

**NWT
Economic Review
& Outlook**

Norecon Ltd.
for RWED Economic Planning,
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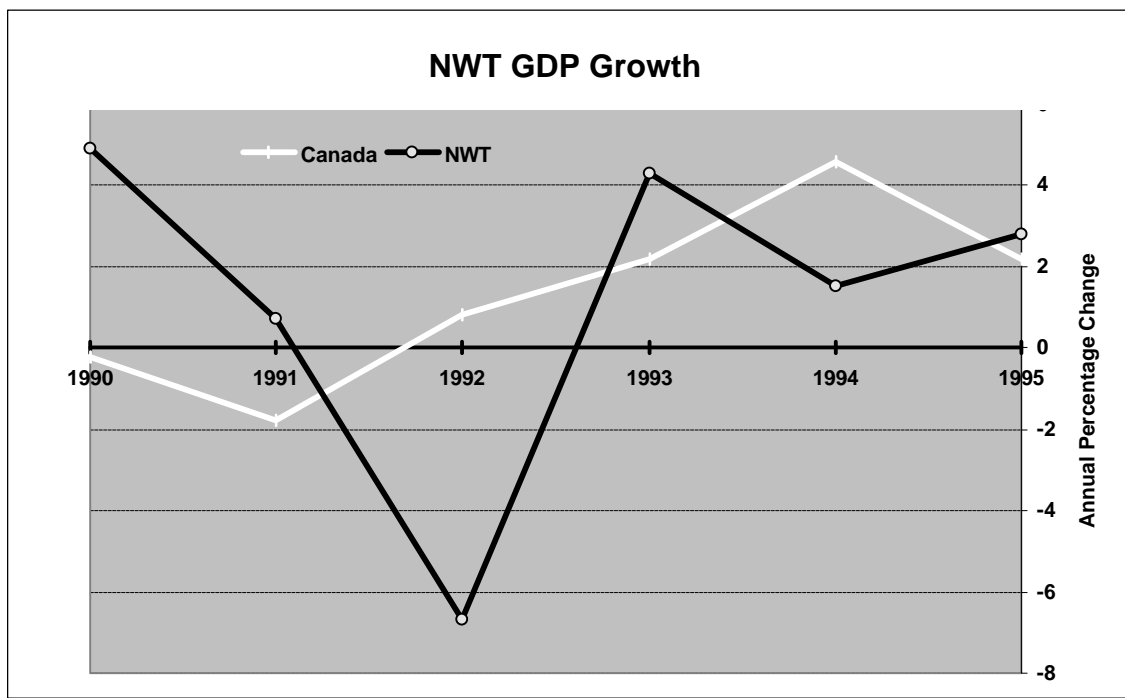
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Recent Economic Performance

Territorial GDP at market prices (measured in constant 1986 dollars) grew by \$50-million, or 2.8%, to reach \$1.806-billion in 1995, exceeding both the 1994 rate of 1.5% and the national rate of 2.2% for 1995.

NWT/Canada GDP at 1986 Market Prices (\$millions)				
Year	NWT	Change	Canada	Change
1995	1,806	2.8%	611,300	2.2%
1994	1,756	1.5%	597,936	4.6%
1993	1,730	4.3%	571,722	2.2%
1992	1,659	6.7%	559,305	0.8%
1991	1,779	0.7%	555,052	1.8%
1990	1,767	4.9%	565,155	0.2%

Source: GNWT Statistics Bureau.



The rise in GDP was largely attributable to a 20% increase in fixed capital investment, which climbed by \$88-million, or almost 20%, coupled with a \$144-million (15%) jump in exports between 1994 and 1995.

GDP Expenditure Components (\$millions)			
Expenditure Components	1995	1994	Change
Personal Expenditures	895	861	3.9%
Government Expenditure on Goods & Services	1,260	1,253	0.6%
Fixed Capital Investment	550	462	19.0%
International & Interprovincial Exports	1,132	988	14.6%
International & Interprovincial Imports	1,518	1,425	6.5%
Net Exports	-386	-437	-11.7%
<i>Source: GNWT Statistics Bureau.</i>			

The growth in GDP was accompanied by a \$60-million (4.4%) increase in labour income and a \$65-million (17.5%) increase in corporate profits.

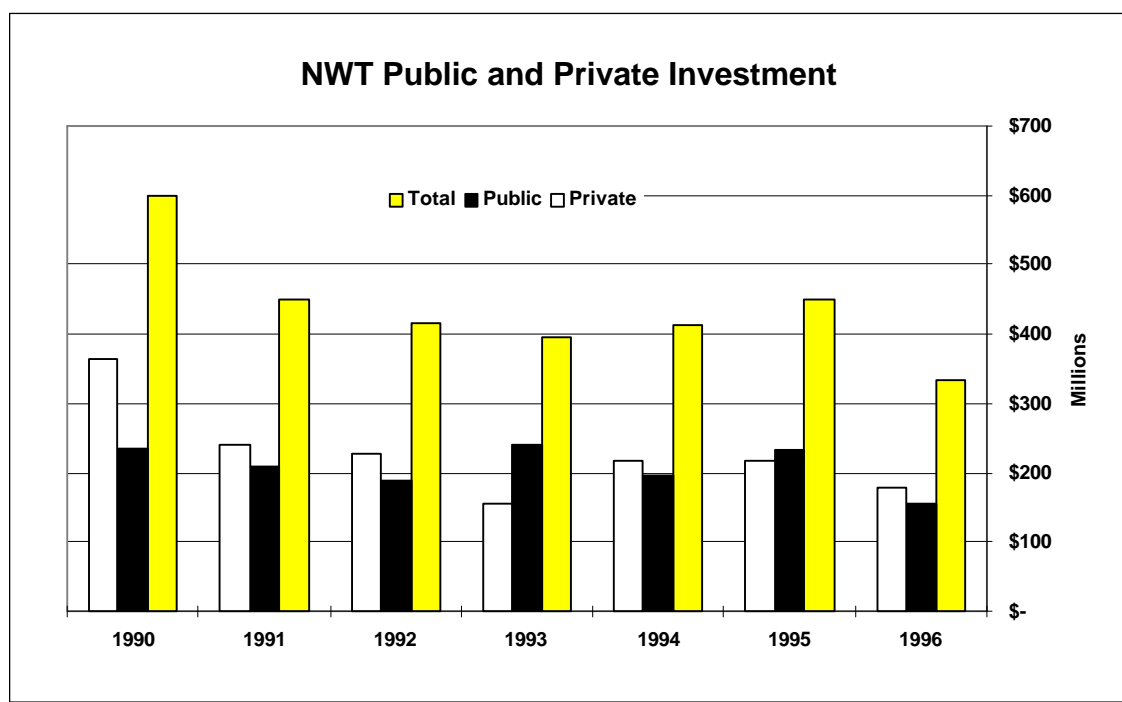
GDP Income Components (\$millions)				
Year	Labour Income	Change	Corporate Profits	Change
1995	1,438	4.4%	436.0	17.5%
1994	1,378	9.0%	371.0	42.1%
1993	1,264	3.3%	261.0	20.8%
1992	1,224	4.2%	216.0	-6.1%
1991	1,175	2.4%	230.0	-39.3%
1990	1,147	7.4%	379.0	-12.1%
<i>Source: GNWT Statistics Bureau</i>				

Public and Private Investment

Total public and private investment grew by \$37.3-million (9%), with the \$38-million (19.6%) increase in public capital expenditures far exceeding the nearly \$1-million (0.4%) decline in private sector investments. However, preliminary estimates suggest these gains were wiped out in 1996, as total capital expenditures plummeted to their lowest level in more than 10 years, and government investment shrank by a third.

Private and Public Investment (\$millions)						
Year	Total	Change	Public	Change	Private	Change
1996	333.5	-25.8%	155.3	-33.5%	178.2	-17.5%
1995	449.4	9.1%	233.5	19.6%	215.9	-0.4%
1994	412.1	4.0%	195.3	-18.7%	216.8	39.1%
1993	396.2	-4.7%	240.3	27.5%	155.9	-31.4%
1992	415.6	-7.5%	188.4	-9.6%	227.2	-5.6%
1991	449.1	-25.2%	208.3	-11.5%	240.8	-34.0%
1990	600.3	-37.9%	235.3	-25.4%	365.0	-44.0%

Source: GNWT Statistics Bureau.



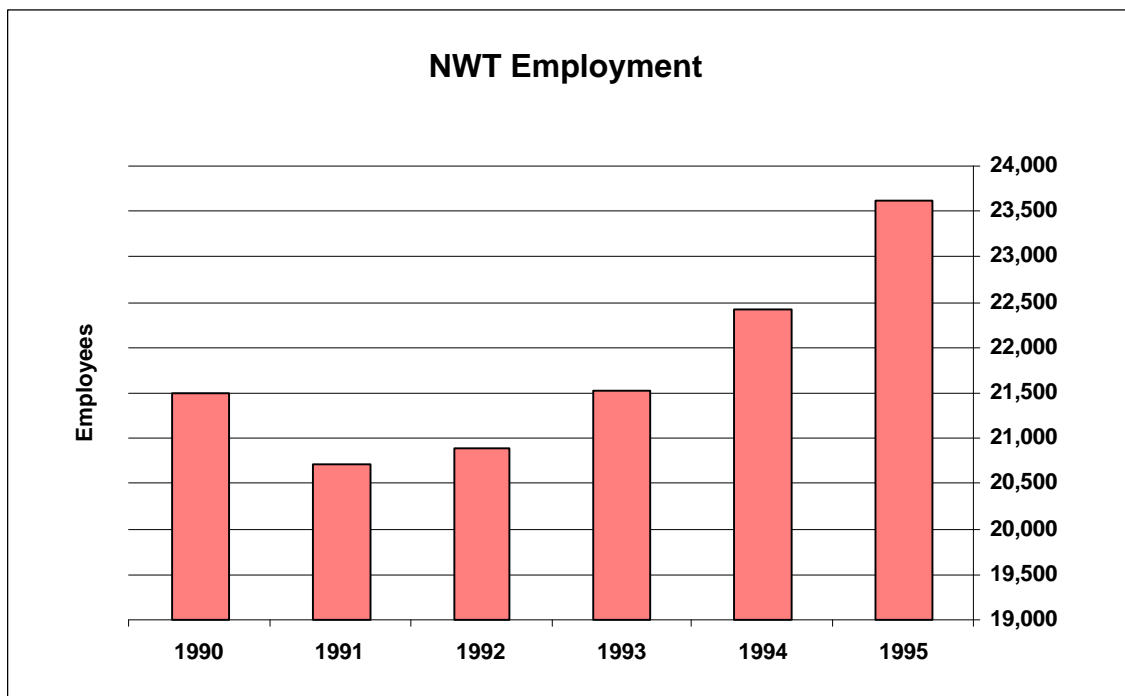
Employment

The pickup in economic activity in 1995 created approximately 1,100 more jobs, an increase of about 5% over 1994, compared with only 2% for the national average. However, as detailed below, employment declined substantially in 1996.

NWT Employment				
Year	* Total Employees	Change	Goods Producing Industries	Service Producing Industries
1995	23,617	5.3%	3,669	19,777
1994	22,430	4.3%	3,512	18,776
1993	21,515	3.0%	3,093	17,978
1992	20,893	0.9%	3,099	17,410
1991	20,702	-3.7%	3,066	17,276
1990	21,508	-0.9%	3,453	17,669

** Total figures include unclassified industries; goods and service do not.*

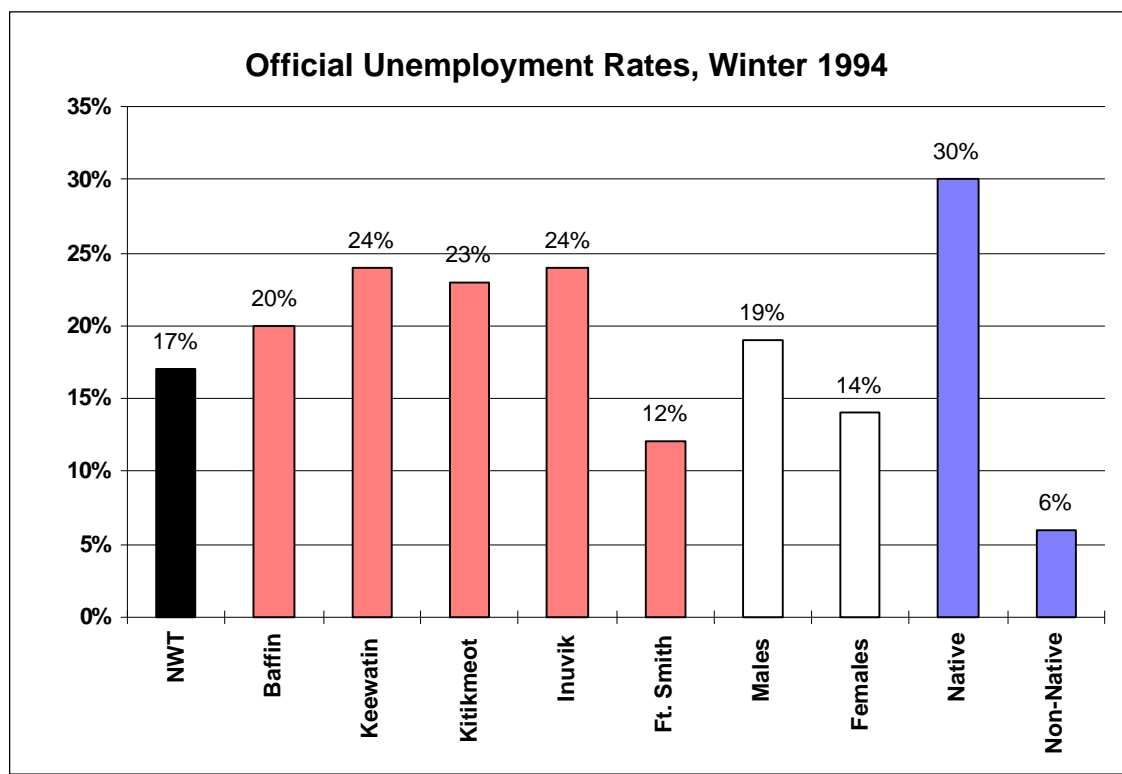
Source: GNWT Statistics Bureau



Unemployment

The number of residents collecting unemployment insurance fell by 117, or 6.3%, in 1995 to 1,728, although the number of beneficiaries in June 1996 was higher than in June 1995.

According to the GNWT Statistics Bureau's Labour Force Survey, the NWT unemployment rate was 17% in the winter of 1994 — 1% higher than it was during the 1989 survey. The 1991 Census found an unemployment rate of 13% during the summer, when more jobs are typically available. There is no cause to believe these rates have changed dramatically since 1994, and in any event they are only the *official* rates. As such, they do not count those who would like to work but who have not actively sought work because they perceive there are no jobs available for them. According to the survey, including this "hidden unemployment" would yield an unemployment rate of more than 21% (although the rate remains 6% for non-natives). In fact, in most communities, even the *official* rate was over 20% and in many cases exceeded 30%.



Income

The NWT continued to have the highest average weekly earnings in the country, currently about \$711 per week versus about \$572 in Canada as a whole.

Average Weekly Earnings (dollars per week)						
Year	Goods	Service	NWT	Change	Canada	Change
1995	901	675	711.0	1.0%	572	0.9%
1994	878	671	704.0	0.1%	567	1.8%
1993	900	670	703.0	-1.4%	557	1.8%
1992	932	675	713.0	1.0%	547	3.4%
1991	992	655	706.0	6.0%	529	4.8%
1990	980	605	666.0	5.0%	505	4.6%

Source: GNWT Statistics Bureau

Of course the cost of living is considerably higher in most of the NWT than in most of the rest of the country — about 35% higher in Yellowknife and more than twice as high in many smaller and more northerly NWT communities. Moreover, inflation in 1995 — 2.9% in Yellowknife versus 2% on average for Canada as a whole — would have more than offset the above gains.

NWT/Canada Inflation and CPI				
	Inflation Rate		Consumer Price Index (1986 = 100)	
Year	Yellowknife	Canada	Yellowknife	Canada
1995	2.9	2.1	132.6	133.5
1994	1.8	0.2	128.9	130.7
1993	1.7	1.8	126.6	130.4
1992	1.1	1.5	124.5	128.1
1991	6.5	5.6	123.2	126.2
1990	4.2	4.8	115.7	119.5

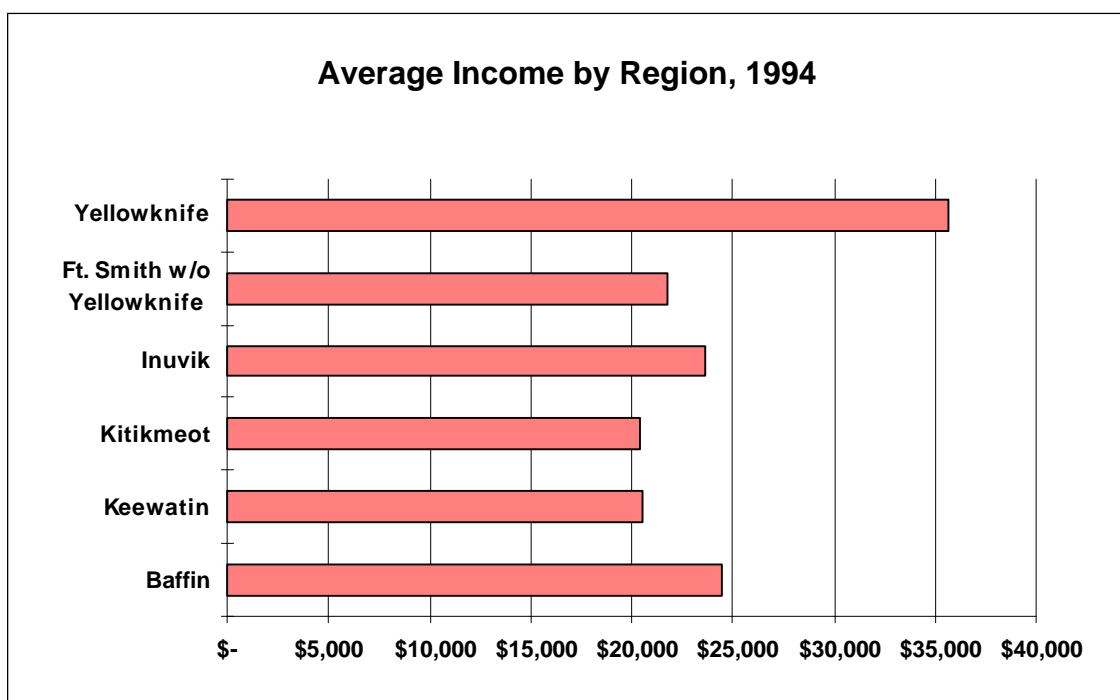
Source: GNWT Statistics Bureau

Average personal income (based on tax returns) grew by 6% in nominal (current dollar) terms, from \$30,723 in 1993 to \$32,611 in 1994 (the latest year for which

figures are available). This compares with a 7.3% increase to \$27,262, on average for the entire country.

Average Income by Region, 1994		
	Average	% of Total
Region	Income (\$)	NWT Income
Northwest Territories	32,611	
Canada	27,262	
Baffin	24,462	16%
Keewatin	20,545	7%
Kitikmeot	20,459	5%
Inuvik	23,584	12%
Ft. Smith w/o Yellowknife	21,742	18%
Yellowknife	35,683	43%

Approximately 58% of taxpayers made an average of \$30,000 or less in 1994, while 42% made more than \$30,000 and 27% made \$10,000 or less while 25% made \$50,000 or more. Regionally, Yellowknife accounted for 43% of total assessed territorial income and had by far the highest average income.

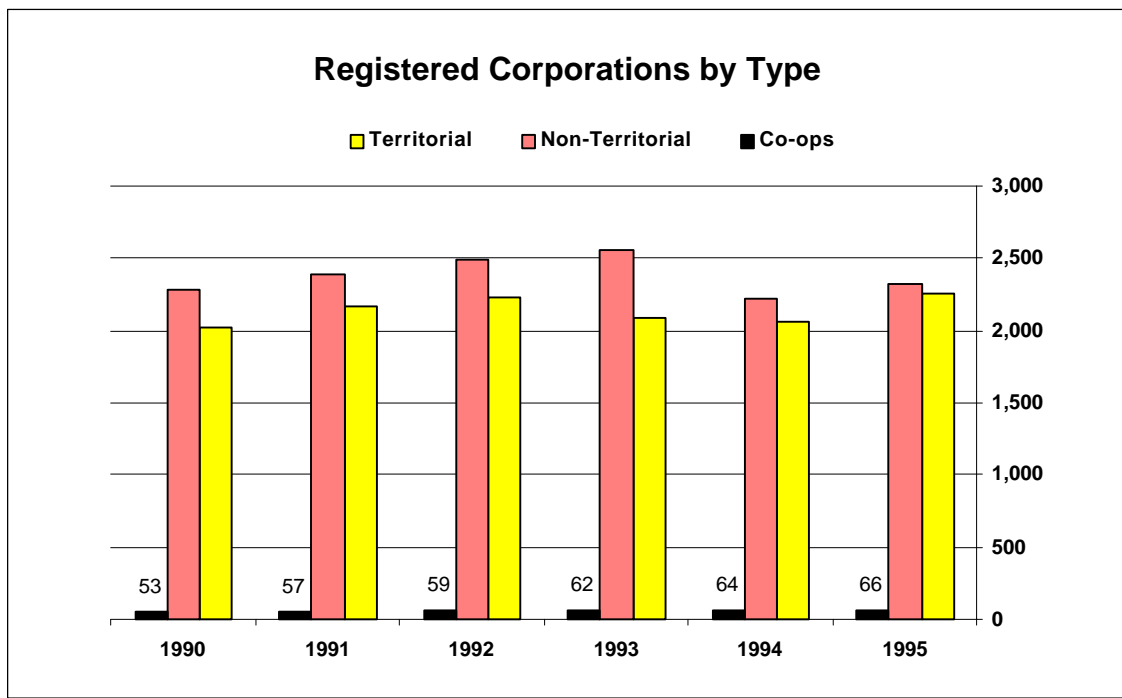


Corporate Activity

The number of corporations registered in the Northwest Territories (excluding societies) grew by 9% to 4,635 in 1995, a gain of 299, of which 192 were territorial and 105 were non-territorial companies. At 2,253, the number of NWT-registered companies was higher than it has been in more than a decade.

Registered Corporations by Type					
Year	Total	Change	Territorial	Non-Territorial	Co-op
1995	4,635	7%	2,253	2,316	66.0
1994	4,336	-8%	2,061	2,211	64.0
1993	4,714	-1%	2,091	2,561	62.0
1992	4,781	4%	2,228	2,494	59.0
1991	4,613	6%	2,167	2,389	57.0
1990	4,359	7%	2,019	2,287	53.0

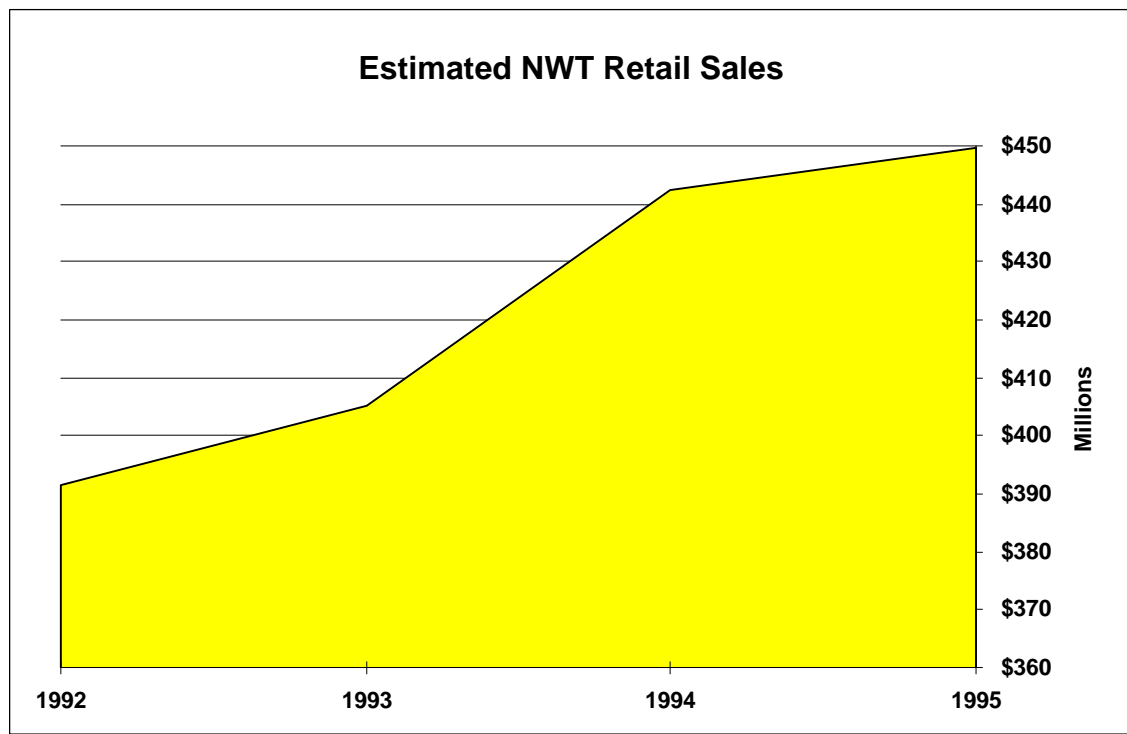
Source: GNWT Statistics Bureau



Retail Sales

Retail sales grew by 2%, i.e. at the same rate as national sales, to reach \$449.7-million in 1995. This gain was not nearly as impressive as the previous year's 9% jump, however total retail sales in October of 1996 were \$3-million (8%) higher than in the same month in 1995.

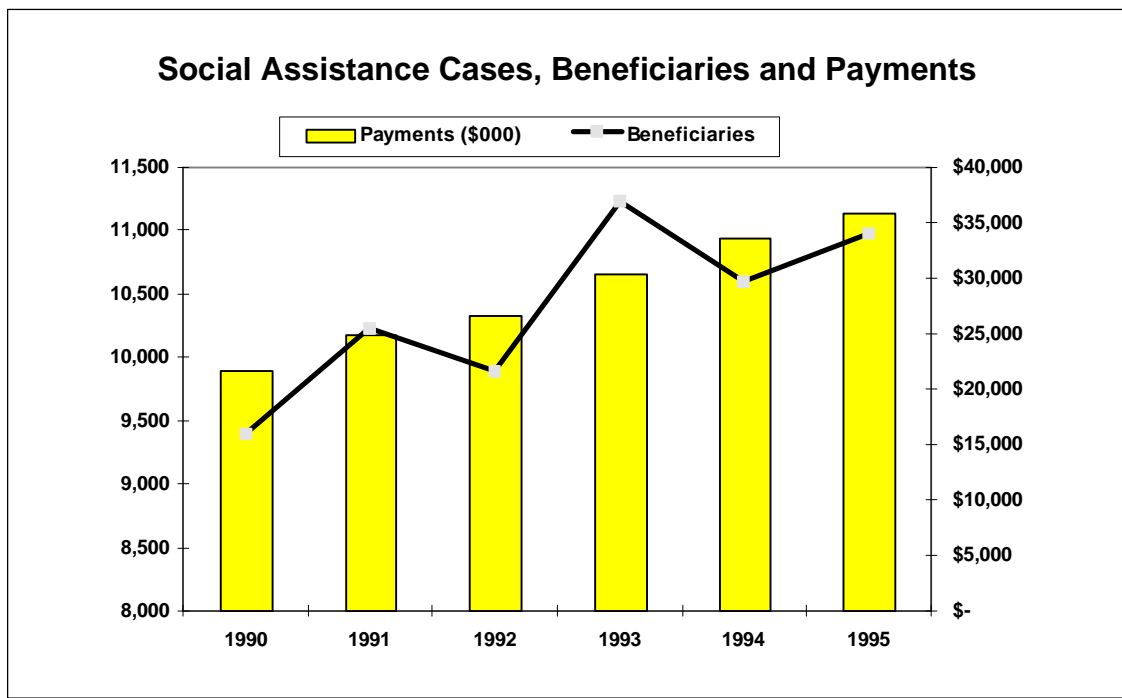
Estimated Retail Sales by Type, 1995 (\$million)		
Group	Sales	% of Total
All Trade Groups	449.6	100%
Supermarkets and Grocery Stores	84.4	19%
Household Furnishings and Appliances	7.1	2%
Recreational & Motor Vehicle Dealers	52.4	12%
Gasoline Service Stations	17.1	4%
Other Semi-Durable Goods	14.8	3%
Other Durable Goods	9.1	2%
Restaurants, Caterers and Taverns	41.6	9%
Other	223.1	50%



Social Assistance

Economic and employment growth in 1995 was not sufficient to offset population growth. Both the number of beneficiaries (claimants and dependents) and the percentage of the population collecting social assistance payments rose, although the latter at 16% was about 1% less than in 1993. The number of cases (claimants) also increased, as did total payments as well as payments per case and per recipient.

Social Assistance Cases, Beneficiaries and Payments					
Year	Cases	Change	Beneficiaries	% Population	Payments (\$)
1995	4,639	5.4%	10,975	16.6%	35,879,000
1994	4,403	3.9%	10,601	16.3%	33,482,000
1993	4,238	8.4%	11,228	17.5%	30,335,000
1992	3,911	6.0%	9,889	15.7%	26,670,000
1991	3,688	11.5%	10,224	17.8%	24,804,000
1990	3,308	5.3%	9,394	16.5%	21,647,000



Sector Review

Mining

NWT mines employ nearly 2,000 people directly (about 1,200 of whom are territorial residents) and approximately another 2,000 indirectly, thus accounting for about 17% of total employment and 22% of private sector employment. With average annual wages over \$65,000, i.e. \$15,000 (30%) more than the national industry average, direct mining wages alone constitutes close to 10% of labour income. In addition, mines and exploration companies collectively purchase several millions of dollars annually in goods and services in the NWT, and pay governments many millions in taxes and royalties.

The total value of metal mineral shipments from the NWT's six gold mines and two lead-zinc mines rose by 7% to nearly \$520-million in 1995. The total volume of gold, zinc and silver shipments increased as well, while lead shipments declined. The increase in gold production was first since 1991.

Value and Volume of Metal Mineral Shipments						
	Value		Gold	Zinc	Lead	Silver
Year	(\$000)	Change	(kg)	(tonnes)	(tonnes)	(tonnes)
1995	519,740	7%	13,758	178,965	31,542	18.0
1994	485,337	24%	13,140	171,840	34,126	17.0
1993	392,456	-16%	13,205	143,521	29,178	11.0
1992	468,506	-2%	13,518	171,481	39,141	16.0
1991	477,572	-32%	16,752	173,154	35,388	17.0
1990	703,833	-25%	15,557	218,241	46,588	19.0

Source: GNWT Statistics Bureau.

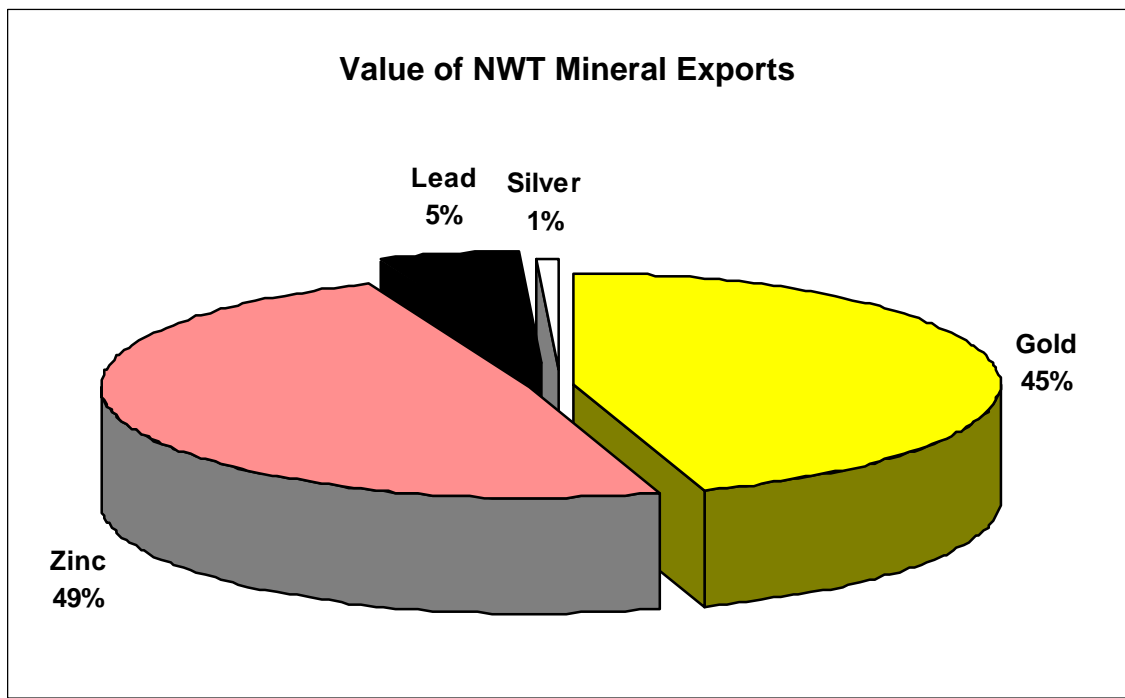
NWT mines produced roughly 9% of Canada's gold in 1995, 16% of its zinc and lead, and 1.5% of its silver. The NWT ranked second among the provinces and territories in the production of zinc, third in lead, and fourth in gold.

Miramar Mining Corporation's underground **Con** mine (Yellowknife) produced a record 4,242 kg of gold in 1995 (a 9% increase over 1994) and employed about 395. The company completed expansion of its Bluefish hydro plant to double capacity, although low water levels precluded full operation in 1995. The NWT's oldest mine has been in operation since the 1930s. Known reserves today suggest the mine will be in operation for at least another five years and quite possibly much longer. The company has explored less than a quarter of its property's surface, and recent exploration results have been very promising. As well, modern technology has allowed the mine to resume extracting a type of ore it was forced to abandon some 25 years ago.

Of course, the lifespan of this and all other gold mines ultimately depends on the volatile world price of gold, which dropped substantially in 1996.

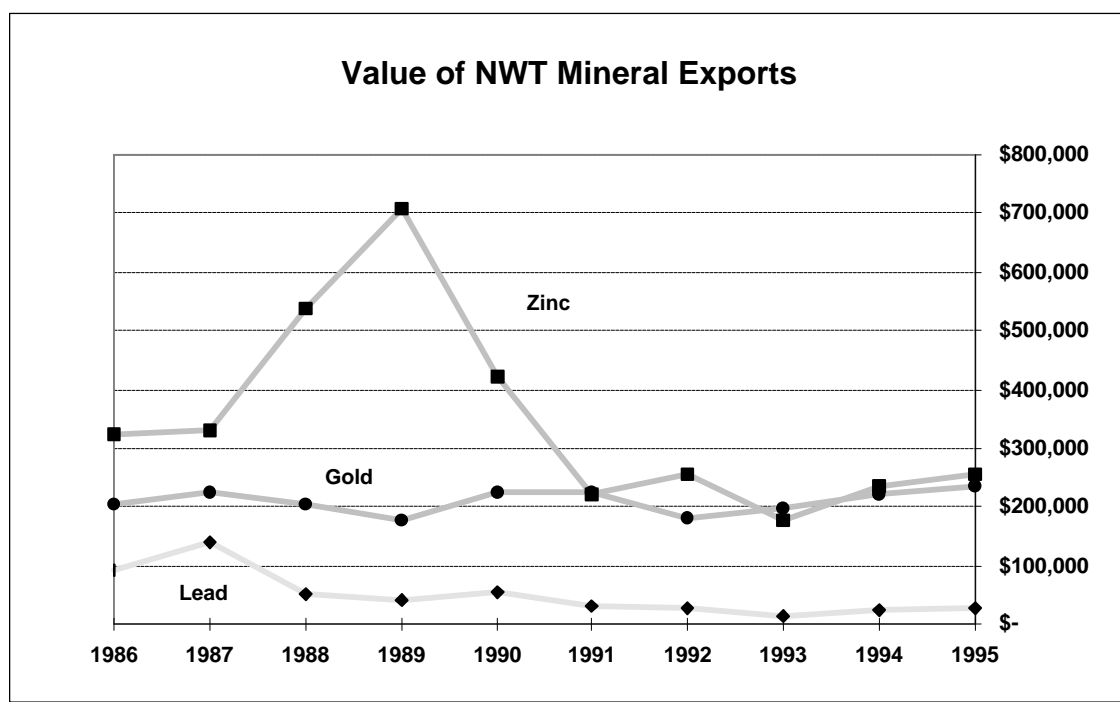
Royal Oak's underground **Giant** mine (Yellowknife) produced 3,845 kg of gold in 1995 (a 22% increase) and employed about 300. The mine has been in operation since the late 1940s. Additional production from a nearby deposit has increased minable reserves by 25%, however industry observers expect the mine will be forced to close within next the few years (depending, again, on prices).

Royal Oak's open pit **Colomac** mine (200 km north of Yellowknife) resumed operations in 1994, reaching full production in 1995 to mine 4,659 kg of gold. It



employs about 240 workers on multi-week, fly-in, fly-out rotational shifts. The company has acquired some nearby satellite deposits, but reserves are still limited, and barring any unexpected significant discoveries, the mine will probably close within the next few years. However, the company recently purchased Athabaska Gold's Nicholas Lake project (about 100 km north of Yellowknife) from which Athabaska had proposed to produce 40,000 oz a year for at least five years and perhaps as many as 20.

Echo Bay Mines Ltd.'s underground **Lupin** mine (500 km north of Yellowknife) produced 5,797 kg of gold in 1995 (a 14% decrease). The world's most northerly gold mine outside of Russia, and once Canada's fifth largest gold producer, employs about 450 fly-in workers on multi-week rotational shifts. Every year since production began in 1982, the company has built a 665-km ice road from Yellowknife for annual resupply between January and March. The mine has almost exhausted its economic reserves, but is milling ore from a small satellite deposit and is evaluating the feasibility of other similar open pit sites. As well, Echo Bay has plans to begin mining the recently acquired Ulu property (160 km to the north) in 1997. The ore will be processed at Lupin, probably for about five years, or perhaps as many as 10.



Treminco Resources Ltd.'s small **Ptarmigan** and **Tom** mines (just east of Yellowknife) produced about 132 kg of gold in 1995 (an 22% increase) and employed about 15. Known reserves at these deposits, and a third one between the two, are nearly exhausted, but the company is hoping to attract sufficient financing for a diamond drill program to expand reserves.

Ger-Mac Contracting Ltd.'s **Mon** mine (50 km north of Yellowknife) is strictly a tiny seasonal operation which produced 6 kg of gold in June-November 1995 (a 22% increase) and employed about 10.

Breakwater Resources Ltd.'s **Nanisivik** mine (north Baffin) produced 97,000 tonnes of zinc concentrate in 1995 (an 85% increase) and 600 tonnes of lead concentrate. It employs about 190 workers mostly on fly-in, fly-out rotation, although some are permanent residents of the \$50-million townsite, which unlike other remote territorial mining locales, has detached housing, a school, health facilities and police service, etc. The company ships stockpiled concentrate to Europe in summer. The mine had been expected to close several years ago, but has so far managed to find sufficient economic reserves to continue production, and drilling in 1996 led to a significant increase in ore reserves. Still, closure is expected within the next five years or so, at which time the municipal infrastructure, jet airport and deep-sea dock could be put to other economic uses.

The **Polaris** mine (Little Cornwallis Island) owned jointly by Cominco Ltd. and Teck Corp. produced more than 225,000 tonnes of zinc concentrate in 1995 (a 76% increase) and 45,000 tonnes of lead concentrate (a 32% increase). The mine employs about 285 fly-in workers on multi-week rotational shifts. The world's most northerly base metal mine began production in 1982, stockpiling its year-round production for shipment to Europe in summer. Cominco has announced it expects to shut down by 2001. Most of the mine's infrastructure — including concentrator, powerhouse, shops, warehouse, changing rooms and offices — were barged to the site initially, and will likely be removed by ocean tugs on closure.

Fortunately there are several promising new developments lined up to offset the negative economic repercussions of these eventual closures, at least from a territorial-wide perspective. The BHP Diamonds Inc. (an affiliate of Broken Hill Properties Pty of Australia) and Blackwater Group (Vancouver) joint venture received government approval in November 1996 to proceed with development of North America's first diamond mine at Lac de Gras, 300 km north of Yellowknife,

where Charles Fipke found diamond-bearing kimberlite in 1991. The \$750-million project is scheduled to begin mining five kimberlite pipes over 25 years in 1999 at a rate of 9,000 tonnes a day, rising to 18,000 tonnes in the tenth year. The five initial pipes could ultimately be worth US\$11-billion and two other potentially economic nearby pipes could add another US\$2-billion; future exploration work might well reveal more. Annual revenues from the open pit operation are projected to range between \$400- and 500-million per year for most of the duration of the project. The company expects to pay 1,000 workers (17% northern) a total of nearly \$32-million during the two-year construction period, and employ an average of 830 during operations, about two-thirds (550) of whom would be northerners. According to BHP's Environmental Impact Statement, coupled with the estimated 640 additional indirect and induced jobs, this would boost northern payrolls by some \$39-million annually and raise average earned income by up to 40%. Further, it would reduce unemployment by about 3% (1.4% during construction) for the NWT as a whole, and as much as 10% in aboriginal communities. In addition, BHP will spend an average of approximately \$57-million on goods and services to the year 2000: \$36-million in Yellowknife, \$18-million in Hay River, \$2-million in Dogrib communities and \$1-million in Kugluktuk (Coppermine). Total capital expenditures are projected at \$1.2-billion, and BHP estimates the operation will increase Canadian GDP by \$6.2-billion over the 25 years, with \$2.5-billion of this accruing to the NWT. Approximately 60% of this would be in the form of wages and benefits, and Canadian governments would collect approximately \$2.5-billion in revenues. The company calculates that the federal and territorial governments together will reap one dollar in economic benefits for every nickel incurred for project-related physical and social infrastructure costs.

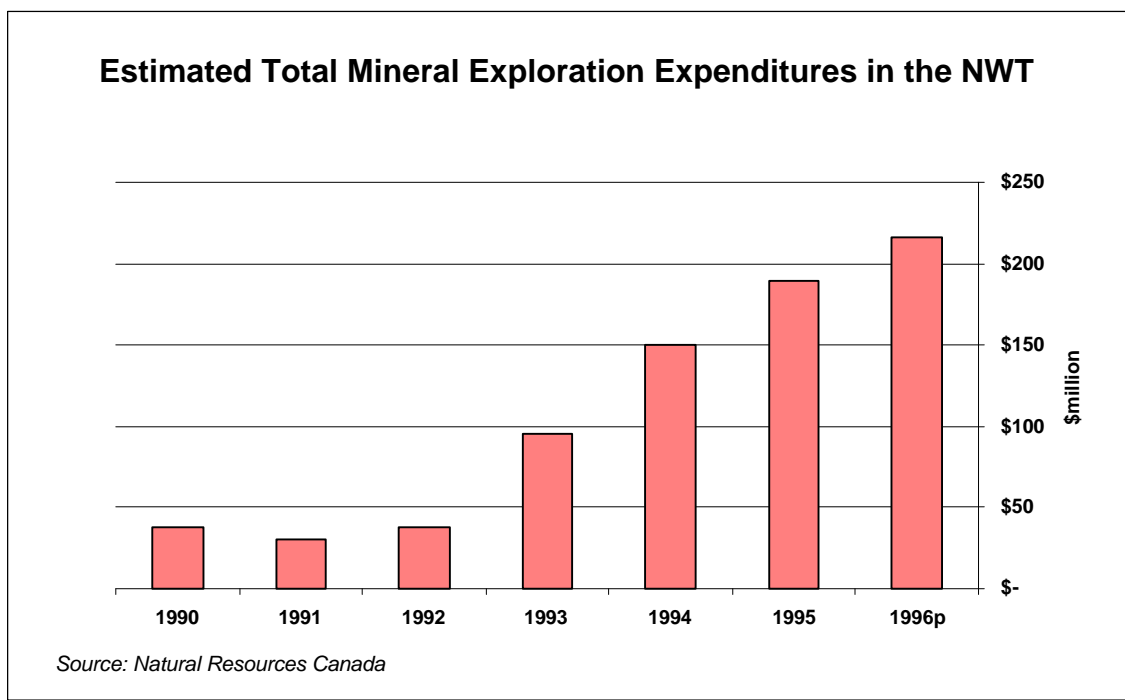
Owners of the adjacent Diavik property — Kennecott Canada Inc. (a subsidiary of the RTZ Corporation of Britain) and Aber Resources Ltd. (Vancouver) — are virtually certain to begin mining four diamondeiferous kimberlites within the next five years. Three of these pipes are said to be among the richest in the world, and Kennecott estimates the value of the Diavik field to be about the same as BHP's, but for a number of reasons development costs would be less. Barring highly unlikely negative final test results and/or unexpected regulatory delays, construction is expected to begin in 1999 and production to commence by 2001. The open pit project would employ 350 permanent workers at an average wage of about \$50,000.

Mineral Exploration

Mineral exploration expenditures in the NWT have climbed steadily and dramatically since Fipke's discovery in 1991, reaching an all-time high of \$189-million in 1995, and Natural Resources Canada projects they will surpass \$200-million for 1996. Although only a portion of this expenditure is actually spent in the NWT, the percentage has grown in recent years — to at least \$80-million in 1994, for example — and is expected to continue growing as the territorial mine-service industry expands.

The exploration companies collectively employ at least 300 northerners on seasonal basis. For example, 170 of the workers at BHP's Koala Camp in 1994 were NWT residents, and Diavik's crew included 70 in 1996. To date, BHP has spent \$75-million (approximately 30% of the \$256-million total) in the NWT, including \$20-million for contractors, \$13-million for labour, \$11.5-million for air services and \$10-million for fuel.

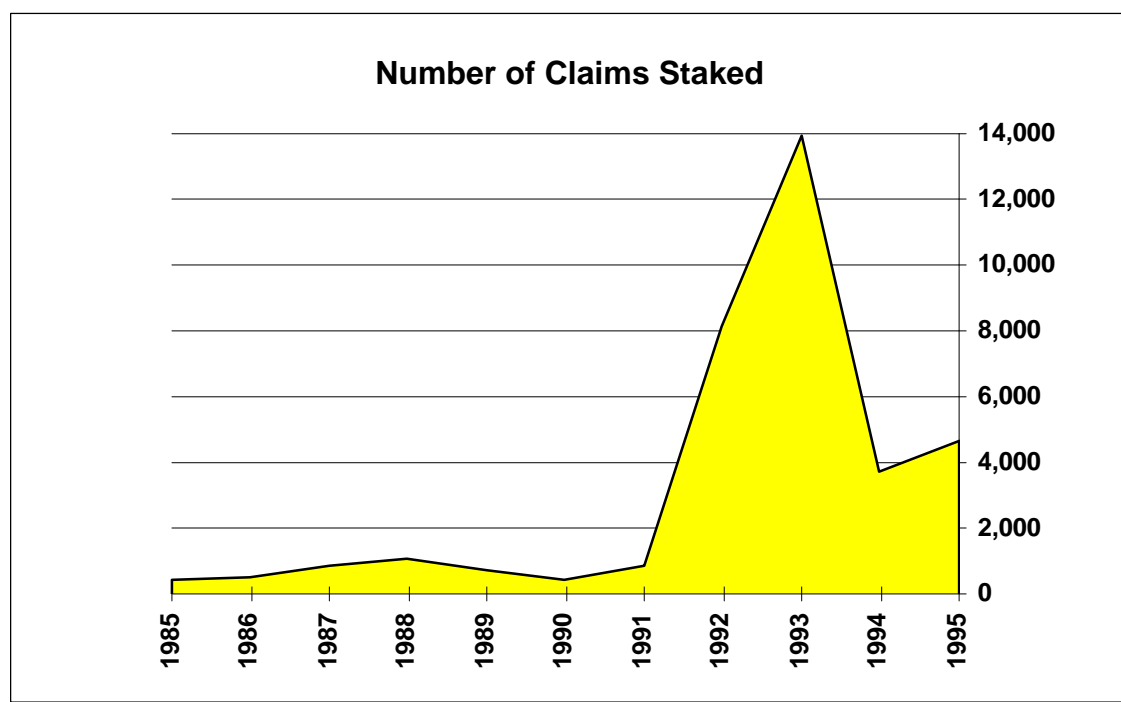
The focus of exploration has shifted from the intense rush to stake new claims in 1992 and 93 to more drilling and geophysical work on existing properties. So although there were 20% more claims staked in 1995 — 4,654 on 3.9-million ha vs 3,707 on 2.9 ha in 1994 — this was far less than the 13,903 (6.9 ha) in 1993 and 8,130 (6.9 ha) in 1992. Accordingly, the ratio of advanced to basic exploration



work has increased substantially, and there were fewer prospects under evaluation — 306 in 1995 vs 737 in 1994 — but more than twice as many were drilled in 1995 (202) than in 1994 (100). There were 18,150 claims in good standing covering more than 15-million ha in April 1996.

Not surprisingly, much of this exploration activity was concentrated on diamonds and in the so-called “Corridor of Hope” surrounding Lac de Gras, however several companies are working on promising deposits of both gold and base metals in many other regions of the NWT. According to DIAND, there were at least 119 exploration projects underway in the NWT in 1996, including seven high-cost underground exploration programs: three for diamonds (BHP, Diavik and Jericho) and four for gold (Boston, Discovery, Ulu and Damoti Lake).

In the Slave Province, Lytton Minerals Ltd. and New Indigo Resources are studying the feasibility of mining the Jericho diamond-bearing pipes at Contwoyto Lake near Lupin (about 250 miles northeast of Yellowknife). Known deposits are smaller than BHP’s or Diavik’s but tests suggest diamond values similar to those produced at several South African mines, and more discoveries are expected. Moreover the property would be easier, faster and cheaper to develop because there is no need to drain lakes and ore could be trucked to Lupin for processing, thus negating the need to construct new facilities.



Mountain Province Mining, Glenmore Highlands and Camphore Ventures have had very encouraging results at their AK property (about 155 miles northeast of Yellowknife). Tests have yielded a high number of diamonds, and what might yet prove to be the richest kimberlite pipe in the NWT. Drilling suggests a preliminary resource estimate of 12-million tonnes. The company is discussing a partnership with a major mining company to share development costs.

Cypango Ventures Ltd. and joint venture partners Tanqueray Resources Ltd. and Mill City Gold Mining Corp. have found five diamondiferous kimberlite pipes on their Yamba Lake property, close to the BHP deposit.

Ashton Mining Ltd. (of Australia) has discovered 12 kimberlite pipes in the Slave Craton. The company is also looking for gems in both the Mackenzie District and on Victoria Island.

Tradewinds has found the largest pipe yet in the territories near Dry Bones Bay on Great Slave Lake (50 km southeast of Yellowknife). This is well outside the "Corridor of Hope" but being closer to Yellowknife it is more favourably located from an economic standpoint. The 25-30 hectare pipe contains some diamonds but only a small portion has been tested to date.

As for gold exploration, GMD Resource Corp. and New Discovery Mines Ltd. hope to reactivate the old Discovery Mine (85 km north of Yellowknife) which produced a million ounces of gold between 1950 and 1969. Recent drilling results on previously unrecognized deposits indicate possible reserves of 10-million ounces of gold or more, which would make the open-pit mine one of the largest in North America. The ore is similar to that found at the Con and Giant mines, which together have produced a total of more than 13-million ounces of gold over their exceptionally long lifespans. A feasibility study is underway and production could begin in 1997 or 98.

Elsewhere in the Slave Province, BHP's Boston project in the Hope Bay Volcanic Belt 100 km northeast of Bathurst Inlet (700 km northeast of Yellowknife) has undergone an underground bulk sampling program, and the company has commenced drilling on a similar deposit at Windy Lake 50 km to the north.

Arauco Resources Corp. is holding talks with the Kitikmeot Corporation about plans to develop six gold properties near George Lake and Black River, about 70

km south of Bathurst Inlet. The deposits hold potential resources of approximately 2-million ounces. Arauco hopes to launch a feasibility study this year.

Consolidated Ramrod Gold Corporation, Athabaska Gold and Gitennes Resources Inc. have discovered an estimated 600,000 ounces of gold in Damoti Lake area (approximately 180 km north of Yellowknife) close to Royal Oak's Colomac mine.

Fortune Minerals Ltd. and others are exploring around Lou Lake (150 km north of Yellowknife) for copper-gold-silver-uranium deposits similar to those found at a 2-billion tonne mine in Australia, and have uncovered significant results to date. The targets are close to both an existing winter road and the Snare Lake hydro complex.

Rhonda Mining Corp. and Noranda Mining and Exploration Inc. have reported encouraging test results on lead-zinc-silver properties 120 km southeast of Kugluktuk (Coppermine).

Darnley Bay Resources Ltd. entered into a joint venture with the Inuvialuit Regional Corporation in 1995 to explore the Darnley Bay for nickle, copper and platinum.

At Prairie Creek near Nahanni Butte, San Andreas Resources has had very successful drilling results on one of the largest and highest-grade lead-zinc deposits in the world. The property already has \$100-million worth of infrastructure left by Cadillac Resources, which abandoned the site in the 1980s when the price of silver collapsed. The company has signed a benefits negotiations with the Nahanni Butte Dene Band regarding a potential 10-year mine that could open before 2000, although feasibility will depend to a large extent on the cost of improving the access road to accommodate truck loads of 1,200 tonnes per day. The mine would require about 250 employees, and would also be a boon to Fort Liard and Fort Simpson economies.

In the Keewatin, Cumberland Resources Ltd. and Comaplex Minerals Corp. have encountered promising gold prospects on their Meliadine property 15 km northwest of Rankin Inlet and on their Meadowbank property 50 km north of Baker Lake. Uranium exploration is also continuing at a steady pace in the Baker Lake area.

In the Baffin, Cominco and several other companies are exploring for nickel and other base metals on the Meta Incognita Peninsula on the southeast corner of the island. International Capri Resources Ltd. has discovered a lead-zinc deposit on the Cumberland Peninsula, near Pangnirtung and Broughton Island. As well, Ascot Resources Ltd. and Monopros are looking for diamonds on Victoria Island, while BHP tests for base metals on Little Cornwallis Island.

Mining Sector Outlook

The NWT attracted the largest share of mineral exploration expenditures of any jurisdiction in Canada in 1995, for the second consecutive year, and was probably first again in 1996. The prime impetus, of course, was the discovery of diamonds in 1991, which triggered one of the most intense searches for kimberlites the world has ever seen. But the frantic claim-staking activity also uncovered other potentially “world class” deposits of precious and base metals. According to NWT Chamber of Mines General Manager Mike Vaydik, it would not be unrealistic to anticipate the arrival of four new mines in the near future, in addition to the BHP/Blackwater and Kennecott/Aber ventures.

Of course, the scale and pace of development will be determined by the size and grade of ore deposits, the world price of minerals, and the cost of extracting and transporting them to market.

With respect to diamonds, NWT gems are as good or better than those mined elsewhere. BHP's, for example, are comparable with the best stones found in the top 10 pipes anywhere. Moreover, the forces of supply and demand weigh heavily in the north's favour. Of the 4,000 known kimberlite pipes in the world, only 60 have enough diamonds to make mining economically viable, and only 15 of those support major diamond producers. With the expected decline in production at mines in Africa and Russia, world supply is expected to slump towards the end of the century. Meanwhile, global demand is growing, and has intensified over the last two decades, especially in Japan, Southeast Asia and China.

Prospects for the development of new gold mines — and chances for survival of existing mines — are far less certain because they depend on the notoriously volatile world price of gold. That price recently crashed through the “key support level” of \$350US an ounce, from a high last year of more than US\$400, largely as a result of some European countries selling off massive amounts of gold reserves in an effort to cut their deficits to levels that will permit their entry into the European Monetary Union. The cost of production at both the Giant and Con mines is around \$330 an ounce, so they won't last long if the downward price trend continues. For the same reason, any new mines would have to be based on deposits rich enough to render production economic in the face of possible price declines. As well, increases in the value of the Canadian dollar (and hence NWT export prices) would further strain commercial viability.

Base metal prices are also prone to price fluctuations, but development of new mines confront yet another common hurdle in the north: lack of infrastructure. Gold bricks can be profitably flown to market, but lead, zinc and copper, etc. must be shipped in bulk, and that requires access to suitable roads and/or ice-free waters. So, for example, while Metall Mining Corporation's Izok Lake zinc-copper-lead-silver deposit, located about 270 km south of Kugluktuk (Coppermine), is the largest undeveloped lead-zinc deposit in North America, with grades twice as high as those of the former Pine Point mine, it will remain untapped until there is a road connecting the minesite to a deep-sea port on the Coronation Gulf. Similarly, known deposits such as Hackett River and George Lake will require improved infrastructure to render development economic. At the moment it would not be commercially feasible to develop the needed infrastructure without government financial assistance, and debt-ridden governments are not likely to put up the capital any time soon (as they could and did for Nanisivik in the late 1970s). However, there is a distinct possibility that a few more mineral discoveries in the area would render a road and port commercially viable. In fact, Arauco Resources' six prospective gold properties near Bathurst Inlet have revived talk of building a road to the Gulf.

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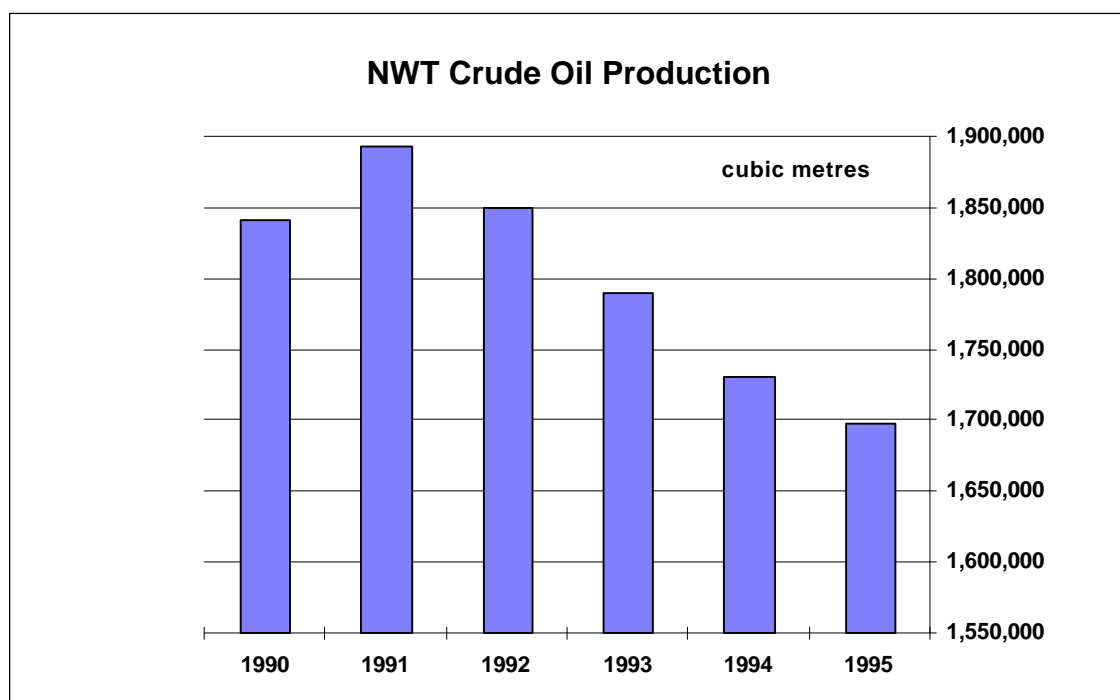
Petroleum

The value of crude oil shipments rose by 18.4% in 1995, while the value of natural gas exports slumped by 5.7%, for a total petroleum increase of 17.1%.

Value of Crude Oil and Natural Gas Shipments (\$000)						
Year	Total	Change	Oil	Change	Gas	Change
1995	215,216	17.1%	205,601	18.4%	9,615	-5.7%
1994	183,863	4.5%	173,669	5.1%	10,19	-5.2%
1993	175,968	-10.4%	165,219	-12.0%	10,74	23.7%
1992	196,339	-6.9%	187,651	-7.2%	8,688	0.1%
1991	211,001	-17.0%	202,318	-18.3%	8,683	30.8%
1990	254,362	36.9%	247,723	39.1%	6,639	-13.8%

Source: GNWT Statistics Bureau

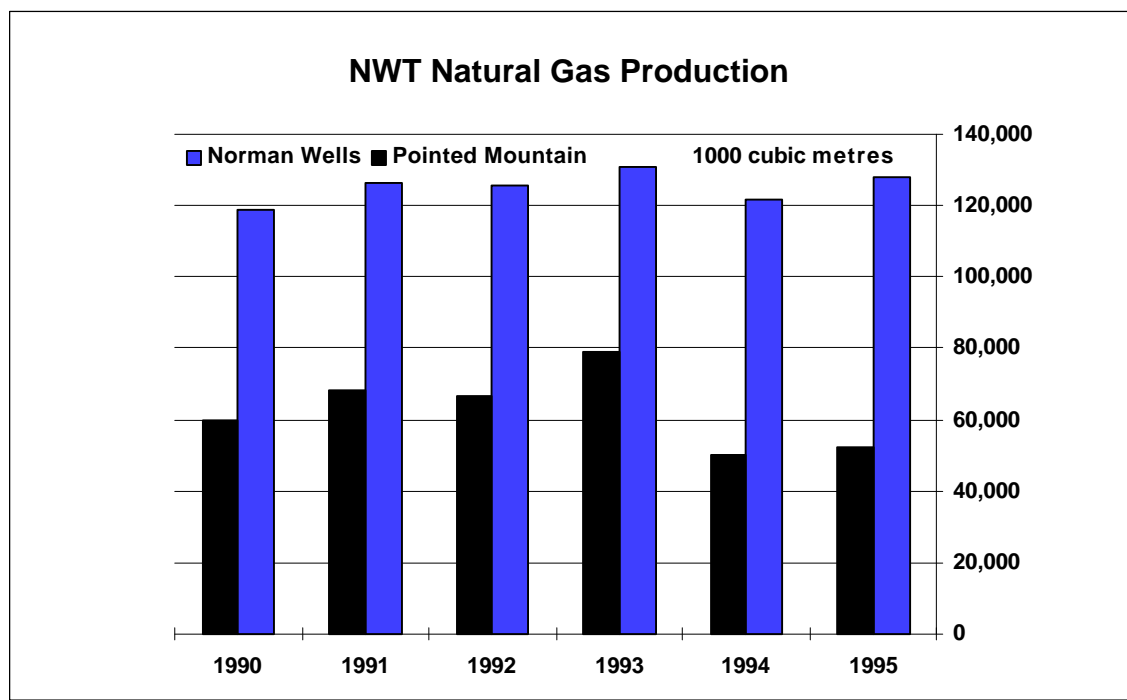
Imperial Oil Resources Ltd. decided to close its Norman Wells refinery in 1996 because it was much cheaper to pipe oil to its Strathcona plant and import refined product back into the NWT than to supply directly from the Wells. The closure eliminated approximately 20 direct jobs, although most of them were held by non-residents. The company and its contractors still employ about 100 NWT residents in production and exploration activities.



The Liard area is already an important part of western Canada's natural gas supply. Discovered in 1967, Amoco's Pointed Mountain gas field has been shipping natural gas since 1972. Today, the Westcoast pipeline carries about 50-million cubic feet of gas per day to Fort Nelson, B.C. for processing. Meanwhile, Paramount and others are undertaking staged development of the Cameron Hills oil field.

To the east, in High Arctic Islands, Panarctic continued shipping one tanker load of high-quality light oil from the Bent Horn field on Cameron Island in summer, as it has done annually since 1985.

Petroleum exploration in the NWT came to an abrupt halt in the early 1980s for a number of reasons. The federal government discontinued its generous Petroleum Incentive Program (PIP) grants as world oil prices collapsed — from more than \$US30 per barrel (of West Texas Intermediate crude) to less than US\$20 today — and DIAND ceased issuing new or renewal exploration permits following the Berger Inquiry in 1976, to allow time for land claims settlements. However, in 1994, DIAND invited industry bids for exploration licences in both the Mackenzie Valley near Norman Wells, where claims have been settled with the Sahtu and Gwich'in, and in the Liard Valley. Although the Deh Cho claim has yet to be settled, individual bands are free to open their lands for exploration, and Fort Liard chose to do so.



The petroleum industry had already become bullish on the northern provinces and hence also the Yukon, because the lands extending north of 60 from the Alberta border to the Beaufort Sea are a geological continuation of the oil and gas-rich Western Canada Sedimentary Basin. As such, they have significant potential for future hydrocarbon discoveries, compared with the dwindling possibilities for major finds in the more mature (i.e. heavily explored) areas further south in the provinces. Limited exploration in the Liard Valley to date indicates potential for discoveries in the area are comparable to those in adjacent areas of Alberta, which is to say the potential is substantial. Likewise, in the Mackenzie Valley, Esso's Norman Wells oil field is Canada's fourth largest producing field in terms of remaining reserves, and estimated ultimate recoverable reserves are 37.5-million cubic metres.

Encouraged by this huge potential, the sheer size of properties available for exploration, attractive bidding terms and royalty rates, ample capacity in two existing pipeline systems and, not least, greater certainty of land tenure, companies responded in droves to several DIAND calls for bids. By 1996, Ranger, Unocal Canada Exploration, Foxboro, Amoco Canada, Chevron, Ocelot, Paramount, Shell, Canadian 88, Grand River, Husky, Murphy and Norcen had committed a total of \$56-million for 21 exploration licences covering a total of 834,233 ha of land in these two areas. (An exploration license grants exclusive right to drill and test for petroleum, develop resources and obtain a production license on the parcel of land in question.)

Petroleum Exploration Company Commitments			
	Total to Date	1996	1995
Liard Valley			
Parcels offered	27	8	8
Licences issued	14	6	8
Hectares	295,257	145,257	150,000
Expenditure commitment	43,017,131	20,317,131	22,700,000
Mackenzie Valley			
Parcels offered	21	5	5
Licences issued	7	5	2
Hectares	538,976	375,087	163,889
<i>Source: Northern Oil & Gas Bulletin, DIAND</i>			

As well, another 11 parcels of land will be up for bids in each area for 1997, and DIAND officials are confident they will be greeted with similar industry enthusiasm.

Detailed employment figures are not available, but it would be safe to say all of this exploration work has created at least 200 seasonal jobs.

Although Inuvik is located close to over a billion barrels of discovered oil and 10 trillion cubic feet of gas, diesel fuel is still transported from Edmonton to generate power for the community. The Inuvialuit Petroleum Corporation plans to spend \$1.5-million, and create up to 30 jobs, testing the feasibility of developing the nearby Ikhil K35 oil well. If preliminary estimates of recoverable gas are confirmed as reserves; if the resulting oil can compete in price with diesel fuel; and if the project receives regulatory approval, the Ikhil pool could supply the community for some 25 years.

Petroleum Sector Outlook

Exploration in the NWT is stail at a relatively very early stage. Fewer than 1,500 wells have been drilled to date in the North, compared with 150,000 in Alberta, and yet there have been eight gas discoveries near Fort Liard alone. Because the Southern Mackenzie Valley is comparable in potential to the prolific Alberta foothills, industry analysts expect further exploration will uncover pools larger than 50-billion cubic feet. The Westcoast pipeline already has 20% excess capacity and the Fort Nelson refinery could handle significant volume increases from new fields. Likewise, there is about 40% capacity available in the Interprovincial's oil pipeline from Norman Wells to the system in northern Alberta. The capacity in both lines will only grow as production from current wells declines.

All of this bodes well for future petroleum development in the NWT. The potential gas resource is large by any standard, and excess capacity in existing pipelines greatly enhances economic potential. Moreover, exploration costs in the southern NWT are only 10-15% higher than in northern Alberta and British Columbia, while the bidding terms and royalty rates are more generous. In fact, according to DIAND, the profit-sensitive nature of the northern royalty regime for oil and gas — and mining — makes it one of the most competitive in the world. Of course, future development will be dictated by market forces, but the recent firming of prices in the eastern United States augurs well for growth in exports from western Canada, as does an expected expansion in western Canada's petrochemical industry. A 1996 study by the Canadian Energy Research Institute calculated that the petroleum exploration and development in the Southern Mackenzie Valley alone could increase territorial GDP by between \$34-million and \$159-million, and create between 543 and 2,769 person-years of employment over 12 years, in addition to numerous business opportunities in nearby communities.

Similar benefits could result from activity around Norman Wells, and according to DIAND it is only a matter of time before the discovered inventory further upstream becomes a major source of future oil and gas exports. The Mackenzie Delta/Beaufort Sea Basin and Western Arctic Islands host huge proven and probable petroleum reserves and have an excellent discovery record, including two major oilfields, three major gas fields and one major oil and gas field. Discovered resources total 1.4-billion barrels of oil and 12.7 trillion cubic feet (tcf) of gas in 53 significant discoveries. More than 5 tcf has been found in three onshore discoveries, including over 300-million barrels in the Amauligak field.

Similarly, in the eastern Arctic Islands, there have been 19 significant discoveries after fewer than 200 exploration wells.

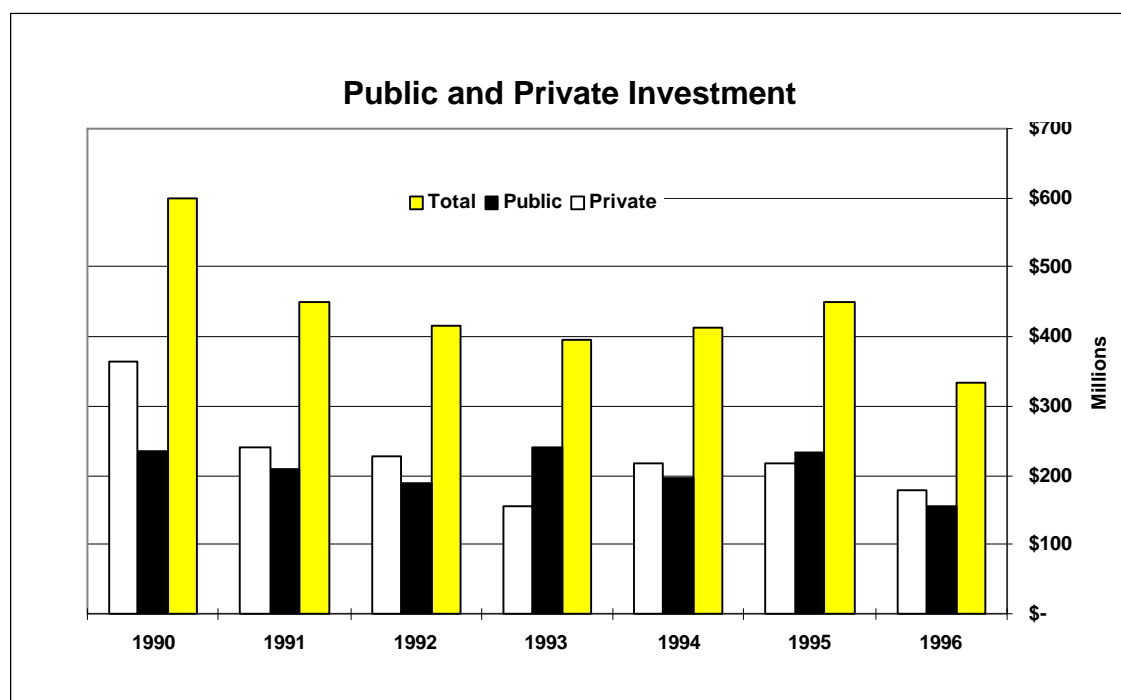
The extremely high costs of operating in the Delta/Beaufort and the Arctic Islands will likely discourage corporate interest in the immediate future, however, industry analysts believe discovery of only 100-million additional barrels onshore would justify extending the pipeline northwards from Norman Wells — the likelihood of which is now enhanced by the settlement of land claims in the Wells area. Husky and Gulf are committed to work in the Delta/Beaufort, and should one of them find just one other large pool, it could render development of the entire area economically feasible by spreading the cost of pipeline construction across a greater number of companies.

Construction

Total capital expenditures on construction plunged 34% in 1996, as public expenditure was cut by more than half and private expenditure slumped 14%, bringing total expenditures to \$254.5-million in 1996.

Capital Expenditures on Construction (\$millions)						
Year	Total	Change	Public	Change	Private	Change
1996	254.5	-34%	129.2	-53%	125.4	-14%
1995	341.1	6%	197.6	14%	143.5	-6%
1994	322.2	11%	169.8	-7%	152.4	30%
1993	287.5	-7%	180.9	5%	106.6	-27%
1992	308.3	-8%	172.5	2%	135.8	-20%
1991	332.6	-35%	169.4	-20%	163.2	-52%
1990	450.3	-67%	202.9	-36%	247.4	-91%
1989	750.0	26%	276.9	41%	473.1	18%
1988	552.4	3%	163.6	-33%	388.8	19%
1987	533.5	-52%	217.5	-9%	316.0	-81%
1986	809.1	-41%	236.6	-22%	572.5	-48%

Source: GNWT Statistics Bureau



Total housing investment rose by 4% in 1995, but began falling in 1996, by 23% in the first quarter (compared with January-March 1995), 11% in the second and 2% in the third; total spending for the first three quarters of 1996 was down by more than \$5-million, or 11%, compared with the same period in the previous year.

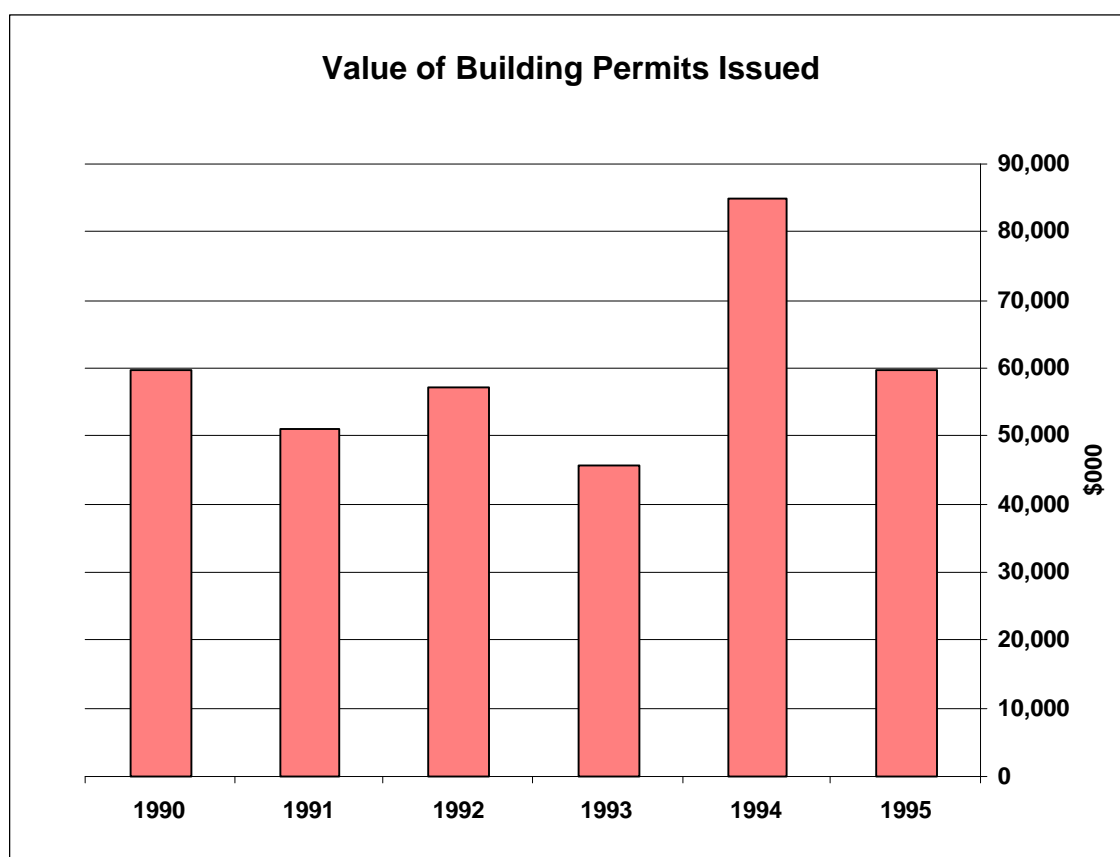
Housing Investment (\$000)			
Year	Total	Change	New Dwellings
1995	61,561	4%	49,044
1994	59,195	98%	45,195
1993	29,896	-19%	19,977
1992	36,859	0%	25,322
1991	36,991	-8%	27,083
1990	40,196	-12%	27,050
<i>Source: GNWT Statistics Bureau</i>			

Year	Jan-Mar	Apr-Jun	July-Sep	Total
Change (1996-95)	-23.0%	-11.0%	-1.8%	-10.8%
1996	10,311	13,928	18,037	42,276
1995	13,397	15,646	18,371	47,414

The value of building permits issued across the NWT declined by 30% in 1995, because a 53% increase in the value of industrial permits was not sufficient to offset a 70% fall in the value of public permits and 7% drop in commercial permits.

Value of Building Permits (\$000)					
Year	Total	Residential	Industrial	Commercial	Public
1995	59,645	32,505	1,536	19,662	5,942
1994	84,864	43,475	1,005	21,199	19,185
1993	45,711	18,361	2,589	9,798	14,963
1992	57,060	22,460	10,874	14,585	9,141
1991	51,159	22,635	2,957	22,480	3,087
1990	59,794	23,061	9,170	22,379	5,184

Source: GNWT Statistics Bureau



The upshot of these investment reductions was a decline in construction jobs in 1996, after six consecutive annual increases.

Annual Construction Employment (monthly average)		
Year	Jobs	Change
1995	1,385	8.0%
1994	1,283	18.7%
1993	1,081	25.3%
1992	863	0.2%
1991	861	2.0%
1990	844	17.1%
<i>Source: GNWT Statistics Bureau</i>		

The monthly decline in construction jobs averaged 5% between January and October 1996, compared with the same months in 1995.

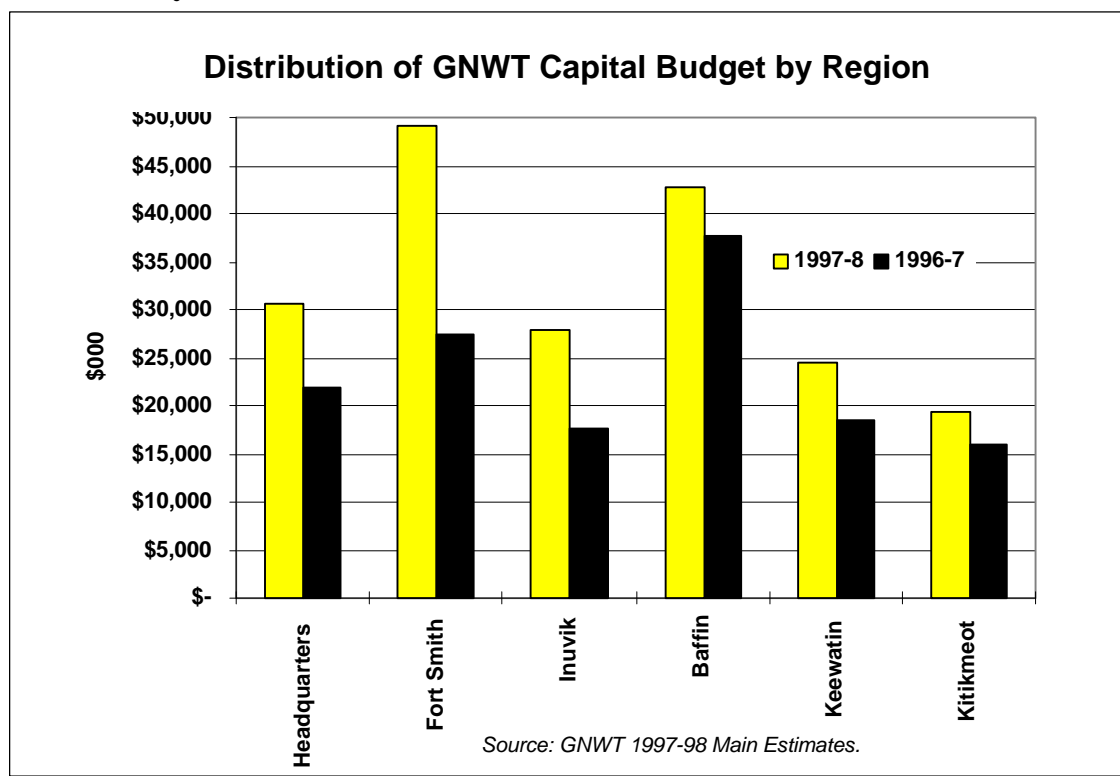
Construction Jobs by Month			
Month	1995	1996	Change
Oct	1,698	1,757	3.5%
Sep	1,873	1,808	-3.5%
Aug	1,813	1,857	2.4%
Jul	1,636	1,565	-4.3%
Jun	1,358	1,322	-2.7%
May	1,212	1,138	-6.1%
Apr	1,035	993	-4.1%
Mar	1,112	894	-19.6%
Feb	1,107	973	-12.1%
Jan	1,009	978	-3.1%
Average			-5.0%
<i>Source: GNWT Statistics Bureau</i>			

Construction Outlook

The Executive Director of the NWT Construction Association, Dick Bushey, says the contracting business is very slow virtually everywhere. In the Inuvik Region, he says, companies are folding or leaving, while activity in Fort Smith, Hay River and the Fort Simpson areas is “not great, but not terrible.” He says work is fairly steady in Cambridge Bay, but most contractors in the Baffin and Keewatin are keeping only skeleton crews while they anxiously await details of the Nunavut infrastructure building program. The recent explosion in mining exploration would make Yellowknife the one bright spot in the territory, but Bushey’s enthusiasm is tempered by high residential and commercial vacancy rates as well as recent and pending government staff cutbacks.

According to a 1996 Construction Association survey the vast majority of members (90% of survey respondents) saw a 25-50% shrinkage in their workloads in 1996, and only 15% of respondents felt work would pick up in 1997, 60% predicted no change or worse, and 15% were unsure.

According to the GNWT’s 1997-98 Main Estimates, total territorial capital expenditures are slated to drop by almost 30%, from \$193-million to \$140-million in the 97-98 fiscal year.



However, the Association predicts mining and petroleum industry expenditures will triple in the next five years to more than \$600-million. This would provide contractors with numerous job opportunities, including camp construction, all-weather and winter roads, air strips, diesel plants, hydro operations as well as supply of materials and equipment. Not all of the money will actually be spent in the north, but even a portion of these substantial expenditures would generate spin-off demand for new housing, renovation, business expansion, etc. in communities supplying labour and services to the remote camps. In addition, the petroleum industry seems poised to continue priming the economies of Fort Liard and communities in the Norman Wells area.

The mining industry's impact will be felt most in Yellowknife, Hay River, the Dogrib communities and the Kitikmeot, and development might well take place in the Keewatin.

The future for Nunavut contractors will depend to a large extent on whether work on Nunavut infrastructure will be contracted out to private sector companies or done by land claims organizations.

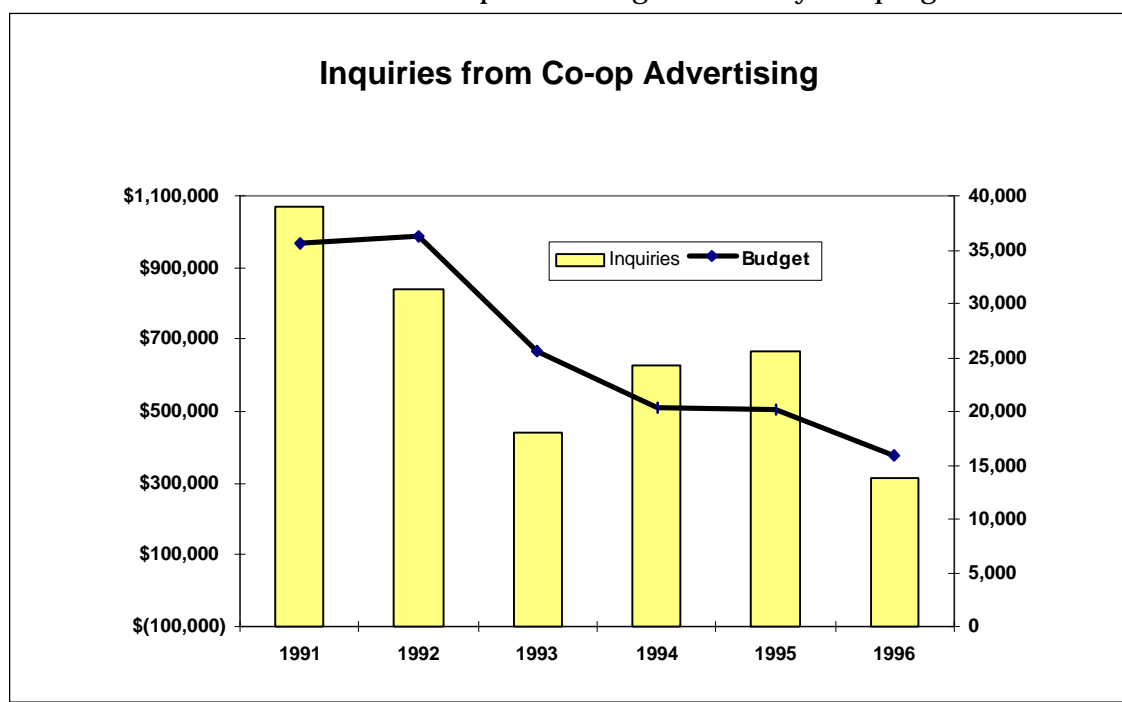
Tourism

Tourist visitation to the NWT slumped in the early 1990s (as it did across the country) as a result of the world-wide recession, but picked up again after 1992, and by 1994 had risen 6% over 1989, according to the 1994 NWT Visitor Exit Survey. By 1996, however, statistics suggest it declined again, despite a 2.5% increase in travel to Canada in January-September of that year.

One probable reason for the slump in visitors is the corresponding 25% cut in the territorial marketing budget, from \$507,000 in 1995 to \$376,600 in 1996. Responses generated by the industry-government cooperative advertising campaign dropped by almost 50%, from 25,599 to 13,689 in 1996. A conversion study (determining how many ad respondents actually booked a trip to the NWT) indicates the program generated between \$740,000 and \$2-million in total visitor expenditures in 1995.

Lack of North American consumer confidence probably also accounts at least partially for decline, as people are less likely to opt for the comparatively expensive vacations, like a trip to the Arctic, when they are worried about keeping their jobs.

Consumer reluctance probably also explains the estimated drop in sales resulting from the 1995 consumer show program, from 415 in 1994 to approximately 300 in 1995. Total estimated visitor expenditures generated by the program — which



offers territorial outfitters financial assistance to attend sportsmen, boating and other tourism-related exhibitions in southern Canada and the States — were close to \$485,000 in 1996, versus \$600,000 in 1995.

Regionally, counts of traffic on ferries, in campgrounds, at visitor centres and on airlines indicate that with the exception of the Hay River corridor, which experienced a slight increase in tourists in 1996, all other regions saw little or no growth, or even a decline, overall. However, certain types of operators reported an excellent year in 1996, including sports hunting outfitters, some fishing lodge operators, and aurora-viewing packagers. Recent repeal of the Marine Mammal Act in the States (which forbade importation of polar bear skins) was largely responsible for the upsurge in high-priced polar bear hunt bookings. The number of Japanese visiting Yellowknife to see the northern lights continued to grow, by about 25% to 1,500 in 1995, and operators fully expect another 25% increase for 1996. Nunavut also appeared to attract more visitors during off-season for spring packages like floe-edge tours and dogsledding, as well as for groups and meetings. Public awareness of division of the NWT seems to be stimulating inquiries at the Nunavut Tourism office.

A random survey of industry participants indicates that while many businesses are struggling with low occupancy levels (especially hotels in most regions as a result of cutbacks in government travel) the more established tourism operators are generally optimistic about the future because they are finally beginning to see the positive results of their marketing activities over the past several years. Still, many others expressed concern about poor consumer confidence levels in the Canadian market, which is by far the NWT's largest source of tourists.

Tourism Outlook

Increasing international interest in the kinds of natural and cultural attractions the NWT has to offer bodes well for further development of the outdoor adventure segment. By the turn of the century roughly one-third of the American population will have joined the “gray travel boom” — i.e. the ever-increasing number of affluent retirees who have the time, resources and desire to engage in “soft-adventure” focused on history, nature and wildlife viewing, culture, crafts and ecotourism. As well, younger North Americans and Europeans show a growing interest in both soft adventure and hard adventure products, like kayaking/canoeing, dogsledding, hiking/backpacking and cross-country skiing, especially when packages include contact with aboriginal people. Both kinds of adventure is the fastest growing segment of the international tourism industry, and it will likely supplant fishing, hunting and auto touring as the NWT’s principal tourism revenue-generator in the years ahead.

Arts and Crafts

Northern artists are among the best in the world. Traditional works include soapstone, bone and ivory carvings, jewellery, hand-made prints, dolls, hand puppets, and beaded clothing such as parkas, mukluks, vests, mittens. More recently, northern musicians like Susan Aglukark, the Blue Tundra Band and Night Sun have attained notoriety and commercial success across Canada, and such modern fields as northern theatre and photography are coming to the fore.

The GNWT Statistics Bureau's 1994 survey of the NWT's traditional labour force indicates that some 6,000 territorial residents (roughly 13% of the working-age population) are involved in the production of arts or crafts. Most of these artists and artisans comprise a cottage industry in which individuals work on their own and sell their work either privately or through local co-ops and other retailers and wholesalers. A minority work in small, organized arts and crafts studios in several communities.

Given the highly informal and unstructured nature of the industry it is impossible to accurately measure its total economic impact. However, RWED estimates that it generates at least \$5-million annually for producers. Sales of NWT arts and crafts at the NWT Development Corporation's three Arctic Canada Gift Boutiques in Toronto almost doubled to \$611,000 in 1995, from \$308,000 in 1994.

According to the labour force survey, approximately 45% of producers sell their work, but the vast majority made less than \$1,000 in annual revenues; the unsold work would be for domestic use and/or simple artistic pleasure.

Estimated Revenues from Craft Sales	
Revenues	Number of People
Less than \$1,000	1,981
\$1,000 — \$4,999	541
\$5,000 — \$19,999	104
\$20,000 or more	37
Not Provided	78
<i>Source: GNWT Statistics Bureau, preliminary figures.</i>	

Inuit art comprises by far the bulk of total arts and crafts sales because sculptures — which routinely fetch thousands of dollars a piece — and prints command comparatively high prices; because Inuit themes and media are readily distinguished from other native products; and because Inuit products have been extensively promoted for more than 40 years. Conversely, while Dene arts and crafts are unique in many ways, they are more difficult to distinguish from other North American Indian work, and there has been virtually no attempt to promote and properly position Dene products in the marketplace. However, the Dene Cultural Institute has recently had some success in marketing Dene products as unique, high-quality artwork in appropriate American venues. For example, beaded moccasins, baskets, purses and other Dene traditional work, as well as contemporary carvings by up-and-coming young Dene sculptors were well received at an exclusive New Mexico museum last year, and Dene work has been selling well at an upscale Washington State gallery.

Arts and Crafts Outlook

Canada still constitutes the NWT arts and crafts industry's largest market, but according to the Dene Cultural Institute (DCI), there has been a tremendous upsurge in demand for all North American native arts and crafts. The Northwest Company, a major wholesaler, has been making inroads into the huge American market in the past few years, and others have had some success in breaking into European and Asian markets.

Nonetheless, supply — not demand — is the major constraint on future industry expansion. For one thing, raw materials, like soapstone in Nunavut, and traditionally tanned leather in the west are increasingly hard to come by. For another, although NWT art enjoys an enviable national and international reputation today, it is based largely on themes rooted in the traditional way of life, and there are fewer Inuit and Dene youths willing and/or capable of carrying the tradition forward. Future growth will depend on artists maintaining high standards of artistic quality and integrity, and will therefore hinge largely on the industry's success in nurturing young talent.

In terms of Dene art, in particular, future success will also require extensive promotion in appropriate markets to properly position NWT products. According to DCI, this should include a campaign to increase public awareness, coupled with

an “authenticity” program to educate and reassure potential customers by tagging qualified work as genuine Dene art., as has been done for many years with Inuit art.

Competition has intensified in the global marketplace as wholesalers and artisans themselves make increasing use of the Internet to generate heightened awareness of their products. But by the same token, the worldwide web offers Inuit and Dene product marketers a very effective vehicle to contact and educate a huge potential customer base.

In terms of souvenirs (as opposed to art), surveys indicate NWT tourists purchase about 46% of all products, and that there is considerable unmet demand in this market for products retailing at about \$200 or less. Success in exploiting this market, both locally and in southern Canada, will depend on producers’ ability and willingness to supply the kinds of products buyers want at a price they are willing to pay. A major obstacle in this regard, among the Dene in particular, is that production (i.e. mostly sewing) typically requires so much time that revenues calculated on an hourly basis are frequently far below minimum wage.

Arts and crafts is quite a lucrative occupation for true Inuit and Dene artists, but for the majority of non-salaried producers, it will likely remain only a source of occasional supplementary income.

Commercial Fishing

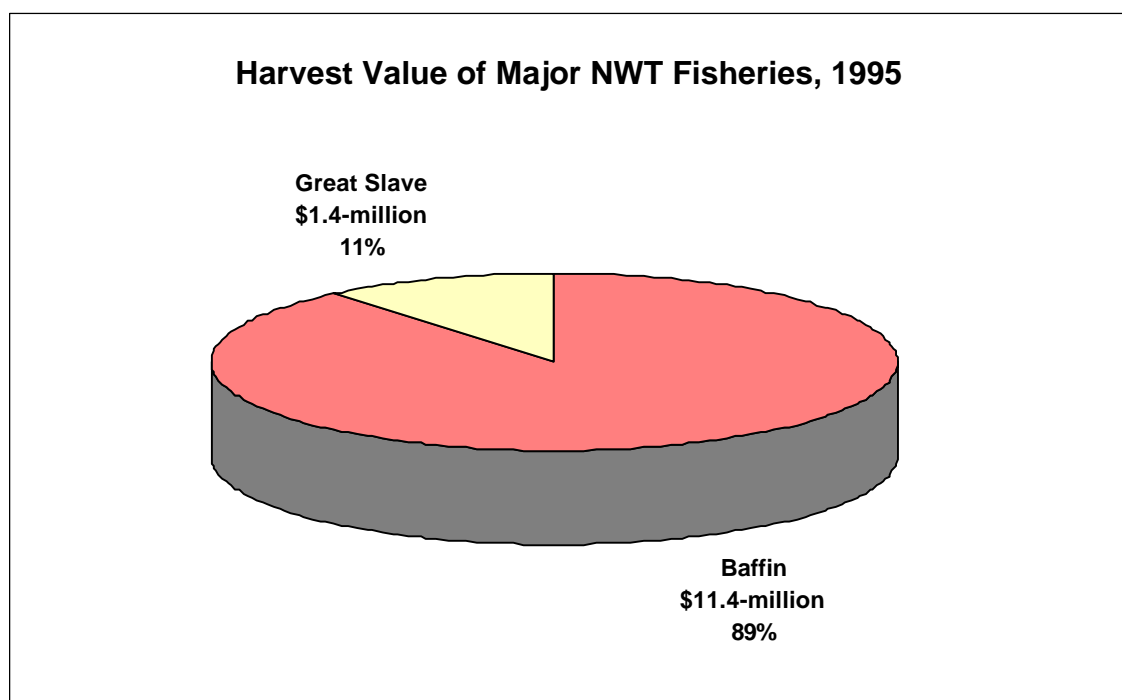
The Baffin fishery has grown exponentially over the past few years. It now surpasses Great Slave Lake output, and indeed dwarfs total NWT commercial fish production when the offshore shrimp harvest is included.

The NWT Development Corporation's Pangnirtung Fisheries Ltd. fish processing plant sold approximately \$1.7-million worth of turbot and arctic char in 1995.

Baffin Fishery Output, 1995				
	Total	Shrimp	Char	Turbot
Dollar Value	11,404,548	9,360,000	1,444,548	600,000
Kilograms	4,157,697	2,600,000	96,000	1,461,697

However, the inshore turbot fishery is vulnerable to climactic uncertainties and production was all but wiped out in 1996 by adverse ice conditions. Unfortunately, Pangnirtung has so far proven to be the only regional community with the environmental conditions needed to support turbot fishing most of the time.

Recovering from a dismal year in 1994, the Great Slave Lake fishery sold \$1.4-million in whitefish, trout, northern pike, inconnu and pickerel to the



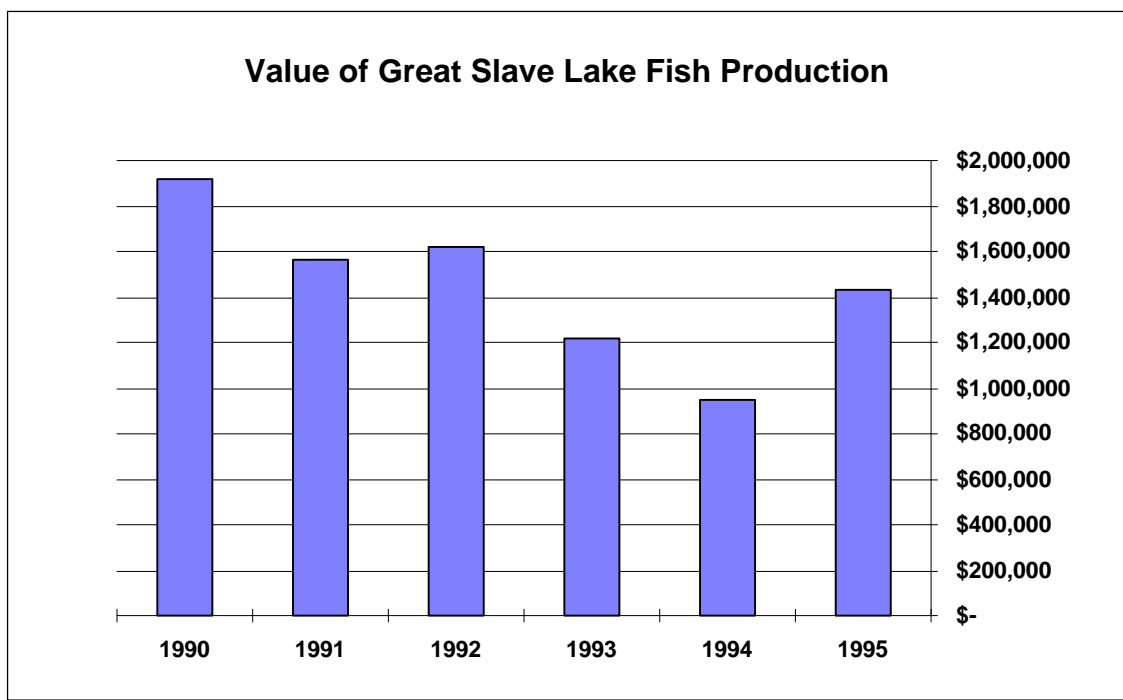
Freshwater Fish Marketing Corporation (FFMC) processing plant in Hay River in 1995.

The Baffin fishery — which last year included an experimental offshore turbot harvest — provides seasonal income for about 200-300 annually; there are 150-200 people involved in the Slave Lake fishery. There are also dozens of people seasonally active in relatively small-scale char fisheries in the Keewatin and Kitikmeot Regions which normally produce less than \$100,000 annually.

In a joint venture with seasoned southern shrimpers, a Davis Strait freezer trawler harvested and processed \$9.4-million in shrimp in 1995. The fishery pays 30-40 Inuit an average of more than \$50,000 a year for their long stints at sea. This commercial venture is totally self-sufficient and has returned roughly \$500,000 annually in investment revenue to the Qikiqtalluk Corporation since 1987.

Commercial Fishing Outlook

Apart from the profitable Davis Strait shrimp fishery, commercial fishing will provide a few energetic entrepreneurs with a decent living, but for most of the several hundred northerners involved, it will probably remain only a part-time occupation that must be supplemented by income from other sources.



Fur Harvesting

After more than a decade of decline precipitated by the anti-fur movement's success in decimating European markets, the NWT fur industry, and especially the seal industry, continued to rebound in 1995 and 96. Fetching much improved prices, the total value of non-seal pelts rose 32% in 1995 on only a 1% rise in the number of pelts sold, while sales of hair seal climbed 152% on a 98% increase in pelts.

Fur Production				
Non-Seal Harvest				
Year	Value	Change	Pelts	Change
1995	1,398,000	32%	38,212	1%
1994	1,056,000	10%	37,808	42%
1993	962,000	-59%	26,668	-31%
1992	2,361,000	27%	38,906	9%
1991	1,853,000	-36%	35,577	-14%
1990	2,890,000	-34%	41,335	-41%
Hair Seal Harvest				
1995	58,000	152%	2,343	98%
1994	23,000	15%	1,182	5%
1993	20,000	33%	1,128	28%
1992	15,000	-53%	884.0	-42%
1991	32,000	-3%	1,517	-17%
1990	33,000	0%	1,817	7%
<i>Source: GNWT Statistics Bureau</i>				

Figures for later years are not yet available, but preliminary indications are that it was another encouraging year. For example, 6,000 Nunavut sealskins sold at the North Bay auction in December 1996 at an average price of \$29 — the highest volume in more than a decade — and both volumes and prices at the January 1997 Vancouver auction (at which 80-90% of territorial output is sold) were also exceptionally good, according to RWED.

A major reason for the resurgence in the sealskin harvest is a GNWT support program which guarantees trappers a certain price for their pelts, thus eliminating the risk they would otherwise face of not being able to cover expenses should prices

suddenly slump again. The program has obviously been successful in reviving the once moribund Nunavut sealskin harvest and now, according to RWED, market prices are approaching the subsidized prices.

Recent attempts to diversify the industry have also met with some initial success in both the east and the west. In Aklavik and Tuktoyaktuk, furriers are designing and manufacturing coats and vests. In Fort Simpson women are being trained by internationally renown fur designer Darcy Moses. In four Baffin communities, women are producing slippers, mitts, hats and other small sealskin garments. And Broughton Island is exploring the commercial feasibility of marketing of seal meat products.

Fur Harvesting Outlook

Looking ahead, RWED sees opportunity for expansion into the Pacific Rim, but survival of the fur industry still depends entirely on retention of the traditional European market, and hence the outcome of the European Community's threat to ban importation of pelts and articles made from the pelts of wild animals.

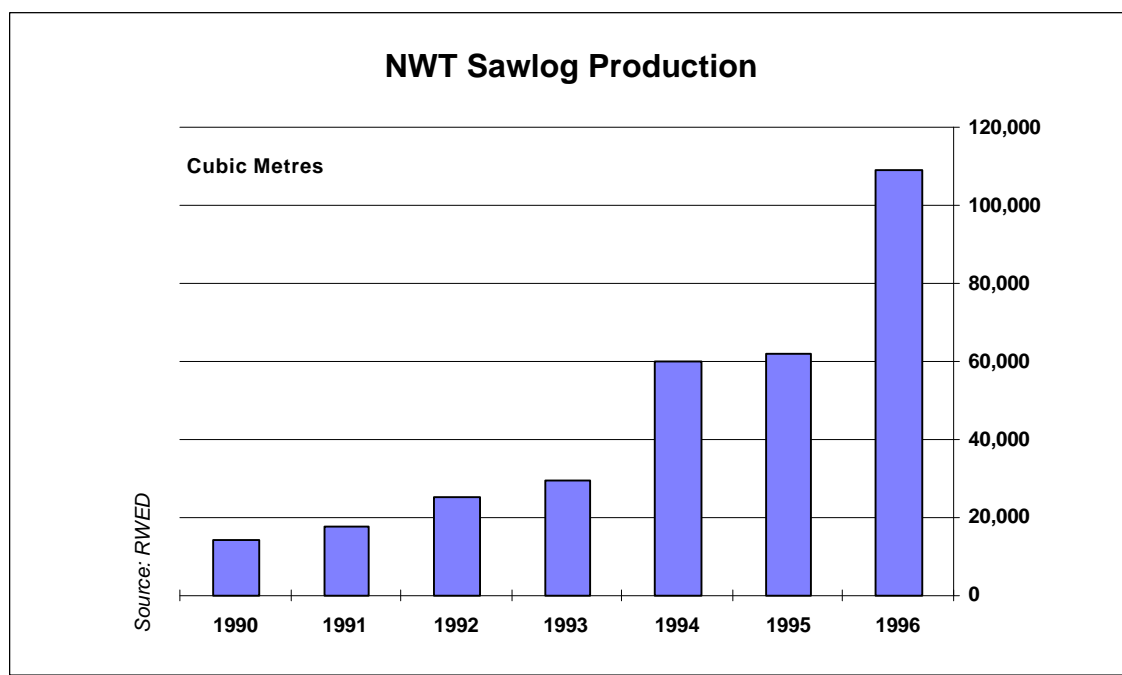
The EU's proposed legislation was scheduled to take effect January 1, 1997, but was postponed for a third time late last year. Canada, Russia, and Europe have initialed a quadrilateral agreement aimed at satisfying the animal-right lobby's concerns by establishing standard methods for humane trapping and thereby removing the need to ban imports from those countries which adhere to the standards (e.g. those which have replaced leg-hold traps with the "quick-kill" type, as the NWT has done). However, the United States, fourth party to the agreement, has yet to sign, and no one knows what will happen next, or when. But if Europeans does adopt the ban fur imports, it would almost certainly put an end to the NWT trapping industry. Not only does Europe buy 70-80% of territorial fur production, but is the unrivaled leader in world fur fashion; if Europeans stopped designing and producing fur garments, demand in the States and Asia would likely evaporate.

Forestry

Soaring demand and hence rising prices for softwood lumber, especially in the United States, is continuing to fuel a boom for the South Slave forest industry. According to RWED, the industry harvested an estimated 110,000 cubic metres of sawlogs (the source of 2x4s, etc.) in 1995-96, i.e. almost double the 62,000 cubic metres cut in the previous year. Output is expected to grow by roughly 15% to 125,000 cubic metres next year.

Demand is still climbing in response to rebuilding projects necessitated by a succession of hurricanes, floods and earthquakes in the States, and can be expected to rise even more in the years ahead as supply continues to dwindle. On the supply side, large tracts of land have been withdrawn in the northeastern states and American forestry companies have used up all of their reserves. They are also cutting trees faster than they can be regrown on the land still available to them. Demand for NWT wood is also enhanced by the fact that it is not subject to American import tariffs, as wood from British Columbia and other provinces is. Thus NWT sawlogs are sold to British Columbia mills which export lumber to the U.S. tariff-free.

The industry's two forestry operations employ about 40 people seasonally. As well, numerous individuals cut an average of approximately 15,000 cubic metres of fuelwood annually.



Forestry Outlook

Forestry Canada estimates the total gross volume of merchantable NWT timber (10 cm stump diameter) is 446-million cubic metres, of which 71% is coniferous. Wood prices are expected to rise as supply dwindles south of the border, and with proper management has the potential to become a significant supplier of NWT materials for the coming construction boom in the mining industry.

However, the industry is confronted with a number of significant development obstacles relative to their southern competitors. These include restricted access to federally-owned land, extraordinarily high start-up and operational costs (especially for electricity), and the short growing and cutting seasons.

Food Processing and Agriculture

The NWT's tiny agricultural sector is centred in the southwest near Hay River, where there are two egg production facilities, a hog farm, a feed mill, an abattoir and several small-scale market garden operations. There are also four commercial greenhouses in Hay River, Norman Wells, Trout Lake and Fort Smith which supply modest amounts of cucumbers, cabbages and broccoli, etc. to local retailers.

The Supreme Court of Canada recently ruled in the NWT's favour in a longstanding legal dispute between territorial producers and the Canadian Egg Marketing Agency (CEMA) over the right to export eggs outside the NWT.

Keewatin Meat and Fish Ltd. in Rankin Inlet employs seven people full-time and two seasonally and provides some income for approximately another 125 cottage workers, hunters and fish harvesters in the processing of caribou and arctic char. In Cambridge Bay, Kitikmeot Foods Ltd. employs nine people full-time and four seasonally and supplements the income of approximately 125 local suppliers of muskox, caribou, char, lake trout and white fish. Both enterprises produce standard meat cuts as well as salami, jerky, pastrami, paté, etc. for resale through regional retailers and the occasional southern Canadian outlet.

The rejuvenated Tuaro Dairy in Yellowknife began selling milk, cream and fruit juices in 1995, both directly to customers' homes and through local retailers.

Outlook

The Development Corporation's Arctic Canada Foods has sold caribou and muskox products from the processing plants in Rankin Inlet and Cambridge Bay in all regions of the NWT, in central and western Canada as well as several European countries, and working on establishment of a sales network in Asia. Further development will require a willingness and ability on the part of producers to supply on time and to market-determined standards.

Any future relatively large-scale development in the South Slave — the NWT's prime traditional agricultural region — will depend first and foremost on ready access to commercial land, which in turn will have to await finalization of land claims south of Great Slave Lake

Public Sector

Although governments collectively are still the largest territorial employer and biggest purchaser of northern goods and services in the north, total federal and territorial public sector employment shrunk marginally in 1995, while municipal government staff continued to rise.

Federal payroll continued its downward trend, while territorial and municipal staff took home higher total paycheques in 1995.

Public Sector Employment and Payroll								
Year	Total	%	Federal	%	GNWT*	%	Local	%
Number of Employees								
1995	10,036	-0.9%	1,387	-6%	7,073	-0.1%	1,576	0.4%
1994	10,123	1.4%	1,476	-5%	7,078	2.3%	1,569	4.5%
1993	9,979	2.1%	1,556	-1%	6,922	2.1%	1,501	5.3%
1992	9,775	-0.3%	1,567	0%	6,782	-0.9%	1,426	2.0%
1991	9,804	2.1%	1,563	3%	6,843	2.1%	1,398	0.9%
1990	9,607		1,519		6,703		1,385	
Payroll (\$000)								
1995	546,836	1.3%	85,433	-3.7%	405,466	2.5%	55,937	1.3%
1994	539,618	1.2%	88,730	-4.7%	395,687	3.4%	55,201	-4.1%
1993	533,452	2.6%	93,149	-1.7%	382,752	3.7%	57,551	3.1%
1992	519,770	4.6%	94,804	0.5%	369,154	5.0%	55,812	8.9%
1991	496,974	9.7%	94,288	0.5%	351,433	12.6%	51,253	8.8%
* GNWT figures include public hospitals. Source: GNWT Statistics Bureau.								

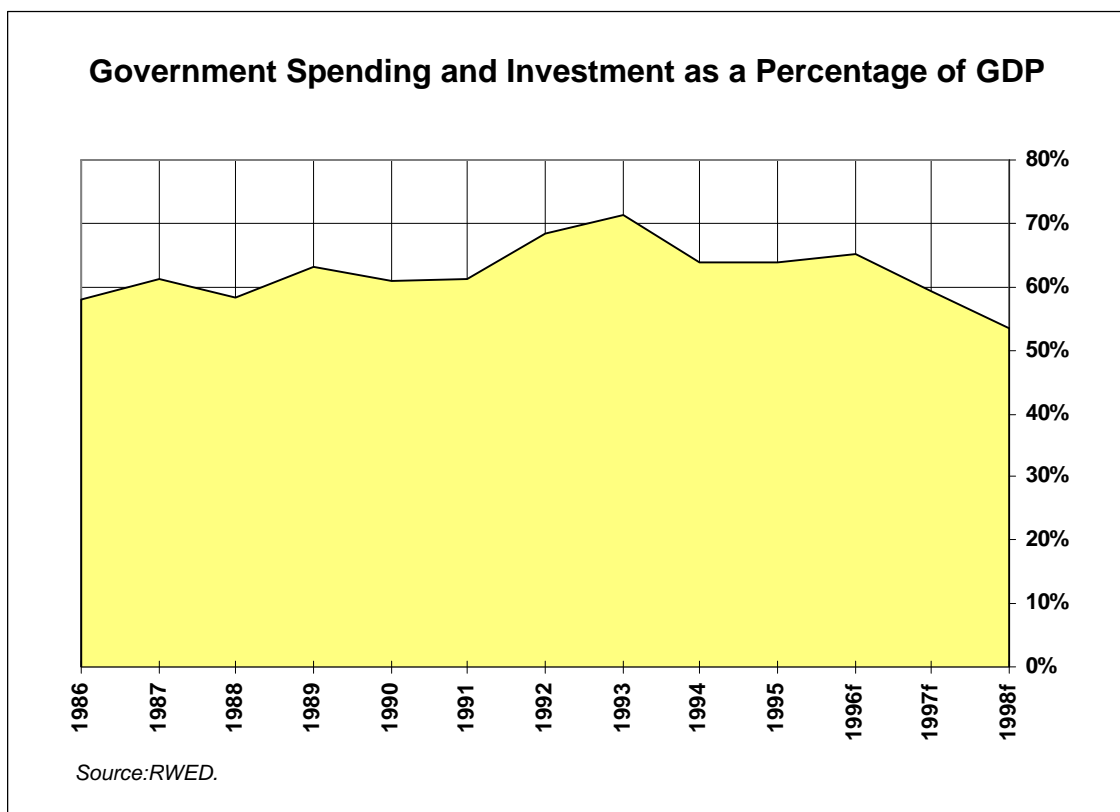
Outlook

According to the 1997-98 GNWT Main Estimates, the total number of territorial jobs declined by 10% in 1996-97 and is slated to fall another 8% in 1997-98 to 5,845. Both fiscal restraint brought on by reductions in federal transfer payments and devolution of responsibilities under the Community Empowerment initiative account for these declines. Cutbacks will mean less expenditure in the NWT economy, but devolution will result mostly in a change of employers.

Future Economic Prospects

For the past several decades governments have been directly or indirectly responsible for most investment and spending in the NWT. This took the form of transfers to individuals and investments to develop infrastructure such as housing, educational, recreational and health facilities, transportation systems, etc., as well as the rapid expansion of government itself.

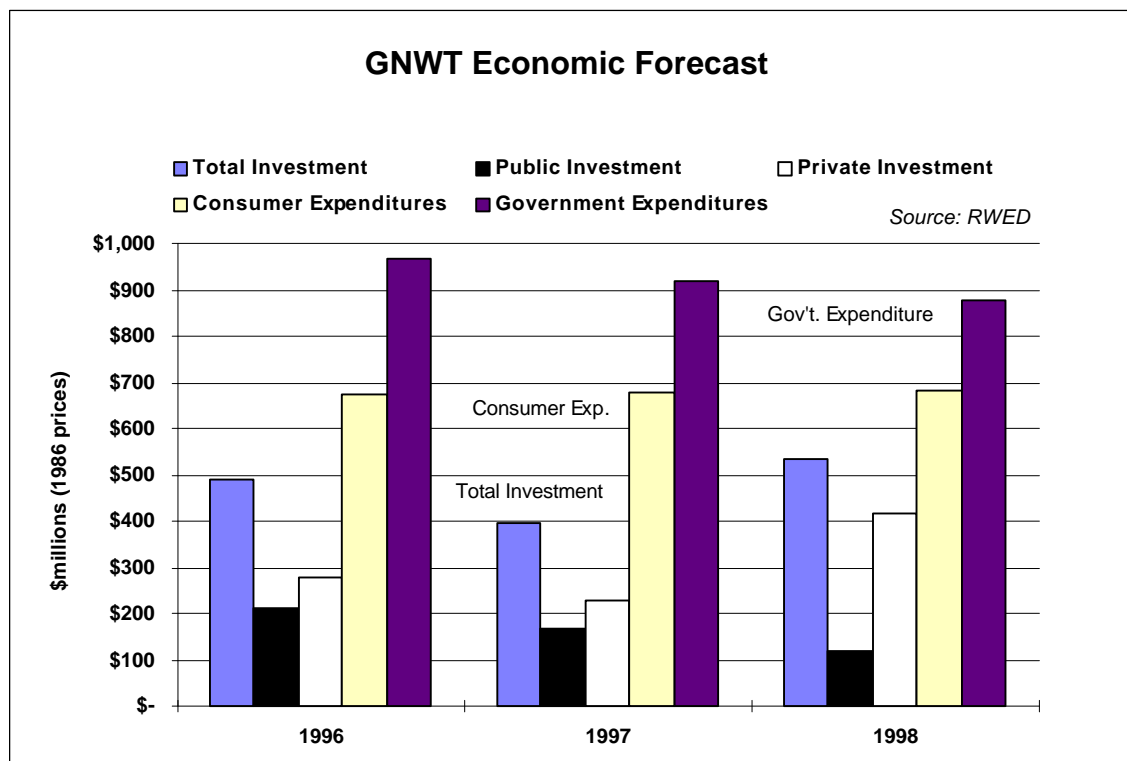
However, government expenditures on goods and services and public investment as a percentage of GDP have declined since 1993, and are expected to continue falling in the foreseeable future.



RWED forecasts the following changes in territorial GDP and total employment between 1996 and 1998:

Forecasted Annual Change in GDP			
GDP Component	1996	1997	1998
GDP at 1986 Market Prices	-0.7%	2.6%	3.5%
Final Domestic Demand	-1.6%	-6.9%	5.0%
Total Investment	-5.3%	-14.3%	34.3%
Public Investment	-16.0%	-6.2%	-29.3%
Private Investment	2.9%	-19.3%	80.4%
Consumer Expenditures	-1.9%	0.4%	1.0%
Government Expenditures	2.5%	-5.0%	-4.7%
Total Employment	0.9%	0.4%	2.6%
<i>Source: RWED</i>			

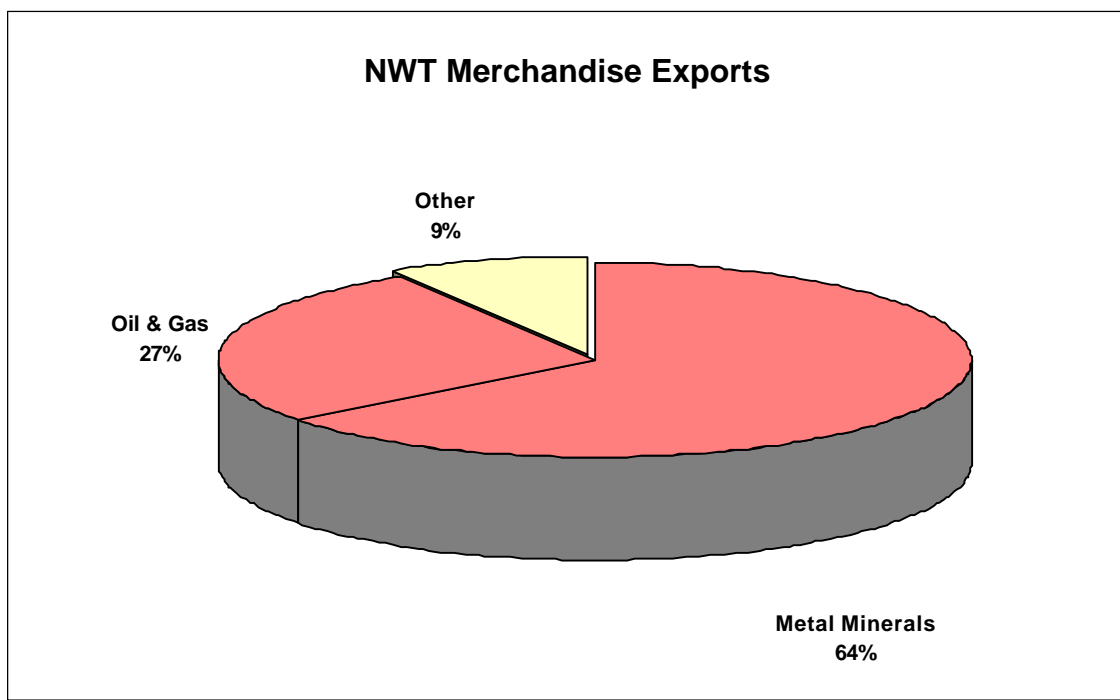
The government also anticipates a 1% increase in average weekly earnings in 1997 and another 0.7% increase in 98, with the consumer price index for Yellow-knife climbing by 2.3% and 2.6% in 1997 and 98 respectively.



The forecasted rise in total investment for 1998 is largely attributable to the mining industry, and the projected rise in employment would result from mineral exports.

In fact, mining and petroleum development appear certain to become the prime source of economic wealth for the NWT in the years to come. There is no doubt that pure tourism (as opposed to business travel), arts and crafts and the renewable resource industries are important — albeit usually supplementary — sources of income and employment for many, and there is room for future expansion. Likewise, the domestic country food harvest is as a significant source of food and clothing that would otherwise have to be imported. Nonetheless, in terms of their capacity to provide business opportunities and jobs for the growing number of unemployed northerners, they pale in comparison with the non-renewable sector (as the chart below illustrates).

The NWT and Yukon hold about 25% of Canada's remaining discovered resources of conventional recoverable light crude oil and natural gas. More important from a development perspective is the fact that they harbour an estimated 40% of Canada's future discoveries of both commodities. As extensions of the Western Canada Sedimentary Basin, NWT lands in the foothills of the Mackenzie Mountains and up to the Delta and Beaufort Sea have significant potential for both gas and oil discoveries, as do the Arctic Islands. A 1994 Geological Survey of



Canada resource assessment suggested that some 3-billion barrels of oil and 17.2 tcf of gas has yet to be found in these areas.

However, barring any dramatic rise in the world price of oil or discovery of another well in the Delta/Beaufort large enough to make extension of the Mackenzie Valley pipeline feasible, the mining industry will be the principal engine of economic growth in the short and medium term, at least.

In terms of employment, there is every indication there will be thousands of jobs created by new mines alone in the next few years, and the major challenge will be to train enough northerners to qualify for them. There will still be a need for the traditional trades like miners, millwrights, heavy equipment operators, mechanics, carpenters, plumbers, electricians, and all manner of office staff. But the mines of the future will be radically different from the Cons and Giants of old because they will be highly computerized and automated. To quote the Mining Association of Canada: "As the face of mining has changed, so have the faces of those it employs. The old image of miners and prospectors with picks and shovels has been replaced by workers using robotics, computers and the most modern high-tech equipment. Women today are employed as mining engineers, equipment operators, technicians, environmental specialists and geologists. They work underground, in laboratories, smelters, exploration sites and head offices." A lot of mine equipment, like scooptrams, drills, and 180-ton ore trucks can now be operated by remote control, and many processes, like milling, can be monitored by computers. In some cases these high-tech innovations will require employees to have more education than in the past, but technology cuts both ways. According to Diavik Manager Doug Willy, for example, computers will readily diagnose many mechanical problems and parts will be serviced simply by swapping modularized components, which can be easily removed and sent out for factory servicing.

The NWT Construction Association and Arctic College have launched training programs to prepare northerners for the kind of jobs expected to appear over the next few years. They both aim to avoid trained non-residents from monopolizing the NWT job market like they did during construction of the Mackenzie Valley pipeline, for example. As well, the mining companies are expected to provide job training.

Realistically, however, if several mines go into development simultaneously, we will be extremely hard-pressed to find enough northerners with the knowledge

and skills required to fill a lot of the positions. Vaydik suggests one way to address such a bottleneck would be for the mining companies to hire skilled non-residents on a short-term basis and on the understanding that they will train northerners to take over their jobs once they are qualified.

In addition to job training, there will be a need to provide many potential workers with assistance in adjusting to a modern industrial workplace. There will also be a need to provide counselling to the families of workers who must commute to work on multi-week shifts. Doug Willy, who worked at Lupin for many years, says the most frequent and difficult problems he has encountered with people new to the mining industry is not the job itself, but family and other social problems that arise in their home communities. The problems of domestic strife, alcohol and drug abuse and other potential social concerns that can result from workers being away from their homes and families for extended periods and from having considerably more cash than they are used to are well documented. Both the Department of Health and Social Services and mining personnel are acutely aware of these issues, and are both working to mitigate the social ill-effects of industrial development.

In terms of business opportunities, those most likely to benefit directly are expeditors, airlines, fuel and lumber distributors and other mine-supply companies, construction contractors, accommodation providers, and geological and engineering services, but increased employment and income would also bolster sales in virtually every sector. A recent government study found the NWT's operating mines spend more than \$200-million annually on goods and services, but only 17% of this is spent in the NWT. The study concluded local businesses could increase their share of mining expenditures considerably — provided they become more aggressive in pursuing these opportunities and improve their management and marketing skills — especially in the provision of: assay services, safety training, plumbing supplies and other construction materials, catering, and geological and engineering services.

Perhaps the most frequently cited drawback to non-renewable resource development is the boom-and-bust syndrome and the fact that local residents have no control over these developments. It is true that once the metals and petroleum are extracted they are gone forever, and that affected communities have little control over “outside” company policies and no control at all over external mineral markets. But it is equally true that they have no control over global fur, fish or tourism

prices, and with land claims settlements, communities are acquiring more control over mineral company policies in the important areas of employment, training and purchasing than they have, say, over changes in caribou migrations or lynx-hare population cycles — which have caused numerous recessions in the traditional economy in the past. What's more, there is growing evidence to suggest the NWT is on the verge of a long-term mineral expansion whose total impact could well overcome the negative cyclical economic impacts associated with earlier, relatively short-term industrial developments.

Despite its comparatively high costs, the NWT is becoming an increasingly attractive international exploration target. The diamond find focused world attention on the North and thereby made many more companies aware of its enormous geological potential. Many companies now realize that less than 5% of the territory has been mapped in sufficient detail and that massive areas have received only cursory grassroots prospector attention. In short, many major exploration companies now know that the numerous deposits found to date are only a small sample of total subsurface riches, and that the chances finding another Voisey's Bay below the tundra are excellent. So, therefore, are the chances of avoiding or at least minimizing any future economic doldrums, for the more companies look for new mines, the more they are likely to find, and the more mines they find, the more they are likely to keep looking.

The prospect of such a lucrative virtuous circle is fortuitous, to say the least. Given continuing government fiscal restraint, rapid population growth and worsening unemployment, the NWT has no real economic alternative but to maximize its competitive advantage, i.e. to develop its non-renewable resources to the fullest possible extent.

In addition to favourable market forces, as the Chamber of Mines' Mike Vaydik points out, realizing all this potential growth will also depend on the attitude and actions of governments and quasi-government aboriginal regulatory boards. Mineral development requires exploration and exploration capital is extremely fickle and highly mobile, he says, so bad political "vibes" from jurisdictions insensitive to global mining realities can easily kill the golden goose. He cautions that while the NWT may be a hot destination today, there are other equally attractive countries, especially in Latin and South America and West Africa, where governments have been successfully courting mining companies in recent years. Chile alone, for example, has captured almost a billion dollars in Canadian mineral

investment. Vaydik notes that before the British Columbian Government appeased the provincial environment lobby by forcing Royal Oak to abandon its Windy Craggy project midstream, approximately 80% of the exploration money raised on the Vancouver Stock Exchange was spent in the province; now it's down to about 10% because many exploration companies bailed out of B.C.

According to a recent GNWT survey, the mineral industry view the political climate in the NWT as hostile to mineral development and a majority of companies believe political risk is a major deterrent to investment. Vaydik cites several recent events which partially explain that perception, like the federal government's decision last fall to please environmentalists at an international conference in Montreal by announcing creation of a park at Wager Bay in the Keewatin. The regional Land Use Plan had recognized the possibility of a base metal mine to the west of Wager Bay, and had approved establishment of a park on condition there could still be an access road between minesite and the Hudson Bay. But the Canada Parks Act now forbids transportation corridors, and any future mine development would be uneconomic without sea access to markets. Also last year, Vaydik says, BHP shelved work on a prospective gold mine because the Nunavut Impact Review Board placed extraordinarily onerous conditions on a bulk sampling proposal, i.e. a routine proposal which would ordinarily be considered benign and therefore routinely approved.

Now there is the contentious Protected Areas Strategy which, as part of a Canadian commitment to a United Nations environmental initiative, is intended to identify and protect "representative and unique" natural areas. The proposed federal-territorial plan arose following a legal threat by the Canadian branch of the World Wildlife Fund, a threat which could have disrupted BHP's project. Vaydik suspects governments caved in to the Fund to garner political points in southern Canada, where environmental reserves are popular among voters who don't have to live with the consequences. The industry is also unhappy with the process of selecting protected areas, since it appears to them the deck is heavily stacked with environmentalists and there has been little or no consultation with more development-minded government officials. He says the industry is not opposed to protecting sensitive areas in principle, but is concerned that the proposed strategy seems to have "picked on" the Slave geological province, which is unquestionably the most promising area for new mineral discoveries in the NWT. He warns that there is a real economic risk in banning exploration activity forever even in those

areas which don't appear geologically promising today. Geological science and engineering are continually developing new exploration techniques and new ways of assessing old data that could easily lead to new discoveries where none were thought to exist before. Indeed, Vaydik says, had a similar strategy been in place prior to 1991, it might well have banned exploration in the very place where Fipke found diamonds, because no one considered the area significant until then.