

2 PEOPLE AND THE ECONOMY

2.1 Introduction

This section describes the people of the study area and their economy, including:

- population composition and dynamics
- economic activity
- labour force
- income sources and amounts
- cost of living

In comparison with the rest of Canada, the territorial population is relatively young, although both the birth and the death rates have been declining for the past 20 years.

Migration rates are also high in the Northwest Territories, primarily because about half the population is non-Aboriginal. Most of these people spend some years in the territories, and then return home to the southern provinces.

Compared to other areas of Canada, the population is small and geographically scattered. The economy has traditional and monetary components, with the monetary component increasingly dependent on extracting mining and hydrocarbon-related resources. See Section 5, Traditional Culture for information on participation in the dual economy.

2.2 Baseline Conditions – Inuvialuit Settlement Region

2.2.1 Population Composition and Dynamics

The five ISR communities – Aklavik, Tuktoyaktuk, Holman, Paulatuk and Sachs Harbour – are diverse in size and economy. In Aklavik, situated in the middle of the Mackenzie Delta, residents enjoy muskrat and other harvesting advantages of the community's location. Tuktoyaktuk is located on Kugmallit Bay just east of the Mackenzie Delta. It is an important staging site and transshipment point, and is the largest Inuvialuit community.

Holman, Sachs Harbour and Paulatuk are all smaller and more isolated. Holman is on Banks Island, Sachs Harbour is on Victoria Island and Paulatuk is on the mainland coast, 400 km east of Tuktoyaktuk. These three are commonly referred to as the high arctic communities. Along with residents of Tuktoyaktuk, residents of these communities harvest the game and fish of the arctic tundra and shore.

Although Inuvik is in the GSA, a significant number of Inuvialuit live there. It is also the administrative centre of the ISR. However, for this EIS, Inuvik is considered a Gwich'in community and will be discussed in the Gwich'in sections.

Table 2-1 shows that the estimated population of the ISR communities in 2003 was 2,506. The census count data is underenumerated, as is all census data. The 2003 population estimates of the GNWT Bureau of Statistics, which take into account adjustments for underenumeration, and migration, birth and death rates since the 2001 census, were taken as more accurate indicators of the recent populations. Census counts for 1991 and 2001 showed a 4% decline in population for the ISR. Aklavik had the greatest decline, of 21%. Holman had an increase of 10%, and Paulatuk had an increase of 12%.

Table 2-1: Census Counts and Population Estimates for the Inuvialuit Communities

Location	Census Population Numbers ¹				Growth 1991–2001 (%)	2003 Estimated Population ²
	1986	1991	1996	2001		
NWT	33,830	36,405	35,370	37,360	3	41,872
ISR total	2,346	2,460	2,505	2,360	-4	2,506
Aklavik	763	801	727	632	-21	656
Tuktoyaktuk	929	918	943	930	1	990
Holman	303	361	423	398	10	424
Paulatuk	193	255	277	286	12	319
Sachs Harbour	158	125	135	114	-9	117

NOTE:

1 Only 2001 census population data is randomly rounded (see Section 1.8.3, Limitations of Low-Frequency Data)

2 Estimates are calculated by the GNWT Bureau of Statistics by allocating the demographic components of growth, down to a community level, using information from a variety of sources

SOURCE: GNWT Bureau of Statistics (2003d, 2004)

Table 2-2 provides census counts for 2001. More than 80% of the population of the ISR was Aboriginal. Except for Aklavik, the Aboriginal component was almost exclusively Inuit. In Aklavik, the Inuit formed the majority, but about one quarter of the Aboriginal population was Dene.

Table 2-2: Ethnicity in the Inuvialuit Communities (2001 Census Count)

Location	Total Population (No.)	Non-Aboriginal (%)	Aboriginal (%)	Aboriginal Components (Total = 100%)				
				Inuit (%)	Dene (%)	Métis (%)	Multiple (%)	Other Aboriginal (%)
NWT	37,360	50	50	21	57	19	1	2
Aklavik	630	9	91	62	24	7	1	2
Tuktoyaktuk	930	6	94	96	2	1	1	–
Holman	395	5	95	95	–	–	–	–
Paulatuk	290	21	81	100	–	–	–	–
Sachs Harbour	115	–	96	100	–	–	–	–

NOTES:
– = data not available or too small to be expressed
Percentages computed from randomly rounded data (see Section 1.8.3, Limitations of Low-Frequency Data)

SOURCE: GNWT Bureau of Statistics (2003e)

Statistics on five-year mobility status for 1996 indicated that 9% of Aklavik residents were interprovincial or international migrants. In Tuktoyaktuk, 5% were in this category. Higher percentages of the population moved between Northwest Territories communities in the high arctic communities than in Aklavik and Tuktoyaktuk. In each case, the proportion moving was 18% or less, except for Sachs Harbour, where one third changed communities (GNWT Bureau of Statistics 2003a).

2.2.2 Economic Activity

Table 2-3 presents 1991 and 2001 occupational groupings for the total labour force, males and females in the ISR. Statistics Canada made some changes to the occupational categories between 1991 and 2001. However, at the level of aggregation found in this table, the changes make little, if any, difference.

Between 1991 and 2001, there were increases in the proportions of the ISR population employed in government service, sales and service and primary industry occupations. The proportions in clerical occupations and manufacturing occupations declined during this period. These changes were largely driven by changes in the occupations of residents in Tuktoyaktuk, the largest ISR community.

Table 2-3: Labour Force by Standard Occupational Categories in the Inuvialuit Communities

Occupation	Gender	Northwest Territories		ISR Total		Aklavik		Tuktoyaktuk		Holman		Paulatuk		Sachs Harbour	
		1991	2001	1991	2001	1991	2001	1991	2001	1991	2001	1991	2001	1991	2001
Labour force, 15+ years	Total (No.)	20,070	20,785	1,030	965	260	325	395	385	150	170	95	105	65	45
	Male (No.)	11,225	11,115	610	525	140	185	245	215	80	85	60	60	40	25
All occupations	Female (No.)	8,850	9,670	420	435	115	140	150	170	70	85	35	40	25	25
	Total (No.)	19,675	20,425	970	915	300	300	370	365	145	170	95	100	60	45
Management, business, finance and administration occupations	Male (No.)	11,030	10,935	580	530	130	175	230	210	75	85	60	55	40	50
	Female (No.)	8,645	9,490	390	435	110	125	140	155	70	90	35	40	20	40
Clerical occupations	Total (%)	18	21	12	12	19	10	14	12	17	0	11	0	0	44
	Male (%)	19	19	13	11	15	11	13	10	20	12	17	18	0	0
Natural and applied sciences, and related occupations	Female (%)	16	24	10	10	23	8	14	0	14	0	0	25	0	25
	Total (%)	17	9	11	5	4	10	9	7	14	6	21	0	0	0
Health occupations	Male (%)	6	3	7	6	8	6	4	5	13	12	17	0	0	0
	Female (%)	32	16	17	10	16	16	18	10	14	11	29	25	0	0
Social services, education, government service and religious occupations	Total (%)	4	7	2	5	4	3	0	4	0	6	0	10	17	0
	Male (%)	6	11	2	4	6	6	0	5	0	0	0	0	0	20
Art, culture, recreation and sport occupations	Female (%)	1	3	3	0	0	0	0	0	0	0	0	0	50	0
	Total (%)	3	4	2	4	6	3	3	0	0	6	0	10	0	0
All occupations	Male (%)	1	1	0	0	0	0	0	0	0	0	0	0	0	0
	Female (%)	6	7	5	5	9	8	7	0	0	11	0	0	0	0
Labour force, 15+ years	Total (%)	9	12	9	17	21	10	9	14	14	24	0	15	0	0
	Male (%)	6	7	0	9	15	0	0	5	0	12	0	18	0	0
All occupations	Female (%)	14	17	22	26	27	24	25	23	29	33	0	25	0	25
	Total (%)	2	2	5	2	0	0	3	0	7	6	11	10	33	0
All occupations	Male (%)	2	2	5	2	0	0	0	0	13	0	17	18	25	0
	Female (%)	2	3	5	9	0	0	7	6	0	11	0	25	50	25

Table 2-3: Labour Force by Standard Occupational Categories in the Inuvialuit Communities (cont'd)

Occupation	Gender	Northwest Territories		ISR Total		Aklavik		Tuktoyaktuk		Holman		Paulatuk		Sachs Harbour	
		1991	2001	1991	2001	1991	2001	1991	2001	1991	2001	1991	2001	1991	2001
Sales and service occupations	Total (%)	18	22	22	27	27	26	22	27	17	26	11	25	33	33
	Male (%)	15	18	12	21	14	19	11	17	13	29	0	27	25	20
Trades, transport and equipment operators, and related occupations	Female (%)	23	27	37	36	44	32	39	45	21	28	29	38	50	25
	Total (%)	16	17	25	22	22	17	22	29	21	15	47	20	33	22
Occupations unique to the primary industry	Male (%)	27	30	38	36	37	31	35	48	27	29	58	27	50	20
	Female (%)	2	2	5	2	0	0	0	0	14	11	29	0	0	0
Occupations unique to the processing, manufacturing and utilities industries	Total (%)	5	4	5	7	3	9	8	5	0	6	0	10	17	0
	Male (%)	8	8	7	11	6	19	9	7	0	12	0	0	25	20
Occupations not classified elsewhere	Female (%)	1	1	3	0	0	0	7	0	0	0	0	0	0	0
	Total (%)	4	1	6	0	7	0	5	0	7	0	11	0	0	0
Occupations unique to the processing, manufacturing and utilities industries	Male (%)	7	2	7	4	6	0	4	5	13	0	17	0	0	20
	Female (%)	1	0	5	0	8	0	7	0	0	0	0	0	0	0
Occupations not classified elsewhere	Total (%)	3	0	7	0	10	0	7	0	10	0	0	0	0	0
	Male (%)	4	0	12	0	17	0	11	0	20	0	0	0	0	0
Female (%)	1	0	0	0	0	0	0	0	0	0	0	0	0	0	0

NOTES:

Because census data is independently randomly rounded (all numbers end in a 5 or 0), totals may not add to 100, especially in small communities (see Section 1.8.3, Limitations of Low-Frequency Data)
Number and percentage of the population, aged 15 years and older

SOURCE: Statistics Canada (1991, 2001), prepared by GNWT Bureau of Statistics

In comparison with the occupational distribution for the Northwest Territories, the ISR distribution shows under-representation in management and business, and clerical occupations, and over-representation in the government service, sales and service, and trades and transport.

Between 1991 and 2001, there were increased numbers of males in government service, sales and service, trades and transport, and primary industry occupations in the ISR. In Tuktoyaktuk, the largest ISR community, there were sizable increases in government service, sales and service, and trades and transport occupations.

In Holman, there were significant total labour force reductions in management and business, clerical, art and culture, trades and transport, and processing and manufacturing occupations. There were increases in government service, sales and service and primary industry occupations. Employment of women in Holman increased in art and culture, and sales and service occupations. In the ISR as a whole, the percentages of women in clerical, and processing and manufacturing occupations declined, but increased in government service, and art and culture occupations.

2.2.3 Labour Force

Table 2-4 shows that in the five ISR Aboriginal communities, between 31 and 43% of residents aged 15 years and older were high school graduates in 2001 and 23 to 41% had some post-secondary school education. High school graduation rates improved a lot in Holman, decreased dramatically in Sachs Harbour, and improved slightly in Tuktoyaktuk and Paulatuk. Recall, however, that with the low total populations in these communities, the errors introduced by random rounding could make the percentages for these communities unreliable (see Section 1.8.3, Limitations of Low-Frequency Data).

Table 2-4: Adult Education Attainment in the Inuvialuit Communities

Location	High School Graduation		Some Post-Secondary Education	
	1991 (%)	2001 (%)	1991 (%)	2001 (%)
Northwest Territories	54	65	47	56
NWT Aboriginal communities total ¹	33	42	30	37
ISR total	35	39	30	36
Aklavik	38	43	31	41
ISR Aboriginal communities total	35	39	30	36
Tuktoyaktuk	35	37	31	33
Holman	33	42	33	41
Paulatuk	28	31	21	23
Sachs Harbour	59	43	35	36

NOTE:
1 Includes study area communities in the Northwest Territories except Inuvik, Norman Wells, Fort Simpson, Yellowknife, Hay River and Enterprise
Percentage of population, aged 15 years and older

SOURCE: GNWT Bureau of Statistics (2003h)

See Section 4.2.5, Education and Training (ISR) for further information on education and training attainment.

The data in Table 2-5 on participation, employment and unemployment rates for males and females shows little change between 1991 and 2001. In the five Aboriginal communities as a whole, the employment rate changed little, although the unemployment rate decreased. The exceptions are Paulatuk and Sachs Harbour, where both the participation and employment rates decreased, and unemployment rate increased as persons not formerly looking for work became job seekers. There was no clear trend in the participation rate.

Table 2-5: Population, Participation, Employment and Unemployment in the Inuvialuit Communities

Location	Gender	1991				2001				Difference (2001 minus 1991)		
		Pop. (No.)	Part. (%)	Empl. (%)	Unempl. (%)	Pop. (No.)	Part. (%)	Empl. (%)	Unempl. (%)	Part. (%)	Empl. (%)	Unempl. (%)
NWT	Male	13,540	83	73	12	13,810	80	72	10	-3	-1	-2
	Female	12,145	73	65	10	13,130	74	67	8	1	2	-2
NWT Aboriginal communities total ¹	Male	2,425	73	54	27	2,470	66	52	23	-7	-2	-4
	Female	2,010	59	46	22	2,225	58	48	17	-1	2	-5
ISR total	Male	830	74	49	31	830	63	48	24	-11	-1	-7
	Female	725	58	44	25	765	58	46	18	0	2	-7

Table 2-5: Population, Participation, Employment and Unemployment in the Inuvialuit Communities (cont'd)

Location	Gender	1991				2001				Difference (2001 minus 1991)		
		Pop. (No.)	Part. (%)	Empl. (%)	Unempl. (%)	Pop. (No.)	Part. (%)	Empl. (%)	Unempl. (%)	Part. (%)	Empl. (%)	Unempl. (%)
Tuktoyaktuk	Male	335	73	46	35	330	65	47	28	-8	1	-7
	Female	270	56	39	33	300	57	43	24	1	4	-9
Aklavik	Male	250	74	42	43	245	57	41	29	-17	-1	-14
	Female	240	58	40	32	210	57	43	25	-1	3	-7
Holman	Male	115	70	56	19	125	68	60	0	-2	4	-19
	Female	115	61	56	0	140	64	57	0	3	1	0
Paulatuk	Male	80	75	62	17	95	63	47	25	-12	-15	8
	Female	65	54	46	29	80	50	44	25	-4	-2	-4
Sachs Harbour	Male	50	80	70	0	35	71	57	40	-9	-13	40
	Female	35	71	57	0	35	71	57	0	0	0	0

NOTES:
1 All study area communities in the Northwest Territories except Inuvik, Norman Wells, Yellowknife, Hay River and Enterprise
Pop. = population
Part. = participation rate, which is the percentage of population, aged 15 years and older in the labour force
Empl. = employment rate, which is the percentage of population, aged 15 years and older employed during the week before the survey
Unempl. = unemployment rate, which is the percentage of the labour force that was unemployed during the week before the survey
Statistics for very small communities are uncertain and should be considered with caution
Because census data is independently randomly rounded (all numbers end in a 5 or 0), totals may not add to 100, especially in small communities (see Section 1.8.3, Limitations of Low-Frequency Data)

SOURCE: Statistics Canada (1991, 2001)

There was an 11% decline in the male participation rate between 1991 and 2001 in the ISR as a whole. The rate declined in each community, except Sachs Harbour, but was greater in Aklavik and Paulatuk. The female participation rates showed little change during this period in the ISR as a whole. In Tuktoyaktuk and Holman, the rate increased slightly, whereas it decreased in Paulatuk.

There was a 1% decline in the male employment rate between 1991 and 2001, whereas the female rate increased by 2%. The decline in male rates was greatest in the two smallest communities, Paulatuk and Sachs Harbour. These communities are so small that allowances must be made for the instability of the randomly rounded data. The female employment rates increased by 4% in Tuktoyaktuk and 3% in Aklavik.

The data shows a 7% decline in the regional male unemployment rates between 1991 and 2001 in every ISR community, related to the 11% regional decline in the participation rate. There was a 7% decline in the regional female

unemployment rate, including a 9% decline in Tuktoyaktuk, the largest ISR community.

Table 2-6 shows that the potential labour supply comprised 31% of the ISR working-age population in 1999, 65% of whom said they needed training. The potential labour supply is composed of people of working age who are unemployed and those not participating in the labour force who do want a job, less those who, because of disability, age, illiteracy, or lack of education, skills or training could be considered unemployable, according to the GNWT Bureau of Statistics definition.

Table 2-6: Profile of the Working-Age Population in the Inuvialuit Communities (1999)

Profile Category	NWT Aboriginal Communities ¹	ISR Total	Aklavik	Tuktoyaktuk	Holman	Paulatuk	Sachs Harbour
Population 15+ (No.)	5,821	1,746	506	655	310	174	101
Potential labour supply (No.)	1,797	543	148	229	81	59	26
Potential labour supply ² (%)	31	31	29	35	26	34	26
Need training ³ (%)	53	65	62	56	86	75	65
Would do rotational work ³ (%)	73	70	65	79	63	54	81
Male ³ (%)	60	62	66	66	46	51	73
Aboriginal ³ (%)	94	95	96	97	96	92	85
Less than high school education ³ (%)	68	72	66	76	69	78	69
NOTES: 1 All study area communities in the Northwest Territories, except Inuvik, Norman Wells, Fort Simpson, Yellowknife, Hay River and Enterprise 2 Percentage of population, aged 15 years and older 3 Percentage of potential labour force							
SOURCE: Calculated using GNWT Bureau of Statistics (1999)							

2.2.4 Income Sources and Amounts

Table 2-7 shows that there were 56 tax-paying companies in the BDR in 2000, i.e., those that made sufficient profits to be required to pay a tax to the GNWT. Altogether, \$1.3 million in corporate income taxes was paid in the BDR in 2000, which includes data for all the territorial regions for comparison purposes. Taxes paid to the Northwest Territories for 1995 to 1998 were low, but increased in 1999, and again in 2000, then declined in 2001. GNWT Finance explained the decline, reporting that the 2000 corporate income tax revenue included a significant amount from one company because of capital gains on the sale of shares. This level of tax is not expected to occur again.

Table 2-7: Corporate Tax Status in the Northwest Territories

Region	Year	Corporate Income Tax Paid (\$)	Tax-Paying Companies	Non Tax-Paying Companies	Total Companies
Northwest Territories	1995	32,650,756	895	1,158	2,053
	1996	31,369,701	887	1,193	2,080
	1997	27,024,079	932	1,356	2,288
	1998	23,965,218	953	1,335	2,288
	1999	89,778,543	957	1,342	2,299
	2000	382,558,653	920	1,126	2,046
	2001	80,931,551	–	–	–
Yellowknife region ¹	1995	31,996,748	721	817	1,538
	1996	30,715,198	710	830	1,540
	1997	26,312,437	757	974	1,731
	1998	23,128,104	774	955	1,729
	1999	88,148,015	811	1,021	1,832
	2000	380,858,591	771	817	1,588
BDR ²	1995	141,614	43	116	159
	1996	286,548	56	115	171
	1997	153,810	55	123	178
	1998	314,806	60	116	176
	1999	691,900	54	96	150
	2000	1,284,076	56	98	154
SSA	1995	64,634	21	44	65
	1996	51,939	18	52	70
	1997	82,048	19	57	76
	1998	61,303	15	60	75
	1999	32,035	9	37	46
	2000	47,898	15	29	44
DCR	1995	40,256	18	38	56
	1996	40,786	20	38	58
	1997	40,839	17	39	56
	1998	41,665	12	39	63
	1999	238,010	13	38	51
	2000	41,665	12	39	51

NOTES:

– = data not available

1 Yellowknife region includes Yellowknife, and the N'dilo and Dettah suburbs

2 Only data aggregated for Inuvialuit and Gwich'in communities is available

Income tax amounts are not adjusted for inflation

SOURCE: GNWT Finance (2002)

Table 2-8 shows that the average annual employment income for ISR community residents in 2001 was about \$26,000. Increases between 1996 and 2001 were substantial, especially in Tuktoyaktuk. The ISR communities generally showed a decline in the average monthly number of income support beneficiaries between 1996 and 2003, except in Aklavik, reflecting changes in government support policy and increased prosperity in the region.

Table 2-8: Employment Income and Income Support Beneficiaries in the Inuvialuit Communities

Location	Employment Income			No. of Income Support Beneficiaries ¹			
	1996 (\$)	1999 (\$)	2001 (\$)	1996	1999	2001	2003
Northwest Territories	33,748	35,450	38,497	102	86	59	51
Study area Aboriginal communities ²	22,228	23,551	26,135	–	–	–	90
ISR total	20,404	21,786	26,391	–	–	–	115
Aklavik	20,143	21,013	23,526	151	224	149	156
Tuktoyaktuk	21,911	23,322	30,427	278	213	79	66
Holman	17,456	20,724	23,905	145	124	168	134
Paulatuk	–	19,822	22,508	395	349	229	188
Sachs Harbour	–	–	–	67	126	44	34

NOTES:
 – = data not available, or held confidential because of low frequencies
 1 Average monthly number of recipients and dependents per 1,000 population, calculated based on population estimates for 1996 to 2002, prepared by GNWT Bureau of Statistics
 2 Does not include data for Sachs Harbour
 Dollar amounts not adjusted for inflation

SOURCE: GNWT Bureau of Statistics (2002a, 2003g)

2.2.5 Cost of Living

The data reported for cost of living comes from:

- a 2000 cost-of-living index that uses Edmonton as a base
- a 2001 food price index that uses Yellowknife as a base

Table 2-9 shows that the cost of living in the coastal communities was about 80% higher than in Edmonton, but somewhat less for Aklavik. Compared to costs in Yellowknife, food prices were about 87% higher in the coastal communities and 83% higher in Aklavik.

Table 2-9: Cost of Living Differentials for the Study Area Communities

Region	Community	Cost of Living Differential ¹ (2000)	Estimated Food Price Index ² (2001)
ISR	Aklavik	155–160	183
	Coastal communities (average)	178–181	187 ^b
	Tuktoyaktuk	160–165	165
	Holman	160–165	182
	Paulatuk	160–165	193
	Sachs Harbour	160–165	188
GSA	Inuvik	145–150	147
	Fort McPherson	150–155	150
	Tsiigehtchic	150–155	130
SSA	Norman Wells	150–155	160
	Fort Good Hope	160–165	166
	Déline	160–165	173
	Tulita	155–160	172
	Colville Lake	210–215 ^a	213 ^b
DCR	Fort Simpson	135–140	128
	Fort Providence	130–135	113
	Fort Liard	130–135	129
	Wrigley	145–150	174
	Nahanni Butte	140–145	155
	Trout Lake	–	155 ^b
	Jean Marie River	145–150 ^a	143
	Kakisa	135–140 ^a	155 ^b
	Hay River Reserve	125–130 ^a	118 ^b
	West Point Reserve	125–130	125–130
ICCs	Yellowknife	120–125	100
	Hay River	125–130	110
NOTES: – = data not available or too small to be expressed 1 Cost of living differentials are used to calculate the Government of Canada federal isolated post allowances and use Edmonton as a base, e.g., Edmonton = 100 2 Food price indexes are calculated using Yellowknife as a base, e.g., Yellowknife = 100 a 1997 data b 2000 data			
SOURCE: GNWT Bureau of Statistics (2003g)			

2.3 Baseline Conditions – Gwich’in Settlement Area

2.3.1 Population Composition and Dynamics

Communities in the GSA include Inuvik, the commercial and administrative hub of the Mackenzie Delta, and the two smaller and largely Aboriginal communities of Fort McPherson and Tsiigehtchic.

Table 2-10 shows the 2003 estimated population of the GSA communities was 4,450, including 3,435 in Inuvik. Census counts for 1991 and 2001 showed a 10% decline in population for Inuvik, little change in Fort McPherson and a 35% increase in Tsiigehtchic.

Table 2-10: Census Counts and Population Estimates for the Gwich’in Communities

Location	Census Population Numbers				Growth 1991–2001 (%)	2003 Estimated Population (No.)
	1986	1991	1996	2001		
Northwest Territories	33,830	36,405	35,370	37,360	3	41,872
GSA total	4,257	4,109	4,336	3,850	-6	4,450
Inuvik	3,389	3,206	3,296	2,894	-10	3,435
Fort McPherson	760	759	878	761	1	808
Tsiigehtchic	108	144	162	195	35	207
NOTE: Estimates were calculated by the GNWT Bureau of Statistics by allocating the demographic components of growth, down to a community level, using information from a variety of sources						
SOURCE: GNWT Bureau of Statistics (2003d, 2004)						

Table 2-11 shows census data for 2001, indicating that 90% or more of the population of Fort McPherson and Tsiigehtchic was Aboriginal (mostly Dene). In Inuvik, only 59% of the population was Aboriginal – largely Inuit, but with Dene representation.

Table 2-11: Ethnicity in the Gwich'in Communities (2001 Census Count)

Location	Total Population (No.)	Non-Aboriginal (%)	Aboriginal (%)	Aboriginal Components (Total = 100%)				
				Inuit (%)	Dene (%)	Métis (%)	Multiple (%)	Other Aboriginal (%)
Northwest Territories	37,360	50	50	21	57	19	1	2
Inuvik	2,895	41	59	65	26	9	1	3
Fort McPherson	765	7	93	2	75 ^a	6	4	6 ^a
Tsiigehtchic	195	8	90	6	66	14	9	6

NOTES:
a Estimated, as the 25% figure given in the census data for Other Aboriginal is incorrect (too large)

SOURCE: GNWT Bureau of Statistics (2003e)

The original 2001 census data had 175 people, or 23% of the Fort McPherson population, in the category of Other Aboriginal, which is without precedent in the Northwest Territories. The figure of 6% has been substituted for the 23% figure, because this is the Other Aboriginal total for Tsiigehtchic. Substituting this figure is plausible because Tsiigehtchic originated as a breakaway community from Fort McPherson. The remaining 17% (of the 23%) was added into the Dene category.

Statistics on five-year mobility status for 1996 reported that 24% of Inuvik residents were interprovincial or international migrants. Only 8% of those in the Aboriginal communities were in this category. Just over half of the population in the Aboriginal communities moved to a different residence. In Inuvik, this figure was 77%. The percentage that moved between Northwest Territories communities was higher in Tsiigehtchic than in Fort McPherson. However, these percentages were lower than Inuvik, where 39% of people who changed residence moved to another community (GNWT Bureau of Statistics 2003a).

2.3.2 Economic Activity

Table 2-12 presents 1991 and 2001 occupational groupings for the labour force for the GSA. Although some Statistics Canada changes were made in the occupational categories between 1991 and 2001, at the level of aggregation in the table, these changes make little, if any, difference.

Table 2-12: Labour Force by Standard Occupational Categories in the Gwich'in Communities

Occupation	Gender	Northwest Territories		GSA Total		Gwich'in Aboriginal Communities		Inuvik		Fort McPherson		Tsiigehtchic	
		1991	2001	1991	2001	1991	2001	1991	2001	1991	2001	1991	2001
Labour force, 15+ years	Total (No.)	20,070	20,785	2,180	2,045	370	400	1,810	1,645	315	320	55	88
	Male (No.)	11,225	11,115	1,215	1,085	220	210	995	875	185	160	35	50
	Female (No.)	8,845	9,670	770	765	150	190	935	770	130	160	20	38
All occupations	Total (No.)	19,675	20,425	2,155	2,015	360	385	1,795	1,630	305	305	55	80
	Male (No.)	11,030	10,935	1,200	1,075	205	205	995	870	175	160	30	45
	Female (No.)	8,645	9,490	955	955	155	190	800	765	130	150	25	40
Management, business, finance and administration occupations	Total (%)	18	21	17	23	7	19	19	23	8	18	0	25
	Male (%)	19	19	18	20	7	15	21	21	9	13	0	22
	Female (%)	16	24	15	25	6	21	17	26	8	13	0	50
Clerical occupations	Total (%)	17	9	16	9	13	4	17	10	11	5	18	0
	Male (%)	6	3	5	5	0	5	6	5	0	6	0	0
	Female (%)	32	16	31	15	29	8	31	17	27	10	100	0
Natural and applied sciences, and related occupations	Total (%)	4	7	3	6	0	5	3	6	0	3	0	13
	Male (%)	6	11	4	9	0	10	5	9	0	6	0	22
	Female (%)	1	3	1	3	0	5	1	3	0	7	0	0
Health occupations	Total (%)	3	4	4	5	0	3	5	6	0	3	0	0
	Male (%)	1	1	2	2	0	5	2	2	0	6	0	0
	Female (%)	6	7	7	8	0	0	9	10	0	0	0	0
Social services, education, government service and religious occupations	Total (%)	9	12	8	13	8	17	8	12	10	16	0	19
	Male (%)	6	7	5	6	5	0	6	7	6	0	0	0
	Female (%)	14	17	12	18	13	26	12	16	15	27	0	25
Art, culture, recreation and sport occupations	Total (%)	2	2	2	2	0	0	2	2	0	0	0	0
	Male (%)	2	2	2	1	0	0	2	1	0	0	0	0
	Female (%)	2	3	2	2	0	0	2	3	0	0	0	0
Sales and service occupations	Total (%)	18	22	19	21	15	23	19	20	18	25	0	19
	Male (%)	15	18	14	16	5	12	16	17	6	16	0	0
	Female (%)	23	27	25	25	29	32	24	24	35	33	0	25
Trades, transport and equipment operators, and related occupations	Total (%)	16	17	18	19	19	25	18	17	20	23	18	31
	Male (%)	27	30	30	34	34	41	29	33	34	38	33	56
	Female (%)	2	2	3	2	0	5	4	1	0	7	0	0
Occupations unique to the primary industry	Total (%)	5	4	4	3	19	5	1	2	20	7	18	0
	Male (%)	8	8	6	4	29	7	1	3	29	9	33	0
	Female (%)	1	1	1	1	6	0	0	1	8	0	0	0

Table 2-12: Labour Force by Standard Occupational Categories in the Gwich'in Communities
(cont'd)

Occupation	Gender	Northwest Territories		GSA Total		Gwich'in Aboriginal Communities		Inuvik		Fort McPherson		Tsiigehtchic	
		1991	2001	1991	2001	1991	2001	1991	2001	1991	2001	1991	2001
Occupations unique to the processing, manufacturing and utilities industries	Total (%)	4	1	5	1	6	3	4	1	7	3	0	0
	Male (%)	7	2	7	2	5	5	7	1	6	6	0	0
	Female (%)	1	0	2	0	6	0	1	0	8	0	0	0
Occupations not classified elsewhere	Total (%)	3	0	2	0	3	0	2	0	3	0	0	0
	Male (%)	4	0	4	0	5	0	4	0	6	0	0	0
	Female (%)	1	0	0	0	0	0	0	0	0	0	0	0

NOTES:
Number and percentage of population, aged 15 years and older
Because census data is independently randomly rounded (all numbers end in a 5 or 0), totals may not add to 100, especially in small communities (see Section 1.8.3, Limitations of Low-Frequency Data)

SOURCE: Statistics Canada (1991, 2001), prepared by GNWT Bureau of Statistics

In the GSA, there was heavy representation in management and business, sales and service, and trades and transport occupations. The proportion employed in clerical, and processing and manufacturing occupations declined between 1991 and 2001, whereas employment in management and business, and in government service occupations increased. There are essentially no differences between the occupational distributions for the GSA and the Northwest Territories, probably because Inuvik dominates the GSA distribution.

The gender comparisons for standard occupational categories for the Gwich'in total and Gwich'in Aboriginal communities present virtually identical patterns. In both, females are under-represented in management and business, science, trades and transport, and primary industry occupations. They are over-represented in clerical, sales and service, and various government service occupations. Female representation increased between 1991 and 2001 in government service, science, sales and service, and trades and transport occupations. Their involvement in clerical, management and business, and health occupations declined.

2.3.3 Labour Force

Table 2-13 shows that, in 2001 in the GSA Aboriginal communities, about 41% of residents over 15 years of age graduated from high school and 35% had some post-secondary education. In Inuvik, where 41% of the residents are non-Aboriginal, 71% of adults graduated from high school and 61% had some post-secondary education. Between 1991 and 2001, the proportion of those who graduated from high school in all three communities increased, and the proportion

with some post-secondary education also increased in Fort McPherson and Tsiigehtchic.

Table 2-13: Adult Education Attainment in the Gwich'in Communities

Location	High School Graduation		Some Post-Secondary Education	
	1991 (%)	2001 (%)	1991 (%)	2001 (%)
Northwest Territories	54	65	47	56
NWT Aboriginal communities total ¹	33	42	30	37
GSA total	59	64	50	54
GSA Aboriginal communities total	33	41	27	35
Inuvik	66	71	56	61
Fort McPherson	35	41	27	36
Tsiigehtchic	26	40	26	32

NOTE:
1 All study area communities in the Northwest Territories except Inuvik, Norman Wells, Fort Simpson, Yellowknife, Hay River and Enterprise
Percentage of population, aged 15 years and older

SOURCE: GNWT Bureau of Statistics (2003f)

See Section 4.3.5, Education and Training (GSA) for further information on education and training attainment.

Table 2-14 shows data for the relative participation, employment and unemployment rates of males and females, and the differential changes in these rates between 1991 and 2001.

Table 2-14: Participation, Employment and Unemployment in the Gwich'in Communities

Location	Gender	1991				2001				Difference (2001 minus 1991)		
		Pop. (No.)	Part. (%)	Empl. (%)	Unempl. (%)	Pop. (No.)	Part. (%)	Empl. (%)	Unempl. (%)	Part. (%)	Empl. (%)	Unempl. (%)
NWT	Male	13,540	83	73	12	13,810	80	72	10	-3	-2	-2
	Female	12,145	73	65	10	13,130	74	67	8	1	2	-2
NWT Aboriginal communities ¹	Male	2,425	73	54	27	2,470	66	52	23	-7	-2	-4
	Female	2,010	59	46	22	2,225	58	48	17	-1	2	-5
GSA total	Male	1,555	81	68	15	1,375	78	72	9	-3	4	-6
	Female	1,375	72	64	11	1,355	71	65	9	-1	1	-2
GSA Aboriginal communities total	Male	305	69	42	34	335	61	49	22	-8	7	-12
	Female	275	56	47	19	325	60	51	18	4	4	-1

Table 2-14: Participation, Employment and Unemployment in the Gwich'in Communities (cont'd)

Location	Gender	1991				2001				Difference (2001 minus 1991)		
		Pop. (No.)	Part. (%)	Empl. (%)	Unempl. (%)	Pop. (No.)	Part. (%)	Empl. (%)	Unempl. (%)	Part. (%)	Empl. (%)	Unempl. (%)
Inuvik	Male	1,235	84	74	11	1,040	84	79	6	0	5	-5
	Female	1,100	75	68	10	1,030	75	70	7	-5	2	-3
Fort McPherson	Male	270	68	43	35	270	59	46	22	-9	3	-13
	Female	235	58	47	15	265	60	49	16	2	2	1
Tsiigehtchic	Male	50	70	40	29	65	69	62	22	-1	22	-7
	Female	40	50	50	50	60	58	58	29	8	8	-21

NOTES:

1 All study area communities in the Northwest Territories except Inuvik, Norman Wells, Yellowknife, Hay River and Enterprise

Pop. = population

Part. = participation rate, which is the percentage of population, aged 15 years and older in the labour force

Empl. = employment rate, which is the percentage of population, aged 15 years and older employed during the week before the survey

Unempl. = unemployment rate, which is the percentage of the labour force that was unemployed during the week before the survey

Statistics for very small communities are uncertain and should be considered with caution

Because census data is independently randomly rounded (all numbers end in a 5 or 0), totals may not add to 100, especially in small communities (see Section 1.8.3, Limitations of Low-Frequency Data)

SOURCE: Statistics Canada (1991, 2001)

Between 1991 and 2001, male participation rates declined in the GSA by 3% and female rates by 1%. The male rate decline was predominantly in Fort McPherson. The female rate in Inuvik declined by 5%, whereas in Fort McPherson and Tsiigehtchic it increased.

The decline in the male participation and unemployment rates in the GSA Aboriginal communities between 1991 and 2001 facilitated a 7% increase in the male employment rate during the decade. The rate was greatest in Tsiigehtchic, at 22%. The female employment rate increased by 4%, as did their participation rate, with the greatest increase again in Tsiigehtchic. Both the male and female employment rates increased in Inuvik during this period.

Male unemployment rates in the GSA Aboriginal communities declined more than female rates, except in Tsiigehtchic, but were higher than those for females in both 1991 and 2001. This is explained by the lower female participation rate.

In Table 2-15, data for 1999 shows that the potential labour supply was 32% of the working-age population in the GSA Aboriginal communities. The profile of this potential labour supply indicated that 83% need training. In Inuvik, the potential labour supply was only 14% of the working-age population.

Table 2-15: Profile of the Working-Age Population in the Gwich'in Communities (1999)

Profile Category	NWT Aboriginal Communities ¹	GSA Total	Inuvik	Gwich'in Aboriginal Communities Total	Fort McPherson	Tsiigehtchic
Population 15+ (No.)	5,821	3,078	2,347	731	628	103
Potential labour supply (No.)	1,797	568	336	232	199	33
Potential labour supply ² (%)	31	18	14	32	32	32
Need training ³ (%)	53	59	52	83	83	82
Would do rotational work ³ (%)	73	55	47	81	83	67
Male ³ (%)	60	52	51	54	57	27
Aboriginal ³ (%)	94	86	81	99	99	100
Less than high school education ³ (%)	68	59	57	67	69	58
NOTES:						
1 All study area communities in the Northwest Territories, except Inuvik, Norman Wells, Fort Simpson, Yellowknife, Hay River and Enterprise						
2 Percentage of population, aged 15 years and older						
3 Percentage of potential labour force						
SOURCE: Calculated using GNWT Bureau of Statistics (1999)						

2.3.4 Income Sources and Amounts

Table 2-7, shown previously, provides information on tax-paying companies and corporate income taxes paid in the BDR.

Table 2-16 shows that average employment income in Inuvik in 2001 was about \$39,000 per year. In Fort McPherson, it was about \$24,000 and in Tsiigehtchic, it was about \$20,000. Average personal income grew between 1996 and 2001 in both Inuvik and Fort McPherson. Reflecting changes in government policy, the average monthly number of income support beneficiaries decreased substantially between 1996 and 2003 in all the GSA communities.

Table 2-16: Employment Income and Income Support Beneficiaries in the Gwich'in Communities

Location	Employment Income			No. of Income Support Beneficiaries ¹			
	1996 (\$)	1999 (\$)	2001 (\$)	1996	1999	2001	2003
Northwest Territories	33,748	35,450	38,497	102	86	59	51
NWT Aboriginal communities ²	22,228	23,551	26,135	–	–	–	90
GSA total ³	30,794	32,806	36,021	123	125	64	51
Inuvik	33,220	35,656	39,125	103	102	60	50
GSA Aboriginal communities total	20,872	20,014	23,123	–	–	–	62
Fort McPherson	20,872	20,014	23,700	194	193	79	52
Tsiigehtchic	–	–	20,443	138	194	63	48

NOTES:
– = data not available, or held confidential because of low frequencies
1 Average monthly number of recipients and dependents per 1,000 population, calculated based on population estimates for 1996 to 2002 (prepared by GNWT Bureau of Statistics)
2 Does not include data for Sachs Harbour
3 GSA totals do not include Tsiigehtchic for 1996 to 1999
Dollar amounts not adjusted for inflation

SOURCE: GNWT Bureau of Statistics (2002a, 2003g)

2.3.5 Cost of Living

The cost of living in the GSA was about 50% higher than in Edmonton in 2000 (see Table 2-9, shown previously).

In 2001, food prices in the GSA were 47% higher than in Yellowknife.

2.4 Baseline Conditions – Sahtu Settlement Area

2.4.1 Population Composition and Dynamics

Table 2-17 shows the 2003 estimated population of the SSA communities was 2,504, including 797 for Norman Wells. Census counts between 1991 and 2001 show increases for the Aboriginal communities of Colville Lake and Tulita.

Table 2-17: Census Counts and Population Estimates for the Sahtu Communities

Location	Census Population Numbers				Growth 1991–2001 (%)	2003 Estimated Population (No.)
	1986	1991	1996	2001		
Northwest Territories	33,830	36,405	35,370	37,360	3	41,872
SSA total	2,105	2,224	2,598	2,330	5	2,504
Norman Wells	627	627	798	666	6	797
Fort Good Hope	562	602	644	549	-9	540
Déline	532	551	616	536	-2	551
Tulita	332	375	450	473	26	489
Colville Lake	52	69	90	102	48	127

NOTE:
Estimates are calculated by the GNWT Bureau of Statistics by allocating the demographic components of growth, down to a community level, using information from a variety of sources

SOURCE: GNWT Bureau of Statistics (2003d, 2004)

Table 2-18 shows census data for 2001, which indicates that more than 90% of the populations of Fort Good Hope, Déline, Tulita and Colville Lake were Aboriginal. The Aboriginal population was mostly Dene. In Norman Wells, only 29% of the population was Aboriginal, mostly Dene and Métis.

Table 2-18: Ethnicity in the Sahtu Communities (2001 Census Count)

Location	Total Population (No.)	Non- Aboriginal (%)	Aboriginal (%)	Aboriginal Components (Total = 100%)				
				Inuit (%)	Dene (%)	Métis (%)	Multiple (%)	Other Aboriginal (%)
Northwest Territories	37,360	50	50	21	57	19	1	2
Norman Wells	665	71	29	18	42	40	–	–
Fort Good Hope	550	7	92	0	91	9	2	–
Déline	540	8	92	0	96	3	–	2
Tulita	475	7	93	2	81	16	–	–
Colville Lake	100	10	90	0	100	–	–	–

NOTES:
– = values held confidential because of small size and random rounding
Percentages computed from randomly rounded data (see Section 1.8.3, Limitations of Low-Frequency Data)

SOURCE: GNWT Bureau of Statistics (2003e)

Statistics on five-year mobility status for 1996 reported that 45% of Norman Wells residents were interprovincial or international migrants, whereas only 6% of the Sahtu Aboriginal residents were migrants. Just over half of the population in the Aboriginal communities moved to a different residence. In Norman Wells, it was 80%. Less than one fifth of the movement in the Aboriginal communities was from one community to another. In Norman Wells, 59% of the residents who

changed residence moved to another community (GNWT Bureau of Statistics 2003a).

2.4.2 Economic Activity

Table 2-19 shows the standard occupational groupings for the SSA workforce for 1991 and 2001. As mentioned previously, Statistics Canada made some changes in the occupational categories between 1991 and 2001. However, given the level of aggregation in the table, the changes make little, if any, difference.

In 2001 in the SSA, trades and transport, sales and service, and management and business occupations were well represented. Between 1991 and 2001, the proportions in management and business, science, government service, sales and service, and primary industry occupations increased, but the proportion in clerical occupations declined. The occupational distribution in the SSA was similar to that in the Northwest Territories in 2001, except for the higher proportion in trades and transport occupations in the SSA.

The changes from 1991 to 2001 in occupational distributions in the Sahtu Aboriginal communities were distinctive. The percentages of men increased in management and business, government service, science, and trades and transport occupations. Fort Good Hope best exemplified these changes, except for science occupations.

Fewer changes were seen in the occupations of women, but there were two main changes between 1991 and 2001 in their occupations in the Aboriginal communities:

- a decline from 25% to 7% among women in clerical occupations
- an increase from 8% to 29% among women in management and business occupations

Table 2-19: Labour Force by Standard Occupational Categories in the Sahtu Communities

Occupation	Gender	Northwest Territories		SSA Total		SSA Aboriginal Communities		Norman Wells		Fort Good Hope		Déline		Tulita		Colville Lake	
		1991	2001	1991	2001	1991	2001	1991	2001	1991	2001	1991	2001	1991	2001	1991	2001
Labour force, 15+ years	Total (No.)	20,070	20,785	975	1,125	585	695	390	430	215	260	190	210	155	180	25	45
	Male (No.)	11,225	11,115	560	635	335	395	225	240	125	145	105	120	85	105	20	25
	Female (No.)	8,850	9,670	410	480	245	290	165	190	90	110	80	90	65	75	10	15
All occupations	Total (No.)	19,675	20,425	970	1,110	575	685	395	425	215	260	180	200	155	180	25	45
	Male (No.)	11,030	10,935	565	615	335	385	230	230	125	145	105	115	90	100	15	25
	Female (No.)	8,645	9,490	405	490	240	295	165	195	90	110	75	85	65	80	10	20
Management, business, finance and administration occupations	Total (%)	18	21	13	19	9	17	20	22	7	17	14	15	6	17	0	22
	Male (%)	19	19	15	18	9	14	24	24	12	17	14	17	0	10	0	0
	Female (%)	16	24	11	30	8	29	15	31	0	27	13	18	15	25	0	100
Clerical occupations	Total (%)	17	9	12	6	10	5	15	7	9	4	11	8	13	6	0	0
	Male (%)	6	3	2	2	0	0	4	4	0	0	0	0	0	0	0	0
	Female (%)	32	16	27	9	25	7	30	13	22	0	27	12	31	13	0	0
Natural and applied sciences, and related occupations	Total (%)	4	7	3	6	2	3	5	12	0	4	6	0	0	6	0	0
	Male (%)	6	11	5	9	3	3	9	20	0	0	10	0	0	10	0	0
	Female (%)	1	3	0	4	0	3	0	5	0	9	0	0	0	0	0	0
Health occupations	Total (%)	3	4	2	3	2	3	3	2	0	4	0	0	6	6	0	0
	Male (%)	1	1	0	2	0	3	0	0	0	0	0	0	0	0	0	40
	Female (%)	6	7	5	2	4	0	6	5	0	0	0	0	15	0	0	0
Social services, education, government service and religious occupations	Total (%)	9	12	10	13	15	15	3	8	14	15	19	15	6	14	40	22
	Male (%)	6	7	2	8	3	9	0	7	8	10	0	9	0	10	0	0
	Female (%)	14	17	21	20	31	27	6	10	22	27	47	29	15	19	100	50

Table 2-19: Labour Force by Standard Occupational Categories in the Sahtu Communities (cont'd)

Occupation	Gender	Northwest Territories		SSA Total		SSA Aboriginal Communities		Norman Wells		Fort Good Hope		Déline		Tulita		Colville Lake	
		1991	2001	1991	2001	1991	2001	1991	2001	1991	2001	1991	2001	1991	2001	1991	2001
Art, culture, recreation and sport occupations	Total (%)	2	2	3	3	3	3	0	2	4	5	6	0	0	6	0	0
	Male (%)	2	2	3	3	5	5	0	0	7	0	10	9	0	0	0	0
	Female (%)	2	3	2	4	3	3	0	0	11	0	0	0	0	13	0	0
Sales and service occupations	Total (%)	18	22	21	22	17	22	18	20	23	23	14	23	16	19	0	22
	Male (%)	15	18	11	9	13	13	9	9	8	17	10	13	11	10	0	0
	Female (%)	23	27	30	29	32	32	30	33	44	36	20	35	23	31	0	0
Trades, transport and equipment operators, and related occupations	Total (%)	16	17	23	24	25	25	25	20	19	21	25	28	35	28	0	22
	Male (%)	27	30	37	39	44	44	35	35	32	38	43	48	50	50	0	40
	Female (%)	2	2	7	4	0	0	12	5	0	0	0	0	15	0	0	0
Occupations unique to the primary industry	Total (%)	5	4	5	7	9	9	5	4	9	10	0	5	6	8	0	22
	Male (%)	8	8	9	11	9	14	9	7	16	17	0	9	11	10	0	40
	Female (%)	1	1	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Occupations unique to the processing, manufacturing and utilities industries	Total (%)	4	1	2	3	2	3	3	4	5	0	0	10	0	0	0	0
	Male (%)	7	2	4	2	3	0	4	4	8	0	0	0	0	0	0	0
	Female (%)	1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Occupations not classified elsewhere	Total (%)	3	0	4	0	3	0	4	0	5	0	0	0	6	0	0	0
	Male (%)	4	0	6	0	6	0	7	0	8	0	0	0	11	0	0	0
	Female (%)	1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0

NOTES:

Number and percentage of population, aged 15 years and older

Because census data is independently randomly rounded (all numbers end in a 5 or 0), totals may not add to 100, especially in small communities (see Section 1.8.3, Limitations of Low-Frequency Data)

SOURCES: Statistics Canada (1991, 2001), prepared by GNWT Bureau of Statistics

2.4.3 Labour Force

Table 2-20 shows that in 2001, 36 to 49% of those aged 15 years and over in the SSA Aboriginal communities had some high school education, and from 31 to 45% had some post-secondary education. In the largely non-Aboriginal community of Norman Wells, data shows that in 2001, 84% of adults had some high school education and 72% had some post-secondary education. The percentages for Colville Lake are unreliable because of random rounding of the very low frequencies used in calculating the percentages.

Table 2-20: Adult Education Attainment in the Sahtu Communities

Location	High School Graduation		Some Post-Secondary Education	
	1991 (%)	2001 (%)	1991 (%)	2001 (%)
Northwest Territories	54	65	47	56
NWT Aboriginal communities total ¹	33	42	30	37
SSA total	49	55	43	49
SSA Aboriginal communities total	33	42	31	39
Norman Wells	76	84	63	72
Fort Good Hope	40	49	35	45
Déline	29	39	26	37
Tulita	–	36	–	34
Colville Lake	11	46	44	31
NOTE: 1 All study area communities in the Northwest Territories except Inuvik, Norman Wells, Fort Simpson, Yellowknife, Hay River and Enterprise Percentage of population, aged 15 years and older There is no data for Tulita				
SOURCE: GNWT Bureau of Statistics (2003f)				

See Section 4.4.5, Education and Training (SSA) for further information on education and training attainment.

Table 2-21 presents the relative participation, employment and unemployment rates of males and females, and the differential changes in these rates between 1991 and 2001.

Table 2-21: Participation, Employment and Unemployment in the Sahtu Communities

Location	Gender	1991				2001				Difference (2001 minus 1991)		
		Pop. (No.)	Part. (%)	Empl. (%)	Unempl. (%)	Pop. (No.)	Part. (%)	Empl. (%)	Unempl. (%)	Part. (%)	Empl. (%)	Unempl. (%)
NWT	Male	13,540	83	73	12	13,810	80	72	10	-3	-1	-2
	Female	12,145	73	65	10	13,130	74	67	8	1	2	-2
NWT Aboriginal communities ¹	Male	2,425	73	54	27	2,470	66	52	23	-7	-2	-4
	Female	2,010	59	46	22	2,225	58	48	17	-1	2	-5
SSA total	Male	625	72	60	19	830	76	66	14	4	6	-5
	Female	535	59	48	16	705	66	58	11	7	10	-5
SSA Aboriginal communities total	Male	385	62	46	28	575	69	57	18	7	11	-10
	Female	325	50	38	20	520	58	48	15	8	10	-5
Norman Wells	Male	240	94	92	4	255	92	84	8	-2	-8	4
	Female	210	79	71	9	230	85	80	5	6	9	-4
Fort Good Hope	Male	195	64	51	24	205	71	63	14	7	12	-10
	Female	180	50	33	28	180	64	53	13	14	20	-15
Délina	Male	195	54	41	24	180	67	44	29	13	3	5
	Female	170	47	41	12	175	51	43	11	4	2	-1
Tulita	Male	125	68	48	35	155	64	58	15	-4	10	-20
	Female	120	54	46	23	135	56	48	13	2	2	-10
Colville Lake	Male	25	80	40	50	35	86	86	0	46	46	-50
	Female	20	50	0	0	30	67	50	50	17	50	50

NOTES:

1 All study area communities in the Northwest Territories except Inuvik, Norman Wells, Yellowknife, Hay River and Enterprise

Pop. = population

Part. = participation rate, which is the percentage of population, aged 15 years and older in the labour force

Empl. = employment rate, which is the percentage of population, aged 15 years and older employed during the week before the survey

Unempl. = unemployment rate, which is the percentage of the labour force that was unemployed during the week before the survey

Statistics for very small communities are uncertain and should be considered with caution

Because census data is independently randomly rounded (all numbers end in a 5 or 0), totals may not add to 100, especially in small communities (see Section 1.8.3, Limitations of Low-Frequency Data)

SOURCE: Statistics Canada (1991, 2001)

In contrast to the BDR, both the male and female participation rates in the SSA increased between 1991 and 2001, by 4% for males and by 7% for females. The gender difference was largely because of the influence of Norman Wells, where there was a 2% decline in male rates and a 6% increase in female rates.

Male and female employment rates increased between 1991 and 2001 in the Sahtu Aboriginal communities. Although the female employment rates increased in Norman Wells by 9% during this period, the male rates fell by 8%.

The unemployment rates of both males and females in the SSA fell by 5% between 1991 and 2001, driven primarily by declines in Fort Good Hope.

Table 2-22 shows data for 1999, indicating that the potential labour supply was 32% of the working-age population in the SSA Aboriginal communities. The profile of this potential labour supply indicated that 71% need training. In Norman Wells, the potential labour supply was only 10% of the working-age population.

Table 2-22: Profile of the Working-Age Population in the Sahtu Communities (1999)

Profile Category	NWT Aboriginal Communities ¹	SSA Total	Norman Wells	Sahtu Aboriginal Communities Total	Fort Good Hope	Déline	Tulita	Colville Lake
Population 15+ (No.)	5,821	1,917	651	1,266	471	422	307	66
Potential labour supply (No.)	1,797	476	67	409	151	161	78	17
Potential labour supply ¹ (%)	31	25	10	32	32	38	25	26
Need training ³ (%)	53	68	46	71	72	76	74	–
Would do rotational work ³ (%)	73	74	46	78	84	81	80	–
Male ³ (%)	60	56	43	58	53	63	68	–
Aboriginal ³ (%)	94	88	61	93	97	94	100	–
Less than high school education ³ (%)	68	67	54	68	72	74	65	–

NOTES:

– = numbers too small or cannot be released

1 All study area communities in the Northwest Territories, except Inuvik, Norman Wells, Fort Simpson, Yellowknife, Hay River and Enterprise

2 Percentage of population, aged 15 years and older

3 Percentage of potential labour force

SOURCE: Calculated from GNWT Bureau of Statistics (1999)

2.4.4 Income Sources and Amounts

There were 15 tax-paying companies in the SSA in 2000. Total corporate income tax paid was about \$48,000 (see Table 2-7, shown previously).

Table 2-23 shows that in the SSA Aboriginal communities, average employment income dropped between 1996 and 1999, then increased between 1999 and 2001

to almost \$24,000 per year. This was in contrast to the strong growth in average employment income in Norman Wells, reaching over \$51,000 in 2001. The average number of monthly income support beneficiaries in all SSA communities declined markedly between 1996 and 2003, reflecting changes in government policy that introduced more stringent income support criteria (GNWT Education, Culture and Employment (ECE) regional superintendent 2002, personal communication).

Table 2-23: Employment Income and Income Support Beneficiaries in the Sahtu Communities

Location	Employment Income			No. of Income Support Beneficiaries ¹			
	1996 (\$)	1999 (\$)	2001 (\$)	1996	1999	2001	2003
Northwest Territories	33,748	35,450	38,497	102	86	59	51
NWT Aboriginal communities ²	22,228	23,551	26,135	–	–	–	90
SSA total	30,990	30,980	33,885	135	105	53	46
Norman Wells	44,121	47,428	51,338	17	18	11	10
SSA Aboriginal communities total	23,204	21,386	23,817	–	–	–	62
Fort Good Hope	19,419	20,469	24,197	177	136	61	61
Déline	20,756	21,388	24,819	236	135	103	96
Tulita	19,659	22,716	22,086	119	159	69	29
Colville Lake	–	–	–	219	114	57	–

NOTES:
– = data not available, or held confidential because of low frequencies
1 Average monthly number of recipients and dependents, calculated based on population estimates for 1996 to 2002, prepared by GNWT Bureau of Statistics
2 All study area communities in the Northwest Territories, except Inuvik, Norman Wells, Fort Simpson, Yellowknife, Hay River and Enterprise
Dollar amounts not adjusted for inflation

SOURCE: GNWT Bureau of Statistics (2002a, 2003g)

2.4.5 Cost of Living

In the Mackenzie River Valley, the cost of living was highest in the Sahtu communities, i.e., between 50 and 65% higher than in Edmonton in 2000 (see Table 2-9, shown previously). However, in Colville Lake, it was 110% higher, according to the most recent, 1997, data.

In the SSA, food prices were 60 to 73% higher than Yellowknife prices in 2001. In Colville Lake, they were 113% higher in 1997.

2.5 Baseline Conditions – Deh Cho Region

2.5.1 Population Composition and Dynamics

The DCR includes Fort Simpson, a moderately sized administrative centre, and several smaller communities, i.e., Fort Providence, Fort Liard, Wrigley, Nahanni Butte, Trout Lake, Jean Marie River, Kakisa, Hay River Reserve and West Point Reserve. All these communities have mostly Aboriginal populations.

Table 2-24 shows that the estimated population of the DCR communities in 2003 was 3,428, including 1,237 for Fort Simpson. Census counts for 1991 and 2001 showed most communities had slight increases in population, with Fort Providence, Nahanni Butte and Hay River Reserve experiencing higher increases, of about 17%, than the other communities.

Table 2-24: Census Counts and Population Estimates for the Deh Cho Communities

Location	Census Population Numbers				Growth 1991–2001 (%)	2003 Estimated Population (No.)
	1986	1991	1996	2001		
Northwest Territories	33,830	36,405	35,370	37,360	3	41,872
DCR total ¹	2,543	2,953	3,208	3,147	6	3,428 ^a
Fort Simpson	987	1,142	1,257	1,163	2	1,237
Fort Providence	588	645	748	753	16	842
Fort Liard	395	517	539	530	2	588
Wrigley	161	174	167	165	-5	168
Nahanni Butte	84	90	75	107	17	109
Trout Lake	54	66	68	70	6	78
Jean Marie River	64	49	53	50	2	71
Kakisa	30	39	36	40	3	40
Hay River Reserve	180	231	265	269	17	295
West Point Reserve	–	–	–	–	–	–

NOTES:
 – = data not available
 1 Does not include data for West Point Reserve
 a Includes Kakisa 2001 census count population figures
 Estimates are calculated by the GNWT Bureau of Statistics by allocating the demographic components of growth, down to a community level, using information from a variety of sources (see Section 1.8.3, Limitations of Low-Frequency Data)

SOURCE: GNWT Bureau of Statistics (2003d, 2004)

Table 2-25 shows that census data for 2001 indicated mostly Aboriginal populations in all communities, including the regional centre of Fort Simpson.

The Aboriginal component was 89% or more in each of the smaller communities, and consisted mostly of Dene.

Table 2-25: Ethnicity in the Deh Cho Communities (2001 Census Count)

Location	Total Population (No.)	Non-Aboriginal (%)	Aboriginal (%)	Aboriginal Components (Total = 100%)				
				Inuit (%)	Dene (%)	Métis (%)	Multiple (%)	Other Aboriginal (%)
NWT	37,360	50	50	21	57	19	1	2
DCR total ¹	2,855	14	86	1	87	9	–	3
Fort Simpson	1,150	31	69	3	86	13	–	4
Fort Providence	750	10	91	1	88	11	–	2
Fort Liard	530	10	89	–	92	6	–	2
Wrigley	165	6	91	–	97	–	–	–
Nahanni Butte	105	–	–	–	–	–	–	–
Trout Lake	65	–	–	–	93	14	–	–
Jean Marie River	50	22	100	–	90	–	–	–
Kakisa	40	–	100	–	100	–	–	–
Hay River Reserve	265	2	98	0	90	4	–	6
West Point Reserve	–	–	–	–	–	–	–	–

NOTES:
 – = data not available or too small to be expressed
 1 Does not include West Point Reserve
 Percentages computed from randomly rounded data (see Section 1.8.3, Limitations of Low-Frequency Data)

SOURCE: GNWT Bureau of Statistics (2003e)

Statistics on five-year mobility status for 1996 indicate that 29% of Fort Simpson residents and 11% of residents of the other Deh Cho communities were interprovincial or international migrants. About 51% of the Deh Cho population moved to a different residence, and 29% of those movements were from one community to another within the Northwest Territories (GNWT Bureau of Statistics 2003a).

2.5.2 Economic Activity

Table 2-26 presents the standard occupational groupings for the labour force for 1991 and 2001. The few small Statistics Canada changes in occupational categories between 1991 and 2001 make little, if any, difference given the level of aggregation in the table.

Table 2-26: Labour Force by Standard Occupational Categories in the Deh Cho Communities

Occupation	Gender	Northwest Territories		DCR Total		Fort Simpson		Fort Providence		Fort Liard		Wrigley		Nahanni Butte		Trout Lake		Jean Marie River		Kakisa		Hay River Reserve		West Point Reserve		
		1991	2001	1991	2001	1991	2001	1991	2001	1991	2001	1991	2001	1991	2001	1991	2001	1991	2001	1991	2001	1991	2001	1991	2001	
Labour force, 15+ years	Total (No.)	20,070	20,785	1,300	1,515	575	660	275	340	220	255	85	75	-	-	40	45	25	30	-	-	80	110	-	-	
	Male (No.)	11,225	11,115	765	880	325	365	175	200	125	150	55	45	-	-	20	25	15	20	-	-	50	65	-	-	
	Female (No.)	8,850	9,670	530	650	250	295	100	135	90	105	30	25	-	-	20	20	15	15	-	-	25	45	-	-	
All occupations	Total (No.)	19,675	20,425	1,245	1,470	565	650	245	315	205	250	85	70	-	-	40	45	30	30	-	-	75	110	-	-	
	Male (No.)	11,030	10,935	740	860	320	360	160	185	120	145	55	45	-	-	20	25	15	20	-	-	50	70	-	-	
	Female (No.)	8,645	9,490	505	625	245	285	85	130	85	105	30	25	-	-	20	20	15	10	-	-	10	25	40	-	
Management, business, finance and administration occupations (%)	Total (%)	18	21	12	14	15	18	12	4	10	12	0	14	-	-	25	0	0	0	33	-	-	13	0	-	-
	Male (%)	19	19	11	15	13	18	13	11	8	10	0	22	-	-	0	0	0	0	50	-	-	20	14	-	-
	Female (%)	16	24	15	18	18	23	12	19	12	14	0	0	-	-	50	0	0	0	0	-	-	0	0	-	-
Clerical occupations (%)	Total (%)	17	9	11	7	15	8	6	6	10	10	12	0	-	-	0	0	0	0	0	-	-	13	9	-	-
	Male (%)	6	3	3	0	6	0	0	0	0	0	0	0	-	-	0	0	0	0	0	-	-	0	0	-	-
	Female (%)	32	16	24	13	27	14	18	8	24	19	33	0	-	-	0	50	0	0	0	-	-	40	0	-	-
Natural and applied sciences, and related occupations (%)	Total (%)	4	7	2	4	4	8	4	0	0	4	0	0	-	-	0	0	0	0	0	-	-	0	0	-	-
	Male (%)	6	11	4	8	6	13	6	5	0	0	0	0	-	-	0	0	0	0	0	-	-	0	14	-	-
	Female (%)	1	3	0	3	0	0	0	0	0	10	0	40	-	-	0	0	0	0	0	-	-	0	0	-	-
Health occupations (%)	Total (%)	3	4	3	2	3	4	4	3	0	0	0	0	-	-	0	0	33	0	0	-	-	0	0	-	-
	Male (%)	1	1	0	1	0	0	0	5	0	0	0	0	-	-	0	0	0	0	0	-	-	0	0	-	-
	Female (%)	6	7	8	4	6	9	12	0	0	0	0	0	-	-	0	0	100	0	0	-	-	0	0	-	-
Social services, education, government service and religious occupations (%)	Total (%)	9	12	11	13	10	13	14	11	10	8	0	14	-	-	0	44	33	0	0	-	-	27	14	-	-
	Male (%)	6	7	4	6	3	7	0	5	8	7	0	0	-	-	0	0	67	0	0	-	-	0	14	-	-
	Female (%)	14	17	21	21	18	21	41	23	12	14	0	40	-	-	0	0	0	0	0	-	-	60	38	-	-

Table 2-26: Labour Force by Standard Occupational Categories in the Deh Cho Communities (cont'd)

Occupation	Gender	Northwest Territories		DCR Total		Fort Simpson		Fort Providence		Fort Liard		Wrigley		Nahanni Butte		Trout Lake		Jean Marie River		Kakisa		Hay River Reserve		West Point Reserve		
		1991	2001	1991	2001	1991	2001	1991	2001	1991	2001	1991	2001	1991	2001	1991	2001	1991	2001	1991	2001	1991	2001	1991	2001	
Art, culture, recreation and sport occupations (%)	Total (%)	2	2	3	2	4	3	0	0	0	4	0	0	-	-	25	0	0	0	0	-	-	13	0	-	-
	Male (%)	2	2	4	3	3	4	0	0	0	0	0	22	-	-	50	-	-	-	-	-	-	20	0	-	-
Sales and service occupations (%)	Female (%)	2	3	2	2	4	0	0	0	0	10	0	0	-	-	0	0	0	0	0	-	-	0	0	-	-
	Total (%)	18	22	22	25	21	22	31	29	22	22	12	29	-	-	25	33	0	33	0	-	-	0	27	-	-
Trades, transport and equipment operators, and related occupations (%)	Male (%)	15	18	16	16	16	18	28	19	21	10	0	22	-	-	0	0	0	0	0	-	-	0	14	-	-
	Female (%)	23	27	31	36	29	28	35	42	41	38	33	40	-	-	50	50	0	0	0	-	-	0	50	-	-
Occupations unique to the primary industry (%)	Total (%)	16	17	22	21	19	18	20	22	29	26	35	21	-	-	25	22	33	33	33	-	-	20	23	-	-
	Male (%)	27	30	36	35	33	29	31	35	50	41	36	44	-	-	50	40	67	50	50	-	-	30	36	-	-
Occupations unique to the processing, manufacturing and utilities industries (%)	Female (%)	2	2	2	3	0	4	0	8	0	0	33	0	-	-	0	0	0	0	0	-	-	0	0	-	-
	Total (%)	5	4	7	10	2	5	12	13	10	14	12	14	-	-	0	0	0	33	0	-	-	27	18	-	-
Occupations not classified elsewhere (%)	Male (%)	8	8	11	16	3	11	13	19	17	24	18	22	-	-	0	0	0	0	0	-	-	49	28	-	-
	Female (%)	1	1	2	0	0	0	12	0	0	0	0	0	-	-	0	0	0	0	0	-	-	0	0	-	-
Occupations not classified elsewhere (%)	Total (%)	4	1	4	3	3	2	8	3	5	4	0	0	-	-	0	22	0	0	0	-	-	0	9	-	-
	Male (%)	7	2	5	1	5	0	13	0	0	7	0	0	-	-	0	0	0	0	0	-	-	0	0	-	-
Occupations not classified elsewhere (%)	Female (%)	1	0	2	3	0	4	0	8	12	0	0	0	-	-	0	0	0	0	0	-	-	0	0	-	-
	Total (%)	3	0	4	0	4	0	4	0	5	0	12	0	-	-	0	0	0	0	0	-	-	0	0	-	-
Occupations not classified elsewhere (%)	Male (%)	4	0	7	0	6	0	6	0	8	0	18	0	-	-	0	0	0	0	0	-	-	0	0	-	-
	Female (%)	1	0	0	0	0	0	0	0	0	0	0	0	-	-	0	0	0	0	0	-	-	0	0	-	-

NOTES:

- = data not available or too small to be expressed
 Number and percentage of population, aged 15 years and older
 Data not available for DCR, excluding Fort Simpson (Aboriginal communities total), Nahanni Butte, Kakisa or West Point Reserve, all with very small populations. This data was probably held confidential by Statistics Canada to prevent identification of individual residents.
 Because census data is independently randomly rounded (all numbers end in a 5 or 0), totals may not add to 100, especially in small communities (see Section 1.8.3, Limitations of Low-Frequency Data)

SOURCE: Statistics Canada (1991, 2001), prepared by GNWT Bureau of Statistics

As in the other regions, the most frequent occupational categories were sales and service, trades and transport, and management and business. Changes in the occupational distributions between 1991 and 2001 included a reduction in clerical occupations, an increase in management and business occupations, and only small changes in the occupational categories. The only significant differences between the distributions in the DCR and the Northwest Territories were an over-representation of primary industry occupations in the DCR, and under-representation in management and business occupations.

The changes in distribution of male occupations between 1991 and 2001 included increases in management and business, science, and primary industry occupations, and declines in clerical, processing and manufacturing, and unclassified occupations. Most of these changes were also seen in Fort Simpson. Perhaps because of the oil and gas activity in the Fort Liard area, there was a shift from sales and service, and trades and transport occupations to primary industry, and processing and manufacturing occupations.

The few region-wide changes in female employment between 1991 and 2001 included a decline in clerical occupations and health occupations. The proportions of women in sales and service, and science occupations increased. Fewer women in Fort Liard were involved in processing and manufacturing, but more were employed in management and business, science, and art and culture occupations.

2.5.3 Labour Force

Table 2-27 shows that in 2001, between 33 and 38% of those aged 15 years and over in the larger Deh Cho Aboriginal communities were high school graduates, whereas in Fort Simpson, the regional centre, it was 62%. Between 27 and 30% in the larger Aboriginal communities, and 52% in Fort Simpson had some post-secondary education. Marked variations were evident among communities. Almost all the larger communities had increases in the percentages of adults who had graduated from high school. Many community rates had large changes in post-secondary education. It is difficult to determine whether there was a reliable decrease, or an apparent decrease because of random rounding of the frequency data.

Table 2-27: Adult Education Attainment in the Deh Cho Communities

Location	High School Graduation		Some Post-Secondary Education	
	1991 (%)	2001 (%)	1991 (%)	2001 (%)
Northwest Territories	54	65	47	56
NWT Aboriginal communities total ¹	33	42	30	37
DCR total ²	40	46	37	37
DCR Aboriginal communities total	31	36	29	28
Fort Simpson	53	62	48	52
Fort Providence	32	38	24	30
Fort Liard	30	33	29	27
Wrigley	38	35	33	30
Nahanni Butte	31	–	46	–
Trout Lake	20	33	60	17
Jean Marie River	29	29	57	27
Kakisa	–	43	–	–
Hay River Reserve	25	37	18	31
West Point Reserve	–	–	–	–
NOTES: – = data not available or too small to be expressed 1 All study area communities in the Northwest Territories except Inuvik, Norman Wells, Fort Simpson, Yellowknife, Hay River and Enterprise 2 Does not include data for West Point Reserve and Kakisa Percentage of population, aged 15 years and older				
SOURCE: GNWT Bureau of Statistics (2003f)				

See Section 4.5.5, Education and Training (DCR), for further information on education and training attainment.

Table 2-28 presents labour force participation data for males and females in the DCR for 1991 and 2001. It also shows the relative participation, employment and unemployment rates, and the differential changes in these rates between 1991 and 2001.

Table 2-28: Participation, Employment and Unemployment in the Deh Cho Communities

Location	Gender	1991				2001				Difference (2001 minus 1991)		
		Pop. (No.)	Part. (%)	Empl. (%)	Unempl. (%)	Pop. (No.)	Part. (%)	Empl. (%)	Unempl. (%)	Part. (%)	Empl. (%)	Unempl. (%)
NWT	Male	13,540	83	73	12	13,810	80	72	10	-3	-2	-2
	Female	12,145	73	65	10	13,130	74	67	8	1	2	-2
NWT Aboriginal communities ¹	Male	2,425	73	54	27	2,470	66	52	23	-7	-2	-4
	Female	2,010	59	46	22	2,225	58	48	17	-1	2	-5
DCR total	Male	1,090	72	58	23	1,190	74	60	21	2	2	-2
	Female	900	60	49	18	1,005	65	55	15	5	6	-3
DCR, excluding Fort Simpson	Male	665	70	53	30	730	71	55	26	1	2	-4
	Female	510	57	44	21	615	58	47	18	1	3	-3
Fort Simpson	Male	425	76	67	12	460	80	68	14	4	1	2
	Female	390	64	55	14	390	76	68	12	12	13	-2
Fort Providence	Male	255	69	49	31	300	67	52	25	-2	3	-6
	Female	200	50	38	25	250	54	46	15	4	8	-10
Fort Liard	Male	180	69	49	31	300	67	52	25	-2	3	-6
	Female	140	64	54	17	175	63	51	14	-1	-3	-3
Wrigley	Male	75	73	53	36	65	69	54	33	-4	1	-3
	Female	45	67	44	0	55	46	36	0	-21	-8	0
Nahanni Butte	Male	35	71	43	40	-	-	-	-	-	-	-
	Female	30	33	33	100	-	-	-	-	-	-	-
Trout Lake	Male	30	67	50	50	30	83	50	40	16	0	-10
	Female	20	100	75	0	30	67	67	50	-33	-8	50
Jean Marie River	Male	15	100	67	67	20	100	75	50	0	8	-17
	Female	15	100	67	0	15	67	67	100	-33	0	100
Kakisa	Male	-	-	-	-	15	67	67	0	-	-	-
	Female	-	-	-	-	15	67	0	0	-	-	-
Hay River Reserve	Male	75	67	60	20	100	65	55	23	-10	-5	3
	Female	60	42	33	40	75	60	47	22	18	14	-18

NOTES:

- = data not available

¹ All study area communities in the Northwest Territories except Inuvik, Norman Wells, Fort Simpson, Yellowknife, Hay River and Enterprise

Pop. = population

Part. = participation rate, which is the percentage of population, aged 15 years and older in the labour force

Empl. = employment rate, which is the percentage of population, aged 15 years and older employed during the week before the survey

Unempl. = unemployment rate, which is the percentage of the labour force that was unemployed during the week before the survey

Statistics for very small communities are uncertain and should be considered with caution

Because census data is independently randomly rounded (all numbers end in a 5 or 0), totals may not add to 100, especially in small communities (see Section 1.8.3, Limitations of Low-Frequency Data)

SOURCE: Statistics Canada (1991, 2001)

Female participation rates increased in the DCR by 5% between 1991 and 2001. This was more than the rates for males, which increased by 2%. The difference was largely driven by Fort Simpson employment, where female participation increased by 11% and male participation by 4%.

Male–female differences in changing employment rates parallel those for participation rates. The female increase of 6% was greater than the male increase of 2%, and the differential was again driven by the greater increases for females in Fort Simpson. Unemployment rates fell in the DCR between 1991 and 2001, by 2% for males and 3% for females.

Table 2-29 shows that in 1999, the potential labour supply in the DCR communities was 613 people, including 172 in Fort Simpson, 190 in Fort Providence, 79 in Fort Liard and 54 in Wrigley. The profile of this potential labour supply showed 67% need training.

Table 2-29: Profile of the Working-Age Population in the Deh Cho Communities (1999)

Profile Category	NWT Aboriginal Communities ¹	DCR Total ²	Fort Simpson	Fort Providence	Fort Liard	Wrigley	Nahanni Butte	Trout Lake	Jean Marie River	Kakisa	Hay River Reserve ³
Population 15+ (No.)	5,821	2,078	908	611	345	125	55	58	59	28	160
Potential labour supply (No.)	1,797	613	172	190	79	54	20	22	10	5	–
Potential labour supply ⁴ (%)	31	30	19	31	23	43	36	38	17	18	–
Need training ⁵ (%)	53	67	60	71	44	56	35	50	–	–	–
Would do rotational work ⁵ (%)	73	70	63	74	58	72	70	41	–	–	–
Male ⁴ (%)	60	63	49	57	53	57	75	82	–	–	–
Aboriginal ⁵ (%)	94	93	91	96	91	98	100	82	–	–	–
Less than high school education ⁵ (%)	68	65	45	62	73	91	35	68	–	–	–
NOTES:											
– = data not available or too small to be expressed											
1 All study area communities in the Northwest Territories, except Inuvik, Norman Wells, Fort Simpson, Yellowknife, Hay River and Enterprise											
2 Does not include data for West Point Reserve (data not available)											
3 1996 data, 1999 data is not available											
4 Percentage of population, aged 15 years and older											
5 Percentage of potential labour force											
SOURCE: Calculated from GNWT Bureau of Statistics (1999)											

2.5.4 Income Sources and Amounts

In 2000, the 12 tax-paying companies in the DCR together paid a total of about \$42,000 in corporate income taxes (see Table 2-7, shown previously).

Average annual employment income for the DCR communities in 2001 was about \$28,000 (see Table 2-30). An appreciable increase in average employment income was recorded in Fort Liard between 1996 and 1999, likely a reflection of natural gas exploration and development activity in the area. Reflecting changes in government policy, the number of average monthly income support beneficiaries declined between 1996 and 2002. However, in Fort Providence, the number of income support beneficiaries declined between 1996 and 2001, and then rose again in 2002. The Nahanni Butte number also rose from 1999 to 2003.

Table 2-30: Employment Income and Income Support Beneficiaries in the Deh Cho Communities

Location	Employment Income			No. of Income Support Beneficiaries ¹			
	1996 (\$)	1999 (\$)	2001 (\$)	1996	1999	2001	2003
Northwest Territories	33,748	35,450	38,497	102	86	59	51
NWT Aboriginal communities total ²	22,228	23,551	26,135	–	–	–	90
DCR total ³	23,194	26,467	28,035	133	82	64	75
DCR, excluding Fort Simpson	18,485	22,559	24,357	–	–	–	102
Fort Simpson	28,115	30,588	31,444	116	41	22	26
Fort Providence	17,834	19,943	21,977	134	131	116	151
Fort Liard	19,174	27,355	27,458	177	60	58	97
Wrigley	19,756	–	–	110	39	28	30
Nahanni Butte	–	–	–	13	0	13	28
Trout Lake	–	–	–	82	24	12	0
Jean Marie River	–	–	–	138	59	15	0
Kakisa	–	–	–	134	78	78	38
Hay River Reserve	–	–	–	192	257	119	108
West Point Reserve	–	–	–	–	–	–	–
NOTES:							
– = data not available, or held confidential because of low frequencies							
1 Average monthly number of recipients and dependents, calculated based on population estimates for 1996 to 2002, prepared by GNWT Bureau of Statistics							
2 All study area communities in the Northwest Territories, except Inuvik, Norman Wells, Fort Simpson, Yellowknife, Hay River and Enterprise							
3 Does not include data for West Point Reserve							
Dollar amounts not adjusted for inflation							
SOURCE: GNWT Bureau of Statistics (2002a, 2003g)							

2.5.5 Cost of Living

The cost of living in the DCR communities in 2000 ranged from 30 to 50% above Edmonton levels (see Table 2-9, shown previously).

In 2001, the differentials were even more extreme for food prices, with prices 13 to 74% higher than those in Yellowknife.

2.6 Baseline Conditions – Industrial and Commercial Communities in the Northwest Territories

2.6.1 Population Composition and Dynamics

Table 2-31 shows the 2003 estimated population of the ICCs was 22,368. Census counts for 1991 and 2001 showed modest increases for Yellowknife, 9%, and Hay River, 8%, and a more pronounced growth for Enterprise, 33%.

Table 2-31: Census Counts and Population Estimates for the Industrial and Commercial Communities in the Northwest Territories

Location	Census Population Numbers				Growth 1991–2001 (%)	2003 Estimated Population (No.)
	1986	1991	1996	2001		
Northwest Territories	33,830	36,405	35,370	37,360	3	41,872
ICCs	14,815	18,441	20,962	20,112	9	22,368
Yellowknife	11,753	15,179	17,275	16,541	9	18,673
Hay River	3,006	3,253	3,611	3,510	8	3,620
Enterprise	56	49	86	61	33	75

NOTE:
Estimates are calculated by the GNWT Bureau of Statistics by allocating the demographic components of growth, down to a community level, using information from a variety of sources

SOURCE: GNWT Bureau of Statistics (2003d, 2004)

The population characteristics of the other Northwest Territories regions reviewed in this section are typical of a mostly Aboriginal northern population with a substantial mixture of non-Aboriginal people. Three communities in the study area are distinctive because Aboriginal people are in the minority (see Table 2-32):

- Yellowknife – the territorial capital and largest population centre, which is 22% Aboriginal
- Hay River – the main transshipment point on the Mackenzie River and 45% Aboriginal

- Enterprise – a small industrial and commercial centre, which is 38% Aboriginal

Table 2-32: Ethnicity in the Northwest Territories, Yellowknife, Hay River and Enterprise (2001 Census Count)

Location	Total Population (No.)	Non-Aboriginal (%)	Aboriginal (%)	Aboriginal Components (Total = 100%)				
				Inuit (%)	Dene (%)	Métis (%)	Multiple (%)	Other Aboriginal (%)
Northwest Territories	37,360	50	50	21	57	19	1	2
Yellowknife	16,450	78	22	18	44	35	2	1
Hay River	3,455	55	45	7	42	51	2	1
Enterprise ¹	65	62	38	33	33	33	0	0

NOTE:
 1 Frequencies and percentages are distorted by random rounding (see Section 1.8.3, Limitations of Low-Frequency Data)

SOURCES: GNWT Bureau of Statistics (2003e), Town of Enterprise residents (2002 and 2003, personal communication)

The smallest Aboriginal percentage was reported in Yellowknife. Dene and Métis formed the two largest components of the Aboriginal population. Yellowknife and Hay River resemble frontier communities by having more men than women, and high migration rates.

According to statistics on five-year mobility status for 1996, 28% of Yellowknife residents and 21% of those in Hay River were interprovincial or international migrants in that year. Large proportions, i.e., 69% for Yellowknife and 58% for Hay River, of people moved to a different residence within the Northwest Territories. Hay River had a lower percentage of nonmovers (GNWT Bureau of Statistics 2003a).

2.6.2 Economic Activity

Table 2-33 shows the distribution of labour force members by occupational grouping for the Northwest Territories ICCs. The few small Statistics Canada changes in occupational categories in 1991 and 2001 make little, if any, difference, given the level of aggregation in the table.

Table 2-33: Labour Force by Standard Occupational Categories in the Industrial and Commercial Communities in the Northwest Territories

Occupation	Gender	Northwest Territories		ICCs		Yellowknife		Hay River		Enterprise	
		1991	2001	1991	2001	1991	2001	1991	2001	1991	2001
Labour force, 15+ years	Total (No.)	20,070	20,785	11,665	12,540	9,730	10,470	1,910	2,030	25	40
	Male (No.)	11,225	11,115	6,340	6,575	5,255	5,475	1,070	1,075	15	25
	Female (No.)	8,850	9,670	5,326	5,965	4,476	4,995	840	955	10	15
All occupations	Total (No.)	19,675	20,425	11,590	12,425	9,675	10,380	1,890	2,000	25	45
	Male (No.)	11,030	10,935	6,310	6,520	5,235	5,435	1,060	1,060	15	25
	Female (No.)	8,645	9,490	5,280	5,900	4,440	4,945	830	935	10	20
Management, business, finance and administration occupations	Total (%)	18	21	20	23	21	24	16	20	0	22
	Male (%)	19	19	22	21	23	22	19	17	0	0
	Female (%)	16	24	18	26	19	27	11	23	0	50
Clerical occupations	Total (%)	17	9	19	11	20	11	19	11	40	0
	Male (%)	6	3	6	4	6	4	6	5	0	0
	Female (%)	32	16	35	18	35	18	35	19	100	0
Natural and applied sciences, and related occupations	Total (%)	4	7	5	8	5	9	3	5	0	0
	Male (%)	6	11	8	13	8	14	4	8	0	0
	Female (%)	1	3	2	4	2	4	1	1	0	0
Health occupations	Total (%)	3	4	4	4	4	4	4	4	0	0
	Male (%)	1	1	1	2	1	2	1	1	0	0
	Female (%)	6	7	7	7	7	7	7	7	0	0
Social services, education, government service and religious occupations	Total (%)	9	12	8	10	8	11	7	9	0	22
	Male (%)	6	7	5	7	5	7	4	5	0	0
	Female (%)	14	17	11	14	12	14	11	13	0	0
Art, culture, recreation and sport occupations	Total (%)	2	2	2	3	2	3	1	1	0	0
	Male (%)	2	2	1	2	2	2	0	1	0	0
	Female (%)	2	3	3	3	3	4	1	1	0	0
Sales and service occupations	Total (%)	18	22	17	22	17	21	20	25	0	22
	Male (%)	15	18	15	19	15	20	15	19	0	0
	Female (%)	23	27	20	25	19	24	26	33	0	50
Trades, transport and equipment operators, and related occupations	Total (%)	16	17	14	14	13	13	18	20	40	22
	Male (%)	27	30	23	26	22	24	29	36	100	60
	Female (%)	2	2	2	1	2	1	3	2	0	0
Occupations unique to the primary industry	Total (%)	5	4	4	3	4	3	3	4	0	0
	Male (%)	8	8	8	6	8	5	6	6	0	40
	Female (%)	1	1	0	1	0	1	0	1	0	0
Occupations unique to the processing, manufacturing and utilities industries	Total (%)	4	1	4	1	4	1	6	2	0	0
	Male (%)	7	2	7	1	7	1	9	2	0	0
	Female (%)	1	0	1	1	1	0	2	2	0	0

Table 2-33: Labour Force by Standard Occupational Categories in the Industrial and Commercial Communities in the Northwest Territories (cont'd)

Occupation	Gender	Northwest Territories		ICCs		Yellowknife		Hay River		Enterprise	
		1991	2001	1991	2001	1991	2001	1991	2001	1991	2001
Occupations not classified elsewhere	Total (%)	3	0	0	0	1	0	3	0	0	0
	Male (%)	4	0	0	0	2	0	5	0	0	0
	Female (%)	1	0	1	0	0	0	1	0	0	0
NOTES:											
Number and percentage of population, aged 15 years and older											
Because census data is independently randomly rounded (all numbers end in a 5 or 0), totals may not add to 100, especially in small communities (see Section 1.8.3, Limitations of Low-Frequency Data)											
SOURCE: Statistics Canada (1991, 2001), prepared by GNWT Bureau of Statistics											

The occupational groupings of these communities reflect the dominant centre position of Yellowknife and the transportation significance of Hay River. Thus, the most frequent occupational categories in the ICCs were:

- management and business – Yellowknife influence
- sales and service, and trades and transport – Hay River influence

Between 1991 and 2001, the number of management and business, science, and sales and service occupations increased. The number of clerical, and processing and manufacturing occupations declined during the decade.

Mine construction and operation, and mineral exploration activities are major contributors to primary industry labour force activity, and have a profound effect on all sectors of the Yellowknife economy.

Gold production is winding down in Yellowknife. Giant has ceased mining operations, leaving just the Nerco Con gold mine. Administration offices for the Ekati, Diavik and Snap Lake diamond mines are in Yellowknife. The city is the point of hire for the diamond mines, and many of the mine management and rotational workers live there. Diavik completed construction and has started production at its Lac De Gras property. DeBeers expects to complete the feasibility and licencing for its Snap Lake property, and start construction and operation of its diamond mine by 2005 (DeBeers 2004). The BHP diamond mine impact benefit agreements with Aboriginal bands and a socio-economic agreement with the GNWT have established preferential hiring for Northwest Territories and Aboriginal residents, and purchase of goods and services from Northwest Territories businesses. Yellowknife has been a beneficiary of these agreements.

Compared to the Yellowknife economy, the economies of Hay River and Enterprise are more oriented to transshipment. Larger percentages of the labour

force in these two communities are engaged in sales and service, and smaller percentages work in government services.

2.6.3 Labour Force

Table 2-34 shows that in 2001, 78% of people aged 15 years and over in Yellowknife and 67% in Hay River had graduated from high school. The percentage of the adult population with some post-secondary education was 66% for Yellowknife and 58% for Hay River. Between 1991 and 2001 in both communities, the proportions of adults with high school graduation and some post-secondary education increased. In Enterprise, the percentage with some post-secondary education decreased from 67% to 20%. This might be related to the small population of the town.

Table 2-34: Adult Education Attainment in Yellowknife, Hay River and Enterprise

Location	High School Graduation		Some Post-Secondary Education	
	1991 (%)	2001 (%)	1991 (%)	2001 (%)
Northwest Territories	54	65	47	56
NWT Aboriginal communities total ¹	33	42	30	37
Yellowknife	74	78	62	66
Hay River	61	67	51	58
Enterprise	–	–	67	20

NOTES:
 – = data not available
 1 All study area communities in the Northwest Territories except Inuvik, Norman Wells, Fort Simpson, Yellowknife, Hay River and Enterprise
 Percentage of population, aged 15 years and older

SOURCE: GNWT Bureau of Statistics (2003f)

See Section 4.6.5, Education and Training Attainment (ICCs in the Northwest Territories) for further information on education and training attainment.

Table 2-35 shows labour force activity rates in the ICCs for 1991 and 2001 for male and female participation, employment and unemployment rates, and the differential changes in these rates between 1991 and 2001.

Table 2-35: Participation, Employment and Unemployment in Yellowknife, Hay River and Enterprise

Location	Gender	1991				2001				Difference (2001 minus 1991)		
		Pop. (No.)	Part. (%)	Empl. (%)	Unempl. (%)	Pop. (No.)	Part. (%)	Empl. (%)	Unempl. (%)	Part. (%)	Empl. (%)	Unempl. (%)
NWT	Male	13,540	83	73	12	13,810	80	72	10	-3	-2	-2
	Female	12,145	73	65	10	13,130	74	67	8	1	2	-2
NWT Aboriginal communities ¹	Male	2,425	73	54	27	2,470	66	52	23	-7	-2	-4
	Female	2,010	59	46	22	2,225	58	48	17	-1	2	-5
ICCs total	Male	7,010	90	86	5	7,515	88	82	6	-2	-4	1
	Female	6,475	82	77	7	7,375	81	76	6	-1	-1	-1
Yellowknife	Male	5,780	91	87	4	6,195	88	84	5	-3	-3	1
	Female	5,360	84	78	6	6,125	82	78	5	-2	0	-1
Hay River	Male	1,210	88	79	10	1,295	83	75	9	-5	-4	-1
	Female	1,100	76	70	9	1,225	78	69	12	2	-1	3
Enterprise	Male	20	75	50	0	25	100	80	0	25	30	0
	Female	15	67	67	0	25	80	80	0	13	13	0

NOTES:

1 All study area communities in the Northwest Territories except Inuvik, Norman Wells, Yellowknife, Hay River and Enterprise

Pop. = population

Part. = participation rate is the percentage of population, aged 15 years and older in the labour force

Empl. = employment rate is the percentage of population, aged 15 years and older employed during the week before the survey

Unempl. = unemployment rate is the percentage of the labour force that was unemployed during the week before the survey

Statistics for very small communities are uncertain and should be considered with caution

Because census data is independently randomly rounded (all numbers end in a 5 or 0), totals may not add to 100, especially in small communities (see Section 1.8.3, Limitations of Low-Frequency Data)

SOURCE: Statistics Canada (1991, 2001)

In contrast to the other study area regions, there was little difference in the participation rates of men and women during this decade. The rates for both fell very slightly, by 2% for the men and 1% for the women. A similar but greater difference is seen for employment rates, which fell by 4% between 1991 and 2001 for men, and by just 1% for women. Unemployment rates fell by 1% for women, and increased by 1% for men during the decade.

Table 2-36 shows the potential labour supply numbered 1,405 people in Yellowknife and 282 in Hay River in 1999. No figure is available for Enterprise.

Table 2-36: Profile of the Working-Age Population in the Northwest Territories, Yellowknife, Hay River and Enterprise (1999)

Profile Category	NWT Aboriginal Communities ¹	Yellowknife	Hay River	Enterprise
Population 15+ (No.)	5,821	13,139	2,665	–
Potential labour supply (No.)	1,797	1,405	282	–
Potential labour supply (%)	31	11	11	–
Need training ³ (%)	53	45	55	–
Would do rotational work ³ (%)	73	44	62	–
Male ³ (%)	60	46	53	–
Aboriginal ³ (%)	94	39	65	–
Less than high school education ³ (%)	68	32	54	–

NOTES:
 – = data not available or held confidential to protect individual identities
 1 All study area communities in the Northwest Territories, except Inuvik, Norman Wells, Fort Simpson, Yellowknife, Hay River and Enterprise
 2 Percentage of population, aged 15 years and older
 3 Percentage of potential labour force

SOURCES: GNWT Bureau of Statistics (1999), GNWT (1999)

2.6.4 Income Sources and Amounts

Table 2-7, shown previously, shows that of the 920 tax-paying companies in the Northwest Territories in 2000, 771 were located in the Yellowknife region. The amount of corporate income tax paid by Yellowknife region companies in 1999 was about \$88 million, out of about \$90 million for the Northwest Territories as a whole.

Table 2-37 shows that in 2001, average employment income was about \$45,000 in Yellowknife and about \$38,000 in Hay River, well above levels for any of the Northwest Territories Aboriginal communities. However, 25% of income tax filers in Yellowknife had annual incomes of less than \$15,000 in 1998 (GNWT Bureau of Statistics 2002a). The number of monthly income support beneficiaries declined between 1996 and 2003.

Table 2-37: Employment Income and Income Support Beneficiaries in Yellowknife, Hay River and Enterprise

Location	Employment Income			No. of Income Support Beneficiaries ¹			
	1996 (\$)	1999 (\$)	2001 (\$)	1996	1999	2001	2003
Northwest Territories	33,748	35,450	38,497	102	86	59	53
Yellowknife	40,118	41,870	45,147	713	694	473	472
Hay River	31,186	34,421	38,246	243	346	224	168
Enterprise	–	–	–	–	–	–	–

NOTES:
 – = data not available, or held confidential because of low frequencies
 1 Average monthly number of recipients and dependents, calculated based on population estimates for 1996 to 2002, prepared by GNWT Bureau of Statistics
 Dollar amounts not adjusted for inflation

SOURCE: GNWT Bureau of Statistics (2002a, 2003g)

2.6.5 Cost of Living

In 2000, the cost of living was about 22% higher in Yellowknife and Hay River than in Edmonton. Hay River food prices were about 10% higher than Yellowknife prices (see Table 2-9, shown previously).

2.7 Baseline Conditions – Dene Tha’ First Nation in Northwestern Alberta

2.7.1 Population Composition and Dynamics

The DTFN population resides in three largely Aboriginal reserves at Chateh, Meander River and Bushe River in northwestern Alberta. Table 2-38 shows that the total on-reserve population in 2001 was 1,580. Each of the three reserves had a population increase between 1991 and 2001. However, the growth at Bushe River was 174%. As the most recently established Dene Tha’ community and the one closest to High Level, it was also the most rapidly growing.

Table 2-38: Census Counts and Total Registered Populations in the Dene Tha' Communities

Location	1991 (No.)	1996 (No.)	2001 (No.)	Growth 1991–2001 (%)	Total Registered Population 2003 ¹ (No.)
DTFN total ²	1,222	1,340	1,580	29	2,358
Chateh	773	836	915	18	–
Meander River	333	338	347	4	–
Bushe River	116	166	318	174	–

NOTES:
– = data not available
1 From Indian and Northern Affairs Canada (INAC) (2003a)
2 Including those both on and off reserves

SOURCES: Statistics Canada (2001, 2003a)

In Table 2-39, census data for 2001 shows that 94% of the combined populations of the three Dene Tha' communities was Aboriginal, almost exclusively Dene. In Chateh, only 3% of the population was non-Aboriginal, whereas in both Meander River and Bushe River this figure was 8%.

Table 2-39: Ethnicity in the Dene Tha' Communities (2001)

Ethnic Origin	DTFN		Chateh		Meander River		Bushe River	
	No.	%	No.	%	No.	%	No.	%
Total Aboriginal and non-Aboriginal population (20% sample) ¹	1,545	100	915	100	345	100	315	100
Aboriginal origins population ²	1,455	94	885	97	335	90	285	90
Non-Aboriginal population	80	5	30	3	10	8	25	8

NOTE:
1 Based on data for a 20% sample of the total population
2 Includes all First Nations, Inuit, Métis and multi-origin Aboriginal people

SOURCE: Statistics Canada (2002)

Five-year mobility statistics for 2000 show that an average of 35% of residents on the three reserves moved to different residences during the previous five years. Only 11% moved from one community to another. Most of the movers and migrants lived in Bushe River, the newest of the three Dene Tha' communities (Statistics Canada 2001).

2.7.2 Economic Activity

Table 2-40 presents the distributions of male and female labour force members by standard occupational groupings for the Dene Tha' communities for 1991 and 2001. The few small Statistics Canada changes in occupational categories

between 1991 and 2001 make little, if any, difference, given the level of aggregation in the table.

Table 2-40: Labour Force by Standard Occupational Categories in Census Division 17 and the Dene Tha' Communities

Occupation	Gender	CD 17		DTFN		Chateh		Bushe River		Meander River	
		1991	2001	1991	2001	1991	2001	1991	2001	1991	2001
Labour force, 15+ years	Total (No.)	–	27,655	400	485	240	270	65	120	95	95
	Male (No.)	–	16,020	225	285	140	160	30	65	55	60
	Female (No.)	–	11,635	165	190	95	110	30	50	40	30
All occupations	Total (No.)	–	27,185	365	445	220	245	60	115	85	85
	Male (No.)	–	15,790	220	265	135	145	35	65	50	55
	Female (No.)	–	11,400	145	175	85	95	25	50	35	30
Management, business, finance and administration occupations	Total (%)	–	20	6	15	5	12	5	22	5	12
	Male (%)	–	9	5	4	7	7	0	20	0	0
	Female (%)	–	14	0	13	0	16	0	20	0	33
Clerical occupations	Total (%)	–	6	4	7	7	4	7	17	7	0
	Male (%)	–	2	0	0	0	0	0	0	0	0
	Female (%)	–	9	10	8	18	10	0	20	0	0
Natural and applied sciences, and related occupations	Total (%)	–	3	0	0	0	0	0	0	0	0
	Male (%)	–	4	0	0	0	0	0	0	0	0
	Female (%)	–	1	0	0	0	0	0	0	0	0
Health occupations	Total (%)	–	2	3	4	5	0	5	9	5	12
	Male (%)	–	1	0	4	0	0	0	0	0	18
	Female (%)	–	4	7	4	0	10	0.4	0	0.4	0
Social services, education, government service and religious occupations	Total (%)	–	8	12	15	11	12	11	17	11	18
	Male (%)	–	4	0	11	0	7	0	15	0	18
	Female (%)	–	10	28	17	24	26	40	20	40	33
Art, culture, recreation and sport occupations	Total (%)	–	1	3	0	5	0	5	0	5	0
	Male (%)	–	1	0	0	0	0	0	0	0	0
	Female (%)	–	1	0	0	0	0	0	0	0	0
Sales and service occupations	Total (%)	–	19	30	26	25	26	25	26	25	24
	Male (%)	–	9	11	9	11	17	29	0	29	0
	Female (%)	–	24	52	28	47	42	60	40	60	50
Trades, transport and equipment operators, and related occupations	Total (%)	–	23	22	30	23	31	23	26	23	35
	Male (%)	–	36	32	47	33	48	29	46	29	46
	Female (%)	–	3	7	0	12	0	0	0	0	0
Occupations unique to the primary industry	Total (%)	–	18	23	11	20	12	20	9	20	12
	Male (%)	–	25	36	17	33	17	29	15	29	18
	Female (%)	–	6	0	0	0	0	0	0	0	0

Table 2-40: Labour Force by Standard Occupational Categories in Census Division 17 and the Dene Tha' Communities (cont'd)

Occupation	Gender	CD 17		DTFN		Chateh		Bushe River		Meander River	
		1991	2001	1991	2001	1991	2001	1991	2001	1991	2001
Occupations unique to the processing, manufacturing and utilities industries	Total (%)	–	6	0	5	0	4	0	9	0	0
	Male (%)	–	9	0	8	0	7	0	15	0	0
	Female (%)	–	1	0	0	0	0	0	0	0	0
Occupations not classified elsewhere	Total (%)	–	–	–	–	–	–	–	–	–	–
	Male (%)	–	–	–	–	–	–	–	–	–	–
	Female (%)	–	–	–	–	–	–	–	–	–	–

NOTES:
 CD = Census Division
 – = data not available
 Number and percentage of population, aged 15 years and older
 Because census data is independently randomly rounded (all numbers end in a 5 or 0), totals may not add to 100, especially in small communities (see Section 1.8.3, Limitations of Low-Frequency Data)

SOURCE: Statistics Canada (1991, 2001), prepared by GNWT Bureau of Statistics

As in the other regions, this data shows the most frequent occupational categories in the DTFN in 2001 were trades and transport, sales and service, and government service, followed by primary industry, and management and business. Compared to the Census Division 17 total labour force, the Dene Tha' labour force is under-represented in management and business, science, sales and service, and primary industry occupations. This comparison shows that the DTFN labour force is over-represented in government services, sales and service, and trades and transport occupations.

Fewer people were in primary industry, and sales and service occupations in 1991 than in 2001, but more people were in trades and transport, and management and business occupations.

A gender comparison of the 2001 occupational grouping data for the DTFN shows that women were under-represented in trades and transport, primary industry, and processing and manufacturing occupations. Women were over-represented in management and business, clerical, government services, and sales and service occupations.

2.7.3 Labour Force

Data in Table 2-41 shows that the proportions of the DTFN population who were high school graduates increased from 22% in 1991 to 27% in 2001, whereas those with post-secondary training increased from 18% to 22% during this period.

Table 2-41: Education Attainment Levels of Dene Tha' Community Residents

Location	High School Graduation		Some Post-Secondary Education		Some Trades or Technical Training		Some College or University Education	
	1991 (%)	2001 (%)	1991 (%)	2001 (%)	1991 (%)	2001 (%)	1991 (%)	2001 (%)
Census Division 17	–	51	–	41	–	14	–	27
DTFN total	22	27	18	22	13	8	5	14
Chateh	22	26	19	21	11	9	8	12
Meander River	16	12	11	8	11	0	0	8
Bushe River	29	57	19	43	19	17	0	26
NOTES: – = data not available Percentage or number of population, aged 15 years and over								
SOURCE: Calculated from Statistics Canada (1991, 2001)								

In both 1991 and 2001, the highest percentages of high school graduates were in Bushe River, which had the youngest population, and lowest rates were in Meander River. In 1991, 19% of both Chateh and Bushe River populations had some post-secondary training, and by 2001, those with post-secondary education had increased to 21% in Chateh, and to 43% in Bushe River.

See Section 4.7.5, Education and Training (ICCs in the Northwest Territories) for further information on education and training attainment.

Labour force activity in the Dene Tha' communities was at a lower level than in the Northwest Territories regions. Table 2-42 shows that in 2001, the participation rate averaged 46%, the employment rate 37% and the unemployment rate 19%, with both the employment and unemployment rates substantially higher than in 1991. The male participation, employment and unemployment rates were higher than those for females in 2001. However, the female unemployment rate was only slightly lower than the male rate in 2001.

Table 2-42: Participation, Employment and Unemployment in the Dene Tha' Communities

Location	Gender	1991				2001				Difference (2001 minus 1991)		
		Pop. (No.)	Part. (%)	Empl. (%)	Unempl. (%)	Pop. (No.)	Part. (%)	Empl. (%)	Unempl. (%)	Part. (%)	Empl. (%)	Unempl. (%)
CD 17	Total	–	–	–	–	39,400	70	64	9	–	–	–
	Male	–	–	–	–	–	–	–	–	–	–	–
	Female	–	–	–	–	–	–	–	–	–	–	–
DTFN	Total	855	45	32	32	1,060	46	37	19	1	5	-13
	Male	455	48	32	32	550	52	41	21	4	9	-11
	Female	400	43	33	33	510	39	31	20	-4	-2	-13
Chateh	Total	525	44	32	30	615	44	34	20	0	2	-10
	Male	280	50	32	36	280	49	39	22	-1	7	-14
	Female	245	64	36	29	290	38	29	18	-26	-7	-11
Meander River	Total	220	41	27	39	240	40	31	21	-1	4	-18
	Male	120	42	25	50	130	46	35	25	4	10	-25
	Female	100	40	35	25	110	32	27	29	-8	-8	4
Bushe River	Total	110	59	41	31	205	57	50	13	-2	9	-18
	Male	55	55	46	33	95	68	58	15	13	12	-18
	Female	55	64	36	29	110	50	41	18	-14	5	-11

NOTES:

CD = Census Division

– = data not available

Pop. = population

Part. = participation rate, which is the percentage of population, aged 15 years and older in the labour force

Empl. = employment rate, which is the percentage of population, aged 15 years and older employed during the week before the survey

Unempl. = unemployment rate, which is the percentage of the labour force that was unemployed during the week before the survey

Statistics for very small communities are uncertain and should be considered with caution

Because census data is independently randomly rounded (all numbers end in a 5 or 0), totals may not add to 100, especially in small communities (see Section 1.8.3, Limitations of Low-Frequency Data)

SOURCE: Statistics Canada (1991, 2001)

Labour force participation data for the Chateh, Bushe River and Meander River Reserve populations in 2001 shows the Dene Tha' participation rate for 2001, 46%, is only about two thirds as high as that for Census Division 17, in which these communities are located. The Bushe River Reserve had the highest participation rate, 57%, and the lowest, only 40%, was found in Meander River. Employment rates followed similar trends. Unemployment rates were ranked in reverse order, with the highest rate, 21%, in Meander River and lowest, 13%, in Bushe River.

2.7.4 Income Sources and Amounts

No information is available on corporate income for the DTFN. Table 2-43 shows the available information on employment and total incomes for the Dene Tha'

communities. Average employment income is higher than average total income, because some of the people included in the average total income category are unemployed or unable to work.

Table 2-43: Average Employment and Total Income for Census Division 17 and Dene Tha' Communities

Year	Gender	CD 17		DTFN ¹		Chateh		Meander River		Bushe River	
		Empl. Income (\$)	Total Income (\$)	Empl. Income (\$)	Total Income (\$)	Empl. Income (\$)	Total Income (\$)	Empl. Income (\$)	Total Income (\$)	Empl. Income (\$)	Total Income (\$)
1990	Total	–	–	12,605	–	13,480	–	10,653	–	–	–
	Male	–	–	11,994	–	12,753	–	10,010	–	–	–
	Female	–	–	13,704	–	14,765	–	11,884	–	–	–
2000	Total	27,771	25,062	18,582	13,888	18,794	13,454	15,331	11,636	21,722	17,528
	Male	34,626	32,466	21,885	15,649	20,639	14,359	16,745	12,290	29,686	21,903
	Female	18,713	17,119	15,769	12,175	16,238	12,436	12,974	10,883	19,251	13,654

NOTES:
 CD = Census Division
 – = data not available or held confidential because of low frequencies
 Empl. = employment
 1 Excludes communities from DTFN total calculations for which data is unavailable

SOURCE: Statistics Canada (1991, 2001)

Between 1990 and 2000, the employment incomes of both men and women have increased, although men had greater increases. Sizable differences existed in the employment and total incomes among these communities in 2000. Bushe River had the highest incomes and Meander River the lowest.

Personal income levels among the registered Dene Tha' in 1995 were similar to those of the Northwest Territories Dene, but the earnings of the nonregistered Dene Tha' averaged almost twice that of the Northwest Territories Dene (Statistics Canada 1996).

For the Dene Tha' communities, information on income support is available only as a percentage of total income. Table 2-44 shows a 5% decline in this percentage between 1990 and 2000. In agreement with the employment data cited, in 2000 Bushe River had the lowest, and Meander River the highest, percentages of total income that could be ascribed to transfer payments.

Table 2-44: Transfer Income as a Percentage of Total Income in the Dene Tha' Communities

Year	DTFN (%)	Chateh (%)	Meander River (%)	Bushe River (%)
1990	30	28	35	–
2000	25	26	32	16
NOTE: – = data not available or frequency too small to be expressed				
SOURCE: Statistics Canada (1991, 2001)				

2.7.5 Cost of Living

Data on cost of living and food price differentials is not available for the DCR communities.

2.8 Baseline Conditions – Industrial and Commercial Communities in Northwestern Alberta

2.8.1 Population Composition and Dynamics

There are three predominantly non-Aboriginal communities in the northwestern Alberta part of the study area:

- High Level, the regional service hub for this area
- Rainbow Lake
- Zama City

Both Rainbow Lake and Zama City are smaller than High Level, and are involved in servicing the northwestern Alberta oil industry. According to town officials, the 2001 census count for High Level, 3,445, was under-enumerated, and the actual population was about 3,650. Officials in Rainbow Lake reported a population of about 1,200, which was higher than the census count figure of 975.

In Zama City, the census count figure of 145 was also challenged. According to a census conducted by the hamlet, the Zama City population in fall 2003 was 183. According to officials of the towns of High Level and Rainbow Lake, and Municipal District 23, 2004, typically, two or more camps accommodate oil and gas exploration and production workers within the hamlet boundaries. Often as many as 4,000 workers live in camps near the hamlet.

Table 2-45 shows the 1991 and the 2001 age and gender distributions of the High Level and Rainbow Lake populations, and the 2001 distributions only for Zama City. Both High Level and Rainbow Lake increased in size by about 20% between 1991 and 2001. All three populations have over 50% in the age 15 to 44 young workforce category – 57% in High Level, 60% in Rainbow Lake and 51% in Zama City. In 2001, there were more men than women in all three communities – 128 men for every 100 women in Rainbow Lake, 123 for every 100 women in Zama City, and 108 for every 100 women in High Level.

Table 2-45: Census Counts for High Level, Rainbow Lake and Zama City

Location	Age	1991				2001				2001 as % of 1991 Totals (%)
		Male (No.)	Female (No.)	Total (No.)	% of Total (%)	Male (No.)	Female (No.)	Total (No.)	% of Total (%)	
High Level	Total	1,465	1,385	2,850	100	1,785	1,660	3,445	100	121
	0–14	470	485	955	34	505	485	990	29	104
	15–24	240	265	505	18	315	290	605	18	120
	25–44	590	520	1110	39	680	655	1,335	39	120
	45–64	140	105	245	9	260	200	460	13	188
	65 +	30	15	45	2	30	30	60	2	133
Rainbow Lake	Total	410	410	820	100	545	430	975	100	119
	0–14	120	145	265	32	160	110	270	28	102
	15–24	55	80	135	16	60	55	115	12	85
	25–44	200	160	360	44	230	200	430	44	119
	45–64	35	30	65	8	90	70	160	16	246
	65 +	0	5	5	1	5	5	10	1	200
Zama City	Total	–	–	–	–	80	65	145	100	–
	0–14	–	–	–	–	15	20	36	24	–
	15–24	–	–	–	–	15	10	25	17	–
	25–44	–	–	–	–	35	15	50	34	–
	45–64	–	–	–	–	10	20	30	21	–
	65 +	–	–	–	–	0	0	0	0	–

NOTE:

– = data not available

Totals may not equal the sum of their parts because of random rounding of low-frequency data (see Section 1.8.3, Limitations of Low-Frequency Data)

SOURCE: Statistics Canada (1991, 2001)

In Table 2-46, the census counts for 2001 show Aboriginal populations formed small minorities in Rainbow Lake, 11%, and Zama City, 8%. However, in High Level, 22% of residents were of Aboriginal origin.

Table 2-46: Ethnicity in High Level, Rainbow Lake and Zama City (2001)

Ethnic Origin	High Level		Rainbow Lake		Zama City	
	No.	%	No.	%	No.	%
Total Aboriginal and non-Aboriginal population (20% sample) ¹	3,435	100	980	100	130	100
Total Aboriginal origin population	750	22	100	11	10	8
Total non-Aboriginal population	2,685	78	875	89	120	92
North American Indian single origin	250	7	0	0	0	0
North American Indian and non-Aboriginal origins	170	5	50	5	0	0
Métis single origin	155	5	40	4	0	0
Métis and non-Aboriginal origins	125	4	10	1	0	0
Other Aboriginal multiple origins	45	1	0	0	0	0
Inuit origin	0	0	0	0	0	0
NOTE:						
1 Based on data for a 20% sample of the total population						
Percentages may not total 100 because of random rounding of low-frequency data (see Section 1.8.3, Limitations of Low-Frequency Data)						
SOURCE: Statistics Canada (2002)						

Statistics on five-year mobility status for 1991 and 2001 indicate large proportions of the High Level and Rainbow Lake populations moving to a different residence during the previous five years – 71% in High Level and 65% in Rainbow Lake. Rainbow Lake had more in-migrants than High Level, over 50% in 1991 and 2001 (Statistics Canada 2001).

2.8.2 Economic Activity

Table 2-47 describes distributions by standard occupational groupings for 1991 and 2001 for the High Level, Rainbow Lake and Zama City labour forces. The few small Statistics Canada changes in occupational categories between 1991 and 2001 make little, if any, difference, given the level of aggregation in the table. In High Level, the highest numbers of occupations were in the trades and transport, and primary industry categories.

Table 2-47: Labour Force by Standard Occupational Category in High Level, Rainbow Lake and Zama City

Occupation	Gender	High Level		Rainbow Lake		Zama City	
		1991	2001	1991	2001	1991	2001
Labour force, 15+ years	Total (No.)	1,620	2,070	415	610	–	90
	Male (No.)	930	1,135	260	370	–	60
	Female (No.)	690	930	150	240	–	30
All occupations	Total (No.)	1,615	2,060	400	605	–	90
	Male (No.)	925	1,130	260	365	–	60
	Female (No.)	690	930	140	245	–	30
Management, business, finance and administration occupations	Total (%)	11	18	15	19	–	11
	Male (%)	12	15	12	10	–	17
	Female (%)	9	20	21	35	–	33
Clerical occupations	Total (%)	15	7	4	0	–	0
	Male (%)	3	3	0	0	–	0
	Female (%)	31	12	11	4	–	0
Natural and applied sciences, and related occupations	Total (%)	2	5	5	12	–	0
	Male (%)	4	8	8	21	–	0
	Female (%)	0	2	0	0	–	0
Health occupations	Total (%)	2	4	4	3	–	0
	Male (%)	0	1	0	3	–	0
	Female (%)	6	8	11	6	–	0
Social services, education, government service and religious occupations	Total (%)	7	11	4	7	–	0
	Male (%)	3	4	0	4	–	0
	Female (%)	12	20	11	12	–	0
Art, culture, recreation and sport occupations	Total (%)	1	1	3	0	–	0
	Male (%)	0	1	0	0	–	0
	Female (%)	1	2	7	0	–	0
Sales and service occupations	Total (%)	25	22	19	19	–	17
	Male (%)	17	15	6	4	–	17
	Female (%)	36	31	43	39	–	33
Trades, transport and equipment operators, and related occupations	Total (%)	18	12	13	13	–	22
	Male (%)	29	37	19	23	–	33
	Female (%)	3	2	0	0	–	33
Occupations unique to the primary industry	Total (%)	7	4	21	13	–	22
	Male (%)	9	6	31	15	–	33
	Female (%)	3	2	0	4	–	0

Table 2-47: Labour Force by Standard Occupational Category in High Level, Rainbow Lake and Zama City (cont'd)

Occupation	Gender	High Level		Rainbow Lake		Zama City	
		1991	2001	1991	2001	1991	2001
Occupations unique to the processing, manufacturing and utilities industries	Total (%)	12	7	15	12	–	11
	Male (%)	18	12	23	21	–	0
	Female (%)	3	2	0	0	–	0
NOTES: Number or percentage of population, aged 15 years and older Because census data is independently randomly rounded (all numbers end in a 5 or 0), totals may not add to 100, especially in small communities (see Section 1.8.3, Limitations of Low-Frequency Data) Note particularly that since only 60 men and 30 women were reported as having occupations in Zama City in 2001, the occupational distribution percentages, based on randomly rounded data, are only suggestive at best.							
SOURCE: Statistics Canada (1991, 2001)							

The dominant industrial category groupings for High Level and Rainbow Lake in 2001 were similar, with management and business, and sales and service occupations highest.

The changes in the distributions from 1991 to 2001 were similar for High Level and Rainbow Lake, with increases in the percentages employed in management and business, and government service occupations, science, and trades and transport in both communities. There was decreased employment in clerical, processing and manufacturing, and primary industry occupations in High Level and Rainbow Lake, and also trades and transport occupations in High Level.

2.8.3 Labour Force

Table 2-48 shows that in 2001, people aged 20 years and older who had graduated from high school included 71% of those in High Level, 76% in Rainbow Lake and 74% in Zama City. In 2001, the percentage of those aged 20 and over with some post-secondary education was 15% for High Level, 23% for Rainbow Lake and 42% for Zama City. Between 1991 and 2001, the number of High Level residents who had graduated from high school decreased from 46% to 33%. However, those with some post-secondary education or training increased from 53 to 61%. This pattern was reversed in Rainbow Lake, where the number of residents who had graduated from high school increased between 1991 and 2001, but the number with some post-secondary training decreased.

Table 2-48: Adult Education Attainment by Gender in Alberta, High Level, Rainbow Lake and Zama City (2001)

Region	Gender	High School Graduation (%)	Some Trades or Technical Training (%)	Some College or University (%)
Alberta	Total	78	14	38
	Male	78	20	34
	Female	79	9	43
High Level	Total	71	15	37
	Male	73	23	30
	Female	70	6	44
Rainbow Lake	Total	76	23	19
	Male	82	34	18
	Female	69	10	21
Zama City ¹	Total	74	26	16
NOTES: Adults aged 20 to 64 years 1 Gender breakdown is not available				
SOURCE: Calculated from Statistics Canada (2003d)				

See Section 4.8.5, Education and Training (ICCs in Northwestern Alberta) for further information on education and training attainment.

Table 2-49 shows that labour force participation in these communities, driven by the oil industry, has been high. In both 1991 and 2001, the total participation rate was about 85% in High Level and 77% in Rainbow Lake, increasing to 86% between 1991 and 2001 in Rainbow Lake. The employment rates in High Level were about 82% in both years, and were 68% increasing to 81% for 1991 and 2001 in Rainbow Lake. Total unemployment rates were low in 2001, 2% in High Level and 5%, both lower than the 1991 rates. The male employment rate in these communities in 2001 was high, with 86% in High Level and 95% in Rainbow Lake. Employment rates for women in 2001 were 77% in High Level and 66% in Rainbow Lake.

Table 2-49: Participation and Employment Rates in High Level, Rainbow Lake and Zama City

Location	Gender	1991				2001				Difference (2001 minus 1991)		
		Pop. (No.)	Part. (%)	Empl. (%)	Unempl. (%)	Pop. (No.)	Part. (%)	Empl. (%)	Unempl. (%)	Part. (%)	Empl. (%)	Unempl. (%)
High Level	Total	1,915	85	81	4	2,450	84	82	2	-1	1	-2
	Male	1,015	92	87	5	1,280	89	86	3	-3	-1	-2
	Female	905	76	73	3	1,175	79	77	2	3	4	-1
Rainbow Lake	Total	535	77	68	12	710	86	81	5	9	13	-7
	Male	280	93	93	9	380	97	95	3	4	2	-6
	Female	250	60	42	33	325	74	66	10	14	24	-23
Zama City	Total	–	–	–	–	85	93	86	0	–	–	–
	Male	–	–	–	–	45	89	89	0	–	–	–

NOTES:

– = data not available, held confidential because of low frequencies to protect individual identities.

Pop. = population

Part. = participation rate, which is the percentage of population, aged 15 years and older in the labour force

Empl. = employment rate, which is the percentage of population, aged 15 years and older employed during the week before the survey

Unempl. = unemployment rate, which is the percentage of the labour force that was unemployed during the week before the survey

Statistics for very small communities are uncertain and should be considered with caution

Because census data is independently randomly rounded (all numbers end in a 5 or 0), totals may not add to 100, especially in small communities (see Section 1.8.3, Limitations of Low-Frequency Data)

Number and percentage of population aged 15 years and older

SOURCE: Statistics Canada (1991, 2001)

Table 2-50 shows the potential labour supply was 50 people in High Level and 30 in Rainbow Lake in 2001. Figures were not available for Zama City.

Table 2-50: Profile of the Working-Age Population in High Level, Rainbow Lake and Zama City

Profile Category	High Level		Rainbow Lake		Zama City	
	1991	2001	1991	2001	1991	2001
Population 15+ (No.)	1,785	2,150	485	625	–	–
Potential labour supply ¹ (No.)	70	50	50	30	–	–
Potential labour supply ² (%)	4	2	10	5	–	–

NOTES:

– = data not available or too small to be expressed

1 Unemployed are presented as indicative of potential labour

2 Percentage of population, aged 15 years and older

Data is lacking on persons wanting a job

SOURCE: Statistics Canada (1991, 2001)

Table 2-51 shows the 1991 and 2001 distributions for the active labour force by industrial divisions for High Level, Rainbow Lake and Zama City. This data shows the significance of hydrocarbon industry employment in 2001 in Rainbow Lake at 27% and in Zama City at 38%. High Level is seen more as a service centre in terms of involvement in the total government services, 24%, and retail trade sectors, 15%, in 2001. However, in 2001, 16% in Rainbow Lake and 13% in Zama City were employed in government services.

Table 2-51: Active Labour Force by Industrial Divisions, High Level, Rainbow Lake and Zama City

Occupation	High Level		Rainbow Lake		Zama City ¹
	1991	2001	1991	2001	2001
Total labour force 15+ (No.)	1,620	2,070	415	610	85
Not applicable (No.)	0	10	15	0	10
All industries (No.)	1,620	2,060	400	610	80
Agricultural, fishing and trapping, logging and forestry (%)	6	2	5	0	13
Mining, quarrying and hydrocarbon (%)	6	3	18	27	38
Primary industries					
Manufacturing (%)	10	15	21	12	0
Construction (%)	4	6	3	13	0
Transportation and storage (%)	8	7	0	11	13
Communication and other utilities (%)	2	2	0	0	0
Wholesale and retail trade (%)	17	15	31	6	13
Finance, real estate and insurance agent (%)	5	3	0	2	0
Business services (%)	2	3	0	0	0
Public sector – total government services (%)	22	24	18	16	13
Accommodation, food and beverage services (%)	11	8	0	7	13
Other service industries (%)	6	8	4	3	0
NOTES: – = data not available or held confidential because of low frequencies 1 1991 data for Zama City not available Subtotals may not add up to totals because of variations introduced by random rounding (see Section 1.8.3, Limitations of Low-Frequency Data) Percentage of labour force					
SOURCE: Statistics Canada (1991, 2001)					

The 1991 to 2001 comparison shows that whereas hydrocarbon industrial employment increased in Rainbow Lake, it declined in High Level as the significance of the service centre functions of the town increased.

2.8.4 Income Sources and Amounts

No information is currently available on corporate income in any of the northwestern Alberta communities.

Table 2-52 shows that High Level and Rainbow Lake average earned incomes in 2000 were higher than that in Census Division 17. In 2000, the average earned income in Rainbow Lake was higher than in High Level. There were sizeable increases in both communities between 1990 and 2000. The difference between the 1990 and 2000 figures reflects the relatively high pay scales and heavy work schedules characteristic of employment in the oil and gas sector.

Table 2-52: Employment Incomes for Census Division 17, High Level, Rainbow Lake and Zama City

Year	Gender	CD 17 (\$)	Total Communities (\$)	High Level (\$)	Rainbow Lake (\$)	Zama City (\$)
1990	Total	–	26,230	24,951	30,820	–
	Male	–	32,407	29,686	42,131	–
	Female	–	18,212	19,251	14,701	–
2000	Total	27,771	36,244	33,834	44,653	–
	Male	34,626	45,935	41,407	60,765	–
	Female	18,713	23,654	24,234	21,415	–
NOTE: CD = Census Division – = data not available, or held confidential because of low frequencies to preserve individual privacy.						
SOURCE: Statistics Canada (1991, 2001)						

The gender-specific data shows that female earned incomes were substantially lower than male incomes. Female 2000 earnings were only 54% of male earnings in Census Division 17, and only 51% of males in High Level and Rainbow Lake combined. The greatest disparity was in Rainbow Lake, where the average female income was only 35% of average male income. Comparison of 1990 and 2000 data shows that the earnings of both men and women increased by 31% in Rainbow Lake. However, in High Level, the 20% increase in female income was exceeded by the 28% increase in male income.

Actual income support figures are not supplied in Census Canada data, but Table 2-53 shows the percentage of total income derived from government transfer income support payments. Census Division 17 income support percentages in 2000 were three times the weighted averages for High Level and Rainbow Lake combined, probably reflecting the greater impact of the oil and gas sector on the economies of the two communities. The decline in income support percentages, and the increase in earned income between 1990 and 2000, indicates the gain in

prosperity between 1990 and 2000 in both communities, with Rainbow Lake the more prosperous of the two.

Table 2-53: Transfer Income as a Percentage of Total Income for Census Division 17, High Level, Rainbow Lake and Zama City

Year	CD 17 (%)	Total Communities (%)	High Level (%)	Rainbow Lake (%)	Zama City (%)
1990	–	5	6	3	–
2000	12	4	5	2	–
NOTE: CD = Census Division – = data not available or frequency too small to be expressed					
SOURCE: Statistics Canada (1991, 2001)					

2.8.5 Cost of Living

Alberta Finance, Statistics conducted a price comparison survey in April 2001 based on pricing 266 to 299 food and non-food items, depending on local availability, in 35 Alberta communities. With Edmonton prices taken as the reference base and assigned a value of 100, the all-commodity index value for High Level was 101.0, indicating prices were 1% higher than Edmonton prices. The all-food (only) index value for High Level was 106.3, and the all non-food index value was 99.8 (Alberta Economic Development 2004).

2.9 Synopsis

2.9.1 Population Composition and Dynamics

According to the 2003 population estimated by GNWT Bureau of Statistics and Statistics Canada, the study area has a total population of about 42,000, including 35,000 residents in the 26 territorial communities and 7,000 in the six communities in northwestern Alberta.

Although the Northwest Territories population fluctuated in size during the 1990s, the population is currently increasing, largely because there are more births than deaths.

The population of the Northwest Territories is predominantly urban. Of the total estimated population in 2003, 60% were urban dwellers:

- 18,673 in the city of Yellowknife
- 3,620 in the town of Hay River
- 3,435 in the town of Inuvik

There were 6,956 people living in the ISR and GSA combined (the BDR) in 2003, about 49% of them in Inuvik. The SSA had 2,504 residents, of whom 797 lived in ethnically mixed Norman Wells. There were 3,428 residents in the DCR. Among the essentially Aboriginal communities, only two have populations of about 1,000, Tuktoyaktuk with 990 and Fort Simpson with 1,237. Seven territorial communities have populations of 500 to 1,000 and, of the remaining 14 communities, three have populations of less than 100 (Statistics Canada 2003a). Populations of communities in northwestern Alberta within the study area range from 145 to 3,445.

The Northwest Territories population has a larger number of males than females and is disproportionately young. In 2001, 51% of the population was male. The number of people 24 years old and under formed 42% of the Northwest Territories population, whereas those 65 years old and over were just over 4% of the total. In all of Canada, 32% were 24 years old or less and 14% were 65 years old or older (Statistics Canada 2003a).

About 50% of the total Northwest Territories and 45% of the study area populations were of Aboriginal origin in 2001. The ethnic mix differs greatly by community. Small communities are predominantly Dene or Inuvialuit, except for Enterprise. Yellowknife, Hay River and Enterprise are predominantly non-Aboriginal (Statistics Canada 2003a). Norman Wells, Inuvik and Fort Simpson are considered ethnically mixed communities.

Population growth in the Northwest Territories is mainly attributed to high birth and low death rates. In 2002, the birth rate in the Northwest Territories was 15.7 per 1,000 population, compared to 10.4 per 1,000 population for Canada. The death rate was 4.3 per 1,000 population, compared to 7.5 per 1,000 for Canada (GNWT Bureau of Statistics 2003a).

Although the pattern in small communities is often indiscernible, the high Aboriginal birth rates characteristic of the 1960s and 1970s are falling. With reduced infant mortality rates and changing expectations of family members, the reasons for having large families have weakened. Similarly, the high death rates, characteristic of earlier decades, are receding. Tuberculosis is now largely under control, and readily accessible health care has brought down the rates of infant and other premature deaths.

The populations in the study area communities are fairly mobile. This is reflected in the migration within the territories for employment and training, and the relatively short-term commitments that many non-Aboriginal people have to living in the study area.

Future population growth in the Northwest Territories is expected to average 1.2% per year between 1999 and 2019. Seniors are the fastest growing segment of the Northwest Territories population. Between 1999 and 2019, it is estimated that

the number of individuals 65 years of age and older will increase by 164%, to 9% of the total, whereas the number of those aged 24 years and younger is expected to increase by only 13%, to 38% of the total (GNWT Bureau of Statistics 2000).

The total nontransient population of the Alberta portion of the study area, including the three Dene Tha' communities, High Level, Rainbow Lake and Zama City, was about 7,000 in 2003. All the communities experienced relatively rapid growth between 1991 and 2001.

About 38% of those in northwestern Alberta were of Aboriginal origin, including virtually all the Dene Tha' community residents and 22% of those living in High Level.

2.9.2 Economic Activity

For as long as there have been semi-settled communities, the economic history of the study area has been marked by a series of booms and slumps. Early booms and slumps occurred with fox cycles and fluctuating fur prices. Since the 1970s, the fortunes of the oil and gas sector have been the major drivers of the economy. In most communities, employment in the public sector, i.e., government services, health and education, is important and has become a steadying influence through periods of economic slowdown.

By summer 2002, expansion of hydrocarbon exploration and mining had substantially increased employment in the Northwest Territories, including:

- important natural gas discoveries in the Fort Liard area of the DCR
- renewed natural gas exploration activity in the BDR
- construction of a second diamond mine in the North Slave or Dogrib Region

A wide range of organizations, both internal and external to the study area, has undertaken major recent economic initiatives. Boards and committees established in each of the land claim areas have been instrumental in making business investments and setting up joint ventures with outside firms. The most prominent of these are the Inuvialuit Regional Corporation, the organization set up under the *Inuvialuit Final Agreement*, and the Gwich'in Development Corporation, the economic arm of the Gwich'in Tribal Council. Economic initiatives have been launched by community development corporations in small communities, such as Jean Marie River in the DCR. Additional information on local businesses is found in Volume 6, Section 3.1.2, Existing Baseline Conditions.

The GNWT annually makes considerable commitments to expenditures on capital projects and these, and other projects, result in construction employment in many communities.

Employment and business concerns in northwestern Alberta are heavily influenced by the primary industrial sector, especially the oil and gas industry. This, and logging, are important sources of employment for the Dene Tha', mostly in unskilled or semi-skilled capacities, because few have the needed specialized training. The Dene Tha' are still very involved in resource harvesting.

2.9.3 Labour Force

By summer 2002, the diamond mining ventures and greater hydrocarbon exploration had substantially increased employment in the monetary economy (Mackenzie Valley Environmental Impact Review Board (MVEIRB) 2002). Participation and employment rates for the Northwest Territories, including the urban communities and the mostly Aboriginal rural communities, were well above those for Canada as a whole. The annual average unemployment rate in the Northwest Territories was 5.8%, compared to 7.7% in the rest of Canada (GNWT Bureau of Statistics 2002a).

A sizable potential labour force exists in the study area Aboriginal communities. The size of this potential force reflects the relatively low participation and high unemployment rates in many smaller communities (GNWT Bureau of Statistics 1999, 2002a; Statistics Canada 2003a). These rates are partly explained by the low education and training levels of some people, and by their attraction to the dual economy (see Section 5, Traditional Culture).

The Aboriginal labour force is a smaller proportion of the Aboriginal population of the Northwest Territories than the Canadian labour force is of the Canadian population. In this context, the participation rate of the Northwest Territories Aboriginal population is almost as high as in the rest of Canada, the employment rate is lower and the unemployment rate is higher (GNWT Bureau of Statistics 2002a, Statistics Canada 2003a). Reasons for these differences could be:

- for the adult population, a much lower percentage of relevant jobs, those for which unemployed workers are qualified, is available than in the rest of Canada
- an unknown number of discouraged workers drop out of the labour force by failing to continue looking for work, knowing that in their small communities no jobs are available
- some Aboriginal people find traditional harvesting so attractive that they tend not to accept full-time employment. However, they accept seasonal work to subsidize their more traditional lifestyle.

GNWT ECE provides many programs that subsidize training and apprenticeships. Aurora College undertakes to deliver a broad range of upgrading, specialty

preparation and technical training programs at its three campuses, and in Aboriginal communities or larger centres where there is adequate demand.

Courses providing upgrading and training in skills relevant to the oil and gas industry have been delivered in Aboriginal communities throughout the study area. In recent years, the GNWT, Aurora College, and the oil and gas industry have actively cooperated in providing training to Aboriginal residents. An example of cooperation was the Rig Hands Training Project, to which government and industry contributed substantial funding, industry contributed a new drill rig and housing facilities in a new \$2-million, 60-person camp, and Aurora College administered the program. See also Section 4, under Education and Training.

In the Alberta portion of the study area, the Dene Tha' communities, like the Aboriginal communities in the Northwest Territories, have lower participation and employment rates, and higher unemployment rates than the non-Aboriginal population. The participation and employment rates in High Level, Rainbow Lake and Zama City are generally higher than the Alberta-wide rates, because these communities have younger populations.

The oil and gas industry dominates the economy of northwestern Alberta. The importance of this industry is apparent in data showing employment by industrial sector and occupations in High Level, Rainbow Lake and Zama City. Differences in the occupational distributions among these communities highlight the role of High Level as the service centre for northwestern Alberta.

2.9.4 Income Sources and Amounts

Although both traditional harvesting of meat and trapping for furs have an economic component, their primary importance is related to their roles in traditional culture. See Section 5, Traditional Culture for a discussion of the traditional component of the dual economy.

Trends in nontraditional income sources can be determined through data on corporate income, not available for individual communities, personal income, and income support. Levels of cash income appear to vary widely among communities in the study area (GNWT Bureau of Statistics 2003a).

Corporate tax data for 2000 shows that there were 56 tax-paying companies in the BDR, 15 in the SSA and 12 in the DCR (see Table 2-7, shown previously). In every year from 1995 to 2000, corporations in the BDR paid more in taxes than in the SSA and DCR combined. The taxes paid by corporations in the BDR in 1999 were more than twice the sum paid in 1998. Corporate income tax paid in the DCR increased almost six-fold between 1998 and 1999, but dropped to the previous rate again in 2000. SSA corporate taxes declined between 1998 and 1999, and then rose again the following year (GNWT Finance 2002).

A large proportion of the Northwest Territories population has a low cash income. In 2000, 30% of all Aboriginal income groups in the Northwest Territories aged 15 and over had annual incomes of less than \$15,000, whereas only 19% of the Northwest Territories non-Aboriginal income groups were in this low-income category. Comparison with the total Canadian income groups aged 15 and over is distorted by the fact that the territorial population is younger, with fewer over age 65 than the total Canadian population. In addition, income and the cost of living are relatively low in the Maritime Provinces. This explains the higher percentage in all of Canada with incomes under \$15,000, 34% in comparison with the 30% figure for the Northwest Territories total Aboriginal population. The average employment income in the Aboriginal communities of the ISR, GSA, SSA and DCR was \$26,135 in 2000, well below the Canadian average of \$31,757, and even lower in comparison with the average for Northwest Territories non-Aboriginal earners of \$44,116 (Statistics Canada 2004a).

The large amounts of wildlife harvested and of country food consumed provide clear indications of the importance of income-in-kind to most Aboriginal people. Depending on the usually meagre income from trapping is typically not a viable option. Therefore, involvement in both the monetary and traditional economies is commonplace.

The high levels of average earned income and the low percentages of income from support in Rainbow Lake and Zama City reflect the involvement of these communities in the oil and gas sector. Average incomes are lower in High Level, where employment by the important service centre enterprises pays less than the oil industry.

2.9.5 Cost of Living

The cost of living in northern communities is a function of distance from southern sources of supply, and thus is highest in the most northerly communities. This is supported by other data for a broad-based cost of living index and a narrower food price index (GNWT Bureau of Statistics 2003g).

The Government of Canada conducts retail price surveys to determine the cost-of-living differentials for those living in Northwest Territories communities. The differential figure is based on a cost comparison of a basket of goods and services in Edmonton and in a Northwest Territories community. The cost of living does not take into account either the value of foods gained through resource harvesting or the costs associated with this harvesting. The data shows that in 2000, the cost of living was 25 to 115% higher in the study area than in Edmonton. The differentials tended to be smaller in the Deh Cho communities, somewhat larger in the Gwich'in and certain Sahtu communities, and largest in the Inuvialuit communities (GNWT Bureau of Statistics 2003g).

Northwest Territories food price surveys use the cost of a standard food basket in Yellowknife as a base for comparison. In 2001, the cost of food in the study area was 10 to 113% higher than in Yellowknife. These costs were highest in the SSA and lowest in the DCR (GNWT Bureau of Statistics 2003g).

In High Level, the cost of living in 2003 was only 1% higher than in Edmonton (Alberta Economic Development 2004).

