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# LABOUR MARKET ISSUES IN SASKATCHEWAN

## A SITUATIONAL ANALYSIS

MAY 2009

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SASKATCHEWAN LABOUR MARKET COMMISSION



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A report prepared for the

**SASKATCHEWAN LABOUR MARKET COMMISSION**

by  
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## EXECUTIVE SUMMARY

The Saskatchewan Labour Market Commission has a mandate to develop a labour market strategy for the province. In most kinds of strategic planning, a situational analysis is a first step in the process because one needs to evaluate the current situation and how it came about before a plan for the future can be made. This document is intended to help the Commission undertake that kind of situational analysis by providing quantitative information about recent trends in the Saskatchewan labour market.

The research was conducted and this report was prepared by Doug Elliott, the principal of QED Information Systems Inc., a Regina based consulting firm and the publisher of *Sask Trends Monitor*. The opinions expressed here do not necessarily represent those of the staff or board members of the Saskatchewan Labour Market Commission.

The analysis begins with a recognition that, for two reasons, this is a particularly difficult time to be planning for the future in Saskatchewan. The first is that at the time this report was prepared the world economy was in a very volatile state with a financial crisis that had spread to the “real economy”. Commodity prices had fallen precipitously from recent highs governments world-wide were going into debt to avert what some were calling the worst recession since the 1930s. The second reason is that after years of stability, the demographic trends in the province appear to be on the cusp of a change. According to preliminary data, Saskatchewan is in the midst of an almost-unprecedented influx of people from Alberta and other provinces. To avoid a serious shortage of labour, the Saskatchewan government is ramping up the Saskatchewan Immigrant Nominee Program to increase the number of immigrants coming to Saskatchewan.

In other words, the long term trends typically used to forecast what may be coming may no longer be a reliable guide.

### How many?

The report begins in Section 2 with an assessment of what the demand for labour could be in the short to medium term. Using long term trends in economic growth and output per worker in Saskatchewan and the other western provinces, we conclude that it would be prudent to plan for an increase of 10,000 per year in the demand for labour over the next five to twenty years. This is well above the long term average for the province but similar to employment growth in 2007 and 2008.

According to preliminary estimates of the supply of labour that are part of the Saskatchewan Labour Force Supply report prepared for the Ministry of Advanced Education, Employment, and Labour, the recent influx of interprovincial migrants and the ongoing growth in international immigration will be sufficient to meet the 10,000 per year demand over the short term, that is, the next five years. After 2013, however, increasing participation rates by the Aboriginal population and other groups currently under-represented in the labour market will be required to meet the demand. In the long term, even higher levels of international and interprovincial migration and labour force participation rates will be needed in order to ensure that the supply of workers will not be a limiting factor in economic growth.

### Characteristics of Labour Market Demand

Section 2 of the report describes recent trends (from 2002 to 2008) in the labour market from a demand perspective. The changes in the characteristics of the employed are summarized below.

- From 2002 to 2008, employment has increased the fastest in construction and the resource (mining, oil and gas) sectors. Employment dropped in agriculture and in sectors with below average skill levels and pay rates, namely personal and household services and accommodation and food services.
- In terms of employment growth, the fastest growing sub-provincial region from 2002 to 2008 was the Saskatoon metropolitan area. Approximately one half of Saskatchewan’s employed workers live in or near Regina and Saskatoon.

- The number of self-employed individuals is declining in both agriculture, where the majority work, and outside agriculture. The number of paid workers in the public sector is growing as quickly as the number in the private sector.
- There is no apparent trend away from permanent full-time positions.
- The number of involuntary part-time workers is declining.
- Average wage rates are growing more quickly than the rate of inflation. This is true for both permanent and non-permanent employees for those covered by a collective agreement and those not.
- Employment among union members is growing at the same rate as employment among those who are not.
- Employment is growing more quickly among large employers than smaller ones. Still, four out of ten paid workers work at an establishment with fewer than twenty employees.
- Employment is increasing among those who are post-secondary graduates but the increase among those with a certificate or diploma is small compared with the increase among those with an undergraduate degree. The number of employed persons with a graduate degree declined from 2002 to 2008.
- Using the proportion of the employed who are post-secondary graduates as a measure, Saskatchewan has, among the provinces, the second lowest level of completed education in its workforce.

### Characteristics of Labour Market Supply

Section 3 of the report describes recent trends in the labour market from a supply perspective. The changes in the characteristics of the supply are summarized below.

- The “natural growth rate” (birth less deaths) in the provincial population has declined to approximately 3,000 persons per year and is expected to stay low. Any future population growth will have to come from international or interprovincial migration.
- After years when immigration fluctuated between 1,000 and 3,000, the number of international immigrants increased to more than 4,000 between 2007 and 2008.
- The number of people moving to Saskatchewan from other provinces jumped from 12,000 to 30,000 in a recent twelve-month period leading to positive net interprovincial migration for the first time since the early 1980s.
- Saskatchewan’s population is estimated at 1.016 million as of July 2008 up 1.6% from July 2007. All of the growth from 2002 to 2007 has occurred in the Regina and Saskatoon metropolitan areas.
- The population forecast in the Saskatchewan Labour Force Supply Report prepared for the Ministry of Advanced Education, Employment, and Labour suggests that the population in the primary labour market age group (25 to 54 years of age) will continue to grow in the foreseeable future.
- Labour force participation rates in Saskatchewan are near record levels and may be close to theoretical maximums for men. Higher rates among women have provided for most of the increase in recent years and there is still some scope for further increases, particularly among older women and those in the child bearing age groups.
- Participation rates among older residents have increased significantly in the past few years.

Section 3 also looks at the potential to develop the province’s labour force from within by, in effect, increasing the labour force participation rates among persons who have historically had low labour force participation rates. For two large groups, women and older workers, this is happening already.

Among Aboriginal people, the largest of the groups with low participation rates, there are several challenges to be addressed.

- Relatively few Aboriginal people are employed.
- Even those who are employed have a low attachment to the labour force and tend to work in low skill jobs.
- The vast majority of those who are not working have very low levels of formal education.
- Even an adequate level of education, many of those who are not working live on Reserve or in other remote communities so a relocation would probably be necessary to take a job.

The participation rates for two other (overlapping) groups living in Saskatchewan, members in a visible minority group and immigrants, are already near the rates in the general population. There are opportunities for a better use of this labour force because recent immigrants and members of a visible minority group tend to be young and well-educated. There is, however, relatively little opportunity for a significant increase in the absolute size of the labour force from this group.

One cannot easily determine *a priori* if the health and activity limitations for persons with a disability could affect labour market participation because the effect of the limitation will depend on the skills and abilities needed for different occupations. Nevertheless, it seems that there are opportunities for improvements in participation rates for this group for residents although, once again, the numbers are quite small.

Section 3.6 of the report looks at the approximately 80,000 Saskatchewan people who are 15 to 54 years of age and “not in the labour force”, that is, not working nor looking for work. There is some limited opportunity to expand the labour force by increasing the participation of this group but 35,000 are going to school, 15,600 have not completed high school, and 2,400 have never worked. Many of the remaining 27,000 with at least grade 12 will be retired, with health problems, or at home looking after young children.

### **Sector Analysis**

Section 4 looks at sixteen industry groups in the province with a view to determining which will face increasing supply and demand imbalances in the short term. Those with an increasing likelihood of having recruitment or retention problems were assumed to be those with :

- recent employment growth;
- higher proportions of older workers;
- higher levels of formal education among their employees;
- lower average wage rates; and
- recent increases in wage rates that were above the provincial average.

With this criteria the industries with the highest probabilities of labour market imbalances were:

- professional and business services;
- health care and social assistance;
- agriculture;
- personal and household services; and
- construction.

Those with the lowest probabilities were:

- the resource sector (mining/oil and gas);
  - finance, insurance, and real estate;
  - manufacturing; and
  - information, culture, and recreation.
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## SECTION 1 INTRODUCTION AND BACKGROUND

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The Saskatchewan Labour Market Commission (referred to as the “Commission” in the balance of this document) has a mandate to develop a labour market strategy for the province of Saskatchewan. In most kinds of strategic planning, a situational analysis is a first step in the process because one needs to evaluate the current situation and how it came about before a plan for the future can be made. This document is intended to help the Commission undertake that kind of situational analysis by providing quantitative information describing the current situation and the recent trends in the Saskatchewan labour market.

The research was conducted and this report was prepared by Doug Elliott, the principal of QED Information Systems Inc., a Regina based consulting firm and the publisher of *Sask Trends Monitor*. The opinions expressed here do not necessarily represent those of the staff or board members of the Saskatchewan Labour Market Commission.

### Organization of the Report

The report has five sections including this introduction and background. Sections 2 and 3 deal, respectively, with labour market issues related to demand and supply. Elements of these two aspects of the labour market interact and overlap, of course, so some of the topic areas could easily have been moved from one section to the other. Section 4 looks at some specific issues raised in the first two sections as they relate to specific sectors (industry groups) in the province.

The bulk of the data are included as appendices rather than in the body of the report.

### Data Sources

There are many different data sources that describe different aspects of the labour market but two main ones are used in this report. The first is the Statistics Canada census which has information about the labour market on the “long form” which is effectively a 20% sample of the households in Saskatchewan. The census is the most accurate of the data sources about the labour market but it is not the most comprehensive nor the most up-to-date so the monthly Statistics Canada Labour Force Survey (LFS) is used as well.

The LFS is a monthly telephone survey with a large sample size in Saskatchewan (4,347 households with 6,779 adults in January 2007 for example) that yields statistically reliable information about the labour market. Unfortunately, the survey excludes the population living on Reserve from the sample frame so these statistics cover only the population living off Reserve. Some other limitations of the LFS are listed below.

- The survey measures employment according to where the respondent lives not where they work. So persons living in Saskatoon and working in the North, for example, are classified as being an employed person in Saskatoon. This will affect the provincial figures to the extent that the place of employment and the place of residence are not in the same province (e.g. Lloydminster). This has more impact when examining sub-provincial data.
- For those who have two or more jobs simultaneously, only information about the “main job” is collected.
- The LFS has only limited information about those not in the labour force and why they are not working.

Other data sources used in the report are described as they are referenced.

## Note on the Current Economic Climate

This report describes the future supply of and demand for labour in broad terms. Making predictions about the future is difficult at the best of times but forecasting the supply and demand for labour in Saskatchewan is particularly difficult right now because a) after years of stability, demographic trends in the province appear to be on the cusp of a change and b) the world economy is in a particularly volatile state. Some observers are speculating that Saskatchewan has entered a period of permanent prosperity. Others, pointing to historical patterns, are speculating that this is just another version of “next year country”.

At the time this report was prepared, a number of volatile and interrelated factors were at play.

1. According to preliminary data, Saskatchewan is in the midst of an almost-unprecedented influx of people from Alberta and other provinces.
2. The Saskatchewan government is ramping up a program (the Saskatchewan Immigrant Nominee Program) designed to increase the number of immigrants coming to Saskatchewan.
3. Major banks were either failing or being taken over by governments as the “sub-prime” mortgage market disaster in the USA was rippling through the world’s financial system. The financial crisis was spreading to the “real economy” leading to what some had called the worst worldwide recession since the 1930s.
5. Commodity prices in general and crude oil prices in particular were plummeting after increasing sharply during 2007 and the first part of 2008. Major capital projects were being cancelled because of the lower prices or an inability to obtain finance.
6. A real estate “bubble” had developed in Saskatchewan at least in part because of the interprovincial migration. Late in 2008, prices were falling and sales had slowed.
7. A 40% drop in stock market capitalization was having an effect on pension plans, retirements, and beginning to affect consumer confidence and consumer spending.

## SECTION 2      LABOUR MARKET DEMAND ISSUES

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This section provides a description of the key issues facing the Saskatchewan labour market from the point of view of the demand side of the labour market supply and demand equation. The distinction between supply and demand is not clear cut so some of these issues, the level of completed formal education, for example, could just have easily been included in the next section on the supply side.

The issues that were deemed to be elements of the demand side of the equation and included in this section are:

- trends in employment growth by industry group;
- trends in employment growth by sub-provincial region;
- types of jobs and hours of work;
- earnings and wage rates;
- union membership and size of employer; and
- levels of completed formal education.

We begin, however, with an estimate of how aggregate labour demand in Saskatchewan could unfold in the short to medium term.

## 2.1 Productivity and Economic Growth: Projections of Aggregate Demand

Two of the fundamental questions facing Saskatchewan are “how many employees will be needed in the future and where will they come from?”. There is, of course, no precise answer to these questions. Even arriving at an educated guess is difficult because the future could unfold in many different and unpredictable ways. Who would have guessed five years ago, for example, that the price of crude oil would be US\$130/bbl in the summer of 2008 when it was at US\$30/bbl at the time? If they had, would they have known that the price would fall back to \$US40/bbl within a few months?

There are a number of industry-specific demand models (e.g. mining, construction, oil/gas) that can project future demand for specific occupations either for normal ongoing activities or for new projects. The Saskatchewan Ministry of Advanced Education, Employment and Labour and Human Resources Development Canada jointly develop a demand forecast annually by occupation using the Canadian Occupational Projection System (COPS) as a basis. A macroeconomic model for the labour market is also under consideration by the Commission. The macro level analysis in this section is neither as sophisticated nor as accurate as these models. It is, instead, a quick approach to obtaining an “order of magnitude” estimate of demand that is based on general economic patterns rather than industry-specific trends.

By taking a longer view, the demand projection is less affected by current trends and will be less volatile than other demand projections which typically change from year to year, often dramatically.

### Methodology

One way to estimate the demand for employment is to treat it as a function of the volume of output in goods and services and output per employed person. That is,

$$\textit{employment} = \textit{output} \div \textit{output per employed person}$$

where:

- employment is the number of persons employed on average throughout the year;
- output is the annual value of goods and services produced in the economy after adjusting for inflation (i.e. real GDP); and
- output per employed person is that output divided by aggregate employment in the province.

Output per employed person is sometimes called labour productivity but this is a very crude measure of that complex variable so it should only be considered as a proxy for a true measure of productivity. There are number of drawbacks to this approach with the most important one being the fact that labour productivity is strongly influenced by capital investment at both the firm level and for the provincial economy. In this exercise, we are not, however, seeking to measure labour productivity *per se*, simply using the ratio of economic output per employed person to estimate future employment. So the term “labour productivity” will be avoided in favour of the more precise but more cumbersome “output per employed person”.

The equation can be readily understood for a single business where an increase in the volume of goods or services produced can arise:

- by hiring more people (or more accurately, adding hours of work); or
- with an increase in the output from each employee; or
- from a combination of these.

The same is true at an aggregate level for the provincial economy as a whole.

We are trying to project aggregate demand so the main drawback to this methodology is the implicit assumption that the current level of employment in the province is equal to that aggregate demand. This is not the case, of course, because the unmet demand for workers in 2008 is known to be relatively high and so current demand exceeds current employment (i.e. there are more jobs than people). There are no data sources, however, to measure the size of the gap between employment and demand so it cannot be quantified<sup>1</sup>.

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1. The Ministry of Advanced Education, Employment, and Labour has noted that there were more than 5,000 “help wanted” ads posted on the Saskjobs.ca website.

The analysis will include several scenarios for GDP and growth in output per employed person. Some scenarios will be informed by past experience in Saskatchewan, others by the experience in other western provinces.

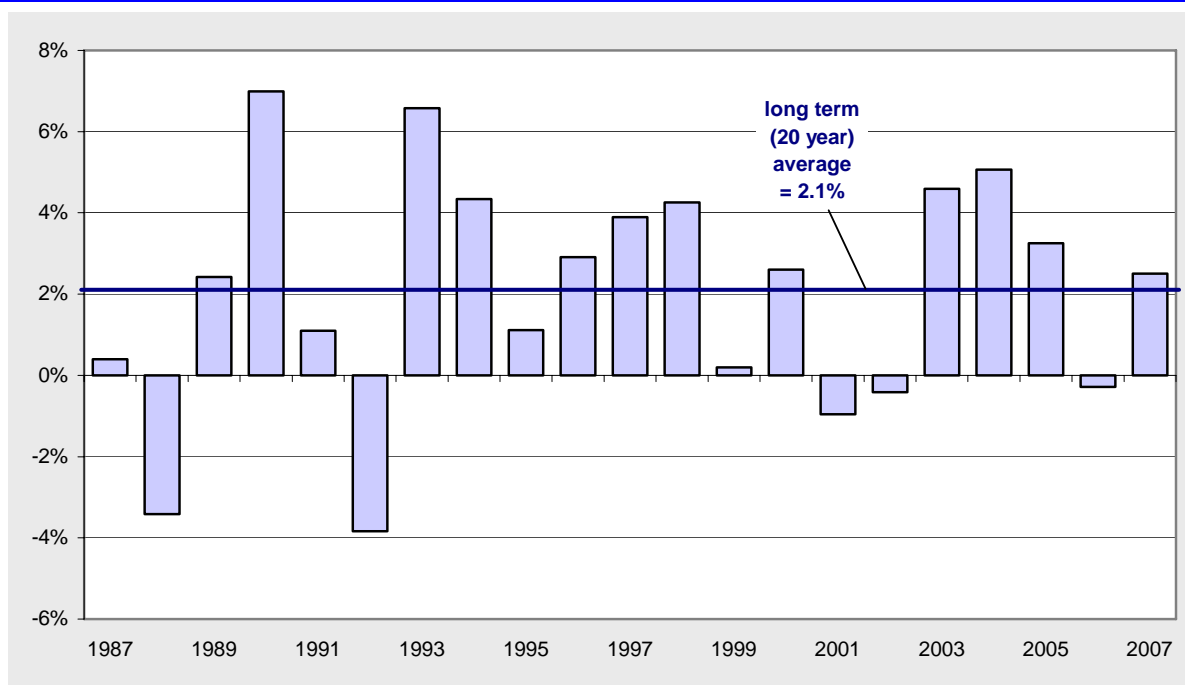
## GDP Growth

To measure economic growth, that is, the volume of goods and services produced in the Saskatchewan economy, the Gross Domestic Product measured in constant 2002 dollars (real GDP) is used<sup>2</sup>. In 2007, real GDP in Saskatchewan was \$39.8 billion (Appendix A.)

On average, Saskatchewan's real GDP has grown by 2.1% per year over the past twenty years, that is, from 1987 to 2007. There have been several periods of higher growth when the increase was more than 3% per year (see Figure 2.1). From 1993 to 1998, for example, the average annual increase was 3.8% and from 2003 to 2005, the average annual increase was 4.0%. The highest rate of growth over any five-year period over the twenty years was 3.8% per year and the lowest rate of growth was 0.6% per year. It is unlikely that either of these extreme rates of growth could be realized over a long period unless there was a fundamental positive or negative shift in the nature of the Saskatchewan economy. Some observers, however, feel that such a positive shift is exactly what is happening in Saskatchewan right now.

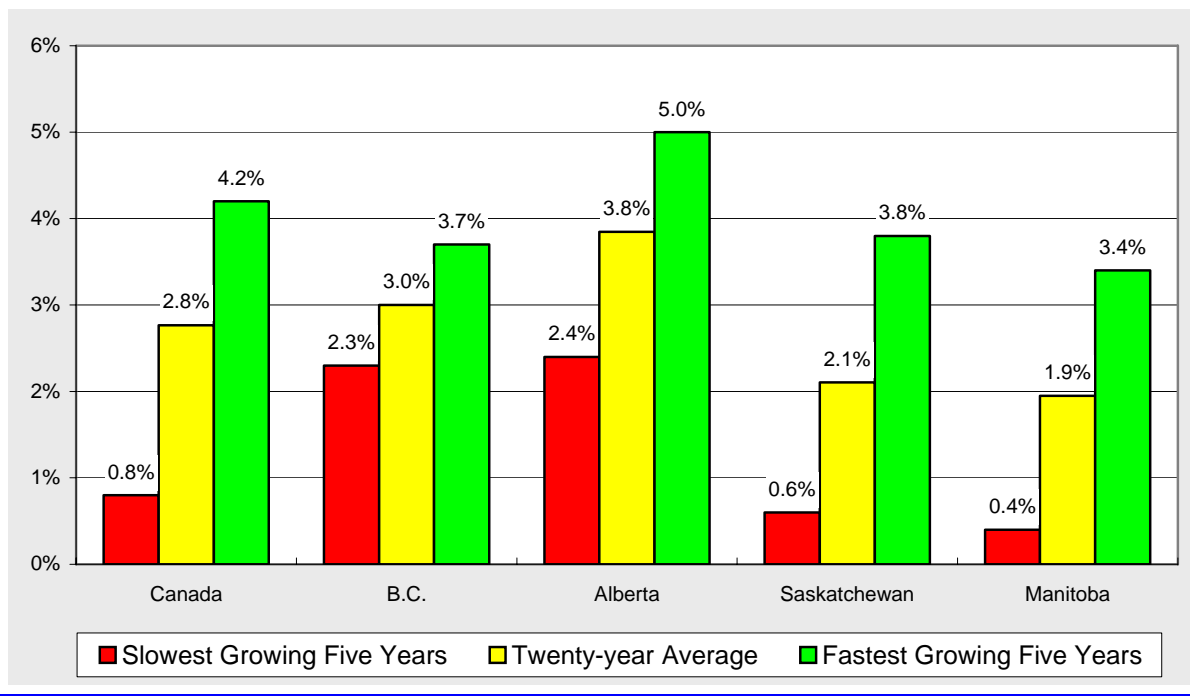
A comparison with the other western provinces and Canada as a whole can also be used to help inform the assumption about long-term growth rates. The rates of growth in Figure 2.2 show that 3.8% is the long term average rate of growth for Alberta which has had a five-year period where real GDP grew by 5.0% per year. The highest rate of growth over a five-year period in Saskatchewan was 3.8% and in Canada as a whole it was 4.2%. The lowest rate of growth over any five-year period was in Manitoba at 0.4%. The lowest Alberta has registered has been 2.4%. British Columbia's economic growth has been more stable than in the prairie provinces with a lower "high" and a higher "low".

**Figure 2.1 Annual Change in Real Gross Domestic Product (chained \$2002), Saskatchewan**

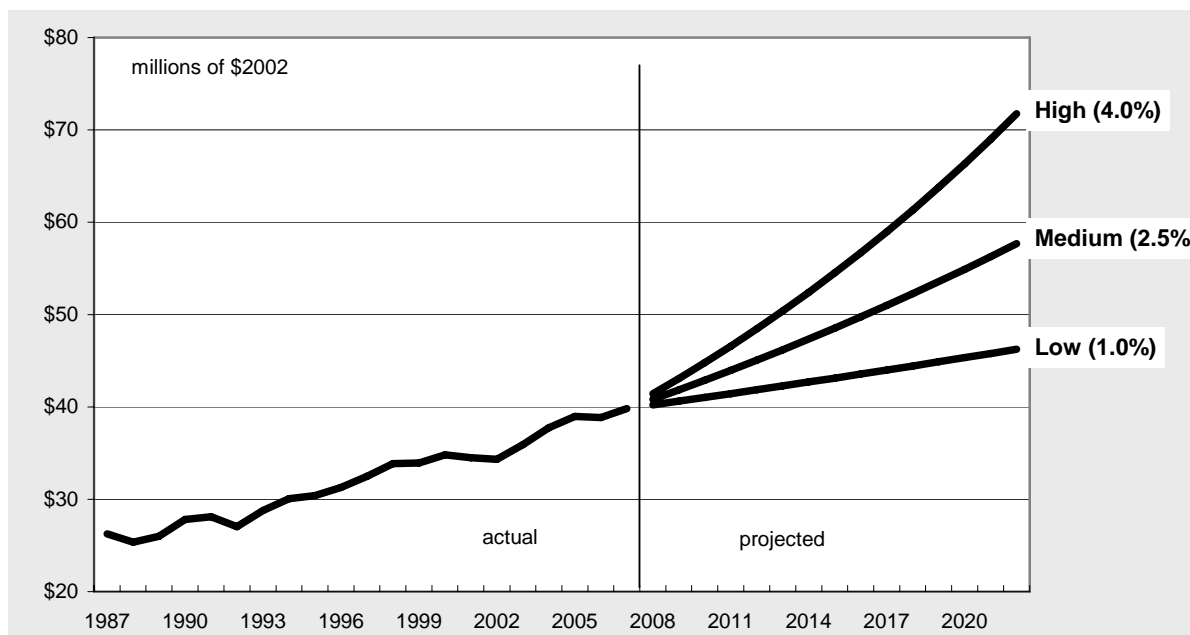


2. Source: Statistics Canada Provincial Economic Accounts. The Gross Domestic Product or GDP is the value of all goods and services produced in an economy.

**Figure 2.2 Minimum, Maximum, and Average Annual Rates of Growth in Real GDP, Canada and the Western Provinces, 1987 to 2007**



**Figure 2.3 Three Scenarios for GDP Growth in Saskatchewan**



Taking all of the factors into account, the assumptions for long-term real GDP growth used in the analysis that follows were chosen as follows:

- 4.0% per year for a high rate of economic growth;
- 2.5% per year for a medium rate of economic growth; and
- 1.0% per year for a low rate of economic growth.

The three growth rates should provide a sufficient range for an examination of possible economic futures.

The three scenarios are shown in Figure 2.3 to illustrate how they would compare with the long term trend in economic growth for Saskatchewan. These projections may seem unduly pessimistic given the recent performance of the Saskatchewan economy but it is important to remember that the rates of growth in past twenty years were achieved in an environment of adequate or surplus labour. Economic growth in the future will not occur in such a benign labour market environment. The data are presented in Appendix A.

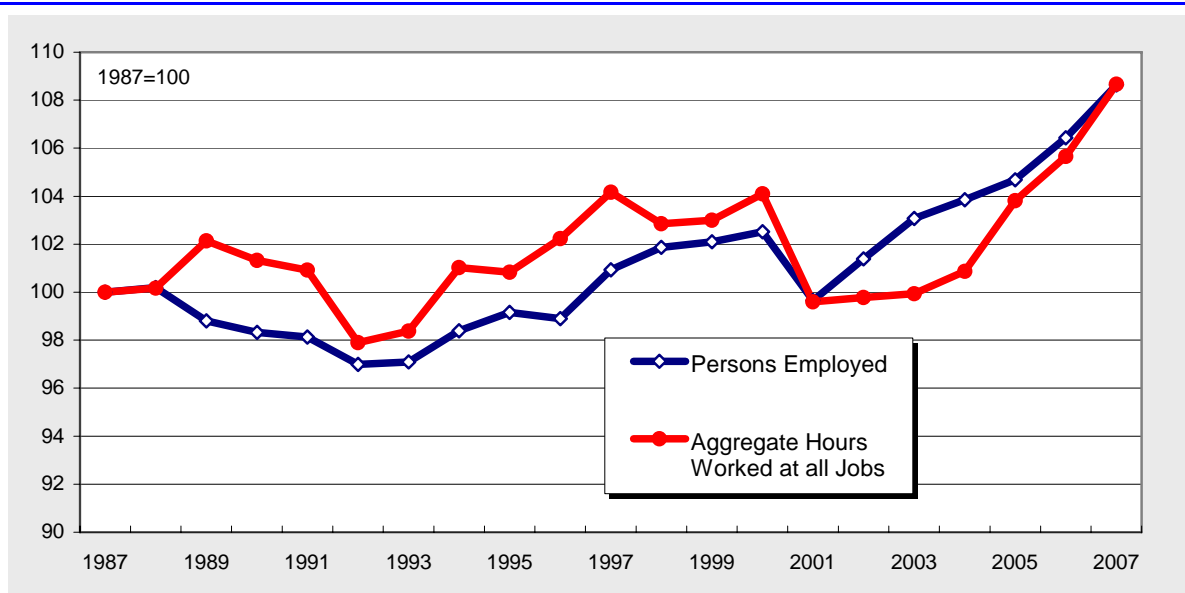
### Growth in Output per Employed Person

The next step in the analysis is an examination of long term trends in output per employed person. Total employment in the province is obtained from the Statistics Canada Labour Force Survey (LFS)<sup>3</sup>. This introduces some methodological problems which are not particularly serious but need to be kept in mind when interpreting the results.

- The LFS excludes the population living on Reserve so it will understate total employment.
- The LFS measures employment according to the location of the respondent's residence rather than the location of their job. Persons who live in Alberta and work in Saskatchewan, for example, should properly be included in the calculation whereas those who live in Saskatchewan and work in Alberta should be excluded.

The other drawback with this ratio is that it is affected by hours of work in general and multiple job holders in particular<sup>4</sup>. The demand for labour would be more accurately expressed in hours of work rather than as persons employed. To examine this issue, Figure 2.4 uses an indexing technique to compare changes in employment with changes in the actual number of hours worked (at all jobs including overtime but excluding time for illness, vacation, etc.). Although there are annual fluctuations, the hours of work tend to track employment quite closely.

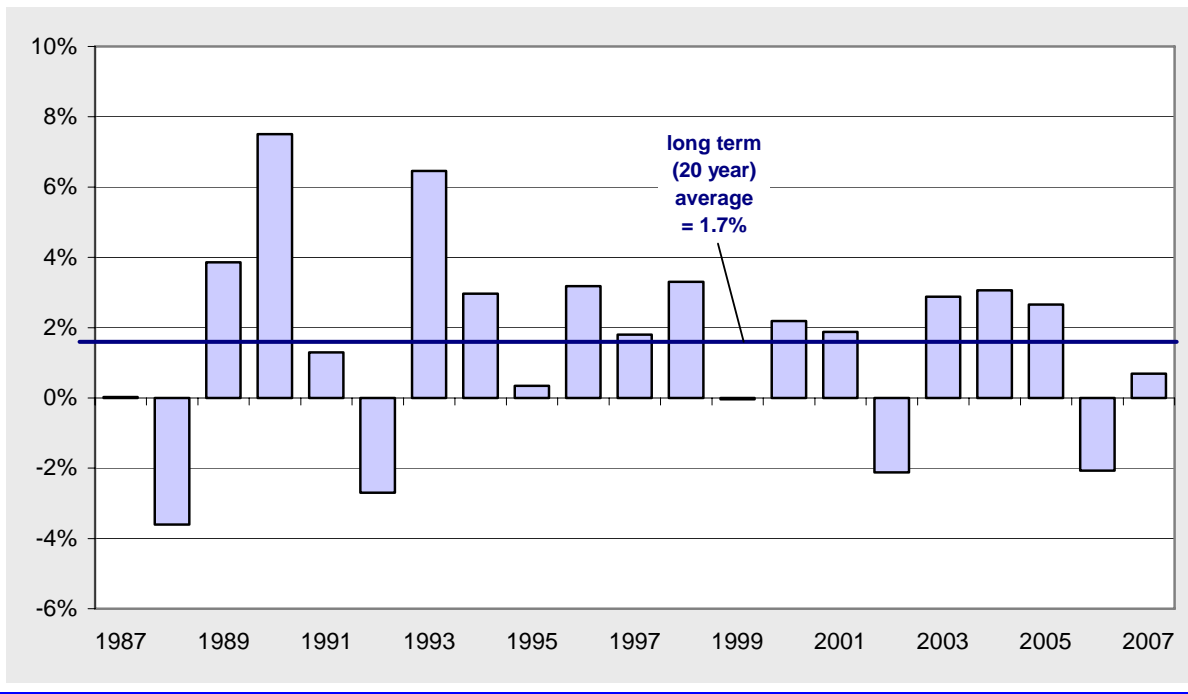
**Figure 2.4 Trends in Employment and Hours Worked, Saskatchewan, 1987 to 2007**



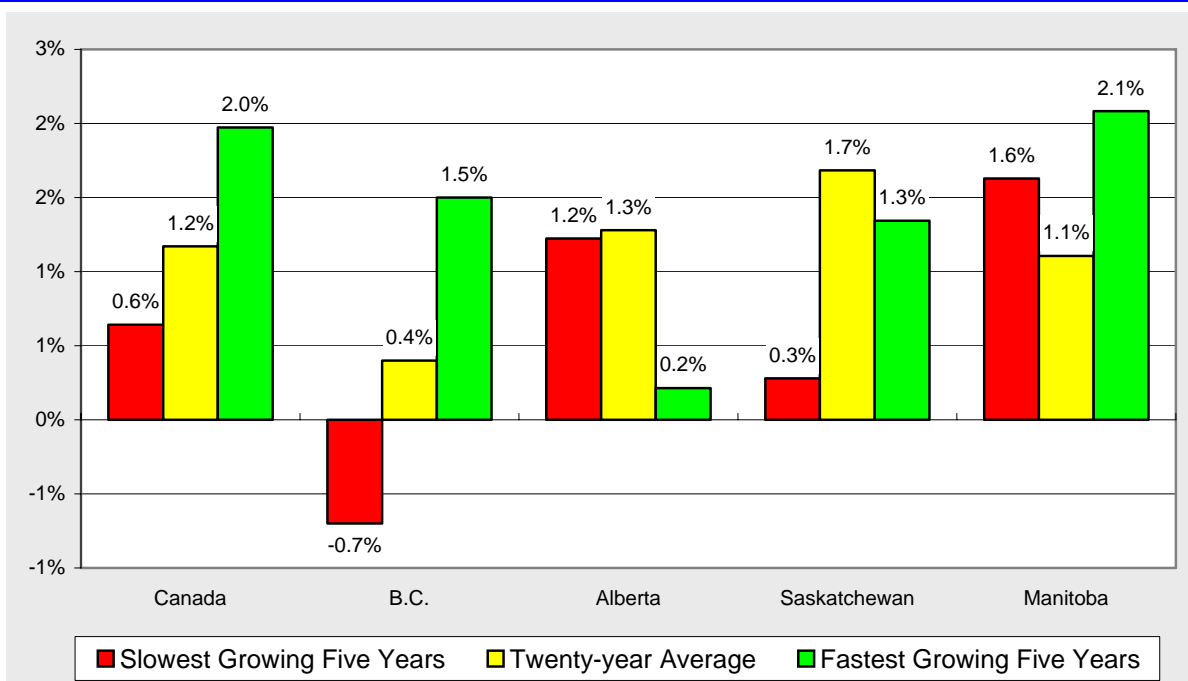
3. Source: Labour Force Survey Annual Historical Review CDROM

4. A "multiple job holder" in the LFS is a person who holds two or more jobs simultaneously. Saskatchewan has the highest proportion of multiple job holders in Canada – a monthly average of 39,000 in 2007.

**Figure 2.5 Annual Change in Output per Employed Person (Real GDP divided by employment), Saskatchewan, 1987 to 2007**



**Figure 2.6 Minimum, Maximum, and Average Annual Rates of Growth, Output per Employed Person, Canada and the Western Provinces**



In effect, the increase in full-time work and longer hours of work among some has been offset by longer vacations and higher levels of sick leave among others. If past experience is any indication, then, there will be no difference in using employment rather than hours of work to project future demand.

Figure 2.5 shows economic output per employed person in Saskatchewan over the past twenty years. Whereas GDP has increased by an average of 2.1% per year from 1987 to 2007, employment has grown by only 0.4% per year on average. This translates into an annual growth of 1.7% per year in output per employed person. Annual growth rates vary from -4% to +8% over the twenty years with less volatility in recent years. See Appendix A for the details.

Figure 2.6 shows that past growth in output per employed person has been higher in Saskatchewan than in any of the western provinces or in Canada as a whole. The 1.7% annual average over the twenty years, for example, compares with 1.1% in Manitoba, 1.3% in Alberta, and only 0.4% in British Columbia. This suggests that the province will have difficulty maintaining that level of productivity growth in the future. In the analysis that follows, assumptions for the annual growth in output per employed person were:

- a growth rate of 1.6% per year for the high rate of increase in output per employed person; and
- a growth rate of 1.0% per year for the low rate of increase in output per employed person.

### **Employment Demand Scenarios**

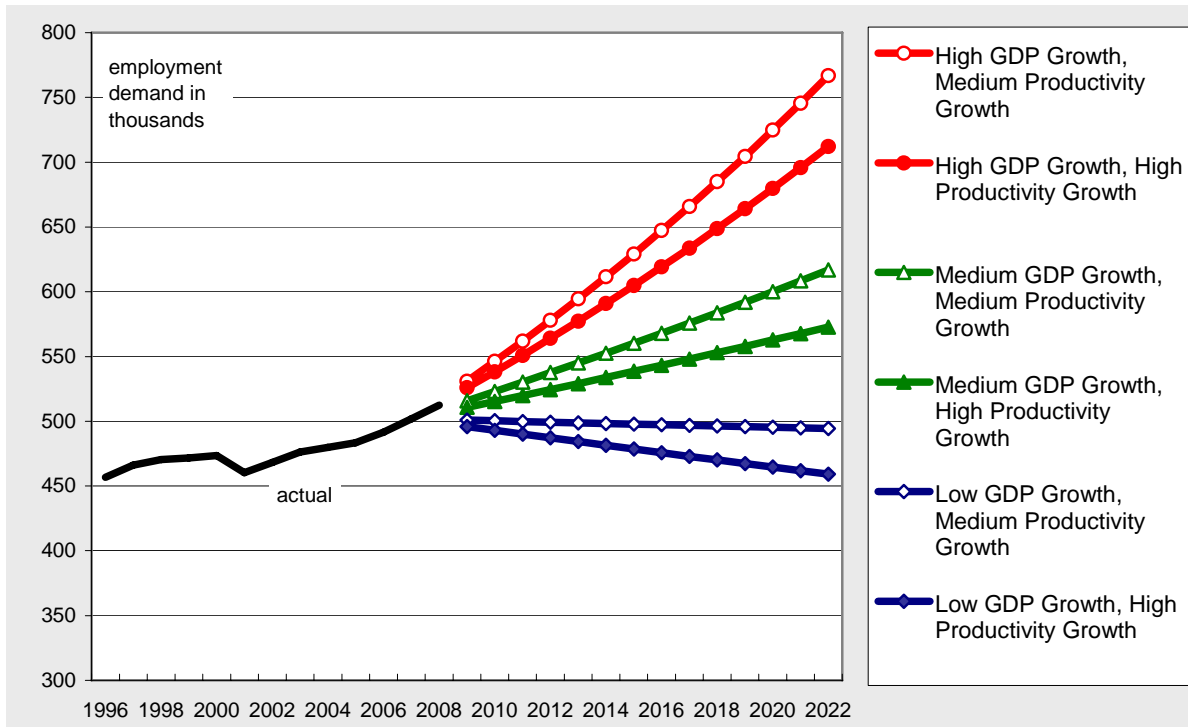
The final step in estimating future employment demand is to simply divide the economic output figures under the various assumptions with the output per employed person assumptions to arrive at an estimate for employment demand. Note that we are assuming the current level of employment is the current demand whereas most observers feel that current demand is in excess of current employment. In effect, this projection assumes that the current gap between employment and demand, whatever it is, will continue under the various scenarios.

The data (see Appendix A) show that there is a great deal of variation in the projections of future employment under the various scenarios. The sensitivity is higher for the range of GDP scenarios than it is for changes in output per person employed. Employment demand grows by 13,000 to 16,000 per year for the high growth rate scenario and is stable or declining for the low growth scenario. (Employment grew by approximately 10,000 in each of the calendar years 2007 and 2008.)

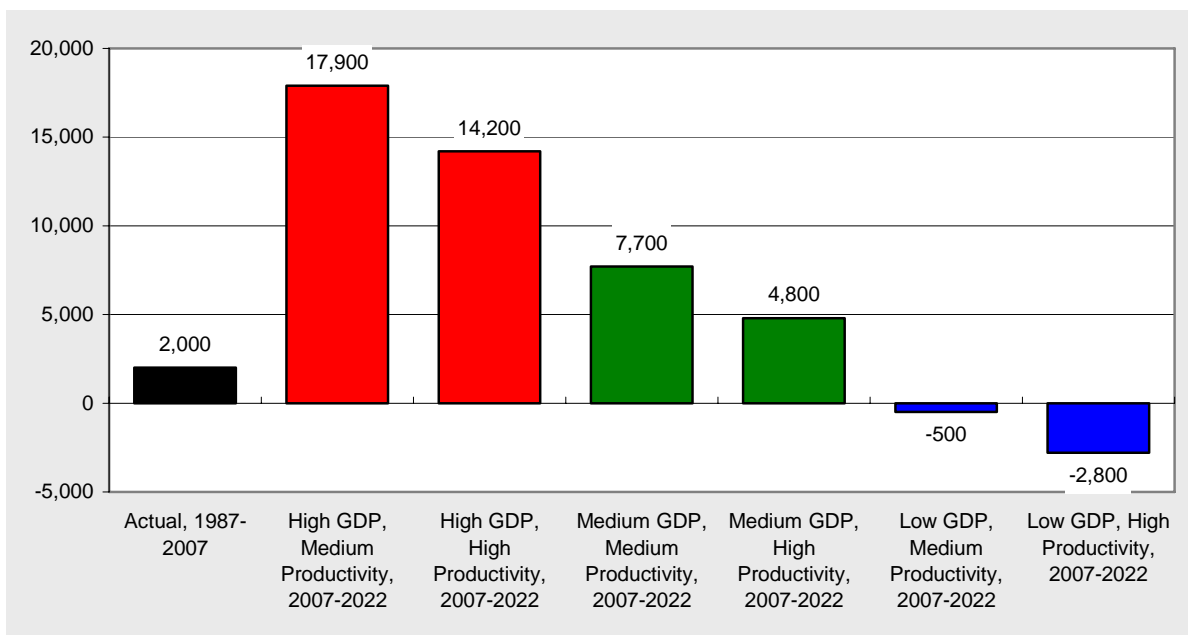
Which scenario is the most likely? The low GDP growth scenario is effectively a worst case scenario for the province because such a low rate of GDP growth implies recessions or near-recessions for the next fifteen years. It would be a longer-term version of the 1997 to 2002 period when the province's economy was hit hard by a North American recession, low commodity prices, and a falling population. It would be foolish to plan for this as the most likely future scenario. The high rate of GDP growth combined with the medium increase in labour productivity is also unlikely because that rate of GDP growth in a time of labour shortages would probably require a significant and sustained high level of growth in labour productivity.

On balance then it would seem that employment demand will grow in the middle range of scenarios, that is, by the 4,800 to 14,200 per year shown in Figure 2.8. This level of growth will be much higher than the long term average in the province and near the current employment growth rate of 10,000 per year.

**Figure 2.7 Six Scenarios for Growth in Employment Demand, Saskatchewan**



**Figure 2.8 Average Annual Change in Employment Demand, Various Scenarios**



## Comparison of Supply and Demand

These demand estimates can be compared with an estimate of the available supply to determine the nature of the labour market imbalance that could arise in the province. The most recent supply estimates are contained in a recently prepared report prepared by the author for the Ministry of Advanced Education, Employment, and Labour<sup>5</sup>.

That projection was based on the assumptions that:

- the current positive net interprovincial in-migration will continue but the net flow into the province will gradually return to zero;
- the number of immigrants under the Saskatchewan Immigrant Nominee Program will increase to 10,000 per year; and
- labour force participation rates will increase because of higher participation rates in the Aboriginal population and among women and older workers.

With the expected population growth (see Figure 2.9 and Table 2.1), that report suggested that the potential labour force would grow by 10,600 to 13,300 in the short term but that the growth rate would decline to below 10,000 per year after 2013. When compared with the demand estimates, it is clear that

- a) there will not be sufficient workers to enable a high rate of GDP growth unless the population grows rapidly, and
- b) even a medium growth rate in economic output will put strain on the supply after a few years.

Additional analysis of the estimated supply is provided in Section 3 of this report.

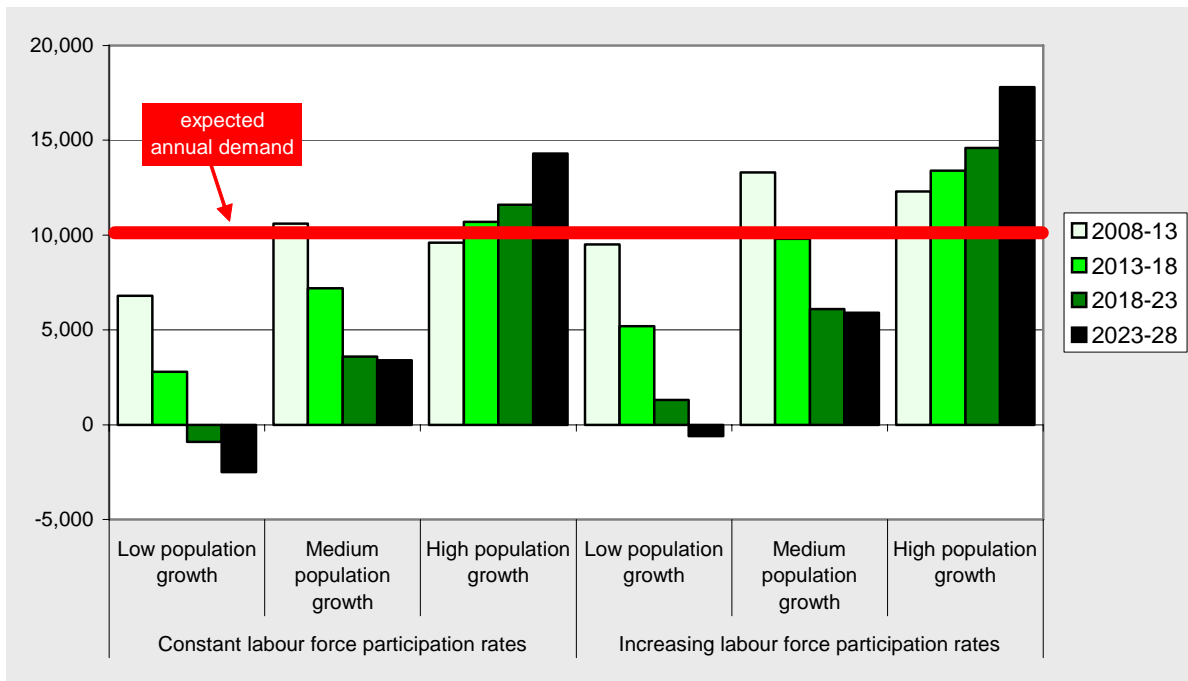
Although these figures are subject to the usual *caveats* about predicting the future, they make it clear that under any reasonable scenario, the current shortage of labour in Saskatchewan will worsen in the next ten to fifteen years. This is particularly true given the fact that the current labour force supply is already insufficient to meet current demand according to numerous anecdotal reports.

**Table 2.1 Projected Potential Labour Force Growth, Saskatchewan**

		2008-13	2013-18	2018-23	2023-28
Constant labour force participation rates	Low population growth	6,800	2,800	(900)	(2,500)
	Medium population growth	10,600	7,200	3,600	3,400
	High population growth	9,600	10,700	11,600	14,300
Increasing labour force participation rates	Low population growth	9,500	5,200	1,300	(600)
	Medium population growth	13,300	9,800	6,100	5,900
	High population growth	12,300	13,400	14,600	17,800

5. *Labour Force Supply Projection, 2008, Sask Trends Monitor*

**Figure 2.9 Comparison of Expected Demand and Potential Supply, Various Scenarios**



## 2.2 Industry Specific Employment Trends

The recent growth in employment in Saskatchewan hides a good deal of variation within specific industries. In this section, total employment in the province is broken down into sixteen industry groups using the North American Industry Classification System (NAICS)<sup>6</sup>. The growth over the most recent seven-year period (from 2002 to 2008) is shown in Figure 2.10 along with the absolute level of employment in the most recent year, that is, in 2008<sup>7</sup>. The overall growth rate over the seven-year period was 1.4% per year<sup>8</sup>.

Broken down in this way, the two largest industry groups are retail trade (an average of 63,400 persons reported this as their main job in 2008) and health care/social assistance (63,300).

In terms of employment growth, there are three distinct clusters of industry groups. The first is the set of five industry groups that show employment over the period was either declining or growing much more slowly than other sectors. The five represent about one third (32%) of the jobs in the province during 2008. They are:

- agriculture;
- personal and household services;
- accommodation and food services;
- finance, insurance, real estate, and leasing; and
- education services.

In two of four, namely accommodation/food services and personal/household services, the decline is thought to be the result of a shortage of workers. In agriculture and the finance group, the declines are the result of ongoing industry consolidation, that is, fewer employees producing the same level of goods and services. This is the continuation of a long term trend in agriculture but a more recent phenomenon in the finance group. The fifth, education services, grew marginally over the period with small increases in the elementary/secondary school system offset by declines in post-secondary education.

At the other end of the spectrum, two industry groups have shown dramatic increases in the past five years, namely construction and the resource sector (i.e. forestry, fishing, mining, and oil/gas). These two industry groups accounted for 12% of the 2008 employment in the province. The increase in the resource sector is a simple consequence of increased employment in exploration and production in the mining and in the oil patch. The increase in construction has been driven by the residential housing boom and spending on infrastructure projects such as roads and institutional buildings.

The remaining nine industry groups show employment growth near or above the overall provincial average of 1.4% per year and account for just over one half of the 2008 employment in the province.

More specific information about labour market issues for each of the industry sectors is contained in Section 4 of this report.

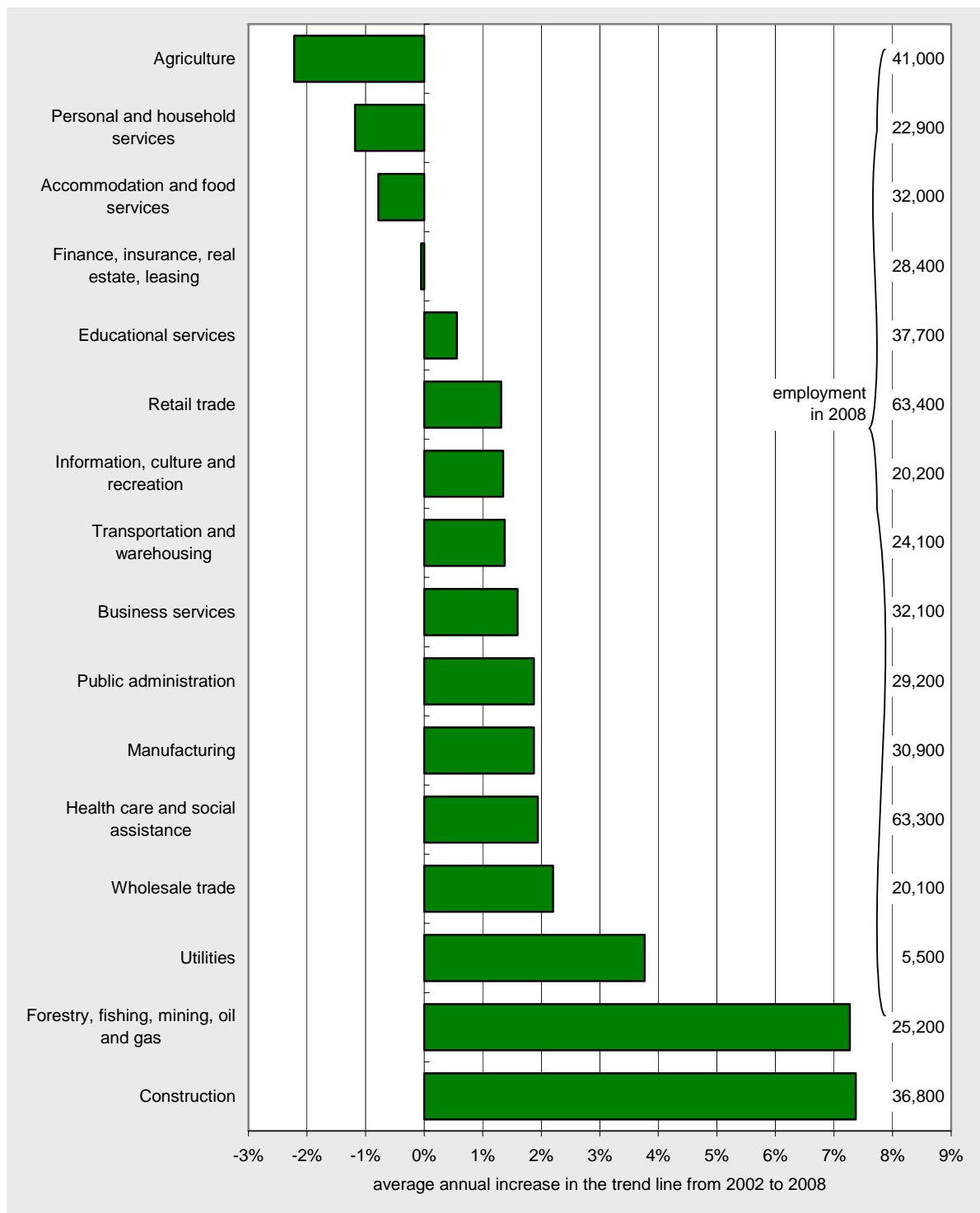
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6. See Appendix B for more detail about what kinds of businesses are in each of the sixteen groups.

7. In this and subsequent graphs in this section of the report, the “average annual increase in the trend line from 2002 to 2008” is calculated by dividing the slope of the least squares regression line for the seven years from 2002 to 2008 by the average value of the employment from 2002 to 2008. It is similar to the average annual increase over the period but this formula removes some of the effects of annual volatility and the specific values of the endpoint.

8. This time frame was chose because it represents the period since the last large drop in employment during the 2001 recession.

**Figure 2.10 Trends in Employment by Industry Group, Saskatchewan, 2002 to 2008, Off Reserve Population Only**



### 2.3 Region Specific Employment Trends

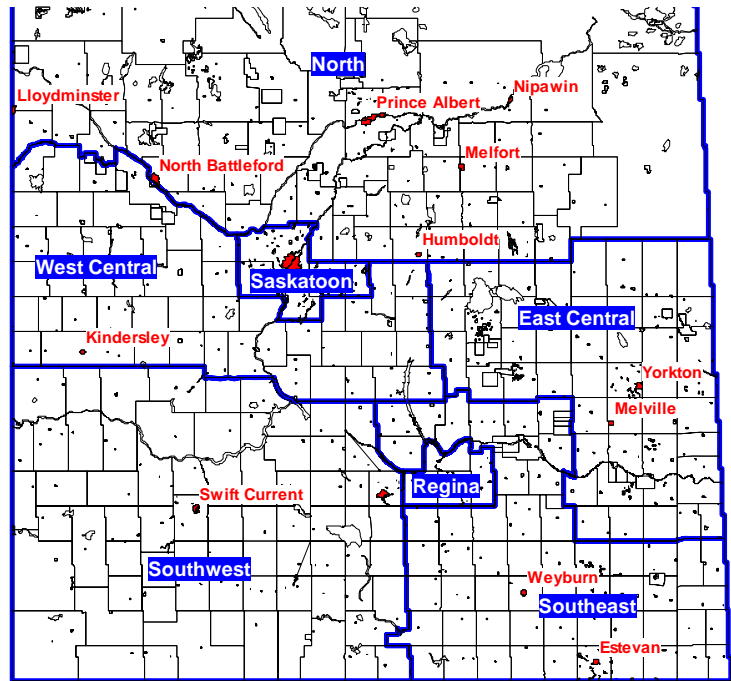
The sample size in the Labour Force Survey is large enough to enable reliable employment estimates to be made for seven sub-provincial regions in the province – the Regina and Saskatoon Census Metropolitan Areas (CMAs) and five other regions. The map in Figure 2.11 shows the economic regions used in the LFS and the data in Figure 2.12 show employment trends in these regions over the past seven years.

The strongest growth by far has been in the Saskatoon CMA where employment has grown by an average of 2.7% per year from 2002 to 2008. The two large urban centres and their metropolitan areas now account for nearly one half (49%) of employment in the province. Regina’s growth rate has been much lower than Saskatoon’s.

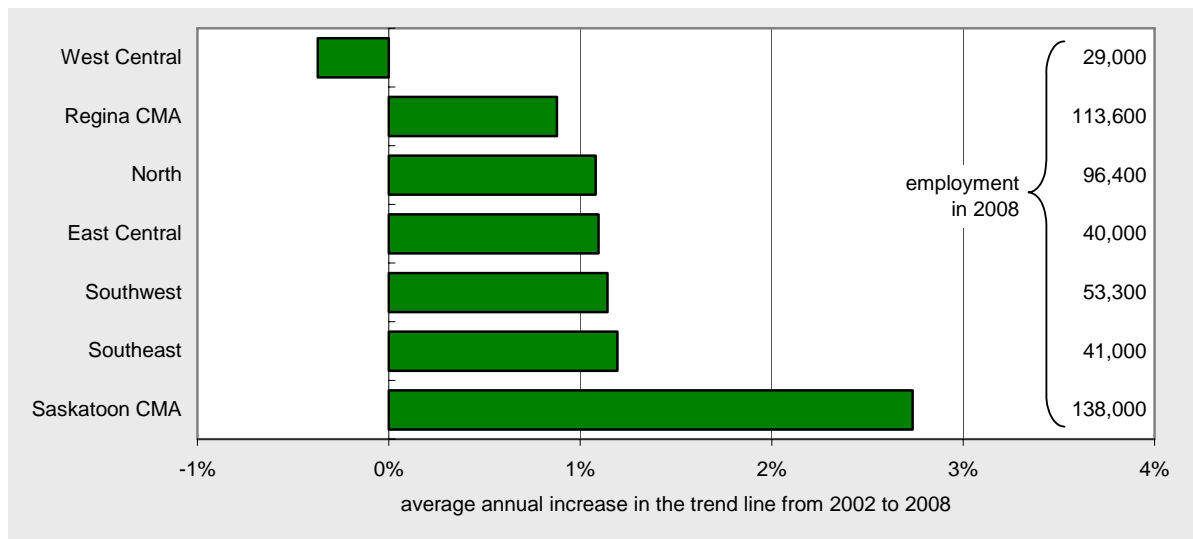
Only one of the regions, namely the west central part of the province saw an employment decline over the period. The other four rural economic regions had similar growth rates suggesting that the employment growth was spread relatively uniformly across the province.

Although not shown here, the LFS also shows that employment in rural areas (those who live in RMs or in communities with a population under 1,000) increased over the seven years whereas employment among those who lived in smaller urban areas (population 1,000 to 10,000) dropped.

**Figure 2.11 LFS Economic Regions in Saskatchewan**



**Figure 2.12 Trends in Employment by Region, Saskatchewan, 2002 to 2008, Off Reserve Population Only**



## 2.4 Types of Jobs and Hours of Work

This section contains information about where the demand for employment lies in terms of the kinds of jobs. As with other sections, some of these trends are also affected by supply.

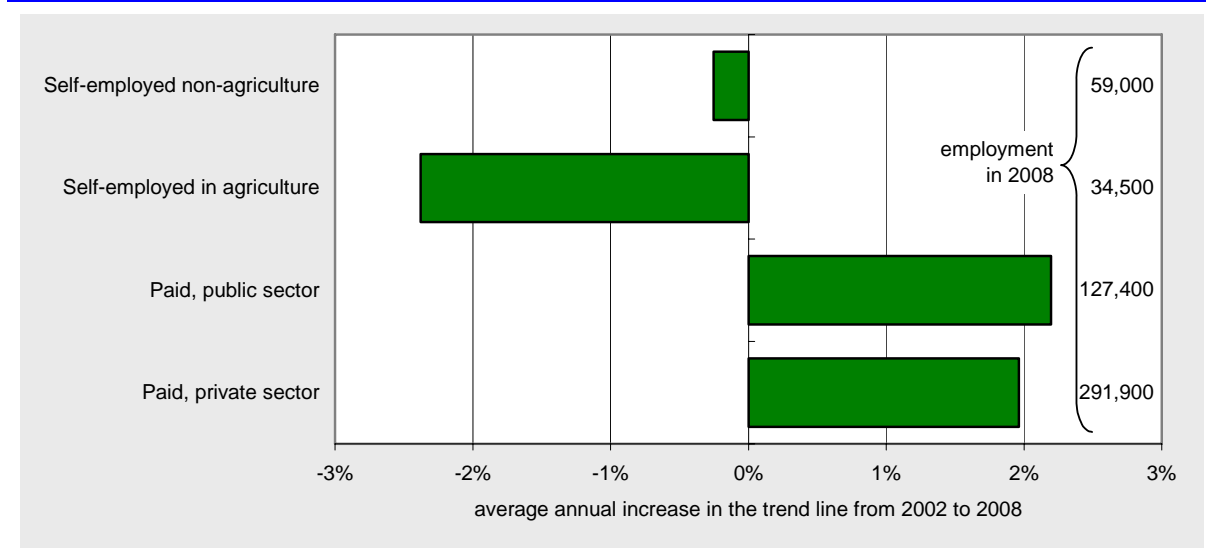
Figure 2.13 shows that all of the employment growth in the past seven years has been among paid employees, that is, those who work for someone else. The number of self-employed individuals has declined and the decline is not just in the agriculture sector where the majority work. The second trend evident in Figure 2.13 is the fact that, among paid workers, employment in the public sector (broadly defined to include the crown corporations, health and education services as well as government proper) has been growing somewhat faster than employment in the private sector.

There are two reasons why some observers are concerned about these trends. The first is that self-employment is often used as a proxy for entrepreneurial activity and the decline in self-employment is taken to mean a lack of entrepreneurial spirit among Saskatchewan residents. The second reason for concern is that the growth rate among paid workers in the public sector is higher than the growth rate in the private sector. The private sector is considered by many to be the main engine of economic growth so the opposite trend would be more sustainable over the long term.

The second figure (Figure 2.14) shows the trend in employment by job permanence. In this indicator, there is some evidence of an increase in term, contract, casual and other kinds of non-permanent employment that many observers were predicting – from 2002 to 2008, these kinds of jobs have increased as quickly as permanent jobs. Still, permanent jobs made up 88% of jobs in 2008, the same as ten years ago. The prevalence of multiple job holders, that is, those who hold two or more jobs simultaneously, has remained steady in the past seven years. (Saskatchewan has the highest proportion of multiple job holders in Canada.) Compared with an increase of 1.6% per year among single job holders, the number of multiple job holders has grown by 1.1% per year. In 2008, there was an average of 41,900 multiple job holders living in the province.

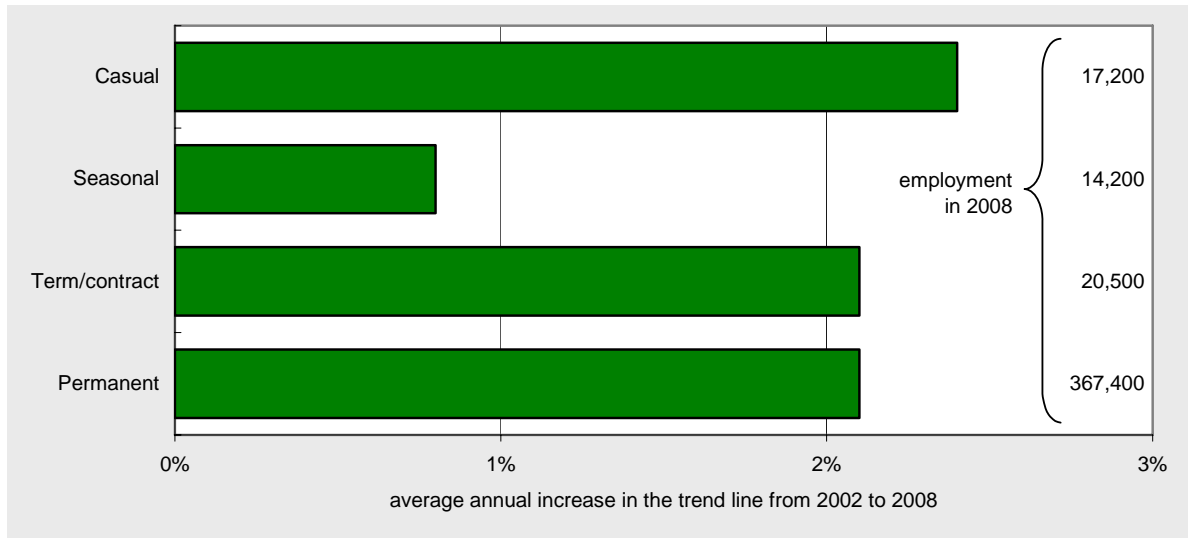
The third figure (Figure 2.15) shows the trend in full-time and part-time employment<sup>9</sup>. In the past seven years, the number of full-time jobs has grown by an average of 1.9% per year whereas the number of part-time jobs has declined by an average of 0.6% per year.

**Figure 2.13 Trends in Employment by Type of Worker, Saskatchewan, 2002 to 2008, Off Reserve Population Only**



9. Statistics Canada considers an individual to be working full-time if they usually work thirty hours per week or more at their main or only job.

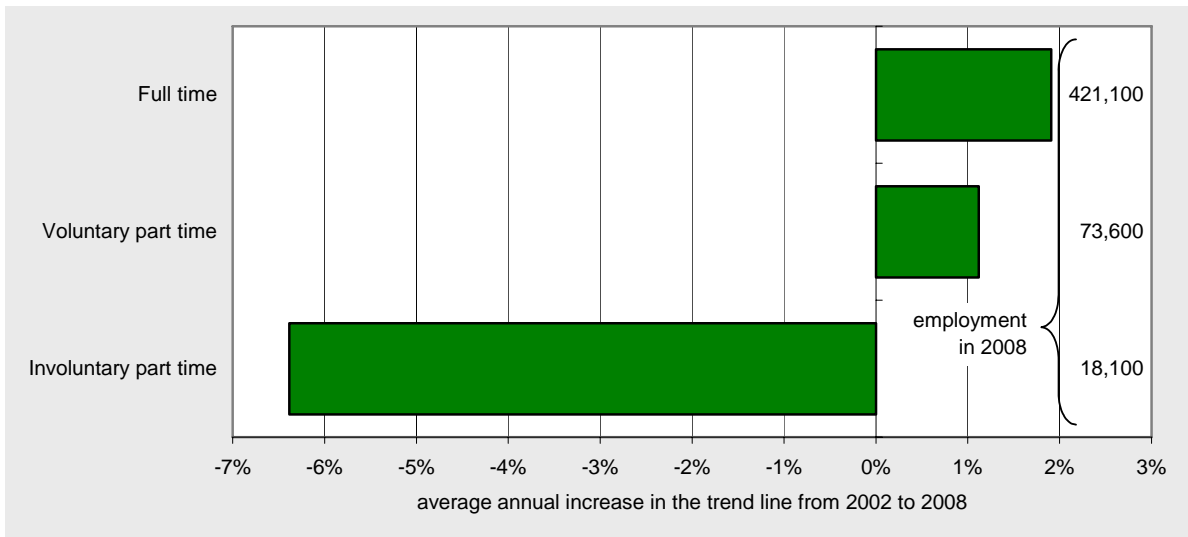
**Figure 2.14 Trends in Employment by Job Permanence, Saskatchewan, 2002 to 2008, Off Reserve Population Only**



The major trend, however, is the sharp drop in the number of part-time workers who would rather work full-time, called involuntary part-time workers in Figure 2.15. There are now 18,100 of these kinds of workers compared with 25,100 in 2002. Among these involuntary part-time workers, seven out of ten are women.

Average actual hours of work (for full-time and part-time workers combined) has increased from 35.4 hours/week in 2002 to 35.7 hours/week in 2008. Longer hours from more full-time workers has been offset by more time off for vacations and sick leave.

**Figure 2.15 Trends in Employment by Hours of Work, Saskatchewan, 2002 to 2008, Off Reserve Population Only**



## 2.5 Earnings and Wage Rates

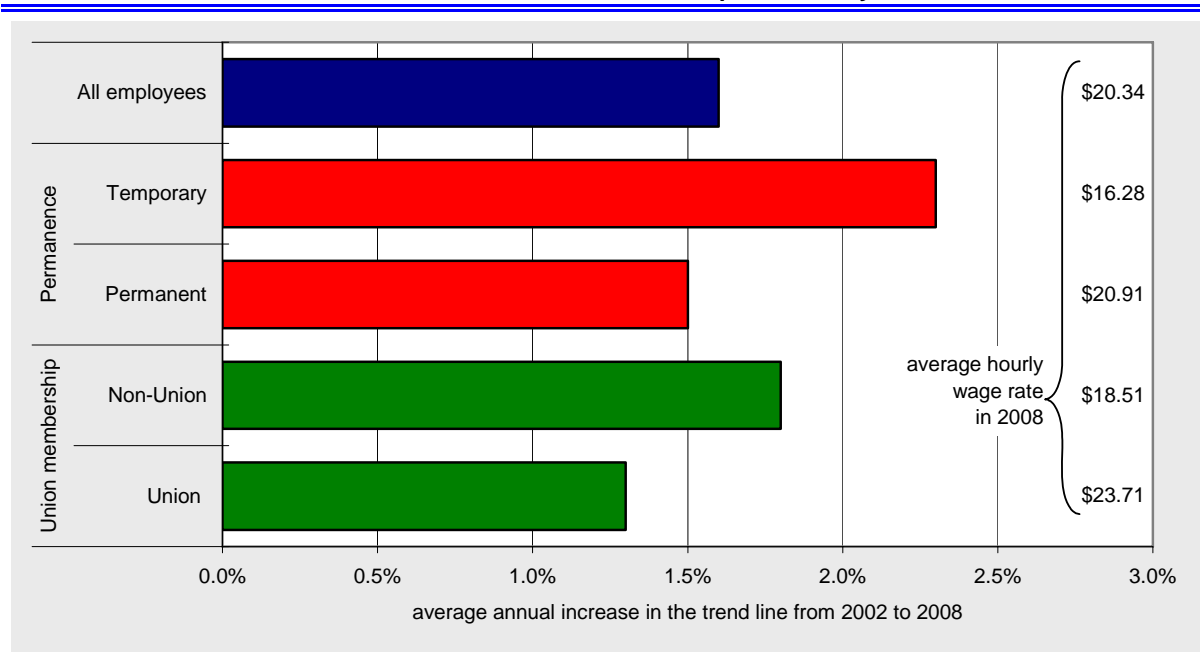
The Labour Force Survey asks respondents to report on their “usual” wages or salary at their main job, to report their wage or salary before taxes and other deductions, and to include tips, commissions and bonuses.

In recent years, wage rates have increased more quickly than the rate of inflation which is usually indicative of a tight labour supply or a structural change in the economy to higher-paying industries and occupations. Both situations are the case in Saskatchewan right now so wage rates have grown quickly.

The average wage rate among paid employees (that is, excluding the self-employed) was \$20.34 per hour in 2008. Adjusted for inflation, average wage rates have increased by an average of 1.6% per year since 2002 with larger increases in the most recent three years. Figure 2.16 shows that wage rates are much higher among union members (28% higher than non-union members) and much higher among permanent staff (28% higher than among temporary staff). Over time, however, the rate of increase has been higher for non-union members and higher among non-permanent staff than among permanent staff. The net effect of this is that the gap between union and non-union members is narrowing as is the gap between permanent and temporary staff.

More information about wage rates in specific industries is contained in Section 4.

**Figure 2.16 Trends in the Average Hourly Wage Rate, Adjusted for Inflation (constant \$2008), Saskatchewan, 2002 to 2008, Off Reserve Population Only**



## 2.6 Union Membership and Size of Workplace

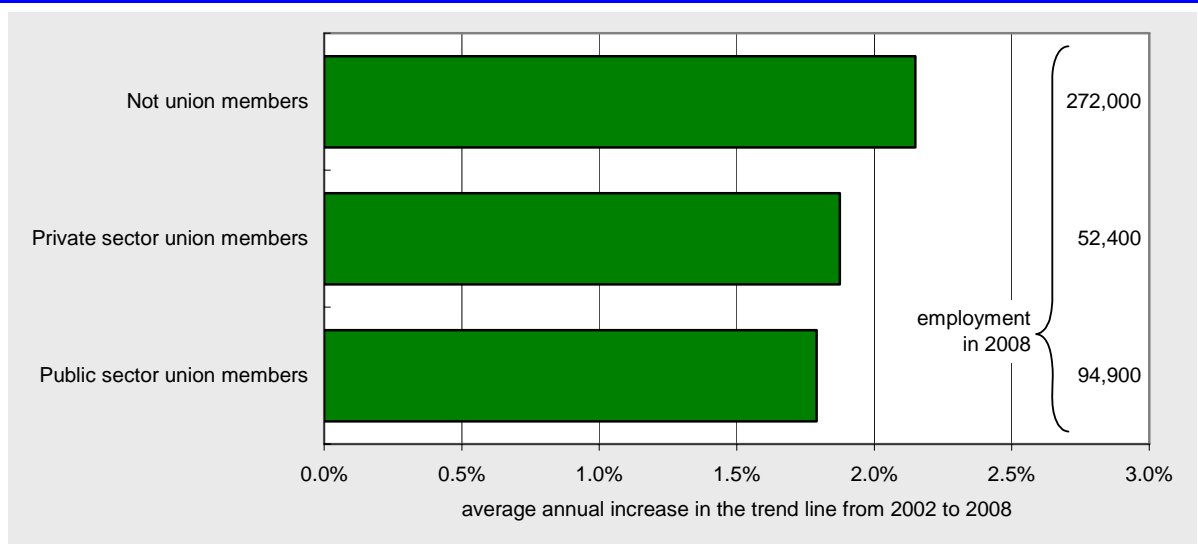
The Labour Force Survey also asks respondents some limited information about how large their workplace is<sup>10</sup> and whether or not they are union members (including those who say they are not union members but work under a collective agreement).

In 2008, about one third (35%) of Saskatchewan's paid workers (or 29% of total employment if the self-employed are included) were union members. Figure 2.17 shows that the majority of union members are in the public sector in Saskatchewan. For example, 75% of paid workers in the public sector are union members compared with 18% in the private sector. Looked at another way, two thirds of union members work in the public sector.

The figure also shows that employment is growing a bit more slowly among union members as it is among non-union members.

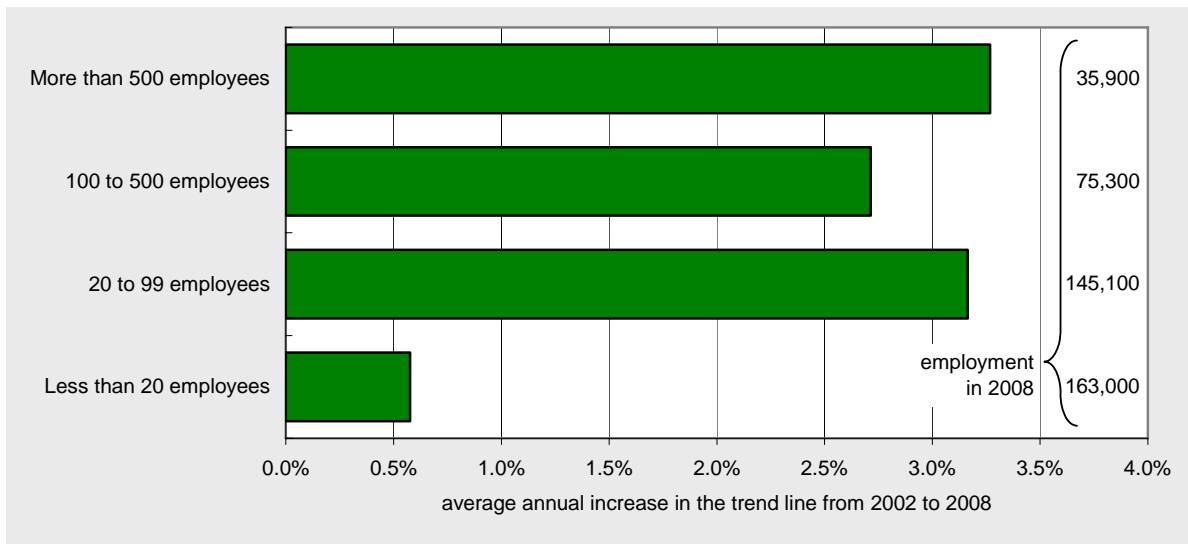
Figure 2.18 shows that, excluding the self-employed, employment is growing more quickly among those who work for the larger firms in the province, namely those with 20 or more employees at the location. The average annual rate of growth has been approximately 3% among this group of employers compared with 0.6% for those with fewer than twenty employees. Notwithstanding this pattern, almost four out of ten (39%) of paid workers in Saskatchewan work at an establishment with fewer than twenty employees.

**Figure 2.17 Trends in Employment by Union Membership and Sector, Saskatchewan, 2002 to 2008, Off Reserve Population Only**



10. This is measured as the number of employees at the location of employment (i.e. building or compound). The concept of location of employment approximates the concept of establishment used by many Statistics Canada business surveys so it represents the size of the workplace more than the size of the firm.

**Figure 2.18 Trends in Employment by Size of Establishment, Saskatchewan, 2002 to 2008, Off Reserve Population Only**



## 2.7 Levels of Completed Education

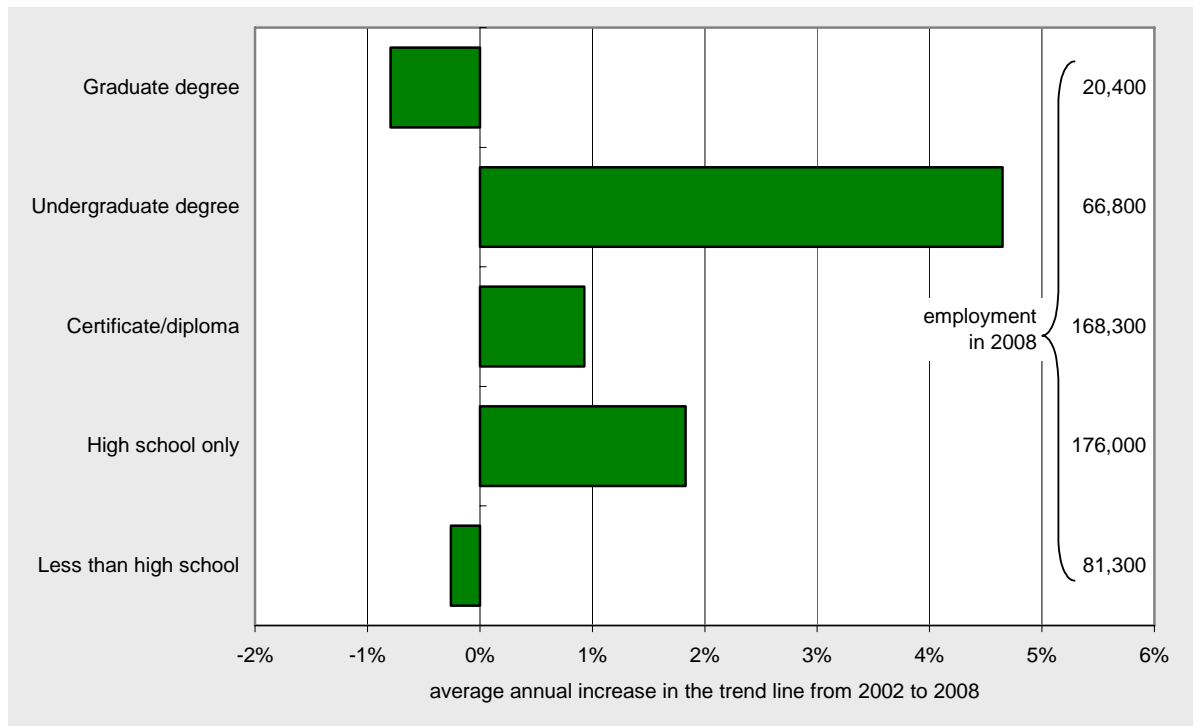
This section contains information about the levels of completed education among those working in the province<sup>11</sup>. As with the data in other sections, some of these trends are affected by supply as well as by demand.

In spite of a slowing of the number of post-secondary graduates in the labour market over the past two years, Figure 2.19 shows the expected increase in the proportion of Saskatchewan employees who are post-secondary graduates. The long term trend is upward for this indicator because of an increase in the demand among employers for more skilled workers and because of gradually increasing levels of completed education in the general population.

One of the surprises in the figures, however, is the relatively slow growth among those with a post-secondary certificate or diploma. The 0.9% average annual increase is lower than the 1.8% annual increase among those with only a grade 12 graduation and the 4.6% increase among those with an undergraduate university degree. Another surprise is the drop in the (small) number of Saskatchewan employees with a graduate degree, that is, a Masters or PhD.

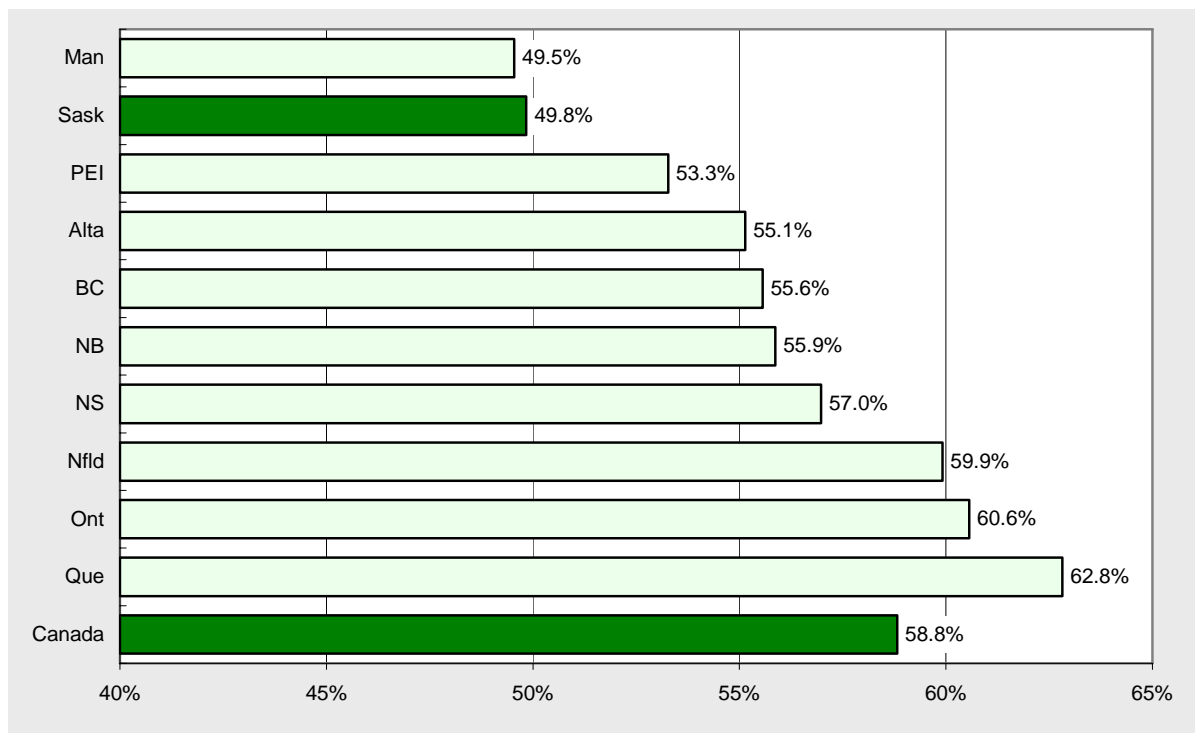
Figure 2.20 shows an interprovincial comparison of education levels in the labour market, namely the percentage of the employed persons in 2008 who were post-secondary graduates. Saskatchewan has the second lowest percentage after Manitoba and is well below the national average. Looked at another way, Saskatchewan would need an additional 46,000 employed post-secondary graduates to reach the national average of 58.8%.

**Figure 2.19 Trends in Employment by Highest Level of Completed Education, Saskatchewan, 2002 to 2008, Off Reserve Population Only**



11. Statistics Canada measures the level of completed education according to the "highest" credential received and degrees are considered as higher than certificates or diplomas. That means, for example, that those with both a post-secondary certificate and a university degree will be counted as having a degree. Note that just because a person with a credential is employed in a position doesn't necessarily mean that credential is needed for that occupation.

**Figure 2.20 Post Secondary Graduates as a Percentage of the Employed, 2008, Off Reserve Population Only**



## 2.8 Summary and Issues

This section looks at the topics included in the demand side of the labour market equation, summarizes them, and looks at some of the issues arising from the trends.

Summary of Findings	Issue or Implication
<p>Section 2.1 shows that with modest growth rates in the size of the provincial economy, the demand for labour in the province will be 5,000 to 8,000 per year for the next fifteen years. This does not include any current excess of demand over supply.</p> <p>An estimate of the supply over the same period suggest that even with this modest economic growth, the province will have a general labour shortage in ten years.</p>	<p>Higher economic growth will not be possible without a substantial increase in the size of the labour force.</p> <p>It would be prudent to plan for a growth in demand of 10,000 employed persons per year.</p> <p>The province need not concern itself with choosing among the different ways in which the labour force can be expanded over the long term. In any reasonable scenario for economic growth, all of the possibilities, such as increasing participation among the Aboriginal population, seniors and the under-employed can be pursued along with increased international and interprovincial migration.</p>
<p>Section 2.2 shows that among sixteen industry groups in the province, employment is growing strongly among two – construction and the resource sector – and declining or growing only slowly among five.</p>	<p>In two of the industries with declining employment, a shortage of workers is thought to be the reason. This implies that a supply shortage is already limiting economic growth. Employment growth is unevenly distributed across sectors so a more diversified economy will be required to avoid a downturn when the inevitable drop in commodity prices or consumer spending occurs.</p>
<p>Section 2.3 shows that employment is growing in six of the seven regions in the province – all except the west central area. Saskatoon has the fastest rate of growth.</p>	<p>Employment is becoming concentrated among residents of the province’s urban centres. This has implications for the development of public infrastructure such as schools, roads, health care, and telecommunications in both rural and urban centres.</p>
<p>Section 2.4 shows that the number of self-employed persons is declining and the drop is not restricted to agriculture.</p>	<p>To the extent that self-employment is indicative of entrepreneurial activity, a decline may suggest the province lacks entrepreneurial spirit or that entrepreneurs tend to leave the province.</p>
<p>Section 2.4 shows that public sector employment (broadly defined) is growing as quickly as private sector employment.</p>	<p>Most observers feel that for long term sustainability, private sector growth should lead public sector growth.</p>

Section 2.4 shows that term/contract employment is growing as quickly as permanent employment. Full-time employment is growing more quickly than part-time employment. The incidence of involuntary part-time employment is declining.

Not all young people want full-time permanent employment and older workers are often looking for more flexible work arrangements. Employers and unions will have to ensure that they remain flexible about their working arrangements if they want to attract and retain staff in these diverse age groups.

In spite of recent declines, there are still 17,000 involuntary part-time workers in the labour market. Seven out of ten are women.

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Section 2.5 shows that the average hourly wage rates among paid workers have been growing more quickly than the rate of inflation in the past seven years. Some of the highest rates of pay and the largest increases have been among public sector workers.

To the extent that wage rates increase beyond a level that enables Saskatchewan businesses to be nationally and internationally competitive, increases required to attract employees may be a detriment to long term growth. The private sector needs to pay higher wage rates in order to remain competitive with the public sector and to attract workers from other provinces.

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Section 2.6 shows that the majority of union members in the province work in the public sector (broadly defined) and that the increase in employment over the past seven years has been equally split between union and non-union members.

Issues affecting trade unions in the province have a greater impact on the public sector than on the private sector.

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Section 2.6 shows that the fastest growing employment in the past seven years has been in locations with at least 20 employees.

To the extent that small businesses are the engine of growth, the province has not been making use of this sector in recent years.

Much of the focus for human resource support is designed to help small businesses whereas larger ones may need as much assistance.

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Section 2.7 shows that the average level of formal education in the Saskatchewan labour force continues to increase. The fastest growth has been among those with an undergraduate university degree. The number with a graduate degree has declined and the number with a certificate or diploma is growing only slowly.

A recent slowdown in the proportion of employees who are post-secondary graduates may be a short term phenomenon but it bears watching. The long term prosperity of the provincial economy depends on having a well-educated work force. In 2008, the proportion of Saskatchewan's employed labour force with a post-secondary education was the second lowest in Canada.

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## SECTION 3      LABOUR MARKET SUPPLY ISSUES

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This section provides a description of the key issues facing the Saskatchewan labour market from the point of view of the supply of labour. The distinction between supply and demand is not clear cut so some of these issues could just have easily been discussed in the previous section on demand issues. The issues that were deemed to be elements of the supply side of the equation are typically demographic:

- population trends in the province including the elements of population growth;
- age and gender;
- under-represented groups including the Aboriginal population, members of a visible minority group, the immigrant population, and those reporting a disability;
- older workers;
- other persons “out of the labour force”; and
- the competition for skilled workers from other provinces.

Traditionally, the supply of labour was taken to be the number of people currently employed plus the number unemployed, that is, actively looking for work. Those who were not working or looking for work were considered “out of the labour force” and not part of the supply.

The analysis in this section takes a broader view of the supply by looking at all residents in the province as potential labour force participants and by including residents of other provinces as part of Saskatchewan’s potential labour supply.

### 3.1 Demographic Trends in Saskatchewan

Most of the key factors affecting the supply of labour are demographic – how many people are living in the province and therefore at least theoretically available for work. In this section, we look at overall population trends and the components of population growth. A brief look at regional differences within the province is included but this is probably not as important because intraprovincial mobility is normally higher than interprovincial mobility. In other words, people will generally be more willing to move within the province to take work than to move from another province to do so. Those living near the borders may not feel that constraint.

Interprovincial migration largely determines the size of the Saskatchewan population and it will continue to do so for the foreseeable future. The other elements of population change (births, deaths, immigration, and emigration) are much smaller in magnitude than interprovincial migration. For example, from July 2006 to June 2007 there were an estimated:

- 579 emigrants;
- 3,086 immigrants;
- 9,079 deaths; and
- 11,918 births.

Over the same period, there were an estimated:

- 25,903 interprovincial in-migrants; and
- 21,904 interprovincial out-migrants.

The net change in the population arising from the three elements of population change were, therefore:

- +2,507 from international immigration and emigration;
- +2,839 arising from the natural growth rate – births less deaths; and
- +4,001 arising from interprovincial migration.

In other words, there are, in an average year, almost twice as many people moving to Saskatchewan from another province as there are births and immigrants combined and more than twice as many people leaving than there are deaths and emigrants combined. Each of these trends is documented in this section<sup>12</sup>. The actual components of the change in population are included as Appendix D.

The “natural growth rate”<sup>13</sup> in Saskatchewan is declining as it is in other provinces and, in fact, in much of the industrialized world. This is caused by two factors – a decline in the fertility rate (fewer births per woman over the course of her lifetime), and a drop in the number of women in the child bearing age group. These combine to yield a drop in the absolute number of births. The lower mortality rates and longer life expectancy is not enough to offset this drop and the natural increase in the population continues to get smaller every year (see Figure 3.1 and Appendix D).

In the past few years, the natural growth in the population has been approximately 3,000 persons per year compared with, for example, 4,000 ten years ago and 10,000 twenty years ago. The rate is expected to continue to remain low for the foreseeable future so any substantial population growth will have to come from people moving to Saskatchewan from other provinces and countries rather than from a natural increase arising from higher fertility and/or lower mortality.

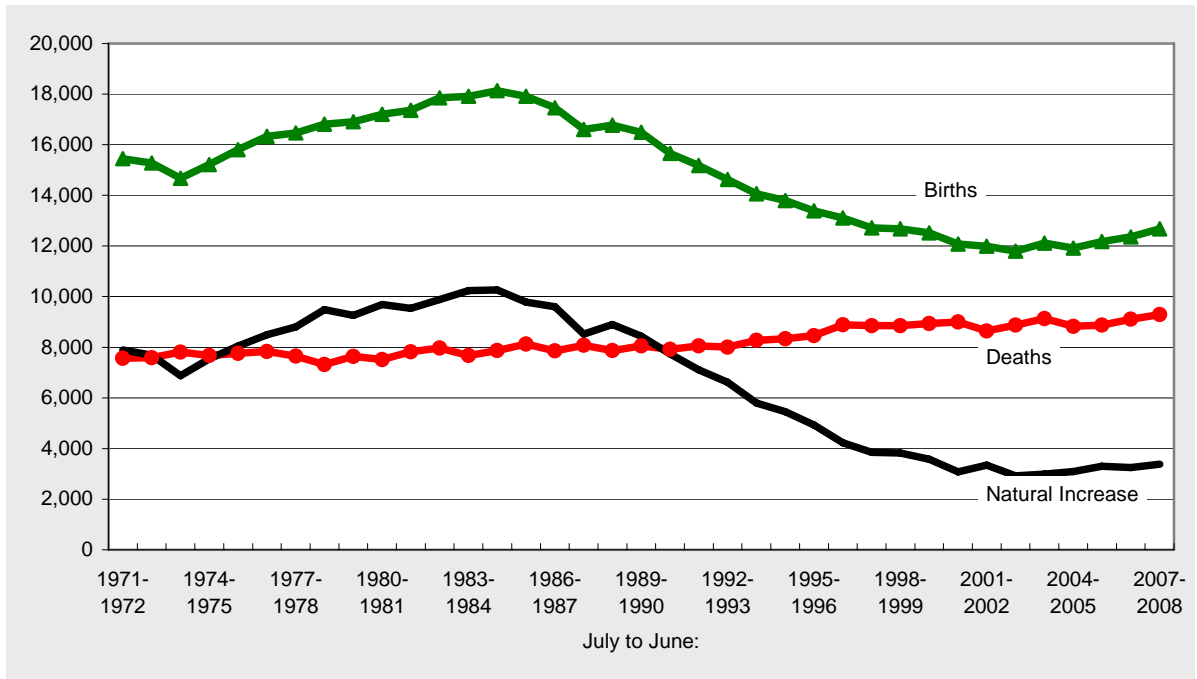
Trends in international immigration are shown in Figure 3.2 and Appendix D. Here we see the effects of recent changes in the provincial nominee program; the number of international immigrants to Saskatchewan has increased substantially in the past few years. With the increase, immigration is now adding approximately 3,500 persons to the provincial population on a net basis compared with less than 1,000 in the late 1990s.

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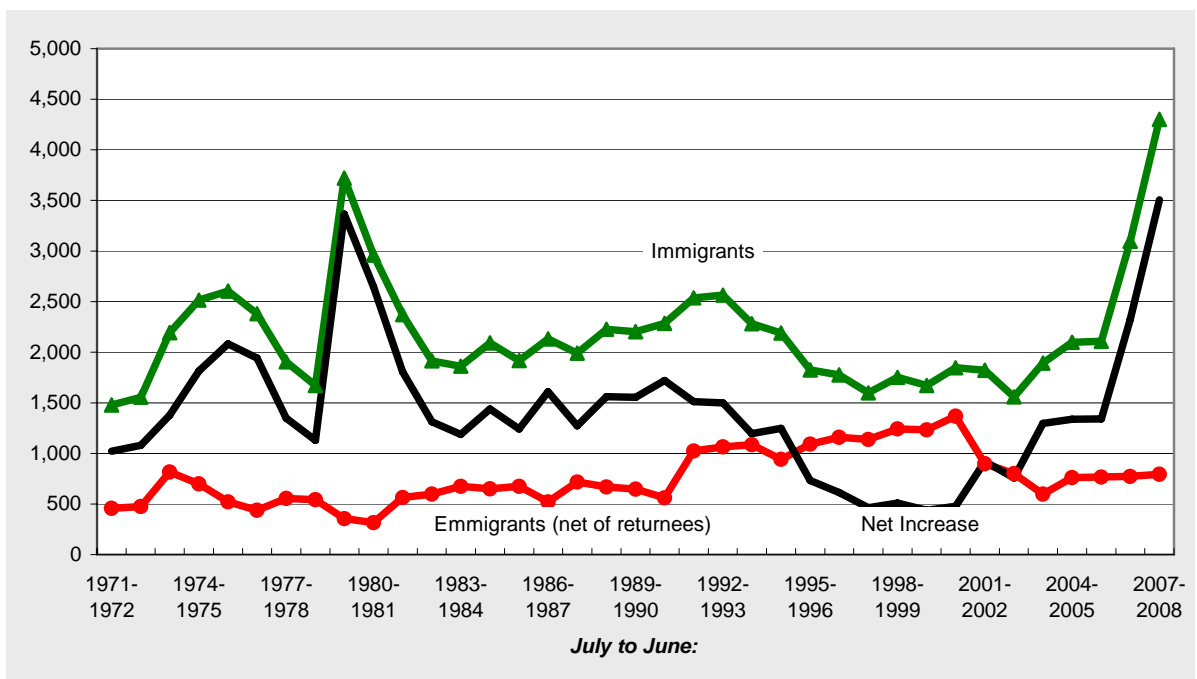
12. Source: Statistics Canada, *Demographic Estimates Compendium CDRom, 91-213-SCB, 2007*. The most recent few years are estimates and subject to retroactive revisions. Preliminary estimates suggest that the trends evident from 2006 to 2008 may have slowed in early 2009.

13. The natural growth rate is the change in the population that would arise without migration, that is, the absolute number of births less the absolute number of deaths as a percentage of the population.

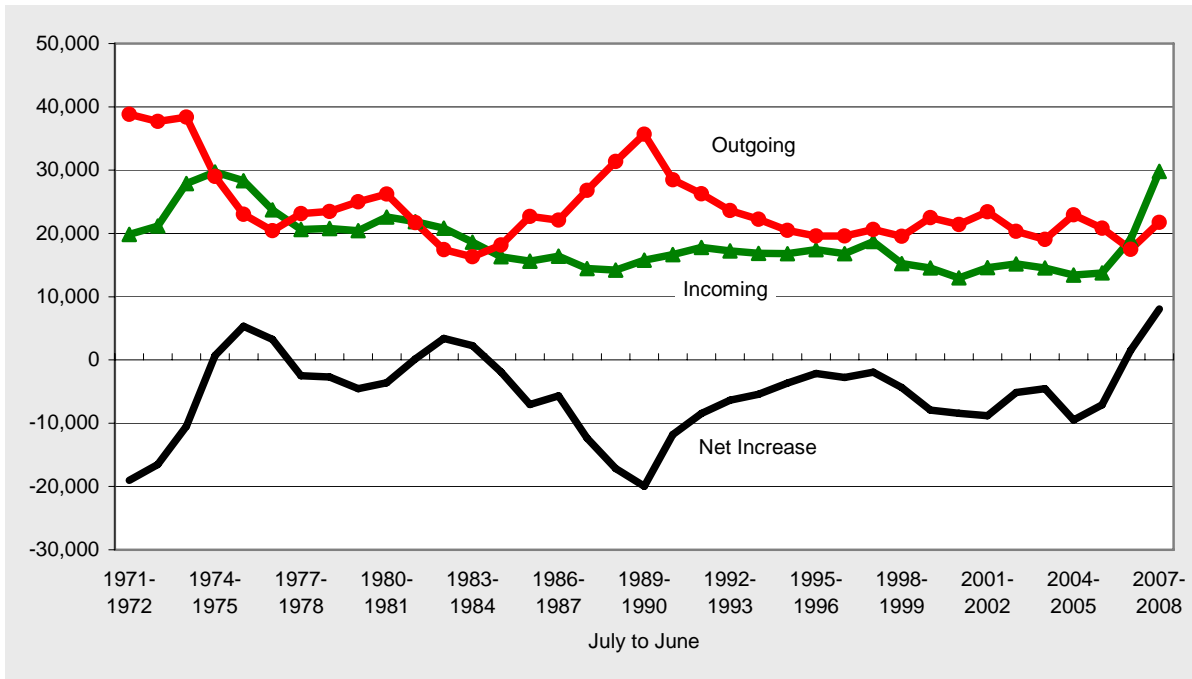
**Figure 3.1 Births, Deaths, and Natural Increase, Saskatchewan**



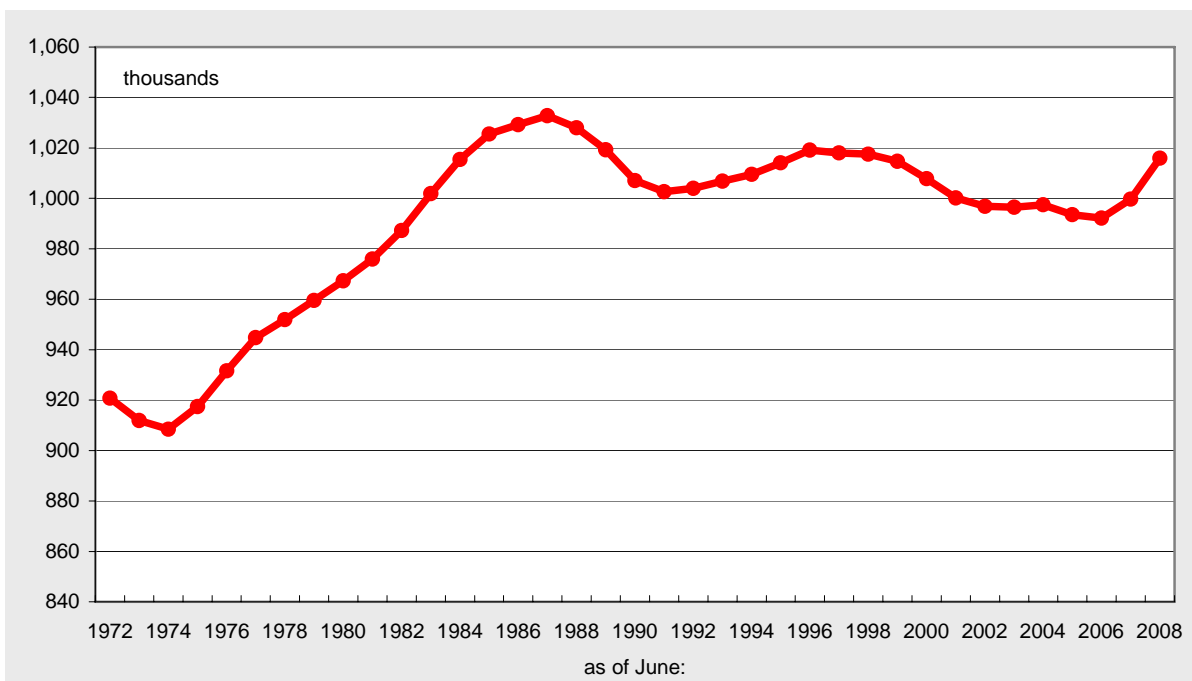
**Figure 3.2 Immigration to and Emigration from Saskatchewan**



**Figure 3.3 Interprovincial Migration to/from Saskatchewan**



**Figure 3.4 Saskatchewan Population, 1972 to 2008**



There has also been a recent change in the long term pattern of interprovincial migration. Figure 3.3 and Appendix D show that net interprovincial migration from July 2006 to June 2007 was positive for the first time in over twenty years. The turnaround, which is based on preliminary estimates, is primarily the result of an increase in the number of people moving to Saskatchewan rather than a decline in the number leaving.

The net effect of all of these population flows is shown in Figure 3.4 which shows the population of the province over the past three decades. Notwithstanding the recent increase, the population of the province has fluctuated near one million for most of the past thirty years. There were periods of increases during the late 1970s and early 1980s when the “baby boom” generation was entering the family formation age group and interprovincial migration was near zero. There were also periods of declines during the late 1980s when interprovincial out-migration was high.

A population projection prepared by the author for Saskatchewan Advanced Education, Employment, and Labour suggests that the population would continue to grow in the short to medium term<sup>14</sup>. The medium growth projection is based on continuing positive net interprovincial in-migration and continued growth in the number of immigrants. With these assumptions, the total population would grow by more than 1.5% per year in the next ten years, reaching 1.1 million by 2013 and 1.2 million by 2018. Later in the period, the growth rate slows to less than 1% per year as interprovincial in-migration slows.

### Regional Patterns

A full analysis of the geographic patterns of population growth is beyond the scope of this report and, one could argue, of less relevance to the labour market than the overall population. Employment demand is typically although not always sensitive to geography – a mine, a manufacturing plant, or a restaurant has a physical location although a call centre or Internet service need not. The supply, on the other hand, is relatively mobile and young people in particular are often willing to move in order to find the right job.

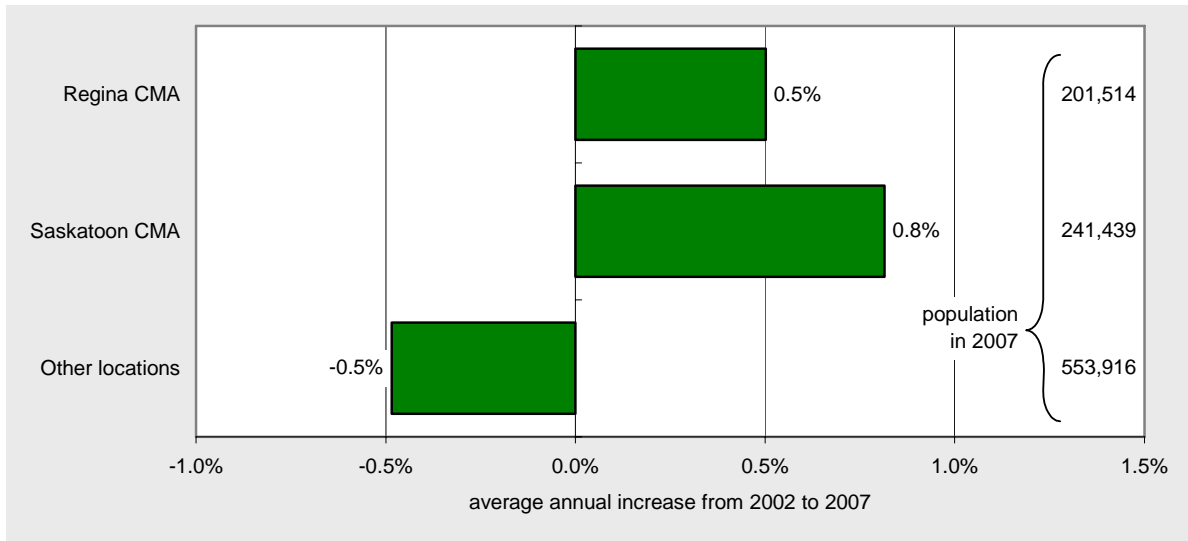
Figure 3.5 shows that the population in Saskatchewan is becoming more concentrated in urban centres. This is neither new nor unique to the province as the same phenomenon has been happening for several decades in the province and in most parts of the world. In 2007, 44% of the province’s population lived in one of the two largest cities or their surrounding metropolitan areas<sup>15</sup>. This compares with 43% seven years ago and 39% twenty years ago.

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<sup>14</sup> Labour Force Supply Projections, 2008

<sup>15</sup> *The Regina and Saskatoon Census Metropolitan Areas (or CMAs) include the city proper and the surrounding “bedroom” communities such as Warman, Martinsville, Pilot Butte, and Lumsden.*

**Figure 3.5 Population Trends in Sub-Provincial Regions, 2002 to 2007**



## 3.2 Age and Gender

While the overall size of the population in Saskatchewan is important, the age and gender distribution is at least as important from the point of view of the labour market. This is because the labour force participation rates (the percentage of the population that “participates” in the labour market by either working or looking for work) varies dramatically by age group and gender. Participation rates are zero for children and decline rapidly among older residents to reach near zero among older seniors. At the other extreme, the rates are over 95% among men 25 to 54 years of age. In effect the size of the population in a specific age-sex cohort has just as much of an impact on the supply of labour as the participation rate for that age and sex cohort. Doubling the size of a population in a given age group with no change in participation will double the supply as will doubling the participation rate with no change in the size of the population.

Figure 3.6 shows labour force participation rates for men in Saskatchewan by age group. The same information is shown for women in Figure 3.7. These figures are from the Labour Force Survey and therefore exclude the population living on Reserve.

The participation rates make it clear why the 25 to 54 age group is considered as the “primary labour market” age group. Participation rates among those in this age group are above 90% for men and approaching that level for women. Young adults, namely those 15 to 24 years of age, have lower participation rates because many are attending school or at home looking after young children. Among older adults, the participation rate falls off rapidly to between 60% and 70% among those 55 to 64 years of age and to less than 25% among seniors.

These figures show that the increase in participation rates that has occurred in the last thirty years has been the result of an increase in the participation rates among women in the primary labour force age group. Participation rates among men were largely unchanged over the period.

Figure 3.8 shows the age distribution of the province’s residents in 2007, the large number of people in their fifties who will soon be considering retirement and the large number in their ‘teens and early twenties poised to enter the labour market age groups.

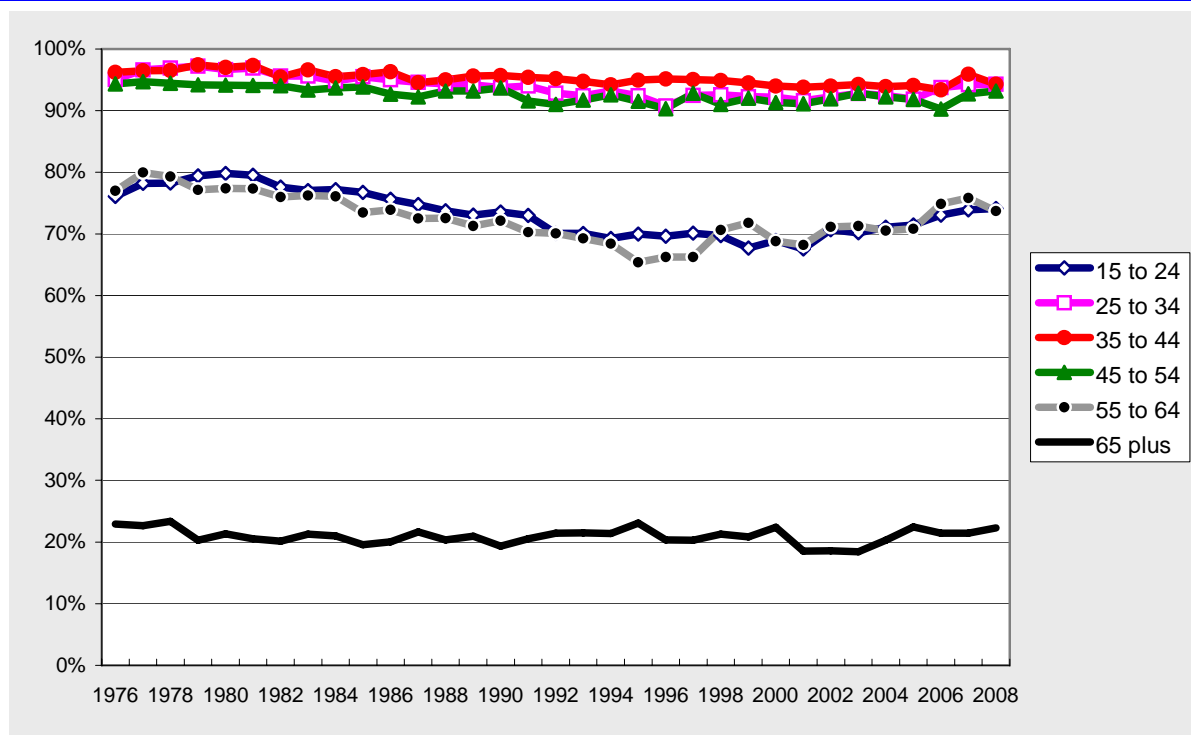
The labour market supply can be increased in three different ways.

- Firstly, the population can increase although the increase has to occur in the primary labour market age group in order to have much of an impact on the supply.
- Secondly, there is a natural flow to the population’s age distribution. An increase in the number of young adults relative to the number of persons in the retirement age group will yield a “natural” increase in the labour force even with no migration or change in participation rates.
- Thirdly, the participation rates can increase so that a higher proportion of those currently in the province are available for work.

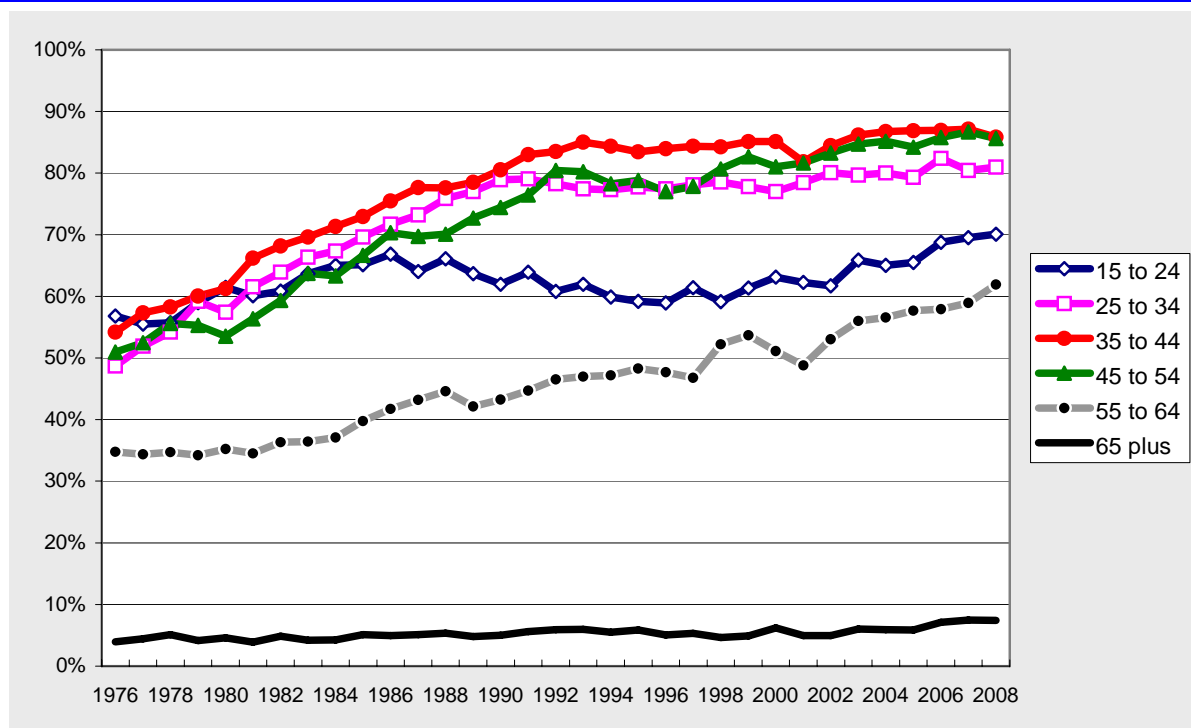
The age distribution in Figure 3.8 shows that in the short to medium term, the number of people turning fifty-five years of age will be about the same as the number turning twenty-five years of age. In other words, there is no “natural” growth in the labour force on the horizons. The participation rates in Figures 3.6 and 3.7 suggest that this third strategy will be the most successful for women and those in older age groups. These two groups currently have the lowest participation rates.

The next three sections look at those possibilities in more detail.

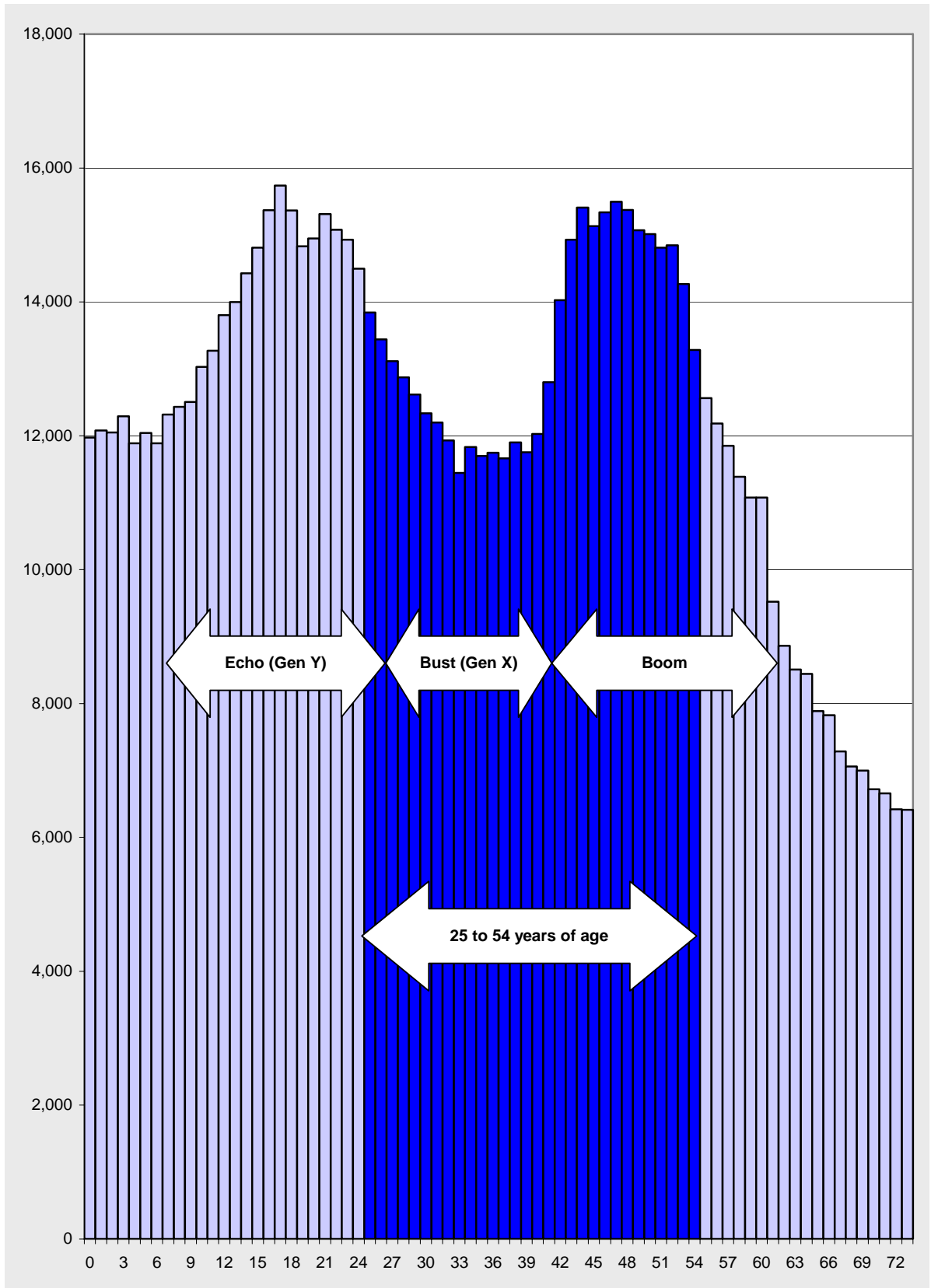
**Figure 3.6 Labour Force Participation Rates by Age Group, Men, Saskatchewan, Off Reserve Population Only**



**Figure 3.7 Labour Force Participation Rates by Age Group, Women, Saskatchewan, Off Reserve Population Only**



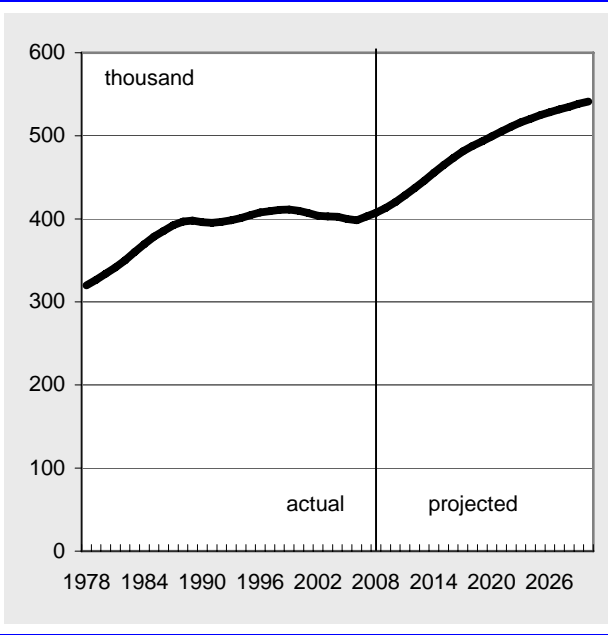
**Figure 3.8** Population in Saskatchewan by Individual Ages, July 2007



The population in the primary labour market age group (25 to 54 years) was on an upward trend until it levelled off near 400,000 in the 1990s. The population projection prepared for Saskatchewan Advanced Education, Employment, and Labour shows a resurgence in the size of this population. This is because of several demographic factors, some actual and some projected.

- a) In the next ten years the “echo” generation will be entering the primary labour market age group.
- b) The young Aboriginal population will be entering the labour force in increasing numbers.
- c) The recent increase in the number of people moving to Saskatchewan from other countries is expected to continue and many of these immigrants are in the 25 to 54 age group.
- d) The number of interprovincial in-migrants (net of out-migrants) is expected to remain positive and the majority of these new residents are in the 25 to 54 age group.

**Figure 3.9** Population in the Primary Labour Market Age Group (25 to 54 years), Actual and Projected, Saskatchewan



This means that even without any increase in participation rates, the labour force will grow because international and interprovincial migration has increased the number of people in the primary labour market age group. The analysis in Section 2.1 shows, however, that with reasonable assumptions about economic growth, this will be insufficient to meet the demand. Any increase in the supply will therefore have to come from a combination of:

- higher participation rates among the increasing number of people in the 25 to 54 years of age, and Aboriginal people in particular;
- higher participation rates among those outside this primary labour market age group, that is, 15 to 24 years of age or 55 and older; and
- even higher levels of immigration from other provinces or countries.

Section 3.3 looks at opportunities for higher participation rates among the province’s Aboriginal population and Section 3.4 looks at other groups who are traditionally under-represented in the labour force. Section 3.5 looks at opportunities for increasing the participation rates of older workers. Increasing the participation rates among those 15 to 24 years of age is not seen by many as desirable because the focus for this group should be on higher levels of education rather than labour market participation.

### 3.3 Aboriginal People

The Aboriginal population arguably represents the best opportunity for Saskatchewan to meet its future labour market needs. Aboriginal people are the largest group already living in Saskatchewan and under-represented in the labour market. Furthermore, their relative youth means that the population will increase over time. So even without the compelling arguments about equality of opportunity, there is a business case for improving the labour market outcomes for this important population. This section looks at some of the key labour force, location, and educational characteristics of the Aboriginal population to help inform the policies and decisions that would enable equal participation in the provincial labour force.

There are four main barriers that make full participation in the Saskatchewan's labour market a challenge for Aboriginal people.

1. Even though the population is younger than the non-Aboriginal population, Aboriginal people have a low employment rate. That is, relatively few are employed.
2. Even those who are employed have a low attachment to the labour force and tend to work in low skill jobs.
3. The vast majority of those who are not working have very low levels of formal education.
4. Many of those who are not working live on Reserve or in other remote communities so a relocation from family and friends would probably be necessary to take a job.

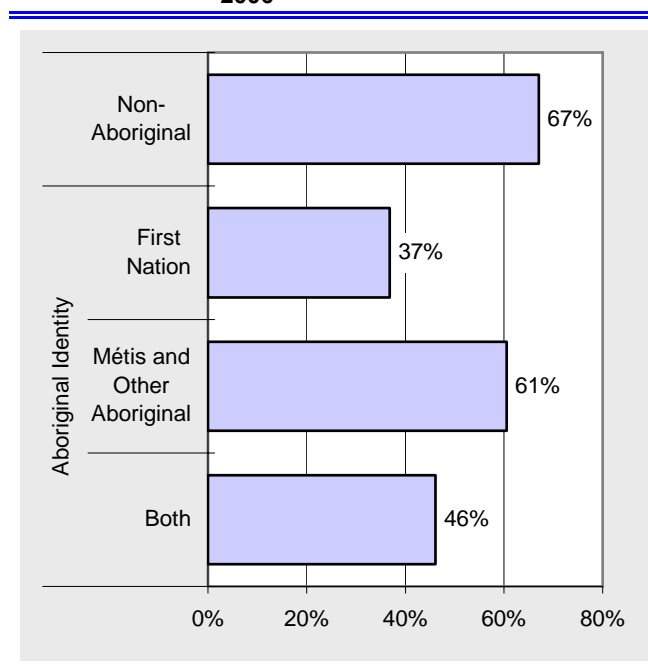
#### Low Employment Rates

There were more than 90,000 adults (fifteen and older) who self-identified as Aboriginal in the 2006 census (see Table 3.1). Figure 3.10 shows that this population tends to have a low employment rate – only 46% of adults were employed in May 2006 compared with 67% of the non-Aboriginal population. Because of the relative youth of the Aboriginal population, one would expect, all other things being equal, a higher rather than a lower employment rate.

The difference in rates is most pronounced among the First Nations population.

Notwithstanding the low employment rates, the rates among Aboriginal people increased from 42% in 2001 to 46% in 2006. This increase together with the increase in the absolute size of the Aboriginal population means that Aboriginal employment grew strongly from 2001 to 2006 (see Figure 3.11).

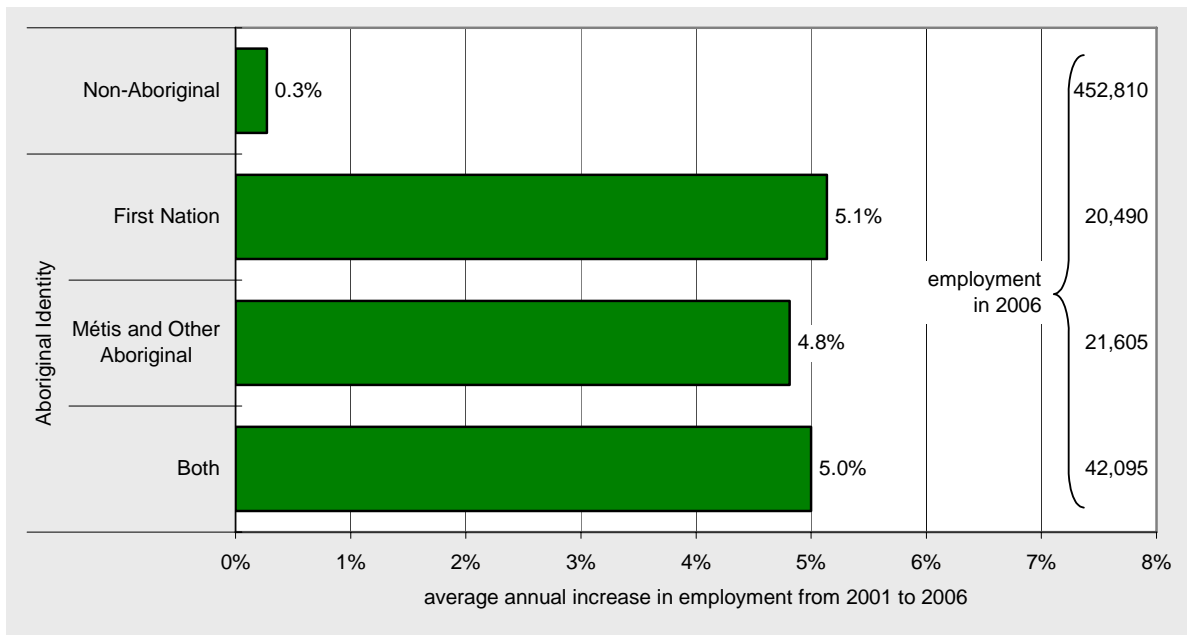
**Figure 3.10 Employment Rates, Population Fifteen and Older, by Aboriginal Identity, May 2006**



**Table 3.1 Labour Market Characteristics of the Aboriginal Population, Saskatchewan, May 2006**

	Non-Aboriginal	Aboriginal		
		First Nations	Métis and Other Aboriginal	Total
Employed	452,805	20,490	21,605	42,095
Unemployed	20,015	6,785	2,600	9,390
Not in the labour force	202,115	28,335	11,480	39,815
Total population 15 & older	674,935	55,610	35,685	91,295
Employment rate	67%	37%	61%	46%
Participation rate	70%	49%	68%	56%
Employment rate in 2001	66%	33%	56%	42%

**Figure 3.11 Trends in Employment by Aboriginal Identity, 2001 to 2006, Saskatchewan**



The average annual increase was near 5% among both First Nation and Métis people. Looked at another way, Aboriginal people were responsible for 60% of the net 15,000 increase in provincial employment from 2001 to 2006.

If this population was employed at the same rate as the non-Aboriginal population, that is, at 67% of the population fifteen years of age and older, there would be an additional 19,000 Aboriginal workers in Saskatchewan in 2006. The number will have increased since then.

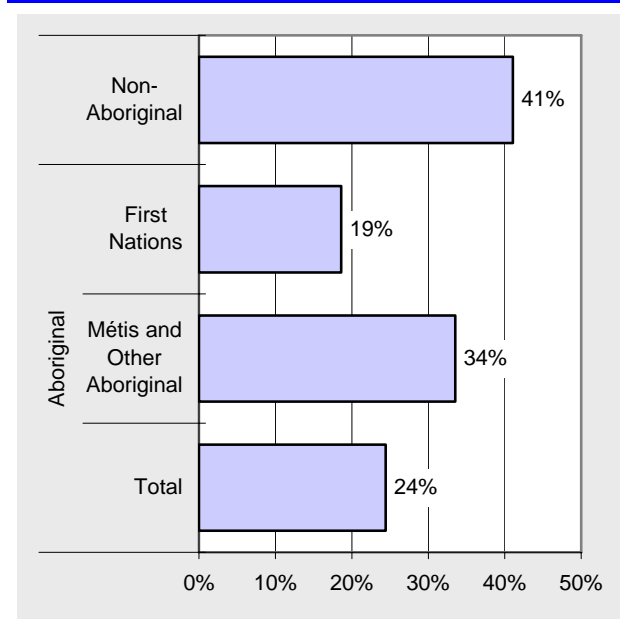
**Low Attachment**

Among Aboriginal adults surveyed in May 2006, 43% did not work at all in 2005 compared with 26% of the non-Aboriginal population (see Figure 3.12 and Table 3.2). Among those who did work, 43% worked on a full-time, full-year basis compared with 56% of the non-Aboriginal population. Once again, this is in spite of the relative youth of the Aboriginal population which, all else being equal, should mean higher labour force attachment with more full-time employment.

Among those who worked full-time throughout 2005, their gross employment income was \$35,708 which is 17% lower than the non-Aboriginal average of \$42,815. This is not a perfect measure of the skill level of the job but it is a good proxy because low skill jobs tend to have lower rates of pay.

The obvious conclusion is that Aboriginal people were more likely than non-Aboriginal people to be working in lower skilled jobs.

**Figure 3.12 Percentage of the Adult Population who Worked Full-Time Throughout 2005, Saskatchewan**



**Table 3.2 Labour Force Attachment in 2005, Aboriginal and Non-Aboriginal Populations, Saskatchewan**

	counts				percent of total			
	Non-Aboriginal	Aboriginal			Non-Aboriginal	Aboriginal		
		First Nations	Métis and Other Aboriginal	Total		First Nations	Métis and Other Aboriginal	Total
Worked full time throughout 2005	277,290	10,330	11,970	22,305	41%	19%	34%	24%
Worked part of the year or part time	218,995	16,645	13,340	29,985	32%	30%	37%	33%
Did not work in 2005	178,650	28,635	10,370	39,005	26%	51%	29%	43%
Total work activity in 2005	674,935	55,610	35,685	91,295	100%	100%	100%	100%
Average employment income among full-time full-year workers	\$42,815	\$33,261	\$37,691	\$35,708				

### Low Levels of Completed Education

There is a strong correlation between education and employment that prevails in both good economic times and bad ones. This means that in times of economic growth such as the one Saskatchewan was experiencing in 2006, low levels of education rather than a shortage of work tends to be the main barrier for higher levels of employment. This is the case for the Aboriginal population in Saskatchewan in 2006.

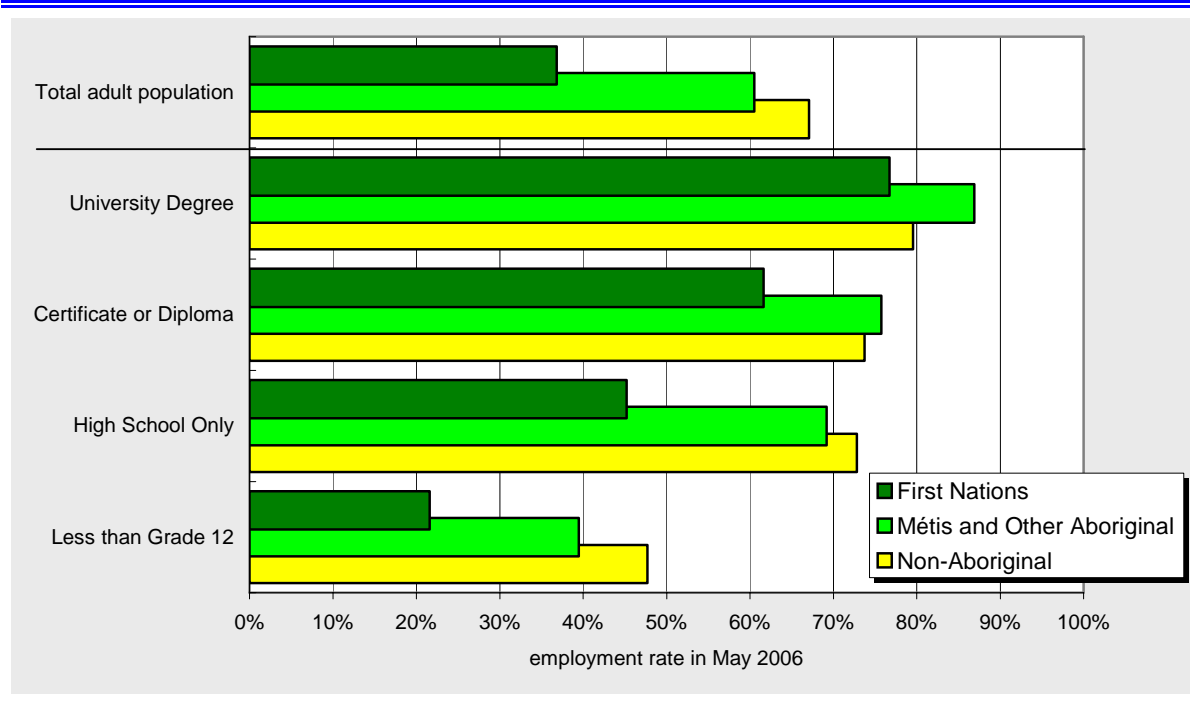
There are two ways to look at the relationship between education and employment in the Aboriginal population. In the first, the employment rates for the Aboriginal population are compared with those for the non-Aboriginal population with the same level of education. This is shown in Table 3.3 and Figure 3.13.

Overall, the employment rate gap is 21% (67% for the non-Aboriginal population and 46% for the Aboriginal population) but it narrows significantly with increasing education level so that employment rates are effectively the same for Aboriginal and non-Aboriginal people with a university degree. Employment rates among Métis people are almost the same as for non-Aboriginal people with the same level of education. Differences between First Nation people and non-Aboriginal people also disappear among those with a degree but persist in lower levels of completed education.

**Table 3.3 Labour Force and Education, May 2006, Aboriginal and Non-Aboriginal Populations, Saskatchewan**

Highest level of completed education	Number				Employment Rate			
	Non-Aboriginal	Aboriginal			Non-Aboriginal	Aboriginal		
		First Nations	Métis and Other Aboriginal	Total		First Nations	Métis and Other Aboriginal	Total
Less than Grade 12	186,590	31,105	14,030	45,135	48%	22%	39%	27%
High School Only	185,440	10,705	9,345	20,055	73%	45%	69%	56%
Certificate or Diploma	209,435	10,910	9,900	20,815	74%	62%	76%	68%
University Degree	93,460	2,880	2,405	5,285	80%	77%	87%	81%
Total adult population	674,940	55,610	35,685	91,295	67%	37%	61%	46%

**Figure 3.13 Employment Rates in May 2006 by Level of Completed Education and Aboriginal Identity, Saskatchewan**



There are two clear implications of this relationship. Firstly, a higher level of education is clearly a way for Aboriginal people to ensure that they have employment at levels equivalent to the general population. This is the most common interpretation of this relationship. But there is a second implication.

The figures show that something beyond education is affecting employment rates; otherwise the employment rates would be similar for each level of education. Put another way, why aren't First Nation people with a grade twelve diploma employed at the same rate as non-Aboriginal people with the same education (73%) rather than the lower rate (45%).

Looked at another way, a theoretical calculation shows that the overall employment rate for the Aboriginal population of 46% would increase to 56% rather than 67% if the Aboriginal population had equivalent education levels to the non-Aboriginal population. One half of the difference in employment rates can be explained by the lower levels of education in the Aboriginal population and it follows that only one half of the potential Aboriginal labour force can be accessed by focusing on improving education levels.

The second approach is shown in Figure 3.14. Here we look at the age and education level for the 49,200 Aboriginal adults (15 and older) who were not working, that is, either unemployed or out of the labour force in May 2006. Age, education level, and identity for this population can be used to assess the possibilities for employment.

1. In the first instance, about four in ten are probably not available by virtue of their age because they are under 20 (26%) or 55 and older (17%).
2. Of the remaining 28,100, nearly one half (12,760) should be employable from the point of view of their education level because they have at least a grade 12 education.
3. The remaining third (15,340 persons) have not completed high school but are at least twenty years of age so the possibility of employment for these individuals will be low. Most are of First Nations identity.

### Remote Locations

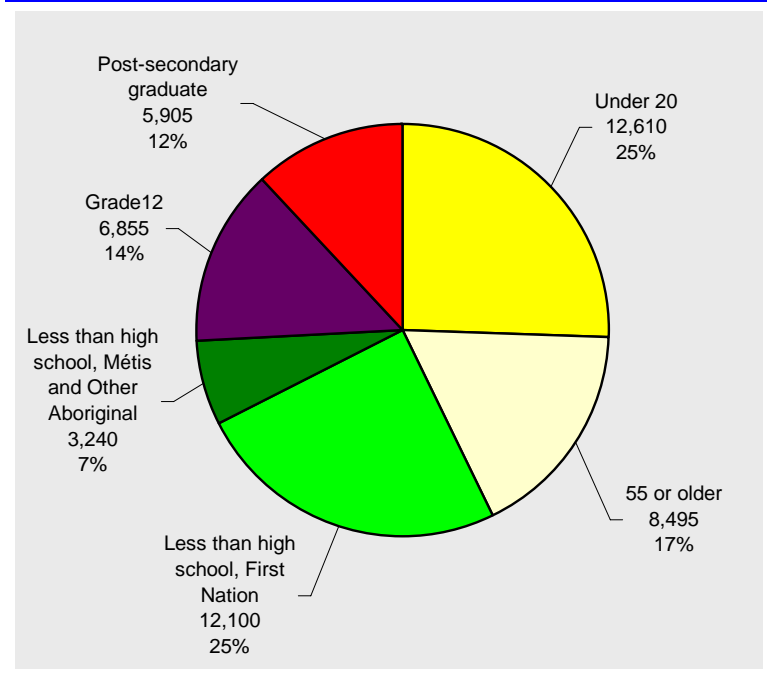
The other barrier to increased employment levels is the relative remoteness of many Reserves.

Of the 28,100 Aboriginal people who are 20 to 54 years of age and not working, Figure 3.15 shows that about one quarter would have good employment opportunities, all else being equal, because they live in one of Saskatchewan's four largest urban centres.

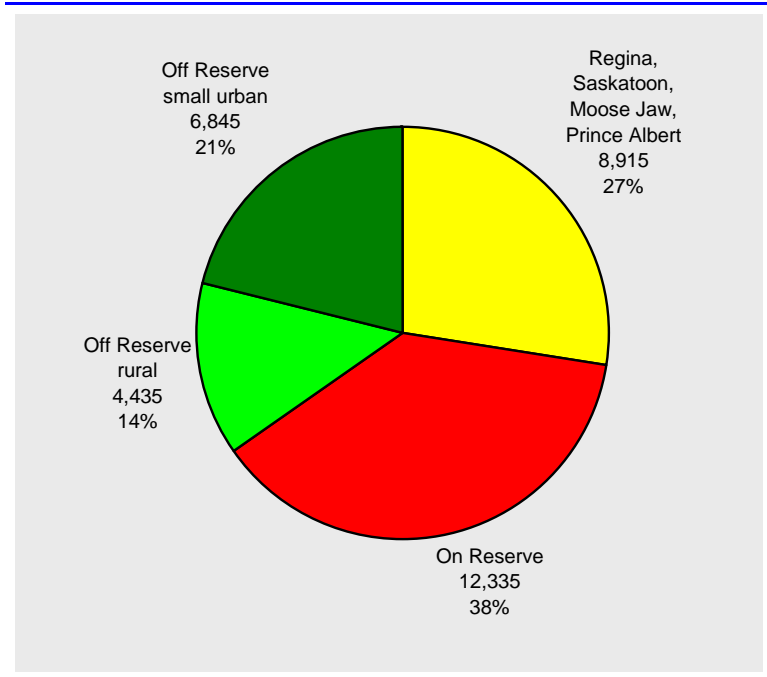
Another one half (52%) live in rural areas, typically on Reserve (38%) and the remaining 21% are in smaller urban centres of the province such as North Battleford and Meadow Lake.

Looked at from another geographic perspective, about one quarter of Aboriginal adults 20 to 54 years of age who were not working in May 2006 live in the far North where employment opportunities tend to be limited to either the resource sector or the public sector, broadly defined to include health, education, and crown corporations, as well as government proper.

**Figure 3.14 Selected Characteristics for Aboriginal People who were Not Employed in May 2006**



**Figure 3.15 Residence for Aboriginal People 20 to 54 Years of Age and Not Employed in May 2006**



### 3.4 Other Under-Represented Groups

This section looks at employment trends for groups other than Aboriginal people who have traditionally been under-represented in the labour market. These are:

1. persons who are members of a visible minority group;
2. immigrants, particularly recent immigrants; and
3. persons reporting a disability.

The Statistics Canada census is the most reliable source of information about employment among these groups so the statistics in this section are mainly from the census.

#### Members of a Visible Minority Group

The adult population in Saskatchewan who are members of a visible minority group is relatively small in size. In 2006, 26,000 persons fifteen and older reported in the census that they were a member of a visible minority group – about 2½% of the population.

The employment rates for visible minority group members are similar to the rate for non-members as Figure 3.16 shows. So this group of Saskatchewan residents is not under-represented in the labour force but rather “under-employed” because one would have expected a higher employment rate. Members of a visible minority group in Saskatchewan are, on average, younger and have higher levels of education, than non-members so all else being equal, one would expect a higher employment rate<sup>16</sup>.

**Figure 3.16 Employment Rates, Members of a Visible Minority Group, Population 15 and Older, Saskatchewan, May 2006**

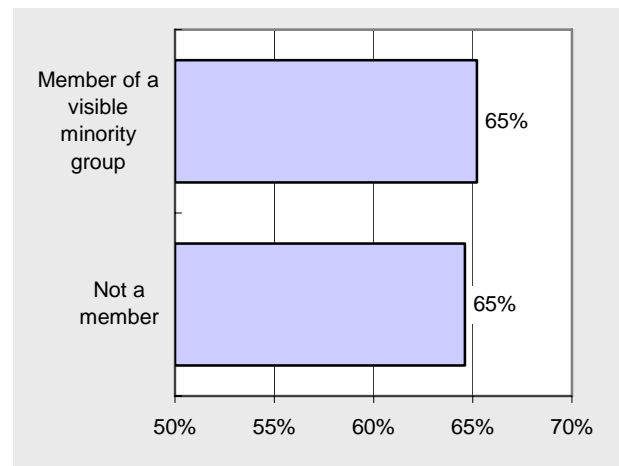
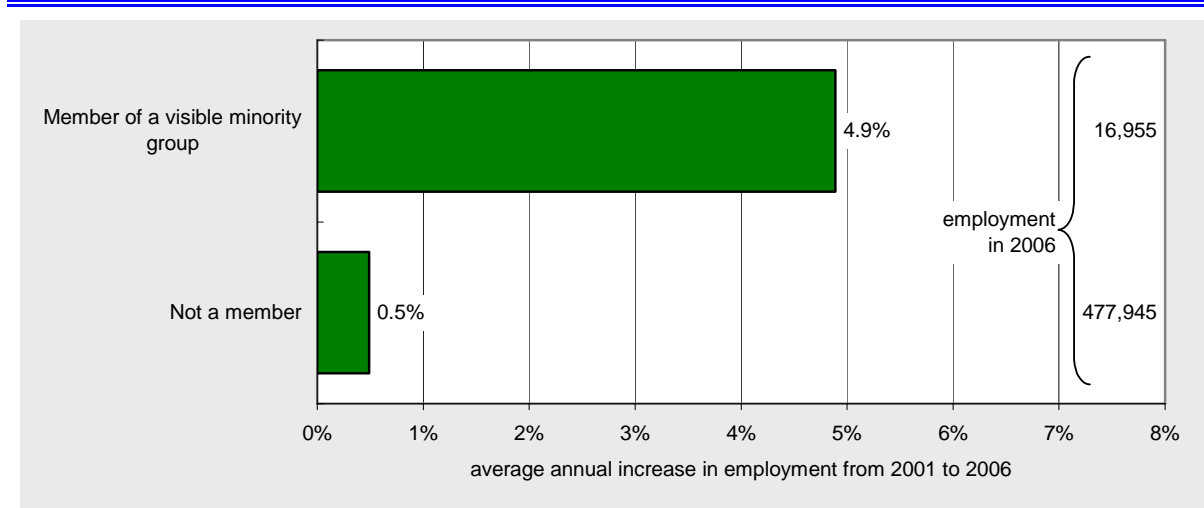


Figure 3.17 shows that employment grew by an average of nearly 5% per year from 2001 to 2006

**Figure 3.17 Employment Trends, Membership in a Visible Minority Group, 2001 to 2006, Saskatchewan**



16. In 2006, 55% of those who reported that they were members of a visible minority group were post-secondary graduates compared with 43% of those who were not members.

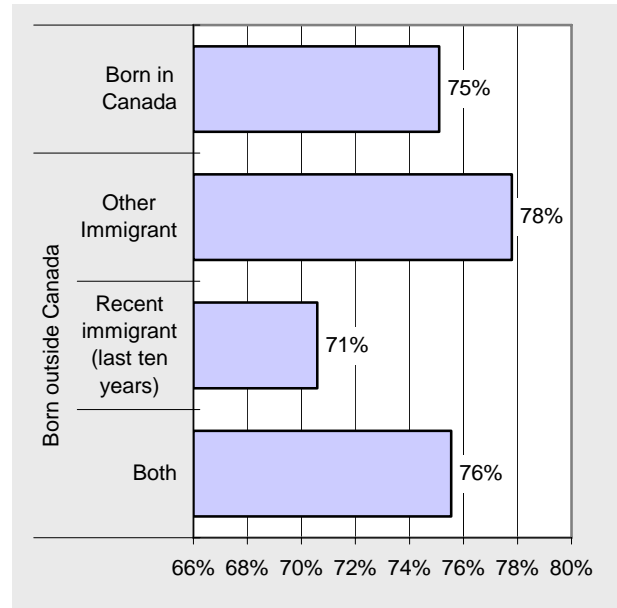
among this group of Saskatchewan residents. This compares with an annual growth rate of 0.5% among non-members.

The figures make it clear that although members of a visible minority group will be an important part of the Saskatchewan's future supply of workers, there are only limited opportunities for an increase in the absolute size of the labour force supply from visible minority group members. The opportunities instead, are to find a better match of employment with the skill levels of visible minority members.

**Immigrants**

The adult population in Saskatchewan who are immigrants (also called foreign-born) is also relatively small although the number is growing again after declining for years. In 2006, there were over 45,000 immigrants in the province. But a high proportion (27%) are seniors who immigrated many years ago so the statistics in this section concentrate on the population 15 to 64 years of age. In 2006, there were 32,400 Saskatchewan residents in the 15 to 64 age group who were born outside Canada. Of these, about one third had immigrated to Canada in the past ten years.

**Figure 3.18 Employment Rates by Place of Birth and Period of Immigration, Population 15 to 64 Year of Age, May 2006, Saskatchewan**



The employment rates for immigrants are similar to the ones for Canadian-born adults as Figure 3.18 shows. There is a difference, however, that depends on how long the person has been in Canada. Among recent immigrants, the employment rate is 71% compared with 78% for those who have been in Canada for ten or more years and 75% among those born in Canada.

**Figure 3.19 Employment Trends among Immigrants, Population 15 to 64 Years of Age, Saskatchewan, 2001 to 2006**

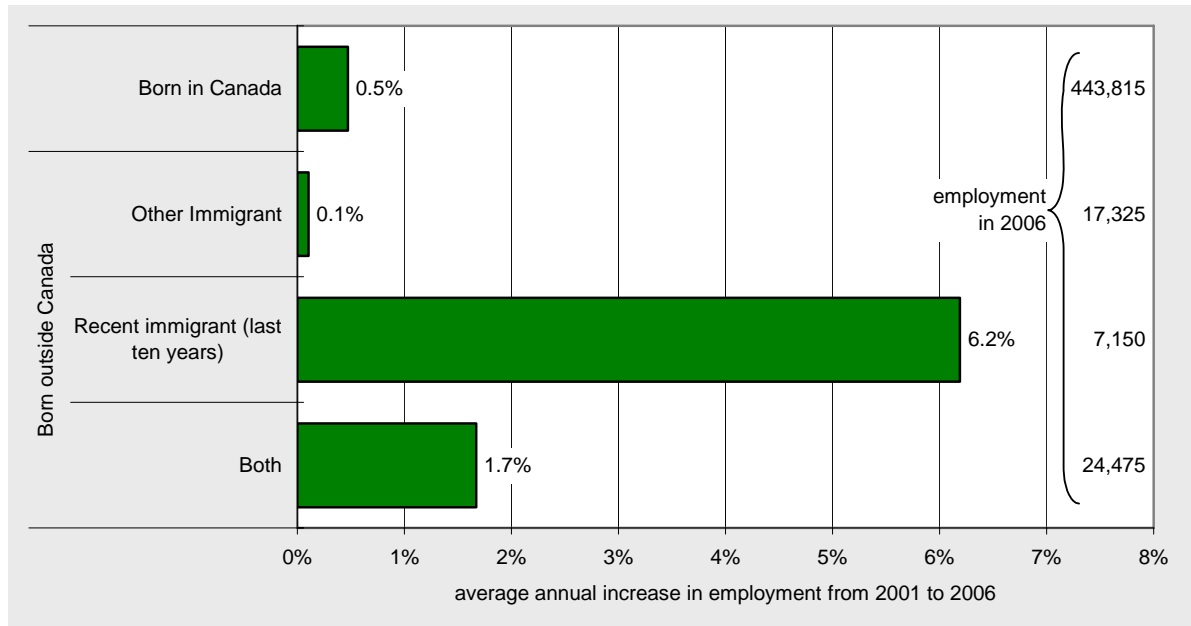


Figure 3.19 shows that employment grew by an average of more than 6% per year from 2001 to 2006 among recent immigrants. This compares with an annual growth rate of 0.5% among non-immigrants and 0.1% among those who have been in Canada for at least ten years. Part of the reason for the increase will be the increase in the number of immigrants to Saskatchewan during those five years.

As with the population who are members of a visible minority group (and there is a good deal of overlap between recent immigrants and members of a visible minority group), it is clear that immigrants will be an important part of the Saskatchewan's future supply of workers but that any significant increase in immigrant workers will need to come from an increase in the number of immigrants rather than an employment increase among those who are already living here. And as with those who are members of a visible minority group, there may be opportunities to make better use of the higher levels of formal education that are typical among immigrants<sup>17</sup>.

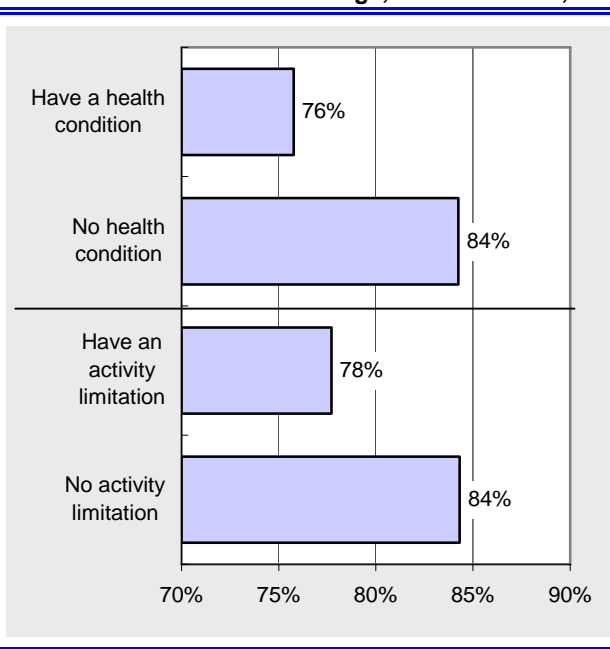
### Persons Reporting a Disability

Measuring the potential increase in the labour force supply that could arise from those with a disability is more difficult for two reasons. Firstly, the measurement of disability is more subjective so the actual size of the population is difficult to measure. Secondly, some types of disability may mean that the person is unable to work at all or in certain kinds of jobs.

The statistics about disabilities and activity limitations in this report are from the Canada Community Health Survey<sup>18</sup>. Among those 18 to 64 years of age, 22% reported that they had a health condition, that is, difficulty hearing, seeing, communicating, walking, climbing stairs, bending, learning or doing any similar activities.

In a separate question, 29% reported that they had an activity limitation, namely a long-term health condition or problem (a condition that is expected to last or has already lasted 6 months or more) that sometimes or often has an impact on the type or duration of activities in which they can participate.

**Figure 3.20 Employment Rates, Population 18 to 64 Years of Age, Saskatchewan, 2005**



One cannot easily determine *a priori* if these conditions affect labour market participation because the effect of the limitation will depend on the skills and abilities needed for different occupations.

Figure 3.20 shows that the presence of a health condition lowers the employment rate from 84% to 76% and the presence of an activity limitation lowers it from 84% to 78%.

So there is clearly some potential for an increase in employment among those with health conditions or activity limitations. Reaching the equivalent employment rates would generate an additional 10,000 persons in the labour supply. The extent to which these health conditions preclude an increase of that magnitude, however, is not known.

17. In 2006, 55% of immigrants were post-secondary graduates compared with 42% of Saskatchewan residents who were born in Canada.

18. Special tabulations from the microdata for cycle 3.1 conducted in 2005. The sample excludes the population living on Reserve.

### 3.5 Older Workers

One group that is clearly a potential source of supply for the labour market is older workers, taken here to mean those beyond the “primary labour market age group”, that is, 55 and older. Even if one stops at 74 years of age there are certainly enough older residents (over 175,000 in 2007) to make a difference and many are either already in the labour market or have been in the past. Furthermore the number is expected to increase in the coming years as the baby boomers move decisively into their sixties.

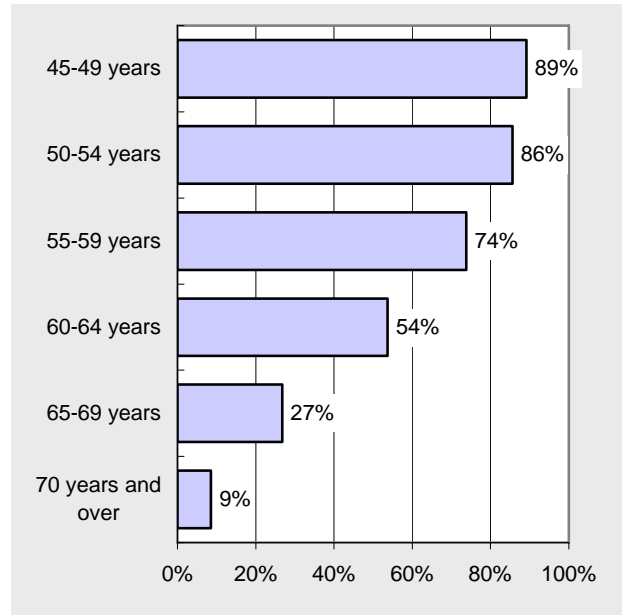
Figure 3.21 shows how quickly the employment rate falls off among older workers. Whereas more than 85% of those in their early fifties are working, the proportion is just over one half of those in their early sixties and 9% for those in their early 70s.

There is already evidence that this group is staying in the labour force longer than expected. Figure 3.33 shows that employment among those under 50 years of age has increased only marginally in the past seven years whereas employment among those in their sixties has increased by more than 5%.

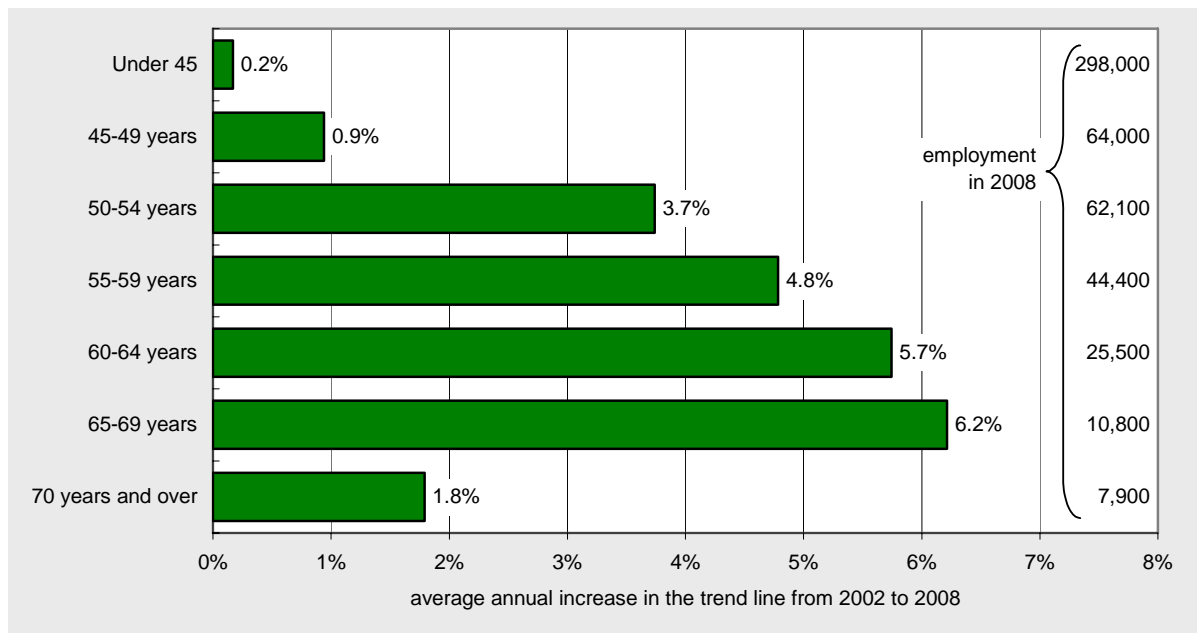
Some of this increase is simple demographics. About one quarter of the increase is a consequence of the higher number of older adults in Saskatchewan. The other three quarters is because of higher labour market participation rates.

Although it is difficult to tell from the survey data, the increase seems to be largely the result of older workers staying in their jobs longer rather than retiring and re-entering the labour force. The

**Figure 3.21 Employment Rates Among Older Workers, Saskatchewan, 2008, Off Reserve Population Only**



**Figure 3.22 Recent Employment Trends Among Older Workers in Saskatchewan, Off Reserve Population Only**



increase is more pronounced among women than among men and more pronounced among those with higher levels of education. Industry groups with the strongest increases are retail trade and those in the public sector, broadly defined to include health and education services as well as government proper.

There are obvious benefits of attracting older workers in the labour market or keeping those who are already employed from retiring. One is the sheer size of this group; a single percentage point increase in the employment rate would generate 2,500 new employees. Another is the fact that they are already living in the province and most have experience and perhaps a strong work ethic. Some will be willing to mentor younger employees.

On the other hand, there are potential difficulties as well. Higher participation rates will, at most, merely postpone the labour shortage because the older workers will eventually retire. Secondly, there is concern about productivity for those in this age group. Many do not have the ability to work in physically demanding jobs or technically challenging ones. Hours of work tend to be shorter because of longer vacations and more time off for health reasons.

### 3.6 Other Persons Not in the Labour Force

Figure 3.23 shows the adult population in Saskatchewan according to their labour force status in an average month during the past three years, that is, from 2006 to 2008. The previous section looked at those 55 years of age and older so we are limiting this to those 15 to 54 years of age.

Of the 518,200 persons, the vast majority are working. The next obvious group that could supplement the labour supply are those who are unemployed, that is, the 19,900 individuals who are currently looking for work. But this represents an unemployment rate of 4.5% so there is a limited potential to access this group of people. Most economists feel that an unemployment rate of near 3% can be considered as “full employment”. Besides, 2,800 of these already have a job that will start in the future but are still considered as “unemployed” by Statistics Canada.

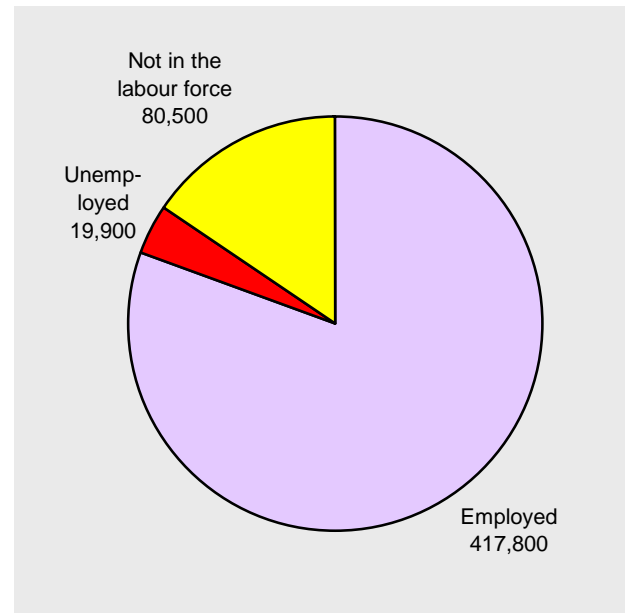
Of more interest are the 80,500 who are “not in the labour force”, that is, not working nor looking for work. But a closer examination of these Saskatchewan residents suggest that there is also a limited potential to access this group as a source of supply for the labour market.

Of the 80,500 many are either going to school or may not be able to work because of a lack of education.

1. Almost one half (35,100) are attending school leaving a total of 45,300.
2. Of the 45,300, about one third have not completed high school (and are not going to school because these were excluded in #1 above) and so will have limited opportunities to work. That leaves 29,700.
3. Of the 29,700, 8% or 2,400 have never worked so one suspects that health limitations may be an issue or they may be older women who have never had an opportunity to join the labour force. Another 60% haven't worked in over a year. Among the 9,500 who were employed in the last year, one quarter left work to look after children or because of their own health.
4. There is also a strong likelihood that among the approximately 27,400 who have completed high school, are not going to school, and who have labour market experience are staying at home to look after children. One third, for example, are women with a working spouse and children under 18 years of age. Another 15% are lone parents. More than one half of the households have children under the age of six.

This means that there is limited opportunity to expand the labour force supply by accessing those who are “not in the labour force”. The province might be able add several thousand people to the supply by means of adult education in order to upgrade formal education levels and the provision of more child care to enable more families to have both partners working. Moving beyond these incremental additions will be much more difficult.

**Figure 3.23** Labour Force Status for the Population Off Reserve, 15 to 54 Years of Age, Saskatchewan, 2006 to 2008 Average



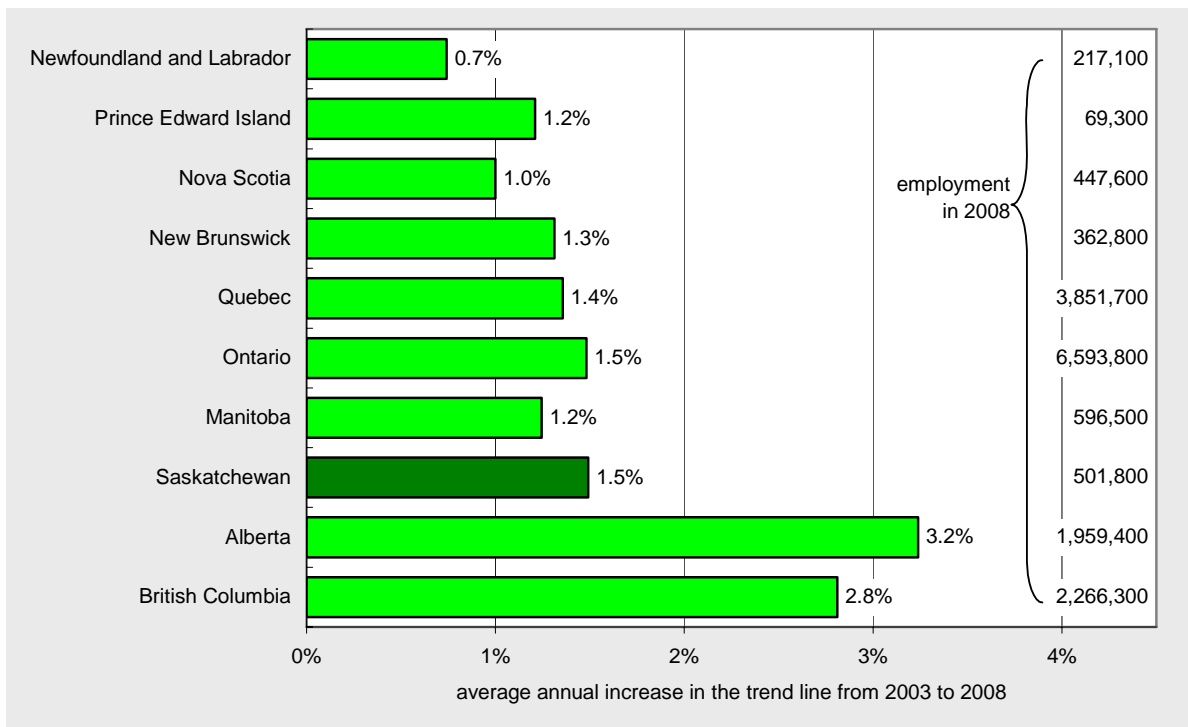
### 3.7 Interprovincial Competition

The supply of labour for the Saskatchewan economy is ultimately, because of the relative ease by which people can move across borders in Canada, at least national if not international in scope. This section looks at labour market trends by province for the past five years. This may provide an indication of where future growth might lie and therefore which provinces could provide labour to Saskatchewan through interprovincial migration. Note that language issues will limit the number of Quebecers who will be willing to move to Saskatchewan.

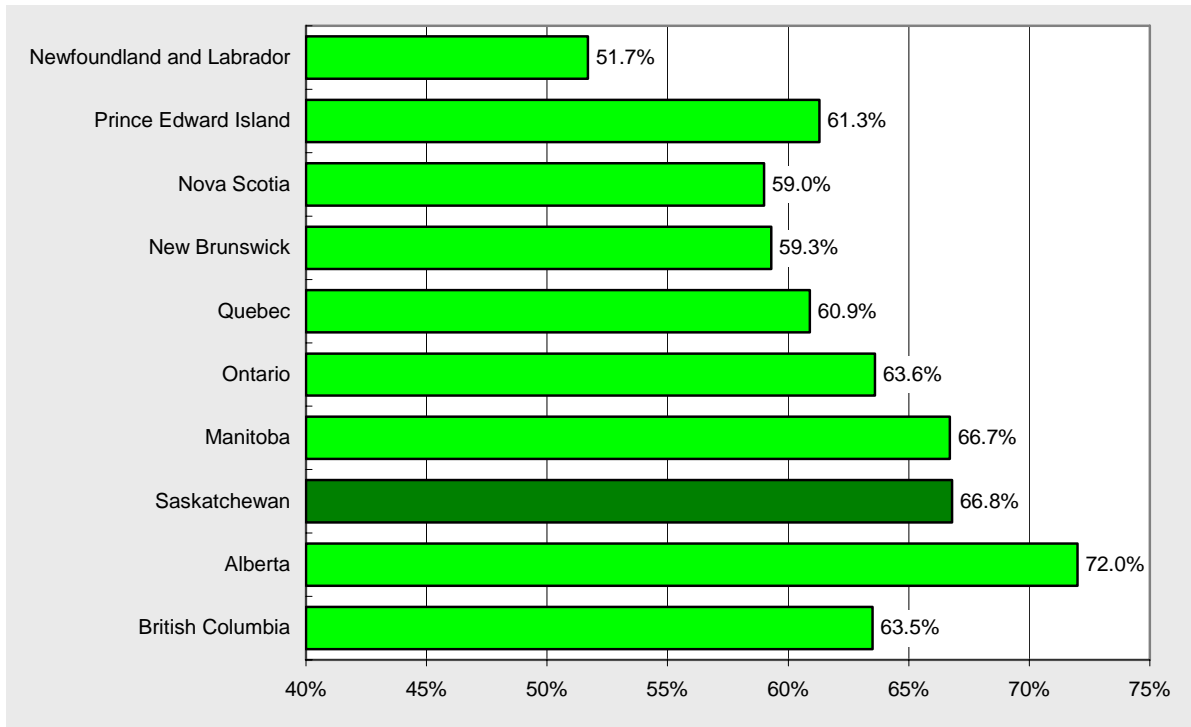
In the past five years employment has been growing more quickly in B.C. and Alberta and more slowly in Manitoba, and the Atlantic provinces (see Figure 3.24). If those trends continue, one would expect that recruiting workers from Manitoba and the Atlantic provinces would be the most successful than recruiting them from Alberta. (Recent population trends, however, show the opposite to be true.)

Figure 3.25 shows that employment rates are relatively low in the Atlantic provinces which would suggest that there are more potential workers available than in Manitoba or Alberta where employment rates are higher. The unemployment rates are the highest, however, in the Atlantic provinces and Ontario (see Figure 3.26).

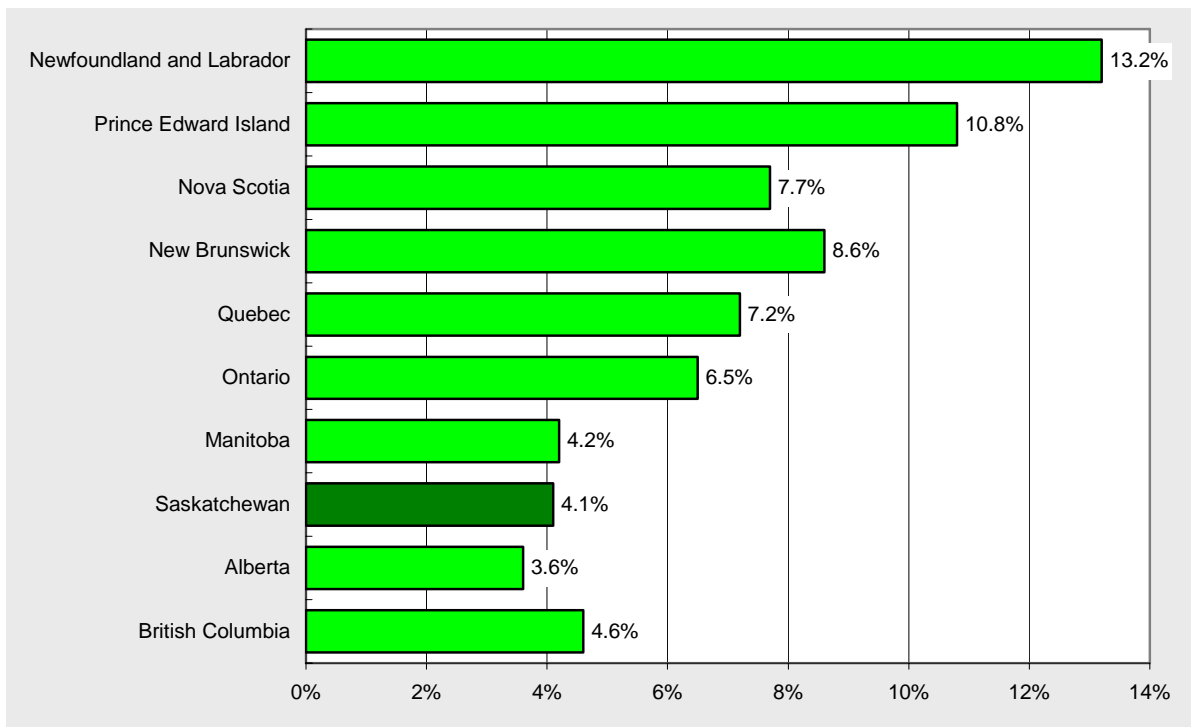
**Figure 3.24 Average Annual Employment Growth, by Province, 2003 to 2008**



**Figure 3.25 Employment Rates by Province, 2008, Off Reserve Population Only**



**Figure 3.26 Unemployment Rates by Province, 2008, Off Reserve Population Only**



### 3.8 Summary and Issues

This section looks at the topics included in the supply side of the labour market equation, summarizes them, and looks at some of the issues arising from the trends.

<u>Summary of Findings</u>	<u>Issue or Implication</u>
Section 3.1 shows that the natural growth rate of the provincial population (births less deaths) has been declining and is expected to continue to be low for the foreseeable future.	Over the long term, any significant population growth in the province will have to come from changes in interprovincial and international migration patterns.
Section 3.1 shows a recent surge in the number of immigrants to Saskatchewan because of the Saskatchewan Immigrant Nominee Program.	<p>The increase in the number of immigrants to Saskatchewan will assist in meeting the demand for workers in the province. Historically, immigrants to the province have moved to other parts of Canada soon after their arrival, however, and if this continues in the future, this group of individuals will contribute only marginally to the supply of workers.</p> <p>Recent immigrants need community support and a welcoming environment to successfully integrate.</p> <p>The equivalency of foreign credentials is an ongoing issue.</p>
Section 3.1 shows that interprovincial migration led to a population increase in the 2007-08 period for the first time in over twenty years.	Interprovincial in-migration is one of the fastest ways to increase the size of the labour force supply. Interprovincial migration trends are slow to change so it is too soon to tell if the surge of people moving to the province from elsewhere in Canada is a short term phenomenon or the start of a permanent change in a long term pattern.
Based on a population projection that assumes continued international and interprovincial migration, the population in the primary labour market age group (25 to 54 years) will increase for the foreseeable future.	There is a “built-in” increase in the labour force supply over the short to medium term but it may not be sufficient to meet the demand.

Section 3.3 looks at the Aboriginal population and identifies four challenges involved in increasing their labour force participation:

- low employment rates;
  - a low attachment to the labour force and low-skill jobs among those who are working;
  - low levels of completed education among those not working; and
  - the remoteness of many Reserves.
- 

While the Aboriginal population is arguably the best choice for increasing the labour force supply in the province, the challenges in doing so are significant.

Section 3.4 looks at the other traditionally under-represented groups in the labour market and finds that:

- employment rates among members of a visible minority group are near the provincial average;
  - employment rates among recent immigrants are below the provincial average whereas rates among those who moved to Canada more than ten years ago are higher; and
  - employment rates among those with a physical or mental health condition or activity limitation are lower than the provincial average.
- 

There is some potential to increase labour force participation among all three groups but the numbers are relatively small so gains will be small. A greater opportunity exists for a more effective use of their skills.

Section 3.5 looks at older workers, namely those 55 years of age and older. There has been significant growth in employment among older workers since 2001 because “baby boomers” seem to be postponing their retirement.

The population of older workers is large so even modest increases in participation rates will result in a large increase in the labour market supply.

Most of these individuals have experience in the labour market but absentee rates are higher than normal because of health issues and many cannot work in physically or technically challenging jobs.

Because many in this group are already able to retire, this is a very “fragile” source of supply for the labour market.

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Section 3.6 looks, in general, at the parts of the population who are “out of the labour force” and in the 15 to 54 age – currently approximately 85,000 individuals.

The majority of these individuals are either going to school, have low levels of education, or are stay-at-home spouses caring for children. The potential to increase the labour market supply significantly from this pool of individuals is limited.

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Section 3.7 looks at employment growth and employment rates in other provinces. The highest employment rates and the fastest growing employment is currently in western Canada.

One would suspect, although recent trends tend to suggest otherwise, that the province’s best prospects for attracting workers from elsewhere in Canada lie in Ontario or the Atlantic provinces.

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## SECTION 4      SECTOR SPECIFIC ISSUES

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The trends in supply and demand discussed in the previous two sections are not universal across industry groups. This section looks at the sixteen industry groups typically used for labour market analysis (see Appendix B for a description) according to five indicators of current or future supply and demand imbalances. The five indicators are:

- recent employment growth rates;
- the age distribution of current employees;
- the formal education levels of current employees;
- average wage rates among paid workers in the industry group; and
- recent increases in wage rates among paid workers in the industry group.

Industry groups with an above-average growth rate, higher levels of formal education needed in their workforce, and an age distribution skewed toward older employees could reasonably be expected to have more difficulty in recruiting and retaining workers in the short term than others. Higher than average growth in wage rates may indicate a current imbalance. Lower wage rates will, on balance, mean more difficulty attracting workers in a tight labour market.

For the purposes of the trend analysis, the seven-year period from 2002 to 2008 is used.

Note that these indicators are not a forecast of future supply and demand imbalances, just an indication of which sectors have been under the most pressure recently and/or could be under the most pressure in the near future.

Table 4.1 shows the five indicators and the rank among the sixteen industry groups. The ranking is arranged so that a high rank indicates a current or potential labour market imbalance between supply and demand. So for example, the resource sector has a high rank because it is growing rapidly and wage rates are increasing more quickly than average. This would suggest a labour market imbalance. On the other hand, wage rates are high and there are lots of younger workers in the sector so the sector may not have as much difficulty recruiting or retaining workers. The fact that relatively few are post-secondary graduates may also mean less difficulty recruiting<sup>19</sup>.

Figures 4.1 through 4.5 show the five indicators graphically.

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19. *Anecdotal evidence suggests that in fact, some of the “hard-to-fill” positions right now are low skill positions. Over the long term, however, one suspects that increased competition will mean that post-secondary graduates will be the hardest to recruit.*

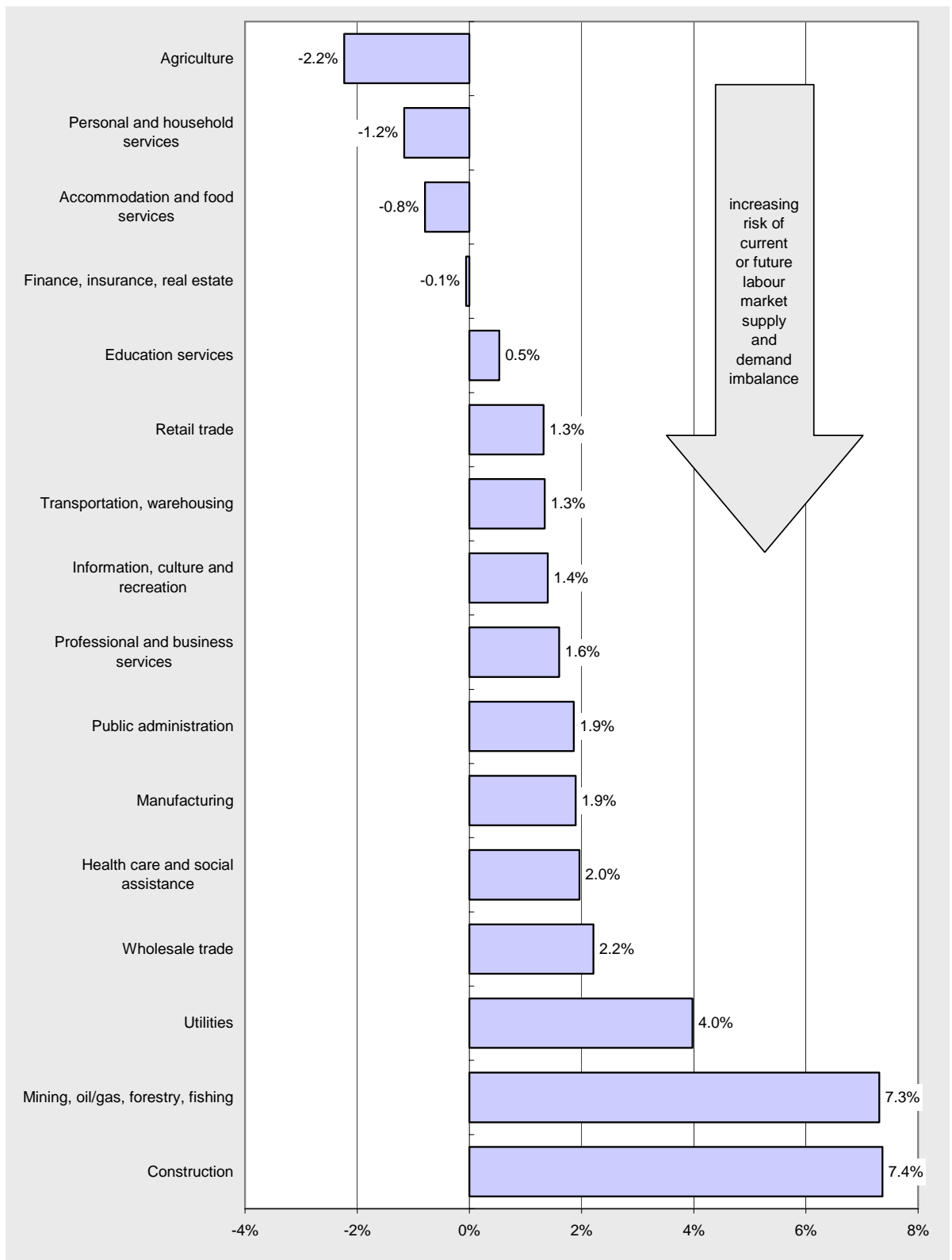
**Table 4.1 Indicators of Current or Future Labour Market Supply and Demand Imbalances**

	Average annual employment growth from 2002 to 2008		Hourly gross wage rate in 2008		Average annual growth in wage rates, 2002 to 2008		Ratio of older to younger workers**, 2008		% post-secondary graduates, 2008	
	Value	Rank*	Value	Rank*	Value	Rank*	Value	Rank*	Value	Rank*
Agriculture	-2.2%	16	\$15.83	3	5.0%	1	248%	1	33%	13
Mining, oil/gas, forestry, fishing	7.3%	2	\$26.99	15	4.0%	8	20%	15	48%	8
Utilities	4.0%	3	\$29.98	16	4.7%	4	55%	5	77%	2
Construction	7.4%	1	\$20.25	7	4.0%	7	34%	10	38%	12
Manufacturing	1.9%	6	\$21.33	11	3.3%	14	32%	12	47%	9
Wholesale trade	2.2%	4	\$20.44	8	3.7%	10	33%	11	43%	11
Retail trade	1.3%	11	\$14.14	2	3.4%	12	26%	13	29%	15
Transportation, warehousing	1.3%	10	\$20.53	9	3.3%	13	58%	3	31%	14
Finance, insurance, real estate	-0.1%	13	\$20.64	10	2.6%	16	48%	8	50%	7
Professional and business services	1.6%	8	\$20.20	6	4.8%	3	50%	7	61%	6
Information, culture and recreation	1.4%	9	\$20.14	5	3.1%	15	24%	14	45%	10
Accommodation and food services	-0.8%	14	\$11.38	1	4.8%	2	16%	16	22%	16
Personal and household services	-1.2%	15	\$17.70	4	4.2%	6	43%	9	62%	5
Education services	0.5%	12	\$25.05	13	3.7%	9	58%	4	79%	1
Health care and social assistance	2.0%	5	\$22.02	12	4.5%	5	63%	2	73%	4
Public administration	1.9%	7	\$26.13	14	3.6%	11	54%	6	76%	3

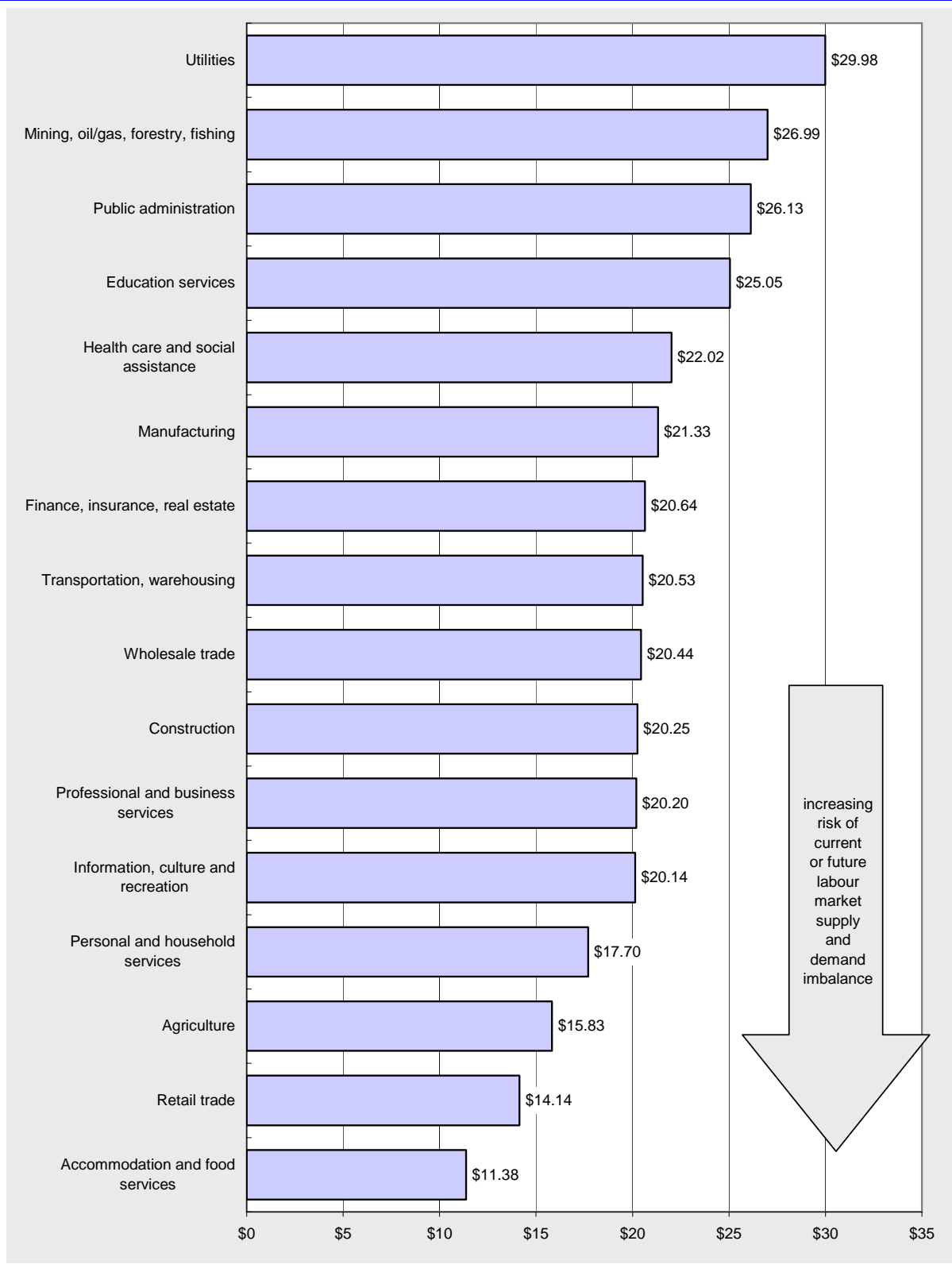
Source: Labour Force Survey Special Tabulation from the microdata file.

\* a lower number is thought to be indicative of a current or future labour market supply or demand imbalance  
 \*\* percentage of those 55 and older relative to those 15 to 34 years of age

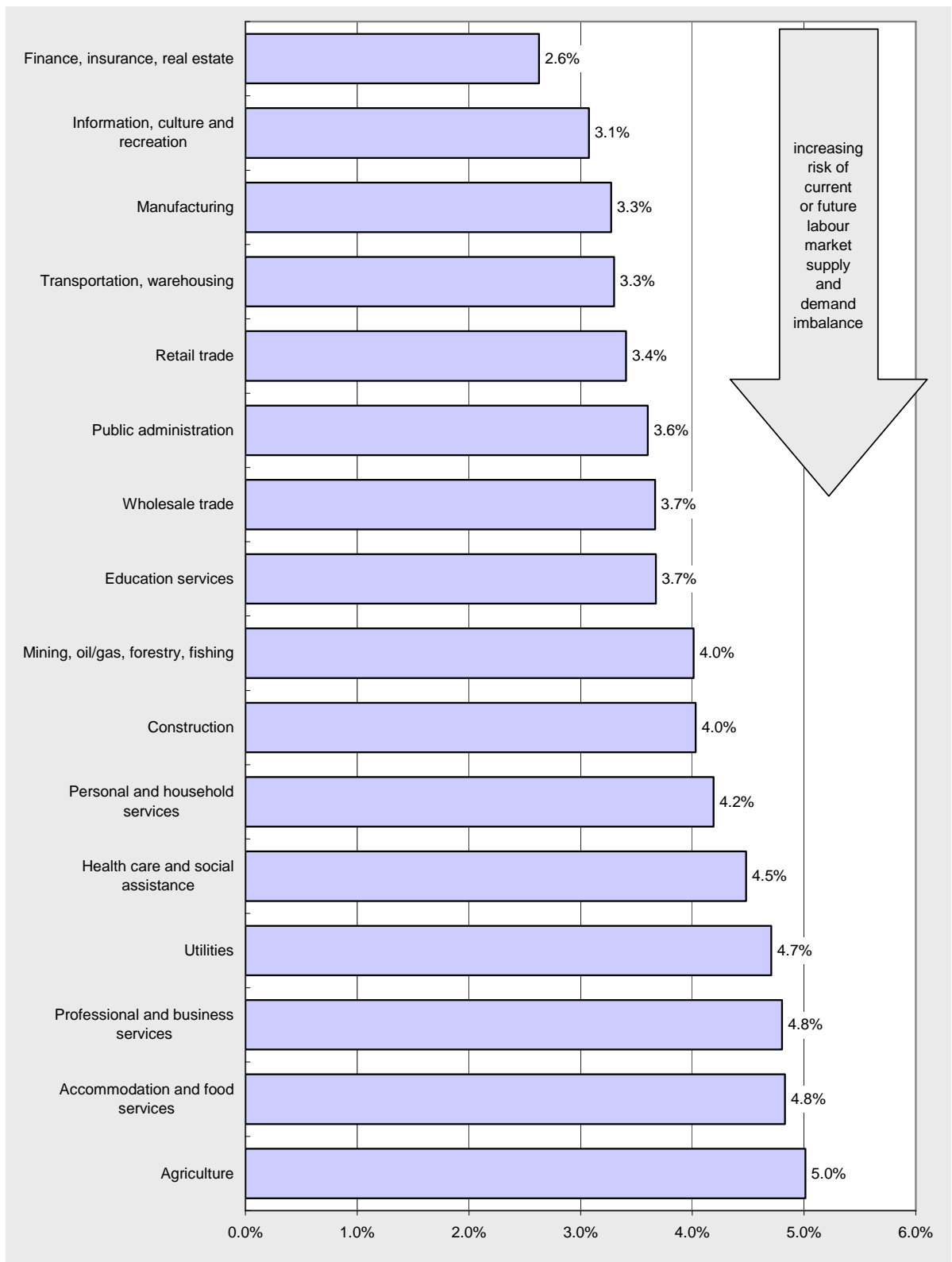
**Figure 4.1 Trends in Employment Growth, 2002 to 2008, by Industry Group, Saskatchewan Off Reserve Population Only**



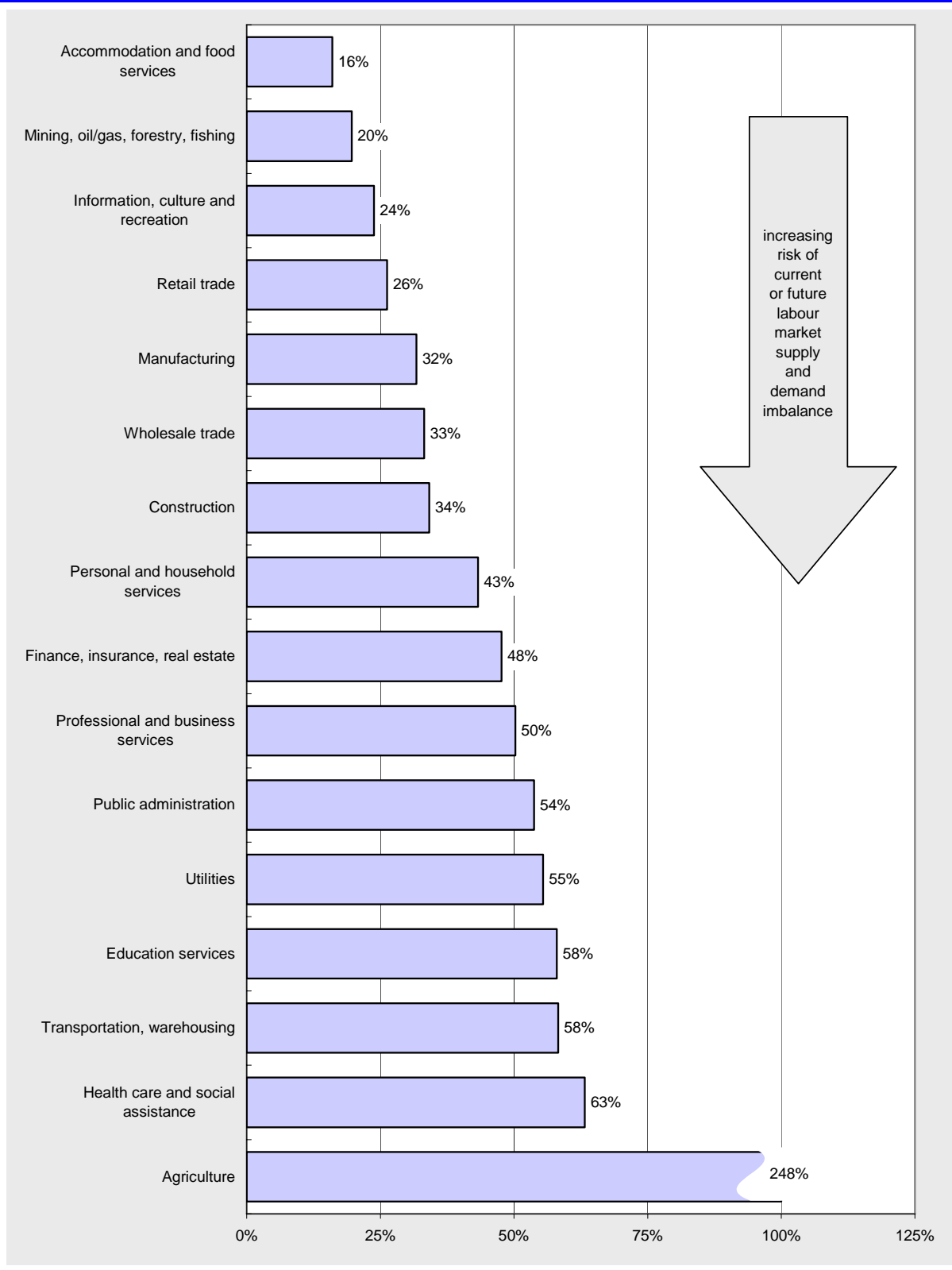
**Figure 4.2 Average Hourly Wage Rate (paid employees only), 2008, by Industry Group, Saskatchewan Off Reserve Population Only**



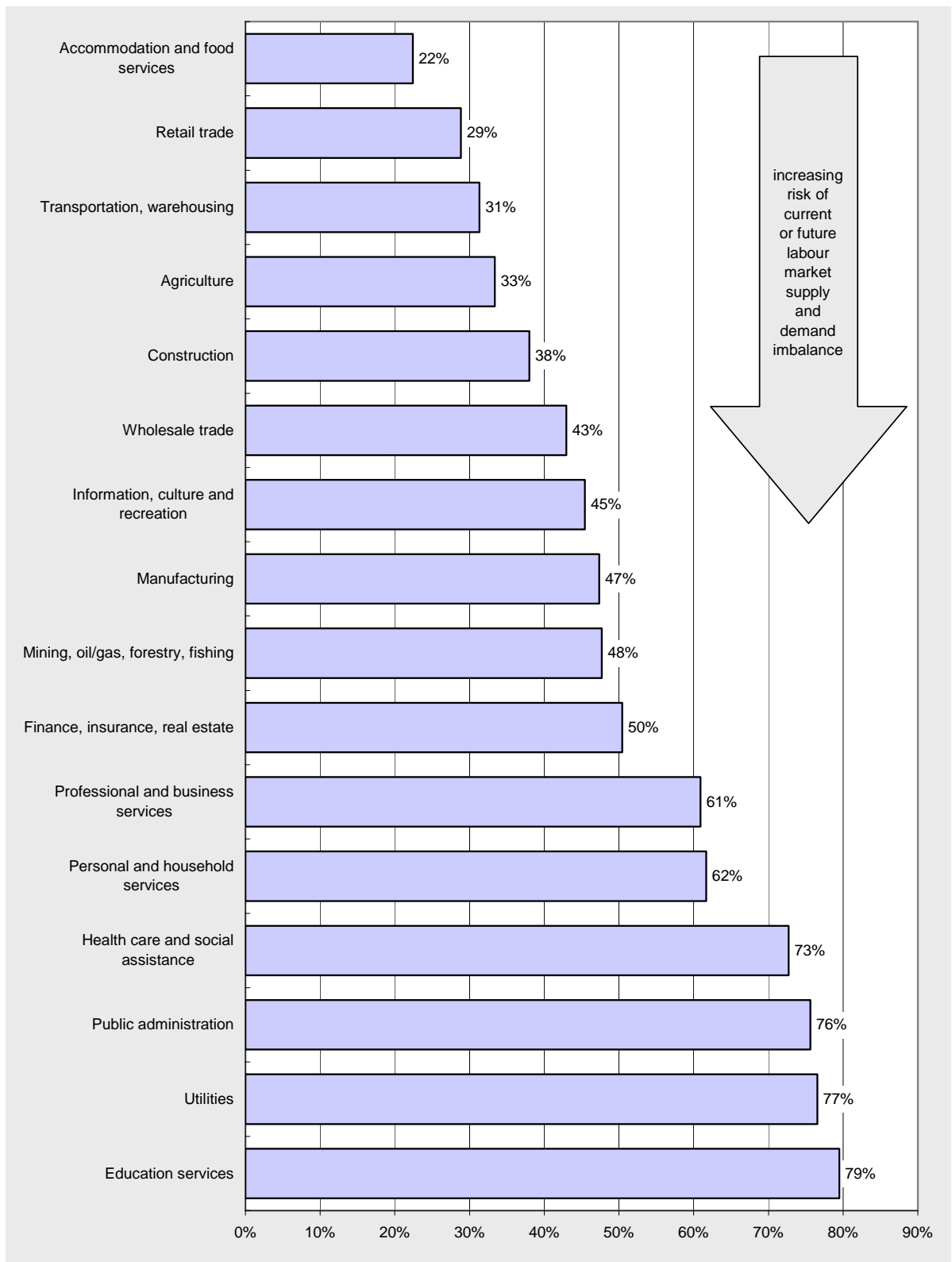
**Figure 4.3 Trend in Average Wage Rate (paid employees only), 2002 to 2008, by Industry Group, Saskatchewan Off Reserve Population Only**



**Figure 4.4 Ratio of Persons 55 and Older to Those Under 35 Years, 2008, by Industry Group, Saskatchewan Off Reserve Population Only**



**Figure 4.5 Post-Secondary Graduates as a Percentage of Employment, 2008, by Industry Group, Saskatchewan Off Reserve Population Only**



This general overview shows that some sectors are currently experiencing or can be expected to experience more difficulties recruiting and retaining workers. Figure 4.6 averages the rankings for the five indicators. The results are summarized below.

### **Agriculture**

Low pay rates and a preponderance of older workers in the current labour force means that primary agriculture is deemed to be at risk for labour market imbalances. This has not been the case in the past because the sector has been shrinking and it won't be in the future if farms continue to get larger and automation continues to reduce the number of employees required.

This sector bears watching because it is one of Saskatchewan's largest, has spinoff effects into transportation, manufacturing, and wholesale trade, and is easily the most important sector in rural Saskatchewan. The province is not well positioned if there is a sudden resurgence in the importance of agriculture.

### **Mining, oil/gas**

In spite of recent growth, this sector is not expected to experience above-average difficulty retaining or recruiting workers in the future because it has relatively high pay rates and a young labour force. This could change as some of the projected new mines come on stream or if there is oil sands development in the north or a sustained drilling program in the Southeast.

This sector bears watching because of the vulnerability to fluctuations in commodity prices and its importance to provincial government revenues.

### **Utilities**

Electricity and natural gas utilities in Saskatchewan are almost exclusively in the public sector. This sector has a moderate risk of labour market imbalances because it has a large number of older workers and because many of the employees require a post-secondary education. On the other hand, the pay rates are high so attracting workers has not been a particular problem in the past.

### **Construction**

This sector is deemed to be at high risk for labour market imbalances because of its recent growth, below-average wage rates, and lack of younger workers. Construction is often a "second job" for those in other industry groups so it has a fairly flexible work force. Labour productivity will help keep demand under control in the future but even a few large projects will exceed the sector's capacity.

This sector is important because the cost and feasibility of most capital investment by other sectors is dependent upon the local construction industry.

### **Manufacturing**

The model suggests that the manufacturing sector is not at risk of a shortage in the near term. Although it has been growing, there are a high number of younger workers in the sector and an ability to train on the job so the industry is not as dependent on post-secondary graduates as some others.

This sector bears watching because many observers feel that the province needs to diversify into more manufacturing and processing of raw materials.

### **Wholesale trade**

In Saskatchewan, this sector is largely comprised of farm machinery, chemical, and fuel dealers and is an important employer in rural Saskatchewan. The model suggests no risk of a general shortage in the near term.

### **Retail trade**

The model suggests no risk of a general shortage in the near term for this sector because employees are young and can be recruited from several sources because relatively few are post-secondary graduates. Low wage rates are a constraint for recruitment and retention.

This sector bears watching because it is, at least anecdotally, currently having difficulty recruiting workers, and because it is a major source of jobs in both rural and urban Saskatchewan.

### **Transportation, warehousing**

This sector has a below-average risk of a supply/demand imbalance in the near term because it is not growing. It does, however, have a relatively high proportion of older workers which will be a constraint for future development.

### **Finance, insurance, real estate**

The model suggests that this sector has a low risk for supply/demand imbalances. Relatively few employees are post-secondary graduates and wage rates are high but not increasing quickly. The sector is shrinking in Saskatchewan.

### **Professional and business services**

The model suggests that this sector has a high risk for supply/demand imbalances, the highest among the sixteen industry groups, in fact. This is because it is a growing sector with relatively low wage rates that are increasing quickly. An average proportion of employees are older but many require a post-secondary education.

This sector bears watching because poor services in legal, accounting, engineering, and information technology services can limit growth in other sectors. On the other hand, most business and professional services can be readily obtained by out-of-province firms.

### **Information, culture and recreation**

The model suggests that this sector has a low risk for supply/demand imbalances. Wage rates are relatively high and not increasing quickly and there is a large proportion of younger people working in the sector.

### **Accommodation and food services**

This sector has a medium risk for supply/demand imbalances. As with retail trade, workers tend to be young and can be recruited from several sources because relatively few are post-secondary graduates. Low wage rates are a constraint for recruitment and retention.

This sector bears watching because it is, at least anecdotally, currently having difficulty recruiting workers, and because it is a major source of jobs in rural Saskatchewan.

### **Personal and household services**

The methodology suggests that this sector has a relatively high risk for supply/demand imbalances because of the recent growth in wage rates. The sector is shrinking, however, so there may be limited demand in the future.

### **Education services**

The methodology suggests that this sector has a medium risk for supply/demand imbalances. The sector has the highest proportion of post-secondary graduates among the sixteen and a large proportion of older workers. On the other hand, wage rates are high and the sector is not growing quickly.

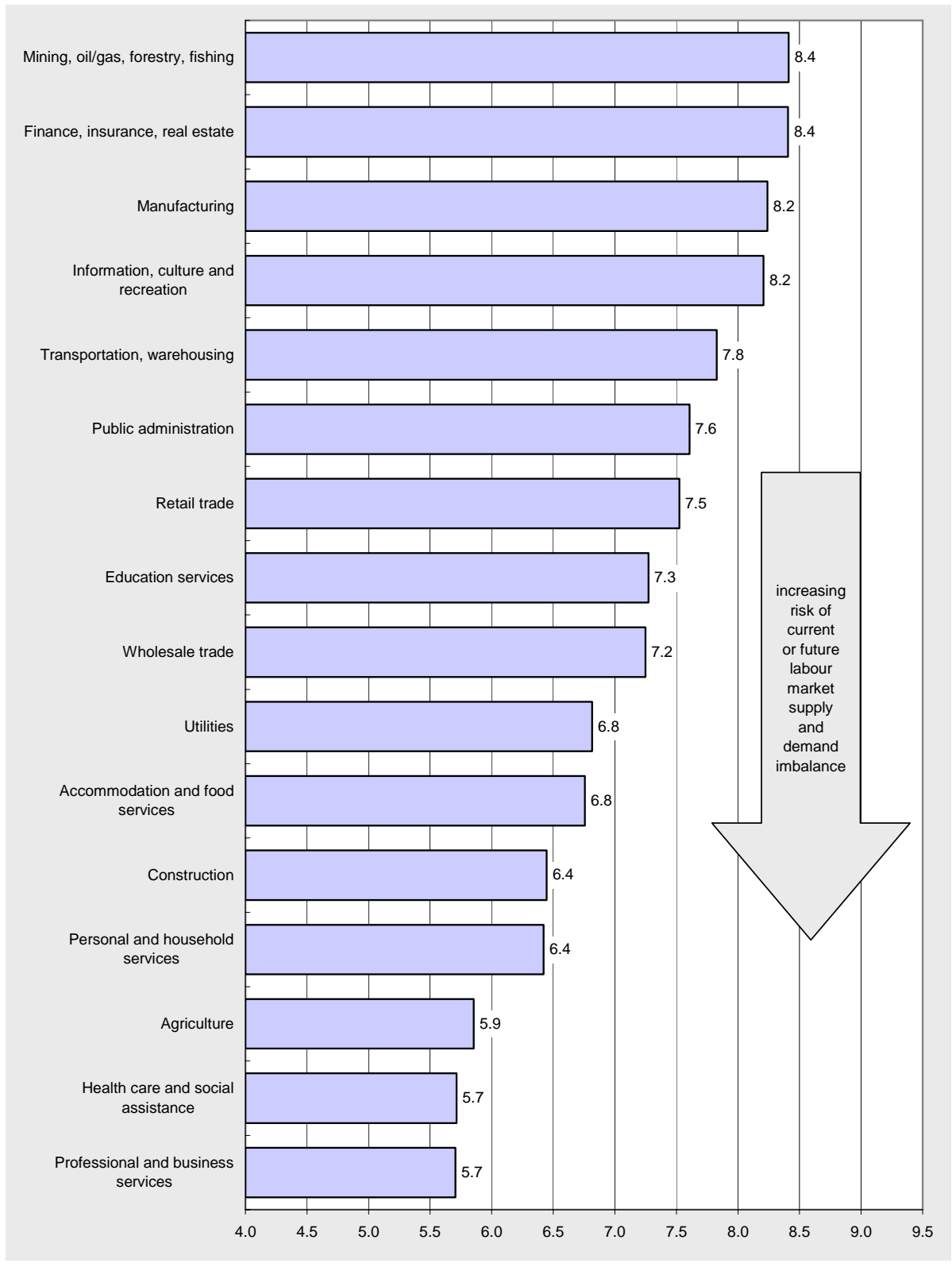
**Health care and social assistance**

The model suggests that this sector has the second highest risk for supply/demand imbalances. The sector has a high proportion of older workers, the fastest growing wage rates in spite of the fact that they are already high, and a high proportion of post-secondary graduates among the employees.

**Public Administration**

In spite of the fact that this sector has a preponderance of older workers and an above-average need for post-secondary graduates, the risk of a supply/demand imbalance is lower because the sector is not expanding and because wage rates are relatively high.

**Figure 4.6 Average Ranking of Six Indicators of Current or Future Labour Market Imbalances**



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**Appendix A**  
**Employment Demand Calculation**

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**Table A1: Economic Output**

Year	GDP in millions of chained \$2002					Annual Change				
	Canada	B.C.	Alberta	Sask	Manitoba	Canada	B.C.	Alberta	Sask	Manitoba
1987	\$764,664	\$91,503	\$88,135	\$26,259	\$28,316	4.3%	6.2%	2.1%	0.4%	1.5%
1988	\$802,702	\$96,824	\$95,173	\$25,362	\$28,167	5.0%	5.8%	8.0%	-3.4%	-0.5%
1989	\$823,728	\$100,007	\$96,522	\$25,977	\$28,916	2.6%	3.3%	1.4%	2.4%	2.7%
1990	\$825,318	\$101,408	\$98,683	\$27,793	\$29,629	0.2%	1.4%	2.2%	7.0%	2.5%
1991	\$808,051	\$101,593	\$99,169	\$28,098	\$28,634	-2.1%	0.2%	0.5%	1.1%	-3.4%
1992	\$815,123	\$104,216	\$100,085	\$27,020	\$28,933	0.9%	2.6%	0.9%	-3.8%	1.0%
1993	\$834,185	\$108,874	\$107,266	\$28,797	\$29,038	2.3%	4.5%	7.2%	6.6%	0.4%
1994	\$874,261	\$111,945	\$113,942	\$30,047	\$30,171	4.8%	2.8%	6.2%	4.3%	3.9%
1995	\$898,814	\$114,620	\$117,518	\$30,382	\$30,253	2.8%	2.4%	3.1%	1.1%	0.3%
1996	\$913,364	\$117,442	\$119,905	\$31,267	\$31,182	1.6%	2.5%	2.0%	2.9%	3.1%
1997	\$951,962	\$121,177	\$128,018	\$32,486	\$32,343	4.2%	3.2%	6.8%	3.9%	3.7%
1998	\$990,968	\$122,766	\$134,750	\$33,868	\$33,716	4.1%	1.3%	5.3%	4.3%	4.2%
1999	\$1,045,786	\$126,708	\$136,603	\$33,936	\$34,248	5.5%	3.2%	1.4%	0.2%	1.6%
2000	\$1,100,515	\$132,578	\$144,886	\$34,820	\$35,708	5.2%	4.6%	6.1%	2.6%	4.3%
2001	\$1,120,146	\$133,403	\$147,394	\$34,487	\$35,996	1.8%	0.6%	1.7%	-1.0%	0.8%
2002	\$1,152,905	\$138,193	\$150,594	\$34,343	\$36,559	2.9%	3.6%	2.2%	-0.4%	1.6%
2003	\$1,174,592	\$141,435	\$155,359	\$35,921	\$37,059	1.9%	2.3%	3.2%	4.6%	1.4%
2004	\$1,211,239	\$146,541	\$163,564	\$37,741	\$37,861	3.1%	3.6%	5.3%	5.1%	2.2%
2005	\$1,246,064	\$152,998	\$171,416	\$38,970	\$38,783	2.9%	4.4%	4.8%	3.3%	2.4%
2006	\$1,284,819	\$159,733	\$181,791	\$38,860	\$40,344	3.1%	4.4%	6.1%	-0.3%	4.0%
2007	\$1,319,681	\$164,583	\$187,493	\$39,834	\$41,662	2.7%	3.0%	3.1%	2.5%	3.3%

**Average annual growth rates**

1987-92	1.3%	2.6%	2.6%	0.6%	0.4%
1992-97	3.2%	3.1%	5.0%	3.8%	2.3%
1997-02	3.9%	2.7%	3.3%	1.1%	2.5%
2002-07	2.7%	3.6%	4.5%	3.0%	2.6%
1987-07	2.8%	3.0%	3.8%	2.1%	1.9%

**Maximum and Minimum five year growth periods**

	Maximum		Minimum	
	Period	Growth	Period	Growth
Canada	1996-01	4.2%	1988-03	0.8%
B.C.	2001-06	3.7%	1989-94	2.3%
Alberta	1992-97	5.0%	1988-93	2.4%
Sask	1992-97	3.8%	1987-92	0.6%
Manitoba	1995-00	3.4%	1990-95	0.4%

Source: Statistics Canada, Provincial Economic Accounts, CANSIM Table 384-0013

**Table A2: Employment and Hours of Work**

Year	Average monthly employment (000)					Millions of hours worked (actual, all jobs)*				
	Canada	B.C.	Alberta	Sask	Manitoba	Canada	B.C.	Alberta	Sask	Manitoba
1987	12,333.0	1,377.7	1,187.7	461.9	505.2	22,222	2,413	2,210	863	910
1988	12,709.6	1,434.6	1,222.3	462.8	506.3	23,287	2,580	2,303	865	921
1989	12,996.2	1,508.3	1,251.3	456.4	512.7	24,126	2,778	2,416	882	956
1990	13,086.4	1,559.6	1,276.8	454.2	513.8	23,935	2,831	2,478	875	946
1991	12,857.4	1,577.5	1,284.4	453.3	506.8	23,068	2,798	2,436	871	910
1992	12,730.9	1,617.2	1,280.0	448.0	499.9	22,478	2,831	2,372	845	887
1993	12,792.7	1,668.0	1,288.7	448.5	503.8	22,880	2,939	2,406	849	909
1994	13,058.7	1,743.2	1,324.5	454.5	507.7	23,660	3,074	2,526	872	928
1995	13,295.4	1,785.6	1,364.9	458.0	516.5	23,923	3,138	2,588	870	938
1996	13,421.4	1,816.4	1,405.1	456.8	517.4	24,319	3,200	2,694	882	949
1997	13,706.0	1,860.5	1,451.4	466.2	525.6	24,850	3,262	2,778	899	973
1998	14,046.2	1,858.4	1,509.9	470.5	534.2	25,236	3,204	2,802	888	980
1999	14,406.7	1,894.4	1,544.0	471.6	541.4	26,097	3,268	2,881	889	989
2000	14,764.2	1,931.3	1,584.0	473.5	552.3	26,927	3,404	3,015	898	1,015
2001	14,946.2	1,921.6	1,630.9	460.3	554.3	26,733	3,289	3,098	860	1,006
2002	15,310.4	1,965.0	1,670.8	468.3	567.2	27,190	3,337	3,109	861	1,012
2003	15,672.3	2,014.7	1,716.7	476.1	570.3	27,349	3,402	3,172	863	1,013
2004	15,947.0	2,062.7	1,757.5	479.7	576.6	28,109	3,544	3,266	871	1,025
2005	16,169.7	2,130.5	1,784.4	483.5	580.3	28,738	3,699	3,368	896	1,038
2006	16,484.3	2,195.5	1,870.7	491.6	587.0	29,079	3,794	3,521	912	1,049
2007	16,866.4	2,266.3	1,959.4	501.8	596.5	29,828	3,965	3,732	938	1,075
<b>Average annual growth rates</b>										
1987-92	0.6%	3.3%	1.5%	-0.6%	-0.2%	0.2%	3.3%	1.4%	-0.4%	-0.5%
1992-97	1.5%	2.8%	2.5%	0.8%	1.0%	2.0%	2.9%	3.2%	1.2%	1.9%
1997-02	2.2%	1.1%	2.9%	0.1%	1.5%	1.8%	0.5%	2.3%	-0.9%	0.8%
2002-07	2.0%	2.9%	3.2%	1.4%	1.0%	1.9%	3.5%	3.7%	1.7%	1.2%
1987-07	1.6%	2.5%	2.5%	0.4%	0.8%	1.5%	2.5%	2.7%	0.4%	0.8%

Source: Labour Force Historical Review CDROM, Table CD1T01AN for employment and Table CD1T10AN for hours of work.

\* This is a 12-month average of the total number of hours actually worked by all employed persons in the Labour Force Survey reference weeks multiplied by 52. It is only a proxy for the actual hours worked during the year.

**Table A3: Output per Employed Persons**

Year	Output per employed person					Annual Change				
	Canada	B.C.	Alberta	Sask	Manitoba	Canada	B.C.	Alberta	Sask	Manitoba
1987	\$62,001	\$66,417	\$74,206	\$56,850	\$56,049	...	...	...	...	...
1988	\$63,157	\$67,492	\$77,864	\$54,801	\$55,633	1.9%	1.6%	4.9%	-3.6%	-0.7%
1989	\$63,382	\$66,304	\$77,137	\$56,917	\$56,399	0.4%	-1.8%	-0.9%	3.9%	1.4%
1990	\$63,067	\$65,022	\$77,289	\$61,191	\$57,666	-0.5%	-1.9%	0.2%	7.5%	2.2%
1991	\$62,847	\$64,401	\$77,210	\$61,985	\$56,500	-0.3%	-1.0%	-0.1%	1.3%	-2.0%
1992	\$64,027	\$64,442	\$78,191	\$60,313	\$57,878	1.9%	0.1%	1.3%	-2.7%	2.4%
1993	\$65,208	\$65,272	\$83,236	\$64,207	\$57,638	1.8%	1.3%	6.5%	6.5%	-0.4%
1994	\$66,949	\$64,218	\$86,026	\$66,110	\$59,427	2.7%	-1.6%	3.4%	3.0%	3.1%
1995	\$67,603	\$64,191	\$86,100	\$66,336	\$58,573	1.0%	-0.0%	0.1%	0.3%	-1.4%
1996	\$68,053	\$64,656	\$85,336	\$68,448	\$60,267	0.7%	0.7%	-0.9%	3.2%	2.9%
1997	\$69,456	\$65,131	\$88,203	\$69,683	\$61,535	2.1%	0.7%	3.4%	1.8%	2.1%
1998	\$70,551	\$66,060	\$89,244	\$71,983	\$63,115	1.6%	1.4%	1.2%	3.3%	2.6%
1999	\$72,590	\$66,886	\$88,473	\$71,959	\$63,258	2.9%	1.2%	-0.9%	-0.0%	0.2%
2000	\$74,539	\$68,647	\$91,468	\$73,537	\$64,653	2.7%	2.6%	3.4%	2.2%	2.2%
2001	\$74,945	\$69,423	\$90,376	\$74,923	\$64,940	0.5%	1.1%	-1.2%	1.9%	0.4%
2002	\$75,302	\$70,327	\$90,133	\$73,335	\$64,455	0.5%	1.3%	-0.3%	-2.1%	-0.7%
2003	\$74,947	\$70,202	\$90,499	\$75,448	\$64,982	-0.5%	-0.2%	0.4%	2.9%	0.8%
2004	\$75,954	\$71,043	\$93,066	\$78,676	\$65,663	1.3%	1.2%	2.8%	4.3%	1.0%
2005	\$77,062	\$71,813	\$96,064	\$80,600	\$66,833	1.5%	1.1%	3.2%	2.4%	1.8%
2006	\$77,942	\$72,755	\$97,178	\$79,048	\$68,729	1.1%	1.3%	1.2%	-1.9%	2.8%
2007	\$78,243	\$72,622	\$95,689	\$79,382	\$69,844	0.4%	-0.2%	-1.5%	0.4%	1.6%

**Average annual growth rates**

1987-92	0.6%	-0.6%	1.1%	1.2%	0.6%
1992-97	1.6%	0.2%	2.4%	2.9%	1.2%
1997-02	1.6%	1.5%	0.4%	1.0%	0.9%
2002-07	0.8%	0.6%	1.2%	1.6%	1.6%
1987-07	1.2%	0.4%	1.3%	1.7%	1.1%

**Maximum and Minimum five year growth periods**

	Maximum		Minimum	
	Period	Growth	Period	Growth
Canada	1995-00	2.0%	1988-93	0.6%
B.C.	1997-02	1.5%	1988-93	-0.7%
Alberta	1992-97	0.2%	1998-03	1.2%
Sask	1988-93	1.3%	1998-03	0.3%
Manitoba	1995-00	2.1%	1990-95	1.6%

Source: Tables A1 and A2

**Table A4: Projected GDP and Output per Employed Persons**

Year	Real GDP (actual and projected) in \$ millions				Real GDP per Employed Person		
	Actual	Projected annual growth rates			Actual	Projected	
		Low (1%)	Med (2.5%)	High (4%)		Low (1.1%)	High (1.6%)
1987	\$26,259	...	...	...	\$56,850	...	...
1988	\$25,362	...	...	...	\$54,801	...	...
1989	\$25,977	...	...	...	\$56,917	...	...
1990	\$27,793	...	...	...	\$61,191	...	...
1991	\$28,098	...	...	...	\$61,985	...	...
1992	\$27,020	...	...	...	\$60,313	...	...
1993	\$28,797	...	...	...	\$64,207	...	...
1994	\$30,047	...	...	...	\$66,110	...	...
1995	\$30,382	...	...	...	\$66,336	...	...
1996	\$31,267	...	...	...	\$68,448	...	...
1997	\$32,486	...	...	...	\$69,683	...	...
1998	\$33,868	...	...	...	\$71,983	...	...
1999	\$33,936	...	...	...	\$71,959	...	...
2000	\$34,820	...	...	...	\$73,537	...	...
2001	\$34,487	...	...	...	\$74,923	...	...
2002	\$34,343	...	...	...	\$73,335	...	...
2003	\$35,921	...	...	...	\$75,448	...	...
2004	\$37,741	...	...	...	\$78,676	...	...
2005	\$38,970	...	...	...	\$80,600	...	...
2006	\$38,860	...	...	...	\$79,048	...	...
2007	\$39,834	...	...	...	\$79,382	...	...
2008		\$40,232	\$40,830	\$41,427		\$80,255	\$80,652
2009		\$40,635	\$41,851	\$43,084		\$81,138	\$81,943
2010		\$41,041	\$42,897	\$44,808		\$82,031	\$83,254
2011		\$41,451	\$43,969	\$46,600		\$82,933	\$84,586
2012		\$41,866	\$45,069	\$48,464		\$83,845	\$85,939
2013		\$42,285	\$46,195	\$50,403		\$84,768	\$87,314
2014		\$42,707	\$47,350	\$52,419		\$85,700	\$88,711
2015		\$43,135	\$48,534	\$54,516		\$86,643	\$90,131
2016		\$43,566	\$49,747	\$56,696		\$87,596	\$91,573
2017		\$44,002	\$50,991	\$58,964		\$88,559	\$93,038
2018		\$44,442	\$52,266	\$61,323		\$89,534	\$94,527
2019		\$44,886	\$53,572	\$63,776		\$90,518	\$96,039
2020		\$45,335	\$54,912	\$66,327		\$91,514	\$97,576
2021		\$45,788	\$56,284	\$68,980		\$92,521	\$99,137
2022		\$46,246	\$57,692	\$71,739		\$93,539	\$100,723

Source: Tables A1 and A3

**Table A5: Six Scenarios for Employment Demand (all figures in thousands)**

Year	Medium Growth in Output per Employee (1.1%)				High Growth in Output per Employee (1.6%)			
	Actual	Projected annual GDP growth rates			Actual	Projected annual GDP growth rates		
		Low (1%)	Med (2.5%)	High (4%)		Low (1%)	Med (2.5%)	High (4%)
1995	458.0	...	...	...	458.0	...	...	...
1996	456.8	...	...	...	456.8	...	...	...
1997	466.2	...	...	...	466.2	...	...	...
1998	470.5	...	...	...	470.5	...	...	...
1999	471.6	...	...	...	471.6	...	...	...
2000	473.5	...	...	...	473.5	...	...	...
2001	460.3	...	...	...	460.3	...	...	...
2002	468.3	...	...	...	468.3	...	...	...
2003	476.1	...	...	...	476.1	...	...	...
2004	479.7	...	...	...	479.7	...	...	...
2005	483.5	...	...	...	483.5	...	...	...
2006	491.6	...	...	...	491.6	...	...	...
2007	501.8	...	...	...	501.8	...	...	...
2008		501.3	508.7	516.2		498.8	506.2	513.7
2009		500.8	515.8	531.0		495.9	510.7	525.8
2010		500.3	522.9	546.2		493.0	515.3	538.2
2011		499.8	530.2	561.9		490.1	519.8	550.9
2012		499.3	537.5	578.0		487.2	524.4	563.9
2013		498.8	545.0	594.6		484.3	529.1	577.3
2014		498.3	552.5	611.7		481.4	533.8	590.9
2015		497.8	560.2	629.2		478.6	538.5	604.9
2016		497.4	567.9	647.2		475.8	543.3	619.1
2017		496.9	575.8	665.8		472.9	548.1	633.8
2018		496.4	583.8	684.9		470.1	552.9	648.7
2019		495.9	591.8	704.6		467.4	557.8	664.1
2020		495.4	600.0	724.8		464.6	562.8	679.7
2021		494.9	608.3	745.6		461.9	567.7	695.8
2022		494.4	616.8	766.9		459.1	572.8	712.2
<b>Average annual change in demand</b>								
1992-97	3.6	...	...	...	3.6	...	...	...
1997-02	0.4	...	...	...	0.4	...	...	...
2002-07	6.7	...	...	...	6.7	...	...	...
2007-12	...	-1.5	7.1	15.2	...	-3.9	4.5	12.4
2012-17	...	-0.5	7.7	17.6	...	-2.8	4.7	14.0
2017-22	...	-0.5	8.2	20.2	...	-2.8	4.9	15.7
1987-2007	2.0	...	...	...	...	...	...	...
2007-2022	...	-0.5	7.7	17.9	...	-2.8	4.8	14.2

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**APPENDIX B**  
**SUMMARY OF INDUSTRY GROUPS**

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The industry categories used in this report are as follows. If an establishment is engaged in more than one activity, it is classified according to the one with the greatest revenue.

Agriculture	This category includes grain and cattle farming, market gardens, intensive livestock operations, and services related to agriculture such as crop spraying, custom harvesters, seed cleaning, and animal breeding services.
Mining, oil/gas, forestry, fishing	Sometimes called the “resource” sector, this category includes oil and gas exploration and production, mining, and contract drilling. Logging and forestry activities are also included as is commercial fishing and hunting.
Utilities	Only water, natural gas, and electricity generation and distribution are considered as utilities. Telecommunications is included in the “Information, culture, and recreation” group.
Construction	<p>This sector comprises establishments primarily engaged in constructing, repairing and renovating buildings and engineering works, and in subdividing and developing land. These establishments may operate on their own account or under contract to other establishments. They may produce complete projects or subcontract work to other establishments.</p> <p>Firms involved in building natural gas and other pipelines are included.</p>
Manufacturing	<p>Manufacturing establishments take raw materials and transform them into finished products, in the sense that they are ready to be used or consumed, or semi-finished products, in the sense of becoming a raw material for an establishment to use in further manufacturing. Manufacturing establishments may own the materials which they transform or they may transform materials owned by other establishments.</p> <p>Certain activities involving the transformation of goods are classified in other sectors. Some examples are crop drying, logging, and various activities conducted by retailers, such as meat cutting and the assembly of products such as bicycles and computers.</p> <p>In Saskatchewan, this category includes traditional manufacturing activities as well as food processing (meat processing plants and grain milling). Oil refineries are also considered as manufacturing establishments.</p>

Wholesale trade	<p>The wholesaling process is generally an intermediate step in the distribution of merchandise; many wholesalers are therefore organized to sell merchandise in large quantities to retailers, and business and institutional clients. However, some wholesalers, in particular those that supply non-consumer capital goods, sell merchandise in single units to final users.</p> <p>Wholesale agents and brokers who buy and sell merchandise owned by others on a fee or commission basis are included even if they do not take title to the goods they buy or sell.</p> <p>Farm machinery dealers and lumber yards are considered as wholesale establishments.</p>
Retail trade	<p>This category includes establishments that sell merchandise (not services) to the general public. Non-store retailers are included in this category as are catalogue sales showrooms, gasoline service stations, new and used car dealers, and mobile home dealers.</p>
Transportation and warehousing	<p>This category includes businesses involved in moving either goods or people and so includes trucking, couriers, Canada Post, rail transportation, pipelines, and grain handling. Airports and airline companies are included. Grain handling companies are included in this category.</p>
Finance, insurance, and real estate	<p>This category includes both deposit-taking financial institutions such as banks and credit unions as well as financial management firms. Insurance companies, insurance agencies, and real estate agencies are also included.</p>
Professional and business services	<p>These kinds of establishments provide services to businesses. The category includes, for example, management and computer consulting firms, law offices, accounting services, architectural, and engineering services. Also included are head offices and companies that provide waste management or cleaning services to buildings.</p>
Information, culture, and recreation	<p>This is a disparate group of industries involved in services such as the media and telecommunications, museums, theatre, dance and other cultural organizations, and recreational facilities such as casinos and amusement parks.</p>
Accommodation and food services	<p>These are establishments primarily engaged in providing accommodation services such as hotels, motels, vacation farms, and campgrounds or food and beverage services such as lounges, restaurants, and catering services.</p>

Personal and household services	<p>This is a disparate group of establishments that provide personal services or services to maintain households:</p> <ul style="list-style-type: none"> <li>• repair services for motor vehicles, appliances, and other household goods;</li> <li>• religious organizations;</li> <li>• professional associations, unions, employee and business associations, social advocacy organizations;</li> <li>• home maintenance services such as lawn care;</li> <li>• barbers and beauty salons;</li> <li>• laundry and dry cleaning establishments; and</li> <li>• funeral parlours.</li> </ul>
Education service	<p>Education services include elementary and secondary education, post-secondary institutions and private vocational schools.</p>
Health and social assistance	<p>Health and social services includes establishments that are involved in the delivery of health services such as hospitals, physicians or dentists offices, or ambulances or social services such as special care homes, child care services, or services for those with a disability.</p>
Public administration	<p>Public includes all levels of government – federal, provincial, town, municipal, and First Nation – but does not include government enterprises such as crown</p>

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**Appendix C**  
**Selected Characteristics of the Employed in Saskatchewan**

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### Basic Labour Force Status, Off Reserve Population

	<u>2002</u>	<u>2003</u>	<u>2004</u>	<u>2005</u>	<u>2006</u>	<u>2007</u>	<u>2008</u>	<u>Trend*</u>
Employed	468,300	476,100	479,700	483,500	491,600	501,800	512,700	1.4%
Unemployed	28,200	28,200	27,000	25,900	24,000	22,000	22,000	-4.9%
<u>Not in the labour force</u>	<u>246,300</u>	<u>239,100</u>	<u>239,100</u>	<u>239,000</u>	<u>230,900</u>	<u>227,600</u>	<u>232,400</u>	<u>-1.1%</u>
Total population 15 and Older	742,700	743,400	745,900	748,400	746,400	751,400	767,100	0.4%

### Employed Labour Force Off Reserve

	Employment							<u>Trend*</u>
	<u>2002</u>	<u>2003</u>	<u>2004</u>	<u>2005</u>	<u>2006</u>	<u>2007</u>	<u>2008</u>	
<b>Gender</b>								
Men	253,400	254,300	256,400	259,500	262,400	269,900	274,800	1.4%
<u>Women</u>	<u>214,800</u>	<u>221,800</u>	<u>223,300</u>	<u>224,000</u>	<u>229,200</u>	<u>231,900</u>	<u>237,900</u>	<u>1.5%</u>
Both Sexes	468,300	476,100	479,700	483,500	491,600	501,800	512,700	1.4%
<b>Age Group</b>								
15 to 19	35,400	35,900	34,100	34,500	36,800	36,600	37,600	1.1%
20 to 24	46,900	48,600	50,900	51,000	52,600	54,600	55,300	2.7%
25 to 29	46,200	46,600	47,800	48,500	49,600	50,700	53,500	2.3%
30 to 34	45,400	45,600	45,200	45,900	46,500	46,400	49,500	1.2%
35 to 39	55,000	51,200	49,700	47,700	46,500	47,000	49,500	-2.1%
40 to 44	64,900	65,100	63,600	62,100	59,500	58,200	52,600	-3.3%
45 to 49	60,600	61,700	64,800	61,200	64,700	65,000	64,000	0.9%
50 to 54	48,700	52,000	51,600	56,700	55,300	59,400	62,100	3.7%
55 to 59	32,900	34,700	36,300	38,700	40,000	41,900	44,400	4.8%
60 to 64	17,700	19,500	19,500	19,900	22,200	24,000	25,500	5.8%
65 to 69	7,500	7,500	7,400	9,100	9,100	9,500	10,800	6.3%
<u>70 and older</u>	<u>7,000</u>	<u>7,800</u>	<u>8,700</u>	<u>8,200</u>	<u>8,700</u>	<u>8,500</u>	<u>7,900</u>	<u>1.7%</u>
All ages	468,300	476,100	479,700	483,500	491,600	501,800	512,700	1.4%
<b>Legal Marital Status</b>								
Married	271,000	279,400	279,000	281,800	275,800	282,200	285,700	0.6%
Common law	34,100	33,300	36,500	38,800	44,000	43,900	47,600	6.1%
Widowed/separated/divorced	36,400	36,400	37,800	35,700	40,300	40,600	41,500	2.4%
<u>Single, never married</u>	<u>126,700</u>	<u>127,000</u>	<u>126,300</u>	<u>127,200</u>	<u>131,500</u>	<u>135,000</u>	<u>137,900</u>	<u>1.5%</u>
Total	468,300	476,100	479,700	483,500	491,600	501,800	512,700	1.4%
<b>School Attendance</b>								
Not a student	418,600	426,000	430,200	431,400	438,300	446,900	456,500	1.3%
<u>Student</u>	<u>35,200</u>	<u>34,800</u>	<u>33,300</u>	<u>34,900</u>	<u>35,400</u>	<u>36,900</u>	<u>37,500</u>	<u>1.3%</u>
Total	453,800	460,800	463,600	466,200	473,700	483,700	494,100	1.3%
<b>Completed Education</b>								
Less than Grade 12	86,600	82,900	80,400	80,400	85,500	85,300	81,300	-0.3%
Grade 12 only	113,800	111,500	117,100	117,400	121,400	123,900	127,400	2.1%
Some post-secondary	43,500	44,400	46,800	45,100	44,300	45,400	48,600	1.1%
Certificate or diploma	152,500	164,200	159,500	160,700	156,000	163,400	168,300	0.9%
<u>University degree</u>	<u>71,900</u>	<u>73,200</u>	<u>76,000</u>	<u>79,900</u>	<u>84,300</u>	<u>83,700</u>	<u>87,200</u>	<u>3.3%</u>
Total	468,300	476,100	479,700	483,500	491,600	501,800	512,700	1.4%

## Employed Labour Force Off Reserve

	Employment							Trend*
	2002	2003	2004	2005	2006	2007	2008	
<b>Multiple job holder</b>								
No	429,000	437,300	440,900	443,000	450,100	462,300	470,800	1.5%
Yes	<u>39,300</u>	<u>38,800</u>	<u>38,800</u>	<u>40,500</u>	<u>41,500</u>	<u>39,400</u>	<u>41,900</u>	<u>1.1%</u>
Total	468,300	476,100	479,700	483,500	491,600	501,800	512,700	1.4%
<b>Class of worker</b>								
Paid, private sector	110,700	113,700	117,300	119,400	121,000	123,900	127,400	2.2%
Paid, public sector	258,800	263,500	265,900	266,100	274,700	284,800	291,900	2.0%
Self-employed	<u>98,800</u>	<u>98,900</u>	<u>96,400</u>	<u>98,000</u>	<u>95,900</u>	<u>93,000</u>	<u>93,500</u>	<u>-1.1%</u>
Total	468,300	476,100	479,700	483,500	491,600	501,800	512,700	1.4%
<b>Job Permanence (paid workers only)</b>								
Permanent	320,200	332,100	338,400	337,100	346,500	359,100	367,400	2.1%
Seasonal	14,000	12,600	13,000	14,700	13,100	13,800	14,200	0.8%
Contract	20,000	18,000	17,800	19,900	20,500	20,500	20,500	1.7%
Casual	<u>15,300</u>	<u>14,500</u>	<u>14,100</u>	<u>13,700</u>	<u>15,500</u>	<u>15,400</u>	<u>17,200</u>	<u>2.1%</u>
Total	369,500	377,200	383,200	385,500	395,600	408,700	419,200	2.0%
<b>Industry</b>								
Agriculture	48,900	46,600	46,700	46,600	47,800	43,800	41,000	-2.2%
Resources, forestry, hunting	15,400	17,100	19,000	18,600	21,500	22,100	25,200	7.3%
Utilities	4,000	4,100	4,400	4,600	4,500	4,200	5,600	4.0%
Construction	24,800	23,300	24,000	26,300	29,600	32,100	36,800	7.4%
Manufacturing	28,300	27,100	28,800	30,300	29,300	30,700	30,900	1.9%
Wholesale trade	17,800	17,400	17,400	18,100	17,400	19,600	20,100	2.2%
Retail trade	58,600	60,100	59,300	60,200	61,900	62,900	63,400	1.3%
Transportation, warehousing	23,500	22,100	23,200	24,900	25,700	24,600	24,000	1.3%
Finance, insurance, real estate	27,200	28,100	26,700	25,700	25,700	26,600	28,400	-0.1%
Professional & business services	29,400	30,200	30,000	31,400	31,500	32,600	32,100	1.6%
Education services	35,700	39,000	40,400	38,800	38,100	40,200	37,700	0.5%
Health care & social assistance	56,100	57,200	57,700	58,100	59,500	61,700	63,400	2.0%
Information, culture & recreation	17,700	19,800	20,300	20,300	20,200	19,900	20,300	1.4%
Accommodation & food services	31,800	33,100	33,100	29,700	30,200	30,800	32,000	-0.8%
Personal & household services	23,400	24,600	22,800	22,600	21,200	22,400	22,900	-1.2%
Public administration	<u>26,000</u>	<u>26,200</u>	<u>25,800</u>	<u>27,200</u>	<u>27,500</u>	<u>27,700</u>	<u>29,200</u>	<u>1.9%</u>
Total	468,300	476,100	479,700	483,500	491,600	501,800	512,700	1.4%
<b>Union Membership (paid workers only)</b>								
Yes including those covered by a collective agreement	131,900	133,200	135,600	136,700	142,300	142,300	147,300	1.8%
No	<u>237,600</u>	<u>244,000</u>	<u>247,700</u>	<u>248,700</u>	<u>253,300</u>	<u>266,400</u>	<u>272,000</u>	<u>2.1%</u>
Total	369,500	377,200	383,200	385,500	395,600	408,700	419,200	2.0%
<b>Hourly Wage Rates (paid workers only)</b>								
Average hourly wage rate	\$15.83	\$16.42	\$16.94	\$17.28	\$18.11	\$19.00	\$20.34	3.9%
In constant 2008 dollars	\$18.35	\$18.60	\$18.77	\$18.74	\$19.24	\$19.61	\$20.34	1.6%

## Employed Labour Force Off Reserve

	Employment							Trend*
	2002	2003	2004	2005	2006	2007	2008	
<b>Size of Establishment (paid workers only)</b>								
Less than 20 employees	156,100	162,900	159,500	159,500	160,700	165,000	163,000	0.6%
20 to 99 employees	121,900	119,400	129,500	128,300	135,800	140,400	145,100	3.2%
100 to 499 employees	64,200	67,700	63,800	69,900	71,200	74,100	75,300	2.7%
<u>500 or more employees</u>	<u>27,300</u>	<u>27,200</u>	<u>30,400</u>	<u>27,800</u>	<u>27,900</u>	<u>29,200</u>	<u>35,900</u>	<u>3.2%</u>
Total	369,500	377,200	383,200	385,500	395,600	408,700	419,200	2.0%
<b>Hours of Work</b>								
Full time	373,400	380,200	386,100	389,700	400,100	408,000	421,100	1.9%
Part time, voluntary	69,800	72,000	67,600	70,700	70,600	76,100	73,600	1.1%
<u>Part time, involuntary</u>	<u>25,100</u>	<u>23,900</u>	<u>26,000</u>	<u>23,100</u>	<u>20,900</u>	<u>17,600</u>	<u>18,100</u>	<u>-6.4%</u>
Total	468,300	476,100	479,700	483,500	491,600	501,800	512,700	1.4%
<b>Tenure (years with current employer)</b>								
Less than a year	90,800	87,000	87,200	90,000	98,200	106,800	115,600	4.6%
1 to 4.9 years	138,800	142,700	140,000	137,900	136,800	143,700	148,500	0.7%
5 to 19.9 years	153,700	161,300	162,500	164,700	165,800	162,200	158,500	0.4%
<u>20 or more years</u>	<u>84,900</u>	<u>85,100</u>	<u>90,000</u>	<u>90,800</u>	<u>90,900</u>	<u>89,000</u>	<u>90,100</u>	<u>1.0%</u>
Total	468,300	476,100	479,700	483,500	491,600	501,800	512,700	1.4%
<b>Region</b>								
Regina CMA	106,800	106,300	109,200	108,900	109,100	109,800	113,600	0.9%
Saskatoon CMA	117,100	120,400	120,600	126,600	126,900	135,100	138,000	2.7%
Southeast	37,200	38,300	38,000	38,900	37,800	39,200	41,000	1.2%
Swift Current/Moose Jaw region	50,100	52,500	50,300	52,100	54,400	54,400	53,300	1.2%
West central	28,400	30,100	29,000	27,500	28,300	28,900	29,100	-0.2%
East central (incl. Yorkton)	38,600	37,500	39,400	39,800	40,600	41,300	40,000	1.2%
<u>P.A./Northern Saskatchewan</u>	<u>88,000</u>	<u>91,100</u>	<u>92,300</u>	<u>90,300</u>	<u>92,600</u>	<u>92,600</u>	<u>96,400</u>	<u>1.1%</u>
Total	468,300	476,100	479,700	483,500	491,600	501,800	512,700	1.4%

\* The trend is calculated by dividing the slope of the least squares regression line for the period from 2002 to 2007 by the average value from 2002 to 2008. This is similar to the "average annual increase" over the period but this formula removes some of the effects of annual volatility and the specific values of the endpoint .

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**Appendix D**  
**Demographic Trends in Saskatchewan**

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**Table D1 - Components of Population Growth**

<u>July to June:</u>	Population	Natural Increase			Population	<u>Annual Growth</u>
	<u>at start</u>	<u>Births</u>	<u>Deaths</u>	<u>Net</u>	<u>at end</u>	
1971-1972	932,037	15,456	7,563	7,893	920,780	...
1972-1973	920,780	15,280	7,591	7,689	911,936	-1.0%
1973-1974	911,936	14,680	7,806	6,874	908,455	-0.4%
1974-1975	908,455	15,217	7,681	7,536	917,411	1.0%
1975-1976	917,411	15,809	7,765	8,044	931,619	1.5%
1976-1977	931,619	16,328	7,830	8,498	944,801	1.4%
1977-1978	944,801	16,463	7,657	8,806	951,918	0.8%
1978-1979	951,918	16,813	7,318	9,495	959,519	0.8%
1979-1980	959,519	16,906	7,642	9,264	967,356	0.8%
1980-1981	967,356	17,201	7,514	9,687	975,867	0.9%
1981-1982	975,867	17,359	7,822	9,537	987,274	1.2%
1982-1983	987,274	17,856	7,969	9,887	1,001,872	1.5%
1983-1984	1,001,872	17,912	7,675	10,237	1,015,494	1.4%
1984-1985	1,015,494	18,137	7,872	10,265	1,025,469	1.0%
1985-1986	1,025,469	17,911	8,128	9,783	1,029,270	0.4%
1986-1987	1,029,270	17,461	7,862	9,599	1,032,745	0.3%
1987-1988	1,032,745	16,604	8,079	8,525	1,028,012	-0.5%
1988-1989	1,028,012	16,772	7,875	8,897	1,019,222	-0.9%
1989-1990	1,019,222	16,499	8,059	8,440	1,007,114	-1.2%
1990-1991	1,007,114	15,655	7,921	7,734	1,002,686	-0.4%
1991-1992	1,002,686	15,177	8,061	7,116	1,003,956	0.1%
1992-1993	1,003,956	14,631	8,013	6,618	1,006,854	0.3%
1993-1994	1,006,854	14,068	8,273	5,795	1,009,521	0.3%
1994-1995	1,009,521	13,795	8,344	5,451	1,014,126	0.5%
1995-1996	1,014,126	13,392	8,466	4,926	1,019,100	0.5%
1996-1997	1,019,100	13,114	8,886	4,228	1,018,067	-0.1%
1997-1998	1,018,067	12,711	8,859	3,852	1,017,506	-0.1%
1998-1999	1,017,506	12,677	8,851	3,826	1,014,707	-0.3%
1999-2000	1,014,707	12,524	8,939	3,585	1,007,767	-0.7%
2000-2001	1,007,767	12,084	9,001	3,083	1,000,221	-0.7%
2001-2002	1,000,221	11,996	8,650	3,346	996,801	-0.3%
2002-2003	996,801	11,794	8,880	2,914	996,483	-0.0%
2003-2004	996,483	12,121	9,130	2,991	997,447	0.1%
2004-2005	997,447	11,915	8,828	3,087	993,579	-0.4%
2005-2006	993,579	12,178	8,877	3,301	992,122	-0.1%
2006-2007	992,122	12,358	9,114	3,244	999,697	0.8%
2007-2008	999,697	12,674	9,291	3,383	1,015,985	1.6%

**Table D2 - Components of Population Growth**

<u>July to June:</u>	International Migration					<u>Net</u>
	<u>Immig-</u> <u>ration</u>	<u>Emigration</u>	<u>Returning</u> <u>immigrants</u>	<u>Temporary</u> <u>Emigrants</u>	<u>Emigration</u>	
1971-1972	1,479	1,268	811	...	457	1,022
1972-1973	1,555	1,197	723	...	474	1,081
1973-1974	2,194	1,528	712	...	816	1,378
1974-1975	2,514	1,405	706	...	699	1,815
1975-1976	2,604	1,197	676	...	521	2,083
1976-1977	2,380	1,039	600	...	439	1,941
1977-1978	1,906	1,136	580	...	556	1,350
1978-1979	1,673	1,113	569	...	544	1,129
1979-1980	3,722	886	529	...	357	3,365
1980-1981	2,961	808	493	...	315	2,646
1981-1982	2,371	1,008	445	...	563	1,808
1982-1983	1,913	1,110	511	...	599	1,314
1983-1984	1,861	1,244	570	...	674	1,187
1984-1985	2,091	1,201	550	...	651	1,440
1985-1986	1,918	1,215	539	...	676	1,242
1986-1987	2,131	755	235	...	520	1,611
1987-1988	1,990	1,045	327	...	718	1,272
1988-1989	2,228	971	303	...	668	1,560
1989-1990	2,201	938	291	...	647	1,554
1990-1991	2,284	818	256	...	562	1,722
1991-1992	2,538	906	282	401	1,025	1,513
1992-1993	2,563	947	286	402	1,063	1,500
1993-1994	2,283	897	214	403	1,086	1,197
1994-1995	2,191	883	342	401	942	1,249
1995-1996	1,825	976	284	401	1,093	732
1996-1997	1,775	925	279	514	1,160	615
1997-1998	1,599	917	293	513	1,137	462
1998-1999	1,752	1,054	325	514	1,243	509
1999-2000	1,671	956	235	512	1,233	438
2000-2001	1,848	1,215	359	512	1,368	480
2001-2002	1,821	636	248	512	900	921
2002-2003	1,558	566	279	513	800	758
2003-2004	1,894	505	420	512	597	1,297
2004-2005	2,097	567	322	515	760	1,337
2005-2006	2,108	573	322	515	766	1,342
2006-2007	3,095	579	322	515	772	2,323
2007-2008	4,300	600	322	515	793	3,507

**Table D3 - Components of Population Growth**

<u>July to June:</u>	<u>Interprovincial Migration</u>		
	<u>In</u>	<u>Out</u>	<u>Net</u>
1971-1972	19,831	38,826	-18,995
1972-1973	21,167	37,691	-16,524
1973-1974	27,887	38,359	-10,472
1974-1975	29,697	29,000	697
1975-1976	28,299	23,003	5,296
1976-1977	23,691	20,428	3,263
1977-1978	20,637	23,141	-2,504
1978-1979	20,779	23,453	-2,674
1979-1980	20,428	24,992	-4,564
1980-1981	22,603	26,207	-3,604
1981-1982	21,867	21,716	151
1982-1983	20,810	17,409	3,401
1983-1984	18,592	16,315	2,277
1984-1985	16,289	18,163	-1,874
1985-1986	15,639	22,660	-7,021
1986-1987	16,416	22,070	-5,654
1987-1988	14,454	26,818	-12,364
1988-1989	14,216	31,381	-17,165
1989-1990	15,748	35,676	-19,928
1990-1991	16,665	28,448	-11,783
1991-1992	17,796	26,277	-8,481
1992-1993	17,258	23,606	-6,348
1993-1994	16,828	22,259	-5,431
1994-1995	16,814	20,466	-3,652
1995-1996	17,411	19,572	-2,161
1996-1997	16,771	19,565	-2,794
1997-1998	18,697	20,637	-1,940
1998-1999	15,200	19,533	-4,333
1999-2000	14,556	22,503	-7,947
2000-2001	12,985	21,395	-8,410
2001-2002	14,598	23,418	-8,820
2002-2003	15,172	20,313	-5,141
2003-2004	14,551	19,072	-4,521
2004-2005	13,431	22,946	-9,515
2005-2006	13,735	20,818	-7,083
2006-2007	19,037	17,488	1,549
2007-2008	29,802	21,735	8,067

**Table D4 - Labour Force Participation Rates by Age Group, Men, Off Reserve Only**

	Men						Total
	<u>15 to 24</u>	<u>25 to 34</u>	<u>35 to 44</u>	<u>45 to 54</u>	<u>55 to 64</u>	<u>65 plus</u>	
1976	76.1%	95.1%	96.2%	94.3%	77.0%	22.9%	77.5%
1977	78.2%	96.6%	96.5%	94.7%	80.0%	22.7%	78.9%
1978	78.2%	96.9%	96.5%	94.5%	79.3%	23.4%	79.0%
1979	79.4%	97.2%	97.4%	94.2%	77.1%	20.3%	78.7%
1980	79.8%	96.7%	97.0%	94.1%	77.4%	21.3%	78.9%
1981	79.5%	96.9%	97.3%	94.1%	77.3%	20.5%	78.8%
1982	77.6%	95.6%	95.5%	94.0%	76.0%	20.2%	77.6%
1983	77.0%	95.6%	96.6%	93.3%	76.2%	21.3%	77.9%
1984	77.2%	94.8%	95.5%	93.7%	76.1%	21.0%	77.7%
1985	76.7%	95.5%	95.9%	93.8%	73.5%	19.6%	77.4%
1986	75.6%	95.0%	96.3%	92.7%	73.9%	20.0%	77.2%
1987	74.8%	94.6%	94.5%	92.2%	72.5%	21.7%	76.6%
1988	73.8%	94.4%	95.0%	93.2%	72.6%	20.3%	76.3%
1989	73.1%	94.2%	95.6%	93.2%	71.3%	20.9%	76.1%
1990	73.6%	93.7%	95.7%	93.7%	72.1%	19.3%	75.9%
1991	73.0%	94.0%	95.4%	91.6%	70.3%	20.5%	75.4%
1992	70.1%	92.8%	95.2%	91.0%	70.1%	21.4%	74.5%
1993	70.1%	92.5%	94.8%	91.7%	69.3%	21.5%	74.4%
1994	69.3%	93.2%	94.2%	92.6%	68.4%	21.4%	74.2%
1995	70.0%	92.4%	94.9%	91.5%	65.4%	23.1%	74.2%
1996	69.6%	90.8%	95.1%	90.3%	66.2%	20.3%	73.3%
1997	70.1%	92.5%	95.0%	92.8%	66.2%	20.3%	74.1%
1998	69.7%	92.6%	94.9%	91.0%	70.6%	21.3%	74.3%
1999	67.7%	92.3%	94.5%	92.0%	71.8%	20.8%	74.0%
2000	68.9%	92.2%	94.0%	91.3%	68.8%	22.4%	73.9%
2001	67.5%	91.6%	93.8%	91.1%	68.2%	18.5%	72.7%
2002	70.7%	92.2%	94.0%	91.9%	71.2%	18.6%	73.8%
2003	70.2%	92.8%	94.2%	92.8%	71.3%	18.4%	74.0%
2004	71.1%	92.5%	93.9%	92.2%	70.5%	20.3%	74.1%
2005	71.4%	91.9%	94.1%	91.8%	70.8%	22.5%	74.4%
2006	73.0%	93.8%	93.4%	90.3%	74.9%	21.5%	75.0%
2007	73.9%	94.2%	95.9%	92.7%	75.8%	21.4%	76.0%
2008	74.1%	94.3%	94.3%	93.2%	73.7%	22.3%	75.8%

Source: Labour Force Survey

**Table D5 - Labour Force Participation Rates by Age Group, Women, Off Reserve Only**

	Women						Total
	<u>15 to 24</u>	<u>25 to 34</u>	<u>35 to 44</u>	<u>45 to 54</u>	<u>55 to 64</u>	<u>65 plus</u>	
1976	56.8%	48.7%	54.2%	50.9%	34.8%	4.0%	43.4%
1977	55.5%	51.9%	57.3%	52.5%	34.4%	4.4%	44.2%
1978	55.7%	54.2%	58.3%	55.6%	34.7%	5.1%	45.3%
1979	59.0%	59.2%	60.0%	55.3%	34.2%	4.2%	46.9%
1980	61.5%	57.4%	61.3%	53.5%	35.2%	4.6%	47.3%
1981	60.1%	61.6%	66.2%	56.3%	34.5%	3.9%	48.5%
1982	60.8%	63.9%	68.2%	59.3%	36.3%	4.8%	50.1%
1983	63.7%	66.4%	69.6%	63.7%	36.4%	4.2%	52.0%
1984	65.0%	67.3%	71.3%	63.3%	37.1%	4.2%	52.8%
1985	65.1%	69.6%	72.9%	66.7%	39.7%	5.1%	54.2%
1986	66.9%	71.7%	75.5%	70.3%	41.7%	4.9%	56.0%
1987	64.0%	73.2%	77.6%	69.7%	43.2%	5.1%	56.0%
1988	66.1%	75.9%	77.6%	70.1%	44.6%	5.3%	57.2%
1989	63.7%	77.0%	78.5%	72.7%	42.1%	4.8%	56.8%
1990	61.9%	78.9%	80.5%	74.4%	43.2%	5.0%	57.5%
1991	63.9%	79.1%	83.0%	76.4%	44.7%	5.6%	58.6%
1992	60.8%	78.2%	83.5%	80.4%	46.5%	5.9%	58.6%
1993	61.9%	77.5%	85.0%	80.2%	47.0%	6.0%	58.9%
1994	59.9%	77.3%	84.4%	78.3%	47.2%	5.5%	58.1%
1995	59.2%	77.8%	83.5%	78.8%	48.3%	5.9%	58.1%
1996	58.9%	77.5%	83.9%	77.0%	47.7%	5.0%	57.7%
1997	61.4%	78.1%	84.4%	77.8%	46.8%	5.3%	58.4%
1998	59.1%	78.5%	84.3%	80.7%	52.2%	4.6%	59.0%
1999	61.4%	77.8%	85.1%	82.6%	53.7%	4.9%	59.9%
2000	63.1%	77.0%	85.1%	81.0%	51.1%	6.2%	59.8%
2001	62.2%	78.4%	81.8%	81.6%	48.8%	4.9%	58.8%
2002	61.7%	80.1%	84.5%	83.3%	53.0%	4.9%	60.0%
2003	65.9%	79.6%	86.2%	84.7%	56.0%	6.0%	61.8%
2004	65.0%	80.0%	86.7%	85.2%	56.6%	5.9%	61.9%
2005	65.5%	79.3%	86.9%	84.2%	57.7%	5.9%	61.9%
2006	68.8%	82.4%	86.9%	85.8%	57.9%	7.1%	63.3%
2007	69.5%	80.4%	87.1%	86.7%	58.9%	7.5%	63.5%
2008	70.1%	81.0%	85.8%	85.6%	61.9%	7.4%	63.8%

Source: Labour Force Survey

**Table D4 - Labour Force Participation Rates by Age Group, Both Sexes, Off Reserve Only**

	Both Sexes						Total
	<u>15 to 24</u>	<u>25 to 34</u>	<u>35 to 44</u>	<u>45 to 54</u>	<u>55 to 64</u>	<u>65 plus</u>	
1976	66.6%	72.3%	75.5%	72.8%	55.8%	13.2%	60.6%
1977	67.2%	74.8%	77.1%	73.6%	56.7%	13.3%	61.6%
1978	67.3%	76.1%	77.6%	75.2%	56.6%	13.9%	62.2%
1979	69.3%	78.6%	78.8%	74.7%	55.3%	12.1%	62.9%
1980	70.7%	77.6%	79.3%	73.9%	56.1%	12.6%	63.1%
1981	70.0%	79.6%	81.9%	75.4%	55.5%	11.8%	63.6%
1982	69.3%	80.0%	81.9%	76.8%	55.8%	11.9%	63.8%
1983	70.5%	81.3%	83.3%	78.5%	55.9%	12.2%	64.9%
1984	71.1%	81.4%	83.7%	78.7%	56.1%	12.0%	65.2%
1985	71.1%	82.8%	84.5%	80.3%	56.3%	11.6%	65.8%
1986	71.3%	83.6%	86.1%	81.7%	57.5%	11.8%	66.5%
1987	69.4%	84.0%	86.3%	80.9%	57.6%	12.6%	66.3%
1988	70.0%	85.2%	86.6%	81.7%	58.4%	12.1%	66.7%
1989	68.4%	85.6%	87.4%	82.8%	56.5%	12.1%	66.4%
1990	67.9%	86.4%	88.3%	83.9%	57.5%	11.3%	66.6%
1991	68.6%	86.5%	89.3%	83.9%	57.4%	12.2%	66.9%
1992	65.5%	85.6%	89.4%	85.6%	58.1%	12.8%	66.5%
1993	66.0%	85.0%	90.0%	85.9%	58.0%	12.9%	66.5%
1994	64.7%	85.2%	89.3%	85.4%	57.7%	12.7%	66.1%
1995	64.6%	85.2%	89.3%	85.1%	56.9%	13.5%	66.0%
1996	64.4%	84.1%	89.6%	83.6%	56.9%	11.8%	65.4%
1997	65.8%	85.3%	89.7%	85.4%	56.5%	12.0%	66.1%
1998	64.5%	85.6%	89.6%	86.0%	61.5%	11.9%	66.5%
1999	64.7%	85.1%	89.7%	87.4%	62.7%	12.0%	66.9%
2000	66.1%	84.7%	89.6%	86.2%	59.9%	13.3%	66.8%
2001	65.0%	85.1%	87.9%	86.4%	58.5%	10.9%	65.6%
2002	66.4%	86.2%	89.2%	87.6%	62.0%	10.9%	66.8%
2003	68.1%	86.3%	90.3%	88.8%	63.6%	11.6%	67.8%
2004	68.2%	86.3%	90.4%	88.7%	63.5%	12.3%	67.9%
2005	68.5%	85.7%	90.6%	88.0%	64.3%	13.2%	68.1%
2006	71.0%	88.1%	90.2%	88.2%	66.4%	13.5%	69.1%
2007	71.8%	87.5%	91.5%	89.7%	67.3%	13.6%	69.7%
2008	72.1%	87.7%	90.0%	89.4%	67.8%	14.0%	69.7%

Source: Labour Force Survey