

North Saskatchewan River Basin: Socio-Economics Profiles, 2006



North Saskatchewan Watershed Alliance

9504 49 Street
Edmonton, Alberta T6B 2M9
Tel: (780) 442-6363
Fax: (780) 495-0610
Email: water@nswa.ab.ca

<http://www.nswa.ab.ca>

The North Saskatchewan Watershed Alliance (NSWA) is a non-profit society whose purpose is to protect and improve water quality and ecosystem functioning in the North Saskatchewan River watershed in Alberta. The organization is guided by a Board of Directors composed of member organizations within the watershed. NSWA is the designated Watershed Planning and Advisory Council (WPAC) for the North Saskatchewan River under the Government of Alberta's *Water for Life Strategy*.

Report prepared under contract to NSWA by John Thompson, Watrecon Consulting.

Suggested Citation:

North Saskatchewan Watershed Alliance (NSWA). 2010. *North Saskatchewan River Basin: Socio-Economic Profiles, 2006*. 266 pp. Submitted by John Thompson, Watrecon Consulting. Edmonton, Alberta: The North Saskatchewan Watershed Alliance Society. Available on the internet at http://www.nswa.ab.ca/economic_profiles

TABLE OF CONTENTS

Table of Contents.....	i
Acknowledgements.....	ii
1.0 BASIN OVERVIEW.....	1
2.0 CLINE SUB-BASIN.....	24
3.0 BRAZEAU SUB-BASIN.....	37
4.0 RAM SUB-BASIN.....	51
5.0 CLEARWATER SUB-BASIN.....	66
6.0 MODESTE SUB-BASIN.....	77
7.0 STRAWBERRY BUS-BASIN.....	100
8.0 STURGEON SUB-BASIN.....	124
9.0 BEAVERHILL SUB-BASIN.....	150
10.0 WHITE EARTH SUB-BASIN.....	174
11.0 VERMILION SUB-BASIN.....	200
12.0 FROG SUB-BASIN.....	225
13.0 MONNERY SUB-BASIN.....	250
14.0 DATA SOURCES AND METHODS.....	266

ACKNOWLEDGMENTS

The NSWA wishes to thank John Thompson of Watrecon Consulting for all of his diligent work in compiling this report. Valuable comments on the draft report were brought forward by members of the NSWA Board of Directors and the Integrated Watershed Management Plan Steering Committee. Special thanks goes to the NSWA Economics Sub-Committee for their input and guidance.

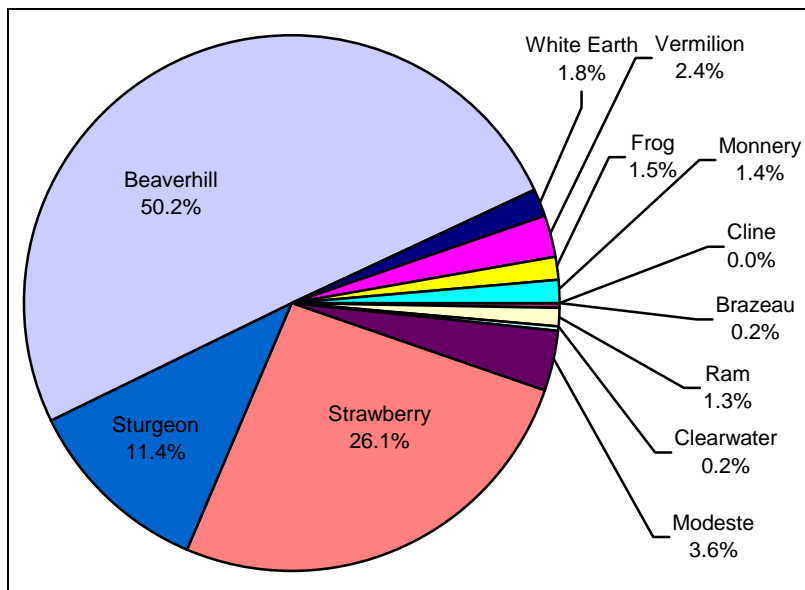
This project was made possible through a contract with NSWA from Alberta Environment.

1.0 BASIN OVERVIEW

1.1 Population

In 2006, the North Saskatchewan River Basin (NSRB) had a population of about 1.16 million people. Nearly two-thirds of basin residents (62.9%) lived in the City of Edmonton. Another 17.9% lived in one of the other five cities (St. Albert, Spruce Grove, Leduc, Lloydminster and Fort Saskatchewan) or the specialized county of Strathcona, which includes Sherwood Park. The balance of the population lived in one of 23 towns (7.1% of the population), 24 villages (0.9%), 9 summer villages (0.1%), 7 Indian reserves (0.4%), or 22 counties and municipal districts (10.5%).

Figure 1-1: Population by Sub-Basin, 2006

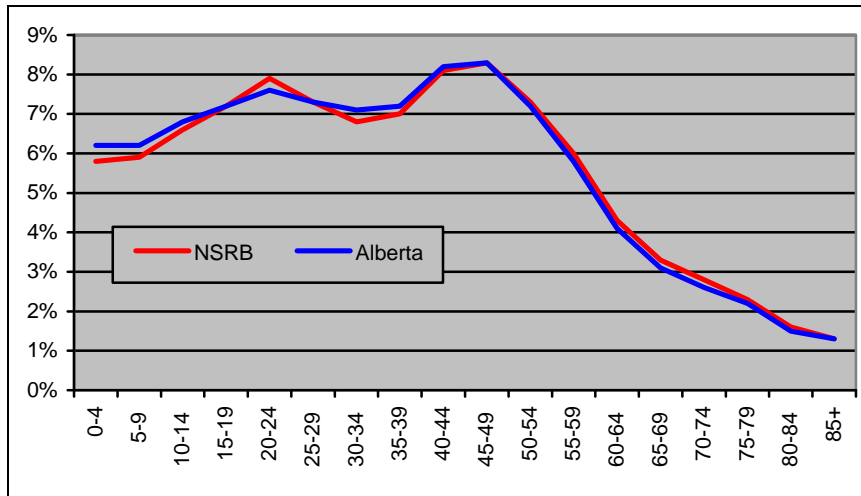


As shown in Figure 1-1, the bulk of the basin population (89%) lives in the Beaverhill, Strawberry or Sturgeon sub-basins. These three sub-basins include the City of Edmonton, most of the other five cities, and Strathcona County.

1.2 Age Characteristics

In terms of age, residents of the NSRB were nearly identical to the Alberta population. Figure 1-2 shows that the percentage of the basin population in each of the 5-year age intervals closely matched the provincial statistics. Overall, the NSRB had slightly lower percentages of children under the age of 15, more in the 20-24 age category, less in the 30-39 age groups, and more in all population groups aged 50+.

Figure 1-2: Age Composition of the Basin Population, 2006



Overall, 81.7% of the population of the NSRB was aged 15 years or older, and this was slightly higher than for Alberta (81.4%)

1.3 Aboriginal Population

About 5.8% of the residents of the NSRB were Aboriginal. The 61,256 Aboriginal residents of the basin accounted for 33% of all Aboriginal people in Alberta. Figure 1-3 shows that Aboriginal people accounted for less than 6% of the population in 7 of the 12 sub-basins. The highest concentrations of Aboriginal people were found in the Brazeau, Frog, Ram, Modeste and White Earth sub-basins.

Figure 1-3: Aboriginal Population by Sub-Basin, 2006

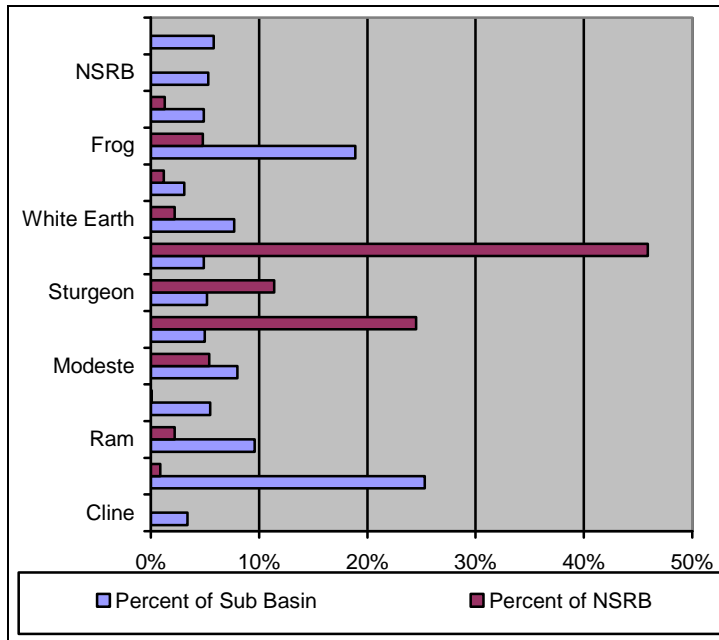
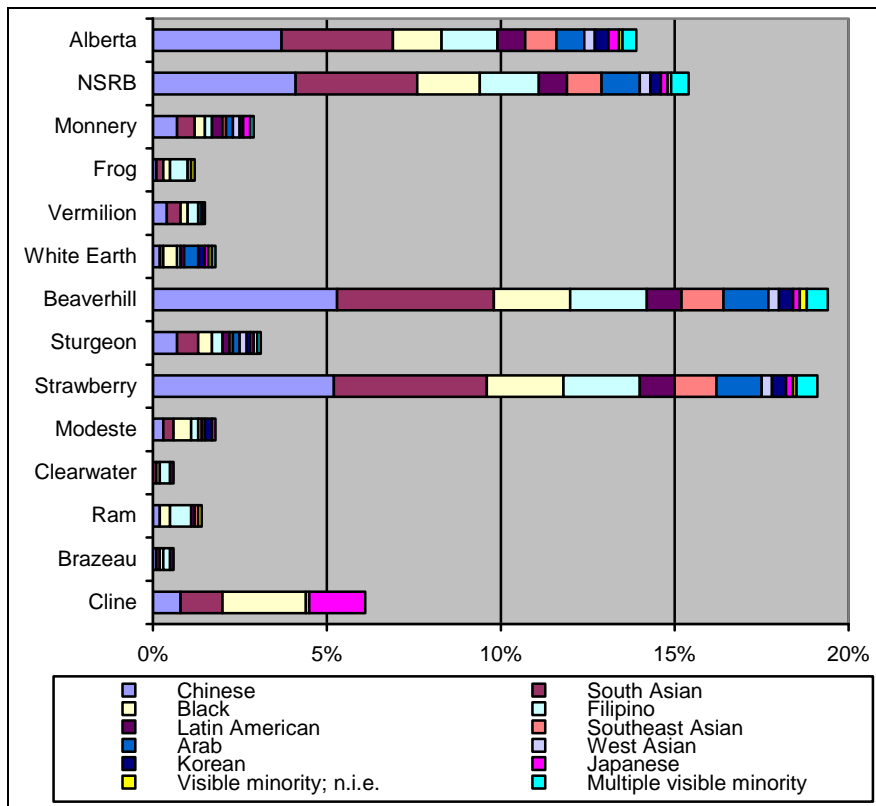


Figure 1-3 also shows that the majority of Aboriginal people lived in the Beaverhill (46%), Strawberry (25%) and Sturgeon (11%) sub-basins, primarily in the major population centres. Only 8% of the Aboriginal population lived on one of the 7 reserves.

1.4 Ethnicity

About 15.5% of the NSRB population consisted of visible minorities; this is slightly higher than for Alberta (13.9%). Visible minorities were found primarily in the sub-basins with the largest communities, such as Beaverhill and Strawberry, where they accounted for more than 19% of the population.

Figure 1-4: Visible Minorities by Sub-Basin, 2006

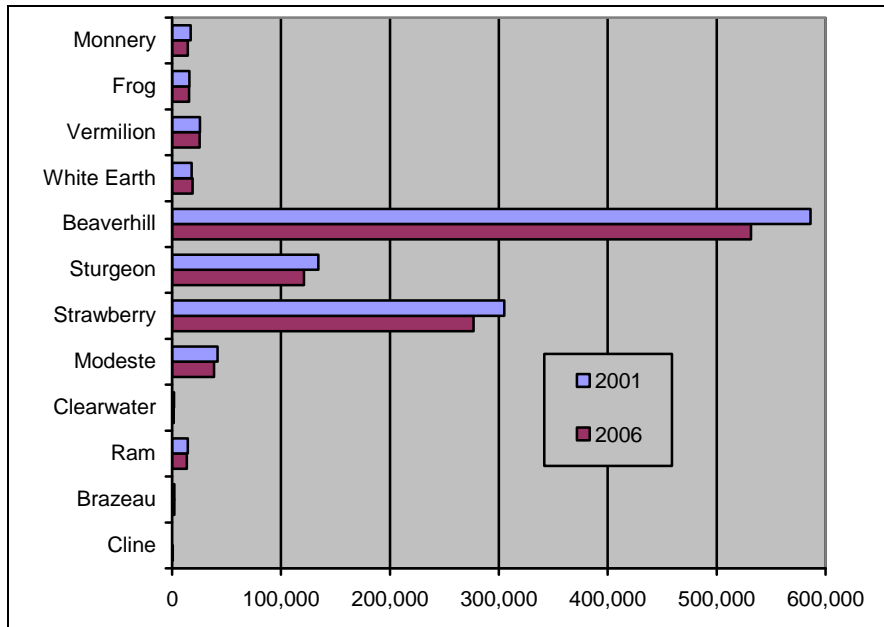


The most common visible minorities were Chinese (4.1% of the population), South Asian (3.5%), Black (1.8%) and Filipino (1.7%).

1.5 Population Change

Between 2001 and 2006, the population of the NSRB increased by 9.6%, which was slightly lower than the Alberta average (10.6%). Figure 1-5 shows that most of the population increases occurred in the Beaverhill, Strawberry and Sturgeon sub-basins where the population increased by at least 10%. Overall, the highest population growth rates occurred in the Monnery sub-basin (19.0%).

Figure 1-5: Population Change in the NSRB, 2001-2006

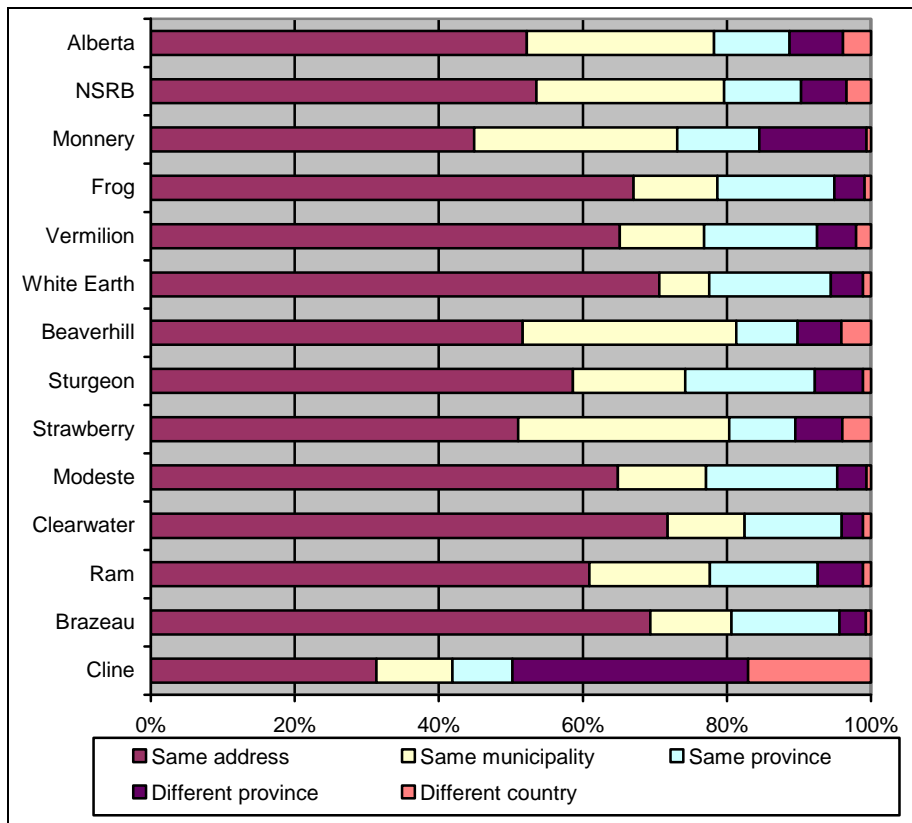


Three of the sub-basins experienced population losses, including the Cline sub-basin (-30.3%), White Earth (-5.0%) and Brazeau (-2.9%). The Clearwater, Vermilion and Frog sub-basins each experienced population growth of less than 3%.

One factor affecting population growth is migration from one area to another.

Figure 1-6 shows population mobility in the NSRB between 2001 and 2006. It shows that 53.6% of basins residents resided at the same address for the 5-year period, 3.4% moved in from another country, 6.3% mover from another province, and 10.7% moved from a different municipality in Alberta. This profile matched the provincial profile.

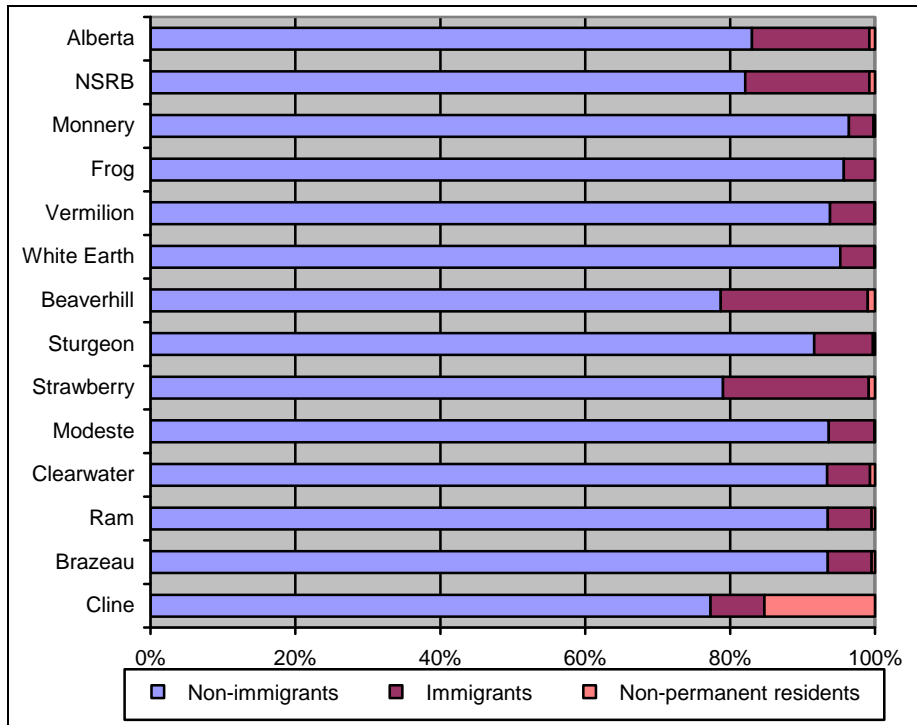
Figure 1-6: Population Mobility, 2001-2006



Sub-basins with the largest portion of the population having resided outside their current municipality included Monnery and Sturgeon, where between 25% and 30% of residents had moved into their current municipality since 2001. While the Cline sub-basin had high mobility, the high percentages are due to the small population in this part of the NSRB.

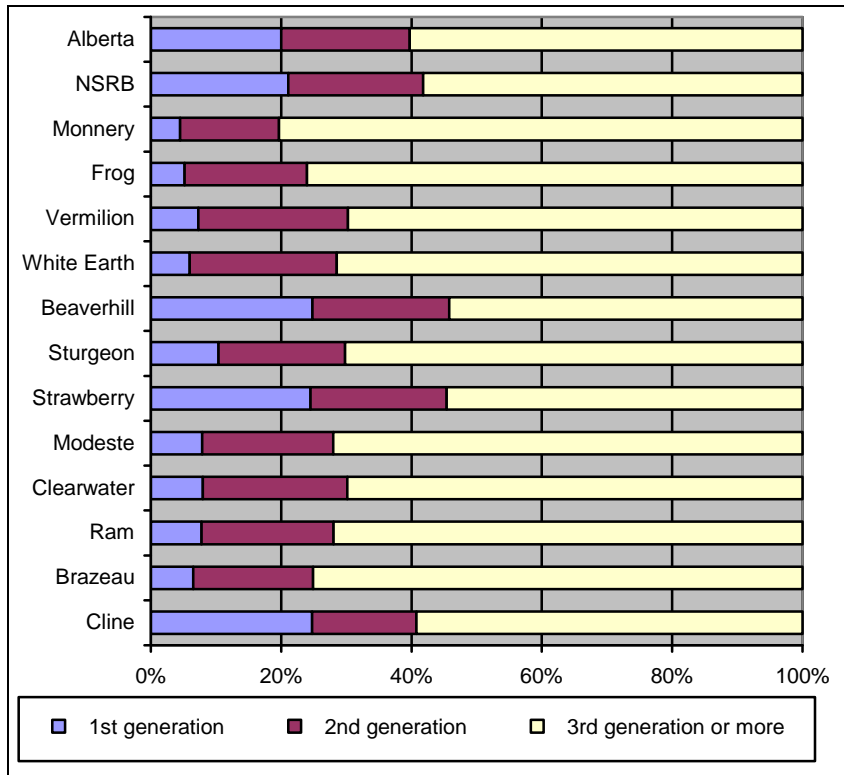
Immigration has contributed to population growth in the NSRB. About 17% of the basin population consists of immigrants, compared to 16% for Alberta. Immigrants accounted for more than 20% of the populations of the Beaverhill and Strawberry sub-basins, which include the City of Edmonton. For the other sub-basins, immigrants accounted for 8% or less of the sub-basin population.

Figure 1-7: Role of Immigration by Sub-Basin, 2006



About 58% of the basin population consisted of people who had lived in Canada for 3 or more generations. Sub-basins with the highest concentrations of people who had lived in Canada for 3 or more generations included the Monnery, Frog, and Brazeau sub-basins. The sub-basins with the highest percentage of the population that has lived in Canada for only 1 or 2 generations include the Beaverhill and Strawberry sub-basins which, as noted previously, have the highest percentages of immigrant populations.

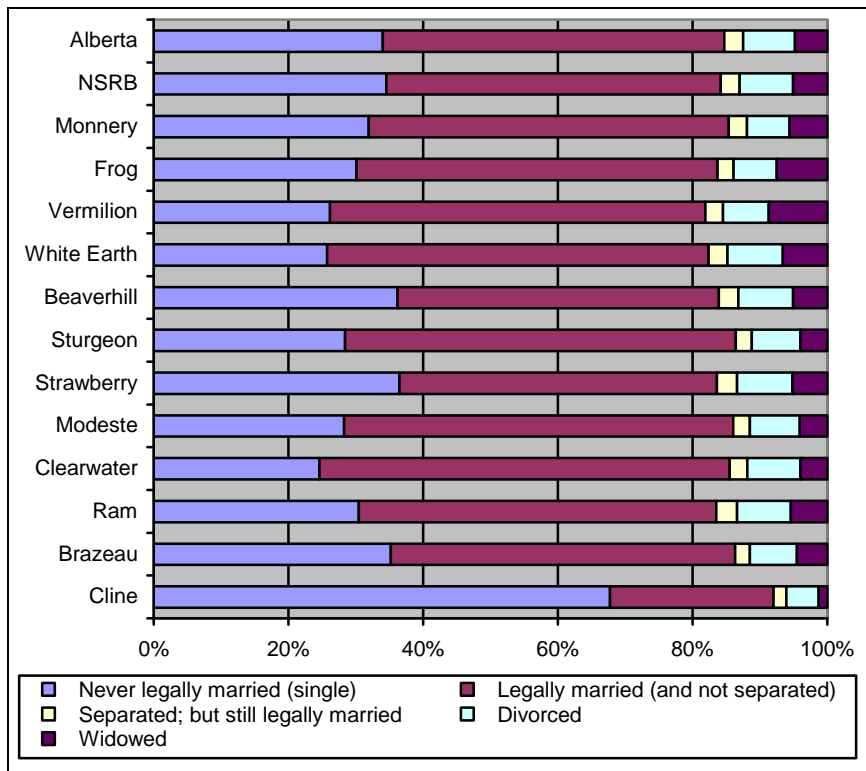
Figure 1-8: Residency in Canada by Sub-Basin, 2006



1.6 Marital Status

Married people account for 49.6% of the basin population, while the balance consists of single people (34.5%), divorced people (5.8%), widowed people (5.1%) and people who are separated (2.8%). The basin profile (Figure 1-9) closely matches the Alberta profile, although the basin has slightly higher percentages of single people, divorcees and widows/widowers.

Figure 1-9: Marital Status by Sub-Basin, 2006

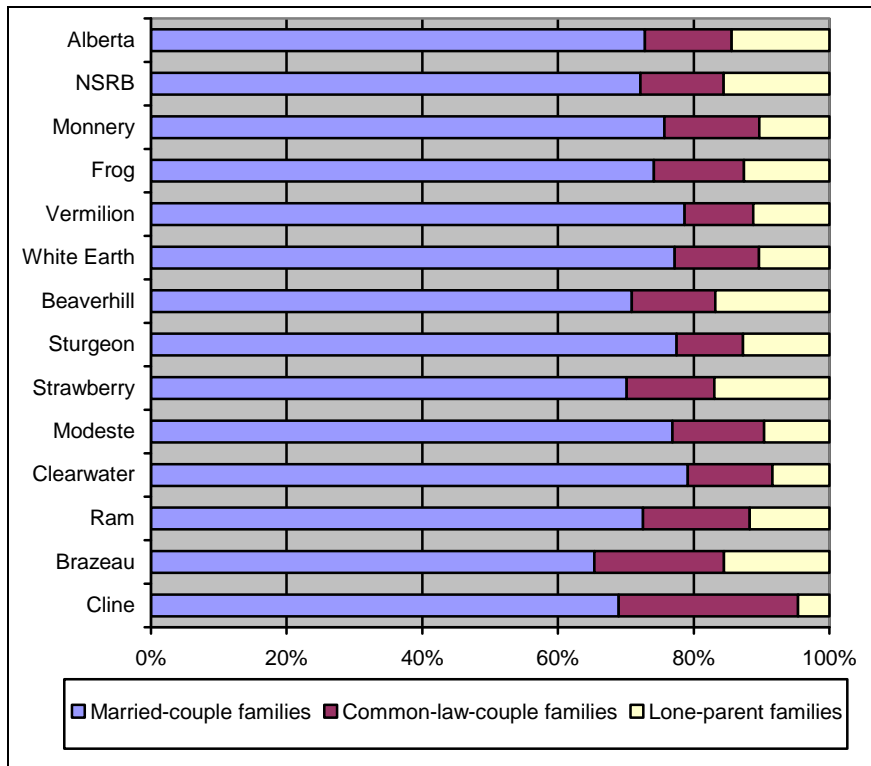


The highest percentages of single people are found in the Cline, Strawberry and Beaverhill sub-basins. The highest percentages of married people are found in the Clearwater, Sturgeon, and Modeste sub-basins. Marital status is partially correlated with age distributions, with higher percentages of widows/widowers found in older populations.

1.7 Family Structure

Married couple families account for 72.1% of the 319,560 families in the NSRB. Lone parent families account for 15.6% of families, while common-law couples account for the balance (12.2%). Figure 1-10 shows that the highest percentages of single-parent families occur in the Strawberry and Beaverhill sub-basins. In contrast, the sub-basins with the highest percentages of married couple families include the Clearwater and Vermilion.

Figure 1-10: Family Structure by Sub-Basin, 2006

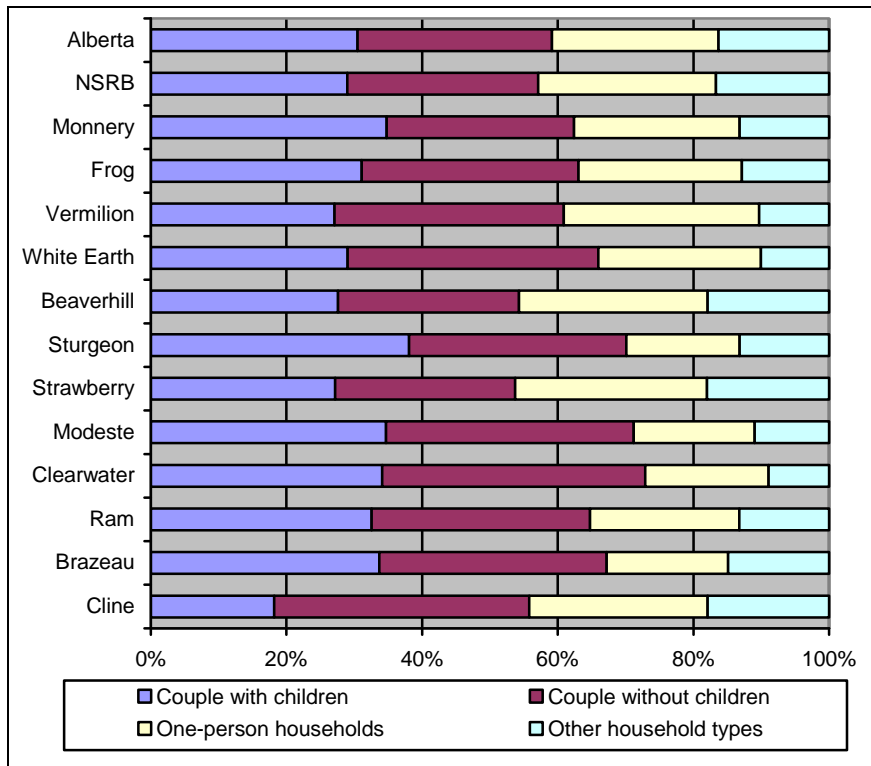


The highest incidence of common-law families is observed in the Brazeau, Ram and Monnery sub-basins.

1.8 Household Structure

Household structure differs from family structure because households can contain one or more families. Figure 1-11 shows that 29.0% of households consisted of a couple with children, 28.1% were couples with no children, 26.2% were single person households, and the balance (16.7%) consisted of other household types. Married couples with children were most common in the Sturgeon sub-basin, followed by the Modeste and Monnery sub-basins.

Figure 1-11: Household Structure by Sub-Basin, 2006

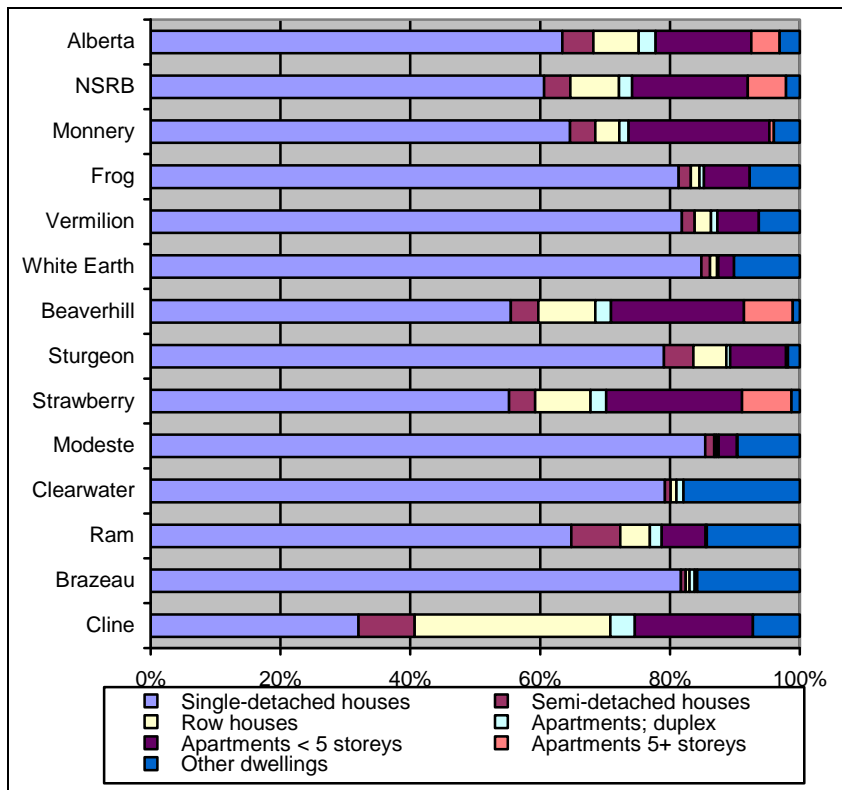


Single-person households were most commonly found in the Vermilion, Strawberry and Beaverhill sub-basins.

1.9 Housing

In 2006 there were about 452,900 housing units in the NSRB; this represents 36% of all housing in Alberta. Figure 1-12 shows the composition of housing in each of the sub-basins. Overall, single detached houses accounted for 60.5% of housing in the basin, and were most prevalent in the Modeste, White Earth, Frog and Vermilion sub-basins, where all of the larger cities and towns are located..

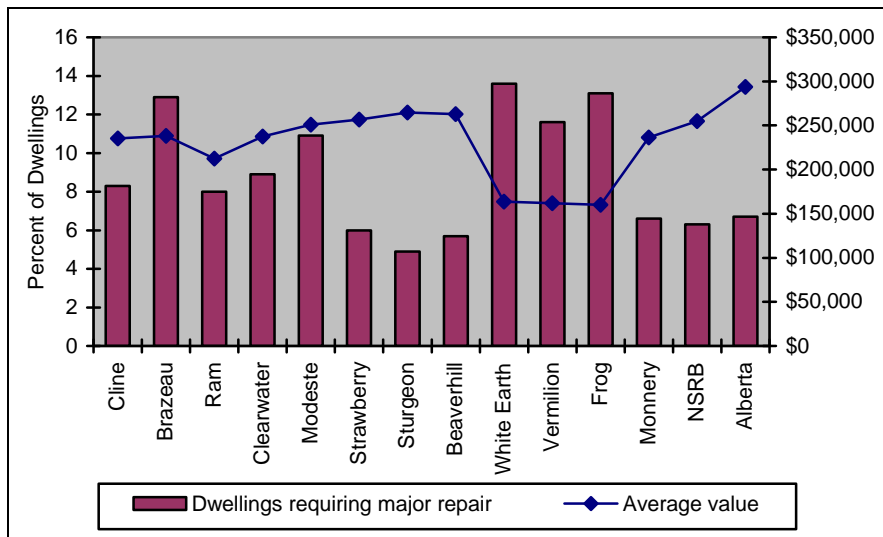
Figure 1-12: Housing Characteristics by Sub-Basin, 2006



Other housing types were most prevalent in the sub-basins with the large population centres (Beaverhill and Strawberry). The Cline sub-basin also featured an unusual housing mix, and this reflects the small population. Apartment buildings of less than 5 stories in height were the second most dwelling type, and were found mostly in the Beaverhill, Strawberry and Monnery sub-basins.

Figure 1-13 shows the reported value of housing in each of the sub-basins as well as the percentage of housing stock in need of major repair. Overall, the average value of a house in the NSRB in 2005 was \$254,828, which was about 13% lower than the Alberta average.

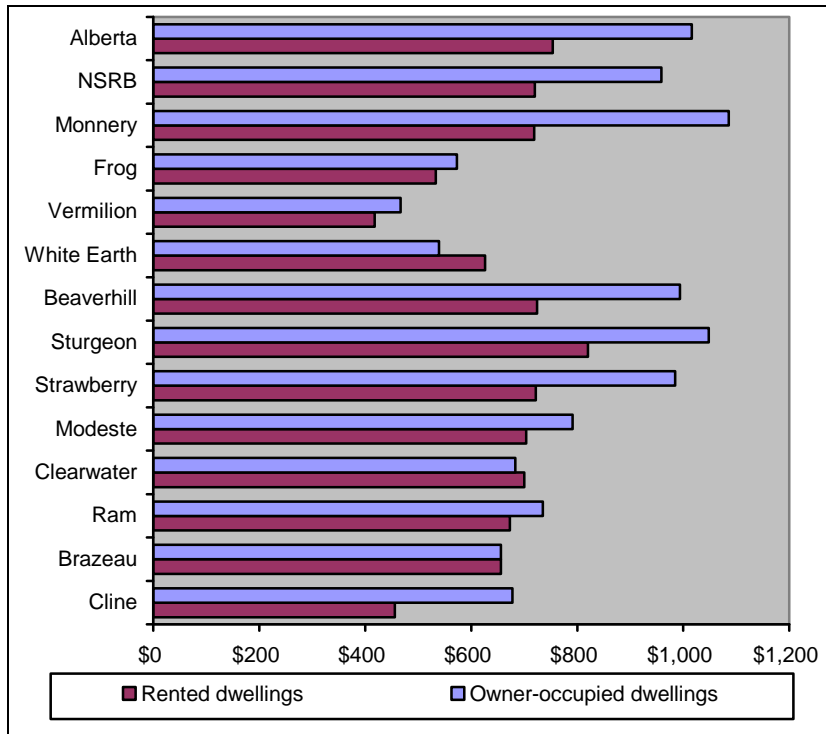
Figure 1-13: Value of Housing (2005) and Need for Major Repairs by Sub-Basin



Within the basin, the highest housing values were reported in the Sturgeon, Beaverhill, and Strawberry sub-basins, and this reflects the higher value of housing in Edmonton and the surrounding cities. The lowest housing values occurred in the White Earth, Frog and Monnery sub-basins and, coincidentally, these sub-basins also had the highest percentage of dwellings in need of major repair (11% or more). Overall, 6.3% of dwellings in the basin were in need of major repair and this was slightly lower than the provincial average of 6.7%. Housing stock in the major communities in the Strawberry, Sturgeon and Beaverhill sub-basins was in better condition than in the other sub-basins.

Figure 1-14 summarizes the average monthly costs of renting and owning dwellings in each of the sub-basins in 2005. These costs include rent/mortgage, electricity, heat and municipal services to operate a dwelling. Overall, rental costs averaged \$720 per month in the NSRB compared to \$959 per month for owned dwellings. These costs were slightly less than the provincial averages (\$754 and \$1,016, respectively).

Figure 1-14: Average Monthly Costs for Rental and Owned Dwellings, 2005

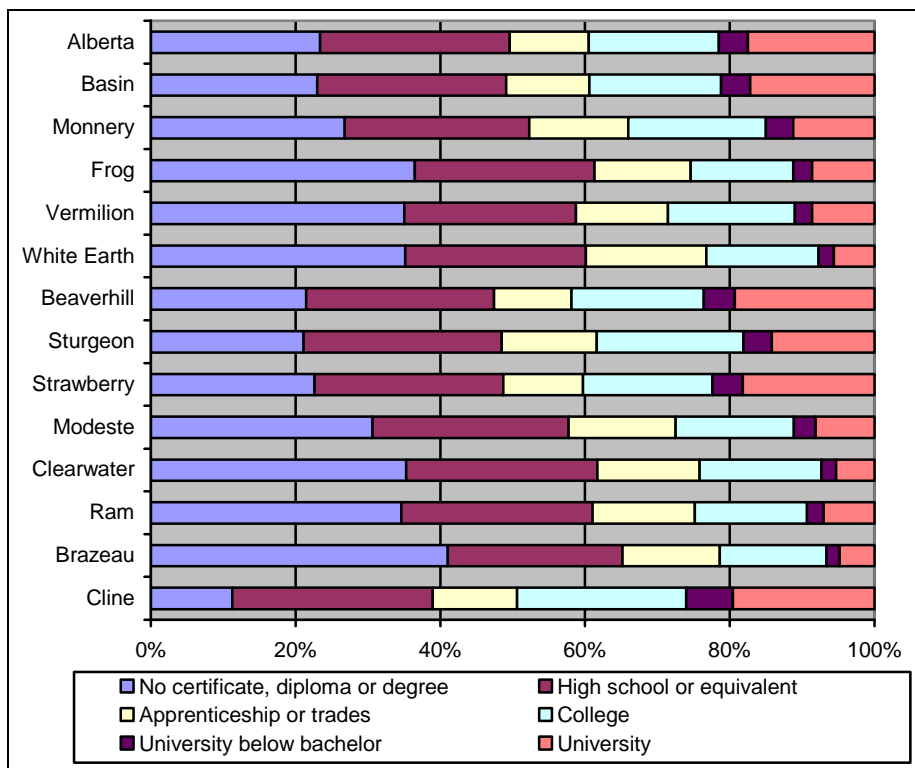


The highest monthly costs for both rental and owned-dwellings were reported in the Sturgeon sub-basin, followed by the Beaverhill, Strawberry and Monnery sub-basins. The lowest rental costs were in the Vermilion and Cline sub-basins. The lowest costs for owned dwellings were reported in the Vermilion, White Earth and Frog sub-basins.

1.10 Education

Basin residents were slightly better educated than the Alberta average. Although a slightly higher percentage of Alberta residents had graduated from university, more basin residents had apprenticeships or trades certificates and a smaller percentage had not completed high school.

Figure 1-15: Educational Attainment by Sub-Basin

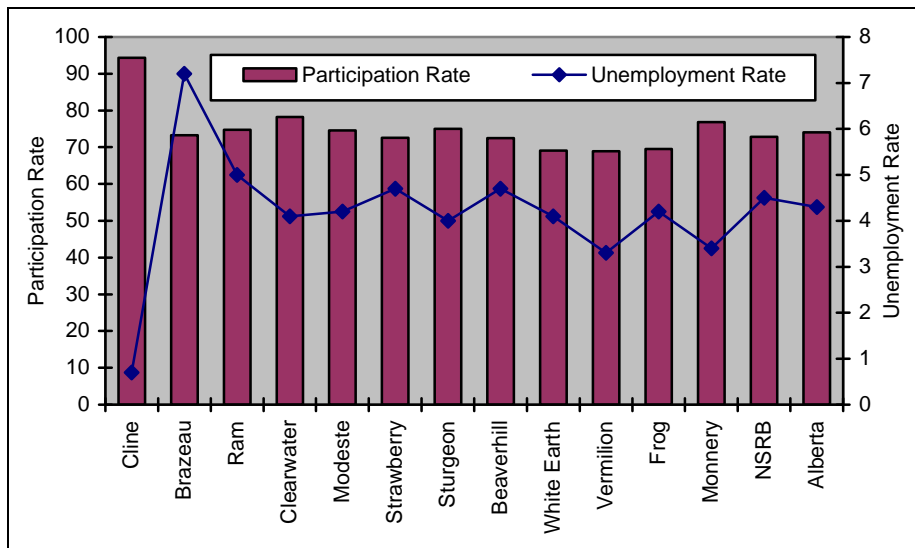


The highest levels of educational attainment were found in the Beaverhill, Strawberry and Cline sub-basins, where at least 22% had completed at least some university courses. The highest incidence of people with apprenticeships or trades certificates was found in the White Earth and upper sub-basins (Ram, Clearwater, and Modeste) where at least 14% of the adult population (aged 15+) had completed this training. The lowest levels of educational attainment were found in the Brazeau, Frog, Vermilion and White Earth sub-basins; at least 54% of the population in these sub-basins had not completed high school.

1.11 Labour Force Participation

Overall, 72.8% of the adult population was participating in the labour force, either working or actively seeking work. Figure 1-16 shows that labour force participation rates were fairly consistent throughout the basin.

Figure 1-16: Labour Force Participation and Unemployment Rates, 2006

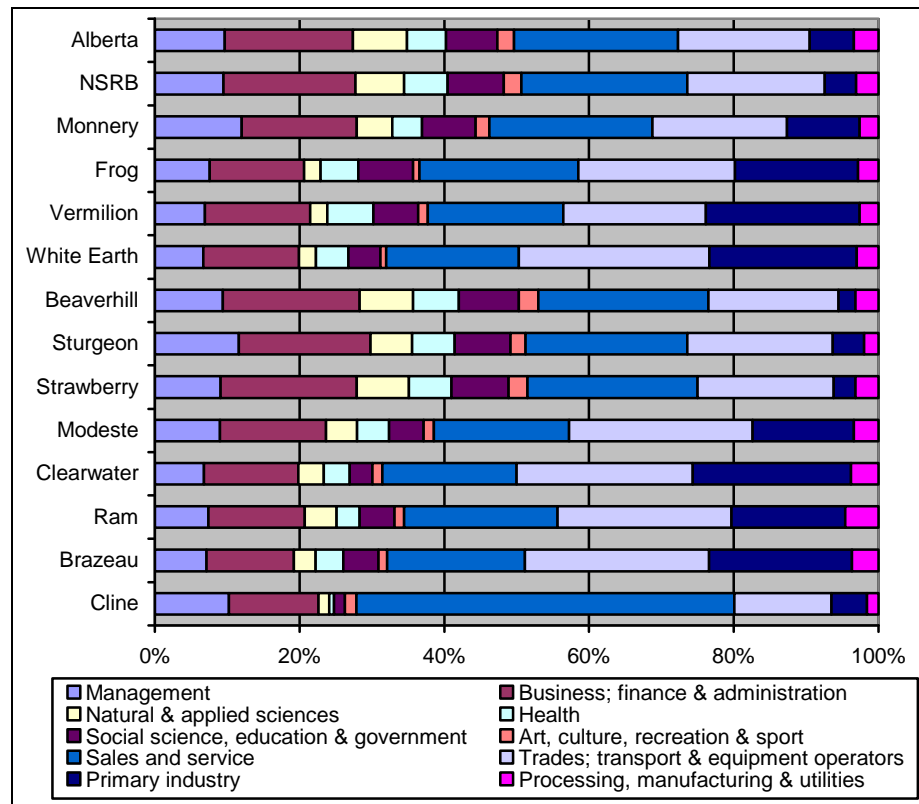


However, labour force participation was slightly less than 70% in the White Earth, Vermilion and Frog sub-basins, but was 94% in the Cline sub-basins and exceeded 74% in the Monnery, Clearwater and Sturgeon sub-basins. Average unemployment in 2006 was 4.5%, which was slightly higher than the provincial average (4.3%). The lowest unemployment rates occurred in the Vermilion (3.3%) and Monnery (3.4%) sub-basins. Unemployment rates were higher in the upper parts of the basin, reaching 7.2% in the Brazeau sub-basin and 5.0% in the Ram sub-basin.

1.12 Employment by Occupation

Figure 1-17 shows employment by occupation for each of the sub-basins.

Figure 1-17: Employment by Occupation, 2006



Employment in occupations related to primary industry was particularly important in the more rural parts of the NSRB, including the White Earth, Vermilion, and Clearwater sub-basins where more than 20% of the adult population was working in these occupations, compared to 4.3% for the entire basin. Employment in the trades or as transport and equipment operators was also more predominant in the more rural areas, especially in the upper basin (Brazeau, Ram, Clearwater, Modeste).

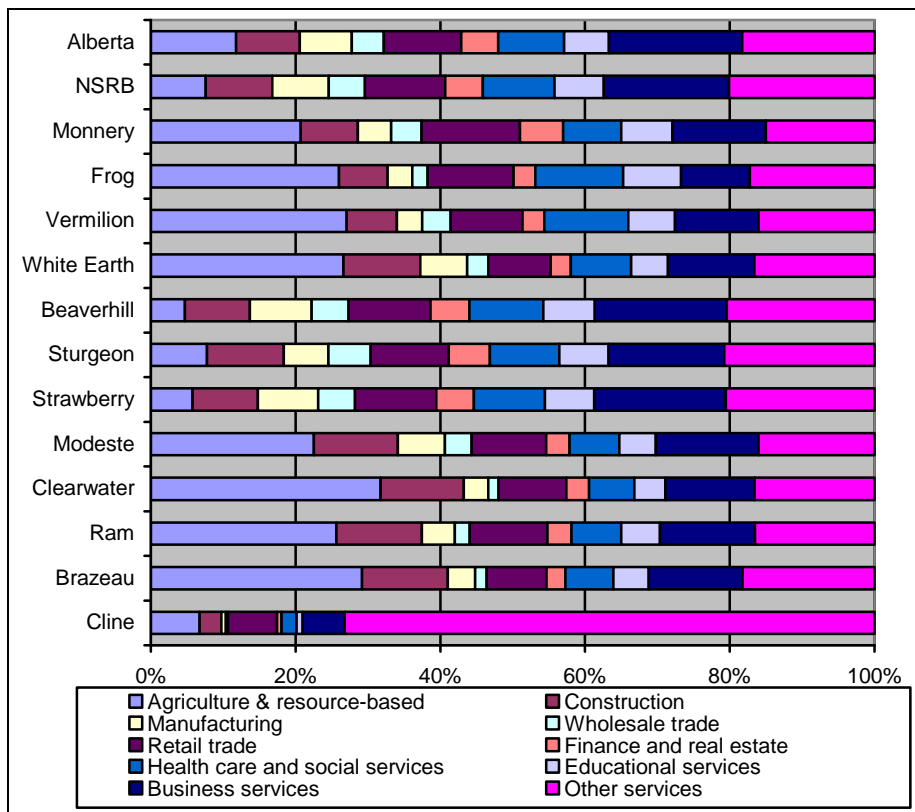
While employment in sales and service occupations accounted for nearly 23% of employment in the NSRB, this type of employment was more prevalent in the sub-basins with the large population centres (Beaverhill and Strawberry).. These sub-basins also had the highest percentages of people working in business, finance and administration, and natural and applied sciences.

1.13 Employment by Industry

Figure 1-18 shows employment in each sub-basin based on the industry of employment. Overall, 20.1% of the workforce was experienced in the other services industries, with 17.3% in business services and 11.2% in retail trade. Another 24.6% of the workforce is working in basic (goods-producing) industries, including agriculture and other resource-based industries, manufacturing and construction. Participation in these basic industries is much higher in the more rural parts of the basin, accounting for more than 40% of workers in the Brazeau, Ram, Clearwater and Modeste sub-basins, and more than 36% of workers in the White Earth, Vermilion and Frog sub-basins.

The more urban sub-basins (Strawberry, Sturgeon and Beaverhill) have no more than 25% of their workforce employed in basin industries. These three sub-basins have much higher percentage of their workforce employed in retail and wholesale trade, finance and real estate, education, and health care and social services. The employment profiles for the Monnery and Cline sub-basins are relatively unique. The Cline sub-basin is unusual because of very small employment in basic industries, which can be attributed to the small population. The employment profile for the Monnery sub-basin features employment rates for non-basic industries that are higher than in the rural areas, but lower than for the urban sub-basins.

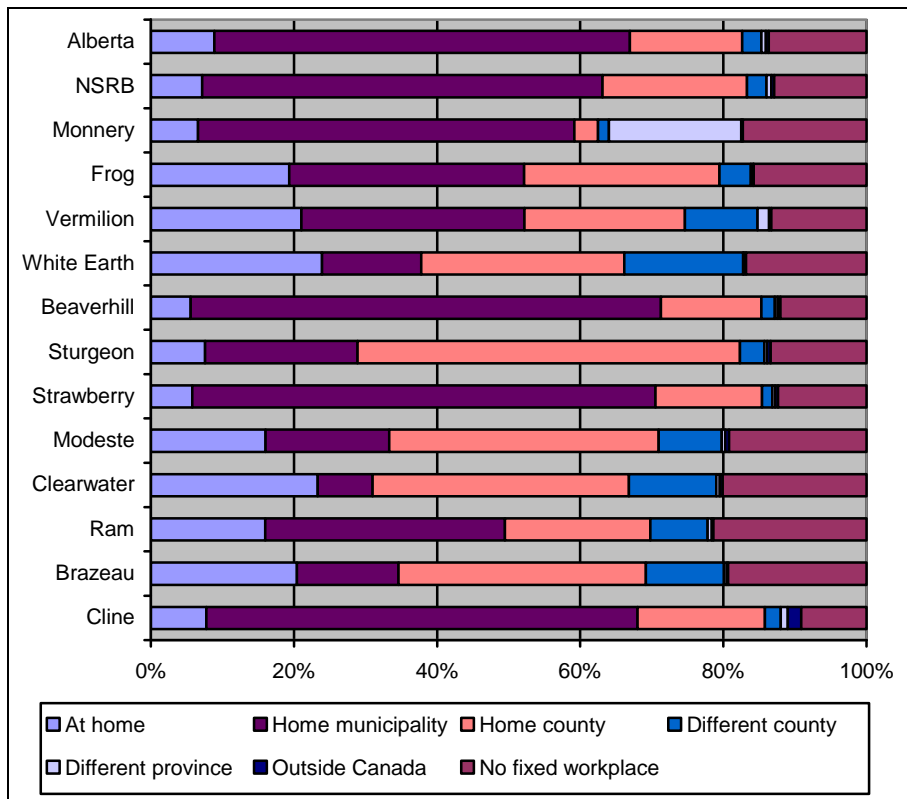
Figure 1-18: Employment by Industry, 2006



1.14 Location of Employment

Figure 1-19 shows where residents of the various sub-basins actually worked. Overall, 7% worked at home and 56% worked at a usual place in their home municipality. Another 20% worked in their home county outside their local community, while 3% worked in another part of Alberta, 0.7% worked outside Alberta and 0.4% worked outside Canada. The location of the workplace varies considerably among sub-basins. While the majority residents in the Cline, Strawberry and Beaverhill sub-basins worked at home or in their home municipality, a large percentage of people in the Sturgeon sub-basin reported working outside their home community but in the same county (i.e. St. Albert residents working in Edmonton). A relatively higher percentage of people living in the Monnery sub-basin reported working outside Alberta, and this reflects Lloydminster residents working in Saskatchewan.

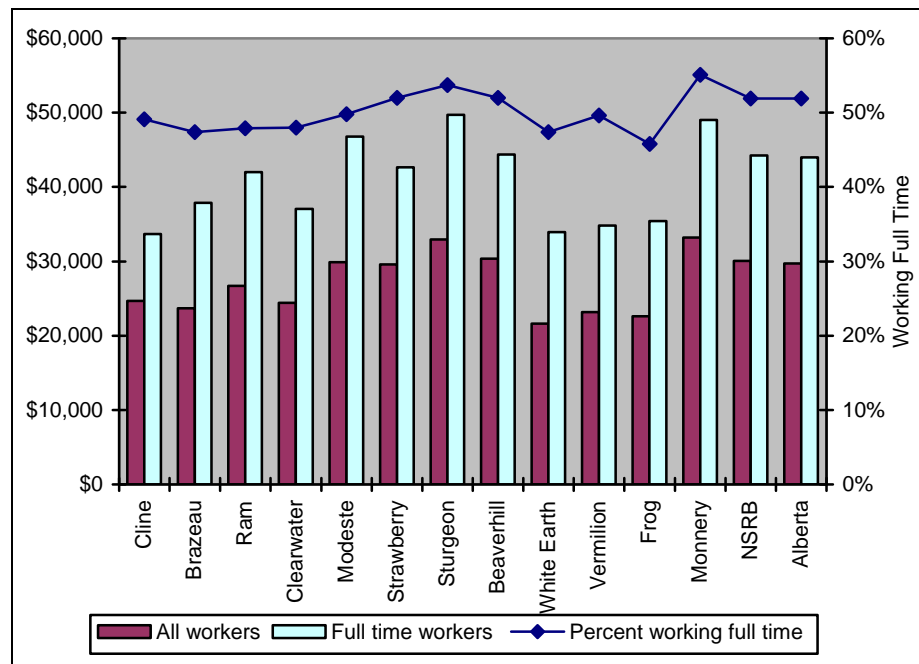
Figure 1-19: Location of Work, by Sub-Basin, 2006



1.15 Employment Earnings

Residents of the NSRB reported median earnings of \$30,068 in 2005. However, only 52% of workers were employed full-time, year round, and median earnings for this group averaged \$44,233. The corresponding statistics for individual sub-basins are provided in Figure 1-20. Within the basin, the Monnery sub-basin had the highest percentage of people working full time (55%), while only 46% of people in the Frog sub-basin and 47% of people in the White Earth and Brazeau sub-basins reported full time employment.

Figure 1-20: Median Earnings and Full-Time Employment, 2006

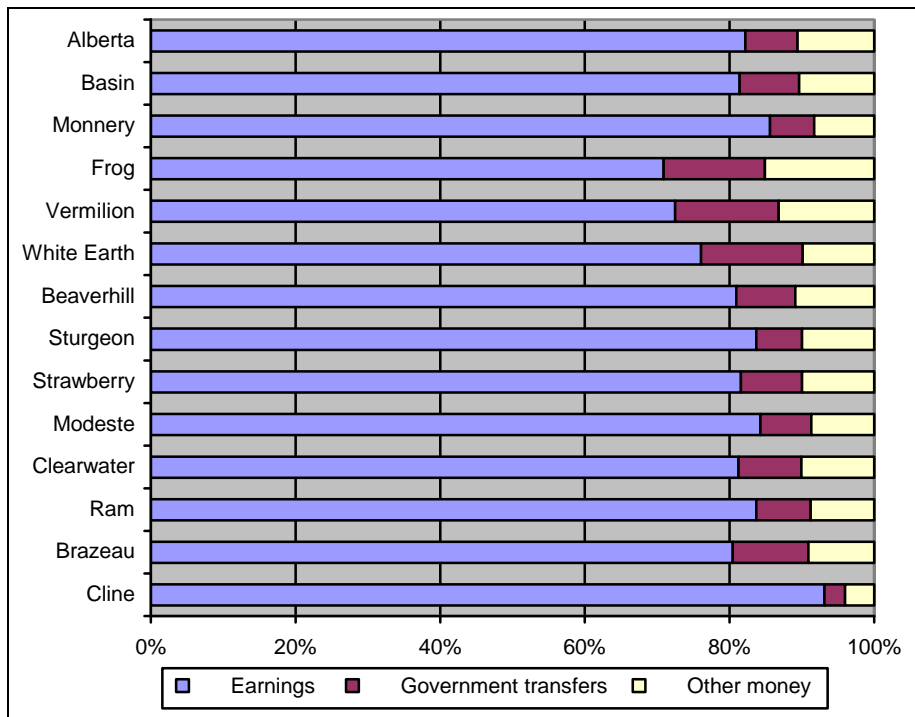


Median earnings ranged from an average of \$21,605 in the White Earth Sub-basin to a high of \$32,953 in the Sturgeon Sub-basin. In general, median earnings were highest in the sub-basins with the larger population centres, including Sturgeon, Beaverhill, Strawberry and Monnery. This applies to both earnings reported by all workers and those workers with full-time employment. Of note is that the median income for residents of the Vermilion sub-basin who worked full-time was lower than the median earnings reported for many of the other sub-basins.

1.16 Other Income Sources

Earnings accounted for 81.4% of income for basin residents. The remainder came from government transfers (8.2%) and other sources (10.4%). Figure 1-21 shows the reliance on transfer payments and other income for residents of the 12 sub-basins.

Figure 1-21: Reliance on Transfer Payments and Other Income, 2005

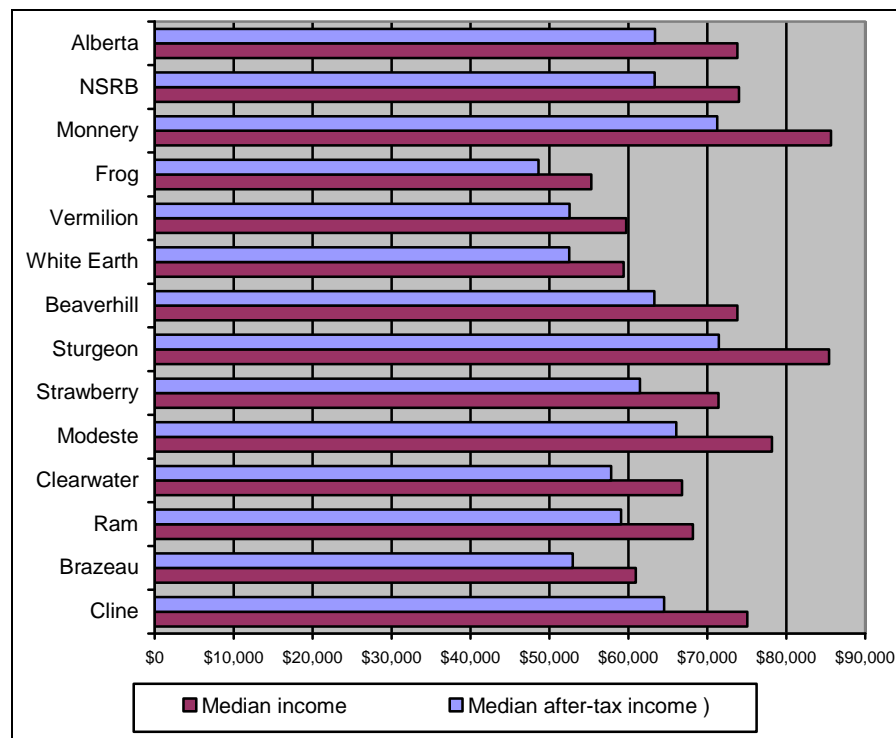


Earnings accounted for more than 80% of income sources in 9 of the sub-basins. The main exception was the Frog Sub-basin where earnings only generated 71% of income, with 14% from government transfers and 15% from other sources. Residents of the Vermilion and White Earth sub-basins also reported higher reliance on income from government transfers and other sources.

1.17 Family and Individual Income

In 2005 families in the NSRB reported median incomes averaging \$74,009, and \$63,337 after tax. These numbers correspond with the median incomes for Alberta. Variations in median family incomes among basins are shown in Figure 1-22.

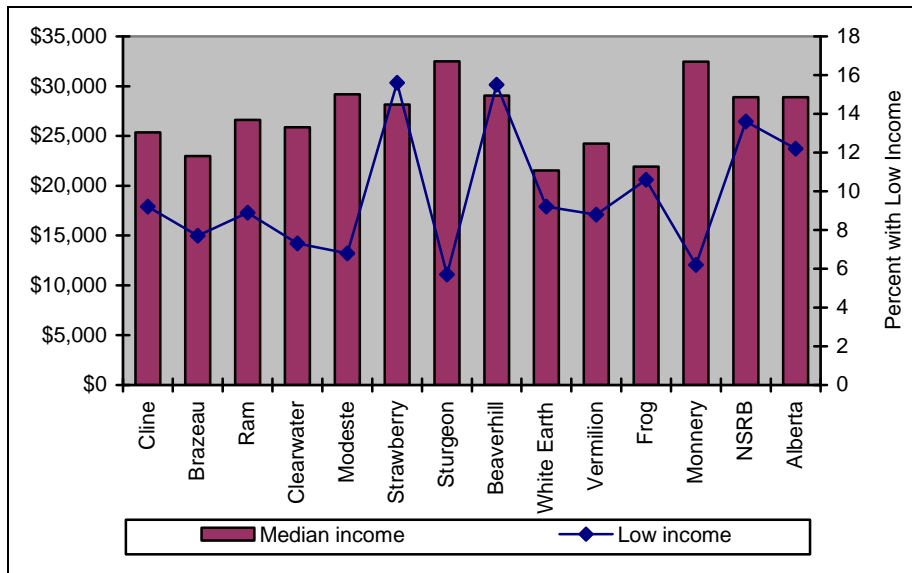
Figure 1-22: Median Family Income, Before and After Tax, 2005



Median family incomes are highest in the Monnery and Sturgeon sub-basins and are about 16% higher than the NSRB average. The lowest median family incomes were reported in the Vermilion and Frog sub-basins.

Median incomes in 2005 for persons in private households averaged \$28,898 for the NSRB and \$28,896 for Alberta. Overall, 13.6% of basin residents were considered to have low incomes (before tax). This percentage is slightly higher than the Alberta average (12.2%). Figure 1-23 summarizes median incomes and the incidence of low incomes for the 12 sub-basins. As was the case for family incomes, the highest individual incomes were reported in the Sturgeon and Monnery sub-basins, while the lowest incomes occurred in the White Earth, Vermilion and Frog sub-basins.

Figure 1-23: Median Personal Income and Incidence of Low Income, 2005



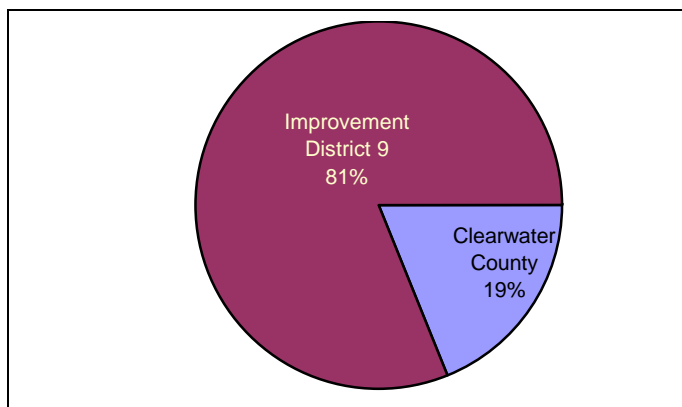
Although residents of the Strawberry and Beaverhill sub-basins reported relatively high incomes, these sub-basins had the highest incidence of low incomes (more than 15%). Measures of low income reflect costs of living in addition to income, so less income is required to live in smaller communities.

2.0 CLINE SUB-BASIN

2.1 Population

In terms of population, the Cline Sub-basin is the smallest in the NSRB. In 2006, it had a population of only about 350 people. As shown in Figure 2-1, about 90 people lived in Clearwater and accounted for 19% of the sub-basin population, with the balance (260 people or 81% of the population living in Improvement District No. 9. (ID 9), which includes parts of Jasper National Park. There are no cities, towns, villages or Aboriginal reserves in the Cline Sub-basin.

Figure 2-1: Population Distribution in the Cline Sub-Basin, 2006



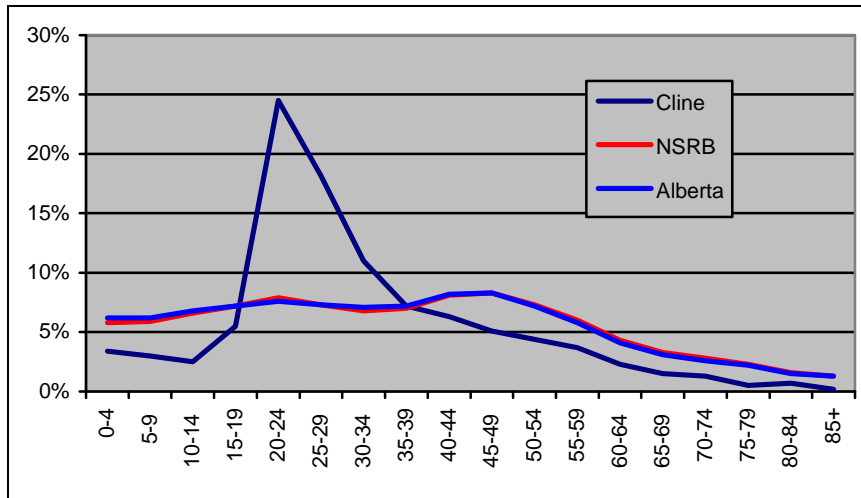
Because of the small population and with Census data being rounded to the nearest 5, some of the estimates for the Cline Sub-basin may not be accurate.

2.2 Age Characteristics

In terms of age, residents of the Cline Sub-basin were remarkably different from the overall population of the NSRB and Alberta. While the sub-basin had very few young people (only 9% were under the age of 15), there were also very few older people (people over the age of 35 accounted for less than 33% of the population).

Figure 2-2 shows that nearly 25% of the population was in the 20 to 24 age group, and another 18% were in the 25 to 29 age group.

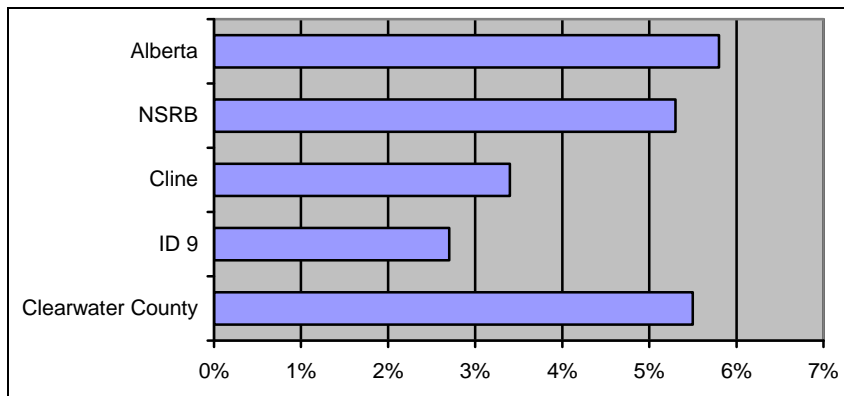
Figure 2-2: Age Composition of the Cline Sub-Basin Population, 2006



2.3 Aboriginal Population

About 3.4% of the residents of the Cline Sub-basin were Aboriginal. Figure 2-3 shows that Aboriginal people accounted for 5.5% of the population of Clearwater County but only 2.7% of the population in ID 9.

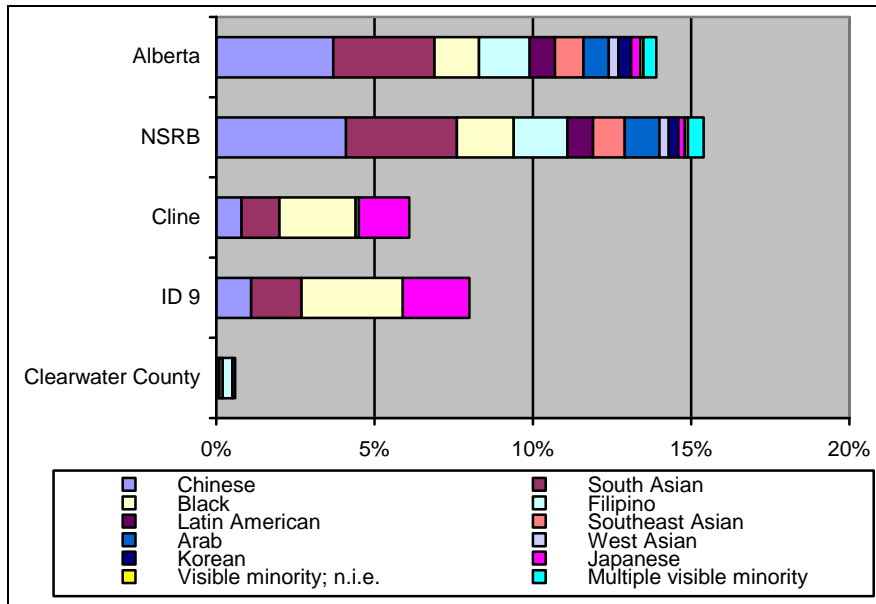
Figure 2-3: Aboriginal Population in the Cline Sub-Basin, 2006



2.4 Ethnicity

Only 6.9% of the Cline Sub-basin population consisted of visible minorities; this is slightly higher than for the NSRB (15.5%). Visible minorities were found primarily in ID 9, where they accounted for more 9.1% of the population. Visible minorities accounted for only 0.6% of the population of Clearwater County

Figure 2-4: Visible Minorities in the Cline Sub-Basin, 2006

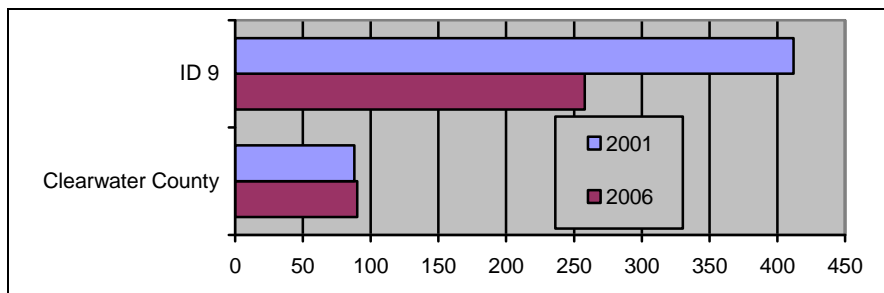


The most common visible minorities in the Sub-Basin were Black (2.4% of the population) and Japanese (1.6%).

2.5 Population Change

Between 2001 and 2006, the population of the Cline Sub-basin decreased by 30.3%. Figure 2-5 shows that almost all of the population decrease occurred in ID 9, while there was actually a small population increase in Clearwater County.

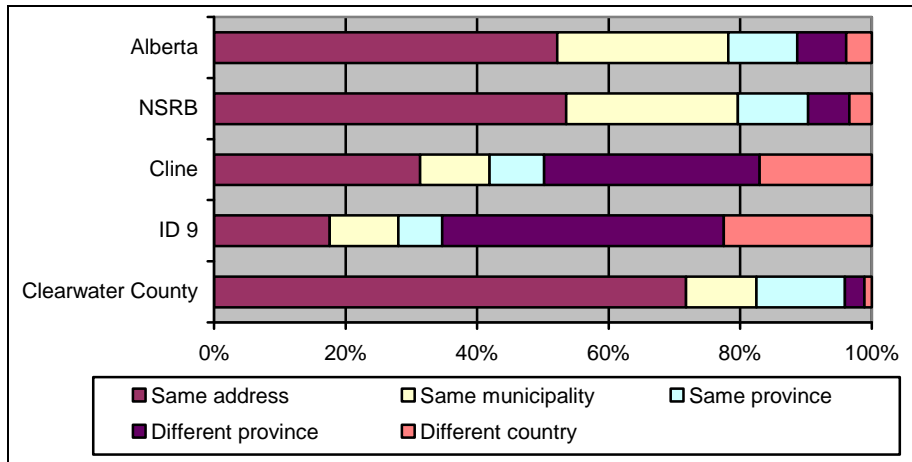
Figure 2-5: Population Change in the Cline Sub-Basin, 2001-2006



One factor affecting population growth is migration from one area to another.

Figure 2-6 shows that, while the population of Clearwater County was very stable (71.9% of the population had lived at the same address for the 5-year period), the population of ID 9 was highly mobile: 22.4% had lived in a different country in 2001 and 42.6% had lived in a different province. Only 17.5% of the population in ID 9 had lived at the same address for the period from 2001 to 2006.

Figure 2-6: Population Mobility in the Cline Sub-Basin, 2001-2006



About 7.4% of the sub-basin population consists of immigrants compared to 17.1% for the NSRB. However, non-permanent residents accounted for 20.2% of residents of ID 9, and this is much higher than anywhere else in the basin where, on average, non-permanent residents represented only 0.8% of the population. There were very few immigrants (5.9%) or non-permanent residents (0.7%) in Clearwater County.

Figure 2-7: Role of Immigration in the Cline Sub-Basin, 2006

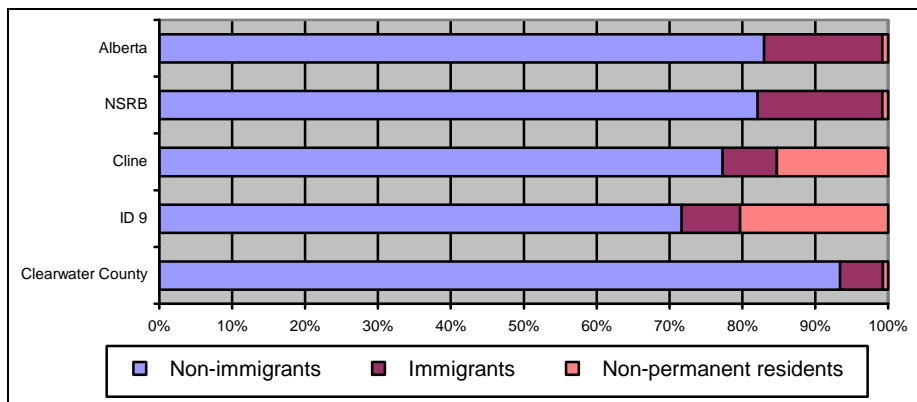
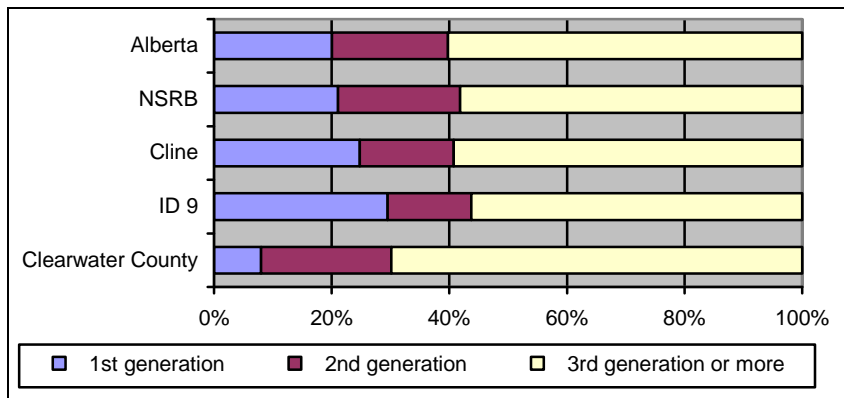


Figure 2-8: Residency in Canada, Cline Sub-Basin, 2006

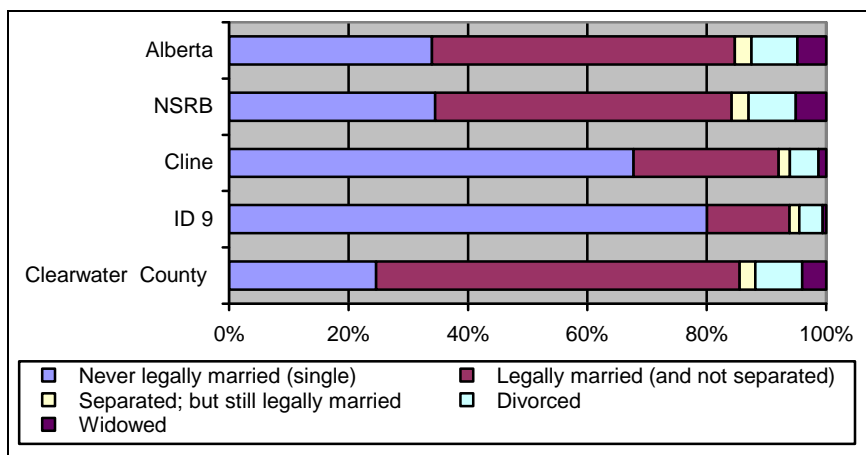


About 59% of the sub-basin basin population consisted of people who had lived in Canada for 3 or more generations; this is slightly higher than for the NSRB (see Figure 2-8). Clearwater County had a very high concentration of people who had lived in Canada for 3 or more generations (69.9%) compared to only 56.3% in ID 9. Nearly 30% of residents of ID 9 had lived in Canada for only one generation, and this is higher than found in the NSRB.

2.6 Marital Status

Married people account for 24.4% of the sub-basin population, while the balance consists of single people (68.0%), divorced people (4.8%), widowed people (1.3%) and people who are separated (1.9%). The sub-basin profile (Figure 2-9) is quite different from the NSRB profile, as are the profiles for Clearwater County and ID 9. While Clearwater County has a very high percentage of married people (60.9%) and few single people (24.6%), ID 9 had few married people (14.6%) and a very high [percentage of single people (80.6%).

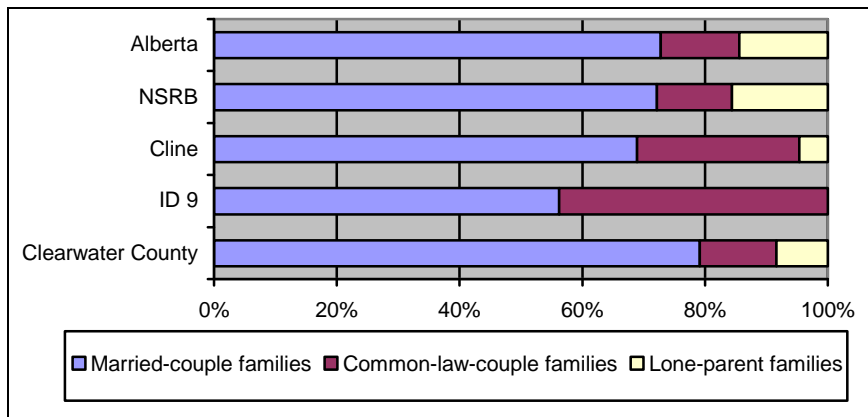
Figure 2-9: Marital Status in the Cline Sub-Basin, 2006



2.7 Family Structure

Married couple families account for 67.0% of the 50 families in the Cline Sub-basin. Lone parent families account for 4.5% of families, while common-law couples account for the balance (25.7%). Figure 2-10 shows that married couple families accounted for 79.1% in Clearwater County but only 52.9% of families in ID 9. ID 9 had a very high percentage of common law couples (41.2%) compared to only 12.5% of families in Clearwater County. Single-parent families only occurred in Clearwater County.

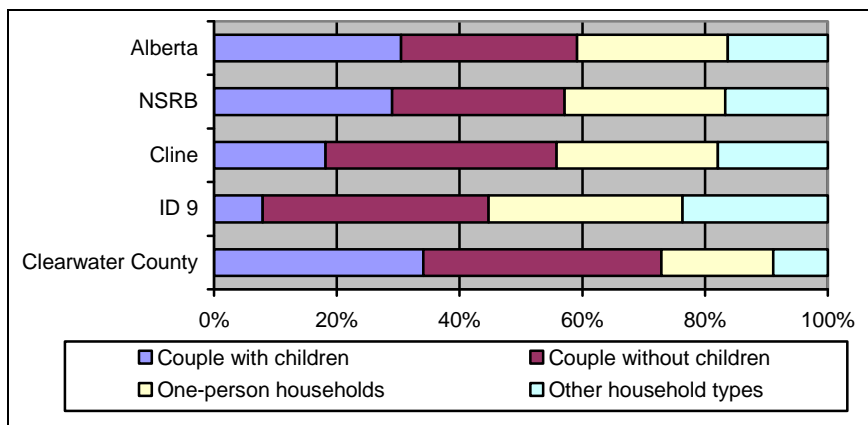
Figure 2-10: Family Structure in the Cline Sub-Basin, 2006



2.8 Household Structure

Household structure differs from family structure because households can contain one or more families. Figure 2-11 shows that 17.9% of households in the Cline Sub-basin consisted of a couple with children, 37.0% were couples with no children, 25.9% were single person households, and the balance (17.6%) consisted of other household types. There were few couples with children in ID 9 (7.7%) compared to 34.1% in Clearwater County. While single-person households represented 30.8% of households in ID 9, they accounted for only 18.2% in Clearwater County. A higher proportion of other household types was also reported in ID 9.

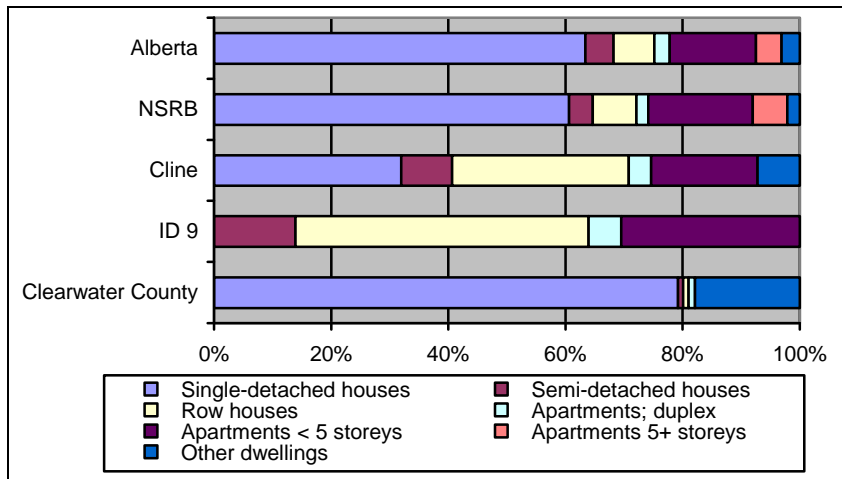
Figure 2-11: Household Structure in the Cline Sub-Basin, 2006



2.9 Housing

In 2006 there were about 86 housing units in the Cline Sub-basin. Figure 2-12 shows the composition of these housing units in each community within the sub-basin.

Figure 2-12: Housing Characteristics in the Cline Sub-Basin, 2006



While single-detached dwellings accounted for 79.2% of housing in Clearwater County, there were no single family dwellings in ID 9. Housing in ID 9 consisted of row houses and small apartment buildings.

Figure 2-13 shows the reported value of housing in the Cline Sub-basin as well as the percentage of housing stock in need of major repair. Overall, the average value of a house in the Cline Sub-Basin was \$235,450 which was about 8% lower than the NSRB average.

Figure 2-13: Value of Housing (2005) and Need for Major Repairs, Cline Sub-Basin

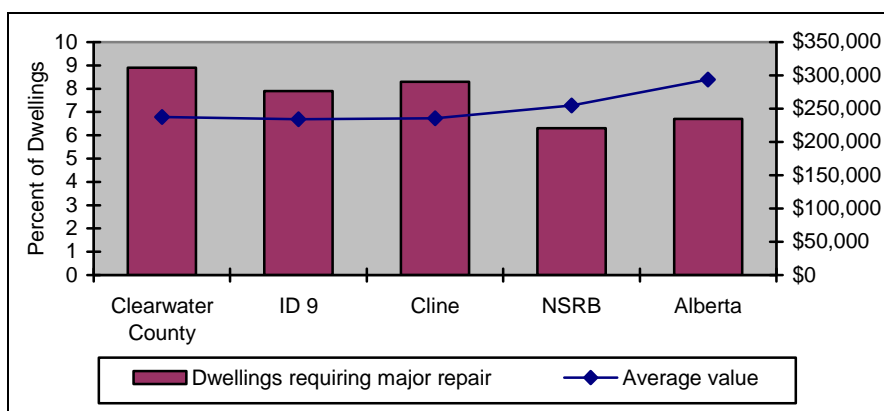
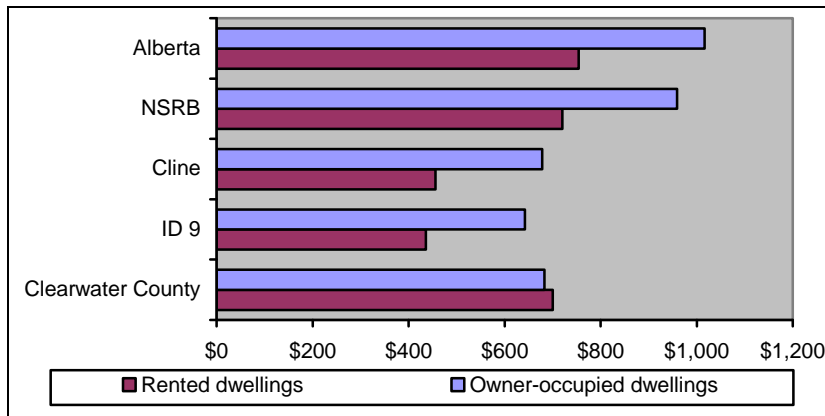


Figure 2-14 summarizes the average monthly costs of renting and owning dwellings in the various communities in the Cline Sub-basin in 2005. These costs include rent/mortgage, electricity, heat and municipal services to operate a dwelling. Overall, rental costs averaged \$456 per month compared to \$678 per month for owned dwellings. These monthly costs were higher in Clearwater County than in ID 9.

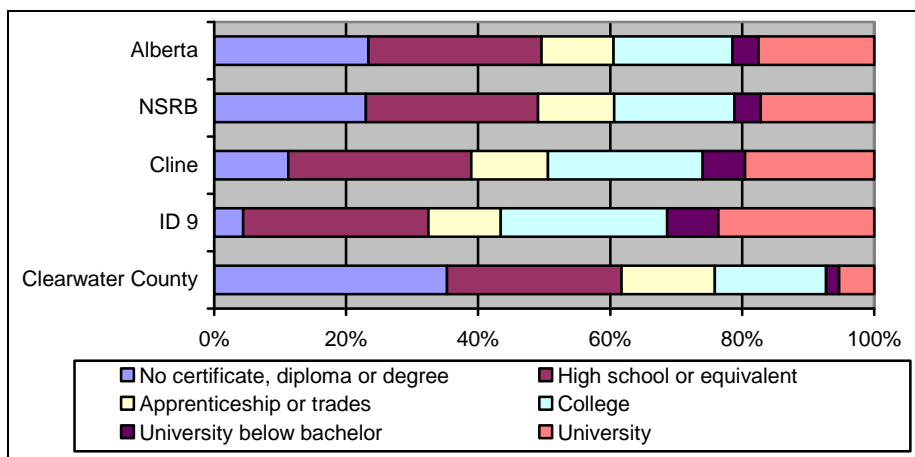
Figure 2-14: Average Monthly Costs for Rental and Owned Dwellings, 2005



2.10 Education

Basin residents were better educated than the average for the NSRB (see Figure 2-15). This is due to the high educational attainment reported by residents of ID 9: only 4.4% had not completed high school and 23.5% had graduated from university.

Figure 2-15: Educational Attainment for the Cline Sub-Basin



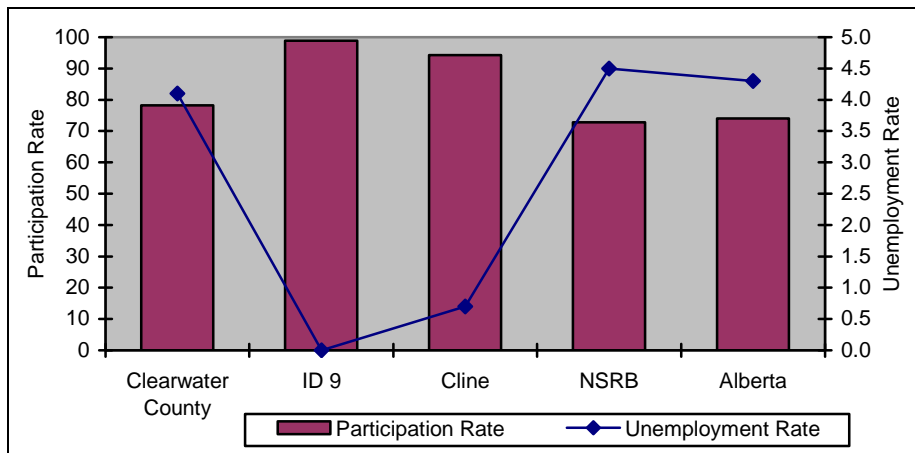
In contrast, residents of Clearwater County had lower levels of educational attainment, with 35.2% not having completed high school and only 5.3% having graduated from university.

2.11 Labour Force Participation

Overall, 94.3% of the adult population in the Cline Sub-basin was participating in the labour force, either working or actively seeking work.

Figure 2-16 shows that labour force participation in ID 9 was very high (98.9%) while the corresponding rate for Clearwater County was similar to the basin average.

Figure 2-16: Labour Force Participation and Unemployment Rates, 2006

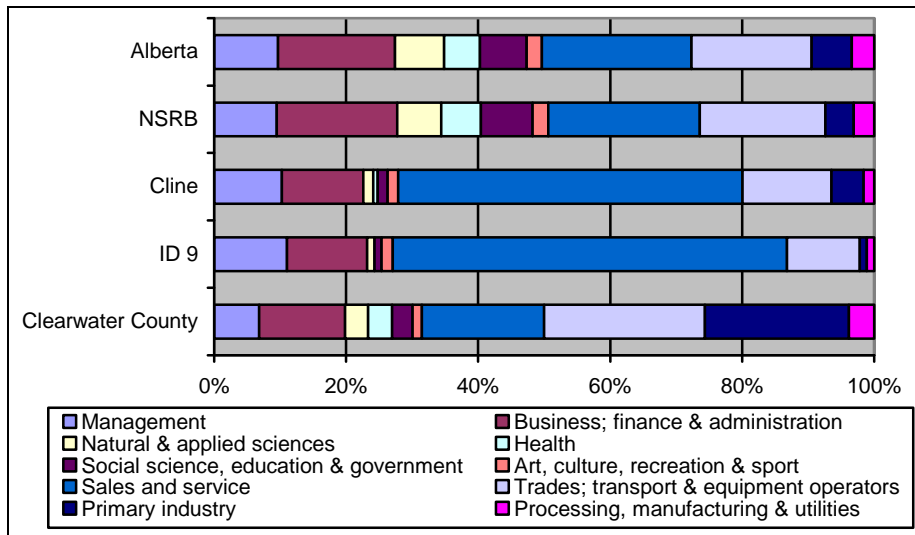


There was no unemployment reported in ID 9. The unemployment rate in Clearwater County was 4.1%, and this was slightly lower than average unemployment in the NSRB (4.5%).

2.12 Employment by Occupation

Figure 2-17 shows employment by occupation within the sub-basin. The profile for ID 9 is quite different from the profile for the NSRB or Alberta, featuring much higher levels of employment in sales and service occupations. In comparison, residents of Clearwater County showed a more rural profile, with a higher percentage of people being employed in occupations related to primary industry.

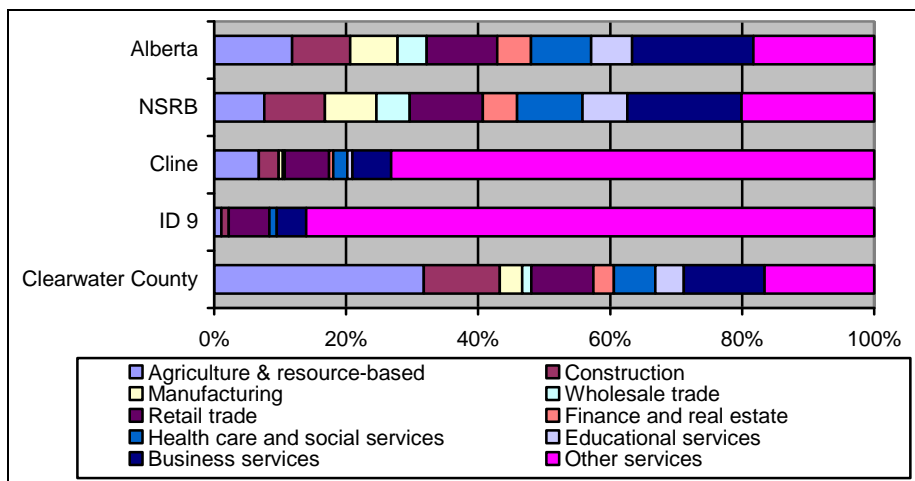
Figure 2-17: Employment by Occupation, Cline Sub-Basin, 2006



2.13 Employment by Industry

Figure 2-18 shows employment in the sub-basin based on the industry of employment. Overall, 72.6% of the workforce was experienced in the other services industries; this reflects the very high employment in the other services industry in ID 9 (85.1%). In contrast, only 16.6% of the labour force in Clearwater County was employed in the other services industry, and this is consistent with the NSRB average. Clearwater County reported that 31.8% of its labour force was experienced in agriculture and other resource-based industries. This is twice the Alberta average and is more typical of rural communities. ID 9 had very low levels of employment in health or education while the percentage of the workforce in Clearwater County employed in these industries was closer to the NSRB average.

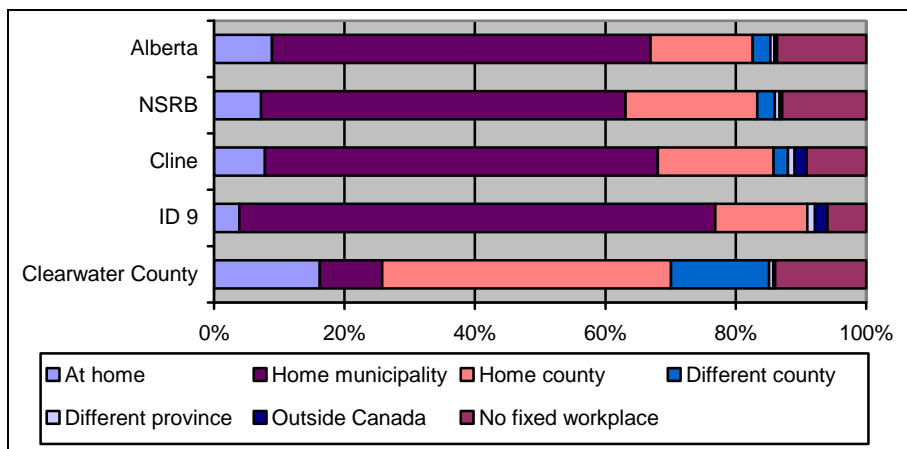
Figure 2-18: Employment by Industry, Cline Sub-Basin, 2006



2.14 Location of Employment

Figure 2-19 shows where residents of the Cline Sub-basin actually worked. For this indicator, the profile for ID 9 more closely matches the basin average, with the vast majority (83.7%) working in their home community.

Figure 2-19: Location of Work, Cline Sub-Basin, 2006

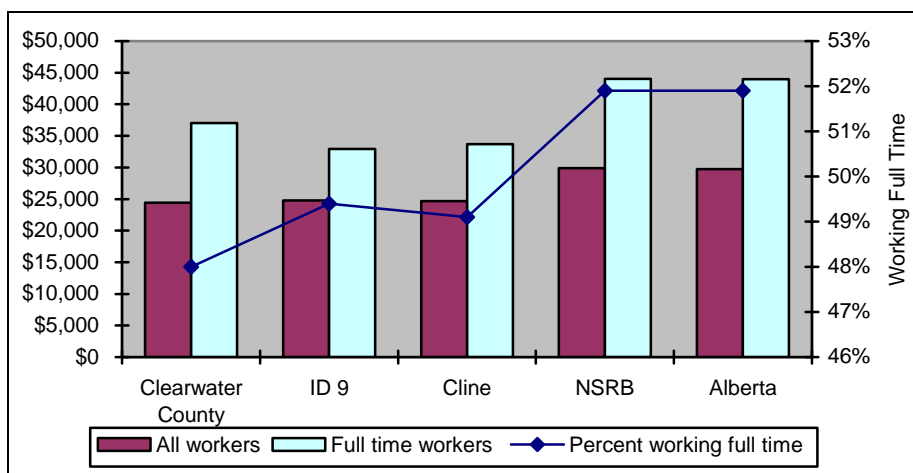


In contrast, only 13.7% of residents of Clearwater County reported working in their home community. The majority (63.7%) of people in Clearwater County reported working in their home county, but not in their home community, suggesting that many rural residents were actually employed in nearby communities.

2.15 Employment Earnings

Residents of the Cline Sub-basin reported median earnings of \$24,695 in 2005, which was 16% lower than the NSRB average. Average earnings in Clearwater County were slightly higher than in ID 9.

Figure 2-20: Median Earnings and Full-Time Employment, Cline Sub-Basin, 2006



While 51.9% of basin residents were employed full-time, this percentage dropped to 49.1% in the Cline Sub-basin and was slightly higher for residents of ID 9 than for residents of Clearwater County.

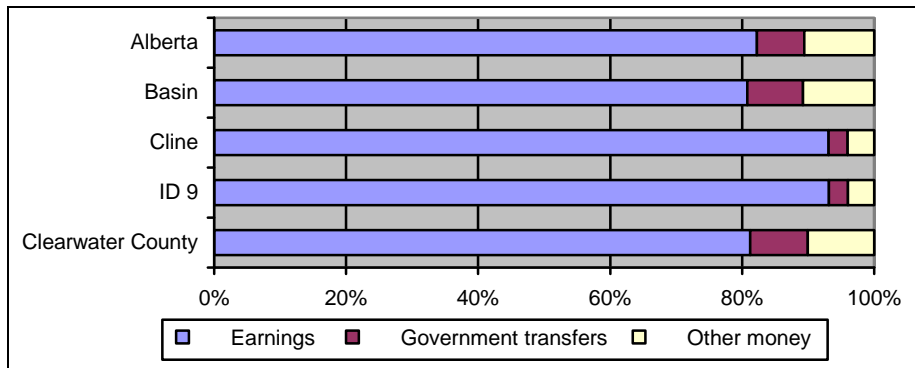
People working full-time reported median earnings of \$33,700 which was \$10,300 (or 24%) less than average median earnings estimated for NSRB residents.

2.16 Other Income Sources

Earnings accounted for 93.0% of income for basin residents and this is higher than the basin average (81.4%). Residents of ID 9 relied on earnings for 93.5% of the earnings while earnings accounted for 84.3% of earnings in the Clearwater County. For the Cline Sub-basin the remaining income came from government transfers (2.9%) and other sources (4.0%).

Figure 2-21 shows residents of Clearwater County were more heavily dependent on income from these other sources.

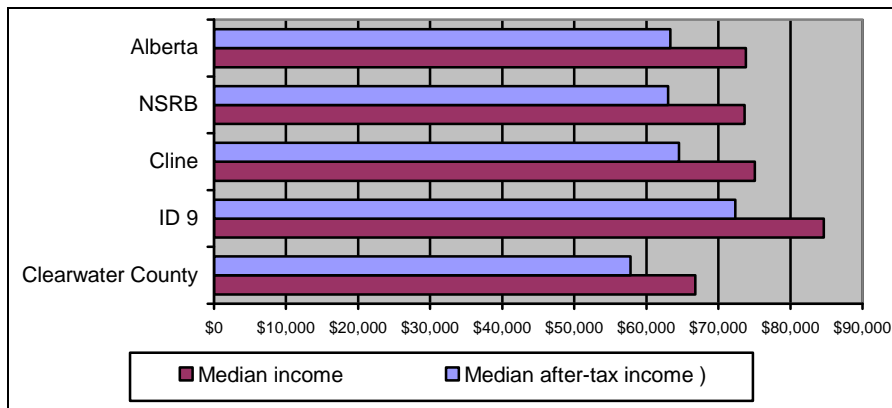
Figure 2-21: Reliance on Transfer Payments and Other Income, 2005



2.17 Family and Individual Income

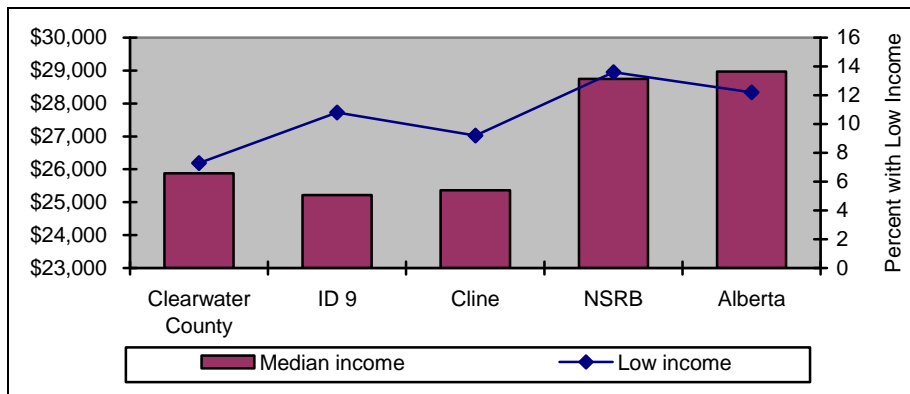
In 2005 families in the Cline Sub-Basin reported median incomes averaging \$75,065, and \$64,543 after tax. These numbers are just slightly higher than the median incomes for families in the NSRB or Alberta. Figure 2-22 shows that median family incomes in Clearwater County were about \$8,000 lower than for the sub-basin and \$17,800 lower than for families in ID 9.

Figure 2-22: Median Family Income, Before and After Tax, 2005



Median incomes in 2005 for persons in private households averaged \$25,632 for the Cline Sub-basin compared to \$28,898 for the NSRB. Median incomes were higher in Clearwater County than in ID 9 (see Figure 2-23). Overall 9.2% of individual in the Clines Sub-basin were considered to have low incomes. This percentage was lower than for the NSRB (13.6%). The percentage of individual with low incomes was slightly higher in ID 9 than in Clearwater County.

Figure 2-23: Median Personal Income and Incidence of Low Income, 2005

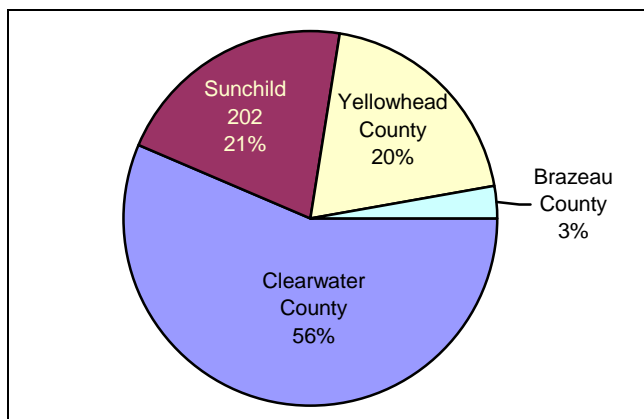


3.0 BRAZEAU SUB-BASIN

3.1 Population

In 2006, the Brazeau Sub-basin had a population of 2,099 people. This represents 0.2% of the population of the NSRB. As shown in Figure 3-1 the majority of residents of the Brazeau Sub-basin were residents of Clearwater County (56%), with 20% residing in Yellowhead County and 3% in Brazeau County. The balance of the population (21%) resided on the Sunchild 202 Indian Reserve.

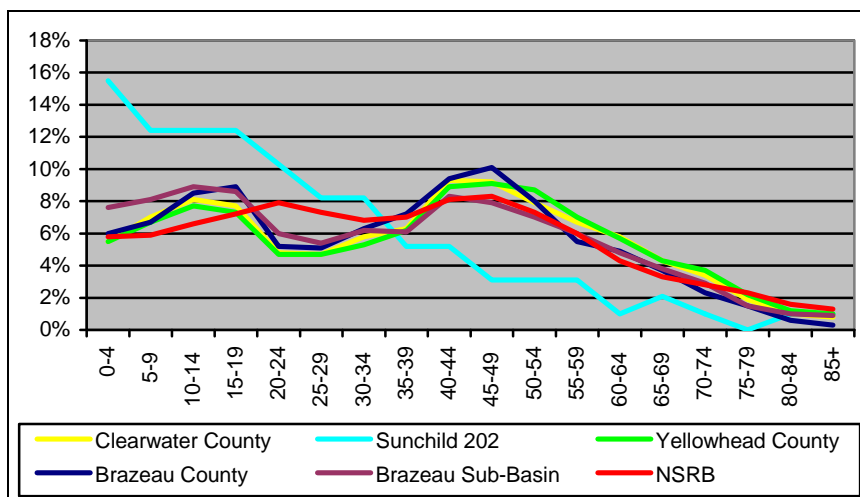
Figure 3-1: Population Distribution in the Brazeau Sub-Basin, 2006



3.2 Age Characteristics

In terms of age, the Brazeau Sub-basin had a higher percentage of population under the age of 15 years (24.6%) than did the basin average (18.3%), but had a smaller percentage of people in the 20 to 34 year age groups, but more in the 40 to 54 year age categories. The percentages of people over the age of 54 were the same for the basin and the sub-basin. In general, the age profiles for the three counties were quite similar. However, the age profile for the Sunchild 202 was markedly different, with 40.2% of the population being under the age of 15 years and only 25.8% being over the age of 34 years.

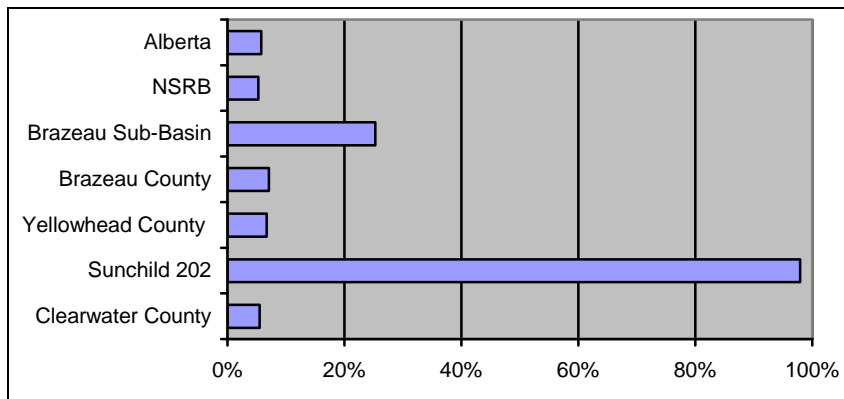
Figure 3-2: Age Composition of the Brazeau Sub-Basin Population, 2006



3.3 Aboriginal Population

About 25.3% of the residents of the Brazeau Sub-basin were Aboriginal. Figure 3-3 shows that this percentage ranged between 5.5% and 7.1% for the three counties but jumped to 92.9% for residents of the Sunchild 202 Reserve.

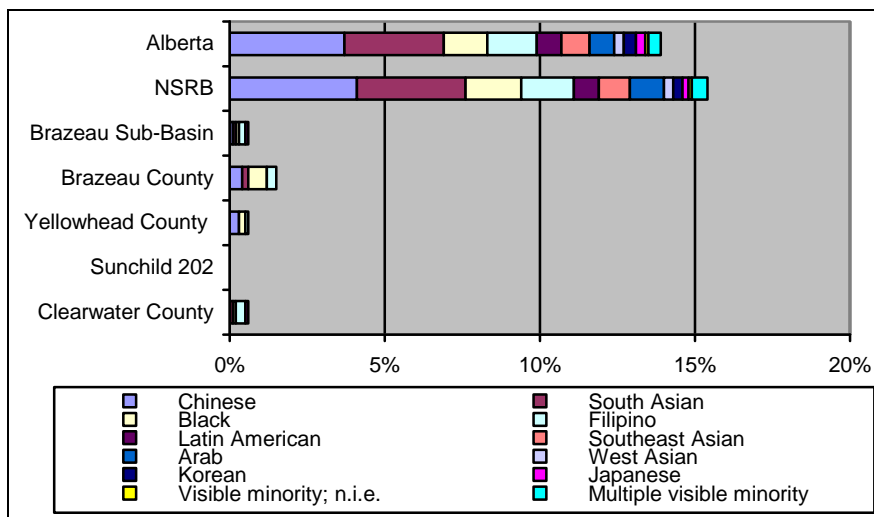
Figure 3-3: Aboriginal Population in the Brazeau Sub-Basin, 2006



3.4 Ethnicity

About 0.5% of the Brazeau Sub-basin population consisted of visible minorities; this is much lower than for the NSRB (15.6%). Visible minorities were found primarily in Brazeau County where they accounted for 1.7% of the population.

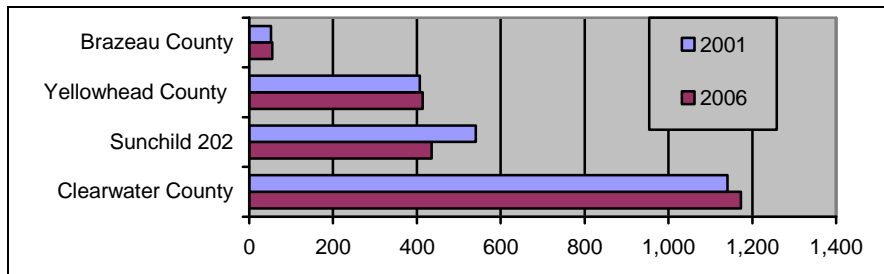
Figure 3-4: Visible Minorities in the Brazeau Sub-Basin, 2006



3.5 Population Change

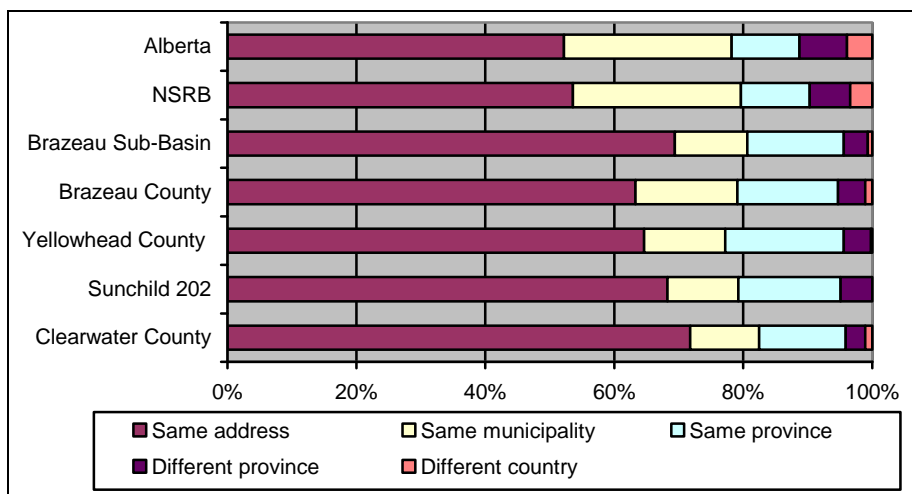
Between 2001 and 2006, the population of the Brazeau Sub-basin dropped by 2.9%. Figure 3-5 shows that while the populations of the tree counties all increase slightly (by between 4.7% and 6.6%), there was a significant decrease (19.4%) in the population of the Sunchild 202 Reserve.

Figure 3-5: Population Change in the Brazeau Sub-Basin, 2001-2006



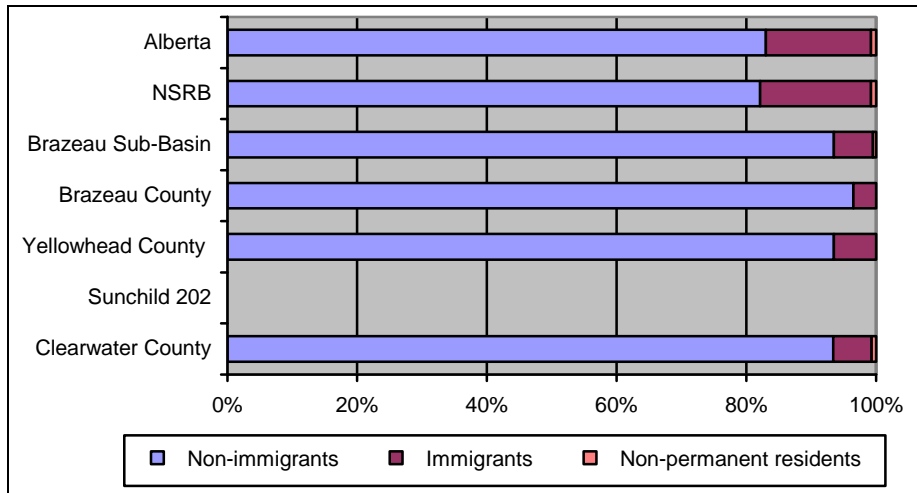
One factor affecting population growth is migration from one area to another. Figure 3-6 shows population mobility in the Brazeau Sub-basin between 2001 and 2006. It shows that 69.5% of sub-basin residents resided at the same address for the 5-year period. This is higher than for the NSRB (53.6%), and suggests a more stable sub-basin population. Only 0.7% of sub-basin residents had relocated to the Brazeau Sub-basin from another country while 3.7% moved from another province, and 15.0% moved from a different municipality in Alberta. The remainder (11.3%) had changed addresses within their home municipality.

Figure 3-6: Population Mobility in the Brazeau Sub-Basin, 2001-2006



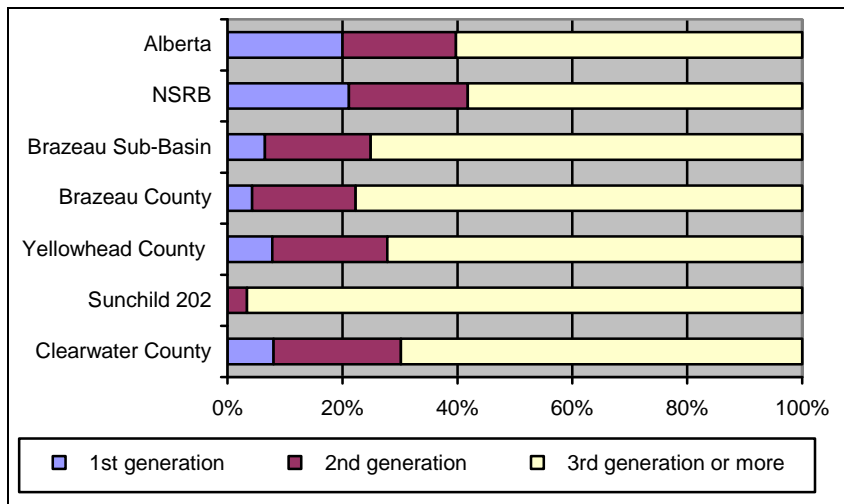
About 6.0% of the sub-basin population consisted of immigrants, and this was much lower than for the NSRB where immigrants accounted for 17% of the population. The percentage of immigrants ranged from 3.5% in Brazeau County to 6.5% in Yellowhead County.

Figure 3-7: Role of Immigration by Brazeau Sub-Basin, 2006



About 75% of the sub-basin population consisted of people who had lived in Canada for 3 or more generations. The highest concentration of people who had lived in Canada for 3 or more generations was found on the Sunchild 202 reserve (96.6%). In the other parts of the sub-basin, the percentage of people who had lived in Canada for 3 or more generations ranged between 69.98% in Clearwater County to 77.7% in Brazeau County. Only 6.5% of the population of the Brazeau Sub-basin had lived in Canada for 1 generation, and this percentage was highest in Clearwater County.

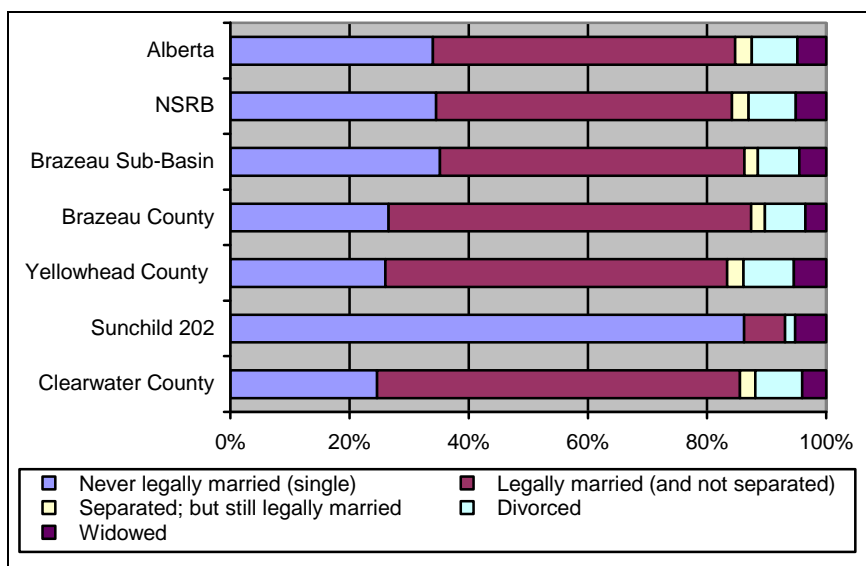
Figure 3-8: Residency in Canada, Brazeau Sub-Basin, 2006



3.6 Marital Status

Married people account for 51.1% of sub-basin residents, while the balance consists of single people (35.2%), divorced people (7.0%), widowed people (4.5%) and people who are separated (2.2%). The sub-basin profile (Figure 3-9) closely matches the NSRB profile. Within the sub-basin there were significant differences in marital status between the Sunchild 202 reserve and the rest of the sub-basin. Only 6.9% of the adult residents of the Sunchild 202 reserve were legally married and 86.2% were considered single (never legally married). Elsewhere in the Brazeau Sub-basin, between 57% and 61% of the adult population was legally married while single people accounted for 25% to 27% of the population.

Figure 3-9: Marital Status in the Brazeau Sub-Basin, 2006

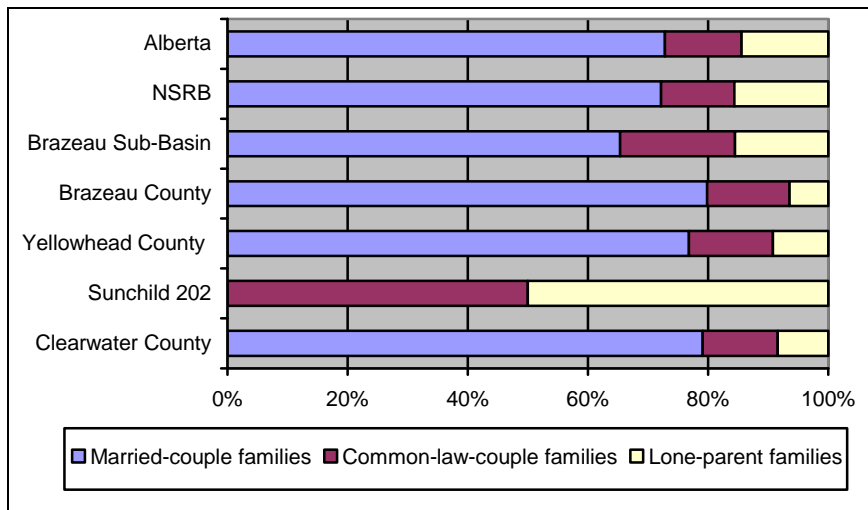


3.7 Family Structure

Married couple families account for 64.4% of the 600 census families in the Brazeau Sub-basin. Lone parent families account for 15.3% of families, while common-law couples account for the balance (18.8%).

Figure 3-10 shows that the percentage of married couple families in the Brazeau Sub-basin was slightly less than the provincial and NSRB average. Within the sub-basin, half the adult population of the Sunchild 202 reserve indicated that they were part of either common-law families or single parent families. Elsewhere in the sub-basin, the percentage of married couple families was actually higher than the NSRB or provincial averages. Married couple families accounted for 76.8% of census families in Yellowhead County and 79.6% of families in Brazeau County.

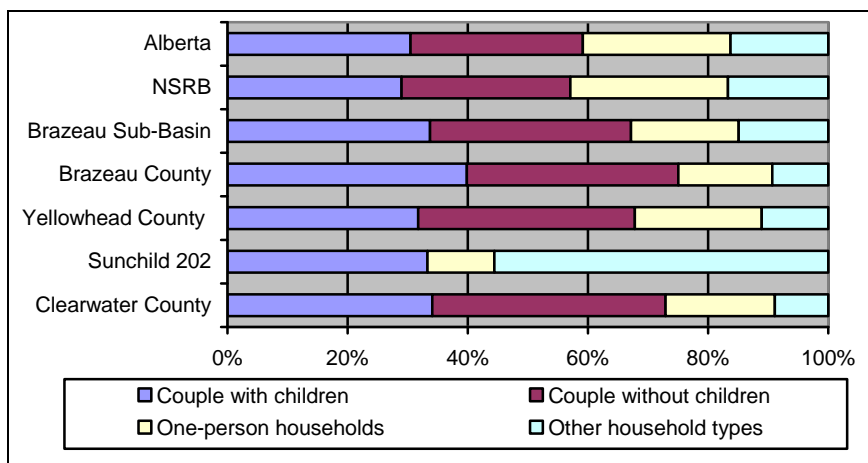
Figure 3-10: Family Structure in the Brazeau Sub-Basin, 2006



3.8 Household Structure

Household structure differs from family structure because households can contain one or more families. Figure 3-11 shows that 33.7% of households consisted of a couple with children, 33.5% were couples with no children, 17.9% were single person households, and the balance (14.9%) consisted of other household types. Higher percentages of married couples with children were found in Brazeau County (39.8%) and the lowest percentage (31.8%) was found in Yellowhead County. The majority of households on the Sunchild 202 reserve (55.6%) consisted of other household types. Other household types only accounted for between .9% and 11.1% of households in other parts of the Brazeau Sub-basin. Yellowhead County had the highest percentages of one-person households (21.1%)

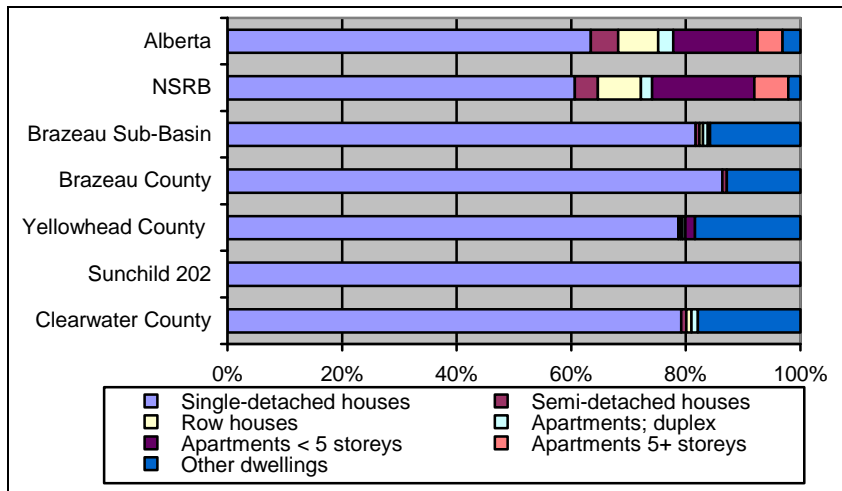
Figure 3-11: Household Structure in the Brazeau Sub-Basin, 2006



3.9 Housing

In 2006 there were about 700 housing units in the Brazeau Sub-basin. Figure 3-12 shows the composition of housing in each part of the sub-basin.

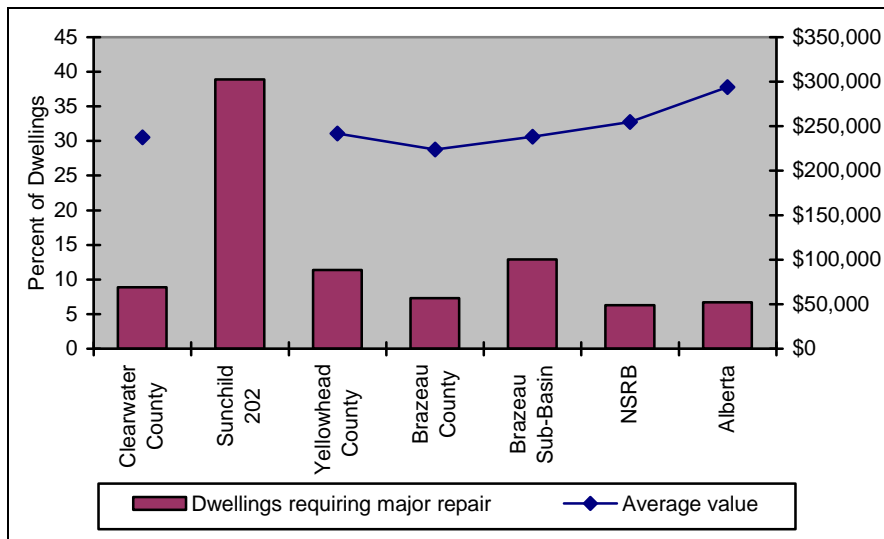
Figure 3-12: Housing Characteristics in the Brazeau Sub-Basin, 2006



Overall, single detached houses accounted for 81.7% of housing in the sub-basin, although this ranged from 78.7% in Yellowhead County to 100% on the Sunchild 202 reserve. Other dwelling types accounted for most of the other housing units in the sub-basin (15.8%). While there were small percentages of row housing and apartments in the sub-basin, these were almost entirely found within Clearwater County.

Figure 3-13 shows the reported value of housing in each of the sub-basins as well as the percentage of housing stock in need of major repair. Overall, the average value of a house in the Brazeau Sub-basin in 2005 was \$238,000, which was about 6% less than the NSRB average (\$254,828). Average housing values within the sub-basin were quite consistent, ranging from \$223,600 in Brazeau County to \$241,900 in Yellowhead County. There is no information on housing values on the Sunchild 202 reserve.

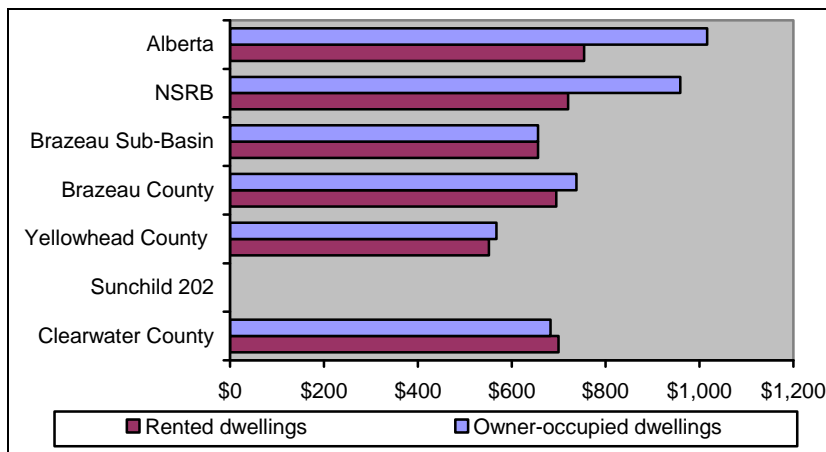
Figure 3-13: Value of Housing (2005) and Need for Major Repairs, Brazeau Sub-Basin



Overall, 12.9% of dwellings in the Sub-basin were in need of major repair and this was double the NSRB average. Housing stock on the Sunchild 202 reserve was in relatively poor quality, with 38.9% being in need of major repair. Elsewhere in the sub-basin, the percentage of housing in need of major repair ranged from 7.3% in Brazeau County to 11.4% in Yellowhead County.

Figure 3-14 summarizes the average monthly costs of renting and owning dwellings in each of the sub-basins in 2005. These costs include rent/mortgage, electricity, heat and municipal services to operate a dwelling. Overall, monthly costs for both rental and owner-occupied dwellings both averaged \$656 per month. Residents of Yellowhead County reported the lowest monthly housing costs (\$551 for rental buildings and \$568 for owner-occupied dwellings). Housing costs were highest for residents of Brazeau County (\$695 and \$738 for rented and owned dwellings, respectively). IN Clearwater County average monthly costs for rented dwellings (\$700) were slightly higher than for owner-occupied dwellings (\$683).

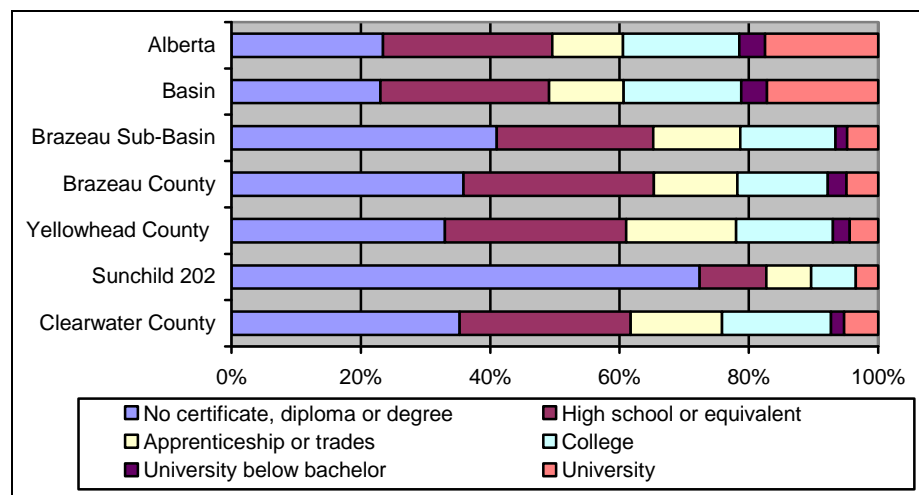
Figure 3-14: Average Monthly Costs for Rental and Owned Dwellings, 2005



3.10 Education

Residents of the Brazeau Sub-basin were less educated than the NSRB average. Overall, 40.9% of sub-basin residents had not graduated from high school, although this ranged from 71.2% of adult residents of the Sunchild 202 reserve to 33.0% of Yellowhead County residents. Residents of the Brazeau Sub-basin were more likely to have apprenticeships or trades certificates (13.4%) and Yellowhead County had the highest percentage of adults with such training (17.0%). Only 6.8% of residents of the Sunchild 202 reserve had apprenticeships or trades certificates.

Figure 3-15: Educational Attainment in the Brazeau Sub-Basin



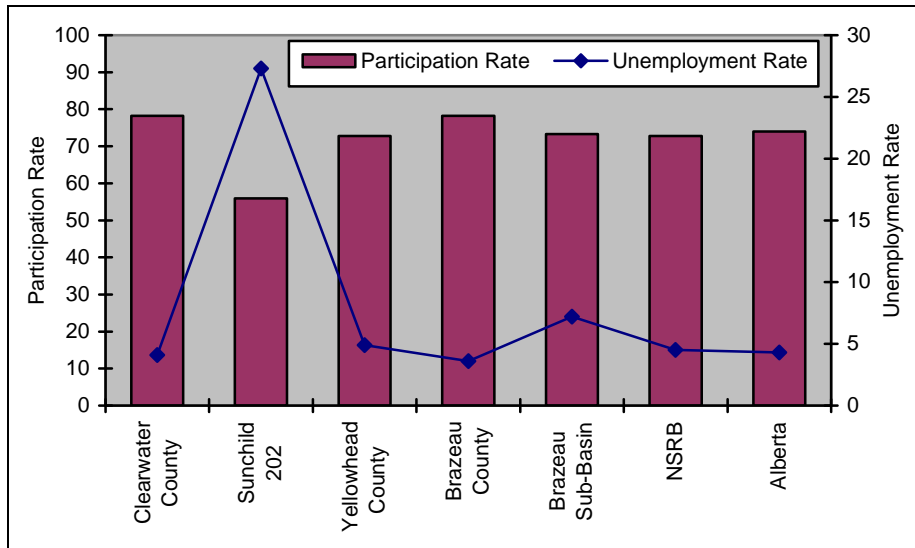
3.11 Labour Force Participation

Overall, 73.3% of the adult population in the Brazeau Sub-basin was participating in the labour force, either working or actively seeking work. This is slightly higher than for the NSRB.

Figure 3-16 shows that, within the sub-basin, labour force participation rates for residents of the Sunchild 202 reserve were the lowest (55.9%). Elsewhere, labour force participation ranged from 72.8% in Yellowhead County to 87.2% in both Brazeau and Clearwater counties.

The rate of unemployment in the Brazeau Sub-basin was 7.2% in 2006, which was higher than for the NRBS (4.5%). The highest rate of unemployment was on the Sunchild 202 reserve where 27.3% of the labour force was not working. Elsewhere in the Sub-basin, unemployment rates ranged from 3.6% in Brazeau County to 4.9% in Yellowhead County.

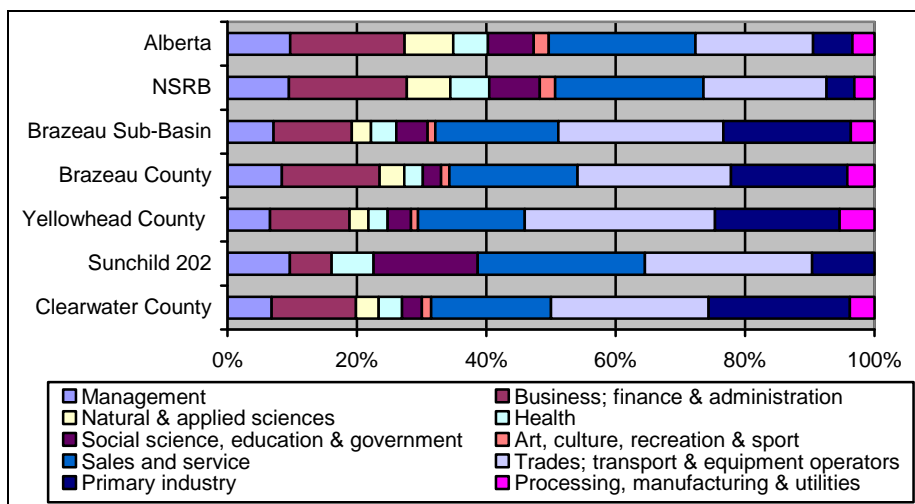
Figure 3-16: Labour Force Participation and Unemployment Rates, 2006



3.12 Employment by Occupation

Figure 3-17 shows employment by occupation for each of the communities in the Brazeau Sub-basin. Compared to the NSRB average, all of the communities in the sub-basin had higher percentages of people employed in occupations related to primary industry and the occupations in the trades and as transportation and equipment operators. The percentages of people employed in sales and service occupations in each of the communities were similar to the NSRB average. Compared to the overall NSRB, residents of the sub-basin were less likely to be employed in occupations related to management, business, and natural and applied sciences. With the exception of the Sunchild 202 reserve, residents of the sub-basin were also less likely to be employed in health and social science and government related occupations. The Sunchild 202 reserve actually had higher percentages of people employed in health and social and sciences and government than elsewhere in the sub-basin or the NSRB average.

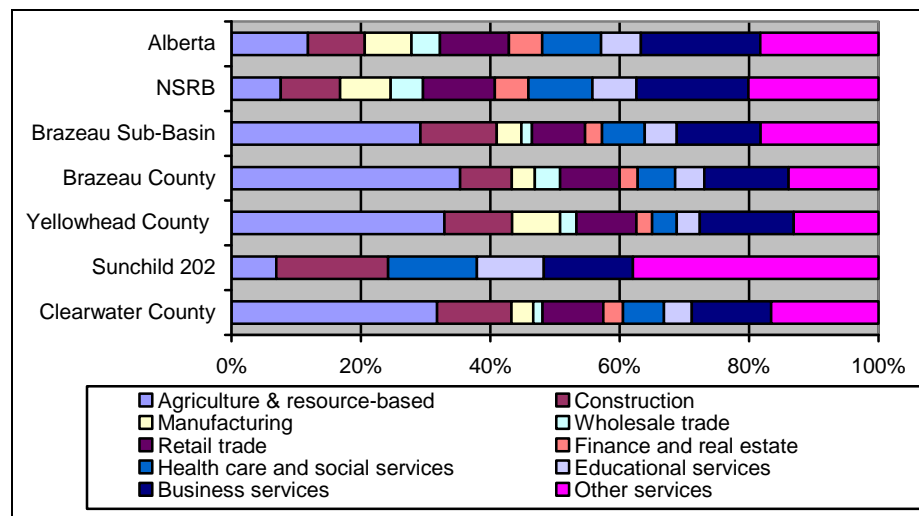
Figure 3-17: Employment in the Brazeau Sub-Basin by Occupation, 2006



3.13 Employment by Industry

Figure 3-18 shows employment in each sub-basin based on the industry of employment. Overall, 29.1% of the workforce was experienced in the agriculture and other resource-based industries, 18.2% in the other services industries, with 12.9% in business services and 11.8% in the construction industry. Compared to the NSRB, residents of the Brazeau Sub-basin were less likely to be employed in wholesale trade of finance and trade. The employment-by-industry profiles for the three counties were quite similar, although Yellowhead County had a slightly higher percentage of people with experience in manufacturing. The profile for the Sunchild 202 reserve was quite different, however, with none of the adult population reporting experience in the manufacturing, wholesale trade, retail trade, or finance and insurance industries. Residents of the Sunchild 202 reserve were more like to be experienced in the other services industry (36.7%) than other residents of the sub-basin.

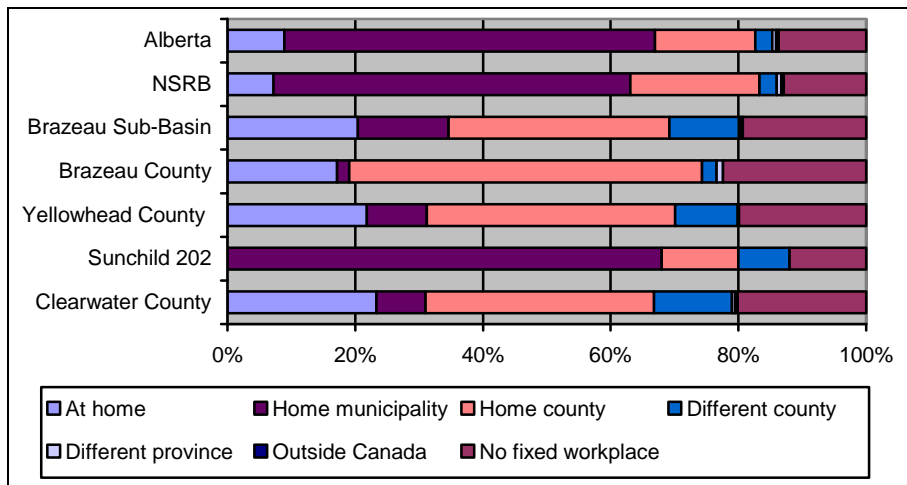
Figure 3-18: Employment in the Brazeau Sub-Basin by Industry, 2006



3.14 Location of Employment

Figure 3-19 shows where residents of the various communities within the Brazeau Sub-basins actually worked. Overall, 20.4% of sub-basin residents worked at home, and this was nearly three times the NSRB average. Only 14.2% worked at a usual place in their home municipality while another 34.5% worked in their home county outside their local community. Another 10.9% worked in another part of Alberta, 0.4% worked outside Alberta and 0.2% worked outside Canada. This pattern of working is quite different from the NSRB average and reflects the rural nature of the sub-basin where residents either work at home or commute to a nearby community for work. Within the sub-basin, residents of the Sunchild 202 reserve were most likely to work at home or at a location within their home community or county. Residents of Clearwater County were most likely to work in a different county.

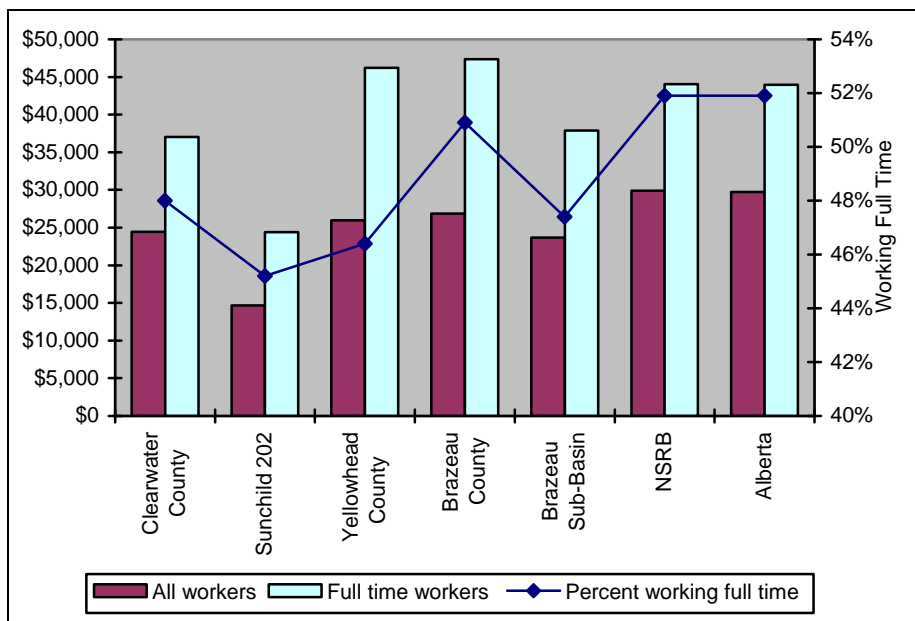
Figure 3-19: Location of Work, Brazeau Sub-Basin, 2006



3.15 Employment Earnings

Residents of the Brazeau Sub-basin reported median earnings of \$23,683 in 2005, and this was 20% less than the NSRB average (\$30,068). However, only 47.4% of workers in the Sub-basin reported being employed full-time, year round, and median earnings for this group averaged \$37,871. The corresponding statistics for individual communities within the Brazeau Sub-basin are provided in Figure 3-20. Within the basin, workers in Brazeau County reported the highest median earnings as well as the highest percentage of people working full time (50.9%). In comparison, only 45.2% of residents of the Sunchild 202 reserve reported full-time employment and they had the lowest earnings. The median earnings reported by all workers was \$14,656 in 2005, and this was 38% lower than for the total Brazeau Sub-basin.

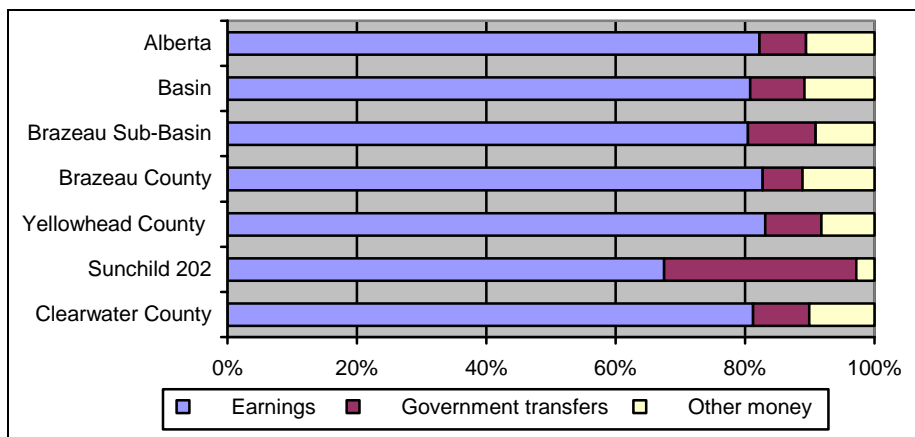
Figure 3-20: Median Earnings and Full-Time Employment, Brazeau Sub-Basin, 2006



3.16 Other Income Sources

Earnings accounted for 80.5% of income for residents of the Brazeau Sub-basin; this was nearly identical to the NSRB average. The remainder came from government transfers (10.5%) and other sources (9.1%). Figure 3-21 shows the reliance on transfer payments and other income for residents of the individual communities within the sub-basin.

Figure 3-21: Reliance on Transfer Payments and Other Income, 2005



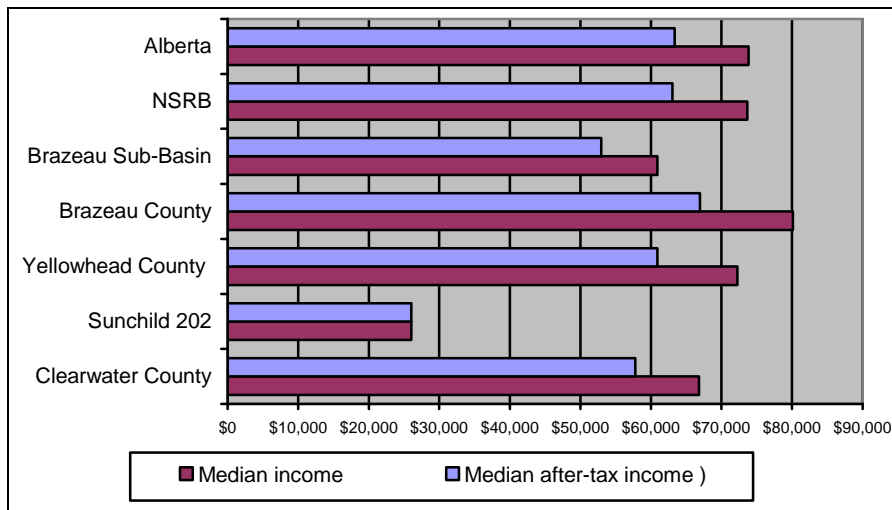
The percentage of income that came from earnings was nearly the same for residents of all three counties, but residents of the Sunchild 202 reserve only received 67.7% of their income from earnings. Residents of the reserve obtained received 29.8% of their incomes from government transfers.

3.17 Family and Individual Income

In 2005 families in the Brazeau Sub-basin reported median incomes averaging \$60,920. This was 17% lower than the NSRB average (\$73,823). Variations in median family incomes within the sub-basin are shown in

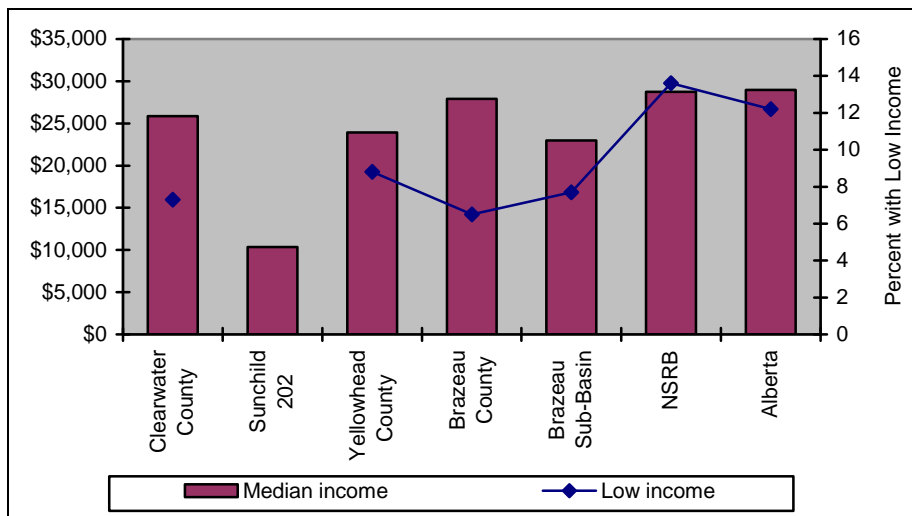
Figure 3-22. Residents of Brazeau County reported the highest median family income (\$80,127) and this was 32% higher than the average for the Brazeau Sub-basin. In contrast, the median family income for residents of the Sunchild 202 reserve was only \$40,576, which was 33% lower than the sub-basin average.

Figure 3-22: Median Family Income, Before and After Tax, 2005



Median incomes in 2005 for persons in private households averaged \$22,964 in 2005, and this was 17% lower than for the NSRB. Overall, 7.7% of sub-basin residents were considered to have low incomes (before tax), and this was nearly half the percentage of all NSRB residents considered to have low incomes. Figure 3-23 summarizes median incomes and the incidence of low incomes for the communities within the Brazeau Sub-basin. As was the case for family incomes, the highest individual incomes were reported in Brazeau County, while the lowest incomes occurred on the Sunchild 202 reserve. The median income for individuals on the Sunchild 202 reserve was \$10,336 and this was 55% lower than the sub-basin average.

Figure 3-23: Median Personal Income and Incidence of Low Income, 2005



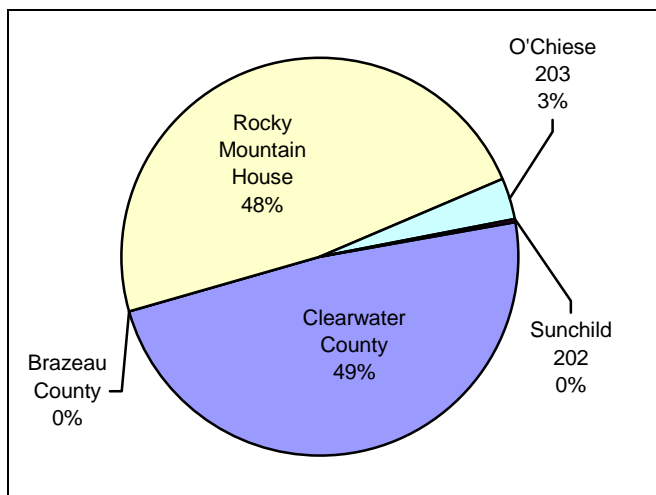
Residents of Yellowhead County reported the highest incidence of low income (8.8%) while residents of Brazeau County reported the lowest incidence of low income (6.5%). Data on the incidence of low income for the Sunchild 202 reserve are not available.

4.0 RAM SUB-BASIN

4.1 Population

In 2006, the Ram Sub-basin had a population of about 14,259 people; this represents 1.2% of the total population of the NSRB. As shown in Figure 4-1, the population of the sub-basin was nearly evenly split between Clearwater County (48.3%) and the Town of Rocky Mountain House (48.2%), with a few people living in Brazeau County. The balance of the sub-basin population was living on either the O'Chiese 203 or Sunchild 202 reserves.

Figure 4-1: Population Distribution in the Ram Sub-Basin, 2006

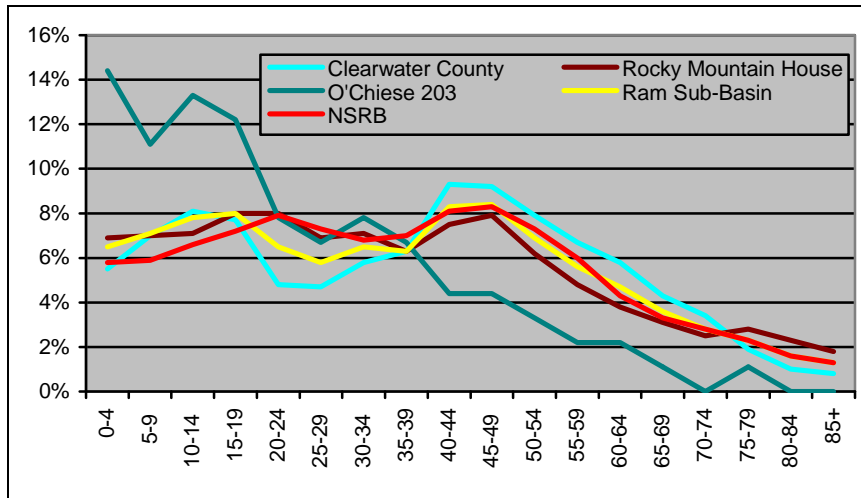


Given the small number of residents of Brazeau County and the Sunchild 202 reserve living in the Ram Sub-basin, statistics for these communities are not included in the following analysis.

4.2 Age Characteristics

In terms of age, residents of the Ram Sub-basin were similar to population of the NSRB, although Figure 4-2 shows that the Ram Sub-basin had higher percentages of people under the age of 20 children and lower percentages of people between the age of 20 and 34. The population distribution for people aged 35 and older in the sub-basin was nearly identical to the NSRB population. Within the Ram Sub-basin, the O'Chiese 203 reserve had much higher percentages of young people (39% were under the age of 15) while the population of Clearwater County was older, having higher percentages of people over the age of 39 years. The population of Rocky Mountain House most closely matched the NSRB average, although it had smaller percentages of people aged 40 to 74 years, but a higher percentage of people aged 75 years and older.

Figure 4-2: Age Composition of the Ram Sub-Basin Population, 2006

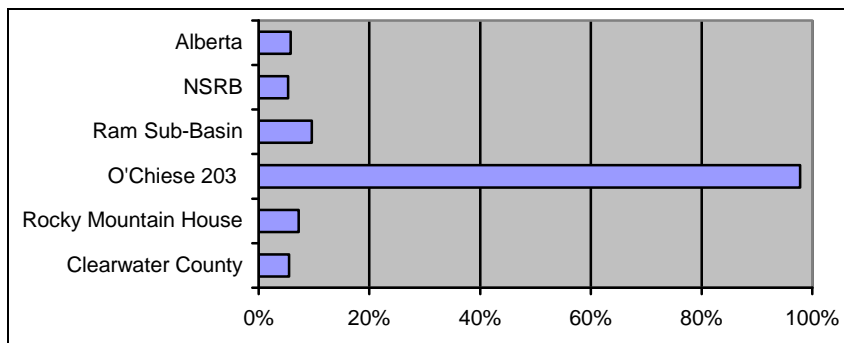


4.3 Aboriginal Population

About 9.6% of the residents of the Ram Sub-basin were Aboriginal. There were about 1,350 Aboriginal people in the sub-basin and 36% of these lived in Rocky Mountain House, 33% lived on the O'Chiese 203 reserve and 28% lived in Clearwater County.

Figure 4-3 shows that Aboriginal people accounted for 97.8% of the residents of the O'Chiese 203 reserve while the percentage of Aboriginal people in the other communities ranged from 5.5% of people in Clearwater County to 7.2% in Rocky Mountain House.

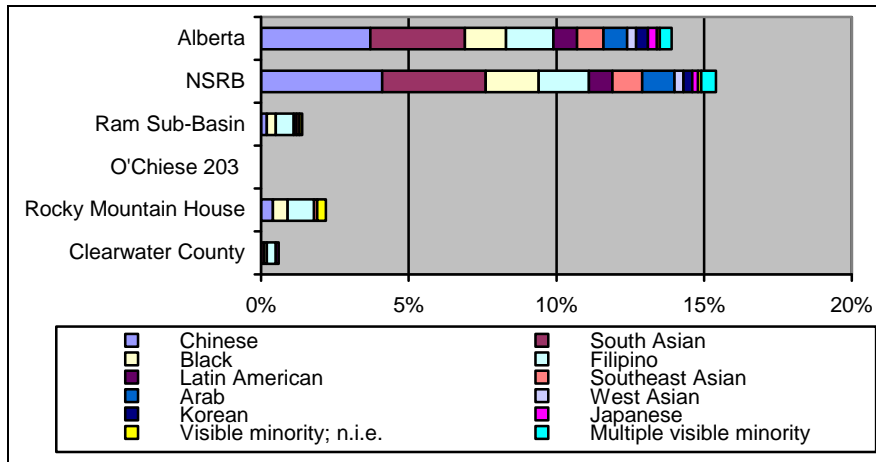
Figure 4-3: Aboriginal Population in the Ram Sub-Basin, 2006



4.4 Ethnicity

Only 1.5% of the Ram Sub-basin population consisted of visible minorities; this is much lower than for the NSRB (15.5%). Visible minorities were found primarily in Rocky Mountain House, where they accounted for 2.5% of the population. The most common visible minority was Filipino (0.6% of the total population).

Figure 4-4: Visible Minorities in the Ram Sub-Basin, 2006



4.5 Population Change

Between 2001 and 2006, the population of the Ram Sub-basin increased by 5.8%.

Figure 4-5 shows that most of the population increase occurred in Rocky Mountain House, with a smaller increase in the population of Clearwater County. The population of the O'Chiese 203 reserve actually decreased by 10.7% during this period.

Figure 4-5: Population Change in the Ram Sub-Basin, 2001-2006

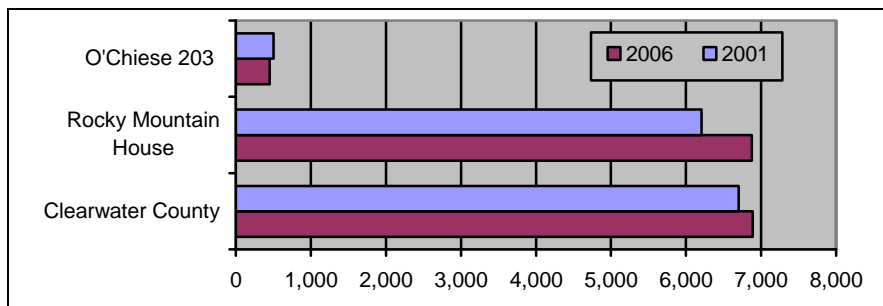
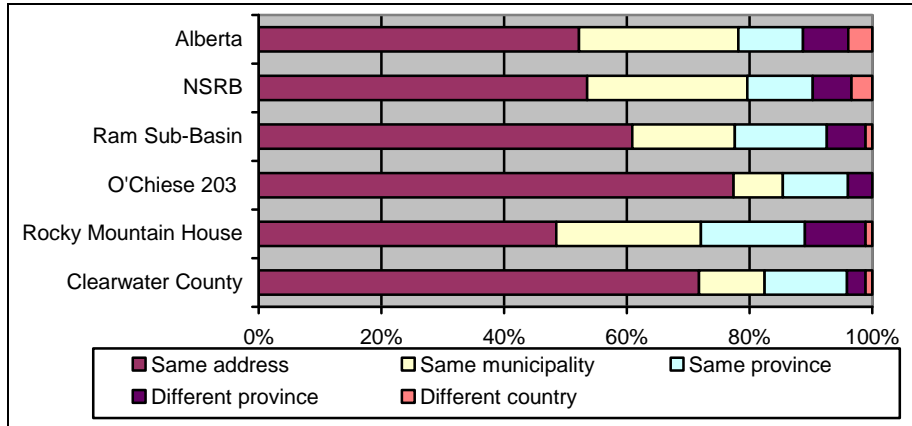


Figure 4-6 shows population mobility in the Ram Sub-basin between 2001 and 2006.

Figure 4-6: Population Mobility in the Ram Sub-Basin, 2001-2006

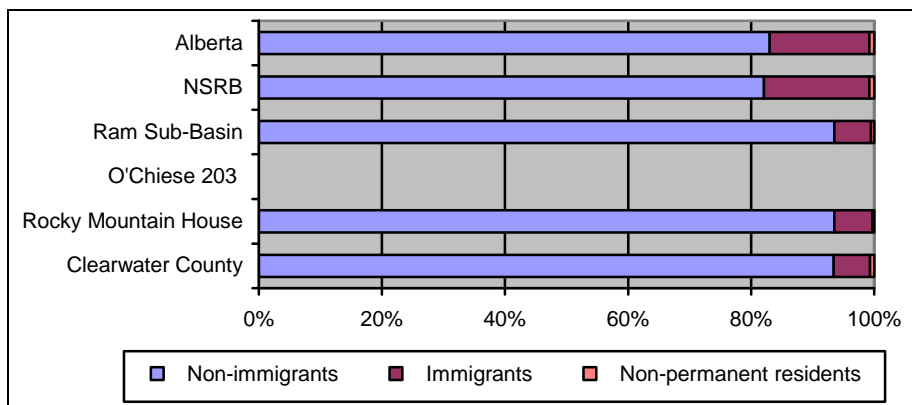


It shows that 60.9% of basins residents resided at the same address for the 5-year period, and another 16.7% changed addresses within the same county or municipality. A small percentage (1.1%) moved in from another country, 6.3% moved from another province, and 15.0% moved from a different municipality in Alberta. Within the sub-basin residents of the O'Chiese 203 reserve were the least mobile, with 76.3% having lived at the same address between 2001 and 2006, while residents of Rocky Mountain House were the most mobile, with only 48.5% giving lived at the same address for those five years. This is consistent with the population growth that has occurred in Rocky Mountain House.

The Ram Sub-basin has relatively few immigrants: immigrants accounted for only 6.0% of the sub-basin population but 17% of the NSRB population.

Figure 4-7 shows that the percentage of immigrants in Clearwater County and Rocky Mountain House was nearly identical.

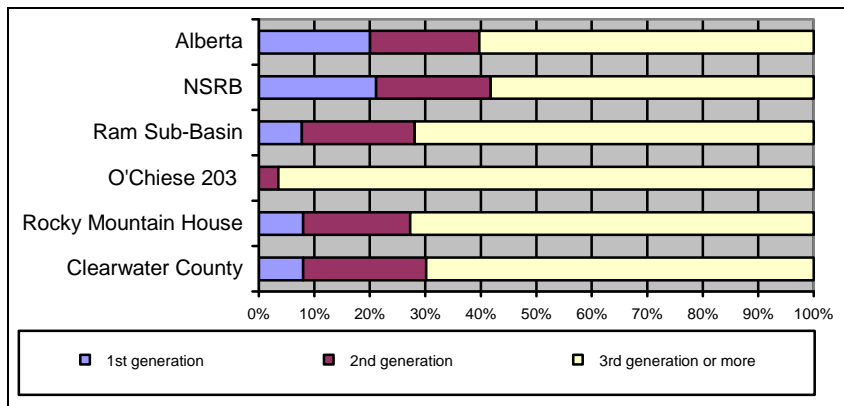
Figure 4-7: Role of Immigration in the Ram Sub-Basin, 2006



About 72% of the sub-basin population consisted of people who had lived in Canada for 3 or more generations. This percentage is higher than for the NSRB and was similar for Clearwater County and

Rocky Mountain House. Almost all residents of the O’Chiese 203 reserve (98.2%) had lived in Canada for 3 or more generations.

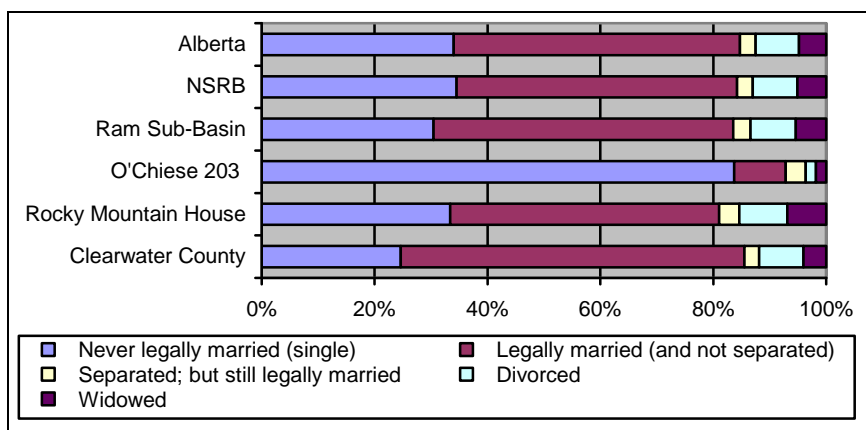
Figure 4-8: Residency in Canada, Ram Sub-Basin, 2006



4.6 Marital Status

Married people account for 53.1% of the sub-basin population, while the balance consists of single people (30.5%), divorced people (8.0%), widowed people (5.4%) and people who are separated (3.1%). Figure 4-9 shows that the sub-basin profile closely matches the NSRB profile, although the sub-basin has slightly lower percentages of single people.

Figure 4-9: Marital Status in the Ram Sub-Basin, 2006

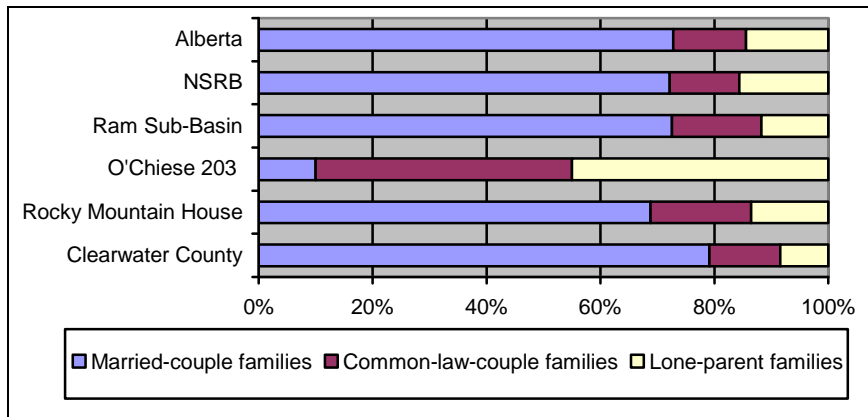


Only 9.1% of the adult population on the O’Chiese 203 reserve was married; most of the balance (83.6%) was considered to be single (never legally married). Rocky Mountain House has a higher population of single people and widowed people than does Clearwater County.

4.7 Family Structure

Married couple families account for 72.4% of the 4,010 families in the Ram Sub-basin. Lone parent families account for 11.7% of families, while common-law couples account for the balance (15.7%). Figure 4-10 shows that the O’Chiese 203 reserve had a very high percentage of single-parent families (45.0%) as well as common-law-couple families (45.0%) with very few married couple families (10.0%). Rocky Mountain House had higher percentages lone-parent and common-law couple families than did Clearwater County.

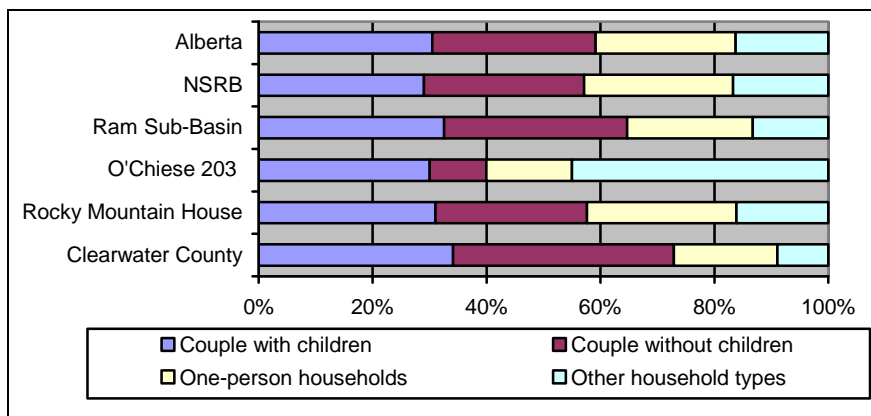
Figure 4-10: Family Structure in the Ram Sub-Basin, 2006



4.8 Household Structure

Household structure differs from family structure because households can contain one or more families. Figure 4-11 shows that 32.5% of households consisted of a couple with children, 32.1% were couples with no children, 22.0% were single person households, and the balance (13.2%) consisted of other household types. Compared to the NSRB, the Ram Sub-basin has a smaller percentage of single person households and a higher percentage of couples without children. Clearwater County has a higher percentage of couples without children than does Rocky Mountain House; however, Rocky Mountain House has a higher percentage of single-person households and other households. On the O’Chiese reserve 42.9% of households were considered to be other household types.

Figure 4-11: Household Structure in the Ram Sub-Basin, 2006



4.9 Housing

In 2006 there were about 5,300 housing units in the Ram Sub-basin. Figure 4-12 shows the composition of housing in each of the communities in the sub-basin. Overall, single detached houses accounted for 65.1% of housing in the sub-basin, although this ranged from 50.1% of housing in Rocky Mountain House to 90.5% of housing on the O'Chiese 203 reserve. Single family dwellings accounted for 79.2% of housing in Clearwater County. Within the sub-basin there were small numbers of semi-detached houses, row houses and apartments, and these were found primarily in Rocky Mountain House.

Figure 4-12: Housing Characteristics in the Ram Sub-Basin, 2006

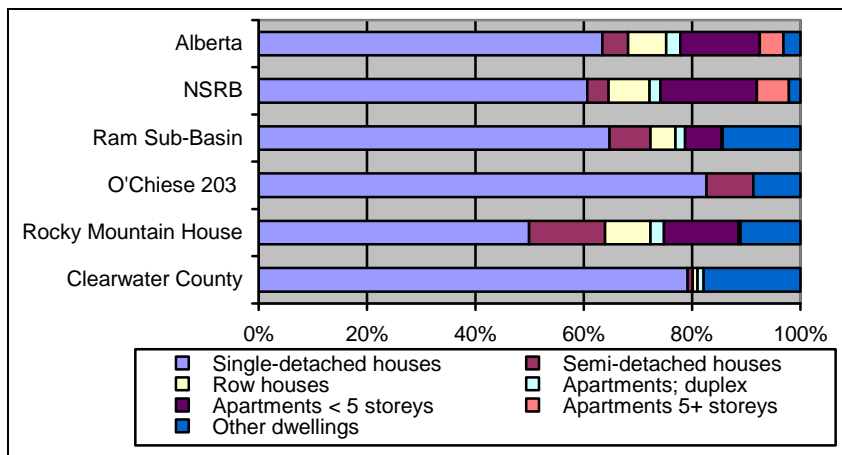


Figure 4-13 shows the reported value of housing in the Ram Sub-basins as well as the percentage of housing stock in need of major repair. Overall, the average value of a house in the Ram Sub-basin in 2005 was \$212,464, which was about 16% lower than the NSRB average (\$254,828). Housing values in Rocky Mountain House averaged \$197,249 but averaged \$237,282 in Clearwater County. There is no information on the value of housing on the O'Chiese 203 reserve.

Overall, 8.0% of dwellings in the sub-basin were in need of major repair and this was slightly higher than the NSRB average of 6.3%. The percentage of housing in need of major repair was only 5.5% in Rocky Mountain House, increased to 8.9% in Clearwater County, but jumped to 47.6% on the O'Chiese 203 reserve.

Figure 4-13: Value of Housing (2005) and Need for Major Repairs, Ram Sub-Basin

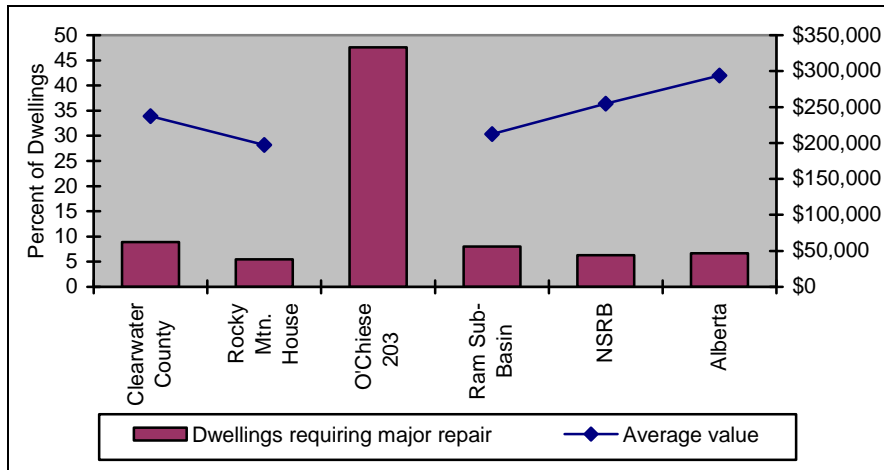
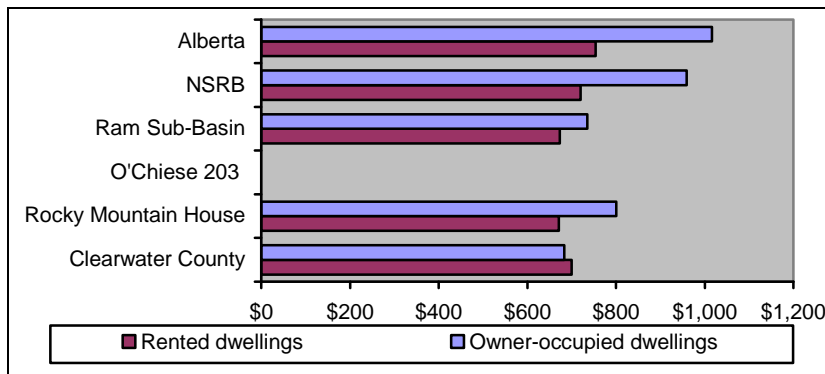


Figure 4-14 summarizes the average monthly costs of renting and owning dwellings in the Ram sub-basin in 2005. These costs include rent/mortgage, electricity, heat and municipal services to operate a dwelling. Overall, rental costs averaged \$673 per month compared to \$735 per month for owned dwellings. These costs were less than the NSRB averages (\$720 and \$959, respectively).

Figure 4-14: Average Monthly Costs for Rental and Owned Dwellings, 2005

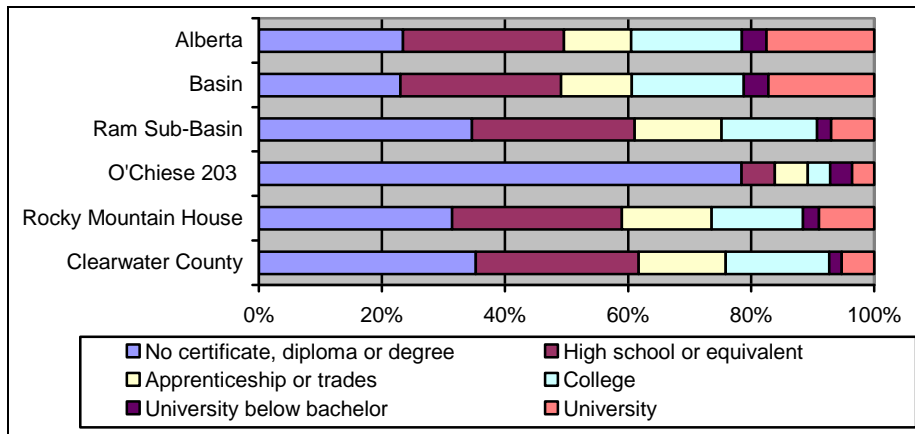


The costs of owner occupied dwellings was higher in Rocky Mountain House while the average monthly costs for renters in Clearwater County were actually higher than the monthly costs for people living in owner-occupied dwellings.

4.10 Education

Residents of the Ram Sub-basin were less educated than the NSRB average. Within the sub-basin, 34.6% of adults (people aged 15+) had not completed high school and this is higher than the NSRB average (23.0%). Compared to the NSRB, a higher percentage of sub-basin residents had apprenticeships or trades certificates (14.1%) but a smaller percentage of university graduates (7.0%).

Figure 4-15: Educational Attainment, Ram Sub-Basin



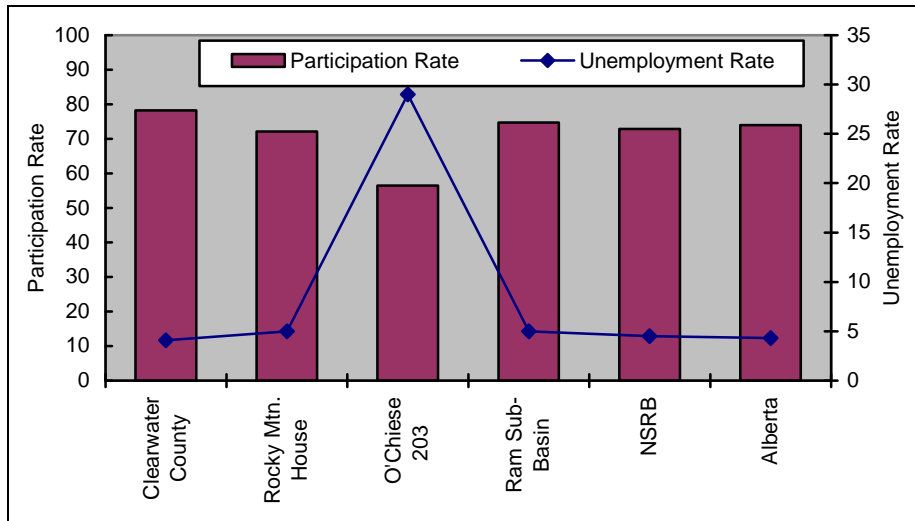
Educational attainment in Rocky Mountain House and Clearwater County were similar, although a higher percentage of County residents had not completed high school. On the O'Chiese 203 reserve, the majority of adults (78.6%) had not completed high school.

4.11 Labour Force Participation

Overall, 74.7% of the adult population was participating in the labour force, either working or actively seeking work; this was slightly above the NSRB average.

Figure 4-16 shows that Rocky Mountain House had a labour force participation rate that was slightly higher than in Clearwater County, but the participation rate for the O'Chiese 203 reserve was much lower (40.0%).

Figure 4-16: Labour Force Participation and Unemployment Rates, 2006

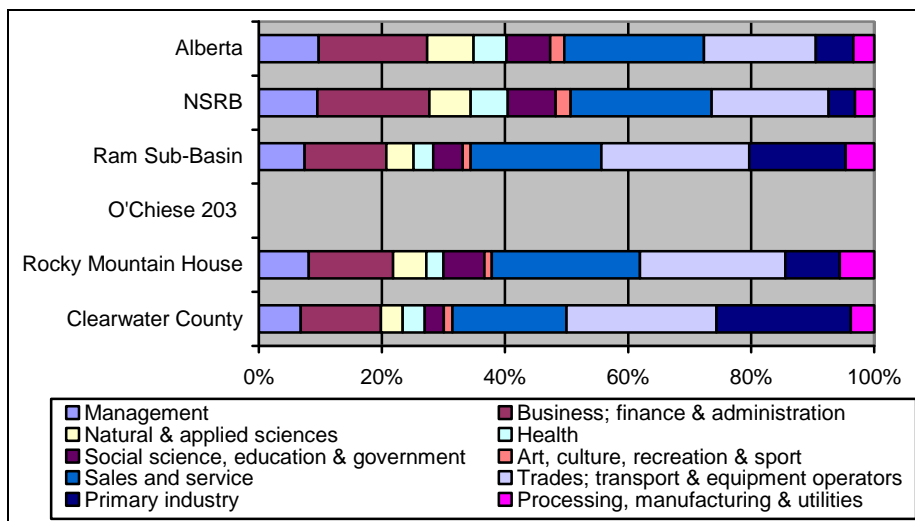


Average unemployment in 2006 was 5.0%, which was slightly higher than the NSRB average (4.5%). The lowest unemployment rate occurred in Clearwater County (4.1%) and was slightly higher in Rock Mountain House (5.0%). On the O'Chiese 203 reserve 29.0% of the labour force was unemployed in 2006.

4.12 Employment by Occupation

Figure 4-17 shows employment by occupation for the Ram sub-basin. Overall, the employment mix in the sub-basin featured higher employment in occupations relating to primary industry, especially in Clearwater County, and in occupations related to trade, transport and equipment operation. Within the sub-basin, Rocky Mountain House had higher percentage of people employed in management, business, and social sciences education and government. Occupational information is not available for the O'Chiese 203 reserve.

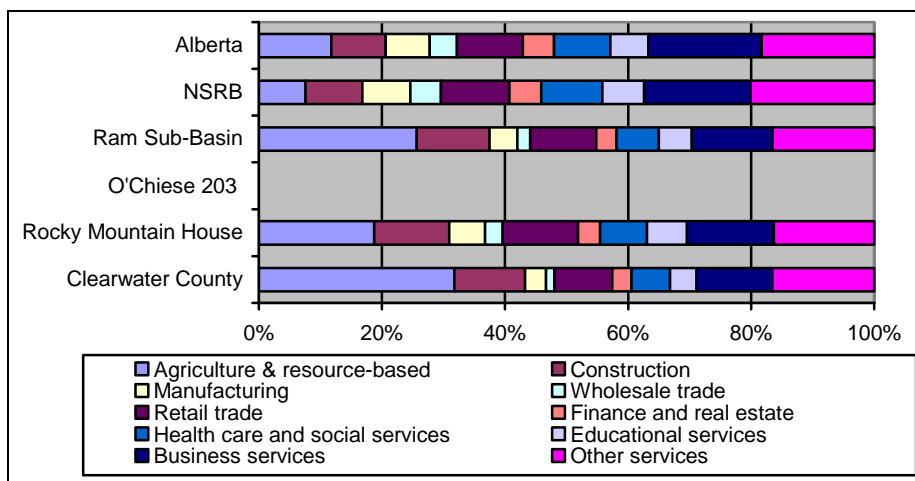
Figure 4-17: Employment by Occupation, Ram Sub-Basin, 2006



4.13 Employment by Industry

Figure 4-18 shows employment in each part of the sub-basin based on the industry of employment. Overall, 25.6% of the workforce was experienced in agriculture and other resource-based industries, 16.5% in the other services industries, with 11.8% in construction and 10.7% in retail trade. The profile for the Ram Sub-basin shows higher levels of employment in the basic industries (agriculture and other resource-based industries, manufacturing and construction) than in the overall NSRB. Within the sub-basin, residents of Clearwater County were more likely to be experienced in these basic industries while higher percentages of residents of Rocky Mountain House were employed in business services and education industries.

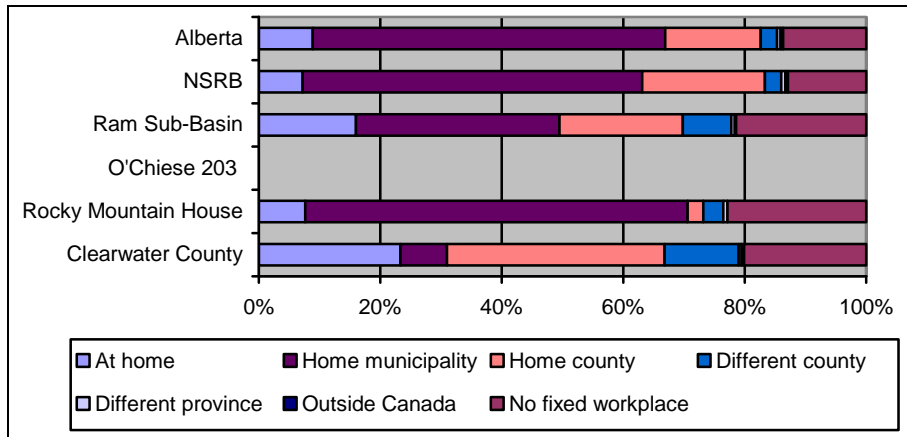
Figure 4-18: Employment by Industry, Ram Sub-Basin, 2006



4.14 Location of Employment

Figure 4-19 shows where residents of Ram Sub-basin actually worked. Overall, 16.0% worked at home and 33.5% worked at a usual place in their home municipality. Another 20.3% worked in their home county outside their local community, while 8.0% worked in another part of Alberta, 0.6% worked outside Alberta and 0.2% worked outside Canada. While residents of Rocky Mountain House were most likely to work in their home, relatively high percentages of people in Clearwater County either worked at home or worked in their home county outside their home municipality or in a different county.

Figure 4-19: Location of Work, Ram Sub-Basin, 2006

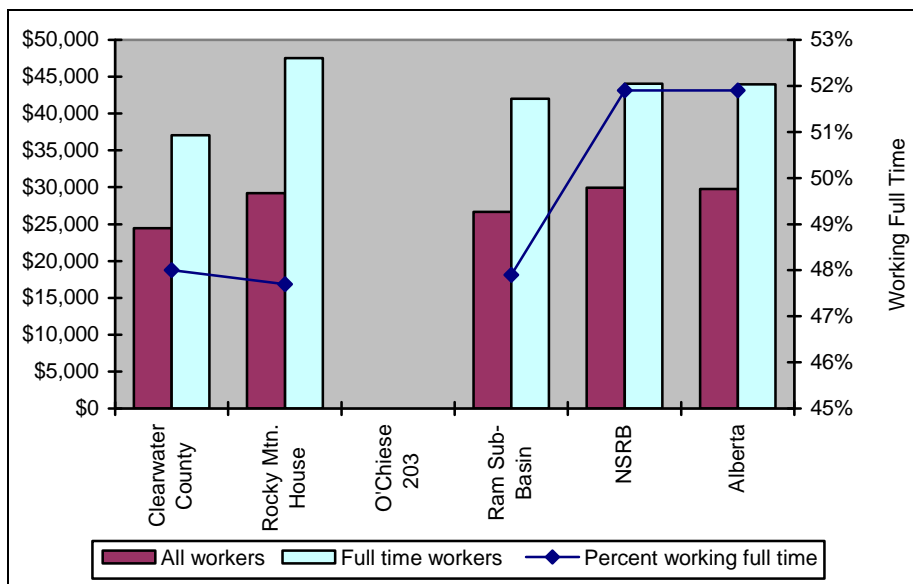


4.15 Employment Earnings

Residents of the NSRB reported median earnings of \$26,688 in 2005; this was about 10% lower than the NSRB (\$30,068). Median earnings in Rocky Mountain House (\$29,085) were higher than in Clearwater County (\$24,439). Income data were not available for the O'Chiese 203 reserve.

Only 47.9% of workers in the Ram Sub-basin were employed full time and this was lightly lower than the NSRB average (51.9%). Median earnings for people working full-time averaged \$42,008. Figure 4-20 shows that although residents of Rocky Mountain House were less likely to be employed full-time, they reported higher earnings. Median earnings for Rocky Mountain House residents working full-time were \$47,519 and this was 8% higher than median incomes reported for the NSRB and Alberta.

Figure 4-20: Median Earnings and Full-Time Employment, 2006

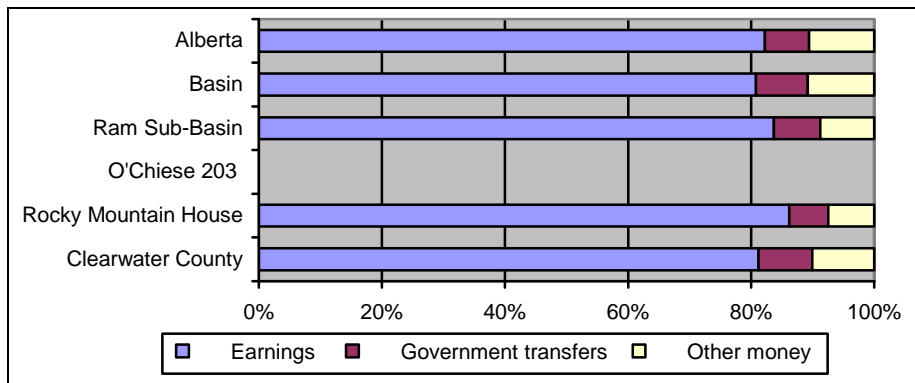


4.16 Other Income Sources

Earnings accounted for 83.7% of income for basin residents. The remainder came from government transfers (7.5%) and other sources (8.8%).

Figure 4-21 shows the reliance on transfer payments and other income for residents of the Ram sub-basin. It shows that earnings accounted for a higher percentage of income for residents of Rocky Mountain House (86.2%) than for residents of Clearwater County (81.3%). No income data for individuals are available for the O'Chiese 203 reserve.

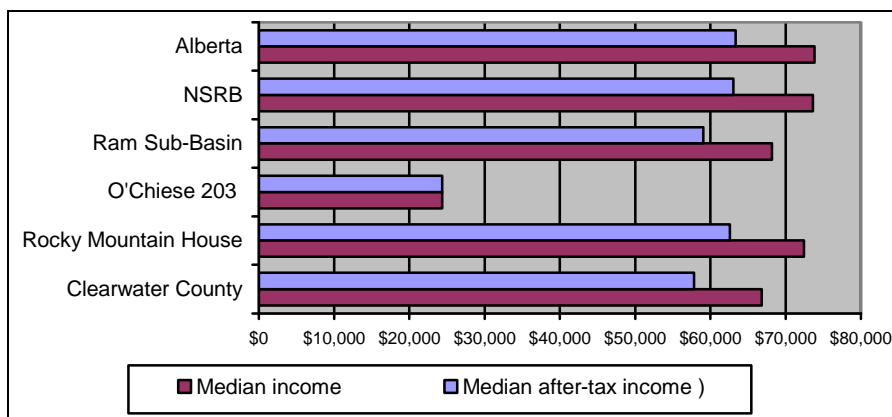
Figure 4-21: Reliance on Transfer Payments and Other Income, 2005



4.17 Family and Individual Income

In 2005 families in the Ram Sub-basin reported median incomes averaging \$68,190, and this 7% lower than the NSRB average (\$73,823). Figure 4-22 shows that residents of Rocky Mountain House reported family incomes that were 4% higher than the sub-basin average. The lowest family median incomes were reported for the O'Chiese 203 reserve (\$24,384) and this was 64% lower than the sub-basin average.

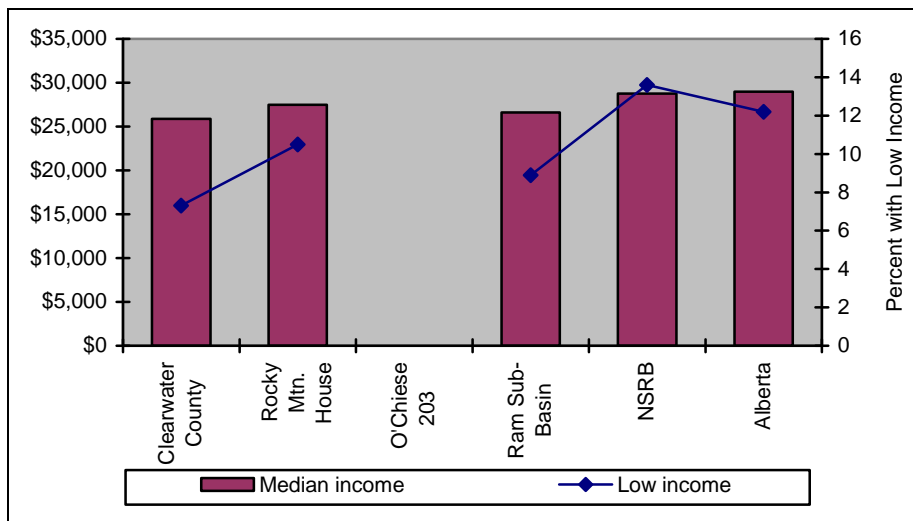
Figure 4-22: Median Family Income, Before and After Tax, 2005



Median incomes in 2005 for persons in private households in the Ram Sub-basin averaged \$26,613 and this was 4% lower than the NSRB average (\$28,898). Overall, 8.9% of basin residents were considered to have low incomes (before tax). This percentage is less than the NSRB average (13.6%).

Figure 4-23 summarizes median incomes and the incidence of low incomes within the sub-basin. As was the case for family incomes, the highest individual incomes were reported in Rocky Mountain House, which also had the highest incidence of individuals with low incomes (10.5%).

Figure 4-23: Median Personal Income and Incidence of Low Income, 2005

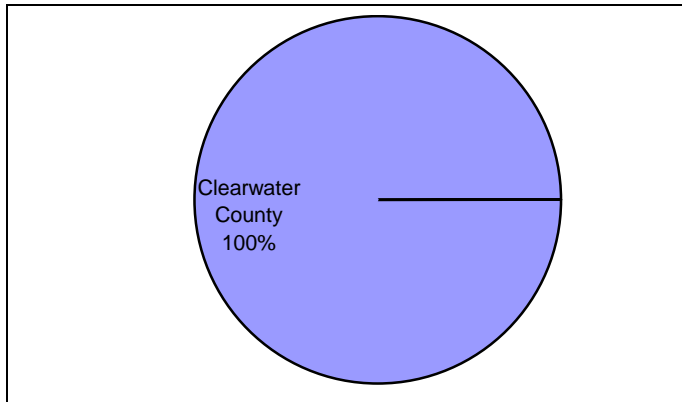


5.0 CLEARWATER SUB-BASIN

5.1 Population

In terms of population, the Clearwater Sub-basin is one of the smallest in the NSRB. In 2006, it had a population of about 1,659 people, all of whom resided in Clearwater County (Figure 5-1). There are no cities, towns, villages or Aboriginal reserves in the Clearwater Sub-Basin.

Figure 5-1: Population Distribution in the Clearwater Sub-Basin, 2006

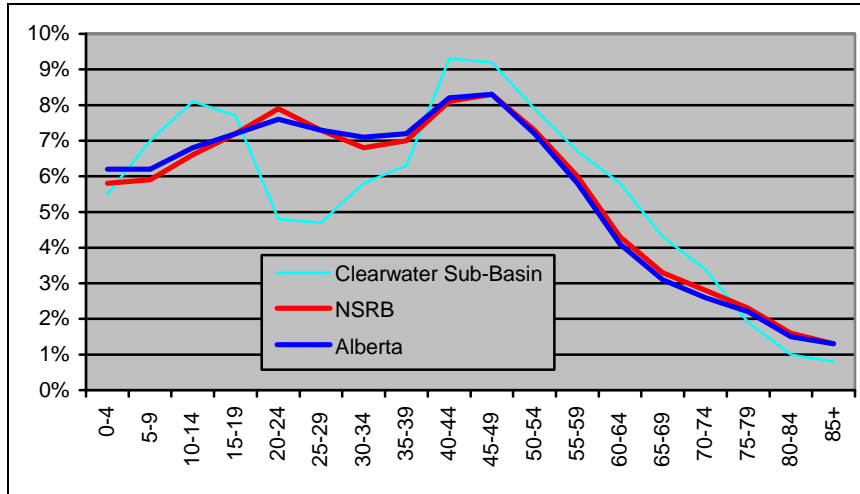


Because of the small population and with Census data being rounded to the nearest 5, some of the estimates for the Clearwater Sub-Basin may not be accurate.

5.2 Age Characteristics

In terms of age, residents of the Clearwater Sub-basin were quite different from the overall population of the NSRB and Alberta. Figure 5-2 show the sub-basin had higher percentages of people under the age of 20, but a relatively small percentage of people aged 20 to 39. A higher percentage of people in the Clearwater Sub-basin were aged 40 and older, but there was a smaller percentage over the age of 74.

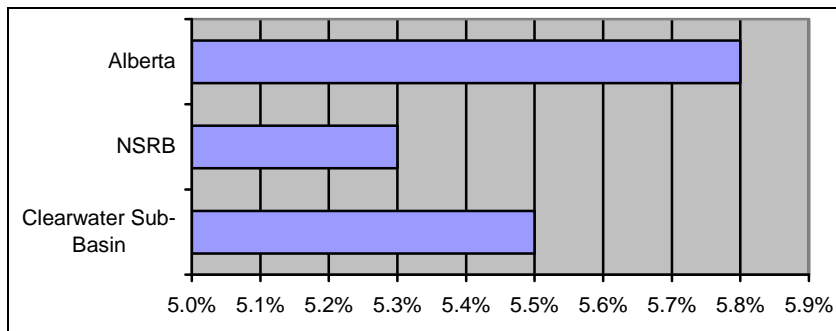
Figure 5-2: Age Composition of the Clearwater Sub-Basin Population, 2006



5.3 Aboriginal Population

Figure 5-3 shows that Aboriginal people accounted for 5.5% of the population of Clearwater County.

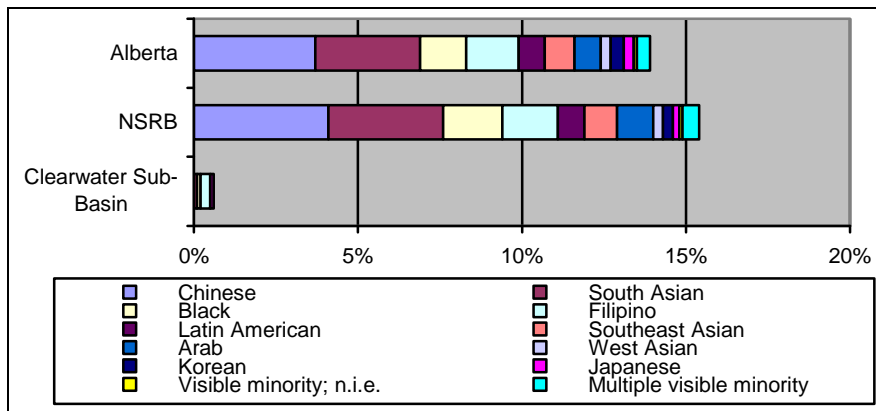
Figure 5-3: Aboriginal Population in the Clearwater Sub-Basin, 2006



5.4 Ethnicity

Only 0.6% of the Clearwater Sub-basin population consisted of visible minorities; this is much lower than for the NSRB (15.5%). The most common visible minorities in the Sub-Basin were Black (2.4% of the population) and Japanese (1.6%).

Figure 5-4: Visible Minorities in the Clearwater Sub-Basin, 2006



5.5 Population Change

Between 2001 and 2006, the population of the Clearwater Sub-Basin decreased by 2.8%. Figure 5-5 shows that this represents an increase of about 45 people.

Figure 5-5: Population Change in the Clearwater Sub-Basin, 2001-2006

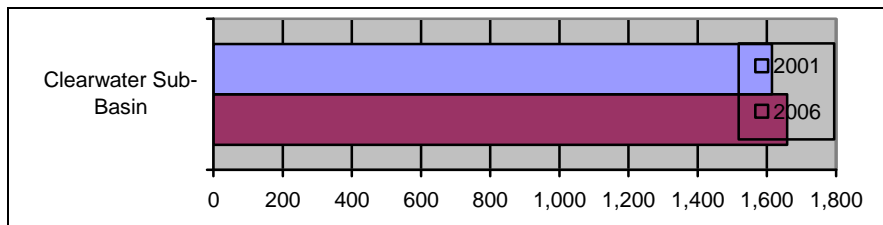
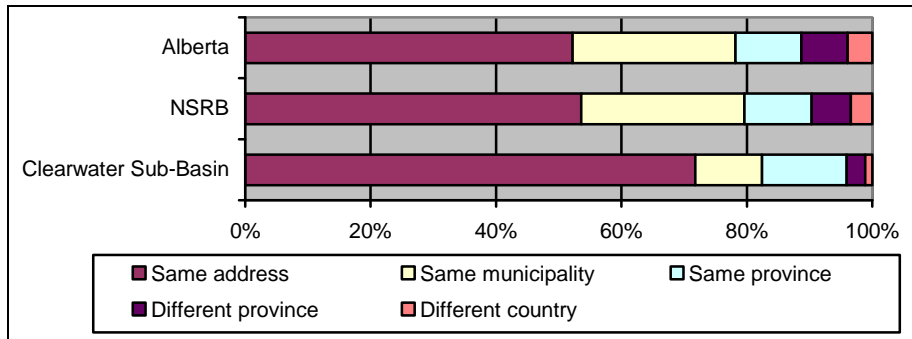


Figure 5-6 shows that the population of Clearwater County was very stable (71.9% of the population had lived at the same address for the 5-year period).

Figure 5-6: Population Mobility, 2001-2006



There were very few immigrants (5.9%) or non-permanent residents (0.7%) in the Clearwater Sub-basin.

Figure 5-7: Role of Immigration in the Clearwater Sub-Basin, 2006

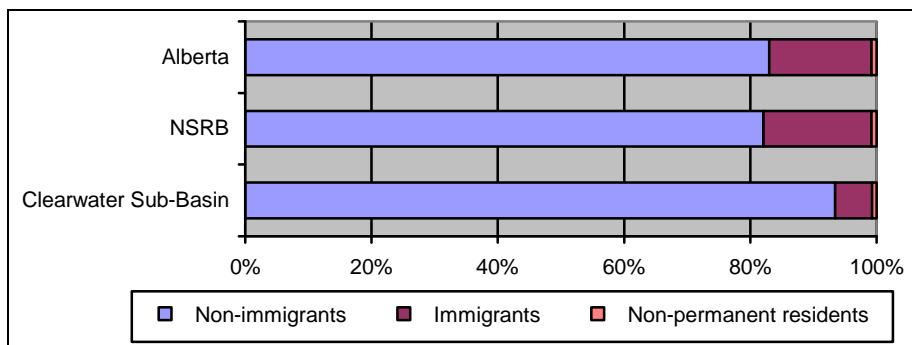


Figure 5-8: Residency in Canada, Clearwater Sub-Basin, 2006

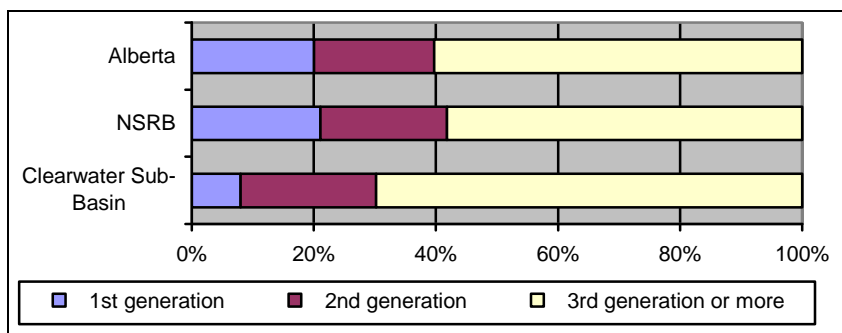
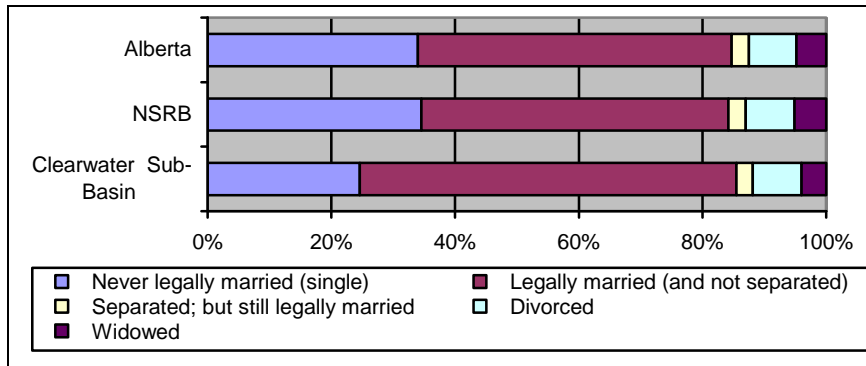


Figure 5-8 shows that the Clearwater Sub-basin had a very high concentration of people who had lived in Canada for 3 or more generations (69.9%) compared to only 58.2% in the NSRB.

5.6 Marital Status

Married people account for 60.9% of the Clearwater Sub-basin population, while the balance consists of single people (24.6%), divorced people (7.9%), widowed people (4.0%) and people who are separated (2.6%). The sub-basin profile (Figure 5-9) differs from the NSRB profile because it has a lower percentage of single people and more married people.

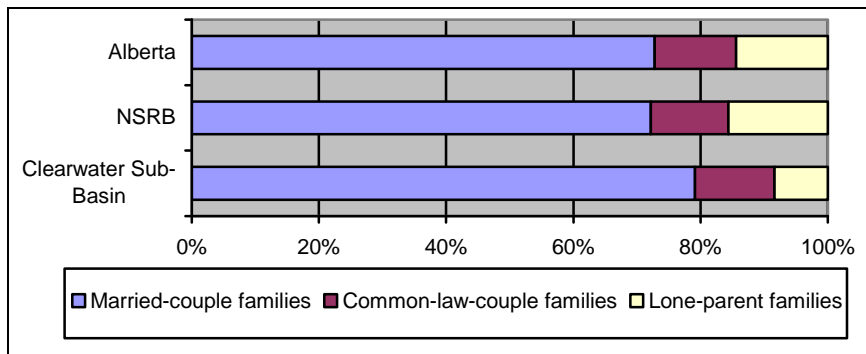
Figure 5-9: Marital Status in the Clearwater Sub-Basin, 2006



5.7 Family Structure

Figure 5-10 shows that married couple families accounted for 79.1% of families in the Clearwater Sub-basin while common-law couple accounted for 12.5% of families and 8.4% were single-parent families.

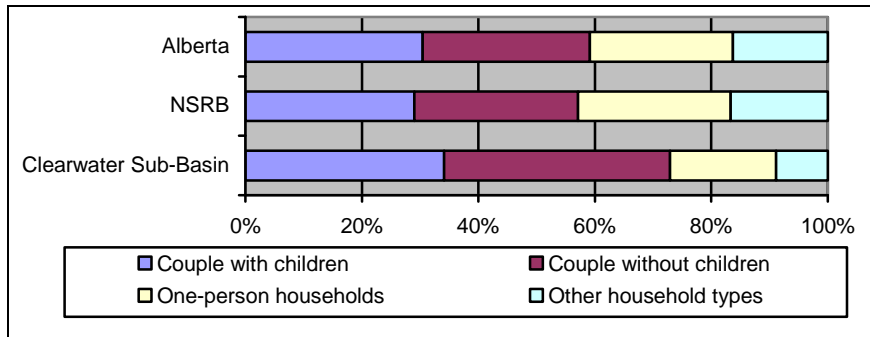
Figure 5-10: Family Structure in the Clearwater Sub-Basin, 2006



5.8 Household Structure

Figure 5-11 shows that 34.1% of households in the Clearwater Sub-basin consisted of a couple with children, 38.8% were couples with no children, 18.2% were single person households, and the balance (8.9%) consisted of other household types.

Figure 5-11: Household Structure in the Clearwater Sub-Basin, 2006



5.9 Housing

In 2006 there were about 620 housing units in the Clearwater Sub-basin. Figure 5-12 shows that single family dwellings accounted for 79.2% of housing types and another 17.9% consisted of other dwelling types. There was a very small percentage of semi-detached and row housing and apartments in the sub-basins.

Figure 5-12: Housing Characteristics in the Clearwater Sub-Basin, 2006

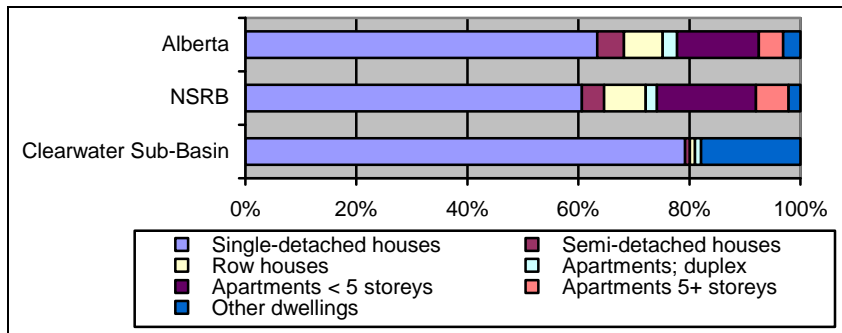
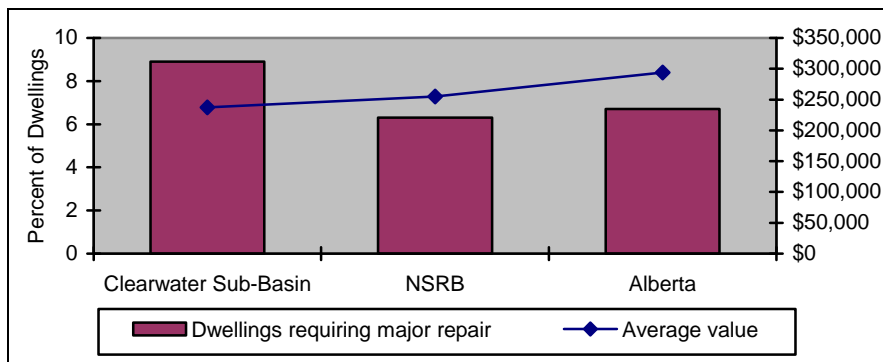


Figure 5-13 shows the reported value of housing in the Clearwater Sub-basins in 2005 was \$237,282 which was 7% less than the NSRB average.

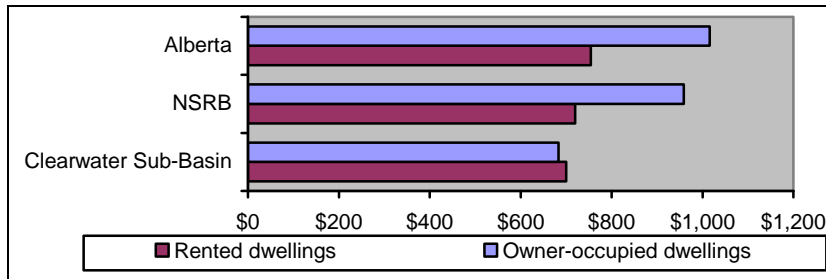
Figure 5-13: Value of Housing (2005) and Need for Major Repairs by Sub-Basin



About 8.9% of housing in the sub-basin was considered to be in need of major repair.

Figure 5-14 shows that the average monthly costs of housing in the Clearwater Sub-basin in 2005 ranged from \$700 for rented dwellings to \$683 for owner-occupied dwellings. These costs include rent/mortgage, electricity, heat and municipal services to operate a dwelling and were slightly less than the NSRB averages (\$720 and \$959, respectively).

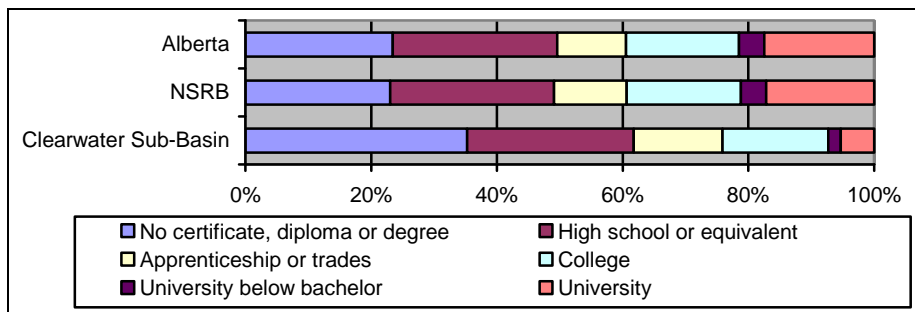
Figure 5-14: Average Monthly Costs for Rental and Owned Dwellings, 2005



5.10 Education

Residents of the Clearwater Sub-basin were less educated than the NSRB average. About 35.2% of the adult population had not completed high school and this was higher than the NSRB average (23.0%). However, 14.1% of sub-basin residents had completed an apprenticeship or trade program and this was higher than the basin average (11.5%).

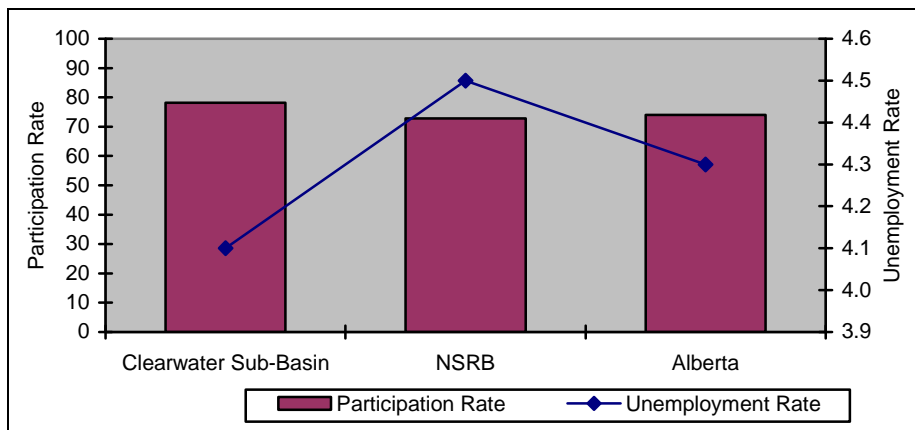
Figure 5-15: Educational Attainment for the Clearwater Sub-Basin



5.11 Labour Force Participation

Overall, 78.1% of the adult population in the Clearwater Sub-basin was participating in the labour force, either working or actively seeking work. Figure 5-16 shows that this rate was much higher than for the NSRB (72.1%).

Figure 5-16: Labour Force Participation and Unemployment Rates, 2006

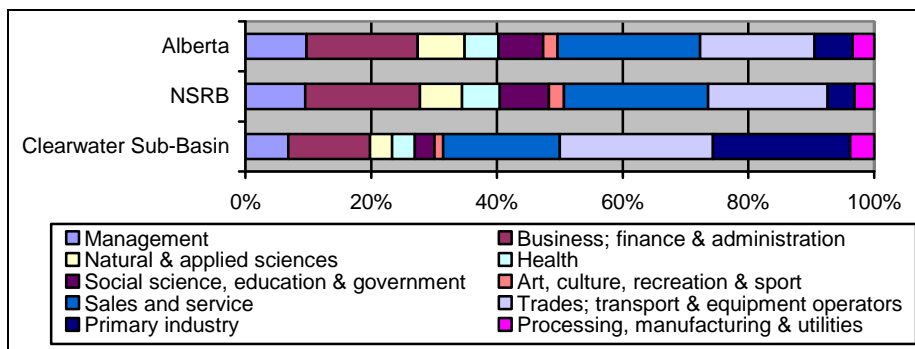


In 2006, the Clearwater Sub-basin had an unemployment rate of 4.1% and this was slightly below the NSRB average (4.5%).

5.12 Employment by Occupation

Figure 5-17 shows employment by occupation for the Clearwater Sub-basin. Compared to the NSRB, residents of the Clearwater Sub-basin were more likely to be employment in occupations related to primary industry and trades, transport and equipment operations. The sub-basin had a lower percentage of people employment in management and business, natural and applied sciences, health and the social sciences, education and government.

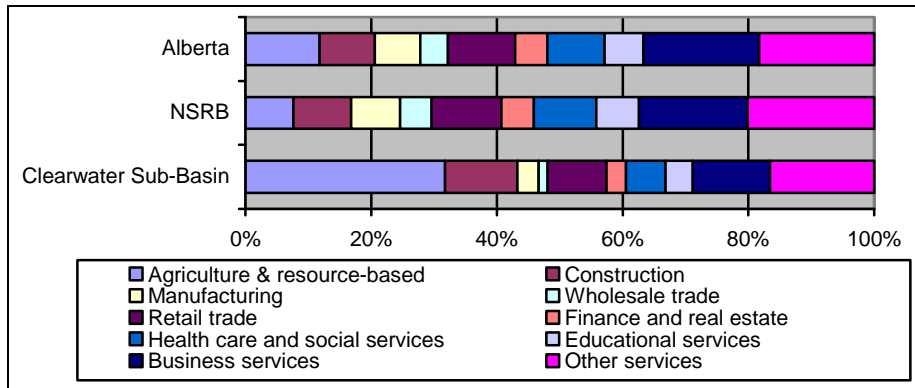
Figure 5-17: Employment by Occupation, Clearwater Sub-Basin, 2006



5.13 Employment by Industry

Figure 5-18 shows employment in each sub-basin based on the industry of employment. Overall, 46.6% of the workforce was experienced in basic (goods-producing) industries, primarily agriculture and other resource-based industries (which accounted for 31.8% of employment in the sub-basin), manufacturing and construction. Compared to the NSRB profile, residents of the Clearwater Sub-basin were less like to be employed in finance and insurance, health care, education and business services.

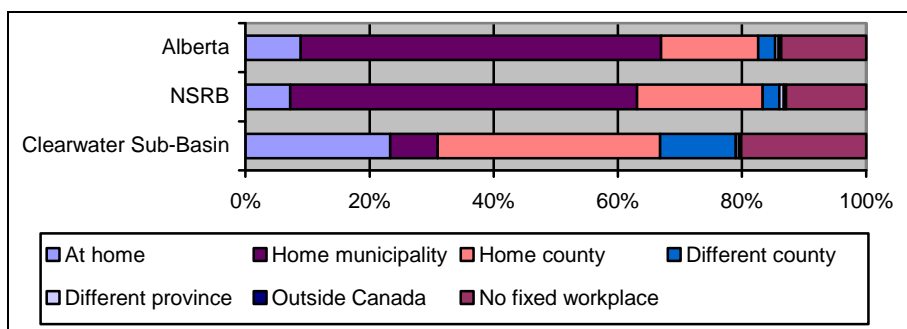
Figure 5-18: Employment by Industry, Clearwater Sub-Basin, 2006



5.14 Location of Employment

Figure 5-19 shows where residents of the Clearwater Sub-basins actually worked. Overall, 23.3% worked at home and this was much higher than the NSRB average. Another 7.7% worked at a usual place in their home municipality and 35.8% worked in their home county outside their local community, while 12.2% worked in another part of Alberta, 0.5% worked outside Alberta and 0.4% worked outside Canada.

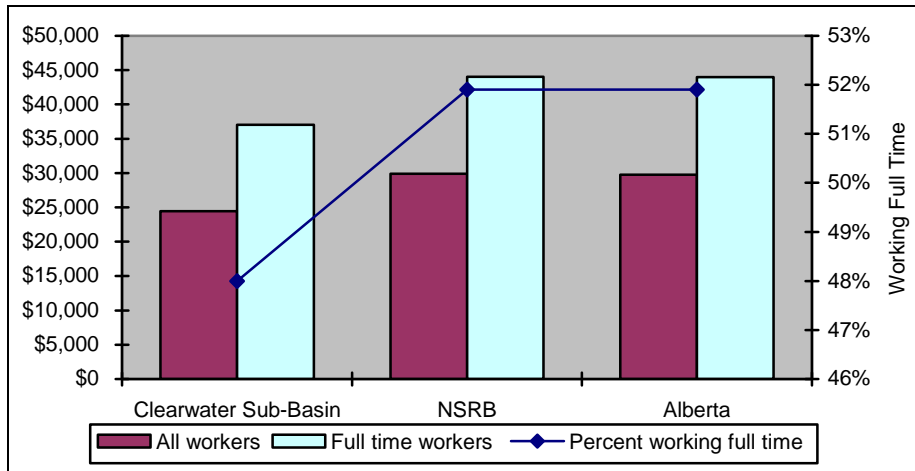
Figure 5-19: Location of Work, Clearwater Sub-Basin, 2006



5.15 Employment Earnings

Residents of the NSRB reported median earnings of \$24,439 in 2005; this was 17% lower than the NSRB average (\$30,068). Full-time year-round employment was reported by 48.0% of workers in the Clearwater Sub-basin, slightly below the basin average of 51.9%. Figure 5-20 shows that residents of the sub-basin who worked full-time earned \$37,040 and this was also less than the basin average.

Figure 5-20: Median Earnings and Full-Time Employment, 2006

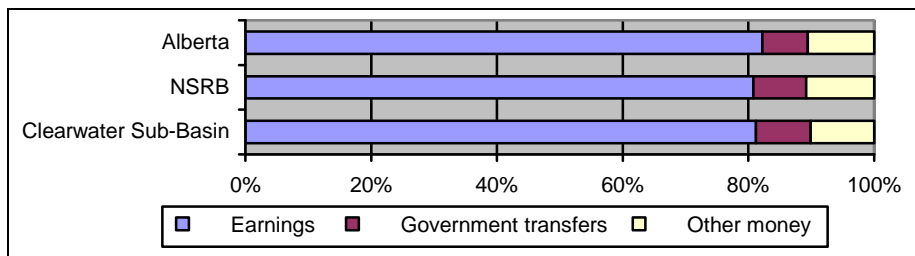


Median earnings ranged from an average of \$18,340 in the Vermilion sub-basin to a high of \$32,953 in the Sturgeon sub-basin. In general, median earnings were highest in the sub-basins with the larger population centres, including Sturgeon, Beaverhill, Strawberry and Monnery. This applies to both earnings reported by all workers and those workers with full-time employment. Of note is that the median income for residents of the Vermilion sub-basin who worked full-time was lower than the median earnings reported for many of the other sub-basins.

5.16 Other Income Sources

Earnings accounted for 81.3% of income for residents of the Clearwater Sub-basin. The remainder came from government transfers (8.7%) and other sources (10.1%). Figure 5-21 shows that incomes sources for sub-basin residents were almost identical to the sources of income for residents of the entire NSRB.

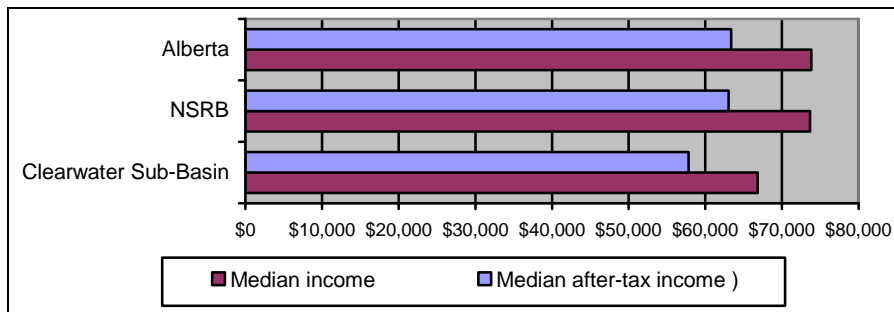
Figure 5-21: Reliance on Transfer Payments and Other Income, 2005



5.17 Family and Individual Income

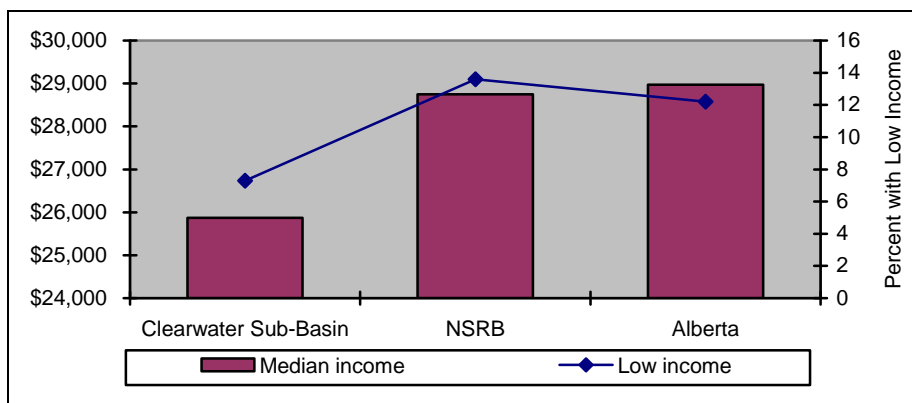
In 2005 families in the Clearwater Sub-basin reported median incomes of \$66,819 which was about 9% lower than the NSRB average of \$73,823 (Figure 5-22).

Figure 5-22: Median Family Income, Before and After Tax, 2005



Median incomes before tax in 2005 for persons in private households in the Clearwater Sub-basin were \$25,874. As shown in Figure 5-23, this was lower than the NSRB average of \$28,898. About 7.3% of individuals in the Clearwater Sub-basin were considered to have low incomes and this was considerably less than the 13.6% of NSRB residents who were considered to have low incomes.

Figure 5-23: Median Personal Income and Incidence of Low Income, 2005

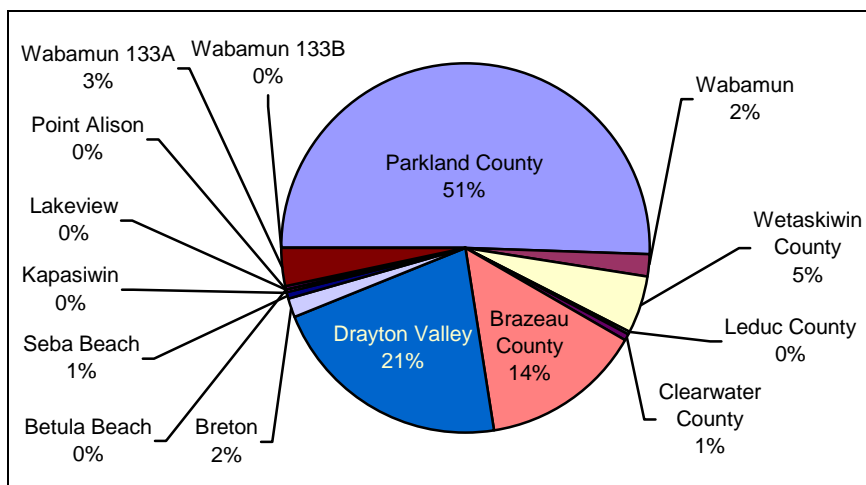


6.0 MODESTE SUB-BASIN

6.1 Population

In 2006, the Modeste Sub-basin had a population of about 32,110 people which represents about 2.8% of the population of the entire NSRB. The majority of the population (70.5%) lives in the rural parts of the sub-basin. Figure 6-1 shows that just over half of the sub-basin population lived in Parkland County, with another 14% living in Brazeau County. A small portion of the population lived in parts of the sub-basin situated in Wetaskiwin, Clearwater and Leduc counties. The Modeste Sub-basin has a small urban population which is primarily centered in the Town of Drayton Valley (21%) and the Villages of Wabamun (2%) and Breton (2%).

Figure 6-1: Population Distribution in the Modeste Sub-Basin, 2006



There are five summer villages in the sub-basin (Seba Beach, Kapasiwin, Lakeview, Betula Beach and Point Alison) and collectively, they account for another 1% of the population, with the vast majority living in Seba Beach. The Modeste Sub-basin also includes the Wabamun 133A and 133B reserves which, in 2006, accounted for 3.5% of the sub-basin population.

Complete census information is not available for any of the summer villages or the Wabamun 133B reserve, so these communities are not included in the following analysis.

6.2 Age Characteristics

In terms of age, residents of the Modeste Sub-basin were different from the overall population of the NSRB.

Figure 6-2 shows that, the Modeste Sub-basin had higher percentages of both young people (under 20 years of age) and older adults (people aged 40 to 69). However, the sub-basin had relatively small percentages for young adults (people aged 20 to 39) and relatively fewer very old people (70 years of age or older).

Figure 6-2: Age Composition of the Modeste Sub-Basin Population, 2006

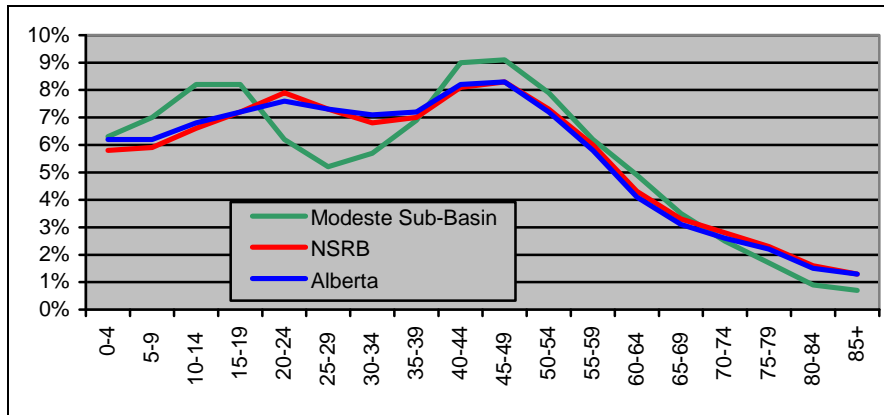
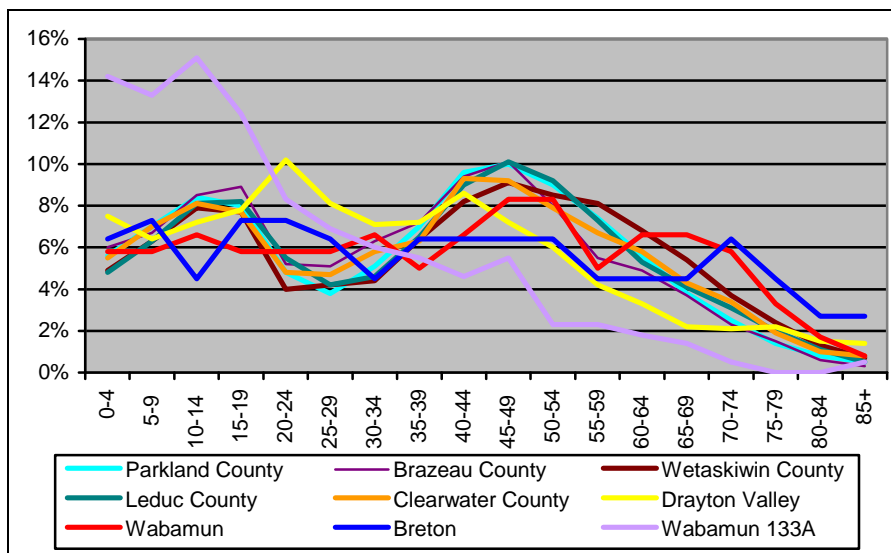


Figure 6-3 shows the age distributions for the individual communities within the Modeste Sub-basin. Most noticeable is that the population of the Wabamun 133A reserve is very young, with 55% of the population being under the age of 20 years. Another observation is that, with the exception of Drayton Valley, there were relatively few people aged 20 to 39 in most of the communities and rural areas. The villages of Breton and Wabamun can be considered relatively older communities with higher populations of people aged 70 years of age and older.

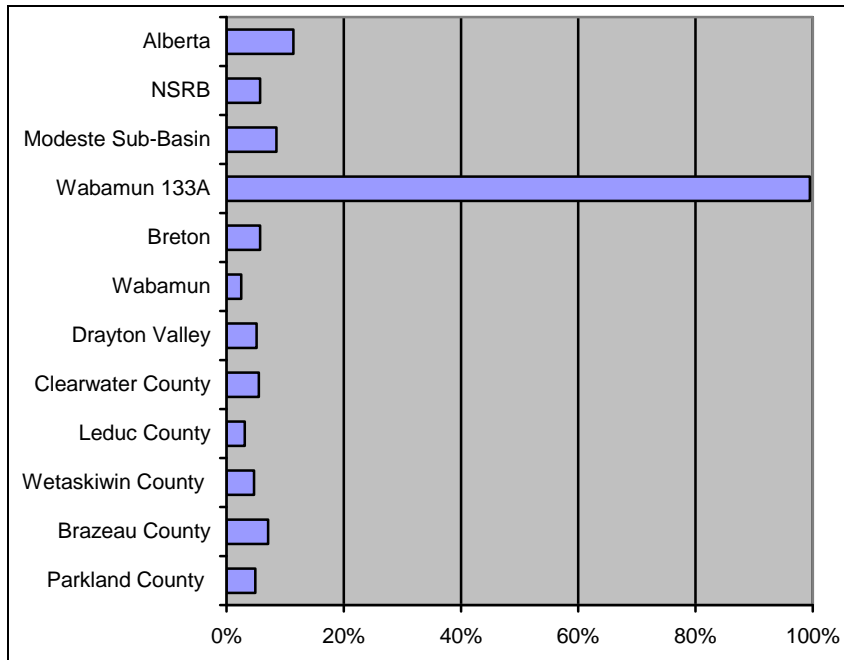
Figure 6-3: Age Composition of Communities in the Modeste Sub-Basin, 2006



6.3 Aboriginal Population

About 8.5% of the residents of the Modeste Sub-basin were Aboriginal and this is higher than the NSRB average (5.8%). There were about 2,700 Aboriginal people living in the sub-basin and 40% of these were living on the Wabamun 133A reserve. Figure 6-4 shows that, in general, communities in the sub-basin had lower percentages of Aboriginal residents than were found in either the NSRB or the overall Modeste Sub-basin.

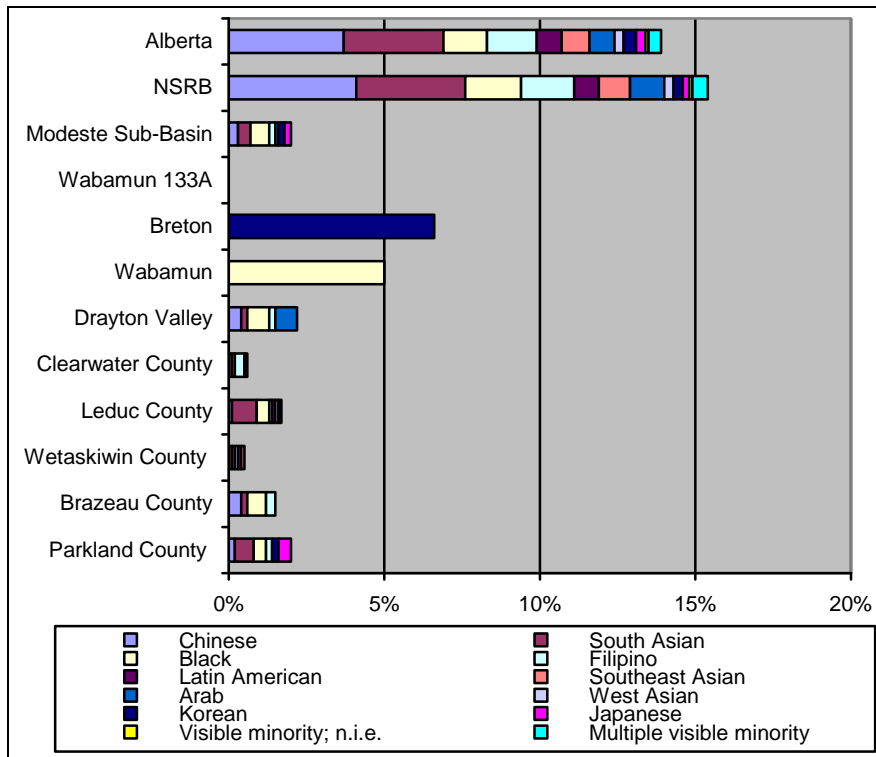
Figure 6-4: Aboriginal Population in the Modeste Sub-Basin, 2006



6.4 Ethnicity

About 2.0% of the population of the Modeste sub-basin consisted of visible minorities. This is well below the NSRB average of 15.5%. Figure 6-5 shows the percentage of visible minorities within each of the communities within the Modeste sub-basin. It shows that the highest percentages occurred in the villages of Breton (primarily Korean) and Wabamun (primarily Black). The population of Drayton Valley and the rural areas featured a mix of visible minorities.

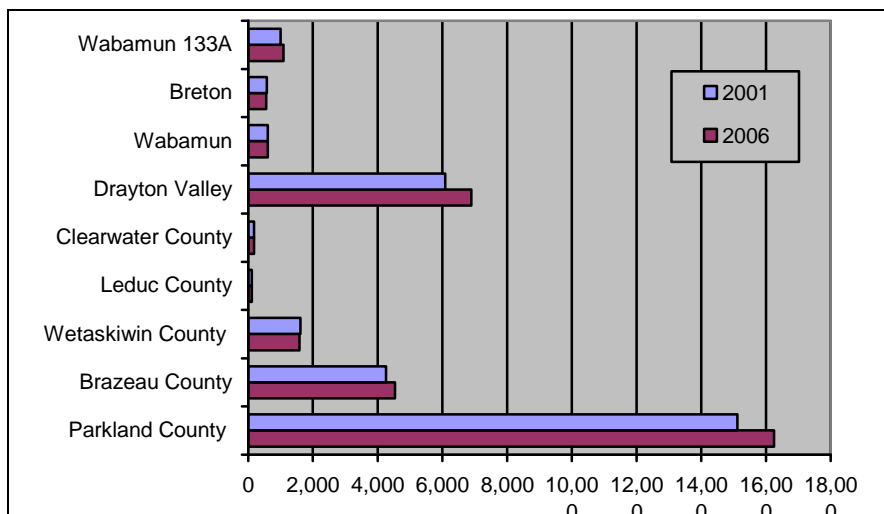
Figure 6-5: Visible Minorities in the Modeste Sub-Basin, 2006



6.5 Population Change

Between 2001 and 2006, the population of the Modeste Sub-basin increased by 2,440 people which represents an increase of 8.2%. This growth rate was slightly less than population growth rate for the NSRB (9.6%). Figure 6-6 shows that most of the population increases occurred in Parkland County and Drayton Valley. The populations of Wetaskiwin County, Breton and Wabamun did not change during this period. The population of the Wabamun 133A reserve increased by 9.0%. It should be noted that the population of the five summer villages grew by 17.2% between 2001 and 2006, and most of this increase occurred in the Summer Village of Seba Beach.

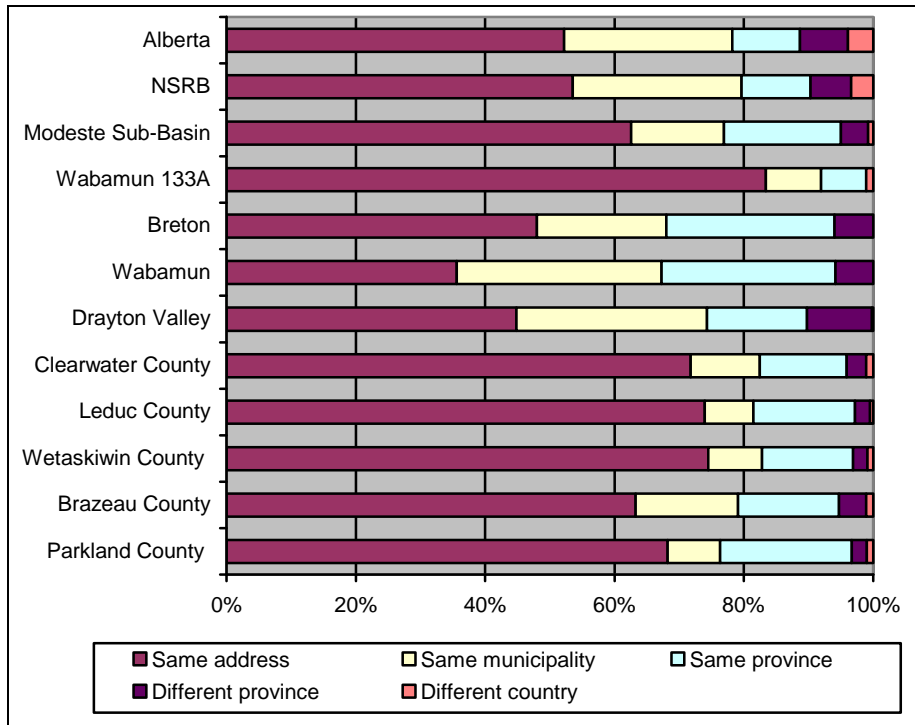
Figure 6-6: Population Change in the Modeste Sub-Basin, 2001-2006



One factor affecting population growth is migration from one area to another.

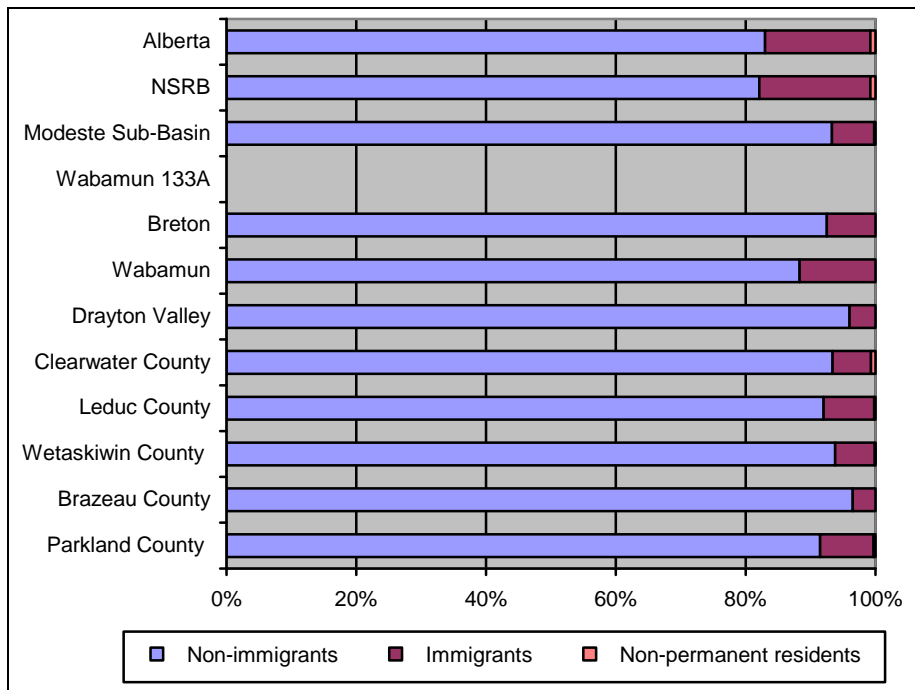
Figure 6-7 shows population mobility in the Modeste Sub-basin between 2001 and 2006. It shows that 62.6% of sub-basin residents resided at the same address for the 5-year period; this about 10 percentage points higher than the NSRB average (53.6%). Another 14.3% lived in the same census subdivision but changed addresses. A small percentage of sub-basin residents (0.8%) moved in from another country, 4.2% moved from another province, and 18.1% moved from a different municipality in Alberta. Residents of the Wabamun 133A reserve were the most likely to have lived at the same address for the period from 2001 to 2006, while residents of the Wabamun, Breton and Drayton Valley were the most mobile. The mobility profiles for Clearwater Leduc and Wetaskiwin counties were nearly identical, with between 72% and 75% of residents living at the same address for the five-year period.

Figure 6-7: Population Mobility in the Modeste Sub-Basin, 2001-2006



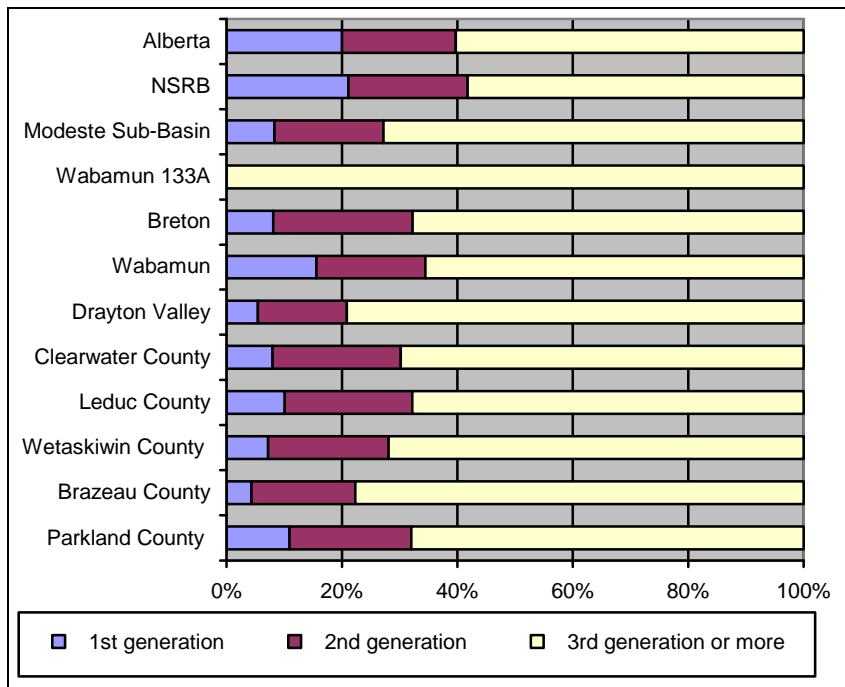
Immigration has also contributed to population growth. About 6.5% of sub-basin residents consisted of immigrants and this was well below the NSRB average of 17.1%. Overall, the percentage of immigrants ranged from 3.5% in Brazeau County and 4.0% in Drayton Valley to 11.6% in the Village of Wabamun.

Figure 6-8: Role of Immigration in the Modeste Sub-Basin, 2006



About 72.8% of people living in the Modeste sub-basin had lived in Canada for 3 or more generations, 18.9% had lived in Canada for 2 generations and 8.3% were first-generation Canadians. As shown in Figure 6-9 shows that the highest percentages of sub-basin residents who had lived in Canada for 3 or more generations were found on the Wabamun 133A reserve and in Drayton Valley and Brazeau County. The communities in the sub-basins with the highest percentage of the population that has lived in Canada for only 1 or 2 generations include the Village of Wabamun, and Parkland, Leduc and Clearwater counties.

Figure 6-9: Residency in Canada, Modeste Sub-Basin, 2006

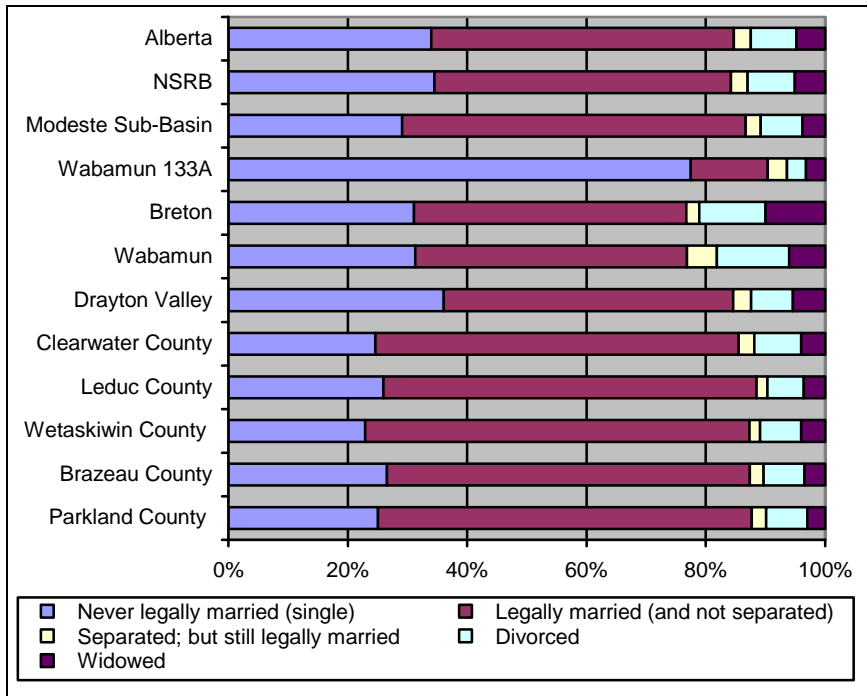


6.6 Marital Status

Married people account for 57.5% of the sub-basin population, while the balance consists of single people (29.1%), divorced people (7.0%), widowed people (3.8%) and people who are separated (2.5%). The sub-basin profile (

Figure 6-10) shows that it had higher percentages of married people than were found in the NSRB. In general, the rural areas (all five counties) had higher percentages of married people (ranging from 61% to 64%) while higher percentages of single people were found in Drayton Valley and the villages of Breton and Wabamun (31% to 36%). On the Wabamun 133A reserve 77.4% of the adult population had never been legally married.

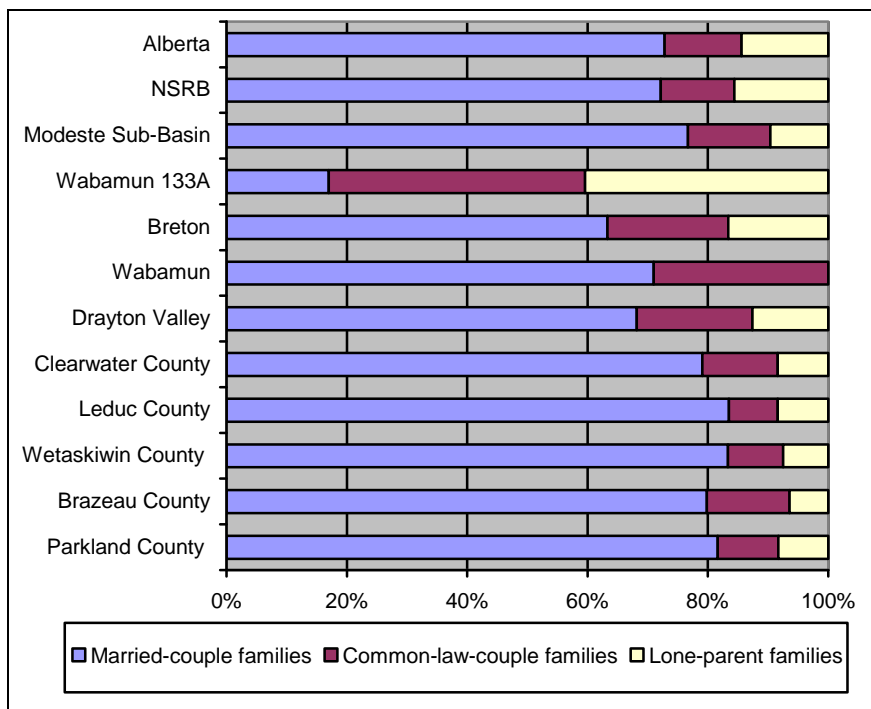
Figure 6-10: Marital Status in the Modeste Sub-Basin, 2006



6.7 Family Structure

Married couple families account for 77.6% of the 9,350 families in the Modeste Sub-basin. Lone parent families account for 9.6% of families, while common-law couples account for the balance (13.7%). Figure 6-11 shows that, when compared with the NSRB, sub-basin had a higher percentage of married couple families and less single parent families. The lowest percentage of married couple families was found on the Wabamun 133A reserve (only 17.0% were married couple families) and lower percentages of married couple families were found in Drayton Valley, Breton and Wabamun. The highest percentages of lone-parent families were found on the Wabamun 133A reserve and in Breton and Drayton Valley. There were reported to be no lone-parent families in Wabamun.

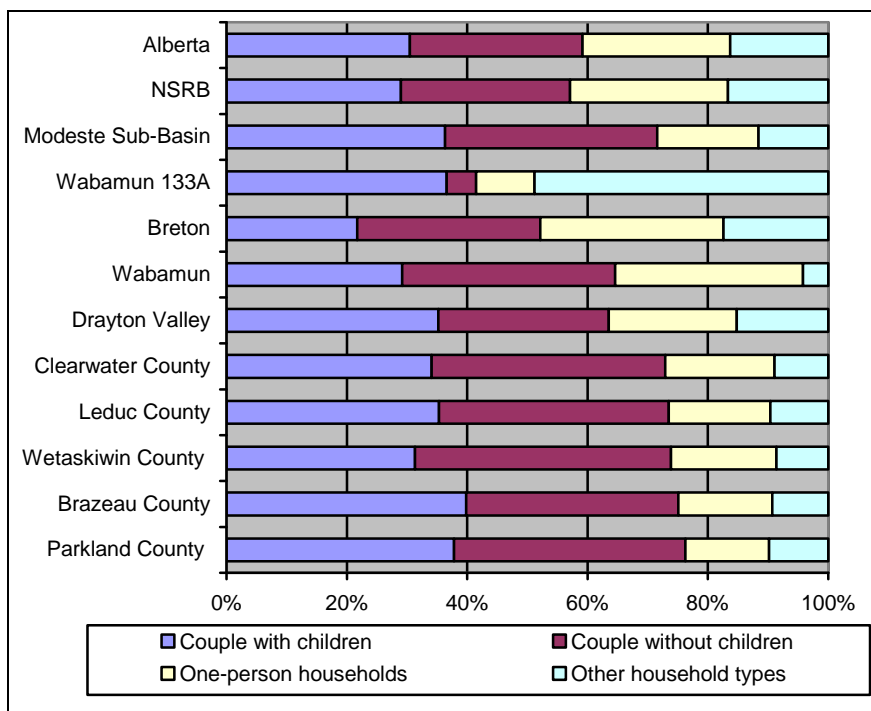
Figure 6-11: Family Structure in the Modeste Sub-Basin, 2006



6.8 Household Structure

Household structure differs from family structure because households can contain one or more families. Figure 6-12 shows that 36.3% of households consisted of a couple with children, 35.3% were couples with no children, 16.8% were single person households, and the balance (11.6%) consisted of other household types. Overall, the Modeste Sub-basin had a higher percentage of married couples with children than did the NSRB. Within the sub-basin, the lowest percentages of families with children were found in Breton and Wabamun, and these communities had higher percentages of one-person households. The majority of households on the Wabamun 133A reserve consisted on other household types.

Figure 6-12: Household Structure in the Modeste Sub-Basin, 2006



6.9 Housing

In 2006 there were about 11,320 housing units in the Modeste Sub-basin. Figure 6-13 shows the composition of housing in each of the communities within the sub-basin. Overall, single detached houses accounted for 86.4% of housing in the sub-basin, and represented more than 92% of housing in Parkland and Leduc counties and on the Wabamun 133A reserve. Drayton Valley had the widest mix of housing, without only 64.6% consisting of single detached houses. Apartments and semi-detached houses were found almost exclusively in Drayton Valley. Breton and Clearwater County reported relatively high percentages of other dwelling types.

Figure 6-13: Housing Characteristics in the Modeste Sub-Basin, 2006

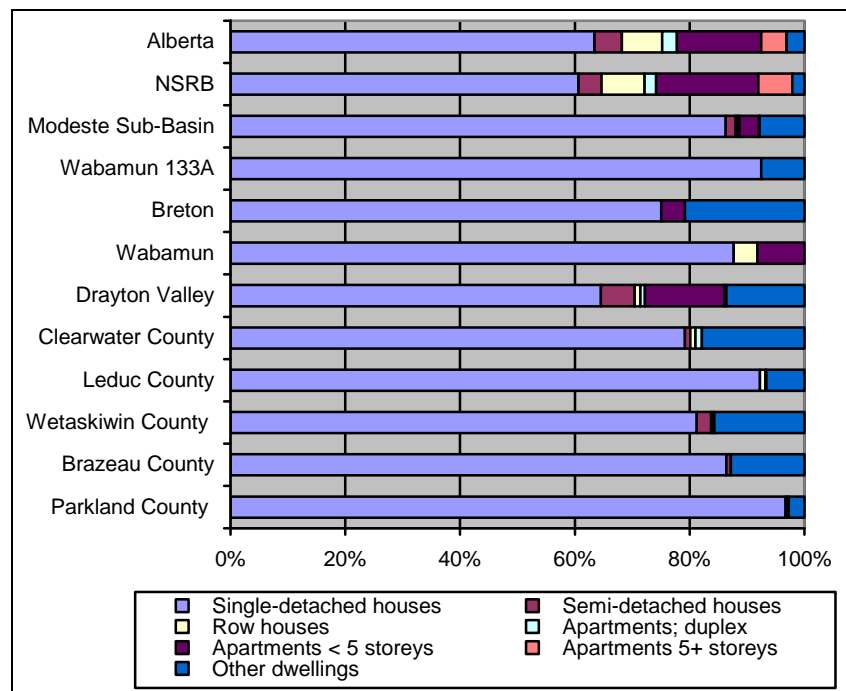


Figure 6-14 shows the reported value of housing in each of the communities within the Modeste Sub-basin as well as the percentage of housing stock in need of major repair. Overall, the average value of a house in the Modeste Sub-basin in 2005 was \$268,260, which was slightly higher than the NSRB average (\$254,828). The communities with the highest valued dwellings included Leduc and Parkland counties while the lowest values occurred in the villages of Breton and Wabamun, where the average values were in the ranges of \$109,200 to \$129,800. There is no information on the average value of dwellings on the Wabamun 133A reserve.

Overall, 9.6% of dwellings in the basin were in need of major repair and this was slightly higher than the NSRB average of 6.3%. Housing stock in the on the Wabamun 133A reserve was in the poorest condition, with 56.4% being in need of major repair. Relatively high percentages of housing in need of major repair were also reported in Wabamun (20.4%) and Breton (26.1%).

Figure 6-14: Value of Housing (2005) and Need for Major Repairs, Modeste Sub-Basin

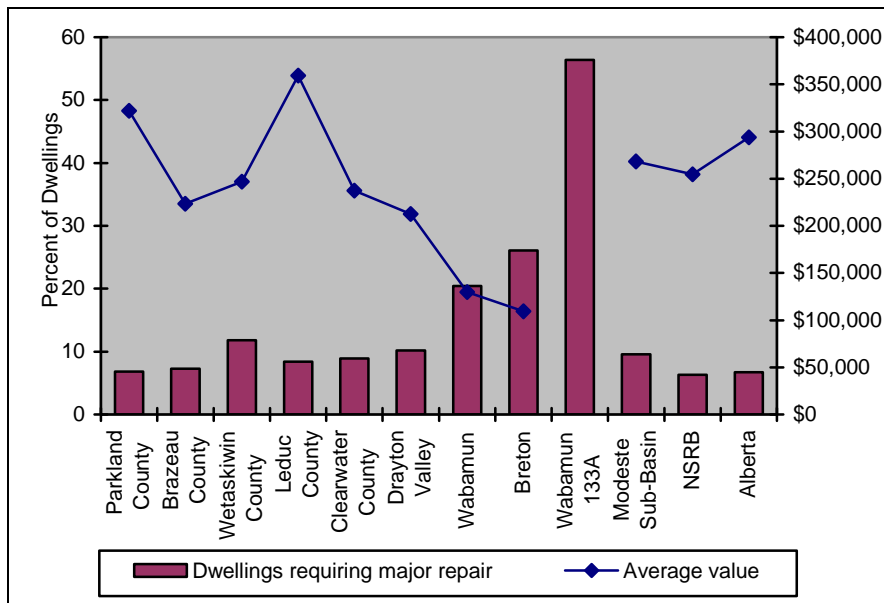
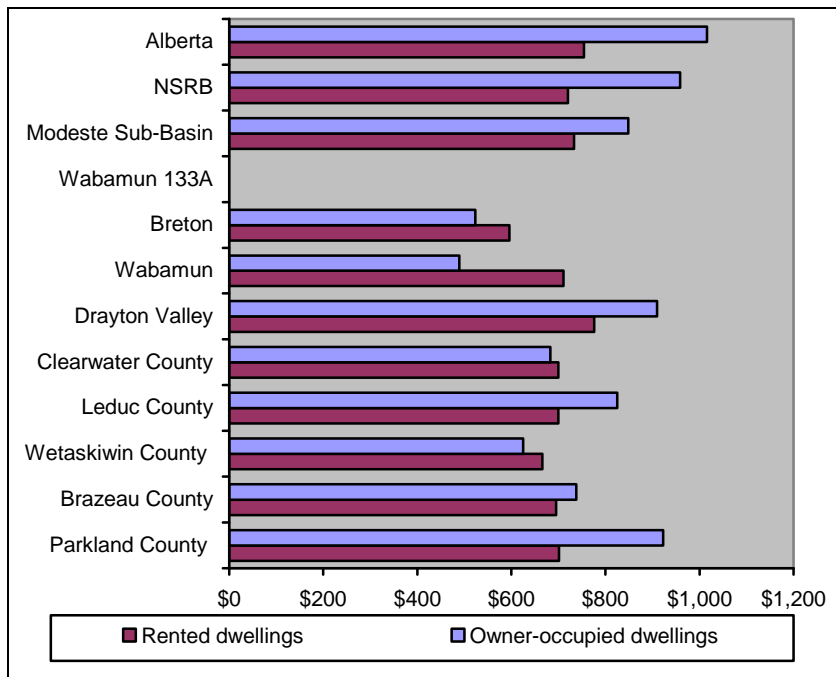


Figure 6-15 summarizes the average monthly costs of renting and owning dwellings in communities in the Modeste Sub-basin in 2005. These costs include rent/mortgage, electricity, heat and municipal services to operate a dwelling. Overall, rental costs averaged \$733 per month (compared to \$720 in the NSRB) while the average cost for owned dwellings was \$849 per month (compared to \$959 for the NRBS). The highest monthly housing costs were reported for Drayton Valley and Parkland County while the lowest monthly costs were reported in Breton and Wabamun. Monthly costs for rental accommodation were typically lower than for owned dwellings, except in Breton and Wabamun and Wetaskiwin and Clearwater counties.

Figure 6-15: Average Monthly Costs for Rental and Owned Dwellings, 2005



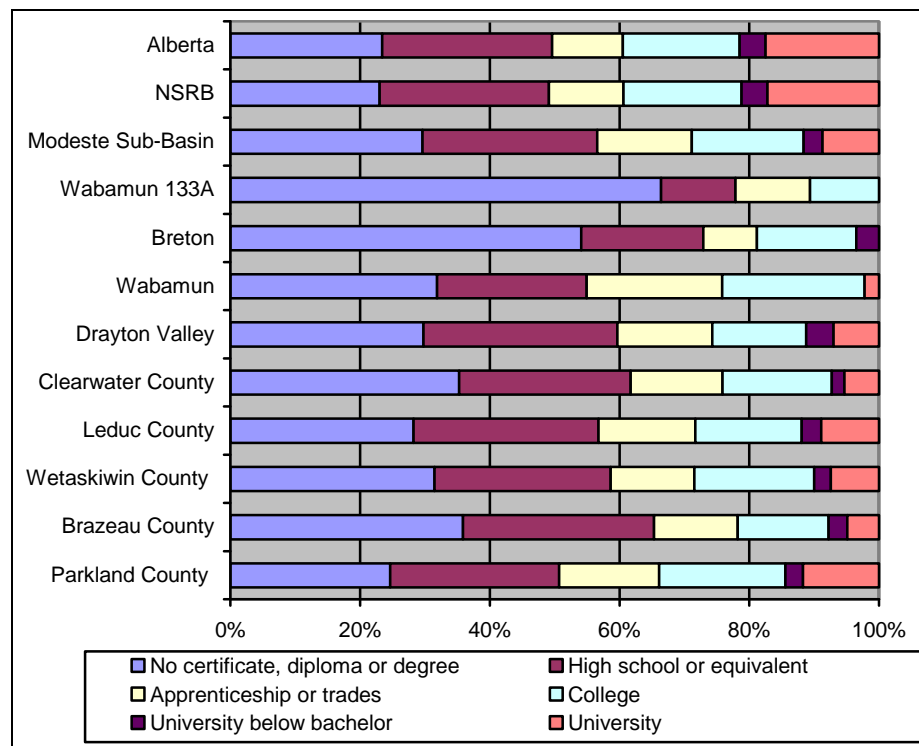
6.10 Education

Residents of the Modeste Sub-basin were slightly less educated than the NSRB average.

Figure 6-16 shows that 29.5% of sub-basin residents had not completed high school and this percentage was higher than for the NSRB (23.0%). The communities with the lowest levels of educational attainment, as measure in terms of the percentage who had not completed high school, include the Wabamun 133A reserve (64.9%), Breton (52.3%), Brazeau County (35.9%) and Clearwater County (35.2%). The lowest percentage of people who had not completed high school was found in Parkland County (24.9%) but even this was higher than the NSRB average.

About 14.5% of adult residents of the Modeste Sub-basin had completed an apprenticeship or trades certificate, and this was slightly higher than the NSRB average of 11.5%. Communities with relatively high percentages of residents with an apprenticeship or trades certificate included Wabamun (20.9%) and Parkland County (15.4%). Only 8.7% of sub-basin residents had completed their university education; this is less than half the NSRB average of 17.2%. The highest percentage of people with university educations were found in Parkland County (11.7%) and Leduc County (8.9%).

Figure 6-16: Educational Attainment, Modeste Sub-Basin

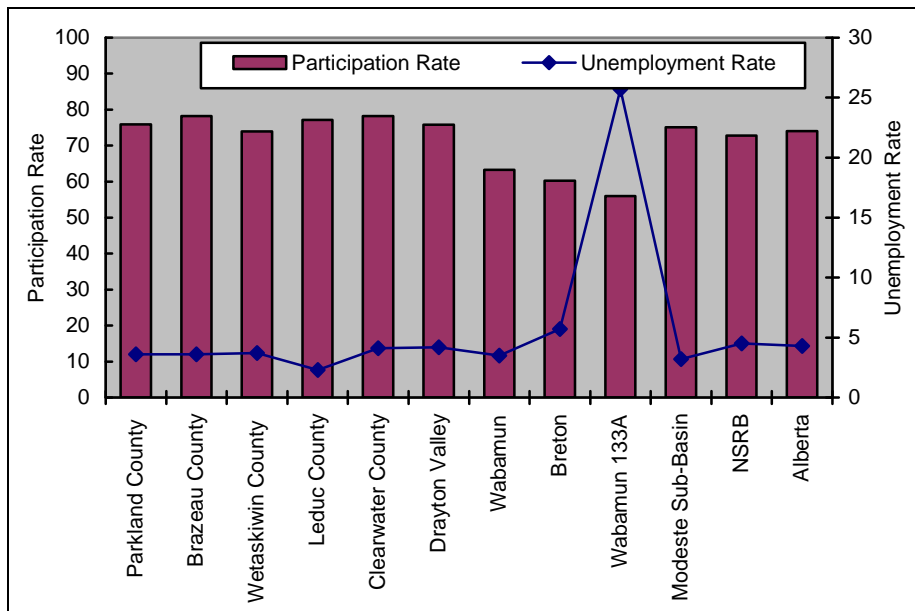


6.11 Labour Force Participation

Overall, 75.1% of the adult population in the Modeste Sub-basin was participating in the labour force, either working or actively seeking work. This rate was higher than for the NSRB (72.1%).

Figure 6-17 shows that labour force participation rates ranges from a high of 78.2% in Brazeau and Clearwater counties, but dropped to 63.3% in Wabamun, 60.2% in Breton and to 56.0% on the Wabamun 133A reserve.

Figure 6-17: Labour Force Participation and Unemployment Rates, 2006

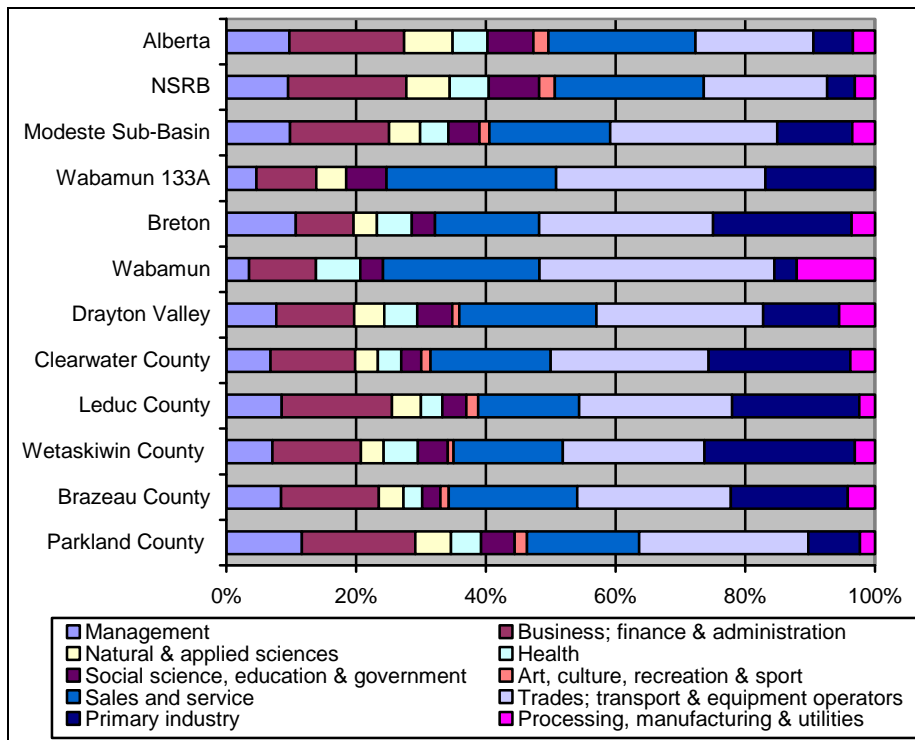


In 2006, the Modeste Sub-basin had an unemployment rate of 4.2%, which was slightly less than the NSRB average (4.5%). Unemployment rates were about 3.6% to 3.7% in the rural areas, although Leduc County had an unemployment rate of 2.3%. Unemployment rates in the communities were a little higher, ranging from 3.5% in Wabamun to 5.7% in Breton. However, 25.7% of the active labour force on the Wabamun 133A reserve was unemployed.

6.12 Employment by Occupation

Figure 6-18 shows employment by occupation for the Modeste Sub-basin. Overall, the sub-basin profile is similar to the NSRB profile with the exception that the sub-basin had a higher proportion of the adult population employed in primary industry and smaller proportions employed in occupations related to business, finance and administration; natural and applied sciences; health; social sciences, education and government; and art, culture and recreation.

Figure 6-18: Employment by Occupation, Modeste Sub-Basin, 2006



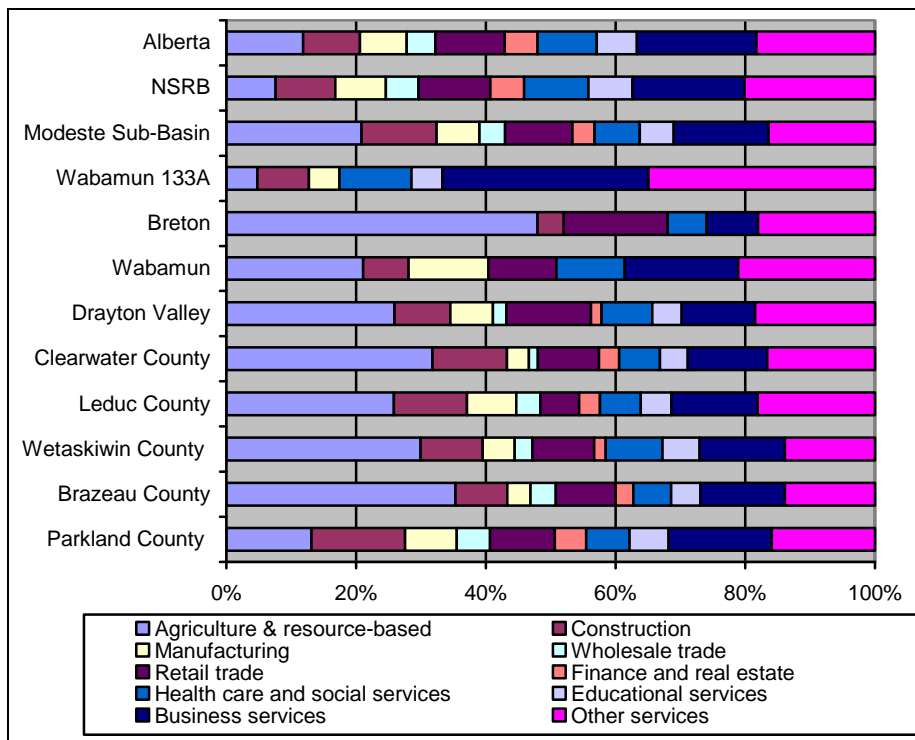
Within the sub-basin, the highest employment in primary industry occupations was reported in the rural areas, especially Clearwater and Wetaskiwin counties, but Breton also had high employment in primary industries. Employment in processing, manufacturing and utilities occupations accounted for 3.4% of employment in the sub-basin but increased to 12.5% of employment in Wabamun and this likely relates to employment related to the thermal power plants. Overall, 25.8% of the sub-basin population was employed in occupations related to the trades, transportation and equipment operation, but these occupations accounted for 44.0% of employment in Wabamun and 32.8% on the Wabamun 133A reserve. Another 18.7% of the sub-basin population was employed in sales and service occupations and this percentage was highest on the Wabamun 133A reserve (26.6%) and in Wabamun (25.0%). And, while 15.3% of the sub-basin population was employed in occupations related to business, finance and administration, the counties had higher percentages of people employed in these occupations than did any of the three communities.

6.13 Employment by Industry

Figure 6-19 shows employment in the Modeste sub-basin based on the industry of employment. Overall, 39.0% of the workforce was working in basic (goods-producing) industries, including agriculture and other resource-based industries, manufacturing and construction. This was much higher than the NSRB, where 24.6% of the workforce was employed in basic industries. Employment in the agriculture and resource-based industries accounted for 20.8% of the employment workforce, although this percentage reached 45.3% in Breton, and 35.4% in Brazeau County. Employment in manufacturing was relatively small (6.6% of total employment) but provided nearly twice this percentage in Wabamun (12.3%).

Non-basic industries accounted for 61.0% of employment in the Modeste Sub-basin. The non-basic industries that provided the greatest amounts of employment included other services (16.4%), business services (14.6%) and retail trade (10.4%). Within the sub-basin, the Wabamun 133A reserve reported the highest employment in other industries (34.4%) and in business services (31.1%). The highest participation in retail trade was reported in Breton (15.1%) and Drayton Valley (13.0%).

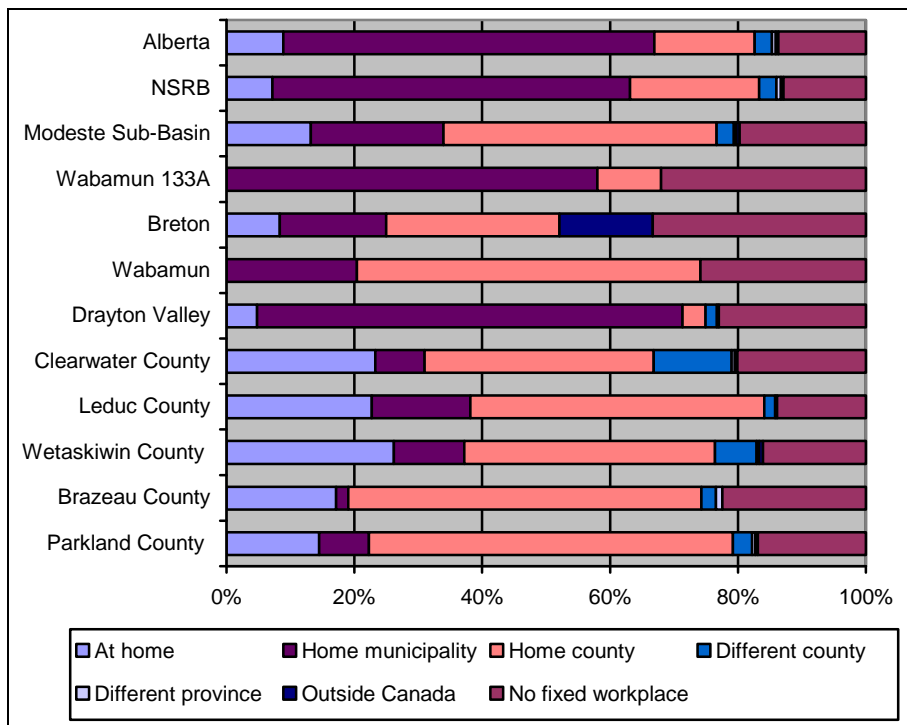
Figure 6-19: Employment by Industry, Modeste Sub-Basin, 2006



6.14 Location of Employment

Figure 6-20 shows where residents of the Modeste sub-basin actually worked. Overall, 13.2% worked at home and 20.7% worked at a usual place in their home municipality. Another 42.7% worked in their home county outside their local community, while 2.7% worked in another part of Alberta, 0.4% worked outside Alberta and 0.5% worked outside Canada. The balance (19.7%) had no fixed workplace. Compared to the NSRB, residents of the Modeste Sub-basin were more likely to work at home or in their home county, but less likely to work in their home municipality. This pattern is characteristic of a more rural population where people work on the farm or commute to a nearby community to work.

Figure 6-20: Location of Work, Modeste Sub-Basin, 2006

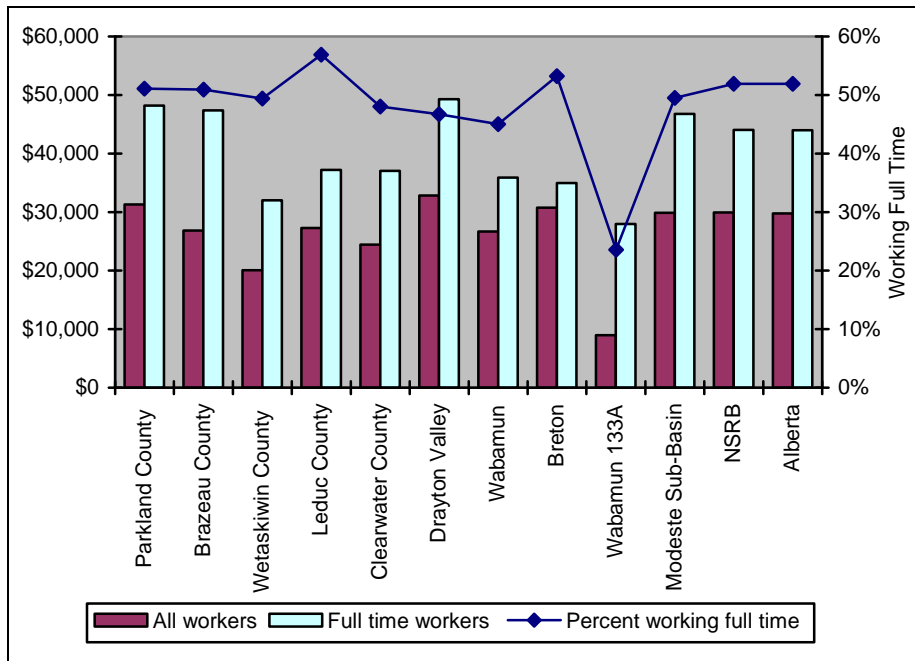


Nearly two-thirds of workers in Drayton Valley (66.3%) worked in their home community, but this percentage was substantially lower in Brazeau County (1.9%), Clearwater County (7.7%) and Parkland County (7.8%). The highest percentages of workers who commuted to another location within the same municipality occurred in Parkland County (56.9%), Brazeau County (55.4%) and Wabamun (53.7%). About 12.2% of workers in Clearwater County reported working in another county and this was much higher than elsewhere in the sub-basin. The greatest percentages of workers who had no fixed workplace occurred in Breton (32.0%) and the Wabamun 133A reserve (30.8%).

6.15 Employment Earnings

Residents of the Modeste Sub-basin reported median earnings of \$29,880 in 2005; this was slightly above the NSRB average of \$30,068. The highest median earnings were reported in Drayton Valley (\$32,798) but workers on the Wabamun 133A reserve reported median earnings of only \$8,992. Residents of Wetaskiwin County also reported relatively low median incomes (\$20,096).

Figure 6-21: Median Earnings and Full-Time Employment, 2006

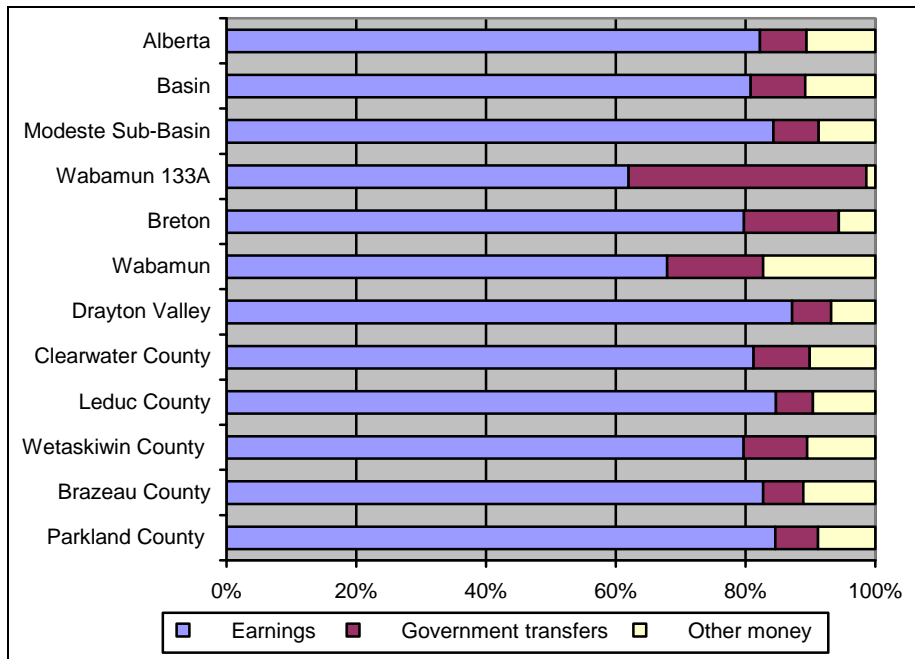


Within the sub-basin 49.5% of workers reported being employed full-time, year round; this compares to 51.9% of workers in the NSRB. Within the Modest Sub-basin the percentage of workers with full-time employment ranged from 56.9% in Leduc County to only 23.6% on the Wabamun 133A reserve. People who did work full-time, year round, reported median earnings of \$46,790, which was high than the NSRB average (\$44,233). The highest median incomes from full-time employment were reported in Drayton Valley (\$49,255), Parkland County (\$48,194) and Brazeau County (\$47,361). Workers on the Wabamun 133A reserve reported median earnings of \$27,968 from full time employment; this is less than the median earnings reported by all workers in the sub-basin.

6.16 Other Income Sources

Earnings accounted for 84.2% of income for residents of the Modeste Sub-basin; this is higher than for the NSRB (81.4%). The remaining income came from government transfers (7.0%) and other sources (8.7%). Figure 6-22 shows the reliance on transfer payments and other income for individual communities within the sub-basin.

Figure 6-22: Reliance on Transfer Payments and Other Income, 2005



It shows that earnings accounted for more than 80% of income in most communities, with the exception of Wabamun (68.4%) and the Wabamun 133 reserve (62.1%). Residents of the Wabamun 133A reserve were highly reliant on government transfers (36.7% of income) while residents of Wabamun were more reliant on incomes from other sources (17.4%).

6.17 Family and Individual Income

In 2005 families in the Modeste Sub-basin reported median incomes averaging \$78,168 (or \$66,085 after tax); these incomes are higher than the NSRB average of \$73,823 (or \$63,361 after tax). Variations in median family incomes within the sub-basin are shown in Figure 6-23. The highest median family incomes were reported in Drayton Valley (\$83,375) and Parkland County (\$81,904). Median family incomes in Wabamun and Breton were lower: \$59,298 and \$58,021, respectively. However, the lowest median family incomes were reported on the Wabamun 133A reserve (\$27,776).

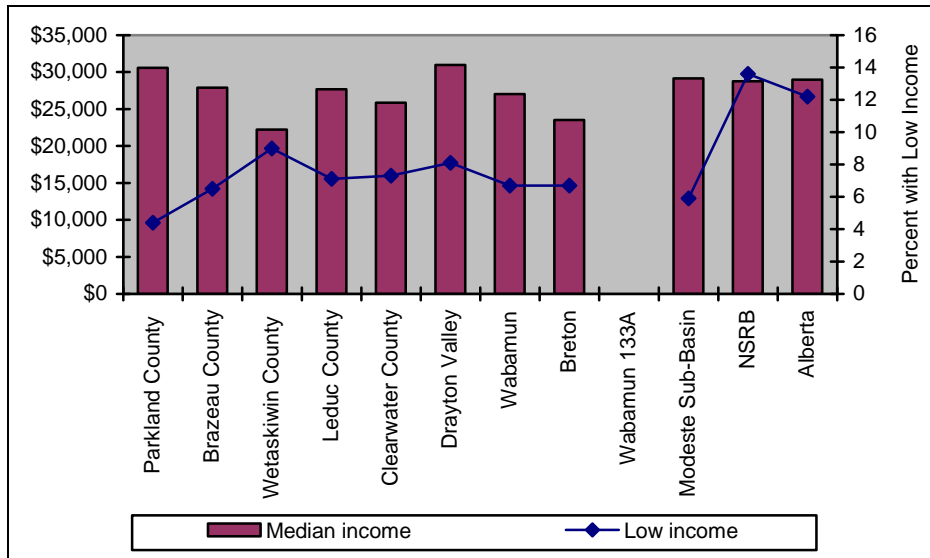
Figure 6-23: Median Family Income, Before and After Tax, 2005



Median incomes in 2005 for persons in private households in the Modeste Sub-basin averaged \$29,167; this is slightly higher than the NSRB average (\$28,898). Overall, 5.9% of residents of the Modeste Sub-basin were considered to have low incomes (before tax), and this is much less than the NSRB average (13.6%).

Figure 6-24 summarizes median incomes and the incidence of low incomes for communities in the sub-basin. Median personal incomes ranged from \$30,973 in Drayton Valley to \$22,206 in Wetaskiwin County, although no data are available Wabamun 133A reserve. The incidence of people with low incomes ranged from 4.4% in Parkland County to 9.0% in Wetaskiwin County, although 8.1% of people in Drayton Valley were considered to have low incomes.

Figure 6-24: Median Personal Income and Incidence of Low Income, 2005

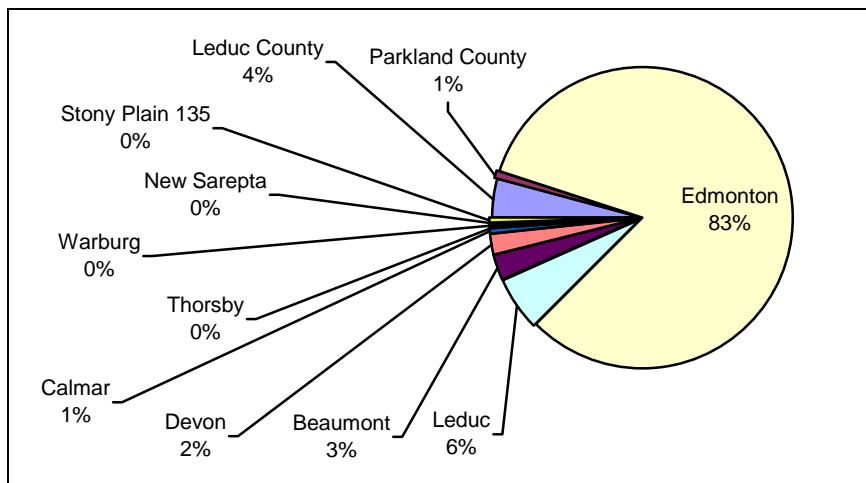


7.0 STRAWBERRY SUB-BASIN

7.1 Population

In 2006, the Strawberry Sub-basin had a population of about 302,909 people which represents about 26.3.8% of the population of the entire NSRB. Figure 7-1 shows that the majority of the population (82.5%) consists of residents of the City of Edmonton. About 5.1% lived in rural areas (counties), primarily Leduc County (4.1%) and Parkland County (1.0%), although small number of people also lived in Wetaskiwin, Brazeau and Camrose counties. Another 12.0% lived in one of five urban communities in the sub-basin. These include the City of Leduc (5.6%), the towns of Beaumont (3.0%), Devon (2.1%) and Calmar (0.6%), and the villages of Thorsby (0.3%), Warburg (0.2%) and New Sarepta (0.1%). A small number of residents of St. Albert also live in the Strawberry Sub-basin.

Figure 7-1: Population Distribution in the Strawberry Sub-Basin, 2006



There is one reserve in the Strawberry Sub-basin - the Stony Plain 135 reserve – and it accounted for 0.5% of the sub-basin population in 2006.

7.2 Age Characteristics

In terms of age, residents of the Strawberry Sub-basin were very similar to the overall population of the NSRB. Figure 7-2 shows that, the Strawberry Sub-basin had slightly lower percentages of children under 15 years of age and higher percentages of people aged 20 to 34 years of age. The sub-basin age profile for people over the age of 34 was nearly identical to the NSRB profile.

Figure 7-2: Age Composition of the Strawberry Sub-Basin Population, 2006

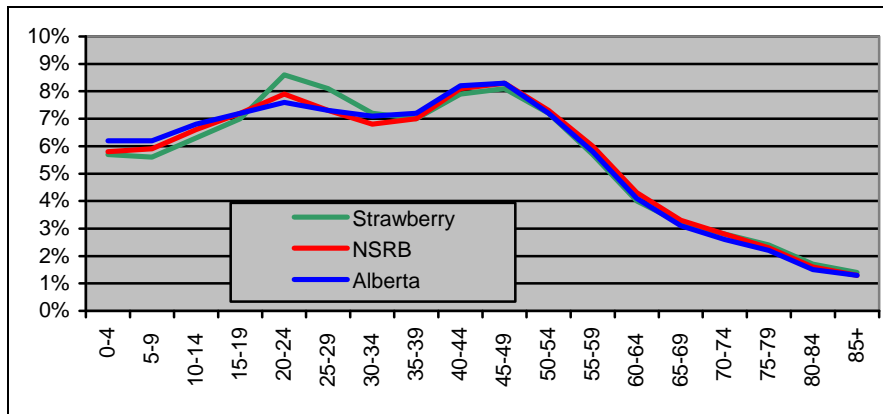
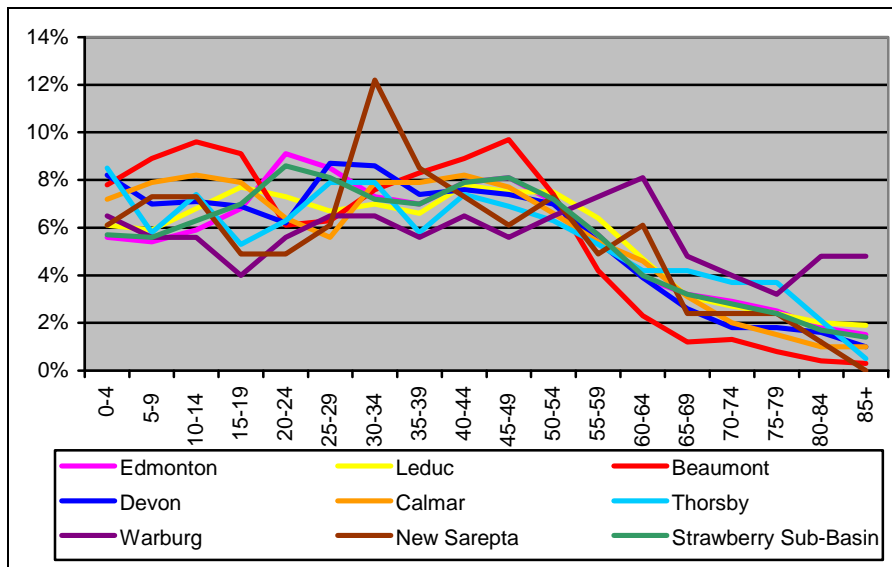


Figure 7-3 shows the age distributions for the urban communities within the Strawberry Sub-basin. It shows that the age profile for Edmonton was nearly identical to the sub-basin profile, with the exception that Edmonton had a slightly higher percentage of people aged 20 to 29 and a smaller percentage of children aged 10 to 19. The City of Leduc features higher percentages of people under the age of 20, but much fewer people aged 20 to 29 years. Leduc has a higher percentage of people aged 50 to 64 years. Beaumont is a very young community with much higher percentages of people under 20 years of age and people aged 35 to 49 years. It has a relatively small percentage of young adults (20 to 34 years) and people over the age of 54 years. Devon is slightly older than Beaumont, with higher percentages of people under 15 years of age and more people aged 30 to 39 years. However, Devon has relatively few young adults (20 to 24 years) and lower percentages of people over the age of 65 years.

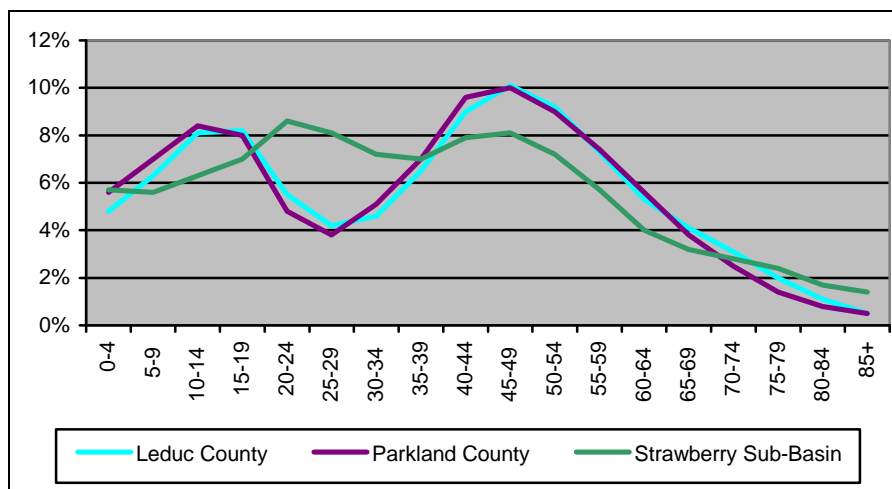
Figure 7-3: Age Composition of Urban Communities in the Strawberry Sub-Basin, 2006



Calmar also has relatively higher numbers of young people (under 20 years) and people aged 30 to 45 years, but has very few people in the 20 to 29 years age group and smaller percentages of people over the age of 69. Thorsby has a mix of very young people (under 5 years) and their parents (30 to 34 years) and people over the age of 64. Warburg has a fairly old population with much higher percentages of people over the age of 54 years. New Sarepta is a much younger community with higher percentages of children aged 5 to 14 and has the highest percentage of people aged 30 to 34 in the sub-basin.

Figure 7-4 shows the age profiles for the rural population in the Strawberry Sub-basin. The age profiles for both Leduc County and Parkland County are nearly identical, featuring higher percentages of people aged 5 to 19 years, lower percentages of people aged 20 to 34 years, and higher percentages of people aged 40 to 69 years.

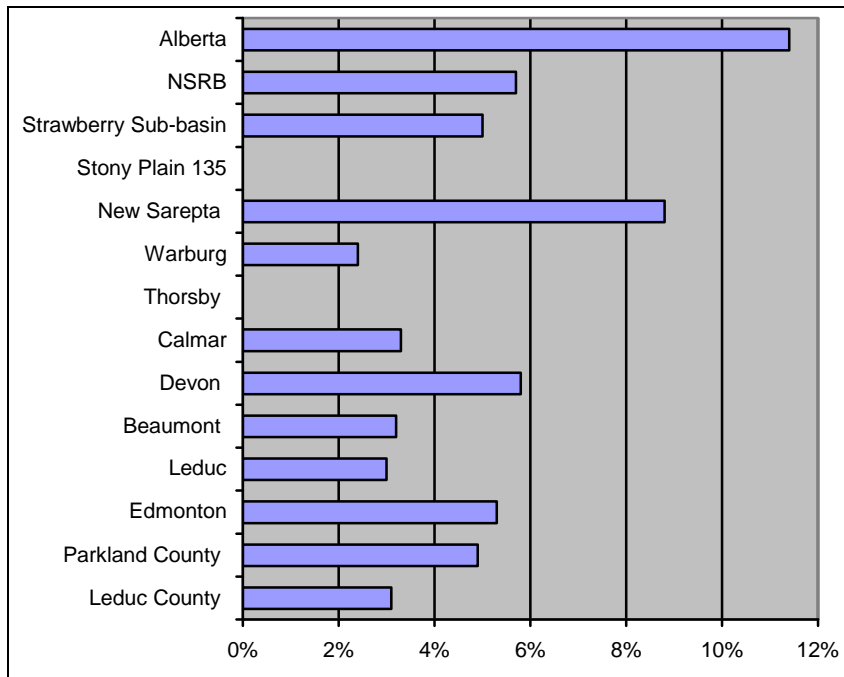
Figure 7-4: Age Composition of Rural Communities in the Strawberry Sub-Basin, 2006



7.3 Aboriginal Population

About 5.0% of the residents of the Strawberry Sub-basin were Aboriginal and this is slightly lower than the NSRB average (5.8%). There were about 14,850 Aboriginal people living in the sub-basin, although this doesn't include the 1,420 residents of the Stony Plain 135 reserve. Figure 7-5 shows that New Sarepta had the highest percentage of Aboriginal people living off reserves (8.8%), compared to 5.3% in the City of Edmonton. Devon also had a relatively high percentage of Aboriginal people.

Figure 7-5: Aboriginal Population in the Strawberry Sub-Basin, 2006

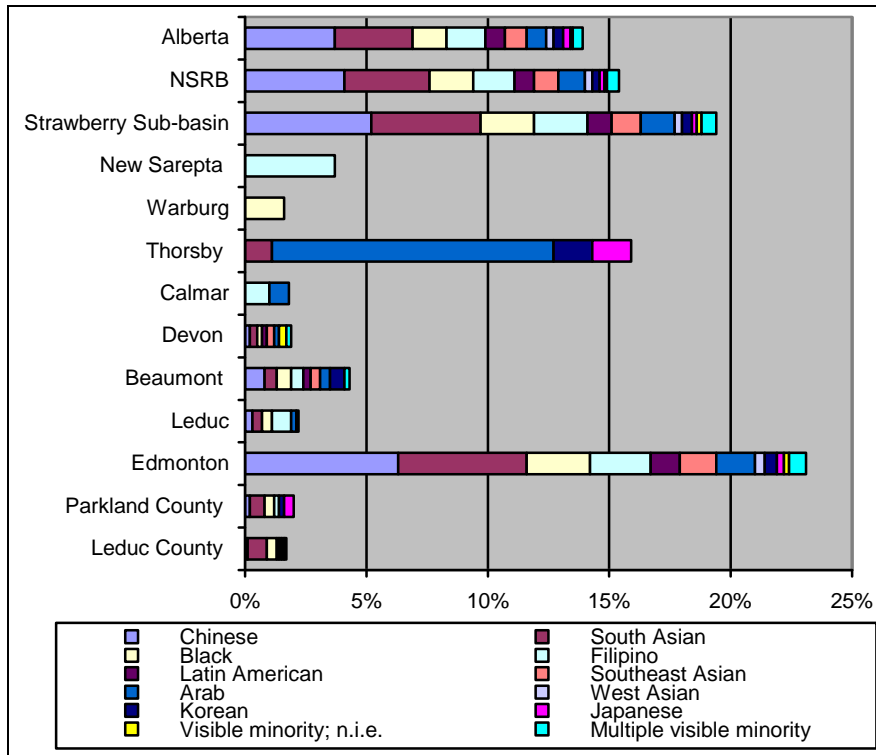


7.4 Ethnicity

About 19.4% of the population of the Strawberry sub-basin consisted of visible minorities. This is much higher than the NSRB average of 15.5% and reflects the high percentages of visible minorities living in Edmonton.

Figure 7-6 shows that 22.9% of the population of Edmonton consisted of visible minorities, primarily Chinese, South Asian, Blacks and Filipino. In most other communities, visible minorities accounted for less than 5% of the population. The only exception was Thorsby where visible minorities, primarily Arabs, represented 15.9% of the population. The information shows that in New Sarepta the visible minorities were primarily Filipino while, in Warburg, Blacks were the primary visible minority.

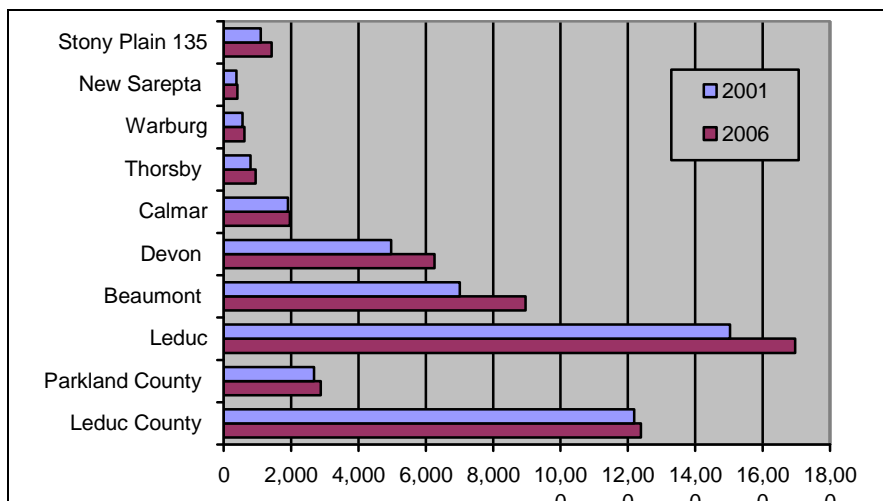
Figure 7-6: Visible Minorities in the Strawberry Sub-Basin, 2006



7.5 Population Change

Between 2001 and 2006, the population of the Strawberry Sub-basin increased by 28,190 people which represents an increase of 10.3%. This growth rate was higher than the population growth rate for the NSRB (9.6%). Population growth in Edmonton, which had a growth rate of 9.6%, accounted for 78% of the total population change in the sub-basin. Figure 7-7 shows that the population of the other urban and rural communities in the sub-basin also increased between 2001 and 2006, with the largest increases occurring in Beaumont and Leduc. The population increases in the other areas was relatively small. The highest growth rates occurred on the Stony Plain 135 reserve (28.9%) followed by Beaumont (27.9%) and Devon (25.9%). The population of Leduc increased by 12.9%. Calmar had the lowest population growth rate (3.0%).

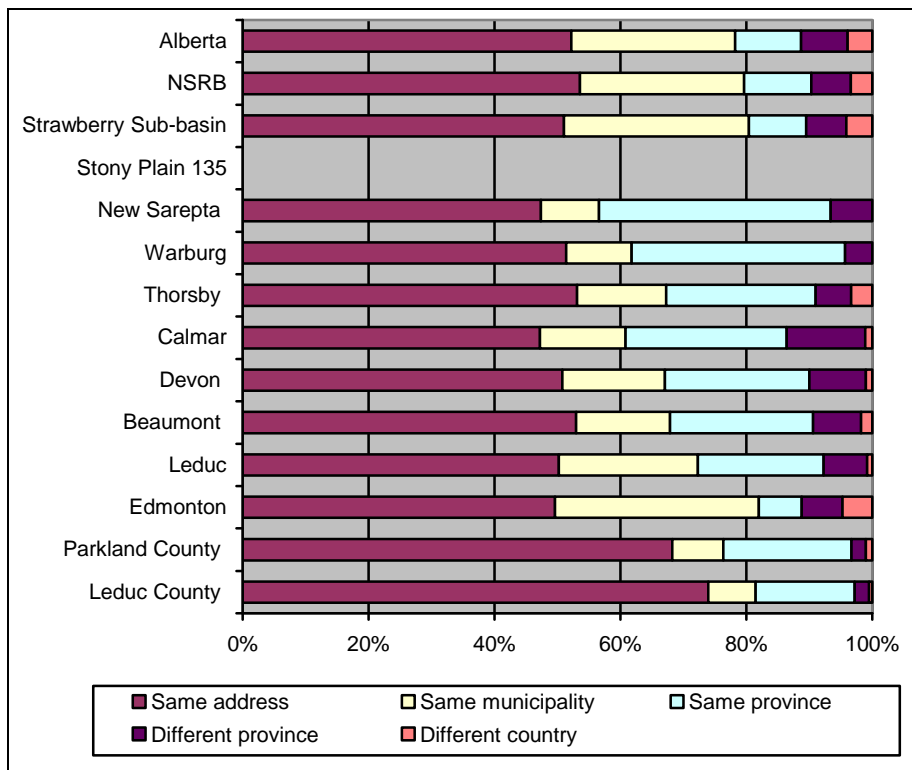
Figure 7-7: Population Change in the Strawberry Sub-Basin, 2001-2006



One factor affecting population growth is migration from one area to another.

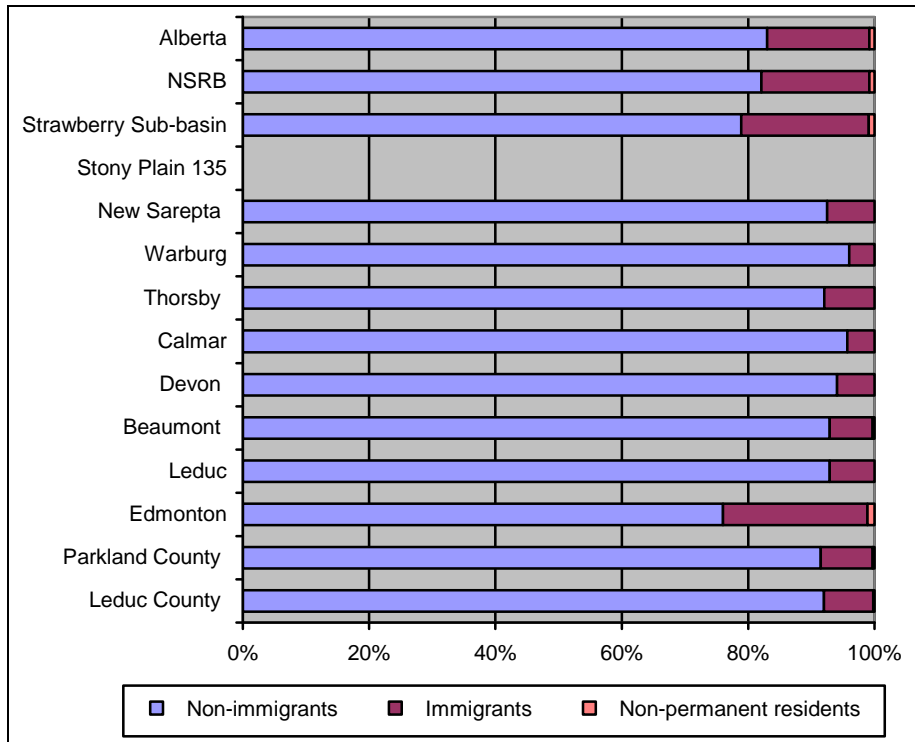
Figure 7-8 shows population mobility in the Strawberry Sub-basin between 2001 and 2006. It shows that 51.0% of sub-basin residents resided at the same address for the 5-year period; this about slightly less than the NSRB average (53.6%). Another 29.4% lived in the same census subdivision but changed addresses. A relatively high percentage of sub-basin residents (4.1%) moved in from another country, 6.4% moved from another province, and 9.1% moved from a different municipality in Alberta. Residents of Parkland and Leduc counties were the most likely to have lived at the same address for the period from 2001 to 2006. The percentages of people living at the same address in the urban areas were quite similar, but there were some differences in terms of movement patterns. Edmonton had the highest percentages of people who had lived in a different country in 2001, or who had changed addresses within the same community. New Sarepta and Warburg had the highest percentages of people who had moved into the communities from a different part of the province. Calmar and Devon had the highest percentages of people who had moved into those communities from another province.

Figure 7-8: Population Mobility in the Strawberry Sub-Basin, 2001-2006



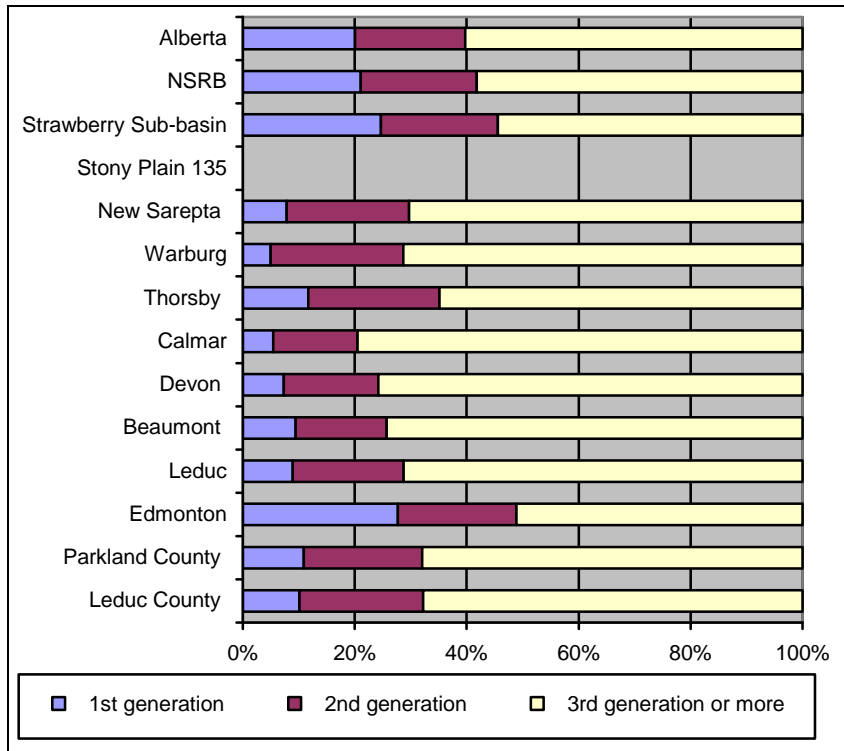
Immigration has also contributed to population growth. About 20.2% of sub-basin residents consisted of immigrants and this was higher than the NSRB average of 17.1%. Edmonton had the highest percentages of immigrants (22.9%). Elsewhere, immigrants accounted for no more than 8.2% of the population. The percentage of immigrants ranged from 4.0% in Warburg and 4.3% in Calmar to 8.2% in Parkland County.

Figure 7-9: Role of Immigration in the Strawberry Sub-Basin, 2006



About 54.4% of people living in the Strawberry sub-basin had lived in Canada for 3 or more generations, 20.9% had lived in Canada for 2 generations and 24.7% were first-generation Canadians. As shown in Figure 7-10, Edmonton had the highest percentages of first generation Canadians (27.7%); in no other community did first-generation Canadians account for more than 11.7% of the population. The communities with the highest percentages of people who had lived in Canada for 3 or more generations include Calmar (78.5%), Devon (75.8%) and Beaumont (74.3%).

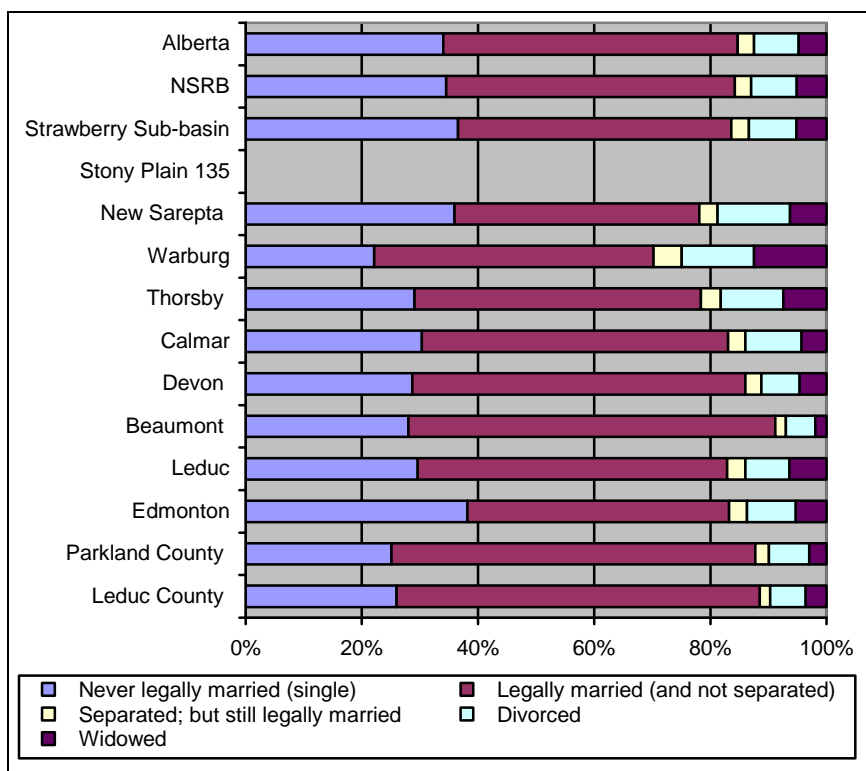
Figure 7-10: Residency in Canada, Strawberry Sub-Basin, 2006



7.6 Marital Status

Married people account for 47.1% of the sub-basin population, while the balance consists of single people (36.6%), divorced people (8.2%), widowed people (5.2%) and people who are separated (3.0%). The sub-basin profile (Figure 7-11) was very similar to the NSRB profile, although the sub-basin had a slightly higher percentage of single people. The two rural areas had much higher percentages of married people (about 62.6%) than most urban areas. The highest percentages of single people were found in Edmonton (38.2%) and New Sarepta (35.4%). Elsewhere, single people accounted for less than 30% of the population. Warburg had much higher percentages of widowed people (12.7%) than all other communities.

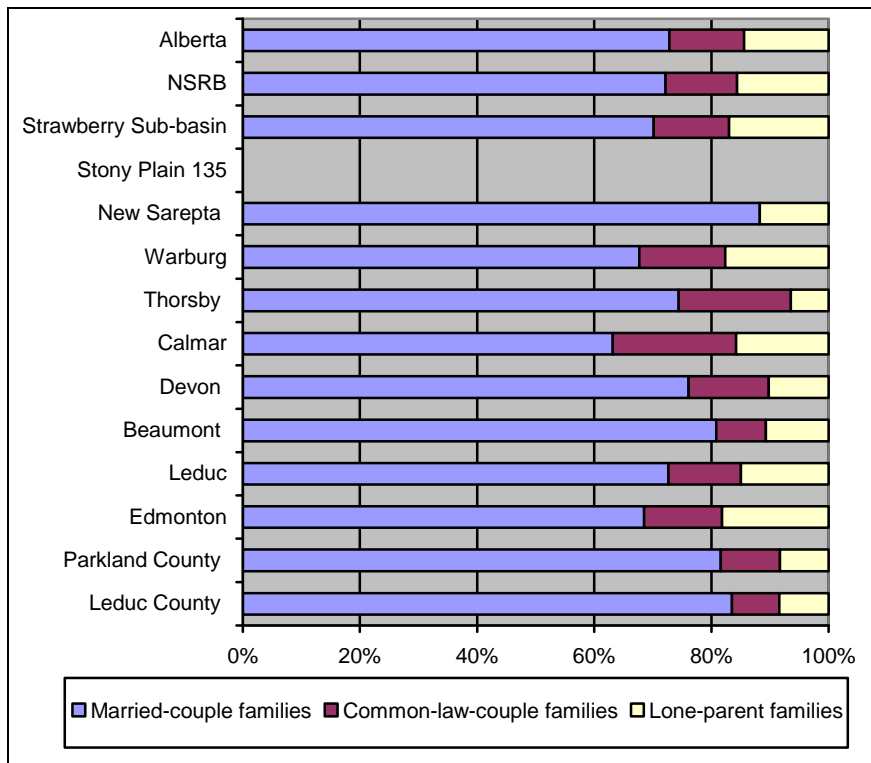
Figure 7-11: Marital Status in the Strawberry Sub-Basin, 2006



7.7 Family Structure

Married couple families account for 70.2% of the 84,765 families in the Strawberry Sub-basin. Lone parent families account for 17.0% of families, while common-law couples account for the balance (12.9%). Figure 7-12 shows that, when compared with the NSRB, the sub-basin had a slightly smaller percentage of married couple families and more single parent families. The lowest percentage of married couple families was found in Calmar (63.2%), Warburg (67.6%) and Edmonton (68.5%). These three communities also had the highest percentages of single-parent families. The highest percentages of common-law couple families were found in Calmar (21.1%) and Thorsby (18.8%).

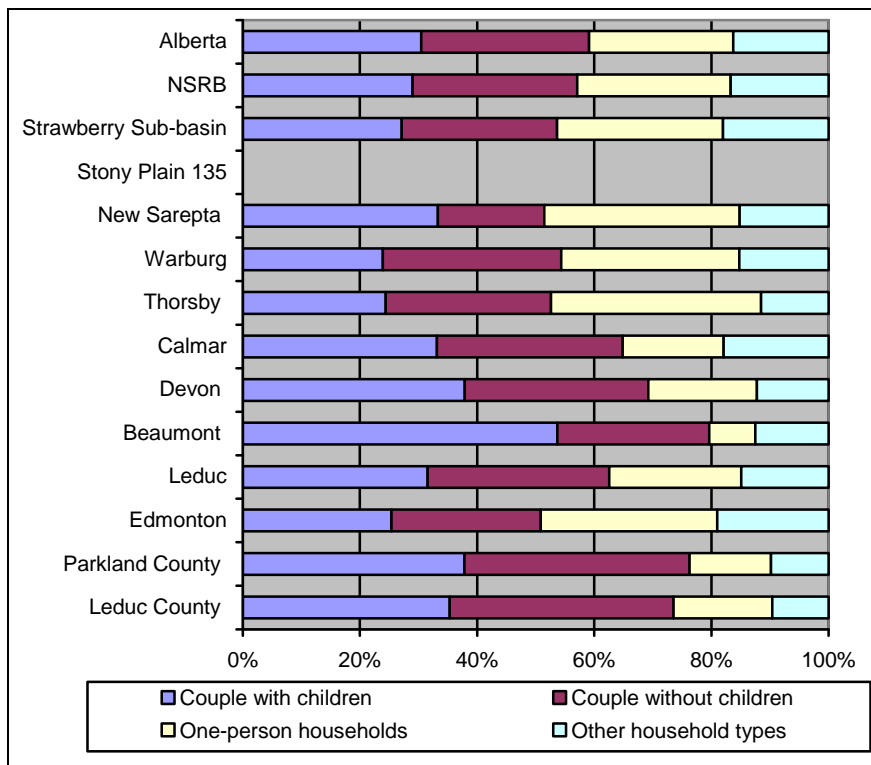
Figure 7-12: Family Structure in the Strawberry Sub-Basin, 2006



7.8 Household Structure

Household structure differs from family structure because households can contain one or more families. Figure 7-13 shows that 27.1% of households consisted of a couple with children, 26.5% were couples with no children, 28.3% were single person households, and the balance (18.0%) consisted of other household types. Overall, the Strawberry Sub-basin had a slightly smaller percentage of married couples with children than did the NSRB, and a higher percentage of one-person households. Within the sub-basin, the lowest percentages of families with children were found in Edmonton (25.4%), Warburg (24.4%) and Thorsby (23.9%). Communities with the highest percentages of one-person households included New Sarepta (33.3%), Thorsby (35.9%), Warburg (30.4%) and Edmonton (30.1%). The rural communities had the highest percentages of couples without children: 38.2% in Leduc County and 38.4% in Parkland County.

Figure 7-13: Household Structure in the Strawberry Sub-Basin, 2006



7.9 Housing

In 2006 there were about 120,530 housing units in the Strawberry Sub-basin. Figure 7-14 shows the composition of housing in each of the communities within the sub-basin. Overall, single detached houses accounted for 54.9% of housing in the sub-basin, but this reflects the relatively high percentage of Edmonton residents who live in apartments and others types of housing units. Elsewhere in the sub-basin, single attached houses accounted for at least 67% of housing stock and accounted for more than 90% of housing in Beaumont, Leduc County and Parkland County.

Figure 7-14: Housing Characteristics in the Strawberry Sub-Basin, 2006

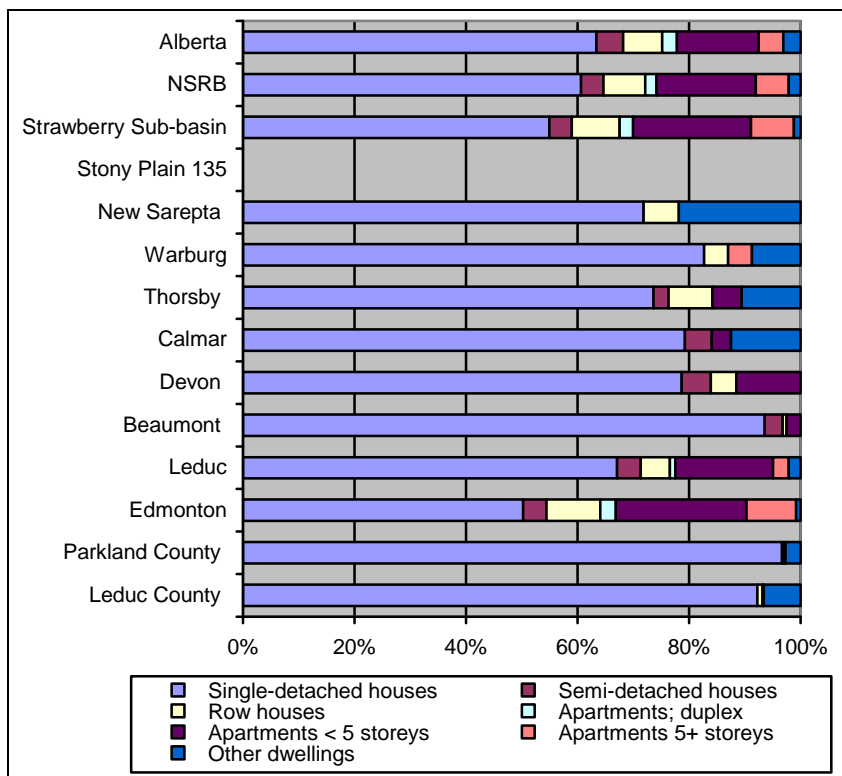


Figure 7-15 shows the reported value of housing in each of the communities within the Strawberry Sub-basin as well as the percentage of housing stock in need of major repair. Overall, the average value of a house in the Strawberry Sub-basin in 2005 was \$257,180, which was slightly higher than the NSRB average (\$254,828). The communities with the highest valued dwellings included Leduc and Parkland counties while the lowest values occurred in Thorsby, Warburg and New Sarepta. The average value of housing in Edmonton was \$255,525.

Overall, 6.0% of dwellings in the basin were in need of major repair and this was slightly lower than the NSRB average of 6.3%. Housing stock in Calmar and Warburg was in the poorest condition, with 11.0% and 8.7%, respectively, being in need of major repair.

Figure 7-15: Value of Housing (2005) and Need for Major Repairs, Strawberry Sub-Basin

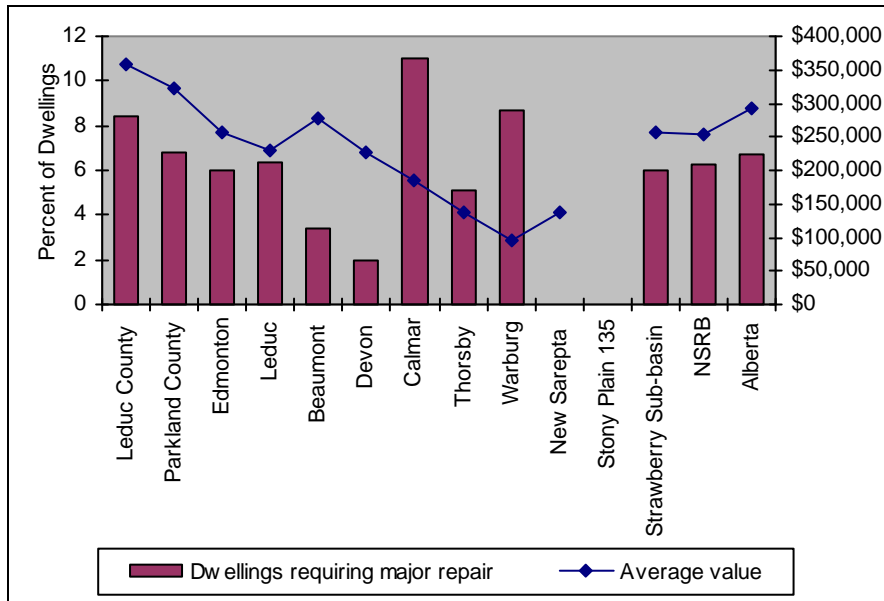
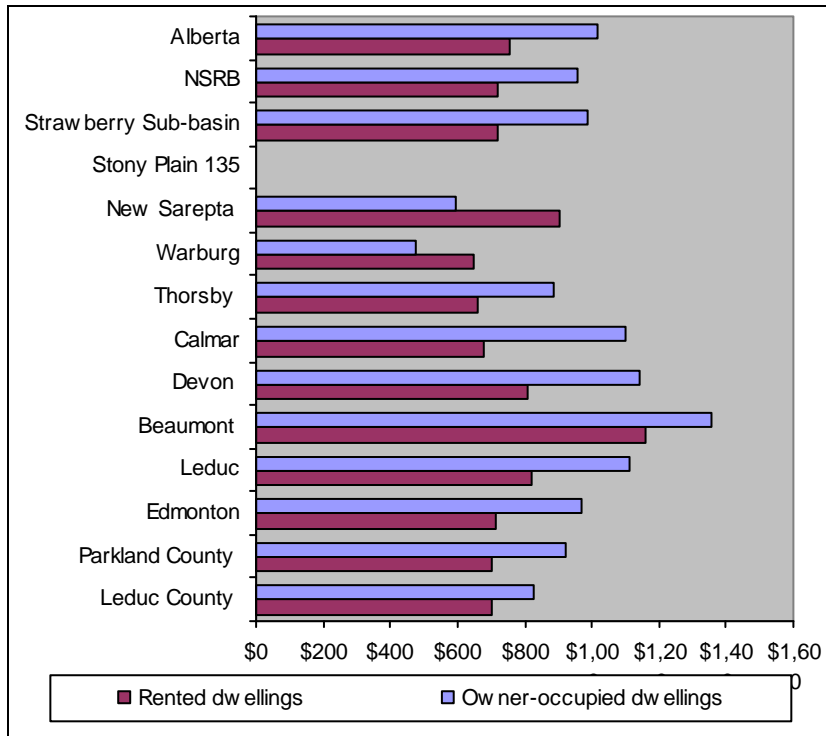


Figure 7-16 summarizes the average monthly costs of renting and owning dwellings in communities in the Strawberry Sub-basin in 2005. These costs include rent/mortgage, electricity, heat and municipal services to operate a dwelling. Overall, rental costs averaged \$722 per month (compared to \$720 in the NSRB) while the average cost for owned dwellings was \$985 per month (compared to \$959 for the NRBS). The highest monthly housing costs were reported for Beaumont while the lowest monthly costs were reported in Warburg. Monthly costs for rental accommodation were typically lower than for owned dwellings, except in New Sarepta and Warburg.

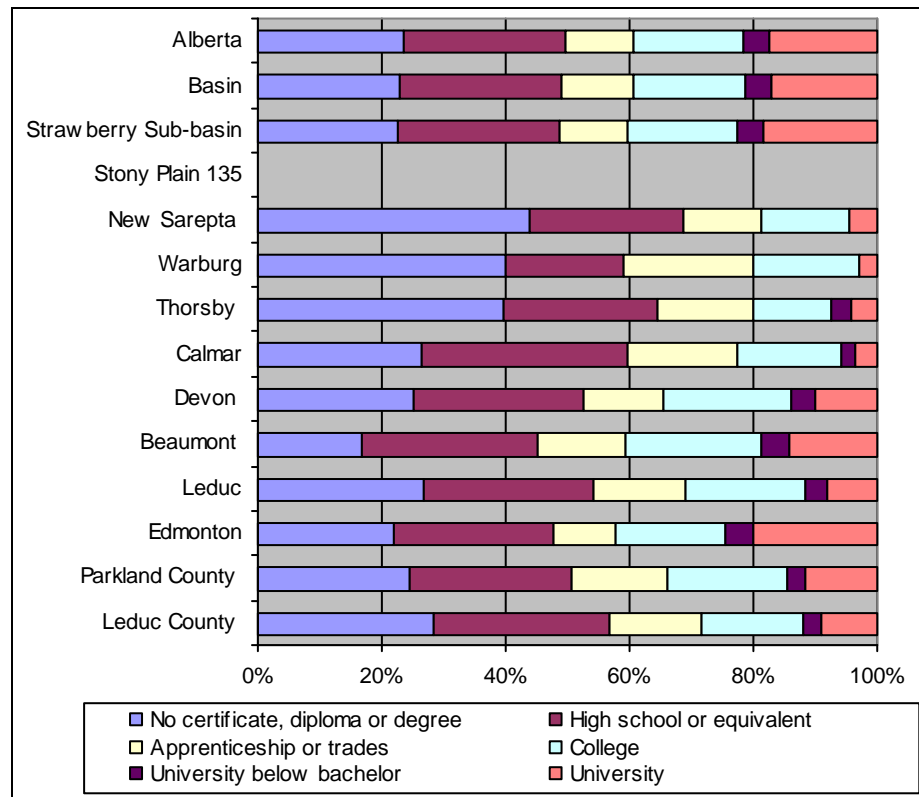
Figure 7-16: Average Monthly Costs for Rental and Owned Dwellings, 2005



7.10 Education

Residents of the Strawberry Sub-basin were slightly better educated than the NSRB average. Figure 7-17 shows that 22.5% of sub-basin residents had not completed high school and this percentage was just below the NSRB average (23.0%). The communities with the lowest levels of educational attainment, as measured in terms of the percentage that had not completed high school, include New Sarepta (43.1%), Warburg (39.3%), and Thorsby (39.2%).

Figure 7-17: Educational Attainment, Strawberry Sub-Basin



The lowest percentage of people who had not completed high school was found in Beaumont (16.8%) while 21.9% of adults in Edmonton had not completed high school.

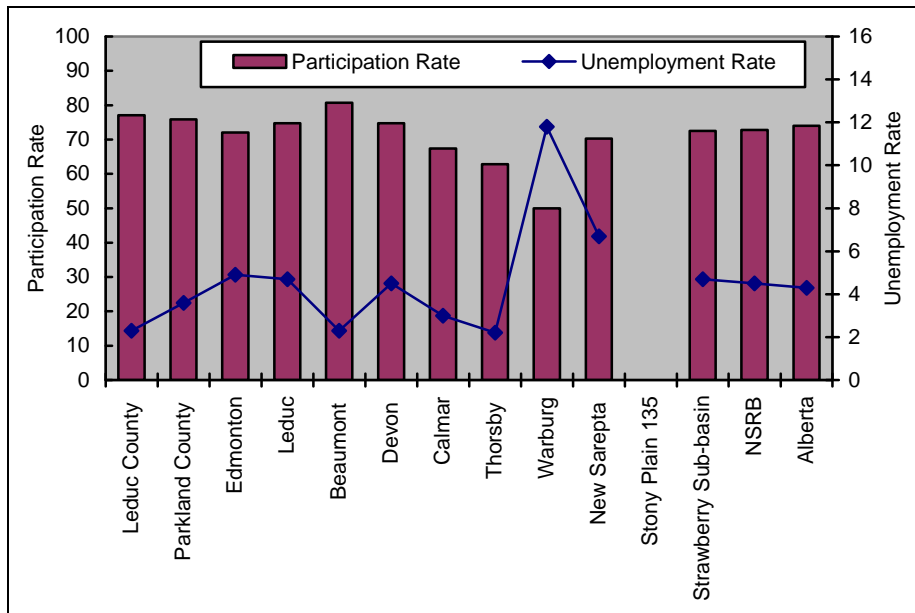
About 11.0% of adult residents of the Strawberry Sub-basin had completed an apprenticeship or trades certificate, and this was slightly higher than the NSRB average of 11.5%. Communities with relatively high percentages of residents with an apprenticeship or trades certificate included Warburg (20.6%) and Calmar (17.8%). About 18.3% of sub-basin residents had completed their university education; this is higher than the NSRB average of 17.2%. The highest percentage of people with university educations were found in Edmonton (20.1%) and Beaumont (14.2%).

7.11 Labour Force Participation

Overall, 72.5% of the adult population in the Strawberry Sub-basin was participating in the labour force, either working or actively seeking work. This rate was slightly higher than for the NSRB (72.1%). Figure 7-18 shows that labour force participation rates ranged from a high of 80.7% in Beaumont and 77.1% in Leduc County to only 62.8% in Thorsby and 50.0% in Warburg.

In 2006, the Strawberry Sub-basin had an unemployment rate of 4.7%, which was slightly higher than the NSRB average (4.5%). Unemployment rates were lowest in Thorsby (2.2%) and Beaumont and Leduc County (2.3%) and jumped to 4.9% in Edmonton. The highest unemployment rates were in Warburg (11.8%) and New Sarepta (6.7%).

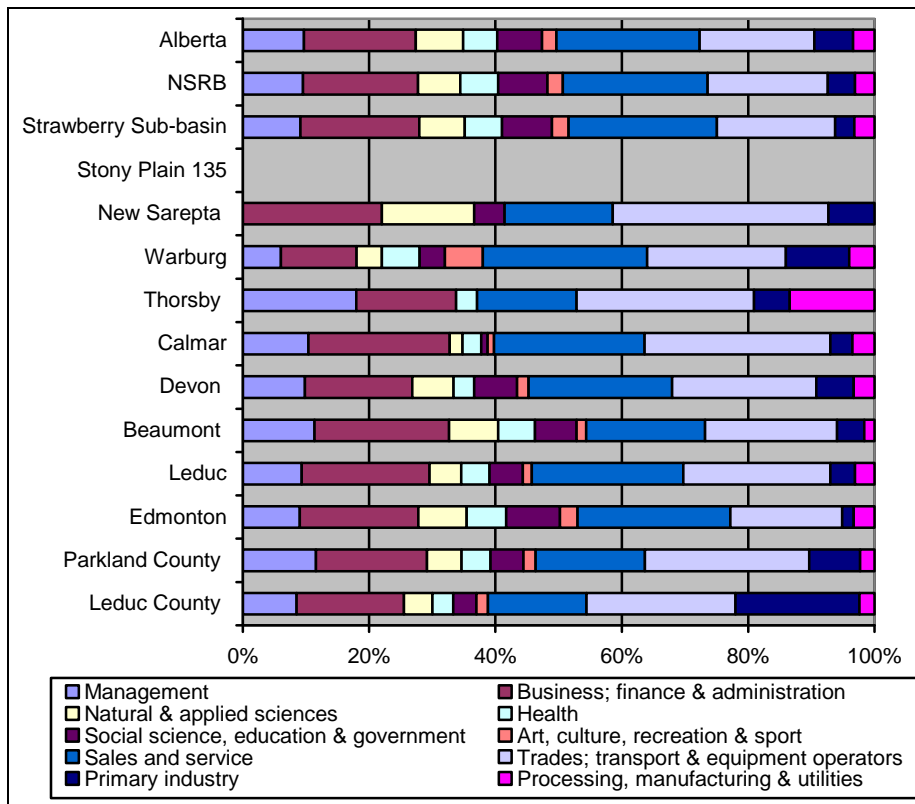
Figure 7-18: Labour Force Participation and Unemployment Rates, 2006



7.12 Employment by Occupation

Figure 7-19 shows employment by occupation for the Strawberry Sub-basin. Overall, the sub-basin profile is nearly identical to the NSRB profile, with a slightly higher percentage of people employed in occupations related to business, finance and administration. Within the sub-basin, employment in occupations related to processing, manufacturing and utilizes accounted for 3.2% of employment, but these occupations were more important in Thorsby. Employment in occupations related to primary industry accounted for 3.0% of total employment, but was more important in Leduc County and Warburg. Thorsby reported the highest percentage of its workforce in management occupations. The highest employment in sales and service occupations were reported in Warburg and Edmonton. Calmar and Beaumont had the highest percentages of employment in occupations related to business, finance and administration. Edmonton had the highest percentage of people employed in health occupations and social sciences, education and government.

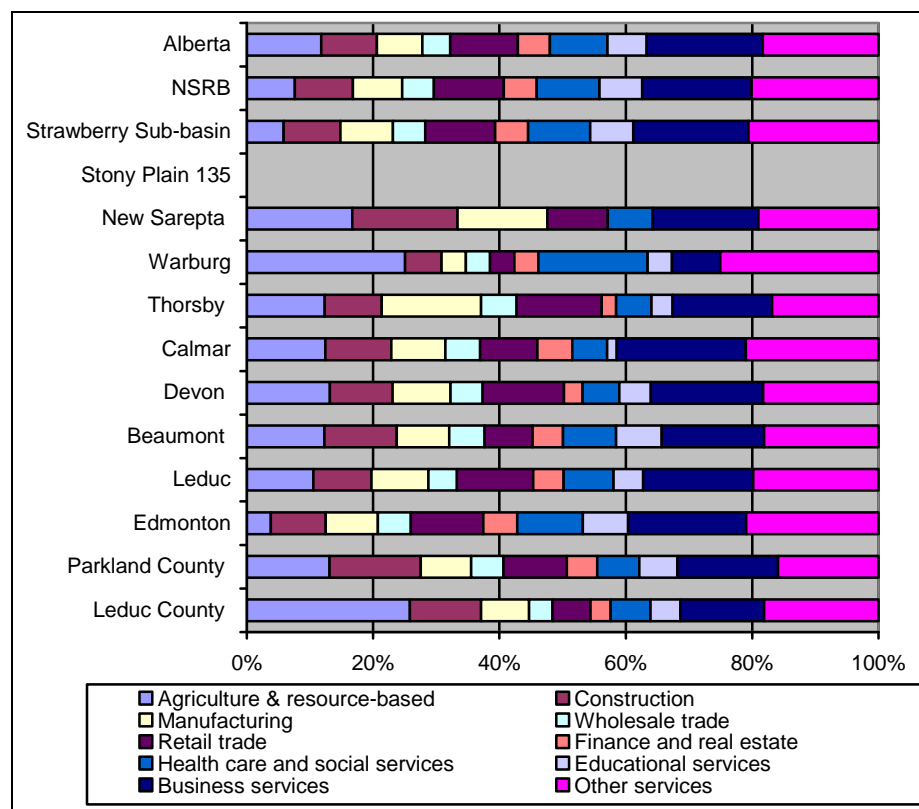
Figure 7-19: Employment by Occupation, Strawberry Sub-Basin, 2006



7.13 Employment by Industry

Figure 7-20 shows employment in the Strawberry Sub-basin based on the industry of employment. Overall, 23.1% of the workforce was working in basic (goods-producing) industries, including agriculture and other resource-based industries, manufacturing and construction. This was slightly lower than the NSRB, where 24.6% of the workforce was employed in basic industries. Employment in the agriculture and resource-based industries accounted for only 5.8% of the employment workforce, although this percentage reached 25.8% in Leduc County and 13.1% in Parkland County. Employment in manufacturing accounted for 8.3% of total employment but was quite important in Thorsby and New Sarepta.

Figure 7-20: Employment by Industry, Strawberry Sub-Basin, 2006

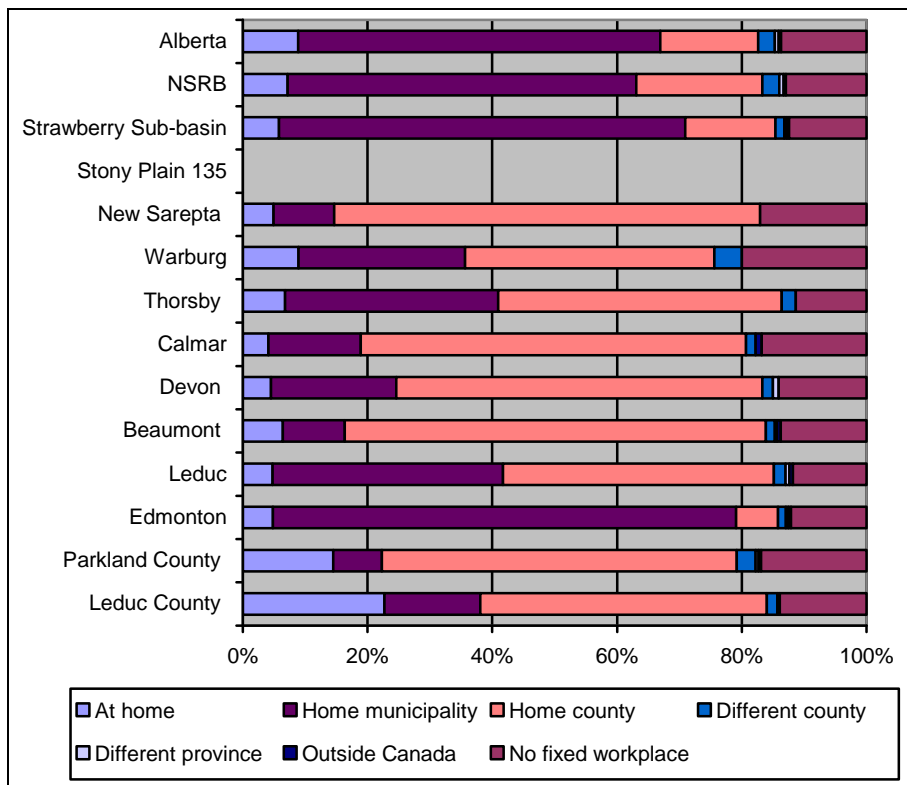


Non-basic industries accounted for 76.9% of employment in the Strawberry Sub-basin. The non-basic industries that provided the greatest amounts of employment included other services (20.6%), business services (18.2%) and retail trade (11.1%). Within the sub-basin, the percentage of employment in other industries was similar across the communities, although slightly higher in Warburg, and employment in business services ranged from 7.8% in Warburg to 20.4% in Calmar. The highest participation in retail trade was reported in Devon (12.8%) and Leduc (12.1%).

7.14 Location of Employment

Figure 7-21 shows where residents of the Strawberry Sub-basin actually worked.

Figure 7-21: Location of Work, Strawberry Sub-Basin, 2006

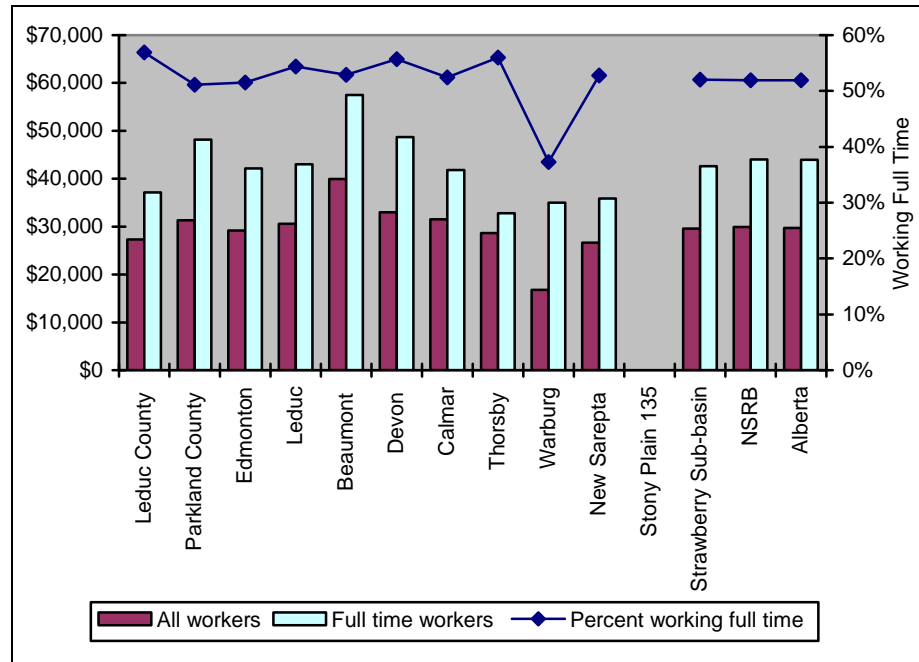


Overall, 5.8% worked at home and 65.2% worked at a usual place in their home municipality. Another 14.5% worked in their home county outside their local community, while 1.4% worked in another part of Alberta, 0.4% worked outside Alberta and 0.4% worked outside Canada. The balance (12.4%) had no fixed workplace. Compared to the NSRB, residents of the Strawberry Sub-basin were more likely to work in their home municipality, but this reflects the fact that 74.3% of Edmonton workers worked in the city. The figure shows that, for all communities but Edmonton, the majority of people worked in their home county, rather than their home community, indicating that many people were commuting to jobs in Edmonton or other nearby communities. Compared to the other communities, residents of Leduc, Thorsby and Calmar were more likely to work in their home community, but more people were commuting to other locations. Residents of the two rural communities were more likely to work at home than were residents of the urban centres.

7.15 Employment Earnings

Residents of the Strawberry Sub-basin reported median earnings of \$29,595 in 2005; this was nearly the same as the NSRB average of \$30,068. Figure 7-22 shows that the highest median earnings were reported in Beaumont (\$39,945) while workers from Warburg reported median earnings of only \$17,766. Residents of New Sarepta and Thorsby also reported relatively low median earnings. The median earnings for workers in Edmonton was \$29,182.

Figure 7-22: Median Earnings and Full-Time Employment, 2006

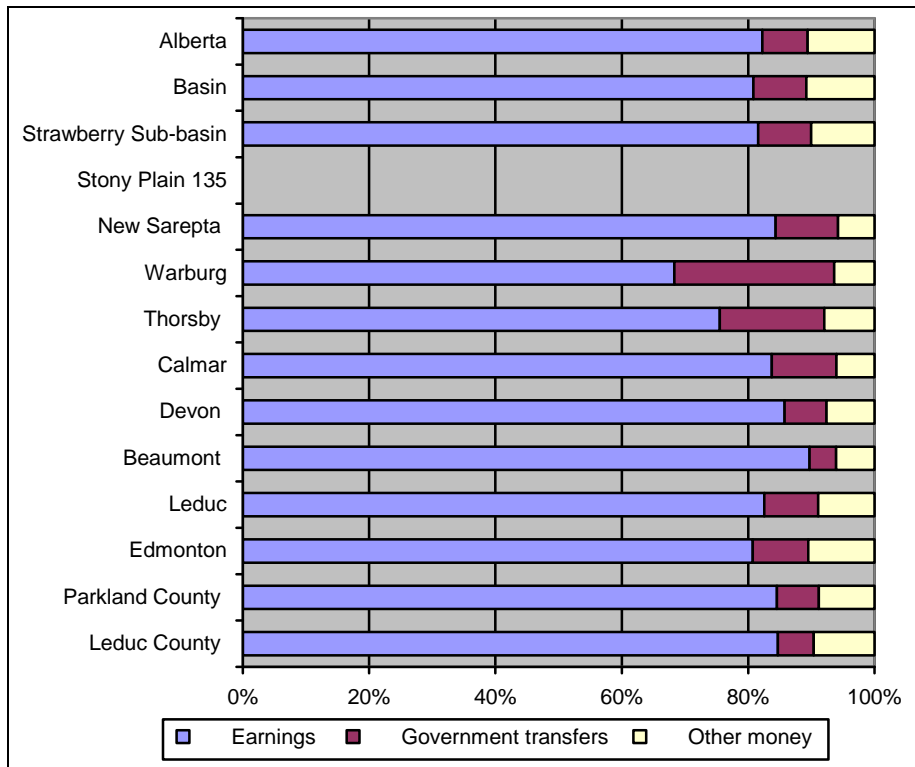


Within the Strawberry Sub-basin 52.0% of workers reported being employed full-time, year round; this compares to 51.9% of workers in the NSRB. The percentage of workers with full-time employment ranged from 56.9% in Leduc County to only 37.3% in Warburg. People who did work full-time, year round, reported median earnings of \$42,630, which was lower than the NSRB average (\$44,233). The highest median incomes from full-time employment were reported in Beaumont (\$57,492), Devon (\$48,736) and Parkland County (\$48,194). Workers in Edmonton report median earnings of \$42,182, but the lowest median earnings from full time employment occurred in Thorsby (\$32,786).

7.16 Other Income Sources

Earnings accounted for 81.6% of income for residents of the Strawberry Sub-basin; this is higher than for the NSRB (81.4%). The remaining income came from government transfers (8.4%) and other sources (10.0%). Figure 7-23 shows the reliance on transfer payments and other income for individual communities within the sub-basin.

Figure 7-23: Reliance on Transfer Payments and Other Income, 2005

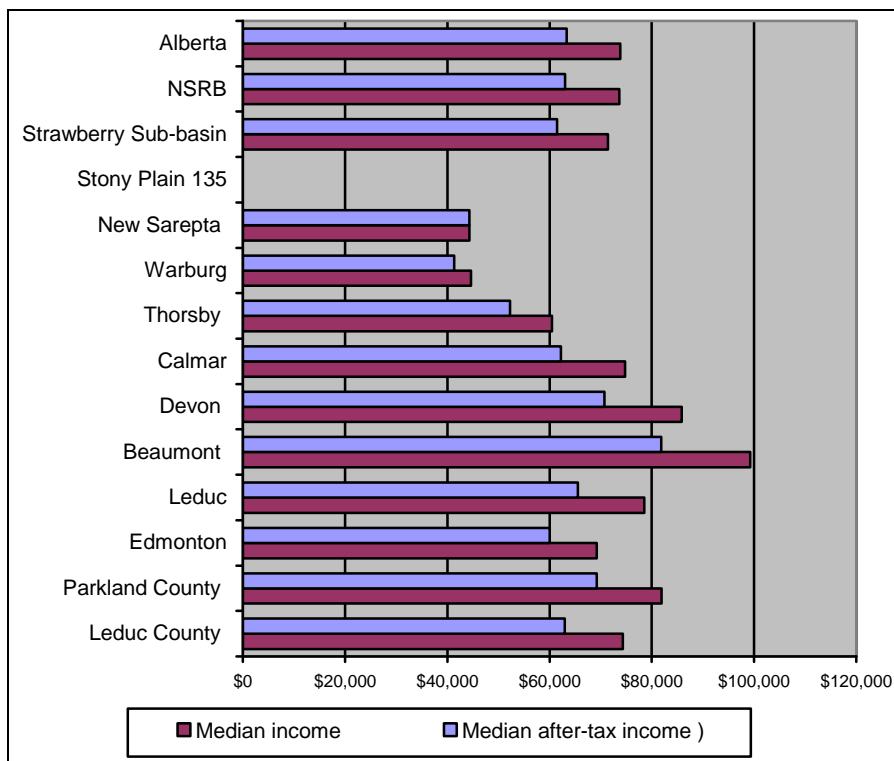


It shows that earnings accounted for more than 80% of income in most communities, with the exception of Warburg (67.3%) and Thorsby (75.3%). Residents of these two communities were more reliant on government transfers than were other communities in the sub-basin. Residents of Beaumont were the least reliant on income from government transfers or other income sources.

7.17 Family and Individual Income

In 2005 families in the Strawberry Sub-basin reported median incomes averaging \$71,411 (or \$61,469 after tax); these incomes are lower than the NSRB average of \$73,823 (or \$63,361 after tax). Variations in median family incomes within the sub-basin are shown in Figure 7-24. The highest median family incomes were reported in Beaumont (\$99,256) and Devon (\$85,829). The median family income in Edmonton was \$69,214. Median family incomes were lowest in New Sarepta (\$44,356) and Warburg (\$44,675).

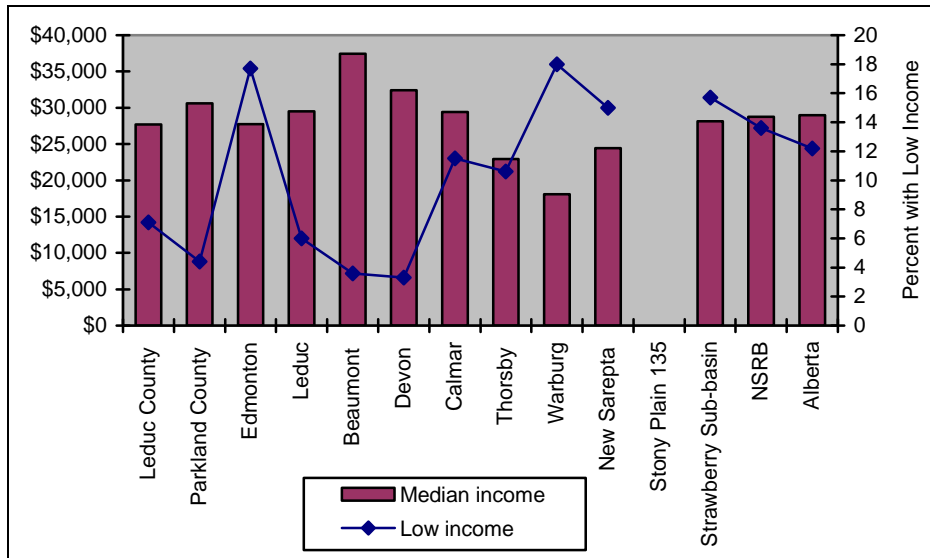
Figure 7-24: Median Family Income, Before and After Tax, 2005



Median incomes in 2005 for persons in private households in the Strawberry Sub-basin averaged \$28,147; this is slightly lower than the NSRB average (\$28,898). Overall, 15.7% of residents of the Strawberry Sub-basin were considered to have low incomes (before tax), and this is higher than the NSRB average (13.6%).

Figure 7-25 summarizes median incomes and the incidence of low incomes for communities in the sub-basin. Median personal incomes ranged from \$37,438 in Beaumont to \$18,086 in Warburg. The median personal income in Edmonton was \$27,734. The incidence of people with low incomes ranged from 3.3% in Devon and 3.6% in Beaumont to 18.0% in Warburg, although 17.7% of people in Edmonton were considered to have low incomes.

Figure 7-25: Median Personal Income and Incidence of Low Income, 2005

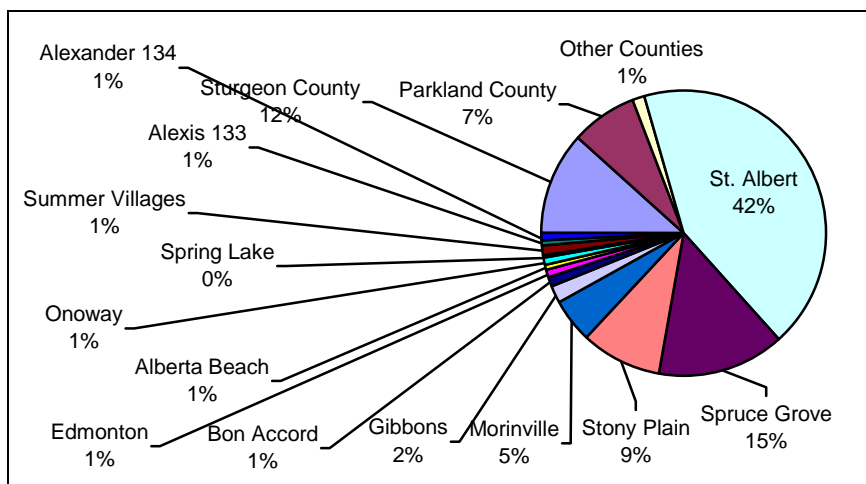


8.0 STURGEON SUB-BASIN

8.1 Population

In 2006, the Sturgeon Sub-basin had a population of about 134,390 people which represents about 11.7% of the population of the entire NSRB. The City of St. Albert accounts for much of the sub-basin population (42.8%). Figure 8-1 shows that another 14.5% lived in the City of Spruce Grove, with another 17.2% living in one of four towns (Stony Plain, Morinville, Gibbons and Bon Accord). A small portion of the population (1.7%) lived in one of three villages (Onoway, Alberta Beach and Spring Lake). A small portion of Edmonton is also situated in the Sturgeon Sub-basin and accounts for 0.7% of the population.

Figure 8-1: Population Distribution in the Sturgeon Sub-Basin, 2006



People living in rural parts of the Sturgeon Sub-basin accounted for 20.4% of the population, with most of these being in Sturgeon County (11.7%), Parkland County (7.4%) and Lac Ste. Anne County (1.3%). Small numbers of sub-basin residents lived in Barrhead and Westlock counties.

There are 9 summer villages in this sub-basin (Sunset Point, Sandy Beach, Ross Haven, Val Quentin, Silver Sands, Sunrise Beach, Yellowstone, West Cove, and South View) and collectively, they account have a population of 1,660 people which represents 1.2% of the population. Complete census information is not available for most of the summer villages so these communities are not included in the following analysis.

The Sturgeon Sub-basin also includes the Alexis 133 and Alexander 134 reserves which, in 2006, accounted for another 1.3% of the sub-basin population.

8.2 Age Characteristics

In terms of age, residents of the Sturgeon Sub-basin were different from the overall population of the NSRB. Figure 8-2 shows that, the Sturgeon Sub-basin had higher percentages of both young people (under 20 years of age) and older adults (people aged 40 to 69). However, the sub-basin had relatively small percentages for young adults (people aged 20 to 39) and relatively fewer very old people (70 years of age or older).

Figure 8-2: Age Composition of the Sturgeon Sub-Basin Population, 2006

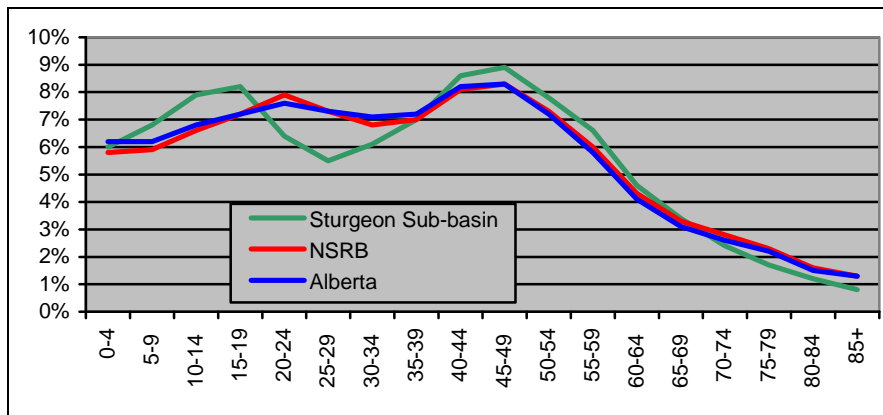


Figure 8-3 shows the age distributions for the cities and towns in the Sturgeon Sub-basin. In general, the population profiles are similar to the sub-basin total. However, some communities had higher percentages of young children (Gibbons, Bon Accord, Spruce Grove and Stony Plain). While some communities (Morinville) had higher percentages of teenaged children, Stony Plain and Spruce Grove had lower percentages. Compared to the sub-basin, nearly all of the communities had higher percentages of people aged 25 to 34 years. St. Albert tends to have a higher percentage of older people, especially in the 45 to 59 year age groups. Stony Plain has the highest percentages of people over the age of 64 years; while Bon Accord has the lowest percentages of people over the age of 59.

Figure 8-3: Age Composition of Cities and Towns in the Sturgeon Sub-Basin, 2006

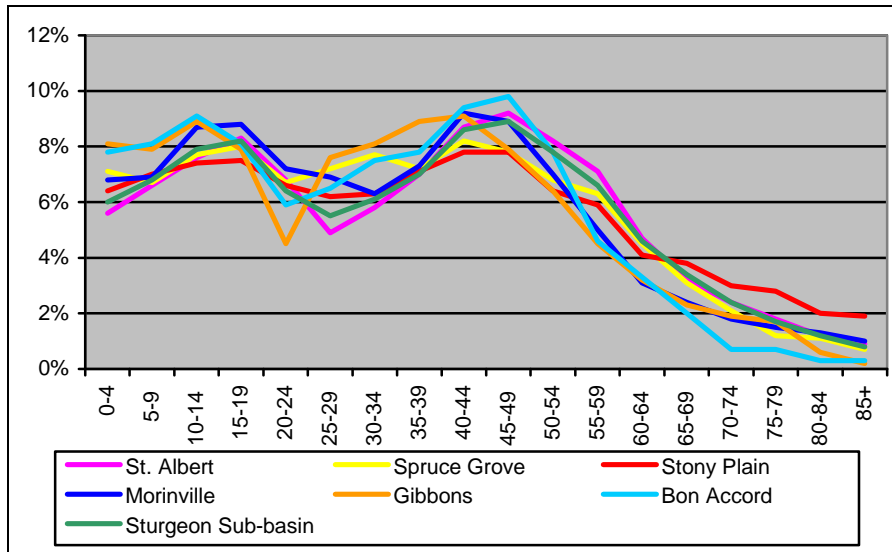


Figure 8-4 provides the age profiles for the three villages and two reserves. It shows that the populations on the Alexis 133 and Alexander 134 reserves are very young, with an average of 47.8% of the population being under the age of 20 years. While Onoway also had higher than average percentages of young children, Alberta Beach had relatively few people under 20 years of age and Spring Lake had fewer young teenagers (10 to 14) and more older teenagers (15 to 19). While all the villages and reserves had similar percentages of people in the 30 to 34 year group, Alberta Beach had much higher percentages of people aged 50 to 69, while Onoway had a high population of people over the age of 69 years. Spring Lake had comparatively few people over the age of 69 years.

Figure 8-4: Age Composition of Villages and Reserves in the Sturgeon Sub-Basin, 2006

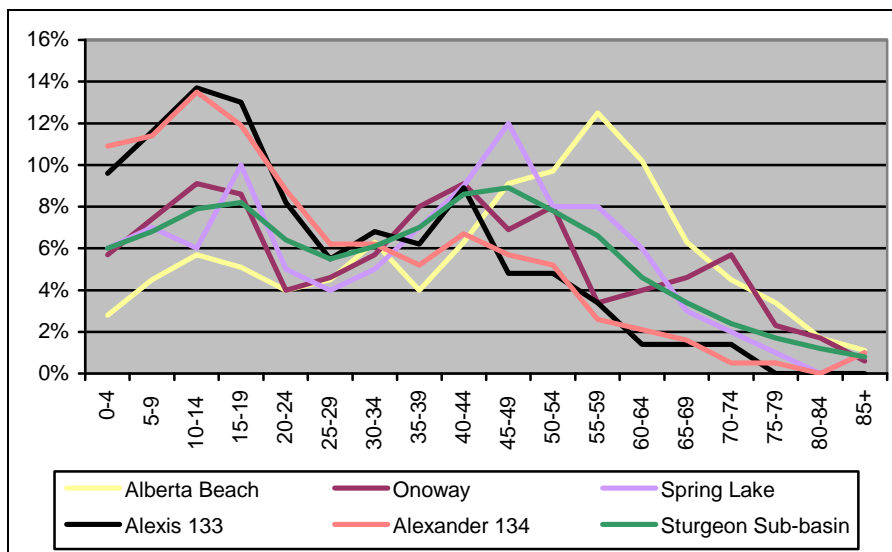
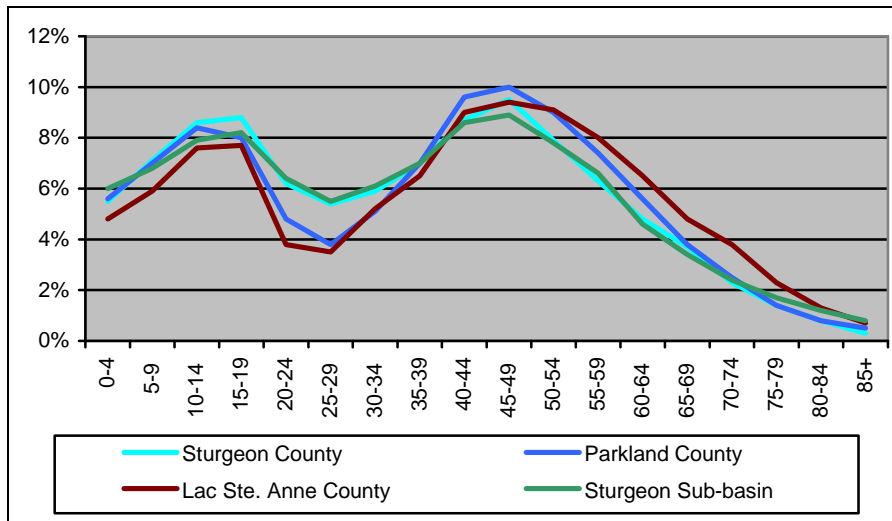


Figure 8-5 provides the age profiles for the three counties. The profiles are quite similar, with the profile for Sturgeon County nearly matching the sub-basin profile. Both Lac Ste. Anne and Parkland counties had higher percentages of people over the age of 39 but lower percentages of people aged 20 to 34 years. Compared to the other two counties, Lac Ste. Anne County had a lower percentage of people under the age of 20 years.

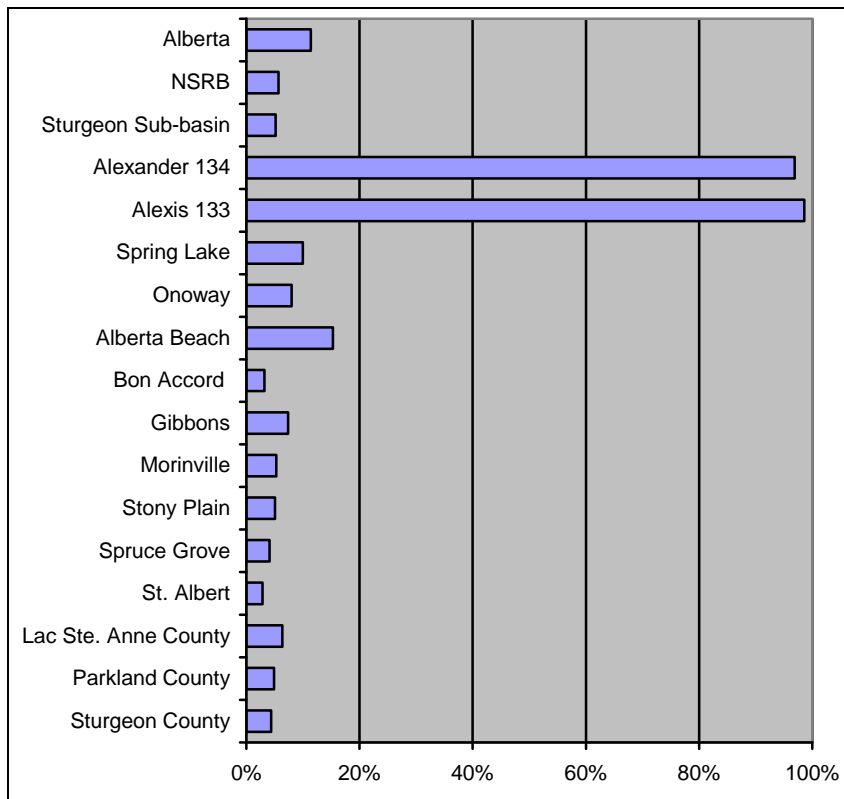
Figure 8-5: Aboriginal Population in the Sturgeon Sub-Basin, 2006



8.3 Aboriginal Population

About 5.2% of the residents of the Sturgeon Sub-basin were Aboriginal and this is the NSRB average (5.8%). There were about 6,970 Aboriginal people living in the sub-basin but only 24% of these were living on the either the Alexis 133 or Alexander 134 reserves. Figure 8-6 shows that most of the communities in the sub-basin had lower percentages of Aboriginal residents than were found in either the NSRB or the overall Sturgeon Sub-basin. The communities with the highest percentages of Aboriginal people include Alberta Beach (15.3%), Spring Lake (10.0%) and Onway (8.3%). St. Albert had the lowest percentage of Aboriginal people (2.9%).

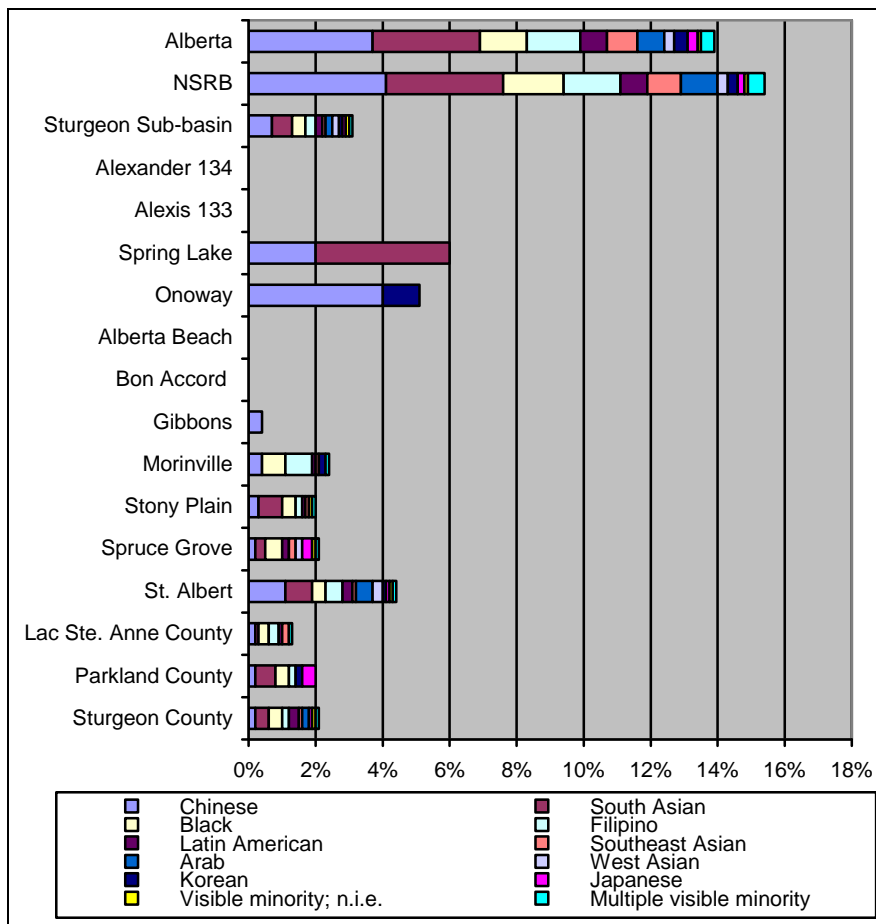
Figure 8-6: Aboriginal Population in the Sturgeon Sub-Basin, 2006



8.4 Ethnicity

About 3.1% of the population of the Sturgeon sub-basin consisted of visible minorities. This is well below the NSRB average of 15.5%. Figure 8-7 shows the percentage of visible minorities within each of the communities within the Sturgeon sub-basin. It shows that the highest percentages occurred in the villages of Spring Lake (primarily South Asian and Chinese) and Onoway (primarily Chinese and Korean). The population of St. Albert had the next percentage of visible minorities. Some communities (Alberta Beach, Bon Accord and Gibbons) reported having no or few visible minorities.

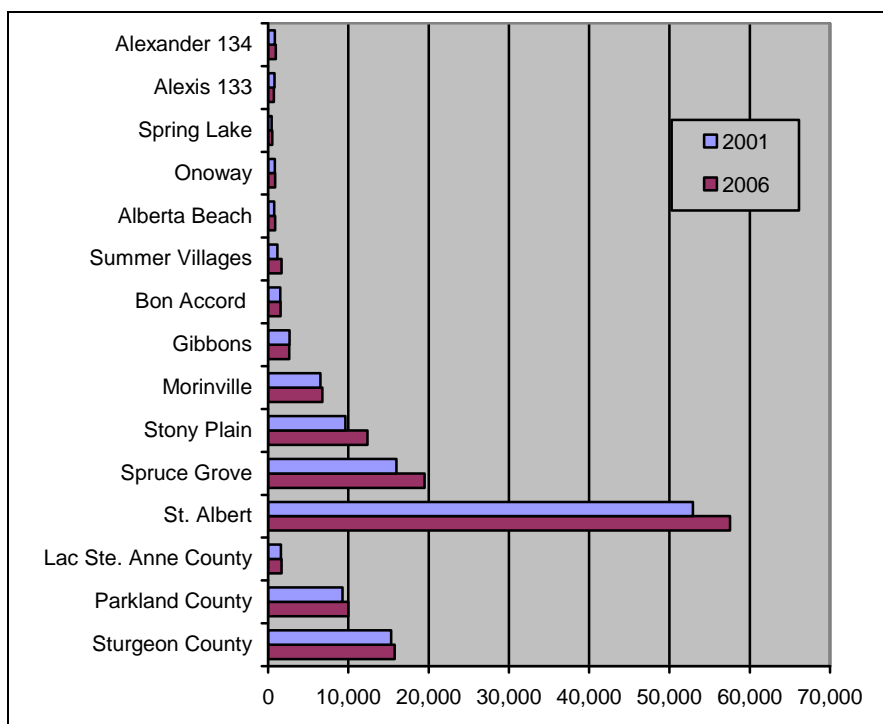
Figure 8-7: Visible Minorities in the Sturgeon Sub-Basin, 2006



8.5 Population Change

Between 2001 and 2006, the population of the Sturgeon Sub-basin increased by 13,210 people which represents an increase of 10.9%. This growth rate was higher than the population growth rate for the NSRB (9.6%). Figure 8-8 shows that most of the population increases occurred in the larger population centres: St. Albert, Spruce Grove and Stony Plain. While the population of most other communities increased, these increases were relatively small in terms of the overall population increase. The fastest growth rates were observed in Stony Plain (28.5%) and Spruce Grove (22.0%). In contrast, the population of Gibbons actually declined by 0.5%. While the population of the Alexander 134 reserve increased by 14.7%, the Alexis 133 reserve declined by 9.3%. The population of the 9 summer villages increased by 45.4% between 2001 and 2006.

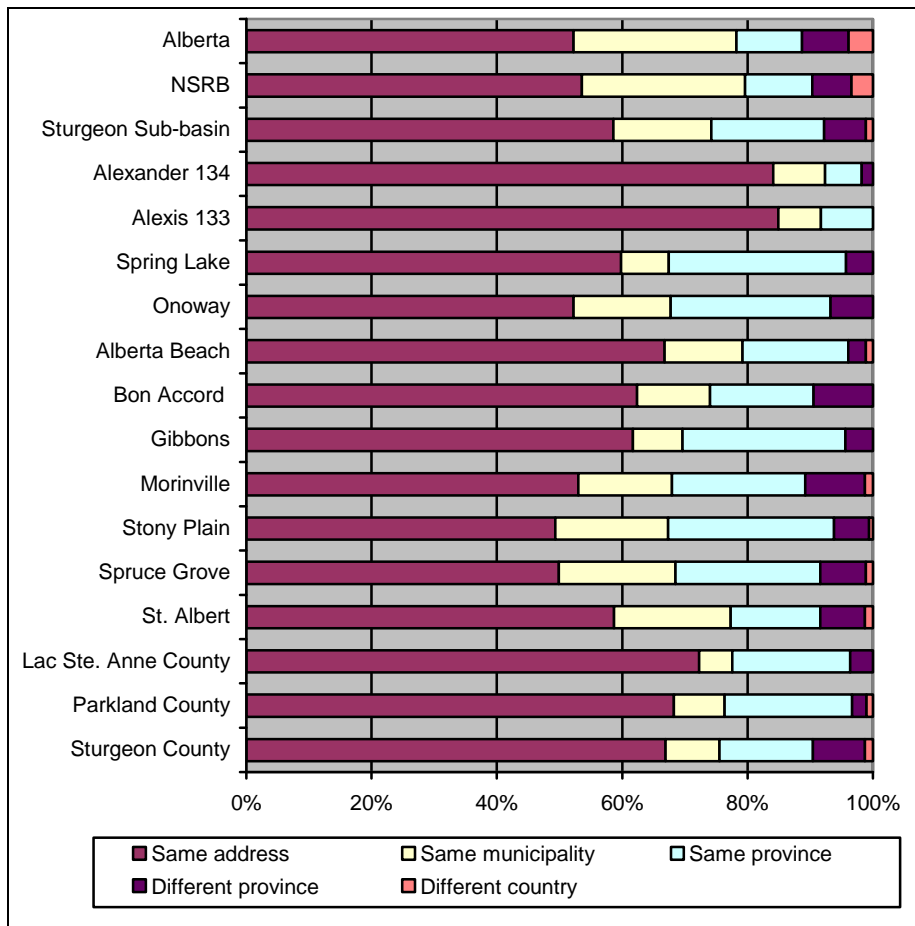
Figure 8-8: Population Change in the Sturgeon Sub-Basin, 2001-2006



One factor affecting population growth is migration from one area to another.

Figure 8-9 shows population mobility in the Sturgeon Sub-basin between 2001 and 2006. It shows that 58.6% of sub-basin residents resided at the same address for the 5-year period; this 5 percentage points higher than the NSRB average (53.6%). Another 15.6% lived in the same census subdivision but changed addresses. A small percentage of sub-basin residents (1.1%) moved in from another country, 6.7% moved from another province, and 18.0% moved from a different municipality in Alberta.

Figure 8-9: Population Mobility in the Sturgeon Sub-Basin, 2001-2006

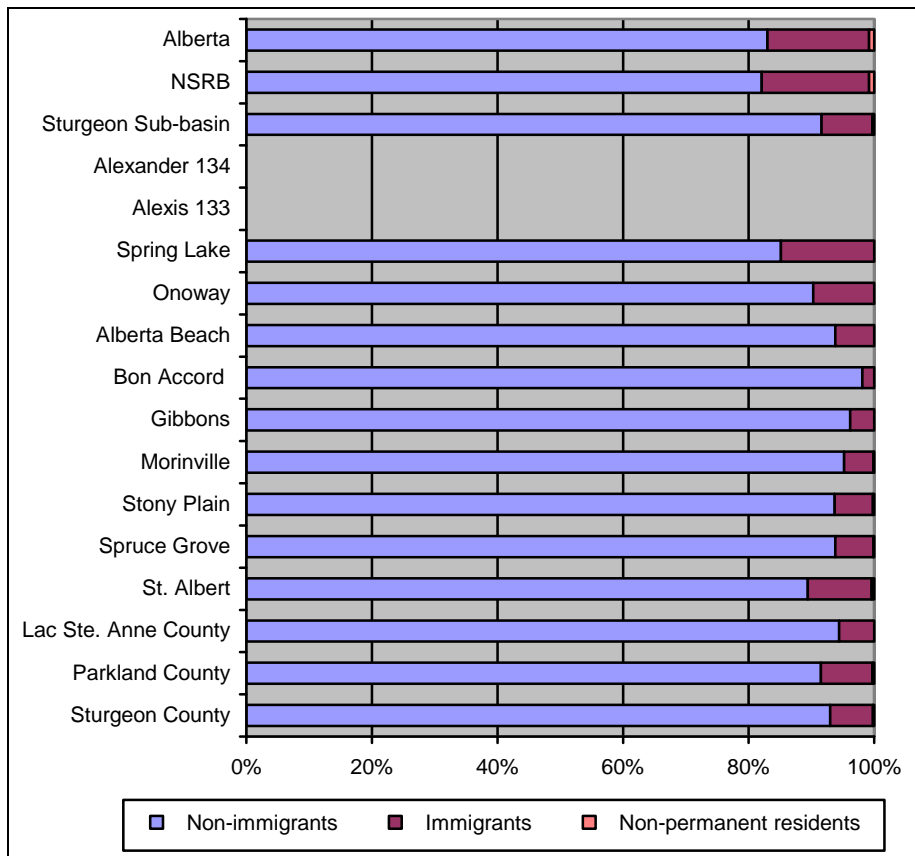


Residents of the Alexis 133 and Alexander 134 reserves were the most likely to have lived at the same address for the period from 2001 to 2006. Residents of Lac Ste. Anne County were also more likely to have lived at the same address since 2001. Residents of Stony Plain and Spruce Grove are the most mobile, with less than 50% having lived at the same address between 2001 and 2006.

Immigration has also contributed to population growth. About 8.1% of sub-basin residents consisted of immigrants and this was less than half the NSRB average of 17.1%.

Figure 8-10 shows that the percentage of immigrants in the Sturgeon Sub-basin ranged from 1.9% in Bon Accord to 10.2% in St. Albert and 15.0% in Spring Lake.

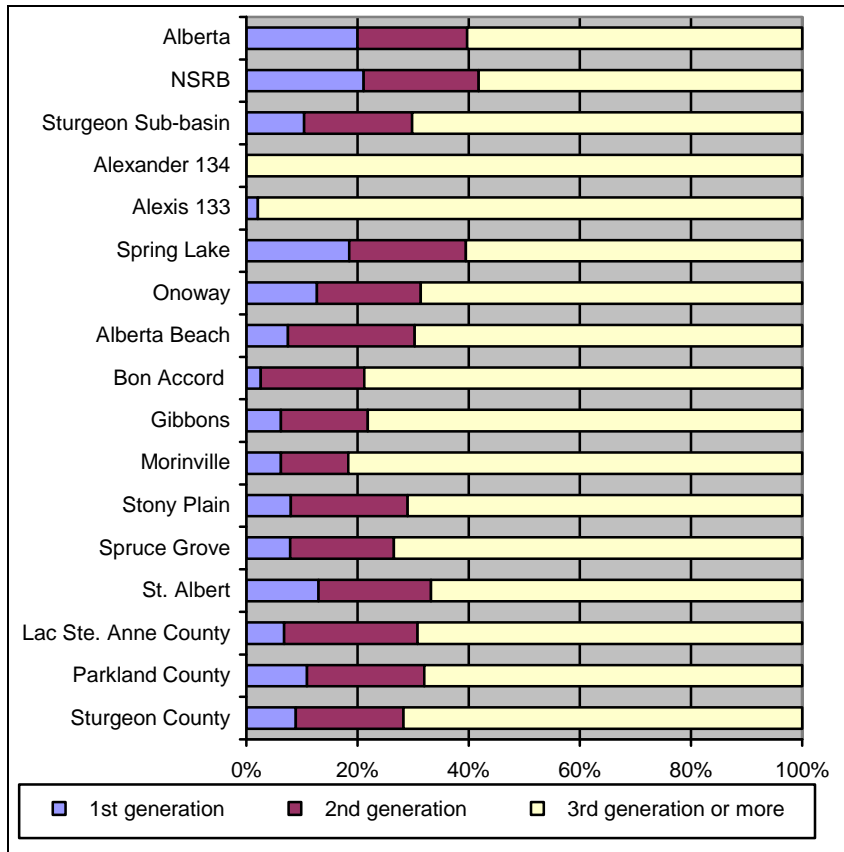
Figure 8-10: Role of Immigration in the Sturgeon Sub-Basin, 2006



About 70.2% of people living in the Sturgeon sub-basin had lived in Canada for 3 or more generations, 19.4% had lived in Canada for 2 generations and 10.4% were first-generation Canadians.

Figure 8-11 shows that the highest percentages of sub-basin residents who had lived in Canada for 3 or more generations were found on the Alexis 133 and Alexander 134 reserves and in Morinville, Gibbons and Bon Accord. The communities in the sub-basins with the highest percentage of the population that has lived in Canada for only 1 or 2 generations include Spring Lake, St. Albert, Onoway and Alberta Beach.

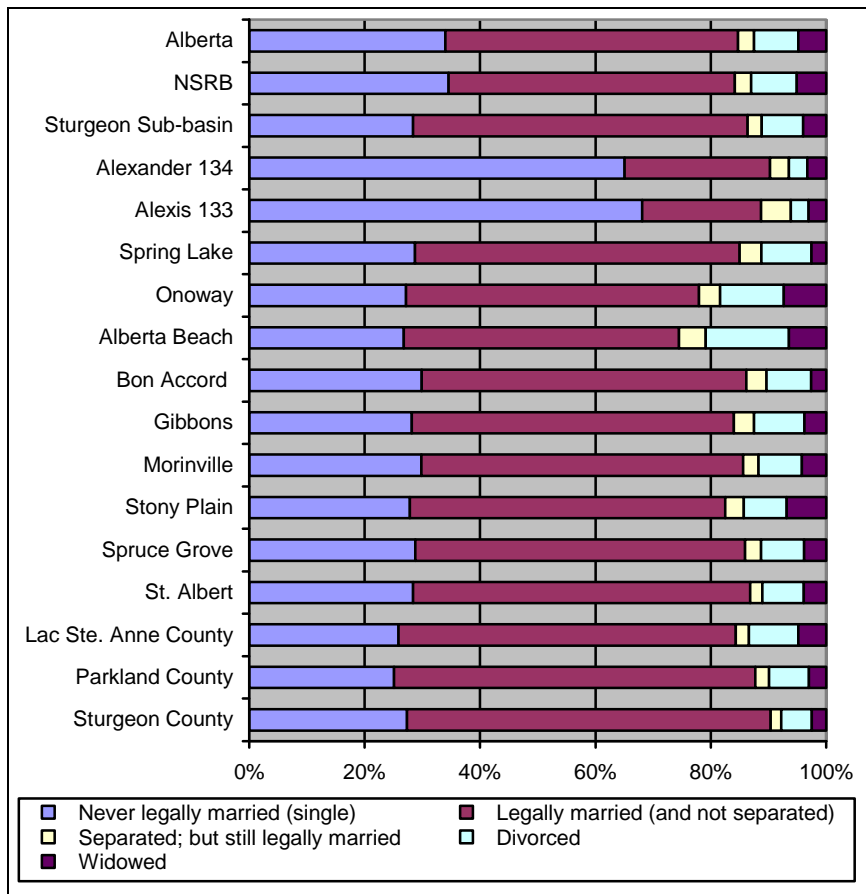
Figure 8-11: Residency in Canada, Sturgeon Sub-Basin, 2006



8.6 Marital Status

Married people account for 58.0% of the sub-basin population, while the balance consists of single people (28.4%), divorced people (7.2%), widowed people (4.0%) and people who are separated (2.4%). The sub-basin profile (Figure 8-12) shows that it had higher percentages of married people than were found in the NSRB.

Figure 8-12: Marital Status in the Sturgeon Sub-Basin, 2006



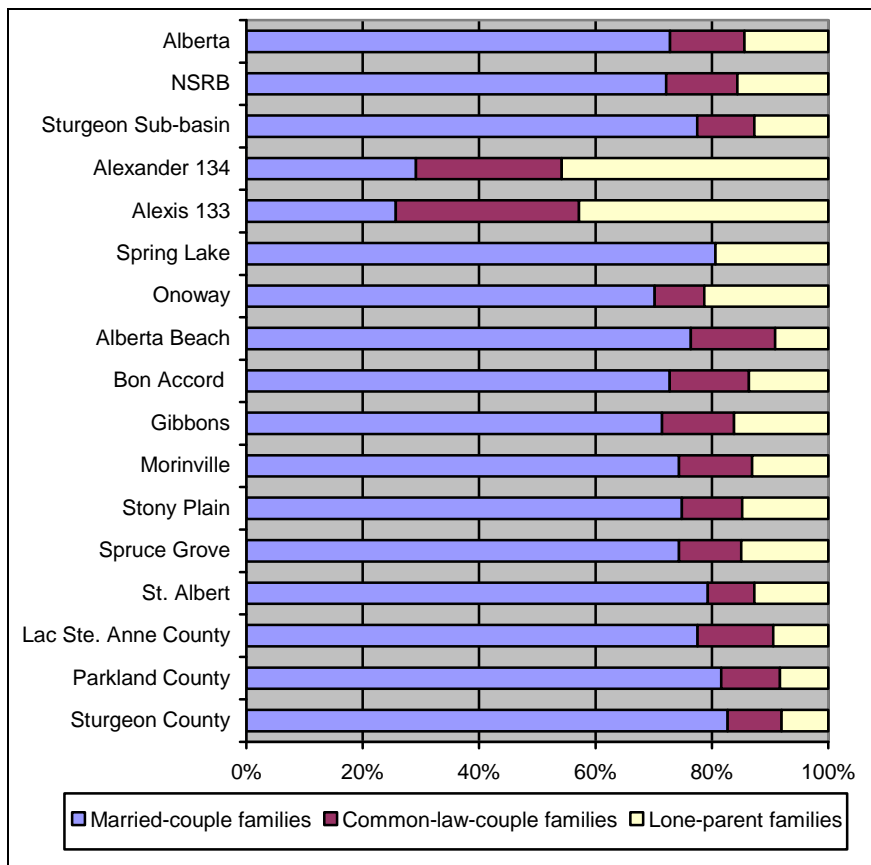
In general, the rural areas (all three counties) had higher percentages of married people (ranging from 59% to 63%). The highest percentages of single people were found on the Alexis 133 and Alexander 134 reserves where between 68.8% and 64.5% of the adult population had never been legally married. The highest percentages of divorces people were found in Alberta Beach and Oneway, which also had relatively higher percentages of widowed people.

8.7 Family Structure

Married couple families account for 77.4% of the 30,340 families in the Sturgeon Sub-basin. Lone parent families account for 9.8% of families, while common-law couples account for the balance (12.7%). Figure 8-13 shows that, when compared with the NSRB, the sub-basin had a higher percentage of married couple families and less single parent families.

The lowest percentages of married couple families were found on the Alexis 133 reserve (25.0%) and the Alexander 134 reserve (28.6%); these communities also had the highest percentages of common-law couple families (30.6% and 24.5%, respectively). Onoway, Spring Lake and Gibbons had the highest percentages of lone-parent families, while Alberta Beach has a relatively high percentage of common-law couple families. There were reported to be no common-law couple families in Spring Lake.

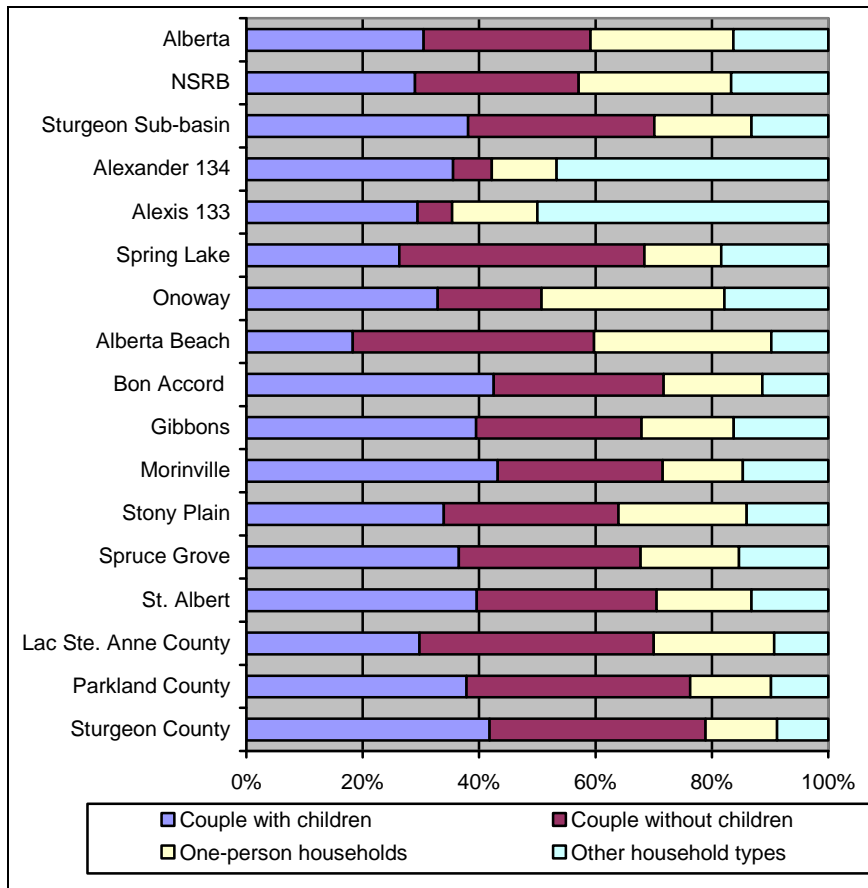
Figure 8-13: Family Structure in the Sturgeon Sub-Basin, 2006



8.8 Household Structure

Household structure differs from family structure because households can contain one or more families. Figure 8-14 shows that 38.1% of households consisted of a couple with children, 32.0% were couples with no children, 16.7% were single person households, and the balance (13.2%) consisted of other household types. Overall, the Sturgeon Sub-basin had a higher percentage of married couples with children than did the NSRB.

Figure 8-14: Household Structure in the Sturgeon Sub-Basin, 2006

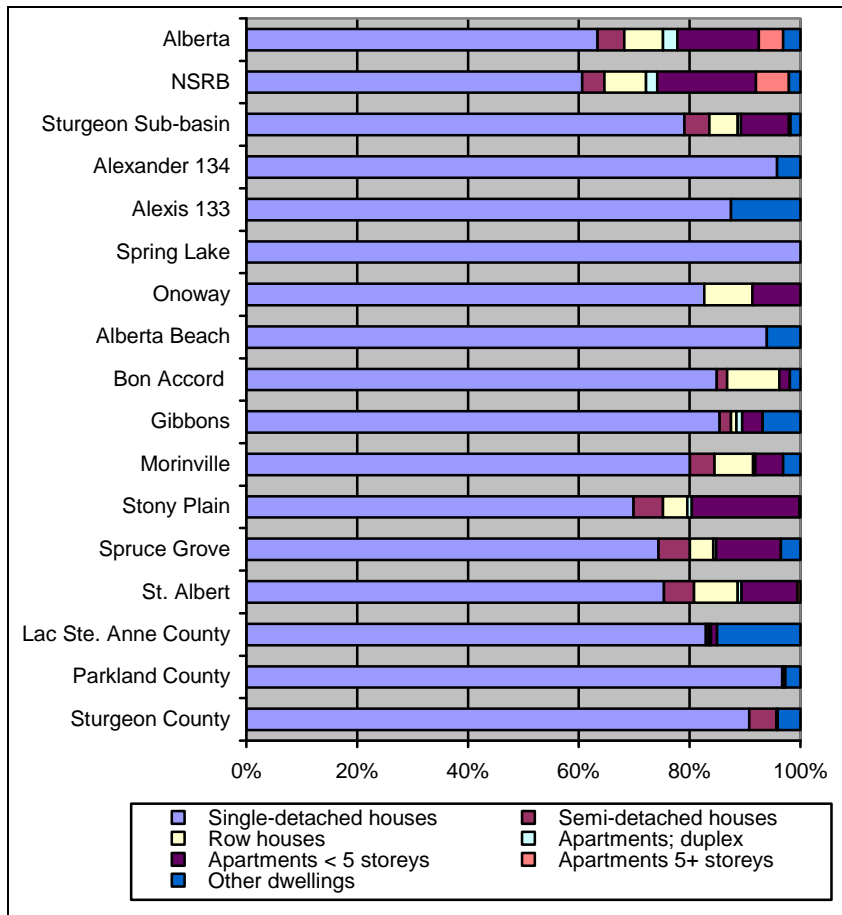


Within the sub-basin, the lowest percentages of families with children were found in Alberta Beach and Spring Lake, and these communities had higher percentages of couples without children. The highest percentage of single-person households was reported in Alberta Beach, Onoway and Stony Plain. The majority of households on the Alexis 133 and Alexander 134 reserves consisted on other household types.

8.9 Housing

In 2006 there were about 47,485 housing units in the Sturgeon Sub-basin. Figure 8-15 shows the composition of housing in each of the communities within the sub-basin. Overall, single detached houses accounted for 79.0% of housing in the sub-basin, and represented more than 90% of housing in Sturgeon and Parkland counties and on the two reserves.

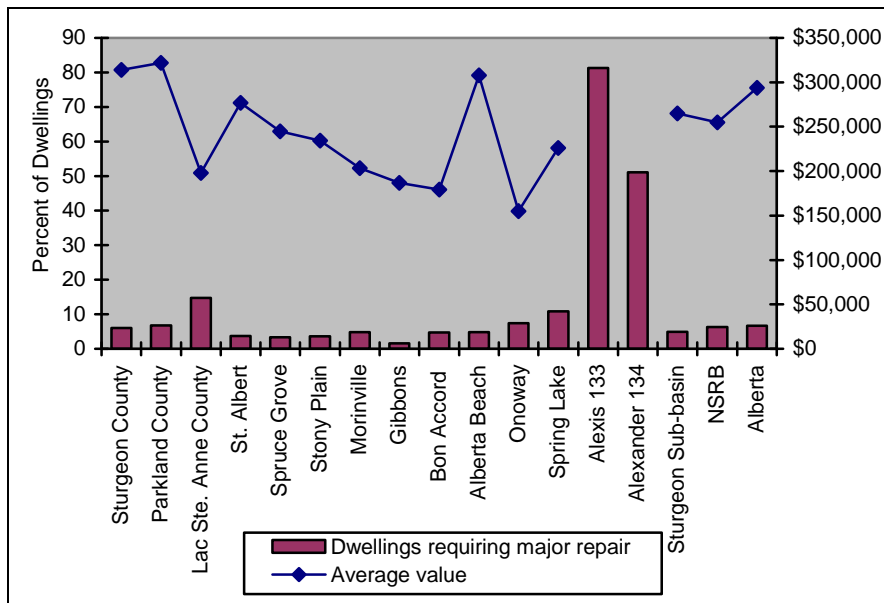
Figure 8-15: Housing Characteristics in the Sturgeon Sub-Basin, 2006



The larger communities had the widest mix of housing. Single detached houses accounted for 69.8% of housing in Stony Plain, 74.2% in Spruce Grove and 75.2% in St. Albert. There were few apartments and semi-detached houses in the sub-basin, and these were found almost exclusively in the larger communities.

Figure 8-16 shows the reported value of housing in each of the communities within the Sturgeon Sub-basin as well as the percentage of housing stock in need of major repair.

Figure 8-16: Value of Housing (2005) and Need for Major Repairs, Sturgeon Sub-Basin

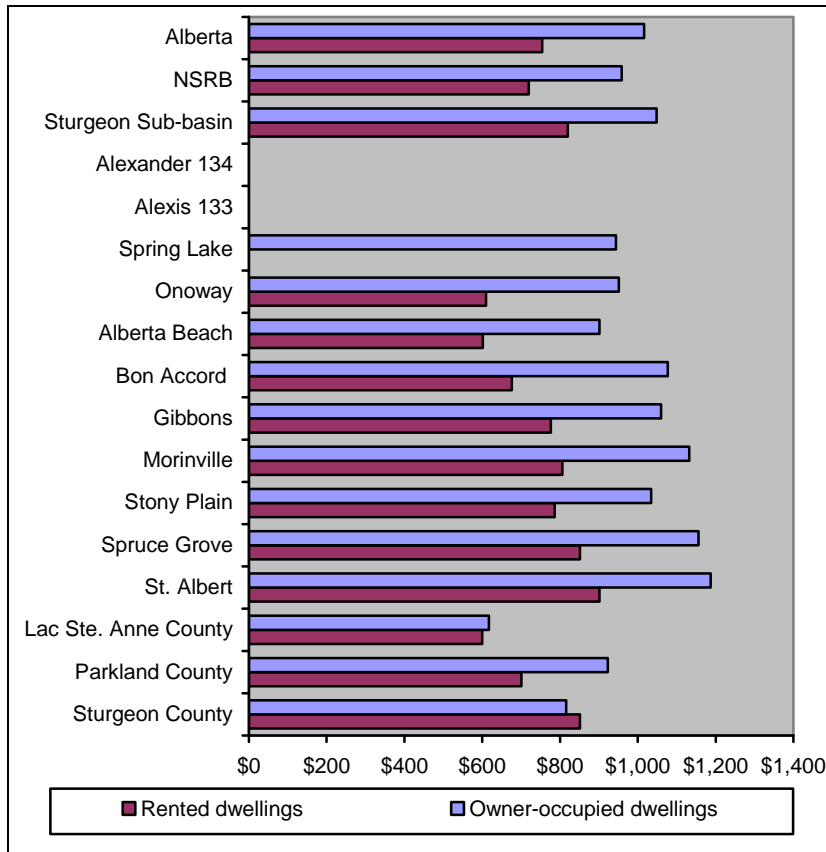


Overall, the average value of a house in the Sturgeon Sub-basin in 2005 was \$264,850, which was slightly higher than the NSRB average (\$254,828). The communities with the highest valued dwellings included Sturgeon and Parkland counties (\$314,025 and \$321,765, respectively) while the lowest values occurred in Onoway, Bon Accord and Gibbons, where the average values were in the range of \$155,140 to \$186,800. There is no information on the average value of dwellings on the Alexis 133 or Alexander 134 reserves.

Overall, 4.9% of dwellings in the basin were in need of major repair and this was lower than the NSRB average of 6.3%. Housing stock in the on the Alexis 133 and Alexander 134 reserves was in the poorest condition, with 81.3% and 51.1%, respectively, being in need of major repair. Relatively high percentages of housing in need of major repair were also reported in Lac Ste. Anne County (14.7%) and Spring Lake (10.8%).

Figure 8-17 summarizes the average monthly costs of renting and owning dwellings in communities in the Sturgeon Sub-basin in 2005. These costs include rent/mortgage, electricity, heat and municipal services to operate a dwelling. Overall, rental costs averaged \$820 per month (compared to \$720 in the NSRB) while the average cost for owned dwellings was \$1,048 per month (compared to \$959 for the NRBS). The highest monthly housing costs were reported for St. Albert and Spruce Grove while the lowest monthly costs were reported in Lac Ste. Anne County. Monthly costs for rental accommodation were typically lower than for owned dwellings, except in Sturgeon County.

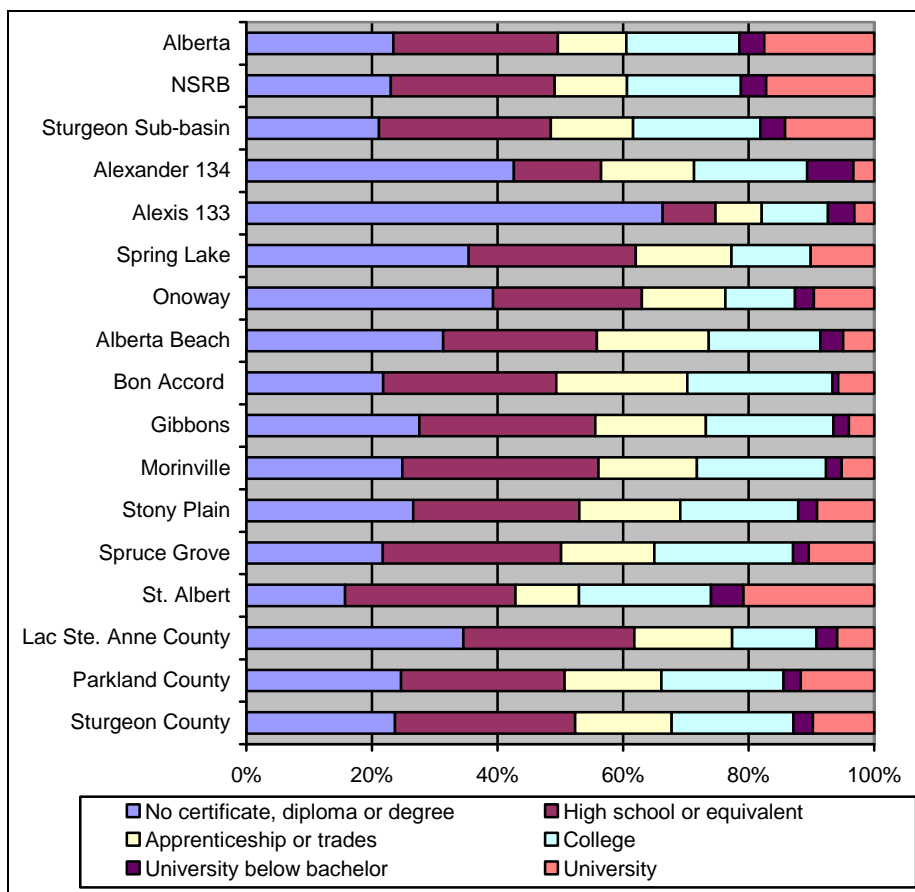
Figure 8-17: Average Monthly Costs for Rental and Owned Dwellings, 2005



8.10 Education

Residents of the Sturgeon Sub-basin were slightly better educated than the NSRB average. Figure 8-18 shows that 21.1% of sub-basin residents had not completed high school and this percentage was just below the NSRB average (23.0%). The communities with the lowest levels of educational attainment, as measured in terms of the percentage that had not completed high school, include the Alexis 133 reserve (65.6%), the Alexander 134 reserve (42.6%), Onoway (39.6%), Spring Lake (35.0%) and Lac Ste. Anne County (34.5%). The lowest percentage of people who had not completed high school was found in St. Albert (15.7%).

Figure 8-18: Educational Attainment, Sturgeon Sub-Basin

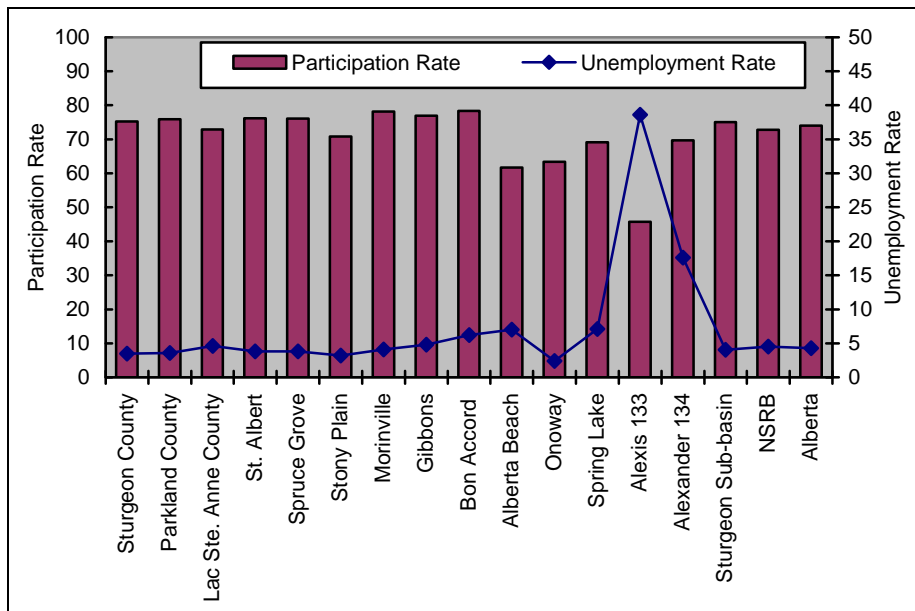


About 13.1% of adult residents of the Sturgeon Sub-basin had completed an apprenticeship or trades certificate, and this was slightly higher than the NSRB average of 11.5%. Communities with relatively high percentages of residents with an apprenticeship or trades certificate included Bon Accord (20.7%), Alberta Beach (18.0%), Gibbons (17.6%) and Stony Plain (16.1%). About 14.2% of sub-basin residents had completed their university education; this is just below the NSRB average of 17.2%. The highest percentages of people with university educations were found in St. Albert (20.8%) and Edmonton (20.1%).

8.11 Labour Force Participation

Overall, 75.0% of the adult population in the Sturgeon Sub-basin was participating in the labour force, either working or actively seeking work. This rate was slightly higher than for the NSRB (72.1%). Figure 8-19 shows that labour force participation rates were highest in Bon Accord (78.3%) and Morinville (78.2%) and dropped to 76.2% in St. Albert. The lowest participation rates were reported in Alberta Beach (61.7%), Onoway (63.4%), and Spring Lake (69.1%). Labour force participation rates ranged from 45.8% on the Alexis 133 reserve to 69.7% on the Alexander 134 reserve,

Figure 8-19: Labour Force Participation and Unemployment Rates, 2006



In 2006, the Sturgeon Sub-basin had an unemployment rate of 4.0%, which was less than the NSRB average (4.5%). Unemployment rates were lowest in Onoway (2.4%) and increased to 3.8% in St. Albert. The highest unemployment occurred in Alberta Beach (7.1%), Spring Lake (7.0%) and Bon Accord (6.2%), but climbed to 17.6% on the Alexander 134 reserve and 38.6% of the Alexis 133 reserve.

8.12 Employment by Occupation

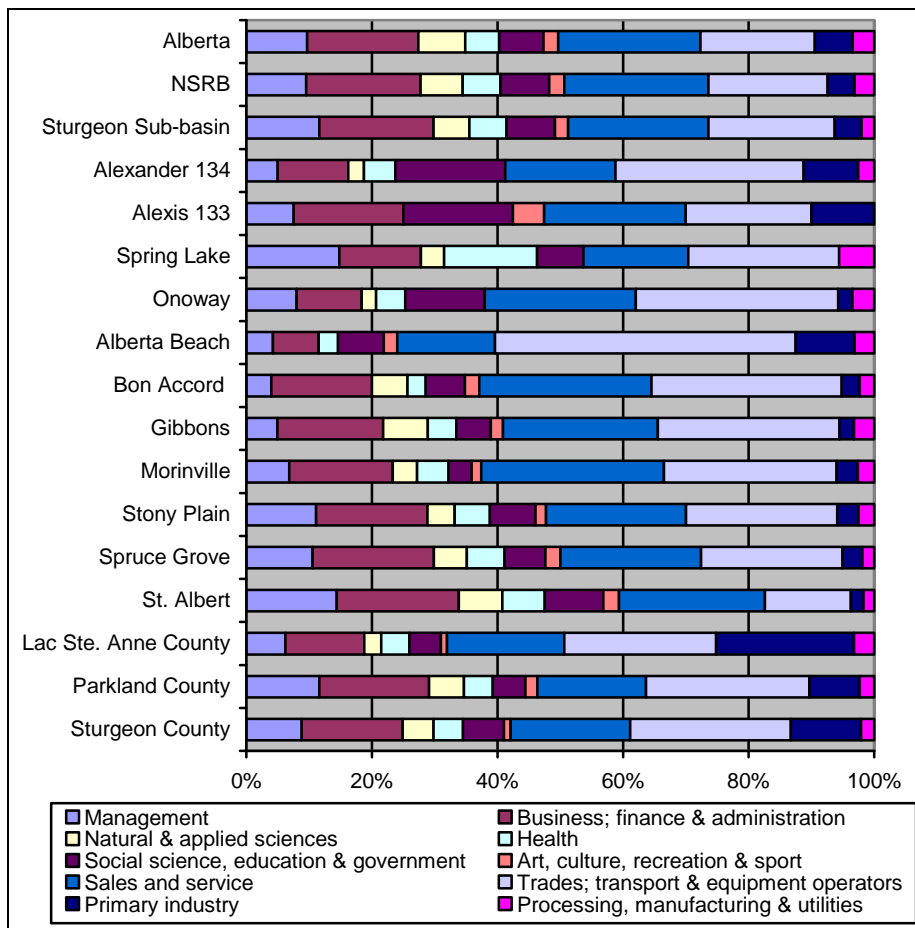
Figure 8-20 shows employment by occupation for the Sturgeon Sub-basin. Overall, the sub-basin profile is nearly identical to the NSRB profile, with a slightly higher percentage of people employed in occupations related to business, finance and administration.

Within the sub-basin, employment in occupations related to primary industry accounted for 4.3% of total employment, but was more important in Lac Ste. Anne County, Alberta Beach and the two reserves. Employment in trades, transport and equipment operations averaged 20.1% in the sub-basin but ranged from 47.9% in Alberta Beach and 32.6% in Onoway to 13.7% in St. Albert.

St. Albert reported the highest percentage of its workforce in management occupations. The highest employment in sales and service occupations were reported in Morinville. St. Alberta and Spruce Grove

had the highest percentages of employment in occupations related to business, finance and administration. Spring Lake had the highest percentage of people employed in health occupations while Onoway had the highest percentage of people employed in social sciences, education and government.

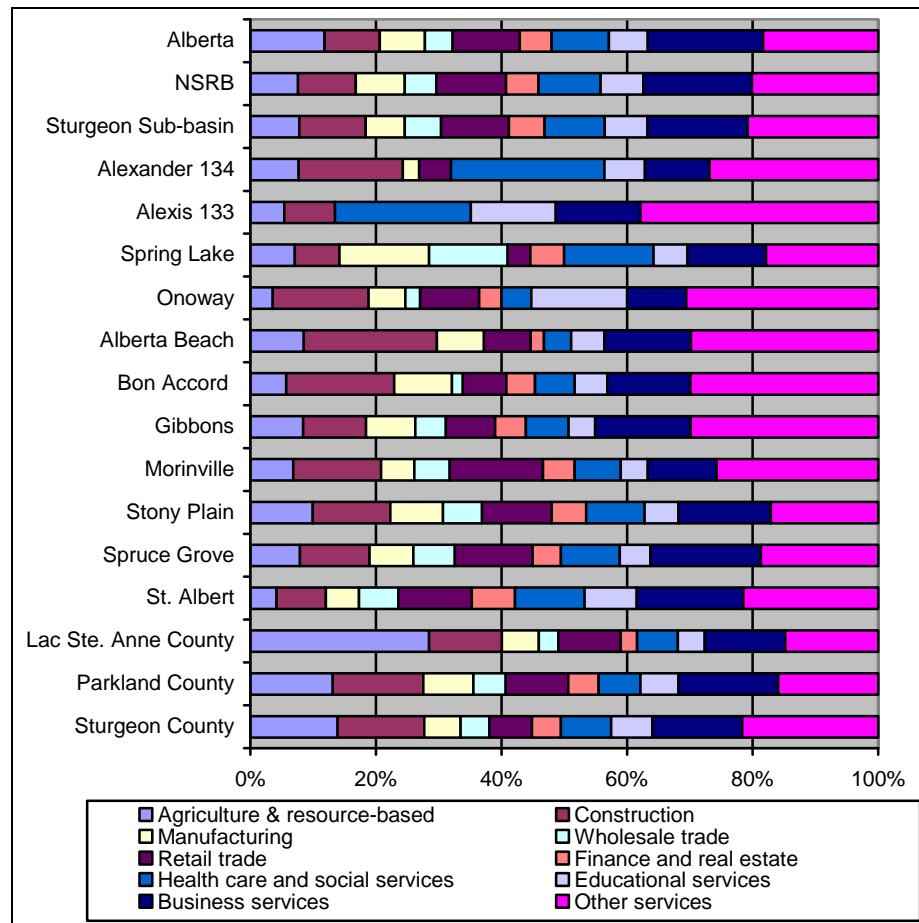
Figure 8-20: Employment by Occupation, Sturgeon Sub-Basin, 2006



8.13 Employment by Industry

Figure 8-21 shows employment in the Sturgeon Sub-basin based on the industry of employment. Overall, 24.5% of the workforce was working in basic (goods-producing) industries, including agriculture and other resource-based industries, manufacturing and construction. This was nearly identical to the NSRB, where 24.6% of the workforce was employed in basic industries.

Figure 8-21: Employment by Industry, Sturgeon Sub-Basin, 2006



Employment in the agriculture and resource-based industries accounted for only 7.8% of the employment workforce, although this percentage reached 13.1% in Parkland County and 13.9% in Sturgeon County. Employment in manufacturing accounted for 6.2% of total employment but was quite important in Spring Lake.

Non-basic industries accounted for 75.4% of employment in the Sturgeon Sub-basin. The non-basic industries that provided the greatest amounts of employment included other services (20.8%), business services (16.8%) and retail trade (10.8%). Within the sub-basin, the percentage of employment in other industries was highest on the Alexis 133 reserve and in the communities of Onoway, Alberta Beach, Bon Accord and Gibbons. Employment in business services ranged from 17.6% in Spruce Grove and 17.0% in St. Albert to 9.3% in Onoway and 10.9% in Morinville. The highest participation in retail trade was

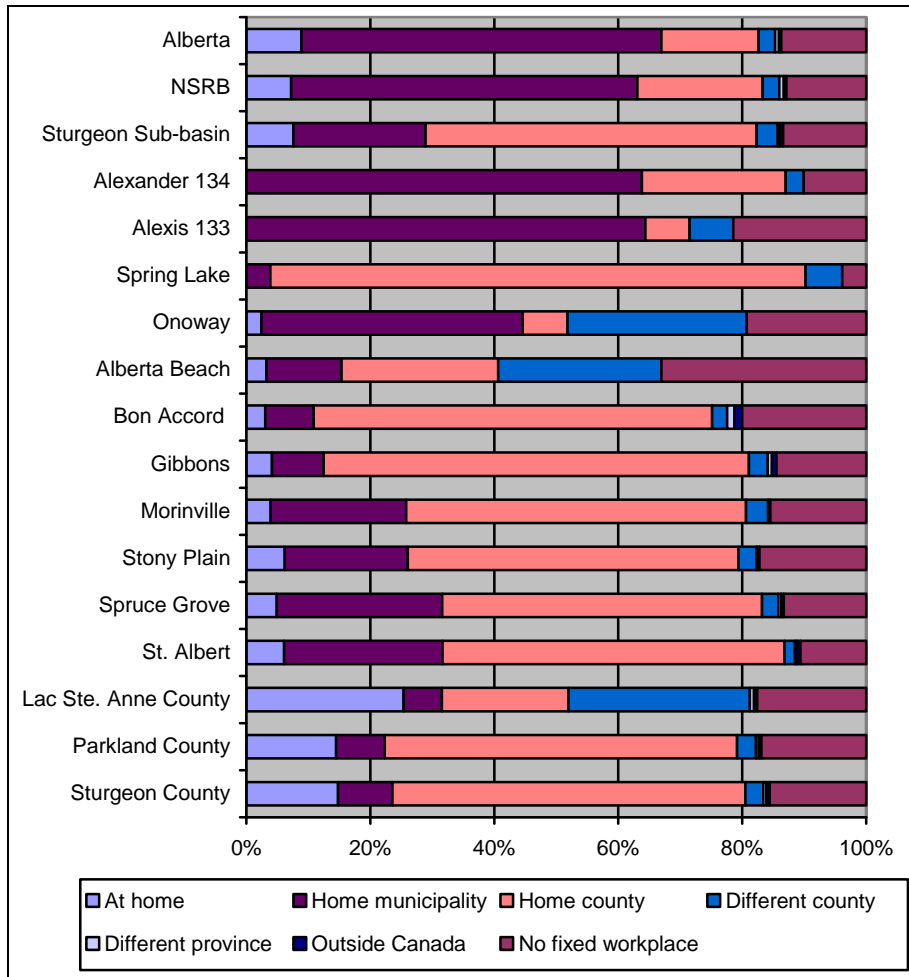
reported in Spruce Grove (12.4%) and St. Albert (11.7%). St. Albert had relatively greater percentages of people employed in the health care and education industries.

8.14 Location of Employment

Figure 8-22 shows where residents of the Sturgeon Sub-basins actually worked. Overall, 7.6% worked at home and 21.3% worked at a usual place in their home municipality. Another 53.4% worked in their home county outside their local community, while 3.4% worked in another part of Alberta, 0.4% worked outside Alberta and 0.5% worked outside Canada. The balance (13.4%) had no fixed workplace. Compared to the NSRB, residents of the Sturgeon Sub-basin were more likely to work outside their home municipality in their home county. This likely reflects the fact many residents of the Sturgeon Sub-basin commute for work in Edmonton or other nearby communities.

The figure shows that residents of Spring Lake, Gibbons and Morinville were most likely to commute to other locations to work. Residents of Lac Ste. Anne County were most likely to work at home, or to work in a different county. People living in Onoway and Alberta Beach were also highly likely to work in another county. Residents of the Alexis 133 and Alexander 134 reserves were most likely to work in their home municipalities, as were residents of Onoway. Residents of Alberta Beach were also least likely to have a fixed workplace.

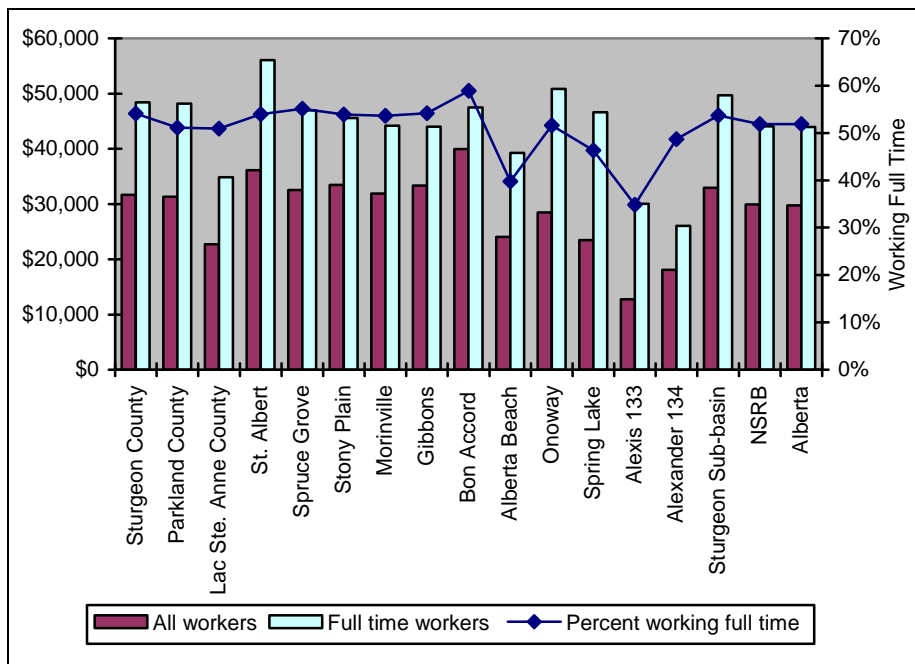
Figure 8-22: Location of Work, Sturgeon Sub-Basin, 2006



8.15 Employment Earnings

Residents of the Sturgeon Sub-basin reported median earnings of \$32,950 in 2005; this was higher than the NSRB average of \$30,068. Figure 8-23 shows that the highest median earnings were reported in Bon Accord (\$39,950) and St. Albert (\$36,100) while workers from Alberta Beach and Spring Lake reported median earnings of only \$24,029 and \$23,503, respectively. The lowest earnings were reported on the Alexis 133 and Alexander 134 reserves, where the median income in 2005 was only \$12,725 and \$18,112.

Figure 8-23: Median Earnings and Full-Time Employment, 2006

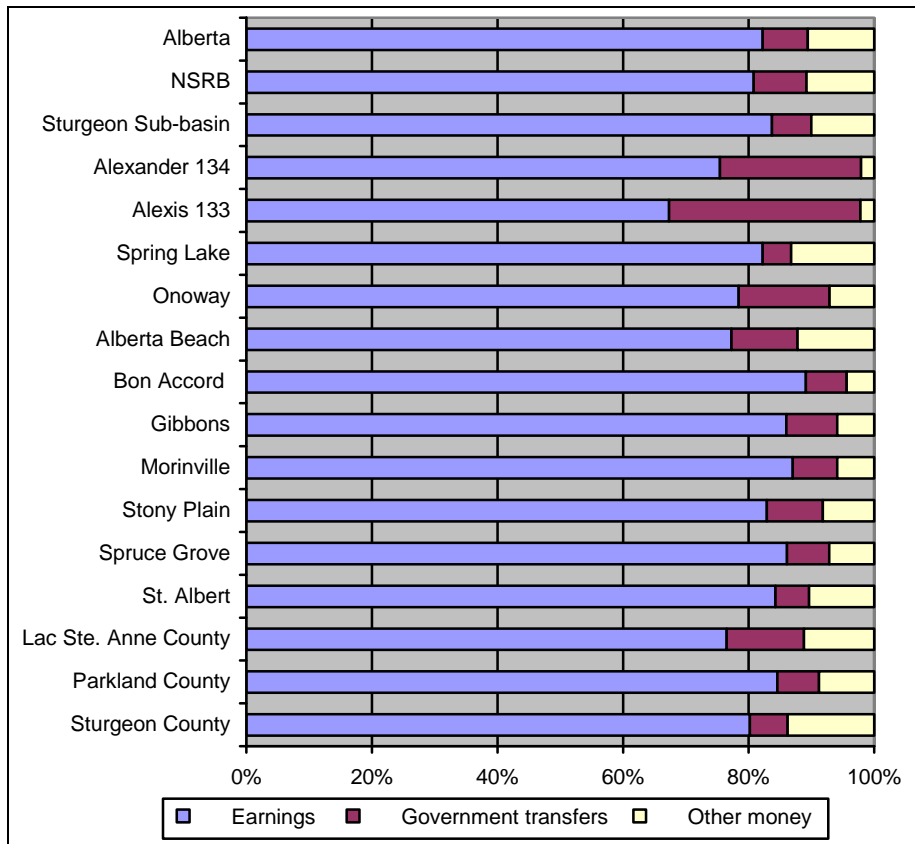


Within the Sturgeon Sub-basin 53.7% of workers reported being employed full-time, year round; this is slightly higher than for the NSRB where 51.9% of workers were employed full-time. The percentage of workers with full-time employment ranged from 58.9% in Bon Accord to 39.8% in Alberta Beach and only 34.8% on the Alexis 133 reserve. People who did work full-time, year round, reported median earnings of \$49,695, which was much higher than the NSRB average (\$44,233). The highest median incomes from full-time employment were reported in St. Albert (\$56,036) and Onoway (\$50,815). The lowest median earnings from full-time employment occurred on the Alexander 134 reserve (\$26,048), and this was lower than the median earnings reported by all workers in the Sturgeon Sub-basin.

8.16 Other Income Sources

Figure 8-24 shows that earnings accounted for 83.7% of income for residents of the Sturgeon Sub-basin; this is higher than for the NSRB (81.4%).

Figure 8-24: Reliance on Transfer Payments and Other Income, 2005



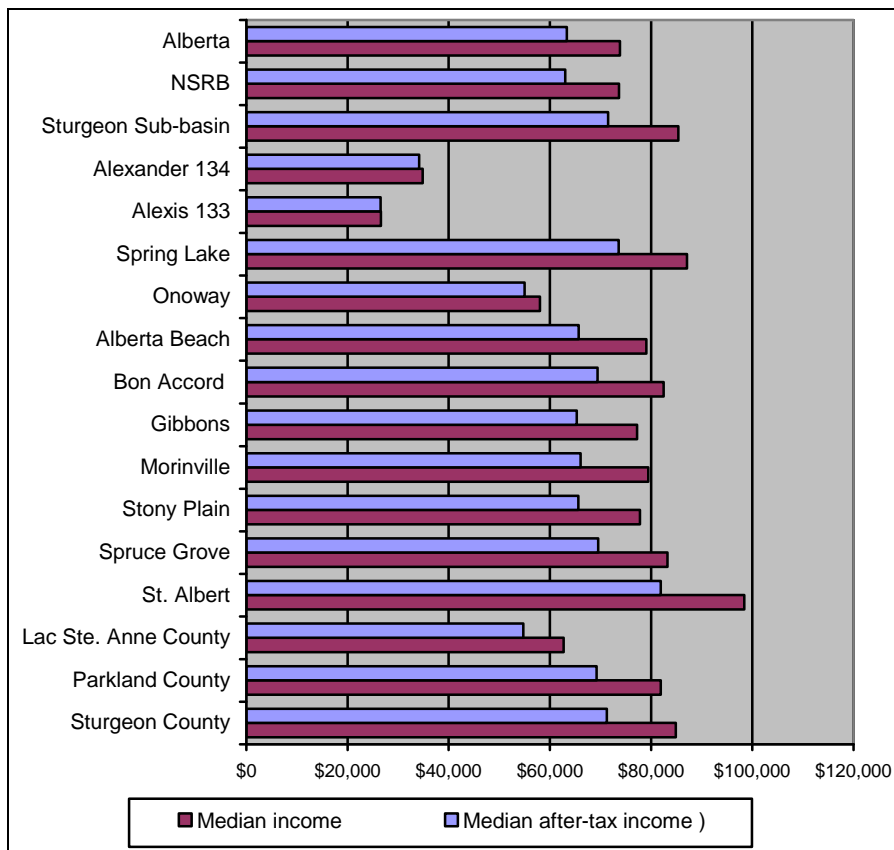
The remaining income came from government transfers (6.3%) and other sources (10.0%). It shows that earnings accounted for more than 80% of income in most communities, with the exception of Lac Ste. Anne County (76.5%), Alberta Beach (77.2%) and Onoway (78.2%). Residents of these three communities were more reliant on government transfers than were other communities in the sub-basin. Residents of Bon Accord were the least reliant on income from government transfers or other income sources. Residents of the Alexis 133 and Alexander 134 reserves were most reliant on income from government transfer, which accounted for 30.8% and 22.4% of their annual incomes, respectively.

8.17 Family and Individual Income

In 2005 families in the Sturgeon Sub-basin reported median incomes averaging \$85,407 (or \$71,471 after tax); these incomes are much higher than the NSRB average of \$73,823 (or \$63,361 after tax). Variations in median family incomes within the sub-basin are shown in Figure 8-25. The highest median family incomes were reported in St. Albert (\$98,401) and Spring Lake (\$87,121). For the non-Aboriginal communities, median family incomes were lowest in Onoway (\$58,023) and Lac Ste. Anne County (\$62,734). The lowest family incomes were reported for the Alexis 133 and Alexander 134 reserves. Median incomes for families on these reserves ranged from \$26,603 to \$34,859, respectively, which represents between 31% and 41% of the estimated median family income for the Sturgeon Sub-basin.

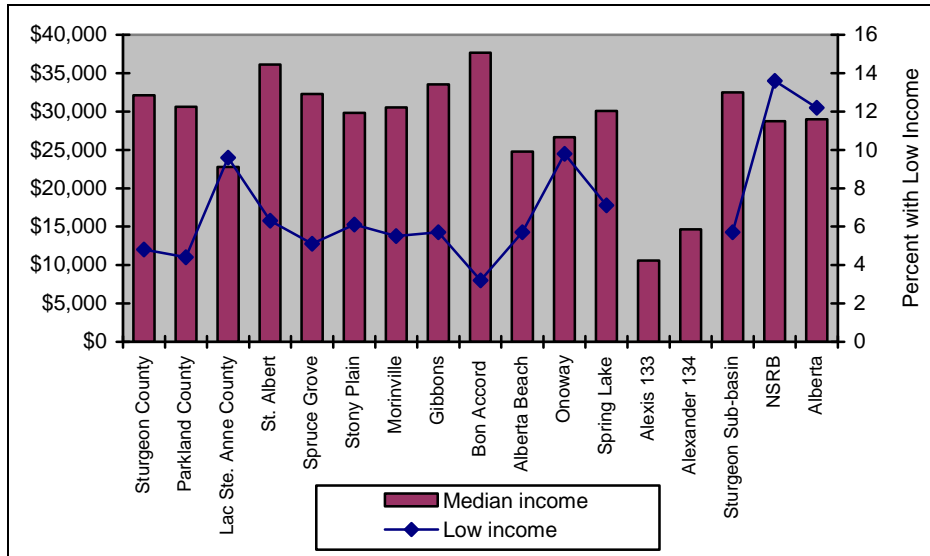
Median incomes in 2005 for persons in private households in the Sturgeon Sub-basin averaged \$32,500; this is much higher than the NSRB average (\$28,898). Overall, 5.7% of residents of the Sturgeon Sub-basin were considered to have low incomes (before tax), and this is much less than the NSRB average (13.6%). Figure 8-26 summarizes median incomes and the incidence of low incomes for communities in the sub-basin. Median personal incomes ranged from \$37,679 in Bon Accord to \$22,779 in Lac Ste. Anne County and \$24,759 in Alberta Beach. The median income reported by residents of the Alexis 133 reserve was only \$10,608 and this increased to \$14,624 for residents of the Alexander 134 reserve.

Figure 8-25: Median Family Income, Before and After Tax, 2005



The incidence of people with low incomes ranged from 3.2% in Bon Accord to 9.8% in Onoway and 9.6% in Lac Ste. Anne County. There is no information on the incidence of low income on the Alexis 133 or Alexander 134 reserves.

Figure 8-26: Median Personal Income and Incidence of Low Income, 2005

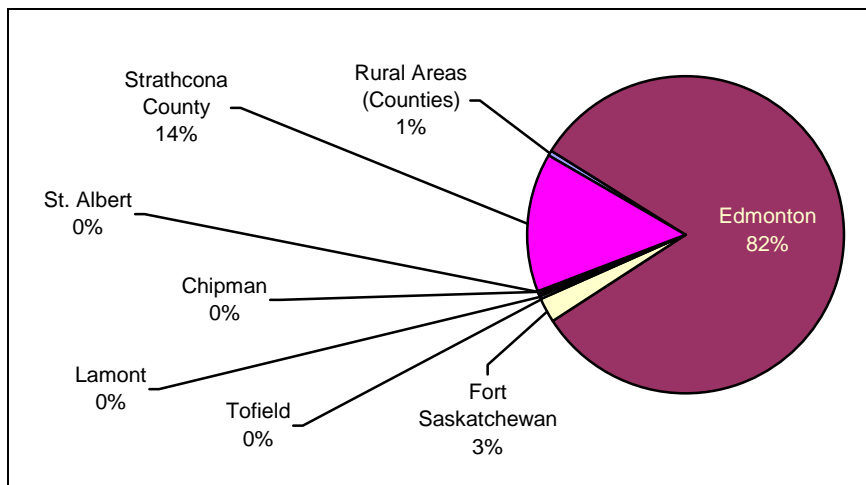


9.0 BEAVERHILL SUB-BASIN

9.1 Population

In 2006, the Beaverhill Sub-basin had a population of about 586,100 people which represents about 51.0% of the population of the entire NSRB. The majority of the population in the sub-basin (81.8%) lives in Edmonton. Figure 9-1 shows that 14.7% of the sub-basin population lives in one of 7 counties, although Strathcona County accounts for 14.1% of the sub-basin population. Small numbers of people live in Beaver County, Sturgeon County, Lamont County, Camrose County, Improvement District No. 13, and Leduc County. The balance of the population (3.5%) lives in one of 5 urban communities in the sub-basin, the largest of which is Fort Saskatchewan. Other communities include Tofield, Lamont, Chipman and St. Albert.

Figure 9-1: Population Distribution in the Beaverhill Sub-Basin, 2006



9.2 Age Characteristics

In terms of age, residents of the Beaverhill Sub-basin were very similar to the overall population of the NSRB. Figure 9.0-2 shows that, the Beaverhill Sub-basin had slightly lower percentages of children (under 15 years of age) and a higher percentage of young adults (people aged 20 to 29).

Figure 9.0-2: Age Composition of the Beaverhill Sub-Basin Population, 2006

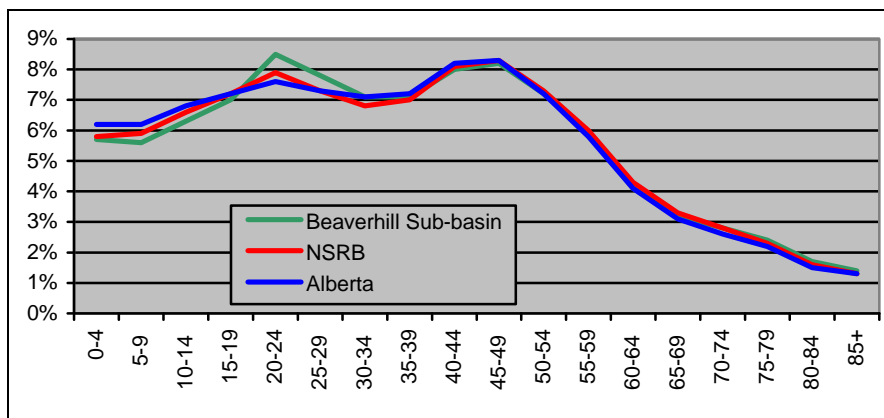
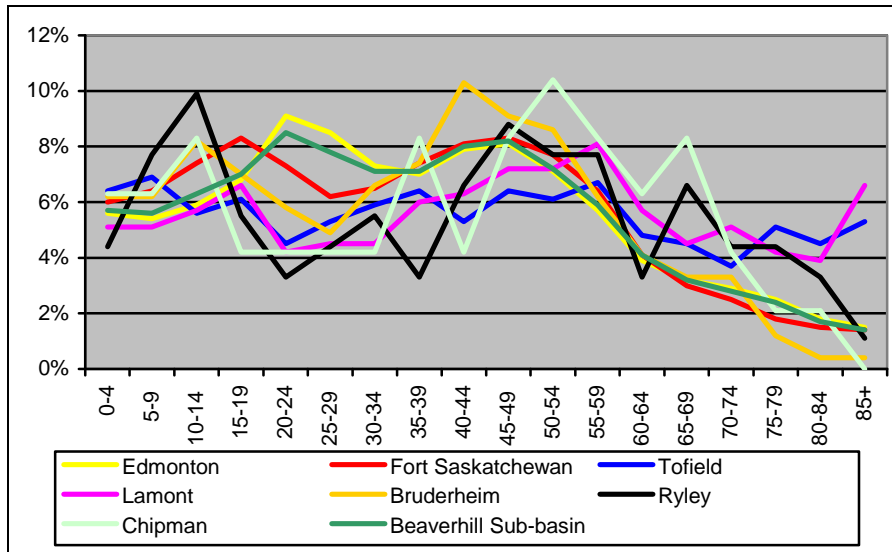


Figure 9.0-3 shows the age distributions for the urban communities within the Beaverhill Sub-basin. The age distribution for Edmonton, which accounts for the majority of the population, is very similar to the sub-basin, although the City had even smaller percentages of children (under 15 years) and higher percentages of young adults (aged 20 to 29 years).

For all the other communities there are no consistent patterns. Fort Saskatchewan shows the opposite trend than Edmonton, with higher percentages of children and lower percentages of young adults. Communities that share this pattern include Chipman, Bruderheim and, to a lesser extent, Ryley (which actually had the lowest percentage of children under 5. These communities had higher percentages of children than the Beaverhill Sub-basin, but also had lower percentages of adults from 20 to 34 years. In terms of older populations, Chipman and Ryley generally had much higher percentages of people over the age of 50, although Ryley had a much smaller percentage of people aged 50 to 64 and Chipman had a smaller percentage of people over the age of 85. Bruderheim also had higher percentages of people aged 40 to 54, but lower percentages of people over the age of 74 years.

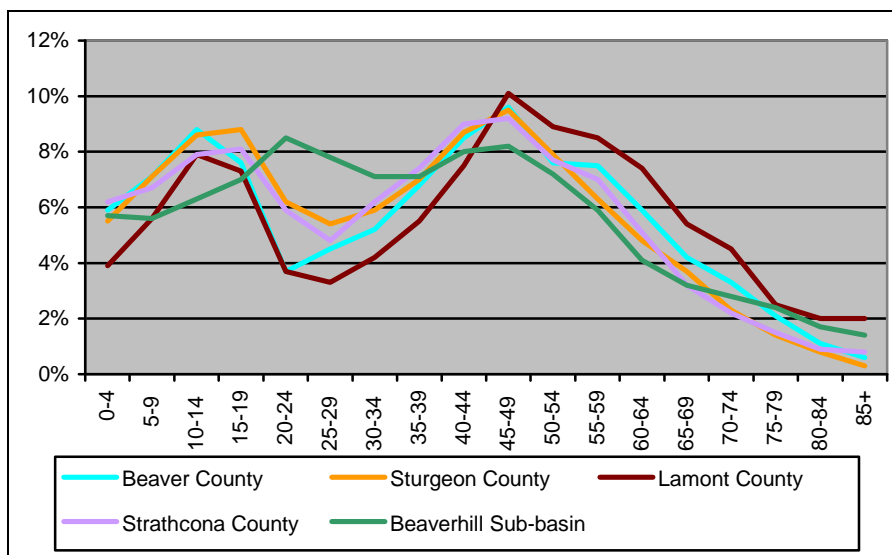
Figure 9.0-3: Age Composition of Urban Communities in the Beaverhill Sub-Basin, 2006



Tofield and Lamont tended to be much older, with relatively few people aged 15 to 50, but much higher percentages of people over the age of 55 years and, in the case of Lamont, a very high percentage of people over the age of 84 years.

Figure 9.0-4 shows the population composition of the rural communities in the Beaverhill Sub-basin and shows that age distributions were quite similar. Compared to the sub-basin, all the rural areas (including Strathcona County) featured populations with larger percentages of young people (under 20 years), smaller populations of young adults (20 to 34) and higher percentages of people over the age of 44 years. The populations of Sturgeon County and Strathcona County tended to be younger while Lamont County and Beaver County tended to be older.

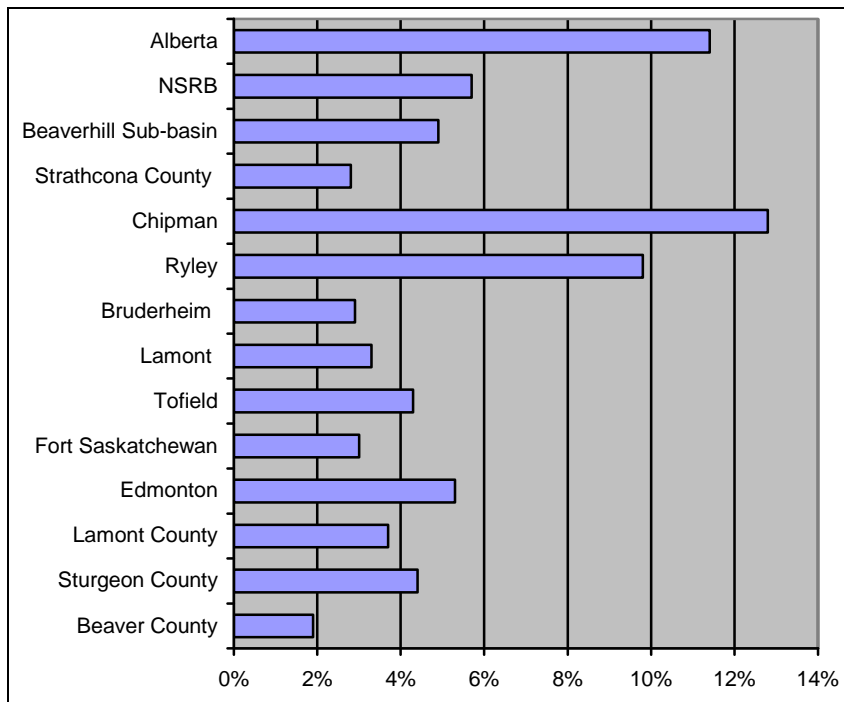
Figure 9.0-4: Age Composition of Rural Communities in the Beaverhill Sub-Basin, 2006



9.3 Aboriginal Population

About 4.9% of the residents of the Beaverhill Sub-basin were Aboriginal and this is lower than the NSRB average (5.8%). There were about 28,115 Aboriginal people living in the sub-basin and 89% of these were living in Edmonton. Figure 9.0-5 shows that, in general, communities in the sub-basin had lower percentages of Aboriginal residents than were found in either the NSRB or the overall Beaverhill Sub-basin. The only exceptions were in Ryley and Chipman, where Aboriginal people accounted for 9.8% and 12.8% of the population, respectively.

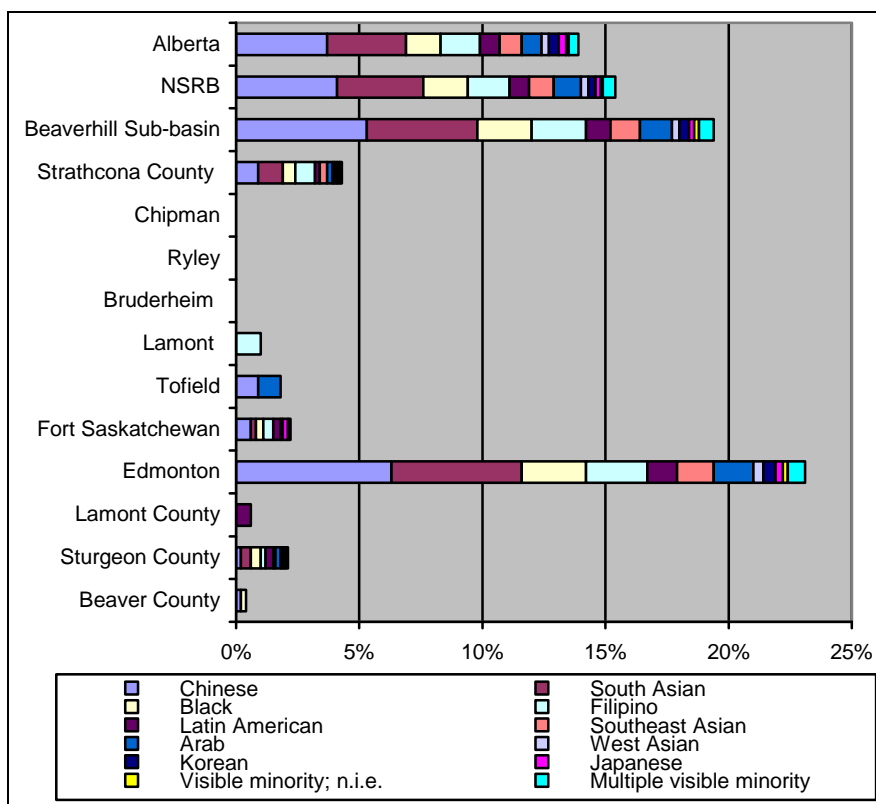
Figure 9.0-5: Aboriginal Population in the Beaverhill Sub-Basin, 2006



9.4 Ethnicity

About 19.4% of the population of the Beaverhill sub-basin consisted of visible minorities. This is considerably higher than the NSRB average of 15.5%. Figure 9.0-6 shows the percentage of visible minorities within each of the communities within the Beaverhill sub-basin. It shows that the highest percentage of visible minorities occurred in Edmonton and, to a lesser extent, Strathcona County. In all the other communities, visible minorities accounted for less than 2.3% of the population. In Edmonton, 22.9% of the population consisted of visible minorities, which were typically Chinese (6.3% of the total population), South Asian (5.3%), Black (2.6%) and Filipino (2.5%). Various other visible minority groups accounted for another 6.2% of the population.

Figure 9.0-6: Visible Minorities in the Beaverhill Sub-Basin, 2006

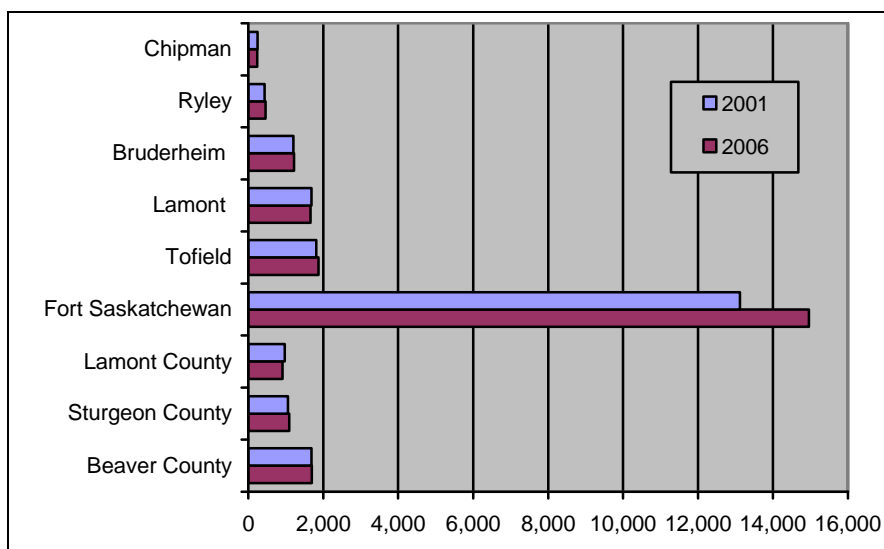


In most communities there was a wide mix of visible minorities. However, visible minorities in Lamont consisted entirely of Filipinos, while Tofield had a combination of Chinese and Arabian population.

9.5 Population Change

Between 2001 and 2006, the population of the Beaverhill Sub-basin increased by 54,575 people which represents an increase of 10.3%. This growth rate was slightly higher than population growth rate for the NSRB (9.6%). About 77% of this increase occurred in Edmonton, which experienced a population growth rate of 9.6%. Another 19.3% of population growth occurred in Strathcona County, which recorded a 14.6% growth rate. Figure 9.0-7 shows the population increases in the other communities in the Beaverhill Sub-basin. It shows that most of the other population growth occurred in Fort Saskatchewan, which had a population growth rate of 14.0%. Small population increases occurred in Ryley and Tofield, while the populations of Bruderheim, Sturgeon County and Beaver County remained unchanged. Chipman, Lamont and Lamont County actually experienced population decreases.

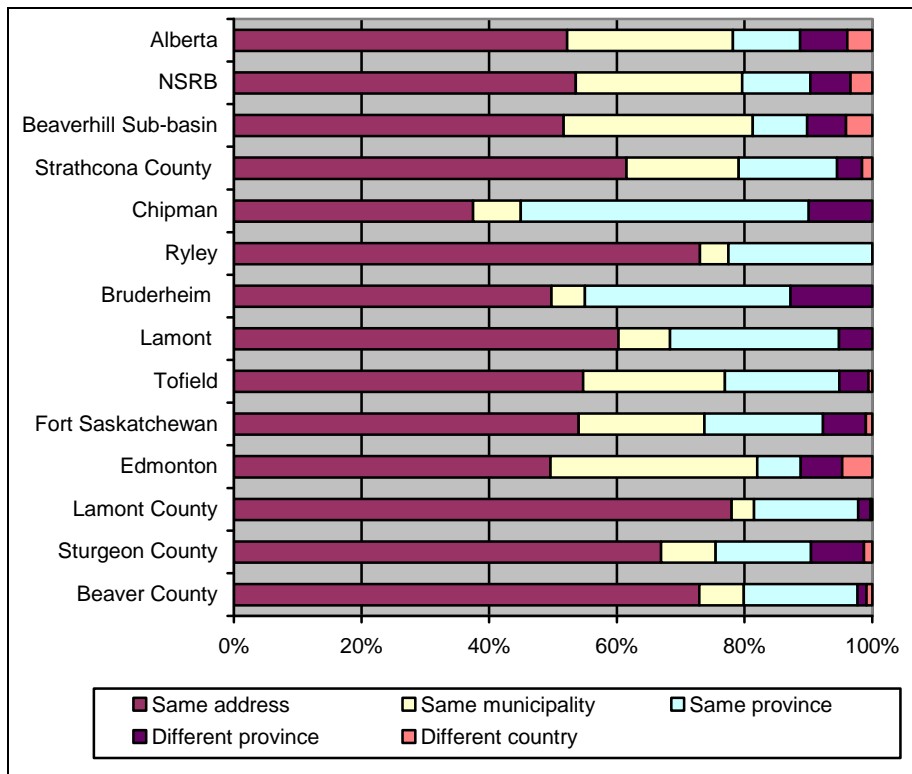
Figure 9.0-7: Population Change in the Beaverhill Sub-Basin, 2001-2006



One factor affecting population growth is migration from one area to another.

Figure 9.0-8 shows population mobility in the Beaverhill Sub-basin between 2001 and 2006. It shows that 51.6% of sub-basin residents resided at the same address for the 5-year period; this slightly less than the NSRB average (53.6%). Another 29.6% lived in the same census subdivision but changed addresses. A small percentage of sub-basin residents (4.1%) moved in from another country, 6.1% moved from another province, and 8.5% moved from a different municipality in Alberta.

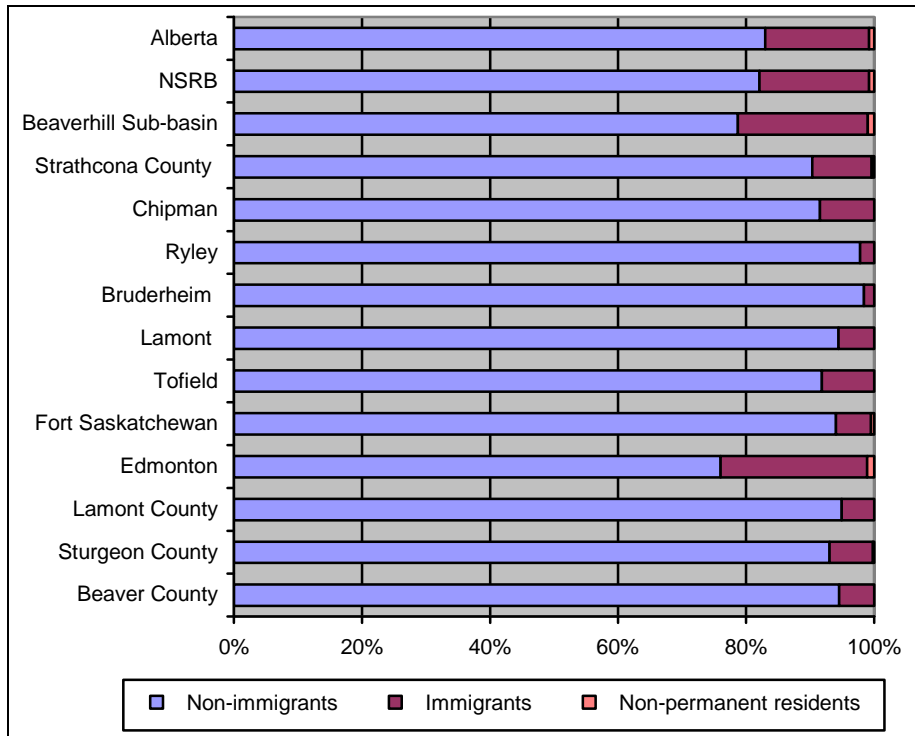
Figure 9.0-8: Population Mobility in the Beaverhill Sub-Basin, 2001-2006



Residents of Ryley and Lamont County were the most likely to have lived at the same address for the period from 2001 to 2006, while residents of Chipman, Edmonton and Bruderheim were the most mobile. Edmonton had the highest percentage of people who had moved from another country, while Chipman and Bruderheim had the highest percentages of people who had moved from another province. Chipman and Bruderheim also had the highest percentages of people who had moved into the communities from other parts of Alberta.

Immigration has also contributed to population growth. About 20.3% of sub-basin residents consisted of immigrants and this was higher than the NSRB average of 17.1%. Overall, the percentage of immigrants ranged from 1.6% in Bruderheim and 2.2% in Ryley to 22.9% in Edmonton.

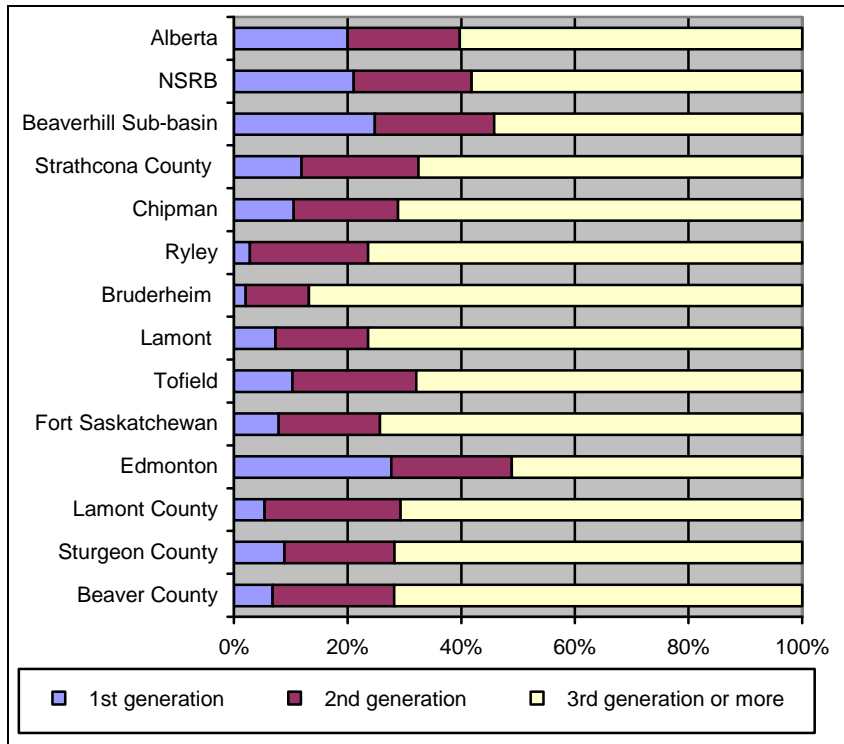
Figure 9.0-9: Role of Immigration in the Beaverhill Sub-Basin, 2006



About 54.2% of people living in the Beaverhill sub-basin had lived in Canada for 3 or more generations, 21.0% had lived in Canada for 2 generations and 24.8% were first-generation Canadians.

Figure 9.0-10 shows that the highest percentages of sub-basin residents who had lived in Canada for 3 or more generations were found in Bruderheim, Lamont and Ryley. The communities in the sub-basins with the highest percentage of the population that has lived in Canada for only 1 or 2 generations include Edmonton and Strathcona County.

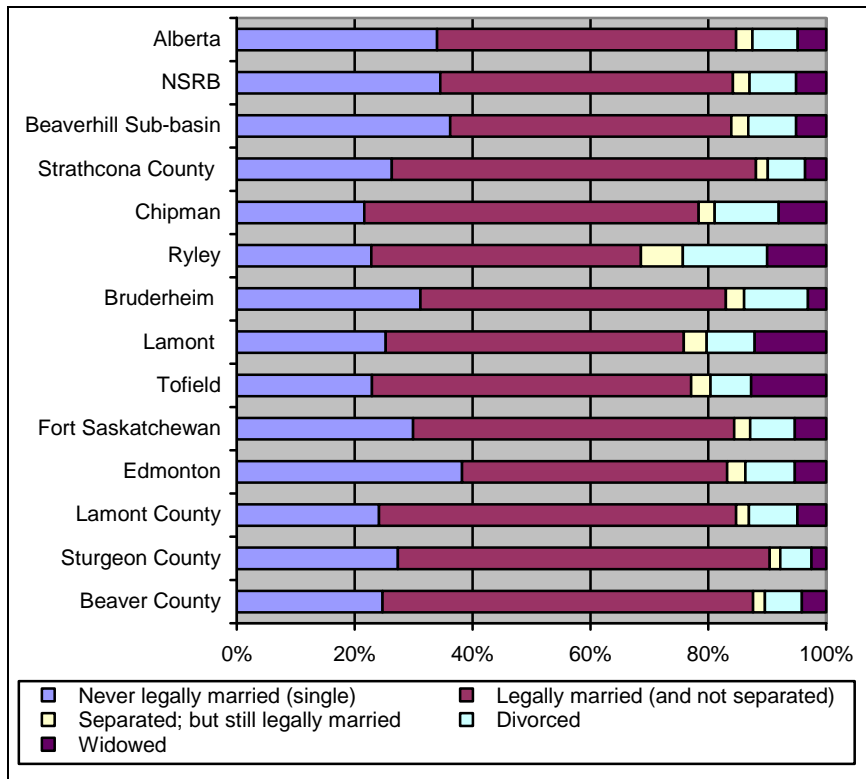
Figure 9.0-10: Residency in Canada, Beaverhill Sub-Basin, 2006



9.6 Marital Status

Married people account for 47.7% of the sub-basin adult population, while the balance consists of single people (36.2%), divorced people (8.1%), widowed people (5.1%) and people who are separated (2.9%). The sub-basin profile (Figure 9.0-11) shows that it was nearly identical to the NSRB profile. Overall, Edmonton had the highest percentage of single people (38.2%) while in all of the other communities (except for Bruderheim), single people accounted for less than 30% of the population. Married people accounted for at least 60% of the adult population in all four counties but only 45.0% of adults in Edmonton and 45.1% in Ryley. Widowed people accounted for Lamont and Tofield.

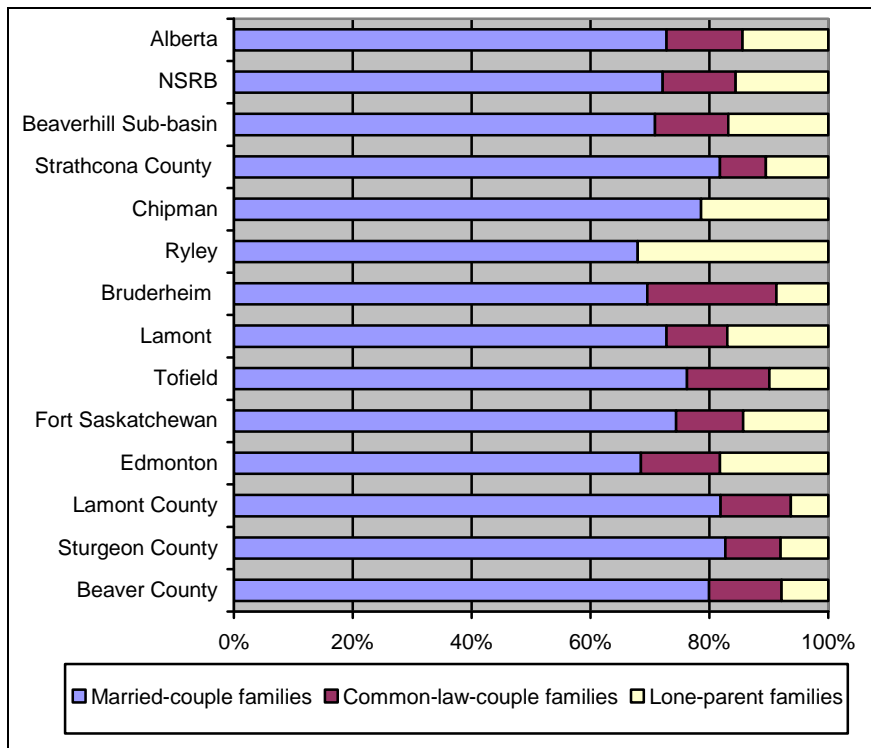
Figure 9.0-11: Marital Status in the Beaverhill Sub-Basin, 2006



9.7 Family Structure

Married couple families account for 70.8% of the 159,390 families in the Beaverhill Sub-basin. Lone parent families account for 16.8% of families, while common-law couples account for the balance (12.3%). Figure 9.0-12 shows that, when compared with the NSRB, sub-basin had a slightly smaller percentage of married couple families and more single parent families. The lowest percentages of married couple families were found in Edmonton and Ryley while in the four counties, married-couple families accounted for more than 80% of families. The highest percentage of lone-parent families was found in Ryley.

Figure 9.0-12: Family Structure in the Beaverhill Sub-Basin, 2006

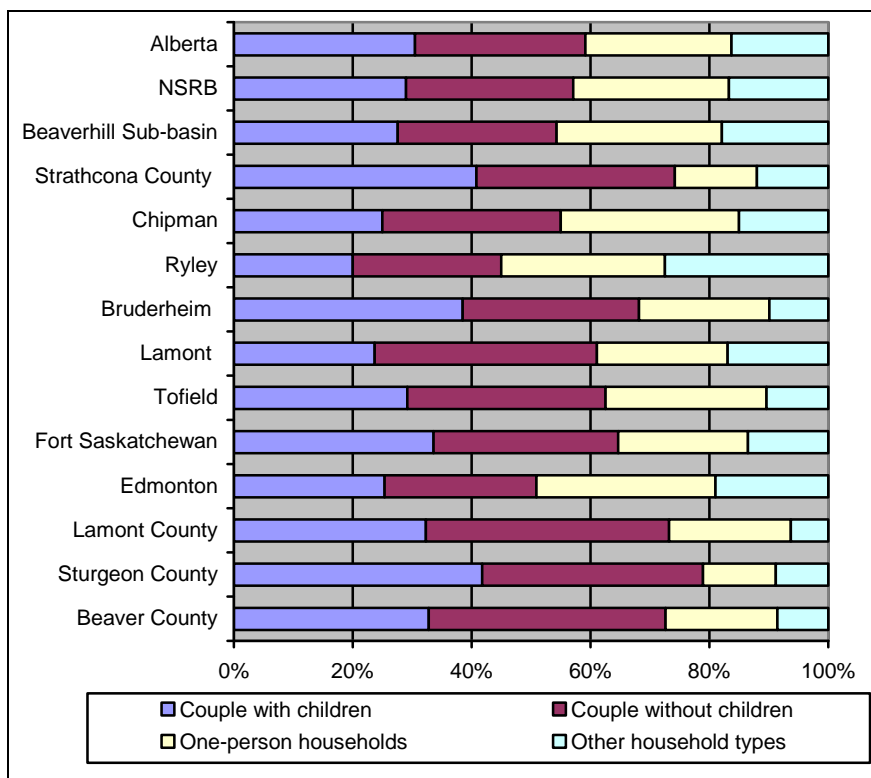


9.8 Household Structure

Household structure differs from family structure because households can contain one or more families.

Figure 9.0-13 shows that 27.6% of households consisted of a couple with children, 26.7% were couples with no children, 27.8% were single person households, and the balance (17.9%) consisted of other household types. Overall, the Beaverhill Sub-basin had a slightly lower percentage of married couples with children than did the NSRB. Within the sub-basin, the highest percentages of families with children were found in Strathcona County and Sturgeon County, while the communities with the lowest percentage of households consisting of married couples with children included Ryley, Chipman and Edmonton. In Edmonton 30.1% of households were one-person households. The highest percentages of couples without children households were found in the rural areas: Lamont, Beaver and Sturgeon counties.

Figure 9.0-13: Household Structure in the Beaverhill Sub-Basin, 2006



9.9 Housing

In 2006 there were about 233,135 housing units in the Beaverhill Sub-basin. Figure 9.0-14 shows the composition of housing in each of the communities within the sub-basin. Overall, single detached houses accounted for 55.5% of housing in the sub-basin, but represented more than 80% of housing in all communities in the sub-basin except for Edmonton, Fort Saskatchewan and Bruderheim. Edmonton had the widest mix of housing, with only 50.2% consisting of single detached houses. Apartments of 5 or more stories were found only in Edmonton (8.9% of housing stock), while smaller apartment buildings (less than 5 stories) accounted for 23.4% of housing stock in Edmonton and 17.7% in Fort Saskatchewan.

Figure 9.0-14: Housing Characteristics in the Beaverhill Sub-Basin, 2006

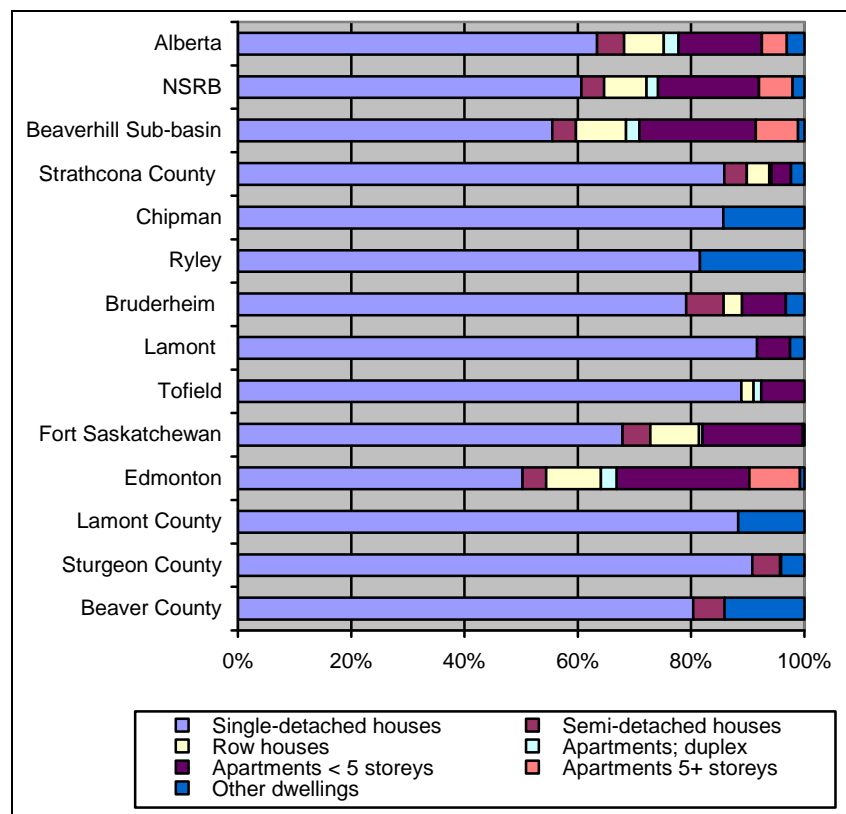


Figure 9.0-15 shows the reported value of housing in each of the communities within the Beaverhill Sub-basin as well as the percentage of housing stock in need of major repair. Overall, the average value of a house in the Beaverhill Sub-basin in 2005 was \$262,685, which was slightly higher than the NSRB average (\$254,828). The communities with the highest valued dwellings included Strathcona County (\$323,855) and Sturgeon County (\$314,125) while the lowest values occurred in the villages of Ryley (\$68,750) and Chipman (\$110,146). The average value of housing in Edmonton was \$255,525.

Overall, 5.7% of dwellings in the basin were in need of major repair and this was less than the NSRB average of 6.3%. Housing stock in Ryley was in the poorest condition, with 25.0% being in need of major

repair. Relatively high percentages of housing in need of major repair were also reported in Chipman (14.3%).

Figure 9.0-15: Value of Housing (2005) and Need for Major Repairs, Beaverhill Sub-Basin

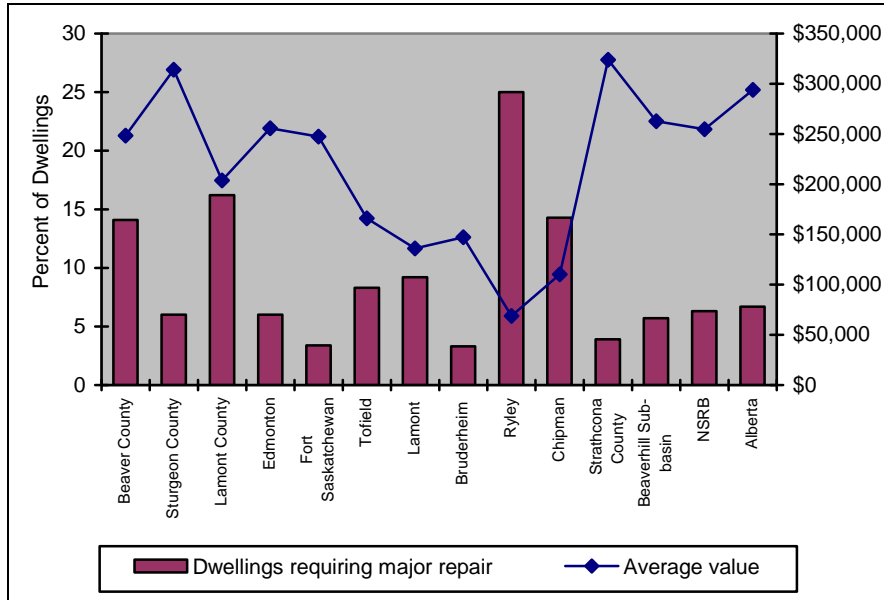
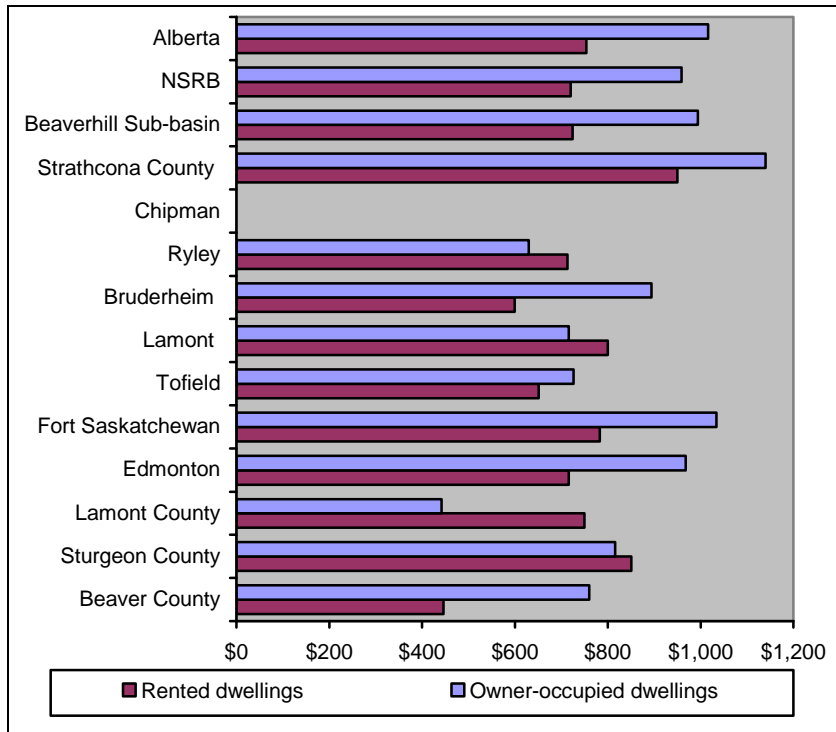


Figure 9.0-16 summarizes the average monthly costs of renting and owning dwellings in communities in the Beaverhill Sub-basin in 2005. These costs include rent/mortgage, electricity, heat and municipal services to operate a dwelling. Overall, rental costs averaged \$724 per month (compared to \$720 in the NSRB) while the average cost for owned dwellings was \$994 per month (compared to \$959 for the NRBS). The highest monthly housing costs were reported for Strathcona County and Fort Saskatchewan while the lowest monthly costs for rented accommodation were found in Beaver County and the lowest cost for owned dwellings occurred in Lamont County. There are no data on housing costs for Chipman.

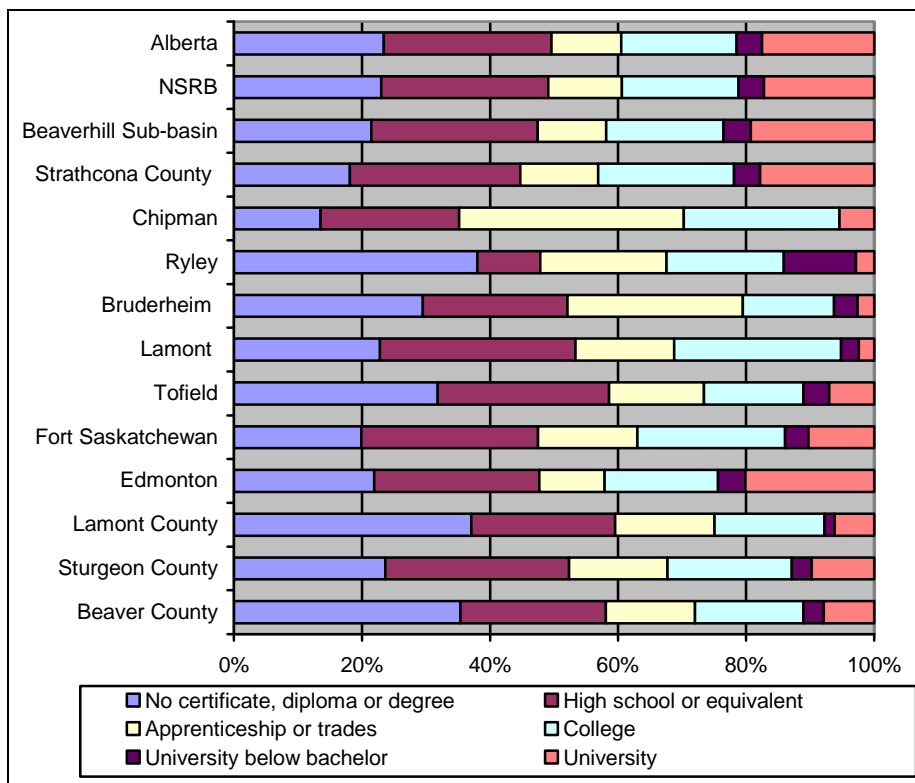
Figure 9.0-16: Average Monthly Costs for Rental and Owned Dwellings, 2005



9.10 Education

Residents of the Beaverhill Sub-basin were slightly better educated than the NSRB average. Figure 9.0-17 shows that 21.5% of sub-basin residents had not completed high school and this percentage was just below the NSRB average (23.0%).

Figure 9.0-17: Educational Attainment, Beaverhill Sub-Basin



The communities with the lowest levels of educational attainment, as measured in terms of the percentage that had not completed high school, include Ryley (37.5%), Lamont County (37.1%), and Beaver County (35.4%). The lowest percentage of people who had not completed high school was found in Chipman (13.2%) while 21.9% of adults in Edmonton had not completed high school.

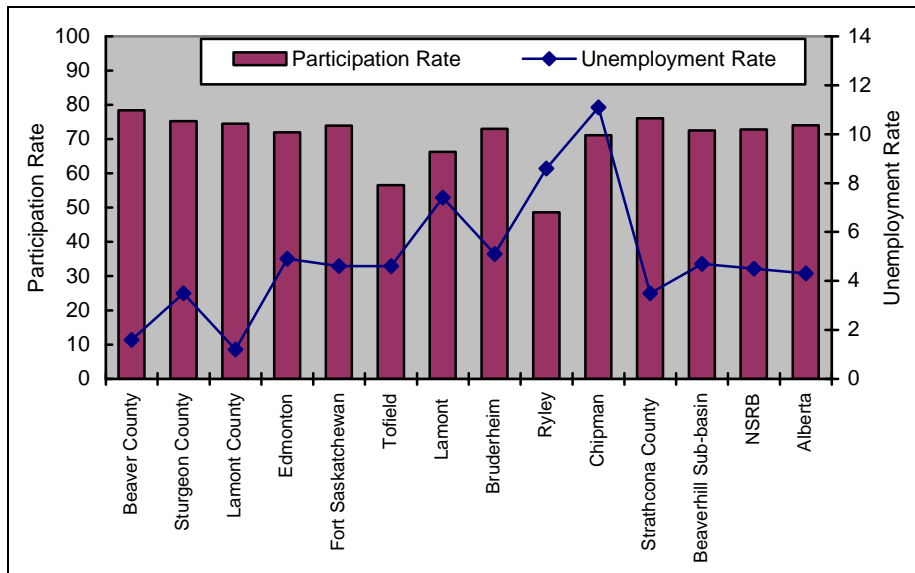
About 10.7% of adult residents of the Beaverhill Sub-basin had completed an apprenticeship or trades certificate, and this was slightly less than the NSRB average of 11.5%. Communities with relatively high percentages of residents with an apprenticeship or trades certificate included Chipman (34.2%) and Bruderheim (27.4%). About 19.8% of sub-basin residents had completed their university education; this is just below the NSRB average of 17.2%. The highest percentages of people with university educations were found in Edmonton (20.1%) and Strathcona County (17.8%).

9.11 Labour Force Participation

Overall, 72.5% of the adult population in the Beaverhill Sub-basin was participating in the labour force, either working or actively seeking work. This rate was slightly higher than for the NSRB (72.1%). Figure 9.0-18 shows that labour force participation rates ranged from a high of 78.5% in Beaver County to only 48.6% in Ryley, 56.5% in Tofield and 66.3% in Lamont. The labour force participation rate in Edmonton was 72.0%.

In 2006, the Beaverhill Sub-basin had an unemployment rate of 4.7%, which was slightly higher than the NSRB average (4.5%). Unemployment rates were lowest in Lamont County (1.2%) and Beaver County (1.6%) and jumped to 4.9% in Edmonton. The highest unemployment rates were in Chipman (11.1%), Ryley (8.6%) and Lamont (7.4%).

Figure 9.0-18: Labour Force Participation and Unemployment Rates, 2006

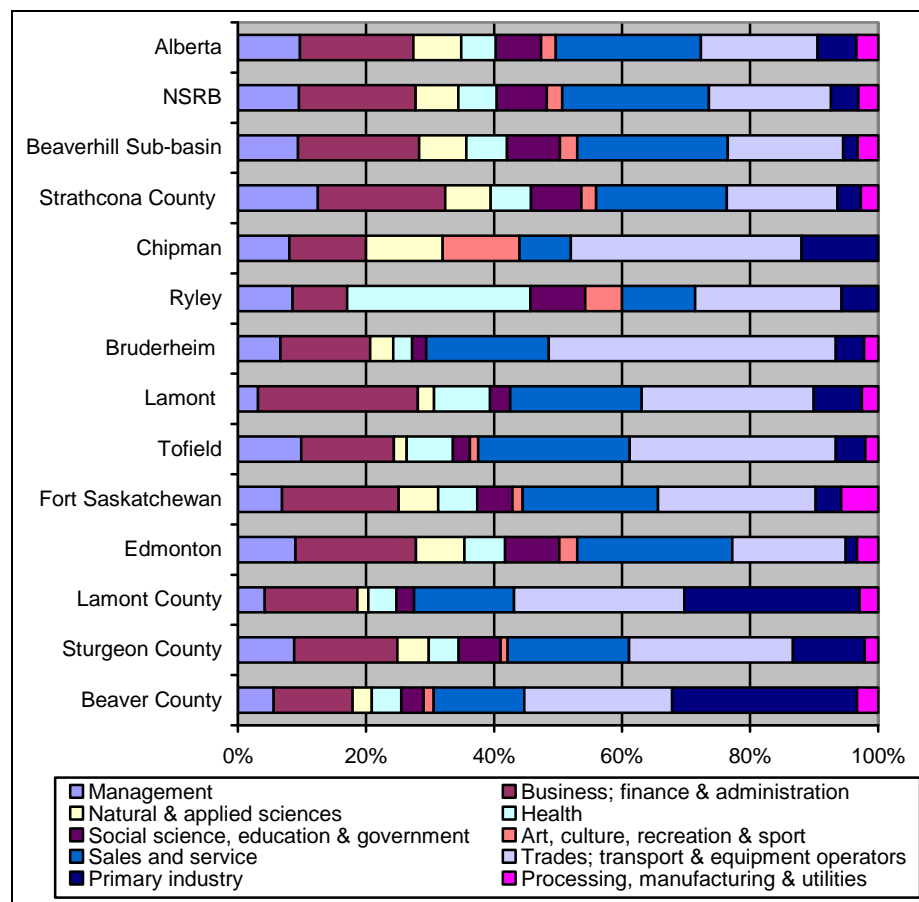


9.12 Employment by Occupation

Figure 9.0-19 shows employment by occupation for the Beaverhill Sub-basin. Overall, the sub-basin profile is nearly identical to the NSRB profile, with a slightly higher percentage of people employed in occupations related to business, finance and administration.

Within the sub-basin, employment in occupations related to primary industry accounted for 2.3% of total employment, but was more important in Lamont County and Beaver County. Employment in trades, transport and equipment operations averaged 18.0% in the sub-basin but ranged from 17.3% in Strathcona County and 17.7% in Edmonton to 44.5% in Bruderheim and 34.6% in Chipman.

Figure 9.0-19: Employment by Occupation, Beaverhill Sub-Basin, 2006

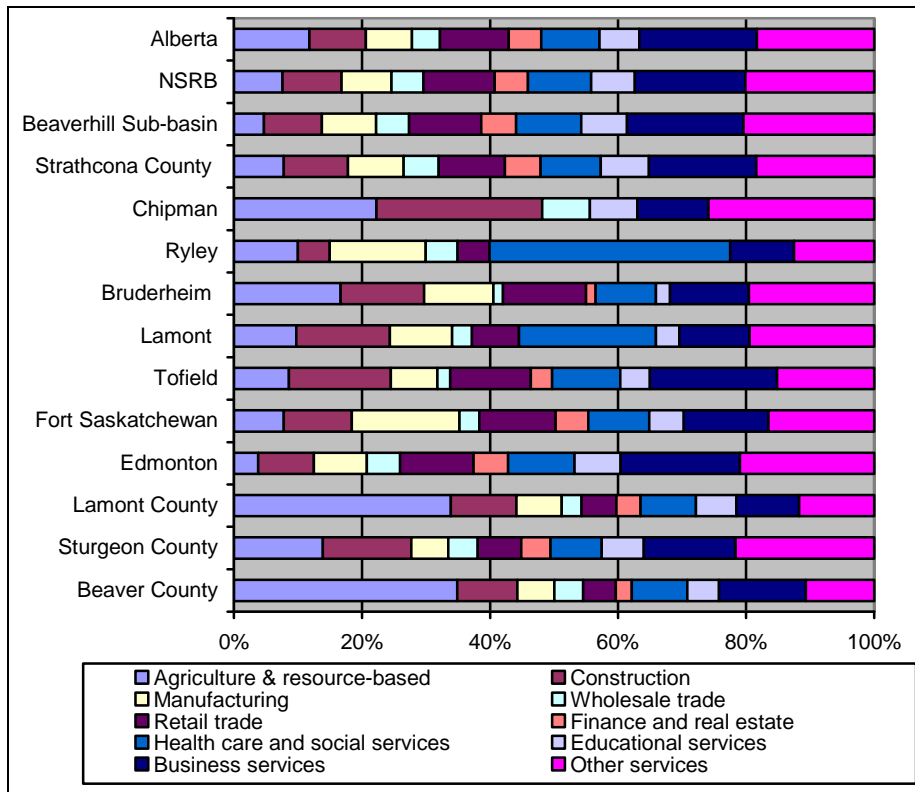


Strathcona County reported the highest percentage of the workforce in management occupations (12.5%). The highest employment in sales and service occupations were reported in Edmonton (24.2%) and Tofield (23.5%). Lamont and Strathcona County had the highest percentages of employment in occupations related to business, finance and administration. Ryley had the highest percentage of people employed in health occupations (27.8%) while Edmonton had the highest percentage of people employed in social sciences, education and government.

9.13 Employment by Industry

Figure 9.0-20 shows employment in the Beaverhill Sub-basin based on the industry of employment. Overall, 22.2% of the workforce was working in basic (goods-producing) industries, including agriculture and other resource-based industries, manufacturing and construction. This was less than in the NSRB, where 24.6% of the workforce was employed in basic industries.

Figure 9.0-20: Employment by Industry, Beaverhill Sub-Basin, 2006



Employment in the agriculture and resource-based industries accounted for only 4.7% of the employment workforce, although this percentage reached 34.9% in Beaver County and 33.8% in Lamont County. While employment in manufacturing only accounted for 8.5% of employment in the sub-basin, it accounted for 17.1% of employment in Ryley and 16.8% in Fort Saskatchewan.

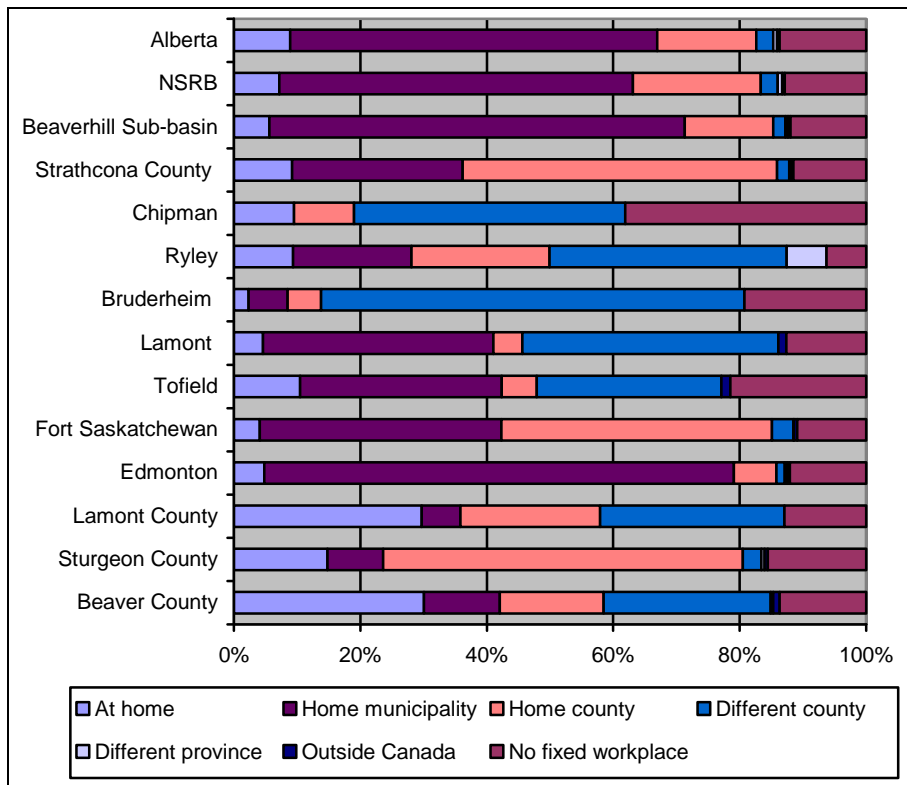
Non-basic industries accounted for 77.8% of employment in the Beaverhill Sub-basin. The non-basic industries that provided the greatest amounts of employment included other services (20.4%), business services (18.2%), retail trade (11.3%), and health care and social services (10.2%). Within the sub-basin, the percentage of employment in other industries was highest in Chipman. Employment in business services ranged from 19.6% in Tofield and 18.7% in Edmonton to 9.8% in Lamont County and 11.0% in Lamont. The highest participation in retail trade was reported in Bruderheim (13.1%) and Tofield (12.4%). Ryley had the highest percentages of its workforce employed in the health care industry (42.5%).

9.14 Location of Employment

Figure 9.0-21 shows where residents of the Beaverhill Sub-basin actually worked. Overall, 5.6% worked at home and 65.7% worked at a usual place in their home municipality. Another 14.0% worked in their home county outside their local community, while 1.9% worked in another part of Alberta, 0.4% worked outside Alberta and 0.4% worked outside Canada. The balance (12.0%) had no fixed workplace. Compared to the NSRB, residents of the Beaverhill Sub-basin were more likely to work in their home municipality and less likely to work outside their home municipality in their home county. This likely reflects the fact most residents of Edmonton work in Edmonton.

The figure shows that residents of Strathcona County, Fort Saskatchewan and Sturgeon County were most likely to commute to other locations to work. Residents of Beaver County and Lamont County were most likely to work at home. Residents of Chipman, Tofield and Bruderheim were least likely to have a fixed workplace.

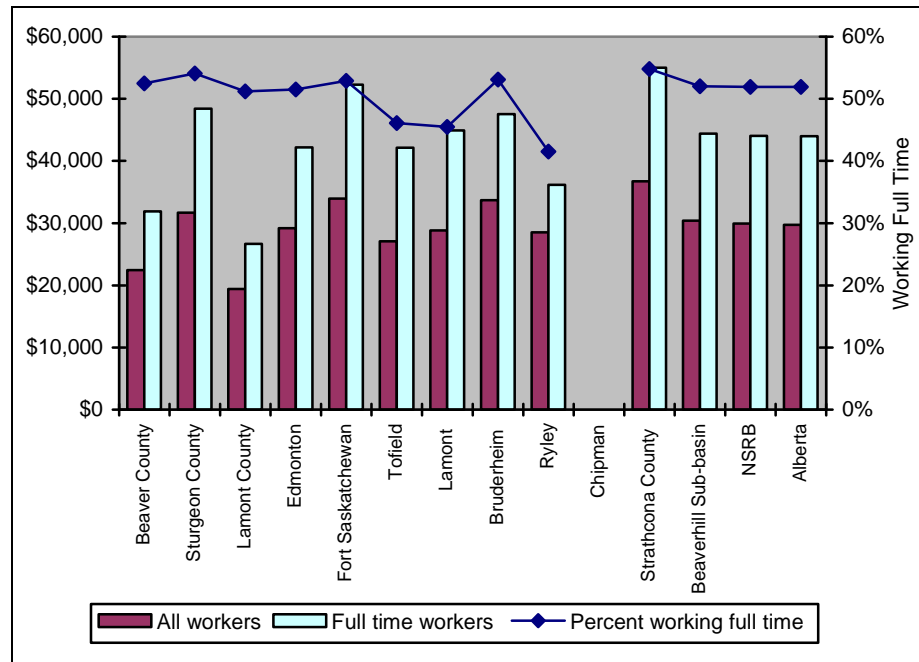
Figure 9.0-21: Location of Work, Beaverhill Sub-Basin, 2006



9.15 Employment Earnings

Residents of the Beaverhill Sub-basin reported median earnings of \$30,366 in 2005; this was slightly higher than the NSRB average of \$30,068. Figure 9.0-22 shows that the highest median earnings were reported in Strathcona County (\$36,703), Fort Saskatchewan (\$33,947) and Sturgeon County (\$31,675) while workers from Lamont County and Beaver County reported median earnings of only \$19,440 and \$22,431, respectively. Residents of Edmonton reported median earnings of \$29,182.

Figure 9.0-22: Median Earnings and Full-Time Employment, 2006

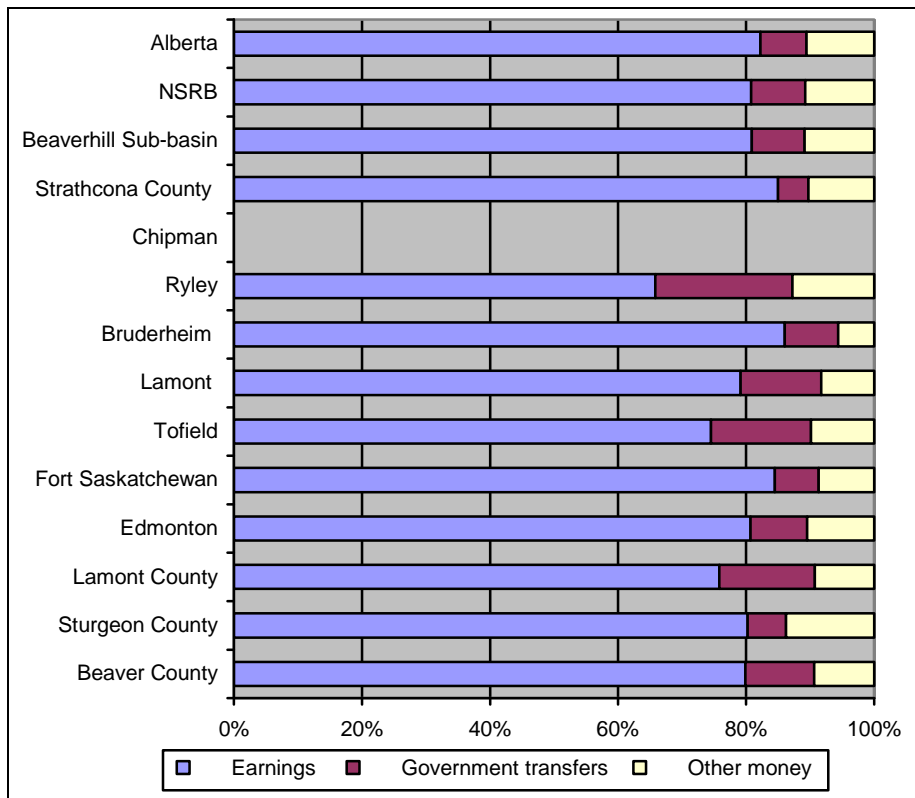


Within the Beaverhill Sub-basin 52.0% of workers reported being employed full-time, year round; this is nearly identical to the NSRB average, which saw 51.9% of workers being employed full-time. The percentage of workers with full-time employment ranged from 54.8% in Strathcona County and 54.1% in Sturgeon County to 41.5% in Ryley, 45.5% in Lamont and 46.1% in Tofield. People who did work full-time, year round, reported median earnings of \$44,372, which is slightly higher than the NSRB average (\$44,233). The highest median incomes from full-time employment were reported in Strathcona County (\$54,989) and Fort Saskatchewan (\$52,256). People working full time in Edmonton reported median earnings of \$42,182. The lowest median earnings from full time employment occurred in Lamont County (\$26,662) and Beaver County (\$31,898).

9.16 Other Income Sources

Figure 9.0-23 shows that earnings accounted for 80.9% of income for residents of the Beaverhill Sub-basin; this is about the same as for the NSRB (81.4%). The remaining income came from government transfers (8.2%) and other sources (10.9%).

Figure 9.0-23: Reliance on Transfer Payments and Other Income, 2005

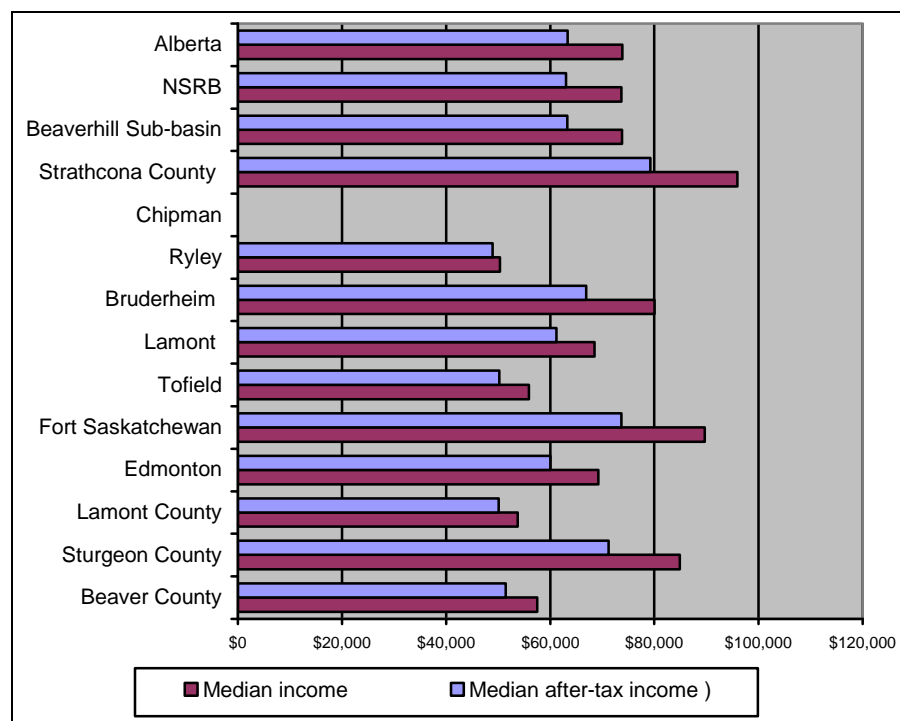


It shows that earnings accounted for more than 80% of income in most communities, with the exception of Ryley (66.5%), Tofield (74.7%) and Lamont County (75.8%). Residents of these three communities, especially Ryley, were more reliant on government transfers) than were other communities in the sub-basin. Residents of Bruderheim, Strathcona County and Fort Saskatchewan were the least reliant on income from government transfers or other income sources.

9.17 Family and Individual Income

In 2005 families in the Beaverhill Sub-basin reported median incomes averaging \$73,787 (or \$63,295 after tax); these incomes are nearly identical to the NSRB average of \$73,823 (or \$63,361 after tax). Variations in median family incomes within the sub-basin are shown in Figure 9.0-24.

Figure 9.0-24: Median Family Income, Before and After Tax, 2005



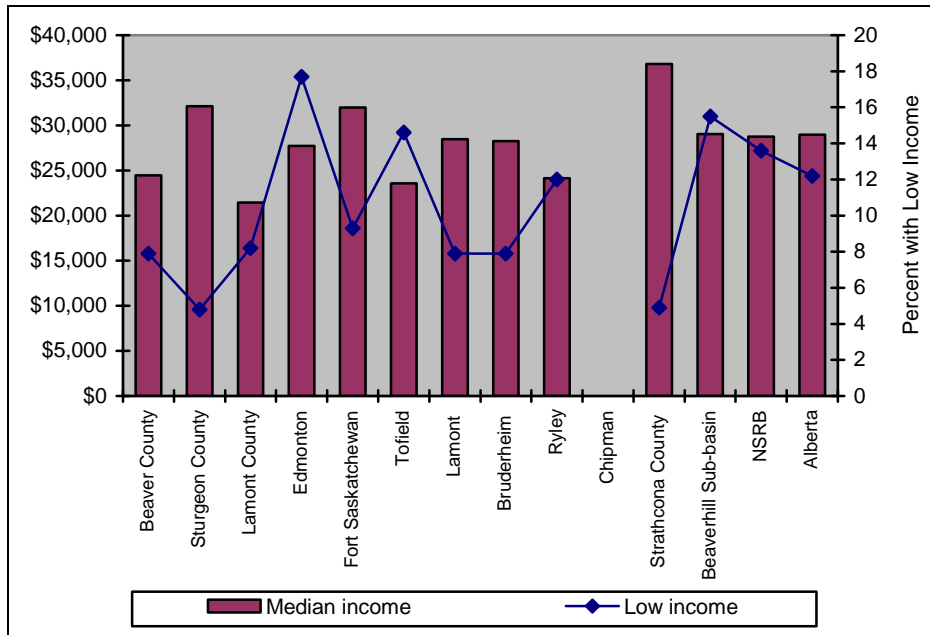
The highest median family incomes were reported in Strathcona County (\$95,937), Fort Saskatchewan (\$89,699) and Sturgeon County (\$84,910). Families in Edmonton had median incomes of \$69,214. The lowest family incomes were reported for Ryley (\$50,308), Lamont County (\$53,852) and Tofield (\$55,928).

Median incomes in 2005 for persons in private households in the Beaverhill Sub-basin averaged \$29,042; this is slightly higher than the NSRB average (\$28,898). Overall, 15.5% of residents of the Beaverhill Sub-basin were considered to have low incomes (before tax), and this is higher than the NSRB average (13.6%).

Figure 9.0-25 summarizes median incomes and the incidence of low incomes for communities in the sub-basin. Median personal incomes ranged from \$36,792 in Strathcona County and \$31,995 in Fort Saskatchewan to \$21,451 in Lamont County and \$23,579 in Tofield. Data on income in Chipman are not available.

The incidence of people with low incomes ranged from 4.9% in Strathcona County to 17.7% in Edmonton and 14.6% in Tofield.

Figure 9.0-25: Median Personal Income and Incidence of Low Income, 2005



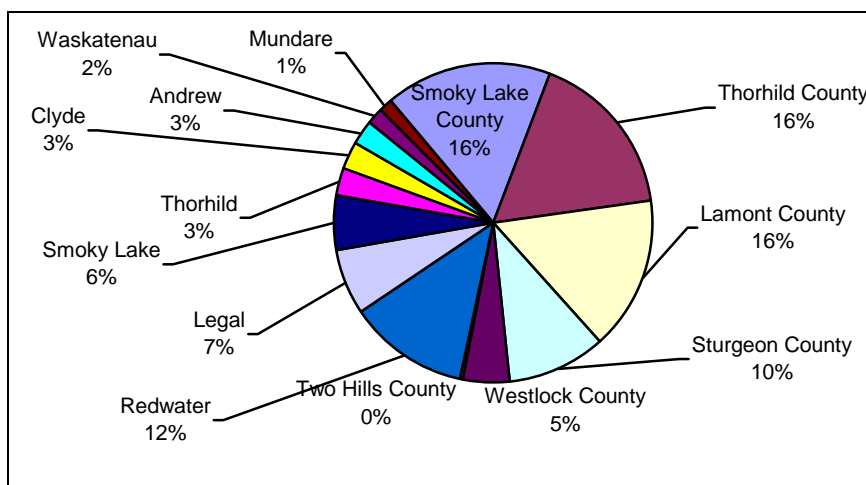
10.0 WHITE EARTH SUB-BASIN

10.1 Population

In 2006, the White Earth Sub-basin had a population of about 17,870 people which represents about 1.6% of the population of the entire NSRB. The majority of the population (64.3%) lives in the rural parts of the sub-basin. Figure 10-1 shows that nearly half the sub-basin population lived in one of three counties; about 16% of the population lived in each of Smoky Lake County, Thorhild County and Lamont County. Another 9.8% lived in Sturgeon County with 4.7% living in Westlock County 0.3% in Two Hills County.

The balance of the population (35.7%) lived in one of 8 urban communities. The largest of these is Redwater, with 12.3% of the population, followed by Legal (6.7%) and Smoky Lake (5.7%). Relatively small numbers of people live in the villages of Thorhild (2.8%), Clyde (2.6%), Andrew (2.6%), Waskatenau (1.6%) and a portion of Mundare (1.5%).

Figure 10-1: Population Distribution in the White Earth Sub-Basin, 2006



10.2 Age Characteristics

In terms of age, residents of the White Earth Sub-basin were different from the overall population of the NSRB. Figure 10-2 shows that, the White Earth Sub-basin had lower percentages of young children (under 5 years), higher percentages of children aged 10 to 14, much lower percentages of young adults (people aged 20 to 39 years) and much higher percentages of people over the age of 49 years.

Figure 10-2: Age Composition of the White Earth Sub-Basin Population, 2006

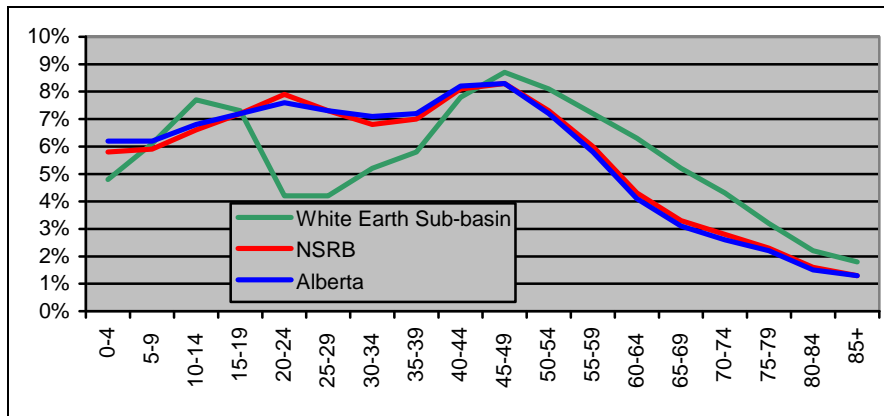


Figure 10-3 shows the age distributions for the urban communities in the White Earth Sub-basin. There is no consistent pattern. Some communities tend to be younger than average. Legal and Clyde have the highest percentages of children under 15 years, higher percentages of young adults and relatively smaller percentages of over the age of 44 years in Legal and over 54 years of age in Clyde. Redwater is also a relatively young community. Although it doesn't have the same percentages of children as the other two communities, it has proportionately more young adults than Clyde and also has smaller percentages of people over the age of 49 years.

The other five communities tend to be older than average. They have relatively small percentages of young people (under 20 years) and higher percentages of people over the age of 59 years. Smoky Lake and Thorhild have the highest percentages of people over the age of 69 years, although Andrew reported the highest percentage of people aged 70 to 74 years. Waskatenau had the lowest proportion of people aged 20 to 29 years, but the highest percentage of people in the 30 to 34 years age group. Mundare has the highest percentages of people in the 40 to 44 and 60 to 64 year age groups.

Figure 10-3: Age Composition of Urban Communities in the White Earth Sub-Basin, 2006

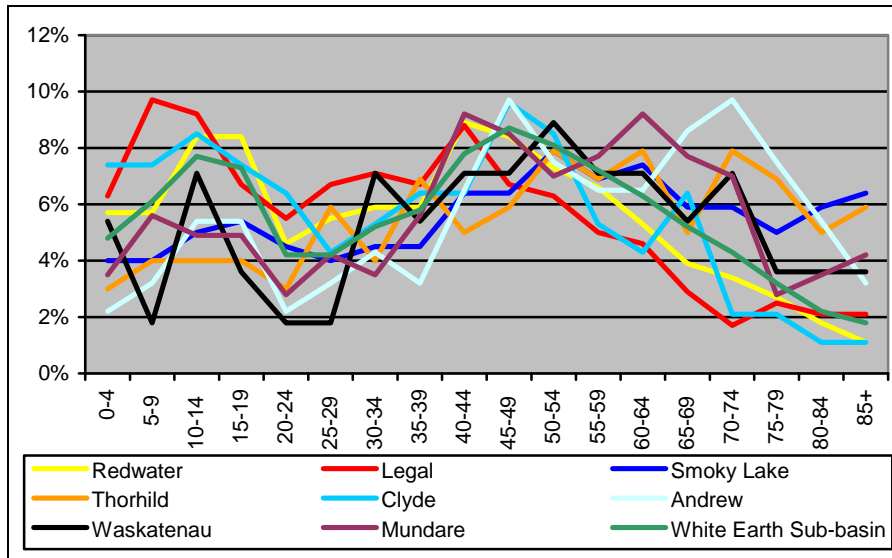
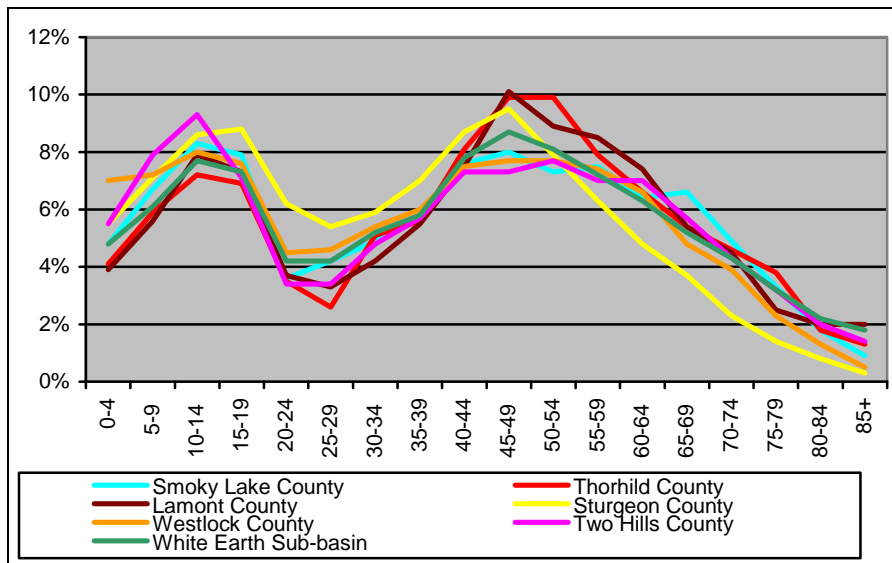


Figure 10-4 shows the age distributions for the rural communities in the White Earth Sub-basin. In general, the overall population distributions for the rural area closely match the sub-basin profile and are relatively similar to each other. Two Hills County has the highest percentages of children under 14 years of age while Thorhild County and Lamont County have the lowest percentages of children. Sturgeon County has the highest percentages of young adults (ages 15 to 39 years). The highest percentages of people in 45-59 year age groups are found in the Thorhild County and Lamont County while Sturgeon County has the smallest percentages of people over the age of 54 years. In all the other counties the percentages of people over the age of 54 years tends to mirror the sub-basin profile.

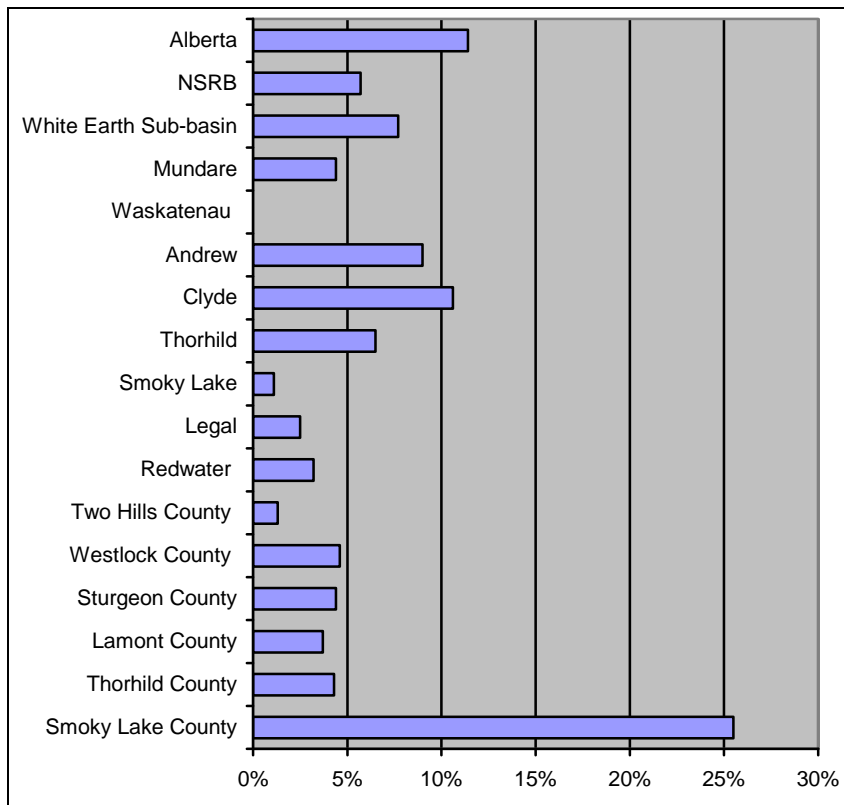
Figure 10-4: Age Composition of Rural Communities in the White Earth Sub-Basin, 2006



10.3 Aboriginal Population

About 7.7% of the residents of the White Earth Sub-basin were Aboriginal and this is slightly higher than the NSRB average (5.8%). There were about 1,365 Aboriginal people living in the sub-basin and 57% of these were living in Smoky Lake County. Figure 10-5 shows that, in general, Aboriginal people accounted for less than 5% of the population in most communities. The exceptions were Clyde, where 10.6% of the population was Aboriginal, Andrew (9.0%) and Thorhild (6.5%). There were reported to be no Aboriginal people living in Waskatenau.

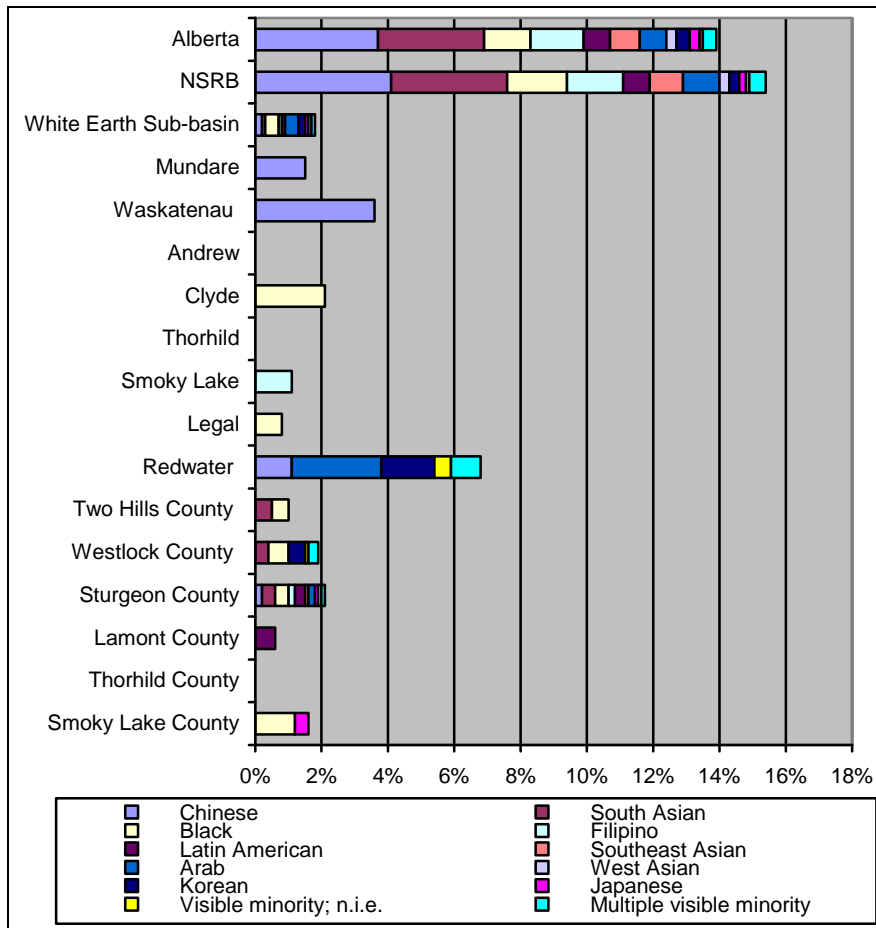
Figure 10-5: Aboriginal Population in the White Earth Sub-Basin, 2006



10.4 Ethnicity

About 1.9% of the population of the White Earth sub-basin consisted of visible minorities. This is well below the NSRB average of 15.5%. Figure 10-6 shows the percentage of visible minorities within each of the communities within the White Earth sub-basin. It shows that the highest percentages occurred in Redwater, where visible minorities, primarily Arab, accounted for 6.6% of the population. There were reported to be no visible minorities in Andrew, Thorhild and Thorhild County. Mundare and Waskatenau had small percentages of Chinese people, while Blacks were the predominant visible minorities in Clyde, Legal and Smoky Lake County.

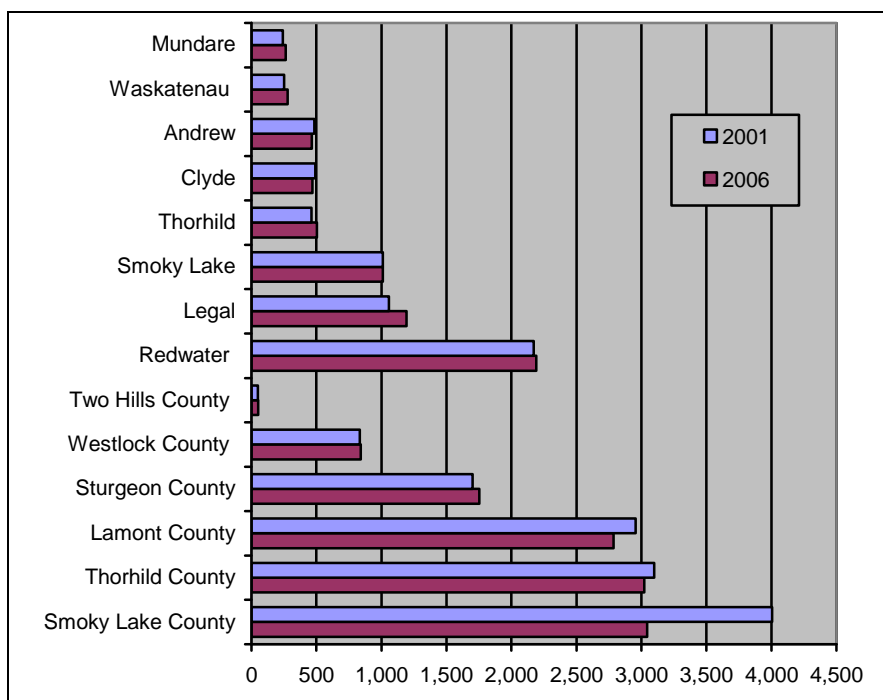
Figure 10-6: Visible Minorities in the White Earth Sub-Basin, 2006



10.5 Population Change

Between 2001 and 2006, the population of the White Earth Sub-basin decreased by 945 people which represents a decline of 5.0%. In contrast, the population of the NSRB increased by 9.6%. Figure 10-7 shows that most of the population decreases occurred in the rural population, primarily Smoky Lake County, with small decreases reported in Lamont County and Thorhild County. The population of Two Hills County and Westlock County remained the same between 2001 and 2006, while the population of Sturgeon County increased slightly. The population of most of the towns and villages increased, notably in Legal, and to a lesser extent in Redwater, Thorhild, Waskatenau and Mundare. The populations of Andrew and Clyde declined slightly, while the population of Smoky Lake remained unchanged.

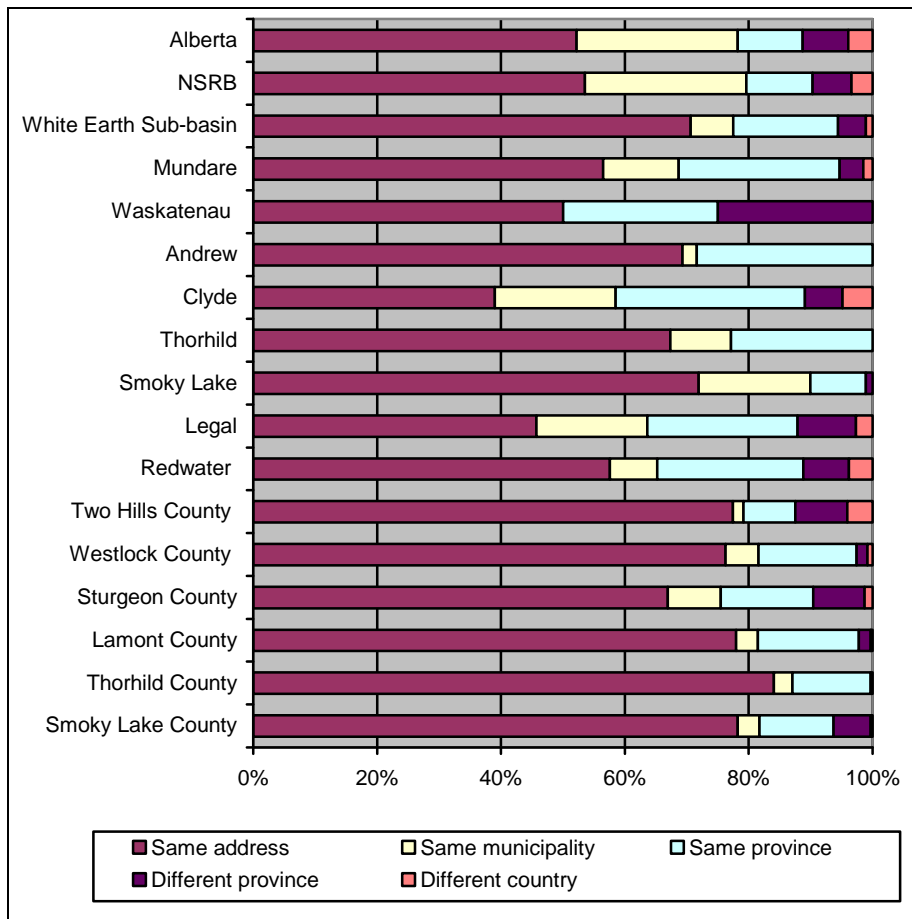
Figure 10-7: Population Change in the White Earth Sub-Basin, 2001-2006



One factor affecting population growth is migration from one area to another.

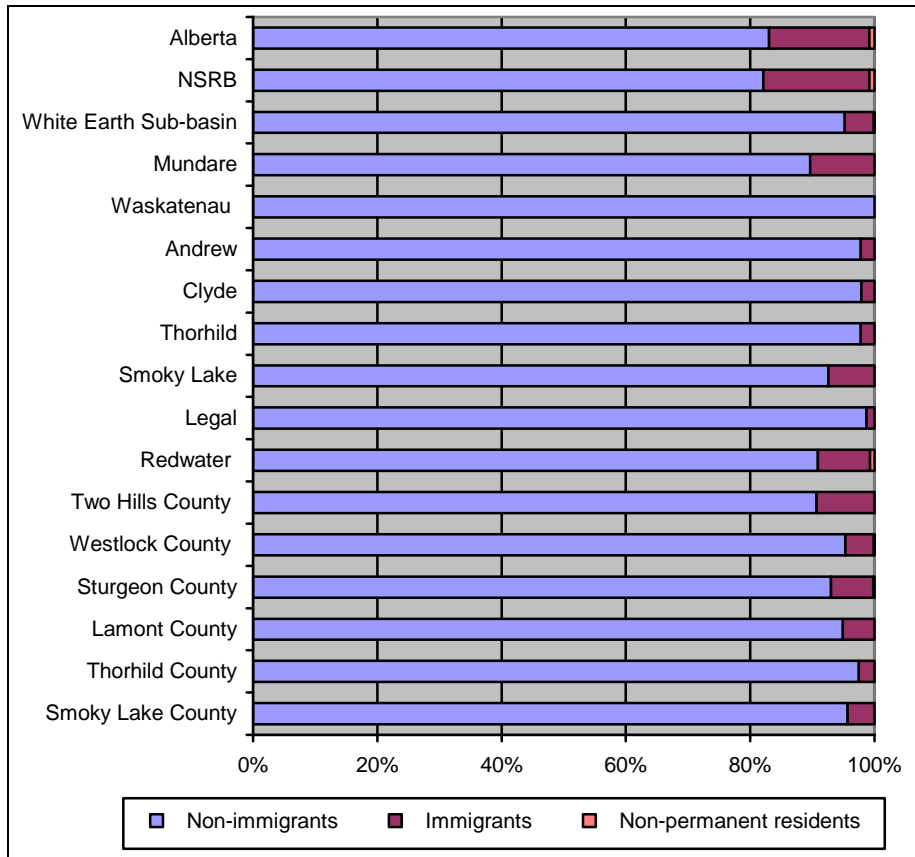
Figure 10-8 shows population mobility in the White Earth Sub-basin between 2001 and 2006. It shows that 70.7% of sub-basin residents resided at the same address for the 5-year period; this about 17 percentage points higher than the NSRB average (53.6%). Another 6.9% lived in the same census subdivision but changed addresses. A small percentage of sub-basin residents (1.1%) moved in from another country, 4.5% moved from another province, and 16.9% moved from a different municipality in Alberta.

Figure 10-8: Population Mobility in the White Earth Sub-Basin, 2001-2006



Residents of the five of the six counties were the most likely to have lived at the same address for the period from 2001 to 2006; only in Sturgeon County had less than 76% of the residents lived at the same address for the 5-year period. Residents of Clyde and Legal were the most mobile, with relatively large percentages of the population changing addresses in the community or moving in from another part of Alberta. Waskatenau reported a higher percentage of people moving in from another province.

Figure 10-9: Role of Immigration in the White Earth Sub-Basin, 2006



Immigration has also contributed to population growth.

Figure 10-9 shows that immigrants comprised 4.7% of sub-basin residents and this was well below the NSRB average of 17.1%. Overall, the percentage of immigrants ranged from 0.0% in Waskatenau and 1.3% in Legal to 10.4% in Mundare and 9.3% in Two Hills County.

Figure 10-10: Residency in Canada, White Earth Sub-Basin, 2006

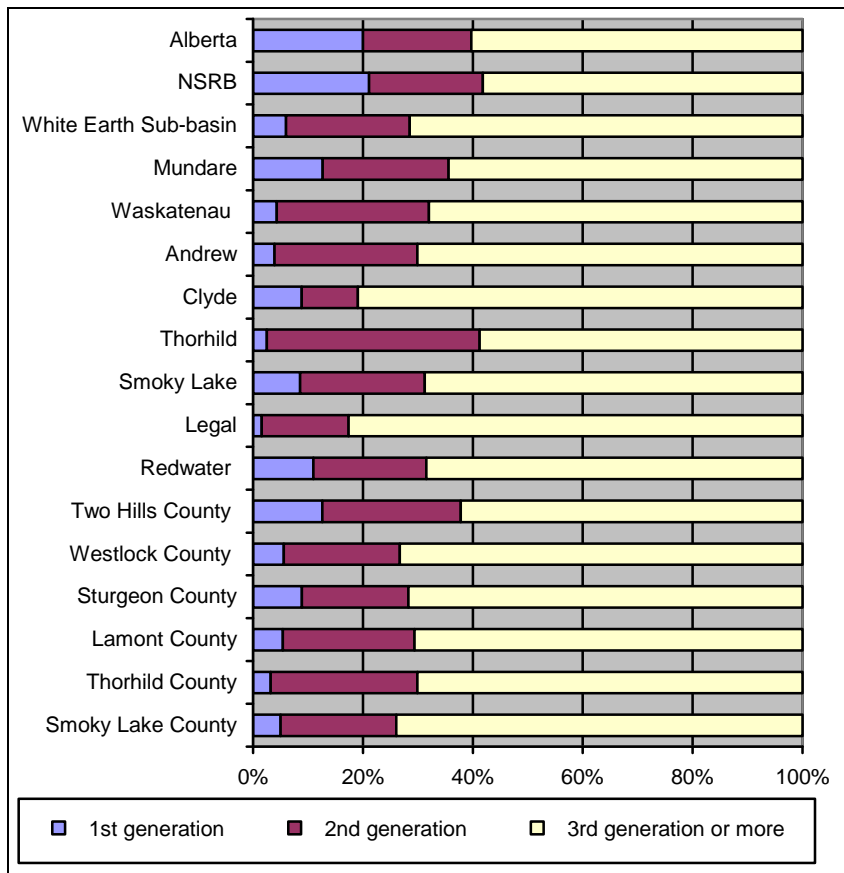
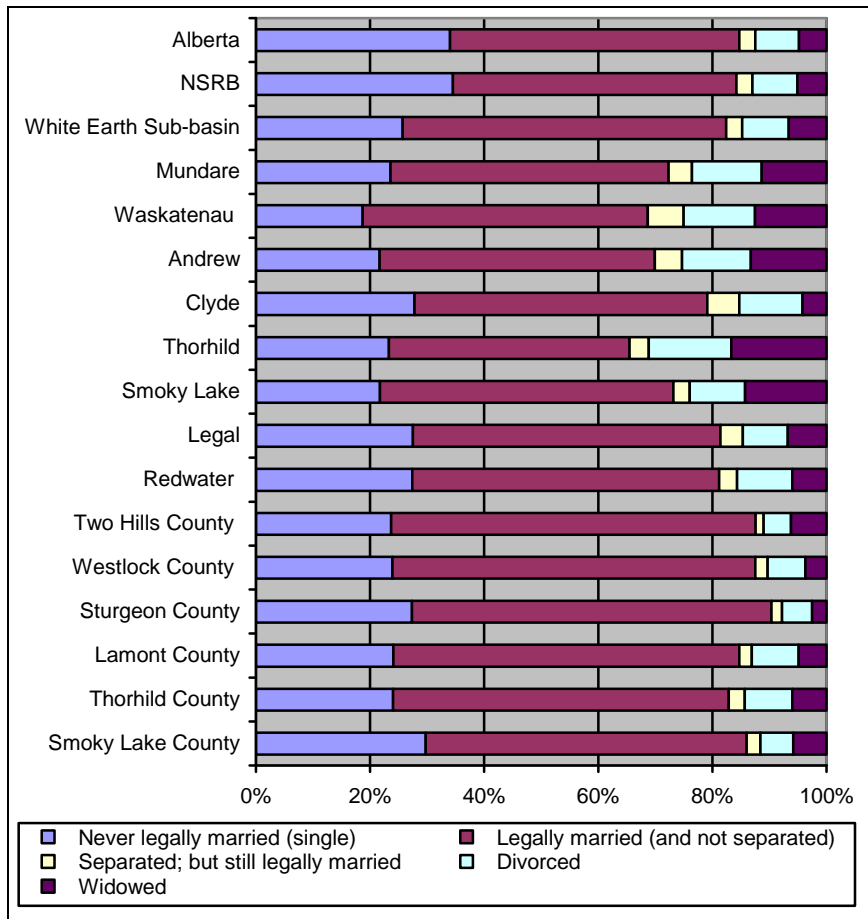


Figure 10-10 shows that 71.4% of people living in the White Earth sub-basin had lived in Canada for 3 or more generations, 22.5% had lived in Canada for 2 generations and 6.0% were first-generation Canadians. Clyde and Legal had the highest percentages of sub-basin residents who had lived in Canada for 3 or more generations. High percentages of third generation Canadians were also found in Smoky Lake County and Westlock County. The communities in the sub-basins with the highest percentage of the population that has lived in Canada for only 1 or 2 generations include the Thorhild, Two Hills County and Mundare.

10.6 Marital Status

Married people account for 56.6% of the sub-basin adult population, while the balance consists of single people (25.7%), divorced people (8.2%), widowed people (6.6%) and people who are separated (2.2%). The sub-basin profile (Figure 10-11) shows that it had higher percentages of married people than were found in the NSRB. In general, the rural areas (all five counties) had higher percentages of married people (ranging from 56.2% in Smoky Lake County to 63.8% in Smoky Lake County). The percentage of married people in the towns and villages ranged from 53.8% in Redwater to 42.7% in Thorhild. The highest percentages of single people were found in Smoky Lake County (29.7%) and 27.8% in Clyde. Thorhild and Smoky Lake had the highest percentages of widowed people, although widowed people also accounted for more than 11% of the population of Andrew, Mundare and Waskatenau.

Figure 10-11: Marital Status in the White Earth Sub-Basin, 2006

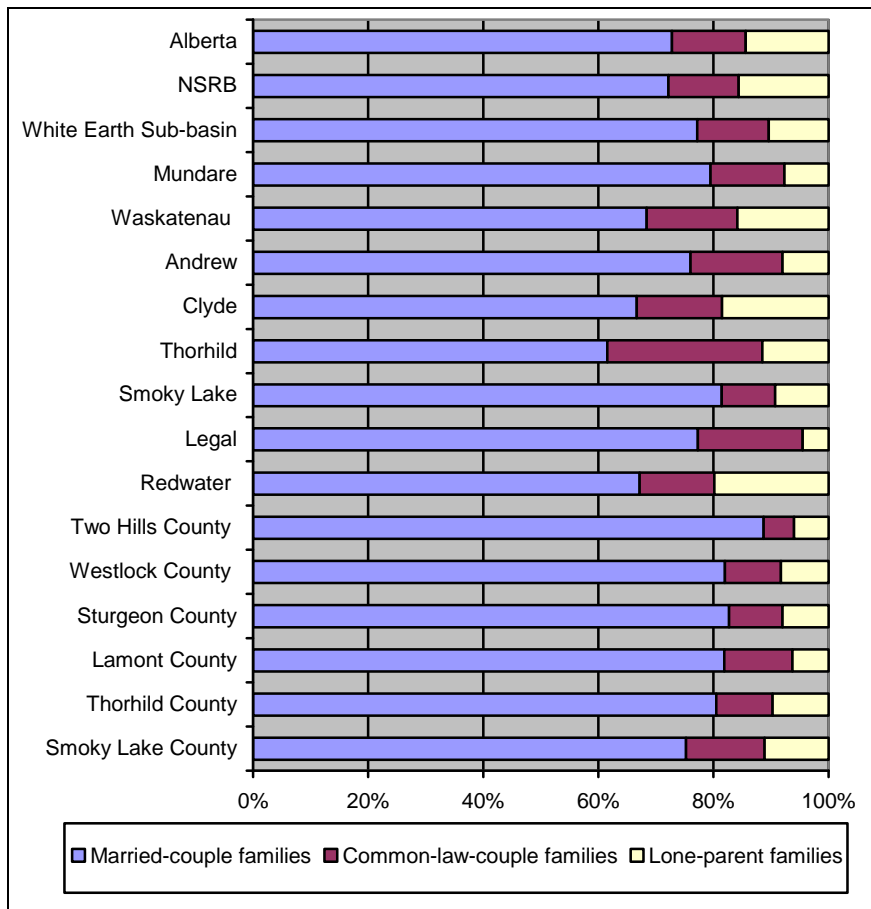


10.7 Family Structure

Married couple families account for 77.4% of the 5,180 families in the White Earth Sub-basin. Lone parent families account for 10.5% of families, while common-law couples account for the balance (12.1%).

Figure 10-12 shows that, when compared with the NSRB, sub-basin had a higher percentage of married couple families and less single parent families. The lowest percentage of married couple families was found in Thorhild (59.3%) and low percentages of married couple families were found in Clyde, Redwater and Thorhild. The highest percentages of lone-parent families were found in Redwater and Clyde. The rural areas tended to have higher populations of married couple families than did the towns or villages.

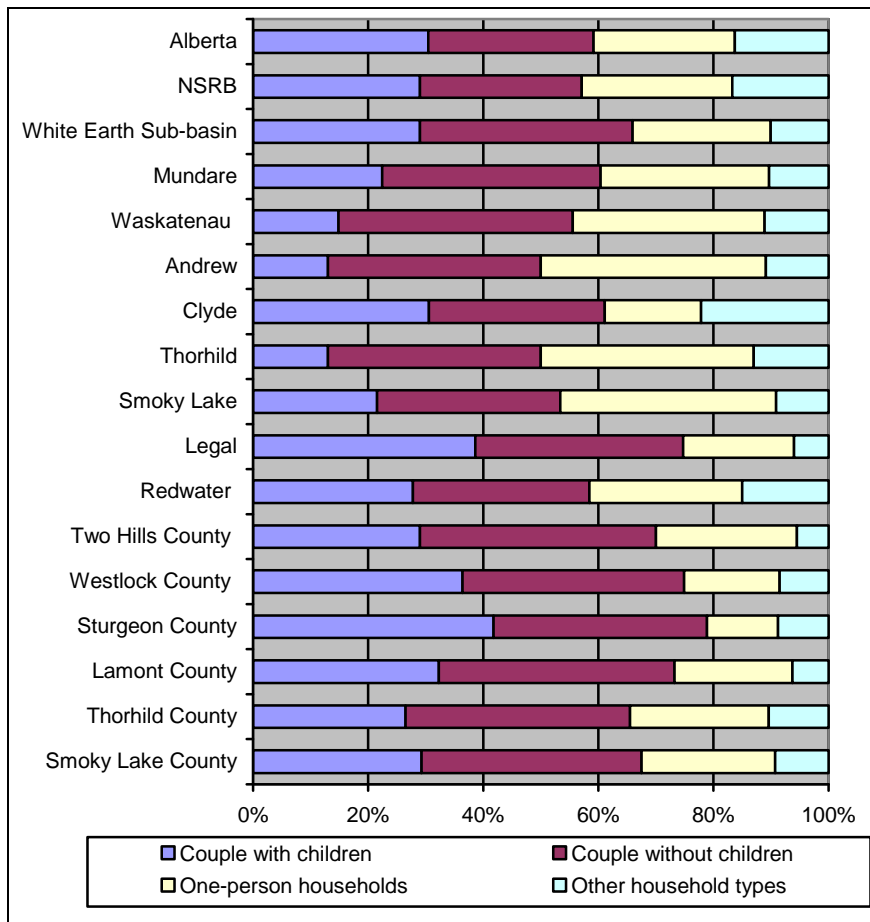
Figure 10-12: Family Structure in the White Earth Sub-Basin, 2006



10.8 Household Structure

Household structure differs from family structure because households can contain one or more families. Figure 10-13 shows that 28.9% of households consisted of a couple with children, 36.8% were couples with no children, 23.9% were single person households, and the balance (10.0%) consisted of other household types. Overall, the White Earth Sub-basin had a higher percentage of married couples without children than did the NSRB.

Figure 10-13: Household Structure in the White Earth Sub-Basin, 2006

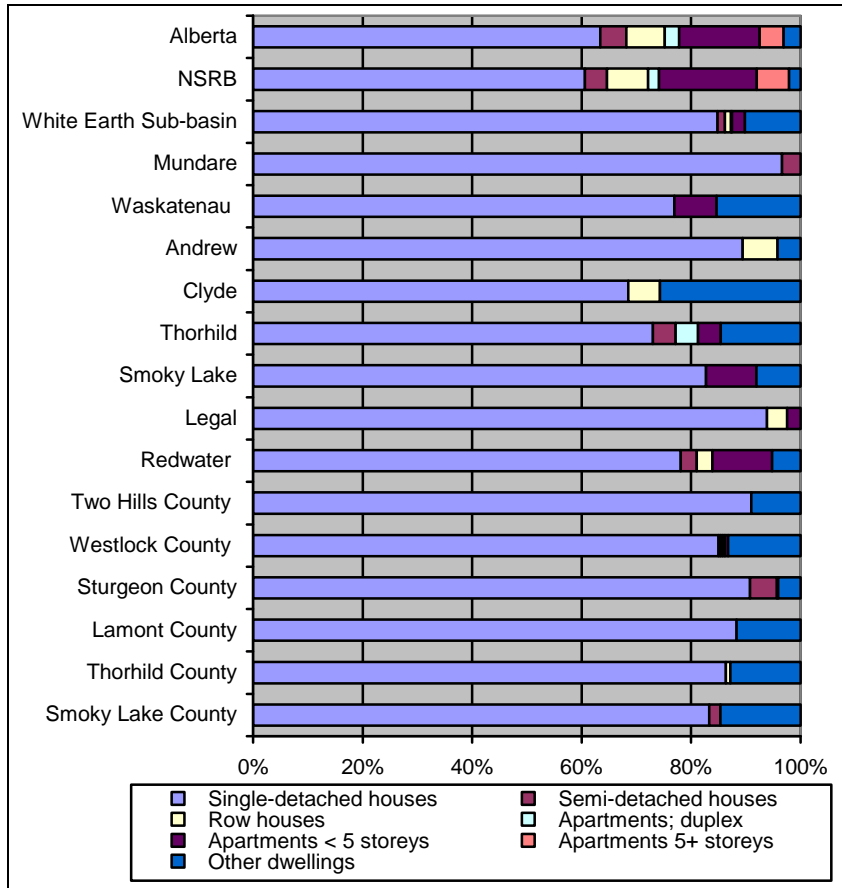


Within the sub-basin, the lowest percentages of families with children were found in Andrew and Thorhild, while the highest percentages of families without children were found in Two Hills County, Lamont County and Waskatenau. Smoky Lake and Thorhild had the highest percentages of one-person households.

10.9 Housing

In 2006 there were about 6,900 housing units in the White Earth Sub-basin. Figure 10-14 shows the composition of housing in each of the communities within the sub-basin.

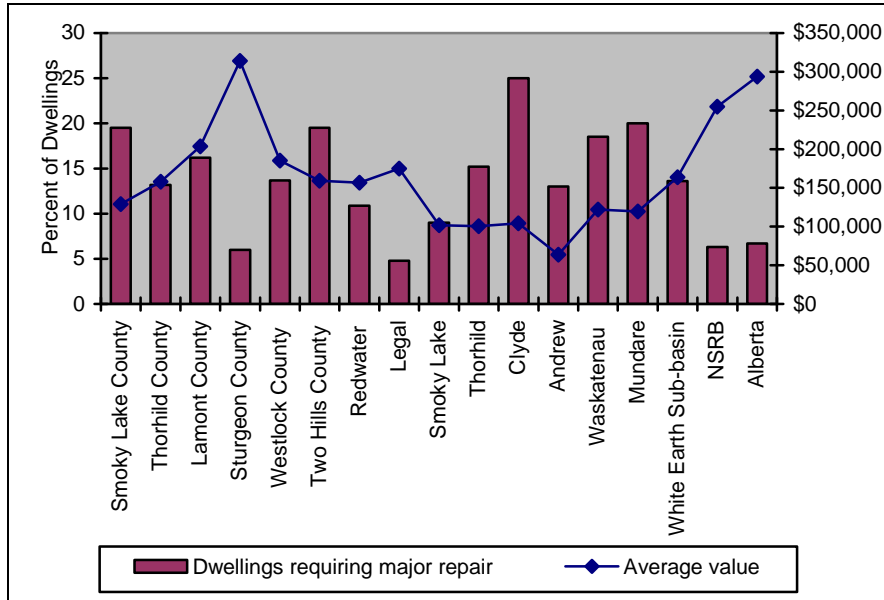
Figure 10-14: Housing Characteristics in the White Earth Sub-Basin, 2006



Overall, single detached houses accounted for 84.5% of housing in the sub-basin. Other types of housing were most commonly found in Clyde and Thorhild (other dwelling types). Apartments of less than 5 stories were found in Redwater, Smoky Lake and Waskatenau.

Figure 10-15 shows the reported value of housing in each of the communities within the White Earth Sub-basin as well as the percentage of housing stock in need of major repair.

Figure 10-15: Value of Housing (2005) and Need for Major Repairs, White Earth Sub-Basin



Overall, the average value of a house in the White Earth Sub-basin in 2005 was \$163,925, which was well below the NSRB average (\$254,828). The communities with the highest valued dwellings included Sturgeon County (\$314,123) and Lamont County (\$203,559). The lowest values occurred in Andrew (\$63,801), while the average value of housing in Smoky Lake, Thorhild and Clyde ranged between \$100,722 and \$104,422.

With the White Earth Sub-basin, 13.6% of dwellings were in need of major repair and this was double the NSRB average of 6.3%. Housing stock in Clyde was in the poorest condition, with 25.0% being in need of major repair. Relatively high percentages of housing in need of major repair were also reported in Mundare (20.0%), Smoky Lake County and Two Hills County (19.5% each) and Waskatenau (18.5%).

Figure 10-16: Average Monthly Costs for Rental and Owned Dwellings, 2005

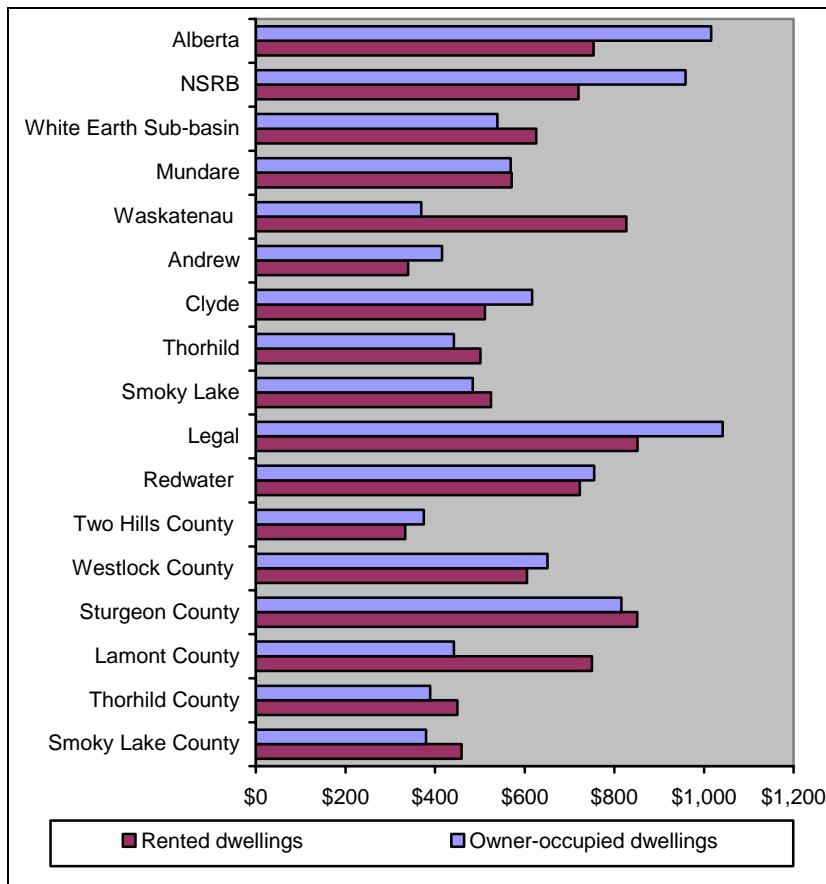


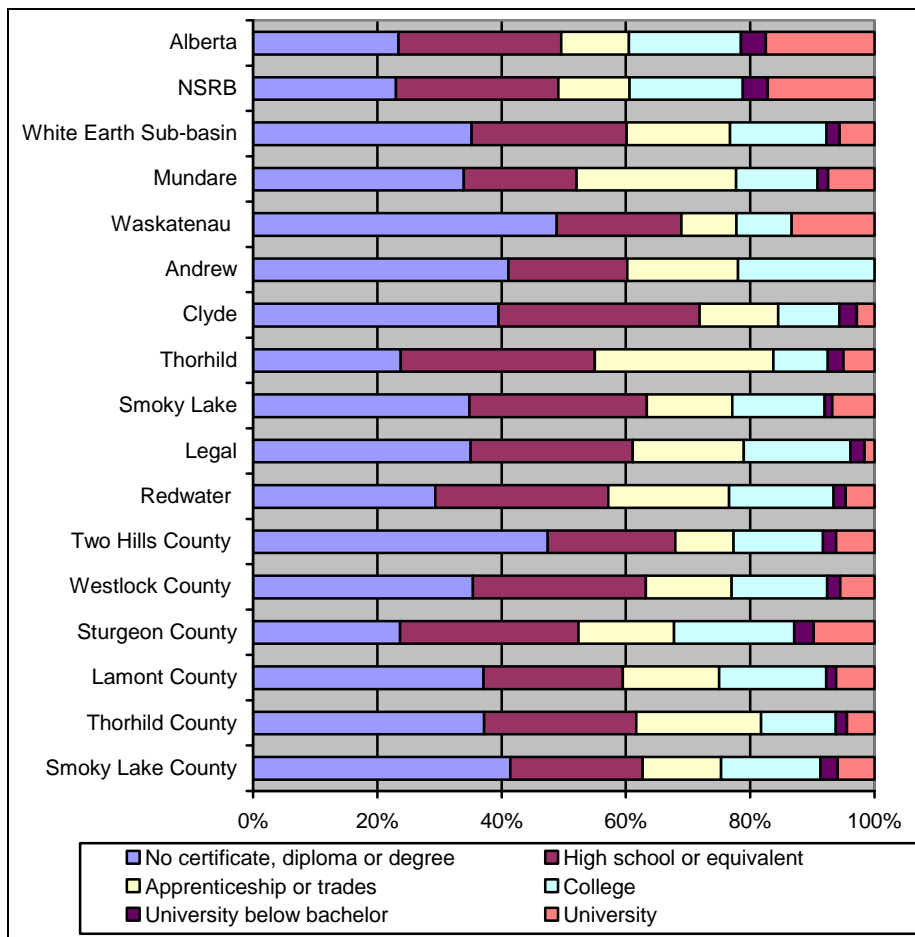
Figure 10-16 summarizes the average monthly costs of renting and owning dwellings in communities in the White Earth Sub-basin in 2005. These costs include rent/mortgage, electricity, heat and municipal services to operate a dwelling. Overall, rental costs averaged \$626 per month (compared to \$720 in the NSRB) while the average cost for owned dwellings was \$539 per month (compared to \$959 for the NRBS). The highest monthly housing costs were reported for Legal, although Sturgeon County and Waskatenau reported relatively high costs for rental accommodation. Two Hills County and Andrew reported the lowest monthly costs for housing. Monthly costs for rental accommodation were higher in four of the counties and the communities for Smoky Lake, Thorhild and Waskatenau.

10.10 Education

Residents of the White Earth Sub-basin were less educated than the NSRB average. Figure 10-17 shows that 35.1% of sub-basin residents had not completed high school and this percentage was well below the NSRB average (23.0%). The communities with the lowest levels of educational attainment, as measured in terms of the percentage that had not completed high school, include Two Hills County (37.5%), Waskatenau (45.8%), Smoky Lake County (41.4%), and Clyde (40.6%). The lowest percentage of people who had not completed high school was found in Sturgeon County (13.2%), Thorhild (23.8%) and Redwater (29.3%).

About 16.6% of adult residents of the White Earth Sub-basin had completed an apprenticeship or trades certificate, and this was higher than the NSRB average of 11.5%. Communities with relatively high percentages of residents with an apprenticeship or trades certificate included Thorhild (28.8%), Thorhild County (20.0%) and Redwater (19.4%). About 5.6% of sub-basin residents had completed their university education; this is nearly one-third of the NSRB average of 17.2%. The highest percentages of people with university educations were found in Waskatenau (12.5%) and Sturgeon County (9.8%).

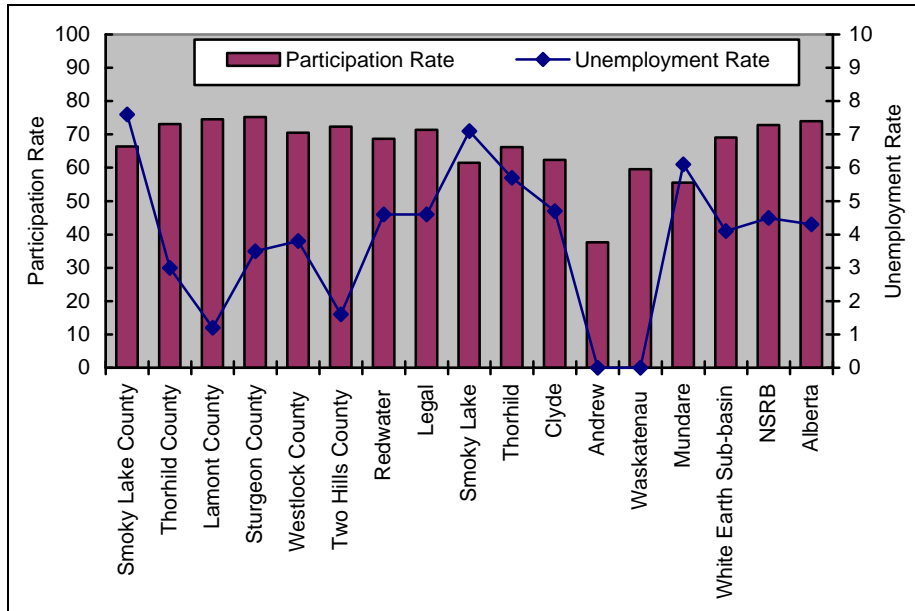
Figure 10-17: Educational Attainment, White Earth Sub-Basin



10.11 Labour Force Participation

Overall, 69.1% of the adult population in the White Earth Sub-basin was participating in the labour force, either working or actively seeking work. This rate was less than for the NSRB (72.1%). Figure 10-18 shows that labour force participation rates ranged from a high of 75.2% in Sturgeon County and 74.5% in Lamont County, but dropped to only 37.7% in Andrew, 55.5% in Mundare and 59.6% in Waskatenau.

Figure 10-18: Labour Force Participation and Unemployment Rates, 2006

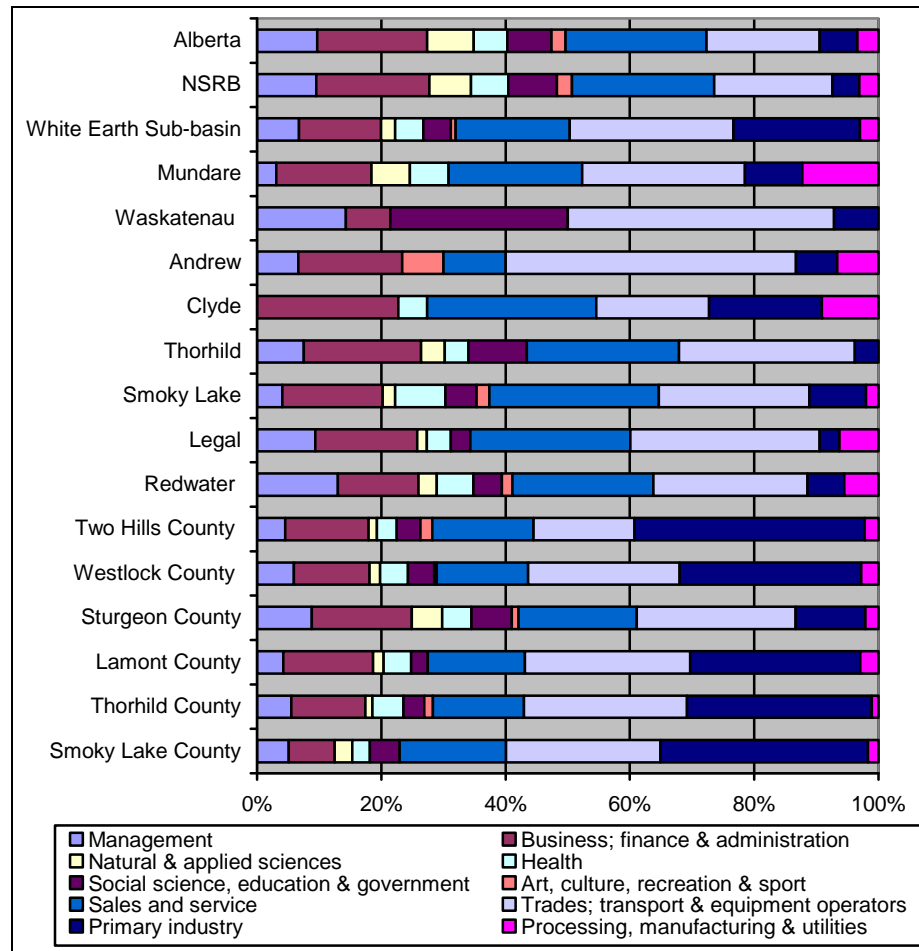


In 2006, the White Earth Sub-basin had an unemployment rate of 4.1%, which was less than the NSRB average (4.5%). Unemployment rates were lowest in Lamont County (1.2%) and Two Hills County (1.6%). The highest unemployment rates were in Smoky Lake County (7.6%), Smoky Lake (7.1%) and Mundare (6.1%).

10.12 Employment by Occupation

Figure 10-19 shows employment by occupation for the White Earth Sub-basin. It shows that the sub-basin profile is quite different from the NSRB profile, with much higher percentages of people employed in occupations related to primary industry and lower percentages of people employed in management on business, finance and administration.

Figure 10-19: Employment by Occupation, White Earth Sub-Basin, 2006



Within the sub-basin, employment in occupations related to primary industry accounted for 20.3% of total employment, but was more important in Two Hills County, Smoky Lake County, Thorhild County, and Lamont County. Employment in trades, transport and equipment operations averaged 26.3% in the sub-basin but ranged from 13.2% in Two Hills County to 50.0% in Andrew and 41.4% in Waskatenau.

Waskatenau and Redwater reported the highest percentage of the workforce in management occupations (13.8% and 13.0%, respectively). The highest employment in sales and service occupations were reported in Clyde (27.9%) and Smoky Lake (27.0%). Clyde, Thorhild and Andrew had the highest percentages of employment in occupations related to business, finance and administration. Mundare had the highest percentage of people employed in health occupations (6.0%) while Waskatenau had the highest percentage of people employed in social sciences, education and government.

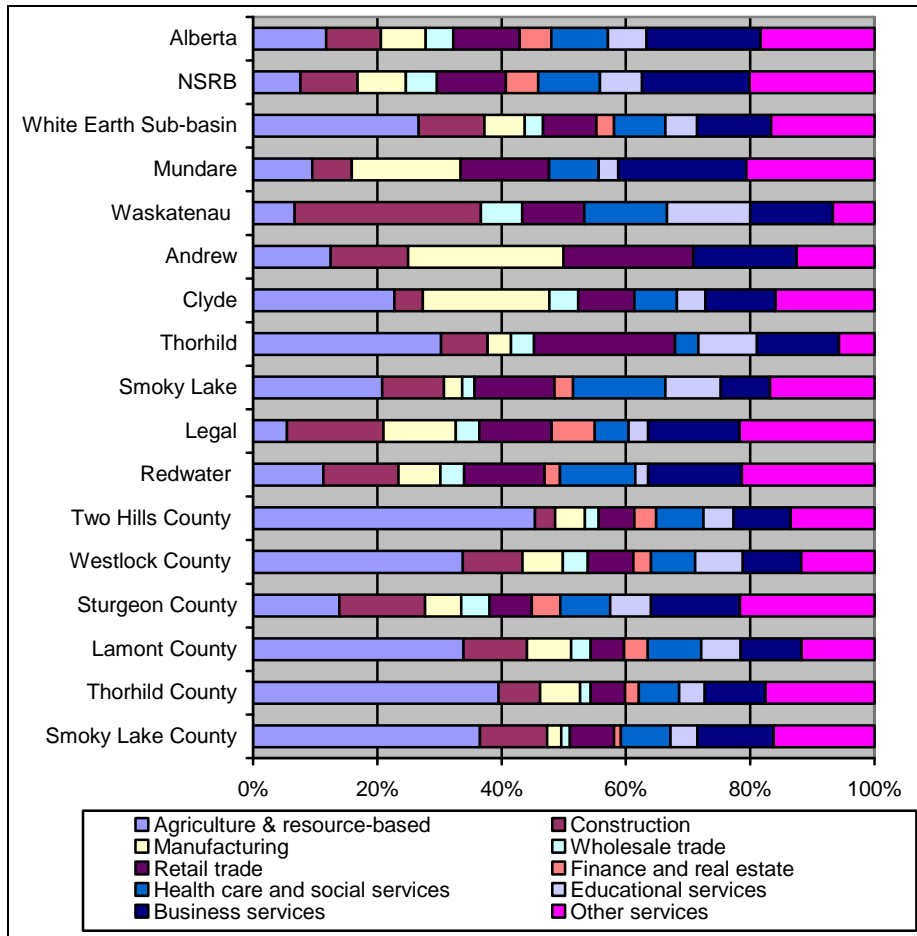
10.13 Employment by Industry

Figure 10-20 shows employment in the White Earth Sub-basin based on the industry of employment. Overall, 43.7% of the workforce was working in basic (goods-producing) industries, including agriculture and other resource-based industries, manufacturing and construction. This was much higher than in the NSRB, where 24.6% of the workforce was employed in basic industries.

Employment in the agriculture and resource-based industries accounted for only 26.6% of the employment workforce, although this percentage reached 39.2% in Thorhild County, 36.5% in Smoky Lake County and 30.8% in Thorhild. While employment in manufacturing only accounted for 6.5% of employment in the sub-basin, it accounted for 21.4% of employment in Andrew and 20.9% in Clyde.

Non-basic industries accounted for 56.1% of employment in the White Earth Sub-basin. The non-basic industries that provided the greatest amounts of employment included other services (16.6%), business services (11.9%), retail trade (8.6%), and health care and social services (8.3%). Within the sub-basin, the percentage of employment in other industries was highest in Sturgeon County (21.7% and reached 21.5% in Redwater and Legal. Employment in business services ranged from 8.0% in Smoky Lake to 19.7% in Mundare and 15.2% in Redwater. The highest participation in retail trade was reported in Thorhild (23.1%) and Andrew (17.9%). Smoky Lake had the highest percentages of its workforce employed in the health care industry (15.0%).

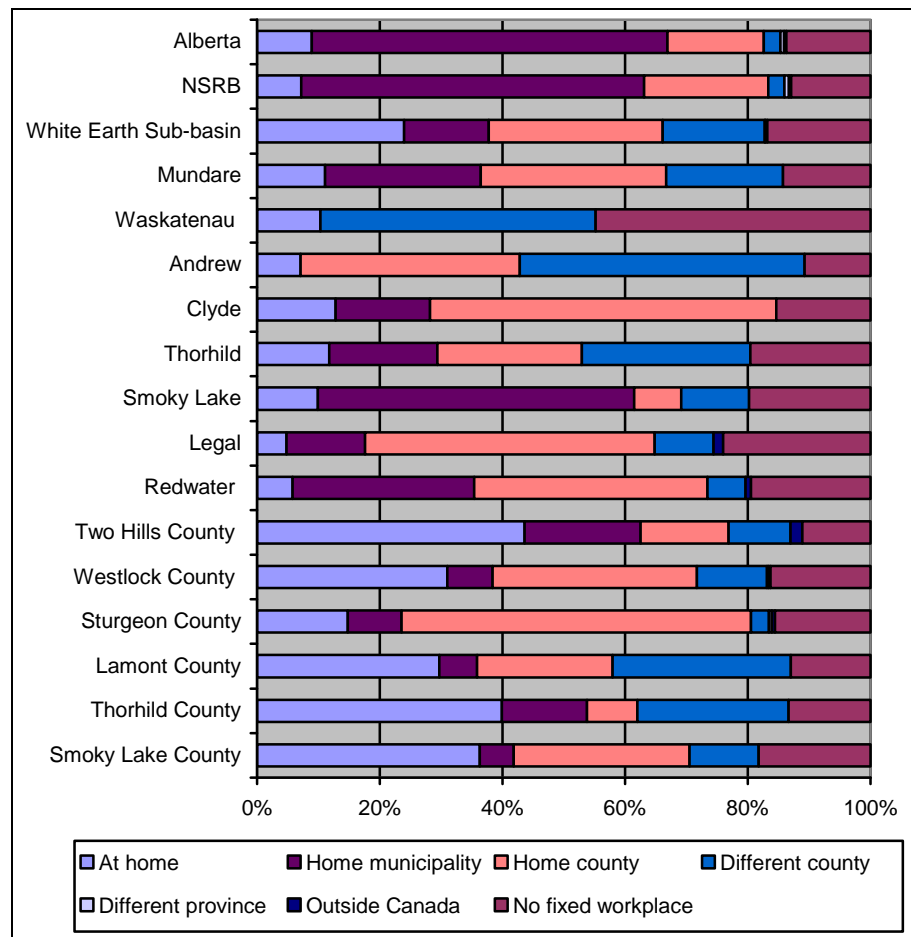
Figure 10-20: Employment by Industry, White Earth Sub-Basin, 2006



10.14 Location of Employment

Figure 10-21 shows where residents of the White Earth Sub-basin actually worked.

Figure 10-21: Location of Work, White Earth Sub-Basin, 2006



Overall, 23.9% worked at home and 13.8% worked at a usual place in their home municipality. Another 28.3% worked in their home county outside their local community, while 16.6% worked in another part of Alberta, 0.1% worked outside Alberta and 0.3% worked outside Canada. The balance (16.8%) had no fixed workplace.

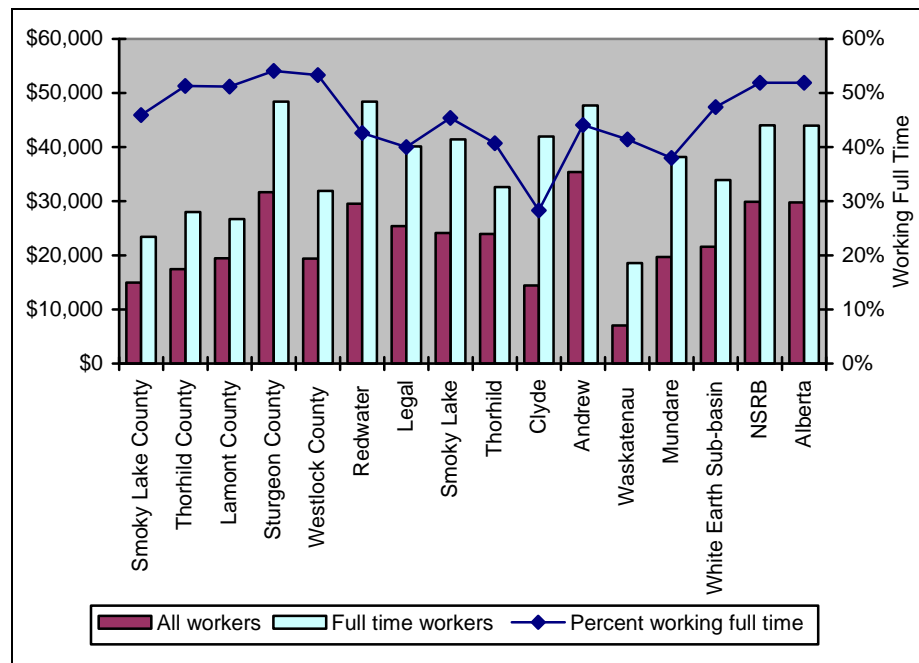
Compared to the NSRB, residents of the Beaverhill Sub-basin were more likely to work at home or outside their home municipality in their home county. The figure shows that, with the exception of Sturgeon County, rural residents were most likely to work at home. Residents of Smoky Lake were the most likely to work in their home municipality. The percentage of sub-basin residents who commuted to work within their home county ranged from 0.0% in Waskatenau and 7.5% in Smoky Lake to 53.7% in Clyde and 57.0% in Sturgeon County. Residents of Legal were least likely to have a fixed workplace.

10.15 Employment Earnings

Residents of the White Earth Sub-basin reported median earnings of \$21,605 in 2005; this was much less than the NSRB average of \$30,068. Figure 10-22 shows that the highest median earnings were reported in Andrew (\$35,397), Sturgeon County (\$31,675), and Redwater (\$29,521). In contrast, workers from Waskatenau, Clyde and Smoky Lake County reported median earnings of only \$7,039, \$14,424 and \$14,946, respectively.

Within the White Earth Sub-basin 47.4% of workers reported being employed full-time, year round; this is less than the NSRB average of 51.9%. The percentage of workers with full-time employment ranged from 54.1% in Sturgeon County and 53.3% in Westlock County to 28.3% in Clyde, 38.0% in Mundare and 40.0% in Legal. People who did work full-time, year round, reported median earnings of \$33,926, which was much less than the NSRB average (\$44,233). The highest median incomes from full-time employment were reported in Sturgeon County (\$48,411), Redwater (\$48,407) and Andrew (\$47,664). The lowest median earnings from full-time employment occurred in Waskatenau (\$18,589) and Smoky Lake County (\$23,459).

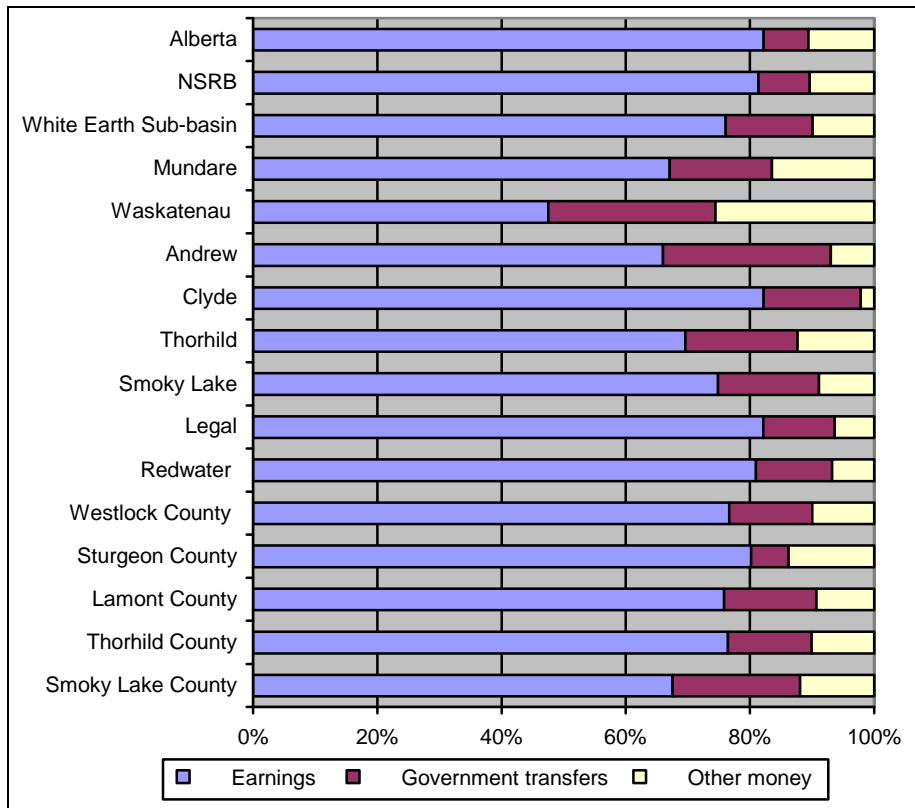
Figure 10-22: Median Earnings and Full-Time Employment, 2006



10.16 Other Income Sources

Figure 10-23 shows that earnings accounted for 76.0% of income for residents of the White Earth Sub-basin; this lower than for the NSRB (81.4%). The remaining income came from government transfers (14.0%) and other sources (9.9%). It shows that only in Legal and Clyde did earnings account for more than 80% of income. Communities with the lowest reliance on earned incomes included Waskatenau (47.6%), Andrew (66.0%) and Mundare (66.8%). Residents of these three communities, especially Waskatenau, were most reliant on government transfers.

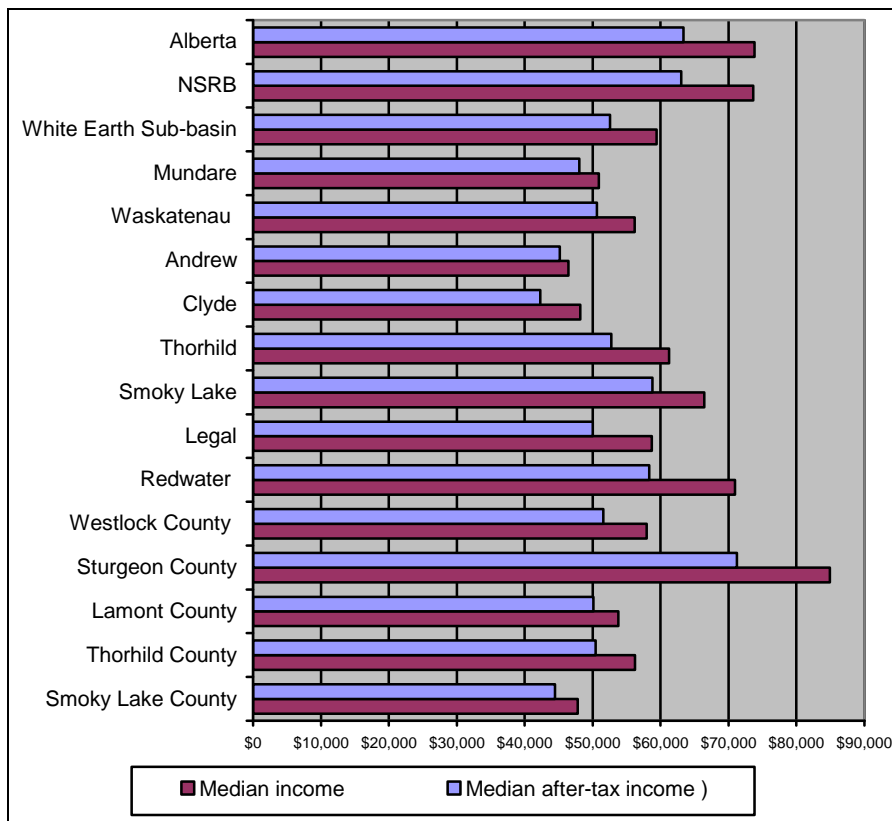
Figure 10-23: Reliance on Transfer Payments and Other Income, 2005



10.17 Family and Individual Income

In 2005 families in the White Earth Sub-basin reported median incomes averaging \$59,408 (or \$52,528 after tax); these incomes are considerably less than the NSRB average of \$73,823 (or \$63,361 after tax). Variations in median family incomes within the sub-basin are shown in Figure 10-24. The highest median family incomes were reported in Sturgeon County (\$84,910), Redwater (\$70,967) and Smoky Lake (\$66,416). The lowest family incomes were reported for Andrew (\$46,457), Smoky Lake County (\$47,804) and Clyde (\$48,180).

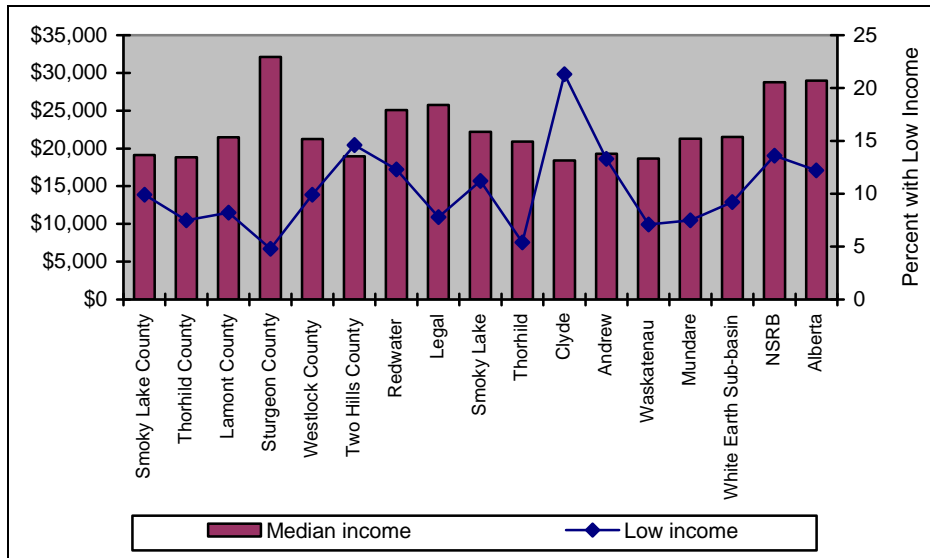
Figure 10-24: Median Family Income, Before and After Tax, 2005



Median incomes in 2005 for persons in private households in the White Earth Sub-basin averaged \$21,530; this is also well below the NSRB average (\$28,898). Overall, 9.2% of residents of the White Earth Sub-basin were considered to have low incomes (before tax), and this is lower than the NSRB average (13.6%).

Figure 10-25 summarizes median incomes and the incidence of low incomes for communities in the sub-basin. Median personal incomes ranged from \$32,103 in Sturgeon County, \$25,758 in Legal and \$25,081 in Redwater to \$18,401 in Clyde and \$18,835 in Two Hills County.

Figure 10-25: Median Personal Income and Incidence of Low Income, 2005



The incidence of people with low incomes ranged from 4.8% in Sturgeon County and 5.4% in Thorhild to 21.3% in Clyde, 14.6% in Two Hills County and 13.3% in Andrew.

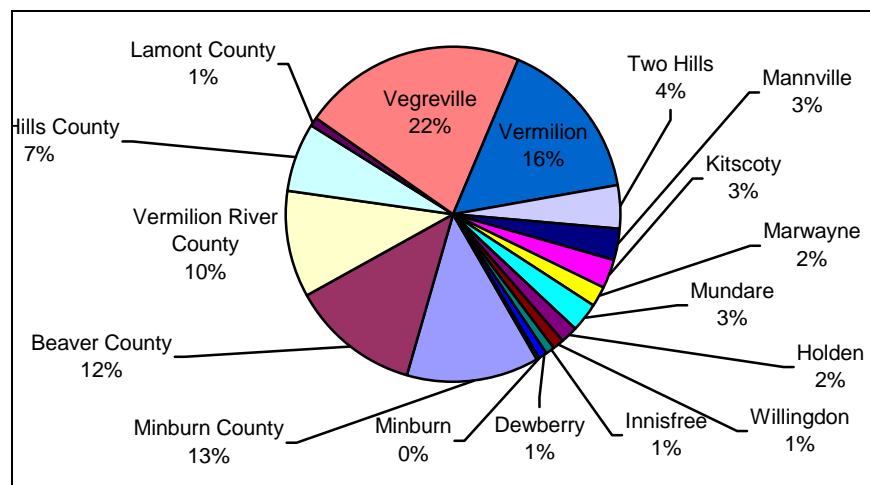
11.0 VERMILION SUB-BASIN

11.1 Population

In 2006, the Vermilion Sub-basin had a population of about 25,490 people which represents about 2.2% of the population of the entire NSRB. The majority of the population (56.9%) lives in the urban parts of the sub-basin. Figure 6-1 shows that 41.6% of the sub-basin population lives in one of three towns: Vegreville (21.7%), Vermilion (15.8%) and Two Hills (4.1%). Another 15.3% of the population lived in one of 8 villages. The largest of these are Mannville (3.1%), Kitscoty (2.8%), the part of Mundare in the sub-basin (2.8%), Marwayne (2.0%) and Holden (1.6%). The other villages are very small: Willingdon, Innisfree, Dewberry and Minburn each have less than 300 residents and account for 1% or less of the sub-basin population.

The balance of the population (43.1%) lives in one of 6 counties in the sub-basin. The largest of these include Minburn County, with 12.9% of the population, Beaver County (12.4%) and Vermilion River County (10.2%). Smaller numbers of people live in Two Hills County (6.6%) and Lamont County (0.9%), and a very few live in Camrose County.

Figure 11-1: Population Distribution in the Vermilion Sub-Basin, 2006



11.2 Age Characteristics

In terms of age, residents of the Vermilion Sub-basin were different from the overall population of the NSRB. Figure 11-2 shows that, the Vermilion Sub-basin had higher percentages of children aged 5 to 14 years and people over the age of 54 years. However, the sub-basin had relatively small percentages of adults aged 20 to 49.

Figure 11-2: Age Composition of the Vermilion Sub-Basin Population, 2006

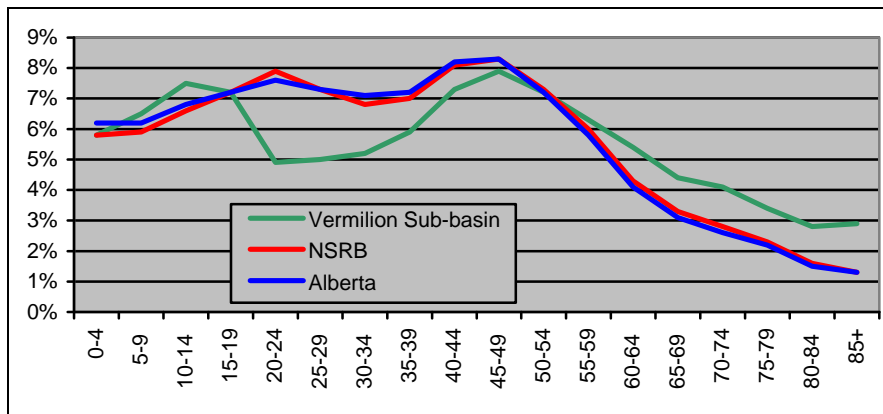
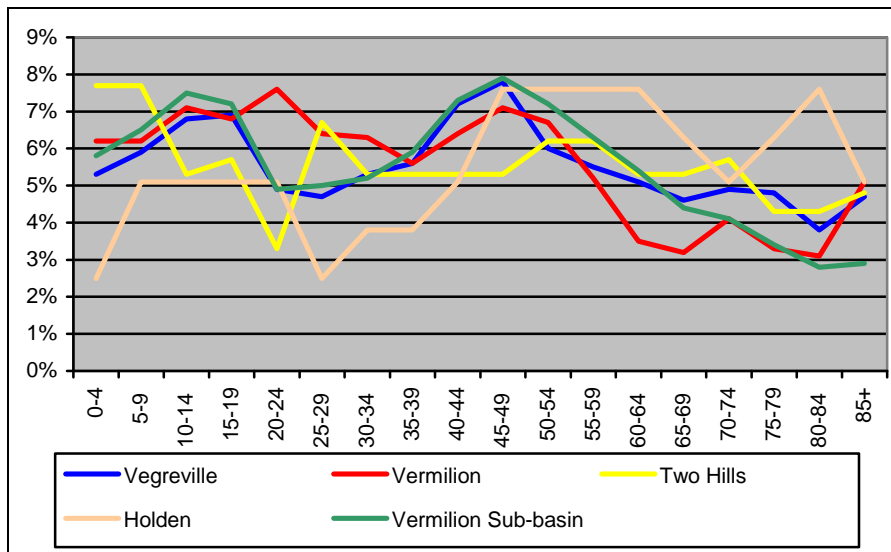


Figure 11-3 shows the age distributions for towns in the Vermilion Sub-basin. The population profile for Vegreville is similar to the sub-basin profile, although Vegreville has lower percentages of children under 15 years and people aged 50 to 59 years, but higher percentages of people over the age of 69 years. While Vermilion also has relatively fewer children under 15 years, it has the highest percentage of people in the 20 to 34 age groups, and relatively fewer people aged 60 to 69 years. Holden is a much older town. It has proportionately very few people under the age of 20 years and people aged 25 to 44 years, but very high percentages of people over the age of 49 years. Two Hills is also relatively old, but not as old as Holden. Two Hills reported the lowest percentage of people aged 20 to 24 years, but the highest percentage of children under 10 years. Two Hills also had relatively high percentages of people over the age of 64 years.

Figure 11-3: Age Composition of Towns in the Vermilion Sub-Basin, 2006



The age distributions for villages in the Vermilion Sub-basin are shown in Figure 11-4. Due to the smaller population size, the age profiles are much more uneven. Minburn, for example, reported very high percentages of its population in the 25 to 29 and 65 to 69 year age groups, but no one in the 15 to 24, 40 to 44, 50 to 54 and over 69 year age groups. Compared to the sub-basin profile, Kitscoty had the highest percentages of children under 15 years of age, among the highest percentages of people aged 20 to 34 years, and the lowest percentages of people over the age of 50 years. Dewberry had a different profile with relatively few young children, higher percentages of people aged 15 to 19 years, the highest percentages of people aged 40 to 45 years, and fewer people over the age of 49 years.

Mannville, Holden and Innisfree appear to be older communities, with relatively flat age profiles. They have comparatively small percentages of children and higher percentages of older people. Mannville has the highest percentage of people aged 85 years and older; Innisfree has among the highest percentages of its population in the 55 to 69 years age groups. Holden has some of the smallest percentages of people aged 25 to 40 years.

Figure 11-4: Age Composition of Villages in the Vermilion Sub-Basin, 2006

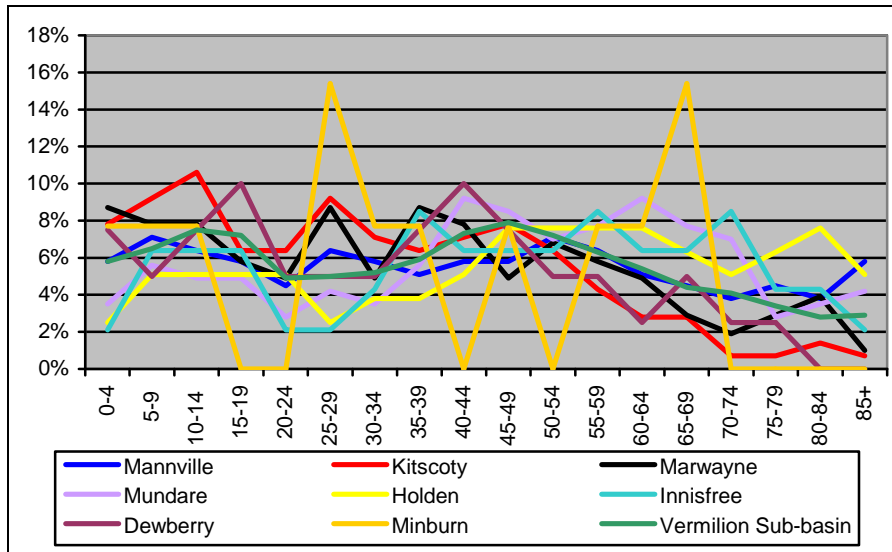
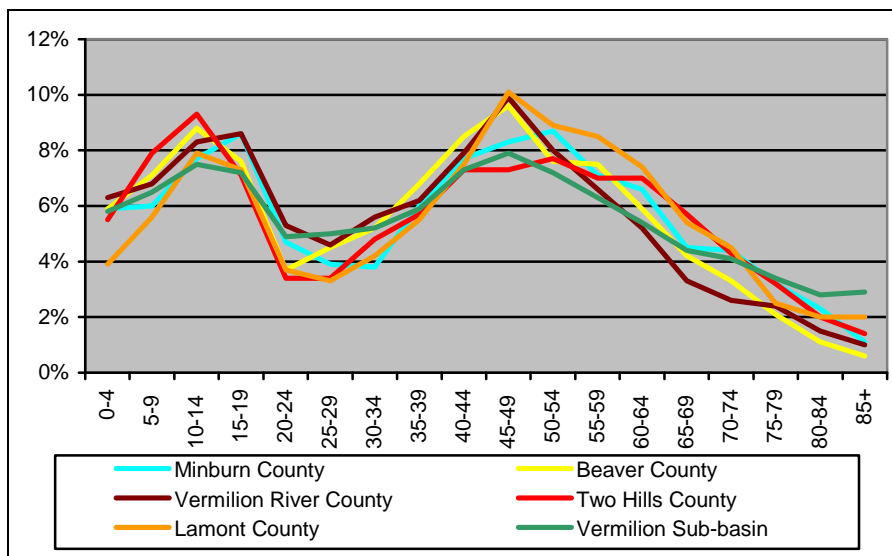


Figure 11-5 shows the age distributions for counties in the Vermilion Sub-basin. The age distributions for all five counties are generally the same as the sub-basin profile. Lamont County appears to have an older population than the other rural areas, with lower percentages of children and people over 74 years and higher percentages of people aged 45 to 69 years. Two Hills County has the highest percentage of children of all the counties, but among the lowest percentages of people aged 20 to 39 years. Vermilion and Beaver counties have the lowest percentages of people over the age of 69, but had higher proportions of people aged 30 to 49 years.

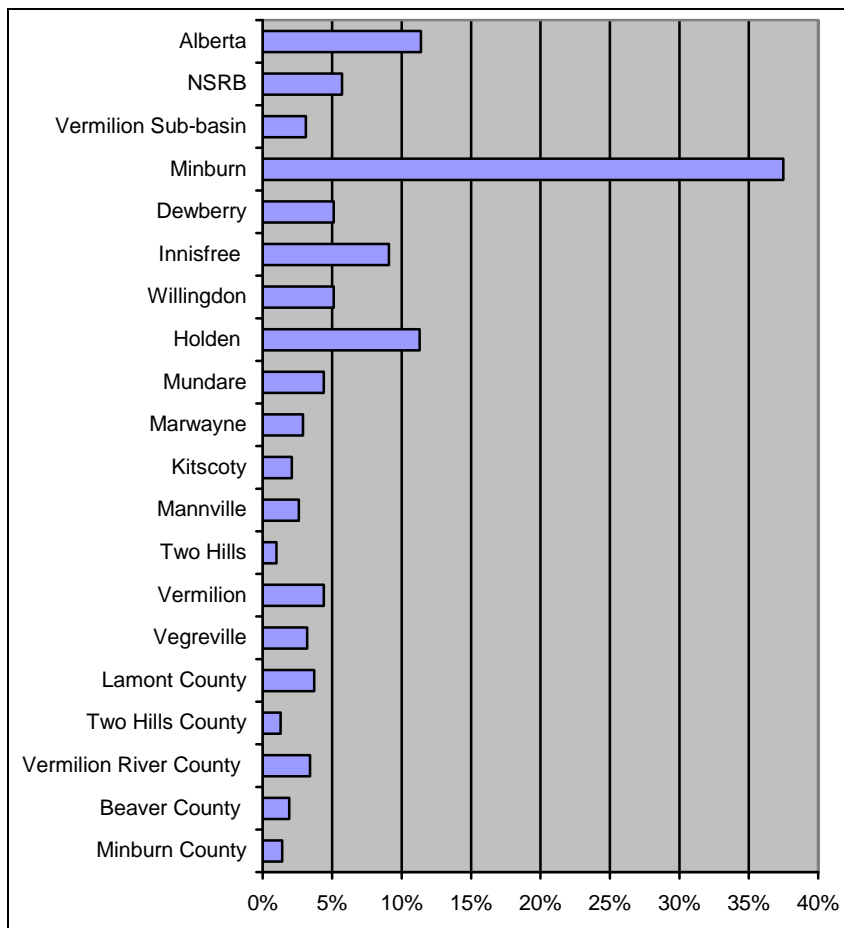
Figure 11-5: Age Composition of Counties in the Vermilion Sub-Basin, 2006



11.3 Aboriginal Population

About 3.1% of the residents of the Vermilion Sub-basin were Aboriginal and this is nearly half the NSRB average (5.8%). There were about 765 Aboriginal people living in the sub-basin. Figure 11-6 shows that, in most communities, Aboriginal people accounted for less than 5% of the population. The exceptions were Minburn, where Aboriginal people accounted for 37.5% of the population, Holden (11.3%) and Innisfree (9.1%). Overall, the urban communities in the sub-basin had higher percentages of Aboriginal residents than were found in the five counties.

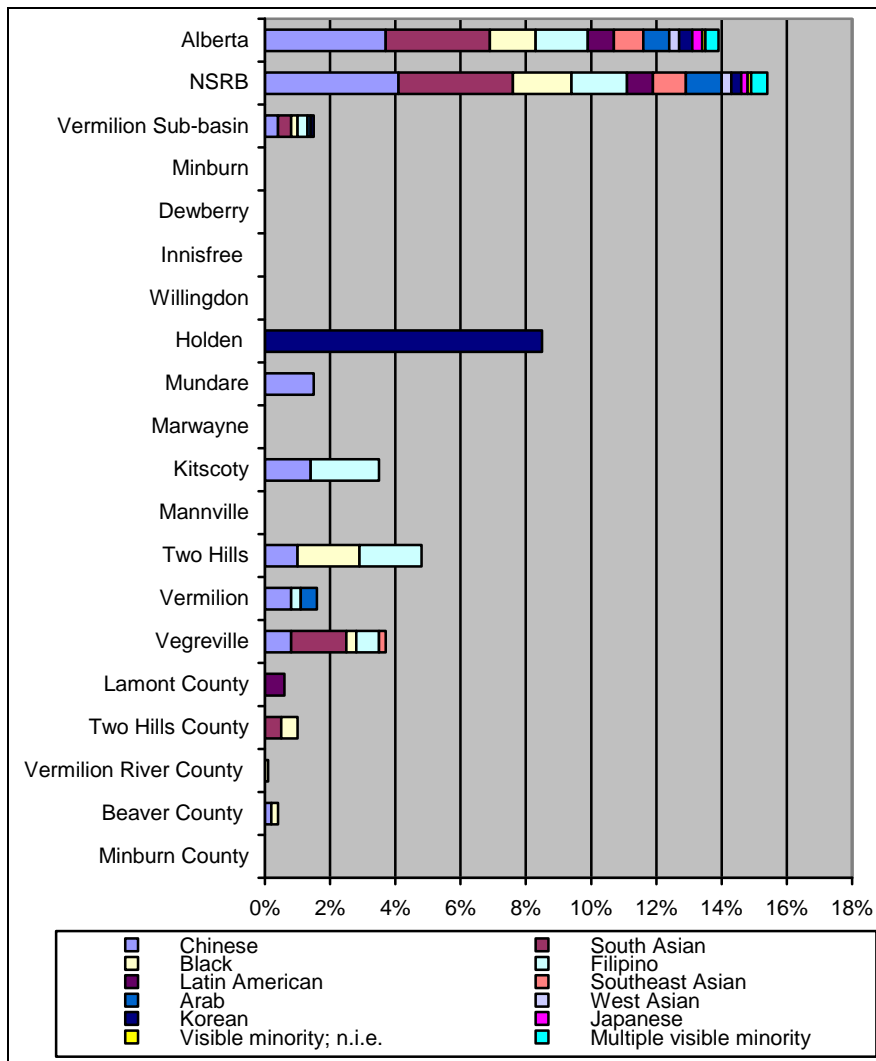
Figure 11-6: Aboriginal Population in the Vermilion Sub-Basin, 2006



11.4 Ethnicity

About 1.6% of the population of the Vermilion sub-basin consisted of visible minorities. This is well below the NSRB average of 15.5%. Figure 11-7 shows the percentage of visible minorities within each of the communities within the Vermilion sub-basin.

Figure 11-7: Visible Minorities in the Vermilion Sub-Basin, 2006



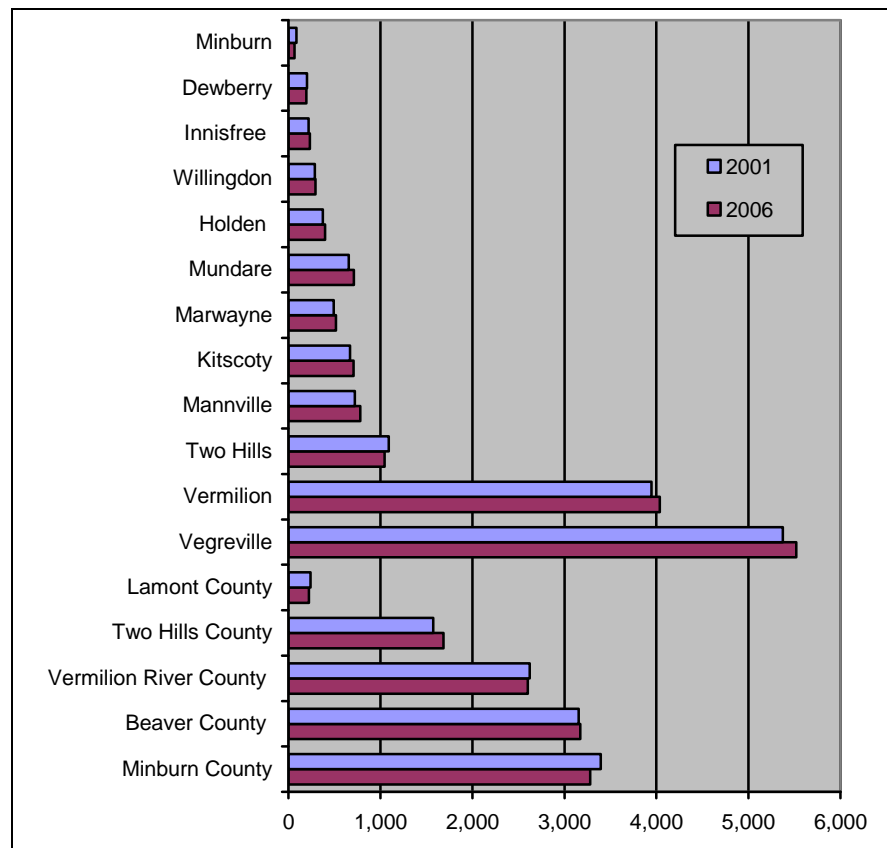
It shows that some communities reported having no visible minorities (Vermilion River and Minburn counties, Mannville, Marwayne, Willingdon, Innisfree, Dewberry and Minburn). Visible minorities were concentrated in Holden, where the Korean community accounted for 8.5% of the population, Two Hills, Vegreville and Kitscoty. The visible minorities in these communities included a mix of Chinese, Filipino, South Asian and Blacks minority groups.

11.5 Population Change

Between 2001 and 2006, the population of the Vermilion Sub-basin increased by 360 people which represents an increase of 1.4%. This growth rate was well below the population growth rate for the NSRB (9.6%). Figure 11-8 shows that small population increases occurred in Vegreville, Vermilion, Mannville, Kitscoty, Marwayne, Mundare, Holden and Willingdon. However, this was offset by population declines in Vermilion River County, Minburn County, Dewberry, Two Hills and Minburn. The populations of Lamont County, Dewberry and Innisfree remained largely unchanged. The highest population growth rates occurred in the Mannville (8.3%) and Mundare (8.2%). The greatest decline occurred in Minburn, where the population dropped by 26.1%.

One factor affecting population growth is migration from one area to another. Figure 11-9 shows population mobility in the Vermilion Sub-basin between 2001 and 2006. It shows that 65.1% of sub-basin residents resided at the same address for the 5-year period; this about 12 percentage points higher than the NSRB average (53.6%). Another 11.7% lived in the same census subdivision but changed addresses. A small percentage of sub-basin residents (2.1%) moved in from another country, 5.4% moved from another province, and 15.7% moved from a different municipality in Alberta.

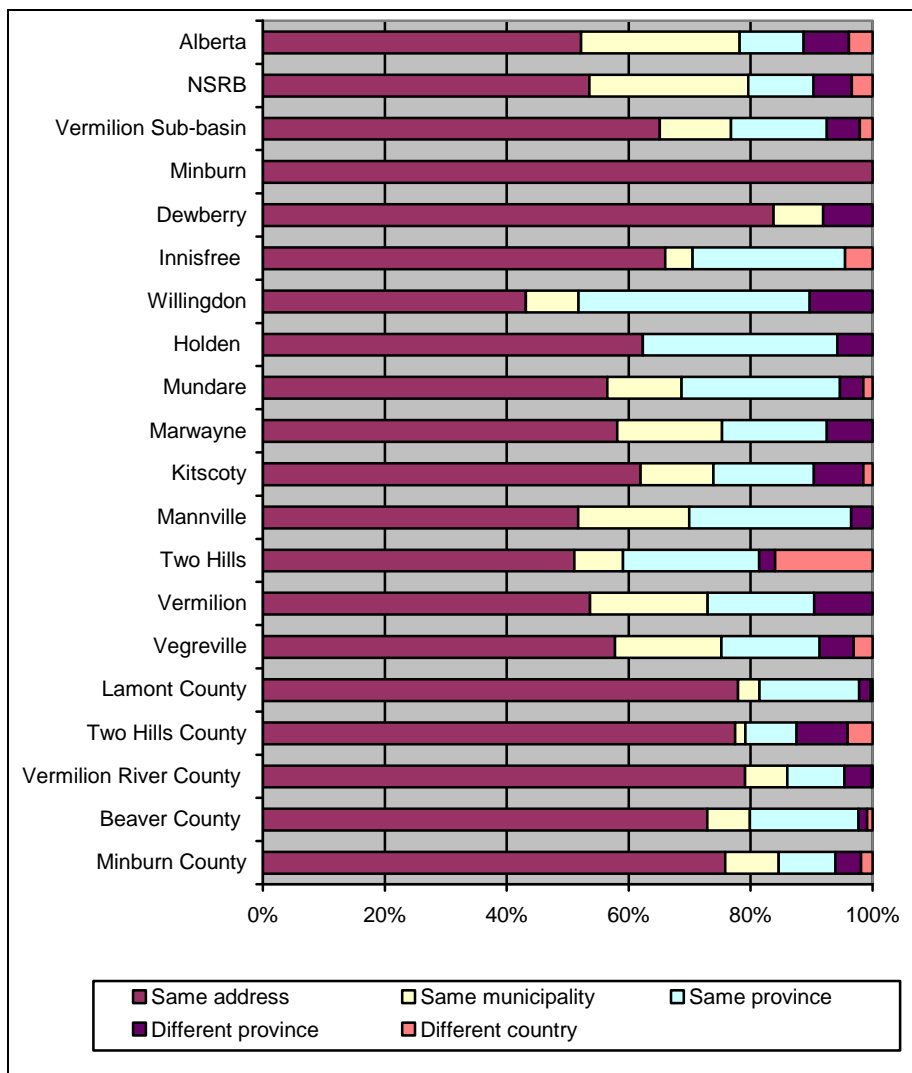
Figure 11-8: Population Change in the Vermilion Sub-Basin, 2001-2006



Residents of Minburn, Dewberry and the five counties were the most likely to have lived at the same address for the period from 2001 to 2006. Residents of Willingdon, Two Hills, and Mannville were the most mobile. Willingdon reported the highest percentage of residents who had moved in from another

province (10.5%). Willingdon and Holden had the highest percentages of people who had moved to the community from another part of Alberta. Residents of Vermilion and Mannville were the most likely to have changed addresses within the community between 2001 and 2006.

Figure 11-9: Population Mobility in the Vermilion Sub-Basin, 2001-2006



Immigration has also contributed to population growth. About 6.1% of sub-basin residents consisted of immigrants and this was well below the NSRB average of 17.1%. Overall, the percentage of immigrants ranged from 0% in Marwayne, Innisfree and Dewberry to 21.0% in Two Hills and 15.5% in Holden.

Figure 11-10: Role of Immigration in the Vermilion Sub-Basin, 2006

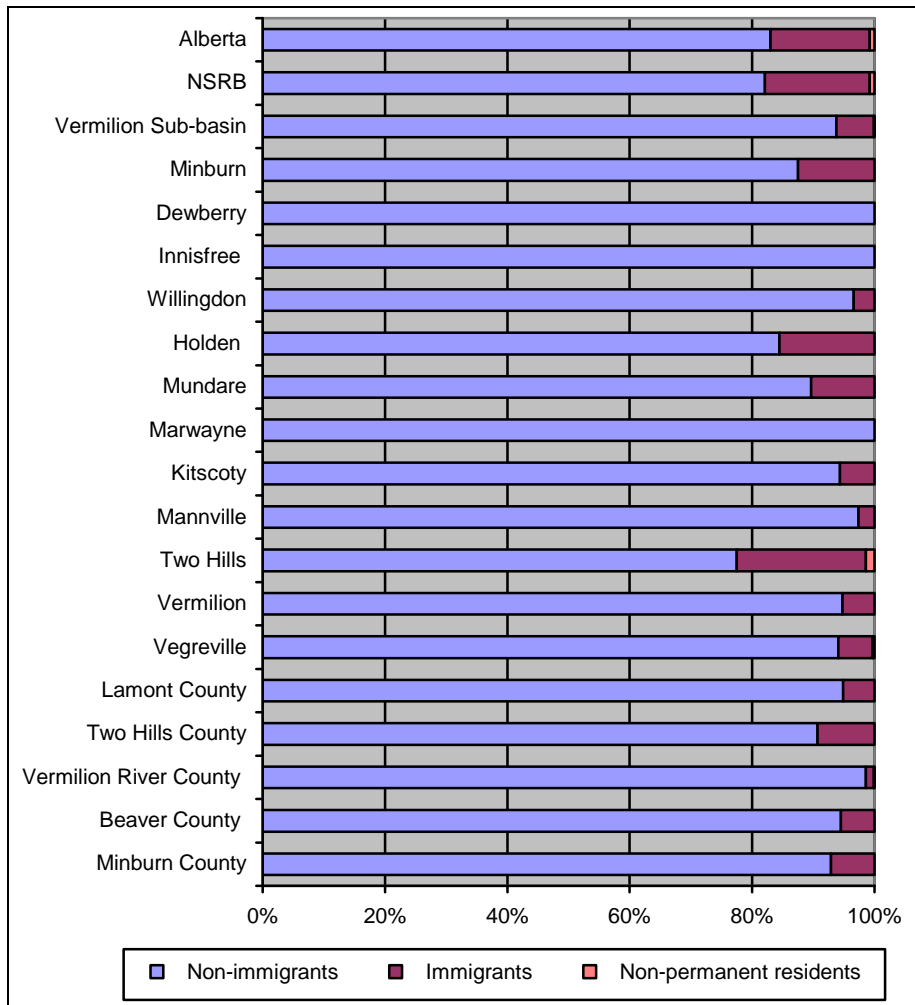
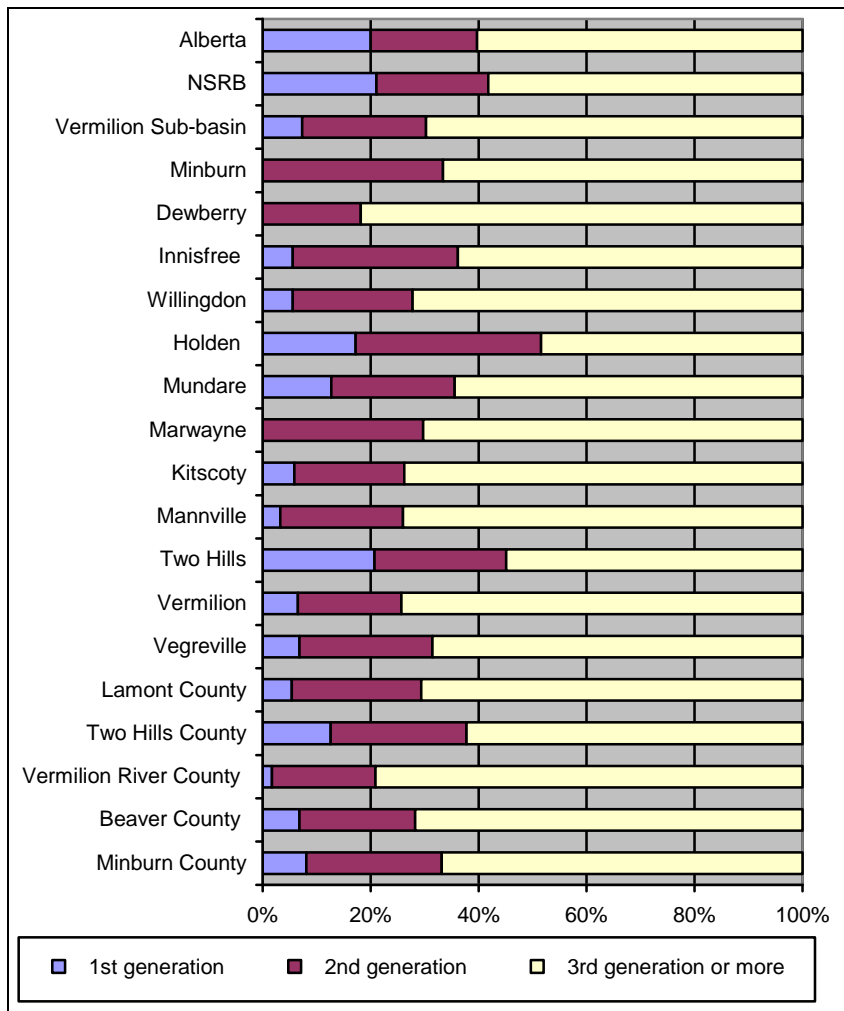


Figure 11-11 shows that 69.6% of people living in the Vermilion sub-basin had lived in Canada for 3 or more generations, 22.9% had lived in Canada for 2 generations and 7.3% were first-generation Canadians.

Figure 11-11: Residency in Canada, Vermilion Sub-Basin, 2006

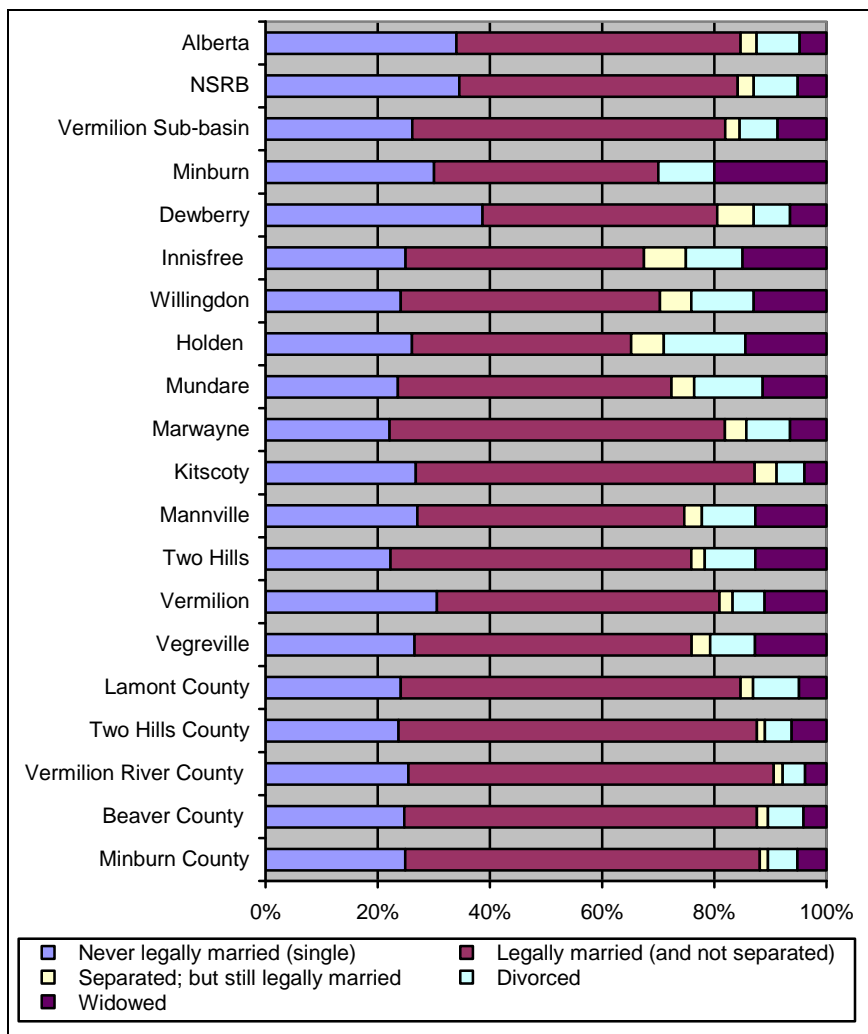


The highest percentages of sub-basin residents who had lived in Canada for 3 or more generations were found in Dewberry and Vermilion River County. The communities in the sub-basin with the highest percentage of the population that has lived in Canada for only 1 or 2 generations include Holden, Two Hills and Two Hills County.

11.6 Marital Status

Married people account for 55.8% of the sub-basin population, while the balance consists of single people (26.2%), divorced people (6.8%), widowed people (8.7%) and people who are separated (2.6%). The sub-basin profile (**Error! Reference source not found.**) shows that it had higher percentages of married people than were found in the NSRB. In general, the rural areas (all five counties) had higher percentages of married people (ranging from 61% to 65%) while higher percentages of single people were found in Dewberry and Vermilion. Widowed people accounted for relatively high percentages of the population in most communities, with the highest percentages occurring in Minburn, Innisfree and Holden.

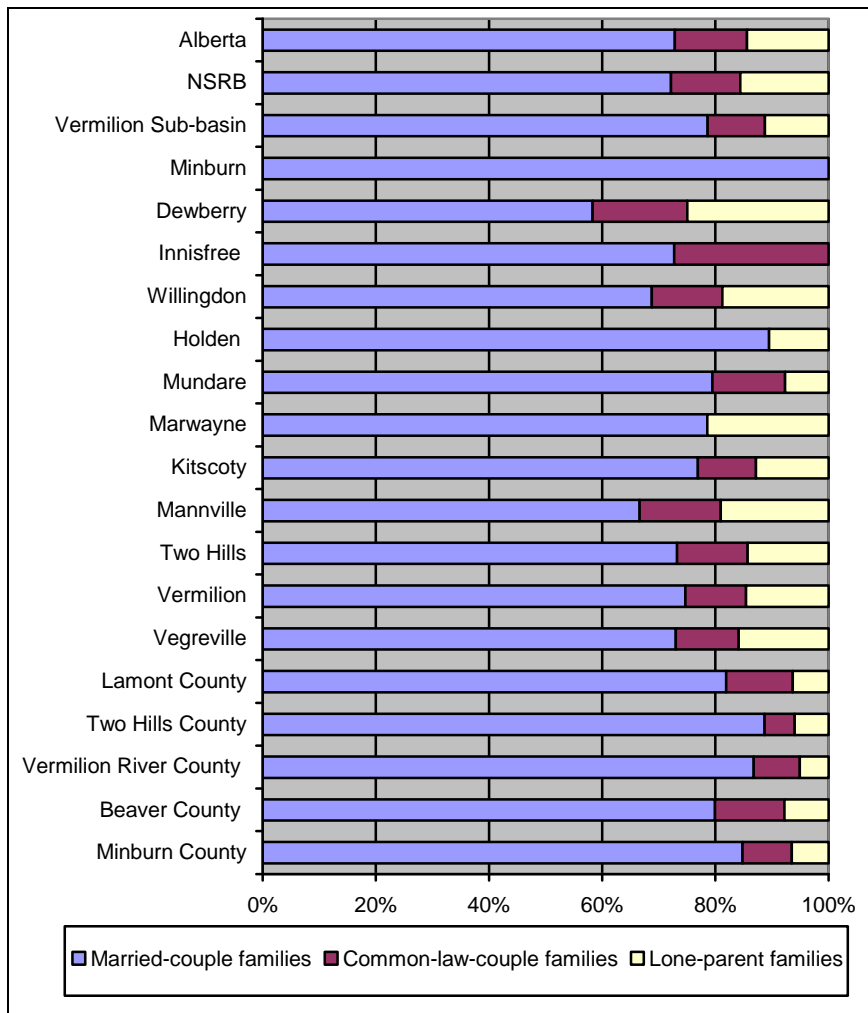
Figure 11-12: Marital Status in the Vermilion Sub-Basin, 2006



11.7 Family Structure

Married couple families account for 78.4% of the 6,980 families in the Vermilion Sub-basin. Lone parent families account for 11.2% of families, while common-law couples account for the balance (10.2%). Figure 11-13 shows that, when compared with the NSRB, the sub-basin had a higher percentage of married couple families and less single parent families. The lowest percentage of married couple families was found in Dewberry (58.3%); lower percentages of married couple families were also found in Mannville and Willingdon. The highest percentages of lone-parent families were found in Dewberry (25.0%) and Marwayne (21.8%). There were reported to be no lone-parent families in Minburn.

Figure 11-13: Family Structure in the Vermilion Sub-Basin, 2006



11.8 Household Structure

Household structure differs from family structure because households can contain one or more families. Figure 11-14 shows that 27.1% of households consisted of a couple with children, 33.8% were couples with no children, 28.8% were single person households, and the balance (10.3%) consisted of other household types.

Figure 11-14: Household Structure in the Vermilion Sub-Basin, 2006

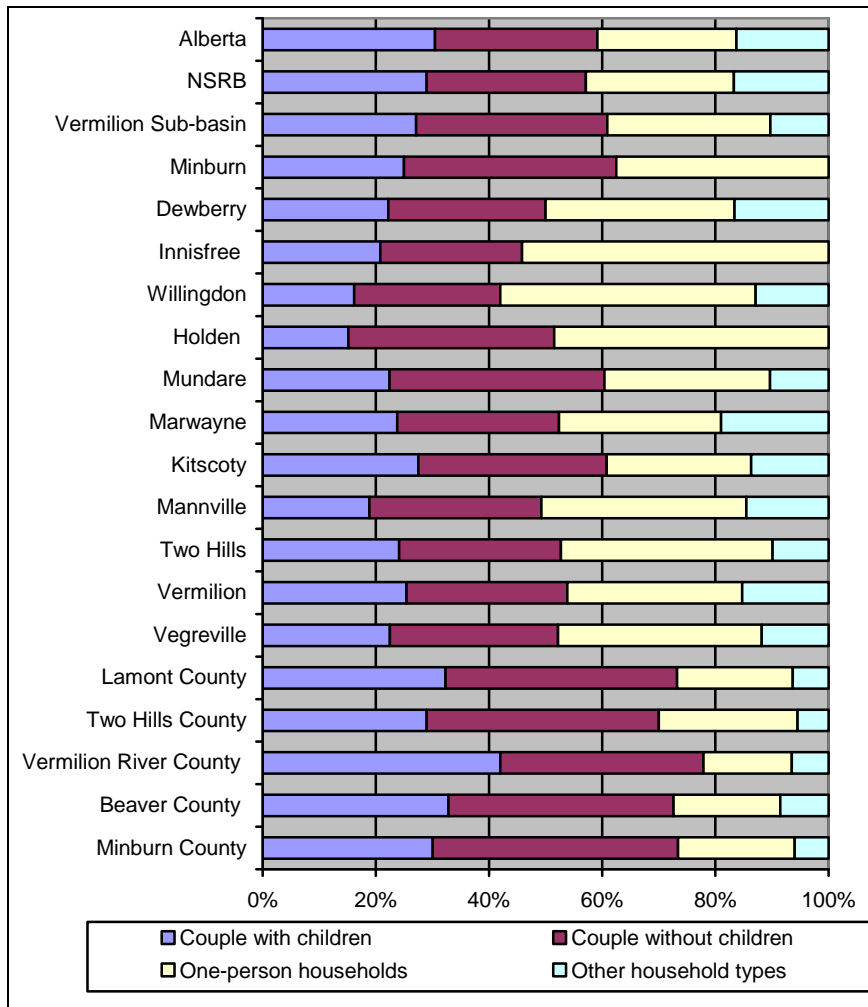
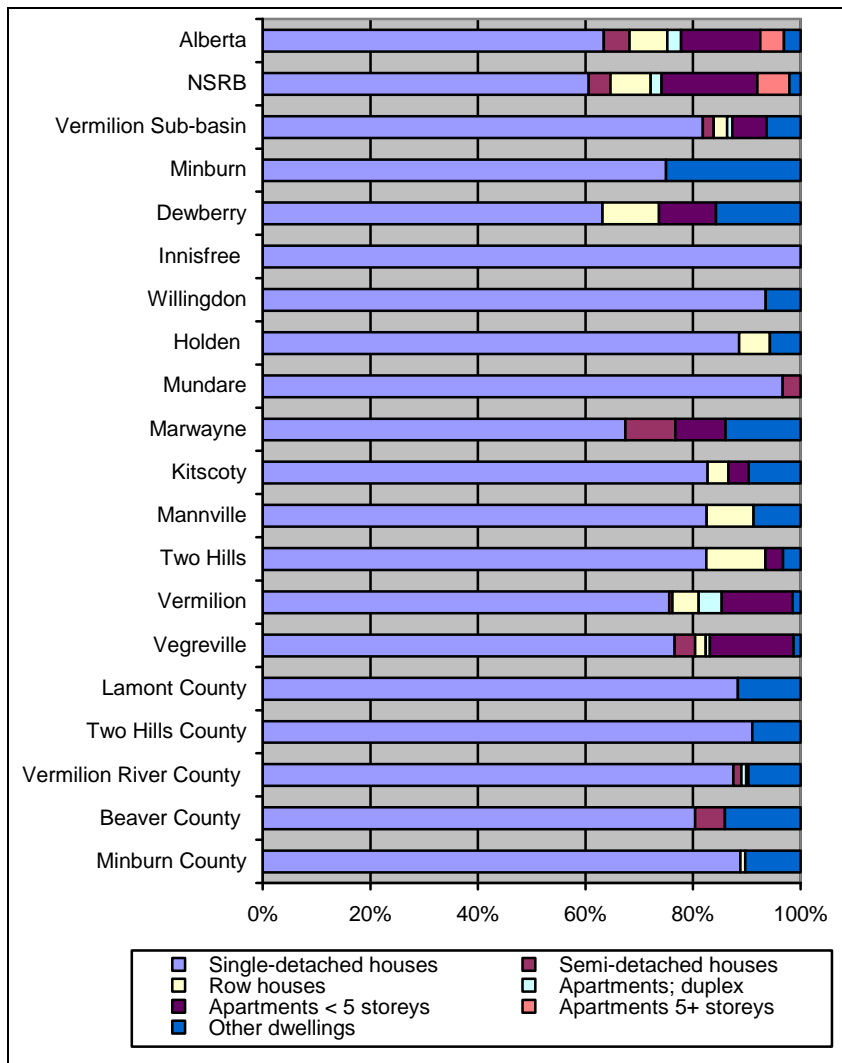


Figure 11-15: Housing Characteristics in the Vermilion Sub-Basin, 2006



Overall, the Vermilion Sub-basin had higher percentages of married couples without children and one-person households than did the NSRB. Within the sub-basin, the lowest percentages of families with children were found in Holden, Willingdon and Mannville. Communities with the highest percentages of couples with children included Vermilion River County Beaver County and Lamont County. The highest percentages of couples without children were found in Minburn and Minburn County. Innisfree, Willingdon and Holden had the highest percentages of one-person households.

11.9 Housing

In 2006 there were about 10,010 housing units in the Vermilion Sub-basin.

Figure 11-15 shows the composition of housing in each of the communities within the sub-basin. Overall, single detached houses accounted for 81.9% of housing in the sub-basin. Other housing types were found in Dewberry, which had some row housing and semi-detached housing, as well as Marwayne, Vermilion and Vegreville. Apartments of less than 5 stories were found primarily in Vegreville, Vermilion, Dewberry, and Marwayne.

Figure 11-16 shows the reported value of housing in each of the communities within the Vermilion Sub-basin as well as the percentage of housing stock in need of major repair. Overall, the average value of a house in the Vermilion Sub-basin in 2005 was \$162,065, which was much less than the NSRB average (\$254,828). The communities with the highest valued dwellings included Vermilion River County and Beaver County. The lowest valued housing occurred in Minburn (\$14,906) while average values of less than \$100,000 were reported for Two Hills, Holden, Willingdon, Innisfree and Dewberry.

Overall, 11.6% of dwellings in the basin were in need of major repair and this was nearly double the NSRB average of 6.3%. Housing stock in Minburn was in the poorest condition, with 28.6% being in need of major repair. Relatively high percentages of housing in need of major repair were also reported in Mannville (20.0%), Mundare (20.0%) and Two Hills County (19.5%).

Figure 11-16: Value of Housing (2005) and Need for Major Repairs, Vermilion Sub-Basin

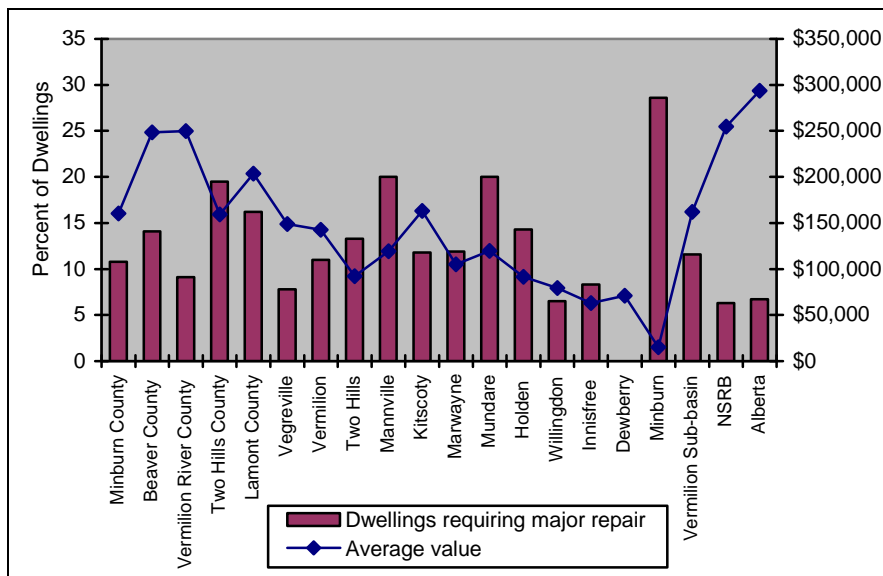
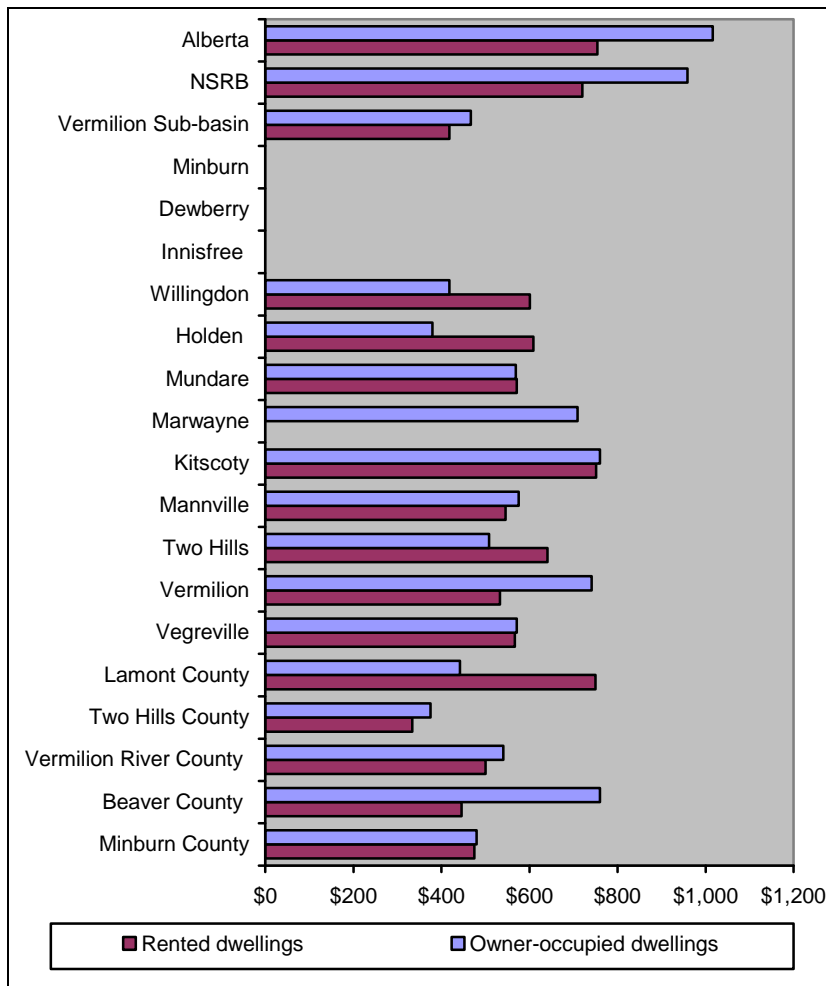


Figure 11-17 summarizes the average monthly costs of renting and owning dwellings in communities in the Vermilion Sub-basin in 2005. These costs include rent/mortgage, electricity, heat and municipal services to operate a dwelling. Overall, rental costs averaged \$418 per month (compared to \$720 in the NSRB) while the average cost for owned dwellings was \$467 per month (compared to \$959 for the NRBS). The highest monthly costs for rental housing were reported for Kitscoty and Lamont County, while the highest monthly costs for owned dwellings was in Kitscoty, Vermilion, Beaver County and Marwayne. The lowest monthly costs were reported in Two Hills County. Monthly costs for rental accommodation were typically lower than for owned dwellings, except in Willingdon, Holden and Lamont County.

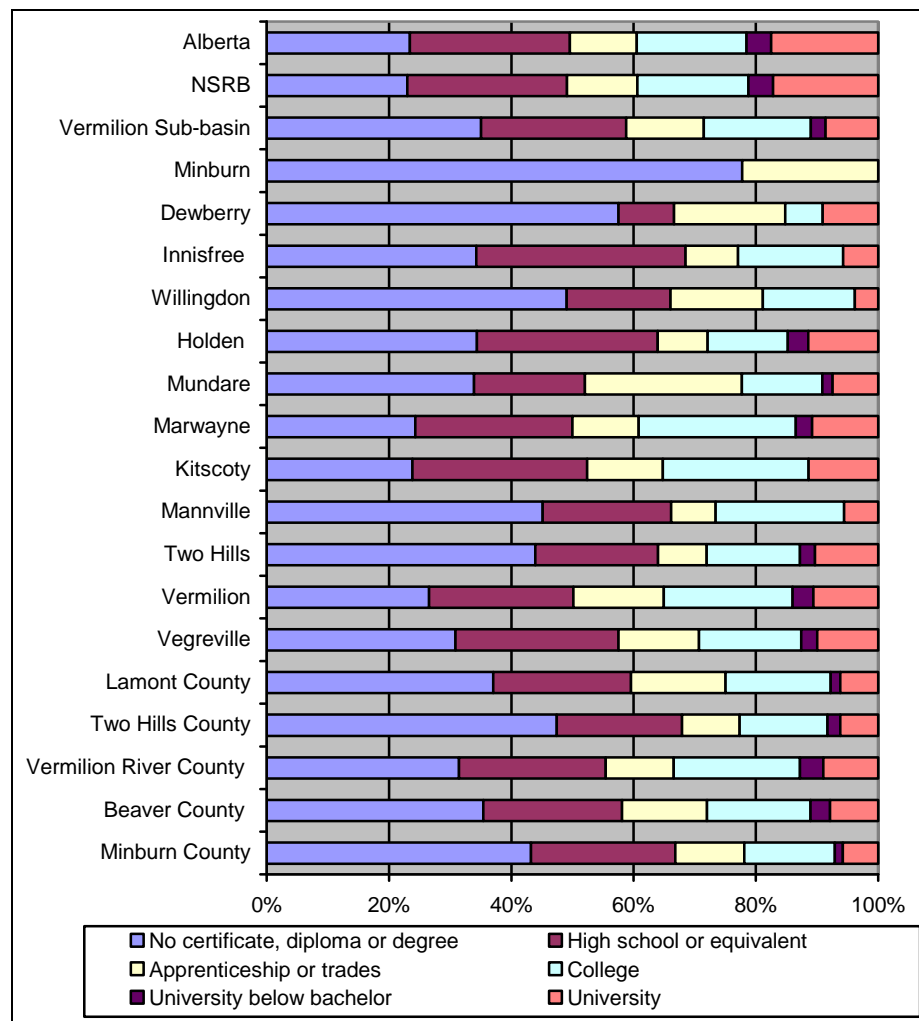
Figure 11-17: Average Monthly Costs for Rental and Owned Dwellings, 2005



11.10 Education

Residents of the Vermilion Sub-basin were less educated than the NSRB average. Figure 11-18 shows that 35.0% of sub-basin residents had not completed high school and this percentage was well below the NSRB average (23.0%).

Figure 11-18: Educational Attainment, Vermilion Sub-Basin



The communities with the lowest levels of educational attainment, as measured in terms of the percentage that had not completed high school, include Minburn (63.6%), Dewberry (57.6%), Willingdon (49.1%), Mannville (45.2%), Two Hills (44.2%) and Minburn County (43.2%). The lowest percentage of people who had not completed high school was found in Kitscoty (24.0%), Marwayne (24.3%) and Vermilion (26.5%).

About 12.7% of adult residents of the Vermilion Sub-basin had completed an apprenticeship or trades certificate, and this was slightly higher than the NSRB average of 11.5%. Communities with relatively high percentages of residents with an apprenticeship or trades certificate included Mundare (26.1%) and Dewberry and Minburn (18.2%). About 8.6% of sub-basin residents had completed their university

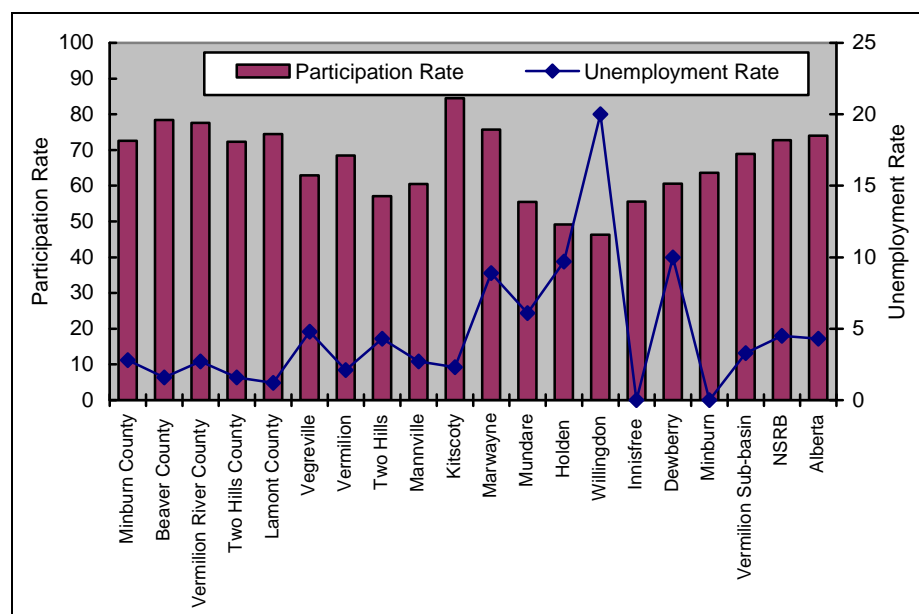
education; this is half the NSRB average of 17.2%. The highest percentages of people with university educations were found in Kitscoty (11.5%) and Holden (11.1%).

11.11 Labour Force Participation

Overall, 68.9% of the adult population in the Vermilion Sub-basin was participating in the labour force, either working or actively seeking work. This rate was less than for the NSRB (72.1%). Figure 11-19 shows that labour force participation rates ranged from a high of 84.5% in Kitscoty and 78.4% in Beaver County, but dropped to only 46.3% in Willingdon, 49.2% in Holden, 55.5% in Mundare and 55.6% in Innisfree.

In 2006, the Vermilion Sub-basin had an unemployment rate of 3.3%, which was much less than the NSRB average (4.5%). Unemployment rates were lowest in Minburn (0.0%) and Lamont County (1.2%). The highest unemployment rates were in Willingdon (20.0%), Dewberry (10.0%), Holden (9.7%) and Marwayne (8.9%).

Figure 11-19: Labour Force Participation and Unemployment Rates, 2006

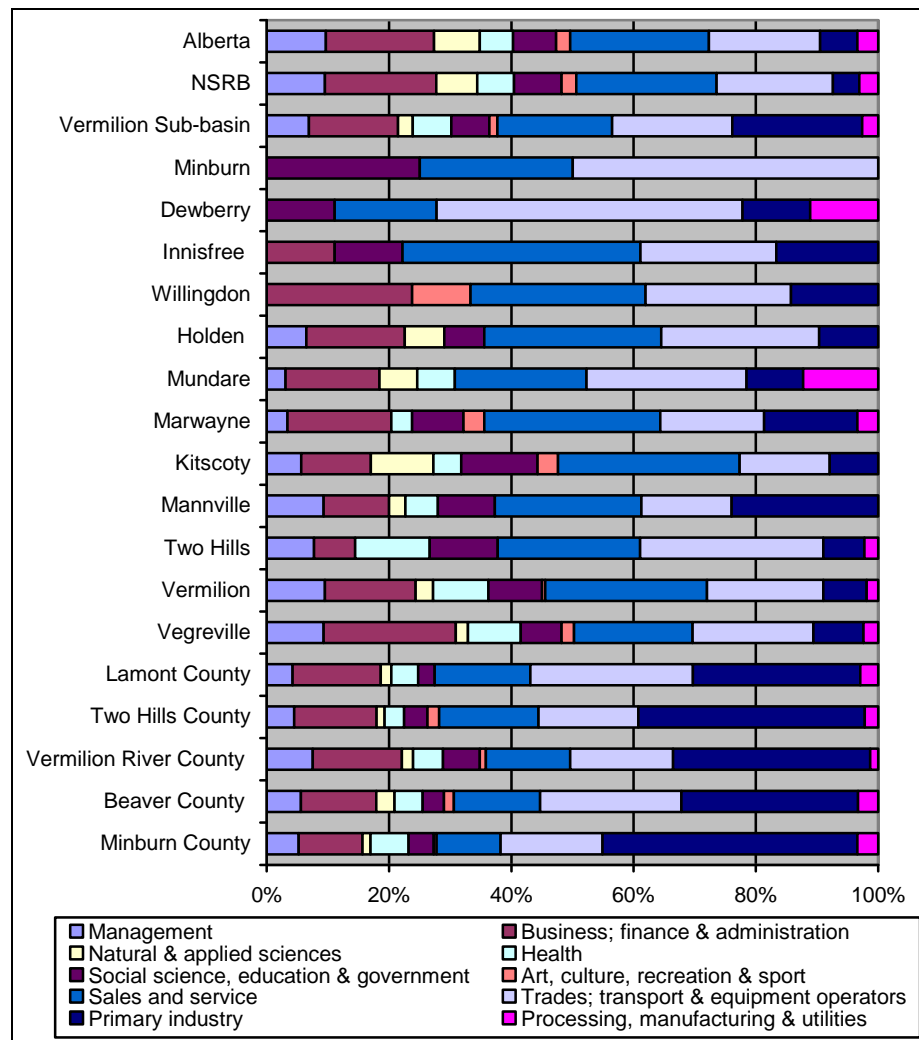


11.12 Employment by Occupation

Figure 11-20 shows employment by occupation for the Vermilion Sub-basin. The sub-basin profile differs from the NSRB profile in that the sub-basin has a much higher percentage of people employed in occupations related to primary industry and smaller percentages of people employed in management and business, finance and administration.

Within the sub-basin, employment in occupations related to primary industry accounted for 21.2% of total employment, but was more important in Minburn County and Two Hills County. Employment in trades, transport and equipment operations averaged 19.6% in the sub-basin but ranged from 14.9% in Mannville and 14.7% in Kitscoty to 57.1% in Minburn and 45.0% in Innisfree.

Figure 11-20: Employment by Occupation, Vermilion Sub-Basin, 2006



Vermilion reported the highest percentage of the workforce in management occupations (9.5%), followed by Vegreville and Mannville (each at 9.3%). The highest employment in sales and service occupations was reported in Innisfree (35.0%) and Marwayne (30.4%). Willingdon (21.7%) and Vegreville (21.6%) had the highest percentages of employment in occupations related to business, finance and administration. Two Hills had the highest percentage of people employed in health occupations (11.8%) while Minburn had the highest percentage of people employed in social sciences, education and government (28.6%).

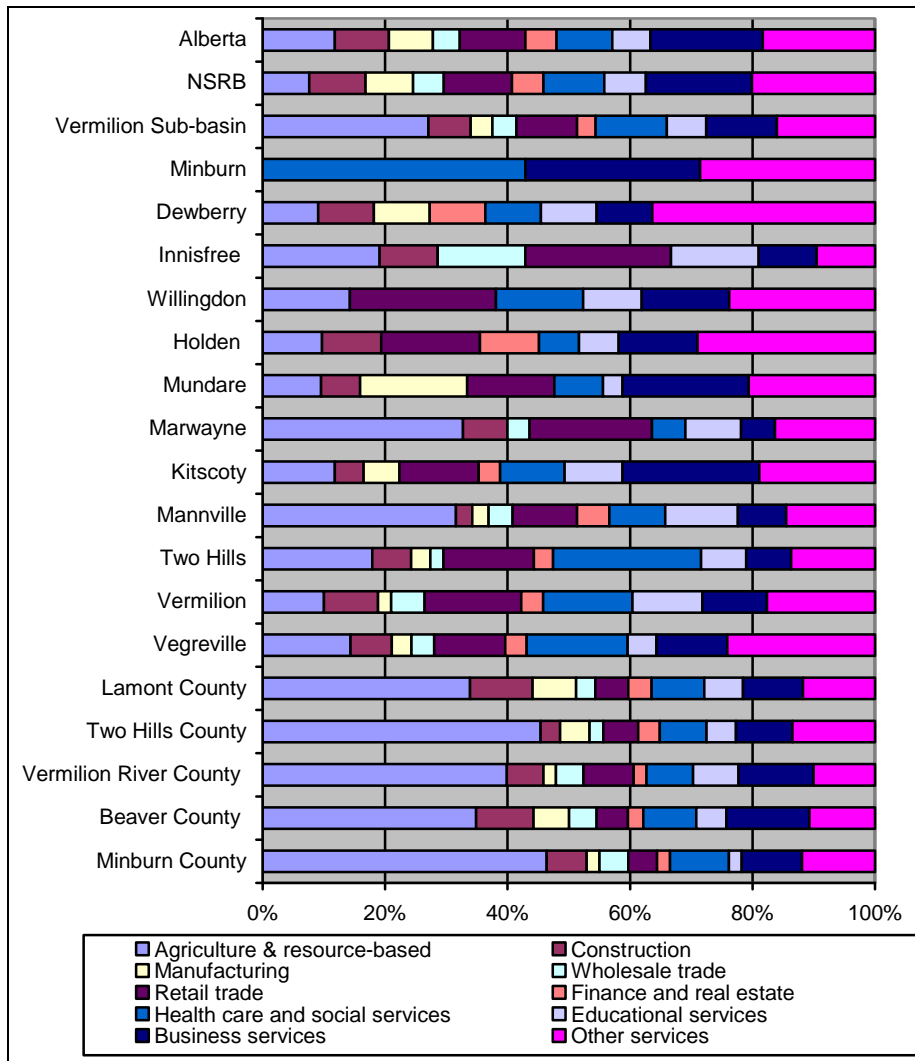
11.13 Employment by Industry

Figure 11-21 shows employment in the Vermilion Sub-basin based on the industry of employment. Overall, 37.4% of the workforce was working in basic (goods-producing) industries, including agriculture and other resource-based industries, manufacturing and construction. This was higher than in the NSRB, where 24.6% of the workforce was employed in basic industries.

Employment in the agriculture and resource-based industries accounted for 27.0% of the employment workforce, although this percentage reached 46.3% in Minburn County and 45.2% in Two Hills County. While employment in manufacturing only accounted for 3.5% of employment in the sub-basin, it accounted for 10.0% of employment in Dewberry.

Non-basic industries accounted for 62.3% of employment in the Vermilion Sub-basin. The non-basic industries that provided the greatest amounts of employment included other services (16.0%), business services (11.5%), retail trade (9.9%), and health care and social services (11.5%). Within the sub-basin, the percentage of employment in other industries was highest in Dewberry (40.0%), Minburn (33.3%) and Holden (29.0%). Employment in business services ranged from 5.3% in Marwayne to 21.8% in Kitscoty and 33.3% in Minburn. The highest participation in retail trade was reported in Innisfree (26.3%) and Holden (21.7%). Two Hills had the highest percentages of it workforce employed in the health care industry (24.7%).

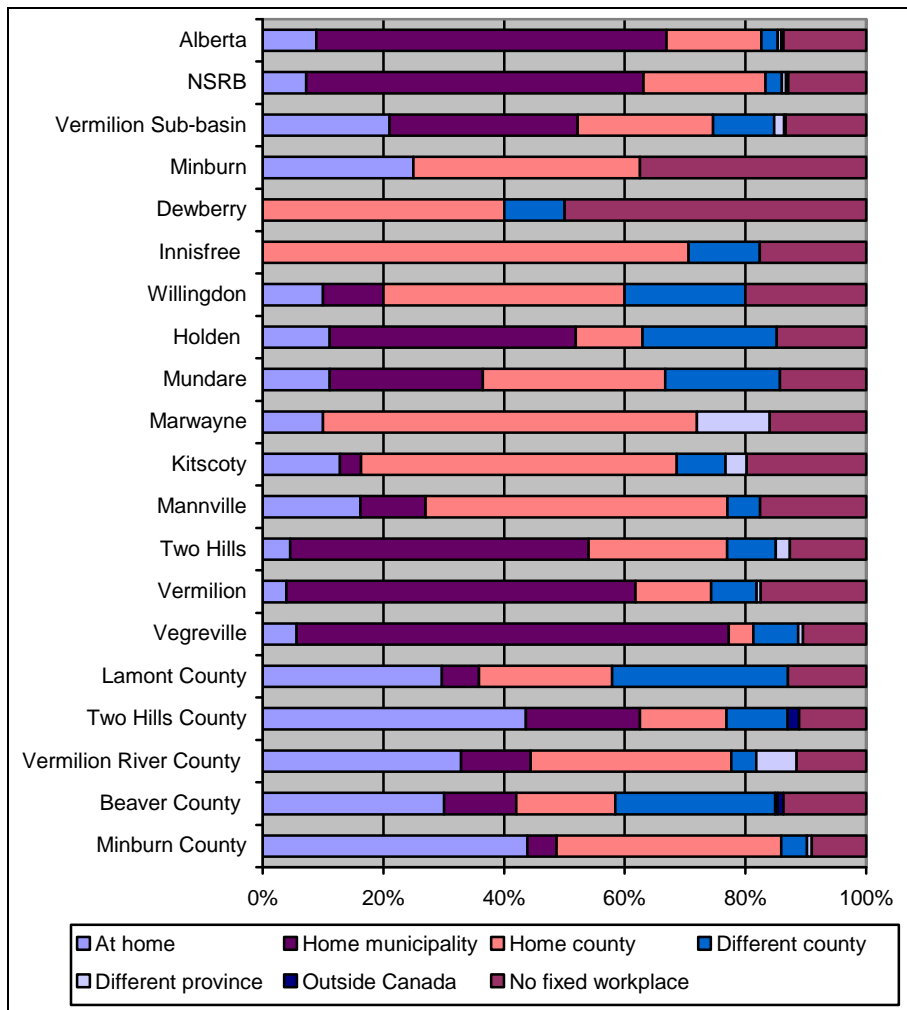
Figure 11-21: Employment by Industry, Vermilion Sub-Basin, 2006



11.14 Location of Employment

Figure 11-22 shows where residents of the Vermilion Sub-basin actually worked.

Figure 11-22: Location of Work, Vermilion Sub-Basin, 2006



Overall, 21.0% worked at home and 31.1% worked at a usual place in their home municipality. Another 22.4% worked in their home county outside their local community, while 10.1% worked in another part of Alberta, 1.6% worked outside Alberta and 0.3% worked outside Canada. The balance (13.3%) had no fixed workplace. Compared to the NSRB, residents of the Beaverhill Sub-basin were more likely to work at home and in their home county outside their home municipality.

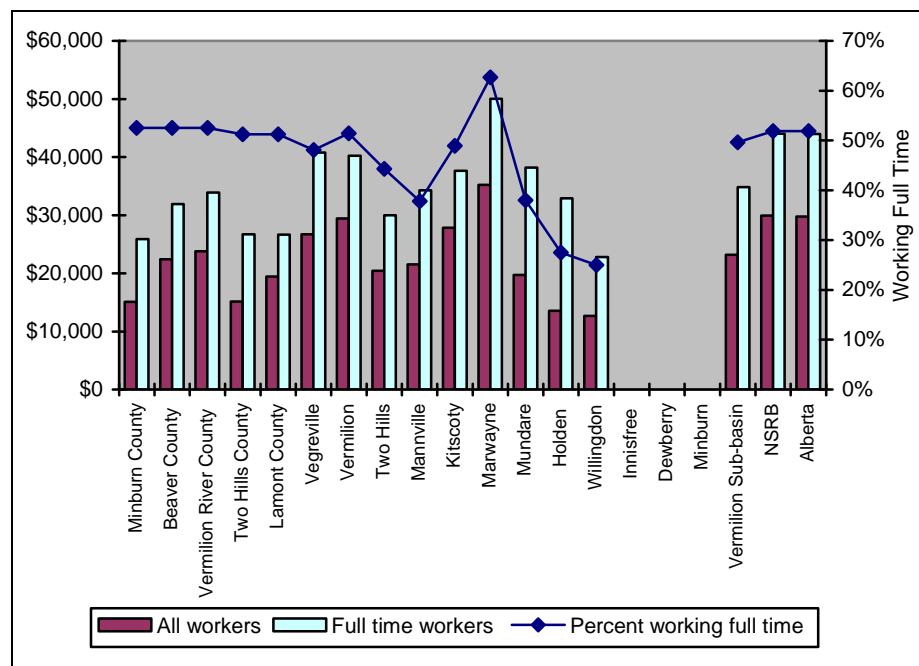
The figure shows that residents of the five counties were most likely to work at home. Residents of Vegreville, Vermilion, Two Hills and Holden were most likely to work at a fixed location in those communities. High percentages of people in Innisfree, Marwayne, Kitscoty, Mannville, Willingdon and Minburn County commuted to another location in their home county to work. Residents of Marwayne and Vermilion County were more likely to work in another province. Residents of Dewberry and Minburn were the least likely to have a fixed workplace.

11.15 Employment Earnings

Residents of the Vermilion Sub-basin reported median earnings of \$23,182 in 2005; this was much lower than the NSRB average of \$30,068. Figure 11-23 shows that the highest median earnings were reported in Marwayne (\$35,209), followed by Vermilion (\$29,429) and Vegreville (\$26,726). In contrast, workers from Willingdon, Holden and Two Hills County reported median earnings of only \$12,695, 13,558 and \$15,178, respectively. There is no income data for residents of Innisfree, Dewberry or Minburn.

Within the Vermilion Sub-basin 49.6% of workers reported being employed full-time, year round; this less than the NSRB average of 51.9%. The percentage of workers with full-time employment ranged from 62.7% in Marwayne to 25.0% in Willingdon and 27.5% in Holden. People who did work full-time, year round, reported median earnings of \$34,812, which was much less than the NSRB average (\$44,233). The highest median incomes from full-time employment were reported in Marwayne (\$50,041), Vegreville (\$40,777) and Vermilion (\$40,238). The lowest median earnings from full time employment occurred in Willingdon (\$22,807).

Figure 11-23: Median Earnings and Full-Time Employment, 2006

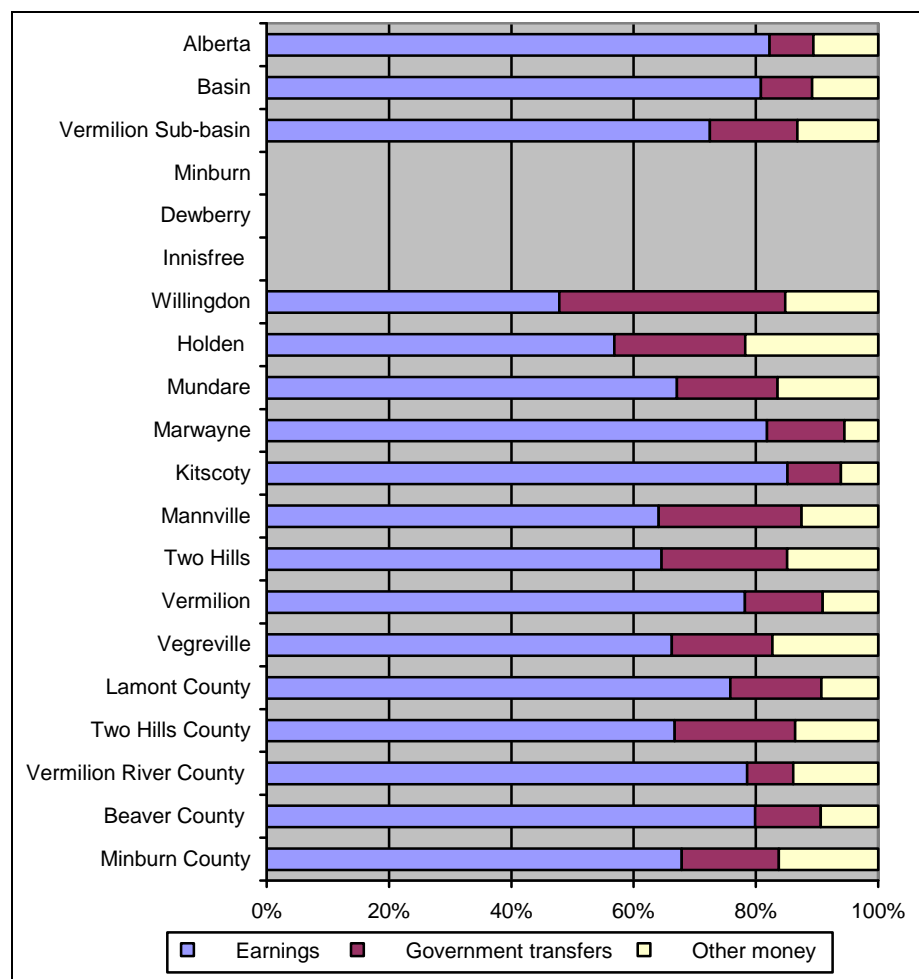


11.16 Other Income Sources

Figure 11-24 shows that earnings accounted for 72.4% of income for residents of the Vermilion Sub-basin; this is about 8 percentage points lower than for the NSRB (81.4%). The remaining income came from government transfers (14.3%) and other sources (13.2%). It shows that only in three communities, Kitscoty, Marwayne and Beaver County did earnings account for more than 80% of income.

Communities that obtained the lowest percentages of their annual incomes from earnings included Willingdon (47.9%) and Holden (57.3%). In Mundare, Mannville, Two Hills, Vegreville, Two Hills County and Minburn County, earnings accounted for less than 70% of total income. Communities that were most reliant on income from government transfers included Willingdon (37.0%), Mannville (23.4%), Holden (21.6%), Two Hills (20.5%), and Two Hills County (19.4%).

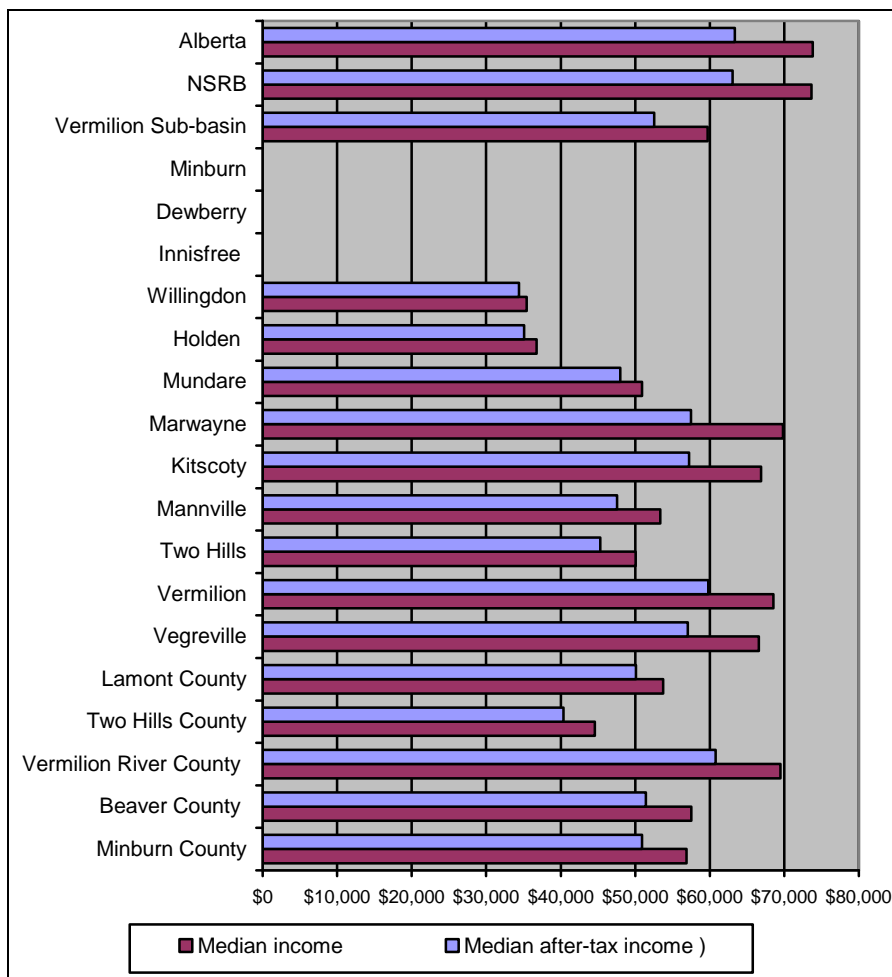
Figure 11-24: Reliance on Transfer Payments and Other Income, 2005



11.17 Family and Individual Income

In 2005 families in the Vermilion Sub-basin reported median incomes averaging \$59,719 (or \$52,539 after tax); these incomes are much lower than the NSRB average of \$73,823 (or \$63,361 after tax). Variations in median family incomes within the sub-basin are shown in Figure 11-25.

Figure 11-25: Median Family Income, Before and After Tax, 2005

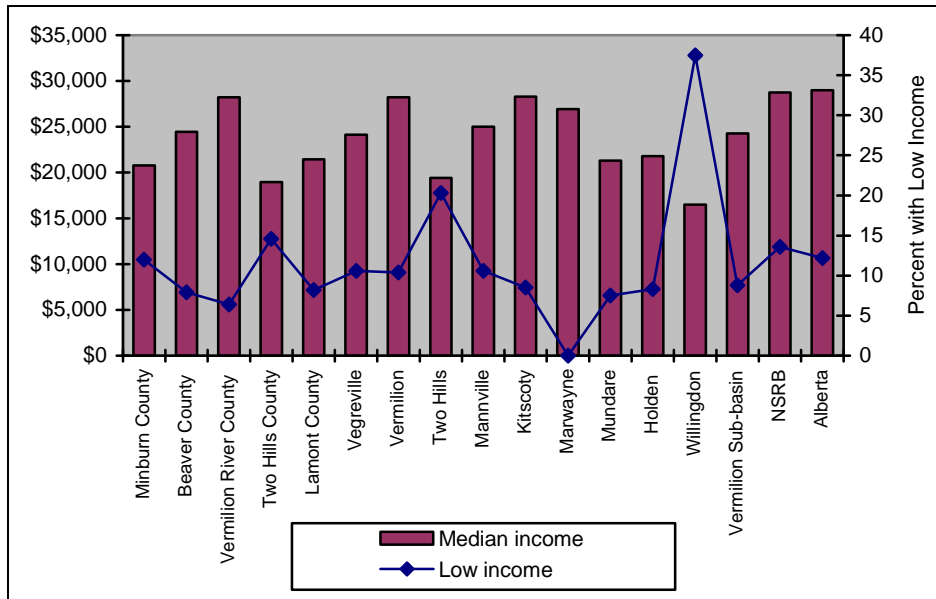


The highest median family incomes were reported in Marwayne (\$69,184), Vermilion River County (\$69,491) and Vermilion (\$68,546). The lowest family incomes were reported for Willingdon (\$35,429) and Holden (\$36,766).

Median incomes in 2005 for persons in private households in the Vermilion Sub-basin averaged \$24,249; this is less than the NSRB average (\$28,898). Overall, 8.8% of residents of the Vermilion Sub-basin were considered to have low incomes (before tax), and this is lower than the NSRB average (13.6%).

Figure 11-26 summarizes median incomes and the incidence of low incomes for communities in the sub-basin. Median personal incomes ranged from \$28,304 in Kitscoty, \$28,214 in Vermilion River County and \$28,207 in Vermilion to \$16,516 in Willingdon, \$18,952 in Two Hills County and \$19,412 in Two Hills.

Figure 11-26: Median Personal Income and Incidence of Low Income, 2005



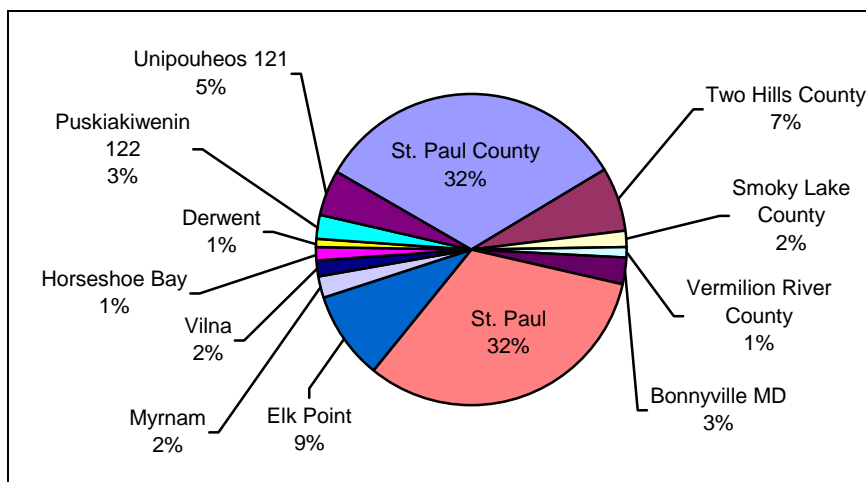
The incidence of people with low incomes ranged from 0.0% in Marwayne to 20.3% in Two Hills County and 37.5% in Willingdon.

12.0 FROG SUB-BASIN

12.1 Population

In 2006, the Frog Sub-basin had a population of about 15,975 people which represents about 1.4% of the population of the entire NSRB. The population is nearly evenly split between urban communities (17.3%) and rural areas (45.5%), with a small portion of the population (7.3%) living on one of 2 reserves. Figure 12-1 shows that much of the population is concentrated in the Town of St. Paul (32.0%) and St. Paul County. Another 9.3% lives in the Town of Elk Point while 4.7% live in one of 3 villages: Myrnam (2.3%), Vilna (1.7%) and Derwent (0.7%). A small portion of the population lived in the Summer Village of Horseshoe Bay (1.3%). The balance of the rural population lived in Two Hills County (6.7%), Smoky Lake County (1.6%), Vermilion County (1.0%) and the Municipal District (MD) of Bonnyville (3.0%). The two reserves include the Puskiakiwenin 122 reserve, with 2.6% of the sub-basin population, and the Unipouheos 121 reserve, with 4.7%.

Figure 12-1: Population Distribution in the Frog Sub-Basin, 2006



12.2 Age Characteristics

In terms of age, residents of the Frog Sub-basin were different from the overall population of the NSRB. Figure 12-2 shows that, the Frog Sub-basin had higher percentages of both young people (under 15 years of age) and older adults (people aged 60 years and older). However, the sub-basin had relatively small percentages for young and middle age adults (people aged 20 to 54).

Figure 12-2: Age Composition of the Frog Sub-Basin Population, 2006

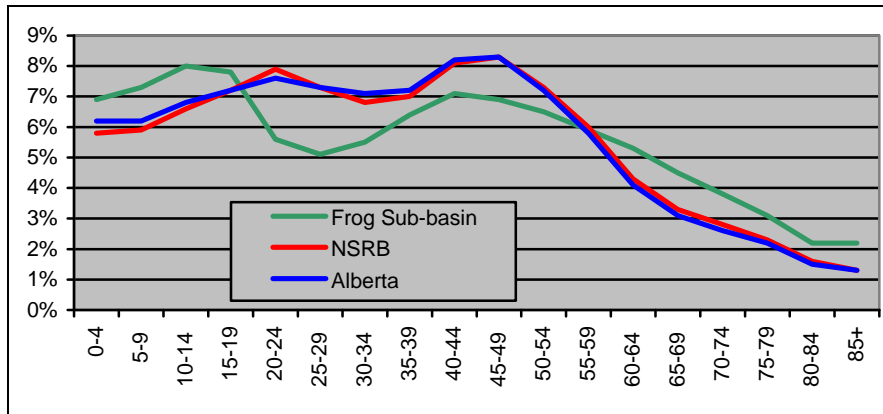


Figure 12-3 shows the age distributions for the towns and reserves in the Frog Sub-basin. Most noticeable is that the population of the Puskiakiwenin 122 and Unipouheos 121 reserves is very young, with at least 42% of the population in each reserve being under the age of 15 years and very small percentages of the reserve populations being over the age of 45 years. The two reserves had almost no residents older than 65 years of age. In contrast, both St. Paul and Elk Point had higher percentages of people in the 20 to 34 age groups and smaller percentages of people aged 40 to 64 years. Elk Point appears to be a slightly younger community than St. Paul, with higher percentages of children under 10 years and even lower percentages of people in the 45 to 54 year age groups. However, Elk Point had a much higher percentages of the population over the age of 80 years. The population profile for Elk Point is somewhat unusual however, in that it has a very low population of people aged 15 to 19 years, but a much higher percentage of people in the 20 to 24 year age group. St. Paul, on the other hand, has a much higher population of people aged 15 to 19 years, but relatively fewer children aged 10 to 14 years.

Figure 12-3: Age Composition of Towns and Reserves in the Frog Sub-Basin, 2006

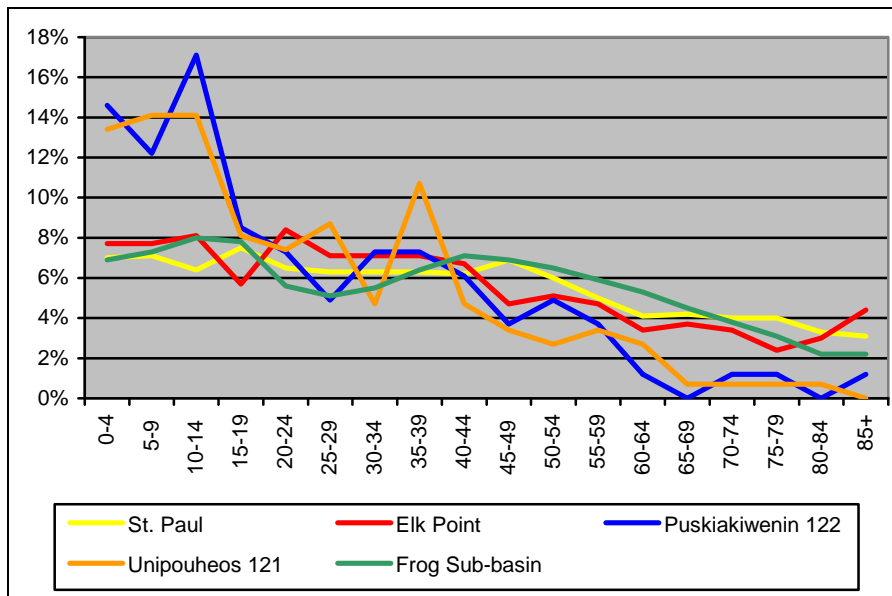
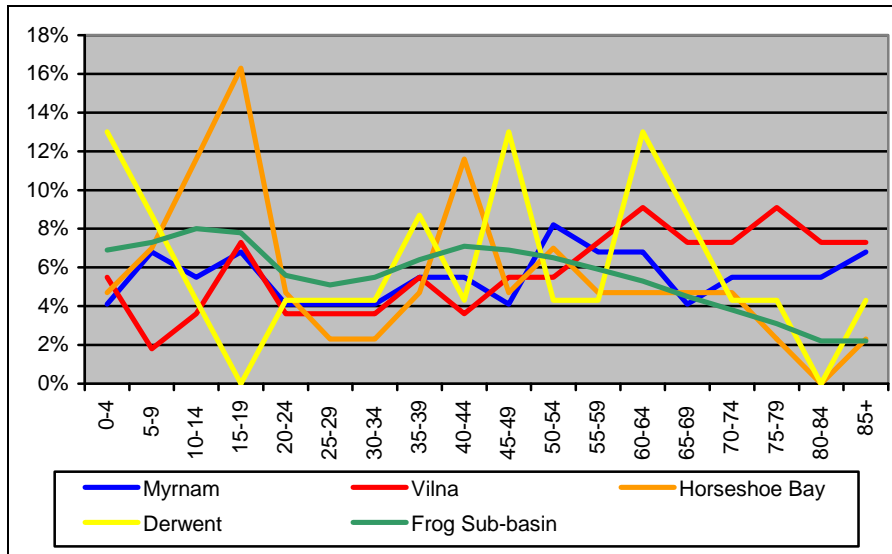


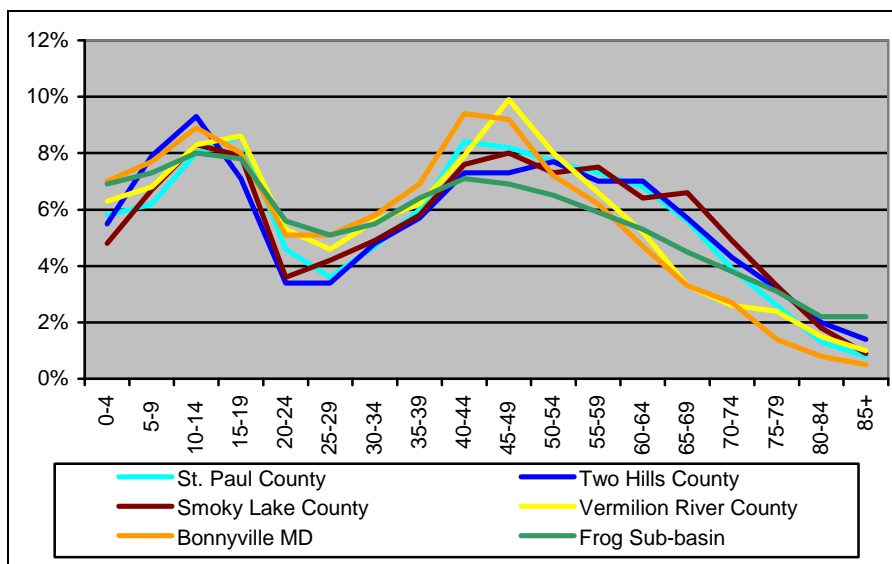
Figure 12-4 shows the population distributions for the villages in the Frog Sub-basin, including the Summer Village of Horseshoe Bay. Each of the villages has a somewhat distinct age distribution. Vilna is an older community, with the lowest percentages of children under 15 years and the highest percentages of people over 59 years. Myrnam is also an older community but, when compared to Vilna, it has proportionately more children and fewer people over 59 years. The percentages of people aged 15 to 39 years of age in each of these communities were nearly identical. The population distributions for Derwent and Horseshoe Bay are highly erratic and this reflects the relatively small population in each community. Derwent has the highest population of young children (under 5), but no one aged 15 to 19 years. It also had very high percentages of the population aged 45 to 49 and 60 to 69 years, and the highest percentage of people aged 85 years and older. Horseshoe Bay have a very high percentage of people aged 15 to 19 years, relatively fewer people aged 25 to 34 years, a higher percentage of people 40 to 44 years, and very few people over the age of 70 years.

Figure 12-4: Age Composition of Villages in the Frog Sub-Basin, 2006



The age distribution of people living in the 4 counties and the MD of Bonnyville are shown in Figure 12-5. The population profiles for these rural areas are almost identical to the profile for the Frog Sub-basin, with subtle difference among them. Both the MD of Bonnyville and Vermilion River County have higher percentages of people aged 40 to 54 and lower percentages of people over the age of 60 years. The other 3 counties have higher percentages of people aged 45 to 69 years, but relatively fewer people in the 20 to 19 year age groups. The MD of Bonnyville had the highest percentage of children less than 5 years of age while Two Hills County had the highest percentage of people aged 10 to 14 years.

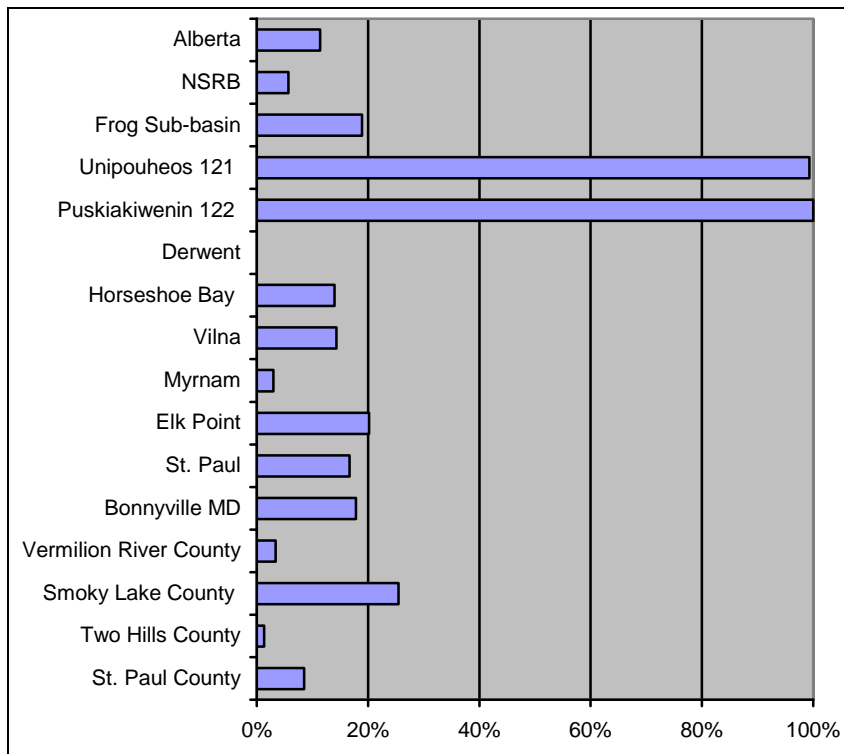
Figure 12-5: Age Composition of Counties and MDs in the Frog Sub-Basin, 2006



12.3 Aboriginal Population

About 18.9% of the residents of the Frog Sub-basin were Aboriginal and this is more than 3 times the NSRB average (5.8%). There were about 2,950 Aboriginal people living in the sub-basin and 39% of these were living on the Puskiakiwenin 122 and Unipouheos 121 reserves. Figure 12-6 shows that, with the exception of Derwent and Myrnam, at least 14% of the populations of all of the towns and villages were Aboriginal people. The highest percentage of Aboriginal people were found in Smoky Lake County (25.5%) while Aboriginal people represented only 8.5% of the population in St, Paul County and only 1.3% of the population in Two Hills County.

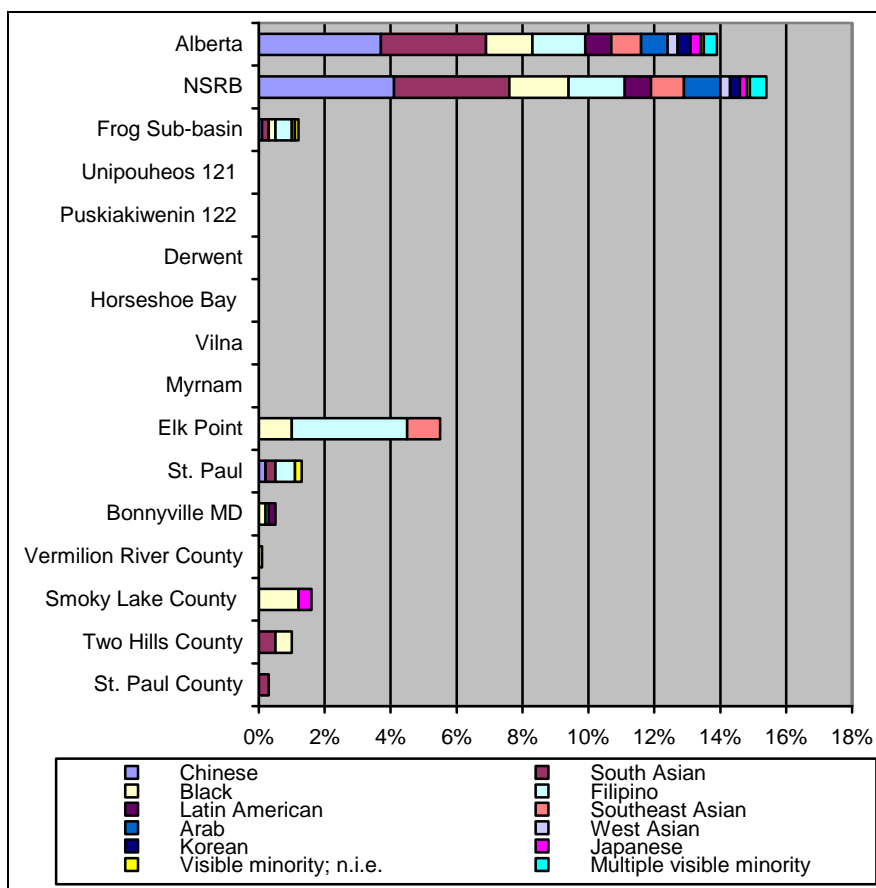
Figure 12-6: Aboriginal Population in the Frog Sub-Basin, 2006



12.4 Ethnicity

About 1.2% of the population of the Frog sub-basin consisted of visible minorities. This is well below the NSRB average of 15.5%. Figure 12-7 shows the percentage of visible minorities within each of the communities within the Frog sub-basin. It shows that visible minorities were not present in any of the villages, but accounted for 1.4% of the population of St. Paul and 5.6% of the population in Elk Point. In the rural areas, the highest concentration of visible minorities occurred in Smoky Lake County (1.6%). The figure shows Filipinos account for the majority of visible minorities in Elk Point, with smaller percentages of Blacks and Southeast Asians. Blacks accounted for more than half the visible minorities in Smoky Lake County.

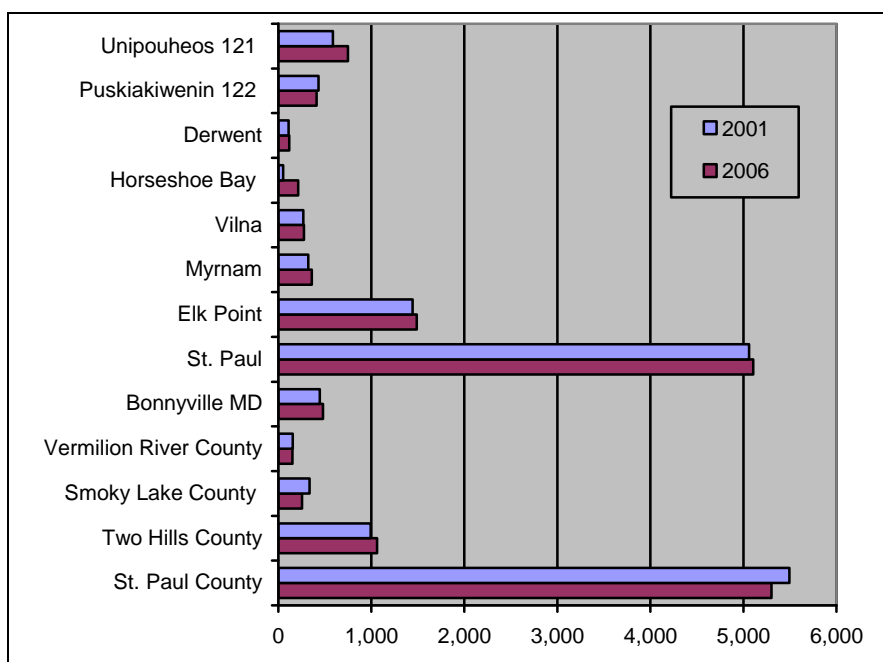
Figure 12-7: Visible Minorities in the Frog Sub-Basin, 2006



12.5 Population Change

Between 2001 and 2006, the population of the Frog Sub-basin increased by 273 people which represents an increase of only 1.7%. This growth rate was much less the population growth rate for the NSRB (9.6%). Figure 12-8 shows that most of the population increases occurred in Elk Point and St. Paul and on the Unipouheos 121 reserve. The population of St. Paul County actually declined by 3.5% and population declines also occurred in Smoky Lake County (-24.0%) and on the Puskiakiwenin 122 reserve (-4.9%). The largest percentage increases occurred in Horseshoe Bay (311.5%), the Unipouheos 121 reserve (27.8%) and Myrnam (12.4%). The population of St. Paul remained relatively unchanged (+0.9%) while Elk Point increased by 2.9%.

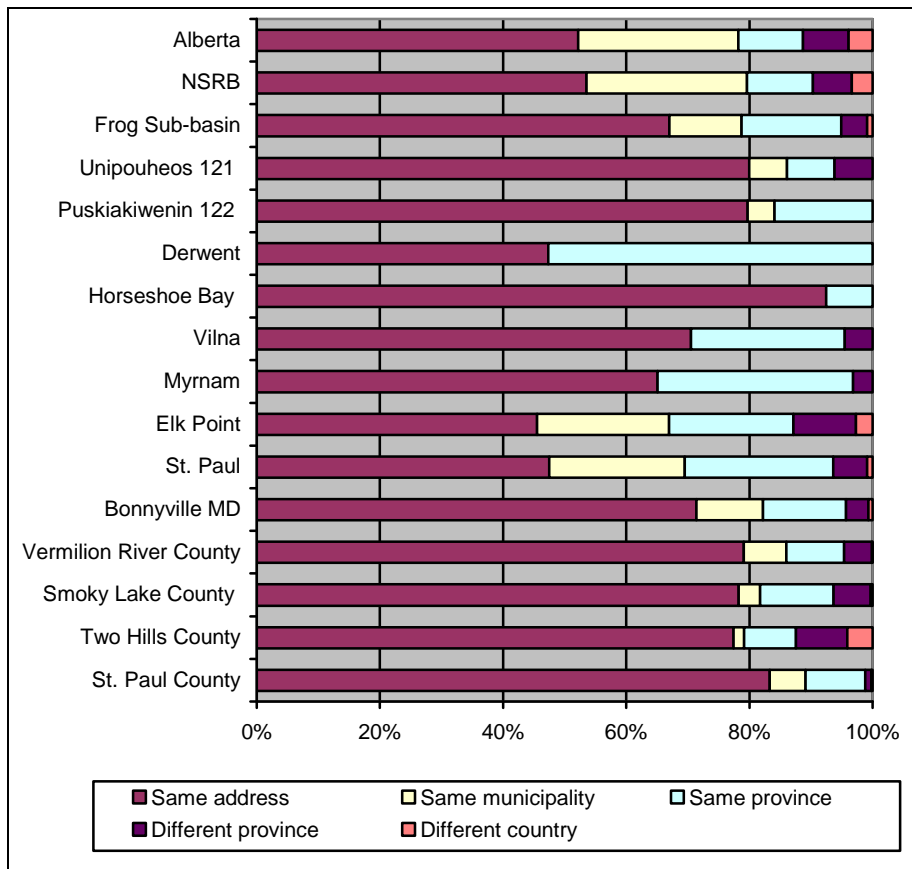
Figure 12-8: Population Change in the Frog Sub-Basin, 2001-2006



One factor affecting population growth is migration from one area to another.

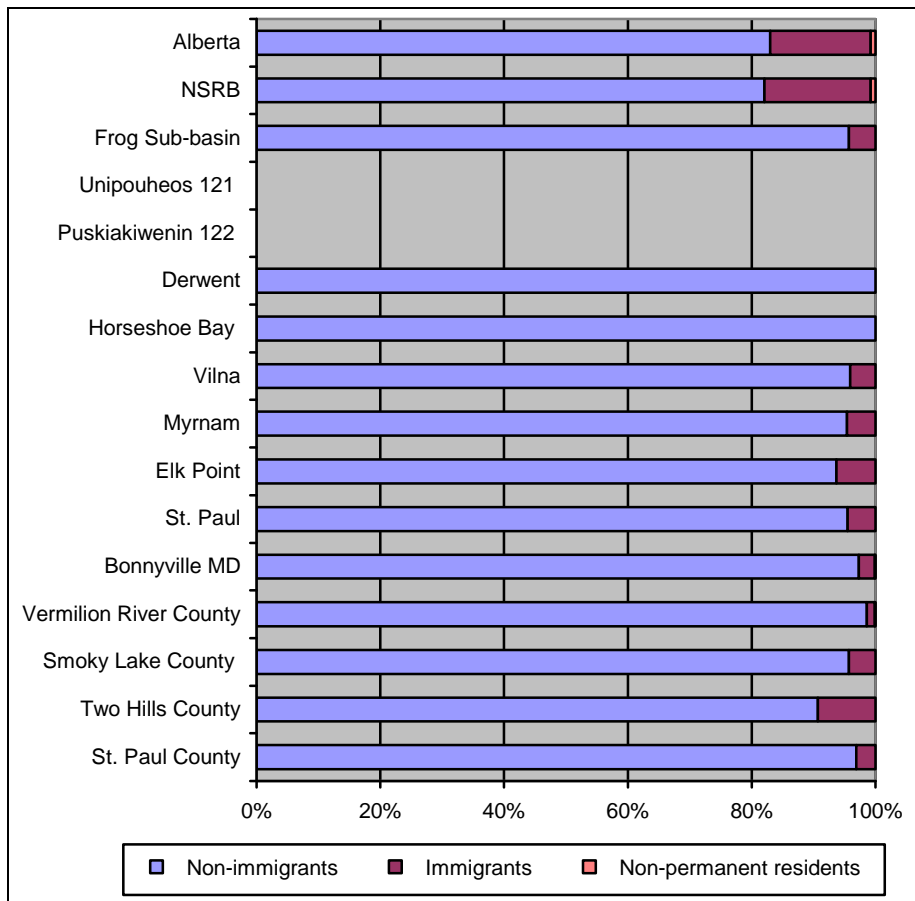
Figure 12-9 shows population mobility in the Frog Sub-basin between 2001 and 2006. It shows that 67.0% of sub-basin residents resided at the same address for the 5-year period; this about 13 percentage points higher than the NSRB average (53.6%). Another 11.7% lived in the same census subdivision but changed addresses. A small percentage of sub-basin residents (0.4%) moved in from another country, 4.2% moved from another province, and 16.2% moved from a different municipality in Alberta.

Figure 12-9: Population Mobility in the Frog Sub-Basin, 2001-2006



Residents of Horseshoe Bay were the most likely to have lived at the same address for the period from 2001 to 2006, while residents of Elk Point and St. Paul were the most mobile. The mobility profiles for the two reserves showed that 80% of residents of each reserve had lived at the same address for the previous 5 years. Low mobility was also apparent for residents of the four counties. Of those who had not lived at the same address between 2001 and 2006, most had moved into their community from another part of Alberta. This was most evident for Derwent, Myrnam and Vilna but also accounted for many of the people who moved into St. Paul and Elk Point.

Figure 12-10: Role of Immigration in the Frog Sub-Basin, 2006

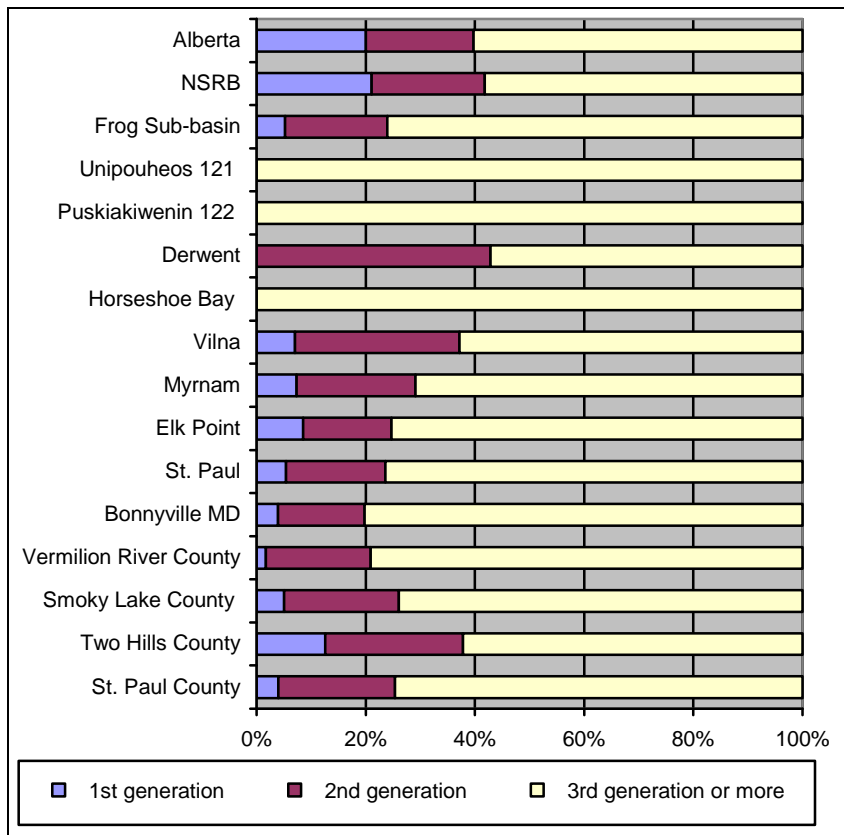


Immigration has also contributed to population growth. About 4.3% of sub-basin residents consisted of immigrants and this was well below the NSRB average of 17.1%.

Figure 12-10 shows that the percentage of immigrants ranged from 0% in Derwent and Horseshoe Bay to 6.3% in Elk Point and 9.3% in Two Hills County.

Figure 12-11 shows that 75.8% of people living in the Frog sub-basin had lived in Canada for 3 or more generations, 18.7% had lived in Canada for 2 generations and 5.2% were first-generation Canadians.

Figure 12-11: Residency in Canada, Frog Sub-Basin, 2006



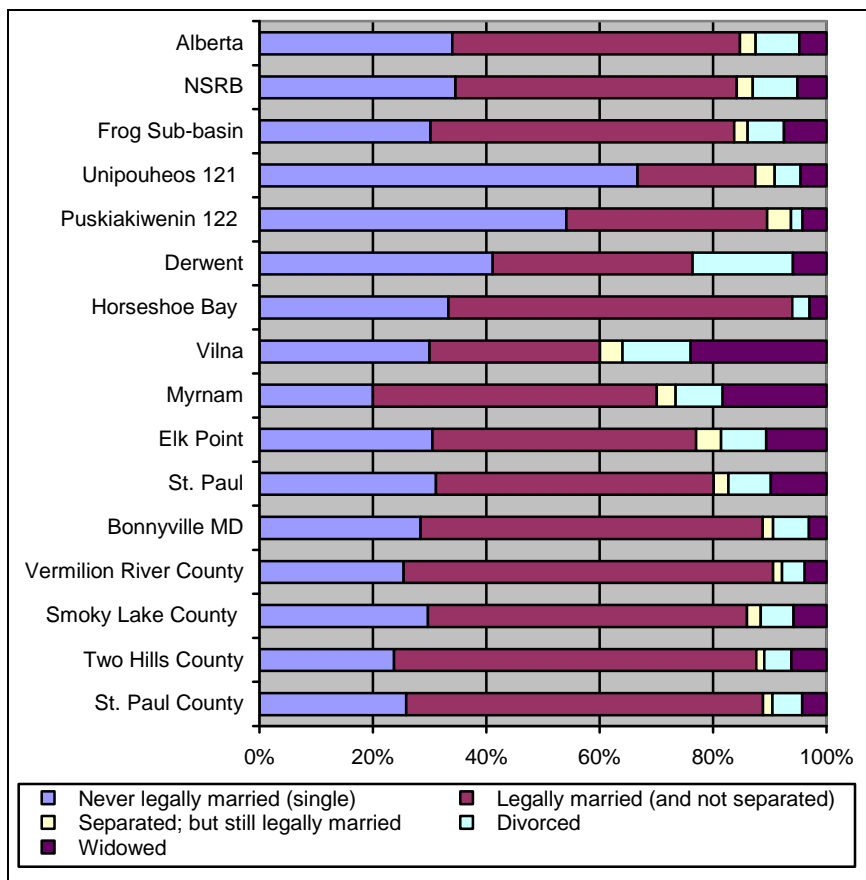
The highest percentages of sub-basin residents who had lived in Canada for 3 or more generations were found on the Unipouheos 121 and the Puskiakiwenin 122 reserves, and Horseshow Bay. The communities in the sub-basin with the highest percentage of the population that has lived in Canada for only 1 or 2 generations include Derwent (but no first generation Canadians) Two Hills County and Vilna.

12.6 Marital Status

Married people account for 53.5% of the sub-basin population, while the balance consists of single people (30.1%), divorced people (6.4%), widowed people (7.5%) and people who are separated (2.4%). The sub-basin profile (Figure 12-12) shows that it had smaller percentages of single (never married) people than were found in the NSRB. The Unipouheos 121 and the Puskiakiwenin 122 reserves had the highest percentages of single adults (65.9% and 55.3%, respectively). The lowest percentages occurred in Myrnam (20.0%). In the rural areas, more than 60% of adults were married but, with the exception of Horseshoe Bay, married people accounted for 50% or less of the adult population.

Compared to the NSRB, the Frog Sub-basin has a higher than average percentage of widowed people. The highest concentrations of widowed people were found in Derwent and Myrnam, although widowed people accounted for 9.8% of the adult population in St. Paul and 10.6% of the population in Elk Point.

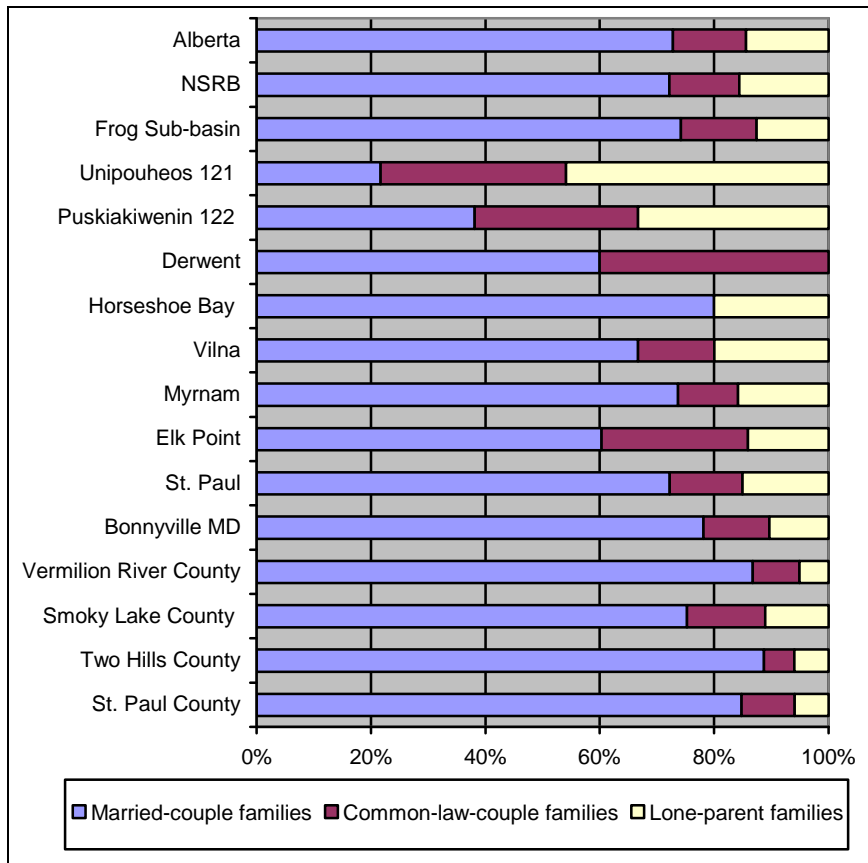
Figure 12-12: Marital Status in the Frog Sub-Basin, 2006



12.7 Family Structure

Married couple families account for 74.3% of the 4,380 families in the Frog Sub-basin. Lone parent families account for 12.6% of families, while common-law couples account for the balance (13.3%). Figure 12-13 shows that, when compared with the NSRB, the sub-basin had a slightly higher percentage of married couple families and less single parent families.

Figure 12-13: Family Structure in the Frog Sub-Basin, 2006

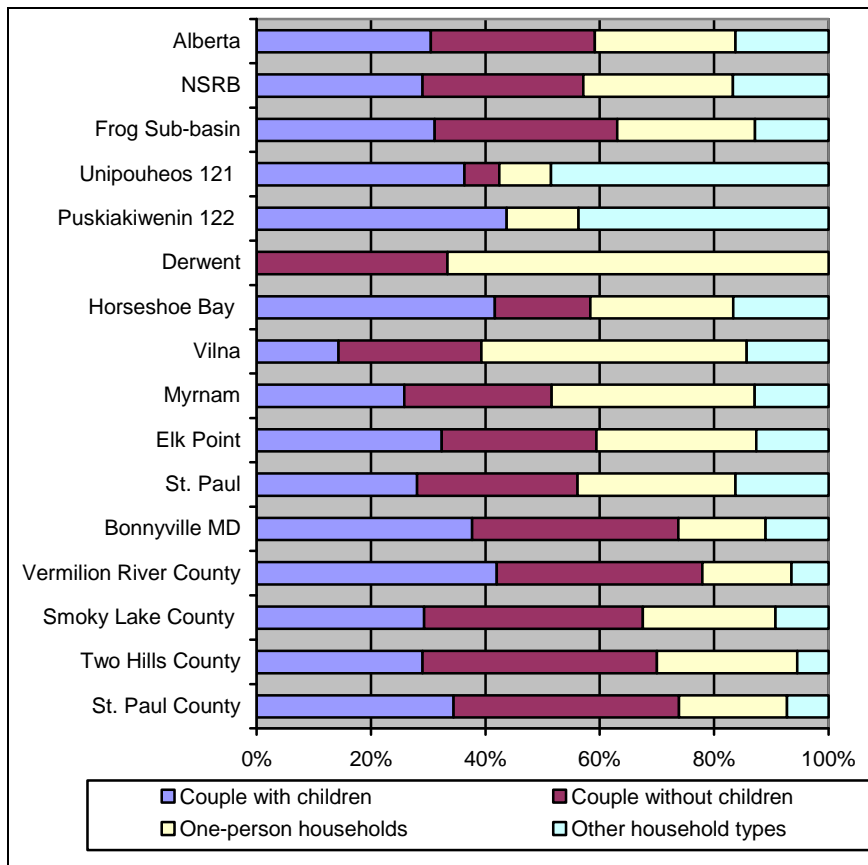


The lowest percentage of married couple families was found on the Unipouheos 121 and the Puskiakiwenin 122 reserves. Only 35.3% and 41.2% of families on the reserves were married couple families; lone-parent families represent 44.7% and 35.0% of families on the reserves. Low percentages of married couple families were also found in Elk Point and Vilna. The highest percentages of married-couple families were found in the rural areas, particularly Two Hills County and Vermilion River County.

12.8 Household Structure

Household structure differs from family structure because households can contain one or more families. Figure 12-14 shows that 31.0% of households consisted of a couple with children, 31.8% were couples with no children, 24.0% were single person households, and the balance (12.8%) consisted of other household types.

Figure 12-14: Household Structure in the Frog Sub-Basin, 2006



Overall, the Frog Sub-basin had a higher percentage of married couples with children and one-person households than did the NSRB. Within the sub-basin, the lowest percentages of families with children were found in Derwent, Vilna and Myrnam. The majority of households in Derwent were single-person households. The communities with the highest percentages of couples with children included Horseshoe Bay, Vermilion River County and the MD of Bonnyville. The majority of households on the Unipouheos 121 and the Puskiakiwenin 122 reserves consisted of other household types.

12.9 Housing

In 2006 there were about 5,850 housing units in the Frog Sub-basin. Figure 12-15 shows the composition of housing in each of the communities within the sub-basin. Overall, single detached houses accounted for 81.0% of housing in the sub-basin. The only communities with lower percentages of single detached houses included Elk Point (69.6%), St. Paul (71.7%) and Derwent (72.7%). While Derwent had a relatively high percentage of row housing, the majority of other housing in St. Paul and Elk Point were small apartment buildings (less than 5 stories).

Figure 12-15: Housing Characteristics in the Frog Sub-Basin, 2006

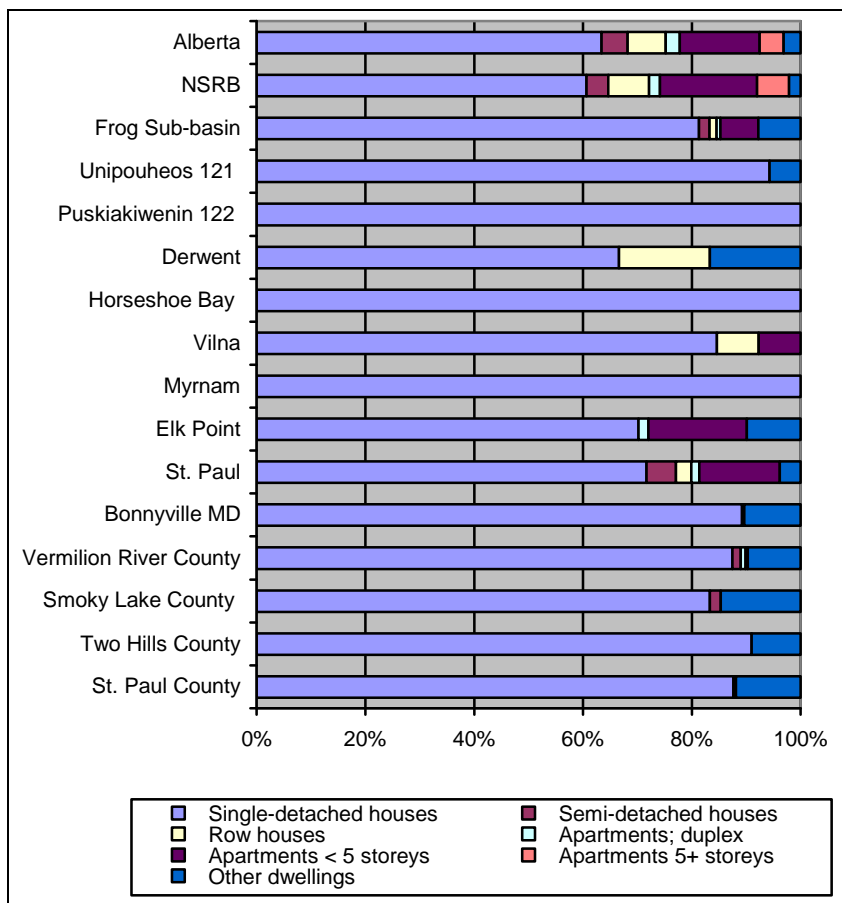


Figure 12-16 shows the reported value of housing in each of the communities within the Frog Sub-basin as well as the percentage of housing stock in need of major repair. Overall, the average value of a house in the Frog Sub-basin in 2005 was \$159,965, which was well below the NSRB average (\$254,828). The communities with the highest valued dwellings included Vermilion River County (\$249,650) and the MD of Bonnyville (\$230,796) while the lowest values occurred in the villages of Derwent (\$57,104), Vilna (\$74,004), and Myrnam (\$74,848). There is no information on the average value of dwellings on the Unipouheos 121 and the Puskiakiwenin 122 reserves.

Overall, 13.1% of dwellings in the basin were in need of major repair and this was more than double the NSRB average of 6.3%. Housing stock on the Unipouheos 121 and the Puskiakiwenin 122 reserves was in the poorest condition, with 58.8% and 52.9% of housing being in need of major repair. Relatively high percentages of housing in need of major repair were also reported in Vilna (29.6%) and Myrnam (15.6%).

Figure 12-16: Value of Housing (2005) and Need for Major Repairs, Frog Sub-Basin

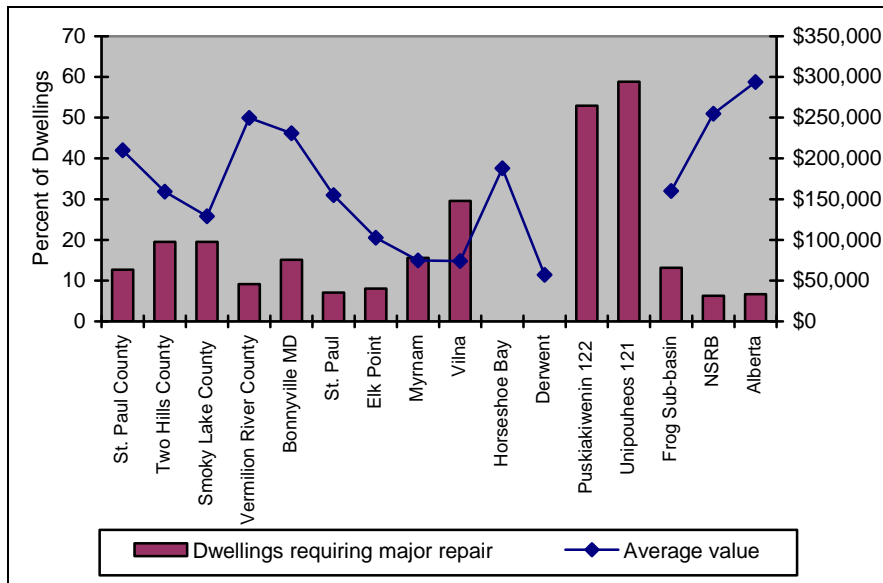
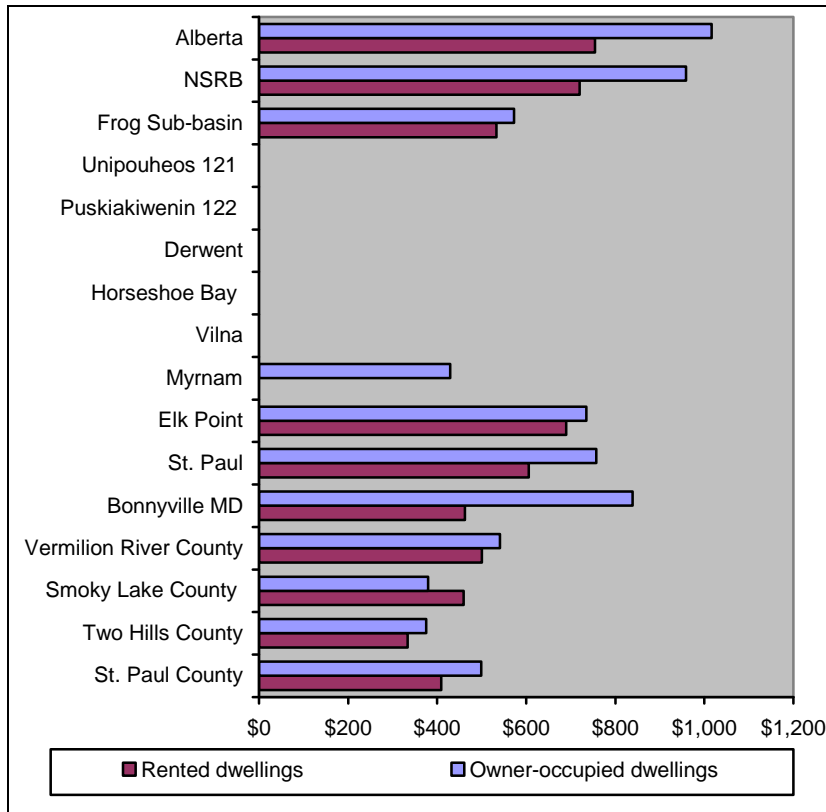


Figure 12-17 summarizes the average monthly costs of renting and owning dwellings in communities in the Frog Sub-basin in 2005. These costs include rent/mortgage, electricity, heat and municipal services to operate a dwelling. Overall, rental costs averaged \$533 per month (compared to \$720 in the NSRB) while the average cost for owned dwellings was \$573 per month (compared to \$959 for the NRBS). The highest monthly housing costs for rented housing occurred in Elk Point and St. Paul, while the MD of Bonnyville had the highest monthly costs for owned dwellings. The lowest monthly costs were reported in Two Hills County. There was no information on the monthly costs of housing in the three small villages or the two reserves.

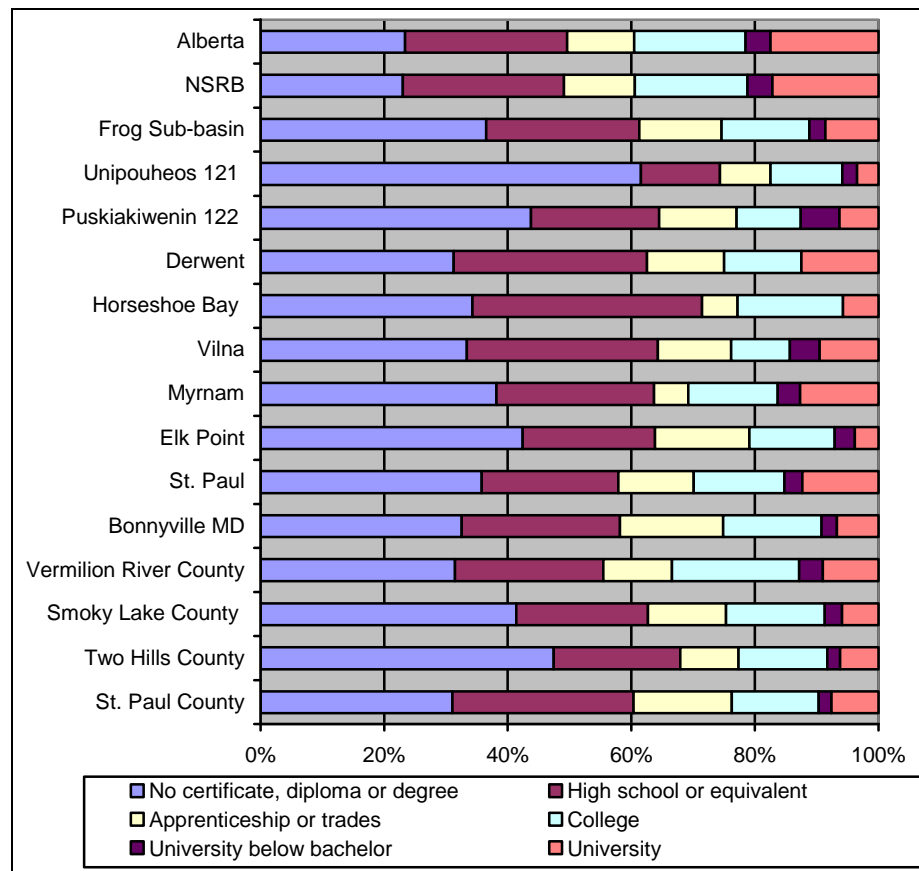
Figure 12-17: Average Monthly Costs for Rental and Owned Dwellings, 2005



12.10 Education

Residents of the Frog Sub-basin were less educated than the NSRB average. Figure 12-18 shows that 36.5% of sub-basin residents had not completed high school and this percentage was much higher than the NSRB average (23.0%).

Figure 12-18: Educational Attainment, Frog Sub-Basin



The communities with the lowest levels of educational attainment, as measured in terms of the percentage that had not completed high school, include the Puskiakiwenin 122 reserve (60.2%), the Unipouheos 121 reserve (4.8%), Two Hills County (47.5%) and Elk Point (42.4%). The lowest percentage of people who had not completed high school was found in Derwent (31.1%), St. Paul County (31.3%), and Vilna (32.5%).

About 13.3% of adult residents of the Frog Sub-basin had completed an apprenticeship or trades certificate, and this was higher than the NSRB average of 11.5%. Communities with relatively high percentages of residents with an apprenticeship or trades certificate included St. Paul County (15.9%) and Elk Point (15.2%). About 8.6% of sub-basin residents had completed their university education; this is half the NSRB average of 17.2%. The highest percentages of people with university educations were found in Myrnam (12.7%), Derwent (12.5%) and St. Paul (12.3%).

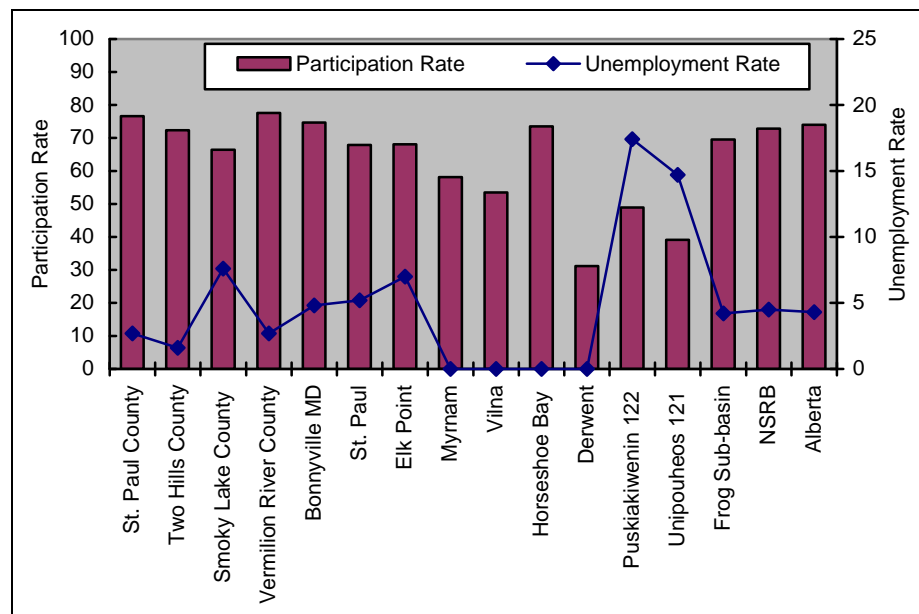
12.11 Labour Force Participation

Overall, 69.5% of the adult population in the Frog Sub-basin was participating in the labour force, either working or actively seeking work. This rate was less than for the NSRB (72.1%). Figure 12-19 shows that labour force participation rates ranged from a high of 77.6% in Vermilion River County and 76.6% in St. Paul County, but dropped to only 31.2% in Derwent, 53.5% in Vilna and 58.2% in Myrnam.

In 2006, the Frog Sub-basin had an unemployment rate of 4.2%, which was slightly less than the NSRB average (4.5%). There was reported to be no unemployment in Derwent, Vilna and Myrnam. The highest unemployment rate was in Elk Point (7.0%).

About 48.9% of the labour force on the Puskiakiwenin 122 reserve was working or actively seeking work, but 17.4% were unemployed. On the Unipouheos 121 reserve, 39.1% of the adult population was participating in the labour force and 14.7% were unemployed.

Figure 12-19: Labour Force Participation and Unemployment Rates, 2006

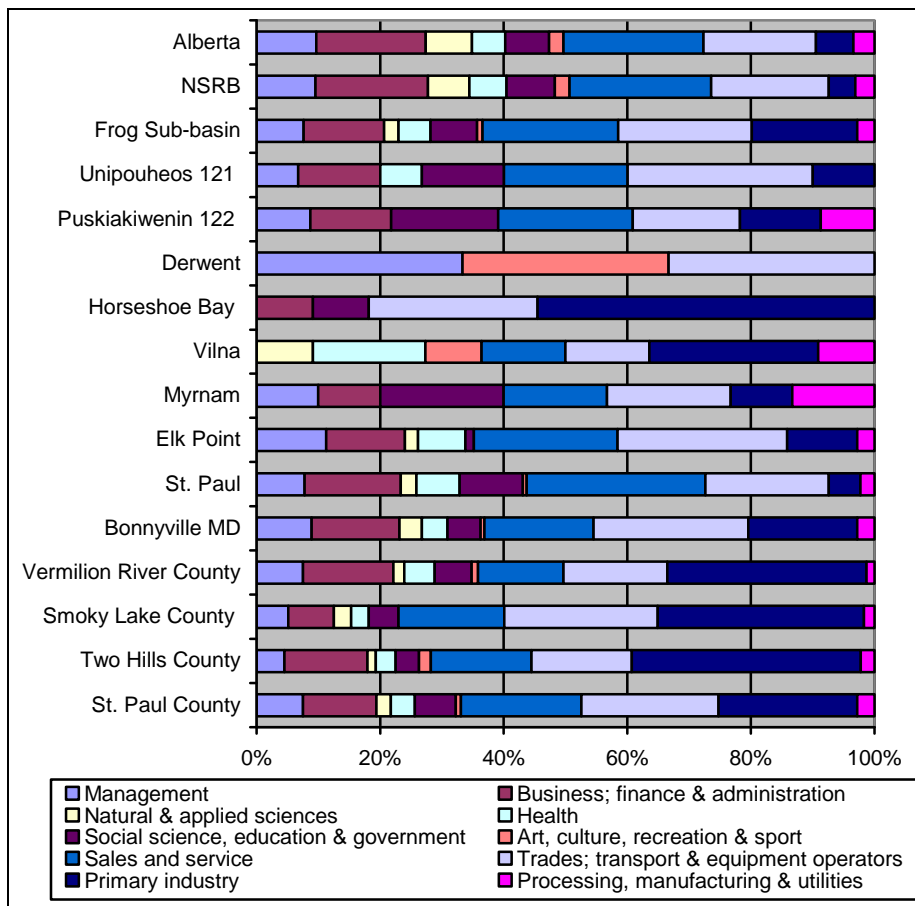


12.12 Employment by Occupation

Figure 12-20 shows employment by occupation for the Frog Sub-basin. The sub-basin profile is different from the NSRB profile, with much higher participation in occupations and lower participation in business, finance and administration. The percentages of the workforce employed in other occupations were relatively similar.

Within the sub-basin, employment in occupations related to primary industry accounted for 17.0% of total employment, but was even more important in Horseshoe Bay, Two Hills County, Smoky Lake County and Vermilion River County. Employment in trades, transport and equipment operations averaged 21.6% in the sub-basin but ranged from 33.0% in Derwent and 29.0% on the Unipouheos 121 reserve to 16.2% in Two Hills County.

Figure 12-20: Employment by Occupation, Frog Sub-Basin, 2006

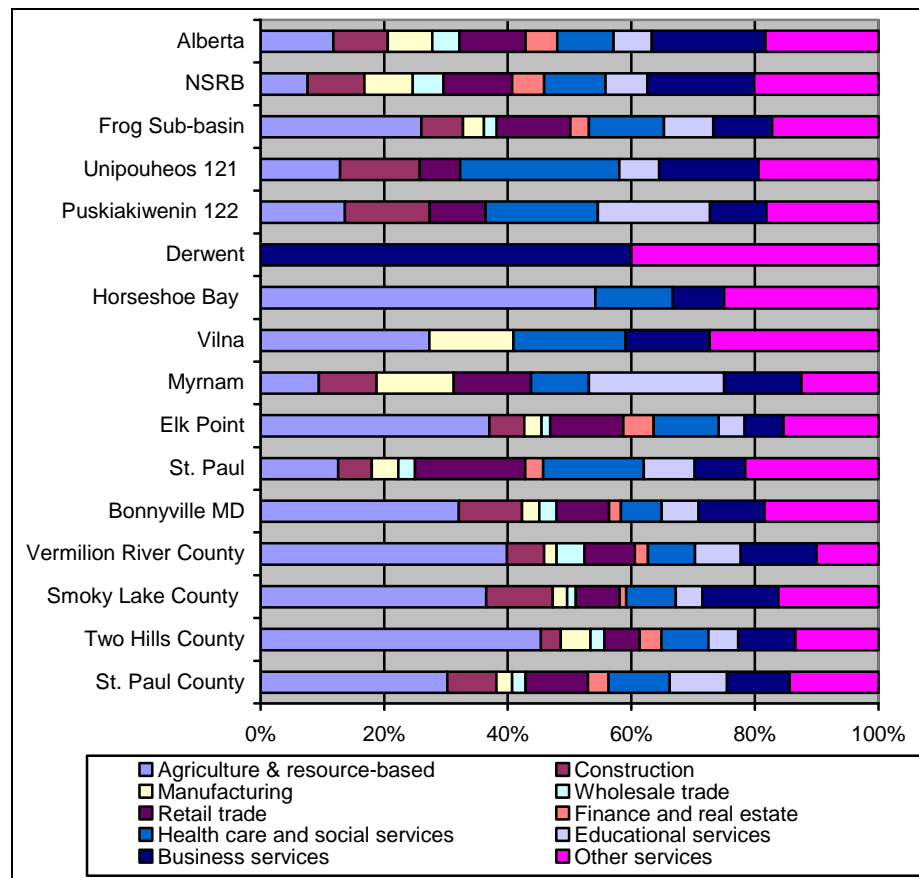


Derwent reported the highest percentage of the workforce in management occupations (33.3%). The highest employment in sales and service occupations were reported in St. Paul (29.0%) and the Puskiakiwenin 122 reserve (23.8%). St. Paul and Vermilion River County had the highest percentages of employment in occupations related to business, finance and administration. Vilna had the highest percentage of people employed in health occupations (17.4%) while the Puskiakiwenin 122 reserve had the highest percentage of people employed in social sciences, education and government.

12.13 Employment by Industry

Figure 12-21 shows employment in the Frog Sub-basin based on the industry of employment.

Figure 12-21: Employment by Industry, Frog Sub-Basin, 2006



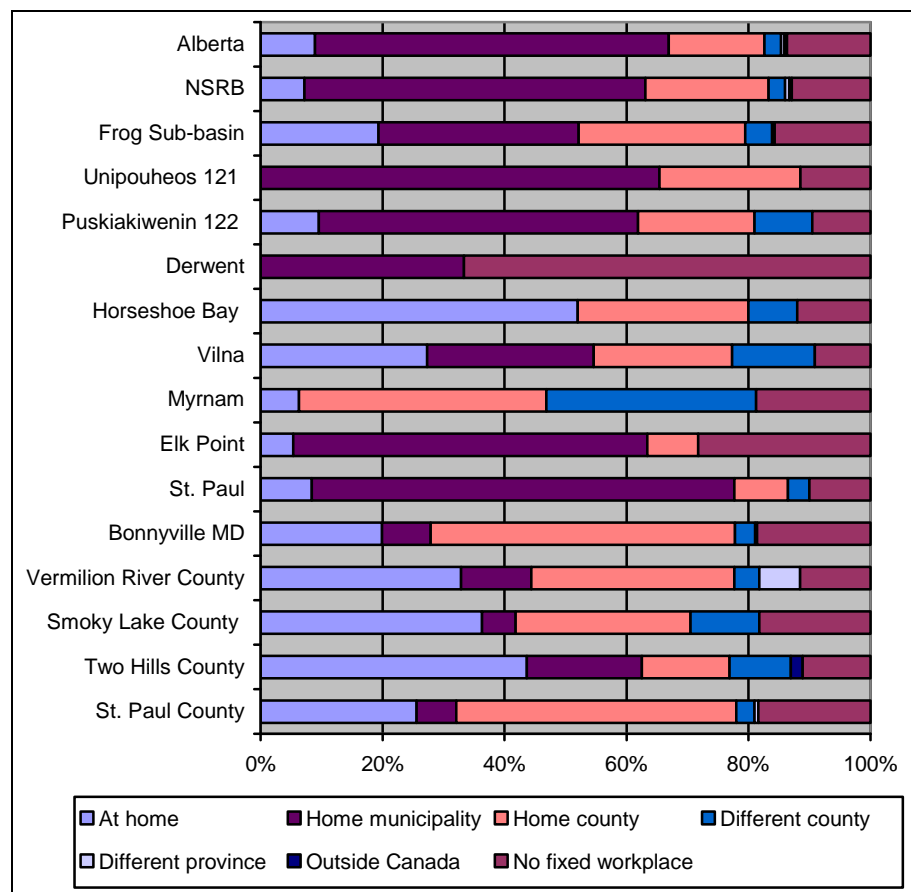
Overall, 36.1% of the workforce was working in basic (goods-producing) industries, including agriculture and other resource-based industries, manufacturing and construction. This was much higher than in the NSRB, where 24.6% of the workforce was employed in basic industries. Employment in the agriculture and resource-based industries accounted for 26.0% of the employment workforce, although this percentage reached 52.0% in Horseshoe Bay and 45.2% in Two Hills County. While employment in manufacturing only accounted for 3.4% of employment in the sub-basin, it accounted for 13.0% of employment in Vilna and 12.5% in Myrnam.

Non-basic industries accounted for 63.8% of employment in the Frog Sub-basin. The non-basic industries that provided the greatest amounts of employment included other services (17.2%), health care and social services (12.1%) and business services (11.9%). Within the sub-basin, the percentage of employment in other industries was highest in Derwent (33.0%). Employment in business services ranged from 6.3% in Elk Point to 50% in Derwent. The highest participation in retail trade was reported in St. Paul (17.9%) and Myrnam (12.5%). The Unipouheos 121 and the Puskiakiwenin 122 reserves had the highest percentages of it workforce employed in the health care industry: 25.8% and 199.0%, respectively.

12.14 Location of Employment

Figure 12-22 shows where residents of the Frog Sub-basin actually worked. Overall, 19.3% worked at home and 32.7% worked at a usual place in their home municipality. Another 27.2% worked in their home county outside their local community, while 4.4% worked in another part of Alberta, 0.3% worked outside Alberta and 0.1% worked outside Canada. The balance (15.7%) had no fixed workplace. Compared to the NSRB, residents of the Beaverhill Sub-basin were more likely to work at home or in their home county and less likely to work in their home municipality.

Figure 12-22: Location of Work, Frog Sub-Basin, 2006

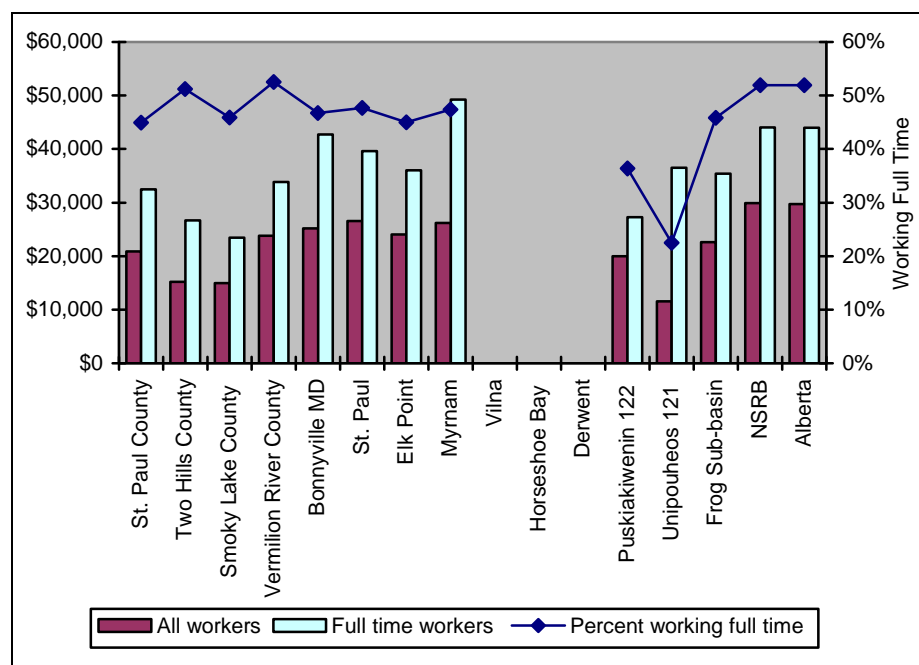


The figure shows that rural residents (the four counties and the MD of Bonnyville) were more likely to work at home, as were residents of Horseshoe Bay and Vilna. Residents of St. Paul and Elk Point, as well as the two reserves, were most likely to work in their home municipality. Residents of Derwent were the least likely to have a fixed workplace.

12.15 Employment Earnings

Residents of the Frog Sub-basin reported median earnings of \$22,619 in 2005; this was considerably less than the NSRB average of \$30,068. Figure 12-23 shows that the highest median earnings were reported in St. Paul (\$26,569), Myrnam (\$26,202) and the MD of Bonnyville (\$25,156) while workers from Two Hills County and Smoky Lake County reported median earnings of only \$15,178 and \$14,946, respectively. However, residents of the two reserves earned substantially less. The median earnings for the Unipouheos 121 reserve in 2005 were \$11,552 and this increased to \$20,000 for the Puskiakiwenin 122 reserve.

Figure 12-23: Median Earnings and Full-Time Employment, 2006



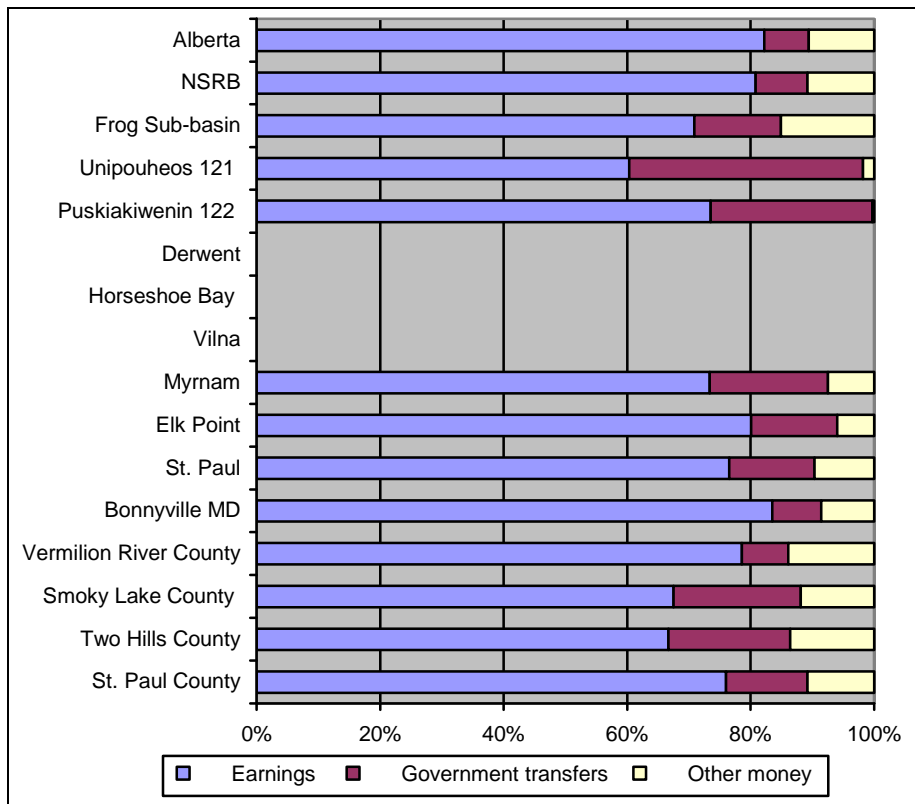
Within the Beaverhill Sub-basin 45.8% of workers reported being employed full-time, year round; this is considerable lower than the NSRB average of 51.9%. The percentage of workers with full-time employment ranged from 52.5% in Vermilion River County and 51.2% in Two Hills County to 36.4% on the Puskiakiwenin 122 reserve and 22.5% on the Unipouheos 121 reserve. People who did work full-time, year round, reported median earnings of \$35,408, which is lower than the NSRB average (\$44,233). The highest median incomes from full-time employment were reported in Myrnam (\$49,256) and the MD of Bonnyville (\$42,719). The lowest median earnings from full time employment occurred in Smoky Lake County (\$23,459) and Two Hills County (\$26,701). Residents of the two reserves who worked full time actually reported higher earnings than for the two counties. The median earnings for full time workers on the Puskiakiwenin 122 reserve were \$27,307 and this increased to \$36,480 on the Unipouheos 121 reserve.

12.16 Other Income Sources

Figure 12-24 shows that earnings accounted for 70.8% of income for residents of the Frog Sub-basin; this is 10 percentage points lower than for the NSRB (81.4%). The remaining income came from government transfers (14.0%) and other sources (15.1%). It shows that only in the MD of Bonnyville did earnings account for more than 80% of income. The lowest reliance on earnings was on the Unipouheos 121 reserve where earnings only accounted for 60.1% of incomes. Residents of Two Hills County and Smoky Lake County also relied on earnings for less than 70% of their annual incomes. Earnings accounted for 72.5% of annual incomes on the Puskiakiwenin 122 reserve.

The communities that were most reliant on income from government transfers included the Unipouheos 121 and Puskiakiwenin 122 reserves, where transfers accounted for 37.7% and 25.8% of income, respectively. Non-Aboriginal communities with higher reliance on government transfers included Smoky Lake County (20.5%), Two Hills County (19.7%) and Myrnam (19.2%).

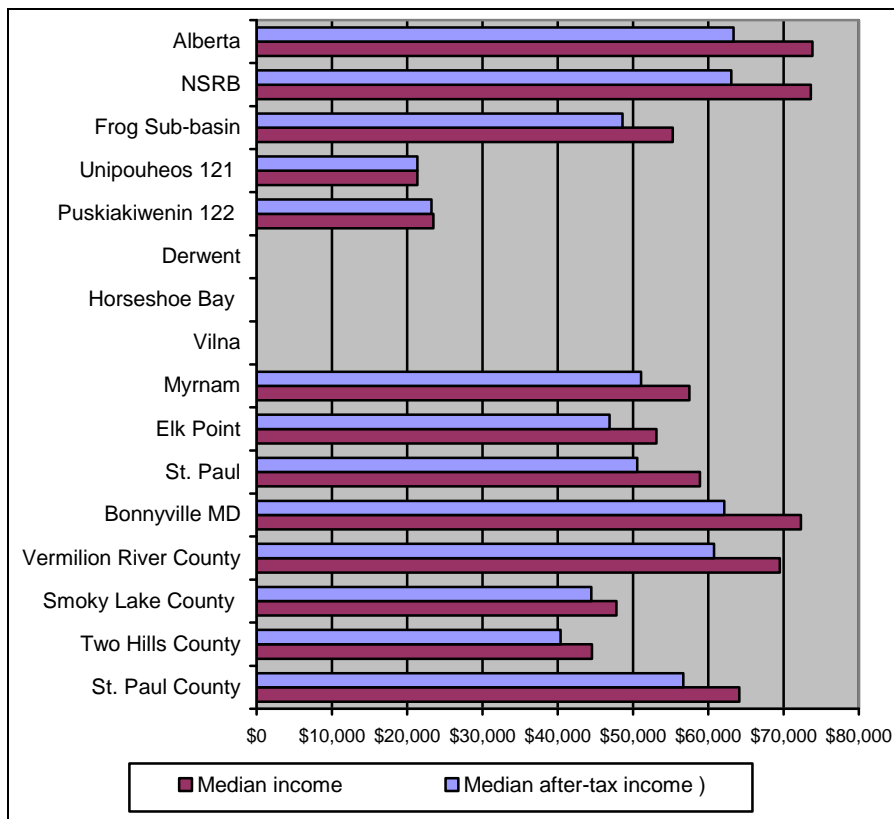
Figure 12-24: Reliance on Transfer Payments and Other Income, 2005



12.17 Family and Individual Income

In 2005 families in the Frog Sub-basin reported median incomes averaging \$55,285 (or \$48,615 after tax); these incomes are much less than the NSRB average of \$73,823 (or \$63,361 after tax). Variations in median family incomes within the sub-basin are shown in Figure 12-25. The highest median family incomes were reported in the MD of Bonnyville (\$72,294), Vermilion River County (\$69,491), and St. Paul County (\$69,491). The lowest family incomes were reported for the Unipouheos 121 reserve (\$21,376) and the Puskiakiwenin 122 reserve (\$23,488).

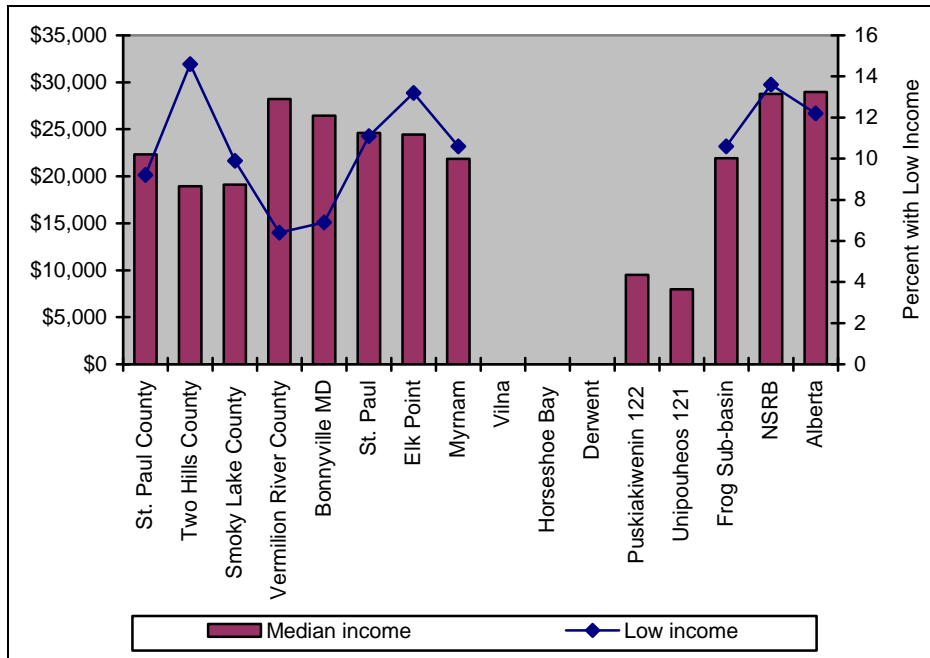
Figure 12-25: Median Family Income, Before and After Tax, 2005



Median incomes in 2005 for persons in private households in the Frog Sub-basin averaged \$21,910; this is well below the NSRB average (\$28,898). Overall, 10.6% of residents of the Beaverhill Sub-basin were considered to have low incomes (before tax), and this is less than the NSRB average (13.6%).

Figure 12-26 summarizes median incomes and the incidence of low incomes for communities in the sub-basin. Median personal incomes ranged from \$28,214 in Vermilion River County and \$26,462 in the MD of Bonnyville to \$9,504 on the Puskiakiwenin 122 reserve and \$7,984 on the Unipouheos 121 reserve.

Figure 12-26: Median Personal Income and Incidence of Low Income, 2005



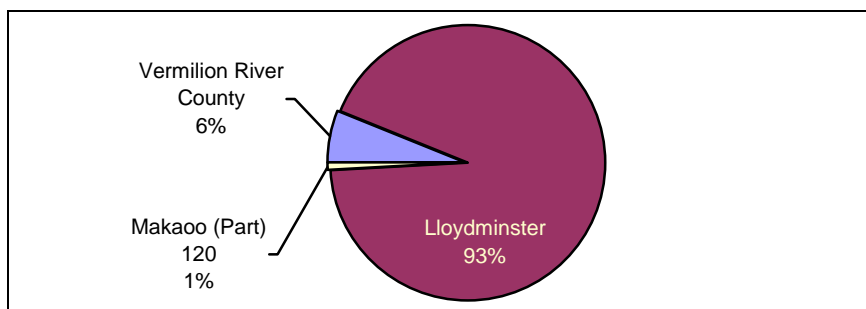
The incidence of people with low incomes ranged from 6.4% in Vermilion River County and 6.9% in the MD of Bonnyville to 13.2% in Elk Point and 14.6% in Two Hills County.

13.0 MONNERY SUB-BASIN

13.1 Population

In 2006, the Monnery Sub-basin had a population of about 15,975 people which represents about 1.5% of the population of the entire NSRB. The majority of the population (93.0%) lives in the City of Lloydminster. Figure 13-1 shows that another 6.1% live in Vermilion River County and another 0.9% live on the Makaoo (Part) 120 reserve.

Figure 13-1: Population Distribution in the Monnery Sub-Basin, 2006



13.2 Age Characteristics

In terms of age, residents of the Monnery Sub-basin were similar to the overall population of the NSRB. Figure 13-2 shows that, the Monnery Sub-basin had higher percentages of children (under 10 years of age), adults in the 25 to 34 year age groups, and adults over the age of 85 years). However, the sub-basin had relatively small percentages of adults in the 50 to 74 year age groups.

Figure 13-3 shows the age distributions for the individual communities within the Monnery Sub-basin. The sub-basin profile is nearly identical to the age profile for Lloydminster. The rural population in Vermilion River County tends to be older with lower percentages of people in the 20 to 39 year age groups and higher percentages in the 40 to 69 year age groups. In contrast, the population of the Makaoo (Part) 120 reserve, where 60% of the population was under the age of 25.

Figure 13-2: Age Composition of the Monnery Sub-Basin Population, 2006

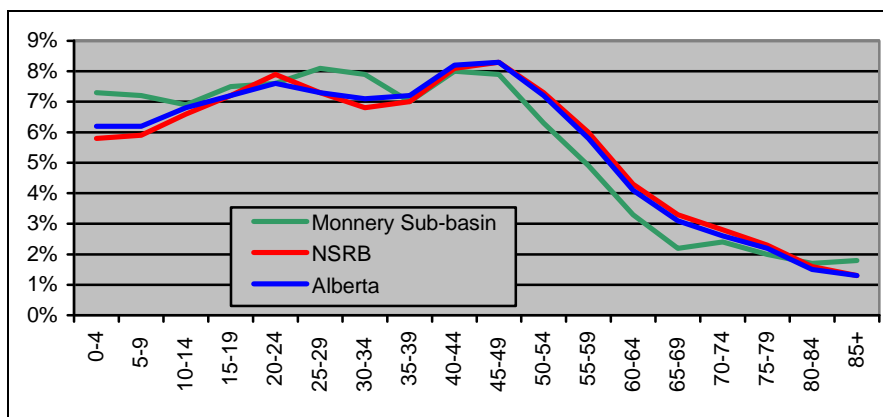
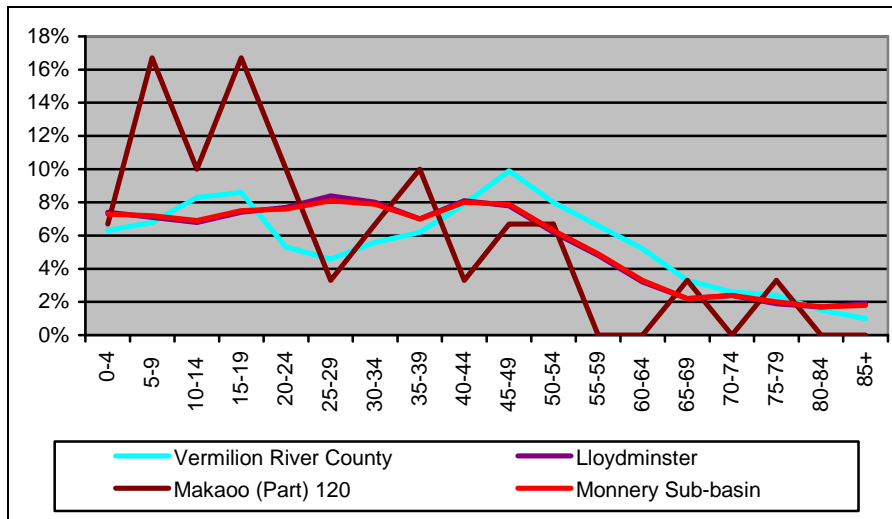


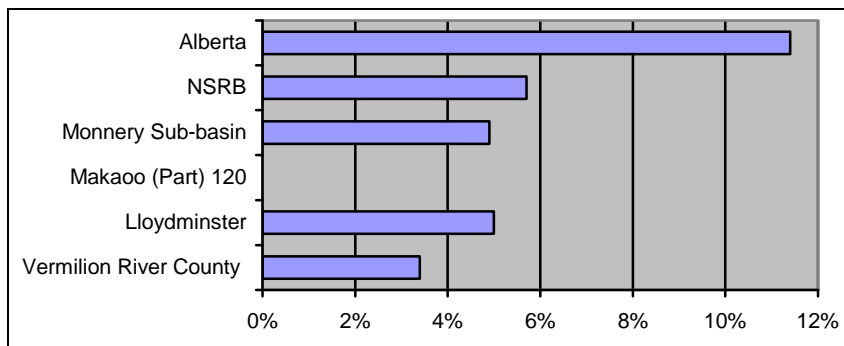
Figure 13-3: Age Composition of Communities in the Monnery Sub-Basin, 2006



13.3 Aboriginal Population

About 4.9% of the residents of the Monnery Sub-basin were Aboriginal and this is slightly lower than the NSRB average (5.8%). There were about 825 Aboriginal people living in the sub-basin in addition to the Aboriginal population on the Makaoo (Part 1) reserve. Information on the ethnic composition of the reserve population is not available. Figure 13-4 shows that Aboriginal people accounted for a higher population in Lloydminster than in Vermilion River County.

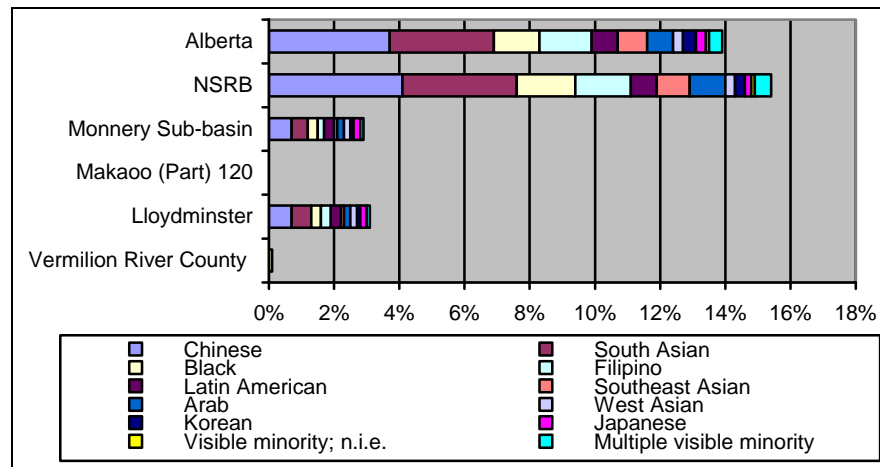
Figure 13-4: Aboriginal Population in the Monnery Sub-Basin, 2006



13.4 Ethnicity

About 2.8% of the population of the Monnery sub-basin consisted of visible minorities. This is well below the NSRB average of 15.5%. Figure 13-5 shows visible minorities were only present in Lloydminster; no visible minorities were reported in Vermilion River County. The most common visible minority in the sub-basin was Chinese.

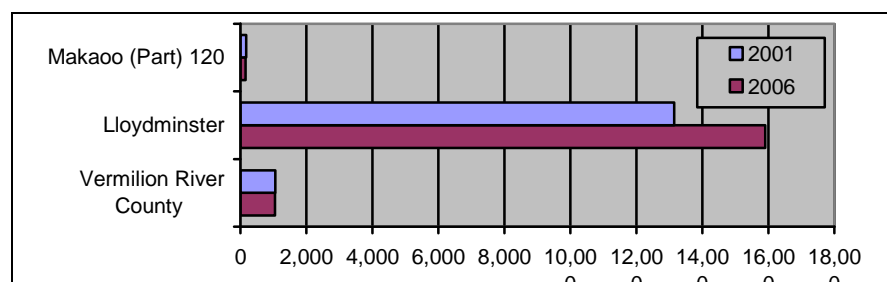
Figure 13-5: Visible Minorities in the Monnery Sub-Basin, 2006



13.5 Population Change

Between 2001 and 2006, the population of the Monnery Sub-basin increased by 2,730 people which represents an increase of 19.0%. This growth rate was nearly double the population growth rate for the NSRB (9.6%). Figure 13-6 shows that all of the population increases occurred in Lloydminster, where the population increased by 21.0%, while the population of Vermilion River County dropped slightly (-0.8%) and the population of Makao (Part) 120 dropped by 11.4%.

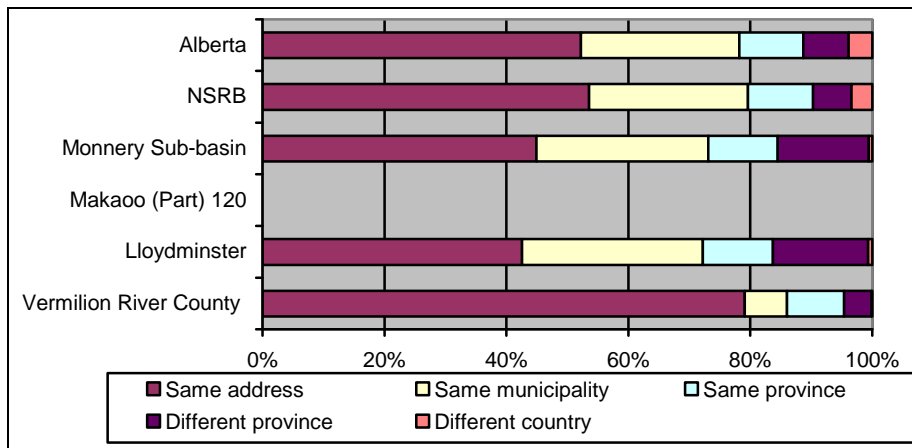
Figure 13-6: Population Change in the Monnery Sub-Basin, 2001-2006



One factor affecting population growth is migration from one area to another. Figure 13-7 shows population mobility in the Monnery Sub-basin between 2001 and 2006. It shows that only 44.9% of sub-basin residents resided at the same address for the 5-year period; this about 9 percentage points less than the NSRB average (53.6%). Another 28.2% lived in the same census subdivision but changed addresses. A small percentage of sub-basin residents (0.6%) moved in from another country, 14.9%

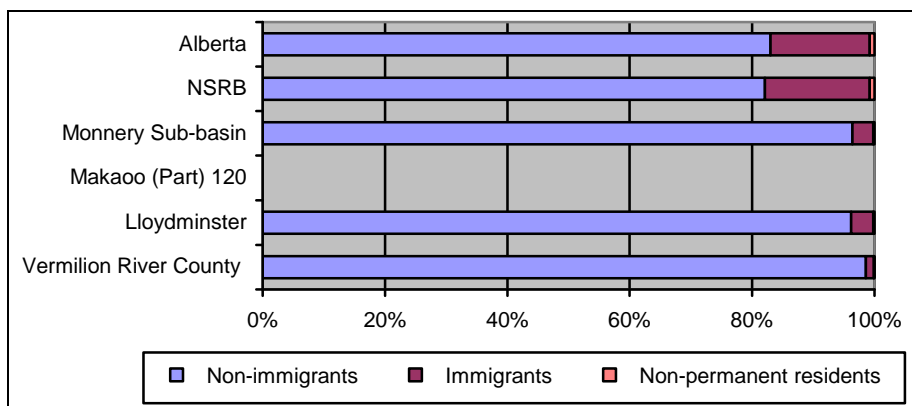
moved from another province, and 11.4% moved from a different municipality in Alberta. Residents of Vermilion River County were more likely to have lived at the same address for the period from 20001 to 2006, while residents of Lloydminster were much more mobile.

Figure 13-7: Population Mobility in the Monnery Sub-Basin, 2001-2006



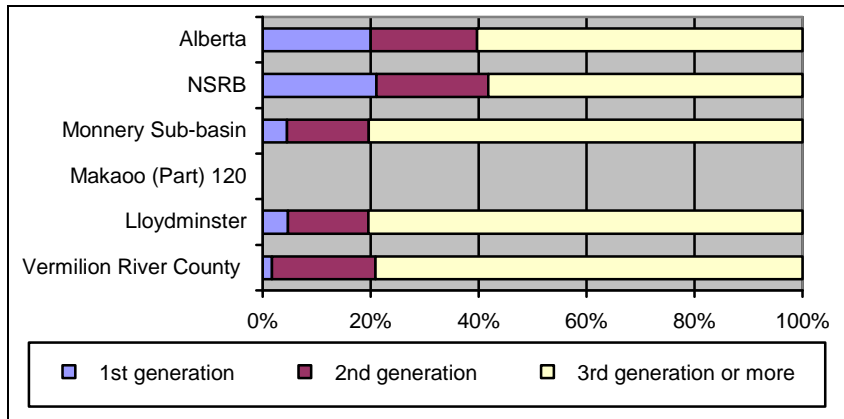
Immigration has also contributed to population growth, but Figure 13-8 shows that in the Monnery Sub-basin immigrants only accounted for 3.5% of the population and this was well below the NSRB average of 17.1%. The percentage of immigrants ranged from 1.3% in Vermilion River County to 3.6% in Lloydminster.

Figure 13-8: Role of Immigration in the Monnery Sub-Basin, 2006



About 80.4% of people living in the Monnery sub-basin had lived in Canada for 3 or more generations, 15.2% had lived in Canada for 2 generations and 4.5% were first-generation Canadians. As shown in Figure 13-9, the percentage of people who had lived in Canada for 3 or more generations was the same for Lloydminster and Vermilion River County, while Lloydminster had the highest percentage of first generation Canadians.

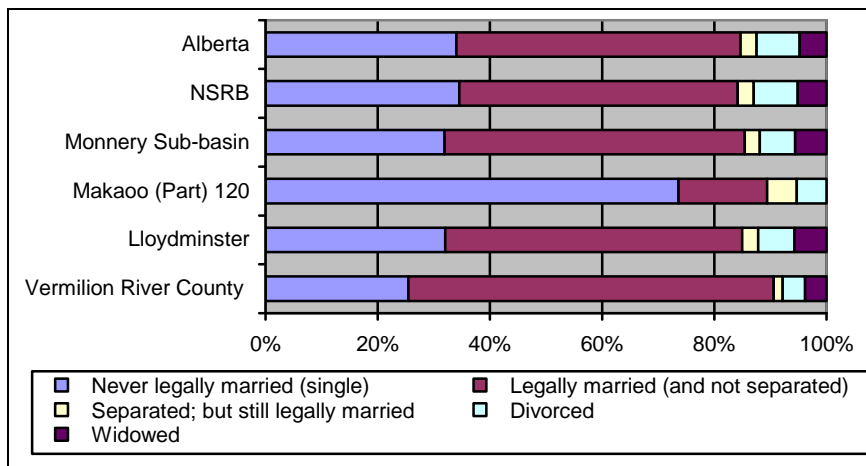
Figure 13-9: Residency in Canada, Monnery Sub-Basin, 2006



13.6 Marital Status

Married people account for 53.4% of the sub-basin population, while the balance consists of single people (31.9%), divorced people (6.3%), widowed people (5.6%) and people who are separated (2.7%). The sub-basin profile (Figure 13-10) shows that it had slightly higher percentages of married people than were found in the NSRB. Vermilion River County had the highest percentages of married people (65.0%) while the highest percentage of single (never married) people was found on the Makaoo (Part) 120 reserve.

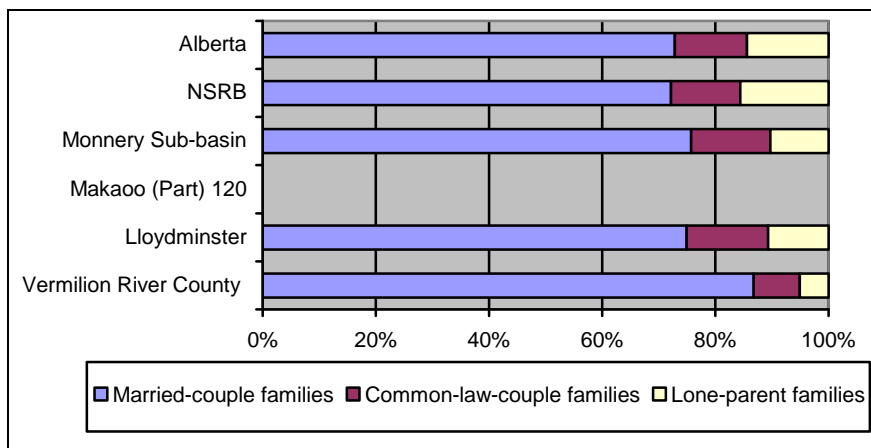
Figure 13-10: Marital Status in the Monnery Sub-Basin, 2006



13.7 Family Structure

Married couple families account for 75.7% of the 4,650 families in the Monnery Sub-basin, not including families on the Makaoo (Part) 120 reserve. Lone parent families account for 10.3% of families, while common-law couples account for the balance (14.0%). Figure 13-11 shows that, when compared with the NSRB, the sub-basin had a higher percentage of married couple families. Vermilion River County had a higher percentage of married couple families than did Lloydminster, which had higher proportions of common-law couple and lone-parent families.

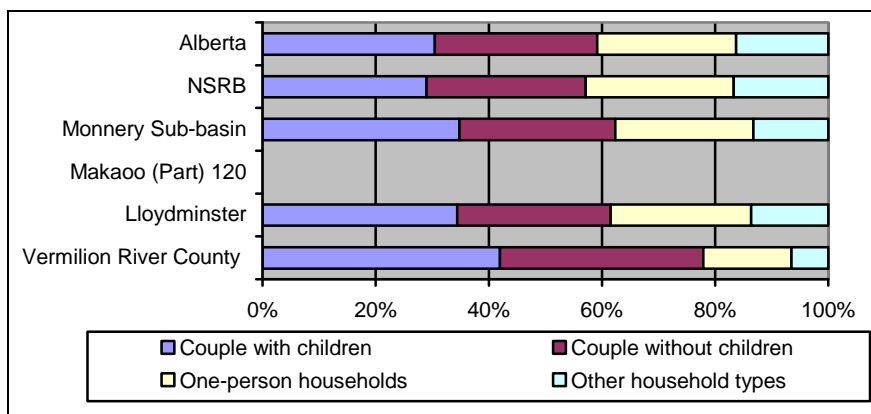
Figure 13-11: Family Structure in the Monnery Sub-Basin, 2006



13.8 Household Structure

Household structure differs from family structure because households can contain one or more families. Figure 13-12 shows that 34.8% of households consisted of a couple with children, 27.6% were couples with no children, 24.4% were single person households, and the balance (13.2%) consisted of other household types.

Figure 13-12: Household Structure in the Monnery Sub-Basin, 2006



Compared to the NSRB, the Monnery Sub-basin had a higher percentage of married couples with children. Within the sub-basin, Lloydminster had much higher percentages of single person households and other household types.

13.9 Housing

In 2006 there were about 6,450 housing units in the Monnery Sub-basin, excluding dwellings on the Makaoo (Part) 120 reserve. Figure 13-13 shows the composition of housing within the sub-basin. Overall, single detached houses accounted for 64.6% of housing in the sub-basin. However, single detached houses accounted for 87.5% of housing in Vermilion River County. Other housing types were more commonly found in Lloydminster, where 23.0% of housing consisted for apartment buildings of less than 5 stories.

Figure 13-13: Housing Characteristics in the Monnery Sub-Basin, 2006

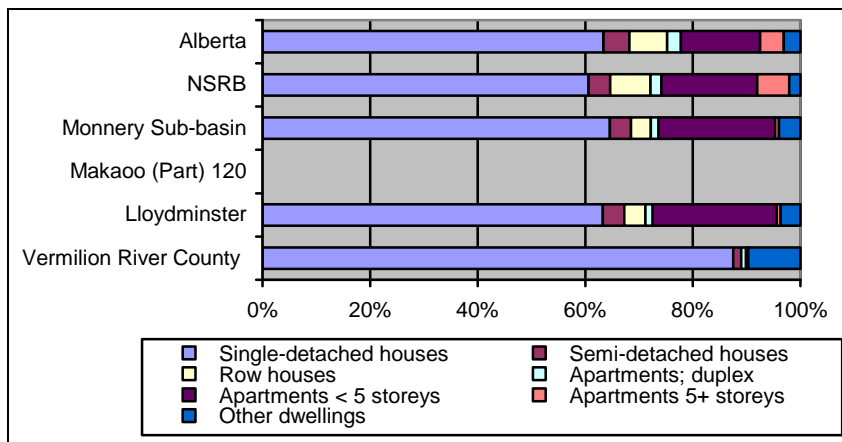


Figure 13-14 shows the reported value of housing in each of the communities within the Monnery Sub-basin as well as the percentage of housing stock in need of major repair. Overall, the average value of a house in the Monnery Sub-basin in 2005 was \$236,290, which was slightly lower than the NSRB average (\$254,828). Dwellings in Vermilion River County had a higher average value (\$249,650) than did dwellings in Lloydminster (\$235,480).

Overall, 6.6% of dwellings in the basin were in need of major repair and this was slightly higher than the NSRB average of 6.3%. The percentage of housing stock in need of major repair was higher in Vermilion River County (9.1%) than in Lloydminster (6.4%).

Figure 13-14: Value of Housing (2005) and Need for Major Repairs, Monnery Sub-Basin

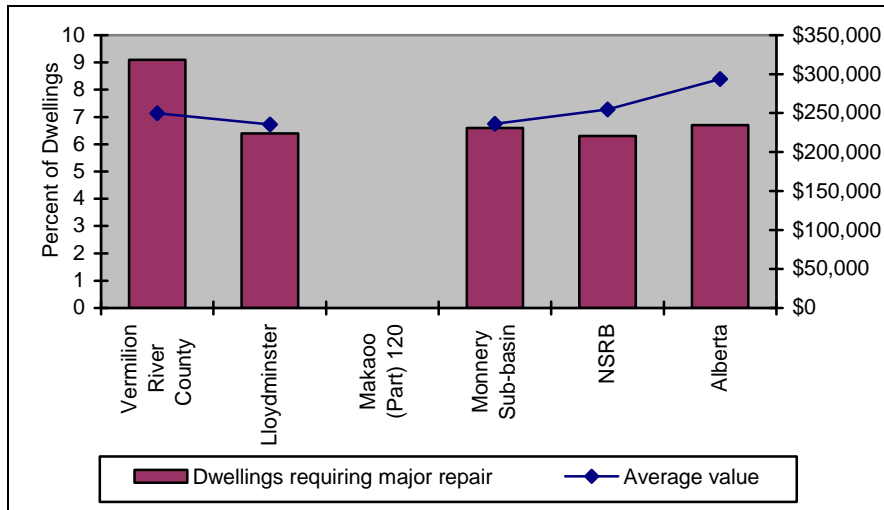
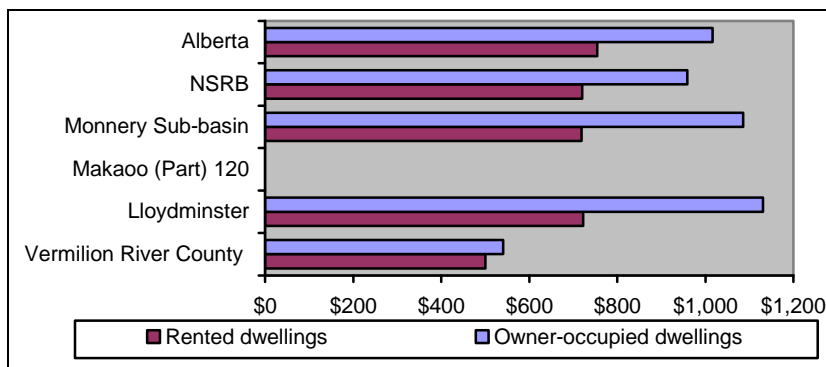


Figure 13-15 summarizes the average monthly costs of renting and owning dwellings in communities in the Monnery Sub-basin in 2005. These costs include rent/mortgage, electricity, heat and municipal services to operate a dwelling. Overall, rental costs averaged \$719 per month (compared to \$720 in the NSRB) while the average cost for owned dwellings was \$1,086 per month (compared to \$959 for the NRBS). Lloydminster had higher monthly housing costs for both rental and owned housing than did Vermilion River County.

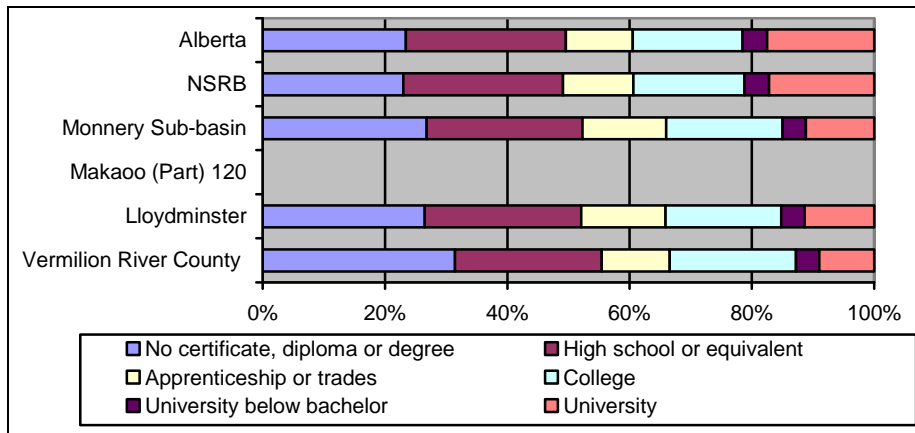
Figure 13-15: Average Monthly Costs for Rental and Owned Dwellings, 2005



13.10 Education

Basin residents were slightly less educated than the Alberta average. Figure 13-16 indicates that 26.8% of adults in the Monnery Sub-basin had not completed high school and this is higher than the NSRB average (22.9%). However, a higher percentage of sub-basin residents had obtained apprenticeships or trades certificates (13.7%) than was generally found in the NSRB (11.4%).

Figure 13-16: Educational Attainment, Monnery Sub-Basin

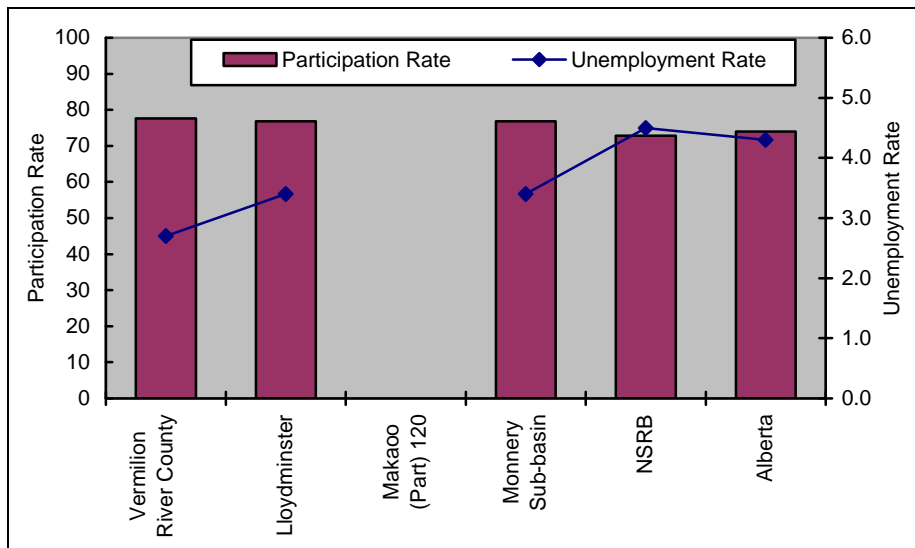


Levels of educational attainment were higher in Lloydminster than in Vermilion River County. About 31.4% of adults in Vermilion River County had not completed high school and 11.1% had obtained apprenticeships or trades certificates.

13.11 Labour Force Participation

Overall, 76.8% of the adult population was participating in the labour force, either working or actively seeking work. Figure 13-17 shows that labour force participation rates were fairly consistent throughout the sub-basin and were slightly higher than the NSRB average (72.8%).

Figure 13-17: Labour Force Participation and Unemployment Rates, 2006

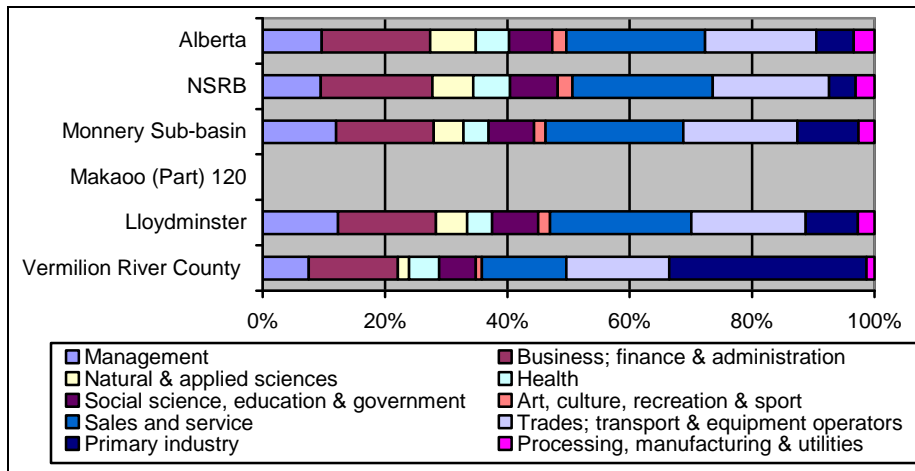


Average unemployment in the Monnery Sub-basin in 2006 was 3.4%, which was lower than the NSRB average (4.5%). Unemployment rates in Vermilion River County (2.7%) were lower than in Lloydminster (3.4%).

13.12 Employment by Occupation

Figure 13-18 shows employment by occupation for the Monnery Sub-basin. It shows that, when compared to the NSRB, the Monnery Sub-basin had higher percentages of people employed in occupations related to primary industry, especially in Vermilion River County, and lower percentages of people employed in health occupations and natural and applied sciences.

Figure 13-18: Employment by Occupation, Monnery Sub-Basin, 2006

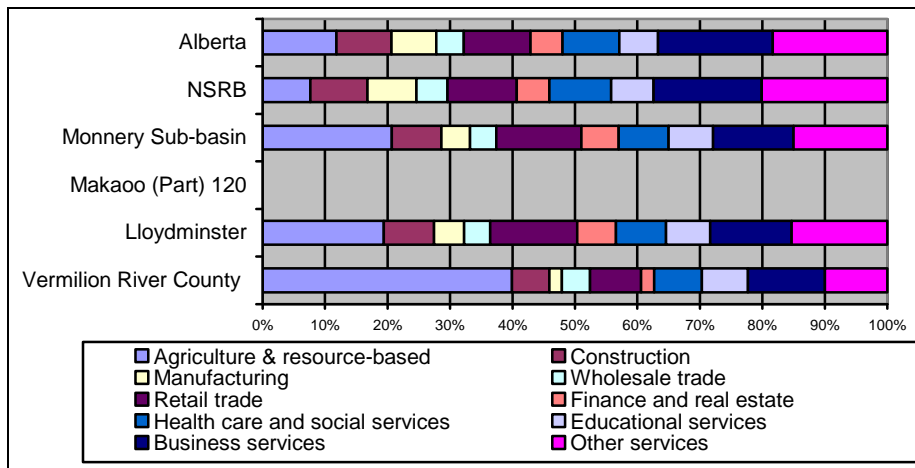


Within the sub-basin, Lloydminster had higher percentages of people employed in management occupations, business, natural and applied sciences, and sales and service occupations than did Vermilion River County.

13.13 Employment by Industry

Figure 13-19 shows employment in the Monnery Sub-basin based on the industry of employment. Overall, 20.7% of the workforce was experienced in the agriculture and other resource-based industries, although these industries accounted for 39.9% of employment in Vermilion River County. Another 12.9% were employed in business services and 13.6% in retail trade, with 15.0% being employed in the other services industry. The percentage of people employed in retail and wholesale trade was much higher in Lloydminster than in Vermilion River County.

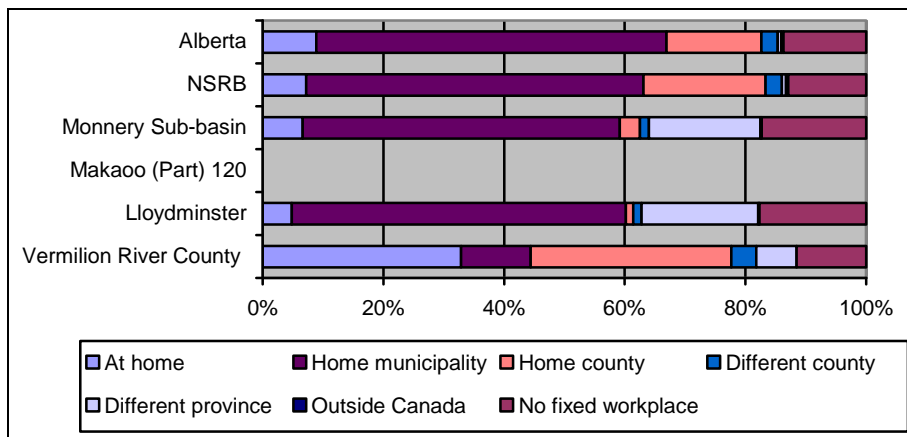
Figure 13-19: Employment by Industry, Monnery Sub-Basin, 2006



13.14 Location of Employment

Figure 13-20 shows where residents of the Monnery Sub-basin actually worked. Overall, 6.6% worked at home and 52.6% worked at a usual place in their home municipality. Another 3.3% worked in their home county outside their local community, while 1.5% worked in another part of Alberta, 18.5% worked outside Alberta and 0.2% worked outside Canada. The profile for the Monnery Sub-basin is very similar to that of the NSRB except for one major exception – the high percentage of people who work in a different province, but this is because Lloydminster is located on the Alberta-Saskatchewan boundary and people who live on the Alberta side may work on the Saskatchewan side. In Vermilion River County, a much higher proportion of the labour force works at home (32.8%) or at a location in their home county 33.2%, with much smaller percentage working in their home municipality (11.5%). This pattern is more typical of a rural agricultural community where people farm or work in the nearest major community (Lloydminster).

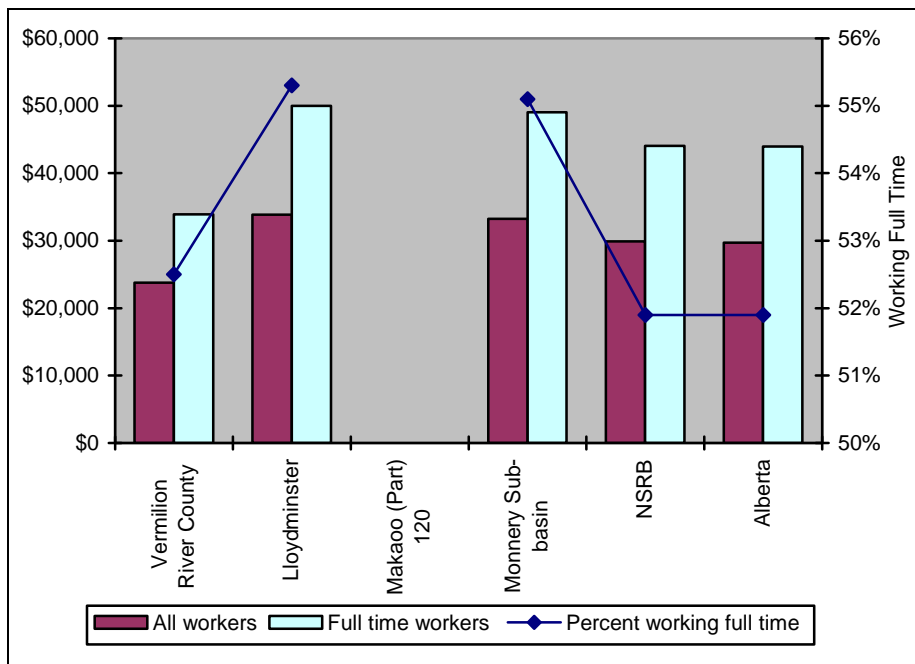
Figure 13-20: Location of Work, Monnery Sub-Basin, 2006



13.15 Employment Earnings

Residents of the Monnery Sub-basin reported median earnings of \$33,209 in 2005; this was 12% higher than the average median of \$30,068. Figure 13-21 shows that residents of Lloydminster reported median earnings of \$33,838 which was 43% higher the median earnings reported by residents of Vermilion River County. Within the sub-basin 55.1% of adults reported working full-time year round, ranging from 55.3% in Lloydminster to 52.5% in Vermilion River County. For the entire NSRB, 51.9% of workers were employed full-time, year round.

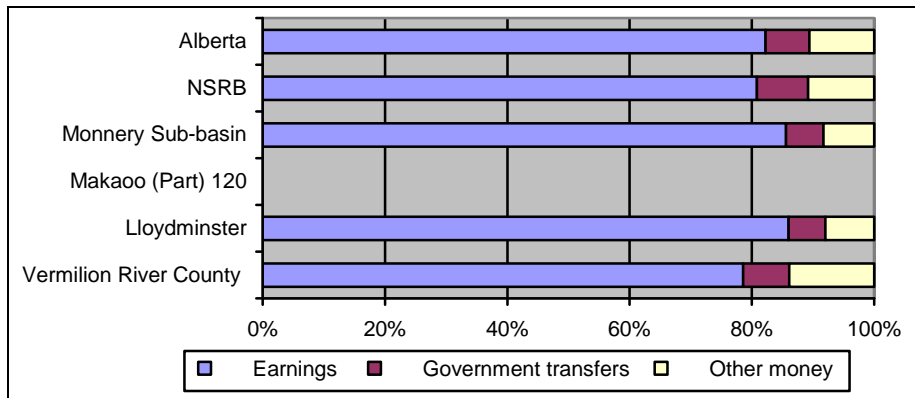
Figure 13-21: Median Earnings and Full-Time Employment, 2006



13.16 Other Income Sources

Earnings accounted for 85.6% of income for residents of the Monnery Sub-basin. The remainder came from government transfers (6.1%) and other sources (8.3%). Figure 13-22 shows that residents of the Monnery Sub-basin earned more of their annual incomes than the NSRB average (81.4%). Within the sub-basin, residents of Lloydminster obtained more of their income from earnings than did residents of Vermilion River County, who were more reliant on income from other sources.

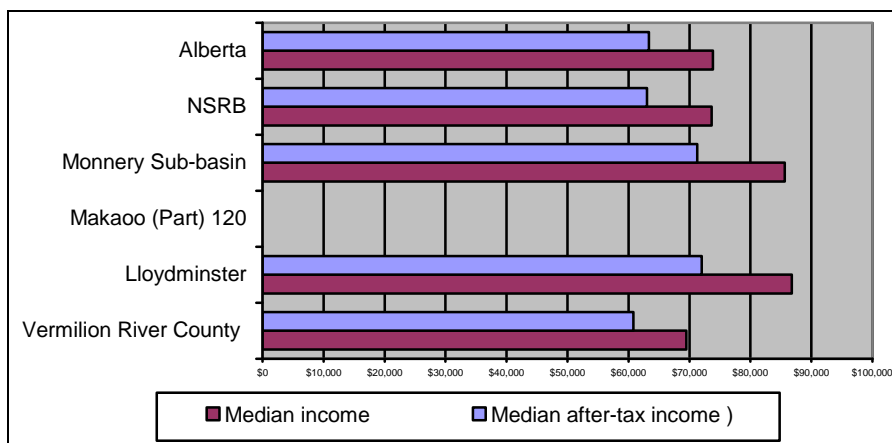
Figure 13-22: Reliance on Transfer Payments and Other Income, 2005



13.17 Family and Individual Income

In 2005 families in the Monnery Sub-basin reported median incomes averaging \$85,662, and \$71,268 after tax. These numbers are 16% and 13% higher, respectively, than for the NSRB, where the average median income was estimated to be \$73,823 and \$63,361 after tax. Variations in median family incomes within the sub-basins are shown in Figure 13-23. It shows that median family incomes in Lloydminster are about 25% higher than in Vermilion River County.

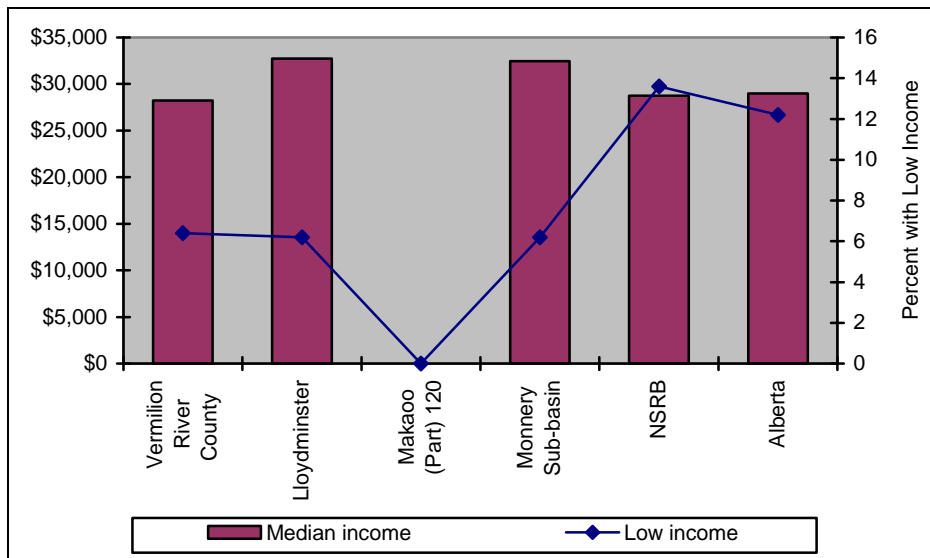
Figure 13-23: Median Family Income, Before and After Tax, 2005



Median incomes in 2005 for persons in private households in the Monnery Sub-basin averaged \$32,450. This was 17% higher than for the NSRB average (\$28,898). Figure 13-24 shows that, within the sub-basin, residents of Lloydminster had median incomes (\$32,732) that were 16% higher than the median income reported by residents of Vermilion River County.

Overall, 6.2% of people in the Monnery Sub-basin were considered to have low incomes (before tax). Within the NSRB, 13.6% of basin residents were considered to have low incomes. The percentage of residents with low incomes was slightly higher in Vermilion River County (6.4%) than in Lloydminster (6.2%).

Figure 13-24: Median Personal Income and Incidence of Low Income, 2005



14.0 DATA SOURCES AND METHODS

All of the data used in this assessment is drawn from the 2006 Census of Canada, and available from Statistics Canada at <http://www12.statcan.ca/census-recensement/2006/dp-pd/prof/92-591/index.cfm?Lang=E>. The profiles for the sub-basins were calculated as the sum of the reported information for cities, towns, villages, summer villages and Indian reserves plus the portions of the rural areas (counties and municipal districts) that fell inside each sub-basin. The percentages of counties and municipal districts, as well as some of the larger communities (Edmonton) were taken from AMEC 2007, Current and Future Water Use in the North Saskatchewan River Basin, which was prepared for the NSWA. These assumptions are summarized in Table 1.0 below. Please note there is likely to be some variability in socio-economic characteristics within counties and municipal districts, and such differences are not captured in the analysis because census information is not available for specific portions of the counties and municipal districts.

Table 1.0 Percentages of counties and municipal districts within sub-basins.

	Sub-Basin												Total
	Cline	Brazeau	Ram	Clear-water	Modeste	Straw-berry	Sturgeon	Beaverhill	White Earth	Vermilion	Frog	Monnery	
Improvement District No. 9	27.5%												27.5%
Clearwater County	0.8%	9.9%	58.2%	14.0%	1.5%								84.5%
Yellowhead County		4.1%											4.1%
Brazeau County		0.8%	0.0%		64.4%	0.2%							65.4%
Lac Ste. Anne County					0.0%		17.7%						17.7%
Leduc County					0.9%	97.3%		0.1%					98.2%
Parkland County					55.5%	9.9%	34.1%						99.5%
Wetaskiwin County No. 10					15.0%	0.2%							15.2%
City of Edmonton						34.2%	0.1%	65.6%					100.0%
Barrhead County No. 11							0.0%						0.0%
Sturgeon County							84.7%	5.9%	9.4%				100.0%
Westlock County							0.1%		12.2%				12.2%
Beaver County								30.0%		55.9%			85.8%
Strathcona County								99.9%	0.0%				99.9%
Lamont County								23.3%	71.0%	5.7%			100.0%
Camrose County No. 22								0.6%		0.2%			0.9%
Smoky Lake County									90.7%		7.6%		98.3%
Thorhild County No. 7									99.3%				99.3%
Two Hills County No. 21									1.8%	60.2%	38.0%		100.0%
Flagstaff County										0.0%			0.0%
Minburn County No. 27										98.8%	0.0%		98.8%
St. Paul County No. 19										0.0%	89.5%		89.5%
Bonnyville No. 87											4.7%		4.7%
Vermilion River County No. 24										34.9%	2.0%	14.0%	50.9%