

**APPENDIX 4A**

**SOCIO-ECONOMIC BASELINE REPORT**



# **BAFFINLAND IRON MINES CORPORATION**

## **MARY RIVER PROJECT**

### **SOCIO-ECONOMIC BASELINE**

December 1, 2010



**BAFFINLAND IRON MINES CORPORATION**

**MARY RIVER PROJECT**

**SOCIO-ECONOMIC BASELINE**

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## **ABBREVIATIONS**

AEC.....	Alcohol Education Committee
APS.....	Aboriginal Peoples Survey
CCSA .....	Canadian Centre On Substance Abuse
CED .....	Community Economic Development
CMHC .....	Canadian Mortgage and Housing Corporation
CPNP .....	Canadian Prenatal Nutrition Program
DEW.....	Distant Early Warning
ED&T.....	Economic Development and Transportation
EIS .....	Environmental Impact Statement
FAE .....	fetal alcohol effect
FAS .....	fetal alcohol syndrome
FASD.....	fetal alcohol spectrum disorder
FIFO.....	fly-in/fly-out
FY/FT .....	full-year, full-time
IALSS.....	International Adult Literacy and Skills Survey
IPG.....	Institutions of Public Governance
IQ .....	Inuit Qaujimajatuqangit
IS.....	income support
ITK .....	Inuit Tapirisat Kanatami
LFS .....	labour force survey
LSA .....	local study area
Mt/a.....	million tonne-per-annum
NIRB .....	Nunavut Impact Review Board
NLC.....	Nunavut Liquor Commission
NLCA.....	Nunavut Land Claims Agreement
NNI.....	Nunavummi Nangminiqatunik Ikajuuti
NOC .....	National Occupational Classification
NOCS.....	National Occupancy Standard for Statistics
NTI .....	Nunavut Tunngavik Inc.
NWHS .....	Nunavut Harvest Study
NWT .....	Northwest Territories
PYLL .....	potential years of life lost'

PY/PT .....	part of the year and/or part-time
QIA.....	Qikiqtani Inuit Association
QC.....	Qikiqtaaluk Corporation
QL .....	Qikiqtaaluk Logistics
STDs .....	sexually transmitted disease
STI .....	sexually transmitted infection
WSCC .....	Workers' Safety and Compensation Commission

## EXECUTIVE SUMMARY

### Purpose

The socio-economic baseline presents information and data needed to assess the socio-economic impacts of the Project and to understand how the Project fits into the local social and economic environment. The baseline report is structured to meet several specific objectives:

- Identify socio-economic conditions and trends that may interact with the Project;
- Identify variability in socio-economic indicators across communities and social groups;
- Present data to help measure contributions of the Project to the achievement of community development objectives;
- Describe conditions in areas that will be monitored should the Project proceed.

### Study Methods

Qualitative data gathered from the community-based research for the Project provide insight into the perceptions, expectations, values, concerns, and aspirations of study area residents. Analysis of this qualitative data helped to frame the issues of importance to study area residents and provided the essential structure of the socio-economic baseline report. These perceptions also set the quantitative (statistical) data in a context that allowed for better interpretation.

Study area-specific statistical data were compiled mainly from government sources, including standard and customized 2006 Statistics Canada Census data, standard and customized Statistics Canada tax file data, and a range of Government of Nunavut data. In addition, data provided by the major employers involved during the exploration and bulk sample activities were compiled.

### Population Characteristics

#### *Inuit and Non-Inuit Components of the Population*

The population of the North Baffin region consists mostly of Inuit (94%), with non-Inuit accounting for just 6% of the area's population. The balance between Inuit and non-Inuit in Iqaluit is more even, with 60% Inuit and 40% non-Inuit. While the Inuit population has a very young age profile, nearly all non-Inuit residents in North Baffin are of working age. In Iqaluit, 58% of the population—and 66% of the male population—age 40 to 64 are non-Inuit. Non-Inuit men also account for a majority of Iqaluit's male population age 25 to 39 years of age. The demographic data suggest non-Inuit residents move to local study area (LSA) communities primarily to work and that relatively few are raising families or living out their retirement years in these communities.

#### *Sex Ratios*

The ratio of non-Inuit males to females is approximately even in the younger half of the working-age population. In the older age categories there are substantially more men, with a ratio of roughly 60% males to 40% females in both North Baffin and Iqaluit. Among the Inuit population, more males than females are resident in North Baffin, across all age groups. The opposite picture is seen in Iqaluit, where the number of Inuit females is greater than that of males.

#### *Stability of Residency*

The Inuit population of North Baffin communities was very stable over the past decade. Decentralization of territorial government jobs to Igloolik and Pond Inlet during this period did not lead to major relocation of Inuit workers from other communities. This contrasts sharply with the

non-Inuit population of North Baffin, where only 1-in-3 (35%) non-Inuit residents were resident in the same community five years earlier. The level of instability of the non-Inuit population was even slightly higher during the five years leading up to the previous census in 2001.

The residential stability of the Inuit population in Iqaluit is significantly less than that in North Baffin. In the five years leading up to 2006, 2-in-10 Inuit moved to Iqaluit from another community, province, or territory. This level of mobility declined from a rate of 1-in-4 (24%) before 2001. Stability of the non-Inuit population is considerably higher in Iqaluit than it is in North Baffin, and appears to be trending toward greater permanency. Before 2001, 41% of this population had been resident in the capital for at least five years. By 2006, this stable population had increased to 50%.

#### *Net Migration into the Baffin Region*

There are indications of an increasing net movement of Inuit from communities in the north to urban centres in the south. During the 10-year period between the 1996 and 2006 censuses, the Inuit population in regions outside traditional Inuit lands, or “Inuit Nunaat,” increased 62% from 6,795 to 11,000 individuals. In 2006, Inuit living outside Inuit Nunaat accounted for 21.8% of the 50,480 Inuit living in all regions of Canada.

As suggested by the analysis of the non-Inuit component of the LSA population, there has been tremendous movement between southern points-of-origin and Iqaluit and North Baffin, with nearly half the population changing-over within five years. The majority of this group comes to pursue employment opportunities and, as indicated by the age profile, does not settle permanently in the region.

Taxfiler data indicate that during the period from 1997 through 2002—leading up to division of Nunavut from the Northwest Territories (NWT), and for several years into the establishment of the territorial government—the net flow of people between the Baffin region and other parts of Canada was mostly into the region. Since 2002, this has reversed, with more people leaving the Baffin region than moving into the region (see Table 7 and Figure 6). This net migration is small, however, in the order of 150 individuals per year, or less than 1% of the total population of the region.

Other regions of Nunavut as well as the Atlantic region of Canada have consistently seen more people leave for the Baffin region than they saw arrive from the Baffin region. Since 1995/96, 548 more individuals moved to the Baffin region from Atlantic Canada than returned to that region. By contrast, the Baffin region provided a net contribution of 497 people to the population of Ontario during the same period, as well as 373 to the NWT and 383 to western Canada.

#### *Family Structure*

Most Inuit across the LSA live with immediate family members. Among non-Inuit residents, a substantial number either live alone or with unrelated individuals. In North Baffin, 94% of Inuit live with immediate family members (i.e., in a “census family”). Only 3% live either alone or with unrelated people, with the remaining 3% living with relatives. Perhaps unexpectedly, this picture extends to Iqaluit as well. The picture for non-Inuit is rather different, with approximately 3-in-4 living with immediate family members, while most of the remainder either live alone—14% in Iqaluit and 21% in North Baffin—or with unrelated people—9% for Iqaluit and 6% for North Baffin.

### *Children in Single-Parent and Two-Parent Families*

In Nunavut, 1-in-4 children live with a single parent and the remaining three-quarters live with two parents (see Table 10). The incidence of children living in single-parent families in Iqaluit is similar to the territorial average at 26%, while in North Baffin communities the rate ranges from 26% in Hall Beach and Igloolik to 20% in Arctic Bay, Pond Inlet, and Clyde River. In comparison, approximately 22% of Canadian children live in single-parent families, suggesting that the incidence in the LSA is in line with the national situation.

### *Language*

The Inuktitut language is prevalent in North Baffin LSA communities (see Table 11, Figure 8, and Figure 9). Nearly all Inuit residents of the North Baffin LSA learn this language as their mother tongue, and for 9-in-10 residents, Inuktitut is the language most commonly spoken at home. A portion of the population, ranging from 6% in Hall Beach to 24% in Igloolik, consists of unilingual Inuktitut speakers. In North Baffin, nearly 2-in-3 Inuit work in settings where Inuktitut is the prevalent language.

The linguistic picture in Iqaluit is dramatically different from that of North Baffin. In the capital, slightly more than one-fifth of the Inuit population did not learn Inuktitut as their mother tongue and fewer than half speak Inuktitut at home. Only 20% of Inuit in Iqaluit speak Inuktitut in the workplace and only 3% are unilingual Inuktitut speakers. It seems clear that while Inuktitut is healthy in North Baffin, it is under considerable threat in Iqaluit.

## **Education and Training**

### *Early Childhood Education*

Early childhood education (pre-school) opportunities are not widely available across the study area. Before-school and after-school programs, which are important for parents working during the day, are absent in nearly all LSA communities, except for Clyde River, where an after-school program has been in place since 2008 (see Table 47). The level of service in Iqaluit is better, with full-day and part-day preschool programs and after-school programs available.

### *Grade 12 Graduation*

The number of high school graduates has been increasing both in Iqaluit and across North Baffin over the past 20 years (see Table 50). In total, 390 North Baffin and 393 Iqaluit residents have graduated from high school since 1987. However, while Grade 12 enrolment in Iqaluit and Pond Inlet has increased in recent years, it has declined elsewhere in the LSA.

### *Post-Secondary Qualifications and Training*

While education levels are low across the study area, many residents of the RSA have been engaged in training and upgrading through the local college system and through various specialized programs. Arctic College, which has Adult Learning Centres in every community, reports that between 1,200 and 1,350 Nunavummiut enrol in full-time programs at the college. This equates to roughly one-quarter of the population between 20 and 29 years of age, or one-fifth of the 20- to-34-year-old age group.

The focus of post-secondary training varies between Inuit males and females. Inuit men acquired post-secondary qualifications in areas such as construction trades and mechanical/repair technology, culinary services, corrections officer/services, peace officer/police, fire protection, heavy-truck driver, commercial driver, heavy-equipment operation, and commercial fishing. Inuit women have focused more on the fields of business, management, public administration, social and behavioural sciences, law, and education (see Table 53 and Figure 47). Some men, particularly in Iqaluit, have also pursued programs focused on business, management, and public administration.

#### *Literacy and Numeracy*

Low baseline levels of literacy and numeracy present a major challenge to labour force development in the LSA and across Nunavut. In a report on adult learning in Nunavut, the largest group of adult learners in the territory are said to be at the lowest two levels of the four-level scale used in the International Adult Literacy and Skills Survey.

### **Livelihood and Employment**

#### *Importance of the Land-Based Economy to North Baffin Livelihoods*

The land-based economy is a major component of the livelihoods of many residents of the LSA, particularly in North Baffin. The North Baffin land-based economy generates productive work equivalent to an estimated 356 full-time jobs annually, or approximately one-third the labour demand from the formal wage economy in the region. This amount of work roughly translates to 0.6 million hours of labour.

The harvest effort of residents of the five North Baffin LSA communities is estimated to yield approximately 830,000 kg of food. The cost to purchase an equivalent amount of imported food through local retailers is estimated at \$12 million. This is the in-kind value to households of harvest activity in the land-based economy. Since retail foods are subsidized through the food mail (and now through the Nutrition North) program, the “economic value” of the land-based harvest should take this into account, leading to a total economic value of the land-based harvest of approximately \$20 million.

#### *Demand for Workers in the Formal Labour Market*

The current amount of work opportunity generated by the wage economies of the study area amounts to the equivalent of 3,700 to 3,900 full-time, year-round jobs, of which 1,100 are located in North Baffin and 2,600 to 2,800 in Iqaluit. This equates to approximately 2 million hours of work in the North Baffin labour market each year, and 4.7 million hours of work in the Iqaluit labour market.

The number of jobs occupied by women has generally increased at a greater rate than those occupied by men. In North Baffin, the growth in demand for male labour has not kept pace with the growth of the Inuit male population. In Iqaluit, male-occupied job growth and Inuit male population growth rates appear to have increased at similar rates (see Table 14). The jobs occupied by women are more narrowly concentrated in public sector industries. While these sectors might be fairly stable in terms of boom and bust cycles, they are less likely to experience dramatic growth, suggesting that women coming into the labour market might need to find work in sectors not traditionally filled by women.

In terms of the skills required by the LSA labour market, approximately 18% of occupations in North Baffin, and 21% in the Iqaluit labour markets require a university education. One-quarter to

one-third of occupations in the study area require college or apprenticeship levels of training and skills. A similar number of occupations require high school education and/or occupation-specific training. The remainder of jobs can be accessed by unskilled workers capable of undertaking on-the-job training.

#### *Supply of Workers to the Formal Labour Market*

A total of 2,255 North Baffin residents worked to “fill” 1,100 North Baffin jobs, a rate of 2 workers per job. In Iqaluit, 3,665 individuals worked to fill the 2,600 to 2,800 jobs in that labour market, a rate of 1.3 to 1.4 workers per job. Wage-earners in North Baffin deliver 1.7 to 2 million hours less than they would if they were all working full-time, full-year. Wage earners in Iqaluit deliver 3 million hours less than they would if they all worked full-time, year-round.

Demand among residents for wage employment in the study area is very high, even when this work requires working in remote locations away from the community. Inuit employment in North Baffin is characterized by many individuals earning small levels of income, well under what full-time work would pay, and a small number earning full-time, year-round income levels. The picture of Inuit employment in Iqaluit suggests a blend of work patterns with many individuals earning small wage income and many earning full-time wage levels. Most residents working in full-time jobs in Iqaluit work these jobs year-round. In North Baffin, many more full-time workers are engaged in these jobs for only short periods. The highest rate of short-term employment among full-time workers is among the younger North Baffin male workforce. Women who work full-time jobs in North Baffin are more likely to work year-round than are men.

#### *Experience from the Mary River exploration and bulk sample activities*

A total of 1.3 million hours of fly-in/fly-out labour was delivered during the Mary River exploration and bulk sample activities by 776 workers from across Canada over a three-year period. Of this labour, 0.4 million hours were provided by 265 North Baffin residents, and 212 residents of Iqaluit. Women accounted for 11% of the total number of people involved at the Project. During peak activity in 2008, 0.8 million hours were worked at the Project, of which 0.2 million hours were provided by residents of the LSA.

Approximately 4-in-6 workers hired from North Baffin worked for at least three rotations of two weeks in, followed by two weeks back home. However a substantial number, 1-in-5, did not complete one full 14-day rotation. Among workers hired from Iqaluit, 1-in-8 did not complete one full rotation. Both North Baffin and Iqaluit labour forces continued to supply new workers for the three-year period for which data were analyzed. Therefore, the project definition phase did not “tap out” the study area labour force.

#### *Sources of Income in LSA Households*

In addition to the \$12 million in-kind income generated for North Baffin households through harvest activities in the land-based economy, residents gain monetary income through employment and various social transfers. In 2007, personal income reported by residents of the five North Baffin LSA communities amounted to \$83 million and income reported by Iqaluit residents amounted to \$196 million. Among the resident Inuit population, earned income accounts for between 70% (Clyde River) and 81% (Pond Inlet) of total income. Most of the remaining income, ranging from 17% (Pond Inlet) to 27% (Clyde River) is derived from government transfers. Other income, such as investment income, accounts for less than 3% of total income. In Iqaluit, the role of government transfers is much lower than in North Baffin communities, accounting for only 8% of the total income of the Inuit population of the city.

## Human Health and Well-Being

### *Population Health Status*

Life expectancy at birth in Nunavut is 10 years shorter than it is for the Canadian population overall. From 1999 to 2001, life expectancy at birth in Nunavut was 68.7 years. Life expectancy at age 65 is similar among the male populations of Canada and Nunavut. However, while Canadian women age 65 can expect to live an additional 20.6 years, in Nunavut, women's average life expectancy at age 65 is 11.4 years.

In Nunavut the birth rate is roughly twice that of Canada generally, while the incidence of pre-term delivery and low birth weight are both high in Nunavut relative to Canada overall. Nunavut's infant mortality rate has been improving. It is, however, much higher than in other regions of Canada.

The major causes of death in Nunavut are cancer, suicide, heart disease, and accidents. The profile of causes of death in Nunavut differs from that of Canada overall. Age-standardized death rates for Canadian provinces and territories can be used to compare death rates in Nunavut's young population with those of the aging Canadian population:

- the proportion of deaths by suicide in Nunavut is nearly four times that of Canada
- transportation-related deaths are more than twice as common in Nunavut as in Canada
- cancer accounts for a slightly higher share of deaths in Nunavut than in Canada
- heart and other cardiovascular disease account for a lower share of deaths in Nunavut
- other causes of death account for a greater share of deaths in Canada than in Nunavut

### *Community Perspectives On Social and Cultural Change*

The Inuit of the North Baffin region have experienced tremendous social and cultural change over the course of a few decades. During the Arctic Bay working group conference several participants spoke about the effect that recent changes, particularly the residential schools, have had on family integrity and by implication social cohesion. Some indication that Elders are starting to become more engaged in community life and in the learning of the younger generation came out of community research. In addition, though, a shift toward western middle-class values and expectations was observed to be taking place among Inuit youth.

Social change is clearly related to livelihood options. A shift from traditional to wage economy livelihoods was clearly identified by an Elder in Pond Inlet as being related to an understanding that the capacity of the environment has become inadequate to support today's population's food needs. Many other comments were made about the importance of employment both for gaining self-reliance as well as to support traditional harvesting activities. Finally, the importance of strong social networks in supporting people's ability to take on the challenges of fly-in/fly-out rotational work was raised.

### *Alcohol and Drugs in the LSA*

Tobacco smoking rates in Nunavut are also high. Smoking during pregnancy has major adverse effects on fetal development, contributing to low-birth weight and pre-term delivery. The relationship between indoor smoking and respiratory problems has recently been highlighted in a study of Nunavut housing and respiratory disease.

Alcohol abuse is an issue that concerns many residents, health practitioners, social service providers and those involved in the justice system. On the health side, use of alcohol during pregnancy is known to cause brain damage in the fetus, leading to serious consequences for the individual born with fetal alcohol spectrum disorder (FASD). Community perceptions and

concerns related to substance abuse, along with local alcohol policies and other related issues include the following:

- perception that alcohol and drugs becoming more prevalent
- misuse of income on substances affects individuals, families, and the community
- “If there is more money then there is potentially more availability of substances to abuse.”
- ...but, even those without jobs are said to be able to purchase alcohol
- some are making an active effort to quit using drugs
- drug/alcohol-free workplace is desirable: “Access to a drug-free place will be good for people.”
- FASD is a concern, education to warn pregnant women not to drink is noticed by some

In the Baffin Region, Iqaluit is the only “open” community, while Kimmirut, Pangnirtung, and Sanikiluaq are the only “dry” communities. The five communities of the North Baffin LSA each have policies in place to restrict access to alcohol. Bootleg alcohol, however, is considered to be widely available at a high cost.

#### *Incidents of Reported Crime*

The rate of violent crime in Nunavut is the highest across Canada, varying from between six and eight times the national rate during the period 1999 to 2007. Within the LSA, violent crime across North Baffin has been slightly over half the rate in Iqaluit.

A territorial breakdown of crime incidents (see Table 58 and Figure 50) provides insight into the nature of this violence. The rate of sexual assault across the territory reached a peak in 2003 at over ten times the national rate. While rates of sexual assault continued to be high into the later part of the decade, a decline has been noted, with the 2008 rate being the lowest of the ten year period. Assaults with weapons and those causing bodily harm have increased consistently and dramatically over the decade.

#### *Accidents and Unintentional Injury*

Potential years of life lost (PYLL) among the male population across Nunavut is 3,465 per 100,000 population per year. The corresponding rate for Nunavut women is 673 per 100,000 population. This is the equivalent of roughly 110 PYLL per year for men and women due to unintentional injury in the North Baffin LSA and 140 PYLL in Iqaluit. Workplace injury frequency is measured in days of work lost or modified. In the Nunavut/NWT mining sector an average of 27 days of lost/modified work is experienced per 200,000 hours of labour supplied (see Table 60). Over a three-year period these territories experienced one workplace fatality (see Table 61), which could be equivalent to up to 60 PYLL.

#### *Food Security*

For many North Baffin households, the harvest of country food provides an important contribution to overall wellbeing. In all five communities, caribou, ringed seal, and arctic char are of major importance. In addition, walrus is a major species of importance in Hall Beach and Igloolik, while narwhal is a key component of the harvest among households in Arctic Bay, Pond Inlet, and to a lesser degree, Clyde River (see Table 66). The rate of subsidy that is effectively applied to country food harvests is estimated to average approximately \$1.23/kg of edible food (see Table 71). This equates to between one-tenth to one-fifth the subsidy rate applied to southern foods transported for sale in the North Baffin LSA.

The amount of nutritious, perishable food shipped per person in the LSA has increased steadily since 1999 (see Table 72). During the decade total per capita shipments have increased by 52%. This observed increase in per capita retail food consumption would be consistent with an increasing reliance on retail foods to meet household nutritional requirements. A positive relationship appears to exist between increasing income reported by women and the amount of nutritious, perishable foods purchased from retailers (see Figure 51).

## **Economic Development and Self-Reliance**

### *Sectors of the economy*

The public sector accounts for a large portion of Nunavut's economic activity. Public sector jobs in administration, education, and health areas account for about half of all employment earnings in the territory. Public administration accounted for \$271 million, or 24%, of the territory's total \$1.1 billion GDP in 2008. Education and health expenditures account for another \$202 million. Combined, these public expenditures account for more than 40% of the territory's GDP.

Nunavut's mining sector is once again expanding following closure, in the previous decade, of the Nanisivik and Polaris mines in the LSA and the Lupine and Jericho mines in the Kitikmeot region. The Meadowbank Mine outside the study area in the Kivalliq region is expected to begin contributing over \$90 million to Nunavut's GDP. Medium-term prospects for expansion in the sector include Newmont's Hope Bay development in Kitikmeot and AREVA Resources' Kiggavik project in the Kivalliq region. The Mary River Project is the only project in the LSA that has progressed to project description and feasibility study stage. A major challenge for the territory is to develop the labour force and entrepreneurial capacity to participate in the economic activity generated by the mining sector. The shortage of skilled workers is expected to lead to local workers filling between 15% and 20% of Meadowbank jobs (Conference Board of Canada 2010). Major investments in training will be required to improve these numbers. Communities, government, and the mining companies must work effectively together to achieve the potential for the mineral sector to contribute to sustainable community development.

The construction industry in Nunavut is driven by a combination of government-funded infrastructure projects and major private sector developments such as the Meadowbank Mine Project. Territorial government planned capital expenditures for the North Baffin LSA total \$32.3 million for the planning period 2010/11 to 2014/15, with another \$33 million planned for Iqaluit. Across the territory, \$381.6 million in capital expenditures is envisioned over this period.

The transportation sector provides a critical link between Nunavummiut in small communities to the specialized medical and educational services available only in larger centres. For the 2010/2011 fiscal year, for example, the territorial government has budgeted \$47.9 million for medical travel, an expenditure item that has increased at a rate of 6.9% year-over-year, from a level of \$32.6 million in 2005/06. Goods imported into Nunavut by air and marine transport totalled \$900 million in 2008, and the Iqaluit airport was among the top 20 busiest airports in Canada, based on number of flights. In spite of the tremendous importance of air and marine transport, the sector is largely based outside the territory and transportation contributes less than \$21 million to the territorial GDP. The high cost of transportation means that many Nunavummiut face limited mobility options.

Nunavut has a small commercial fishery based on turbot and shrimp fished offshore primarily in Baffin Bay and Davis Strait. Nunavut's share of this fishery has grown significantly during the past half decade. In addition to the offshore fishery, commercial char production is carried out at plants in Pangnirtung, Iqaluit, Rankin Inlet, and Cambridge Bay. Although the economic value is modest,

the quality of this product is high and potential for value-added processing and marketing, including supplying the local Nunavut market where high retail food prices are the norm, continues to be realized. A modest commercial caribou and musk ox harvest is also carried out, the former predominantly from Coral Harbour and the latter from Cambridge Bay. As with the char fishery, these products represent high-value specialties that sell for premium prices. Given the importance, and precedence under the Nunavut Land Claims Agreement (NLCA), of the traditional non-commercial harvest of these species, the potential for expansion of commercial fish and wildlife operations is subject to inherent biological limitations.

Most visitors to Nunavut come to the territory for work activities. These business travellers account for approximately three-quarters of all Nunavut visitors. Between 3,000 to 6,000 visitors come to the territory each year for non-work purposes and this component spends between \$6 to \$12 million annually. An amount of \$500,000 is estimated to be allocated each year across the North Baffin LSA to tourism activities outside business travel and sport-hunting. In addition to spending by tourists who come to visit friends and family living in the north, these expenditures also include those of cruise ship visitors (\$15,000 in one community) visitors to the national park, and adventure tourists.

#### *Community Economic Development*

The municipalities of the LSA regularly undertake broad planning processes that engage many groups in the community. These processes offer an opportunity to reflect on strengths and challenges faced by the community. This self-reflection typically addresses social issues, cultural change, and issues related to education, business, and economic development. Reflection on how well local organizations are working together to address common goals is an important outcome of this process, as this can improve institutional capacity at the local level. It can be expected that with recent establishment of the Regional Socio-Economic Monitoring Committees, which involve the hamlet mayors, the CED planning process could link in with monitoring progress in key areas.

Infrastructure gaps are frequently suggested as important barriers to business, social, and cultural development in communities across the LSA. Hamlet CED plans call for many types of infrastructure: space for small businesses, workshop space for carvers, visitor centres, fish plants, swimming pools, day cares, youth centres, healing centres.

Major economic projects are widely seen to present opportunities to support achievement of local development aspirations. The mechanisms that drive these opportunities typically include project effects on human resources development through training and employment, expansion of local business opportunities by raising the level of disposable income available to purchase local goods and services, and by offering opportunities to supply goods and services to the Project, and in development of local and regional infrastructure through direct contributions as well as through increased government revenue.

Local wealth is a significant component for community development. In 2007 personal income reported by residents of the five North Baffin LSA communities and Iqaluit amounted to \$83 million and \$196 million respectively.

#### *Contracting and Business Opportunities*

The LSA business community is small, reflecting the small populations and low income levels of these communities. This is particularly the case in the North Baffin LSA communities, where two dozen businesses are registered with Nunavut Tunngavik Inc. (NTI) as Inuit firms, and/or with the

Nunavummi Nangminiaqtunik Ikajuuti (NNI) program as Nunavut firms. The business sector in Iqaluit is substantially larger, with a total of 129 enterprises registered with NNI, NTI, or both. In addition to these are a number of businesses that have not registered with either NTI or NNI. These include incorporated and unincorporated enterprises such as local bed and breakfasts, taxi services, outfitters, and others. For example, while there are seven businesses from Arctic Bay registered with NNI and/or NTI, the Arctic Bay Economic Development Plan (2007) identified 26 local businesses. A total of 25 local businesses were identified in the Pond Inlet CED Plan (2010), compared with the 11 listed with NNI and/or NTI.

Self-employment is an important indicator of entrepreneurial capacity, as it can be a stepping-stone toward larger-scale business activities. The level of self-employment across the RSA is fairly low, as is the amount of income earned through self-employment activities. In 1996, a total of 270 Baffin residents reported income from self-employment business activities. By 2004, this number had increased to 410 individuals. Most (6 out of 10) of these self-employed entrepreneurs live in Iqaluit, with the remaining 40% distributed across the other Baffin communities. In the North Baffin LSA, approximately 70 individuals earned self-employment income in 2004.

Most North Baffin LSA residents reporting self-employment income earned less than \$5,000 through their business activities. In Iqaluit, self-employment earnings are a little higher, with half of self-employment income earners reporting more than \$5,000, and 1-in-5 reporting \$35,000 or more. Of the self-employment income earners in Iqaluit, 1-in-4 had family incomes with no other source of market income. Most people who report self-employment income however, live in families where a wage income is also earned. This other income can be substantial.

In Iqaluit in 2004, 100 of the 240 self-employment income earners, or 42%, had family wage incomes of \$85,000 or more. In the rest of the Baffin region, a similar proportion of self-employment earners (24%) have no other family wage income. In these communities, however, the level of other family wage income is lower, with only 41% of families having wage incomes of \$35,000 or more, suggesting that employment income plays an important role as a spring-board to self-employment. While a few families rely on self-employment as their main source of income, it is more common that self-employment activities are nurtured by the wage employment earnings of either the self-employed person or a family member, or both. This pattern appears to be stronger in Iqaluit than it is in the other Baffin region communities.

#### *Supply of Goods and Services to the Mining Sector*

During the Mary River project definition phase, from 2006 through August 2010, \$49.7 million worth of goods and services was procured by Baffinland from vendors based in the North Baffin LSA and Iqaluit. Of this amount, \$10 million was purchased from businesses based in North Baffin, 3% of total procurement, and \$39.9 million from vendors based in Iqaluit, or 11% of total procurement.

## SECTION 1.0 - INTRODUCTION

The Project is a proposed iron ore mine and associated facilities located on North Baffin Island, in the Qikiqtani Region of Nunavut. The Project involves construction, operation, closure, and reclamation of a 21 million tonne-per-annum (Mt/a) open pit mine that will operate for 21 years. The high-grade iron ore to be mined is suitable for international direct shipment after crushing and screening with no secondary processing or concentrating required. Three Mt/a of iron ore will be transported via an upgraded existing road to Milne Inlet where it will be stockpiled for shipment during the open-water season. A railway system will transport an additional 18 Mt/a of the ore from the mine area to an all-season deep-water port and ship-loading facility at Steensby Port, where the ore will be loaded into ore carriers for overseas shipment through Foxe Basin. A dedicated fleet of cape-sized ice-breaking ore carriers and some non-icebreaking ore carriers and conventional ships will be used during the open-water season to ship the iron ore to markets.

This environmental baseline study report was prepared in support of an Environmental Impact Statement (EIS) for the Project, to be submitted by Baffinland to the Nunavut Impact Review Board (NIRB).

### 1.1 BASELINE OVERVIEW

The socio-economic baseline presents information and data needed to assess the socio-economic impacts of the Project.

A wide range of data, indicators, and qualitative information can be used to describe communities and regions. Data included in this baseline report were limited to those areas where meaningful interactions between the Project and baseline conditions are expected to arise.

#### 1.1.1 Objectives

The baseline report is structured to meet several specific objectives. These include:

- Identify socio-economic conditions and trends that may interact with the Project;
- Identify variability in socio-economic indicators across communities and social groups;
- Present data to help measure contributions of the Project to the achievement of community development objectives;
- Describe conditions in areas that will be monitored should the Project proceed.

#### 1.1.2 Focus on Assessment Themes

The baseline report is focused to support understanding and analysis of the socio-economic themes identified during community engagement activities and that will be considered in the impact assessment. Major themes emerging from the community research are presented at the start of each section.

#### 1.1.3 Support Monitoring Processes

The baseline report identifies indicators that will be of use in ongoing monitoring programs. This includes indicators that present Project-generated data in areas such as recruitment, employment, training, and procurement of goods and services. These indicators rely on data generated directly by the Project.

Indicators are also presented that relate to data not directly generated by the Project. Indicators at the community and regional level are expected to be monitored by the Qikiqtaaluk Socio-Economic Monitoring Committee, consisting of government, municipal, Inuit, and corporate participants, and by other processes such as the Nunavut General Monitoring Program.

It is expected that as the indicators presented in this baseline report are put to use, some will be found to be more useful than others. This should lead to a reduction in the number of indicators for which data are needed in the future.

## 1.2 SOURCES OF DATA

Several types of data are presented in this baseline, including:

- Qualitative and quantitative data that describe socio-economic conditions and functions in the study area;
- Data from outside the study area that are relevant to understanding baseline conditions in the study area;
- Data generated from the proponent's Project definition phase activities.

### *Qualitative Data from the Study Area*

A substantial body of information was gathered from the community-based research for the Project, particularly during the period between 2006 and 2008. These qualitative data provide insight into the perceptions, expectations, values, concerns, and aspirations of study area residents. Analysis of this body of data established the issues of importance to study area residents and provides the essential structure of the baseline report.

The comments and insights shared by residents are presented as qualitative baseline data. These perceptions are intended to help frame the issues and set the statistical data in a context where they can be better interpreted.

In addition to data collected expressly for this Project, qualitative data generated from the study area over the past decades were also accessed through literature review and are presented to further support understanding of the key baseline conditions.

### *Statistical Data on Socio-economic Conditions of the Study Area*

Study area-specific statistical data were gathered mainly from government sources. These included both standard and customized presentations of 2006 census data, standard and customized presentations of data derived from the tax file database administered by Statistics Canada, as well as a range of data provided by the Government of Nunavut.

### *Data from Beyond the Study Area*

Where adequate data were not available to confidently establish baseline conditions specific to the local study area (LSA), attempts were made to present relevant information from areas outside the study area. This includes statistical data available only on a territorial level, as well as qualitative and quantitative data related to key issues that could be sourced from research in other regions of Nunavut, Canada, or from relevant international contexts.

### *Qualitative and Quantitative Data Related to Project Definition Phase*

Activities during the Project definition phase generated substantial data of value to understanding baseline socio-economic conditions in the study area, particularly the LSA. Data sources include employment data provided by the major employers of Inuit labour at the Project—Qikiqtaaluk Logistics (QL) and Nuna Logistics—as well as data from interviews with workers and supervisors engaged in definition phase activities.

### *Constraints*

Three constraints of this baseline study relate to: 1) the level of data aggregation, 2) availability of time series data, and 3) access to individual knowledge and perceptions. The first two relate primarily to quantitative data, whereas the third is specific to qualitative data. These constraints are inherent to socio-economic research.

### Data Aggregation

The most useful data are available at a level of detail or aggregation that corresponds to the distinctive groups in the study area. Generally, a fine level of detail is required during the research process to identify what these groups are. Constraints that limit access to disaggregated data include the capacity of agencies to collect and appropriately manage the data, as well as issues related to privacy and confidentiality. In many situations, potentially useful data are simply not yet available in Nunavut, or not available at a level of aggregation that reflects the specific conditions of the study area.

### Time Series

A review of the same data indicators collected consistently and repeatedly over an appropriately long period allows detection of changes in the baseline over time, leading to establishment of socio-economic trends. In Nunavut, some socio-economic data are available over a period of ten years or longer. Many data, however, are only available for single points of time. In this latter situation, the data provide a baseline, but cannot indicate how this baseline fits in the larger context of social or economic change that might be taking place.

### Individual Knowledge and Perceptions

Many of the constraints inherent in statistical data can be addressed in part by talking with local residents, service providers, and subject area experts. The perceptions and insights of these individuals provide another dimension of data that can be used to understand the socio-economic baseline. To some degree, this qualitative data can help to establish trends and identify how demographic groups might be different from each other in areas where quantitative data are not available.

As with quantitative data, qualitative data also present challenges. People's perceptions are coloured by their experiences and points of view. In addition, personal perspectives will vary over time and across demographic groups. Community perceptions can also be highly influenced by recent events. Overcoming these constraints involves accessing a broad cross-section of the community over an extended period.

## SECTION 2.0 - POPULATION CHARACTERISTICS

*Theme: How will the Project affect demographic characteristics of communities in the study area?*

*Theme: How will the Project interact with family structures and population health characteristics?*

### 2.1 NUMBER OF PEOPLE

Nunavut has one of the fastest-growing populations in Canada (see Table 1). During the five years between 2001 and 2006, Nunavut's population increased by 2,729 residents, or 10.2%, nearly twice the 5.4% national growth rate during this period. During the 25-year period between 1981 and 2006, Nunavut's population nearly doubled, increasing from 15,572 to 29,474 residents.

The greatest rate of growth in Nunavut over the past five years has taken place in Iqaluit. The population of the capital city increased by 18% over the past five years and 25% over the previous five-year period. Since 1981, the population of Iqaluit has nearly tripled in population, ballooning from 2,333 residents to the current (2009) estimate of 6,832.

The North Baffin region has grown by 9% over the 2001 to 2006 period—in a similar range as the average 11% growth experienced in the Kitikmeot region and 10% growth in the Kivalliq region. This contrasts with a more modest 3% population change experienced in South Baffin. However, more than half of North Baffin growth has taken place in the community of Igloolik, which increased by 20% during the period, adding 252 individuals to the local population. Most other North Baffin communities have experienced more modest growth rates of between 4.5% and 7.8%. For annual estimates for the LSA and RSA populations, see Table 2.

**Table 1 Population Growth in the LSA and RSA, 2001–2006**

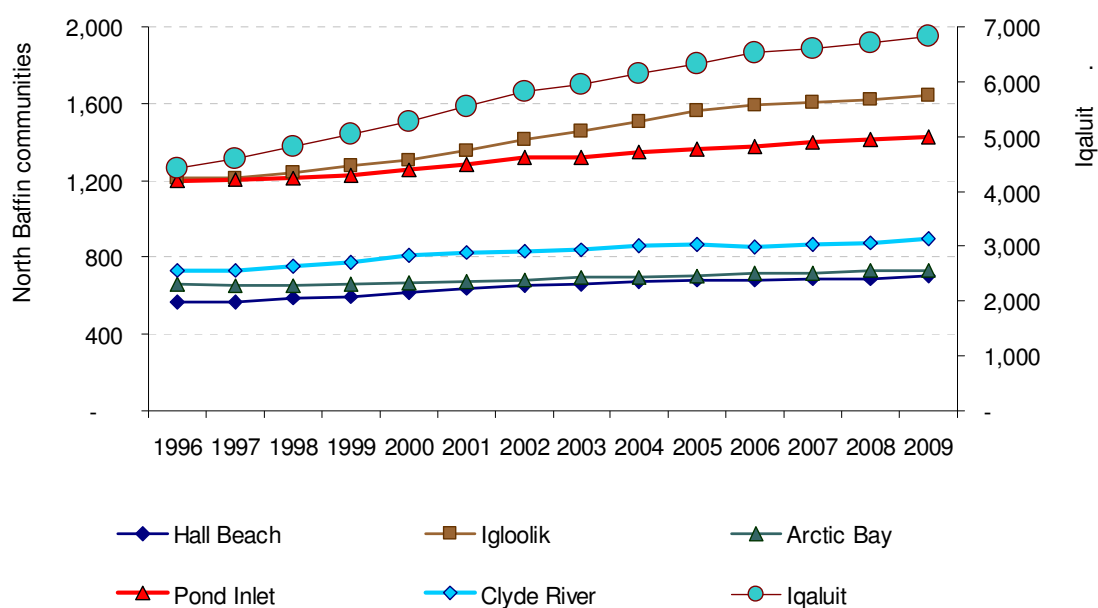
	2006 Population	2001 Population	1981 Population	Change From 2001 (percent)	Change From 1981 (percent)
Hall Beach	654	609	349	7.4	87.4
Igloolik	1,538	1,286	746	19.6	106.2
Arctic Bay	690	646	375	6.8	84.0
Pond Inlet	1,315	1,220	705	7.8	86.5
Clyde River	820	785	443	4.5	85.1
Iqaluit	6,184	5,236	2,333	18.1	165.1
North Baffin	5,390	4,920		9.4	
South Baffin	4,190	4,060		3.2	
Kivalliq	8,348	7,557	4,327	10.5	92.9
Kitikmeot	5,340	4,806	2,945	11.1	81.3
Nunavut	29,474	26,745	15,572	10.2	89.3
NWT	41,464	37,360		11	
Canada	31,612,897	30,007,094		5.4	

Sources: Statistics Canada, 1981, 1986, 1991, 1996, 2001, and 2006 Censuses of Population, Catalogue 97-550-XWE2006002, Catalogue 93F0050XDB01003, and special tabulations.

Notes: 1) Source data prepared by Nunavut Bureau of Statistics, March 28, 2008. 2) Values for North Baffin and South Baffin 2001 and 2006 populations are custom aggregations by Statistics Canada prepared for BDS Inc.

**Table 2 Nunavut Population Estimates by Community, 1996–2009**

	Hall Beach	Igloolik	Arctic Bay	Pond Inlet	Clyde River	Iqaluit	Nunavut
2009	702	1,639	728	1,424	895	6,832	32,183
2008	690	1,620	729	1,410	876	6,695	31,623
2007	685	1,607	714	1,398	866	6,609	31,274
2006	681	1,592	720	1,377	856	6,517	30,799
2005	684	1,566	703	1,359	864	6,315	30,328
2004	671	1,508	698	1,346	857	6,149	29,854
2003	658	1,454	693	1,319	839	5,951	29,320
2002	653	1,412	683	1,321	828	5,809	28,819
2001	638	1,352	674	1,283	821	5,543	28,134
2000	619	1,303	669	1,251	810	5,280	27,498
1999	595	1,273	658	1,229	773	5,034	26,820
1998	586	1,240	654	1,211	751	4,816	26,373
1997	569	1,215	654	1,205	729	4,603	25,884
1996	565	1,213	660	1,195	730	4,417	25,669



Source: Statistics Canada, Demography Division, CANSIM Table 051-0001 and Table 051-0052, and Special tabulations. Prepared by: Nunavut Bureau of Statistics, March 2, 2010

Notes: 1) Postcensus estimates are based on the 2006 census counts adjusted for net census undercoverage and for the estimated population growth that occurred since that census. Intercensus estimates are based on postcensus estimates and data adjusted for net census undercoverage of the censuses preceding and following the considered year. Population estimates for July 1 are final intercensus from 1996 to 2005, final postcensus for 2006, updated postcensus for 2007 and 2008 and preliminary postcensus for 2009. 2) The community population estimates are "non-official" since they are not based on components of population growth (births, deaths and migration). They should be used with caution.

### 2.1.1 Age Structure of the RSA

Nunavut's population has a dramatically younger profile than found elsewhere in Canada. The median age across Nunavut was 23.1 years in 2006, compared with the median age of 39.5 years for Canada overall. In comparison, the median age of the Northwest Territories—the next-youngest population in Canada—is eight years older, at 31.2 years.<sup>1</sup>

The young age profile of the territory is reflected throughout North Baffin communities and applies equally to both male and female components of the population (see Table 3, Figure 1, and Figure 2). More than one-third of the North Baffin population is under 15 years of age, while well over half—58%—are under the age of 25 years. This pattern does not, however, extend to the population of Iqaluit, where the proportion of young adult and middle-aged population components is much higher than elsewhere in the study area.

**Table 3 Age Structure of LSA, RSA, and Comparator Regions – 2006**

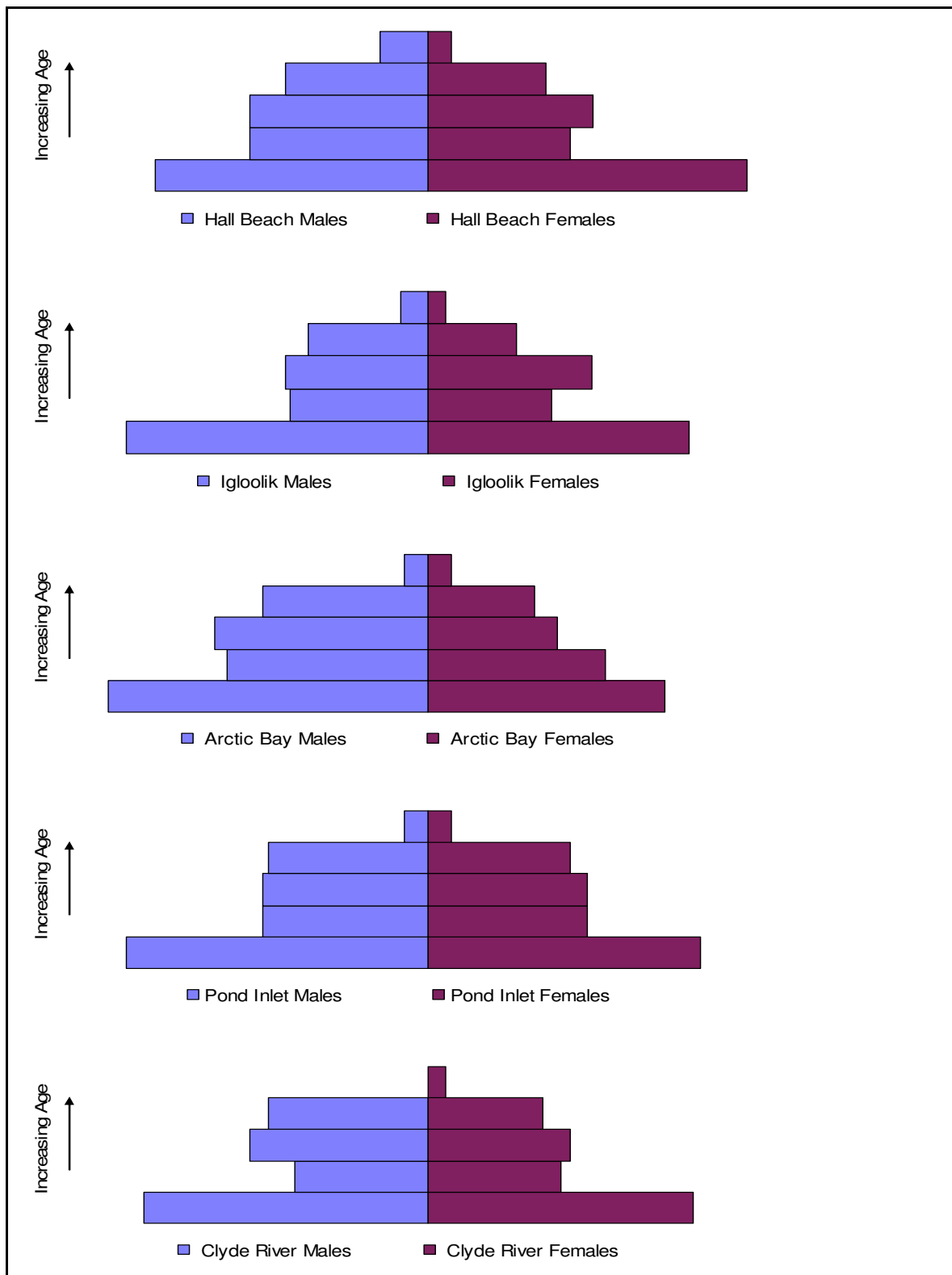
		Age category (years)				
		0 to 14	15 to 24	25 to 39	40 to 64	65+
		(number in category)				
Hall Beach	Males	115	75	75	60	20
	Females	135	60	70	50	10
Igloolik	Males	340	155	160	135	30
	Females	295	140	185	100	20
Arctic Bay	Males	135	85	90	70	10
	Females	100	75	55	45	10
Pond Inlet	Males	255	140	140	135	20
	Females	230	135	135	120	20
Clyde River	Males	160	75	100	90	-
	Females	150	75	80	65	10
Iqaluit	Males	770	520	855	890	60
	Females	770	495	880	775	65
North Baffin	Males	1,075	580	600	530	65
	Females	980	515	555	445	50
South Baffin	Males	735	415	435	470	70
	Females	735	390	445	425	55
Kivalliq	Males	1,520	820	910	800	125
	Females	1,525	805	910	770	110
Kitikmeot	Males	960	530	565	560	105
	Females	895	515	575	540	95
Nunavut	Males	5,070	2,860	3,370	3,260	430
	Females	4,915	2,725	3,360	2,960	370
Canada	Males	2,855,485	2,145,565	3,019,720	5,491,775	1,813,705
	Females	2,721,325	2,062,245	3,165,055	5,705,545	2,260,580

Source: Derived from 2006 Census population by sex and age groups.

Notes: 1) Statistics Canada applies a random rounding procedure to all numbers. An age category with between 0 and 9 individuals, for example, might be rounded up to 10 or down to 0.

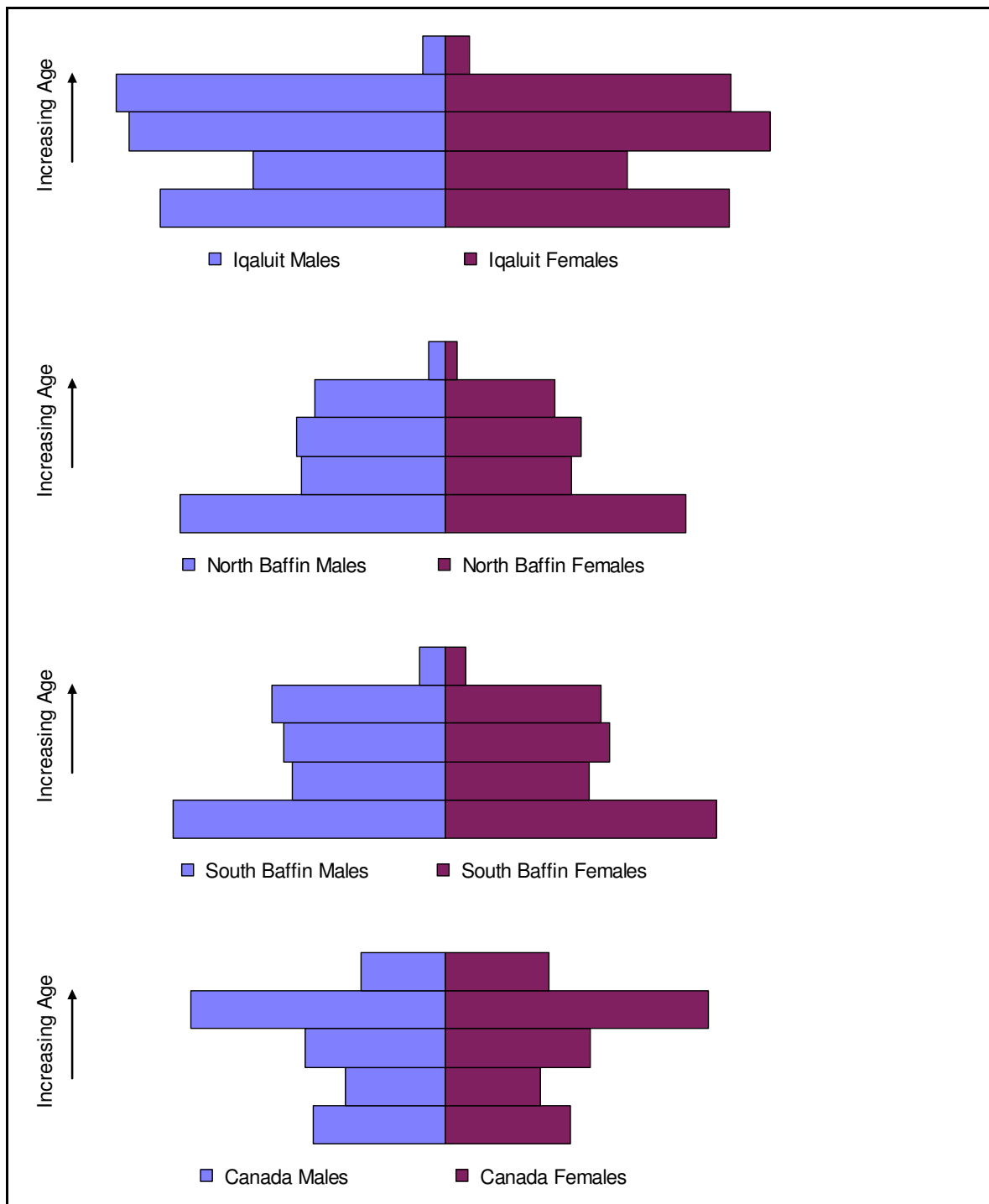
2) The 18 age groups provided by Statistics Canada have been compressed into five categories.

<sup>1</sup> Statistics Canada. 2007. 2006 Community Profiles. 2006 Census. Statistics Canada Catalogue no. 92-591-XWE. Ottawa. Released March 13 2007. <http://www12.statcan.ca/english/census06/data/profiles/community/index.cfm?Lang=E>

**Figure 1 Age Structure of North Baffin Communities – 2006**

Source: Derived from 2006 Census population by sex and age groups.

Notes: Horizontal axis, representing the number in each age and gender category, is not presented on a constant scale.

**Figure 2 Age Structure of Iqaluit and Baffin Sub-regions – 2006**

Source: Derived from 2006 Census population by sex and age groups.

Notes: 1) Horizontal axis, representing the number in each age and gender category, is not presented on a constant scale. 2) In these figures, as elsewhere in this report, "South Baffin" does not include Iqaluit.

### 2.1.2 Inuit and Non-Inuit Components of the Population

The population of the North Baffin region consists mostly of Inuit (94%), with non-Inuit accounting for just 6% of the region's population. In Iqaluit the balance between Inuit and non-Inuit is more even, with 60% Inuit and 40% non-Inuit, similar to the ratio observed during the 2001 census.

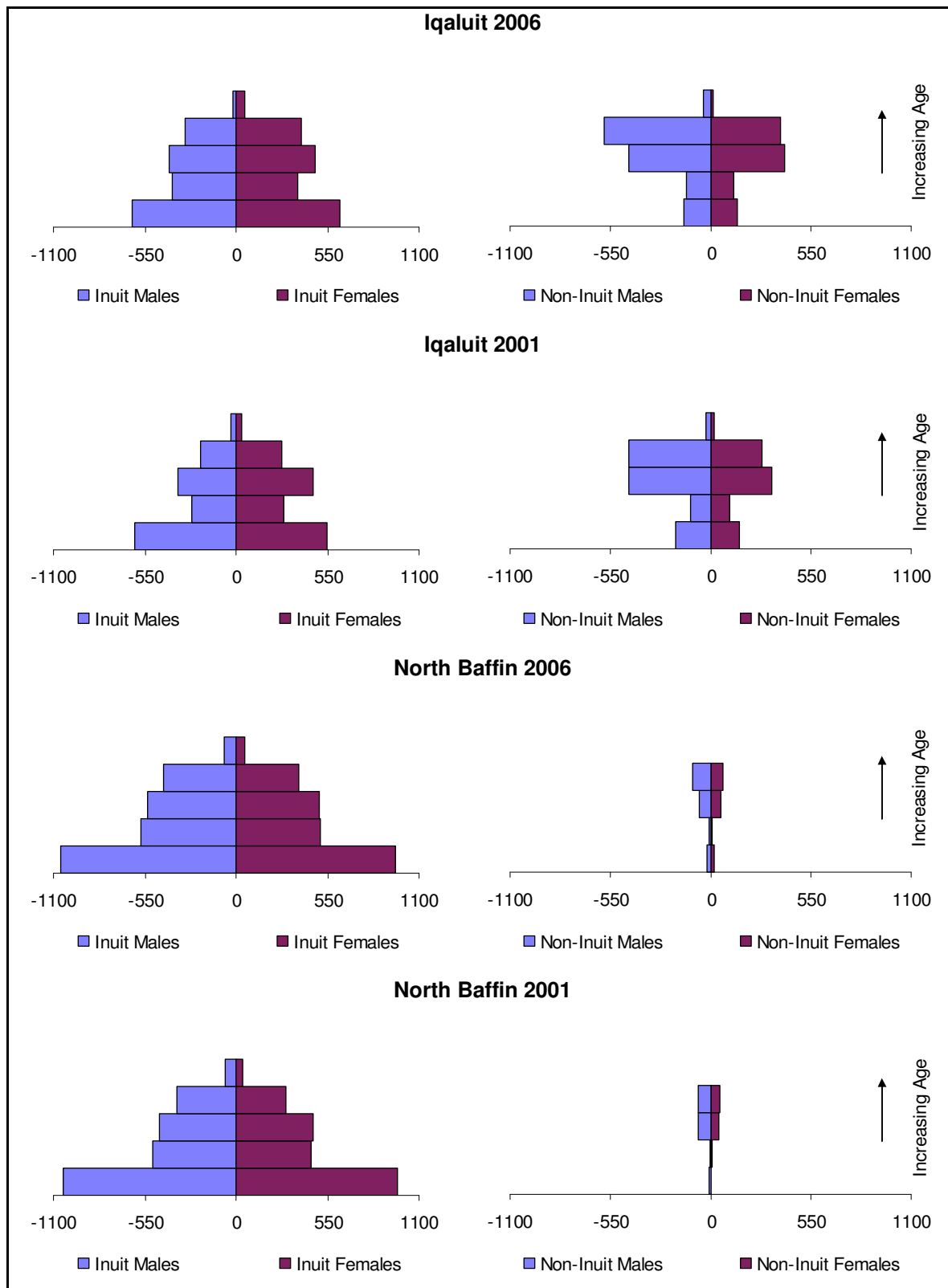
The age profiles for the Inuit and non-Inuit components of the population are of particular interest in understanding the demographic make-up of the region. The distinction between Inuit and non-Inuit components of the population is most pronounced in North Baffin where nearly all non-Inuit residents are of prime working age—between 25 and 64 years of age (see Table 4 and Figure 3). This dimension of the North Baffin population is similar to that of South Baffin, when Iqaluit is not taken into consideration.

The picture suggests that non-Inuit residents move to North Baffin communities primarily to work and that relatively few are raising families in these communities. The small numbers obscure the picture somewhat, though the data suggest that the number of non-Inuit children has increased from the 2001 census.

**Table 4 Age Structure of Inuit and Non-Inuit Population Components, 2001–2006**

				Age category (years)					Total
				0 to 14	15 to 24	25 to 39	40 to 64	65+	
				(number in category)					
2006	Iqaluit	Inuit	Males	625	385	405	305	20	1740
			Females	625	370	475	390	50	1910
		Non-Inuit	Males	145	135	450	585	40	1355
			Females	145	125	405	385	15	1075
	North Baffin	Inuit	Males	1055	570	535	435	70	2660
			Females	960	505	500	375	50	2385
		Non-Inuit	Males	20	10	65	95	-5	190
			Females	20	10	55	70	0	155
	South Baffin	Inuit	Males	720	400	390	385	65	1980
			Females	710	380	400	375	65	1935
		Non-Inuit	Males	15	15	45	85	5	155
			Females	25	10	45	50	-10	120
2001	Iqaluit	Inuit	Males	610	265	350	215	30	1470
			Females	550	285	460	275	35	1595
		Non-Inuit	Males	190	110	445	445	25	1220
			Females	155	105	335	280	20	915
	North Baffin	Inuit	Males	1040	500	460	355	65	2420
			Females	970	450	465	300	40	2225
		Non-Inuit	Males	10	5	70	70	0	160
			Females	0	10	45	50	0	110
	South Baffin	Inuit	Males	780	370	405	335	80	1980
			Females	740	350	395	305	60	1845
		Non-Inuit	Males	10	10	70	50	0	135
			Females	10	10	40	40	-5	105

Source: Derived from 2006 Census population by sex and age groups. North Baffin is a custom aggregation of raw data by Statistics Canada.

**Figure 3 Age Structure of Inuit and Non-Inuit Components of the Population, 2001–2006**

Source: Derived from 2006 Census population by sex and age groups. North Baffin is a custom aggregation of raw data by Statistics Canada.

This situation is not the case in Iqaluit, where the proportion of non-Inuit children and youth more closely resembles the national age profile. The most striking characteristic of the non-Inuit population in Iqaluit is the dramatically reduced number of elderly men and women. Few non-Inuit, it would appear, choose to retire and grow old in the territory. Another striking characteristic is that in Nunavut's capital, non-Inuit comprise a majority of the middle-aged population—61% of the 40- to 54-year-old age group and 51% of the 55- to 64-year-old age group. While Inuit dominate in the younger population group, even here non-Inuit children make up 23% of those under the age of 15 years.

The Inuit population profile of Iqaluit is characterized by a younger population than is the norm across Canada, but this is not nearly as dramatic in the capital as it is in North Baffin communities. Most of the growth in the Inuit population between 2001 and 2006 was in the youth (15 to 24 years), and middle-aged (40 to 64 years) components. Meanwhile, the number of Inuit children remained constant, as did the population of young adults (25 to 39 years) and elders (65+).

#### 2.1.2.1 Sex Ratios of Inuit and Non-Inuit Components of the Population

The ratio between males and females is an indicator that can provide useful insight into a population. Within the working-age population, for example, an imbalance could suggest that the local labour market is attracting more of one sex than the other.

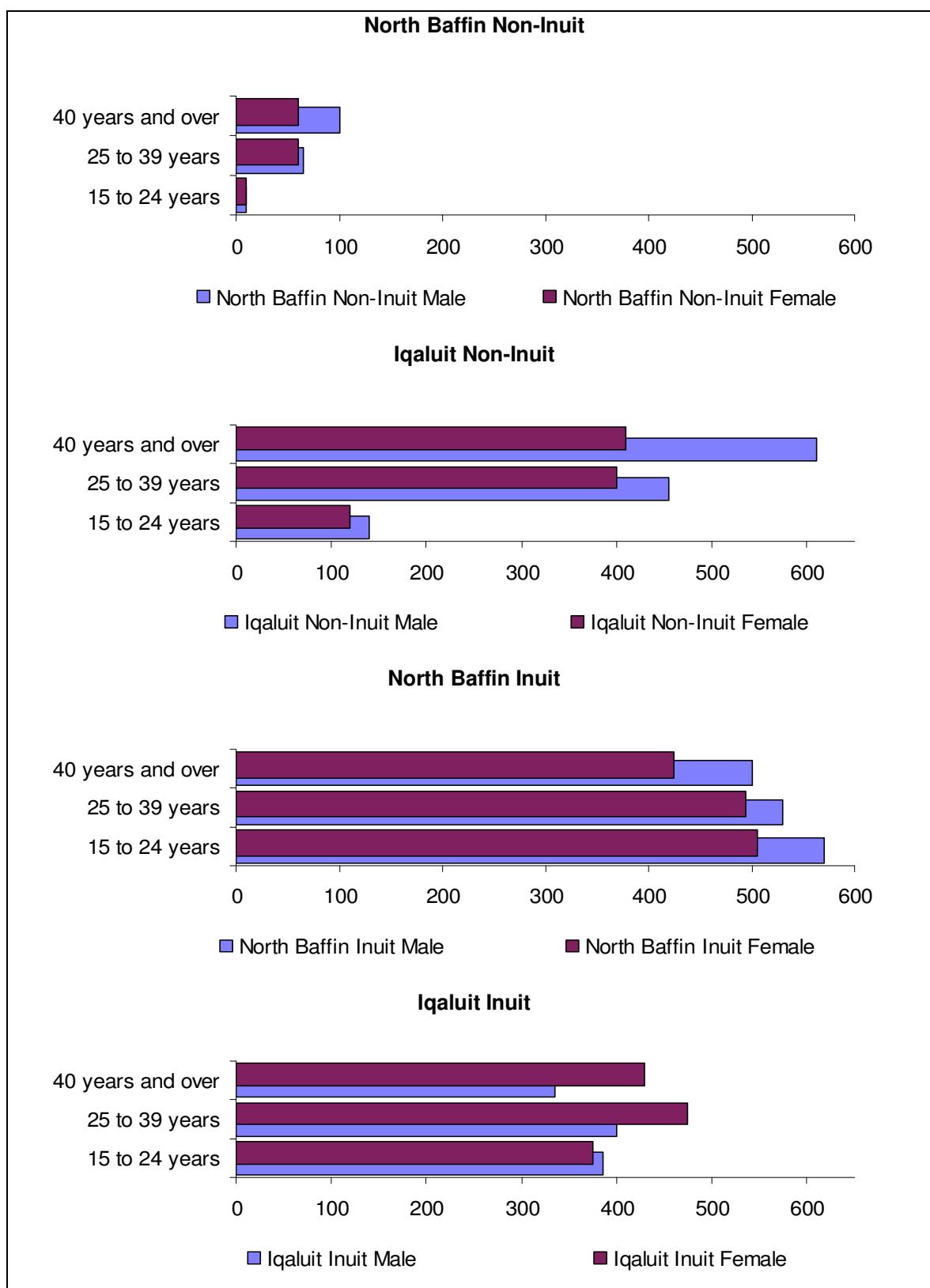
Among non-Inuit there are more males than females in the older age categories of the population. This is particularly visible among those aged 40 and over (see Table 5 and Figure 4). This is interesting, given that across Canada, there are slightly more females than males among this age group (51 females: 49 males). The sex ratio among non-Inuit aged 40 to 64 years in North Baffin is roughly similar to Iqaluit, which is approximately 60 males: 40 females.

Across Nunavut, the number of Inuit males and females are well-balanced. However, this is not the case at finer levels of detail. In particular, the census counted more Inuit males than females resident in North Baffin, while the opposite picture is seen in Iqaluit where the number of Inuit females is greater than that for males. The situation in Iqaluit might be explained by a possible movement of females to take up work in the territorial government and to study at Arctic College.

**Table 5 Sex Ratios in the RSA, Inuit and Non-Inuit Populations – 2006**

			Age Group			
			15 to 24 years	25 to 39 years	40 to 64 years	65+ years
Total	Canada	<i>male ratio</i>	0.51	0.49	0.49	0.45
Non-Inuit	Nunavut	Males	205	790	1,075	55
		Females	195	715	745	35
		<i>male ratio</i>	0.51	0.52	0.59	0.61
	Iqaluit	Males	135	450	585	40
		Females	125	405	385	15
		<i>male ratio</i>	0.52	0.53	0.60	0.73
	North Baffin	Males	10	65	95	-
		Females	10	55	70	-
		<i>male ratio</i>	0.50	0.54	0.58	x
	South Baffin	Males	15	45	85	-
		Females	10	45	50	-
		<i>male ratio</i>	0.60	0.50	0.63	x
Inuit	Nunavut	Males	2,655	2,580	2,185	375
		Females	2,530	2,645	2,215	335
		<i>male ratio</i>	0.51	0.49	0.50	0.53
	Iqaluit	Males	385	405	305	20
		Females	370	475	390	50
		<i>male ratio</i>	0.51	0.46	0.44	0.29
	North Baffin	Males	570	535	435	70
		Females	505	500	375	50
		<i>male ratio</i>	0.53	0.52	0.54	0.58
	South Baffin	Males	400	390	385	65
		Females	380	400	375	65
		<i>male ratio</i>	0.51	0.49	0.51	0.50

Source: Calculated from 2006 census data.

**Figure 4 Gender Balance in RSA, Inuit and Non-Inuit Populations – 2006**

Source: Statistics Canada, 2006 Census, custom aggregations of age data prepared for Brubacher Development Strategies Inc. 2008.

## 2.2 MIGRATION

In its recent economic forecast for the three territories, the Conference Board of Canada projects that Nunavut will experience an ongoing net flow of residents out of the territory over the next decade. They estimate approximately 175 more residents moving out of the territory than moving into Nunavut each year. However, in spite of this expected out-migration, the territory's high birth rate is expected to support continued population growth.<sup>2</sup> This section provides baseline data regarding community perspectives related to migration, followed by statistical data related to migration into and out of the RSA.

### 2.2.1 Community Perspectives Related to Migration

#### 2.2.1.1 In-Migration of Southern Workers

A potential influx of outsiders is a concern for some residents and leaders in the small North Baffin communities:

[Hamlet Leader 3]: "...with the mine, will they encourage people to stay here, rather than flying back and forth?"

[Public Sector 2]: "I'm worried that Pond Inlet might be swamped by people moving into the community."

The experience of government decentralization has provided some experience with this:

"There are "rough spots" arising in [my community] related to the mix of cultures now working together."<sup>3</sup>

The influence that employment compensation arrangements might have on in-migration of workers was raised during a meeting between Baffinland and the hamlet of Clyde River:

Hamlet official: "With the mine, will they encourage people to stay here, rather than flying back and forth? ...[Some companies] give money to relocate and buy a house."<sup>4</sup>

#### 2.2.1.2 Labour Mobility and Choice of Community

The possibility for labour mobility introduced by multiple point-of-hire communities is perceived by some as an opportunity to reunite extended families, return to one's traditional land, or to go to where valued services are most readily available:

"We could live in Iqaluit and work, but I'd rather live in [North Baffin]. My kids have been homesick for [my home community] for the last seven years. They have more things to do for kids there. There is hardly anything here in [another North Baffin community]. Only one gym, no drop-in centres here. My kids like sports... [Back home] they have two gyms, an arena, a drop-in centre. They can hardly wait to move back there. Here sometimes they go to the adult education centre to use the computers, but it's only at certain times...[back home], you can drop in any time.

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<sup>2</sup> Conference Board of Canada. 2010. *Northern Outlook, January 2010 – Economic Forecast*. Ottawa, Ontario.

<sup>3</sup> Comment made during ED&T socio-economic workshop, November 2007.

<sup>4</sup> Hamlet meeting with Baffinland, April 2008.

...My parents had 12 kids. My brothers and sisters have all moved back to [our home community], and I'm moving back there now so we are going to have a big family there all together. We were spread out all over and now we are going to be back together again. It's going to be great!"<sup>5</sup>

"I'd move to Iqaluit if they keep hiring from Iqaluit."<sup>6</sup>

[Researcher: Would you consider moving to Pond Inlet?]

[Worker 12]: "No, definitely not...too small for me. [How about moving to Ottawa?] We've considered moving down south—it would depend on employment, how far the kids are in their education."<sup>7</sup>

[Researcher: Would you come back to this community or maybe move to Iqaluit?]  
[Applicant 1]: "I would come back to this community." [Why is that?] "Not so much drugs and alcohol — Iqaluit's way too open for drugs and alcohol." [What about a place like Ottawa?] "It would be the same. Too much drugs and alcohol."<sup>8</sup>

[Worker 6]: He prefers living in this community to [a previous small community where he lived]—it's the land he knows. Sometimes in [previous community] he didn't know where to hunt. I asked if he'd live in Ottawa or Iqaluit—no... "I hate cities."<sup>9</sup>

### 2.2.2 Stability of Residency

The Inuit population of North Baffin communities was very stable over the five-year period leading up to the 2006 census. Only one-in-ten Inuit had re-located from another community during this period (see Table 6 and Figure 5). A similar picture of stability in the Inuit population can be seen during the period before 2001. Evidently the decentralization of territorial government jobs to Igloolik and Pond Inlet during this period did not lead to major relocation of Inuit workers from other communities, although some instances, no doubt, did occur.

This contrasts sharply with the non-Inuit population of North Baffin, where only one-in-three (35%) of non-Inuit residents had been resident in the same community five years earlier. The level of instability of the non-Inuit population had been even slightly higher during the five years leading up to the previous census in 2001. At that time, only slightly more than one in four (27%) non-Inuit residents had lived in the community five years before.

The residential stability of the Inuit population in Iqaluit is significantly less than that seen in the North Baffin. In the five years leading up to 2006, two-in-ten Inuit moved to Iqaluit from another community, province, or territory. This level of mobility declined from a rate of one-in-four (24%) during the period before 2001.

Stability of the non-Inuit population is considerably higher in Iqaluit than it is in the North Baffin, and appears to be trending in a direction of greater permanency. Before 2001, 41% of this

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<sup>5</sup> Worker 5, interviewed in 2008.

<sup>6</sup> Worker 9, interviewed in 2007.

<sup>7</sup> Worker 12, interviewed in 2007.

<sup>8</sup> Applicant 1, interviewed in 2008.

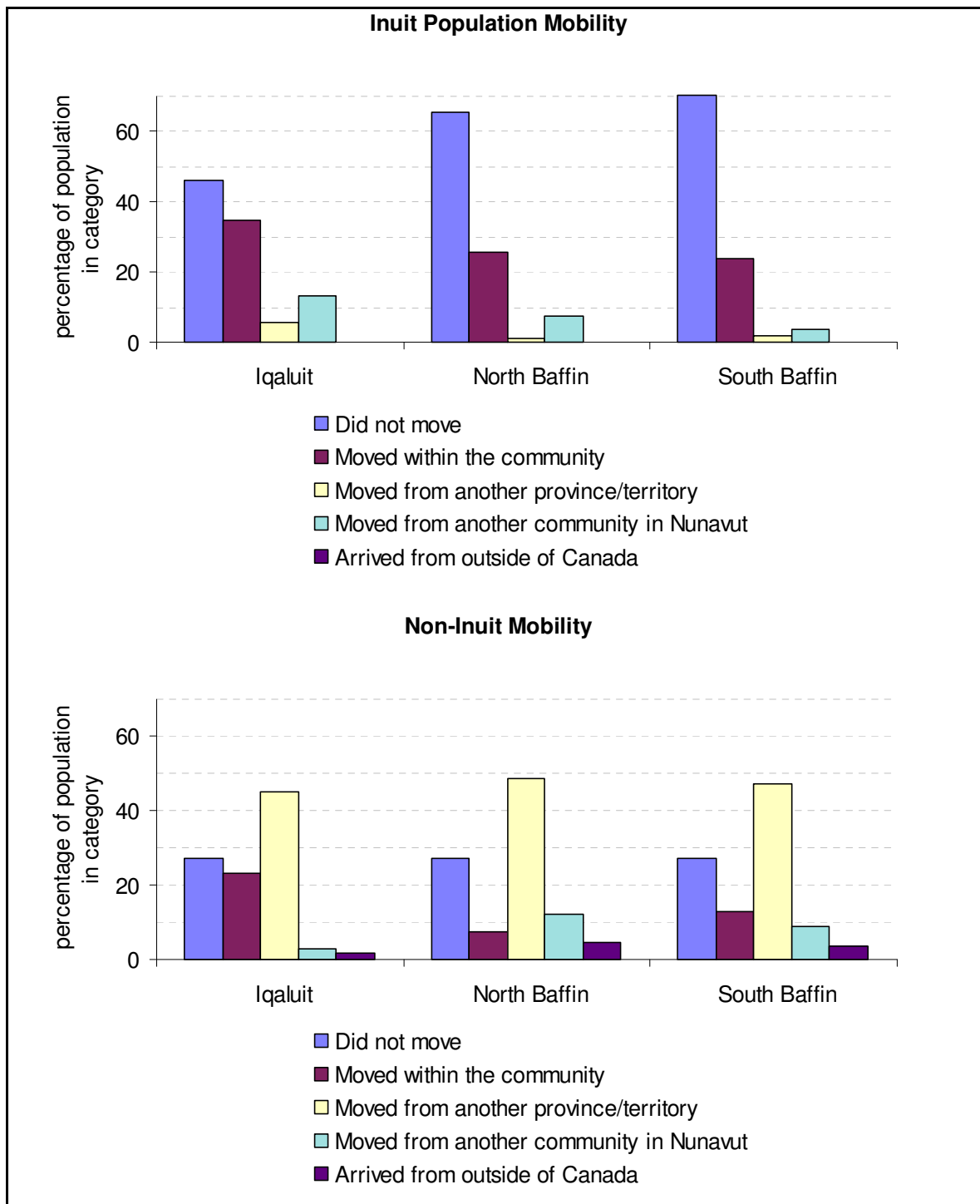
<sup>9</sup> Notes from interview with Worker 6, interviewed in 2008.

population had been resident in the capital for at least five years. By 2006, this stable population had increased to half (50%).

**Table 6 Movement of People Within and Into the LSA (Five-Year Mobility Status), 2006**

			Iqaluit	North Baffin	South Baffin
			<i>(percent of population in category)</i>		
2006	Inuit	Did not move	46	65	70
		Moved within the community	35	26	24
		Moved from another province/territory	6	1	2
		Moved from another community in Nunavut	13	8	4
		Arrived from outside of Canada	0	0	0
	Non-Inuit	Did not move	27	27	27
		Moved within the community	23	8	13
		Moved from another province/territory	45	48	47
		Moved from another community in Nunavut	3	12	9
		Arrived from outside of Canada	2	5	4
2001	Inuit	Did not move	31	53	58
		Moved within the community	44	38	34
		Moved from another province/territory	7	2	2
		Moved from another community in Nunavut	17	7	6
		Arrived from outside of Canada	0	0	0
	Non-Inuit	Did not move	20	21	18
		Moved within the community	21	6	13
		Moved from another province/territory	52	58	56
		Moved from another community in Nunavut	4	9	9
		Arrived from outside of Canada	2	6	4

Source: Statistics Canada, 2006 Census; custom aggregations for North Baffin and South Baffin.

**Figure 5 Movement of People Within and Into the LSA (Five-Year Mobility Status), 2006**

### 2.2.3 Net Migration into the study area – Origin and Destination

Establishing a baseline for the flow of people into and out of the LSA is important to detect whether the Project leads to increased migration of Inuit out of the study area, or increased movement of non-Inuit into the region.

#### *Flows of Inuit Between Nunavut and the South*

There are indications of an increasing net movement of Inuit from communities in the north to urban centres in the south. During the 10-year period between the 1996 and 2006 censuses, the Inuit population in regions outside the traditional Inuit lands, or “Inuit Nunaat,” increased 62% from 6,795 to 11,000 individuals.<sup>10</sup> In 2006, Inuit living outside the Inuit Nunaat accounted for 21.8% of the 50,480 Inuit living in all regions of Canada. There are, however, few data on the specific flow of Inuit migrants from North Baffin and Iqaluit components of the LSA, and the south. Nor have data been located to indicate flow back into Inuit Nunaat from southern locations.

There are, no doubt, many different motivations for moving out of the north. Pauktuutit has noted that Inuit move, “to pursue education and career opportunities. Still many other urban Inuit have fled their home communities to escape abuse, overcrowded housing, the legacy of residential schooling, and poor living conditions in the North. ...Still others move to the south to access specialized healthcare and treatment options that are not available in their home community” (Pauktuutit 2007).

#### *Flow of Non-Inuit Between the South and Nunavut*

As suggested by the analysis of the non-Inuit component of the LSA population, there has been tremendous movement between southern origins and Iqaluit and North Baffin, with nearly half the population changing-over within five years. The majority of this group comes to pursue employment opportunities and, as indicated by the age profile, does not settle permanently in the region.

#### *Net Flow into the Baffin Region*

Table 7 and Figure 6 illustrate the flow of people into and out of the Baffin region from six geographic regions.<sup>11</sup>

Two conclusions can be drawn from these data. First, during the period from 1997 through 2002 — leading up to division of Nunavut from the Northwest Territories, and for several years into the establishment of the territorial government — the net flow of people was mostly into the Baffin region. Since around 2002, this has reversed, with more people leaving the Baffin region than moving into the region. However, this net migration number is small, in the order of 150 individuals per year, or less than 1% of the total population of the region. During the period

<sup>10</sup> Two data sources were available. Statistics Canada, “2006 Census Inuit Tables” Catalogue no. 89-636-X-No.001 provides a snap shot of the increase in Inuit numbers outside Inuit Nunaat. Secondly, the Statistics Canada, Small Area and Administrative Data Division, Annual Migration Estimates by Census Division/Census Metropolitan Area (91C0025) tables provide insight into flows from major regions—including the Baffin region—and specific southern regions. However, as these tables are derived from taxfiler data, they do not distinguish Inuit identity.

<sup>11</sup> These geographies were constructed for convenience of visual presentation. The source data provide more precise identification of origins and sources of flow. In addition, it is possible to analyze in-migration and out-migration separately. For this baseline, net flow was considered to be the appropriate indicator.

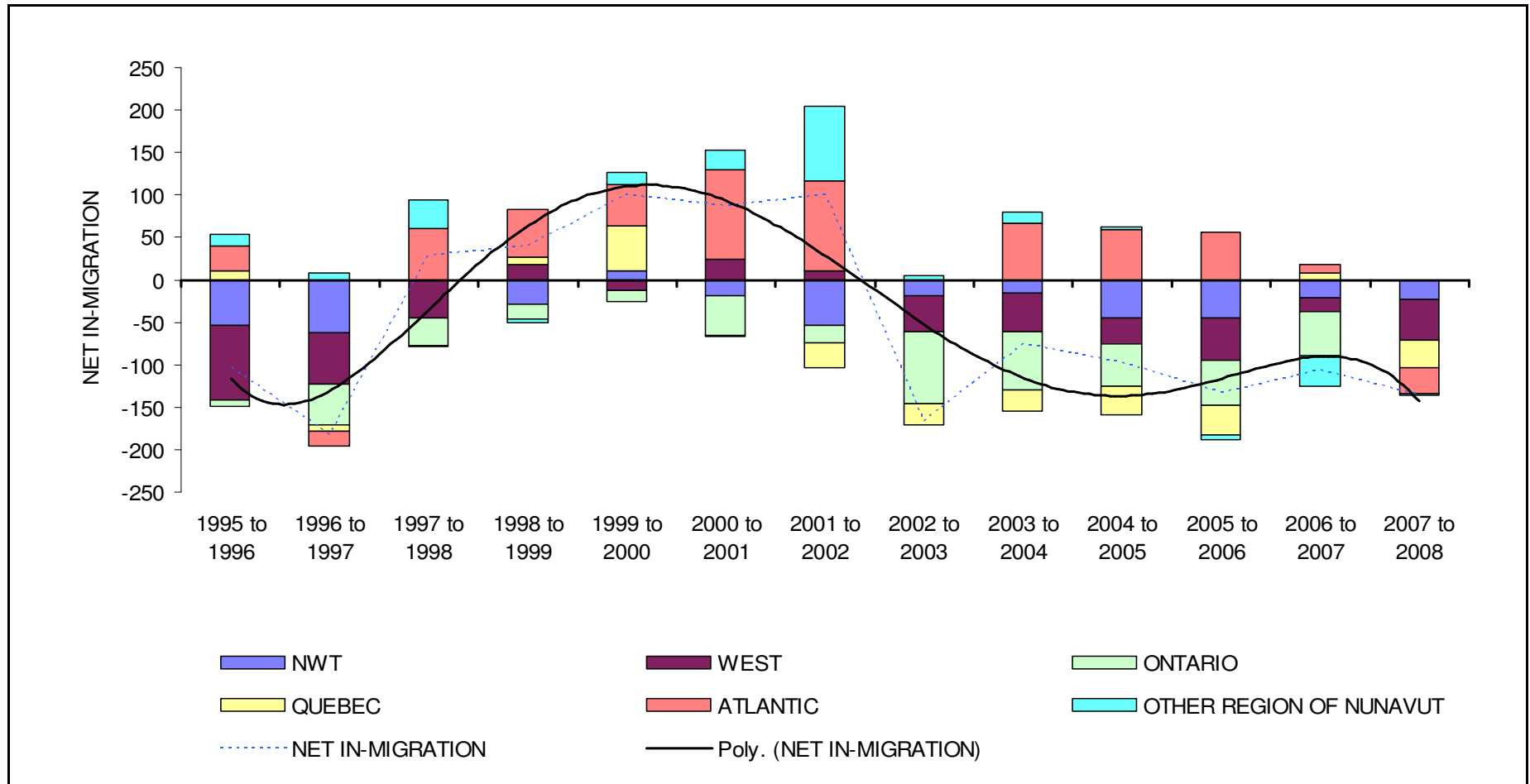
leading up to division of Nunavut from the Northwest Territories, and for several years into the establishment of the territorial government, the flow was mostly into the Baffin region.

Secondly, certain regions outside of Nunavut are consistent “net-suppliers” of in-migrants, while other regions have consistently received more out-migrants from the region than they supplied (see Table 7). Other regions of Nunavut as well as the Atlantic region of Canada have consistently seen more people leave for the Baffin Region than they saw arrive from the Baffin. Since 1995/96, 548 more individuals moved to the Baffin region from Atlantic Canada than returned to that region. By contrast, the Baffin Region provided a net contribution of 497 people to the population of Ontario during the same period, as well as 373 to the Northwest Territories (NWT) and 383 to western Canada.

**Table 7 Net Migration In and Out of the Baffin Region, by Origin & Destination**

	Other region of Nunavut	NWT	Western Canada	Ontario	Quebec	Atlantic Canada	<i>Net in- migration</i>
	(number entering Baffin from the region minus number leaving)						
1995 to 1996	14	-53	-88	-8	11	29	-103
1996 to 1997	8	-63	-59	-49	-7	-18	-182
1997 to 1998	33	0	-44	-33	-1	61	29
1998 to 1999	-4	-28	18	-18	9	56	41
1999 to 2000	15	11	-12	-14	53	48	101
2000 to 2001	23	-19	24	-46	-1	106	87
2001 to 2002	88	-53	11	-21	-30	105	100
2002 to 2003	5	-18	-43	-85	-25	0	-166
2003 to 2004	13	-16	-45	-69	-25	67	-75
2004 to 2005	3	-45	-31	-49	-34	59	-97
2005 to 2006	-7	-45	-50	-53	-34	56	-133
2006 to 2007	-36	-21	-16	-52	8	10	-107
2007 to 2008	-1	-23	-48	0	-32	-31	-135
<i>last 5 yrs</i>	-28	-150	-190	-223	-117	161	-547
<i>previous 5 yrs</i>	127	-107	-2	-184	6	315	163
<i>total from 1995</i>	154	-373	-383	-497	-108	548	-640

Source: Statistics Canada, SAAD Division, based on T1FF data. Prepared by Brubacher Development Strategies, July 2010.

**Figure 6 Net Migration, Baffin Region, by Origin and Destination – 1995 to 2007**

Source: Based on data from Statistics Canada, SAAD Division, based on T1FF data. July 2010.

## 2.3 FAMILY STRUCTURE

### *Census Families and Other Living Arrangements*

Individuals either live alone, with immediate family members, with relatives, or with other people who are not related. Understanding the configuration of a population in terms of these alternative living arrangements provides some insight into social stability. The conventional interpretation is that people living with family or relatives will have higher expectations to follow family social norms than those living alone or with unrelated peers. “Boom town” concerns frequently arise when large numbers of workers move into a community to live as “non-family persons” in socially unrestricted household configurations.

During a conference of working groups held in Arctic Bay, a discussion touched on the issue of young people living without parental direction:

[Resident 1]: “Every community has places [houses] where people go to spend money and party.”

[Resident 33]: “Younger people without parents need guidance and healing. These people might get into sniffing and drugs. Those are the ones who are at risk. Those who are alone are more at risk. These people are the ones the healing programmes should focus on.”

[Resident 34]: “Lone people, without parents, have always been, but it’s different today. Those with parents, by 20 years of age they had skills, a wife... Elders taught there was no easy way out—maximum discipline. Today it’s different...even 20 year olds are not able to even look after themselves, [let alone others]. ...That is why we say there needs to be healing and counselling at Mary River.”

[Facilitator]: “Are the people without families often the ones causing trouble? Are they the ones most in need of counselling?”

[Group]: “Yes.”

For the living configurations for both Inuit and non-Inuit populations of the RSA, see Table 8. In North Baffin, 94% of Inuit live with immediate family members (i.e., in a “census family”). Only 3% live either alone or with unrelated people, the remaining 3% living with relatives. Perhaps unexpectedly, this picture extends to Iqaluit as well.

The picture for non-Inuit is rather different, with approximately three-in-four living with immediate family members, while most of the remainder either live alone—14% in Iqaluit and 21% in North Baffin—or with unrelated people—9% for Iqaluit and 6% for North Baffin.

### *Economic Family Arrangements*

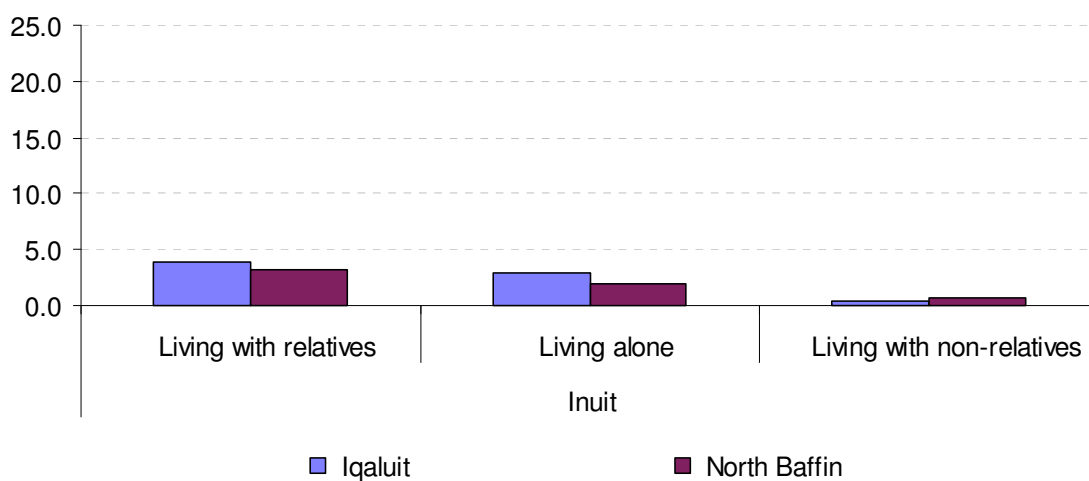
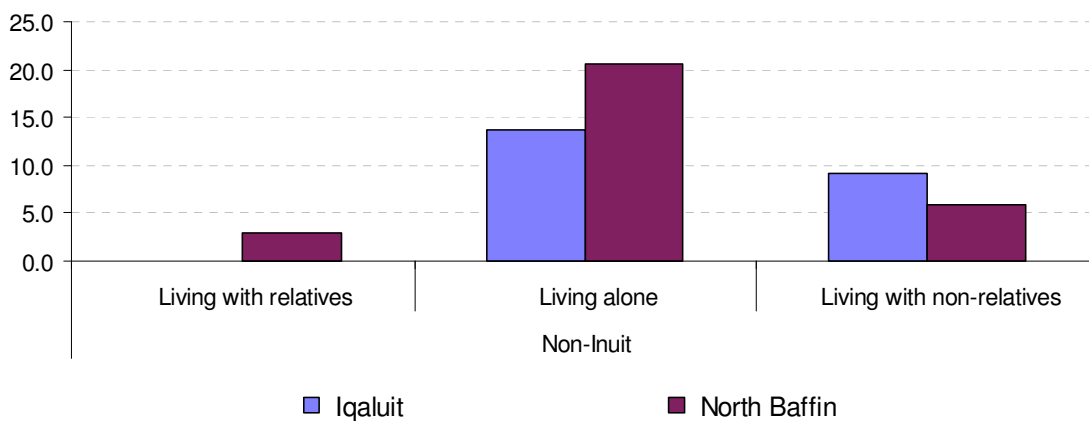
Configurations of living arrangements including either immediate family members or relatives are considered “economic families,” implying an assumption of the sharing of resources to some extent. Individuals living with unrelated persons are not expected to be sharing resources such as food or income. These individuals, plus those living alone, are not considered to be in an economic family.

For a picture of the economic family status of LSA residents, according to age and Inuit identity, see Table 9 and Figure 7. The highest incidence of individuals living in situations where they are presumed to not have economic relationships with anyone else in their household is seen among non-Inuit over the age of 25 years. Close to one-third of these individuals are living in non-economic family settings. While this sort of arrangement is fairly uncommon in the Inuit population, there is a small group of about one-in-ten Inuit in the 25- to 39-year-old and 40+ years age categories living in this type of setting in Iqaluit. In total, 140 non-Inuit males (110 females) and 55 Inuit males (40 females) age 25 to 39 years are living in non-economic families in Iqaluit.

This analysis does not lead to any specific conclusions related to social stability. However, it does set a baseline for monitoring the structure of households. In particular, the data provide insight into the baseline level of “unattached young, single males” often associated with boom and bust resource developments.

**Table 8 Census Family and Other Household Configurations, by Inuit Identity – 2006**

		Iqaluit	North Baffin	South Baffin	Nunavut
		<i>(percentage of population living in household configuration)</i>			
Inuit	Living in a census family	92.8	94.0	92.3	92.6
	Living with relatives	3.9	3.3	3.7	3.5
	Living alone	2.9	2.0	3.3	3.0
	Living with non-relatives only	0.4	0.7	0.6	0.9
Non-Inuit	Living in a census family	76.1	72.1	72.7	73.6
	Living with relatives	0.0	2.9	0.0	1.6
	Living alone	13.8	20.6	21.8	15.9
	Living with non-relatives only	9.2	5.9	7.3	8.9

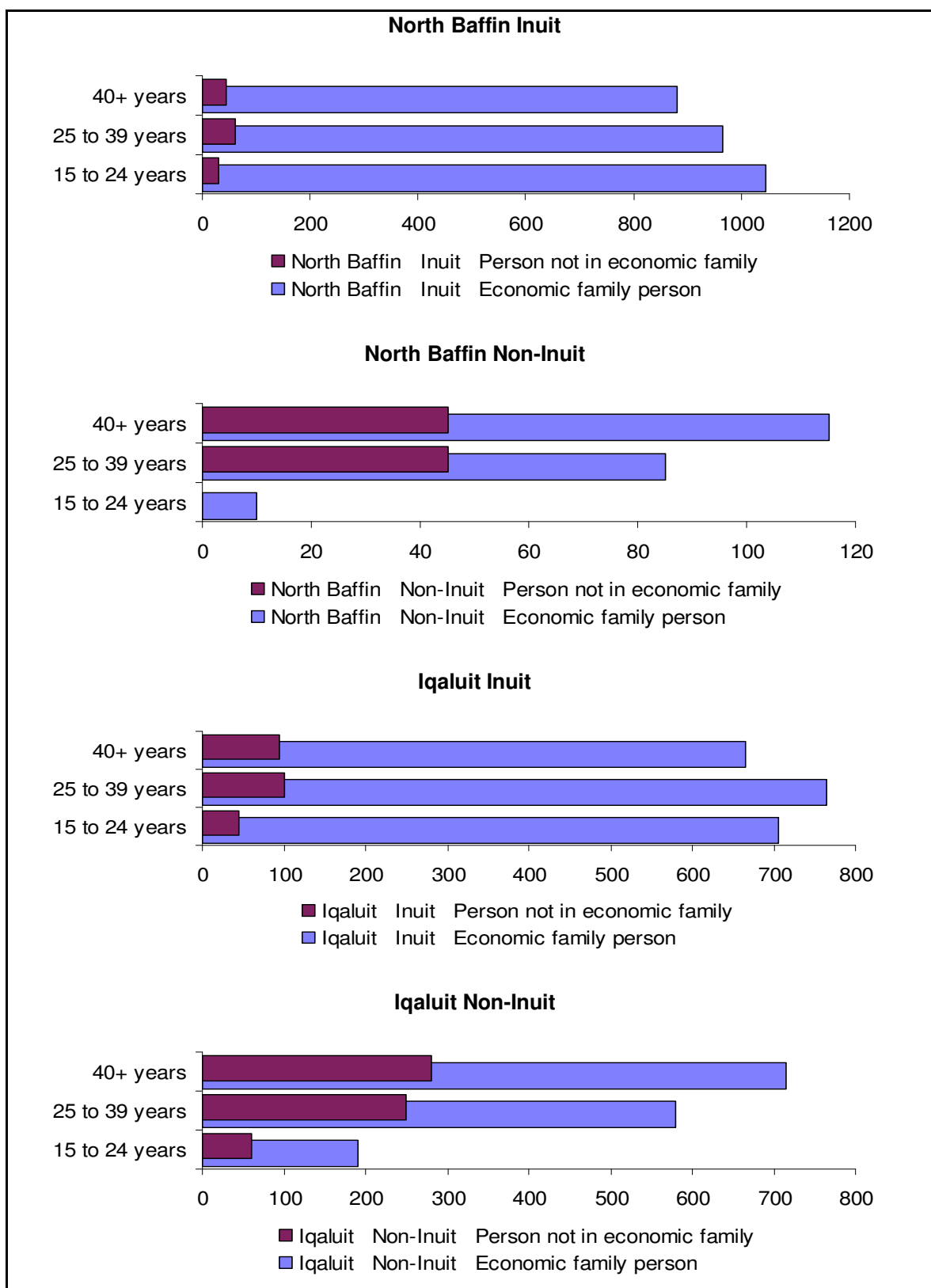
**Inuit Population****Non-Inuit Population**

Source: Statistics Canada, 2006 Census.

**Table 9 Economic Family Status, by Age and Inuit Identity – 2006**

			Age Group		
			15 to 24 years	25 to 39 years	40+ years
North Baffin	Inuit	Economic family person	1045	965	880
		Person not in economic family	30	60	45
	Non-Inuit	Economic family person	10	85	115
		Person not in economic family	0	45	45
Iqaluit	Inuit	Economic family person	705	765	665
		Person not in economic family	45	100	95
	Non-Inuit	Economic family person	190	580	715
		Person not in economic family	60	250	280

Source: Statistics Canada, 2006 Census; custom aggregations of economic family status data prepared by Statistics Canada for Brubacher Development Strategies Inc. 2008.

**Figure 7 Economic Family Status, by Inuit Identity and Age – 2006**

Source: Statistics Canada, 2006 Census; custom aggregations of economic family status data prepared by Statistics Canada for Brubacher Development Strategies Inc. 2008.

### 2.3.1 Children in Single-Parent and Two-Parent Families

Many situations can lead to children living in single-parent family situations, or in situations that are functionally the same as a single-parent family. Some of these include the loss of one parent from a previously two-parent family. This can occur through the death of a parent, geographical separation of a parent who leaves the community to pursue educational or work opportunities, and marriage breakup through separation or divorce. In other instances, the child might be born into a situation where the father and mother have never been in a marriage or common-law relationship. Still other situations can involve adoption of a child by an adult who is not living in a common-law or marriage relationship.

One-in-four children in Nunavut live with a single-parent, while the remaining three quarters live with two parents (see Table 10). The incidence of children living in single-parent families in Iqaluit is similar to this territorial average at 26%, while in North Baffin communities the rate ranges from 26% in Hall Beach and Igloolik to 20% in Arctic Bay, Pond Inlet, and Clyde River. In comparison, approximately 22% of Canadian children live in single-parent families, suggesting that the incidence in the RSA is in line with the national situation.

**Table 10 Children in Single-Parent Families in the LSA and RSA – 2006**

	Children in families with two parents (total number of children)	Children In Single- Parent Families	% Children In Single- Parent Families
Hall Beach	280	100	26.3%
Igloolik	620	217	25.9%
Arctic Bay	284	71	19.9%
Pond Inlet	524	138	20.9%
Clyde River	343	88	20.4%
Iqaluit	1,645	580	26.1%
Nunavut	10,600	3,490	24.8%
Canada	7,586,250	2,147,520	22.1%

Source: Nunavut community data derived from Statistics Canada 2006 Census Community Profiles online, September 2007. Canada and Nunavut data from 2006 Population Census, Catalogue No. 97-553-XCB2006007.

This statistical picture may not be particularly useful in understanding the well-being of children in families of the study area. In situations where the single-parent is resident in his or her home community, proximity to extended family members can lead to a much different experience for children than in situations where family members are not close at hand. In contrast, the high cost of transportation can serve to isolate single-parents and their children from close relatives when the parent is living in a community away from these relatives.

These data are relevant, however, in terms of implications for child care in the context of fly-in/fly-out work rotations. The greater the rate of single-parent families, the more inaccessible these jobs might be—or the more challenging and complex child-care arrangements will become. The data also set a baseline against which future spikes in single-parent family rates, should they occur, can be identified and underlying causes investigated.

## 2.4 LANGUAGE AND CULTURE

### 2.4.1 Inuktitut

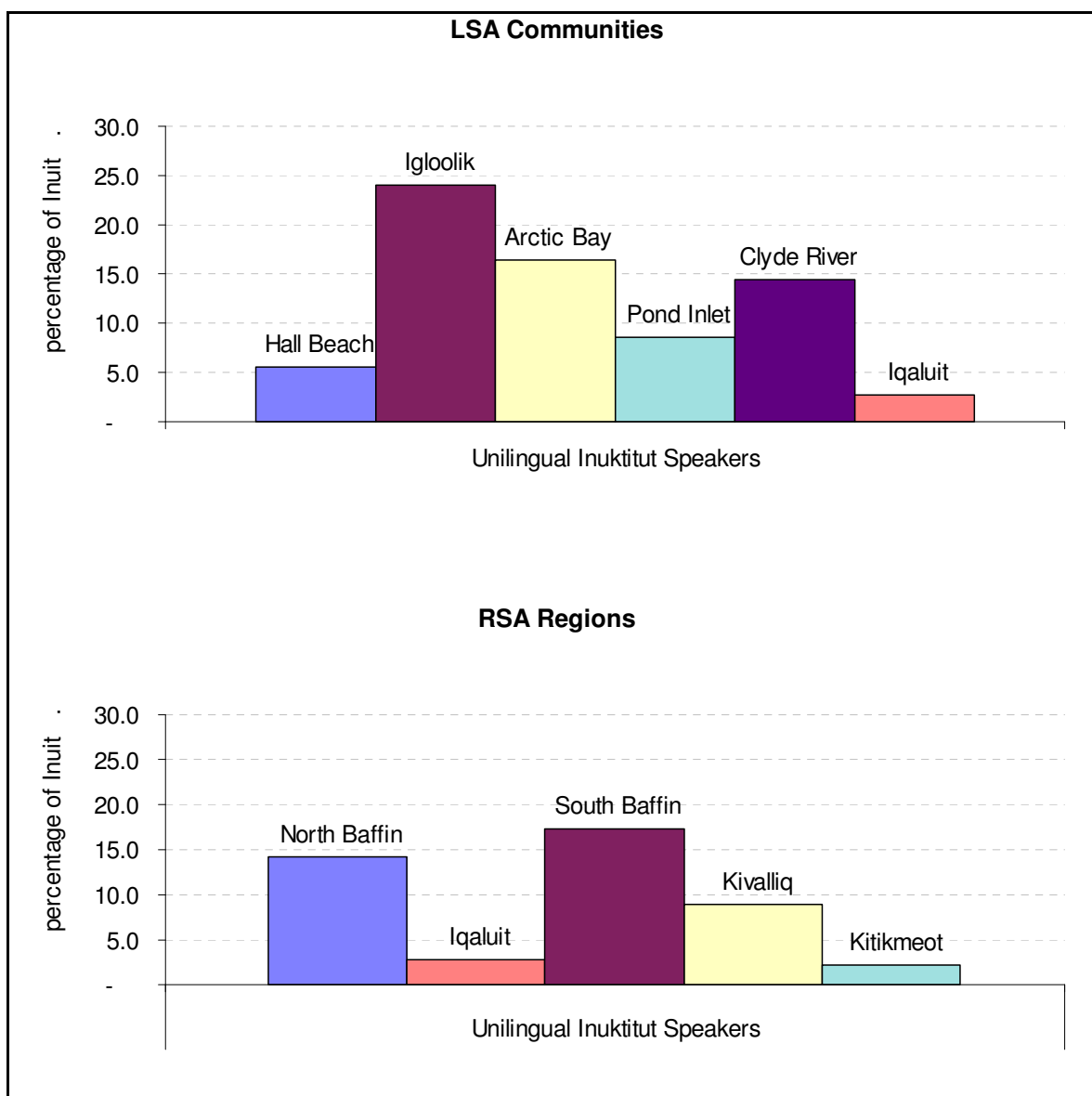
The Inuktitut language is prevalent in North Baffin LSA communities (see Table 11, Figure 8, and Figure 9). Nearly all Inuit residents of the North Baffin LSA learn this language as their mother tongue, and for nine-in-ten residents, Inuktitut is the language spoken most prevalently at home. A portion of the population, ranging from 6% in Hall Beach to 24% in Igloolik, consists of unilingual Inuktitut speakers. Of particular importance is the use of Inuktitut in the workplace environment. In North Baffin, nearly two-in-three Inuit work in settings where Inuktitut is the prevalent language. The lowest rate of use is in Hall Beach, at 44%, ranging to a high of 75% in Clyde River and 72% in Igloolik.

**Table 11 Knowledge and Use of Inuktitut Among Inuit – 2006**

	Unilingual Inuktitut Speakers	Mother tongue is Inuktitut	Language spoken mostly at home is Inuktitut	Language spoken mostly at work is Inuktitut
	<i>(percentage in category)</i>			
Hall Beach	5.6	98.4	94.4	43.5
Igloolik	24.0	98.6	97.2	72.4
Arctic Bay	16.4	97.7	93.8	63.0
Pond Inlet	8.6	96.7	91.4	61.9
Clyde River	14.5	99.4	95.6	75.4
Iqaluit	2.7	78.5	47.6	20.3
North Baffin	14.3	96.7	91.3	62.5
South Baffin	17.4	98.1	93.7	66.6
Kimmirut	11.7	97.4	89.6	54.5
Cape Dorset	11.9	97.4	91.2	63.6

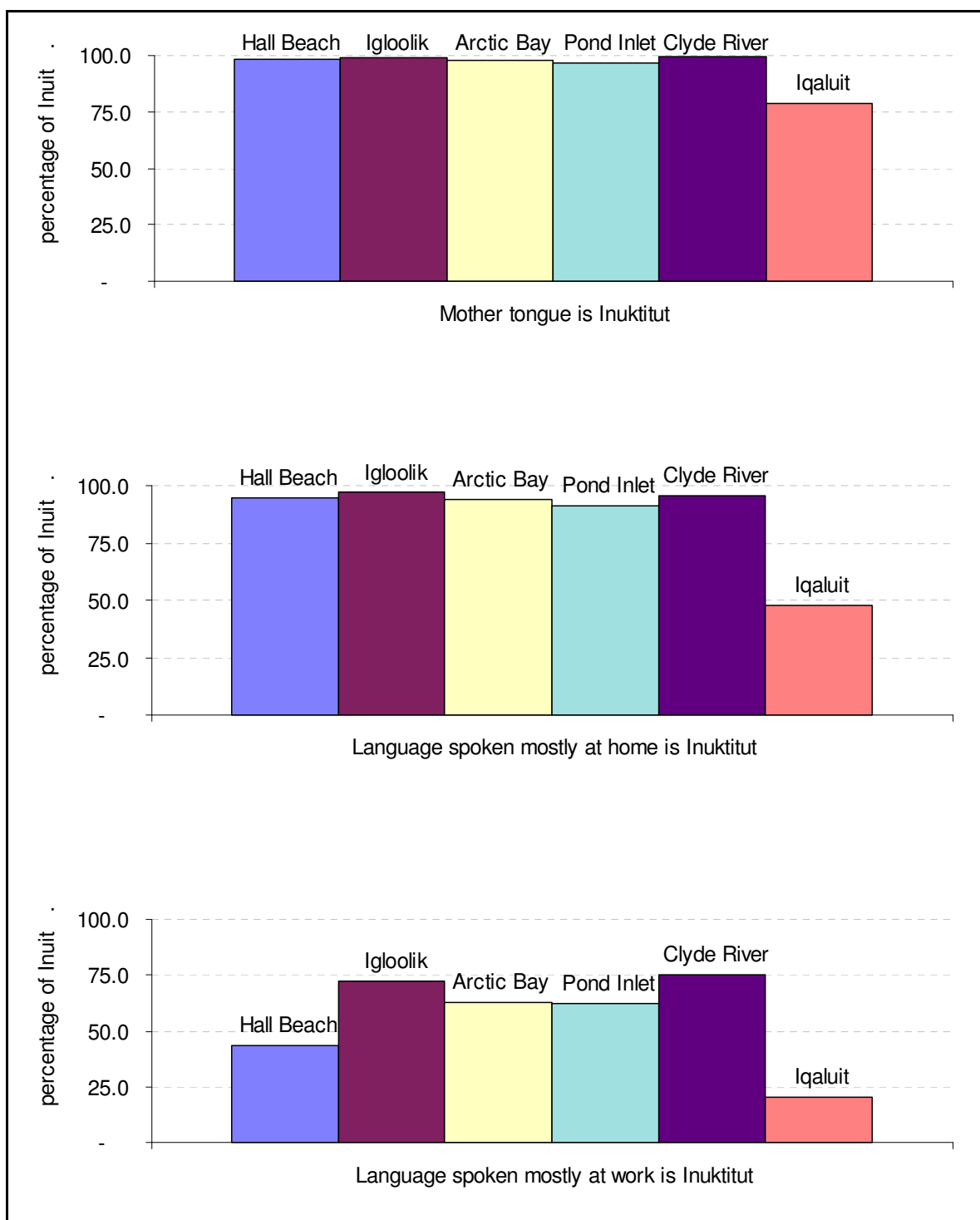
Source: Derived from 2006 census; custom aggregations for North Baffin and South Baffin prepared by Statistics Canada for Brubacher Development Strategies Inc. 2008.

Notes: 1) The Aboriginal identity population for these communities is assumed to be Inuit. The census does identify a very small percentage of non-Inuit Aboriginal persons in Iqaluit. 2) Census references to non-official languages or to “neither English nor French” are assumed to imply Inuktitut in the context of these communities.

**Figure 8 Unilingual Inuktitut Speakers in the LSA, RSA, and Nunavut Regions – 2006**

Source: Derived from 2006 census; custom aggregations for North Baffin and South Baffin prepared by Statistics Canada for Brubacher Development Strategies Inc. 2008.

Notes: 1) The Aboriginal identity population for these communities is assumed to be Inuit. The census does identify a very small percentage of non-Inuit Aboriginal persons in Iqaluit. 2) Census references to “non-official” languages or to “neither English nor French” are assumed to imply Inuktitut in the context of these communities.

**Figure 9 Use of Inuktitut by Inuit At Home and At Work – 2006**

Source: Derived from 2006 census; custom aggregations for North Baffin and South Baffin prepared by Statistics Canada for Brubacher Development Strategies Inc. 2008.

Notes: 1) The Aboriginal identity population for these communities is assumed to be Inuit. The census does identify a very small percentage of non-Inuit aboriginal persons in Iqaluit. 2) Census references to "non-official" languages or to "neither English nor French" are assumed to imply Inuktitut in the context of these communities.

The linguistic picture in Iqaluit is dramatically different from that of North Baffin. In the capital, slightly more than one-fifth of the Inuit population did not learn Inuktitut as their mother tongue and fewer than half speak Inuktitut at home.<sup>12</sup> Only 20% of Inuit in Iqaluit speak Inuktitut in the workplace and only 3% are unilingual Inuktitut speakers. It seems clear that while Inuktitut is healthy in North Baffin, it is under considerable threat in Iqaluit. Integration of Inuktitut language into Nunavut's public sector has been a goal of the Nunavut government. Results of language training of senior bureaucrats have been perceived, however, to have greatest value in demonstrating respect toward Inuit.

### *Community Perspectives on Language*

Although Inuit comprise a very large majority of the North Baffin population, linguistically Inuktitut has, in the past, often been excluded from major sectors of economic and administrative life. This has placed Inuit in the paradoxical situation of becoming a minority group in important areas of their own society. Considerable interest has been raised relative to language policy at the Mary River site:

[Resident]: "Another question I have is related to hiring unilingual Inuit. Will they have an opportunity to work? Unilingual Inuit are used to working hard. I worked during the first discovery of iron ore at Mary River."

[Baffinland Representative 4]: "We will work to bring unilingual workers to site, and focus on conveying safety messages."

[Baffinland Representative 3]: "This year we have three bilingual supervisors, which now makes it possible to hire unilingual speakers."<sup>13</sup>

Residents have also been assured that Inuktitut will be used at the Project by their representatives involved in negotiating the IIBA:

[Qikiqtani Inuit Association (QIA) Representative 2]: "...They need to use the language of Inuktitut and we also encourage them to use Inuktitut, and documents need to be translated. At Mary River you can see Inuktitut notices posted at the site."<sup>14</sup>

Reference to how social and cultural changes are also being reflected in language was made during a meeting with the Pond Inlet Pisiksik Working Group. The following exchange came up during a discussion of healing and how people seek counselling support. It relates to communication between youth and elders:<sup>15</sup>

[Resident 27]: "I think a youth representative should be present [in counselling sessions] as well [as an elder], so that it is not just the elder's opinion being expressed...."

[Resident 16]: "There is a big difference between elders and the younger generation. I would walk up to an elder and try to talk to them and get my bad feelings out. But, because I use different words, the elder may not understand."

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<sup>12</sup> The number of Inuit in Iqaluit who learned Inuinnaqtun as the mother tongue is negligible, at between 5 and 10 individuals out of a total of 3,650 residents.

<sup>13</sup> Exchange during Pond Inlet public meeting hosted by Baffinland, September 2007.

<sup>14</sup> Excerpt from QIA presentation during Arctic Bay public meeting hosted by Baffinland, March 2008.

<sup>15</sup> Exchange during meeting with Pond Inlet Pisiksik Working Group, March 2008.

[Resident 27]: “Yes, language can be a big barrier. I know the older way of speaking, but the younger generation is losing it, so it is a barrier, and makes the generations lose the connection. The older generation is still connected, but the younger generation is becoming disconnected.”

The following excerpt from the researcher’s notes provide another perspective on how demographic and cultural changes proceed in small northern communities. These are from a conversation with an individual commenting on the changes he perceived taking place in the western arctic:

With regard to cultural/demographic change, he has worked in Yellowknife in the 1980s to 1990s and saw major changes occur there, and also in the Kitikmeot, over a decade.

The pathway he sees for Nunavut is this:

Inter-racial marriage and/or professional jobs - education valued at home by parents - children go off to university - areas of life/day where Inuktitut is relevant/familiar gets more narrow (you learn concepts at university or southern colleges in English, then English is the language you use when applying these concepts) and/or the child finds their “niche” outside Nunavut and they settle there.

He has mostly Inuit staff who are fluent in Inuktitut and he encourages them to use it, yet they do the paper work in English by preference...partly because [the rest of the system] is not so Inuktitut-friendly.

He sees the mining future as a cultural threat. People will meet and form relationships and the erosion continues. I guess this is essentially a demographic path to culture change.<sup>16</sup>

#### 2.4.2 Intergenerational Transfer of Culture

The maintenance of Inuit culture in the face of social, linguistic, and economic change is an issue of importance to many residents of the LSA. Finding opportunities to transfer culture and cultural knowledge to the next generation is seen as a critical challenge:

“Here the older people are taking the younger people out to learn Inuit skills. When I was a kid, my father would wake me up at 5:00 am — it was hard! But it taught me that discipline. We lived south of Arctic Bay, toward Igloolik, here and there — where there were animals. My son is learning these skills now — how to hunt a polar bear, narwhals, caribou, build an igloo or shelter.”<sup>17</sup>

“When I’m not working, I mostly do nothing. Stay home. I don’t go hunting. Don’t watch T.V. either. Just relax. I have a snow machine and a four-wheeler. My kids use them and they love to go out hunting. I did a little taking them out to give them experience and after that I told them, do your own experience. They go out anywhere they want to go—even if they break the ski-doo, they know how to fix it themselves.”<sup>18</sup>

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<sup>16</sup> Researcher’s notes from conversation with ‘Public Sector 16,’ in 2008.

<sup>17</sup> Worker 7, interviewed 2008.

<sup>18</sup> Worker 5, interviewed 2008.

A more general expression of optimism about the future of youth and intergenerational communication and knowledge transfer arose during a meeting with Elders in Pond Inlet:

“It seemed like it was impossible to help youth before, probably because they always said they were bored. It is easier to teach the ones who are eager to learn. Some youth don’t seem to enjoy learning about their own culture.

And, it is hard if you only go on short trips, because they only learn part of the traditional ways, and then they are eager to go home and then they just go back to their regular lives. But, I am getting more optimistic about the younger generation, because they seem to be more eager to learn...and once they start to learn, they become more interested.”<sup>19</sup>

“We are doing much less now that we have moved into communities [as compared to living in smaller groups in the old days]. When we were children, before we moved in to communities, we did more. Now that we are in communities, IQ is used less now. Now we have to talk, and teach, and counsel because people are forgetting about IQ. We older people are not teaching it enough. We get invited to go up to the high school and teach. I myself taught IQ skills there for one year—building komatiks (qamutiks), harpoons and gaffs. There isn’t much though—we are waiting for someone to start something. It seems like we take youth out for a short time, and teach them a little IQ, but as soon as they get back in the communities they forget about it. The older generation has IQ, and can help the younger generation to learn.”<sup>20</sup>

## 2.5 POPULATION HEALTH STATUS

### 2.5.1 Life Expectancy

Life expectancy at birth in Nunavut is 10 years shorter than it is for the Canadian population overall. Over the three-year period between 1999 to 2001 life expectancy at birth in Nunavut was 68.7 years (GN Health and Social Services 2004). This indicator has ranged from 67.5 years during the early 1990s to 70.4 years in the mid-1990s. In comparison, life expectancy at birth across the overall Canadian population has increased steadily from 77.9 years during the early 1990s to 79.3 years by the beginning of the new millennium, and to 80.3 years as of 2007 (CIA 2007). Life expectancy at birth in Nunavut is only slightly lower than that of Greenland, which was 70.2 years in 2007.

Life expectancy at age 65 is fairly similar among the male populations of Canada and Nunavut. In Canada, men age 65 can expect to live an additional 17.1 years on average, while men in Nunavut have a life expectancy of an additional 16.3 years. For women, however, the picture is much different. Canadian women age 65 can expect to live an additional 20.6 years while in Nunavut, women’s life expectancy at age 65 is only 11.4 years, on average.

### 2.5.2 Birth Rate

In Nunavut the birth rate is roughly twice that of Canada generally, and has remained consistent for the period between 2003 and 2006. In the year 2005–2006, for example, the rate in Nunavut was 23.5/1000 whereas in Canada for the same year the birth rate was 10.8/1000. As noted by

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<sup>19</sup> Elder 7, focus group with elders in Pond Inlet, March 2008.

<sup>20</sup> Elder, focus group with elders in Pond Inlet, March 2008.

the Conference Board of Canada (2010), Nunavut's high fertility rate will more than make up for net migration out of the territory, leading to continued population growth into the future.

### 2.5.3 Infant Health and Mortality

The incidence of both pre-term delivery and low birth weight are both high in Nunavut relative to Canada overall. One in 10 births in Nunavut (10.4%) are pre-term. The incidence of low birth weight (under 2,500 g) births in Nunavut between 1991 and 2003 is between 6.7 and 8%. This is slightly higher than the rate of 5.7% for Canada overall.<sup>21</sup>

Nunavut's infant mortality rate has been improving. During the period from 1991 to 2001, the number of infants who die before their first birthday has declined from a rate of 18.3 infant deaths per 1,000 live births, to 13.9, an improvement of 24% over 10 years. However, these rates continue to be much higher in Nunavut than in other regions of Canada. In 2001, for example, the Nunavut infant mortality rate of 15.6 per 1,000 births was 3½ times the Canadian rate of 4.4. The comparable rate for the NWT was 4.9 and for Yukon was 8.7. It is noted that the current rate of infant mortality in Greenland is quite similar to that of Nunavut, at 15 deaths per 1,000 births. Globally, infant mortality rates vary widely, ranging from lows below 3 in countries like Singapore, Sweden, and Japan, to over 75 in various poor tropical countries and more than 150 in some war-torn regions of the world. The median rate among 221 countries is 20 deaths per 1,000 births (CIA 2007).

### 2.5.4 Self-Assessed Health Status

Middle-aged men in Nunavut perceive themselves to be experiencing significant health issues more frequently than their peers across Canada and more frequently than women of a similar age in Nunavut. On a territory-wide basis, more men than women reported "health problems that limit activities or participation" in the 2005 Canadian Community Health Survey. The difference in this perception of health between the sexes was small among the 12 to 19 and 20 to 34 years age groups. However, among those age 35 to 44 years, more than 40% of men reported some activity-limiting health problem, compared with fewer than 15% of women in this age group.

### 2.5.5 Cause-of-Death and Death Rate

The major causes of death in Nunavut are cancer, suicide, heart disease, and accidents. Cancer accounted for 23% of territory deaths in 2004, while suicide made up 20%. Heart and other cardiovascular diseases accounted for 17% of deaths in that year, and accidents were responsible for another 12%.

The profile of causes of death in Nunavut differs from that of Canada overall, where cancer and cardiovascular disease is of greater importance, accounting for 30% and 32% of deaths. Suicide is much less important nationally, accounting for only 2% of deaths in 2004.

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<sup>21</sup> Statistics Canada, CANSIM Table 102-4005, May 11, 2007 update. The range for Nunavut is a 95% confidence interval, calculated from the raw data.

However, Nunavut has a very young population. It is known that the rate of cancer increases with age and that most suicides are committed by the younger segment of a population.<sup>22</sup> To gain insight into what the cause-of-death can tell us about Nunavut's population behaviour, it is necessary to separate out the influence of the territory's age profile.

Age-standardized death rates for provinces and territories reported by Statistics Canada<sup>23</sup> can be used to compare death rates in Nunavut's young population with those of the aging Canadian population. These transformed data allow the following observations to be suggested:

- On an age-standardized basis the proportion of deaths by suicide in Nunavut is nearly four times that of Canada.
- Transportation-related deaths are more than twice as common in Nunavut as in Canada.
- Cancer accounts for a slightly higher share of deaths in Nunavut than in Canada.
- Heart and other cardiovascular disease account for a lower share of deaths in Nunavut.
- Other causes of death account for a greater share of deaths in Canada than in Nunavut.

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<sup>22</sup> The leading causes of death among the Canadian population age 1 year old to 34-years-old are accidents (34% of all deaths in this broad age category), suicide (19% of deaths), and cancer (11%). Source: Derived from Statistics Canada – Catalogue No. 84FR0209: *Mortality, Summary List Of Causes 2004*.

<sup>23</sup> Statistics Canada, Catalogue No. 84FR0209: *Mortality, Summary List of Causes 2004*.

## SECTION 3.0 - COMMUNITY PERSPECTIVES ON WORK

*Theme: What values, perspectives, and suggestions do residents of the LSA hold in relation to work?*

The creation of jobs arising from the Project is a topic of major interest and importance to leaders and residents of the affected communities. Many statements were made during public consultations and community-level research that relate to jobs. Interviews with individuals who experienced fly-in/fly-out work during the Project definition phase, along with supervisors involved during this phase provided further insight into perspectives on the work experience. These are presented under three headings:

- Importance of Jobs
- Observations About the Workplace
- Employee Recruitment, Retention, and Turnover

### 3.1 IMPORTANCE OF JOBS

#### 3.1.1 Need for Jobs

Many residents have commented on the need for jobs. These comments are frequently linked to the changes that have taken place in traditional livelihoods and the ability to provide for the family:

“This Project [Mary River] brings employment. Kids today can’t eat only meat anymore—they need money to buy store food. I will support you to have a route through our region.”<sup>24</sup>

“The potential for Baffinland to have a very positive impact is tremendous. The leading stressors for suicide are powerlessness and hopelessness, in particular for young men. With steady work and a paycheque, they will be providers again and the impact of this could be phenomenal. ...you give someone a job and right away they have a sense of meaning.”<sup>25</sup>

“Having a job is like a hunter who provides for his family. The meaning is the same, the way I look at it.”<sup>26</sup>

“The reason, the ONLY reason [that jobs are important], is that life is changing. The land is changing, and the animals—the seal and fish and caribou—are changing, and so people will need jobs to survive.”<sup>27</sup>

Having a job can be important not only as a source of income but also for the opportunity to engage in positive activities. This perspective was raised during interviews with workers at the pre-Project phase of Mary River. Talking about preferred rotation lengths, one worker noted that he “really doesn’t like being unemployed....nothing to do.”

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<sup>24</sup> Comment during Igloodik public meeting hosted by Baffinland, September 2007.

<sup>25</sup> Public Sector 4.

<sup>26</sup> Resident (man) 3, Arctic Bay conference of working groups, March 2008.

<sup>27</sup> Elder (man) 4, Elders focus group, Pond Inlet, March 2008.

When asked if the motivation was the money or the work itself, the response was:

“[I prefer] more work—I don’t like to be unemployed. ...two weeks off is too long to be off work—there are no opportunities to work in [my community] during this time off.”<sup>28</sup>

Another worker noted:

“Before, when I was in Iqaluit, I was bored. Nothing to do. [Now] when I’m back in Iqaluit on my break, I’m looking forward to come back and keep working. I would like to stay on this job, no matter how hard it is.”<sup>29</sup>

A supervisor adds:

“Some of the people that are more steady, they take great pride in that. They say we’ve been here from the start and haven’t missed a plane, there is a sense of pride there...the fact that some of them have turned their lives around because of a job.”<sup>30</sup>

The need for a wider variety of jobs was also raised. Recognizing that current government jobs require a level of education beyond that attained by many community members, one resident noted the following:

“There are a lot of able-bodied people in the community who are unemployed. The ones who are employed have higher education. I am in full support of your Project....”<sup>31</sup>

Job creation in Pond Inlet and Igloolik got a significant boost during decentralization of several government offices to these communities in the early 2000s, following territorial division. These jobs offered opportunities for some residents, particularly those with education. However, the pace of job creation has not kept up with growth in the pool of high school graduates. As one resident noted:<sup>32</sup>

“There were some new jobs even before the GN decentralization. The Parks Canada visitor’s centre and library made some new jobs, and the hamlet jobs grew a bit—more at the garage and in the office.

“Then in 2000 the GN Building was built. Some people moved to Pond Inlet, but lots of GN people are from Pond Inlet. I notice that people working in GN departments used to be working as cashiers at Northern or Co-op. Back then they had no other choice, even though the cashier jobs were not full-time.

“Even today, students who graduate from high school they end up as cashiers at the store. There is nothing for them....”

Further insight into the current job prospects in one of the smaller communities was provided by a resident of Arctic Bay,<sup>33</sup> who noted how full-time jobs are limited and casual work is more available during the summer months than in the winter:

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<sup>28</sup> Worker (man) 1, interviewed 2007.

<sup>29</sup> Worker (man) 3, interviewed 2007.

<sup>30</sup> Supervisor B, interviewed 2008

<sup>31</sup> Comment made during Igloolik public meeting hosted by Baffinland, September 2007.

<sup>32</sup> Resident 10, interviewed in 2007.

<sup>33</sup> Worker 7, interviewed 2008.

[Worker]: “There are quite a few spring and summer jobs, but the only full-time jobs are hamlet, school...community service. But there are more people [who want work]...expect that more people will go out to Mary River to work.”

[Researcher]: “Can young people get the jobs in the community?”

[Worker]: “Its hard to get those full-time jobs, but right now [during the spring season], people and it's easy to get part-time work as fill-in. But starting in June, the full-time workers will come back to their jobs.”

[Researcher]: “Did you see a change in local job prospects after Nanisivik closed?”

[Worker]: “During winter now, we don't have many jobs for those people who were working at the Nanisivik Mine.”

Other comments about the need for jobs were made during the public meetings hosted by Baffinland:

“There are a lot of able-bodied people in the community who are unemployed. The ones who are employed have higher education. I am in full support of your Project and coming through the area.”<sup>34</sup>

“Living on income support you get tired. After a while, you need real employment.”<sup>35</sup>

### 3.1.2 Job Creation and Concerns about Wildlife

Community members, particularly Elders, frequently expressed their assessment that while the Project may have implications for hunting and travel, the jobs that it will generate are badly needed:

“If you do this properly, the animals should not be bothered. I am a hunter, but I have children who need store-bought food. I am in support of employment, but everyone needs to be in agreement so [there are] less problems later on.”<sup>36</sup>

“Thinking about our future, I'm supportive of the Project long-term. Thinking about now I would oppose thinking about the animals, and we should be thinking about people. You are talking about working with us and we are starting to believe you. ...I want my kids to have work, which is why I am supportive of this Project.”<sup>37</sup>

“I can only say that if there is mining in the future, we will want economic opportunities for the future. We do want to protect animals, but my children will only live if we have money. We won't live only on animals. Jobs will be more important than animals.”<sup>38</sup>

### 3.1.3 Opportunities for Youth

Community concern for job creation is focused mostly on youth. Many residents express concerns that youth have not managed to gain the work skills needed in the modern economy. Access to job opportunities is therefore often seen as a positive social impact in addition to the

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<sup>34</sup> Igloolik public meeting hosted by Baffinland, September 2007.

<sup>35</sup> Igloolik public meeting hosted by Baffinland, March 2008.

<sup>36</sup> Resident (man) 15, Igloolik public meeting hosted by Baffinland, September 2007.

<sup>37</sup> Comment during Igloolik public meeting hosted by Baffinland, September 2007.

<sup>38</sup> Resident (woman) 16, Arctic Bay conference of working groups, March 2008.

contribution that work provides to income and livelihood. This was well expressed by one resident during a public meeting in Igloolik:

“We need something to keep our hands busy and we need money. I heard on the radio people selling their personal goods because they don’t have any money. Young people are very active and if you offered jobs to young people...they have nothing to do and they are just carrying babies around. We need something to keep us busy.... We as Inuit are afraid of development, but we are worried about our young people and they have no jobs. ...I don’t want to live without any jobs.”<sup>39</sup>

Another resident noted that the level of work experience among youth is often low and that many of the skills needed to function in a work setting are yet to be acquired:

“Some of the things I notice are ...They are employing too young people who have just come out of school and have no work ethics. The young people get into more accidents and they goof around. Employing young people is good but they have to be able to do the job and do it well.”<sup>40</sup>

A suggestion that young people who are still in school could be hired during the summer months was made:

“It would be good to provide summer work opportunities for kids still in school—just during summer, then they’d return to school.”<sup>41</sup>

#### 3.1.4 Opportunities for Women

Employment of women was also raised as an issue during public meetings and during the community research. The potential for hiring women for the Project was raised in a number of contexts. During a public meeting in Pond Inlet, a local entrepreneur drew applause from the other community participants while speaking about the value of hiring women:

“I try to hire people but it is hard to hire them. If you look at the males, if they get a chance, they go out hunting. They buy a snowmobile, gas and so on. To meet your target of trainees, have you considered training females? I run a construction business, and that was my biggest problem, to try to hire men [applause].”<sup>42</sup>

Some women in North Baffin are already working as heavy equipment operators. In Arctic Bay, for example, one worker noted that he knew about two or three women who were operating heavy equipment, working on the new airstrip runway.<sup>43</sup>

Another comment was provided that indicates both a desire to gain opportunities for women at the Project, as well as a recognition that consideration needs to be paid to creating an environment that is amenable to women in the workplace:

“I think it is also important to remember mining is perceived as a man’s world, and often... there is a lot of focus on employment, land use, ...but us women are also

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<sup>39</sup> Comment during Igloolik public meeting hosted by Baffinland, March 2008.

<sup>40</sup> Resident (man) 5. Interviewed by Richard Akoto, 2008.

<sup>41</sup> Resident 1, interviewed 2007.

<sup>42</sup> Resident 17, Pond Inlet public meeting hosted by Baffinland, March 2008.

<sup>43</sup> Worker (man) 7, interviewed 2008.

impacted by these projects....What approach is QC doing to ensure that women are given opportunities? What are the safety precautions that you are doing so women going to site feel safe? Many women feel on the outside of a male dominated industry....

“...Inuit and also women have a traditional role and can be very skilled. The problem is Inuit are traditionally not proud of themselves. What they can do – they are not traditionally boasting about themselves. There needs to be some kind of employment counsellor to recruit Inuit women. They need to see an Inuit leader in the company to provide guidance to Inuit women. They won’t tell you they can do this or that – you have to ask if you can do this and that. I think it would be a good idea for a role model for women to look at and see, he or she is Inuit and is in leadership. When they can have a role model, either way they can see that Inuit are able to do the leadership role, too. ...

“...What I am trying to say that sometimes Inuit and Qallunaat get misinterpreted. Someone can be the communicator between Inuit and Qallunaat. Us Inuit women—I am an Elder—and on my resume—maybe I can say just a few words that I can do more. Us Inuit can’t say “I can do that; I know I can do it.” We don’t do that. That’s what I am trying to say. We need a communicator between Inuit and Qallunaat. Thank you.”<sup>44</sup>

Community residents offered some insight into the issues that must be addressed to make the mine camp workplace inviting for women. When asked if she thought the camp could be a good place for women to work, a woman worker at the pre-Project phase provided the following insight:

“I don’t know if this really can happen or not...But women are interested. I know a few people, older women, who are interested in working there. But the only thing is, they don’t speak English. ...[One woman she knows] has experience doing housekeeping work at Polaris. Plus she used to be a cook at the hotel here. But at Mary River, they are only looking for cooks who have certificates.”<sup>45</sup>

The challenge to maintain a harassment-free workplace was raised during several interviews:

[Researcher: “How can they make a mine camp that is supportive for women who want to work there?”]

[Female worker]: “Maybe, to me, if there were more ladies in that camp instead of less ladies that would be better. ‘Cause it’s kind of scary when there’s less females and more males working there. If I don’t talk with the guys they don’t bother me at all. But as soon as I come talk with them and try to make friends, then they try to find out if I’m “easy” to go out with.”<sup>46</sup>

[Supervisor]: “Has there been harassment? Yes, there is some of that. Females can be subject to abuse...sometimes it’s just general comments. ...we handle it very quickly. It means people going home. They’ve lost their job.”<sup>47</sup>

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<sup>44</sup> Elder (woman) 5, Iqaluit public meeting hosted by Baffinland, April 2008.

<sup>45</sup> Worker 11, interview in 2008.

<sup>46</sup> Interview with former worker, 2008.

<sup>47</sup> Interviewed 2008.

### 3.1.5 Supervisors

The importance of having good supervisors was noted by several workers. Workers were asked what makes a good supervisor:

“Good supervisors explain what’s going on and what will happen.”<sup>48</sup>

“A good supervisor is one who looks after his crew and makes sure you do your work.”<sup>49</sup>

Good supervisors seem to be highly appreciated by workers. One worker described how the guys would talk during their breaks about how things were going:

“When they had their break time, when I was working on night shift in the kitchen, [the labourers] would talk about their supervisors. They’d sometimes complain about their supervisors, “We’re so bored, we have nothing to do and our supervisor doesn’t tell us much what we have to do. We’re so bored and we don’t have much to do.” But this guy [a supervisor], when he came to camp, the guys liked him because they had more work to do and the time went faster. [He] was always on the radio giving guys instructions on what to do. A good supervisor is talking more on the radio. They liked [him] because he made the labourers work, instead of just sitting around doing nothing much. ...the labourers like him because they find that the time goes faster. Plus he’s not bossing them too much. He talks to his crew in Inuktitut and English.”<sup>50</sup>

Those in a supervisory position may play an important role in worker development by inspiring individuals to pursue their interests and advance in their careers. One worker talked about how working at Mary River during the pre-Project phase taught him some good things:

“I learned to be responsible up there, how to be safe. Working with the drillers really helped [me] learn how to be cautious and safe in preparing the equipment. [The contractor I worked for] told me about how to get training in the south. They told me about an Inuk who was a driller. That was kind of inspiring to hear about.”<sup>51</sup>

Another worker described his experience with five supervisors over some 10 weeks of work at Mary River:

“[Good supervisors are the] ones who help you to understand what they need and how to do it. The ones who understand you and respect you.”<sup>52</sup>

The importance of good communication between workers and supervisors was also noted:

“When Nanisivik was running there were some older people who had little English but lots of good experience. One of the hardest things is for those guys — good HEOs, welders, other skills — trying to communicate with their supervisors. Good supervisors would try to help people. Others would not try to communicate properly. Nanisivik had not a lot of Inuktitut-speaking supervisors. ...I know there are quite a few French-speaking people up there. And they have translators. They should do the same for the guys who only speak

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<sup>48</sup> Worker 2, interviewed in 2007.

<sup>49</sup> Worker 6, interviewed in 2008.

<sup>50</sup> Worker 11, interviewed in 2008.

<sup>51</sup> Worker 10, interviewed in 2007.

<sup>52</sup> Worker 1, interviewed in 2007

Inuktitut. The younger [Inuit] guys all speak English. The young guys manage o.k. if they have good supervisors.”<sup>53</sup>

One supervisor describes his approach to working with Inuit:

“Get involved with the communities... enough where you have an understanding....we just don't send people off to do something without first understanding the community and how it affects them.”<sup>54</sup>

There were also comments that supervisors need to be aware of individual challenges workers may face. For example, supervisors need to create an environment where those who face mental health challenges can succeed. As one community health worker suggested, those who are supervising guys with FAS/FAE will need “lots of patience — repeat, repeat, repeat!”<sup>55</sup>

It is also noted that supervisors may need to be vigilant against bullying of vulnerable individuals by other workers. The importance to follow through to find out why a worker quits or fails to return from the off-rotation was also noted:

“It's good that there are a lot of jobs, but so many workers quit their jobs. Maybe somebody should be trying to find out why they are quitting their jobs. There must be a problem somewhere.”

### 3.1.6 Accommodation, Recreation, and Workplace Policy

Interviews with workers at the pre-Project phase of the Project provided some observations and suggestions related to the workplace accommodation and site policies. Workers recognized that accommodations during the advanced exploration and bulk sample phase are much different from those that will be available during mine operations. Nonetheless, the following comments may assist in understanding the values and preferences of workers that should be considered during design and construction of both the construction and operations phase of the Project.

One comment that was heard related to the need for some sort of store where people could buy everyday items.

“The toughest thing is running out of smokes...even if you bring lots with you, people bum them from you and soon you are out. So you run out fast. There is no store onsite for use to serve our needs---we have money but nothing to spend it on. The weather is also a challenge --- if you order something (like smokes) and then the plane doesn't come in you are stuck.”<sup>56</sup>

A similar point was raised in several other contexts:

“Today 25 [people] from Pond Inlet are working. They ask for cigarette and pop, but [for] those people in Mary River there needs to be a small shop for cigarette and pop at the site...or laundry service.”<sup>57</sup>

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<sup>53</sup> Worker 7, interviewed in 2007.

<sup>54</sup> Supervisor II interviewed 2008

<sup>55</sup> Workshop in Pond Inlet with Inuit workers in HSS field, February 2008

<sup>56</sup> Worker 1, interviewed in 2007.

<sup>57</sup> Resident 17, comment during Pond Inlet public meeting hosted by Baffinland, March 2008.

“Right now there is no store onsite. That’s something that could happen — socks, underwear, toothpaste, cigarettes, chocolate bars, movie rentals ...That could be an Inuit-run business.”<sup>58</sup>

“At Cape Dyer [DEW Line cleanup project] they had a canteen there: hats, smokes, and stuff. Run by the company.”<sup>59</sup>

Questions were also raised about the policy around hunting during off-work-hours. One local resident noted that for Inuit workers, the ability to go out and engage in hunting activity could relieve stress:

“I don’t know if there is any harvesting – this is one way they can relieve angst.”<sup>60</sup>

The potential for after-hours training, skills-development was raised as well, on several occasions:

“Voisey’s Bay is the only industrial site in Newfoundland and Labrador that has a certified onsite adult education program. Guys can upgrade their education after-hours (i.e. after their 12 hour shift).”<sup>61</sup>

[Researcher]: “How about upgrading onsite here, say after your rotation. Would people do that?” [Worker] “That’d be tough.”

“Do they work 12-hour shifts? ... cause if Baffinland is really serious about professional development, maybe one of the things they can think about is having onsite...it would be nice to have the facility onsite for people to have opportunities to grow. To work on their literacy, to work on their English upgrading, to work on their math upgrading. So when employees are bored, rather than just going on the internet all the time, maybe they could take a couple courses.”<sup>62</sup>

“For those workers at the MR Mine, after they are finished their 12-hour shift and during their days off, they should also have the alternative of having a place to carve or to sew, or to learn how to carve or to sew...you could find an instructor to teach one time and then switch and have another instructor come to teach something else...cause each community has carvers who could share their knowledge...”<sup>63</sup>

“It might be almost therapeutic for northern workers to have a place where you could work on this sort of thing. When I worked at Norman Wells it was two weeks in and two weeks out, twelve hours a day minimum. ...and when you got off work you either watched a movie that someone else picked out, or you went to the bar. ...there was nothing else. ...and over there you’re not going to have the bar, so all you’ve got is movies that someone else picked out. [laughter].”<sup>64</sup>

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<sup>58</sup> Supervisor suggestion, interviewed in 2007.

<sup>59</sup> Worker 3, interviewed in 2007.

<sup>60</sup> Comment during Iqaluit public meeting hosted by Baffinland, April 2008.

<sup>61</sup> Theresa Hollett, presentation during ED&T socio-economic workshop, November 2007.

<sup>62</sup> Workshop with Arctic Bay economic development committee, May 2008.

<sup>63</sup> Workshop with Arctic Bay economic development committee, May 2008.

<sup>64</sup> Workshop with Arctic Bay economic development committee, May 2008.

The physical aspects of living at site were also raised on occasion. Comments related to noise, light, air temperature and low humidity, and meals:

“The tents are nice and dark.”<sup>65</sup>

“[Camp accommodations] are o.k. The only thing is the noise. The tents don’t keep the noise out — helicopters, neighbours snoring.”<sup>66</sup>

“The food is great!”<sup>67</sup>

“It’s so dry, I had a problem with my breathing. It’s electric heat. It’s so dry. The Mary River site is bad too, even with heating oil. For myself, I had difficulty breathing. We had to put water in our room to add moisture. Fighting to control temperature — some would turn heat up, some turn it down — fighting to control temperature.”<sup>68</sup>

Crowded housing situations are common in many communities. The potential that camp accommodations may be experienced as preferable to that available at home was raised by an individual with experience in the corrections field. Describing conditions at the Baffin Correctional Centre he noted:

“For some [accommodation at BCC] is better than at “home.” They have their own bed—some never have had this at home where they’d either take turns (shifts) or sleep on the floor. And they get three meals a day, every day.”<sup>69</sup>

Interest was also raised about the potential for accommodating couples at the mine. During an exercise to identify issues related to the proposed Project, the following comment was posed:

“Housing for families/couples at Mary River: What about married couples working at the site? Will they have to sleep in separate units or will accommodation be available for couples? Need to look at how residential arrangements are made at the workplace.”<sup>70</sup>

Finally, recognition of the importance that observance of Christianity has for many Inuit led to a couple of recommendations intended to help improve life at the mine camp:

“...will [you] provide some kind of worship centre? ...Inuit are already into [Christianity] now and don’t have a choice now. Would you allow a service to be held or some kind of church at the site?”<sup>71</sup>

“In an Elder’s opinion there should be a day of rest. It gives you time to think about things. “You need to stick to the unwritten guidelines—things will run more smoothly.”<sup>72</sup>

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<sup>65</sup> Worker 8, interviewed in 2007.

<sup>66</sup> Worker 11, interviewed in 2008.

<sup>67</sup> Worker 4, interviewed in 2007.

<sup>68</sup> Worker 7, interviewed in 2008.

<sup>69</sup> Public Sector 16, interviewed 2008.

<sup>70</sup> Workshop in Pond Inlet with Inuit workers in HSS field, February 2008.

<sup>71</sup> Comment by Inuk woman during Iqaluit public meeting hosted by Baffinland, April 2008.

<sup>72</sup> Elder 6, comment during meeting with Pond Inlet Economic Development Committee, July 2007.

### 3.1.7 Workplace Culture

The importance of workplace culture to supporting successful employment and retention of Nunavummiut workers was also raised. During one of the public meetings, the following exchange was recorded between a resident and a representative of Baffinland:

[Resident]: “Welcome to Clyde River. I’ll be working with you in the future hopefully, if you don’t think I am too old! In the last year I’ve been working with southern people. I understand how it works, we have different ways and we can’t connect. I know that before we couldn’t work together as a team, hopefully we can work together well in the future. ...We like country food. Will workers have access to country food? We eat it all the time.”

[Baffinland Representative 3]: “One of the greatest challenges is to make Inuit feel comfortable working at the mine. We started serving country food this year and it is appreciated. By hiring QC this year we have supervisors who are Inuk and they have morning meetings in Inuktitut. We are trying to make the workplace friendlier to Inuit. One other program we are working with Qikiqtaaluk Corporation on is a cultural orientation program, so people from the south understand the culture and are able to work more effectively with you.”<sup>73</sup>

A more general comment related to workplace culture arose in the context of a workshop in Pond Inlet:

“The workplace culture will be based partly on who is hired—what is the character/background of those who get jobs there.”<sup>74</sup>

The importance of having Inuit senior managers involved at the Project was noted by one worker, but an expectation was that this may take time to happen:

“...’Figure it’ll be 20 or 30 years before Inuit have those jobs. ...[But] somewhere in Nunavut there are some Inuit with mining experience. So far, the only higher jobs for Inuit are as supervisors/team leaders of the Inuit crews. ...It would be good to hire a very high-level Inuit into the company.”<sup>75</sup>

This same individual went on to suggest that the proponent might be able to tap into some of the non-Inuit supervisors who had been involved at the Nanisivik Mine and who have good relationships established with North Baffin workers:

“If Baffinland wanted to hire people with lots of experience working with Inuit they should hire the guys who were working with Inuit up at Nanisivik Mine. They were working with Inuit for many years. [Or] they could hire people who have had a lot of experience working with Inuit or with other native [peoples].”<sup>76</sup>

Several comments related to the rivalry that sometimes exists among different communities. When individuals who strongly identify with their home community are brought together with those

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<sup>73</sup> Exchange during Clyde River public meeting hosted by Baffinland, September 2007.

<sup>74</sup> Comment during workshop in Pond Inlet with Inuit workers in HSS field, February 2008.

<sup>75</sup> Worker 8, interviewed in 2007.

<sup>76</sup> Worker 8, interviewed in 2007.

of other communities there can be new tensions introduced. One supervisor noted that this dynamic can be managed by being aware of the reality and adjusting accommodation and work arrangements accordingly. The role of Inuit supervisors who understand the roots of this is recognized as critical to success:

“There is also rivalry among guys from different communities. They never have worked closely before... There might be really old, deep issues at the root of this. We are starting to work this out... Some from the different communities are learning to work together, some [we] are learning who not to put together. The Inuit supervisors are “on this.” We’ve had incidents with tent accommodation allocations. O.K. you make other arrangements for sleeping. Everyone is going to come through here!”<sup>77</sup>

A similar observation was made by a public sector official involved in training. This person noted that when people are sent from different communities to residential training programs these kinds of community rivalries and prejudices can sometimes come into play.<sup>78</sup>

A link between land-based, traditional skills, and the wage economy that might be useful in the design of an appropriate workplace culture was suggested by ITK (2005):

“Integrating essential traditional skills into the workplace would be a step to creating healthy Inuit communities. Inuit need to create support centres where Elders pass on knowledge aimed at teaching marketable traditional skills to ensure these traditions are passed on to the next generation. Also important is the need to support additional trained counsellors and mentors....”

In this regard, an observation made by Hobart (1976) that Inuit working at the Strathcona (Nanisivik) project during the early 1970s excelled in areas of camp citizenship is interesting.

### 3.1.8 Attitudes, Prejudice, and Stereotypes

The potential for misunderstanding or prejudice will always exist when distinct cultural groups come together in a work relationship. This may arise between ethnic cultures, e.g. Inuit and southern, as well as between different communities, and different work cultures. Sometimes work subcultures may clash with expectations, leading to perceptions of disrespect:

“For kitchen staff, the cooks are always bullying the helpers. The workers [equipment operators/labourers] respect the kitchen staff—it’s just the cooks. They are too aggressive. There are different kinds of cooks, some are o.k.”<sup>79</sup>

“In terms of positive things, the mine site was a good place—it was quiet. There were mostly French guys, but they didn’t bother us. On the negative side, I didn’t like when the drillers would talk about Inuit among themselves. They’d say bad things about us. ...but overall it was “calm and smooth” when I worked there.”<sup>80</sup>

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<sup>77</sup> Supervisor interview, 2007.

<sup>78</sup> Notes from discussion with Public Sector 3, in 2007.

<sup>79</sup> Worker F, interviewed in 2007.

<sup>80</sup> Worker 10, interviewed in 2007.

The potential for prejudice and misunderstanding can be compounded by language. This can particularly be the case when both parties to a conversation are speaking in their second language:

“Sometimes language is a problem. There are guys here who speak French and have a hard time understanding my English. It’s not fun trying to speak to them.”<sup>81</sup>

The issue of prejudice, lack of understanding and stereotypes was discussed during a workshop in Pond Inlet. The following comments emerged:<sup>82</sup>

“[Let’s have] ...No racial segregation—No more “Drunken Indian Syndrome,” where the prejudice or the ‘lens’ of seeing Inuit is coloured by stereotypes. ...There is some progress being made here, but there are still tendencies and steps that need to be taken to address these tendencies.”

“There should be no tolerance [for prejudice]... If you can get racism/cultural biases/prejudice out of the workplace this would lead to good job retention and good career progression. It would be so transformational!”

The implication of perceived workplace prejudice for levels of stress was raised during a discussion with the wife of a worker. She spoke about how her husband would call home and talk about how things were going:

“Some of his supervisors are prejudiced. Sometimes I can tell from his voice on the phone that he’s had a hard day.”<sup>83</sup>

Language is also identified as a barrier to the improved communication that is needed to overcome prejudice:

“I am worried that because I’m unilingual it’s hard for me to build a relationship with the company—I can’t socialize with Qallunaat, it’s hard to understand each other. I’m worried that supervisors at Mary River might push around unilingual staff and might be racist toward Inuit.”<sup>84</sup>

On a positive note, workshop participants suggested that relationships between Inuit and Qallunaat have changed in good ways over recent years:

“Communication is better, more equal, than it used to be. Inuit have started to talk back and fight for our own rights.”<sup>85</sup>

### 3.1.9 Availability of Country Food at Camp

During the pre-Project phase, country food was included in the regular menu. This practice reflects the importance of access to country food at the mine site as expressed by residents:

“... people older than us, they like to eat the country food. They like it raw. Some younger ones want to eat it cooked, but the southern cooks always add too much to it—spiced up

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<sup>81</sup> Worker 1, interviewed in 2007.

<sup>82</sup> Pond Inlet economic development workshop, February 2008.

<sup>83</sup> Wife of worker, interviewed in 2008.

<sup>84</sup> Workshop in Pond Inlet with Inuit workers in HSS field, February 2008.

<sup>85</sup> Workshop in Pond Inlet with Inuit workers in HSS field, February 2008.

too much, mixed with vegetables and all that. We know that country food keeps you warm in the cold winter. Chicken, beef—that doesn't do the same. The labourers are working outside in the cold, so they should be eating good country food.”<sup>86</sup>

Interest was also expressed in the policy around harvesting by Inuit during their off-hours:

“I am interested to learn about what the rules will be at the worksite. Can Inuit hunt? fish? Will there be country food at the worksite? While Caribou are scarce, they say they are plentiful around the MR site.”<sup>87</sup>

During a conference hosted by the Department of Economic Development and Transportation (ED&T), the question of inspection of country food was raised by an Inuit participant. The response was that the country food being provided at the camp is accessed from Nunavut meat and fish plants that adhere to territorial rules for movement of food products in the territory.<sup>88</sup>

A description of how accommodation for country food preparation is addressed at an operating mine was provided by a speaker describing the Voisey's Bay project in Labrador:

“There is a “country kitchen” where people can prepare food, and employees can request ingredients from the kitchen to complete their meals ...and of course have the option to eat the regular meals.”<sup>89</sup>

### 3.1.10 Employee Assistance Onsite

The challenge and potential reward represented by workplace employee assistance was plainly set out by one health professional interviewed in 2008:<sup>90</sup>

“Some sort of onsite treatment centre needs to be in place. You are dealing with extreme addictions, suicidal ideation and a population where 95% of people have likely been sexually abused. There is a history of deep trauma in this culture and they are highly at risk. With regard to the mine you will be dealing with suicidal ideation and possible attempts, pathological jealousy, aggression and impulsivity.

“The highest risk group is young males in their teens. ...There needs to be structured, onsite counselling services available. It is important to have group sessions on orientation to the mine...group sessions that educate workers about how they will feel when they start work...demystify this emotional process. There also needs to be adequate counselling in the communities that will sustain stability back in the community. There needs to be a tandem service—one at the mine and one in the community. ...It is crucial that you pre-empt suicides and accidents. You need to provide as much services as possible at the front end and commit to trying to hire the most stable workforce possible. Suicides, self-harm, aggression and other accidents need to be pre-empted. Baffinland could have a profound [positive] impact if they pre-empt and respond to mental health

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<sup>86</sup> Worker 11, interviewed in 2008.

<sup>87</sup> Public Sector 6, interviewed in 2007.

<sup>88</sup> Discussion during ED&T socio-economic workshop, November 2007.

<sup>89</sup> Theresa Hollett, Impact and Benefit Agreement Coordinator, Lands and Resources Department, Nunatsiavut Government. Presentation made at the ED&T Socio-economic Workshop, Pond Inlet, November 2007.

<sup>90</sup> Public Sector 5, interviewed in 2008.

issues. Having their own autonomous team might be the best way to do this. You give someone a job and right away they have a sense of meaning.”

A brief description of the employee assistance program provided at the Voisey's Bay project was provided during a workshop hosted by ED&T in Pond Inlet. The program is not a custom or autonomous program but is provided through phone support out of Ontario:

“The Employee Family Assistance program includes financial counselling/money management; personal counselling; addictions counselling; adult education onsite. It is a generic program, offered by a company based in Ontario. They often serve as a listening ear for family members.”<sup>91</sup>

A more customized program, such as having an Elder onsite, came up often:

“Have an Elder onsite so you can voice your concerns or just talk whenever you want to. I think that would make people want to come up here.”<sup>92</sup>

Residents of the LSA understand the challenges associated with leaving the community and family behind for periods of time. For example, women from the smaller communities often spend a good deal of time in Iqaluit before giving birth; people leave home to attend Arctic College for extended periods; and, some individuals are sent out of the LSA for periods of detention at the Baffin Correctional Centre.

Best practices for assisting workers who need help to cope with the isolation and separation from family experienced at a fly-in/fly-out worksite camp might be drawn from these other experiences.

One respondent noted some of the issues faced by individuals who are sent out to the Baffin Correctional Centre:

“...guys would face issues of jealousy, their partners would be in situations where they'd have little money, little protection, and if they turned to someone else, their incarcerated partner would be upset. Threat of suicide was sometimes the "glue" holding these relationships together ... "if you leave me, I'll kill myself." [At BCC] they did try to establish some support structure to help couples weather the period of separation. They'd have people in the community who could provide support to the family and communicate how the incarcerated partner was making out—"he's trying, doing well in his program..., also missing you"—and so forth.”<sup>93</sup> A recommendation that Elders and adults who have had experience working at previous mine projects was provided:

“The young people who are working at Nuluujaak need to be talked to by an Elder so that they can have life skills to support them when they come back home. ...need Elders and adults with mine life experience—the focus is to avoid problems with too much money during time off in the community.”<sup>94</sup>

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<sup>91</sup> Theresa Hollett, Impact and Benefit Agreement Coordinator, Lands and Resources Department, Nunatsiavut Government. Presentation made at the ED&T Socio-economic Workshop, Pond Inlet, November 2007.

<sup>92</sup> Supervisor B, interviewed 2008

<sup>93</sup> Public Sector 20, interviewed in 2008.

<sup>94</sup> Comment provided during workshop in Pond Inlet with Inuit workers in HSS field, February 2008.

Reference to formal employee support services was made during research carried out during monitoring of the Jericho project in the Kitikmeot region (Brubacher Development Strategies, 2009):

“At the Lupin Mine there were counsellors, a family support group. That was a formal program, hired from the south. People would use that service. Jericho didn’t have anything like that—if you had problems, you’d talk to friends. You could call home on the phones. Sometimes calling home—you find that your spouse is drunk or something. But you’d have to be able to let that go and get back to work...that could be a challenge.”

### 3.2 EMPLOYEE RECRUITMENT, RETENTION AND TURNOVER

#### 3.2.1 Local Interest in Working at Mary River

The level of interest in work at the fly-in/fly-out Mary River site is considerable. People in the communities are learning about the Project from friends who have worked there already:

[Worker]: “I think the work is good for the area—when I go back to Iqaluit, guys are asking me about how it is here. They are interested.”

[Researcher]: “Do these kids know what they need to do to get work here?”

[Worker]: “Lots of them probably need to do some upgrading to get into trades or pre-trades.”

Familiarity with what the job entails is derived from friends and relatives. An interview with an applicant for Mary River indicated that while the individuals did not have a lot of information about the kind of work at Mary River, he did have friends who have worked there as well as a brother who had worked at the Nanisivik Mine. As a result of talking with these people, the would-be worker indicated the following expectation about work at a remote fly-in/fly-out job:

“I wouldn’t mind working there. [I] expect it to be good, expect it to be a fun job, but a tough job—and I’d gain new experiences.”

For some workers and applicants, the possibility for work at a project like Mary River is seen to represent a chance to begin achieving career objectives. One applicant outlined how he hoped an entry-level job at the pre-Project phase of Mary River would lead to further steps in a career:

Applicant: “I really want experience in working at the mine.”

Researcher: “If you start in a labour job — do you expect to go into other jobs?”

Applicant: “Oh yes,...I hope to go into helping plumbing, and to do some carpentry...yeah...”<sup>95</sup>

Some workers expressed the pride they feel in accomplishing their work, applying their skills or learning new things:

“I’ve learned a lot of things from this work — mostly safety, eh? That’s what I’ve been learning. That’s the big thing for me.”<sup>96</sup>

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<sup>95</sup> Applicant (man) 1, interviewed 2008.

<sup>96</sup> Worker (man) 5, interviewed 2008.

“...My aunt told me that if I make that place [Mary River camp] clean, the people who are working there will be more able to concentrate. And if I make this place clean, the people who see it, they will wake up more lightly and focus better. And I noticed that when I became a housekeeper, the office guy was telling me that he saw it was cleaner now and that he appreciated what I was doing. Well I have experience with that — people are more concentrating, happier...”<sup>97</sup>

Similar expressions of satisfaction arose from those who have gained opportunities for training related to industrial work. One applicant to the Mary River pre-Project phase who participated in a drilling training course offered in Igloolik noted that this was the first time he had lived away from his home community. It was a good experience and he earned certificates for a variety of new skills.

Work also provides an opportunity for individuals to get a change of scene, or to simply get out of the community where they live. One applicant to Mary River described his goals for wanting to work at the pre-Project phase as:

“In general, I want to earn income ...plus for the experience. Meet new people, work with guys I know...find out what they are up to, ...and travel. I've been in one place for a year, it would be nice to travel.”<sup>98</sup>

### 3.2.2 Eligibility for Work

Public questions related to eligibility focus on three key areas—education, drug testing, and criminal records:

[Resident]: “Will I be able to be hired with a criminal record?”

[Baffinland Representative 4]: “At this time Baffinland and its contractors do not do a background check; Baffinland is in the process of developing its human resource policies.”<sup>99</sup>

### 3.2.3 High Turnover Rates Anticipated

An expectation was expressed that the rotational nature of the work will contribute to attrition among local workers, after an initial level of high interest. This was expressed by a North Baffin resident who felt that not everyone will be keen on the rotational work, while involvement in the Project “will start big, people will drop away and you will end with only a few Inuit.”<sup>100</sup>

Another perspective was provided by an industry insider familiar with industrial employment of Inuit in the Baffin region:<sup>101</sup>

“One of the biggest challenges is getting guys to commit to full-time employment. There's a fair bit of pressures from home—they're “so close but so far.” It's only 25 minutes by air [from the local communities]...yet they are here four weeks at a shot. I think you're going to see that some guys will really like the 2 by 2 week rotation. The 4-on/2-off rotation is

<sup>97</sup> Worker (woman) 11, interviewed 2008.

<sup>98</sup> Applicant (man) 3, interviewed 2008.

<sup>99</sup> Exchange during Hall Beach public meeting hosted by Baffinland, September 2007.

<sup>100</sup> Resident (man) 11, comment during ED&T socio-economic workshop, November 2007.

<sup>101</sup> Supervisor 1, interviewed 2007.

great, they make good money and are able to stand being at the camp, but you go back home after a month away and you know full well that you're looking down the barrel of another month after the two weeks goes 'like that' [snaps fingers]. I think that 2 by 2, when you're living this close, I think that might be the schedule that you're looking at."

Seasonal preference for working and for not working was expressed:

"In spring and summer Inuit want to be on the land and young families or new couples want to be together on the land."<sup>102</sup>

One insider suggested that community-specific variation in worker turnover has been seen during the pre-Project phase at Mary River. Communities where residents have had more industrial work opportunities—Iqaluit and Arctic Bay are identified—are described as having lower turnover rates:<sup>103</sup>

"Some communities are definitely more prepared for work here. Maybe [a third] from [one community] are really dedicated, the rest are unprepared or not familiar....

"...On the other hand, Iqaluit staff—we find we don't really have a high turnover rate with them. They are more familiar with the working society. [Other] folks are very familiar with the work that goes on because they had the Nanisivik Mine."

One resident noted that holding onto a job can be a challenge and that individual response to this challenge varies from person-to-person:

"...sometimes we are wrong in that we don't like the jobs. If the Inuit want to work, they could be productive people ...[but] when they have a job sometimes they just quit. Some are good workers and keep going on."<sup>104</sup>

A similar point was also provided from the perspective of a mine supervisor who noted,

"People want jobs, but this [fly-in/fly-out] job is not for everyone."

Some reasons for workers quitting their jobs were offered during community-level research. The following comment suggests that job consistency and predictability might be an important characteristic for some individuals:

"You hear reasons why people quit working...If a person doesn't change duties they can stay with it...if they keep getting changed around, they can't keep with it."<sup>105</sup>

Addictions are also seen to be linked to turnover rates for some people:

"We have people who come out to the [Mary River] site and they sober up for a period of time...[but] some get very antsy toward the end...they see the plane going and they will quit so they can get on that plane [before their rotation is up] because their addictions are so strong."<sup>106</sup>

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<sup>102</sup> Resident (man) 5, interviewed 2008.

<sup>103</sup> Supervisor, Interviewed 2007.

<sup>104</sup> Comment during Igloolik public meeting hosted by Baffinland, March 2008.

<sup>105</sup> Comment during conference of working groups held in Arctic Bay, March 2008.

<sup>106</sup> Supervisor, interviewed 2008.

However, high rates of turnover are not limited to fly-in/fly-out work. One official noted that staff turnover in hamlet jobs is also high in many Nunavut hamlets. Typically, the number of individuals hired to carry out the work associated with a hamlet's full-time jobs is five or six times the number of those full-time positions.<sup>107</sup> This presumably arises from a combination of at least two factors—full-time staff who quit their job, and short-term casual workers who are engaged to fill-in for the full-time workers. The official noted that in one community with a more robust local economy, the number of workers per full-time position was lower—suggesting that where more job opportunities are available there may be less “coming-and-going” from the hamlet jobs.

International experience with fly-in/fly-out work suggests that high turnover may relate both to the characteristics of the mine site and supervisory staff, as well as to those of the workers themselves (Beach et. al., 2003):

“On the other hand, managers at sites with high turnover had divergent views about the relevance of cultural factors to employee turnover at their sites. One training superintendent saw turnover in the mining operations at his site as being due, in large part, to ‘internal politics’.

“Particularly in the mine there is quite often a feeling of not being wanted. Supervisory styles have (also) been an issue, although some of the strong personalities have now left. Some of the crews underground have good morale and function well, but this isn't true for all of them. (Training coordinator)

“However, the general manager at the same site considered that ‘the culture here is no worse than anywhere else’. At another site, the HR manager expressed the opinion that ‘the culture here is good; people just can't cope with all the family pressures.’”

### 3.2.4 Challenges and Successes

Youth are seen as facing the greatest challenge to successful transition to an industrial work environment. For example:

“Guys that are in their late 20s to late 30s, they have a higher success rate. ...also guys that had a bit more background outdoors, and those who grew up without computers, TV, movies...The younger group coming up here are really used to the internet. They have a harder time here...[they] don't want to be out of communication.”<sup>108</sup>

Similar observations are reported by Brubacher Development Strategies (2009) in relation to the Jericho project in the Kitikmeot region:

[Worker]: “There were young guys who didn't have previous experience. But some of them didn't last long — a week maybe, some wouldn't even last the day. But some stuck it out.... They are young. Some would get homesick. Others had trouble getting up early in the morning to get to work.”

[Researcher]: “Is this more a mental challenge or a physical, withdrawal issue?”

[Worker] “For many, it's that they've never done this kind of thing before. They are used to staying up late and sleeping in. They have to learn how to get themselves to bed early.

<sup>107</sup> Based on a count of the number of T4 slips issued compared to the number of FT positions.

<sup>108</sup> Supervisor 3, interviewed 2008.

I went through the same thing when I was working at the Beaufort back in the 1970s. ...Some of the more experienced workers, we'd sometimes go and wake them up in the morning if we didn't see them in the morning meeting. If they blew it three times, they'd be let go—but then six months down the road they could be re-hired. ...When you're young, you don't really care so much about work responsibility, you are not focused on the need to earn money. As you get older you realize you've got to support the kids. You've got to be more responsible. This change takes place in your 30s. The majority of those in their early 20s have kids, but they are not quite at that stage of taking responsibility."

### 3.2.5 Worker Development and Promotion Highly Valued

Concern was raised that Inuit from North Baffin might get only entry-level jobs and that career progression might not meet expectations. Some residents have expressed a perception that Inuit get stalled when it comes to promotion. During a meeting in Pond Inlet, examples from the past were raised where "people with qualifications" did not get promoted in their work. This lack of career progression is sometimes linked to concerns about prejudice at the worksite and/or an inability or lack of willingness among managers to recognize the abilities of Inuit workers.<sup>109</sup>

During a workshop session, participants were asked to identify ways in which the Project might serve to "push" toward achievement of a goal of "productive livelihoods" the group had earlier identified. One response was to ensure:

"...advancement opportunities in jobs and careers supported through training that meets individual needs and sets the worker up for higher levels of employment."<sup>110</sup>

The basis for this response was illustrated by reference to an acquaintance who had been working at the Nanisivik Mine for 9 and 3/4 years and quit just before his tenth anniversary. The explanation was that the man had been in the same job he started in, had never advanced, and finally got discouraged. The prospect of receiving recognition for 10 years of service without ever being promoted was too humiliating.<sup>111</sup>

Residents recognize that many young people have little past experience and may be facing challenges that will be transferred to the work context. It was noted that a challenge will be to get supervisors trained and oriented to give guys who may have challenges—including mental health challenges—a fair chance to succeed:

"Supervisors need to know if someone is facing mental health challenges so that they can respond in a good manner. For example, those who are supervising guys with FASD will need lots of patience — repeat, repeat, repeat! ...Employers need to understand that some people they hire won't have good lifeskills."<sup>112</sup>

Given the expectation that some of those who are hired to work at Mary River may struggle to gain the skills they need to hold onto a job, a high level of interest exists in the approach the proponent plans to take toward incidents where workers break workplace policy:

<sup>109</sup> Based on comments made during meetings held in Pond Inlet in January 2007.

<sup>110</sup> Pond Inlet economic development workshop, February 2008.

<sup>111</sup> Discussion and comments from workshop in Pond Inlet with Inuit workers in economic development field, 2008.

<sup>112</sup> Workshop in Pond Inlet with Inuit workers in HSS field, February 2008.

[Resident]: “If an employee misbehaves would they still be allowed to come back to work?”

[Baffinland Representative 4]: “In cases where the employee was in serious violation of rules we would return them to the community but with the possibility of that they could come back. The only exception is using drugs and alcohol in which case they will not be allowed back. For other cases there is a possibility they would be allowed back.”<sup>113</sup>

A similar concern was raised in Pond Inlet:

[Resident]: “I don’t like to see young people getting fired for minor things like sleeping too much or when they smoke inside [their tent] ...they should be allowed some kind of chance to try again. Our young children—allow them several times to break the rules. When we are gone, our children will want to work in Mary River, I don’t want them to be fired for one infraction. So give them three chances. Thank you.”

[Baffinland Representative 4]: “Thank you for the questions. Hopefully I can answer them. We don’t hire people to fire people and I know that smoking in a tent sounds like a minor incident, but from a safety perspective it is a very serious thing if a tent catches fire. But also, there is a law in Nunavut that says you can’t smoke in a confined space where people are. There are certain standards that people are told when they come to site and we have an expectation that they will follow those rules. Once a person is let go, it is not a life ban, so after a few months, we will consider having them come back to site.”<sup>114</sup>

A suggestion was offered that, “You need to inform workers about the career path.” The same source also noted, though, that while some people will want to progress in a career, others will work simply to earn money.

Overall, it was felt that:

“The Project will encourage people to work longer, more consistently—develop better work habits.... Some people don’t have much labour work experience and it would be good for them to have more experience and to learn to stick with it.”<sup>115</sup>

A similar point was made during a workshop in Pond Inlet:

“If the supervisors make sure the workers do the job right, it will help the workers to grow and to mature.”<sup>116</sup>

Recognition that fly-in/fly-out work has a cost for workers and their families was expressed by one Inuit worker at the pre-Project phase of Mary River. The focus of this comment, though, is that responsibility lies with the individual worker to use the opportunity to its best advantage:

“If guys are going away from their home, leaving their families, to come here they should make it worth while and work hard...not just [be] wasting their time.”<sup>117</sup>

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<sup>113</sup> Exchange during Arctic Bay public meeting hosted by Baffinland, September 2007.

<sup>114</sup> Exchange during Pond Inlet public meeting hosted by Baffinland, March 2008.

<sup>115</sup> Comments made during a meeting with the Pisiksik Working Group, Pond Inlet, January 2007.

<sup>116</sup> Elder (woman) 3, Pond Inlet HSS workshop, February 2008.

<sup>117</sup> Worker 3, interviewed in 2007.

The relationship between learning, education, and work was raised during the working groups conference, hosted in Arctic Bay. One participant expressed the following perspective:

“Elders kept jobs. Youth—we can’t keep them at a job. Those with less education have fewer skills they can apply. Less educated also have less understanding of the language. Some Inuit hold a job for a long time—to retirement—they learn and grow...”<sup>118</sup>

Interviews with workers illustrate that on-the-job learning is valued by workers:

“I learned to be responsible up there [at Mary River], how to be safe.”<sup>119</sup>

“Another really good thing about Polaris is that you’d get on-the-job training that would lead to gradual progression in your qualifications and your position. ...We got rotated through all kinds of different jobs.”<sup>120</sup>

Interestingly, Hobart (1976) considered rotation through different jobs to be best practice at Nanisivik as it allowed workers to eventually find work they enjoyed and to ensure “the men do not dislike the work they are doing.”

Hobart goes on to note that Strathcona at the time was flexible and focused in its human resources policies with respect to Inuit workers. While policy was to have regularly scheduled leaves and returns to work, “no man has ever been fired or suspended, according to the Superintendent, for difficulties or shortcomings in these areas.” It was felt that this focus on flexibility has led to community members learning company policy and the underlying rationale without becoming hostile toward it—resulting in workers putting pressure on co-workers from their own community to conform to the company rules.

During a workshop with residents engaged in the social services sector, the importance of maintaining high standards at the workplace was raised. Residents expect that a Project like Mary River will instil a good work ethic among Inuit youth who are engaged in the Project. A link between how young people were taught critical skills in the past was made:

“Today, it’s different how children are raised. It seems like youth need support for what they do. When we were raised and were sewing, in the past, we were never praised, and if you made a mistake, they’d rip it apart and tell you to start over again. That would show us what we did wrong. ...If the supervisors make sure the workers do the job right, it will help the workers to grow and to mature.”<sup>121</sup>

### 3.2.6 Communication, Dispute Resolution, and Worker Advocacy

An effective part of the employee retention strategy at the Voisey’s Bay Mine in Labrador was described during the ED&T socio-economic workshop in Pond Inlet. At that project, a key labour force mechanism has been the Inuit Employee’s Advisory Committee. This has been in place since the construction phase. Monthly meetings are held to identify issues and solutions and, as a result, the committee has been effective in helping to retain employees.<sup>122</sup>

<sup>118</sup> Resident (woman) 14, working groups conference, Arctic Bay.

<sup>119</sup> Worker (man) 10, interviewed 2007.

<sup>120</sup> Worker (man) 11, interviewed 2007.

<sup>121</sup> Elder 3, during workshop in Pond Inlet with Inuit workers in HSS field, February 2008.

<sup>122</sup> Theresa Hollett, Nunatsiavut Government. ED&T Workshop, November 2007.

More generally, the need for a “safe” way to raise concerns was identified by one worker in the context of a discussion that touched on language, trust and respect:

“Communication is the most important thing, plus respect....On communication and safety, we need a way to raise issues.”<sup>123</sup>

### 3.3 RELEVANT EXPERIENCE FROM OTHER PROJECTS

#### 3.3.1 Nanisivik Mine

Employment of Nunavummiut at the Nanisivik Mine ranged between 9% and 24% of the total workforce over the period from 1978 to 2001, with the higher employment rates experienced during the 1970s and 1980s.<sup>124</sup>

Some of the challenges to achieving higher rates of Inuit participation in the Nanisivik labour force are described in a report by the Inter-Governmental Working Group:

“Some challenges facing the mine, however, are poor attendance by and retention of Inuit employees. There have been a few instances where Inuit employees have had to be terminated due to being absent from work for three days in any six-month period, without application for leave. It is not uncommon for Inuit employees to quit their jobs at the mine after eight to nine weeks of employment, and later on be rehired. This cycle hinders their advancement in job position due to the need to retrain at “learner rates” and a loss in seniority and benefits.”<sup>125</sup>

#### *Union Experience at Nanisivik*

The Nanisivik project also provides some experience into the functioning of collective agreements in the context of major industrial projects. While the current context of IIBAs was not in place at the time, the Nanisivik union experience may be relevant still. The IGWG project provides the following commentary and excerpts on this experience:<sup>126</sup>

##### “4.5.3.i Union at Nanisivik

The United Steelworkers of America Local Union 9446 at Nanisivik was certified in June 1999 to address employee concerns that included wage increases or profit sharing bonuses, improvements in work rotations, contracting out protection, job security and innovative language to incorporate the Inuit workforce. A four-year collective bargaining agreement came into effect on November 1<sup>st</sup>, 2000. Included below are some provisions in the agreement, specific to Inuit and northern employees.

##### “Article 3: Discrimination, Strikes and Lockouts

“Traditional Inuit values and traditions will continue to be acknowledged by the Company and the Union and the parties accept that there will be certain conditions set out in this Agreement under which Inuit employees will be granted rights and benefits different than those extended to other employees. These provisions will not be considered to be

<sup>123</sup> Worker 1, interviewed in 2007.

<sup>124</sup> Brubacher & Associates. 2002. and Hickling-Partners Inc. 1981.

<sup>125</sup> IGWG. 2002. Article written by the Communications, Energy and Paperworkers Union.

<sup>126</sup> IGWG. 2002. Article written by the Communications, Energy and Paperworkers Union.

discriminatory, and it is agreed that no action will be taken or sanctioned by either party where such rights are extended”.

“Article 6: Leaves of Absence

6.03c) “An Inuit employee who secures a polar bear tag or a narwhal tag in either of the annual lotteries will be granted an unpaid leave of absence of up to one (1) week each to participate in the hunt(s). In this situation the employee agrees that he will make his supervisor aware of his absence to attend the hunt(s) as soon as he is selected”.

“If the court duty as described above is in Arctic Bay, and is not brought about by alleged wrongdoing on the part of the employee in question, the Company will make reasonable arrangements for the transportation of the employee and will incur the associated costs. If the court duty requires air transportation, the Company will make the necessary arrangement but the cost of such flight and all other associated travel costs will be the responsibility of the employee. In either event, transportation arrangements will be made in a fashion that will minimize the employee’s time away from site while still allowing him to fulfill his court obligations”.

“6.12 “If an employee is called upon to serve as a member of a jury in Arctic Bay, he will be granted the necessary leave of absence and daily transportation will be provided. In addition, such an employee will be paid the difference between any pay received from the court for serving as a member of a jury and the Standard Hourly Wage Rate (Appendix “A”) he would have received had he reported for work as scheduled”.

“Article 8: Seniority

“The Company agrees that a copy of all entry-level job postings for bargaining unit positions will be made available to the community of Arctic Bay and will be posted at Arctic Bay for viewing. Interested residents of Arctic Bay must apply on these postings within the time limits prescribed at Article 8.06 of this Agreement.”

“Article 12: Hours of Work

12.07 “For any overtime opportunity that requires transportation to and/or from an employee’s residence, it will be the responsibility of the Company to provide such transportation. For the purposes of this Article, “residence” will be restricted to Nanisivik or Arctic Bay”.

“Article 16: Paid Holidays

“The parties agree, should the Territory of Nunavut adopt legislation declaring an annual, statutory holiday celebrating the creation of the Territory, this day will be added to Article 16.01 and will be celebrated in the fashion prescribed by the legislation. In the meantime, and as an interim measure only, each April 1st all Inuit employees wishing to take an unpaid leave of absence on that day to celebrate the creation of the Territory of Nunavut will be given the opportunity to do so”.

“Letter of Agreement 3: Freight Allowance

“Inuit employees resident in Arctic Bay will be allowed to carry over their freight allowance from one year to the next to a maximum of 500 kg”.

“Letter of Agreement 12: “8+4” Shift Schedule

3.c) “All family status employees (including working couples with no dependent children) and employees residing in Arctic Bay will be given the option of working either the 8+4 or 12+4 shift schedule”.

“Letter of Agreement 17: Inuit Travel

“Inuit employees and their spouses resident in Arctic Bay or Nanisivik will be eligible for an annual return trip from Nanisivik to Ottawa provided that they meet the following conditions.

- a) They have no less than two (2) years of continuous service.
- b) They have been in attendance for no less than 90% of their scheduled shifts in the preceding year.

“If an Inuit employee is entitled to this travel award but does not wish to take advantage of the flight(s), such employee may make application for a cash pay out. In such cases, the employee will be paid 75% of the cost that the Company would have incurred if the employee had elected to take the flights”.

“4.5.3.ii Union Observations

According to the local union at Nanisivik, the provisions in the collective agreement specific to Inuit and northern employees are important, however, further provisions could improve their working conditions. Pursuant of Article 3.02, further recognition and respect of the Inuit culture in the workplace is needed to make Inuit employees feel more comfortable and happier. Pursuant of Article 6.03 c), further provisions should be made to enable Inuit employees to elsewhere make up the time they take off. Furthermore, good attendance should be awarded.”

## SECTION 4.0 - STATISTICAL PERSPECTIVES ON THE LABOUR MARKET

*Theme: How many people from the study area might be available to work at Mary River and how does this compare to the level and type of work currently available to residents?*

*Theme: How many people should the Mary River Project expect to hire to fill a specific number of positions over a period of a year?*

### 4.1 HIGHLIGHTS OF THIS SECTION

Given the considerable length of this section a brief summary is provided here, along with references to the appropriate location in the document.

The North Baffin land-based economy generates productive work equivalent to an estimated 356 full-time jobs annually, or approximately one-third the labour demand from the formal wage economy in the region. This amount of work roughly translates to 0.6 million hours of labour (see Section 4.2.2).

The current amount of work opportunity generated by the economies of the study area amounts to the equivalent of 3,700 to 3,900 full-time, year-round jobs, of which 1,100 are located in North Baffin and 2,600 to 2,800 in Iqaluit. This equates to approximately 2 million hours of work in North Baffin and 4.7 million hours of work in the Iqaluit labour market each year (see Section 4.3.1.1).

The number of jobs occupied by women has generally increased at a greater rate than those occupied by men. In North Baffin, the growth in demand for male labour has not kept pace with the growth of the Inuit male population. In Iqaluit, male-occupied job growth and Inuit male population growth rates appear to be increasing at similar rates (see Section 4.3.1.1).

The jobs occupied by women are more narrowly concentrated in public sector industries. While these sectors might be fairly stable in terms of boom and bust cycles, they are less likely to experience dramatic growth, suggesting that women coming into the labour market may need to find work in sectors not traditionally filled by women (see Section 4.3.2.1).

Approximately 18% of occupations in North Baffin, and 21% in the Iqaluit labour markets require a university education. One-quarter to one-third of occupations in the study area require college or apprenticeship levels of training and skills. A similar number of occupations require high school education and/or occupation-specific training. The remainder of jobs can be accessed by unskilled workers capable of undertaking on-the-job training (see Section 4.3.3.1).

A total of 2,255 North Baffin residents worked to “fill” 1,100 North Baffin jobs, a rate of 2 workers per “job.” In Iqaluit, 3,665 individuals worked to “fill” the 2,600 to 2,800 “jobs” in that labour market, a rate of 1.3 to 1.4 workers per “job” (see Section 4.4.1.2).

Wage-earners in North Baffin deliver some 1.7 to 2 million hours less than they would if they were all working full-time, full-year. Wage earners in Iqaluit deliver 3 million hours less than they would if they all worked full-time, year-round (see Section 4.4.3).

Demand for wage employment in the study area is very high. One-in-five working-age residents in North Baffin, and one-in-six Iqaluit working-age residents applied for work with QL at some point during the three-year period between 2007 and 2009 (see Section 4.4.4).

Inuit employment in North Baffin is characterized by many individuals earning small levels of income, well under what full-time work would pay, and a small number earning full-time, year-round income levels. The picture of Inuit employment in Iqaluit suggests a blend of work patterns with many individuals earning small wage income and many earning full-time wage levels (see Section 4.5.1).

Most residents working in full-time jobs in Iqaluit work these jobs year-round. In North Baffin, many more full-time workers are engaged in these jobs for only short periods. The highest rate of short-term employment among full-time workers is seen among the younger North Baffin male workforce. Women who work full-time jobs in North Baffin are more likely to work year-round than are men (see Section 4.5.1, Figure 30).

A total of 1.3 million hours of fly-in/fly-out labour was delivered to the Project definition phase by 776 workers from across Canada. Of this labour, 0.4 million hours were provided by 265 North Baffin residents, and 212 residents of Iqaluit. Women accounted for 11%, of the total number of people involved at the Project (see Section 4.6.1).

Approximately four-in-six workers hired from North Baffin worked for at least three rotations of two weeks in, followed by two weeks back home (“two-in/two-out”). A substantial number of those hired, one-in-five, did not manage to complete one full fourteen day rotation. Among workers hired from Iqaluit, one-in-eight did not complete one full rotation (see Section 4.6.1).

The Project definition phase did not “tap out” the labour force of the study area. Both the North Baffin and Iqaluit labour forces were able to continue supplying workers who had not previously worked at the Project (see Section 4.6.4).

## 4.2 LABOUR FORCE PARTICIPATION IN THE LAND-BASED ECONOMY

The land-based economy is an important component of the RSA economy and draws on a large amount of labour from the region’s workforce. However, its informal nature means that the conventional sources of statistical data on labour force participation rates, level of work activity, and value of production do not extend to this sector. Fortunately, the 1996/97 to 2000/01 Nunavut Harvest Study (NWHs) carried out under a mandate arising from the Nunavut Land Claims Agreement provides at least an early snapshot of the level of production arising from the sector and the number of participants engaged in carrying out country food harvest activity.

### 4.2.1 Number of Participants in the Land-based Economy

Estimates of participation rates for the land-based economy arising from the NWHs indicate that a total of 1,451 North Baffin hunters 16 years of age or older were registered into the study. This represents approximately 52% of the Inuit population in this age category.

A second estimate of land-based economy participation is available from the post-census 2006 Aboriginal Peoples Survey (APS). According to the APS, across Nunavut, on average, 74% of Inuit males age 15+, and 59% of Inuit females age 15+, reported harvesting at least some country food during the previous year.<sup>127</sup> Applied to the North Baffin Inuit population of 1,600 males and 1,425 females in this age group, these rates correspond to 1184 males and 840 females, for a

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<sup>127</sup> Statistics Canada, Social and Aboriginal Statistics Division. 2006. “Aboriginal Peoples Survey, 2006: Inuit Health and Social Conditions: Supporting Data Tables.” Catalogue no. 89-637-X — No. 002. The APS is was carried out between October 2006 and March 2007, following the 2006 census. Personal interviews were carried out in Inuit communities.

total of 2,024 individuals, participating in the harvesting sector of the land-based economy. The difference between the NWHS and APS estimates lies in the different methodology and intent of the two surveys.

#### 4.2.2 Job Equivalents in the Land-Based Economy

While the participation rates estimated by the NWHS and APS provide insight into the broad participation in the harvesting sector, they do not provide a means to understand the importance of this sector in relation to sectors of the formal wage economy. To compare the level of labour force participation in this informal sector with that of the formal wage economy, a comparable indicator—that of “job equivalents” is used. The methodology involves assigning a realistic value to the harvest production and converting this value into “job equivalents.”

An estimation of the number of “job equivalents” was made by establishing the total value of country food harvested in the RSA, as determined by the NWHS, and dividing this by the same standard (\$35,000 per full-time “job equivalent”) that will be used to estimate total “jobs” in the wage economy. For harvest data and associated economic values associated with country foods, see Section 7.1.1. Only the retail portion of the value of country food was considered, as this is the “in-kind” income the harvest represents to households. The subsidy component of retail foods that is paid by the federal government was not included.

Using this approach, an estimated 356 full-time “job equivalents” were created by the North Baffin country food harvest sector of the land-based economy.<sup>128</sup> This is roughly one-third of the 1,086 total full-time job equivalents estimated for the wage economy of the North Baffin RSA.

### 4.3 DEMAND FOR WORKERS IN THE FORMAL LABOUR MARKET

Establishing a baseline for labour force demand is an important first step in understanding the size of the labour demands of the proposed Project in relation to the existing labour market.

Three characteristics serve to describe the size and nature of the demand side of the labour market of the LSA:

- the number of jobs in the economy
- how labour is allocated across sectors of the economy
- the skills demanded of the labour force

#### 4.3.1 Number of Jobs in the Economy

##### 4.3.1.1 Job Creation Baseline for the RSA

###### *Job Estimates Based on Tax Return Data*

The North Baffin economy generated a total of approximately 1,086 “full-time equivalent” jobs in 2004 (see Table 12). This is an increase of some 260 jobs from the level in 1996, at a rate of 32 new jobs, or 3%, per year. The number of jobs in Iqaluit has grown at over twice the rate seen in the North Baffin. These jobs equate to approximately 2 million hours of labour in the

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<sup>128</sup> A total edible harvest of 830,000 kg is estimated in Section 7.1.1, with an assumed “in-kind” value of \$15 per kilogram. The total in-kind value of the harvest is therefore \$12.5 million. This is equivalent to 356 “\$35,000” jobs.

North Baffin and 4.7 million hours of labour in Iqaluit, based on an average 1,800 hours per full-time job equivalent.

Slightly more than 1,000 jobs have been added to the Iqaluit labour market since 1996, yielding a total of some 2,600 jobs as of 2004. This is an annual rate of increase of 6.4%. With respect to job growth, two distinct groups can be seen among the five North Baffin communities. Two communities experienced substantial growth in jobs, as government positions were decentralized to these communities during this period: Igloolik (5%) and Pond Inlet (5.7%). The labour markets of Hall Beach, Arctic Bay, and Clyde River, however, remained essentially static (see Figure 11).

**Table 12 Jobs and Job Growth in the LSA and RSA, by Gender – 1996–2004**

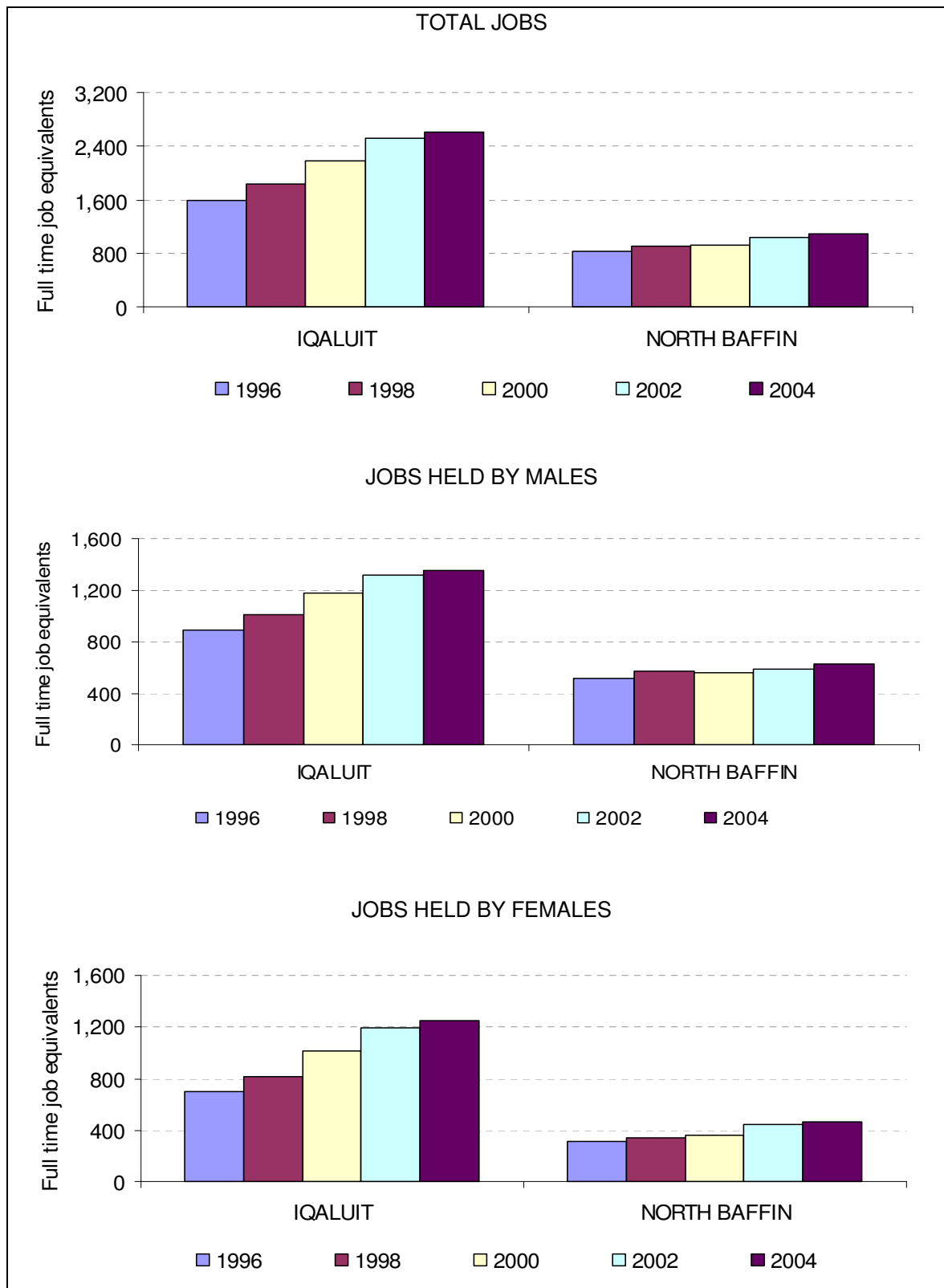
<b>Total Job Equivalents</b>							
	Estimated FY/FT Job Equivalents					Average annual increase in jobs	Average annual % change in jobs
	1996	1998	2000	2002	2004		
Hall Beach		118	118	128	126	1	1.1%
Igloolik		221	215	248	291	12	5.0%
Arctic Bay		143	144	152	143	0	0.0%
Pond Inlet		209	241	266	289	13	5.7%
Clyde River		148	140	161	161	2	1.5%
IQALUIT	1,588	1,824	2,184	2,511	2,606	127	6.4%
NORTH BAFFIN	826	910	919	1,035	1,086	32	3.1%
SOUTH BAFFIN	701	794	773	866	876	22	1.8%
KITIKMEOT	1,095	1,174	1,141	1,310	1,304	26	1.9%
KIVALLIQ	1,608	1,748	1,775	1,928	1,937	41	1.8%
<b>Jobs Filled by Males</b>							
	Estimated FY/FT Job Equivalents					Average annual increase in jobs	Average annual % change in jobs
	1996	1998	2000	2002	2004		
Hall Beach		75	71	78	84	2	2.1%
Igloolik		137	130	135	166	5	3.5%
Arctic Bay		93	88	85	85	-1	-1.5%
Pond Inlet		120	149	149	164	7	5.6%
Clyde River		98	97	98	94	-1	-0.6%
IQALUIT	888	1,007	1,174	1,311	1,349	58	5.2%
NORTH BAFFIN	519	572	560	589	624	13	1.5%
SOUTH BAFFIN	407	463	421	462	452	6	-0.2%
KITIKMEOT	698	698	662	735	742	6	1.1%
KIVALLIQ	918	1,024	965	1,027	1,031	14	0.2%
<b>Jobs Filled by Females</b>							
	Estimated FY/FT Job Equivalents					Average annual increase in jobs	Average annual % change in jobs
	1996	1998	2000	2002	2004		
Hall Beach		40	47	48	47	1	2.8%
Igloolik		81	89	116	129	8	8.6%
Arctic Bay		50	56	64	55	1	2.0%
Pond Inlet		87	97	129	128	7	7.2%
Clyde River		45	49	59	69	4	7.7%
IQALUIT	703	810	1,014	1,194	1,254	69	8.0%
NORTH BAFFIN	310	342	356	447	461	19	5.5%
SOUTH BAFFIN	288	327	350	405	426	17	4.7%
KITIKMEOT	394	475	472	569	565	21	3.2%
KIVALLIQ	694	728	807	901	906	27	3.9%

Source: Derived from employment income data generated by Statistics Canada, SAADD, from T1FF. Custom order.

Notes: 1) "Jobs" are "\$35,000-equivalent jobs." Individuals earning \$35,000 or more are each counted as one "\$35K job".

Lower categories of income are used to estimate equivalent jobs by dividing earnings in these categories by \$35,000.

2) Inflation over the period would lead to underestimation of earlier year job estimates. An adjustment, based on the Consumer Price Index, was applied to offset this effect.

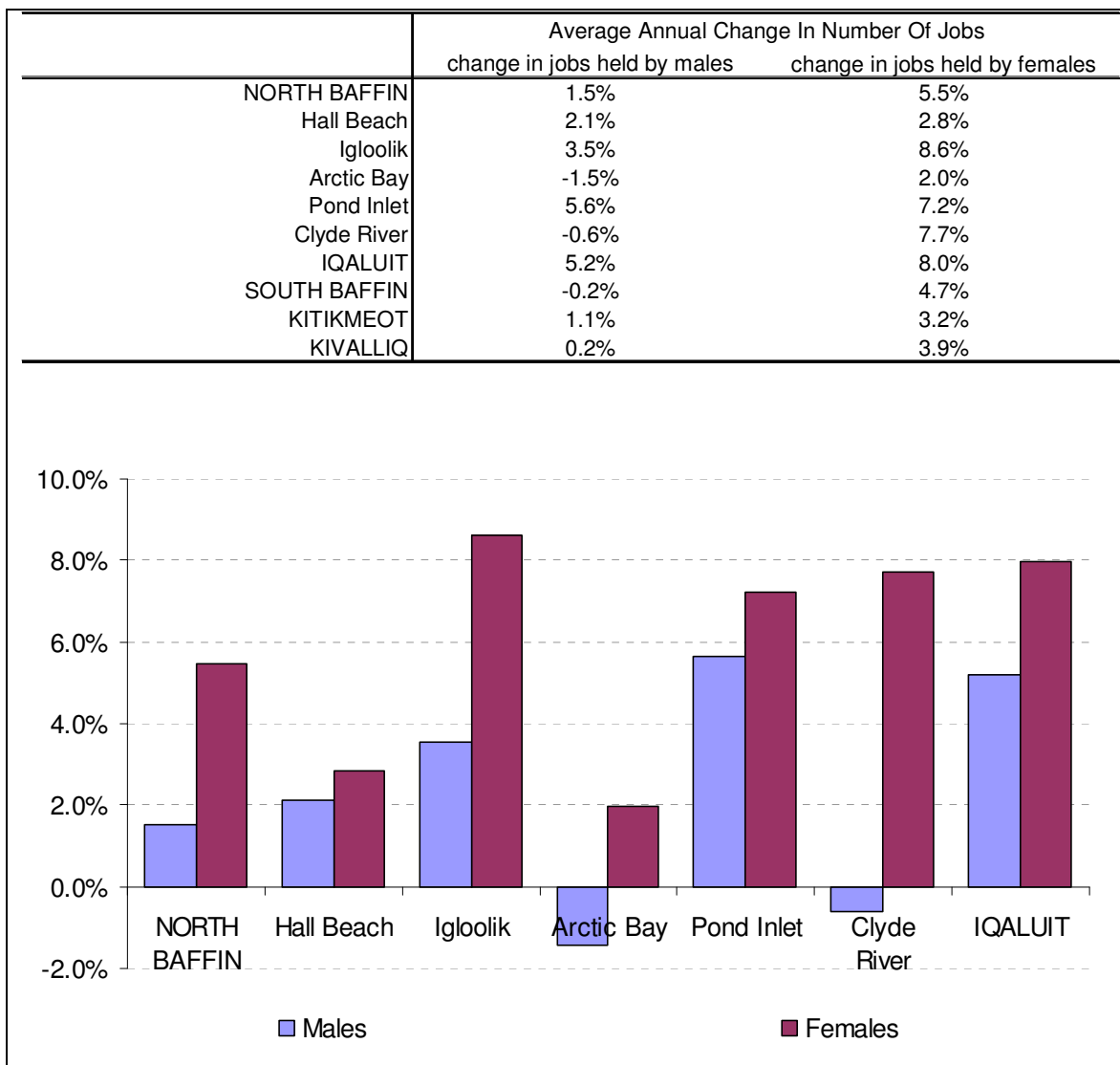
**Figure 10 Job Growth in Iqaluit and North Baffin, by Gender – 1996–2004**

Source: Derived from employment income data generated by Statistics Canada, SAADD, from T1FF (tax file). See data table for detailed job estimate numbers.

### Gender Analysis of Number of Jobs in the Study Area

The tax filer data allow “jobs” data to be considered separately for males and females. This analysis suggests that for most of the study area, the picture is very different for jobs occupied by men versus those occupied by women (see Table 13 and Figure 11).

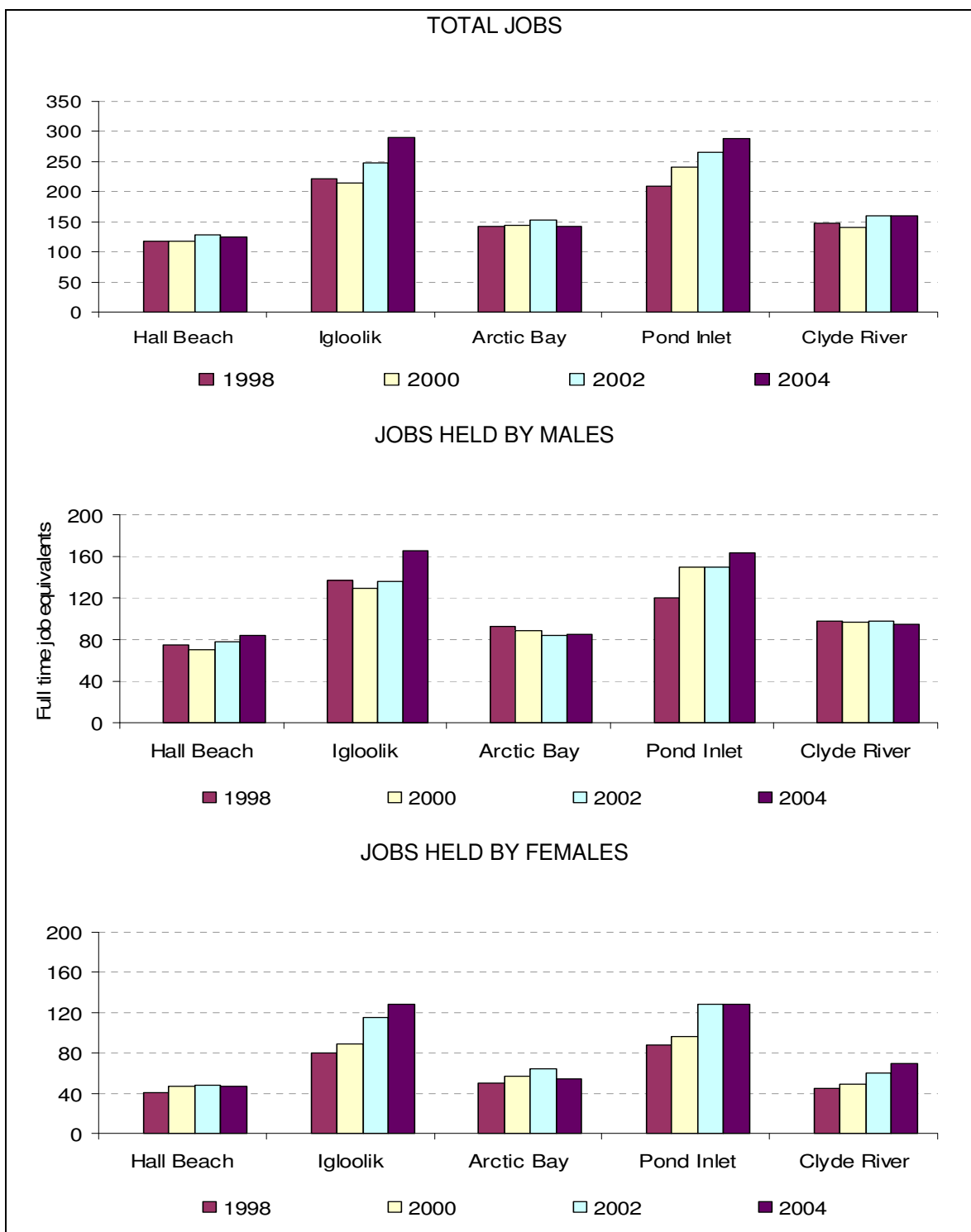
**Table 13 Average Annual Percentage Change in Jobs, by Gender – 1998–2004**



Source: Derived from employment income data generated by Statistics Canada, SAADD, from T1FF.

Notes: 1) "Jobs" are "\$35,000 equivalent jobs." Individuals earning \$35,000 or more are each counted as one "\$35K job". Lower categories of income are used to estimate equivalent jobs by dividing earnings in these categories by \$35,000.

2) Inflation over the period would lead to underestimation of earlier year job estimates. An adjustment, based on the Consumer Price Index, was applied to offset this effect.

**Figure 11 Job Growth in North Baffin LSA Communities, by Gender – 1998–2004**

Source: Derived from employment income data generated by Statistics Canada, SAADD, from T1FF (tax file). See data table for detailed job estimate numbers.

In Arctic Bay, jobs occupied by males declined by an average of 1.5% per year during the period 1998 to 2004, while those occupied by females increased modestly at 2% per year. This picture is consistent with the closure of the Nanisivik Mine where more men than women were engaged in

employment. The situation in Clyde River during this period was similar to Arctic Bay, with a decline in the number of male-occupied jobs or nearly 1% per year, while female-occupied jobs increased dramatically at close to 7.7% per year. In Hall Beach, growth in jobs was fairly consistent between male-occupied jobs (2.1%) and female-occupied jobs (2.8%).

In Iqaluit, as well as in the decentralized communities<sup>129</sup> of Pond Inlet and Igloolik, the rate of growth in jobs occupied by women increased dramatically at between 7% and 8% per year. In these communities, growth in jobs occupied by males was respectable, but considerably lower, ranging from 3.5% in Igloolik to 5.6% for Pond Inlet and 5.2% Iqaluit.

#### *Job Growth Compared with Growth of the Inuit Working-Age Population*

Total job growth, as estimated by equivalent jobs derived above, has kept pace with growth in the Inuit working-age population (those 15 years of age and over). The estimated annual increase in jobs in North Baffin has been roughly 3%, while the Inuit population increased by a similar level annually (see Table 14). In Iqaluit, job growth appears to have out-paced growth of the Inuit population component of the capital, at 6.4% versus 5.1%.

**Table 14 Growth of Jobs Relative to Growth of the Inuit Working-Age Population**

	Average Annual Change In Estimated Number Of Jobs			Average Annual Change In The Inuit Working Aged Population		
	Total	Males	Females	Total	Males	Females
IQALUIT	6.4%	5.2%	8.0%	5.1%	5.9%	4.4%
NORTH BAFFIN	3.1%	1.5%	5.5%	3.1%	3.3%	2.8%
SOUTH BAFFIN	1.8%	-0.2%	4.7%	1.4%	0.8%	2.0%

Notes: 1) Job- growth estimates refer to estimated job equivalents derived from tax filer data for the period 1996 to 2004. These are jobs held by both Inuit and non-Inuit. 2) Population data refer only to the Inuit component of working-age population growth that occurred between the 2001 and 2006 censuses.

However, the uneven allocation of new jobs across gender lines creates a somewhat different picture. In North Baffin particularly, the 1.5% annual increase in job equivalents contrasts to a 3.3% increase in the population of Inuit working-age males. Growth of the Inuit female working-age population, at 2.8%, was well under the 5.5% rate of growth of jobs held by females. In Iqaluit, the rate of growth of jobs held by males appears to have kept pace with the growth of the Inuit working-age male population, while the growth in female-held jobs was nearly double the rate of growth among the female Inuit working-age population.

The clear picture that emerges from this analysis is that, whatever the underlying causes might be, the job market for Inuit males has become tighter than that for Inuit females.<sup>130</sup>

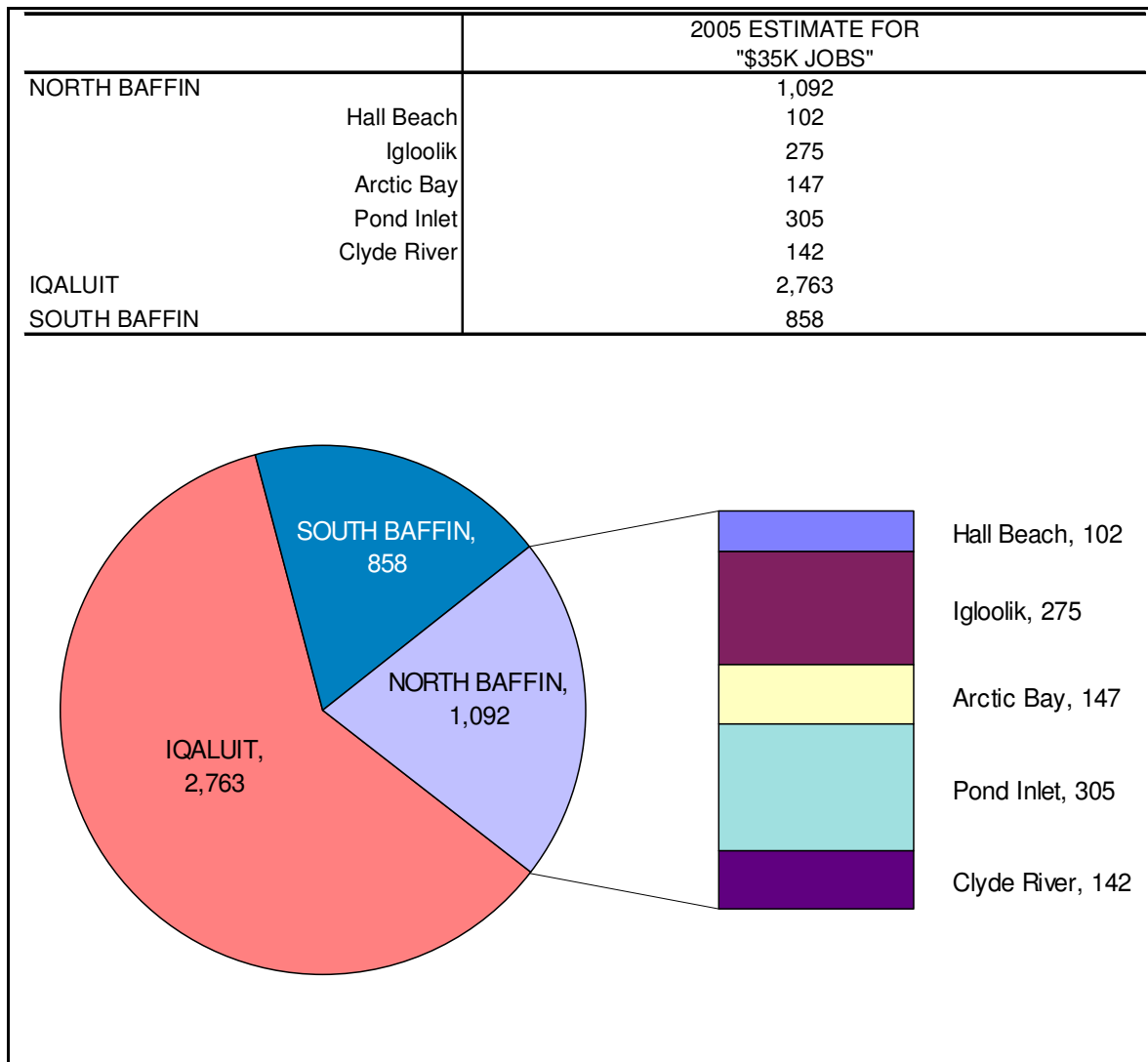
<sup>129</sup> The Government of Nunavut has located some government departments in communities outside the major centres. These communities with decentralized government offices are typically referred to as “decentralized” communities. In the LSA, Igloolik and Pond Inlet have decentralized government offices.

<sup>130</sup> The analysis does not, however, provide insight into the causes underlying this picture. Are “male” and “female” jobs distinct because these are traditionally “male jobs” or “female jobs,” or is it caused by females being more successful at getting and holding on to jobs that are accessible to both sexes? Nor does the data allow for insight into whether Inuit

### Job Estimates Based on Census Data

A second estimate of the number of full-time, full-year job equivalents can be generated using data from the 2006 census. Using this dataset, and methodology similar to that used with the T1FF data, leads to an estimate of 1,092 job equivalents generated in the North Baffin economy in 2005, and 2,763 job equivalents in Iqaluit. These equate to approximately 2 million hours of labour demand in North Baffin, and 5 million hours in Iqaluit. The South Baffin region, without Iqaluit, generated 858 jobs (see Table 15).

**Table 15 Estimated Jobs in the LSA and RSA, 2006 Census-Based Estimate**



Source: Estimates generated based on 2006 census categories of employment income.

Note: Income data for 2005. Individuals earning \$35,000 or more are each counted as one "\$35K job." Lower categories of income are used to estimate equivalent jobs by dividing total earnings in these categories by \$35,000.

Females are actually filling the "female-filled jobs" or whether, in fact they are filled by non-Inuit. This is due to the nature of the taxfiler data source that does not provide information on aboriginal identity.

### 4.3.2 Allocation of the Labour Force to Different Sectors of the Economy

#### 4.3.2.1 Territorial Labour Market Expansion

The overall size of the Nunavut Labour market has grown from 19.8 million hours worked in 1999 to 27.4 million hours in 2008. This is an increase of some 7.6 million hours, or 38% (see Table 16). This rate of growth in the labour market can be compared with an increase in the Nunavut population of 4,803, or 18%, over the same period.

**Table 16 Hours Worked in Nunavut, Select Industries, 1999–2008, ('000s of hours)**

	1999	2000	2001	2002	2003	2004	2005	2006	2007	2008
Mining and oil and gas	2,138	1,993	1,989	1,551	601	453	357	681	916	944
Transportation and warehousing	2,167	1,487	964	797	874	777	700	773	1,061	1,152
Construction	1,297	1,282	2,129	2,643	2,341	2,647	3,289	2,539	3,435	3,614
Retail trade	2,132	1,545	1,321	1,446	1,685	1,636	1,750	1,935	2,351	2,620
Government sector	4,730	9,080	9,771	9,559	10,135	10,232	10,028	9,414	11,753	10,934
All other industries	7,345	5,274	4,911	5,381	5,760	5,234	5,657	5,675	7,836	8,121
All industries	19,809	20,661	21,085	21,377	21,396	20,979	21,781	21,017	27,352	27,385

#### (Year-Over-Year Change)

	2000	2001	2002	2003	2004	2005	2006	2007	2008	change from 1999
Mining and oil and gas	-6.8%	-0.2%	-22.0%	-61.3%	-24.6%	-21.2%	90.8%	34.5%	3.1%	-56%
Transportation and warehousing	-31.4%	-35.2%	-17.3%	9.7%	-11.1%	-9.9%	10.4%	37.3%	8.6%	-47%
Construction	-1.2%	66.1%	24.1%	-11.4%	13.1%	24.3%	-22.8%	35.3%	5.2%	179%
Retail trade	-27.5%	-14.5%	9.5%	16.5%	-2.9%	7.0%	10.6%	21.5%	11.4%	23%
Government sector	92.0%	7.6%	-2.2%	6.0%	1.0%	-2.0%	-6.1%	24.8%	-7.0%	131%
All other industries	-28.2%	-6.9%	9.6%	7.0%	-9.1%	8.1%	0.3%	38.1%	3.6%	11%
All industries	4.3%	2.1%	1.4%	0.1%	-1.9%	3.8%	-3.5%	30.1%	0.1%	38%

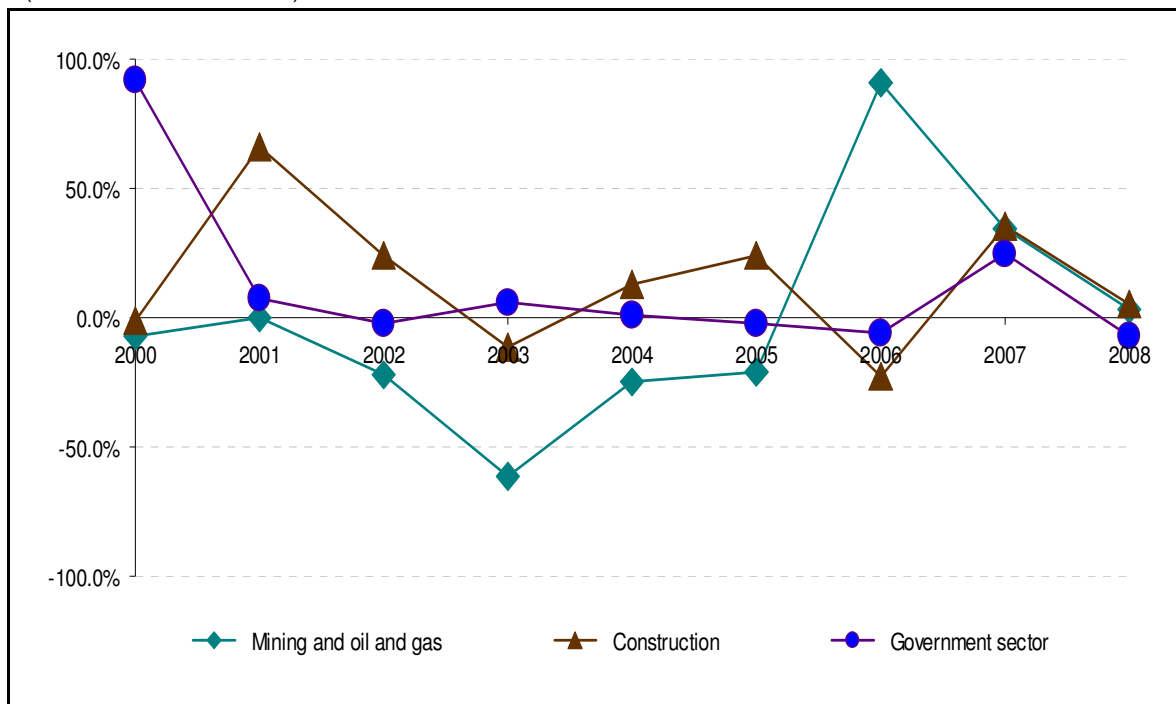
Source: Derived from Statistics Canada (CANSIM Table 383-0010, "Labour Statistics by Business Sector Industry and Non-Commercial Activity." Last updated: 2010-06-03). Canadian Productivity Accounts program. Accessed 16/06/10.

In this overall labour market growth scenario, the construction industry has generated the greatest expansion, nearly tripling in size from 1.3 million hours in 1999, to 3.6 million hours in 2008, an increase of 179%. The government sector has also expanded rapidly, and has added the most additional work, 6.2 million new hours, over this time period. For year-to-year changes in three key sectors, mining, construction, and government, see Figure 12.

Several major events in the mining sector have led to large fluctuations, and an overall decline in total hours from a high of 2.1 million in 1999 to a low point of 0.36 million in 2005. This low point coincides with closure of the Nanisivik Mine in the North Baffin region and the Polaris Mine in the high arctic region, and with the earlier 2003 closure of the Lupin Mine in the Kitikmeot. The brief activity of the Jericho Mine before ceasing operations in late 2008 contributed modestly to the

sector, under 50,000 hours in 2006 and 2007,<sup>131</sup> while, as will be seen later in this baseline report, the Mary River bulk sample activity, provided 0.78 million hours in 2008.

**Figure 12 Year-Over-Year Change in Hours Worked in Nunavut, Select Industries**  
(1999/2000 to 2007/2008)



Source: Derived from Statistics Canada (CANSIM Table 383-0010, "Labour Statistics by Business Sector Industry and Non-Commercial Activity." Last updated: 2010-06-03). Canadian Productivity Accounts program. Accessed 16/06/10.

#### 4.3.2.2 Major Industries of the LSA Labour Markets

In the territorial context of labour market growth, an understanding of how the current labour force of the LSA is allocated across various industries can be gained from census data, providing a basis for insight into how introduction of a major mining project will affect diversity of the local economy.

In North Baffin, three industries—public administration, educational services, and retail trade—each account for more than 15% of labour force allocation, collectively occupying nearly two-thirds (59%) of total labour force activity (see Table 17).

The economy of Iqaluit is substantially more diverse, with all industry sectors except public administration accounting for less than 10% of total labour force allocation. Still, with public administration occupying the efforts of more than one-third (36%) of the workforce, the Iqaluit economy can only be considered "diverse" in comparison with the far less-diverse economies of North Baffin.

<sup>131</sup> As estimated in Brubacher Development Strategies. 2009. "Jericho Diamond Mine: 2007 Socio-Economic Monitoring Report." Prepared for the Kitikmeot Socio-Economic Monitoring Committee. 80 pp.

Among the remaining industry sectors, *health care and social services* accounts for 8% of the North Baffin economy, while *construction* accounts for 6% and *transportation and warehousing* accounts for 5%. The mining sector accounted for only 2% of labour force allocation in the North Baffin region at the time of the 2006 census. The labour market in this region is clearly heavily focused on government administration and service delivery, with some 70% of capacity directed to these sectors and the remaining 30% directed at various private-sector activities, including retail, accommodation, construction, real estate, cultural industries, and others.

The picture in Iqaluit is somewhat different. In addition to the 36% of the labour force allocated to *public administration*, labour allocated toward *health care and social services* accounts for 9%, while *educational services* adds another 7% to the “public” side of labour market allocation. This leads to 55% of capacity directed to government administration and service delivery.

Private sector activities in the capital city account for 45% of the labour market. At the time of the 2006 census, the mining sector did not register even 1% of total labour market allocation in Iqaluit.

#### 4.3.2.3 Allocation of Male and Female Labour to LSA Industries

To a large degree, the same industries are of importance to both men and women (see Table 18 and Table 19). As illustrated in Figure 13, *public administration* is a major industry in North Baffin as well as Iqaluit. In the North Baffin, *educational services*, and *retail trade*, are also shared by both genders as industries of major sources of employment. However, the importance of these industries is greater for women than for men, and is equal to the *public administration* sector. For allocation of the North Baffin labour force by gender, see Figure 14 and for the Iqaluit labour force, see Figure 15. The major contrast is that the *health care and social assistance* sector is important to female employment, whereas males are engaged in a wider variety of other industry sectors, with very little involvement in this sector.

The employment allocation picture for women in Iqaluit is similar to that in North Baffin, with the same four industry sectors occupying the most important positions. However, here the *public sector* is much more important, accounting for four-of-ten jobs occupied by women, compared with only half that level in North Baffin. The relative importance of the *retail trade* and *educational services* sectors are considerably less in Iqaluit. For men, the importance of the *public sector* is similar to North Baffin, accounting for one-in-three jobs. The *construction* sector is the only other industry that accounts for 10% or more of jobs for men.

**Table 17 Allocation of the LSA Labour Force to Industries – 2005**

North American Industry Classification System (NAICS) CATEGORY	North Baffin	Hall Beach	Igloolik	Arctic Bay	Pond Inlet	Clyde River	Iqaluit	South Baffin
	(number who worked mostly in this industry in 2005)							
11 Agriculture, forestry, fishing and hunting	25	0	0	0	0	15	15	30
21 Mining and oil and gas extraction	40	0	10	10	25	10	10	0
22 Utilities	35	0	10	10	10	0	60	25
23 Construction	110	25	20	30	20	15	200	75
31-33 Manufacturing	10	0	0	0	0	10	25	35
41 Wholesale trade	0	0	0	0	0	0	35	10
44-45 Retail trade	290	25	65	45	80	55	245	230
48-49 Transportation and warehousing	90	10	20	20	20	15	210	85
51 Information and cultural industries	45	0	25	10	0	10	100	15
52 Finance and insurance	0	0	0	0	0	0	45	10
53 Real estate and rental and leasing	60	0	15	10	25	10	80	60
54 Professional, scientific and technical services	20	0	0	10	10	10	145	10
55 Management of companies and enterprises	0	0	0	0	0	0	0	0
56 Administrative and support, waste management and remediation services	40	0	10	10	0	10	110	45
61 Educational services	320	35	75	45	70	60	260	250
62 Health care and social assistance	140	10	35	20	35	35	305	140
71 Arts, entertainment and recreation	30	0	10	0	10	10	70	100
72 Accommodation and food services	75	0	15	15	25	0	150	40
81 Other services (except public administration)	45	0	10	10	10	15	170	30
91 Public administration	485	50	135	45	140	55	1245	410
Industry - Not applicable	95	0	25	15	15	30	70	105

Source: Statistics Canada, 2006 Census; custom aggregations prepared by Statistics Canada for North Baffin and South Baffin.

**Table 18 Allocation of LSA Labour Force to Industries, Males – 2005**

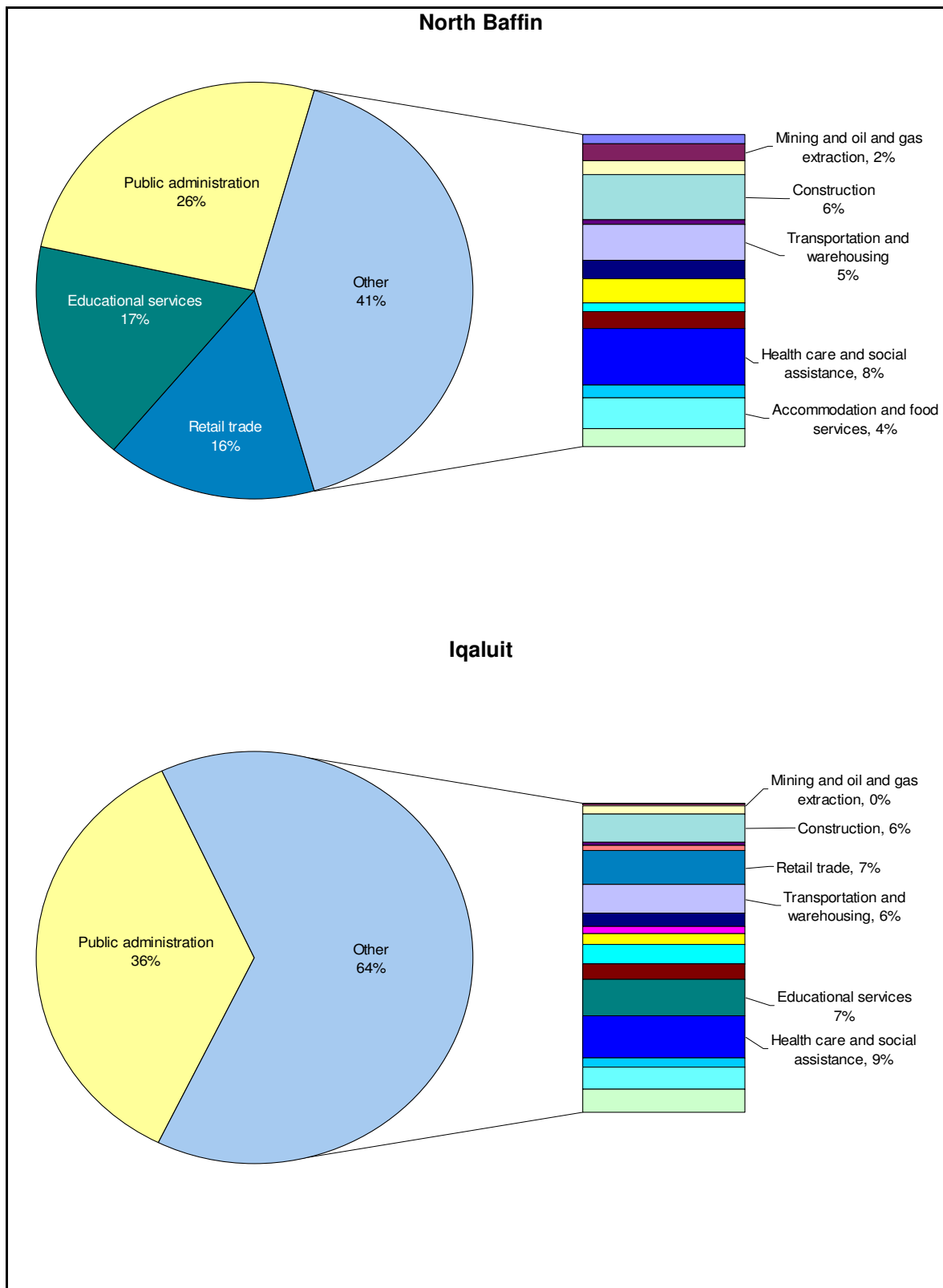
North American Industry Classification System (NAICS) CATEGORY	North Baffin	Hall Beach	Igloolik	Arctic Bay	Pond Inlet	Clyde River	Iqaluit	South Baffin
	(number who worked mostly in this industry in 2005)							
11 Agriculture, forestry, fishing and hunting	25	0	10	0	10	15	10	30
21 Mining and oil and gas extraction	40	0	0	0	25	0	10	10
22 Utilities	35	0	10	0	15	0	50	25
23 Construction	100	20	15	25	20	15	175	70
31-33 Manufacturing	0	0	0	0	0	0	20	20
41 Wholesale trade	0	0	0	0	0	0	30	0
44-45 Retail trade	130	10	30	20	40	25	130	105
48-49 Transportation and warehousing	75	10	10	15	15	10	155	65
51 Information and cultural industries	25	0	20	0	0	0	55	10
52 Finance and insurance	0	0	0	0	0	0	15	0
53 Real estate and rental and leasing	45	0	10	10	20	10	55	40
54 Professional, scientific and technical services	10	0	0	0	10	0	80	10
55 Management of companies and enterprises	0	0	0	0	0	0	0	0
56 Administrative and support, waste management and remediation services	25	0	10	0	0	10	70	25
61 Educational services	105	15	25	15	25	25	85	65
62 Health care and social assistance	30	0	0	0	0	10	65	10
71 Arts, entertainment and recreation	30	0	10	0	10	10	50	85
72 Accommodation and food services	35	0	10	0	10	0	80	15
81 Other services (except public administration)	30	0	0	0	10	10	95	20
91 Public administration	315	30	80	25	95	45	595	230
Industry - Not applicable	55	0	20	0	10	20	35	50

Source: Statistics Canada, 2006 Census; custom aggregations prepared by Statistics Canada for North Baffin and South Baffin.

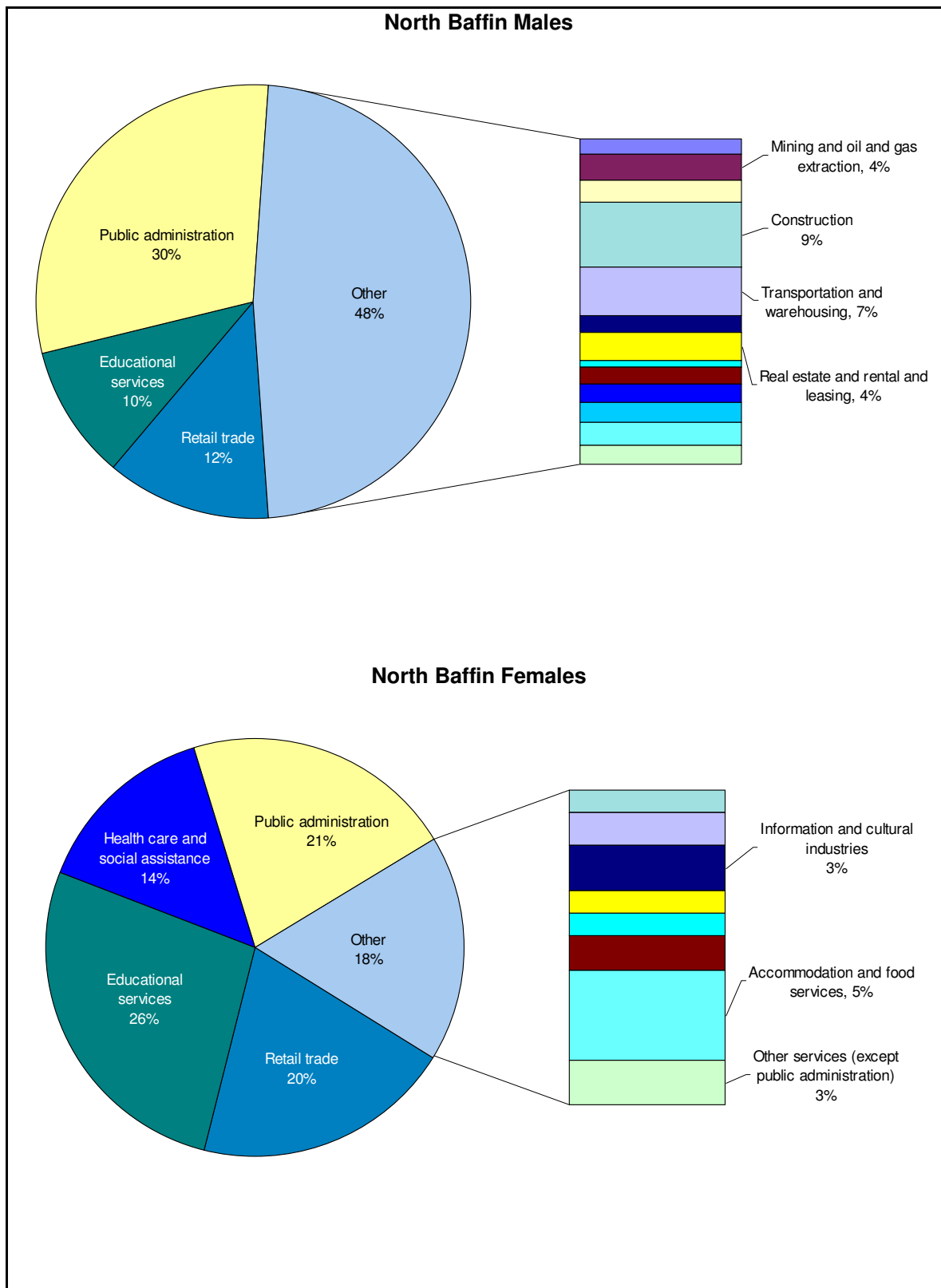
**Table 19 Allocation of LSA Labour Force to Industries, Females – 2005**

North American Industry Classification System (NAICS) CATEGORY	North Baffin	Hall Beach	Igloolik	Arctic Bay	Pond Inlet	Clyde River	Iqaluit	South Baffin
	(number who worked mostly in this industry in 2005)							
11 Agriculture, forestry, fishing and hunting	0	0	0	0	0	10	0	10
21 Mining and oil and gas extraction	0	0	0	0	0	0	0	0
22 Utilities	0	0	0	0	0	0	10	10
23 Construction	10	0	0	10	0	0	25	10
31-33 Manufacturing	0	0	0	0	0	0	0	10
41 Wholesale trade	0	0	0	0	0	0	0	0
44-45 Retail trade	160	15	35	25	40	30	110	125
48-49 Transportation and warehousing	15	0	10	10	0	10	50	20
51 Information and cultural industries	20	0	0	10	0	0	45	10
52 Finance and insurance	0	0	0	0	0	0	35	0
53 Real estate and rental and leasing	10	0	10	10	10	0	20	20
54 Professional, scientific and technical services	10	0	0	0	10	0	60	0
55 Management of companies and enterprises	0	0	0	0	0	0	0	0
56 Administrative and support, waste management and remediation services	15	0	0	0	10	10	40	20
61 Educational services	215	20	55	30	50	35	180	185
62 Health care and social assistance	115	10	30	15	30	25	240	125
71 Arts, entertainment and recreation	0	0	10	0	0	10	15	15
72 Accommodation and food services	40	0	10	10	15	10	65	20
81 Other services (except public administration)	20	0	10	0	0	10	75	10
91 Public administration	170	20	55	20	50	15	650	180
Industry - Not applicable	35	0	10	0	10	15	30	55

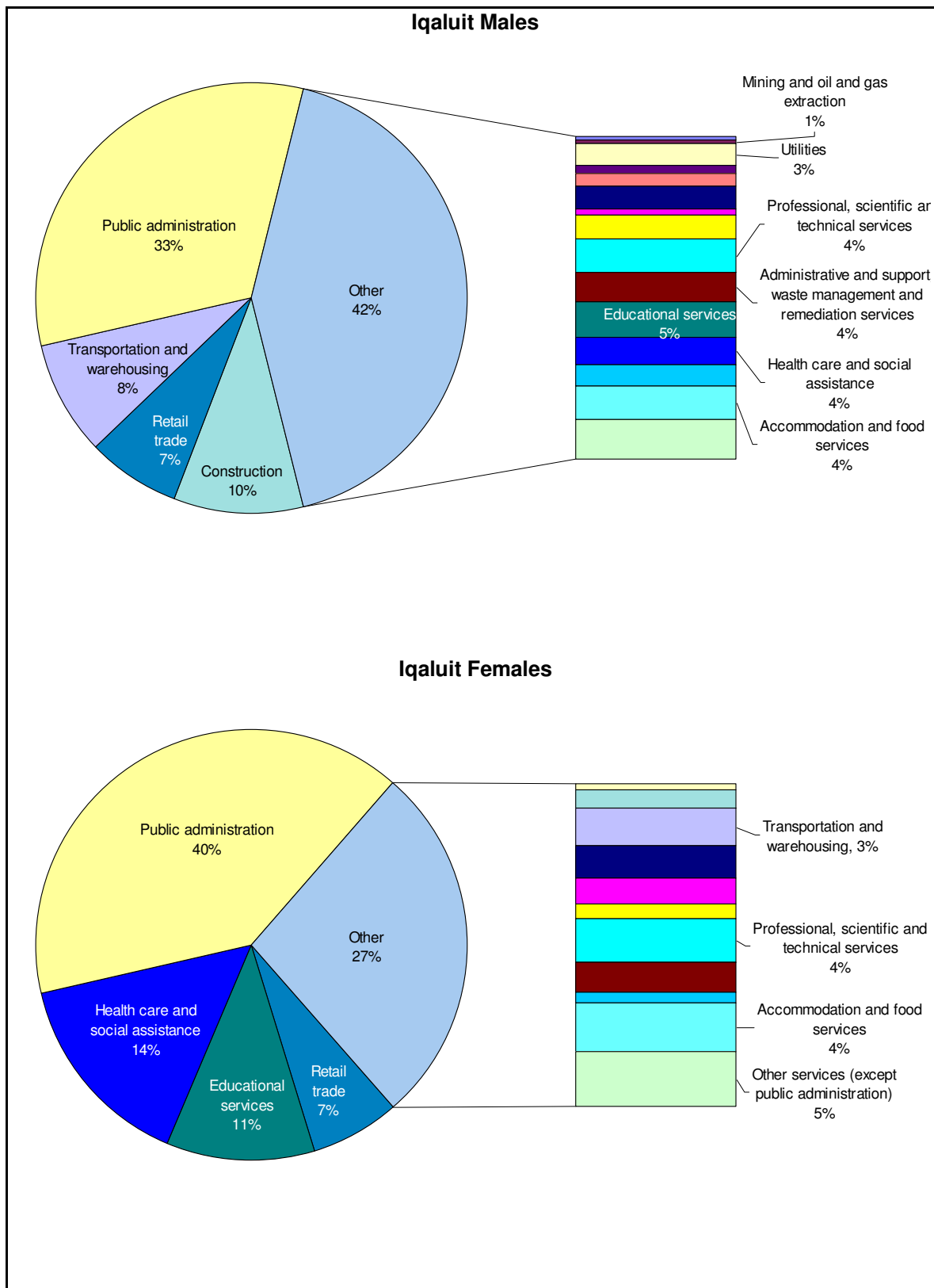
Source: Statistics Canada, 2006 Census; custom aggregations prepared by Statistics Canada for North Baffin and South Baffin.

**Figure 13 Labour Force by Industry Category – 2005**

Source: Statistics Canada, 2006 Census; custom aggregations prepared by Statistics Canada for North Baffin.

**Figure 14 Labour Force by Industry Category, by Gender, North Baffin – 2005**

Source: Statistics Canada, 2006 Census; custom aggregations prepared by Statistics Canada for North Baffin.

**Figure 15 Labour Force by Industry Category, by Gender, Iqaluit – 2005**

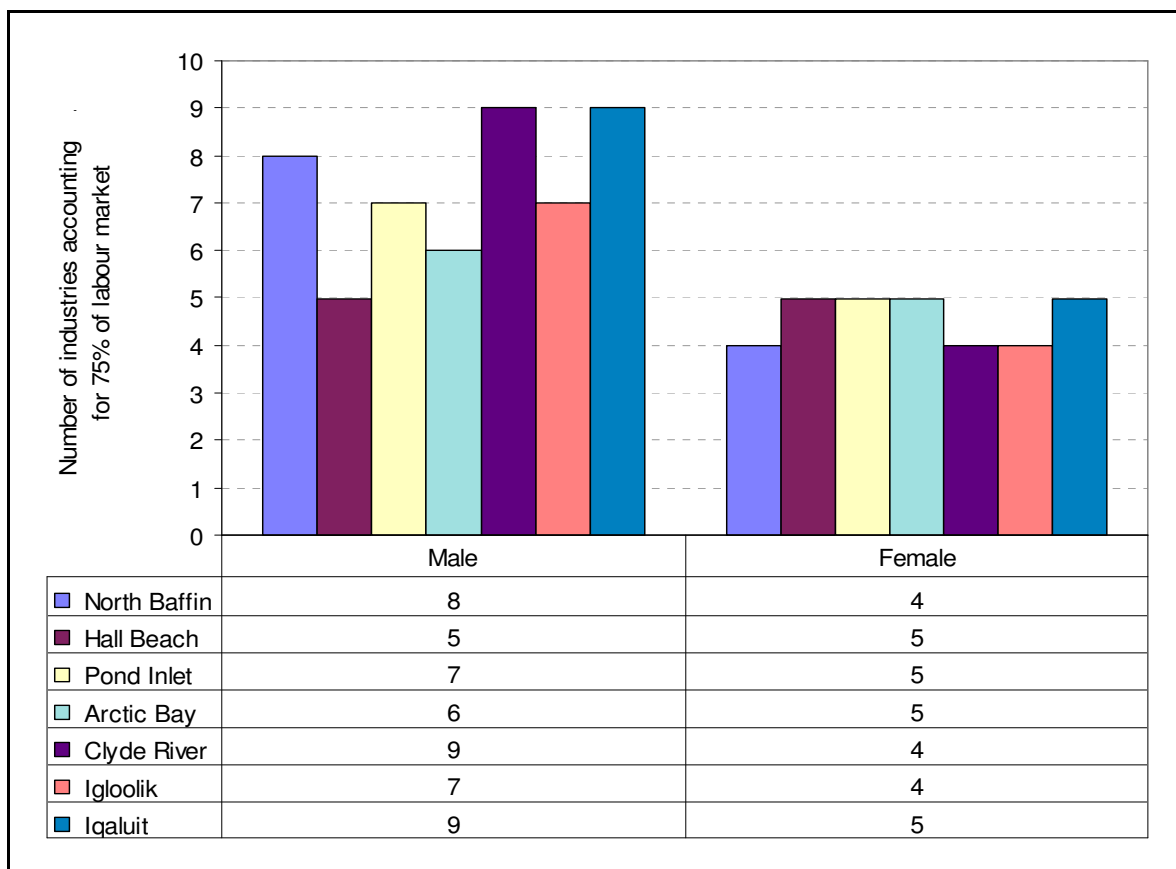
Source: Statistics Canada, 2006 Census.

#### 4.3.2.4 Labour Market Diversity Experienced by Inuit Males and Females

Consideration of the degree of concentration of the labour force into different sectors of the economy provides insight into the resilience or vulnerability of the local economies. As can be seen in Figure 16, Table 20, and Table 21, the diversity of industry sectors typically filled by women is much narrower than that typically filled by men. While eight industries account for three-quarters of Inuit male workers, three-quarters of Inuit women are engaged in just four sectors of the economy. There is some variability in this scenario, with the male workforce of Hall Beach and Arctic Bay also highly concentrated in only a few sectors. This suggests that the female labour force is more vulnerable to industry-specific shocks than is the male workforce.

Most women are engaged in industries funded through public government, so these sectors are unlikely to experience major economic collapse. Rather the vulnerability of these sectors lies in future prospects for expansion—as growth in government spending slows, these sectors will reduce the rate at which they add new jobs. In the short and medium term, there will continue to be lots of opportunity for Inuit residents of the study area to obtain credentials needed to gain access to public sector jobs through replacement of southern workers. This will have the same effect, in terms of employment opportunities, as public sector expansion would have. In the longer term, as Inuit reach representative levels in the public service, these substitution opportunities will decline.

**Figure 16 Labour Market Diversity Experienced by Inuit Labour Force – 2005**



Source: Derived from Statistics Canada 2006 Census; custom aggregations prepared by Statistics Canada for North Baffin. This figure can be derived from the data presented in Table 21.

**Table 20 Industry Sectors as Percentage of Total Labour Force, by Gender – 2005**

<b>Both Inuit and Non-Inuit Workers</b>								
NAICS Category		North Baffin	Hall Beach	Iqloolik	Arctic Bay	Pond Inlet	Clyde River	Iqaluit
		(number who worked mostly in this industry in 2005)						
MALES	91 Public administration	28.4%	35.3%	30.2%	22.7%	22.0%	30.8%	32.0%
	23 Construction	9.0%	23.5%	6.3%	22.7%	7.3%	5.8%	9.4%
	48-49 Transportation and warehousing	6.8%	11.8%	4.8%	13.6%	4.9%	3.8%	8.3%
	44-45 Retail trade	11.7%	11.8%	12.7%	18.2%	12.2%	11.5%	7.0%
	81 Other services (except public administration)	2.7%	0.0%	3.2%	0.0%	4.9%	0.0%	5.1%
	61 Educational services	9.5%	17.6%	7.9%	13.6%	12.2%	9.6%	4.6%
	72 Accommodation and food services	3.2%	0.0%	3.2%	0.0%	0.0%	3.8%	4.3%
	54 Professional, scientific and technical services	0.9%	0.0%	3.2%	0.0%	0.0%	0.0%	4.3%
	56 Administrative and support, waste management and re	2.3%	0.0%	0.0%	0.0%	4.9%	3.8%	3.8%
	62 Health care and social assistance	2.7%	0.0%	0.0%	0.0%	4.9%	0.0%	3.5%
	51 Information and cultural industries	2.3%	0.0%	0.0%	0.0%	0.0%	7.7%	3.0%
	53 Real estate and rental and leasing	4.1%	0.0%	6.3%	9.1%	4.9%	3.8%	3.0%
	71 Arts, entertainment and recreation	2.7%	0.0%	3.2%	0.0%	4.9%	3.8%	2.7%
	22 Utilities	3.2%	0.0%	4.8%	0.0%	0.0%	3.8%	2.7%
	Industry - Not applicable	5.0%	0.0%	3.2%	0.0%	9.8%	7.7%	1.9%
	41 Wholesale trade	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	1.6%
	31-33 Manufacturing	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	1.1%
	52 Finance and insurance	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.8%
	11 Agriculture, forestry, fishing and hunting	2.3%	0.0%	3.2%	0.0%	7.3%	3.8%	0.5%
	21 Mining and oil and gas extraction	3.6%	0.0%	7.9%	0.0%	0.0%	0.0%	0.5%
	55 Management of companies and enterprises	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%
FEMALES	91 Public administration	20.4%	30.8%	22.2%	14.3%	8.3%	23.4%	39.4%
	62 Health care and social assistance	13.8%	15.4%	13.3%	10.7%	13.9%	12.8%	14.5%
	61 Educational services	25.7%	30.8%	22.2%	21.4%	19.4%	23.4%	10.9%
	44-45 Retail trade	19.2%	23.1%	17.8%	17.9%	16.7%	14.9%	6.7%
	81 Other services (except public administration)	2.4%	0.0%	0.0%	0.0%	5.6%	4.3%	4.5%
	72 Accommodation and food services	4.8%	0.0%	6.7%	7.1%	5.6%	4.3%	3.9%
	54 Professional, scientific and technical services	1.2%	0.0%	4.4%	0.0%	0.0%	0.0%	3.6%
	48-49 Transportation and warehousing	1.8%	0.0%	0.0%	7.1%	5.6%	4.3%	3.0%
	51 Information and cultural industries	2.4%	0.0%	0.0%	7.1%	0.0%	0.0%	2.7%
	56 Administrative and support, waste management and re	1.8%	0.0%	4.4%	0.0%	5.6%	0.0%	2.4%
	52 Finance and insurance	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	2.1%
	Industry - Not applicable	4.2%	0.0%	4.4%	0.0%	8.3%	4.3%	1.8%
	23 Construction	1.2%	0.0%	0.0%	7.1%	0.0%	0.0%	1.5%
	53 Real estate and rental and leasing	1.2%	0.0%	4.4%	7.1%	0.0%	4.3%	1.2%
	71 Arts, entertainment and recreation	0.0%	0.0%	0.0%	0.0%	5.6%	4.3%	0.9%
	22 Utilities	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.6%
	11 Agriculture, forestry, fishing and hunting	0.0%	0.0%	0.0%	0.0%	5.6%	0.0%	0.0%
	21 Mining and oil and gas extraction	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%
	31-33 Manufacturing	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%
	41 Wholesale trade	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%
	55 Management of companies and enterprises	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%

Source: Statistics Canada, 2006 Census; custom aggregations prepared by Statistics Canada for North Baffin.

**Table 21 Industry Sectors as Percentage of Total Labour Force, by Gender – 2005**

<b>Inuit Workers</b>								
NAICS Category		North Baffin	Hall Beach	Igloolik	Arctic Bay	Pond Inlet	Clyde River	Iqaluit
		(number who worked mostly in this industry in 2005)						
MALES	91 Public administration	27.6%	37.5%	28.3%	21.7%	20.5%	33.3%	28.2%
	23 Construction	9.4%	25.0%	5.7%	21.7%	7.7%	7.7%	10.1%
	44-45 Retail trade	12.0%	12.5%	13.2%	13.0%	10.3%	12.8%	8.1%
	48-49 Transportation and warehousing	6.8%	12.5%	5.7%	8.7%	5.1%	5.1%	6.0%
	81 Other services (except public administration)	3.1%	0.0%	3.8%	0.0%	5.1%	0.0%	5.4%
	56 Administrative and support, waste management and recycling	1.6%	0.0%	0.0%	0.0%	5.1%	0.0%	5.4%
	71 Arts, entertainment and recreation	2.6%	0.0%	0.0%	0.0%	0.0%	0.0%	4.7%
	61 Educational services	6.8%	0.0%	7.5%	8.7%	10.3%	5.1%	4.0%
	62 Health care and social assistance	2.1%	0.0%	3.8%	0.0%	5.1%	0.0%	4.0%
	Industry - Not applicable	5.7%	0.0%	3.8%	8.7%	7.7%	7.7%	3.4%
	72 Accommodation and food services	3.1%	0.0%	3.8%	0.0%	0.0%	5.1%	3.4%
	54 Professional, scientific and technical services	1.0%	12.5%	0.0%	0.0%	5.1%	0.0%	3.4%
	51 Information and cultural industries	2.6%	0.0%	3.8%	8.7%	5.1%	7.7%	2.7%
	22 Utilities	3.6%	0.0%	5.7%	0.0%	5.1%	5.1%	2.7%
	53 Real estate and rental and leasing	4.2%	0.0%	5.7%	8.7%	0.0%	5.1%	2.0%
	31-33 Manufacturing	1.0%	0.0%	0.0%	0.0%	0.0%	0.0%	2.0%
	41 Wholesale trade	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	2.0%
	11 Agriculture, forestry, fishing and hunting	2.6%	0.0%	0.0%	0.0%	7.7%	0.0%	1.3%
	52 Finance and insurance	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	1.3%
	21 Mining and oil and gas extraction	4.2%	0.0%	9.4%	0.0%	0.0%	5.1%	0.0%
	55 Management of companies and enterprises	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%
FEMALES	91 Public administration	20.1%	17.6%	19.5%	14.3%	13.6%	25.0%	40.7%
	62 Health care and social assistance	12.8%	11.8%	12.2%	9.5%	18.2%	13.9%	13.6%
	61 Educational services	21.5%	17.6%	17.1%	23.8%	27.3%	19.4%	9.3%
	44-45 Retail trade	20.8%	17.6%	19.5%	23.8%	27.3%	19.4%	8.6%
	81 Other services (except public administration)	2.7%	0.0%	4.9%	0.0%	0.0%	5.6%	5.6%
	72 Accommodation and food services	5.4%	0.0%	7.3%	9.5%	0.0%	5.6%	3.1%
	51 Information and cultural industries	2.7%	0.0%	4.9%	0.0%	0.0%	5.6%	3.1%
	Industry - Not applicable	4.7%	0.0%	0.0%	9.5%	13.6%	0.0%	3.1%
	48-49 Transportation and warehousing	2.0%	0.0%	4.9%	0.0%	0.0%	0.0%	3.1%
	54 Professional, scientific and technical services	1.3%	0.0%	0.0%	0.0%	0.0%	0.0%	3.1%
	56 Administrative and support, waste management and recycling	1.3%	11.8%	4.9%	9.5%	0.0%	0.0%	1.9%
	23 Construction	1.3%	11.8%	4.9%	0.0%	0.0%	0.0%	1.2%
	53 Real estate and rental and leasing	2.0%	11.8%	0.0%	0.0%	0.0%	0.0%	1.2%
	52 Finance and insurance	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	1.2%
	71 Arts, entertainment and recreation	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	1.2%
	31-33 Manufacturing	1.3%	0.0%	0.0%	0.0%	0.0%	5.6%	0.0%
	11 Agriculture, forestry, fishing and hunting	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%
	21 Mining and oil and gas extraction	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%
	22 Utilities	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%
	41 Wholesale trade	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%
	55 Management of companies and enterprises	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%

Source: Statistics Canada, 2006 Census; custom aggregations prepared by Statistics Canada for North Baffin.

### 4.3.3 Skills Demanded by the Local Labour Market

#### 4.3.3.1 Occupational Skill Levels In The LSA & RSA Labour Markets

Meeting the demand for workers generated by the Nunavut economy is typically characterized as requiring the import of labour from regions outside the territory. Relatively short-term construction projects typically involve trades people who are flown in and put up in local temporary accommodation. Longer-term government jobs require skill sets that are often not locally available, resulting in in-migration and residency of workers hired from the south.

Insight into the general level of skills required by the economies of the LSA and RSA can be derived from census occupational classification data. The 2006 census categorizes the labour force according to the National Occupancy Standard for Statistics (NOCS) classification system. The NOCS categories correspond generally to five skill levels associated with the source of education and training typically required by different jobs. These levels are:

- Management occupations
- Skill Level A occupations usually requiring university education
- Skill Level B occupations usually requiring college education or apprenticeship training
- Skill Level C, usually requiring secondary school and/or occupation-specific training
- Skill Level D, on-the-job training is usually provided for these occupations

During the week prior to the 2006 census enumeration, 21% of Iqaluit's labour force was engaged in occupations requiring university education (level "A" skills), with another 15% engaged in management occupations (see Table 22).

The profile of skills demanded by occupations of the North Baffin labour market is generally lower. A total of 345 individuals, or 18% of the labour force, were engaged in positions usually requiring a university education. The proportion of the labour force in management positions in North Baffin is only half that found in Iqaluit, at 7%.

The proportion of the labour force in occupations typically requiring college or apprenticeship training, and those requiring high school and/or occupation-specific training are similar in both areas, at approximately 25% and 30%, respectively. Those occupations with the lowest skill-level requirements, where on-the-job training is usually sufficient, involve 19% of the North Baffin labour force, compared with just 8% in Iqaluit (see Figure 17).

**Table 22 Labour Force by Occupational Skill Level, Aboriginal Identity, Gender – 2006**

			NOC OCCUPATIONAL SKILL LEVEL					Experienced Labour Force
			Management	A	B	C	D	
Total population	All	Iqaluit	540	750	920	1,005	275	3,490
		North Baffin	135	345	455	585	350	1,870
		South Baffin	105	295	415	485	285	1,585
		Nunavut	1,275	2,220	3,090	3,610	1,885	12,080
		Canada	1,631,730	2,763,080	5,365,660	5,050,270	2,050,420	16,861,160
	Males	Iqaluit	335	290	515	555	140	1,835
		North Baffin	95	135	250	390	165	1,035
		South Baffin	70	85	240	320	115	830
		Nunavut	820	800	1,740	2,165	925	6,450
		Canada	1,032,940	1,273,685	3,208,825	2,448,350	920,995	8,884,795
	Females	Iqaluit	710	355	1,015	650	45	2,775
		North Baffin	205	250	530	490	40	1,515
		South Baffin	180	220	505	460	35	1,400
		Nunavut	1,790	1,465	3,685	2,970	225	10,135
		Canada	2,760,790	1,598,405	6,437,840	2,951,825	610,310	14,359,170
Aboriginal population	All	Iqaluit	150	250	385	525	180	1,490
		North Baffin	75	220	425	535	335	1,590
		South Baffin	55	190	410	445	275	1,375
		Nunavut	555	1,135	2,305	2,920	1,730	8,645
		Canada	31,965	48,915	152,255	179,630	84,480	497,245
	Males	Iqaluit	80	70	210	275	75	710
		North Baffin	55	75	225	365	160	880
		South Baffin	35	60	225	285	120	725
		Nunavut	310	350	1,220	1,775	835	4,490
		Canada	17,250	16,800	88,935	92,285	38,545	253,815
	Females	Iqaluit	70	175	220	230	115	810
		North Baffin	35	135	205	175	175	725
		South Baffin	30	145	155	165	165	660
		Nunavut	235	770	1,090	1,150	900	4,145
		Canada	14,715	32,125	63,315	87,355	45,945	243,455

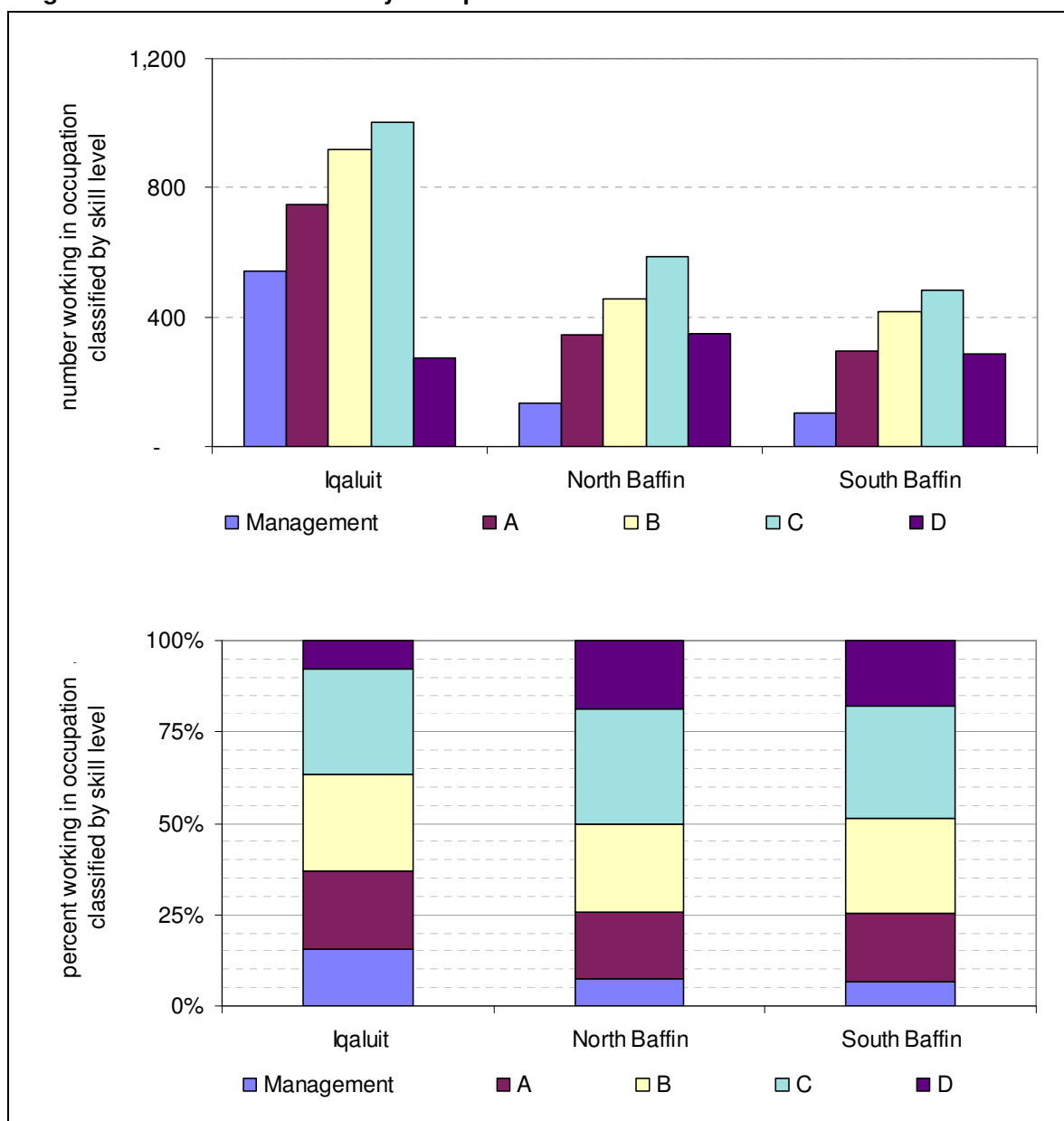
Source: Derived from the NOC-S categories generated from 2006 census. Custom census aggregations for North and South Baffin (minus Iqaluit) were generated by Statistics Canada.

Notes: 1) Refers to the kind of work persons were doing during the reference week, as determined by their kind of work and the description of the main activities in their job. If the person did not have a job during the week (Sunday to Saturday) prior to enumeration, the data relate to the job of longest duration since January 1, 2005. Persons with two or more jobs were to report the information for the job at which they worked the most hours.

2) NOC-S categories were converted to comparable HRSDC NOC (2006) categories, for which related skill levels are provided by HRSDC.

3) Skill levels are from the HRSDC NOC Matrix and are described as follows: Skill Level A occupations usually require university education; "B" occupations usually require college education or apprenticeship training; "C" occupations usually require secondary school and/or occupation-specific training; and for "D", on-the-job training is usually provided for these occupations.

4) Data are not presented for individual North Baffin communities, as the small populations, combined with data suppression and random rounding, makes the presentation unreliable.

**Figure 17 LSA Labour Force by Occupational Skill Levels – 2006**

Source: Derived from the NOC-S categories generated from 2006 census. Custom census aggregations for North and South Baffin (minus Iqaluit) were generated by Statistics Canada.

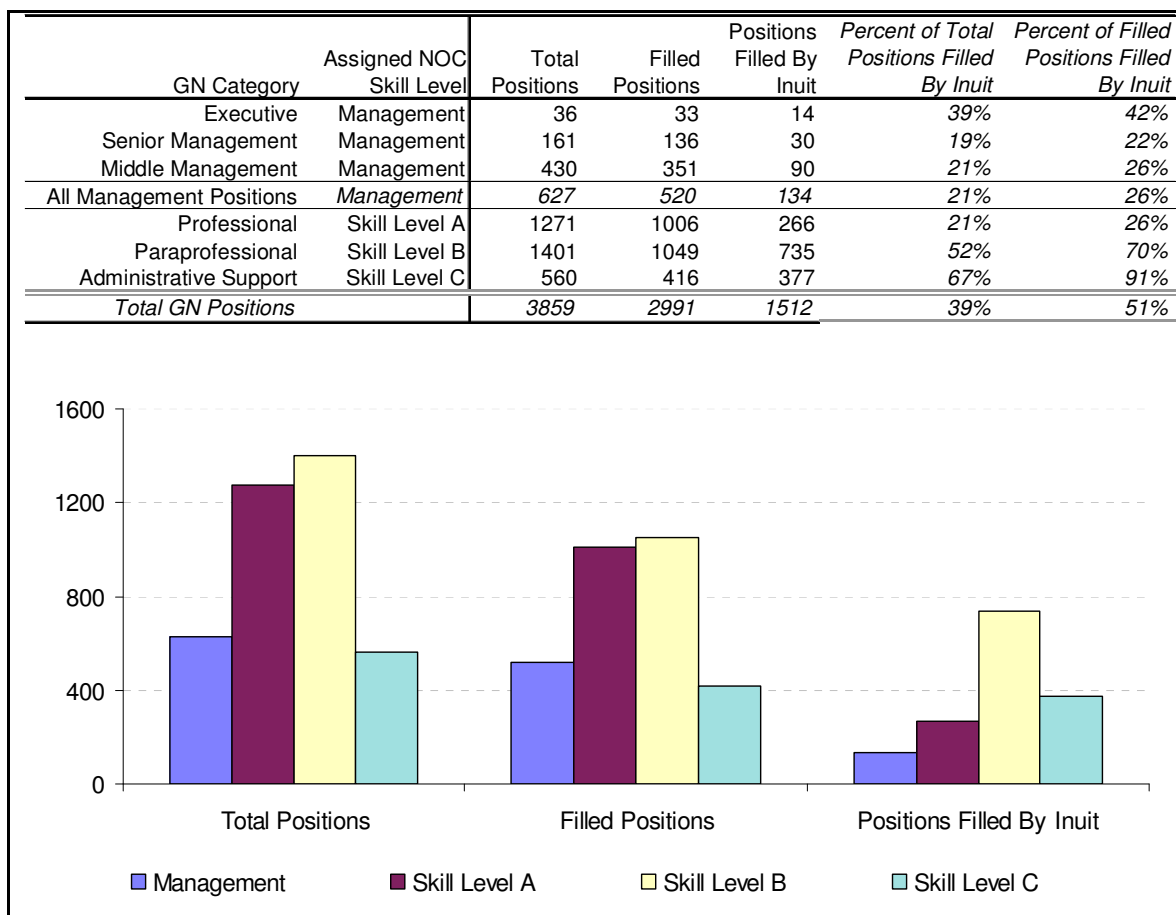
Note: 1) Refers to the kind of work persons were doing during the reference week, as determined by their kind of work and the description of the main activities in their job. If the person did not have a job during the week (Sunday to Saturday) prior to enumeration, the data relate to the job of longest duration since January 1, 2005. Persons with two or more jobs were to report the information for the job at which they worked the most hours. 2) NOC-S categories were converted to comparable HRSDC NOC (2006) categories, for which related skill levels are provided by HRSDC. 3) Skill levels are from the HRSDC NOC Matrix and are described as follows: Skill Level A occupations usually require university education; "B" occupations usually require college education or apprenticeship training; "C" occupations usually require secondary school and/or occupation-specific training; and for "D", on-the-job training is usually provided for these occupations. 3) Data are not presented for individual North Baffin communities, as the small populations, combined with data suppression and random rounding, makes the presentation unreliable.

### 4.3.3.2 Skills Required by Specific Sectors of the RSA Economy

#### *Government of Nunavut*

Across the territorial government, demand for labour breaks down according to National Occupational Classification (NOC) skill levels as roughly one-third management, one-third Skill Level B, and the remaining third split between Skill Level A and C (see Table 23).

**Table 23 Skill Levels in the Territorial Government – 2010**



Source: GN Human Resources, 2010. "Towards a Representative Public Service." IEP Capacity to March 31, 2010.

Available at: [http://www.gov.nu.ca/hr/site/doc/TRPS\\_updates/March%202010/2010%20March%20English%20Final.pdf](http://www.gov.nu.ca/hr/site/doc/TRPS_updates/March%202010/2010%20March%20English%20Final.pdf)

Accessed: August 2010.

#### *Skill Levels Associated with the Project Definition Phase*

The demand for labour during the Project definition phase can very roughly be broken into the same categories of skills used by HRSDC. In general, QL supplied the labour component, while Nuna Logistics provided equipment operators. Other contractors provided specialized services ranging from drilling to environmental and engineering support to helicopter operations. Applying the NOC matrix to these categories provides insight into the skill requirements of the Project definition phase (see Table 24).

This analysis shows that 29% of hours at the Project were delivered by QL workers (see Table 25). Considering that some QL workers were engaged in management, supervisory, and other higher-skilled occupations, approximately one-quarter of labour demanded by the Project during the year of the bulk sample was for unskilled workers (i.e., Skill Level D).

**Table 24 Definitions from Statistics Canada 2006 Census**

**Occupation**

Refers to the kind of work persons were doing during the reference week, as determined by their kind of work and the description of the main activities in their job. If the person did not have a job during the week (Sunday to Saturday) before enumeration (May 16, 2006), the data relate to the job of longest duration since January 1, 2005. Persons with two or more jobs were to report the information for the job at which they worked the most hours.

The 2006 census occupation data are classified according to the *National Occupational Classification for Statistics 2006* (NOC-S 2006). This classification consists of four levels of aggregation. There are 10 broad occupational categories containing 47 major groups, further subdivided into 140 minor groups. At the most detailed level, there are 520 occupation unit groups. Occupation unit groups are formed on the basis of the education, training, or skill level required to enter the job, as well as the kind of work performed, as determined by the tasks, duties and responsibilities of the occupation. For information on NOC-S 2006, see the *National Occupational Classification for Statistics 2006*, Catalogue No. 12-583-XIE.

**Labour Force**

Refers to persons who were either employed or unemployed during the week (Sunday to Saturday) before Census Day (May 16, 2006). Labour force = Employed + Unemployed

**All Occupations**

Refers to the experienced labour force population: includes persons who were employed and persons who were unemployed who worked for pay or in self-employment since January 1, 2005. [In contrast to “unemployed persons 15 years and over who have never worked for pay or in self-employment or who had last worked before January 1, 2005, only.”]

**Notes:**

1) For concordance between NOC-S 2006 and the National Occupational Classification (NOC) 2006, see Statistics Canada website: <http://www.statcan.gc.ca/subjects-sujets/standard-norme/concordances/nocs2006-noc2006-cnps2006-cnp2006-eng.htm>. Accessed August 2010.

2) Skill Levels associated with NOC occupations are from the National Occupational Classification Matrix, 2006, published by Human Resources and Social Development Canada (HRSDC):

- Skill Level A occupations usually require university education.
- Skill Level B occupations usually require college education or apprenticeship training.
- Skill Level C occupations usually require secondary school and/or occupation-specific training.
- Skill Level D on-the-job training is usually provided for these occupations.

Source: Statistics Canada, as provided with “20/20” electronic data file.

**Table 25 Skill Levels During Mary River Project Definition Phase Peak Activity – 2008**

	Labour Demand In 2008	
	hours	percentage
Management and Level A & B Skills (BIM & specialized contractors)	301,280	38%
Level B & C Skills (Nuna Logistics and Nuna Contracting)	254,762	32%
Level D Skills (Qikiqtaaluk Logistics)	228,277	29%
<i>Total Hours Of Labour</i>	<i>784,319</i>	

Source: Data for QL and NL were derived from actual timesheet data. Total hours data are from the Baffinland HR and Safety Monthly Reports. Hours for Baffinland and specialized contractors were derived by subtracting QL and NL hours from the total.

#### 4.4 SUPPLY OF WORKERS TO THE FORMAL LABOUR MARKET

The conclusion of the previous section is that the wage economy of the study area has produced some 3,700 to 3,900 full-time equivalent jobs, with 1,100 of these located in North Baffin and the remaining 2,600 to 2,800 situated in Iqaluit. That is the “demand” side of the labour market. An understanding of how labour is supplied to fill these jobs is required to complete the picture of the labour market.

Three characteristics serve to describe the size and nature of the supply side baseline of the labour market of the RSA:

- number of workers participating in the economy
- age, gender, and Inuit identity profile of these workers
- intensity of work activity

Of equal importance is the fact that it is on the supply side of the labour market equation that most residents of the LSA will interact with the proposed Project. Understanding how residents engage with the market to provide labour provides important insights into the nature of expected interactions. Therefore, this section will also seek to provide insight into the potential for the labour force to supply labour, particularly with regard to remote industrial work.

Insight into the baseline potential for labour supply expansion can be gained by considering:

- underused labour force capacity
- level of interest in wage economy participation and, specifically, in remote industrial work

##### 4.4.1 Engagement in the Wage Economy

Participation in the formal labour market is measured at the community level during the five-year census (long-form) and at the territorial level by the monthly labour force survey (LFS).<sup>132</sup> These

<sup>132</sup> Nunavut's LFS was implemented in 2004, with a limited focus on the ten largest communities accounting for 70% of the population. Starting in March 2008, coverage of the survey was extended to 19 communities accounting for 97% of the territorial population. This expanded survey coverage includes all the communities of the study area, however the data is reported at the territorial level.

data provide a snapshot of the level of participation in the formal wage economy. These surveys count the number of residents who were “employed,” “unemployed,” or “not in the labour force” during a specific survey “reference week.”

The LFS provides monthly insight into the size of the labour force at specific one-week sampling windows. Additional insight can be gained from the more in-depth interviews carried out during the long-form census. The census includes the standardized labour force questions, but also gathers information about work activities that residents have engaged in over the course of an entire reference year. This provides insight into how many people have demonstrated interest and ability to engage in the wage economy.

The distinction is relevant in understanding the potential field of individuals who might seek to engage in work at the Project. Residents who are coded as “not in the labour force” in the LFS might, in fact, have worked at some earlier point in the year. This wage economy activity can be picked up in the census.

An additional source of insight can be gained on an annual basis from tax filer data. This data source allows assessment of the categories of wage income earned by individuals, thereby providing a measure not only of the numbers of individuals who have engaged in work for employment income, but also the level of intensity of this engagement, as suggested by the amount of employment income earned.

Considered together, these data sources provide a fairly good picture of the nature of the supply side of the LSA labour markets. The supporting data are summarized in the following section.

#### 4.4.1.1 Labour Force Participation and Employment in LSA Communities

##### *Participation and Employment*

The level of participation of LSA residents in the wage economy varies across the Baffin region, as well as by age, gender, and Inuit identity (see Table 26). Among Inuit men 25 years of age and over, the overall participation rate<sup>133</sup> measured during the 2006 census was 71% for North Baffin and 76% in Iqaluit. The corresponding rates for Inuit women of this age group were 60% and 73%. (For an explanation of employment rate measurement, see Table 27.)

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<sup>133</sup> The labour force participation rate is the number of employed plus the number of unemployed individuals expressed as a percentage of the total population.

**Table 26 Participation by Inuit in the LSA Labour Markets – 2006 Census**

	Age	Gender	Hall Beach	Igloolik	Arctic Bay	Pond Inlet	Clyde River	North Baffin	Iqaluit	South Baffin
Total population	15+	Male	210	470	255	445	270	1600	1115	1260
		Female	185	435	200	390	240	1425	1280	1215
	15 to 24+	Male	70	150	90	145	75	570	385	410
		Female	55	140	75	130	75	505	375	385
	25+	Male	130	275	140	255	175	1,030	730	850
		Female	115	255	110	225	150	920	910	835
Participation rate	15+	Male	48	54	61	66	70	59	66	60
		Female	46	49	55	54	60	52	65	59
	15 to 24+	Male	21	33	33	38	47	36	48	44
		Female	18	32	53	31	47	36	44	44
	25+	Male	58	58	75	78	83	71	76	68
		Female	57	53	55	62	67	60	73	65
Employment rate	15+	Male	38	43	45	48	54	44	56	44
		Female	41	44	45	45	46	43	57	48
	15 to 24+	Male	14	23	17	28	33	25	36	29
		Female	18	25	33	27	27	28	37	33
	25+	Male	46	47	57	53	63	54	66	51
		Female	52	47	46	51	53	52	65	55

Source: Statistics Canada, 2006 census; custom census aggregations for the North and South Baffin (minus Iqaluit) were generated by Statistics Canada.

**Table 27 Interpretation of the Labour Force Survey Employment Rate Measure**

The standard “employment rate” reported in the LFS and in the census provides a snapshot of the number of people employed during a one-week reference period. This provides a good picture of labour market demand, as it shows how many people are working from one period to the next. As such the monthly LFS numbers are widely reported in the Canadian media as an economic indicator.

In Nunavut where there are many individuals who do not have access to full time, permanent jobs the LFS employment rate, and the associated participation rate, probably does not provide good understanding of the number of individuals who are actually interested in working — or attempting to gain the work skills and life skills to allow participation.

To illustrate the limitation of the LFS employment indicator, consider two communities each with a population of 30 working-aged individuals aged 15+ years. In one community, 10 individuals are employed year-round in various full-time and part-time jobs. During each of the LFS reference weeks, these 10 individuals will be counted as employed, leading to an “employment rate” of 33%.

In the second community, there are the same 10 positions available to be filled year-round, however this time, all 30 individuals aged 15+ share the work, with some engaged throughout the year, others picking up a few hours or weeks here and there in order to earn some income and then going off to engage in the land-based economy, enrolling in a course for a few months, or simply to sit back and collect Income Support.

Clearly, the two communities have very different labour markets. Yet the employment rates will be identical for both communities, since at every reference week ten individuals are working. The participation rates will depend on many factors, including employment patterns, and the choices made by individuals not employed about how to spend their time...i.e. looking for work versus land-based activities versus skills acquisition through training.

These rates correspond to a total of 5,495 residents of the study area participating in the labour force (see Table 28). This total consists of 1,680 Inuit and 280 non-Inuit in North Baffin, and 1,565 Inuit and 1,970 non-Inuit resident in Iqaluit.

Of these labour force participants, 1,315 Inuit and 260 non-Inuit in North Baffin, and 1,350 Inuit and 1,910 non-Inuit in Iqaluit were employed—a total 4,835 individuals in the LSA who did some type of work during the reference week of the 2006 census. By way of comparison, in 2001, a total of 4,715 individuals participated in the labour force, with 4,035 of these engaging in paid work. This represents growth of 16.5% growth in the labour force, and 19.8% growth in the employed labour force during this five-year period.

**Table 28 Participation in the LSA Wage Economy, By Inuit Identity – 2001 & 2006**

			North Baffin		Iqaluit		South Baffin	
			2001	2006	2001	2006	2001	2006
Total population	Inuit	Males	1,385	1,600	860	1,115	1,200	1,260
		Females	1,260	1,425	1,045	1,280	1,110	1,215
		Both	2,640	3,030	1,905	2,395	2,315	2,475
	Non-Inuit	Males	140	175	1,030	1,205	120	135
		Females	105	135	750	930	90	110
		Both	245	305	1,785	2,140	200	245
In the labour force	Inuit	Males	780	940	645	740	745	760
		Females	675	740	710	830	645	715
		Both	1,455	1,680	1,360	1,565	1,390	1,480
	Non-Inuit	Males	135	160	985	1,130	115	135
		Females	95	115	685	840	70	90
		Both	235	280	1,665	1,970	190	215
Employed	Inuit	Males	560	700	515	625	540	555
		Females	510	615	605	730	505	580
		Both	1,070	1,315	1,120	1,350	1,045	1,135
	Non-Inuit	Males	135	155	965	1,090	110	125
		Females	85	110	670	820	65	80
		Both	215	260	1,630	1,910	175	205
Unemployed	Inuit	Males	225	245	125	115	205	210
		Females	165	120	105	100	140	140
		Both	385	365	235	220	350	345
	Non-Inuit	Males	-	5	25	40	5	-
		Females	5	10	15	20	10	5
		Both	15	15	40	55	10	10
Participation rate	Inuit	Males	56	59	75	66	62	60
		Females	54	52	68	65	58	59
		Both	55	55	71	65	60	60
	Non-Inuit	Males	96	91	96	94	96	100
		Females	90	85	91	90	78	82
		Both	96	92	93	92	95	88
Employment rate	Inuit	Males	40	44	60	56	45	44
		Females	41	43	58	57	46	48
		Both	41	43	59	56	45	46
	Non-Inuit	Males	96	89	94	90	92	93
		Females	81	81	89	88	72	73
		Both	88	85	91	89	88	84

Source: Statistics Canada, 2006 census. Custom census aggregations for North and South Baffin (minus Iqaluit) were generated by Statistics Canada.

Note: Participation rate and employment rate are percentages, all other numbers are the number of individuals in the category, subject to random rounding.

**Statistics Canada Definitions Related to Labour Force Activity****In the labour force:**

Refers to persons who were either employed or unemployed during the week (Sunday to Saturday) before Census Day (May 16, 2006). Labour force = Employed + Unemployed

**Employed:**

Persons who, during the week (Sunday to Saturday) before Census Day (May 16, 2006): (a) did any work at all for pay or in self-employment or without pay in a family farm, business or professional practice; (b) were absent from their job or business, with or without pay, for the entire week because of a vacation, an illness, a labour dispute at their place of work, or any other reasons.

**Unemployed:**

"Persons who, during the week (Sunday to Saturday) before Census Day (May 16, 2006), were without paid work or without self-employment work and were available for work and either: (a) had actively looked for paid work in the past four weeks; or (b) were on temporary lay-off and expected to return to their job; or (c) had definite arrangements to start a new job in four weeks or less."

**Not in the labour force:**

Refers to persons who, in the week (Sunday to Saturday) before Census Day (May 16, 2006), were neither employed nor unemployed. It includes students, homemakers, retired workers, seasonal workers in an 'off' season who were not looking for work, and persons who could not work because of a long-term illness or disability.

NOTE: In Nunavut census enumeration was carried out earlier than the May Census Day.

The level of labour force participation varies substantially across the North Baffin communities. The rate for males age 25+ varied from a low of 58% in Hall Beach and Igloolik to 75% in Arctic Bay and 78% in Pond Inlet. In Iqaluit the participation rate for this group was 76%. Clyde River males reported the highest rate of labour force participation in the RSA, at 83%. Participation rates among women age 25+ do not show this level of variation, although rates in Clyde River and Pond Inlet were again the highest in North Baffin, at 67% and 62% respectively.

Participation among females 25+ years of age was the highest across the LSA, at 73%. Overall in North Baffin, the 25+ female Inuit population shows a 10% lower rate of participation than the corresponding male population. This is most pronounced in Arctic Bay, Pond Inlet, and Clyde River. Rates of participation among the 25+ female group were only slightly lower than males in Iqaluit and the other North Baffin communities.

Participation by younger Inuit residents is, as expected, considerably lower. Among males 15 to 24 years of age, the pattern is similar to that of the older men, but at about half the level of participation, ranging from 21% to 47% across North Baffin communities, and 48% in Iqaluit. The main difference is that the rate in Igloolik is similar to that of Arctic Bay and Pond Inlet. At 21% in Hall Beach, participation is again at the low end, while in Clyde River nearly half of Inuit age 15 to 24 were in the labour force. Unlike the older female cohort, the younger female Inuit population is similar to that of their male counterparts. In Arctic Bay, the young female population seems to be participating at a substantially higher rate, at 53%, versus 33% for the males.

Participation rates among non-Inuit residents are extremely high for both males and females, ranging from a low of 85% for North Baffin females to 94% for Iqaluit males (see Table 28 and Figure 19).

Participation rates have remained fairly constant over the five-year period between the 2001 and 2006 censuses—except for the Inuit male population in Iqaluit where a 9% decline can be seen

over this period. This might reflect a rate of population growth in Iqaluit that exceeds the rate of job creation for Inuit males in that city.

#### *Employment–Participation Spread*

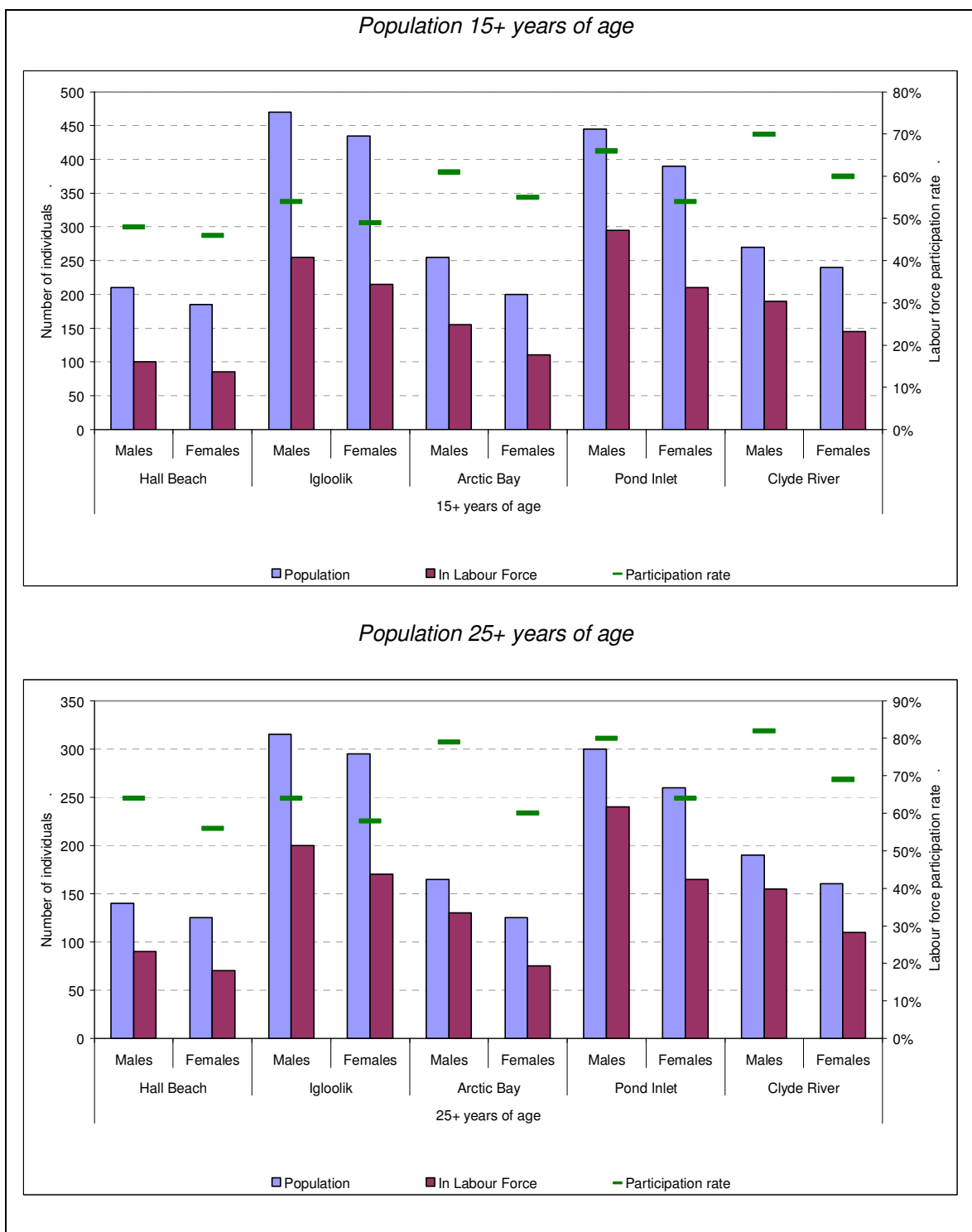
The rate of employment tracks below the participation rate, since not all individuals participating in the labour force will be employed at any particular time. The difference between rates of participation and rates of employment provides some insight into the level of unused labour capacity. Labour market stability will also affect this indicator, with the spread being smallest when there is greater stability in employment and increasing when there is instability in the labour market.

For the pattern of participation–employment rate spreads across the RSA, see Figure 19. The lowest spreads between labour force participation and employment rates are seen in the non-Inuit population, where the difference is less than 5%, both across North Baffin as well as in Iqaluit. The spread among Inuit females is considerably lower than that of Inuit males. This is particularly the case among older (25+ years old) workers in North Baffin, where the spread for males is twice that of females, and for younger (15- to 24-year-old) workers in Iqaluit.

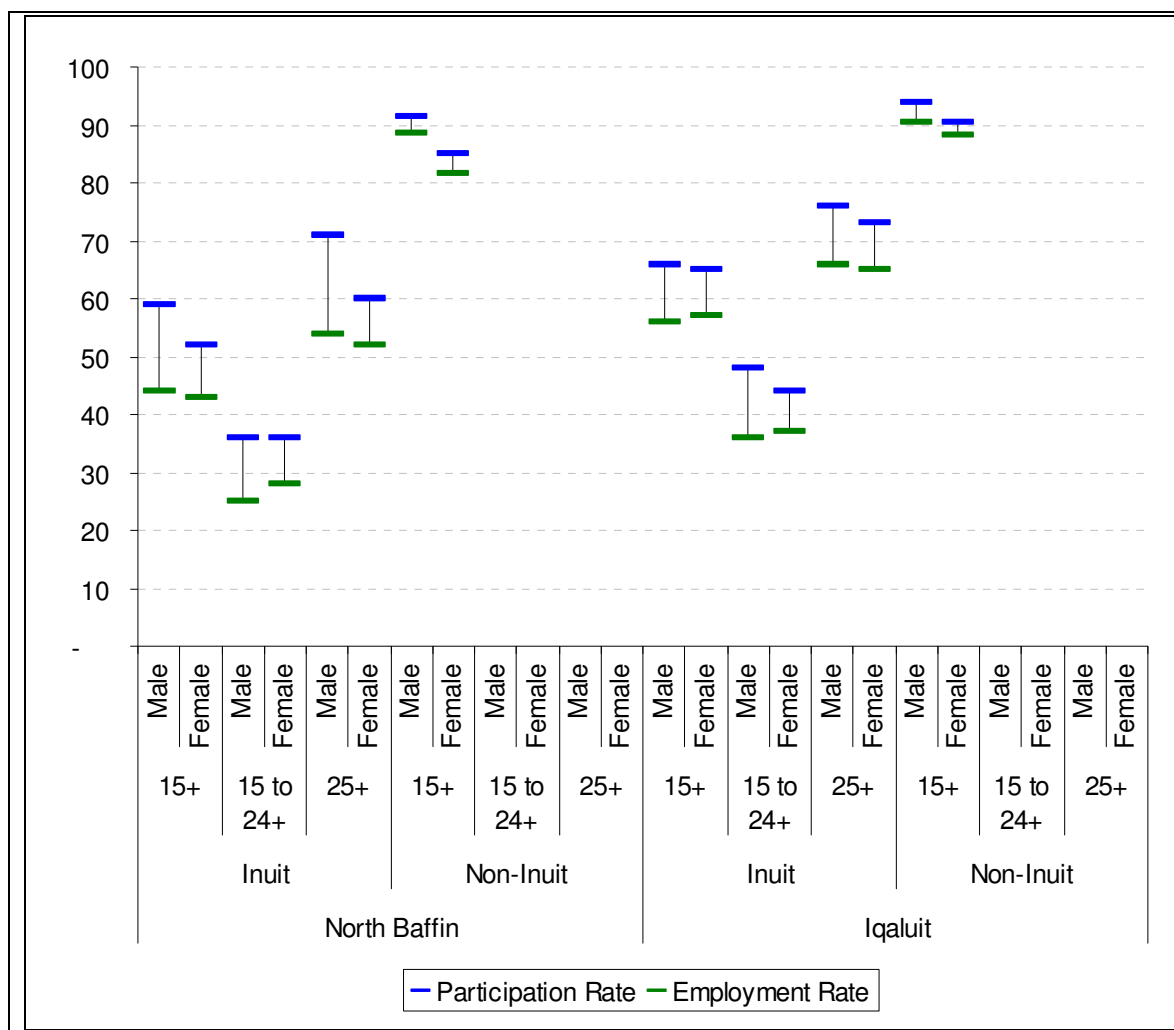
These patterns suggest a difference in the labour market behaviour of these three segments of the LSA labour force. As one potential explanation, the observed patterns would be consistent with situations of greater employment stability among the non-Inuit and female Inuit workforce.

Another explanation that could account for the data could be that Inuit males who do not have jobs stay in the labour force seeking work for longer periods than do Inuit females. This would keep the participation rates for males high, while females leave the labour force to pursue other activities outside the labour force.

The data for the non-Inuit labour force could be generated by high job-seeking success and work stability among this population. It could also be supported if those who leave a job or are unsuccessful in finding a job leave the territory. Both these situations would serve to lower the spread between participation and employment rates.

**Figure 18 Participation in North Baffin LSA Labour Markets, By Community**

Source: Statistics Canada, 2006 Census. Data is for both Inuit and non-Inuit components of the population combined.

**Figure 19 Participation Rate and Employment Rates Spreads in LSA – 2006**

Source: Based on participation and employment rates reported by Statistics Canada, 2006 census. North Baffin rates are from a custom aggregation prepared by Statistics Canada. Non-Inuit rates were generated by comparing Aboriginal identity data with total population data.

#### 4.4.1.2 Annual Work Activity—A Longer View of the Workforce

Community-level research and engagement activities suggest that many individuals move in and out of the labour force during the year. Individuals who work infrequently may be missed by the “reference week” approach used to identify the participation and employment rates. A longer-term view would be expected to capture more of these occasional wage economy participants. This is done through the census in questions aimed at describing work activity that took place over a one-year reference period. For the 2006 census, the reference year was 2005.

##### *Engagement in Wage Economy – Census and Tax File Perspectives*

Data from the 2006 census indicate that in 2005 3,335 residents of North Baffin were of working age, 15+ years old, as were 4,535 residents of Iqaluit, for a total working-age population of 7,870 (see Table 29 and Figure 20). Of these, 2,255 residents of North Baffin and 3,665 residents of Iqaluit engaged in some type of wage work during the year.

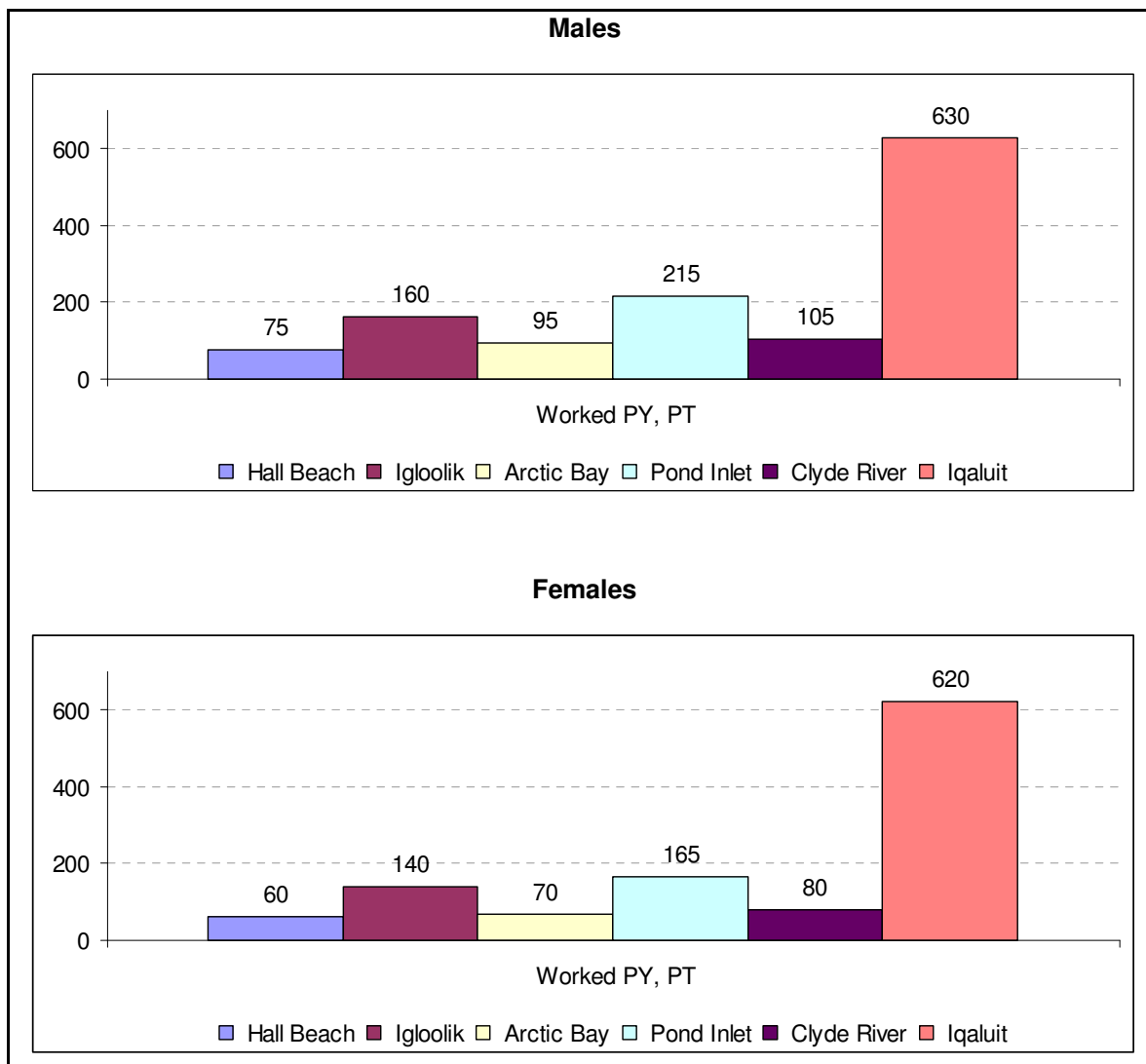
This provides a total of 5,920 residents across the study area, or 75% of the working-age population, who demonstrated an interest and ability to engage in the wage economy in 2005. This compares with the 5,495 residents of the study area, or 70% of the working-age population, identified as participants in the labour force under the “reference week” method used to identify the labour force participation and employment rates.

**Table 29 Work Activity in the LSA, by Gender – 2005**

		Population 15 Years Of Age And Older	Population 15+ With Employment Income	Worked FY, FT	Worked PY, PT	Median Employment Income Of FY, FT Workers	Median Employment Income Of PY, PT Workers
Both Men and Women	Hall Beach	395	240	95	135	\$43,904	\$9,504
	Igloolik	910	575	225	295	\$48,256	\$8,640
	Arctic Bay	455	290	95	170	\$53,824	\$7,120
	Pond Inlet	840	615	210	380	\$53,504	\$9,856
	Clyde River	505	325	120	185	\$36,928	\$7,136
	Iqaluit	4535	3665	2345	1250	\$68,884	\$18,368
	North Baffin	3335	2255	830	1295	\$48,960	\$8,988
	South Baffin	2720	1760	700	975	\$43,264	\$8,608
Male	Hall Beach	210	135	60	75	\$50,048	\$10,016
	Igloolik	470	305	125	160	\$42,496	\$10,016
	Arctic Bay	255	175	65	95	\$52,096	\$10,000
	Pond Inlet	445	345	120	215	\$53,120	\$11,232
	Clyde River	270	185	70	105	\$45,013	\$6,192
	Iqaluit	2320	1915	1265	630	\$69,911	\$20,006
	North Baffin	1775	1260	480	720	\$50,061	\$10,007
	South Baffin	1395	930	400	485	\$42,496	\$9,888
Female	Hall Beach	185	105	40	60	\$32,128	\$8,512
	Igloolik	435	265	100	140	\$57,216	\$7,168
	Arctic Bay	200	115	35	70	\$53,888	\$5,200
	Pond Inlet	390	265	90	165	\$55,936	\$8,008
	Clyde River	240	140	45	80	\$29,504	\$7,792
	Iqaluit	2210	1750	1080	620	\$64,912	\$17,824
	North Baffin	1560	990	350	575	\$43,968	\$8,011
	South Baffin	1325	830	300	490	\$44,800	\$7,824

Source: Statistics Canada, 2006 census. Custom census aggregations for the North and South Baffin (minus Iqaluit) were generated by Statistics Canada.

**Figure 20 Work Activity in the LSA, 2005**  
 (Number of Residents Working Part-Year and/or Part-Time)



Source: Statistics Canada, 2006 census. Custom census aggregations for North and South Baffin (minus Iqaluit) were generated by Statistics Canada.

A similar view of wage economy participation can be gathered from the wage earnings reported in annual tax files. In 2007, a total of 1,230 male and 1,010 female residents of North Baffin reported earning some wage income for a total of 2,240 wage-earners. In Iqaluit, 1,570 males and 1,510 females, or 3,080 individuals, reported earnings in 2007 (see Table 30).

In 2005, the total number reporting wage income was 2,220 in North Baffin and 3,070 in Iqaluit. Interestingly, tax filer data for North Baffin are more closely aligned with census data than in Iqaluit. The difference of nearly 600 individuals reporting wage income during the census but not reporting wage income on tax files might reflect a larger informal or “under-the-table” economy in Iqaluit.

**Table 30 Number of Tax Filers Reporting Labour Income, LSA – 1995 to 2007**

MALES						
	HALL BEACH	IGLOOLIK	ARCTIC BAY	POND INLET	CLYDE RIVER	IQALUIT
1995	110	230	110	210	130	1090
1996	120	230	130	200	150	1080
1997	130	240	130	220	180	1180
1998	140	250	140	230	180	1270
1999	140	260	140	250	160	1390
2000	140	250	130	250	170	1450
2001	150	260	170	290	180	1670
2002	160	270	160	290	180	1660
2003	170	270	150	280	190	1590
2004	160	310	170	300	190	1540
2005	170	330	180	330	190	1580
2006	170	330	180	310	200	1570
2007	160	340	200	320	210	1570
percent change	45%	48%	82%	52%	62%	44%
FEMALES						
	NUMBER OF TAXFILERS REPORTING LABOUR INCOME, FEMALES					
	HALL BEACH	IGLOOLIK	ARCTIC BAY	POND INLET	CLYDE RIVER	IQALUIT
1995	80	160	90	160	100	920
1996	80	170	90	170	100	950
1997	90	180	110	180	130	1020
1998	100	190	110	200	130	1110
1999	90	210	120	210	120	1280
2000	100	210	110	210	140	1340
2001	110	240	130	230	150	1550
2002	120	240	130	250	160	1550
2003	130	240	140	260	180	1470
2004	130	280	140	280	170	1450
2005	130	290	150	280	170	1490
2006	130	270	140	270	180	1500
2007	130	260	140	280	200	1510
percent change	63%	63%	56%	75%	100%	64%

Source: Statistics Canada, Labour Income Profile (LIP), Small Area and Administrative Data Division, Annual Estimates for Census Families and Individuals (71C0018). July 2010.

Note: Taxfile data does not distinguish Inuit from non-Inuit.

*Year-Over-Year Changes in Wage Economy Participation*

In Iqaluit, the number of individuals earning at least some wage income has increased steadily from 1995, reaching a peak of some 1,670 men and 1,550 women by 2001 (see Figure 21). The number has remained fairly constant since then, with a modest decline to 1,570 men and 1,510 women. This suggests that either the labour market in Iqaluit has reached a plateau, with few new employment opportunities arising, or that the labour force has stabilized. If those with work hold onto their jobs, there will be fewer opportunities for other potential workers to “share” a job over the course of a year.

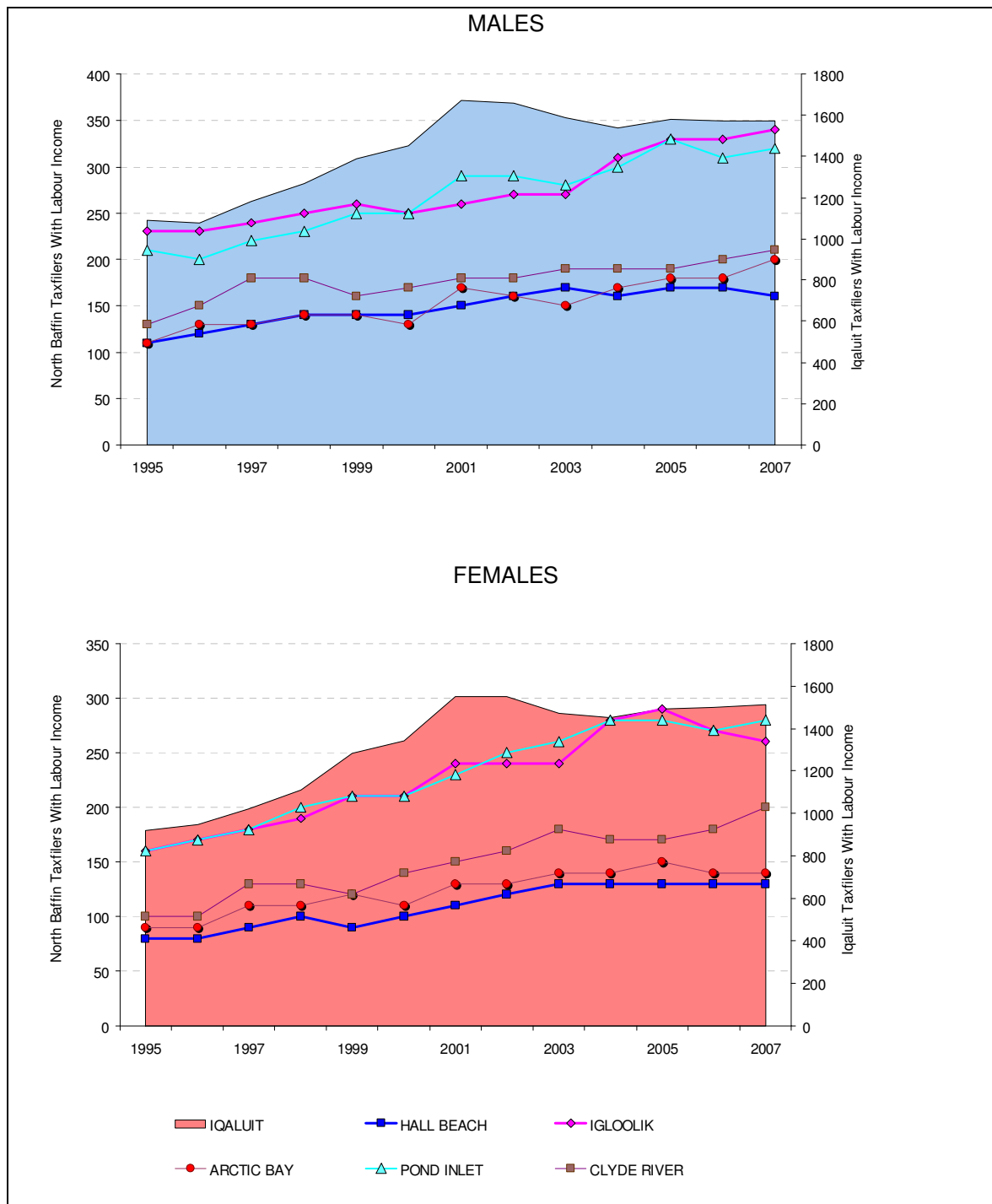
Overall, the number of women engaging in formal wage work in Iqaluit has increased substantially more than has the number of men, at 64% among women and 44% among men. For percentage change in number of wage-earners in the LSA communities and in Iqaluit, over the period, see Table 31 and Figure 22.

The picture of labour supply growth in North Baffin communities is different from the situation in Iqaluit. In the three smaller communities—Hall Beach, Arctic Bay, and Clyde River—there has been a fairly steady increase in the number of individuals who engaged at least a little with the labour market. In Arctic Bay the number of men has nearly doubled during this period, increasing from 110 in 1995 to 200 in 2007.

This is in spite of a dip from 170 down to 150 male participants from 2001 to 2003, corresponding to the gear-down and closure of the Nanisivik Mine. The second-highest rate of increase is seen in Clyde River, from 130 to 210 men reporting wage income, while the increase in male participation in Hall Beach has been modest, at 45% over the period.

During the period from 1995 to 2003, the number of men working in Igloolik remained fairly constant. However, in the four years since 2003 there was a substantial increase in formal wage economy participation with an addition of 70 participants. This may be in part related to the filling of decentralized government jobs to the community and, possibly, some employment related to the Roche Bay exploration project. Participation of Pond Inlet men in the wage economy shows two periods of increase. The first occurred between 2000 and 2001, with the addition of 40 tax filers reporting wage income, followed by a plateau and then a second increase starting in 2003. The earlier increase may be related to decentralization of government positions to Pond Inlet, while the second round may be related to local construction projects and some work that was starting at the Project definition phase.

Participation of women in North Baffin has generally increased more than that of men, although the starting point in 1995 was lower. This has had the effect of narrowing the “participation gap” between men and women in North Baffin. In Clyde River, women seem to be participating at the same rate as men, and in Pond Inlet the gap has been nearly closed—with 47% of all wage-reporting tax filers being women. The pattern of change in the participation of women in the wage economy is interesting. Since 2004 the number of women seems to have reached a plateau in most communities. Clyde River is an exception, with a recent increase in female participation leading to a record level of 200 women reporting wage income in 2007. For Pond Inlet and Igloolik, the 2004 plateau may be related to completion of the hiring cycle that took place during the early phase of decentralization.

**Figure 21 Growth in Number of Tax Filers Reporting Labour Income**

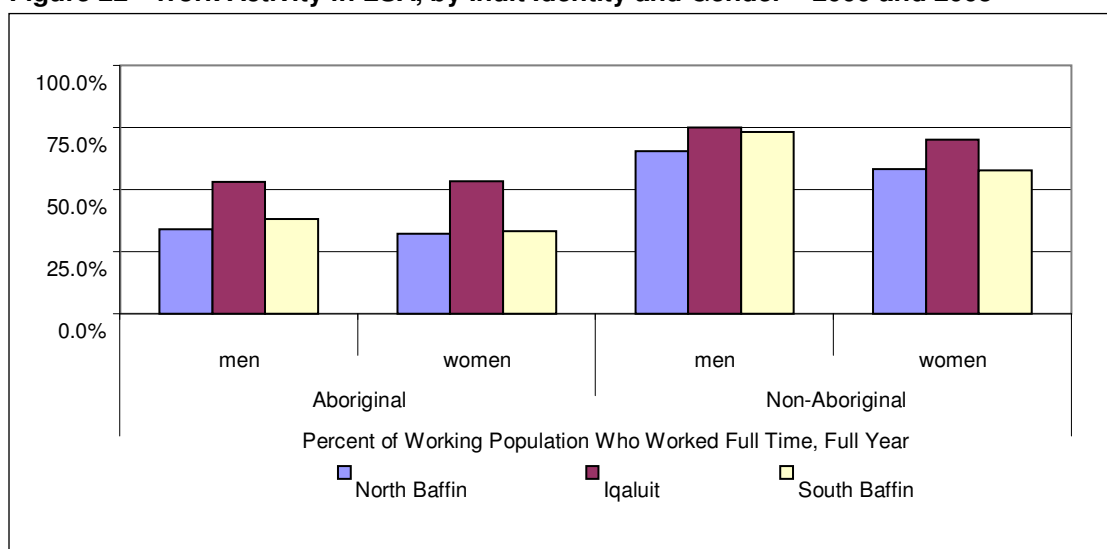
Source: Statistics Canada, Labour Income Profile (LIP), Small Area and Administrative Data Division, Annual Estimates for Census Families and Individuals (71C0018). July 2010.  
Based on data in Table 28.

**Table 31 Work Activity in LSA, by Inuit Identity, Gender – 2000 and 2005**

				North Baffin	Iqaluit	South Baffin
2001 Census	Working Population As A Percent of Total Population	Inuit	men	67.8%	78.5%	72.1%
			women	59.5%	71.0%	64.6%
		Non-Inuit	men	96.6%	97.1%	95.8%
			women	95.0%	95.3%	93.8%
	Percent Of Total Population Working Full Time, Full Year	Inuit	men	18.1%	36.6%	20.8%
			women	13.1%	31.9%	14.3%
		Non-Inuit	men	55.2%	67.0%	58.3%
			women	50.0%	58.4%	43.8%
	Percent of Working Population Who Worked Full Time, Full Year	Inuit	men	26.7%	46.7%	28.9%
			women	22.0%	45.0%	22.2%
		Non-Inuit	men	57.1%	69.0%	60.9%
			women	52.6%	61.3%	46.7%
2006 Census	Working Population As A Percent of Total Population	Inuit	men	68.8%	70.9%	63.5%
			women	61.1%	68.8%	60.5%
		Non-Inuit	men	91.4%	93.4%	96.3%
			women	88.9%	93.5%	86.4%
	Percent Of Total Population Working Full Time, Full Year	Inuit	men	23.4%	37.7%	24.2%
			women	19.6%	36.7%	20.2%
		Non-Inuit	men	60.0%	70.1%	70.4%
			women	51.9%	65.6%	50.0%
	Percent of Working Population Who Worked Full Time, Full Year	Inuit	men	34.1%	53.2%	38.1%
			women	32.2%	53.4%	33.3%
		Non-Inuit	men	65.6%	75.1%	73.1%
			women	58.3%	70.1%	57.9%

Source: Statistics Canada, 2001 and 2006 census, custom aggregations.

Notes: 1) Work data relates to the 2000 and 2005 reference years. 2) "Working Population" includes all those age 15 years or older who have earned employment income during the reference year. 3) "South Baffin" category does not include Iqaluit. 4) Data for the non-Inuit population were derived by subtracting the "total" population data from the Aboriginal identity population.

**Figure 22 Work Activity in LSA, by Inuit Identity and Gender – 2000 and 2005**

Source: Statistics Canada, 2001 and 2006 census, custom aggregations.

Notes: 1) Work data relates to the 2000 and 2005 reference years. 2) "Working Population" includes all those age 15 years or older who have earned employment income during the reference year. 3) "South Baffin" category does not include Iqaluit. 4) Data for the non-Inuit population is derived by subtracting the "total" population data from the Aboriginal identity population.

#### 4.4.2 Part-time Versus Full-time Work

During 2005, a total of 830, or 39%, of the North Baffin working population worked full-year, full-time (FY/FT), while 1,295, or 61%, worked only part of the year and/or part-time (PY/PT). The corresponding numbers for Iqaluit are 2,345 FY/FT, or 64%, and 1,250 PY/PT, or 34% (see Table 29). In general terms, these 2,545 PY/PT workers in the LSA represent a potentially underused component of the working-age population. This component consists of 720 males and 575 females resident in North Baffin, and 630 males and 620 females resident in Iqaluit.

Insight into the nature of part-time employment can be gained by considering the level of earnings of part-time workers. In North Baffin, the median earnings of those working part-time or part of the year were less than one-fifth of those working full-time, full-year (see Table 29). The spread between part-time and full-time work in Iqaluit was somewhat less, at one-quarter, suggesting that the intensity of part-time work is higher in Iqaluit than in North Baffin communities.

#### 4.4.3 Estimating the Unused Labour Capacity of the LSA

A very rough approximation of the magnitude of the “unused” labour capacity represented by the part-time component of the workforce can be generated by comparing the wages of PY/PT with those of FY/FT workers (see Table 32). This analysis suggests that in North Baffin a total of 1.8 million hours of labour might be available if all PY/PT workers worked FY/FT. Roughly 1 million of these would be supplied by men. PY/PT workers in Iqaluit might deliver another 1.7 million hours, split equally between men and women.

A second estimation of unused labour can be generated by considering the number of wage earners who earned less than a full-time wage. This analysis suggests a potential of 2 million hours of unused labour in the North Baffin region in 2004. Of this, a little less than 1 million hours would be supplied by men and a little more than 1 million hours by women. In Iqaluit, an estimated 1.5 million hours would become available if every wage-earner worked full-time, with 0.7 million coming from unused male labour and 0.8 million from women.

A third estimate can be generated from census reports of the categories of wages earned. This dataset provides an estimation of 1.7 million unused hours of labour in North Baffin, of which 0.9 million hours is accounted for by men currently earning less than a full-time wage and 0.8 million hours by women. Nearly all (96%) of this unused labour potential rests within the Inuit population, reflecting the predominant Inuit composition of the population. Well over one-third of these hours are accounted for by wage-earners between 15 and 24 years of age—a group likely to be engaged in schooling and other educational activities.

Census data provide an estimate of 1.3 million hours of unused labour in the Iqaluit population, split evenly between men and women. Approximately two-thirds of this potential is accounted for by the Inuit population and the remaining one-third by the non-Inuit population of Iqaluit. Close to half the unused Inuit wage-earning population's hours are in the 15- to 24-year-old age group—many of whom are engaged in educational pursuits and not available for full-time work.

**Table 32 Rough Estimate of Unused Labour in the LSA**

		Unutilized hours per PY/PT worker	Total unutilized hours of all PT/PY workers
NORTH BAFFIN	All	1,470	1,760,438
	Males	1,320	950,579
	Females	1,363	783,563
IQALUIT	All	1,359	1,699,265
	Males	1,113	701,320
	Females	1,141	707,414
TOTAL RSA	All	-	3,459,703
	Males	-	1,651,900
	Females	-	1,490,977

Source: Derived by Brubacher Development Strategies using 2006 Statistics Canada Census, Work Activity data, with the assumption that PY/PT workers earn 75% of the wages of FY/FT workers, on an hourly basis.

Note: Estimate based on median incomes. As a consequence, estimates for males and females do not equal the estimate for “all” workers since the median incomes of these groups are not arithmetically related.

These are viewed as rough estimates, and many factors will influence the total hours potentially available to the wage economy. One consideration is that many hours might be spent by residents in unpaid but highly productive activities such as wildlife harvesting. Further, not every part-time worker has the capacity or interest to work full-time. These factors will have the effect of reducing the level of “unused” or “underused” labour. The analysis should therefore be interpreted as providing insight into the upside limit of what the LSA workforce can potentially deliver, not the actual level of labour available to be mobilized.

No labour market provides full-time, full-year employment to everyone interested in work, and no population of individuals interested in earning at least some income will make every individual available to work full-time, year-round. Estimates derived from census and tax filer data suggest that the population of male wage-earners in North Baffin currently delivers 0.9 to 1 million hours of labour less than they would if everyone were working full-time, full-year.

The North Baffin population of women who earned some income has delivered between 0.8 and 1 million hours of labour less than the full-time, full-year maximum. Combined, these un-worked hours of labour potential total some 1.7 to 2 million hours. A slightly lower level of between 1.3 and 1.7 million hours is seen as the un-worked portion of the labour force in Iqaluit, split evenly between men and women. Many factors account for un-worked labour potential, ranging from lack of jobs, to alternative time allocation priorities in the workforce.

#### 4.4.4 Demonstrated Interest in Remote Industrial Work

Another view of the potential for LSA residents to deliver labour to the proposed Project can be generated by looking at the level of interest expressed by residents in work at remote, fly-in/fly-out industrial projects, including the Project definition phase.

Not everyone who is interested in participating in the wage economy will be interested in working the intense, full-time, fly-in/fly-out, industrial shift work of the type presented by the Project.

Therefore, a second question needs to be addressed—“How many people have demonstrated an interest in remote industrial employment?”

The number of residents of the LSA applying for work at remote industrial projects provides good insight into the regional demand for work and the level of interest that people have in at least considering the kind of fly-in/fly-out employment offered by a project such as Mary River.

Applicant data were available from QL for the period between 2007 and 2009 (see Table 33). During this time a total of 1,309 individuals from the study area applied for work at various projects that QL was involved with.<sup>134</sup> These applications were distributed across North Baffin and Iqaluit, with 621 coming from residents of North Baffin communities and 688 from Iqaluit.

**Table 33 Interest Among LSA Residents in Remote Industrial Employment**

	Age Of Applicants				Applicants as		PY/PT workers in 2005	Applicants as a percent of PY/PT workers
	15 to 24 years	25 to 39 years	40+ years	Total, all ages	Total population aged 15+	percent of total population aged 15+		
HALL BEACH	18	14	10	42	395	11%	135	31%
IGLOOLIK	22	39	21	82	910	9%	295	28%
ARCTIC BAY	46	41	23	110	455	24%	170	65%
POND INLET	99	92	46	237	840	28%	380	62%
CLYDE RIVER	59	56	35	150	505	30%	185	81%
NORTH BAFFIN	244	242	135	621	3335	19%	1295	48%
IQALUIT	193	205	128	688	4535	15%	1250	55%

Source: Applicant numbers provided by QL. Population and population employed part year and/or part-time from the 2006 census, work activity.

Notes: 1) Number of individuals who applied at least once between 2007 and end of 2009. Individuals who applied more than once counted only once. 2) PY/PT worker numbers provide insight into the level of interest in fly-in/fly-out relative to underused workforce. Not all those who are “not employed” will be interested in or available for employment. 3) Age data were unavailable for some Iqaluit applicants, but all Iqaluit applicants are counted in the “total” column. 4) Many Clyde River applicants were applying for Cape Christian work close to Clyde River, and not a fly-in/fly-out worksite.

Not everyone in the study area is interested in participating in the wage economy, and some of those interested in wage economy participation are already engaged in full-time, year-round jobs. Insight into the level of interest in remote industrial work relative to the available workforce can be gained by comparing applicant numbers with the number of wage economy participants who were not already engaged full-time, year-round.

These PY/PT workers were measured by the 2006 census to total 1,295 in North Baffin and 1,250 in Iqaluit (see Table 29). Using these numbers as a base suggests that the level of interest expressed through applications to QL is comparable to approximately half the existing underused workforce in the RSA—1,309 applicants versus 2,545 part-time wage economy participants. This includes both men and women in the wage economy.

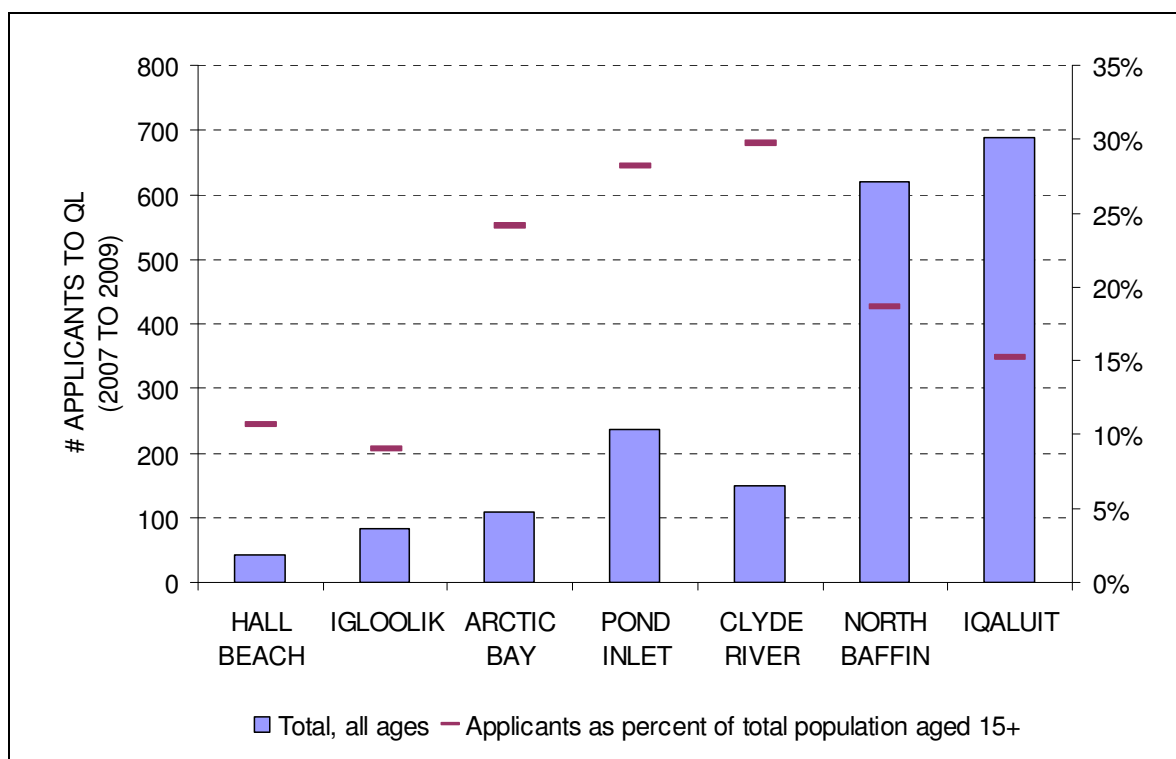
This level of interest in work is remarkably high, reflecting the tremendous demand for wage employment in the region. One fifth, or 19%, of all working-age residents in North Baffin, and 15%

<sup>134</sup> The dataset does not distinguish between the different projects QL was involved with during this period, though QL sources indicate that Mary River accounted for the majority of applications, except for Clyde River, where many or most might have been applying for work at the local Cape Christian military base cleanup project.

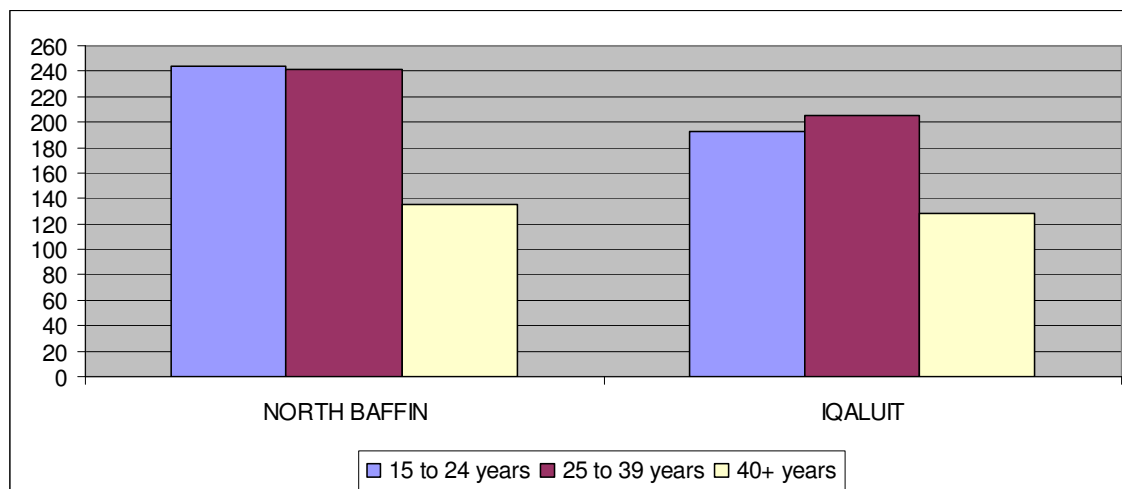
of the Iqaluit working-age population applied for work with QL at some point during the three-year period between 2007 and 2009. At the LSA level the picture is even more remarkable (see Figure 23). During this period, one-in-four working-age residents from Pond Inlet and Arctic Bay, and nearly one-in-three residents of Clyde River sought work with QL.

The rate of applicant interest in Hall Beach and Igloolik was lower, at one-in-ten, probably reflecting the initial focus of the Mary River work on moving the bulk sample ore north to Milne Inlet toward Pond Inlet. The high level of interest among the Clyde River population relates to a QL cleanup project at the Cape Christian site near the community. For the breakdown of applicants by age group, see Figure 24.

**Figure 23 Interest in Fly-In/Fly-Out Work (Applications to QL) – 2007 to 2009**



Source: Applicant numbers provided by QL. Population and population employed part year and/or part-time is from 2006 census, work activity.

**Figure 24 QL Applicants, by Age Group – 2007–2009**

Source: Derived from applicant numbers provided by QL. Age category totals do not sum to the total number of applicants since age data were unavailable for some applicants.

#### *Potential Hours Supplied by Those Interested in Remote Industrial Work*

A rough estimate of the upside limit of hours of labour that could be supplied by the “interested” labour force can be generated by applying the unused hours per PY/PT worker to the number of interested individuals. Using an allocation of 1,050 hours<sup>135</sup> per person and the 621 North Baffin and 688 Iqaluit individuals who demonstrated interest yields an upside of 0.65 million hours from North Baffin and 0.72 million from Iqaluit, or a total potential of 1.4 million hours. This can be considered the level of labour the labour force is interested in supplying. It does not indicate the capacity to supply this level, however.

### 4.5 DYNAMICS OF EMPLOYMENT IN THE RSA

Additional understanding of the labour market can be gained by considering employment earnings of workers in the study area. These data provide a picture of the “intensity” of participation in the wage economy, something that is influenced both by the nature of the jobs available to workers as well as the choices and capacity of workers to supply their labour. Employment data were available from two sources—the 2006 long-form census and annual tax filer data. Both these data sources are presented.

#### 4.5.1 Employment Income Categories

The median income levels for full-time and part-time workers provide a general picture of the level of intensity of work by residents of the study area. A more detailed picture can be generated by looking at the actual categories of wage earnings of workers from the area. These data serve as a baseline against which to assess future movements of workers from casual to more intense engagement in the wage economy.

<sup>135</sup> Reflecting a turnover rate of 2 per year in the 2,100 hours per year of a 2-2 fly-in/fly-out rotational job. See Section 4.6.3.

#### 4.5.1.1 Census Estimates

For the number of Inuit and non-Inuit residents in North Baffin, Iqaluit, and South Baffin earning different categories of employment income as of 2005, see Table 34, and Figure 25 to Figure 28.

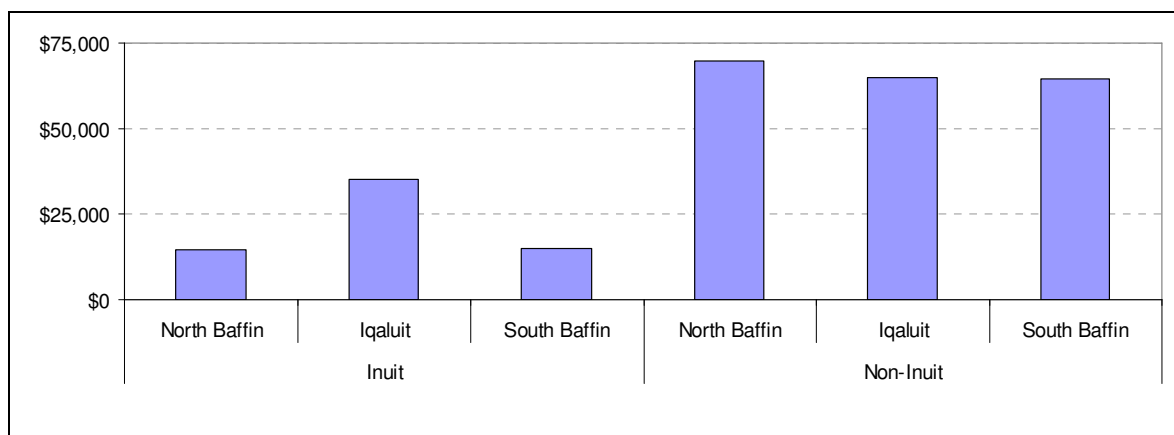
**Table 34 Employment Income in the LSA – 2005 Census Estimates**

		< \$15,000	\$15,000 to \$34,999	\$35,000 to \$59,999	\$60,000 to \$99,999	\$100,000 and over	Total with any employment income	Median Employment Income
North Baffin	Inuit	1,000	485	250	205	30	1,970	\$14,419
	Non-Inuit	30	40	35	120	50	280	\$69,888
	Combined	1,030	525	285	330	80	2,250	\$16,947
South Baffin	Inuit	760	390	220	150	15	1,535	\$15,000
	Non-Inuit	25	35	40	85	40	225	\$64,640
	Combined	790	420	260	240	45	1,760	\$18,272
Iqaluit	Inuit	485	325	360	395	100	1,670	\$35,036
	Non-Inuit	170	310	370	795	350	1,995	\$64,911
	Combined	655	640	730	1,185	450	3,665	\$50,167

Source: Statistics Canada, 2006 Census. Data for North Baffin and South Baffin (minus Iqaluit) are custom aggregations generated by Statistics Canada. Data for the non-Inuit population were derived from census data for the Aboriginal identity and total populations.

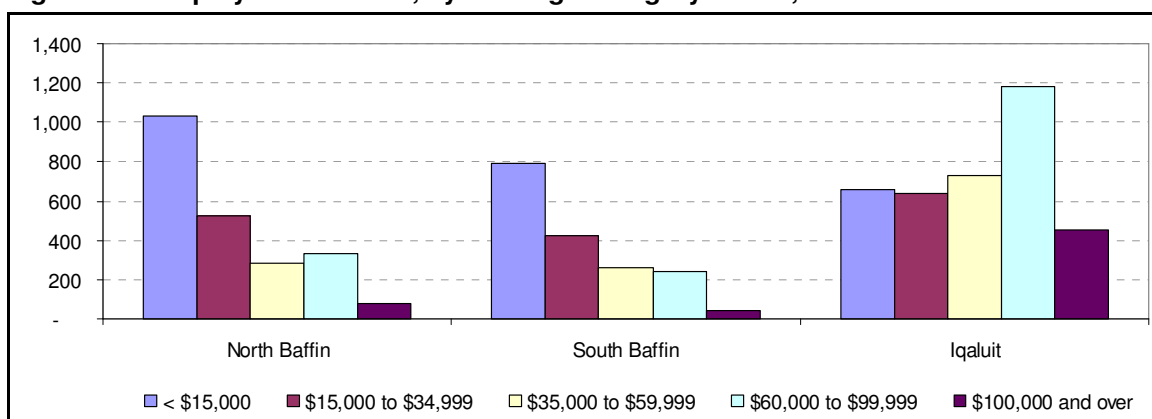
Note: Number of residents in each employment income category.

**Figure 25 Median Employment Earnings in LSA, by Inuit Identity – 2005, Census**

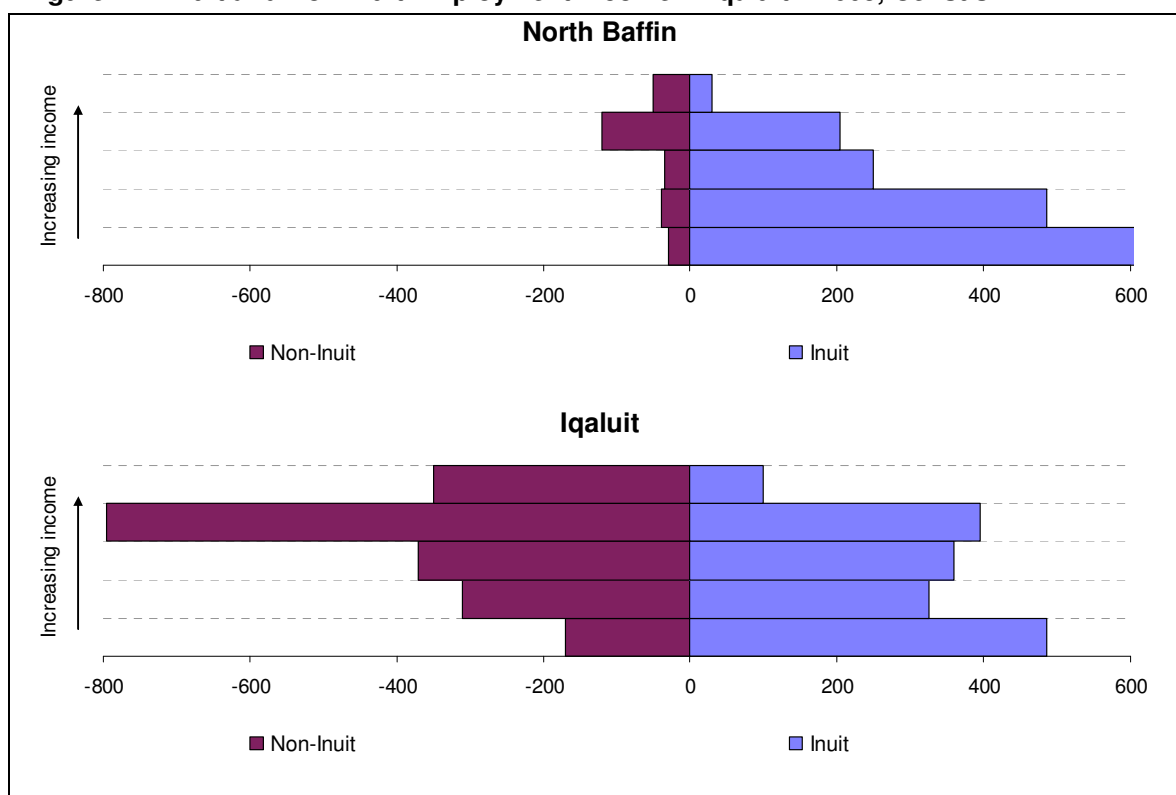


Source: Statistics Canada, 2006 Census. Data for North Baffin and South Baffin (minus Iqaluit) are custom aggregations generated by Statistics Canada. Data for the non-Inuit population were derived from census data for the Aboriginal identity and total populations.

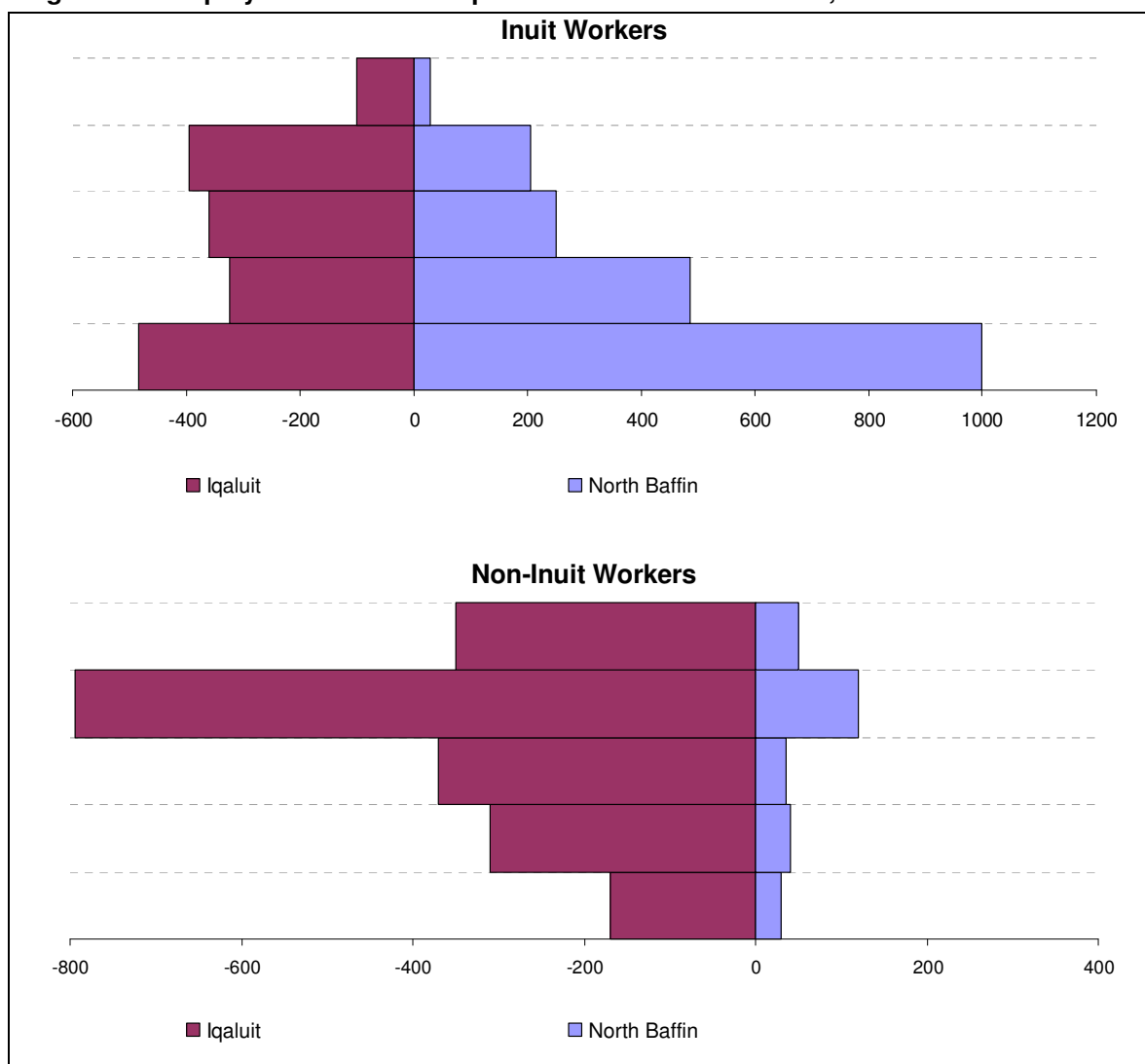
Note: The Census provides estimated median employment income of those who earned some employment income during the year prior to enumeration. For the 2006 census, this is for income earned in 2005.

**Figure 26 Employment Income, by Earnings Category – 2005, Census**

Source: Statistics Canada, 2006 Census. Data for North Baffin and South Baffin (minus Iqaluit) are custom aggregations generated by Statistics Canada. Note: The Census provides estimated employment income for the year prior to enumeration. For the 2006 census, this is for income earned in 2005.

**Figure 27 Inuit and Non-Inuit Employment Income in Iqaluit – 2005, Census**

Source: Statistics Canada, 2006 Census. Data for the non-Inuit population were derived from census data presented for the Aboriginal identity and total populations. Note: The Census provides estimated employment income for the year prior to enumeration. For the 2006 census, this is for income earned in 2005.

**Figure 28 Employment Income in Iqaluit and North Baffin – 2005, Census**

Source: Statistics Canada, 2006 Census. Data for North Baffin are a custom aggregation generated by Statistics Canada. Note: The Census provides estimated employment income for the year prior to enumeration. For the 2006 census, this is for income earned in 2005.

Several stories emerge from these data. First, patterns of wage employment among non-Inuit workers are essentially similar across the region. While there are many more non-Inuit working in Iqaluit, the median level of income, as well as the relative breakdown of this group into higher and lower categories of earnings is similar in both Iqaluit and North Baffin.

The second striking story is a significant contrast between employment earnings of Inuit in Iqaluit versus those in North Baffin (see Figure 28). North Baffin is characterized by a large number of individuals earning lower categories of wage income declining consistently to a small number earning higher levels. Among non-Inuit workers in Iqaluit the pattern is the reverse—a small number earning lower categories of income increasing consistently to the higher levels, though dropping off for the highest category of earnings.

The pattern for Inuit in Iqaluit appears to be a blend of these two models. While there is a large number of Inuit earning at the lowest income category, there is also an increasing move up

toward the higher levels. The explanation suggested by this pattern is of a workforce that is split into two segments, one sharing the attributes of North Baffin where the intensity of employment is relatively modest for most workers and the other that of the non-Inuit workforce where attachment to work is much more intense.

Perspective into the work patterns of youth can be gained from census data (see Table 35). This will be of value as a baseline to monitor youth engagement patterns in the future. It is to be expected that employment income will increase with age.

This is, in fact, the pattern seen in the Inuit population of the LSA (see Figure 29). What is remarkable, though, is the contrasting rate of entry into serious wage employment between Inuit in North Baffin and Iqaluit. In Iqaluit, median employment incomes jump from \$10,000 among workers under the age of 25 years to \$43,000 among those 25 to 39 years of age. There is not much change in median income from that group to the oldest age category. In North Baffin, median incomes increase substantially during each progression from lower to higher age category.

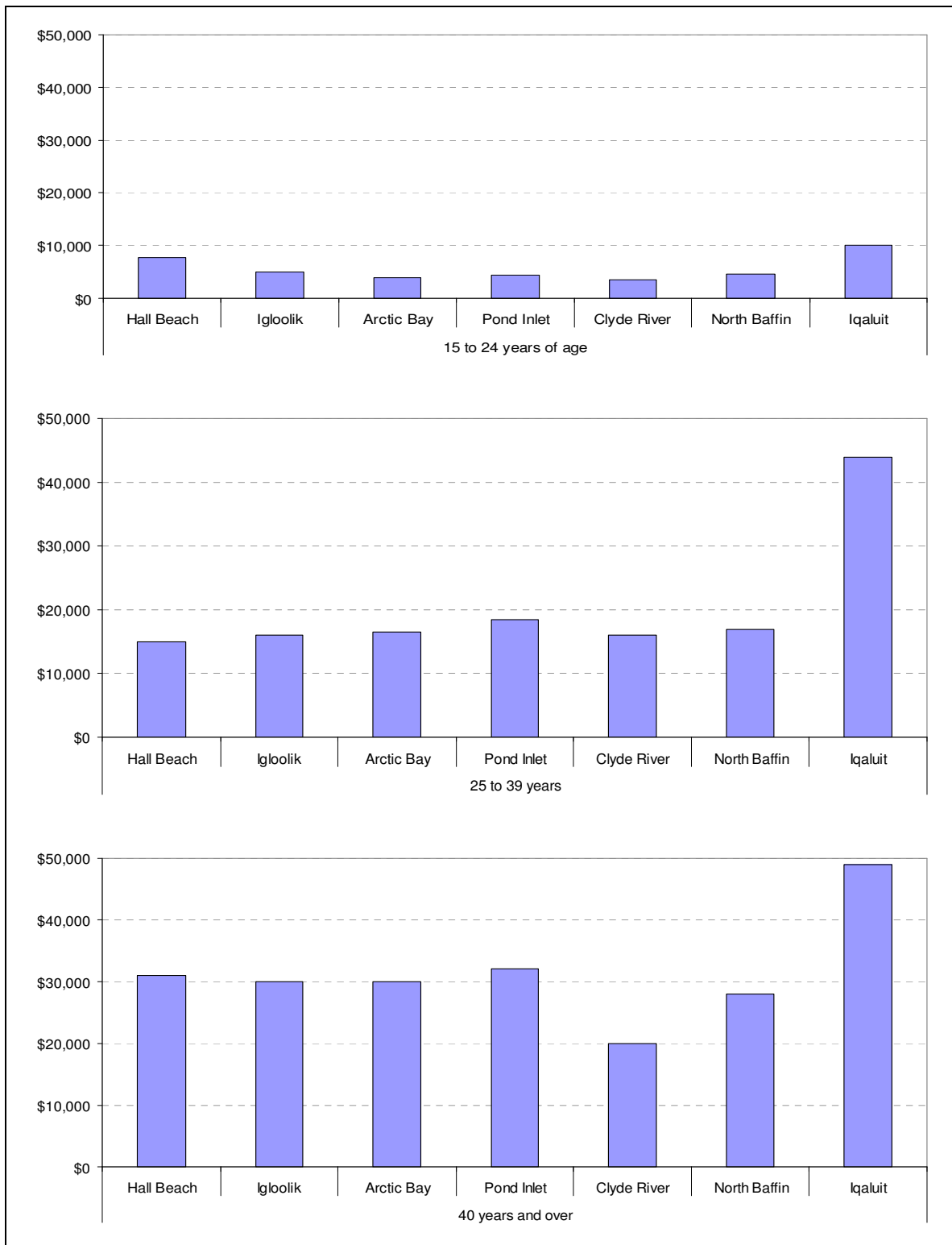
These patterns would be consistent with a labour market where a limited number of full-time jobs in North Baffin have already been filled so that younger workers coming into the market have only lower-paying part-time work available to them. The situation in Iqaluit is consistent with a labour market where high-quality work has been available to younger workers. Of interest also is the picture in Clyde River, where the pattern is somewhat closer to that of Iqaluit. Presumably there has been increased opportunity for younger workers in that community than elsewhere in North Baffin.

**Table 35 Median Employment Earnings of Inuit Workers, LSA, by Age – 2005, Census**

		MEDIAN EMPLOYMENT INCOME	NUMBER IN CATEGORY
15 to 24 years of age	Hall Beach	\$7,792	45
	Igloolik	\$5,021	120
	Arctic Bay	\$3,968	75
	Pond Inlet	\$4,368	150
	Clyde River	\$3,552	80
	North Baffin	\$4,488	530
	Iqaluit	\$10,018	405
25 to 39 years	Hall Beach	\$14,992	105
	Igloolik	\$16,056	220
	Arctic Bay	\$16,480	95
	Pond Inlet	\$18,496	200
	Clyde River	\$16,016	115
	North Baffin	\$16,909	785
	Iqaluit	\$43,904	730
40 years and over	Hall Beach	\$31,040	70
	Igloolik	\$30,016	155
	Arctic Bay	\$30,016	75
	Pond Inlet	\$32,064	190
	Clyde River	\$20,032	100
	North Baffin	\$27,989	655
	Iqaluit	\$49,024	535
Total - Age 15 years and over	Hall Beach	\$14,995	220
	Igloolik	\$13,995	495
	Arctic Bay	\$11,744	250
	Pond Inlet	\$15,037	535
	Clyde River	\$12,000	300
	North Baffin	\$14,419	1,970
	Iqaluit	\$35,036	1,670

Source: Statistics Canada, 2006 Census. Data for North Baffin are a custom aggregation generated by Statistics Canada.

Note: Median income is for the population of individuals who earned at least some employment income.

**Figure 29 Median Employment Earnings in LSA, Inuit Workers, by Age – 2005, Census**

Source: Statistics Canada, 2006 Census. Data for North Baffin are a custom aggregation generated by Statistics Canada.

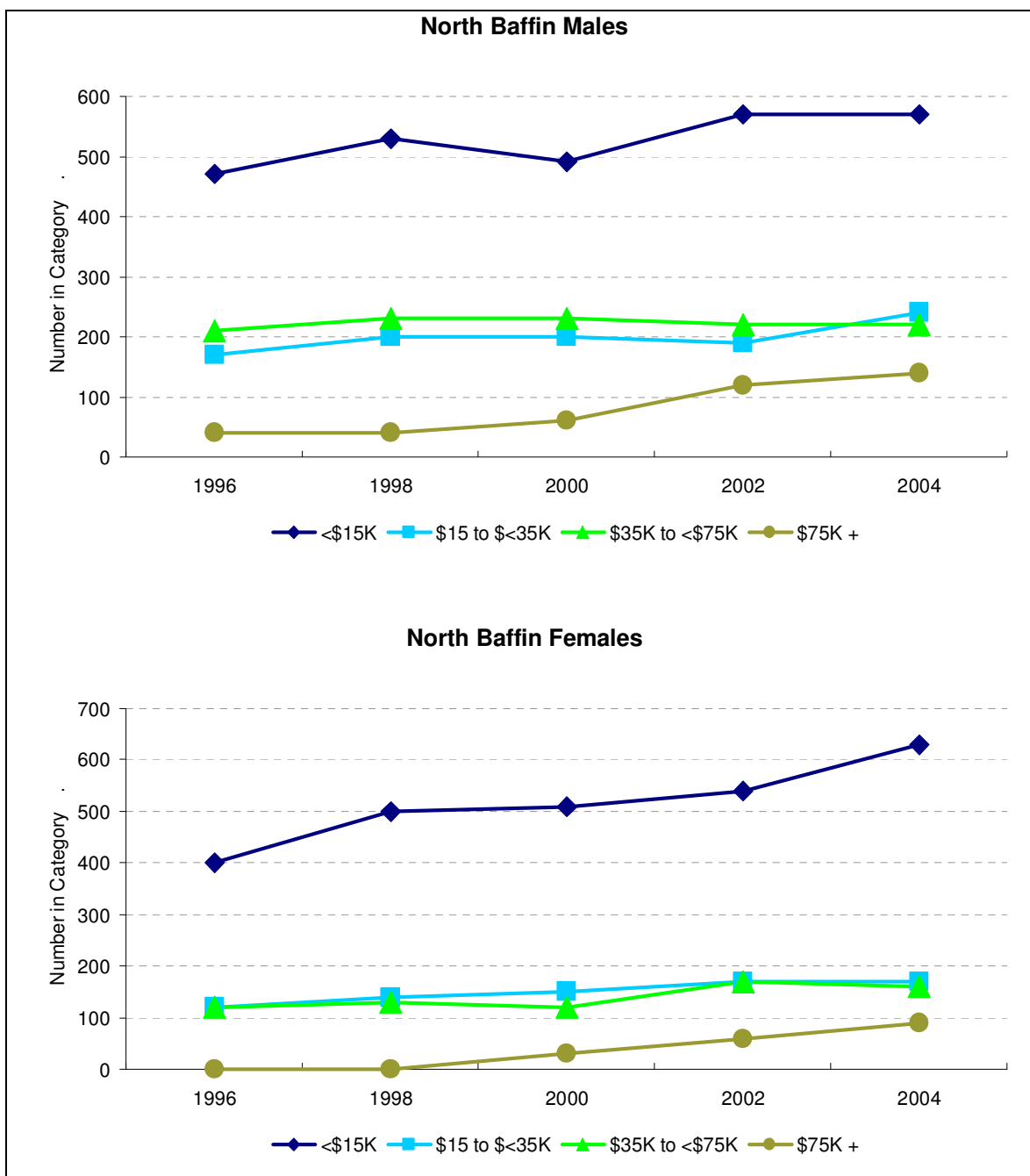
#### 4.5.1.2 Tax File Estimates

A second perspective into wage employment can be gained by considering the level of income earned by individuals as reported through taxfiles.<sup>136</sup> In North Baffin, nearly one-third of tax filers reported wage income of less than \$5,000. Over half of North Baffin tax filers earned under \$15,000 in 2004, while only 15% earned \$65,000 or more.

This North Baffin employment profile contrasts with that seen in Iqaluit. In the capital city, only 11% of tax filers reported earnings of under \$5,000, while those earning less than \$15,000 make up less than one-quarter of Iqaluit's tax filers. More than one-in-three tax filers in Iqaluit (38%) reported earnings of \$65,000 or more and one-in-ten (11%) had earnings of \$100,000 or higher (see Figure 30 and Figure 31).

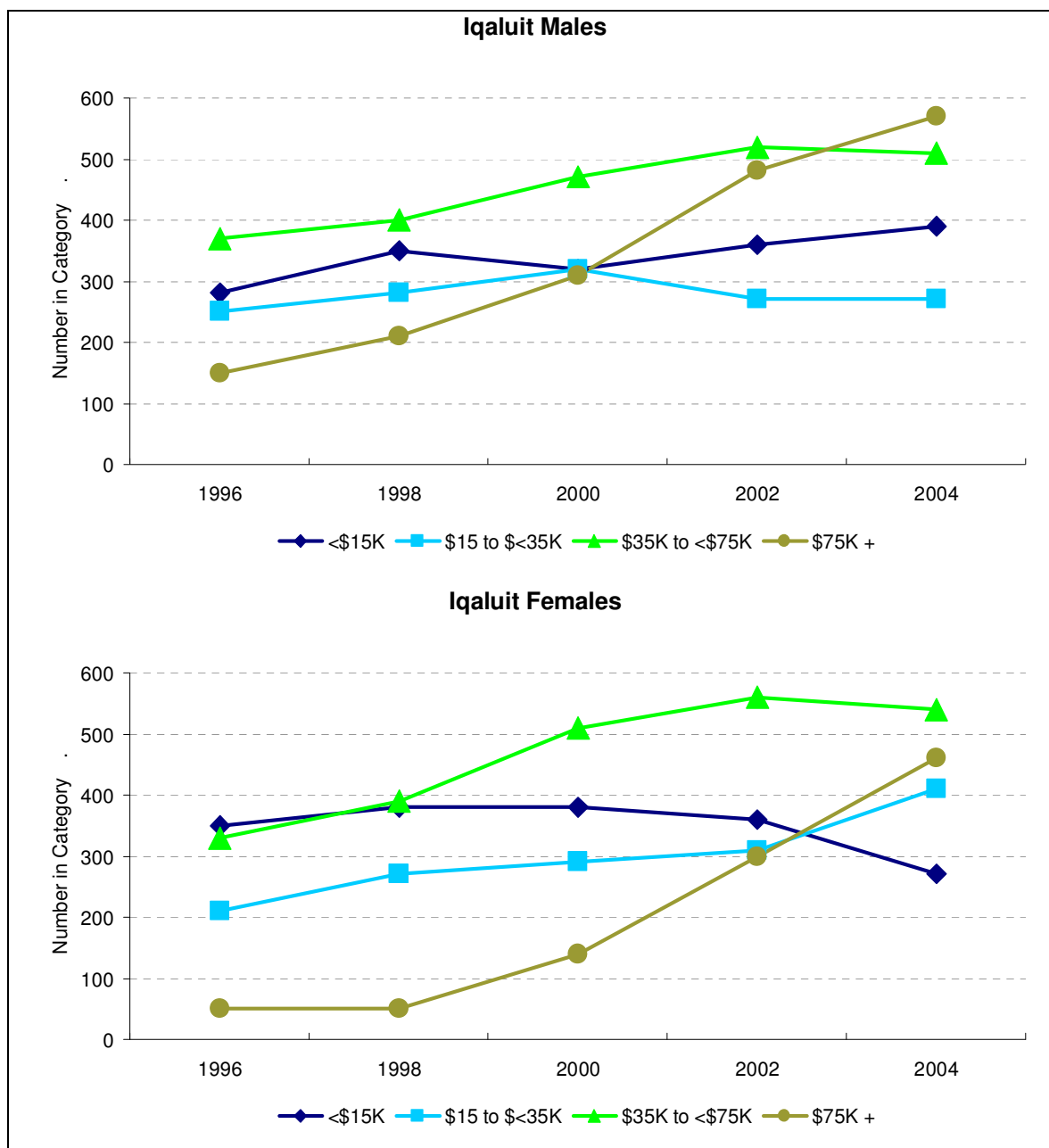
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<sup>136</sup> Statistics Canada, SAADD, wage income category data was generated as a custom request. This data source has the advantage of being available annually and is not subject to the uncertainties around data quality recently been raised by potential cancellation of the long-form of the 2011 census.

**Figure 30 Wage Income in Iqaluit – 1996–2004**

Source: Statistics Canada, SAADD. 2007.

Note: Data are for wage, salary, and commission income only. This is not a "standard" table and therefore required custom data extraction by the SAADD division of Statistics Canada.

**Figure 31 Wage Income in Iqaluit – 1996–2004**

Source: Statistics Canada, SAADD. 2007.

Note: Data for wage, salary, and commission income only. This is not a "standard" table and therefore required custom data extraction by the SAADD division of Statistics Canada.

#### 4.5.2 Work by Residents Engaged in Mainly Full-Time Jobs

A final look into the dynamics of wage employment across the study area is focused specifically on the amount of work carried out by those working in jobs that are full-time (but not necessarily year-round). The baseline for full-time work is generated from census work activity data. The 2006 census reports the number of weeks worked by all workers, by those who worked mostly full-time—defined as 30 hours or more per week—and those who worked mostly part-time, or between 1 and 29 hours per week.

Since the proposed Project will create opportunities for full-time, not part-time work, the full-time work activity data provide an appropriate baseline. Community research identified that employment for youth is a major priority for many residents of the LSA (see Section 3.1.3). A good baseline for how youth currently engage in the wage economy is therefore important to establish.

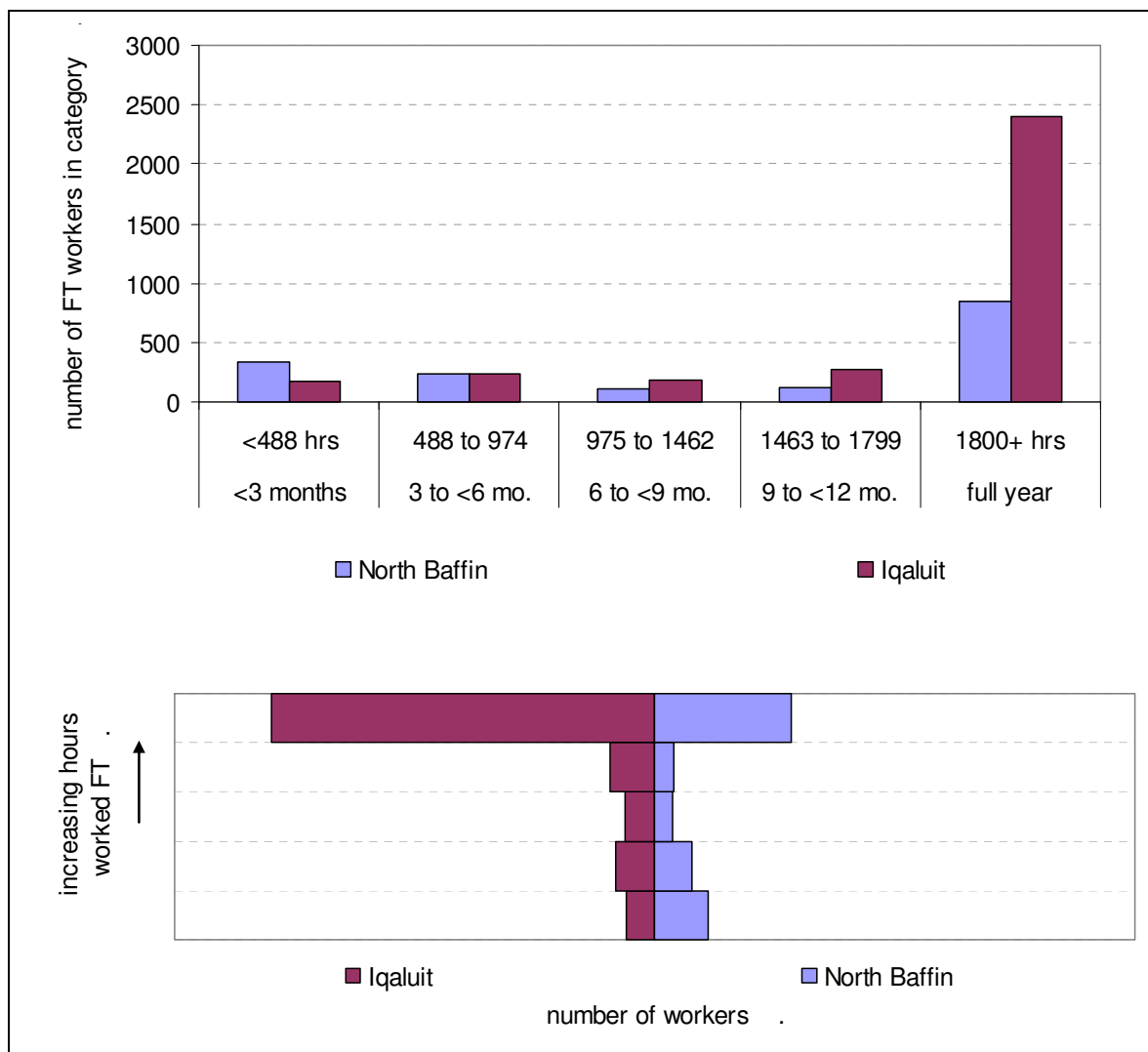
For work activity by age group and by gender, see Table 36, and Figure 32 to Figure 35). The general picture is that most of those working in full-time jobs in Iqaluit work these jobs year-round, whereas in North Baffin many more full-time workers are engaged in these jobs for only short periods (see Figure 32). This would be consistent with a North Baffin economy supplying a high proportion of seasonal jobs, as well as, potentially, a workforce more prone to high turnover in jobs. It does not clearly distinguish the relative importance of these two scenarios, however.

The highest rate of short-term employment among full-time workers is seen among the younger North Baffin male workforce (see Figure 33 and Figure 34). Most of the 15- to 24-year-old group engaged in full-time work do so for less than three months. Among the 25- to 39-year-olds, a larger proportion hold full-year positions, however short-term work is also common. Most of the 40+-year-old men who work full-time do so on a full-year basis. The picture for women in North Baffin who work full-time is different (see Figure 35) with fewer individuals engaged on a short-term basis. This is also the picture for both men and women of all age categories in Iqaluit (see Figure 33), where most full-time work is carried out full-year.

**Table 36 Full-Time Work in the LSA by Category of Hours Worked – 2005**

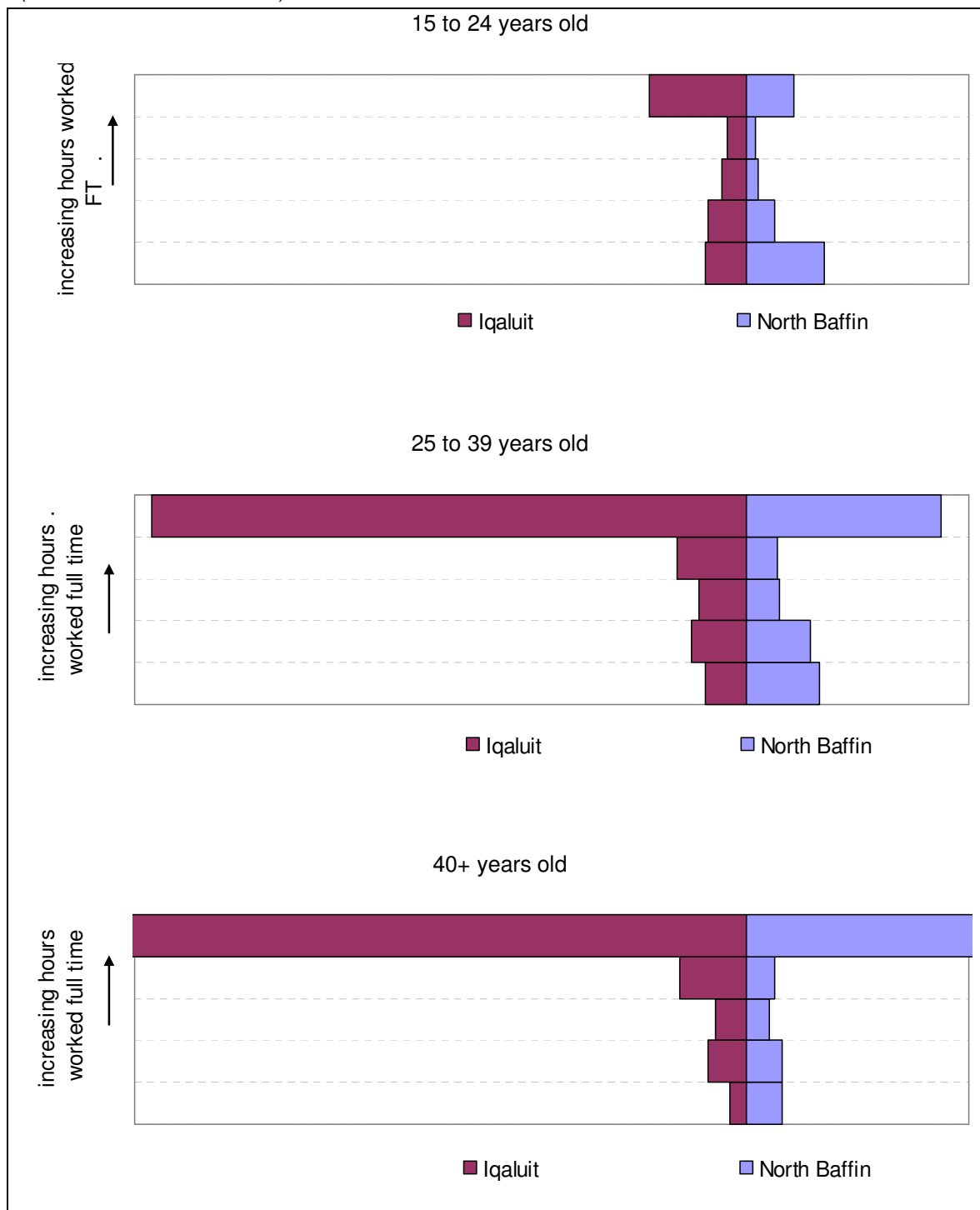
			months, and equivalent hours, of FT hours worked					total FT, full year job equivalents	
			<3 mo.	3 to <6 mo.	6 to <9 mo.	9 to <12 mo.	full year		
Gender	Age Group	Region	<488 hrs	488 to 974	975-1462	1463 to 1799	1800+ hrs		
both	all	North Baffin	330	235	115	120	850	1,156	
		Iqaluit	180	240	190	280	2400	2,876	
	15 to 24	North Baffin	140	50	20	15	85	147	
		Iqaluit	75	70	45	35	175	269	
	25 to 39	North Baffin	130	115	60	55	350	495	
		Iqaluit	75	100	85	125	1070	1,279	
	40+	North Baffin	65	65	40	50	415	516	
		Iqaluit	30	70	55	120	1145	1,314	
males	15 to 24	North Baffin	100	25	15	10	50	90	
		Iqaluit	35	35	20	20	105	153	
	25 to 39	North Baffin	95	85	40	35	180	279	
		Iqaluit	35	50	45	60	555	659	
	40+	North Baffin	40	45	20	25	265	321	
		Iqaluit	20	30	35	65	635	728	
	females	15 to 24	North Baffin	40	25	10	10	35	64
			Iqaluit	40	35	25	15	70	117
25 to 39		North Baffin	35	35	20	25	165	217	
		Iqaluit	40	50	40	65	520	626	
40+		North Baffin	20	25	20	20	155	197	
		Iqaluit	15	40	25	45	515	587	

Source: Statistics Canada, 2006 Census work activity data. North Baffin is a custom aggregation, prepared by Statistics Canada.

**Figure 32 Full-Time Hours Worked in the LSA, 2005***(Two graphical presentations of the same data)*

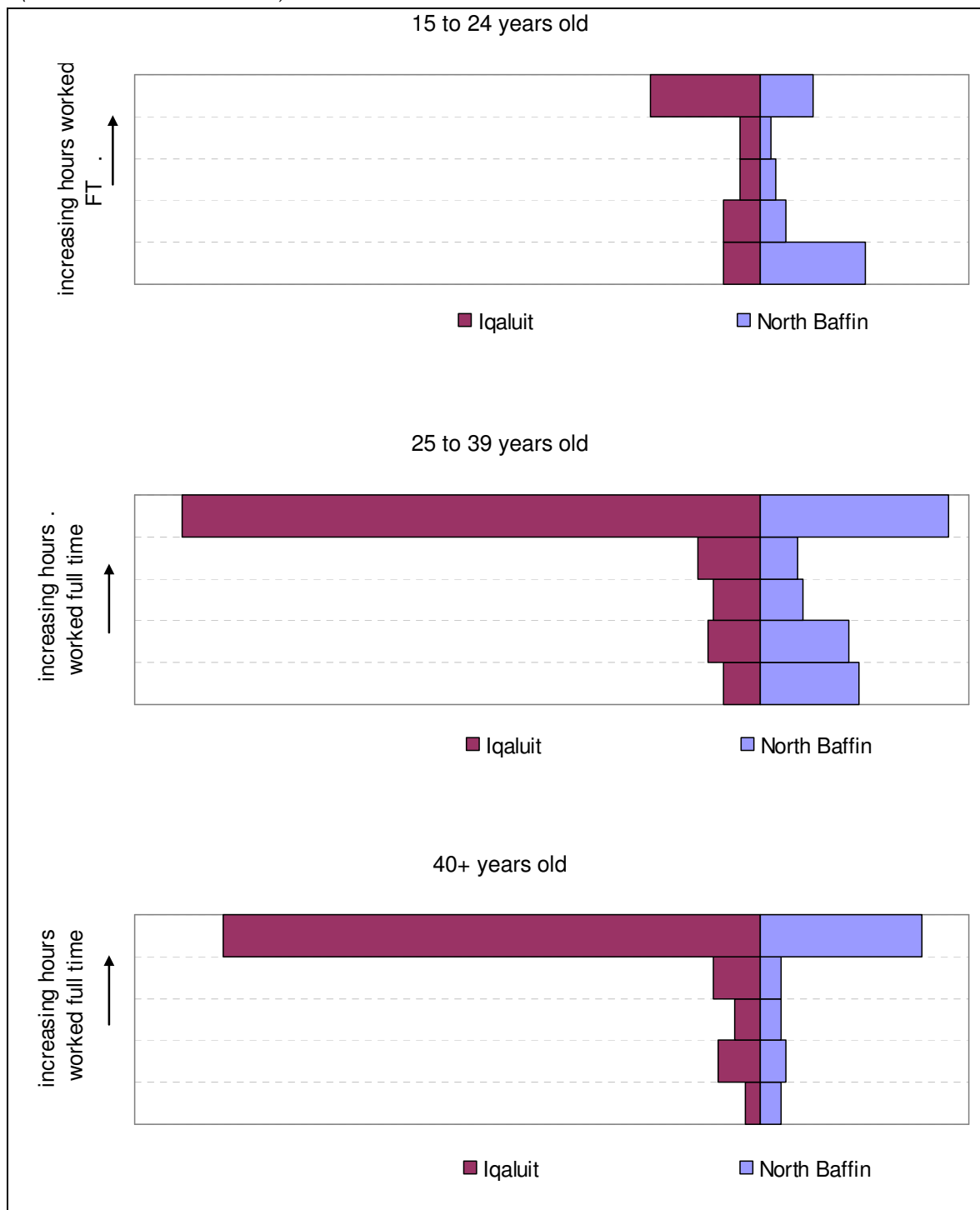
Source: Statistics Canada, 2006 Census work activity data. "North Baffin" is a custom aggregation, prepared by Statistics Canada.

Note: Detailed definition of "Work activity in 2005": Refers to the number of weeks in which a person worked for pay or in self-employment in 2005 at all jobs held, even if only for a few hours, and whether these weeks were mostly full-time (30 hours or more per week) or mostly part-time (1 to 29 hours per week). The term full-year full-time workers refers to persons 15 years of age and over who worked 49 to 52 weeks (mostly full-time) in 2005 for pay or self-employment.

**Figure 33 Patterns of Full-Time Hours Worked, by Age Group – 2005***(Inuit and non-Inuit combined)*

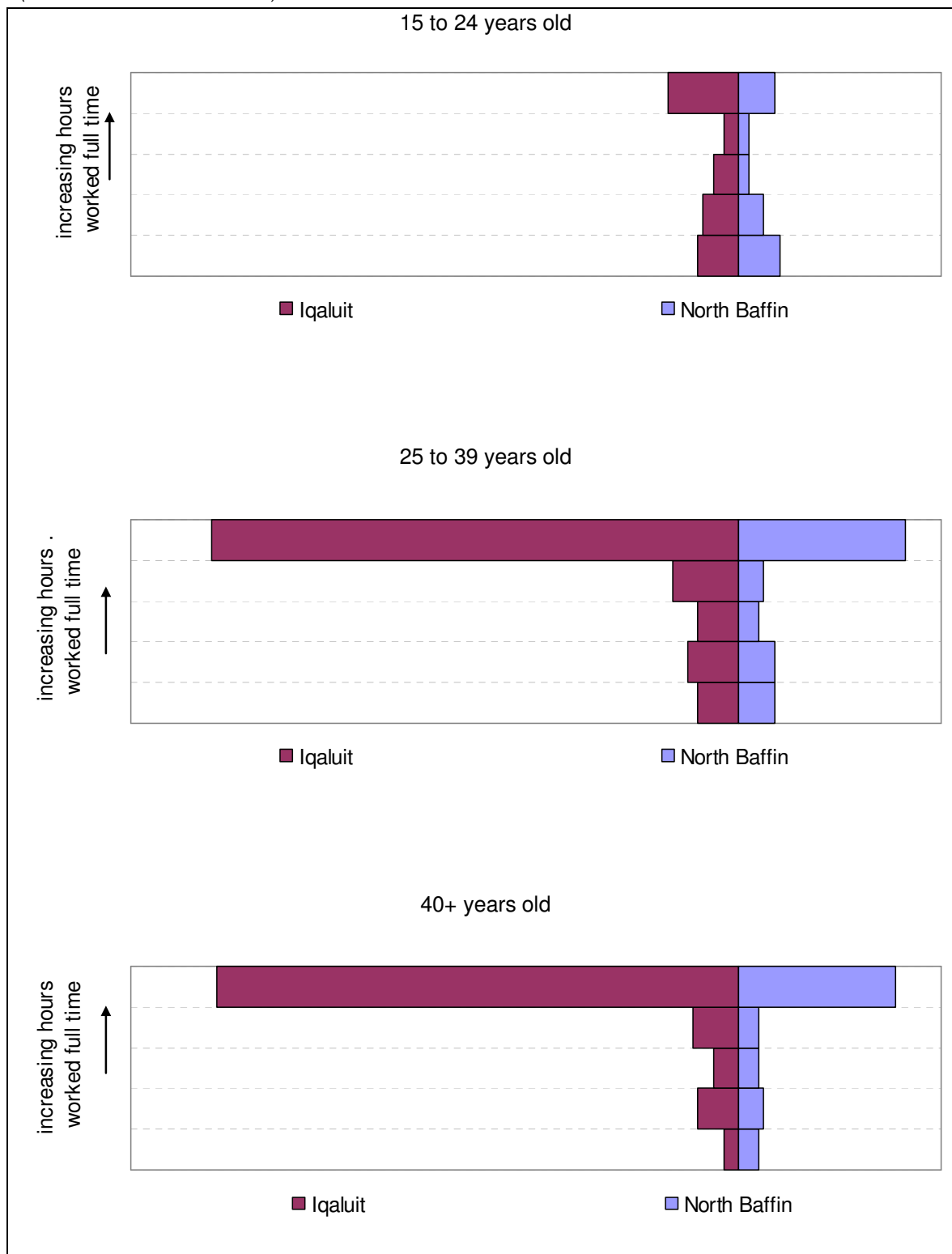
Source: Statistics Canada, 2006 Census work activity data. North Baffin is a custom aggregation, prepared by Statistics Canada.

Note: Scale is the same for all age groups in this chart, for ease of comparison. See Table 36 for actual values.

**Figure 34 Patterns of Full-Time Hours Worked by Men – 2005***(Inuit and non-Inuit combined)*

Source: Statistics Canada, 2006 Census work activity data. North Baffin is a custom aggregation, prepared by Statistics Canada.

Note: Scale is the same for all age groups in this chart and in the charts for female workers. See Table 36 for values.

**Figure 35 Patterns of Full-Time Hours Worked by Women – 2005***(Inuit and non-Inuit combined)*

Source: Statistics Canada, 2006 Census work activity data. "North Baffin" is a custom aggregation, prepared by Statistics Canada.

Note: Scale is the same for all age groups in this chart, for ease of comparison. See Table 36 for actual values.

#### 4.6 EXPERIENCE FROM THE PROJECT DEFINITION PHASE

An important means by which the Project will interact with communities will be through fly-in/fly-out employment of residents. Many of the impacts and benefits that arise from the Project will be through this employment interaction. Therefore, a good understanding of the number of individuals from in the study area who will work at the Project, along with the dynamic nature of this employment, will be essential to much of the socio-economic impact assessment. The project definition phase, particularly the bulk sampling program, provided an excellent opportunity to build insight into the dynamics of the labour force of the LSA and Iqaluit, related specifically to the kind of fly-in/ fly-out work that is associated with the proposed Project.

One supervisor reflects on the challenge finding qualified people to work away from home:

“People who have the skill, knowledge and experience...they are already working in the communities, in well paid government jobs. They don't want to leave. One of our challenges for the future is the pool of people who don't want to leave the communities”<sup>137</sup>

Over a three-year period from spring 2007 to the end of March 2010, approximately 1.3 million hours of work were carried out at Mary River. Most of this work, 0.8 million hours, was performed during the bulk sample in 2008. For a summary of the hours worked at the Project, see Table 37.

Consideration of the way in which this labour was supplied to Mary River will contribute additional insight into the workforce ecology of the participating communities in the region. This understanding is used to assess employment effects and to support development of the human resources management plan and monitoring program. The data also serve as a baseline for future monitoring.

**Table 37 Labour Demand Generated by the Mary River Project Definition Phase**

	Qikiqtaaluk Logistics	Nuna Logistics	Nuna Contracting	Total (all contractors plus BIM)
	<i>(hours supplied)</i>			
2007 (Apr through Dec)	107,297	3,716	60,261	387,004
2008	228,277	11,889	242,873	780,882
2009	80,902	2,986	16,094	101,678
2010 (Jan through Mar)	13,705	1,592	10,034	24,996
<b>Total hours over three years</b>	<b>430,181</b>	<b>20,182</b>	<b>329,262</b>	<b>1,294,560</b>

Source: QL and NL/NC hours derived from data provided by these companies. Total hours derived from monthly Baffinland HR and Safety reports.

<sup>137</sup> Supervisor A interviewed 2008

Labour demand indicators include the following:

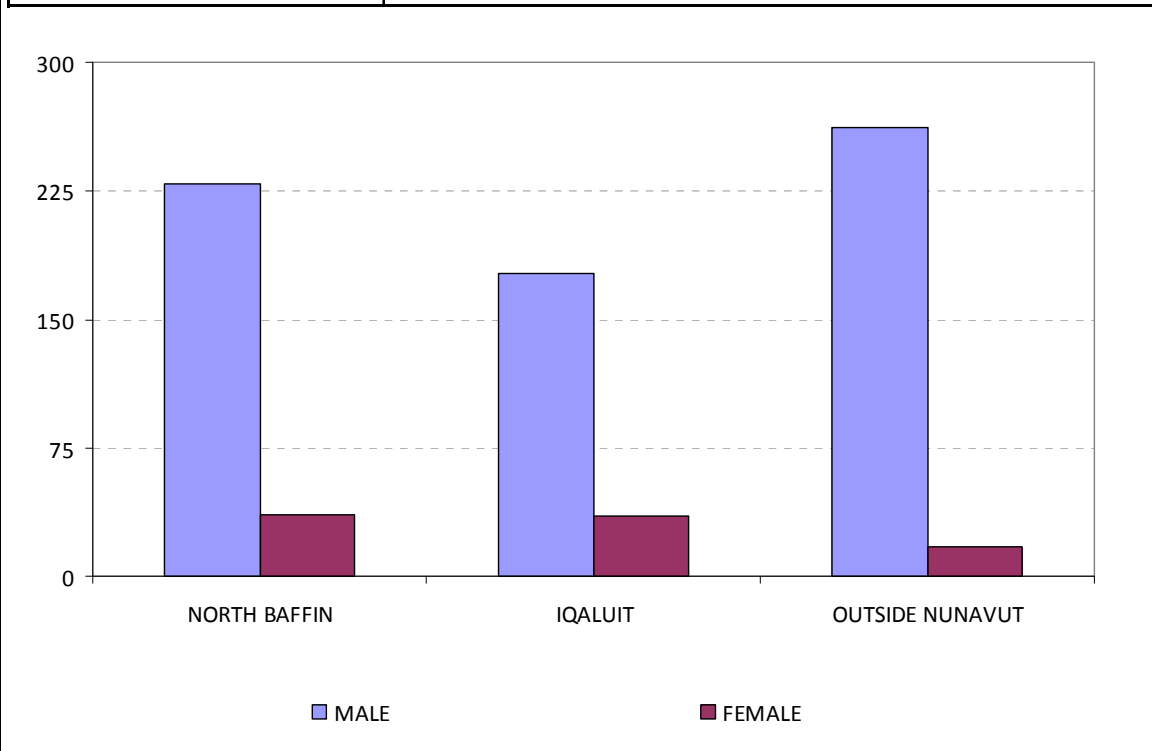
- number of LSA and RSA residents who worked at the Project;
- hours of experience gained by residents over entire Project activity;
- total hours of work by study area residents relative to the total hours of work carried out at the Project (an indicator of the contribution of the RSA to the labour demand of the Project);
- number of LSA residents by category of hours they worked per year at the Project;
- number of workers hired to fill one full-time position.

#### 4.6.1 Experience Gained During Exploration and Bulk Sample Activities

A total of 776 individuals worked at the Project through either QL or Nuna Logistics over the three-year period from April 2007 to March 2010. Of these, 279 workers came from outside Nunavut, while 265 were North Baffin residents and 212 were residents of Iqaluit (see Table 38). Most of these were men, with women accounting for a total of 11%, or 89 individuals.

**Table 38 Number Employed by QL and Nuna Logistics at Mary River, by Gender**

	TOTAL WORKERS	MALE	FEMALE	% FEMALE
NORTH BAFFIN	265	229	36	14%
IQALUIT	212	177	35	17%
OTHER NUNAVUT REGIONS	20	19	1	5%
OUTSIDE NUNAVUT	279	262	17	6%
<i>TOTAL</i>	<i>776</i>	<i>687</i>	<i>89</i>	<i>11%</i>



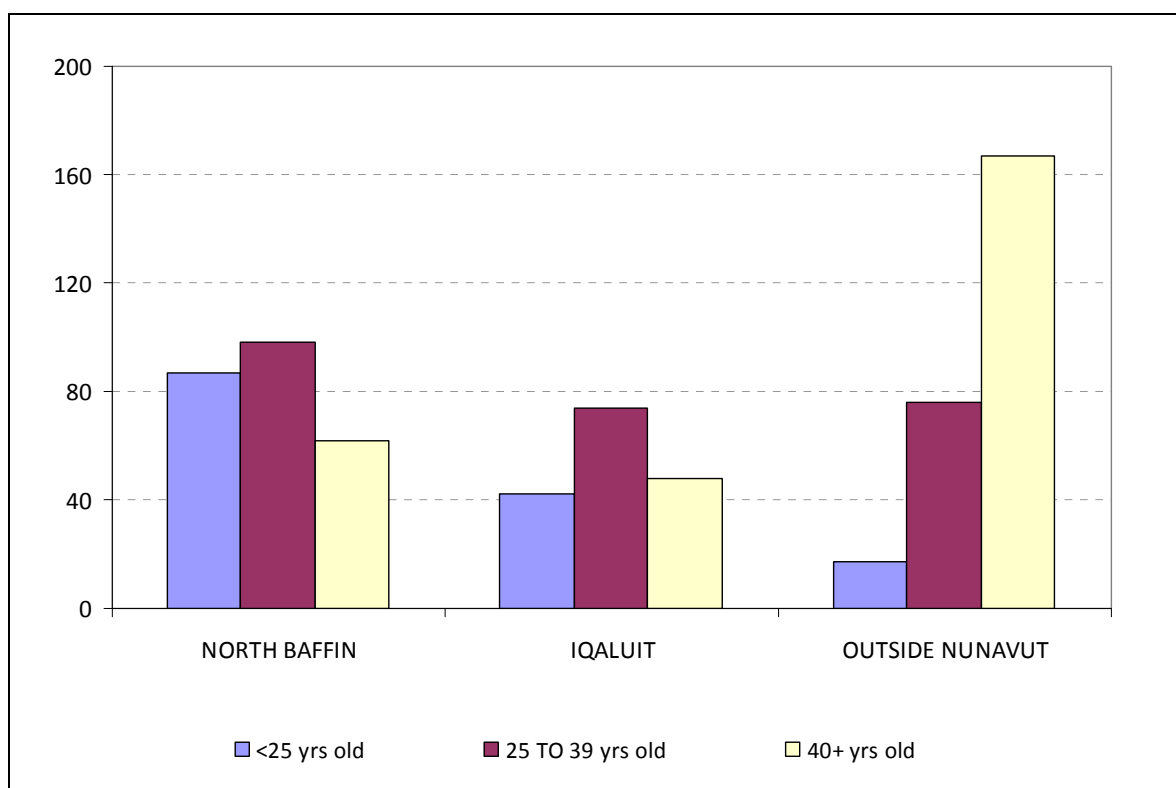
Source: Data provided by QL and Nuna Logistics, July 2010. Data for 2007 starts April 1<sup>st</sup> (Q2) and 2010 data covers to the end of March (Q1).

The age profile of the workforce supplied to Mary River from North Baffin was much younger than that of the southern workforce. Iqaluit fell in between (see Table 39). Most of the young people under the age of 25 years involved in the Project were from North Baffin. The southern workforce, in contrast, was mostly older—40+ years of age.

This different age profile reflects the predominant involvement of southerners in the Nuna Logistics jobs, which required more experience. Most North Baffin residents worked in labourer positions that were more accessible to a younger, less-experienced workforce.

**Table 39 Mary River Employment by QL and Nuna Logistics, by Age – 2007 to 2010**

	<25 yrs old	25 TO 39 yrs old	40+ yrs old
NORTH BAFFIN	87	98	62
IQALUIT	42	74	48
OUTSIDE NUNAVUT	17	76	167
<i>TOTAL</i>	<i>148</i>	<i>253</i>	<i>283</i>



Source: Data provided by QL and Nuna Logistics, July 2010. Data for 2007 starts April 1<sup>st</sup> (Q2) and 2010 data covers to the end of March (Q1). Note: 1) Nuna Logistics includes those working for Nuna Contracting. 2) Age data were not available for all workers, particularly those from Iqaluit. Age data were available for all Nuna Logistics hires.

A supervisor notes that it was sometimes challenging to find labour jobs that unskilled workers would enjoy doing:

“They were coming there as a labourer and maybe doing one of 75 different things. In a lot of cases, they didn’t like that, so we put them somewhere else. So that was some of the issue, where they didn’t understand what the different types of work were really about. Part of that goes to us, we didn’t really have a clear job description for most of the work.” <sup>138</sup>

#### *Amount of Fly-in/Fly-out Work Experience Gained*

The intense two-week-in/two-week-out rotations typical in the remote mining sector—12 hours a day for 14 consecutive days—is a challenging work environment and can be a particularly challenging transition for younger workers who likely have little previous employment experience. Therefore, the experience gained during the Mary River definition phase may be particularly valuable in preparing individuals and families to understand the implications of taking on fly-in/fly-out work.

A worker might ask to go home to attend the funeral of a community member:

[Researcher]: What if you say no?

[Supervisor D]: “Sometimes they just don’t go....sometimes they just quit.”

Or there may be a concern over children at home:

“For some parents the kids are the [reason] they quit. Sometimes the spouse at home may not be the best parent to look after the kids.” <sup>139</sup>

Young people “quitting” was also raised during a working group conference held in Arctic Bay:<sup>140</sup>

“Those of us who were born earlier were brought up in a good way. Younger people now don’t know what their role is. This can be straightened out through healing. This has a connection to work, because if you have issues, you can’t work. Younger people quit because they have personal issues.”

The number of hours worked by individuals from the LSA was assessed to provide insight into how much rotational work experience was gained (see Table 40 and Figure 36). Somewhat less than half (43%) of North Baffin residents engaged at the Project gained substantial fly-in/fly-out experience, working three rotations or more over the three year period. A similar number worked the equivalent of one to three rotations, while close to one-in-five who were hired managed to get less than one full 14-day rotation of work experience.

The picture for Iqaluit workers is a bit different, with half of this group getting at least three rotations of work experience. However, one-in-eight residents from Iqaluit who were hired managed to complete less than one full rotation.

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<sup>138</sup> Supervisor A interviewed 2008

<sup>139</sup> Supervisor D interviewed 2008

<sup>140</sup> Resident 13, comment during conference of working groups held in Arctic Bay, March 2008.

**Table 40 Experience Gained at Mary River – April 2007 to March 2010**

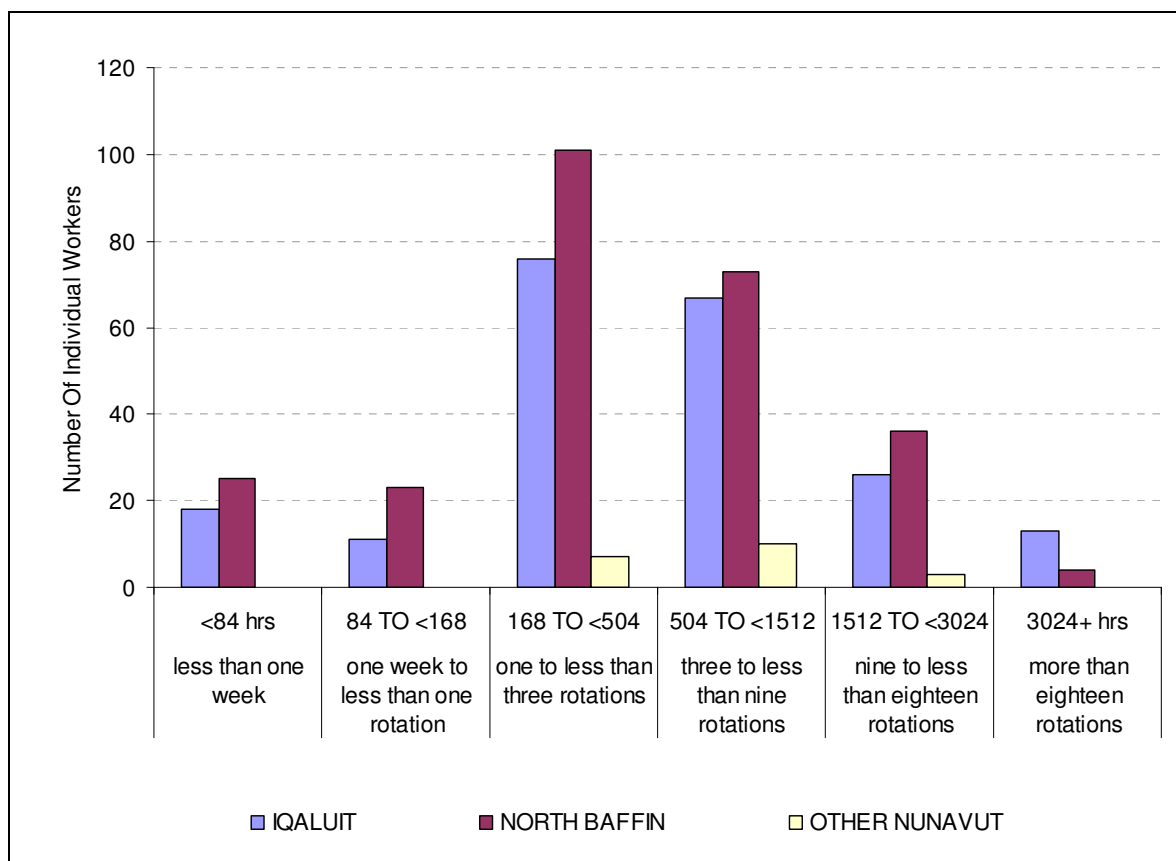
	IQALUIT	NORTH BAFFIN	OTHER NUNAVUT	WORKERS FROM NUNAVUT
<ONE WEEK	18	25	-	43
ONE WEEK TO LESS THAN ONE ROTATION	11	23	-	34
ONE TO THREE ROTATIONS	76	101	7	184
THREE TO LESS THAN NINE ROTATIONS	67	73	10	150
NINE TO LESS THAN 18 ROTATIONS	26	36	3	65
MORE THAN 18 ROTATIONS	13	4	-	17
<i>Total Number Who Worked At Mary River</i>	<i>211</i>	<i>262</i>	<i>20</i>	<i>493</i>

Source: Based on data provided by QL and Nuna Logistics, July 2010.

Notes: 1) Based on hours-of-work data provided by QL and Nuna Logistics for Nuna Contracting workers. 2) Conversion from hours-of-work to rotations was based on 84 hours of work per week and two weeks per rotation (2-in/2-out). See conversion table below.

Conversion from hours worked to equivalent work rotations:

HOURS WORKED	ROTATION EQUIVALENTS
<84	less than one week
84 TO <168	one week to less than one rotation
168 TO <504	one to less than three rotations
504 TO <1512	three to less than nine rotations
1512 TO <3024	nine to less than eighteen rotations
3024+	more than eighteen rotations

**Figure 36 Experience Gained at Mary River – April 2007 to March 2010**

Source: Based on data provided by QL and Nuna Logistics, July 2010.

#### 4.6.2 Degree of Interaction Between the LSA/RSA and the Project

##### *Importance of Labour from the LSA/RSA to the Project*

Another indicator of interest relates to how important the labour supplied by the RSA was to the Project relative to the total size of the Project. As indicated in Table 41-a, approximately 32% of the 1.3 million hours carried out at Mary River over the three-year period were supplied from Nunavut, with 31%—a total of some 0.4 million hours—coming from residents of the RSA. The remainder of the labour required for this early phase of the Project was sourced from outside the territory.

Nearly two-thirds of all labour supplied by residents of the North Baffin LSA came from Pond Inlet (see Table 41-b). Arctic Bay was the second most-important source of labour, followed by Clyde River, Igloodik, and Hall Beach.

During the peak of activity in 2008, women supplied approximately 15% of the labour provided from the North Baffin LSA (see Table 41-c). For the contribution of monthly labour from the North Baffin and Iqaluit relative to total labour demand over the period of the Project definition phase, see Figure 37.

**Table 41 Source of Labour Supplied to Mary River Project Definition Phase**

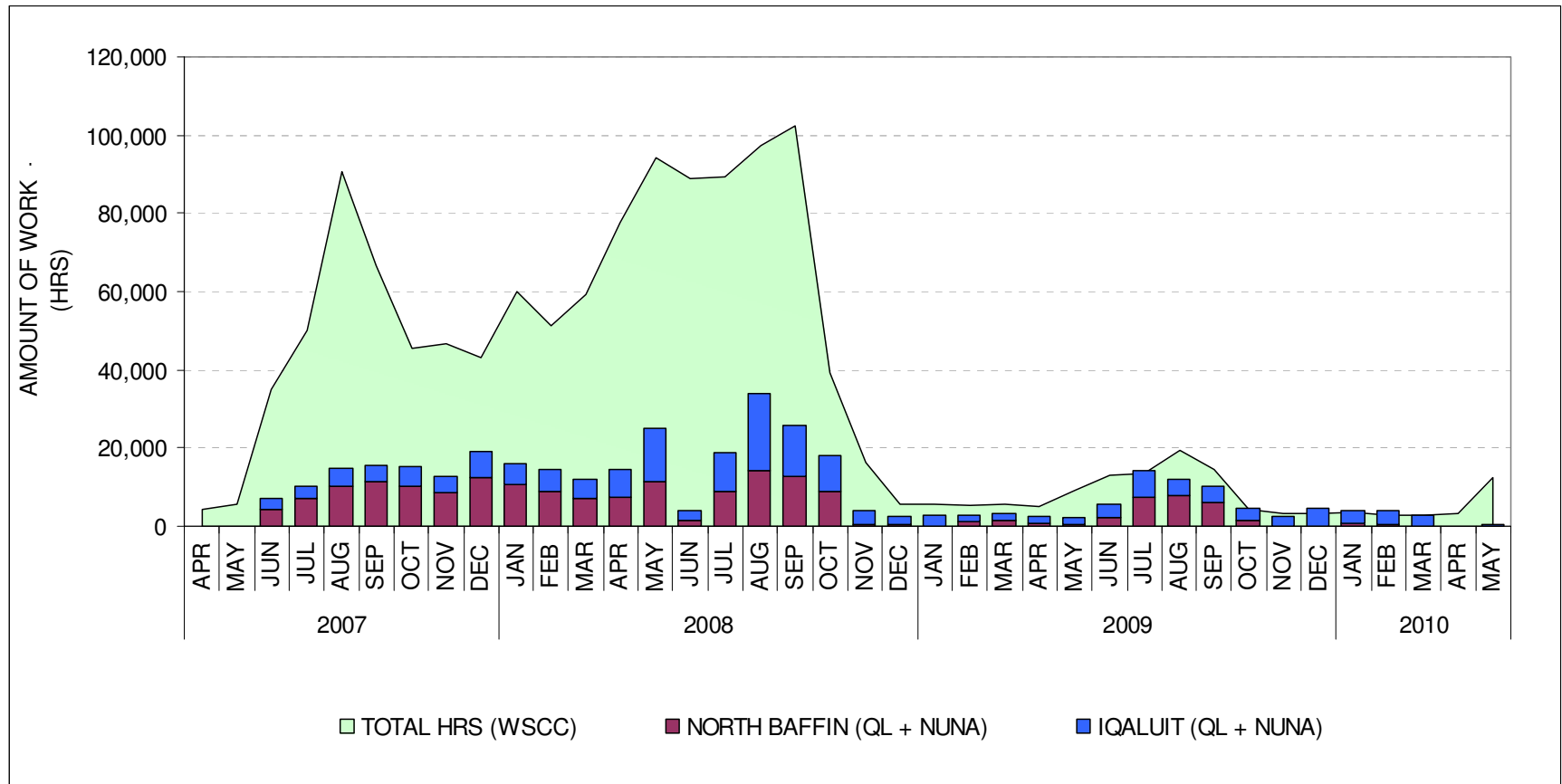
a - Regional Sources of Labour						
	Labour Supplied By QL and NL				All Labour	
	North Baffin	Iqaluit	South Baffin	Other Nunavut	Outside Nunavut	Total Hours
	(hours supplied)					
2007 (Apr through Dec)	67,236	36,249	1,529	2,479	279,512	387,004
2008	94,119	112,886	4,919	6,786	562,173	780,882
2009	30,553	46,729	1,268	863	22,266	101,678
2010 (Jan through Mar)	1,113	13,290	0		10,594	24,996
Total	193,020	209,153	7,715	10,128	874,545	1,294,560
% of Total	15%	16%	0.6%	0.8%	68%	

b - North Baffin Communities							
	Labour Supplied By QL and NL					All Labour	
	Hall Beach	Igloolik	Arctic Bay	Pond Inlet	Clyde River	North Baffin Total	Total Hours
	(hours supplied)						
2007 (Apr through Dec)		707	12,817	52,700	1,013	67,236	387,004
2008	6,044	3,300	19,272	63,315	2,189	94,119	780,882
2009		9,410		5,863	15,281	30,553	101,678
2010 (Jan through Mar)				826	287	1,113	24,996
Total	6,044	13,417	32,088	122,703	18,769	193,020	1,294,560
% of North Baffin	3%	7%	17%	64%	10%		
% of Total Labour	0.5%	1.0%	2.5%	9.5%	1.4%	14.9%	

c - North Baffin by Gender							
	Labour Supplied By QL and NL					North Baffin Total	
	Hall Beach	Igloolik	Arctic Bay	Pond Inlet	Clyde River		
	(hours supplied)						
Men	2007 (Apr through Dec)		707	11,001	48,485	1,013	61,206
	2008	3,963	3,300	15,965	54,624	2,189	80,040
	2009		9,410		3,943	12,365	25,717
	2010 (Jan through Mar)				826	287	1,113
Women	2007 (Apr through Dec)			1,816	4,215		6,031
	2008	2,081		3,307	8,691		14,079
	2009				1,920	2,916	4,836
	2010 (Jan through Mar)						0

Source: QL and NL/NC hours were derived from data provided by these companies. Total hours (all labour) derived from monthly Baffinland HR and Safety Reports.

Note: It was assumed that all RSA labour was supplied through QL and Nuna Logistics/Contracting. While there was some direct employment by Baffinland from the region, local CLOs for example, this was modest and did not influence the analysis based on the table.

**Figure 37 Hours Worked During Mary River Project Definition Phase – All Employers**

Source: Based on data provided by QL and Nuna Logistics, with total hours obtained from monthly HR and Safety Reports provided by Baffinland to the Nunavut/NWT Workers' Safety and Compensation Commission (WSCC). Missing data for 2007 Q2 were derived from total hours for this period.

Note: Over the entire period, a total of approximately 1.3 million hours was allocated to work at the Project, of which 0.38 million hours was provided by residents of the RSA through QL and Nuna Logistics/Nuna Contracting. Of these hours, 190,000 were provided by workers from North Baffin, and 193,000 from Iqaluit. Another 0.38 million hours were provided by workers from outside the LSA working for QL, Nuna Logistics, Baffinland directly, and through a variety of other contractors.

*Scale of the Project Definition Phase Relative to the LSA Labour Market*

It was estimated (see Section 4.3.1.1) that the labour market of the LSA requires between 6.7 and 7 million hours of labour each year, of which 2 million is needed in the North Baffin economy and 4.7 to 5 million in Iqaluit. At its peak in 2008, the Project bulk sample drew on just under 0.1 million hours of labour from each of the North Baffin and Iqaluit labour forces (see Table 42). This level of demand equates to 5% of the total North Baffin labour market and 2% of the Iqaluit labour market.

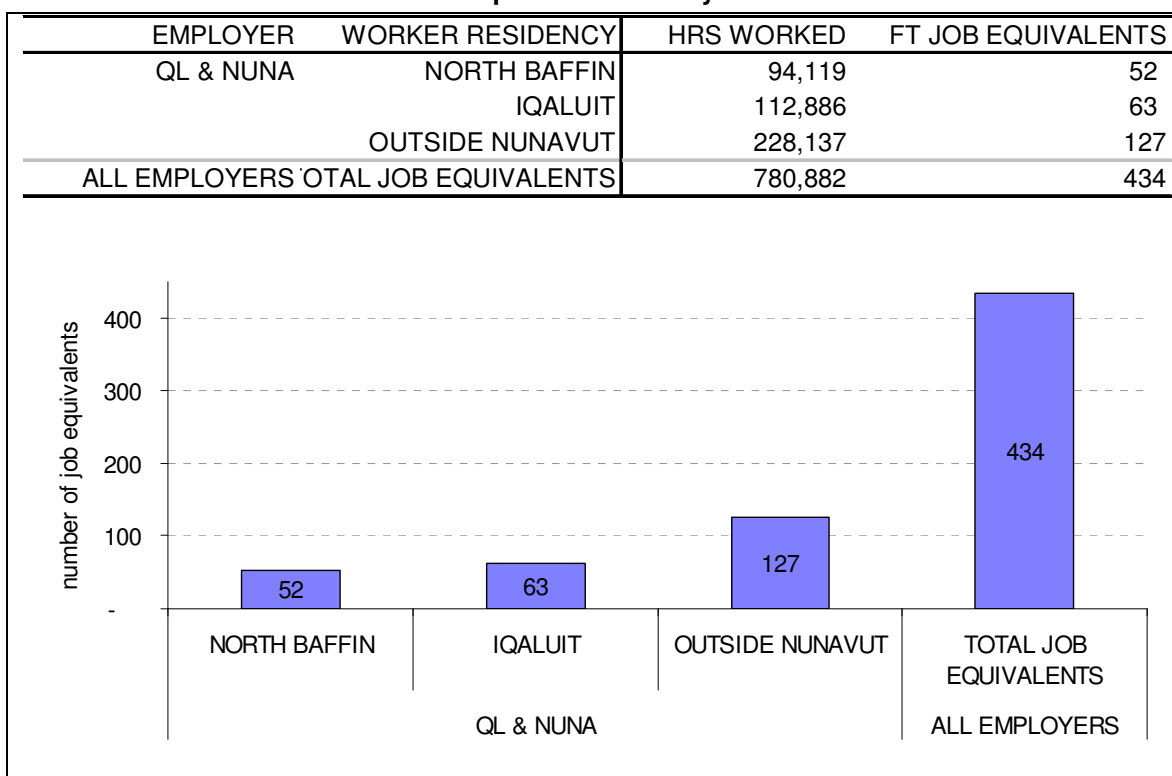
*Scale of the Project Definition Phase Relative to Key Components of the North Baffin LSA Labour Market*

At a community level, the Project was most significant to the labour markets of Pond Inlet and Arctic Bay (see Figure 38). As shown earlier in Table 12, the labour markets in 2004 of these communities generated a total of 289 job equivalents in Pond Inlet and 143 job equivalents in Arctic Bay. The corresponding hours of labour for this labour demand is 520,000 and 257,000 hours per year, for Pond Inlet and Arctic Bay respectively.

At its peak labour demand, in 2008, the Mary River bulk sample activity drew 63,000 hours of labour from Pond Inlet and 19,000 hours from Arctic Bay. This corresponds to 12% and 7% of the total, pre-bulk sample, labour markets of these two communities.

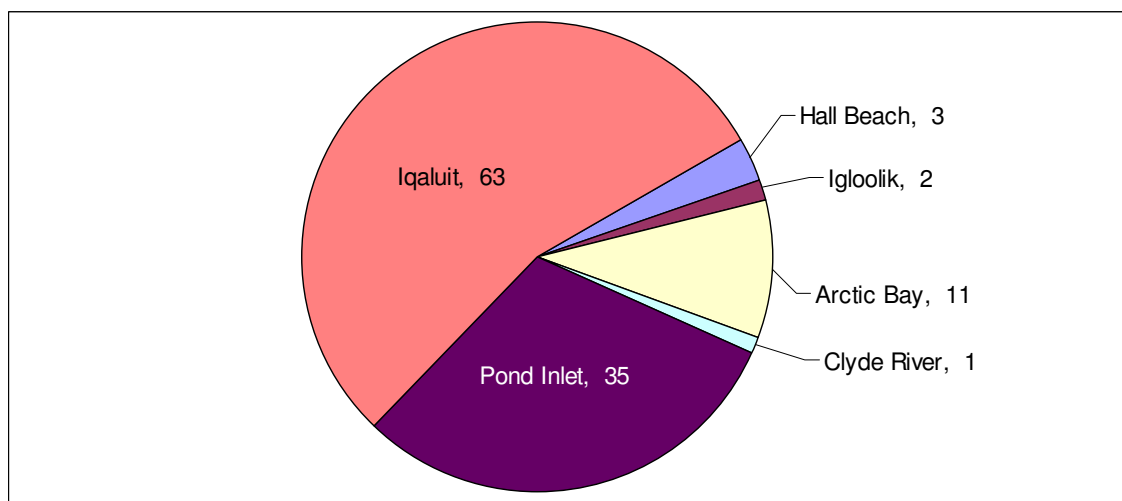
A consideration of gender components of the labour market shows the Project was substantially more significant for the Pond Inlet male labour force. Of the total hours supplied to Mary River from Pond Inlet and Arctic Bay, men provided 54,624 and 15,965 hours of labour, respectively. These levels are equal to 19% of the total male workforce of Pond Inlet, which had supplied a total of 295,000 hours of labour before the Project, and 10% of Arctic Bay's male labour market of 153,000 hour of labour before the Project.

The rate of job creation in Pond Inlet has been equivalent to adding demand for an average annual addition of some 13 jobs, equivalent to 23,000 hours of labour demand per year (see Table 12). The Mary River bulk sample, in adding 63,000 hours to the labour market in 2008 essentially provided three-years worth of labour market growth all at once. The effect of this would be to provide opportunities for individuals seeking work, or seeking additional hours of work, three years earlier than otherwise possible.

**Table 42 Hours Worked and Job Equivalents at Mary River in 2008**

Source: Data for QL and Nuna Logistics/Nuna Contracting employment from QL and Nuna Logistics, July 2010. Data for "all employers" from Baffinland's monthly Safety and HR Reports. Note: One "Full time job equivalent" was defined for this table to equal 1838 hours of labour. This level of hours permits comparison of these jobs with other jobs generated in the regional economy.

**Figure 38 Supply of Labour to Mary River by LSA Communities in 2008,**  
*(Full Time, Full Year Job Equivalents)*



Source: Data for QL and Nuna Logistics/Nuna Contracting employment from QL and Nuna Logistics, July 2010.  
 Note: Number of full-time job equivalents filled.

#### 4.6.3 Turnover Rates During Project Definition Phase

The demand for labour has varied considerably during the Project definition phase. This makes it more difficult to determine the rate of worker turnover during the period than would be the case under a constant-demand scenario. Insight is gained, however, by looking at the numbers of workers over different timeframes. A perfectly “stable” workforce would involve only the number of employees required during the peak period of employment—with those laid off during a slowdown returning to work when demand for labour picks up again. In this situation, the number of employees over a one-year period would be equal to the number employed during the peak demand month (see Table 43).

During 2007, 69 employees were hired from North Baffin during the month of March. During that quarter, however, a total of 94 individuals passed through the Mary River labour force. Over the entire year, 126 residents were hired. Thus, to meet a peak demand of 69 workers, 126 workers were hired—or 1.8 individuals hired per “job.” A similar ratio was seen for Iqaluit, while a lower ratio of 1.2 can be seen for workers hired from outside Nunavut.

During 2008, 153 North Baffin residents were hired while the peak worker demand, occurring in September, was 85 employees during the month. This provides a ratio of 1.8 hires per job. A similar ratio for Iqaluit was 1.6, and for workers from outside Nunavut was 1.3.

Over a longer period, the turnover becomes higher. During the three years of the Project definition phase a total of 262 North Baffin residents were hired while the peak demand period required 85 workers. This yields a ratio of 3.1 hires per peak job. The ratio for Iqaluit over this period is 2.1 while that for hires outside of Nunavut was 1.5. Since the peak demand is set on a one-month period, the rotational nature of employment is factored into the number. Therefore, a fully stable workforce would generate a ratio very close to 1, with some minor divergence expected due to vacation time and sick leave.

**Table 43 Numbers Hired by Month, Quarter, and Year**

			North Baffin			Iqaluit			Outside Nunavut		
			month	quarter	year	month	quarter	year	month	quarter	year
<i>(number of employees during period)</i>											
2007	Q2	April									2
		May									4
		June	31	31		18	18		8	10	
	Q3	July	44			24			9		
		August	69			32			45		
		September	66	94		33	45		56	68	
	Q4	October	63			32			64		
		November	51			32			71		
		December	61	82	126	31	41	61	96	101	119
2008	Q1	January	68			36			100		
		February	61			42			104		
		March	47	81		39	56		106	121	
	Q2	April	41			47			120		
		May	50			68			157		
		June	9	61		16	81		144	125	
	Q3	July	51			67			155		
		August	78			99			162		
		September	85	109		80	112		179	180	
	Q4	October	61			59			148		
		November	6			22			54		
		December	1	60	153	11	59	161	14	149	231
2009	Q1	January	1			11			11		
		February	12			10			10		
		March	11	13		10	12		8	12	
	Q2	April	11			8			8		
		May	2			11			11		
		June	13	19		22	22		12	12	
	Q3	July	51			29			12		
		August	50			26			10		
		September	45	68		23	33		18	21	
	Q4	October	15			24			16		
		November				20			7		
		December		15	73	25	34	51	7	16	28
Entire Three Year Period			262			211			276		

Source: Derived from data provided by QL and Nuna Logistics, July 2010.

#### 4.6.4 Intensity of Engagement by Individuals Resident in the RSA

It is clear from the previous analysis that on average, individuals employed at the Project did not work all the shifts that the number of available positions would imply. However, it is also clear from the community research and from interviews with Mary River site supervisors that there was tremendous variation in the hours worked by individuals hired to the Project, with some maintaining longer term patterns of work and others working for brief periods.

Site supervisors found even some of the most conscientious workers stayed only a short time:

“Some of [the LSA workers] are extremely hard working and quite attentive...then all of a sudden, they pack it in. It's usually because of issues off site...they just quit.”<sup>141</sup>

Insight into this worker-level of labour dynamics can be gained by comparing the hours worked per worker among workers hired from different age groups and from different regions (see Table 44 and Figure 39 to Figure 41).

**Table 44 Hours Worked Per Individual Hired by QL and Nuna Logistics**

2008 – Annual			
	NORTH BAFFIN	IQUALUIT	OUTSIDE NUNAVUT
<168 hrs	24	20	9
<488 hrs	62	58	43
488 to 974 hrs	29	39	54
975 to 1462 hrs	19	24	47
1463 to 1799 hrs	15	10	33
1800+ hrs	4	10	45
<i>Total number who worked</i>	<i>153</i>	<i>161</i>	<i>231</i>
2008 – Third Quarter			
	North Baffin	Iqaluit	Outside Nunavut
	(number in category)		
<84	12	10	4
84 TO 167	16	4	6
168 TO 335	29	26	33
336 TO 503	26	24	45
504+	26	48	87
<i>Total number who worked</i>	<i>109</i>	<i>112</i>	<i>175</i>

Source: Derived from data provided by QL and Nuna Logistics, July 2010.

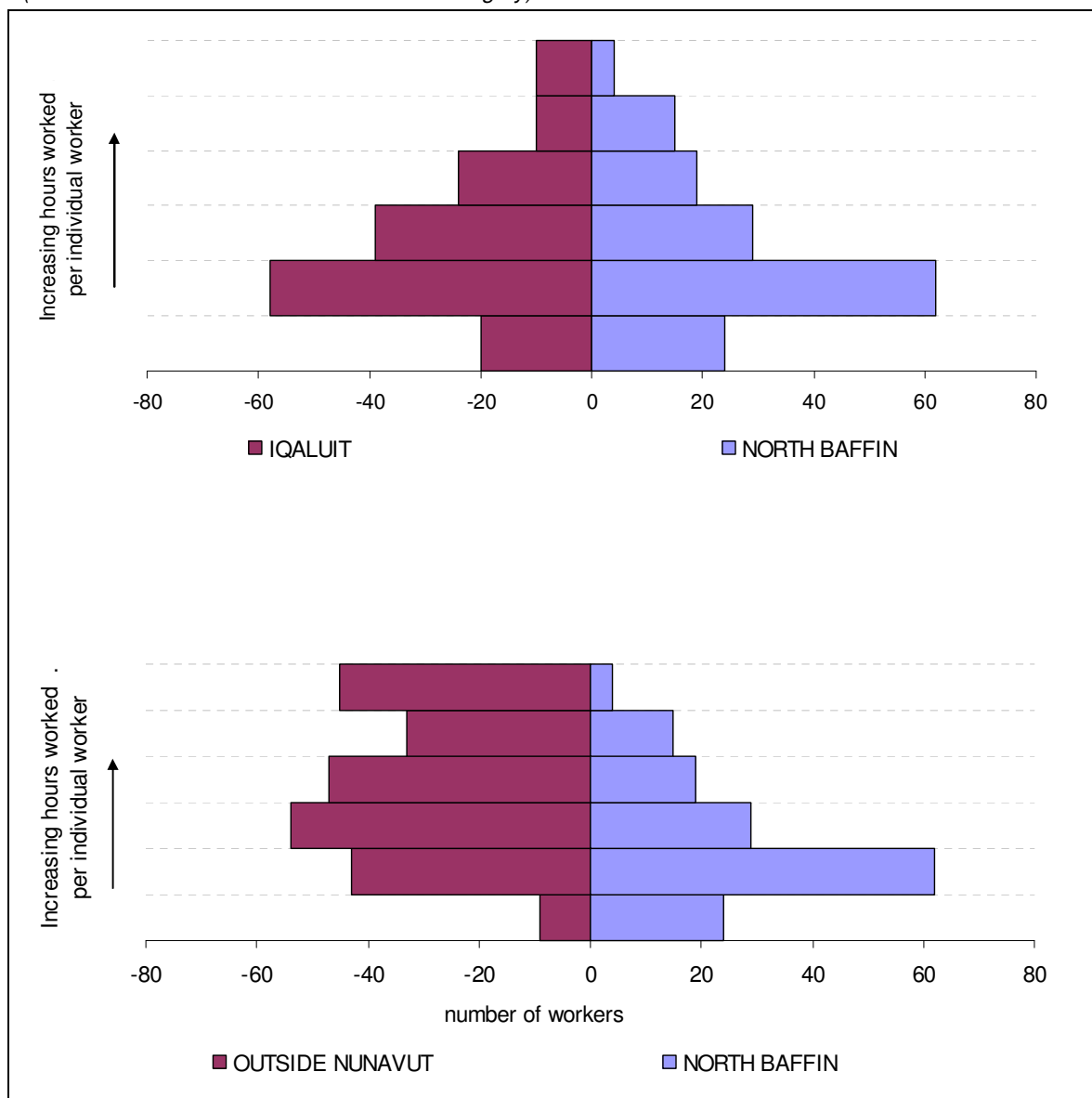
Note: 1) Categories of hours for the annual presentation correspond to the categories used by Statistics Canada in its work activity tables, as presented in Table 31. An additional category, <168, was added to represent workers who completed less than one full two-week rotation of 168 hours. 2) Categories for the quarterly presentation relate to the number of rotations in a quarter, from less than one week (<84 hours), to less than one full rotation, to the six full rotations available over a three-month period (504 hours).

<sup>141</sup> Supervisor D, interviewed 2008.

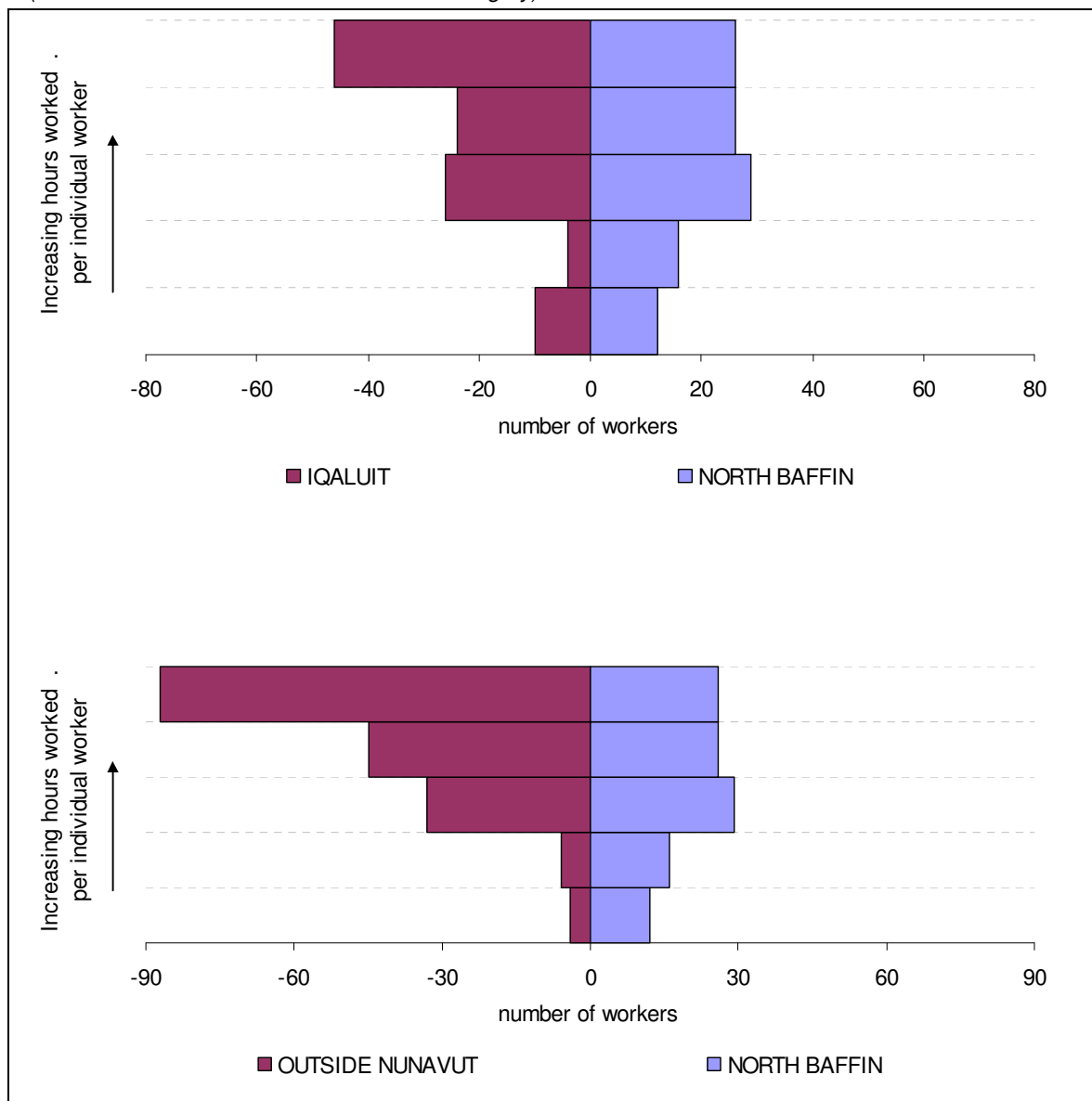
In general, workers hired from outside Nunavut worked more hours on the Project than those hired from within the study area (see Figure 39). While fewer than 5% of workers hired from Iqaluit and North Baffin worked full-year, nearly 20% of those from outside Nunavut worked year-round. This pattern extends to the employment pattern seen during the height of the bulk sample activity in the third quarter of 2008 (see Figure 40).

**Figure 39 Hours Worked Per Individual Worker – 2008**

(number of workers in each hours-worked category)



Source: Derived from data provided by QL and Nuna Logistics, July 2010.

**Figure 40 Hours Worked Per Individual Worker – Third Quarter 2008***(number of workers in each hours-worked category)*

Source: Derived from data provided by QL and Nuna Logistics, July 2010.

Note: All but five North Baffin and one Iqaluit worker were hired by QL, while all but 21 of 175 workers from outside Nunavut were hired by Nuna Logistics.

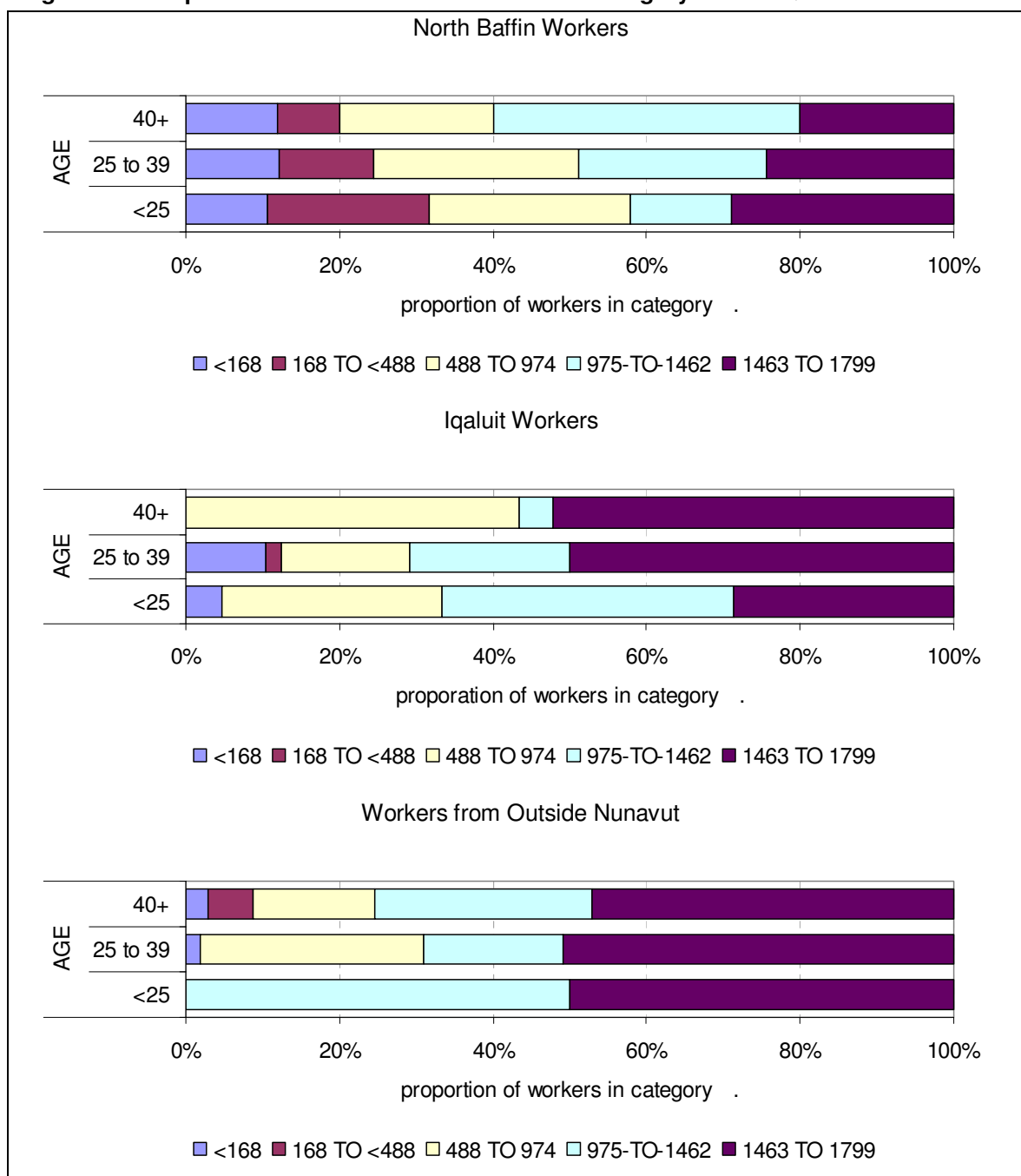
Some supervisors perceived older workers as having more success on the job:

“I would say, generally speaking, folks with more experience, like in their 40s and up have worked in other commercial and industrial sites and can understand what the expectations are about a work day”<sup>142</sup>

Longevity of employment does not appear to be dramatically different across different age groups. Of particular interest is the evidence that young workers from both North Baffin and Iqaluit do not appear to be dramatically less able to sustain multiple rotations than older workers hired from these regions (see Figure 41). This finding is not fully consistent with the anecdotal observations from community research and from site supervisors—suggesting that careful monitoring might be required to clarify this scenario.

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<sup>142</sup> Supervisor A, interviewed 2008

**Figure 41 Proportion of Workers in Hours Worked Category – Third Quarter 2008**

Source: Derived from data provided by QL and Nuna Logistics, July 2010.

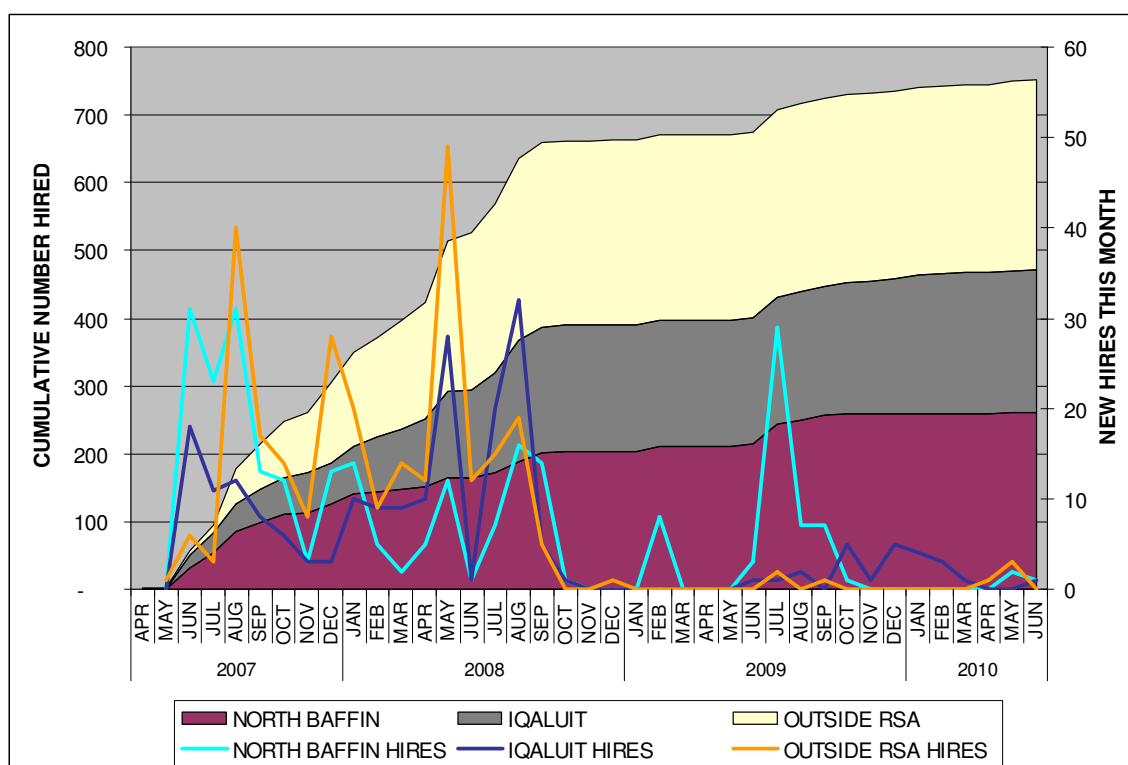
#### 4.6.5 LSA Labour Force Not Tapped Out During Project Definition Phase

A final analysis considered the ability of the LSA labour force to meet the labour demand of the Mary River Project definition phase. “Did the Project approach the limit of the region’s capacity to supply workers?”

A source of insight into the ability of the LSA labour force to supply Project labour needs is to consider the availability of new hires who have not worked at the Project. If the LSA workforce is “tapped out” then a plot of the “cumulative number of workers” supplied from the LSA would reach a plateau, even as total “cumulative workers” continues to increase.

This situation was not reached during the Project definition phase (see Figure 42). In particular, both the North Baffin and Iqaluit labour forces continued to supply workers who had not previously worked at the Project throughout the three-year period ending in 2010.

**Figure 42 Capacity of the LSA Labour Force to Supply Workers to Mary River**



Source: Derived from data provided by QL and Nuna Logistics, July 2010.

Note: Number of new hires and cumulative number hired.

## SECTION 5.0 - EDUCATION, SKILLS, AND EXPERIENCE

*Theme: How will the experience and education profile of the study area affect the ability of Mary River to engage and promote residents from the area?*

*Theme: How will the Mary River Project affect education and skills in the study area?*

Ways of learning and gaining experience have changed dramatically in Nunavut over the past two generations. Many comments and observations were provided by residents of the affected communities that reflect values and expectations related to how the proposed Project might interact with the broad area of “experience and education.”

These comments are presented under the following headings:

- valuing both experience and credentials
- schooling
- post-secondary training

### 5.1 SKILLS AND EXPERIENCE

#### 5.1.1 Community Perspectives – Valuing Life Experience and Credentials

There is a clear desire in the North Baffin region that life experience should be highly valued in worker recruitment. One hamlet official, for example, suggested that “our Elders are some of the best heavy equipment operators—and they had no formal education. They have a strong work ethic instilled in them.”<sup>143</sup> The value of land skills and cold-weather skills to a remote, arctic mine Project is also recognized and valued by North Baffin residents.<sup>144</sup> A former worker noted that he had worked for nearly two decades as a heavy equipment operator for both industry and hamlets, yet when his drivers' licence expired, passing the written portion of the licence exam was a major challenge for him.

Insight into the transferability between land skills and work skills was expressed well during a session in Arctic Bay:

“We have been doing out-on-the-land trips and I've seen that the stuff that you teach on the land is the same stuff that you teach in the classroom. It's just taking place in a different environment.”<sup>145</sup>

This observation was expanded by the same speaker to explore the deeper link between education, traditional skills, and Inuit culture:

“Another thing I've noticed when we go out on the land is that it's the guys who seem to be hit hardest with the notion that, “you're Inuk and you need to know how to hunt and fish and do all the cultural stuff...so you've got [names a few individuals] and they've got, like, university degrees on being out on the land, and then they come here and now they

<sup>143</sup> Quotes are from a workshop hosted by ED&T, November 2007 in Pond Inlet, to explore the socio-economic implications of the Project for the North Baffin communities.

<sup>144</sup> E.g. Story recounted from PanArctic project, Pisiksik Working Group, February 2008.

<sup>145</sup> Arctic Bay Economic Development Committee workshop, May 22, 2008.

try to get a job and everyone tells them, “well, you don’t have your Grade 12”...so now they don’t have a job to be able to pay for the gas and stuff to be able to go out on the land....

“But what we don’t do is go back far enough, because if you are an Inuk male and you’ve learned to hunt and fish and do all those skills, why did you learn those skills? What was the point? ...the reason that you did that is because you’re going to be the father and the provider for the family. So things have changed and now your weapon is no longer going to be a harpoon, but [instead] you’ve got a computer and you’ve got e-mail, and those are now your weapons. You’re still being a good Inuk by providing that final goal of providing for your family.”

The transferability of traditional Inuit culture and skills to the workplace was well-expressed by one Inuk man who has worked at the Project:

“Here the older people are taking the younger people out to learn Inuit skills. When I was a kid, my father would wake me up at 5:00 am — it was hard! But it taught me that discipline. We lived [in outpost camps] here and there — where there were animals. My son is learning these skills now — how to hunt a polar bear, narwhals, caribou, build an igloo or shelter...”<sup>146</sup>

A site supervisor talked about one Inuit employee who has done particularly well onsite. He credits that employee’s success to having been raised in a very traditional family where hunting, fishing, and surviving on the land were important to the family.<sup>147</sup>

The value of on-the-land programs in teaching life skills and skills that can be transferred to the workplace was discussed during a meeting with the Pisiksik Working Group:<sup>148</sup>

[Resident 29]: “I think it’s better to have another [on-the-land] program to train younger people before they go to work at the site, to teach them life and job skills...”

[Resident 40]: “This program is to teach the youth about the traditional way of growing up on the land – the expectations, work ethic, and responsibilities.

[Elder 7]: “I was taught by my father to go out early in the morning, and even though I was still drowsy, I would get on my qamutik, with only a small piece of seal meat, to eat. My father taught me this because he was thinking of the future, and giving me the skills to survive.”

Recognition of a tension between offering employment based on skills rather than requiring minimum educational credentials was noted by a local teacher in Clyde River who stated:

“Nowadays we want to keep kids in school. The last Elder who spoke wants exceptions [so youth can get jobs without needing a diploma]...but I am worried that kids won’t finish school because they can go to the mine to work. I don’t mind if they are trained to go to the site, but I don’t want them not to finish school.”<sup>149</sup>

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<sup>146</sup> Interview, 2008.

<sup>147</sup> Supervisor D, interviewed 2008

<sup>148</sup> Pisiksik Working Group meeting, Pond Inlet, March 2008.

<sup>149</sup> Clyde River Public meetings hosted by Baffinland, September 19<sup>th</sup>, 2007.

This may not be the predominant view, however. A subsequent speaker at the same meeting again asked for assurance that high school diplomas would not be required for employment at the mine and went on to add:

“...because in our culture we don’t look at diplomas, but at what people can do. And we have people that are all different. Some people want to hunt and others just want to stay home. I am happy that *no Grade 12* doesn’t mean *no job*.”<sup>150</sup>

The importance of basic work experience was emphasized by one worker:

“It takes some time for guys to gain work skills. So the guys who are labourers now may become skilled workers in the future. They are learning important lessons now as labourers. They may not see that, may not realize it, but any work experience can become important later on.”<sup>151</sup>

Valuing education is a theme that was also raised in the context of individuals perception of the value of personal investment in their own education.

“We did a [drivers] course... and there was a group that really wanted to get their drivers’ licence. So we [rented a vehicle] for the day and everyone got to drive. They pitched in their own money. ...For some reason lots of people feel that they shouldn’t have to put money out to help themselves get an education.”<sup>152</sup>

#### 5.1.2 Previous Work Experience of Job-Seekers

As noted in Section 4.4.4, a remarkably high level of interest in fly-in/fly-out work has been expressed in the LSA communities. Insight into the level of work experience of this potential labour force can be gained from the analysis of the 600-plus applications from North Baffin and 750 applications from Iqaluit for work at QL fly-in/fly-out projects from 2007 through 2009. For results of this analysis in the LSA, see Table 45 and Figure 43.

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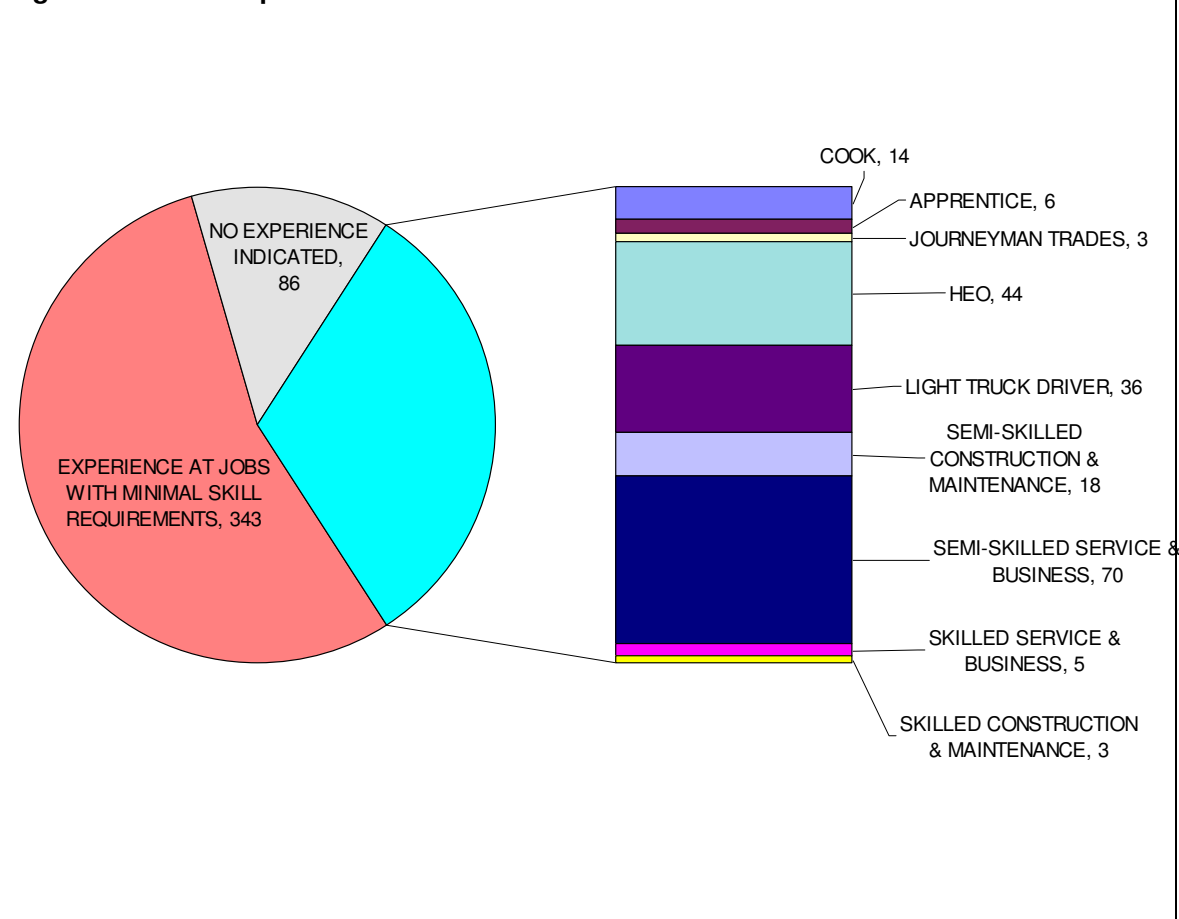
<sup>150</sup> Clyde River Public meetings hosted by Baffinland, September 19<sup>th</sup>, 2007.

<sup>151</sup> Worker interview, 2007.

<sup>152</sup> Comment made during meeting with Arctic Bay economic development committee, May 22, 2008.

**Table 45 Work Experience of Job-Seekers – North Baffin LSA Communities**

TYPE OF EXPERIENCE	NUMBER OF APPLICANTS
COOK	14
APPRENTICE	6
JOURNEYMAN TRADES	3
HEO	44
LIGHT TRUCK DRIVER	36
MINIMAL SKILL REQTS	343
NO EXPERIENCE INDICATED	86
SEMI-SKILLED CONSTRUCTION & MAINTENANCE	18
SEMI-SKILLED SERVICE & BUSINESS	70
SKILLED SERVICE & BUSINESS	5
SKILLED CONSTRUCTION & MAINTENANCE	3

**Figure 43 Work Experience of Job-Seekers – North Baffin Communities**

Source: Derived from QL job applicant summary data for work at QL projects during the period 2007–2009.

Note: Categories of experience were assigned for this presentation.

The analysis suggests that two-thirds of the applicants from North Baffin communities indicated either no previous work experience, or work experience in jobs that would qualify as requiring minimal skills (Skill Level D under the NOC rating system).

Of the remaining one-third of job-seekers, the most common clearly relevant previous work experience was heavy equipment operator, accounting for 7% of all applicants. Approximately 5% of applicants had experience driving light trucks, and a smaller number has some semi-skilled construction and/or maintenance experience. Only a very small number had trades certification or were in the process of attaining trades skills through apprenticeship, or had skilled construction and/or maintenance experience. A small number also had experience as cooks. A relatively large number of applicants, 11%, had experience in semi-skilled areas of the service and business sectors.

#### 5.1.2.1 Data Quality and Interpretation

Given the high rate of coverage of the population represented by these applications, and the evidence that very few residents of LSA communities gained work through Nuna Logistics, it is reasonable to consider these results as a good sample of the experience profile of the job-seeking population. It seems clear that the availability of work was widely known in the communities of the LSA and that people knew how to access the application process.

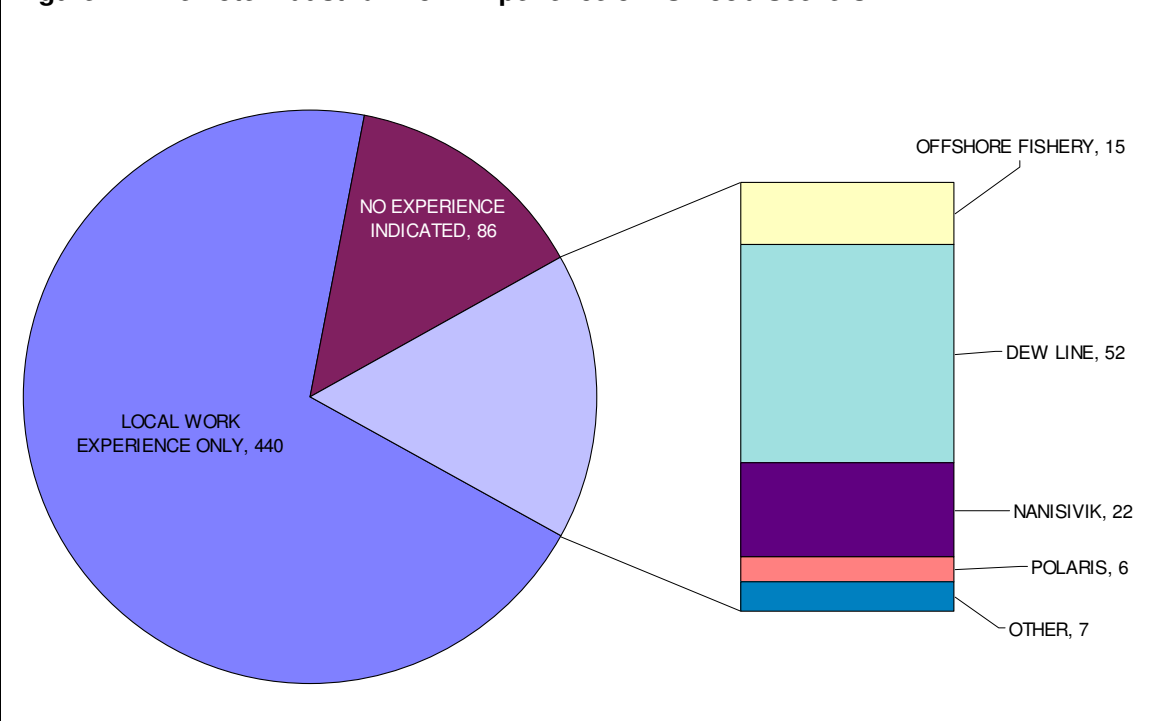
The data do not, however, provide insight into the experience profile of the total population. It should be anticipated that those who did not apply would include three groups: 1) those more highly skilled and experienced individuals who held jobs they perceived as preferable to the fly-in/fly-out work offered through QL, 2) those seeking employment but who knew they would be able to undertake remote fly-in/fly-out industrial shift work, and 3) those who had no interest in wage work.

#### 5.1.3 Familiarity and Experience with Fly-in/Fly-out Work

There have been various opportunities for residents of the LSA to gain experience in industrial, mining, and fly-in/fly-out industries. In the LSA communities these have included work at the Nanisivik Mine, in DEW Line cleanup activities, and in various seasonal mineral exploration projects. Residents of Iqaluit have had access to offshore shrimp and turbot fisheries, various DEW Line cleanup activities, as well as some mineral exploration work. As with work experience, the applicant analysis provides perspective into the level of this experience (see Table 46 and Figure 44).

**Table 46 Experience of North Baffin Residents in Remote Industrial Work Settings**

TYPE OF EXPERIENCE	NUMBER OF APPLICANTS	% OF APPLICANTS
LOCAL WORK EXPERIENCE ONLY	440	70%
NO EXPERIENCE INDICATED	86	14%
OFFSHORE FISHERY	15	2%
DEW LINE	52	8%
NANISIVIK	22	4%
POLARIS	6	1%
OTHER	7	1%

**Figure 44 Remote Industrial Work Experience of LSA Job-Seekers**

Source: Based on summary data derived from job applications for work at QL projects 2007 through 2009.

Of a total 628 North Baffin applicants, 102, or 16% indicated they had some level of experience that can be categorized as remote work experience. Half of these individuals had previously worked at various DEW Line cleanup projects. Experience gained at the Nanisivik Mine was indicated by 22 applicants, while another 15 applicants had worked on offshore fishing vessels. A small number of applicants indicated experience at the Polaris Mine. Several others had experience working in the south or as tourist outfitters, Canadian Rangers and other activities that can be considered as relevant “remote” work experience. Of the remaining 84% of applicants, 14% did not indicate any previous work experience, while 70% indicated experience in the local community.

#### 5.1.4 Additional Experience Gained During Project Definition Phase

##### 5.1.4.1 Fly-in/Fly-out Work Experience

As noted in Section 4.6.1, a total of 265 North Baffin residents, and 212 residents of Iqaluit gained at least a taste of fly-in/fly-out work during the Project definition phase. If all 102 applicants who

had previous relevant experience were hired, this would mean that an additional 110 residents of North Baffin gained fly-in/fly-out experience, doubling the experienced population in the LSA.

Most of these newly experienced workers are residents of Pond Inlet, with 64% of all hours of labour provided from the LSA coming from this community (see Table 40 and Table 41).

#### 5.1.4.2 Formal Training Through Mary River

Over the course of the Project definition phase a total of \$2.1 million of third-party training was delivered through approximately \$1.7 million in funding provided by Baffinland. These training activities included emergency first aid/WHMIS to residents of the LSA; cultural awareness training delivered by QC to staff at Mary River; simulator heavy equipment (haul truck/dozer) training delivered to 20 candidates by NUNA Logistics; diamond drill program to 10 candidates from Igloolik delivered by Springdale Diamond Drilling; and, heavy equipment operator training for 8 students from Pond Inlet.<sup>153</sup>

### 5.2 FORMAL EDUCATION

#### 5.2.1 Community Perspectives on Schooling

##### 5.2.1.1 Relevance of Education to Livelihoods

In the small economies of North Baffin, the benefits of high school education credentials may not be immediately apparent to graduates. For many North Baffin Inuit residents, the local Co-op and Northern stores offer the first job opportunity. Two store managers indicated<sup>154</sup> that in hiring stock boys and check-out clerks they looked for reliability and good work ethic, not for any particular level of formal education.

A related observation was provided during a workshop in Pond Inlet:

“A challenge is to make education relevant to the livelihoods that youth are going to live. A school stream related to occupations could be useful for some. There used to be an occupational stream in the schools but kids in that stream were often marginalized, not respected.”<sup>155</sup>

Many jobs, particularly in Nunavut's large public sector, do require minimum education credentials and, often, specialized degrees. Recognition that education is needed for modern mine work has also been expressed:

“For a job you need education first. It's not a simple thing to work in a mine, you need education.”<sup>156</sup>

This situation was also noted by a resident of Pond Inlet who noted that the local residents who found work in the GN when several departments were decentralized to that community had previously been cashiers at the Northern or Co-op stores. Before decentralization in 2001, people

<sup>153</sup> Data provided by Baffinland, September 2010.

<sup>154</sup> Interviews carried out during 2008.

<sup>155</sup> Research notes from Pond Inlet Economic Development Workshop, February 2008.

<sup>156</sup> Hamlet Councillor, Clyde River hamlet meeting, April 1, 2008.

had no other choice, even though the cashier jobs were not full-time. Now that those government jobs have been filled, students who graduate from high school end up as cashiers at the stores—there is nothing else for them. The specialized government jobs currently filled by people from the south require specific skills and credentials related to the position—it will take time to fill those specialized jobs with Inuit.

The potential for a major mine project to motivate people to stay in school by offering a tangible economic rationale for gaining education was suggested:

“I think the Mary River Mine could be an awesome motivator to get kids through high school. ...On the other hand, if kids stay in school, we could have, say, 300 high school graduates. What are we going to do with 300 graduates? In the past, that was a problem because there were no jobs for them here, so they’d have to move on, to leave the community, if they wanted to succeed. So there was little incentive to graduate. Now, if Mary River goes ahead, these kids will have somewhere to move on to without having to leave the community.”<sup>157</sup>

Another perspective on the relationship between education and lifestyle was provided during meetings in Arctic Bay:

“I work in a trade job where my body gets tired. I’m stuck with this bad job. Because I don’t have an education I’m stuck with this. If I did, I would change jobs. If you have an education, you can select which job is good for you. If you don’t you are stuck with it.”<sup>158</sup>

“I want my children to be good workers and employees. If they stick to their education, they can select what good job they want.”<sup>159</sup>

#### 5.2.1.2 School Completion and Reasons for Dropping Out

Discussion of the reasons youth drop out of school came up during scoping issues and during a workshop session with several youth in Pond Inlet. Some of the themes that arose during these various discussions include:

- Pressure from parents for kids to leave school early in the day, even to drop out of school, to help look after younger children, particularly if the parent is working.
- Taking care of grandparents or other family members.
- Pregnancy and becoming a parent.
- Being teased, not fitting in socially, “I wasn’t in school for two weeks because I was picked on too much.”
- Not comfortable being in situation with lots of people, with being in public.
- Inadequate literacy skills to carry student through Grade 10, the grade level where success requires an ability to read and write.
- Teachers sometimes “doubt the ability of students.”

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<sup>157</sup> Arctic Bay Economic Development Committee Workshop, May 22, 2008.

<sup>158</sup> Resident (man) 2, Arctic Bay conference of Working Groups, 2008.

<sup>159</sup> Elder (man) 1, Arctic Bay conference of Working Groups, 2008.

Sometimes parents try to encourage youth to go back to school, in other situations youth reported their parents asking them to stay home for awhile to help out with some specific issue. The birth of a sibling or the need to look after another family member were cited as instances where such a request might be made. These parental requests are identified as most problematic when the student is close to graduation.

Connections between school attendance and parental care for children were also made. One educator suggested: “Five-year olds don’t get themselves up and dressed and fed and off to school by themselves. If they don’t get to school on time, that is a parenting issue.”<sup>160</sup> A similar observation was made by a male North Baffin resident who was asked why some are not graduating:

“There is no one answer to that. It could be the family situation. When parents provide food and other necessities for children they go to school and continue to graduation. In families that have problems with food and other provisions, they tend to quit school and involve themselves in drugs and mischief in the community.”<sup>161</sup>

It was clear from discussions with youth that dropping out of school is often a temporary measure in response to specific situations that arise in one’s personal or family life or at school itself. Some youth later return to school.

While many Inuit under the age of 35 have grown up in a community setting, some young adults have had experience living in more traditional Inuit outpost camp settings. For these people, school was an intermittent thing, as described by one young North Baffin man in his late twenties:

“Before we went to our outpost camp I was in school from kindergarten to about Grade 3 or 4. Then we went to the outpost camp. Then I skipped and went back to school into Grade 10. I really never had time in my childhood to go to school. Sometimes when we came into [the community] to get food and stuff, I’d go to school for brief periods of time. I learned how to read and write.”<sup>162</sup>

An important step to achieving a capable and skilled workforce is to get fundamental literacy and numeracy skills in place. Literacy and numeracy challenges were also identified as a reason that many students drop out of school around the Grade 10 to Grade 11 level, expressed as follows:

“The thing that’s blocking kids right now at school is basic literacy, in both languages, and numeracy. If you can improve in these two areas, you’re going to be able to handle any field much better. ...any progress in improving the level of general education and in improving [school] attendance is going to have a big benefit to the community.”<sup>163</sup>

### 5.2.2 Early Childhood Education

Early childhood education (pre-school) opportunities are not widely available across the study area. Those that are might be available for only part of the day. Before-school and after-school programs, which are important for parents working during the day, are absent in nearly all LSA

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<sup>160</sup> Interviewed in 2007.

<sup>161</sup> Interviewed in 2008.

<sup>162</sup> Interviewed 2008.

<sup>163</sup> Arctic Bay Economic Development Committee workshop, May 22, 2008.

communities, except for Clyde River, where an after-school program was in place as of 2008 (see Table 47). The level of service in Iqaluit is better, with full-day and part-day preschool programs available as well as after-school programs.

**Table 47 Early Childhood Education in North Baffin Communities and Iqaluit – 2008**

	Full-day pre-school program	Part-day pre-school program	Before-school program	After-school program
	<i>(availability of the service and numbers of children enrolled if program is available)</i>			
Hall Beach	not available	not available	not available	not available
Igloolik	not available	not available	not available	not available
Arctic Bay	not available	not available	not available	not available
Pond Inlet	14	2	not available	not available
Clyde River	not available	not available	not available	78
Iqaluit	91	34	not available	25

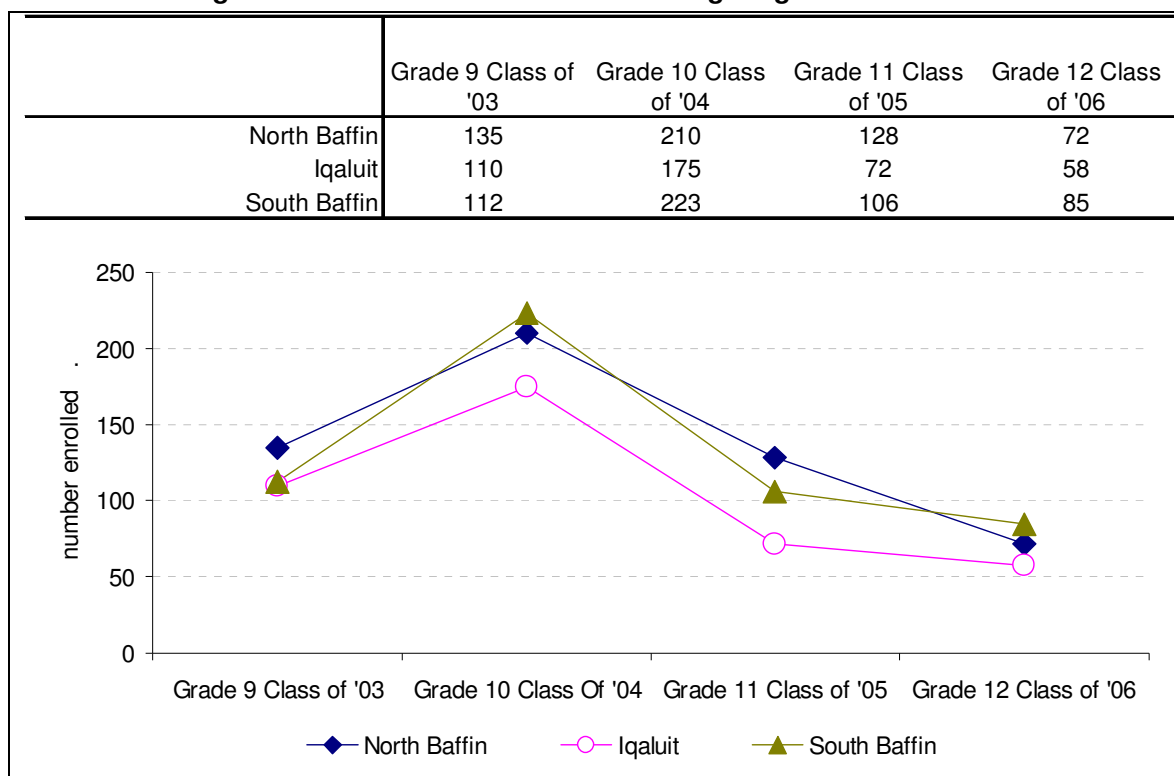
Source: Data provided by the Government of Nunavut, Department of Education, 2008.

Note: Data in this table might overlap with childcare data presented elsewhere.

### 5.2.3 Enrolment and Progression through School

Insight into where students exit and enter formal schooling can be gained by following groups of students as they progress through the school system. An estimate of these “school cohorts” is available from enrolment data (see Table 48).

**Table 48 Progression of 2003 Grade 9 Cohort Through High School**



Source: Calculated from enrolment data provided by Government of Nunavut Department of Education, 2008.

Note: Students of the 2003 Grade 9 class are expected to progress to become the 2004 Grade 10 class, unless they move away or drop out of school. By 2006 these students would be graduating from Grade 12.

From a population of 135 North Baffin students who started Grade 9 in 2003, slightly more than half (53%) were still in school to begin Grade 12 in 2006. A similar progression rate can be seen for Iqaluit, while in South Baffin, three-quarters of the Grade 9 class seem to make it to Grade 12.

However, the picture may not be quite so good. Grade 10 is the grade that youth who have previously dropped out of school can re-enter to try again. In North Baffin, for example, an additional 75 students enrolled into Grade 10, beyond the entry of the previous year's Grade 9 cohort. Starting from this class size of 210 students, by Grade 12 only 72 are enrolled, suggesting that 138 students dropped out along the way with only one-in-three making it through to start Grade 12. Similar rates are seen in Iqaluit and in South Baffin.

#### 5.2.4 Grade 12 Enrolment

The number of students starting Grade 12 in Nunavut increased by 19%, from 336 to 399 students, between 2003 and 2006. There is considerable regional variation in this trend (see Table 49 and Figure 45). However, most of this increase has come from the Kivalliq, where an increase of 60 students was experienced. In the Baffin region, Iqaluit has shown a modest increasing trend, while enrolment in the North Baffin region declined over this period.

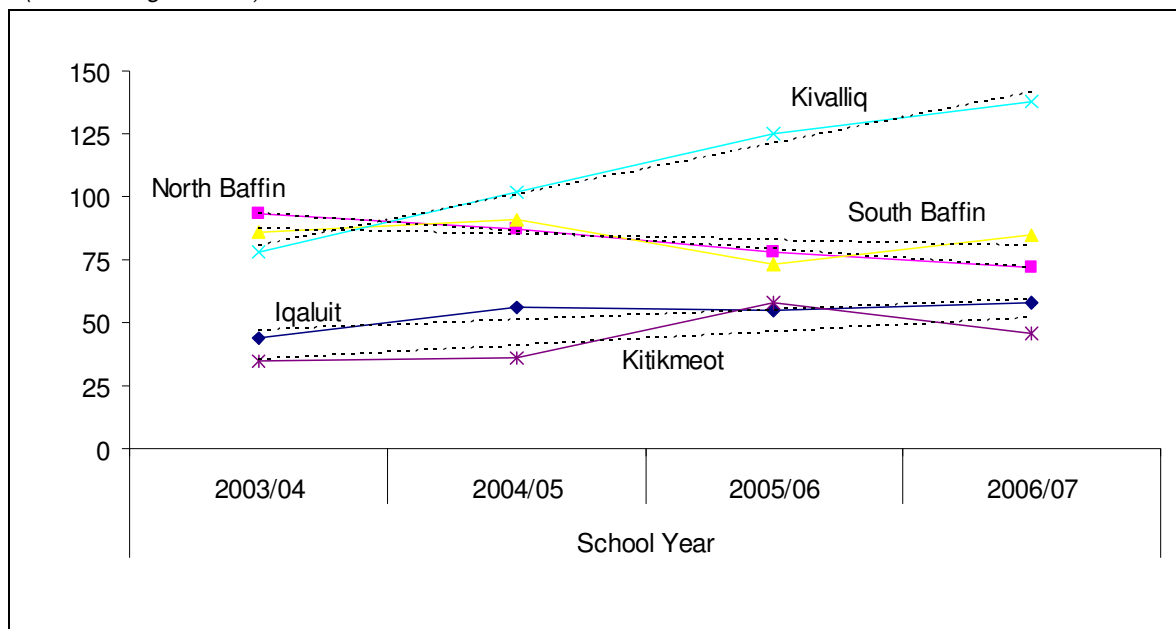
Not all communities in the North Baffin region share the overall declining trend in Grade 12 enrolment. While enrolment in Clyde River, Arctic Bay, Igloolik, and Hall Beach has been trending down, Pond Inlet has seen a robust increase in its high school student population.

**Table 49 Trends in Grade 12 Enrolment in the LSA and RSA**

	School Year				Percent change over four years
	2003/04	2004/05 (number enrolled)	2005/06	2006/07	
Hall Beach	13	12	9	8	-38%
Igloolik	22	23	21	5	-77%
Arctic Bay	9	7	6	3	-67%
Pond Inlet	17	10	21	27	59%
Clyde River	28	25	16	17	-39%
Iqaluit	44	56	55	58	32%
North Baffin	93	87	78	72	-23%
South Baffin	86	91	73	85	-1%
Kivalliq	78	102	125	138	77%
Kitikmeot	35	36	58	46	31%
<i>Nunavut</i>	<i>336</i>	<i>372</i>	<i>389</i>	<i>399</i>	<i>19%</i>

Source: Derived from school level enrolment data provided by Government Of Nunavut Department of Education, 2008.

**Figure 45 High School Enrolment Trends in Nunavut**  
(number of graduates)



Source: Derived from school level enrolment data provided by Government Of Nunavut Department of Education, 2008.

Note: Linear regression lines are shown as dashed lines.

#### 5.2.5 Grade 12 Graduation

The number of high school graduates has been increasing both in Iqaluit and across North Baffin over the past 20 years (see Table 50). During the five-year period from 1992 to 1996, for example, 71 individuals in Iqaluit and 54 from North Baffin communities gained their Grade 12 diplomas. Between 2002 and 2006, 148 Iqaluit students and 182 North Baffin students successfully obtained Grade 12 diplomas. In total, 390 North Baffin and 393 Iqaluit residents have graduated from high school since 1987.

The number of male students and female students graduating in Nunavut has generally been well balanced both in Iqaluit and in North Baffin (see Table 51). In Iqaluit, 52% of the graduates have been males, and 48% females, while the North Baffin ratio is 50:50. In contrast, South Baffin seems to produce more female than male graduates at a ratio of 58 females per 42 males.

**Table 50 High School Graduation Across Nunavut Since 1987**

	Five-Year Period				Total graduates since 1987
	1987 - 91	1992 - 96 (number of graduates)	1997 - 01	2002 - 06	
Iqaluit	64	71	110	148	393
North Baffin	15	54	139	182	390
South Baffin	37	27	99	141	304
Kivalliq	29	84	126	216	455
Kitikmeot	17	27	72	72	188
<b>Nunavut Total</b>	<b>162</b>	<b>263</b>	<b>546</b>	<b>759</b>	<b>1730</b>

Source: Derived from school level enrolment data provided by Government of Nunavut Department of Education, 2008.

**Table 51 High School Graduation, by Gender – 1999 to 2006**

	male graduates		female graduates	
	number	% male	number	% female
North Baffin	143	50%	144	50%
Hall Beach	19	58%	14	42%
Igloolik	29	50%	29	50%
Arctic Bay	15	44%	19	56%
Pond Inlet	41	52%	38	48%
Clyde River	25	46%	29	54%
Iqaluit	111	52%	103	48%
South Baffin	87	42%	121	58%

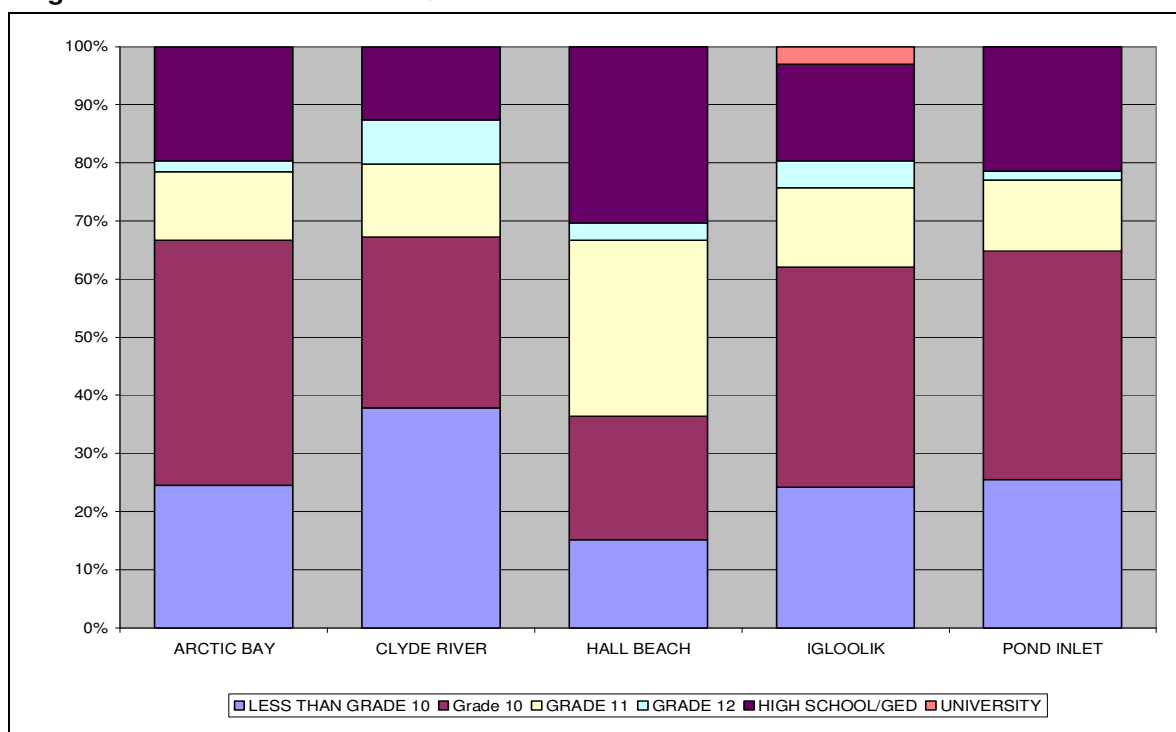
Source: Data provided by Government of Nunavut Department of Education, 2008.

#### 5.2.6 High School Attainment in the Population

Insight into high school education levels in the population can be gained from the graduation data in Table 50. In North Baffin, the 390 high school graduates between 1987 and 2006 equates to roughly 20% of the age-appropriate population having graduated from high school.<sup>164</sup>

The QL applicant summary data provide a similar perspective on the school levels of the LSA populations. In this job-seeking group of over 600 applicants, between 20% and 30% indicated either a Grade 12 diploma or an equivalent adult education diploma (see Figure 46). Between 60% and 80% of the job-seeking population indicated they had Grade 10 or higher levels of education. It is unclear, however, how many of these might have been individuals who had some Grade 10, but who had not completed the grade.

<sup>164</sup> In 2006, the oldest graduates from this group in the North Baffin would be 37 years of age, while the youngest would be 17 years. An estimate of 1,935 individuals fell within this age range in 2006 (see Table 3). 390 residents is 20% of 1,935. There could be additional residents who have achieved high school equivalency through adult education that are not captured in this number.

**Figure 46 Education Level of QL Job-Seekers From LSA**

Source: Based on summary data derived from job applications for work at QL projects during the period 2007–2009.

### 5.3 POST-SECONDARY QUALIFICATIONS AND TRAINING

While education levels are low across the study area, many residents of the LSA have been engaged in the pursuit of training and upgrading through the local college system and through various specialized programs. Arctic College, which has Adult Learning Centres in every community reports that between 1,200 and 1,350 Nunavummiut enrol in full-time programs at the college.<sup>165</sup> This equates to roughly one-quarter of the population between 20 and 29 years of age, or one-fifth of the 20-to-34 year old age group.

Because of the low rate of high school completion in North Baffin, a majority (62%) of the population 25 to 64 years of age has earned no formal educational credentials. However, of those who have, only a small proportion, 7%, have settled with high school—most have gone on to other programs.

As a result, nearly one-third of the North Baffin Inuit population between 25 and 64 years of age have attained some post-secondary training qualification. In Iqaluit this proportion is similar (see Table 52).

<sup>165</sup> Source: <http://www.arcticcollege.ca/publications/corporate/CorporatePlan2008-final.pdf>.

**Table 52 Education Levels Among LSA Residents 25 to 64 Years of Age – 2006**

		No certificate, diploma or degree	High school certificate or equivalent	Apprenticeship or trades certificate or diploma	College, CEGEP or other non-university certificate or diploma	University certificate, diploma or degree
Inuit	North Baffin	1140	125	150	355	70
	Iqaluit	775	230	90	340	130
	South Baffin	1000	105	125	255	65
Non-Inuit	North Baffin	30	35	15	50	165
	Iqaluit	130	290	150	520	735
	South Baffin	10	25	20	40	125
		Education level expressed as a percentage				
Inuit	North Baffin	62%	7%	8%	19%	4%
	Iqaluit	50%	15%	6%	22%	8%
	South Baffin	65%	7%	8%	16%	4%
Non-Inuit	North Baffin	10%	12%	5%	17%	56%
	Iqaluit	7%	16%	8%	28%	40%
	South Baffin	5%	11%	9%	18%	57%

The chart displays the percentage distribution of education levels for Inuit and Non-Inuit residents across three regions: North Baffin, Iqaluit, and South Baffin. For the Inuit population, the majority (62-65%) have no certificate, diploma, or degree, while for the Non-Inuit population, the majority (40-56%) have a university certificate, diploma, or degree. The legend indicates the following categories from top to bottom in the stack: University certificate, diploma or degree (dark purple), College, CEGEP or other non-university certificate or diploma (light blue), Apprenticeship or trades certificate or diploma (yellow), High school certificate or equivalent (dark red), and No certificate, diploma or degree (light blue).

Source: Statistics Canada, 2006 census; North Baffin and South Baffin are custom aggregations.

Notes: 1) Statistics Canada notes that in this table, "Highest certificate, diploma or degree" refers to the highest certificate, diploma or degree completed based on a hierarchy which is generally related to the amount of time spent "in-class." For post-secondary completers, a university education is considered to be a higher level of schooling than a college education, while a college education is considered to be a higher level of education than in the trades. Although some trades requirements may take as long or longer to complete than a given college or university program, the majority of time is spent in on-the-job paid training and less time is spent in the classroom. 2) Data for the "non-Inuit" population were calculated by subtracting census data for the Aboriginal Identity population from that of the total population. 3) Percentage data were suppressed where the total population is too small to provide meaningful results. This is the case for the small population of 15- to 24-year-old non-Inuit in North Baffin and South Baffin.

The focus of post-secondary training varies between Inuit males and females, but is fairly consistent across the LSA. Based on data collected during the 2006 census, Inuit men acquired post-secondary qualifications in areas that fall within the “Classification of Instructional Programs” categories of “architecture, engineering, and related technologies” and “personal, protective, and transportation services fields.”<sup>166</sup>

In pursuing post-secondary qualifications, Inuit women have focused more on the fields of “business, management, and public administration,” “social and behavioural sciences and law,” and “education” (see Table 53 and Figure 47). Some men, particularly in Iqaluit, have pursued programs focused on business, management, and public administration.

**Table 53 Post-Secondary Qualifications in the LSA – 2006, Census**

(number of residents with certificate, diploma or degree)

			Architecture, engineering, and related technologies	Business, management and public administration	Social and behavioural sciences and law	Education	Personal, protective and transportation services	Health, parks, recreation and fitness	Other fields of study	Total
Inuit	Females	North Baffin	10	70	65	50	20	25	10	250
		Iqaluit	10	110	55	60	10	25	35	305
		South Baffin	10	55	45	45	10	25	35	225
	Males	North Baffin	135	35	20	15	55	10	60	330
		Iqaluit	100	45	25	10	15	10	45	250
		South Baffin	110	10	10	10	35	15	30	220
Non-Inuit	Females	North Baffin	0	15	5	35	5	20	15	95
		Iqaluit	20	155	100	80	20	125	135	635
		South Baffin	0	15	5	25	0	20	15	80
	Males	North Baffin	25	15	10	35	10	5	30	130
		Iqaluit	235	140	100	45	85	45	130	780
		South Baffin	20	15	10	20	5	0	35	105

Source: Statistics Canada, 2006 Census; custom aggregations for North Baffin and South Baffin.

Notes: 1) The detailed label for this indicator is “Total male/female population 25 to 64 years with post-secondary qualifications by major field of study - Classification of Instructional Programs, 2000.” 2) Statistics Canada provides the following definition related to these data: “Field of study” is defined as the main discipline or subject of learning. It is collected for the highest certificate, diploma or degree above the high school or secondary school level.

<sup>166</sup> In the context of the LSA, the former category would include construction trades and mechanical/repair technology, while the latter could encompass areas such as: culinary services, corrections officer/services, peace officer/police, fire protection, heavy truck driver, commercial driver, heavy equipment operation, and commercial fishing. See Statistics Canada 2000: *Classification of Instructional Programs*. See Catalogue 12-590-XIE for a full list.

**Figure 47 Post-Secondary Qualifications of Residents in the LSA – 2006**

Source: Statistics Canada, 2006 Census; custom aggregations for North Baffin and South Baffin.

### 5.3.1 Local Perspectives Related to Education and Training

Training is widely identified by residents of the affected communities, as well as by officials of government and Inuit organizations, as a necessary step toward successful engagement of Inuit in the proposed Project. Training is also seen as a necessary step to avoid loss of employees from hamlets and local businesses by ensuring that skilled workers are available to step in when existing local employees leave their local jobs to take on work at the Project.

Some specific training opportunities identified are the following:

“One of the things that is blocking [drivers from getting work] is lack of Class 3 driver certification. That’s a major bottleneck right now for getting drivers.”<sup>167</sup>

A site supervisor at Mary River also identified a need for more specialized training programs, such as on heavy equipment:

“There are people engaged as labourers or in the kitchen who want to do a job that is definitely more fulfilling....lots of people would like to drive a big truck and move dirt around or drive a bulldozer, but in the short term we haven’t got the training programs. I think that is the next step moving forward, is recognizing the needs...and start those training programs now.”<sup>168</sup>

A suggestion was also made that training available at the mine should go beyond trades training to include things like office procedures and so forth.<sup>169</sup>

Some concern was raised about whether training associated with the Project would be only focused on mining, or if training support would be provided to help people pursue training or education in other areas of interest to them. In addition, a view was expressed by one local official that new training opportunities facilitated by a major project could be designed to focus on the long-term skills requirements of a community to ensure benefits are ongoing.<sup>170</sup>

A similar concern was raised during a workshop held with the Arctic Bay Economic Development Committee. The way that training gets funded was described as arising from a federal agency (Service Canada) and flowing to local training programs offered by Arctic College through agencies such as Kakivak. Since Arctic College gets its program funding through these groups, the kinds of training that can be offered is essentially defined through this process:

“So, Baffinland is talking with these different groups to try to set up different kinds of training, and that is fine. ...Maybe these groups know what kinds of training is needed...but I kind of imagine they don’t...it would be nice to know because maybe there will be conflicts in the future between what we [in the community] are saying the community wants, and what Baffinland is saying that we need [in terms of training]. ...

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<sup>167</sup> Arctic Bay Economic Development Committee Workshop. May 22, 2008.

<sup>168</sup> Supervisor A, interviewed 2008

<sup>169</sup> Worker interview notes, 2007.

<sup>170</sup> Public Sector 6, interviewed in January 2007.

“...It would help ...to have a description or list of the kinds of jobs that will be created by the Project. [Nunavut Arctic College] does a needs assessment as preparation for planning the kinds of courses that should be offered....if we know the kinds of opportunities that are coming along and the skills needed, we can start working to find funding to offer those courses.”<sup>171</sup>

More generally, a need for community leadership to become engaged in decisions related to education and training was provided in another context:

“For programs to benefit Inuit, community leaders need to be empowered with the ability to make and implement practical decisions.”<sup>172</sup>

A relevant conclusion along these lines was also made during a past review of the socio-economic effects that the Nanisivik Mine had in the community of Arctic Bay (Brubacher and Associates 2004):

“The skills profile developed by Nanisivik work must also be considered. These have been mostly in areas that relate to infrastructure creation and maintenance—carpentry, machinery operation and repair, some trades. These skills are not irrelevant to Arctic Bay’s future development, but they are not the skills that will power the community toward development in the identified strategic sectors such as tourism, arts and crafts, commercial fisheries, and even mining development. What are needed will be entrepreneurial skills, administrative skills, research capabilities, people skills, conflict resolution, and so on. Over nearly three decades of proximity to Arctic Bay, Nanisivik has had a remarkably negligible impact on building skills in these areas.”

### 5.3.2 Perspectives on Career Advancement

Education and training appears to be on the minds of many residents. A comment made by a government official is interesting in this regard. Inmates at Baffin Correctional Centre in Iqaluit are said to be much more interested in getting educational upgrading and pre-trades training now than in the past. With all the talk of mining developments, they see a chance that they might now find work. A similar comment was made by a North Baffin resident who observed that the possibility of employment is generating more hope and interest in training.

The notion of “career planning” was noted to be a relatively recent thing in Inuit culture. One local woman described this in the following way:

“Some kids are lucky, they know what they want to be at an early age.... Then they can put their energy into that direction. But from my traditional knowledge it’s entirely different from your [southern] point-of-view. My grandmother, the only thing she showed me about was how to make kamiks, look after my kids and my husband, to go out hunting...they didn’t really teach us to think about what you want to be when you grow up, to imagine different things we could become. Rather they taught us how to be a mother, how to look after your family....But learning strong traditional skills gives me ability to make a living.

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<sup>171</sup> Arctic Bay Economic Development Committee Workshop, May 22, 2008.

<sup>172</sup> Public Sector 19, interviewed in 2008.

Knowing how to make kamiks, how to make parkas...it gives confidence. "If I can do this, then I can do that..."<sup>173</sup>

During the course of scoping interviews, worker interviews, workshop sessions and other community meetings a range of comment was heard relating to individual career aspirations and training experiences. These are summarized below:

Parent: "If I ask my son what he wants to do, its, "I don't know" — it seems like it's not until the last minute that he decides to take an office procedures course. But why office procedures? He doesn't stay inside all the time!"

Worker: "I'd like to get a job doing drilling. I'd need certification to do this."

Worker: Interviewee was applying to get in on a Class 3 drivers licence course but the application was misdirected to Mary River. So now he's on the waiting list to work at Mary River and "will go with the flow."

Worker: Interviewee likes carpentry and has previously taken some pre-trades at Arctic College. He'd like to go back to get the next level and eventually work to get a journeyman carpentry ticket.

Mary River Applicant: "I really want experience in working at the mine. I hope to go into helping with plumbing and to do some carpentry."

Mary River Applicant: "My trade of interest is construction. I've done pre-trades." He'd like to get into one of the Nunavut Housing Corporation's apprenticeship positions. The number of positions "depends on the number of trades guys available — it's a select few of those who apply who get in."

Worker: He took Inuit Studies and describes that as the most rewarding study he's done. He is thinking that he may do management studies in the future.

Career advancement might come at the Mary River site itself when a particular worker was identified as having more advanced skills:

"A carpenter...when he first came here people said he was not very fast, he wasn't very good. But when I chatted with him a few times...I found out that he was educated and quite capable of doing a lot more complex, complicated carpentry jobs here. That was very good"<sup>174</sup>

Opportunities for exposure to drilling has also been provided:

"We put a helper on with each drilling crew so that they can try and learn some of the drilling techniques. When the drillers come onto the site, they can hire that person again next year as a helper."<sup>175</sup>

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<sup>173</sup> Interview June 2007.

<sup>174</sup> Supervisor, interviewed 2008

<sup>175</sup> Supervisor B, interviewed 2008

A link between career advancement and worker retention was noted during a workshop in Arctic Bay:

“It [onsite education] might actually help in keeping employees and keeping track of employees and seeing where they want to go. I find that people, if you don’t get professional development of some sort, you just get stale and bored, “why am I doing this?” — and then people quit. But if they feel like they are doing something, I really think that would help.”<sup>176</sup>

As previously noted,<sup>177</sup> lack of career progression can become a cause for an individual feeling that s/he is not making progress and may ultimately lead to the person leaving his/her job.

### 5.3.3 Training And Exposure To Industrial Jobs

Training, combined with other career development elements such as aptitude testing, is also seen as helping people to find work in areas of personal interest. Along these lines, reference was made to a program (the Community Operational Program, or COP) in the 1980s where youth could spend a year gaining exposure to a variety of different career options. Another suggestion is that orientation to industrial work needs to begin at the school level.<sup>178</sup>

The importance of having an opportunity to explore a job before investing several years in preparatory training was further emphasized by an official from the Nunatsiavut Government (Labrador) who noted that the Voisey’s Bay Mine Project gives youth an opportunity to test different jobs before they commit to pursuing a specific training program.<sup>179</sup> It was suggested during a meeting in Arctic Bay that it would be good for everyone who wants to work to get a chance to try it out: “It will be good for them, and the company will learn who are the good workers.”<sup>180</sup>

Concerns that many youth have not had experience that would prepare them for mine work were raised at the community level in North Baffin. During meetings and consultations in Pond Inlet, participants indicated that youth “can’t hold onto a job” and they need opportunities to provide the experience needed to “mentally prepare for jobs.”

It was suggested that on-the-land programs might provide this sort of life experience. This line of thought was further developed in a workshop in Arctic Bay with the local economic development committee during discussion of the many transferable skills that can be learned on the land.

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<sup>176</sup> Arctic Bay EDC Workshop, May 22, 2008.

<sup>177</sup> Section 3.2, “Worker development and promotion is highly valued.”

<sup>178</sup> Pond Inlet Hamlet meeting, 2008.

<sup>179</sup> Theresa Hollett, Impact and Benefit Agreement Coordinator, Lands and Resources Department, Nunatsiavut Government. Presentation made at the ED&T Socio-economic Workshop, Pond Inlet, November 12 to 15, 2007.

<sup>180</sup> Inuksuligaqjuk Working Group, Arctic Bay, May 20, 2008.

## 5.4 COMMUNITY PERSPECTIVES RELATED TO TRAINING AND CAPACITY

### 5.4.1 Pre-employment and On-the-Job Training

There is a recognition that much of the challenge related to building a productive labour force will be simply to instil basic work skills. Learning the habits that will support success on the job might require a substantial change in how people manage their time and social activities while at site:

“Some like to sit and talk until one or two in the morning [after their twelve hour shift ends at 7 pm]...and then, you know, six in the morning comes pretty early and they don’t want to get out of bed.”<sup>181</sup>

The idea of training or preparation for employment before starting work (pre-employment training) was raised during community research and scoping interviews and it was suggested to include sessions to prepare workers for the typical emotional and physiological responses<sup>182</sup> experienced when entering a remote industrial workplace for the first time. This should be combined with complementary preparation at the community level.<sup>183</sup>

The link between “healing” and “training” was made during a workshop in Arctic Bay:

“People maybe don’t consider ...having people onsite to deal with social problems...as education and training, but it is. The well-being of somebody, learning how to deal with stress, learning how to deal with family, learning how to be alone...how to deal with isolation. Those types of things need to be addressed too, in terms of training onsite.”<sup>184</sup>

A related comment arising from a different source was made that for some individuals the structure of an industrial workplace may elicit strong emotional responses that are rooted in past residential school experiences. In the context of discussion around drug use, a suggestion was made that “counsellors should talk to people before they go out to site. This should happen before people ever leave the community to work.”<sup>185</sup>

Not everyone identified pre-employment orientation as a needed training component. One Inuit worker employed at the bulk sample phase noted that he was satisfied with the general onsite orientation to the workplace and its rules and procedures... “apart from that, I fit in right away, using experiences that I gained at home.”<sup>186</sup>

During meetings and workshops in Iqaluit, and in North Baffin, local residents frequently recommended that training should include money management components. The value of money management was also identified during interviews with Inuit employed at Mary River during the bulk sample phase. Money management is a component that was described as included in the

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<sup>181</sup> Supervisor, interviewed 2008.

<sup>182</sup> Particularly in relation to symptoms that may arise from substance (alcohol or drug) withdrawal.

<sup>183</sup> Interview, 2008.

<sup>184</sup> Arctic Bay Economic Development Committee Workshop. May 2008.

<sup>185</sup> Pisiksik Work Group meeting facilitated by Richard Akoto, March 2008.

<sup>186</sup> Worker interview, 2007.

Employee Family Assistance program implemented at the Voisey's Bay Mine, along with personal counselling, addictions counselling and onsite adult education.<sup>187</sup>

During a public meeting hosted in Iqaluit, a participant recommended that training programs related to the Project should be formally accredited. The point was made that accredited programs lead to better transferability of acquired skills.<sup>188</sup>

A program to offer certified onsite adult education at the Voisey's Bay Mine in Labrador was described at a meeting of North Baffin hamlet officials hosted by ED&T. The program allowed workers to upgrade their education through after-hours courses.

The notion of having onsite training programs for workers at the Project was also raised during a session in Arctic Bay:<sup>189</sup>

"It would be nice to have the facility onsite for people to have opportunities to grow. To work on their literacy, to work on their English upgrading, to work on their math upgrading. So when employees are bored, rather than just going on the internet all the time, maybe they could take a couple courses."

#### 5.4.2 Challenges and Capacity Related to Education and Training

North Sky Consulting Group (2009) heard numerous comments related to the quality of skills that high school graduates have gained. Many of these comments come from the RSA:

"Some Grade 12 graduates can't read and write. Those that apply for Hamlet jobs usually need more training. Students should be passed on their school work not just age. We need a stronger system. (Clyde River)."

"Grade 12 graduates in Nunavut cannot compete with other Grade 12 (Pond Inlet)"

"Students are passed, whether or not they're ready to go on to the next grade, up to Grade 9 – this produces low-grade students and probably responsible for them dropping out of school before finishing high school. Education people need to make sure that when people pass a grade, they actually have the skills. There are people in Grade 8 who are reading at a Grade 2 or Grade 4 level (Iglulik)."

"We are turning out graduates who are illiterate. They have their Grade 12 certificate and they are reading at a level that they can't even function in the world. I can't hire them because they don't have the skills (Iqaluit)."

In his report on the challenges to increasing the number of Inuit in government positions, Berger (2006) pointed to low education levels, not a lack of employment opportunities or hiring efforts, as the critical issue:

"The problem is not on the demand side of the equation. The Government of Nunavut, which has 3,200 employees, has strived mightily to provide opportunities for virtually all

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<sup>187</sup> Theresa Hollett, Impact and Benefit Agreement Coordinator, Lands and Resources Department, Nunatsiavut Government. Presentation made at the ED&T Socio-economic Workshop, Pond Inlet, November 12 to 15, 2007.

<sup>188</sup> Public Sector 21, Iqaluit public meeting, April 2, 2008.

<sup>189</sup> Arctic Bay EDC Workshop, May 22, 2008.

qualified Inuit. The problem is that the supply of qualified Inuit is exhausted ...Only 25% of Inuit children graduate from high school.”

Berger went on to identify barriers to educational success:

“The dropout rate is linked to the unhappy incidence of crime, drugs and family violence. Inuit children live in the most over crowded, overheated houses in Canada. One-third to one-half of the children suffer from hearing impairment and/or delayed speech development....

“In my judgment, the failure of the school system has occurred most of all because the education system is not one set up for a people speaking Inuktitut. It is a bilingual system in name only, one that produces young adults who, by and large, cannot function properly in either English....or Inuktitut.”

Further, Berger appealed to governments to seriously address the need to support Inuit in gaining the education and skills they need to participate in emerging economic opportunities:

“For the Inuit, the advance of the industrial frontier coupled with the possibility of the loss of traditional resources, reveals how compelling it is that the Inuit should be able to equip themselves with education and training for employment.”

Citing research carried out by DaSilva and Hallett, Berger (2006) emphasizes the critical role that parents play in their children’s success at school:<sup>190</sup>

“Parents must do all they can to keep their children in school. Students who have graduated from Nunavut high schools say that two important factors in enabling them to be successful in school are parental support and high expectations.”

In the LSA, a community-based process initiated by the RCMP in Arctic Bay set out to better understand the challenges and barriers that lead to children not staying in school. This is described in the Hamlet of Arctic Bay (2007) community economic development plan:

“The RCMP has started a stay-in-school program and did some community consultations as well. Through these consultations they found that students drop out for the following reasons:

- Failure to recognize school as an important community institution;
- Failure to recognize education as a way of attaining an easier life;
- Lack of parental support or lack of parenting skills;
- Young parents with little understanding of the needs of their children;
- Lack of understanding by community leaders that it is a community issue;

“The belief in non-interference and [that] children need to learn by watching and then copying what they see. It can be as simple as putting on a pair of pants or as harsh as surviving out on the land. There should be no praise or punishment, no withholding of privileges or promising of rewards. The child needs to do it all on their own.”

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<sup>190</sup> Berger is citing DaSilva, Christian and Cassandra Hallett, 1997. “Northern Lights: A Research Study Of Successful High School Students Across Nunavut.” (Not Reviewed).

### *Travelling to Learn*

Frequently, specialized training programs for Nunavummiut are offered in the south at specialized training facilities. This is recognized to create barriers for those who have family obligations:

“The Morrisburg [heavy equipment operator training] is a ten-week course. For those who are single, that training is perfect. But if you have a family, 10 weeks is too long. ...[on the other hand] The drillers’ training is training on the job. You don’t have to go down south. That’s better.”<sup>191</sup>

A similar observation is made by the Inuit Tapirisat Kanatami (ITK), which points to two factors that relate to the low level of Inuit pursuit of trades study, in spite of good levels of aptitude and interest.<sup>192</sup> The first relates to the low level of academic preparedness to enter into these programs. Secondly, the ITK notes there are few college or university-level courses offered in the land claims areas leading to the need to travel outside the community to pursue training objectives. This is considered to be a further barrier to learning.

“It is not surprising that there are also a low number of Inuit who go on to complete trade certificates, college certificates/diplomas or University degrees given the low number of Inuit high school graduates.”

Few courses at the college level and limited courses at the University level are offered in the land claims areas.

### *Literacy and Numeracy Levels*

Low baseline levels of literacy and numeracy present a major challenge to labour force development in the LSA and across Nunavut. In a report on adult learning in Nunavut, the largest group of adult learners in the territory are said to be at the lowest two levels of the four-level scale used in the International Adult Literacy and Skills Survey (IALSS).<sup>193</sup> As a consequence:

“The largest group of adult learners in Nunavut needs programming that focuses on literacy, life skills, completion of high school or high school equivalency, adult basic education and personal empowerment.”

Similar observations are made in the 2008 Nunavut Economic Outlook:<sup>194</sup>

“Low levels of adult literacy and numeracy create additional training challenges. The task of bringing individual math and literacy skills up to the needed level must be carried out as part of training programs. In the context of construction trades programs such as that being implemented under the Nunavut Housing Trust Delivery Strategy, this is typically done by incorporating pre-trades math and science into trades training programs. This challenge has been also noted previously, where low levels of literacy and numeracy across Nunavut’s Inuit population are seen to raise challenges to training by adding an extra upgrading or access step to the training process.”

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<sup>191</sup> Worker (male) 10, interviewed in July 2007.

<sup>192</sup> ITK. 2005.

<sup>193</sup> Government of Nunavut. 2006. “Nunavut Adult Learning Strategy.”

<sup>194</sup> Clinton and Vail. 2008.

*Turning the Tide*

A comment made during the Qanukkanniq consultations (North Sky Consulting Group, 2009) suggests that the transition toward post-secondary education pursuit can happen relatively quickly:

“We are doing quite well (post secondary enrolment). The kids have decided to become part of a much bigger world. 5 years ago nobody left here for school. Now we have an increasing rate of kids leaving to move on to post-secondary education (140 this year). Seems to be a revolution in the embracement of education; however, only 25% of our kids have national average grades (Arviat).”

*Infrastructure for Education*

“Right now we are running three programs, but only have two classrooms. We are able to use the school now, but they are cramped too. We really need some additional space.”<sup>195</sup>

In a recent scan of the environment for adult education, the Arctic College noted that “a large investment in infrastructure” was needed to respond to the demand for trades and resource technology training in Nunavut. This demand appears to have been met with the recent opening of the new trades training centre in Rankin Inlet in September 2010. Cambridge Bay is also slated for a new mine training facility.<sup>196</sup>

A 2008 overview of the state of Arctic College community learning centres suggests that generally the adult learning infrastructure across the LSA is good.<sup>197</sup> Hall Beach, Arctic Bay, and Clyde River each have two classrooms, of which only one (one of the two Hall Beach portables) was in poor condition. With the recent construction of a new learning centre in Pond Inlet, both Igloolik and Pond Inlet now have four community learning centre classrooms that are in good condition.

*Experience from Other Regions*

Programs designed to assist Aboriginal people to gain the work habits and technical skills they need to work in the mining sector have been developed across Canada over the past two decades.

In the Kitikmeot region, for example, focused pre-employment training had been provided to prepare Inuit for work at the Lupin Mine, as described by one worker from Jericho who has gone through the program and was anticipating similar support for less experienced workers at Jericho:<sup>198</sup>

“...I explained to the manager about the experience I have had with the [Lupin] course for northern employees. They were trying to set up a similar course for Jericho. They were looking into this around 2006/2007. That’s when I spoke to them about it. I’m pretty sure that that course would have been up and running if the mine had been in a more stable

<sup>195</sup> Pond Inlet HSS workshop, February 2008.

<sup>196</sup> Nunavut Arctic College presentation at the 2010 Nunavut Mining Symposium, Iqaluit.

<http://www.nunavutminingsymposium.ca/wp-content/uploads/2010/05/Shouldice-NAC.pdf>.

<sup>197</sup> NAC Corporate Plan, 2008 to 2013. <http://www.arcticcollege.ca/publications/corporate/CorporatePlan2008-final.pdf>.

<sup>198</sup> Brubacher Development Strategies. 2009.

condition. This course would be really good for guys. For me, back then, I really didn't have much of an education and was kind of jumping around from course-to-course before the Lupin course came up."

In Saskatchewan, the multi-partner, multi-phased training program established to support northern employment in the uranium mining sector has been well-documented and evaluated.<sup>199</sup> This program consisted of several phases, including assessment of aptitude and life skills, counselling, pre-employment preparation that addressed academic, life skills, physical and mental discipline dimensions; skills training; job training; and, finally, employment with ongoing training to support career advancement. The capacity to carry out this program was accessed through federal, provincial and corporate funding. An analysis of the cost-benefit to the public of this program suggested that the cost to government was paid back within eight months.

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<sup>199</sup> See, for example, the case study by Parsons and Barsi. 2001.

## SECTION 6.0 - PUBLIC HEALTH AND SOCIAL ISSUES

*Theme: How will the social, cultural, and health context of the study area interact with the Project and how will the Project affect these areas?*

### 6.1 COMMUNITY PERSPECTIVES ON SOCIAL AND CULTURAL CHANGE

The baseline conditions related to public health and social issues are closely connected to the context of change that characterizes the communities of the LSA and RSA. The Inuit of the North Baffin region have experienced tremendous social and cultural change over the course of a few decades. Some insight into the changes that have taken place was provided by a speaker during a public meeting in Igloolik:

“Igloolik is recognized as a cultural community, inhabited for more than 4,000 years. Everyday, we are extremely thankful that we are here today, and are grateful and respect our ancestors. Baffinland is interested in Inuit Qaujimajatuqangit (IQ), have employed people; as a number of people have asked the question – will you respect and take it [IQ] seriously? Igloolik and Hall Beach are the ones who will be affected by this project. ...There are a lot of social issues – in the 1960s the federal government arrived and built schools and other buildings but nothing for Inuit. His grandfather asked “Where is Canada? Who are Canadians?” in 1962. The Canadian Government didn’t arrive until 1960 – before that the church was from Belgium, the Hudson Bay post people were from Scotland, and at Hall Beach there were Americans. The social impact of these events was huge and we don’t want another big social impact. We are a Third World, we have one of the highest rates of suicide, high levels of drug abuse.”<sup>200</sup>

Some observations of social and cultural changes were also made during community research sessions. For example, the following comments were provided during a meeting of the Pisiksik Working Group:<sup>201</sup>

[Resident 29]: “When youth and kids are out on the land, they are helpful and interact with everyone. When they get back into the community, they disperse, and become disconnected.”

[Resident 27]: “We are talking about the ways that we need to conduct ourselves, the proper ways to behave. We were brought up by our parents to have a good life. The people who are taught the good way of life, live well with other people and the community, and do not tire easily, and do not give up. I have to have a sound mind to make good decisions. I have to grasp life, and hold on to life. This is how our parents taught us to move forward and do things properly. When people started going to school, the teachers acted like they were eggs, and they were careful not to break them [coddled them]. Now, it seemed like the youth are our bosses, because life was too easy on them. Nowadays, young people are lazy and seem to have no direction in life. This is not the way life was. Now, we are saying that we have to teach our kids how to live life.

“We used to be able to function year-round, but now younger people only want to be outside when it is warm. The old way of child-rearing is past, and even though the old

<sup>200</sup> Resident 35, comment during Igloolik public meeting hosted by Baffinland, September 2007.

<sup>201</sup> Comments during meeting with Pond Inlet Pisiksik Working Group, March 2008.

people know what to do, and how to keep themselves occupied, we are now at a stage where we have to teach our kids how to keep themselves occupied.”

Similar perspectives were provided during the working group conference held in Arctic Bay.<sup>202</sup>

“Those of us who were born earlier were brought up in a good way. Younger people now don’t know what their role is. This can be straightened out through healing. This has a connection to work, because if you have issues, you can’t work. Younger people quit because they have personal issues.”

“I’m looking around the room and seeing three lives—Elders, middle-aged and young people. Three generations here with different lives. The youth and middle-aged often only know about the present. Some middle-aged have lived through the transition from traditional life to modern life, but the youth have not. Life has changed. Each of these three life stages should be considered by Baffinland.”<sup>203</sup>

“In the past we never heard about people doing suicide. Never heard about couples splitting up. Is it use of alcohol/drugs that leads to these things? I don’t know. Young people sit and watch TV. We need to be strong—plan for the future.”<sup>204</sup>

During the Arctic Bay working group conference several participants spoke about the effect that recent changes, particularly the residential schools, have had on family integrity and by implication social cohesion:

[Resident 3]: We are all family. When the white man came though (e.g. RCMP, missionaries), families broke down. In the past all the communities were family.

[Resident 33]: “When the residential schools came, families broke down. [But] we still share money—our children share their money even though they have their own households. They share also food, and food is the most important. But for those without parents, they have no food. When Inuit are in need of food, they go to their family.”

Additional influences on social structure are also recognized. The recent formation of North Baffin communities means that the patterns of helping each other and resolving issues that were developed for life in traditional Inuit camps are still adapting to meet the needs of socially complex communities. But communities are beginning to recognize the need for this evolution to proceed:

[Public Sector 10]: “People in [this community] are learning to help each other, mentally, physically, spiritually. Things are changing, and the old, tight, family lines are opening up a bit. People are gaining a “community identity” rather than just a “family group” identity.

...[In the past those who are now] Elders were used to living on their own within small camps. They supported themselves and this led to real tight family connections. We (adults under 45 or 50 years) have grown up with more people around. We are learning to help whoever—not just family members. The younger people here are also learning

<sup>202</sup> Resident 13, comment during conference of working groups held in Arctic Bay, March 2008.

<sup>203</sup> Resident 37, comment during conference of working groups held in Arctic Bay, March 2008.

<sup>204</sup> Resident 3, comment during conference of working groups held in Arctic Bay, March 2008.

this now. Back in Pan Arctic days [in the 1970s] they would never have shared across family lines.”<sup>205</sup>

Another North Baffin resident spoke about recent changes that have occurred in his community and how communication across generations is starting to recover following the social changes associated with movement into communities. The following excerpt is from researcher notes from a meeting hosted by ED&T in Pond Inlet:<sup>206</sup>

[Hamlet Leader 1] spoke about how Elders are starting to become more engaged in community life and the learning of the younger generation. He started by explaining that before 1967, before his family moved to town from their camp they lived in snow huts and sod houses. “We knew how to survive.” When the lifestyle changed and they moved toward the government services, then “the Elders backed off.” Youth went to school. Before school, we used to talk to our children and teach them how to live. Just loving your children isn’t enough for them to learn, you need to give them direction—that’s ‘tough love’—without tough love, the youth go astray. “Today the Elders are starting to gain their confidence and it’s becoming easier to get their information/knowledge out.”

Some of the steps taking place to start building community cohesiveness have been described as the need to work together at the organisational level:

[Public Sector 10]: “There are too many different groups in our community.... These groups are often working separately, not together. But [the community has] set up an interagency group that started last year. The intent is to get all these agencies working toward the same things and to start sharing plans and information.”<sup>207</sup>

A shift toward western middle-class values and expectations was observed to be taking place among Inuit youth:

[Public Sector]: “Is becoming ‘middle class’ the solution? We see the down-side to that. At the same time, the Inuit social and cultural landscape is changing, driven by factors that are global in origin and that are operating around the world. We don’t know what the benefit of a project like this will be in the short term, but in the long-term it is important. Lots of education is going to be required. Remember that we are a new territory with fragile administrative systems. We face rising expectations in terms of access to middle-class life.”<sup>208</sup>

Social change is clearly related to livelihood options. A shift from traditional to wage economy livelihoods was clearly identified by an Elder in Pond Inlet as being related to an understanding that the capacity of the environment has become inadequate to support today’s population’s food needs:<sup>209</sup>

[Facilitator]: “Can you help me to understand why it is important for people to get jobs at the mine?”

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<sup>205</sup> Interviewed in 2007.

<sup>206</sup> Notes from Doug Brubacher taken during the ED&T socio-economic workshop held in Pond Inlet, November 2007.

<sup>207</sup> Interviewed in 2007.

<sup>208</sup> Comment during meeting with GN HSS SMC, April 2008.

<sup>209</sup> Exchange during focus group with elders in Pond Inlet, March 2008.

[Elder 4]: “The reason, the ONLY reason, is that life is changing. The land is changing, and the animals—the seal and fish and caribou—are changing. And so people will need jobs to survive. ...If the country food is decreasing, the young people will have a way of getting food.”

A more in-depth discussion of the changes taking place in livelihoods among the younger and elder generations emerged during a meeting of the five community working groups hosted in Arctic Bay:<sup>210</sup>

[Resident 34, addressed to participating youth]: “What do you feel today? The Nunavut Land Claims Agreement says that youth are the future—which way do you think youth will live in the future—as hunters or workers?”

[Young Woman 1]: “I can only say that if there is mining in the future, we will want economic opportunities for the future. We do want to protect animals, but my children will only live if we have money. We won’t live only on animals. Jobs will be more important than animals.”

[Young Man]: “I wanted to be on this committee even though I’m young. I wanted to learn hunting and life skills. For my future, for my grandchildren, I want to be able to teach them our Elders’ knowledge. I don’t think that we will only live by hunting. Their main activity will be job-related.”

[Young Woman 2]: “Which way will my children and grandchildren live? [To the Elders] We are listening to your opinions, but I agree that we will use money. As we said, there are three generations here [at this meeting]. We still want to know your Elder’s knowledge, but now we need education and money. More economic opportunities are needed.”

[Elder 1]: “We live in the Arctic. In the future, I will want our animals protected. Store-bought goods go up in price, but for me, I believe young people will be desperate to get more money. Please take care to look at the number of animals available for the future and remember that it is the owners of Mary River who will make the money, so Inuit may still need the animals. [To youth reps and younger delegates] As an Elder, I want you to work, but I also want you to go hunting.”

[Young Woman 2]: “Thank you. Yes, prices are going up. And, to buy hunting equipment, we need jobs. Gas prices go up and unemployed people can’t afford to hunt. You want to keep both sides, but this can’t always work in the future. After experiencing this personally, I know that future generations won’t survive unless we have graduates and people who have good jobs.

Through the radio you can hear people selling off their belongings to make money. Money will be very important.”

[Elder 1]: “When I think about employed people, I see that they can take time off on weekends and are able to go hunting. ...I think this will continue, where people can go hunting on their time off. They do need education to get better jobs, as it is impossible to

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<sup>210</sup> Comment during conference of working groups held in Arctic Bay, March 2008.

get things without money. I have no job, and no money to buy a skidoo so I can only walk around town.”

[Resident 2]: “You asked if there was a separation between having a wage job and hunting. You are encouraged to get an education to reach their goals. But, they can still choose to hunt. That option is there. I was taught to have a job and know that if I didn’t do what was required I would lose it. Some people think I’m not a hunter because I work. But, there should be options.”

[Resident 12, to the youth delegates]: “I am glad to hear your comments about this. It helps us to think about the future. Thank you – you are thinking about my grandchildren, and telling me that they might just be wage earners. What is the reason that you thinking this?”

[Young Woman 2]: “There are three generations here. Yes, the next generation will have options, but how can I be a hunter unless I have a job to buy hunting equipment? At my age, we need things and to get these things, we need education. For myself, I believe that you can get an education and also learn hunting as a parallel so that you can always have a choice. But, if I want money to buy a skidoo, I have to earn it. I want both sides – a job and hunting. I want my children to keep both sides, to eat country food but also to have jobs. I think in the future there can be options either way.”

[Young Woman 1]: “We are here to listen to what is proposed. As the younger generation, we are trying both to get jobs and retain our knowledge. We tend to go along with what Elders say, but at the same time we know that we will need jobs in the future. Mining is a route to get these jobs.”

[Young Woman 2]: “These are some of our ideas [from the youth] and we are glad to hear your ideas. I am in the middle and I think my grandchildren will be in the middle too, and so I want to collect your ideas to share with my children one day. To have business or work, I need certain skills. Humans are like trees – as they grow they branch out. Looking at it this way, there are different directions to grow. If I have a job, I can buy new things, and look after them and maintain them. I don’t want to buy used stuff that is already in bad shape. This is not what I want.

“I was brought up being scolded and disciplined. The older generation who never went to school encouraged us to go to school, but they also passed along hunting skills. But, younger youth are afraid to ask Elders sometimes. This has hurt us. I’ve cried because Elders won’t answer us sometimes. The Elders tell us “You have no skills” but when I have asked directly you won’t tell us. I thought you wanted us to learn? Why do you refuse to answer? Teach us, not just by your words but by your actions. If Elders want us to learn, so don’t refuse us when we ask you.

“The Elders and the youth need to work together. I want the ability to be a wage earner, but also keep traditional knowledge. So now, whenever a young person asks, please answer them straight so that we can keep this knowledge.” [Applause]

[Resident 3]: “Thank you for your comments. As Elders, we know it’s hard to bring yourself up when you are feeling low. We are here to represent five different communities, and we need to hear from the youth. I feel a strong love between these generations—the Elders and the youth are both hunting in different ways, and I feel sympathy for both.”

The importance of strong social networks in supporting people's ability to take on the challenges of fly-in/fly-out rotational work was raised by an individual who has worked both at Nanisivik and at Mary River. Nanisivik involved an early morning commute, while Mary River is fly-in/fly-out. When asked about his preference for commuting versus living out at a mine camp he spoke about how community support enables him to continue working at the camp:

"For me, I have a dog-team. It's hard to look after them when I'm working away for four weeks...14 dogs—it's a lot of seals, a lot of fish.

My brothers and my friends helped to look after my dogs and my family when I was away. Up here, everyone pitches in to help out and share their food — char, seal, caribou. In other communities, like in Iqaluit, there are so many people I wouldn't know who to help. Here in Arctic Bay it's a small community. Right now, there is a family whose snow machine is broken down, so somebody will go out to help them."<sup>211</sup>

## 6.2 COMMUNITY PERSPECTIVES ON SUBSTANCE ABUSE

Residents of North Baffin expressed concerns related to alcohol and the perceived effects that a mine might have on alcohol and drug abuse.<sup>212</sup>

[Resident 31]: "I want to make a statement. My concerns. I am not a mining company, but from my knowledge, the mining companies looking for minerals, Inuit never approve of mining activities, because before Nunavut we never benefited from mining activities. Why? Because of alcohol – it is the reason Inuit have never benefited. Now it is drugs – marijuana and substances – the drugs are getting stronger – and this should be considered by mining companies to make a law. Put a visible sign – if I go down south, I would see a lighted sign. Same as in Mary River, put a lighted sign to say there should be no drugs or alcohol, or marijuana or other mind-altering drugs. And some people end up going to hospital over those drugs. For that reason, you are trying to help Inuit and respond to Inuit knowledge. They never had alcohol or drugs and we are the descendents of our ancestors and we are trying to teach the Inuit life to have employed Inuit. For those reasons, I want a sign posted at the site "no drugs". And in Pond Inlet, since there is no sign, maybe they read it and it would have impact on them.

"Drugs from down south and if they have income from mining they have money to buy drugs. They are the most destructive and it breaks relationships and there is abuse. They go to jail and are charged. Please think of those things. Thank you."

[Baffinland Representative 4]: "Thank you for speaking so caringly about your community and children. I will have a sign made and have it posted. One of the things I want to share with you, we have a zero tolerance policy about drugs and alcohol at the site, and when anyone is hired, this is reviewed by them, and they sign a document saying they will bring no drugs or alcohol to the site. We also have security that check all our baggage when we come to site. We take the safety of everyone very seriously and that's why we have a zero tolerance policy. Thank you for raising a very serious issue."

Drug use is often described as being prevalent in Nunavut communities. As one North Baffin resident<sup>213</sup> explained, marijuana plays a "big time" role in the community. Drug use is not

<sup>211</sup> Worker, interviewed in 2008.

<sup>212</sup> The following exchange was made during a public meeting in Pond Inlet hosted by Baffinland, 2008.

perceived to be confined to any particular social group. Rather, “everybody uses it—youth, adults, Elders/grandparents.”

[Resident 25]: “I think there are drugs in town. Most of the young people and their parents use pot. It is too available— \$30 and \$20 [for a joint]. [Can people who don’t have high-paying jobs get it?] Yes, somehow—use child tax credit money and by playing cards [gambling]. Use of marijuana has increased. Also an increase in violence over the use of it. There are more people addicted to it now than before. [What about other drugs?] Don’t know—hash is used by the older generation and some younger people.

“Parents sharing with children. Many government employees do drugs. More use it because they have more money.”

### 6.2.1 Drugs and Alcohol in the Community

A perception that alcohol and drugs are becoming more prevalent was expressed during a workshop session in Pond Inlet. Participants working in small groups were asked to identify changes they perceived in their community over the past 10 years or so:

[Group 1]: “In terms of social problems, there are more drugs, alcohol, abuse, problems in households. Alcohol particularly gives us problems in the home. People are trying to get money all the time. People will get drugs or alcohol in any way they can. They will neglect to get food to get these things. We who have jobs give money to our family members thinking (hoping) it will go for food, but it goes to drugs. ...And people on drugs who do get jobs end up getting fired/losing their employment ...this causes problems in families.”<sup>214</sup>

A similar perception was expressed during workshops in Arctic Bay:

[Resident 21]: “Drugs damage your brain. A lot of younger people have been affected by drugs. Drugs seem to be more readily available now. There needs to be a better way of controlling the drugs in a community.”<sup>215</sup>

However, some residents are making an active effort to quit using drugs. One woman spoke about drugs in the context of her relationship with her partner:

“The goal for our relationship is ‘no drugs’—we have quit using drugs and are happier... [my partner] sees things more clearly, has more money. [I] used to get pretty emotional when [he] was using the child tax credit money [for drugs]—children need diapers, clothes.”<sup>216</sup>

Another resident<sup>217</sup> noted that accessibility to alcohol would be a factor in choosing where to live:

[Researcher: “Would you come back to Arctic Bay or maybe move to Iqaluit?”]

[Applicant 2]: “I would come back to Arctic Bay.”

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<sup>213</sup> Resident 24, interviewed 2008.

<sup>214</sup> Reporting out from small group during Workshop on HSS, Pond Inlet, February 2008.

<sup>215</sup> Comment during conference of working groups held in Arctic Bay, March 2008.

<sup>216</sup> Comment made during interview carried out by another North Baffin resident, 2008.

<sup>217</sup> Applicant 2, interviewed 2008.

[Researcher: “Why is that?”] “Not so much drugs and alcohol—Iqaluit’s way too open for drugs and alcohol.”

[Researcher: “Is there some drugs and alcohol here?”] “Not bad.”

Researcher: “[What’s more of concern to you, drugs or alcohol?].” “Alcohol!” [no hesitation].

[Researcher: “What about a place like Ottawa?”] “It would be the same. Too much drugs and alcohol. [Researcher: “Is that partly of what you like about the idea of working at the Mary River camp, to get away from alcohol?”] Yeah, yeah—and [away from] drugs.”

[Researcher: “O.K. So if you look at Arctic Bay right now is there more of a problem with drugs or more of a problem with alcohol...in Arctic Bay?”]: “Alcohol.”

A different perspective on this association between where a person lives and their ability to avoid substance abuse was provided by an individual who felt the need to get away from his peer group:

[Applicant 1]: “I’ve been in town for about a decade now — I’ve got to get out of the community for awhile. For a change, get away from drugs. ...I’ll let people know that I was at Mary River and am back and am feeling better... Just get away from trouble.” [Is it possible for you live in Arctic Bay without smoking up?] ...No!, I have to get out.”<sup>218</sup>

[Workshop Group]: “Access to a drug-free place, Mary River, will be good for people.”<sup>219</sup>

An interesting and supporting perspective on the influence of peers on individuals seeking to overcome addictions was provided by a government official:

[Public Sector ]: “A treatment centre would be good. But we currently spend lots of money to send people out to treatment and they come back and they are soon back to the abuse. The problem is that they socialize with the same friends they had before and these friends also have addictions issues.”<sup>220</sup>

[Public Sector 1]: ...”Social issues play into this. People are putting their money into ‘tax-free enterprises’ [bootleggers and dope-dealers]. So there is little cash available to support small businesses. But what are the reasons? No investment opportunities? No banking services?”<sup>221</sup>

Although alcohol is controlled in North Baffin communities, there is a sense that it is available through bootleggers:

[Resident 23]: “I don’t see many drunk people. Don’t drink, it’s not part of my life... Hear about it. Alcohol is quite available through bootlegging. When people get money they order alcohol and then sell it. And people also bring alcohol back from the south. Not really possible to describe any particular “group” who use alcohol—if it’s available people drink it. People who are not working can’t afford to buy alcohol—but others may share with friends. Alcohol use has changed over the years. Before, people were older when

<sup>218</sup> Interview 2008.

<sup>219</sup> Point made during Pond Inlet workshop with HSS workers, February 2008.

<sup>220</sup> Personal communication to Doug Brubacher, 2008.

<sup>221</sup> Exchange during Pond Inlet economic development workshop, February 2008.

they drank. Now younger people will drink, as soon as they turn 18 or 19 years they will start.”

[Resident 24]: “It’s a big and bad problem. The two RCMP are very busy. Young couples can order alcohol when they are 21. They may have a house now at that age. It makes a lot of trouble because they do not know how to use it properly. They drink until it’s gone. Alcohol is too available. Friends get together to order. There is also some home brew and some who cannot afford it use mouthwash. Drinking patterns are passed on from parent to child. They may be unemployed or they may be workers...”

“...Sometimes people get it from others who share, or by bootlegging. ...There is more violence now and an increase in the amount of drinking.”

Use of alcohol by women when they are pregnant is a concern among some:

[Resident 24]: “Drinking when pregnant...Some seem to find it acceptable—no respect for the unborn baby. They just think about what they want/need. FASD is a concern.”

[Resident 23]: “Don’t see pregnant women drinking much. There is more education now about drinking.”

While the issue of alcohol is of considerable concern, the existing social or cultural institutions do not seem to be adequate to identify solutions. Efforts to cope with alcohol at the community level seem to rely on outside resources, with inadequate success apparently. As suggested by the following exchange with members of the Pond Inlet Pisiksik Working Group, creating a more open forum for talking about alcohol abuse is seen by some as a way forward.<sup>222</sup>

[Facilitator 1]: “In your community, with Inuit knowledge, what can you do about alcohol?”

[Resident 27]: “There is an alcohol committee in town that gives permits to get alcohol.”

[Facilitator 2]: “Right now, is IQ used to deal with alcohol problems? Either in families, or as a community?”

[Resident 28 (Elder)]: “When alcohol first came into our town, my parents would both get drunk. My mother would leave my father because he was drinking. Nobody did anything about it. Nobody tries to help, even today. At that time, I was glad that there were RCMP. Even now, if my children are drinking, I call the RCMP to deal with it. If I try to get help from another person in the community, they would just shrug and say “Oh?”

[Resident 1]: “If you tell other people, they don’t do anything about it.”

[Facilitator 2]: “I have heard people say that since alcohol comes from outside of the community, that RCMP should deal with it, not Inuit.”

[Resident 28 (Elder)]: “Yes, that is how I would deal with it.” [All agree].

[Facilitator 1]: “Is there IQ to deal with alcohol?”

[Resident 28 (Elder)]: “We first encountered alcohol in the 1960s. In the past, Inuit were scattered around in small camps. The Elders would lecture us to live good lives, not to do bad things, like steal or murder. Some people would ignore IQ and just live the way they

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<sup>222</sup> March, 2008.

want to live. Now, there are so many young people in the community and the young people, single parents, live the way they want. They need to be told to listen to the Elders about how to live a good life. Elders can try to solve problems, but when it comes to social problems, they cannot seem to control the problems that are happening.”

[Facilitator 2]: “If a person has a drinking problem, whose problem is it? Is it only that person’s problem, their family’s problem, or the whole community?”

[Resident 28 (Elder)]: “I think the problems start with the person, and that person alone has that problem.”

[Resident 29]: “It can be all of the above – individual, family or community problem.”

[Facilitator 2]: “When does it go beyond the individual?”

[Resident 29]: “When there is abuse in the family, or to other people.”

[Resident 27]: “When laws were introduced, IQ was replaced for dealing with problems. This way of life was new, and we replaced our IQ and traditional ways with the new laws, and let the white people deal with the problems.”

[Facilitator 1]: “Is it only for alcohol, or in general?”

[General Discussion]: All agreed that Inuit have lost the ability to deal with a variety of social problems, and now rely on Qallunaat laws....

[Resident 30]: “It’s almost as if we have become disabled.”

[Resident 28 (Elder)]: “Now, we have committees to deal with the problems, instead of that person dealing with the problem, or the Elders helping.”

[Resident 40]: “In the past, when there were problems, everyone would get together to solve the problems. In the past, there was no alcohol. When the alcohol came, problems started. As you pointed out Elders in your [one of the facilitators] community would get together, and I like that idea, because in the past we would get together to solve problems. ...Elders would take out their food and invite people, especially those people who were causing problems, and they would talk about the problem.

[Resident 27]: “I have heard this, and lived it also. In the past, when people had problems, they would get together and talk, and try to solve it. When a person is causing problems, like not sharing or not helping out, they would be confronted by a group, and told what the problem is. When one person is not helping out, the larger group would be affected, so they would deal with it together. This is Inuit Qaujimaqatungit....

“Now, people aren’t talking about problems together. When kids are in school, the parents are giving away their responsibility for raising the children to these institutions. This has caused pain for the Elders—they don’t have control over what needs to be done, such as raising children. For instance, if my child goes to school, the school would be teaching them one way to live. In the meantime, I am out on the land continuing my way of life. [At School] my child has learned a different way of life, and when he tries to go out on the land with me, I see his connection with the Inuit way of life has been broken. This has created a barrier between the generations.”

### 6.2.2 Effects of Income on Drug and Alcohol Use

A link between work, income, and substance abuse is widely perceived among residents of North Baffin communities:

[Public Sector 9]: “The money from the jobs are bringing more alcohol and drugs into the community, and they might be bringing different drugs.”<sup>223</sup>

Another person suggested that the income–substance abuse link might be strongest among younger adults:

“Teenagers are the largest population. If there is more money then there is potentially more availability of substances to abuse.”<sup>224</sup>

Another resident perceived that there was more drinking due to decentralization, attributing this to job stress, combined with increased income. Similarly, another North Baffin resident<sup>225</sup> noted that since decentralization, “there is more drinking in the community now. Some cannot deal with stress from the jobs. There is a lack of communication and more money around.”

The connection between income and alcohol use appeared obvious to one young resident during a workshop in Pond Inlet:

[Resident 26 (youth)]: “Imagine how things could worsen here. Alcohol is already here. When more money is being made, more alcohol will come in to some houses. This will mean people face more problems, and may not come to work.”<sup>226</sup>

[Workshop Group]: “Drug and alcohol use increases as money increases in the community.”<sup>227</sup>

A less direct reference to this concern was raised in the context of identifying ways in which the pre-Project phase of Mary River has already affected the communities. One participant made a link between new wages and problems that can arise from this and suggested that support from Elders and adults could be effective:

“The young people who are working at Nuluujaak need to be talked to by an Elder so that they can have life skills to support them when they come back home. ...need Elders and adults with mine life experience — the focus is to avoid problems with too much money during time off in the community.”<sup>228</sup>

“[If both partners are working] there can be a lot of money coming in to the house, and maybe the money isn’t spent in the right way.”<sup>229</sup>

This concern was situated in the broader context of alcohol in the community:

[Facilitator]: “Is there already an alcohol problem?”

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<sup>223</sup> Focus group participant, March 2008.

<sup>224</sup> Public Sector 7, interviewed 2008.

<sup>225</sup> Interviewed 2008.

<sup>226</sup> Comment during focus group with several women in Pond Inlet, March 2008.

<sup>227</sup> Point made during Pond Inlet workshop with HSS workers, February 2008.

<sup>228</sup> Written comment provided during Pond Inlet workshop with HSS workers, February 2008.

<sup>229</sup> Comment during focus group with several women in Pond Inlet, March 2008.

[Resident 22 (adult)]: “Yes, I don’t want to go out at night.”

[Resident 26 (youth)]: “It’s scary to go out when the alcohol orders come in. I was stuck inside a house one time because there were so many drunken people on the street... and there was a guy trying to get me to drink so that he could take advantage of me.”

[Facilitator]: “What is the community doing about this?”

[Resident 26 (youth)]: “No one is taking individual responsibility for this. People depend on the alcohol committee to stop liquor from coming in, but it shouldn’t be the community who has to deal with it, it should be personal responsibility. The community has tried to help with AA meetings, counselling, restricting alcohol orders, programs set up, but no one really steps up and tries to make a difference. They’ve done all that they can do. ...I think people feel that they have tried so much, and they are just tired. There is no more they can do.”<sup>230</sup>

A local public sector worker felt that for people with drinking problems, there may be a connection between income and alcohol abuse. However, this same individual felt that drugs seem to be accessible, regardless of employment status. Even those without jobs are said to be able to purchase alcohol:

[Public Sector 10]: “People use child tax credit money, or ask for money from Elders. There is more marijuana being used now than before. Some people have to take it all the time—so much money is used. Sealift money is used to buy drugs instead.”<sup>231</sup>

An individual from another community described how her partner had actually stopped using drugs when he got a job at a fly-in/fly-out project:

“But, now [my husband] has quit using drugs and we are happier. [He] sees things more clearly, has more money.”<sup>232</sup>

The measures people sometimes take to access money to purchase drugs were also discussed by another resident:

[Resident 23]: “Many people spend lots of money on marijuana. People will sell their own stuff like TV games on the radio. The radio station has banned selling children’s items like pampers or formula, or asking for cigarettes. People will use money from Elders for drugs. Young people get a physical need for drugs. It ruins relationships. ...[But] some people have quit drugs.”

The following exchange related to the effects of income on alcohol was recorded during a workshop in Pond Inlet hosted by ED&T:

[Delegate]: “We hear that around Nunavut, people whose income is growing may increase their use of alcohol and crack. ...[addressed to a Baffinland representative] are you going to do anything around this issue?”

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<sup>230</sup> Comment during focus group with several women in Pond Inlet, March 2008.

<sup>231</sup> Public Sector 10, Interviewed 2007.

<sup>232</sup> Interview with spouse of a fly-in/fly-out worker. March 2008.

[Baffinland Representative 5]: “You see the income—drugs/alcohol link among some. It goes beyond Baffinland, but we will explore with others where we fit.”<sup>233</sup>

For some who make the connection between income and alcohol, a major concern relates to the misuse of income that these expenditures represent:

[Resident 13]: “Some, when they are paid, they only buy drugs with the money. ...Drugs and alcohol are the main way wages are used—it drains money from the income.”<sup>234</sup>

[Elder 4]: “People use money on drugs, and don't have money to buy things like snow machines. ...There are even people with good-paying jobs, but we, people with less money, have to support them.”<sup>235</sup>

[Resident 16]: “I have a job—guys buying drugs have no jobs.”<sup>236</sup>

The root causes of substance abuse was on the minds of individuals during several workshop settings in North Baffin:

[Resident 20]: “When people are [feeling] low they turn to alcohol. As young women, they don't know sewing. Young men are not hunting. As parents, we try to advise them.”<sup>237</sup>

[Elder 1]: “Drugs can't be controlled in the community. People who take drugs are in need of healing. There [are] committees that were established to control the flow of alcohol, but they won't work for drugs.”<sup>238</sup>

[Resident 7]: “If you are happy and you know who you are and you don't feel the pressure of people saying..., and you don't feel the need to escape by taking drugs...I think there's a difference between recreational experimenting and those who are now addicted to it because they are running away from their problems. And that's the thing that we are trying to address when we are working at healing, [through] some of the culture programs...”<sup>239</sup>

### 6.2.3 Perceived Effects of Mary River on Drug and Alcohol Abuse

For many residents in the North Baffin, particularly those from Arctic Bay, the Nanisivik Mine provides the closest example of a major industrial project. Therefore, perceptions about effects the Project might have on alcohol use in the community are influenced by the Nanisivik project.

[Resident 22]: “Will this [Mary River] be like Nanisivik? Will liquor be permitted out there? It was a big problem at Nanisivik....People got kicked out of their homes, they would break in to other peoples homes, and try to sexually touch other people. These things would happen when men were drunk.”<sup>240</sup>

[Elder 4]: [Facilitator: “Is alcohol a problem already in this community?”] “Yes, and I think it will probably increase as the mine progresses. ...Most of the stories we hear in the

<sup>233</sup> Exchange during ED&T socio-economic workshop, November 2007.

<sup>234</sup> Comment during conference of working groups held in Arctic Bay, March 2008.

<sup>235</sup> Focus group with Pond Inlet Elders, March 2008.

<sup>236</sup> Comment during conference of working groups held in Arctic Bay, March 2008.

<sup>237</sup> Comment during conference of working groups held in Arctic Bay, March 2008.

<sup>238</sup> Comment during conference of working groups held in Arctic Bay, March 2008.

<sup>239</sup> Workshop with Arctic Bay economic development committee, May 2008.

<sup>240</sup> Small group discussion with Pond Inlet women, Mary 2008.

news in Nunavut are alcohol-related. I have heard that our alcohol policies in Pond Inlet are very outdated. Even with a committee [the alcohol committee], there are still people who bring in alcohol illegally.”<sup>241</sup>

[Public Sector 12]: “I grew up in Arctic Bay when Nanisivik was open. Some families separated because of the mine—because of the alcohol. The alcohol led to people sleeping around. I think it would be easier if there were counsellors onsite to help people.”<sup>242</sup>

However, residents understand that the Project is significantly different from Nanisivik:

[Worker 4]: [Did Nanisivik have much affect in AB, good or bad?] Maybe both ways. I remember they had problems with alcohol. But here there is no direct connection with Pond Inlet—so people won’t be bringing alcohol back to the community.”<sup>243</sup>

[Resident 2]: “I was at Nanisivik from its beginning to end. You used to be able to order your alcohol on the plane to Nanisivik. There were parties every month and they could get violent. Alcohol is not the cause of this violence though. It is the person and their life situation that causes this.”<sup>244</sup>

A similar perception related to the impact of the Project on local alcohol use was offered by an individual from another community who was applying for work at Mary River:

[Applicant 2]: [If people are earning more money will there be more alcohol?] “Mmmm.” [So do you think that if lots of people start working at Mary River do you think that there will be more alcohol?] “No—because at Nanisivik they used to have lots of alcohol all the time, but at Mary River you are not allowed to bring alcohol there.”<sup>245</sup>

However, a link between increased mobility and increased opportunity to import drugs was made by a resident in Pond Inlet:

[Resident 29]: “Between Qallunaat and Inuit working at the site, there are people coming from all over Nunavut and down south. With flights coming from Iqaluit, or from Ottawa, drugs will flow in. Also, people might choose to go down south for their two weeks off, instead of returning to Pond Inlet. ...We have to brainstorm about how to deal with flights coming in and out.”<sup>246</sup>

This link between transportation and increased access to alcohol was also raised by a public sector worker in Pond Inlet who felt there could be concern about more substance abuse associated with the Project...more alcohol coming into the community through Project-related transportation.”<sup>247</sup>

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<sup>241</sup> Comments during focus group with Elders in Pond Inlet, March 2008.

<sup>242</sup> Comment during Pond Inlet workshop with HSS workers, February 2008.

<sup>243</sup> Worker interview, 2007.

<sup>244</sup> Comment during conference of working groups held in Arctic Bay, March 2008.

<sup>245</sup> Interviewed 2008.

<sup>246</sup> Comment made during Pisiksik Working Group meeting, Pond Inlet, March 2008.

<sup>247</sup> Public Sector 9, interviewed 2007.

Another resident noted that the rotational nature of work at Mary River may lead to support for local bootleggers, given the barriers to ordering legitimately through the local alcohol committee:

[Public Sector 9]: “There are bootleggers, who sell it [alcohol] at \$100 per mickey. The problem is that if you only have two weeks off, it’s hard to get an alcohol order in, because you have to wait for the alcohol committee to meet and approve your order, then send it to Rankin Inlet, then do a cash transfer at the Northern to pay for it. It’s faster just to go to a bootlegger.”<sup>248</sup>

The potential that work at Mary River may lead to better coping skills for individuals with regard to substances was also raised:<sup>249</sup>

[Researcher]: Could Baffinland’s drug and alcohol policy onsite change people’s habits in the community?

[Participant 1]: Yes, I think it could.

[Participant 2]: I think it [alcohol] could cause Baffinland to lose a lot of employees, because they might not want to [have to] choose between partying and jobs. I don’t know because I’ve never felt that pressure.

[Participant 1]: It would make a difference for me, because I wouldn’t want to face the boss [in a state of drunkenness].

[Participant 3]: I agree.

[Participant 2]: Once people start to realize the consequences of using drugs and alcohol, they may change what they are doing if they want to work at the mine.

The expectation that work at a drug-free workplace may help people to overcome their dependencies or substance abuse behaviours was expressed frequently in a variety of contexts:

[Supervisor 1]: “Some guys actually want to come here to get away from the alcohol back home — a chance to sober up a bit.”

[Worker 11]: “I’ve heard a few people saying they are happy to be in the camp because [in town] they can’t stop smoking [pot]. Now that they are in the camp for two or four weeks they are going to be not smoking. They want to see how it feels with their own life instead of being high. Some people even say they’ve been smoking for five months non-stop and this is the better chance for them to not smoke. First they were grumpy, then a few days I notice their face is happier because they have nothing to smoke. And there is no alcohol.”

[Resident 4]: “We’ve already heard of people getting fired for having drugs and alcohol at Mary River. Mary River will be different than Nanisivik, where people lived in a townsite. Mary River will be a ‘work town’. The anti-drug and alcohol policies at Mary River are already having a positive effect on workers.”<sup>250</sup>

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<sup>248</sup> Focus group participant, March 2008.

<sup>249</sup> Exchange during meeting with women in Pond Inlet, March 2008.

<sup>250</sup> Comment during conference of working groups held in Arctic Bay, March 2008.

One worker described that he had been heavily into substances for a period of his life, but that an opportunity to do labour work in Iqaluit on some construction projects got him out of what he described as his “screwed up period” and back on a good path. He went on to do some upgrading classes at Arctic College and into a trades program.<sup>251</sup>

#### 6.2.4 Drugs, Alcohol, and Addictions at the Worksite

The issue of drugs or alcohol being available or used at the Project site is a major issue that was raised by numerous residents and others in many different contexts. Some of these concerns over alcohol and industrial projects arise from past experience in North Baffin:

[Elder 1]: “In 1972 when Pan-Arctic arrived, that’s when drugs arrived. Even the old generation that is passing away now, they learned about drugs and started to use them back then. If Mary River opens, please try to keep the drugs out—run it in a positive way.”<sup>252</sup>

[Resident 3]: “When Nanisivik was a worksite, it had its negative aspects too—alcohol and drugs—and I regret to say that I know people in my community who abused this. I have learned from the Nanisivik experience, and don’t want this to happen at Mary River. This experience should not be repeated.”<sup>253</sup>

Strong support for a zero-tolerance policy was expressed during an economic development workshop in Arctic Bay:

[Resident 9]: “On social issues, I guess the elephant in the room is drugs...From my point-of-view here, the thing that I think I’d worry about most is the southerners bringing drugs up for sale at the mine site and then that gets transported in to here. There’s also the issue of people here having enough money to go into dealing on their own...but for what Baffinland can do, I think that they really have to be tough on it in their southern hires, that they make it abundantly clear that if you bring in drugs you’re fired.”<sup>254</sup>

The following exchange during a public meeting demonstrates the complex nature of the issue. On the one hand, people expect that local people will be able to access Project jobs. On the other hand, there is a recognition that the use of drugs—particularly marijuana—is prevalent in the population. Maintaining a drug-free workplace in this context is perceived to present some challenges.<sup>255</sup>

[Resident A]: “Since you are looking for workers, if I were to get hired would my bags be checked?”

[Baffinland Representative 3]: “We search all bags, as the site is drug and alcohol-free.”

[Resident A]: “The reason is I am wondering if you’ll test and then throw the person out.”

[Baffinland Representative 4]: “There is currently no drug testing.”

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<sup>251</sup> Worker interview, 2007.

<sup>252</sup> Comment made during Pond Inlet workshop on HSS issues, February 2008.

<sup>253</sup> Comment during conference of working groups held in Arctic Bay, March 2008.

<sup>254</sup> Comment during workshop with Arctic Bay economic development committee, May 2008.

<sup>255</sup> Exchange during Clyde River public meeting hosted by Baffinland, September 2007.

[Resident B]: “I am thankful you will be providing employment—kids these days are often on drugs. Will these young kids as workers be terminated right away?”

[Baffinland Representative 4]: “...The site is and will be zero tolerance for drugs and alcohol. Once we are into construction, we would have drug testing in place so that no one is injured. Right now anyone caught [with drugs] is sent home.”

[Resident B]: “They tend to get terminated because of a history of drugs even though they are not currently using.”

[Baffinland Representative 4]: If someone tests positive we don’t hire, but it is only current drug users we will test for. Also, we don’t listen to rumours of what people may have done in the past.”

[Resident B]: “If you’re using this system, you’ll lose a lot of good employees.”

[Baffinland Representative 4]: We will support drug and alcohol awareness programs for youths to recognize the dangers involved. Mining is too dangerous to allow people who use drugs and alcohol onsite.”

[Resident C]: “I’m happy with zero tolerance. I worked at Nanisivik underground and worked with a guy who lost an arm in an accident. We later found out he was stoned.”

The use of drugs or alcohol at the site appears to be considered a serious issue.

“One of the greatest disappointments is substance abuse, addictions to alcohol and marijuana. [We can’t allow guys] to operate equipment [under the influence]...but even if threatened with drug tests ...it can happen. ...We know it exists and may demote or fire the person.”<sup>256</sup>

In response to a question at a public meeting, a company representative indicated that onsite substance abuse would lead to permanent expulsion from the Project. Other infractions are expected to lead to temporary firing—with a chance to return at a future time:

[Resident]: “If an employee misbehaves would they still be allowed to come back to work?”

[Baffinland Representative 4]: “In cases where the employee was in serious violation of rules we would return them to the community but with the possibility of that they could come back. The only exception is using drugs and alcohol ...in which case they will not be allowed back. For other cases there is a possibility they would be allowed back.”<sup>257</sup>

However, while support for a zero tolerance policy on alcohol or drug abuse is strong, the implication that the community is left to cope with people in need of healing and treatment was also recognized:

“I really like what I have heard, that the mine sends people home if they are caught drinking. It is very good that people are given jobs, but then there are even more problems if the person is sent home and they have no job.”<sup>258</sup>

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<sup>256</sup> Supervisor 3, 2008.

<sup>257</sup> Exchange during Arctic Bay public meeting hosted by Baffinland, September 2007.

<sup>258</sup> Elder 4, comment during focus group with Elders in Pond Inlet, March 2008.

The following observation was provided by a worker who spoke about the difference in those who were used to smoking pot versus those going through withdrawal from alcohol:

[Worker 11]: “I find that for those who drink more alcohol they have more bad attitude... Even if you say just a little word, they get really serious and they get really pissed off. They are always looking to go home and they are going to drink. They are always talking about alcohol and going to the bar.”<sup>259</sup>

The implications of addictions and other effects of community-level substance abuse, such as FAS/FAE, for the workplace were also raised in the context of providing support for workers. In one discussion,<sup>260</sup> it was noted that a challenge will be to get supervisors and co-workers trained and oriented to give guys who may have challenges, including mental health challenges, a fair chance to succeed.

### 6.3 RESEARCH AND ANALYSIS RELATED TO SUBSTANCE ABUSE

Tobacco, alcohol, and marijuana are the most often used substances of concern to the health of Nunavummiut. The Canadian Centre On Substance Abuse (CCSA) summarizes the issue of substance abuse in Nunavut as follows:<sup>261</sup>

“The substances most often abused are alcohol and marijuana. Because of the high price of boot-legged alcohol - up to \$250 a bottle - binge drinking is the most common pattern. In addition, some communities are dry and alcohol use is illegal. Marijuana is often cheaper and easier to bring into the Territory. Street drugs such as cocaine or heroin are seen in Iqaluit which is the most urban of all the population centres. The use of this type of drug may increase if mining and subsequent prosperity become more prevalent. Pockets of solvent abuse appear and disappear within the communities. Cigarettes are the most commonly used drug, as approximately 70% of the population smokes.”

Tobacco smoking rates in Nunavut are also high. Between one-in-three and two-in-three Nunavut teens are believed to smoke daily. Across Canada, the rate of daily teen smoking has declined from 12.9% in 2000 to less than one-in-ten (9.1%) in 2003 (GN Health and Social Services 2004).

In addition to concerns over the health implications for the individual tobacco users, smoking during pregnancy has major adverse effects on fetal development, contributing to low-birth weight and pre-term delivery. The relationship between indoor smoking and respiratory problems has recently been highlighted in a study of Nunavut housing and respiratory disease. To address the challenge presented by youth tobacco addictions, the Government of Nunavut has initiated the Minister's Youth Action Team on Tobacco, consisting of Inuit teens, to advise the Minister on tobacco cessation, prevention, and education program design and implementation.

Marijuana is considered to be a drug of preference in Nunavut and its use has been described as “endemic in Nunavut, among all age groups” (New Economy Development Group 2006).

Alcohol abuse is an issue that concerns many in the RSA, ranging from local residents, health practitioners, social service providers and those involved in the justice system. On the health

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<sup>259</sup> Worker 11 interview.

<sup>260</sup> Workshop in Pond Inlet with Inuit workers in HSS field, February 2008.

<sup>261</sup> <http://www.ccsa.ca/Eng/Priorities/North/CanadaNorth/Pages/default.aspx>, accessed September 2007.

side, use of alcohol during pregnancy is known to cause brain damage in the fetus, leading to serious consequences for the individual born with fetal alcohol syndrome (FAS) or fetal alcohol spectrum disorder (FASD).

Alcohol abuse is associated with adverse individual behaviours that can lead to personal harm, such as personal risk-taking leading to injury and to economic harm through impacts on the ability to hold onto jobs. Individual behaviours fuelled by alcohol are also associated with many instances of criminality, including family violence, sexual assault, other assaults, and damage to property.

In April 2010, Minister Keith Peterson announced a task force to review Nunavut's *Liquor Act*. The task force is made up of MLA's, members of the local alcohol education committees (AECs), NTI, the RCMP, and the Qullit Nunavut Status of Women Council. Task force members are expected to visit every community in Nunavut during 2010 and report back to the government on recommended changes.

#### 6.3.1 Alcohol Access, Control and Consumption

There are three distinct approaches to alcohol access across Nunavut. Iqaluit is an “open” access community where alcohol can be ordered by individuals for personal use and where one can walk into a bar and buy a drink. Other communities have voted to legally designate themselves as “dry” communities where no alcohol is allowed. While these alternatives represent the opposite ends of the spectrum in terms of access to alcohol, the most common policy for communities across the territory is a “restricted” alcohol policy, requiring residents to apply to bring in wine, beer or spirits.

In the Baffin Region, Iqaluit is the only “open” community, while Kimmirut, Pangnirtung, and Sanikiluaq are the only “dry” communities. The rest of the region consists of “restricted” access. Within the “restricted” definition, there are different rules for each community.

##### *Access and Control in LSA Communities*

The five communities of the North Baffin LSA each have policies in place to restrict access to alcohol. Residents in each case apply to a local Alcohol Education Committee (AEC) with their requests for wine, beer, or spirits. The amount of alcohol allowed depends on the community. Some place a limit on the quantity, such as two 40 oz bottles of spirits, or the equivalent (such as 24 cans of beer), each month. In other cases there are no restrictions on how much an individual can order, however the AEC may deny an individual the privilege of being able to order alcohol.

The AECs are generally made up of interested citizens from the general population, they are not usually required to be associated with any specific organizations. The committees are tasked with approving or turning down individual requests for alcohol. The most frequent reason for denial is previous interaction with police where alcohol is determined to be a factor. For the most part, the RCMP play an advisory role on these committees. In some cases, police officers are invited to attend the by-monthly or monthly meetings. In other cases, the detachment may simply be asked to provide a list of people who have had alcohol related involvement with police.

Once permits are approved, they are compiled and sent to the Nunavut Liquor Commission (NLC). The NLC might fill the orders out of their own stock, which is stored in warehouses in

Iqaluit and Rankin Inlet. Otherwise the alcohol is ordered from the south and brought into Nunavut. It is up to the individual filling out the permit to indicate whether they want their products from the NLC or to be imported.


In either situation, the NLC arranges for the product to be shipped to the communities and individuals pick up their deliveries once they are flown into the community. For a summary of recent practice related to alcohol control, see Table 54. For an example of the form used by the AECs, see Figure 48.

**Table 54 Alcohol Policies in the LSA**

Hall Beach	There is no defined limit to how much alcohol an individual can order, however the committee has limited the number of permits it will approve at each meeting. The cap is now six. Typical orders for Hall Beach are several 1.7 litre bottles per permit. While the RCMP are not invited to attend the committee meetings they do provide the committee with a list of people they feel should not receive alcohol. The committee also provides the detachment with a copy of the permits that are approved.
Igloolik	In Igloolik, the RCMP were not aware of any limit on how much alcohol an individual can order. The police do not sit on the alcohol committee in Igloolik.
Arctic Bay	In this hamlet an individual can order three 60 oz bottles every two weeks or the equivalent of five Mickey's or one case of beer. The RCMP sit on the committee and can participate by recommending who should not receive alcohol. The committee retains decision-making power. The committee approves about 24 permit applications every two weeks. It usually receives 40 to 50 applications.
Pond Inlet	No defined limit to how much alcohol each person is allowed to order. The committee meets bi-monthly and the RCMP has recently begun to take a more active role.
Clyde River	The Clyde River committee meets once a month to review permit applications and often approves 24 permits a month. Each person/permit is allowed to order no more than two 40 oz bottles or equivalent each month. (e.g. one 40 oz bottle equals twelve beer). The RCMP attends committee meetings. If a person has been in trouble with the law where alcohol is involved, they will recommend the permit is refused.

Source: Personal interviews with RCMP detachments in the LSA communities, June 2010.

**Figure 48 Alcohol Education Committee Permit Form**

		<b>NUNAVUT LIQUOR MANAGEMENT</b> <b>Pond Inlet Alcohol Education Committee</b>		P.O. Box 09 Rankin Inlet, Nunavut XOC-OGO Tel: (867) 645-8475 Fax: (867) 645-3327	
Date: _____		Members present (to pass list a Quorum of 4 is required)			
Print	Signature	Print	Signature	Print	Signature
1		6			
2		7			
3		8			
4		9			
5		10			
<b>PLEASE PRINT</b> List Quantities as individuals (quantities sold as each)					
Name of Applicant	Permit #	Beer/Coolers ml's	other	Wine (ml's)	other
		330 355 341 473		375 750 1000 1500 4000	375 750 1000 1140 1750
1					
2					
3					
4					
5					
6					
7					
8					
9					
10					
11					
12					
13					
14					
*Please indicate if any orders requires Liquor Import Permit* When sending approved list to Nunavut Liquor, include all approved Customer Purchase order form, so they are process ASAP					
Chairperson/ _____		Signing Member/ _____			


Source: Nunavut Liquor Commission.

*Access and Control in Iqaluit*

As noted earlier, Iqaluit is an “open” community with regards to alcohol. This means that individuals are able to purchase alcohol with no need to obtain the approval of an oversight committee. However, there are no retail outlets where individuals can purchase alcoholic beverages. Instead, individuals must prepare an import form (see Figure 49) and pay the prescribed fees. The desired product can then be shipped in, either from a southern point of origin or from the Liquor Commission warehouse located in Rankin Inlet.

Iqaluit, unlike any other community in the study area, hosts several licensed drinking establishments. In addition to the Legion, there are at least three bars open to the public. Several restaurants also have permits which allow the sale of alcohol beverages as part of a meal.

Figure 49 Liquor Import Application Form

	<b>Application for Liquor Import Permit</b>	Date: <span style="border: 1px solid black; padding: 2px;">(DD/MM/YYYY)</span>																																																																																															
<b>NUNAVUT LIQUOR COMMISSION</b>		Issuing Office: <span style="border: 1px solid black; padding: 2px;"></span>																																																																																															
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Source: Nunavut Liquor Commission.

**Bootleg Alcohol**

Two factors drive demand for illegal 'bootlegged' alcohol. First, even in Iqaluit there is no retail store where an individual can walk in and purchase a bottle of beer, wine, or spirits. Legal acquisition requires an order to be placed and the product flown in from either the Rankin Inlet warehouse or from a southern supplier. The associated delay means there can be no spontaneous purchase.

Would-be consumers who come into an occasion to buy a bottle either go to the black market or wait. This scenario also applies to “restricted communities” where an individual who is able to get a permit from the AEC will have to come up with money and place an order well in advance of actually consuming the product.

The second demand arises from those who are unable to obtain a permit, either because they are resident in a “dry” community or because they have been denied access to a permit by the local AEC. Both these situations create business for the illegal alcohol trade.

The price for convenience and access is high. Bootleg alcohol sells for many times its retail store price with anecdotal evidence suggesting a range of between \$250 to \$600 per bottle of liquor. But it seems to be widely in demand—during the first quarter of 2010, RCMP are reported to have seized some \$400,000 in bootlegged liquor across the territory (Windeyer, 2010). This suggests the black market for alcohol could be at the same order of magnitude as the legal market.<sup>262</sup>

### 6.3.2 Alcohol and Drug Consumption

Across Nunavut’s legal alcohol sector, beer is by far the drink of choice. NLC sales by volume are as follows: 87% beer, 7% spirits, 4% wine, and 2% coolers.<sup>263</sup> It is expected that the bootleg sector focuses more on spirits, with vodka being an important segment of this market.

Anecdotal evidence suggests that the use of cannabis in the Baffin Region of Nunavut is widespread. There is concern among health providers, community members and justice workers that illicit drug use is becoming more frequent in Iqaluit and evidence of this is being seen in referral patterns for addictions. An anecdotal association between lump-sum residential school payments has been made with the capacity to purchase crack cocaine.

### 6.3.3 Alcohol Abuse

#### 6.3.3.1 Drinking while Pregnant

Drinking while pregnant is a major concern because of the long-term effects of brain damage associated with this behaviour. Fetal alcohol syndrome or fetal alcohol effect (FAS/FAE) is one of the potential, and entirely avoidable, outcomes. Data for prevalence of this behaviour were not available.

#### 6.3.3.2 Binge Drinking

No alcohol and drug survey has been completed in Nunavut since division from the Northwest Territories. The closest comparable data on alcohol consumption arise from the 2002 Northwest Territories Addictions Survey, which provides demographic relationships that might be relevant to Nunavut’s drinking population. In the NWT, 30% of the female population age 15 or older who described themselves as current drinkers reported drinking more than five drinks per day (see Table 55). This is considered heavy drinking and is strongly linked to “binge drinking.” Among the 15- to 24-year-old age group, 52% of current drinkers reported drinking greater than

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<sup>262</sup> Assuming this seizure equates to 1,000 bottles, and that the success rate of police in seizing this form of contraband is no more than 25%, that leaves some 3,000 bottles getting through to the market over a three-month period, or 1,000 bottles per month.

<sup>263</sup> Nunavut Liquor Commission, personal communication, 2010.

five drinks per drinking occasion. Heavy drinking or binge drinking is also associated with a lower level of household income and with lower levels of education.

**Table 55 Alcohol Use and Self-harm – Northwest Territories and Canada**

	Northwest Territories (%)	Canadian Provinces (%)
Current Drinkers	total: 77.9	total: 79.3
	male: 81.1	male: 82.0
	female: 74.6	female: 76.8
Heavy Drinkers	40	9.9
>5 drinks per drinking occasion	male: 48.7	male: 13.9
	female: 29.9	Female: 5.9
Current Drinkers by income who reported heavy drinking.	Low: 60	Low: 6.0
	Middle: 43.4	Middle: 9.8
	High: 29.9	High: 13.1
Current Drinkers who reported heavy drinking by education level.	< Secondary: 59.3	
	Completed Secondary: 45.5	Completed Secondary 8.3
	Some Post Secondary: 31.1	Some Post Secondary: 9.2
	University Degree: 20.4	University Degree: 12.4
Population reporting self-harm from drinking in previous years	22	8.8
Population reporting self-harm from drug use past year	39.2	17.5
Population reporting harm from other people's drinking	55.9	32.9

Source: NWT data adapted from Government of Northwest Territories, 2005. Data for Canadian provinces are from Canadian Centre for Substance Abuse, 2005. Canadian Addictions Survey: A National Survey of Canadians' Use of Alcohol and Other Drugs.

#### 6.3.4 Consequences of Substance Abuse

“The consequences of excessive alcohol use are extensive and serious. This includes injuries from accidents and violence, depression and suicide and poor pregnancy outcomes such as fetal alcohol spectrum disorder.”

Source: 2008-2013 Public Health Strategy, Developing Healthy Communities

Interview data from community members, frontline workers and health officials in the Baffin region reveal that spousal assaults, violence, and numbers of children in care are often linked to alcohol abuse. Iqaluit Mental Health Services case data from 2006–2007 demonstrate that referrals for substance abuse and suicide risk are the top two reasons for referral.

Pauktuutit Inuit Women's Association also emphasize that the “complex health conditions that contribute to unacceptable levels of smoking, Fetal Alcohol Spectrum Disorder, alcoholism and mental health concerns as a legacy of residential schools and suicide are priority issues.”

#### 6.3.4.1 Self-Harm and Harm to Others

The 2005 NWT Addictions Survey found that more than one-in-five (22%) residents 15 years of age or older reported some form of 'self-harm' from drinking during the previous year, while two out of five (39%) reported self harm from drug use (see Table 55). In southern Canada, the comparable rates are just under one-in-ten (9%) for alcohol, and 18% for drug related self-harm. Among the 18% of the population found by the NWT survey to actually use drugs, 79% reported self-harm.

Across the NWT, more than half the population reported having suffered harm from other people's drinking. The comparable rate for southern Canada was one-in-three.

#### 6.3.4.2 Fetal Alcohol Syndrome/Fetal Alcohol Effect

A range of adverse effects related to fetal development can occur in an individual whose mother drank alcohol during pregnancy. These fall across a broad spectrum and are referred to as fetal alcohol syndrome or fetal alcohol effect (FAS/FAE). The term fetal alcohol spectrum disorder (FASD) is also frequently used.

Characteristics of FAS/FAE noted by Health Canada range from permanent brain damage, heart and other organ defects, facial deformation, trouble learning and controlling temper, low-weight babies with slower growth rates than healthy babies, drug and alcohol problems, difficulty keeping jobs, and higher frequency of individuals getting into trouble with the law.<sup>264</sup>

Neurological damage caused by prenatal exposure to alcohol presents differently in each person but typically involves cognitive, behavioural, and psychosocial impairments that present special challenges to the individual seeking to succeed in life pursuits.

FAS/FAE can affect an individual from early life through adulthood. Reports of the level of support needed for children in schools indicate the challenges that alcohol abuse has created for children in Nunavut. A rehabilitation needs assessment in Nunavut schools in 2002 involved identifying children's support needs under the categories of physical limitation, communication concern, developmental delay, and psychosocial concern. While the research does not specifically identify the underlying cause, interpretation of the results implicates FAS/FAE as a key factor.

Characteristic challenges that could be faced by adults living with FAS/FAE include:

- difficulty holding down jobs
- difficulty living independently
- problems managing money
- poor social skills
- depression and suicidal thoughts
- unpredictable behaviour
- increased susceptibility to chemical dependency

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<sup>264</sup> An excellent resource for understanding FAS/FAE from a holistic point of view can be found at Health Canada:  
<http://www.hc-sc.gc.ca/fni/ah-sp/ia/famil/preg-gros/intro-eng.php>.

### 6.3.5 Prevention and Accommodation

#### *Primary Prevention: Maternal and Child Health*

FAS/FAE is caused by behaviour, drinking while pregnant. However the context in which this behaviour becomes widespread to the extent that prevalence of the syndrome becomes a significant social and economic problem is complex. Why do individuals abuse alcohol? Why do women choose to drink when they are pregnant?

Recognizing the context in which FAS/FAE arises, the best practice for primary prevention is targeted education and outreach programs to provide support for high-risk women. Several programs exist in the Baffin region that provide education and support to communities and individuals about prenatal health. The FASD program through the Government of Nunavut is funded by Health Canada.

In 2008 it had an operating budget of some \$450,000 for the territory. Half of this funding is spent on prevention and public awareness activities and slightly less than \$100,000 is spent on training.

#### *Mitigating the Impacts of FAS/FAE in Childhood, Adolescence, and Adulthood*

Early identification is the hallmark of mitigating the psychosocial impacts of FAS/FAE and is considered best practice for secondary prevention. Without intervention, affected children often go on to have a disrupted school experience, leading to school failure. The secondary disabilities associated with FAS/FAE are mental illness, inability to live independently, reduced employability, and run-ins with the law.

As in many areas of population well-being, efforts are being made to improve how individuals with FAS/FAE are integrated into the broader social and economic life of the population. One area is to work with employers to accommodate and improve the chances for success of individuals who face the challenges they presented with before their birth.

A summary of basic principles for adapting employment for adults with FAS/FAE include:

- Use clear concise communication in multiple formats including schedules and breaks.
- Evaluate the environment to accommodate for over-stimulation, distractibility, and memory difficulties.
- Use visual cues in all areas of work including schedules, and health and safety.
- Do not make sudden changes to schedules, routines or breaks without clear concise explanations and advanced warning.
- Use the “learns by doing” approach and provide kinaesthetic experiential learning opportunities.

Effective targeting of support measures in school and in the workplace is facilitated by appropriate diagnosis. At the present time in Nunavut, however, FAS/FAE diagnosis is rarely made as it requires a multidisciplinary team assessment. Resources are currently not in place to support this level of diagnostic capacity, nor to support individuals should a diagnosis be made.

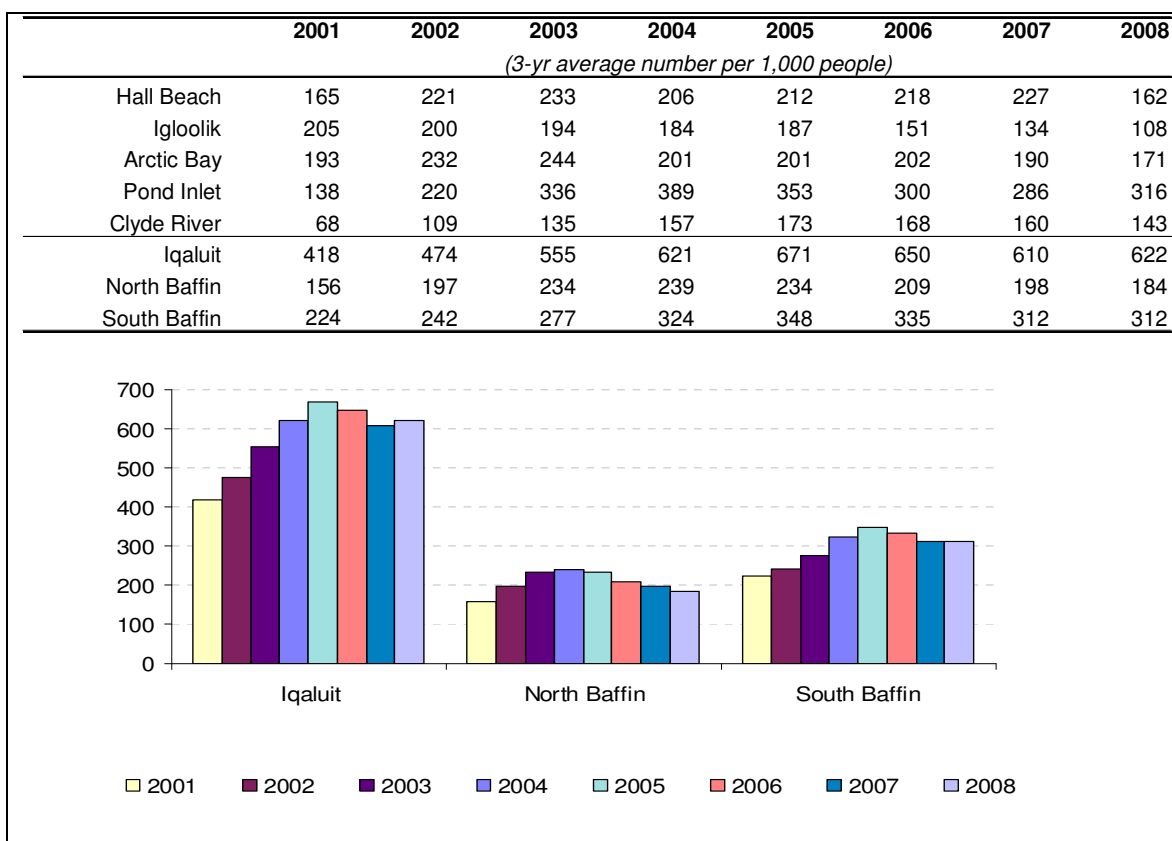
## 6.4 CRIME, POLICING, CORRECTIONAL SERVICES

### 6.4.1 Incidents of Reported Crime

The rate of violent crime in Nunavut is the highest across Canada, varying from between six and eight times the national rate during the period 1999 to 2007<sup>265</sup>. The incidence of total reported crime ranks second, behind the NWT, and has been four to six times the national rate.

Across the territory, rates of reported crime vary considerably. While the territorial average total crime rate has ranged between 200 to 370 per 1,000 population, rates in some communities have been considerably higher or lower than these. The rate of crime in Iqaluit has ranged between 400 to 650 per 1,000 while in the North Baffin LSA, rates have been at the low end of the Nunavut range (see Table 56). Across the study area, rates of crime increased during the first half of the decade, but seem to have fallen back a little since then.

**Table 56 Crime Incidence in the Baffin – 2001 to 2008**



Source: Statistics Canada, Canadian Centre for Justice Statistics, uniform Crime Reporting Survey, Special Tabulations. File prepared by Nunavut Bureau of Statistics, January 12, 2010, North Baffin aggregations and 3-yr moving averages prepared by BDS Inc, July 2010.

Notes: 1) Incidents are classified as "reported," "unfounded," "actual." When a crime is reported to the police, the incident is recorded as a "reported" incident. Police then conduct a preliminary investigation to determine the validity of the report. Occasionally, crimes reported to the police prove to be unfounded. Unfounded incidents are subtracted from the number of reported incidents to produce the number of "actual incidents." Numbers and rates of crime are calculated on the basis of "actual incidents" categorized according to the most serious offence.

2) A three-year moving average serves to smooth out year-to-year variations.

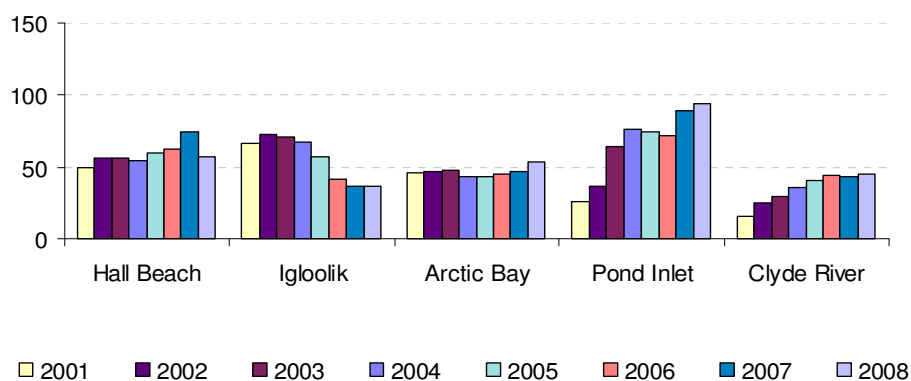
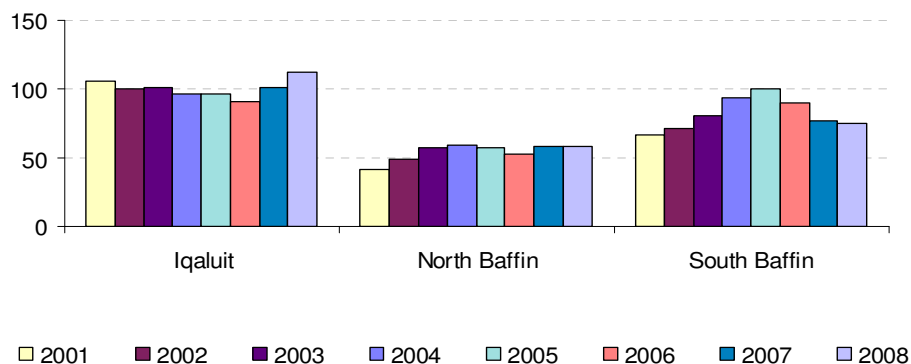
<sup>265</sup> Nunavut Crime Statistics Profile, 2007. Prepared by Statistics Canada for the Nunavut Bureau Of Statistics.

Of particular relevance is the rate of violent crime (see Table 57). Across the LSA the rate has been essentially stable over the past decade. Violent crime has been particularly high in Iqaluit, at an incidence rate of 100 per 1,000 population, ten times higher than the national average of 10 per 1,000 people. The rate of violent crime across the North Baffin LSA has been slightly over half the rate in Iqaluit, or five times higher than the rate of violent crime experienced in the Canadian population generally.

A territorial breakdown of crime incidents (see Table 58 and Figure 50) provides insight into the nature of this violence. The rate of sexual assault across the territory reached a peak in 2003 at 10 per 1,000 population—well over ten times the national rate. While rates of sexual assault continued to be high into the later part of the decade, a significant decline has been noted, with the 2008 rate of 6.7 being the lowest of the ten years for which data were available.

**Table 57 Violent Crime Incidence in the Baffin – 2001 to 2008**

	2001	2002	2003	2004	2005	2006	2007	2008
<i>(3-yr average number per 1,000 people)</i>								
Hall Beach	49	56	56	55	60	62	75	57
Igloolik	66	72	71	67	57	41	37	36
Arctic Bay	46	47	47	43	43	45	47	53
Pond Inlet	26	37	64	77	75	71	89	93
Clyde River	15	25	29	36	41	44	44	45
Iqaluit	106	100	101	96	96	91	101	112
North Baffin	41	49	57	59	58	53	58	58
South Baffin	66	71	81	94	100	90	77	75

*Violent Crime In The North Baffin LSA**Violent Crime Across The Baffin Region*

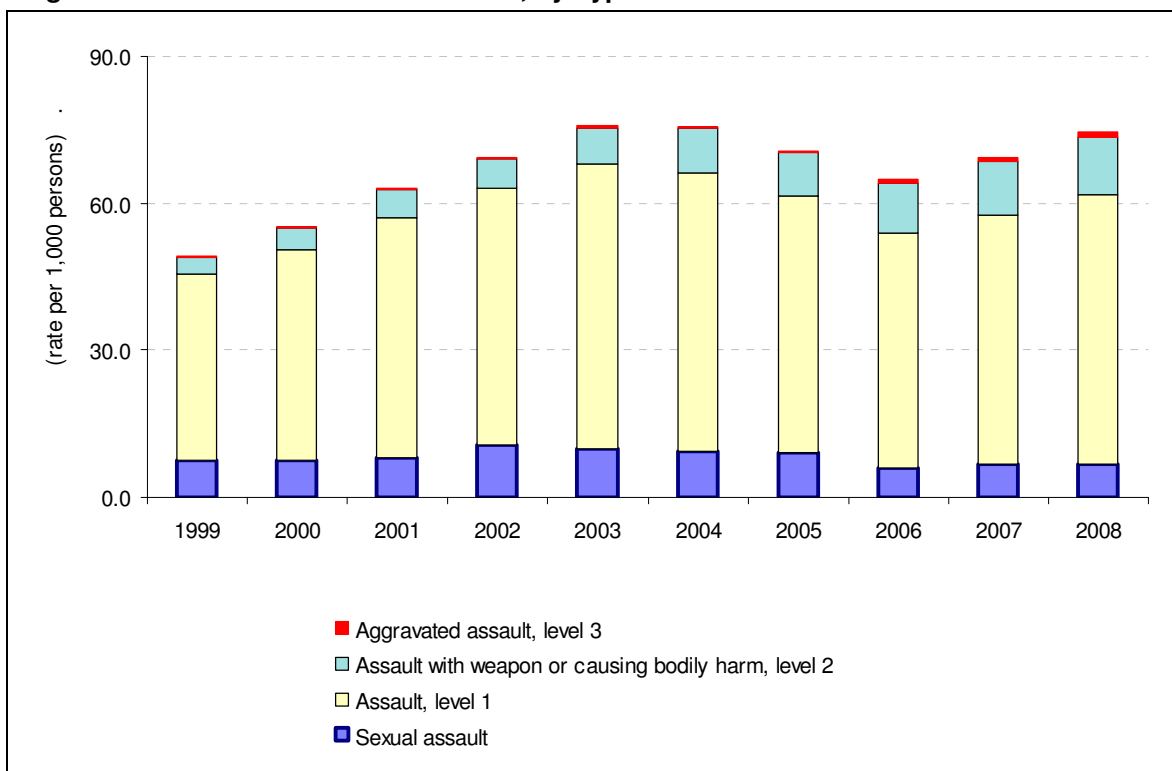
Source: Statistics Canada, Canadian Centre for Justice Statistics, Uniform Crime Reporting Survey, Special Tabulations. File prepared by Nunavut Bureau of Statistics, January 12, 2010, North Baffin aggregations and 3-yr moving averages prepared by BDS Inc, July 2010.

Notes: 1) Incidents are classified as 'reported,' 'unfounded,' 'actual.' When a crime is reported to the police, the incident is recorded as a "reported" incident. Police then conduct a preliminary investigation to determine the validity of the report. Occasionally, crimes reported to the police prove to be unfounded. Unfounded incidents are subtracted from the number of reported incidents to produce the number of "actual incidents." Numbers and rates of crime are calculated on the basis of "actual incidents" categorized according to the most serious offence.

**Table 58 Number of Police-Reported Violent Incidents in Nunavut – 1999 to 2008**

	1999	2000	2001	2002	2003	2004	2005	2006	2007	2008
	(number of actual incidents per 1,000 people)									
<b>Crimes of violence</b>	52.8	60.3	66.7	72.7	79.9	78.7	73.6	67.6	73.1	78.2
Homicide	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.2	0.1
Attempted murder	0.0	0.0	0.0	0.1	0.1	0.2	0.2	0.1	0.2	0.2
Assault	51.9	59.3	65.6	71.7	79.1	77.9	72.8	66.5	71.3	76.3
Sexual assault	7.6	7.6	8.1	10.7	10.0	9.4	9.2	5.9	6.8	6.7
Assault (not sexual assault)	41.6	47.6	55.0	58.7	65.9	66.2	61.4	58.9	62.5	67.8
Assault, level 1	38.0	42.7	48.8	52.3	57.9	56.8	52.3	48.0	50.7	55.0
Assault with weapon or causing bodily harm, level 2	3.4	4.6	5.9	6.1	7.5	9.1	8.8	10.2	11.1	11.7
Aggravated assault, level 3	0.2	0.3	0.2	0.3	0.5	0.3	0.3	0.7	0.7	1.0
Unlawfully causing bodily harm	1.3	1.8	0.5	0.5	0.3	0.1	0.1	0.0	0.0	0.0
Discharge firearm with intent	0.1	0.0	0.0	0.0	0.0	0.1	0.1	0.0	0.2	0.1
Assault, police	0.9	1.4	1.4	1.2	2.4	1.6	1.9	1.5	1.4	1.6
Assault, other peace or public officers	0.1	0.1	0.1	0.3	0.1	0.1	0.1	0.1	0.3	0.1
Other assaults	0.3	0.7	0.6	0.1	0.5	0.3	0.0	0.1	0.1	0.1
Other sexual offences	0.4	0.5	0.5	0.6	0.2	0.4	0.3	0.5	0.9	1.0
Abduction	0.1	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.1	0.0
Robbery	0.3	0.5	0.4	0.3	0.3	0.1	0.2	0.4	0.4	0.5

Source: Statistics Canada, Canadian Centre for Justice Statistics, Uniform Crime Reporting Survey, CANSIM Table 252-0013. File prepared by Nunavut Bureau of Statistics, January 12, 2010.

**Figure 50 Rate of Assaults in Nunavut, by Type – 1999 to 2008**

Source: Statistics Canada, Canadian Centre for Justice Statistics, Uniform Crime Reporting Survey, CANSIM Table 252-0013. File prepared by Nunavut Bureau of Statistics, January 12, 2010.

The rate of other assaults, including domestic violence, also peaked in the mid-2000s. The slight decline in 2005 and 2006, however, appears to be losing ground with rates in 2008 setting a new high of 67.8 per 1,000. Disturbingly, assaults with weapons and those causing bodily harm have increased consistently and dramatically over the decade. The 2008 rate of 11.7 per 1,000 was nearly 350% higher than the 1999 rate.

#### 6.4.2 Roots of Crime and Family Violence

Family violence is a major concern across Nunavut. Professionals working across government sectors, as well as community members living in the Baffin region describe violence as one of the biggest health issues facing Nunavummiut. This concern was repeatedly voiced by both front line and policy staff of across Government of Nunavut departments. The Government of Nunavut's 2008 Public Health Strategy includes two goals that relate to family violence. One of the eight goals of the strategy is, "to decrease the number of people experiencing mental, physical, emotional or sexual abuse, particularly children." In a separate goal, related to substance use and abuse, decreasing rates of substance abuse-related violence and family dysfunction is listed.

The attention given to this issue by the Government of Nunavut and by Inuit organizations indicates the magnitude of this problem. Pauktuutit (2006a) talks about the cycle of abuse in Inuit society:

"Violence and abuse are serious problems in Inuit communities. Far too many children, adults and Elders are living in violent and abusive situations today. Many others have deep and traumatic memories of abuse. Those who are knowledgeable about the issue say that most Inuit have been victims of sexual, physical or emotional abuse or have witnessed a close family member being abused, assaulted or killed.

Abusers are often survivors of abuse themselves—abuse that occurred in the community, in the residential schools, or in their own families. Abuse creates a cycle of fear, shame, anger, addictions and violence that passes from one generation to the next, from man to woman and from adult to child."

Pauktuutit has carried out research seeking to understand the roots of family violence and to learn effective prevention measures. This work has linked cultural change experienced by Inuit with a decline in traditional family structures and discipline. A recent report (Pauktuutit, 2005), for example, suggests that young people are pulled between two worlds, Inuit and Southern, and that in this context some parents give up trying to raise their children:

"There is a tendency for families to relinquish their responsibilities for guiding their children and family into a secure knowledge of who they are and what to value. In many instances, children rear themselves and their siblings. Therefore, family problems are growing because of a lack of parenting and the children are growing up without the ability to parent their own children appropriately – a recipe for disaster."

The report's authors go on to say that too often drugs fill the void parental involvement has left:

"Many children are exposed regularly to spousal assaults, verbal abuse and ridicule. Communications in many families is non-existent. Teenagers are rejecting their Elder's ways while having no alternatives to replace them."

In a presentation, Pauktuutit (2006c) offered further insight into the roots of family violence, listing a range of contributing factors:

- trauma and abuse (usually suffered as children)
- continuing cycle of abuse
- parenting and family problems
- lack of community-based intervention
- lack of healing and counselling support services in communities
- lack of recruitment and training of Inuit for front-line work
- substance abuse

Pauktuutit's National Strategy to Prevent Abuse in Inuit Communities cites a cycle of fear, shame and anger resulting from loss of culture and traditions as a root of the high incidence of violence (Pauktuutit 2006b).

Statistics Canada (2006) in its report on trends in violence against women, points directly to the impact of family violence on children wherever it occurs in Canada:

“In addition to the negative effects for women themselves, the violence women experience at the hands of their intimate partners can have profound effects on their children. Children who are exposed to violence in the home suffer emotional trauma, have poor educational outcomes, and are at increased risk of using violence to solve problems.”

The report goes on to note that while more detailed data are required to fully explore the nature, prevalence and risk factors of violence against Aboriginal women it is clear that rates of abuse are higher among Aboriginal than non-Aboriginal people. Possible risk factors are suggested:

“Many risk factors associated with violence for Aboriginal people have been cited, including lower educational achievement, higher unemployment rates, alcohol abuse, experiences of colonization, feelings of devaluation...and a history of abuse in residential schools. Rates of sexual assault and other types of violence are many times higher on reserves than in non-reserves areas. Spousal violence experienced by Aboriginal women is more severe, including a higher risk of homicides.”

## 6.5 ACCIDENTS AND UNINTENTIONAL INJURY

### 6.5.1 Injury in the Community

Unintentional injuries are higher among men than women in Nunavut. Men have lost more than two and one-half times the “potential years of life” as women due to unintentional accidents between 2000 and 2003.<sup>266</sup> The mortality rate due to unintentional injuries is also significantly higher for men than women in Nunavut, and the Nunavut rate is much higher than that of the Canadian population generally. In 2001, the rate of ‘potential years of life lost’ (PYLL) due to unintentional injuries was 3,465 PYLL per 100,000 population for men and 673 PYLL per 100,000 population for women living in Nunavut. Comparable rates for Canada were dramatically lower, at 673 for men and 298 for women.

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<sup>266</sup> This indicator looks at both the number of fatal accidents as well as the age of the person injured. The source is Statistics Canada, CANSIM Table 102-0110.

### 6.5.2 Workplace Injury

Injuries occur in the workplace across all sectors of the economy, from construction and mining to retail trade and government work (see Table 59). In the mineral exploration and mining sector, there were an average of 25 lost-time claims for exploration work, and 50 lost-time claims for mining work per 200,000 hours of labour carried out in these industries (see Table 60). However, less-serious “modified work” injuries are more prevalent in the exploration phase, at 84 claims per 200,000 hours worked, compared with 37 claims per 200,000 hours worked in the mining phase.

**Table 59 Workplace Lost-Time Injuries in the LSA – 2007**

	North Baffin	Iqaluit
	(number of claims)	
Renewable Resources Industries and Outdoor Recreation	5	3
Mining Services	4	0
General Construction	2	18
Mobile Equipment Operations	4	3
Mechanical Installation and Servicing	3	2
Air Transportation	1	12
Ground Transportation	3	0
Water Transportation	2	0
Trade Distribution, Wholesaling & Warehousing	0	3
Retail Trade	5	7
Metal Fabrication, Body Work Alterations	0	1
Automotive Sales and Services	0	1
Business and Professional Services	0	1
Accommodation, Food and Entertainment	0	5
Camps/Industrial Caterers	1	0
Miscellaneous Services	0	3
Government	3	16
Authorities	20	23
Dew Line Projects	1	1
<b>Total Lost-Time Injuries</b>	<b>54</b>	<b>99</b>

Source: Adapted from WSCC data.

**Table 60 Mining Injury Frequency and Severity Rates, NWT & Nunavut – 2004 to 2007**

	Exploration	Mining
	(incidents per 200,000 hrs worked)	
Average annual frequency	6	0.8
Average annual severity (days of lost time or modified work)	56	27
Average annual number of claims - modified work	84	37
Average annual number of claims - lost time	25	50

Source: Adapted from WSCC data.

It is typically during the construction phase of large projects that injury rates are expected to peak. This is the time when the work is very dynamic. Once a mine moves into the operational phase, injury rates are generally expected to decline as problem areas are identified and safety training and systems can be focused.<sup>267</sup>

Young Aboriginal males are at a higher risk for injuries related to a range of factors related to the nature of work this demographic group typically find employment in, such as construction work in extreme cold environments. In addition, factors related to the workforce itself can also increase the risk of workplace injury. These could include the level of experience, attitudes toward risk, substance withdrawal, as well as underlying conditions. For example, employees on a two-week-in, two-week-out rotation might experience alcohol or cannabis withdrawal symptoms at the worksite. These can include, among others, anger, irritability, headaches, restlessness, and lack of appetite. FAS/FAE impairments, discussed in Section 6.3.4.2, can further contribute to injury risk-factors.

Injuries occur in the mining industry during the exploration, construction and operational phases of development. The Workers' Safety and Compensation Commission (WSCC) breaks the sector into several categories for the purpose of injury reporting. For a summary of total claims across these components of the mining sector, see Table 61.

- underground and open pit mining
- mining services
- general construction
- mobile equipment operations
- mechanical installation and servicing
- camps/industrial catering

**Table 61 Mining & Exploration Injury Claims, NWT & Nunavut – 2000 through 2002**

	Claims	Time Lost (major)	Time Lost (moderate)	No Time Lost	Fatal
<i>(number of claims)</i>					
Underground and open pit	285	18	17	183	1
Mining services	54	11	10	17	
General construction	191	9	20	104	
Mobile equipment operations	98	7	17	48	
Mechanical installation and servicing	53	2	9	32	
Camps/industrial catering	45	4	5	11	
Other classes	52	5	5	26	
<b>Total Claims</b>	<b>778</b>	<b>56</b>	<b>83</b>	<b>421</b>	<b>1</b>

Source: Adapted from WSCC data.

<sup>267</sup> This scenario is derived from interviews with the territorial mine inspector at the Nunavut, NWT WSCC, 2008.

### 6.5.3 Workplace Injury During Project Definition Phase

For injury rates during the Project definition phase, see Table 62. During the height of the bulk sample work (2008), there were a total of four injuries leading to lost-time, and 23 injuries leading to modified work assignments. On a standardized basis, these correspond to rates of 1 lost-time injuries per 200,000 hours worked, and 5.9 modified work injuries per 200,000 hours worked.

**Table 62 Lost-Time Injuries at Mary River – 2004 to 2010**

Year	Hours Worked	Accident Type			
		Lost Time (number)	Modified Duty (number)	Lost Time (rate per 200,000 hours worked)	Modified Duty (rate per 200,000 hours worked)
2004	29,275	2	0	13.7	0
2005	59,700	3	2	10.1	6.7
2006	134,400	7	3	10.4	4.5
2007	397,504	4	9	2.0	4.5
2008	778,467	4	23	1.0	5.9
2009	99,830	0	5	0.0	10.0
2010	119,664	1	1	1.7	1.7

Source: Adapted from WSCC data, provided September 2010.

Note: 2010 data is only up to August.

### 6.5.4 Community Perspectives Related to Workplace Injury

Several concerns were raised about the potential for accidents and injury at the work place. These were often made in relation to experiences at previous mines:

[Elder Woman]: “I had a husband who worked for Nanisivik for 20 years. My husband’s companion fell through thin ice and damaged his lungs, while saving a prospector’s life pulling him to shore. There was another incident when one of the large doors at the mine site was loose and the big door fell on him and he broke six ribs. Because of these incidents he suffered personally, with no worker’s compensation.”<sup>268</sup>

A general comment was made during a meeting of the Pond Inlet Pisiksik Working Group:

“We need to also think about the bad sides of mining — someone gets hurt, there are dangers involved. Not everything is positive. You need to have medical personnel at the site. You need a plan to ensure the worksite is well run—safety.”<sup>269</sup>

A particular concern relates to the fact that workers will be in touch with their home communities, receiving both good and bad news. Issues arising from the family or community level might be transferred to the workplace, leading to safety concerns:

“In every mine I’ve seen, there are going to be guys dealing with jealousy and suspected infidelity.” This may be relevant to the workplace — If a guy has just split from his wife/partner over the phone, you want to know about that before you send him out to pack explosives into a blast hole.”<sup>270</sup>

<sup>268</sup> Comment during Arctic Bay public meeting hosted by Baffinland, September 2007.

<sup>269</sup> Hamlet Leader 2, ED&T socio-economic workshop, November 2007.

<sup>270</sup> Comment during ED&T socio-economic workshop, November 2007.

During a workshop with local health and social services workers in Pond Inlet, several potential effects on health were also listed during a group work session:

“Physical health effects:

- Inadequate training could lead to injury on the job.
- There may be more sexually transmitted disease (STDs) if there is too much sleeping around.”<sup>271</sup>

A perception that profit-seeking might over-ride safety was also expressed: <sup>272</sup>

“Nanisivik was used by the white man to make money. Even when there are hazardous materials or chemicals, the white man will still want to make money. Inuit are different; they care about their physical being. At Nanisivik, the white man got rich, but the Inuit did not.”

On the other hand, the need to reduce injuries at work through proper training is recognized. In particular the challenges of work in extreme cold conditions require preparation:

“[I’d] like to bring in an occupational therapist to show people how to properly stretch before work. Lots of guys have to stop due to back problems. ...older guys in their late-20s and 30s are in better shape and more used to working outdoors.”<sup>273</sup>

## 6.6 SEXUAL HEALTH

### 6.6.1.1 STIs and Sexual Risk-Taking

Sexually transmitted infection (STI) rates are higher in Nunavut than in the rest of Canada. Self-reported rates of STIs in Nunavut are, at 24%, three times higher in Nunavut than in Canada generally.<sup>274</sup> Public health data suggest that rates might be higher than these self-reported rates. Clinical data put chlamydia infection rates in Nunavut at 18 times higher than the Canadian rate, and between two and three times higher than the rate in the Northwest Territories.<sup>275</sup> Chlamydia is a common, treatable STI that can lead to serious reproductive health consequences.

The rates of HIV/Aids and Hepatitis C are currently low in Nunavut. However, the high prevalence of chlamydia is considered to be a good indicator of the level of high risk behaviours such as unprotected sex. The concern is that as more pernicious STIs enter into the population their spread could be rapid.

### 6.6.2 Attitudes Toward Sex and Family Planning

Rates of teen-age pregnancy and births are used internationally as indicators of adolescent sexual and reproductive health. The rate of teen-age pregnancy and births to teen-age mothers is high in Nunavut, compared with Canada generally. For example, the rate of pregnancy in 2004

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<sup>271</sup> Comments raised during workshop in Pond Inlet with Inuit workers in HSS field, February 2008.

<sup>272</sup> Comment by Resident 33 during conference of working groups held in Arctic Bay, March 2008.

<sup>273</sup> Supervisor, interviewed 2008.

<sup>274</sup> Statistics Canada, Canadian Community Health Survey 2005, Special tabulation. Prepared by Nunavut Bureau of Statistics, January 9, 2008.

<sup>275</sup> Adapted from Public Health Agency of Canada, 2008.

for teen-age women was 131 per 1000 in Nunavut and 26 per 1000 for Canada.<sup>276</sup> More than one-in-ten (161 per 1000 births) births in Nunavut are to teen-age mothers, over four times the national rate in Canada (New Economy Development Group 2006).

A high rate of birth to teen mothers is cited by government to be a concern due to poorer health outcomes among children of teen mothers. Generally across Canada, health practitioners find that “younger mothers are more likely to smoke, binge drink and less likely to breastfeed.” Mothers under 18 years of age are also at an increased risk of delivering pre-term and/or low-weight babies (New Economy Development Group 2006).

#### 6.6.2.1 Community Perspectives

There is a sense among some residents that young parents are not always as prepared for the responsibilities of parenthood as in the past:

“There are young people, under 20, making babies. There are a lot of young men not working. There are different reasons for this: not graduating [dropouts], less job opportunities so they turn to other things [such as] selling drugs and alcohol, which becomes a problem to the individuals, families and the community.”<sup>277</sup>

The following notes were recorded during a conversation about sex, relationships and family planning.<sup>278</sup>

“It used to be that there would be commitment first. [Now a relationship lasts] two or three weeks and then it’s gone — women get pregnant by accident. The attitude toward sex is different for men and women. Younger people are more having sex for pleasure, with different people. One-night stands... it affects the kid’s life....

“With regard to family planning, people do not decide to have a baby. Its just sex for pleasure, and then the baby comes. No plan to prevent pregnancy. But then [with the baby] things change. To be a parent at a really young age, 14 or 15 years old... So she adopts the baby out. Why do they have babies? It’s just sex for pleasure, lust, experimenting, learning about sex, bodies. [Do people use birth control?] Some... “

Another observation was made during a workshop session in Arctic Bay about some of the motivation behind teenage sexual activity leading to pregnancy:

“There is also the issue of high risk behaviour, sexual behaviour that can lead to things like HIV, and also the high teenage pregnancy rates. Obviously that happens for a reason, people feeling lost and alone, they need something...so if it’s not drugs, alcohol, it’s sex, if it’s not sex, it’s having a baby...and if they have a baby it becomes a whole set of other problems...”<sup>279</sup>

Still, some sense was expressed that social attitudes are starting to change with respect to teenage pregnancy:

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<sup>276</sup> Teenage Pregnancy Nunavut and Canada, 2004. (Adapted from Statistics Canada #106-9002. Pregnancy outcomes by age group. Canada provinces and territories.)

<sup>277</sup> Resident 5, interviewed in 2008.

<sup>278</sup> Anonymity requested.

<sup>279</sup> Workshop with Arctic Bay economic development committee, May 2008.

“Teenagers are “judging” young people who are having babies—older people are more accepting of teenagers with respect to having babies. Some mothers are advising their daughters to have only two, three, or four babies.”<sup>280</sup>

The following comments were recorded from a conversation with two teenage women, one a mother of two and the other with no children.<sup>281</sup>

[Interviewer: “When do young adults decide to have babies?”]: “It just happens.”

[Interviewer “But why have babies?”]: “Just want boyfriends. Girls have babies to keep the guy. Parents don’t care if their son/daughter has a boyfriend or girlfriend. There is no decision to have a baby, it just happens.”

Another woman made the following observations:

“Youth have babies too young, [as young as] 14 years old. It should be after marriage, not just boyfriend/girlfriend relationships. The reason is that they do not have enough education about sex and birth control. Plus, the girl is thinking she could trap the guy—but now she’s a single parent. There is too much sex involved now—too many children [having sex]. Babies making babies. Both males and females want sex often.

“Sex is used to control—girls trapping guys. Guys will use sex to control women. Some teenagers jump from one partner to another. No one uses condoms. Among older people, sex helps keep people committed. Among younger people sex is casual. A girl will have children from various men.

[Are both the guy and girl actively involved in decision to have a baby?] “No—the girl decides to not use birth control or to have a baby. ...Not many people use condoms. That is why so many babies [are born] and so many diseases. ...Plus, older people do not care as much now [i.e., not engaged in lives of youth] because the young ones are not listening anyway. ...As people get older, some relationships become closer, some separate. We change to work out things, learn to deal with anger.”<sup>282</sup>

“Today relationships are more free—we can do whatever we want. Parents are scared of young children. Before it was another way, parents were in control. ....

[Attitudes toward sex] it’s more casual. Some men are too controlling. Men want more sex and use it as a form of control. Youth are having babies at very young age, especially now—they are not even thinking about the future like Inuit [should]. No one is talking to youth about birth control. So in a relationship neither is thinking of having babies—just in love—it just happens. [With respect to birth control] Not many use birth control. The husband is not happy—there is a husband shortage—they should be thinking about it. Not many people use condoms.”<sup>283</sup>

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<sup>280</sup> Recorded notes from conversation with Resident 23, interviewed in 2008.

<sup>281</sup> Conversation with Resident 38 & 39, interviewed in 2008.

<sup>282</sup> Resident 24, interviewed in 2008.

<sup>283</sup> Resident 25, interviewed in 2008.

With regard to resolving conflict and other issues in the family, the following comments were made in response to a question about whether roles have changed between men and women:

“Yes, there is a big difference now. In the past, when a couple were fighting the [extended] family would get together to talk and the young couple would talk it out, about what they disliked, and they would try to solve the problem with the family. Now, people/youths are on their own. They try to solve their own problems and it leads to lots of fighting. ... Youth now would not ever want help [from extended family].”<sup>284</sup>

Finally, an Elder offered the following insight into conflict resolution in a family:

“When you humble yourself to your spouse, it is very effective. I have been a widower for [many] years, and I haven’t forgotten her. We used to disagree on all topics, and say bad things to each other. After I humbled myself to her, the anger went out of our marriage, and we became closer. In some marriages, people do not understand that, and they try to make themselves higher than the other. This is why people tend to fight.”<sup>285</sup>

## 6.7 MENTAL HEALTH AND SUICIDE

### 6.7.1 Impact of Work on Mental Health

Several observations were made about how work can improve people’s mental health:

[Partner of worker]: “In terms of his mental outlook, he’s much better with work, less angry, less stressed.”<sup>286</sup>

[Group work]: “Men working at Mary River have more confidence in themselves because they are able to provide for their family. They have higher self-esteem.”<sup>287</sup>

[Resident 40]: “When a father is proud and confident, it affects the whole family.”<sup>288</sup>

Health professionals who work with the at-risk population in the Baffin region also believe that employment could have a profound and positive impact:

[Public Sector 7]: “The focus on hiring beneficiaries is good. The possibility of employment is generating more hope. For example Arctic college is carrying out courses on office management, pre-trades, and heavy equipment. It is a really positive thing.”

[Public Sector 5]: “The leading stressors for suicide are powerlessness and hopelessness, in particular for young men. With steady work and a paycheque they will be providers again and the impact of this could be phenomenal.”<sup>289</sup>

[Public Sector 5]: “It is crucial that you pre-empt suicides and accidents. You need to provide as much services as possible at the front end and commit to trying to hire the most stable workforce possible. Suicides, self-harm, aggression and other accidents need to be pre-empted. Baffinland could have a profound impact if they pre-empt and

<sup>284</sup> Resident 23, interviewed in 2008.

<sup>285</sup> Elder 8, comment during focus group with Elders in Pond Inlet, March 2008.

<sup>286</sup> Partner Of Worker 1, interviewed 2008.

<sup>287</sup> Group discussion of expected effects of work at Mary River on men, HSS workshop, PI, 2008.

<sup>288</sup> Comment during HSS workshop, PI, 2008.

<sup>289</sup> Interviewed by telephone, 2008

respond to mental health issues. Having their own autonomous team might be the best way to do this. You give someone a job and right away they have a sense of meaning.”<sup>290</sup>

In discussing the NLCA Article 23 goal for more Inuit in the public service, Berger (2006) also suggests that a working population is a healthier population:

“...a population that is unemployed and marginalized is likely to have a higher rate of social pathology than one that is fully employed (with consequent costs for treatment of alcohol and drug abuse, health costs, the costs of higher incarceration rates, family violence and suicide).”

The potential for beneficial effects of work on domestic violence has been observed by the Qullit Nunavut Status of Women Council (2004). The Council surveyed women on what they need when abused by their partners. While the report does not quantify the amount of abuse, it offers some insight into the reasons for domestic violence:

“A lot of times when the men are not working, there is more violence as there isn’t money for bills, food, the house.”

A link between good mental health and good physical health was made during the gathering of working groups in Arctic Bay:

“If you have a good mental state, you will have a good physical [health]... IQ knowledge of the younger generation is not that strong. Elders should share openly.”<sup>291</sup>

This notion that good mental health in the context of a remote industrial workplace is something that requires knowledge and teaching was also noted during a workshop session with the Arctic Bay economic development committee.<sup>292</sup>

[Resident 7]: And since we are talking about training, that could tie in with the social aspects. At one time [we] did talk about the possibility to have healing ...like people onsite to deal with some social problems. People maybe don’t consider that as education and training, but it is...the well-being of somebody, learning how to deal with stress, learning how to deal with family, learning how to be alone without...freaking out...how to deal with isolation. Those types of things I guess need to be addressed too in terms of training onsite...

Concerns were also raised about parental absence related to the fly-in/fly-out nature of remote mining work and the resulting stresses and mental health effects this may interact with:

“There are vulnerable groups when it comes to mental health. When the parents are going out for four to six weeks, parenting falls back to the spouse left at home. Children are the vulnerable group here. ...Relatives step in to babysit but a lot of people don’t have family to do this.”<sup>293</sup>

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<sup>290</sup> Interviewed by telephone, 2008.

<sup>291</sup> Resident 27, Comment during conference of working groups held in Arctic Bay, March 2008.

<sup>292</sup> Arctic Bay Economic Development Committee workshop, May 2008.

<sup>293</sup> Public Sector 7, interviewed in 2008.

### 6.7.2 Potential Similarities to Residential School Experience

The potential for life at the mine camp to bring back memories of residential school experience was raised:<sup>294</sup>

[Public Sector 13]: “[There] seems to see a lot of similarities between the residential school system and the mine camp...feels that the same things are going to happen at the mine camps. Issues identified by the residential schooling system were: isolation from family and community; authority (domination) over Inuit life; and, sexual issues (e.g., touching, name calling, whistling). The community seems to see a lot of similarities between the residential school system and the mine camp and feels that the same things are going to happen at the mine camps.”

### 6.7.3 Isolation and Homesickness at the Worksite

One of the key challenges anticipated for some individuals working at the proposed Project relate to becoming isolated and coping with isolation and separation from family and community life:

“The first [rotation] was kind of hard, by the second rotation I was used to it. Familiar with what I’m doing. Learning here and there and meeting new people. I don’t have friends from home working here — but getting to know new people.”<sup>295</sup>

“We talked about young people working at Mary River who get homesick — they may be away from their husband or wife for weeks at a time. ...so, there is a need for counselling sessions.”<sup>296</sup>

“When management is uptight, scolding employees, it affects workers’ self-esteem. I think the situation is worsened because this is an isolated area.”<sup>297</sup>

The following exchange between a resident and a Baffinland representative also addressed the challenges faced particularly by young people working at an isolated setting and the need for onsite support:<sup>298</sup>

[Public Meeting Participant]: “There is employment of young people in Mary River and some people return home. If people work at MR, whether man or woman, they need to have counsellors that they can talk to at the site, because young people have no real commitments to stay in the job if they have family problems at home... they need a place to talk to at site. There should be some kind of social or employment counsellor to discuss personal matters that are involving employees.”

[Baffinland Representative 3]: “The comment I think is a very good one. We’ve been thinking for some time now of the possibility of having an Elder at the site as a counsellor for young people. This is an idea that we will be looking into this year and next year.”

Calls for counselling support at the Project site are related to a recognition of a widespread need for healing in the communities related to past events and experiences:

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<sup>294</sup> Public Sector 13, interviewed in 2008.

<sup>295</sup> Worker 2, interviewed in 2007.

<sup>296</sup> Resident 4 comment during conference of working groups held in Arctic Bay, March 2008.

<sup>297</sup> Resident 5, interviewed in 2008.

<sup>298</sup> Hall Beach public meeting hosted by Baffinland, March 2008.

[Resident 13]: “Healing is not just about alcohol and drugs. Children who were abused while growing up or who were mistreated, or other people who were mistreated need healing. It is not just the young people that need healing, but the adults and elders too.”

[Resident 33]: “Many of us here have been related to someone who has committed suicide. If there was healing, maybe these people would have lived longer. Some children who were abused have gone on to commit suicide. We need to confront the suicide issue head-on.”

[Resident 34]: ...“The mining company might not be interested in having a healing room, but ...we can apply for government funding for this.”<sup>299</sup>

In addition to recommendations related to onsite counselling and healing support facilities, suggestions were also offered that facilities be available for workers to engage in culturally relevant recreational activities:

[Resident 9]: “It might be almost therapeutic for northern workers to have a place where you could work on this sort of thing. When I worked [in the NWT] it was two weeks in and two weeks out, twelve hours a day minimum. ...and when you got off work you either watched a movie that someone else picked out, or you went to the bar. ...there was nothing else. ...and over there [at Mary River] you’re not going to have the bar, so all you’ve got is movies that someone else picked out.”<sup>300</sup>

A link between art/artistic expression and healing was suggested by Simonsen (2007) in a letter to the editor of *Nunatsiaq News*:

“How come so much money is being invested into lawyers' education, the courthouse, the jail, the police station and only pebbles are given to the arts? For me and many artists who I know, art is a tool to polish hope - and even find hope, when it was lost. For us the arts are a language that expresses complex issues and clears the vision to find the path when everything seems dark and chaotic. I believe that the arts would be the best and perhaps only, suicide prevention program that could actually work.”

#### 6.7.4 Suicide Prevention

The suicide rate in Nunavut is the highest of any region in Canada, and is four times the national average, on an age-standardized basis. The population at greatest risk for suicide death is males between the age of 15 to 29 years.

There is currently a wide spectrum of perspectives on best practices for prevention and support for mental health issues facing Nunavummiut. The issues are complex and the social determinants of health including unemployment, poverty, poor education, lack of opportunities and loss of cultural identity, have a significant role to play in suicide prevention. “Annirukutugut, A Suicide Prevention Strategy for the Government of Nunavut” was developed in 2007 and called for collaboration between government departments and community level organizations to streamline and improve suicide prevention and intervention.

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<sup>299</sup> Comment during conference of working groups held in Arctic Bay, March 2008.

<sup>300</sup> Workshop with Arctic Bay economic development committee, May 2008.

Health Canada has published recommendations for components of primary prevention of suicide in Aboriginal Communities.<sup>301</sup> Based on this document, prevention should include:

- Treatment and support that reflects community beliefs, ethics and values.
- Availability of crisis services.
- Programs that are locally initiated owned and accountable.
- Programs that reflect promotion of health of the whole person and focus on community wellness.
- Programs that focus on children and young people through school curriculum and workshops.
- Programs that are the responsibility of an entire community through collaboration between health, social services and education.
- Programs that embrace the concept of a large multi-faceted health prevention program.
- Peer Counselling
- Recreation and sport opportunities for youth
- Life-skills work-shops
- Cultural programs and activities

For a list of resources available to support mental health and contribute toward prevention and intervention related to family violence and suicide, see Table 63.

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<sup>301</sup> Health Canada, 2002. Acting on what we know: Preventing Youth Suicide in First Nations. Retrieved from <http://www.hc.sc.gc.ca/hppb/mentalhealth/problems.htm#suicide> on May 20, 2008.

**Table 63 Resources to Support Health and Mental Health in the Baffin Region**

Out-of-territory	<i>Mamisarvik Healing Centre: Ottawa-based residential treatment centre.</i>
Baffin Region	<p><i>Health Canada</i></p> <p>National Native Alcohol and Drug Awareness Program: funds community level programs – critical stress management, youth peer counselling, and suicide intervention.</p> <p><i>Not for Profit</i></p> <p>Embrace Life Council: Nunavut wide suicide prevention activities, &amp; resources.</p> <p>Kamatsiaqtut Nunavut Help Line: Counselling 7 pm-midnight 365 nights a year.</p> <p>Quama: Mobile program for residential school survivors</p>
Iqaluit	<p><i>Government of Nunavut</i></p> <p>Baffin Regional Psychologist</p> <p>2 Mental Health Consultants</p> <p>4 Wellness Counsellors</p> <p>Community Liaison Officer (Qikiqtani General Hospital)</p> <p>2 Child and Youth Outreach Workers</p>
Pond Inlet	<p><i>Government of Nunavut</i></p> <p>-Itinerant Psychiatric Nurse (4 visits annually)</p> <p>-Itinerant Psychiatrist (1-2 visits annually)</p> <p>-Wellness Worker</p> <p>-Social Worker</p>
Igloolik	<p><i>Government of Nunavut</i></p> <p>-Psychiatric Nurse</p> <p>-Wellness Worker</p> <p><i>Hamlet</i></p> <p>-Social Services Worker</p>
Clyde River	<p><i>Not for Profit</i></p> <p><i>Ilisaqsivik: Offers several programs including hip hop program for youth, women's healing group, summer and winter land retreats.</i></p> <p>-Family Counsellor: 1</p> <p>-Addictions Counsellor: 11</p> <p>-Youth Counsellor: 1</p> <p>-Elder Counsellor: 1</p> <p><i>Government of Nunavut</i></p> <p>-Psychiatrist Nurse</p> <p>-Itinerant Psychiatrist 1 visit/year</p> <p>-Social Services Worker</p> <p>-Community Wellness Worker</p>
Arctic Bay	<p><i>Government of Nunavut</i></p> <p>-Itinerant Psychiatric Nurse 3 visits/year</p> <p>-Community Wellness Worker</p> <p>-Social Services Worker</p>
Hall Beach	<p><i>Government of Nunavut</i></p> <p>-Itinerant Psychiatric Nurse 3 visits/year</p> <p>-Community Wellness Worker</p>

Source: Government of Nunavut, personal communications, carried out in 2008, Q3.

## 6.8 FAMILY, COMMUNITY, AND THE FLY-IN/FLY-OUT STYLE OF WORK

### 6.8.1 Maternal and Child Health Programs

For a summary of programs focused on maternal and child health, see Table 64. The Canadian Prenatal Nutrition program (CPNP) is funded by Health Canada and operated through various organizations in most communities in Nunavut. All communities in North Baffin and Iqaluit, as of 2008, have CPNP programs operating. The annual operating budget for this program in 2006/2007 was \$855,720, and of this, \$331,128 was dedicated to maternal and child health.

**Table 64 Health Canada Funding for Maternal and Child Health Programs 2004–2005**

Program	Nunavut Budget FY 2004/05	Amount spent by community FY 2004/05
FASD	N/A	N/A
Brighter Futures	\$2,040,000	Arctic Bay: \$39,180 Hall Beach: \$20,400 Clyde River: \$43,789 Igloolik: \$48,085 Pond Inlet: \$83,938 Iqaluit: \$199,904
Canadian Prenatal Nutrition Program	\$796,995	Arctic Bay: \$39,180 Hall Beach: \$0 Clyde River: started CPNP after 2004/05 Igloolik: \$48,084 Pond Inlet: \$0 Iqaluit: \$199,904
Building Healthy communities: Solvent Abuse Program.	\$117,382	Igloolik: \$12,335

Source: Health Canada, 2005. Inuit Wellness Programs in Nunavut 2004–2005.

Community level organizations can also access funding through Health Canada's Brighter Futures program that focuses on Inuit children and strives to improve the physical, mental and social wellbeing of the individual, their family and their community. The operating budget for this program in 2006–2007 was just over two million dollars.

Of particular relevance to the LSA is the non-profit organization Ilisaqsivik, based in Clyde River. In 2007 this organization had a project-based operating budget of \$1.8 million. Ilisaqsivik runs projects that are rooted in Inuit culture and are community-driven. The organization runs several programs related to maternal and child health, including a pre-school drop in program, a moms and tots group, Canadian Prenatal Nutrition program, and a Youth hip hop drop-in program.

Ilisaqsivik also runs the North Baffin Alcohol and Drug Training Mentorship, a course designed to teach a culturally relevant approach to drug and alcohol counselling.

### 6.8.2 Child Care Services in the LSA

A major issue that arises as parents take on full-time employment is the challenge of finding appropriate day care for children. This is an issue across Canada as the incidence of dual working parents and single parent families has become frequent.

The availability of day care services varies across the LSA and Iqaluit. Access to these services also varies over time, with established daycares sometimes closing due to issues related to management, access to adequate staff, and access to space. The Hamlet of Arctic Bay (2007) Community Economic Development (CED) plan notes that while there was a daycare society there was no daycare service. The plan suggests that:

“This makes it very difficult for working parents. Parents need to have a place where they can drop off their children and not be concerned about the child’s well being during the work day. The society needs to be supported in its quest to open at least one daycare at a time in the community.”

In Igloolik, the situation is similar, with no daycare services offered at the time of the Hamlet of Igloolik (2006) CED planning process. As indicated in this planning document:

“...three daycares were identified as being needed in the community: one at the high school; one in the centre of the community; and one closer to the Hamlet building.”

Formal early childhood education programs were previously noted (see Table 47). For a list of available day care services, capacity and enrolment in the region as of 2008, see Table 65.

**Table 65 Day Care Services in Iqaluit and the LSA – 2008**

	Number Daycares Registered	Number With Staff	Total Staff	Total Enrolment	Facilities With Care for Children of Students	Kids Of Students Enrolled
Iqaluit	10	5	31	145	2	13
Arctic Bay	1	0	0	0	0	0
Clyde River	2	1	6	78	0	0
Hall Beach	0	0	0	0	0	0
Igloolik	1	0	0	0	0	0
Pond Inlet	2	1	4	16	0	0

Source: Department of Education, [kkilabuk@gov.nu.ca](mailto:kkilabuk@gov.nu.ca)

Note: Data in this table might overlap with the early childhood education data presented earlier.

Issues related to child protection are also of concern in the LSA as well as in Nunavut generally. During consultations for “Qanukkanni? The GN Report Card,” several observations and comments were made by residents of LSA communities:

“It is an Inuit way for the grandparents to be involved in all aspects of child rearing. There are now too many foster children because GN does not consult with family matters. They just pushed their laws which do not fit Inuit ways most of the time (Pond Inlet).”

“Social Workers are too lenient toward families abusing alcohol or illegal drugs, compared to their counterparts in southern Canada – some families would have lost their children, for neglecting them while abusing alcohol or drugs if same level of policies used in Southern Canada were used up here (Arctic Bay).”

### 6.8.3 Community Perspectives on Fly-In/Fly-Out Work

#### *Effect of Fly-in/Fly-out Lifestyle on Community Life*

[Resident 9]: “[When I worked fly-in/fly-out at another project] I found that you don’t belong in either community. You are not around half the time, so it doesn’t work to get involved in any structured activities...”<sup>302</sup>

#### *Fly-in/Fly-out Lifestyle and Binge Drinking*

A possible link between binge drinking and the fly-in/fly-out style of work has been suggested based on experience gained from other regions (see Brubacher Development Strategies 2009).

#### *Potential for Mary River to Influence Social Development*

In another setting, a sense was expressed that Mary River may introduce further social change and stresses. At the same time, though, some optimism was expressed that the Project might also provide opportunities for social and cultural investments as well:<sup>303</sup>

[Resident 32]: “Something I am thinking about are some of the social impacts that will result from this employment. Not only because of the cash injection, but time spent away from families. I am not sure the exact rate of unemployment in Clyde River but it is one of the highest in Nunavut so therefore one of the highest in Canada. The amount of social change that will result in a short period will be enormous, and problems with drug and alcohol abuse; problems between husbands and wives and between parents and kids; dislocation between Elders and youth. Youth go into the mine and potentially forget about Inuit culture. ...Baffinland has a tremendous opportunity over 25 years to have an impact – there is an opportunity to invest in the social and cultural development in the communities, in ways that government is struggling to do.”

During scoping interviews, community workshops, interviews with workers having fly-in/fly-out experience, and other community research several themes were often raised. These related to the effects of absence of workers from their family, and on the effects of the fly-in/fly-out work style on relationships. In addition, several suggestions were provided on how families might be supported in their efforts to cope with the challenges presented by engagement in the Project.

It was noted that the Project is not the first time that individuals would experience separation from families. In North Baffin, a number of people worked on a rotational basis at the former Pan Arctic

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<sup>302</sup> Comment during workshop, 2008.

<sup>303</sup> Comment during Clyde River public meeting hosted by Baffinland, September 2007.

Gas project, the Polaris Mine project, and on various DEW Line cleanup projects. The nature of fly-in/fly-out work is therefore reasonably familiar to many families. Other non-work experiences that also regularly separate individuals from their families were also noted. In particular, medical travel for those with cardiac conditions or chronic health issues may require repeated trips to Iqaluit or Ottawa.<sup>304</sup> Incarceration at the Baffin Correctional Centre facility in Iqaluit was raised as another situation that has exposed some families to the challenges of adjusting to the absence of a family member.<sup>305</sup>

#### 6.8.3.1 Effects of Absence

##### *Children*

Effects on children are identified to arise from parental absence brought about by fly-in/fly-out work rotations. One person noted that sometimes relatives may step in to babysit, “but a lot of people don’t have family to do this.” In a separate interview, the issue of availability of reliable babysitters was also raised. Parents seeking quality care for their children while they work or attend school are said to face serious concerns about drug use and child safety when placing children in private care situations.

A woman whose husband also worked away from the community described how her fly-in/fly-out work affected her children.<sup>306</sup>

“They were O.K. ...[Before my husband started fly-in/fly-out work] he was taking care of our kids. There was no problem at all. The only thing was when he got hired, I went on my rotation a week later than he did. It was hard for me, for my 10-month old baby. For the other kids it’s O.K. I can talk to them.”

Some concern was raised about child welfare in relation to parental absence:

“Something that Baffinland is going to have to be aware of, especially during construction when you’re doing four [weeks] in, two out, is being real careful about hiring a husband and wife team... where does that leave the kids? ...In the case where two parents are working at the same rotations, you’ll be looking at extended family being involved. The point is that you’ve got to make the company aware this could be an issue for people.”<sup>307</sup>

Local childcare facilities and programs are often lacking. In Arctic Bay the local daycare facility is currently closed. In Pond Inlet, there is a “parents and tots” program, and a pre-natal program that addresses cooking, diet, and other issues. The programs are scattered across different buildings with “some things in one place, and other things in some other place.” A desire to accommodate all these various functions in one location was expressed.

The emotional effects of parental absence were also raised during various interviews with workers. One woman noted that they don’t tell their three-year-old child when his father is heading out on rotation or is scheduled to get back home. These departures are difficult for the

<sup>304</sup> This situation was raised by a government health worker in the North Baffin region.

<sup>305</sup> It was noted by a government representative that the length of incarceration at BCC is typically in the range of several months.

<sup>306</sup> Worker G, interviewed 2008.

<sup>307</sup> Arctic Bay Economic Development Committee Workshop. May, 2008.

child and travel is uncertain [from Nanisivik to the Mary River site]. If a flight is delayed or cancelled after the good-byes are said, they simply have to go through it all again the next time.

The potential to bridge the gap between children and parents by showing children what goes on at a mine site was suggested. “It would be good to take kids to a functioning mine to illustrate what we are talking about.” Still, a parent talked about how he tries to explain to his four-year-old that he has to work to buy a house and support the family.

“My son sees the videos and I tell him about the work we do, and the helicopters and everything. I talk to him about how I need to work to buy a house. My son is very young but he knows this [that you need to work to live]...but it comes to the point where he says, “I don’t want a new house. I like the one where we are, as long as you stay home it’s OK.””<sup>308</sup>

Concern about the effects of parental absence on older children was also raised:

“If you do have family [parents working at Mary River], you’re going to have kids running around in the community who have nothing to do. ...and you’ll have kids saying [to their working parents], “send me money” and they’ll be sending money, and if there is no-one at home to monitor where the money’s going it’s going to be going, ...well you could say to drugs and alcohol, but even just diet. If you’re a kid 13 or 14 years old ...they’re going to be buying pop, chocolate, chips, frozen pizza...so what kind of a healthy lifestyle is that person going to have...and you’re going to have increased diabetes... if you don’t have activities for youth to do... your workers in the future are not going to be healthy.”<sup>309</sup>

On the positive side, the observation was also made that:

“It is better for children when the father is working. He is a role model to his children and to the whole family. He will have more respect.”<sup>310</sup>

Concern about the effect of parental absence on children was expressed during an Arctic Bay workshop.<sup>311</sup>

“How do you build those healthy and happy individuals when their parents are away half the year? Because you’re working away for two weeks at a time and then home for two weeks at a time — that means the parents are away for half the time. ...Now you throw school in there and you throw in all the other distractions...there is not a lot of time. ...And then you take away the parents!”

### *Care-Givers*

The issue of access to child care is a source of concern, even stress, for some. One North Baffin woman described how responsibility for care of children and parents leads to stress:

“When he’s not working, [my husband] supports the family by babysitting the children. On weekends he goes hunting by skidoo. When he is out working, babysitting is an issue.”<sup>312</sup>

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<sup>308</sup> Worker interview, 2007.

<sup>309</sup> Arctic Bay Economic Development Committee Workshop. May, 2008.

<sup>310</sup> Local Health and Social Services Workshop, Pond Inlet. February, 2008.

<sup>311</sup> Arctic Bay Economic Development Committee Workshop. May, 2008.

Another partner of a fly-in/fly-out worker spoke about the stresses associated with starting a family when one parent is away:

“At the beginning in a relationship there are just two people. Then babies. Stress, more fights, more fights—how to raise a family, how to treat the children. I wanted no more children but [my husband] wanted a daughter. Now there is stress.”<sup>313</sup>

This respondent went on to note that her parents are also getting old and will need care, and that a younger sibling is having a baby and has no babysitter lined up to help. The responsibilities to help the family out leads to more stress.

Another woman described how the absence of her husband, combined with lack of daycare services, affected her childcare arrangements:

“For me, I was used to being a single working mom. Before, I used the daycare and would work at the hamlet. When the daycare closed it was harder to work.”

When she got married and had a child with her husband, her husband would help look after the infant while the woman worked at a local job. When her husband started work at Mary River, he was no longer able to help out:

“I’m getting used to it....[sighed]... it’s not easy.”<sup>314</sup>

One front-line worker noted that:

“There are vulnerable groups when it comes to mental health. When parents are going out [for a work rotation], parenting falls back on the spouse left at home.”

A site supervisor also observed the challenges that can arise in relation to child care and work rotations:<sup>315</sup>

“Sometimes the spouse at home may not be the best parent to look after the kids. That is another issue.”

The perspective from a male worker at in a fly-in/fly-out job was provided during an interview carried out at Mary River:

“My [older children] are at day care and our newest should be in day care in the next few months... [When I am away] it’s very exhausting for my wife, it’s very hard for her. It’s just in the past year or so that she’s finally starting to get into a routine. She knows I have to be up here, she knows that I enjoy the work and she’s been really supportive that way. But the first five years were pretty hard.”<sup>316</sup>

As parents try to cope with childcare demands, other family members may gain new responsibilities. As one front line government worker suggested, older children may find themselves “forced through circumstance to babysit.” A similar conclusion was drawn by a small

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<sup>312</sup> Resident 23, interviewed 2008.

<sup>313</sup> Wife of a fly-in/fly-out worker, 2008.

<sup>314</sup> Wife Of Worker 1, interviewed 2008.

<sup>315</sup> Interviewed 2008.

<sup>316</sup> Worker 12, interviewed 2007.

group asked during a workshop setting to identify the effects of a mine on children, youth, women, and men. They noted that for youth, “Youth will have to take care of kids on their own when their father is away.” This situation was also described by a male worker who had experience with fly-in/fly-out work at Mary River:

“We have seven kids. The oldest usually takes care of his sisters and brothers. Next time [I go on rotation] we won’t get a babysitter, my son will look after all of the other six kids.”<sup>317</sup>

During a workshop with local business people, the local lack of access to daycare was described as a problem:

“Daycare is a problem that prevents some of the women from proper employment; it’s a disincentive.”<sup>318</sup>

However, while subsidies are available to parents to offset the costs of daycare, expansion of the local daycare requires expansion of the building itself and that would entail capital costs for which funds are harder to come by.<sup>319</sup>

### *Families*

A participant at the socio-economic workshop hosted by ED&T indicated that he’d be interested in seeing a mining community/camp located near the site where families could live. If that’s not possible, perhaps improved day cares are a solution:

“Rotation is tough on families—what do we do to help if it’s not by allowing people to live nearby? ...Maybe it’s a need for childcare. Set up daycares...”

One woman spoke about how she worries when her husband is away on a work rotation:

“It is harder when [my husband] is gone. What if something breaks down? He is the one who looks after house things. [I am] more stressed when he’s out—who do I get to help?”<sup>320</sup>

Another woman indicated that while both she and her husband support the proposed Mary River for the jobs it will create, wives do not like the absence of their partners, “there is no one to help out with everything... cooking, babysitting, transportation.”<sup>321</sup>

A similar observation was provided in a different setting:

“There are already things affecting women. When their men are working, they are practically single for four weeks while the men are away. They are struggling to take care of kids, pay bills before things get cut off.”<sup>322</sup>

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<sup>317</sup> Worker 5, interviewed 2008.

<sup>318</sup> Public Sector 1, Small Business Workshop, Pond Inlet, February 2008

<sup>319</sup> Small Business Workshop, Pond Inlet, February 2008.

<sup>320</sup> Resident 24, interviewed 2008.

<sup>321</sup> Resident 25, interviewed 2008.

<sup>322</sup> Meeting with several women in Pond Inlet, March 2008.

Another woman wondered what kind of “social preparation” will be undertaken for the Project. She suggested that there may be a need for “some sort of support network for women whose partners are involved” in the Project.<sup>323</sup>

An Elder spoke about how women in the past often lived alone while the man was away:

“In the past, a woman could not survive without a man. ...As we move into the future, mothers will slowly start to learn how to live alone with the children. We learned this in the past – we would be alone in the igloo or tent with the children because we had no choice when the man was out hunting. If the man was not out hunting, we would have no food or heat. This was something that can be learned, how to be alone. This is a part of maturing that young worker need to learn – this is a part of getting money for food, and supporting your family.”<sup>324</sup>

Another man who has previous fly-in/fly-out work experience observed that,

“Two weeks in and two week out is a great job for a young, single person...but once you’re married and you’ve got kids, ...its not so good.”<sup>325</sup>

One man noted that he has been doing rotational work previously on DEW Line cleanup projects, so his family is familiar with the lifestyle. But he noted that those projects were only during the summer months—working at the Mary River exploration Project would be the first time he’d be away over the winter.

He sees that as a different situation than being away in the summer—“we’ll see how it works.” He noted that he keeps in touch with his children by phone and through the internet. “One of my daughters taught me how to use the internet.”<sup>326</sup>

An effect on family life was also noted: “A disadvantage is that I’d be going out for day trips if [my husband] were home...we’d have family time. When he gets home [from his current rotation] we won’t be able to go out much because of the melting ice.”<sup>327</sup>

During an IQ session held in Arctic Bay, discussion of the family raised some points that are relevant to understanding the interaction of the proposed Project with a particular segment of the population:<sup>328</sup>

[Resident 4]: “Young people without parents will often earn money, but then other young people will come and ask for some of that money. People without parents cannot get guidance from parents on money management.”

[Resident 30]: “A lot of children without parents will abuse alcohol and drugs and might go to jail. Kids who have parents who abuse alcohol and drugs are just like kids who do not have parents. They don’t have parental support.”

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<sup>323</sup> Public Sector 9, interviewed in 2007.

<sup>324</sup> Comment by Elder 4, February 2008.

<sup>325</sup> Resident 9, interviewed 2008.

<sup>326</sup> Worker 7, interviewed 2007.

<sup>327</sup> Resident 24, interviewed 2008.

<sup>328</sup> Exchange during conference of working groups held in Arctic Bay, March 2008.

While parental absence is seen to create challenges for families, the benefits of having a working parent are also understood to affect the family:

“When a father is proud and confident, it affects the whole family.”<sup>329</sup>

In response to the challenges families are expected to face relative to the rotational work offered during Project construction and operations, a suggestion was made to establish some sort of family support program:

“In terms of employee care...in Ottawa, for Inuit living in that city, there is a family resource centre. In Yellowknife, they have a family resource centre for the military...in Edmonton on the bases they have family resources centres...[employees] are working for two weeks and we don’t know what goes on and what problems they are dealing with, and then they come back here...what I’m thinking is to have a family resource centre, some place where families can go if they are struggling and having a hard time...because social services is stressed, mental health is stressed, the nurses are stressed.”<sup>330</sup>

The notion that families need to actively prepare for or adjust to the involvement of a family member in fly-in/fly-out work was expressed by a small group during a breakout session of Inuit involved in health and social services in Pond Inlet:

“Overall, the family needs to learn how to have a person working at Mary River.”<sup>331</sup>

### *Workers*

Some of the challenges faced by workers engaged in fly-in/fly-out rotational work were raised during one-on-one interviews. One man in his late 20s spoke about being away from his extended family.

Even though he and his former partner were no longer together, he found that being away from his extended family for two weeks at a time was hard. He missed out on things going on at home. He’d miss his nieces and nephews. They’d do things that he was not a part of. He noted that “it was a good thing we had a satellite phone up there. Helped to keep in touch.” He’d indicated that he would talk to his parents as well as to his former partner.

Another worker suggested that the biggest challenges are faced by those who have a family. He indicated that he doesn’t have kids, so being away from the community was not an issue for him—“no big thing.” He doesn’t feel that he’s giving up anything to be working on a rotation. His parents are supportive, “As long as I’m happy with it, they don’t mind.” However, for those with families, it’s very different, much more challenging in terms of being away. He suggested that one way to help families would be to, “Make this an artificial community so people can come and live here with their families.”

Pressure to quit work can be felt. One worker spoke about how most of the guys working at the Project have kids at home. He had a tent-mate whose common-law spouse wanted him to quit work and come home.

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<sup>329</sup> Pond Inlet HSS Workshop, February 2008.

<sup>330</sup> Arctic Bay EDC Workshop, May 2008.

<sup>331</sup> Pond Inlet Health & Social Services Workshop, February 2008.

Several people who spoke about their fly-in/fly-out rotational work experience spoke about personal breakups with girlfriends and wives. Being away from home on rotation was considered to have been a factor in these situations. However, these events did not necessarily lead to loss of support for the rotational lifestyle. One North Baffin resident whose girlfriend had left him suggested that he'd work at the mine "as long as it is there...I don't usually quit my jobs." Another individual noted that "a mine site is a mine site. It is the way it is."

#### 6.8.3.2 Fly-In/Fly-Out Work and Relationships

Concern about negative effects of remote fly-in/fly-out work on relationships is frequently expressed by North Baffin residents. During the course of scoping and community workshops and consultations several ways in which mine work can contribute to breakups were presented, along with various suggestions to support couples.

The importance of communications between workers at a remote mine site and partners back home was raised as a means of keeping relationships strong. During a focus group session with several women from Pond Inlet, it was suggested that orientation of workers should include encouragement to call their partners often. The women thought that this form of communication helps to strengthen relationships.<sup>332</sup>

One resident noted that at Nanisivik it was the alcohol that caused problems:

"I grew up in Arctic Bay when Nanisivik was open. Some families separated because of the mine—because of the alcohol. The alcohol led to people sleeping around. I think it would be easier if there were counsellors onsite to help people."<sup>333</sup>

A less direct reference to the link between mine employment and breakups was made by another North Baffin resident who suggested the relationship problems could result from the increased money and time spent away—"improper spending...relationship problems."

Another North Baffin resident, a woman, noted the connection between infidelity and drugs and alcohol: "Younger people have more jealousy. Some partners are more into drugs/alcohol and may "go with" people. ...The younger ones are tempted with drugs and booze. Then they end up going with another partner."<sup>334</sup>

This issue of jealousy, suspicion, and lack of trust between partners was noted by a mine site supervisor:

"The jealousies and worries about girlfriends back home—guys get worried that their girlfriends go with other guys when they are away. ...There is not much you can do about this other than shortening up the rotation—but with shorter rotations then you get into [other] issues."<sup>335</sup>

"Some get very homesick. ...the girlfriends and wives [working at the camp], they can become very jealous and think the guys are messing around. And the guys [at the camp]

<sup>332</sup> Focus group with women in Pond Inlet. Richard Akoto. March 2008.

<sup>333</sup> Workshop in Pond Inlet with Inuit workers in HSS field, February 2008.

<sup>334</sup> Resident 24, interviewed in 2008.

<sup>335</sup> Supervisor 1, interviewed 2007.

think their partners are messing around. That creates havoc. The two week in/two week out schedule seems to help...they are not gone from the community for too long. ...but this still leads to guys having to get home to make sure [things are alright].”<sup>336</sup>

This issue of absence and jealousy was also raised by a woman whose partner worked at a fly-in/fly-out job. While he was away, other men were gossiping about her past, and she and her partner had to talk about it over the phone. This same woman also noted that:

“Absence is harder for younger people because there is more jealousy. They have to call each other constantly to check up on the other person.”<sup>337</sup>

Some women find themselves at risk from other men when their partner is away at work. One woman indicated that she does not feel safe when her partner is on a work rotation. This scenario was echoed during a separate scoping interview where a male respondent suggested that he would not leave his partner alone in the community for an extended time while he worked at a remote site. He felt his partner might be in danger from other men.

In a different setting, a resident noted that:

“What everyone is thinking but no one is talking about is the effect of absence on couple’s relationships and jealousy. [During DEW line projects families have broken up when] one of the partners goes with someone else and moves away. These breakups are very hard on people and can lead to suicides.”<sup>338</sup>

A young woman also spoke of concerns related to absence and jealousies:

“Can I raise another concern? ...When a person is working out there, and their partner worries about them cheating. For me, I have a boyfriend who works at the mine, and he can be gone for, like, four weeks. I can worry about him cheating on me out at the site, and he can worry about me cheating on him here in town. ...My worry is that the people are so busy out there and don’t have time to be in contact, and I don’t really know what is happening over there.”<sup>339</sup>

The challenges of maintaining trust between partners where one is involved in fly-in/fly-out work is certainly not unique to the north. An interesting article in a local Australian paper notes how “shift work is fuelling suspicions of adultery and resulting in more West Australians hiring private investigators to catch their partners cheating.”<sup>340</sup>

However, absence and remote worksite employment is sometimes seen to have some benefits for a relationship:

“On the positive side, the kids are not hearing fights and arguments while [my husband] is gone. Also, financially, [he] is starting to help out, so it’s not just me trying to pay the bills....Also, since the worksite is 100% drug-free, [my husband] had to quit drugs for the job.”

<sup>336</sup> Supervisor 1, second interview in 2008.

<sup>337</sup> Resident 24, interviewed 2008.

<sup>338</sup> Resident 11, interviewed 2007.

<sup>339</sup> Focus group session with several women, Pond Inlet, 2008.

<sup>340</sup> Hampson, Katie. 2008. “Fly-in/fly-out couples employing ‘sex spies’.” *The West Australian*. June 7<sup>th</sup>. Perth.

Another spouse of a rotational worker suggested that the rotational work, “makes us stronger—I know that if I become a widow I can do it. The absence gives us a break from each other, but it’s hard.” Still, this same woman, who has been with her husband for over 20 years, suggests that “separation is difficult.” She notes, though, that absence is easier for those like herself and her husband who have been together for years than it is for younger couples.

#### 6.8.3.3 Suggestions for Supporting Families

One wife of a fly-in/fly-out worker suggested that to make absence easier, there could be radio shows about relationships. She also suggested that partners of workers could go to the camp for a weekend or for a rotation to see how their partner lives and works.<sup>341</sup> Tours of the site for family members were also recommended by the wife of another worker.<sup>342</sup>

A suggestion by a front-line government worker was to produce a film about life at mine camps. It is thought that this would help to alleviate some of the “fear and tension” in the community about what is going on at the mine site. Since fly-in/fly-out mining and its related activities are new to the community, such a film could help the community to better understand what friends, relatives and family members are doing at the site.<sup>343</sup>

The potential to develop family wellness and counselling services was noted during the 2007 ED&T workshop in Pond Inlet. Steps in this direction are being taken in several communities. These services should build on life skills and knowledge of Elders.

#### 6.8.4 Additional Research and Analysis Related to Fly-In/Fly-Out Work

A substantial body of research has emerged related to the particular challenges and coping strategies associated with fly-in/fly-out patterns of work. The following references are intended to simply point toward some of the highlights of this research.

Nunavummiut have participated in fly-in/fly-out work to varying degrees for more than thirty years. A summary of research carried out during the 1970s of Inuit experiences in the seasonal oil and gas exploration fields, as well as of the experience of workers from Igloodik and Arctic Bay working 42-day in/14-day out rotations at Nanisivik is provided by Hobart (1976 and 1978). Hobart found that both the Coppermine Inuit workers and their wives were supportive of having access to the work.

Concerns for the welfare of their families during the worker’s absence were identified, as were the economic advantages of employment. He does note, though, that local permanent employment was highly preferred.

Several groups of workers were considered, including workers from the Coppermine and Baffin regions. Comparisons between the Inuit and the white commuter workforce were made. While the white workers came out ahead on a “nominations for ‘first rate crew’ index,” on two indices Inuit “were clearly superior: “ability to withstand the stress of working in the Arctic” and “camp

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<sup>341</sup> Resident 24, interviewed 2008.

<sup>342</sup> Wife of worker 1, interviewed in 2008.

<sup>343</sup> Public Sector 13, interviewed in 2008.

citizenship.” In considering these comparisons, Hobart noted that workers from the Baffin were “essentially unselected” while the whites from the south were “highly selected.”

In Arctic Bay, Hobart found that initial support among women for their husbands to work at Strathcona Sound (Nanisivik Mine) declined over time. He relates this to “a clear majority of women [who] experienced a shortage of game meat since their husband’s employment.” Hobart also concluded that the loneliness and worry experienced by women in other regions was less prevalent in Arctic Bay, where the men were able to come home on weekends.

More recently, conversations were carried out with workers having experience at the Jericho diamond mine that had operated in the Kitikmeot region (Brubacher Development Strategies 2009). Several insightful observations by workers were made about a “cycle of emotions” that can be experienced during fly-in/fly-out rotational work:

“One woman ...described the overall feeling she associated with her partner working fly-in/fly-out was that of being left alone. The emotions varied, however, over the course of the rotation:

“When he first gets home she’s glad he’s back...

“By the second week, around three or four days before he goes back to work it’s “please go!” This is a time when arguments tended to happen.

“When he’s gone, there seemed to be a mix of emotions, changing between “missing him” and comfort at being alone again.”

The Jericho research also noted how relationship issues may build up during the “on-the-job” period. These may remain unresolved until they get carried back home with the worker:

“Then there is also the catching up on issues — the guy gets home and just wants to relax. So they may drink alcohol. And then as he overdoes it, he starts thinking back to the phone calls and arguments or rumours that he heard that she was drinking with so and so and everything comes back and he takes it out on his wife. Sometimes he might beat his wife. More in the middle or toward the end of the two weeks at home. At the beginning he just wants to sleep. At the same time, the wife may have expectations for him to start catching up on loose ends at home.”

Another Jericho worker noted:

“Sometimes, when the guy gets home from rotation, everyone is kind of walking on egg-shells, trying to be quiet so he can rest. And then everything gets back to normal...and then before he has to go back to work he can start getting edgy...like he’s itching to get back to work.”

The role of alcohol in the fly-in/fly-out cycle was noted by another Jericho worker:

“...it was only probably the first two or three days when I got home that I’d be drunk. Then I’d sort of relax and mellow out and get used to being home again.”

The same worker noted that stresses related to fly-in/fly-out work, compounded with alcohol are not uniquely felt by northern workers:

“I think it was harder for the guys from down south to stay together. Up here, we don’t have a bar, and if the spouse wants to make an order, then we both have to agree on what we are going to order [to sign the permit]. Down south there is easy alcohol and more temptations than we have here in the north.”

Kaczmarek and Sibbel (2008) reviewed the effects of parental absence on children arising from various work-related causes, including merchant marine as well as fly-in/fly-out mining work. They identified a complex issue that clearly is deserving of better understanding. Their observations include the following points:

- Mothers of children of merchant seamen report behaviour problems, nervousness and lack of self-restraint among their children, while the children report feelings of sadness and depression associated with concern for their father’s safety.
- One study suggested that relatively brief parental absences under routine conditions exerted minimal effects on a specific group of children’s psychosocial well-being.
- Fly-in/fly-out-related variables that need to be investigated in future studies include the age at which children began a fly-in/fly-out lifestyle. Those children who were born into the lifestyle and have always experienced their fathers’ regular absences may cope differently from those children who originally had their fathers at home and were subsequently introduced to fly-in/fly-out at a later age.
- There is some evidence ...that only those families who are able to cope remain in fly-in/fly-out employment for any length of time. Those who remain are families who have adjusted, adapted or learned to cope with the lifestyle.
- Previous research reported families feeling different levels of loneliness and anxiety at different times during the roster cycle.
- Family structure and level of family income seem to be relevant factors. Children from original nuclear families have a much lower incidence of mental health problems than those from single parent or blended families. In addition, higher family income has been associated with better mental health. Quality of parenting and better family functioning can also act as protective factors.

Research reported from northern Saskatchewan uranium mines (InterGroup Consultants 2005) suggested that effects of fly-in/fly-out work on families varies with the age of the children:

“There was a general sense that things got easier for the parents as children got older. This could be linked to the fact that children become more independent and require less personal care, or to the fact that many families begin to rely on older children to help fulfil household duties. One Community Member from Athabasca noted that this practice, in turn, has implications for the older child who essentially begins to assume a parental role at a fairly young age.”

The Saskatchewan research also highlighted an effect that parental absence might have on extended family who step in to help out:

“A handful of community members suggested that there were in fact impacts on the extended family, in particular on the grandparents. As one Community Member from the West Side noted “The Elders are getting depressed and tired but they have no choice but

to help raise the kids.” Another Community Member from La Ronge, however, felt that this parental role assumed by grandparents “provides some stability for the child.”

Interviews with mothers whose partners worked in fly-in/fly-out mine settings in Australia have been carried out by Anne Sibbel (Sibbel 2001). The following observation is of particular relevance:

“Fly-in/fly-out employment imposes both physical and emotional constraints on communication between fly-in/fly-out employees and their families. As indicated by the mothers, problems with communication can be a significant source of family stress. Further research, including both the fly-in/fly-out employees and their partners, would clarify the particular areas that are of concern, and could recommend appropriate strategies to facilitate better communication.”

These interviews with the women “left at home” highlight that in addition to the stresses that may be experienced by workers themselves, other family members, particularly women and mothers are also affected by this style of work:

“The fly-in/fly-out mothers in the present study identified issues associated with attachment difficulties, communication, security of employment, maintaining relationships, roles in the family, roster cycles, social aspects and safety. In addition they expressed concern about being “voiceless”, that is, no one was interested in their feelings about their fly-in/fly-out lifestyles.”

In a recent study carried out by Clifford (2009) in Australia, interviews were carried out with 137 fly-in/fly-out workers and 59 partners of workers to learn about issues related to this form of work. This research found that most workers and partners of workers reported only moderate negative effects related to this style of work. However, a small percentage of workers (3%) and a minority of partners (21%) did experience high stress levels.

Clifford’s research then explored the underlying factors that related to dissatisfaction around fly-in/fly-out work and vulnerability to fly-in/fly-out work-related stress:

“The specific impacts of fly-in/fly-out that employees found most dissatisfying were missing important events with loved ones due to being onsite and their ability to participate in ongoing community events and/or team sports, as reported by approximately three quarters of employees. Partners reported the most dissatisfying aspects of fly-in/fly-out were the employee missing important events due to being onsite, feelings of loneliness when the employees is away and worrying about the employees being able to come home in the case of a personal emergency.”

This study suggests that levels of worker dissatisfaction were higher among those with lower levels of social support and among those who were less satisfied with their jobs. Levels of social support as well as the “depth” of a couple’s relationship were factors in determining the level of dissatisfaction among partners of workers, with those in lower depth relationships more dissatisfied.

## 6.9 CAPACITY IN THE SOCIAL SECTOR

Human resource issues are a challenge across Nunavut. With small populations and many positions to fill, vacancies are common. High turnover rates also lead to ongoing staffing challenges. In 2008, for example, more than one-third of Nunavut's social worker positions were unstaffed. As reported in the local news media at the time (Thompson 2008), the Deputy Minister for GN HSS provided an update in the legislature: of 37 social worker positions across the territory, only 22 were filled.

The Qanukkanniq report (North Sky Consulting 2009) notes challenges related to human resources in the health field:

“Mental illness has been steadily increasing in the community and we don't have the health care to help. If we had psychiatric care in Nunavut it would be good. Mental health workers come and go – no follow up or consistency (Iqaluit).”

“Agency nurses are really not able to give the same level of care as GN nurses – they are not interested in the community and don't stay around long enough to know us and learn our health histories (Igloodik).”

Organizational issues can also lead to capacity challenges. Day cares, in particular, require a significant level of both human resource capacity to ensure reliable staffing, as well as solid financial and administrative capacity to keep the books in order. Weak links in these areas can lead to loss of day care services, even when physical space and demand for the service might be in place.

Related to organizational capacity, but at a higher level, are comments made from across Nunavut (North Sky Consulting 2009) that refer to the trade-offs between cost-effective service delivery and desire to use service delivery as a vehicle for regional development or to meet other political objectives:

“Can the Medical Transportation office in Pangnirtung moved back to Iqaluit for a better service? Lots of money is being wasted by GN by running the transportation office out of Pang and patients are calling Pang office themselves (Pond Inlet).”

“Our health centre is half-empty. Maybe we should just be realistic and say we can't get the staff we need here and stop trying to pretend that doctors want to come and live here. Then we could address our health care needs in a way that reflects reality (Cambridge Bay).”

The need for social services to be delivered in a rational or coordinated way was noted during the Qanukkanniq consultation process:

“There are too many organizations (Social Services, Wellness Organization, Mental Health, Youth Committee, Youth Justice Committee, Alcohol Committee, RCMP, Elders' Group) that are trying to deal with social problems in our community and they are not connected nor coordinated (Arctic Bay).”

In terms of the impact that a major industrial project may have on local health facilities, one local health practitioner noted that the timing of injuries has an impact in addition to the number of incidents. This is because medical evacuations from the Project site will often be after hours,

which means the local health centres may have to call-up a nurse “and that means a minimum four-hour charge” under the contract arrangements with nurses.<sup>344</sup>

Capacity issues have also been raised in relation to family violence across Nunavut. Pauktuutit (2006) noted that in Nunavut, the rate of reported spousal abuse is 6.5 times the national rate. They suggested that the following capacity issues adversely affect the territory's ability to respond to domestic violence:

- There are a few safe shelters and little in the way of alternative housing.
- There are increasing numbers of “hidden homeless” or “couch surfers” in northern communities.
- Women often depend on relatives to put them up for the short term.
- Many must leave their communities to access a regional shelter to escape domestic violence.
- Inuit women might lose custody of their children when they leave abusive relationships.

With regard to the prospect of a major mine development and its implications for LSA health services, a health insider suggested that mitigation measures implemented at the Project should be linked with the community and be community-driven. This respondent noted that the local health committees have a big role to play in healthy communities, and therefore support for these local health committees is important.<sup>345</sup>

Gaining access to information about health and healthy living might be one area where progress can be made. As one resident noted: “On the health front, we have been getting more information about disease and health issues from the health centre. There is more openness today to talk about health issues, like HIV and so forth.”<sup>346</sup>

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<sup>344</sup> Public Sector 17, interviewed 2007.

<sup>345</sup> Public Sector 18, interviewed 2008.

<sup>346</sup> Resident 5, interviewed 2008.

## SECTION 7.0 - HOUSEHOLD ECONOMY

*Theme: How will the Project affect the economy of study area households?*

### 7.1 FOOD SECURITY

#### 7.1.1 Land-Based Economy, Harvesting Sector

For many North Baffin households, the harvest of country food provides an important contribution to overall wellbeing. In all five communities, caribou, ringed seal, and arctic char are of major importance. In addition, walrus is a major species of importance in Hall Beach and Igloolik, while narwhal is a key component of the harvest among households in Arctic Bay, Pond Inlet, and to a lesser degree, Clyde River (see Table 66).

Across the North Baffin LSA, an estimated 830,877 kg of edible food is harvested each year (see Table 67). This equates to approximately 150 kg of harvested edible food per person.<sup>347</sup> In comparison, at the time of the NWHS, the purchase of “nutritious, perishable foods” from local retailers totalled approximately 165 kg per capita in 1999.<sup>348</sup> It is clear that country food is a critical component of the diet for many households in the North Baffin LSA.

Some limited research on nutrition in North Baffin households has been carried out under the federal food mail program. A study commissioned by INAC estimated that country food accounted for over half of the protein, and more than one-third of Vitamin A consumed by residents of Pond Inlet in 1997. At the same time, this source of nutrition added only 6% of sodium and less than one-quarter of the saturated fat of local diets—supporting the widely-held understanding that country foods are superior from a nutritional point-of-view (see Table 68).

Estimation of the monetary value of the North Baffin LSA country food harvest can be made by considering the cost of comparable foods available at the retail level. Two components of the retail food cost are considered. The first is the retail price. A conservative value of \$15/kg is assigned to the edible weight of the country food harvest. Since the retail price is heavily subsidized by the federal food mail program, an estimate of the subsidy level should be added to the retail price to come up with a realistic “replacement value.” Using this approach provides an estimated monetary value of nearly \$20 million per year for the North Baffin LSA harvest (see Table 67).

The harvest sector in Nunavut has thrived on the cultural strength of Inuit harvesting and food use traditions, rather than through the encouragement of subsidy programs. Nonetheless, the harvest is reliant on modern technologies involving costly inputs such as snow machines, boats, fuel, and ammunition. Since the food produced does not, for the most part, generate monetary returns to the harvesters, cash resources come largely from transfers from the wage economy. This

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<sup>347</sup> This estimate is derived by dividing the Nunavut Wildlife Harvest Study (NWHS) data collected a decade ago, with the population estimate for 2006. Although the population has increased, it is unknown whether the harvest level has increased in proportion. The assumption implicit in the 150 kilograms per capita estimate is that the harvest level has not kept up with population growth. Using population data for 2001, the per capita harvest would average 169 kilograms per capita in the LSA.

<sup>348</sup> Derived from Canada Post Food Mail shipment data provided by INAC, July 2010.

includes allocation of wages earned by family/extended family members toward harvest inputs as well as the sale of seal skins through a territorial government program.

The recent, “second wave” collapse of the seal market has again led to serious curtailment of seal skin revenues.<sup>349</sup> Across Nunavut, public sector support for country food harvesters has totalled approximately \$3.75 million per year (see Table 69).

Harvest levels have remained particularly strong in the North Baffin LSA communities, while the intensity of harvesting in Iqaluit is considerably lower on a per capita basis (see Table 70).

The rate of subsidy that is effectively applied to country food harvests is estimated to average approximately \$1.23/kg of edible food (see Table 71). This equates to between one-tenth to one-fifth the subsidy rate applied to southern foods transported for sale in the North Baffin LSA.

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<sup>349</sup> The first collapse of the seal market took place during the late 1970s and into the 1980s, leading to a ban on commercial seal imports by the European Parliament in 1983. These events and the implications for Inuit well-being is well-documented by Wenzel (1991).

**Table 66 Value Of Country Food Harvested In North Baffin Communities, 1996–2001**

HALL BEACH						
	EW (kg) per animal	Number harvested	Edible weight harvested	Replacement value per kg	Food Subsidy replacement value per kg	Value of total harvest
Caribou	45	810	36,450	\$ 15.00	\$ 7.26	\$ 811,377
Polar Bear	159	6	954	\$ 15.00	\$ 7.26	\$ 21,236
Arctic hare	2	23	46	\$ 15.00	\$ 7.26	\$ 1,024
Ringed Seal	23	657	15,111	\$ 15.00	\$ 7.26	\$ 336,371
Other seals	50	77	3,850	\$ 15.00	\$ 7.26	\$ 85,701
Walrus	460	95	43,700	\$ 15.00	\$ 7.26	\$ 972,762
Narwhal	496	3	1,488	\$ 15.00	\$ 7.26	\$ 33,123
Beluga	335	6	2,010	\$ 15.00	\$ 7.26	\$ 44,743
Geese	1.6	291	466	\$ 15.00	\$ 7.26	\$ 10,364
Eider duck	1	186	186	\$ 15.00	\$ 7.26	\$ 4,140
Ptarmigan	0.4	290	116	\$ 15.00	\$ 7.26	\$ 2,582
Eggs	0.075	1448	109	\$ 15.00	\$ 7.26	\$ 2,417
Fish - Arctic Char	2.5	6696	16,740	\$ 15.00	\$ 7.26	\$ 372,632
Fish - Lake Trout	1	555	555	\$ 15.00	\$ 7.26	\$ 12,354
Fish - Cod	1	42	42	\$ 15.00	\$ 7.26	\$ 935
Fish - Sculpin	1	0	-	\$ 15.00	\$ 7.26	\$ -
Fish - Turbot	1	0	-	\$ 15.00	\$ 7.26	\$ -
Clams	0.05	64	3	\$ 15.00	\$ 7.26	\$ 71
Total Annual Value Of Harvest						\$ 2,711,833
IGLOOLIK						
	EW (kg) per animal	Number harvested	Edible weight harvested	Replacement value per kg	Food Subsidy replacement value per kg	Value of total harvest
Caribou	45	1701	76,545	\$ 15.00	\$ 7.26	\$ 1,703,892
Polar Bear	159	10	1,590	\$ 15.00	\$ 7.26	\$ 35,393
Arctic hare	2	34	68	\$ 15.00	\$ 7.26	\$ 1,514
Ringed Seal	23	1799	41,377	\$ 15.00	\$ 7.26	\$ 921,052
Other seals	50	90	4,500	\$ 15.00	\$ 7.26	\$ 100,170
Walrus	460	152	69,920	\$ 15.00	\$ 7.26	\$ 1,556,419
Narwhal	496	7	3,472	\$ 15.00	\$ 7.26	\$ 77,287
Beluga	335	14	4,690	\$ 15.00	\$ 7.26	\$ 104,399
Geese	1.6	332	531	\$ 15.00	\$ 7.26	\$ 11,825
Eider duck	1	177	177	\$ 15.00	\$ 7.26	\$ 3,940
Ptarmigan	0.4	362	145	\$ 15.00	\$ 7.26	\$ 3,223
Eggs	0.075	3331	250	\$ 15.00	\$ 7.26	\$ 5,561
Fish - Arctic Char	2.5	13842	34,605	\$ 15.00	\$ 7.26	\$ 770,307
Fish - Lake Trout	1	114	114	\$ 15.00	\$ 7.26	\$ 2,538
Fish - Cod	1	91	91	\$ 15.00	\$ 7.26	\$ 2,026
Fish - Sculpin	1	79	79	\$ 15.00	\$ 7.26	\$ 1,759
Fish - Turbot	1	0	-	\$ 15.00	\$ 7.26	\$ -
Clams	0.05	23	1	\$ 15.00	\$ 7.26	\$ 26
Total Annual Value Of Harvest						\$ 5,301,330

continued...

ARCTIC BAY/NANISIVIK							
Species	EW (kg) per animal	Number harvested	Edible weight harvested	Replacement value per kg	Food Subsidy replacement value per kg	Value of total harvest	
Caribou	45	778	35,010	\$ 15.00	\$ 9.15	\$	845,492
Polar Bear	159	11	1,749	\$ 15.00	\$ 9.15	\$	42,238
Arctic hare	2	136	272	\$ 15.00	\$ 9.15	\$	6,569
Ringed Seal	23	1450	33,350	\$ 15.00	\$ 9.15	\$	805,403
Other seals	50	24	1,200	\$ 15.00	\$ 9.15	\$	28,980
Walrus	460	3	1,380	\$ 15.00	\$ 9.15	\$	33,327
Narwhal	496	74	36,704	\$ 15.00	\$ 9.15	\$	886,402
Beluga	335	14	4,690	\$ 15.00	\$ 9.15	\$	113,264
Geese	1.6	391	626	\$ 15.00	\$ 9.15	\$	15,108
Eider duck	1	16	16	\$ 15.00	\$ 9.15	\$	386
Ptarmigan	0.4	571	228	\$ 15.00	\$ 9.15	\$	5,516
Eggs	0.075	589	44	\$ 15.00	\$ 9.15	\$	1,067
Fish - Arctic Char	2.5	10237	25,593	\$ 15.00	\$ 9.15	\$	618,059
Fish - Lake Trout	1	8	8	\$ 15.00	\$ 9.15	\$	193
Fish - Cod	1	152	152	\$ 15.00	\$ 9.15	\$	3,671
Fish - Sculpin	1	34	34	\$ 15.00	\$ 9.15	\$	821
Fish - Turbot	1	0	-	\$ 15.00	\$ 9.15	\$	-
Clams	0.05	51	3	\$ 15.00	\$ 9.15	\$	62
Total Annual Value Of Harvest						\$	3,406,556

POND INLET							
Species	EW (kg) per animal	Number harvested	Edible weight harvested	Replacement value per kg	Food Subsidy replacement value per kg	Value of total harvest	
Caribou	45	1828	82,260	\$ 15.00	\$ 10.19	\$	2,072,129
Polar Bear	159	18	2,862	\$ 15.00	\$ 10.19	\$	72,094
Arctic hare	2	105	210	\$ 15.00	\$ 10.19	\$	5,290
Ringed Seal	23	2113	48,599	\$ 15.00	\$ 10.19	\$	1,224,209
Other seals	50	57	2,850	\$ 15.00	\$ 10.19	\$	71,792
Walrus	460	5	2,300	\$ 15.00	\$ 10.19	\$	57,937
Narwhal	496	119	59,024	\$ 15.00	\$ 10.19	\$	1,486,815
Beluga	335	1	335	\$ 15.00	\$ 10.19	\$	8,439
Geese	1.6	539	862	\$ 15.00	\$ 10.19	\$	21,724
Eider duck	1	30	30	\$ 15.00	\$ 10.19	\$	756
Ptarmigan	0.4	926	370	\$ 15.00	\$ 10.19	\$	9,330
Eggs	0.075	4098	307	\$ 15.00	\$ 10.19	\$	7,742
Fish - Arctic Char	2.5	12114	30,285	\$ 15.00	\$ 10.19	\$	762,879
Fish - Lake Trout	1	0	-	\$ 15.00	\$ 10.19	\$	-
Fish - Cod	1	6	6	\$ 15.00	\$ 10.19	\$	151
Fish - Sculpin	1	47	47	\$ 15.00	\$ 10.19	\$	1,184
Fish - Turbot	1	0	-	\$ 15.00	\$ 10.19	\$	-
Clams	0.05	1	0	\$ 15.00	\$ 10.19	\$	1
Total Annual Value Of Harvest						\$	5,802,471

continued...

CLYDE RIVER							
	EW (kg) per animal	Number harvested	Edible weight harvested	Replacement value per kg	Food Subsidy replacement value per kg	Value of total harvest	
Caribou	45	349	15,705	\$ 15.00	\$ 9.29	\$ 381,474	
Polar Bear	159	9	1,431	\$ 15.00	\$ 9.29	\$ 34,759	
Arctic hare	2	55	110	\$ 15.00	\$ 9.29	\$ 2,672	
Ringed Seal	23	2004	46,092	\$ 15.00	\$ 9.29	\$ 1,119,575	
Other seals	50	32	1,600	\$ 15.00	\$ 9.29	\$ 38,864	
Walrus	460	0	-	\$ 15.00	\$ 9.29	\$ -	
Narwhal	496	20	9,920	\$ 15.00	\$ 9.29	\$ 240,957	
Beluga	335	0	-	\$ 15.00	\$ 9.29	\$ -	
Geese	1.6	127	203	\$ 15.00	\$ 9.29	\$ 4,936	
Eider duck	1	133	133	\$ 15.00	\$ 9.29	\$ 3,231	
Ptarmigan	0.4	1214	486	\$ 15.00	\$ 9.29	\$ 11,795	
Eggs	0.075	373	28	\$ 15.00	\$ 9.29	\$ 680	
Fish - Arctic Char	2.5	8463	21,158	\$ 15.00	\$ 9.29	\$ 513,916	
Fish - Lake Trout	1	0	-	\$ 15.00	\$ 9.29	\$ -	
Fish - Cod	1	292	292	\$ 15.00	\$ 9.29	\$ 7,093	
Fish - Sculpin	1	1778	1,778	\$ 15.00	\$ 9.29	\$ 43,188	
Fish - Turbot	1	88	88	\$ 15.00	\$ 9.29	\$ 2,138	
Clams	0.05	9331	467	\$ 15.00	\$ 9.29	\$ 11,332	
Total Annual Value Of Harvest						\$ 2,416,608	

Source: Prepared by Brubacher Development Strategies.

Notes: 1) Five-year mean harvest levels are from the August 2004 report of the Nunavut Wildlife Harvest Study, NWMB, 2004, Priest and Usher. The survey was carried out between 1996 and 2001.

2) Edible weights (EW) are from: Ashley, Bruce. 2002. "Edible weights of wildlife species used for country food in the Northwest Territories and Nunavut." RWED, GNWT. Manuscript Report No. 138.

3) Replacement values are estimates of the cost to purchase comparable food at local retail stores. The \$15/kg value is considered conservative. GSGislason and Associates Ltd., is its 2005 study on the "Benefits of Small Craft Harbours Seven Communities in Nunavut," assigned a value of \$20/kg for country food. They noted, that "the \$20/kg valuation reflects both the higher cost of food in the North and the high protein content of country food."

4) Subsidy replacement is an estimate of the value of the federal food subsidy ("food mail") that is applied to offset freight costs of nutritious foods. The applied subsidy rates is an estimate derived from the June 25 2009 First Air Domestic Cargo Tariff schedule, using rate code "2194" (food).

**Table 67 Total Harvest and Job Equivalents in the Non-Commercial Harvesting Sector**

Community	Edible Harvest (kg)	Total Harvest Value (\$)	Job Equivalents
Hall Beach	121,825	2,711,833	77
Iqloolik	238,155	5,301,330	151
Arctic Bay	141,058	3,406,556	97
Pond Inlet	230,348	5,802,471	166
Clyde River	99,490	2,416,608	69
<b>Total LSA</b>	<b>830,877</b>	<b>19,638,798</b>	<b>561</b>

Notes: 1) Estimated harvest volume and value is derived from Table 64.

2) Job equivalents are based on the same \$35,000 per job as used in the determination of wage economy job equivalents. The total harvest value divided by \$35,000 yields the 'job equivalents' value. These jobs would be distributed across the economy since the "value" includes both primary production as well as retail dimensions that are incorporated into the basis for assigning "value."

**Table 68 Sources of Dietary Nutrients, Pond Inlet – 1997**

Food Category	Calories	Protein	Vitamin A	Sodium	Saturated Fat	Carbohydrate
(proportion of diet filled by food category)						
Food Mail 'A'	26%	21%	42%	28%	39%	25%
Food Mail 'B'	22%	10%	16%	48%	13%	39%
Convenience Perishable	7%	10%	2%	8%	9%	2%
Foods of Little Nutritious Value	19%	3%	2%	10%	16%	34%
Country Food	26%	55%	37%	6%	23%	0%

Source: Adapted from Dialogos Educational Consultants Inc. 2001. Change in Nutrition and Food Security in Two Inuit Communities, 1992 to 1997. Appendix C, Table C-2, p. 4. Published by INAC. Note: The “convenience perishable” category is reported in the original document to include mainly frozen breaded fried chicken.

**Table 69 Support for Country Food Harvesting Across Nunavut**

Program related to harvest of country foods	Budgeted Funding Level (\$)
<i>Nunavut Wildlife Management Board</i>	
HTO core funding	1,817,152
RWO core funding	714,435
<i>Government of Nunavut</i>	
HTO core funding	317,000
RWOs core funding	223,000
Community Harvesters Assistance Program	251,000
Community Organized Hunts	45,000
Hunters and Trappers Disaster Compensation	20,000
Workers Safety & Compensation Commission coverage (3-yr avg)	559,547
Fur Pricing Program	not available
Fish Freight Subsidy	not available
Community Freezers	not available
Nunavut Development Corporation meat and fish plant support	not available
<i>Nunavut Tunngavik Inc.</i>	
Nunavut Harvester Support Program (NHSP)	
Capital Equipment Program	2,000,000
Small Equipment Program	250,000
Women's Role in Harvesting	250,000
Traditional Knowledge Enhancement Program	200,000
Community Harvest Program	177,000
Program administration	500,000
<i>Total Harvester-Related Funding (includes organizational support)</i>	<i>7,324,134</i>
<i>Funding Related Directly To Harvesters</i>	<i>3,752,547</i>

Source: Aarluk Consulting, undated (circa 2006). “A consultation-based review of the harvester support programs of the Government of Nunavut and Nunavut Tunngavik Inc.” Prepared for the GN and NTI.

**Table 70 Harvesting In LSA and Iqaluit – Intensity And Public Support**

<b>North Baffin Communities</b>		
<i>Total who harvested in Nunavut (5-yr period)</i>		4,347
<i>LSA harvesters</i>		
Hall Beach		164
Iglolik		254
Arctic Bay		240
Pond Inlet		312
Clyde River		217
<i>Total LSA harvesters</i>		1,187
<i>LSA harvesters as % of all Nunavut harvesters</i>		27.3%
2001 LSA population		4,546
2001 Nunavut population		26,745
<i>LSA as % of Nunavut population</i>		17.0%
<i>LSA Harvest Intensity Factor</i>		1.6
Total Support To Harvesters	\$	3,752,547
<i>Support To LSA Harvesters (proportionate estimate)</i>	\$	1,024,678
<b>Iqaluit</b>		
Iqaluit		331
<i>Iqaluit harvesters as % of all Nunavut harvesters</i>		7.6%
2001 Iqaluit population		5,236
<i>Iqaluit as % of Nunavut population</i>		19.6%
<i>Iqaluit Harvester Intensity Factor</i>		0.39
<i>Support To Iqaluit Harvesters (proportionate estimate)</i>	\$	285,736

Source: Prepared by Brubacher Development Strategies.

Notes: 1) Information on number of harvesters is from Table 672 (Nunavut), Table 32 (Arctic Bay), Table 76 (Clyde River), Table 124 (Hall Beach), Table 148 (Iglolik), Table 240 (Pond Inlet), and Table 168 (Iqaluit) of the Nunavut Wildlife Harvest Study (Priest and Usher 2004). 2) The estimate of "total support to harvesters" is from Table 67. 3) The "harvest intensity factor" was calculated by dividing the local proportion of harvesters relative to all harvesters by the local proportion of the population relative to the population of Nunavut. For the LSA, this is 27.3% divided by 17%, yielding 1.6. A value over 1 indicates more intense harvesting than the territorial average, while a value less than 1 indicates a less-intense harvest level.

**Table 71 Estimated Subsidy Level for Country Food Production in the LSA**

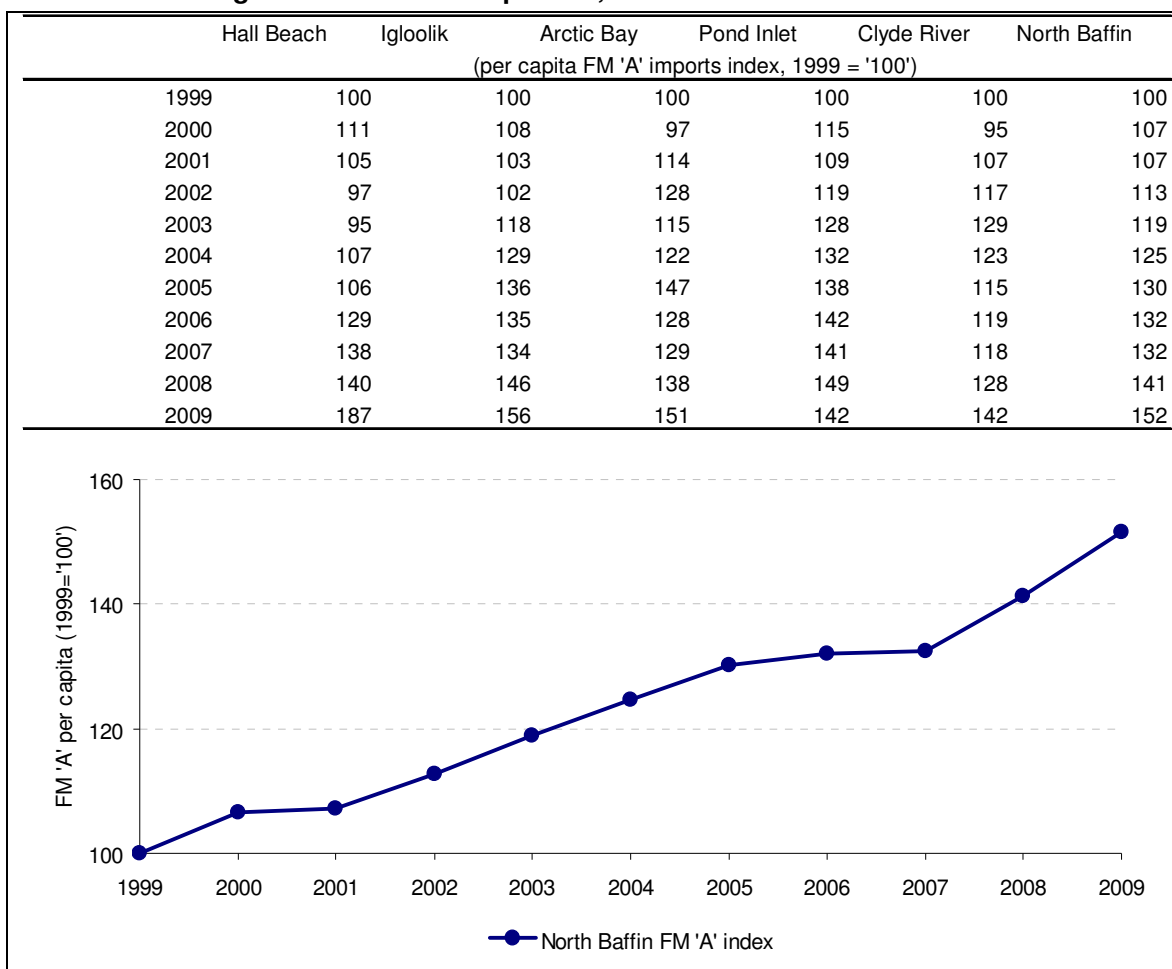
Community	Total Harvest (kg)
Hall Beach	121,825
Iglolik	238,155
Arctic Bay	141,058
Pond Inlet	230,348
Clyde River	99,490
<i>Total edible harvest</i>	830,877
Country Food Subsidy	\$1,024,678
<i>Subsidy per kg</i>	\$1.23

Source: Prepared by Brubacher Development Strategies. Harvest levels are from Table 65. Estimate for country food subsidy applied to LSA communities is from Table 68.

### 7.1.2 Increasing Importance of Retail Foods and Wage Income

Insight into the per capita consumption of retail foods can be gained by considering the level of foods shipped to local retailers. Nutritious perishable foods are highly subsidized through the federal government's food mail program, which offsets the high cost of air transport. The records of food shipments indicate that the amount of nutritious, perishable food shipped per person in the LSA has increased steadily since 1999 (see Table 72). During the decade, the total per capita shipments, presumably equal to per capita consumption of these store-bought foods, has increased by 52%.<sup>350</sup>

**Table 72 Change in Food Mail A Shipments, 1999–2009**



Source: Food Mail A shipments based on Canada Post data provided by INAC, July 2010. Population data from Statistics Canada, Demography Division, CANSIM Table 051-0001 and Table 051-0052, and Special tabulations. Prepared by Nunavut Bureau of Statistics, March 2, 2010.

Note: Per capita shipments, indexed to 1999.

<sup>350</sup> Data for "nutritious, perishable foods" is from Canada Post records of Food Mail A shipments to retail and individual customers in the five LSA communities.

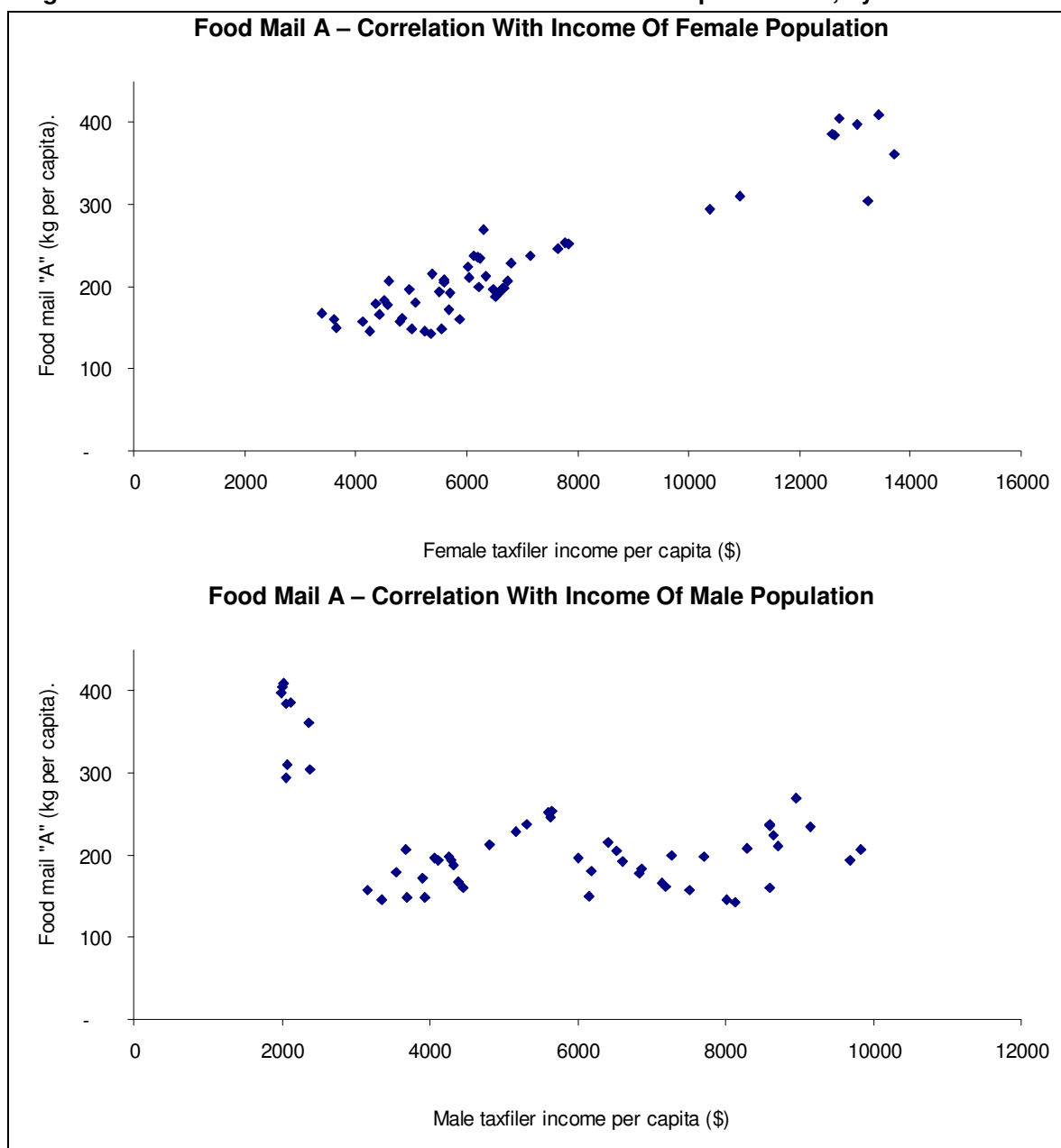
This observed increase in per capita retail food consumption would be consistent with an increasing reliance on retail foods to meet household nutritional requirements. While updated harvest data are not available,<sup>351</sup> a reasonable expectation is that the per capita harvest of country food is decreasing. This does not, though, imply that the total harvest has declined, since population growth has been robust over the same period.

A consequence of increasing reliance on retail foods is that the importance of household income in food security is also increasing. A positive relationship appears to exist between increasing income reported by women and the amount of nutritious, perishable foods purchased from retailers (see Figure 51). This relationship does not extend to income reported by men, possibly suggesting gender differences in household spending decisions.<sup>352</sup>

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<sup>351</sup> The NWHS has not been repeated and its data is now more than a decade old.

<sup>352</sup> This analysis is based on community-level rather than household-specific data (which was not located). It should be considered indicative only. Further investigations into household expenditure and decision-making would be useful here.

**Figure 51 Correlation Between Food Purchase and Per Capita Income, by Gender**

Source: Prepared by Brubacher Development Strategies. Total volume of Food Mail A and B for the period 1999 through 2007 provided by Canada Post and INAC. Total income earned by males and females is from Statistics Canada, SAADD (LIP Tables), 1999 through 2007.

### 7.1.3 Community Perspectives on Access to Healthy Food

The fundamental importance of wildlife as a key food source was made during many public meetings and in other sessions with the HTOs and other community groups. These are presented in more detail in chapters on wildlife.

One such comment is provided here for context:

“We try to say... ‘will the animals be in a safe place?’ because we eat the animals, and food costs a lot in the store, and if you destroy our animals we are afraid of that. You [in the south] have options to choose the cheapest food but here we are not given the choice. Can you guarantee that the animals will be preserved and protected? If possible, let’s say if there is disruption of marine mammals and birds, what will happen let’s say if there is evidence that the animals have disappeared. Can you give us replacement food to eat? Because we tried to tell you the real concerns we have.”<sup>353</sup>

While recognizing the importance of country food, many people spoke in a variety of contexts about how reliance on country food is changing. This change is strongly aligned with generations:

“Young people are not as into country food but everything in the store is very expensive. So we, as older people harvest food. This is our basic foundation. Protection of our environment is important to us.”<sup>354</sup>

“I am a hunter, but I have children who need store-bought food. I am in support of employment, but everyone needs to be in agreement so [there will be] less problems later on.”<sup>355</sup>

Others noted how expensive it is to hunt for country food. One young man was asked how he uses his spare time:

“Go hunting, all the time, winter, fall, spring. Goes with his older brother. It’s “very expensive” to go out hunting. His dad also gets out to hunt.”<sup>356</sup>

Another man spoke about the cost of hunting and how even hunters need income so they can buy ammunition and related tools and supplies:

“We say [we are] ‘self-sufficient’ but what do we mean by that?”<sup>357</sup>

This situation was also well-expressed during an exchange between an Elder and a young woman at the Arctic Bay meeting of North Baffin working groups. In response to the Elder’s request to youth that, “As an Elder, I want you to work, but I also want you to go hunting:”

[Youth]: “Thank you. Yes, prices are going up. And, to buy hunting equipment, we need jobs. Gas prices go up and unemployed people can’t afford to hunt. You want to keep both sides, but this can’t always work in the future. After experiencing this personally, I know that future generations won’t survive unless we have graduates and people who have good jobs. Through the radio you can hear people selling off their belongings to make money. Money will be very important.”

[Elder]: “When I think about employed people, I see that they can take time off on weekends and are able to go hunting. [She] said people will only focus on jobs, but I think this will continue where people can go hunting on their time off. They do need education

<sup>353</sup> An Elder woman speaking at Arctic Bay public session hosted by Baffinland, March 2008.

<sup>354</sup> Hamlet leader 1, comment offered during Pond Inlet ED&T Workshop, November 2007.

<sup>355</sup> Comment offered during Igloolik public meeting hosted by Baffinland, September 2007.

<sup>356</sup> Male applicant 2, interviewed May 2008.

<sup>357</sup> Hamlet leader 2, comment offered during Pond Inlet ED&T Workshop, November 2007.

to get better jobs, as it is impossible to get things without money. I have no job, and no money to buy a skidoo so I can only walk around town.”

[Youth]: “There are three generations here. Yes, the next generation will have options, but how can I be a hunter unless I have a job to buy hunting equipment? At my age, we need things and to get these things, we need education. For myself, I believe that you can get an education and also learn hunting as a parallel so that you can always have a choice. But, if I want money to buy a skidoo, I have to earn it. I want both sides—a job and hunting. I want my children to keep both sides, to eat country food but also to have jobs. I think in the future there can be options either way.”

Recognizing the rapid changes that have occurred in southern foods over recent years, a researcher wondered how knowledge of southern food ingredients has been passed along to the younger generations:<sup>358</sup>

[Researcher]: “Do people know how to cook good meals cheaply with Qallunaat food—dry beans, flour, rice—or is it more prepared foods that people buy?”

[Male worker 7]: “Oh yes! Flour, oatmeal, and so on. The young people are learning how to cook this food from their families.”

[Researcher]: “I’ve never seen an Inuktitut cookbook.”

[Male worker 7]: “It’s almost like a good Inuit carpenter who doesn’t speak English. They know how to build without a blueprint. In springtime, most people eat country food—char, snow goose, Canada goose, seals, narwhals. We don’t have much caribou right now around here.”

Concern about the cost of food was also frequently raised. For example, one worker was asked if he put any of his earnings into a retirement savings plan:<sup>359</sup>

“Retirement savings? No. I don’t have anything left for that. It’s too expensive up here. Groceries for our family—it’s about \$100 to \$200 per day for our family members plus others who come by—we feed about 14 people. Son and his kids and common-law. Sometimes we cook from scratch rather than prepared food. Whoever comes by, we’ll share what we have—I don’t like to have leftovers....

“[I] have never done food mail—you need credit cards for that and people don’t have those. But Northern is getting new MasterCards that you put money into the account and then you can use it like a credit card.

“During Nanisivik we got a freight allocation, 200 kg per person every year. First time I got 250 kg just for myself. When I married it went to 200 kg for each of us. Then with the kids, we got an additional 150 kg per child. It saved us a lot of money on that. ‘Mostly used it for food.’”

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<sup>358</sup> Male worker 7, interviewed May 2008.

<sup>359</sup> Male worker 5, interviewed May 2008.

The freight allocation provided by the former Nanisivik Mine was noted by others as well:

“When the mine was open, we used to have a sealift order from the south and we had a freight allocation—that helped a lot. People would bring in food but also other stuff—whatever they need. I once brought a pick-up up on the Nanisivik barge and I only had to pay the low Nanisivik rate. We also had freight subsidy to bring food up by the jet. Here the food is so expensive. Like, sometimes, a lot of people don’t have clothes—the food is very expensive.”<sup>360</sup>

This concern about high food prices is also referenced in the local community economic development plans. For example, the Hamlet of Arctic Bay (2007) plan suggests that:

“Most disposable income is spent on food, according to many people in the community there is not enough money in the community for food and other necessities. Most of the money is leaving the community.”

Elsewhere in that document, it is noted that smoking rates are high and that drug and alcohol abuse are of concern. Clearly significant amounts of disposable income are leaving the community in the form of payments for these costly consumer goods.

Reference to expenditure on junk food such as pop and chips was made during other discussions. For example, one person noted how the cost of food can influence food choice, and provided a suggestion for how Baffinland might be able to assist in lowering food costs:

“...you can buy a bag of chips and a pop for as much as it costs for two oranges...when I have fruits and vegetables over at my place, most people will eat those things first...before they eat the crap...but, if you only have so much money, then you’re buying the junk, because that’s actually [more filling]...so, if Baffinland is looking for a way to support without putting out extra money for other stuff, maybe what they could do is with all the freight that’s coming in, is there some kind of subsidy you could have for nutritious food...”<sup>361</sup>

The cost of food, possibly combined with money management decisions, leads many people on income support to run short of money before their next payment is received. Gaining work provides better access to food:

“...for many people, income support lasts only two to three weeks of the month—the money runs out before the next cheque comes in.”<sup>362</sup>

“I have friends who have worked at Nanisivik. Their work led to better food, more self-esteem. Anything is better than Income Support.”<sup>363</sup>

It seems clear that the issue of access to healthy food involves both the cost of food as well as the choices that people are making with their scarce disposable income. Poor choices are, in many instances apparently, diverting limited funds away from nutritious food, contributing to food

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<sup>360</sup> Male worker 7, interviewed May 2008.

<sup>361</sup> Comment made during Arctic Bay Economic Development Committee Workshop, May 2008.

<sup>362</sup> Public sector 3, interviewed March 2007.

<sup>363</sup> Public sector 4, comment made during workshop session with GN HSS SMC, April 2008.

insecurity as well as to major health problems. Nunavut's social assistance program is not designed to restrict or influence what recipients spend their monthly entitlements on.

#### 7.1.4 Traditional Sharing Networks

Accessing food is identified to be a problem for some families. It is not uncommon for people who have run out of food or income support funds to go on the radio to request help. Although the intensity of social connectedness is said to be reduced from the past, food sharing is common:

“...families make announcement of their needs. Inuit culture used to be a survival mode to help those in need. But today even though they try to help, the social connection is reduced. But still they share their catch [from hunting]. Not everyone does it but some do it.”<sup>364</sup>

In some communities, efforts to strengthen traditional sharing networks are being made. For example, in Arctic Bay:

[Public Sector 14]: In Arctic Bay people are pulling together to help each other out. They have a Food Bank Collection Drive at the beginning of December, with food delivered to people later in the month. Throughout the year, people will go on the radio if they have food to share—say someone gets a caribou or lots of char. People who have wage jobs will buy gas to give to hunters who will then hunt for that person.<sup>365</sup>

A hamlet leader indicated that traditional knowledge around country food is based on sharing among family — “that's the foundation of our culture. That's why we run into problems with commercialization of country food.”<sup>366</sup>

Sharing money is also common in extended families. However, as evident from the following comment pressure on sharing networks sometimes emerges:

“People are trying to get money all the time. People will get drugs or alcohol in any way they can. They will neglect to get food to get these things. We who have jobs give money to our family members thinking (hoping) it will go for food, but it goes to drugs.”<sup>367</sup>

## 7.2 HOUSING

### 7.2.1 Community Perspectives on Housing

Interviews with workers and other community-level discussions did not provide a strong sense that people who begin working at a mine project will choose to purchase their own home:

“I never bought a house when I was working at Nanisivik—you never know, you might be moving from one place to another. It's better to rent [through NHC social housing].”<sup>368</sup>

“Even the housing is pretty expensive—electric bills, they go by income, based on tax returns. Housing rent too. Last year it was \$700, before \$300, maybe this year \$1000.

<sup>364</sup> North Baffin Male Resident 5, interviewed by Richard Akoto, March 2008.

<sup>365</sup> Interviewed in 2007.

<sup>366</sup> Comment made during Pond Inlet ED&T Workshop, November 2007.

<sup>367</sup> Comment made during Pond Inlet HSS Workshop, February 2008.

<sup>368</sup> Male worker 7, interviewed May 2008.

This includes fuel, but not electric bills—but we pay only about 10% of the electric cost. It would be too expensive to buy a house up here. Fuel is so expensive....<sup>369</sup>

Concerns related to Nunavut's income-based rent scale for publicly provided housing were also raised. One commentator at a public consultation session remarked:

"Whatever income we make is closely scrutinized by housing [NHC]. As employed people there is not much we can do, although somehow they should allow more leniency in how incomes are generated in the household."<sup>370</sup>

A possible origin for this perspective on publicly-provided housing and earned income is suggested in another comment made during the same public session in Igloolik:

"We used to live in the Steensby Inlet and beyond. I used to live in that area. I have a concern—that is that when we moved to Igloolik our children went to school and we were told we could be given houses and only be charged a \$2 rental fee."<sup>371</sup>

Further perspective on local housing perspectives was offered by an elderly woman during a public session in Arctic Bay. She noted:

"The way the rent is now, household income has an impact on the rent scale, and that should be considered somehow in the pay scale. They should continue to get their own homes, because everything is going up in cost. And, for the future, I am thinking the young people when they get employed should be able to get a house because they can learn to pay their own expenses."<sup>372</sup>

Concerns are raised that employment income will lead some families to incur arrears in their rent obligations.<sup>373</sup> These concerns arise from money management issues, possibly combined with some resistance to paying income-adjusted rents based on local understandings of the arrangements made not so long ago when Inuit were first moving into serviced communities. Those arrangements did not, apparently, indicate that housing costs would vary according to economic productivity.

### 7.2.2 Ownership of Houses

An estimated 44% of Nunavut's housing stock, or some 4,086 units, is owned by the public housing system, in which over half (54%) of all Nunavummiut reside.<sup>374</sup> The Nunavut Housing Corporation has funded the construction of 415 new units since 2000. One-third of houses are privately owned, with a large proportion (45%) of these private owners benefiting from government home ownership assistance programs. The rental market for residential housing accounts for 7% of the territory's housing stock, while government staff housing makes up 14%.

<sup>369</sup> Male worker 5, interviewed May 2008.

<sup>370</sup> Igloolik public consultation session hosted by Baffinland, March 2008.

<sup>371</sup> The reference here is to the movement of families off the land into permanent communities.

<sup>372</sup> Arctic Bay public consultation session hosted by Baffinland, March 2008.

<sup>373</sup> Interview with a local housing authority tenant relations officer, 2008.

<sup>374</sup> These data are from the 2007-2008 Business Plan of the Nunavut Housing Corporation. This document notes that across Canada, the mix for residential housing is 70% occupant-owned, 14% rental, and only 6% public social housing.

The proportion of homes owned by someone who lives in the home is significantly lower than the private home ownership numbers suggest. This is due to the fact that some privately owned units are rented to government or other organizations for the purposes of social housing or staff housing. For example, while 31% of homes in Iqaluit were reported by the Canadian Mortgage and Housing Corporation (CMHC) to be privately owned in 2005 (see Table 73), the 2006 census found that just under one-in-four (23%) of homes in Iqaluit are owned by an occupant of the house (see Table 74).

In most North Baffin communities, approximately one-in-five families own the home in which they live, slightly more in Arctic Bay and slightly less in Pond Inlet. In Hall Beach, though, only one-in-ten families own their own house. The stock of owner-occupied homes was fairly stable between 2001 and 2006 in the LSA communities, with possible slight declines in Hall Beach, Igloolik, and Pond Inlet. During this time the stock of rental units increased so the proportion of home ownership has declined over this period (see Table 74). In Iqaluit, the rate of owner-occupied homes is similar to that of North Baffin, although the trend is different, increasing from 20% to 23% over the five-year period between censuses.

**Table 73 Housing Stock In Iqaluit – CMHC 2005 Survey**

<i>Ownership Type</i>	<i>Number Of Units</i>	<i>Percentage</i>
Private home ownership	759	31%
Other home ownership	153	6%
<b>Total home ownership</b>	<b>912</b>	<b>37%</b>
Government staff housing	735	30%
Other staff housing	191	8%
Social housing (public)	421	18%
Rental market – private individuals	171	7%
<b>Total home rental</b>	<b>1,522</b>	<b>63%</b>
<b>Total Iqaluit housing stock</b>	<b>2,434</b>	<b>100%</b>

Source: CMHC presentation, "Iqaluit Nunavut Housing Overview." Based on CMHC October 2005 Survey.

**Table 74 Owner-Occupied and Rental Housing – Census Estimates**

	2001 Census			2006 Census		
	Owned	Rented	% Owner-Occupied	Owned	Rented	% Owner-Occupied
	(number of units)			(number of units)		
Hall Beach	20	100	16.7%	15	125	10.7%
Igloolik	70	205	25.5%	65	265	19.7%
Arctic Bay	35	110	24.1%	35	130	21.2%
Pond Inlet	60	210	22.2%	55	250	18.0%
Clyde River	35	110	24.1%	35	135	20.6%
Iqaluit	365	1415	20.5%	480	1595	23.1%

Source: Statistics Canada 2001 and 2006 census, Community Profiles.

Note: Social housing units are included as rental housing.

### 7.2.3 Private Housing Market

The housing market in North Baffin is very small. During the 10-year period leading to 2008, only one or two sales took place per year per community in the LSA (see Table 75). The housing market in Iqaluit is significantly more vibrant with 20 times more sales than in the North Baffin, on a population-adjusted basis.

The high rate of social housing in the LSA is understood to arise from several factors. First, many households lack an adequate income to support the purchase, maintenance and operations of a private house. In Iqaluit, where skilled trades people are readily available, it was determined by Habitat for Humanity that a minimum income of some \$90,000 per year would be needed. In the LSA, the cost and complexity of maintaining a private home would be expected to be considerably higher.

For others who may have adequate income, the economics may be perceived to not favour home ownership. There are anecdotal instances where home owners have decided to sell their home and move back into social housing due to a perception that the bottom line is more favourable. The lack of a local private housing market may also play a factor, both in terms of availability of houses to purchase, as well as the impact that the lack of market has on the ability to determine fair market value. While high income earners in Iqaluit have had at least some access to houses to purchase, and have been able to determine established house price trends, those in North Baffin have not.

**Table 75 Private House Sales in Nunavut – 1999 Through 2008 (Q3)**

	High Ratio CMHC- Insured Loans (number of loans)	2009 Population	Annual house sales per 1000 population
Hall Beach	0	702	-
Igloolik	19	1,639	1.2
Arctic Bay	7	728	1.0
Pond Inlet	26	1,424	1.8
Clyde River	21	895	2.3
Iqaluit	1,965	6,832	28.8
North Baffin	73	5,388	1.4
South Baffin	56	3,774	1.5

Source: Provided by Government of Nunavut, Department of Finance, 2008.

Notes: High-ratio CMHC mortgage loans are those that account for 75% or more of the sale price. This is believed to account for well over 90% of sales in Nunavut.

#### 7.2.4 Cost of Housing and Home Maintenance

The cost of rental housing in Iqaluit was surveyed by CMHC in October 2005. The average rent for a three-bedroom unit—typically in a row house configuration—was \$2,648. A two-bedroom unit, most often an apartment, had a monthly rent of \$2,100. These rates had not increased during the preceding two years. Rents for smaller units—bachelor and one-bedroom apartments—underwent increases of 3.9% and 4.9% respectively over the two-year period between 2003 and 2005. During the CMHC survey all units were rented, meaning the housing vacancy rate was at 0%.

The sale price of Iqaluit houses sold during the first half of 2005 ranged from \$200,000 to \$445,000 with an average sale price of \$337,993.<sup>375</sup>

<sup>375</sup> CMHC, based on the sale of 18 houses during the first six months of 2005.

### 7.2.5 Social Housing

Across the communities of the North Baffin LSA, approximately four-of-six people live in social housing (see Table 76). In Iqaluit, only one-in-six people live in social housing.

Social housing rent data provide a baseline against which future change in income among the social housing tenant population can be measured. The amount of rent paid by social housing tenants varies across the LSA (see Table 77). Two-thirds of tenants in Igloolik pay \$60 per month, while in Hall Beach the rate is less than half this level. Hall Beach is also the community with the highest proportion of social housing units being assessed \$1000 or more per month. Clyde River and Pond Inlet also stand out as communities with relatively more tenants paying rents at the higher scale.

**Table 76 Population Living in and Waiting for Social Housing**

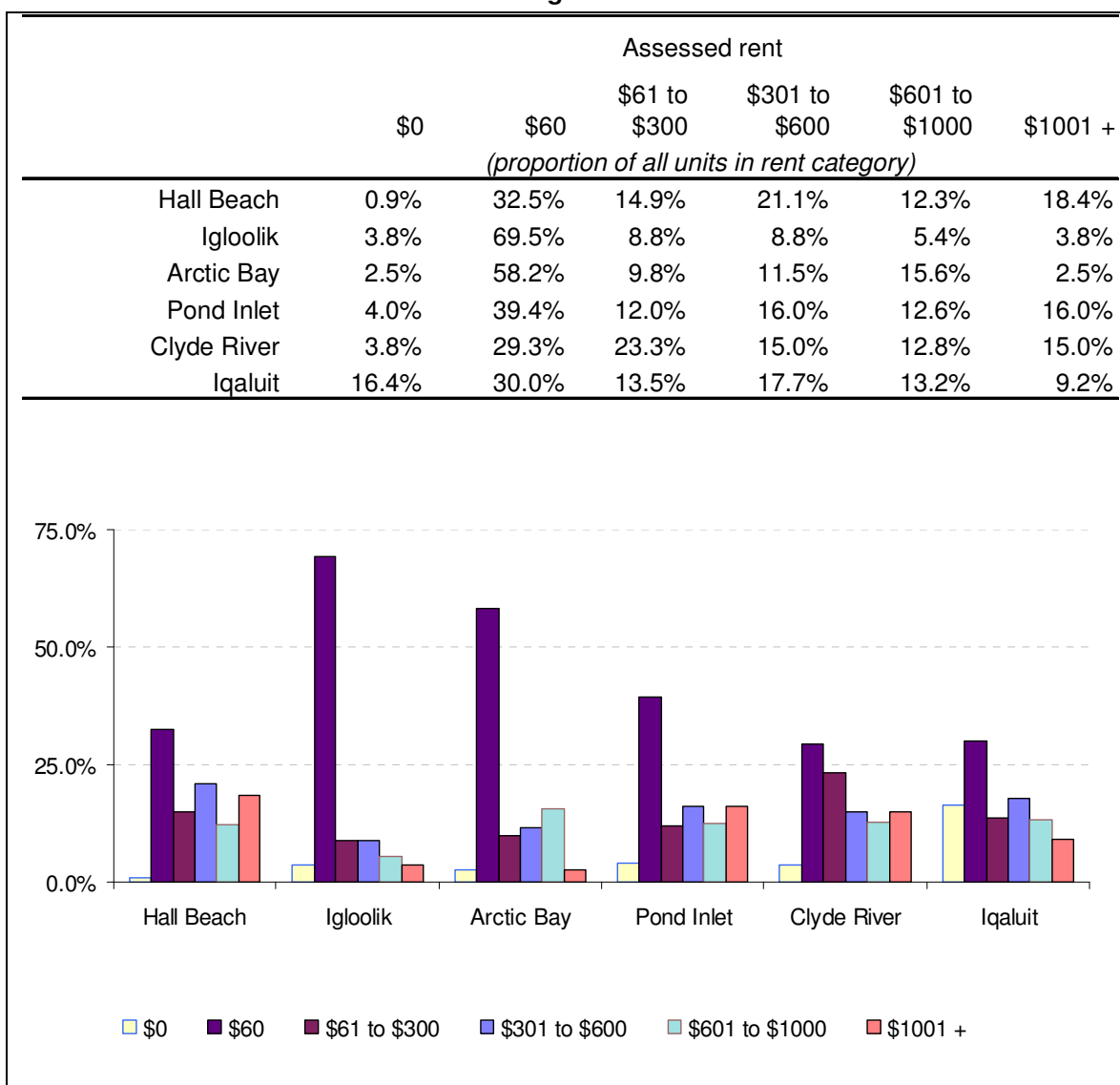
		Population	Tenants	Waiting List	Percent of	Percent of
		(number of people)			population in	population on
					social housing	waiting list
2010	Hall Beach	702	487	32	69%	4.6%
	Igloolik	1,639	1,068	76	65%	4.6%
	Arctic Bay	728	487	44	67%	6.0%
	Pond Inlet	1,424	866	58	61%	4.1%
	Clyde River	895	642	54	72%	6.0%
	Iqaluit	6,832	1,101	241	16%	3.5%
	North Baffin	5,388	3,550	264	66%	4.9%
2006	South Baffin	3,774	2,374		63%	
	Hall Beach	735	460		63%	
	Igloolik	1600	900		56%	
	Arctic Bay	636	445		70%	
	Pond Inlet	1310	794		61%	
	Clyde River	850	545		64%	
	Iqaluit	6200	1242		20%	
	North Baffin	5,131	3,144		61%	

Source: 2006 data from the Nunavut Housing Corporation report, Building Connections in Nunavut - Trends Report - March 2006, Appendix F. Data for 2010 provided by NHC, July 2010.

Note: Individuals on waiting lists might also be counted among the tenants.

Interpretation of these data suggests that in these communities more working households are living in social housing, either by choice or because of a lack of availability of houses to purchase on the private market. The scenario in Igloolik suggests a greater proportion of working households living in private housing.

The rent assessment profile for Iqaluit is slightly different, with a high proportion paying no rent, likely reflecting a population of students living in social housing, a relatively high concentration at the mid-range rent levels, and a modest level at the \$1000 or more level. This might reflect the more robust private housing market where high income earners are able to find private houses to purchase.

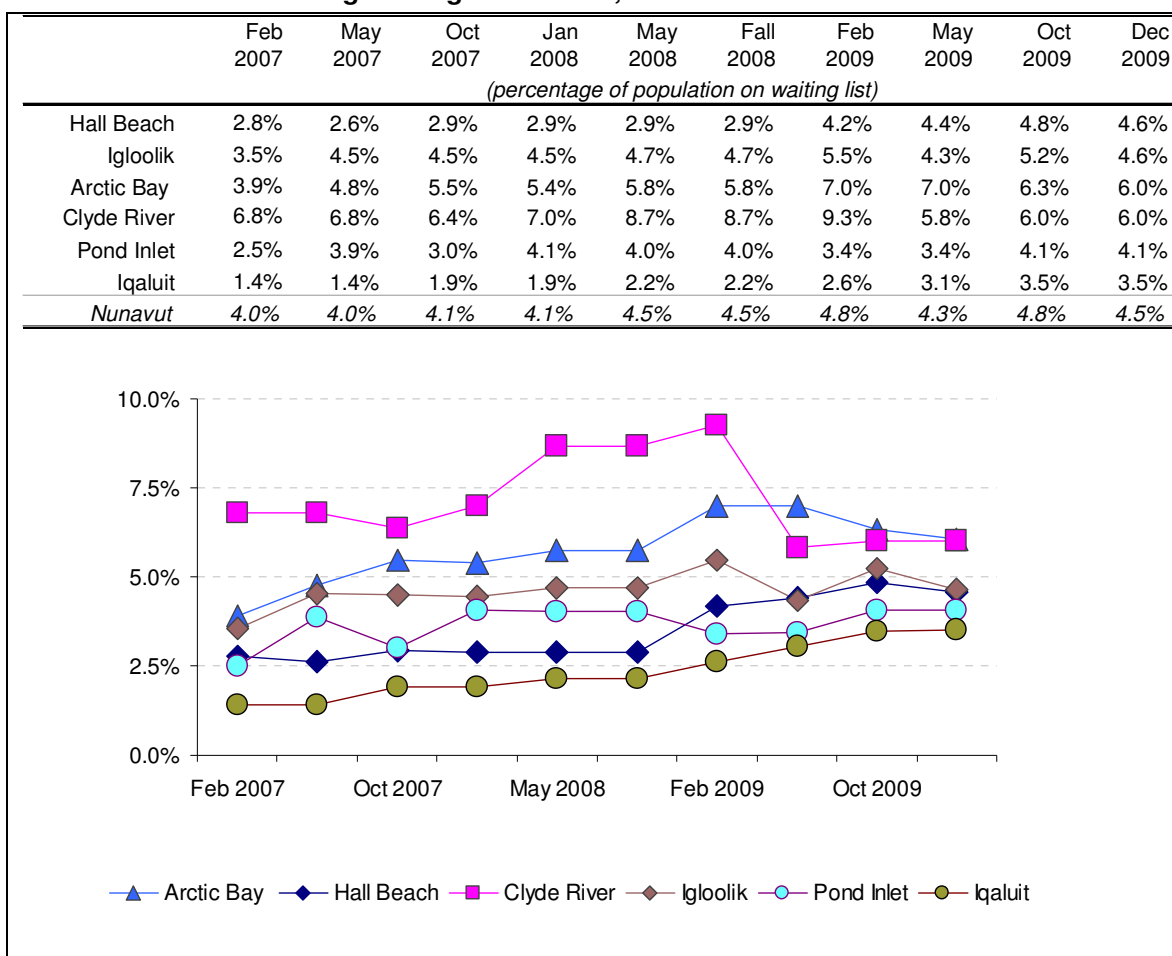
**Table 77 Rent Assessed to Social Housing Tenants – 2010**

Source: Derived from data provided by Nunavut Housing Corporation, July 2010.

### 7.2.6 Housing Need

Insight into the level of inadequate housing can be gained from the waiting list for housing (see Table 78). In the LSA communities between 4% to 6% of the population is living in housing arrangements that are sufficient to motivate individuals to maintain an active application for improved housing and to be approved for inclusion on the waiting list. Criteria for inclusion involves a blend of factors ranging from housing standards related to numbers of people per room, and to the placement of children over the age of five into separate bedrooms, as well as to other factors such as personal safety and multiple generations of families living in the same unit.

The waiting list is highest in Clyde River and Arctic Bay and lowest in Iqaluit. In Igloolik and Pond Inlet, the population living in inadequate housing has been stable over the past few years, while in other communities it has been edging upward. After a jump in Clyde River toward the end of 2007, new construction has served to bring the waiting list more in-line with other communities.

**Table 78 Social Housing Waiting List Trends, 2007–2009**

Source: Derived by Brubacher Development Strategies from data provided by Nunavut Housing Corporation, July 2010.

## 7.3 HOUSEHOLD INCOME

### 7.3.1 Level of Household Income

The level of income of households in both the North Baffin LSA as well as in Iqaluit is influenced tremendously by the configuration of the household structure. Lone-parent (single-parent) families have income levels that are substantially lower than those of couple (two-parent) families.

In four of the five communities of the North Baffin LSA, the median income<sup>376</sup> of lone-parent families ranged between \$19,760 (Clyde River) to \$23,830 (Igloolik) in 2007. The median income in Hall Beach was substantially higher, at \$28,930 in that year (see Table 79). This contrasts with a median income for this household configuration of \$42,390 in Iqaluit, a level twice that of Arctic Bay and Clyde River, and substantially higher than the other communities of the LSA.

<sup>376</sup> Statistics Canada definition of median income: "Median is the middle number in a group of numbers. Where a median income, for example, is given as \$26,000, it means that exactly half the incomes reported are greater than or equal to \$26,000, and the other half are less than or equal to the median amount. Median incomes in the data tables are rounded to the nearest hundred dollars. Zero values are not included in calculation of medians for individuals, but are included in the calculation of medians for families." Statistics Canada, *Census Families Users' Guide*, Catalogue 13C0016.

**Table 79 Income in Lone-Parent Families and Couple Families, 1997–2007**

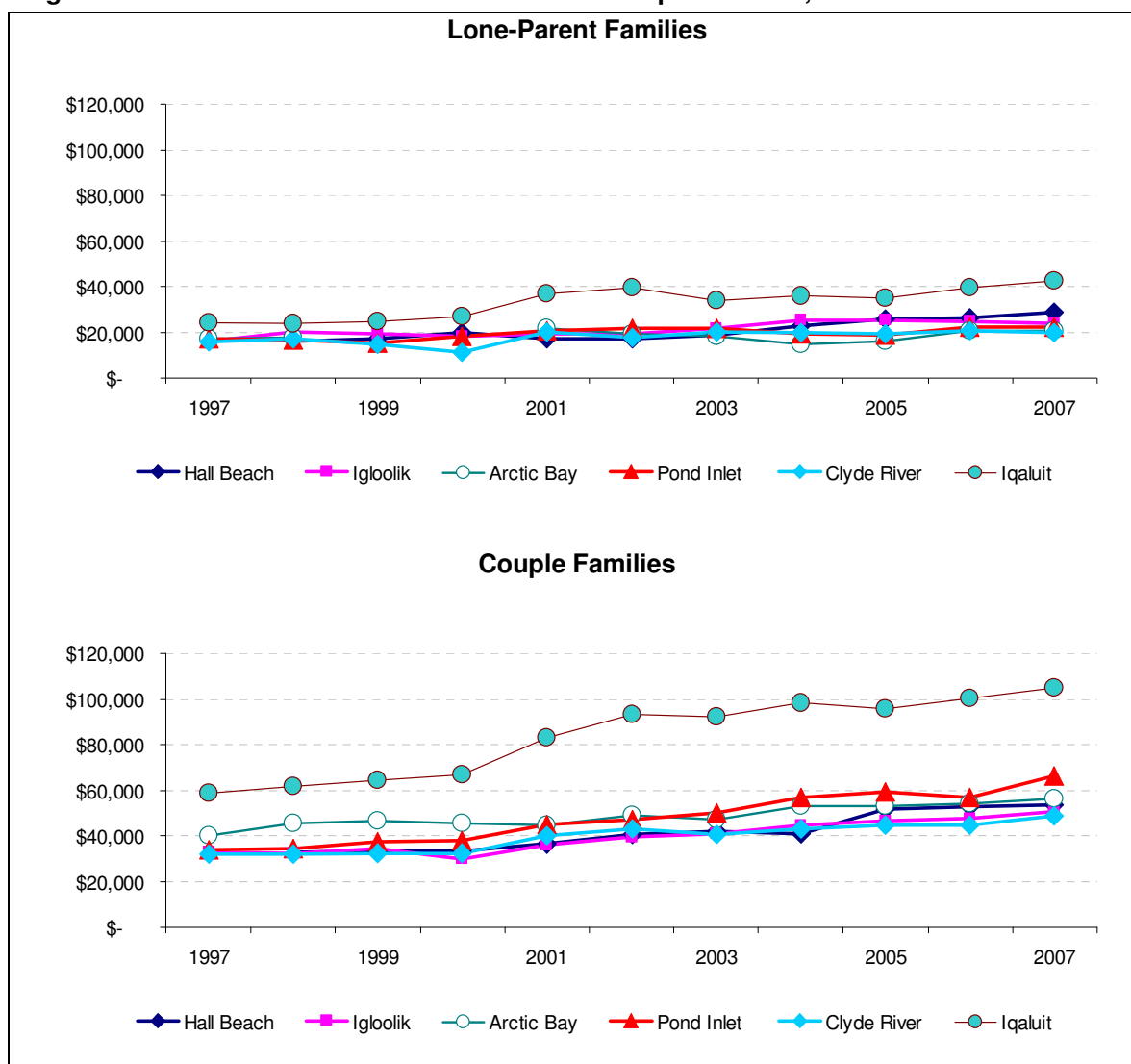
	Hall Beach		Igloolik		Arctic Bay		Pond Inlet		Clyde River		Iqaluit	
	<i>(median income, lone parent families)</i>											
1997	\$	-	\$	16,000	\$	17,400	\$	17,400	\$	15,600	\$	24,100
1998	\$	16,100	\$	20,300	\$	17,700	\$	16,900	\$	17,000	\$	23,900
1999	\$	17,000	\$	19,000	\$	-	\$	15,300	\$	14,800	\$	24,900
2000	\$	19,600	\$	18,000	\$	-	\$	18,100	\$	11,000	\$	26,600
2001	\$	17,200	\$	19,300	\$	22,000	\$	20,900	\$	20,200	\$	36,900
2002	\$	17,400	\$	19,100	\$	19,300	\$	21,700	\$	17,500	\$	39,600
2003	\$	18,600	\$	21,600	\$	18,000	\$	21,600	\$	20,400	\$	33,900
2004	\$	22,800	\$	25,500	\$	14,800	\$	19,200	\$	19,600	\$	35,900
2005	\$	25,900	\$	25,200	\$	16,300	\$	18,700	\$	19,300	\$	34,700
2006	\$	26,300	\$	24,700	\$	20,700	\$	22,500	\$	20,600	\$	39,300
2007	\$	28,930	\$	23,830	\$	20,850	\$	22,360	\$	19,760	\$	42,390
	<i>(median income, couple families)</i>											
1997	\$	27,900	\$	32,800	\$	40,000	\$	33,800	\$	31,800	\$	58,800
1998	\$	33,100	\$	32,600	\$	45,500	\$	34,500	\$	31,900	\$	61,700
1999	\$	33,300	\$	34,500	\$	46,500	\$	37,400	\$	32,300	\$	64,400
2000	\$	33,200	\$	29,900	\$	45,400	\$	37,900	\$	32,200	\$	66,900
2001	\$	36,700	\$	36,100	\$	44,800	\$	45,300	\$	40,100	\$	83,100
2002	\$	40,700	\$	39,400	\$	49,000	\$	47,200	\$	43,100	\$	93,100
2003	\$	41,900	\$	40,800	\$	47,300	\$	49,900	\$	40,500	\$	92,100
2004	\$	40,900	\$	44,800	\$	53,000	\$	56,600	\$	43,200	\$	98,300
2005	\$	51,700	\$	46,700	\$	53,100	\$	59,400	\$	44,400	\$	95,500
2006	\$	52,600	\$	47,400	\$	54,100	\$	56,800	\$	44,700	\$	100,500
2007	\$	53,450	\$	50,820	\$	56,080	\$	66,440	\$	48,400	\$	104,730

Source: Statistics Canada, SAADD, T1FF Family Table 18 (After-tax).

Two-parent families appear to be better off, financially. The median income of these households ranged between a high of \$66,440 (Pond Inlet) to a low of \$48,400 (Clyde River). Again, the picture in Iqaluit is one of much higher incomes, at a median of \$104,730 in 2007.

Couple families have also improved their financial position at a greater rate over the past decade than have lone-parent families, in most cases. The 2007 median incomes for Arctic Bay and Clyde River couple families increased at twice the rate (40% and 52% respectively) as those of lone-parent families in these communities. Couple families in Pond Inlet fared even better, with median incomes of this group nearly doubling (increasing 97%) while lone-parent families in this community experienced a 29% increase.

The situation in Hall Beach and Igloolik is different, with more narrow differences between couple families and lone-parent families. A similar situation is seen in Iqaluit where the rate of increase of median income of lone-parent families kept pace with that of couple families, though, as previously noted, at a much lower level. For an illustration of these trends in median income, see Figure 52.

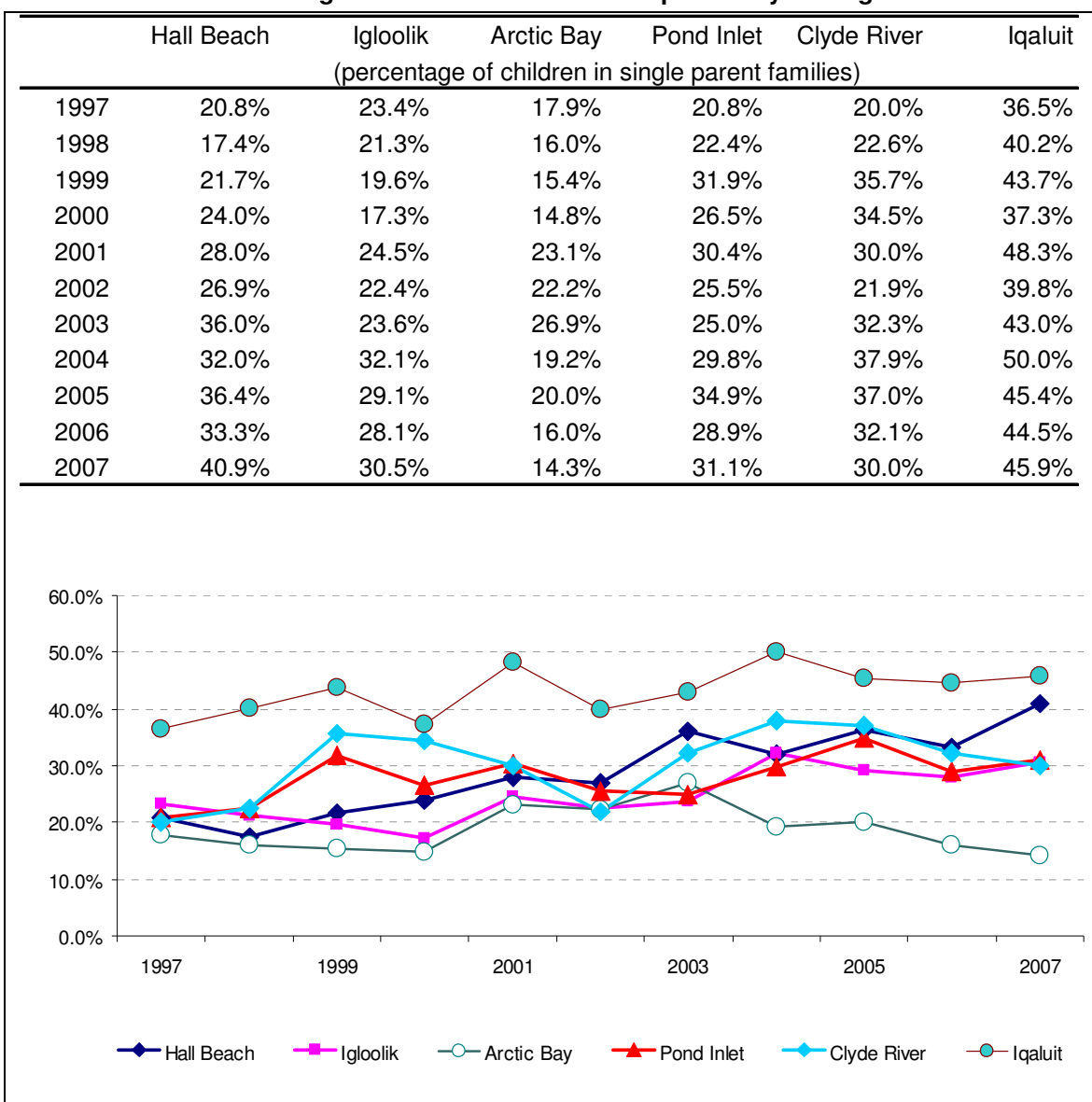
**Figure 52 Income in Lone-Parent Families and Couple Families, 1997–2007**

Source: Statistics Canada, SAADD, T1FF Family Table 18 (After-tax).

### 7.3.2 Children Living In Lone-Parent Families

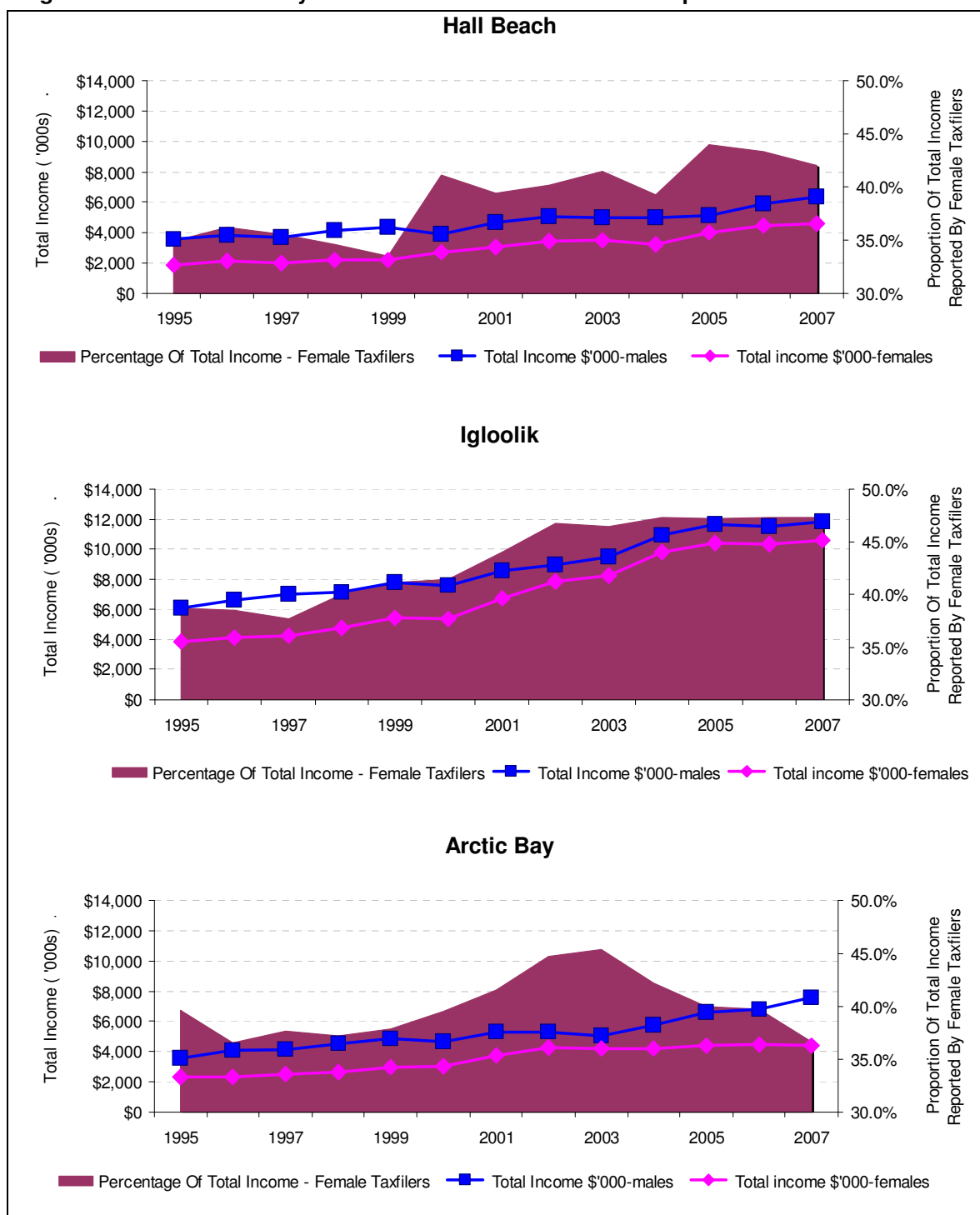
The number of children living in lone-parent versus couple parent family situations is a relevant indicator of the economic well-being of children in light of the significantly lower incomes experienced by lone-parent versus couple parent families. The rate of children living with a single parent is generally similar to the Canadian rate of 28%, ranging from a low of 14% in Arctic Bay to 31% in Pond Inlet. The picture in Hall Beach is a little different, with four-in-ten children living with a single parent. In Iqaluit nearly half (46%) of all children live in a lone-parent setting.

Generally, the proportion of children in lone-parent settings has increased during the past decade (see Table 80). Arctic Bay is an exception, where there has been a modest decline.

**Table 80 Children Living in Lone-Parent Versus Couple Family Settings**

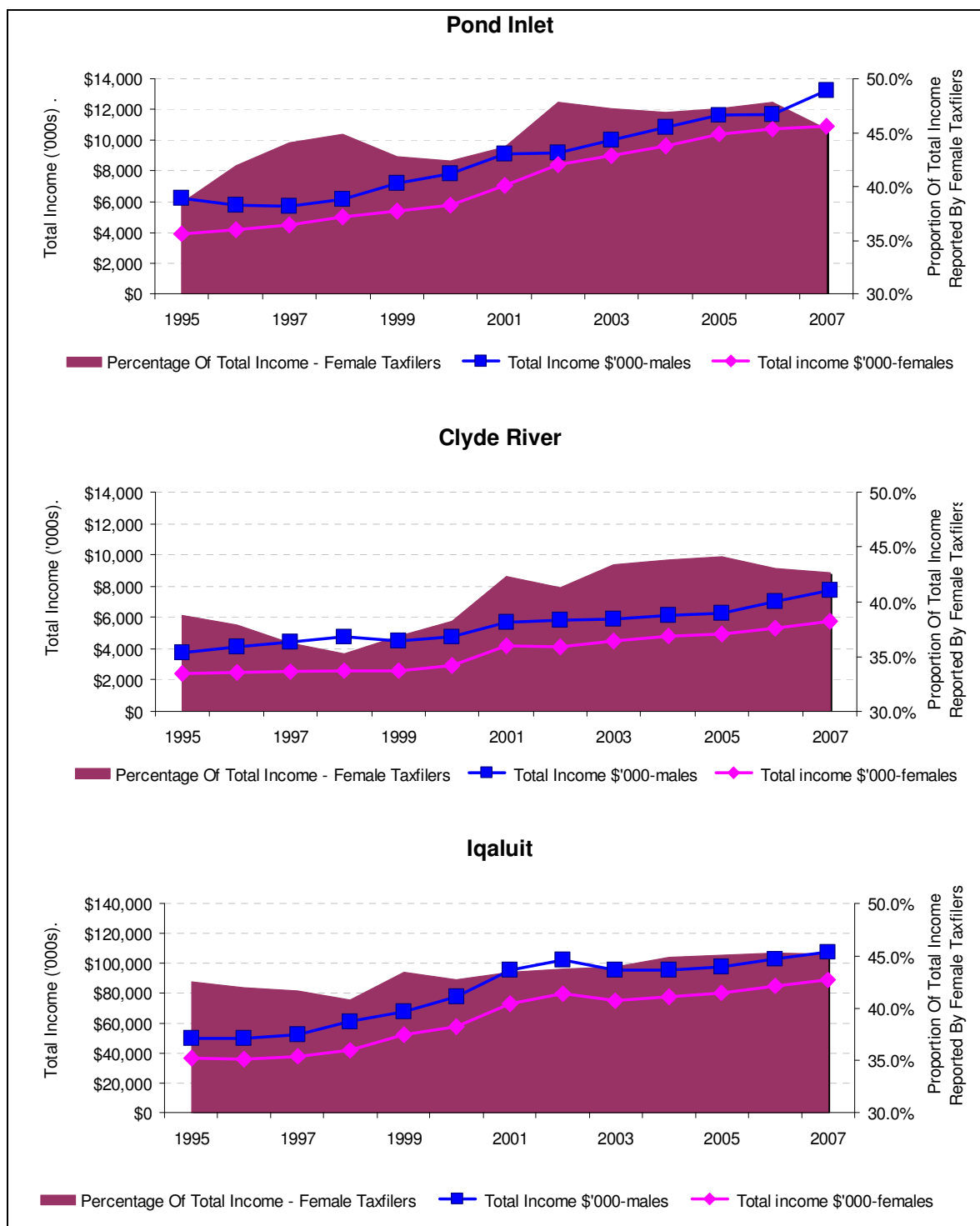
### 7.3.3 Income and Gender

The distribution of income among men and women provides some insight into the economic structure of households. Who is bringing in the income? There is also a reasonable expectation that the individual who brings income into a household is going to have some greater degree of influence over decisions about how this income is allocated. For the gender distribution of income for the total population of tax filers in the LSA communities and Iqaluit, see Figure 53.

**Figure 53 Total Income by Gender in LSA Communities and Iqaluit**

...continued

...Continued



Across North Baffin, women have somewhat less income than men, ranging from a low of about two-thirds that of men, in Arctic Bay, to slightly more than 45% of what men have in Igloolik and Pond Inlet. Generally, the proportion of income reported by women has increased over the past decade or so. The most dramatic changes have been in the communities of Igloolik and Pond Inlet where the proportion of income reported by women has increased from 38% in the mid-1990s to 47% and 45%, respectively, in 2007. This increase in income to women can be explained by the decentralization of territorial government positions that occurred between 2000 and 2002. During this short period, the proportion of income to women jumped by 5% in these communities. Women in Iqaluit also reported some 45% of total income, although in this location the rate of increase has been modest, increasing only 2% from a level of 43% in 1995.

Most of the increase in income among men can be accounted for by an increase in the number of individuals reporting incomes of \$75,000 or more. In the North Baffin communities, this number grew from under 20 to more than 170 over the past decade (see Table 81 and Table 82 and Figure 54 and Figure 55). Among women, growth in income can be accounted for by a doubling of the number of individuals reporting incomes in the \$15,000 to \$35,000 range as well as the emergence of a significant number reporting incomes of \$75,000 or more. Before 2002 the number of high-income earning women was negligible. The situation in Iqaluit is similar, with most of the growth in income being accounted for by an explosion of both men and women earning incomes above \$75,000. Again, however, there has been a significant growth in women earning lower income levels, in this case, at the \$35,000 to \$75,000 level. This latter group presumably relates to those in the clerical and other modest-paying jobs generated by the Iqaluit economy.

**Table 81 Individual Income Categories by Gender, North Baffin, 1995–2007**

<b>North Baffin Male Tax Filers</b>						
	Category of total income				Median total income	Year-over-year change
	<\$15K	\$15K to <\$35K	\$35K to <\$75K	\$75K+		
	<i>(number of male taxfilers)</i>					
1995	350	290	210	20	\$18,840	
1996	420	290	210	0	\$15,120	-19.7%
1997	410	320	250	20	\$17,840	18.0%
1998	380	360	270	0	\$19,640	10.1%
1999	420	360	250	40	\$19,160	-2.4%
2000	420	300	280	40	\$19,180	0.1%
2001	440	340	290	70	\$19,440	1.4%
2002	500	320	210	130	\$18,580	-4.4%
2003	490	360	240	110	\$18,760	1.0%
2004	450	390	270	120	\$20,580	9.7%
2005	460	390	280	140	\$21,240	3.2%
2006	540	420	360	170	\$23,350	9.9%
2007	470	380	310	180	\$24,938	6.8%

<b>North Baffin Female Tax Filers</b>						
	Category of total income				Median total income	Year-over-year change
	<\$15K	\$15K to <\$35K	\$35K to <\$75K	\$75K+		
	<i>(number of female taxfilers)</i>					
1995	590	200	100	0	\$9,100	
1996	520	230	180	0	\$14,200	56.0%
1997	610	200	140	0	\$10,100	-28.9%
1998	620	230	160	0	\$11,220	11.1%
1999	640	250	160	0	\$11,260	0.4%
2000	610	280	170	0	\$11,980	6.4%
2001	580	310	230	0	\$14,120	17.9%
2002	570	350	220	30	\$15,220	7.8%
2003	600	340	210	50	\$14,600	-4.1%
2004	610	350	190	90	\$14,600	0.0%
2005	600	370	210	100	\$15,840	8.5%
2006	650	400	270	110	\$16,233	2.5%
2007	550	390	160	80	\$17,542	8.1%

Source: Statistics Canada, SAADD, Table N-5C: "Neighbourhood Income and Demographics — Tax Filers and Dependents with Income." These data are from T1 Family Files (tax return data).

Note: As data were provided for the five individual North Baffin communities and aggregated manually, rounding errors could be compounded.

**Table 82 Individual Income Categories by Gender, Iqaluit, 1995–2007**

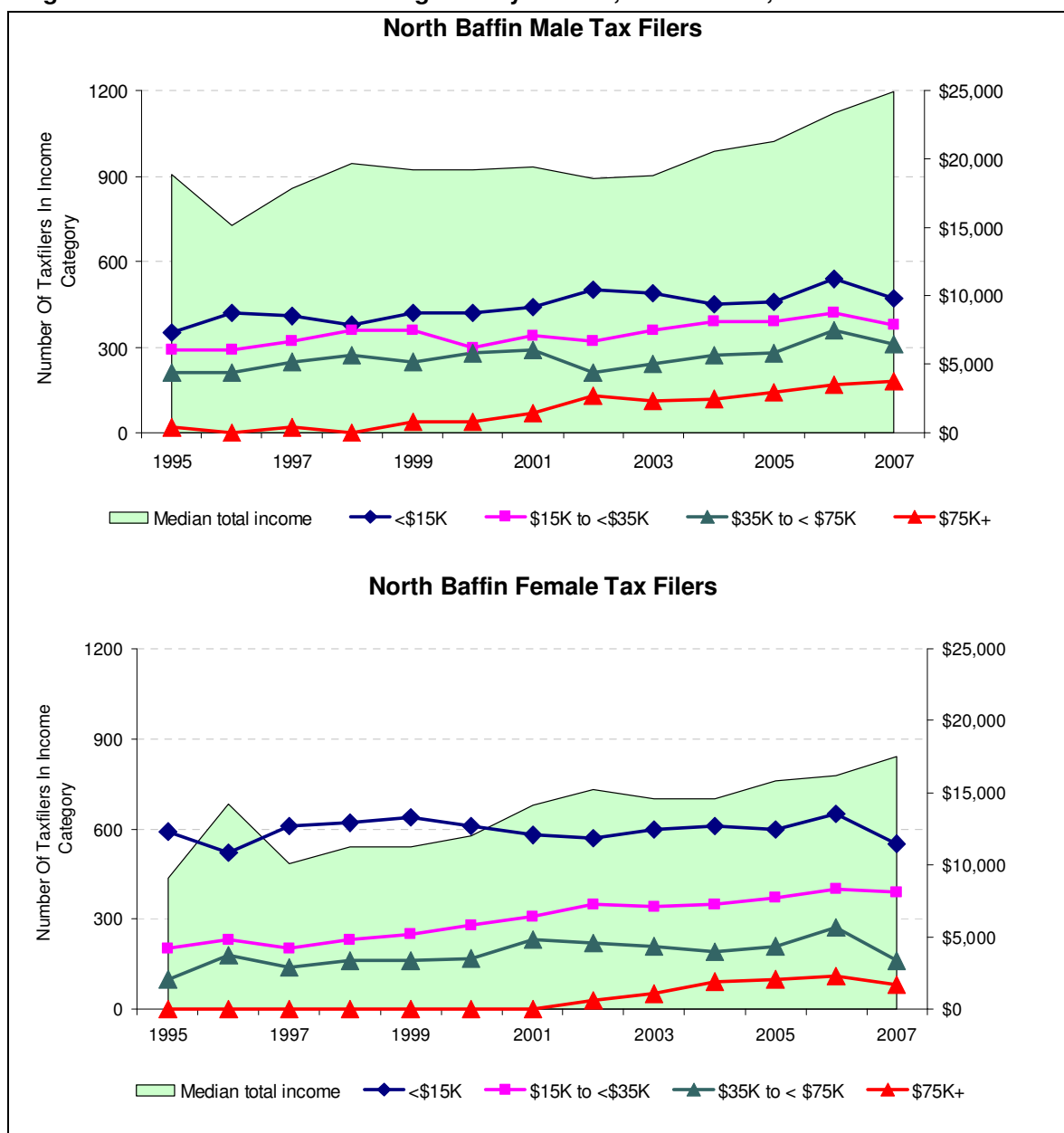
<b>Iqaluit Male Tax Filers</b>						
	Category of total income				Median total income	Year-over-year change
	<\$15K	\$15K to <\$35K	\$35K to <\$75K	\$75K+		
	<i>(number of male taxfilers)</i>					
1995	290	270	400	190	\$35,900	
1996	280	300	410	170	\$35,200	-1.9%
1997	360	270	420	210	\$34,700	-1.4%
1998	330	330	430	250	\$35,200	1.4%
1999	360	370	430	320	\$35,900	2.0%
2000	330	370	490	350	\$39,500	10.0%
2001	390	370	540	470	\$44,100	11.6%
2002	370	340	510	540	\$48,800	10.7%
2003	360	330	540	470	\$46,400	-4.9%
2004	360	320	460	510	\$47,900	3.2%
2005	350	350	450	540	\$47,000	-1.9%
2006	340	330	440	560	\$49,600	5.5%
2007	330	290	450	610	\$54,040	9.0%

<b>Iqaluit Female Tax Filers</b>						
	Category of total income				Median total income	Year-over-year change
	<\$15K	\$15K to <\$35K	\$35K to <\$75K	\$75K+		
	<i>(number of female taxfilers)</i>					
1995	400	300	370	80	\$24,500	
1996	440	310	360	70	\$22,100	-9.8%
1997	450	340	380	70	\$24,200	9.5%
1998	440	360	440	70	\$25,800	6.6%
1999	490	390	460	140	\$26,800	3.9%
2000	500	370	540	170	\$29,700	10.8%
2001	450	420	600	270	\$35,000	17.8%
2002	420	380	610	340	\$39,300	12.3%
2003	430	370	490	400	\$37,800	-3.8%
2004	390	370	490	400	\$40,000	5.8%
2005	420	380	500	410	\$38,100	-4.8%
2006	420	370	480	460	\$40,800	7.1%
2007	410	330	520	470	\$43,200	5.9%

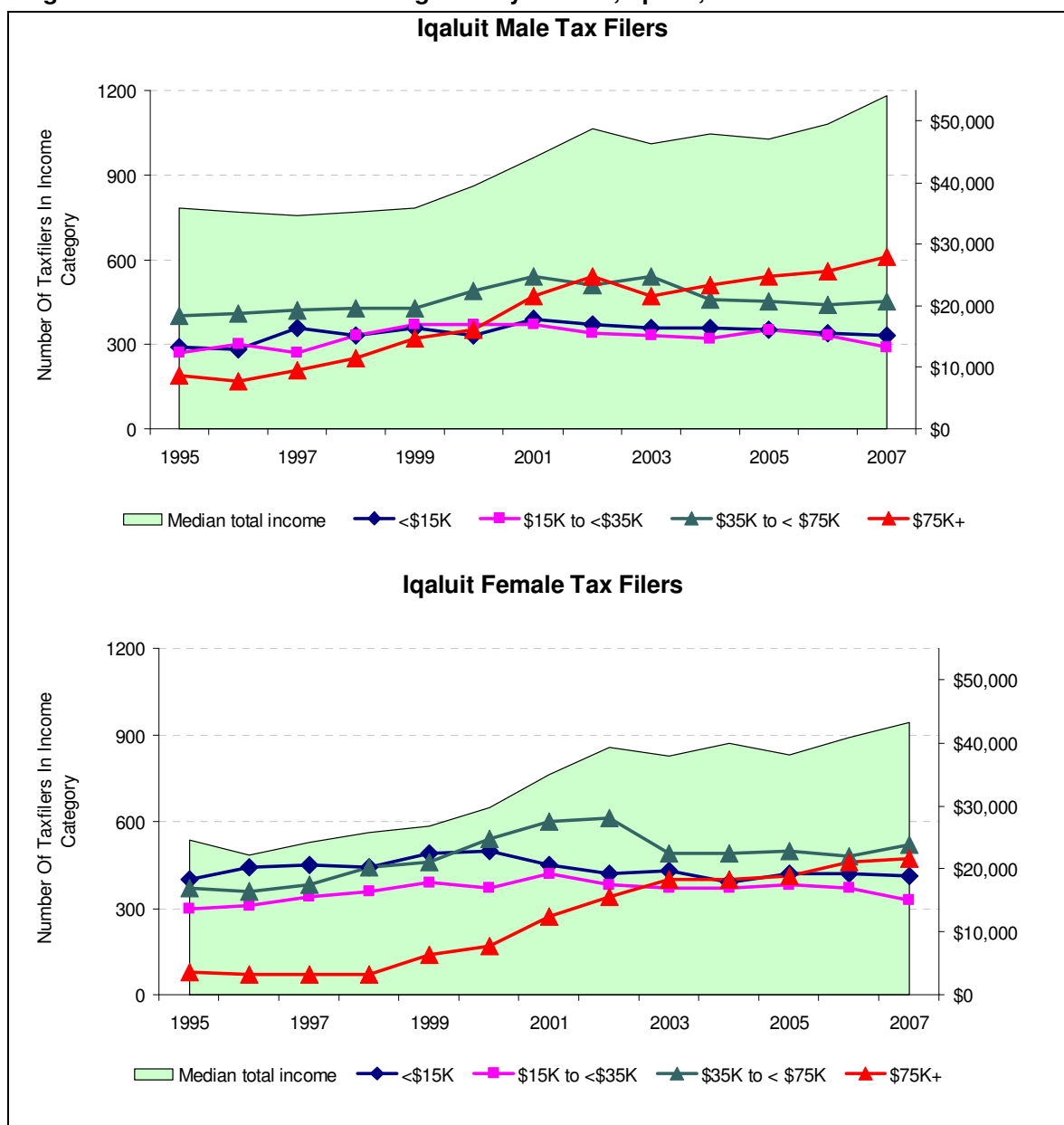
Source: Statistics Canada, SAADD, Table N-5C: Neighbourhood Income and Demographics — Tax Filers and Dependents with Income." These data are from the T1 Family Files (tax return data).

Note: As data were provided for the five individual North Baffin communities and aggregated manually, rounding errors could be compounded.

**Figure 54 Individual Income Categories by Gender, North Baffin, 1995–2007**

Source: Statistics Canada, SAADD, Table N-5C Neighbourhood Income and Demographics — Tax Filers and Dependents with Income." These data are from the T1 Family Files (tax return data).

Note: As data were provided for the five individual North Baffin communities and aggregated manually, rounding errors could be compounded.

**Figure 55 Individual Income Categories by Gender, Iqaluit, 1995–2007**

Source: Statistics Canada, SAADD, Table N-5C Neighbourhood Income and Demographics — Tax Filers and Dependants with Income." These data are from the T1 Family Files (tax return data).

Note: As data were provided for the five individual North Baffin communities and aggregated manually, rounding errors could be compounded.

### 7.3.4 Sources of Income In LSA Households

Income in the LSA is comprised primarily of income earned from labour activities and government transfers. Among the resident Inuit population, earned income accounts for between 70% (Clyde River) and 81% (Pond Inlet) of total income.<sup>377</sup> Most of the remaining income, ranging from 17% (Pond Inlet) to 27% (Clyde River) is derived from government transfers. Other income, such as investment income, accounts for less than 3% of total income. In Iqaluit, the role of government transfers is much lower than in the LSA communities, accounting for only 8% of the total income of the Inuit population of the city.

#### *Income Support Program*

As noted above, government transfers account for between one-fifth and one-quarter of the income in the LSA. Much of this is provided through the territorial income support (IS) program. Income support is provided to the heads of household comprising a family unit. There might be more than one IS recipient in a particular house, say in a situation where an adult child is living with his or her parents.

For a summary of income support entitlements available to eligible recipients, see Table 83. In addition to benefits for food and clothing, the program also pays for housing. When income support recipients are living in social housing units, this rent level is typically \$60 per month, payable to the local housing authority. This amount may be higher when another “household” is living in the same housing unit and is earning income. In that case, the income support recipient “head of household” might be tagged with a higher rent, which will be picked up by the IS program. In cases where no public social housing unit is available, an IS recipient might be able to find private rental housing, in which case the IS program would cover the cost of this rent.

Heads of households or individuals receiving “adult benefits” or “youth/educational support” are entitled to earn a modest amount of income with no impact on their income support payments. For example, recipients with dependants can retain \$400 of income. Income beyond this amount is clawed back from the income support amount at a rate of \$1 dollar for every \$1 dollar earned.

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<sup>377</sup> Statistics Canada. 2007. 2006 Aboriginal Population Profile. 2006 Census. Statistics Canada Catalogue no. 92-594-XWE. Ottawa. Released January 15 2008. <http://www12.statcan.ca/census-recensement/2006/dp-pd/prof/92-594/index.cfm?Lang=E>.

**Table 83 Income Support Program Benefits**

Type of Benefit	Transitional Assistance	Youth/Educational Support	Adult Benefits	Community Living Support
food	X	X	X	X
shelter	X	X	X	X
utilities	X	X	X	X
clothing		X	X	X
furniture		X	X	X
education expenses		X	X	X
tuition		X	X	X
day care		X	X	X
emergency		X	X	X
unable to work				X
Income Support Zone		Single Adult	Family of Four	Single Adult with One Dependent
<i>(monthly income support amount)</i>				
Zone 2: Iqaluit, Arviat, Kugluktuk, Pangnirtung, Qikiqtarjuaq, Rankin Inlet.		\$335.66	\$1,114.64	\$619.32
Zone 3: Cambridge Bay, Cape Dorset, Clyde River, Gjoa Haven, Hall Beach, Nanisivik, Pond Inlet, and Whale Cove.		\$354.66	\$1,175.64	\$652.32
Zone 4: Arctic Bay, Baker Lake, Chesterfield Inlet, Coral Harbour, Igloolik, Kimmirut, Repulse Bay, Resolute Bay, Taloyoak.		\$373.66	\$1,235.64	\$685.32

Source: Types of benefits derived from Department Of Education, Income support program brochure. Support amounts provided by Department of Education, 2008. Allocation of community to zone is from Nunavut Hansard:

[http://www.assembly.nu.ca/english/debates/2nd\\_assembly/1st\\_session/Hansard\\_20040526.pdf](http://www.assembly.nu.ca/english/debates/2nd_assembly/1st_session/Hansard_20040526.pdf).

Note: These amounts all include \$20 per month for clothing and \$16.66 per month for “seasonal clothing.” The “seasonal clothing” amount is only provided to those who have been on income support for longer than six months. These amounts do not include the housing benefits provided by the program to the Nunavut Housing Corporation, through the local housing authority. For a household in social housing with no income other than Income Support, the social housing rent will be \$60 per month—this will be paid directly by the Income Support Program to the housing authority.

## 7.4 MONEY GOALS AND MONEY MANAGEMENT

### 7.4.1 Money Management

A link between child wellbeing and money management was made: “There are families who cannot provide food for their children because of mismanagement of money.”<sup>378</sup> The potential for negative consequences of increased wages on children was identified to arise, “if the parent blows the money on dope and drink.”

This situation was expressed well by a woman who spoke about how her husband was adapting to fly-in/fly-out work:

“But, now [my husband] has quit using drugs and we are happier. [He] sees things more clearly, has more money. [I] used to get pretty emotional when [he] was using the child tax credit money [for drugs]—children need diapers, clothes.”<sup>379</sup>

Poor household money management not only reduces the benefits that could be achieved through increased employment income—it may also put children in worse positions than they were before by reducing or eliminating income support payments. Income support is based on the level of employment income that is earned, not on how that income is spent in the family. Several residents and government officials noted that if wages don’t get sent to a spouse, the family may find itself in tough economic straits. Others noted how wages are paid directly to the worker who can use them in any way they choose. Income support in the North Baffin region is typically deposited directly to the recipient’s account at the local Co-op or Northern stores, with only a small amount of cash provided for purchases from other sources. This policy is intended to reduce spending of income support funds on black market items.

During a workshop session of Inuit involved in various health and social services activities in Pond Inlet, one small breakout group of two women and one man noted the following impact of the Project for women:

“It’s hard for women when there is only income while a partner is away working at Mary River for four weeks. Women go on the radio asking for money that they will repay when the man comes back.”

A second breakout group of four women described how a mine at Nuluujaak will affect women and men in the following terms:

“Women: Always asking to borrow money. Some couples will separate. Some wives will be sleeping around, gambling or smoking away the money.

“Men: They will learn job experience and work skills. They’ll get money, but may also lose the money through gambling, drinking and drugs.”

Later during this same workshop, the breakout groups were asked to describe changes they have seen in their community over the past decade. One group included observations related to how money gets spent:

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<sup>378</sup> Interview with government official by Richard Akoto, March 2008.

<sup>379</sup> Interview with spouse of a fly-in/fly-out worker. March 2008.

“In terms of social problems, there are more drugs, alcohol, abuse, problems in households. Alcohol particularly gives us problems in the home. People are trying to get money all the time. People will get drugs or alcohol in any way they can. They will neglect to get food to get these things. We who have jobs give money to our family members thinking (hoping) it will go for food, but it goes to drugs. Younger people are getting too lazy for school or work—they get bored easily. And people on drugs who do get jobs end up getting fired/losing their employment ...this causes problems in families.”

During a focus group session with three women from Pond Inlet, a similar line of comments were made:

“When their men are working, [women] are practically single for four weeks while the men are away. They are struggling to take care of kids, pay bills before things get cut off. Not only that, if the female is working as well, there can be a lot of money coming in to the house, and maybe the money isn’t spent in the right way.”

Not all households run into money management problems, of course. As one woman put it,

“In terms of money, [my husband] gets his pay transferred to his account at Royal Bank. I do the decision-making on how money gets spent.”<sup>380</sup>

Another worker noted that:

“My wages are sent to me by cheque. Some people get direct deposit but my cheques are sent to me. [The cheque] has been late once—I didn’t get payment until I was back on rotation. It would be good to have bank facility onsite.”

An Elder man also had a positive experience to relate:

“My oldest son manages his money well, and he is the main one working for the family. He has worked at Mary River for the last two years.”<sup>381</sup>

“At Pan Arctic in 1972, I had four sons and husband working at different camps. With the money they made they bought three skidoos and a sewing machine. Today, even though I have grandchildren working at Mary River, there don’t seem to be people making big purchases like they did in the past. All the money is going to small things. Only one of them bought groceries, like flour, for me. My youngest grandson is trying hard, and I noticed he looks healthier when he comes back from the site.” (Elder Woman 1)

#### 7.4.2 Spending and Money Goals

Some insight into the values and expectations related to income earned at the Project can be gained from conversations with workers during the Baffinland exploration activities about their “money goals:”

[Worker] “I’d like to buy a [snow] machine so I don’t have to walk at home and go hunting with that machine.” I never get picked for the HTO Lottery. ‘Figure it will take me about half a year to save for this machine—because most of my pay check goes to food. Food

<sup>380</sup> Wife Of Worker 1, interviewed May 2008.

<sup>381</sup> Focus group with elders in Pond Inlet. Richard Akoto. March 2008.

and bills—I get so little money at the end.” [Researcher] I asked if it would help if every month a part of the pay cheque could be set aside for savings. Is that something you would do, would that be useful? [Worker] “Yep, that would be very good. Like, having ability to set a goal—that gives you motivation to live longer, to work harder. Like a reason for living.... It’s still a challenge though, because everyone knows you are working and some people work in the Co-op where my cheque gets cashed—they know what I earn.”<sup>382</sup>

[Researcher] How do you use the money you earn from this work? [Worker] “Help out with my mother’s bills, groceries, buy my sisters clothing and what not. Have a bank account where I deposit my cheque. [Researcher] Do you save any of your income? [Worker] “Yep, I save more than a quarter of it, the rest of it helps out.” [Researcher] What do you spend for yourself? [Worker] “I give my mom \$400 every week before I come here—probably \$1500 for my family every rotation. [Researcher] He figures about half of his pay goes to family. His mom is in public housing, so I asked if he thinks her rent will go up? [Worker] “Pretty soon I’ll find out if the monthly rate is going up. ...For myself I’m saving first to repair my snow machine and then after that I’ll get a laptop with internet.”<sup>383</sup>

[Worker] “I used my money to buy a 24-foot canoe. Cost around \$8,900. Using my dad’s motor for now. Plus I’ve bought carving tools. ...I give my dad some money...I had some initial troubles with my pay—it was a direct deposit but my account had been closed and my pay got held up. Now I get the cheque in hand and cash it at the bank. [Researcher note]: He needs photo ID and pays a small fee—but he notes that it’s not like Northmart’s fee. [Worker] When I’m back home, I’ll be carving to earn some extra money.”<sup>384</sup>

[Worker]: “Wages seem to be alright. I’m trying to save some of my money—but since I’ve been working I’ve been buying stuff that I want—a snowmobile, TV, some smaller things like an iPod. [Researcher notes: He gives \$200 to \$500 to his parents, help buy groceries, on his two-week break. He’s thinking to save for a couple of years, toward a house. ...He doesn’t have a bank account yet — but he’s filled out his application... but no response yet, it’s been a month. Royal Bank in Iqaluit.] [Worker]: “You have to call them up in Iqaluit to get the applications. It would be better to have direct deposit than having to wait for the cheques to come up.”<sup>385</sup>

[Applicant] “I want to get a machine and get involved with the Nunavut Quest next year. That costs \$9,000 to \$11,000—this would be a couple months work. I definitely will be able to save better from Mary River than here.” [Researcher]: “Why is that? [Applicant] “Does MR have a store? [Researcher] “No.” [Applicant] ...yeah. Here, stuff is very expensive—if I spend time at MR I’ll save a lot more money. ...I really want to quit smoking...I don’t drink pop. [Researcher] “How does the money you earn now get spent? [Applicant] “Right now, every two weeks I earn \$600. Housing is \$60/month. Groceries and cigarettes, around \$300 to \$400 [Research note: I think this is per two weeks, so

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<sup>382</sup> Worker 1, Interviewed November 2007.

<sup>383</sup> Worker 2, Interviewed November 2007.

<sup>384</sup> Worker 3.

<sup>385</sup> Worker 4.

\$800/month]. Pot is \$100/month. A joint is \$20. I don't have a [snow]machine...Sometimes give food to family members. ...Not saving anything now. If I'm away at MR I won't be needing to spend money on groceries."<sup>386</sup>

[Worker]: "When you are having family the money goes. Even the housing is pretty expensive—electric bills, they go by income, based on tax returns. Housing rent too. Last year it was \$700, before it was \$300, maybe this year it will be up to \$1000 per month. This includes fuel, but not electric bills—but we pay only about 10% of the electric cost. It would be too expensive to buy a house up here. Fuel is so expensive—but you don't see people burning wood in wood stoves. Saw this in Clyde River once, but a lot of people were complaining about all the smoke." [Researcher]: What about retirement savings. [Worker]: "No, I don't have anything left for that. It's too expensive up here. Groceries for our family—it's about \$100 to \$200 per day for our family members plus others who come by—we feed about 14 people. Son and his kids and common-law. Sometimes we cook from scratch rather than prepared food. Whoever comes by, we'll share what we have—I don't like to have leftovers. If no one come by and there are leftovers, I'll feed the ravens.... At Nanisivik, I think you could apply for some kind of pension. But I never did. [Worker] "Have never done food mail—you need credit cards for that and people don't have those. But Northern is getting new MasterCards, that you put money into the account and then you can use it like a credit card....[Worker] "During Nanisivik we got a freight allocation. 200 kg per person every year. First time I got 250kg just for myself. When I married it went to 200 kg for each of us. Then with the kids, we got an additional 150 kg per child. It saved us a lot of money on that. Mostly used it for food."<sup>387</sup>

[Researcher] Do you have friends who've worked at MR? [Applicant] Yes. They like the money. It's easy money, easy work. At the Co-op you work 30 to 40 hrs in a week and earn maybe \$600 in two weeks. At Mary River you can earn in three weeks, close to \$6,000 in two weeks close to \$3,000 as a labourer. That's what you get on your paycheque. So at MR you work long days and build up lots of hours—12 hours a day, every day. [Researcher]: What money goals, if any, do you have if you get a job? [Applicant]: The point of work is for the money. Hope to purchase snow machine, Honda, outboard motor. For the family. A motor might cost near to \$18,000. ...He would save up to help his dad buy these things. When he worked at Co-op, the cheque would get deposited to his account at Co-op or Northern. Helped to buy food, pay bills. He helped to pay some of the bills at home."<sup>388</sup>

[Applicant]: In general, I want to earn income—not that I have outstanding bills...plus for the experience. Meet new people, work with guys I know...find out what they are up to, ...and travel, I've been in one place for a year, it would be nice to travel.... [Researcher] How much do people earn? [Applicant] Couldn't say—but those I know, they like their income...unless they are in the hole. [Researcher] What's the first thing you'd do with your income? [Applicant] Pull myself together first. Pay off outstanding bills—housing bill. Then gather more tools for myself, carpentry tools. I like to make small furniture. Right now I've got everything for the pouch but need to buy power tools—skill saws, sanders,

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<sup>386</sup> Applicant 1.

<sup>387</sup> Worker 5.

<sup>388</sup> Applicant 2.

drills. In general, even when you do get paid, I worry about my girls first, food first, basics. After that then whatever comes to mind.<sup>389</sup>

[Worker]: Pay for the house (the mortgage); buy rifles, furniture, washing machine; try to get his dog flown in. [Researcher note]: He moved in from another community. [Worker]: Get my pay as a cheque and cash it at the Co-op—they don't charge a fee. Once I cashed a \$2,500 cheque at Northern and the fee was \$49.<sup>390</sup>

Other perspectives about money and how it gets spent in the community were raised during interviews and workshops with community residents and leaders:

"I see every cheque that comes in to town. I know that for every cheque, maybe \$200 gets spent on food and the rest is not going anywhere good. A nice paycheque is coming in, but it's not helping the community. Maybe we should see how we can fix this—put money into the community in a positive way."<sup>391</sup>

"Social issues play into this. People are putting their money into "tax-free enterprises" [this became the euphemism for the bootleggers and dope-dealers]. So there is little cash available to support small businesses. But what are the reasons? No investment opportunities? No banking services? But no one can really say how much money is being given to family members. We are a sharing culture. Just the fact that I have a bank account has changed this—I don't have the cash in my pocket. This slows down the outward flow—out-of-sight, out-of-mind."<sup>392</sup>

"Some people don't want to put money into Co-op accounts because they are afraid that family members can access the account. Also, the Co-op doesn't pay interest on surplus funds."<sup>393</sup>

"I'm encouraging my grandson to go to Mary River—at least it will get him off the drugs for the time that he is at work. I find out from my grandkids where the money goes and they aren't getting big purchases like snowmachines—its all being smoked up or spent on household things like heating fuel."<sup>394</sup>

"The good effect of the mine will be more jobs for the community. The bad effect will be that if they just spend their money on drugs, then their whole family will be hungry because they had income and are not eligible for Income Support."<sup>395</sup>

"When people have a job, they can buy boats and skidoos, but some people spend their income unwisely. I told my sons to spend their money on big purchases [boats, skidoos] so they would have these things in the future. My sons get envious of other people going out hunting, so I tell them to buy hunting equipment. ["When is the right time to advise children on how to use income?"] Go out hunting with them—then they'll want to buy a gun...."<sup>396</sup>

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<sup>389</sup> Applicant 3

<sup>390</sup> Worker 6

<sup>391</sup> Resident 19, comment made in workshop setting.

<sup>392</sup> Public Sector 1, during Pond Inlet Economic development workshop, February 2008.

<sup>393</sup> Public Sector 2, during Pond Inlet Economic development workshop, February 2008.

<sup>394</sup> Elder Woman 1, Pond Inlet HSS workshop, February 2008.

<sup>395</sup> Comment provided during Pond Inlet HSS workshop, February 2008.

<sup>396</sup> Resident 1. Arctic Bay gathering of North Baffin Working Groups, March 2008.

“Qallunaat are used to having money, managing money. Inuit don’t have the same history of managing money. We have houses now, expenses to pay. This is where our income goes now. We’re learning slowly how to manage our money, but we’re not used to investing and saving our money, we’re used to spending money as soon as we get it.”<sup>397</sup>

“We are Inuit and live on country food—we don’t know how to manage money—we just play with it. Qallunaat know how to manage money, to save it. You start leaning this when you are being brought up as children.”<sup>398</sup>

“Youth...some may not spend well. But they are learning from us. If they are living away from their parents [in their own house] they will ask advice on how they should spend this money. Those without parents are the ones who in their social life may be ruined more by Mary River....people ‘give away’ money rather than ‘invest it’ ... when kids get more than, say, \$500, they will check with their parents on how to spend it. ... Young people without parents will often earn money, but then other young people will come and ask for some of that money. People without parents cannot get guidance from parents on money management.”<sup>399</sup>

“Is there a place in the north we can invest our money? Could Inuit start their own investment company? I want to see this and would want to invest. My wife is working and puts some money away...she is the savings bank for big items.”<sup>400</sup>

An observation related to another challenge to “good money management” was made during research carried out around the Jericho diamond mine project in the Kitikmeot (Brubacher Development Strategies 2009):

“One person commented about how the willingness to share sometimes leads to an unintended consequence in terms of money management:

“[When someone in your family requests money] you can’t say “no,” so you end up with less money. So if you can’t save the \$10,000 or \$15,000 you need for a major purchase, you may as well spend it.”

The potential that pressures to share income could actually be a contributing factor to decisions related to out-migration has been raised by O’Faircheallaigh (cited by InterGroup Consultants 2005) who suggested “resentment generated from increased cash income” as a potential cause of out-migration. A similar observation has been made by Shrimpton and Storey (cited by Costa et. al. 2005) who suggested that in some Aboriginal communities “the sudden economic prosperity might create unexpected differences and negative individual-community dynamics” resulting in mine employees leaving their traditional community.

#### 7.4.3 Suggestions Related to Money

During a workshop in Arctic Bay, participants made several recommendations and suggestions about how people might be supported in making productive decisions related to income:

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<sup>397</sup> Resident 2. Arctic Bay gathering of North Baffin Working Groups, March 2008.

<sup>398</sup> Resident 3. Arctic Bay gathering of North Baffin Working Groups, March 2008.

<sup>399</sup> Resident 4. Arctic Bay gathering of North Baffin Working Groups, March 2008.

<sup>400</sup> Resident 12, Arctic Bay gathering of North Baffin Working Groups, March 2008.

“Will it [training for Mary River] include financial management and those aspects? When the wage package is quite large, and people could become financially secure quickly, this is an issue.”<sup>401</sup>

“A bank representative should come up to help employees set up bank accounts. Financial management is a big need here.”<sup>402</sup>

“Deductions should be taken off people's pay for the future. Now they only take off taxes, but nothing is taken off for the future.” [In further discussion, we clarified the speaker was referring to deductions for retirement savings.]<sup>403</sup>

“Only a few workers have bank accounts—most people just cash their cheques. Most people don't know how to budget—they spend their money on drugs and alcohol. I grew up in Arctic Bay with Nanisivik—there was lots of money going around at first. Mary River could be the same—we might be left with nothing when it's gone. If I get a pay cheque, it's my property—but if the company can help to organize the workers' income, like savings plans, that would help. Would help people save for things like snowmachines.”<sup>404</sup>

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<sup>401</sup> Question posed at Iqaluit public meeting hosted by Baffinland, April 2008.

<sup>402</sup> Suggestion made during Pond Inlet economic development workshop, February 2008.

<sup>403</sup> Suggestion made during Pond Inlet HSS workshop, February 2008.

<sup>404</sup> Suggestion made during Pond Inlet HSS workshop, February 2008.

## SECTION 8.0 - LOCAL AND REGIONAL ECONOMY

*Theme: What is the economic context in which the Project will be located, and what capacity do study area businesses have to participate in the economic opportunities generated by the Project?*

*Theme: How well does the Project fit in with local development objectives, and what capacity do government and non-government agencies have to support effective linkages?*

### 8.1 MAJOR SECTORS OF THE REGIONAL ECONOMY

This section provides additional insight into the key sectors of importance to the Baffin economy that are potentially of relevance to the impact assessment.

#### 8.1.1 Government Sector

The public sector accounts for a large portion of Nunavut's economic activity. Public administration accounted for \$271 million, or 24%, of the territory's total \$1.1 billion GDP in 2008 (GN Department of Finance 2010a). Education and health expenditures account for another \$202 million. Combined, these public expenditures account for more than 40% of the territory's GDP. Publicly funded construction activity—social housing, and various public infrastructure—further bolsters the contribution of the public sector.

The GN Department of Finance (2010a) noted that public sector jobs in administration, education, and health areas account for about half of all earnings in the territory. As observed by the Conference Board of Canada (2010) this large public administration sector provides stability to the territory's economy. In the study area, this will particularly be the case in Iqaluit. In the LSA, the communities of Igloodik and Pond Inlet can be expected to be more insulated from economic ebb and flow in the private sector since these communities have a significant number of decentralized government jobs.

In spite of the importance of the public sector to the territorial economy, future economic expansion is not expected to be driven by growth in federal transfers to Nunavut. Rather, growth in the private sector is required (Clinton and Vail 2008).

#### 8.1.2 Mining Sector

Nunavut's mining sector is once again expanding following the closure, in the previous decade, of the Nanisivik and Polaris mines in the LSA and the Lupine and Jericho mines in the Kitikmeot region of the RSA. The recent opening of the Meadowbank mine in the Kivalliq region is expected to begin contributing over \$90 million to Nunavut's GDP now that it has entered production (GN Department of Finance 2010a). Medium-term prospects for expansion in the sector include Newmont's Hope Bay development in the Kitikmeot, AREVA Resources' Kiggavik project in the Kivalliq region.

The Mary River Project is the only project in the LSA that has progressed to the point of having a project description and definitive feasibility study completed. Exploration activities have been taking place at Roche Bay, and early exploration activities are being carried out by Peregrine Diamonds in South Baffin, particularly at their Chidliak property. A number of exploration activities mostly related to diamonds are at a very early stage.

A major challenge for the territory is to develop the labour force and entrepreneurial capacity to participate in the economic activity generated by the mining sector. The Conference Board of Canada (2010) points out that the shortage of skilled workers is expected to lead to local workers filling between 15% and 20% of Meadowbank jobs. Major investments in training will be required to improve these numbers.

The Nunavut Government (GN Economic Development and Transportation 2005) formally recognizes the potential for the mineral sector to contribute to sustainable community development and the requirement that communities, government, and the mining companies work effectively together to achieve this potential. For example, the following statements are made under “Pillar 2 Community Benefits” of the territory’s strategy for mineral exploration and mining:

“The mineral exploration and mining industries have the potential to contribute significant and sustainable benefits to Nunavummiut, including infrastructure, jobs, education, skills, career development and local business opportunities.

“Economic development, however, also has the potential for negative socio-economic impacts, which could include wealth mismanagement, loss of traditional lifestyle, and increased stress on already struggling community social infrastructure.

“It is essential that strong and functional relationships between developers, government and communities be established to manage impacts and maximize benefits, and to ensure that the development of Nunavut’s mineral resources is beneficial to all Nunavummiut.”

#### 8.1.3 Construction

The construction industry in Nunavut is driven by a combination of government-funded infrastructure projects and major private sector developments such as the Meadowbank Mine project. Construction at Meadowbank peaked in 2008, contributing some \$250 million to territorial GDP that year. Residential construction is also an important component of the construction sector. For example, residential construction in Iqaluit varied between \$33 million and \$53 million from 2006 to 2009 (GN Department of Finance 2010a). For the 2010/11 fiscal year, a total expenditure of some \$111 million is envisioned in the territorial government’s capital expenditure plan, with another \$23 million in capital projects funded jointly by the territorial government and various third-party funders (GN Department of Finance 2010b).

Planned capital expenditures for the North Baffin LSA total \$32.3 million for the five-year planning period, 2010/11 to 2014/15, while a similar amount of \$33 million is planned for Iqaluit. Across the territory, a total of \$381.6 million in capital expenditures is envisioned.

#### 8.1.4 Transportation

The transportation sector provides a critical link between Nunavummiut in small communities to the specialized medical and educational services that are only available in larger centres. For the 2010 to 2011 fiscal year, for example, the territorial government has budgeted \$47.9 million for medical travel, an expenditure item that has increased at a rate of 6.9% year-over-year, from a level of \$32.6 million in 2005/06.

The Department of Finance (2010a) notes that imports of goods into Nunavut by air and marine transport totalled \$900 million in 2008, and comments that the Iqaluit airport moved into the top 20 busiest airports in Canada, based on the number of flights. In spite of the tremendous importance of air and marine transport, the sector is largely based outside of the territory. As a result, transportation contributes less than \$21 million to the territorial GDP.

Locally, snow machines, ATVs, and small boats are important components of the transportation sector. These permit harvesting of country food and inter-community travel along well-used traditional travel routes.

The high cost of transportation means that many Nunavummiut face limited mobility options. For example, ownership of snow machines, ATVs, or boats is out of reach of those who are solely dependent on social assistance. Passenger fares, typically in the \$1000+ range, are also well beyond reach. As a consequence, for many Nunavummiut medical travel or other publically provided travel becomes the only means to get out of town.

#### 8.1.5 Renewable Resources

Nunavut has a small commercial fishery based on turbot and shrimp that is fished offshore primarily in Baffin Bay and Davis Strait. Nunavut's share of this fishery has grown significantly during the past half decade. Turbot quota allocated to Nunavut interests totalled 9,350 tons for the 2010 season, up from 5,326 tons in 2005. This increased quota has come as a result of concerted efforts by Nunavut industry and government officials to influence federal decisions related to stock allocation. In addition to gaining access to the resource, and the "royalty" value inherent in this access, the territory has worked hard to maximize the value of this fishery to Nunavummiut through ownership of fishing vessels and supply of labour. These offshore products enter the market as commodities.

In addition to the offshore fishery, some commercial char production is carried out at plants in Pangnirtung, Iqaluit, Rankin Inlet and Cambridge Bay. Although the economic value is modest, the quality of this product is high and potential for value-added processing and marketing, including supplying the local Nunavut market where high retail food prices are the norm, continues to be realized. A modest commercial caribou and musk ox harvest is also carried out, the former predominantly from Coral Harbour and the latter from Cambridge Bay. As with the char fishery, these products are high value specialties that sell for premium prices. Recent changes in the federal food subsidy program (Food Mail) might facilitate intercommunity trade of these commercial products in the territory.

Given the importance, and precedence under the NLCA, of the traditional non-commercial harvest of these species, the potential for expansion of commercial fish and wildlife operations is subject to inherent biological limitations.

#### 8.1.6 Tourism, Arts, and Cultural Industries

Most visitors to Nunavut come to the territory in the course of their work activities. These business travellers are estimated to account for approximately three-quarters of all tourists<sup>405</sup> to

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<sup>405</sup> It is common to include business travelers within the broad "tourist" category. Their expenditure pattern is similar to that of other visitors—hotel accommodations, food, transportation, purchase of souvenirs and gifts.

Nunavut. It is thought that between 3,000 to 6,000 visitors come to the territory each year for purposes not related to their work and that this component spends between \$6 to \$12 million annually (GSGislason and Associates 2005).

Among these expenditures, an estimated \$4 to \$8 million is allocated to non-hunting tourism-related expenditures, of which no more than 10% to 20%, or an average of \$100,000 per year, would be spent in these smaller Nunavut communities.<sup>406</sup>

Applied to the five North Baffin communities, this would lead to a total estimate of some \$500,000 allocated each year across the North Baffin LSA to tourism outside the business travel and sport-hunting areas. In addition to spending by tourists who come to visit friends and family living in the north, these expenditures would also include those of cruise ship visitors, visitors to the national park, and adventure tourists.

An estimate of the value of cruise ship tourism is suggested from the Arctic Bay community economic development plan (Hamlet of Arctic Bay, 2007) which noted three cruise ship visits in 2006 with between 20 and 100 passengers coming ashore with each ship, and spending an average of between \$70 and \$100 each. This leads to a total local expenditure in the neighbourhood of \$15,000 from the cruise ship sector for one community.

As noted frequently over the past decade, tourism in Nunavut is characterized more by its “potential” than its current reality.<sup>407</sup> The Hamlet of Arctic Bay (2007) CED plan notes that in addition to the three cruise ships, there were also, in 2006, six sport hunters. The plan implies that visitors who come for business purposes may be the real target for generating increased revenues: “There are no tourists per se that really come to Arctic Bay, mostly business people, government officials, contractors, doctors, dentists and optometrists.” The plan goes on to note that “There aren’t any tours offered through the hotel. There aren’t any tour guides and again, this should be developed with the ever-growing potential tourism market in Nunavut.” The potential that one or two-day packages that start from the hotel might be developed and marketed is identified.

The market for local arts and crafts created by visitors is an important benefit of the tourism sector. This is true both for business travellers as well as for those engaged in some form of recreational tourism. A challenge for artists is to build up inventory that is adequate to meet demand. This can be particularly challenging in relation to cruise ship visits, when several hundred passengers may come through the community over the course of a few weeks.

## 8.2 GOVERNANCE AND INSTITUTIONAL CAPACITY

### 8.2.1 Principle of Self-reliance and the Role of Government

Adult individuals are ultimately responsible for their own wellbeing and that of dependent family members. In Nunavut, this concept of self-reliance is formally recognized through “IQ Principles” and “Inuit Societal Values.” This understanding of personal responsibility and self-reliance

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<sup>406</sup> GSGislason (2005) considered seven communities ranging from Pangnirtung and Pond Inlet to Kugaaruk and Repulse Bay. They note that Pangnirtung would attract the largest expenditures.

<sup>407</sup> For example, Clinton and Vail (2008), suggest the “tourism industry remains largely undeveloped.” The Department of Finance (2010a) suggests “tourism has sizeable potential to add value.”

typically applies at the level of extended family. Strong kinship-based support networks are a characteristic of traditional Inuit communities across Nunavut.

In the context of individual responsibility, government plays an important role in removing barriers to individual and family self-reliance. Government also plays a role in providing support to those who fail to gain acceptable levels of well-being through their existing social networks. The balance between individual and government roles shifts and evolves over time and is the subject of political discourse and democratic processes.

This is another form of self-reliance, simply played out at a national level through the political process. The logic underpinning this political process is that citizens debate how much of their collective wealth remains in the hands of families and how much is pooled together to meet objectives that cannot effectively be met individually.

#### *Private Sector Social Licence to Operate*

Corporations participate in the social contract by contributing to the cost of public services. The price corporations pay is determined through the political process. For resource companies the price is reflected in the amount paid to purchase resources “in the ground” or “in the water”—resource rents or “royalties”—and in the various taxes paid by the corporation. Governments learn to strike a balance between “giving away” their natural resources and setting tax and resource rates so high that corporations mobilize their expertise and capital in regions with more favourable conditions. As a major global resource economy, Canadian governments are well-acquainted with this balancing process.

Corporations and individual citizens alike also typically contribute directly to social development in areas that are not addressed by government. This social engagement is crucial to the well-being of communities and involves volunteerism, support for the activities of not-for-profit and charitable organizations, as well as direct charitable or philanthropic donations to worthy causes. Leaders in these areas are considered “good citizens” and, in the case of corporations, “good corporate citizens.” Good corporate citizens understand that their activities, the activities of their employees, and their financial power can all be used to affect the communities in which they operate in beneficial ways. Increasingly, companies recognize the tangible benefits they generate for society as a means to maintain their “social licence” to operate.

#### 8.2.2 Nunavut Land Claims Agreement and Governance Landscape

The Nunavut Land Claims Agreement (NLCA) was signed between the Government of Canada and the Tungavik Federation of Nunavut in May, 1993. The agreement created certainty related to land and resource ownership between Inuit and the Crown.

Of particular significance, The NLCA identified areas of land where Inuit retained ownership of subsurface mineral rights. In agreeing to the terms of the NLCA, the Crown agreed to cede claim to the future royalty revenues that would be generated by development of these resources. This part of the land claim was recognized to entail a cost in terms of foregone revenues to the Crown. This cost would only be incurred by the Crown at the time the resources are developed and the royalties paid to Inuit rather than to the Crown. As Mary River proceeds, the cost of these provisions will begin to be realized by the Crown, in terms of ongoing responsibilities for public service delivery without the traditional off-set of revenues from the sale of resources.

It is this rooting in the give-and-take negotiation of the land claim that gives rise to the ongoing responsibility of government to ensure public services are adequate to address the needs engendered by the Project. Royalties paid to Inuit from the Project are a deferred benefit of the land claim. They do not in any way imply a transfer of responsibility for the delivery of public services from the Crown to Inuit institutions.

Through the Nunavut Land Claims Agreement, several important institutions have been established to carry out some key functions of good governance. These include the Institutions of Public Governance (IPGs)—Nunavut Wildlife Management Board (wildlife management), the Nunavut Planning Commission (land use planning), and the Nunavut Impact Review Board (development project permitting).

Inuit organizations such as Nunavut Tunngavik Inc. (NTI) and QIA are membership-based entities consisting of Inuit beneficiaries to the NLCA. As democratically structured, non-government organizations, the decisions these organizations make are the business of their membership. As the financial capacity of these entities increases through receipt of resource royalties, their ability to benefit their Inuit membership can also be expected to increase.

### 8.2.3 Government Capacity

At a very basic level, governments raise revenues by selling access to natural resources and by levying taxes. These revenues support the costs associated with governance and with the social and economic services provided through the public sector. While taxation levels are established through highly political processes, resource rents (“royalty”) are established based on more global competitiveness factors. The price governments set for resources need to be high enough to address the costs associated with resource development and to provide acceptable benefits to the public. At the same time they must be low enough so as to attract the private sector investment needed to develop the resource.

In Nunavut, the Crown’s claim to some mineral resources was relinquished in return for other benefits, as negotiated under the NLCA. Where the Crown retained mineral resource ownership, this vests with the federal government. The territorial government does not receive direct benefits from the resource rents generated by mining activities in the territory. Rather the capacity of the territory to provide public services, such as health and education will continue based largely on transfers from the federal government. The territorial government does, however, gain revenues from individual and corporate taxation and thereby has a direct financial stake in resource development activities. As these activities increase, so too will the financial capacity of the territory.

The capacity of government to provide services is constrained by the cost of these services. This cost is influenced by many factors, of which level of demand, and ability to recruit qualified personnel are major determinants. Transportation, infrastructure, energy and many other factors also come into play. The cost of providing public services in Nunavut is high when considered on a per capita basis. The 2010/11 territorial budget will be some \$1.2 billion (GN Department of Finance, 2010a). With a population of just over 32,000 residents, territorial government services will total over \$37,000 per capita. The largest single expenditure is made for health and social services, with a budget of \$265 million, or over \$8,100 per capita.

Federal transfers to the territorial government will total \$35,985 per capita, or \$1.167 billion, for the 2010/11 fiscal year.<sup>408</sup> The territorial government expects to raise \$0.117 billion from taxes and other own-source revenues (Department of Finance 2010c). Personal taxes are estimated at \$12 million and corporate taxes at \$6 million. Payroll taxes and tobacco taxes are more larger revenue-providers at \$17 million and \$12 million, respectively. Fuel tax generates an additional \$5.4 million.

In its recent economic forecast for the territories, the Conference Board of Canada (2010) noted that the fiscal health of the Government of Nunavut is good and that the outlook over the coming decade is even better. The report goes on, though, to suggest that the population health status of Nunavummiut can be expected to attract government spending toward areas of health and social services rather than toward education. As of the start of the 2010/11 fiscal year, the consolidated debt of the territory is less than \$150 million. Less than \$5 million of this is directly attributable to the GN, with most related to outstanding debts of the Qulliq Energy Corporation, the Nunavut Housing Corporation, and the Nunavut Development Corporation. Under the *Nunavut Act*, the GN may borrow a maximum of \$200 million. The GN has borrowed only modest amounts, generally under \$5 million per year, over the past five years (GN Department of Finance 2010).

#### 8.2.3.1 Municipalities

Nunavut is composed of 25 communities which are, with the exception of Iqaluit, incorporated as hamlets. With no tax base, the hamlets are dependent on contributions provided by the territorial government. These allow them to deliver such local programs and services as:

- general government services
- general works
- protective services (e.g., bylaw enforcement, emergency planning)
- transportation (road maintenance, access roads)
- building maintenance
- utilities (water, sewage)
- recreation facilities and program coordination
- land administration
- community planning administration

Iqaluit was incorporated as a city in 2001 and raises revenue from its business and residential tax base. Given the small size of this tax base, equalization grants are provided by the territory to help the city maintain programs and services.

Hamlet capacity to deliver programs and services is said to be constrained, but improving with targeted training through the Municipal Training Organization (North Sky Consulting Group 2009):

“The GN tried to empower communities by downloading a lot of things to them—education, housing, justice... but communities don’t have the capacity to do all of these things to the extent that the GN has tried to download them. The GN needs to take all of these programs and services back, administer them properly, and listen for guidance from the communities but the communities cannot be the delivery agent (Iqaluit).”

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<sup>408</sup> Finance Canada. Available at: <http://www.fin.gc.ca/fedprov/mtp-eng.asp>. Accessed: September 2010.

“MTO [Municipal Training Organization] seem to be doing well with the training needs of Nunavut communities (Pond Inlet).”

#### 8.2.4 Not-For-Profit Organizational Capacity

Non-profit, non-government organizations play an important role in the capacity of communities to address common needs and development aspirations. In the LSA, these range from the Local Housing Authorities and Hunter and Trapper Organizations to local radio societies, day care committees, organized sports and recreation groups, youth groups, Elders' groups, and performance troupes (see Table 84). Formal registration as societies is a prerequisite for these groups to access government funding support.

### 8.3 COMMUNITY ECONOMIC DEVELOPMENT

Community development in the LSA and across Nunavut is supported by the territorial government through program resources that are aligned with the “CED Policy Framework.” The underlying philosophy is described as follows (GN Department of Sustainable Development 2003):

“CED is social and economic development aimed at benefiting the community as a whole (not simply individual entrepreneurs and industries). It is flexible and adaptable to various community situations and stages of readiness and results in improved quality of life and enhanced sustainability.”

Under this approach the territorial government endorses CED as a valuable approach to social, economic, cultural and environmental development. This endorsement requires a policy that will:

- Provide a collaborative approach to CED through GN partnerships.
- Assist with the establishment of community partnerships for CED.
- Encourage a more coordinated approach to service delivery that supports CED objectives.
- Align program support to address community priorities.
- Support community capacity-building to reach CED goals.
- Create a CED system that will provide continuity of approach across the territory.

At the level of individual communities, hamlets regularly undertake broad planning processes that engage many groups in the community. These processes offer an opportunity to reflect on strengths and challenges faced by the community. This self-reflection typically addresses social issues, cultural change, and issues related to education, business, and economic development. Reflection on how well local organizations are working together to address common goals is an important outcome of this process, as this can improve institutional capacity at the local level.

It can be expected that with recent establishment of the Regional Socio-Economic Monitoring Committees, which involve the hamlet mayors, the CED planning process could link in with monitoring progress in key areas.

**Table 84 Non-Government Organizations in North Baffin – 2007**

<i>Community</i>	<i>Registered Societies</i>	<i>Purpose</i>
Hall Beach	Amittuq Radio Society	Radio
	Hall Beach Housing Association	Public housing
	Hall Beach HTA	Hunters & Trappers
	Hall Beach Inummariit Society	Heritage, History and Culture
	Katiqsuivikut	
	Sanirajak Pairivvik	Day care
	Sanirayak Community Development Society	
Igloolik	Ajagutaq Day Care	Day care
	Amitturmiut Radio Society	Radio
	Archives Council Nunavummi	Heritage, History and Culture
	Arnait Media Productions	
	ArtCirq	Youth development, arts
	Igloolik Angirraq Society	
	Igloolik Curling Society	Recreation
	Igloolik Daycare Committee	Day care
	Igloolik Housing Association	Public housing
	Igloolik HTA	Hunters & Trappers
	Igloolik Qimuksiit Society	
	Ikulliat Society	
	Inullariit	Elders society
	Inuusi Youth Committee	Youth development
	Issaktautiit Society	Heritage, History and Culture
	Katiqsivik Church	Church
	Management Studies Group Society	
	Nalluat Sewing Society	
	Niuqvik Carvers Society	
	Nunavut Independent Television Network	Education
	Pirursiivik Daycare	Day Care
	Qimuksiqtiit Society	
	Survivors Tasiuqtit	
	Tarriaksuk Video Centre	
	The Foxe Basin Bowhead Whale Foundation	
Arctic Bay	Arctic Bay Housing Association	Public housing
	Hamlet of Arctic Bay	Local government
	Atta Suvaguq Society	
	Ikajutit HTA	Hunters & Trappers
	Qaiqtuq Nangirvik Society	
	Quasaapaa Historical Society	Heritage, History and Culture
	Aqsuksivik Society	
	Nunavut Youth Consulting	Youth development
	Nunavut Marathon Association	Tourism
	Pangaggujiniq Nunavut Quest	
	Tununirusirmiut SAR	Search and rescue

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<i>Community</i>	<i>Registered Societies</i>	<i>Category</i>
Pond Inlet	Aulajaaq (1994)	
	Kasarnak Child Care (1988)	Day Care
	Mittimatalik HTO (1973)	
	Naalakvik Society (1990)	
	Nasivvik Student Daycare (2001)	Day Care for Students
	Naurainnuk Daycare (1997)	Day Care
	Nunavut Inuit Childcare Association (2001)	Day Care
	Pauti Arctic Institute Of Research (2001)	
	Pond Inlet Credit Union Building Society (1993)	
	Pond Inlet Housing Association (1968)	Public housing
	Qaiqtuq Nangirvik (1996)	
	Qarasaujaqarvik CAP Society (2000)	Internet service
	Rebecca P. Idlout Library Board (2006)	Library
	Tumiit (1987)	
	Tunooniq Theatre (1987)	
Clyde River	Clyde River Childcare Committee	Day care
	Clyde River Housing Association	Public housing
	Clyde River Society For Economic Development	
	Ilisaqsivik Society	Social services
	Clyde River HTA	Hunters & Trappers

Source: Nunavut Registrar, GN Department of Justice, 2007.

Notes: 1) Information related to the category of activity is reported as listed in the Nunavut registry of businesses and societies. This information is, however, frequently not included in the registry. Information from other sources has been used when available. 2) Registered societies are not delisted until notification is provided to the registrar. Therefore, not all these listed societies are necessarily active.

The CED planning process also serves to establish development “goal posts” through the identification of vision statements for the community. As an example, the vision for Arctic Bay, as described in the Hamlet of Arctic Bay (2007) is:

“The people of Arctic Bay want Arctic Bay to be a place that has:

- facilities for everyone to participate equally
- community members who have a good understanding of their cultural roots
- everyone living healthy, happy lives
- community members comfortable enough with themselves to go out in the world and teach others about IQ.”

Igloolik’s vision (Hamlet of Igloolik, 2006) states:

“Igloolik maintains its strong Inuit Culture through traditional practices, theatre and film. Igloolik wants to be recognised as a world class tourist destination that draws international visitors with cultural, adventure and eco-tourism. ...The overall vision of Igloolik is based on the goal of alleviating the high unemployment in the community through the following activities:

- Increasing the education and training of individuals to take advantage of possible future opportunities in various sectors such as mining, oil, trades, and business.
- Fostering better support for small business development in the community for existing and new businesses.

- Developing the arts and crafts and renewable resource sectors.
- Ensuring the long-term financial viability of the Hamlet.
- Increasing the theatre and film production through Isuma Productions' highly acclaimed award winning *Atanarjuat* (The Fast Runner) and the latest film to come out of Igloolik, *The Diaries of Knud Rasmussen*.

"Igloolik wants a community that is healthy and offers its people adequate recreational and social infrastructure, housing, and resources to develop in the future."

The vision stated by the residents of the Hamlet of Pond Inlet (2010) includes:

"Pond Inlet will be a friendly community of healthy homes where drugs, alcohol and smoking are not an acceptable choice of the residents but instead, a safe culturally stimulating environment with healthy, active, happy and well nourished children.

"Pond Inlet will become a leader in local and regional development through education of the residents and the establishment of businesses while striving for the most efficient use of non renewable resources and examining new ways to provide services cost effectively to the community.

"Pond Inlet will revitalize the Inuit Culture through the Elders, programs and the establishment of markets for art and crafts to ensure generations of Inuit children will understand and appreciate their heritage."

All three of the CED plans reviewed include mining as an important strategic sector that can support achievement of development objectives in the LSA communities. Nonetheless, a desire to achieve broad economic opportunities across diversified economic sectors is expressed in the local CED plans.<sup>409</sup>

"The development of one industry should not be done at the expense of another. For example, mining activity in Nunavut should not be promoted more than tourism or small business. There needs to be a balance struck among the different industries. Also, the development of the community needs to be done with Inuit Qaujimajatuqangit as a guiding force: we must never develop at the expense of the land.

"To achieve the balance Pond Inlet will need to:

- Identify and take advantage over time of all opportunities for increased employment and business development.
- Maximize the benefit for employment and business development from each opportunity.
- Ensure that all factors are in place for successful development—money, financial, technical expertise, management, traditional skills, and markets."

### 8.3.1 Community Development and Mining

#### 8.3.1.1 Experience from Other Mine Projects

Major economic projects are widely seen to present opportunities to support achievement of local development aspirations. The mechanisms that drive these opportunities typically include project

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<sup>409</sup> The following quotes are included in all three CED plans.

effects on human resources development through training and employment, expansion of local business opportunities by raising the level of disposable income available to purchase local goods and services, and by offering opportunities to supply goods and services to the Project, and in development of local and regional infrastructure through direct contributions as well as through increased government revenue.

Past projects provide insight into how well these expectations have been met. In the LSA, reporting on experience from the Nanisivik Mine includes original research by Hobart (1976), Brubacher and Associates (2002), and Bowes-Lyon (2006). Synthesis papers by Pierce and Hornal (1994) and McPherson (2003) provide good summaries of additional findings related to this experience.

In the Brubacher and Associates (2002) study, carried out for the Government of Nunavut just before the Nanisivik Mine closure, a local hamlet leader is quoted as saying that:

“Nanisivik has had relatively little impact on the local business community. Things could have been different. The mine should have been more visible in the community so opportunities would be known. Would need government assistance too.”

Another person quoted in this study noted the importance of the increased income earned by residents working at the Nanisivik Mine to the local economy of Arctic Bay:

“We see that people mostly spend their money locally. Nanisivik cheques help the local economy—especially the retailers. They will have less revenue when the mine closes.”

The importance of the Project on local carvers was also noted:

“Arctic Bay carvers will be impacted—they are selling 90% of their work to Nanisivik people. One guy has a Nanisivik worker who serves as a dealer for him at the Nanisivik site.”

The Nanisivik Legacy report (Brubacher and Associates 2002) identified the following “lessons learned” from the Arctic Bay experience with Nanisivik:

- maintain a focus on community development goals
- ensure corporate memory is documented and available to the community
- monitor social and economic conditions related to these goals
- maintain open channels for communication between the mine and the community and workers
- manage alcohol according to community wishes
- address future use options and opportunities during the design phase
- set up pre-employment orientation training for all who are interested

The 2007 Socio-Economic Monitoring Report for the Jericho Mine considered effects of the Jericho diamond project on the local (Kitikmeot Region) business community. While quantitative data on procurement of goods and services from locally based businesses were not available, interviews with key people suggested that direct effects on local businesses were modest (Brubacher Development Strategies 2009).

Contribution of the project to the local economy through wages earned at the project was considerable, however. At its peak, that project was estimated to have contributed 5.6% of the total income entering the community of Kugluktuk and between 1% and 2% of the total income of other Kitikmeot communities.

#### 8.3.1.2 Community Expectations for Sustainable Benefits

The employment prospects offered by a major mine project such as Mary River are perceived as a good thing. Still, people look into the future to the point at which the mine shuts down and wonder what will be the long-term effects.

What happens when the Project is finished? The following exchange took place at one of Baffinland's public meetings:<sup>410</sup>

[Local MLA]: "I am very much in favour of employment being created. The feeling is that the mine is the only place where they can obtain employment...but there are other places. There will be probably other problems that will arise in the future that will be taken care of. I have a son who is 18 and by the time he is 36 the mine will close. What do we do with their future?"

[Baffinland Representative 1]: "Job opportunities and skills development lead to other opportunities to apply it to other things. We see that work opportunities at the Project not only support the Project but have the potential to support a wider range of activities. There will be new skills acquired that can be transferred."

An expectation was raised that the benefits of a major mine project need to go beyond simply "levelling out" the negative effects a project may generate. Rather, a project like Mary River should actually contribute to the positive development direction of a community.<sup>411</sup>

An expectation that benefits accrue to future generations was also expressed during a meeting with Baffinland in Pond Inlet:<sup>412</sup>

[Hamlet Councillor]: "I want to see monetary compensation [royalties to Inuit in North Baffin communities] through the mining. ...My future generation must be helped too."

[Baffinland Representative]: "The Project will generate royalties and taxes. Money will go to the federal government, territorial government and people, and an agreement will be established. ...We also, and do it today, pay rent for permission to work on the land to use the water and to use the gravel. In addition to that, direct benefits to individual people come through employment and wages, training, new business opportunities. So when we look at the picture there are many ways that benefits flow back."

#### 8.3.1.3 Perspectives on Synergistic and Antagonistic Interactions

Beneficial interactions between the Project and local communities may be generated through interactions that emerge from the Project. Some of these could be passive, such as increased

<sup>410</sup> Exchange during Igloodik public meeting, March 2008.

<sup>411</sup> Meeting with the Pond Inlet EDC, January 2007.

<sup>412</sup> Pond Inlet Hamlet Council meeting with Baffinland, March, 2008.

access to Mary River soapstone due to the increased air transportation brought about by the Project. Some interactions may arise from intentional efforts to make “excess capacity” available to local communities. Access to technical experts or professionals on staff with the Project could improve local capacity where the costs of identifying and flying these resources in would otherwise be prohibitive.

The potential for adverse effects also exists—the community of Arctic Bay has perceived that facilities and services provided by government to support the Nanisivik project impeded their access to similar facilities and services. Some comment was heard from Pond Inlet in relation to that community’s long-standing desire to gain transportation infrastructure that would support the community becoming a regional hub.

The high cost of transportation led to questions about whether personal goods might be brought north using the company’s shipping capacity:

[HTO Member]: Shipping will be year-round, if you get approval, when you start operating. Can you bring anything in from Montreal for personal items?

[Baffinland Representative]: Our ore ships are designed just for ore and they’ll come from overseas. We’ll have freight as well, but they are specific for the mining operation.<sup>413</sup>

In a different setting, a government official suggested that it might be possible to tranship stuff at Montreal and that the GN would work with Baffinland through the DPA process.<sup>414</sup>

A similar question was raised during a meeting with the same HTO and the socio-economic researcher:

“Might Baffinland be willing to assist in transportation of big ticket items (like snowmachines/ATVs/boats)? Bring them up on the Project sealift and drop them off at Milne Inlet where people can come and pick them up.”<sup>415</sup>

Transportation synergies were raised again during the ED&T-hosted meeting in Pond Inlet. Here a government official suggested that, “maybe there’d be opportunities to use the Baffinland port at Steensby to get sealift in by deep water vessel and then deliver locally from there to Igloolik and Hall Beach.”

At a more fundamental level the long-distance commuter model, or fly-in/fly-out employment model, for major, long-term projects have been considered, particularly during the 1980s. Storey and Shrimpton (1989a and b) have described how the shift toward this model away from the establishment of mining towns came about with a decline in air transport costs, improved communications, and increasing costs associated with building, operating, and closing industry-focused towns. At the same time, the need for diverse employment opportunities has expanded with the move toward two-income households as the employment needs of both partners must be met. Further, attitudes and expectations have changed related to local services. The potential to develop a town at Mary River was considered in moderate detail by government officials during the early development of the Project (Bissett 1970).

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<sup>413</sup> Arctic Bay HTO meeting with Baffinland, March 2008.

<sup>414</sup> Pond Inlet ED&T socio-economic workshop, November 2007.

<sup>415</sup> Meeting with Arctic Bay HTO, 2007.

### 8.3.2 Infrastructure and Community Development

For a baseline summary of the total value of municipal infrastructure, see Table 85. Infrastructure gaps are frequently suggested as important barriers to business, social, and cultural development in communities across the LSA. Hamlet CED plans call for many types of infrastructure: space for small businesses, workshop space for carvers, visitor centres, fish plants, swimming pools, day cares, youth centres, healing centres.

**Table 85 Municipal Infrastructure in the LSA and RSA**

Capital infrastructure owned by municipalities (insured value of buildings and other infrastructure)			Population (number in 2007)	Per capita value of municipal infrastructure
LSA	Hall Beach	\$13,966,100	685	\$20,388
	Igloolik	\$20,048,000	1,607	\$12,475
	Arctic Bay	\$18,533,700	714	\$25,958
	Pond Inlet	\$22,071,200	1,398	\$15,788
	Clyde River	\$14,698,300	866	\$16,973
RSA	Iqaluit	\$67,742,900	6,609	\$10,250
	North Baffin	\$89,317,300	5,390	\$16,571
	South Baffin	\$105,073,700	4,190	\$25,077

Source: Per capita values calculated by Brubacher Development Strategies from data provided by Government of Nunavut, Department of Community and Government Services, August 2010.

Notes: 1) South Baffin includes communities of Qikiqtarjuaq, Pangnirtung, Kimmirut, Cape Dorset, and Sanikiluaq.

2) Inconsistencies arise in the reporting of infrastructure. For example, Clyde River does not include a water pump station, which the other communities include. The per capita value is intended to provide a population-standardized baseline to allow for future monitoring as population growth occurs.

One example of how the link between social, cultural, and infrastructure concerns is perceived can be seen in the following excerpt from a CED plan:

“There is anger in the community and it is mostly among the youth. The youth are angry because there is no one who is telling them and showing them how to do things. There is an overall lack of guidance for the youth. The youth in turn are afraid to go and seek the assistance of the Elders and the Elders will not just offer assistance without being approached and asked. It is obvious that the youth need a place to go and seek guidance from the elders and this will be established once the elders centre becomes a reality. Youth benefit from participating in the youth—Elder camps every year. However, they do not practice what they learn out on the land, once they arrive back in the community. If there was a building here for the Elders, the teachings could continue.”<sup>416</sup>

During the various public meetings, one-on-one interviews, and group sessions held during the consultation and scoping phase, a variety of comments were raised that relate to infrastructure. These cover several broad categories.

The first relates to how the Project might affect or interact with critical transportation infrastructure components and transportation functions such as the annual sealift resupply on which North Baffin communities are dependent:

<sup>416</sup> Hamlet of Igloolik, 2006.

[Resident]: “Pond Inlet keeps asking for a breakwater and dust control and infrastructure, but [we] haven’t seen any benefit agreement... Pond Inlet needs to see tangible benefits before supporting your proposal.”<sup>417</sup>

[Resident]: “My question is with respect to infrastructure. It is a significant change to infrastructure in the north, and [I am] wondering what kind of thought [has been given] to spin-off benefits at those two locations and how that might affect community resupply?”

[Baffinland Representative 3]: Those are very good questions, aspects. ...over the next two years that will be something we will think about very hard, how we are going to incorporate community infrastructure needs with what we are doing.<sup>418</sup>

Another dimension of infrastructure-related issue raised by local residents relates to the need for infrastructure to support community services:

“There is hardly anything here—only one gym, no drop-in centres here. My kids like sports...[in another community] they have two gyms, an arena, a drop-in centre. Here sometimes they go to the adult education centre to use the computers, but it’s only at certain times—different times for different ages.”<sup>419</sup>

The demand for building space to house a range of community services, training facilities, and/or business space, has been previously noted.<sup>420</sup>

The costs associated with physical infrastructure, associated with the scarcity of available space, makes community planning a real challenge:

“One of the things we’ve tried to do in our CED plan is to get the facilities...but not just the buildings, but also the programming...for structured activities for youth to do if parents aren’t around. But even if the mine wasn’t here, we’ve already got it in our plan that that’s something we recognize has got to be a part of Arctic Bay anyway. The stumbling block is that it runs into the other issue of infrastructure and buildings...”<sup>421</sup>

Perception that Mary River infrastructure may adversely affect the prospects for community-based infrastructure was also evident during discussions held in Pond Inlet. Two individuals voiced concern that Baffinland-specific infrastructure—particularly jet strip and service—will reduce the political and financial rationale for Pond Inlet achieving its objectives for jet service.<sup>422</sup>

At the same time, the group perceived that one opportunity raised by the Project is for Baffinland and the GN to partner on building infrastructure of importance to the community. In discussion, it was noted that the practice of building project-specific infrastructure that is of public importance and highly desired has been both a failure in terms of northern development and also an irritant to North Baffin residents. Reference was made to the Nanisivik jet strip and Nanisivik port facility.

<sup>417</sup> Pond Inlet public meeting, hosted by Baffinland, March 2008.

<sup>418</sup> Iqaluit public meeting, April 2008.

<sup>419</sup> Worker (male) 5, interviewed May 2008.

<sup>420</sup> See discussion of training needs, childcare services, above, and local business challenges, below.

<sup>421</sup> Arctic Bay EDC Workshop, May 2008.

<sup>422</sup> Pond Inlet Economic Development Workshop, February 2008.

With regard to infrastructure planning, a member of the Arctic Bay EDC noted that his community is now working on an “Integrated Sustainability Plan” through GN CGS. This is to include community economic development, healing, and infrastructure. The intention is to plan 10 to 15 years out.<sup>423</sup>

### 8.3.3 Community Perceptions Related to the Local Labour Market

During a workshop session with small business owners, concern was raised about the impact of major hiring for the Project on the ability of local businesses to hire the labour they require. One construction business noted that with the Mary River pre-Project hiring labour force effects were already being felt—and offered a solution to help alleviate the shortage:

“I’m having trouble finding drivers, and the people I train end up getting better paying jobs and they leave. We know there is going to be a shortage so we need a concerted effort to start training women drivers.”<sup>424</sup>

Concerns about the impact of the Project on municipal hiring were also raised during the socio-economic workshop hosted by ED&T. A delegate from Hall Beach noted his concern about losing hamlet staff to the various industrial activities taking place in the region. A Clyde River delegate indicated that there is a lot of development activity taking place around his community and that it is also putting lots of pressure on their job pool:

[Clyde River Delegate]: I may need to train new heavy equipment operators for the hamlet.

[Baffinland Representative]: Baffinland recognizes there is a finite level of skilled workers. This Project offers the opportunity for training new people. We could do cross-training — there is a need to involve the hamlets and the GN, and an opportunity to develop working agreements. We have started simulator training at Milne Inlet.

A similar concern was raised during a meeting between the Clyde River hamlet and Baffinland:<sup>425</sup>

[Hamlet Official]: ...will there be a benefit for the communities? ...because you’re going to strip the labour and we need to start at the bottom—we train people to a certain level and they go to other jobs.

[Baffinland Representative]: The IIBA has to consider the social fabric of the community—monitoring, measuring, compensating or mitigating. We’ll want to ...ensure we don’t take all the qualified workers.

In an interview with a worker at the pre-Project phase of Mary River, the researcher asked if the Project will lead the hamlet to lose staff. The following response illustrates that while Mary River may contribute to turnover among staff of local employers, the Project is not the only factor affecting staff retention:

“They are already losing people to Mary River. Even the [name of a hamlet position] went to work at Mary River—but it wasn’t just about the Mary River [job opportunity], but also about [specific non-monetary workplace considerations].”<sup>426</sup>

<sup>423</sup> Arctic Bay EDC Workshop, May 2008.

<sup>424</sup> Resident (man) 6, Small Business Workshop, Pond Inlet, February 2008.

<sup>425</sup> Clyde River Hamlet meeting with Baffinland, April 2008.

The challenge of staff retention is not unique to hamlet governments. The following comment notes the reality that many people who are able to access good government jobs must move away from their home communities. The multiple points-of-hire for the Mary River may be attractive for some:

“The GN is already understaffed. A lot of people are unhappy with their jobs, and when they see an opportunity where they can stay in their home community and commute [fly-in/fly-out] to work ...it could affect an awful lot of positions.”<sup>427</sup>

The impact of Mary River on local employers may also be influenced by the preference of workers for community-based or fly-in/fly-out work. During research carried out for this Project, questions were posed in the course of worker interviews that relate to job location preference:

“If the pay is the same, I'd rather work here [in the community]. ...over there [at Mary River] the work was hard physical work. ...[as well] here there are fewer rules. ...But for “a couple bucks” more per hour I'd take a job at MR.”<sup>428</sup>

For many individuals, full-time jobs are not available to them. If they are able to find work it is likely to be casual or part-time. For these people—particularly those younger individuals who are not in established family relationships—the fly-in/fly-out work style may be more attractive than the job options available in the community. One pre-Project phase applicant indicated that if he were successful in getting a job at Mary River he'd, “Do more stuff, instead of waiting to do my [part-time] job here in town.” He further noted that his friends look forward to getting back to work at Mary River when they are on their off-rotation.<sup>429</sup>

Another worker who operated heavy equipment expressed a preference for working in the camps, rather than in the community setting:

“I like working in camps, not in towns or communities—there are too many people there—when you are operating heavy equipment, you have to be careful when people are around.”<sup>430</sup>

The partner of a Mary River worker was asked why her husband chose to work at the fly-in/fly-out operation. She responded that even though he has his drivers' licence and has previous experience driving water, sewage, and garbage trucks, he was only able to get casual work in the community. She did note, however, that her husband would prefer to come back to the community if he could get a good job.<sup>431</sup>

During the ED&T workshop, a delegate asked about the experience of Labrador communities with respect to loss of hamlet employees to the Voisey's Bay Mine:

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<sup>426</sup> Worker (man) 9, interviewed July 2007.

<sup>427</sup> Resident (man) 9, Arctic Bay EDC Workshop, May 2008.

<sup>428</sup> Worker (male) 10, interviewed July 2007.

<sup>429</sup> Applicant (male) 1, interviewed May 2008.

<sup>430</sup> Worker (male) 5, interviewed 2008.

<sup>431</sup> Wife of worker 1, interviewed 2008.

“...Initially they lost people, but some of these came back again. The heavy equipment operators seem to stick around at the 2-week in/ 2-week out rotation.”<sup>432</sup>

The problem of casual rather than full-time jobs in the hamlets may be, in part, brought about by tight budgets and low local employment rates:

[Participant 1]: “For casual workers, the union rule is that the hamlet cannot hire casuals for more than four months at a time—after that they need to be provided with benefits. So casuals are laid off after four months. The hamlet rule, then, is that once a casual worker finishes a four month stint, they can’t be rehired within the next four-month period after being laid off. This makes it hard for the hamlet to find the drivers they need.”

[Participant 2]: “...The hamlet may have been thinking, probably, to circulate those jobs around the eligible residents. Give everyone a chance to work.”

In communities where the hamlet workforce has been unionized, communities are further constrained in their competitive options, since they are bound to the union wage scales established for their workers.<sup>433</sup>

The prospect for an expanded demand for licensed drivers has led to growing recognition of the need for driver certification. As noted during a workshop in Arctic Bay:<sup>434</sup>

[Participant 1] “One of the things that is blocking that is lack of Class 3 driver certification. That’s a major bottleneck right now for getting drivers.”

[Participant 3]: “In addition to certification of Class 3 workers, there should be also be basic drivers’ licence course so people can get started in driving. For many, they have no access to a vehicle to learn how to drive. It would be good to have a vehicle available for practice and road test.”

The situation where a Mary River worker does a few shifts as a hamlet water delivery and sewage truck driver was also heard during the worker interviews. Similar situations were noted to take place among heavy equipment operators in Labrador who work at Voisey’s Bay on a rotational basis, and also in the Kitikmeot region, where job-sharing has reportedly been done between the hamlet and a mine contractor company.<sup>435</sup>

## 8.4 THE LOCAL ECONOMY

### 8.4.1 Community Income

In addition to affecting household economic wellbeing, the level of personal income that flows through the local economy also influences opportunities for consumer-focused business development. As income increases, discretionary expenditures will also increase, creating new opportunities for entrepreneurs to capture some of this income and cycle it through the community creating new wealth and new jobs.

<sup>432</sup> Response of Theresa Hollett, Nunatsiavut Government. ED&T Workshop, November 2007.

<sup>433</sup> Comment provided by Pond Inlet delegate to ED&T Workshop, November 2007.

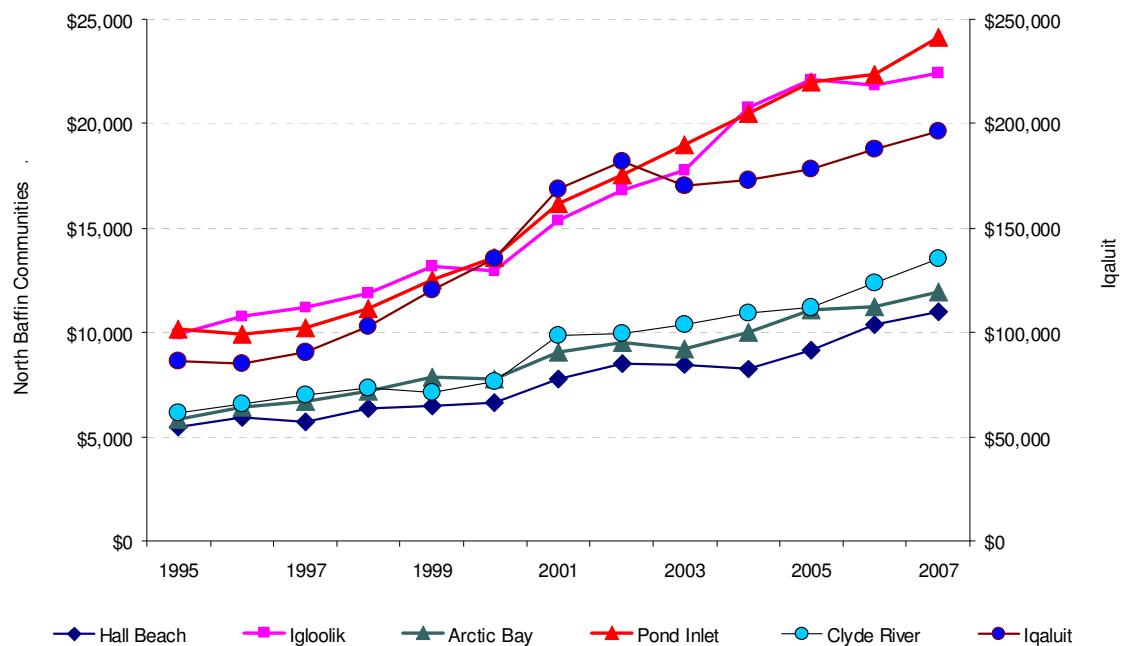
<sup>434</sup> Arctic Bay EDC workshop, May, 2008.

<sup>435</sup> Comments provided during ED&T Workshop in Pond Inlet, 2007.

For baseline levels of total personal income entering the LSA communities and Iqaluit, see Table 86. In 2007 personal income reported by residents of the five North Baffin LSA communities and Iqaluit amounted to \$83 million and \$196 million respectively.

**Table 86 Total Personal Income Entering Economy of the LSA, 1995–2007**

	Hall Beach	Igloolik	Arctic Bay	Pond Inlet	Clyde River	Iqaluit
	(total income of all taxfilers in the community, '000s)					
1995	\$5,438	\$9,910	\$5,851	\$10,159	\$6,130	\$85,958
1996	\$5,943	\$10,756	\$6,411	\$9,918	\$6,598	\$85,356
1997	\$5,707	\$11,213	\$6,693	\$10,213	\$6,988	\$90,298
1998	\$6,355	\$11,899	\$7,198	\$11,146	\$7,322	\$102,691
1999	\$6,488	\$13,184	\$7,844	\$12,549	\$7,100	\$120,231
2000	\$6,652	\$12,967	\$7,742	\$13,588	\$7,649	\$135,188
2001	\$7,756	\$15,356	\$9,056	\$16,177	\$9,852	\$168,670
2002	\$8,505	\$16,810	\$9,554	\$17,549	\$9,973	\$182,168
2003	\$8,481	\$17,774	\$9,217	\$19,019	\$10,383	\$170,432
2004	\$8,249	\$20,757	\$9,984	\$20,490	\$10,931	\$172,968
2005	\$9,140	\$22,095	\$11,060	\$22,014	\$11,175	\$178,185
2006	\$10,374	\$21,830	\$11,235	\$22,397	\$12,389	\$187,765
2007	\$10,975	\$22,430	\$11,945	\$24,150	\$13,540	\$196,520



Source: Statistics Canada, Labour Income Profile, Small Area and Administrative Data Division, Annual Estimates for Census Families and Individuals (71C0018). July 2010.

#### 8.4.2 Local Business Profile

The business community of the LSA is small, reflecting the small populations and low income levels of these communities. For a list of local businesses in the LSA registered with NTI as Inuit firms, or with the Nunavummi Nangminiaqtunik Ikajuuti (NNI) program as Nunavut firms, see Table 87.

In addition to these there are a number of businesses that have not registered either with the NTI or the NNI program. These include incorporated and unincorporated enterprises such as local bed and breakfasts, taxi services, outfitters and others. As an example, while there are seven businesses from Arctic Bay registered with NNI and/or NTI, the Arctic Bay Economic Development Plan (2007) identifies a total of 26 local businesses. A total of 25 local businesses are identified in the Pond Inlet CED Plan (2010), compared with the 11 listed with either or both of the registry schemes.

The business sector in Iqaluit is substantially larger, with a total of 129 enterprises registered with either the NNI, NTI or both registries.

The GN Department of Justice maintains a legal registry of incorporated and unincorporated businesses. This registry lists 94 unincorporated and 27 incorporated businesses, both active and inactive, in the LSA communities and 1,426 unincorporated, 371 incorporated businesses in Iqaluit.<sup>436</sup>

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<sup>436</sup> Government of Nunavut Department of Justice, legal registry, accessed September 2007.

**Table 87 Businesses in the LSA**

<i>Location</i>	<i>Name</i>	<i>Description</i>	<i>NNI</i>	<i>NTI</i>
Hall Beach	Hall Beach Eskimo Co-operative	Store, Inns North Hotel and other hotel, Cable TV, POL, Post Office		X
Igloolik	Aqiggiq Store	Retail Store and Taxi services		X
	Igloolik Co-operative Ltd.	Store, Inns North Hotel and other hotel, Cable TV, Convenience Store, POL, Post Office		X
	Igloolik Isuma Productions Inc.	Independent Film, Video, TV production		X
Arctic Bay	5027 Nunavut Ltd		X	
	ADCO Ikpiaryuk Ltd.		X	
	Arqvirtuq Services Ltd.	Taxi services, rental and charters	X	X
	Ikpiaryuk Services Ltd.	Building Materials, Residential and Commercial	X	X
	Maniituaq Outfitting	Outfitting		X
	Ron Elliott Photography		X	
	Taqqut Co-operative Ltd.	Store, Cable TV, POL, Post Office, Inns North Hotel and other hotel		X
Pond Inlet	Aupilatunguaq	Cleaning & contracts service		X
	Iglugili	General Contracting, Sales and Services		X
	Inuarak Outfitting	Tourism, Sport Hunting, Fishing		X
	Kamikpak General Contracting/Construction	General Contracting	X	X
	Merkosak Construction Limited	General contracting, earth moving, sealift, local cartage		X
	Nanooq Expeditions	Outfitting, Sport Hunting/Tourism		X
	Salummaqsai		X	
	Solunarcic Designs		X	
	Tagak Outfitting Services	Outfitting service	X	X
	Toonoonik Sahooinik Co-op Ltd.	Store, Inns North Hotel and other hotel, Cable TV, Construction, POL, Post office	X	X
Clyde River	Aarruja Development Corporation	Retail, grocery, hotel	X	X
	Nutaaq Construction Ltd	Building, Construction, General		X
	Prime Business Services Ltd.	Expediting and Business Consultants		X

Source: Derived from NNI and NTI business registries, August 2010.

#### 8.4.3 Formal Self-employment in the Wage-Based Economy

Self-employment is an important indicator of entrepreneurial capacity, as it can be a stepping-stone toward larger-scale business activities. The level of self-employment across the RSA is fairly low, as is the amount of income earned through self-employment activities. In 1996 a total of 270 Baffin residents reported some income from self-employment business activities.<sup>437</sup> By 2004, this number had increased to 410 individuals. Most (six out of ten) of these self-employed entrepreneurs live in Iqaluit, with the remaining 40% being distributed across the other Baffin communities. In the North Baffin LSA, approximately 70 individuals earned self-employment income in 2004.

Most North Baffin LSA residents reporting self-employment income earned less than \$5,000 through their business activities. In Iqaluit, self-employment earnings are a little higher, with half of self-employment income earners reporting more than \$5,000, and one-in-five reporting \$35,000 or more.

<sup>437</sup> This data is based on taxfiler data prepared by Statistics Canada, SAADD division, as a custom order. 2007.

One-in-four self-employment income earners in Iqaluit had family incomes with no other source of market income. Most people, however, who report self-employment income live in families where there is also wage income being earned. This other income can be substantial. In Iqaluit in 2004, 100 of the 240 self-employment income earners, or 42%, had family wage incomes of \$85,000 or more. In the rest of the Baffin region, a similar proportion of self-employment earners (24%) have no other family wage income. However, in these communities, the level of other family wage income is lower, with only 41% of families having wage incomes of \$35,000 or more.

These data suggest that employment income plays an important role as a “spring-board” to self-employment. While a few families rely on self-employment as their main source of income, it is more common that self-employment activities are nurtured by the wage employment earnings of either the self-employed person or a family member, or both. This pattern appears to be stronger in Iqaluit than it is in the other communities of the Baffin region.

#### 8.4.4 Procurement During Project Definition Phase

During the course of the Project definition phase, from 2006 through August 2010, a total of \$49.7 million worth of goods and services was procured by Baffinland from vendors based in the North Baffin LSA and Iqaluit. Of this amount, \$10 million was purchased from businesses based in the North Baffin LSA and \$39.9 from vendors based in Iqaluit. These expenditures accounted for 3% and 11% of total procurement, respectively. For a summary of these expenditures broken into subcategories, see Table 88.

**Table 88 Procurement by Baffinland During Project Definition Phase**

<b>North Baffin LSA Vendors</b>						
	2006	2007	2008	2009	2010	
donations	4,286	36,000	12,399	11,429	29,524	
food & accommodation	1,848,865	1,699,429	2,983,050	169,208	217,441	
fuel	177,419	1,447,988	555,166	-	-	
labour	106,857	163,954	146,696	3,172	16,111	
NTI fees	-	-	34,948	36,348	34,514	
office lease	-	26,051	53,444	23,332	7,200	
ground transportation	-	2,899	3,840	122	540	
other	2,286	29,631	76,020	11,563	6,304	
<b>Total</b>	<b>2,139,713</b>	<b>3,405,952</b>	<b>3,865,562</b>	<b>255,173</b>	<b>311,634</b>	<b>9,978,035</b>
<b>Iqaluit Vendors</b>						
	2006	2007	2008	2009	2010	
advertising	-	7,401	7,915	1,024	2,724	
donations	-	4,762	9,524	-	-	
equipment	1,030	-	44,025	-	27,600	
food & accommodation	-	69,773	257,019	9,169	10,831	
freight & transportation	54,812	47,658	175,977	102,124	178,423	
fuel	-	182,693	1,713,963	160,189	126,992	
3rd party contract	1,020,270	11,060,807	15,645,694	2,884,527	1,061,884	
other	67	33,763	35,385	25,637	4,131	
property leases	7,500	7,500	1,064,233	641,539	166,057	
royalty lease	-	-	2,334,318	37,573	6,263	
supplies	1,752	170,345	338,241	2,891	2,306	
	<b>1,085,430</b>	<b>11,584,701</b>	<b>21,626,293</b>	<b>3,864,672</b>	<b>1,587,209</b>	<b>39,748,305</b>

Source: Baffinland, September 2010. Note: The “3<sup>rd</sup> party contract” includes supply of labour, catering, and road contract.

#### 8.4.5 Perceptions Related to Opportunities for Business Development

The potential that opportunities for local business development may emerge from the Project were expressed during discussions with LSA residents.

“The communities need to have more benefit in terms of contracts.... There needs to be more incentive for the business owners. Having a business—Baffinland will need to say these are the contracts or services that we need in operation. Today 25 [residents] from Pond Inlet are working, they ask for cigarettes and pop, but those people in Mary River, there needs to be a small shop for cigarette and pop at the site, these kind of businesses, or laundry service.”<sup>438</sup>

“The weather is also a challenge—if you order something (like smokes) and then the plane doesn’t come in you are stuck. You can make arrangements with people to buy things for you and send them up on the plane. A store would help. We have money but no way to spend it here.”<sup>439</sup>

Mine workers themselves are also seen as a potentially important market for locally produced items such as carvings, clothing items, and souvenir items:

“When Nanisivik was operating carvers would just go to the site to sell their carvings. Here there’s going to need to be a different way to get carvings to the guys who may want to buy them. I’m sure some of the southern employees are going to want something to take back home with them.”<sup>440</sup>

“We could also market our gift shop here in Arctic Bay with the book that we are going to be producing....”<sup>441</sup>

During the ED&T workshop in Pond Inlet, Theresa Hollett, from Labrador, spoke about the business opportunities that the Voisey’s Bay Mine has generated so far. At that project, contracts are awarded based on a number of factors: previous experience of the company; safety record; continuity of business; evidence of timeliness of completion; personnel; commitment to Inuit/Innu employment; and financial capacity. While Inuit have been more successful in business partnerships, the Innu have a catering/cleaning contract and also run a store onsite. She also noted that under an Impact Benefits Agreement associated with the project, a “Nunatsiavut Business Centre and Business Fund” was established. However, so far there have not been many applicants to this fund.

The potential that weather-related delays will contribute to local economic activity was also noted. This effect is thought to be most important for Iqaluit. Some effects could also be experienced by North Baffin communities associated with landing strips that might serve as alternatives for landing the Mary River commuter flights. One person, for example, suggested that:

“When guys get stuck in Iqaluit on their way from Ottawa to Mary River due to weather issues, those guys will stay at local hotels, spend money and buy things — all of that will contribute to the economy.”<sup>442</sup>

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<sup>438</sup> Local entrepreneur 1, Pond Inlet public meeting hosted by Baffinland, March 2008.

<sup>439</sup> Worker (male) 7, interviewed November 2007.

<sup>440</sup> North Baffin resident 7, Arctic Bay EDC Workshop, May 2008.

<sup>441</sup> North Baffin resident 4, Arctic Bay EDC Workshop, May 2008.

The idea that Mary River could support businesses that are not directly dependent on the ongoing Project but could be sustained beyond the Project's life was also raised.<sup>443</sup> An observation was made by a local entrepreneur that there is already more money available to be spent locally, arising from the pre-Project phase of Mary River employment.<sup>444</sup>

This was reinforced by the response of a worker at the pre-Project phase who was asked if he expected to see any changes in his community if the Project goes ahead: "You already see changes, economic changes. People have more money to do more things with. So the issue is, 'what is there to spend money on?'" He suggested that he'd buy drugs, mostly weed, if there's nothing else to do with it. "But you can do other things too — buy a snowmachine for hunting. Maybe there will be other things to buy."

An idea of the range of services that are typically perceived as opportunities for local business can be derived from a review of community economic development plans from the North Baffin LSA (see Table 89).

It should be noted that in some instances these services are already offered through the local Co-op business. However, it is typically felt that the Co-op should facilitate, or at least not stand in the way of the development of individually-owned local businesses. For example the Igloodik CED Plan (2006) noted that "philosophically, the Co-op supports the development of small business...."

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<sup>442</sup> Worker (male) 7, interviewed November 2007.

<sup>443</sup> This idea was raised by Public Sector 5, interviewed January 2007.

<sup>444</sup> Local entrepreneur 2, Pond Inlet public meeting hosted by Baffinland, March 2008.

**Table 89 Business Ideas Identified in LSA CED Plans**

Service/business idea	Community Economic Development Plan		
	Iglolik	Arctic Bay	Pond Inlet
24 hour taxi service			X
Airport gift shop/coffee shop	X	X	
Arcade	X		X
Arts and crafts store			X
Automotive shop			X
Bakery	X		
Boat building business			X
Bookkeeping service	X		
Bowling alley	X		X
Carving facility and store		X	
Clam fishery	X		
Clothing store (new and used)	X		X
Coffee and/or Donut shop	X	X	X
Convenience store	X		X
Country food store		X	
Curling rink			X
Electrical and plumbing supplies		X	
Ferry service business	X		
Fitness Centre			X
Fur outlet			X
Furnace repair and cleaning service	X	X	
Furniture restoring, tent making			X
General contracting/construction business	X	X	
Hairdresser/salon	X	X	X
Hardware store			X
Heavy equipment shop			X
Local television production			X
Massage therapist			X
Movie Theatre	X		X
Music business	X		
Office supplies store		X	
Outfitting business	X	X	
Private radio station			X
Private water and sewage trucks			X
Restaurant	X	X	X
Safety supply store			X
Sale of iceberg ice			X
School bus service	X		
Second hand store or a dollar store			X
Selling soapstone and other carving stone			X
Sewing centre	X		
Skidoo, ATV and boat sales/rentals	X		X
Small engine repair shop	X	X	X
Stationary store	X		
Tannery	X		
Vehicle maintenance garage	X	X	
Video rental	X		

Source: Hamlet CED Plans

#### 8.4.6 Perceptions Related to Challenges Faced by Local Businesses

Recognition of the need for planning and for a manageable rate of growth for local businesses was expressed:

“We need to know what Baffinland needs to plan for Projects, financing, expansion. It would be good to identify opportunities that can start small and then grow as the Project expands.”<sup>445</sup>

Recognition that the current business community might be unprepared to benefit from opportunities generated by the Project was also expressed during the Pond Inlet small business workshop:

[Local entrepreneur]: “We need both political will and organization/leadership. ...Without leadership, this won't fly.”

Other challenges faced by local businesses were identified. For example, one local economic development officer spoke of the difficulties business people sometimes face in doing their paperwork—book-keeping, applying for funding, preparing business plans. Keeping up with the administrative and tax filing side of business can be difficult. Many entrepreneurs do not have access to affordable business support services to assist with bookkeeping, remittance of tax instalments, remittance of payroll source deductions, tax filing and so forth.

More fundamental challenges lie in the economics of running local service-oriented businesses in small communities where disposable income is quite low. While businesses like a local restaurant or even a coffee shop would be highly valued by residents as “a place to go, hang out, talk with people...” the economics of such businesses are uncertain given high costs associated with the capital and operating costs of infrastructure. “How much would a business like this lose? Can you find someone able to own and operate it without an expectation of a living return?”

In another community, the issue of physical space to support local business operations was also raised, along with the concept of a multipurpose centre that would include a mix of government rental space, space for social programs, as well as space for service businesses such as a coffee shop.

The dominant role of the local co-op in Pond Inlet's entrepreneurial landscape was noted during an economic development workshop:

[Workshop Participant 1]: It is impossible to compete against the Co-op....

[Manager]: I don't know about the Co-op in the past, but I know that now Pond Inlet needs other businesses. We, as the Co-op, have cash and clout...but what is our role in supporting other businesses?

[Facilitator]: So one potential "pushing factor" — pushing toward a desired future — might be the Co-op as a small business supporter / incubator...

[Workshop Participant 2]: I know people would like to work out of the Co-op, but there is no space available.

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<sup>445</sup> North Baffin resident 6, Small Business Workshop, Pond Inlet, February 2008.

The link between local consumption of drugs and alcohol and the availability of disposable income that might support local service-oriented businesses was made quite compellingly during a workshop in Pond Inlet:

“Social issues play into this. People are putting their money into “tax-free enterprises” [this became the euphemism for the bootleggers and dope-dealers]. So there is little cash available to support small businesses.”<sup>446</sup>

A high-level challenge that relates to both local business development as well as to other dimensions of community economic development was identified in the Hamlet of Arctic Bay (2007) CED plan:

“A final area of challenge for the development of the community is the increasing dependency of people on income support. People have become complacent and are not willing to take on new challenges.”

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<sup>446</sup> Public Sector 1, Economic Development Workshop, Pond Inlet, February 2008.

## SECTION 9.0 - COMMUNITY – COMPANY RELATIONSHIP

*Theme: What is the basis for a strong relationship between the Project and communities so that issues can be effectively resolved if and as they arise?*

The Mary River story is not new in North Baffin. Some residents of the LSA today recall hearing about the proposed development during the earliest days of exploration work that took place decades ago when they were young. Bissett (1970) summarized the early days of the Project.

Residents of the LSA, particularly those of Arctic Bay, also have a collective memory of the decision making process and relationships leading to the establishment of the Nanisivik Mine. This experience continues to influence how residents view the proposed Project at Mary River. A detailed case study of this process was completed by Gibson (1978).

There is, clearly, an established relationship between Mary River and the Inuit of Baffin Island. This history has led to a sense of engagement with the Project and a desire to develop the best relationship possible with the Project's proponents. The following is a snapshot of the history of community-company relations, and, for-the-record, more recent interactions between the company and the Inuit of North Baffin.

### 9.1 ROOTS OF LOCAL ENGAGEMENT IN THE PROJECT

Relationships with the iron Project itself have deep roots in some families. During interviews with individuals both in Pond Inlet and Arctic Bay, stories were heard about local people engaged during the early exploration activities at Mary River back in the 1960s and 1970s:

[Researcher]: "How did you learn about Mary River?"

[Resident]: "It's been with me all my life. [My uncle] and my Grandpa were talking about this a long time ago, before all of this was created. [My uncle] was working on the land stuff and Grandpa was working on which land was going to be [Inuit Owned Land]."

Historical and contemporary land-use connections with the region around Mary River provide a strong attachment to the Project for many residents of the LSA. One Pond Inlet resident suggested:

"The general feeling is that Mary River is in our back yard and Baffinland is just helping themselves, with little benefit to us. Baffinland needs to address this honestly and head-on. The general feeling is that we could get screwed again and we want to make sure we benefit this time."<sup>447</sup>

Strong connections to the Steensby area are expressed, particularly among residents from Igloolik and Hall Beach:

"We used to live in the Steensby Inlet [area] and beyond. I used to live in that area...."

"The Steensby Inlet was occupied by my cousins—my own relatives lived in that area...."

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<sup>447</sup> Comment made during Pond Inlet Small Business Workshop, February 2008.

The land claims agreement provides considerable empowerment in support of this local connection to the Project. This was well-described by a QIA representative, during public meetings in Igloolik:<sup>448</sup>

“In 1960s the iron was discovered in Mary River, but they didn’t proceed as a mine as the iron price was too low to start the mine, and ...ships weren’t equipped to handle the ice....

“In the 1980s they started negotiating the NLCA and communities started negotiating what lands they wanted to call their own...Pond Inlet identified the Mary River as their own. ...

“When the NLCA became law they said the QIA will be administering the Inuit Owned Land, so now today the QIA is administering the land. Baffinland has said in 2004 they started looking at the development of the Mary River deposits, and asked the QIA and Federal government if the deposits can be looked at. They got approval and did more work to see the quality and quantity of the ore. When they determined the quality is high and quantity is enough, they had enough incentive to continue. Last year we tried to negotiate with Baffinland just for the bulk sample of 250,000 tonnes they wanted to send to Europe to the factories to show what kind of product they will come up with. As QIA, we awarded them permission to do surface lands starting from August 2007, up to October 2009. Beyond that they will need to apply for more permission.”

“Also to mention the role of QIA in terms of administering IOL. Since the Project is on IOL they need permission from QIA to see if Inuit agree with it. The QIA lands division give it to local CLARCs to review the request and whether or not the communities approve through the committees. Then the licence will be issued. To get sand and gravel they need to pay. We have monitors, Mathew Akavak, to make sure the company is following the guidelines of the lands. Steve is an environmental technician to be sure the company is doing things to the land claims. For two years, they will as QIA be very careful in terms of monitoring the activities and these different agencies will also be involved in administering their own interest in the land, so the Inuit in the area are aware of the development.”

Several perspectives were expressed in relation to how well the various institutions that now have such influence over development decisions are representing local Inuit most closely affected by their decisions:

“Inuit are being asked now for input into activity, and I know we have representatives... QIA is representing us, and MLAs, and they represent us and need to know how we think. I believe we are being represented and our concerns need to be considered by our representatives.”<sup>449</sup>

The level of Inuit involvement and sense of empowerment related to the decision-making process is clearly perceived to be much higher with regard to the Project than it was during the lead-up to the Nanisivik project in the pre-NLCA era.

<sup>448</sup> The following excerpts are from researcher notes listening to the English interpretation of John Amagoalik's comments.

<sup>449</sup> Comment from resident during public meeting in Igloolik hosted by Baffinland, March 2008.

## 9.2 EXPECTATIONS RELATED TO INFORMATION

A desire for consistent and high quality information related to the Project was clearly expressed during public meetings and other sessions with residents and leaders of the affected communities. Areas of particular interest among community residents include:

- drug and alcohol policy
- benefits that will accrue to communities
- fly-in/fly-out work and resulting separation from families

### 9.2.1 Importance of Documentation

The importance of maintaining a record of discussions and consultations that take place in the communities was raised during a meeting in Pond Inlet:<sup>450</sup>

[Elder 6]: “In the beginning we had meetings... have you documented any proceedings in the beginning when you first looked at, “if you do that, you can do that.”...have you documented any meetings with the community, or did you just throw those away?”

[Baffinland Representative 2]: “We have recorded minutes for all the meetings.”

[Elder 6]: “We got advice from the Elders to plan some of the activities, which is why I asked about recording. There is a very nice side and very dangerous side too. Take your time and if you walk around in the dark in a hurry you’re going to fall down. To protect the animals and environment we try to stop any ships from going through the ice. We need to work together and you need assistance from the Inuit and we need your assistance, and the original goal was to cooperate.

[Baffinland Representative 1]: “Thank you for the comments and advice. We do look to listen and record the discussions, and we’ll continue to do that, to work together.”

## 9.3 DESIRE FOR A GOOD RELATIONSHIP WITH BAFFINLAND

An understanding of how the NLCA has helped to set the stage for meaningful involvement of Inuit residents in decisions related to major projects was well-expressed by a resident in Clyde River:<sup>451</sup>

“[I came here] in the 1960s. We lived like real Inuit at that time and not in a community. The government didn’t consider us before and they did what they want and took minerals without considering the Inuit. Today I am happy to see in the NLCA that we have representatives. In years past they were not like you today – like Baffinland is doing today. I am happy with you that you can meet with Clyde River Inuit. ...Before the NLCA, when they found minerals they used to take what they found and ship it out, that’s how bad they were with us. But now with the NLCA we see mining companies approach us and ask for permission. I will be happy to work with you. ... Welcome to Clyde River.”

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<sup>450</sup> Exchange during Pond Inlet HTO meeting with Baffinland, March 2008.

<sup>451</sup> Comment during Clyde River public meeting hosted by Baffinland, April 2008.

Further recognition of how the climate for Inuit participation has changed over the past decades was expressed in Pond Inlet:<sup>452</sup>

“First of all I would say that Baffinland is doing a good job in getting the communities involved in this Project. There had not been any IQ research or any involvement with the communities or any professionals when I worked at Nanisivik and at Polaris. What Baffinland is doing, collecting IQ and involving the communities is good.”

Recognition that a mine project can bring about desired benefits to the region was stated frequently during public meetings. Combined with some of these statements was an expressed desire that the proponent and communities work honestly together:<sup>453</sup>

“We want benefits to see that there can be a good side of mining and not just hear of the bad side and damaging the land but looking at the positive way that it would improve the economy, not just with Baffinland but with other companies. We welcome your proposal and the business you are planning. We want to work with you honestly.”

### 9.3.1 Supporting Good Communications with Residents and in the Workplace

The issue of communicating across barriers of language, culture and geographic distance is recognized as a particular challenge that needs to be addressed up-front:

[Iqaluit Resident]: “Sometimes Inuit and Qallunaat get misinterpretation... We need a communicator between Inuit and Qallunaat.”

[Baffinland Representative 3]: “We couldn’t agree with you more. We’ve been trying several things over the last 1.5 to 2 years. We’ve established CLO offices staffed by local people. We now have five translators. That’s one bridge. Another thing we’ve done with Qikiqtaaluk Logistics is ask them to provide front-line supervisors, and they struggled with this a bit but have been successful in finding us Inuit supervisors. The Inuit supervisors will meet the night before to discuss the next day’s plans, and the next morning the workers have the option to speak and get instruction in either language. We have five CLOs translating, and are getting more translated materials at site all the time. Those are some of the early steps we are taking.”

Similar calls for good communication were expressed during other meetings:

[Hamlet Leader]: Communication is the main thing for good cooperation, and since they live there and Baffinland representatives don’t, communication is the only tool for working together actively and productively.<sup>454</sup>

[Resident]: “If Baffinland were to open its mine, how often will you report to the community about your operations?”

[Baffinland Representative 1]: “All the time. That is part of why [we] have established the offices in the communities. [We] are always looking for ways to provide information to the community, and to receive input from the communities.”<sup>455</sup>

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<sup>452</sup> Resident 5, interviewed in 2008.

<sup>453</sup> Arctic Bay public meeting hosted by Baffinland, March 2008.

<sup>454</sup> Clyde River Hamlet Council meeting with Baffinland, September 2007.

<sup>455</sup> Exchange during Hall Beach public meeting hosted by Baffinland, September 2007.

Concern about consistency in communication was raised along with an explanation about why project plans can evolve over time:<sup>456</sup>

[Resident 35]: “My personal comment. I live in Igloolik. We heard from you different things, especially mining activity in Mary River, and I noticed this is the third time you are coming to the community to present your plans. We believe your comments that you respect Inuit concerns. When we heard a commitment or comment, we believe you. You also make mistakes and we also hear untrue stories.

“When you first came here you said that if you go through on the shipping route there will be five ships. Then the second time you came you said there will be seven ships going through for nine months so we believed that too. ...Now you are saying ten ships will be built, and the shipping will be every day [all year] and we heard in the summer there will be more ships involved. So we’re confused now, which one to believe. Most of us here hear different comments, the majority don’t want any activities in our waters, especially 365 days a year and it will be used at least 320 days a year, and it is a concern about accidents. We’ve heard different comments and support as well. Please consider these comments. When we heard you covered the archaeological sites. Please tell us the truth because we believe every word you say.”

[Baffinland Representative 1]: “Thank you for that. Perhaps we can walk through the evolution of the Project over time and why the number of ships have changed and the plan sounds different. As we discussed, we’ve been doing work since 2004, to understand the ore deposit and what the Project might look like. As our understanding grows, the plans develop further and the plans become more developed and refined. Initially we looked at Milne Inlet. We looked at a certain level, a smaller amount of mining, and as we considered all of these things the plans developed. So the number of ships has grown because the size of the mine has grown. The plans for shipping through Foxe Basin have always been 12 months, so the apparent changes are growing understanding the changes in the Project. We have finished a technical study—a feasibility study—which supports the development of a Project proposal. We are continuing to learn more, so there will be still some changes we anticipate as we move forward. But we’ve got to the point where the big pieces are together, so the changes are to be smaller. This is what happens with every project, as you learn more and understand. So part of that has to do with communicating often to the community, so we are communicating plans that are still under development, so we can use the information we get back in our planning.”

While consistency of the message to communities coming from Baffinland was often valued, recognition that details of a major project may change in response to new information, and in response to community participation was also noted:<sup>457</sup>

[QIA Representative 3]: “This proposal keeps changing. We should be thankful that when doing consultation you heard the concerns of the people, and I thank you for your sensitivity on this....”

[Baffinland Representative 1]: “Perhaps we can speak about Project changes. We continue to learn more all the time. We just finished the feasibility study—our engineering

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<sup>456</sup> Exchange during Igloolik public meeting hosted by Baffinland, March 2008.

<sup>457</sup> Comment made during meeting between Baffinland, QIA and the Hall Beach CLARC, March 2008.

study—to define the Project. But we can fully expect that by the time the Project is built, that there will be changes. But the main components of the Project are defined.”

A similar explanation was provided on another occasion where questions were raised about changes to the shipping component of the proposed Project:

[QIA Representative 2]: “I think you were originally planning 7 ships in 8 months, then 8 ships in 9 months, and now 10 ships in 12 months.”

[Baffinland Representative 1]: “As we gather more information, things develop and change. Previously we had identified an eight month shipping season out of Milne Inlet. As we looked at that further, we determined for the Project that the port and the shipping needs to be out of Steensby Inlet, and that we need to ship 12 months out of the year.

As we’ve gathered more information, we’ve identified more iron ore and the amount of ore being shipped has changed too. So over the past several years, it’s helped further to define the Project.”<sup>458</sup>

Another concern related to consistency of company commitments was raised during a small business workshop session:<sup>459</sup>

[Participant 1]: “When Baffinland came here four years ago, they promised us the moon. They’ve been backing away ever since.”

[Participant 2]: “At first they needed our support. But once they got our approval for the bulk sample they don’t need us anymore. Now they disregard our community—pulled the contract away from the Co-op and so on....”

[Participant 1]: “They took the contract away from the Co-op, but only gave it back because the community made an outcry. Everything has to be in writing.”

Some residents noted that corporate take-overs, consolidations, mergers and so forth are typical in the mining sector. They expressed a perception that the relationships they establish with company representatives during consultations and permitting phase may not last through to the time when commitments need to be acted on:

[Igloolik Resident]: “I want a promise from you, Baffinland, to have that name all the way through the Project. With Nanisivik, they had this name, established promises, but then they are gone and the water licence is issued to a different company name....”

[Baffinland Representative 1]: “Regarding the company name, in the business world we can’t promise this. The IIBA is a legally-binding agreement that is transferred irrespective of any changes to the Company.”<sup>460</sup>

[Arctic Bay Resident 18]: “I know from Nanisivik they had an agreement but they never followed the agreement. ...Maybe another company might take over Baffinland. What would happen if another company took over, what price would you sell and would the IIBA be part of the even if another company takes over?”

<sup>458</sup> Exchange during Pond Inlet HTO meeting with Baffinland, QIA, March 2008.

<sup>459</sup> Comments made during Pond Inlet Small Business Workshop, February 2008.

<sup>460</sup> Exchange during Igloolik public meeting, September 2007.

[Baffinland Representative 1]: “The agreements are signed they are legally binding, so if there was a change, they would still apply.”<sup>461</sup>

A similar point was raised during a meeting with Iqaluit City Council:

[Iqaluit City Councillor]: “This is my own understanding—Baffinland is not necessarily the company that will own and operate the site but you’re doing the preparation, getting the site ready, getting the environmental review, but at some point you need deeper pockets that come in to do the construction to do the infrastructure....”

[Baffinland Representative 3]: “In terms of Baffinland’s tenure, the information we’ve shared with the public, we have 100% control of the leases. We have hired...two international firms [that] are talking to many international companies with those deep pockets. We’ve had a favourable response around the world.

The mission is to find minority partners who form joint venture or who make a minority investment in our shares, or both. There are examples of junior companies who have found partners and retained control. ...You’ll see Baffinland as controlling for decades only if we are successful with regulatory and IIBA. Our plans are to be the corporate entity that develops the asset.”<sup>462</sup>

A level of scepticism about how much confidence to place on commitments made by the Project proponents is frequently voiced. This scepticism is often explained as arising from experiences with past projects where residents feel that important commitments were not followed through on.

[Resident]: “In the past there was public consultation and they talked about [communication with mine] but once they’ve left town it changes. Like the mine at Resolute, every time the company representatives were in town they were listening and collecting information, but then it changed... It’s very good that Clyde River is included in the [Mary River] Project, but I want communication to work better than other mines we’ve seen.”<sup>463</sup>

[Resident]: “Only one side of the coin, the good side, is presented and only now we are hearing the other side. People of Pond Inlet are being treated like children. In summary, if people are going to make statements, they need to present all the facts.”<sup>464</sup>

Experience and accounts passed on among residents in North Baffin about Nanisivik and the changing alcohol policy at that project led to numerous comments:

[Elder Woman]: “At Nuluujaak, when they first started having meetings, they said it wasn’t going to be like Nanisivik. At Nanisivik they talked about no alcohol, but at the end they changed the policy. Will the same thing happen at Nuluujaak?”<sup>465</sup>

[Resident]: “Before the mine starts when they have the mine proposal they look for approval, but since they are a business they need to look at the best way to make money

<sup>461</sup> Exchange during Arctic Bay public meeting, March 2008.

<sup>462</sup> Exchange during Iqaluit City Council meeting with Baffinland, April 2008.

<sup>463</sup> Clyde River public meeting hosted by Baffinland, September 2007.

<sup>464</sup> Pond Inlet public meeting hosted by Baffinland, September 2007.

<sup>465</sup> Comment made during Pond Inlet HSS workers workshop, February 2008.

so when they start operating they don't worry about what was discussed before the start of the mine.”<sup>466</sup>

[Elder Man]: “An Inuk told us about Nanisivik. They were told that alcohol would not be a problem, but it became a problem later on. We fear that the same thing would happen here. Some of my relatives worked at that mine, and told me stories about alcohol problems there. This is what I can say about what I have heard.”<sup>467</sup>

A desire for Inuit to have a substantive role in planning components of the Project was expressed as a clear recommendation during a meeting in Pond Inlet.<sup>468</sup>

[Resident]: “I think we need to include local people in the design. When we see it is already planned. We need Inuit knowledge to participate in the planning stage.”

[Baffinland Representative 1]: “We've been working with the community—and have been collecting Inuit knowledge and have held many discussions and sought much information and that input has been considered in all of our work.”

[Resident]: “I think you misunderstand. These plans—in Toronto or somewhere south—when they are drafting these plans, invite people from Pond Inlet to participate in drafting the plan. Show the plan to Pond Inlet residents before you release it. We see the plans without input from the people.”

Scepticism about the value of participating in consultation processes was also expressed on at least one occasion:<sup>469</sup>

[Resident]: “My comment, I am glad to see a mining company planning to start a mine because we need jobs. ...but the concerns that we have heard, I want them to be respected and at least looked at. ...When Nanisivik was closing out I was part of a committee and we had meetings in Iqaluit and here in Arctic Bay, and we asked what the community wanted in terms of the closure of the Nanisivik Mine. But whatever we requested in the meetings, not even one was respected or followed. Having meetings have no purpose if they don't listen. When Nanisivik was closing down, the only thing we heard is that they have no money for benefits to follow those recommendations.”

#### 9.4 INFORMATION PROVIDED BY BAFFINLAND REPRESENTATIVES

##### 9.4.1 Response to Concerns Related to Specific Effects

Many comments and questions were raised during public meetings that relate to the impacts and benefits that may arise from the proposed Project. The following exchanges are presented as a representation of these kinds of questions and the consistency of Baffinland response from community-to-community and over time.<sup>470</sup>

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<sup>466</sup> Comment made during Arctic Bay public meeting hosted by Baffinland, March 2008.

<sup>467</sup> Comment made during focus group with Elders in Pond Inlet, March 2008.

<sup>468</sup> Exchange during Pond Inlet HTO meeting with Baffinland, QIA, March 2008.

<sup>469</sup> Comment made during Arctic Bay public meeting with Baffinland, March 2008.

<sup>470</sup> Exchange during Pond Inlet Hamlet Council meeting with Baffinland, March 2008.

[Hamlet Leader 3]: “Under the IIBA the Hamlet is not a DIO—will there be a benefit for the communities? ...Because you’re going to strip the labour and we need to start at the bottom. We train people to a certain level and they go to other jobs.”

[Baffinland Representative 3]: “One of the considerations in the IIBA is the effect of the mine on the social fabric of the communities. The IIBA has to consider the social fabric of the community – monitoring, measuring, compensating or mitigating.”<sup>471</sup>

[Hamlet Leader 5]: “Just looking at the shipping route, people still travel across, even as we speak. Rangers were down at Rowley Island, and people go there even in mid-winter.”

[Baffinland Representative 1]: “Because of the frequency of the ships, the track is not likely to get solid enough, so people will have to go around. This is one of the issues we’re going to be talking to the QIA about in the IIBA, that this will be a result of the Project, and we need to provide some mechanism.”<sup>472</sup>

[Hamlet Leader]: “What will happen to you if one of the communities won’t approve the Project? How do you get approval if there is one community opposing?”

[Baffinland Representative 1]: “That’s a very good question. To get to the stage we’re at, we’ve all be doing a lot of work and working together, and looking for input and questions all the way along. To get to this point, we’ve been trying to use that input.

...Not all [this] input will we be able to incorporate, because we need a project that finds a balance on the environment [and with] communities, making sure from economics that the Project makes money. So that’s why we are receiving the input. We would hope as [we are] working through this that people will look to support the Project. Not everyone will. What’s important—the Project can’t go forth without the IIBA and the benefits need to outweigh the impacts.”

During the following exchange, a specific request was made to adjust ship speeds according to local input. The Baffinland response included a commitment to listen and consider this sort of suggestion. The example provided suggested that “consideration” includes a degree of careful study of the technical possibility of the suggestion...but also a clear statement that not all local input will be implemented:<sup>473</sup>

[Resident]: “When we had Nanisivik there was an ice breaker in our hunting area. We tried to tell the ship, if you travel this way, you would avoid the main hunting areas, and we tried to suggest the speed they break the ice. [I would like to ask] if you would consider Inuit’s suggestions for certain speeds when going through the animal areas?”

[Baffinland Representative 1]: “One of the things we do is listen to the concerns. There will be some things we can do and some things we can’t do. But we will always consider all of these things. In September we presented two different possible ways the ships can travel in Foxe Basin and we were told that the east side of Rowley Island was the better route. That was to avoid the areas where Igloodik and Hall Beach hunt. So we heard that and we confirmed in our studies that we can do that, and it is [now] our preferred shipping

<sup>471</sup> Exchange during Clyde River Hamlet meeting with Baffinland, April 2008.

<sup>472</sup> Exchange during Igloodik Hamlet Council meeting with Baffinland, March 2008.

<sup>473</sup> Exchange during Arctic Bay public meeting hosted by Baffinland, March 2008.

route. I use that as an example of how we use that information....But as I say, not in every case are we able to do everything we hear.”

[Resident]: “At least if some proof our concerns are considered or included in the plans. But through these meetings, we can see the usefulness of these meetings if you considered our concerns.”

#### 9.4.2 Response to Questions Related to Royalties and Other Cash Payments

Community leaders and residents expressed considerable interest in learning more about the royalty revenues that will be generated by the Project. For example, the following exchange occurred during a meeting in 2007 with the Hall Beach Hamlet Council:<sup>474</sup>

[Councillor]: “How much money will be made from the mine over 25 years?”

[Baffinland Representative 3]: “We are completing a feasibility study that will tell us that.”

[Councillor]: “You have a rough idea how much it will cost you to set up the mine and ships so you should know how much money it will make.”

[Baffinland Representative 3]: “We do not have a clear idea of this until the study is done. We will have to borrow money from a bank to build the mine and the ships. Most of the profit in the first five years goes to paying the bank. There will also be royalties paid to the federal Government as well as the Inuit.”

Similar interest was demonstrated during a public meeting held around the same time in the same community:

[Resident]: “With beneficiaries ...will there be royalties?”

[Baffinland Representative 1]: “Regarding royalties payable to Inuit. There will be two royalties payable. The first is paid to the federal government and then they give the royalty to NTI. The second royalty will be payable on profits and will go to the QIA.”<sup>475</sup>

Ongoing interest in understanding the royalty stream and its general scale continued to be expressed during additional meetings held as the Project definition phase proceeded:

[Hamlet Leader 6]: “Igloolik, Hall Beach, Arctic Bay, Pond Inlet—these communities will be impacted in the future, and during the mining. Does that mean that the NTI or QIA, can they negotiate a percentage? Do they get something back in terms of payment, or royalties I guess? What percentage would they get?”

[Baffinland Representative 1]: “There are royalty payments, because of work in IOL, there are also payments to QIA for use of gravel and use of the land, and use of water. In terms of benefits and compensation related to impacts because of the mining, that’s part of the negotiations with the QIA on an IIBA, and the mine can’t go forward without an agreement in place, and it will not.”<sup>476</sup>

<sup>474</sup> Exchange during Hall Beach Council meeting with Baffinland, September 2007.

<sup>475</sup> Exchange during Hall Beach public meeting hosted by Baffinland, September 2007.

<sup>476</sup> Exchange during Igloolik Hamlet Council meeting with Baffinland, March 2008.

The following question and response was addressed to the QIA during a public meeting:<sup>477</sup>

[Igloolik Resident]: “\$4 billion—oh my goodness! I heard a little over \$4 billion to construct the mine. \$4 billion! ...It is four times the territorial budget! What kind of profits will you have, if you are looking at using \$4 billion! My understanding is Baffinland is there to make money and not help us. ...The QIA, do you realize now that the royalties the Inuit get...how much will it be? Will it be 50%? Did you estimate how much royalty you will get?”

[QIA Representative 1]: “The deposit, since it is under the IOL, the royalties will go to NTI, but we have not heard how much it will be.”

...and during a public meeting in Arctic Bay:<sup>478</sup>

[Elder]: “Will we get any royalties? Hall Beach, Igloolik, Arctic Bay, Pond Inlet, Clyde River, and what about Cape Dorset? What about these communities, will they get any royalties from the mine when they sell the iron?”

[Baffinland Representative 3]: “Thank you for those questions. I’ll mention the royalty on Deposit No. 1. There is a mineral royalty paid to the federal government and through to the NTI on Deposit No. 1. There may be other royalties that are negotiated through the IIBA. I’m sure that during our IIBA discussions we will talk about donations in the communities.”

...and during a public meeting in Pond Inlet:<sup>479</sup>

[Hamlet Leader 7]: “As Beneficiaries, Inuit living around these five communities, they need to get royalties too.... So that my grandchildren and my future generation, I want them to be helped just in case there is a disruption to the animals... As an example, the company gets a certain portion, the Federal government gets a percentage, so somehow Inuit should be included in the distribution of the royalties.”

[Baffinland Representative 1]: “The Project will generate royalties and taxes. Money will go to the federal government, territorial government and people, and an agreement will be established.”

[Resident]: “The IIBA is being discussed, and the NTI will get the royalties. ...But Pond Inlet residents need to be considered—what we can get—because it seems that money going to Inuit organizations is toward the whole Inuit [population]. ...The community needs to get more royalty, and NTI will need to consider giving us more than other communities. ...As business owners, we are not getting any support. The QC for example are under QIA, and we compete against Inuit organizations. As Inuit business we are not supported. We need to get bigger royalties....”

[QIA Representative 2]: “Yes, thank you. The IIBA we are working on started from Pond Inlet because Pond Inlet has outlined the area, and we will be sure that Pond Inlet has the highest benefit in the agreement and then look at other communities. We keep saying that in the QIA.”

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<sup>477</sup> Exchange during Igloolik public meeting hosted by Baffinland, March 2008.

<sup>478</sup> Exchange during Arctic Bay public meeting hosted by Baffinland, March 2008.

<sup>479</sup> Exchange during Pond Inlet Hamlet Council meeting with Baffinland, March 2008.

The most detailed information on royalties—and the only reference to a dollar amount provided in the recorded meetings with public or municipal leaders—came out during an April 2008 meeting with Iqaluit City Council:<sup>480</sup>

[Iqaluit City Councillor]: “Over the next 20 years, [do] you have an idea of the return on investment? What do you anticipate what will come to Nunavut through royalties and wages?”

[Baffinland Representative 3]: “In terms of total benefits, we haven't released to the public total numbers, but you can see our press release. In general terms, we are taxable by the federal government. There are issues with how much and how that money returns. Other ways to Nunavut is through taxation and taxation on the import of fuel. In addition, there is a mineral royalty payable on Deposit No. 1 payable to the federal government and it reverts to NTI: 14% of the net profits. Another important mechanism is the IIBA which will be the basis of monies flowing direct and indirect to Inuit. Direct includes payment on gravel, water; payments to businesses. Beyond the direct purchases, there are many indirect economic multipliers through jobs. This is a large enough project – we hear federal government transfers \$1 billion each year to Nunavut. Our Project will represent a significant portion of the annual transfer payments ... it will be measured in 100s of millions of dollars annually.”

During some of the meetings, residents indicated an awareness that communities in Northern Quebec have received payments from the Xstrata Raglan Nickel Mine. This has contributed to some local expectations related to benefits to communities or individuals.

A press release issued in 2008, gave a very specific breakdown of the nature of Xstrata's construction costs, capital investments, explorations results, as well as payments to date to communities in Nunavik:<sup>481</sup>

#### 9.4.3 Response to Specific Requests

During the consultation process carried out by Baffinland, various specific requests or suggestions were put forward. For example, the following suggestions was made related to support for harvesters:<sup>482</sup>

[Resident]: “Will you provide some kind of program that can support hunters in each community, to get their equipment and supplies and so on?”

[Baffinland Representative 1]: “That is a very specific question about benefits. How communities may directly benefit is part of the discussions and negotiations of the IIBA. What I can tell you is that the company is supportive of various initiatives, and we have supported community hunts before, as an example.”

The potential to add some degree of “normalcy” to the work place by providing opportunity for religious observance was raised during a public meeting in Iqaluit:<sup>483</sup>

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<sup>480</sup> Exchange during Iqaluit City Council meeting with Baffinland, April 2008.

<sup>481</sup> Xstrata Nickel News Release: Inuit communities receive \$32.6 million in profit-sharing from Xstrata Nickel's Raglan mine. Quaqtaq, Nunavik (Québec), April 3, 2008.

<sup>482</sup> Exchange during Clyde River public meeting hosted by Baffinland, April 2008.

[Resident]: “Would you allow a service to be held or some kind of church at the site?”

[Baffinland Representative 4]: “This is the first time someone raised that question. We have time, so we will think about this. That’s a great recommendation. Thank you.”

Ensuring that soap stone found at the site is made available to carvers was raised:<sup>484</sup>

[Resident]: “There is a good quality soapstone at Mary River, so one of the benefits you can talk about is helping to provide the artists in the communities soapstone.”

[Baffinland Representative 1]: “There is Mary River soapstone in the area, and it has been discussed. ...There is an opportunity for increased access for soapstone. We’ve raised it as a point of discussion with QIA in terms of the IIBA.”

The potential that some spin-off opportunities or synergies might arise from the Project was also raised:<sup>485</sup>

[Public Sector 8]: “My question is with respect to infrastructure. [Mary River Project] is a significant change to infrastructure in the north, and [I’m] wondering what kind of thought of spin off benefits at those two locations and how that might affect community resupply?”

[Baffinland Representative 1]: “Those are very good questions, aspects. In the next couple of years we’ll see clarity in a few ways. Questions of how the infrastructure can benefit communities and IIBA, and talking to GN about development partnerships. They would follow in sequence. The IIBA needs to be far along before we start talking to the GN. We are at a very early stage—only a couple of weeks since we put together the Project description. Now that we know what we want to do, over the next two years that will be something we will think about very hard, how we are going to incorporate community infrastructure needs with what we are doing.”

Suggestions for direct contributions to communities were also raised:<sup>486</sup>

[Hamlet Leader 4]: “Happy that you are working with the QIA, but the benefit directly to the community will be limited to training and employment. The community has been trying to get a breakwater without success. We didn’t get any money from government for the breakwater. Baffinland is interested in helping out the community and since there is no breakwater this is a way you can help us.”

[Baffinland Representative 3]: “This will be a topic we will broach with the QIA in our discussions.”

Interest in company policy related to harvesting by employees during their off-time was also expressed:<sup>487</sup>

[Iqaluit Resident]: “I have another wildlife question. ...I don’t know if there is any harvesting. This is one way they [Inuit working at site] can relieve angst.”

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<sup>483</sup> Exchange during Iqaluit public meeting hosted by Baffinland, April 2008.

<sup>484</sup> Exchange during Iqaluit public meeting hosted by Baffinland, April 2008.

<sup>485</sup> Exchange during Iqaluit public meeting hosted by Baffinland, April 2008.

<sup>486</sup> Exchange during Hall Beach Hamlet Council meeting with Baffinland, September 2007.

<sup>487</sup> Exchange during Iqaluit public meeting hosted by Baffinland, April 2008.

[Baffinland Representative 1]: “We are not allowing people to harvest while working. I am not sure if anyone would have the time or energy while working. We are working in an area of traditional land use and on people’s time off people from the communities come and hunt and they will continue to do so and support that activity. While at site and working it is our policy not to allow it.”

During another meeting, Baffinland was asked about their plans related to disposal of infrastructure at mine closure. The speaker clearly indicated opposition to the idea of simply dumping material into a waste site as was done during the recent Nanisivik Mine closure.

The response clearly indicated that while hazardous materials will be removed, other materials will be disposed of onsite:<sup>488</sup>

[Hamlet Councillor]: “I think I heard that in the previous mine—not here in Pond Inlet but somewhere else—the equipment, they put all the infrastructure underground. You’re not planning to do that just leave your equipment? There will be a lot of infrastructure. You’re not planning to leave in the pit or somewhere. It might cost a lot to bring down south.”

[Baffinland Representative 1]: “We do have closure plans that we are always working on and depending on the materials what we do with it. There will be a landfill for inert, non-hazardous materials operated at the site, as part of normal operations during operational and closure. In terms of closure, there could be things left in the pit too. Any materials that are hazardous will always be taken off-site. The idea is to not leave anything that is hazardous.”

In another instance where a direct question was asked about a design option not supported by the proponent, a clear response was provided:<sup>489</sup>

[Resident]: “If the majority of the residents don’t agree to freeze the fuel ship, would you decide to build a tank on land to store your fuel needs?”

[Baffinland Representative 1]: “To begin construction, we need the fuel but don’t have the tanks.”

[Resident]: “If the majority of the community doesn’t want it would you consider building a tank farm on land?”

[Baffinland Representative 1]: “I guess we wouldn’t be able to do that and execute the Project.”

#### 9.4.4 Response to Questions Related to Fly-in/Fly-out Nature of Project

Several questions were raised about whether families would be able to relocate to Mary River to be closer to their working parent or spouse/partner. The issue seems to be related to the potential that Mary River might become a townsite, either as part of the initial Project design or through changes over time:

[Resident]: “There are a lot of unemployed who want to work but don’t want to leave their families behind. Will there be businesses or houses or schools built?”

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<sup>488</sup> Exchange during Pond Inlet Hamlet Council meeting with Baffinland, March 2008.

<sup>489</sup> Exchange during Pond Inlet HTO meeting with Baffinland and QIA, March 2008.

[Baffinland Representative]: "...there will be no houses, schools or permanent community built at Mary River. This is not allowed in the North Baffin Regional Land Use Plan. Governments will receive royalties and it is their job to provide community services."<sup>490</sup>

[Worker]: "Make this an artificial community so people can come and live here with their families."<sup>491</sup>

[Researcher notes from workshop<sup>492</sup>]: ...One participant spoke about how he understands that the federal government is shy about building new mining towns. He suggested that we need to provide opportunities for people to work, but without destroying families. He mentioned a friend in an NWT native community where there is now only one person left working at the mine—others who tried it have quit because of stress on their families. An ED&T representative noted that Tumbler Ridge and Nanisivik were among the last new mining towns built in Canada and mentioned that the NPC does not support new town sites. Therefore, we need to consider how best to support families. Rotations are one way, and have evolved from long periods away toward the current 2-2 arrangement.

[Resident]: "There are a lot of unemployed who want to work but don't want to leave their families behind. Will there be businesses or houses or schools built?"

[Baffinland Representative]: "Regarding the first question, there will be no houses, schools or permanent community built at Mary River. This is not allowed in the North Baffin Regional Land Use Plan. Governments will receive royalties and it is their job to provide community services."<sup>493</sup>

[Resident]: "A long time ago, I worked in Nanisivik. Will you have a school, gymnasium, and health centre? Because our children will grow to be adults, and they may want to move to the mine site."

[Baffinland Representative 1]: "The mine is designed to be a fly-in/fly-out operation, so living accommodations and recreation facilities will be provided onsite. Emergency and health services will also be provided, but it is not our plan to set up a townsite. The North Baffin Regional Land Use Plan will not allow us to set up a townsite."<sup>494</sup>

[Iqaluit City Councillor]: "What I am getting at—this is the potential for a community. ...Are you entertaining creating another Labrador City, where you have a community based there?"

[Baffinland Representative 3]: "It is too difficult running a city. We can run a mine but not a city."

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<sup>490</sup> Igloodik public meeting hosted by Baffinland, September 2007. Reference is to the North Baffin Land Use Plan, 2000, Section 3.6 Mineral Exploration and Production Background: "The policy of the GNWT is to discourage the formation of new communities in favour of fly-in/fly-out mining camps. This policy encourages use of existing community infrastructure and facilitates eventual abandonment of mines when the ore reserves are no longer economic. The NPC supports this approach (NBRLUP pg. 46). The land use plan identifies legally required "actions" and "conformity requirements." Reference to formation of mining communities is not stated as "action," "conformity requirement," or "recommendation."

<sup>491</sup> Worker, interviewed November 2007.

<sup>492</sup> Record of discussion during ED&T Workshop, November 2007.

<sup>493</sup> Igloodik public meeting hosted by Baffinland, September 2007.

<sup>494</sup> Exchange during Hall Beach public meeting hosted by Baffinland, March 2008.

[Baffinland Representative 1]: “It is planned as fly-in fly-out. Under the land use plan, townsites are not permitted.”<sup>495</sup>

[Resident]: “It looks like during operation you’re looking at something similar to the diamond mines—the rotational schedule. Has anyone looked at the situation of having arrangements at site for families?”

[Baffinland Representative 1]: “We are looking at a fly-in fly-out operation and the North Baffin Regional Land Use Plan does not permit establishment of town sites.”<sup>496</sup>

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<sup>495</sup> Exchange during Iqaluit City Council meeting with Baffinland, April 2008.

<sup>496</sup> Exchange during Iqaluit public meeting hosted by Baffinland, March 2008.

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