Canada

Rural Alberta Profile:

A Ten-year Census Analysis (1991 - 2001)

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Foreword

Rural Alberta Profile is one of a series of fourteen profiles – one for each territory and province plus one national document. These profiles represent one response by the Government of Canada's Rural Secretariat to address a need for better information concerning rural areas. Distance from urban centres and population density are correlated to a number of factors that affect the wellbeing of Canadians. It is hoped that this document will draw attention to areas that require in-depth research. Most importantly, for government policy and programmes to meet the particular needs of rural Canadians living in zones of varying degrees of metropolitan influence, government needs to understand the differences between these zones.

The Rural Secretariat owes a debt of gratitude to members of the Profiles Steering Committee. Special thanks to Ray Bollman with Statistics Canada and to Robert Hornbrook with the Government of Alberta's Agriculture, Food, and Rural Development.

The Rural Secretariat values readers' feedback. Any suggestions or comments may be directed to:

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Executive Summary

Introduction

The Government of Canada's Rural Secretariat initiated this report to advance its goal of improving government and citizen understanding of rural conditions in the province of Alberta. This report benchmarks major socio-economic structures and trends regarding rural areas. The overall objective is to help improve policy with respect to the economic and social conditions found in rural Alberta.

Research Methods

Two major classification systems form the core analysis in this report. First, the Metropolitan Influenced Zone (MIZ) system, developed by McNiven et al. (2000), is used to make distinctions within rural and small town Alberta. The four MIZ categories are *Strong*, *Moderate*, *Weak*, and *No MIZ*, with each reflecting progressively greater rurality. Second, a basic comparison between urban centres and rural/small town zones is also presented to capture overall differences between the two sectors of the province. In total, 20 indicators from Statistics Canada's 2001, 1996 and 1991 Censuses of population have been calculated and analyzed for each of four degrees of rurality, for rural and small town Alberta as a whole, and for urban centres.

MAJOR FINDINGS

Population Indicators

One-quarter of Albertans reside in rural zones of the province. Between 1996 and 2001, population growth was slightly lower in rural than in urban Alberta (5.5% compared to 12.0%). Within rural and small town Alberta, population growth varied considerably with the least populated zone, *No MIZ,* experiencing the greatest increase (17.9%), followed by *Strong MIZ* (12.7%), and *Moderate MIZ* (5.9%) zones. *Weak MIZ*, which contains the largest rural population, experienced the least growth of the rural zones (1.8%). While much of the growth in *No MIZ* zones is likely due to an increase in the number of Aboriginal people in the area, population increases in *Strong MIZ* zones reflect a net in-migration increase, possibly due to the draw of the strong economy and labour market in these zones of Alberta.

Alberta's rural population comprises a slightly larger share of the total province's population than is the case Canada wide (24.6% compared to 20.6%). While Canada's rural population contracted between 1996 and 2001 (by 0.4%), Alberta's rural population grew by 5.5%. Compared to urban Albertans, rural and small town residents have a more polarized age structure with slightly higher proportions falling within the lowest (children) and highest (seniors) age categories. Between 1991 and 2001, all but one Alberta geographic zone aged, with *Moderate MIZ* populations aging, as a group,

the most rapidly. The *No MIZ* population actually became more 'youthful,' perhaps, as a function of the higher birth rates among the predominantly Aboriginal population residing in these zones.

The share of the population that is Aboriginal increased as the level of urban integration decreased. Aboriginal representation increased in virtually all geographic zones of the province between 1996 and 2001, but most dramatically in *No MIZ* zones; half of the total population, 36,432, of *No MIZ* zones are individuals of Aboriginal identity.

Economic, Education, Social and Health Care Indicators

Most of the results illustrate a great deal of variation in the economic, education, social, and health care situations within rural and small town Alberta. While differences between the urban and rural populations are apparent, there was often greater variation among the four MIZ categories. *Strong MIZ* zones typically stand out as being most similar to the more advantaged urban centres, and for some indicators, actually exceeded urban regions. The Aboriginal-intensive *No MIZ* zones consistently ranked last within rural Alberta. Hence, among rural Albertans, *Strong MIZ* zones tended to be the most advantaged, *No MIZ* zones the most disadvantaged, and *Moderate* and *Weak MIZs* often fell somewhere in between the two extremes.

The use of three consecutive census years permits a review of changes over the decade of the 1990s in rural Alberta. Most apparent in what the indicators show over time is the relative economic prosperity within the province in 2001 compared to the 1996 census year. The 1996 to 2001 growth cycle, however, is not equally apparent across all geographic zones of the province. For some indicators, the perennially disadvantaged *No MIZ* zones experienced a decline in economic well-being between 1996 and 2001. These results indicate a growing disparity between the improving socioeconomic position of *Strong MIZ* residents and the deteriorating position of those residing in *No MIZ* zones.

Examples of this pattern include the following:

<u>Economic Indicators</u>

- High labour force participation and low unemployment rates are consistently found across time in *Strong MIZ* zones, while low labour force participation and high unemployment rates are consistently found in *No MIZ* zones.
- Median personal incomes were the highest in urban centres and *Strong MIZ* zones and the lowest in *No MIZ* zones. *No MIZ* was also the only geographic zone in the province to exhibit a decline in income between 1996 and 2001.
- Compared to other MIZ Zones, *No MIZ* zones derived by far the greatest proportion of their income as social transfer income and were the only geographic zones to

demonstrate an increasing reliance between 1996 and 2001 (from 19.3% to 22.0% of total income).

Education Indicators

- The lowest level of educational attainment is observed in *No MIZ* zones where 46% of the population of at least 20 years of age had not completed high school as recently as 2001. *Strong MIZ* residents were the most likely of all rural and small town Albertans to have a university degree (10.1%), although they were still much less likely than urban Albertans to have this level of education (19.1%).

Social Indicators

- *No MIZ* has the highest rate and experienced the greatest over time growth in the incidence of lone-parent families (from 11.8% in 1991 to 21.8% in 2001), while the lowest rates are observed in *Strong MIZ* zones (9.2%).
- Average dwelling values were more than two times as high in *Strong MIZ* zones than in *No MIZ* zones of the province, but the latter geographic zones were only marginally less likely to have households that spend 30% or more on shelter costs.

Health Care Indicators

- In Rural and small town Alberta resided lower numbers of health care providers per capita than in urban regions. Within non-metropolitan Alberta, in *No MIZ* zones resided by far the fewest and *Strong MIZ* zones the greatest relative number of health care providers (13.9 compared to 24.6 per 1,000).

Rural and small town Albertans are clearly not equivalent to their urban counterparts with respect to economic prosperity, social well-being, educational attainment and access to health care. Two important exceptions to this trend are the lower rates of low income and the more affordable housing in rural zones of the province. These data suggest that though incomes are lower in rural regions of the province, the higher cost of living in urban centres offsets the advantage of living there.

The differences that exist within rural and small town Alberta are even more apparent than the total urban / rural differences. Despite moderate improvements in the least advantaged zones of the province, residents of *No MIZ* zones continue, as recently as 2001, to experience conditions of disadvantage relative to the rest of rural Albertans. The MIZ classification system consistently demonstrates that resources and support are increasingly needed as social and economic integration with urban regions decreases. *No MIZ* zones are in a relative position of greater need of supporting policy and programs than are their more integrated *Strong MIZ* counterparts.

Introduction

The Government of Canada's Rural Secretariat initiated this report to advance its goal of improving government and citizen understanding of rural conditions in the province of Alberta. This report benchmarks the major socio-economic structures and trends in rural Alberta. The overall objective is to help improve policy with respect to the economic and social conditions found in rural Alberta. Similar documents have been prepared profiling the rural conditions in each of Canada's nine other provinces and three territories.

Rural Albertans comprise one-quarter of the provincial population. But, this population exhibits considerable variation; ranging from the most remote, sparsely populated, and typically most disadvantaged regions to the more affluent metro-adjacent regions that have established economic and social connections with urban sites.[1] To appropriately capture the conditions of rural Alberta, therefore, it is important to recognize the diversity and varying degrees of 'rurality' within different rural sectors of the province. Accordingly, a major goal of this report is to examine how regions within rural Alberta exhibit variable population, economic, education, social, and health care characteristics.

The analysis presented here divides rural Alberta into four categories, each representing a specific degree of 'rurality.' These four categories are based on the Census **M**etropolitan Area and Census Agglomeration **I**nfluenced **Z**ones (MIZ) classification system (McNiven et al., 2000). In addition, the comparison of the CMA/CA population (as defined in the "Research Methods" section below) and the non-CMA/CA population (also called the "rural and small town population") is used to draw distinctions between rural and urban regions of the province.

The Rural and Small Town and MIZ definitions have proven useful for developing the profiles because they have allowed us to describe rurality using broad-brush strokes, highlighting differences between types of rural based on labour market integration as a proxy for rurality. However, it is important to recognize that there are limitations to the MIZ concept. While allowing an analysis and comparison between different types of rural, MIZ glosses over some important differences within each zone. For example in No MIZ, where Aboriginal people comprise a significant proportion of the population, we cannot describe rural non-Aboriginal separately from rural Aboriginal. MIZ also tends to obscure important place-related aspects. The provincial north disappears as a distinct region. Thus, we are describing averages and averages conceal the intra-zone variation.

[1] See, for example, the report "Rural Alberta: A Profile" prepared by Rural Team Alberta.

Accuracy and comprehensiveness were important considerations in selecting the indicators used to examine the characteristics of rural Alberta. To understand the social and economic conditions among Albertans, the indicators must be accurate measures of population, economic, education, social, and health care characteristics. Accuracy of the indicators was substantiated by previous research (see, for example, McNiven *et al.*, 2000). Every attempt was also made to select indicators that fully represent the breadth of the Albertan experience. Still, they are perhaps not as comprehensive as they could be and adding to them will enrich similar profiles in the future.

Statistics Canada Census data are used for the years 1991, 1996, and 2001 to establish evidence of trends within rural and small town Alberta. It is important to understand, however, that since these data are compiled from census subdivisions, which may themselves contain a high level of variability, it is inappropriate to apply any of the findings to specific communities.

The report presents a number of findings that, together, paint a picture of diversity, both between urban and rural Alberta as well as within rural Alberta. In addition to interpreting the findings individually, attempts are made to make sense of the data on an interrelated basis. In many of these instances, causes for differences in findings are extrapolated from the aggregation of data. These conjectures are, however, tentative since a more definitive causal analysis is beyond the scope of this report.

The following section of the report describes the research methods used in this analysis while subsequent sections (Sections A through E) present the population, economic, education, social, and health care profiles of rural Alberta. Section F summarizes the findings and the Appendix includes a series of tables containing the raw numbers to compliment the percentages and ratios depicted in the tables and figures within the main body of the text.

Research Methods

Defining "Rural"

Two classification systems are used in this report: one to delineate between the rural and urban population and the other to distinguish differences among the rural population of the province.

The Rural and Small Town (RST) definition is used to demarcate between urban and rural populations.[2] Residents of rural Alberta are defined as individuals residing in RST regions that have a population of less than 10,000 and where less than 50% of employed individuals commute to a Census Metropolitan Area (CMA) or Census Agglomeration (CA) (Statistics Canada, 1999a). Residents of urban Alberta are those residing in a CMA or CA. CMAs have an urban core population of at least 100,000 and include all neighbouring municipalities where 50% or more of the labour force commutes into the urban core. CAs have an urban core population between 10,000 and 99,999 and abide by the same commuting rules as CMAs (Statistics Canada, 1999a).

To capture varying degrees of rurality among the rural or non-metropolitan population of the province, we use a system developed by McNiven et al. (2000) whereby rural communities are classified into four groups using the Census **M**etropolitan Area and Census Agglomeration **I**nfluenced **Z**ones (M**I**Z). The MIZ classification system (or typology) permits distinctions among rural communities that are masked by the commonly-used CMA/CA and non-CMA/CA dichotomy. MIZ is designed to measure the degree to which all CMAs/CAs influence the rural community, as measured by commuting flows. Rural communities are classified into four MIZ categories based on the proportion of the population commuting to CMAs and CAs as follows:

MIZ Zones for Rural and Small Town (RST):

1. ***Strong MIZ***: Between 30% and 49% of the employed workforce commutes to the urban core of any large urban centre, suggesting that this population is strongly integrated with the urban economy.[3]
2. ***Moderate MIZ***: At least 5% but less than 30% of the employed workforce commutes to the urban core of any large urban centre, suggesting that this population is moderately integrated with the urban economy.

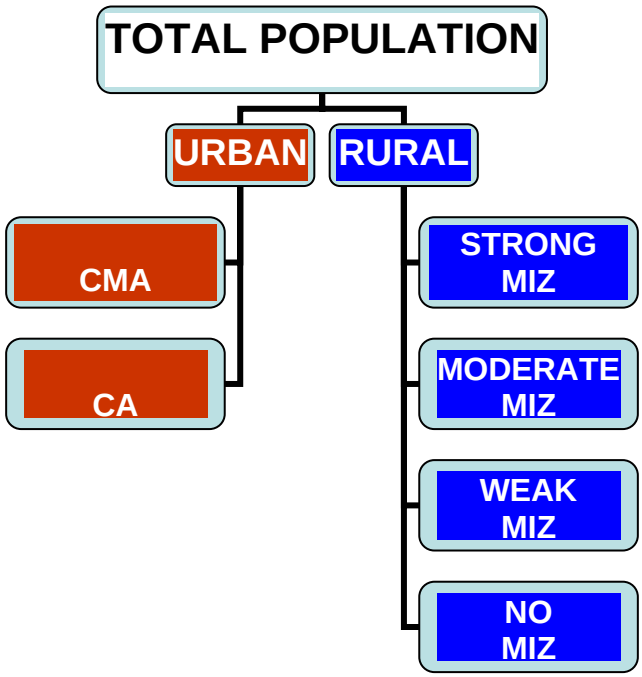
[2] RST is also known as Statistical Area Classification (SAC).
[3] The upper commuting limit of 49% holds for the vast majority of CSD designations. In instances where more than 49% of the employed workforce commutes to more than one CMA or CA, however, the CSD is designated as *Strong MIZ*.

3. ***Weak MIZ***: More than 0% but less than 5% of the employed workforce commutes to the urban core of any large urban centre, suggesting that this population is weakly integrated with the urban economy.

4. ***No MIZ***: 0% of the employed workforce commutes to the urban core of any large urban centre (plus any CSD that has less than 40 people in its employed labour force), suggesting that this population is not at all integrated with the urban economy.

The geographic zones presented for each indicator are depicted in Figure 1 below.

Figure 1: Geographic Zone Model



The MIZ typology is a good proxy for rurality because of its use of commuter flows. These flows are more than just a measure of home to work journeys and access to labour markets since people tend to use services provided in the same regions where they work. Hence, the MIZ classification system is a measure of rural residents' interrelation with urban regions and reflects both the economic and social connection from rural to urban regions.

Indicators

Using 2001, 1996, and 1991 Census data, several measures of rural life were examined both between rural and urban Albertans as well as among the rural population of the province. The 20 indicators used to measure the population, economic, education, social, and health conditions of Albertans by geographic zone are:

Population Indicators:

- Population size
- Age distribution
- Global dependency ratio
- Gender distribution
- Aboriginal identity population
- Home language

Economic Indicators:

- Labour force participation rates
- Unemployment rates
- Industry employment distribution
- Incidence of self-employment
- Median personal income
- Incidence of low income
- Social transfer income as a proportion of total income

Education Indicators:

- Educational attainment
- Number of education providers per 1,000 residents

Social Indicators:

- Incidence of lone-parent families
- Recent housing construction
- Average dwelling value
- Dwelling (housing) affordability

Health Care Indicators:

- Number of health care providers per 1,000 residents

Data Limitations

Since the analyses in this project involve comparisons between 1991, 1996, and 2001 Census data and Statistics Canada changes definitions or compilations for some indicators between census years, only inter-census comparisons of indicators with the same definitions are made. For indicators where changes are significant, results are presented separately. For example, level of education was modified from using the population 15 years of age and older in 1991 and 1996, to using the population 20 years of age and older in the 2001 Census. As such, level of education is presented for 2001 separately from 1996 and 1991. In instances where a significant change occurred between the 1991 and 1996 Census (e.g., Aboriginal identity), data for the earlier year are not presented.

Second, the census data used in this report have been compiled at the Census Subdivision (CSD) level, which is generally equivalent to municipalities. However, the use of CSDs means that this analysis may be affected by area suppression. Designed to protect the confidentiality of individual respondents, area suppression refers to the practice of deleting all characteristic data for regions with total populations of less than 40 (Statistics Canada, 1999a). This process may result in minor discrepancies between these numbers and those published by Statistics Canada. [4]

Third, the reclassification of some CSDs to different geographic zones between census years changes the population living in each geographic zone across time. In short, since the CSDs within each geographic zone are not exactly the same between census years some of the over-time changes observed may be a function of this reclassification. Though the total provincial figures are not susceptible to this issue, care should be taken when comparing between census years within each geographic zone. For the population change data presented in Sections A.1 and A.2, however, CSD reclassification is overridden since the results for 1996 are standardized to 2001 census boundaries for calculating the 1996 to 2001 rate of population growth and the 1991 results are standardized to the 1996 boundaries for calculating the 1991 to 1996 rate of population growth.

Fourth, the MIZ system is, as mentioned, an appropriate measure of rurality since it incorporates the economic and social connections between smaller communities and larger urban centres. Relying exclusively on size and commuting proportions, however, can result in an over-estimation of the rural designation. For example, in instances where a community has a population of less than 10,000 and is within commuting distance to a CMA or CA, but the local job market is strong and independent such that less than 50% of the population commutes to the nearby urban centre, this community would be designated as rural. Hence, even though the community may have access to the amenities and services of the nearby urban centre, it is designated as rural because of its size and non-commuting patterns.

[4] The use of the smaller CSDs, as opposed to CDs, as the building blocks of the urban / rural configuration increases the likelihood of area suppression. This limitation is somewhat offset by the ability of CSDs to provide greater precision in population size and commuting flows (McNiven et al., 2000).

Fifth, Census data in No MIZ zones and Aboriginal data everywhere have limited reliability. The proportion of Aboriginal people in No MIZ varies between just over 1% and over 67%. Some First Nations, however, do not participate in the census and are therefore not captured. Furthermore, our indicator captures people who self-identify as Aboriginal. Changes over time in that number may be due to changes in birth/death rates but also to a varying number of individuals self-identifying. Then, some of our indicators are derived from Statistics Canada's 20% sample which, in zones with small populations, becomes slightly less reliable.

Lastly, it should be understood that the least integrated MIZ zones are not necessarily the most geographically remote. Since commuting patterns may be for longer periods than just daily commutes (it can be weekly or even less often), individuals in a CSD may commute over greater distances than what is typically observed among daily commuters. Thus, a CSD that is geographically remote from an urban centre may be classified as weakly, moderately, or even strongly integrated with a CMA/CA because of its commuting patterns.

Please note, to see a map of the Statistical Area Classification for Canada in 2001, go to the Statistics Canada website (4Hwww.statcan.ca) and click on "Census", then click on "Reference Maps" and then click on "Statistical Area Classification". The exact URL, for English, is
5Hhttp://geodepot.statcan.ca/Diss/Maps/ReferenceMaps/n_sac_e.cfm
and for French is
6Hhttp://geodepot.statcan.ca/Diss/Maps/ReferenceMaps/n_sac_f.cfm

For the population count for 1996 and 2001 for the Statistical Area Classification, go to the Statistics Canada website (7Hwww.statcan.ca) and click on "Census", then click on "Data" on the left-hand panel, then click on "Population and Dwelling Counts" and then click on "Statistical Area Classification". The exact URL, for English, is
8Hhttp://www12.statcan.ca/english/census01/products/standard/popdwell/Table-SAC.cfm
and for French is
9Hhttp://www12.statcan.ca/francais/census01/products/standard/popdwell/Table-SAC.cfm

For selected socio-economic characteristics for larger urban centres (CMAs and CAs) and for rural and small town areas (non-CMA/CA areas), go to the Statistics Canada website (10Hwww.statcan.ca) and click on "Census", then click on "Data" on the left-hand panel, then click on "Highlight Tables" and then scroll down and click on "Statistical Area Classification" The exact URL, for English, is
11Hhttp://www12.statcan.ca/english/census01/products/highlight/SAC/Page.cfm?Lang=E&Geo=PR&Code=01&Table=1a&StartRec=1&Sort=2&B1=Age&B2=Counts
and for French is
12Hhttp://www12.statcan.ca/english/census01/products/highlight/SAC/Page.cfm?Lang=F&Geo=PR&Code=01&Table=1a&StartRec=1&Sort=2&B1=Age&B2=Counts

A detailed set of socio-economic characteristics by the Statistical Area Classification for the 2001 Census of Population is available for $60 by going to the Statistics Canada website (13Hwww.statcan.ca) and click on "Census", then click on "Data" on the left-hand panel, then scroll down and click on "Profiles" and then scroll down and click on "Statistical Area Classification". The exact URL in English is
14Hhttp://www.statcan.ca:8096/bsolc/english/bsolc?catno=95F0495XCB2001012
and for French is
15Hhttp://www.statcan.ca:8096/bsolc/francais/bsolc?catno=95F0495XCB2001012

FINDINGS

A. Population Indicators

KEY FINDINGS

A.1 Population Distribution and Growth

- Rural and small town Albertans comprise one-quarter of the total population of Alberta**.** *Weak MIZ* zones are the most populated of the rural zones (comprising 12.1% of the total Alberta population), followed by *Moderate* (6.8%), *Strong* (4.5%), and finally, *No MIZ* (1.2%) zones.

- Between 1996 and 2001 the population of rural and small town Alberta grew at a lower rate than urban Alberta (5.5% compared to 12%). The rural share of the total population also declined slightly during this period (from 25.7% in 1996 to 24.5% in 2001).

- Great variation in the population growth among the different geographic zones of rural Alberta is observed, with the most substantial growth occurring in the least populated zone, the Aboriginal-intensive *No MIZ,* (17.9%), and the smallest growth in *Weak MIZ* zones (1.8%), between 1996 and 2001.

A.2 Alberta - Canada Population Comparison

- Rural Alberta comprises a slightly larger share of the total population compared to the national rural share (24.6% compared to 20.6%). Most of this difference can be attributed to the much larger proportion of *Weak MIZ* residents in Alberta than in Canada (12.1% compared to 6.6%).

- The Alberta rural population grew at a faster rate than did the Canadian rural population, due primarily to the greater-than-average growth in *Strong* and *No MIZ* zones of the province.

A.3 Population Age Structure and Global Dependency Ratio

- Compared to the urban population, the rural population has a more polarized age structure with slightly higher proportions falling within the lowest (children) and highest (seniors) age categories.

- The average age of the population in the province increased between 1991 and 2001 with the age of the *Moderate MIZ* population increasing the most rapidly. In contrast, children comprised an increasing proportion of the population in *No MIZ* zones.

A.4 Population Gender Structure

- Although rural Alberta has a marginally lower proportion of women, very few differences in the male/female ratio are detected over time or across geographic zones of the province.

A.5 Aboriginal Identity Population

- Aboriginal representation increases in the more rural zones with *No MIZ* zones having by far the largest proportion (49.8% compared to 10.0% for the rural and small town total). Between 1996 and 2001, the proportion of Aboriginal people increased in all of Alberta's geographic zones, but again, most significantly in *No MIZ* zones (by 11.7 percentage points).

A.6 Home Language

- Urban Albertans are slightly more likely than rural dwellers to speak a non-official Canadian language (i.e., not English or French) indicating the propensity for immigrants to locate themselves in urban regions.

Summary

Explanations for population changes between 1991 and 2001 vary by geographic zone. The reason for a large population growth rate in *No MIZ* zones lies in the high proportion of Aboriginal people and their associated high birth rates (and therefore more "youthful" population) whereas in *Strong MIZ* the growth is mainly explained by in-migration.

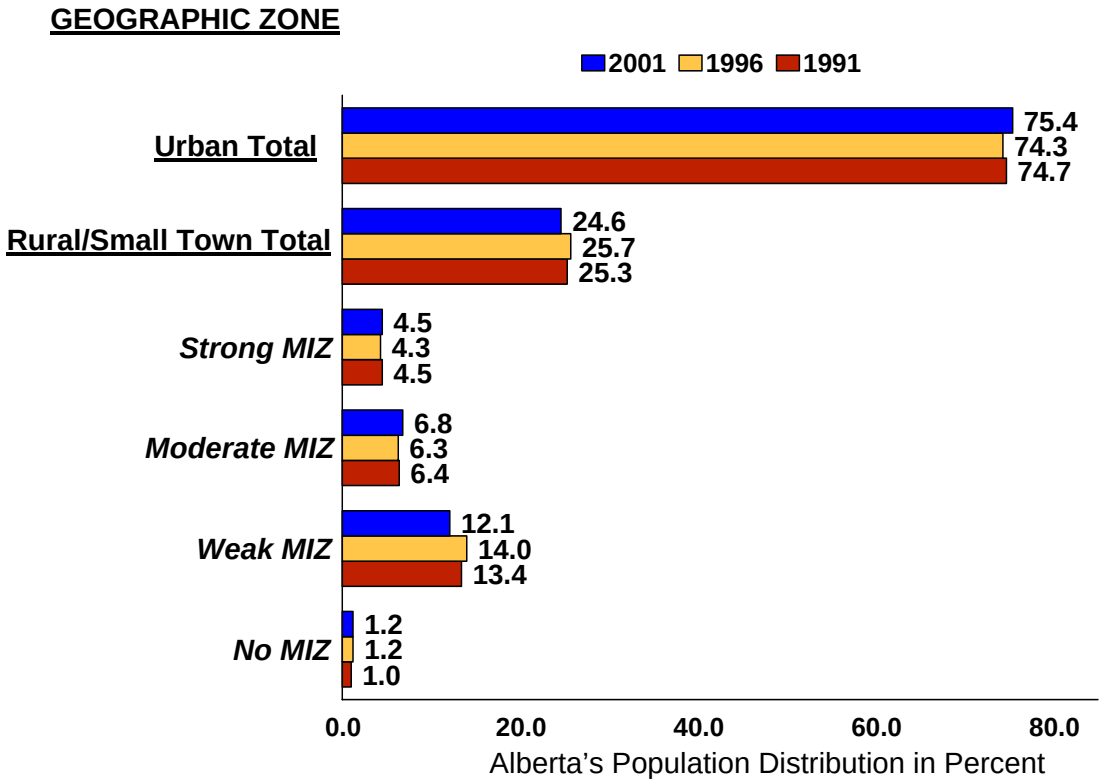
A.1 POPULATION DISTRIBUTION AND GROWTH

Between 1996 and 2001, the population size in rural Alberta grew at a lower rate than in urban regions, but *Strong and No MIZ* zones grew at the highest rates in the province.

We begin our examination of population by first looking at the proportion of Alberta's population distributed between urban and rural Alberta and between the four MIZ geographic zones in 2001, 1996, and 1991. Figure 2 demonstrates that rural Alberta accounts for about one-quarter of the total population in all three census years. In 2001, *Weak MIZ* zones were the most populated of the rural zones (12.1%), followed by *Moderate* (6.8%), *Strong* (4.5%), and finally, *No MIZ* (1.2%) zones.

By 2001, 730,471 of the 2,974,807 inhabitants of Alberta resided in a rural region or a small town (see Appendix Table 1). Rural Alberta's share of the total population increased by 0.4 percentage points between 1991 and 1996 but decreased by 1.1 percentage points between 1996 and 2001. While the population share in most MIZ zones remained stable, the share of the total population residing in *Weak MIZ* decreased by 1.9 percentage points during this period. Since *Weak MIZ* zones are the most populated of all rural zones (358,995 people in 2001), this decrease largely explains the reduction in the proportion of Albertans residing in all rural regions. These fluctuations are minimal, however, and the overall theme of the data is one of comparable over-time stability in the regional population distribution of the province.

Figure 2: Rural Albertans Comprise One-Quarter of the Total Population of Alberta



Source: Statistics Canada, Census of Population, 2001, 1996 and 1991

In Figure 3, the inter-census population percentage changes from 1991 to 1996 and from 1996 to 2001 are presented for each geographic zone of the province using constant boundaries.[5] Provincially, strong population growth is observed throughout the decade, but with most of the increase occurring since 1996.

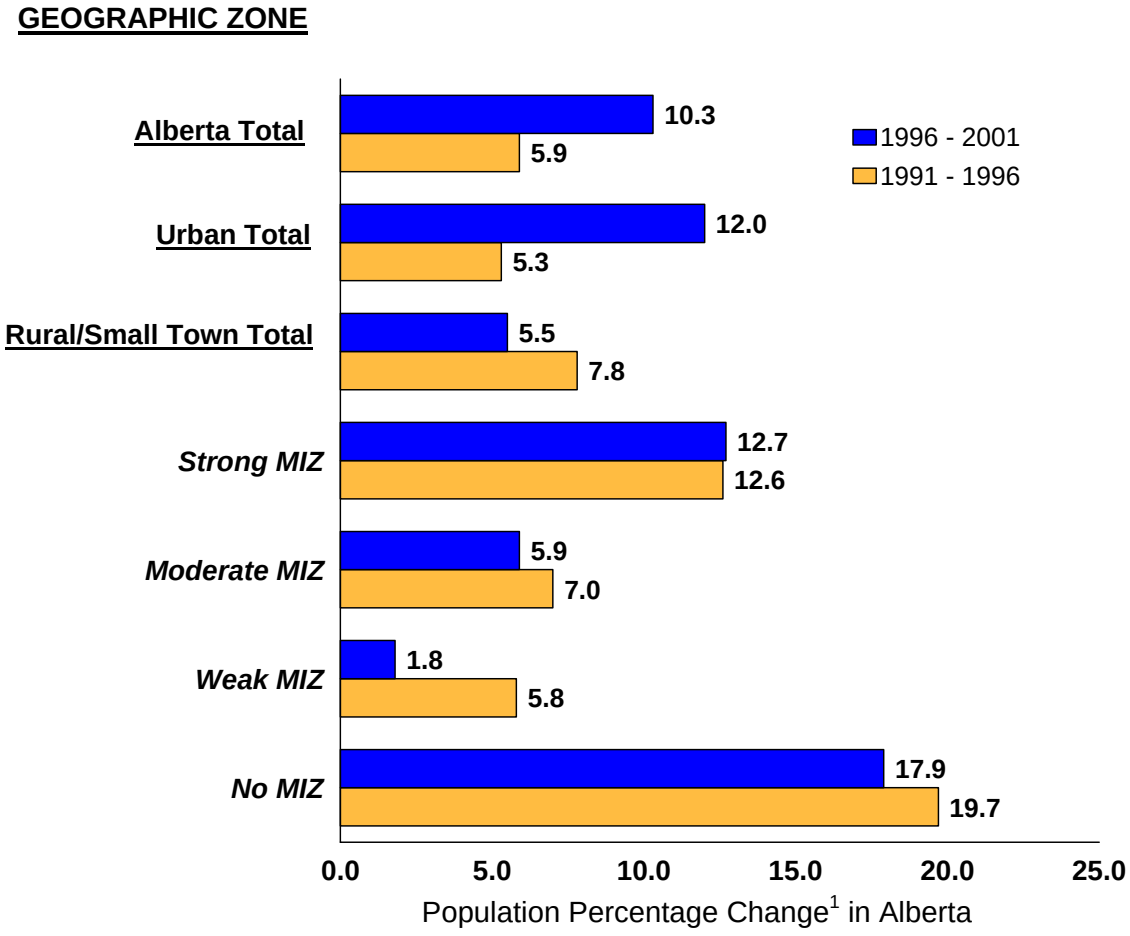
Population growth across inter-census periods and between geographic zones varies somewhat. While the population increased more substantially in rural Alberta than in urban regions in the earlier period (by 7.8 percentage points compared to 5.3 percentage points), growth between 1996 and 2001 accelerated in urban regions but slowed in rural Alberta (12.0 compared to 5.5 percentage points).

This pattern, however, masks considerable deviation between the four MIZ rural zones. Increasing by 19.7% between 1991 and 1996, and by 17.9% between 1996 and 2001, the *No MIZ* zones consistently exhibit the strongest population growth in the province.

[5] As mentioned in the Methods Section, constant boundaries are used to override the effects of CSD reclassifications between census years. Population change between 1991 and 2001 is not presented because 1991data are not available in constant (2001) boundaries.

Although not as dramatic, *Strong MIZ* zones also underwent substantial population increases, of 12.6% and 12.7% between 1991 and 1996, and 1996 and 2001, respectively. *Moderate* and *Weak MIZ* zones exhibited the least growth in each period with *Weak MIZ* experiencing the smallest increase of all zones of only 1.8% between 1996 and 2001. Again, because *Weak MIZ* zones are the most populated of all rural regions it has a strong influence on the relatively modest total rural population change of 5.5% from 1996 to 2001. Conversely, the strong population growth within the much less densely populated *No MIZ* zones adds very little weight to the total rural population change.

Figure 3: The Population in *No MIZ* Zones Increased at the Highest Rate in the Province



Source: Statistics Canada, Census of Population, 2001, 1996, and 1991

[1] 1991 data are adjusted to 1996 boundaries for the calculation of 1991 to 1996 growth and 1996 data are adjusted to 2001 boundaries for the calculation of 1996 to 2001 growth.

The greater growth between 1996 and 2001 in urban regions is likely explained by the very healthy Alberta economy characterizing that period. The larger-than-average growth in *No MIZ* zones no doubt reflects the increasing Aboriginal population which is noted for its relatively high birth rates (Figures 8 and 9). An explanation for the much smaller population increase in *Weak MIZ* zones, however, is not as readily apparent. Since there is no evidence to suggest that the population of Weak MIZ was any more or less likely than other zone populations to have experienced changes in their natural population determinants (e.g. decreased births or increased deaths), we can only conclude that most of the difference was due to a lower net migration. The question remains, nevertheless, as to whether net migration is primarily a function of *Weak MIZ* residents leaving these zones or fewer individuals moving into these relatively weakly integrated communities.

A.2 ALBERTA – CANADA POPULATION COMPARISON

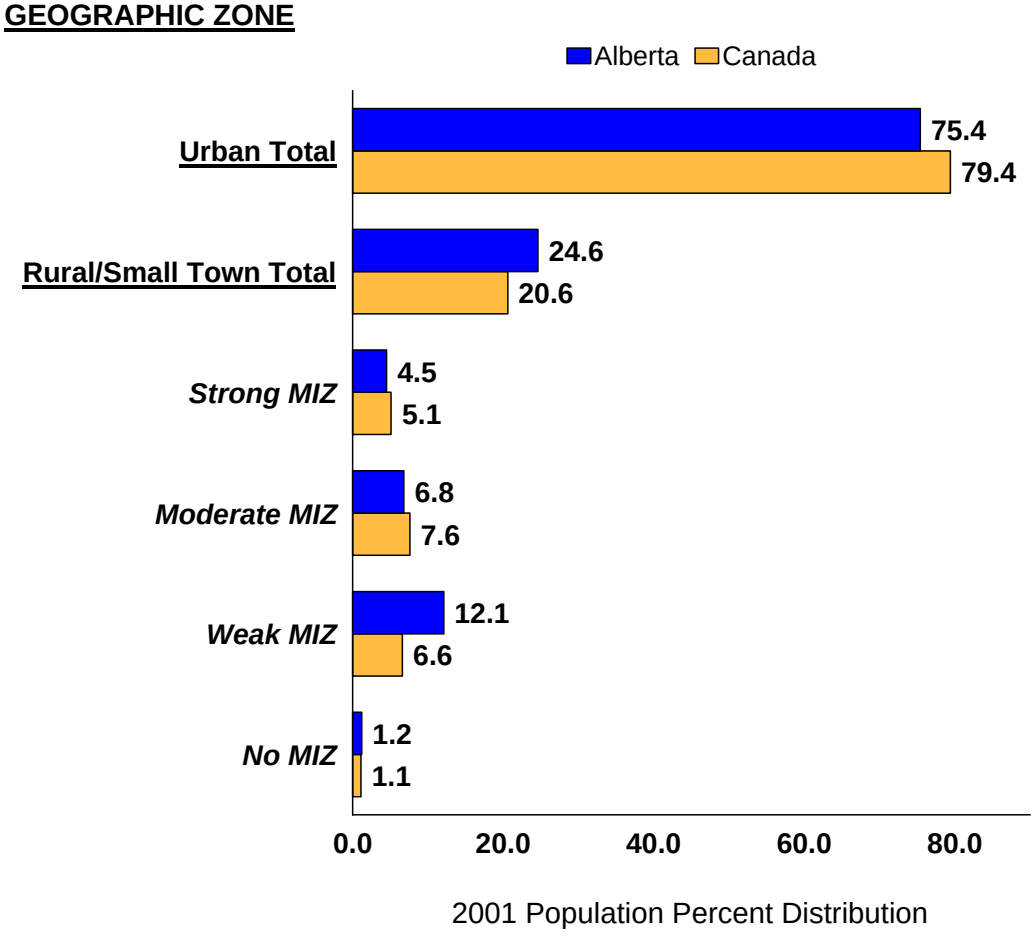
Compared to Canada, Alberta has a slightly higher share of its population residing in rural regions and these regions grew at a much higher rate.

Having examined Alberta's population, it is fruitful to situate these provincial data within the larger Canadian context. Figure 4 presents the population percent distribution across geographic zones for Canada and Alberta (see Appendix Table 2 for the distributions for each of the 13 provinces and territories). Compared to Canada as a whole, Alberta has a slightly larger rural population (25% compared to 21%). Put another way, while urban Alberta comprises 9.4% of the total Canadian urban population, it contributes 11.8% to the Canadian rural population (see Appendix Table 3). When comparing Alberta with Canada for the four MIZ geographic zones, it is clear that the urban/rural difference is principally because of the much larger share of the *Weak MIZ* population in Alberta (12.1% in Alberta compared to 6.6% in Canada).

Alberta has a smaller proportion of its population residing in rural and small town regions, however, than the Atlantic provinces, Manitoba, Saskatchewan, the Northwest Territories, and Nunavut (Appendix Table 2). Of the 13 provinces and territories, Alberta has the fourth smallest proportion of the population designated as rural, with only Quebec, Ontario, and British Columbia having a smaller proportion of rural individuals.

With few exceptions the distribution of the population within rural and small town zones across Canada follows a pattern whereby the smallest proportion of the population is located in *No MIZ* and *Strong MIZ* zones. Alberta follows this trend as well, with 1.2% in *No MIZ* and 4.5% in *Strong MIZ* zones, 6.8% in *Moderate MIZ* zones, and 12.1% in *Weak MIZ* zones in 2001.

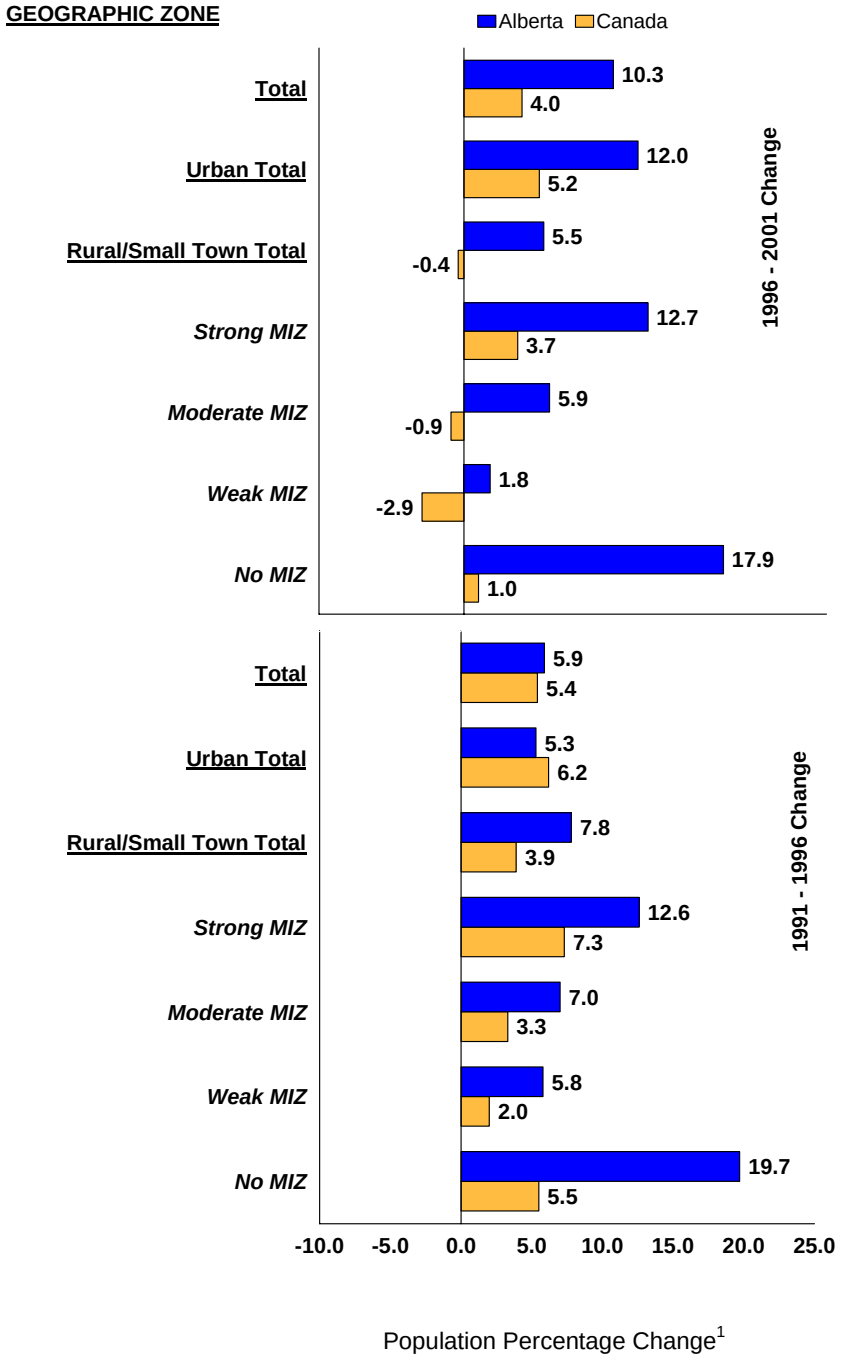
Figure 4: The Rural Population in Alberta Comprises a Larger Share of the Total Population than it does in Canada



Source: Statistics Canada, Census of Population, 2001

Using standardized boundaries, Figure 5 highlights the Alberta – Canada comparison of population percentage change in each geographic zone between 1991 and 1996 and between 1996 and 2001(see Appendix Table 3 for the population change within each province). The figure demonstrates stronger population growth in urban than in rural regions of the entire country. The total Canadian urban population grew in each inter-census period by 6.2% from 1991 to 1996, and by 5.2% between 1996 and 2001, while Canada's rural population grew by 3.9% in the first half of the 1990s, but fell by 0.4 percentage points in the latter 5-year period. Alberta's rural population growth of 7.8% from 1991 to 1996 and of 5.5% from 1996 to 2001 strongly contradicts the national pattern. In fact, the 1996 to 2001 rural Alberta population growth exceeds the growth in all provinces and territories of the country except Nunavut. While the population growth in all Alberta MIZ zones was at a higher rate than the Canadian average, much of the growth is explained by the much larger than average growth patterns exhibited in *Strong* and especially in *Weak MIZ* zones than in those of any other province or territory.

Figure 5: Alberta's Rural Population Grew at a Much Higher Rate than the Canadian Rural Population



Source: Statistics Canada, Census of Population, 2001, 1996, and 1991

[1] 1991 data are adjusted to 1996 boundaries for the calculation of 1991 to 1996 growth and 1996 data are adjusted to 2001 boundaries for the calculation of 1996 to 2001 growth.

A.3 POPULATION AGE STRUCTURE AND GLOBAL DEPENDENCY RATIO

The Rural Alberta population has a more polarized age structure than the urban population since greater proportions are children and seniors.

The changing age structure of a population helps to forecast future demand for services such as education and health care. It can also inform future changes in the labour market structure and contribute to an understanding of how these changes may affect the economy.

Five age groups were used to analyze the age structure of the population. These are: 0–14 years, 15–24 years, 25–44 years, 45–64 years and 65 years of age and over. These categories were chosen because they represent five defined demographic groups; namely, children, youth, young adults, adults, and seniors.

Table 1 presents the percentage distribution of the population in 2001 across each of the five age categories, and for each of the geographic zones (see also Appendix Tables 4 and 5). Compared to urban Albertans, the rural population tends to have a more polarized age structure with slightly higher proportions falling within the lowest and the highest age categories. While 23.9% of rural residents were children in 2001, only 20.1% of individuals residing in urban centres were within the same age category. And, while 10.7% of rural Albertans were seniors, 9.3% of urban residents were in the same age category.

Table 2 presents the 1991 to 2001 age distribution percentage change for each age category and each geographic zone of the province. The table demonstrates that the Alberta population as a whole is aging. Between 1991 and 2001, the proportion of adults and seniors in the province increased by 5.2 and 0.6 percentage points, respectively. In contrast, we observe a decrease in the proportion of children during the same time period (of 2.5 percentage points). The proportion of young adults between the ages of 25 and 44 also decreased significantly by 3.4 percentage points in the 10-year period. Since this is the age group most likely to bear children, we might predict even further proportional losses to the children age group in the future. These changes in age distribution also occurred in urban parts of the province.

Table 1: Rural Albertans are More Likely to be Children and Seniors than are Urban Albertans

Population Age Percent Distribution; 2001

Geographic Zone	Total	Children (0-14 years)	Youth (15-24 years)	Young Adults (25-44 years)	Adults (45-64 years)	Seniors (65 years +)
Alberta Total	100.0	21.1	14.8	32.1	22.4	9.7
Urban Total	100.0	20.1	15.1	33.2	22.3	9.3
Rural/Small Town Total	100.0	23.9	14.0	28.6	22.7	10.7
Strong MIZ	**100.0**	**24.2**	**13.5**	**29.2**	**24.4**	**8.7**
Moderate MIZ	**100.0**	**23.3**	**13.2**	**27.4**	**23.7**	**12.4**
Weak MIZ	**100.0**	**23.6**	**14.6**	**29.3**	**21.9**	**10.6**
No MIZ	**100.0**	**30.0**	**15.0**	**26.6**	**18.4**	**10.0**

Source: Statistics Canada, Census of Population, 2001

A slightly different trend is observed, however, within rural and small town Alberta. Though a similar proportional reduction of children occurred between 1991 and 2001 (2.4 percentage points), the proportion of seniors also decreased during this period by 0.2 percentage points (Table 2). Within the MIZ categories further variation in age patterns is evident. While *Moderate* and *Weak MIZ* populations more closely approximated the aging trend of their urban counterparts, inhabitants of the Aboriginal-intensive *No MIZ* zones exhibited a reversed trend of increasing youthfulness: children/youth representation increased by 2.4 percentage points and seniors decreased by 3.6 percentage points.

Table 2: The Proportion of Children is Decreasing in Both Rural and Urban Zones

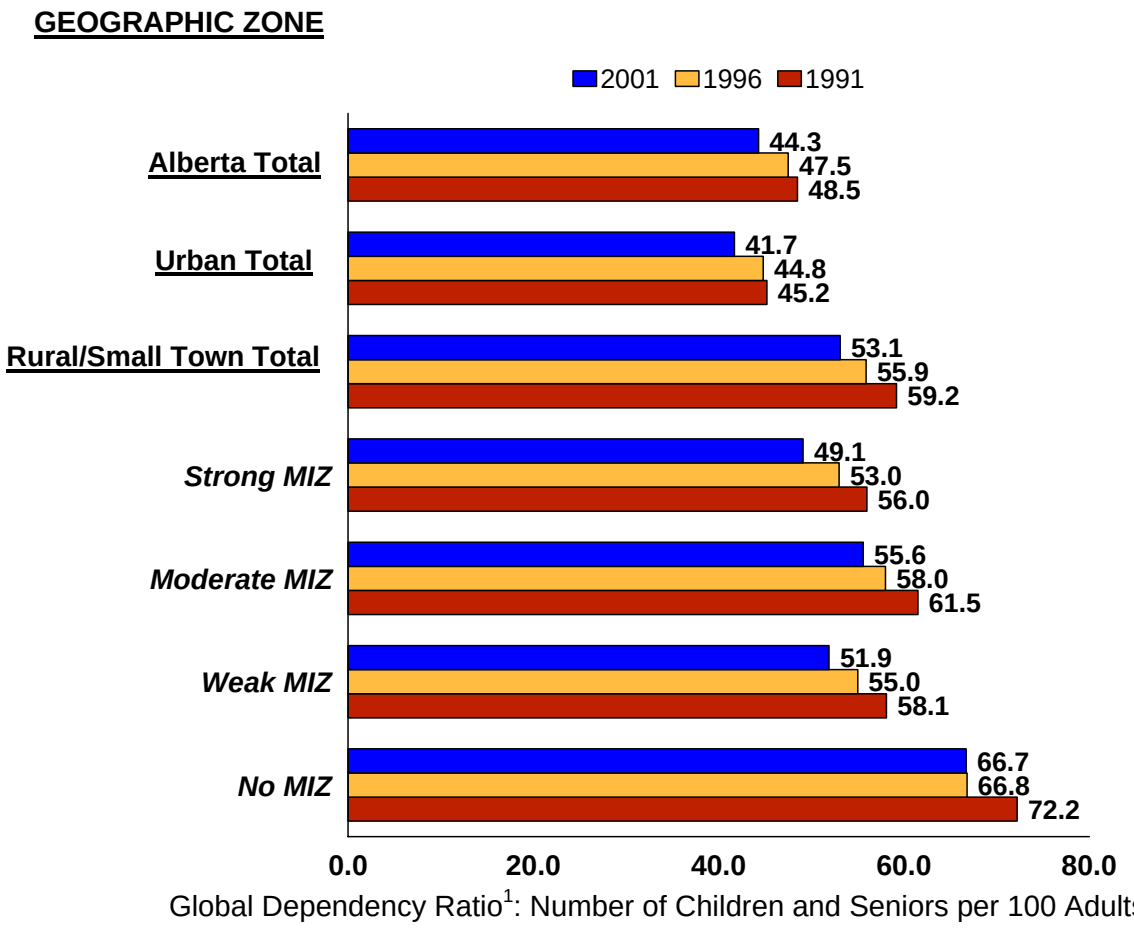
Percentage Point Change in Share of Individuals in Each Age Class; 1991-2001, 1996-2001, and 1991-1996

Geographic Zone	Children (0-14 years)			Youth (15-24 years)			Young Adults (25-44 years)			Adults (45-64 years)			Seniors (65+ years)		
	1991 - 2001	1996 - 2001	1991 - 1996	1991 - 2001	1996 - 2001	1991 - 1996	1991 - 2001	1996 - 2001	1991 - 1996	1991 - 2001	1996 - 2001	1991 - 1996	1991 - 2001	1996 - 2001	1991 - 1996
Alberta Total	-2.5	-1.9	-0.6	0.2	0.7	-0.5	-3.4	-2.1	-1.3	5.2	2.9	2.3	0.6	0.5	0.1
Urban Total	-2.6	-2.0	-0.6	0.2	1.0	-0.8	-3.8	-2.2	-1.6	5.3	2.8	2.5	0.9	0.5	0.4
Rural/ Small Town Total	-2.4	-1.7	-0.7	0.3	0.1	0.2	-2.6	-2.0	-0.6	4.8	3.2	1.6	-0.2	0.5	-0.7
Strong MIZ	**-2.4**	**-2.1**	**-0.3**	**0.5**	**0.6**	**-0.1**	**-3.2**	**-2.4**	**-0.8**	**5.6**	**3.6**	**2.0**	**-0.7**	**0.4**	**-0.8**
Moderate MIZ	**-3.0**	**-1.4**	**-1.6**	**-0.1**	**-0.1**	**0.0**	**-2.6**	**-1.8**	**-0.8**	**5.1**	**2.9**	**2.2**	**0.6**	**0.4**	**-0.2**
Weak MIZ	**-2.4**	**-2.0**	**-0.4**	**0.2**	**0.0**	**0.2**	**-2.3**	**-2.0**	**-0.3**	**4.6**	**3.3**	**1.3**	**-1.0**	**0.7**	**-0.8**
No MIZ	**1.6**	**0.8**	**0.8**	**0.8**	**-0.1**	**0.9**	**-1.3**	**-1.1**	**-0.2**	**2.3**	**1.3**	**1.0**	**-3.6**	**-0.9**	**-2.7**

Source: Statistics Canada, Census of Population, 2001, 1996, and 1991

Since rural Albertans are more likely than urban Albertans to be children and seniors they are less likely to be participating in the paid labour force. Consequently, this age structure means that rural Albertans have a higher global dependency ratio (Figure 6). This ratio measures the proportion of children (aged 0 to 14 years) and seniors (aged 65 years and over) compared to the working population (aged 15 to 64). In 2001, there were 41.7 children and seniors per 100 urban adults, compared to 53.1 for every 100 rural and small town adults. *No MIZ* zones had the largest dependency ratio (66.7 dependents per 100 adults). While this figure declined in *No MIZ* zones between 1991 and 1996, it remained constant between 1996 and 2001. Hence, having more dependents to care for, rural and small town adults, and especially *No MIZ* adults, have a greater relative need for services targeted to seniors, children, and families.

Figure 6: Populations in Rural Alberta have a higher Dependency Ratio than those in Urban Alberta



Source: Statistics Canada, Census of Population, 2001, 1996, and 1991

[1] Global dependency ratio is defined as the ratio of children (0-14 years of age) and senior (65 years of age and over) populations to the total working age population (15-64 years of age).

The age distribution findings in Tables 1 and 2 and Figure 6 have important government policy implications with respect to services targeted toward children, teens, adults and seniors. For example, the slightly greater proportion of seniors in rural and small town Alberta suggests that seniors-related services are in greater relative demand in these zones of the province. Initiatives such as community-based health services and long-term care facilities will have to maintain sufficient capacity to address the demand. This demand is especially applicable to *Moderate MIZ* zones, which not only have the largest proportion of seniors but were also the only rural zones to exhibit an over-time increase in this age group.

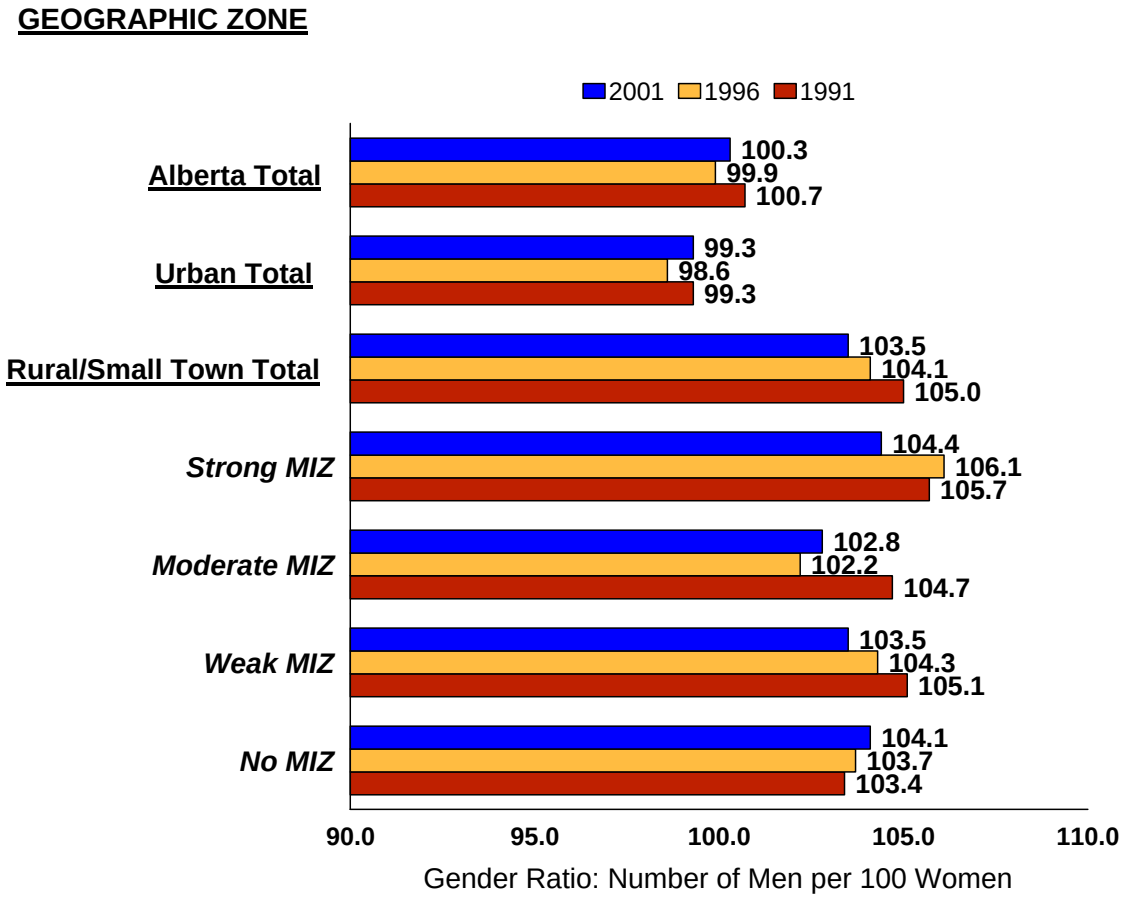
Furthermore, although the proportion of rural Albertans who are children decreased between 1991 and 2001, the younger age structure and higher dependency ratio suggests a greater overall need for children-related services in rural than in urban regions of the province. This need has, in fact, intensified in *No MIZ* zones, which not only had the highest share of children, but also was the only geographic zone to exhibit an over-time proportional increase in youthfulness. Since these residents are also the least likely to be adults (Table 1) and have the lowest labour force participation rate in the province (Figure 10), they are the least likely to contribute to tax revenues. The provision of services in *No MIZ* zones is, therefore, limited by a comparatively small per capita tax base. These findings might suggest that regional governments in *No MIZ* zones are in greater need of transfer payments.

A.4 POPULATION GENDER STRUCTURE

Rural Alberta has a slightly larger male than female population while the reverse is true in urban regions.

Figure 7 illustrates that, irrespective of census year, the province of Alberta had a fairly equal distribution of men and women. Gender parity is also evident in urban centres, but rural/small town Alberta had a slightly higher ratio in 2001, at 103.5 men per 100 women. Among MIZ zones, the largest male to female ratio is found in *Strong MIZ* zones of the province (104.4 men per 100 women) and the smallest in *Moderate MIZ* zones (102.8). These differences, however, are minimal and, for the most part, the figure depicts gender equivalency across time and across geographic zones of Alberta.

Figure 7: Rural Zones Have Slightly Higher Proportions of Males than Urban Zones



Source: Statistics Canada, Census of Population, 2001, 1996, and 1991

A.5 ABORIGINAL IDENTITY POPULATION[6]

Within rural Alberta, Aboriginal representation increases as integration with urban centres decreases, with *No MIZ* having by far the largest and most rapidly expanding proportion of Aboriginal citizens.

The Aboriginal population in Canada has experienced significantly greater growth than the general population. In fact, the Registered Indian population is growing at a rate of almost twice that of the Canadian population (Corporate Information Management Directorate, 2000). Further, the Registered Indian population of Alberta is projected to almost double over the next 20 years (Indian and Northern Affairs, 2000). Individuals with this ethnic background have specific needs with respect to government services and the demand for these services will likely intensify as the population grows (Aboriginal Justice Implementation Commission, 1999).

As shown in Figure 8, though urban areas contained a larger number of Aboriginal people in 2001 than did rural zones (84,140 compared to 72,080—see Appendix Table 6) the proportion of the population that is Aboriginal was higher in rural Alberta than in urban regions (10.0% compared to 3.8%). Aboriginal representation varies considerably among the four MIZ geographic zones. Independent of census year, it is apparent that the less integrated the zone is with urban centres, the more likely it is to have Aboriginal individuals residing in the community. Though *Weak MIZ* zones had the largest absolute number of Aboriginal individuals in 2001 (37,695--see Appendix Table 6), *No MIZ* zones had by far the largest proportion of their population as Aboriginal, with half (49.8%) of the 36,432 residents in these zones self-identifying as Aboriginal.

Figure 9 indicates that, between 1996 and 2001, the proportion of Aboriginal individuals in the province increased by 0.7 percentage points (from 4.6% to 5.3%), with increases occurring in all geographic zones.[7] The percentage of Aboriginal representation in rural zones was more than double that of urban regions in 2001 (10.0% compared to 3.8%), and increased at a marginally greater rate between 1996 and 2001.[8] Again, however, these proportions mask the fact that the majority of Aboriginal Albertans reside in urban centres.

Figure 9 also shows that of all zones, *No MIZ* underwent the largest proportional increase in Aboriginal representation between 1996 and 2001 of 11.7 percentage points. Though *Weak MIZ* zones experienced a proportional increase in their Aboriginal

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[6] Refers to persons who reported identifying with at least one Aboriginal group, i.e. North American Indian, Métis or Inuit (Eskimo) and/or those who reported being a Treaty Indian or a Registered Indian as defined by the *Indian Act* of Canada and/or who were members of an Indian Band or First Nation (Statistics Canada, 1999a).

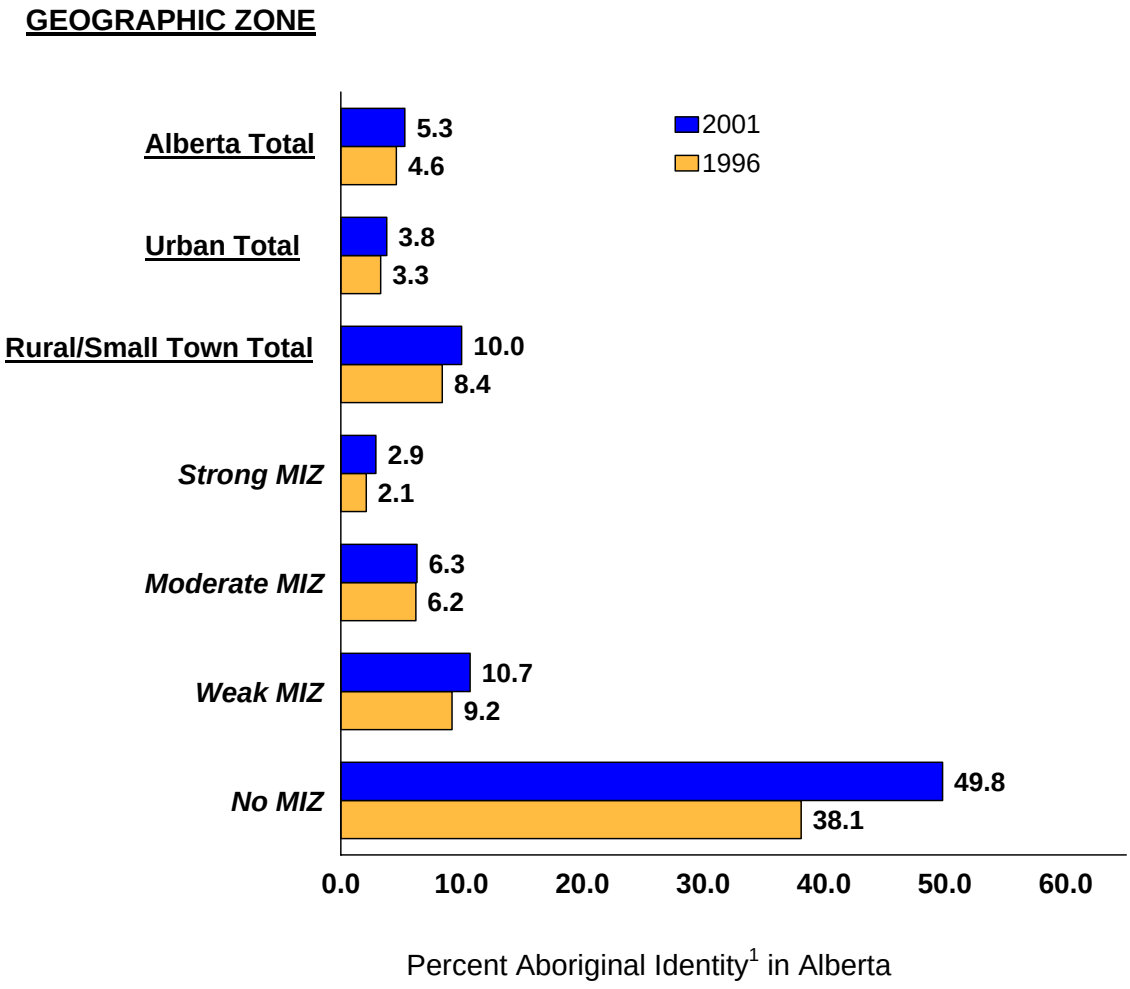
[7] Aboriginal identity is not presented for 1991 because of significant differences in the definition in this year.

[8] Some of the increase in the Aboriginal population may be a result of an increasing tendency for individuals to self-report as Aboriginal.

population far below that of their *No MIZ* counterparts (only 1.5 compared to 11.7 percentage points, the absolute numerical increase of Aboriginal people in *Weak MIZ* zones is more than two times higher than in *No MIZ* zones (37,695 compared to17,935; Appendix Table 6).

By comparison, Aboriginal representation in *Strong* and *Moderate MIZ* zones is much smaller and increased only marginally between 1996 and 2001. Hence, it appears that not only does Aboriginal representation increase in the more rural zones, but this is progressively the case over time.

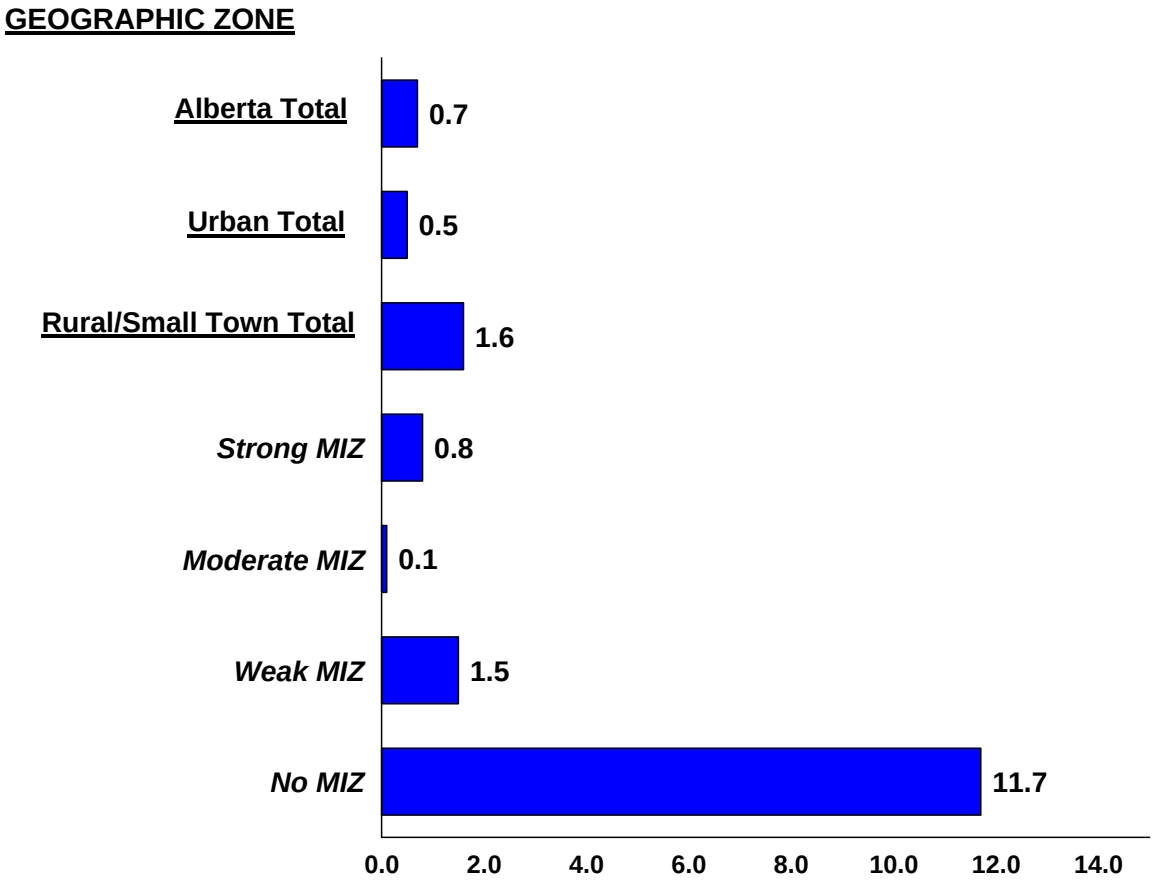
Figure 8: The Share of the Population that is Aboriginal is by Far the Highest in *No MIZ* Zones



Source: Statistics Canada, Census of Population, 2001 and 1996

[1] Refers to persons who reported identifying with at least one Aboriginal group, i.e. North American Indian, Métis or Inuit (Eskimo) and/or those who reported being a Treaty Indian or a Registered Indian as defined by the *Indian Act* of Canada and/or who were members of an Indian Band or First Nation (Statistics Canada, 1999a).

Figure 9: The Share of the Population that is Aboriginal Increased Most Dramatically within *No MIZ* Zones



1996 to 2001 Percentage Point Change in the Share of the Population that is Aboriginal[1] Within Each Geographic Zone

Source: Statistics Canada, Census of Population, 2001 and 1996

[1] Refers to persons who reported identifying with at least one Aboriginal group, i.e. North American Indian, Métis or Inuit (Eskimo) and/or those who reported being a Treaty Indian or a Registered Indian as defined by the *Indian Act* of Canada and/or who were members of an Indian Band or First Nation (Statistics Canada, 1999a).

A.6 HOME LANGUAGE

By examining the language spoken most often at home, we can garner an indication of the language diversity in rural versus urban Alberta. Home language can also be used as a proxy for ethnicity. Table 3 presents the proportion of Albertans speaking one of Canada's official languages (English or French), those speaking a non-official language (not English and not French), and those speaking more than one language (multiple languages) most often at home (see also Appendix Table 7).

Three notable observations can be made from the data presented in Table 3. First, compared to urbanites, a slightly smaller proportion of rural Albertans spoke a non-official Canadian language in 2001 (8.2% compared to 5.2%). These data follow

immigration patterns whereby few newcomers to Canada choose to reside in rural regions of the country (Beshiri, 2004). This finding, however, does not hold for *No MIZ* zones, which, as already noted, contain a large population of Aboriginal people who could be included in the "non-official language" category.

Second, although a slightly greater proportion of *Weak MIZ* residents spoke French as their home language in 2001 than did urban Albertans, French was a very uncommon language for residents of the other three MIZ zones, with between 0.2% and 0.6% speaking French at home.

Third, the data reveal over-time stability in the proportion speaking each of the language categories most often at home for each geographic zone. While a few minor fluctuations can be observed, the data are remarkably consistent over time.

Table 3: Rural Albertans are Less Likely Than Urban Albertans to Speak a Non-Official Language

Home Language[1] Percent Distribution, 2001, 1996, and 1991

Geographic Zone	English			French			Non-official language[2]			Multiple Responses		
	2001	1996	1991	2001	1996	1991	2001	1996	1991	2001	1996	1991
Alberta Total	90.5	90.3	90.7	0.6	0.6	0.7	7.5	7.4	7.0	1.4	1.7	1.6
Urban Total	89.6	89.4	90.1	0.6	0.5	0.6	8.2	8.2	7.5	1.6	1.9	1.8
Rural/Small Town Total	93.2	92.8	92.4	0.8	0.7	0.9	5.2	5.4	5.4	0.8	1.1	1.2
Strong MIZ	97.2	96.8	96.6	0.2	0.2	0.2	2.2	2.4	2.6	0.3	0.6	0.7
Moderate MIZ	94.4	94.1	94.2	0.3	0.2	0.4	4.7	4.8	4.3	0.6	0.9	1.0
Weak MIZ	91.9	91.8	90.9	1.3	1.2	1.5	5.9	5.9	6.3	0.9	1.2	1.3
No MIZ	83.6	82.1	82.5	0.6	0.7	0.7	13.2	14.4	13.2	2.5	2.8	3.4

Source: Statistics Canada, Census of Population, 2001, 1996, and 1991

[1] Home language is based on the language "most often spoken at home" for all three censuses. For the 2001 Census, the home language question asked for the language spoken "most often at home" AND the languages spoken "on a regular basis at home." The 2001 data includes only the language "most often spoken at home" which is the equivalent of "home language" in the 1991 and 1996 censuses.

[2] "Non-official languages" include all languages excluding English and French.

SUMMARY

The above discussion highlights some of the implications for each of the population indicators. We can also, however, explore possible inferences by linking these results together.

For instance, the marked population growth in *No MIZ* zones is likely attributable to the simultaneous increase in the Aboriginal population in this area. Since we do not observe decreases in the Aboriginal population within any other geographic zones of the province, we can assume that much of the increase is a function of the relatively high birth rates typically found among Aboriginal people. This high birth rate also means that a greater proportion of the Aboriginal population than non-Aboriginal population are children, thus explaining the higher preponderance of children in *No MIZ* zones. Though the number of Aboriginal people residing in urban regions is larger, proportionally speaking, these population trends intensify the demand on children's services in remote regions of Alberta, particularly on Indian reserves. Programs such as Aboriginal Head Start and First Nations and Inuit Child Care are in high need especially within *No MIZ* zones, but they are also increasing in demand within *Weak MIZ* zones of the province (Figure 8). Other programs such as the Canada Pre-Natal Nutrition Program and the Community Action Program for Children may also feel added pressure in the near future. In addition, as the *No MIZ* population matures and enters the labour force, there may be increased demand for employment and associated services. Indeed, projections over the next 20 years indicate that the registered Indian population is moving into a different phase of the demographic cycle as the portion of the working age population (20 - 64 years of age) increases (Indian and Northern Affairs, 2000). While still far below the average age of the non-Aboriginal population, future demand will increase for services related to employment, housing, and other services required for Aboriginal people to enter the workforce.

Unlike *No MIZ* zones, increased birth rates do not explain the above-average population growth in *Strong MIZ* zones since we observe a reduction in the proportion of children (Table 2). Hence, the population increase in these zones must be a result of in-migration. But what, exactly, drew individuals to *Strong MIZ* zones of the province? One possibility is the 'pull' of new jobs as a result of a shift in employment away from farming (primary industry) to manufacturing and construction (secondary industry) in *Strong MIZ* zones (Tables 4 and 5). The in-migration to these zones may also reflect a lifestyle choice to move into semi-rural settings that offer convenient access to urban amenities and employment.

We have already mentioned that the low population growth within *Weak MIZ* zones is likely because of a net out-flow of individuals from these zones. Research shows that most of the population losses from rural regions are among individuals between the ages of 15 and 24 (Dupuy et al., 2000). Given the strong job market within other geographic zones of the province in the late 1990s, we might speculate that many

young residents of *Weak MIZ* zones relocated to one of Alberta's city centres or perhaps to fill the growing number of service industry jobs in *Strong MIZ* zones (Tables 4 and 5).

These different explanations for population changes throughout the four MIZ zones of the province highlight the importance of examining the rural sector as a heterogeneous entity. Clearly, the smaller population increase that is apparent in rural Alberta masks a great deal of variation throughout the province in population change and in the underlying causes for these over-time shifts.

B. Economic Indicators

KEY FINDINGS

B.1 Labour Market Indicators

- Throughout all three census years, labour force participation (LFP) rates range from 70% to 75% in all but one geographic zone of the province. The LFP rate in *No MIZ* zones is consistently much lower, ranging from 57% to 60%.

- By 2001, unemployment rates reduced to below 4-5.5% in all geographic zones of the province, except *No MIZ* zones, which increased from 10% to 11% between 1991 and 2001.

- Both the SIC industry classification system for the 1991 and 1996 census and the NAICS classification system for the 2001 census reveal that rural and small town Albertans dominate employment in primary industries while urbanites are more strongly represented in service industries.

- Employment in agriculture, forestry, fishing and hunting accounts for a decreasing share of employment in rural Alberta.

- Although down slightly since 1996, self-employment is still higher in 2001 than it was in 1991 in both urban and rural Alberta. The incidence of self-employment is twice as prevalent in rural and small town Alberta, due to the large percentage of jobs in agriculture in these zones.

B.2 Income

- Median personal incomes decrease in the more rural zones with *No MIZ* residents earning only 58% of the incomes earned in *Strong MIZ* zones.

- The proportion of low income individuals increased in virtually all geographic zones of the province between 1991 and 1996, but the incidence decreased within all zones between 1996 and 2001. *No MIZ* residents are the least likely to have experienced a reduction in the incidence of low income in the past 10 years.

- In all three census years, rural and small town Albertans garnered a larger proportion of their income from social transfer payments than did urban citizens. Among the former group, *No MIZ* zones were by far the most likely to rely on social transfer income and was the only population zone to demonstrate an increase between 1996 and 2001 (from 19.3% to 22.0% of total income).

Summary

These indicators reveal the more robust economic conditions of the late 1990s compared to the first portion of this decade, but not all zones reaped the same benefits from this positive economic cycle. Specifically, between 1996 and 2001, Aboriginal-intensive *No MIZ* experienced the greatest decrease in LFP rates and the least significant drop in unemployment rates and was the only geographic zone to exhibit a decreased median income and an increase in reliance on social transfer income. Moreover, the disadvantaged position of these zones appears to be increasing, thus further polarizing the economic distance between *Strong* and *No MIZ* individuals. The dominant story of the economic indicators, therefore, is that the disparities among rural regions are as important (if not more important) as the overall differences between urban and rural Alberta.

B.1 LABOUR MARKET INDICATORS

B.1.1 Labour Force Participation and Unemployment Rates[9]

Strong MIZ zones have the highest labour force participation and lowest unemployment rates in the province and _No MIZ_ zones the lowest labour force participation and highest unemployment rates.

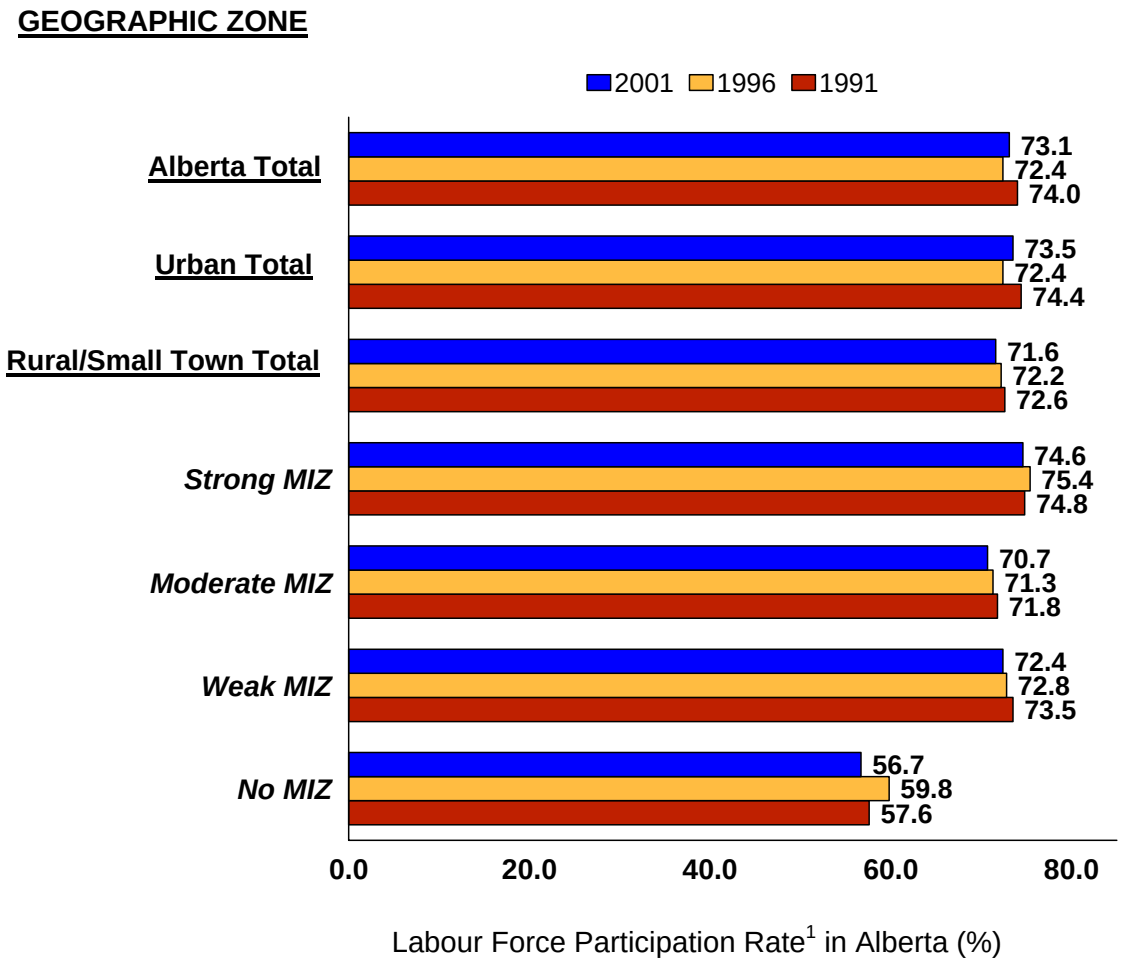
In 2001, the Alberta labour force had 1,696,755 members (Appendix Table 8) for a labour force participation (LFP) rate of 73.1% (Figure 10). Although the urban LFP rate was slightly higher than the rural rate, the differences between the zones was minimal, with one notable exception. In all three census years and in all but one geographic zone, the LFP ranges between 71% and 75%. *No MIZ* zones, however, consistently have a significantly lower rate ranging between 57% and 60%. In contrast, *Strong MIZ* zones exhibit the highest LFP rates in the province in each census year.

The LFP rate for urban regions increased by 1.1 percentage point between 1996 and 2001, although it is still slightly below the 1991 rate of 74.4%. Small decreases, however, are observed for *Strong*, *Moderate*, and *Weak MIZ* zones throughout the 10-year interval. *No MIZ* zones experienced the greatest LFP decrease in the province between 1996 and 2001, of 3.1 percentage points.

Turning to unemployment rates, Figure 11 demonstrates a similar ranking to the LFP labour market indicator between geographic zones of the province (see also Appendix Table 9). Independent of census year, *Strong MIZ* zones have the lowest unemployment rates in the province, while the highest rates are found in *No MIZ* zones. *No MIZ* zones were also the only geographic zones to experience an increase in their unemployment rate from 9.6% in 1991 to 11.3% in 2001, for an increase of 1.7 percentage points. Otherwise, the rate decreased in the remaining zones of the province. In short, Figures 10 and 11 reveal that *Strong MIZ* zones consistently exhibit the most positive labour market characteristics in Alberta, while the *No MIZ* zones are clearly the most disadvantaged with respect to their labour force participation and unemployment rates.

[9] Please note that the data for unemployment and labour force participation refer to one week of each Census year. Potential seasonal fluctuations or random events that affect the data are not considered. However, at this time, no better data source is available.

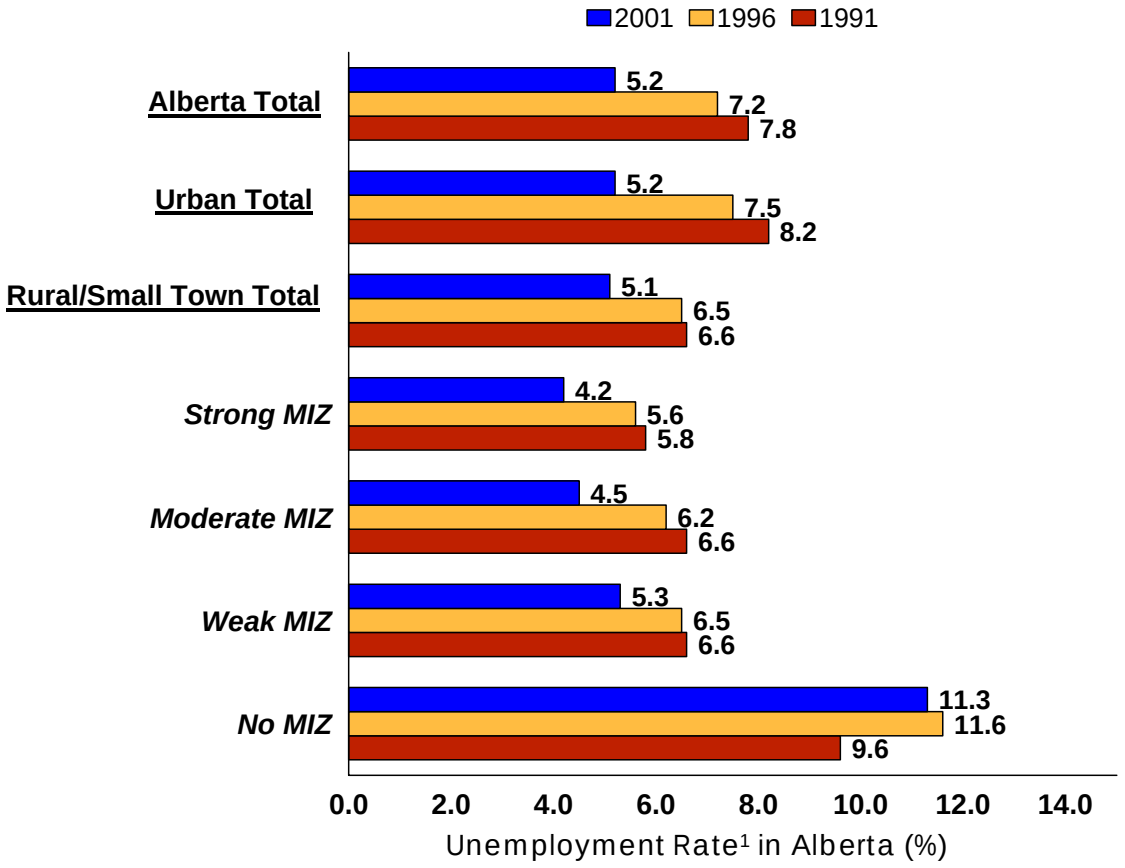
Figure 10: Between 1996 and 2001, *No MIZ* Zones Underwent the Largest Labour Force Participation Rate Decrease in Alberta



Source: Statistics Canada, Census of Population, 2001, 1996, and 1991

[1] The Labour Force Participation Rate is the ratio of individuals who are currently employed or who are out of work (but looking for work) to the total number of individuals in the population who are over the age of 15.

Figure 11: *No MIZ* Zones Have the Highest Unemployment Rates in Alberta



Source: Statistics Canada, Census of Population, 2001, 1996, and 1991

[1] The Unemployment Rate is based on the ratio of individuals who are currently unemployed to those who are in the labour force.

B.1.2 Industry Employment Distribution

Compared to urbanites, rural individuals in all four MIZ regions are significantly more likely to be working in primary industries and less likely to be employed in production services.

The Alberta labour force can be classified by the industry in which people are employed. This is determined by assessing the general nature of the business carried out by the individual's employer. In measuring industry employment, the 1991 and 1996 censuses used the 1980 Standard Industrial Classification (SIC) system, while the 2001

census adopted the North American Industry Classification System (NAICS). Comparisons between the two systems are inappropriate and the differences warrant presenting industry employment separately for 2001 and for 1996 and 1991. Beginning with the NAICS system, Table 4 presents seven broad industry categories for each geographic zone of the province for 2001 only (also see Appendix Table 10).

Primary industry employment (including agriculture, forestry, fishing and hunting, and mining and oil and gas extraction) accounted for 10.1% of employment in all Alberta industries in 2001. Rural and small town regions, however, eclipse urban centres in employment in primary industries by a factor of four (24.2% compared to 5.9%). This high representation in primary industries, moreover, is observed for all four MIZ categories.

We observe much less variation between geographic zones in employment in secondary industries (construction and manufacturing), than for primary industries. But the table reveals that service jobs are more prevalent in urban regions, accounting for more than three-quarters (78%) of all employment here compared to only six in ten jobs in rural and small town Alberta. Employment in production services (e.g. communications, wholesale trade, finance and insurance) is especially lower in rural than in urban regions (19.6% compared to 32.0%). The urban-rural difference in employment in consumer services (e.g., retail trade, accommodation, food and beverage) and the difference in government-provided services (e.g., educational, health and social assistance, and government services) is smaller. The single exception is found within *No MIZ* zones where employment in government services is the highest in the province at 29.5%.

The overall industry patterns across geographic zones observed in Table 4 are very similar to those of 1991 and 1996, as shown in Table 5 (Appendix Table 11). For example, rural and small town Albertans were more likely than their urban counterparts to be employed in both of the two primary industries. The dominance of *No MIZ* employment in government services (27.0% in 1996 compared to 20.9% for the province) is also observed.

All rural zones underwent a reduction in the agricultural, fishing and hunting portion of primary industry employment between 1991 and 1996. Since the majority (71%) of rural primary industry employment is in agriculture, part of the explanation for the decrease in these industries is because of the substitution of machinery for labour in agricultural production (Beshiri, 2001a). Over-time stability in rural mining and oil and gas extraction employment, conversely, resulted from slight increases in employment in these industries within *Strong* and *Weak MIZ* zones, counteracted by decreases in *Moderate* and *No MIZ* zones.

Table 4: Rural Albertans are Much More Likely than Urban Albertans to be Working in Primary Industries

Percent Employed in Each Industry Sector (NAICS)[1], 2001

		Primary Industries		Secondary Industries		Service Industries		
Geographic Zone	Total	Agriculture, Forestry, Fishing & Hunting	Mining and Oil & Gas Extraction	Construction	Manufacturing	Production Services[2]	Consumer Services[3]	Government-Provided Services[4]
Alberta Total	100.0	5.0	5.1	7.7	8.0	29.1	25.0	20.0
Urban Total	100.0	1.3	4.6	7.6	8.5	32.0	25.5	20.5
Rural/Small Town Total	100.0	17.3	6.9	8.2	6.4	19.6	23.1	18.5
Strong MIZ	**100.0**	**14.9**	**6.2**	**9.5**	**7.2**	**23.8**	**22.1**	**16.8**
Moderate MIZ	**100.0**	**21.3**	**5.9**	**8.3**	**6.9**	**19.6**	**20.5**	**17.4**
Weak MIZ	**100.0**	**16.1**	**7.6**	**7.7**	**5.9**	**18.1**	**25.4**	**19.2**
No MIZ	**100.0**	**14.8**	**8.9**	**7.8**	**3.6**	**18.2**	**17.1**	**29.5**

Source: Statistics Canada, Census of Population, 2001

[1] Based on the 1997 North American Industry Classification system (NAICS).

[2] Production Services includes utilities, wholesale trade, transportation and warehousing, information and cultural industries, finance and insurance, real estate and rental and leasing, professional, scientific and technical services, management of companies and enterprises, and administrative and support waste management and remediation services.

[3] Consumer Services includes retail trade, arts, entertainment and recreation, accommodation and food services, and other services.

[4] Government-Provided Services includes educational services, healthcare and social assistance, and public administration.

Table 5: Between 1991 and 1996, Employment in Primary Industries Decreased in Rural Alberta

Percent Employed in Each Industry Sector (SIC)[1], 1996 and 1991

	Primary Industries				Secondary Industries				Service Industries					
Geographic Zone	Agric., Forestry, Fishing, & Hunting		Mining and Oil & Gas Extraction		Construction		Manufacturing		Production Services[2]		Consumer Services[3]		Government-Provided Services[4]	
	1996	1991	1996	1991	1996	1991	1996	1991	1996	1991	1996	1991	1996	1991
Alberta Total	6.5	7.2	5.2	5.7	6.9	7.3	8.3	7.6	24.7	23.2	27.5	25.9	20.9	23.1
Urban Total	1.9	2.0	4.5	5.3	6.8	7.4	9.1	8.3	27.5	25.9	28.7	27.2	21.5	23.8
Rural/Small Town Total	20.6	23.1	6.9	6.8	7.0	6.9	6.0	5.4	16.5	15.0	23.9	21.9	19.1	20.9
Strong MIZ	**20.3**	**22.2**	**5.6**	**5.0**	**8.2**	**8.5**	**6.8**	**6.4**	**19.4**	**17.5**	**22.5**	**21.1**	**17.2**	**19.4**
Moderate MIZ	**25.1**	**26.9**	**5.5**	**6.2**	**7.0**	**6.8**	**6.1**	**5.3**	**16.9**	**13.9**	**20.7**	**19.3**	**18.7**	**21.6**
Weak MIZ	**18.5**	**21.6**	**8.1**	**7.6**	**6.5**	**6.5**	**5.9**	**5.2**	**15.3**	**14.8**	**26.2**	**23.5**	**19.5**	**20.9**
No MIZ	**18.7**	**21.9**	**7.1**	**7.4**	**7.1**	**6.1**	**3.1**	**3.4**	**15.1**	**15.1**	**21.8**	**20.9**	**27.0**	**25.1**

Source: Statistics Canada, Census of Population, 1996 and 1991

[1] Based on the 1980 Standard Industry Classification (SIC) system.

[2] Production Services includes communication and other utilities, wholesale trade, transportation and storage, finance and insurance, real estate operator and insurance agent, and business services.

[3] Consumer Services includes retail trade, accommodation, food and beverage, and other services.

[4] Government-Provided Services includes educational services, health and social assistance, and government service.

A higher proportion of construction jobs in *No* and *Moderate MIZ* zones in 1996 than in 1991 resulted in a marginally higher overall percentage of rural and small town Albertans being employed in this industry by the mid-1990s. Urban Albertans, on the other hand, were less likely to work in construction in 1996 than in 1991 (6.8% compared to 7.4%). Employment in manufacturing industries increased slightly in all but *No MIZ* zones of the province. The increase in manufacturing employment in other rural and small town zones is particularly noteworthy because it implies that these zones are competitive in important value-added industries (Beshiri, 2001b).

Employment in production and consumer services increased in virtually all geographic zones between 1991 and 1996, but a decrease is observed for government-provided services during the same period. The single notable exception to the latter trend is found in *No MIZ* zones which underwent an increase in government-provided services employment from 25.1% in 1991 to 27.0% in 1996.

B.1.3 Self-Employment

Compared to urbanites, rural individuals are two times as likely to be self-employed.

The Alberta labour force can also be analyzed by examining the proportion of self-employed individuals versus those who are considered employees. Self-employment includes operating a business or professional practice, doing freelance or contract work, and farming, fishing and trapping. It also includes operating a direct distributorship selling and distributing goods such as cosmetics (Statistics Canada, 1999a).

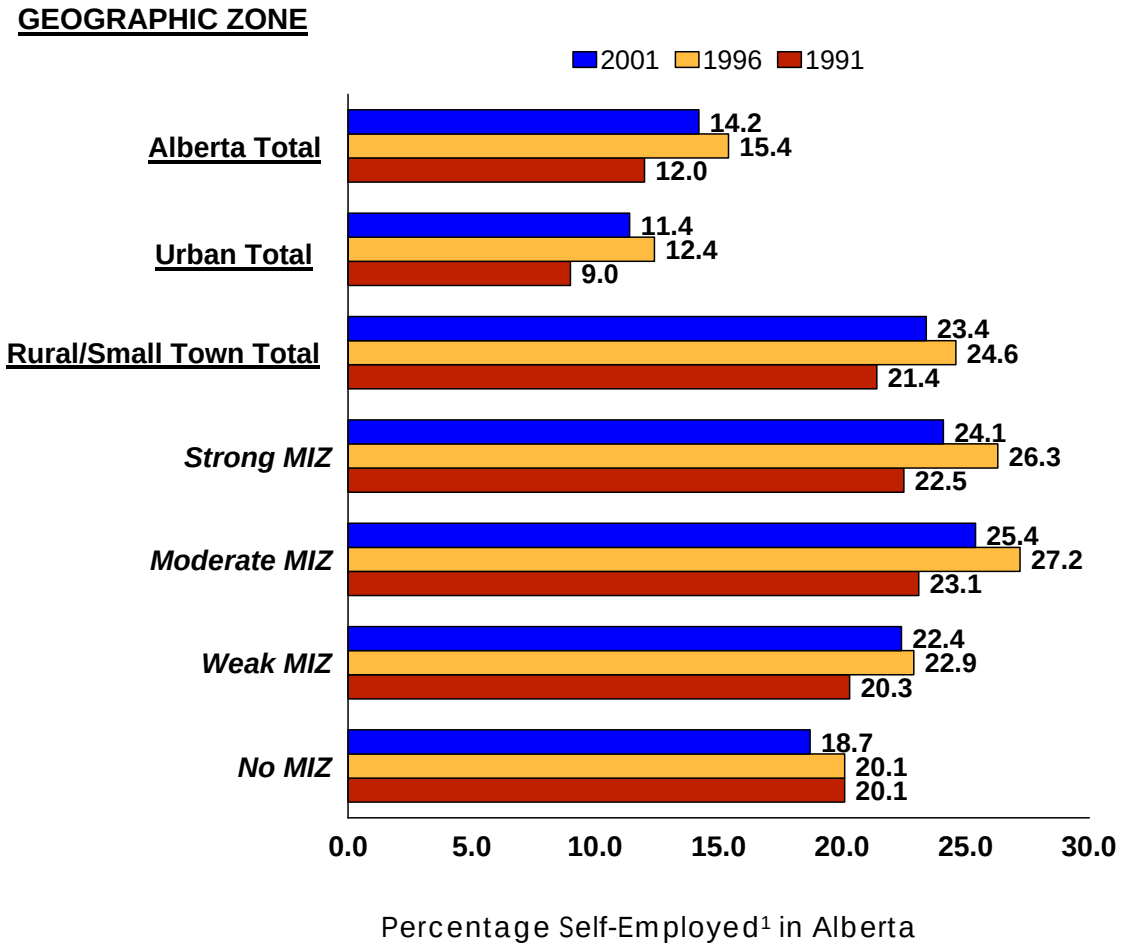
In 2001, 14.2% of the Alberta labour force was self-employed as opposed to working as an employee (Figure 12). Compared to urban citizens, rural and small town Albertans were two times as likely to be self-employed (23.4% compared to 11.4%).

Among rural and small town regions in 2001, *Moderate MIZ* individuals were the most likely to be self-employed (25.4%), which is likely a reflection of the predominance of farming in these zones (21.3%; Table 4), an industry largely comprised of self-employed farmers (du Plessis, 2004). Conversely, *No MIZ* residents were the least likely to be working on a self-employed basis (18.7%) and were the least likely to be working in the agriculture industry (14.8%).

Figure 12 also demonstrates that, in every geographic zone of the province, the 2001 figures are lower than the 1996 data (though, with the exception of *No MIZ* zones, they are still above the earlier 1991 figures). The 1996 to 2001 downward shift in self-

employment most likely indicates increased hiring during this period that, in part, offset the corporate downsizing and therefore the self-employment growth during the earliest years of the 1990s. While the 1991-1996 growth in self-employment and subsequent reduction between 1996 and 2001 can generally be observed across the province, *Strong* and *Moderate MIZ* zones most visibly exemplify this trend.

Figure 12: Self-employment is More Prevalent in Rural Alberta



Source: Statistics Canada, Census of Population, 2001, 1996, and 1991

[1] Self-employment is expressed as a ratio to the total labour force 15 years of age and over. Self-employment includes operating a business or professional practice, doing freelance or contract work, and farming, fishing and trapping. It also includes operating a direct distributorship selling and distributing goods such as cosmetics (Statistics Canada, 1999a).

B.2 INCOME

The incomes of rural Albertans (and especially *No MIZ* residents) are below those of urban residents.
Although social transfer income comprises a larger share of rural incomes, rural regions have a smaller proportion of low-income citizens.

B.2.1 Median Personal Income

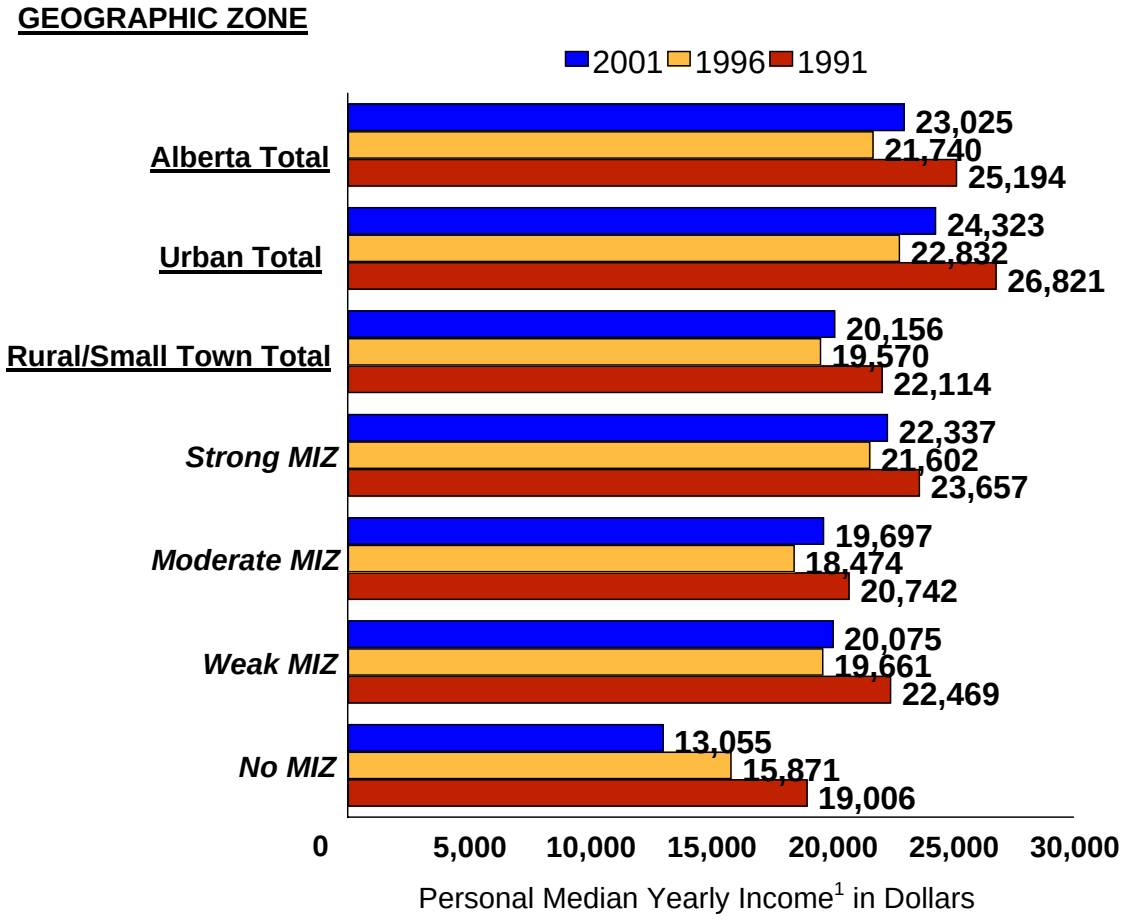
Mean income values are commonly used as an estimate of the economic well-being of the inhabitants of a given area. Median personal income is used in this report since it is a more appropriate measure when making comparisons across time.[10] Unlike mean income values, median measures are not as unduly influenced by extreme values, whether high or low. The 1991 and 1996 annual income figures presented in Figure 13 are adjusted to 2000 real dollars.

In 2001, the provincial median income was just over $23,000, up from the 1996 amount of $21,740, but still not as high as the 1991 figure of $25,194. Once again, this over-time pattern depicts the declining economy in the first half of the 1990s and the economic recovery characterizing the latter years.

Median incomes range considerably across geographic zones of the province, with urban centres averaging higher income values than all four measures of rurality in every census year. The income variation within rural and small town Alberta is, however, greater than between urban and rural Alberta. On average, rural Albertans earned 83% of the incomes of urbanites in 2001. However, within rural and small town Alberta, *No MIZ* residents earned, on average, only 58% of the incomes of individuals residing in *Strong MIZ* zones. Further, while all other zones experienced an income increase between 1996 and 2001, *No MIZ* underwent a decline from $15,871 to $13,055 during the same period. In fact, Aboriginal-intensive No MIZ residents earned, in 2001, only 69 cents for every dollar earned in 1991, while those in each other geographic zone earned at least 90 cents for every 1991 dollar earned. These data suggest growing income disparity between the wealthiest and poorest rural Albertans.

[10] Mean is also commonly known as the average. Median is equivalent to the 50th percentile.

Figure 13: In 2001, the Income of Rural Albertans was 83% of the Income of Urban Albertans



Source: Statistics Canada, Census of Population, 2001, 1996, and 1991

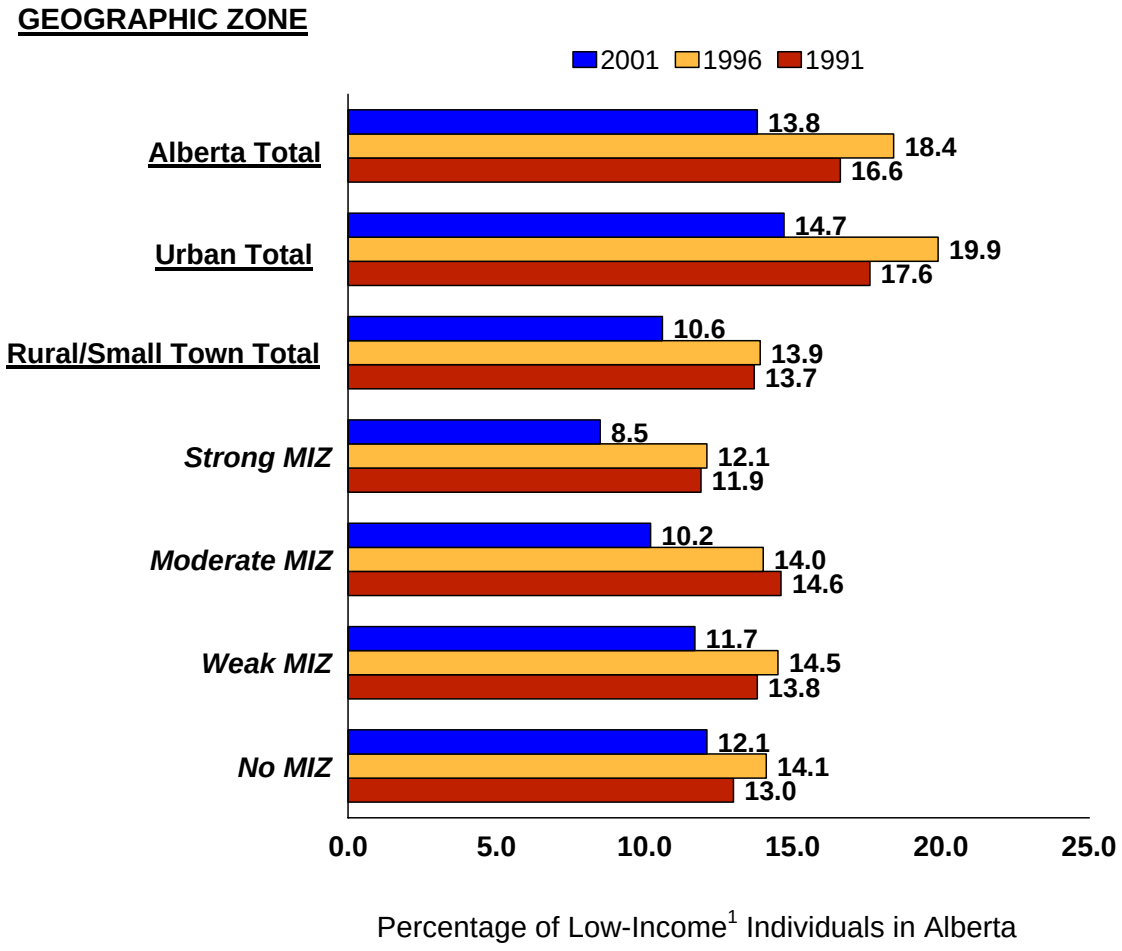
[1] Median income is yearly income for the population aged 15 years and over and is reported in 2000 real dollars.

B.2.2 Incidence of Low Income

Another measure used to illustrate the relative economic well-being of residents within each geographic zone of the province is the share of the population with low incomes (as measured by the percent of the population living in households with incomes below the low-income cut-offs (LICOs)). This indicator refers to the proportion of individuals with incomes below the cost of basic necessities including food, shelter, and clothing. Along with family size, level of urbanization is factored into the estimated costs of necessities for each census individual, thereby determining the low-income cut-off

value. The indicator assumes, quite rightly, that a higher cost of living amount coincides with a higher level of integration with urban centres.[11]

Figure 14: Low-Income Individuals are More Prevalent in Urban Alberta than in Rural Zones of the Province



Source: Statistics Canada, Census of Population, 2001, 1996, and 1991

[1] The incidence of low income is calculated as the number of individuals living in a household with an income below the low-income cut-offs (LICOs) divided by the total number of individuals. The LICO is a level of income where households are judged to be in straitened circumstances, on the basis of the income required to provide food, clothing and shelter.

[11] A few methodological considerations should be noted with the use of LICOs. First, different levels of the LICO are calculated for each family size class and for each urbanization class. The urbanization classes used for the LICO calculation are different than the rural and urban categories used in this report. For our tabulations, a household is assigned to be below LICO based on the original urbanization coding and then we retabulated the data according to our own rural – urban categories. In addition to these concerns, it should be noted that LICOs are, by Statistics Canada's admission, not a measure of poverty. There is also considerable debate about whether LICOs are a valid measurement of low income (see, for example, Webber (1998)).

Perhaps of all the data presented in this report, Figure 14 most clearly illustrates the strengthening Alberta economy in the late 1990s. The proportion of low-income individuals decreased in the entire province between 1996 and 2001 (also see Appendix Table 13). Of even greater significance for the purposes of this report, however, are the lower rates of low income in all rural zones of the province and in every census year in comparison to urban regions.[12] This finding even holds for the most disadvantaged *No MIZ* zone, which, although having the highest proportion of the rural population with incomes below the cost of basic necessities, is still below that of urban Alberta (12.1% compared to 14.7%). These data suggest that though incomes are lower in rural zones of the province, the higher cost of living in urban centres may offset this disadvantage. For example, with the exception of *Strong MIZ* zones, housing values are much higher in urban than in rural regions (see Figure 19).

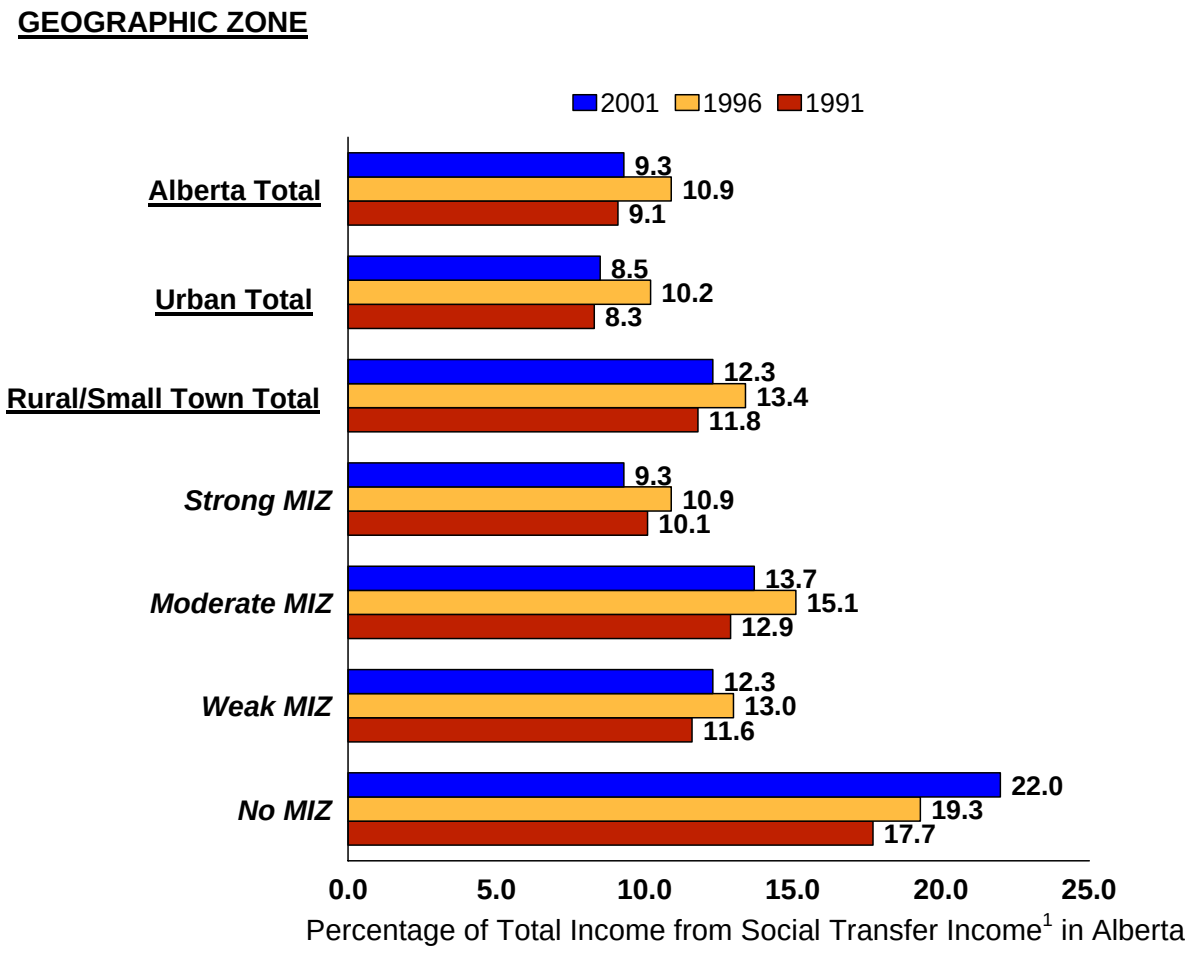
B.2.3 Share of Total Income From Social Transfer Income

We can also gain an indication of the relative economic conditions for each geographic zone of Alberta by examining source of income. If a group of people derives a relatively greater percentage of income from social transfer payments, as opposed to employment income or personal investments, this suggest greater economic dependency for members of that group.

Figure 15 presents the percentage of total income derived from social transfer payments for each geographic zone and for 2001, 1996, and 1991. Most evident is the fact that rural and small town Albertans garnered a larger proportion of their income from government sources than urban Albertans in all three census years. Among the former group, *No MIZ* zones were by far the most likely to rely on social transfer income and were the only zone to undergo an increase between 1996 and 2001(from 19.3% to 22.0%). *Strong MIZ* residents, in contrast, received only a slightly greater proportion of their income from social transfers than urban residents (9.3% compared to 8.5% in 2001).

[12] The fact that households located on Indian reserves are excluded from the LICO designation but are included in the percentage calculations of low income individuals, may in part explain the lower than expected rates of low-income in some rural zones.

Figure 15: Rural Albertans Garner a Larger Share of their Income from Social Transfer Payments than do Urban Albertans



Source: Statistics Canada, Census of Population, 2001, 1996, and 1991

[1] Social transfer income refers to all government transfer payments to individuals including Old Age Security, Canadian/Quebec Pension Plans, Unemployment Insurance and Child Tax Credits and is expressed as a ratio of the amount of government transfer payments to the total average income among the population 15 years and older.

These over-time changes could be due to increasing or decreasing unemployment, old age security, Canadian Pension Plan payments, or child tax credits. The decrease in government financial dependence in most geographic zones is likely a reflection of both decreasing reliance on unemployment insurance because of a reduction in unemployment rates[13] (Figure 11) and decreasing reliance on child tax credits as a

[13] Some of the decrease in social transfer income between 1996 and 2001 may also reflect unemployment policy reform during this period. The federal Bill C-62, which was introduced in 1996, tripled the minimum number of qualifying hours of work to receive benefits and reduced the maximum weeks benefits are provided. In Alberta, the Canadian Labour Congress (2003) estimates that the proportion of unemployed receiving benefits reduced from 36% in 1996 to 29% in 2001.

result of a decrease in the share of the child population (Table 2). The increase observed among *No MIZ* citizens is, no doubt, attributable to the reversed trend; increasing unemployment insurance as a result of increasing unemployment rates and increasing child tax credits as a result of an increasing share of the population that are children.

SUMMARY

All economic indicators reflect the more robust economic conditions of the late 1990s compared to the first portion of this decade. For example, unemployment rates, low income incidence, and social transfer income reliance were all lower in 2001 than in 1996. Throughout this economic indicator analysis, however, a number of distinctions between geographic zones of the province have been highlighted.

We observe a very healthy economy in *Strong MIZ* zones that consistently exhibits a pattern of development and growth. In fact, for some indicators, residents of these zones show a level of economic well-being that surpasses urban regions (i.e., labour force participation and unemployment rates). *Moderate* and *Weak MIZ* zones also display positive signs of economic progress from 1996 to 2001. In contrast, the data for *No MIZ* zones suggest that residents of these zones have not reaped the same benefits from the positive economic cycle as those residing in other parts of the province. *No MIZ* experienced the largest decrease in LFP rates, the smallest drop in unemployment rates, the largest decline in personal median income, and by 2001, continued to have the highest incidence of low income of the rural zones as well as the highest rate of reliance on social transfer income in the province. Not only are *No MIZ* zones by far the most economically disadvantaged geographic zones of the province, but these disadvantages appear to be following an increasing trend, thus further polarizing the economic distance between *Strong* and *No MIZ* individuals in Alberta.

The overall lower economic standing of rural Albertans as a whole, however, should not be overlooked. Despite the more positive economic conditions in rural Alberta in 2001, the economic disparity between the urban and rural population observed in 1996 continued for most 2001 indicators. Labour force participation rates and personal incomes are still lower in rural zones and rural residents continue to garner a larger share of their income from social transfer payments. The data indicated that rural residents are two times as likely to be self-employed than urban Albertans, which likely reflects the predominance of the former group in primary industries.

Nonetheless, the urban/rural differences are not as dramatic as those found among the four rural zones. The dominant story of the economic indicators, therefore, is that the disparities within zones of rural and small town Alberta are as noteworthy (if not more so) as the overall differences between urban and rural Alberta.

C. Education Indicators

KEY FINDINGS

C.1 Educational Attainment

- Not only do rural and small town Albertans have lower levels of education compared to individuals in urban regions, but the educational disparity between the two major regions is increasing.
- The lowest educational attainment is observed in *No MIZ* zones where 46% of the population of at least 20 years of age had not completed high school as recently as 2001.

C.2 Education Providers

- All rural zones have per capita education providers below that of urban regions. Interestingly, *Strong MIZ* zones, which have the highest education levels among the rural population, had the lowest number of teachers and professors per 1,000 residents in the province (14.1) in 2001. The second lowest figure is found in *No MIZ* zones, which had 15.4 educational providers per 1,000 residents in 2001.
- While per capita education providers stabilized in urban regions by 1996, the numbers continued to drop in most rural zones of the province through to 2001.

Summary

The educational findings presented in this section signal a growing urban/rural disparity in terms of educational attainment and perhaps also for access to education. First, the lower levels of high school completion among rural Albertans implies they will have more difficult labour market experiences such as unemployment and lower incomes. Second, the lower per capita education providers in rural regions of the province may influence the education provided in these zones. Third, the trend of decreasing post-secondary educational attainment as MIZ weakens implies a geographical and economic deterrent of access to institutions of higher learning.

C.1 EDUCATIONAL ATTAINMENT

Compared to urbanites, rural residents are less likely to have completed high school and to have earned a university degree.

It is generally accepted that higher educational attainment is associated with higher earnings and an increased level of well-being. As was the case for industry employment, a change to the census in 2001 precludes the ability to directly compare level of education between 2001 and the two earlier census periods.[14] Table 6 presents the highest level of educational attainment achieved by populations in each geographic zone of the province for 2001 and Table 7 presents the same indicator for 1996 and 1991 (also see Appendix Tables 14 and 15).

Beginning with Table 6, in 2001, 26.3% of the provincial adult population had less than a high school education. A higher proportion of rural and small town Albertans than urbanites (35.8% compared to 23.4%) had not attained a high school diploma, with Aboriginal-intensive *No MIZ* residents by far the most highly represented at this lowest level of education (46.3%). Nearly equal proportions of urban and rural and small town residents, however, had earned a high school diploma. Again, however, *No MIZ* residents were the least likely to have reached this level of education (8.9%).

Urban residents eclipse nearly all rural and small town zones in all three post-secondary educational categories. The greatest disparity is found between urban and rural citizens for the highest educational category; as of 2001, 19.1% of urban Albertans had a university degree compared to only 8.7% of those residing in rural zones. The urban/rural difference in those with a post-secondary certificate/diploma is, however, negligible.

Within rural Alberta we see a familiar pattern whereby *Strong MIZ* citizens are the most likely to have attended a post-secondary institution and *No MIZ* residents are the least likely. In fact, those residing in *Strong MIZ* zones are the most likely of all Albertans to have earned a certificate or diploma from a college or technical institute (34.4%). And while *No MIZ* residents are more likely than all other rural zones to be represented in the "some post-secondary" category, they are the least likely of all rural residents to have earned a certificate/diploma (25.8%) or a degree (5.6%).

[14] The data provided for 1991 and 1996 are for individuals aged 15 and over, while the 2001 census data are provided for those 20 years of age and over.

Table 6: Rural Albertans have Lower Levels of Educational Attainment than Urban Albertans

Educational Attainment[1] Percent Distribution, 2001

Geographic Zone	Total	Less Than High School	High School Diploma	Some Post-Secondary	Post-Secondary Cert./Dip.	University Degree
Alberta Total	100.0	26.3	11.4	14.7	31.0	16.7
Urban Total	100.0	23.4	11.1	15.5	31.0	19.1
Rural/Small Town Total	100.0	35.8	12.3	12.1	31.1	8.7
Strong MIZ	**100.0**	**29.9**	**12.7**	**12.9**	**34.4**	**10.1**
Moderate MIZ	**100.0**	**37.5**	**12.1**	**11.6**	**30.9**	**7.9**
Weak MIZ	**100.0**	**36.1**	**12.6**	**11.9**	**30.6**	**8.9**
No MIZ	**100.0**	**46.3**	**8.9**	**13.4**	**25.8**	**5.6**

Source: Statistics Canada, Census of Population, 2001

[1] 2001 educational attainment data are provided for the population 20 years of age and over.

Table 7 presents 1996 and 1991 Census data on educational attainment and depicts the same trends that were observed in 2001: urban Albertans are more likely than rural residents to have attended a post-secondary institution and within rural Alberta, those living in *Strong MIZ* zones have the highest levels of education, while *No MIZ* residents have the lowest. And again, the urban – rural differences are most apparent for university degree holders and least apparent for recipients of post-secondary certificates or diplomas.

As for over-time changes, Table 7 illustrates province-wide increases in educational attainment. In virtually all geographic zones, greater proportions of individuals had attained some post-secondary education in 1996 than in 1991. Stronger increases, however, are observed among urban residents than for rural and small town Albertans. For instance, the proportion of urbanites holding a university degree increased by 1.5%, compared to an increase of just 0.9% within the rural population.

These findings suggest that not only is rural and small town Alberta educationally disadvantaged compared to individuals in urban regions, but also that the educational disparity between the two major regions is increasing. Again, moreover, this disparity is higher in the more rural zones.

Table 7: Between 1991 and 1996, Educational Attainment Increased in all Geographic Zones, But Most Notably in Urban Regions

Educational Attainment[1] Percent Distribution, 1996 and 1991

Geographic Zone	Less Than High School		High School Diploma		Some Post-Secondary		Post-Secondary Cert./Dip.		University Degree	
	1996	1991	1996	1991	1996	1991	1996	1991	1996	1991
Alberta Total	33.5	35.9	11.8	12.8	12.4	12.6	28.9	26.8	13.3	11.9
Urban Total	30.4	32.3	11.8	12.9	13.1	13.5	29.4	27.5	15.3	13.8
Rural/Small Town Total	43.1	46.7	12.0	12.6	10.9	9.9	27.6	24.7	7.0	6.1
Strong MIZ	**37.7**	**41.4**	**12.6**	**13.4**	**10.9**	**10.7**	**30.3**	**27.5**	**8.4**	**7.0**
Moderate MIZ	**44.4**	**47.8**	**11.8**	**11.9**	**10.5**	**9.7**	**26.7**	**24.8**	**6.4**	**5.8**
Weak MIZ	**43.6**	**47.2**	**12.1**	**12.8**	**9.9**	**9.9**	**27.4**	**24.1**	**7.1**	**6.1**
No MIZ	**50.8**	**55.9**	**9.9**	**10.7**	**10.3**	**8.5**	**24.5**	**20.7**	**4.4**	**4.3**

Source: Statistics Canada, Census of Population, 1996 and 1991

[1] 1996 and 1991 educational attainment are for the population 15 years of age and over.

C.2 EDUCATION PROVIDERS

Urban regions have the highest per capita education providers in Alberta, although the figures decreased between 1991 and 2001, as they did in rural Alberta.

There are many factors that might contribute to the quality of education. One practice that permits easily quantifiable comparisons is to examine the number of education providers in the area. This is calculated by determining the number of people who are employed as teachers or professors per 1,000 people.[15] These data are presented in Figure 16 by geographic zone and for 2001, 1996 and 1991 (also see Appendix Table 16).

In 2001, the highest number of education providers is observed in urban centres at 19.6 per 1,000 population. All rural zones have per capita education providers below this figure, but *Weak MIZ* zones most closely approximate the urban data (17.9 per 1,000 population). Interestingly, *Strong MIZ* zones, which have the highest education levels among the rural population (Tables 6 and 7), have the lowest ratio of teachers and professors in the province (14.1 per 1,000 population). The second lowest figure is found in *No MIZ* zones, where there are 15.4 education providers per 1,000 population.

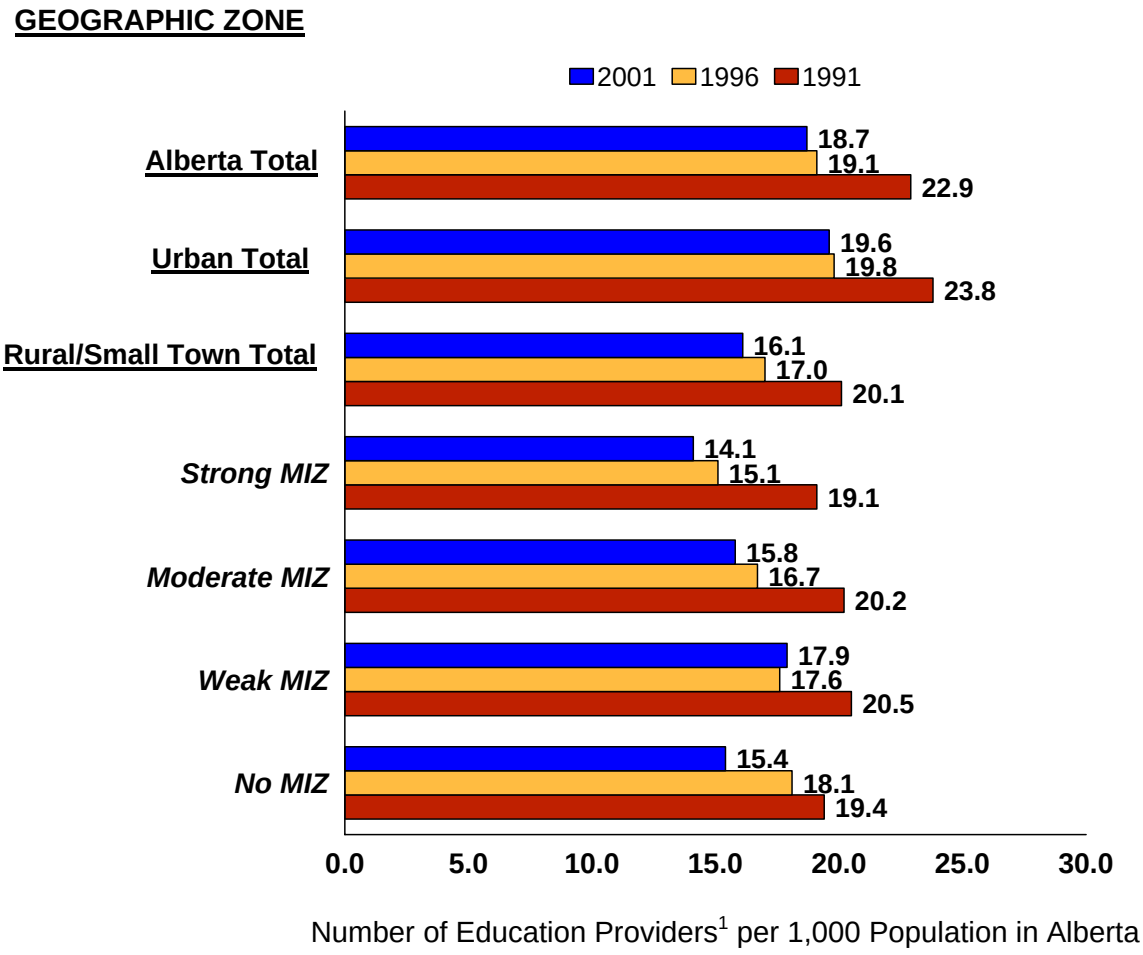
Although the number of education providers per capita decreased in all geographic zones of the province between 1991 and 1996, Figure 16 reveals a mixed pattern between the 1996 and 2001 census years. Urban regions remained stable between 1996 and 2001, but per capita education providers dropped in three of the four MIZ zones within this most recent period. The largest decrease occurred within *No MIZ* zones, which experienced a reduction of 2.7 teachers/professors per 1,000 population. These data add further evidence to the earlier conclusion that the educational disparity between urban and most rural regions is increasing over time. *Weak MIZ* zones, however, are the exception to this pattern, at least in terms of education providers.

Part of the explanation for the urban/rural differences lies in the propensity for post-secondary institutions (and particularly large universities) to be located in cities rather than in rural regions of Alberta. Insofar as the post-secondary system continues to expand in urban zones, therefore, so too will the disparity between the number of professors serving urban as opposed to rural citizens. But since educators are predominantly primary and secondary school teachers, the urban/rural difference is not entirely explained by geography and also must be a function of true educational disparity. While all but *No MIZ* zones experienced a reduction in the proportion of children, the fact remains that rural regions have larger proportions of children than

[15] It should be understood that education providers are designated to the geographic area where they reside and not where they teach. As such, the per capita education providers in each zone may not accurately represent the number of educators serving the population in the zones.

urban regions, suggesting that the teacher component of the education provider indicator should be higher than it is.

Figure 16: Rural Alberta Has Fewer Per Capita Education Providers than Urban Alberta



Source: Statistics Canada, Census of Population, 2001, 1996, and 1991

[1] The number of individuals working in Statistics Canada's occupational classification category of 'teachers or professors' per 1,000 people.

SUMMARY

The educational findings presented in this section signal a growing urban/rural disparity in terms of educational attainment and perhaps also for access to education. This disparity, moreover, explains some of the urban/rural differences found for the economic and labour market indicators presented in Section B. First, the lower levels of high school completion among rural Albertans implies more difficult labour market experiences such as unemployment, long work hours and, of course, lower incomes. This relationship is

borne out with these data, but especially for Aboriginally-intensive *No MIZ* residents who have the lowest levels of high school completion, the highest unemployment rates and the lowest incomes. The economic benefits of providing programs that encourage school attendance and completion such as mentoring, tutoring, peer support, and parental involvement might be further examined.

Second, the lower number of education providers per capita in rural regions of the province suggests this finding be more fully explored since the implications for educational quality are not clear. For example, other educational research in this province shows that class sizes (which are often used as a measure of the quality of education) in rural Alberta are typically lower (Alberta Learning, 2004). These seemingly contradictory findings indicate that the relationship between per capita education providers, class size, and the number of school-age children needs to be investigated further. Still, unlike the Alberta Learning study, which examined rural Alberta as a whole, our findings imply that classroom sizes may vary between MIZ zones. For example, classroom sizes may be, on average, larger in *No MIZ* zones since they have the largest and growing proportion of children combined with one of the lowest, and decreasing, per capita number of teachers and professors.

Third, the trend of decreasing post-secondary educational attainment as metropolitan influence weakens implies a geographical and economic deterrent of access to institutions of higher learning. The educational attainment data presented in this report suggest that for rural residents colleges and technical institutes are more easily accessible than are universities. Previous studies have found that individuals living further away from a university are more likely to attend a non-university post-secondary institution, if they choose to continue their education (Frenette, 2002). It is, therefore, possible that the distance from universities (most of which are housed in urban centres) is a deterrent to attending, whereas it may not have such an influence on attending other educational institutions. Other factors such as family income also influence post-secondary choices. The lower incomes in rural regions likely impose a barrier to attending university, perhaps compelling individuals to choose the typically less expensive route of enrolling in colleges or technical institutes. Further research that examines the implications of increasing access among rural residents to post-secondary institutions, and especially universities, is implied from these findings. Programs aimed at distance-learning or at encouraging further education, through scholarships, for example, may be of value to rural Albertans.

D. Social Indicators

KEY FINDINGS

D.1 Family Structure (Lone-Parent Families)

- In 2001, lone-parent families were more prevalent in urban areas than in rural zones (15.3% compared to 11.5%). The incidence of lone-parent families, however, increases in the more rural zones with *Strong*, *Moderate*, *Weak* and *No MIZ* zones respectively having 9.2%, 10.6%, 11.9% and 21.8% lone parents.

D.2 Housing

- In 2001, *Strong MIZ* individuals were much more likely to be residing in new houses than other residents of Alberta (15.7% compared to the provincial total of 11.2% houses were constructed since 1996).

- Dwelling values are consistently higher in urban than in rural and small town Alberta. Within rural Alberta, dwelling values in *Strong MIZ* zones are similar to urban averages, but they are much lower in *No MIZ* zones.

- The percentage of Alberta households spending significant portions of their income on shelter nearly doubled between 1991 and 1996 (from 8.6% to 15.1%). Between 1996 and 2001 the proportion remained stable in urban regions, but continued to increase within rural Alberta (by 1.9 percentage points).

Summary

The social indicators presented in this section contribute to a recurring finding revealed in this report: although urban-rural differences are apparent, the considerable variation among rural zones should also be considered when creating social policy. The data also suggest that housing indicators are strongly influenced by economic indicators.

D.1 FAMILY STRUCTURE (LONE-PARENT FAMILIES)

In *No MIZ* regions, the proportion of lone-parent families nearly doubled between 1996 and 2001; it now contains double the total rural proportion.

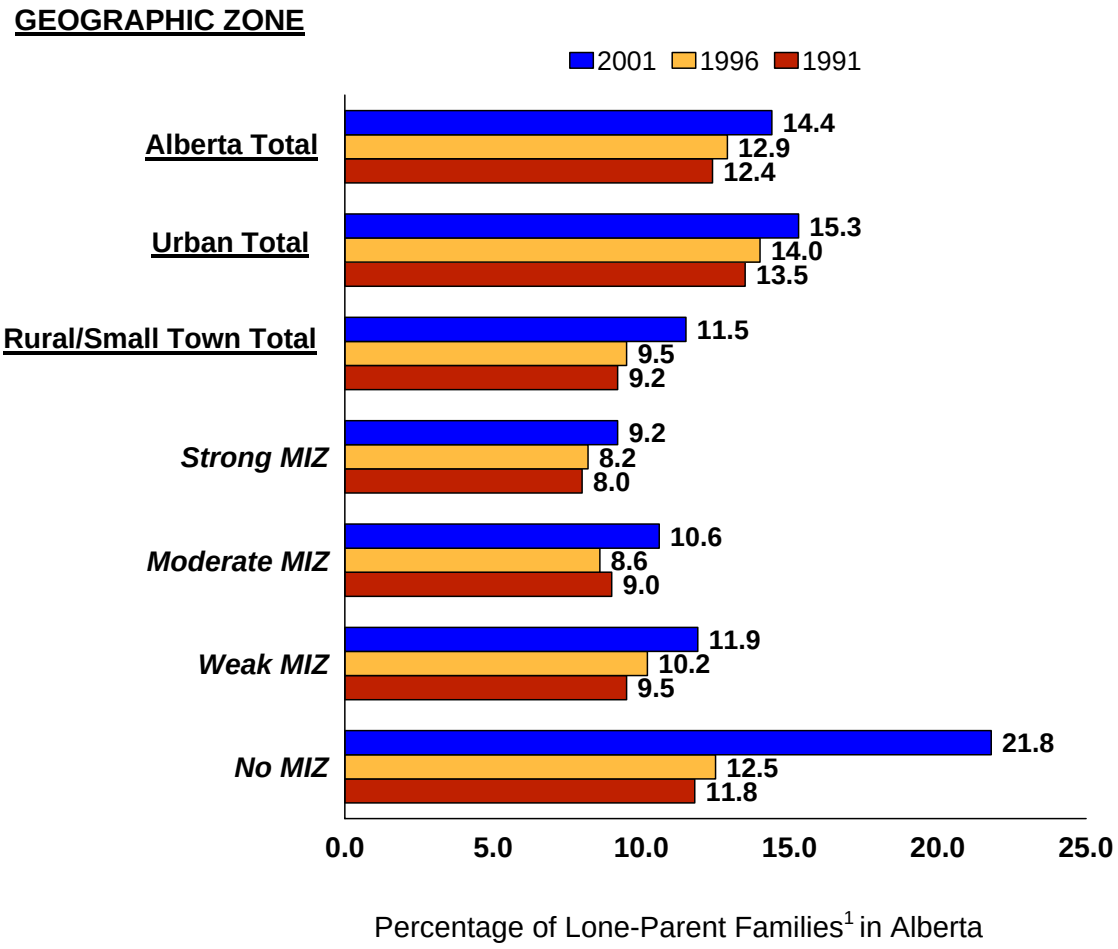
In Canada, as in many countries, family structures have been changing. The frequency of divorce has risen and common-law relationships are increasingly popular (Statistics Canada, 2002). Studies have shown that the growth in lone-parent families has been one of Canada's most significant social trends (Ross *et al.*, 1998). Alberta is no exception to this rising trend although the incidence is slightly lower than for the country as a whole. In 2001, 14.4% of Alberta families were considered lone-parent families compared to 15.7% of Canadian families.

Figure 17 (and Appendix Table 17) reveals that, compared to rural and small town Albertans, lone-parent families are more prevalent in urban centres (15.3% compared to 11.5%). As has been the pattern in so much of the analysis presented in this report, the incidence of lone-parent families increases in the more rural zones with *Strong*, *Moderate*, *Weak* and *No MIZ* zones respectively having 9.2%, 10.6%, 11.9% and 21.8% lone parents.

Over-time increases in lone-parent families are apparent in all geographic zones. The increase within *No MIZ* zones, however, is the most noteworthy; with an increase of 9.3 percentage points between 1996 and 2001, the incidence of single-parent families rose within *No MIZ* zones more than the combined increase of all other Alberta geographic zones. The higher incidence of lone-parent families in *No MIZ* zones may reflect the high rates of this family structure among Aboriginal people living in Canada (26.6%; Corporate Information Management Directorate, 2000). Further, the higher incidence combined with the larger proportion of children in *No MIZ* zones increases the likelihood that single parents in these zones cope with running larger families than elsewhere in the province.[16]

[16] Interestingly, further analysis (not shown) revealed that the proportion of male–headed, lone-parent families is much higher in *No MIZ* zones than in other regions of the province. For example, while only 19% of urban single-parent families are male headed, 26% of *No MIZ* families are run by a single male. In 1996, only 17% of all Canadian single-parent families were headed by a male (Statistics Canada, Census families in private households by family structure, 1991 and 1996 Censuses).

Figure 17: Lone-Parent Families are Most Prevalent in *No MIZ* Zones of Alberta



Source: Statistics Canada, Census of Population, 2001, 1996, and 1991

[1] A change to the measurement of lone-parent families in 2001 marginally inflates the percentage in this year.

D.2 HOUSING

***Strong MIZ* zones have the newest, the second most expensive, and the least affordable houses in Alberta.**

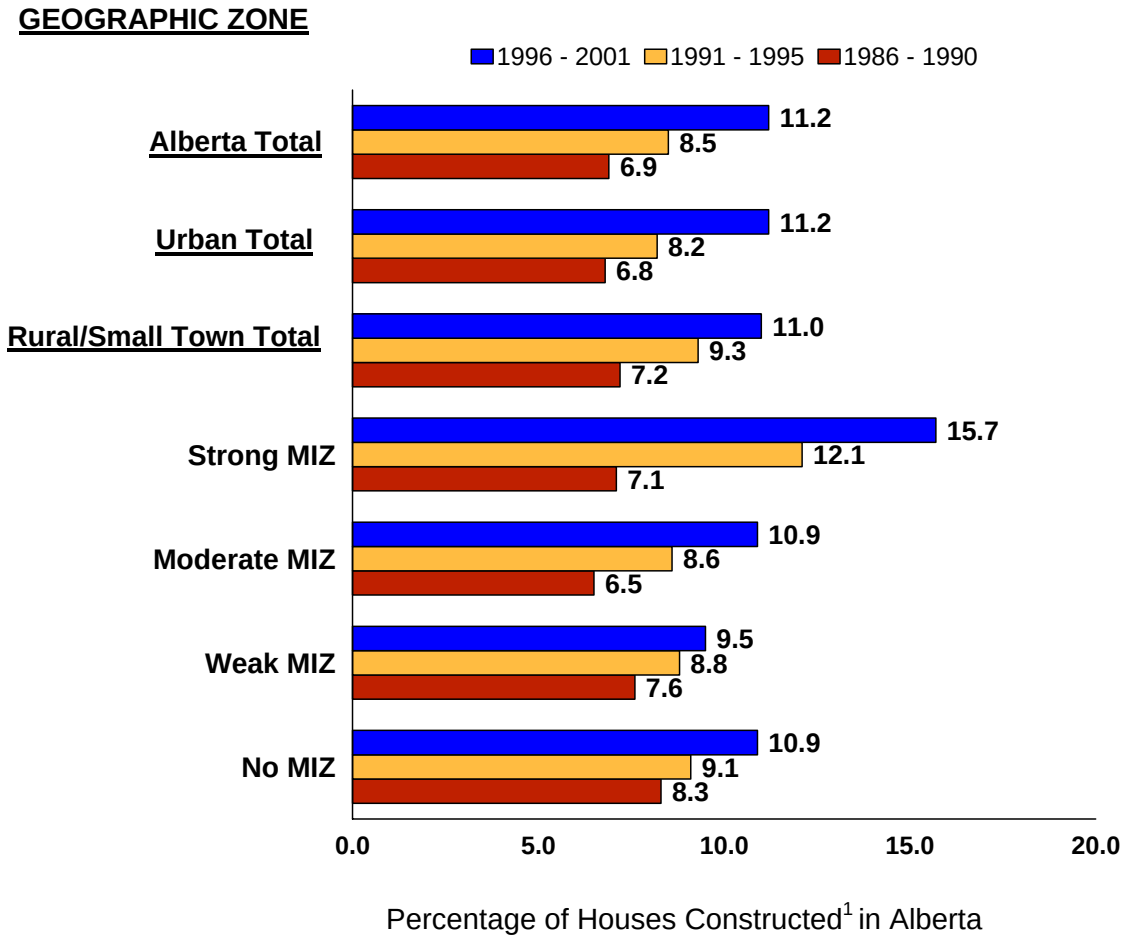
D.2.1 Recent Housing Construction

The period of housing construction provides an indication of economic and population growth in the various geographic zones of Alberta. The greater the percentage of houses constructed more recently in a region, the greater the likelihood that communities in those zones have experienced economic and population growth. Figure 18 presents the percentage of houses constructed between 1996 and 2001, 1991 and 1995, and 1986 and 1990 for each geographic zone (see also Appendix Table 18).

Provincially, 11.2% of dwellings were constructed between 1996 and 2001 (compared to the nation-wide figure of 7.1%). This is about the same rate of construction observed for urban centres and for *Moderate*, *Weak*, and *No MIZ* zones. *Strong MIZ* zones, however, experienced more construction with 15.7% of houses built between 1996 and 2001. Hence, homes in *Strong MIZ* zones are slightly newer than in other regions of the province. These findings correspond with the larger-than-average population growth of 12.7% between 1996 and 2001 for *Strong MIZ* zones (Figure 3). With *No MIZ* zones experiencing the greatest proportional population increase in the province between 1996 and 2001 of 17.9%, however, we would expect a corresponding higher level of housing construction in these zones. Since this is not the case, these data suggest that the average number of persons in each household has increased within *No MIZ* zones during this period.

Another important observation to make from Figure 18 is the greater proportion of houses constructed in the most recent inter-census period than previously. Again, these data demonstrate the recent strengthening economic climate in Alberta and again we see that not all residents benefited equally from this positive cycle. Though a larger proportion of houses were constructed in the most recent inter-census period in both *Weak* and *No MIZ* zones, the difference between this and earlier periods is not nearly as great as it is in other geographic zones of Alberta. New housing construction increased by only 2.6 percentage points in *No MIZ* zones between 1986–1990 and 1996–2001 and by 1.9 points in *Weak MIZ* zones, whereas the increase observed between the two inter-census periods is 8.6 points for *Strong MIZ* zones.

Figure 18: *Strong MIZ* Zones had the Largest Percentage of their Houses Constructed Between 1991 and 2001



Source: Statistics Canada, Census of Population, 2001, 1996, and 1991

[1] Expressed as a percentage of the total number of occupied private dwellings.

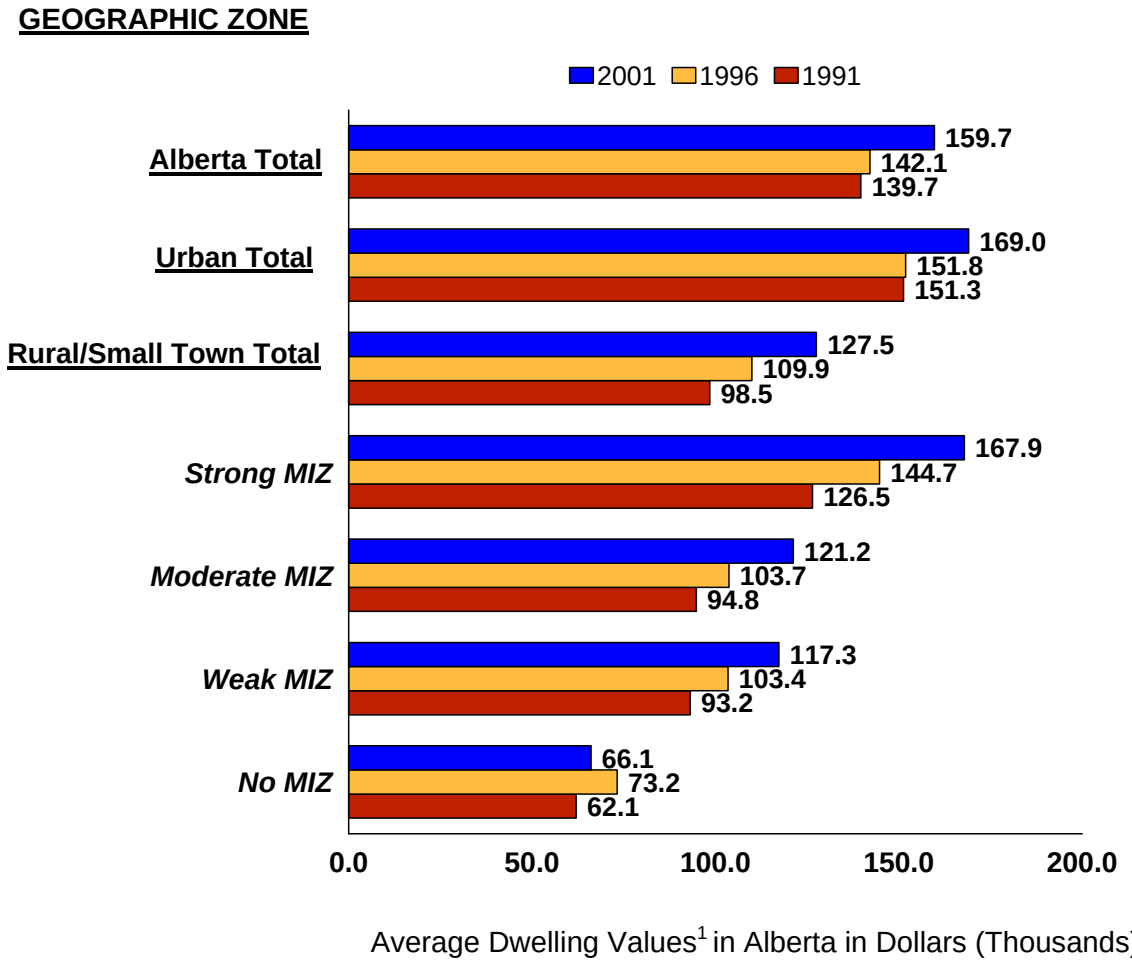
D.2.2 Average Dwelling (Housing) Values

Dwelling cost is a relevant indicator of prosperity and may illustrate the ability of a family or individual to purchase 'big-ticket' items.

As indicated in Figure 19, the average dwelling value in Alberta in 2001 was close to $160,000. Urban housing is valued, on average, $41,500 higher than rural housing. Yet again, considerable variation exists among the four MIZ categories. Housing costs in *Strong MIZ* zones were marginally below urban costs at $167,900, *Moderate* and *Weak MIZ* averaged just over $121,000 and $117,000, respectively, while the *No MIZ* average cost for housing was much lower at $66,100. Hence, with the exception of *Strong MIZ*

zones where housing values are comparable to those of urban centres, the average value in rural regions is substantially lower.

Figure 19: Dwelling (Housing) Values are Highest in Urban Regions and *Strong MIZ* Zones



Source: Statistics Canada, Census of Population, 2001, 1996, and 1991

[1] Average dwelling (housing) values are for owner-occupied non-farm, non-reserve dwellings and are reported in 2001 real dollars.

Figure 19 also reveals increasing housing values throughout the province between 1991 and 2001, but inconsistently so. Urban housing values increased by 12 percentage points during this period, while, on average, rural and small town housing values increased by 29 percentage points. Within rural Alberta, the percentage increase in housing values declines with rurality during this 10-year period: *Strong MIZ* housing increased by 33 percent, *Moderate MIZ* housing by 28 percent, *Weak MIZ* housing by 26 percent, and *No MIZ* housing by just 6 percent.

D.2.3 Dwelling (Housing) Affordability

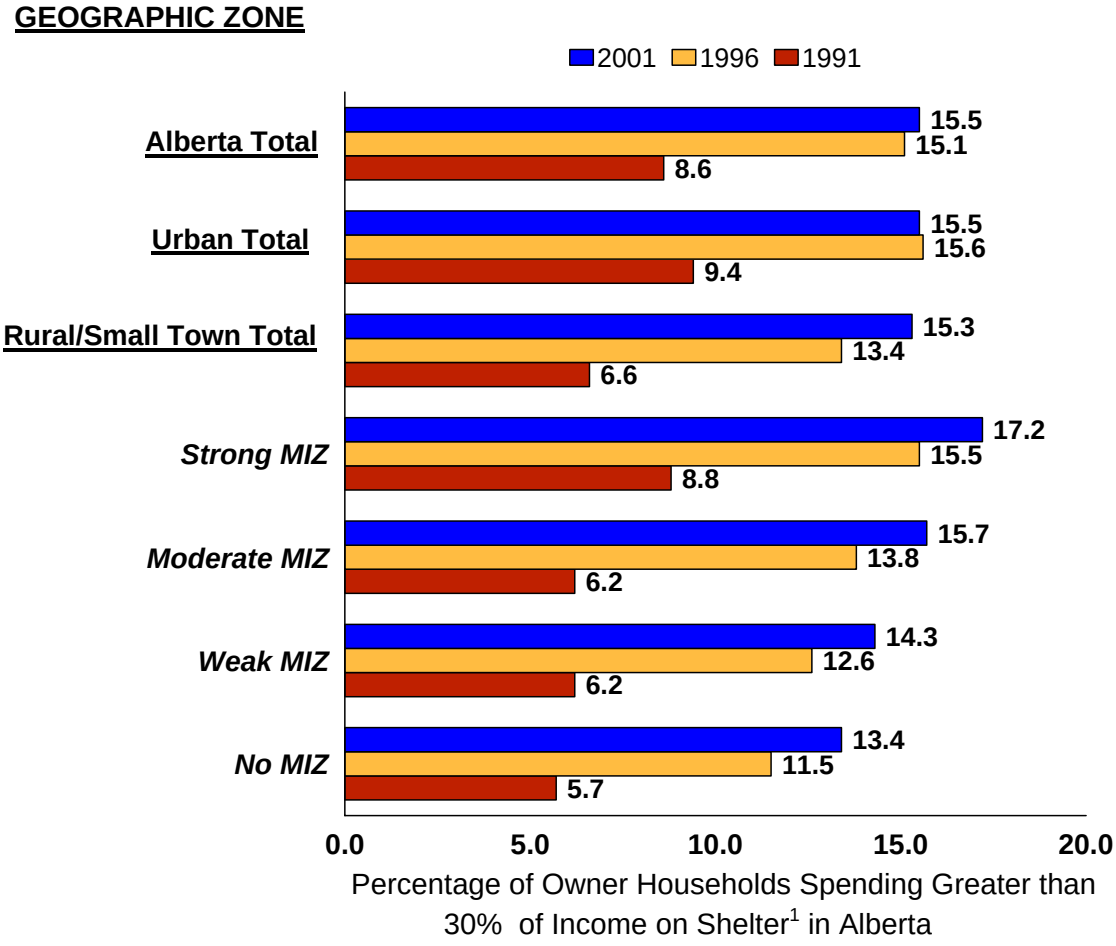
The proportion of household owners spending greater than 30% of their income on shelter costs is generally accepted to be an indicator of housing affordability. Figure 20 highlights the proportion of Alberta household owners in each geographic zone spending more than 30% of their income on shelter costs (also see Appendix Table 19).

In 2001,15.5% of household owners in the province exceeded this 30% spending cutoff. An equal proportion of urban and rural residents spent this amount on housing, but greater variation exists within rural zones. *Strong MIZ* zones, which have the highest housing values in the province (Figure 19), were the most likely of all geographic zones to spend more than 30 percent of their income on shelter (17.2%). *No MIZ* zones, with the lowest housing values, were the least likely (13.4%) to exceed the 30% spending limit.

Between 1991 and 1996, the percentage of Alberta households spending significant portions of their income on shelter increased significantly in both urban and rural Alberta (by 6.2 and 6.8 percentage points, respectively). But between 1996 and 2001, the proportion remained stable in urban regions whereas it continued to increase within rural Alberta (by 1.9 percentage points). These results correspond to the larger over-time housing value increases in rural Alberta and indicate that shelter is becoming less affordable for rural Albertans.

Of final interest is the observation that average housing values in *No MIZ* zones do not correspond with their affordability in the same way as they do for other geographic zones. Despite having lower housing values in 2001 than in 1996 (Figure 19), smaller proportions of *No MIZ* residents are able to afford their housing (Figure 20).

Figure 20: In 2001, Urban and Rural Albertans were Equally Likely to Spend More Than 30% of Their Income on Shelter



Source: Statistics Canada, Census of Population, 2001, 1996, and 1991

[1] Refers to total household income which is spent on shelter costs for owners only (not renters) and refers to payments for electricity, fuel, water, municipal services, mortgage payments, property taxes and condominium fees.

SUMMARY

The social indicators presented in this section contribute to a recurring story line revealed in this report: although urban-rural differences are apparent, considerable variation among rural regions should also be considered when creating social policy.

For instance, the percentage of lone-parent families is generally higher in urban regions than in rural settings, however, in zones with higher metropolitan influence, the incidence is relatively low. In contrast, in 2001, the percentage of lone-parent families in zones that

experience no metropolitan influence is much higher than that observed in cities (21.8% in *No MIZ* zones versus 15.3% in urban Alberta).

Research suggests that the growing trend of lone-parent families is of significance . For example, the National Longitudinal Survey of Children and Youth (Ross *et al*., 1998) found that when measuring behavioural outcomes such as emotional disorders and aggression, children in lone-parent family situations fared relatively poorly, compared to the general population of children. In addition, the parents in these situations may experience further barriers when raising children, including an increased likelihood of poverty. This economic factor may be just as instrumental in the development patterns of children as is their family situation (Ross *et al.*, 1998). Therefore, programs designed to mediate these effects are advisable. Possible examples include childcare support or subsidies, and financial support for low-income single parents. It is also essential that early intervention is emphasized, as poor performance in social and academic arenas is not likely to resolve itself with age, and may, in fact, worsen (Ross *et al*., 1998). These recommendations are especially pertinent to *No MIZ* zones where we see increasing rates of lone-parent families combined with decreasing income.

The housing situation for rural Albertans is more complex but also demonstrates rural variability: in the more rural zones, the small drop in housing affordability does not correspond with the much larger drop in housing prices. For example, *No MIZ* residents have average housing values that are less than half the value for *Strong MIZ* residents, but only 3.8% fewer of *No MIZ* residents are above the shelter spending cutoff limit. This, combined with the over-time increase in those exceeding the 30% cut off, suggests that incomes in some rural zones have not sufficiently increased to offset increasing housing prices. However, with the greatest proportion of new houses and the mix of high housing values and housing that is just slightly less affordable than urban housing, *Strong MIZ* residents are actually in the best position provincially. On the whole, it appears that housing indicators in rural Alberta are strongly influenced by the pattern of greater labour market and economic advantage demonstrated by *Strong MIZ* zones and the disadvantages evident among residents of *No MIZ* zones.

E. Health Care Indicators

KEY FINDINGS

E.1 Health Care Providers

- *No MIZ* zones have by far the lowest ratio of health care providers in the province (13.9 per 1,000 population) in 2001 and were the only geographic zone to experience a decrease between 1996 and 2001 (of 1.0 providers per 1,000 population).

- The gap in the number of health care providers per 1,000 inhabitants between rural and urban Alberta increased from 5.5 in 1996 to 7.0 providers in 2001.

- Rural regions are also disadvantaged with respect to their access to professional health care providers (e.g. physicians) and must rely more upon the services offered by RN's and other health care individuals.

Summary

The results suggest a health care disadvantage for rural and small town citizens of Alberta (and particularly for *No MIZ* zones). The ability of rural residents to access health care is further exacerbated by the greater distance needed to travel to services and specialists that are typically located in urban zones. Access to adequate health care among the growing Aboriginal population residing in *No MIZ* zones of the province is of particular concern.

E.1 HEALTH CARE PROVIDERS

Rural Alberta has fewer per capita health care providers than urban regions of the province.

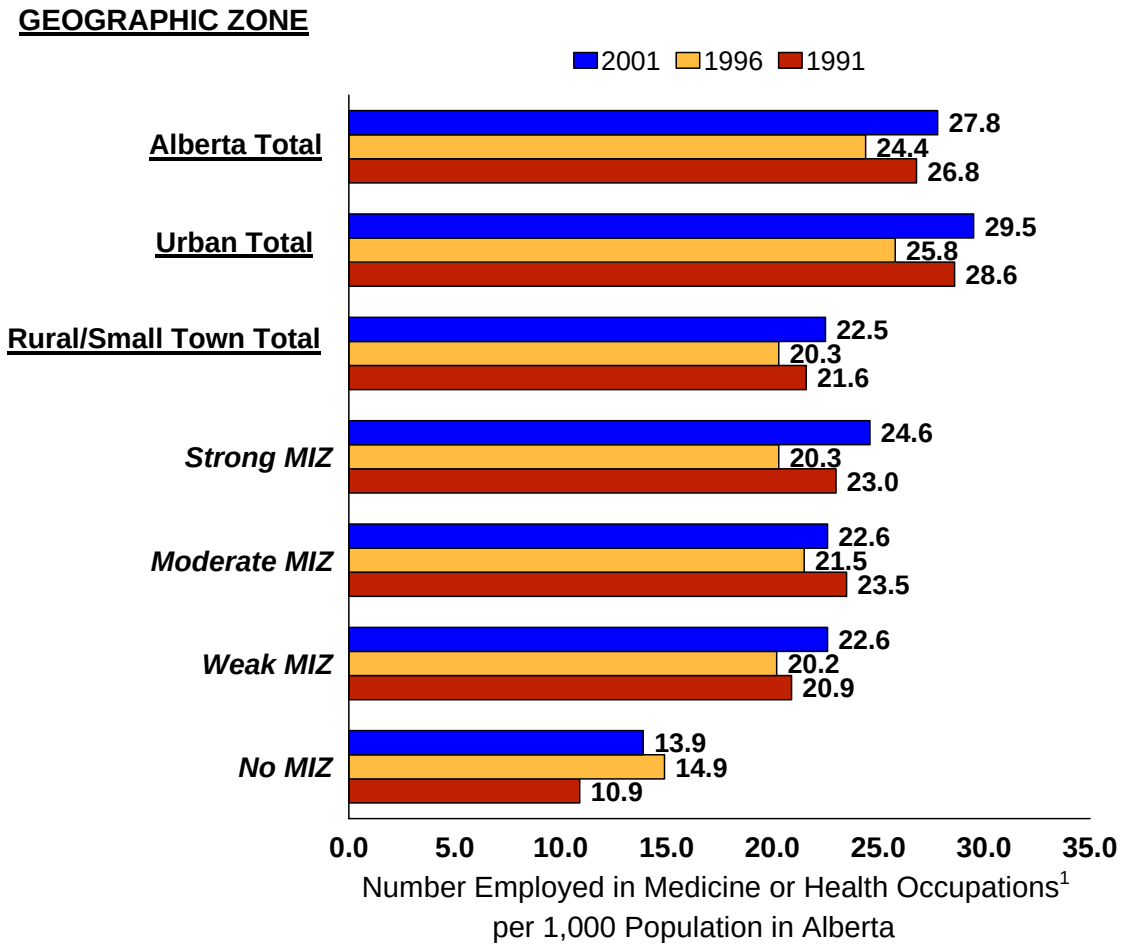
Access to health services is a concern to all Albertans and especially to those residing outside urban regions. One measure of access to health care is the number of health care providers per capita in a given area. In this instance, the number of health providers per 1,000 people is used to illustrate accessibility to health services. [17]

As demonstrated in Figure 21, in 2001, the number of health care providers in urban centres was considerably higher than in rural regions (29.5 compared to 22.5) (see also Appendix Table 20). Among non-urban regions, the highest ratio of health care providers is in *Strong MIZ* zones (24.6 per 1,000 population), followed by *Moderate and Weak MIZ* zones (both at 22.6). *No MIZ* zones had, by far, the smallest ratio of health care providers (13.9 per 1,000 population).

With the exception of *No MIZ*, all geographic zones of the province experienced an increase in health care providers between 1996 and 2001, thereby recouping some of the loss that occurred in the 1991-1996 inter-census period. Urban and *Strong MIZ* zones, however, were the most likely to have their per capita health care providers increased during the late1990s and into 2000. Interestingly, the urban/rural difference in per capita health care providers is greater in 2001 than it was in 1996 (a difference of 7.0 providers per 1,000 population in 2001 versus 5.5 in 1996). These findings suggest that a disproportional redeployment of health care providers occurred between 1996 and 2001 between urban and rural regions of the province. This unequal redistribution of health care providers is also evident within rural geographic zones. Once again, *Strong MIZ* zones were the most likely to benefit from the growth in health care providers and *No MIZ* zones the least likely. In 2001, the *Strong*/*No MIZ* difference is 10.7 health providers per 1,000 population compared to a difference of 5.4 providers in 1996. Hence, the disparity in health care access within non-urban Alberta has increased as well.

[17] It should be understood that health care providers are designated to the geographic area where they reside and not where they work. As such, the per capita health care providers in each zone may not accurately represent the number of providers serving the population of that zone.

Figure 21: Per Capita Health Care Providers is Lower in Rural than in Urban Alberta



Source: Statistics Canada, Census of Population, 2001, 1996, and 1991

[1] The number of individuals working in Statistics Canada's occupational classification category of 'health occupations' per 1,000 people.

Table 8 presents a more detailed picture of the type of health care providers per 1,000 population for each geographic zone and for the 2001 and 1996 censuses only (see also Appendix Table 21).[18]

Compared to urban regions, rural and small town regions of Alberta have somewhat fewer health care providers working in professional occupations such as physicians (6.8 versus 3.6). As we move across the table, the rural disadvantage is still apparent in 2001, but is not as striking. The urban/rural difference in RN supervisors/RNs and technical

[18] Detailed occupational information on health care providers is not available for 1991.

providers is 1.9 and 1.7 per 1,000 population, respectively, and only 0.1 for assisting occupations.

Table 8: Per Capita Professional Health Care Providers is Lower in Rural than Urban Alberta

Number Employed in Health Occupational Categories per 1,000 People, 2001 and 1996

	Professional Occupations		RN Supervisors & RNs		Technical & Related Occupations		Assisting Occupations in Support of Health	
Geographic Zone	**2001**	**1996**	**2001**	**1996**	**2001**	**1996**	**2001**	**1996**
Alberta Total	6.0	5.2	7.7	8.0	7.2	6.2	6.9	5.0
Urban Total	6.8	5.9	8.2	8.4	7.6	6.6	6.9	5.0
Rural and Small Town Total	3.6	3.4	6.3	6.8	5.9	4.9	6.8	5.1
Strong MIZ	**4.1**	**3.8**	**7.0**	**7.6**	**6.6**	**4.5**	**6.8**	**4.4**
Moderate MIZ	**2.9**	**3.1**	**6.6**	**7.2**	**6.2**	**4.9**	**6.8**	**6.3**
Weak MIZ	**4.0**	**3.7**	**6.0**	**6.5**	**5.7**	**5.1**	**6.9**	**4.9**
No MIZ	**1.4**	**1.0**	**3.8**	**5.9**	**3.8**	**5.4**	**5.3**	**2.5**

Source: Statistics Canada, Census of Population, 2001 and 1996

As we move down Table 8, it is also clear that the health care accessibility disadvantage usually increases as metropolitan influence decreases. For example, *Strong MIZ* zones have the highest per capita workers in virtually all occupational categories and *No MIZ* have by far the lowest number. But again, the differences within rural regions reduce as we move across the table. These findings suggest that rural residents, and especially those residing in *No MIZ* zones, must rely more frequently on lower occupational levels of providers to meet their health care needs.

As for over-time trends, all but RN supervisors and RNs increased in most geographic zones. The greatest per capita reduction of RN supervisors / RNs occurred within *No MIZ* zones (2.1 per 1,000 population). This health care occupational loss was offset by a similar increase in per capita assisting health care workers (2.8 per 1,000 population).

SUMMARY

The results from Figure 21 and Table 8 suggest a health care disadvantage for rural and small town citizens of Alberta. Not only do rural regions have fewer health care providers per capita, they also have a greater distance to travel to access services and specialists located in urban regions. This further limits the ability of residents of rural Alberta to access needed health care services. These concerns are especially problematic for *No MIZ* residents who have the lowest number of health care providers per capita and are likely (but not always) required to travel the furthest distance to access health care services. In 2001, residents of *No MIZ* zones had 13.9 health care providers per 1,000 people, only 1.4 of whom were health care professionals such as doctors. Such a low number of per capita doctors may put a strain on those who choose to practice in these geographic zones. This is especially the case when one considers that the majority (over 80%) of consultations with health care providers are with physicians (Statistics Canada, 1999b). There may also be an extra burden placed on other health care providers such as RNs who, no doubt, are relied upon to fulfill the health care needs of rural residents more than urban RNs. Although the relatively low number of doctors per capita holds true for all MIZ zones, there is a slightly higher ratio in zones that experience greater metropolitan influence, perhaps reducing the burden on these physicians somewhat. Furthermore, rural residents living near urban centres may well be accessing health care service there. Still, the findings suggest further investigation would be required to fully understand the urban/rural disparity in health care providers.

Other aspects of health care must also be considered. For instance, the larger proportion of seniors in rural zones places greater demand on home care services such as personal care, housework, and meal preparation, all of which play into the wellness of the elderly. Use of these services, however, is influenced by other factors. Individuals with low incomes and education levels, for example, are more likely to use home care services (Statistics Canada, 1999b). Both of these characteristics are found most predominantly in *No MIZ* zones. Hence, supporting home care programs may be a viable way to promote health and decrease health care costs by delaying or avoiding institutionalization. However, care must be taken to not unduly burden informal caregivers who may lack support because of the isolation of their rural communities.

The wellness of the Aboriginal population should also not be overlooked. Though Aboriginal people are more likely to reside in urban regions of the province, their higher proportional representation in rural zones is an important consideration when assessing health care. This is especially the case in *No MIZ* zones, where, as shown in Figures 8 and 9, Aboriginal people comprise a large and growing proportion of the population.

It is becoming increasingly apparent that the health of Aboriginal Canadians is well below that of other citizens. Aboriginal people have higher rates of chronic conditions such as diabetes, cardiovascular disease and cancer, and are more likely to be exposed to infectious diseases such as hepatitis, meningitis, and HIV/AIDS, to name a few (Kinnon, 2002). The distance required to access health care may limit the ability of Aboriginal people in many rural communities to access needed health care services. Access to adequate health care among the Aboriginal population residing in rural regions of the province is therefore worthy of further investigation.

F. Conclusions

Although the rural and small town share of the total Alberta population is decreasing slightly, rural population growth continues, with *Strong* and *No MIZ* zones exhibiting the greatest proportional growth in the past decade. Positive economic conditions in *Strong MIZ* zones likely explain the attraction to these zones and a growing Aboriginal identity population in the least population *No MIZ* zones, no doubt, underlies the population increase in these communities of the province in addition to the younger average age of residents in these zones.

The report further demonstrates that the economic, educational, social and health care advantages typifying Alberta's urban centres are not equally apparent in all rural zones. These advantages, furthermore, have escalated between 1996 and 2001, but not equally so across all rural zones. *Strong MIZ* zones have reaped the same (and, by some measures, even more) benefits from a positive economic cycle as those residing in urban centres and *Moderate* and *Weak MIZ* zones display some positive signs of economic progress. The economic and educational disadvantages found in *No MIZ* zones, however, are not only apparent, but they are increasing relative to the rest of the province. In short, the economic, educational, social, and health care disparities between the most rural and the least rural parts of Alberta are growing.

The conclusion that *No MIZ* zones are the most disadvantaged of geographic regions is an important one, but we have no indication of the source of this outcome. It is well documented that Aboriginal populations endure a high level of disadvantage no matter where they reside. In the case of *No MIZ* zones, lack of metropolitan influence is confounded with a high proportion of Aboriginal people. Further research into this issue, therefore, would help clarify our understanding of rural conditions in Alberta.

An important objective of this document is to provide information that will inform policy makers with respect to the economic and social conditions found in rural Alberta. Some of these policy implications have been noted throughout the report. Perhaps the single most important implication of this analysis, however, is that decision makers should recognize the range of conditions across the four MIZ zones of the province when drafting policy and implementing programs. The MIZ classification system consistently demonstrates that resources and support are increasingly needed as economic and social integration with urban communities decreases. Being the least integrated with urban centres, *No MIZ* zones are in a relative position of greater need in terms of supporting policy and programs than are their more integrated *Strong MIZ* counterparts.

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APPENDIX

SUPPLEMENTARY TABLES

This Appendix contains the numbers used to calculate the data presented in the charts and tables in the text. The numbers are reported within each geographic zone for each of the census years -- 1991, 1996 and 2001. In some cases, census subdivisions (CSDs) (incorporated towns and municipalities) were classified to a different MIZ zone in one census, compared to another census. Thus, in the text, we calculated the proportion of individuals within each MIZ zone with a particular characteristic, such as the unemployment rate. In the text, we did not calculate the change in the number of unemployed within a MIZ zone over time. Readers should be cautioned that such a calculation, using the data provided here, would need to include two components: (a) the actual change in the number of unemployed individuals; AND (b) the change in the number of unemployed individuals in a zone that was due to a CSD being reclassified into this zone or being reclassified out of this zone. The calculation of population change removes the impact from reclassification by using "constant boundaries" for the 1991 to 1996 calculation of population change and for the 1996 to 2001 calculation of population change.

Appendix Table 1: Population[1] and Population Percentage Change in Alberta by Geographic Zone; 1996 to 2001 and 1991 to 1996

Geographic Zone	1996 Population (2001 Boundaries)	2001 Population (2001 Boundaries)	% Change (1996 – 2001)	1991 Population (1996 Boundaries)	1996 Population (1996 Boundaries)	% Change (1991 – 1996)
Alberta Total	2,696,826	2,974,807	**10.3**	2,545,553	2,696,826	**5.9**
Urban Total	2,004,641	2,244,336	**12.0**	1,901,066	2,002,352	**5.3**
Rural/Small Town Total	692,185	730,471	**5.5**	644,487	694,474	**7.8**
Strong MIZ	**118,425**	**133,432**	**12.7**	**103,035**	**115,974**	**12.6**
Moderate MIZ	**190,335**	**201,612**	**5.9**	**158,227**	**169,300**	**7.0**
Weak MIZ	**352,527**	**358,995**	**1.8**	**356,885**	**377,669**	**5.8**
No MIZ	**30,898**	**36,432**	**17.9**	**26,340**	**31,531**	**19.7**

Source: Statistics Canada, Census of Population, 2001, 1996, and 1991

[1] Population figures for urban and rural do not add up to the provincial total because data are suppressed if there are fewer than 40 residents in any Canadian Census Subdivision.

Appendix Table 2: Population Percent Distribution in Canada
by Province / Territory and Geographic Zone; 2001, 1996, and 1991

Percent

	2001	1996	1991
Canada	100.0	100.0	100.0
Urban Total	79.4	77.8	77.2
Rural and Small Town (RST) Total	**20.6**	**22.2**	**22.8**
.. Strong MIZ	5.1	5.4	5.8
.. Moderate MIZ	7.6	8.2	8.6
.. Weak MIZ	6.6	7.2	7.1
.. No MIZ	1.1	1.2	1.1
.. Territories[2]	0.2	0.2	0.2
Alberta	100.0	100.0	100.0
Urban Total	75.4	74.3	74.7
Rural and Small Town (RST) Total	**24.6**	**25.7**	**25.3**
.. Strong MIZ	4.5	4.3	4.5
.. Moderate MIZ	6.8	6.3	6.4
.. Weak MIZ	12.1	14.0	13.4
.. No MIZ	1.2	1.2	1.0
Newfoundland/Labrador	100.0	100.0	100.0
Urban Total	46.5	44.4	44.6
Rural and Small Town (RST) Total	**53.5**	**55.6**	**55.4**
.. Strong MIZ	3.5	3.6	3.4
.. Moderate MIZ	24.4	25.5	24.3
.. Weak MIZ	20.9	21.6	22.2
.. No MIZ	4.7	5.0	5.5
Prince Edward Island	100.0	100.0	100.0
Urban Total	55.1	54.4	56.0
Rural and Small Town (RST) Total	**44.9**	**45.6**	**44.0**
.. Strong MIZ	14.0	14.1	12.0
.. Moderate MIZ	21.7	22.1	22.0
.. Weak MIZ	8.6	8.9	9.4
.. No MIZ	0.5	0.5	0.6
Nova Scotia	100.0	100.0	100.0
Urban Total	63.3	61.3	60.4
Rural and Small Town (RST) Total	**36.7**	**38.7**	**39.6**
.. Strong MIZ	2.4	3.3	3.2
.. Moderate MIZ	10.9	11.3	11.3
.. Weak MIZ	22.9	23.6	24.6
.. No MIZ	0.5	0.5	0.5

. . . Continued

Appendix Table 2 Continued

Percent

	2001	1996	1991
New Brunswick	100.0	100.0	100.0
Urban Total	52.3	51.5	52.0
Rural and Small Town (RST) Total	**47.7**	**48.5**	**48.0**
.. Strong MIZ	6.9	7.0	7.9
.. Moderate MIZ	20.0	20.3	18.9
.. Weak MIZ	18.6	19.0	19.0
.. No MIZ	2.3	2.2	2.2
Quebec	100.0	100.0	100.0
Urban Total	78.5	77.6	77.3
Rural and Small Town (RST) Total	**21.5**	**22.4**	**22.7**
.. Strong MIZ	6.1	6.0	6.1
.. Moderate MIZ	10.9	11.2	11.4
.. Weak MIZ	3.9	4.4	4.4
.. No MIZ	0.6	0.8	0.8
Ontario	100.0	100.0	100.0
Urban Total	87.0	85.2	84.2
Rural and Small Town (RST) Total	**13.0**	**14.8**	**15.8**
.. Strong MIZ	6.1	7.0	7.5
.. Moderate MIZ	4.3	5.0	5.8
.. Weak MIZ	2.4	2.5	2.2
.. No MIZ	0.2	0.3	0.3
Manitoba	100.0	100.0	100.0
Urban Total	66.6	66.7	66.8
Rural and Small Town (RST) Total	**33.4**	**33.3**	**33.2**
.. Strong MIZ	4.4	4.1	5.2
.. Moderate MIZ	10.4	10.3	9.2
.. Weak MIZ	14.9	15.4	15.6
.. No MIZ	3.6	3.5	3.2
Saskatchewan	100.0	100.0	100.0
Urban Total	57.7	56.7	56.4
Rural and Small Town (RST) Total	**42.3**	**43.3**	**43.6**
.. Strong MIZ	2.7	2.6	2.5
.. Moderate MIZ	10.3	10.4	11.3
.. Weak MIZ	19.8	20.5	19.9
.. No MIZ	9.5	9.8	9.9
British Columbia	100.0	100.0	100.0
Urban Total	86.2	84.5	84.6
Rural and Small Town (RST) Total	**13.8**	**15.5**	**15.4**
.. Strong MIZ	1.8	2.1	2.5
.. Moderate MIZ	4.8	5.7	5.4
.. Weak MIZ	6.1	6.9	6.8
.. No MIZ	1.1	0.8	0.7

. . . Continued

Appendix Table 2 Continued

Percent

	2001	1996	1991
Yukon[1]	100.0	100.0	100.0
Urban Total	74.6	70.9	64.5
Territories	**25.4**	**29.1**	**35.5**
Northwest Territories[1]	100.0	100.0	100.0
Urban Total	44.3	43.6	41.8
Territories	**55.7**	**56.4**	**58.2**
Nunavut[1]	100.0	100.0	100.0
Urban Total	0.0	0.0	0.0
Territories	**100.0**	**100.0**	**100.0**

Source: Statistics Canada, Census of Population, 1991, 1996, and 2001

[1] The statistical area classification for the northern territories does not specify MIZ zones. "Territories" is the equivalent of "Rural and Small Town Total."

Appendix Table 3: Population Percentage Change[1] in Canada

By Province / Territory and Geographic Zone; 1996 to 2001 and 1991 to 1996

	1996 (2001 boundaries)	2001 (2001 boundaries)	1996-2001 % Change	1991 (1996 boundaries)	1996 (1996 boundaries)	1991-1996 % Change
Canada	**28,846,761**	**30,007,094**	**4.0**	**27,318,076**	**28,871,473**	**5.7**
Urban Total	22,654,692	23,839,086	5.2	21,140,156	22449855	6.2
RST Total	**6,192,069**	**6,168,008**	**-0.4**	**6,177,920**	**6,421,618**	**3.9**
.. Strong MIZ	1,470,493	1,524,579	3.7	1,458,941	1,564,837	7.3
.. Moderate MIZ	2,307,387	2,285,538	-0.9	2,290,094	2,365,371	3.3
.. Weak MIZ	2,027,488	1,969,211	-2.9	2,078,315	2,119,337	2.0
.. No MIZ	330,616	333,847	1.0	329,353	347,361	5.5
.. Territories[2]	56,085	54,833	-2.2	n.a.	n.a	n.a.
Alberta	**2,696,826**	**2,974,807**	**10.3**	**2,545,553**	**2,696,826**	**5.9**
Urban Total	2,004,641	2,244,336	12.0	1,901,066	2,002,352	5.3
RST Total	**692,185**	**730,471**	**5.5**	**644,487**	**694,474**	**7.8**
.. Strong MIZ	118,425	133,432	12.7	103,035	115,974	12.6
.. Moderate MIZ	190,335	201,612	5.9	158,227	169,300	7.0
.. Weak MIZ	352,527	358,995	1.8	356,885	377,669	5.8
.. No MIZ	30,898	36,432	17.9	26,340	31,531	19.7
Newfoundland/ Labrador	**551,792**	**512,930**	**-7.0**	**568,474**	**551,792**	**-2.9**
Urban Total	244,868	238,538	-2.6	244,889	244,868	0.0
RST Total	**306,924**	**274,392**	**-10.6**	**323,585**	**306,924**	**-5.1**
.. Strong MIZ	19,947	17,804	-10.7	20,770	19,947	-4.0
.. Moderate MIZ	140,596	125,213	-10.9	150,471	140,672	-6.5
.. Weak MIZ	118,960	107,024	-10.0	122,833	119,012	-3.1
.. No MIZ	27,421	24,351	-11.2	29,511	27,293	-7.5
Prince Edward Island	**134,557**	**135,294**	**0.5**	**129,765**	**134,557**	**3.7**
Urban Total	73,225	74,558	1.8	69,885	73,225	4.8
RST Total	**61,332**	**60,736**	**-1.0**	**59,880**	**61,332**	**2.4**
.. Strong MIZ	18,966	18,989	0.1	17,902	18,966	5.9
.. Moderate MIZ	29,713	29,371	-1.2	29,227	29,713	1.7
.. Weak MIZ	11,925	11,690	-2.0	11,940	11,925	-0.1
.. No MIZ	728	686	-5.8	811	728	-10.2
Nova Scotia	**909,282**	**908,007**	**-0.1**	**899,942**	**909,282**	**1.0**
Urban Total	568,062	574,696	1.2	546,052	557,614	2.1
RST Total	**341,220**	**333,311**	**-2.3**	**353,890**	**351,668**	**-0.6**
.. Strong MIZ	21,172	22,209	4.9	28,370	29,777	5.0
.. Moderate MIZ	100,647	98,571	-2.1	101,241	102,422	1.2
.. Weak MIZ	214,691	207,881	-3.2	219,618	214,691	-2.2
.. No MIZ	4,710	4,650	-1.3	4,661	4,778	2.5

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Appendix Table 3 Continued

	1996 (2001 boundaries)	2001 (2001 boundaries)	1996-2001 % Change	1991 (1996 boundaries)	1996 (1996 boundaries)	1991-1996 % Change
New Brunswick	**738,133**	**729,498**	**-1.2**	**723,900**	**738,133**	**2.0**
Urban Total	380,153	381,169	0.3	370,439	380,149	2.6
RST Total	**357,980**	**348,329**	**-2.7**	**353,461**	**357,984**	**1.3**
.. Strong MIZ	51,349	50,527	-1.6	50,342	51,353	2.0
.. Moderate MIZ	150,795	145,567	-3.5	148,540	150,380	1.2
.. Weak MIZ	139,698	135,618	-2.9	140,434	140,113	-0.2
.. No MIZ	16,138	16,617	3.0	14,145	16,138	14.1
Quebec	**7,138,795**	**7,237,479**	**1.4**	**6,895,963**	**7,138,795**	**3.5**
Urban Total	5,569,642	5,681,453	2.0	5,353,846	5,543,060	3.5
RST Total	**1,569,153**	**1,556,026**	**-0.8**	**1,542,117**	**1,595,735**	**3.5**
.. Strong MIZ	429,851	439,797	2.3	391,396	422,875	8.0
.. Moderate MIZ	800,113	789,980	-1.3	785,081	802,485	2.2
.. Weak MIZ	292,140	279,400	-4.4	313,032	315,625	0.8
.. No MIZ	47,049	46,849	-0.4	52,608	54,750	4.1
Ontario	**10,753,573**	**11,410,046**	**6.1**	**10,084,885**	**10,753,573**	**6.6**
Urban Total	9,291,331	9,925,949	6.8	8,559,726	9,157,435	7.0
RST Total	**1,462,242**	**1,484,097**	**1.5**	**1,525,159**	**1,596,138**	**4.7**
.. Strong MIZ	668,346	695,979	4.1	710,094	756,992	6.6
.. Moderate MIZ	489,985	489,378	-0.1	520,565	539,257	3.6
.. Weak MIZ	278,623	270,527	-2.9	266,562	269,132	1.0
.. No MIZ	25,288	28,213	11.6	27,938	30,757	10.1
Manitoba	**1,113,898**	**1,119,583**	**0.5**	**1,091,942**	**1,113,898**	**2.0**
Urban Total	742,444	746,184	0.5	736,318	742,560	0.8
RST Total	**371,454**	**373,399**	**0.5**	**355,624**	**371,338**	**4.4**
.. Strong MIZ	47,324	48,808	3.1	62,279	45,593	7.8
.. Moderate MIZ	114,608	116,659	1.8	110,237	115,127	4.4
.. Weak MIZ	169,348	167,188	-1.3	167,254	171,105	2.3
.. No MIZ	40,174	40,744	1.4	35,854	39,513	10.2
Saskatchewan	**990,237**	**978,933**	**-1.1**	**988,928**	**990,237**	**0.1**
Urban Total	561,672	565,222	0.6	551,776	561,672	1.8
RST Total	**428,565**	**413,711**	**-3.5**	**437,152**	**428,565**	**-2.0**
.. Strong MIZ	25,788	25,990	0.8	26,511	26,013	-1.9
.. Moderate MIZ	103,051	100,376	-2.6	105,203	102,823	-2.3
.. Weak MIZ	203,012	193,996	-4.4	207,229	202,570	-2.2
.. No MIZ	96,714	93,349	-3.5	98,209	97,159	-1.1
British Columbia	**3,724,500**	**3,907,738**	**4.9**	**3,282,061**	**3,724,500**	**13.5**
Urban Total	3,179,571	3,369,035	6.0	2,770,905	3,147,837	13.6
RST Total	**544,929**	**538,703**	**-1.1**	**511,156**	**576,663**	**12.8**
.. Strong MIZ	69,325	71,044	2.5	67,749	77,210	14.0
.. Moderate MIZ	187,544	188,811	0.7	181,119	212,996	17.6
.. Weak MIZ	246,564	236,892	-3.9	236,084	256,500	8.6
.. No MIZ	41,496	41,956	1.1	26,204	29,957	14.3

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Appendix Table 3 Continued

	1996 (2001 boundaries)	2001 (2001 boundaries)	1996-2001 % Change	1991 (1996 boundaries)	1996 (1996 boundaries)	1991-1996 % Change
Yukon[2]	**30,766**	**28,674**	**-6.8**	**27,797**	**30,766**	**10.7**
Urban Total	21,808	21,405	-1.8	20,075	21,808	8.6
Territories	**8,958**	**7,269**	**-18.9**	**7,722**	**8,958**	**16.0**
Northwest Territories[2]	**39,672**	**37,360**	**-5.8**	**36,343**	**39,672**	**9.2**
Urban Total	17,275	16,541	-4.2	15,179	17,275	3.8
Territories	**22,397**	**20,819**	**-7.0**	**21,164**	**22,397**	**5.8**
Nunavut[2]	**24,730**	**26,745**	**8.1**	**21,217**	**24,712**	**16.5**
Urban Total	N/A	N/A	N/A	N/A	N/A	N/A
Territories	**24,730**	**26,745**	**8.1**	**21,217**	**24,712**	**16.5**

Source: Statistics Canada, Census of Population, 1991, 1996, and 2001

[1] Population figures for urban and rural do not add up to the provincial / Canadian total because data are suppressed if there are fewer than 40 residents in any Census Subdivision.

[2] The statistical area classification for the northern territories does not specify MIZ zones. "Territories" is the equivalent of "Rural and Small Town Total."

Appendix Table 4: Population Age Distribution in Alberta by Geographic Zone; 2001, 1996, and 1991

Percent

Geographic Zone	Children (0-14 years)			Youth (15-24 years)			Young Adults (25-44 years)			Adults (45-64 years)			Seniors (65 years +)		
	2001	**1996**	**1991**	**2001**	**1996**	**1991**	**2001**	**1996**	**1991**	**2001**	**1996**	**1991**	**2001**	**1996**	**1991**
Alberta Total	21.1	23.0	23.6	14.8	14.1	14.6	32.1	34.2	35.5	22.4	19.5	17.2	9.7	9.2	9.1
Urban Total	20.1	22.1	22.7	15.1	14.1	14.9	33.2	35.4	37.0	22.3	19.5	17.0	9.3	8.8	8.4
Rural/Small Town Total	23.9	25.6	26.3	14.1	14.0	13.8	28.6	30.6	31.2	22.7	19.5	17.9	10.7	10.2	10.9
Strong MIZ	**24.2**	**26.3**	**26.6**	**13.5**	**12.9**	**13.0**	**29.2**	**31.6**	**32.4**	**24.4**	**20.8**	**18.8**	**8.7**	**8.3**	**9.4**
Moderate MIZ	**23.3**	**24.7**	**26.3**	**13.2**	**13.3**	**13.3**	**27.4**	**29.2**	**30.0**	**23.7**	**20.8**	**18.6**	**12.4**	**12.0**	**11.8**
Weak MIZ	**23.6**	**25.6**	**26.0**	**14.6**	**14.6**	**14.4**	**29.3**	**31.3**	**31.6**	**21.9**	**18.6**	**17.3**	**10.6**	**9.9**	**10.7**
No MIZ	**30.0**	**29.2**	**28.4**	**15.0**	**15.1**	**14.2**	**26.6**	**27.7**	**27.9**	**18.4**	**17.1**	**16.1**	**10.0**	**10.9**	**13.6**

Source: Statistics Canada, Census of Population, 2001, 1996, and 1991

Appendix Table 5: Population Age in Alberta[1] by Geographic Zone; 2001, 1996, and 1991

Number

Geographic Zone	Children (0-14 years)			Youth (15-24 years)			Young Adults (25-44 years)			Adults (45-64 years)			Seniors (65+ years)		
	2001	1996	1991	2001	1996	1991	2001	1996	1991	2001	1996	1991	2001	1996	1991
Alberta Total[1]	619,130	614,175	601,110	435,325	375,705	371,370	943,525	913,175	904,505	658,840	520,510	438,030	284,345	245,605	230,550
Urban Total	446,595	439,050	430,010	334,390	280,245	281,485	737,250	703,995	701,775	495,280	387,250	321,780	207,035	175,775	159,665
Rural/Small Town Total	172,535	175,130	170,745	100,930	95,465	89,810	206,275	209,190	20,250	163,560	133,275	116,010	77,310	69,830	70,830
Strong MIZ	**32,040**	**30,820**	**29,515**	**17,795**	**15,175**	**14,395**	**38,630**	**37,040**	**35,995**	**32,310**	**24,405**	**20,925**	**11,540**	**9,765**	**10,400**
Moderate MIZ	**46,445**	**46,575**	**46,405**	**26,380**	**25,070**	**23,400**	**54,545**	**54,905**	**52,970**	**47,175**	**39,115**	**32,785**	**24,775**	**22,535**	**20,745**
Weak MIZ	**83,240**	**88,840**	**87,405**	**51,370**	**50,625**	**48,300**	**103,550**	**108,795**	**106,245**	**77,445**	**64,545**	**58,095**	**37,385**	**34,245**	**36,125**
No MIZ	**10,800**	**8,880**	**7,420**	**5,385**	**4,610**	**3,715**	**9,555**	**8,435**	**7,290**	**6,630**	**5,195**	**4,205**	**3,595**	**3,305**	**3,560**

Source: Statistics Canada, Census of Population, 2001, 1996, and 1991

[1] Population figures for urban and rural do not add up to the provincial totals because data are suppressed if there are fewer than 40 residents in any Canadian Census Subdivision.

Appendix Table 6: Aboriginal Identity[1] Population[2] in Alberta
by Geographic Zone; 2001 and 1996

Number

Geographic Zone	2001	1996
Alberta Total[2]	156,220	122,840
Urban Total	84,140	65,115
Rural/Small Town Total	72,080	57,720
Strong MIZ	**3,850**	**2,425**
Moderate MIZ	**12,600**	**11,730**
Weak MIZ	**37,695**	**31,965**
No MIZ	**17,935**	**11,600**

Source: Statistics Canada, Census of Population, 2001 and 1996

[1] Refers to persons who reported identifying with at least one Aboriginal group, i.e. North American Indian, Métis or Inuit (Eskimo) and/or those who reported being a Treaty Indian or a Registered Indian as defined by the *Indian Act* of Canada and/or who were members of an Indian Band or First Nation (Statistics Canada, 1999a).

[2] Population figures for urban and rural do not add up to the provincial totals because data are suppressed if there are fewer than 40 residents in any Canadian Census Subdivision.

Appendix Table 7: Home Language[1] Population[2] in Alberta
by Geographic Zone; 2001, 1996, and 1991

Number

Geographic Zone	English			French			Non-official language[3]			Multiple Response		
	2001	1996	1991	2001	1996	1991	2001	1996	1991	2001	1996	1991
Alberta Total	2,661,035	2,410,660	2,285,525	18,705	15,725	17,805	220,085	198,575	175,200	41,320	44,240	40,650
Urban Total	1,989,200	1,776,640	1,684,845	13,095	10,730	11,680	182,315	161,945	139,830	35,770	37,000	32,710
Rural/Small Town Total	671,130	634,010	599,525	5,585	5,000	6,065	37,695	36,625	35,210	5,580	7,240	7,860
Strong MIZ	128,655	113,495	107,905	280	225	185	2,945	2,760	2,890	385	720	790
Moderate MIZ	188,270	177,080	163,650	645	460	735	9,345	8,990	7,495	1,100	1,660	1,820
Weak MIZ	324,600	318,445	306,700	4,445	4,095	4,975	20,740	20,505	21,415	3,210	4,015	4,730
No MIZ	29,595	24,995	21,270	215	215	170	4,665	4,370	3,410	885	845	880

Source: Statistics Canada, Census of Population, 2001, 1996, and 1991

[1] Home language is based on the language "most often spoken at home" for all three censuses. For the 2001 Census, the home language question asked for the language spoken "most often at home" AND the languages spoken "on a regular basis at home." The 2001 data includes only the language "most often spoken at home."

[2] Population figures for urban and rural do not add up to the provincial totals because data are suppressed if there are fewer than 40 residents in any Canadian Census Subdivision.

[3] "Non-official languages" include all languages excluding English and French.

Appendix Table 8: Population Participating in Labour Force[1] in Alberta
By Geographic Zone; 2001, 1996, and 1991

Number

Geographic Zone	2001	1996	1991
Alberta Total[2]	1,696,755	1,486,980	1,419,280
Urban Total	1,304,290	1,120,180	1,073,195
Rural/Small Town Total	392,465	366,805	345,750
Strong MIZ	**74,800**	**65,140**	**61,170**
Moderate MIZ	**108,010**	**100,925**	**91,525**
Weak MIZ	**195,380**	**187,845**	**182,465**
No MIZ	**14,280**	**12,890**	**10,590**

Source: Statistics Canada, Census of Population, 2001, 1996, and 1991

[1] The Labour Force Participation Rate is the ratio of individuals who are currently employed or who are out of work (but looking for work) to the total number of individuals in the population who are over the age of 15.

[2] Population figures for urban and rural do not add up to the provincial totals because data are suppressed if there are fewer than 40 residents in any Canadian Census Subdivision.

Appendix Table 9: Population Unemployed[1] in Alberta
by Geographic Zone; 2001, 1996, and 1991

Number

Geographic Zone	2001	1996	1991
Alberta Total[2]	87,920	107,275	110,480
Urban Total	67,745	83,585	87,750
Rural/Small Town Total	20,175	23,685	22,710
Strong MIZ	**3,175**	**3,670**	**3,545**
Moderate MIZ	**4,900**	**6,255**	**6,025**
Weak MIZ	**10,420**	**12,270**	**12,125**
No MIZ	**1,680**	**1,495**	**1,015**

Source: Statistics Canada, Census of Population, 2001, 1996, and 1991

[1] The Unemployment Rate is based on the ratio of individuals who are currently unemployed to those who are in the labour force.

[2] Population figures for urban and rural do not add up to the provincial totals because data are suppressed if there are fewer than 40 residents in any Canadian Census Subdivision.

Appendix Table 10: 2001 Labour Force Population by Industry Sector (NAICS)[1] in Alberta
by Geographic Zone

Number

Geographic Zone	Agriculture, Forestry, Fishing & Hunting	Mining and Oil & Gas Extraction	Construction	Manufacturing	Production Services[2]	Consumer Services[3]	Government Provided Services[4]
Alberta Total[5]	84,570	85,970	130,015	134,925	489,870	420,130	336,505
Urban Total	17,325	59,060	98,030	110,120	413,630	330,140	264,380
Rural/Small Town Total	67,245	26,910	31,985	24,805	76,250	89,985	72,130
Strong MIZ	**11,125**	**4,595**	**7,085**	**5,365**	**17,695**	**16,485**	**12,125**
Moderate MIZ	**22,870**	**6,375**	**8,870**	**7,425**	**21,045**	**22,010**	**18,680**
Weak MIZ	**31,205**	**14,705**	**14,960**	**11,515**	**34,995**	**49,135**	**37,255**
No MIZ	**2,040**	**1,230**	**1,070**	**500**	**2,510**	**2,355**	**4,060**

Source: Statistics Canada, Census of Population, 2001

[1] Based on the 1997 North American Industry Classification (NAICS) system.

[2] Production Services includes utilities, wholesale trade, transportation and warehousing, information and cultural industries, finance and insurance, real estate and rental and leasing, professional, scientific and technical services, management of companies and enterprises, and administrative and support waste management and remediation services.

[3] Consumer Services includes retail trade, arts, entertainment and recreation, accommodation and food services, and other services.

[4] Government-Provided Services includes educational services, healthcare and social assistance, and public administration.

[5] Population figures for urban and rural do not add up to the provincial totals because data are suppressed if there are fewer than 40 residents in any Canadian Census Subdivision.

Appendix Table 11: 1996 and 1991 Labour Force Population by Industry Sector (SIC)[1] in Alberta
by Geographic Zone

Number

Geographic Zone	Agric., Forestry, Fishing, & Hunting		Mining & Oil & Gas Extraction		Construction		Manufacturing		Production Services[2]		Consumer Services[3]		Government Provided Services[4]	
	1996	1991	1996	1991	1996	1991	1996	1991	1996	1991	1996	1991	1996	1991
Alberta Total[5]	94,945	100,745	75,200	79,695	100,675	102,095	121,365	106,905	361,475	326,550	402,145	363,875	305,555	324,965
Urban Total	20,370	21,735	50,135	56,520	75,400	78,360	99,525	88,350	301,810	274,770	315,530	288,935	236,310	252,960
Rural/Small Town Total	74,575	78,750	25,060	23,025	25,275	23,615	21,845	18,375	59,665	51,275	86,615	74,590	69,250	71,360
Strong MIZ	**13,055**	**13,415**	**3,625**	**3,010**	**5,280**	**5,120**	**4,390**	**3,900**	**12,530**	**10,585**	**14,540**	**12,790**	**11,055**	**11,735**
Moderate MIZ	**25,020**	**24,275**	**5,450**	**5,570**	**7,015**	**6,140**	**6,065**	**4,760**	**16,815**	**12,505**	**20,675**	**17,415**	**18,615**	**19,525**
Weak MIZ	**34,155**	**38,870**	**15,100**	**13,705**	**12,100**	**11,745**	**11,000**	**9,370**	**28,420**	**26,670**	**48,685**	**42,290**	**36,210**	**37,585**
No MIZ	**2,340**	**2,190**	**885**	**740**	**880**	**610**	**390**	**345**	**1,890**	**1,515**	**2,715**	**2,095**	**3,370**	**2,515**

Source: Statistics Canada, Census of Population, 1996 and 1991

[1] Based on the 1980 Standard Industry Classification (SIC) system.

[2] Production Services includes communication and other utilities, wholesale trade, transportation and storage, finance and insurance, real estate operator and insurance agent, and business services.

[3] Consumer Services includes retail trade, accommodation, food and beverage, and other services.

[4] Government- Provided Services includes educational services, health and social assistance, and government services.

[5] Population figures for urban and rural do not add up to the provincial totals because data are suppressed if there are fewer than 40 residents in any Canadian Census Subdivision.

Appendix Table 12: Self-Employed[1] Population in Alberta
By Geographic Zone; 2001, 1996, and 1991

Number

Geographic Zone	2001	1996	1991
Alberta Total[2]	238,545	228,690	169,220
Urban Total	147,400	138,350	95,230
Rural/Small Town Total	91,145	89,760	73,340
Strong MIZ	**17,960**	**16,945**	**13,625**
Moderate MIZ	**27,215**	**22,805**	**20,915**
Weak MIZ	**43,400**	**47,395**	**36,730**
No MIZ	**2,570**	**2,615**	**2,070**

Source: Statistics Canada, Census of Population, 2001, 1996, and 1991

[1] Self-employment includes operating a business or professional practice, doing freelance or contract work, and farming, fishing and trapping. It also includes operating a direct distributorship selling and distributing goods such as cosmetics (Statistics Canada, 1999a).

[2] Population figures for urban and rural do not add up to the provincial totals because data are suppressed if there are fewer than 40 residents in any Canadian Census Subdivision.

Appendix Table 13: Low-Income Population[1] in Alberta
By Geographic Zone; 2001, 1996, and 1991

Number

Geographic Zone	2001	1996	1991
Alberta Total[2]	395,650	481,515	408,760
Urban Total	324,335	392,195	325,225
Rural/Small Town Total	70,355	87,315	82,075
Strong MIZ	**10,970**	**14,005**	**12,785**
Moderate MIZ	**19,075**	**25,010**	**23,685**
Weak MIZ	**38,760**	**47,535**	**43,760**
No MIZ	**1,550**	**2,765**	**1,890**

Source: Statistics Canada, Census of Population, 2001, 1996, and 1991

[1] Based on Low-Income Cut-off (LICOs), which are individuals with incomes below the cost of basic necessities including food, shelter, and clothing.

[2] Population figures for urban and rural do not add up to the provincial totals because data are suppressed if there are fewer than 40 residents in any Canadian Census Subdivision.

Appendix Table 14: 2001 Population Educational Attainment[1] in Alberta
By Geographic Zone

Number

Geographic Zone	Less Than High School	High School Diploma	Some Post-Secondary	Post-Secondary Cert./Dip.	University Degree
Alberta Total[2]	551,770	239,710	308,070	651,055	349,750
Urban Total	376,725	179,660	249,055	498,720	307,255
Rural/Small Town Total	175,050	60,055	59,025	152,330	42,495
Strong MIZ	**26,635**	**11,310**	**11,515**	**30,650**	**9,000**
Moderate MIZ	**51,345**	**16,535**	**15,940**	**42,300**	**10,815**
Weak MIZ	**86,835**	**30,240**	**28,610**	**73,670**	**21,440**
No MIZ	**10,230**	**1,970**	**2,965**	**5,710**	**1,235**

Source: Statistics Canada, Census of Population, 2001

[1] 2001 educational attainment data are provided for the population 20 years of age and over.

[2] Population figures for urban and rural do not add up to the provincial totals because data are suppressed if there are fewer than 40 residents in any Canadian Census Subdivision.

Appendix Table 15: 1996 and 1991 Population Educational Attainment[1] in Alberta
by Geographic Zone

Number

Geographic Zone	Less Than High School		High School Diploma		Some Post-Secondary		Post-Secondary Cert./Dip.		University Degree	
	1996	1991	1996	1991	1996	1991	1996	1991	1996	1991
Alberta Total[2]	689,225	687,960	243,075	245,770	255,620	242,400	594,345	514,205	272,755	227,945
Urban Total	470,190	465,695	182,150	185,800	203,485	195,055	454,300	396,160	237,125	198,550
Rural/Small Town Total	219,030	221,525	60,930	59,705	52,130	46,985	140,045	117,315	35,630	29,120
Strong MIZ	**32,600**	**33,800**	**10,865**	**10,935**	**9,450**	**8,700**	**26,210**	**22,385**	**7,255**	**5,725**
Moderate MIZ	**62,950**	**60,805**	**16,780**	**15,205**	**14,935**	**12,305**	**37,880**	**31,605**	**9,080**	**7,395**
Weak MIZ	**112,540**	**116,810**	**31,145**	**31,630**	**25,520**	**24,435**	**70,660**	**59,585**	**18,335**	**15,230**
No MIZ	**10,945**	**10,110**	**2,135**	**1,935**	**2,220**	**1,545**	**5,290**	**3,740**	**960**	**770**

Source: Statistics Canada, Census of Population, 1996 and 1991

[1] 1996 and 1991 educational attainment are for individuals 15 years of age and over.

[2] Population figures for urban and rural do not add up to the provincial totals because data are suppressed if there are fewer than 40 residents in any Canadian Census Subdivision.

Appendix Table 16: Number of Education Providers[1] in Alberta
By Geographic Zone; 2001, 1996, and 1991

Number

Geographic Zone	2001	1996	1991
Alberta Total[2]	55,085	50,980	57,770
Urban Total	43,500	39,410	44,555
Rural/Small Town Total	11,590	11,575	13,055
Strong MIZ	**1,870**	**1,770**	**2,130**
Moderate MIZ	**3,155**	**3,140**	**3,510**
Weak MIZ	**6,010**	**6,115**	**6,915**
No MIZ	**555**	**550**	**500**

Source: Statistics Canada, Census of Population, 2001, 1996, and 1991

[1] The number of individuals working in Statistics Canada's occupational classification category of teachers or professors.

[2] Population figures for urban and rural do not add up to the provincial totals because data are suppressed if there are fewer than 40 residents in any Canadian Census Subdivision.

Appendix Table 17: Number of Lone-Parent Families in Alberta
By Geographic Zone; 2001, 1996, and 1991

Number

Geographic Zone	2001[1]	1996	1991
Alberta Total[2]	116,525	92,480	83,010
Urban Total	93,580	75,230	67,455
Rural/Small Town Total	22,945	17,245	15,505
Strong MIZ	**3,460**	**2,670**	**2,410**
Moderate MIZ	**5,945**	**4,375**	**4,130**
Weak MIZ	**11,465**	**9,255**	**8,205**
No MIZ	**2,075**	**950**	**760**

Source: Statistics Canada, Census of Population, 2001, 1996, and 1991

[1] A minor change in the measurement of lone-parent families in 2001 marginally inflates the number in this year.

[2] Population figures for urban and rural do not add up to the provincial totals because data are suppressed if there are fewer than 40 residents in any Canadian Census Subdivision.

Appendix Table 18: Number of Houses Constructed Between 1986 and 1990, 1991 and 1995, and 1996 and 2001 in Alberta by Geographic Zone

Number of Houses

Geographic Zone	1996 - 2001	1991 - 1995	1986 - 1990
Alberta Total[1]	123,455	93,195	76,090
Urban Total	95,095	69,240	57,550
Rural/Small Town Total	28,355	23,955	18,545
Strong MIZ	**7,095**	**5,485**	**3,215**
Moderate MIZ	**7,865**	**6,190**	**4,690**
Weak MIZ	**12,090**	**11,195**	**9,645**
No MIZ	**1,300**	**1,085**	**990**

Source: Statistics Canada, Census of Population, 2001, 1996, and 1991

[1] Population figures for urban and rural do not add up to the provincial totals because data are suppressed if there are fewer than 40 residents in any Canadian Census Subdivision.

Appendix Table 19: Number of Owner Households Spending Greater than 30% of Income on Shelter[1] in Alberta
by Geographic Zone; 2001, 1996, and 1991

Number of Households

Geographic Zone	2001	1996	1991
Alberta Total[2]	113,810	93,695	50,300
Urban Total	88,925	74,390	39,400
Rural/Small Town Total	24,395	19,300	10,860
Strong MIZ	**5,530**	**4,075**	**2,275**
Moderate MIZ	**7,105**	**5,520**	**2,840**
Weak MIZ	**11,315**	**9,095**	**5,105**
No MIZ	**445**	**615**	**340**

Source: Statistics Canada, Census of Population, 2001, 1996, and 1991

[1] Refers to total household income spent on shelter costs for owners only (not renters) and refers to payments for electricity, fuel, water and municipal services.

[2] Population figures for urban and rural do not add up to the provincial totals because data are suppressed if there are fewer than 40 residents in any Canadian Census Subdivision.

Appendix Table 20: Number Employed in Medicine or Health Occupations[1] in Alberta by Geographic Zone; 2001, 1996, and 1991

Number

Geographic Zone	2001	1996	1991
Alberta Total[2]	81,790	65,230	67,665
Urban Total	65,565	51,345	53,425
Rural/Small Town Total	16,230	13,890	14,000
Strong MIZ	**3,255**	**2,385**	**2,575**
Moderate MIZ	**4,500**	**4,050**	**4,080**
Weak MIZ	**7,980**	**6,995**	**7,065**
No MIZ	**500**	**455**	**280**

Source: Statistics Canada, Census of Population, 2001, 1996, and 1991

[1] The number of individuals working in Statistics Canada's occupational classification category of 'health occupations.'

[2] Population figures for urban and rural do not add up to the provincial totals because data are suppressed if there are fewer than 40 residents in any Canadian Census Subdivision.

Appendix Table 21: Number Employed in Health Occupational Categories in Alberta by Geographic Zone; 2001 and 1996

Number

Geographic Zone	Professional Occupations		RN Supervisors & RNs		Technical & Related Occupations		Assisting Occupations in Support of Health	
	2001	1996	2001	1996	2001	1996	2001	1996
Alberta Total[1]	17,640	14,010	22,750	21,360	21,200	16,500	20,200	13,350
Urban Total	15,060	11,675	18,245	16,695	16,955	13,130	15,295	9,850
Rural/Small Town Total	2,575	2,340	4,505	4,670	4,250	3,375	4,900	3,500
Strong MIZ	**540**	**445**	**930**	**895**	**880**	**530**	**905**	**515**
Moderate MIZ	**585**	**585**	**1,315**	**1,360**	**1,235**	**915**	**1,360**	**1,195**
Weak MIZ	**1,405**	**1,270**	**2,130**	**2,245**	**2,000**	**1,770**	**2,445**	**1,715**
No MIZ	**50**	**30**	**135**	**180**	**135**	**165**	**190**	**75**

Source: Statistics Canada, Census of Population, 2001 and 1996

[1] Population figures for urban and rural do not add up to the provincial totals because data are suppressed if there are fewer than 40 residents in any Canadian Census Subdivision.