

**THE LABOUR MARKET AND RURAL-URBAN DIFFERENCES
AMONG FIRST NATIONS: THE CASE OF SASKATCHEWAN**

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Abstract

This paper is an analysis of two samples taken from First Nation communities living in Saskatchewan, one urban (Prince Albert) and the other rural (the Montreal Lake Cree Nation Reserve). The paper compares their income and expenditure patterns as well as their labour market characteristics, and a number of hypotheses are tested. Contrary to the received view, it is found that the residents of the reserves are no worse off than their urban counterparts and that in terms of training for the labour market, those on the reserve had a higher educational attainment. For both communities, our analysis indicates that high school diploma significantly raises income, but trade certificates do not translate into higher employment. As a consequence, it is not surprising that poverty is endemic among First Nations. The incidence of poverty was higher in the urban sample: 93 percent lived below the poverty line whereas on the reserve it was 73 percent. Given these results we also compared the expenditure and income patterns with the National Family Expenditure Survey Data and also the CCSD data on urban poverty. We conclude that the aboriginal people in general and in Saskatchewan in particular are the poorest of the poor in Canada. This cannot be called structural unemployment. The findings suggest some future directions for research.

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INTRODUCTION

There have been many attempts to compare various socio-economic aspects of the life of the aboriginal people, both on and off reserves. Prominent among these studies have been many research papers by Health Canada, Department of Indian and Northern Affairs Canada, and the Conference Board of Canada. There is also the five volume Report of the Royal Commission on Aboriginal Peoples (1996). They all demonstrate the enormous social problems that aboriginal peoples face in comparison to the average Canadian. First Nations Health Status indicators for 1993 show that infant mortality is 1.7 times higher among native peoples than in the general Canadian population. Life expectancy was reported to be 7 to 8 years less and the suicide rate among young people 5 to 8 times higher among natives. Rates of diabetes and tuberculosis were 3 times higher and 6.6 times higher, respectively, than in the general Canadian population (Health Canada, 1997). Health Canada attributes the poor health status of native peoples relative to the general Canadian population to the following socio-economic factors: a lower level of education, higher unemployment, lower incomes and a greater welfare dependency. A study for the Analytical Studies Branch of Statistics Canada notes that aboriginal peoples have less education than do Canadians as a whole. Thirty-five per cent of aboriginal workers aged 18 to 64 have only elementary or secondary schooling without a graduation diploma, compared to 25 per cent for Canadians as a whole. The type of employment also varies between aboriginal workers and Canadians as a whole. There are fewer professionals, managers and technicians among aboriginal workers, but slightly more workers in the services and blue collar sectors (Bernier, 1997). A study by Geroge et al. (1994) found that in 1990 the employment rate of Canadians of non-aboriginal origins was 70.4 per cent, or 11.7 per cent higher than the employment rate for Canadians of aboriginal origin, which was at only 58.7 per cent. According to the Bernier study, Canadian workers reporting aboriginal origin earned \$6,500 less than Canadian workers as a whole in 1991. For those who identified with one of the aboriginal peoples, their earnings were a further \$2,900 lower.

According to the widely quoted UN Human Development Index, Canada has, over the last number of years, scored the highest global ranking in terms of a combined measure of per capita income, education levels and life expectancy. However, according to the Department Indian Affairs (xxxx ??), this index can be used to show that off-reserve aboriginals rank about 35th and on-reserve natives rank about 63rd. The Department of Indian Affairs concludes that the quality of life for on-reserve natives - about 380,000 people - is on a par with Brazil and countries considered having only a medium level of human development. In fact the ranking is worse than for Mexico and Thailand. Broken down by province, the aboriginals fall fairly close together. But the study gives the lowest rating to on-reserve natives in the Yukon and Northwest Territories. Reserves in British Columbia have the highest rating. For off-reserve aboriginals, Ontario offers the highest standard of human development, while the lowest rating is found in Saskatchewan. The analysis by the Department of Indian Affairs indicates that not only are native peoples worse off (in terms of the benchmarks cited above) than Canadians in the general population, but also that native peoples on reservation are generally worse off than those

off-reservation. This view is also echoed by Clatworthy et al. (1995), who found earnings to be substantially lower on-reserve, educational levels to be higher off-reserve and that the dominant jobs on-reserve were low skill, low wage jobs. Thus there was significantly more dependence on government transfers on the part of individuals on reserve compared to those off-reserve.

Given the dismal picture of living standards among native peoples, it seems surprising that a literature search of ECONLIT (the main database of academic and professional economics), Political Science Abstracts and ABI-INFORM (also known as Proquest) turned up little evidence of published research papers on aboriginal poverty. Perhaps this dearth of research may be indicative of the difficulty of doing sample surveys. In this regard we were fortunate to have at our disposal income and socio-economic sample data from two aboriginal communities living on-reserve and off-reserve in the area of Prince Albert, Saskatchewan. This has allowed us to carry out an analysis that examines native poverty and labour market conditions using a micro sample approach.

In March and April of 1995 two studies were published by the Prince Albert Model Forest Association concerning natives living on and off reservation in the Prince Albert area. Based on data from 1993-1994, these studies seemed to draw many of the same general conclusions. They described two aboriginal communities both of which had families larger than the Canadian average that were living on meagre means and significantly dependent on government transfers. Members of these families exhibited a low participation rate in the labour force and a comparatively high unemployment rate. In addition, both aboriginal communities had a high young dependency ratio, and a slightly higher proportion of females. Both had comparatively strong proportions of individuals with less than a grade 9 education. On the other hand, both communities had fairly strong proportions of individuals with some sort of trade certificate or diploma. Finally, the two communities displayed patterns of out-migration (to the city) of young females and an in-migration (to the reserves) of families with children.

As noted above, it has been advanced in the literature that native people living on-reserve are much worse off than their counterparts living off-reserve in terms of income, educational attainment and employment. This analysis attempts to build on the results of these two Prince Albert studies, and addresses the question of whether or not significant differences exist between the two communities in terms of quality of life as measured by income and expenditure levels, as well as in terms of educational attainment and employment patterns. Hence we set out to test the general hypotheses that:

- 1) Aboriginal families living on the reserve were just as well off as those living in an urban setting, in terms of income and are no more dependent on government transfers

and

- 2) Aboriginal families living on reserves exhibited the same educational attainment and employment patterns as those in an urban setting and were no worse off in terms of labour force participation rate and unemployment rate.

We begin with a description of the two communities and the sample data. We then consider the two hypotheses in detail, using straightforward statistical tests. As part of the analysis, we discuss the findings in light of data from Statistics Canada's National Expenditure Survey (Statistics Canada, 1996) and a recent study of urban poverty carried out by the Canadian Council on Social Development (CCSD, 1996). We caution that the results should be treated as preliminary, as there are certain theoretical difficulties with the urban data. Nonetheless, we believe that some valid general conclusions can be drawn.

This paper is organized as follows. Section 1 is a description of the two samples. Section 2 is a statistical analysis of economic well-being as shown by income and expenditure patterns. Section 3 concentrates on the labour force characteristics of the two communities. The final section deals with the poverty of First Nations as shown by our sample and also other data. This is followed by a few concluding remarks.

SECTION 1: A Description of the Two Communities and the Sample Data

The following are general descriptions of the urban and rural communities, adapted from the two studies published by the Prince Albert Model Forest Association Inc. titled respectively: Selected Socio-economic Characteristics of Aboriginal Families Living Off-Reserve: A Case Study of Prince Albert and Socio-Economic Baseline Survey of Montreal Lake Cree Nation.

The urban sample consisted of 30 aboriginal families living in the city of Prince Albert. Since a sampling frame was unavailable, a true random sample of families could not be drawn. However, the process adopted was to select cases at random in predominantly aboriginal areas of the City of Prince Albert. Due to funding limitations, the sample size is small but adequate from the standpoint of statistical analysis. About one fifth of the families in the sample were Metis, while the remaining 80 per cent were treaty Indians. The average family size was 3.83 persons, of which 2.13 were children and infants. Only 4 families in the sample had six or more persons. The age distribution showed more younger people, relative to those retired, leading to a younger dependency ratio of 0.56, which in relation to the rest of the Canadian population is high.

The rural sample consisted of 153 households of the Montreal Lake Cree of which 146 were usable. This study, however, uses only 139 respondents. The Montreal Lake Cree Nation (MLCN) people are the main inhabitants of the Prince Albert Model Forest. The MLCN live at Montreal Lake Reserve and at three other communities-Little Red Reserve, Timber Bay and Weyakwin. Almost half of the respondents were at Montreal Lake reserve, while the other three communities have a smaller sample size, but proportionally the same to the total as for the main community. The average family had 4.09 people, of which 2.2 were adults, 1.17 children and 0.72 infants. The family was slightly larger at the Montreal Lake Reserve, with 4.58 people and smaller at Timber Bay

(3 people). Among the adults, a slightly higher proportion of females was noted, and this proportion was highest for the Montreal Lake reserve. There were more young people in these communities than older adults and the young dependency ratio was higher than that in the case of the urban sample at 0.95. Both the urban and rural communities exhibited a pattern of out migration (from the reserve to the city) of young females and in-migration (from the city to the reserve) of families with children.

SECTION 2: Economic Well-Being : Income and Expenditure

2.1: Income

We shall proceed by first comparing the income characteristics of the two communities as described in the Prince Albert Studies then go on to discuss the results of various statistical tests that were carried out on the data.

According to the authors of the Prince Albert studies, economic well-being is directly related to command over economic resources and this is reflected in income. Due to the social, political and economic situation of natives, their average income is below that of the general Canadian population. The study notes that the average income of a Canadian family was about \$38,000 compared to \$21,000 for the natives on reserve (constant 1985 dollars). The study also points out that according to a census conducted between 1980 and 1985 the numbers of natives receiving government transfer payments (non-wage income) as a major source of income increased. The increase was about 16 per cent for off-reserve Indians and 12 per cent for the total Indian population, compared to 4 per cent for the general Canadian population.

The Prince Albert survey of the urban community indicated that all of the families in the urban sample had two or fewer earners. About 76 per cent of all urban families had no earners. Of the remaining 23.3 per cent, most had only one wage earner per family. Direct employment and related income of the aboriginal families in the urban setting was \$6,250 per family, per year as against non-employment related income, including government transfer payments being over one and one half times more, on average. The total family income of the respondents was estimated at \$17,066 per family per annum, of which social assistance payments constituted 42 per cent of the total.

A traditional use of forests only led to an average of \$70 per family per year of imputed cash income and was an insignificant amount of income relative to the total. As noted, the average family had \$17,066 per year to live on. After all adjustments (borrowing or taxes) this amount rose to \$17,513 as disposable income per family. On a per capita basis, income before loans and deductions was only \$4,573 per year compared to an average Saskatchewan person making \$18,900 per annum in 1994. This indicates the economic plight of aboriginal people living in an urban environment.

Data for the MLCN indicates that 44 per cent of the families surveyed did not have any earners in the family. Direct employment and related income was at \$8,696 per family per year. The average income was estimated at \$16,992 per annum, about 29 per cent of which was from social assistance. As in the case of the urban sample, income from

traditional use was an insignificant amount relative to the total, on average \$141.00. Disposable income stood at \$18, 519 or \$4,528 per capita. Clearly, the economic plight of natives living on reserve is similar to that of their urban counterparts.

In general we see that average annual income on the reserve was higher and a smaller proportion had no wage earners. Average income from direct employment and related sources was higher. Government transfer payments on the reserve constituted a smaller fraction of income than in the urban setting. Per capita disposable income, however, for urban dwellers was marginally higher. We are interested to know if the differences in these averages are statistically significant. Because of the differences in family size all analyses were done in per capita terms.

In this section we test for statistically significant differences in the averages of:

- Per capita Income
- Per capita Direct and Related Employment Income
- Dependence on Government Transfers
- Per capita Disposable Income
- Per capita Family Expenditure
- Dependence on Social Assistance
- Dependence on Family Allowance Payments
- The variables appearing in the tables below are defined as follows (all in per capita terms):
- $X1$ = Average Total Income
- $X2$ = Average Total Employment and Related Income
- $X3$ = Ratio of Government Transfer Payments (Social Assistance and Family Allowance) to Total Income
- $X4$ = Disposable Income
- $X5$ = Expenditures
- $X6$ = Ratio of Social Assistance Payments to Total Income
- $X7$ = Ratio of Family Allowance Payments to Total Income.

- All testing is done at a 5% level of significance.

Table 1

Group Statistics

	SAMPLE	N	Mean	Std. Deviation	Std. Error Mean
X1	PA	30	4455.7621	1805.1080	329.5661
	ML	139	4154.4719	2471.3873	209.6203
X2	PA	30	1959.7394	2641.1932	482.2137
	ML	139	2338.8238	2781.1791	235.8965
X3	PA	30	.6096	.3781	6.904E-02
	ML	139	.5309	.4087	3.467E-02
X4	PA	30	4572.5767	1939.4162	354.0873
	ML	139	4527.8866	3200.8828	271.4953
X5	PA	30	4524.5349	1785.8183	326.0443
	ML	139	4519.2324	3187.8265	270.3879
X6	PA	30	.5014	.3579	6.535E-02
	ML	139	.3688	.3499	2.968E-02
X7	PA	30	.1082	.1014	1.851E-02
	ML	139	.1621	.1731	1.468E-02

Independent Samples Test

		Levene's Test for Equality of Variances		t-test for Equality of Means						
		F	Sig.	t	df	Sig. (2-tailed)	Mean Difference	Std. Error Difference	95% Confidence Interval of the Difference	
									Lower	Upper
X1	Equal variances assumed	2.736	.100	.632	167	.528	301.2902	476.9483	-640.3349	1242.9153
	Equal variances not assumed			.771	55.309	.444	301.2902	390.5823	-481.3560	1083.9365
X2	Equal variances assumed	.000	.999	-.683	167	.496	-379.0844	555.1009	-1475.00	716.8353
	Equal variances not assumed			-.706	44.011	.484	-379.0844	536.8214	-1460.97	702.8003
X3	Equal variances assumed	2.447	.120	.969	167	.334	7.875E-02	8.125E-02	-8.17E-02	.2392
	Equal variances not assumed			1.019	44.869	.314	7.875E-02	7.726E-02	-7.69E-02	.2344
X4	Equal variances assumed	4.521	.035	.074	167	.941	44.6901	607.9446	-1155.56	1244.9374
	Equal variances not assumed			.100	68.170	.921	44.6901	446.1923	-845.6325	935.0127
X5	Equal variances assumed	5.162	.024	.009	167	.993	5.3025	602.3091	-1183.82	1194.4238
	Equal variances not assumed			.013	75.137	.990	5.3025	423.5735	-838.4740	849.0790
X6	Equal variances assumed	.007	.931	1.876	167	.062	.1327	7.073E-02	-6.98E-03	.2723
	Equal variances not assumed			1.848	41.825	.072	.1327	7.177E-02	-1.22E-02	.2775
X7	Equal variances assumed	3.344	.069	-1.644	167	.102	-5.391E-02	3.279E-02	-.1187	1.082E-02
	Equal variances not assumed			-2.282	71.054	.025	-5.391E-02	2.362E-02	-.1010	-6.82E-03

The data reveals that average per capita income was higher for those living in an urban environment by \$300.00 but the difference was not statistically significant. Average per capita income from direct employment and related sources was higher on reserve by almost \$380.00, but neither was this difference in means statistically significant. In terms of dependence on government transfers, there was no statistically significant difference in means between the two communities. However, when government transfers were subdivided into social assistance payments and family allowance payments, certain significant differences did appear. Urban dwellers tended to be more reliant on social assistance payments than their rural counterparts. Rural dwellers tended to be more reliant on family allowance payments than their urban counterparts. It would seem that the phenomenon of in-migration of families with young children was reflected in these results. We note, finally, that per capita disposable income was essentially the same for the two communities, as were per capita expenditures. This indicates that families on the reserve were at least no worse off relative to their urban counterparts when it comes to being in a position to save. But more importantly, we note that in both cases per capita expenditure outstripped per capita income, implying that members of both groups exhausted their income and took loans to finance expenditures. This is more so the case for people living on the reserves where per capita expenditure was \$4,519, whereas per capita income is \$4,154, a difference of \$365 per capita.

To this point we have demonstrated that that there do not seem to be many differences in economic well being in terms of income between natives on the reserve and those off the reserve, in the Prince Albert Area. But this conclusion is exclusively based on the analysis of certain averages. In order to help answer the question as to whether natives on the reserves were any worse off we tested the difference in the proportion of those families whose income was below the 1994 Statistics Canada Low Income Cutoff (LICO) for a four person family, living in a city of 30,000 to 99,000 and for rural areas. We found that 93 percent of the urban dwellers were below the LICO (or the so-called poverty line), whereas 73 percent of rural dwellers were below this cutoff. We found this difference in proportions to be statistically significant. Based on this evidence one would conclude that those living in the urban communities were worse off by income standards, but perhaps more importantly, this result raises questions about the distribution of income. It would appear that not only was income meagre, but also that it was not particularly evenly distributed among members in either community, given that the mean incomes were not significantly different in a statistical sense.

2.2: Expenditure

The MLCN study revealed that in most cases all the income of families was spent on purchasing necessities for living. The average expenditure per family in the MLCN was estimated at about \$18,484 per annum which is five per cent higher than the total income. Savings were not common among the aboriginal families living on the reserves. Only 3 of the 139 families had any savings. As noted above, purchases of durables and semi-durables were financed through loans, with 35 families having loans. The average loan payment amounted to \$1,527 per annum or 9 per cent of total income. The MLCN study revealed that the major item of expense for families was food, which accounted for 31 per cent of the total, followed by transportation. Shelter was a relatively smaller part of the total at 16 per cent. The study indicated that the share of income spent on basic necessities (food, shelter and transportation) was lower for natives on reserves compared to those off reserve. This is principally due to the lower proportion spent on housing by natives on reserve (as noted above). This may suggest that on reserve natives benefit from housing subsidies or some form of government transfers to reduce housing expenditure. As might be expected, expenditure on transportation was higher for on-reserve residents compared to off reserve natives. This may be due to lack of dependable public transportation. The Prince Albert Studies note that compared to Saskatchewan families, two things are clear: the proportion of total income being spent was much higher; and aboriginal families, both on and off reserve, spent a higher proportion of their total expenditure on basic needs (food, shelter and transportation).

In the urban setting, an average aboriginal family spent almost all their disposable income. Disposable income was estimated at \$17,513 per annum, which included cash available to the family through loans, but excluded all deductions at source as required. Disposable income constituted 98.4 per cent of total income. Family expenditure level was estimated at \$17,329 per annum, leaving \$184 for savings. The major item of expenditures was related to shelter, with such expenditures constituting one third of the total. The second major expenditure item was on food. Transportation and clothing were

the next two major items. Food and shelter claimed almost 61 percent of total income of aboriginal families in Prince Albert.

We estimated the marginal means of disaggregated expenditure categories at two levels of detail, and then tested for differences in these means. We did not find major differences in expenditure patterns between the two communities, except in terms of housing. The results are reported in Table 2. Urban dwellers spent more on average on housing than their rural counterparts and this difference was statistically significant. We also tested for differences in average expenditure on specific items.

Disaggregated Expenditure Categories

The categories are represented in the table as follows:

X1 = All Food

X2 = Clothing

X3 = Personal Care/Health /Education

X4 = Recreation

X5 = Housing

X6 = Furnishings

X7 = Transportation

X8 = Other Expenditures

Table 2

Pairwise Comparisons

Dependent Variable	(I) SAMPLE	(J) SAMPLE	Mean Difference (I-J)	Std. Error	Sig. ^a	95% Confidence Interval for Difference ^a	
						Lower Bound	Upper Bound
X1	ML	PA	103.861	162.026	.522	-216.022	423.745
	PA	ML	-103.861	162.026	.522	-423.745	216.022
X2	ML	PA	22.385	78.613	.776	-132.818	177.588
	PA	ML	-22.385	78.613	.776	-177.588	132.818
X3	ML	PA	47.771	91.199	.601	-132.281	227.822
	PA	ML	-47.771	91.199	.601	-227.822	132.281
X4	ML	PA	51.882	101.605	.610	-148.713	252.477
	PA	ML	-51.882	101.605	.610	-252.477	148.713
X5	ML	PA	-439.706*	158.191	.006	-752.018	-127.394
	PA	ML	439.706*	158.191	.006	127.394	752.018
X6	ML	PA	48.105	58.998	.416	-68.372	164.583
	PA	ML	-48.105	58.998	.416	-164.583	68.372
X7	ML	PA	450.690	305.396	.142	-152.244	1053.624
	PA	ML	-450.690	305.396	.142	-1053.624	152.244
X8	ML	PA	50.523	74.727	.500	-97.008	198.054
	PA	ML	-50.523	74.727	.500	-198.054	97.008

Based on estimated marginal means

*. The mean difference is significant at the .05 level.

a. Adjustment for multiple comparisons: Least Significant Difference (equivalent to no adjustments).

The reason for the significant difference in expenditure on housing was clear when we moved to the second level of disaggregation. Urban dwellers spent significantly more on rent and water than their rural counterparts. Other categories in which urban dwellers spent on average more than their rural counterparts, and in which this difference was statistically significant, included school expenses, movies and cable. These differences probably reflect life in an urban environment. We also found that natives on the reserve spent more on average for gasoline to operate their cars and that this difference was significant. According to the discussion above, this was simply due to a lack of public transportation on the reserve. We were particularly interested in testing for differences in average expenditure on protein (meat, fish and dairy products) and for differences in expenditure on alcohol and tobacco. We did not find any statistically significant differences. The idea here is that each of these two types of expenditures has positive and negative effects, respectively, on an individual in terms of their quality of human capital. It would not appear that natives living on the reserve are any worse off or better off in this regard than their urban counterparts, at least in the Prince Albert area.

As a final exercise we set out to compare expenditure patterns of those individuals surveyed with other Canadians. Using the 1996 Family Expenditure Data, we compared expenditures of families living in Regina to aboriginal people living off the reservation in Prince Albert. We must make two points of caution. First, Regina is a larger city than Prince Albert and expenditure figures represent both aboriginal and non-aboriginal residents. Second, expenditure figures are in 1996 current dollars for Regina and 1994 current dollars for Prince Albert. Nevertheless, we believe that certain general points are

worth noting. The results are presented in Table 3. As has been noted earlier, residents of Regina had a much higher level of expenditure, nearly four times that of natives living in Prince Albert. Residents of Regina spent 2 times more on food, 3 times more on shelter, 6 times more on transportation and 14 times more on personal care than aboriginal residents. However, as a fraction of total expenditure the native's expenditure on food is 12 per cent greater; expenditure on shelter is 6 per cent greater. Expenditure for personal care as a fraction of total expenditure stands out at 14 per cent less for natives living off reserve in Prince Albert.

Table 3

	PRINCE		FRACTION OF TOTAL	FRACTION OF TOTAL	DIFFERENCE	
	REGINA	ALBERT				
FOOD	2694.275	1272.58	2.1	16.12%	28.34%	-12.22%
SHELTER	4724.427	1505.1	3.1	28.26%	33.52%	-5.25%
FURNISHINGS	609.9237	125.51	4.9	3.65%	2.80%	0.85%
CLOTHING	850	331.06	2.6	5.09%	7.37%	-2.29%
TRANSPORTATION	2740.84	442.46	6.2	16.40%	9.85%	6.54%
PERSONAL CARE	3300.382	234.15	14.1	19.75%	5.21%	14.53%
RECREATION	1373.664	286.34	4.8	8.22%	6.38%	1.84%
OTHER	421.374	293.05	1.4	2.52%	6.53%	-4.01%
TOTAL	16714.89	4490.25	3.7	100.00%	100.00%	0.00%

2.3: Summary of Section 2

We set out to test the hypothesis that natives on reserves were not significantly worse off than their urban counterparts in terms of income and dependence on social assistance. We were led to conclude that natives living on the reserve were no worse off, based on testing for differences in the means of simple income as indicators of economic well-being. However, when we examined the proportions of families living below the poverty line, it would appear that natives on the reserve are, in this respect, better off than their urban counterparts. When one compares natives living off the reserve in the Prince Albert area to residents of Regina it would appear that the aboriginal people simply have less of everything. The most striking discrepancy is the amount of income they have available to spend on personal care, health and education.

SECTION 3: LABOUR MARKET CHARACTERISTICS

We shall proceed by examining the similarities and differences in educational attainment and employment patterns as outlined in the two Prince Albert Studies, and then discuss the results of the various statistical tests that were carried out.

3.1: Educational Skills and Attainments

In neo-classical economic theory, investment in human capital has become accepted as an important factor of production. Some of the differences in the command over economic resources can be reflected in differences in educational attainments and development of other skills. The rate at which natives attend school has increased over the past decade, particularly for younger members. For example, in 1960 only 43 per cent of native children between the ages of 4 and 5 went to kindergarten and by the 1990s this has increased to about 70 per cent. In general, only 33 per cent of natives aged 15 to 24 years attend school compared to 40 per cent for all Canadians. More than half of natives 15 years and older and with less than grade 9 education are not attending schools while this proportion for all of Canada is about 22 per cent. In 1961, less than 5 per cent of native students completed grade 12 or 13 though this has increased in 1991/92. Despite the increasing number of Indian students remaining in school, few obtain a diploma. A study by Frideres (1993) revealed that close to 25 per cent of Indians off-reserve had less than grade 9 education in 1986 compared to about 18 per cent for all of Canada. A similar study carried out in the city of Calgary indicates about 21 per cent of the native respondents have at least high school education compared to about 52 per cent for non-natives. Various reasons have been given to explain the differences in educational attainment between natives and the general Canadian population. These range from lack of interest to urge to join the labor force for economic or other reasons.

In the Prince Albert urban study, of the aboriginal members 55 per cent did not have grade 9 and about 72 per cent did not have a grade 12 certificate. Out of the 51 adults 19.61 per cent completed high school and obtained some form of certificate, 1.96 per cent obtained high school and some form of diploma while another 3.92 per cent completed

high school and obtained both a certificate and a diploma. The higher percentage of drop-outs after grade 7 has been attributed to a number of factors. The problems include: lack of interest, joining the labour force, family responsibilities, alcohol and drug problems and discrimination. Other factors include the lack of financial assistance, bad counseling, misinformation of native history and differences in their levels of training compared to other students from the cities. Parnell (1976) indicates that socio-economic factors such as the relationship between increased standard of living and the amount of time native children spend in school could influence the drop out rate of natives. It has also been suggested that schools on the reserves teach not only marketable skills but also programs to enhance job seeking skills and vocational training that are useful to the integration of natives who migrate to the urban centres in their attempt to find employment. Another noticeable feature of the adult members of aboriginal households in the City of Prince Albert is the differences in the educational attainment of male and female members. Relatively fewer male members of the sample attained education levels of high school and beyond. Among those who completed high school, relatively few proceeded on to higher education. In contrast there was evidence to suggest that there are two groups-those who did not proceed beyond grade 9 and those who went to university or some trade school. Beyond the elementary level and particularly that of secondary school, the pattern of native student enrolment changes from the Canadian norm. In 1981, less than one percent of natives attended university as compared to 7 per cent for the general population. Of the native students involved in some form of post-secondary education 60 per cent were enrolled in vocational training and another 30 percent were involved in skills upgrading. According to the Department of Indian and Northern Development (DIAND) 1978-79 Annual Report, nearly all natives enrolled in post-secondary institutions were being prepared for jobs at the semi-skilled level or lower. The urban Prince Albert native data confirms this.

In the rural environment, enrolment in kindergarten, elementary and secondary schools on reserves increased from about 72 per cent in 1960/61 to nearly 96 per cent of all children aged 4 to 18 by 1991/1992. The increase has been attributed to the increase in the school age population and the decrease in the drop out rate. Although there has been a tremendous improvement in the retention rate over the past three decades, these figures remain less than half of the national average. The reason for the increase in the education of on reserve enrolment is the increasing control of on reserve communities over their education system. School attendance data for the MLCN indicate that on average more females attend school than males. As in the case of their urban counterparts, despite the increasing number of aboriginal students remaining at school, few obtain a diploma. The MLCN data shows that 80.5 per cent of the respondents did not have Grade 12 although a large majority attended high school. About 14 percent of adults with high school proceeded to attend trade or vocational school or university. The general pattern of the highest level of education indicates that over 44 per cent of MLCN adults had between grade 10 and grade 12 while close to about 135 obtained grade 8 education. The distribution of skills and trades is similar to the data from the urban sample, confirming the DIAND report that most natives obtain training in semi-skilled and lower skilled professions.

3.2: Labour Force Participation Rate and Unemployment

Theoretically members of the labour force include all members over the age of 15 and under the age of 66 years. This is the number of people who, conditions permitting, may be able to participate in work activities. The total number of adults in this category for MLCN was estimated at 311 people. It was determined that 53 per cent of these people participated in the labour force. This rate is slightly smaller than the participation rate for Saskatchewan, which was estimated at 66 per cent (Statistics Canada, 1991). The reasons for this may include a relatively younger population, some may not be willing to participate on account of lack of opportunities and withdraw due to family circumstances. Employment is one of the major problems of native communities, influencing migration, and social stability and community development. It has been documented that unemployment among natives is high compared to the general Canadian population. Darroch (1980) examined the over and under occupational representation in the labour force. Using an index to measure the differences between ethnic groups, occupational distribution and the entire labour force, Darroch concludes that for most ethnic groups, the differences in occupational distributions have been substantially reduced. However, for native people such disparities have substantially increased. Native Canadians are more than twice as likely to be unemployed than non-native Canadians. Data from the MLCN indicate that more than three quarters of the adults who participate in the labour force were not gainfully employed on a full-time basis. These employment opportunities included both wages and salaried employment as well as employment in traditional activities. About 99 of the 165 adults were employed, although not full time. Thus the unemployment rate, disregarding the problem of seasonal employment, is about 40 per cent. Thus, slightly more than half of the MLCN adults participate in the labour force, of which 60 per cent are able to avail themselves of some employment opportunities, more than half of which are only part time in nature. The unemployment rate in the MLCN rises sharply to 76.4 per cent if both unemployed workers and those employed on a part time basis are included.

In the urban setting, the labour force participation rate was determined by the analysis of 51 individuals. Results suggest that participation rate was 65 percent, which was almost equal to 66.8 per cent for the province. Furthermore, in spite of the lower participation rates, unemployment was very high at 60.66 percent and 75.8 per cent if the rate includes those employed part of the year. This was very high compared to the provincial average of 7 per cent.

In terms of employment patterns, we were interested to see if there were significant differences in labour force participation rate and unemployment rate between the two communities. As both of these statistics are simple proportions we could carry out a simple test for difference in proportions. The results are reported in Table 4.

Table 4

	Rural	Urban	Significant
Labour Force Participation Rate	53%	65%	No
Unemployment Rate	40%	61%	Yes
Unemployment Rate including	76%	76%	N/A

those unemployed part of the year

We found that while the labour force participation rate was not significantly different, the unemployment rate was. It was higher in the urban setting and the difference was significant in a statistical sense. However, when we included those individuals who are unemployed for part of the year, the rural unemployment rate rose sharply and was no different from the urban unemployment rate. Although we could not test for differences explicitly, we can speculate as to the differences regarding an important phenomenon- the tendency not to work a full year. It would appear from the evidence above that this tendency is more prevalent in the rural environment, given the effect on unemployment rate of including the part-time employed.

At this stage we also tested the difference in proportions of families who generated no income in terms of direct employment or related sources. We found that in the urban sample 40 per cent of the respondents represented families with no one generating this sort of income. In the rural sample the proportion was 30 per cent. We did not find the difference in proportions to be statistically significant.

Thus it seems that urban natives have the same willingness to participate in the labour force as their rural counterparts, but have more difficulty securing employment, possibly owing to a mismatch of education and technical skills to labour market demands, especially for those in the urban environment. We can speculate that this explains migration to the city and back to the reservation. Aboriginal people move to the city in hopes of better employment opportunities but do not have the skills to integrate into the labour market.

In order to investigate these possibilities further, we began by testing to see if there were statistically significant differences in educational attainment and then examined the relationship between educational attainment and earned income, on and off the reservation. The nature of the original survey made it difficult to test for differences in educational attainment in a highly structured, hierarchical sense. The survey asked for the highest level of education attained, and whether or not a respondent had a diploma or a trade certificate. It did not clearly distinguish between a high school diploma or a college or university diploma. As a result, we were constrained to test the following aspects of educational

attainment: the proportions of each community that had less than a grade 9 education, some amount of high school education, some sort of diploma (high school diploma at the minimum) and the proportion of each community that had a trade certificate. The results are reported in Table 5.

Table 5

Category	Urban	Rural	Significant
Less than Grade 9	63%	35%	Yes
Some High School	37%	65%	Yes
Diploma	60%	15%	Yes at 10%
Certificate	24%	22%	No

Thus we see that natives on the reservation were generally better educated than natives in the urban setting in Prince Albert. We found that in all cases except for trades certificates, the differences in proportions were statistically significant.

The original surveys of the aboriginal populations asked respondents to list various socio-economic characteristics (one of which was educational attainment) beginning with the so-called head of the family. The income data collected was family income. Given these two pieces of information the following approach was adopted: we were interested in examining the marginal effect of education of the head of the family on earned family income. We were also interested to see if there were any locational differences. While some may object to the fact that this analysis seems to be predicated on the antiquated notion of the family breadwinner, given the nature of the data a more sophisticated approach was not possible. Here again we think that certain valid conclusions can still be drawn.

We tested the hypothesis that achieving the minimum of a high school diploma has a significant effect on earned income and that this is significantly greater for urban dwellers. We also test the hypothesis that the achievement of a trades certificate has a significant effect on earned income, and that this is significantly greater for urban dwellers. The following regression models were estimated:

Model 1

$$Y_i = \alpha_1 + \alpha_2 D_{2i} + \alpha_3 D_{3i} + \alpha_4 (D_{2i} D_{3i}) + \mu_i$$

Y_i = earned income α_2 = differential effect of diploma

$D_2 = 1$ if minimum high school diploma α_3 = differential effect of location
= 0 otherwise

$D_3 = 1$ if urban α_4 = differential effect of being
= 0 otherwise with a diploma

Model 2

$$Y_i = \beta_1 + \beta_2 D_{2i} + \beta_3 D_{3i} + \beta_4 (D_{2i} D_{3i}) + \psi_i$$

Y_i = earned income β_2 = differential effect of diploma

$D_2 = 1$ if certificate β_3 = differential effect of location
= 0 otherwise

$D_3 = 1$ if urban β_4 = differential effect of being urban
= 0 otherwise with a certificate

The equations were estimated and the following results obtained:

Model 1

$$Y_i = 7307.6 + 2400.8 D_{2i} + 2185.7 D_{3i} + 8401.4 (D_{2i} D_{3i})$$

t-values (7.3196) (3.6319) (-0.74506) (0.76956)

Model 2

$$Y_i = 7307.6 + 2400.8 D_{2i} + 2185.7 D_{3i} + 8401.4 (D_{2i} D_{3i})$$

t-values (7.6966) (0.21710) (-1.3970) (0.89743)

We found that a minimum of a high school diploma had a significant effect on earned income, raising it on average by approximately \$8,000 dollars across both rural and urban aboriginal samples. But it was also the case that urban dwellers with a minimum of a high school diploma are not significantly better off in terms of earned income than their rural counterparts. From all of this we can conclude that families in an urban environment would be better off (in terms of income generated through employment) if there were a higher proportion of heads of the family with at least a high school education. We have established above that this proportion, at the time of the survey, was quite low.

By contrast, we found that the achievement of a trades certificate did not have a significant effect on earned income across both communities. We speculate that this reflects the fact that while one fifth of all the aboriginals surveyed (in both communities) had some sort of certificate, they seemed to be in areas such as “life skills,” and that this type of education does not translate into dollar incomes. Such education is mismatched with the demands in the labour market.

3.3: Summary of Section 3

We set out to test the hypothesis that natives living on the reserve are no worse off in terms of educational attainment, labour force participation and unemployment rate. The results of the statistical tests lead us to conclude that natives living on the reservation were no worse off. In fact, natives on the reserve are demonstrated to have a higher level of educational attainment than their rural counterparts. Both communities had similar rates of labour force participation and unemployment. In addition, in this section, we found that the data supported the hypothesis that while levels of educational attainment have been improving, this does not seem to be leading to income gains, possibly due to a lack of matching of skills to labour market demand.

SECTION 4: THE LABOUR MARKET AND NATIVE POVERTY

In the course of testing our first hypothesis, we tested for the proportion of families living below the Low Income Cutoff (LICO) for a four-person family, when LICO is conventionally identified as the poverty line. We found that a staggering 93 per cent of those living in the urban setting were living below the poverty line, while this number was lower but still alarming at 73 percent for those living on the reserve. We were interested in comparing these poverty rates with those in the CCSD study on urban poverty.

The CCSD study has determined that certain population groups were more likely to be poor than others were. The average poverty rate among all city residents was 24.5 per cent. In contrast, 62.4 per cent of non-permanent residents (refugee claimants, foreign students and foreign workers) lived below the poverty line--the highest rate among groups examined. The next highest poverty rate was among aboriginal people at 55.6 per cent, followed by recent immigrants (52.1 percent), visible minorities (37.6 percent) and persons with disabilities (36.1 per cent). Based on the CCSD findings, we should not be surprised to find such a high poverty rate among natives in the Prince Albert area. We were not able to use a common basis of comparison as the CCSD calculates a poverty rate for aboriginal individuals and our analysis was done at the family level. In this regard, it is important to compare the poverty rate for economic families to our figure. The poverty rate for economic families in the province of Saskatchewan was 14 per cent. It was 14 per cent in Regina and somewhat higher at 17 per cent in Saskatoon. The CCSD study stresses the point that poverty is by no means evenly distributed across the country, nor are poverty rates for certain population groups invariant across cities. The CCSD data suggest that the range of poverty rates was substantial for aboriginal people in cities with sizable aboriginal populations, varying from 40.8 per cent in Burnaby to 66.1 per cent in Vancouver. In each city, the poverty rate among aboriginal people was considerably greater than the rate among non-aboriginal people. It is more than double the non-aboriginal rate in two thirds of the cities examined and more than triple the non-aboriginal rate in Thunder Bay, Saskatoon and London. In Regina the incidence of poverty among aboriginal people was 4.2 times the rate of non-aboriginal people. Aboriginal people account for a relatively small proportion of most city populations. Even in cities with larger than average shares of aboriginal people (Saskatoon, Regina, Winnipeg, Thunder Bay and Edmonton), less than eight per cent of the population was aboriginal. Most of the cities with the highest proportion of aboriginal people were also those with the highest aboriginal poverty rates. In Regina, aboriginal people accounted for 24.3 per cent of the poor population--more than three times their proportion of the total population. Saskatoon also had a large share of aboriginal people among its poor population--22.5 per cent of all the poor in that city. Thus it may be the case that the City of Prince Albert represents a pocket of extreme poverty for aboriginal people.

Drost (1995) attempted to explain unemployment among urban natives. He found that city of residence was the single most important factor contributing to the gap in aboriginal and non-aboriginal unemployment. He found this situation to be most dismal in the West and suggests that ghetto effects may exacerbate already low levels of labour force

integration. In addition, we recall the findings of the Department of Indian Affairs on applying the UN Human Development Index to aboriginal people (see above) that indicated that the lowest rating for off-reserve native peoples was found for the Province of Saskatchewan. The other explanation for the extraordinarily high poverty rate in the urban sample is problems with the data set (from a standpoint of statistical theory) that were previously noted. Finally, we must bear in mind, as pointed out by the CCSD study, that the nature of local economies is correlated with local poverty rates. There is a clear relationship between the lack of employment and higher poverty. Each city has a unique pattern of employment and its performance has implications for the local labour market. In some cities relatively high poverty rates suggest that the local economy does not provide sufficient employment for many area residents. In other cities, particularly those in prosperous regions, high poverty rates suggest that good jobs are not equally accessible to all residents. Nonetheless, it is important to note that the aboriginal peoples are the only ethnic group singled out in the hierarchy of the poor. The CCSD study emphasizes that education and employment are important factors in reducing the likelihood of being poor, but they are no guarantee. In general, the chances of living in poverty decreased as education levels, employment activity and occupational skills increased. However, for a certain proportion of the population, high educational achievement, full employment and high skill levels do not protect individuals from poverty. The study notes that extreme poverty rates among aboriginal people, recent immigrants and nonpermanent residents, visible minorities and persons with disabilities are evident in most communities. This suggests that there are real barriers preventing these groups from acquiring adequate incomes. Because these groups are faced with employment disadvantages unlike those faced by other people in Canada, improvements in the labour market alone are not the sole solution to their structural poverty.

Thus the numbers calculated in this analysis in terms of poverty rate may reflect the fact that the Prince Albert area economy does not create enough jobs to go around. If this is the case, then the poverty is exacerbated by the apparent tendency described in the Prince Albert study for natives not to leave their community even though they cannot find a job, just as in Newfoundland. If there were enough jobs to go around then it may be the case that they are facing artificial barriers to their participation in the labour market, provided their education and skill levels are sufficient for the available jobs. A report for the Royal Commission on aboriginal peoples states that they are not favoured in today's labour market. "Aboriginal peoples face discrimination in hiring and employment. They earn about one third less in wages. They are less likely to hold down full time year round jobs. They are much more likely to be employed in manual trades such as construction than in white-collar jobs as professionals, administrators, managers or clerks. Low levels of employment and poor wages typically translate into low earnings".

Carter (1990) indicates that through the Indian Act, Federal policies have always oriented the native occupation towards agriculture and primary resource industries. According to Frideres (1993) the structure of Canadian society prevents natives from effectively participating in the social, economic and political structure of society as a whole. He states that there is a strong correlation between external political control and economic dependence. Frideres argues that natives have become economically redundant because of changes in the structure and technology, as Canada moves from a traditional

resource based economy to become a diversified modern economy. The natives do not possess the skills and the technology to advance with the rest of Canada. Certain technical and social skills are prerequisite to entering the labour force and people without these skills are kept from participating as fulltime workers and members of the society. The lack of such social and technical skills of the natives keeps them away from the labour market, as the primary and secondary sectors become more distinct. In a study of Canada's off-reserve aboriginal population, Statistics Canada provides a summary of findings as to how distributions by occupation and industry compare to the Canadian population as a whole (Statistics Canada, 1991). This study notes that persons of aboriginal origin living off reserve are under-represented in managerial and professional occupations when compared to the Canadian population as a whole; similarly, they are proportionately less numerous in the manufacturing sector. Persons of aboriginal origin living off reserve are distributed among occupations in a way that is similar to the Canadian population as a whole. The major difference is that aboriginal Canadians living off-reserve are under-represented in office-related occupational categories such as managerial and administrative, professional, clerical and sales. Aboriginal people make up 45 per cent in such occupations compared to 54 per cent of all Canadians. Furthermore the aboriginal people are over represented in most other categories.

By comparison, fewer aboriginal persons living on-reserve appear to find themselves working in office-related occupations – only 25 per cent- while a higher proportion are occupied in primary occupations such as fishing, mining, and construction related occupational categories. A very similar picture emerges of natives living in urban areas. Although their distribution by industry is somewhat similar, Canadians of aboriginal ancestry living off reserve are still employed in slightly higher proportion (9 percent) as a whole than the Canadian population as a whole (7 percent) in the primary sector, which includes agriculture, fishing, logging and mining. In the service or tertiary sector the proportion of aboriginal people is 78 percent compared to 76 percent for the Canadian population as a whole; and in the manufacturing sector the comparable proportion of aboriginal people is 14 percent compared to 17 percent for the Canadian population.

Along with other industrialized nations Canada experienced profound economic changes in the last quarter of the 20th century. Fueled primarily by globalization, technological improvements and international trade patterns, economic restructuring swept through Canadian institutions Although these changes have provided many Canadians with economic benefits, the changes have hindered others in the labour market and have contributed to pockets of high levels of unemployment and labour market polarization. Because earnings are a major source of income for most families and individuals the nature of a worker's relationship with the labour market has obvious implications. Native Canadians face a problem on two fronts. They are marginalized and face artificial barriers to full participation in the labour market. In addition, they face a labour market situation that is increasingly becoming more dichotomous and in which jobs increasingly fit into two categories: good jobs (full-time well remunerated and satisfying) and bad jobs (unstable, poorly paid and devalorizing). Unfortunately, natives have tended to be employed in areas that might be considered bad jobs. According to Mendelson and Battle (1999) many aboriginal Canadians will not find consistent work in their lifetime. Between the 1991 recession and the 1996 recovery, aboriginal unemployment did not improve, either in

absolute or relative terms to the overall population. This may indicate the extent to which the qualifications of native workers do not match the demands of the labour market. It will even be difficult to maintain this unimpressive record since there is projected to be an increase in the population of aboriginal youth. From a policy perspective, Mendelson and Battle (1999) indicate that there must be a large investment in opportunities for training, skills acquisition and education. They argue that good childcare and quality housing are required to serve as an anchor to turn around communities. But equal attention should be placed on ensuring that social assistance payments are adequate to bring up the levels of expenditure on food and personal care. If these areas are not improved simultaneously, then investment in education, childcare and housing will themselves be wasted. Our sample surveys indicate that, while there is no African style hunger and starvation, per capita income levels are so dismally low that job searching is not a feasible activity.

CONCLUDING REMARKS

A literature search suggests that there appear to be no sample surveys of aboriginal communities and none that compare urban natives to rural residents on reserves. The received wisdom seems to be that natives on reserves are worse off than their urban counterparts, and that out-migration from the reserves must confirm that. In our sample study, we statistically compared income and expenditure patterns of two aboriginal samples, one in an urban area and one living on a reserve. We found no statistical evidence to indicate that the residents of reserves are worse off. For example, the expenditure on proteins was not significantly different. In terms of income, both communities seem to be dependent on government transfers, with the urban dwellers more reliant on social assistance and the rural on family allowances. In fact when we test for the proportion of families living below the poverty line, a staggering 93 percent of urban natives were below the poverty line compared to 73 percent on the reserves, and this difference was statistically significant.

We also compared the expenditure patterns of the urban sample to the (1996) Family Expenditure, assuming that Prince Albert is roughly comparable to other cities in Saskatchewan. Our sample was far behind in terms of total expenditures compared to the other cities, but as a proportion our urban sample spent 12 percent more on food and 6 percent more on shelter compared to residents of Regina. This is indicative of their relative poverty.

Both communities had a similar labour force participation rate, with the urban sample having a statistically significant higher unemployment rate. The natives on the reserve were in general better educated and this was statistically significant. A high school diploma had a significant effect on income in both samples, raising income by about \$8,000. On the other hand trade certificates had no effect on raising incomes. We think that this may be because the trade certificates are the types not demanded by the labour market. Finally we compared our income data with that of the CCSD on urban poverty. We found that Prince Albert (our urban sample) was a pocket of extreme poverty, with a per capita income of \$4,154, which was \$365 lower than the per capita income on the reserve, and in both cases the per capita expenditure outstripped income. Some 93 percent lived below the poverty line in Prince Albert. Our results appear to be in line with the ranking of

aboriginal people in terms of the UN Human Development Index, carried out by the Department of Indian and Northern Development. According to this ranking, the aboriginal people rank on a par with countries like Brazil, a ranking which is below that of Mexico and Thailand. Now Canada ranks *first* in this index, whereas Canadian natives rank 35th, and on the reserves the ranking is 63rd. That this should occur in Canada is a serious blow to the international image of Canada.

Given the portrait of unemployment and income that we found, we cannot call this “structural unemployment” of the classical kind. The latter is a *change* that occurs as an economy *evolves*. The natives of Prince Albert and the Montreal Lake Cree Nation Reserve were never part of the economy. Trying to deal with this enormous problem might require the kind of “big push” recommended by Mendelson and Battle of the Caledon Institute. A rich industrialized country can afford that big push.

We caution that the above conclusions are based on two sample surveys. The conclusions reached here need to be tested with better and more extensive samples that might throw more light on the nature of income distribution among native Canadians in other rural and urban settings. The largest aboriginal population is in Ontario and British Columbia, and our research should be extended to these provinces for a start. Then there is the whole question of intra-aboriginal income differences between status and non-status Indians, and the Métis. Could it be that Ontario has a small aboriginal elite in terms of income, where the community operates casinos? How effective are the expenditures of the Department of Indian and Northern Affairs in reducing poverty? Why does such dismal poverty persist?

Finally in the analysis of the labour market, it is not clear that current approaches are appropriate for preparing policy prescriptions for dealing with aboriginal poverty and unemployment. Labour economists expect that labour should be mobile; it should acquire the necessary skills and move where there are jobs. But if capital were mobile, it would move to areas where there was cheap and abundant labour. Thus there is an asymmetry in factor mobility, coupled with market size. What is the nature of the relationship of native reserves to small cities? Can the reserve system survive with (a) a decline in traditional means of obtaining a living from the land, and (b) massive demographic shift that is sure to come within the next three decades? The research effort needs to shift to long term issues, to location theory, and to understanding the nature of the economies of small cities.

References

Bernier, Rachel, (1997) *The Dimensions of Wage Inequality among Aboriginal Peoples*. Analytical Studies Branch, Research Paper Series.

Carter, S. (1990) *Lost Harvest*. Montreal: McGill-Queens University Press.

Drost, H. (1995). *The Aboriginal-White Unemployment Gap in Canada's Urban Labour Markets* in *Market Solutions for Native Poverty, Social Policy for the Third Solitude*, Richards, J. and Watson, W.G., eds. Winnipeg: C.D. Howe Institute, Toronto, p. 13-57

Department of Indian and Northern Affairs.

Frideres, J.S. (1993). *Native Peoples in Canada: Contemporary Conflicts*. Scarborough, Ontario: Prentice-Hall Canada Inc.

Health Canada (1999). *A Second Diagnostic on the Health of First Nations and Inuit People in Canada*.

Health Canada (1997). *Report of the Auditor General of Canada to the House of Commons, Chapter 13, Health Canada-First Nations Health*. Minister of Public Works and government Services Canada.

Indian Affairs and Northern Development (1997). *Socio-economic Indicators in Indian Reserves and Comparable Communities*.

Kulshreshtha, S.N. and K. Agyirey-Kwakye (1995). *Selected Socio-economic Characteristics of Aboriginal Families Living Off-Reserve: A Case Study of Prince Albert*. Report 95-05. Prince Albert: The Prince Albert Model Forest Association.

Kulshreshtha, S.N. (1995). Socio-economic Baseline Survey of Montreal Lake Cree Nation. Report 95-06. Prince Albert: The Prince Albert Model Forest Association.

Lee, K. (1996). Urban Poverty in Canada: A Statistical Profile. Canadian Council on Social Development.

Mendelson, M. and Battle, K. (1999). Aboriginal People in Canada's Labour Market. Caledon Institute of Social Policy.

Report of the Royal Commission on Aboriginal Peoples (1996). In *Perspectives and Realities, Volume 4*. Minister of Supply and Services Canada: Canada Communications Group Publishing.

The Social Trends Analysis Directorate (1991). Canada's Off-Reserve Aboriginal Population: A Statistical Overview. , Department of the Secretary of State of Canada.

Average household expenditure, selected metropolitan areas (Family Expenditure Series Statistics Canada). URL:
<http://www.statcan.ca/english/Pgdb/People/Families/famil10d.htm>.

Average household food expenditure, selected metropolitan areas (Family Expenditure Series Statistics Canada)
<http://www.statcan.ca/english/Pgdb/People/Families/famil27h.htm>.