



# 2002 Nunavut Economic Outlook

*An Examination of the Nunavut Economy*

Prepared for the Socio-economic Planning Study in conjunction  
with the Nunavut Economic Development Strategy

November 2002



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## 1 Introduction and Purpose of Report

In May 2001, The Conference Board of Canada released its review of Nunavut's economy. Funded by the Government of Nunavut, Nunavut Tunngavik Inc., and Indian and Northern Affairs Canada, the Nunavut Economic Outlook (herein referred to as the NEO) included a 20-year economic forecast for Nunavut, identifying structural issues underlying economic performance over the long term. The study was significant for several reasons. It included a review of both wage-based and land-based economic activities.<sup>1</sup> It also took a holistic approach to socio-economic development. Of equal significance is the fact that the study represented the first socio-economic snapshot of Nunavut since its formal recognition in 1999.

One constraint faced in producing the report of a newly established jurisdiction was the absence of data and in particular, the absence of time series data for comparison purposes. The report was recognised as being a benchmark that could be used for comparison purposes as new data became available.

Since the publication of the report in May 2001, data specific to Nunavut have been released that can now be used to:

- enhance the data presented in the original report; and
- determine in some instances, changes and trends in Nunavut's socio-economic development.

Accordingly, the purpose of this report is to provide an independent update to the 2001 NEO. Specifically this report updates the status of four forms of capital required for wealth creation as they exist in Nunavut: physical capital; human capital; natural capital; and social/organisational capital. The original report included sections on the history behind the creation of the Territory of Nunavut and the process of economic development and the reader should refer to the original report for details on these matters.<sup>2</sup>

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<sup>1</sup> Land-based economy or subsistence economy refers to all economic activity that is non-wage-based. For example, hunting, fishing and trapping activities used for household use or for barter would be considered land-based economic activity. The recorded selling of sealskins or fish for processing, although tied to the land, would not be considered land-based economic activity for the purposes of this report when these activities involve an income of some sort and are recorded as economic activities in standard Statistics Canada indicators. While a large portion of land-based economic activity pertains to hunting and fishing, it can also include the making of clothes and crafts as well as informal child-care services.

<sup>2</sup> The Conference Board of Canada, *Nunavut Economic Outlook May 2001: An Examination of the Nunavut Economy* (Ottawa: The Conference Board of Canada, 2002).

## 2 General Approach and Methodology

This report focuses on updating both the qualitative and quantitative information contained in chapters 4-6 in the original Nunavut Economic Outlook. This report therefore follows the approach taken in the original report that features an analysis of four forms of capital involved in wealth creation.

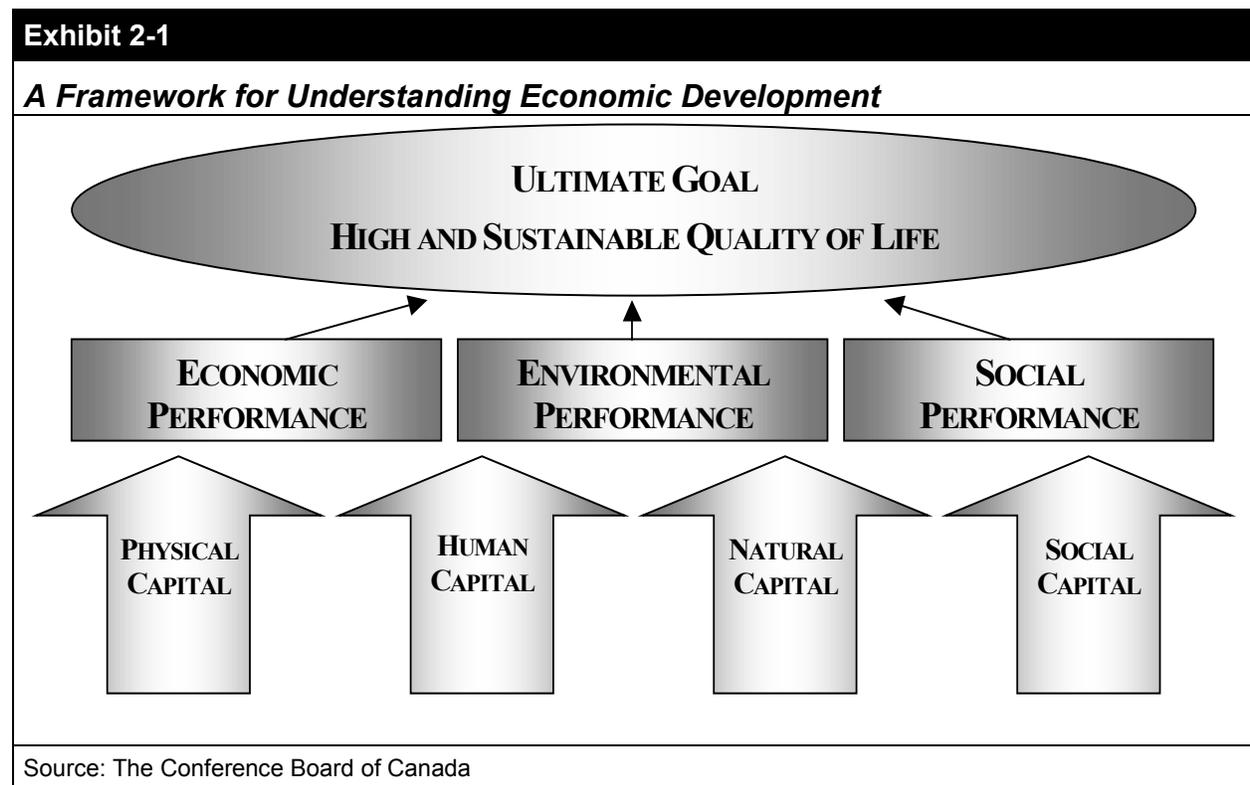
*Physical capital:* This includes the infrastructure or capital required for business and industrial purposes, such as investments, transportation infrastructure, power generation capacity, communications systems as well as housing, recreational facilities and hospitals.

*Human capital:* This includes a society's level of literacy, health and social wellbeing, education and skills status, and knowledge.

*Natural capital:* This includes the raw materials required for economic activity, such as land, wildlife, minerals, energy, as well as services provided by the environment such as waste management.

*Social/organisational capital:* This encompasses the business and social environment within which economic activity takes place and explains how a society is organised to create wealth (e.g., system of governance, the regulatory system).

In general, the extent of wealth-creating capital in an economy dictates how an economy can develop, and also influences the success of this development. As seen in Exhibit 2-1, the ultimate goal of a high and sustainable quality of life is achieved through



economic, social and environmental performance, which in turn comes about through capital investment. For example, a population with a high level of human capital in the form of knowledge (be it scientific or traditional knowledge) can expand the natural capital base by finding additional resources or using existing resources more efficiently through innovative techniques. It can also find better ways to protect the environment.<sup>3</sup> Alternatively, physical capital in the form of buildings, computer networks or community centres is required to provide education and training for community members (human capital) or to facilitate decision making and business networks (social/organisational capital).

The information used to update the 2001 NEO was obtained from the following sources:

- National and territorial socio-economic databases (e.g., Statistics Canada and Nunavummit Kiglisiniartiit-Nunavut Bureau of Statistics);
- Recent industry publications and key government/public reports;
- The latest Canadian and World Economic Outlooks published by the Forecasting Services Group of the Conference Board of Canada; and
- Interviews with key Nunavut officials.

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<sup>3</sup> Centre for the Study of Living Standards, *Health and Education Human Capital Indicators*. Prepared for the National Roundtable on the Environment and the Economy (Ottawa, February 2001).

### **3 Where We Stand Today: Overview of Nunavut**

This section examines the status of each of Nunavut's four forms of capital based on data obtained subsequent to the production of the NEO. In some cases, no new additional data were available and the reader should refer to the findings in the NEO report.

#### **3.1 Physical Capital**

In the NEO, The Conference Board of Canada identified the lack of physical capital as a serious problem affecting both economic and social development. Key areas requiring attention related to quality of life include housing, sewage and waste management systems, affordable transportation and telecommunications systems, and child care services. Our concern was that these services, already seriously underdeveloped, would come under increasing pressure from Nunavut's growing population and the need to provide for an acceptable standard of living.

In addition, there is very little infrastructure to support economic growth in Nunavut. The lack of housing prevents the employment and redeployment of workers while the absence of port facilities increases shipping costs and hinders the development of the Territory's fishing industry. Few communities can properly accommodate an expansion in tourism such as receiving tourists from cruise ships or showcasing local performing and visual artists.

Limited funding for municipal infrastructure projects has been secured for some necessary projects through the federal government's Infrastructure Canada Program. The Government of Nunavut and the Government of Canada will provide over \$4 million for infrastructure improvements between 2002 and 2003 with priority going towards green municipal infrastructure. The amount allocated to a given province or territory through the Infrastructure Canada Program is based on the jurisdiction's percentage of Canada's total unemployment and its percentage of Canada's total population. In the NEO, we identified that the per-capita formula used by many federal programs works to the disadvantage of jurisdictions with a low human/land ratio. The levels of funding are usually more suitable for repairing existing infrastructure, as is often the case in southern Canada, than for building new infrastructure systems. Iqaliut's infrastructure needs alone have been estimated to be \$50 million—well beyond the \$4 million allocated for all of Nunavut.

Some of the specific areas of physical capital are highlighted below.

##### **3.1.1 HOUSING/COMMERCIAL SPACE**

Housing remains a high priority for the Government of Nunavut (GN) particularly with its growing population. We outlined in the NEO numerous housing problems and how they were hindering Nunavut's socio-economic potential. For example, Nunavut's resident-per-dwelling rate is 50 per cent higher than the rest of Canada. There is virtually no private housing market with almost 60 per cent of Nunavummiut living in public housing

and there is a high demand for social housing. The Nunavut Housing Corporation (NHC), a public agency of the GN, maintains 3,586 public housing units in Nunavut.<sup>4</sup>

Funding from Nunavut Housing Corporation and CMHC has been provided to construct over 150 social housing units in the past three years but this is not enough. Twenty-seven million dollars has been committed for capital investment in social housing and the construction of 78 new social housing units. The problem is not only the lack of housing stock but also the need to upgrade the existing stock—25 per cent of Nunavut's houses are over 30 years old. According to the 2001 Nunavut Household Survey over 60 per cent of Inuit were dissatisfied with the conditions of their housing.<sup>5</sup>

The government acknowledges that the lack of housing hinders its ability to attract labour. Efforts are being made to encourage greater investment in the private sector housing market. The transfer of government housing to the NHC will allow for the application of innovative models to help address the housing shortages. For example, one approach being tested is the employee condominium initiative. Up to 130 new staff housing units will be constructed that employees will be able to buy with assistance from the Nunavut Housing Corporation. There is also a Tenant-to-Own Program that assists housing tenants to eventually purchase their rental unit.

A new public housing rent scale is being developed, which will allow previously unemployed tenants who secure a paid job to retain more of their income. Presently, an individual who finds employment can face several simultaneous disincentives such as a reduction in financial assistance from the Income Support Program and an increase in rent for their public housing.<sup>6</sup> Under the new policy, rent increases will be deferred for one year.

Nunavut's housing crisis and its impact on the outlook are discussed further in section 5.2.4.

### 3.1.2 WATER/SEWAGE TREATMENT/WASTE MANAGEMENT

Another area identified in the NEO requiring serious attention is the need to upgrade its basic municipal services such as water and sewage. Services are presently inadequate in many communities and this will only intensify with growing populations. Efforts are underway to address the infrastructure inadequacies. For example, Iqaluit has started a limited recycling program since December 2001 involving metal cans and certain plastics.

Efforts are underway to identify alternate sources of energy to address the high cost of relying on diesel power. Nunavut Power is planning a multimillion-dollar expansion of its waste heat program. Currently, about a half-dozen waste heat programs are running and the plan is to expand the program to nine more communities over the next decade. It is hoped that the federal government will agree to finance a quarter of the estimated

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<sup>4</sup> Nunavut Housing Corporation, *Business Plan, 2001/02*.

<sup>5</sup> Nunavummit Kiglisiniartiit (Nunavut Bureau of Statistics), 2001 Nunavut Household Survey

<sup>6</sup> Nunavut Standing Committee on Health and Education, *Report on the Nunavut Income Support Policy Review*, November 2001, [www.assembly.nu.ca](http://www.assembly.nu.ca).

\$20 million required to expand the program. Nunavut Power is also currently looking into the feasibility of re-introducing wind energy capability.

### 3.1.3 TRANSPORTATION

The NEO identified a lack of transportation infrastructure to support economic growth. Since the report, Nunavut has lost regular air service to Greenland—a loss in its efforts to connect more with its circumpolar partners.

The Government of Nunavut has also subsequently released the first portion of its Transportation Strategy. The Strategy expresses a vision for transportation by the year 2021. The Strategy is guided by several principles including that transportation services must be updated and modernised, as far as economically feasible and without direct or indirect subsidies. The Strategy's vision includes new all-weather roads connecting the Kivalliq regions and Manitoba and the Kitikmeot region's mining properties to Bathurst Inlet. In December 2001, the governments of Nunavut and Manitoba signed a Memorandum of Understanding (MOU) that will facilitate joint planning of a Nunavut-Manitoba road link. The jurisdictions will develop terms of reference for the selection of a route. They will also explore opportunities for the joint use of staff, information exchanges and joint training initiatives in the area of airport and motor vehicle administration and operations.

The Territory remains without a deepwater port or adequate harbour facilities. The poor marine infrastructure will impede industrial expansion such as Nunavut's fishery. In Pangnirtung, the offloading of turbot to the processing plant is done through the use of an old transport running back and forth between town and the offshore fishing trawler that must remain anchored at sea for days while this takes place. In Iqaluit, the offloading of goods from the sealift is performed in a similar manner, though trucks are used when the tide waters in Frobisher Bay allows it. These operations are costly and inefficient, and in the case of Pangnirtung, quite dangerous. At the same time, construction of a deepwater port and improved harbour facilities are expensive propositions and could never be undertaken by the private sector or even the Government of Nunavut, alone. With so many competing interests for infrastructure investment throughout the Territory, advocates for improved marine infrastructure will have to defend this spending initiative against others.

### 3.1.4 TELECOMMUNICATIONS/CONNECTIVITY

The original NEO noted the various barriers facing Nunavut in implementing an adequate level of telecommunications networks. A principal problem was the high cost of satellite capacity. Since our report, much attention was given to the work of the National Broadband Task Force on bringing high-speed broadband Internet services to all Canadian communities including northern isolated communities and to the work of the companion Nunavut Broadband Task Force.<sup>7</sup> Currently, no communities in Nunavut have access to high speed Internet service. In Yukon, by comparison, 43 per cent of

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<sup>7</sup> The 2001 federal budget did not include any new funding for implementing the recommendations of the National Broadband Taskforce report.

communities have such access.<sup>8</sup> Nunavut's low to mid level broadband capacity limits the applications that can be run at the same time. It also reduces reliability and quality (e.g., poor video resolution).

As of November 2002, thirteen out of twenty-five communities had local dial-up access to slow Internet connections. As a result, households, businesses and organisations that wish to connect to the Internet must pay long-distance telephone charges on top of connection fees. Long distance charges typically range anywhere from \$400 to \$4,000 per month for businesses and organisations. The major barriers to local dial-up access are the high costs of connecting to the satellite network as well as the technical and administrative abilities.

Although all communities will benefit significantly from narrowband connections to the Internet, data networks and telecommunications, it is high-speed, or broadband<sup>9</sup> networks that have the capacity to transform Nunavut's economy. Without any land-based infrastructure (e.g. roads, rail, bridges), broadband access to the Internet, data and telecommunications becomes increasingly important for economic self-reliance.

Broadband networks provide households, organisations and businesses:

- remote access to professional services. This is particularly important for accounting, legal, marketing and business administration advice and assistance;
- access to global markets for goods and services produced in Nunavut;
- telework, especially in the areas of translation services and cultural product development;
- more equitable access to health and education services; and
- access to information about federal and territorial programs.

The major barrier to broadband networks is the high, on-going cost of satellite bandwidth. In other jurisdictions with roads and railways, the major investment for broadband networks is fibre optic or microwave relay infrastructure. After the infrastructure is in place, the actual cost of bandwidth is low. In Nunavut, the opposite is true—land-based infrastructure accounts for about 10 per cent of the total cost of data, Internet and telephone network connections, while 90 per cent of the cost is operational, or the ongoing cost to purchase satellite bandwidth.

With this in mind, the Government of Nunavut has embarked on a series of broadband initiatives designed to bring down the high cost of satellite bandwidth. To date, these initiatives have resulted in Industry Canada's allocation of 15 Megahertz of satellite bandwidth at no cost to the Government of Nunavut, to support six projects outlined in

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<sup>8</sup>National Broadband Taskforce, *The New National Dream: Networking the Nation for Broadband Access* (Ottawa: Industry Canada, 2001).

<sup>9</sup> Broadband refers to very high speed network connections that allow data to be transferred quickly, enables high resolution video-conferencing, and interactive real-time applications. For Nunavut, broadband connections mean minimum community connections of 1.5 Megabits.

the *Nunavut Broadband Services*<sup>10</sup> proposal. This bandwidth will be put to immediate use in health, education and community economic development applications and will transform the way that people are able to access public services and economic development opportunities.

### 3.1.5 CHILD CARE/SCHOOLS

The early years of a child's life can have a huge impact on how that child will develop into adulthood. It is now recognised that certain key skills such as learning readiness in children are developed *prior to* entering school. This means that it is important to ensure that healthy learning opportunities are available for pre-school children. This can include access to high quality child care or assistance to support parents who care for their children at home.

Both the federal and territorial governments have increased funding for child care. The Nunavut Child Benefit, the Territorial Workers' Supplement and the Healthy Children Initiative provide financial assistance and programming to support parents and children. Additional funding has been allocated in the GN's 2002 budget for day care facilities.

School enrolment in Nunavut continues to face rapid increases rising by three per cent per year. Attention is currently being given to upgrading school operations rather than physical capacity as in previous years. This should result in an increase in the number of teachers in the system. Inuktitut language education from kindergarten to grade three is now provided in the Kivalliq and Qikiqtani regions.

Some positive efforts have taken place to upgrade computer access in Nunavut's schools. Approximately 300 multimedia, classroom-ready computers are making their way to Nunavut to help promote the use of technology in schools through Industry Canada's Computers for Schools Program. The Government of Nunavut partnered with Industry Canada and private sector firms to launch its own Nunavut Computers for Schools Program in the fall of 2000, and continues to coordinate the development of computer repair workshops in schools across the territory.

### 3.1.6 HEALTH AND SOCIAL SERVICES

Health care remains the number one national issue in Canada today. The Commission on the Future of Health Care in Canada (Romanow Commission) is currently examining Canada's health care system and will be issuing its report in late Fall, 2002. The issue is how to sustain or preserve a publicly funded health-care system amidst increasing demands for high quality services and little tolerance for higher taxes or other funding mechanisms. Provincial and territorial governments have been devoting most of their available surplus funds to health care.

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<sup>10</sup> The *Nunavut Broadband Service Proposal* was based on *Ingirrajualuit Moving Forward: Strengthening Our Self-Reliance in the Information Age*.

**Table 3-1****Comparison of Health-Care Spending across Canada (2000)**

(percentage and dollars per person)

	Government Spending	Per Capita Spending	
	(percentage of annual budget)	(Public, \$)	(Private, \$)
Nunavut*	19	5145	379
NWT*	17	5175	427
Yukon	15	3438	761
Newfoundland	31	2550	695
Nova Scotia	31	2279	950
Prince Edward Island	26	2181	878
New Brunswick	28	2306	760
Quebec	26	2186	713
Ontario	36	2363	1072
Manitoba	32	2724	906
Saskatchewan	31	2579	716
Alberta	31	2501	826
British Columbia	34	2632	908

Source: National Health Expenditure Database, CIHI

\* Does not include federal spending on health care.

The health care system in Nunavut has been characterised by its Minister of Health as a “national problem and a national disgrace”.<sup>11</sup> The Government of Nunavut devotes considerably fewer resources to health care as a percentage of government spending than any provincial government (see Table 3-1). However, on a per capita basis, more public money is spent on health care in Nunavut than all other jurisdictions except for NWT. GN health officials have argued that higher levels of spending will be necessary to raise the level of services up to acceptable standards. To this end, health care is receiving increased attention through a \$32 million increase in the Ministry of Health’s annual budget this fiscal year.

The Government is pursuing the construction of a new general hospital in Iqaluit and two new regional health facilities in Rankin Inlet and Cambridge Bay. Since the NEO was completed, Nunavut has seen the establishment of the Ikajuruti Inungnik Ungasiktumi (IIU) Network enabling Nunavut to expand telehealth services to several of its communities with links to southern medical centres. This will help address access problems for Nunavummiut to family physicians and specialists (all but one of Nunavut’s 10 physicians reside in Iqaluit). GN spends approximately one fifth of its health-care budget on medical evacuation and physician services in the South.

<sup>11</sup> Notes taken from statements by Edward Picco, Minister of Health and Social Services, Government of Nunavut. Iqaluit Public Hearings to the Commission on the Future of Health Care in Canada, April 8, 2002. <http://www.healthcarecommission.ca/Suite247/Common/>

## 3.2 *Human Capital*

The need to develop Nunavut's human capital was also identified in the NEO as a serious priority. Nunavut has a young population that offers great potential. While improving, Nunavummiut's level of education and skills still ranks low compared to populations in other Canadian jurisdictions and improvements must be directed toward narrowing the gap.

### 3.2.1 DEMOGRAPHICS

According to the most recent census results, Nunavut's population grew by 8.1 per cent between 1996 and 2001, one of the highest rates of growth in the country (and the highest growth rate among the northern territories). Iqaluit's population during this five-year period increased by over 24 per cent accounting for half of Nunavut's population growth.<sup>12</sup> However, Nunavut's population growth is now in a state of deceleration due to a decline in the natural increase and outward migration to other territories and provinces.<sup>13</sup>

A key feature of Nunavut's population is that approximately one half of Nunavummiut are under the age of 20.

### 3.2.2 EDUCATION

Education and skills development are very important in building human capital and potential growth. In our last report we said that levels of education among Nunavummiut were low compared to the national average but were improving based on participation increases in senior secondary education and graduate rates.

Very little new data on education indicators have become available since the release of NEO. What has been made available suggests that Nunavut will need to continue its focus on educational priorities. According to the 2001 Nunavut Household Survey, about 12 per cent of Inuit adults having some form of post-secondary education with less than one per cent with a University degree. By contrast, according to the 1996 Census, 40 per cent of Canadians 15 years of age and over had completed some form of post-secondary education. True, Nunavut's population is considerably younger than the rest of the Canadian population with many residents still in school and it has not been very long since secondary education was available in all communities. However, if Nunavummiut are to increase their participation in the Nunavut economy, attention to education and skills development must be a priority.

A considerable amount of activity is underway in regards to education in Nunavut. For instance, a new Education Act was introduced into the legislature in March 2002 and is currently under review. Another development since the initial NEO was undertaken is the establishment of the Akitsiraq Law School in Iqaluit. The law school is a joint venture between Nunavut Arctic College and the University of Victoria and is supported by

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<sup>12</sup> The Conference Board of Canada, *Nunavut Economic Outlook*, p. 19.

<sup>13</sup> Statistics Canada, *A Profile of the Canadian Population: Where We Live*. 2001 Census Analysis Series. <http://www.statcan.ca/english/census2001/where/where.htm>

federal and territorial funding. It saw a one-time admission of 15 students to take the four-year program. The program is intended to meet the demand for Inuit lawyers in both public and private domains.

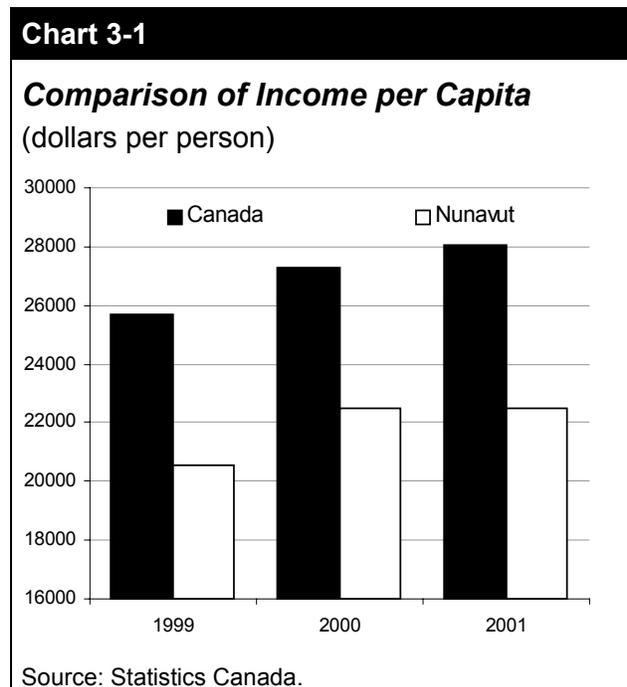
### 3.2.3 SOCIAL CONDITIONS

#### 3.2.3.1 Income Levels

Income has been identified as an important determinant of health and well-being. Income per capita in Nunavut is low in relation to its total output and to the national average.

While income per capita in Nunavut has risen since 1999, Statistics Canada figures show that Nunavut's income per capita for 2001 was approximately \$22,500 compared to \$28,076 for Canada (see Chart 3-1). The recent 2001 Nunavut Household Survey confirms these findings: 57 per cent of Inuit reported personal income of less than \$10,000 and only 27 per cent reported personal income above \$20,000.<sup>14</sup> Considering the higher cost of living in the north, these income levels impede the goal of attaining a higher quality of life in Nunavut.

Income support has been an important source of income for many Nunavummiut. Over half of all households in Nunavut in 2001 had someone receiving income support amounting to 3,100 adults and 5,000 dependants.<sup>15</sup> As outlined in the Bathurst Mandate, the Government of Nunavut has been looking to change its Income Support Program to allow for an easier transition between it and greater self-reliance. It also requires amendments that will provide recipients the opportunity to make productive choices that are consistent with Inuit Qaujimajatuqangit.



<sup>14</sup> Nunavummit Kiglisiniartiit (Nunavut Bureau of Statistics), 2001 Nunavut Household Survey. It is quite likely that people considered income as earned income and not all sources of income. Nevertheless, the numbers are still quite low.

<sup>15</sup> Government of Nunavut, Department of Education, Income Support: A New Vision. A New Direction. November, 2001.

### 3.2.3.2 Family Violence and Crime Rates

Family violence had been identified previously as one of the most serious social problems in Nunavut. According to the 1999-2000 Transition Home Survey, there were 911 admissions of women and dependent children in shelters for women in Nunavut. A snapshot taken on April 17, 2000, identified 59 residents in Nunavut's shelters of which 44 per cent were women and 56 per cent were dependent children.<sup>16</sup>

<b>Table 3-2</b>				
<b>Crime rates 2001 (based on incidents per 100,000 population)</b>				
	Property Crimes	% change from 2000	Violent Crimes	% change from 2000
Canada	4,047	-0.6	994	1.3
Nunavut	5,501	12	6,573	8.7
NWT	5,184	-11.5	4,922	1.5

Note: The rates in this table are based on populations of 100,000 (and not actual incident numbers) to allow for comparison purposes.

Source: Canadian Centre for Justice Statistics, 2002

Recent crime statistics indicate rates (per 100,000 population) for both property crimes and violent crimes have increased in Nunavut (see Table 3-2). The violent crime rate for Nunavut is also higher than the 1996 rate included in the NEO. In addition to a rise in incidents, Nunavut holds the distinction of being the only jurisdiction in Canada that had more violent crimes reported than property crimes.

### 3.2.4 HEALTH STATUS

There has been substantial progress made on the availability of health status data for Nunavut since the 2001 NEO was produced. More Nunavut specific data are now available. This provides us with a better picture of the health status of Nunavummiut and how they compare to residents of other regions.<sup>17</sup>

Table 3-3 provides health status indicators for Nunavummiut and residents of NWT, Yukon and Canada as a whole. While it is still too early to identify many trends, the data reaffirm the observations made in the NEO, namely:

<sup>16</sup> Statistics Canada, 1999-2000 Transition Home Survey, [www.statcan.ca/english/freepub/85-404-MIE/nunavut.htm](http://www.statcan.ca/english/freepub/85-404-MIE/nunavut.htm) (Data is based on 5 of 6 shelters reporting).

<sup>17</sup> For example, in a recent Statistics Canada publication, Nunavut is now considered part of a peer group that includes Nunavik, the James Bay region, northern Saskatchewan and northern Manitoba (Churchill region). Statistics Canada, *The Health of Canada's Communities*. Supplement to Health Reports, Volume 13, 2002.

**Table 3-3****Health Indicators**

	<b>Nunavut</b>	<b>NWT</b>	<b>Yukon</b>	<b>Canada</b>
Total population	29,000	42,000	30,655	31,260,000
Aboriginal population (per cent of total population)	85	50	20	3
Life expectancy at birth, males, (years)*	67.7**	73.6	74.5	76.3
Life expectancy at birth, females, (years)*	70.2**	79.5	79.0	81.7
Infant mortality rate (per 1,000 live births, 500 grams or more)*	16.3	10.5	5.4	4.6
Low-birth weight rate (percentage of live births less than 2,500 grams)*	6.9	4.8	4.5	5.6
Potential years of life lost due to unintentional injury deaths per 100,000 (e.g., motor vehicle collisions, falls, drowning, burns and poisonings)*	3,089	1,309	1,907	697
Suicides per 100,000 population*	67.3	12.0	20.9	13.0
Lung cancer (mortality rate per 100,000 population)*	173.5	70.9	69.0**	49.3
Acute Myocardial Infarction deaths (rate per 100,000 population) *	39.0	46.4	40.5**	63.5
Patient satisfaction with overall health care (per cent rating the system as excellent or very good), 2000-01	71	81	82	84
Alcohol consumption by adults (per cent drinking 5 or more drinks on one or more occasions per month,) 2000-01	30	41	30	20
Cigarette smoking, aged 12 and over (per cent of population that are daily smokers)**	50	36	26	22
Self-reported health status (per cent of people 12 years and over indicating excellent or very good health)	53***	54	62	61
Physical activity, (per cent aged 12 and over reporting "inactive")**	47	48	47	49

\*These rates were created by averaging three years of data (1997, 1998, 1999).

\*\* 1999 rate

\*\*\*73 per cent of Nunavummiut reported excellent or very good health in the 2001 Nunavut Household Survey.

Sources: CIHI, Statistics Canada (Canadian Vital Statistics Database, Canadian Community Health Survey, 2000-01), Nunavut Department of Health and Social Services, NWT Department of Health and Social Services, Yukon Health and Social Services, 1994-95 National Population Health Survey.

- There is a large discrepancy between Nunavummiut and Canadians in regard to many health indicators such as life expectancy and infant mortality.
- Potential years of life lost (PYLL), that is, the rate of premature death due to unintentional injury along with the rates for suicide and lung cancer are much higher in Nunavut than in the NWT or for Canada as a whole.

- Deaths due to heart disease (Acute Myocardial Infarction) in Nunavut are the lowest in Canada.
- Self-reported health status and levels of physical activity among Nunavummiut are comparable to the Canadian average; however, cigarette smoking is significantly higher among Nunavummiut than the rest of the Canadian population.

There continues to be concern over the large numbers of infectious diseases in Nunavut. Nunavut's, tuberculosis incidence rate was approximately 17 times higher than the national rate,<sup>18</sup> while the rate of Genital Chlamydia, a sexually transmitted disease, was 17 times higher for women and 18 times higher for men in Nunavut than the national rate.

The situation in Nunavut reveals less reliance on the formal health care system than other jurisdictions. This is likely due in part to the lack of services compared to southern communities and illustrates yet again how health care supply often drives demand. For example, Nunavut has the lowest acute care hospitalisation rates and the lowest number of physicians per capita in the country. Not surprisingly, Nunavummiut have the lowest level of satisfaction for their health care system than citizens from any other Canadian jurisdiction.<sup>19</sup> Further, Nunavummiut are also among the lowest spenders of pharmaceuticals in the country—the fastest growing component of the health care system in Canada.<sup>20</sup>

### **3.3 Natural Capital**

Nunavut has abundant natural capital. Nunavummiut have depended on Nunavut's natural capital to survive, and the land and sea and all of its resources maintain their importance to local citizenry. Both components of Nunavut's mixed economy are highly dependent on a healthy and sustainable stock of natural capital. As reported in the NEO, the biggest issue for Nunavut's natural capital is building up the knowledge base using both traditional and scientific sources of knowledge. This was also a key finding of the recent Report of the Standing Senate Committee on Fisheries. It called for more funding for multi-year, fish stock and marine mammal assessments to support co-management of resources in Nunavut and other Arctic regions.<sup>21</sup> Recent growth in Nunavut's fishing industry has been attributed to increased knowledge in fisheries science for the region.

Much has been taking place over the past few years concerning the management and control of Nunavut's natural capital. Work has been underway regarding the stewardship of Nunavut's parks and conservation areas and their desired role within

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<sup>18</sup> Nunavut Department of Health and Social Services, *Report on Comparable Health Indicators for Nunavut and Canada*. September 2002. The high rate is partly due to large numbers of people with latent tuberculosis that reactivates as they age.

<sup>19</sup> Ibid.

<sup>20</sup> Canadian Institute for Health Information and Statistics Canada, *Health Care in Canada – 2002*. (Ottawa: CIHI, 2002).

<sup>21</sup> The Standing Committee on Fisheries. Media Advisory, *Increased Research in Support of Fisheries Co-Management in Nunavik, Nunavut and Northwest Territories*. February 19, 2002.

Nunavut. An Inuit Impact and Benefits Agreement for Territorial Parks was recently signed identifying the role that Inuit will play in joint park planning and management and related tourism initiatives.<sup>22</sup> The Government of Canada's fall 2002 Speech from the Throne included an announcement for two new park sites in Nunavut (Wager Bay/Ukkusiksalik and Bathurst Island).

In addition, a considerable amount of research is planned or underway to collect a high degree of traditional and scientific knowledge on Nunavut's natural capital. For example, Inuit Tapiriit Kanatami (ITK) and Environment Canada recently signed a formal agreement on July 25, 2002, as part of the Northern Ecosystem Initiative. ITK will contribute to the \$10 million, five-year program that will be studying how northern environments respond to climate change, contaminants and resource use activities.

While the Government of Nunavut retains ultimate responsibility for wildlife management, the Nunavut Land Claims Agreement identifies the Nunavut Wildlife Management Board as a main instrument of wildlife management. The Board's mandate includes the funding of research to support its mandate (e.g., the Nunavut Wildlife Research Trust). It is also overseeing the Nunavut Wildlife Harvest Study, a five-year project that will identify basic need levels for the Inuit population. A final report is expected in 2003. Opportunities for an ongoing data collection approach are being explored.

The GN also desires to re-write its Wildlife Act (inherited from the NWT) so that it more appropriately represents the needs of Nunavummiut and is consistent with the Nunavut Land Claims Agreement. Nunavut remains the only jurisdiction in Canada without a protected area strategy (conservation areas, parks, wildlife sanctuaries, etc.). The consequences of this are that protected areas will continue to be established by various agencies in isolation of each other. Without a territorial framework, the territory runs the risk of losing important habitat and representative areas, duplicating conservation/protection efforts and discouraging economic development due to uncertainty.

A Nunavut regulatory regime is being developed to oversee its natural resources. For instance, the Nunavut Wildlife Management Board, DFO, DSD and NTI formed the Nunavut Regulatory Review Committee in May 2000 to develop new fishery regulations.

The active monitoring of Nunavut's natural capital can have serious socio-economic repercussions. If wildlife studies reveal a decline in a specific animal population, harvesting quotas will have to be reduced. Government and Inuit Organisations are expected to respond to the impact on peoples' livelihoods. For instance, the Government of Nunavut established its Special Economic Initiatives Fund in 2001 to assist selected communities in developing economic alternatives to the harvesting of polar bears due to reductions in quotas.

A major issue identified in the NEO was the lack of public geoscience data. Some progress is being made. Since the late 1990s, the Canada-Nunavut Geo-Science Office has begun collecting and making accessible geoscience data and expertise to develop

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<sup>22</sup> Government of Nunavut. Press Release, *Inuit Impact and Benefits Agreement for Territorial Parks Signed*. May 13, 2002.

geoscience capacity in Nunavut. In April 2002, the Government of Nunavut and the Government of Canada signed an agreement to renew the commitment until 2008. An improved geoscience database can better support land use management decisions including mineral exploration and other economic development opportunities.

Land use planning will also be improved through the work of the Nunavut Planning Commission. It has been collecting environmental, cultural and scientific data about Nunavut and entering the information into a GIS system that can then integrate data for a wide range of planning purposes.

### **3.4 Social and Organisational Capital**

The 2001 NEO provided background to the formation of the Territory of Nunavut, the details of the Nunavut Land Claim Agreement, the establishment of the Government of Nunavut, and all of the significant organisations that are involved in working with the other forms of capital to generate wealth. We commented on the fact that much of Nunavut's social and organisational capital was still in the process of being established and we expressed the need for better inter-organisational collaboration and to clarify the roles of the numerous organisations involved in economic development.

“Building partnerships” is a key theme among economic development strategies today. The Conference Board of Canada's Third Annual Innovation Report identifies collaboration as an important ingredient in fostering innovation and growth.<sup>23</sup> There have been some signs of progress toward collaboration in Nunavut in the past few years. Strategic partnerships for the purposes of socio-economic development have been made in several areas including:

- establishing Nunavut wide associations to strengthen the voice of industry sectors in Nunavut and abroad as well as provide support to their members (e.g., Ajjit – The Nunavut Media Association, the Baffin Fishing Coalition);
- the strengthening of links between Manitoba and the Kivalliq region (the Memorandum of Agreement between the Government of Nunavut and the Government of Manitoba and a Treaty of Friendship and Cooperation signed between NTI/Kivalliq Inuit Association and Northern Manitoba Dene and First Nations);
- a letter of understanding between NTI and Nunavik's Makivik Corporation to develop reciprocal hunting rights;
- participating in trade missions (e.g., Team Canada) that provide an opportunity to promote Nunavut products such as country food products; and
- establishing an Elders Council by the Ministry of Culture, Language, Elders and Youth for the purposes of transferring IQ knowledge to the members of Nunavut's Legislature.

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<sup>23</sup> The Conference Board of Canada, *Investing in Innovation: Third Annual Innovation Report* (Ottawa: The Conference Board of Canada, 2001).

Notwithstanding these efforts, we believe that there is still a need for improved co-ordination between the various public organisations involved in wealth creation. There are a considerable number of organisations and bodies responsible for governing Nunavut. Moreover, the federal government has shifted to a more horizontal policy and program approach in dealing with Nunavut whereby responsibility for Nunavut at the federal level cuts across all departments and not just through Indian and Northern Affairs Canada. Many federal departments now have some of their operations in Nunavut and directly allocate funds to Nunavut organisations and projects. This means that Nunavut's interaction with the federal government will increasingly require partnerships with several departments on a variety of initiatives thereby increasing the need for coordination both on the federal side and on the Nunavut side.

The NEO also identified poor private-sector development as an issue in Nunavut—another player involved in wealth creation. Chapter 5 outlines that the situation regarding the private sector has not improved in the short-term.

The NEO also noted that the Government of Nunavut (GN) was still in the midst of being established and was guided by an overall commitment to a decentralised approach. Approximately 78 per cent of government's approved staff complement has been achieved. As of December 2001, 209 positions in designated communities had been filled while 131 positions remained vacant. This vacancy rate of 37 per cent is higher than the overall GN vacancy rate of 22 per cent. However, Inuit are employed in approximately 59 per cent of decentralised government jobs compared to only 42 per cent of the overall total of GN public service jobs. A third phase of decentralisation is planned for 2002-03 when 78 additional positions will be shifted to four communities. The lack of government housing units has slowed the pace of government decentralisation.

Employment statistics show that Inuit are most predominately found holding para-professional and administrative support jobs. "They have not yet achieved the same level of success in middle management and in the professional category."<sup>24</sup> There is also a discernible retention problem facing Inuit males in the public service.<sup>25</sup>

As part of a joint federal/territorial review of Nunavut's fiscal capacity and needs, the GN recently undertook a program review to ensure there is no duplication and that existing programs are being run efficiently.

#### 3.4.1 INUIT QAUJIMAJATUQANGIT (IQ)

Inuit Qaujimajatuqangit, or IQ for short, has played a major role in guiding the creation and distribution of wealth in Nunavut, particularly for the land-based economy but increasingly for the wage economy. IQ is literally translated as "that which are long known by Inuit," and is a philosophy or a way of living and thinking that encompasses a range of elements such as:

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<sup>24</sup> Millennium Partners, *Building Nunavut through Decentralisation: Evaluation Report*, February 2002, p. 26.

<sup>25</sup> Joint Report of the Standing Committees of the Legislative Assembly of Nunavut on the 2001-02 Budget and Departmental Business Plans of the Government of Nunavut. May 2001.

- the long-practised tradition of passing Inuit knowledge, values and teachings from the elders down to the younger generations;
- a system of laws, values and consultations before making important decisions that affect the community;
- an understanding of complex family relationships that is explained by Inuktitut kinship terminology;
- a knowledge of traditional healing and counselling methods and a system of dealing with fellow Inuit who need help that is based on trust and love; and
- the knowledge of wildlife, hunting techniques and an understanding of animal life, biology and migratory problems.<sup>26</sup>

IQ not only involves past knowledge but speaks to the present and future knowledge of Inuit society as well.<sup>27</sup> There has been a considerable amount of activity by GN on integrating IQ in its activities. The GN has established an IQ Task Force over the past year. It is also planning to establish an Elders Council in the near future to advise the legislature on how it can best integrate IQ practices into its activities.

### 3.4.2 HERITAGE AND THE 'CULTURE SECTOR'

Heritage or more often, cultural heritage, are notions used to refer to distinctive, historical and artistic expressions of a society. Cultural heritage appears in both tangible forms (monuments, landscapes and objects) and intangible forms (languages, knowledge, the performing arts, music, etc.). The United Nations Educational, Scientific, and Cultural Organisation (UNESCO) identifies twenty types of cultural heritage, from archaeological sites, to museums, music, culinary traditions and traditional sports and games.<sup>28</sup>

The culture sector<sup>29</sup> is of particular interest to the formation of social capital because of the many intangible contributions it provides to society and its development:

- as a driving force in developing a sense of identify and building social cohesion,<sup>30</sup>
- as a resource for creativity in development efforts;<sup>31</sup> and

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<sup>26</sup> Taken from Government of Nunavut, Report from the September Inuit Qaujimagatuqangit Workshop, Niaqunngnut, Nunavut, September 29–30, 1999. Department of Culture, Language, Elders and Youth.

<sup>27</sup> Mike Bell, *Nunavut Literacy Development in the Context of Inuit Qaujimagatuqanginnut (IQ)*. A discussion Paper. 2002.

<sup>28</sup> See the following UNESCO website for more information on the different types of cultural heritage: [http://portal.unesco.org/culture/ev.php?URL\\_ID=1335&URL\\_DO=DO\\_TOPIC&URL\\_SECTION=201](http://portal.unesco.org/culture/ev.php?URL_ID=1335&URL_DO=DO_TOPIC&URL_SECTION=201)

<sup>29</sup> Economic activity arising from the distinct themes of cultural heritage is usually grouped under the culture sector.

<sup>30</sup> Dick Stanley, Beyond Economics: Developing Indicators of the Social Effects of Culture". Statistics in the Wake of Challenges Posed by Cultural Diversity in a Globalization Context. International Symposium on Culture Statistics, Montreal, October 21-23, 2002.

<sup>31</sup> The notion of creativity is based not only on the recognition of culture's contribution to the economy, but also on the cultivation of human creativity as an essential contribution to improving the quality of life and

- as an important contributor to the economy; that is, the role cultural goods and events play in the economy.<sup>32</sup>

Many people in Nunavut recognise that the Territory's cultural heritage plays an important role in its socio-political development and as a key contributor to the economy. Surprisingly, very little data is available on the size of Nunavut's arts sector and cultural industries (e.g., level of participation and its economic contribution).

The information that does exist suggests Nunavummiut involvement in the arts and crafts sector is high in comparison to other jurisdictions in Canada.<sup>33</sup> The 2001 Nunavut Household Survey found that twenty percent of Nunavummiut were involved in making arts and crafts for sale during the preceding year. Participation can be higher in particular communities. For example, the General Manager at the Uqqurmiut Centre of Pangnirtung estimates that 80 per cent of that town's residents are involved in arts production in one form or another.

Parks can play a central role in cultural heritage by defining a geographic area as an "Aboriginal Cultural Landscape":

*Aboriginal cultural landscape is a place valued by an Aboriginal group (or groups) because of their long and complex relationship with that land. It expresses their unity with the natural and spiritual environment. It embodies their traditional knowledge to spirits, places, land uses, and ecology.*<sup>34</sup>

Referencing local human-environment interactions through the preservation of landscapes gains even more importance in a context where a society regards itself as part of the environment. It is an important tool to indicate the importance that a landscape has to its residents. In preserving selected areas, Parks can support the accumulation, conservation and transfer of local knowledge. The recently signed *Inuit Impact and Benefits Agreement for Territorial Parks* is a step towards a local management of cultural heritage.

There has been considerable activity in recent years in promoting Nunavut's cultural heritage, particularly through the arts and cultural industries. Since 1998, numerous publications with topics referencing Nunavut's cultural heritage have sharpened the awareness of Nunavut's art production. Many exhibitions, including international travelling exhibitions, have documented and portrayed Nunavut artists and artwork. In 2002 alone, twelve Inuit artists were among 60 new members inducted to the Royal Canadian Academy of Arts. Also in 2002, the Canadian Museum of Civilization dedicated an exhibition exclusively to Pangnirtung tapestries. This recognition of Nunavut's arts sector provides a good base to build upon.

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to a society's development. For further discussion see *The Intergovernmental Conference on Cultural Policies for Development*, Stockholm, Sweden, 1998.

<sup>32</sup> *Towards New Strategies For Culture In Sustainable Development*. UNESCO conference, Florence, Italy, 4-7 October 1999. [www.unesco.org/culture/policies/florence/html\\_eng/index\\_en.shtml](http://www.unesco.org/culture/policies/florence/html_eng/index_en.shtml).

<sup>33</sup> The Conference Board of Canada, *Examining Nunavut's Arts Sector and Cultural Industries – Phase I*. Prepared for the Nunavut Office of Canadian Heritage. June 2002.

<sup>34</sup> Parks Canada, *Aboriginal Cultural Landscapes*.  
[http://www.parksCanada.gc.ca/aborig/hsmbc/hsmbc20\\_e.htm](http://www.parksCanada.gc.ca/aborig/hsmbc/hsmbc20_e.htm)

Of all forms of media, film has received the most attention since the creation of Nunavut. The film “Atanarjuat” received widespread attention in May 2001, after winning the award for best first feature at the Cannes Film Festival. Shown at numerous film festivals, the film collected several national and international awards. Inuit viewers stressed the fact that this film was the first full-length Inuktitut feature film produced, directed, written and acted by Inuit.<sup>35</sup>

The grand success story of “Atanarjuat”, however, is countered by stories of film projects that were not realised in Nunavut due in part to a lack of financial incentives and subsidies—financial incentives that are available in most other jurisdictions in Canada. There appears to be a need to improve capacity to take advantage of these opportunities. The initial step was taken when in the recent budget statement, the Government of Nunavut committed to develop a policy for film development.

A key area for concern with respect to cultural heritage in Nunavut is how it is organised and supported. There is no single repository of Inuit collections with little co-ordination between existing centres. Moreover, there are few organisations that can provide support for Nunavut’s artists (e.g., exchange ideas, provide a location to work or showcase and promote works). There is also an obvious need for greater electronic promotion via the Internet that would allow both Nunavummiut and non-Nunavummiut to browse for information on Nunavut’s arts sector.

Some organisations are trying to overcome these problems (e.g., the Nunavut Arts and Crafts Association) but the level of assistance can vary from one art form to the next. Recently, Nunavut’s Department of Culture, Language, Elders and Youth commissioned a study on a future Nunavut Heritage Centre. Organisations play a critical role because most of the available funding is provided through them. A comprehensive examination of Nunavut’s culture sector would facilitate the building of support structures and policies. Identifying the challenges and opportunities for promoting Nunavut’s heritage and culture will help maximise this sector’s benefit to the Territory’s development.

### 3.4.3 SOCIAL COHESION

Social cohesion is a concept that has received considerable attention nationally and internationally in recent years. Social cohesion has no universally accepted definition but it usually involves a sense of trust present in society based on having some shared values while at the same time a respect for diversity. Social cohesion ultimately serves as the “glue” that keeps society and networks functioning properly.<sup>36</sup> According to Jenson, social cohesion includes five dimensions:

- *Belonging/isolation*: social cohesion signifies sharing values, a sense of being part of the same community

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<sup>35</sup> Atanarjuat - The Fast Runner. Inuit Art Quarterly, 2002, Vol 17, no.3, p.7.

<sup>36</sup> A recent Canadian Heritage paper defines social cohesion as being “based on the willingness of individuals to co-operate and work together at all levels of society to achieve collective goals.” M. Sharon Jeannotte et al., *Buying in or Dropping Out: The Public Policy Implications of Social Cohesion Research* (Hull, Quebec: Department of Canadian Heritage, February 2002).

- *Insertion/exclusion*: social cohesion supposes a largely shared market capacity, particularly with respect to the labour market
- *Participation/passivity*: social cohesion calls for involvement in the management of public affairs, in partnerships and in the voluntary/non-profit sector, as opposed to political disenchantment
- *Recognition/rejection*: social cohesion considers pluralism not just a fact but a virtue, that is, the tolerance of differences
- *Legitimacy/illegitimacy*: social cohesion supposes the maintenance of public and private institutions that act as mediators in conflicts.<sup>37</sup>

The level of social cohesion in a society can play a role in economic outcomes. For example, increased levels of trust between members of a society may reduce uncertainty and the costs of doing business. Alternatively, low levels of trust, ethnic tensions, and wide disparities of income may have a negative impact on the economy. There is concern among some policy makers and academics around the world that social cohesion within jurisdictions is weakening due in part to globalisation and a perception that income and knowledge gaps are increasing within societies.

In recent years, social scientists have been identifying and debating possible indicators of social cohesion to measure its level in societies (e.g., level of voter turnout, crime levels, levels of trust, public attitudes towards diversity).<sup>38</sup> Like many other jurisdictions, assessing the level of social cohesion in Nunavut can be problematic. The Conference Board of Canada is not in a position to say whether or not there is a lack of social cohesion in Nunavut. The large number of organisations involved in governing Nunavut and the apparent overlap with some activities (e.g., economic development) might suggest low levels of trust among organisations. However, this is something for Nunavummiut to consider along with ideas for improving levels of trust among citizens and organisations, developing a sense of community across Nunavut, and having mechanisms to resolve differences between people and regions that are respected by all parties. Low levels of social cohesion can lead to higher social and economic costs—additional costs that Nunavut can ill afford.

### **3.5 Implications of Capital Shortage**

It is clear from the preceding discussion that Nunavut is in critical need of capital investments in many areas. The importance of a balanced approach to an investment strategy can not be overstated. As Exhibit 2-1 suggests, the attainment of society's ultimate goal of a High and Sustainable Quality of Life can only be achieved through equal economic, environment and social performance, that is advanced through balanced investments into Nunavut's four forms of wealth-generating capital. Ample housing, safe drinking water, and adequate sewage and waste disposal can contribute

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<sup>37</sup> "Mapping Social Cohesion: The State of Canadian Research", Jane Jenson, CPRN Study No. F/03, 1998.

<sup>38</sup> See for example, Canadian Council on Social Development, *Social Cohesion in Canada: Possible Indicators*. Prepared for the Social Cohesion Network, Department of Canadian Heritage and Department of Justice. November 2000.

to healthy people and communities. Greater emphasis on an effective education system and access to health care services also lend themselves to an improved social environment. Meanwhile, the advancement of knowledge of natural capital throughout the Territory can provide a needed sense of environmental security as well as job security. Job opportunities that stem from improved physical infrastructure and knowledge of natural capital go hand in hand with improvements in human capital at the personal and community level. Improved organisational effectiveness and greater social cohesion and trust among private and public operators and organisations facilitate these activities.

This revised Outlook has found that investments into capital formation have not been balanced, or at least, the results of investments have not been balanced. Economic performance will likely outstrip that of environmental and social performance over the next ten years, which will promote a sense of an improved quality of life that may be short lived. That is, without environmental and social improvements, the higher quality of life will not be sustained. Those with a role to play in the investment strategy for Nunavut must be cognisant of the need for a balanced approach. Nunavut was established under a unique set of values and opportunities that should not be overshadowed by the prospects of short-term performance, regardless of what form it might come under.

## 4 Update on Nunavut’s “Mixed Economy”

In the 2001 Nunavut Economic Outlook, we highlighted Nunavut’s unique “mixed economy” that included economic activity in land-based activities (e.g., harvesting, arts and crafts) and wage-based activities. We noted that while the level of wage activity in Nunavut is captured by standard economic measurement systems such as used by Statistics Canada, land-based activity is much harder to quantify. Many harvesting activities do not involve the payment of wages that is often used to record activity levels. Many of the inputs for these activities will be recorded (e.g., the purchase of gas and other supplies), but the output will go unrecorded (i.e., the meat and pelt for personal use). This result is the value of this activity goes unrecorded in standard economic measures such as Gross Domestic Product (GDP). Consequently, the value of harvesting activities can be underestimated, hindering policy and program planning and also lead to it being undervalued by Canadians.

We recognise that land-based and wage-based economic activities do not operate in isolation of each other. Mention has been made in the past that subsistence living or land-based activity was a necessary complement to wage employment. However, the opposite is true—the wage economy is necessary to support traditional activities since most of the inputs such as supplies and equipment must be purchased with cash. Either someone must earn cash to pay for the supplies or someone else in the family must earn income to be set aside for these purposes—either way harvesting is very much tied into the wage economy. Some argue that as the wage economy increases, more income will be obtained to actually support harvesting and develop local markets for products.

### 4.1 The Land-Based Economy

Both the NEO and a subsequent report prepared by the Conference Board identified several benefits to harvesting country food:

- Harvesting contributes to food autonomy and food security—that is, ensuring members of the community have access to safe, healthy and affordable food. Reliance on country food can help reduce the need to purchase costly imported foods flown in from the south. Despite efforts to transport food as effectively as possible and the existence of shipping subsidies, much of the imported food is still expensive and in poorer condition than found in southern centres (i.e., less fresh or reduced shelf life).
- Country food is an important contributor to a healthy diet. Country food is very nutritious with wild meat such as caribou being leaner than beef or pork. A wide range of vitamins and nutrients are found in traditional food. A study of the Inuit diet in Nunavik found that the consumption of marine products (fish and marine animals), rich in omega-3 fatty acids, was associated with low mortality rates from ischemic heart disease, visual acuity and increased birth weight.<sup>39</sup>

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<sup>39</sup> Eric Dewailly et al., n—3 Fatty Acids and Cardiovascular Disease Risk Factors Among the Inuit of Nunavik, *American Journal of Clinical Nutrition*, Vol. 74, pp. 464-473. 2001.

- Country food production is seen as an opportunity for economic development through its commercialisation. There is a growing demand for country food products in Canadian and international markets.
- The production and consumption of country food also serves spiritual, cultural and social purposes. It provides a connection to the land and sea and the sharing of social norms and cultural beliefs.<sup>40</sup> Some country foods are used for medicinal purposes to improve health.

**Table 4-1****Self-Reported Harvesting Activity of Inuit Males in Nunavut, Ages 15-54**

(per cent)

	Employed	Not Employed
Harvests frequently	37.1	46.0
Harvests occasionally	41.2	27.7
Rarely or never harvests	16.5	23.7
Not Stated	5.0	5.6

Source: Nunavummit Kiglisiniartiit (Nunavut Bureau of Statistics), 1999 *Community Labour Force Survey*

Reliance on country food and the harvesting of country food remains significant in Nunavut. According to the 1999 Nunavut Community Labour Force Survey, 54 per cent of Inuit surveyed indicated they eat caribou—only one source of country food—3 to 4 times a week or more. Country food consumption remains highest among older adults. A survey of residents in the community of Sanikiluaq found that over 80 per cent of older adults ate country food every day compared with 45 per cent of those 18-34 years of age.<sup>41</sup> A study for the Keewatin region found similar results: 81 per cent of people 55 or older ate country food daily (land mammals), compared to 65 per cent of those between 35-55 years and 45 per cent of those under 35 years of age.<sup>42</sup>

A review of previous studies and reports from key stakeholders indicates that the number of people participating in harvesting remains high. According to the 1999 Nunavut Community Labour Force Survey, a significant portion of both employed (78.5 per cent) and unemployed (73.7 per cent) Inuit males between the ages of 15 and 54 harvested frequently or occasionally (see Table 4-1). The Government of Nunavut has estimated that between 54 and 60 per cent of Nunavummiut aged 15 years and older are harvesters. Results from the recent 2001 Nunavut Household Survey were consistent with this level, with 55 per cent of Inuit reporting they actively or occasionally harvest.<sup>43</sup>

However, there is a prevailing view among many officials that harvesting levels have been dropping or are likely to decrease as the cost of harvesting rises, wage employment grows and the necessary harvesting skills are lost. Others suggest that what is occurring are more subtle shifts in harvesting patterns. For example, Nunavut

<sup>40</sup> The Conference Board of Canada, *Innovation and Traditional Resource-Based Economies Study*, Prepared for Indian and Northern Affairs Canada. May 1992.

<sup>41</sup> E.E. Wein, M.M.R. Freeman and J.C. Makus, "Use of and Preference for Traditional Foods Among the Belcher Island Inuit," *Arctic*, 49(3): 256-264. In Heather Myers, *The Changing Food Economy in Nunavut*.

<sup>42</sup> Moffatt. *Current Status of Nutritional Deficiencies in Canadian Aboriginal People*.

<sup>43</sup> Nunavummit Kiglisiniartiit (Nunavut Bureau of Statistics), 2001 Nunavut Household Survey.

Tunngavik Incorporated's Harvester Support Program has found that while a large proportion of the population harvests, participation is moving from intensive and active harvesting to harvesting on a more occasional basis. The level of harvesting will also be affected by such factors as international fur prices and quotas set for each species in a region.<sup>44</sup>

The Government of Nunavut along with Inuit organisations will continue to fund programs that support traditional activities. The 2002-03 budget sets aside over \$300,000 for Hunters and Trappers' organisations, \$251,000 for the Community Harvester Assistance Program and \$200,000 for the Nunavut Arts and Crafts Association.

One traditional activity that may be making a comeback is the commercial viability of sealing. An activity that largely passes below the radar screens of Statistics Canada's *National Income Accounts*, commercial sealing is showing signs of life after a decade or more of poor sales. This year's auction saw sealskins fetch \$67 a pelt, up dramatically from the \$10 to \$15 levels of the mid-1990s. At this price, hunters received \$335,000 for the 5,000 pelts sold.<sup>45</sup>

Seals are harvested for subsistence purposes regardless of their skin's value, but in times of high prices, the market offers hunters an additional source of income. It is not cheap to hunt seal however, and to increase harvesting, equipment such as snowmachines, boats and rifles are needed along with fuel and bullets that can cost a part-time hunter \$20,000 annually.<sup>46</sup> Current signs suggest the market will continue its upward movement, though it is difficult to know how far it will rise and how long it will last. But the trend should give hunters some confidence in investing in new equipment. And while sealing may not impact the final GDP figures published by Statistics Canada, a strong industry can have positive repercussions, such as a reduced need for social assistance.

## **4.2 The Wage-Based Economy**

Over the past 18 months since the release on the original NEO, Nunavut's fledgling economy has, for the most part performed well. There are now three years of economic data from Statistics Canada in which the economy's performance can be based. As will be discussed, the size of Nunavut's economy lends itself to some variations in the estimated contributions of some sectors. It also means that some data are secure due to issues of confidentiality.<sup>47</sup> Regardless, these new data do reflect accurately some of the important trends taking place.

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<sup>44</sup> The Conference Board of Canada, *Innovation and Traditional Resource-Based Economies Study*.

<sup>45</sup> Northern News Service, August 2002.

<sup>46</sup> George Wenzel. 1991. Quoted in the "*Social and Economic Benefits Assessment of Fisheries and Sealing in Nunavut*", prepared for the Department of Sustainable Development, Government of Nunavut by Jacques Whitford Environmental Limited (Ottawa, 2002).

<sup>47</sup> Secured data means the public cannot access this information. It usually occurs in situations where there are only one or two active firms in one business area. Making the data available would then allow researchers to determine the exact financial position of those firms.

First, as expected, Nunavut's economic growth has been robust over the past two years. In terms of real expenditure-based Gross Domestic Product (GDP) at Market Prices<sup>48</sup> the economy grew by 4.5 per cent in 2000 and 3.7 per cent in 2001 (see Table 4-3). Last year's growth is right in line with prior expectations, however, the 2000 figure is somewhat lower than forecast in the original NEO. This difference can be attributed to much lower than expected investment spending on residential and non-residential structures by private business—falling 31.6 per cent, and a decrease in the combined production of Nunavut's three mines reducing total exports for the year.

Second, employment growth has been strong, advancing by 8.5 per cent in 2000 and a seemingly inconceivable 18.5 per cent in 2001.<sup>49</sup> This latest increase should not be overstated and may not be accurately reflecting reality in Nunavut since Statistics Canada is also reporting a much lower increase in wages, salaries and supplementary income of 5 per cent for 2001. The divergence can be explained either through increased employment for significantly shorter periods of time (i.e. seasonal work), more part-time employment, significant declines in wages, or through sampling error on the part of the Survey of Employment, Payroll and Hours (SEPH).<sup>50</sup> According to SEPH data, the first six months of this year show a further 4.4 per cent advance over the same period last year.

In general, the overall characteristics of Nunavut's economy remain unchanged. The reliance on government to fuel over 50 per cent of the local economy remains steadfast. The Territorial government in turn relies on the Federal government for 90 per cent of its revenues. Also, diversification away from government and mining has not yet taken place.

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<sup>48</sup> Expenditure-based GDP is the methodology used to evaluate the size of an economy through the addition of all the purchases of final goods or services by consumers, government and business. It also takes into account exports and imports and the change in inventories.

<sup>49</sup> These employment figures are based on Statistics Canada's *Survey of Employment, Payroll and Hours* (SEPH). In southern Canada, where both SEPH and Labour Force Survey (LFS) data are available, it is common that the two estimates do not equal. In the case of Nunavut, where the LFS is not available, a comparison can be made between the first 12 months of SEPH data (04/1999 to 03/2000) showing an average employment figure of 7,585 and the Nunavummit Kiglisiniartiit (Nunavut's Bureau of Statistics) 1999 Community LFS which suggests employment in the Territory during the survey period was 8,646—a difference of 1,061.

<sup>50</sup> The SEPH is the only employment survey conducted in Nunavut by Statistics Canada on a monthly basis.

**Table 4-3****Gross Domestic Product at Market Prices, Expenditure-Based**

(millions of dollars at constant 1997 prices)

	1999	2000	2001
<b>Personal Expenditures on Consumer on Goods and Services</b>	<b>342</b>	<b>356</b>	<b>362</b>
<b>Government Current Expenditures on Goods and Services</b>	<b>614</b>	<b>629</b>	<b>627</b>
<b>Government Gross Fixed Capital Formation</b>	<b>79</b>	<b>111</b>	<b>104</b>
Structures	56	93	89
Machinery and Equipment	23	18	15
<b>Business Gross Fixed Capital Formation</b>	<b>136</b>	<b>113</b>	<b>134</b>
Residential Structures	15	10	9
Non-Residential Structures	85	55	68
Machinery and Equipment	36	48	57
Statistical Discrepancy	-79	-111	-104
<b>Domestic Demand</b>	<b>1092</b>	<b>1098</b>	<b>1123</b>
<b>Plus Exports of Goods and Services</b>	<b>341</b>	<b>324</b>	<b>344</b>
Exports to Other Countries	240	223	223
Goods	229	211	214
Services	11	12	9
Exports to Other Provinces	101	101	121
Goods	37	20	29
Services	64	81	92
<b>Deduct Imports of Goods and Services</b>	<b>541</b>	<b>556</b>	<b>558</b>
Imports to Other Countries	124	131	142
Goods	95	106	110
Services	29	25	32
Imports to Other Provinces	417	425	416
Goods	163	157	167
Services	254	268	249
Statistical Discrepancy	-24	41	32
<b>Gross Domestic Product at 1997 Market Prices</b>	<b>868</b>	<b>907</b>	<b>941</b>

Source: Statistics Canada

With that being said, the next few years will see some important changes in Nunavut's economic landscape. First of all, two of the Territory's three operating mines are closing in the third quarter of this year, while the third will likely shut down sometime in 2005. Second, while the public service will continue to expand over the next two years, it will do so at a reduced rate. Many of the current unfilled positions within the Territorial government have been decentralised and may prove more difficult to fill.

Other sectors of the economy, however, show promise. The fishing industry is gaining momentum with the formation of the Baffin Fishing Coalition that is pushing for

increased control and participation in the industry through the purchase of an offshore fishing trawler. There is a further opportunity for the food-processing industry to grow alongside the growth of the fishery if strategic investments are made. Manufacturing is also receiving a boost through European Union certification of Kivalliq Arctic Meats that will provide the company easier access to the European market.

There was a drop off in activity at hotels and restaurants last year, but 2002 already looks to be a better year, starting with the success of the Arctic Winter Games in Iqaluit. Also, Nunavut Tourism received a \$1 million boost through the 2002/03 budget that should allow for the implementation of an effective tourism strategy. As these fledgling industries (fishing, food processing and tourism) take hold, mining will resurface as a major player in the economy with the development of at least two new sites. With greater representation from the GN and NTI, these mines are expected to open under tighter environmental regulations and a mandate to hire and train Nunavummiut as well as award mine-related contracts to local service providers. This will result in a greater portion of mining's contribution to real GDP remaining in the Territory—an issue raised in the 2001 NEO.

There are reasons for optimism if continued investments in Nunavut's social, physical and human capital are made. But first the Territory will have to endure its first real economic slowdown as the impact of the mine closures feed through the economy.

## 5 Renewed Economic Outlook for Nunavut

There have now been three years since Nunavut's inauguration date, and from the economy's perspective, the next three years may be more interesting than the first. The Territory is about to embark on a new economic path as the temporary disappearance of the mining sector will force the economy to rely on fishing, food processing, and tourism, as well as the continued contribution of the public service for its wage-based economic growth. This challenge can also be seen as an opportunity for the Territory to start anew: new economic opportunities under new Territorial government and Inuit representation with a focus on cultural preservation and sustainable economic growth. Now, more than ever, we see the need for the Territory to focus on developing cohesive strategies that direct investments into wealth-generating capital in order to achieve a more sustainable economy. In this way, Nunavut will find its new place within Canada and the world.

### 5.1 *Nunavut's Place Within Canada and the World*

Nunavut's place in the world economy has never been so evident. In the 2001 NEO, the discussion of Nunavut's participation in the global economy focussed primarily on the significant challenges the Territory will face given its geographical location, the starting point of its human and physical capital relative to the rest of the world, and its dependence on world markets to maintain the value of its natural resources. The closure of Nanisivik due to a prolonged slump in raw mineral prices is a prime example of this, as are the events surrounding 9/11 and its impact on tourism. While all of these challenges remain, it is important to point out where challenges have become opportunities. Such is evident by the first ever, European Union certification of Nunavummiut-processed country food and the slow re-emergence of sealskins on the world market.

The discovery of diamonds in Canada's North is another example of Nunavut's growing opportunities to attract the world's interest. We have already seen the positive impact of diamond mining in the Northwest Territories where the region has been transformed by the influx of foreign capital<sup>51</sup> and skilled labour. Similar structural changes could occur in Nunavut with the development of these resources.

Continued efforts by the Canadian and Nunavut governments and by NTI on the promotion of sealskins are paying dividends on the world markets.<sup>52</sup> The GN's Sealing Strategy involves developing attractive, functional clothing products for local and international markets and has set out an aggressive marketing campaign involving the use of models and attending key trade shows. Attention has also been given to instructing harvesters in methods of preparing the sealskins in a way that ensures the

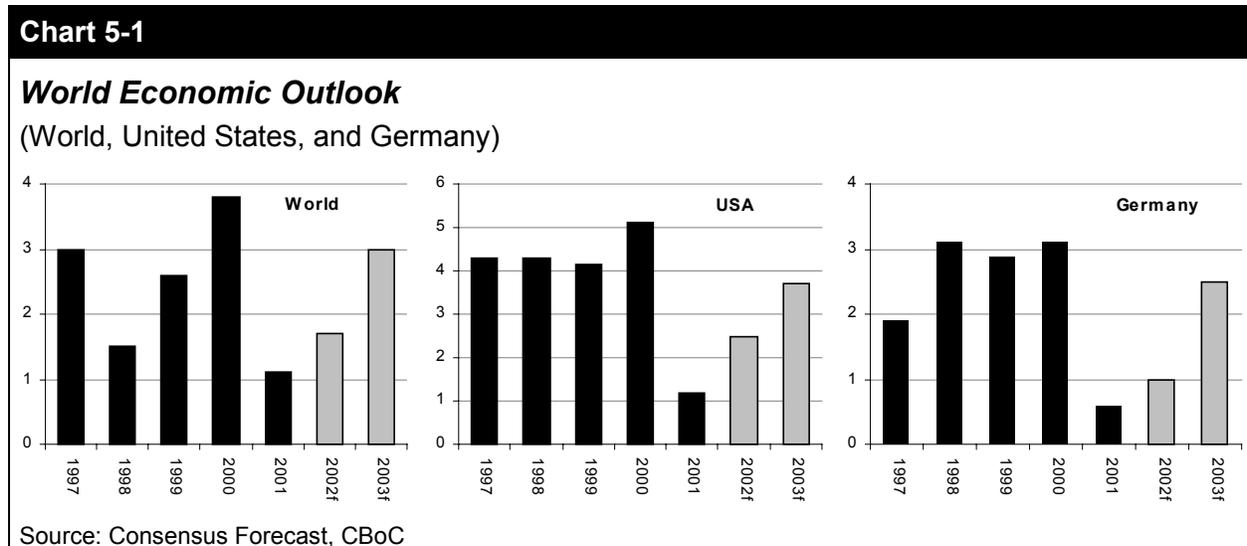
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<sup>51</sup> The controlling interests of the NWT diamond mines are headquartered in Australia, Great Britain, and South Africa.

<sup>52</sup> The Government of Nunavut launched an aggressive campaign in 2000 as part of the *Nunavut Sealing Strategy*, <http://www.nunavuteda.com/>

highest possible market return. Thus far, the number of skins and sealskin products sold has increased along with revenues for hunters.<sup>53</sup>

These markets, along with the rejuvenation of the tourism trade should lead to an increase in international opportunities for Nunavut. With the recent international success of Atanarjuat, Nunavut's exposure to the world is increasing. With that will come more opportunities for the arts sector and cultural industries of the Territory in conjunction with the growing interest in cultural tourism around the world. As pointed out in the 2001 NEO, tourism is Nunavut's second greatest export (after raw minerals), and for a few years to come will actually be the single largest private source of external capital. This will coincide with an expanding world economy. The Conference Board of Canada, in its latest *World Economic Outlook*<sup>54</sup> projects the world economy to expand by 3 per cent in 2003, up significantly from the past two years when growth fell to 1.1 per cent in 2001 and less than 2 per cent in 2002 (see Chart 5-1). The drivers of this growth will be the US and Europe (in particular, Germany)—two regions that figure prominently in Nunavut's international tourism outlook and its vision of future sales of Arctic products, including food, clothing and cultural goods.



Back home in Canada, the long-term outlook for our economy remains relatively unchanged from the last NEO. Where change has come is in the medium-term forecast, where last summer's faltering world economy was sent into turmoil with the terrorist attacks on the US.<sup>55</sup> What has followed has been a prolonged period of economic uncertainty, despite continued signs within Canada that the economy here will be strong

<sup>53</sup> The Conference Board of Canada, *Innovation and Traditional Resource-Based Economies Study*, (Ottawa, May 2002).

<sup>54</sup> Kip Beckman, *World Economic Outlook* (Ottawa: The Conference Board of Canada, July 2002).

<sup>55</sup> The discussion on the Canadian outlook is based on the latest release of The Conference Board of Canada's *Canadian Outlook* that was released in September 2002.

enough to overcome the tough times south of the border. In fact, the Canadian economy has defied the pervading sense of gloom with growth well ahead of expectations. And while this economic growth is expected to slow over the short term, the pause will be barely noticeable and short-lived. Consequently, growth in gross domestic product is forecast to reach 3.5 per cent in 2002 and 3.4 per cent in 2003 (see Chart 5-2).<sup>56</sup>

One of the surprising elements of Canada's economic performance this year has been the pace of job creation. To date, over 385,000 jobs have been added, with a large contingent source in the manufacturing and construction sectors. Moreover, the majority of these have been full-time, private sector positions. And while the pace of employment growth is expected to weaken toward the end of the year and into the first half of 2003, the recent boost in personal incomes will sustain growth in domestic demand over this period.

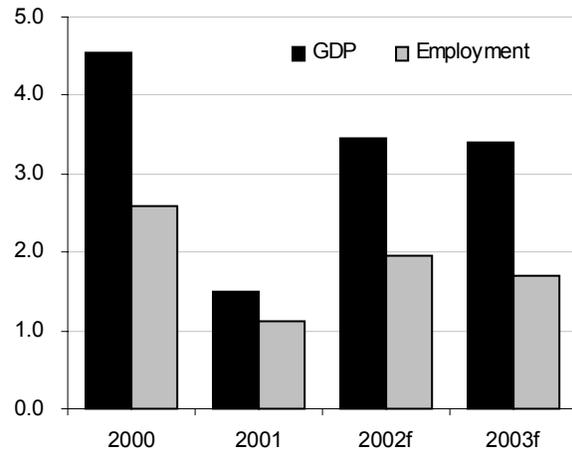
The strong pace of GDP growth does come with some less-than-desirable consequences. As the pace of growth exhausts the spare capacity that opened up during the sluggish months of 2001, inflation will once again become a concern. As such, the Bank of Canada will act to pre-empt a run up in general prices, raising short-term interest rates by a total of 225 basis points through late 2003.

For Nunavut, there will be some impact on its economy as a result of these changes to the Canadian economy. However, it is influenced more by

**Chart 5-2**

**Real GDP and Employment Growth (Canada)**

(per cent)

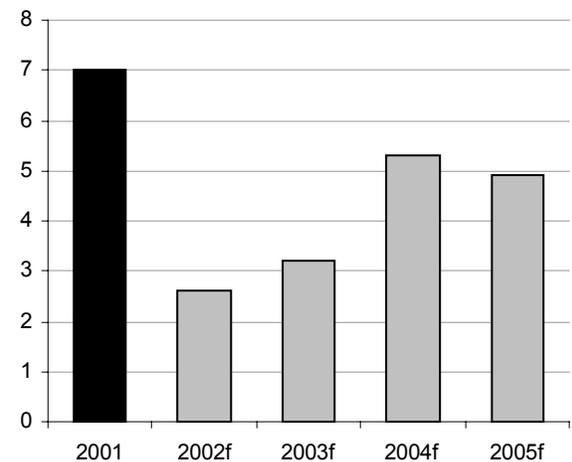


Source: Statistics Canada, CBoC.

**Chart 5-3**

**Change in Transfers from Federal Government to the Regions**

(per cent)



Source: Statistics Canada, CBoC.

<sup>56</sup> Peter Hall, Canadian Outlook; Executive Summary (Ottawa: The Conference Board of Canada, September 2002)

alterations in the Territorial Formula Financing agreement, the Canada Health and Social Transfer and one-off spending initiatives arranged through negotiations between the Federal and Territorial governments. To this end, recent changes to the financing agreement meant a one-time pay out of \$46 million to the Territory.<sup>57</sup> Countering that change is a temporary slowdown in the overall transfers from the Federal government this year as it re-evaluates its fiscal position in face of the continued economic woes south of the border. The Conference Board expects this evaluation will show that the Federal government's fiscal position has remained intact and that total transfer to the regions will begin to grow at an average rate of 5 per cent by 2004 and beyond (see Chart 5-3). Meanwhile, speculation continues in the face of the Prime Minister's announced resignation and how this might impact the government's spending on Aboriginal peoples over the next 18 months. This possibility represents an upside risk to Nunavut's near-term outlook.

## **5.2 Nunavut's Outlook**

### 5.2.1 FUNDAMENTALS OF LONG-TERM FORECASTING

The methodology used in updating Nunavut's economic outlook is unchanged from the 2001 report.<sup>58</sup> An estimate of Nunavut's underlying economic growth was developed by assessing the Territory's expected labour force growth, which is a function of the population projections provided by Nunavummit Kiglisiniartiit (Nunavut Bureau of Statistics)<sup>59</sup> and developing an understanding of the existing capital stock using the three years of economic data as a guide, including production, investment and employment levels. Assumptions were made on the long-term shifts in productivity—the effectiveness and efficiency in which labour and capital are combined. Productivity might change due to new investments in capital or in education and training. Next, the baseline forecast was assessed on an industry-by-industry basis gauging the likelihood of economic activity in each over the forecast period. The contribution of the economic activity to the baseline forecast is determined by evaluating that activity based on its value-added contribution to GDP.

Because of the small size of Nunavut's economy, by including/excluding projects, the forecast can be altered dramatically. Also, the timing of start-ups and closures similarly impacts individual years. The exclusion of particular projects from the forecast usually indicates that there is not enough evidence at this time to warrant its inclusion, or that it has not proven itself to provide a return to society greater than its costs. In addition to

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<sup>57</sup> Government of Nunavut, *Summary Tables, Appendix A, Budget Address 2002*. (Iqaluit: Government of Nunavut, 2002).

<sup>58</sup> For a more detailed explanation of the methodology please see the *2001 Nunavut Economic Outlook*, Conference Board of Canada (Ottawa, 2001).

<sup>59</sup> The same population projections were used in this outlook as the last. Statistics Canada's 2001 Census data will soon be available, which could lead to a renewed forecast. Until then, we felt no reason to alter the growth patterns of population that were previously provided to us, even though the base level for 2001 may well be different than was estimated.

this, the Conference Board produces a dynamic forecast<sup>60</sup> of the economy and therefore does not attach probabilities to developments. If risk analysis suggested a project has a 50 per cent chance of proceeding, we must decide whether to include it in the baseline forecast with a negative risk to the forecast in the case it does not proceed, or exclude the project with a positive risk to the forecast that it does proceed. We do not include in the forecast 50 per cent of the impacts of a project. It either takes place or it does not. Through the development of a baseline forecast, researchers can consider the impact of positive or negative shocks to the economy and generate alternative scenarios from that baseline.

### 5.2.2 FISHING, HUNTING AND TRAPPING<sup>61</sup>

The fishing industry in Nunavut is based primarily on three species; turbot, shrimp and Arctic char. There is also exploratory work being conducted on the commercialisation of such species as clams, scallops, cod and kelp; however, these are many years away from mass harvest, and at best represent a cottage industry over the next 10 years. Nevertheless, the overall outlook for the fishing industry in Nunavut is promising. But as will be shown below, the future fishery requires careful nurturing of all four forms of capital.

The turbot fishery consists of two Divisions—0A and 0B which are located on the eastern shore of Baffin Island. The Total Allowable Catch (TAC) in Division 0A to the north of Pangnirtung has varied in recent years and will reach 4,000 tons in 2002 with the possibility of it growing to 6,000 to 7,000 tons by next year.<sup>62</sup> In Division 0B to the south the TAC is 5,500 tons. These quotas in Division 0B are allocated amongst Nunavut residents (1,500 tons), private companies (2,500 tons), and a competitive fishery (1,500 tons). Of the total amount earmarked for Nunavut residents, 1,000 tons are available to inshore fishers with any unmet quota being added to the offshore portion. Inshore fishing in Nunavut is labour intensive and quite dangerous since it takes place during winter months on the ice flows. The past winter saw 70-80 tons caught inshore.

Most of the turbot is therefore allocated to offshore fishing companies, none of who are based in Nunavut. These quotas are contracted to major fishing outfits from southern Canada (Davis Straight Fishing Ltd and Clearwater Fisheries). Agreements ensure that Nunavummiut are hired on the trawlers, a percentage of the catch is offloaded at the Pangnirtung Fish Processing Plant (38 per cent in 2001) and the companies pay a royalty fee on the tonnage of fish caught.

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<sup>60</sup> Every aspect of the economy is linked, such that a change in one variable will affect multiple aspects of the economy. For instance, if there is a change in demand (either locally or internationally), production of that good will increase, requiring further employment in the short term and investment in capital in the medium and long term, the rise in employment impacts personal income, which will then spur further demand in a wide range of goods and service, and so on.

<sup>61</sup> Unless otherwise noted, the facts and figures presented in this section were taken from “*Social and Economic Benefits Assessment of Fisheries and Sealing in Nunavut*” prepared for the Department of Sustainable Development by Jacques Whitford Environmental Limited (Ottawa – 2002) and from the “*Nunavut Economic Outlook*”, Conference Board of Canada (Ottawa – 2001).

<sup>62</sup> The increased quota is the result of initial fisheries science studies of Divisions 0A and 0B.

Foreign (to Nunavut) vessels also fish the 3,500-tons of the 0B turbot quota that is not allocated to Nunavut directly. What's more, this quota does not fall under Nunavut impact benefit agreements, so the private companies involved are not required to hire local labour or offload any portion of the catch at Pangnirtung's processing facility.

A similar reality holds true in Division 0A, where Nunavut holds 100 per cent of the fishing rights, but contracts the activity to non-Nunavut companies who pay royalties (approximately \$425 - \$450 per ton), hire some local labour and offload a small portion at Pangnirtung (200 tons in 2001, headed and gutted).

The turbot fishery provides work for approximately 100 people. Over half work at the fish plant—12 to 15 in the winter processing the inshore catch and as many as 60 to process the offshore fish. The remaining jobs are distributed amongst inshore fishers and their assistants and on company trawlers. The work is seasonal with the work terms often lasting for no more than six weeks, though some deckhands remain onboard private boats for longer durations and fish other waters.

Nunavut's shrimp industry operates much the same as the turbot industry. The northern shrimp fishery consists of seven Shrimp Fishing Areas (SFAs) whose total quota is divided equally among 17 license holders, of which the Qikiqtaaluk Corporation owns 1.5. Similar to the turbot fishery, Qikiqtaaluk Corporation contracts its quota to private fishing interests (Farocan Inc. and Unaaq Fisheries) in return for royalty payments and guaranteed employment and training for Inuit. There is no shrimp processing in Nunavut. This activity would require significant investments in infrastructure and even then, studies have suggested a plant would still lose as much as \$1.8 million per annum given the operating costs and processing volumes that would be considered reasonable.<sup>63</sup> Job counts from 2000 suggested 54 Inuit were employed on shrimp trawlers earning an average of \$24,377. Shrimp boats often remain at sea for extended periods (up to nine weeks) which has been found as a deterrent for Inuit since it keeps them away from home for long periods of time.

The Arctic char fishery is a much different operation than turbot or shrimp. It is relatively small with many fishers working for short periods of time. In 1996, 120 char fishers earned an average of \$1,941 each. Processing is done across the Territory. Kitikmeot Foods in Cambridge Bay is the largest operation, dedicating 70 per cent of its food processing to Arctic char, with Kivalliq Arctic Meats (formerly Keewatin Meat and Fish) in Rankin Inlet, Iqaluit Enterprises and Pangnirtung Fish Plant also contributing to the effort. Employment at these plants varies throughout the year and all companies process other species of fish or animals as well as char. Recently, harvests have declined due to increased stress on stocks, in particular, those easily accessed from communities. In 2000, only 33 per cent of the allowed quota was harvested since the stocks are most plentiful in remote areas. Also, Arctic char is a primary food source for Inuit, and therefore a significant portion of harvesting is for subsistence purposes and goes unrecorded as economic activity. The Nunavut Land Claims Agreement stipulates that country food stocks will be protected against commercial operations in the event

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<sup>63</sup> TAVEL Limited. *Feasibility Study for a Shrimp and Groundfish Processing Facility in Nunavut*, Prepared for the Department of Sustainable Development, Government of Nunavut (2001).

they are depleted, which places some limits of the growth potential for this industry. There is also consideration being given as to how best exploit the resource. It has been shown that sport fishing brings in \$20 per pound, while commercial operations produce a value of \$1.50 per pound.<sup>64</sup> At the same time, there are considerable advantages to selling Arctic char exclusively to high-end southern markets so that additional value can be added to the fish before it is exported.

So where can the overall fishing industry go from here? In 2001, Statistics Canada reported that the industry contributed a mere \$200,000 to the real GDP of the Territory (See Table 5-1). Reasons for this small contribution include the harvesting of all offshore quotas of turbot and shrimp by foreign (to Nunavut) vessels, which is likely being recorded as activity in that jurisdiction in which the boat is registered; the lack of capital (trawlers and gear) whose depreciation is included in the economic contribution of the industry; and the size of the unquantified subsistence fishery. It is also likely that some activity is not being captured due to inaccurate data recording and the difficulty of obtaining data from remote areas (in particular, for fishers of Arctic char). Finally, it unclear as how much of the inshore fishery, in which Nunavummiut are active participants, is being included in this Statistics Canada figure. Of course, the processing side of the fishing industry should be captured under manufacturing (discussed later).

For Nunavut to obtain greater return on its natural capital, it must have greater involvement in the industry. To do so however, will require significant investments and careful nurturing of all forms of capital. Investing in physical capital must be a priority. An offshore fishing trawler capable of harvesting turbot and shrimp and remaining at sea for extended periods comes with a \$15-\$25 million price tag. This is a significant barrier to entry into the industry, but is the only way for Nunavummiut to capture an increased portion of its economic advantages. Presumably, the vessel could be in operation most of the year, employ local fishers (in addition to the already trained Inuit currently working on other fishing boats) and land a greater portion of its Turbot catch within the Territory—all of which contributes to the justification of such a purchase. At the same time, there is a need to promote fishing as a career path to youth and develop training plans that could better prepare them for the job.

The processing facility at Pangnirtung recently increased its freezer capacity to allow greater volumes of fish to be processed. However, it is not currently in a position to handle a significant increase in volumes that could come as a result of a Nunavummiut-owned fishing trawler. Marine facilities are required, but it is not realistic to think that a processing plant alone could justify such investments in infrastructure. These expenses must be considered in conjunction with other community and business needs. The same is true for Iqaluit, where a deeper port facility would improve the feasibility of a processing plant there.

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<sup>64</sup> RT & Associates, Baffin Fisheries Workshop (Iqaluit, 1997).

**Table 5-1****Nunavut's Real GDP at 1997 Basic Prices**

(millions of dollars)

	<b>1999</b>	<b>2000</b>	<b>2001</b>
Agriculture, forestry, fishing and hunting	1	1.4	0.2
Mining and oil and gas extraction	177.9	195.8	186.9
Metal ore mining	170.4	187.1	179.1
Utilities	16.1	17.4	17.7
Construction	73.4	61.5	76.4
Residential construction	14.2	10.5	9.7
Non-residential building construction	30.3	27.6	32
Other Engineering construction	7.2	5.7	11.3
Repair construction	19.2	16	21.9
Manufacturing (includes food processing)	1.1	0.6	0.4
<b>Goods-producing Industries</b>	<b>269.5</b>	<b>276.7</b>	<b>281.6</b>
Wholesale trade	6.3	6.9	6.8
Retail trade	40.7	44.3	45.7
Transportation and warehousing	23.2	22.3	22.5
Arts, entertainment and recreation		Secured	
Information and cultural industries	20.5	23.4	26.3
Publishing, information and data processing services	4.4	6.7	7.4
Motion picture and sound recording industries		Secured	
Broadcasting and telecommunications		Secured	
Finance and insurance, real estate	128.4	134.5	134.5
Professional, scientific and technical services	7.1	8	10.2
Educational services	80.3	79.5	88.5
Health care and social assistance	50.5	51.2	52.1
Accommodation and food services	12.9	11.3	10.7
Public administration	128.4	139.1	150.1
Federal government public administration (except defense)	17.1	17.4	18.8
Provincial and territorial public administration	65.1	75.8	82.6
Local, municipal and regional public administration	46.2	45.9	48.7
<b>Service-producing Industries</b>	<b>498.3</b>	<b>520.5</b>	<b>547.4</b>
<b>Gross Domestic Product at 1997 Basic Prices</b>	<b>786.3</b>	<b>817.1</b>	<b>850.7</b>
<i>Economic Growth</i>		3.9	4.1
<i>Total Secured Data</i>	-18.5	-19.9	-21.7

Source: Statistics Canada

The Baffin Fishing Coalition was formed in 2001 to promote local interests in the Territory's fishery and to claim greater control over its future. A major task of this coalition will not only be to raise money and awareness and to secure an increased share of the Territory's quota, but also to oversee the co-ordination of all the necessary

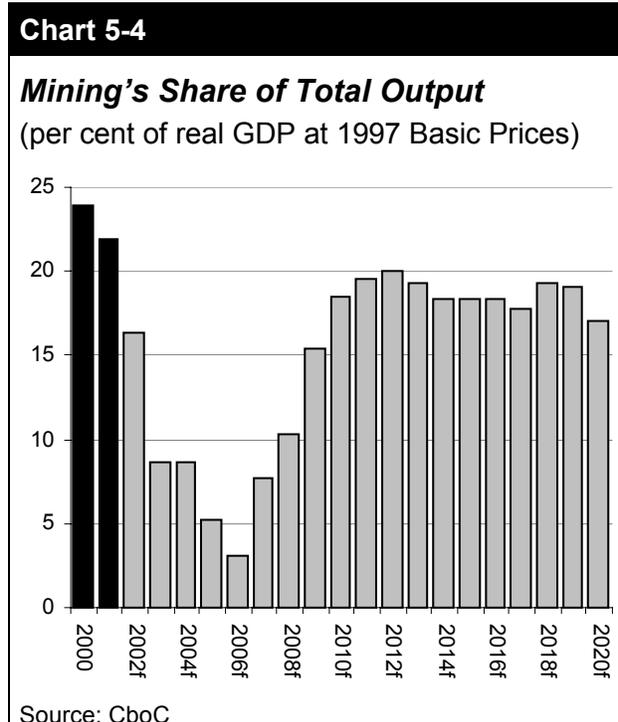
requirements of the industry. The purchase of a boat will not serve the Territory's interest if it cannot be staffed with Inuit or its catch cannot be processed in Nunavut. To this end, the Coalition has tried to take a balanced and realistic approach to advancing the industry by considering issues of pre- and post-employment training and ways to slow the initial turnover that is expected.

This approach lends confidence to the Conference Board's belief that the industry will grow and achieve some success in capturing an increased portion of the offshore quota. It also looks certain that despite its cost, the first Nunavut-registered offshore fishing trawler will soon be in operation—possibly by 2003 or 2004. The remaining requirements will be more difficult to secure. Investments in the processing facilities will take time, and capturing the interest of youth in the industry on a full-time basis may prove to be difficult. However, over the medium term, our forecast includes employment levels in the industry (including the manufacturing activities) doubling. The profits from the expanded operations should be fed back into the industry to aid in its advancement. All of this activity will come under the watchful eye of environmental interests—something that will always exist in today's fishery.

### 5.2.3 MINING

Mining continues to represent the single largest private-sector contributor to overall real GDP in Nunavut, adding \$186.9 million in 2001. However, this is about to change—at least temporarily. Two of the three mines in operation are scheduled to close by the end of this year (Polaris and Nanisivik). Polaris' closure has been expected; however, the closing of Nanisivik comes with some surprise. Only last year Breakwater Resources invested heavily in a Dense Media Separator plant in anticipation of increased production and improved prices of zinc—neither manifested itself, and the result is a September, 2002 closure date. This will leave the gold mine at Lupin as the only site operating in the Territory. It too is scheduled to close in 2004, but may extend its life into 2005 if more reserve can be accessed affordably. A sector that currently constitutes 21 per cent of the entire economy will be reduced to approximately 3 per cent at that time (see Chart 5-4).

This change in Nunavut's economic landscape should be kept in perspective. As shown in the 2001 NEO, in the same way that mines contribute less to a regional economy in terms of wages and salaries than it does to gross domestic product, the closure of a mine has less of an impact



on the economy than is reflected by the change in GDP. Polaris and Nanisivik were developed before regulations were in place mandating the hiring of local workers and contracting Nunavummiut service providers.<sup>65</sup> Also, these mines were shipping their concentrate directly to Europe for processing, so no additional value was being added in Canada, or in Nunavut.

This is not to say there won't be any socio-economic impacts from the mine closures. The mines contributed over \$100 million to real GDP and combined to employ more than 400 people, a portion of whom were northerners. Economic growth in 2002 and 2003 will be negative since the remaining economy will be unable to make up the difference over such a short period. There is also no word yet as to what will become of the infrastructure at Nanisivik and how that will impact the community of Arctic Bay (30 km away).

For those employees who remain in the region, there will be a few years of seasonal work during the reclamation phase of the closure at Polaris. SNC-Lavalin was awarded the \$32 million project that will begin shortly. Other Nunavummiut miners may be offered jobs in other areas, in particular in the Kitikmeot region. With remote mines operating on fly-in, fly-out schedules, relocation to the nearest pick-up and drop-off point would be all that is necessary.

The absence of mining activity in Nunavut will be short lived. Over the five-year period from 2006 to 2010, two (and potentially four) new mines will open, which combined with the related construction and service activity will send the economy into a period of growth never before seen in the Territory. What's more, with the advancement of the NLCA and a more representative Territorial government, the new mining operations will open under tighter guidelines in terms of local hiring practices, service contracts and environmental safety regulations. This will increase the mines real impact on the economy, leaving more money and control in the hands of Nunavummiut.

#### 5.2.3.1 Regional Prospects

There are two mining opportunities in the Kitikmeot region that are edging closer and closer to becoming a reality. The first is in the diamond-rich fields in Kitikmeot close to the Northwest Territories border. Exploration has been ongoing since the discovery of diamonds at what is now the Ekati mine site in the Northwest Territories. It was originally believed that the Jericho site would be the first diamond mine in Nunavut; however, the controlling interest there (Tahera Corporation) has since entered into a joint venture with Kennecott Canada to do more exploration of the area. At this time, it would appear that greater resources might be found at Rockinghorse, to the northwest of the original find. Advanced exploration and drilling has continued, and it is uncertain which site will be developed first. Before either site is developed, it will be subject to a permitting process. Also, there will likely be a negotiation process for operation requirements levied by the landowners, similar to what has taken place in the Northwest Territories. This would include hiring mandates, service contract requirements and

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<sup>65</sup> Some attempts were made to implement a Inuit hiring mandate at Nanisivik, but this program was never entirely successful

some upfront fees for future reclamation of the site. At this point, the Conference Board feels the mine is at least four to five years from producing its first diamond. Estimates from the Jericho site suggested operations would continue for eight years; however, if larger deposits were developed this timeframe would be extended. And while smaller than diamond mines in the NWT, employment at the site could exceed 300 jobs.

The Territory's other most probable new mining operation will occur at Hope Bay<sup>66</sup> on the Arctic coast near Bathurst Inlet. Last year, Miramar spent over \$15 million on exploration at the site (one-quarter of the total in all of Nunavut) in its continuing effort to determine the true extent of gold reserves in the area. At this point, confirmed and inferred resources amount to 4.3 million tonnes,<sup>67</sup> which if extracted could add over \$600 million to Nunavut's GDP at today's prices. Again, more importantly, the mine would open with an Impact Benefit Agreement (IBA) negotiated between NTI, the GN and the mining companies that will provide an opportunity for benefits to remain in Nunavut. The Conference Board has estimated the mine could be operating by 2007, depending on finances and the negotiating spirit of the landowners and environmental interests.

Any IBA that is signed should be followed up with training programs and family service programs to ensure the opportunity for wage-based opportunities are carefully incorporated into the communities. Mining can place enormous social strain on communities that have not worked in the industry before, and counselling will be equally important as job training throughout the affected regions.

The Kivalliq region contains known gold deposits at Meliadine West and Meadowbank. The former recently lost its major financial backer (WMC International) who is looking to exit the gold mining business. This will set the project back from what the Conference Board had originally forecast in the 2001 Nunavut Economic Outlook. But because of the rich deposits in the area, we remain confident that the site will be developed. This forecast assumes development will get underway early in the next decade. Meadowbank, on the other hand, is looking more promising than it did 18 months ago. Advanced exploration has continued in the area and owner Cumberland Resources is reporting confirmed and inferred gold deposits totalling 3 million tonnes. If all goes as planned, gold production could begin by the end of the decade. Both operations in the Kivalliq region will require infrastructure that is not currently in place, in particular road construction and greater marine facilities.

Mining in the Qikiqtaani region will lose the Polaris and Nanisivik mines this year. There is some exploration for diamonds taking place west of Arctic Bay. Quarrying for soapstone will continue, though it too is becoming increasingly scarce in locations easily accessed from communities and more difficult to extract with small hand-tools.

#### 5.2.3.2 Long-Term Prospects

The long-term forecast assumes that a second diamond mine could open. Unless there is significant change in the current mining and exploration environment, the push for

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<sup>66</sup> Miramar have the controlling interests in this property.

<sup>67</sup> Miramar website [www.miramarmining.com](http://www.miramarmining.com).

diamond discoveries seems likely to remain a significant part of Canada's northern landscape—at least for the duration of this forecast. It is also prudent to assume that continued exploration and improved technology will lead to the discovery of affordable nickel, zinc and copper resources that will be developed. Increased interests in rare earth elements such as platinum and palladium will also push exploration forward over the forecast period.

Other production could arise if New Kenross expands its gold mining operation into the Ulu site 160 km north of Lupin. This investment would require a new winter road, with the ore being trucked to Lupin for processing. The current state of gold prices does not make this feasible; however, efforts to lower operation costs are being investigated. The Ulu site is estimated to contain 418,000 ounces of gold and would keep the Lupin mill open for an additional three years or more.

#### 5.2.4 CONSTRUCTION

The greatest boost to the construction industry in Nunavut will come as a result of the mining activities outlined earlier, both for reclamation work over the next three to four years and then with the development of new sites in the Kitkmeot and Kavalliq regions. It is estimated that this work will add over \$400 million to real construction activity during the forecast period.

Other large projects will buoy the industry over the next 20 years. As discussed in Section 2.3.1, the fishing industry is in need of investments in equipment and infrastructure. The expansion of food processing facilities will combine with improvements to water, sewage and waste disposal projects over the next tens years, pushing the construction industry forward. Meanwhile, early indications that an Arts/Heritage Centre in Iqaluit being built before the end of the decade are deteriorating. It is now expected that in its place will be a scaled-down heritage display building. The idea was to create a facility that would promote the tourism trade and Inuit culture. Despite the reduced likelihood of a world-class arts facility being built in the near future, the tourism industry will expand prompting the need for increased hotel space in Iqaluit before the end of the current decade.

Housing remains a central issue for Nunavut and this forecast. And despite its importance, real residential construction activity fell 31 per cent over the past two years. The challenge stems from the constant need for social housing—a reality that comes at a great cost to the GN. In the 2002-03 budget, \$93.9 million was earmarked for the Nunavut Housing Corporation (this is in addition to the \$58 million supplied by CMHC through a housing support program that will be phased out slowly starting in 2005 and ending in 2037)—which represents 12.3 per cent of the total budget. The government continues to reallocate funding from other areas, but this source has a limit that will be reached quickly. Meanwhile, the private sector is backing away from the industry, with investment spending falling from \$15 million in 1999 to \$9 million in 2001. Without private-sector support, government cannot keep pace with demand.

Making the situation worse is that many Nunavummiut who receive social assistance are also provided with social housing and are hesitant to take jobs that would eliminate their housing status. But similarly, in the public service, housing is attached to certain

positions within the government (Federal and Territorial) as an incentive, which also discourages a private-sector housing market. Government cannot be in the business of providing housing for its employees to the extent it currently is—all across the world countries are trying to move away from this practice since it places an enormous burden on the taxpayer and promotes an inefficient market. Research is needed to determine the cost savings that could be realised through the elimination of these incentives, and pass a portion of those savings on to qualifying employees. Employed individuals can then choose their own housing in the free market. As outlined in Section 3.1.1, the Territorial government is trying to promote home ownership amongst its employees through a rental/ownership program that will be available with the construction of new condominiums.

Growth in non-residential construction activity has remained relatively flat over the past three years, contributing approximately \$30 million annually to real GDP. What is alarming is the continued shift in reliance of the industry toward government money. In 1999, private interests spent \$100 million on residential and non-residential construction (\$85 million on non-residential), by 2001 this spending had dropped to \$77 million. Meanwhile, government investment spending on structures<sup>68</sup> has increased from \$56 million in 1999 to \$89 million in 2001, and is likely to rise in 2002 based on the budget estimates. With many of the new government buildings now completed, increased funding is flowing toward non-commercial facilities and equipment (schools, hospitals, etc.) as well as to housing. The concern must lie in the government's role in the long-term growth of the construction industry. This increases the importance of the mining developments, along with the achievements of government investments in infrastructure that are meant to spur greater activity in the private sector.

#### 5.2.5 MANUFACTURING

Nunavut's manufacturing sector is dominated by two industries, the processing of northern foods on a commercial basis (see Chart 5-5) and the production of arts and crafts for sale or trade (the latter often takes place outside the wage-based economy). According to Statistics Canada's estimates of wage-based GDP, manufacturing contributed \$400,000 to the total economy in 2001. This figure seems low and inconsistent with the increased levels of manufacturing activity occurring in the Territory. For instance, activity at the Pangnirtung Fish Plant grew from less than 300 tons of processed Turbot in 2000 to over 400 tons in 2001. In the same year, Kitikmeot Foods in Cambridge Bay processed 35 per cent more muskox than one year earlier, while Kivalliq Arctic Meats received export clearance from the European Union, paving the way for increased sales overseas. Regardless, 2002 is certain to be an improved year; the Pangnirtung operation increased its offshore turbot output to 800,000 tonnes thanks to investments in two industrial freezers. Meanwhile, Kivalliq Arctic Meats topped the \$1 million sales plateau through its increased trade with Europe and the United States. Also, plans are underway to resume the federally regulated muskox hunt this year after being halted last year in order to provide the Cambridge Bay Hunters and Trappers

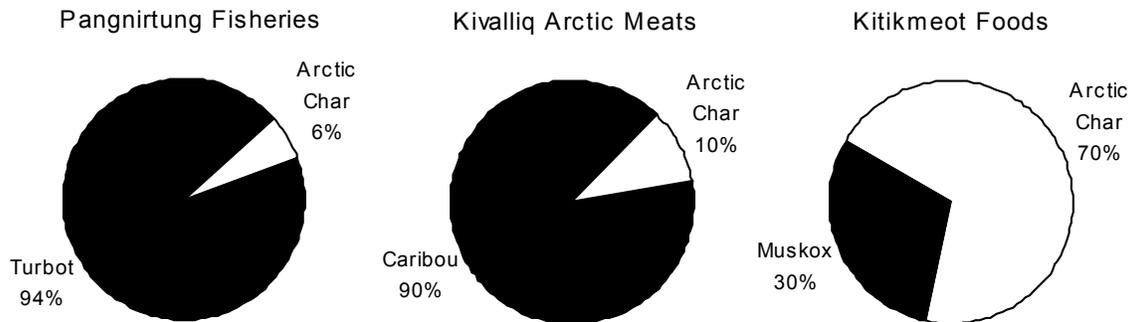
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<sup>68</sup> Statistics Canada does not separate government investment in fixed capital formation between residential and non-residential spending.

Chart 5-5

**Food Processing in Nunavut**

(distribution of processing, by food type)



Source: Social and Economic Benefits Assessment of Fisheries and Sealing in Nunavut

Note: Information on Iqaluit Enterprises was not available. Iqaluit Enterprises is the only entirely private-owned and operated food processing firm in Nunavut.

Organisation an opportunity to meet health and safety standards. These standards are critical in ensuring country food products pass strict European regulatory requirements.

The health of the animal herds and fish stocks remains a long-term risk to the food processing industry. More research is needed to assess better the status of Nunavut's fauna. And because these animals are also a primary source of food for Nunavummiut, they cannot be over-exploited for the purpose of commercial success.

With that being said, the outlook for food processing in Nunavut is optimistic. Following the same lines as the forecast for the fishing industry, increased processing will come with greater control over the local fish stocks. The limits will be set by the capacity at the processing facilities themselves, and their ability to expand in a sustainable fashion. The caribou and muskox trade also has room to grow, in particular with the increased trade outside Canada. However, its growth will be more cautious given the current lack of information on herd sizes and patterns.

### 5.2.6 TOURISM

Tourism was highlighted as an important area for growth in the 2001 NEO. Tourism not only provides Nunavut with a valuable export and hence a source for external capital, it also fosters the preservation and promotion of Inuit culture and the region's natural resources. These two attractions will remain the focal point of future tourism plans. To this end, the development of a system of Territorial Parks and Heritage Rivers to compliment the establishment of new National Parks is viewed as desirable especially since they must now include Inuit Impact and Benefits Agreements in conformance with the Nunavut Land Claim Agreement. Many provisions within these agreements include the development of community tourism strategies. Cruise ship visitation has also

increased, and while also desirable, requires the development of a management plan (currently underway) to ensure benefits from this activity accrue to Nunavummiut in affected communities. In the original report, the Conference Board suggested that investments are needed across all forms of capital in order to take advantage of this opportunity. Right now, the Territory needs more trained tour operators, interpreters, and hospitality staff. There is a need for greater community and regional organisation, along with a more defined role for GN and for Nunavut Tourism.<sup>69</sup> In major centres, there is a need for attractions and activities to provide tourists with things to do while in communities before and after their hiking, camping, hunting or fishing trip. Getting tourists to “hang-around” for an extra day or two can have significant impacts on local economies. Furthermore, these attractions must be complimented by an environment (infrastructure) in which these tourists feel comfortable.

With that being said, there are some specifics of the tourism industry that should be considered before plotting a future course and planning investment strategies. First and foremost is improved data. Data are essential in understanding the marketplace. A new exit survey is currently being planned through the Bureau of Statistics and Nunavut Tourism that will be critical in aiding the development of a new tourism strategy. The increase in government travel to Nunavut has dissipated in the last year now that Nunavut is a recognised territory in the federation. What remains is a need to reassess the profile of Nunavut’s tourists. Data from an exit survey conducted in 2000 and an industry survey in 2001 suggest there were 32,725 visitors in 2000, 79 per cent of who were there for business.<sup>70</sup>

Furthermore, similar to the situation in the fishing industry, Nunavummiut are only partial players in their Territory’s tourism industry. In August 2000, the Arctic Traveller reported that there were 62 active tour operators in Nunavut.<sup>71</sup> At least half of these operators earn less than \$20,000 per annum, and a vast majority of these smaller outfits are Nunavut based, while the larger companies are commonly located in southern Canada. This scenario is typical of Nunavut’s mixed-economy. Due to the seasonal nature of arctic tourism, the desire to subsistence hunt, or the wish to enter into a guaranteed income relationship for a specific period of time, many Nunavut operators fall under this category. Again, this cannot change without providing Nunavummiut with the necessary training, business development and access to start-up capital. There also must be a desire within the Inuit community to participate in this industry. It should be noted that the Government of Quebec announced in its 2000-01 budget that it will support the consolidation of outfitting operations.

The drop in activity at hotels and restaurants over the past two years came with some surprise, as the sector’s contribution to real output fell from \$12.9 million in 1999 to \$10.7 million in 2001. However, the decline is indicative of an industry without a clearly

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<sup>69</sup> The two organising bodies are working toward a greater understanding of their individual roles within the tourism industry through the development of the Nunavut Tourism Strategy.

<sup>70</sup> *Tourism and Parks in Nunavut: Social and Economic Benefits*, Ministry of Sustainable Development, Government of Nunavut (Iqaluit, August 2001).

<sup>71</sup> *Tourism and Parks in Nunavut: Social and Economic Benefits*, Ministry of Sustainable Development, Government of Nunavut (Iqaluit, August 2001).

defined development strategy and a lack of sellable products outside a narrowly defined marketplace. Also, the events of 9/11 have likely affected tourism, though data are not yet available to confirm such a statement. The 79 per cent of visitors who travel to Nunavut for business are predominately government officials. This market is unlikely to expand, especially since the trend in Canada is toward a smaller public service. Therefore, the tourism strategy will have to target other audiences, including private business and adventure, ecological and cultural tourists.

This forecast assumes slow growth in the industry over the next decade, though the Arctic Winter Games held in Iqaluit has provided a significant boost to the industry in 2002. And while the threat of further terrorism has dampened the tourism trade the world over, its long-term prospects remain very positive. Nevertheless, Nunavut needs time to develop its products, organisations and people if it is to expand its tourism trade and lower its dependence on government business to sustain the industry.

#### 5.2.7 ARTS SECTOR AND CULTURAL HERITAGE

Plans for a Nunavut heritage centre have been discussed and its feasibility is currently being studied.<sup>72</sup> It would house archaeological and historic artifacts, an option that presently is not available to Nunavut. The creation of a Nunavut heritage centre could provide an option to support the building of social cohesion Nunavut-wide. Collaboration between a territorial heritage centre and the local centres appears to be desirable and would create more opportunity to establish measures for human capacity building in the cultural and arts fields as well.

There is no doubt a demand for Nunavut cultural products. The new 2002 Directory of Aboriginal Exporters identifies seven Nunavut exporters in the arts and crafts category and three exporters in the Broadcasting, Radio, Film, Television category (of a total of 20).<sup>73</sup>

There are growing opportunities to advance the film industry in Nunavut. The contribution that film production can make to an economy has not gone unnoticed in other jurisdictions, however, meaning competition for film production is fierce both in Canada and internationally. Many provinces aggressively pursue potential film projects. Almost every province and territory has institutions in place (e.g., a film commission or film commissioner) that are responsible for promoting their jurisdiction to attract film projects. Several Canadian cities also have a film commissioner (e.g., City of Edmonton). Some of these institutions and projects have received the support of federal financial assistance as part of an economic development strategy (e.g., the Canada/Manitoba Economic Development Partnership Agreement).

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<sup>72</sup> Information obtained from stakeholders near the completion date of this report suggested that the probability of this cultural centre being built have been reduced. A new plan to construct of scaled-down version of this centre is now being considered.

<sup>73</sup> Government of Canada. Department of Foreign Affairs and International Trade, *Directory of Aboriginal Exporters 2002*. Ottawa, 2002.

Typically, the film commission or film commissioner is responsible for such activities as:

- promoting and marketing their community to film producers;
- serving as a one-point of access for investors and film producers with an interest in filming in the jurisdiction;
- co-ordinating government programs that support film production in the jurisdiction such as tax credits; and
- working with local industry and institutions such as colleges to build local capacity in film production (e.g., skills, infrastructure)

Manitoba has a very organised structure that actively promotes its growing film industry. It offers both a provincial tax credit and an equity investment program administered by Manitoba Film and Sound (a crown corporation) to support independent production and to attract foreign producers.

Clearly, Nunavut cannot rely on its natural capital alone to attract film production. The Government of Nunavut has taken a step to support its film industry. The 2002-03 budget includes a commitment by GN to develop and bring forward a plan to implement an affordable and effective Nunavut Film Incentive Program in collaboration with the private sector and Inuit organisations.

Support for investing in Nunavut's arts sector and cultural industries appears to be high. But a better understanding of its size and potential is first required that can be used to develop a plan of action for the entire sector. One result of this lack of information is that an accurate forecast of the potential impact the film industry could have on Nunavut could not be made, except that it is an excellent avenue for Nunavummiut expression and the advancement of cultural studies. Feature films employ hundreds of people with varying skill sets, all of which could provide job opportunities. There is also an obvious promotional aspect to an increased film industry in the Territory—one that should not be discounted.

#### 5.2.8 PUBLIC SECTOR

The public sector continues to be the main economic driver in Nunavut. Over the past two years, public administration has maintained its relative share of the domestic economy, contributing 65 per cent of domestic demand in 2001. But at the same time it has grown by almost 17 per cent in terms of real output, which translates into a significant increase in the number of public employees. The federal government has almost doubled its workforce in the region, growing from an average of 157 employees in 1999 to an average of 297 employees in 2001.<sup>74</sup> Similarly, the GN has expanded, adding almost 600 employees—an increase of 32 per cent.

As discussed in the original NEO, a large public sector such as this can be maintained so long as its funding is maintained. In other words, as long as the federal transfers to the Territory continue to represent more than 90 per cent of its revenues, the public service will remain a stable economic presence in the economy. However, as the new

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<sup>74</sup> Public Service Employment figures from Statistics Canada CANSIM II database.

government matures and all its responsibilities to society are met, there will not be the need for continued expansion. At that point, growth in government activity should not exceed the growth in population plus inflation, and therefore would not contribute to further growth in Nunavut's economic standing in per capita terms.

Meanwhile, the public investments in Nunavut's social, human and economic capital are intended to increase Nunavummiut's ability to function without the current level of government safety nets. The success of these investments will be measured by the growth in the economy in areas apart from the public service.

The latest budget included important spending initiatives that will help advance this goal. Having achieved a budget surplus in fiscal 2001-02, the government was able to announce a generous tax cut that will help mitigate the higher cost of living in Nunavut. Through higher anticipated transfers from the Federal government's formula financing, the budgets across most departments were increased from last year. Education is one exception; however, the drop in spending will only occur in capital projects where the emphasis had been placed last fiscal year. With new schools built and others repaired, operations and maintenance funding will receive an increase of \$2 million that will be directed toward an increase in teaching staff. On a percentage basis, the legislative assembly will see the greatest funding increase—operations and maintenance there will receive a 37 per cent budgetary increase over last year (almost 47 per cent over the budgeted amount). The higher spending will absorb the increase in federal transfers that will reach \$681.8 million this fiscal year<sup>75</sup> and the anticipated \$6 million rise in own source revenues, leaving the Territory with an operating surplus of \$1.6 million.

#### 5.2.9 RISKS TO THE FORECAST

The risks noted in the 2001 Nunavut Economic Outlook remain valid for the revised forecast. Improvements in education, health status and housing are critical elements in the future success of the Territory. We have seen from the latest budget that these issues are being addressed, which is a very good sign for the long-term sustainability of Nunavut's economy.

Growing economic opportunities represent hope for Nunavut's youth in finding employment. Tourism, fishing, manufacturing and mining will all offer job opportunities. Responsibility will fall to these people to dedicate themselves to these industries. There may be a need for both industry and Nunavummiut to alter their expectations on the interaction of land-based and wage-based economic activity. That is to say, future hiring practices and work rotations that provide Inuit time to pursue subsistence activities may be included in the negotiation of future IBAs. Such practices might provide a means of meeting employment quotas.

It was also pointed out earlier that the new large-scale projects included in the forecast will be developed under greater representation from NTI and the GN. Both groups will look for guarantees on employment, training, service contracts and environmental regulations. Similar agreements have been reached in the Northwest Territories and

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<sup>75</sup> This is actually a decline over the total amount transferred last year, due to a one-time payout of \$46 million.

have proven successful. However, these organisations should be mindful that by signing such agreements, they themselves have an obligation to assist in the preparation of residents for entrance into the workforce. Agreement or not, mining operations will not hire employees who could jeopardise the operation due to a lack of basic skills, nor will the agreements be met if the emerging labour force is uninterested in pursuing a career in these fields. Nunavut's business community will also be called upon to provide services to the mining companies. Currently these types of service providers do not exist in Nunavut, and some efforts will be needed to promote them (either through the GN, development corporations or Inuit Organisations).

Furthermore, there may be value in controlling the pace of development in order to maximise the Territory's return on these projects. For instance, if a new mine were to open tomorrow, the number of Nunavummiut available and qualified to work in the mine and participate in related service industries would not be much greater than the current situation at Lupin, Polaris and Nanisivik. However, in three to five years there will be more youth entering the workforce, and if they have received adequate education, will be able to take advantage of the increased opportunities. As mentioned earlier, the timing of developments will alter the medium-term forecast for real output, but will not have a significant impact over the longer term. Where the effects would be felt are at the community and individual level where greater personal incomes could help improve standards of living and provide an indirect boost to local economies.

Mega-projects can be important components in an economy's development; however, to be a panacea of future growth, the income generated from its activities must be reinvested into sustainable wealth-generating capital. Also, in Nunavut, social safety nets and pre-employment life skills training must be in place to ready Nunavummiut for the significant change in lifestyle that would come with full-time involvement in major economic developments. It is important that Nunavummiut embrace the economic developments that take place—without this commitment, the development will not provide the Territory with any real benefits.

The most significant of these so-called mega-projects not included in this baseline forecast is the Bathurst Inlet Port and Road project. This \$215 million construction project would open up opportunities to develop heavy ore deposits that depend on roads to ship concentrate—Izok Lake zinc deposit is the most significant of these opportunities. The project's go-ahead requires that government officials and landowners agree with the benefit-cost assessment, that it meets all environmental guidelines and that it has adequate financial backing. At this point in time, it is not clear whether the construction project would lead to a positive return on the investment. In fact, without funding from the federal government the project has not shown itself to be economic. A multi-party research team is currently investigating the project's feasibility and various funding options. Decisions affecting the BIPR's go-ahead will be made in the coming year(s). Until then, it is appropriate to leave the project out of the baseline forecast, but does represent an up-side risk to the long-term forecast (see Exhibit 5-1).

**Exhibit 5-1*****Bathurst Inlet Port and Road***

The Bathurst Inlet Port and Road (BIPR) mega-project is becoming the focus of many people's attention throughout Nunavut. For some, it is a project with enormous economic potential and the future for the Territory, while others are concerned that it may distract too much attention away from other needed investment areas.

*The Project:* The idea of constructing an all-weather road through the Slave Geologic Province has been around for decades. The discovery of diamonds, gold and base materials in the region have rejuvenated interest in the project, as has the separation of Nunavut from the Northwest Territories. While many possible scenarios have been considered, the focus in Nunavut has been on the a deepwater port facility constructed at the south end of Bathurst Inlet, with a 290 km all-weather road connecting it to the regions mineral reserves. This scenario would not see the road extend to Yellowknife. The BIPR would make feasible the development of the zinc deposit at Izok Lake, which is thought to contain 16.5 million tonnes of ore with a zinc concentration ratio of 11.4 per cent. The base metal mine requires an all-weather road in order to transport the concentrate out for refining.

*Potential Benefits and Costs:* The BIPR construction costs have been estimated at \$215 million and would employ at its peak 300 people. Under the proposed project outline, the road and port would be owned and operated by an Inuit company, employing Nunavummiut for the construction, maintenance and operations where possible. Further benefits such as employment, service contracts, and tax revenues would stem from the development of previously inaccessible mineral resources. The port facility would also serve as a staging area for supplying four communities in the Kitikmeot region lowering their transportation costs.

*The debate:* Looking at this project, there wouldn't seem to be any downsides. Certainly, mining can be an excellent foundation from which Nunavut's economy can grow. However, the some uncertainties about the project remain. It is not clear that this project will provide a positive return from a benefit-cost perspective.<sup>1</sup> A demonstration of who would receive the lion's share of the benefits is needed. If Northern employment is the central issue for the development of the BIPR, then the Territory should be working to ensure there are enough willing and able Inuit workers in the Kitikmeot region to meet the employment requirements. It is also unclear where the federal government will stand on this development. While DIAND has provided \$3 million toward the feasibility study, federal support for the actual construction may not be forthcoming. There are also environmental concerns. Global warming will have an unknown impact on the maintenance costs of the road, and could even put the road's life span in jeopardy, though counter to this is a concern that the current winter road from Yellowknife will suffer a similar fate if it is not upgraded. A full environmental assessment of the project is required that must meet Canadian environmental standards.

*Will the project go ahead?* It is uncertain at this time whether the project will indeed go ahead. Funding from the Federal government remains the primary stumbling block. What is certain is that a great number of people believe the BIPR is paramount to Nunavut's future. Often from strong resolve comes action. If it does receive approval and funding, there are some fundamental considerations needed. First, a plan must exist that will ensure the profits and savings generated from the project are injected into Nunavut's wealth-generating capital. This would ensure that the *Healthy Communities* discussed in the Bathurst Mandate remain central to this financial venture. And second, while there is no doubt Canada as a whole would see some benefits from the development, every effort will be needed to ensure Nunavummiut will share in these benefits.

*How would the project impact the baseline forecast?* To answer this question, the results of the BIPR Technical Committee's feasibility study are needed. Most important will be the assumptions on mineral production, Nunavummiut employment, and tax revenues. Clarification of the how Nunavut will benefit other than in terms of GDP is also very important.

Source: Bathurst Inlet Port and Road Technical Committee, Government of Nunavut, Conference Board of Canada

<sup>1</sup> Because the initial capital outlay for this project is immediate and most benefits will not occur for at least 5 years from the project start date, the Net Present Value (NPV) of costs may prove to be greater than the NPV of benefits, discounted at an acceptable rate.

Finally, as we all witnessed last year on September 11<sup>th</sup>, the world is becoming increasingly integrated, and at times this integration can be destabilised by catastrophic events. As with any forecast, the unpredictability of natural or man-made disasters will always represent a degree of risk.

### 5.3 Wage-Based Economic Growth Forecast

Because long-term forecasts are rooted in economic fundamentals, the revised forecast is similar to that developed 18 months ago (see Chart 5-6). Few changes have occurred that would impact the potential output of the Territory; that is, the expected labour force growth and capital stock has not altered significantly. Of course, as discussed throughout this report, many things have changed in Nunavut and around the world that will impact the Territory's economic growth profile over the next 20 years. The result of these events combined with the medium- and long-term prospects for the Territory's economy have resulted in a new average growth forecast of real GDP over the period 2002-2020 of 2.2 per cent, compounded annually.

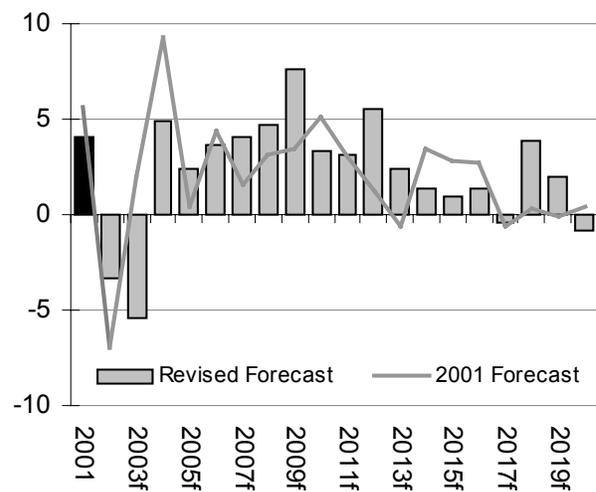
One cannot overstate the impact that the mine closures will have on the economic landscape of Nunavut over the medium-term, placing greater emphasis on other aspects of the wage-based economy. This will have the greatest impact over the first five year period of the forecast, lowering it to 0.4 per cent, compounded annually (see Chart 5-7). As shown earlier, the loss of exports from production at Polaris and Nanisivik will cause the economy to recede in the third and fourth quarter of 2002, with the remaining economy unable to generate enough activity to prevent a decline in the overall economic output this year and next. It is important to note however, that most of the impact will be seen in exports, while domestic demand will continue its slow growth.

This temporary setback will reverse itself over the following 5-year period (2006-2010) with the re-emergence of the mining sector in the Kitikmeot region and the continued expansion of the fishing, food processing and tourism industries. The forecast is for an average growth over this period to reach 4.6 per cent, compounded annually.

**Chart 5-6**

#### **Comparison of Forecasts**

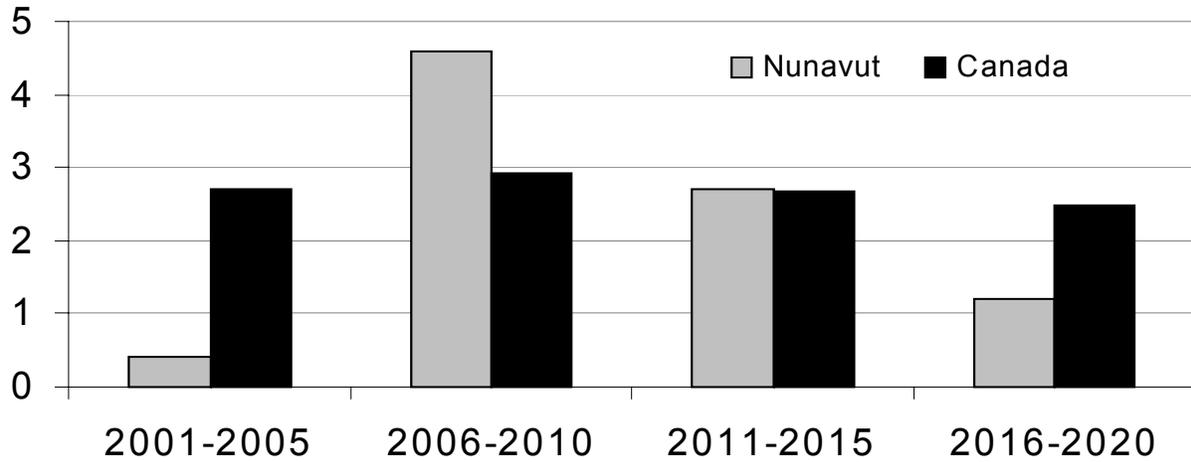
(percentage growth rates, real GDP)



Source: CBoC

**Chart 5-7****Real GDP Growth at 1997 Basic Prices, Nunavut and Canada**

(average annual compound growth rates)



Source: Statistics Canada, CBoC

Over the longer term, the economy will settle down posting average annual growth rates of 2.7 per cent over the period 2011-2015, followed by 1.2 per cent over the final five years. The slowing of growth over the last period is due to anticipated mine closures that will have a similar impact at that time as the closing of Polaris and Nanisivik are having now. Note the main difference being that by 2016 the economy will be more diversified into sustainable economic activities that will limit the overall impact on the economy.

## **6 Summary and Concluding Remarks**

### **6.1 Main Findings**

The Conference Board of Canada was asked to review the 2001 Nunavut Economic Outlook, incorporating new information to determine where the Territory stands in relation to the findings of the original report. Information was gathered from a variety of sources including statistical agencies at the federal and territorial level, non-government agencies and consultants, and from Government of Nunavut publications and staff members. Consideration was given to the progress of all four forms of wealth-creating capital (See Exhibit 6-1 for a summary of the findings) and the recent performance of the wage-based economy. Limited new information on the land-based economy made advancing that topic area more difficult.

What became evident from this research was Nunavut's growing place in the world economy. The closure of Nanisivik due to a prolonged slump in raw mineral prices is a prime example of this, as are the events surrounding 9/11 and its impact on tourism. While these challenges remain, it is important to point out where challenges have become opportunities. Such is the case for Nunavummiut-processed country food that received European Union certification and the slow re-emergence of sealskins on the world market. And despite the turmoil currently plaguing the world economy, Nunavut's fledgling wage-based economy has performed well. In terms of real expenditure-based GDP, the economy grew by 4.5 per cent in 2000 and 3.7 per cent in 2001. However, the overall characteristics of Nunavut's economy remain unchanged since the release of the 2001 NEO. The reliance on government to fuel economic growth remains steadfast, as does the Territorial government's dependence on federal transfers. Diversification away from government and mining has not yet taken place.

With that being said, the next few years will see some important changes in Nunavut's economic landscape. First, two of the Territory's three operating mines are closing this year, while the third will close in 2005. This will place the responsibility of wage-based economic growth squarely on the shoulders of Nunavut's small but emerging fishing, food processing and tourism industries. Currently, all offshore fishing activity is contracted to foreign (to Nunavut) vessels, limiting Nunavummiut's share of the industry's benefits. Nunavut must be more involved if its to obtain a greater return, something that will only come about through increased investment in its capital.

Tourism remains a critical component of Nunavut's economic future and continues as the Territory's second greatest export after raw minerals. The industry provides tremendous opportunities for diversification, attracts foreign capital, and helps foster the preservation and cultivation of the Territory's arts sector and cultural industries. However, growth will be slow over the medium term, as the industry waits for the necessary investments in all four forms of capital. It will also benefit over the long term from the implementation of a tourism strategy.

Mining will return to the Territory in a big way with the opening of two mines over the latter half of this decade. Mining's return to the economic stage will fall under new and improved representation by the Territorial government and Inuit organisations with an

emphasis on Inuit Qaujimajatuqangit and IQ Guiding Principles that will ensure the interests, values, language, and Inuit Traditional Culture are taken into account. Impact Benefit Agreements with mining companies will ensure Inuit are included in the decision making process. The hiring mandates, service contracts and strict environmental adherence that will result from these negotiations will place responsibility for ensuring Nunavummiut have access to relevant training in the hands of the GN and Inuit organisations. Nunavut should be mindful that the pace of development does not exceed the Territory's ability to fully participate in its expansion.

With the long-term fundamentals still in place from 18 months ago, the real growth of the Territory's economy over the period 2002-2020 will average 2.2 per cent,

#### **Exhibit 6-1**

#### ***Summary of Nunavut's Four Forms of Capital***

##### *Physical Capital*

- The lack of housing remains a critical issue. The Government is trying to address this matter such as through facilitating home ownership. The lack of housing is not only a health and social issue but an economic issue in that it is preventing people from seeking work in other communities in the Territory.
- The lack of community infrastructure such as ports/small craft harbours, adequate waste management systems and tourist facilities is hindering economic development at the local level. Improving Internet access remains an issue. Increasing Nunavut's connectivity would increase opportunities for economic development, education, communication and overall business competitiveness.

##### *Human Capital*

- Education remains an area that deserves great attention particularly if Nunavummiut are to access the employment opportunities that will be available in the coming years.
- Nunavummiut's poor health status and poor social conditions relative to the rest of the country are a major concern and deserve national attention. Many of these problems will take years to correct and require more than investments in health care and social services.

##### *Natural Capital*

- Acquiring greater knowledge of Nunavut's natural capital is essential to support both traditional economic activities and new ones such as commercial fishing, food processing and tourism—the future of both depend on the preservation of Nunavut's wildlife.
- Several studies have been conducted over the past two years contributing to an increased knowledge of Nunavut's wildlife. The final report of the Nunavut Wildlife Harvest Study is expected to be released in 2003.

##### *Social/Organisational Capital*

- Nunavut organisations have taken steps over the past several months to improve their coordination to take advantage of economic opportunities (e.g., the creation of the Baffin Fishing Coalition, agreements with neighbouring jurisdictions).
- This report identifies the importance of cultural heritage (distinctive, historical and artistic expressions of a society) as an important component of social capital—it fosters social development, supports social cohesion and can be an important source of economic activity. Nunavut's cultural heritage is increasingly being recognised nationally and abroad and attention is being given to supporting it such as through a Nunavut Heritage Centre.

compounded annually. The weakest 5-year period will be the one we are currently in (2001-2005) due to the mine closures at Polaris and Nanisivik, while the strongest period of growth will follow (2006-2010) due to the re-emergence of mining and accelerated growth in the fishing, food processing, and tourism sectors.

## **6.2 Addressing Nunavut's Capital Needs: The Key to a Successful Outlook**

The economic outlook that has been presented is contingent upon improvements in Nunavut's physical, human, natural and social/organisational capital. There are some mounting concerns over the pace of improvements in these areas. The 18 months since the release of the original report is not enough time to see the emergence of new trends in Nunavut's social statistics; however, new data have confirmed that Nunavummiut are indeed lagging behind the Northwest Territories and the rest of Canada in terms of health status and education. Furthermore, Nunavut's infrastructure remains a concern, particularly as it limits new economic opportunities and as it concerns the health and social needs of the Territory's growing population. Also, the requirement for increased knowledge of the Territory's natural capital continues as identified in the original NEO.

The state of Nunavut's social/organisational capital is also a concern; however, Nunavummiut have shown some improvements in working together toward common goals. The work of government, Inuit organisations, non-government agencies, and business action groups has created economic opportunities in fishing, sealing, food processing, tourism, and mining. Still, there are concerns that the Territory as a whole lacks common strategies and a unified approach to improving conditions in Nunavut. This could leave Nunavummiut unprepared for the coming opportunities. Better co-ordination between existing organisations and a rationalisation of strategies across these organisations would also improve the chances of Nunavut's concerns being heard at the national level.

There are signs that government is moving to correct the current shortcomings. The development of an economic development strategy is a necessary first step. Meanwhile, more money has been directed toward health care, education, housing, tourism and other sustainable development initiatives in this year's territorial budget. These investments will take time before they pay dividends, and the government should not be distracted or discouraged by their progress over the short term, nor should it alter its course toward higher risk prospects. Rather, government should do its best to ensure that balanced progress of all four forms of wealth-generating capital are keeping pace with the advancing wage-based economic opportunities. In this way, Nunavut can better develop a long-term sustainable economy.