



Saskatchewan  
Learning

---

# SASKATCHEWAN LABOUR MARKET TRENDS

## 2004 UPDATE

of the  
2000 Saskatchewan Labour Market Trends Report

November, 2004

---

a report by:  
Doug Elliott  
Sask Trends Monitor



---

# Labour Market Trends

*November 2004*

---

A report prepared for

## **Saskatchewan Learning**

by

Sask Trends Monitor  
444 19th Avenue  
Regina, Saskatchewan  
S4N 1H1

Tel: 306-522-5515

Email: [sasktrends@sasktel.net](mailto:sasktrends@sasktel.net)

Internet: [www.sasktrends.ca](http://www.sasktrends.ca)





## Table of Contents

SECTION 1	INTRODUCTION AND BACKGROUND .....	1
SECTION 2	POPULATION PROJECTION .....	5
2.1	Fertility Rates .....	6
2.2	Mortality Rates .....	12
2.3	Survival Rates .....	13
2.4	Population .....	21
2.5	Summary .....	34
SECTION 3	LABOUR FORCE PARTICIPATION RATE PROJECTION .....	35
3.1	General Population .....	36
3.2	Aboriginal Population .....	45
SECTION 4	POTENTIAL LABOUR FORCE PROJECTION .....	57
4.1	General Population .....	58
4.2	Aboriginal Labour Force .....	60
4.3	Projected Labour Force Composition .....	62
4.4	Summary .....	68
SECTION 5	SUMMARY .....	71
Appendix A - Population Survival Rates		
Appendix B - Population Projection		
Appendix C - Labour Force Participation Rates		
Appendix D - Potential Labour Force		



## List of Tables

Table 1.1	The Saskatchewan Aboriginal population in Private Households, 2001 .....	2
Table 2.1	Fertility Rates for Saskatchewan Women .....	7
Table 2.2	Fertility Rates for Saskatchewan First Nations Women .....	7
Table 2.3	Projected Fertility Rates for Saskatchewan Women .....	11
Table 2.4	Survival Rates Assumed for "Zero Migration" Scenario .....	12
Table 2.5	Actual and Projected Provincial Population by Gender and Age Group .....	23
Table 2.6	Actual and Projected First Nations Population by Gender and Age Group .....	27
Table 2.7	Estimated and Projected Métis (non-Indian Aboriginal) Population by Gender and Age Group .....	29
Table 2.8	Actual and Projected Aboriginal Population by Gender and Age Group .....	30
Table 3.1	Aboriginal Labour Force Participation Rates, 1996 and 2001 .....	45
Table 4.1	Two Scenarios for Total Labour Force in Saskatchewan .....	58
Table 4.2	Two Scenarios for Aboriginal Labour Force in Saskatchewan .....	60

## List of Figures

Figure 1.1	Population and Labour Force Projection Model .....	3
Figure 2.1	Fertility Rates for Saskatchewan Women, 1990, 1995, and 2000 .....	6
Figure 2.2	Fertility Rates Saskatchewan First Nations Women, 1991, 1996, and 2001 .....	8
Figure 2.3	Actual and Projected Total Fertility Rates, Saskatchewan Women .....	10
Figure 2.4	Comparison of Fertility Rate Projections, Total Fertility Rate .....	10
Figure 2.5	Inter-provincial Migration Flows to/from Saskatchewan, 1971-72 to 2003-04 .....	13
Figure 2.6	Sample Survival Rates, Actual and Projected, for Saskatchewan Men .....	16
Figure 2.7	Sample Survival Rates, Actual and Projected, for Saskatchewan Women .....	17
Figure 2.8	Sample Survival Rates for First Nations Men .....	19
Figure 2.9	Sample Survival Rates for First Nations Women .....	20
Figure 2.10	Actual and Projected Saskatchewan Population, All Ages .....	21
Figure 2.11	Comparison of Population Projections .....	22
Figure 2.12	Actual and Projected Population by Age Groups .....	24
Figure 2.13	Actual and Projected Population in Key Labour Market Age Groups .....	25
Figure 2.14	Estimated and Projected First Nations Population in Saskatchewan .....	26
Figure 2.15	Estimated and Projected Métis (non-Indian Aboriginal) Population in Saskatchewan .....	28
Figure 2.16	Aboriginal Population as Percentage of Total Population, Selected Age Groups, 2001 to 2025 .....	32
Figure 2.17	First Nations and Métis (non-Indian Aboriginal) Population as Percentage of Total, Selected Age Groups, 2001 to 2025 .....	33
Figure 3.1	Labour Force Participation Rates, 15 years and Older, Canada and Saskatchewan .....	36
Figure 3.2	Saskatchewan Labour Market Participation Rates .....	36
Figure 3.3	Average Retirement Ages in Canada, by Class of Worker .....	37
Figure 3.4	Actual and Projected Labour Force Participation Rates, 15 to 34 Years of Age .....	39
Figure 3.5	Actual and Projected Labour Force Participation Rates, 35 to 54 Years .....	40
Figure 3.6	Actual and Projected Labour Force Participation Rates, 55 and Older .....	41
Figure 3.7	Labour Force Participation Rates, 15 and Older, Age-adjusted to the 2003 Saskatchewan Population .....	42
Figure 3.8	Comparison of Age-adjusted Labour Force Participation Rates, Men .....	44
Figure 3.9	Comparison of Age-adjusted Labour Force Participation Rates, Women .....	44
Figure 3.10	Labour Force Participation Rates, Saskatchewan Aboriginal and non-Aboriginal Men .....	46
Figure 3.11	Labour Force Participation Rates, Saskatchewan Aboriginal and non-Aboriginal Women .....	46
Figure 3.12	Actual and Projected Labour Force Participation Rates, Men, 15 to 34 Years .....	48
Figure 3.13	Actual and Projected Labour Force Participation Rates, Men, 35 to 54 Years .....	49
Figure 3.14	Actual and Projected Labour Force Participation Rates, Men, 55 and Older .....	50
Figure 3.15	Actual and Projected Labour Force Participation Rates, Women, 15 to 34 Years .....	51
Figure 3.16	Actual and Projected Labour Force Participation Rates, Women, 35 to 54 Years .....	52
Figure 3.17	Actual and Projected Labour Force Participation Rates, Women, 55 and Older .....	53

List of Figures (continued)

Figure 3.18	Comparison of Labour Force Participation Rates, Age-Adjusted to the 2003 Saskatchewan Population, Men	55
Figure 3.19	Comparison of Labour Force Participation Rates, Age-adjusted to the 2003 Saskatchewan Population, Women	55
Figure 3.20	Comparison of Labour Force Participation Rates, First Nations Men	56
Figure 3.21	Comparison of Labour Force Participation Rates, First Nations Women	56
Figure 4.1	Comparison of Labour Force Figures, Saskatchewan, 1982 to 2003	57
Figure 4.2	Potential Labour Force Projections, Effect of Increasing Participation Rates	59
Figure 4.3	Comparison of Potential Labour Force Projections, Previous Report and Current Projection with Increasing Participation Rates	59
Figure 4.4	Breakdown of Projected Potential Labour Force by Aboriginal Status, Constant Labour Force Participation Rate Scenario	61
Figure 4.5	Breakdown of Projected Potential Labour Market by Aboriginal Status, Increasing Labour Force Participation Rate Scenario	61
Figure 4.6	Relative Change in the Composition of the Potential Labour Force, by Aboriginal Identity	63
Figure 4.7	Comparison of Labour Force Shares, 2003 and 2018, by Aboriginal Identity	63
Figure 4.8	Relative Change in the Composition of the Labour Force, by Gender	64
Figure 4.9	Comparison of Labour Force Shares, 2003 and 2018, by Gender	64
Figure 4.10	Relative Changes in the Composition of the Labour Force, by Age Group	66
Figure 4.11	Comparison of Labour Force Shares, 2003 and 2018, by Age Group	66
Figure 4.12	Relative Changes in the Composition of the Youth Labour Force (15 to 29 years), by Aboriginal Identity	67
Figure 4.13	Comparison of Youth (15 to 29 years) Labour Force Shares, 2003 and 2018, by Aboriginal Identity	67
Figure 4.14	Potential Labour Force Projections, Effect of Increasing Participation Rates	68
Figure 4.15	Potential Labour Force by Aboriginal Identity, Increasing Participation Rate Scenario	69
Figure 5.1	Actual and Projected Saskatchewan Population	71
Figure 5.2	Actual and Projected Labour Force Participation Rates, Age Adjusted to the 2003 Population	72
Figure 5.3	Effect of Participation Rate Assumptions on the Size of the Potential Labour Force	73

## SECTION 1 INTRODUCTION AND BACKGROUND

---

In August of 1999, what was then the *Department of Post-Secondary Education and Skills Training* commissioned a study of the Saskatchewan labour market. The resulting report, published in January 2000, ***Saskatchewan Labour Market Trends***, provided a general overview of the labour market in the province and a projection of the future labour market supply. This report refines and updates the second part of that study, the forecast of labour supply, using more recent data and taking into account current trends. Besides improved data, this report also uses an enhanced methodology to project the population and labour force.

The methodology for projecting the provincial labour supply is a three step process.

Section 2 contains a population projection based on expected patterns of fertility, mortality, and inter-provincial migration, the first step in the process. The Aboriginal population exhibits significantly different demographic and labour market characteristics and trends so the projection deals with the Aboriginal population separately from the non-Aboriginal population.

Section 3 contains a projection of labour force participation rates in the province, the second step. These are based on current and expected patterns and are also done separately for the Aboriginal and non-Aboriginal populations.

Section 4 describes the net effect of the projected population and labour force participation rates, providing a projection of the potential labour force supply over the next two decades.

The final section summarizes both the methodology used in projecting the labour force and the results of the research.

Throughout the report, the differences between the current projection and the one in the previous ***Saskatchewan Labour Market Trends*** report are described. There are two main differences between the approach used in this report and the one used in the previous report.

1. What was then the Department of Post-Secondary Education and Skills Training is now the Department of Learning. More attention was paid to the fertility rates in the population forecast so that the population in the elementary/secondary school system could be appropriately projected to deal with the department's expanded mandate. (Fertility rates have very little effect on the size of the labour force over the forecast period.)
2. The previous report dealt only with the "Registered Indian" population as a subgroup within the province. In this report the size of the entire Aboriginal population is projected. This required some assumptions about the demographic characteristics of the Aboriginal population that is not "registered" under *The Indian Act*.

As with the previous report, the population and labour force projections should not be considered as "forecasts". They are, instead, simply mathematical calculations that show how the population and labour force would evolve if the assumptions were satisfied. Different assumptions would lead to different results.



A host of factors will intervene to make the actual population figures different from the ones reported here. These include changes in the economic environment, retirement patterns, public policy, or unexpected changes in fertility or mortality patterns. Indeed, the results of the projection suggest that the province would be remiss in not taking steps to avoid the situation described in this report.

The opinions expressed in this document do not represent those of the provincial government or the employees of the Saskatchewan Department of Learning. In particular, the provincial government does not endorse the population and labour force projections contained here. Responsibility for the accuracy of the data and the validity of the conclusions reached remain with the author.

### The Aboriginal Population

The term “Aboriginal” is used in this report to describe the population that, in the Statistics Canada census,

- answered “yes” to the question “Is this person an Aboriginal person, that is, North American Indian, Métis, or Inuit (Eskimo)?”; or
- answered “yes” to the question “Is this person a member of an Indian Band/First Nation?”; or
- answered “yes” to the question “Is this person a Treaty Indian or a Registered Indian as defined by *The Indian Act* of Canada?”.

The term “First Nation” is used to describe those who answered only “North American Indian” to the first question. The term “Métis” is used to describe all other Aboriginal persons not because all other Aboriginal persons are Métis but to ensure that the “Métis” and the “First Nations” populations sum arithmetically to the entire Aboriginal population.

In 2001, the number of Registered Indians according to the census (84,075) is largely the same population who report North American Indian identity (83,745) as Table 1.1 shows. Using the term “Métis” to describe the non-Indian Aboriginal population adds 2,750 to the population of 43,695 who reported single Métis identity.

In most cases detailed information is not available for the non-Indian Aboriginal population or even the Métis population. Fertility and mortality rates in particular are not available for this population and these are necessary for the development of the population projection which, in turn, leads to the projection of the labour force. In the absence of this kind of demographic data, the characteristics of the Métis population were generally assumed to be midway between the characteristics of the general Saskatchewan population and those of the First Nations population. This is based on the observation that in many socioeconomic and demographic statistics, the Métis population lie somewhere between the characteristics of the First Nations population and the non-Aboriginal population.

**Table 1.1** The Saskatchewan Aboriginal population in Private Households, 2001

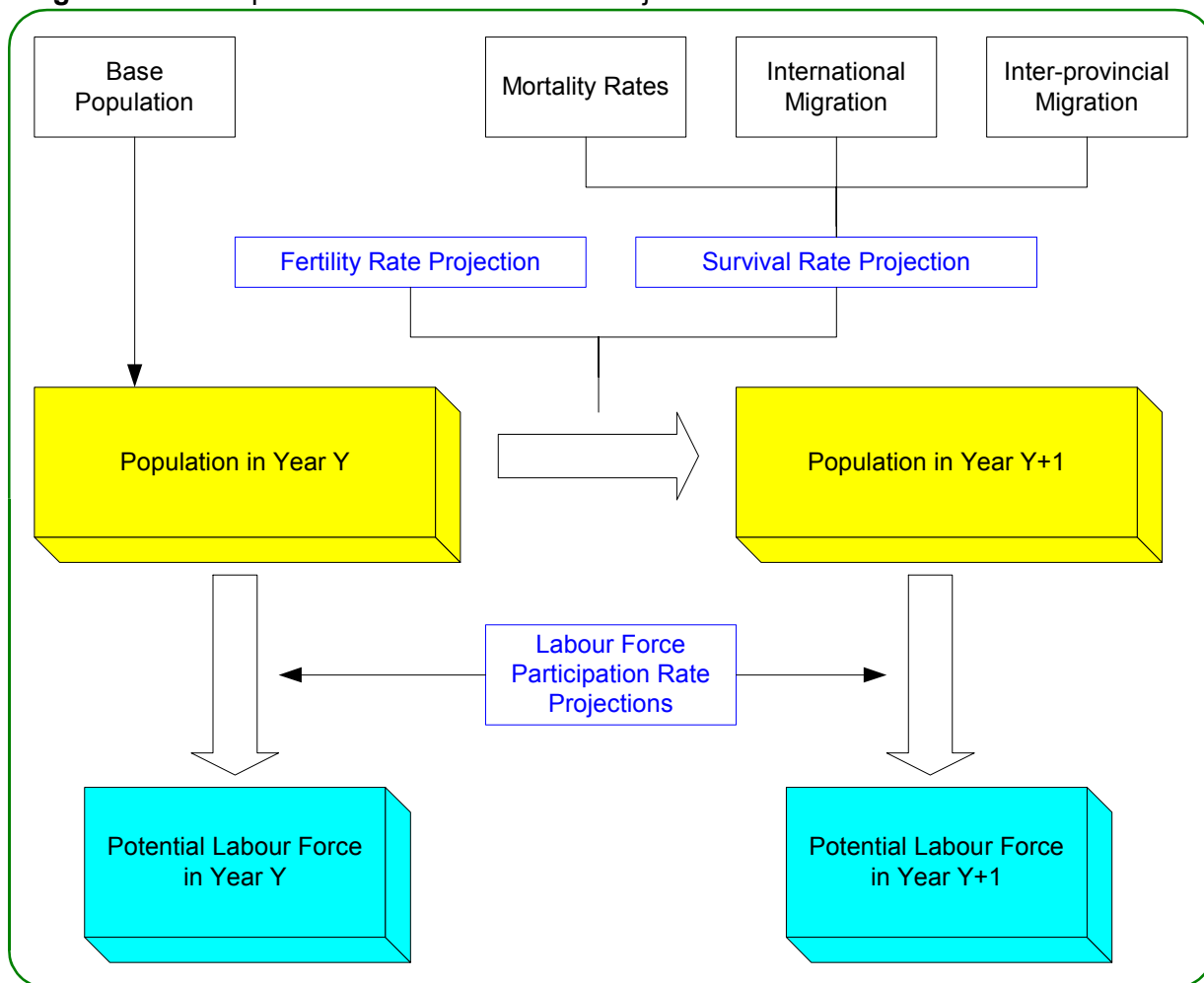
	Total
Registered Indian	84,075
Not a Registered Indian	46,115
Total Aboriginal population	130,190
North American Indian single response	83,745
Métis single response	43,695
All other responses	2,750
Total Aboriginal population	130,190

Source: Statistics Canada Census

Figure 1.1 is a graphic depiction of how the various assumptions are used to derive a projection of the labour force. There are in effect three such models – one for the provincial population, one for the First Nations population, and one for the Métis (non-Indian Aboriginal) population. In each case a base population is required to start the iterative process of determining annual populations. Thereafter, projections are required for:

- fertility rates;
- survival rates (which are the combined effect of mortality, international migration, and interprovincial migration); and
- labour force participation rates.

**Figure 1.1** Population and Labour Force Projection Model





## SECTION 2 POPULATION PROJECTION

---

The first step in projecting the labour market supply is to develop a projection of the provincial population by gender, age group, and Aboriginal status.

The population projection uses a cohort-survival methodology. In simple terms, this methodology uses the fact that, in any given year, and except for migration and mortality, all members of the population grow one year older. For example, if there were 10,000 persons aged 25 in 2011, the starting point for the population projection would be 10,000 persons aged 26 in 2012. The figure is then modified by estimating the number of deaths and the net effect of inter-provincial and international migration.

The methodology requires detailed age-specific data on population, fertility, mortality, and migration for both men and women for both the general population and for the Aboriginal component of that population. This level of detailed data is generally not available so a variety of assumptions and estimates need to be made. These are described as they arise in the analysis.

### Note on population sources

The main source of information about the Saskatchewan population used in this report is the Annual Demographic Statistics 2003 publication (91-213) from Statistics Canada. The population estimates in this publication have taken into account the results of the 2001 census but the figures are still subject to revision. In particular, the counts up to and including 2001 are considered as “final intercensal estimates” and they are unlikely to be revised in any significant way. Those from 2001 on are “postcensal estimates” and will be revised in future publications, perhaps significantly.

Unless otherwise indicated, the source for data about the Aboriginal population in Saskatchewan is the Statistics Canada census.

## 2.1 Fertility Rates

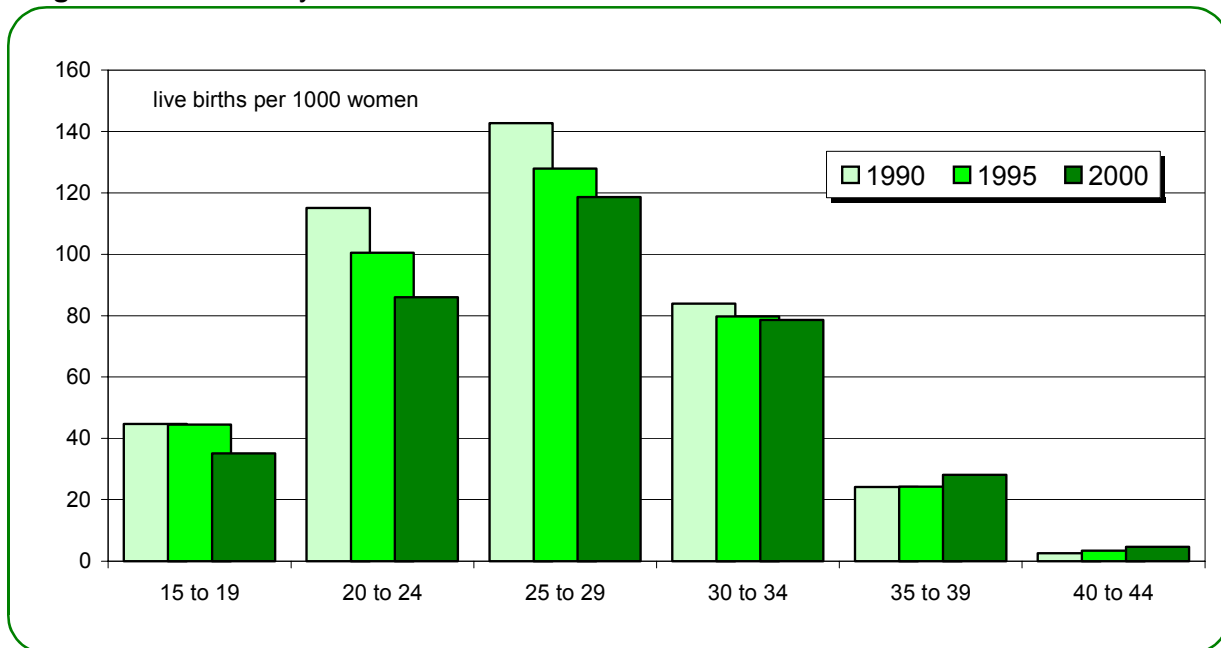
The number of newborns is calculated from age-specific fertility rates applied to the number of women of child-bearing age in the population. Fertility rates are based on the most recent statistics available for Saskatchewan women (see Table 2.1), namely those up to and including the calendar year 2000.

Fertility rates in Saskatchewan are dropping as they are in the rest of Canada. Using the total fertility rate as a summary measure, the average Saskatchewan woman would now give birth to 1.76 children over the course of her lifetime compared with 1.91 in 1995 and 2.08 in 1990.

The decline is evident only among women under thirty years of age (see Figure 2.1). For those thirty and older, fertility rates are either stable or increasing.

The fertility rates for First Nations women<sup>1</sup> are higher than rates for other Saskatchewan women (see Table 2.2). Over the course of a lifetime, current fertility rates suggest a First Nations woman will give birth to 2.60 children compared with 1.76 for women in the general Saskatchewan population. There are also different patterns among some age groups. Rates are declining among First Nations women under 20 years of age as they are in Saskatchewan as a whole. Among those in their twenties, however, rates have increased in the most recent five years after dropping from 1991 to 1996. Among older women, there is no evidence of the increase that is evident in the general population (see Figure 2.2).

**Figure 2.1** Fertility Rates for Saskatchewan Women, 1990, 1995, and 2000



<sup>1</sup> The fertility rate data from Health Canada actually refers to Registered Indian women, that is, those who are registered under *The Indian Act*.

**Table 2.1** Fertility Rates for Saskatchewan Women

Age group	Live births per 1000 women										
	1990	1991	1992	1993	1994	1995	1996	1997	1998	1999	2000
15 to 19	44.7	46.1	44.4	44.0	46.3	44.5	39.5	38.1	38.3	36.8	35.1
20 to 24	115.0	111.1	110.3	104.4	104.6	100.5	96.9	94.7	94.0	89.8	86.0
25 to 29	142.7	140.2	140.1	133.9	131.3	127.9	129.9	123.3	121.2	122.3	118.7
30 to 34	83.9	80.0	84.6	78.9	81.7	79.8	81.3	79.4	79.2	81.0	78.6
35 to 39	24.2	24.8	24.6	25.8	24.3	24.3	26.7	27.0	26.4	27.7	28.1
40 to 44	2.6	3.1	3.7	3.8	3.5	3.4	3.9	4.0	4.0	4.3	4.6
45 to 49	0.0	0.0	0.1	0.1	0.1	0.2	0.2	0.0	0.3	0.1	0.3
Total fertility rate*	2.08	2.04	2.04	1.98	1.97	1.91	1.89	1.83	1.81	1.81	1.76

\* the average number of children born to a woman over the course of her lifetime, calculated using a single year of data

Source: Statistics Canada, Report on the Demographic Situation in Canada, 91-209

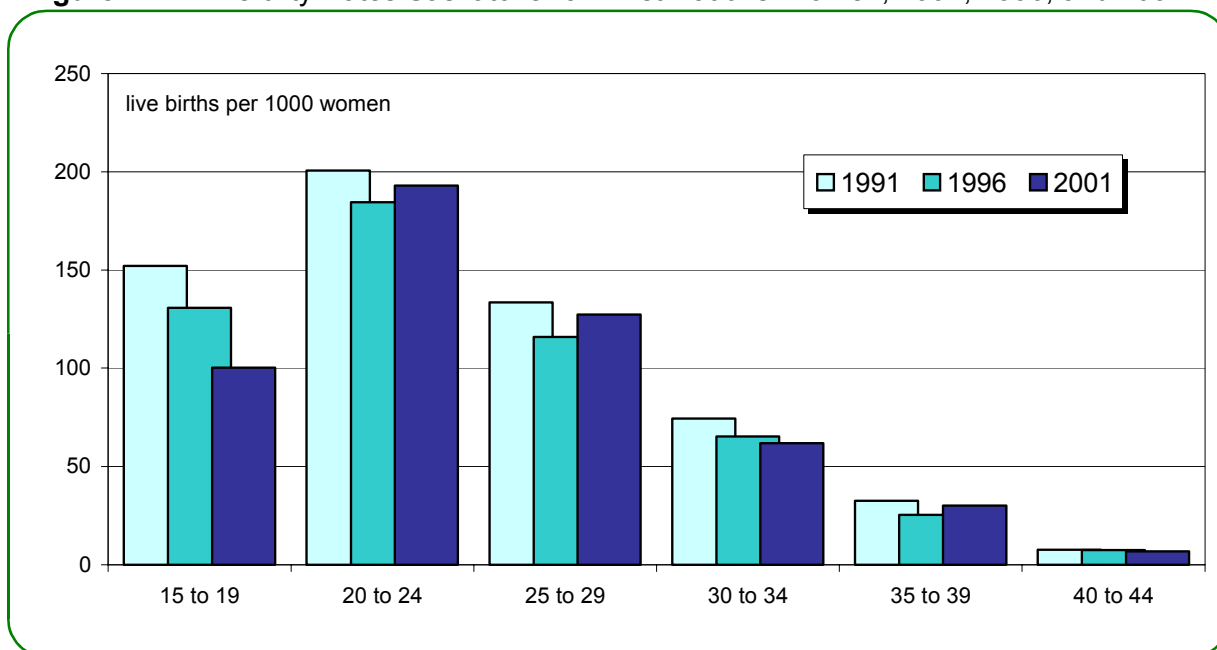
**Table 2.2** Fertility Rates for Saskatchewan First Nations Women

Age group	Live births per 1000 women										
	1991	1992	1993	1994	1995	1996	1997	1998	1999	2000	2001
10 to 14	3.9	5.0	3.4	2.8	2.3	2.4	2.8	0.7	2.5	2.2	1.3
15 to 19	152.2	155.6	149.9	158.2	140.5	130.7	110.4	104.4	119.4	110.5	100.4
20 to 24	200.7	207.8	208.0	212.9	191.1	184.5	167.2	150.6	182.9	182.5	193.1
25 to 29	133.5	140.3	127.5	125.5	125.4	116.0	109.8	103.4	125.3	121.5	127.3
30 to 34	74.5	75.0	70.8	66.0	62.1	65.3	59.1	50.0	56.2	68.0	61.9
35 to 39	32.5	26.5	36.2	25.4	29.4	25.3	26.5	22.7	28.3	26.4	30.1
40 to 44	7.6	9.3	6.3	5.1	5.3	7.4	6.1	5.0	4.9	7.1	6.7
45 to 49	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Total fertility rate*	3.02	3.10	3.01	2.98	2.78	2.76	2.41	2.20	2.60	2.59	2.60

\* the average number of children born to a woman over the course of her lifetime

Source: Medical Services Branch, Health Canada, Vital Statistics of the Saskatchewan Registered Indian Population

**Figure 2.2** Fertility Rates Saskatchewan First Nations Women, 1991, 1996, and 2001



### Projection

Saskatchewan women are clearly choosing to have fewer children and to do so at a later age. Projecting these trends into the future on a linear basis would result in an unreasonably low fertility rate so some adjustments were made on the assumption that fertility rates would not drop much below their current levels. The projections for each age group are based on the assumptions that:

- teenage birth rates would continue to decline as a result of better family planning information and education;
- birth rates for women 20 to 29 years of age would continue to decline but at a lower rate than in the past ten years;
- birth rates for women 30 to 34 years of age would remain constant; and
- birth rates for women 35 years of age and older would continue to increase but at a lower rate than they have in the past.

For First Nations women, there is a clear expectation that fertility rates will decline as socioeconomic conditions improve. This is in spite of the fact that there is a decline evident in only some age groups during the past decade. For the purposes of the projection, the following assumptions were made about fertility rates for Saskatchewan First Nations women.

- By 2025, teen birth rates (15 to 19) will decline from the current level of 100 per 1000 women to a level of 50 per 1000 women which is still higher than the current 35 per 1000 women for the general Saskatchewan population. The rates for those under 15 will decline to zero over the same period.
- The fertility rates for those 20 to 24 which are currently near 200 per 1000 will decline to 135 per 1000 by 2025 and the rates for those 25 to 29 which are currently near 125 per 1000 will remain constant.
- The rates for those in their early thirties will remain at their current levels and the rates for those 35 and older will converge, by 2025, to the general Saskatchewan rate.

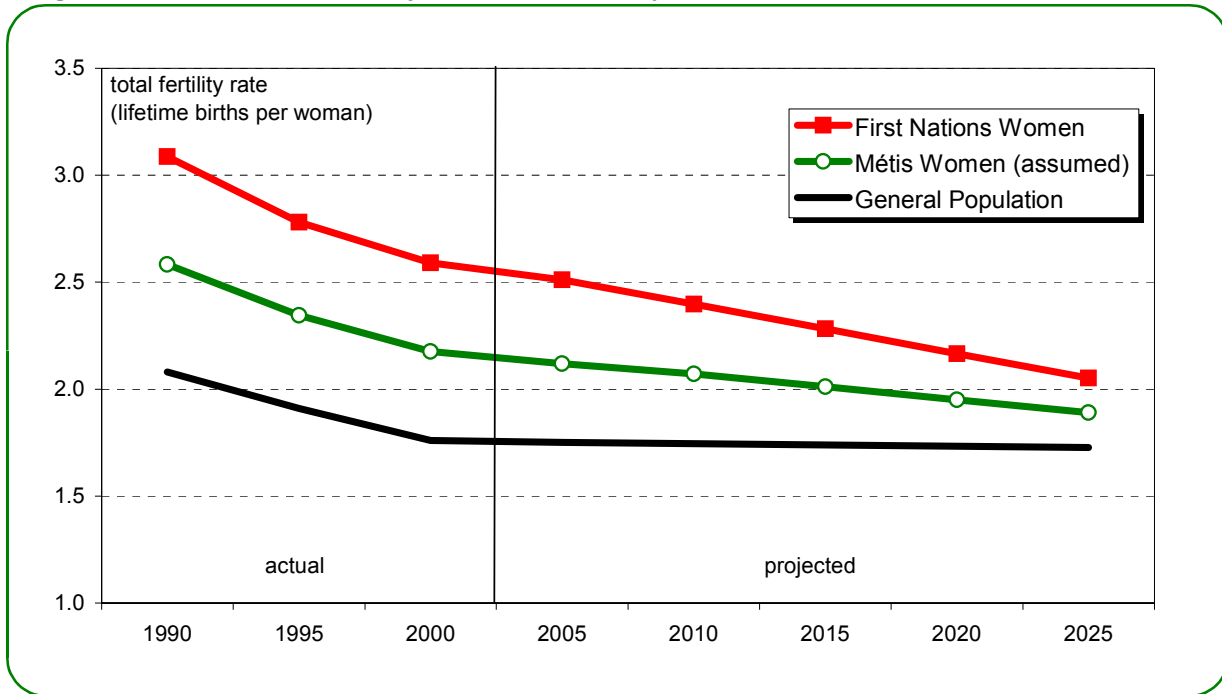
There are no fertility rate data available for Métis women. As an approximation, the population projection model assumes that the rates are midway between those for First Nations women and the general population. (In the actual population projection, the rates for Métis women are applied to the Aboriginal population that does not identify themselves as First Nations and so includes a small number of “other” Aboriginal women and persons who report multiple Aboriginal identities.)

Table 2.3 shows the effect of these assumptions. The total fertility rates for the three population groups are shown graphically in Figure 2.3.

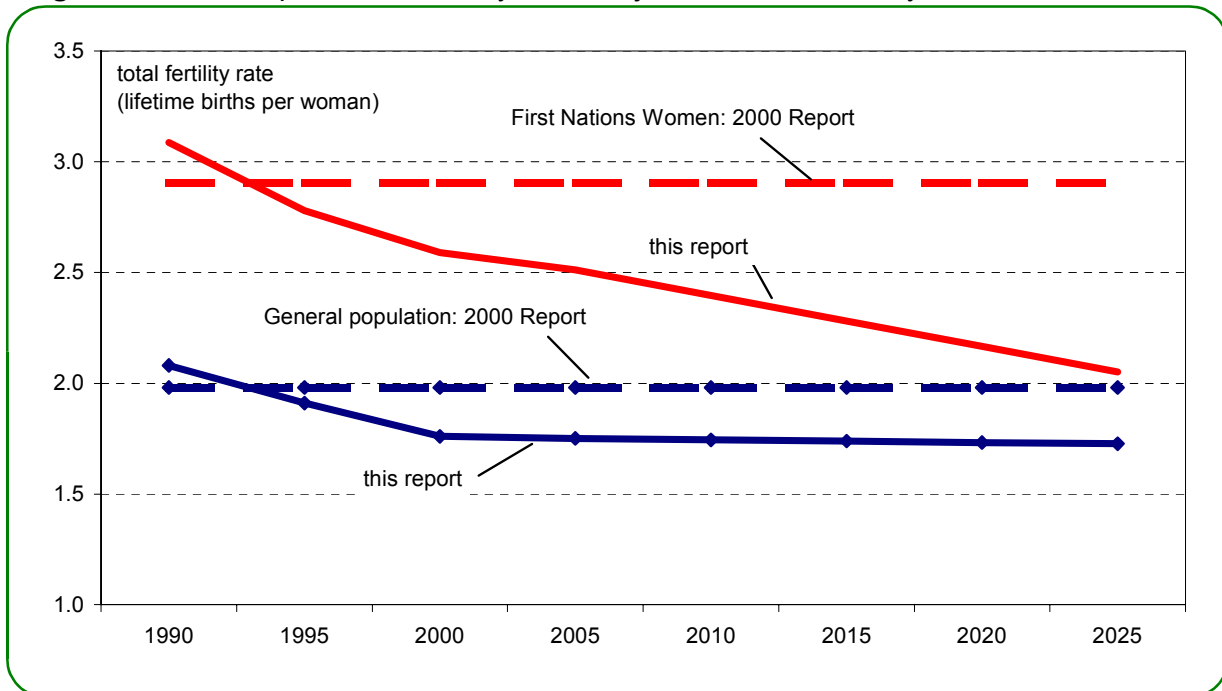
The fertility rates have changed from those assumed in the previous *Labour Market Trends* report. That report used general fertility rates averaged over the 1991 to 1995 period and fertility rates are lower now than in the early 1990s, particularly among Registered Indian women (see Figure 2.4). Although this has an effect on the size of the overall population, it does not dramatically affect the size or composition of the labour force supply because projected births will not reach the primary labour market age group during the forecast period.



**Figure 2.3** Actual and Projected Total Fertility Rates, Saskatchewan Women



**Figure 2.4** Comparison of Fertility Rate Projections, Total Fertility Rate



**Table 2.3** Projected Fertility Rates for Saskatchewan Women

Age group	Live births per 1000 women							
	Actual			Projected				
	1990	1995	2000	2005	2010	2015	2020	2025
General Population								
10 to 14	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
15 to 19	44.7	44.5	35.1	34.1	33.1	32.0	31.0	30.0
20 to 24	115.0	100.5	86.0	84.8	83.6	82.4	81.2	80.0
25 to 29	142.7	127.9	118.7	117.0	115.2	113.5	111.7	110.0
30 to 34	83.9	79.8	78.6	79.9	81.2	82.4	83.7	85.0
35 to 39	24.2	24.3	28.1	29.5	30.9	32.2	33.6	35.0
40 to 44	2.6	3.4	4.6	4.7	4.8	4.9	5.0	5.0
45 to 49	0.0	0.2	0.3	0.3	0.3	0.3	0.3	0.3
Total fertility rate*	2.08	1.91	1.76	1.75	1.74	1.74	1.73	1.73
First Nations Women								
10 to 14	4.4	2.3	2.2	1.1	0.8	0.5	0.3	0.0
15 to 19	148.6	140.5	110.5	92.0	81.5	71.0	60.5	50.0
20 to 24	219.9	191.1	182.5	183.4	171.3	159.2	147.1	135.0
25 to 29	134.9	125.4	121.5	126.9	126.4	126.0	125.5	125.0
30 to 34	76.5	62.1	68.0	61.6	61.2	60.8	60.4	60.0
35 to 39	29.0	29.4	26.4	30.9	31.9	33.0	34.0	35.0
40 to 44	4.1	5.3	7.1	6.4	6.1	5.7	5.4	5.0
45 to 49	0.0	0.0	0.0	0.1	0.1	0.2	0.2	0.3
Total Fertility Rate*	3.09	2.78	2.59	2.51	2.40	2.28	2.17	2.05
Assumed rates for Métis (non-Indian Aboriginal) Women								
10 to 14	2.2	1.2	1.1	0.5	0.4	0.3	0.1	0.0
15 to 19	96.7	92.5	72.8	61.9	57.3	51.5	45.8	40.0
20 to 24	167.5	145.8	134.3	132.8	127.5	120.8	114.2	107.5
25 to 29	138.8	126.7	120.1	121.7	120.8	119.7	118.6	117.5
30 to 34	80.2	71.0	73.3	70.8	71.2	71.6	72.1	72.5
35 to 39	26.6	26.9	27.3	30.4	31.4	32.6	33.8	35.0
40 to 44	3.4	4.4	5.9	5.5	5.4	5.3	5.2	5.0
45 to 49	0.0	0.1	0.2	0.2	0.2	0.2	0.3	0.3
Total Fertility Rate*	2.58	2.35	2.18	2.12	2.07	2.01	1.95	1.89

\* average number of children born to a woman over the course of her lifetime

## 2.2 Mortality Rates

The methodology used for the population projection does not require mortality rates to project the population except for the “zero migration” reference scenario. In this reference scenario, constant mortality rates at their current level are used. Mortality rates can be expressed as a survival rate, namely the number of people from a hypothetical population of 1,000 at a particular age that will live for another year. Table 2.4 shows the survival rates for the general Saskatchewan population and the First Nations population in Western Canada.

The table shows, for example, that out of 1000 Saskatchewan males in the 20 to 24 age group, 998.78 would survive for another year. Out of a similar population, 996.08 First Nations males would survive for another year.

As with the fertility rates, there are no published data available for the Métis population so the survival rates for the Métis population are assumed to be midway between those in the general Saskatchewan population and those for the First Nations population.

**Table 2.4** Survival Rates Assumed for “Zero Migration” Scenario

Age group	General Saskatchewan population		First Nations in Western Canada		Métis (assumed)	
	Men	Women	Men	Women	Men	Women
0 to 1	990.76	992.13	988.89	990.08	989.82	991.11
1 to 4	999.36	999.59	998.26	998.48	998.81	999.03
5 to 9	999.72	999.78	999.53	999.69	999.63	999.73
10 to 14	999.66	999.79	999.19	999.46	999.43	999.62
15 to 19	999.14	999.55	997.52	998.81	998.33	999.18
20 to 24	998.78	999.54	996.08	998.62	997.43	999.08
25 to 29	998.68	999.51	996.26	998.61	997.47	999.06
30 to 34	998.76	999.48	995.92	997.65	997.34	998.56
35 to 39	998.41	999.11	994.87	996.78	996.64	997.94
40 to 44	997.87	998.57	994.47	995.78	996.17	997.18
45 to 49	996.92	997.90	992.66	995.17	994.79	996.54
50 to 54	994.61	996.76	989.27	992.90	991.94	994.83
55 to 59	992.00	995.29	985.60	990.85	988.80	993.07
60 to 64	986.29	992.39	979.06	986.50	982.68	989.45
65 to 69	978.82	988.06	976.39	983.60	977.60	985.83
70 to 74	966.19	982.16	956.29	977.70	961.24	979.93
75 to 79	945.55	969.99	925.32	955.41	935.44	962.70
80 to 84	915.63	949.88	884.03	910.98	899.83	930.43

Source: General population - special tabulation from the Demography Division of Statistics Canada  
 First Nations population - Development & Demographic Methods Section, Demography Division, Statistics Canada, 2003.

## 2.3 Survival Rates

Migration rates generally and inter-provincial migration rates specifically are by far the most important assumption in the projection model. The population of the province is largely determined by the ebbs and flows of inter-provincial migration and this is particularly true for the population in the labour force age group.

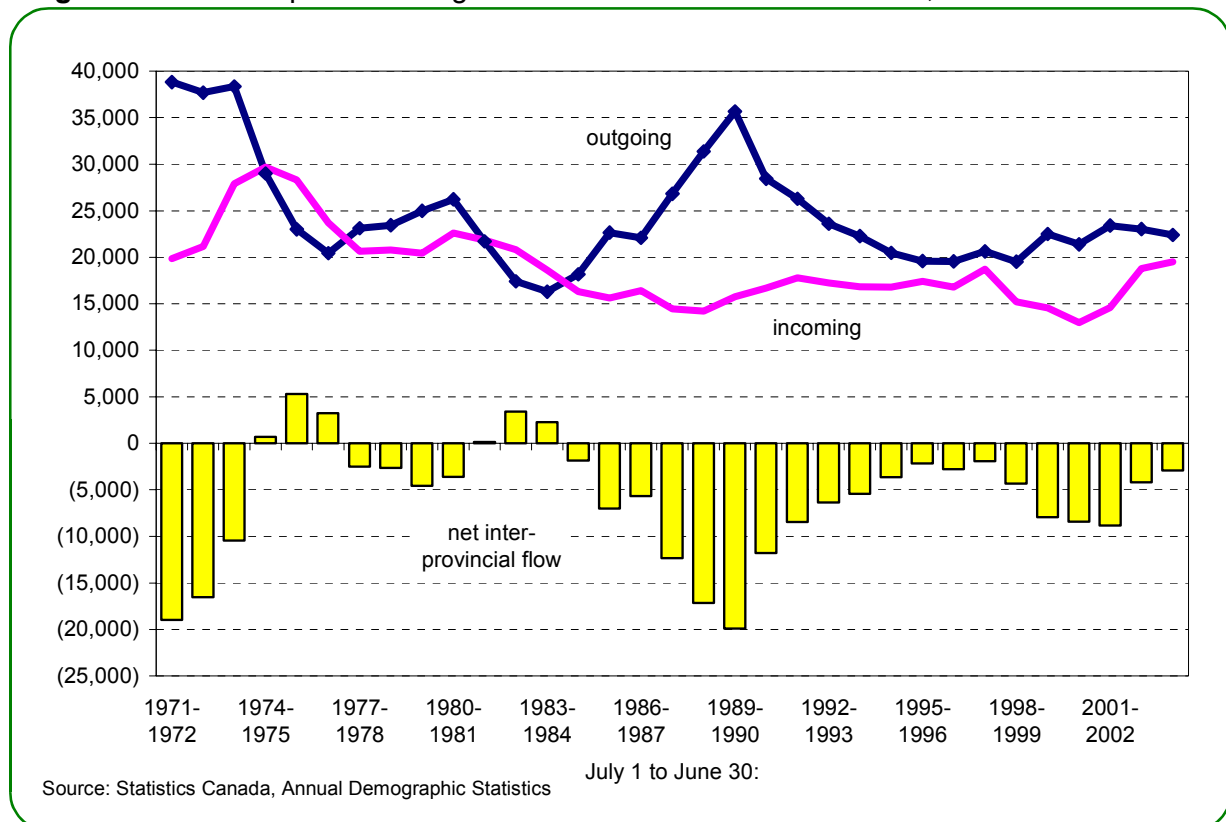
The “cohort survival” methodology used in the population projection requires the calculation of only net survival rates but these rates are effectively determined by inter-provincial migration. An example is the best way to visualize this dependency. The population of 30 year old women in Saskatchewan was 5,896 in July 2002. From July 2002 to June 2003, there were, among 30 year old Saskatchewan women:

- 5 deaths;
- 32 new immigrants;
- 17 emigrants;
- 201 inter-provincial in-migrants; and
- 238 inter-provincial out-migrants.

Clearly the inter-provincial migration rates among those in the labour force age group are critical to the labour market projection so the projection ultimately depends on the projection of inter-provincial migration.

As background, Figure 2.5 shows the inter-provincial migration rates for Saskatchewan over the past thirty-three years. Several observations that are key to the projection can be made about the flows. Much of the volatility in flows arises on the outgoing side; the number of

**Figure 2.5** Inter-provincial Migration Flows to/from Saskatchewan, 1971-72 to 2003-04



people moving to Saskatchewan is relatively constant. Secondly, net flow tends to move in cycles. A period of increasing net outflows lasted from the early to the late 1980s. This was followed by a period of declining net outflows from the late 1980s to the mid 1990s and a subsequent period of increasing net outflows.

While not described in detail in this report<sup>1</sup>, many of the individual age and gender rates tend to follow the overall migration rates. That is, the net outflow for those in the labour market age groups tends to determine and be determined by the overall inter-provincial migration rates. And while not important for the population projection, the inter-provincial flows tend to be similar across provinces of origin and destination with Alberta being the most popular origin and destination.

The inter-provincial migration rates, the international migration rates, and the mortality rates can be combined into a “survival rate” which is a measure of what proportion of a theoretical population of 1000 persons of a given age and sex will be in the province one year hence. These rates are calculated by examining the population at each age and year and then comparing it with the population one year earlier and one year younger. A rate greater than 1.0 will indicate net in-migration in excess of mortality. Note that this calculation implicitly calculates a net survival rate, that is, there is no assumption that the Saskatchewan residents in year  $y+1$  are the same individuals as in year  $y$  and no assumption about what proportion of the change is attributable to mortality, international, or inter-provincial migration.

Survival rates for those under one year of age cannot be calculated with this method so the rates are estimated using the rates for two year olds.

### General Population - Actual and Projected

To develop the population projection, the author examined recent survival rate trends by age and sex cohort and chose rates that were based on either i) a continuation of the current trend, ii) a reversal to previous highs or iii) a five-year average or a blend of these. The survival rates were also chosen so that several assumptions could be fulfilled.

- The population of the province will remain near one million people. This is because the projection is based on a “present trends continue” scenario. Any choice of survival rates that lead to either a dramatic population increase or an equally dramatic decline were avoided.
- Recent trends in inter-provincial migration suggest that net outflow is slowing in one of its periodic cycles. Accordingly survival rates were chosen so that the cyclical nature of interprovincial migration is maintained and that the population of the province will grow in the short term.
- A general shortage of skilled workers in the province will lead to lower levels of out-migration and higher levels of both international and inter-provincial in-migration.

In the previous *Labour Market Trends* report, the survival rates used a five-year average projected into the future. This methodology was not used for this projection because the most recent five year period represents a period with relatively high, by historical standards, levels of out-migration.

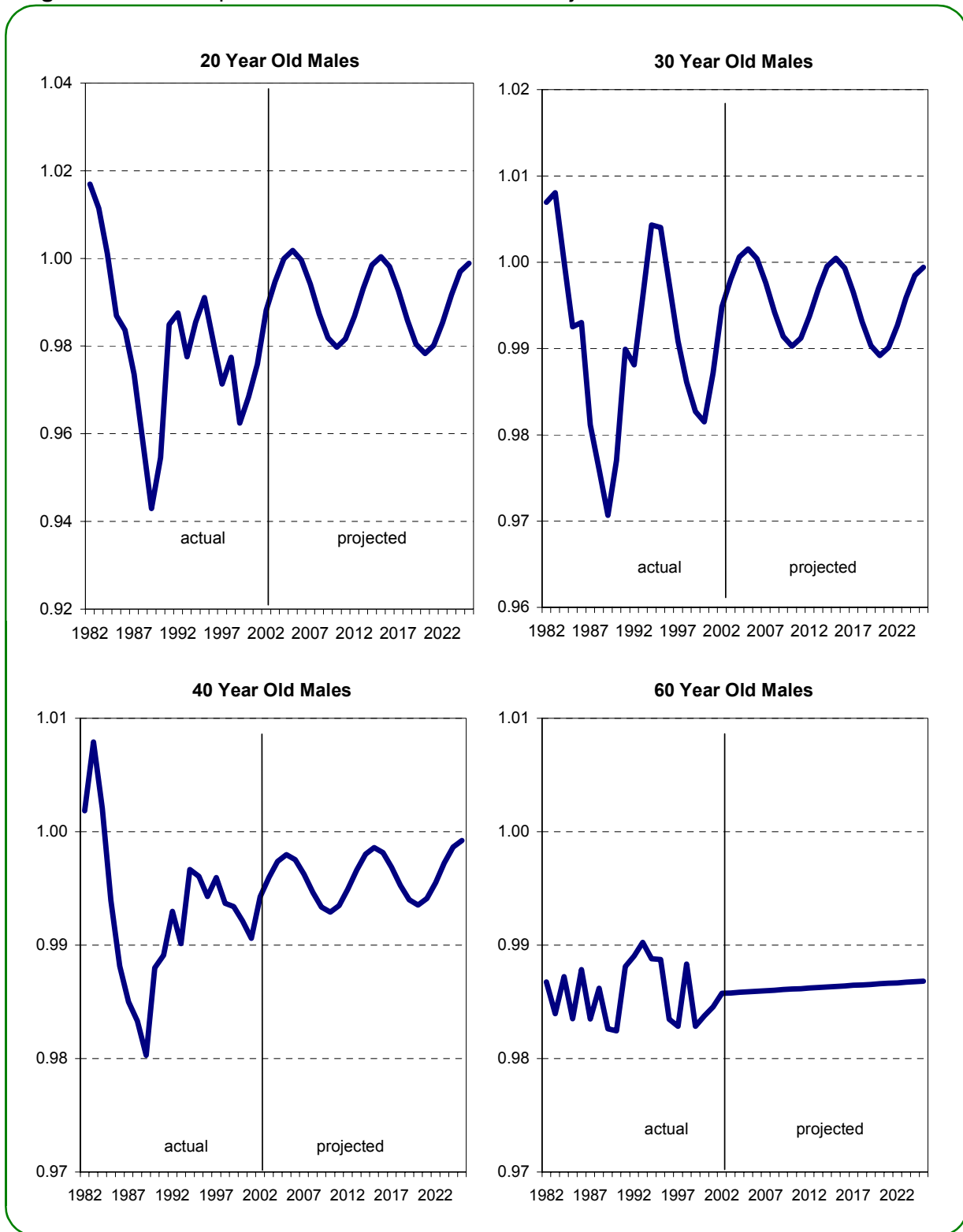
---

<sup>1</sup> For further detail, see the report “Demographic Trends in Saskatchewan: A Statistical Analysis of Population, Migration, and Immigration” by the author, available on [www.sasktrends.ca](http://www.sasktrends.ca).

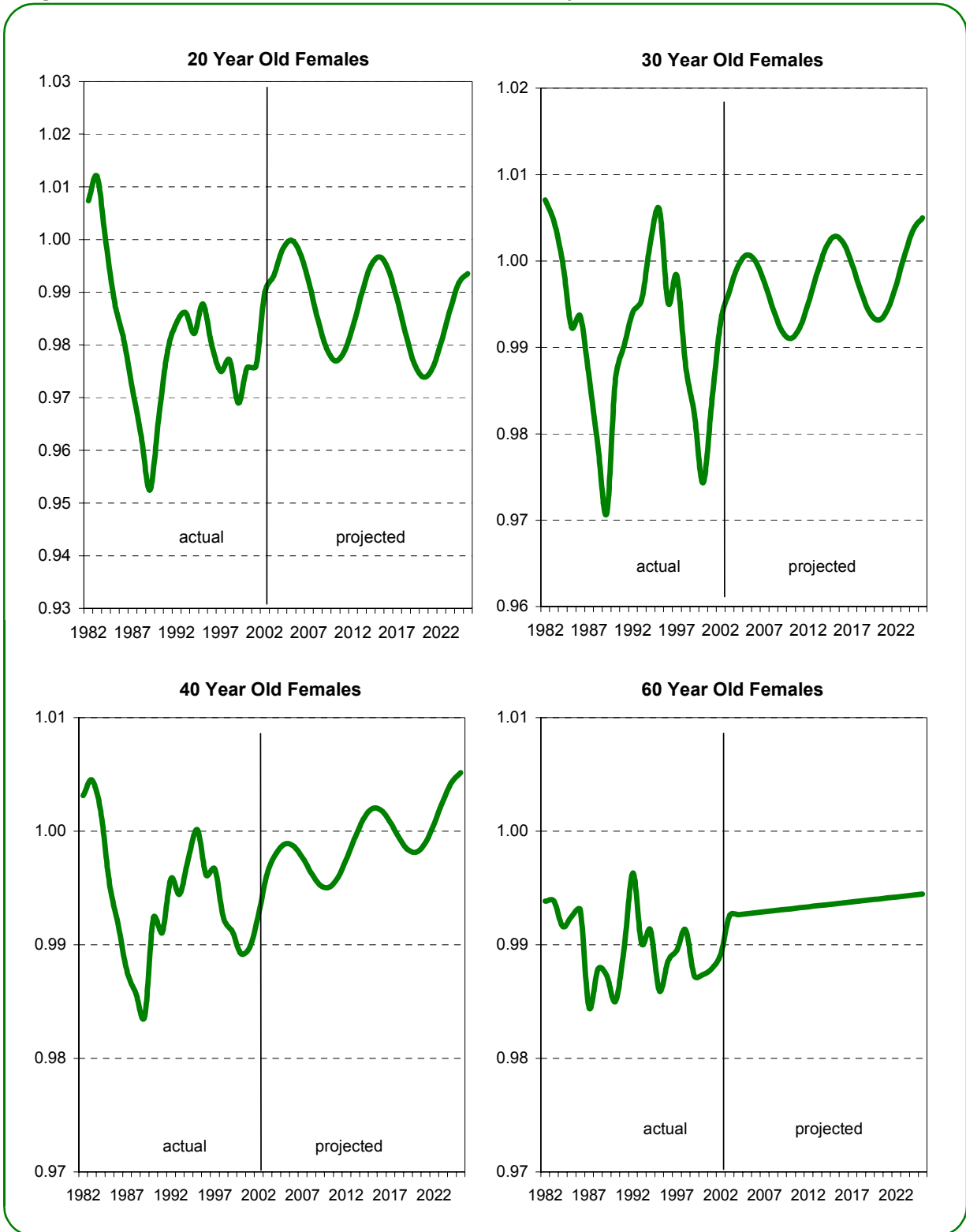
For reference purposes, a population projection that removes the effect of inter-provincial migration was also developed. This is called the “zero net migration” scenario although it is not, strictly speaking, a scenario and is presented simply to illustrate the effect that international and inter-provincial migration has on the population of the province.

The detailed survival rates for age groups under 75 years of age are averaged for display purposes in Appendix A. To illustrate the chosen survival rates, Figure 2.6 and Figure 2.7 show, respectively for men and women, survival rates for four representative age groups. These survival rates can be interpreted as the probability that a person of that age will remain in the province for the next twelve months.

**Figure 2.6** Sample Survival Rates, Actual and Projected, for Saskatchewan Men



**Figure 2.7** Sample Survival Rates, Actual and Projected, for Saskatchewan Women





## **First Nations Population**

Survival rates for the First Nations population are more difficult to calculate and therefore to project because of a lack of data. Available data on Saskatchewan First Nations residents is limited to the census for the 1996 and 2001 periods and Saskatchewan Health's "covered population". The latter was deemed to be more useful for this analysis because the data are published annually so trends can more readily be examined. As well, the self-identity nature of the census data means that there can be changes in an individual's Aboriginal identity over time. This artificially alters the calculated survival rates.

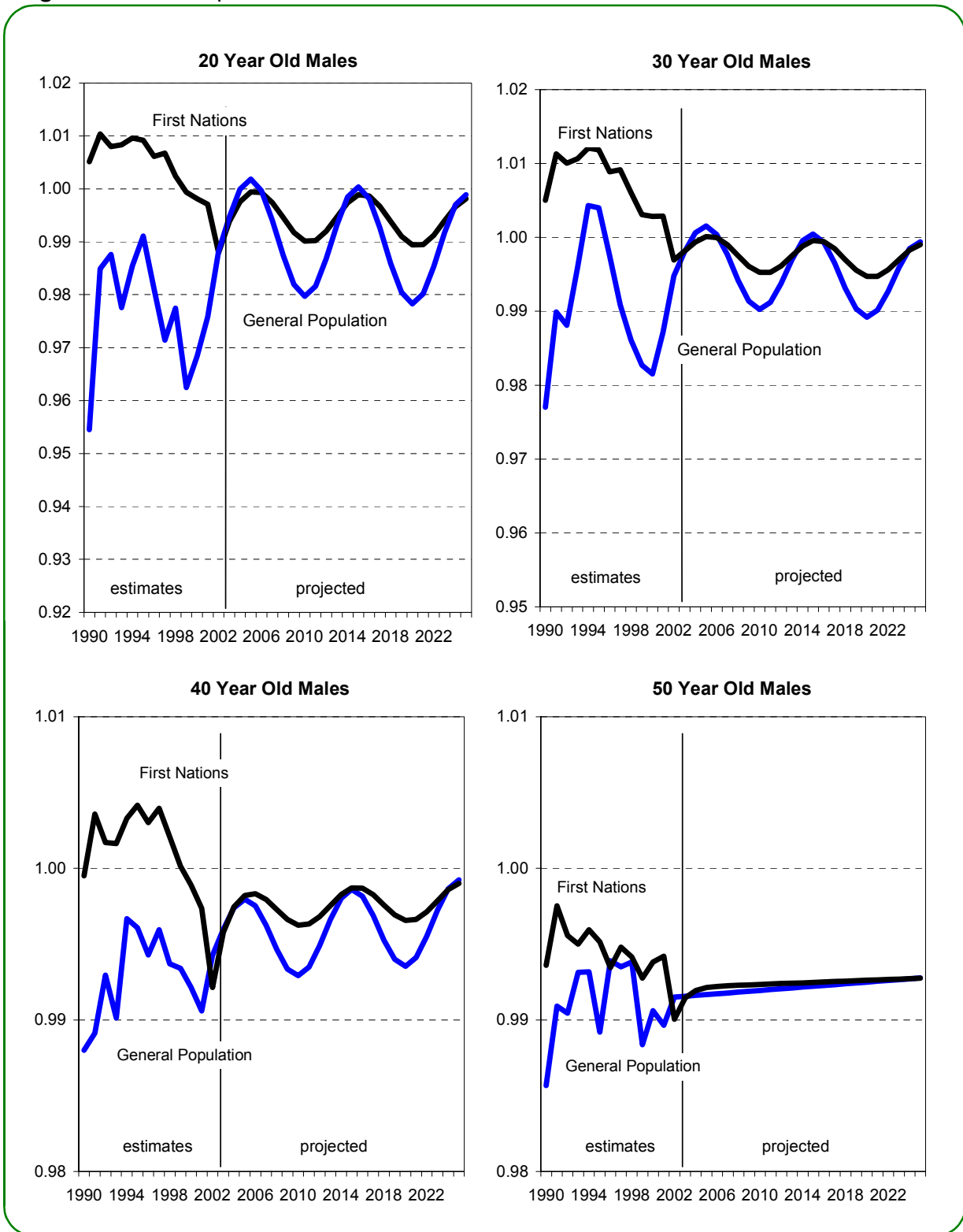
To enable survival rates to be calculated from the covered population, the published five-year age and gender cohorts for the First Nations population were used to calculate annual survival rates for the 1990 to 2003 period. The projection assumes a gradual convergence from the recent (1998-2003) survival rates to the survival rates in the general population. This implicitly assumes that the inter-provincial migration patterns and mortality rates for the First Nations population will, over the course of the next twenty-five years, become identical to those for the general population.

The survival rates for each age and sex cohort under 75 years of age are included in Appendix A. Samples of the projected survival rates for the general population and the First Nations population are shown in Figures 2.8 and 2.9.

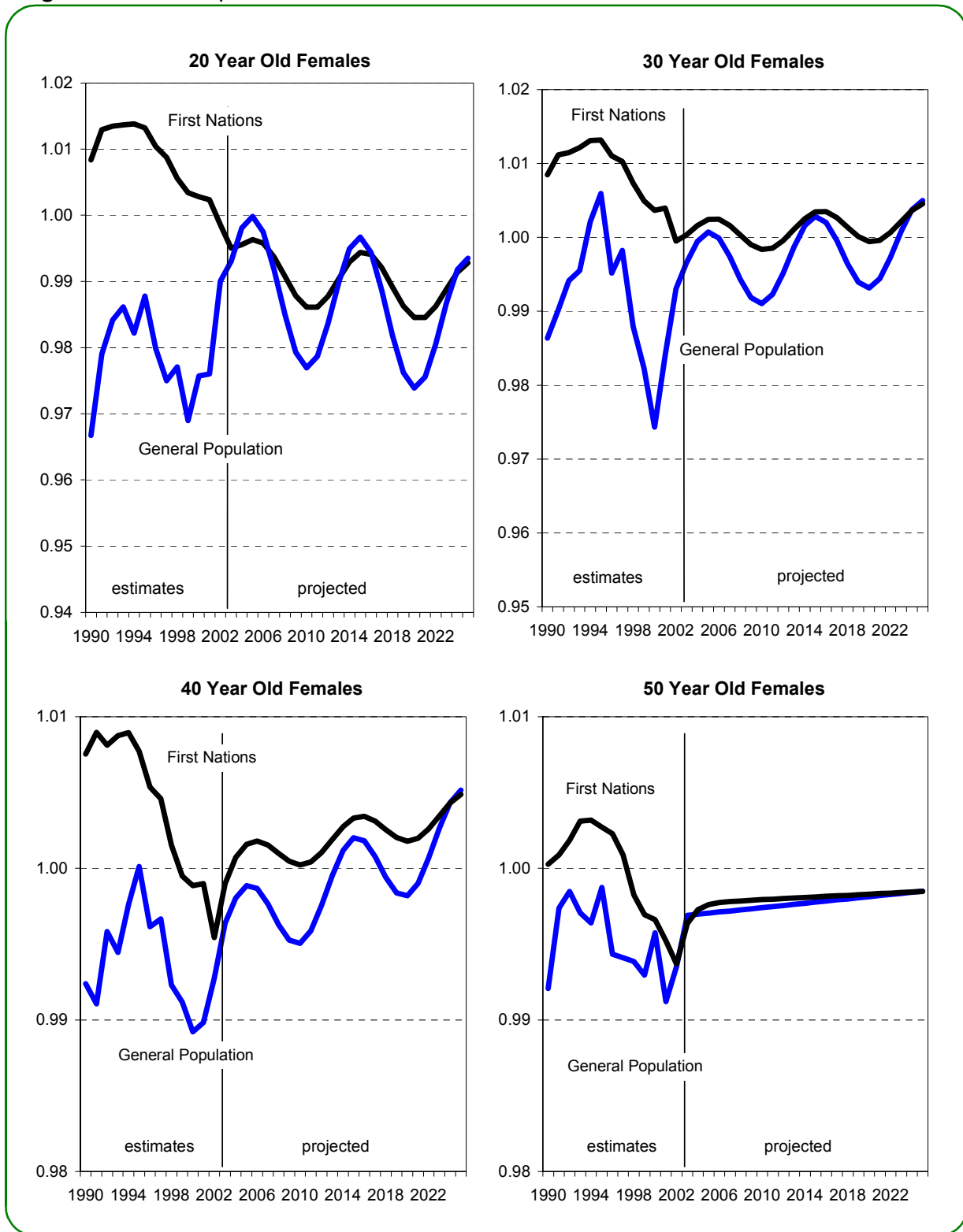
## **Métis Population**

As with fertility and mortality rates, the survival rates for the Métis (that is, the non-Indian Aboriginal population) are assumed to be midway between the rates for the First Nations population and the general population. These rates are also shown in Appendix A.

**Figure 2.8** Sample Survival Rates for First Nations Men



**Figure 2.9** Sample Survival Rates for First Nations Women



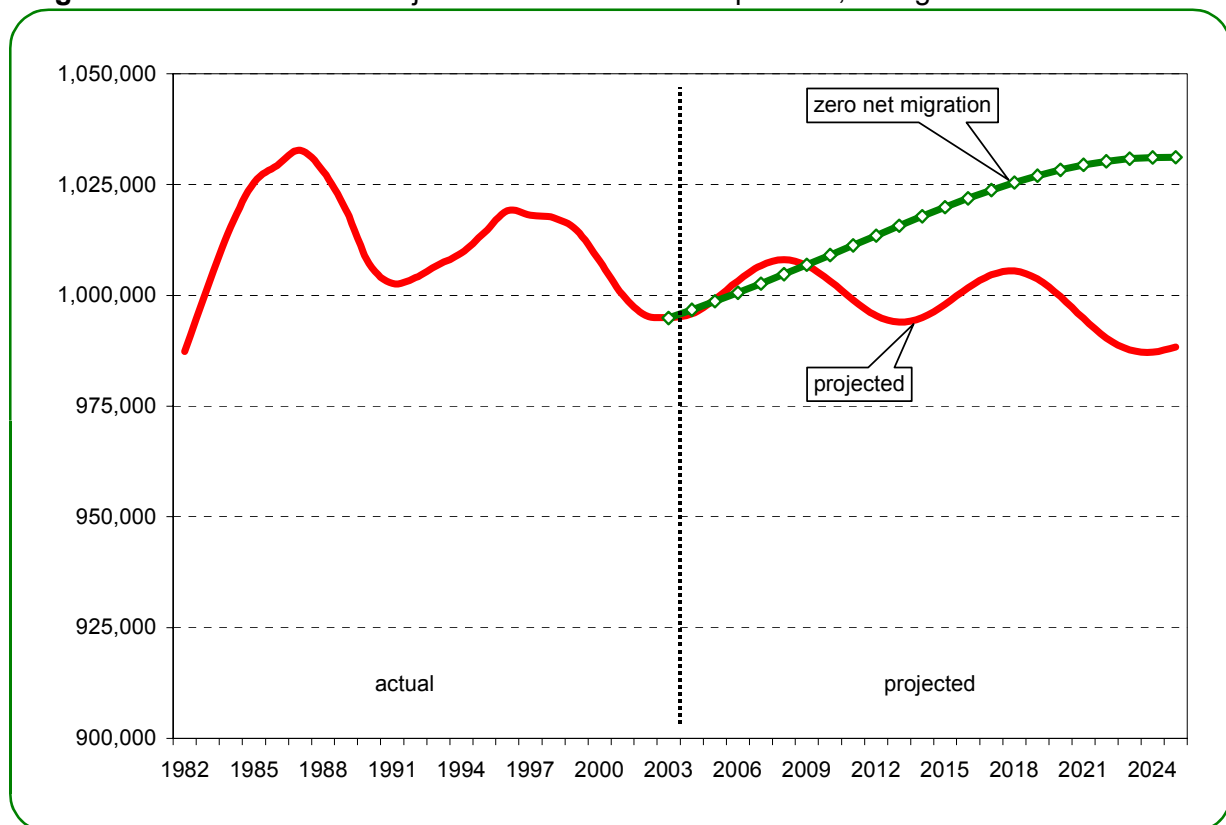
## 2.4 Population

In this section, the assumptions on fertility and survival rates made in the previous section are combined with the current (July 2003) population of the province to generate the projected population over the next two decades.

The population of the province has been at or near one million people for the past thirty years and Figure 2.10 shows that it is projected to remain near that figure, cycling above and below one million with a gradual downward trend. The “zero net migration” scenario shows the impact of migration on the province’s population by projecting the population using only mortality rates. In this theoretical calculation, the population increases to approximately 1,030,000 where it levels off.

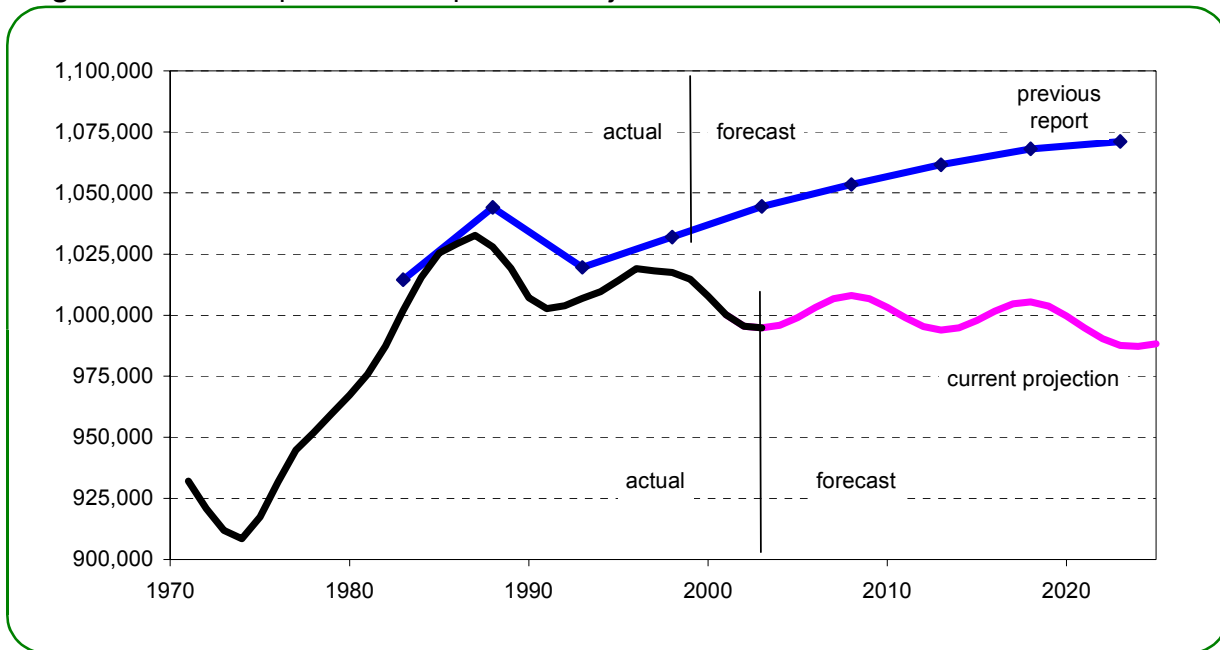
The population projection differs from the one projected in the previous *Labour Market Trends* report (see Figure 2.11). In that report<sup>1</sup>, which assumed higher fertility rates and lower net interprovincial migration, an increasing population over the forecast period resulted in a population of 1,070,000 by 2023 compared with the expected population of 987,700.

**Figure 2.10** Actual and Projected Saskatchewan Population, All Ages



<sup>1</sup> The “actual” populations differ from those in the previous report because the base population used in the previous report was Saskatchewan Health’s “covered population” rather than those published by Statistics Canada. The covered population counts are higher than Statistics Canada’s population counts.

**Figure 2.11** Comparison of Population Projections



## Age Groups

The forecasted population broken down into several key age groups is shown in Table 2.5. Examined in ten year age groups, Figures 2.12 clearly shows that in the short term, the population under 20 years of age will decline and the population 20 to 40 years of age will increase. There will also be a steady increase in the population 50 to 69 years of age as the “baby boom” generation moves decisively into their fifties. Later in the forecast period, the population in their sixties and seventies will increase significantly<sup>1</sup>.

The overall population of youth (15 to 29) increases in the early part of the forecast period, peaking in 2008 at the same level as in the early 1990s. This age cohort moves into their thirties from 2010 to 2020 causing an increase in the size of that population, and into their forties late in the forecast period to cause a reversal in the downward trend in that age group.

In the key labour market age group, broadly 15 to 64 but more narrowly considered as 25 to 59, the population continues to increase over the next few years (see Figure 2.13). The 15 to 64 year old population peaks in 2009 before declining slowly to 660,000 in the 2015 to 2020 period. It subsequently falls rapidly as the baby boom generation reaches age 65.

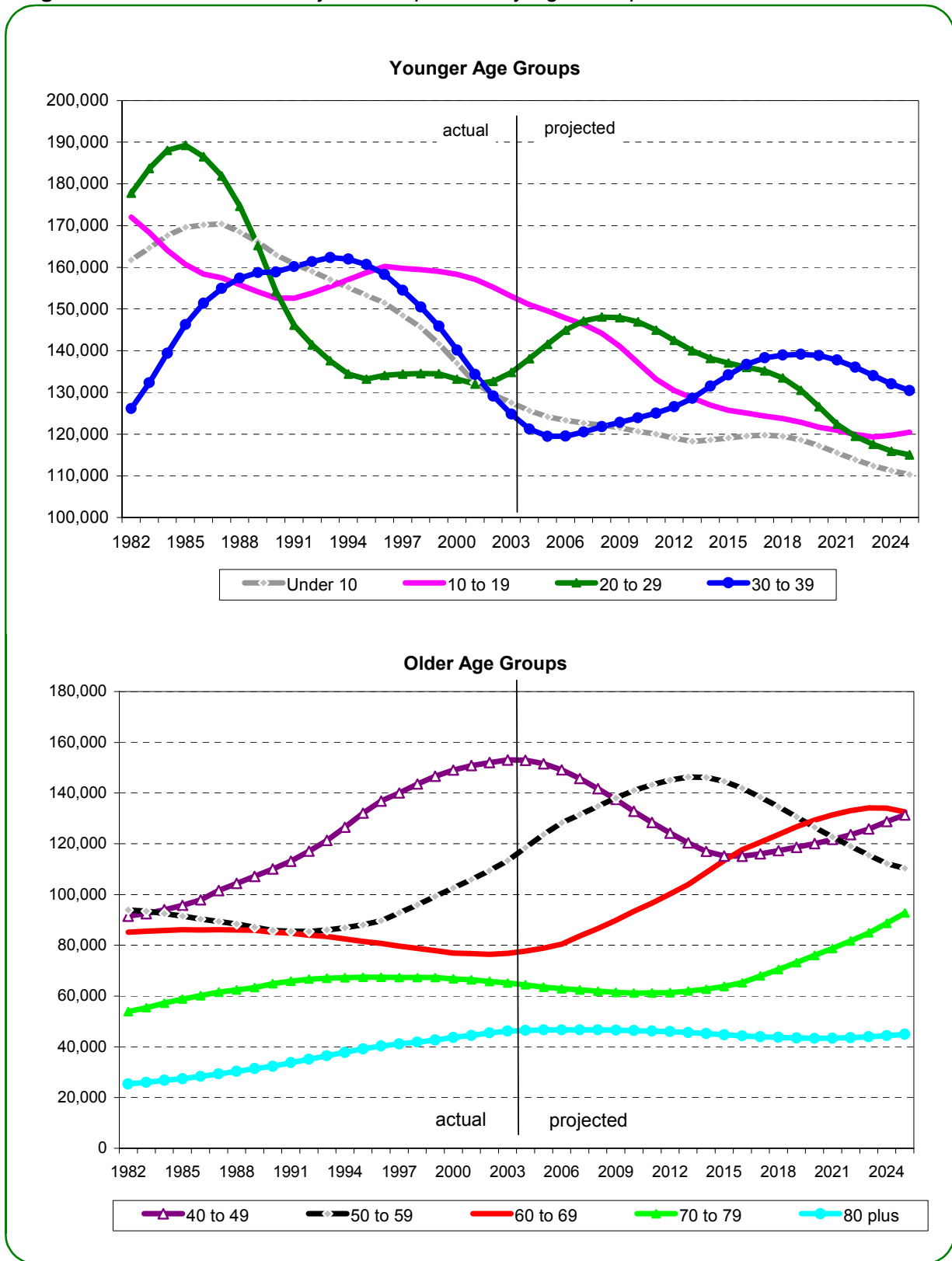
The size of the 25 to 59 age group peaks at about the same point (2009) but the subsequent decline happens earlier.

<sup>1</sup> The population 70 years of age and older will probably increase more quickly than the forecast indicates because no decline in mortality rates was included in the forecast methodology.

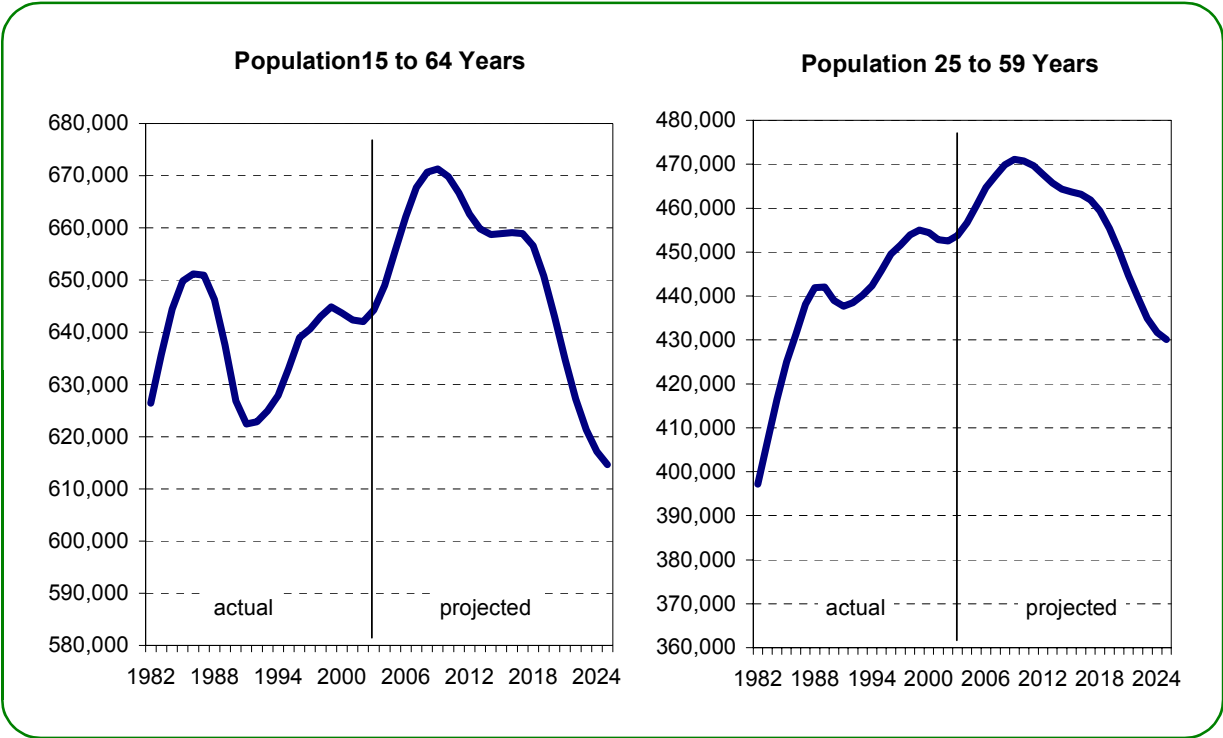
**Table 2.5** Actual and Projected Provincial Population by Gender and Age Group

		Actual			Projected				
		1990	1995	2000	2005	2010	2015	2020	2025
Total		1,007,114	1,014,126	1,007,767	999,036	1,003,231	997,908	999,728	988,312
Men		502,097	504,610	501,227	496,635	498,488	495,346	495,614	488,873
Women		505,017	509,516	506,540	502,401	504,742	502,562	504,114	499,439
Ten year age groups	Under 10	163,009	153,289	136,972	124,158	120,613	119,124	117,225	110,292
	10 to 19	152,626	158,712	158,278	149,549	137,099	125,696	121,698	120,482
	20 to 29	154,185	133,217	133,228	141,550	146,939	137,071	126,590	115,065
	30 to 39	158,885	160,624	140,186	119,484	123,926	134,213	138,865	130,487
	40 to 49	110,104	132,093	149,032	151,578	132,777	115,249	120,121	131,331
	50 to 59	85,918	88,058	102,625	123,694	140,983	144,613	126,501	110,375
	60 to 69	85,196	81,591	76,990	78,865	93,345	113,453	129,363	132,601
	70 to 79	64,875	67,365	66,771	63,497	61,146	63,765	76,073	92,719
	80 plus	32,316	39,177	43,685	46,660	46,401	44,724	43,292	44,960
Key age groups	Under 15	241,439	234,152	215,711	196,841	186,018	180,345	178,040	170,328
	5 to 18	220,188	223,383	215,727	198,239	183,261	172,610	169,782	166,117
	15 to 29	228,381	211,066	212,767	218,417	218,633	201,546	187,473	175,511
	15 plus	765,675	779,974	792,056	802,195	817,212	817,563	821,688	817,983
	15 to 64	626,851	633,087	643,726	655,635	669,797	658,880	642,948	614,644
	25 to 59	438,975	445,752	454,425	460,561	470,731	463,648	450,268	430,099
	65 plus	138,824	146,887	148,330	146,560	147,415	158,683	178,739	203,339
	75 plus	61,171	69,376	74,687	76,414	74,725	72,455	73,896	83,759

**Figure 2.12** Actual and Projected Population by Age Groups



**Figure 2.13** Actual and Projected Population in Key Labour Market Age Groups





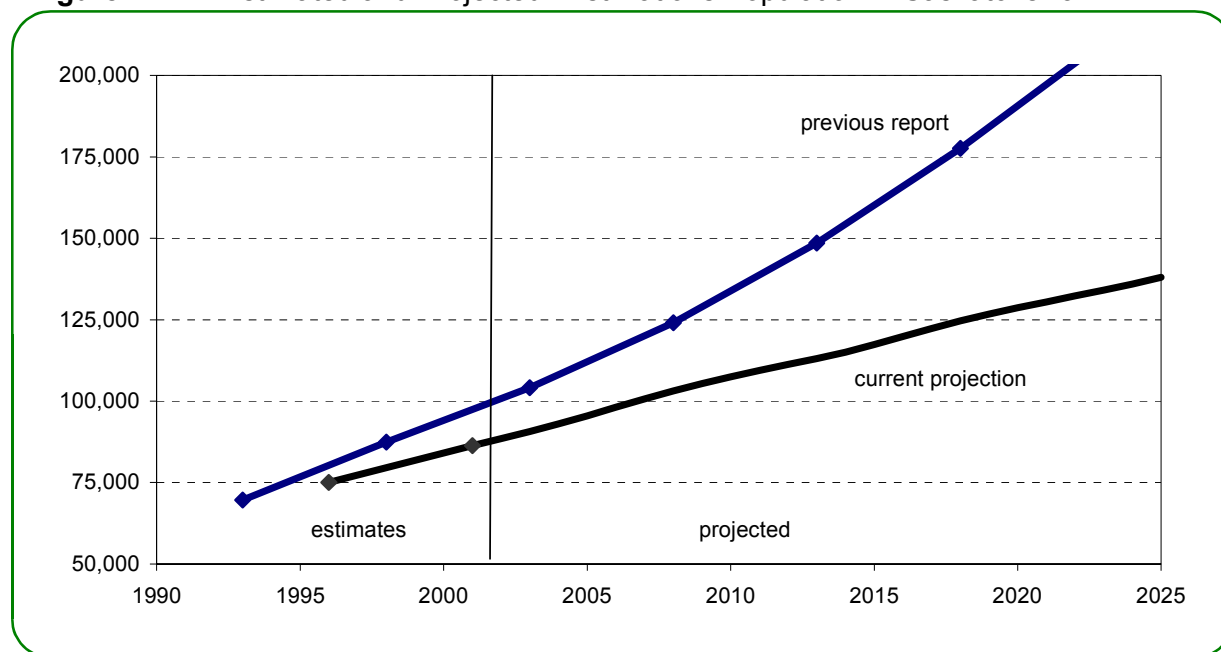
## First Nations Population

The projection of the First Nations population starts with the 2001 census data. The total census population of 83,745 who a) live in private households and b) report single Indian identity is adjusted upward by 3% as an estimate of the undercoverage in the census. A relatively large proportion of the First Nations population is living in collective dwellings (e.g. penal institutions and group homes) but no accurate data are available to estimate the size or age of this population so they are effectively excluded from the counts. The net effect of the adjustment is an estimated First Nations population of 86,268 in 2001.

The First Nations population in Saskatchewan has a much younger age profile and higher fertility rates than the general population. Not surprisingly then, the population continues to grow over the forecast period in spite of the forecasted decline in fertility rates. The estimated 2001 First Nations population and the projected population to 2025 are shown in Table 2.6 and Figure 2.14.

Figure 2.14 also shows the projected population used in the previous *Labour Market Trends* report. The projections in that report used constant fertility rates and higher survival rates than the ones in this update. As a consequence the population increased much more quickly than in the current projection.

**Figure 2.14** Estimated and Projected First Nations Population in Saskatchewan



**Table 2.6** Actual and Projected First Nations Population by Gender and Age Group

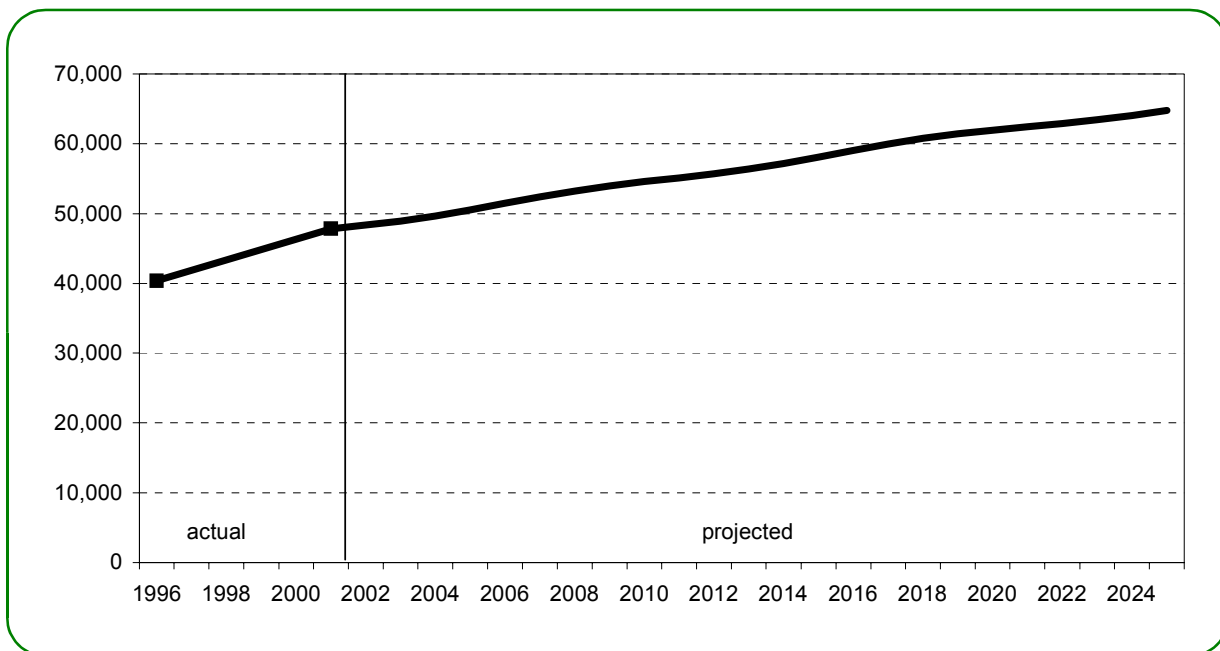
		Estimate	Projected				
		2001	2005	2010	2015	2020	2025
Total		86,268	95,478	107,447	117,372	128,693	138,071
Men		41,797	47,445	54,251	59,189	64,964	69,680
Women		44,470	48,033	53,196	58,183	63,729	68,390
Ten year age groups	Under 10	24,911	23,516	22,371	23,212	24,554	24,366
	10 to 19	20,739	24,513	26,774	24,905	23,155	24,084
	20 to 29	12,994	15,608	20,480	23,997	25,758	23,944
	30 to 39	10,507	11,940	13,390	15,889	20,312	23,698
	40 to 49	8,724	9,894	10,628	12,120	13,408	15,935
	50 to 59	4,480	5,634	8,038	9,577	10,238	11,727
	60 to 69	2,018	2,683	3,734	5,061	7,367	8,803
	70 to 79	1,115	995	1,387	2,022	2,990	4,166
	80 plus	779	694	646	589	911	1,347
Key age groups	Under 15	36,632	36,464	35,869	34,639	36,135	36,776
	5 to 18	31,464	35,598	35,700	33,679	32,613	34,375
	15 to 29	22,012	27,173	33,755	37,475	37,332	35,619
	15 plus	49,636	59,013	71,578	82,733	92,558	101,295
	15 to 64	47,117	56,199	68,124	77,993	85,902	91,444
	25 to 59	29,965	34,219	40,992	48,819	56,466	64,117
	65 plus	2,518	2,815	3,453	4,740	6,656	9,851
	75 plus	1,296	1,158	1,064	1,377	1,966	3,009

## Métis Population

The projection of the Métis population also starts with the 2001 census data. The 83,745 First Nations members were subtracted from the total Aboriginal population of 130,190 to arrive at a figure of 46,445. Of these, 94% reported single Métis identity but the entire non-Indian Aboriginal population was used as the basis for the forecast to ensure that the Métis and First Nations populations sum to the total Aboriginal population.

The figure of 46,445 was adjusted upward by 3% as an estimate of the undercoverage in the census. The net effect of the adjustment is an estimated Métis (non-Indian Aboriginal) population of 47,833 in 2001. The estimated 2001 Métis population and the projected populations to 2025 are shown in Table 2.7 and Figure 2.15.

**Figure 2.15** Estimated and Projected Métis (non-Indian Aboriginal) Population in Saskatchewan



**Table 2.7** Estimated and Projected Métis (non-Indian Aboriginal) Population by Gender and Age Group

		Estimate	Projected				
		2001	2005	2010	2015	2020	2025
Total		47,833	50,535	54,567	58,074	61,966	64,789
Men		23,402	24,718	26,744	28,503	30,424	31,783
Women		24,432	25,817	27,822	29,571	31,543	33,005
Ten year age groups	Under 10	10,805	9,809	9,738	10,096	10,320	9,970
	10 to 19	10,424	11,344	11,108	10,054	9,967	10,348
	20 to 29	7,874	8,569	9,793	10,666	10,490	9,439
	30 to 39	6,658	6,973	7,576	8,306	9,450	10,348
	40 to 49	5,965	6,615	6,529	6,841	7,461	8,239
	50 to 59	3,222	3,886	5,400	6,344	6,260	6,593
	60 to 69	1,517	2,068	2,781	3,570	4,978	5,822
	70 to 79	804	739	1,107	1,681	2,274	2,927
	80 plus	564	533	534	516	766	1,104
Key age groups	Under 15	16,449	15,702	14,961	14,952	15,409	15,217
	5 to 18	15,324	15,560	14,861	13,933	14,160	14,528
	15 to 29	12,654	14,020	15,679	15,864	15,369	14,539
	15 plus	31,384	34,833	39,606	43,123	46,558	49,571
	15 to 64	29,566	32,699	36,836	39,374	41,622	42,647
	25 to 59	19,579	21,428	24,003	26,541	28,620	29,971
	65 plus	1,818	2,135	2,770	3,749	4,936	6,924
		75 plus	938	882	862	1,178	1,633

## Aboriginal Population

Combining the First Nations and Métis (non-Indian Aboriginal) population results in the total Aboriginal population figures shown in Table 2.8.

**Table 2.8** Actual and Projected Aboriginal Population by Gender and Age Group

		Estimate	Projected				
		2001	2005	2010	2015	2020	2025
Total		134,101	146,013	162,013	175,447	190,659	202,859
Men		65,199	72,163	80,995	87,692	95,388	101,463
Women		68,902	73,850	81,018	87,754	95,271	101,396
Ten year age groups	Under 10	35,715	33,325	32,109	33,308	34,874	34,336
	10 to 19	31,163	35,857	37,882	34,960	33,122	34,432
	20 to 29	20,869	24,177	30,273	34,663	36,248	33,383
	30 to 39	17,165	18,913	20,966	24,195	29,761	34,046
	40 to 49	14,689	16,509	17,157	18,961	20,869	24,174
	50 to 59	7,702	9,520	13,438	15,922	16,498	18,320
	60 to 69	3,535	4,751	6,515	8,631	12,345	14,625
	70 to 79	1,919	1,734	2,494	3,703	5,264	7,093
	80 plus	1,343	1,227	1,180	1,105	1,678	2,451
Key age groups	Under 15	53,081	52,166	50,830	49,591	51,544	51,993
	5 to 18	46,788	51,158	50,561	47,612	46,773	48,903
	15 to 29	34,666	41,193	49,434	53,340	52,701	50,157
	15 plus	81,020	93,847	111,184	125,856	139,116	150,866
	15 to 64	76,684	88,897	104,960	117,367	127,524	134,091
	25 to 59	49,544	55,647	64,994	75,360	85,086	94,088
	65 plus	4,336	4,949	6,223	8,489	11,592	16,775
	75 plus	2,234	2,040	1,926	2,555	3,598	5,315

## **Key Age Groups**

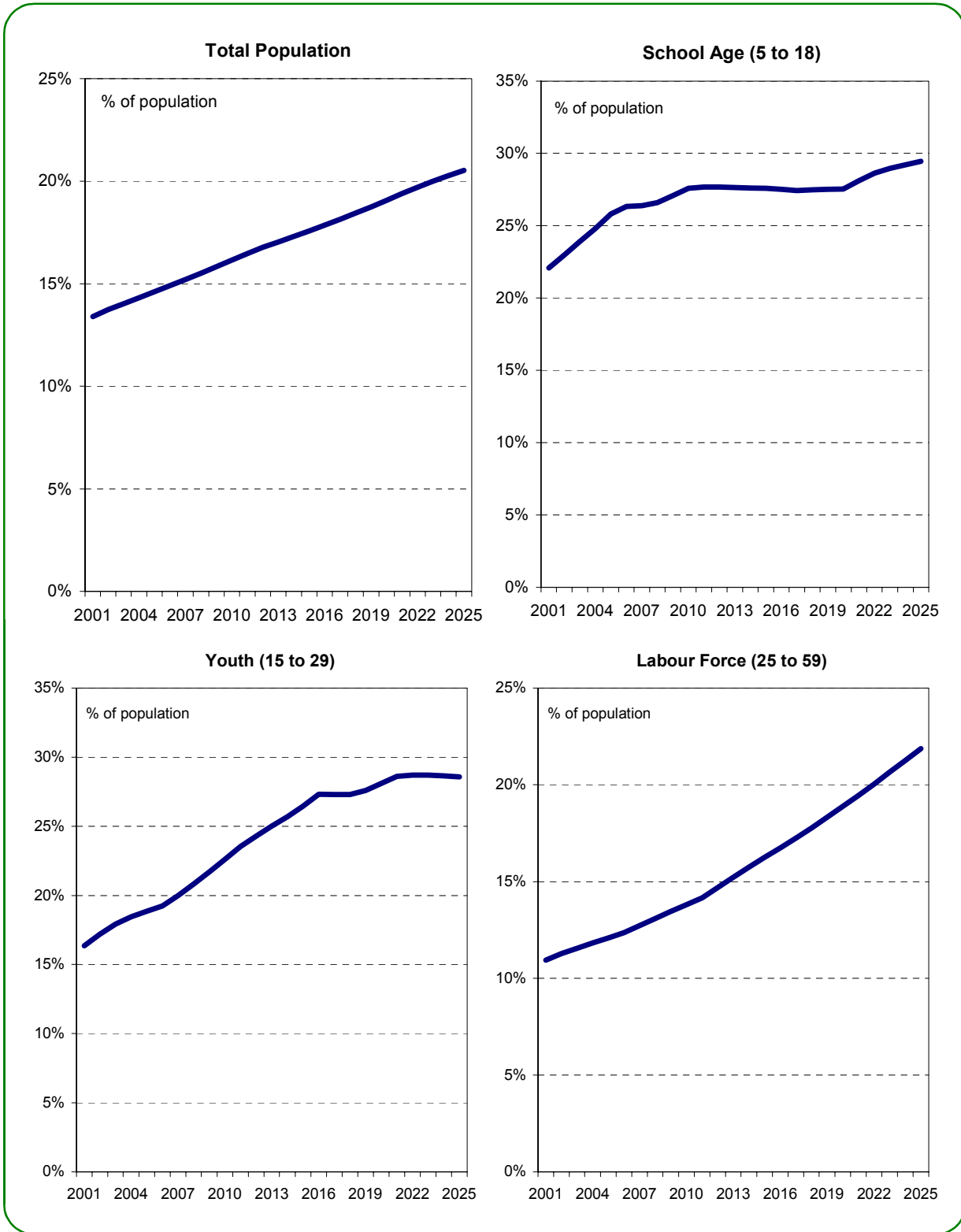
With a growing Aboriginal population and a stable overall population, the Aboriginal population in Saskatchewan will represent an increasing proportion of the overall population as Figures 2.16 and 2.17 show. As a proportion of the total population, the Aboriginal population has grown from 11.3% in 1996 to 13.4% in 2001. The projection suggests that it will increase to 14.6% in 2005, 16.1% in 2010, and be above 20% by 2025.

There are different patterns in some of the key age groups. Among persons five to eighteen years of age, the bulk of the elementary/secondary school population, the proportion increases from 22% to 27% by 2010 where it levels off. A secondary increase happens later in the forecast period.

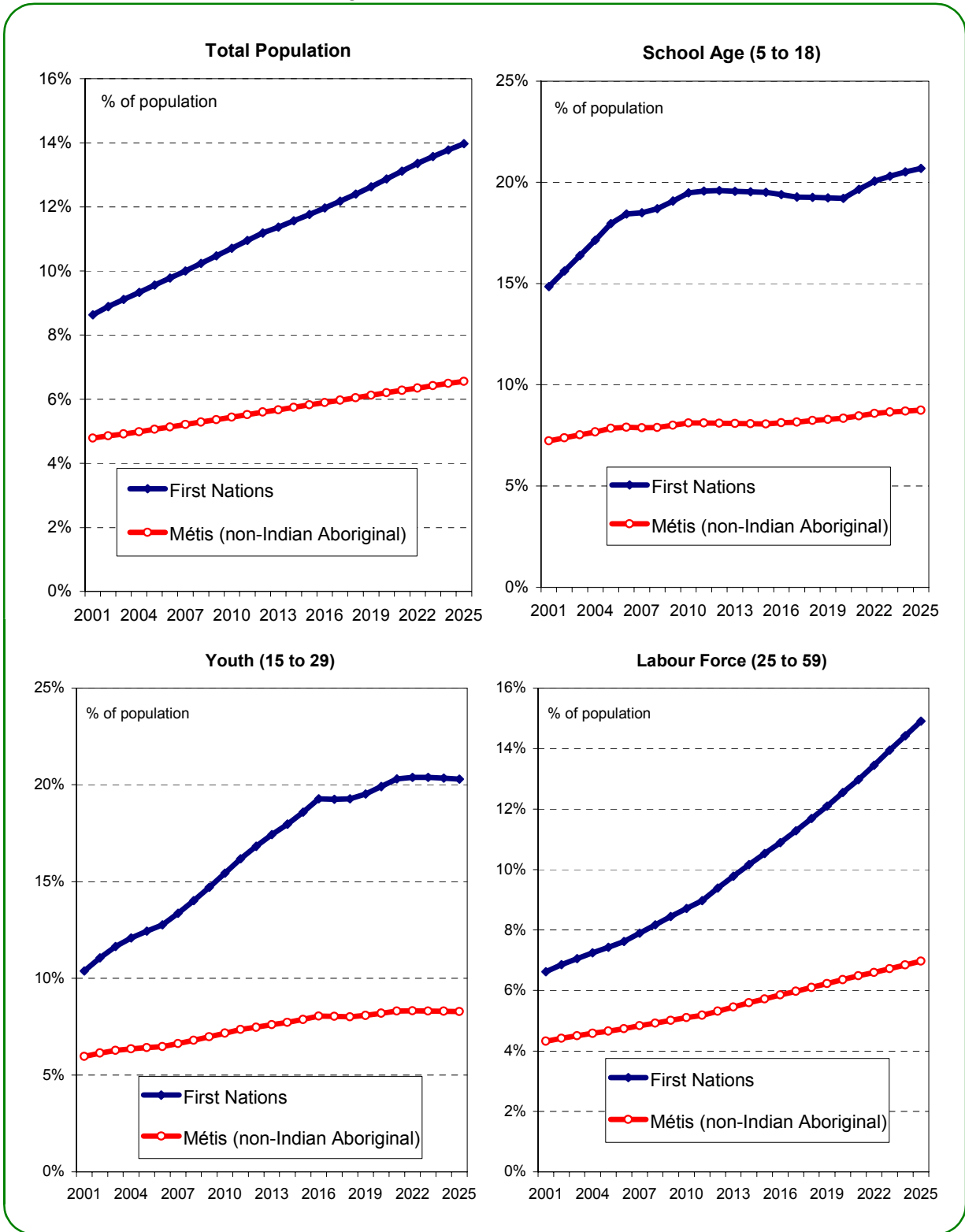
There is also a rapidly increasing proportion of the youth population (taken as 15 to 29 years) that is Aboriginal. From the current level of 16%, Aboriginal youth will represent 20% of Saskatchewan youth by 2007 and 25% by 2013. The proportion levels off late in the forecast period.

The proportion of the primary labour market age group – 25 to 59 years - that is Aboriginal increases exponentially throughout the forecast period. From the current level of 11%, the proportion increases to 15% by 2012 and 20% by 2022.

**Figure 2.16** Aboriginal Population as Percentage of Total Population, Selected Age Groups, 2001 to 2025



**Figure 2.17** First Nations and Métis (non-Indian Aboriginal) Population as Percentage of Total, Selected Age Groups, 2001 to 2025





## 2.5 Summary

A projection of the provincial population is developed in this section based on several assumptions. These assumptions and the main findings in this section are summarized below in point form.

- Fertility rates for the general population of Saskatchewan women remain near their current levels.
- Fertility rates for Aboriginal women in general and First Nations women in particular are assumed to decline from their current level. The total fertility rate of approximately 2.5 births per First Nations woman declines to just over 2.0 by 2025.
- The “survival rate”, which is an amalgam of inter-provincial and international migration rates along with mortality is used to project the population. Survival rates are generally assumed to improve over the forecast period but continue to undergo period cycles.
- The population continues to cycle near one million people over the forecast period.

While the population projection describes a stable overall population, there are significant shifts within the one million people living in the province.

- As a percentage of the total population, the Aboriginal population increases from 13% to 20% by 2025. The proportion is even higher for youth (15 to 29 years) and those in the labour force age group.
- In the short term, the population under 15 years of age will continue to decline and the youth population (15 to 29 years of age) will grow, largely as a result of growth in the Aboriginal population. There will also be a steady increase in the population 50 to 69 years of age as the “baby boom” generation moves decisively into their fifties.
- Later in the forecast period, the population in their sixties and seventies will increase significantly.
- In the key labour market age group, narrowly considered as those 25 to 59 years of age, the population continues to increase over the next few years but starts to fall within a decade.

## SECTION 3 LABOUR FORCE PARTICIPATION RATE PROJECTION

---

The projected population can be translated into a potential supply of labour by using labour force participation rates. The participation rate is the proportion of the population of a given age and gender that is in the labour force, that is, either employed or unemployed (in the “official” sense, that is actively seeking employment). In this section, age and gender specific participation rates are forecast for the next twenty years. These are then applied, in Section 4, to the population projections developed in Section 2 to yield the potential size of the labour force for the next twenty years

Overall participation rates have been relatively stable for the past few years but there are historical trends in specific age and sex cohorts that, if they continue, will significantly affect the size of the labour force. The current and historical participation rates are derived from Statistics Canada’s *Labour Force Survey* so they exclude:

- the population living on Indian Reserves (but they include the Aboriginal population living off-Reserve);
- full-time members of the armed forces; and
- the institutional population, that is, those living in special care homes, penitentiaries, and other collective dwellings.

The participation rates for the on-Reserve and institutional population are lower than for the general population whereas the participation rates for members of the armed forces is 100%. The actual participation rates would be somewhat lower than those published in the LFS if the excluded groups were included in the calculation. The difference will be negligible, however, so these rates from the Labour Force Survey are assumed to apply to the total Saskatchewan population<sup>1</sup>.

---

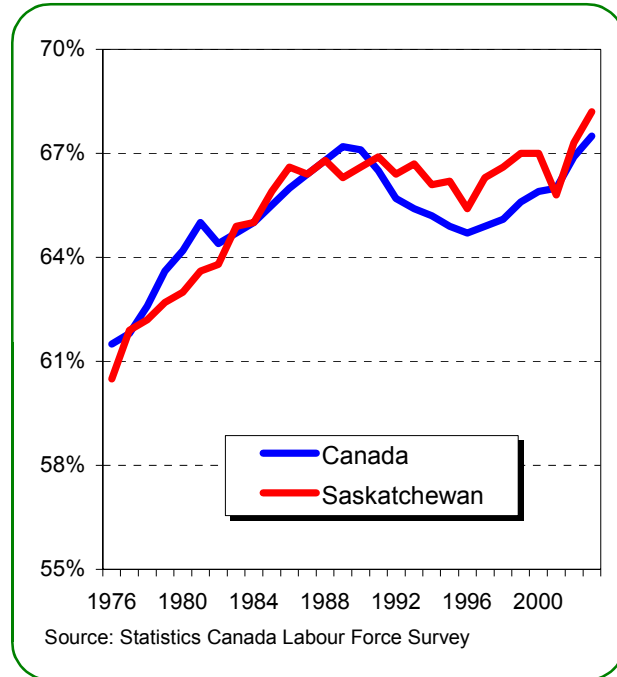
<sup>1</sup> In the previous *Labour Market Trends* report, the LFS participation rates were assumed to apply only to the population that was not a Registered Indian in the sense of *The Indian Act*.

### 3.1 General Population

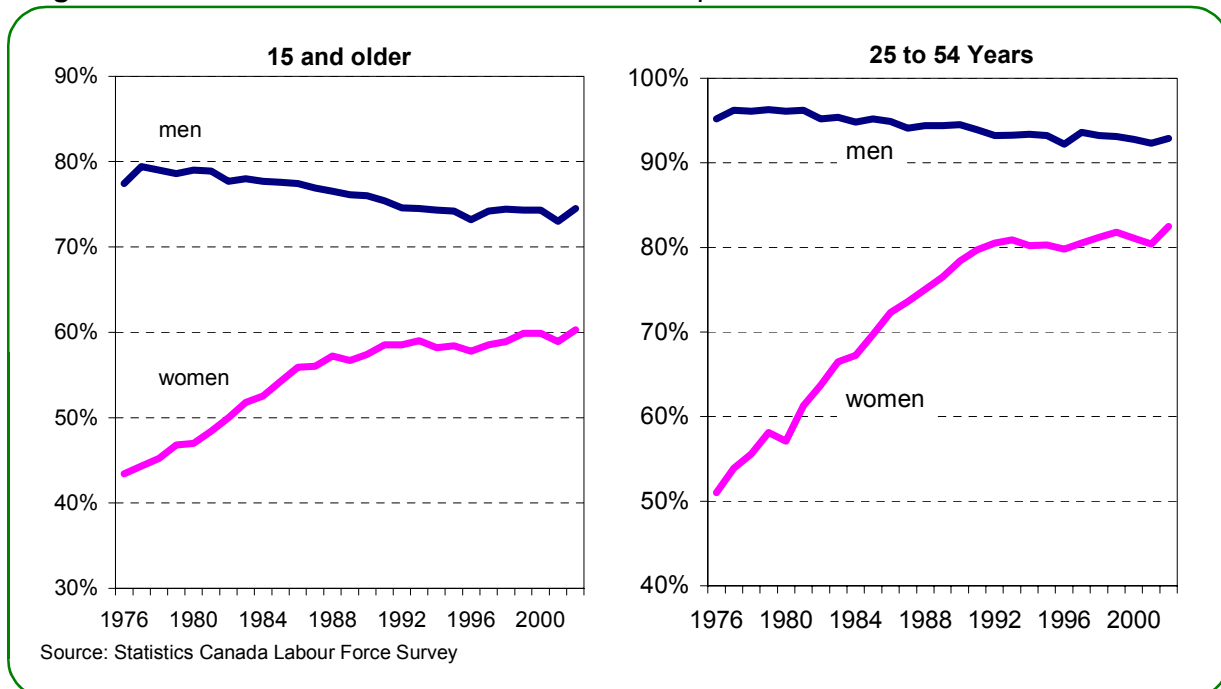
In spite of the fact that Saskatchewan has a relatively large proportion of its population in the 65 and older age group, overall participation rates in the province have been higher than the national average throughout most of the past decade (see Figure 3.1). After increasing from 61% to 67% in the 1980s, the rates have been relatively constant until the recent increase in 2002 and 2003.

Figure 3.2 shows that the increase in the 1980s was gender-related. Participation rates among Saskatchewan women grew throughout the period, increasing from 43% in 1976 to 59% in 1991. Since then, they have been relatively stable near 60%. By looking at the 25 to 54 age group, we can examine participation rates excluding retirees and the majority of those potentially still in school. Although the rates are much higher, the pattern is similar – a steady but slow decline among men and an increase among women until the early 1990s.

**Figure 3.1** Labour Force Participation Rates, 15 years and Older, Canada and Saskatchewan



**Figure 3.2** Saskatchewan Labour Market Participation Rates



Two participation rate scenarios are examined in the labour force projection. In the first, participation rates remain at their current level using the 2001 to 2003 average to remove annual fluctuations. Participation rates have been largely unchanged in the past fifteen years and a continuation of this pattern is a distinct possibility for the future. In particular, the 80% participation rate among Saskatchewan women 25 to 54 years of age may be the maximum that is easily achievable.

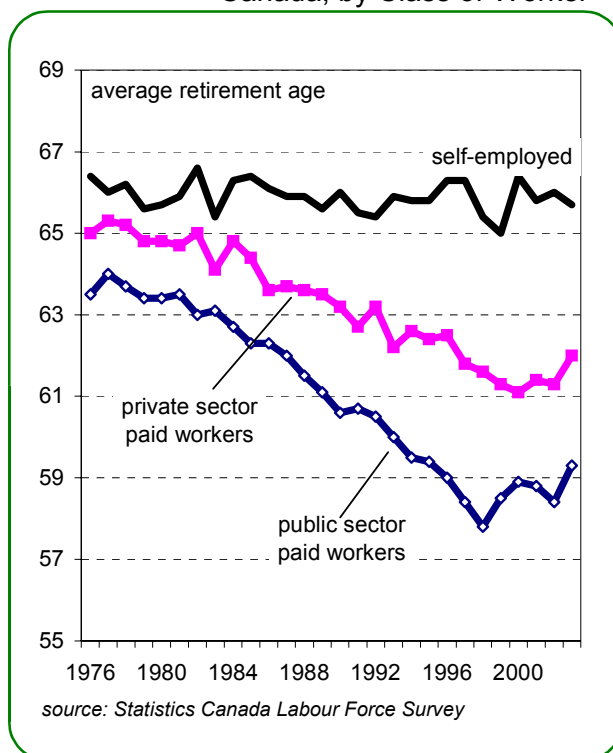
In the second, participation rates increase over the forecast period in response to higher demand in the labour market and higher levels of completed education in the Aboriginal and non-Aboriginal population. No hard and fast rules were used to forecast the rates but the key assumption is that the general aging of the population will lead to a “tight” labour market and increased opportunity for employment. That is, skilled workers will be in short supply in the province and participation rates will increase in response. Most of this increase is assumed to occur among women because participation rates for men are already near 100% in many age groups.

Figure 3.3 shows the average retirement ages in Canada according to the Labour Force Survey<sup>1</sup>. The average retirement age is clearly declining for paid workers in Canada. It is an open question whether the increases in the recent years are indicative of a turnaround or whether average retirement ages will remain near their current levels. The projected labour force participation rates made for Saskatchewan implicitly assume the latter, namely that the average retirement age will remain near its current level.

Other assumptions made in projecting the labour force participation rates are listed below.

- With a tight labour market, participation rates will tend to rise to their theoretical maximums. For most age and sex combinations this was taken to be the maximum that they have achieved over the past 20 years.
- Participation rates among youth (15 to 24) will remain low because of attendance at high school and post-secondary institutions.
- Participation rates among women will approach those among men in the corresponding age group although a differential will remain for women in the child bearing age groups and those in older age groups.

**Figure 3.3** Average Retirement Ages in Canada, by Class of Worker

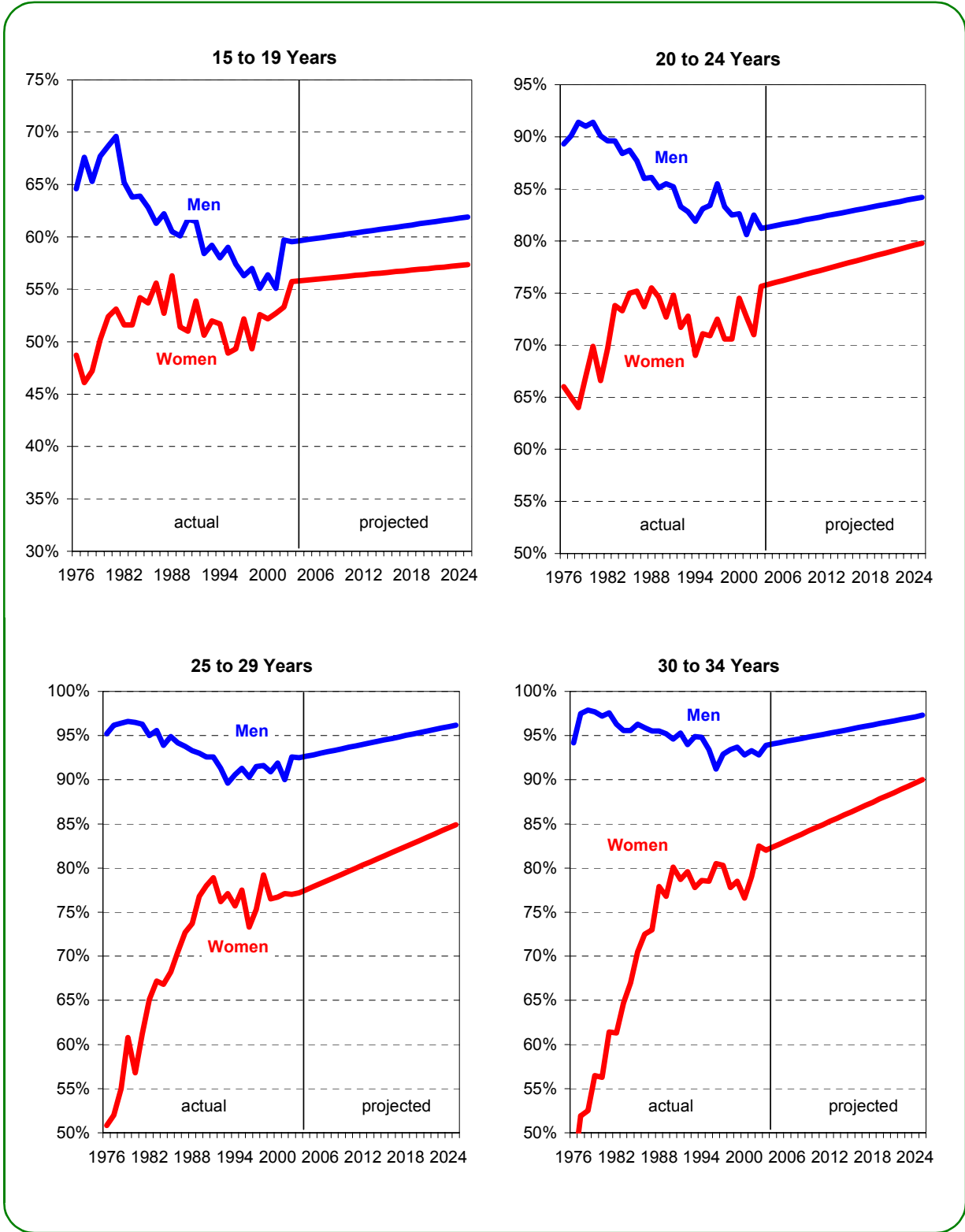


<sup>1</sup> Provincial level data are not available because of the small sample size. “Retirement” is based on responses to the question: “Why did you leave your last job?”.

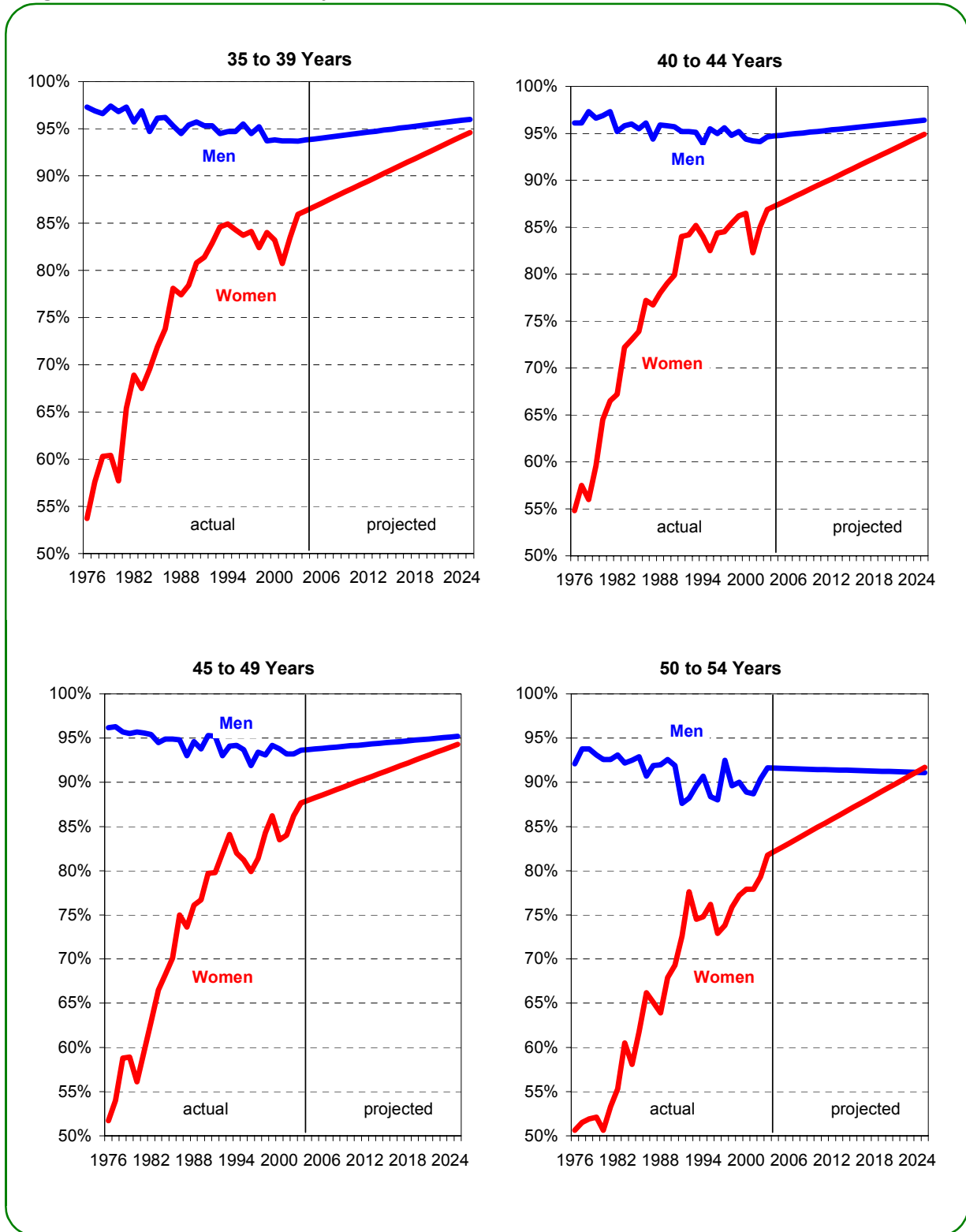
- Participation rates for men near and past the average retirement age of 60 will continue to decline.
- Retirement generally occurs earlier among men than among women although the gap is expected to narrow.

Figures 3.4 to 3.6 show the actual and projected labour market participation rates by age and gender that are assumed under the “increasing participation rate scenario”. A sample of the actual values is included as Appendix C.

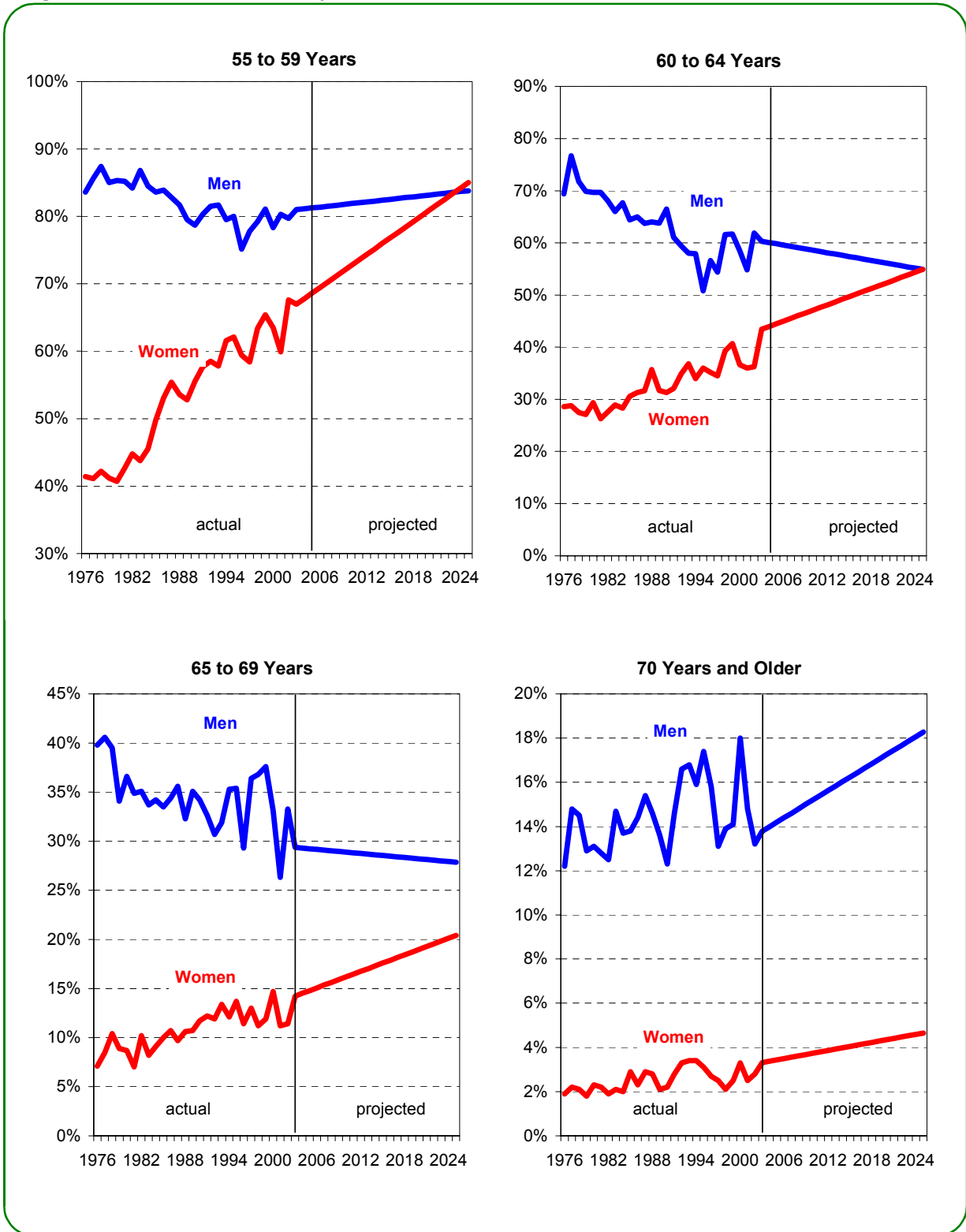
**Figure 3.4** Actual and Projected Labour Force Participation Rates, 15 to 34 Years of Age



**Figure 3.5** Actual and Projected Labour Force Participation Rates, 35 to 54 Years



**Figure 3.6** Actual and Projected Labour Force Participation Rates, 55 and Older



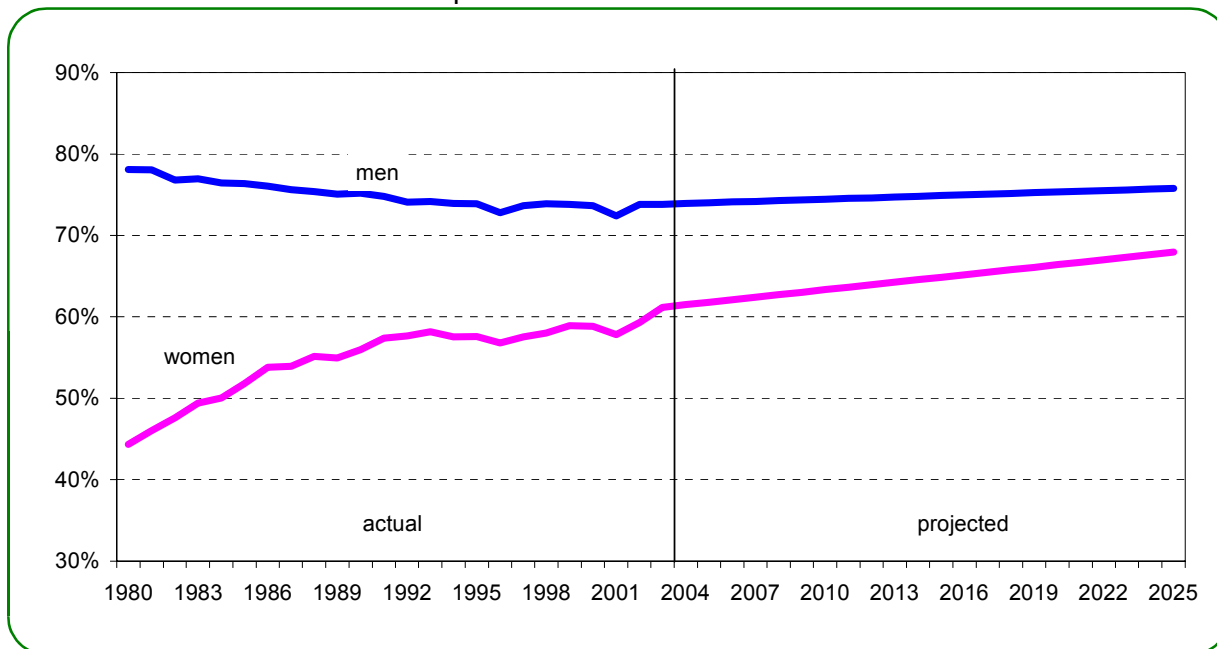


## Summary

Aggregate participation rates, the ones reported monthly in the Labour Force Survey, are affected by both a) the participation rates for the individual age and sex cohorts and b) by the relative mix of these cohorts in the population. A population with more older people will have lower overall participation rates than one with a younger population even if the participation rates for individual age and sex cohorts are the same. To isolate the effect of changes in the participation rates from changes in the age structure of the underlying population, the figure below uses “age-adjusted” participation rates. The 2003 population of Saskatchewan was used as the base year – in other words, these are the male and female participation rates if the mix of ages in the population remained the same.

Figure 3.7 shows the age-adjusted participation rates for men and women under the increasing participation rate scenario. Participation rates increase steadily for women – from 61% in 2003 to 68% in 2025. The rates for men also increase although much more slowly. Overall participation rates for men remain effectively constant near 75% over the forecast period.

**Figure 3.7** Labour Force Participation Rates, 15 and Older, Age-adjusted to the 2003 Saskatchewan Population



## Comparison with Previous Study

The labour force participation rates in the previous *Labour Market Trends* report were also forecast to increase.

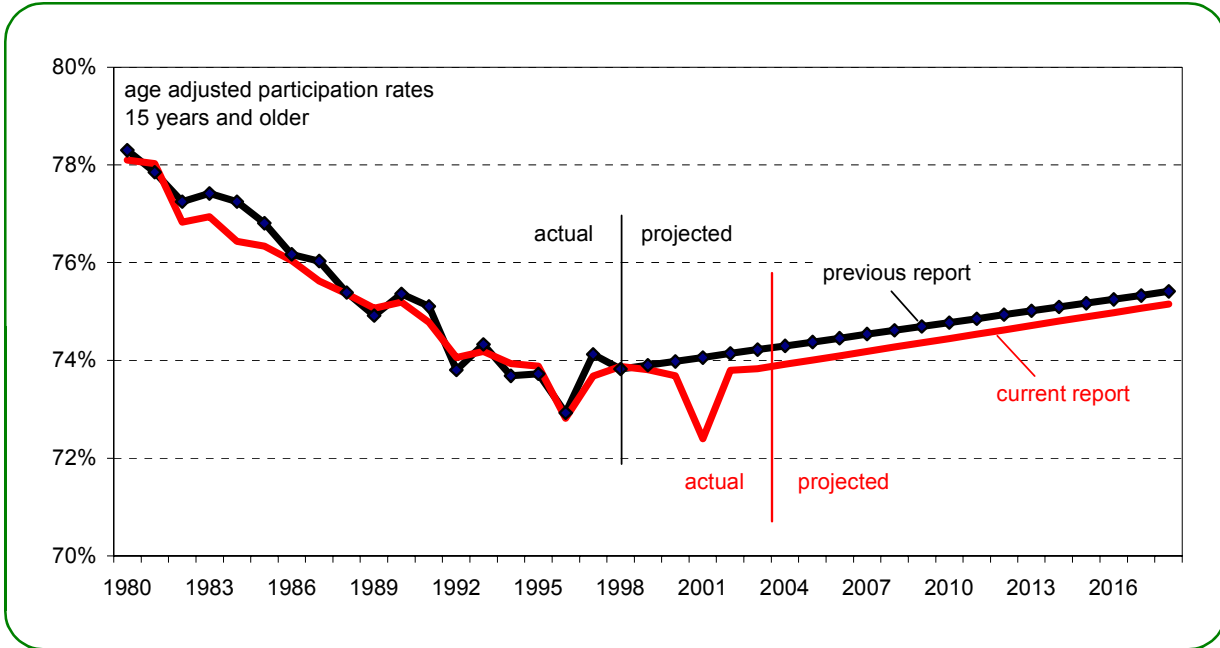
The assumption in that report was that the *Labour Force Survey* participation rates were most applicable to the non-Indian population whereas in this report, the assumption is made that the LFS participation rates apply to the whole population. In both cases, we are measuring and forecasting the same figures. The only difference is how they are applied to the population.

Figures 3.8 and 3.9 show, respectively, the participation rates for men and women in the previous report compared with those used in this report. In both cases, the participation rates are age-adjusted to the 2003 Saskatchewan population.

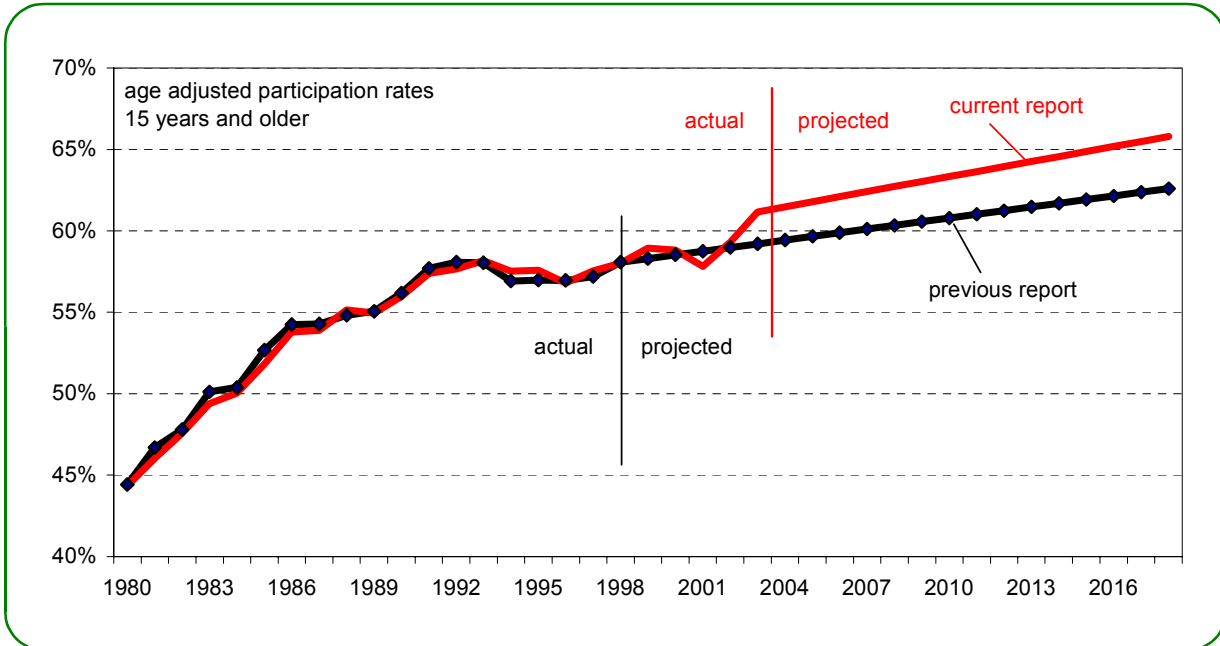
Even discounting the drop in 2001, the participation rates for men have been lower than forecast in the previous report. The projected rates are still forecast to increase at approximately the same rate but do not reach the values assumed in the previous report. In 2015, for example, the previous report would have projected a participation rate of 75.2% compared with 74.9% in the current report.

The opposite is true for women with actual participation rates growing more quickly than previously forecast. The new forecast has a slightly higher rate of increase and significantly higher overall participation rates that reach, for example, 64.9% in 2015 compared with 61.9% in the previous forecast.

**Figure 3.8** Comparison of Age-adjusted Labour Force Participation Rates, Men



**Figure 3.9** Comparison of Age-adjusted Labour Force Participation Rates, Women



## 3.2 Aboriginal Population

Participation rates for the Aboriginal population are more difficult to forecast because there are limited age-specific rates published and very little historical data to establish trends. Table 3.1 and Figures 3.10 and 3.11 show the published data on participation rates from the 1996 and 2001 census, the only source of information about labour force participation rates for the Aboriginal population. These are “snapshots” of labour force participation in the week prior to the respective census surveys.

The participation rates for the Aboriginal population are much lower than for the general population although the difference varies by age, gender, and Aboriginal identity. One of the larger differences is among young (15 to 24 years) First Nations residents where, for example, the participation rate for First Nations women in 2001 is 27% compared with 64% in the general population. A smaller difference is evident among young (15 to 24 years) Métis women where the participation rate was 57% compared with 64% in the general population.

From 1996 to 2001, the difference in participation rates has declined for First Nations men over 45 years of age, for Métis men of all ages, and for First Nations and Métis women under 65 years of age.

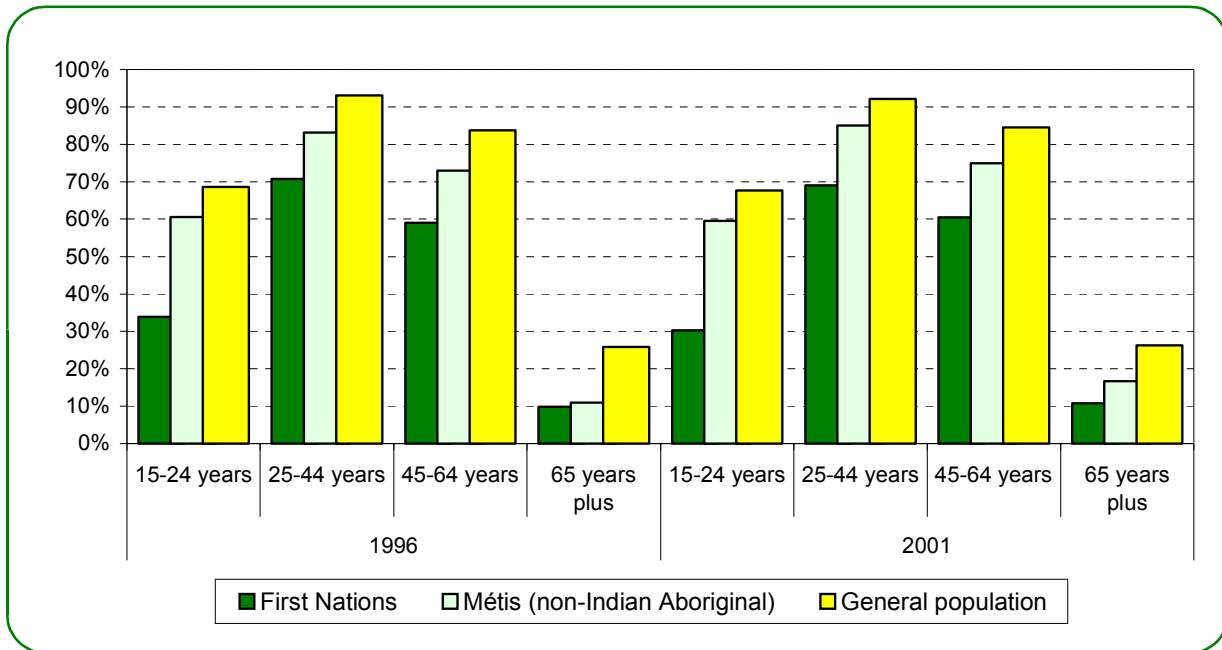
The forecast of the First Nations and Métis labour force requires detailed age specific rates so the published rates in June 1996 and 2001 were used to estimate rates for five-year age groups. The first step was to calculate the ratio between the Aboriginal and non-Aboriginal rates. This was done separately for the eight age-sex cohorts in both years. These ratios were then applied to the 1996 and 2001 participation rates from the Labour Force Survey in the corresponding years to “spread” the participation rates across five-year age groups.

**Table 3.1** Aboriginal Labour Force Participation Rates, 1996 and 2001

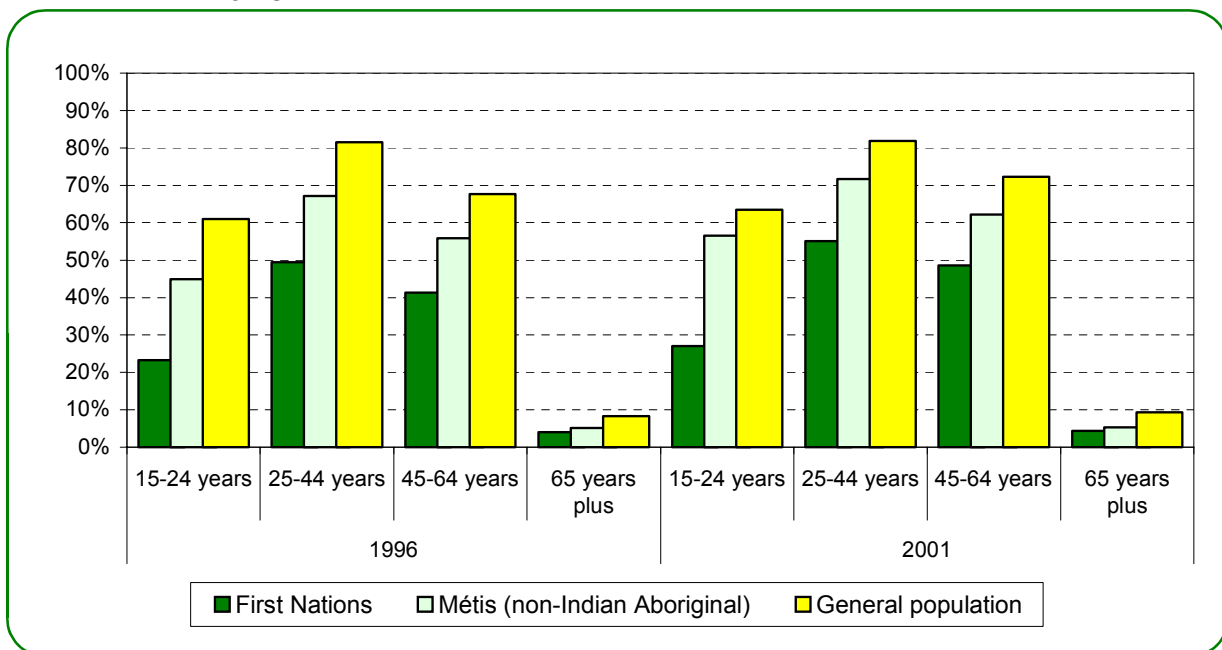
		1996			2001		
		General population	First Nations	Métis (non-Indian Aboriginal)	General population	First Nations	Métis (non-Indian Aboriginal)
Men	15-24 years	69%	34%	61%	68%	30%	60%
	25-44 years	93%	71%	83%	92%	69%	85%
	45-64 years	84%	59%	73%	85%	61%	75%
	65 years and over	26%	10%	11%	26%	11%	17%
	15 and older	75%	53%	70%	74%	52%	72%
Women	15-24 years	61%	23%	45%	64%	27%	57%
	25-44 years	82%	49%	67%	82%	55%	72%
	45-64 years	68%	41%	56%	72%	49%	62%
	65 years and over	8%	4%	5%	9%	4%	5%
	15 and older	60%	38%	54%	62%	43%	61%

Source: Statistics Canada 1996 and 2001 census

**Figure 3.10** Labour Force Participation Rates, Saskatchewan Aboriginal and non-Aboriginal Men



**Figure 3.11** Labour Force Participation Rates, Saskatchewan Aboriginal and non-Aboriginal Women



In effect, this calculation assumes that:

- a) the June rates were representative of the annual rates that year; and that
- b) the relative mix of participation rates within the larger age cohorts is the same in the Aboriginal as it is in the non-Aboriginal population.

Both of these assumptions are reasonable under the circumstances.

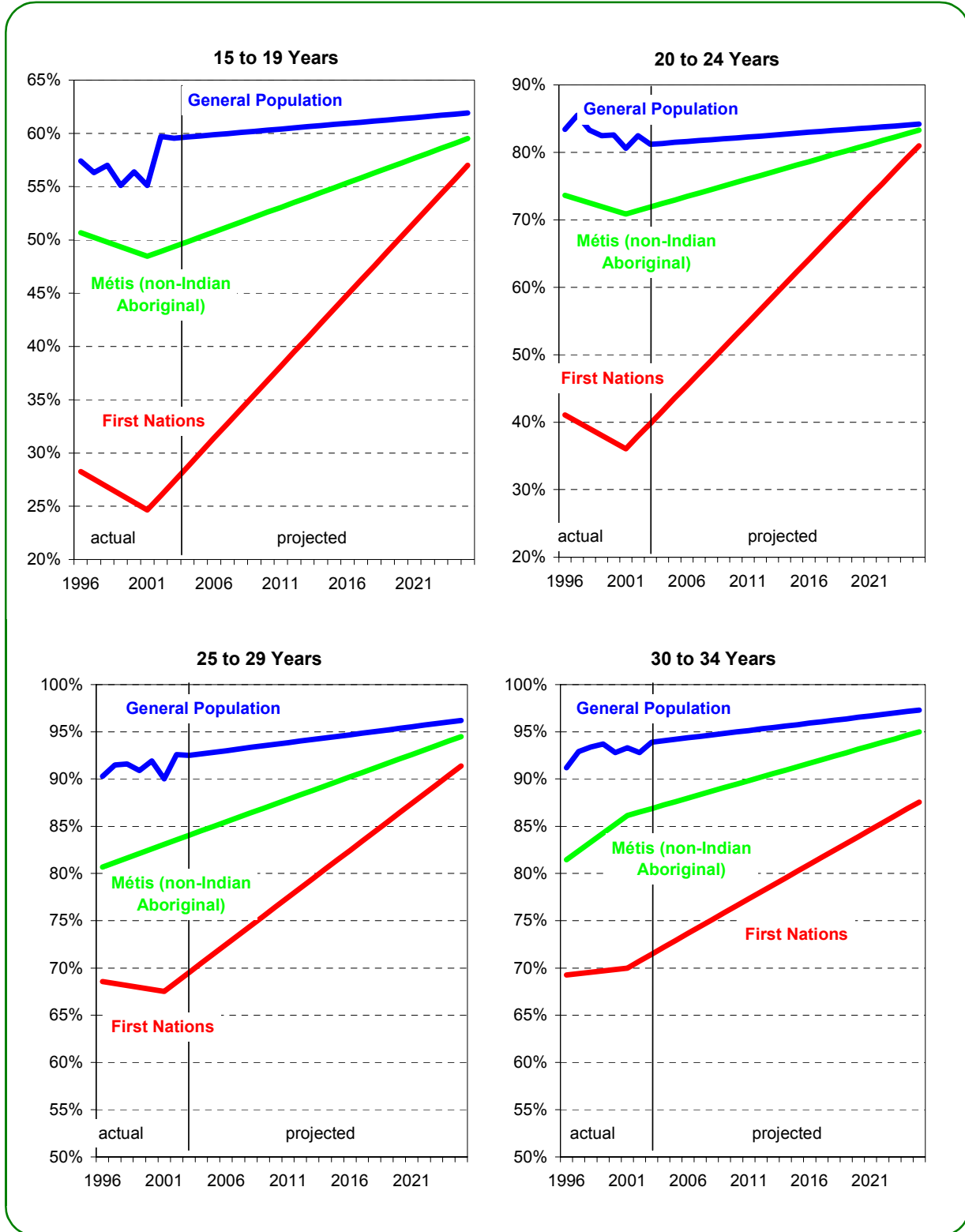
With these assumptions and limited data, a forecast for the Aboriginal participation rates was developed for the forecast period. The basic assumptions made in these projections are optimistic in the sense that they assume a significant increase in participation rates for the First Nations population in Saskatchewan, particularly among young people.

- Labour force participation rates for young First Nations and Métis men and women will gradually converge to the rates in the non-Aboriginal population.
- Labour force participation rates for older First Nations and Métis men and women will improve but the gap between Aboriginal and non-Aboriginal rates will not completely close over the forecast period.

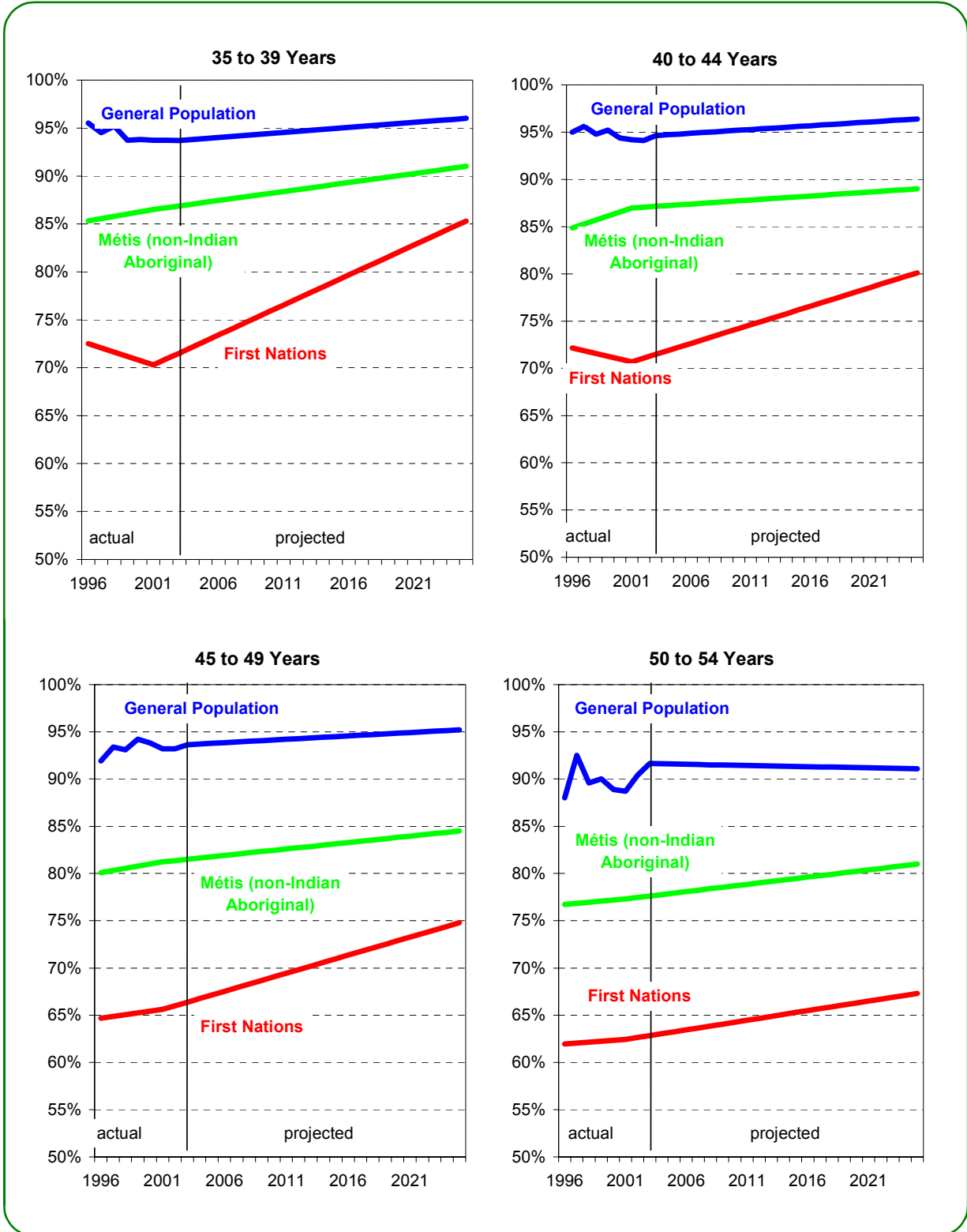
As with the general population, a scenario with participation rates held constant at their 2001 levels is also included in the next section.

The projected participation rates for the Aboriginal population are shown in Figures 3.12 to 3.17.

**Figure 3.12** Actual and Projected Labour Force Participation Rates, Men, 15 to 34 Years

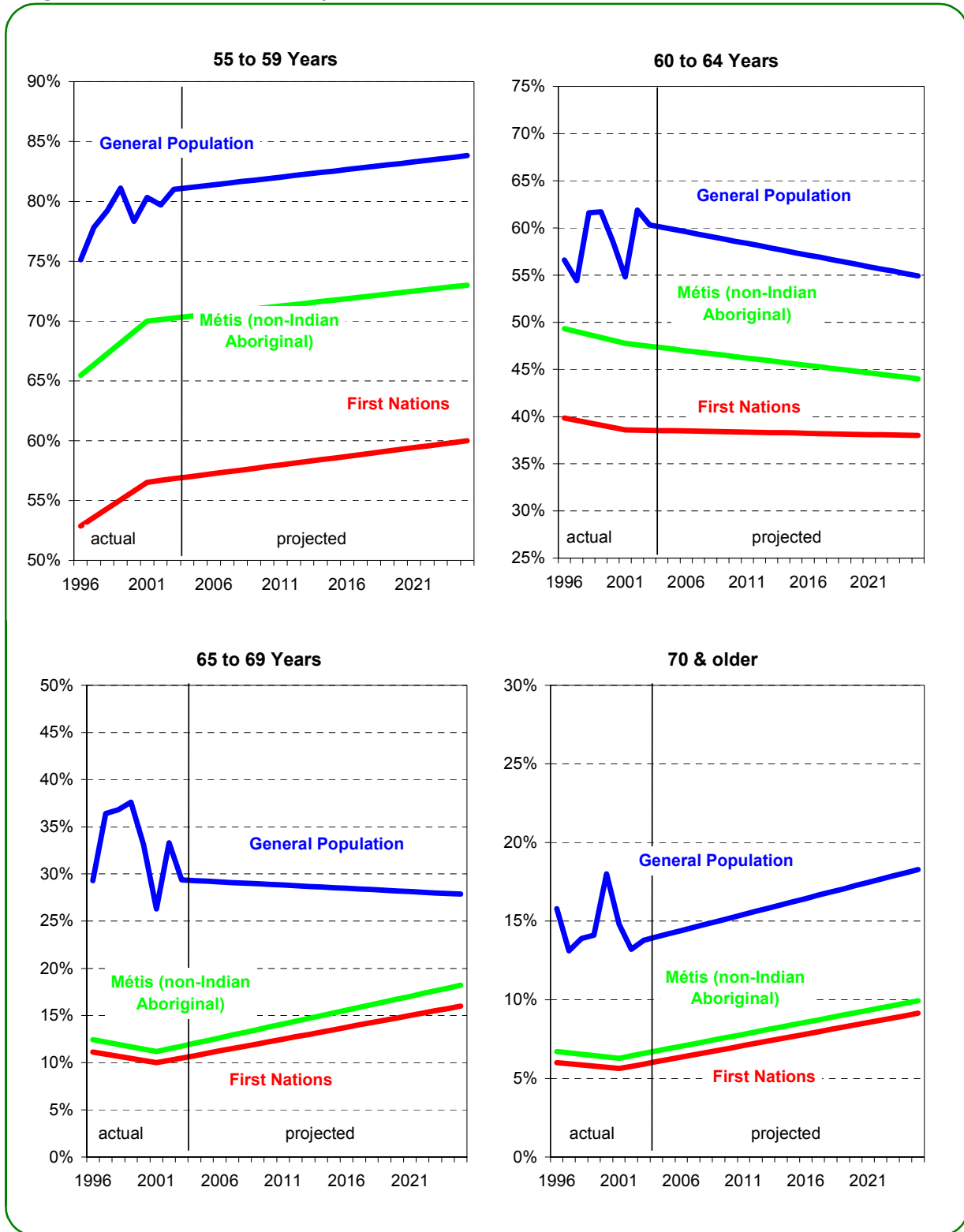


**Figure 3.13** Actual and Projected Labour Force Participation Rates, Men, 35 to 54 Years

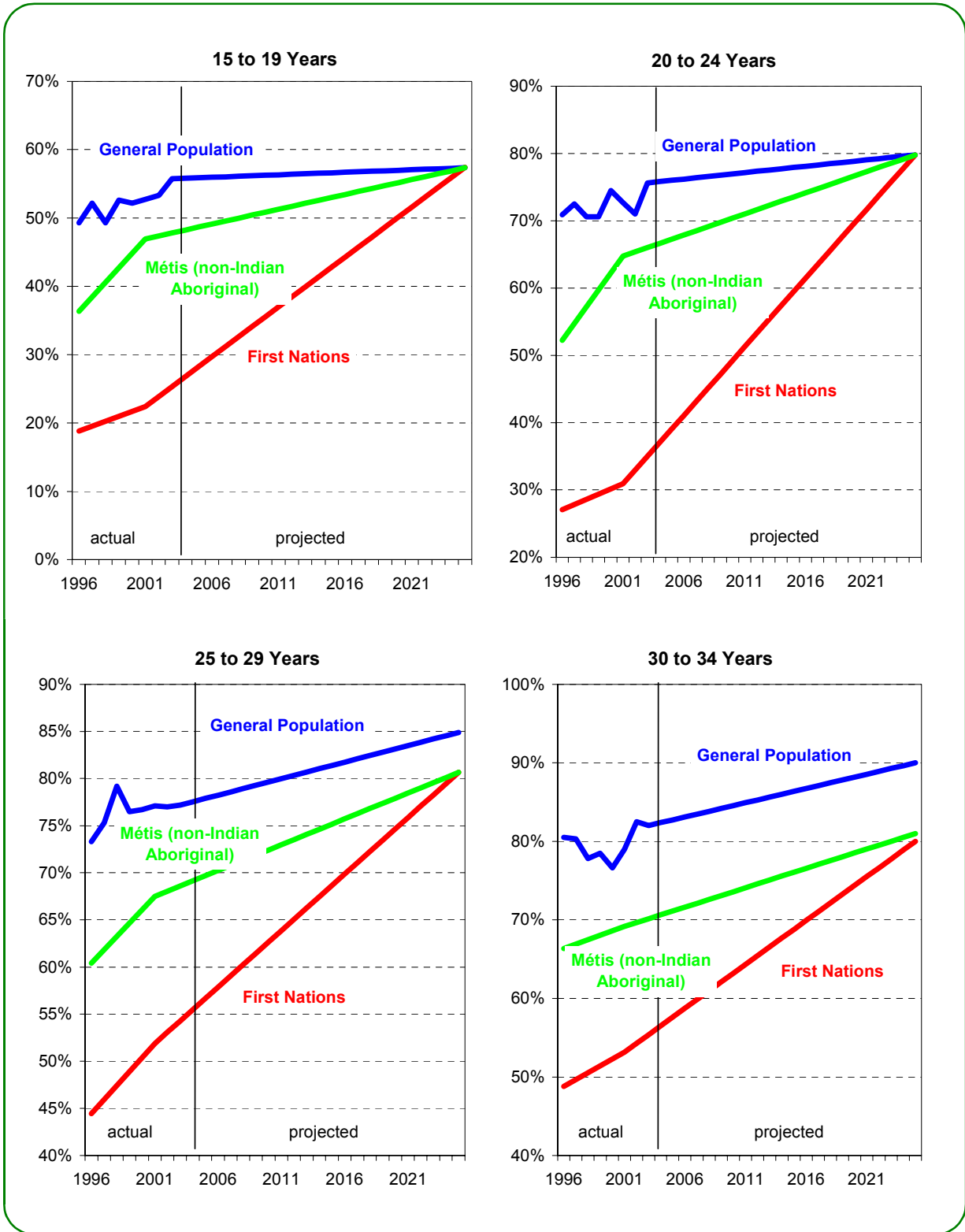




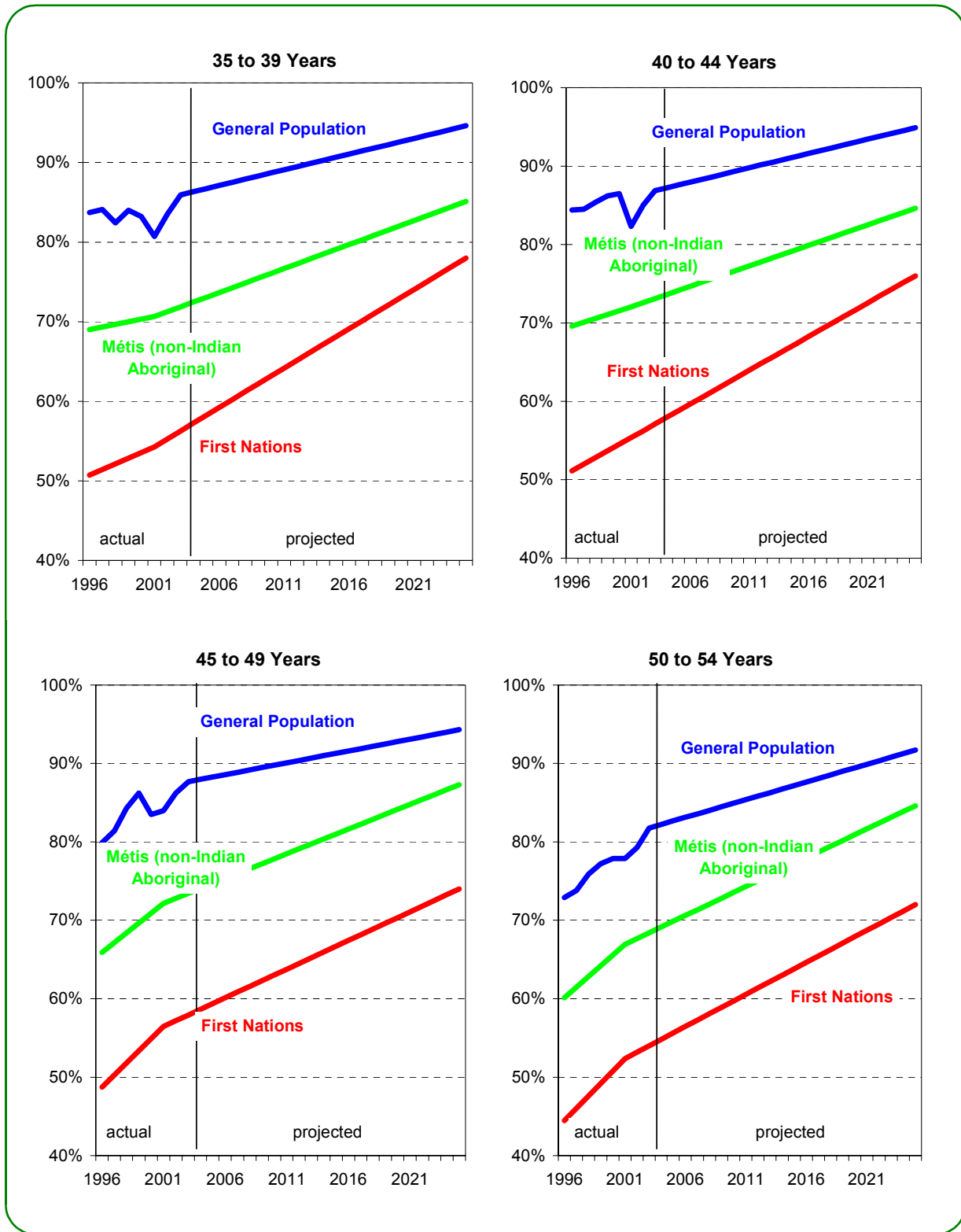
**Figure 3.14** Actual and Projected Labour Force Participation Rates, Men, 55 and Older



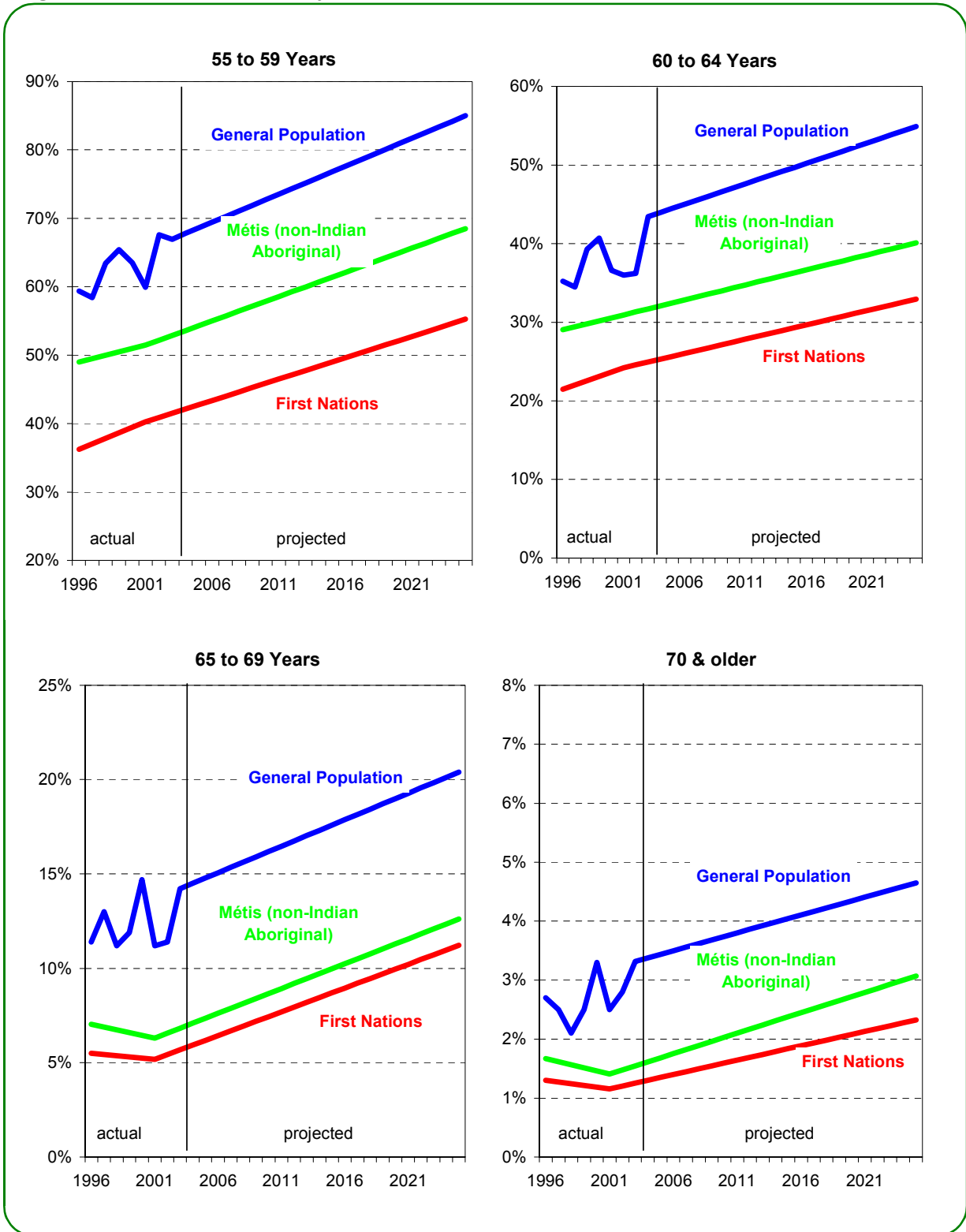
**Figure 3.15** Actual and Projected Labour Force Participation Rates, Women, 15 to 34 Years



**Figure 3.16** Actual and Projected Labour Force Participation Rates, Women, 35 to 54 Years



**Figure 3.17** Actual and Projected Labour Force Participation Rates, Women, 55 and Older



## Summary

Figures 3.18 and 3.19 show a comparison of projected labour force participation rates for the Aboriginal and non-Aboriginal population. All of the participation rates have been age-adjusted to the general 2003 Saskatchewan population to remove the underlying demographic effects from the effects of changes in the participation rates.

The sizable gap in participation rates between the general population and the First Nations population narrows over the course of the projection period. The 2001 gap of 26% for men narrows to 13% over the course of the forecast period and the 2001 gap of 22% for women narrows to 11%.

The gap for Métis men and women narrows as well to the point where the participation rate for Métis women is above the current 2003 level for Saskatchewan women.

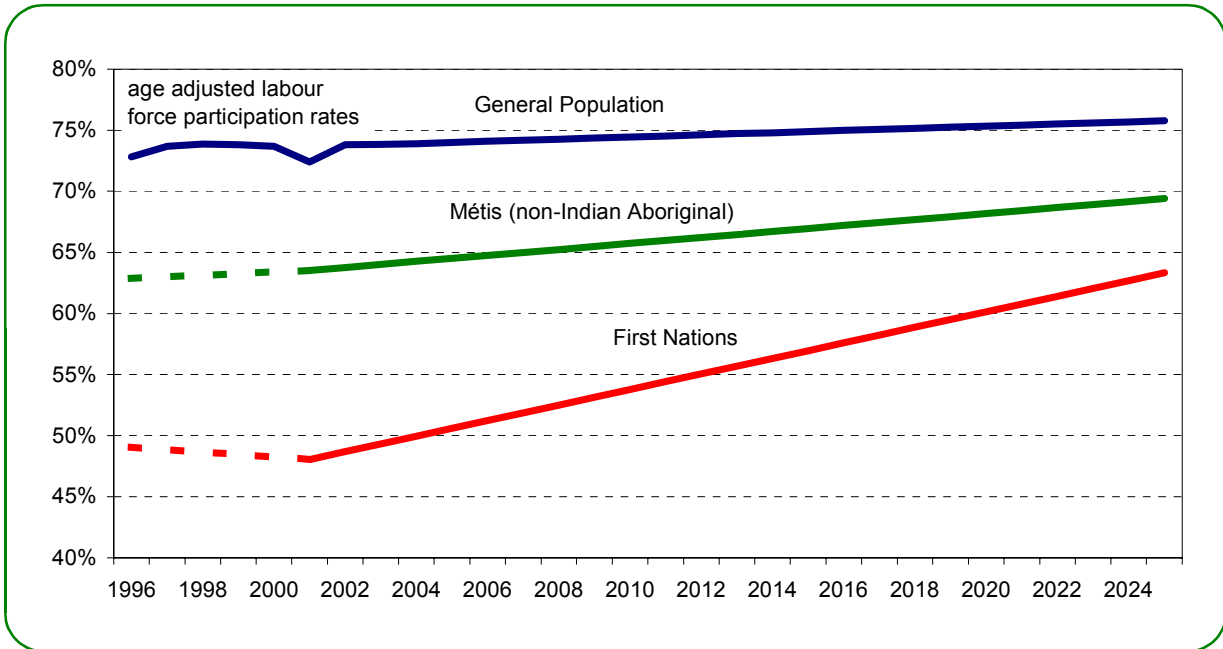
## Comparison with Previous Study

The labour force participation rates in the previous *Labour Market Trends* report were only developed for the First Nations population. As in the current projection, they were forecast to increase significantly.

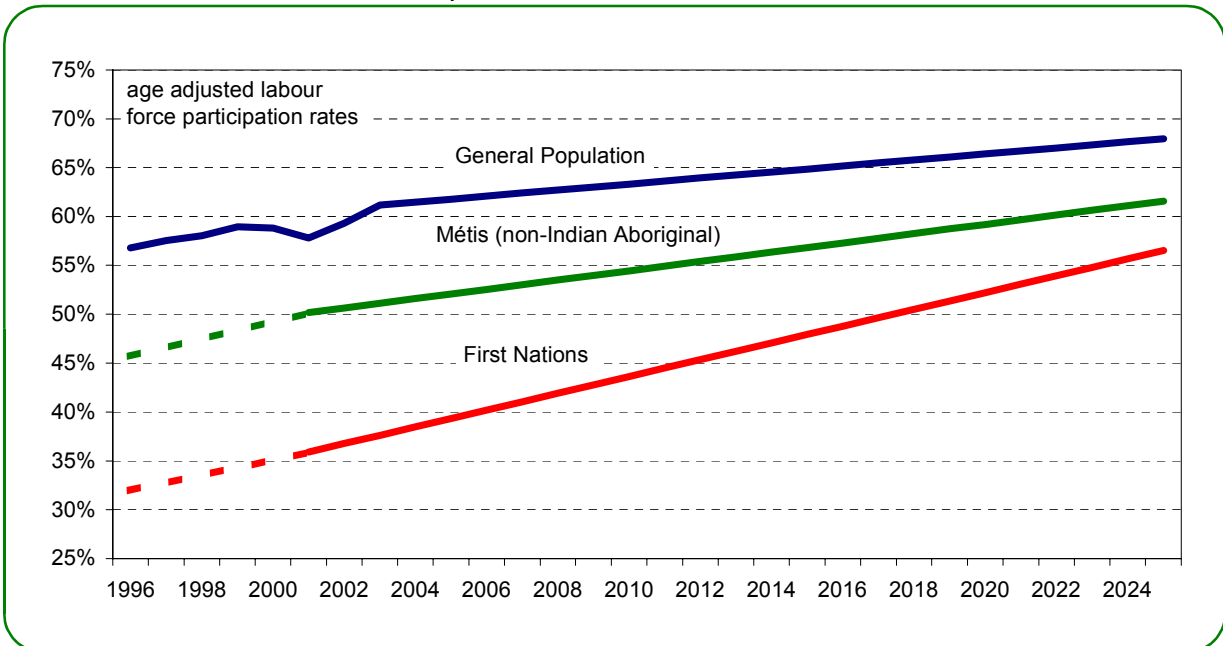
Figure 3.20 shows that for First Nations men, the previous report had a more optimistic growth rate for participation rates than occurred during the 1996 to 2001 period. (Better information on 1996 participation rates which became available after the previous report was written accounts for the differences in the 1996 rates between the two reports.) The current projection has the rates increase as quickly as the previous report but they do not reach the same level because they are starting from a lower base.

In contrast, participation rates for First Nations women increased from 1996 to 2001 at near the forecast rate and the current report has a similar rate of growth over the forecast period (see Figure 3.21).

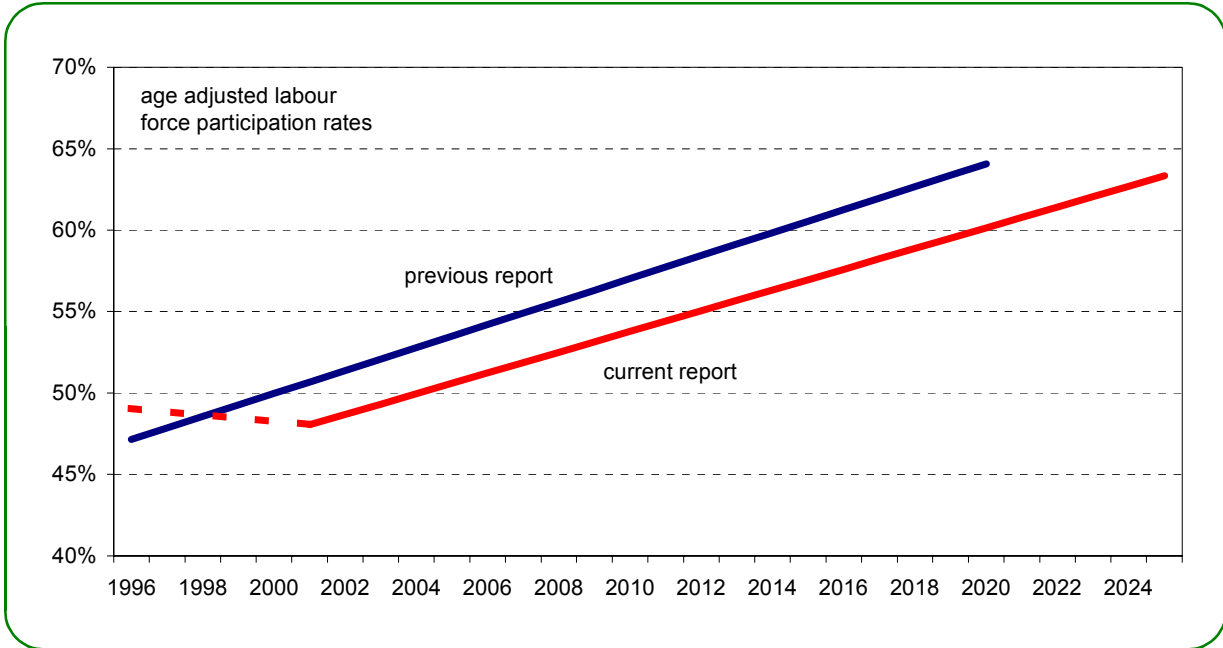
**Figure 3.18** Comparison of Labour Force Participation Rates, Age-Adjusted to the 2003 Saskatchewan Population, Men



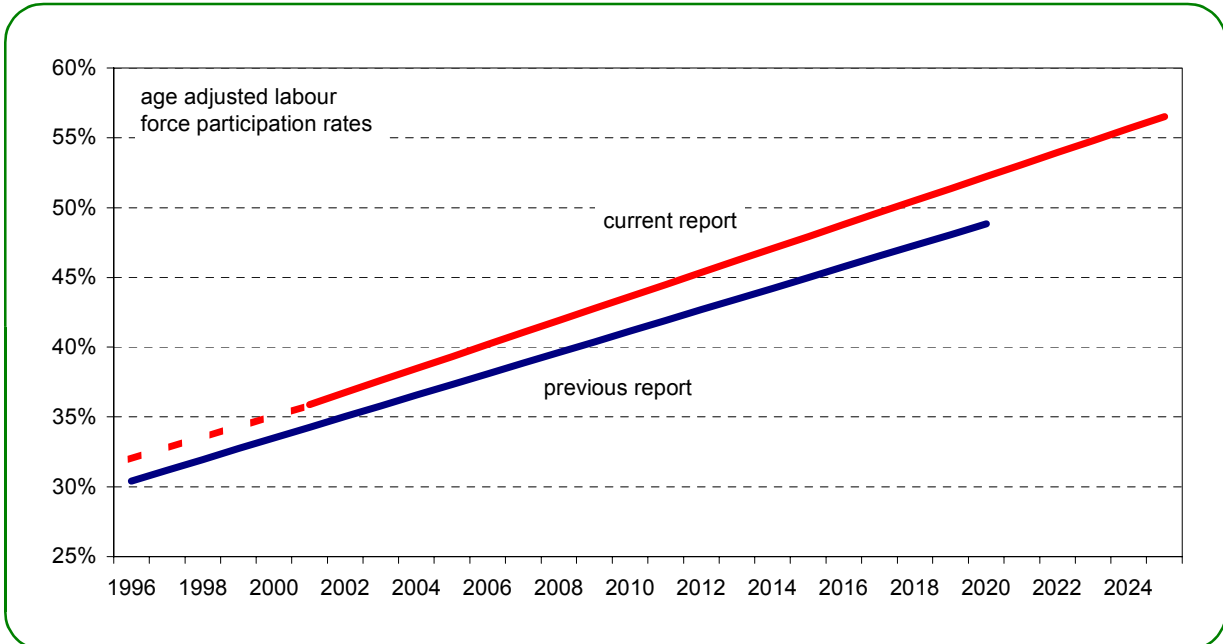
**Figure 3.19** Comparison of Labour Force Participation Rates, Age-adjusted to the 2003 Saskatchewan Population, Women



**Figure 3.20** Comparison of Labour Force Participation Rates, First Nations Men



**Figure 3.21** Comparison of Labour Force Participation Rates, First Nations Women



## SECTION 4 POTENTIAL LABOUR FORCE PROJECTION

A projection of the potential labour force in Saskatchewan can now be calculated by simply multiplying the participation rates developed in Section 3 with the population projection in Section 2. The term “potential” is used to indicate that we are projecting the maximum possible size for the labour force; if jobs are not available the actual labour force will be below this figure because persons will either drop out of the labour market or leave the province.

There is a difference between the size of the potential labour force up to and including 2003 in this report and the labour force figures published in the Labour Force Survey (LFS) by Statistics Canada (see Figure 4.1). For example,

- the 2003 labour force according to the LFS was 515,800 but
- when the 2003 participation rates from the LFS are applied to the 2003 population used in the forecast, the size of the labour force is 18,000 higher at 533,809.

A difference in the size of the adult (15 and older) population used in the Labour Force Survey is the reason; the LFS reports a 2003 population of 756,300 compared with 791,863 for the population used in this report.

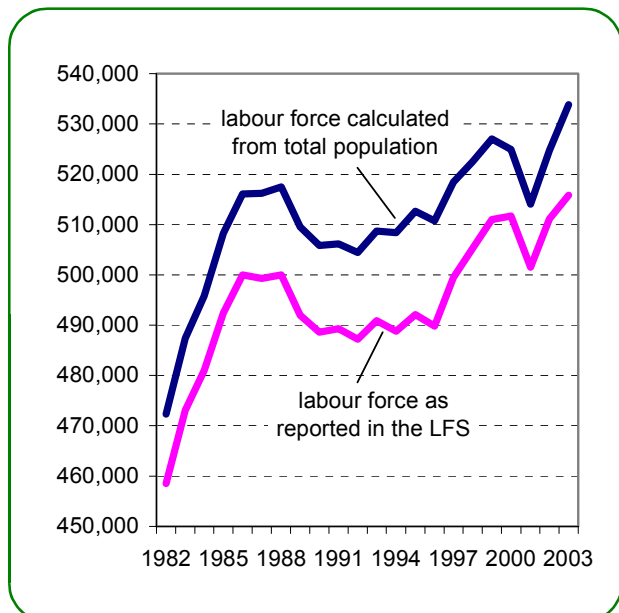
There are two reasons for the discrepancy.

1. The populations in the LFS have not yet been re-based to the 2001 census whereas the population used in this report has been.
2. The population in the LFS excludes three groups that are included in the population:
  - a. the on-Reserve population (the on Reserve labour force in 2001 was 12,710 persons);
  - b. full-time members of the armed forces; and
  - c. the institutional population.

Some of the difference will be removed when the LFS is re-based to the 2001 census but the potential labour force will always be somewhat higher than the published labour force because of the inclusion of the on-Reserve and institutional population. While this difference will affect the size of the potential labour force, it will not affect the trends over time.

Two separate scenarios are used for labour force participation rates in this section. The first is designated as “constant participation rates” and is presented for reference purposes. This projection uses, for each age and sex cohort, the average participation rate over the 2001 to 2003 period. The second scenario is the one developed in Section 3 and is called the “increasing participation rate” scenario.

**Figure 4.1** Comparison of Labour Force Figures, Saskatchewan, 1982 to 2003





## 4.1 General Population

With two possibilities for the participation rate projection (constant and increasing) there are two scenarios for the labour force. These are summarized in Table 4.1 and shown graphically in Figure 4.2.

In a tight labour market, it is highly unlikely that labour force participation rates will remain at their current level. In that unlikely circumstance, the potential labour force increases to peak at just under 550,000 in 2008 and then begins to decline quickly. In ten years, it has returned to the 2003 level and by the end of the forecast period is back to the level it was in the early 1990s.

With increasing participation rates, the potential labour force increases steadily to 2010, remaining between 560,000 and 570,000 until late in the forecast period.

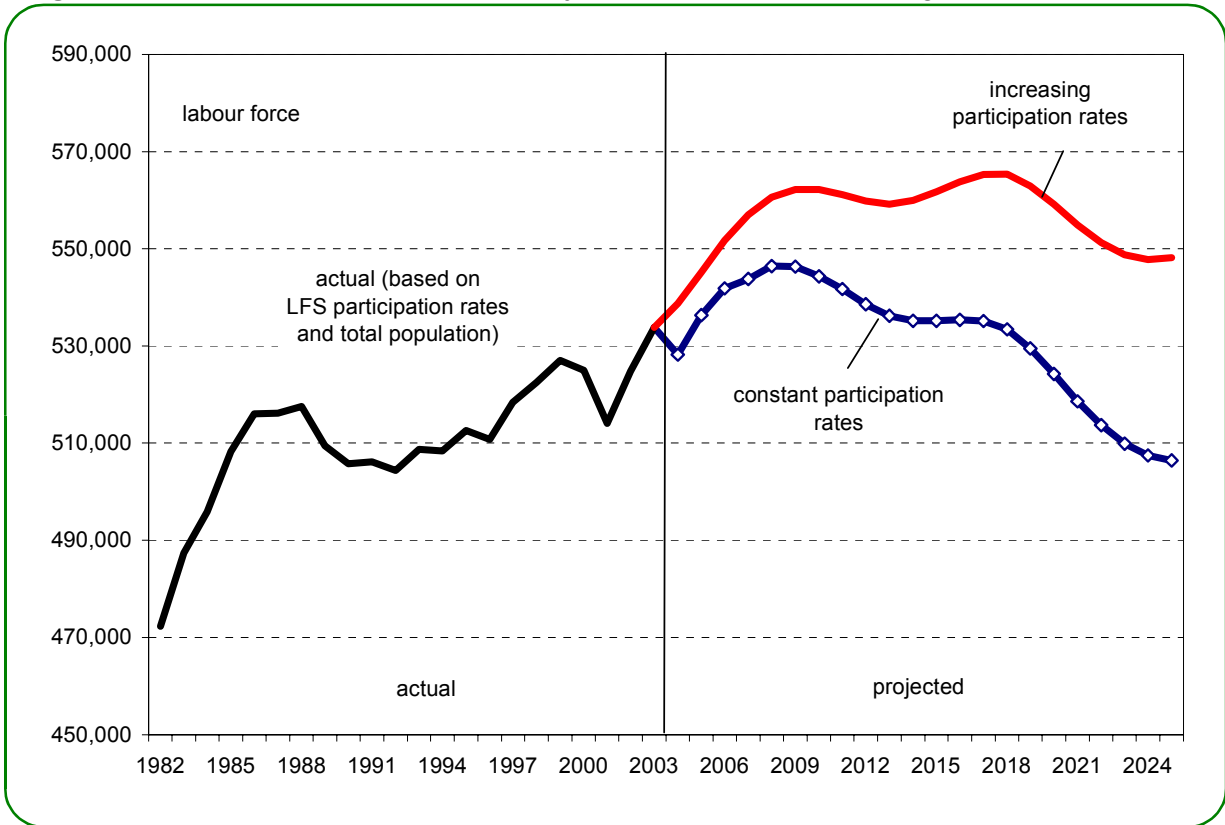
### Comparison with Previous Study

The potential labour force in the previous *Labour Market Trends* report was expected to increase to 539,900 by 2003 and reach a maximum of 558,000 by 2013 before starting to decline. Figure 4.3 shows that with increasing participation rates, the current projection leads to much the same result. The potential labour force is currently lower than previously anticipated, increases more quickly and then levels off at nearly the same point in time. The “levelling off” period is, however, longer than in the previous study.

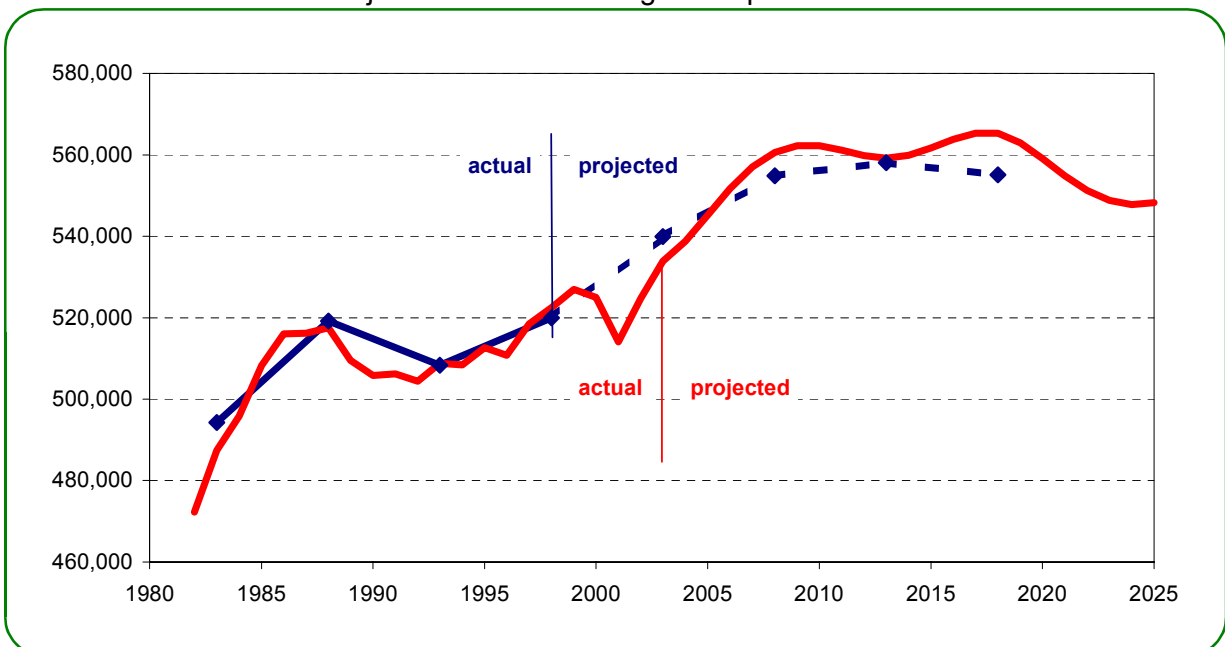
**Table 4.1** Two Scenarios for Total Labour Force in Saskatchewan

Participation rate scenario	Labour Force (000)						
	1990	1995	2000	2005	2010	2015	2020
as reported in LFS	488.6	492.1	511.7	...	...	...	...
constant participation rates	505.8	512.6	524.9	536.3	544.3	535.2	524.2
increasing participation rates	505.8	512.6	524.9	545.2	562.3	561.8	559.1

**Figure 4.2** Potential Labour Force Projections, Effect of Increasing Participation Rates



**Figure 4.3** Comparison of Potential Labour Force Projections, Previous Report and Current Projection with Increasing Participation Rates



## 4.2 Aboriginal Labour Force

The forecasted participation rates for the First Nations and Métis populations can be applied to the projected populations for those Aboriginal groups to determine the proportion they represent of the total potential labour force in the province. The increase in provincial labour force participation rates implicitly assumes that there will also be an improvement in the rates for the Aboriginal population. They will represent an increasing proportion of the population and participation rates cannot increase generally unless they do so for the Aboriginal population. This is shown in the increasing participation rate scenario in Table 4.2.

Table 4.2 also shows one “status quo” scenario that could develop if there is no increase in Aboriginal labour force participation rates and, partly as a consequence, no increase in overall participation rates.

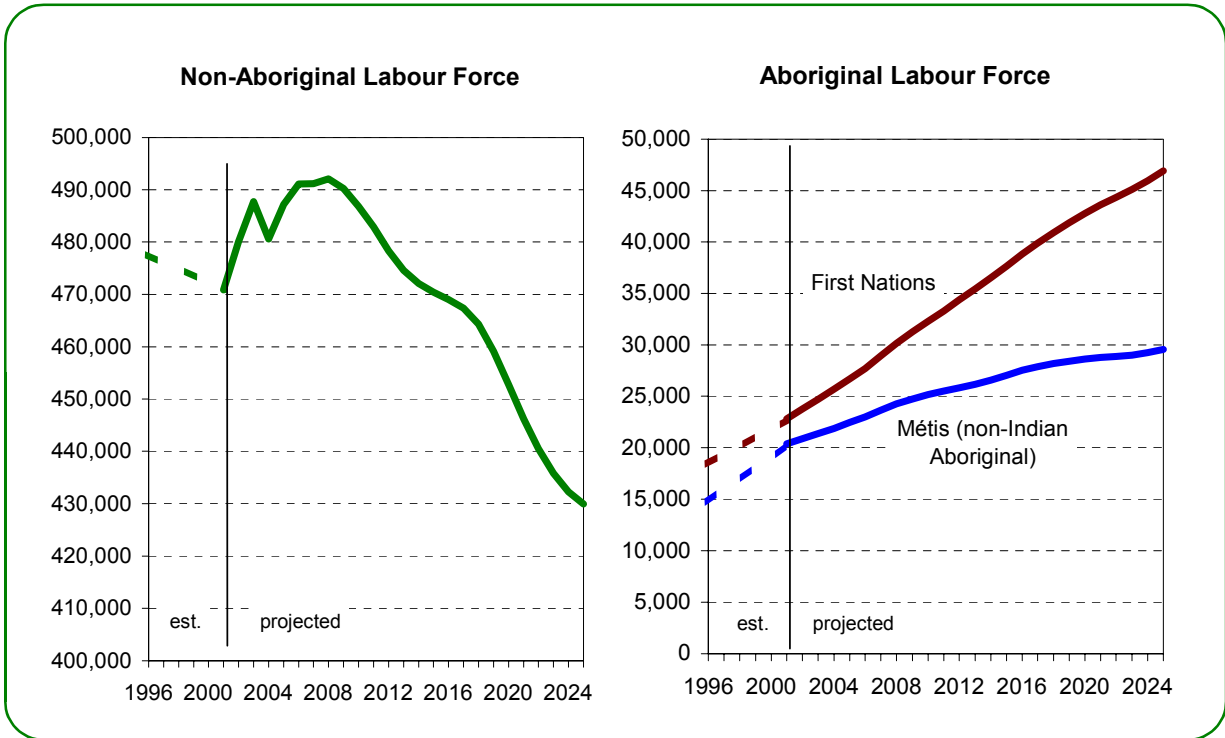
Under the constant participation rate scenario, the size of the Aboriginal labour force still continues to increase by virtue of the increase in the size of the Aboriginal population (see Figure 4.4). The increase is steady over the forecast period for the First Nations population whereas the increase in the size of the Métis labour force begins to slow over the forecast period. The size of the non-Aboriginal labour force increases to 492,000 by 2008 and then begins to fall precipitously as the “baby boom” generation hits the retirement age group. In this scenario, the potential Aboriginal labour force, estimated at 8.4% of the labour force in 2001 reaches 10% of the total in 2008 and 15% of the total by the end of the forecast period.

In the increasing participation rate scenario, the non-Aboriginal labour force still peaks in 2008 but at a higher level (500,000 persons) and the decline thereafter is less pronounced (see Figure 4.5). But even in the scenario with increasing general participation rates, the non-Aboriginal labour force falls back to its 2001 level by 2020. The growth rate for the Aboriginal labour force is much more rapid in this scenario as the increasing participation rates combine with the increasing population to yield rapid growth in the Aboriginal labour force. The potential Aboriginal labour force, estimated at 8.4% of the labour force in 2001 reaches 10% of the total in 2006 and 19% of the total by the end of the forecast period.

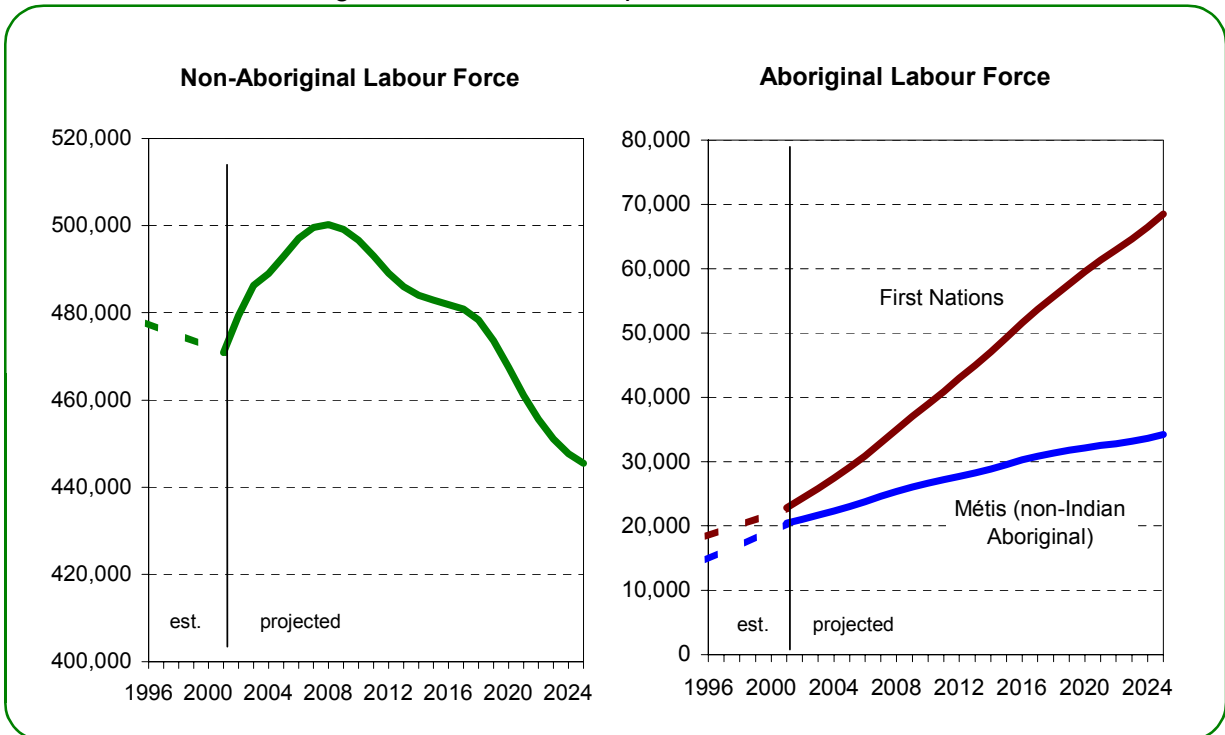
**Table 4.2** Two Scenarios for Aboriginal Labour Force in Saskatchewan

Participation rate scenarios		Potential Labour Force (000)					
		Estimated		Projected			
		1996	2001	2005	2010	2015	2020
constant participation rates	First Nations	18.4	22.8	26.7	32.3	37.7	42.8
	Métis (non-Indian Aboriginal)	14.7	20.4	22.5	25.2	27.1	28.6
	Non-Aboriginal	477.6	470.8	487.2	486.8	470.4	452.8
	Total	510.8	514.1	536.3	544.3	535.2	524.2
increasing participation rates	First Nations	18.4	22.8	29.1	39.0	49.3	59.5
	Métis (non-Indian Aboriginal)	14.7	20.4	23.0	26.7	29.5	32.2
	Non-Aboriginal	477.6	470.8	493.0	496.6	482.9	467.5
	Total	510.8	514.1	545.2	562.3	561.8	559.1

**Figure 4.4** Breakdown of Projected Potential Labour Force by Aboriginal Status, Constant Labour Force Participation Rate Scenario



**Figure 4.5** Breakdown of Projected Potential Labour Market by Aboriginal Status, Increasing Labour Force Participation Rate Scenario



### 4.3 Projected Labour Force Composition

With the projected population and the increasing participation rates for both the general population and the Aboriginal population, the future labour force in Saskatchewan will look substantially different from the current one.

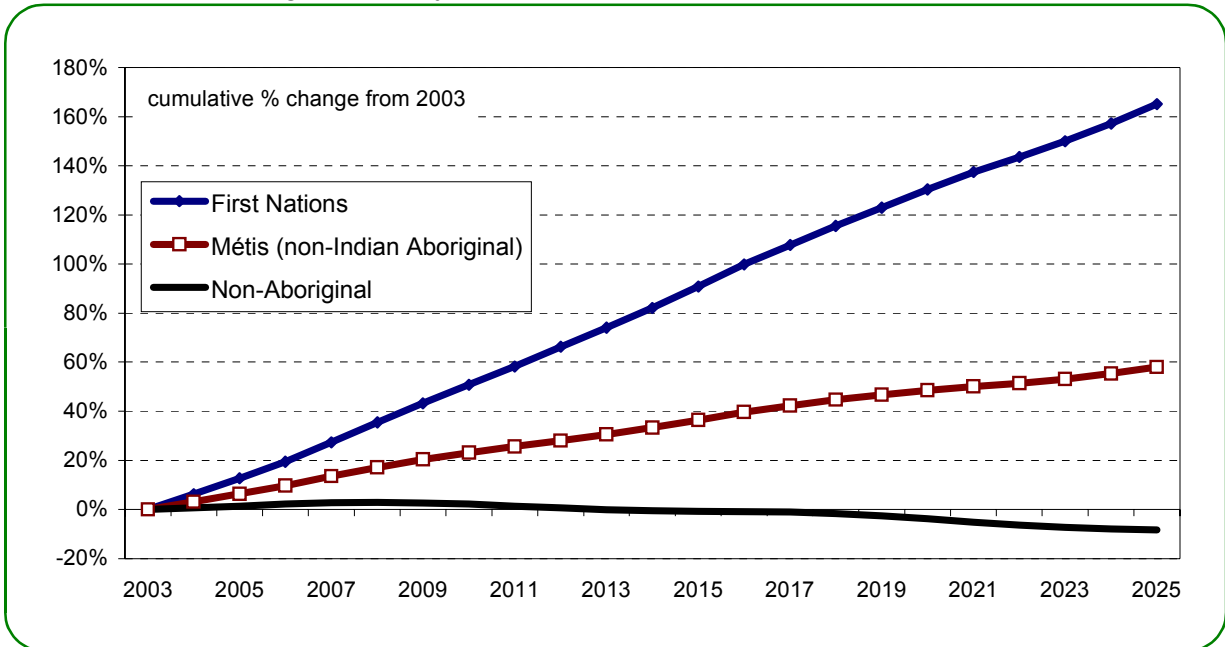
Figures 4.6 and 4.7 show that virtually all of the labour force growth between 2003 and 2018<sup>1</sup> will occur in the Aboriginal labour force generally and the First Nations labour force in particular. Over the fifteen years, the Aboriginal labour force will increase from 9% of the total to 16% of the total. The non-Aboriginal labour force, after increasing marginally in the short term, declines to its current level by 2015 and fall thereafter.

Figures 4.8 and 4.9 show that there will be changes in the gender mix of labour force participants although they are relatively minor. Over the fifteen years, women will increase from 46% to 47% of the potential labour force. Most of that increased share will occur late in the forecast period.

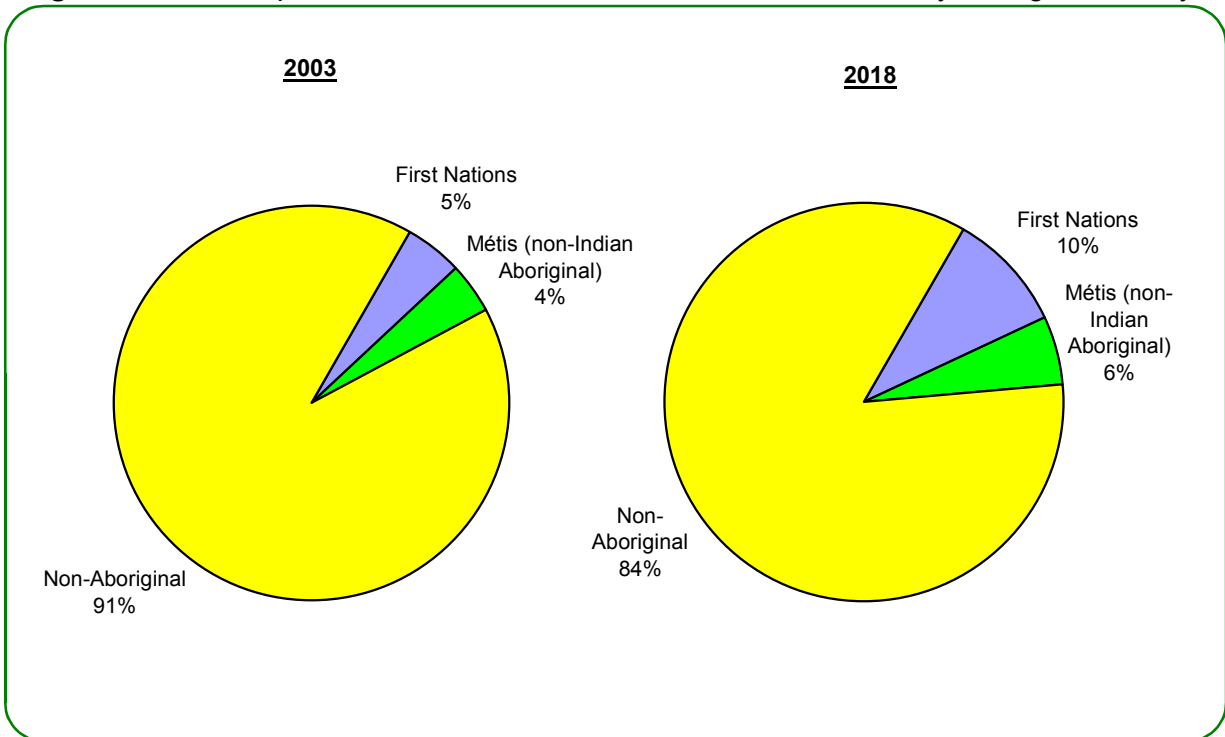
---

<sup>1</sup> The year 2018 was chosen because it is fifteen years into the future, a reasonable planning horizon for public policy and the point at which the size of the potential labour market peaks.

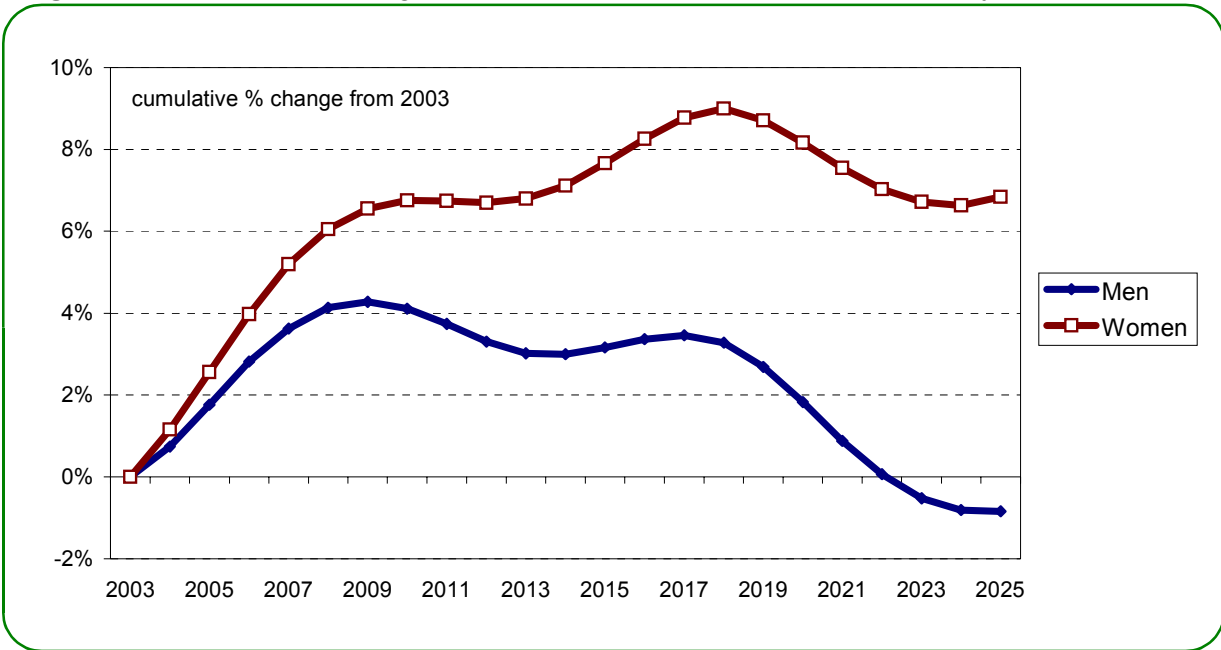
**Figure 4.6** Relative Change in the Composition of the Potential Labour Force, by Aboriginal Identity



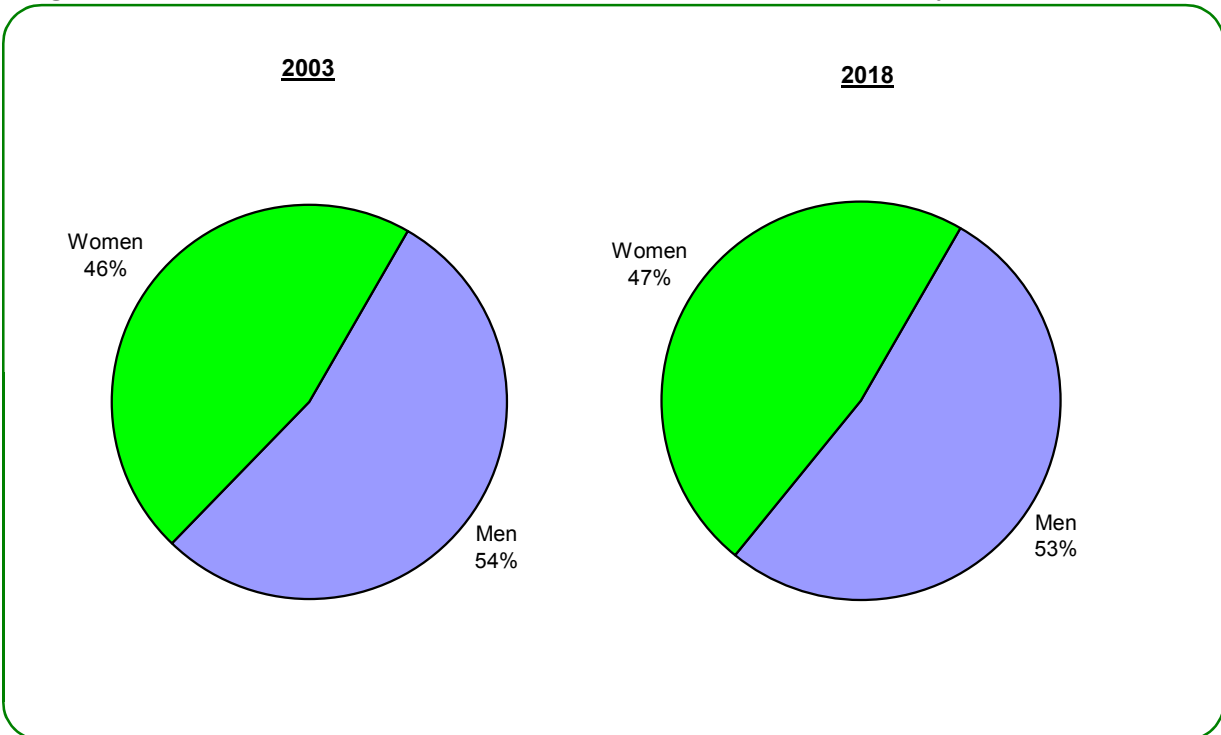
**Figure 4.7** Comparison of Labour Force Shares, 2003 and 2018, by Aboriginal Identity



**Figure 4.8** Relative Change in the Composition of the Labour Force, by Gender



**Figure 4.9** Comparison of Labour Force Shares, 2003 and 2018, by Gender



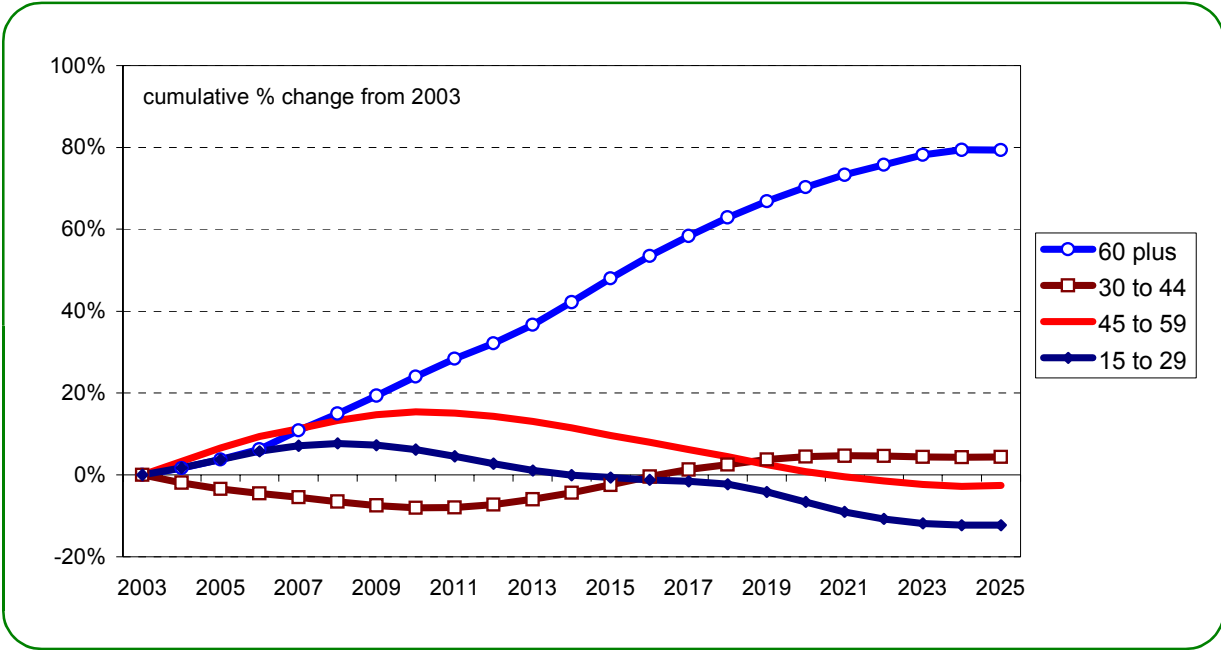
The most important changes in the labour force will be in the age structure (see Figures 4.10 and 4.11). In the short term, there is a decline in the proportion of the potential labour force made up by those 30 to 44 years of age as the population decline offsets the projected increase in labour force participation rates. Other age groups show increases.

In the medium to long term, the proportions of those under 30 years and 45 to 59 years of age decline and the proportion of those 30 to 44 years of age and 60 or older increase. By 2018, those 60 or older have increased from 7% to 11% of the labour force and the proportion under 45 years of age has declined from 63% to 59% of the total.

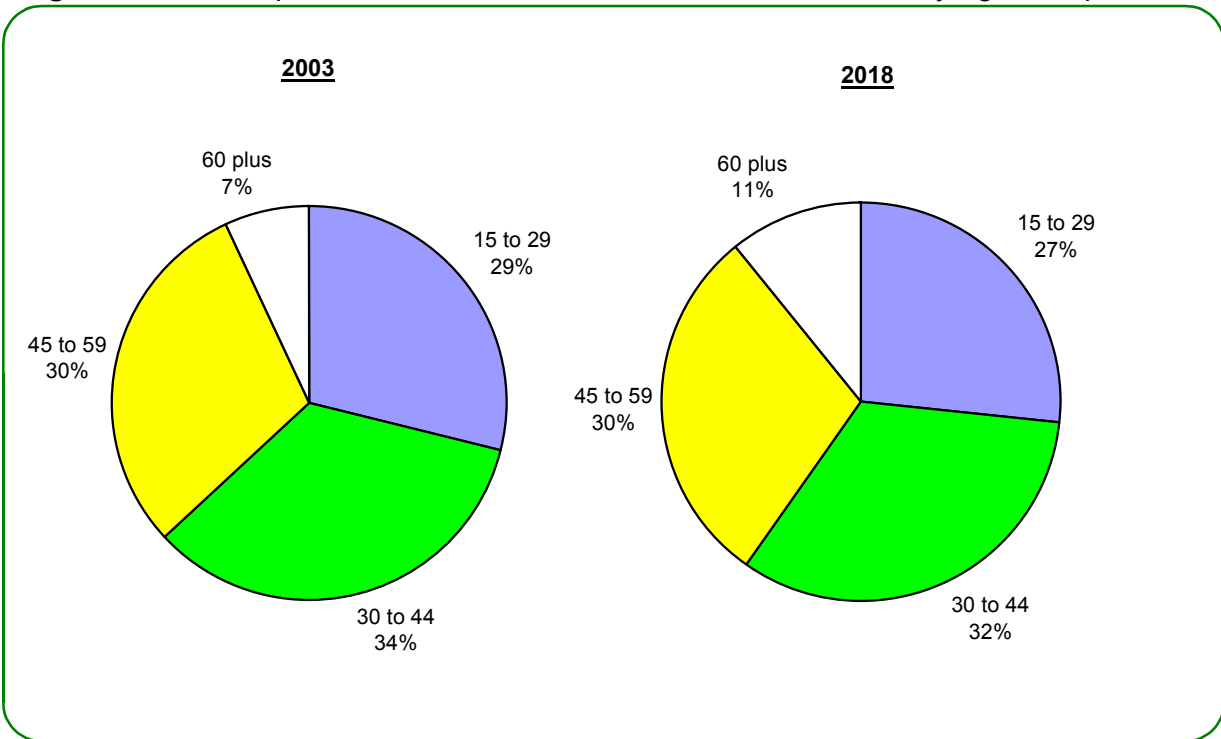
The combination of age and Aboriginal status is also instructive and is shown for the critical youth population (15 to 29 years) in Figures 4.12 and 4.13. This is the age group in which the growing Aboriginal population will soon make itself felt. In 2003, an estimated 11% of the youth population in the labour force is Aboriginal. With a growing population and increasing labour force participation rates, the share more than doubles to 24% by 2018. Looked at another way, one in four new entrants to the labour market will be Aboriginal in 2018 compared with one in ten new entrants in 2003.



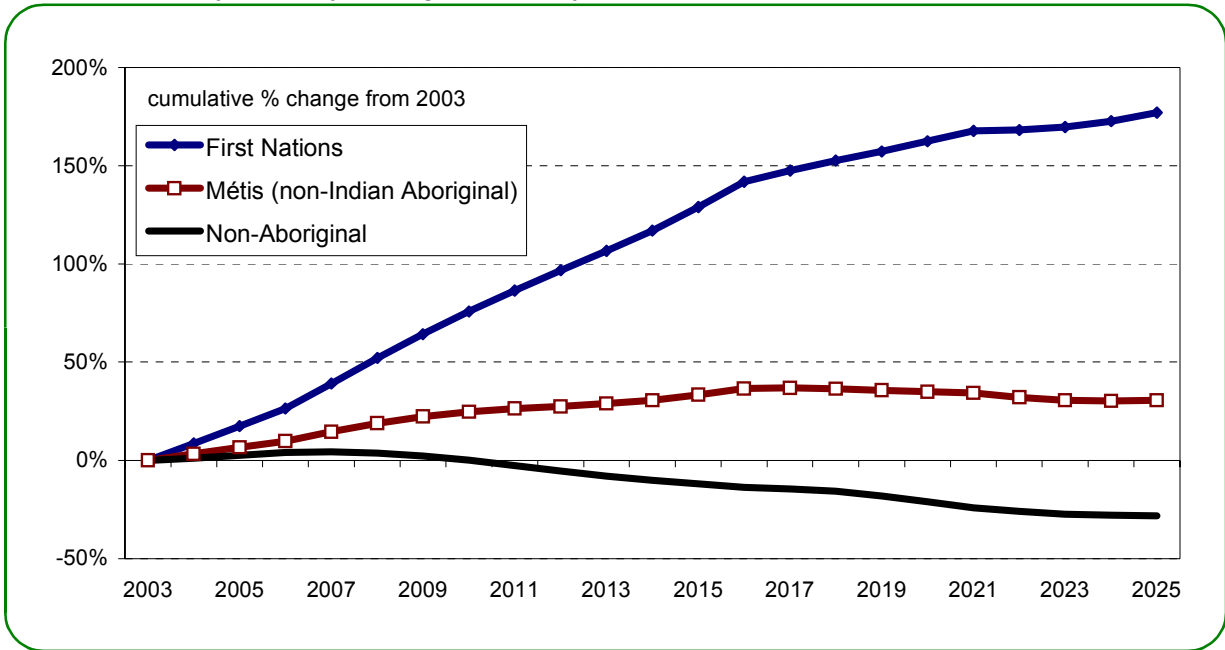
**Figure 4.10** Relative Changes in the Composition of the Labour Force, by Age Group



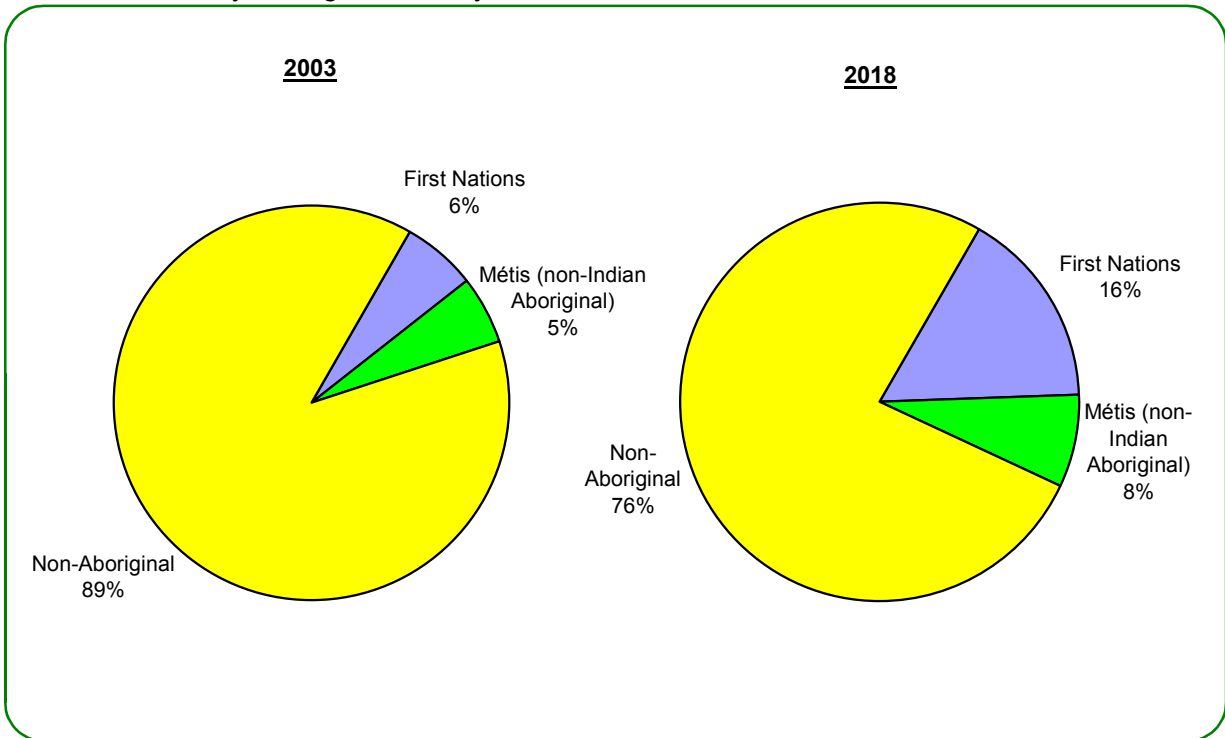
**Figure 4.11** Comparison of Labour Force Shares, 2003 and 2018, by Age Group



**Figure 4.12** Relative Changes in the Composition of the Youth Labour Force (15 to 29 years), by Aboriginal Identity



**Figure 4.13** Comparison of Youth (15 to 29 years) Labour Force Shares, 2003 and 2018, by Aboriginal Identity



## 4.4 Summary

Two figures amply demonstrate the findings in this section. In the first (Figure 4.14, a reproduction of Figure 4.2) the difference in the size of the potential labour force under a situation where labour force participation rates remain constant at their current level and the size of the potential labour force when they increase.

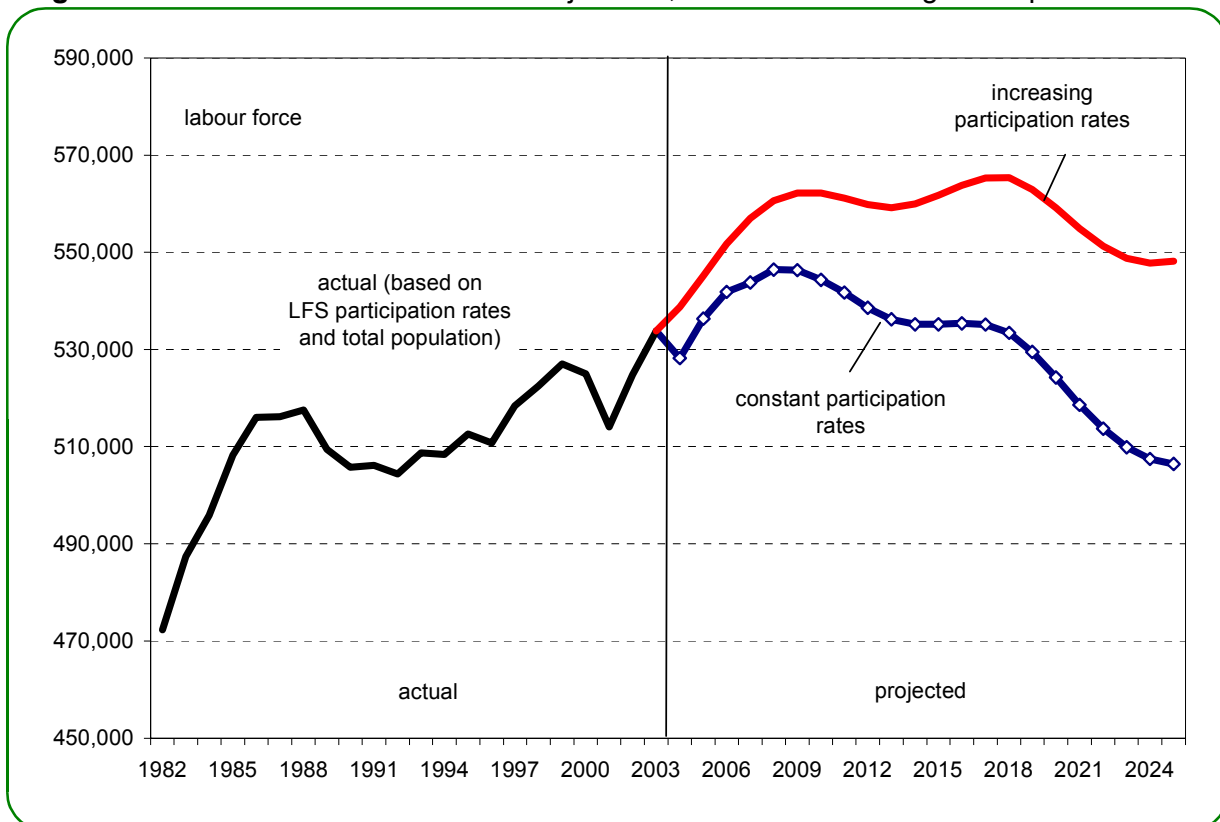
The increasing participation rate scenario makes a significant difference in the size of the potential labour force and the point at which it begins to decline. With increasing participation rates, the potential labour force increases to approximately 560,000 person where it remains until late in the forecast period. With constant participation rates, the potential labour force reaches a maximum of 546,000 in five years and then begins to decline. By 2018, the potential labour force is at its current level and by 2025, it is at the level it was in late 1980s.

This demonstrates the importance of increasing the labour force participation rates in Saskatchewan. The overall participation rates cannot increase without an increase in participation rates among the growing Aboriginal population so this also demonstrates the importance of increasing Aboriginal labour force participation rates.

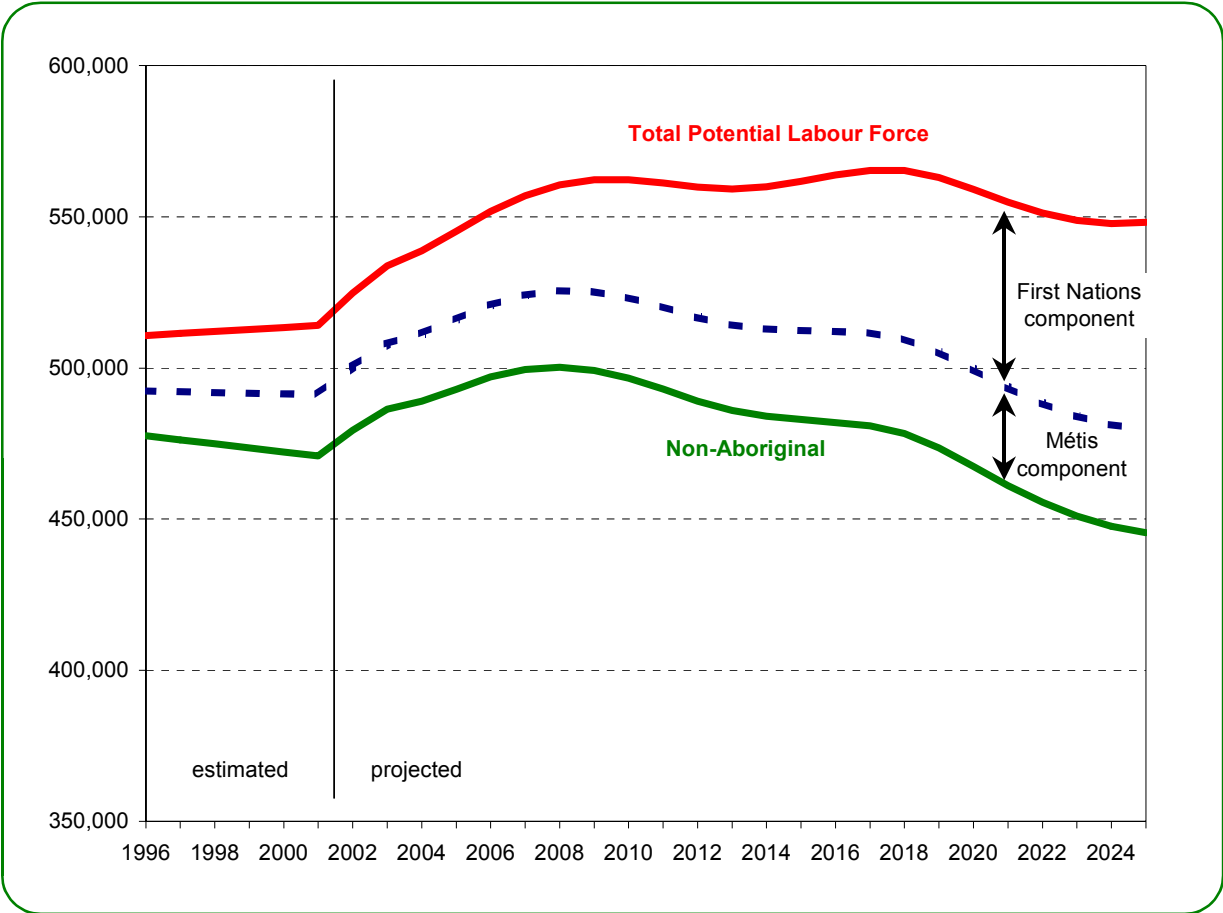
The second figure (Figure 4.15) demonstrates that even with increasing participation rates,

- the size of the non-Aboriginal labour force will begin to decline in five years, and
- a growing percentage of the labour force will be Aboriginal.

**Figure 4.14** Potential Labour Force Projections, Effect of Increasing Participation Rates



**Figure 4.15** Potential Labour Force by Aboriginal Identity, Increasing Participation Rate Scenario





## SECTION 5 SUMMARY

---

This report is an update of a previous labour market supply forecast published as part of the **Saskatchewan Labour Market Trends** report in January 2000. The methodology has been refined and more recent data on demographic trends have been taken into consideration. While the population and labour force figures have changed from the previous projection, the trends are similar and the labour market supply issues are fundamentally the same.

The process for projecting the labour force supply involves three steps.

The first step, documented in Section 2, is a projection of the population by age, gender, and Aboriginal status. The projection is based on expected changes in fertility, mortality, and inter-provincial migration. The assumptions are summarized below.

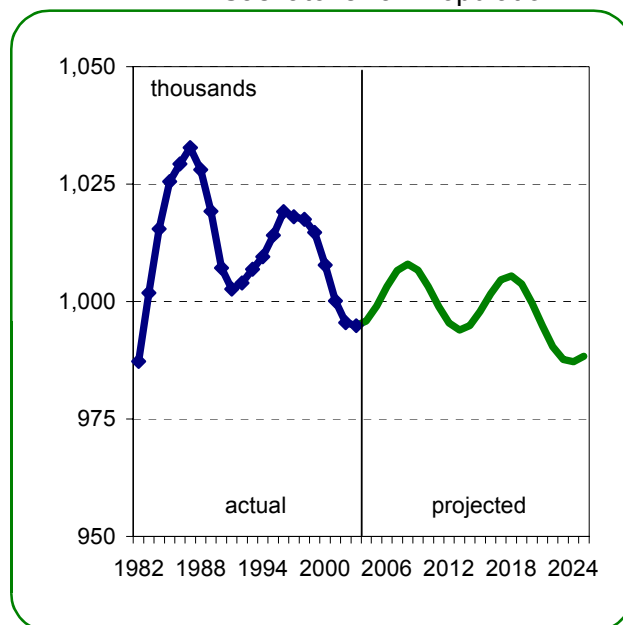
- Fertility rates for the general population of Saskatchewan women remain near their current levels.
- Fertility rates for Aboriginal women in general and First Nations women in particular are assumed to decline from their current level. For example, the total fertility rate of approximately 2.5 births per First Nations woman declines to just over 2.0 by 2025.
- The “survival rate”, which is an amalgam of inter-provincial and international migration rates and mortality is used to project the size of the provincial population.

In the population projection, the population continues to cycle near one million people over the forecast period.

While the population projection describes a stable overall population (see Figure 5.1), there are significant shifts within the one million people living in the province.

- As a percentage of the total population, the Aboriginal population increases from 13% to 20% by 2025. The proportion becomes even higher for those 15 to 29 years (from 16% to 29%) and those 25 to 59 years (from 11% to 22%).
- In the short term, the population under 15 years of age will continue to decline and the youth population will grow.
- There will be a steady increase in the population 50 to 69 years of age as the "baby boom" generation moves decisively into their fifties.
- Later in the forecast period, the population in their sixties and seventies will increase significantly.
- In the key labour market age group, narrowly considered as those 25 to 59 years of age, the population continues to increase over the next few years but starts to fall within a decade.

**Figure 5.1** Actual and Projected Saskatchewan Population

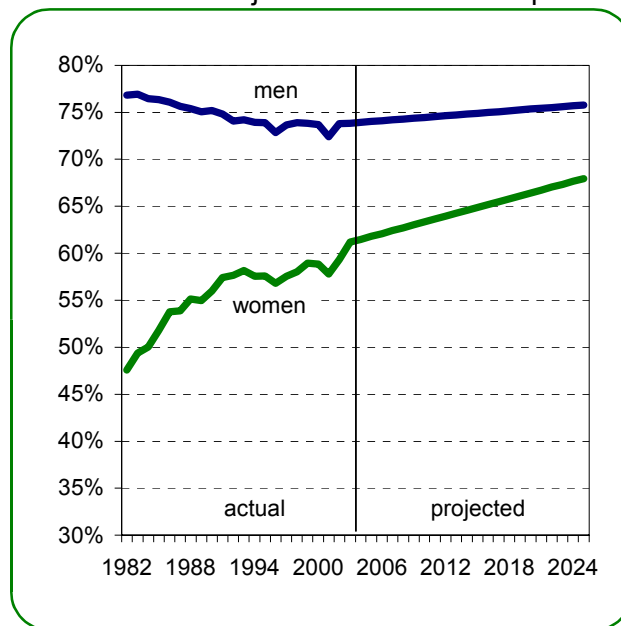


The second step is a projection of labour force participation rates, the percentage of the population that is able and willing to work. Section 3 contains both historical and projected participation rates by age group, gender, and Aboriginal status.

The projected participation rates should be viewed as optimistic in that they assume increasing participation rates generally and increasing participation rates for the Aboriginal population specifically (see Figure 5.2). Other assumptions used in developing the participation rate projections are listed below.

- Participation rates among youth (15 to 24) will remain low because of attendance at high school and post-secondary institutions.
- Participation rates for men near and past the average retirement age of 60 will continue to decline. Retirement will occur earlier among men than among women although the gap will narrow.
- Labour force participation rates for younger Aboriginal men and women will gradually converge to the rates in the non-Aboriginal population.
- Labour force participation rates for older Aboriginal men and women will increase but the gap between Aboriginal and non-Aboriginal rates will not completely close over the forecast period.

**Figure 5.2** Actual and Projected Labour Force Participation Rates, Age Adjusted to the 2003 Population



The third step in the process is largely an arithmetic exercise to combine the projected population from Section 2 with the projected labour force participation rates in Section 3. The results are in Section 4.

Figure 5.3 demonstrates the impact of increased participation rates on the size of the potential labour force. With no increase in the participation rates from their current level, the size of the potential labour force peaks in 2010 and then begins to decline sharply. By 2018, there are the same number of people available to work as there are in 2003. By the end of the forecast period, the potential labour force is at the same level as it was in late 1980s.

With increasing labour force participation rates, there is a significant difference in the size of the potential labour force and the point at which it begins to decline. The potential labour force increases to approximately 560,000 person where it remains until late in the forecast period.

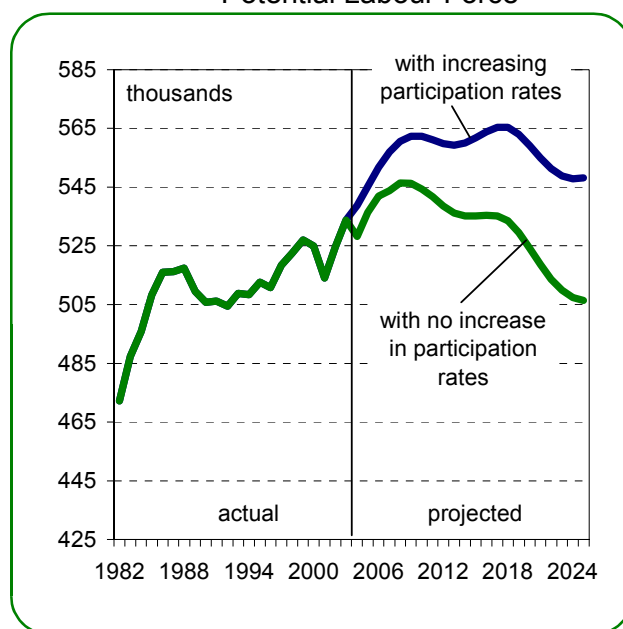
This demonstrates the importance of increasing the labour force participation rates in Saskatchewan which in turn demonstrates the need for increasing participation rates among the Aboriginal population. The overall participation rates cannot increase without an increase in this growing proportion of the labour force age group.

### Implications

The implications of an aging population for the province are significant and extend well beyond the labour market into health care, education, and the market economy. A full examination of these implications is beyond the scope of this report but some of the obvious issues are listed below.

1. The population in the 5 to 18 age group declines throughout the forecast period, reducing the population of elementary/secondary education students. At the same time, there will be an increase in both the size of and the proportion of the population needing post-secondary education. An increasing proportion of both kinds of students will be Aboriginal.
2. Completed education levels for the Saskatchewan population are currently below the national average. The forecasted increase in participation rates will be difficult without a significant improvement in those education levels.
3. The forecasted improvement in general participation rates implicitly assumes an increase in the labour force participation rates among the young Aboriginal population over the next ten to fifteen years. At present, these individuals are either young children or teens; all are either in the elementary/secondary school system or will be entering it within five years.
4. In a tight labour market, skill shortages will become more common and employers will have difficulty recruiting qualified staff. Increases in compensation will be required to attract workers to the province because similar demographics will put pressure on the labour market in most other provinces.
5. The tight labour market will not manifest itself all at once as a sudden shortage of workers, but rather as an increasingly frequent series of shortages in specific industries and occupations.
6. The possibility exists that a general labour shortage will limit economic growth in the province. The timing and extent of any such impact depends on a host of complex interactions in the labour market, the rate of labour and capital productivity growth, and the skill levels of the workforce.

**Figure 5.3** Effect of Participation Rate Assumptions on the Size of the Potential Labour Force





7. Other potential sources for growth in the labour force may have to be examined, particularly if the forecasted increase in participation rates fails to occur.
    - a. Saskatchewan may need to become more successful in attracting and retaining international immigrants.
    - b. Pension plans may have to be modified to enable and encourage older workers to remain in the labour force beyond “normal” retirement.
    - c. Populations with traditionally low labour force participation rates - those with a disability or those on social assistance, for example - are another potential source of employees.
-

---

**Appendix A**  
**Survival Rates**

---

## General Population

		Average net survival rates by age and gender									
		Calculated					Projected				
Gender	Age at start of year	1985-86 to 1989-90	1990-91 to 1994-95	1995-96 to 1999-00	2000-01 to 2002-03	2003-04 to 2004-05	2005-06 to 2009-10	2010-11 to 2014-15	2015-16 to 2019-20	2020-21 to 2024-25	
Men	Under 5	0.9873	0.9979	1.0001	0.9982	1.0068	1.0053	1.0038	1.0066	1.0051	
	5 to 9	0.9888	0.9976	0.9968	0.9964	1.0049	1.0027	1.0003	1.0021	0.9997	
	10 to 14	0.9925	0.9993	1.0005	0.9961	1.0037	1.0021	1.0004	1.0030	1.0013	
	15 to 19	0.9771	0.9904	0.9900	0.9901	1.0003	0.9974	0.9944	0.9991	0.9961	
	20 to 24	0.9657	0.9807	0.9781	0.9737	0.9953	0.9913	0.9866	0.9905	0.9859	
	25 to 29	0.9759	0.9867	0.9869	0.9786	0.9954	0.9921	0.9886	0.9936	0.9901	
	30 to 34	0.9840	0.9923	0.9940	0.9878	0.9997	0.9976	0.9953	0.9973	0.9950	
	35 to 39	0.9867	0.9932	0.9947	0.9890	0.9978	0.9962	0.9945	0.9972	0.9955	
	40 to 44	0.9848	0.9917	0.9929	0.9919	0.9965	0.9956	0.9947	0.9959	0.9949	
	45 to 49	0.9891	0.9926	0.9919	0.9906	0.9947	0.9937	0.9927	0.9939	0.9929	
	50 to 54	0.9902	0.9914	0.9918	0.9921	0.9926	0.9928	0.9930	0.9932	0.9934	
	55 to 59	0.9882	0.9916	0.9898	0.9892	0.9911	0.9913	0.9916	0.9918	0.9921	
	60 to 64	0.9818	0.9852	0.9816	0.9835	0.9848	0.9847	0.9846	0.9845	0.9844	
	65 to 69	0.9717	0.9762	0.9739	0.9726	0.9736	0.9743	0.9752	0.9762	0.9771	
70 to 74	0.9591	0.9615	0.9615	0.9664	0.9670	0.9671	0.9673	0.9675	0.9677		
Women	Under 5	0.9874	0.9983	0.9969	0.9971	1.0088	1.0065	1.0037	1.0053	1.0025	
	5 to 9	0.9889	0.9967	0.9959	0.9963	1.0060	1.0035	1.0006	1.0020	0.9991	
	10 to 14	0.9925	0.9985	0.9982	0.9947	1.0026	1.0007	0.9985	1.0007	0.9986	
	15 to 19	0.9777	0.9866	0.9877	0.9850	0.9934	0.9903	0.9870	0.9914	0.9881	
	20 to 24	0.9688	0.9819	0.9785	0.9797	0.9955	0.9907	0.9851	0.9881	0.9825	
	25 to 29	0.9791	0.9902	0.9924	0.9894	1.0058	1.0009	0.9952	0.9981	0.9924	
	30 to 34	0.9846	0.9945	0.9933	0.9855	0.9975	0.9966	0.9960	0.9996	0.9990	
	35 to 39	0.9877	0.9930	0.9947	0.9915	0.9990	0.9980	0.9972	1.0006	0.9997	
	40 to 44	0.9895	0.9952	0.9947	0.9918	0.9976	0.9974	0.9974	0.9996	0.9996	
	45 to 49	0.9922	0.9941	0.9949	0.9936	0.9984	0.9976	0.9967	0.9980	0.9971	
	50 to 54	0.9930	0.9960	0.9939	0.9933	0.9973	0.9974	0.9975	0.9976	0.9978	
	55 to 59	0.9911	0.9942	0.9914	0.9896	0.9943	0.9944	0.9945	0.9946	0.9947	
	60 to 64	0.9884	0.9900	0.9882	0.9900	0.9943	0.9942	0.9941	0.9939	0.9938	
	65 to 69	0.9842	0.9856	0.9847	0.9856	0.9905	0.9904	0.9902	0.9900	0.9898	
70 to 74	0.9778	0.9785	0.9778	0.9741	0.9776	0.9781	0.9789	0.9797	0.9805		

## First Nations Population

		Average net survival rates by age and gender								
		Calculated					Projected			
Gender	Age at start of year	1985-86 to 1989-90	1990-91 to 1994-95	1995-96 to 1999-00	2000-01 to 2002-03	2003-04 to 2004-05	2005-06 to 2009-10	2010-11 to 2014-15	2015-16 to 2019-20	2020-21 to 2024-25
Men	Under 5	...	1.0188	1.0159	1.0039	1.0051	1.0089	1.0076	1.0096	1.0082
	5 to 9	...	1.0163	1.0148	1.0036	1.0029	1.0046	1.0028	1.0044	1.0026
	10 to 14	...	1.0161	1.0129	1.0030	1.0027	1.0053	1.0039	1.0058	1.0044
	15 to 19	...	1.0107	1.0047	0.9946	0.9961	1.0032	1.0008	1.0042	1.0016
	20 to 24	...	1.0083	1.0048	0.9976	0.9925	0.9955	0.9920	0.9951	0.9916
	25 to 29	...	1.0104	1.0077	1.0026	0.9967	0.9983	0.9953	0.9990	0.9961
	30 to 34	...	1.0098	1.0078	1.0029	0.9987	0.9998	0.9980	0.9996	0.9979
	35 to 39	...	1.0061	1.0069	1.0021	0.9972	0.9995	0.9981	0.9999	0.9985
	40 to 44	...	1.0019	1.0027	0.9981	0.9948	0.9970	0.9963	0.9972	0.9964
	45 to 49	...	1.0004	0.9968	0.9936	0.9923	0.9950	0.9943	0.9951	0.9943
	50 to 54	...	0.9955	0.9941	0.9940	0.9916	0.9931	0.9932	0.9933	0.9934
	55 to 59	...	0.9828	0.9861	0.9865	0.9867	0.9916	0.9919	0.9920	0.9922
	60 to 64	...	0.9814	0.9773	0.9748	0.9803	0.9844	0.9845	0.9844	0.9844
	65 to 69	...	0.9705	0.9587	0.9505	0.9609	0.9756	0.9764	0.9769	0.9774
70 to 74	...	0.9481	0.9382	0.9326	0.9543	0.9672	0.9676	0.9677	0.9678	
Women	Under 5	...	1.0180	1.0162	1.0040	1.0052	1.0078	1.0059	1.0073	1.0053
	5 to 9	...	1.0142	1.0157	1.0044	1.0032	1.0046	1.0026	1.0039	1.0018
	10 to 14	...	1.0186	1.0152	1.0041	1.0024	1.0032	1.0015	1.0032	1.0015
	15 to 19	...	1.0163	1.0122	1.0027	0.9974	0.9957	0.9929	0.9962	0.9935
	20 to 24	...	1.0125	1.0083	1.0026	0.9966	0.9934	0.9893	0.9919	0.9880
	25 to 29	...	1.0104	1.0099	1.0036	1.0027	1.0033	0.9993	1.0019	0.9979
	30 to 34	...	1.0113	1.0094	1.0038	1.0007	1.0017	1.0008	1.0032	1.0023
	35 to 39	...	1.0079	1.0068	1.0006	0.9995	1.0027	1.0017	1.0040	1.0030
	40 to 44	...	1.0085	1.0037	0.9989	0.9981	1.0005	1.0003	1.0016	1.0013
	45 to 49	...	1.0040	1.0017	0.9981	0.9972	0.9991	0.9984	0.9993	0.9986
	50 to 54	...	1.0019	1.0002	0.9959	0.9957	0.9976	0.9977	0.9977	0.9978
	55 to 59	...	0.9928	0.9926	0.9890	0.9890	0.9944	0.9946	0.9946	0.9947
	60 to 64	...	0.9919	0.9844	0.9800	0.9881	0.9938	0.9939	0.9938	0.9937
	65 to 69	...	0.9846	0.9663	0.9683	0.9791	0.9898	0.9899	0.9898	0.9897
70 to 74	...	0.9635	0.9563	0.9408	0.9557	0.9790	0.9799	0.9803	0.9807	

## Métis (non-Indian Aboriginal) Population

		Average net survival rates by age and gender									
		Calculated					Projected				
Gender	Age at start of year	1985-86 to 1989-90	1990-91 to 1994-95	1995-96 to 1999-00	2000-01 to 2002-03	2003-04 to 2004-05	2005-06 to 2009-10	2010-11 to 2014-15	2015-16 to 2019-20	2020-21 to 2024-25	
Men	Under 5	...	1.0084	1.0080	1.0001	1.0051	1.0071	1.0057	1.0081	1.0067	
	5 to 9	...	1.0069	1.0058	0.9990	1.0031	1.0037	1.0016	1.0033	1.0011	
	10 to 14	...	1.0077	1.0067	0.9989	1.0024	1.0037	1.0022	1.0044	1.0028	
	15 to 19	...	1.0005	0.9974	0.9920	0.9968	1.0003	0.9976	1.0017	0.9989	
	20 to 24	...	0.9945	0.9914	0.9826	0.9924	0.9934	0.9893	0.9928	0.9888	
	25 to 29	...	0.9986	0.9973	0.9888	0.9945	0.9952	0.9920	0.9963	0.9931	
	30 to 34	...	1.0011	1.0009	0.9935	0.9985	0.9987	0.9967	0.9985	0.9964	
	35 to 39	...	0.9996	1.0008	0.9945	0.9967	0.9978	0.9963	0.9986	0.9970	
	40 to 44	...	0.9968	0.9978	0.9944	0.9953	0.9963	0.9955	0.9965	0.9957	
	45 to 49	...	0.9965	0.9943	0.9917	0.9931	0.9944	0.9935	0.9945	0.9936	
	50 to 54	...	0.9935	0.9930	0.9929	0.9921	0.9929	0.9931	0.9933	0.9934	
	55 to 59	...	0.9872	0.9879	0.9875	0.9889	0.9915	0.9917	0.9919	0.9921	
	60 to 64	...	0.9833	0.9795	0.9788	0.9825	0.9846	0.9846	0.9845	0.9844	
	65 to 69	...	0.9733	0.9663	0.9614	0.9672	0.9749	0.9758	0.9765	0.9772	
70 to 74	...	0.9548	0.9498	0.9494	0.9606	0.9671	0.9674	0.9676	0.9677		
Women	Under 5	...	1.0082	1.0065	0.9987	1.0062	1.0071	1.0048	1.0063	1.0039	
	5 to 9	...	1.0055	1.0058	0.9991	1.0038	1.0041	1.0016	1.0029	1.0005	
	10 to 14	...	1.0086	1.0067	0.9986	1.0017	1.0019	1.0000	1.0020	1.0001	
	15 to 19	...	1.0015	0.9999	0.9933	0.9944	0.9930	0.9900	0.9938	0.9908	
	20 to 24	...	0.9972	0.9934	0.9886	0.9951	0.9920	0.9872	0.9900	0.9852	
	25 to 29	...	1.0003	1.0011	0.9938	1.0033	1.0021	0.9972	1.0000	0.9951	
	30 to 34	...	1.0029	1.0013	0.9929	0.9983	0.9992	0.9984	1.0014	1.0006	
	35 to 39	...	1.0004	1.0007	0.9954	0.9984	1.0003	0.9994	1.0023	1.0014	
	40 to 44	...	1.0018	0.9992	0.9950	0.9971	0.9990	0.9989	1.0006	1.0005	
	45 to 49	...	0.9991	0.9983	0.9957	0.9971	0.9983	0.9975	0.9987	0.9978	
	50 to 54	...	0.9989	0.9971	0.9944	0.9959	0.9975	0.9976	0.9977	0.9978	
	55 to 59	...	0.9935	0.9920	0.9890	0.9911	0.9944	0.9945	0.9946	0.9947	
	60 to 64	...	0.9909	0.9863	0.9847	0.9907	0.9940	0.9940	0.9939	0.9938	
	65 to 69	...	0.9851	0.9755	0.9765	0.9843	0.9901	0.9900	0.9899	0.9897	
70 to 74	...	0.9710	0.9670	0.9575	0.9661	0.9786	0.9794	0.9800	0.9806		

---

**Appendix B**  
**Projected Populations**

---

## General Population

	Population as of July 1st								
	Actual				Projected				
	1990	1995	2000	2001	2005	2010	2015	2020	2025
<b>Total</b>	1,007,114	1,014,126	1,007,767	1,000,134	999,036	1,003,231	997,908	999,728	988,312
<b>Gender</b>									
Men	502,097	504,610	501,227	497,402	496,635	498,488	495,346	495,614	488,873
Women	505,017	509,516	506,540	502,732	502,401	504,742	502,562	504,114	499,439
<b>Ten Year Age Groups</b>									
Under 10	163,009	153,289	136,972	132,350	124,158	120,613	119,124	117,225	110,292
10 to 19	152,626	158,712	158,278	157,162	149,549	137,099	125,696	121,698	120,482
20 to 29	154,185	133,217	133,228	132,025	141,550	146,939	137,071	126,590	115,065
30 to 39	158,885	160,624	140,186	134,289	119,484	123,926	134,213	138,865	130,487
40 to 49	110,104	132,093	149,032	150,859	151,578	132,777	115,249	120,121	131,331
50 to 59	85,918	88,058	102,625	105,892	123,694	140,983	144,613	126,501	110,375
60 to 69	85,196	81,591	76,990	76,713	78,865	93,345	113,453	129,363	132,601
70 to 79	64,875	67,365	66,771	66,393	63,497	61,146	63,765	76,073	92,719
80 plus	32,316	39,177	43,685	44,451	46,660	46,401	44,724	43,292	44,960
<b>Key age groups</b>									
Under 15	241,439	234,152	215,711	209,665	196,841	186,018	180,345	178,040	170,328
5 to 18	220,188	223,383	215,727	211,878	198,239	183,261	172,610	169,782	166,117
15 to 29	228,381	211,066	212,767	211,872	218,417	218,633	201,546	187,473	175,511
15 & older	765,675	779,974	792,056	790,469	802,195	817,212	817,563	821,688	817,983
15 to 64	626,851	633,087	643,726	642,402	655,635	669,797	658,880	642,948	614,644
25 to 59	438,975	445,752	454,425	452,794	460,561	470,731	463,648	450,268	430,099
65 plus	138,824	146,887	148,330	148,067	146,560	147,415	158,683	178,739	203,339
75 plus	61,171	69,376	74,687	75,298	76,414	74,725	72,455	73,896	83,759

## First Nations Population

	Population as of July 1st						
	Estimated*	Projected					
	1996	2001	2005	2010	2015	2020	2025
<b>Total</b>	75,015	86,268	95,478	107,447	117,372	128,693	138,071
<b>Gender</b>							
Men	36,725	41,797	47,445	54,251	59,189	64,964	69,680
Women	38,290	44,470	48,033	53,196	58,183	63,729	68,390
<b>Ten Year Age Groups</b>							
Under 10	23,608	24,911	23,516	22,371	23,212	24,554	24,366
10 to 19	17,036	20,739	24,513	26,774	24,905	23,155	24,084
20 to 29	12,195	12,994	15,608	20,480	23,997	25,758	23,944
30 to 39	9,924	10,507	11,940	13,390	15,889	20,312	23,698
40 to 49	5,737	8,724	9,894	10,628	12,120	13,408	15,935
50 to 59	3,172	4,480	5,634	8,038	9,577	10,238	11,727
60 to 69	2,096	2,018	2,683	3,734	5,061	7,367	8,803
70 to 79	} 1,231	1,115	995	1,387	2,022	2,990	4,166
80 plus		779	694	646	589	911	1,347
<b>Key age groups</b>							
Under 15	33,346	36,632	36,464	35,869	34,639	36,135	36,776
5 to 18	...	31,464	35,598	35,700	33,679	32,613	34,375
15 to 29	19,503	22,012	27,173	33,755	37,475	37,332	35,619
15 & older	41,669	49,636	59,013	71,578	82,733	92,558	101,295
15 to 64	39,583	47,117	56,199	68,124	77,993	85,902	91,444
25 to 59	24,818	29,965	34,219	40,992	48,819	56,466	64,117
65 plus	2,086	2,518	2,815	3,453	4,740	6,656	9,851
75 plus	680	1,296	1,158	1,064	1,377	1,966	3,009

\* Census Aboriginal Identity population plus 3% to account for census undercoverage



## Métis (non-Indian Aboriginal) Population

	Population as of July 1st						
	Estimated*	Projected					
	1996	2001	2005	2010	2015	2020	2025
Total	37,811	47,833	50,535	54,567	58,074	61,966	64,789
<b>Gender</b>							
Men	18,633	23,402	24,718	26,744	28,503	30,424	31,783
Women	19,179	24,432	25,817	27,822	29,571	31,543	33,005
<b>Ten Year Age Groups</b>							
Under 10	9,394	10,805	9,809	9,738	10,096	10,320	9,970
10 to 19	8,127	10,424	11,344	11,108	10,054	9,967	10,348
20 to 29	6,448	7,874	8,569	9,793	10,666	10,490	9,439
30 to 39	5,552	6,658	6,973	7,576	8,306	9,450	10,348
40 to 49	3,842	5,965	6,615	6,529	6,841	7,461	8,239
50 to 59	2,173	3,222	3,886	5,400	6,344	6,260	6,593
60 to 69	1,308	1,517	2,068	2,781	3,570	4,978	5,822
70 to 79	} 968	804	739	1,107	1,681	2,274	2,927
80 plus		564	533	534	516	766	1,104
<b>Key age groups</b>							
Under 15	14,399	16,449	15,702	14,961	14,952	15,409	15,217
5 to 18	...	15,324	15,560	14,861	13,933	14,160	14,528
15 to 29	10,305	12,654	14,020	15,679	15,864	15,369	14,539
15 & older	25,168	31,384	34,833	39,606	43,123	46,558	49,571
15 to 64	23,572	29,566	32,699	36,836	39,374	41,622	42,647
25 to 59	14,554	19,579	21,428	24,003	26,541	28,620	29,971
65 plus	1,597	1,818	2,135	2,770	3,749	4,936	6,924
75 plus	541	938	882	862	1,178	1,633	2,307

\* Census Aboriginal Identity population plus 3% to account for census undercoverage

---

**Appendix C**  
**Labour Force Participation Rates**

---

## General Population

		Percent of Population in the Labour Force								
		Actual				Projected				
Gender	Age Group	1990	1995	2000	2001	2005	2010	2015	2020	2025
Men	15 to 19	61.7%	59.0%	56.4%	55.1%	59.8%	60.3%	60.8%	61.4%	61.9%
	20 to 24	85.5%	83.1%	82.6%	80.6%	81.5%	82.2%	82.8%	83.5%	84.2%
	25 to 29	92.6%	91.3%	91.9%	90.0%	92.8%	93.7%	94.5%	95.4%	96.2%
	30 to 34	94.6%	93.4%	92.8%	93.3%	94.2%	95.0%	95.8%	96.5%	97.3%
	35 to 39	95.7%	94.7%	93.8%	93.7%	93.9%	94.4%	95.0%	95.5%	96.0%
	40 to 44	95.7%	95.5%	94.4%	94.2%	94.8%	95.2%	95.6%	96.0%	96.4%
	45 to 49	95.3%	93.7%	93.8%	93.2%	93.8%	94.1%	94.5%	94.8%	95.2%
	50 to 54	91.9%	88.4%	88.9%	88.7%	91.6%	91.5%	91.3%	91.2%	91.1%
	55 to 59	78.7%	80.0%	78.3%	80.3%	81.2%	81.9%	82.5%	83.2%	83.8%
	60 to 64	66.5%	50.8%	58.5%	54.8%	59.8%	58.6%	57.4%	56.1%	54.9%
65 to 69	34.2%	35.4%	33.1%	26.3%	29.2%	28.9%	28.5%	28.2%	27.9%	
70 and older	12.3%	17.4%	18.0%	14.8%	14.2%	15.2%	16.2%	17.3%	18.3%	
Women	15 to 19	51.0%	48.9%	52.2%	52.7%	55.9%	56.3%	56.6%	57.0%	57.4%
	20 to 24	72.7%	71.1%	74.5%	72.7%	76.0%	77.0%	77.9%	78.9%	79.8%
	25 to 29	78.0%	77.5%	76.7%	77.1%	77.9%	79.6%	81.4%	83.1%	84.9%
	30 to 34	80.1%	78.5%	76.6%	79.0%	82.7%	84.6%	86.4%	88.2%	90.0%
	35 to 39	80.8%	84.3%	83.2%	80.7%	86.7%	88.7%	90.7%	92.6%	94.6%
	40 to 44	79.9%	82.5%	86.5%	82.3%	87.6%	89.4%	91.2%	93.1%	94.9%
	45 to 49	79.7%	81.2%	83.5%	84.0%	88.3%	89.8%	91.3%	92.8%	94.3%
	50 to 54	69.3%	76.2%	77.9%	77.9%	82.7%	84.9%	87.2%	89.4%	91.7%
	55 to 59	55.5%	62.1%	63.5%	59.9%	68.6%	72.7%	76.8%	80.9%	85.0%
	60 to 64	31.3%	36.0%	36.6%	36.0%	44.5%	47.1%	49.7%	52.3%	54.9%
65 to 69	11.7%	13.7%	14.7%	11.2%	14.8%	16.2%	17.6%	19.0%	20.4%	
70 and older	2.2%	3.1%	3.3%	2.5%	3.4%	3.7%	4.0%	4.3%	4.7%	

## First Nations Population

		Percent of Population in the Labour Force						
		Estimated		Projected				
Gender	Age Group	1996	2001	2005	2010	2015	2020	2025
Men	15 to 19	28%	25%	30%	37%	44%	50%	57%
	20 to 24	41%	36%	44%	53%	62%	72%	81%
	25 to 29	69%	68%	72%	76%	81%	86%	91%
	30 to 34	69%	70%	73%	77%	80%	84%	88%
	35 to 39	73%	70%	73%	76%	79%	82%	85%
	40 to 44	72%	71%	72%	74%	76%	78%	80%
	45 to 49	65%	66%	67%	69%	71%	73%	75%
	50 to 54	62%	62%	63%	64%	65%	66%	67%
	55 to 59	53%	57%	57%	58%	59%	59%	60%
	60 to 64	40%	39%	38%	38%	38%	38%	38%
	65 to 69	11%	10%	11%	12%	13%	15%	16%
70 and older	6%	6%	6%	7%	8%	8%	9%	
Women	15 to 19	19%	22%	28%	36%	43%	50%	57%
	20 to 24	27%	31%	39%	49%	59%	70%	80%
	25 to 29	44%	52%	57%	63%	69%	75%	81%
	30 to 34	49%	53%	58%	63%	69%	74%	80%
	35 to 39	51%	54%	58%	63%	68%	73%	78%
	40 to 44	51%	55%	59%	63%	67%	72%	76%
	45 to 49	49%	56%	59%	63%	67%	70%	74%
	50 to 54	44%	52%	56%	60%	64%	68%	72%
	55 to 59	36%	40%	43%	46%	49%	52%	55%
	60 to 64	21%	24%	26%	27%	29%	31%	33%
	65 to 69	5%	5%	6%	7%	9%	10%	11%
70 and older	1%	1%	1%	2%	2%	2%	2%	

## Métis (non-Indian Aboriginal) Population

		Percent of Population in the Labour Force						
		Estimated		Projected				
Gender	Age Group	1996	2001	2005	2010	2015	2020	2025
Men	15 to 19	51%	48%	50%	53%	55%	57%	60%
	20 to 24	74%	71%	73%	76%	78%	81%	83%
	25 to 29	81%	83%	85%	87%	90%	92%	95%
	30 to 34	81%	86%	88%	89%	91%	93%	95%
	35 to 39	85%	87%	87%	88%	89%	90%	91%
	40 to 44	85%	87%	87%	88%	88%	89%	89%
	45 to 49	80%	81%	82%	82%	83%	84%	85%
	50 to 54	77%	77%	78%	79%	79%	80%	81%
	55 to 59	65%	70%	70%	71%	72%	72%	73%
	60 to 64	49%	48%	47%	46%	46%	45%	44%
	65 to 69	12%	11%	12%	14%	15%	17%	18%
70 and older	7%	6%	7%	8%	8%	9%	10%	
Women	15 to 19	36%	47%	49%	51%	53%	55%	57%
	20 to 24	52%	65%	67%	70%	74%	77%	80%
	25 to 29	60%	67%	70%	72%	75%	78%	81%
	30 to 34	66%	69%	71%	74%	76%	79%	81%
	35 to 39	69%	71%	73%	76%	79%	82%	85%
	40 to 44	70%	72%	74%	77%	79%	82%	85%
	45 to 49	66%	72%	75%	78%	81%	84%	87%
	50 to 54	60%	67%	70%	74%	77%	81%	85%
	55 to 59	49%	51%	54%	58%	61%	65%	69%
	60 to 64	29%	31%	32%	34%	36%	38%	40%
	65 to 69	7%	6%	7%	9%	10%	11%	13%
70 and older	2%	1%	2%	2%	2%	3%	3%	

---

**Appendix D**  
**Potential Labour Force**

---

**Constant Participation Rates (average of 2001 to 2003)**  
**General Population**

Gender	Age group	Calculated				Projected				
		1990	1995	2000	2001	2005	2010	2015	2020	2025
Men	15 to 19	23,329	23,608	23,230	22,842	23,549	21,942	19,717	18,481	18,459
	20 to 24	30,486	29,058	29,934	29,042	32,356	31,628	29,024	26,572	24,418
	25 to 29	39,223	29,995	29,270	28,192	30,377	34,773	33,419	31,412	28,211
	30 to 34	40,301	37,210	29,197	28,394	28,015	30,110	33,633	33,264	30,457
	35 to 39	36,802	38,806	36,496	34,630	28,274	27,716	29,464	33,287	32,589
	40 to 44	30,234	35,319	37,657	37,435	35,369	28,009	27,131	29,292	32,697
	45 to 49	23,212	28,445	33,412	34,116	35,962	34,106	26,869	26,182	28,130
	50 to 54	19,672	20,658	25,952	26,837	30,975	33,837	31,837	25,301	24,461
	55 to 59	17,033	16,442	17,477	18,459	22,603	26,522	29,019	27,323	21,734
	60 to 64	14,235	10,412	11,252	10,586	12,644	15,898	18,661	20,426	19,242
65 to 69	6,758	6,899	6,112	4,763	5,349	5,739	7,284	8,558	9,370	
70 plus	<u>5,106</u>	<u>7,784</u>	<u>8,296</u>	<u>6,863</u>	<u>6,346</u>	<u>6,283</u>	<u>6,382</u>	<u>7,114</u>	<u>8,256</u>	
		286,391	284,635	288,285	282,158	291,818	296,563	292,441	287,211	278,023
Women	15 to 19	18,556	18,502	20,019	20,232	20,116	18,711	16,856	16,044	15,827
	20 to 24	25,053	23,656	25,632	24,892	26,480	25,826	23,482	21,507	20,030
	25 to 29	32,535	24,896	23,571	23,462	25,350	27,212	25,672	23,658	21,035
	30 to 34	33,094	31,168	23,812	23,581	24,225	26,913	28,089	27,223	24,401
	35 to 39	29,501	33,806	32,223	29,899	25,040	24,554	27,277	28,986	27,997
	40 to 44	24,157	29,113	33,745	31,998	32,133	25,171	24,538	27,809	29,344
	45 to 49	19,065	23,925	28,815	29,933	32,925	32,135	25,137	24,697	27,918
	50 to 54	14,762	17,776	22,293	23,177	27,025	30,208	29,302	23,130	22,559
	55 to 59	11,970	12,922	14,284	13,715	18,445	21,818	24,394	23,659	18,682
	60 to 64	6,935	7,470	7,276	7,262	8,482	10,698	12,779	14,285	13,858
65 to 69	2,559	2,857	2,853	2,141	2,403	2,658	3,329	3,962	4,422	
70 plus	<u>1,225</u>	<u>1,916</u>	<u>2,124</u>	<u>1,612</u>	<u>1,907</u>	<u>1,858</u>	<u>1,869</u>	<u>2,036</u>	<u>2,337</u>	
		219,412	228,008	236,649	231,902	244,530	247,763	242,724	236,996	228,410
Both Sexes	15 to 19	41,886	42,109	43,249	43,074	43,665	40,652	36,573	34,525	34,285
	20 to 24	55,539	52,715	55,567	53,934	58,836	57,455	52,506	48,079	44,447
	25 to 29	71,757	54,891	52,842	51,653	55,727	61,985	59,091	55,070	49,247
	30 to 34	73,396	68,378	53,009	51,975	52,240	57,023	61,722	60,487	54,858
	35 to 39	66,303	72,612	68,719	64,528	53,314	52,270	56,741	62,273	60,586
	40 to 44	54,391	64,432	71,402	69,433	67,502	53,180	51,669	57,101	62,041
	45 to 49	42,277	52,369	62,228	64,048	68,887	66,241	52,006	50,878	56,048
	50 to 54	34,434	38,434	48,245	50,014	58,000	64,045	61,139	48,431	47,020
	55 to 59	29,003	29,364	31,761	32,174	41,047	48,340	53,413	50,982	40,416
	60 to 64	21,170	17,882	18,529	17,848	21,126	26,596	31,440	34,711	33,100
65 to 69	9,317	9,756	8,965	6,904	7,752	8,397	10,613	12,520	13,792	
70 plus	<u>6,331</u>	<u>9,700</u>	<u>10,420</u>	<u>8,475</u>	<u>8,253</u>	<u>8,141</u>	<u>8,251</u>	<u>9,150</u>	<u>10,593</u>	
		505,803	512,643	524,934	514,060	536,348	544,326	535,165	524,207	506,432
Key Age Groups	25 to 59	371,561	380,481	388,204	383,826	396,717	403,085	395,782	385,222	370,215
	15 to 29	169,182	149,715	151,658	148,661	158,227	160,091	148,170	137,674	127,979
	50 to 64	84,607	85,680	98,535	100,036	120,174	138,982	145,993	134,124	120,536
	65 plus	15,647	19,457	19,385	15,379	16,005	16,538	18,864	21,670	24,385

**Increasing Participation Rates  
General Population**

Gender	Age group	Calculated				Projected				
		1990	1995	2000	2001	2005	2010	2015	2020	2025
Men	15 to 19	23,329	23,608	23,230	22,842	23,803	22,486	20,379	19,269	19,414
	20 to 24	30,486	29,058	29,934	29,042	32,261	31,868	29,488	27,218	25,216
	25 to 29	39,223	29,995	29,270	28,192	30,565	35,367	34,291	32,517	29,462
	30 to 34	40,301	37,210	29,197	28,394	28,275	30,612	34,469	34,366	31,717
	35 to 39	36,802	38,806	36,496	34,630	28,336	27,932	29,859	33,919	33,390
	40 to 44	30,234	35,319	37,657	37,435	35,538	28,251	27,479	29,792	33,394
	45 to 49	23,212	28,445	33,412	34,116	36,109	34,369	27,177	26,582	28,667
	50 to 54	19,672	20,658	25,952	26,837	31,257	34,117	32,050	25,437	24,560
	55 to 59	17,033	16,442	17,477	18,459	22,858	27,000	29,768	28,245	22,640
	60 to 64	14,235	10,412	11,252	10,586	12,522	15,551	17,864	19,133	17,628
	65 to 69	6,758	6,899	6,112	4,763	5,080	5,495	6,893	8,001	8,655
70 plus	<u>5,106</u>	<u>7,784</u>	<u>8,296</u>	<u>6,863</u>	<u>6,606</u>	<u>6,947</u>	<u>7,531</u>	<u>8,922</u>	<u>10,966</u>	
		286,391	284,635	288,285	282,158	293,209	299,995	297,249	293,402	285,709
Women	15 to 19	18,556	18,502	20,019	20,232	20,697	19,351	17,536	16,800	16,679
	20 to 24	25,053	23,656	25,632	24,892	27,482	27,020	24,855	23,041	21,714
	25 to 29	32,535	24,896	23,571	23,462	25,610	28,105	27,098	25,510	23,161
	30 to 34	33,094	31,168	23,812	23,581	24,475	27,867	29,704	29,393	26,888
	35 to 39	29,501	33,806	32,223	29,899	25,767	25,860	29,353	31,870	31,438
	40 to 44	24,157	29,113	33,745	31,998	32,909	26,341	26,193	30,278	32,577
	45 to 49	19,065	23,925	28,815	29,933	33,557	33,337	26,507	26,473	30,411
	50 to 54	14,762	17,776	22,293	23,177	27,843	31,962	31,814	25,763	25,762
	55 to 59	11,970	12,922	14,284	13,715	19,040	24,047	28,388	29,001	24,060
	60 to 64	6,935	7,470	7,276	7,262	9,578	12,684	15,959	18,776	19,122
	65 to 69	2,559	2,857	2,853	2,141	2,813	3,375	4,582	5,890	7,058
70 plus	<u>1,225</u>	<u>1,916</u>	<u>2,124</u>	<u>1,612</u>	<u>2,188</u>	<u>2,316</u>	<u>2,512</u>	<u>2,942</u>	<u>3,612</u>	
		219,412	228,008	236,649	231,902	251,959	262,264	264,502	265,737	262,483
Both Sexes	15 to 19	41,886	42,109	43,249	43,074	44,500	41,837	37,915	36,069	36,092
	20 to 24	55,539	52,715	55,567	53,934	59,743	58,888	54,343	50,259	46,931
	25 to 29	71,757	54,891	52,842	51,653	56,175	63,472	61,389	58,028	52,623
	30 to 34	73,396	68,378	53,009	51,975	52,750	58,479	64,173	63,758	58,605
	35 to 39	66,303	72,612	68,719	64,528	54,103	53,792	59,212	65,789	64,828
	40 to 44	54,391	64,432	71,402	69,433	68,447	54,593	53,672	60,071	65,971
	45 to 49	42,277	52,369	62,228	64,048	69,666	67,706	53,684	53,054	59,079
	50 to 54	34,434	38,434	48,245	50,014	59,100	66,079	63,865	51,201	50,321
	55 to 59	29,003	29,364	31,761	32,174	41,897	51,047	58,156	57,246	46,700
	60 to 64	21,170	17,882	18,529	17,848	22,099	28,235	33,823	37,908	36,750
	65 to 69	9,317	9,756	8,965	6,904	7,893	8,870	11,476	13,891	15,713
70 plus	<u>6,331</u>	<u>9,700</u>	<u>10,420</u>	<u>8,475</u>	<u>8,794</u>	<u>9,263</u>	<u>10,043</u>	<u>11,864</u>	<u>14,579</u>	
		505,803	512,643	524,934	514,060	545,168	562,259	561,751	559,139	548,193
Key Age Groups	25 to 59	371,561	380,481	388,204	383,826	402,138	415,167	414,151	409,147	398,127
	15 to 29	169,182	149,715	151,658	148,661	160,418	164,196	153,647	144,356	135,646
	50 to 64	84,607	85,680	98,535	100,036	123,097	145,360	155,844	146,355	133,772
	65 plus	15,647	19,457	19,385	15,379	16,687	18,133	21,519	25,755	30,292

**Constant Participation Rates (2001)**  
**First Nations Population**

Gender	Age group	Estimated		Projected				
		1996	2001	2005	2010	2015	2020	2025
Men	15 to 19	1,056	1,107	1,474	1,760	1,801	1,536	1,497
	20 to 24	1,179	1,115	1,611	2,211	2,496	2,628	2,205
	25 to 29	1,819	1,879	2,123	3,107	4,052	4,582	4,751
	30 to 34	1,730	1,845	1,988	2,288	3,219	4,191	4,660
	35 to 39	1,472	1,474	1,815	2,074	2,296	3,229	4,171
	40 to 44	1,122	1,765	1,595	1,876	2,067	2,296	3,204
	45 to 49	733	1,005	1,528	1,480	1,700	1,882	2,083
	50 to 54	546	800	931	1,427	1,356	1,572	1,733
	55 to 59	340	491	649	807	1,237	1,187	1,378
	60 to 64	236	261	295	404	508	798	765
	65 to 69	46	32	54	66	91	120	188
70 plus	<u>33</u>	<u>49</u>	<u>44</u>	<u>48</u>	<u>58</u>	<u>86</u>	<u>122</u>	
		10,311	11,823	14,107	17,549	20,881	24,108	26,757
Women	15 to 19	673	1,014	1,253	1,376	1,384	1,198	1,256
	20 to 24	905	1,129	1,357	1,674	1,807	1,843	1,569
	25 to 29	1,483	1,800	1,870	2,248	2,713	2,968	2,968
	30 to 34	1,468	1,744	1,841	1,950	2,303	2,827	3,038
	35 to 39	1,210	1,354	1,659	1,901	2,004	2,396	2,927
	40 to 44	872	1,624	1,456	1,711	1,951	2,081	2,475
	45 to 49	658	995	1,513	1,483	1,740	1,994	2,122
	50 to 54	412	763	886	1,395	1,362	1,605	1,832
	55 to 59	261	352	525	669	1,054	1,029	1,214
	60 to 64	140	174	192	306	391	616	601
	65 to 69	24	16	30	40	63	81	127
70 plus	<u>9</u>	<u>12</u>	<u>10</u>	<u>14</u>	<u>18</u>	<u>27</u>	<u>39</u>	
		8,115	10,976	12,592	14,767	16,789	18,665	20,167
Both Sexes	15 to 19	1,729	2,122	2,726	3,135	3,185	2,734	2,753
	20 to 24	2,084	2,243	2,969	3,885	4,303	4,472	3,774
	25 to 29	3,301	3,679	3,994	5,355	6,766	7,551	7,718
	30 to 34	3,197	3,589	3,829	4,238	5,521	7,018	7,698
	35 to 39	2,681	2,828	3,474	3,975	4,301	5,625	7,098
	40 to 44	1,994	3,389	3,051	3,587	4,018	4,378	5,679
	45 to 49	1,391	2,000	3,041	2,963	3,440	3,876	4,205
	50 to 54	958	1,562	1,817	2,821	2,717	3,177	3,566
	55 to 59	602	843	1,174	1,477	2,291	2,216	2,592
	60 to 64	376	434	487	711	899	1,414	1,366
	65 to 69	70	48	84	105	154	200	315
70 plus	<u>42</u>	<u>61</u>	<u>54</u>	<u>62</u>	<u>76</u>	<u>113</u>	<u>160</u>	
		18,426	22,799	26,699	32,315	37,671	42,773	46,924
Key	25 to 59	14,125	17,891	20,379	24,418	29,054	33,840	38,556
Age	15 to 29	7,114	8,044	9,689	12,376	14,254	14,756	14,245
Groups	50 to 64	1,936	2,840	3,477	5,009	5,907	6,807	7,523
	65 plus	112	109	139	167	230	314	476



**Increasing Participation Rates  
First Nations Population**

Gender	Age group	Estimated		Projected				
		1996	2001	2005	2010	2015	2020	2025
Men	15 to 19	1,056	1,107	1,796	2,625	3,179	3,130	3,461
	20 to 24	1,179	1,115	1,946	3,244	4,310	5,219	4,950
	25 to 29	1,819	1,879	2,249	3,519	4,888	5,864	6,430
	30 to 34	1,730	1,845	2,071	2,504	3,690	5,024	5,830
	35 to 39	1,472	1,474	1,879	2,240	2,582	3,774	5,061
	40 to 44	1,122	1,765	1,631	1,970	2,228	2,539	3,631
	45 to 49	733	1,005	1,563	1,558	1,839	2,091	2,375
	50 to 54	546	800	943	1,469	1,417	1,669	1,868
	55 to 59	340	491	655	826	1,281	1,245	1,463
	60 to 64	236	261	294	402	503	789	754
	65 to 69	46	32	59	80	122	177	302
70 plus	<u>33</u>	<u>49</u>	<u>48</u>	<u>59</u>	<u>79</u>	<u>129</u>	<u>198</u>	
		10,311	11,823	15,135	20,495	26,119	31,649	36,320
Women	15 to 19	673	1,014	1,579	2,181	2,644	2,679	3,216
	20 to 24	905	1,129	1,715	2,666	3,473	4,152	4,050
	25 to 29	1,483	1,800	2,043	2,716	3,592	4,272	4,615
	30 to 34	1,468	1,744	1,996	2,319	2,981	3,958	4,573
	35 to 39	1,210	1,354	1,779	2,212	2,515	3,224	4,206
	40 to 44	872	1,624	1,546	1,950	2,375	2,695	3,397
	45 to 49	658	995	1,591	1,656	2,055	2,484	2,780
	50 to 54	412	763	942	1,591	1,660	2,082	2,520
	55 to 59	261	352	558	763	1,283	1,332	1,666
	60 to 64	140	174	203	348	473	792	818
	65 to 69	24	16	36	57	106	155	275
70 plus	<u>9</u>	<u>12</u>	<u>12</u>	<u>19</u>	<u>29</u>	<u>49</u>	<u>78</u>	
		8,115	10,976	14,001	18,479	23,186	27,874	32,193
Both Sexes	15 to 19	1,729	2,122	3,374	4,806	5,823	5,809	6,677
	20 to 24	2,084	2,243	3,661	5,910	7,783	9,371	9,001
	25 to 29	3,301	3,679	4,292	6,235	8,480	10,137	11,044
	30 to 34	3,197	3,589	4,067	4,823	6,671	8,982	10,403
	35 to 39	2,681	2,828	3,659	4,453	5,097	6,998	9,266
	40 to 44	1,994	3,389	3,177	3,920	4,603	5,234	7,028
	45 to 49	1,391	2,000	3,155	3,214	3,894	4,575	5,155
	50 to 54	958	1,562	1,884	3,059	3,076	3,751	4,387
	55 to 59	602	843	1,213	1,589	2,564	2,576	3,128
	60 to 64	376	434	498	750	976	1,580	1,571
	65 to 69	70	48	96	137	229	332	577
70 plus	<u>42</u>	<u>61</u>	<u>61</u>	<u>78</u>	<u>108</u>	<u>178</u>	<u>276</u>	
		18,426	22,799	29,135	38,974	49,305	59,523	68,513
Key Age Groups	25 to 59	14,125	17,891	21,447	27,292	34,386	42,253	50,412
	15 to 29	7,114	8,044	11,327	16,952	22,086	25,317	26,722
	50 to 64	1,936	2,840	3,595	5,397	6,617	7,907	9,087
	65 plus	112	109	156	215	337	510	853

**Constant Participation Rates (2001)**  
**Métis (non-Indian Aboriginal) Population**

Gender	Age group	Estimated		Projected				
		1996	2001	2005	2010	2015	2020	2025
Men	15 to 19	953	1,168	1,279	1,430	1,270	1,217	1,286
	20 to 24	1,183	1,394	1,632	1,844	2,025	1,829	1,723
	25 to 29	1,134	1,440	1,531	1,850	2,054	2,304	2,046
	30 to 34	1,166	1,413	1,433	1,568	1,855	2,108	2,314
	35 to 39	1,006	1,354	1,363	1,427	1,549	1,850	2,084
	40 to 44	896	1,621	1,415	1,355	1,405	1,544	1,826
	45 to 49	701	895	1,362	1,292	1,232	1,284	1,405
	50 to 54	411	713	808	1,257	1,185	1,138	1,179
	55 to 59	371	501	596	708	1,102	1,039	999
	60 to 64	198	266	304	384	456	711	670
	65 to 69	34	25	49	65	82	97	152
70 plus	<u>32</u>	<u>38</u>	<u>36</u>	<u>48</u>	<u>65</u>	<u>87</u>	<u>111</u>	
		8,086	10,829	11,808	13,228	14,281	15,210	15,794
Women	15 to 19	718	1,112	1,320	1,378	1,210	1,111	1,148
	20 to 24	969	1,407	1,497	1,744	1,786	1,593	1,436
	25 to 29	955	1,351	1,425	1,533	1,740	1,806	1,572
	30 to 34	1,039	1,309	1,367	1,475	1,550	1,798	1,825
	35 to 39	949	1,102	1,242	1,394	1,498	1,599	1,847
	40 to 44	770	1,322	1,175	1,268	1,415	1,545	1,639
	45 to 49	523	840	1,213	1,170	1,259	1,415	1,541
	50 to 54	375	644	746	1,116	1,070	1,160	1,296
	55 to 59	225	320	450	564	843	808	877
	60 to 64	94	158	176	262	329	492	472
	65 to 69	22	14	27	35	52	65	97
70 plus	<u>8</u>	<u>11</u>	<u>10</u>	<u>12</u>	<u>16</u>	<u>23</u>	<u>32</u>	
		6,647	9,590	10,648	11,951	12,769	13,417	13,782
Both Sexes	15 to 19	1,671	2,280	2,598	2,807	2,480	2,328	2,434
	20 to 24	2,152	2,802	3,129	3,588	3,811	3,422	3,158
	25 to 29	2,089	2,790	2,956	3,383	3,794	4,110	3,618
	30 to 34	2,205	2,722	2,800	3,043	3,405	3,907	4,139
	35 to 39	1,955	2,456	2,605	2,822	3,047	3,449	3,931
	40 to 44	1,666	2,943	2,591	2,623	2,820	3,089	3,465
	45 to 49	1,224	1,736	2,575	2,462	2,491	2,699	2,946
	50 to 54	786	1,357	1,555	2,373	2,255	2,299	2,475
	55 to 59	595	821	1,046	1,271	1,945	1,847	1,876
	60 to 64	292	424	480	646	785	1,204	1,142
	65 to 69	56	39	76	99	133	162	249
70 plus	<u>41</u>	<u>49</u>	<u>46</u>	<u>60</u>	<u>81</u>	<u>110</u>	<u>143</u>	
		14,732	20,419	22,455	25,179	27,050	28,627	29,576
Key	25 to 59	10,521	14,826	16,126	17,978	19,758	21,400	22,450
Age	15 to 29	5,912	7,872	8,684	9,779	10,085	9,861	9,210
Groups	50 to 64	1,673	2,602	3,081	4,291	4,986	5,350	5,493
	65 plus	96	89	121	159	215	272	391

**Increasing Participation Rates  
Métis (non-Indian Aboriginal) Population**

Gender	Age group	Estimated		Projected				
		1996	2001	2005	2010	2015	2020	2025
Men	15 to 19	953	1,168	1,327	1,552	1,439	1,436	1,579
	20 to 24	1,183	1,394	1,680	1,965	2,233	2,083	2,025
	25 to 29	1,134	1,440	1,566	1,945	2,219	2,555	2,327
	30 to 34	1,166	1,413	1,457	1,629	1,966	2,280	2,552
	35 to 39	1,006	1,354	1,375	1,455	1,596	1,926	2,192
	40 to 44	896	1,621	1,421	1,367	1,425	1,573	1,869
	45 to 49	701	895	1,371	1,311	1,261	1,325	1,461
	50 to 54	411	713	815	1,280	1,218	1,181	1,235
	55 to 59	371	501	600	719	1,129	1,074	1,042
	60 to 64	198	266	300	373	435	667	617
	65 to 69	34	25	54	80	112	146	247
70 plus	<u>32</u>	<u>38</u>	<u>39</u>	<u>58</u>	<u>87</u>	<u>127</u>	<u>175</u>	
		8,086	10,829	12,005	13,734	15,119	16,373	17,321
Women	15 to 19	718	1,112	1,368	1,492	1,367	1,307	1,403
	20 to 24	969	1,407	1,555	1,896	2,028	1,886	1,769
	25 to 29	955	1,351	1,472	1,645	1,937	2,085	1,879
	30 to 34	1,039	1,309	1,406	1,569	1,705	2,042	2,137
	35 to 39	949	1,102	1,284	1,501	1,677	1,858	2,225
	40 to 44	770	1,322	1,209	1,351	1,559	1,758	1,924
	45 to 49	523	840	1,256	1,262	1,413	1,650	1,864
	50 to 54	375	644	779	1,226	1,235	1,403	1,638
	55 to 59	225	320	474	634	1,006	1,020	1,167
	60 to 64	94	158	185	291	386	608	612
	65 to 69	22	14	31	48	82	116	194
70 plus	<u>8</u>	<u>11</u>	<u>12</u>	<u>18</u>	<u>28</u>	<u>45</u>	<u>70</u>	
		1,671	2,280	2,696	3,044	2,805	2,743	2,982
Both Sexes	15 to 19	1,671	2,280	2,696	3,044	2,805	2,743	2,982
	20 to 24	2,152	2,802	3,235	3,861	4,261	3,969	3,794
	25 to 29	2,089	2,790	3,038	3,590	4,156	4,639	4,206
	30 to 34	2,205	2,722	2,863	3,198	3,671	4,322	4,689
	35 to 39	1,955	2,456	2,659	2,956	3,272	3,784	4,417
	40 to 44	1,666	2,943	2,630	2,718	2,983	3,331	3,793
	45 to 49	1,224	1,736	2,626	2,573	2,674	2,975	3,325
	50 to 54	786	1,357	1,594	2,506	2,453	2,584	2,874
	55 to 59	595	821	1,075	1,353	2,135	2,094	2,209
	60 to 64	292	424	485	664	821	1,275	1,229
	65 to 69	56	39	85	128	194	262	441
70 plus	<u>41</u>	<u>49</u>	<u>51</u>	<u>76</u>	<u>115</u>	<u>172</u>	<u>245</u>	
		9,757	13,109	14,701	16,778	17,925	19,116	20,303
Key Age Groups	25 to 59	10,521	14,826	16,485	18,895	21,346	23,729	25,513
	15 to 29	5,912	7,872	8,968	10,496	11,222	11,352	10,981
	50 to 64	1,673	2,602	3,154	4,523	5,410	5,953	6,312
	65 plus	96	89	136	204	308	433	685

**Constant Participation Rates (2001)**  
**Aboriginal Population Total**

Gender	Age group	Estimated		Projected				
		1996	2001	2005	2010	2015	2020	2025
Men	15 to 19	2,009	2,275	2,752	3,189	3,071	2,752	2,783
	20 to 24	2,362	2,509	3,243	4,055	4,522	4,457	3,927
	25 to 29	2,953	3,318	3,654	4,957	6,107	6,886	6,796
	30 to 34	2,896	3,258	3,421	3,857	5,074	6,300	6,974
	35 to 39	2,478	2,828	3,178	3,502	3,845	5,079	6,255
	40 to 44	2,018	3,386	3,011	3,232	3,473	3,840	5,030
	45 to 49	1,434	1,900	2,889	2,772	2,932	3,167	3,488
	50 to 54	956	1,512	1,739	2,684	2,541	2,710	2,912
	55 to 59	711	992	1,245	1,515	2,339	2,226	2,377
	60 to 64	434	527	599	788	964	1,509	1,435
	65 to 69	80	58	103	130	172	217	340
70 plus	<u>66</u>	<u>87</u>	<u>80</u>	<u>96</u>	<u>123</u>	<u>173</u>	<u>232</u>	
		18,397	22,652	25,914	30,777	35,162	39,318	42,551
Women	15 to 19	1,392	2,126	2,572	2,754	2,594	2,309	2,404
	20 to 24	1,874	2,536	2,854	3,418	3,592	3,437	3,004
	25 to 29	2,438	3,151	3,296	3,782	4,453	4,774	4,540
	30 to 34	2,506	3,052	3,208	3,425	3,853	4,625	4,863
	35 to 39	2,158	2,456	2,900	3,295	3,502	3,995	4,774
	40 to 44	1,642	2,946	2,631	2,979	3,366	3,627	4,114
	45 to 49	1,180	1,835	2,726	2,653	2,999	3,409	3,662
	50 to 54	787	1,407	1,632	2,511	2,432	2,766	3,129
	55 to 59	486	672	975	1,233	1,898	1,837	2,091
	60 to 64	235	332	368	569	720	1,108	1,073
	65 to 69	46	29	57	74	115	145	224
70 plus	<u>17</u>	<u>22</u>	<u>20</u>	<u>26</u>	<u>35</u>	<u>51</u>	<u>71</u>	
		14,762	20,566	23,240	26,718	29,558	32,082	33,949
Both Sexes	15 to 19	3,400	4,402	5,325	5,943	5,665	5,062	5,187
	20 to 24	4,236	5,045	6,098	7,473	8,114	7,894	6,932
	25 to 29	5,391	6,470	6,950	8,738	10,560	11,661	11,337
	30 to 34	5,403	6,311	6,629	7,281	8,927	10,925	11,837
	35 to 39	4,636	5,284	6,078	6,797	7,348	9,074	11,029
	40 to 44	3,660	6,332	5,642	6,211	6,838	7,467	9,144
	45 to 49	2,615	3,736	5,615	5,425	5,931	6,576	7,150
	50 to 54	1,743	2,919	3,371	5,195	4,973	5,476	6,041
	55 to 59	1,197	1,664	2,220	2,748	4,236	4,063	4,468
	60 to 64	669	858	967	1,357	1,684	2,618	2,508
	65 to 69	126	87	160	205	287	362	564
70 plus	<u>83</u>	<u>110</u>	<u>100</u>	<u>122</u>	<u>157</u>	<u>224</u>	<u>303</u>	
		33,159	43,218	49,154	57,494	64,720	71,400	76,499
Key	25 to 59	24,645	32,716	36,505	42,395	48,813	55,241	61,006
Age	15 to 29	13,027	15,916	18,372	22,154	24,339	24,617	23,455
Groups	50 to 64	3,609	5,442	6,558	9,299	10,893	12,157	13,017
	65 plus	209	197	260	326	445	586	867

**Increasing Participation Rates**  
**Aboriginal Population Total**

Gender	Age group	Estimated		Projected				
		1996	2001	2005	2010	2015	2020	2025
Men	15 to 19	2,009	2,275	3,123	4,177	4,618	4,567	5,040
	20 to 24	2,362	2,509	3,625	5,209	6,543	7,303	6,975
	25 to 29	2,953	3,318	3,815	5,464	7,107	8,419	8,756
	30 to 34	2,896	3,258	3,528	4,132	5,656	7,304	8,382
	35 to 39	2,478	2,828	3,254	3,696	4,178	5,700	7,253
	40 to 44	2,018	3,386	3,052	3,337	3,653	4,111	5,500
	45 to 49	1,434	1,900	2,934	2,869	3,100	3,416	3,836
	50 to 54	956	1,512	1,757	2,748	2,635	2,850	3,103
	55 to 59	711	992	1,256	1,545	2,411	2,319	2,504
	60 to 64	434	527	595	775	939	1,456	1,371
	65 to 69	80	58	113	160	234	322	549
70 plus	<u>66</u>	<u>87</u>	<u>88</u>	<u>117</u>	<u>166</u>	<u>255</u>	<u>373</u>	
		18,397	22,652	27,140	34,230	41,238	48,022	53,641
Women	15 to 19	1,392	2,126	2,947	3,674	4,010	3,986	4,619
	20 to 24	1,874	2,536	3,270	4,562	5,501	6,038	5,819
	25 to 29	2,438	3,151	3,515	4,362	5,529	6,357	6,493
	30 to 34	2,506	3,052	3,402	3,889	4,687	6,000	6,710
	35 to 39	2,158	2,456	3,063	3,713	4,192	5,082	6,430
	40 to 44	1,642	2,946	2,756	3,301	3,933	4,454	5,321
	45 to 49	1,180	1,835	2,847	2,918	3,468	4,134	4,644
	50 to 54	787	1,407	1,721	2,817	2,894	3,485	4,158
	55 to 59	486	672	1,032	1,396	2,289	2,351	2,833
	60 to 64	235	332	388	639	859	1,400	1,429
	65 to 69	46	29	67	105	188	271	469
70 plus	<u>17</u>	<u>22</u>	<u>24</u>	<u>37</u>	<u>57</u>	<u>95</u>	<u>148</u>	
		14,762	20,566	25,032	31,413	37,608	43,651	49,075
Both Sexes	15 to 19	3,400	4,402	6,070	7,851	8,628	8,552	9,659
	20 to 24	4,236	5,045	6,896	9,772	12,044	13,340	12,794
	25 to 29	5,391	6,470	7,330	9,825	12,636	14,776	15,250
	30 to 34	5,403	6,311	6,930	8,021	10,343	13,304	15,092
	35 to 39	4,636	5,284	6,318	7,409	8,369	10,782	13,683
	40 to 44	3,660	6,332	5,807	6,638	7,586	8,565	10,821
	45 to 49	2,615	3,736	5,781	5,787	6,568	7,550	8,480
	50 to 54	1,743	2,919	3,478	5,565	5,530	6,335	7,261
	55 to 59	1,197	1,664	2,288	2,941	4,700	4,671	5,337
	60 to 64	669	858	982	1,414	1,798	2,855	2,800
	65 to 69	126	87	181	265	422	593	1,018
70 plus	<u>83</u>	<u>110</u>	<u>112</u>	<u>154</u>	<u>223</u>	<u>350</u>	<u>520</u>	
		33,159	43,218	52,172	65,642	78,846	91,673	102,716
Key Age Groups	25 to 59	24,645	32,716	37,931	46,187	55,732	65,982	75,925
	15 to 29	13,027	15,916	20,295	27,448	33,308	36,669	37,703
	50 to 64	3,609	5,442	6,748	9,920	12,027	13,861	15,398
	65 plus	209	197	293	419	645	943	1,538