Rural Alberta Profile

A Fifteen-year Census Analysis
(1991 - 2006)

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Prepared for

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JUNE, 2010

* The author would like to gratefully acknowledge Ray Bollman with Statistics Canada for his endless technical advice and support. Robert Hornbrook with the Government of Alberta's Agriculture, Food, and Rural Development also deserves special thanks for his ongoing support. This report would not have been written without him.

FOREWORD

The Rural Alberta Profile is a result of work undertaken jointly by the Governments of Alberta and British Columbia and the Government of Canada, Rural and Co-operatives Secretariat. It is one of two profiles prepared (one each for Alberta and British Columbia) to extend the longitudinal perspective by adding the 2006 Census data to the ten-year census analysis (1991 – 2001) conducted in 2004 to address the need for better information concerning rural areas.

This joint project is a result of an Alberta – British Columbia Memorandum of Understanding on Rural Development, signed on October 1, 2008 that provides a framework for the provinces to share information and collaborate on common rural development initiatives. The Government of Canada's Rural and Co-operatives Secretariat involvement represents their ongoing interest in improving government and citizen understanding of rural conditions throughout Canada as well as their historical involvement and expertise regarding the data used in this analysis.

Rural communities are examined by the extent to which they are influenced by urban centres and are correlated to a number of factors that affect the wellbeing of rural Albertans. It is hoped that this document will draw attention to areas that require further in-depth research. Most importantly, for government policy and programs to meet the particular needs of rural Albertans living in zones of varying degrees of metropolitan influence, government needs to understand the differences between these zones.

This project would not have been possible without the expertise and guidance provided by the Steering Committee - Carl Sauriol, Rural and Co-operatives Secretariat, Agriculture and Agri-Food Canada, Robert Hornbrook, Alberta Agriculture and Rural Development and Anja Peterson, Rural BC Secretariat, British Columbia Ministry of Community and Rural Development.

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EXECUTIVE SUMMARY

Introduction

The growing body of work demonstrating the advantages conferred on rural communities with urban linkages clearly indicates that, to adequately capture the variation within rural Alberta, it is important to examine rural conditions along the dimension of level of urban integration. The over-time analysis in the previous Rural Alberta Profile (2004) demonstrated that between 1991 and 2001 the economic disparity increased between the most and least economically integrated rural regions of Alberta. Hence, the addition of 2006 data for this analysis provides a longer term and therefore more robust measure of over time change. The analysis also provides an indication of whether different geographic zones within rural Alberta have benefited in the same way as urban Alberta, given the strong economic cycle experienced in the province between 2001 and 2006.

Research Methods

Two major classification systems form the core analysis in this report. Along with the typical rural / urban dichotomy, the report utilizes the Metropolitan Influenced Zone (MIZ) system to make distinctions within rural and small town Alberta. The four MIZ categories are Strong, Moderate, Weak, and No MIZ, with each progressively reflecting lower levels of urban integration. In total, 20 indicators from Statistics Canada's 2006, 2001, 1996 and 1991 Censuses of Population are presented and analyzed along the rural/urban and geographic zone categories.

MAJOR FINDINGS

Though Alberta's rural population is growing, a smaller share now live in rural Alberta because some communities were redefined as urban

The rural and small town population increased by 3.8% (25,674) between 2001 and 2006 because of net in-migration and/or net births/deaths, but there were fewer rural Albertans in 2006 than in 2001 because 8.3% (58,181) of the population had been reclassified from rural to urban communities by 2006. Strong MIZ communities were the most likely to be effected by geographic change, as indicated by the reclassification of more than half (50.5%) of its 2001 population, most likely to urban status by 2006. The least integrated and therefore most 'rural' region, No MIZ, also experienced a sizable level of reclassification (38% of its population was reclassified to another MIZ category). Hence, geographic reclassification contributed to the urbanization of the province and resulted in a decreasing level of rurality within rural Alberta.

Rural Albertans are older, aging more rapidly, more likely to be Aboriginal, and less likely to be an immigrant and to be lone parents

Though rural and small town residents have a larger proportional child (0-14) population, they are older, on average, than urban Albertans due to their larger adult (45-64) and senior (65+) populations. Since rural Alberta experienced both a larger proportional decrease in children and a larger proportional increase in seniors between 2001 and 2006, it is concluded that they are aging more rapidly than urban Albertans. The youngest people, on average, reside in No MIZ communities, largely due to the higher birth rates among the relatively large proportional Aboriginal Identity population residing in this zone (43.2%). This finding continues to hold despite the fact that the share of the Aboriginal population in No MIZ declined by 6.6 percentage points between 2001 and 2006. Otherwise, the Aboriginal population increased

in rural Alberta by 3.5 percentage points between 1996 and 2006 (compared to 0.3 points in urban Alberta), with Weak MIZ undergoing the largest proportional increase of 5.9 percentage points during the same 10-year period. Though rural Alberta has a larger proportional Aboriginal Identity population than urban Alberta, it has a smaller proportion of immigrants (6.4% compared to 18.9%). Rural immigrants are also less likely than urban immigrants to be recent arrivals (13.1% arrived between 2001 and 2006 compared to 20.2% of urban immigrants). Finally, the incidence of lone parent families is lower in rural than in urban Alberta (12.6% compared to 15.1%), though No MIZ again stands out as having the largest proportion of lone parent families in the province (29.5%).

Economically speaking, Strong MIZ communities are the most advantaged in the province and No MIZ the least advantaged

Though it is important to recognize that the rural / urban economic gap is evident in every single census year, the powerful economic performance of Strong MIZ between 2001 and 2006 has now positioned these communities as more economically advantaged than urban Alberta. In 2006, Strong MIZ communities led the province by having the highest labour force participation rate, the lowest unemployment rate, the lowest incidence of low-income, the lowest reliance on government income, and were only a fewer dollars short of the urban median income. At the other end of the urban integration continuum is No MIZ which continues to have the lowest labour force participation rate, the lowest median income, the highest unemployment rate, and the highest reliance on government income. With the highest average housing values and the largest proportion of houses built between 2001 and 2006 in the province, Strong MIZ also exhibits the most advantageous position in the province for these economically-related indicators. In contrast, but in congruence with the economic indicators reviewed above, No MIZ has the lowest housing values and the lowest proportion of houses recently built. Even so, the economic disparities within rural Alberta showed some signs of narrowing as did the rural / urban economic gap.

Rural Albertans are similarly likely as urban Albertans to have a high school diploma or a postsecondary certification or diploma, but they are less likely to have a university degree

While rural and urban Albertans have similar rates of high school completion and postsecondary certificate/diploma attainment, the rural / urban educational gap is most striking when comparing the relative proportions of the population who have not completed high school (33.5% of rural Albertans compared to 20.8% of urbanites) and who have completed a university degree (8.1% of rural Albertans compared to 19.9% of urbanites). The relatively large high school incompletion rates is a result of the high incidence of high school drop outs in rural Alberta and the fewer rural education providers per 1,000 population, perhaps as a result of the challenges associated with recruiting and retaining rural teachers. The lower levels of university degree attainment are likely due to the lower aspirations of rural youth to attend university (as opposed to college or technical school), the lack of universities located in rural Alberta and the attendant distance required to access this type of post secondary institution. Research suggests that the overall lower levels of educational attainment may also be because rural youth recognize that they will not receive the same returns on their educational endeavors as urbanites.

Rural Albertans have access to fewer healthcare providers per 1,000 residents than urban Albertans

Compared to urban Albertans who have 33.1 healthcare providers per 1,000 population (6.4 of whom are professionals such as physicians), rural Albertans have access to only 25.6 healthcare providers per 1,000 (only 3.6 of whom are professionals). The rural / urban healthcare gap, moreover, increased since 1996. The ability of rural residents to access health care is further exacerbated by the greater distance needed to travel to access services and specialists that are typically located in urban centres. Access to adequate health care among the large Aboriginal population residing in No MIZ zones of the province is of particular concern.

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A. Introduction

Report Background

Alberta entered Confederation in 1905 with three-quarters of its residents located in rural regions, but by the mid-1950s the province had become predominantly urban (Bollman and Clemenson, 2008). The urbanization trend has slowly but steadily continued into the 21st century: By 2006, rural and small town Albertans comprised just 21% of the total provincial population.[1]

In addition to increasing urbanization, other factors such as farm mechanization, dropping food prices, demographic shifts, and globalization, have had a number of well-documented negative effects on rural Canada. Besides marginalizing rural residents due to their smaller and therefore less numerically influential population, these factors have contributed to the out-migration of youth, aging, poverty, chronic high unemployment, loss of high-quality agricultural land, and environmental challenges (Fairbairn, 1998; Dupuy et al, 2000; Alasia and Rothwell, 2003).

Equally important is the understanding that not all rural regions have been detrimentally effected in the same way or to the same degree. Indeed, the variation within rural sectors is often as great as, or even greater than, the variation between urban and rural. A growing number of studies, including the earlier version of this report (Rural Alberta Profile, 2004), reveal considerable rural variation along a number of population, demographic, social, economic and health dimensions (Sorensen and de Peuter, 2004; Alasia, 2004; Bollman, 2007).

In addition to highlighting the importance of conceptualizing 'rural' as a heterogeneous social geography, the findings of rural variation in the earlier rural profile demonstrated that it is in part a function of the level of rural integration with urban. Specifically, a clear relationship was revealed such that as urban economic and social integration increased so too did rural economic prosperity. This relationship was also consistently observed across most of Canada's provinces (Sorensen and Aylward, 2004).[2]

But what explains this relationship? Though the economies of urban and rural communities were once distinct, policy and research analysts maintain that as rural economies declined and as urban hubs developed into agglomeration economies, rural well-being became increasingly contingent upon its linkages to urban centres (Core Cities, 2003; Slack et al., 2003; Dabson, 2007). Specifically, it is said that rural communities benefit economically from their links with urban communities by having access to diverse employment opportunities, to large end markets for rural production, to resources for public and private investment in rural enterprise, to vibrant environments for knowledge creation and transfer, and to transportation hubs (Dabson, 2007).[3]

Report Approach and Contents

The growing body of work demonstrating the advantages conferred on rural communities with urban linkages clearly indicates that, to adequately capture the variation within rural Alberta, it is important to examine rural conditions along the dimension of level of urban integration. As was done for the 2004 "Rural Alberta Profile", the current analysis accomplishes this by splitting rural Alberta into four categories with each consecutively representing a lesser degree of urban integration. The categories are drawn from the Census Metropolitan Area and Census Agglomeration Influenced Zones (MIZ) classification system based on commuting rates to urban centres for each rural community. Each of the four categories is a measure of progressively lower levels of economic integration (McNiven et al., 2000).

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[1] The declining rural share of the province is a result of the much slower population growth in rural than in urban areas. For example, Alberta's urban population grew at a rate more than four times faster than rural and small town Alberta between 1991 and 2006 (36% compared to 8%).

[2] Other research has found that this pattern also holds true at the regional level in Alberta. A case study analysis of three Regional Economic Development Alliances (REDA's) in Alberta that respectively represented low level, middle level, and high level rural-urban links, consistently demonstrated that stronger rural to urban connections results in greater socio-economic advantage (Sorensen, 2009a, Sorensen, 2009b, and Sorensen, 2009b).

[3] Though the relationship between rural to urban linkages and economic advantage has been demonstrated as being important, there are other influences on rural well-being, including population density, local capacity, and the many important local economic conditions including strength, stability, level of exposure to the global economy, clustering, and diversity (de Peuter et al, 2008).

While it is essential to examine the patterns of variation across the four MIZ categories within rural Alberta, these patterns are more clearly detectable when benchmarked against the conditions found in all of rural and all of urban Alberta. The "Rural Alberta Profile" thus also provides a comparison of the urban population and the rural population.

The over-time analysis in the previous report demonstrated that between 1991 and 2001 the economic disparity increased between the most and least economically integrated rural regions of Alberta. Hence, the addition of 2006 data for this analysis will provide a longer term and therefore more robust measure of over time change. The analysis will also provide an indication of whether different regions of rural Alberta have benefited in the same way as urban Alberta, given the strong economic cycle experienced in the province between 2001 and 2006.

By adding 2006 Census data, this report is an update to the 2004 "Rural Alberta Profile" that analyzed the conditions in rural Alberta by using 1991, 1996, and 2001 Census data.

As was done in the earlier report, a selection of population, demographic, economic, education, social, and health indicators from Statistics Canada 2006, 2001, 1996, and 1991 Census data are used to establish evidence of trends between urban and rural and within rural and small town Alberta. New to this report is an examination of rural to urban and within rural differences in the immigration status of its populations. This indicator was viewed as an important addition because it bears heavily on one source of population growth that has been viewed as critical to the future of rural Canada.

Also new to this report is a more in depth examination of the sources of rural population change between census years, whether they be due to demographic change (i.e., births, deaths, net-migration) or whether they are due to reclassifications of communities from rural to urban or from one MIZ category to another (see Text Box 1 for a more detailed explanation of the different sources of population change and see Section C.1.2 in the main body of the report for this analysis).

The following section of the report describes the Research Methods (B) used in this analysis while subsequent sections (Sections C through G) respectively present the Population, Economic, Education, Social, and Health Care profiles of rural Alberta. Each of these five sections begins with Key Findings and concludes with a summary / conclusion section that provides an interpretation of the results as a whole. The Appendices include a sample list of municipalities comprising each geographic zone (Appendix 1) and a series of tables containing the population counts that compliment the percentages and ratios depicted in the tables and figures within the main body of the text (Appendix 2). Appendix 3 presents a Geographic Zone Designation Map of Canada and Appendix 4 provides supplementary information on how to access further information data and maps on rural Canada through Statistics Canada.

B. Research Methods

Two classification systems are used in this report: one to delineate between the rural and urban population and the second to distinguish differences among the rural population of the province. Both systems use Census Subdivisions (CSDs) as the basic building blocks. CSDs are roughly equivalent to incorporated towns and municipalities.

Defining "Rural" and "Urban"

The Rural and Small Town (RST) definition is used to demarcate between urban and rural populations.[4] 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). Rural and Small Town Alberta is referred to as "rural" Alberta throughout this report.

Residents of urban Alberta are those residing in a CMA or CA. CMAs have an urban core population of at least 50,000 (a total 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).

Defining "Rurality"

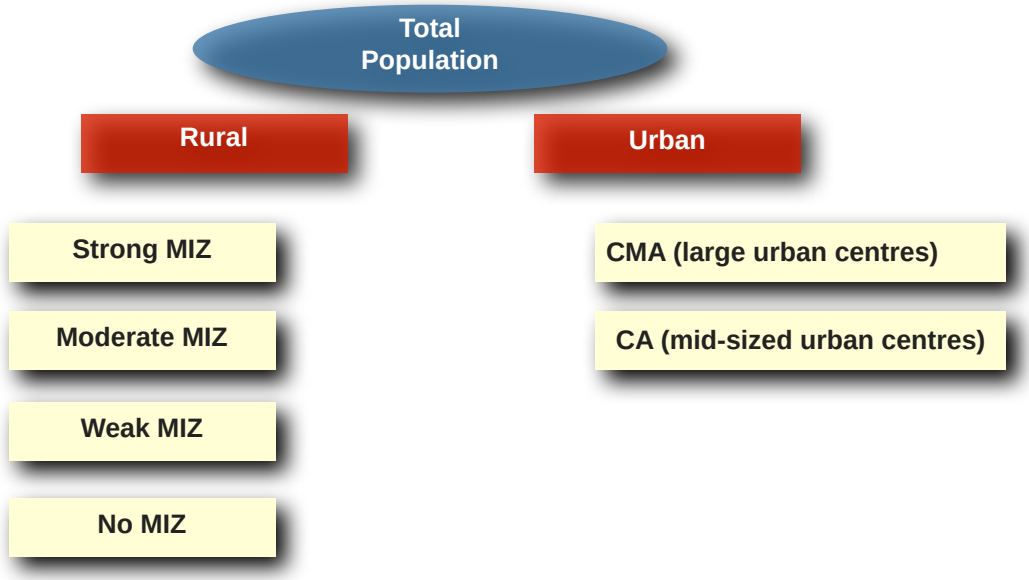
To adequately capture the conditions in rural Alberta, it is important to recognize the diversity and varying degrees of 'rurality' within different rural communities of the province. This is done by using a system developed by McNiven et al. (2000) whereby rural census subdivisions (CSDs) are assigned to one of four categories according to the degree of influence that CMAs and CAs collectively have on them. The four groups draw upon the Census Metropolitan Area and Census Agglomeration Influenced Zones (MIZ) classification system which permits distinctions among rural communities that are masked by the commonly-used urban /rural dichotomy. MIZ is designed to measure the degree to which large urban communities (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 the core of CMAs and CAs as shown in the Geographic Zone Model and a map depicting the geographic zone configuration of Alberta presented on the following pages. The same type of map for Canada is presented in Appendix 3.

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 (e.g., financial institutions and shopping, cultural and sports facilities) 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 connections from rural to urban regions.

At the same time, it should be understood that though rural proximity to urban has been shown to be strongly linked to urban integration (Olfert and Partridge, 2008; Dabson, 2007; Partridge et al., 2007; Wensley and Stabler, 1998), the least integrated MIZ zones are not always the most geographically remote. Since commuting patterns may be for longer periods than just daily commutes (e.g., weekly or monthly), 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 (e.g., the shadow population commuting to the urban core of Wood Buffalo which was estimated to be over 25,000 in 2008; Regional Municipality of Wood Buffalo Census, 2008).

[4] RST is also known as Statistical Area Classification (SAC).

Geographic Zone Model



LEGEND

CSDs: Census subdivision (CSD) is the general term for municipalities (as determined by provincial/territorial legislation) or areas treated as municipal equivalents for statistical purposes (e.g., Indian reserves). CSDs are the building blocks of each geographic zone.

Urban Total: Comprised of CMAs (Census Metropolitan Areas) and CAs (Census Agglomerations). CMAs have an urban core population of at least 50,000 (a total 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 minimum of 10,000 and abide by the same commuting rules as CMAs.

Rural Total: Includes rural communities (CSDs) 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).

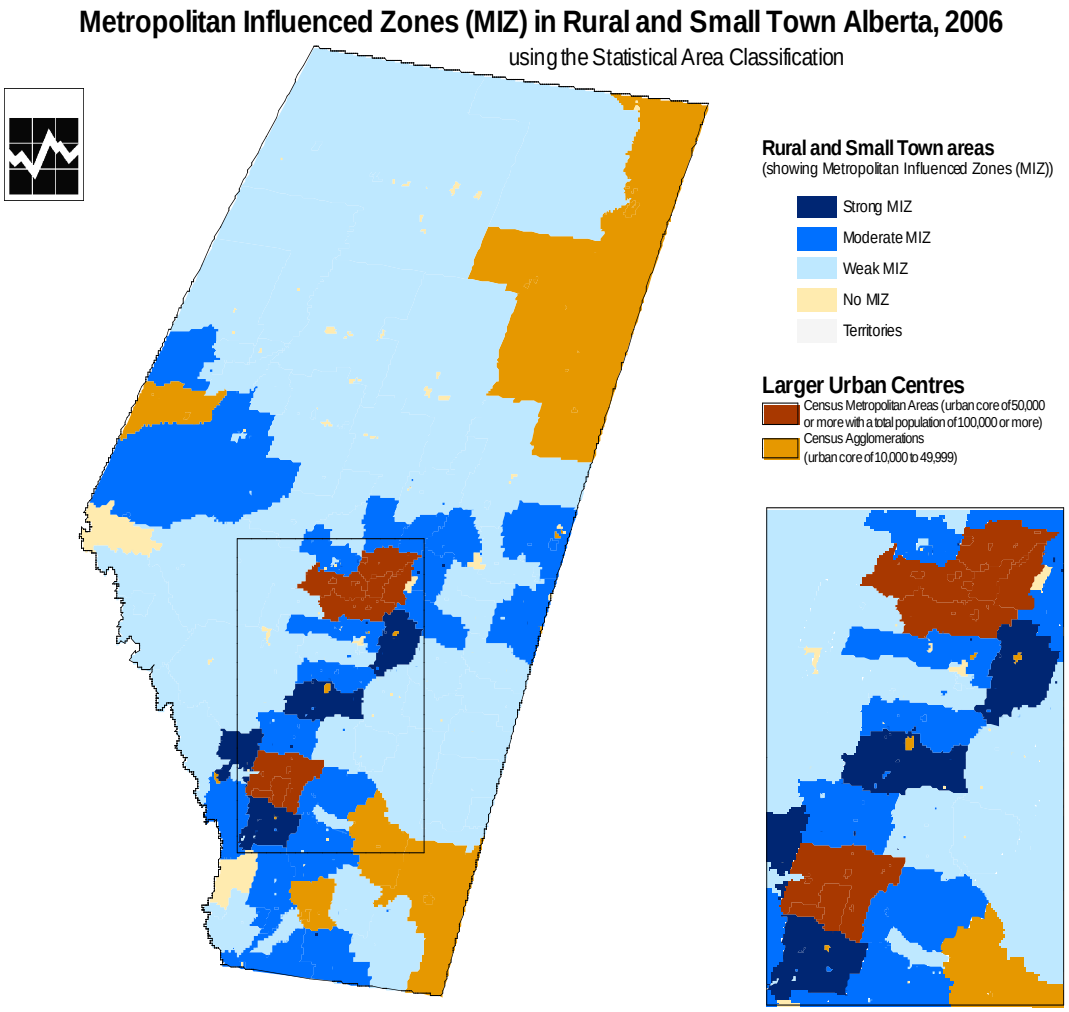
Strong MIZ: Includes CSDs where between 30% and 49% of the employed workforce commutes to the urban core of any urban centre, suggesting that this population is strongly integrated with the urban economy.

Moderate MIZ: Includes CSDs where at least 5% but less than 30% of the employed workforce commutes to the urban core of large urban centre, suggesting that this population is moderately integrated with the urban economy.

Weak MIZ: Includes CSDs where more than 0% but less than 5% of the employed workforce commutes to the urban core of any urban centre, suggesting that this population is weakly integrated with the urban economy.

No MIZ: Includes CSDs where 0% of the employed workforce commutes to the urban core of any urban centre (plus any CSD that has less than 40 people in its employed labour force), suggesting

Geographic Zone Map of Alberta[1]



[1] This map is extracted from the national MIZ map which includes territories. The territory category is not applicable to Alberta.

Box 1: A Note on Sources of Population Change

When interpreting the trend data for each geographic zone presented in this report, it is important to understand that there are two major sources of observed population change between census years. Changes in the characteristics of the population can stem from demographic causes (i.e., births, deaths, and migration), but because this research report is based on geography, over time changes can also result from geographic zone reclassifications of municipalities (CSDs) between censuses (e.g., from Strong MIZ to urban). Changes in CSD designations are a function of one of three possible scenarios: 1) When peri-urban rural growth is sufficient to ultimately result in urban boundary expansion that captures the rural fringe population (e.g., Village of Mirror annexed to Lacombe County); 2) When rural communities meet the minimum 10,000 population criteria for urban (e.g. Canmore); or 3) When rural communities reach the minimum 50% commuting flow criteria to be included in a CMA or CA (e.g. Grand Prairie).

The influence of geographic zone reclassifications on population change is examined in Section C.1.2: Population Change by comparing population change using current geographic zone classifications of CSDs with population change using constant geographic zone classifications. Current boundaries are the boundaries in use in a given census year and represent both demographic and geographic change. Constant boundaries are when the population of the previous comparative census year is reclassified to match the geographic boundaries of the most recent comparative census year. For example, when examining population change between 2001 and 2006, the 2001 population is reclassified to match the 2006 geographic zone boundary demarcations. Current boundaries thus control on geographic change and highlight population change that stems only from demographic sources of change (e.g., net migration and net births/deaths). The results reveal that geographic zone shifts accounted for a significant proportion of population change, especially between 2001 and 2006 and primarily in Strong and No MIZ zones.

Since the data for all but population change are presented in current boundaries, it is not possible to determine the amount of change resulting from demographic versus geographic influences on the remaining indicators. Hence, both factors should be considered when interpreting the over-time changes observed for these indicators throughout the report.

Box 2: Data and Definitional Limitations

Though both the data and Geographic Zone Model used in this report are appropriate, they are not without some limitations.

First, the use of CMAs / CAs and non-CMAs/CAs to demarcate between urban and rural masks the continuum of urban-rural interdependence. Since the definitions of CMA and CA include surrounding municipalities in which at least 50% of the population commutes to the urban core, some of the communities classified as urban might more appropriately be viewed as rural communities that are "very strongly" influenced by urban centres. Thus, the definition used for urban in this analysis may over state the size of urban. For example, the Summer Village of Betula Beach has a population of 15 and is included in the CMA of Edmonton, presumably because at least 7 (50%) of its citizens commute the 90 kilometers to the City of Edmonton to work.

Second, since the analyses in this project involve comparisons between 1991, 1996, 2001, and 2006 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 only for the most recent census years with the same definition. For example, since level of education was modified between 1991 and 1996 and again between 2001 and 2006, its data are presented for 2006 only.

Third, 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. The use of the smaller CSDs, as opposed to CDs, as the building blocks of the rural/urban 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)

Lastly, there are two reasons why care should be taken when interpreting the Aboriginal Identity data in this report. First, some First Nations do not participate in the census. Furthermore, there has been an increase in the number of people who self-identify as Aboriginal. Known as 'ethnic mobility', an increase in Aboriginal Identity individuals between 1996 and 2001 was shown to be the main explanation for the recent population growth for North American Indian and Métis (Guidmond, 2003). Changes over time in Aboriginal Identity Population counts may thus be due to changes in birth/death and mobility rates and variations in the participation rates of First Nations and in the number of individuals self-identifying as Aboriginal. These issues are especially problematic for No MIZ since it has the largest proportion of its population identifying as Aboriginal.

It is also important to understand that since the figures provided for each geographic category are a compilation of data from many census subdivisions, it is inappropriate to apply any of the findings to specific communities. Nonetheless, to provide an understanding of the kinds of communities that comprise each geographic category, a list of sample municipalities is presented in Appendix 1. Again, however, the findings of this report cannot be applied directly to any one of the communities listed in the Appendix.

It is inappropriate to apply any of the findings to specific communities.

Indicators

Using 2006, 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 distribution and change
- Population age structure and change
- Global dependency ratio
- Population gender structure
- Aboriginal identity population
- Immigration status

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 housing value
- Housing affordability

Health Care Indicators:

- Number of health care providers per 1,000 residents

Important methodological issues and challenges (discussed in Box 1 and 2) should be kept in mind when interpreting the results.

C. Population Indicators

KEY FINDINGS

C.1 Population Distribution and Change

- Rural and small town Albertans comprise just over one-fifth (21%) of the total population of Alberta, down from 24.6% in 2001. Weak MIZ zones are the most populated of the rural zones (comprising 11.1% of the total Alberta population), followed by Moderate (6.8%), Strong (2.5%), and finally, No MIZ (0.8%) zones.
- While the urban population continued to exhibit strong population growth, Alberta's rural population got smaller in the most recent inter-census period because of geographic zone changes between census years that resulted in the reclassification of 8.3% of the rural population to urban geography. At the same time, rural Alberta experienced a 3.8% increase in its population size due to demographic factors (net in-migration and net birth-death rates). The net outcome of these two competing forces on population change was a 4.8% reduction in the rural population.
- This pattern was the most clearly displayed by Strong and No MIZ, which lost 52.1% and 37.7% of their respective populations because of boundary changes and gained 12.9% and 14.1% due to demographic changes. The net effect of these two competing forces on population change were population losses of 39.3% in Strong MIZ and 23.6% in No MIZ.

C.2 Alberta - Canada Population Comparaison

- Rural Alberta comprises a slightly larger share of the total population compared to the national rural share (21.1% compared to 18.9%). Most of this difference can be attributed to the much larger proportion of Weak MIZ residents in Alberta than in Canada (11.1% compared to 6.5%).
- A comparison of Alberta to Canada population change reveals that though Alberta has experienced stronger population growth as a result of demographic factors, the net losses in Alberta between 2001 and 2006 were higher than in Canada due to its much larger population losses stemming from geographic zone reclassification.

C.3 Age Indicators

- 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 2006 with the rural population aging more quickly between 2001 and 2006. This finding especially applies to Strong MIZ.
- Similarly, though rural Alberta has a higher dependency ratio than urban Alberta, it is decreasing more rapidly.

C.4 Population Gender Structure

- Though the ratio of men to women in rural Alberta is higher than in urban Alberta, it is decreasing over time.

KEY FINDINGS (CONT'D)

C.5 Aboriginal Identity Population

- Rural Alberta has a larger proportion of Aboriginal Identity people than urban Alberta (11.9% compared to 4.1%), with Aboriginal representation increasing as urban influence decreases.
- Rural Alberta also underwent larger proportional increases in their Aboriginal population than urban Alberta between 1996 and 2006, with the largest proportional increase occurring within Weak MIZ
- Despite experiencing the largest proportional decrease in its Aboriginal population of 6.6 percentage points between 2001 and 2006, No MIZ continued to have the largest proportion of Aboriginal Identity people (43.8%).

C.6 Immigration Status

- As is the case in Canada, urban Alberta has a much larger proportion of immigrants than rural Alberta (18.9% compared to 6.4%). Urban immigrants are also more likely than rural immigrants to be recent arrivals: whereas 20.2% of all urban immigrants arrived between 2001 and 2006, the same figure for rural immigrants is just 13.1%.

Summary

The recent decline of Alberta's rural population because of geographic CSD reallocation is an important finding that clearly offset the gains made by demographic growth. Yet, other findings in this section have future rural population sustainability implications. The growing senior population and the dwindling child population combine to suggest that births will be insufficient to offset deaths, thus contributing to an erosion of the population size in rural Alberta. The relatively minor influence of the rural immigrant population is, given the findings, not likely going to be sufficient to offset these losses. But not all parts of rural Alberta are equally at risk. Strong MIZ experienced relatively robust demographic population gains, has an age profile most closely resembling urban Alberta, the lowest rural dependency ratio, the smallest and the fastest decreasing Aboriginal Identity population, and the largest immigrant population. At the other end of the urban influence spectrum is No MIZ, which has the largest child population and the smallest adult population, the highest dependency ratio, the largest Aboriginal Identity population, and the smallest immigrant population.

C.1 Population Distribution and Change

C.1.1 Population Distribution

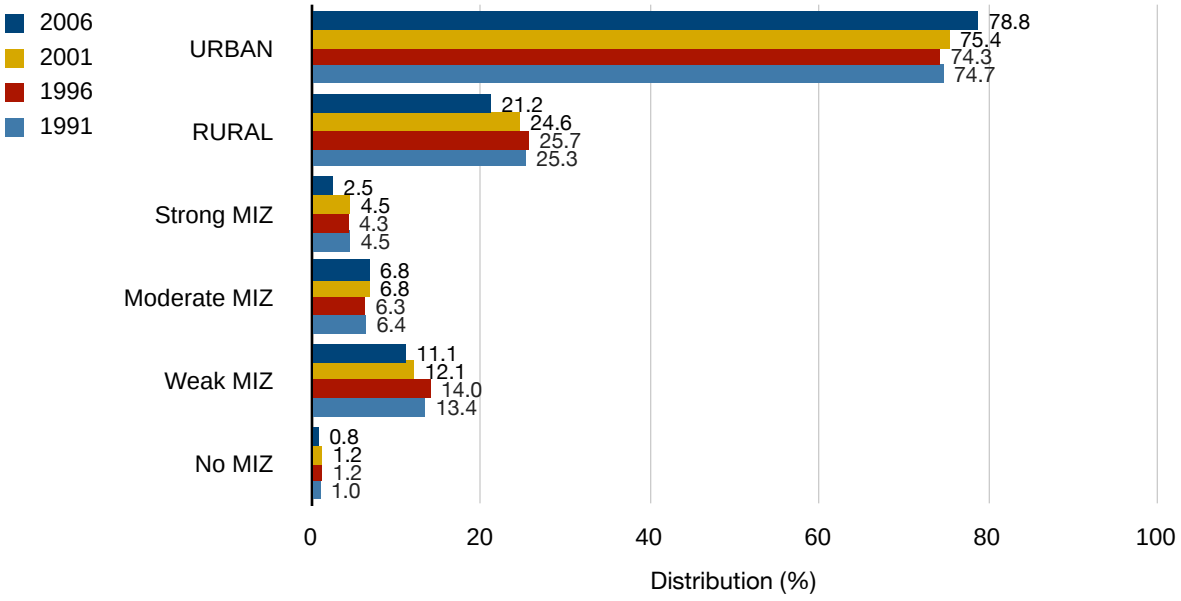
We begin this examination of the population by looking at the proportion of Alberta's population distributed between urban and rural and between the four MIZ geographic zones in 2006, 2001, 1996, and 1991 using current boundary data.

Looking first at the results for 2006, Figure 1 demonstrates that the rural population of 697,964 accounts for just over one-fifth (21.2%) of the total population of the province of 3,290,350. Within rural Alberta, Weak MIZ zones were the most populated (11.1%), followed by Moderate (6.8%), Strong (2.5%), and finally, No MIZ (0.8%) zones.

The figure also reveals that the rural share of the total population has noticeably decreased since the earlier census years. Whereas roughly one quarter of the provincial population in 1991, 1996, and 2001 were rural (25.3%, 25.7%, and 24.6%, respectively), by 2006 just over one-fifth (21.1%) of the population resided in rural Alberta. This decrease, moreover, is observed in all but Moderate MIZ regions of the province which has comprised a relatively stable proportion of the total population since 1991. In all other MIZ regions, the percent distribution for 2006 is lower than it was for all previous census years.

Since Weak MIZ zones are the most populated of all rural areas, accounting for 52.5% (n=364,978; see Appendix Table 1) of the rural and small town population in 2006, the -2.3 percentage point decrease since 1991 (from 13.4% to 11.1%) contributes significantly to the overall reduction in the share of rural population. In contrast, the -2.0 percentage point reduction in Strong MIZ zones has a much weaker influence on the total rural reduction since it has a population size four and one-half times smaller than Weak MIZ (81,051).

Figure 1: Population Distribution[1] in Alberta by Geographic Zone ; 2006, 2001, 1996, and 1991



Source: Statistics Canada, Census of Population, 2006, 2001, 1996, and 1991; 2006 extracted from Bollman and Clemenson (2008): Appendix Table K.10

[1] Population distribution is calculated using current boundaries.

C.1.2 Population Change

We often think of population change as stemming from demographic factors such as net in-migration and net births/deaths. Yet, since the current analysis involves a geographical component, the population can also change because of geographic shifts over time. Between 1971 and 2001, for example, urban land use in Canada increased by 76% (from 15,905 square kilometers to 28,045 square kilometers)(Hoffman, 2001). Such an increase in urban land use means that rural population loss can also be a function of rural communities becoming urban communities. In other words, rural population loss is also due to the geographic reclassification of communities over time.

With this in mind, population change is examined in two ways in this section – change due to demographic factors such as net migration, births, and deaths, and geographic change which is due to the reclassification of a CSD that results in its allocation to different geographic zone between census years (see section B: Research Methods Box 1 for a more detailed explanation).

Population change is due to demographic changes in the population (net migration, births, and deaths) AND due to geographic zone reclassifications between census years.

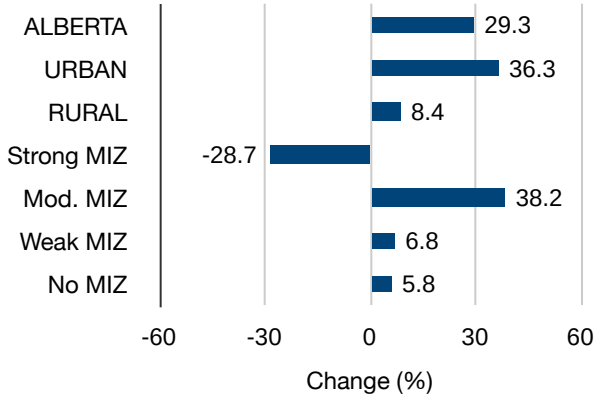
It should be understood that both measures of population change are valid and the choice of which measure to adopt depends on what you want to illustrate. It is common practice at Statistics Canada, for example, to use constant boundaries to highlight the effects of demographic influences on population change and thereby override the effects of geographic zone changes.[5] For the current analysis, however, the goal is to garner an appreciation of the relative influence of each source of population change and especially to highlight the fact that geographic zone change often exerts as much pressure on the trend towards increasing urbanization as do demographic factors. The results suggest that the geographic mechanism of change has had a notable influence on the size of the rural population in Alberta and especially so on Strong and No MIZ populations in the most recent inter-census period.

This comparative analysis is of value because it highlights the fact that urbanization is both a function of rural populations migrating to urban centres and of rural communities becoming urban communities (or becoming less rural). This analysis also has important implications for the trend data presented for all other indicators in this report since they are based on current boundaries. The implications for the other indicators are discussed at the conclusion of this sections' analysis.

The analysis begins in Figure 2 and Table 1 with 1991 to 2006 population change using current boundaries (representing change due to both demographic and geographic factors). Table 2 compares population change using both current and constant boundary demarcations and thus permits the deconstruction of the amount of population change due to geographic zone and demographic shifts.

To begin, Figure 2 displays 1991 to 2006 population change using current boundaries. It is clear from the figure that there was much smaller population growth in rural than in urban Alberta (8.4% compared to 36.3%). It is also clear that significant variation in population change has occurred within rural Alberta. Increasing by 38.2% between 1991 and 2006, Moderate MIZ zones clearly stand out as having the strongest population growth in rural Alberta. Although not nearly as dramatic, the highly populated Weak MIZ zones also underwent population growth of 6.8% as did No MIZ at 5.8%, while Strong MIZ experienced a population loss of -28.7%.

Figure 2: Population Percent Change in Alberta by Geographic Zone; 1991 to 2006
(Current Boundaries)



Source: Statistics Canada, Census of Population, 2006 and 1991 extracted from Bollman and Clemenson (2008): Appendix Table K.10

[5] For this reason, when making comparisons between the population change data presented in this report to other data, it is important to determine whether the comparative data is presented in current or constant boundaries.

Table 1 presents the details of population change for each 5-year inter-census period. Perhaps the most notable result in this table is the shift in rural Alberta from population growth in the first two census periods to population decline in the most recent inter-census period. Whereas the rural population increased by more than 5% in both the 1991-1996 and 1996-2001 census periods, it declined in the most recent 2001-2006 period by -4.5%.

Again, there is considerable variation in population change across rural zones but also across census periods. Whereas Strong and No MIZ both experienced a shift from growth to recent population declines (of -39.3% and -23.6%, respectively), Moderate MIZ has experienced population growth in every 5-year period. Weak MIZ experienced growth in all but the 1996 to 2001 period.

These current boundary data indicate dramatic population change variation across time and across MIZ, but they do not tell us whether these changes were due to demographic or geographic influences. In contrast, however, by comparing population change using current and constant boundaries, we can tease out the sources of change as is done in Table 2.

Table 1: Inter-Census Population Percent Change in Alberta by Geographic Zone; 1991-2006 (Current Boundaries)

	Change (%)			
	1991-2006	2001-2006	1996-2001	1991-1996
Alberta	29.3	10.6	10.3	5.9
Urban	36.3	15.5	12.1	5.3
Rural	8.4	-4.5	5.2	7.8
Strong MIZ	-28.7	-39.3	15.1	2.1
Mod. MIZ	38.2	11.2	19.1	4.4
Weak MIZ	6.8	1.7	-4.9	10.5
No MIZ	5.8	-23.6	15.5	19.9

Source: Statistics Canada Census of Population, 2006, 2001, 1996, and 1991 extracted from Bollman and Clemenson (2008): Appendix Table K.10

Table 2 presents 3 columns of 2001 to 2006, 1996 to 2001, and 1991 to 1996 population change. Column 1 is the same current boundaries as used in the table above and column 2 shows population change using constant boundaries which represents demographic sources of change including net migration and net births/deaths. The difference between the two types of data reflects the amount of population change due to geographic zone changes that occurred within each inter-census period (column 3). Essentially, the table uses the two types of population data (current and constant boundaries) to determine the sources of population change, whether they are demographic or geographic.

Table 2 first demonstrates that both urban and rural Alberta have benefitted from demographic sources of population change in all three census cycles (column 2). Within rural Alberta, however, there is a pattern of diminishing over-time strength in demographic sources of population growth; from 7.8% in the earliest 1991 to 1996 cycle to 5.5% in the 1996 - 2001 cycle to just 3.8% between 2001 and 2006.

Second, while urban Alberta did not experience any population loss from geographic change (column 3), rural Alberta's population was lower by -8.3% because fewer people were classified as rural between 2001 and 2006 and by -0.3% between 1996 and 2001. A glance down column 3 reveals that the changes in the rural population size are primarily due to geographic reclassification in Strong and No MIZ. The Strong and No MIZ losses, moreover, were significantly more pronounced in the 2001 to 2006 cycle; of -50.5% and -37.7%, respectively. In other words, the population losses observed in Table 1 within Strong and No MIZ were entirely due to geographic zone changes. Hence, while the population increased demographically in these two zones (by 12.9% and 14.1%, respectively), the geographic losses were more than sufficient to offset these gains resulting in significant net overall population loss (of -39.3% and -23.6%, respectively).

Population wise, Strong and No MIZ faired the best from demographic change, but the worst from geographic change. Since the losses from geographic change were stronger, the net result is 2001 to 2006 population losses for these two rural geographies.

In contrast, Table 2 reveals that the strong population gains observed in Table 1 for Moderate MIZ were due to both demographic and geographic sources of population increases for the two most recent inter-census cycles. In the 2001 to 2006 cycle, for example, Moderate MIZ experienced a population increase of 3.4% from net migration and net births/deaths and a further increase of

7.8% from the geographic reclassification of CSDs. Similarly, the population size in Weak MIZ was negatively affected by geographic change in only the 1996 to 2001 cycle (-6.7%), but since this zone had lower demographic growth than Moderate MIZ, the net population growth for the entire 1991 to 2006 period was just 6.8% (Table 1).

Table 2: Source of Population Change (Demographic versus Geographic) in Alberta by Geographic Zone; 2001 to 2006, 1996 to 2001, and 1991 to 1996

	Change (%)		
	Demographic & Geographic Change[1]	Demographic Change[2]	Geographic Change[3]
	2001 to 2006		
Alberta	10.6	10.6	0.0
Urban	15.6	12.6	3.0
Rural	-4.5	3.8	-8.3
Strong MIZ	-39.3	12.9	-50.5
Moderate MIZ	11.2	3.4	7.8
Weak MIZ	1.7	1.6	0.1
No MIZ	-23.6	14.1	-37.7
	1996 to 2001		
Alberta	10.3	10.3	0.0
Urban	12.1	12.0	0.1
Rural	5.2	5.5	-0.3
Strong MIZ	15.1	12.7	2.4
Moderate MIZ	19.1	5.9	13.2
Weak MIZ	-4.9	1.8	-6.7
No MIZ	15.5	17.9	-2.4
	1991 to 1996		
Alberta	5.9	5.9	0.0
Urban	5.3	5.3	0.0
Rural	7.8	7.8	0.0
Strong MIZ	2.1	12.6	-10.5
Moderate MIZ	4.4	7.0	-2.6
Weak MIZ	10.5	5.8	4.7
No MIZ	19.9	19.7	0.2

Source: Statistics Canada Census of Population, 2006, 2001, 1996, and 2001 extracted from Bollman and Clemenson (2008): Appendix Table K.10

[1] Demographic and Geographic Changes are represented by current boundary population figures.
[2] Demographic Changes for the 2001-2006 period are represented by constant 2006 boundary population figures. Changes for the 1996-2001 period are represented by constant 2001 boundary population figures. Changes for the 1991-1996 period are presented in constant 1996 boundary population figures.
[3] Geographic Change is calculated by subtracting the amount of change produced when using current boundaries from the amount of change produced when using constant boundaries.

The actual population counts provide further appreciation for the impact of geographic reclassification on rural Alberta population loss and clearly depicts how geography outweighed demography especially in the 2001 to 2006 period. While the rural population increased by 25,674 between 2001 and 2006 because of demographic factors, it decreased by 58,181 because of geographic changes, for a net loss of 32,507. Most of the geographic losses are accounted for by Strong MIZ which experienced a loss of 61,616. The less populated No MIZ zone accounted for just 12,050 of the geographic losses. In contrast, Moderate MIZ gained 15,091 from geographic change while Weak MIZ gained 394.

Though these data aren't sufficiently detailed to determine exactly which geographic zones in No and Strong MIZ CSDs were reallocated to, a quick examination of the municipalities that experienced a change in their geographic zone designation between 2001 and 2006 revealed that, though there are exceptions, most reclassifications reflect greater urbanization or decreasing rurality. For example, the municipalities of Grande Prairie and Okotoks were both designated as Strong MIZ in 2001 and were reclassified to CAs in 2006 since their population size passed the 10,000 minimum of the CA definitional criterion. These two municipalities alone account for 60% (35,115 out of 58,181) of the total loss from rural to urban Alberta. Other reclassifications towards lesser rurality are due to increases in commuting rates. For example, the town of Athabasca moved from Weak to Moderate MIZ between 2001 and 2006, likely reflecting an increase in the proportion of its population commuting to the CMA of Edmonton for work. Identifying the CSD reallocations in No MIZ is much more complex since a large number were allocated both into and out of this zone between 2001 and 2006; however, as the results suggest the out-allocation of CSDs clearly represented a larger population than the in-allocation of CSDs.

In summary, this analysis provides a clear picture of the two and sometimes competing sources of population change that have occurred in rural Alberta between 1991 and 2006. The fact that there are fewer rural Albertans because they became urban populations, even though they haven't moved, has implications for policy. If policy is aimed at rural population sustainability, it should account for geographic sources of urbanization.

The geographic reallocation of Grande Prairie and Okotoks from Strong MIZ to urban between 2001 and 2006 accounted for 60% of the total population loss from rural to urban.

The findings also suggest that geographic sources of change are especially important to keep in mind when conducting rural/urban trend analysis since most trend data draw upon either constant or current boundaries (representing demographic change and both demographic and geographic change, respectively) without deciphering the contribution of geographic reclassifications between census years. Not only does geographic reclassification result in further urbanization, but it can also result in a reduced level of 'rurality' as indicated by the loss of No MIZ populations due to CSD reclassification between census years.

Finally, the population changes revealed in this section are important to keep in mind when examining the trend data for all other indicators in this report since they are presented in current boundaries (see Table 2, column 1). Specifically, the loss of 40% of the population in Strong MIZ and the 24% loss in No MIZ between 2001 and 2006 will have a noticeable effect on these indicators. Since we don't know the population characteristics of the reallocated CSDs, however, the effect of their removal from their zone is incalculable, or at least beyond the scope of this report. They might however, explain, the rather volatile 2001 to 2006 changes observed in No MIZ for many indicators in this report as well as the dramatic reduction in the Aboriginal populations in both Strong and No MIZ (Figure 8). The geographic reallocation of half of the Strong MIZ population to urban between 2001 and 2006 might have also contributed to the extraordinary strengthening of this rural zone that is observed for all economic indicators in the report.

C.2 Alberta - Canada Population Comparison

C.2.1 Population Distribution

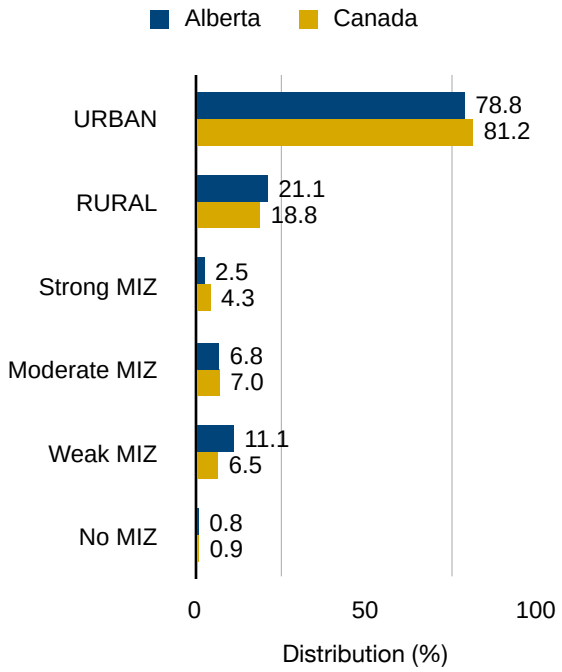
Having examined Alberta's population, it is helpful to situate these provincial data within the larger Canadian context.

Figure 3 presents the population percent distribution across geographic zones for Canada and Alberta. Compared to Canada as a whole, Alberta has a slightly larger rural population (21.1% compared to 19.0%). Put another way, while urban Alberta comprises 10.1% of the total Canadian urban population, rural Alberta contributes 11.7% to the Canadian rural population. When comparing Alberta with Canada across the four MIZ geographic zones, it is clear that the total rural/urban difference is chiefly because of the much larger share of the Weak MIZ population in Alberta than in Canada (11.1% compared to 6.5%). This is offset somewhat, however, by Alberta's smaller Strong MIZ population (2.5% compared to 4.3%), which as demonstrated in the previous section is due to its population loss as a result of geographic zone change.

Compared to Canada, Alberta has a slightly larger share of its population residing in rural regions, mostly due to its larger Weak MIZ.

At 21%, Alberta's rural population share is smaller than only that of Quebec (20%), British Columbia (13%), and Ontario (12%)(see Appendix Table 4). With few exceptions, the distribution of the population within rural and small town zones across Canada follows the pattern observed in Alberta whereby the smallest proportion of the population is located in No and Strong MIZ zones. Furthermore, Alberta follows Newfoundland / Labrador, Nova Scotia, Manitoba, Saskatchewan, and British Columbia in having the largest share of its rural population residing in Weak Metropolitan Influences Zones.

Figure 3: Population Percentage Distribution[1] in Alberta and Canada[2] by Geographic Zone, 2006



Source: Statistics Canada, Census of Population, 2006 extracted from Bollman and Clemenson (2008): Appendix Table K.1

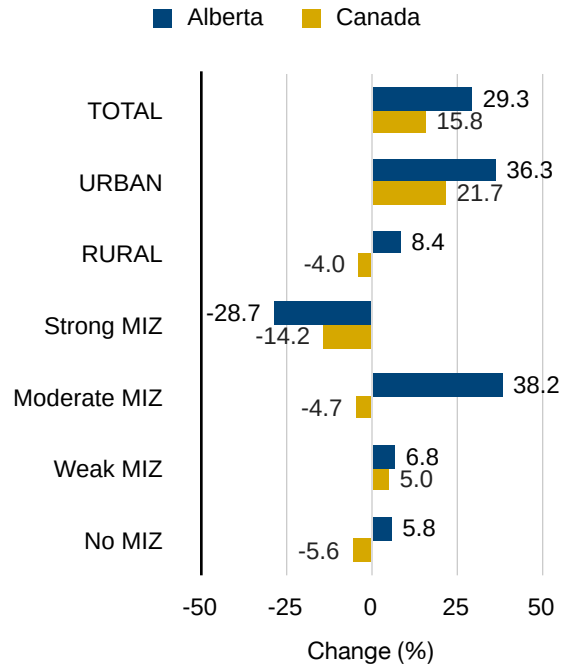
[1] Population distribution is calculated using current boundaries.
[2] Population percent distribution for Canada excludes the territories since they are not part of the MIZ classification system. The territories comprise 0.2% of the total Canadian population.

C.2.2 Population Change

This section examines the relative weight of rural population change arising from demographic versus geographic factors for Alberta in comparison to the findings for Canada. As was done for the Alberta analysis of population change, the section begins with a presentation of population change using current boundaries (reflecting the net influence of demographic and geographic change).

Figure 4 highlights the Alberta – Canada comparison of population percent change in each geographic zone between 1991 and 2006 using current boundaries. The figure demonstrates the very strong relative growth in Alberta over the past 15 years, roughly double the rate observed for the nation as a whole (29.3% compared to 15.8%). More noteworthy is the fact that rural Canada experienced a population decrease of -4.0% while rural Alberta increased by 8.4% in the 15 year period. In fact, population growth is greater in Alberta than in Canada for all but Strong MIZ regions, though both lost populations in this zone (-28.7% compared to -14.2%).

Figure 4: Population Percent Change in Alberta and Canada by Geographic Zone 1991 to 2006 (Current Boundaries)



Source: Statistics Canada, Census of Population, 2006 and 1991 extracted from Bollman and Clemenson (2008): Appendix Tables K.1 and K.11

The two sources of population change in Canada are presented in Table 3. The table reiterates the findings from Table 2 for Alberta: urban Canada increased its population primarily due to demographic changes, but also due to geographic boundary changes. Alberta's population growth from demographic change, however, is consistently stronger than that of Canada in virtually all geographic zones. For example, in the 2001 to 2006 period, rural Alberta grew by 3.8% while rural Canada's population increased by 1.0%.

Furthermore, compared to rural Alberta, geographic population losses in rural Canada were more dramatic in the two earlier census cycles, especially in the 1996 to 2001 period where all four MIZ regions experienced geographic population loss. Though the influence of 2001 to 2006 geographic change within rural regions of both Canada and Alberta is most pronounced for Strong and No MIZ, the losses in Alberta are more than three times higher than they are for Canada: Geographic losses for Strong MIZ in Alberta were -50.5% compared to -16.1% and Alberta's losses in No MIZ were -37.7% compared to the Canadian comparative figure of -11.1%.

Hence, geographic reallocations appear to have been affecting rural population loss for a longer period of time in Canada, but they have had a stronger effect in rural Alberta for the most recent 2001 to 2006 cycle.

Between 2001 and 2006, rural Alberta experienced greater population gains than rural Canada from demographic factors, but greater population losses from geographic reclassifications from rural to urban.

Table 3: Source of Population Change (Demographic versus Geographic) in Canada by Geographic Zone; 2001 to 2006, 1996 to 2001, and 1991 to 1996

	Change (%)		
	Demographic & Geographic Change[1]	Demographic Change[2]	Geographic Change[3]
	2001 to 2006		
Canada	5.4	5.4	0.0
Urban	7.5	6.4	1.1
Rural	-3.0	1.0	-4.0
Strong MIZ	-11.4	4.7	-16.1
Moderate MIZ	-2.7	0.9	-3.6
Weak MIZ	4.1	-1.4	2.7
No MIZ	-10.7	0.4	-11.1
	1996 to 2001		
Canada	4.0	4.0	0.0
Urban	6.2	5.2	1.0
Rural	-3.6	-0.4	-3.2
Strong MIZ	-2.6	3.7	-6.3
Moderate MIZ	-3.4	-0.9	-2.5
Weak MIZ	-5.3	-2.9	-2.4
No MIZ	0.4	1.0	-0.6
	1991 to 1996		
Canada	5.7	5.7	0.0
Urban	6.6	6.2	0.4
Rural	2.7	3.9	-1.2
Strong MIZ	-0.6	7.3	-7.9
Moderate MIZ	1.3	3.3	-2.0
Weak MIZ	6.5	1.8	4.7
No MIZ	5.3	5.2	0.1

Source: Statistics Canada, Census of Population, 2006, 2001, 1996, and 1991 extracted from Bollman and Clemenson (2008): Appendix Table K.1

[1] Demographic and Geographic Changes are represented by current boundary population figures.
[2] Demographic Changes for the 2001-2006 period are represented by constant 2006 boundary population figures, for the 1996-2001 period are represented by constant 2001 boundary population figures, and for the 1991 to 1996 period are represented by 1996 boundary figures.
[3] Geographic Change is calculated by subtracting the amount of change produced when using current boundaries from the amount of change produced when using constant boundaries.

A quick comparison of rural population change between provinces using constant 2006 boundaries provided in Bollman and Clemenson (2008), reveals that, excluding the territories, Alberta experienced the largest 2001 to 2006 increase in its rural population due to demographic change. However, a review of the population losses resulting from boundary changes between 2001 and 2006 in each province shows that all but Newfoundland and Prince Edward Island lost some of its rural population to urban because of geographic zone reclassifications.[6] Notably, though rural Alberta comprises just 12% of the total Canadian rural population, its rural geographic losses accounted for 24% of all rural boundary change losses for the entire county (58,181 out of 245,612). Not knowing the effects of geographic change at the MIZ level in other provinces, however, means that we cannot determine if Alberta's geographic zone losses in Strong and No MIZ is a pattern observed in other provinces, suggesting that future research examine the two sources of population change at the provincial level in Canada. Indeed, the results of this analysis of the source of population change in Alberta provide sound justification for accounting for geographic zone shifts in future investigations of rural population change since they can significantly contribute to the urbanization trend.

[6] From special tables courtesy of Ray Bollman, Statistics Canada.

C.3 Age Indicators

C.3.1 Population Age Structure

With the youngest median age of all provinces (35.7 years), Alberta is a relatively youthful province (Statistics Canada, 2009). This age profile puts Alberta at an advantage in many ways, but especially in terms of the labour market by having a relatively large proportional workforce (71% are of working age) and a more favourable workforce replacement ratio (100 retirements to 150 new entrants).

Yet rural Canada has a more polarized age structure with larger senior and child populations than urban Canada. As a result, rural Canada has higher old age dependency and child dependency ratios suggesting that the working population is under relatively more pressure to provide care for the young and old (Dandy and Bollman, 2008). The polarized age structure of rural Canada has been shown to be primarily a result of youth moving to metropolitan centres in search of better education, employment and life-experience opportunities, the attraction of older generations and retirees to the tranquility of rural spaces, and simply because local rural populations are aging (McCracken et al, 2005).[7] Research has also found that senior populations increase as rurality increases (Dandy and Bollman, 2008).

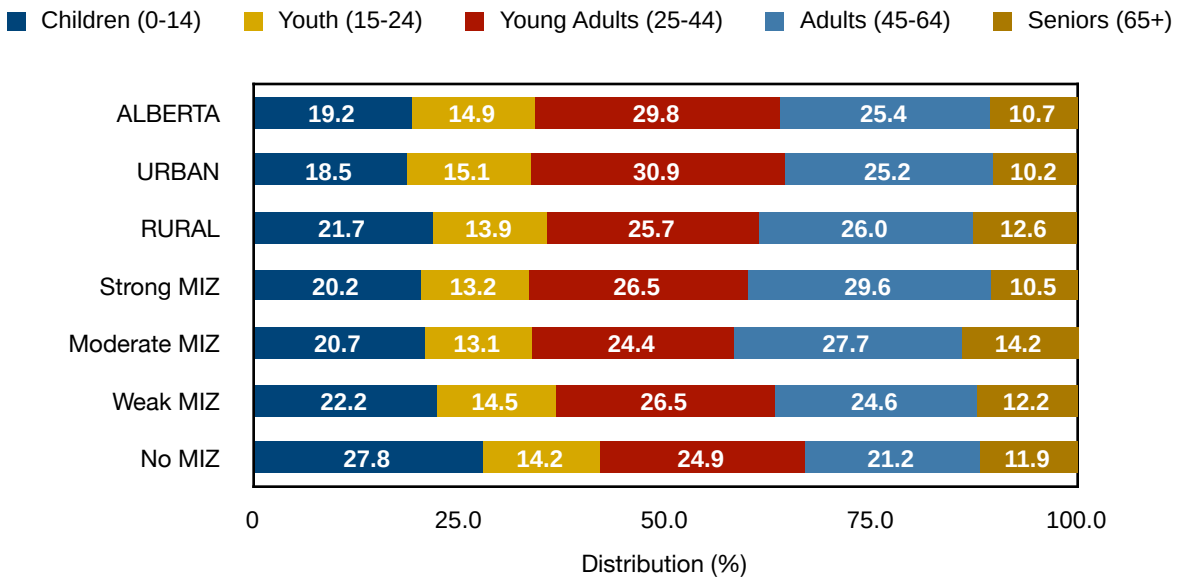
Keeping in mind that Alberta's population is younger than Canada's population, Figure 5 below shows that the Canadian rural age structure is replicated in rural Alberta. Compared to urban Albertans, the rural population tends to have a more polarized age structure with slightly higher proportions falling within the lowest and the highest age categories. While 21.7% of rural residents were children in 2006, only 18.5% of individuals residing in urban centres were within the same age category. And, while 12.6% of rural Albertans were seniors, 10.2% of urban residents were 65 years of age and older. Also of note is the much smaller proportion of what is typically defined as the prime working-age population (25 to 44 years) in rural than in urban Alberta (25.7% compared to 30.9%).

A similar age structure is also observed in all four MIZ regions of Alberta, with a few noteworthy differences. At 27.8%, No MIZ has a significantly larger child population, likely reflecting its large Aboriginal population which tends to be younger. Also, at 14.2%, Moderate MIZ has by far the largest senior population. Both of these geographic zones also have relatively small proportional prime working-age populations (24.4% for Moderate MIZ and 24.9% for No MIZ). Given their relatively large child and senior populations, the smaller prime working-age populations in Moderate and No MIZ suggest that communities in these zones have a smaller population to generate revenues to support a larger population of youth and retired segments.

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

[7] Interestingly, Rothwell (2002) found evidence of the reverse migration of people 70 years of age and older from rural to urban areas, likely to gain better access to specialized medical services.

Figure 5: Population Age[1] Percent Distribution in Alberta by Geographic Zone, 2006



Source: Statistics Canada, Census of Population, 2006

C.3.2 Population Age Change

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. For example, a recent report by Alberta Employment and Immigration (2008) designed to assist the Governments of Alberta and British Columbia in responding to the issue of labour and skill shortages, maintains that due to retirements and an insufficient supply of new workers:

> Alberta and B.C. risk not only a significant decline in the supply of workers over the next decade, but also a potential decline in productivity with the loss of skills, experience, and knowledge. This could exert downward pressure on GDP per capita growth and slow increases in living standards in Alberta and B.C. (Alberta Employment and Immigration, 2008: 11).

Given the larger pool of potential retirees as indicated by the larger adult segment in rural Alberta, the concerns expressed above have perhaps even graver implications for the future well-being of rural Alberta.

Though Alberta's population is aging at the slowest pace of all provinces, (Statistics Canada, 2007a), the Canadian rural population is aging at a faster rate than the Canadian urban population (Dandy and Bollman, 2008). Table 4 provides an indication of how these two competing forces play out in the rural Alberta field.

Table 4 displays the distribution percentage point change for each age category and for each 5-year census cycle. The table demonstrates that the Alberta population as a whole is aging. Between 1991 and 2006, the proportion of adults and seniors in the province increased by 8.2 and 1.7 percentage points, respectively. In contrast, we observe a decrease in the proportion of children during the same time period, of 4.4 percentage points. The proportion of young adults also decreased significantly by 5.7 percentage points in the 15-year period, reflecting the shift towards older adults and a loss of the prime working age cohort. Moreover, as the young adult cohort decreases, so will the future child cohort since these young adults are the age group most likely to bear children. These changes in age distribution also occurred in each inter-census period, thus establishing the aging phenomenon as a trend.

Table 4: Percentage Point Change in Share of Individuals in Each Age Class in Alberta by Geographic Zone, 1991-2006

		Distribution Change (%)				
	Year Range	Children (0-14 years)	Youth (15-24 years)	Young Adults (25-44 years)	Adults (45-64 years)	Seniors (65+ years)
Alberta	**1991-2006**	**-4.4**	**0.3**	**-5.7**	**8.2**	**1.7**
	2001-2006	-1.9	0.1	-2.3	3.0	1.1
	1996-2001	-2.0	0.7	-2.1	2.9	0.5
	1991-1996	-0.6	-0.5	-1.3	2.3	0.1
Urban	1991-2006	-4.2	0.3	-6.1	8.2	1.8
	2001-2006	-1.6	0.1	-2.3	2.9	0.9
	1996-2001	-2.0	1.0	-2.2	2.8	0.5
	1991-1996	-0.6	-0.7	-1.6	2.5	0.4
Rural	1991-2006	-4.6	0.1	-5.4	8.2	1.7
	2001-2006	-2.2	-0.1	-2.9	3.3	1.9
	1996-2001	-1.7	0.0	-2.0	3.2	0.5
	1991-1996	-0.6	0.2	-0.5	1.7	-0.7
Strong MIZ	1991-2006	-6.3	0.2	-5.9	10.8	1.2
	2001-2006	-4.0	-0.3	-2.7	5.2	1.8
	1996-2001	-2.1	0.5	-2.4	3.6	0.4
	1991-1996	-0.2	0.0	-0.8	2.0	-1.0
Moderate MIZ	1991-2006	-5.6	-0.2	-5.7	9.1	2.4
	2001-2006	-2.6	-0.1	-3.0	4.0	1.8
	1996-2001	-1.4	-0.1	-1.8	2.9	0.5
	1991-1996	-1.6	0.0	-0.9	2.2	0.2
Weak MIZ	1991-2006	-3.8	0.1	-5.1	7.3	1.5
	2001-2006	-1.3	0.0	-2.9	2.6	1.6
	1996-2001	-2.0	0.0	-2.0	3.3	0.7
	1991-1996	-0.4	0.2	-0.3	1.3	-0.9
No MIZ	1991-2006	-0.6	0.1	-3.0	5.1	-1.7
	2001-2006	-2.3	-0.7	-1.7	2.8	1.9
	1996-2001	0.8	-0.2	-1.2	1.4	-0.9
	1991-1996	0.9	1.0	-0.1	1.0	-2.7

Source: Statistics Canada, Census of Population, 2006, 2001, 1996, and 1991

While both urban and rural Alberta exhibit the same aging pattern, a more pronounced distribution percentage point change between 2001 and 2006 in rural Alberta has contributed to a more dramatic age profile shift over the entire 15-year period. Whereas the child population decreased by 2.2 percentage points in rural Alberta between 2001 and 2006, it decreased by just 1.6 in urban centres of the province. Similarly, Table 4 reveals that rural adults and senior populations increased between 2001 and 2006 by 3.3 and 1.9 percentage points, respectively, but the same figures for urban Alberta are just 2.9 and 0.9, respectively. Hence, not only is rural Alberta older, it is now aging more rapidly than urban Alberta. The more rapid aging of rural than urban seniors has also been found to be true Canada-wide during the 1996-2006 period (Dandy and Bollman, 2008).

Within MIZ Alberta, Table 4 shows that the rate of aging varies somewhat with Moderate and especially Strong MIZ exhibiting the most rapid aging, primarily in the most recent 2001-2006 period. Strong MIZ lost a 4.0 percentage point share of its children between 2001-2006 alone (-6.3 points between 1991 and 2006) and gained 1.8 percentage points in its share of seniors. Moderate MIZ also lost a notable share of children between 1991 and 2006 (-5.6%), but particularly stands out as having the largest gain in seniors of all geographic zones of 2.4 percentage points, thus explaining its significant senior population of 14.2% (Figure 5). Inhabitants of No MIZ zones aged between 2001 and 2006 as well, signaling a reversal of its previous trend of increasing youthfulness. In contrast to other rural regions of Alberta, the age structure change within Weak MIZ was very similar to that of urban Alberta.

Rural Alberta is now aging more rapidly than urban Alberta, and this is especially the case in Strong MIZ communities.

Uncovering the reasons why rural Alberta's population is aging more rapidly than urban Alberta's is a finding that has strong implications for rural sustainability and is therefore worthy of further exploration. Within the scope of this project, we can speculate that it is linked not only to a lack of rural in-migration but also perhaps to a shortage of new immigrants choosing to reside in rural parts of the province (see Table 5). Immigrants are not only a population source, but since they are, on average, younger than the Canadian born, they help mitigate, but not stop, an aging population. Without immigrants (and non-replacement birth rates), rural Alberta is aging naturally whereas urban Alberta's immigrants (and migrants) are sufficient in number to offset the pace of aging somewhat.

C.3.3 Global Dependency Ratio

Since rural Albertans are more likely than their urban counterparts to be children and seniors, they are less likely to be participating in the paid labour force. This age structure means that rural Albertans have a higher global dependency ratio (Figure 6), a measure of 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).

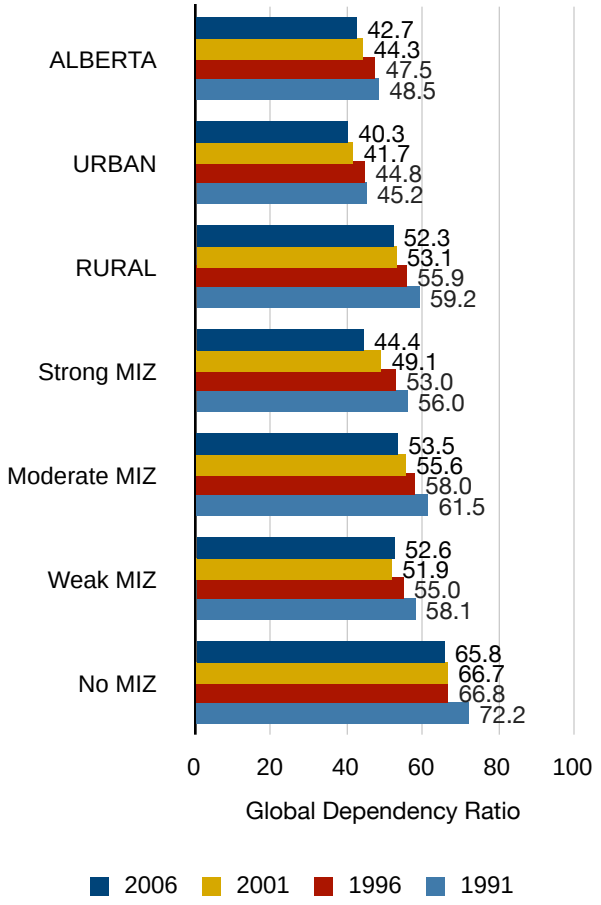
In 2006, there were 40.3 children and seniors per 100 urban adults compared to 52.3 dependents for every 100 rural and small town adult. Global dependency rates tend to increases as rurality increases with Strong MIZ having the lowest dependency ratio (44.4) and No MIZ zones having by far the largest dependency ratio (65.8 dependents per 100 adults).

The reduction of the child population observed across the province and in each inter-census period (in Table 4) has resulted in a continuously lower dependency ratio in each subsequent census year (Figure 6). This is evident in every geographic zone between every inter-census period with one exception: Weak MIZ experienced an increase in its global dependency ratio from 51.9% in 2001 to 52.6% in 2006. This is due to the fact that, in contrast to all other zones, the child population in Weak MIZ did not decrease enough to offset the growth of the senior population.

Though rural Alberta has a higher global dependency ratio, it has declined more quickly than in urban Alberta.

It is also important to note that, though the dependency ratio is higher for all MIZ zones than it is for urban communities, the rate is decreasing more rapidly in rural Alberta. Whereas the urban global dependency rate decreased by -4.9 percentage points between 1991 and 2006 it decreased by -6.9 points in rural Alberta. No where else is this more the case than in Strong MIZ which experienced a dependency ratio decline of -11.6 percentage points during this 15-year period. Again, these findings reflect the greater proportional losses of children in these sectors of the province.

Figure 6: Global Dependency Ratio[1] in Alberta by Geographic Zone; 2006, 2001, 1996, and 1991



Source: Statistics Canada, Census of Population, 2006, 2001, 1996, and 1991

[1] Global dependency ratio is defined as the ratio of child (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 indicator findings in Figures 5 and 6 and Table 4 have important government policy implications with respect to services targeted toward children, teens, adults and seniors. For example, the 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. The more dramatic growth of this population cohort, furthermore, means that service providers targeting seniors have likely been experiencing increased demand and exerted pressure on the system. These pressures have likely been felt most vigorously in Moderate MIZ communities, which not only

have the largest proportion of seniors but experienced the largest proportional jump in their older residents.

Furthermore, although both the proportion of rural Albertans who are children and the global dependency ratio decreased between 1991 and 2006, 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 is no more so the case than in No MIZ communities. Despite experiencing a small proportional drop in their child populations, No MIZ continues to have by far the largest proportion of children and the highest dependency ratio.

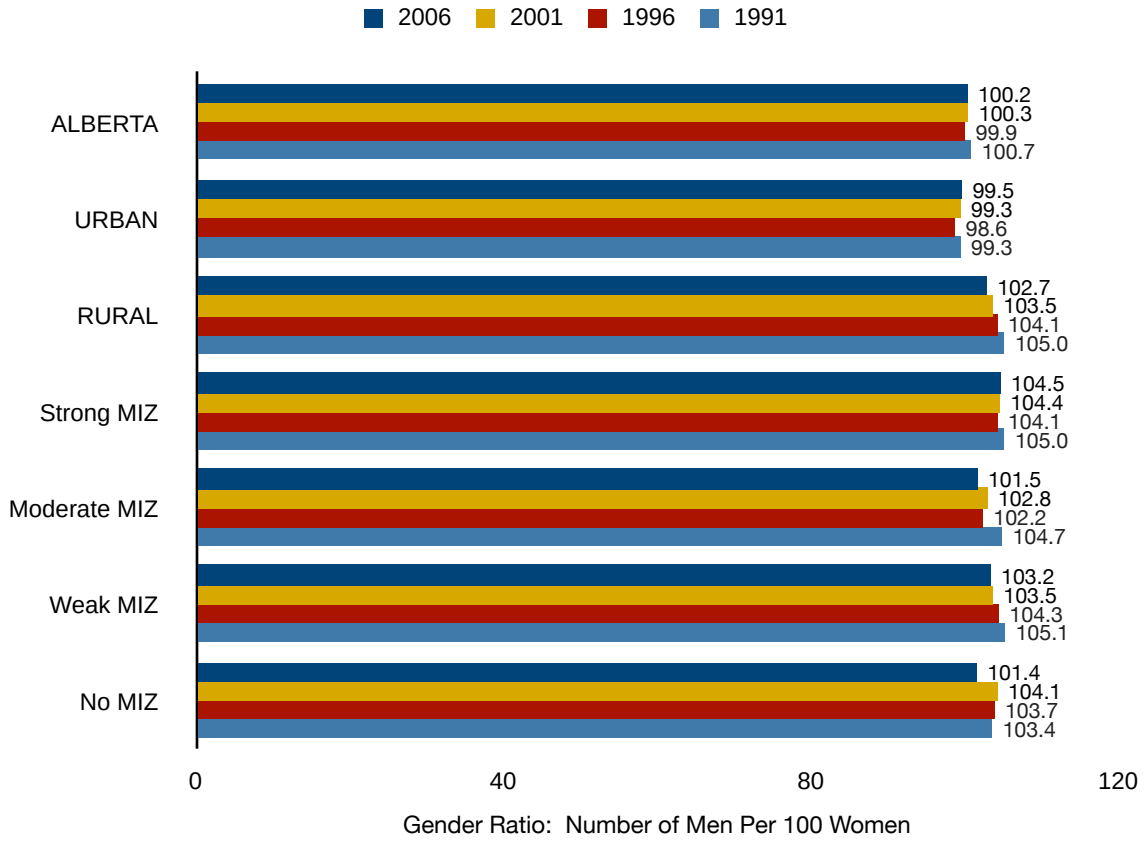
C.4 Population Gender Structure

Figure 7 presents the number of men per 100 women (gender ratio) for each geographic zone. The figure illustrates that, irrespective of census year, urban Alberta had a fairly equal distribution of men and women. In contrast, rural and small town Alberta has consistently had a slightly higher ratio of men. Though each MIZ zone in rural Alberta has a higher gender ratio than in urban Alberta, the largest male to female ratios are found in Strong (104.5) and Weak MIZ (103.2) zones of the province.

Whereas gender parity is consistently observed in urban Alberta, the figure also shows a decreasing gender ratio over time in all rural geographic regions of the province, with the largest decrease occurring in No MIZ regions between 2001 and 2006 (from 104.1 to 101.4). An explanation for this loss is not readily apparent, however, it might simply be a function the population losses in this zone (see Section C.1.2).

Rural Alberta has a slightly larger male to female ratio than does urban Alberta.

Figure 7: Gender Ratio in Alberta by Geographic Zone; 2006, 2001, 1996, and 1991



Source: Statistics Canada, Census of Population, 2006, 2001, 1996, and 1991

C.5 Aboriginal Identity Population

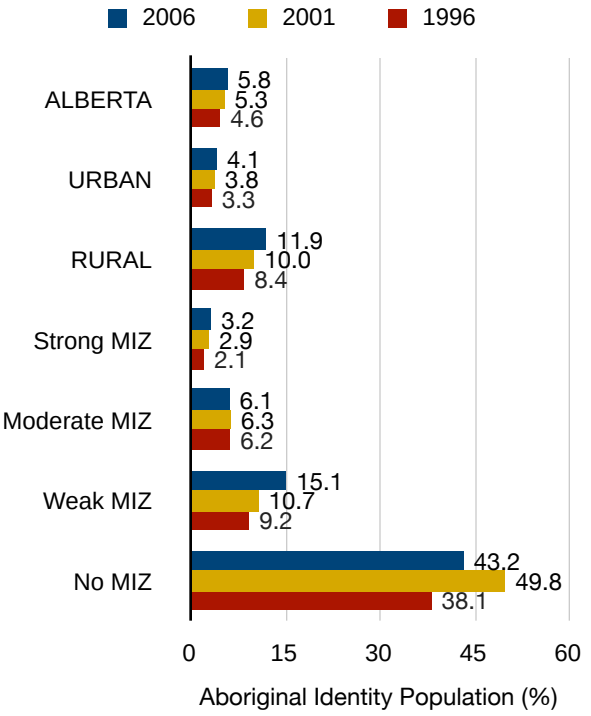
The Aboriginal Identity population in Canada, comprised of First Nations, Métis, and Inuit, has experienced significantly greater growth than the general population. Surpassing the one-million mark in 2006, the Canadian Aboriginal population grew by 45% between 2001 and 2006, nearly six times faster than the 8% rate of increase for the non-Aboriginal population (Statistics Canada, 2008). Several factors explain this growth including high birth rates, changes in migration and mobility patterns, more individuals self-identifying as an Aboriginal person[8], longer life expectancy, and a reduction in the number of incompletely enumerated Indian reserves.

Alberta is home to one of the largest, youngest, and fastest growing Aboriginal populations. In the 2006 census, 188,365 Albertans identified as Aboriginal. Alberta's descendants of the original inhabitants of this nation grew by 20% between 2001 and 2006 such that it is now home to Canada's third largest Aboriginal identity population (after Ontario at 242,495 and British Columbia at 196,075)(Statistics Canada, 2008). It is predicted that by 2017, Alberta may overtake British Columbia to become the second largest provincial Aboriginal population: The Aboriginal population in Alberta is projected to grow by 38.6% in the next 16 years, to reach 232,600 in 2017 (Statistics Canada, 2005a).

Like the non-Aboriginal population, the Aboriginal population displays a trend towards increasing urbanization. Though Aboriginal population is much less likely than the non-Aboriginal population to live in urban centres (54% compared to 81% in 2006), they are increasingly likely to do so (just 50% were urban dwellers in 1996).

Figure 8 presents the Aboriginal Identity population distribution across geographic zones for 2006, 2001, and 1996.[9] The figure demonstrates that, though urban areas had a larger number of Aboriginal people in 2006 than did rural zones (104,300 compared to 80,060—see Appendix Table 9), the proportion of the population that is Aboriginal was higher in rural Alberta than in urban regions (11.9% compared to 4.1%). Aboriginal representation varies considerably among the four MIZ geographic zones. Independent of census year, it is apparent that the lower the urban integration, the higher the proportional Aboriginal population. Though Weak MIZ zones had the largest absolute number of Aboriginal individuals in 2006 (54,150), No MIZ zones had by far the largest proportion of their population as Aboriginal, with 11,910 of its 27,822 (43.2%) of its residents self-identifying as Aboriginal.[10]

Figure 8: Aboriginal Identity [1] Population in Alberta by Geographic Zone; 2006, 2001, and 1996



Source: Statistics Canada, Census of Population, 2006, 2001 and 1996

[1] Refers to persons who reported identifying with at least one Aboriginal group, i.e. North American Indian, Métis or Inuit 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 further indicates that rural Alberta underwent larger proportional increases in their Aboriginal population than urban Alberta in both inter-census cycles. Between 2001 and 2006, for example, the Aboriginal Identity population increased by 1.9 percentage points in rural Alberta compared to 0.4 points in urban

[8] This is also known as 'ethnic mobility' which has been shown to be the main explanation for the recent population growth for North American Indian and Métis (Guimond, 2003).

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

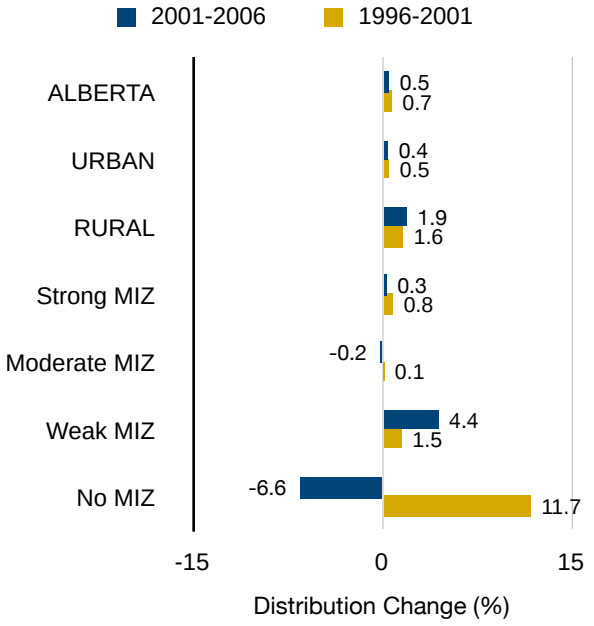
[10] Still, this figure is an under-representation of the Aboriginal Identity population in No MIZ due to the non-participation of two First Nations' Indian Reserves in the Census in this geographic zone. The missing population represents roughly 10% of the 2006 Aboriginal population in No MIZ of Alberta.

Alberta. The figure also shows that the shift in the proportional Aboriginal population varied greatly within rural Alberta. While both Strong and Weak MIZ follow the total rural pattern by experiencing percentage point increases in both inter-census periods, both Moderate and No MIZ underwent proportional increases in their Aboriginal population between 1996 and 2001 and proportional declines between 2001 and 2006. Experiencing a percentage point increase of 11.7 in the first inter-census period and a percentage point decrease of 6.6 in the most recent inter-census period, the change for No MIZ, whether positive or negative, was far above that of any other geographic zone. Still, the net outcome of the two opposing shifts for the full 1996 to 2006 period is an increased share of 5.1 percentage points, the second largest gain in the proportional Aboriginal Identity population in the province, after Weak MIZ at 5.9 percentage points. Moreover, despite the declining Aboriginal share of the No MIZ population, at 43.2%, the proportional Aboriginal Identity population in this zone is still nearly four times higher than observed in the total rural population (11.9%).

Yet it is interesting that the over-time shift from an increasing to decreasing proportional Aboriginal population in No MIZ follows the pattern of total population change that occurred between the two inter-census periods (Table 3). We might therefore speculate that the proportional decline observed in the 2001 to 2006 is not because of the out-migration of Aboriginal individuals from this zone but is a result of the out-classification of No MIZ CSDs that were more likely to be comprised of Aboriginal Identity Individuals. Since demographic growth was sufficient to offset the smaller effects of geographic reclassification of CSDs in the 1996 to 2001 period, moreover, the 11.7 percentage point increase in this earlier period is likely due to natural growth in the Aboriginal population.

Between 2001 and 2006, No MIZ experienced a large decline in its share of Aboriginal Identity Individuals, but its proportional Aboriginal population is still four times larger than the total rural proportional Aboriginal population.

Figure 9: Percentage Point Change in the Share of the Aboriginal Population in Alberta by Geographic Zone; 2001 to 2006 and 1996 to 2001



Source: Statistics Canada, Census of Population, 2006, 2001 and 1996

[1] Refers to persons who reported identifying with at least one Aboriginal group, i.e. North American Indian, Métis or Inuit 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).

These findings have strong implications for program and policy development since Aboriginals have specific needs with respect to government services. Given the consistently strong proportional increases in the Aboriginal population in Weak MIZ, the demand for these services has and likely will continue to intensify as the population continues to grow in these rural communities of the province.

C.6 Immigration Status

It has been clearly established here and elsewhere that rural sustainability is highly contingent upon population growth. As such, immigrants are increasingly viewed as an important source of population growth. As the natural population balance (births minus deaths) becomes negative, the ability of rural Canada to attract immigrants will be one of the chief ways to achieve population growth. Given the now well-documented economic growth benefits of immigration, immigration is also a vital source of rural economic development.

Yet, a small and diminishing share of immigrants choose to reside in rural Canada. Whereas immigrants comprise 28% of the urban population, they make up just 6% of predominantly rural regions. Indeed, a smaller share of new arrivals is choosing to settle in rural regions than ever before: As aptly phrased by Bollman et al (2007);

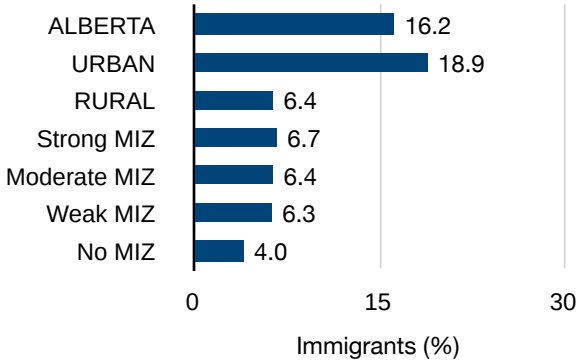
> [I]f you meet an immigrant in rural Canada, this person almost certainly arrived in Canada before 1981. If you meet an immigrant in a large city in Canada, the odds are that this person has arrived since 1981.(p10)

Furthermore, not only are immigrants more highly educated on average than non-immigrants, Citizenship and Immigration Canada (2009) has found that recent immigrants are more likely than Canadian-born persons to be of prime working age. Almost one-half of recent immigrants (48%) are 25 to 44 years of age, while Canada's domestic working-age population makes up only one-third of the total (32%). Given the relative small prime working age population in rural Alberta, and especially in Moderate and Weak MIZ (see Section C.3), it could clearly benefit from increased immigration.

Figure 10 provides the percent of the total population who are immigrants. Immigrants are defined as individuals who are or who have ever been landed immigrants in Canada and who have the right to live in Canada permanently.

The figure clearly establishes that the Canadian urban-rural immigrant pattern is replicated here in Alberta. While 18.9% of urban Albertans are immigrants, they make up just 6.4% of rural Albertans. Similar proportions of immigrants are found in all but No MIZ regions of the province in which just 4.0% of the population are landed immigrants.

Figure 10: Immigrant Population[1] in Alberta by Geographic Zone; 2006



Source: Statistics Canada, Census of Population, 2006

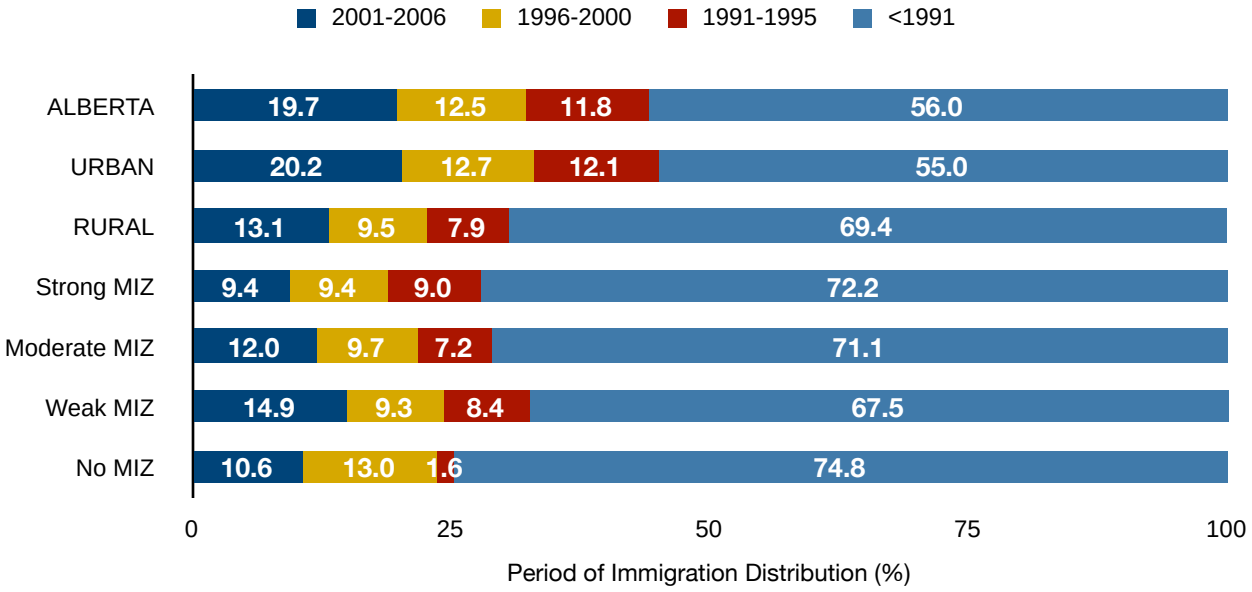
[1] Immigrants are persons who are, or have ever been, landed immigrants in Canada. A landed immigrant is a person who has been granted the right to live in Canada permanently by immigration authorities.

Figure 11 displays the period of immigration to Canada as a proportion of immigrants and demonstrates that, as is the case Canada-wide, urban immigrants in Alberta are more likely than rural immigrants to be recent arrivals: 20.2% of urban immigrants came to Canada between 2001 and 2006 compared to only 13.1% of rural immigrants.

Within rural Alberta, however, the pattern of findings is somewhat contrary to what we would expect. Though No MIZ fits the typical urban influence pattern by having the largest proportion of its immigrants arriving before 1991 (74.8%), Strong MIZ is the least likely of all rural zones to have received immigrants in the most recent 2001 to 2006 period (9.4%). In fact, Weak MIZ stands out as having the largest proportion of recent immigrants (14.9%). Still, compared to other rural zones, Strong MIZ received a larger share of its immigrants in the 1991-1995 period (9.0%). These findings highlight the lack of current knowledge on rural immigration patterns and suggests that further research is needed to determine the types of rural communities that immigrants tend to settle in.[1]

[1] Since Weak MIZ residents are no more likely than the other 3 zones to work in any of the industry sectors examined in Table 5, it is likely that the larger proportion of recent immigrants in Weak MIZ resulted from a combination of factors. Such an analysis is beyond the scope of this report.

Figure 11: Period of Immigration in Alberta by Geographic Zone; 2001-2006; 1996-2000; 1991-1995; before 1991



Source: Statistics Canada, Census of Population, 2006

[1] Immigrants are persons who are, or have ever been, landed immigrants in Canada. A landed immigrant is a person who has been granted the right to live in Canada permanently by immigration authorities.

Nonetheless, the rural/urban differences in immigration have implications for policy development. While a government policy focus on rural population retention and on the attraction of Canadian populations to rural and small town regions is of value, there is also great merit in developing policy to attract new immigrants. Within Alberta, entrance into the federal Provincial Nominee Program in 2002 and the continuous work being conducted on immigration policies, especially those designed to address labour shortages in Alberta, are examples of such forward-thinking policy. But, perhaps in no other province than Manitoba has there been such a solid record of rural immigration policy development. Here, strong immigration to certain rural regions is due to the provision of extensive immigration settlement and integration support and because of cultural and industry-occupation matching between current and new populations of Mennonites. The success of these programs also largely rests on concerted collaboration between local industry, local government and the provincial government under the federal Provincial Nominee Program (Sorensen, 2007). Underlying the success of these programs is the understanding that though employment opportunities are a strong factor attracting immigrants to rural Canada, social factors and/or kinship ties are considered just as important, and in some cases even more important, than economic factors (Derwing et al. 2005; Statistics Canada 2005b). Silvius and Annis (2005), for example, found that having a safe and relaxed atmosphere, helpful neighbours, access to culturally familiar services, and having the perception that a rural environment is a good place to raise children were very important considerations in the choice of immigrants to locate in rural Canada.

Alberta's rural population is much less likely than the urban population to be an immigrant and to be a recent immigrant.

Summary and Conclusions

The population indicator findings examined in this section not only highlight important rural/urban differences but they also demonstrate the great deal of variation that exists within rural Alberta. Given the premise of this analysis that greater rural connections to urban economies yields more positive rural outcomes that are in line with urban outcomes, these variations are at times predictable and at other times not as we would expect with the MIZ classification system.

Concerning the former, age structure, global dependency ratio, and gender structure in Strong MIZ is the most similar to the urban results for these indicators and No MIZ the least similar. However, in contrast to what we would expect are the findings of a decline in the share of the Aboriginal population in No MIZ. Keeping in mind that these population indicators are provided in current boundaries and therefore represent both demographic and geographic sources of change, the unexpected finding for No MIZ is likely a result of the influence of geographic zone change on population decline in this zone. In other words, the reclassification of CSDs out of No MIZ likely brought with it the out-reclassification of Aboriginal peoples from this zone as well.

At the same time, rural Alberta is growing, but we have fewer rural Albertans due to rural-to-urban reclassification. The influence of geographic CSD reallocation on the size of the rural population is an important finding that clearly offset the gains made by demographic growth in absolute terms. That rural Alberta has continued to expand because of net in-migration or net-births/deaths, however, suggests that rural Alberta sustainability is not at risk because people are moving out of rural parts to urban centres. Yet, the geographic reclassification of rural to urban that has recently occurred should be on the policy table as a matter of consideration for rural population sustainability, loss of agriculture land, and the attendant problems associated with further urbanization (e.g, urban sprawl, environmental degradation).

Other findings in this section also have future rural population sustainability implications. The growing senior population and the dwindling child population combine to suggest that births will be insufficient to offset deaths, thus contributing to an erosion of the population size in rural Alberta, if these factors haven't already done so. The relatively minor influence of the rural immigrant population is, given the findings, not likely going to be sufficient to offset these losses. These considerations add up to a future rural Alberta that is at risk of loosing its people because of demographic factors, let alone because of geographic factors.

But not all parts of rural Alberta are equally at risk. Though Strong MIZ lost a significant portion of its population because its communities were reclassified as urban, it experienced relatively robust demographic population gains. Strong MIZ also has an age profile most closely resembling urban Alberta, even though it experienced an above-average loss of children between 2001 and 2006. Strong MIZ also has the lowest rural dependency ratio, the smallest and the fastest decreasing Aboriginal Identity population, and the largest immigrant population. At the other end of the urban influence spectrum is No MIZ which, although also benefiting from demographic growth, lost more than one-third of its population because of the out-allocation of its CSDs to other geographic zones. Furthermore, No MIZ has the largest child population and the smallest adult population, the highest dependency ratio, the largest Aboriginal Identity population, and the smallest immigrant population. As we would predict, the results for Moderate and Weak MIZ typically fell between Strong and No MIZ.

These different outcomes along the MIZ continuum highlight the importance of examining the rural sector as a heterogeneous entity. Clearly, the population indicators examined in this section, mask a great deal of variation within rural Alberta.

D. Economic Indicators

KEY FINDINGS

D.1 Labour Market Indicators

- Throughout all four census years, labour force participation (LFP) rates range from 70% to 76% in all but one geographic zone of the province. Though the LFP rate in No MIZ was at an all time high in 2006 of 61.5%, the rates in this zone have been consistently much lower than elsewhere, ranging from 57% to 62%.
- By 2006, unemployment rates had reduced to below 5% in all geographic zones of the province, except in No MIZ zones where the rates continued to be the highest of all regions despite a 1.7 percentage point decrease between 2001 and 2006 (from 11.3% to 9.6%).
- Rural and small town Albertans dominate employment in primary industries while urbanites are more strongly represented in production service industries.
- Employment in agriculture, forestry, fishing and hunting accounts for a decreasing share of employment in rural Alberta (from 17.3% in 2001 to 14.3% in 2006).
- A 2001 to 2006 reduction in self-employment in rural Alberta parallels the reduction in employment in agriculture, forestry, fishing and hunting.

D.2 Income Indicators

- Median personal incomes tend to decrease as urban influence decreases, with No MIZ residents receiving only 71% of the incomes received in Strong MIZ zones. Still, the 2006 Strong / No MIZ disparity in income is smaller than it was in 2001 (58%).
- 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 2006. Low income is less prevalent in rural Alberta perhaps because of its lower living costs.
- In all four census years, rural and small town Albertans garnered a larger proportion of their income from social transfer payments than did urban citizens. In 2006, 8.2% of the income of rural Albertans came from government transfer payments compared to 6.1% of the income of urbanites. Among rural Albertans, No MIZ zones were by far the most likely to rely on social transfer income despite experiencing a decrease from 22.0% in 2001 to 19.4% in 2006.

Summary

All economic indicators presented in this section reflect the more robust economic conditions of the province that began in the late 1990s. Despite the more positive economic conditions in rural Alberta in 2006, the economic disparity between the urban and rural population continued for all indicators. The economic disparities within rural Alberta, though larger than the rural / urban gap, showed some signs of narrowing. The fact that Strong MIZ out-performed urban Alberta on most of the indicators is also an important finding that warrants further investigation. But, the dominant story of the economic indicators is that the disparities among rural regions are as important (if not more important) as the overall differences between urban and rural Alberta.

D.1 Labour Market Indicators

D.1.1 Labour Force Participation and Unemployment Rates

In 2006, the Alberta labour force had 1,942,825 members (Appendix Table 11) for a labour force participation (LFP) rate of 74.0% (Figure 12). Although the urban LFP rate was slightly higher than the rural rate, the differences between them is not really very large (74.5% compared to 72.3%). In fact, the rural LFP rate is still higher than the Canada-wide rate of 66.8%.

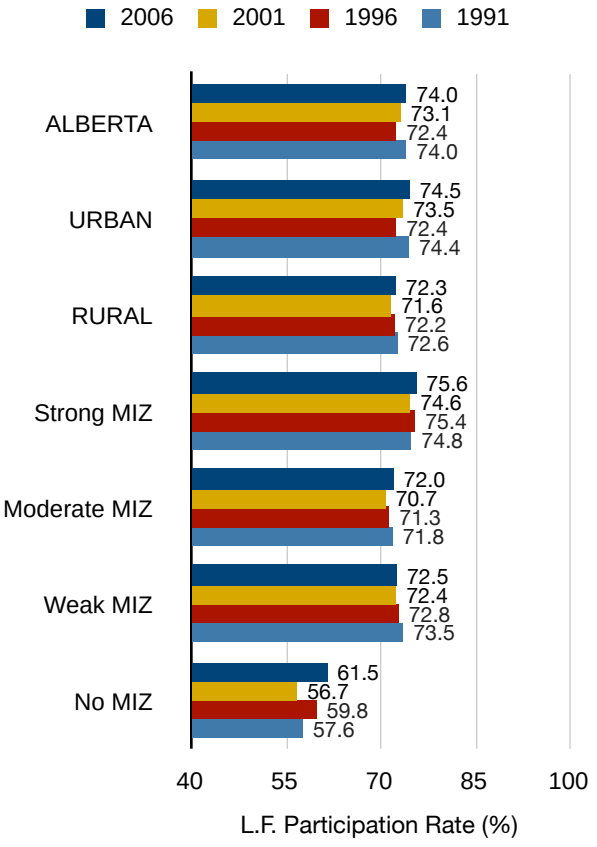
Within rural Alberta, the LFP rate tends to decrease as metropolitan influence decreases. While Strong MIZ has the highest LFP rate in each census year, superseding even that of urban Alberta, No MIZ stands out as consistently having by far the lowest rate.

No MIZ also exhibits the greatest over-time volatility as evidenced by its up and down pattern between every census year. Between 2001 and 2006, increases in the LFP rate occurred in all regions of the province. The increases are really very small, however, and excluding the aforementioned volatile No MIZ, the figure depicts relative over time stability in the LFP rates across the province.

Turning to unemployment rates, Figure 13 shows that the rural and urban rates are similar (4.4% for rural compared to 4.2% for urban). Notably, Strong and Moderate MIZ have the two lowest unemployment rates in the province (3.2% and 3.7%, respectively). Unemployment rates within rural Alberta otherwise depict diminishing economic strength as metropolitan influence decreases with Weak MIZ having the third highest unemployment rate of 4.8%, while the highest rate of 9.6% is found in No MIZ zones. No MIZ was also the only geographic zone to experience an increase in its unemployment rate between 1991 and 1996 (from 9.6% to 11.6%). Otherwise, the rates decreased in every geographic zone since 1991, and except for the aforementioned 1991 to 1996 increase in No MIZ, the unemployment rate data demonstrate improving economic conditions between 1991 and 2006 in both urban and rural Alberta.

In short, Figures 12 and 13 reveal that Strong MIZ zones consistently exhibit the most positive labour market characteristics in Alberta, while No MIZ is clearly the most disadvantaged with respect to their labour force participation and unemployment rates. The higher unemployment rate among Aboriginals may partly explain the high rate in the Aboriginal intensive No MIZ zones. The 9.6% unemployment rate in No MIZ for 2006, however, is still lower than the unemployment rate for all Aboriginals in Canada (14.8%).

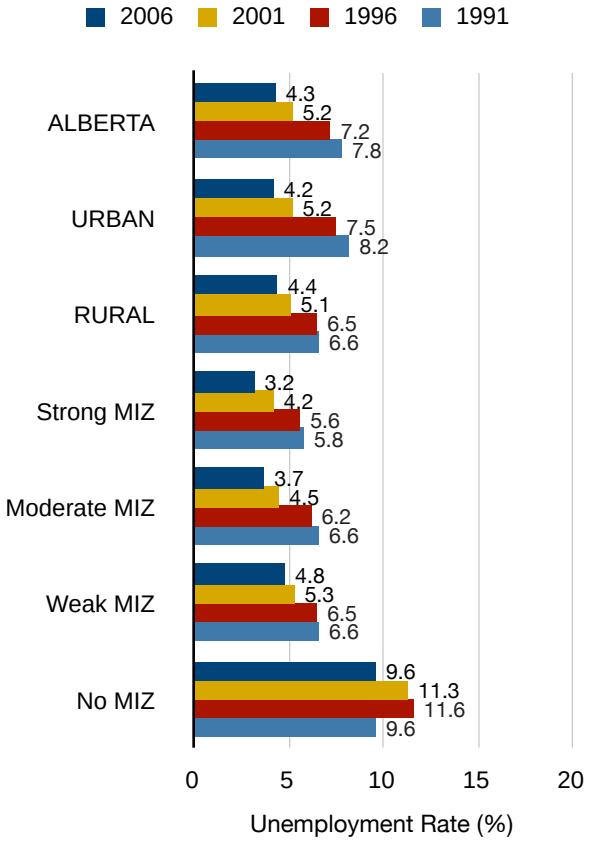
Figure 12: Labour Force Participation Rate[1] in Alberta by Geographic Zone 2006, 2001, 1996, and 1991



Source: Statistics Canada, Census of Population, 2006, 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 13: Unemployment Rate[1] in Alberta by Geographic Zone; 2006, 2001, 1996, and 1991



Source: Statistics Canada, Census of Population, 2006, 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.

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.

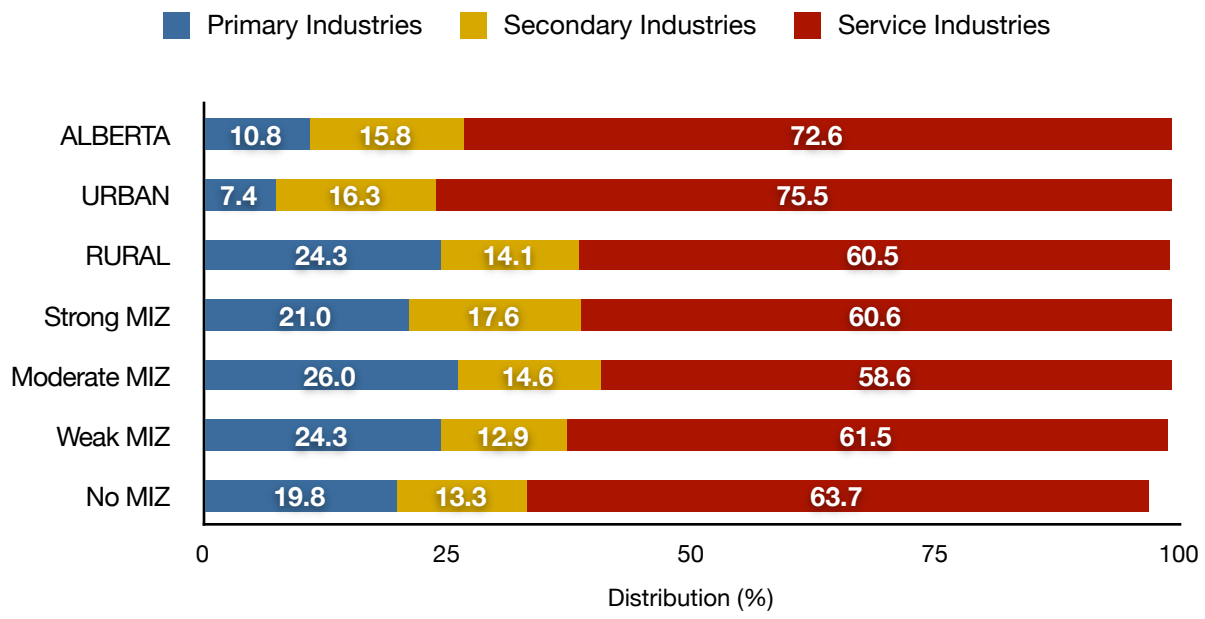
D.1.2 Industry Employment Distribution

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 and 2006 censuses adopted the North American Industry Classification System (NAICS). For this reason, industry employment distribution is presented for 2001 and 2006 only.

Figure 14 presents three broad industry categories for each geographic zone of the province for 2006. Primary industry employment (including agriculture, forestry, fishing and hunting, and mining and oil and gas extraction) accounted for 10.8% of employment in all Alberta industries in 2006. Rural and small town regions, however, eclipse urban centres in employment in primary industries by a factor of three (24.3% compared to 7.4%). This high representation in primary industries, moreover, is observed for all four MIZ categories, with the Moderate MIZ population the most likely to work in these industries (26.0%) and the No MIZ population the least likely (19.8%).

Though there is less geographic zone variation for employment in secondary industries (construction and manufacturing) than for primary industries, representation tends to decrease as metropolitan influence decreases. The figure also reveals that service jobs are more prevalent in urban regions, accounting for more than three-quarters (75.5%) of all employment here compared to only six in ten (60.6%) jobs in rural and small town Alberta. Once again, a pattern is apparent within rural Alberta, though this time it is reversed: employment in service industries increases as metropolitan influence decreases.

Figure 14: Broad Industry Sector[1] Percent Distribution in Alberta by Geographic Zone; 2006



Source: Statistics Canada, Census of Population, 2006

[1] Based on the 1997 North American Industry Classification System (NAICS). Primary industry employment includes agriculture, forestry, fishing and hunting, and mining and oil and gas extraction. Secondary industries include construction and manufacturing. Service industries includes production, consumer, and government services.

These broad industry sector distributions provide a general indication of the differences between urban and rural Alberta and the patterns within rural Alberta. Table 5 provides a more detailed presentation of industry distributions for both 2006 and 2001.

Focussing first on rural/urban differences in 2006, Table 5 shows that the principle explanation for the difference in primary industry employment is the larger proportion of the rural population working in agriculture, forestry, fishing, and hunting (14.3% compared to 1.3%). Still, rural Albertans are more likely than their urban counterparts to be working in mining, oil and gas extraction industries (10.0% compared to 6.2%), a sector containing some of the highest-paying jobs in Canada (Statistics Canada, 2007b).

Rural/urban differences in both types of secondary industries are not very large, though rural Albertans are slightly less likely to work in manufacturing (5.5% compared to 7.5%). The rural/urban difference in service industries observed in Figure 14 is largely explained by the much smaller proportion of rural Albertans employed in production services (19.3% compared to 30.9%). This finding is notable since production services, which include communications, wholesale trade, finance and insurance, tend to provide jobs that are well paying, secure, and of high status.

Table 5 also demonstrates a pattern along the metropolitan influence continuum for manufacturing and production service jobs: Strong MIZ is the most likely to provide jobs in manufacturing (6.7%) and production services (23.9%), while No MIZ is the least likely (3.5% for manufacturing and 17.1% for production services). Otherwise, Moderate MIZ stands out as having the largest proportion of employment in agriculture, forestry, fishing, and hunting (17.4%), Weak MIZ is notable for its relatively high level of employment in consumer services (23.9%), and No MIZ for its employment in both mining and oil & gas extraction (12.5%) and government services (27.4%).

Turning now to a comparison of the 2006 distribution with the 2001 distribution in Table 5, it is apparent that employment in manufacturing, and production services decreased in virtually all geographic regions of the province. Over time percentage distribution decreases are also observed in consumer services, for all but No MIZ which increased by 2.1 percentage points between 2001 and 2006 (from 17.1% to 19.2%). No MIZ also stands out for experiencing a notable reduction in the proportion of its population working in government services (from 29.5% to 27.4%).

Within rural Alberta, employment in agriculture, forestry, fishing, and hunting declined by 3 percentage points between 2001 and 2006, with decreases occurring in all four MIZ regions. This decline illustrates the continued trend towards diminishing farm employment as a result of decreases in the number of farms and in the number of farmers and increases in the number of farmers taking jobs off the farm (Statistics Canada, The Daily, 2007).

A growing body of research shows that economic diversification reduces economic instability in both urban and rural regions by providing a shield from market fluctuations and from natural devastations such as pine beetle infestation and mad cow disease (Trendle; 2006). Despite that Alberta leads the nation in economic growth, over 70% of exported goods are comprised of raw and semi-processed natural resource products (Gartner, 2007), illustrating a continued dependence upon a single industrial sector, at least for exports. This measure of industry diversification is even less evident in rural and small town Alberta where 24.3% of jobs are found within the primary sector (compared to just 7.4% in urban Alberta; Table 5).

It is thus now widely recognized that, if rural areas are to prosper to their fullest potential in a sustainable way and to avoid the risks associated with single-industry economies, they must become more diversified by establishing and cultivating economic activities that extend beyond harvesting primary resources (Johnston, 2005; OECD, 2005; Porter et al, 2004). As was found in the earlier Rural Alberta Profile, without the large population bases that drive service sector employment, rural communities have tended to rely more on resource oriented primary industry (Sorensen and de Peuter, 2005). However, outside of the oil and gas sector, it is precisely these areas of employment that have been subject to global competition and have come under increasing pressure in recent times. The drive to become more efficient and thus remain competitive has often meant the relocation of business activity to "low-wage" areas of the world or the replacement of workers with automated machinery. This poses a threat to the economic viability of many rural areas in Canada (Senate of Canada, 2008).

At the same time, the continued dominance of employment in the consumer services sector in all zones of rural Alberta is also cause for concern. Jobs in this type of service industry tend to be lower earning, less stable, and are more likely to be contingent (part-time or temporary)(Krahn, 1995; Statistics Canada, 2007b).

Table 5: Industry Sector[1] Percent Distribution in Alberta by Geographic Zone; 2006 and 2001

Broad Industry Sector	Detailed Industry Sector	Year	Distribution (%)						
			Alberta	Urban	Rural	Strong MIZ	Mod. MIZ	Weak MIZ	No MIZ
Primary Industries	Agric., Forestry, Fishing & Hunting	2006	3.9	1.3	14.3	11.3	17.4	13.5	7.3
		2001	5.0	1.3	17.3	14.9	21.3	16.1	14.6
	Mining and Oil & Gas Extraction	2006	6.9	6.2	10.0	9.7	8.6	10.9	12.5
		2001	5.1	4.6	6.9	6.2	5.9	7.6	8.9
Secondary Industries	Construction	2006	8.7	8.8	8.5	11.0	8.8	7.7	9.8
		2001	7.7	7.6	8.2	9.5	8.3	7.7	7.8
	Manufacturing	2006	7.1	7.5	5.5	6.7	5.8	5.2	3.5
		2001	8.0	8.5	6.4	7.2	6.9	5.9	3.6
Service Industries	Production Services[2]	2006	28.6	30.9	19.3	23.9	19.2	18.5	17.1
		2001	29.1	32.0	19.6	23.6	19.6	18.1	18.2
	Consumer Services[3]	2006	24.2	24.6	22.5	21.0	21.1	23.9	19.2
		2001	25.0	25.5	23.1	22.1	20.5	25.4	17.1
	Government Services[4]	2006	19.8	20.1	18.7	15.7	18.3	19.2	27.4
		2001	20.0	20.5	18.5	16.8	17.4	19.2	29.5

Source: Statistics Canada, Census of Population, 2006 and 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 Services includes educational services, health care and social assistance, and public administration.

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

D.1.3 Self-employment

The rural 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 by selling and distributing goods such as cosmetics (Statistics Canada, 1999a).

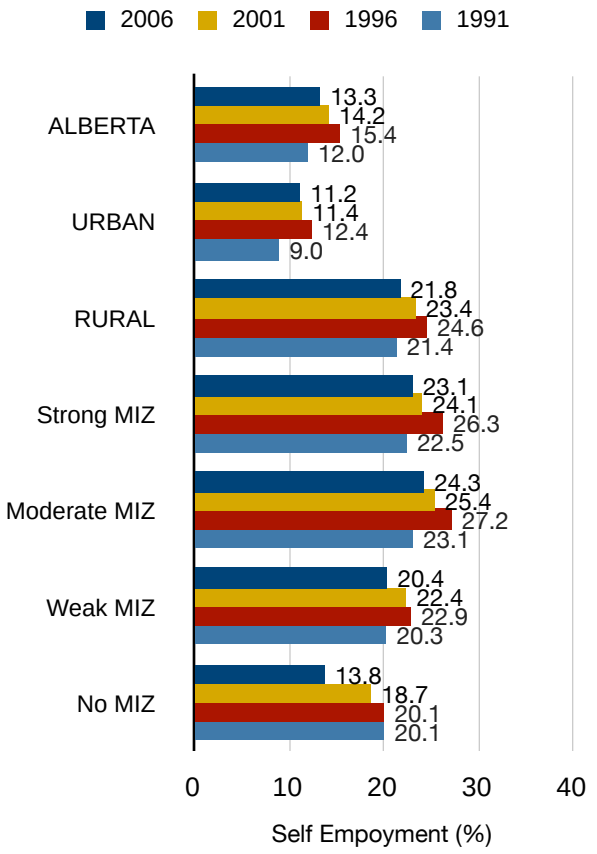
In 2006, 13.3% of the Alberta labour force was self-employed as opposed to working as an employee (Figure 15). Compared to urban citizens, rural and small town Albertans were nearly two times as likely to be self-employed (21.8% compared to 11.2%).

Among rural and small town regions in 2006, Moderate MIZ individuals were the most likely to be self-employed (24.3%), which is likely a reflection of the predominance of farming in these zones (17.4% were employed in agriculture, forestry, fishing, and hunting; Table 5), 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 (13.8%) and were the least likely to be working in the agriculture industry (7.3%).

Figure 15 also demonstrates that, in every geographic zone of the province, the rate of self-employment decreased since 1996. The largest decline occurred in No MIZ of -6.3 percentage points (from 20.1% in 1996 to 13.8% in 2006). Though self-employment tends to decrease in times of economic growth, these downward shifts in self-employment within rural Alberta likely also stem from a reduction in farm employment as a main job (LaRochelle-Coté, 2010; Statistics Canada, 2007b). Within No MIZ, for example, a 2001 to 2006 reduction of 4.9 percentage points in self-employment is accompanied by a decrease of employment in agriculture, forestry, fishing, and hunting of -7.3 percentage points (from 14.6% in 2001 to 7.3% in 2006; Table 5).

Compared to urban Albertans, rural individuals are nearly two times as likely to be self-employed.

Figure 15: Percent Self Employed in Alberta by Geographic Zone 2006, 2001, 1996, and 1991



Source: Statistics Canada, Census of Population, 2006, 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).

D.2 Income Indicators

D.2.1 Median Personal Income

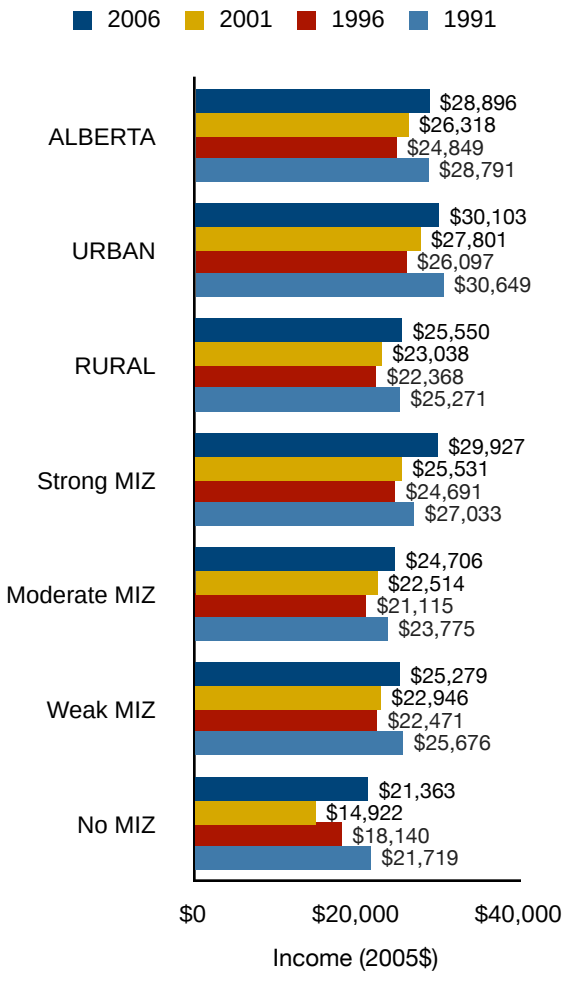
Income is commonly viewed as one of the best indicators of economic well-being of the inhabitants of a given area. Rural incomes in Canada are lower than urban incomes and there is evidence that the gap slightly widened between 1980 and 2000 for Canada as a whole (Singh, 2004). Research also shows that the rural / urban income gap is now greater than the income disparity between provinces (Alasia and Rothwell, 2003). In other words, the geography of income disparities in Canada has shifted from a provincial to a rural- urban divide. Given Alberta's strong economic growth, especially since 2001, it is important to examine whether rural Albertan's benefitted in the same way as urban Albertans, which would be indicated by either a narrowing of the rural / urban income gap or a widening of the gap as it has done in Canada.

Median personal income is used in this report since it is a more appropriate measure when making comparisons across time.[2] Unlike mean income values, median measures are not as unduly influenced by extreme values, whether high or low. The 2006, 2001, 1996, and 1991 annual median income figures are presented in Figure 16 for individuals with some income and are adjusted to 2005 real dollars.

In 2006, the provincial median income was just under $29,000. Median income has steadily increased since a low point of $24,849 in 1996, such that it is now roughly equivalent to the 1991 figure of $28,791. This over-time pattern depicts the declining economy in the first half of the 1990s and the economic recovery characterizing the years since then.

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, however, follows the pattern of decreasing as influence decreases and is greater than the variation between urban and rural Alberta. On average, rural Albertans earned 85% of the incomes of urbanites in 2006, however, No MIZ earned just 71% of the income in Strong MIZ. But, since incomes have gone up in all parts of the province, these figures are lower than they were in 2001. Whereas rural Albertans earned 83% of urban incomes in 2001, this increased slightly to 85% in 2006. Within rural Alberta, the disparity decreased more substantially: whereas No MIZ median incomes were just 58% of Strong MIZ incomes in 2001, this figure increased to 71% by 2006.

Figure 16: Median Yearly Income[1] in Alberta by Geographic Zone; 2006, 2001, 1996, and 1991



Source: Statistics Canada, Census of Population, 2006, 2001, 1996, and 1991

[1] Median income is yearly income for the population aged 15 years and over with some income and is reported in 2005 real dollars.

[2] Mean is also commonly known as the average. Median is equivalent to the 50th percentile such that one-half of the observations are above this level and one-half are below this level.

These data suggest that not only have rural Albertans benefitted in the same way as urban Albertans from the strong 2001 to 2006 economy, but so too have all four rural geographic zones of the province. In other words, the rural / urban and within rural income gap has recently narrowed.

Nonetheless, the data in Figure 16 demonstrate considerable rural / urban income disparity and even greater intra-rural disparity. This is an important finding, since rural income disparity has been shown to be more problematic than it is in urban centres. For example, research has found that while income inequality stimulates economic growth in urban areas, it weakens social cohesion and compromises economic growth in rural regions (Fallah and Partridge, 2006).

The rural-urban income gap not only stems from lower educational attainment but has also been shown to be a function of a lack of rural agglomeration economies in which there is a concentration of workers and firms that drive up wages (Beckstead et al, 2010). The gap can also be partly explained by proximity. According to Beckstead et al (2010), proximity of rural communities to urban centres drives up local earnings, not only because workers take urban-based jobs but also because rural employers are in competition with urban centres for labour supply. Furthermore, proximity to urban labour markets provides rural workers with the option of obtaining higher paying urban-based jobs. This will tend to push up average earnings, either because these workers take urban-based jobs or because rural employers in these areas are in more competition for the local labour supply. Though Strong MIZ communities are not always closer to urban centres than Moderate, Weak, or No MIZ, they are generally akin to the urban periphery, thus explaining the higher median yearly incomes of residents in this zone.

Though a rural / urban income gap is readily apparent, it decreased between 2001 and 2006.

D.2.1 Incidence of Low Income

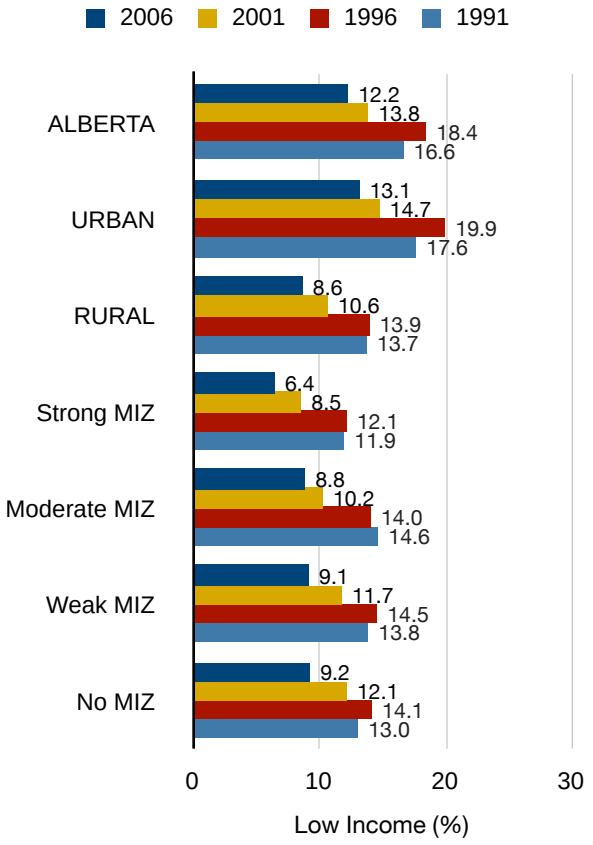
Another measure used to illustrate the relative economic well-being of residents within each geographic zone of the province is the share of the population with low incomes. In the current analysis, the incidence of low income is measured by the percent of the population living in households with incomes below the low-income cut-offs (LICOs). This indicator refers to the proportion of individuals with before tax 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, and is thus an appropriate measure for this analysis. The indicator assumes, quite rightly, that a higher cost of living amount coincides with a higher level of integration with urban centres.[3]

Perhaps of all the data presented in this report, Figure 17 most clearly illustrates the continuous strengthening of Alberta's economy since the late 1990s. The proportion of low-income individuals decreased in the entire province between 1996 and 2006. 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.[4] 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 (9.2% compared to 13.1%). 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, except for Strong MIZ zones, housing values are much higher in urban than in rural regions (see Figure 22). Still, it must be concluded that rural communities are somewhat better off than urban communities in that a lower proportion of rural residents is constrained in their ability to purchase basic necessities.

[3] 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).

[4] 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 17: Percentage of Low Income[1] Individuals in Alberta by Geographic Zone 2006, 2001, 1996, and 1991



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.

The findings in Figure 17, however, should be interpreted with some caution, since different measures of low income yield the opposite conclusion about rural / urban poverty levels. For example, the low income measure (LIM) is an indication of the economic well-being of a community in terms of the proportion of its residents with income one-half of the adjusted national median income (Rupnik et al. 2001). When using the LIM in Canada, the proportion of low income families is higher in rural than in urban areas (about 15% for rural compared to 12% for urban). Furthermore, the proportion of "persistently" poor (i.e., being poor for the two years in a row) is higher for those in rural areas and small towns than for those in larger urban centres and a greater proportion of rural than urban residents are concentrated in the bottom quartile income category (Vera-Tocsin and Associates, 2001). Lastly, it is important to understand that low-income does not necessarily mean poverty and that poverty is not just about incomes, but is a complex interaction of personal, social, and economic conditions that a single measure cannot adequately capture.

Rural individuals are less likely than city dwellers to meet the criteria for low income.

D.2.2 Social Transfer Income

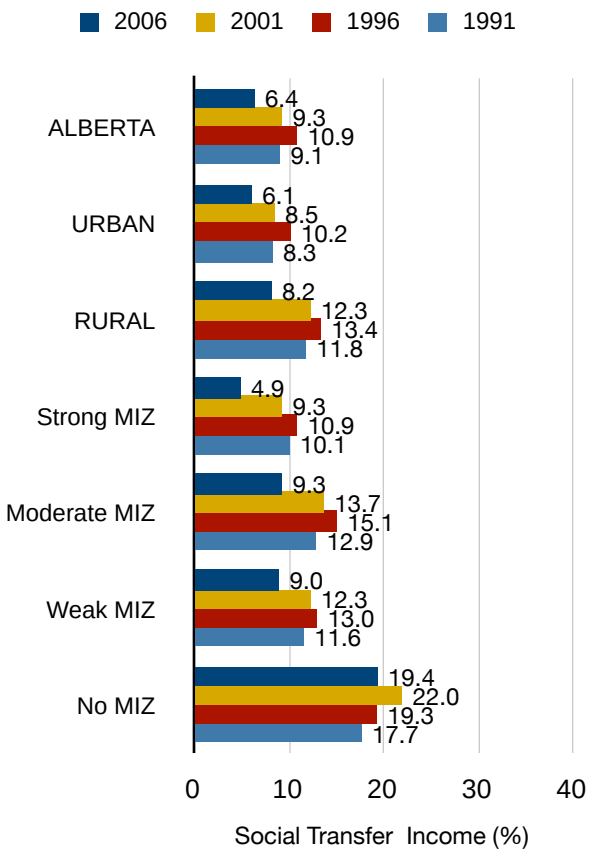
We can also gain an indication of the relative economic conditions for each geographic zone of Alberta by examining source of income. Broadly speaking, there are three sources of income: employment income, investment income, and income from federal, provincial, and municipal government sources such as Old Age Security and Guaranteed Income Supplement, Canadian / Quebec Pension Plans, Employment Insurance, and Child Benefits. If a group of people derives a relatively greater percentage of income from government social transfer payments, as opposed to employment income or personal investments, this suggest greater economic dependency for members of that group.

Figure 18 presents the percentage of total income derived from social transfer payments for each geographic zone and for 2006, 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 (19.4%). By having the smallest proportion of their income come from social transfers in Alberta (4.9%), Strong MIZ residents once again exhibit the best economic position in the province.

The over-time reductions in social transfer income across the province are notable and again exemplify the strengthening economy since 1996. 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 (Figure 13) and decreasing reliance on child tax credits as a result of a declining share of the child population (Table 4).[5]

Compared to urban Albertans, rural individuals are more likely to rely on government sources of income.

Figure 18: Percentage of Total Income from Social Transfer Income[1] in Alberta by Geographic Zone; 2006, 2001, 1996, and 1991



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 and Guaranteed Income Supplement, Canadian/Quebec Pension Plans, Employment Insurance, Child Benefits and income from other government sources (e.g., social assistance and worker's compensation) 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.

[5] 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.

SUMMARY AND CONCLUSIONS

All economic indicators presented in this section reflect the more robust economic conditions of the province that began in the late 1990s. Unemployment rates, low income incidence, and social transfer income reliance were all lower in 2006 than in 1996 and LFP rates and incomes were higher. Throughout this economic indicator analysis, however, a number of distinctions between geographic zones of the province have been highlighted.

Beginning with rural / urban differences, despite the more positive economic conditions in rural Alberta in 2006, the economic disparity between the urban and rural population continued for all indicators. In 2006, labour force participation rates and personal incomes were still lower in rural zones and rural residents continued to garner a larger share of their income from social transfer payments.

The economic disparities within rural Alberta, though larger than the rural / urban gap, showed some signs of narrowing between 2001 and 2006. The income disparity between Strong and No MIZ the most narrowed by a margin of 15% and the Strong/No MIZ gap narrowed by 3.8 percentage points. Similarly, the unemployment rate difference between Strong and No MIZ reduced from 7.1 points in 2001 to 6.4 points in 2006.

The fact that Strong MIZ out-performed urban Alberta on most of the indicators is also an important finding that warrants further investigation. Strong MIZ superseded urban Alberta on both labour market indicators and on all three income indicators. Yet, Strong MIZ resembled its rural counterparts more so than it resembled urban Albertans in terms of industry sector and self-employment. Still, it had the highest representation of all rural Alberta in the more lucrative production service industries (23.9%). These findings are apparent despite, or perhaps because of, a 40% reclassification of its population base between 2001 and 2006. Though it is beyond the scope of this report to analyze every CSD included in Strong MIZ, a look at the MIZ map in the Methods section of this report (p.5), reveals that a good portion of Strong MIZ is located along the economic engine of the Edmonton-Calgary corridor, a region commonly referred to as western Canada's tiger (TD Economics, 2003).

Despite the anomaly of Strong MIZ, the dominant story of the economic indicators examined in this section 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. These disparities have implications not only for the current situation but also for the future well-being of Moderate, Weak, and especially No MIZ Albertans. Specifically, research has shown that rural populations are more vulnerable to a likelihood of worsening socio-economic conditions in the future as they continue to be exposed to the vagaries of global restructuring and continue to display conditions of community stress such as high unemployment and lower participation rates (Alasia et al, 2008).

E. Education Indicators

KEY FINDINGS

E.1 Educational Attainment

- Rural and small town Albertans have lower levels of education compared to individuals in urban regions. The rural / urban disparity is the largest for high school incompletion rates and for university degree attainment and the smallest for high school degrees and postsecondary certificates / diplomas.
- The lowest educational attainment is observed in No MIZ zones where 48.4% of the population of at least 15 years of age had not completed high school as recently as 2006.

E.1 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 (13.9).
- While per capita education providers stabilized in urban regions by 1996, the share continued to drop in most rural zones of the province through to 2006.

Summary

The educational attainment data provided in this section clearly indicate a rural / urban divide as well as diminishing levels of education along the urban influence continuum. Though there are other influences, it is clear that lower levels of educational attainment in rural Alberta result in lower incomes, lower LFP participation, higher unemployment rates, less industry diversity, and greater reliance on government sources of income. The lower levels of high school completion among rural Albertans corresponds to their higher drop out rates, which also corresponds with higher unemployment and lower labour force participation rates. Some of the rural / urban educational differences can be explained by lower educational aspirations among rural Albertans as a result of the lower returns on education in rural areas, unequal geographic access to postsecondary institutions (especially universities), a lowered ability to afford postsecondary education, and the challenges associated with recruiting teachers to rural parts of the province.

E.1 Educational Attainment

It is commonly accepted that a higher education is associated with the ability to find better jobs and an increased level of well-being. At the societal level, widespread participation in higher education can reduce economic disparities and promote social cohesion and citizen engagement as well as ensure the generation of the skills and knowledge required in an increasingly competitive knowledge economy (Sorensen and de Peuter, 2004). Research from the Canadian Council on Learning (2006) also shows that higher education and training are strongly linked to safer communities, a healthier population, and a more sustainable environment.

Yet, despite substantial increases in educational attainment over the past two decades, rural Canadians still have lower levels of education than urban Canadians. Rural Canadian youth also have higher dropout rates and lower achievement scores than urban Canadians (Bowlby, 2005; Canadian Council on Learning, 2006). Such adverse educational outcomes limit the range of employment options available to rural youth and reduce the talent pool available within rural economies. Rural - urban differences in educational attainment also account for a significant portion of the rural-urban income gap (Beckstead, 2010). Thus, it is clearly important to garner a comparative understanding of the educational attainment of rural Albertans.

Table 6 presents the highest level of educational attainment achieved by populations in each geographic zone of the province for 2006. A change to the census in 2006 precludes the ability to directly compare level of education between 2006 and the earlier census periods.

In 2006, 23.4% of the provincial adult population had less than a high school education. A higher proportion of rural and small town than urban Albertans had not attained a high school diploma (33.5% compared to 20.8%), with No MIZ residents by far the most highly represented at this lowest level of education (48.4%). In contrast, nearly equal proportions of rural and urban residents had earned a high school diploma (25.9% compared to 26.3%). Again, however, No MIZ residents were the least likely to have reached this level of education (19.7%).

Table 6 also demonstrates that, while rural Albertans are more than half as likely than the urban population to have obtained a university degree (8.1% compared to 19.9%), they are only slightly less likely to have earned a post-secondary certificate or diploma (32.2% compared to 33.0%).

Within rural Alberta we see a familiar pattern with respect to postsecondary education: As metropolitan influence (MIZ) increases so too does level of educational attainment. For example, the population living in No MIZ communities are the least likely to have any postsecondary education (31.0%) while Strong MIZ communities are the most likely to have attained this level of education (46.2%). 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 (35.5%).

Rural Albertans are more likely than urban Albertans to have less than high school and less likely to have a university degree. But, rural and urban Albertans have similar high school diploma and postsecondary certificate / diploma achievement rates.

Table 6: Educational Attainment Percent Distribution in Alberta by Geographic Zone; 2006

	Distribution (%)					
	Total	Less than High School	High School Cert.	Any Post-Secondary	Certificate / Diploma	University Degree
Alberta	100.0	23.4	26.2	50.4	32.9	17.5
Urban	100.0	20.8	26.3	52.9	33.0	19.9
Rural	100.0	33.5	25.9	40.4	32.2	8.1
Strong MIZ	100.0	25.4	28.0	46.2	35.5	10.7
Moderate MIZ	100.0	31.7	26.3	41.8	33.5	8.3
Weak MIZ	100.0	35.5	25.6	38.7	31.1	7.7
No MIZ	100.0	48.4	19.7	31.0	26.2	4.8

Source: Statistics Canada, Census of Population, 2006

[1] Educational attainment data are provided for the population 15 years of age and over.

Though the data provided in this section do not allow a comparison of 2006 educational attainment with that of previous census years, other evidence suggests that the rural / urban education gap has not closed and may even be increasing. In other words, despite increasing levels of education among rural populations, the greater increase among urban populations has resulted in a growing or at least unchanging rural / urban educational attainment gap.

First, the previous Rural Alberta Profile found an increasing rural / urban gap in educational attainment between 1991 and 1996. Second, immigrants, who are on average more highly educated than the Canadian born population, are more likely to settle in large urban centres in the province (Figure10). Furthermore, rural immigrants are less likely to have a university degree than urban immigrants (Sorensen, 2007; Beshiri, 2004). Third, there is evidence that more highly educated rural people are drawn to urban centres by virtue of the better match of job opportunities commensurate with their skills (Combes, et al, 2008; Beckstead et al, 2010).

E.2 Education Providers

The previous discussion highlights the fact that there are many factors that explain rural / urban differences in educational attainment. Another measure of education 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.[6] These data are presented in Figure 19 by geographic zone and for 2006, 2001, 1996 and 1991.

In 2006, the highest number of education providers is observed in urban centres at 20.6 per 1,000 people. All rural zones have education providers per 1,000 population below this figure. Interestingly, Strong MIZ zones, which have the highest education levels among the rural population (Table 6), have the lowest ratio of teachers and professors in the province (13.9 per 1,000 population). The second lowest figure is found in Weak MIZ zones where there are 14.6 education providers per 1,000 population.

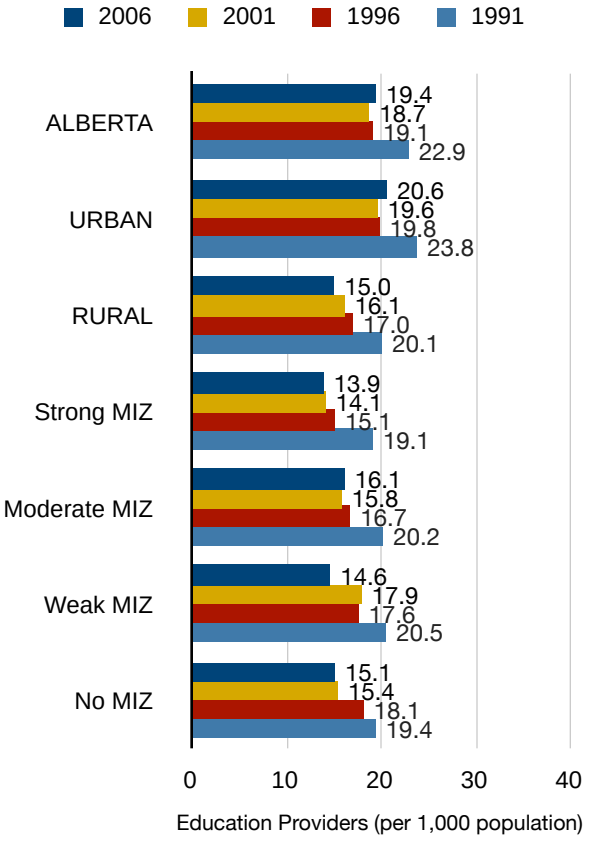
Figure 19 also shows an over-time pattern of declining education providers per thousand in every inter-census period and for nearly every geographic zone. A noteworthy exception to this pattern, however, is evident for the most recent 2001-2006 census cycle: wherein educators per thousand decreased relatively in rural Alberta but increased in urban Alberta. As a result, the rural / urban gap for this indicator has increased since 2001. Whereas in 2001, rural Alberta had 3.5 fewer educators per 1,000 people than urban Alberta, the difference in 2006 was 5.6.

Within rural Alberta, all but Moderate MIZ experienced a reduction in their teachers and professors per thousand between 2001 and 2006, with the largest metropolitan influence zone (Weak MIZ) experiencing the greatest decrease of -3.3 educators per 1,000 population.

In summary, the education indicator data provide evidence that the educational disparity between urban and most rural regions is not only persisting but in some cases increasing. The findings suggest that the number of education providers for a given population is correlated with rural and urban educational attainment. Within rural Alberta, however, the absence of a correlation suggests that other factors are at play. For example, perhaps the higher levels of education and lower educators per thousand in Strong MIZ might be explained by their increased ability to access urban education opportunities simply by virtue of their closer proximity to cities.

The rural / urban educator gap in Alberta increased between 2001 and 2006.

Figure 19: Number of Education Providers per 1,000 Population[1] in Alberta by Geographic Zone; 2006, 2001, 1996, and 1991



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.

[6] It should be understood that education providers are designated to the geographic area where they reside and not where they teach. As such, the education providers per 1,000 population in each zone may not accurately represent the number of educators serving the population in the zones.

SUMMARY AND CONCLUSIONS

The educational attainment data provided in this section clearly indicate a rural / urban divide as well as diminishing levels of education along the urban influence continuum. Though the lack of comparable data with the 2006 educational attainment means that a direct assessment of over time changes could not be made, a number of existing studies were drawn upon to illustrate that the rural/urban gap is not narrowing and may, in fact, be widening.

There is also good reason to conclude that the strong correlation between educational attainment and the economic indicators examined in the previous section is a causal relationship. Though there are other influences, it is clear that lower levels of educational attainment in rural Alberta result in lower incomes, lower LFP participation, higher unemployment rates, less industry diversity, and greater reliance on government sources of income. Though this relationship is borne out with these data, it is especially evident for No MIZ residents who have the lowest levels of high school completion combined with the highest unemployment rates, the lowest incomes, and the greatest dependence on government income. The larger child and Aboriginal populations in No MIZ communities, moreover, suggests that policy directed towards increasing education for rural Albertans should be most intense in these areas and should accommodate the unique culture and needs of Aboriginals. The economic and social benefits of providing programs that encourage school attendance and completion such as mentoring, tutoring, peer support, and parental involvement should also be considered in this policy.

The lower levels of high school completion among rural Albertans is explained by comparative data showing higher drop out rates among rural youth. In fact, the high school drop-out rate in rural Alberta is greater than in any other province of the country. Between 2001 and 2005, the average drop-out rate in rural Alberta was 21.3% compared to the national rural average of 16.4%. The labour market consequences of not completing high school for these rural Alberta youth suggest a decreased employment rate (61.7% for Canadian drop-outs compared to 67.8% for all rural Canadian youth 20-24 years old) and increased unemployment rates (19.4% for drop-outs compared to roughly 10% for all 20 to 24 year olds) (Bowlby, 2005).

Yet, the high drop-out rates and the overall lower levels of educational attainment for rural Albertans are, in some ways, understandable given the lower returns to investment in education in rural areas. The result is often less incentive among rural youth to continue their schooling (Hu, 2003). A study of youth by Cartwright and Allen (2002), for example, found that though similar proportions of rural and urban Albertans reported that they expect to obtain some form of postsecondary education, the rural / urban divide in aspirations to attend university rather than college was greater in Alberta than elsewhere in the country: whereas 81% of urban Alberta youth were planning to get a university degree, just 63% of rural Alberta youth had the same expectations (Cartwright and Allen, 2002).

Along with having lower aspirations to attend university, the educational attainment data presented in this report also suggest that rural residents are better able to access colleges and technical institutes than 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 the same influence on attending other postsecondary 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.

In terms of the overall rural / urban educator gap found in this study, part of the explanation lies again, 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 rural/urban difference is not entirely explained by geography and also must be a function of true educational disparity. Given that rural regions have larger proportions of children than urban regions, the teacher component of the education provider indicator should be higher than it is. Indeed, a recent

survey of Albertans found that the lower number of educator providers in rural Alberta translates to significantly less satisfaction with the availability of education and training opportunities among rural than urban Albertans (Howard Research, 2009).

Another explanation for the relatively lower share of teachers is that rural regions often have a harder time attracting and retaining teachers. A study on access to senior science teachers in rural British Columbia, for example, found that rural schools that are unable to attract and retain specialty teachers are unable to regularly offer the same range of courses found in larger urban schools. Rural B.C. students consequently had fewer opportunities to take certain kinds of courses, particularly the senior science courses often required for admission to post-secondary institutions, thereby limiting the ability of rural students to pursue certain areas of post-secondary education (Nielsen, 2004).

The findings on educators per thousand should also be understood in the context of a projected teacher shortage in Alberta. An analysis conducted by Alberta Learning's Workforce Planning Branch predicts a serious future challenge in the ability of the teacher supply to meet demand. The shortage stems from a number of converging influences on the demand/supply nexus, including increasing fertility and migration rates, retirements, and attrition among new teachers. In addition, populating the teacher workforce in rural and northern parts of Alberta and in Aboriginal communities has been noted as an ongoing challenge. The Aboriginal population has grown three times faster than the non-Aboriginal population over the last decade, such that half of the population is currently under the age of 25. This growth adds to the challenge of providing education to an increasingly diverse population not only in all of Alberta, but especially in rural Alberta and even more so in Aboriginal-intensive No MIZ communities of the province.

This summary draws upon research that captures rural / urban differences in educational attainment. The literature, however, does not explain the findings of educational disparity within rural Alberta, along the urban influence continuum. Given the noteworthy differences in educational attainment between the MIZ categories as shown in Table 7, a deeper understanding of the impact of educational attainment within rural Alberta would be gained by examining the link between education and labour market outcomes in Strong, Moderate, Weak, and especially, in No MIZ communities of the province.

F. Social Indicators

KEY FINDINGS

F.1 Lone-Parent Families

- In 2006, lone-parent families were less prevalent in rural than in urban areas (12.6% compared to 15.1%). The incidence of lone-parent families, however, increases along the rurality continuum with Strong, Moderate, Weak and No MIZ zones respectively having 9.8%, 11.1%, 13.3% and 29.5% lone parents.

F.2 Housing Indicators

- In 2006, Strong MIZ individuals were much more likely to be residing in new houses than other residents of Alberta (17.7% compared to the provincial total of 14.3% of houses were constructed since 2001). In contrast, just 6.5% of houses in No MIZ were built since 2001.
- Dwelling values are consistently higher in urban than in rural and small town Alberta. Within rural Alberta, dwelling values in Strong MIZ zones were the highest in the province and underwent the largest 2001 to 2006 increase. From there, housing values decline along the MIZ continuum with No MIZ containing the least costly houses.
- Between 2001 and 2006, the percentage of rural Alberta households spending significant portions of their income on shelter decreased slightly, despite housing value increases. This finding holds for Strong MIZ even though it experienced the greatest housing value increase in the province. It is concluded that housing value increases and housing affordability do not always work together since individuals living in a house that has undergone escalating value do not necessarily pay larger mortgages.

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 and economic policy. The data also suggest that housing indicators are strongly influenced by economic indicators.

F.1 Lone-Parent Families

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 2006, 14.5% of Alberta families were considered lone-parents compared to 16% of Canadian families.

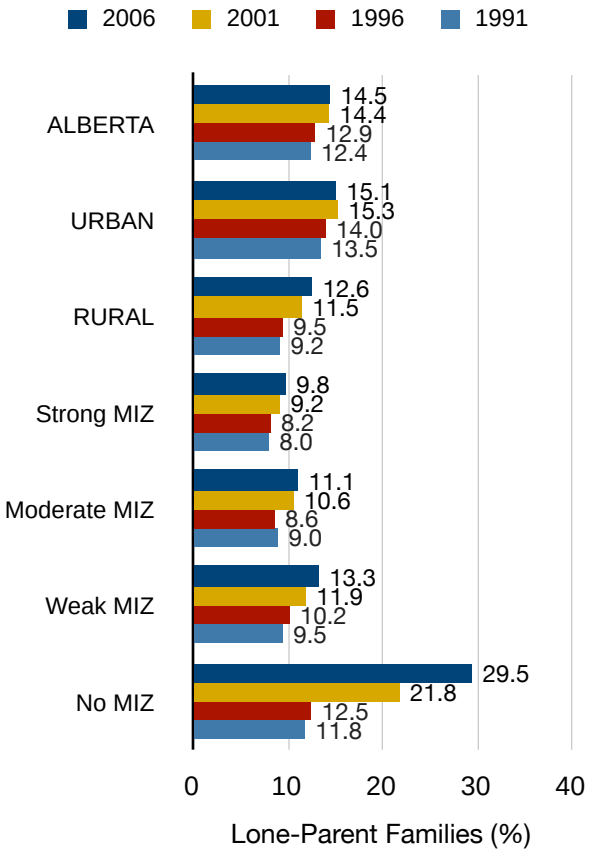
Figure 20 reveals that, compared to rural and small town Albertans, lone-parent families are more prevalent in urban centres (15.1% compared to 12.6%). As has been the pattern in so much of the analysis presented in this report, the incidence of lone-parent families increases as rurality increases with Strong, Moderate, Weak and No MIZ zones respectively having 9.8%, 11.1%, 13.3% and 29.5% lone parents.

The incidence of lone-parent families has increased between every inter-census cycle within rural Alberta, while in urban Alberta it increased in all but the most recent 2001-2006. The increase within No MIZ zones, however, is the most noteworthy; with an increase of 17.7 percentage points between 1991 and 2006, the incidence of single-parent families rose within No MIZ zones by more than double the combined increase of all other Alberta geographic zones (totaling 9.3 percentage points).

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 (36% in 2006; Statistics Canada, 2008a). Further, the higher incidence combined with the larger proportion of children in No MIZ zones elevates the likelihood that single parents in these communities cope with running larger families than elsewhere in the province. These single families, in addition, have been shown to experience lower social and economic outcomes and to be at greater risk of poverty (Burns, Bruce, and Marlin, 2007; Quinless, in print).

Rural adults are less likely than urban adults to be lone parents, except those residing in No MIZ communities.

Figure 20: Percentage of Lone-Parent Families[1] in Alberta by Geographic Zone; 2006, 2001, 1996, and 1991



Source: Statistics Canada, Census of Population, 2006, 2001, 1996, and 1991

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

F.2 HOUSING

F.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. Given a 13.8% increase in households in Alberta between 2001 and 2006, we would expect a significant portion of houses being constructed during this cycle. In light of the population decline in rural Alberta, however, we would expect to have a smaller proportion of houses constructed between 2001 and 2006.

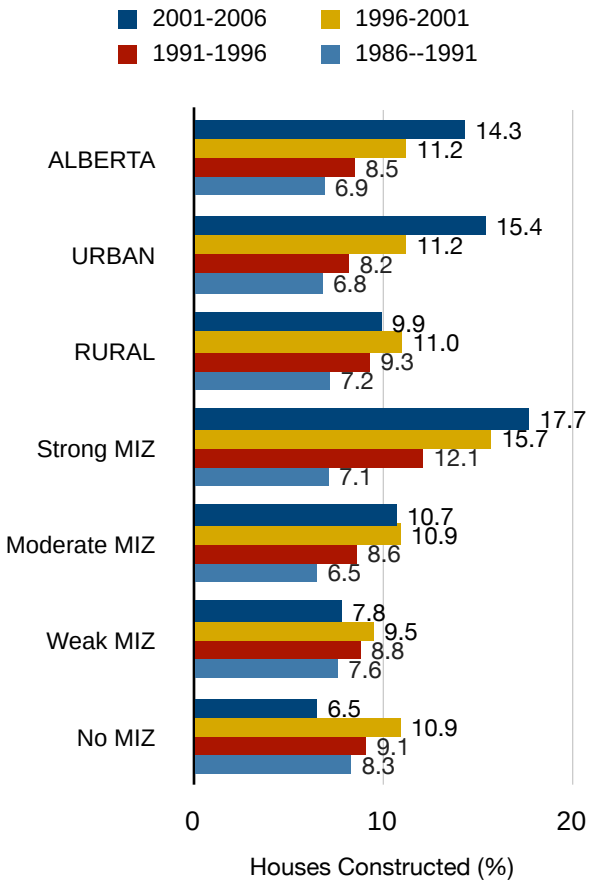
Figure 21 presents the percentage of houses constructed between 2001 and 2006, 1996 and 2001, 1991 and 1996, and 1986 and 1991 for each geographic zone.

Provincially, 179,560 dwellings were constructed between 2001 and 2006, representing 14.3% of all houses (compared to the nation-wide figure of 8.5%). A much larger proportion of urban than rural houses have been built recently (15.4% compared to 9.9%). Strong MIZ zones, however, experienced more recent construction with 17.7% of houses built between 2001 and 2006. In fact, more than half (52.6%) of Strong MIZ houses have been built since 1986--this compares to 41.6% of urban housing. Hence, homes in Strong MIZ communities are newer than in any other regions of the province.

These findings are congruent with the relatively robust economic (Section D) and demographic population growth (Section C.1.2) observed in Strong MIZ. The relatively smaller proportion of new houses in No MIZ (just 34.8% were built since 1986), however, does not match with the fact that the population in this zone grew at the greatest rate of all rural zones in the three intercensus period (19.7%, 17.9%, and 14.1%). Thus, the lack of new housing in No MIZ is likely related to its relatively disadvantaged economic position (Section D).

Urban houses tend to be newer than rural houses, except in Strong MIZ where nearly half of the houses were built since 1991.

Figure 21: Percentage of Houses Constructed by Time Period[1] in Alberta by Geographic Zone; 2001-2006, 1996-2001, 1991-1996, and 1986-1991



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

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

F.2.2 Average Housing Values

Dwelling values are a relevant indicator of prosperity and may illustrate the ability of a family or individual to purchase 'big-ticket' items. Changes in housing values over time also provide an indication of changes in the cost of living. Figure 22 presents average housing values for each geographic zone and for the four census years in 2005 real dollars.

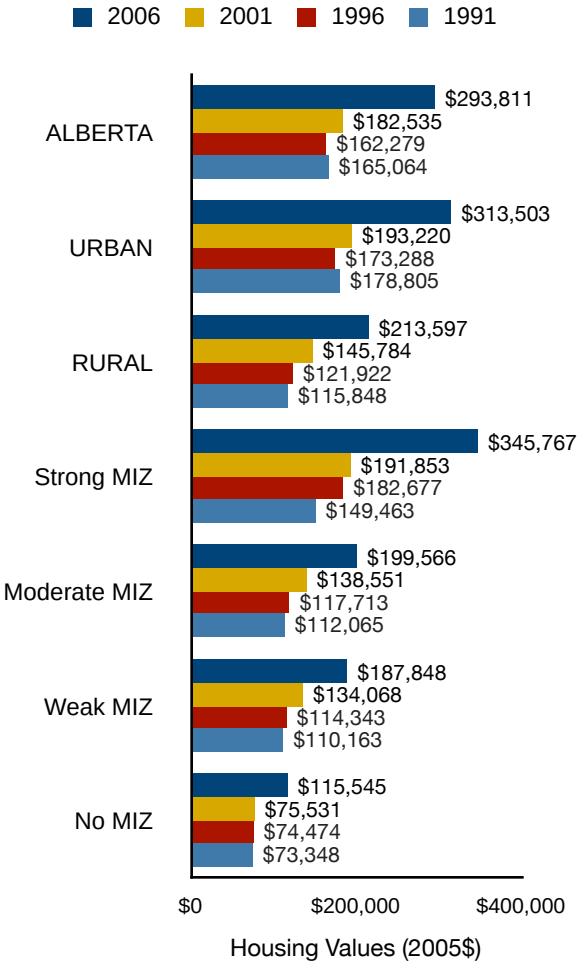
The figure shows that the average dwelling value in Alberta in 2006 was $293,811. Urban housing is valued, on average, nearly $100,000 higher than rural housing. Yet, considerable variation exists among the four MIZ categories with Strong MIZ once again eclipsing urban Alberta with its average housing value of $345,767. Moderate and Weak MIZ houses averaged just under $200,000 and $190,000, respectively, while the No MIZ average cost for housing was much lower at $115,545. Hence, except for Strong MIZ zones where housing values are higher than those of urban centres, the average value in rural regions is substantially lower.

But the most remarkable observation in the figure is the dramatic increase in housing values between 2001 and 2006 in all parts of province. While housing values increased in urban Alberta by 63%, they increased by just 47% in rural Alberta. The increases in Moderate, Weak, and No MIZ regions ranged from 40% to 50%, while the housing value increase in Strong MIZ was much higher than elsewhere in the province at 80%.

Between 2001 and 2006, housing values increased by 47% in rural Alberta and by 63% in urban Alberta. At 80%, the housing value increase in Strong MIZ was the highest in the province.

These large housing value increases are not surprising given the real estate market activity in the mid-2000s in the province. New housing prices, for example, increased by 50% between 2005 and 2006 alone (Tsounta, 2009). Given the large proportion of new houses built in Strong MIZ (Figure 21), the housing values in this zone also make sense. Moreover, the high housing values and robust economic performance in Strong MIZ (Section D) combine to suggest that the urban periphery is becoming the most advantaged place to live in the province.

Figure 22: Housing Values[1] in Alberta by Geographic Zone; 2006, 2001, 1996, and 1991



Source: Statistics Canada, Census of Population, 2006, 2001, 1996, and 1991

[1] Average dwelling (housing) values are for owner-occupied non-farm, non-reserve dwellings, reported in 2005 real dollars.

F.2.3 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 23 highlights the proportion of Alberta household owners in each geographic zone spending more than 30% of their income on shelter costs.

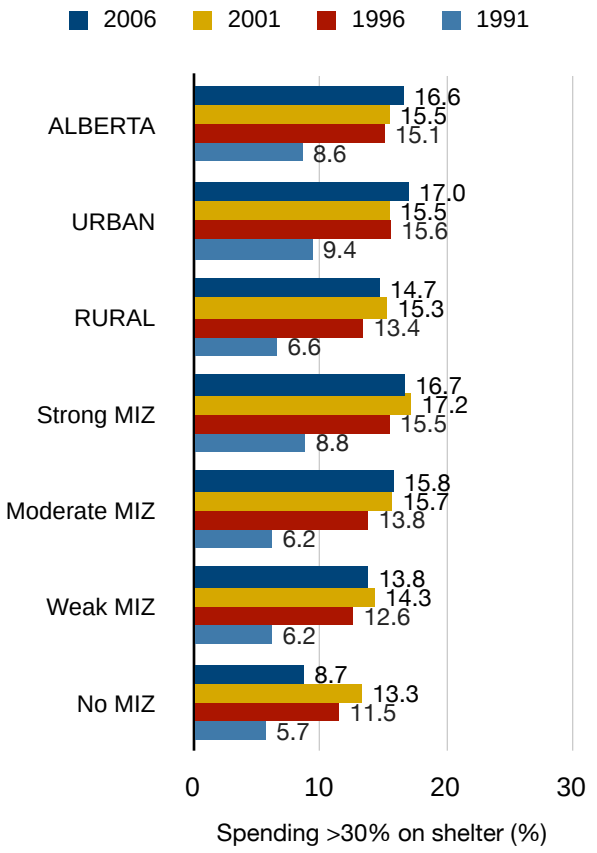
In 2006, 16.6% of household owners in the province exceeded this 30% spending cutoff. A similar proportion of urban residents spent this amount on housing (17.0%), but somewhat fewer (14.7%) rural Albertans spent 30% or more on their shelter needs. Within rural Alberta, Strong MIZ zones, which have the highest housing values in the province (Figure 22), were, as we would expect, the most likely of all rural zones to spend more than 30 percent of their income on shelter (16.7%). No MIZ zones, with the lowest housing values, were the least likely (8.7%) to exceed the 30% spending limit.

Though the relative housing values correspond to the relative housing affordability in each geographic zone, the direction and scale of the two indicators do not always correspond when examining them over time. As housing values rise, we would expect the percentage of owners spending greater than 30% on shelter to also rise, acknowledging that income increases offset this somewhat. With this is mind, it appears that while the income increases observed in rural Alberta between 2001 and 2006 were just able to offset the housing value increases, they were not sufficient in urban Alberta. In other words, while both rural and urban Alberta were subject to the same increasing incomes and housing value impacts, rural Alberta experienced a decrease in the percentage of its population exceeding the 30% limit (from 15.3% to 14.7%), while in urban Alberta the rate increased (from 15.5% to 17.0%). The very large increase in housing values experienced in Strong MIZ seem to be especially unrelated to the 0.5 percentage point increase in the percentage of owners exceeding the 30% spending limit on shelter between 2001 and 2006.

The apparent mismatch between housing values, incomes and housing affordability is likely explained by the fact that the largest component of shelter costs, mortgage payments, do not necessarily go up for owners just because the value of their house increased. The spike in housing values, however, clearly limits the ability of first time buyers to enter the market.

Yet, the data in Figure 23 cannot be ignored and in the end reveals that housing is more affordable in rural than in urban Alberta and is more affordable as urban influence declines.[7]

Figure 23: Percentage of Owner Households Spending Greater than 30% of Income on Shelter[1] in Alberta by Geographic Zone; 2006, 2001, 1996, and 1991



Source: Statistics Canada, Census of Population, 2006, 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.

[7] Recent research demonstrates a spike in the percentage of household income used on shelter costs in Alberta in 2007, but as prices declined in the province the spike subsided by 2009 to levels considered acceptable (RBC, 2010).

Summary and Conclusions

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 economic and 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, the percentage of lone-parent families in zones that experience no metropolitan influence was more than double that of the rates observed in any other geographic zone of the province (29.5%).

Research suggests that the growing trend of lone-parent families is of important social and economic significance. Lone parents tend to have lower levels of education, lower labour force activity and incomes, and greater poverty rates and reliance on government sources of income. These outcomes are no more evident than for Aboriginal lone parents and especially female Aboriginal lone parents (Quinless, in print). Social assistance is cited as the number one factor in the reduction of income stability of lone mothers, and employment insurance is the second most important factor (Morissette and Ostrovsky, 2007). These recommendations are especially pertinent to No MIZ zones where we see increasing rates of lone-parent families.

The housing situation for rural Albertans is more complex but also demonstrates rural variability: houses in rural Alberta are older, are valued at a lower rate, and have undergone a lower increase compared to urban houses. The result is a lower incidence of housing inaffordability in rural Alberta.

Within rural Alberta, however, the housing indicator results follow the same pattern found in the economic indicators section whereby Strong MIZ exhibits the most robust housing conditions in the province. Further, the degradation of the housing indicators along the urban influence continuum is very clearly apparent. Again, No MIZ is at the bottom of this continuum, with the lowest housing values, the smallest over-time increase in housing values, and the smallest proportion of new houses. These findings, however, combined with income increases in No MIZ, result in this zone containing the most affordable houses in the province.

On the whole, it appears that housing indicators in rural Alberta are strongly effected 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.

G. Health care Indicators

KEY FINDINGS

G.1 Health Care Providers

- 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 in 2001 to 7.5 in 2006.
- Though the relative number of health care providers in No MIZ increased from 13.9 in 2001 to 17.5 per 1,000 population in 2006, it still has the lowest ratio of health care providers in the province.
- Rural Albertan 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. This disadvantage, moreover, increased between 2001 and 2006.

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 access 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.

G.1 Health Care Providers

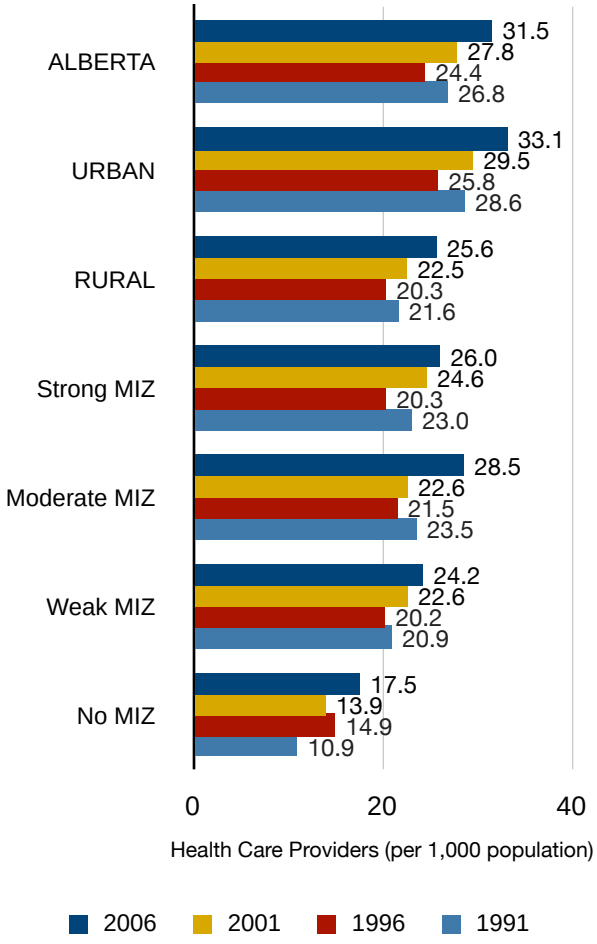
A growing body of research shows a rural / urban gap in health status. For example, Mitura and Bollman (2003) found that the proportion of Canadians self-rating their health as excellent declined as rurality increased. Other research that examined the health status of rural Canadians using the same MIZ categorization used in this report found that as urban influence decreased so too did negative health status indicators such as mortality rates and the incidence of chronic disease. While Strong MIZ stood out as an exception, Moderate, and especially Weak and No MIZ areas were found to be at the greatest risk for mortality (DesMeules and Pong, 2006). In another as yet unpublished study, it was revealed that rural Canadians are much less likely to utilize health care services, especially doctors, but they are more likely to have seen a nurse, which may be the only health care personnel available (Centre for Rural and Northern Health Research, in print). Though other factors such as undesirable health beliefs or behaviors or an unhealthy living environment contribute to the lower health status of rural Canadians, one factor that has been proposed as playing a pivotal role in explaining the rural / urban health gap is having adequate access to health care services. (Patrick et al, 1988).

These findings raise the question of whether rural / urban differences in health status and in health service access are attributable to the uneven distribution of health services that favor urban over rural in Alberta. The concern about access is examined in this section by looking at the number of health care providers per 1,000 people in a given area. [8]

As demonstrated in Figure 24, the number of health care providers in urban centres was considerably higher than in rural regions in 2006 (33.1 compared to 25.6). Among non-urban regions, the highest ratio of health care providers is found in Moderate MIZ zones (28.5 per 1,000 population), followed by Strong MIZ (26.0), Weak MIZ (24.2) and finally No MIZ at 17.5 per capita health care providers.

All geographic zones of the province experienced an increase in health care providers between 2001 and 2006, and in all but No MIZ between 1996 and 2001.[9] Since urban centres experienced an increase of 4.5 per capita healthcare providers and rural Alberta a 4.0 increase between 1991 and 2006, the figure provides evidence of a growing rural / urban gap in access to health care.

Figure 24: Number Employed in Medicine or Health Occupations per 1,000 Population[1] in Alberta by Geographic Zone; 2006, 2001, 1996, and 1991



Source: Statistics Canada, Census of Population, 2006, 2001, 1996, and 1991

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

[8] 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 relative share of health care providers in each zone may not accurately represent the number of providers serving the population of that zone.

[9] Part of the over-time increases in health care providers across the province are due to in-migration. Between 1996 and 2001, for example, Alberta received more health care workers than any other province or territory (CIHI, 2007).

The over time changes in health care providers along the MIZ continuum are more variable, ranging from a high of 6.6 more per thousand health care providers in No MIZ to a low of 3.0 additional providers in Strong MIZ. Since No MIZ has the lowest health care providers and gained the greatest number, the data demonstrate decreasing intra-rural disparity in health service access.

While the rural / urban health care provider gap increased between 1991 and 2006, the gap within rural Alberta decreased.

Table 7 presents a more detailed picture of the type of health care providers per 1,000 population for each geographic zone and for the 2006, 2001, and 1996 censuses only.[10]

Compared to urban regions, rural and small town Alberta has fewer health care providers per thousand working in professional occupations such as physicians (3.6 versus 7.2). As we move across the table, the rural disadvantage is still apparent in 2006, but is not as striking. The rural/urban difference in RN supervisors/RNs and technical providers is -2.4 and -1.9 per 1,000 population, respectively, while there is rural / urban parity for assisting occupations.

Table 7: Number Employed in Health Occupations per 1,000 Population[1] in Alberta by Geographic Zone; 2006, 2001, and 1996

		Healthcare Providers (Per 1,000 Population)			
	Year	Professional Occs.	RN Supervisors & RNs	Tech. & Related Occs.	Assisting Occs. in Support of Health
Alberta	2006	6.4	9.7	8.0	7.4
	2001	6.0	7.7	7.2	6.9
	1996	5.2	8.0	6.2	5.0
Urban	2006	7.2	10.2	8.4	7.4
	2001	6.8	8.2	7.6	6.9
	1996	5.9	8.4	6.6	5.0
Rural	2006	3.6	7.8	6.5	7.4
	2001	3.6	6.3	5.9	6.8
	1996	3.4	6.8	4.9	5.1
Strong MIZ	2006	3.9	7.5	6.1	8.4
	2001	4.1	7.0	6.6	6.8
	1996	3.8	7.6	4.5	4.4
Moderate MIZ	2006	4.0	9.5	6.8	7.9
	2001	2.9	6.6	6.2	6.9
	1996	3.1	7.2	4.9	6.3
Weak MIZ	2006	3.4	7.1	6.6	7.2
	2001	4.0	6.0	5.7	5.3
	1996	3.7	6.5	5.1	4.9
No MIZ	2006	0.8	4.5	3.1	4.3
	2001	1.4	3.8	3.8	5.3
	1996	1.0	5.9	5.4	2.5

Source: Statistics Canada, Census of Population, 2006, 2001, and 1996

[1] The number of health care providers per 1,000 residents across all four occupational categories does not always add up to the total number shown in Figure 22. This is especially the case for No MIZ and is due to area suppression of individual health care occupations when there are less than 40 cases in a census subdivision.

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

As we move down Table 7, it is also clear that within rural Alberta, the health care accessibility disadvantage is the least evident in Moderate MIZ and most evident in No MIZ communities. Whereas Moderate MIZ has the highest relative professional, RN Supervisors, RNs, and technical healthcare workers (4.0, 9.5, 6.8, respectively), No MIZ has the lowest relative workers in all four occupations categories (0.8, 4.5, 3.1, and 4.3). 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, Table 7 displays greater relative increases in urban than in rural Alberta in all four occupations. The differences in growth, however, are most evident for the two highest status occupations. For professional occupations (e.g., physicians), for example, an increase of 1.3 per thousand professional occupations (e.g., physicians) occurred in urban Alberta, while the 1996 to 2006 change in rural Alberta is 0.2, it is 0.1 in Strong MIZ, 0.9 in Moderate MIZ, -0.3 in Weak MIZ, and -0.2 in No MIZ. In fact, No MIZ experienced relative declines in all but assisting health care occupations.

These findings parallel variations in the net rural / urban migration patterns of the different types of healthcare workers. For example, while there has been a steady net out-migration of physicians from rural to urban Canada since 1991, there has been a net in-migration of speech pathologists, physiotherapists, dentists and pharmacists from urban to rural Canada (Canadian Institute for Health Information, 2010).

Summary and Conclusions

The results from Figure 24 and Table 7 suggest a health care disadvantage for rural and small town citizens of Alberta. Not only do rural regions have fewer health care providers per 1,000 residents, 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 and are likely (but not always) required to travel the furthest distance to access health care services. In 2006, residents of No MIZ zones had 17.9 health care providers per 1,000 people, only 0.8 of whom were health care professionals such as doctors. Such a low number of 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 holds true for all MIZ zones, the lowest number is found in No MIZ.

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. This is especially the case in No MIZ zones, where, as shown in Figure 8, Aboriginal people comprise a significant minority 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 also 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 the least integrated rural regions of the province is therefore worthy of further investigation.

As this report has shown, compared to urban and Strong MIZ residents, those living in Moderate, Weak, and especially No MIZ regions of Alberta are more likely to be in poorer socioeconomic conditions and to have lower educational attainment. Insofar as these factors have been shown to detrimentally effect health status (DesMeules and Pong 2006), the health of these Albertans may be further compromised by lower access to health services. Indeed, a recent survey found that rural Albertans were less satisfied with the quality of health services than both small town and urban Albertans (Howard Research, 2009). These findings are particularly troubling given the higher demand for health services in rural Alberta that result from their generally poorer health status.

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Appendix 1
Sample Municipalities by Geographic Zone

Urban Alberta Sample Municipalities

Census Metropolitan Areas

- City of Calgary, including the surrounding municipalities of Airdrie, Beiseker, Chestermere, Cochrane, Crossfield, Irricana, Rocky View, and Tsuu T'ina Nation

Census Agglomerations

- Wood Buffalo
- Okotoks
- Lethbridge

Rural Alberta Sample Municipalities

Strong MIZ

Acme
Black Diamond
Carstairs
Kitschy

Moderate MIZ

High River
Sandy Beach
Innisfail
Smoky Lake County

Weak MIZ

Killam
Ponoka
Sundre
Swan Hills

No MIZ

Big Horn
Cowley
Larkspur
Willingdon

APPENDIX 2

SUPPLEMENTARY TABLES

Appendix Table 1: Population Count in Alberta by Geographic Zone; 1991 to 2006
(Current Boundaries)

	Count			
	2006	2001	1996	1991
Alberta[1]	3,290,350	2,974,807	2,696,826	2,545,553
Urban	2,592,386	2,244,336	2,002,352	1,901,582
Rural	697,964	730,471	694,474	643,971
Strong MIZ	81,051	133,432	115,974	113,644
Moderate MIZ	224,113	201,612	169,300	162,183
Weak MIZ	364,978	358,995	377,669	341,840
No MIZ	27,822	36,432	31,531	26,304

Source: Statistics Canada, Census of Population, 2006, 2001, 1996, and 1991 extracted from Bollman and Clemenson (2008): Appendix Table K.10

[1] Population figures for urban and rural may 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 Count in Alberta by Geographic Zone; 1991 to 2006
(Constant Boundaries)

	Count			
	2006 (2006 boundaries)	2001 (2006 boundaries)	1996 (2001 boundaries)	1991 (1996 boundaries)
Alberta[1]	3,290,350	2,974,807	2,696,826	2,545,553
Urban	2,592,386	2,302,517	2,004,641	1,901,066
Rural	697,964	672,290	692,185	644,487
Strong MIZ	81,051	71,816	118,425	103,035
Moderate MIZ	224,113	216,793	190,335	158,227
Weak MIZ	364,978	359,389	352,527	356,885
No MIZ	27,822	24,382	30,898	26,340

Source: Statistics Canada, Census of Population, 2006, 2001, 1996, and 1991 extracted from Bollman and Clemenson (2008): Appendix Table K.10

[1] Population figures for urban and rural may 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 3: Population Change Count (Demographic versus Geographic) in

Appendix Table 3: Population Change Count (Demographic versus Geographic) in Alberta by Geographic Zone; 2001 to 2006, 1996-2001, and 1991 to 1996

	Change (Count)		
	Demographic & Geographic Change[2]	Demographic Change[3]	Geographic Change[4]
	2001-2006		
Alberta[1]	315,543	315,543	0
Urban	348,040	289,869	58,171
Rural	-32,507	25,674	-58,181
Strong MIZ	-52,381	9,235	-61,616
Moderate MIZ	22,501	7,410	15,091
Weak MIZ	5,983	5,589	394
No MIZ	-8,610	3,440	-12,050
	1996-2001		
Alberta[1]	277,981	277,981	0
Urban	241,984	239,695	2,289
Rural	35,997	38,286	-2,289
Strong MIZ	17,458	15,007	2,451
Moderate MIZ	32,312	11,277	21,035
Weak MIZ	-18,674	6,468	-25,142
No MIZ	4,901	5,534	-633
	1991-1996		
Alberta[1]	151,273	151,273	0
Urban	100,770	101,286	-516
Rural	50,503	49,987	516
Strong MIZ	2,330	12,939	-10,609
Moderate MIZ	7,117	11,073	-3,956
Weak MIZ	35,829	20,784	15,045
No MIZ	5,227	5,191	36

Source: Statistics Canada, Census of Population, 2006, 2001, 1996, and 1991 extracted from Bollman and Clemenson (2008): Appendix Table K.10

[1] Population figures for urban and rural may not add up to the provincial total because data are suppressed if there are fewer than 40 residents in any Canadian Census Subdivision.
[2] Demographic and Geographic Changes are represented by current boundary population figures.
[3] Demographic Changes for the 2001-2006 period are represented by constant 2006 boundary population figures, for the 1996-2001 period are represented by constant 2001 boundary population figures, and for the 1991 to 1996 period are represented by 1996 boundary figures.
[4] Geographic Change is calculated by subtracting the amount of change produced when using current boundaries from the amount of change produced when using constant boundaries.

Appendix Table 4: Population Percentage Distribution in Canada by Province/Territory and by Geographic Zone; 2006, 2001, 1996, and 1991

	Distribution (%)			
	2006	2001	1996	1991
CANADA	100.0	100.0	100.0	100.0
Urban	81.1	79.4	77.8	77.2
Rural	18.8	20.6	22.2	22.8
Strong MIZ	4.3	5.1	5.4	5.8
Moderate MIZ	7.0	7.6	8.2	8.6
Weak MIZ	6.5	6.6	7.2	7.1
No MIZ	0.9	1.1	1.2	1.1
Territories[2]	0.2	0.2	0.2	0.2
ALBERTA	100.0	100.0	100.0	100.0
Urban	78.7	75.4	74.3	74.7
Rural	21.1	24.6	25.7	25.3
Strong MIZ	2.5	4.5	4.3	4.5
Moderate MIZ	6.8	6.8	6.3	6.4
Weak MIZ	11.1	12.1	14.0	13.4
No MIZ	0.8	1.2	1.2	1.0
NEWFOUNDLAND / LABRADOR	100	100.0	100.0	100.0
Urban	46	46.5	44.4	44.6
Rural	54	53.5	55.6	55.4
Strong MIZ	5	3.5	3.6	3.4
Moderate MIZ	18	24.4	25.5	24.3
Weak MIZ	23	20.9	21.6	22.2
No MIZ	8	4.7	5.0	5.5
PRINCE EDWARD ISLAND	100	100.0	100.0	100.0
Urban	55	55.1	54.4	56.0
Rural	45	44.9	45.6	44.0
Strong MIZ	12	14.0	14.1	12.0
Moderate MIZ	25	21.7	22.1	22.0
Weak MIZ	7	8.6	8.9	9.4
No MIZ	1	0.5	0.5	0.6
NOVA SCOTIA	100	100.0	100.0	100.0
Urban	64	63.3	61.3	60.4
Rural	36	36.7	38.7	39.6
Strong MIZ	2	2.4	3.3	3.2
Moderate MIZ	10	10.9	11.3	11.3
Weak MIZ	23	22.9	23.6	24.6
No MIZ	0	0.5	0.5	0.5

Appendix Table 4 Continued

	Distribution (%)			
	2006	2001	1996	1991
NEW BRUNSWICK	100	100.0	100.0	100.0
Urban	58	52.3	51.5	52.0
Rural	**42**	**47.7**	**48.5**	**48.0**
Strong MIZ	5	6.9	7.0	7.9
Moderate MIZ	21	20.0	20.3	18.9
Weak MIZ	14	18.6	19.0	19.0
No MIZ	2	2.3	2.2	2.2
QUEBEC	100	100.0	100.0	100.0
Urban	80	78.5	77.6	77.3
Rural	**20**	**21.5**	**22.4**	**22.7**
Strong MIZ	5	6.1	6.0	6.1
Moderate MIZ	10	10.9	11.2	11.4
Weak MIZ	5	3.9	4.4	4.4
No MIZ	0	0.6	0.8	0.8
ONTARIO	100	100.0	100.0	100.0
Urban	88	87.0	85.2	84.2
Rural	**12**	**13.0**	**14.8**	**15.8**
Strong MIZ	5	6.1	7.0	7.5
Moderate MIZ	4	4.3	5.0	5.8
Weak MIZ	2	2.4	2.5	2.2
No MIZ	0	0.2	0.3	0.3
MANITOBA	100	100.0	100.0	100.0
Urban	68	66.6	66.7	66.8
Rural	**32**	**33.4**	**33.3**	**33.2**
Strong MIZ	3	4.4	4.1	5.2
Moderate MIZ	9	10.4	10.3	9.2
Weak MIZ	17	14.9	15.4	15.6
No MIZ	3	3.6	3.5	3.2
SASKATCHEWAN	100	100.0	100.0	100.0
Urban	60	57.7	56.7	56.4
Rural	**40**	**42.3**	**43.3**	**43.6**
Strong MIZ	2	2.7	2.6	2.5
Moderate MIZ	11	10.3	10.4	11.3
Weak MIZ	19	19.8	20.5	19.9
No MIZ	8	9.5	9.8	9.9

Appendix Table 4 Continued

	Distribution (%)			
	2006	2001	1996	1991
BRITISH COLUMBIA	100	100.0	100.0	100.0
Urban	87	86.2	84.5	84.6
Rural	**13**	**13.8**	**15.5**	**15.4**
Strong MIZ	2	1.8	2.1	2.5
Moderate MIZ	4	4.8	5.7	5.4
Weak MIZ	6	6.1	6.9	6.8
No MIZ	1	1.1	0.8	0.7
YUKON[1]	100	100.0	100.0	100.0
Urban	75	74.6	70.9	64.5
TERRITORIES	25	**25.4**	**29.1**	**35.5**
NORTHWEST TERRITORIES[1]	100	100.0	100.0	100.0
Urban	26	44.3	43.6	41.8
TERRITORIES	**74**	**55.7**	**56.4**	**58.2**
NUNAVUT[1]	n/a	100.0	100.0	100.0
Urban	n/a	0.0	0.0	0.0
TERRITORIES	**n/a**	**100.0**	**100.0**	**100.0**

Source: Statistics Canada, Census of Population, 2006, 2001, 1996, and 1991. Data for 2006 are extracted from Bollman and Clemenson, 2008: Appendix Tables K.1 to K.13.

[1] The statistical area classification for the northern territories does not specify MIZ zones. "Territories" is the equivalent of "Rural and Small Town Total." For 2006, the Northwest Territories includes Nunavut.

Appendix Table 5: Population Count[1] in Canada by Geographic Zone; 1991 to 2006
(Current Boundaries)

	Count			
	2006	2001	1996	1991
Canada	31,612,897	30,007,094	28,846,761	27,296,859
Urban	25,631,557	23,839,086	22,449,855	21,067,214
Rural	5,981,340	6,168,008	6,396,906	6,229,645
Strong MIZ	1,350,098	1,524,579	1,564,700	1,574,359
Moderate MIZ	2,224,347	2,285,538	2,365,175	2,335,157
Weak MIZ	2,049,199	1,969,211	2,078,342	1,951,974
No MIZ	297,984	333,847	332,604	315,813
Territories[1]	59,712	54,833	56,085	52,342

Source: Statistics Canada, Census of Population, 2006, 2001, 1996, and 1991 extracted from Bollman and Clemenson (2008): Appendix Table K.1

[1] The statistical area classification for the northern territories does not specify MIZ zones. "Territories" is the equivalent of "Rural and Small Town Total." For 2006, the Northwest Territories includes Nunavut.

Appendix Table 6: Population Count[1] in Canada by Geographic Zone; 1991 to 2006
(Constant Boundaries)

	Count			
	2006 (2006 Boundaries)	2001 (2006 boundaries)	1996 (2001 boundaries)	1991 (1996 boundaries)
Canada	31,612,897	30,007,094	28,846,761	27,296,859
Urban	25,631,557	24,084,698	22,654,692	21,140,156
Rural	5,981,340	5,922,396	6,192,069	6,156,703
Strong MIZ	1,350,098	1,289,265	1,470,493	1,458,448
Moderate MIZ	2,224,347	2,203,563	2,307,387	2,289,911
Weak MIZ	2,049,199	2,077,950	2,027,488	2,041,871
No MIZ	297,984	296,785	330,616	316,281
Territories[2]	59,712	54,833	56,085	50,192

Source: Statistics Canada, Census of Population, 2006, 2001, 1996, and 1991 extracted from Bollman and Clemenson (2008): Appendix Table K.1

[1] The statistical area classification for the northern territories does not specify MIZ zones. "Territories" is the equivalent of "Rural and Small Town Total." For 2006, the Northwest Territories includes Nunavut.

Appendix Table 7: Population Change Count (Demographic versus Geographic) in Canada[1] by Geographic Zone; 2001 to 2006, 1996-2001, and 1991-1996

	Change (Count)		
	Demographic & Geographic Change[2]	Demographic Change[3]	Geographic Change[4]
	2001-2006		
Canada	1,605,803	1,605,803	0
Urban	1,792,471	1,546,859	245,612
Rural	-186,668	58,944	-245,612
Strong MIZ	-174,481	60,833	-235,314
Moderate MIZ	-61,191	20,784	-81,975
Weak MIZ	79,988	-28,751	108,739
No MIZ	-35,863	1,199	-37,062
	1996-2001		
Canada	1,160,333	1,160,333	0
Urban	1,389,231	1,184,394	204,837
Rural	-228,898	-24,061	-204,837
Strong MIZ	-40,121	54,086	-94,942
Moderate MIZ	-79,637	-21,849	-57,788
Weak MIZ	-109,131	-58,277	-50,854
No MIZ	1,243	3,231	-1,988
	1991-1996		
Canada	1,549,902	1,549,902	0
Urban	1,382,641	1,309,699	72,942
Rural	167,261	240,203	-72,942
Strong MIZ	-9,659	106,252	-115,911
Moderate MIZ	30,018	75,264	-45,246
Weak MIZ	126,368	36,471	89,897
No MIZ	16,791	16,323	468

Source: Statistics Canada, Census of Population, 2006, 2001, 1996, and 1991 extracted from Bollman and Clemenson (2008): Appendix Table K.1

[1] The statistical area classification for the northern territories does not specify MIZ zones. "Territories" is the equivalent of "Rural and Small Town Total." For 2006, the Northwest Terrirtories includes Nunavut.
[2] Demographic and Geographic Changes are represented by current boundary population figures.
[3] Demographic Changes for the 2001-2006 period are represented by constant 2006 boundary population figures, for the 1996-2001 period are represented by constant 2001 boundary population figures, and for the 1991 to 1996 period are represented by 1996 boundary figures.
[4] Geographic Change is calculated by subtracting the amount of change produced when using current boundaries from the amount of change produced when using constant boundaries.

Appendix Table 8: Population Age Distribution in Alberta by Geographic Zone: 2006, 2001, 1996, and 1991

		Distribution (%)						
Age Category	Year	Alberta	Urban	Rural	Strong MIZ	Mod. MIZ	Weak MIZ	No MIZ
Children (0 – 14 years)	2006	19.2	18.5	**21.7**	20.2	20.7	22.2	27.8
	2001	21.1	20.1	**23.9**	24.2	23.3	23.6	30.0
	1996	23.0	22.1	**25.6**	26.3	24.7	25.6	29.2
	1991	23.6	22.7	**26.3**	26.6	26.3	26.0	28.4
Youth (15 – 24 years)	2006	14.9	15.1	**13.9**	13.2	13.1	14.5	14.2
	2001	14.8	15.1	**14.1**	13.5	13.2	14.6	15.0
	1996	14.1	14.1	**14.0**	12.9	13.3	14.6	15.1
	1991	14.6	14.9	**13.8**	13.0	13.3	14.4	14.2
Young Adults (25 - 44 years)	2006	29.8	30.9	**25.7**	26.5	24.4	26.5	24.9
	2001	32.1	33.2	**28.6**	29.2	27.4	29.3	26.6
	1996	34.2	35.4	**30.6**	31.6	29.2	31.3	27.7
	1991	35.5	37.0	**31.2**	32.4	30.0	31.6	27.9
Adults (45 - 64 years)	2006	25.4	25.2	**26.0**	29.6	27.7	24.6	21.2
	2001	22.4	22.3	**22.7**	24.4	23.7	21.9	18.4
	1996	19.5	19.5	**19.5**	20.8	20.8	18.6	17.1
	1991	17.2	17.0	**17.9**	18.8	18.6	17.3	16.1
Seniors (65 years+)	2006	10.7	10.2	**12.6**	10.5	14.2	12.2	11.9
	2001	9.7	10.7	**10.7**	8.7	12.4	10.6	10.0
	1996	9.2	10.2	**10.2**	8.3	12.0	9.9	10.9
	1991	9.1	10.9	**10.9**	9.4	11.8	10.7	13.6

Source: Statistics Canada, Census of Population, 2006, 2001, 1996, and 1991

Appendix Table 9: Population Age in Alberta by Geographic Zone; 2006, 2001, 1996, and 2001

		Count						
Age Category	Year	Alberta[1]	Urban	Rural	Strong MIZ	Mod. MIZ	Weak MIZ	No MIZ
Children (0-14 years)	2006	631,515	479,505	151,070	16,365	46,190	81,160	7,355
	2001	619,130	446,595	172,535	32,040	46,445	83,240	10,800
	1996	614,175	439,050	175,130	30,820	46,575	88,840	8,880
	1991	601,110	430,010	170,745	29,515	46,405	87,405	7,420
Youth (15-24 years)	2006	489,280	391,910	96,590	10,640	29,260	59,920	3,770
	2001	435,325	334,390	100,930	17,795	26,380	51,370	5,385
	1996	375,705	280,245	95,465	15,175	25,070	50,625	4,610
	1991	371,370	281,485	89,810	14,395	23,400	48,300	3,715
Young Adults (25-44 years)	2006	980,970	800,945	178,995	21,410	54,440	96,560	6,585
	2001	943,525	737,250	206,275	38,630	54,545	103,550	9,555
	1996	913,175	703,995	209,190	37,040	54,905	108,795	8,435
	1991	904,505	701,775	20,250	35,995	52,970	106,245	7,290
Adults (45-64 years)	2006	835,170	652,735	180.935	23,965	61,755	89,600	5,615
	2001	658,840	495,280	163,560	32,310	47,175	77,445	6,630
	1996	520,510	387,250	133,275	24,405	39,115	64,545	5,195
	1991	438,030	321,780	116,010	20,925	32,785	58,095	4,205
Seniors (65+ years)	2006	353,420	265,110	87,875	8,500	31,690	44,530	3,155
	2001	284,345	207,035	77,310	11,540	24,775	37,385	3,595
	1996	245,605	175,775	69,830	9,765	22,535	34,245	3,305
	1991	230,550	159,665	70,830	10,400	20,745	36,125	3,560

Source: Statistics Canada, Census of Population, 2006, 2001, 1996, and 1991

[1] Population figures for urban and rural may 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: Aboriginal Identity[1] Population in Alberta by Geographic Zone; 2006, 2001, and 1996

	Count		
	2006	2001	1996
Alberta[2]	188,365	156,220	122,840
Urban	106,300	84,140	65,115
Rural	82,060	72,080	57,720
Strong MIZ	2,535	3,850	2,425
Moderate MIZ	13,465	12,600	11,730
Weak MIZ	54,150	37,695	31,965
No MIZ	11,910	17,935	11,600

Source: Statistics Canada, Census of Population, 2006, 2001 and 1996

[1] Refers to persons who reported identifying with at least one Aboriginal group, i.e. North American Indian, Métis or Inuit 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 may 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: Immigrant Population[1] and Period of Immigration in Alberta by Geographic Zone; 2006

		Period of Immigration (Count)			
	Immigrants (Count)	2001-2006	1996-2000	1991-1995	<1991
Alberta[2]	527,030	103,680	65,270	62,240	295,390
Urban	485,310	98,110	61,645	58,850	266,705
Rural	41,095	5,395	3,900	3,265	28,535
Strong MIZ	5,355	505	505	480	3,865
Moderate MIZ	14,030	1,690	1,355	1,005	9,980
Weak MIZ	21,095	3,135	1,960	1,770	14,230
No MIZ	615	65	80	10	460

Source: Statistics Canada, Census of Population, 2006 and 2001

[1] Immigrants are persons who are, or have ever been, landed immigrants in Canada. A landed immigrant is a person who has been granted the right to live in Canada permanently by immigration authorities.

[2] Population figures for urban and rural may 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: Population Participating in Labour Force[1] in Alberta by Geographic Zone; 2006, 2001, 1996, and 1991

	Count			
	2006	2001	1996	1991
Alberta[2]	1,942,825	1,696,755	1,486,980	1,419,280
Urban	1,552,745	1,304,290	1,120,180	1,073,195
Rural	385,130	392,465	366,805	345,750
Strong MIZ	47,955	74,800	65,140	61,170
Moderate MIZ	125,650	108,010	100,925	91,525
Weak MIZ	200,300	195,380	187,845	182,465
No MIZ	11,225	14,280	12,890	10,590

Source: Statistics Canada, Census of Population, 2006, 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 may 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: Population Unemployed[1] in Alberta by Geographic Zone; 2006, 2001, 1996, and 1991

	Count			
	2006	2001	1996	1991
Alberta[2]	82,860	87,920	107,275	110,480
Urban	65,545	67,745	83,585	87,750
Rural	16,970	20,175	23,685	22,710
Strong MIZ	1,515	3,175	3,670	3,545
Moderate MIZ	4,695	4,900	6,255	6,025
Weak MIZ	9,680	10,420	12,270	12,125
No MIZ	1,080	1,680	1,495	1,015

Source: Statistics Canada, Census of Population, 2006, 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 may 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: Labour Force Population by Industry Sector (NAICs)[1] in Alberta by Geographic Zone; 2006 and 2001

Industry Sector	Year	Count						
		Alberta[5]	Urban	Rural	Strong MIZ	Mod. MIZ	Weak MIZ	No MIZ
Agric., Forestry, Fishing & Hunting	2006	75,875	19,915	55,060	5,415	21,865	26,955	825
	2001	84,570	17,325	67,245	11,125	22,870	31,205	2,040
Mining and Oil & Gas Extraction	2006	134,620	95,590	38,595	4,665	10,775	21,775	1,400
	2001	85,970	59,060	26,910	4,595	6,375	14,705	1,230
Construction	2006	169,420	135,975	32,895	5,260	11,040	15,490	1,105
	2001	130,015	98,030	31,985	7,085	8,870	14,960	1,070
Manufacturing	2006	138,365	116,805	21,295	3,190	7,300	10,415	390
	2001	134,925	110,120	24,805	5,365	7,425	11,515	500
Production Services[2]	2006	555,265	479,030	74,470	11,440	24,150	36,965	1,195
	2001	489,870	413,630	76,250	17,695	21,045	34,995	2,510
Consumer Services[3]	2006	469,615	381,970	86,550	10,075	26,485	47,835	2,155
	2001	420,130	330,140	89,985	16,485	22,010	49,135	2,355
Government Services[4]	2006	385,460	311,905	72,035	7,540	22,955	38,460	3,080
	2001	336,505	264,380	72,130	12,125	18,680	37,255	4,060

Source: Statistics Canada, Census of Population, 2006 and 2001

[1] Based on the 1997 North American Industry Classification (NAICS) system and is for the labour force 15 years of age and older.
[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 may 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: Self-Employed Population[1] in Alberta by Geographic Zone; 2006, 2001, 1996, and 1991

	Count			
	2006	2001	1996	1991
Alberta[2]	258,745	238,545	228,690	169,220
Urban	173,360	147,400	138,350	95,230
Rural	83,975	91,145	89,760	73,340
Strong MIZ	11,065	17,960	16,945	13,625
Moderate MIZ	30,485	27,215	22,805	20,915
Weak MIZ	40,870	43,400	47,395	36,730
No MIZ	1,555	2,570	2,615	2,070

Source: Statistics Canada, Census of Population, 2006, 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 may 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: Low-Income Population[1] in Alberta by Geographic Zone; 2006, 2001, 1996, and 1991

	Count			
	2006	2001	1996	1991
Alberta[2]	388,585	395,650	481,515	408,760
Urban	334,018	324,335	392,195	325,225
Rural	53,673	70,355	87,315	82,075
Strong MIZ	4,965	10,970	14,005	12,785
Moderate MIZ	18,322	19,075	25,010	23,685
Weak MIZ	29,407	38,760	47,535	43,760
No MIZ	979	1,550	2,765	1,890

Source: Statistics Canada, Census of Population, 2006, 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 may 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: Population Educational Attainment[1] in Alberta by Geographic Zone; 2006

	Count				
	Less than High School	High School Cert.	Any Post-Secondary	Certificate / Diploma	University Degree
Alberta[2]	614,865	688,140	1,322,140	863,715	458,425
Urban	433,480	548,450	1,103,040	689,000	414,040
Rural	178,455	137,975	214,935	171,695	43,240
Strong MIZ	16,135	17,780	29,320	22,526	6,795
Moderate MIZ	55,345	45,950	72,895	58,480	14,415
Weak MIZ	98,155	70,650	107,060	85,905	21,155
No MIZ	8,820	3,595	5,660	4,785	875

Source: Statistics Canada, Census of Population, 2006

[1] 2006 educational attainment data are provided for the population 15 years of age and over.
[2] Population figures for urban and rural may 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 Education Providers[1] in Alberta by Geographic Zone; 2006, 2001, 1996, and 1991

	Number			
	2006	2001	1996	1991
Alberta[2]	63,885	55,085	50,980	57,770
Urban	53,235	43,500	39,410	44,555
Rural	10,395	11,590	11,575	13,055
Strong MIZ	1,120	1,870	1,770	2,130
Moderate MIZ	3,590	3,155	3,140	3,510
Weak MIZ	5,300	6,010	6,115	6,915
No MIZ	385	555	550	500

Source: Statistics Canada, Census of Population, 2006, 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 may 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 Lone-Parent Families[1] in Alberta by Geographic Zone; 2006, 2001, 1996, and 2001

	Number			
	2006	2001	1996	1991
Alberta[2]	130,265	116,525	92,480	83,010
Urban	106,420	93,580	75,230	67,455
Rural	23,380	22,945	17,245	15,505
Strong MIZ	2,270	3,460	2,670	2,410
Moderate MIZ	6,830	5,945	4,375	4,130
Weak MIZ	12,910	11,465	9,255	8,205
No MIZ	1,370	2,075	950	760

Source: Statistics Canada, Census of Population, 2006, 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 may 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 of Houses Constructed by Time Period in Alberta by Geographic Zone; 1986 to 2006

	Number			
	2001-2006	1996-2001	1991-1996	1986-1991
Alberta[1]	179,560	123,455	93,195	76,090
Urban	154,230	95,095	69,240	57,550
Rural	24,720	28,355	23,955	18,545
Strong MIZ	5,180	7,095	5,485	3,215
Moderate MIZ	8,735	7,865	6,190	4,690
Weak MIZ	10,230	12,090	11,195	9,645
No MIZ	575	1,300	1,085	990

Source: Statistics Canada, Census of Population, 2006, 2001, 1996, and 1991

[1] Population figures for urban and rural may 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 of Owner Houses Spending Greater than 30% of Income on Shelter[1] in Alberta by Geographic Zone; 2006, 2001, 1996, and 1991

	Number			
	2006	2001	1996	1991
Alberta[2]	148,755	113,810	93,695	50,300
Urban	121,585	88,925	74,390	39,400
Rural	26,270	24,395	19,300	10,860
Strong MIZ	3,890	5,530	4,075	2,275
Moderate MIZ	9,610	7,105	5,520	2,840
Weak MIZ	12,325	11,315	9,095	5,105
No MIZ	445	445	615	340

Source: Statistics Canada, Census of Population, 2006, 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 may 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 22: Number Employed in Medicine or Health[1] Occupations in Alberta by Geographic Zone; 2006, 2001, 1996, and 1991

	Number			
	2006	2001	1996	1991
Alberta[2]	103,620	81,790	65,230	67,665
Urban	85,595	65,565	51,345	53,425
Rural	**17,675**	16,230	13,890	14,000
Strong MIZ	2,100	3,255	2,385	2,575
Moderate MIZ	6,355	4,500	4,050	4,080
Weak MIZ	8,775	7,980	6,995	7,065
No MIZ	445	500	455	280

Source: Statistics Canada, Census of Population, 2006, 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 may not add up to the provincial totals because data are suppressed if there are fewer than 40 residents in any Canadian Census Subdivision.

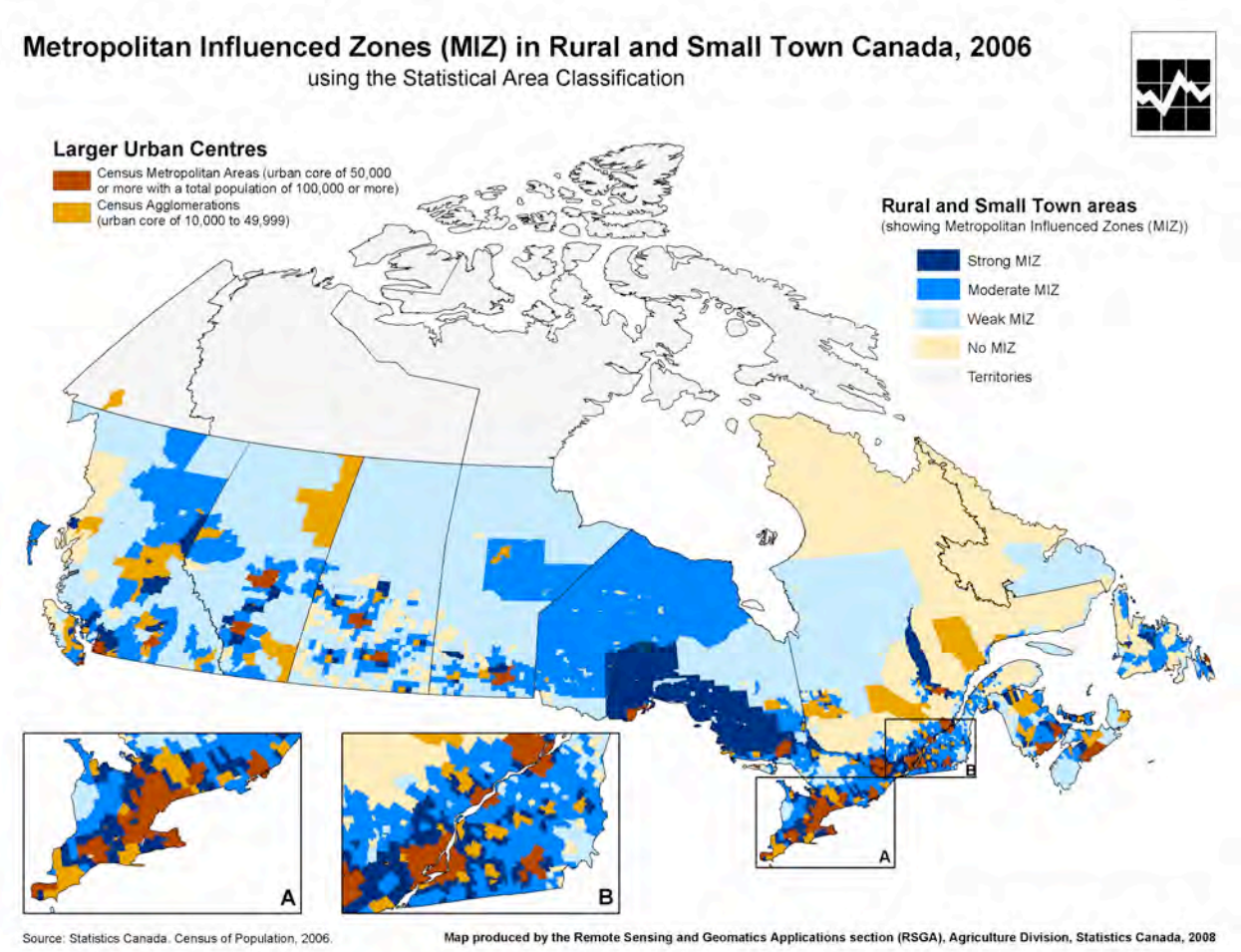
Appendix Table 23: Number Employed in Health Occupational Categories in Alberta by Geographic Zone; 2006, 2001, and 1996

		Number			
	Year	Professional Occs.	RN Supervisors & RNs	Tech. & Related Occs.	Assisting Occs. in Support of Health
Alberta[1]	2006	21,070	31,790	26,365	24,390
	2001	17,640	22,750	21,200	20,200
	1996	14.010	21,360	16,500	13,350
Urban	2006	18,545	26,275	21,775	19,030
	2001	15,060	18,245	16,995	15,295
	1996	11,675	16,695	13,130	9,850
Rural	2006	2,455	5,395	4,475	5,145
	2001	2,575	4,505	4,250	4,900
	1996	2,340	4,670	3,375	3,500
Strong MIZ	2006	315	605	490	680
	2001	540	930	880	905
	1996	445	895	530	515
Moderate MIZ	2006	890	2,120	1,525	1,765
	2001	585	1,315	1,235	1,360
	1996	585	1,360	915	1,195
Weak MIZ	2006	1,230	2,555	2,380	2,590
	2001	1,405	2,130	2,000	2,445
	1996	1,270	2,245	1,770	1,715
No MIZ	2006	20	115	80	110
	2001	50	135	135	190
	1996	30	180	165	75

Source: Statistics Canada, Census of Population, 2006, 2001 and 1996

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

APPENDIX 3
GEOGRAPHIC ZONE MAP OF CANADA



APPENDIX 4
FURTHER RELATED DATA AND MAPS

Further Related Data and Maps

To see a map of the Statistical Area Classification for Canada in 2006, go to the Statistics Canada website (www.statcan.ca) and click on "Census", then click on "Reference Maps" and then click on "Statistical Area Classification". The exact URL, for English and French is:
http://geodepot.statcan.gc.ca/2006/13011619/13011619_030118200519/190703-030720/030114_190103-031919_2006.pdf

To find it from the STC home page www.statcan.gc.ca
Select Language - English
http://www.statcan.gc.ca/start-debut-eng.htm l

In the "Browse by" section select the "Key Resource" tab
http://www.statcan.gc.ca/resource-ressource-eng.htm#ActiveTab

Select Maps and geography from the sub heading "Maps and other geographical tools"
http://www.statcan.gc.ca/mgeo/index-eng.htm

From the "Maps" tab, select Reference maps by geographic area
http://www.statcan.gc.ca/mgeo/geography-geographie-eng.htm

Select Standard Geographical Classification from 2006 Census of Population and Dwellings under Reference Map s
http://geodepot.statcan.gc.ca/2006/13011619/1907032006_05-eng.js p
In Step 1: select the map series "National" and click the "Next" button .

In Step 2: select "D. Statistical Area Classification" and click "Download", you will then be directed to the downloads page,

Click the hyperlink () 030114_190103-031919-20 0 6

A map of the 2006 SAC can also be found in:
Rothwell, Neil. (2010) "Standing firm: Rural business enterprises in Canada." Rural and Small Town Canada Analysis Bulletin Vol. 8, No. 3 (Ottawa: Statistics Canada, Catalogue no. 21-006-XIE) (http://www.statcan.gc.ca/bsolc/olc-cel/olc-cel?catno=21-006-X&CHROPG=1&lang=eng

For the population count for 2006 for the Statistical Area Classification, the URL in English i s
http://www12.statcan.gc.ca/census-recensement/2006/dp-pd/hlt/97-550/Index.cfm?TPL=P2C&Page=FLTR&LANG=Eng&T=601
and the URL in French is
http://www12.statcan.gc.ca/census-recensement/2006/dp-pd/hlt/97-550/Index.cfm?TPL=P2C&Page=FLTR&LANG=Fra&T=601

Population by age and sex for the Statistical Area Classification is available, in English, at
http://www12.statcan.ca/census-recensement/2006/dp-pd/hlt/97-551/pages/page.cfm?Lang=E&Geo=PR&Code=01&Table=3&Data=Count&Sex=1&StartRec=1&Sort=2&Display=Pag e

and in French is at
http://www12.statcan.ca/census-recensement/2006/dp-pd/hlt/97-551/pages/page.cfm?Lang=F&Geo=PR&Code=01&Table=3&Data=Count&Sex=1&StartRec=

A detailed set of socio-economic characteristics for the Statistical Area Classification for the 2006 Census of Population is available for $65 at the following URL, in English
http://www.statcan.gc.ca/bsolc/olc-cel/olc-cel?catno=94-581-XCB2006011&lang=eng
and in French at
http://www.statcan.gc.ca/bsolc/olc-cel/olc-cel?catno=94-581-XCB2006011&lang=fra

Please note, to see a map of the Statistical Area Classification for Canada in 2001, go to the Statistics Canada website (www.statcan.ca) and click on "Census", then click on "Reference Maps" and then click on "Statistical Area Classification". The exact URL, for English, is
http://geodepot.statcan.ca/Diss/Maps/ReferenceMaps/n_sac_e.cfm
and for French is
http://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 (www.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
http://www12.statcan.ca/english/census01/products/standard/popdwell/Table-SAC.cfm
and for French is
http://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 (www.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
http://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
http://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 (www.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 i s
http://www.statcan.ca:8096/bsolc/english/bsolc?catno=95F0495XCB2001012
and for French is
http://www.statcan.ca:8096/bsolc/francais/bsolc?catno=95F0495XCB2001012