

# Economic Review & Outlook 2007

February, 2008

Investment & Economic Analysis



## Table of Contents

---

### **1**    *Introduction*

Introduction to the NWT and its Economy . . . . .	1
Gross Domestic Product or GDP . . . . .	2

---

### **2**    *Factors of Production*

Foundations for Growth . . . . .	3
The Land . . . . .	3
The People and the Labour Force . . . . .	5
Infrastructure (Capital). . . . .	7
Business Climate . . . . .	8

---

### **3**    *Economic Sectors*

Non-Renewable. . . . .	11
Renewable Resources . . . . .	14
Tourism . . . . .	17
Manufacturing . . . . .	18
Construction . . . . .	19
Arts and Fine Crafts . . . . .	20
Retail Trade . . . . .	21
Wholesale Trade . . . . .	22

---

### **4**    *Opportunities and Challenges*

Challenges . . . . .	23
Opportunities . . . . .	23

# 1 Introduction

It has been a challenge for the NWT to adjust to the rapid pace of development. The Territory is now one of the world's largest exporters of diamonds. Major new investments are planned over the next five years, including \$15-30 billion in development of the Mackenzie Gas Project, plus another \$2-3 billion in new mine development.

Resource development has enabled the NWT to achieve the highest average incomes in Canada, and a per capita Gross Domestic Product, or GDP, that is almost twice Alberta's.

However, resource development also faces a number of substantial and unique challenges. Remoteness from markets, and land access both work against resource development. In many cases, the necessary infrastructure and business services are lacking.

Recent growth has been heavily dependent on diamond development, and benefits have been concentrated in the North Slave region. There are also considerable leakages to southern Canada in terms of lost wages and sourcing of supplies and equipment. Rapid economic growth has also strained infrastructure, business capacity and the available labour force.

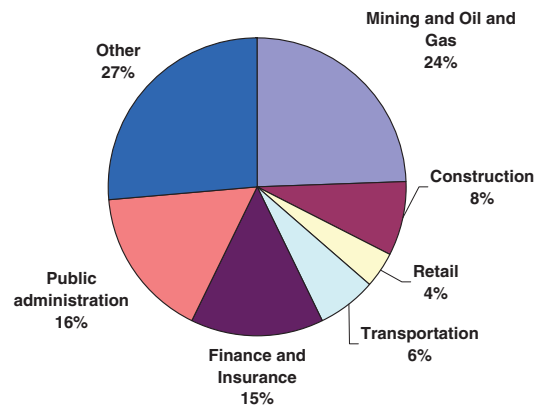
The next section of the report will examine broad measures of economic development, including Gross Domestic Product or GDP. This will be followed by a review of "factors of production," which apply to all sectors of the economy. The third section looks at the performance of individual industries, and is followed by a section on challenges and opportunities.

## GDP or Gross Domestic Product

GDP is the most common measure of economic performance. While GDP has increased by 67% since 1999, mining, and oil and gas accounted for almost 50%. Other sectors have not kept pace.

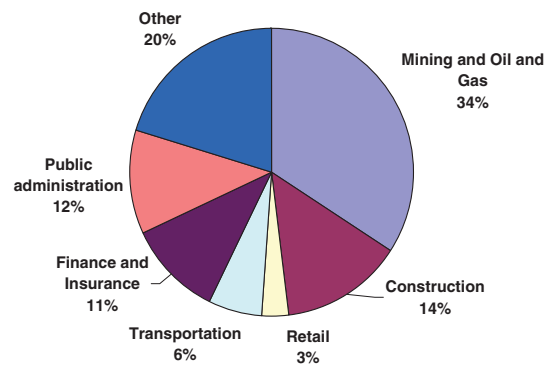
With new mining developments, GDP could increase by three quarters of a billion dollars over the next five years. Development of the Mackenzie Gas Project could increase GDP by a further 1-2.5 billion (depending on production).

Chart 1: GDP 1999 - \$2.6 billion



Source: NWT Bureau of Statistics

Chart 2: GDP 2006 - \$3.5 billion



Source: NWT Bureau of Statistics

Table 1: GDP Growth Rates by Sector, 1999-2006

Source of Growth	1999	2006	Change	Percentage of Total Growth	% in 1999
All Industries	\$ 2,080	\$ 3,458	\$ 1,378	100%	
Mining and Oil and Gas	\$ 507	\$ 1,184	\$ 677	49%	24%
Construction	\$ 168	\$ 480	\$ 312	23%	8%
Retail	\$ 81	\$ 106	\$ 25	2%	4%
Transportation	\$ 133	\$ 212	\$ 79	6%	6%
Finance and Insurance	\$ 302	\$ 375	\$ 73	5%	15%
Public administration	\$ 342	\$ 400	\$ 58	4%	16%
Other	\$ 546	\$ 701	\$ 155	11%	26%

Source: NWT Bureau of Statistics

# 2 Factors of Production

## Foundations for Growth

To produce goods and services requires resources, not just raw materials and land, but people, infrastructure and entrepreneurship. Economists refer to these as “Factors of Production.” To varying degrees, each of these is important to every sector of the NWT economy.

These same factors impact business markets (“Foundations for Growth”). For example, retail sales are linked to population and labour income, and many wholesale businesses depend on investment and mineral development.

## The Land

The economy is closely linked to the land. The sheer size, about 1.2 million square kilometres, of the NWT has been a major challenge throughout its history. The NWT is the third largest jurisdiction in Canada.

The geography of the NWT is diverse. Visitors can dip a toe in the Arctic Ocean, view herds of wood bison, witness the northern lights, or take a hot bath in the Nahanni Springs. The NWT includes two of Canada’s largest lakes, the Great Slave and Great Bear Lakes and also has Canada’s longest river, the Mackenzie, which exceeds 4,000 kilometres in length.

Figure 1: Sedimentary Basins in the NWT and Canada



## 4 | Economic Overview of the NWT

The climate is equally diverse. The NWT has one of the coldest climates in Canada. This creates a significant challenge for investors and residents. Both the costs of heating a home and running a business can be significantly higher in the NWT.

However, the cold climate also provides advantages. Northern businesses have become experts at cold weather construction, and have exported this expertise to other regions and countries. Every year, a network of ice roads provide efficient community and mine re-supply.

For all its size, the NWT is sparsely populated. About 43,000 people live in 33 communities. The Territory accounts for less than 1% of Canada's population.

Forest covers about 600,000 square kilometres (half of the NWT). Of this, about 150,000 square kilometres are considered productive timberland.

While the NWT has a marginal climate, certain regions of the Territory do have productive agricultural land. Overall, there is approximately 4.3 million hectares of arable land in the Slave, Hay and Liard River lowlands and to the west of Great Slave Lake.

A large portion of the NWT falls within the Western Sedimentary (oil) Basin, which extends from Alberta, up the Mackenzie Valley and into the Arctic Ocean. The current boundary of the basin extends from Behchokò in the east to the Mackenzie Mountains in the west. Past exploration has resulted in the discovery of over 1.75 billion barrels of oil and 15 trillion cubic feet of natural gas (excluding Arctic Island discoveries). The estimated total recoverable oil and gas reserves in the NWT are much larger.

The NWT is classified into seven geological zones or provinces. Three of them -- the Slave, Bear and Churchill -- have a complex past, which includes volcanic action, chemical reactions, faulting and folding caused by crustal upheavals. This has tended to concentrate, and in some cases, expose, valuable mineral content. The Slave Province contains the NWT's three diamond mines.

## People and the Labour Force

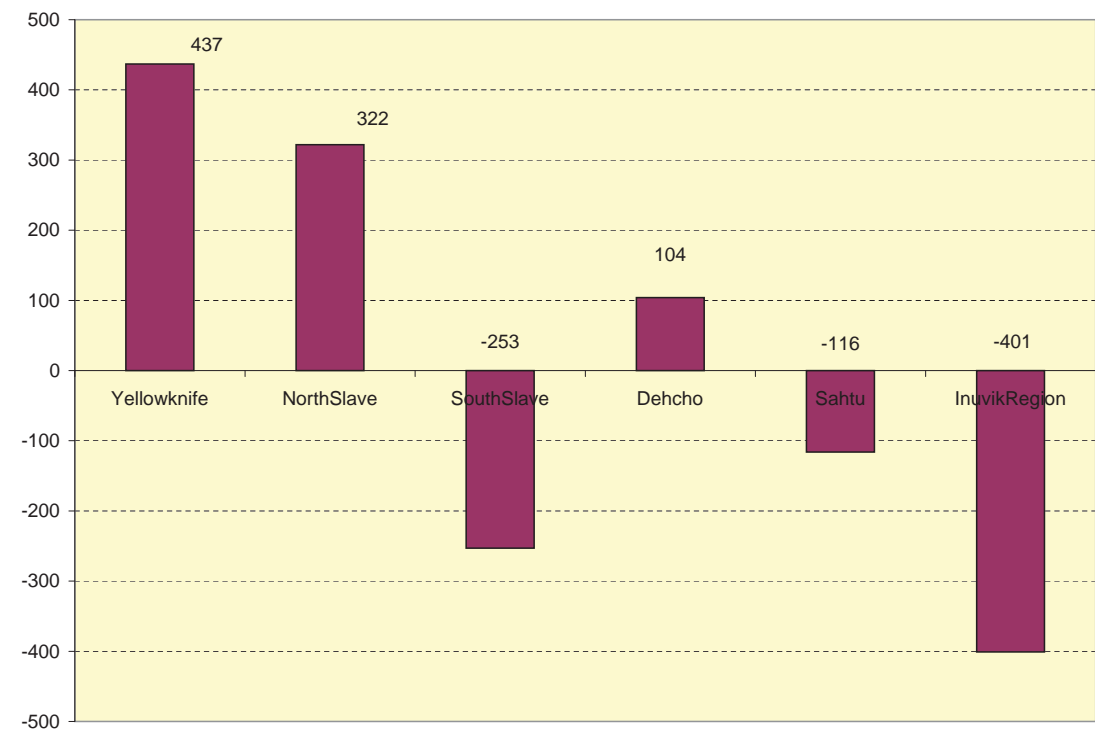
The NWT’s 42,600 residents are evenly split between Aboriginal and non-Aboriginal. 45% of residents are located in Yellowknife with a further 22% situated in the remaining four regional centres. In short, 67% of residents live in five communities, with the remaining 33% of the population in 28 small, largely Aboriginal communities.

Population growth has been modest, on average 195 people per year.

Over the past five years, 6,655 NWT residents have moved to Alberta. This means a loss of transfer payments, skills, investment capital, economies of scale, and business markets.

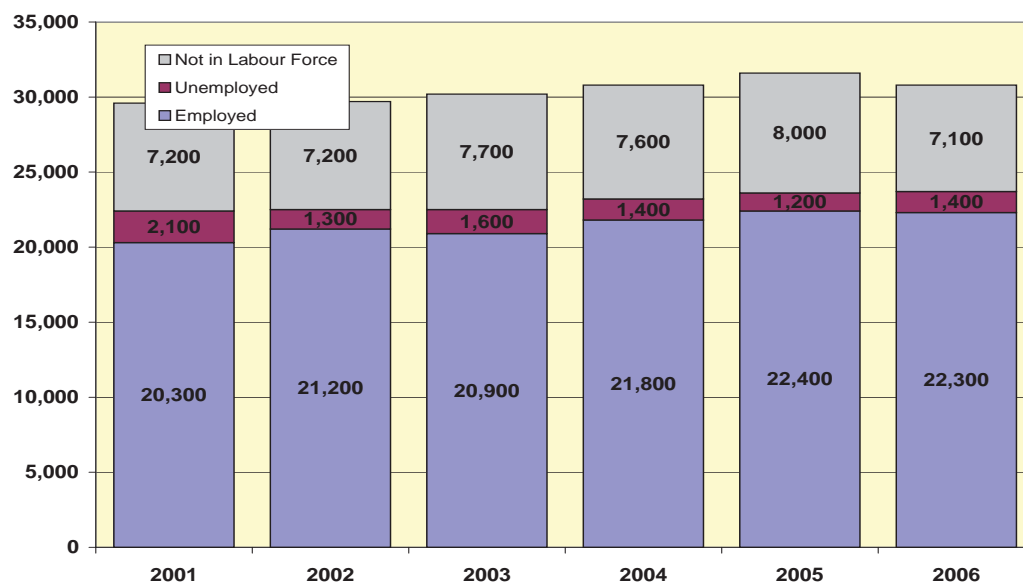
People have moved from regions with limited resource investment. Populations have increased in Yellowknife and the North Slave, but declined in the Inuvik and South Slave regions.

Chart 3 – NWT Region Population Change 1999-2006



Source: NWT Bureau of Statistics and ITI Regional Database (Census Data)

Chart 4 – Labour Force Characteristics 1999-2006



Source: TS1095 TM190100 LABOUR FORCE CHARACTERISTICS  
Statistics Canada

People who move, tend to be in their 20's and 30's, the same group with young children. For the first time in history, some regions in the NWT have more people 45 years or older than young people under 15 years. This will create a labour shortage as older workers retire. (The North Slave region, excluding Yellowknife, is the only region with a significantly larger youth population).

Table 1 – Ageing of the Population

Region	Number of People Over 45 Years	Number of People Under 15 Years	Difference
Yellowknife	4,696	4,342	-354
North Slave	591	876	285
South Slave	2,136	1,578	-558
Dehcho	875	749	-126
Sahtu	646	726	80
Inuvik	1,675	1,721	46

Source: NWT Bureau of Statistics

In 2007, 22,900 people were employed and only 1,400 unemployed. Overall employment growth has been modest in comparison to economic growth. While the GDP has increased by \$730 million or 27% since 2001, employment increased by only 1,812 or 9%.

## Infrastructure and Investment

The NWT has an extensive system of roads, ports and airports, including a rail connection to Hay River. There is also a well-developed marine freight service from Hay River to the Arctic Ocean. In winter, this network is complemented by a system of ice roads.

Most communities also now have high speed Internet at reasonable rates. The NWT also has an extensive system of parks and visitor centres.

There are also some key deficiencies. The NWT is the only Territory or province in Canada without an international airport. The hydro grid is limited to two NWT regions, and a majority of the smaller communities still rely on diesel to provide electricity.

While full cellular service is not available in all regions of the NWT at this time, an investment program has been recently launched to address this.

There is an oil pipeline in place from Norman Wells to Alberta, along with a series of small gas pipelines in the southern NWT that tie into the Alberta grid. However, major NWT gas resources in the Beaufort Delta lack access to market.

Total capital investment in the NWT is expected to approach \$1.6 billion for 2007; this is almost \$40,000 for every person. Most of this investment, \$1.1 billion or 71%, is private, linked to diamond mine development. By contrast, public administration investment is \$88 million (about 6%), and has been declining since 2003. Housing investment is estimated at \$74 million for 2007 (about 5%).

As noted in the annual Fraser Institute Report, the policy environment for development in the NWT is rated lower than other jurisdictions in Canada as a result of unsettled claims and the existing regulatory environment. The federal Minister of DIAND has recently launched an initiative aimed at streamlining regulation.

In addition, ITI has joined other provinces in implementing a BizPal system in the NWT to “blueprint” all approvals needed to start or run a business in the NWT. This system will provide links to permit and licensing information facilitating a faster and more user friendly approach for business.

Chart 5 – Private and Public Investment (In Millions of \$)

	2003	2004	2005	2006	2007	% of the Total in Each Year	
						2003%	2007%
<b>N.W.T.</b>	<b>816.8</b>	<b>1,248.20</b>	<b>1,469.40</b>	<b>1,505.50</b>	<b>1,588.60</b>	<b>100%</b>	<b>100%</b>
Mining and oil and gas extraction	443.5	793.1	1,042.00	1,089.90	1,134.80	54%	71%
Public administration	103.9	119.6	112.7	105.9	88	13%	6%
Transportation and warehousing	37.4	71.1	76	71	79.5	5%	5%
Housing	102.4	105.1	87.2	53.1	74.1	13%	5%
Educational services	11.3	8.5	9.3	36.1	42.3	1%	3%
Real Estate, rental and leasing	8.9	28.2	26.8	27.5	27.8	1%	2%
Information and cultural industries	17.2		25	21.3	26.7	2%	2%
Finance and insurance	6.2	5	7.6	12.7	25.5	1%	2%
Utilities	19.8	17.8		27.6	24.8	2%	2%
All other	66.2	99.8	82.8	60.4	65.1	8%	4%

Source: Statistics Canada, CANSIM, table (for fee) 029-0005

## Business Climate

Business development has lagged economic activity. The number of business establishments in the Territory has increased a modest 5% from 1999 through 2005.

Most growth has been in larger centres, and the limited growth in small communities is problematic. These communities are relatively isolated and predominately Aboriginal with the highest rates of unemployment. The small size of markets in many of the communities limits business opportunities to the most basic commodities - fuel, food, and in most instances accommodations.

The prospects for the service sector are generally sound, given a positive outlook for resource development. Improvements in communications technology are reducing the importance of location and may reduce business inventory costs.

The major issue for businesses in the NWT is labour shortage. To attract more labour, a survey by the Canadian Federation of

Independent Businesses found 63 per cent of their members are increasing salaries or benefits to help make them more competitive. Nearly 60 per cent are also recruiting outside of the NWT, which is significantly higher than other regions in Canada.

Due to a lack of labour, 42% of firms are not taking advantage of new business opportunities. This reduces valued added opportunities within the economy.

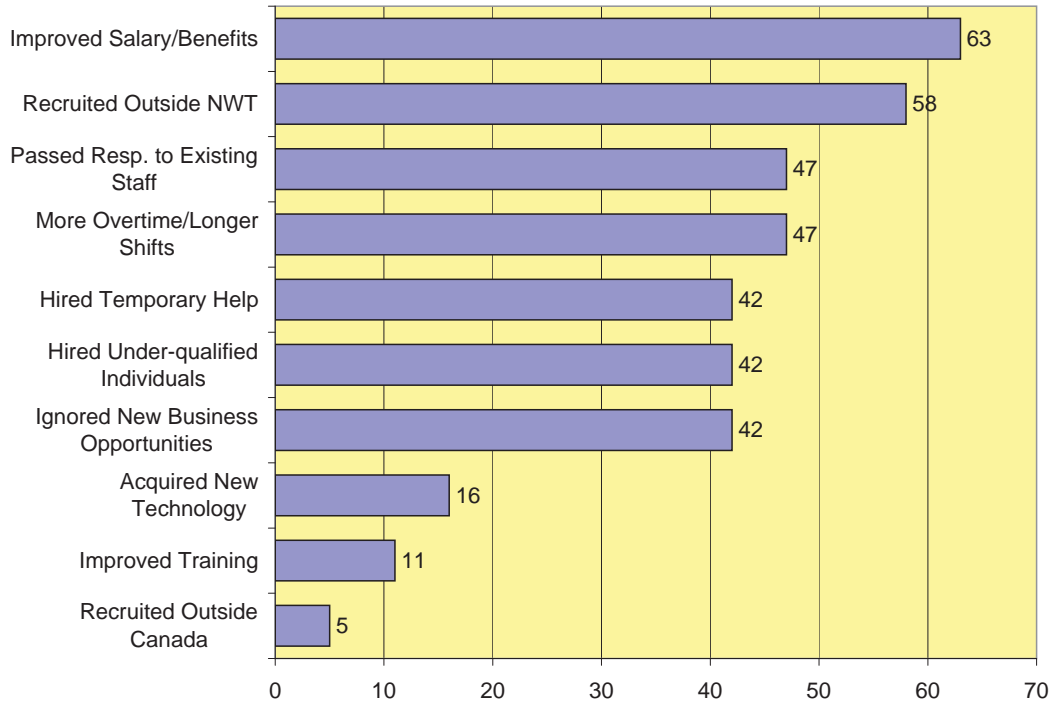
Sixty-three per cent of businesses cite gasoline and diesel fuel taxes as a burden, followed by utility charges, WCB premiums, payroll tax, as well as corporate and personal income taxes. Chart Six shows all response categories from the business survey.

Table 2 – Number and Breakdown of Businesses by Community Level

	Number of Businesses		Percent of the Total		
	1999	2005	Growth	% 1999	% 2005
Regional Centres	1673	1772	99	88%	89%
Other Communities	224	229	5	12%	11%
<b>Sum</b>	<b>1897</b>	<b>2001</b>	<b>104</b>	<b>100%</b>	<b>100%</b>

Source: NWT Bureau of Statistics

Chart 6 – Percentage Reported Responses to the Labour Shortage



Source: Canadian Federation of Independent Businesses  
2007 Member Survey



# 3 Industries

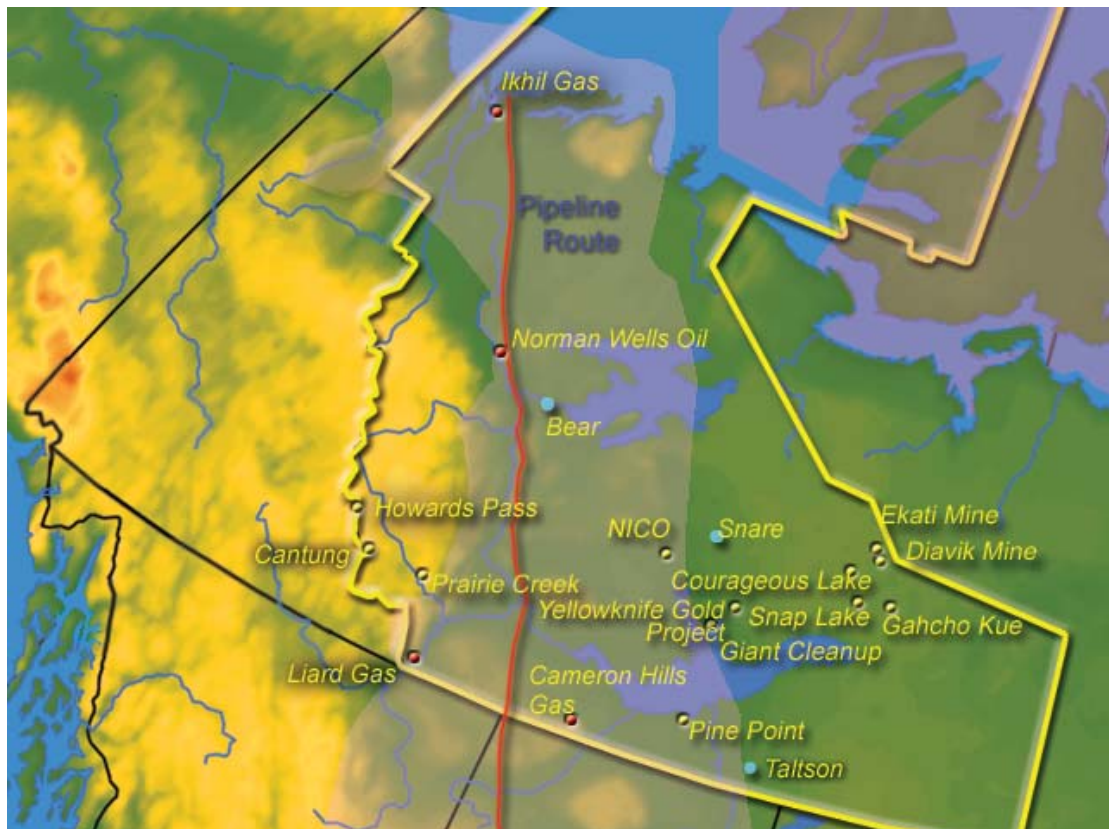
This section summarizes the key industries within the NWT economy. It considers the major factors that affect development in each industry, especially in comparison to the four “factors of production” previously detailed.

## Non-Renewable Resources

Non-renewable resources will continue to drive economic activity. The NWT has an extremely rich resource base. The following map highlights existing and projected developments, along with highlighting oil and gas basins and the proposed pipeline route.

Taken together, new development over the next five years could add \$2 billion to investment while creating approximately 1,900 new jobs.

Figure 2 – Existing and Potential Resource Developments



## 12 | Economic Overview of the NWT

Mineral sales have increased by \$1.3 billion since 1999; diamonds account for over 70% of this increase (see Chart 7), and diamond sales will continue to increase with the development of two new diamond mines. Total mineral sales exceeded \$2.2 billion in 2006.

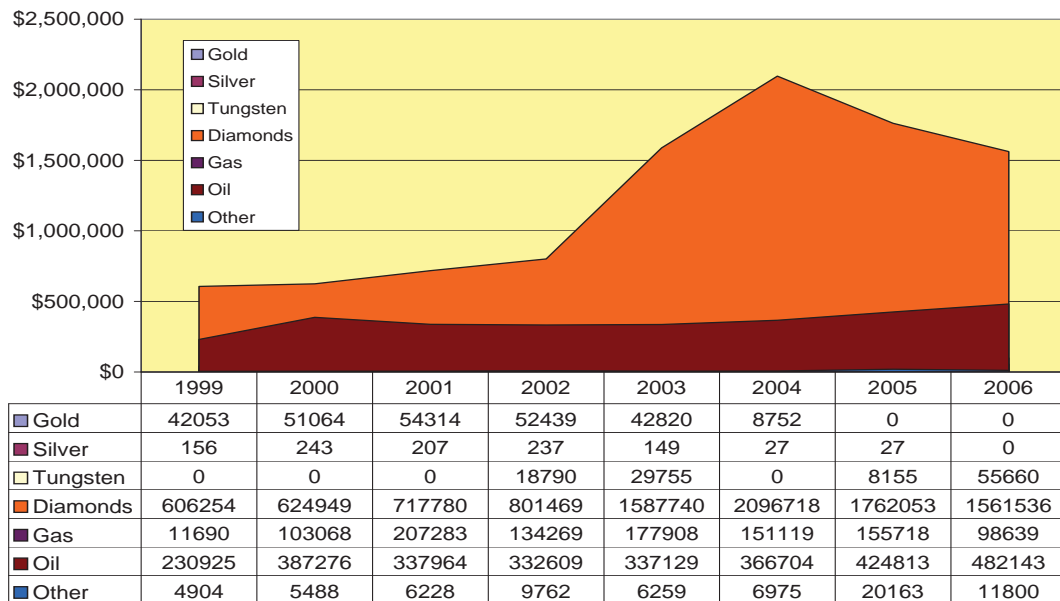
Natural gas exports have declined over the past five years, as existing wells in the southern NWT have depleted. Current production is around \$99 million. The volume of exports has declined from 952 to 248 billion cubic meters annually.

Oil exports have remained fairly stable at around \$482 million. All exports originate with the Norman Wells field. While sales have remained constant, production volumes have declined by 20% over

the past four years, from 1,462 to 1,168 thousand cubic meters in 2006.

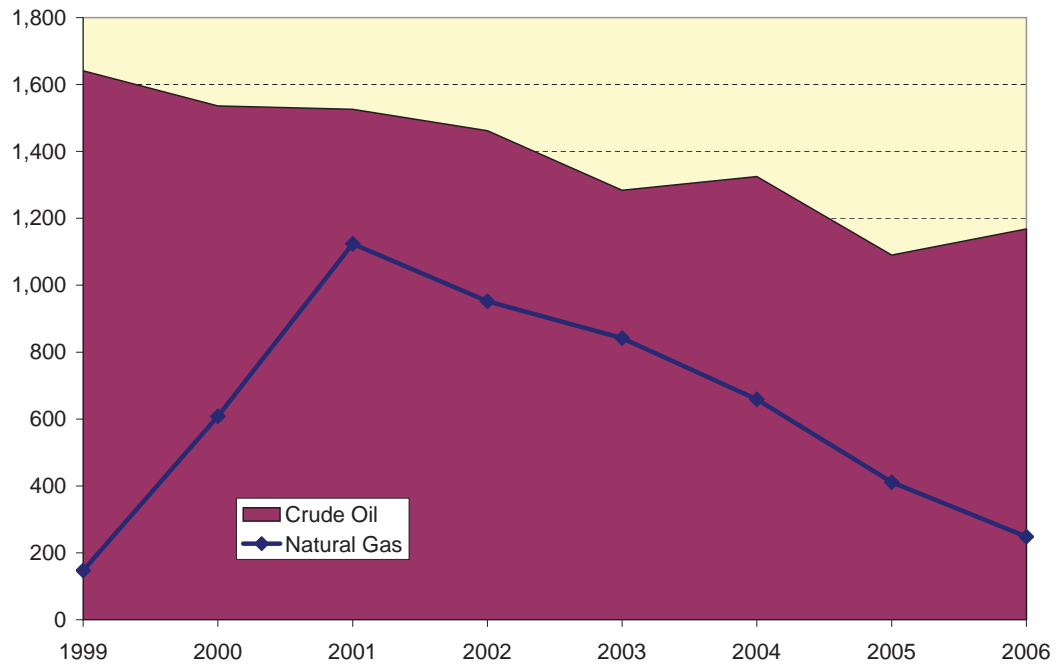
The major potential lies in the development of the multi-billion dollar pipeline along the Mackenzie Valley from the Arctic Ocean to northern Alberta. This pipeline would link an estimated 9 trillion cubic feet (Tcf) of proven natural gas in the Mackenzie Delta region to the North American market. Direct investment associated with the project is expected to range from \$16.1 billion to \$37.3 billion.

Chart 7 – NWT Mineral Production by Value, 1999-2006 (In Thousands of \$)



Source: TM140004 Value of Mineral Shipments, NWT. Metals, Non-Metals & Fuels

Chart 8 – Oil and Gas Shipments ('000 of cubic meters)



Source: TM140005, non-metal shipments from the NWT, Bureau of Statistics

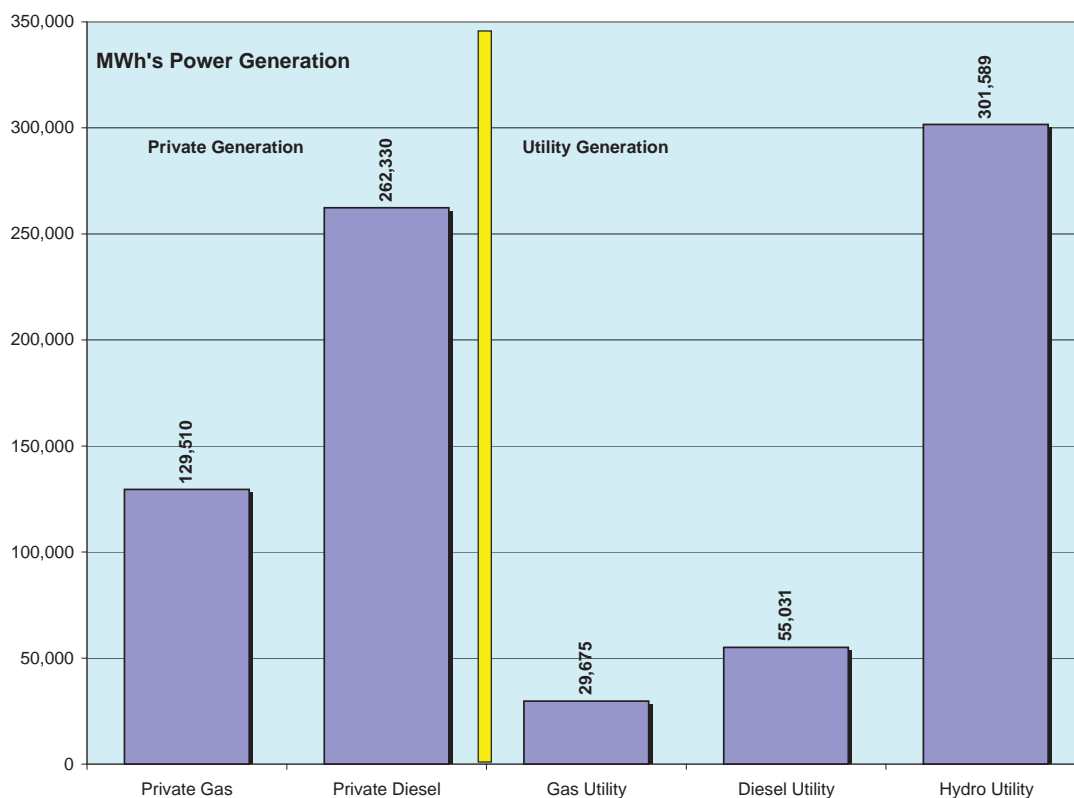
## Renewable Resources

### Hydroelectricity

The Taltson Hydroelectric Expansion Project, a 36 MW expansion on the Taltson River, could supply power to industrial developments in the Slave Geological Province. The feasibility of mini-hydro developments for the communities of Whati, Lutselk'e and Deline are also currently being investigated.

As shown in Chart 9, corporate electrical generation is almost as high as total hydro generation. The majority of private diesel electrical generation originates with NWT diamond mines. This represents a considerable market opportunity for hydro expansion.

Chart 9 – Private and Public Utility Electrical Generation by Type 2006



Source: V222113 Series, Electrical Power Generation, NWT Bureau of Statistics

## Forestry

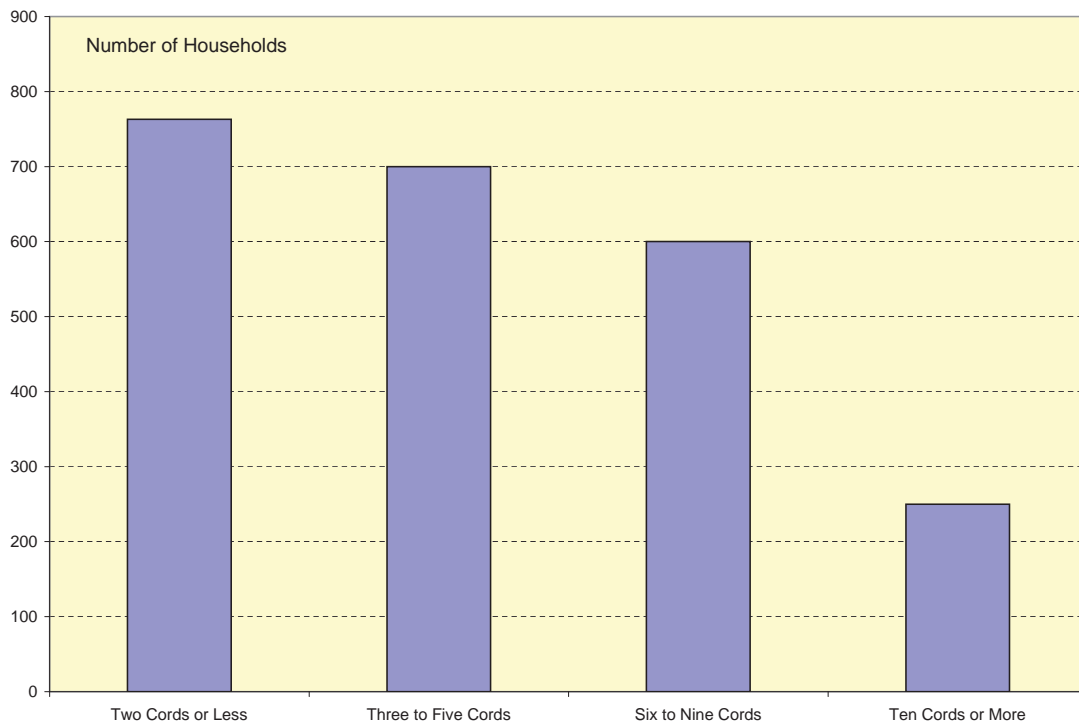
While the NWT has 12% of Canada's productive forested lands, there has been very limited forestry production since 2004.

In general, the market is dictated by changes in North American demand and prices, which have been slumping in recent years. Like other sectors of the economy, forestry is competing for workers. At the same time, a rising Canadian dollar has reduced revenues, while rising fuel prices have increased costs. Logging operations also face an uncertain land access and environmental review process.

However, the industry has potential, especially for supplying local needs, and for supplying specialized products, like rough wooden mats, to industry.

Wood is also used extensively for heating. In regions with significant forest resources, up to one third of households use wood heat.

**Chart 10 – Households Heating with Wood, Average Cord Usage 2002**



Source: Special Household Survey by ITI and the NWT Bureau of Statistics

## Hunting/Fishing/Trapping

Hunting and fishing activities are important to both urban and rural residents with participation ranging between 40 and 45% of the total population.

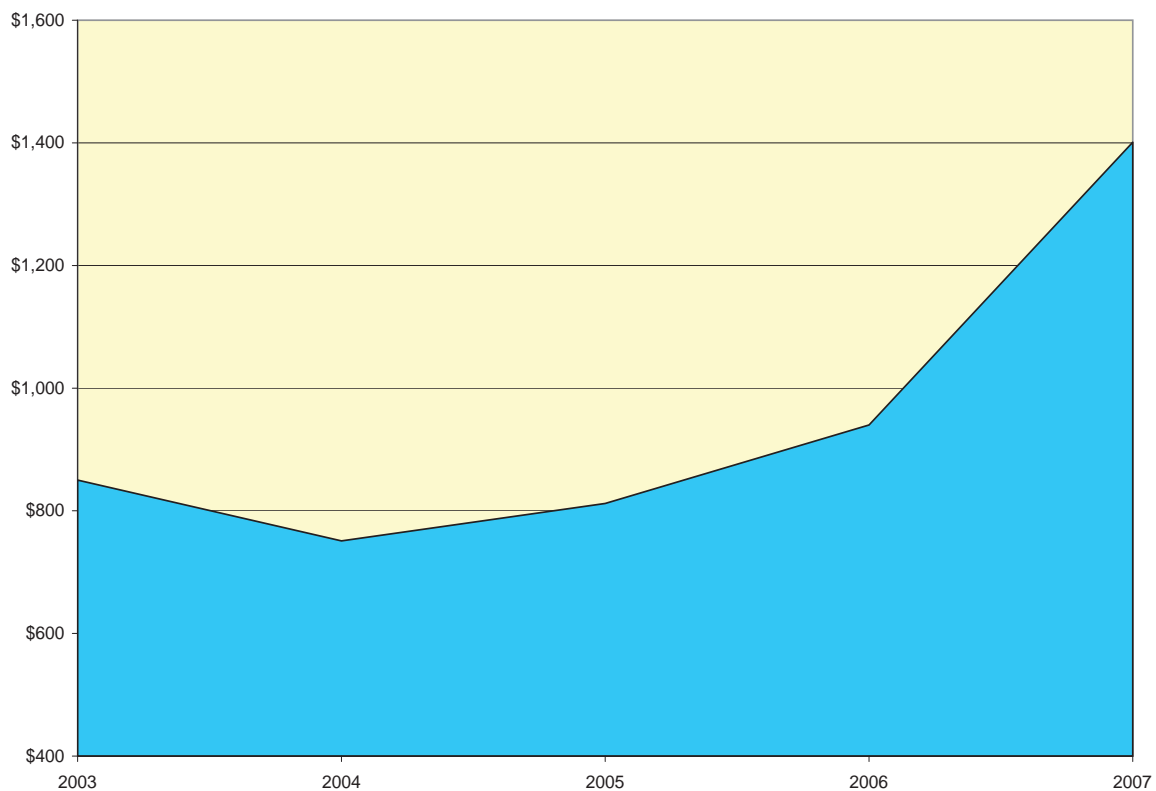
Fur sales have shown strong growth in recent years, with sales increasing by around 55% or \$550,000 since 2003. Total sales for the 2006/2007 exceeded \$1.4 million. The NWT, through its Genuine Mackenzie Valley Furs Program, is building a reputation for high quality furs.

Trapping is an important source of income for almost all small, traditional communities.

The commercial fishery is based out of Great Slave Lake. Since 1999, sales have declined from \$1.5 million to approximately \$400,000. The industry is being challenged by a labour shortage, high operating costs and distance to markets.

Fish is an important food source. In some markets, notably Yellowknife, fish harvesters have been able to successfully sell their product (partly processed) to local tourism and restaurant establishments.

Chart 11 – Fur Sales (In Thousands of \$)



Source: Traditional Economy Section, ITI

## Tourism

Over the past decade, the largest segment in the tourism industry has been Aurora viewing. However, this market has been declining, and the NWT is facing increased competition from Alaska and other destinations. Alaska has the advantage of direct flights to Japan.

Overall, the number of leisure visitors has grown at an average annual rate of one percent while the number of business visitors grew at seven percent on an average annual basis.

The rates and patterns of change have varied widely among the various leisure segments. Following the events of 9/11, the NWT experienced decreases in both Japanese and European tourism. However, the event has had a positive impact on American and Canadian tourism in the Territory.

Tourism can play a bigger part in the economy by taking advantage of niche markets and seasonal and part-time patterns. The NWT is also well situated to take advantage of polar and high latitude flight paths to Europe and Asia. However,

the NWT lacks an international airport.

There is also an opportunity to cater to the corporate and professional meeting market. In total, more than \$107 billion was spent on business and association meetings over 2006. The corporate sector spent about \$32 billion, conventions accounted for \$33.6 billion and the remaining \$41.8 billion came from other association meetings.

Conventions and meetings are actively marketed by provinces and cities. For example, the city of Edmonton has a web site devoted to supporting meeting and convention needs. They have developed a number of standard tours including a "Deh Cho" tour that ends up in Yellowknife. Edmonton also has a northern lights tour listed, this one to Fort McMurray.

While no similar services are offered in the NWT, there could be significant interest in visiting here for meetings or conventions. The NWT has some world class lodges and attractions. Expeditions or tours could be

Table 3: Tourism Spending by Segment (In Millions of \$'s)

Visitor Segment	2004-05	2005-06	2006-07	% Change From Previous Year
Visiting friends & relatives	\$3.2	\$3.8	\$4.5	19.10%
Hunting	\$17.3	\$17.4	\$14.9	-14.70%
Aurora viewing	\$12.5	\$13.4	\$9.2	-31.40%
Outdoor adventure	\$5.6	\$7.1	\$7.1	0.00%
Fishing	\$8.2	\$8.1	\$12.9	59.80%
General touring	\$8.7	\$7.5	\$6.9	-7.60%
Total leisure visitors	\$55.5	\$57.3	\$55.5	-3.10%
Business travelers	\$50.2	\$54.7	\$54.7	0.00%
<b>Total spending</b>	<b>\$105.7</b>	<b>\$112.0</b>	<b>\$110.2</b>	<b>-1.60%</b>

Source: Economic Planning Section, ITI

## Manufacturing

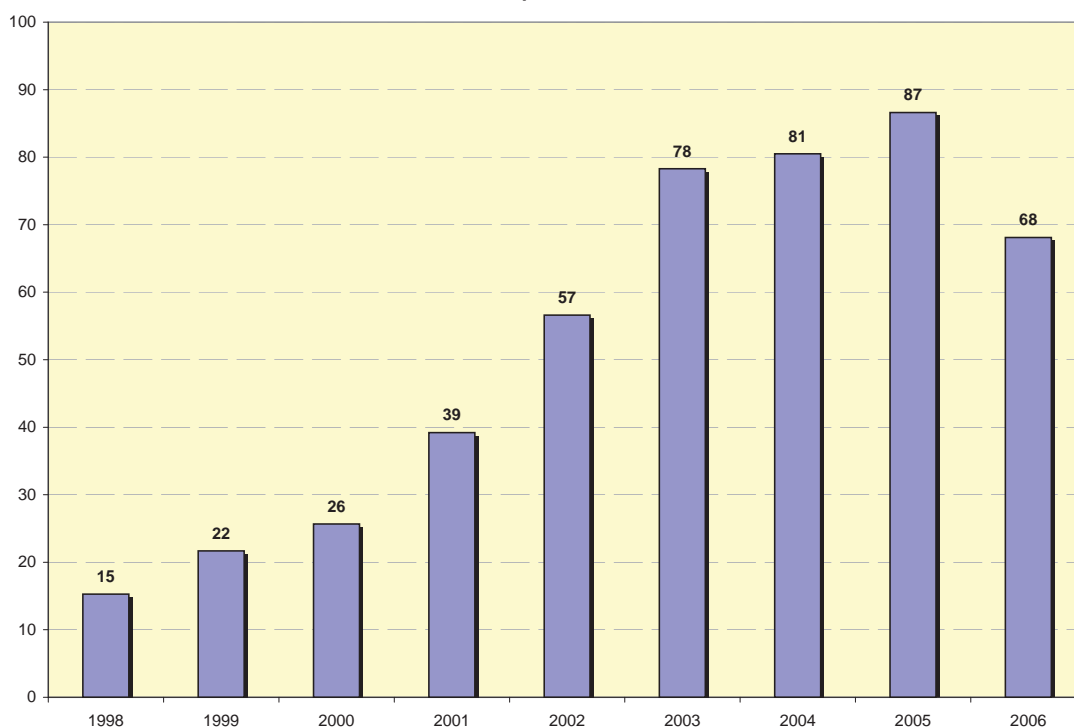
The distance of the NWT from major centres, combined with its low population, puts it at a disadvantage in developing a large manufacturing industry. As such, manufacturing in the NWT is likely to remain small-scale, filling specific niches.

Diamond manufacturing is being promoted by the Territorial government. Currently diamond polishing and processing is the largest component of manufacturing. Growth prospects for the industry are dependent on securing raw diamonds from the mines.

The South Slave region currently benefits from low power rates that could be advantageous to manufacturing. Presently, the region is involved in small-scale industrial and marine manufacturing.

Overall manufacturing sales have increased from \$22 million in 1998 to over \$68 million in 2006. However, manufacturing remains a small segment of the NWT economy.

Chart 12 – Value of Manufacturing Shipments in \$'Millions



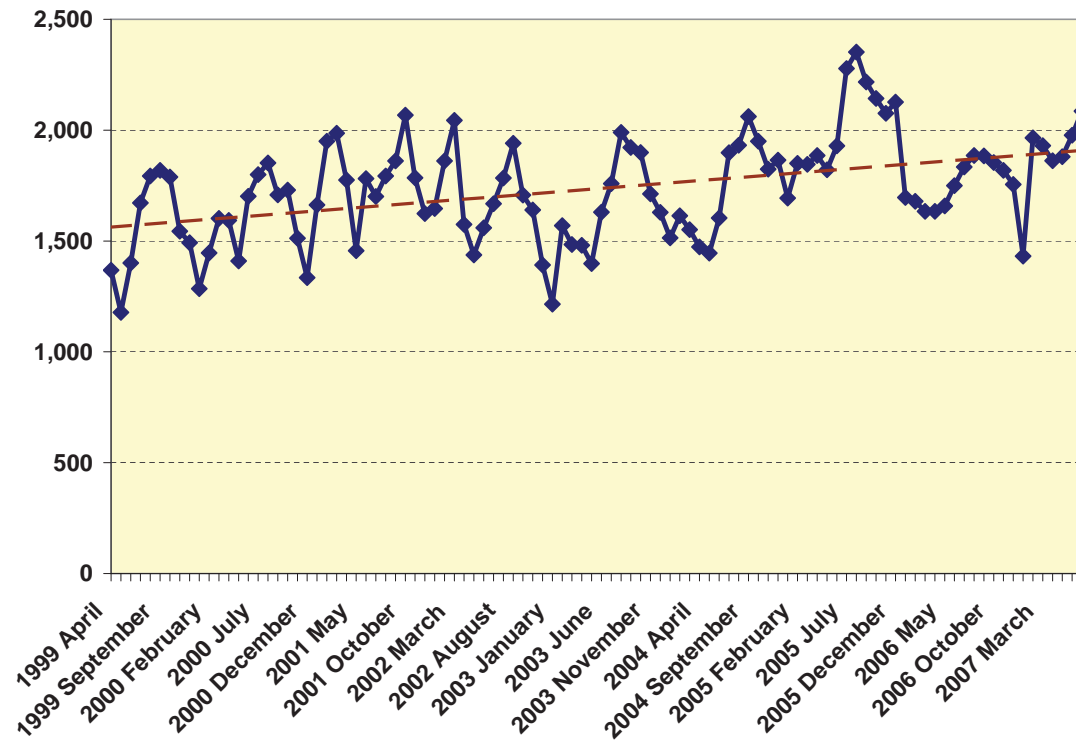
Source: TM100011 Statistics Canada; Value of Manufacturing Shipments

## Construction

The last decade has been one of unprecedented growth for NWT construction. In 1999, the construction industry accounted for 9% of total GDP. Sales grew more than 130% since 1999 from \$194 million to \$454 million. Since April 1999, 357 new jobs have also been created in the industry. Employment in the industry is cyclical, as shown in Chart 13 below, and employment can vary by as much as 1,000 between winter and summer.

Many jobs in the industry require significant technical expertise and a shortage of skilled labour poses a significant problem, one compounded by competition from Alberta and Saskatchewan. Based on investment expectations, future industry growth is expected to remain positive.

Chart 13 – Construction Industry Employment



Source: TM191025, Employment in the Construction Industry

## Arts and Fine Crafts

Approximately 18% of the population are involved with arts and fine crafts production in the NWT. Most artists make products as gifts, or for personal use.

As shown in Chart 14, almost half of artisans are involved with sewing or needle work. The second highest participation is in drawing and painting (27%).

Regionally, participation is highest in the South Slave and Dehcho regions (around 24% in both). The lowest participation is in the Beaufort Delta (13%).

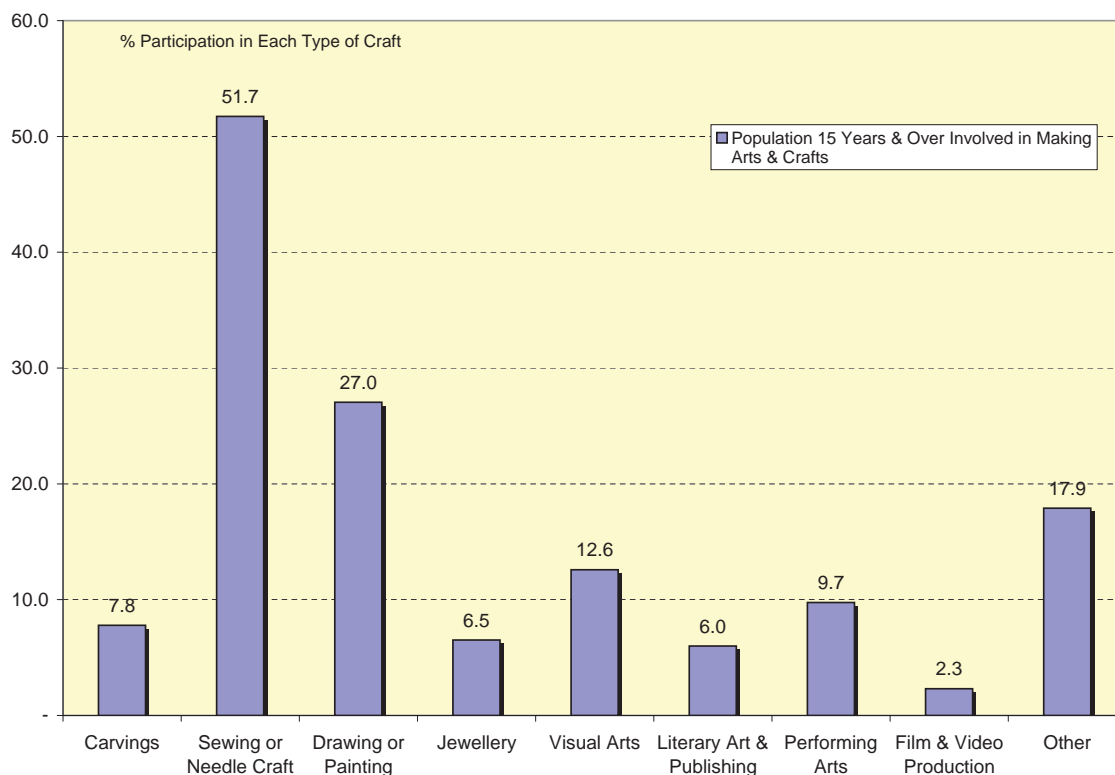
However, due to its large population, Yellowknife accounts for 2,200 or about half, of all artisans in the NWT.

Participation is slightly higher in the Aboriginal population than the non-Aboriginal participation with respective participation rates of 19% and 12%.

Demand for Aboriginal cultural products is strong in European, American and Canadian markets. Efforts are also being made to link arts and fine crafts sales with tourism.

Jewelry design and manufacturing from local diamond and gold offers new opportunities for the industry.

Chart 14 –Arts and Crafts Participation by Type 2002



Source: Special Household Survey by ITI and the NWT Bureau of Statistics

## Retail Trade

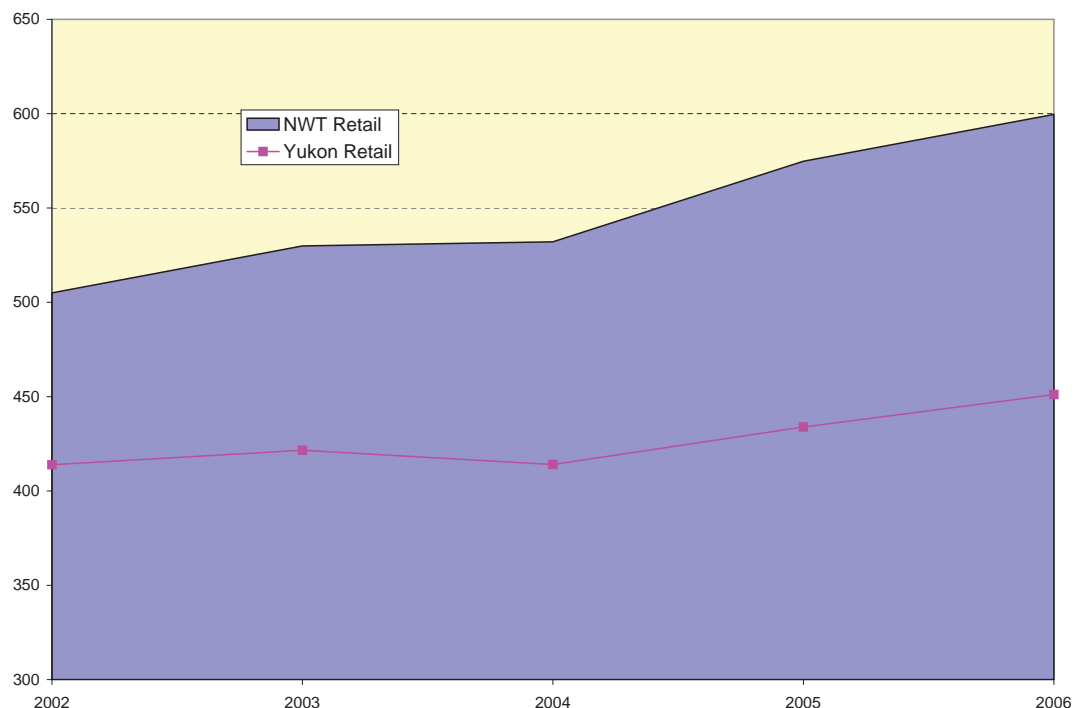
The retail trade industry showed strong growth in 2006, even with limited population growth. Sales increased by four percent in 2006 to \$600 million. Sales are being driven by rising personal incomes, and by industrial growth. Some retailers are also providing wholesale type services. For example, a number of service stations purchase oil and automotive supplies from Wal-mart or Canadian Tire, while the local Yellowknife Direct Charge Cooperative ships food orders throughout the NWT.

Industry employment increased by about 750 jobs since 1999. Given the distribution of businesses in the NWT, it is likely most of these were created in larger communities.

Chart 15 shows retail sales in the NWT and the Yukon. While retail sales in the NWT have shown strong growth, they are only 33% higher than the Yukon. By comparison, the NWT's GDP is more than double that of the Yukon's (\$3.5 billion in the NWT compared to \$1.6 billion in the Yukon).

New mineral investments will spur additional retail expansion. However, long term growth will depend upon population and income growth, not just new investment.

Chart 15 – Retail Sales in the NWT and Yukon (in Millions of \$)



Source: Statistics Canada, CANSIM, table (for fee) 080-0014 and Catalogue no. 63-005-X.

## Wholesale Trade

Wholesale trade sales were \$230 million in 2006. Most is associated with community or mine re-supply. The industry is less labour intensive than retail trade, and employs between 500-700 workers on average.

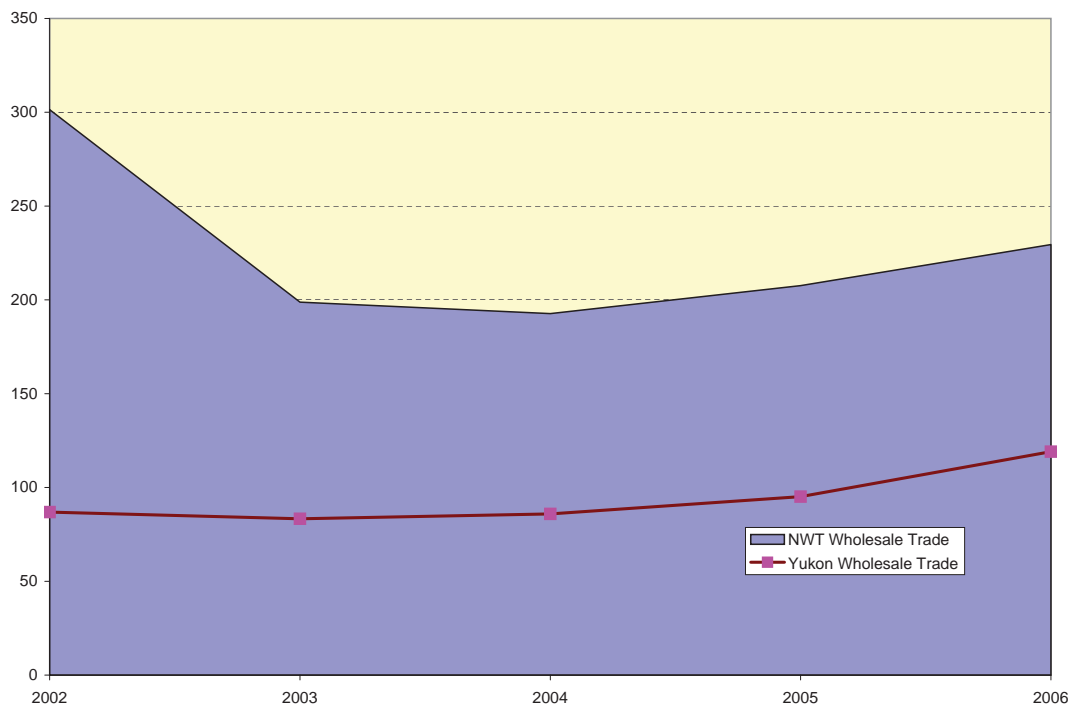
Sales have declined from their peak in 2002, but they have experienced growth since 2004.

Compared to other provinces, there appears to be significant room for growth. Wholesale trade only makes up 2% of the NWT economy, compared to 13% in Prince Edward Island. The industry is expected to expand with the development of more resource industries.

The industry also faces a number of challenges. The NWT's small population limits economies of scale. Development is also hindered by the NWT's large physical size, reliance on southern distributors and a relatively under-developed transportation system.

Market size is critical to industry development. The wholesale industry will continue to expand with projected new resource developments

Chart 16 – Wholesale Trade in the NWT and Yukon (in Millions of \$)



Source: Statistics Canada, CANSIM, table (for fee) 081-0007 and Catalogue no. 63-008-X.

# Notes

