



SIAST

SASKATCHEWAN INSTITUTE OF
APPLIED SCIENCE AND TECHNOLOGY

Saskatchewan Urban Training Needs Assessment 2004

***Prepared by:
SIAST Planning, Research and Development Division
Institutional Research and Analysis***

**September 2004
#04-05**

www.goSIAST.com

Saskatchewan Institute of Applied
Science and Technology

*Saskatchewan Urban Training
Needs Assessment 2004*

Prepared by:
SIAST Planning, Research and Development
Institutional Research and Analysis

Report #04-05

©September 2004
Saskatchewan Institute of Applied Science and Technology (SIAST)
Planning, Research and Development Division

Reproduction of this report or parts thereof is permitted provided
appropriate acknowledgments are given.

Acknowledgments

Thank you to the dedicated team that worked to produce The Saskatchewan Urban Training Needs Assessment (SUTNA) 2004 report. The team collaborated throughout the process to provide valuable input at all levels of the data gathering and report preparation phases. Special mention is made to the following persons who worked so diligently to put the report together:

Gerlinde Sarkar, academic director, planning, research and development, and Barb Heise, academic director of skills initiatives, for their coordination of the training needs consultations, as well as advice on the writing of section three in the report.

Gertrude McGartland and Melanie Skinner, institutional research and analysis unit, for researching data and information, reporting on the discussion group sessions, writing the demographic and economic information and industry sections, and summarizing sector partnership, needs assessments, and other reports.

Bonnie Bond, administrative assistant, planning, research and development, for formatting, printing, producing and distributing the report, and Jacqueline Cates, administrative assistant, skills initiatives, in coordinating the logistics for the planned training needs consultations at the four SIAST campus cities and assisting with data compilation.

SIAST would like to especially thank the participants of the stakeholder consultations who took the time to attend the discussion group sessions and provide SIAST with their views and valuable input with regard to future training needs in Saskatchewan. Also thanks are extended to those invited guests who were unable to attend but submitted completed questionnaires.

* * * * *

Table of Contents

1.0	Introduction	1
1.1	Background.....	1
1.2	Purpose and objectives of the report.....	1
1.3	Format of the report.....	1
2.0	Demographic and Economic Information	3
2.1	Saskatchewan Demographics	3
2.1.1	<i>General Population Trends</i>	3
2.1.2	<i>Population Projections</i>	4
2.1.3	<i>An Aging Population</i>	5
2.1.4	<i>Aboriginal Population</i>	6
2.1.5	<i>Disabled Population</i>	8
2.1.6	<i>Visible Minority Population</i>	9
2.1.7	<i>Rural/Urban Population Swing</i>	9
2.1.8	<i>Immigrants to Canada</i>	9
2.1.9	<i>Inter-provincial Migration</i>	11
2.2	Education.....	11
2.2.1	<i>Kindergarten to Grade 12 Projections</i>	11
2.2.2	<i>Post-Secondary Education Attainment – Canada and Saskatchewan</i>	12
2.2.3	<i>The Pursuit of Post-Secondary Education</i>	14
2.2.4	<i>Post-Secondary Education - Nationally and Provincially</i>	17
2.2.5	<i>Education Indicators for the Aboriginal Population</i>	18
2.3	Labour Force Statistics	22
2.3.1	<i>Employment Rates</i>	22
2.3.2	<i>Employment Status of Canadian Workers</i>	24
2.3.3	<i>Reasons for Part-Time Work</i>	25
2.3.4	<i>Employment by Industry</i>	25
2.3.5	<i>Labour Force by Class of Worker</i>	29
2.3.6	<i>Labour Force by Demographic Characteristics</i>	29

2.3.7	<i>Age of Labour Force</i>	30
2.3.8	<i>Gender</i>	31
2.3.9	<i>Aboriginals in the Work Force</i>	32
2.3.10	<i>Immigrants in the Labour Force</i>	34
2.3.11	<i>Education and Skill Requirements by Occupational Class</i>	37
2.3.12	<i>Labour Force, Post-Secondary Qualifications and Major Fields of Study</i>	39
2.3.13	<i>Canada Employment Outlook for 2004</i>	42
2.3.14	<i>Occupation Shortages</i>	43
2.4	The Economy	47
2.4.1	<i>Canada</i>	47
2.4.2	<i>Saskatchewan</i>	48
3.0	Summaries of Training Needs Assessment Industry Consultations	51
3.1	Introduction	51
3.2	Summary of the Findings.....	51
3.2.1	<i>Provincial Training Needs by Sector – Spring 2004</i>	53
4.0	Summaries of relevant studies and reports	67
4.1	Overview of sector partnership reports.....	67
4.1.1	<i>Early Childhood Care and Education Sector Study: Prior Learning Assessment and Recognition</i>	68
4.1.2	<i>Hunting, Fishing and Tour Guide (Outfitters</i>	69
4.1.3	<i>Information Technology</i>	69
4.1.4	<i>Nursing Sector</i>	70
4.1.5	<i>Plumbing and Pipefitting Trades</i>	71
4.1.6	<i>Saskatchewan Home Builders' Association: Human Resource and Training Strategy for the Residential Construction Industry in Saskatchewan</i>	72
4.2	Summary of SIAST needs assessment studies	74
4.2.1	<i>Advanced Addictions Counselling</i>	74
4.2.2	<i>Multi-Media Communications (expanding the current offering of a one year certificate program in New Media Communications)</i>	75
4.2.3	<i>Dialysis Nursing Program</i>	75
4.2.4	<i>Neo-Natal Nursing Program</i>	76
4.3	Other Reports	76

4.3.1	<i>Saskatoon Labour Market Committee, Saskatoon Work Force & Employer Needs Study</i>	76
4.3.2	<i>Regional Planning Partnership Report, Prince Albert</i>	77

APPENDICES

Appendix A	Invitation Letter
Appendix B	Participants
Appendix C	Training Needs Questionnaire
Appendix D	References

1.0 Introduction

1.1 Background

As part of an annual program planning process, SIAST conducts a number of formal and informal consultations with various SIAST stakeholders - employers, industry organizations and associations, and community representatives. The planning process identifies and researches future program training needs in the province of Saskatchewan. In addition to consultations, a number of publications are also examined that identify labour market information, general trends and statistics, and specific industry reports. Following the compilation of all research conducted this spring, the Saskatchewan Urban Training Needs Assessment Report (SUTNA) 2004 was produced.

1.2 Purpose and objectives of the report

The purpose of the SUTNA 2004 report is three-fold. One is to gather information identifying training needs specific to each of the four SIAST campus cities (Saskatoon, Regina, Moose Jaw and Prince Albert). The second is to gather information relevant to province-wide training needs. The third is to inform industry representatives of the status of those needs that were identified in past consultations. Identified training needs from all processes assist SIAST in determining future development of new programs or updating of existing programs.

An objective in undertaking the needs assessment consultation process is liaising with organizations such as Canada-Saskatchewan Career and Employment Services (CSCES). Another objective is developing partnerships with training providers, such as Saskatchewan Indian Institute of Technologies (SIIT), Dumont Technical Institute (DTI) and the regional colleges. These liaisons identify provincial training needs, share common data and provide for a coordinated information gathering process. Encouraged by Saskatchewan Learning, the process facilitates integrated planning and avoids duplication of services among all players.

The data from the annual SUTNA report forms the basis of a SIAST provincial training plan, and is used for strategic planning at SIAST.

1.3 Format of the report

The SUTNA 2004 report is divided into three sections.

Section 2.0 is the demographic and economic scan that reports information and data gleaned from a variety of sources, such as Statistics Canada. This section provides demographic swings, labour market information, economic activities and future trends relevant to Saskatchewan. In some cases the information includes an international, a national and a provincial perspective.

The results of Census 2001 provided SIAST with updated population, employment and education statistics. Since Census 2001, additional relevant reports have been released by Statistics Canada. All sources of research are referenced throughout the SUTNA 2004 report as well as in the bibliography at the end of the report, as appendix D.

Section 3.0 reports the primary research obtained from the stakeholder consultations that were held this spring. The letter of invitation and industries/associations represented at the consultations are included as appendices A and B.

SIAST is aware that the dates for the stakeholder consultations may not suit all invitees so, in a similar manner to last year, included a questionnaire with the invitation letter that non-attendees at the consultations may complete and send in. The questionnaires were compiled and the information

added to section 3.0 of the report. A copy of the questionnaire is included as appendix C. As well as the above method of providing information for SIAST, some associations and organizations gave input by email or letter. The input was compiled and added to the appropriate sector in section 3.0 of the report.

Section 4.0 records the summaries of the sector partnership studies that have been completed within the past year. There are currently 53 sector partnerships with 32 industries in Saskatchewan. The sector partnership program is an initiative of Saskatchewan Learning and is a plan to develop human resource strategies to address industry skill shortages in the province. This is an ongoing process for the province as new sector partnerships continue to be established.

As well, this section includes a summary of specific needs assessment reports completed at SIAST, as well as other published reports that identify future training trends. These other reports are published by labour market organizations, such as economic development associations.

The purpose of section 4.0 is to summarize identified training needs, assessments and reports that might be relevant to SIAST. For further information on these reports, refer to the bibliography in appendix D at the end of the report.

Many training needs were identified during the consultation process, the questionnaire submissions and the review of many reports. SIAST is aware that it cannot meet all identified training needs. Some are not financially feasible. The Institute is proactive in developing partnerships and in brokering programs from other training institutions, delivering the curricula and offering credentials upon completion.

A statement taken from The Summary of the Rural Industry Working Group Report, of the Department of Education, Science and Training, Government of Australia, is also relevant for SIAST when responding to skill gaps and skill shortages issues that were identified at the consultations. The statement reports that *Skill gaps imply a need for upskilling within the existing enterprises and workforce, while skill shortages occur when skilled job vacancies are hard to fill at reasonable wages and conditions.*

2.0 Demographic and Economic Information

2.1 Saskatchewan Demographics

2.1.1 General Population Trends

Statistics Canada reports that the overall population of Canada in 2003 increased by 268,100 since 2002 – an increase of approximately one percent. The percentage difference in the majority of the provinces for this time period remained stable. Table 1 records that the provinces of Ontario and Alberta both experienced increases of 0.1 percent, and Saskatchewan and the province of Newfoundland and Labrador recorded 0.1 percent decreases in population for this period. In July 2003, Saskatchewan accounted for 3.1 percent of the population of Canada, a decrease from 3.4 and 3.3 percent in Census 1996 and 2001 respectively.

Table 1: Population – Canada, Provinces and Territories – 1999-2003

Population – Canada, Provinces and Territories, 1999-2003					
	1999	2000	2001	2002	2003
	persons (thousands)				
Canada	30,403.9	30,689.0	31,021.3	31,361.6	31,629.7
Newfoundland and Labrador	533.4	528.0	522.0	519.3	519.6
Prince Edward Island	136.3	136.5	136.7	137.0	137.8
Nova Scotia	933.8	933.9	932.4	934.4	936.0
New Brunswick	750.6	750.5	749.9	750.2	750.6
Quebec	7,323.3	7,357.0	7,397.0	7,443.5	7,487.2
Ontario	11,506.4	11,685.4	11,897.6	12,096.6	12,238.3
Manitoba	1,142.5	1,147.4	1,151.3	1,155.5	1,162.8
Saskatchewan	1,014.7	1,007.8	1,000.1	995.5	994.8
Alberta	2,953.3	3,004.9	3,056.7	3,114.4	3,153.7
British Columbia	4,011.3	4,039.2	4,078.4	4,115.0	4,146.6
Yukon	30.8	30.4	30.1	30.1	31.1
Northwest Territories	40.7	40.5	40.8	41.4	41.9
Nunavut	26.8	27.5	28.1	28.7	29.4
Note: Population as of July 1.					
Source: Statistics Canada, CANSIM, table 051-0001 .					
Last modified: 2003-11-06.					

(Source: Statistics Canada, Population by Sex and Age Group. CANSIM, Table [051-0001](#), <http://www.statcan.ca/english/Pqdb/popula.htm#pop>)

In the Census 2001 results, Saskatchewan's population was 978,933, which was a decline of 11,304 people since the Census 1996. The modified results above from Statistics Canada report a further decline in population of 15,867 at July 2003.

Since 1999, Saskatchewan has experienced a significant decrease in population. The Government of Saskatchewan, Bureau of Statistics, recorded that the population in Saskatchewan has been less than one million since July 2001. The province last dropped below that figure in the 1982 – 1983 period. The Bureau reports the provincial population statistics quarterly, and though the population has fluctuated slightly between reporting periods, it remained fairly stable in 2003.

The Bureau also reported that, of the four major cities in the province, Saskatoon was the only city to experience an increase in population in the province – between 1996 and 2001 – increase of 3,158 (slightly less than two percent).

The following are interesting trends to note for the province:

- a) oldest population in Canada;
- b) oldest labour force in Canada with an average worker age of 39.8 in 2001
- c) shift in the demographics with an aging non-Aboriginal population;
- d) Aboriginal population increasing which accounts for majority of young in the province;
- e) rural depopulation with residents moving from the rural to the larger urban centers (however, Saskatchewan still has the highest proportion of rural population of the Western provinces);
- f) increasing trend in net-migration with out-migration being greater than in-migration.

As the non-Aboriginal population ages and creeps towards retirement within the next ten to fifteen years, a shortage of workers is projected. Demographers are hoping that the young, Aboriginal working age population will be able to alleviate some of the pressures that are anticipated in Saskatchewan's future labour market.

2.1.2 Population Projections

Statistics Canada has projected that over the next twenty-five years the population of Canada will continue to increase. In twenty-five years, the population of Canada is projected to be between 34 and 39 million. Statistics Canada reported that if the birth-rate were to remain below the mortality level and was not offset by the high immigration to the country, the population would be in a decline.

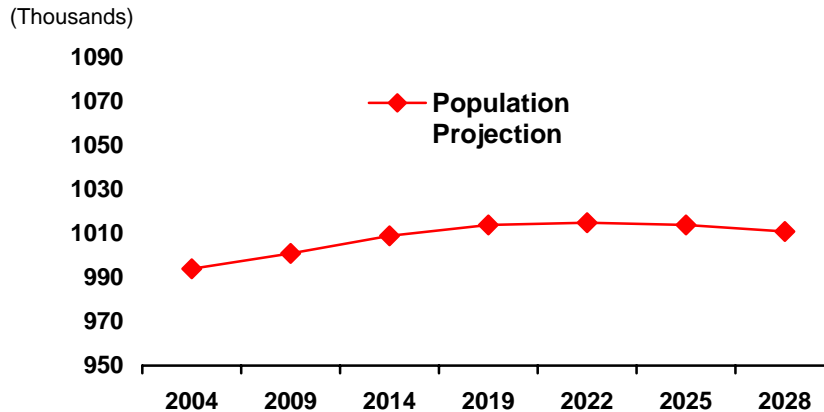
In November 2003, the Saskatchewan Bureau of Statistics projected a moderate growth in the provincial population between the years 2004 to 2022, at the rate of approximately 0.1 percent per year, followed by a gradual decline in the ensuing years, 2023 to 2028. Table 2 and Figure 1 report the components of the population for selected years and are based on the existing migration patterns, fertility and mortality rates.

Table 2: Components of Projected Population Growth, Saskatchewan, November 2003

Year	Population July 1 st	% Change from previous year	Births	Deaths	Net Migration
2004	994,466	0.1	11,658	8,624	-2500
2009	1,001,195	0.2	12,108	8,966	-1500
2014	1,009,224	0.1	12,181	9,244	-1500
2019	1,014,655	0.0	11,659	9,468	-1500
2022	1,015,575	0.0	11,172	9,651	-1500
2025	1,014,529	-0.1	10,720	9,877	-1500
2028	1,011,342	-0.1			

(Source: Government of Saskatchewan, Bureau of Statistics. Components of Population Growth, Saskatchewan. November 2003. <http://www.gov.sk.ca/bureau.stats/pea/rbpop5.pdf>) Extracted

Figure 1: Saskatchewan Population Projection - 2004-2028 Migration Pattern Assumption



(Source: Government of Saskatchewan, Bureau of Statistics. Components of Population Growth, Saskatchewan. November 2003. <http://www.gov.sk.ca/bureau.stats/pea/rbpop5.pdf>) Figure prepared from the data.

2.1.3 An Aging Population

In Table 3 below, the Saskatchewan Bureau of Statistics identifies that the population in the 40-60 age category has increased by 29 percent in the ten year period (1992 to 2002). The increase of the population in the 15-24 age category (6 percent in the ten year period) is a positive sign for the province as the potential labour force in the future. Statistics Canada, in Census 2001, reported that the swing in the age population in Canada, though dramatic, is not as pronounced as that of Saskatchewan.

Table 3: Comparison of Saskatchewan Population by Age Groups at July 1st

Age Levels	1982	1992	2002	Difference 1992 to 2002	% Difference 1992 to 2002
0-4 years	83,279	78,000	61,199	-16,801	-21.54
5-9 years	78,463	81,006	68,249	-12,757	-15.75
10-14 years	79,675	79,230	76,245	-2,985	-3.77
15-19 years	92,316	74,621	78,985	4,364	5.85
20-24 years	92,073	66,921	70,720	3,799	5.68
25-29 years	85,714	74,459	61,915	-12,544	-16.85
30-34 years	70,061	82,516	59,213	-23,303	-28.24
35-39 years	56,061	78,869	69,917	-8,952	-11.35
40-44 years	46,674	64,803	77,948	13,145	20.28
45-49 years	44,791	52,322	74,052	21,730	41.53
50-54 years	47,006	43,538	60,914	17,736	39.91
55-59 years	46,882	41,928	48,561	6,633	15.82
60-64 years	44,856	42,893	39,802	-3,091	-7.21
65-69 years	40,272	41,111	36,580	-4,531	-11.02
70-74 years	31,539	36,970	35,335	-1,635	-4.42
75-79 years	22,300	26,713	30,409	696	2.34
80-84 years	13,564	19,621	23,522	3,901	19.88
85-89 years	7,511	10,200	14,403	4,203	41.21
90 years and over	4,237	5,235	7,521	2,286	43.67
All ages	987,274	1,003,956	995,490	-8,466	-0.84

(Source: Government of Saskatchewan Bureau of Statistics, Saskatchewan. <http://www.gov.sk.ca/bureau.stats/pop/saskpopbyage.pdf>) Adapted

In Canada, with the significant increase in the number of seniors, along with the continuing low fertility rates, the median age in 2001 was identified as 37.6. By 2026 that figure is expected to

increase to 43.6, and by 2051 to 46.2. In Saskatchewan, the 2001 median age was 36.7, which is lower than the Canadian median age of 37.6. Alberta is ranked as the province with the youngest population, at a median age of 35.0. Unlike Alberta, however, Saskatchewan's low median age is attributable to a young Aboriginal population. In 2026, Saskatchewan's median age will have increased to 43.2, which is fairly close to that of Canada.

According to the report, *Building on Values : The Future of Health Care in Canada – Final Report, Commission on the Future of Health Care in Canada* (Romanow Commission), the aging and Aboriginal populations will place considerable strains on the health care system in Saskatchewan. The report indicated that, despite these factors, with the larger aging and Aboriginal populations with greater health care requirements relative to other provinces, public spending on health care in Saskatchewan in 2001 was in line with the national per capita health expenditures. Various health studies indicate that, in Saskatchewan and Manitoba, the combined provincial and federal per capita expenditure on First Nations individuals is twice that of other provincial residents.

(Source: The Saskatchewan Institute of Public Policy, University of Regina. Demographic Trends and Socio-Economic Sustainability in Saskatchewan: Some Policy Considerations. October 2003. ISBN# 0-7731-0459-3)

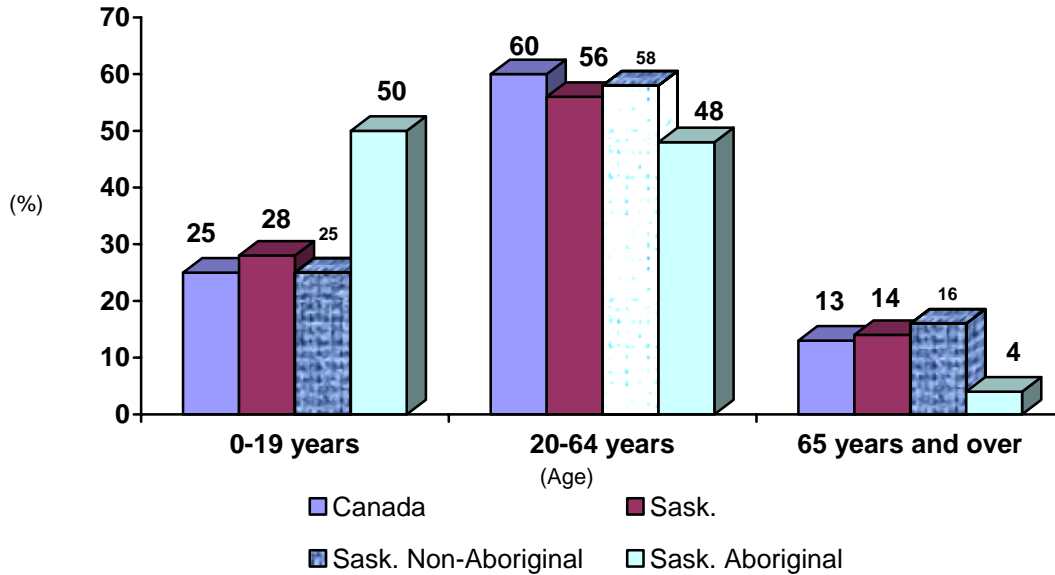
Because of the demographic characteristics in the province - low population density, provincial educational attainment below the national averages, aging workforce, high taxation of the larger non-manufacturing businesses -Saskatchewan is competitively disadvantaged in attracting business to the province.

2.1.4 Aboriginal Population

Statistics Canada reports that at Census 2001, 3.3 percent of the nation's total population was of Aboriginal descent, compared to 2.8 percent in the Census 1996. The youth, aged 0 to under 14, represented one-third of the Aboriginal population compared to 19 percent in the non-Aboriginal population in the same age category. With a high birth rate, Aboriginal children represented 5.6 percent of all children in Canada.

At Census 2001, Manitoba and Saskatchewan recorded the largest Aboriginal populations in Canada, at 13.6 and 13.5 percent respectively of the total population in the provinces. In Saskatchewan, a large percentage of Aboriginals are in the 0-15 age group (40 percent). A small percentage, 4 percent, of the province's senior population (65 and over) is Aboriginal. This is a marked contrast to the 16 percent of the province's non-Aboriginal population who are considered seniors. Figure 2 shows the breakdown of different populations by age group, both in Canada and Saskatchewan for Census 2001.

Figure 2: Census 2001 Populations, by Age Group

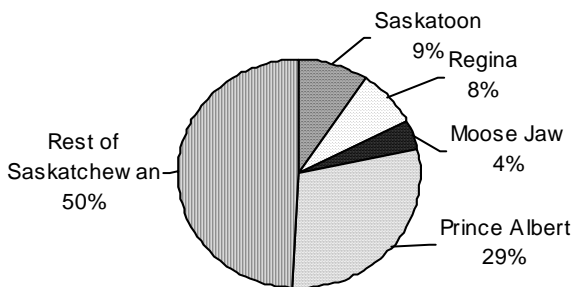


(Source: The Saskatchewan Institute of Public Policy, University of Regina. Demographic Trends and Socio-Economic Sustainability in Saskatchewan: Some Policy Considerations. October 2003. ISBN# 0-7731-0459-3)

The report, *Demographic Trends and Socio-Economic Sustainability in Saskatchewan : Some Policy Considerations*, by the Saskatchewan Institute of Public Policy at the University of Regina, reports that a very young Aboriginal population, along with an aging non-Aboriginal population, are demographically polarizing the province, and that, in the future, Saskatchewan will experience arduous challenges as a result of its population features. The Saskatchewan Health Annual Report, 2000-01 reports that the Aboriginal population in the province is expected to increase to one-third of the provincial population by 2005.

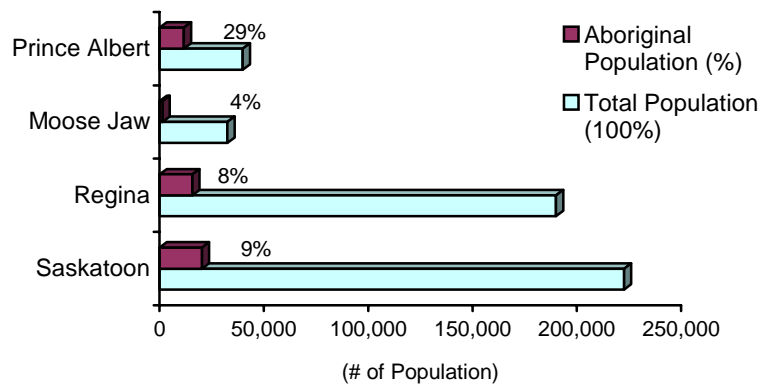
The following two figures identify Aboriginal population features. Figure 3 shows the Aboriginal population, according to Census 2001, in each of the four major cities in the province, which are the locations for SIAST’s four campuses. In 2001, the four cities, Saskatoon, Regina, Moose Jaw and Prince Albert, accounted for 50 percent of the total Aboriginal population in Saskatchewan. Figure 4 reports the Aboriginal population in each of these cities as a percentage of the total population of the cities, at 2001. This growth in the Aboriginal population in the cities is expected to increase as the trend for Aboriginals moving off the reserves to the urban centers continues.

Figure 3: Aboriginal Population - as Percent of Total Population in Saskatchewan – 2001



(Source: Statistics Canada Census 2001. Saskatchewan Bureau of Statistics.) Adapted

Figure 4: Aboriginal Population in 2001 - as % of Total Population in each city



(Source: Statistics Canada. 2001 Census, Saskatchewan Bureau of Statistics.) Adapted

2.1.5 Disabled Population

Following the 2001 Participation and Activity Limitation Survey (PALS), Statistics Canada produced a report on the profile of the disabled in Canada. The national survey collected data about persons with disabilities whose everyday activities are limited because of a physical or mental condition or health problem, on the type and severity of activity limitations, and the need for specialized equipment. Excluded from the survey were those living in the Yukon, Northwest Territories and Nunavut, as well as those living in institutions and on First Nations reserves.

In 2001, one out of every seven Canadians aged 15 and over (an estimated 3.4 million) indicated that they had some level of disability (14.6 percent of the total adult population). The severity of the disabilities ranged from the more than one million who reported mild levels of disability, and the 855,000 who reported moderate levels, to over one million who reported severe or very severe levels. The female population, approximately two million, reported having a disability, compared to one and a half million males. Fifty-three percent of working-age women reported some form of disability with pain ranking high on the types of disabilities.

Table 4 compares the adults in Saskatchewan who declared that they had a disability, with the total population in the province, by gender and age groups. In Saskatchewan 17 percent, aged 15 and over, reported some form of disability, compared to 14 percent of the overall Canadian population. The neighbor province, Alberta, reported approximately 15 percent with a disability.

Table 4: Saskatchewan adults, aged 15 and over with disabilities, by gender and age groups

AGE GROUPS	Total Population			Persons with disabilities			Overall % with Disabilities
	Total	Males	Females	Total	Males	Females	
15-24	125,490	64,200	61,290	5,310	2,630	2,680	4.23
25-44	234,680	115,570	119,120	20,460	9,900	10,560	8.72
45-64	196,980	98,540	98,440	36,040	17,940	18,090	18.30
65-74	66,640	31,770	34,870	22,420	11,300	11,110	33.64
75 and over	61,630	25,080	36,550	34,510	14,180	20,230	56.00
Total Aged 15 and over	685,420	335,160	350,270	118,740	55,950	62,670	17.32

(Source: Statistics Canada, A Profile of Disability in Canada, 2001. – Tables. 2001 Participation and Activity Limitation Survey. December 2002. Catalogue no. 89-579-XIE) Adapted

2.1.6 Visible Minority Population

Statistics Canada, in the results of Census 2001, reported that the visible minority population of Canada was 13.4 percent of the total population (11.2 percent in Census 1996), whereas in Saskatchewan that figure was 2.9 percent of Saskatchewan's total population (2.8 percent in Census 1996). Of the 3,983,845 visible minority population in Canada, effective 2001, a mere 27,580, (0.7 percent) live in Saskatchewan.

The proportion of the visible minority population in Canada has increased steadily over the past twenty years. In 1981, 1.1 million visible minorities accounted for 4.7 percent of the total Canadian population. In 1996, that percentage increased to 11.2 percent, and in 2001, to 13.4 percent of the total population. Two-thirds of the visible minorities in Canada, in 2001, were of Chinese, South Asians and Black ancestry.

The Employment Equity Act of Canada defines visible minorities as "persons, other than Aboriginal peoples, who are non-Caucasian in race or non-white in colour". The visible minority population includes the following groups: Chinese, South Asian, Black, Filipino, Latin American, Southeast Asian, Arab, West Asian, Japanese, Korean and Pacific Islander.

2.1.7 Rural/Urban Population Swing

The rural to urban swing in the population is consistent throughout Canada. Overall, between 1996 and 2001, in Canada, the rural population recorded a decrease of 282,758 (4.5 percent), while in Saskatchewan, the decrease was 13,162 (3.6 percent). Recognizing that the population in the province has decreased in recent years, Saskatoon was the only city that recorded an increase in past five years. Table 5 records the shift in population to the major cities in the province between Census 1996 and 2001.

Table 5: Saskatchewan Population Changes of major cities, 1996-2001

Population	Saskatchewan	Moose Jaw	Prince Albert	Regina	Saskatoon
1996 – 100% data	990,237	32,973	34,777	180,404	193,653
2001 – 100% data	978,933	32,131	34,291	178,225	196,811
Percentage change, 1996-2001	-1.1%	-2.6%	-1.4%	-1.2%	1.6%

(Source: Government of Saskatchewan. Bureau of Statistics, Saskatchewan. Statistical Profiles of Cities – Volumes 1 and 2. <http://www.gov.sk.ca/bureau.stats/census/cities2.pdf>) Extracted

In the same five year period, 1996-2001, the total farm population shift in Saskatchewan was higher than Canada. The province recorded a farm population decrease overall of 15.2 percent, while in Canada that figure was 14.6 percent. The total farm population refers to all persons who are members of a farm operator's household, living on a farm in a rural or urban area. When broken down by rural and urban farm population, the provincial figures recorded a much higher reduction in the rural farm population (15.6 percent) compared to 5.2 percent in urban farm population. In Canada these figures were 15.1 for the rural and 2.9 percent for the urban farm population.

(Source: Statistics Canada, Census of Agriculture, Modified 2003-11,20. <http://www.statcan.ca/english/pgdb/econo141a.htm>)

2.1.8 Immigrants to Canada

In Census 2001, Statistics Canada defined the foreign-born population (also known as the immigrant population) as persons who are now, or who once were, landed immigrants in Canada. In the results in Table 6, the foreign-born population did not include non-permanent residents, who

are persons in Canada on employment or student authorizations, Minister's permits, or refugee claimants. The foreign-born population also excludes persons born outside Canada who are Canadian citizens by birth. The latter are considered part of the Canadian-born or non-immigrant population.

Statistics Canada reports that between 1991 and 2001, the immigrant population in Canada grew by 1,830,680 and by 2001 reached 18.4 percent of the total population in the country. Over the same ten years (1991-2001), Saskatchewan received only 11,365 new immigrants, and in fact recorded a decrease from 5.9 percent in 1991 to 5.0 percent in 2001 of the population in the province. Manitoba's immigrant population, though also recording a decrease, from 12.8 percent in 1991 to 12.1 percent in 2001 of the population in the province, received 32,345 immigrants in the province, practically 21,000 more than Saskatchewan.

Table 6: Immigrant Population – Canada and the Provinces 1991-2001

	1991 (%)	1996 (%)	2001 (%)
Canada	16.1	17.4	18.4
Newfoundland and Labrador	1.5	1.6	1.6
Prince Edward Island	3.2	3.3	3.1
Nova Scotia	4.4	4.7	4.6
New Brunswick	3.3	3.3	3.1
Quebec	8.7	9.4	9.9
Ontario	23.7	25.6	26.8
Manitoba	12.8	12.4	12.1
Saskatchewan	5.9	5.4	5.0
Alberta	15.1	15.2	14.9
British Columbia	22.3	24.5	26.1
Yukon	10.7	10.4	10.6
Northwest Territories	4.9	4.8	6.4
Nunavut	1.7

Source : Statistics Canada, Census of Population.

Last modified: May 12, 2003.

(Source: Statistics Canada. Census 2001: Proportion of Foreign Born Population, Provinces and Territories, modified May 2003, <http://www.statcan.ca/english/Pgdb/demo46a.htm> and Immigrant Status by Period of Immigration, 2001 Counts, for Canada, Provinces and Territories – 20% sample data, modified March 2004, <http://www12.statcan.ca/english/census01/products/highlight/Immigration/Page.cfm?Lang=E&Geo=PR&View=1&Table=1&St.htm>)

In November 2003, The Canadian Education Statistics Council (CESC), a partnership between the Council of Ministers of Canada and Statistics Canada, released the third edition of the report *Education Indicators in Canada Report of the Pan-Canadian Education Indicators Program 2003*. The report highlighted that Canada has benefited greatly from the contribution made by immigrants to this country. Census 2001 reported that almost half of working-age immigrants to Canada have a university degree, while another 13 percent have a college diploma and a further 8 percent a trade vocational certificate – an overall 62 percent of immigrants to Canada with post-secondary education.

With a depleting labour force in the province, as reported earlier, Saskatchewan may need to become more aggressive in enticing a greater number of immigrants to come to the province and work.

2.1.9 Inter-provincial Migration

The Statistics Canada Census 2001 adjusted mobility figures of April 2003, indicated that Canadians are moving very freely between provinces. In Canada, with a population of over thirty-five million in 2003, four and a half million people moved from one location to another. To clarify, some of the movement maybe in-province.

The net-migration of the population in Saskatchewan, according to the Bureau of Statistics, continues to increase. Table 7, reports the in-migration and out-migration number for the three year period, 1999-2002. From this trend, as identified in the table below, it is evident that Saskatchewan's population has been experiencing an overall increase in out-migration over this time period. The age levels where the out-migration was lower than in-migration was in the 25-44 age category.

Table 7: Saskatchewan Inter-provincial Migration Figures, 1999-2002

Age	1999-2000	2000-2001	2001-2002		2001-02
	Net Migration	Net Migration	In Migration	Out Migration	Net Migration
14 and under	-864	-970	3,781	4,822	-1041
15-24 years	-3283	-3228	3,695	6,969	-3274
25-29 years	-795	-985	1,720	2,647	-927
30-34 years	-611	-734	1,455	2,156	-701
35-39 years	-559	-660	1,048	1,698	-650
40-44 years	-465	-538	-43	1,282	-539
45-49 years	-339	-314	600	1,057	-457
50-64 years	-490	-495	924	1,589	-665
65 years & over	-541	-486	627	1,198	-571
All Ages	-7947	-8410	14,598	23,418	-8825

(Source: Statistics Canada. Census 2001, Saskatchewan Bureau of Statistics.
http://www.gov.sk.ca/bureau.stats/pop/inmigrationby_age.pdf)Adapted

2.2 Education

2.2.1 Kindergarten to Grade 12 Projections

In a proactive mode, Saskatchewan Learning, in the late 1990s, gathered data information to predict the teacher supply and demand for the new millennium, in the kindergarten to Grade 12 system in the province, and presented a report projecting student enrolments in the province. The latest report, titled, *Saskatchewan Learning Projections for Kindergarten to Grade 12, 2004-2005 to 2013-14*, released in February 2004, included enrolments in provincial schools as well as independent schools associated with public or separate school divisions. The projections did not include other independent schools not associated with any school division, First Nations (Band) schools, or students involved in home-based education. The projections report is a useful tool for post-secondary institutions in predicting student enrolment in further education programs.

The report predicts significant declining student enrolment numbers over the next ten years. The main reason for the decline is the low birth rate in past years which will result in three to four thousand fewer students entering kindergarten than will be completing Grade 12. The predictions

anticipate a decline in rural enrolments of 21 percent and 18 percent in the urban centers over the next ten years. Currently higher enrolments still exist in Grades 9-12.

Overall, Saskatchewan’s school-aged population has been declining in recent years. The number of Aboriginal school-aged children in Saskatchewan though has been increasing. As recorded earlier, 40 percent of the Aboriginal population is under 15 years of age. Twenty percent of the school-aged population in the province is Aboriginal.

Saskatchewan Learning has indicated that it may have to re-visit the model used to project enrolments for the northern portion of the province. For a number of years the projections stated enrolment projections in the north at 5,500 students, yet the actual enrolments have declined in the past three years (5,264 in 2003-04).

The February 2004 report indicated that the total K-12 provincially funded actual enrollment in 1980-81 was 203,573 students; in 1998-99, 190,896 students; and in 2003-04; 174,263 students; which indicates a reduction of over 14 percent in young students (29,310) in the province in the past twenty four years (1980-81 to 2003-2004). Enrolment projections are not great for the province, even when taking into account the high birthrate in the Aboriginal population. In 2013-14, enrolment is expected to fall to 141,428, which is a further decline of enrolled students by 19 percent (32,835) for the years 2003-04 to 2013-14. Table 8 records the urban, rural and First Nations Grades 9-12 enrollment for the years 1998-99, 2003-04, (actuals); 2007-08 and 2013-14 (projections). At a glance one can see the decline in the rural enrollments and continual increase in enrollments in First Nations schools. Enrollment in the urban centres will start to decline by 2007-08. The declining population in the lower age levels will have implications for the post-secondary institutions in Saskatchewan in the future.

Table 8: Grade 9-12 Actual and Projected Enrollments – Selected Years

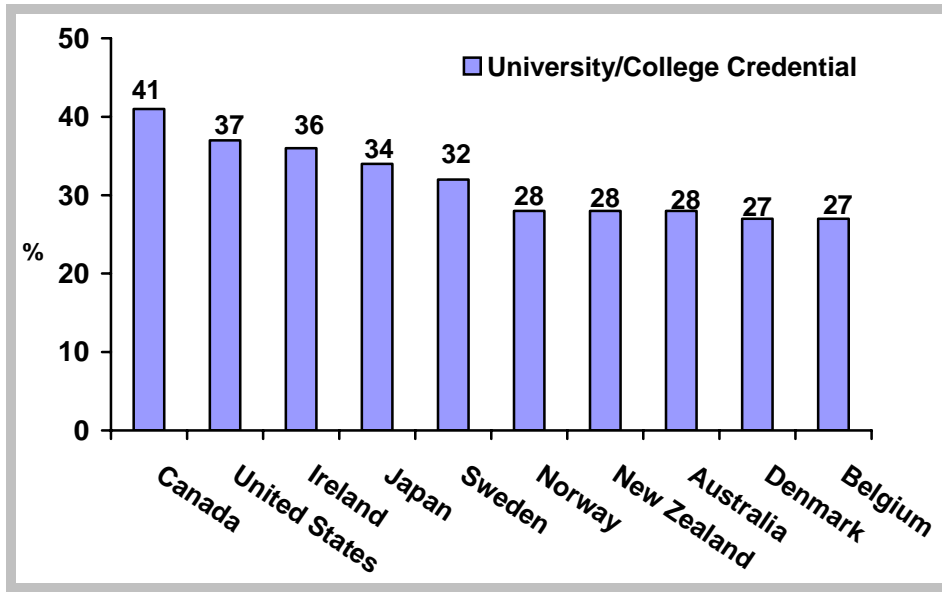
Year	Urban	Rural	First Nations Schools
1998-99	35,270	23,460	2,386
2003-04	37,542	20,628	3,241
2007-08	37,839	18,073	3,919
2013-14	32,272	14,319	4,539

(Source: Saskatchewan Learning. Enrollment Projections for Kindergarten to Grade 12, 2004-05 to 2013-14, February 2004 Update) Adapted – 1998-99 and 2003-04 years are actual enrolments

2.2.2 Post-Secondary Education Attainment – Canada and Saskatchewan

The Education Indicators report records that Canada is a world leader in education. The report states that, in 2000, Canada ranked fourth overall in the proportion of its working-age population with a university degree (20 percent), according to an annual study completed by the Organization for Economic Co-operation and Development (OECD). As well, Canada ranked second overall for the working-age population with college credentials. Figure 5 identifies that Canada, in 2000, was the leader in that a higher proportion of its population aged 25-65 (41 percent) had either a university or college credential.

Figure 5: Proportion of the Population, aged 25-64, with university or college qualifications, 2000



(Source: Canadian Education Statistics Council. Education Indicators in Canada: Report of the Pan-Canadian Education Indicators Program 2003. November 2003. <http://www.cesc.ca/pceipE.html>)

Table 9 presents the level of educational attainment in Saskatchewan and Canada, for the age group 25 to 64, for the Census years 1991 and 2001. Educational attainment at the trades, college and university levels has risen over the 1991-2001 period, while the number of people with less than high school education has declined. Percentages have been rounded.

Table 9: Educational Attainment for those aged 25 to 64, Saskatchewan and Canada, 2001

Educational Level	Canada 2001		% change from 1991	Saskatchewan 2001		% change from 1991
	Number	%*		Number	%*	
Less than high school	3,698,245	23	-9	134,585	28	-9
High school	3,898,400	24	1	103,875	22	
Trades	2,097,145	13		76,050	16	1
College	2,917,890	18	4	74,405	16	4
University	3,676,620	23	6	87,005	18	3
All trades, college and university	8,691,655	53	9	237,460	50	8
Population aged 25 to 64	16,288,300	100	11	475,920	100	7

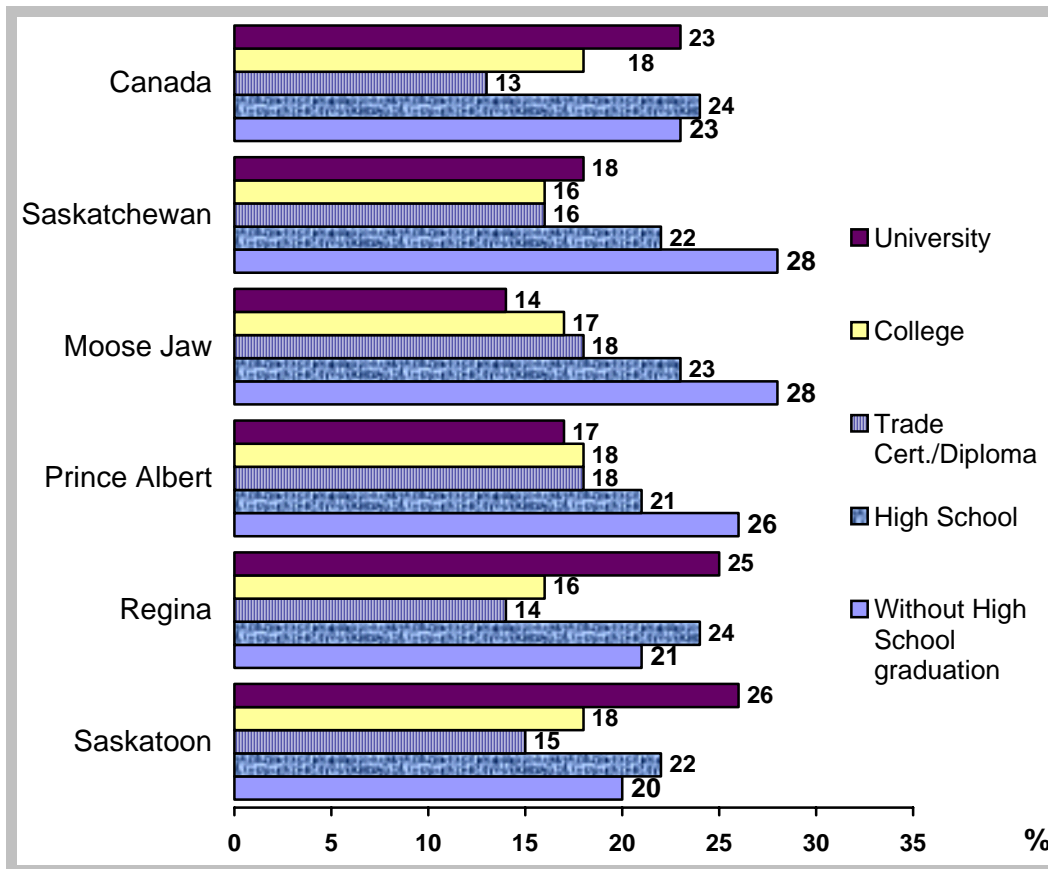
(Source: Canadian Education Statistics Council. Education Indicators in Canada: Report of the Pan-Canadian Education Indicators Program 2003. November 2003. <http://www.cesc.ca/pceipE.html>) Adapted

Statistics Canada Census 2001 reports, in Figure 6, that the majority of the population in Saskatoon, Regina, Prince Albert and Moose Jaw has some post-secondary education. A comparison with Saskatchewan and Canada is also shown in Figure 6. Percentages have been rounded.

In the *High School* category, Statistics Canada included persons who had attended courses at post-secondary institutions and who may or may not have had a high school graduation certificate. Excluded are persons with a post-secondary certificate, diploma or degree. Since 1981, 'post-secondary' refers to years of schooling completed at university or at institutions other than a university, a secondary (high) school or an elementary school. Examples of post-secondary institutions include community colleges, institutes of technology, CEGEPs, private trade schools, private business colleges and schools of nursing.

In the *College* category, Statistics Canada includes non-degree-granting institutions such as, community colleges, CEGEPs, private business colleges and technical institutes. Canada

Figure 6: Saskatchewan Major Cities Education Levels as Percent of the Population, 2001



(Source: Statistics Canada. 2001 Census: Level of Educational Attainment for the Age Group 25 to 64, 2001 Counts for Both Sexes, for Canada, Provinces, Territories, Census Metropolitan Areas and Census Agglomerations.) <http://www12.statcan.ca/english/census01/products/highlight/Education/Page.cfm?Lang=E&Geo=PR&View=1b&Table=1a&StartRec=1&Sort=2&B1=Counts01&B2=Both>

2.2.3 The Pursuit of Post-Secondary Education

The Council of Ministers of Education, Canada, in the 1999 *Report on Public Expectations of Post-Secondary Education in Canada*, identified the five key functions of post-secondary education to be as follows:

- inspire and enable individuals to develop their capabilities to the highest potential levels throughout their lives
- advance, preserve and disseminate knowledge and understanding
- serve the learning and knowledge needs of an adaptable, sustainable, knowledge-based economy at local, regional, and national levels

- foster the application of knowledge and understanding to the benefit of the economy and society
- help shape a healthy, democratic, civil society

(Source: Council of Ministers of Education. Canada (CMEC). A Report on Public Expectations of Post-Secondary Education in Canada. February 1999. ISN 0-88987-118-3)

According to Saskatchewan Learning, Saskatchewan youth, following high school, have many options in their transition to the labour force. The report, *Saskatchewan Education Indicators*, in a May 2001 survey, indicated that the majority of both thirteen and sixteen year olds intended to pursue further education after high schools. The report indicated that females were more likely to follow this route than males. The percentages were similar to the overall Canadian results for the female students in these two age groups, but the percentage for male Saskatchewan students was lower. Table 10 compares the gender Saskatchewan and Canadian figures in both age groups.

Table 10: Percentage of Students Intending to Continue Education after High School, 2001

	Females	Males
Saskatchewan		
13 year olds	96%	89%
16 year olds	97%	90%
Canada		
13 year olds	97%	93%
16 year olds	97%	94%

(Source: Saskatchewan Learning. Saskatchewan Education Indicators: Kindergarten to Grade 12. 2002)

In 2003, the High School Consortium, consisting of post-secondary institutions - University of Regina, University of Saskatchewan, SIAST, and the Saskatchewan Regional Colleges, along with Saskatchewan Learning, surveyed Grade 12 students in the province to determine their intentions upon completion of high school. Advice and input to the process was provided by the Saskatchewan Apprenticeship and Trade Certification Commission and the Federation of Saskatchewan Indian Nations (FSIN). A similar survey had been conducted in 1999 for Grades 11 and 12 students. The 2003 study surveyed students from all high schools in the province, including students in reserve schools, though these schools operate within the federal jurisdiction of government. The reserve schools were not surveyed in 1999. The 2003 survey was completed in May/June 2003 and the analysis and summary of the results is currently being conducted by Saskatchewan Learning. Preliminary results show that the response rate was slightly less than the 1999 study (7147 students in 2003 compared to 9626 in 1999); and that 55 percent planned to attend post-secondary education right after high school (56 percent in 1999). Another 25 percent indicated that they wanted to wait at least one year before proceeding to post-secondary education, compared to 21 percent in the 1999 study.

(Source: Saskatchewan Learning. High School Leaver Consortium. 1999 and 2003 Saskatchewan High School Leaver Studies, 2000 and 2003)

According to Statistics Canada's release of the report, *The Adult Education and Training Survey*, one of every three adult workers (approximately 4.8 million) accessed some type of formal job-related training in 2002 in order to continue learning or to upgrade the skills they already possessed. Participation results had increased over a similar study completed in 1997. Nationally, the largest increase in participation was among older workers aged 55-64 (23 percent). Also, 35

percent of workers aged 25-64 took some formal job-related training, an increase over the 29 percent in 1997.

Even with the high participation rates, more than two million workers did not take any formal training in 2002 or in the five years prior, nor anticipate taking any training in the ensuing three years, 2002-2005. Job-related training was not restricted to formal training but self-directed or informal training, use of the Internet or program software.

Despite the increase in the participation rates in 2002 for additional training, the support provided by employers increased marginally. Twenty-five percent of adult workers reported completing training that was employer-supported – an increase from the 22 percent in 1997, but the balance of the workers indicated that they accessed and paid for the training themselves.

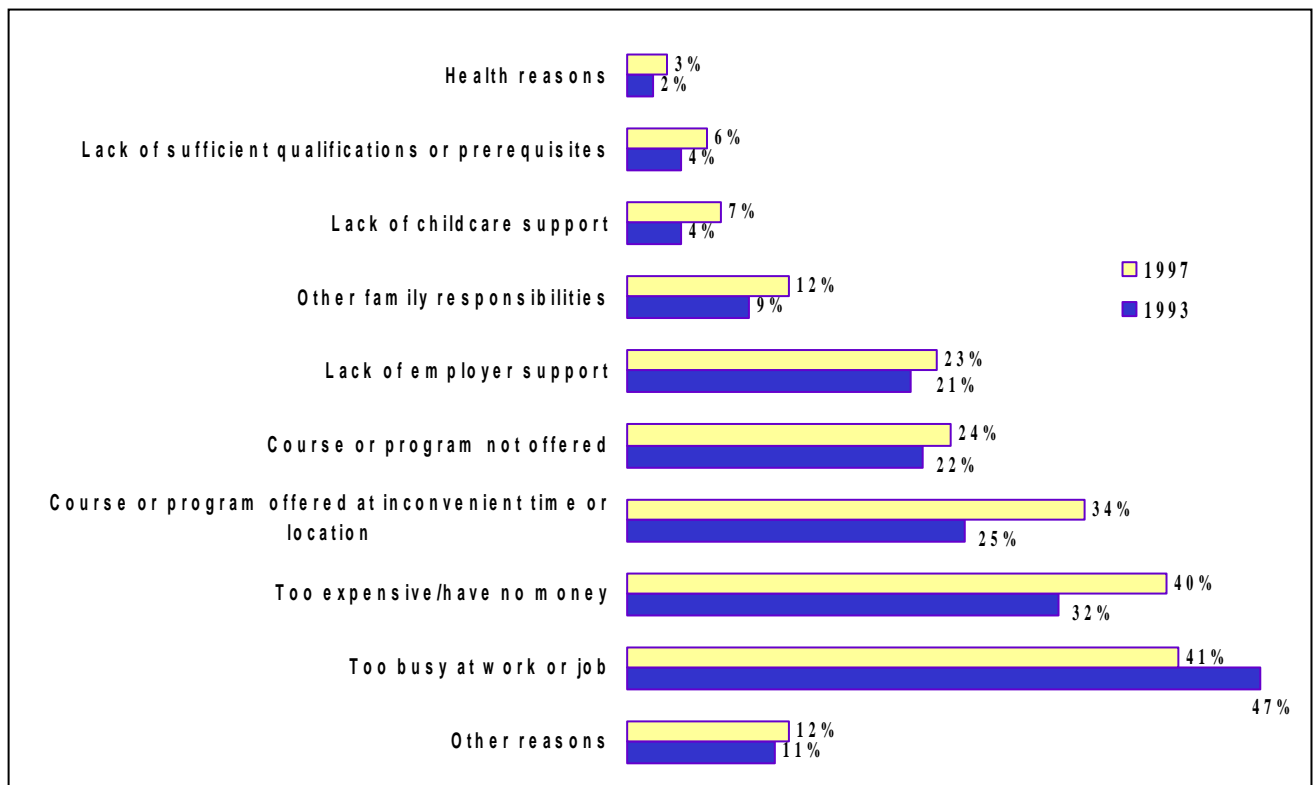
The survey was conducted in February-March 2003, in partnership with Human Resources and Skills Development Canada (HRSDC).

(Source: Statistics Canada. Adult Education and Training Survey 2003. <http://www.stat.ca/daily/English/040430/d040430b/htm>)

The writers of the November 2003, *Report of the Pan-Canadian Education Indicators Program 2003*, recognized that post-secondary education has a direct impact on a person’s ability to compete in the labour market; on the type of job the graduate will attain; and the remuneration that graduates will receive. As Canada shifts from a resource-based to a knowledge-based economy, workplace skills are rapidly evolving and it will fall on adult educators and trainers to update workers’ skills. Accessibility of job-related training becomes an issue for both parties – trainer and learner.

Figure 7 highlights a variety of barriers to obtaining adult education and training in Canada. Though the data is for the years 1993 and 1997, the issues remain as relevant in 2004.

Figure 7: Percentage Distribution of Barriers to Adult Education and Training in Canada, 1993 & 1997



(Source: Canadian Education Statistics Council. Education Indicators in Canada: Report of the Pan-Canadian Education Indicators Program 2003. November 2003. <http://www.cesc.ca/pceipE.html>)

The research paper by the Analytical Studies Branch of Statistics Canada, released in June 2003, focused on access to post-secondary education. The study questioned whether distance was an issue for students wishing to attend a post-secondary institution. If distance was an issue, would students opt to attend a college if it was closer to their home base?

In the study, the analysts determined that students who would not be able to commute daily to a university were more likely to attend a college located closer to their home base, even if university was their first choice. This may be swayed by the fact that, in Quebec a higher percentage of students opt to attend college over university, even when universities were in close proximity to their home bases. Finances do come into play though and the writers also found that college attendance increases among students from lower and middle-income families, whereas students from upper income families are less likely to attend college, even if this is the only choice nearby.

Attendance at university and college, taking into account family income and distance to school, were consistent with the belief that the additional high costs deterred students of lower income families from pursuing a university or college education, but were less likely to affect students of upper income families.

(Source: Statistics Canada, Analytical Studies Branch research paper series. Access to College and University : Does Distance Matter? Catalogue No. 11F0019MIE – No. 201)

2.2.4 Post-Secondary Education - Nationally and Provincially

Statistics Canada, in the Census 2001: Analysis Series – Education in Canada: Raising the Standard, released March 2003, reported the dramatic shift in Canadians with higher education than it was fifty years ago. In 1951, only 2 percent of all Canadians, aged 15 and over had university qualifications. In 1971, that figure rose to 5 percent, in 1991 to 11 percent, and in 2001 it reached 15 percent. Likewise, the percentage of the population with college certification also increased. In 1971, 17 percent of the population indicated that they had completed some post-secondary education, other than university, and this figure increased to 36 percent by 2001.

The report also confirmed that women led the growth in the percentage of the population with university and college credentials while men led in the trades credentials. The growth among women aged 25 and over was greater than that of men. The proportion of university graduates among adult women jumped from 14 percent in 1991, to 20 percent in 2001. Eighteen percent of women indicated they had college credentials in 2001, up from 14 percent in 1991. Women accounted for 57 percent of the growth in university qualifications, and 59 percent of college qualifications in the 1990's.

Also, the number of individuals, aged 25-64, with a university qualification above the bachelor's level reached over one million in 2001.

(Source: Statistics Canada, Census 2001 : analysis series – Education in Canada: Raising the Standard Catalogue no. 96F0030X1E2001012)

The International Adult Literacy Survey, as reported in the *Education in Canada* report, indicated that the earning power for Canadians with less than high school education is rather limited and that this particular group tends to perform more poorly on simple daily literacy tasks than their counterparts in other countries.

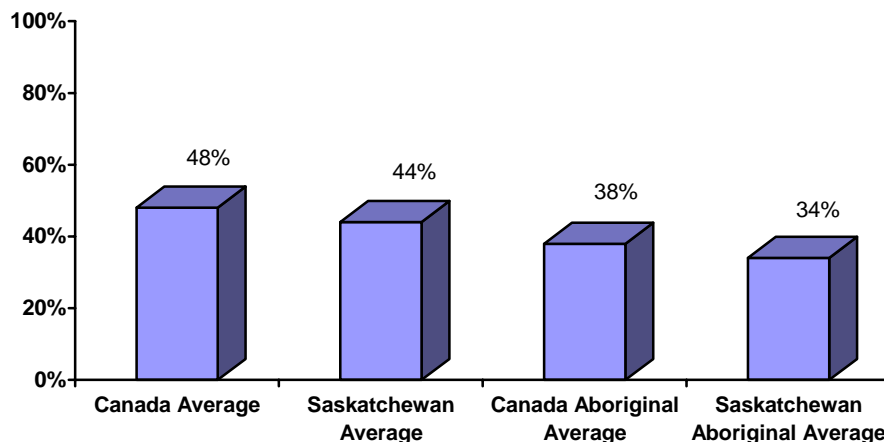
The report also stated that overall, the largest growth in fields of study among men occurred in the technology area – these included engineering and computer science (at the university level) and data processing (at the college level). Though men did appear to be interested in business, finance and commerce fields, it was the primary focus of the female students – both at the university and the college levels.

(Source: Statistics Canada, Census 2001 : analysis series – Education in Canada: Raising the Standard Catalogue no. 96F0030X1E2001012)

According to The Saskatchewan Institute of Public Policy at the University of Regina, an educated labour force is critical for the future economic sustainability of Saskatchewan. Census 2001 results reported that, although educational levels of the population improved over Census 1996, the province continued to lag behind the national levels of educational attainment. There are also the disproportionate attainment levels between the non-Aboriginal and the Aboriginal population in the province, despite significant advances of Aboriginals to further their education levels.

The report indicated that completion of post-secondary training in Saskatchewan – college, trade, or university – for those aged 25 and older - had increased in recent years and now represents 44 percent of the population in that category in the province. The national average of the same category is 48 percent, as identified in Figure 8.

Figure 8: Percentage of Residents with Post-Secondary Education Credentials (Trades, College, University), in Canada and Saskatchewan, 2001



(Source: The Saskatchewan Institute of Public Policy, University of Regina. Demographic Trends and Socio-Economic Sustainability in Saskatchewan: Some Policy Considerations. October 2003. ISBN# 0-7731-0459-3). The Aboriginal figures do not include residents over the age of 64.

With the establishment of Aboriginal controlled post-secondary institutions in the province, it is anticipated that the percentage of Aboriginals with post-secondary credentials will increase in the future.

2.2.5 Education Indicators for the Aboriginal Population

In January 2004, The Canada Millennium Scholarship Foundation released a report on *Aboriginal Peoples and Post-Secondary Education – What Educators Have Learned*. The report recognized that enrolment and completion rates for Aboriginal students has been increasing over the past two decades, but still remains at a significantly lower rate than the non-Aboriginal students. The study identified three phases that could affect Aboriginal students pursuing post-secondary education. These phases were:

- **barrier phase:** socio-economic factors, discrimination, low self-concept and institutional insensitivity to Aboriginal cultures, and in some cases, inadequate high school preparation

- initiatives phase: to make post-secondary education more affordable to Aboriginal peoples
- strategies phase: to make post-secondary education more accessible, relevant and responsive to Aboriginal issues.

Saskatchewan Learning developed the Post-Secondary Sector Aboriginal Education and Training Action Plan in an attempt to improve the post-secondary participation and retention of the Aboriginal population. The two phases to the plan outlined goals for the short-range (5 years) and the long-range (20 years) and identified targets for literacy, academic skills, life skills, and enrolment completion rates. Alberta has also addressed these issues with the release of several initiatives aimed at the retention of Aboriginal post-secondary students.

(Source: Canadian Millennium Scholarships. Aboriginal Peoples and Post-Secondary Education: What Educators Have Learned. <http://www.millenniumscholarships.ca/en/research/Aboriginal.html>)

In December 2003, Statistics Canada released preliminary findings from the *2001 Aboriginal Peoples Survey*. The study, a partnership with Statistics Canada and national Aboriginal organizations, was to collect data on the social and economic conditions of Aboriginal people in Canada. The sample respondents for the survey were selected, based on their responses to the questions in Census 2001 for those who identified themselves as an Aboriginal person, and/or had Aboriginal ancestry, and/or First Nations membership and/or registration under the Indian Act. The response rate for the survey was 84 percent with a sample size of close to 117,000, including adults and children.

Some of the preliminary findings dealt with educational issues identifying those that had not completed high school or post-secondary education. Table 11 records the commonly reported reasons the Aboriginal non-reserve population, aged 25-64, did not complete their post-secondary education. The preliminary results identified both Canadian and Saskatchewan figures and showed that, in both situations, family and financial issues were the most common reasons for not completing post-secondary education. As expected, the female Aboriginals, in this age category, cited family responsibilities as their major reason for not completing, whereas the major reason was financial with the male Aboriginal population. The figures below in Table 11 for Canada and Saskatchewan and both age groups - 15-34 and 25-64 - exclude the population that did not answer the education section of the Aboriginal Peoples Survey.

Table 11: Common Reasons for Not Completing Post-Secondary Education, Aboriginal Non-Reserve Population, Preliminary Results

CANADA

Reasons did not complete post-secondary schooling	Total Pop.		Male		Female	
	#	%	#	%	#	%
Respondent population in 25-64 age range	49,190	22.8	20,910	22.7	28,280	22.8
Family Responsibilities	11,190	22.7	2,460	11.7	8,720	30.8
Financial reasons	10,390	21.1	5,080	24.2	5,310	18.7
Lost Interest/Lack of Motivation	5,740	11.6	2,810	13.4	2,930	10.3
Got a Job/Had to Work	5,400	10.9	2,870	13.7	2,530	8.9
Other reasons	16,470	34	7,690	37	8,790	31

SASKATCHEWAN

Reasons did not complete post-secondary schooling	Total Pop.		Male		Female	
	#	%	#	%	#	%
Respondent population in 25-64 age range	4,800	24.6	1,940	25.1	2,860	24.3
Family Responsibilities	1,180	24.5	170	8.7	1,010	35.3
Financial reasons	960	20	400	20.6	560	19.5
Lost Interest/Lack of Motivation	520	10.8	300	15.4	230	8
Got a Job/Had to Work	350	7.2	210	10.8	130	4.5
Other reasons	1,790	38	860	45	930	33

(Source: Statistics Canada. Aboriginal Peoples Survey 2001 – Initial Release, December 2003. Catalogue no. 89-595-XIE)

Similar statistics exist for those not completing high school. In this instance, the age category was 15-34, so a breakdown of the 15-24 and 25-34 was not possible at the preliminary results stage.

These results state for:

Canada:

- The total 15-34 Aboriginal non-reserve population responded over 17 percent to each of the “wanted to work” and “pregnancy/taking care of children and 17 percent to “bored with school” statements.
- The male population stated over 20 percent for “wanted to work (27 percent)” and “bored with school (21 percent)”.
- The female population stated 32 percent “pregnancy/taking care of children” and 13 percent “bored with school”.

Saskatchewan:

- The provincial 15-34 Aboriginal non-reserve population responded 15 percent to the “bored with school” and 22 percent to “pregnancy/taking care of children” statements.
- The male population stated over 22 percent for “wanted to work” and 20 percent to “bored with school”.
- The female population stated 39 percent “pregnancy/taking care of children” and 11 percent “bored with school”.

(Source: Statistics Canada. Aboriginal Peoples Survey 2001 – Initial Release, December 2003. Catalogue no. 89-595-XIE)

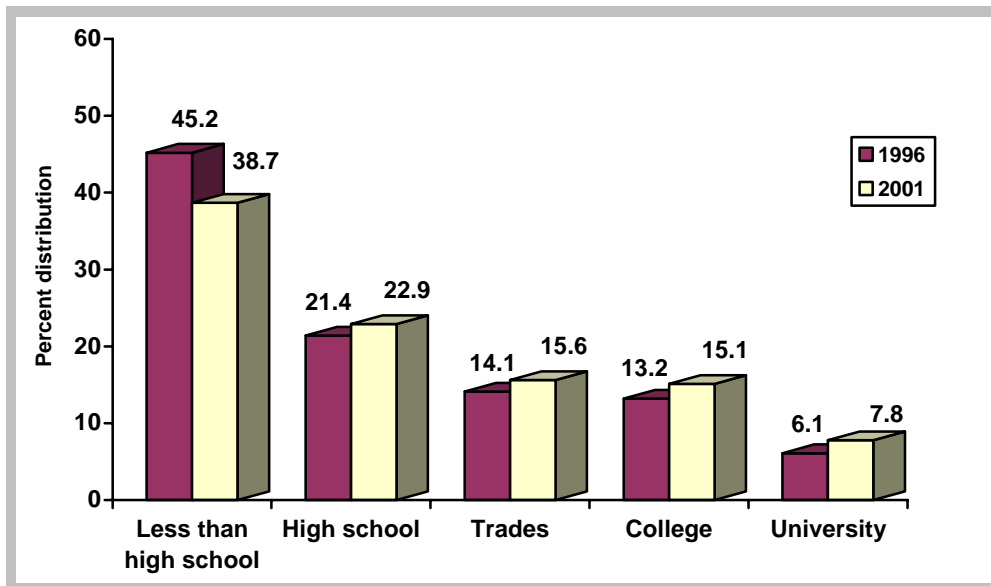
The results to the “not completing high school” question in the survey, both for Canada and Saskatchewan should be of concern to both the federal and provincial governments – especially since a common theme throughout the responses was “bored with school”.

The Canadian Education Statistics Council, in the November 2003 report, *Education Indicators in Canada: Report of the Pan-Canadian Education Indicators Program 2003*, featured a section on educational attainment.

Figure 9 identifies the levels of educational attainment for Aboriginal people in Canada for the Census years 1996 and 2001. For the Aboriginal population, aged 25-64, Census 2001 reports that the level of educational attainment had increased from Census 1996 in all levels of education - high school diploma, post-secondary - trade certificate, college diploma, and finally university degree. As with the educational attainment within the general population in Canada, the percentage of those with less than high school has decreased.

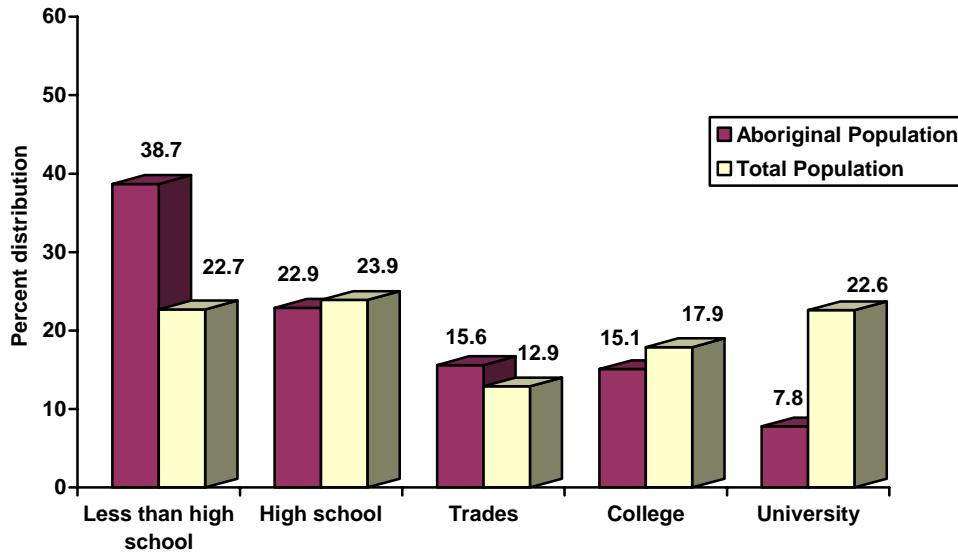
The Aboriginal population is well-represented at the post-secondary trades and college level. The tendency for the Aboriginal population to attain post-secondary education at the trades or college level is illustrated again in Figure 10. In 2001, 30.7 percent of the Aboriginal population, aged 25 to 64, had acquired a trades or college education, which is equivalent to the proportion of all Canadians with a similar education (30.8 percent). The difference in education between the Aboriginal population and all Canadians seems to occur at opposing ends of the spectrum. Nearly one-quarter of all Canadians aged 25 to 64 (22.6 percent) have attained a university level education, compared to only 7.8 percent of Aboriginals. In contrast, 38.7 percent of Aboriginals aged 25 to 64 have less than a high school education, which is significantly higher than 22.7 percent of all Canadians.

Figure 9: Levels of Educational Attainment, Aboriginal Population, Aged 25 to 64, in Canada, 1996 and 2001



(Source: Canadian Education Statistics Council. Education Indicators in Canada: Report of the Pan-Canadian Education Indicators Program 2003. November 2003. <http://www.cesc.ca/pceipE.html>)

Figure 10: Comparison of Levels of Education, Aboriginal and Total Population, Aged 25-64, Canada, 2001



(Source: Canadian Education Statistics Council. Education Indicators in Canada: Report of the Pan-Canadian Education Indicators Program 2003. November 2003. <http://www.cesc.ca/pceipE.html>) Adapted

2.3 Labour Force Statistics

2.3.1 Employment Rates

Statistics Canada reported the nation’s seasonally adjusted employment figure for April 2004 rose by an estimated 50,000 full-time jobs over March 2004, to approximately 15,950,700. The Canadian unemployment rate fell in April by 0.2 percentage points to 7.3 percent, the lowest rate since September 2001.

Saskatchewan also fared well in April, with a 1.2 percent growth in seasonally adjusted employment levels from the previous month, the highest among all the provinces, from approximately 487,500 to 493,500 individuals.

(Source: Statistics Canada. The Daily, May 7, 2004, Labour Force Survey)

Table 12 lists unadjusted employment figures sourced from Statistics Canada by the Saskatchewan Bureau of Statistics¹. Although the unadjusted numbers the Bureau chose to report vary slightly from Statistics Canada seasonally adjusted figures above, they provide a three-year trend and a breakdown of full-time and part-time employment.

¹ “Seasonally adjusted” refers to the technique of adjusting the raw figures to remove seasonal movements. As such, seasonally adjusted employment figures are widely used by Statistics Canada, as they are considered to be a more accurate picture of the current employment situation than the ‘raw’ or ‘unadjusted’ figures. The Saskatchewan Bureau of Statistics has provided *unadjusted* employment data for the last three years, and therefore the reader is cautioned against cross-referencing Statistics Canada figures (seasonally adjusted) and Saskatchewan Bureau of Statistics (unadjusted).

Saskatchewan's labour force increased by approximately 4,000 persons to 510,100 (unadjusted figure) between March 2003 and March 2004, while the participation rate remained relatively constant with a 0.4 percent increase to 67.4 percent. Note: Statistics Canada has defined the labour force as those persons who were either employed or unemployed during the week prior to Census Day; where unemployed means that an individual is without paid work or without self-employment work but is available for work and either is actively looking for paid work, is on a temporary lay-off, or has definite plans to start a job in four weeks or less.

The size of the labour force increased due to a higher number of unemployed individuals over this period. Saskatchewan's unemployment rate rose to over six percent at the end of the first quarter 2004 (unadjusted unemployment rate of 6.4 percent; adjusted unemployment rate of 6.1 percent), although this rate is still lower than the national average (unadjusted unemployment rate of 8.0 percent; adjusted unemployment rate of 7.5 percent).

The number of 'employed' people in Saskatchewan's labour force did not change significantly over the period from March 2003 to March 2004 (unadjusted figures of 477.1 in 2003 and 477.3 in 2004). However, there was a shift of approximately 3,000 employees from full-time to part-time employment. This shift has been reversing itself in the second quarter of 2004.

Saskatchewan's employment figures for the beginning of 2004's second quarter have improved. In April, the number of full-time employees increased by approximately 8,000, with the gains resulting from a growing labour force (3,100 more people), along with a reduction in the number of part-time workers and unemployed people. Saskatchewan's unemployment rate dropped below six percent again to a seasonally adjusted figure of 5.4 percent.

(Source: Statistics Canada, The Daily, May 7, 2004, Labour Force Survey)

Table 12: Labour Market Statistics, Saskatchewan and Canada, Unadjusted Data

Saskatchewan Labour Market Statistics, Unadjusted Data				
	March 2002	March 2003	March 2004	April 2004
Labour Force ('000)	496.6	506.8	510.1	513.2
Employment ('000)	465.7	477.1	477.3	483.0
Full-Time	362.8	381.1	378.2	386.2
Part-Time	102.9	96.0	99.1	96.8
Unemployment ('000)	30.9	29.7	32.8	30.2
Unemployment Rate (%)	6.2	5.9	6.4	5.9
Seasonally Adjusted Unemployment Rate (%)	n/a	5.7	6.1	5.4
Participation Rate (%)	65.3	67.0	67.4	67.8
Canada Labour Market Statistics, Unadjusted Data				
	March 2002	March 2003	March 2004	April 2004
Labour Force ('000)	n/a	16,743.3	16,981.9	17,030.4
Employment ('000)	n/a	15,424.0	15,624.2	15,735.7
Full-Time	n/a	12,347.7	12,605.2	12,767.9
Part-Time	n/a	3,076.3	3,019.0	2,967.8
Unemployment ('000)	n/a	1,319.3	1,357.6	1,294.7
Unemployment Rate (%)	n/a	7.9	8.0	7.6
Seasonally Adjusted Unemployment Rate (%)	n/a	7.4	7.5	7.3
Participation Rate (%)	n/a	66.6	66.6	66.7

Source: Saskatchewan Bureau of Statistics, March 2004 Labour Force Survey

2.3.2 Employment Status of Canadian Workers

Table 13 records that the employment status of Canadian workers has remained relatively unchanged since 1999. Approximately 81 percent of workers are employed full-time, while nearly 19 percent are employed part-time. Saskatchewan statistics show a similar trend. In the five-year period between 1999 and 2003, the ratio of full-time to part-time workers has remained approximately 80:20.

In Canada, there are a higher proportion of men relative to women who are employed full-time (89 percent of men compared to 72 percent of women).

Table 13: Full and Part-time Employment - Canada

Full and Part Time Employment Labour Force Survey, Canada				
Both Genders	1999		2003	
	000's	%	000's	%
Full-time	11,849.2	81.5%	12,781.1	81.2%
Part-time	2,681.9	18.5%	2,964.8	18.8%
Total	14,531.0		15,746.0	
Men	1999		2003	
	000's	%	000's	%
Full-time	7,052.2	89.7%	7,484.9	89.0%
Part-time	813.6	10.3%	921.8	11.0%
Total	7,865.8		8,406.7	
Women	1999		2003	
	000's	%	000's	%
Full-time	4,797.0	72.0%	5,296.2	72.2%
Part-time	1,868.3	28.0%	2,043.1	27.8%
Total	6,665.3		7,339.3	

Source: Statistics Canada Cansim Table 282-0002

2.3.3 Reasons for Part-Time Work

According to 2003 Statistics Canada figures, the primary reasons for part-time work include school attendance (29.6 percent), business conditions and inability to find full-time employment (27.8 percent), as well as personal preference (24.8 percent).

Not surprisingly, those workers between 25-44 years of age are most likely to be working part-time due to school attendance.

One-quarter (25.3 percent) of employed individuals between the ages of 25-44 work on a part-time basis, so that they can care for their children. Workers in this age category also have a greater tendency to be employed part-time due to business conditions or an inability to find full-time employment (37.3 percent).

As Table 14 indicates, more than one-half (55.9 percent) of the part-time workers 45 years and over personally prefer to be employed on a part-time basis.

Table 14: Reasons for Part-time Work

Reasons for Part-time Work, 2003, Statistics Canada				
Both Genders, %				
	Total	15-24	25-44	45 & Over
Going to school	29.6%	72.2%	8.2%	0.6%
Personal preference	24.8	5.2	17.7	55.9
Other - Business Conditions & unable to find full-time work	27.6	20	37.3	26.7
Caring for children	9.5	1.1	25.3	3
Other personal/family responsibilities	4.3	0.7	6.6	6.4
Own illness	3	0.5	3.3	5.8
Other voluntary	1.1	0.3	1.7	1.5
Total employed part-time (000s)	2,964.80	1099.2	956.3	909.3
% Employed part-time	18.8	45.7	12.5	16

Source: Statistics Canada Cansim Tables 282-0014, 282-0001, and Catalogue no 89F0133XIE

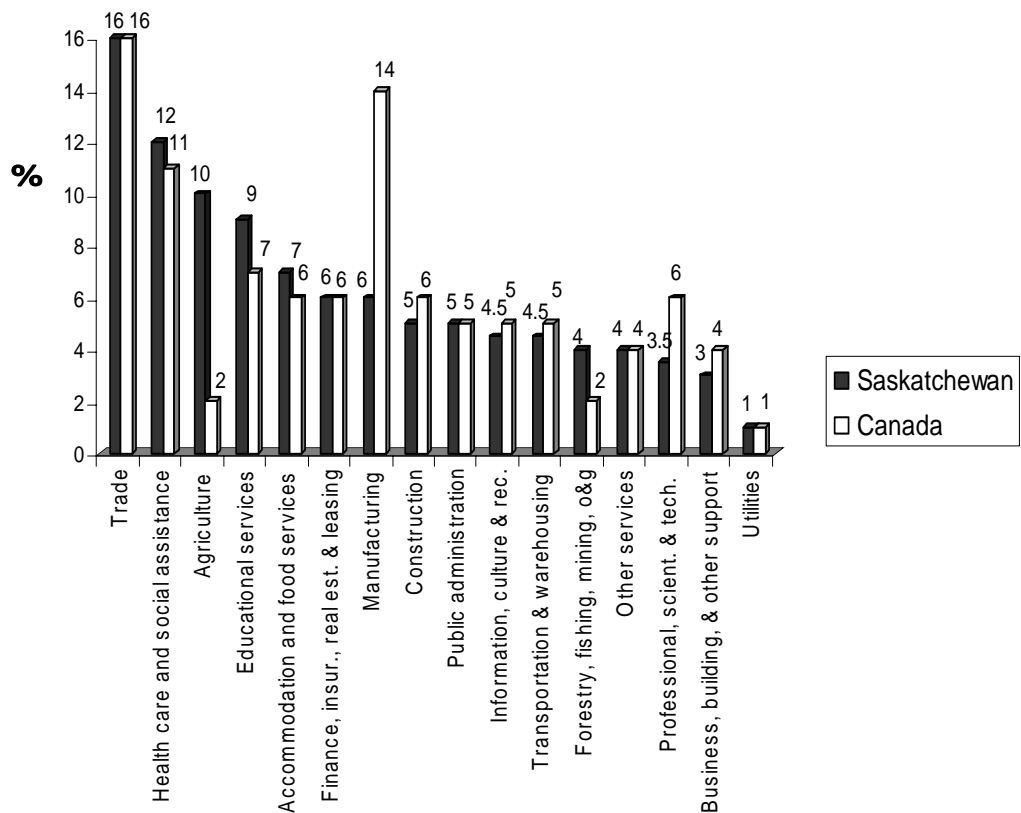
2.3.4 Employment by Industry

Figure 11 illustrates that the majority of Saskatchewan's labour force is employed in the trades (16 percent), health care and social assistance (12 percent), agriculture (10 percent), and educational services (9 percent) sectors. Relative to Canada, Saskatchewan has a higher proportion of employees in the agriculture (8 percent higher), educational services (2 percent higher), and health care and social assistance sectors (1 percent higher).

Nationally, Canada's manufacturing sector replaces agriculture as a high employment industry with 14 percent of employment. In comparison, only 6 percent of Saskatchewan labour force is employed in the manufacturing sector.

Saskatchewan's utilities (1 percent), business, building, and other support services (3 percent), and professional, scientific and technical services (3.5 percent) sectors employ relatively fewer people. (Note: Business, building and other support services was formerly 'Management of companies, administrative and other support service').

Figure 11: Distribution of Employment by Industry



(Source: Statistics Canada. Employment by Major Industry Groups and Province, Seasonally Adjusted, Saskatchewan. Cansim Table 282-0088. April 2004)

Table 15 provides seasonally adjusted figures for the actual number of people employed in each sector as of April 2004 for Saskatchewan and Canada.

Over the year period from March 2003 to March 2004, Canadian and Saskatchewan employment figures remained stable showing an increase in employment over all industries of 1.3 percent and 0.1 percent, respectively. Relative to Canadian employment growth by industry, Saskatchewan experienced significant increases in the utilities sector (34.9 percent employment increase compared to a 0.9 percent decrease Canada-wide); forestry, fishing, mining, oil and gas (17.4 percent increase versus a 0.8 percent increase Canada-wide); and business, building, and other support services (16.8 percent provincial increase compared to a 0.2 percent increase Canada-wide).

Contrary to national increases, the Saskatchewan industries that experienced notable decreases in employment over the March 2003 to 2004 period include the transportation and warehousing sector (9.3 percent provincial decrease versus a 5.9 percent national increase), and the construction sector (9.6 percent provincial decrease versus a 2.6 percent national increase).

The other sectors for which Canada has experienced an increase in employment include health care and social assistance; professional, scientific and technical services; other services, and public administration. The province experienced employment declines in these industries in the first quarter 2004.

Employment in accommodation and food services, and the manufacturing sectors decreased both nationally and provincially.

Heading into the second quarter of 2004, those industries that had a positive growth in employment relative to Canada are continuing to flourish. For instance, Saskatchewan's Forestry, fishing, mining, oil and gas experienced a growth of 3.8 percent in employment from March 2004 to April 2004, which is a 30.7 percent increase over employment in April 2003. Information, culture and recreation joined the high growth sectors, with a 16.1 percent increase since April 2003. Accommodation and food services is also up from the first quarter 2004 (1.7 percent), and showing positive growth relative to April 2003 (3.2 percent).

Those Saskatchewan industries that experienced a significant decrease in annual growth, such as transportation and warehousing and utilities, rebounded slightly in April 2004. However, April's employment figures in these sectors are still below last year's levels. To illustrate, although transportation and warehousing experienced a 4.7 percent growth from March 2004 to April 2004, employment is still down 5.9 percent from April 2003.

Saskatchewan's health care and social assistance, finance, insurance real estate and leasing, and professional, scientific and technical service sectors continue to show year-over-year declines in employment growth relative to Canada.

Saskatchewan's agriculture sector experienced a decline in employment growth from the first quarter 2004 (-2.0 percent). However, April's employment figures are still above April 2003, showing a 3.4 percent growth.

The province's educational services sector is doing well relative to Canada with a 2.1 percent growth in employment since March 2004, and a 6.9 percent increase since the previous year, April 2003.

(Source: Statistics Canada. Employment by Major Industry Groups and Province, Seasonally Adjusted, Saskatchewan. Cansim Table 282-0088. April 2004)

Table 15: Employment by Industry, Saskatchewan and Canada

Employment by Industry				
Saskatchewan, Seasonally Adjusted Figures	April 2004	Change from March 2003 to March 2004	Change from April 2003 to April 2004	Change from March 2004 to April 2004
	'000	%	%	%
All industries	493.5	0.1	1.3	1.2
Goods-producing sector	128.5	3.3	6.1	1.4
Agriculture	48.9	5.9	3.4	-2.0
Forestry, fishing, mining, oil and gas	21.7	17.4	30.7	3.8
Utilities	5.9	34.9	28.3	1.7
Construction	23.1	-9.6	-8.3	1.8
Manufacturing	28.9	-3.9	5.5	5.5
Services-producing sector	365.1	-1.0	-0.3	1.2
Trade	77.5	1.4	1.4	0.6
Transportation and warehousing	22.5	-9.3	-5.9	4.7
Finance, insurance, real estate and leasing	27.9	0.0	-2.1	1.1
Professional, scientific and technical services	16.3	-3.9	-8.4	-5.2
Business, building, and other support services *	13.5	16.8	8.9	-2.9
Educational services	43.2	3.4	6.9	2.1
Health care and social assistance	59.6	-2.2	-3.7	2.1
Information, culture and recreation	22.3	4.3	16.1	2.8
Accommodation and food services	35.2	-2.8	3.2	1.7
Other services	21.5	-12.8	1.4	1.4
Public administration	25.5	-3.1	0.8	0.8
Canada, Seasonally Adjusted Figures	April 2004	Change from March 2003 to March 2004	Change from April 2003 to April 2004	Change from March 2004 to April 2004
	'000	%	%	%
All industries	15,950.7	1.3	1.7	0.3
Goods-producing sector	4,012.4	0.2	0.9	0.6
Agriculture	343.7	1.1	1.8	0.2
Forestry, fishing, mining, oil and gas	298.3	0.8	3.7	1.7
Utilities	130.0	-0.9	-1.8	-0.2
Construction	952.0	2.6	3.9	1.4
Manufacturing	2,288.4	-0.9	-0.6	0.2
Services-producing sector	11,938.3	1.7	1.9	0.2
Trade	2,470.9	2	0.6	-0.8
Transportation and warehousing	809.3	5.9	6.2	-0.1
Finance, insurance, real estate and leasing	976.9	3.9	3.5	1.4
Professional, scientific and technical services	1,009.6	1.1	1.1	-0.5
Business, building, and other support services *	621.3	0.2	2.1	1.9
Educational services	1,044.9	0.6	-0.7	-1.3
Health care and social assistance	1,755.9	4.2	6.1	1.1
Information, culture and recreation	722.2	4.4	5.3	0.7
Accommodation and food services	1,017.6	-3	-0.7	0.6
Other services	696.4	-5.7	-3.3	2.6
Public administration	813.3	2.8	0.8	-0.4

Source: Statistics Canada Cansim Table 282-0088

* Formerly Management of companies, administrative and other support service

2.3.5 Labour Force by Class of Worker

Table 16 reports that nearly two thirds of Canada's employed labour force (65.4 percent) was employed in the private sector (not including self-employment) at the end of the first quarter 2004, compared to only 55 percent of Saskatchewan's employed labour force. Relative to the nation, Saskatchewan has a higher proportion of workers employed in the public sector and self-employed individuals. One quarter of Saskatchewan's employed labour force works in the public sector, compared to approximately 19 percent of the nations' employed labour force. Nearly one-fifth of Saskatchewan's labour force is a self-employed or unpaid family worker (19.7 percent), compared to 15.2 percent of Canada's labour force.

Historically, the proportions of private and public sector workers in Saskatchewan have slowly increased, while the number of self-employed persons has declined. In 2000, 53 percent of Saskatchewan workers were private sector employees, 23 percent were public sector employees, and 23 percent were self-employed persons. The drop in self-employment reflects a decline in the number of farmers, although non-agricultural self-employment has increased over the past decade.

(Source: SaskNetWork website. An Overview of the Saskatchewan Economy and Labour Market 2001)

Table 16: Labour Force by Class of Worker

Labour Force by Class of Worker	Saskatchewan				Canada	
	March 2002	March 2003	March 2004		March 2004	
	(000)	(000)	(000)	%	(000)	%
Employed Labour Force						
Public Sector	114	116	120	25.2%	3,087.9	19.4%
Private Sector	253	260	263	55.1%	10,401.7	65.4%
Self Employed & Unpaid Family	98	101	94	19.7%	2,411.6	15.2%
Subtotal	465	477	477	100.0%	15,901.2	100.0%
Unemployed Labour Force	31	33	33		1,287.0	
Total Labour Force	496	510	510		17,188.2	

Sources: SaskTrends Monitor - April 2002, April 2003, April 2004 editions; Statistics Canada Cansim tables 282-0088 and 282-0089

2.3.6 Labour Force by Demographic Characteristics

The study, *Demographic Trends in Saskatchewan*, completed August 2003 for the Saskatchewan Government Relations and Aboriginal Affairs (GRAA) department, highlights several trends in demographics, migration and immigration that will impact Saskatchewan's labour market in the coming years.

- The province's population is stagnating, having been effectively at or near one million people for the past 20 years.
- Saskatchewan has the oldest labour force in Canada.
- Individuals between the ages of 25 to 54 belong to the peak labour force age group and have employment rates near 80 percent (4 out of 5 employed). However, rates begin to fall quickly at older age groups – 47 percent among those 60 to 64, and 22 percent for those 65 to 69.
- The baby boom will soon be known as the retirement boom (within next 10 years). The average age for retirement has been decreasing. The average private sector employee in Canada now retires at age 61, four years earlier than in 1982, while the average public sector employee now retires at age 58 compared with 63 in 1982 (includes health and education services, as well as crown corporations).

- Saskatchewan is beginning to reach a 'saturated' rate of employment; given the increasing participation rates of women in the labour force over the past two decades, and the high unemployment rates relative to the rest of the country.
- Saskatchewan has the highest proportion of 'multiple job holders' in Canada. Eight percent of employed individuals in Saskatchewan hold two or more jobs simultaneously, compared to a 5 percent national average.
- Saskatchewan has one of the highest rates of youth out-migration in Canada.

The report predicts that given the above realities in Saskatchewan's labour force, and continuing inter-provincial migration and mortality rates, Saskatchewan could face a demand of 50,000 to 100,000 workers over the next 10 to 15 years.

(Source: Government Relations and Aboriginal Affairs. Demographic Trends in Saskatchewan, A Statistical Analysis of Population, Migration, and Immigration. August 2003.)

2.3.7 Age of Labour Force

As mentioned above, Census 2001 revealed that Saskatchewan's labour force has the oldest workers in Canada, with an average age of 39.8 years, compared with the national average of 39.0. One factor that contributes to a relatively older workforce is the province's high proportion of workers aged 55 and over, which represents 15 percent of the total labour force, compared to 11.8 percent for Canada as a whole.

A second factor is that the number of young people aged 20 to 34 in the province's labour force declined 22.5 percent in the 1990's, a steeper drop than the national decline of 15.1 percent. The 2001 census results indicated there was an average of 2.7 entrants to the national labour force aged 20-34 for every person over 55 who was leaving, which is down from a ratio of 3.7 in 1981.

(Source: Statistics Canada. The Changing Profile of Canada's Labour Force. Catalogue No. 96FOO30XIE2001009.)

In addition, more youth today are pursuing post-secondary education, and therefore delaying their entrance into the labour market as full-time employees. Interestingly, even though the number of people aged 20 to 29 in the population has declined over the past 20 years, the number of full-time students in this age group has more than doubled.

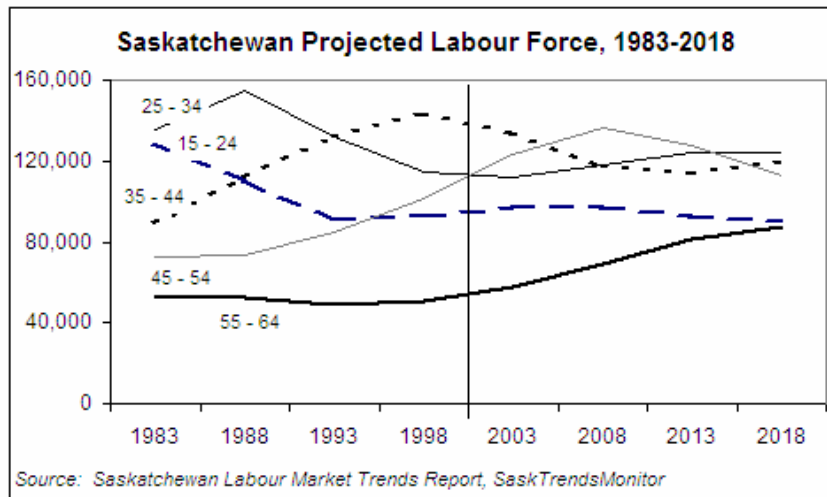
After dropping to 10.5 percent in March 2002, the youth (15-19) unemployment rate hit a high in March 2003 of 16.4 percent. Unemployment for youth in Saskatchewan dropped to 13.6 percent in May 2004, which is comparable to last year's level of 13.2 percent (note, unadjusted figures). The trend is to be expected as youth employment increases during the summer months.

The Census 2001 results reported that approximately fifteen percent of the 15.6 million Canadians were within 10 years of retirement, which indicates the potential for labour shortages in certain occupations by 2011.

In Figure 12, it is expected that the number of labour force participants in Saskatchewan will increase until 2008, when the number will begin to level off. By 2018, the three age cohorts, 25 to 34, 35 to 44, and 45 to 54, are expected to be relatively close in size, while the 55 to 64 age group will increase by almost 50 percent.

(Source: SaskNetWork website. An Overview of the Saskatchewan Economy and Labour Market 2001, <http://www.sasknetwork.gov.sk.ca/html/Home/lmi/overviewdoc/section3.2.htm>)

Figure 12: Saskatchewan Projected Labour Force



(Source: SaskNetWork website. An Overview of the Saskatchewan Economy and Labour Market 2001, <http://www.sasknetwork.gov.sk.ca/html/Home/lmi/overviewdoc/section3.2.htm>)

Although national statistics indicate that on average workers are retiring earlier, Saskatchewan has experienced a slight increase in the proportion of seniors that continue to participate in the labour force. The province's participation rate for seniors (65 and older) increased from 11.3 percent in 2000 to 13.2 percent in March 2004, as referenced in Table 17. There are many reasons seniors will continue working past sixty-five – they are healthier, better educated, need the challenge, or need to continue contributing to their retirement income.

2.3.8 Gender

Women have been making significant inroads in labour force participation over the past several years. In Saskatchewan, women's labour force participation rates for 2003 and 2004 have been approximately 61 percent, which is a three percent increase from four years ago (58 percent in 2000). Men's participation rate has remained around 73 percent over the past four years, as shown in Table 17.

The unemployment rate for women in Saskatchewan is much lower than it is for men, at 4.8 percent in the first quarter of 2004. However, the rate has been creeping slightly higher over the past two years, from 4.4 percent in 2002. Men experienced a 7.8 percent unemployment rate in March 2004, up one percent from 2003.

Nationally, women have made advances in many "non-traditional" areas, particularly in highly skilled occupations (an 8.5 percent increase). Women accounted for more than one-half of the growth during the decade (1991-2001) in those occupations that normally require a university education. Their participation doubled in information technology occupations and more than doubled in professional occupations in business and finance. The proportion of women managers has increased by more than 40 percent over the decade. In contrast, women's participation declined in college related occupations (21.5 percent), and low skilled occupations (15.3 percent)

(Source: Statistics Canada. The Changing Profile of Canada's Labour Force. Catalogue No. 96FOO30XIE2001009.)

Table 17: Unadjusted Labour Force Statistics by Gender and Age, Saskatchewan

SASKATCHEWAN LABOUR FORCE STATISTICS BY GENDER AND AGE													
	Labour Force	Employed	Unemployed	Unemployment Rate					Participation Rate				
	'000	'000	'000	%					%				
	March 2004	March 2004	March 2004	March 2000	March 2001	March 2002	March 2003	March 2004	March 2000	March 2001	March 2002	March 2003	March 2004
GENDER													
Male	274.6	253.1	21.5	8.9	7.4	7.7	6.8	7.8	73.0	72.2	72.7	72.9	73.6
Female	235.5	224.2	11.3	5.3	4.5	4.4	4.7	4.8	58.2	58.3	58.1	61.2	61.3
Total	510.1	477.3	32.8	7.3	6.1	6.2	5.9	6.4	65.5	65.2	65.3	67.0	67.4
AGE													
15-19	38.4	32.1	6.3	15.7	15.9	10.5	14.9	16.4	49.3	50.4	50.1	54.6	54.4
20-24	50.0	45.1	4.9	13.9	9.3	10.2	6.9	9.8	70.7	73.0	69.6	75.0	73.9
25-44	224.5	211.7	12.8	7.1	5.7	6.0	5.8	5.7	87.0	85.8	86.4	88.1	87.5
45-64	179.4	171.3	8.1	3.9	3.8	4.9	3.8	4.5	76.6	75.8	77.4	77.8	78.6
65+	17.7	17.0	0.7	0.0	0.0	0.0	0.0	4.0	11.3	11.3	10.3	10.5	13.2

Source: Saskatchewan Bureau of Statistics, March 2004 Labour Force Survey, Detailed Saskatchewan Unadjusted Series

Note: Figures are set at 0 if under 500 persons

2.3.9 *Aboriginals in the Work Force*

Many analysts agree that Saskatchewan's Aboriginal population is ideally suited, from a demographic perspective, to alleviate the labour shortage that is predicted to occur as the bulk of the baby boomers retire from the labour market. Statistics Canada Census 2001 data shows that one-quarter of the Aboriginal population is between 5 to 14 years of age. This means that over the next 10 to 15 years, 30,000 to 40,000 young Aboriginal people will enter the labour force age group. Assuming this age cohort can achieve higher education levels and employment rates than their parents, they will have a significant impact on the labour market.

However, in spite of social and economic advances, the education levels in the Aboriginal population are still well below the levels in the non-Aboriginal population. In part, this explains why Aboriginal employment rates are still below average, although they have improved since 1996, as seen in Table 18.

Census 2001 figures, report that the Saskatchewan Aboriginal participation rate in the labour force has increased since 1996 to 54.5 percent of the Aboriginal population. Accordingly, the Aboriginal unemployment rate has declined over the four-year period to 23 percent in 2001.

Although there have been improvements in Saskatchewan's Aboriginal labour force activity, the rates are still below the national averages for Aboriginals. Moreover, when compared to non-Aboriginal labour activity, there is still a great deal of room for improvement in narrowing the gap, particularly in employment rates. A concerted effort from political leaders, educational institutions, employers, and communities in both Aboriginal and non-Aboriginal populations will be required.

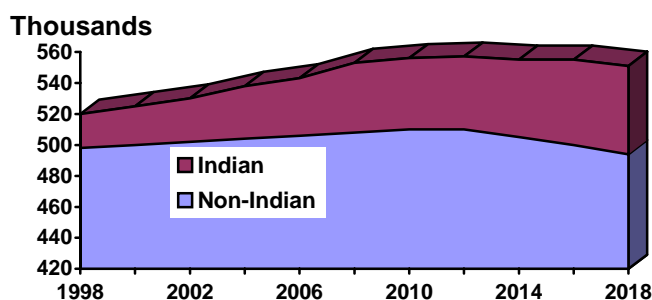
Table 18: Aboriginal and Non-Aboriginal Labour Force Activity

Aboriginal and Non-Aboriginal Labour Force Activity, Saskatchewan	Saskatchewan			Saskatchewan		
	1996			2001		
	Total Population 15 Years +	Aboriginal Population 15 Years +	Non-Aboriginal Population 15 Years +	Total Population 15 Years +	Aboriginal Population 15 Years +	Non-Aboriginal Population 15 Years +
Employment Rate	62.5%	37.7%	64.8%	63.5%	42.0%	66.0%
Unemployment Rate	7.2%	26.0%	5.9%	6.3%	23.0%	4.8%
Participation	67.3%	50.9%	68.9%	67.8%	54.5%	69.3%
Aboriginal and Non-Aboriginal Labour Force Activity, Canada	Canada			Canada		
	1996			2001		
	Total Population 15 Years +	Aboriginal Population 15 Years +	Non-Aboriginal Population 15 Years +	Total Population 15 Years +	Aboriginal Population 15 Years +	Non-Aboriginal Population 15 Years +
Employment Rate	58.9%	44.3%	59.2%	61.5%	49.7%	61.8%
Unemployment Rate	10.1%	24.0%	9.8%	7.4%	19.1%	7.1%
Participation	65.5%	58.3%	65.6%	66.4%	61.4%	66.5%

Source: Statistics Canada Table 97F0012XCB01001

The Saskatchewan Chamber of Commerce, *Action Saskatchewan: A Blueprint for 2005 – It's All About Growth*, reports that, with Saskatchewan traditionally having the lowest unemployment rates in the nation, competition or choices for employers wanting to increase their staff complements is limited. The report points out that, based on current data, the existing work force in the province will peak in 2008 and then start to decline rapidly as the aging work force heads into retirement. On the other hand, and as reported earlier, the First Nations population is growing and will continue to do so for sometime, as depicted in Figure 13. The First Nations population, according to the *Action Saskatchewan* report, will be the work force of the future in Saskatchewan. This target group, however, is not currently finding its way into the workforce at the same pace as other segments of society. This, according to *Action Saskatchewan*, represents lost productivity for the province, particularly at a time when labour shortages are increasingly common.

Figure 13: Saskatchewan's Labour Supply 1998 - 2018



(Source: Saskatchewan Chamber of Commerce. *Action Saskatchewan: A Blueprint for 2005 – It's All About Growth*, May 2002)

It is clear that economists and strategists recommend that the best strategy to deal with a general labour shortage is to continue focusing on education and employment for Saskatchewan's young and growing Aboriginal population. However, it is important to note that there are a limited number of Aboriginal youth in Saskatchewan that will mature over the next 10 to 15 years (30,000 to 40,000), and there is a predicted labour shortage of potentially 50,000 to 100,000 workers.

Subsequently, Saskatchewan will have to access other sources of labour, such as Canada's immigrant population, in order to meet future labour needs.

2.3.10 Immigrants in the Labour Force

Immigration has been an important source of growth for Canada's labour force over the past decade. Between 1991 and 2001, approximately 977,555 of the 1.8 million immigrants that arrived in Canada became part of the nation's labour force. However, the majority of this new labour force was attracted to Ontario (57.6 percent or 557,935 immigrants), followed by British Columbia (19.7 percent or 186,360 immigrants), and Quebec (12.8 percent or 124,935 immigrants), as shown in Figure 14.

Saskatchewan received only 0.6 percent of the new immigrant labour force (6,170 immigrants) in the period between 1991 and 2001. A total of 11,365 immigrants migrated to Saskatchewan in the decade.

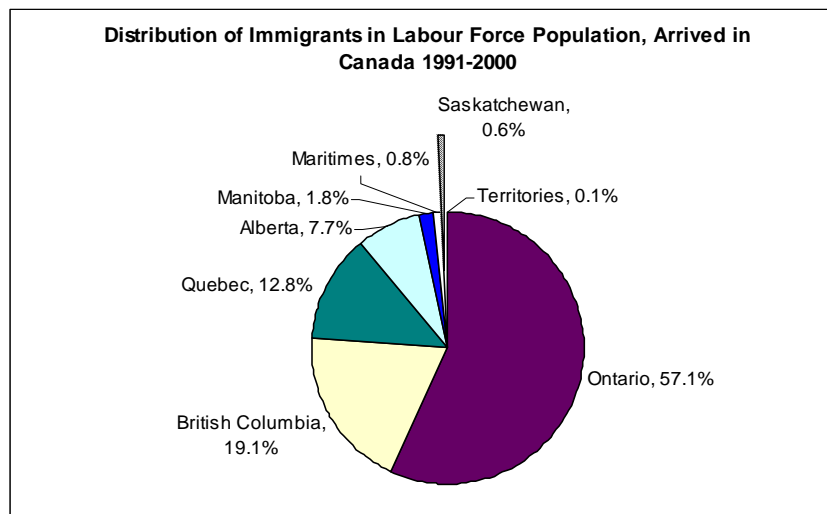
When the change in the total immigrant labour force of Saskatchewan is assessed (includes immigrants before 1991), it is evident that there has been a decline in number of immigrants participating in the province's labour force. In 1991, there were a total of 29,540 immigrants in the labour force; in 2001 that number has decreased to 25,585, a decrease of 13.4 percent. In contrast, Canada has experienced a 17.5 percent growth in the immigrant labour force since 1991, from 2,680,690 immigrants to 3,150,765.

(Source: Statistics Canada. The Changing Profile of Canada's Labour Force. Immigrant Status by Period of Immigration, 2001 Counts, for Canada, Provinces and Territories. Modified March 2004)

Saskatchewan's declining immigrant labour force may be partially attributed to the fact that on a net basis, Saskatchewan retains just over one half (57 percent) of immigrants who originally come to the province, one of the lowest rates in Canada.

(Source: Government Relations and Aboriginal Affairs. Demographic Trends in Saskatchewan, A Statistical Analysis of Population, Migration, and Immigration. August 2003.)

Figure 14: Distribution of Immigrants in Canada's Labour Force Population, Arrived in Canada 1991-2000



(Source: Citizenship and Immigration Canada. Facts and Figures 2002, Immigration Overview)

Statistics from Citizenship and Immigration Canada show that approximately 90 percent of immigrants originally destined for Saskatchewan come from three main immigration classes or groups – skilled workers, family class, and refugees.

In comparison to the country, Saskatchewan receives a much larger proportion of refugees, and a lower proportion of skilled workers or business class immigrants. Over one-third of the province's immigrants come to Saskatchewan as refugees, compared to 11 percent Canada-wide, as recorded in Figures 15 and 16.

Well over one-half of Canada's immigrants (58.7 percent) are either skilled workers or business class immigrants who can readily contribute to the country's labour market and economy. In Saskatchewan, only one-third of the immigrants (33.5 percent) are skilled or business class immigrants.

Figure 15: Immigrant Class, Saskatchewan

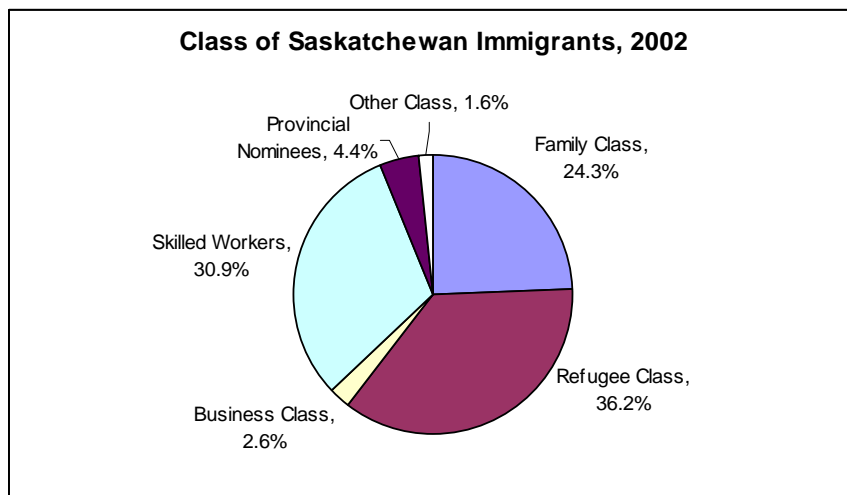
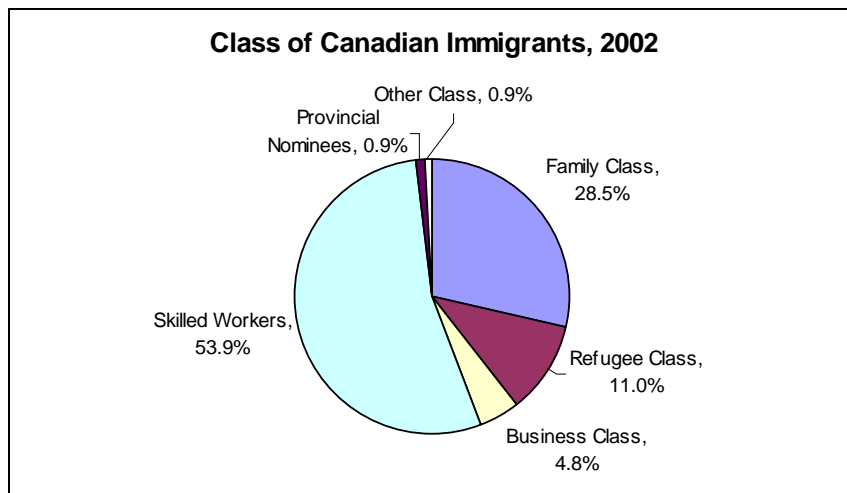


Figure 16: Immigrant Class, Canada



(Source: Citizenship and Immigration Canada. Facts and Figures 2002, Immigration Overview)

A special tabulation from Census 2001 was obtained for a study of *Demographic Trends in Saskatchewan*, conducted on behalf of Government Relations and Aboriginal Affairs in 2003. The data contained information on immigrants who were living in Saskatchewan at the time of the census, and thus does not include those immigrants who have left Saskatchewan.

The following are select highlights of the findings:

- More than one half of recent immigrants to Saskatchewan are members of a visible minority group.
- Although 71 percent of recent immigrants (those who came to Saskatchewan since 1980) report a language other than English as their mother tongue and 61 percent use a language other than English at home, 95 percent can speak English well enough to carry a conversation.
- Recent immigrants in the 15 to 24 age group are more likely to be going to school than non-immigrants. Sixty-eight percent of immigrants 15 to 24 years attended school in the 2000-2001 academic year.
- Completed education levels among immigrants, particularly those who immigrated after 1961, are much higher than non-immigrants. More than one-quarter have a university degree.
- Recent immigrants with a post-secondary education tend to have degrees, diplomas or certificates in the physical sciences including engineering. They are less likely than non-immigrants to have post-secondary qualifications in commerce, business administration or in the trades.
- Recent immigrants, particularly men, are more likely to be employed than non-immigrants. Those who migrated from 1961 to 1980 have a very high attachment to the labour force, with 60 percent working full-time throughout 2000.
- Three quarters of recent immigrants (74 percent) live in Saskatchewan's two largest cities, Saskatoon and Regina.

(Source: Government Relations and Aboriginal Affairs. *Demographic Trends in Saskatchewan, A Statistical Analysis of Population, Migration, and Immigration*. August 2003.)

Immigrants could be an important source of new labour, supplementing Saskatchewan's growing youth Aboriginal population, to meet the forecasted labour shortage in the next ten to fifteen years. To counter Saskatchewan's declining immigrant activity, in May 2004, the Saskatchewan government announced plans to expand the province's immigration program to attract more foreign students; more skilled workers; and provide more opportunities for business owners. The focus will be in the provincial nominee's class. The province's target for 2004-05 is 300 nominations, a significant increase from the 73 nominees reported by Citizenship and Immigration Canada for 2002. The province estimates that a total of 1,000 new immigrants (provincial nominees and dependents) could come to Saskatchewan as a result of the initiative.

(Source: Government Relations and Aboriginal Affairs. *Saskatchewan Expanding Immigration Program*. News Release. May 6, 2004)

2.3.11 Education and Skill Requirements by Occupational Class

Statistics Canada has analyzed the labour market using three broad categories of occupation groups, based on the nature of employees' work and duties. They have assigned an estimated skills level that reflects the level of education normally required in the labour market for a particular occupation.

The three categories include:

- Highly skilled occupations normally requiring a university education;
- Skilled occupations normally requiring a college diploma or certificate or apprenticeship training;
- Low-skilled occupations normally requiring a high school diploma or less.

Managers, as an occupational group, have been given their own category. They are not included in this skill-based classification due to a high degree of variation in their background and education attainment.

It is important to note that these classifications do not reflect the actual level of education the population has obtained, but rather the level of education and skills required for an occupation, based on the nature of the work.

The Census 2001 results revealed that all provinces and territories experienced strong growth in the number of people in the labour force in highly skilled occupations over the past decade. At the national level, highly skilled occupations requiring a university education increased by 32.9 percent, between 1991 and 2001. Saskatchewan experienced a growth of 17 percent in highly skilled occupations, over the decade, as recorded in Table 19.

Skilled occupations, requiring a community college diploma or apprenticeship training, did not experience the same level of growth, nationally or provincially. Within the skilled occupations, there was a 3.8 percent national decline in the number of people in occupations normally requiring apprenticeship training, such as skilled trades. In particular, the number with skills in certain construction trades plunged by between 40 percent and 60 percent. In contrast, the number of skilled occupations usually requiring a college education increased 6 percent in Canada, during the decade.

Saskatchewan experienced a 3.3 percent decline in the number of skilled occupations requiring a college education, and a 1.8 percent increase in occupations with apprenticeship training requirements.

The proportion of low-skilled occupations, which only require a high school education or less, has remained at nearly one-half of all occupations in Saskatchewan and Canada (approximately 43 percent). The significant proportion of low-skilled occupations required by the labour force is one of the main reasons that basic education and essential employability skills training will continue to be important.

(Source: Statistics Canada. The Changing Profile of Canada's Labour Force. Catalogue No. 96FOO30XIE2001009.)

Table 19: Growth in Occupational Skill Groups from 1991 to 2001

Occupational Skill Groups, Canada	1991	2001	Growth 1991-2001
	Distribution of Occupational Skills Groups	Distribution of Occupational Skills Groups	
University	13.4%	16.2%	32.9%
College	22.3%	21.6%	6.2%
Apprenticeship Training	9.4%	8.3%	-3.8%
Secondary or Less	45.1%	43.4%	5.4%
Managers	9.7%	10.4%	17.2%
All Occupations	100.0%	100.0%	9.5%
Occupational Skill Groups, Saskatchewan	1991	2001	Growth 1991-2001
	Distribution of Occupational Skills Groups	Distribution of Occupational Skills Groups	
University	11.4%	13.3%	17.1%
College	29.5%	28.5%	-3.3%
Apprenticeship Training	8.0%	8.1%	1.8%
Secondary or Less	43.1%	42.3%	-1.7%
Managers	8.1%	8.5%	5.2%
All Occupations	100.0%	100.0%	0.8%

Source: Statistics Canada, 2001 Census: The Changing Profile of Canada's Labour Force, Catalogue no. 96F0030XIE2001009

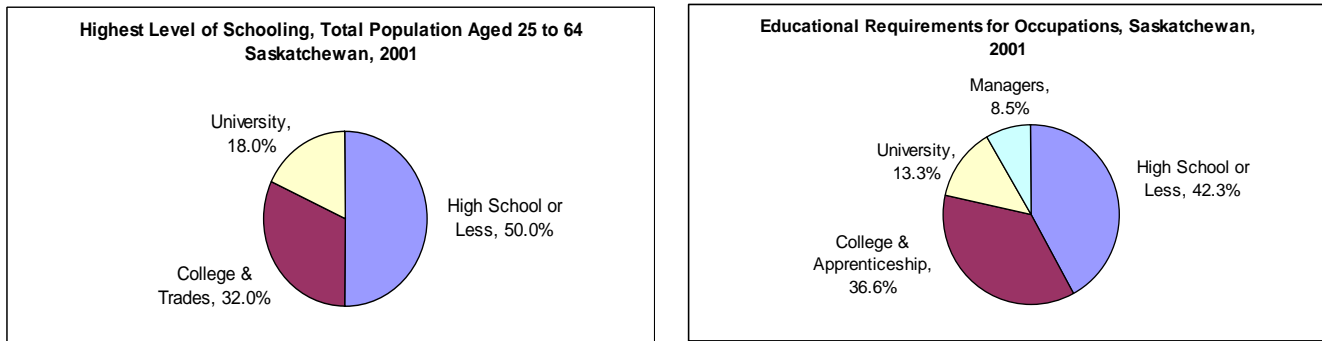
Note: The data does not reflect the level of education the population has obtained, but rather the level of education required for an occupation, based on the nature of employees' work and duties.

Although highly skilled occupations, requiring a university degree, have accounted for the majority of the labour force growth for both Canada and Saskatchewan over the past decade; college and apprenticeship trained (skilled) occupations still account for over one-third (36.6 percent) of the labour force requirements in Saskatchewan. As Table 19 above indicates, this is more than twice the proportion of highly skilled workers (13.3 percent) in Saskatchewan.

In comparing the actual educational levels of Saskatchewan residents to the educational requirements for occupations, it is evident that there is still some need to increase education and skills in the area of college and apprenticeship training. According to Census 2001, the proportion of occupations that required college or apprenticeship training in Saskatchewan is approximately 37 percent, while only 32 percent of Saskatchewan residents, aged 25 to 64, currently have college or trades training. Note, Statistics Canada did not give a specific break down for apprenticeship training when reporting highest level of schooling, but have included a trades category, as shown in Figure 17.

Approximately 18 percent of Saskatchewan's population has university training, while only 13.3 percent of occupations specifically require university education. However, one can assume that a proportion of the 8.5 percent of 'managers' will also require a university education, even though Statistics Canada states there is a high degree of variation in the background and education attainment of this group.

Figure 17: Educational Level of Population Compared to Educational Requirements for Occupations, Saskatchewan, 2001



(Sources: Canadian Education Statistics Council. Education Indicators in Canada: Report of the Pan-Canadian Education Indicators Program 2003 and Statistics Canada, 2001 Census: The Changing Profile of Canada's Labour Force – Adapted)

Recently, Statistics Canada has reported there has been a shift in the 1990s trend toward highly skilled workers. In 2003, the demand for people with university degree slowed just as supply accelerated. Meanwhile, employment opportunities picked up for other skilled workers, in part due to the robust growth in construction and the primary sector, which enjoyed its best year in two decades as commodity prices rose dramatically.

As a result, the gap in the unemployment rate for people with and without a university degree shrank to a record low. This also generated the smallest gap between blue-collar and white-collar jobs in over a decade. Nationally, the unemployment rate for blue-collar workers fell from 8.1 percent in 2002 to 7.7 percent in 2003, while white-collar unemployment rose to 4.5 percent (seasonally adjusted figures).

(Source: Statistics Canada. The Economy: Year-End Review. 2003. The Daily)

2.3.12 Labour Force, Post-Secondary Qualifications and Major Fields of Study

As mentioned earlier, a greater number of youth are pursuing post-secondary education. As a result, the labour force is becoming increasingly skilled, with over half of Canada's labour force (52.3 percent) having acquired some form of post-secondary qualifications in 2001. This is an increase of 8 percent from 1991 census figures. The proportion of Saskatchewan's labour force with post-secondary qualifications has also increased by 6.4 percent since 1991 to 45.8 percent, as referenced in Table 20.

Table 20: Labour Force Attainment of Post- Secondary Qualifications, 1991 to 2001

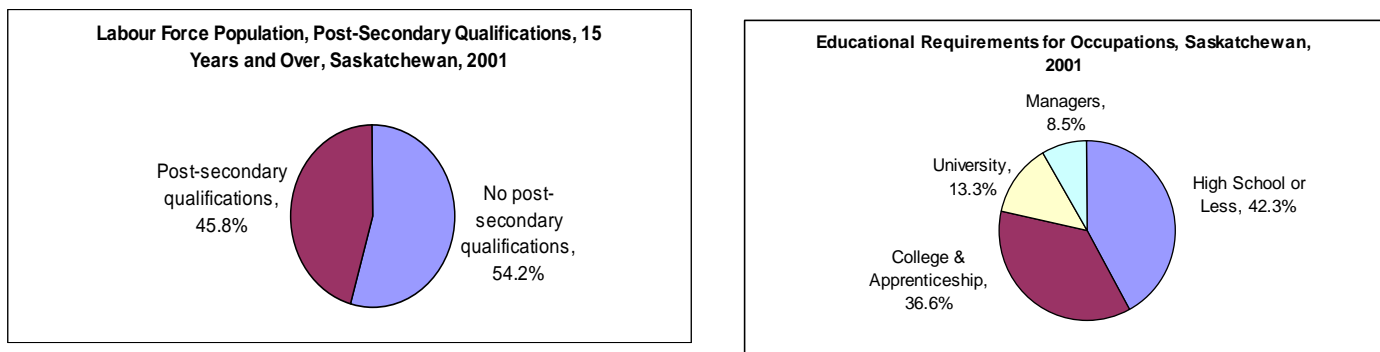
Labour Force Attainment of Post-Secondary Qualifications, 15 Years or Over Saskatchewan and Canada	Saskatchewan				Canada			
	1991		2001		1991		2001	
	#	%	#	%	#	%	#	%
No postsecondary qualifications	307,035	60.6%	277,420	54.2%	506,300	55.7%	512,240	47.7%
Post-secondary qualifications	199,265	39.4%	234,820	45.8%	14,474,945	44.3%	15,872,070	52.3%

Source: Statistics Canada Table 97F0012XCBO1048

Figure 18 illustrates that although a greater proportion of the labour force population has obtained post-secondary qualifications over the past decade, there is still a gap in the proportion of occupations which require some type of post-secondary training and the proportion of labour force participants with post-secondary education as their highest level of schooling.

Once again utilizing Statistics Canada occupational skills levels for comparison, it is evident there is a smaller proportion of individuals in the labour force, aged 15 years or over, with some form of post-secondary education (45.8 percent) than is required by existing occupation skill levels (approximately 58 percent of labour force). Note, this conclusion is made assuming the majority of managers require some form of post-secondary training.

Figure 18: Post-Secondary Qualifications of Labour Force Population Compared to Educational Requirements for Occupations, Saskatchewan, 2001



(Sources: Statistics Canada, Table 97F0012XCB01048 and 2001 Census: The Changing Profile of Canada's Labour Force – Adapted)

In 2001, the major fields of study taken by Saskatchewan labour force participants included applied science technologies and trades (23.8 percent), commerce, management and business administration (20.2 percent), followed by health professions (14.3 percent) and educational, recreational and counselling services (13.2 percent). Canada also has a similar proportion of labour force participants in these fields of study, although there is a slightly higher number of individuals with a social sciences background as opposed to education, as outlined in Figure 19. Following employment trends, Saskatchewan has a higher proportion of individuals, relative to the nation, with health or education related post-secondary qualifications. Note, in this instance, the data indicates the fields of study chosen by the labour force population and does not necessarily reflect the occupational skills required.

The areas of study that Saskatchewan labour force participants are least involved in are mathematics, computer and physical sciences (2.1 percent) and engineering and applied sciences (2.0 percent). Labour participants across Canada are also less likely to have a post-secondary education in these fields of study, although the proportions of individuals who do have these types of training are higher than Saskatchewan (3.9 percent for math etc, and 4.8 percent for Engineering). Agriculture, biological, nutritional, and food sciences, is also a less common field of study for the Canadian workforce (4.7 percent), relative to Saskatchewan.

Figure 19: Labour Force Population with Post-Secondary Qualifications, by Major Field of Study, 2001

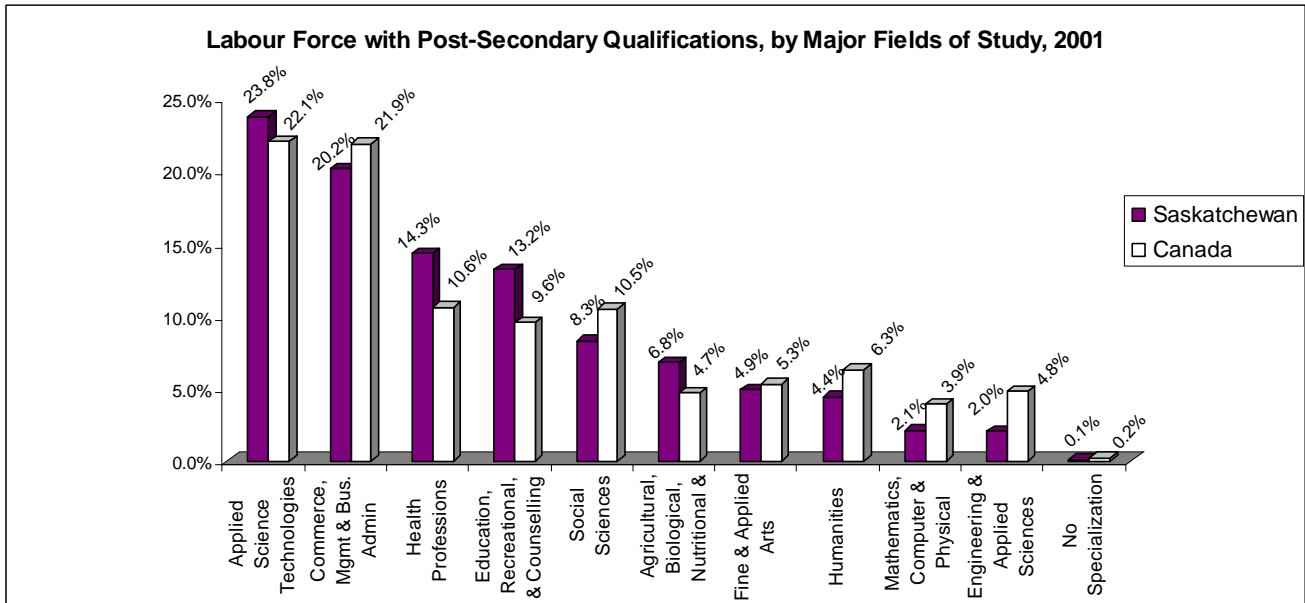


Table 21 reports that over the past decade, the distribution of the labour force population with post-secondary skills among the major fields of study has remained relatively constant, with slight shifts occurring across the majority of fields. In Saskatchewan, the social sciences field has seen a modest increase (1.8 percent) in the proportion of post-secondary studies, while applied science technologies and trades has declined slightly (1.1 percent). Canada has followed a similar trend.

Table 21: Labour Force Population with Post-Secondary Qualifications, by Major Fields of Study, 1991 to 2001

Labour Force With Post-Secondary Qualifications By Major Field of Study, 15 Years or Over Saskatchewan and Canada, 1991-2001	Saskatchewan		Canada	
	1991	2001	1991	2001
Educational, recreational and counselling services	13.8%	13.2%	9.7%	9.6%
Fine and applied arts	4.8%	4.9%	5.3%	5.3%
Humanities and related fields	4.4%	4.4%	6.0%	6.3%
Social sciences and related fields	6.5%	8.3%	9.0%	10.5%
Commerce, management and business administration	20.8%	20.2%	22.1%	21.9%
Agricultural, biological, nutritional, and food sciences	6.1%	6.8%	4.6%	4.7%
Engineering and applied sciences	2.1%	2.0%	4.0%	4.8%
Applied science technologies and trades	24.9%	23.8%	24.5%	22.1%
Health professions and related technologies	14.2%	14.3%	11.1%	10.6%
Mathematics, computer and physical sciences	2.2%	2.1%	3.4%	3.9%
No specialization	0.1%	0.1%	0.3%	0.2%

Source: Statistics Canada Table 97F0012XCB01048

Although there has been a slight decrease in the proportion of labour force participants with applied science technologies and trades relative to all other fields, this field has been one of the top contributors to the growth in Saskatchewan's post-secondary qualifications since 1991, representing 17.5 percent of the total growth, as shown in Table 22. Other fields of study that have had a larger impact on the growth in post-secondary qualifications include the social sciences and

related fields with an 18.3 percent contribution, commerce, management, and business administration with 16.8 percent, followed by health professions and related technologies with 14.7 percent.

Table 22: Contribution by Major Field of Study to Growth in Post-Secondary Qualifications

Total Labour Force By Major Field of Study 15 years or Over, Saskatchewan and Canada	% Contribution to Growth of Post-Secondary Qualifications, 1991-2001	
	Saskatchewan	Canada
Educational, recreational and counselling services	9.5%	9.3%
Fine and applied arts	5.3%	5.2%
Humanities and related fields	4.4%	7.3%
Social sciences and related fields	18.3%	15.3%
Commerce, management and business administration	16.8%	21.2%
Agricultural, biological, nutritional, and food sciences	10.7%	5.2%
Engineering and applied sciences	1.0%	7.6%
Applied science technologies and trades	17.5%	14.1%
Health professions and related technologies	14.7%	9.2%
Mathematics, computer and physical sciences	1.7%	5.6%
No specialization	0.1%	-0.1%

Source: Statistics Canada Table 97F0012XCB01048

2.3.13 Canada Employment Outlook for 2004

According to a Manpower Employment Outlook Survey, the 1,700 Canadian employers surveyed are expecting a strong second quarter hiring climate for 2004. Of the employers surveyed in Western Canada, 33 percent intend to hire and 6 percent anticipate cut backs for a net employment outlook of 27 percent. This is a significant turnaround from the region's first quarter forecast that projected only a positive 5 percent net employment outlook.

The construction and wholesale & retail trade sectors have rebounded significantly from the negative net employment outlooks in the first quarter forecast. Employers in the construction sector lead the way with a net employment outlook of + 44 percent up from - 8 percent in quarter one. In the retail and wholesale sector, net employment is projected to be + 36 percent, up from - 9 percent three months earlier.

Additional Western Canadian sectors expecting positive net employment for the first half of 2004 include manufacturing, public administration, services, and transportation and public utilities.

Table 23 reports that the sectors which have lowered their employment outlook in the second quarter of 2004 include education; finance, insurance and real estate; and mining.

Saskatoon has the lowest net employment outlook in Western Canada, with a net of + 14 percent of employers intending to hire in the second quarter of 2004. However, this is an improvement from the first quarter of 2004 when there was a negative net employment outlook of - 6 percent.

(Source: Manpower. Manpower Employment Outlook Survey Canada, 2nd Quarter 2004)

Table 23: Manpower Employment Outlook Survey 2004

Manpower Employment Outlook Survey 2004

Western Canada	Increase		Decrease		No Change		Don't Know		Net Employ. Outlook	
	Q1	Q2	Q1	Q2	Q1	Q2	Q1	Q2	Q1	Q2
	%		%		%		%		%	
All Industries	19	33	14	6	63	56	4	5	5	27
Construction	19	44	27	0	46	44	8	11	-8	44
Education	25	25	0	20	67	45	8	10	25	5
Finance, Insurance & Real Estate	24	10	12	10	60	80	4	0	12	0
Manufacturing - Durables	23	29	10	11	68	61	0	0	13	18
Manufacturing - Non-Durables	16	36	16	0	63	61	6	4	0	36
Mining	23	0	8	0	54	86	15	14	15	0
Public Administration	11	32	0	4	86	60	4	4	11	28
Services	18	38	10	5	68	50	4	8	8	33
Transportation & Public Utilities	15	27	12	8	64	65	9	0	3	19
Wholesale & Retail Trade	20	43	29	7	51	47	0	3	-9	36

Source: www.manpower.com

2.3.14 Occupation Shortages

Census 2001 Indicators

As mentioned earlier, Census 2001 data forecasts that an aging population and workforce will create critical shortages in several occupations in the next ten years.

There is a general consensus that the national health sector may be in greatest danger of labour shortfalls. Analysts forecast that rising demand for medical services from an aging population will create thousands of new public sector jobs over the next few years.

Medical specialists and general practitioners tend to be older than the overall workforce average and are thus closer to retirement. The average age of a nurse in Canada is lower than that of general practitioners, but is still rising rapidly because there are a declining number of new entrants to the field. In 1991, there were almost five nurses aged 20-34 for every nurse aged 55 and over. By 2001, there were fewer than two young nurses for every nurse 55 and over.

There are also concerns over shortages of skilled trades for the construction sector, where there is a relatively large share of older workers. Plumbers, pipefitters, carpenters and electricians are among the occupations that have aged most rapidly in the last ten years.

(Source: The Canadian Press. Census Forecasts Job Shortages Within a Decade. 2003)

Human Resources and Skills Development Canada Employment Prospects

Human Resources and Skills Development Canada provides a quarterly report on the occupational shortages that occur in Saskatchewan for selected cities. Table 24 summarizes the occupations for where there are likely to be recruiting difficulties over the first half of 2004 due to a lack of available, qualified workers in the labour market. The table is organized by the four SIAST campus cities; other major southern Saskatchewan communities (Yorkton, Estevan, Swift Current and Weyburn); and other major central and northern Saskatchewan communities (Melfort, North Battleford, and LaRonge).

The health care field has the most predominant shortages, especially those occupations that are required in all regions of Saskatchewan. These include general practitioners, family and specialist physicians, pharmacists, psychologists, nurses (registered, licensed practical, operating room

technicians, primary care, and others), physiotherapists, audiologists and speech language pathologists, among others.

Other occupations that have reported shortages in three or more regions include experienced Class 1A license truck drivers, heavy-duty equipment mechanics, automotive service technicians, truck mechanics and mechanical repairers, and cooks in specialized areas/full-service/foreign foods.

On the other end of the spectrum, HRSDC also reports on the occupations for which there is a surplus of qualified available workers, as shown in Table 25. Provincially, those occupations for which additional workers are not in demand include construction trades helpers and labourers, general farm workers, heavy equipment operators, landscaping and grounds maintenance labourers, elementary and kindergarten school teachers, and retail sales persons, clerks, cashiers. Due to the softwood trade dispute with the United States, the northern communities will have a surplus of labourers such as silviculture and forestry workers, sawmill machine operators, and pulp mill operators.

HRSDC also provides a list of hard-to-fill occupations for applicable regions, which consist of occupations where employers find it difficult to recruit or keep workers because of the nature of the work, wages, working conditions, hours, location, or other related reasons. The complete occupational outlook is available through the Saskatchewan Regional Services: Employment Prospects section of the HSRDC site –

http://www.hrsdc.gc.ca/en/sk/lmi/employment_prospects.shtml

(Source: Department of Human Resources and Skills Development Canada Website. Saskatchewan Regional Services. Employment Prospects.)

A more detailed analysis and description of labour shortages, based on SIAST consultations with industry, business and provincial associations is provided in section three of this report.

Upcoming Occupational Forecasts

The Government of Saskatchewan has released the Saskatchewan Employment Demand (SED) Forecast 2003, a five-year projection of provincial employment demand by occupation and industry for 2002 to 2007. Further information on the findings of the report may be obtained from the Policy and Evaluation Branch of Saskatchewan Learning, at (306) 787-7393.

Table 24: HRSDC Saskatchewan Regional Services, Shortage Occupations for Saskatchewan, Quarter 1- Quarter 2, 2004

HRSDC SASKATCHEWAN REGIONAL SERVICES, EMPLOYMENT PROSPECTS						
SHORTAGE OCCUPATIONS						
	SIAST CAMPUS CITIES - Jan-March, 2004				April-June, 2004	Jan-March, 2004
	Saskatoon	Regina	Prince Albert	Moose Jaw	Other Major Southern SK Communities	Other Major Central & Northern SK Communities
Nursing, Science and Health						
Ambulance Attendants and Other Paramedical Occupations (Paramedic)	y					
Audiologists and Speech-Language Pathologists	y	y	y (long-term)		y	y
Dental Hygienists and Dental Therapists						y (La Ronge Area)
Dietitians and Nutritionists	y					
General Practitioners and Family Physicians (Rural Areas)	y	y	y (long-term)	y	y (long-term)	y (long-term)
Head Nurses and Supervisors (Patient Care Supervisors)	y					y
Licensed Practical Nurses and Operating Room Technicians	y	y (LPNs only)	y (LPNs only)		y (LPNs only)	
Managers in Health Care					y	
Medical Laboratory Technologists and Pathologists' Assistants	y	y				
Medical Sonographers (Ultrasound Technologists & Sonographers)	y	y				
Occupational Therapists	y	y				
Orthotists and Prothetists	y	y				
Other Professional Occupations in Health Diagnosing and Treating (Podiatrist)	y		y (long-term)			
Pharmacists (Pharmacy Technician - Regina)	y	y		y	y (long-term)	y (long-term)
Physiotherapists (Physical Therapists)	y	y			y	y
Psychologists (Ph.D., Early Childhood - central/Northern SK)	y	y (Clinical)	y		y	y
Public Health Inspectors					y	
Registered Nurses, Psychiatric Nurses, and Primary Care Nurses	y	y (RNs only)	y (long-term)	y (RNs only)	y (RNs L-T)	y (long-term)
Respiratory Therap., Clinical Perfusionists & Cardio-Pulmonary Technologists	y	y				
Specialist Physicians (Psychiatrists, Specialized Surgeons, Pediatricians)	y	y	y (long-term)	y	y (long-term)	y (long-term)
X-Ray Technicians and Nuclear Medicine Technologists (MRI Technologists)	y					
Community Services						
Community and Social Service Workers					y	y
Cooks (Specialized Areas, Full-service, Foreign Foods)		y		y (f-s, foreign)	y (full-service)	
Hairstylists and Barbers					y (Swift Current)	
Retail Trade Managers & Technical Wholesale Trade Specialists					y (Swift Current)	
Secondary School Teachers (math-science and French only)				y		
Trades, Industrial Training, and General Labour						
Automotive Service Technicians, Truck Mechanics and Mechanical Repairers (journey persons only - Swift Current)	y	y (Truck&Trailer)			y	
Electrical Power Line and Cable Workers		y				
Heavy-Duty Equipment Mechanics (journey persons only - Swift Current)	y	y			y	y
Motor Vehicle Body Repairers (journey persons only - Swift Current)				y	y	
Oil and Gas Well Supervisors, Drillers, Testers, Labourers, and Servicing/Services Operators					y (Swift Current)	
Truck Drivers (experienced, Class 1A license, long haul)	y	y	y	y	y	y
Agriculture						
Agricultural Representatives, Consultants, and Specialists					y (Swift Current)	

(Source: Department of Human Resources and Skills Development Canada Website. Saskatchewan Regional Services. Employment Prospects.)

Table 25: HRSDC Saskatchewan Regional Services, Surplus Occupations for Saskatchewan, Quarter 1- Quarter 2, 2004

SURPLUS OCCUPATIONS						
	SIAST CAMPUS CITIES - Jan-March, 2004				April-June, 2004	Jan-March, 2004
	Saskatoon	Regina	Prince Albert	Moose Jaw	Other Major Southern SK Communities	Other Major Central & Northern SK Communities
Community Services						
Cooks (except full-service and foreign foods)						y
Customer Service, Information, and Related Clerks				y		
Elementary School and Kindergarten Teachers				y	y	y
Food and Beverage Servers					y	y
Food Counter Attendants, Kitchen Helpers and Related Occupations				y	y	
Light Duty Cleaners & Janitors, Caretakers, Building Superintendents					y	
Program Leaders and Instructors in Recreation and Sport					y	
Retail Sales/Trade Managers				y		y
Retail Salespersons, Sales Clerks, Parts Clerks/Storekeepers, Cashiers	y			y	y	y
Business & Business Services						
Bookkeepers						y
Couriers, Messengers, and Door-to-Door Distributors						y
General Office Clerks		y			y	y
Insurance Adjusters and Claims Examiners					y	
Sales, Marketing, and Advertising Managers					y	
Secretaries (except legal and medical)						y
Trades, Industrial Training, and General Labour						
Automotive Service Technicians, Truck Mechanics and Mechanical Repairers (Except 3rd-4th year apprentices and journeypersons)						y
Bus Drivers and Other Transit Operators					y	
Carpenters					y	
Construction Trades Helpers and Labourers	y	y	y		y	y
Electricians (Except Industrial and Power System & journeypersons)					y	
Farmers and Farm Managers/Supervisors & Specialized Livestock Workers				y	y	
General Farm Workers	y	y	y	y	y	y
Heavy Equipment Operators (Except Crane)	y	y			y	y
Labourers in Wood, Pulp, and Paper Processing (Sawmill Labourers; Logging Machinery Operators; Chain-saw and Skinner Operators)					y	y
Landscaping and Grounds Maintenance Labourers (Horticultural Technicians & Specialists - Moose Jaw)	y	y		y		y
Mechanical Assemblers and Inspectors						y
Mine Labourers						y
Oil & Gas Well Drillers, Testers, Labourers, and Servicing/Services Operators					y (Yorkton)	
Other Labourers Processing, Manufacturing, and Utilities						y
Pulp Mill Machine Operators			y			
Sawmill Machine Operators			y			y
Silviculture and Forestry Workers			y			y
Truck Drivers (Without Class 1A or Class 3 license)					y	
Welders, Structural Metal and Platemwork Fabricators and Fitters					y	y

(Source: Department of Human Resources and Skills Development Canada Website. Saskatchewan Regional Services. Employment Prospects.)

2.4 The Economy

2.4.1 Canada

Statistics Canada reported that the country realized a real GDP growth of 1.7 percent, down from the 3.3 percent growth rate recorded in 2002. There were several challenges in 2003 that slowed the pace of GDP growth nationally. Canada experienced depressed exports due to a high appreciation in the value of the Canadian dollar; a SARS outbreak on the tourism industry; the discovery of mad cow disease leading to a U.S. ban on cattle and beef exports; punitive tariffs against the forestry industry due to the ongoing Canada-U.S. softwood lumber dispute; a power outage in Ontario, which shut down many industries for more than a week, as well as other natural disasters (i.e.; fire in B.C., grasshopper blight in prairies, hurricane in Atlantic).

Canada's primary sectors, although heavily export oriented, managed to record an impressive economic growth rate of 8 percent in 2003, according to Statistics Canada. Increased U.S. demand and rising commodity prices contributed to this growth. Unless commodity prices experience significant decline, the resource-based sectors should continue to do well despite the currency's strength.

The agriculture industry faced many challenges in 2003. Agriculture prices in US dollars fell slightly last year, and, as a result, many did not profit from increased output. A ban on cattle and beef exports, due to a single case of mad cow disease was a heavy blow to the industry. The U.S. border has recently re-opened to Canadian shipments of boneless beef from animals less than 30 months of age, but other restrictions remain. U.S. hog producers are now seeking duties on Canadian live hog imports.

Western crop production rebounded after two years of drought in 2003. However, weather conditions will continue to cause a high degree of uncertainty on the level of output the agricultural industry will achieve in the coming year.

The increased value of the Canadian dollar hit the export-oriented manufacturing sector hard. According to Statistics Canada, the manufacturing sector experienced a -0.2 percent annual average change in economic growth in 2003. Manufacturing output ground to a halt, employment declined, and profits contracted. Although manufacturing activity strengthened for the end of 2003, the stronger dollar is anticipated to remain a barrier in 2004.

(Source: TD Bank Financial Group. Quarterly Economic Forecast. March 11, 2004)

In addition, the negative effect of the Iraq war on the U.S. economy has adversely affected a broad range of export-dependent industries, including motor vehicles and parts, primary metals, electrical and electronic products, machinery, and textiles.

Oil and Gas output increased the fourth quarter of 2003 as high energy prices encouraged drilling. Oil and gas profits rose by 61 percent in 2003. In 2004, although crude oil prices are likely decrease, both crude oil and natural gas will remain at highly profitable levels.

Nationally, construction experienced a high level of activity in 2003, primarily in housing markets, which saw the highest level of housing starts in 15 years. Moreover, strong corporate profit growth also provided a boost to non-residential construction. It is anticipated that the pace of the construction industry growth will slow in the coming year, although the level of activity will remain high.

Tourism and accommodation and food services were the hit hard by the SARS outbreak, the war in Iraq, and global concerns about air travel, as well as the impact of the Canadian dollar. It is anticipated the sector will begin to rebound in 2004, but will still feel the effect of the higher Canadian dollar.

Transportation services suffered in response to the ban on cattle and beef exports and the slowdown in manufacturing. Economists forecast that strong U.S. demand and an improvement in manufacturing conditions will be favorable for transportation in 2004.

Professional and administrative services have been, and should continue experience, stable output growth due to a combination of rising corporate profits, and a continued trend toward outsourcing.

Solid growth in consumer spending supported national wholesale and retail activity in 2003, which recorded output growth of 5.8 percent and 1.4 percent respectively. The lower growth level in retail activity was due primarily to slumped automobile purchasing. Excluding automobiles, retail trade rose by 3.4 percent in 2003. It is predicted that Canadian consumers are likely to keep their wallets open for 2004.

Looking at 2004 and 2005, economists predict that Canada should experience annual GDP gains of 2.6 and 3.4 percent, respectively. This stable growth should result from an increase in business spending, and gradually exports, in spite of an expected softening in consumer spending.

(Source: BMO Financial Group Economics Department. Regional Outlook. October 2003)

(Source: TD Bank Financial Group. Quarterly Economic Forecast. March 11, 2004)

2.4.2 Saskatchewan

Saskatchewan's real gross domestic product (GDP - value of goods and services produced after adjusting for inflation) grew by 4.5 percent in 2003, recovering from a two-year recession, as reported in Figure 20. Also, Figure 21 records that this growth rate places Saskatchewan third in the country after the North West Territories (10.6 percent growth due primarily to diamond mining), and Newfoundland (6.5 percent growth due primarily to oil exploration). Saskatchewan's real GDP growth is well ahead of neighbouring provinces (Alberta at 2.2 percent and Manitoba at 1.4 percent), and a national total of 1.7 percent.

Figure 20: Growth in Real Gross Domestic Product, Canada, Provinces, Territories, 2003

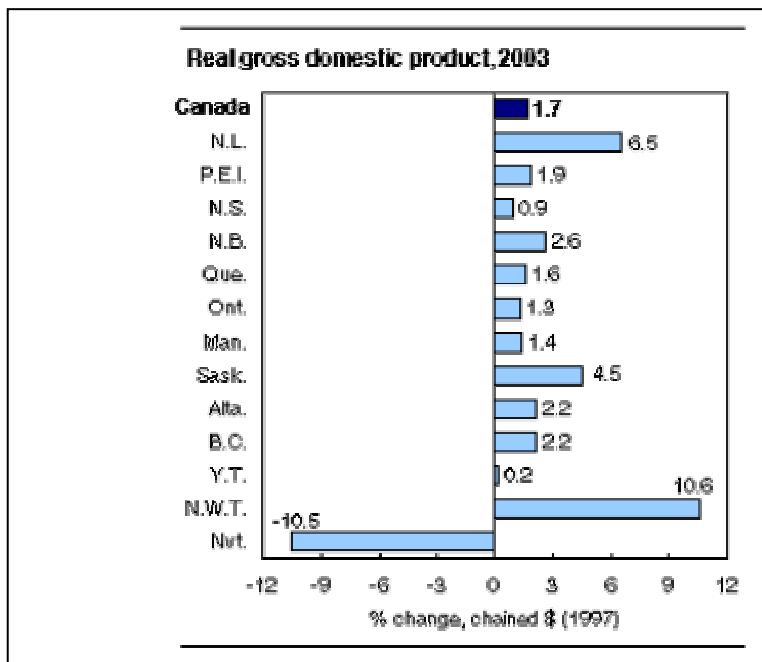
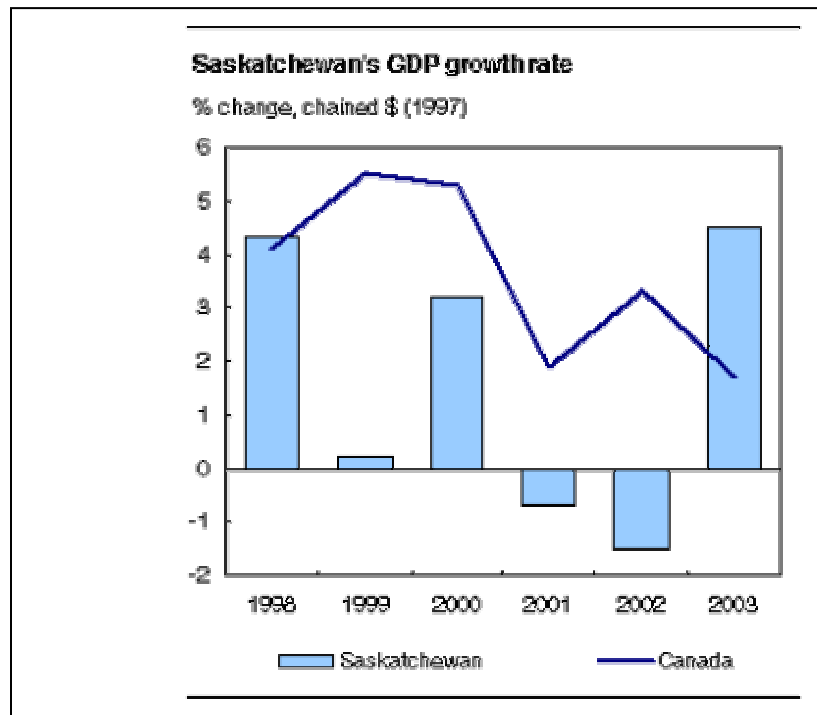


Figure 21: – Saskatchewan's GDP Growth Rate, 1998 - 2003



(Sources: SaskTrends Monitor. Volume XXI, Number 4. April 2004; and, Statistics Canada, The Daily, Wednesday, April 28, 2004, Provincial and Territorial Gross Domestic Product)

In 2003, Saskatchewan farmers experienced an increase in farm production following two years of drought. However, farmers continued to lose money as prices for grains slipped during the year and livestock producers were battered by the mad cow scare. Subsequently, farm inventories increased and exports of cattle and calves, many of which go to Alberta for processing, fell.

The value of manufacturing shipments was initially up 10.5 percent for the first two months of 2004, compared with the same period in 2003. However, shipments dropped by 6.3 percent in April, largely confined to machinery, transportation equipment, wood and related products.

Potash production was up 5.9 percent in 2003, after a 4.4 percent increase in 2002, while potash sales (in tones) were up 8.3 percent compared to 2002. However, the increased production has not quite made up for the ground lost in 2001, when production dropped by over 10 percent.

The mining and oil and gas extraction industry also contributed to the provincial economy's turnaround. The number of oil and gas wells drilled in 2003 (4,157) was up by 679 wells over 2002. The production of natural gas increased by 7.4 percent to 9.0 billion cubic metres compared to 2002.

(Source: Saskatchewan Industry and Resources. Saskatchewan Economic News. March 2004)

After two years of decline, Saskatchewan's international exports were up 3.2 percent, primarily due to strength in mineral fuels, grains and other agricultural products in 2003.

Saskatchewan business investment in residential structures had another excellent year. A 9.0 percent advance in corporation profits, as well as cheaper imports, helped boost outlays for machinery and

equipment by 11 percent, the first increase in four years. Imports from other countries were up by 11 percent.

Consumer spending by Saskatchewan residents outpaced personal disposable income for the fourth year in a row. The new casino in Moose Jaw helped to boost spending on services.

(Source: Statistics Canada, The Daily, Wednesday, April 28, 2004, Provincial and Territorial Gross Domestic Product)

(Source: Statistics Canada, The Daily, Wednesday, April 28, 2004, Provincial and Territorial Gross Domestic Product)

Consumer prices increased by 2.3 percent in 2003, a slowdown from the past three years, but still relatively high to the average rate experienced in the 1990s. The Saskatchewan increase was below the national average of 2.8 percent. Saskatchewan's inflation leveled off in the first quarter of 2004, with consumer prices only up 0.9 percent.

There was a significant recovery in Saskatchewan's retail sales in the first quarter 2004. After an initial decline in retail sales of approximately 3 percent in January 2004 (from January 2003), sales increased by 3.8 percent in February (from February 2003), and continued to increase by 4.6 percent in March (from March 2003). Previously, seasonally adjusted sales had been on a downward trend since August, 2003.

(Source: Sask Trends Monitor, April 2004, Volume XXI, Number 4)

Economic forecasters are expecting Saskatchewan's economy to grow in 2004. Forecasts of real growth include:

- 3.8 percent from the Royal Bank;
- 3.5 percent from the Toronto Dominion (TD) Bank;
- 3.2 percent from the Canadian Imperial Bank of Commerce (CIBC);
- 3.2 percent from the Conference Board of Canada.
- 2.8 percent from the Bank of Montreal;
- 2.8 percent from the Scotiabank;

The Royal Bank and CIBC expect Saskatchewan to have the second fastest real growth in Canada in 2004.

(Source: Economic Analysis Branch, Saskatchewan Industry and Resources, Saskatchewan Monthly Indicators Report, February 2004)

3.0 Summaries of Training Needs Assessment Industry Consultations

3.1 Introduction

Stakeholder consultations were held in March 2004 at three of the four provincial SIAST campuses - Kelsey (Saskatoon), Palliser (Moose Jaw), and Wascana (Regina). Due to inclement weather, the Woodland (Prince Albert) stakeholder consultation was cancelled. Participants at the consultations included representatives from business, industry and professional associations. The purpose of the stakeholder consultations was to gather information on future training needs, employment trends, and emerging occupations and skill sets required for these. The information gleaned from the consultations focused on needs specific to each of the SIAST campus cities, as well as provincially.

The format of the consultations was similar to that of past years. With the invitation letter, invited guests were provided with a copy of section 3.0 (Summaries of Training Needs Assessment Industry Consultations) from last year's report that identified training needs, along with a status report on the activities that resulted from the discussions. Invitees were informed that discussions at the meetings would address new or revised training needs for each of the four SIAST campus cities as well as provincially. Invited representatives were encouraged to complete the questionnaires if they were unable to attend the consultation meetings.

Some of the invitees to the consultation sessions did not attend and therefore a number of industries may have lacked representation and input to the process, and the results of the consultations may not have comprehensively identified the needs of all industries in the province. Some of these invitees availed of the opportunity and presented their views by either submitting written comments or completing the survey questionnaire that had been sent out with the invitation letter.

3.2 Summary of the Findings

The following chart is a summary of the discussions at the consultations with the industry and association representatives. The findings are not necessarily presented in priority order. A new section of the chart includes SIAST initiatives which outline new programs or revisions to existing programs that are relevant to the training needs discussions. Employment projections in the chart, obtained from the *Saskatchewan Economic Demand (SED) Forecast 2002*, are included for each sector. It is anticipated that a new version of the employment projections document for the province will be available in the fall and SIAST will reference this document in the future. Where a sector was not identified in the employment projections document (SED report), information was obtained from industry profile information.

Overall, fifty-five industry/associations were represented at the consultations. Also, forty-seven completed questionnaires were returned from those unable to attend and the information was condensed and incorporated into the following chart, along with received written comments.

Many skill gaps and skill shortages issues identified throughout the consultations and in the submitted questionnaires were not necessarily training needs but issues dealing with employment - demographics, difficulty in attracting qualified personnel, location, working conditions, and salary. These are employer and industry issues and SIAST, though empathetic, is not in a position to respond or change the situation.

Examples of these are:

- Workload and benefits
- Working conditions
- Retention of staff
- Out-migration

- Aging workforce
- Rural depopulation

Skill gaps imply a need for upskilling within the existing enterprises and workforce, while *skill shortages* occur when skilled job vacancies are hard to fill at reasonable wages and conditions. These definitions are taken from the Australian report “The Summary of the Rural Industry Working Group Report”, of the Department of Education, Science and Training, Government of Australia.

The representatives at the consultations spoke very highly about SIAST, the programs, the relevancy of the curriculum to meet the skills required in industry, and the willingness to consult widely on all issues relating to the preparation of graduates for work.

The industry sectors represented on the chart can be located on the following pages:

- Agriculture (page 53)
 - Automotive (page 60)
 - Business Services (page 54)
 - Retail Sales and Service (page 55)
 - Construction (page 55)
 - Health (page 56)
 - Hospitality and Tourism (page 57)
 - Human Services (page 58)
 - Manufacturing (page 58)
 - Food/Beverage Processing (page 59)
 - Metal/Machinery (page 59)
 - Natural Resources (page 62)
 - Environmental (page 63)
 - Forestry (page 63)
 - Mining (page 64)
 - Oil and Gas (page 64)
 - Technology (page 61)
 - Electronics (page 62)
 - Information Technology (page 61)
 - Transportation, Trucking, and Heavy Equipment (page 59)
 - Other Training Needs (page 64)
-
- Recurring Themes Through Sectors (page 65)

3.2.1 Provincial Training Needs by Sector – Spring 2004

The following table provides a summary of the consultations with industry and association representatives held in the spring of 2004. The results of the consultations are organized by sectors and topic areas. Employment projections, obtained from the *Saskatchewan Economic Demand (SED) Forecast 2000-2005*, as well as training needs identified in the sector partnership reports, are included throughout as a preamble for each sector.

Provincial Training Needs by Sector – Summary of 2004 consultations		
Training Issues by Industry/Sector	Impact on SIAST Program Delivery	SIAST Actions
AGRICULTURE		
<i>Jobs in this industry continue to decrease and are projected to decline by 9,200 or 15 percent over the five year forecast period 2000-05. The agriculture sector includes livestock, field crop and combination farms, horticultural specialties, services incidental to livestock, animal specialties and agricultural crops.</i>		
<ul style="list-style-type: none"> Transitional training for farmers, helping them identify and enhance their many transferable skills into a package that is marketable for business and industry. 	<p>In partnership with CSCES and the regional colleges:</p> <ul style="list-style-type: none"> Provide change management workshops. Provide PLAR for transferable skills. 	<ul style="list-style-type: none"> As a result of the agricultural programming renewal process, new or revised programming will be pursued in livestock production, entrepreneurship, functional foods, pulse and organic crops, food safety and environmental protection. SIAST and the University of Saskatchewan are actively working towards fully coordinated training for beef cattle producers. This initiative will result in changes to SIAST beef training and changes to University of Saskatchewan curriculum. These efforts will help the Saskatchewan industry as it recovers from the BSE crisis. Beef Management program title recently re-titled Beef Cattle Production. SIAST is working with the Federation of Saskatchewan Indian Nations to develop agricultural training for the First Nations peoples. SIAST, along with a consortium of colleges across Canada, has been contracted by Farm Credit Canada to provide user training for its AgExpert farm management software. The software will enable producers to more efficiently manage their operations.
<ul style="list-style-type: none"> Training for seed cleaners, mill operators, specialty crops and feed lot operations. 	<ul style="list-style-type: none"> Develop extension courses and workshops. 	
		<ul style="list-style-type: none"> SIAST, Sask Agriculture, Food, and Rural Revitalization continue to provide training on pesticide education. The industry provides the certification credential and SIAST offers training for nine of the ten commercial pesticide applicator license categories provided for in Canada and certification for pesticide dispensers (vendors), as well as the three special categories that are used by applicators in Saskatchewan. Recertification on a five-year basis is also facilitated by SIAST.

Training Issues by Industry/Sector	Impact on SIAST Program Delivery	SIAST Actions
BUSINESS SERVICES		
<i>Professional business services, which includes advertising, customer services, computer and related services, consulting and other business services. It is expected to increase by 4,700 jobs, for a total increase of 25 percent over the 2000-05 forecast period. The industry is an employment growth leader because of the rapid expansion in technologies in all sectors within the economy and the continued out-sourcing of many professional services by governments and other large businesses.</i>		
<ul style="list-style-type: none"> Human resource and succession planning training required for businesses. 	<ul style="list-style-type: none"> Develop/adapt curriculum from existing programs. 	<ul style="list-style-type: none"> Second year of Business program, Accountancy specialty, to be offered in Prince Albert, in partnership with Indian and Northern Affairs Canada. Human resource training offered in the province, through extension.
<ul style="list-style-type: none"> Customer service training in all industries continues. This is a need that extends across all sectors. 		<ul style="list-style-type: none"> SIAST developed a customer service course designed to be offered across the province. There has been limited response.
<ul style="list-style-type: none"> Courses in supervision are needed for managers. 		<ul style="list-style-type: none"> Management Skills for Front Line Managers program (four modules) offered through extension at Kelsey and Woodland campuses. Leadership Development program offered through extension at Kelsey and Wascana Campuses.
<ul style="list-style-type: none"> Need for different approaches to management training in the public sector. This could be a credit program and include courses in "strategic management", "management development", "risk management" and "risk evaluation". 	<ul style="list-style-type: none"> This could be a separate program, available to employees to take in the evening or by distance delivery. Consider developing both basic and advanced public administration programs, with certification levels. Consider brokering programs from other jurisdictions, such as Alberta Public Works Association. 	
<ul style="list-style-type: none"> More teleservice customer representatives needed. Training should include an "Internet communications" module. Opening Houston, Texas based call centre in Saskatoon, employing 250 people. 		<ul style="list-style-type: none"> Teleservice Customer Representative program offered at Regina. Training also offered as work-based through JobStart/Future Skills.
<ul style="list-style-type: none"> Case management skills certification required for those working in insurance field. 	<ul style="list-style-type: none"> Consider brokering programs such as certificate in Rehabilitation Benefits Administration, a joint distance education program offered through Seneca College and the Insurance Institute of Canada. 	
<ul style="list-style-type: none"> Need for computer application training in all sectors. 	<ul style="list-style-type: none"> Incorporate computer application training modules when programs are revised. 	<ul style="list-style-type: none"> SIAST has standardized the curricula and delivery of introductory computer courses.
		<ul style="list-style-type: none"> SIAST Virtual Campus provides access to online learning across the province. Many computer courses are offered online, including web site design.

Training Issues by Industry/Sector	Impact on SIAST Program Delivery	SIAST Actions
<p>Retail Sales and Service</p>		
<p><i>Includes all organizations in the retail industry. Sales and service occupations are projected to account for one-fifth of total job opportunities (approx. 8,900) and just under one-quarter of new job opportunities. Two-thirds of total job opportunities in sales and service occupations are due to attrition and the remaining one-third are due to new growth. Overall employment for the retail sector is projected to decrease by 2,300 individuals, for a total decrease of 4 percent over the five-year period.</i></p>		
<ul style="list-style-type: none"> • Customer service training in retail industry. • Employees in retail industry are often lacking essential, customer service, and public relations skills. 	<ul style="list-style-type: none"> • Consider developing a sales and service program. 	<ul style="list-style-type: none"> • The curriculum of the Business Marketing and Administration diploma programs include courses on retailing and professional selling. • Retail sales training is offered through Quick Skills in response to local needs.
<ul style="list-style-type: none"> • Need for retail management training program. Currently companies provide in-house training (i.e. shadowing managers to learn all aspects of the business). Additional training required. 	<ul style="list-style-type: none"> • Consider developing a retail management training program. Review existing retail management programs and retail association certification. 	<ul style="list-style-type: none"> • The Entrepreneurship and Small Business certificate program includes modules on selling as well as managing a business.
<ul style="list-style-type: none"> • Need to change the fact that the retail sector is not viewed as a career opportunity. 		
<p>CONSTRUCTION AND RELATED TRADES</p>		
<p><i>Employment demand for both commercial and residential construction, plumbing, heating and air conditioning, mechanical work, electrical work, and other services incidental to construction, is projected to increase by more than 1,200 jobs, for a total increase of 5 percent over the five-year forecast period 2000-05. There is a need to offer on-the-job training throughout the industry as well as to create awareness in the K-12 system that the trades are excellent career choices.</i></p>		
<ul style="list-style-type: none"> • Shortage of skilled journeyman trades people, especially carpenters, framers, concrete formers, interior and exterior finishers. 	<ul style="list-style-type: none"> • Continue to provide training in cabinet making, framing, steel stud and drywall, through Quick Skills. 	<ul style="list-style-type: none"> • SIAST, in partnership with Construction Careers, offers construction related programs, such as Carpentry, Framing, Steel Stud and Drywall. • Major revisions underway to the Carpentry Apprenticeship Level III program to align it with the Interprovincial Standards 'Red Seal' certification program. • Apprenticeship program in Construction Craft Labourer recently approved. • Log Building program is now divided into two separate programs: Log Building – Floor and Wall Construction, and Log Building – Roof Construction, Interior Framing, and Finishing. • Pre-trades Carpentry program was recently approved. Upon completion and becoming indentured, graduates may apply to the Apprenticeship Commission to receive credit for Level 1 technical training.
<ul style="list-style-type: none"> • Need for refrigeration and air conditioner training to include new electronics on all types of furnaces. 	<ul style="list-style-type: none"> • Training is mainly brand specific and offered by manufacturers. 	
		<ul style="list-style-type: none"> • Pre-trades Plumbing and Pipefitting program now offered. Graduates of the program are eligible to apply to the Apprenticeship Commission to receive credit for Level 1 technical training. Program was formerly offered without SIAST certification.

Training Issues by Industry/Sector	Impact on SIAST Program Delivery	SIAST Actions
<ul style="list-style-type: none"> Develop career paths and training of sub-trade designations under the existing apprenticeship programs. 	<ul style="list-style-type: none"> Once sub-trade designations are approved, SIAST will work with Apprenticeship Commission to accommodate training. 	
<ul style="list-style-type: none"> Consider offering short generic program for all trades, to include training in safety, equipment usage, and tool usage. 	<ul style="list-style-type: none"> Examine possibility of offering safety training through extension. 	
<ul style="list-style-type: none"> With the approval of Bill C-45, specialized/job specific and supervisory training in occupational health and safety in all trades is required. 	<ul style="list-style-type: none"> Investigate core occupational health and safety topics for incorporation into all trade programs. 	<ul style="list-style-type: none"> The new occupational health and safety program is responding to Sask Labour's request to strengthen occupational health and safety practices and delivery in the province.
<ul style="list-style-type: none"> Train multi-skilled employees to work in a variety of trades: plumbing, electrical, gas, and refrigeration. 	<ul style="list-style-type: none"> Apprenticeship programs do not provide ability for cross trade skills. 	
HEALTH		
<p><i>Statistics Canada labour force estimates indicate that employment in Health Services declined by 2,300 in 2001. Because of the revised estimates from the SED Forecast of 2000, total employment will need to grow by 2,700 over the next four years to meet the projected 2005 employment demand forecast of 52,500. This will be a challenge given the anticipated upcoming vacancies due to attrition. Sector includes positions in hospitals, physicians, practitioners, lab technicians, and other health occupations.</i></p>		
<ul style="list-style-type: none"> Need to offer training through distance education. Need for specialized training for nurses. 	<ul style="list-style-type: none"> Consider increasing technology-based training; offering more distance education. Give employees access close to home communities to update education. 	<ul style="list-style-type: none"> SIAST Virtual Campus provides access to online learning across the province. As many as seventy courses are offered, including nursing. New programs in Basic and Advanced Diabetes Education for Health Care Providers. Target groups for the basic program include community health representatives, community health educators, home care/special care aides and primary care paramedics. Target groups for the advanced program include registered/licensed practical nurses, pharmacists, dieticians, nutritionists, physiotherapists and recreational specialists. Both programs are delivered through a distance delivery format. New Gerontological Nursing/LPN program developed for licensed practical nurses. Currently there are no comparable advanced education programs offered to LPNs in Canada. This program is delivered through distance education.
		<ul style="list-style-type: none"> The seat capacity for the Nursing Education Program of Saskatchewan (NEPS) has been increased at SIAST's Wascana Campus (Regina). Further increases are expected over the next few years, to meet the nursing shortage in the province.
<ul style="list-style-type: none"> Growing demand for more primary care nurse practitioners across the province, particularly in the north. 		<ul style="list-style-type: none"> Revised the Advanced Clinical Nursing program to meet the recently defined SRNA registered nurse (nurse practitioner) competencies and standards. The Primary Care Nurse Practitioner program develops knowledge and skills in diagnosing and treating health problems and prescribing drugs as part of a collaborative health care team. Workshops have been provided for registered nurses working in the nurse practitioner role to assist them in their application to the SRNA for assessment of their experiences, knowledge and skills for licensure as RNs (NPs).

Training Issues by Industry/Sector	Impact on SIAST Program Delivery	SIAST Actions
<ul style="list-style-type: none"> Shortage of emergency medical services personnel. Low wages, part-time employment, and working in rural locations viewed as barriers. Need for continued upgrading of education and training for emergency medical services personnel. 	<ul style="list-style-type: none"> Sector study underway to determine the scope of all levels of emergency services positions and training. 	<ul style="list-style-type: none"> Revisions to the three SIAST emergency medical programs approved to meet new national standards of paramedic practice for Canada.
<ul style="list-style-type: none"> Need for management training for owners/operators and managers of emergency medical services businesses. 	<ul style="list-style-type: none"> SIAST to investigate developing management training with emphasis on emergency medical services. 	<ul style="list-style-type: none"> Leadership Development program is offered through extension at Kelsey and Wascana Campuses. Management Skills for Front Line Managers program (four modules) is offered through extension at Kelsey and Woodland Campuses.
<ul style="list-style-type: none"> Shortage of qualified dental assistants. Many work for a year or two and career ladder to training as dental hygienists with higher salaries. Dental assistants and hygienists need more training and practice in some major restorative procedures and crown preparations. 	<ul style="list-style-type: none"> SIAST to keep abreast of technological changes in industry (e.g. digital x-ray machines). Private training institute Dental Therapy program exists in Prince Albert. Private training institution has inquired about licensing regulations to provide training for dental assistants in Saskatoon. 	<ul style="list-style-type: none"> Two dental programs at SIAST are nationally accredited.
<ul style="list-style-type: none"> Shortage of public service occupational and physical therapists in province. Many have moved into private industry. Ratio of therapists to population in the province is lowest in the country. 	<ul style="list-style-type: none"> Standards for occupational and physical therapists will increase to the Master's level in 2008 as a requirement to work, and SIAST will need to monitor the effect this may have on the training required for the occupational therapist/physical therapist assistants. 	<ul style="list-style-type: none"> Revisions to the Occupational Therapist Assistant/Physical Therapist Assistant program meet new national standards required for the assistant positions in the industry.
<ul style="list-style-type: none"> Specialty training required for laboratory technicians in the province. 	<ul style="list-style-type: none"> Needs assessment identified a 30 percent vacancy rate in provincial urban centres. SIAST to explore alternative delivery models for providing training. 	<ul style="list-style-type: none"> A new Cytotechnology diploma program commenced fall 2003. Cytotechnologists microscopically evaluate cells from all sites of the body for the presence of cancer, precancerous changes, or infections.
<ul style="list-style-type: none"> Difficulty in hiring Medical Laboratory Assistants. 	<ul style="list-style-type: none"> MLA training is offered through CDI in British Columbia and Ontario. 	<ul style="list-style-type: none"> SIAST offers Medical Laboratory Technology, Medical Radiology Technology, and Combined Laboratory and X-ray Technology programs.
<ul style="list-style-type: none"> Bill C-45 identifies that companies are responsible for safety of persons in any workplace. 		<ul style="list-style-type: none"> Occupational Health and Safety Practitioner program now offered. The new program is responding to Sask Labour's request to strengthen occupational health and safety practices and delivery in the province.
HOSPITALITY AND TOURISM		
<p><i>Employment demand for this industry is expected to increase by 1,500, for a total increase of 4 percent over the 2000-05 period. This projected decrease is due to a downturn in the wake of the September 11, 2001 events. However, in the longer term, more cross-border tourists are anticipated in Saskatchewan, which bodes well for the provincial hospitality and tourism industry.</i></p>		
<ul style="list-style-type: none"> Customer service, cross cultural, and employability skills training required. 	<ul style="list-style-type: none"> Consider expanding extension training in co-operation with Saskatchewan Tourism Education Council. 	<ul style="list-style-type: none"> All SIAST programs in this industry provide training in customer service.

Training Issues by Industry/Sector	Impact on SIAST Program Delivery	SIAST Actions
<ul style="list-style-type: none"> Provincial shortage of cooks, front desk receptionists, food and beverage servers, housekeepers and fast food workers. 	<ul style="list-style-type: none"> Expand the delivery of the Food and Beverage Service applied certificate, through Quick Skills. 	<ul style="list-style-type: none"> SIAST offers training in professional cooking, institutional cooking, short order cooking, food service worker, food and beverage service, food and nutrition management and the hotel and restaurant administration. Some programs are also offered through Quick Skills and Work-Based training.
<ul style="list-style-type: none"> Significant need for professional cooking and hotel and restaurant administration training in Regina. 	<ul style="list-style-type: none"> Consider offering these programs (or courses) in Regina. Casino Regina is willing to rent kitchen facilities for cooking programs. 	
<ul style="list-style-type: none"> Food & Nutrition Management diploma program grads have difficulty finding appropriate full-time employment without work experience. 	<ul style="list-style-type: none"> Examine the appropriateness of the curriculum, and length of the program. 	
<ul style="list-style-type: none"> Difficulty in finding managers and supervisors in all areas of tourism. 	<ul style="list-style-type: none"> Provide supervisory and management training in all areas of tourism programming. 	<ul style="list-style-type: none"> Tourism Management and Hotel & Restaurant Administration programs have supervisory and management modules in curriculum.
<ul style="list-style-type: none"> Training should include dealing with contaminated goods. 		<ul style="list-style-type: none"> Curriculum in all food related programs includes training in food safety.

HUMAN SERVICES

The Community and Human Services sector is very diversified and includes many social services occupations. The demand for graduates from the social services occupations remains high.

<ul style="list-style-type: none"> New childcare facilities are opening up, which has resulted in an increased demand for childcare workers. At present there are not enough qualified staff. 	<ul style="list-style-type: none"> Consider offering part-time Early Childhood Education and Youth Care Worker as evening courses (particularly in southern part of province), and ensure that curriculum accurately reflects the working conditions in the field. 	<ul style="list-style-type: none"> Currently SIAST offers Early Childhood Education certificate and diploma programs at three SIAST campuses, as well as through the regional colleges, and some courses through distance education. Evening courses are offered at three SIAST campuses.
<ul style="list-style-type: none"> Expand Chemical Dependency program to include gambling dependency. 		<ul style="list-style-type: none"> Chemical Dependency certificate and diploma programs include courses in addictions counseling, intervention, and therapy, as well as training in gambling and Internet issues. New advanced certificate program in Chemical Dependency, titled Advanced Addictions Counselling, will enhance the two Chemical Dependency programs currently offered.
<ul style="list-style-type: none"> Training in Youth Care Worker program needs updating. There are not enough graduates. 	<ul style="list-style-type: none"> Examine curriculum and seat capacity of Youth Care Worker program. 	

MANUFACTURING

Manufacturing includes food and beverage processing, rubber, plastic and chemical manufacturing, pulp and paper, paper products, wood products manufacturing, metal fabrication, and machinery. Food and beverage processing, and forestry are two of the main areas of growth for manufacturing. There is a need to offer on-the-job training throughout the industry as well as to create awareness in the K-12 system that trades are excellent career choices. Employment is projected to rise by 5,300 for a 17 percent increase over the five year forecast period, as a result of continued diversification of the Saskatchewan economy.

Training Issues by Industry/Sector	Impact on SIAST Program Delivery	SIAST Actions
<p>Metal/Machinery</p> <p><i>Employment demand is projected to increase by more than 2,300 individuals, for a total increase of 37 percent over the 2000-05 period.</i></p>		
<ul style="list-style-type: none"> • More machinists and mechanics required in the industry. 	<ul style="list-style-type: none"> • Examine expanding program offerings. 	<ul style="list-style-type: none"> • Pre-trades Industrial Mechanics program now offered. Graduates of the program are eligible to apply to the Apprenticeship Commission to receive credit for Level 1 technical training. Program was formerly offered without SIAST certification. • Many mechanic and machinery programs also offered by extension as needed, through Quick Skills.
<ul style="list-style-type: none"> • Welders required over the next two years. Need to promote welding as a good well-paying career choice. 	<ul style="list-style-type: none"> • Increased demand on Welding and Production Line Welding programs. 	<ul style="list-style-type: none"> • Welding programs offered in four major cities as well as through extension. Welder apprenticeship programs also offered in the province.
<ul style="list-style-type: none"> • Need for a steel fabricator pre-employment program (similar to welding) 	<ul style="list-style-type: none"> • SIAST to examine potential for a steel fabricator pre-employment program. 	<ul style="list-style-type: none"> • Steel Fabricator apprenticeship program currently offered.
<ul style="list-style-type: none"> • Shortage of skilled fabricators and steel draftspersons. Introduce a steel drafting course. 		
<ul style="list-style-type: none"> • Need for senior journeypersons to have additional coaching and training skills to assist apprentices. 	<ul style="list-style-type: none"> • Consider providing cost recovery train the trainer programming and materials. 	
<p>Food/Beverage Processing</p> <p><i>Employment demand is projected to increase by more than 1,000 individuals, for a total increase of 14 percent over the five-year period 2000-2005.</i></p>		
<ul style="list-style-type: none"> • Process technology training required for processing wild rice, noodle/pasta, fish, wild game, and Saskatoon berries. 	<ul style="list-style-type: none"> • Agricultural programs review implementation. 	<ul style="list-style-type: none"> • As a result of the agricultural programming renewal process, new or revised programming will be pursued in livestock production, entrepreneurship, functional foods, pulse and organic crops, food safety and environmental protection.
<p>TRANSPORTATION, TRUCKING, AND HEAVY EQUIPMENT</p>		
<p><i>Growth of 900 jobs in the truck transport; pipelines/storage/warehousing industry is projected over the five-year forecast period 2000-05 (4 percent increase). The removal of rail subsidies for grain transportation (which has led to rail line abandonment and transformed the grain handling system in rural areas) will place a greater demand on truck transport, and hence employment, in this sector.</i></p>		
<ul style="list-style-type: none"> • Need to recruit young drivers to the trucking industry. 		<ul style="list-style-type: none"> • SIAST delivers driver training programs at SIAST locations and at regional colleges across the province.

Training Issues by Industry/Sector	Impact on SIAST Program Delivery	SIAST Actions
<ul style="list-style-type: none"> Shortage of heavy equipment mechanics provincially, but particularly in Regina. 	<ul style="list-style-type: none"> Consider offering program in Regina. Demand for apprenticeship training delivered as day release or evening classes instead of block training. 	<ul style="list-style-type: none"> Amalgamation of the Heavy Equipment Mechanic and Truck and Transport Mechanical Repair program into one 35-week certificate program, called Heavy Equipment and Truck and Transport Technician. Graduates will receive Level I and II training credits for both apprenticeship trades. Tri-Trades applied certificate program continues to be offered through the regional colleges and Quick Skills, in Regina. The program covers training from the Heavy Equipment Mechanic, Truck and Transport Mechanic and Agriculture Mechanic programs. Upon completion and once employed and indentured, graduates may apply to the Apprenticeship Commission to receive credit for Level 1 technical training in any one of the three trades.
<ul style="list-style-type: none"> Need to include training in new emission controlled engines and all new electronics now incorporated in trucks. 	<ul style="list-style-type: none"> SIAST to examine curriculum of Truck Driver and Heavy Equipment Mechanic programs. 	
AUTOMOTIVE		
<p><i>There are four distinct occupations in this industry: Automotive Service Technicians, Autobody Technicians, Parts Personnel, and Service Advisors. The economy of auto repair shops and specialty repair shops remains strong, with 200,000 individuals employed in the automotive repair and service industry. The Canadian auto industry is the sixth largest in the world, accounting for 25 percent of the country's entire merchandise exports. Billions of dollars change hands every year to keep Canadian drivers on the road. (Source: Canadian Automotive Repair and Service Industry – CARS, and Automotive Industries of Canada)</i></p>		
<ul style="list-style-type: none"> Shortage in province and across Canada of trained: Automotive Service Technicians (i.e. trained in new technology/hybrid technology, diagnostic equipment, product knowledge); Auto Body Technicians (i.e. repair, painting, wheel alignment, body work); Parts Personnel (i.e. parts clerks, warranty clerks); and Service Advisors. 	<ul style="list-style-type: none"> Examine potential for offering upgrading classes that personnel could take while working. Examine the potential for offering more manufacturer specific training, to remain current. 	<ul style="list-style-type: none"> Automotive pre-employment and apprenticeship training, in the four occupations, is offered throughout the province. Training is delivered through classroom/shop and work-based at many locations in the province.
<ul style="list-style-type: none"> Need quality assurance standards for auto body industry. Industry should become a compulsory regulated trade. 	<ul style="list-style-type: none"> SIAST, industry, Apprenticeship Commission, and Saskatchewan Association of Automotive Repairers are to investigate this issue. 	
<ul style="list-style-type: none"> Flexible training hours for apprenticeship trainees required. Consider web training and day release. 		
<ul style="list-style-type: none"> Changing technology requires training to be constantly updated, especially data link diagnostics. Create training for the commonly used automotive service software. 		<ul style="list-style-type: none"> SIAST partners with automotive companies to provide training on latest equipment.

Training Issues by Industry/Sector	Impact on SIAST Program Delivery	SIAST Actions
TECHNOLOGY		
<i>The technology industry is very diversified, covering a wide range of sectors, including electronics, information technology, telecommunications, animation, aircraft, and geomatics.</i>		
<ul style="list-style-type: none"> • Shortage of trained employees to work with faster computers and improved 3D animation software, camera operation, audio, editing, etc. • Provide accredited training for experienced crews to assume higher level positions. 		<ul style="list-style-type: none"> • SIAST offers technology programs in most fields, including architecture, computer engineering, cad/cam engineering, commercial pilot, electrical engineering, environmental engineering, geomatics, geographic information science for resource management, instrumentation engineering, mechanical engineering, power engineering, mining and water resources engineering. • SIAST has revised the Graphic Arts and New Media Communications programs.
<ul style="list-style-type: none"> • Technology industry is fast moving with new products continually coming on the market. Need trained staff to deal with inventory control, purchasing, planning, sales/marketing, and customer and management skills, who also have electronics experience. 	<ul style="list-style-type: none"> • PLAR could be an option for employees to become credentialed in many of SIAST programs, including the new Telecommunications/Radio Systems Technician program. 	
<p>Information Technology</p> <p><i>The sector is composed of three essential elements: hardware, software, and infrastructure (Source: Statistics Canada Industry Profile). It was suggested that in three years more than 65 percent of business would be done online, increasing the need for expertise in information technology (IT). Ten to thirty percent job growth in Saskatoon. There are up to 2,000 vacancies across the province – mostly in project management roles. Figures are captured in Business Services section.</i></p>		
		<ul style="list-style-type: none"> • Computer Systems Technology diploma program revised to meet technological changes in the IT field and address the Canadian Information Processing Society (CIPS) accreditation recommendations. • Electronic and Information Technology programs review completed and recommendations under discussion and development. Industry involved in all aspects of review. • New program in Computer Networking Technician approved to commence September 2004.
		<ul style="list-style-type: none"> • Expansion of curriculum in the Geographic Information Science for Resource Management certificate program to include Internet mapping and programming.
<ul style="list-style-type: none"> • Need in Moose Jaw area for one/two-day or evening professional development training for people working in the IT sector. 	<ul style="list-style-type: none"> • SIAST to examine offering this training through extension. 	

Training Issues by Industry/Sector	Impact on SIAST Program Delivery	SIAST Actions
<ul style="list-style-type: none"> Need for industry-specific software or IT product training (web services, object oriented analysis and design). 	<ul style="list-style-type: none"> Keep instructors, programmers, and designers up to date with new software and products and technologies, and place more emphasis on proper methodologies and best practices. IT industry should jointly investigate with IT suppliers the provision of common training in new software products and technology for employees working in the industry. 	
<ul style="list-style-type: none"> Need for more training in methodologies (life cycle, requirement gathering, project management, and business requirements specific to the IT industry). 		<ul style="list-style-type: none"> SIAST extension education consultants work with businesses to identify and meet special training needs. Example: Project Management training has been delivered to organizations in the province.
		<ul style="list-style-type: none"> On a general note, SIAST Virtual Campus provides access to online learning across the province. Approximately seventy courses currently offered with over 1200 enrollments in nursing, natural resource management, web site design, as well as many computer courses.
<p>Electronics</p>		
<p><i>The electronics industry includes digital and analog systems with applications in the resource, manufacturing and communications industries. (Source: Statistics Canada).</i></p>		
<ul style="list-style-type: none"> Need experienced radio frequency technologists and technicians. 		<ul style="list-style-type: none"> SIAST has developed a new Telecommunications/Radio Systems Technician program.
<ul style="list-style-type: none"> Market changes very fast and products become obsolete. Very competitive sector. 		<ul style="list-style-type: none"> SIAST offers the Electronics Systems Engineering and Electronics Engineering Technology programs in Saskatoon and Moose Jaw respectively. The curriculum in the programs includes radio frequency training, digital electronics, sensors and linear circuits, and circuit design. SIAST has standardized the four electronics programs to a single core Electronics Technician program. The program will be offered at the four SIAST campuses. Advanced specialization will be developed in 2004-05.
<ul style="list-style-type: none"> Provide inventory control training in programs. 		
<p>NATURAL RESOURCES</p>		
<p><i>The natural resources sector includes forests, energy, minerals and metals, and landmass, as well as related industries. The sector is one of the most productive, high tech in the global economy. The prairie regions of Canada and the people provide a strong foundation for the future in helping shape the important contributions of the natural resources sector to the Canadian economy, society and the environment. (Source: National Resources Canada)</i></p>		

Training Issues by Industry/Sector	Impact on SIAST Program Delivery	SIAST Actions
<p>Environmental</p> <p><i>Firms in the environmental industry are often located close to natural resource industries or industrial markets served by these industries. Because of new Canadian legislation, the sector is identified as a growth industry in the country for the foreseeable future. Small firms account for the bulk of employment (less than 100 employees) that provide 41 percent of the jobs. Large firms of over 500 employees account for 35 percent of employment in the industry. (Source: Human Resources Development Canada, Industry Profiles, Environment Industry, 1999)</i></p>		
		<ul style="list-style-type: none"> • A diploma program is offered in Resource and Environmental Law. The program is part of a joint degree program in resource and environmental studies offered in partnership with The First Nations University of Canada and the University of Regina. Upon completion at SIAST, students can transfer to the FNUC and U of R to obtain a degree credential. • A joint degree/diploma program is offered with the University of Regina where graduates of the Integrated Resource Management program can transfer to the university and complete the science degree in Environmental Biology. • SIAST Virtual Campus offers courses online in natural resource management.
<ul style="list-style-type: none"> • Water safety issues are still a high priority. 		<ul style="list-style-type: none"> • The Water and Wastewater Technician program is available in distance format with unlimited capacity to take the program. Graduates are eligible to operate Class 1 and 2 water plants. With the issues around e-coli, the program is very relevant in the province. • Graduates of the Water Resources Engineering Technology program are eligible to operate Class 3 water plants. • Many seminars, workshops, and distance education courses are offered throughout the province for those currently working in the water management industry.
<p>Forestry</p> <p><i>Anticipated increase of 700 jobs for an overall increase of 47 percent in the five-year period 2000-05. There will be a need to train and upgrade labourers to management positions. The risks associated with this industry include the slump in global economic conditions and the ongoing dispute with the United States over softwood lumber.</i></p>		
<ul style="list-style-type: none"> • Variety of training needs such as mill equipment operators, harvesting equipment operators, forestry technicians, etc. 		<ul style="list-style-type: none"> • Two new programs offered titled, Vocational Forestry – Conventional Harvesting and Vocational Forestry – Mechanical Harvesting. Both programs are in response to requests from training partners and clients for recognizable credits that will enhance the employability of forestry workers and document their training levels.
<ul style="list-style-type: none"> • Market uncertainty has affected forestry, and pulp & paper mill industries. • Training for sawmill technicians required (usually trained on the job). • High turnover of foresters, technicians, and scientists for the industry, particularly in the public sector. 	<ul style="list-style-type: none"> • SIAST should investigate flexible delivery systems. 	<ul style="list-style-type: none"> • The Forest Ecosystem Technology diploma program emphasizes forestry skills development.

Training Issues by Industry/Sector	Impact on SIAST Program Delivery	SIAST Actions
<p>Mining</p>		
<p><i>Employment in mining is expected to increase by 300 individuals (5 percent increase) over the 2000-05 period. Employment demand should therefore increase for Underground Miners, Mine Service Workers and operators and supervisors (an opportunity for the 80 percent unemployed people in northern Saskatchewan). Saskatchewan is the third largest non-fuel mineral producing province in Canada.</i></p>		
<ul style="list-style-type: none"> • Upgrade mining labourers to become mining professionals. • Highly regulated industry in province with wide range of positions. • Though no difficulty at present, foresee a shortage of skilled trades people for industry (mechanics, electricians, instrumentation machinists, and welders). • Work schedule (7 days in, 7 days out) is not considered attractive. 		<ul style="list-style-type: none"> • SIAST and Northlands College collaborate to offer mining programs in Northern Saskatchewan. • The Underground Miner Core program provides a comprehensive grounding in mine safety and radiation safety, as well as an understanding of the components in the mining industry and the stages in the mining process. • A new program, Underground Mining Specialized Mining Methods (Raise Boring) was created in response to needs of the province's mining sector. The program prepares miners to work as specialized raise bore operators and provides instruction and skill development training activities that introduce the concepts and procedures associated with operating a machine in a safe and efficient manner.
<ul style="list-style-type: none"> • Need for train the trainer courses/modules where experienced mining personnel could identify good methodologies for training and upgrade the skills of entry level employees. 	<ul style="list-style-type: none"> • Consider providing cost recovery train the trainer programming and materials. 	
<p>Oil and Gas</p>		
<p><i>Employment is projected to increase by 3,000 in this field for a total increase of 37 percent over the 2000-05 projection period. Employment in this sector will, over the forecast period, be influenced by commodity prices, market conditions, technological change and developments arising out of the recently signed Canada Kyoto Protocol.</i></p>		
<ul style="list-style-type: none"> • Shortage of skilled labour, both at entry level and higher end jobs in the industry. Competition experienced from Alberta. 		<ul style="list-style-type: none"> • Though specific programs are not offered, SIAST offers many programs with curriculum relevant to the oil and gas industry. These involve training for instrumentation engineering technologists, electricians, and welders.
<ul style="list-style-type: none"> • More process operators required in Western Canada. 		<ul style="list-style-type: none"> • SIAST offers Process Operator certificate and three Process Operator applied certificates in the province.
<p>OTHER TRAINING NEEDS</p>		
<ul style="list-style-type: none"> • Offer entrepreneurship, communication, risk management, project management, and management skills as options to all programs. 		<ul style="list-style-type: none"> • The curriculum of many programs contains communications skills modules. Extension offerings are available, covering both communication and management skills.
<ul style="list-style-type: none"> • Offer general science diploma program. 		<ul style="list-style-type: none"> • Though not a certificate or diploma program, SIAST offers the Academic Preparation for Science (APS) which is a multi-mode instructional program designed to help prepare adult students for success in grade 12 sciences and further academic science training. The APS has an Aboriginal focus and Canadian content.

Training Issues by Industry/Sector	Impact on SIAST Program Delivery	SIAST Actions
<ul style="list-style-type: none"> Increase offering of basic education. 		<ul style="list-style-type: none"> SIAST offers a variety of basic education programs at all four campuses. Provincial funding dictates the level of capacity for Basic Education programs. Regardless of funding dollars, the following programs must be offered: Basic Education 5-10 and Adult 12.
<ul style="list-style-type: none"> Increase offering of bridging programs. 		<ul style="list-style-type: none"> SIAST provides credit for three courses in the Rehabilitation Worker certificate program for <i>basic skills training courses</i> that employees of rehabilitation centres have taken from Alberta. Over 200 people have bridged into SIAST's program in this manner.
<ul style="list-style-type: none"> Bridging programs for Aboriginal youth to move into SIAST programs. 		<ul style="list-style-type: none"> SIAST recently completed a consultation process across the province to identify ways to create a supportive and attractive learning and working environment for Aboriginal students and staff. SIAST, in partnership with Saskatchewan Indian Institute of Technology (SIIT), Aboriginal Resource Development Council of Canada (AHRDCC) and Saskatchewan Apprenticeship and Trade Certification Commission (SATC) is organizing a symposium to be held in October 2004 to discuss increased participation of Aboriginal people in the trades.
RECURRING THEMES THROUGHOUT SECTORS		
<ul style="list-style-type: none"> Need for employability skills. 		<ul style="list-style-type: none"> Employability skills are incorporated into many SIAST programs.
<ul style="list-style-type: none"> Need for customer service skills. 		<ul style="list-style-type: none"> Customer service courses are available through SIAST extension services.
<ul style="list-style-type: none"> Need for flexible training, particularly in apprenticeship training. 		
<ul style="list-style-type: none"> Need to recruit and train new workers to replace an aging workforce. 		
<ul style="list-style-type: none"> Need to prepare students to make appropriate career choices – including making them aware of what to expect, of potential challenges, of required skill sets, etc. 		
<ul style="list-style-type: none"> There are few women in non-traditional occupations – cultural issues often exist at worksites. 		<ul style="list-style-type: none"> SIAST identifies designated seats for women who graduate from the trades programs.
<ul style="list-style-type: none"> Employers often want trained employees who will be loyal, motivated, and dedicated, yet are not willing to pay salaries sufficient to attract and keep them. 		
<ul style="list-style-type: none"> Need for cross-skill training. 		
<ul style="list-style-type: none"> People not willing to relocate to rural and northern areas of province. 		

4.0 Summaries of relevant studies and reports

4.1 Overview of sector partnership reports

The sector partnership program, an initiative of the Department of Saskatchewan Learning, supports industry sectors in the province to implement partnerships with community stakeholders and training providers. The purpose of the sector partnership program is two-fold: a) plan and develop human resource strategies to address industry skill shortages in the province, and b) improve the province's ability to compete in external markets. Financial assistance is provided by the Department of Saskatchewan Learning to implement the partnerships; identify and address industry-skilled employment needs; and develop a human resource plan and development training approach.

In the 2003-04 year, there are 32 industry sectors (listed below) in the province with a total of 53 completed reports. Many sectors have completed research reports in the past few years and these were summarized in previous SUTNA reports. Some sectors are into phase 2 of the initiative and completing an updated report of the industry. Six reports, highlighted below, were completed within the past year and are summarized in section 4.0.

- 1) Aviation Sector
- 2) Apparel and Textile Sector
- 3) Arts and Culture Sector
- 4) Beef/Cattle Feedlot Sector (*Saskatchewan Beef Cattle Feedlot, May 2002*)
- 5) Commercial Fishing Sector
- 6) Cosmetology/ Beauty Sector
- 7) **Early Childhood Care and Education Sector**
- 8) Environmental Sector (*Northern Saskatchewan Environmental Industry 2002*)
- 9) Export Manufacturing Sector
- 10) Film and Video Sector
- 11) Fire/Rescue Service Sector
- 12) Food Processing Sector
- 13) Forestry Sector
- 14) Floriculture Sector
- 15) Health Sector including:
 - a. Home Care/Special Care Aide Workforce Sector (*Home Care/Special Care Aides, July 2002*)
 - b. Mental Health Workforce Sector (*Saskatchewan Mental Health, January 2003*)
 - c. **Nursing Sector**
 - d. Saskatchewan Association of Health Organizations (SAHO)
 - e. Saskatchewan Paramedic Association
- 16) **Hunting, Fishing and Tour Guide (Outfitters) Sector**
- 17) **Information Technology Sector**
- 18) Immigrant/Refugee Sector
- 19) Implement Manufacturing Sector
- 20) **Low-Rise Residential Construction Sector**
- 21) Masonry sector – (Saskatchewan Masonry Institute)
- 22) Music and Sound Recording Sector (*Music and Sound Recording Industry - Phase 2 – final report pending*)
- 23) Occupational Health and Safety Sector (*Building Capacity in Occupational Health and Safety - final report pending*)
- 24) Plastics Industry Sector (*Saskatchewan Plastics, 2002*)
- 25) **Plumbing and Pipefitting Trades Sector**
- 26) Primary Agriculture production Sector (*Primary Agriculture Production, January 2003*)

- 27) Road Building and Heavy Construction Sector
- 28) Saskatchewan Process Industry Training Network
- 29) Tourism Sector
- 30) Trucking Sector
- 31) Water/Wastewater Systems Operators Sector
- 32) Woodlot/Agroforestry Sector

4.1.1 *Early Childhood Care and Education Sector Study: Prior Learning Assessment and Recognition*

Early Childhood educators are employed in many facilities, such as Child Care Centres, Family Child Care Homes, Schools, Preschools, Nursery Schools, and special needs and infant centres.

In 2001, regulatory changes were approved by the Child Day Care Branch, Department of Community Resources and Employment, that identified the need for credential upgrading for those working in the field.

Since it was not economically feasible for employees to return to school full time, the Prior Learning Assessment and Recognition (PLAR) process was developed to assist those currently working in the industry obtain occupational certification. PLAR is an evaluation through a valid and reliable process, by qualified specialist(s), of the knowledge and skills that have been learned through non-formal education, training or experience to determine the equivalency for credit to a program.

Recent Trends

Approximately 1100 early childhood educators are employed at childcare facility centres.

A literature review was conducted to determine how other educational institutions and regulatory bodies used the PLAR process as an option to assist early childhood educators acquire the additional skills to meet the proposed regulatory standards.

A “gap analysis” was conducted with the 1100 plus educators and 382 responded. Distance education, extension courses and the PLAR process were the more popular methods for educators to complete their practicums.

Key Findings

Distance education, extension courses and the PLAR process were the more popular training methods for educators to meet the new regulatory standards.

Finance was cited as the greatest barrier for the early childhood educators to attend school for additional training.

Recommended Next Steps – for Future PLAR implementation

- Assessment tools need to reflect course revisions well in advance of implementation date.
- Educate the target group about the benefits of PLAR.
- Design a strategy to promote and market PLAR to all stakeholders.
- Allow the sector time to absorb regulatory changes and the implications for change.
- Assign a centralized coordinator within the education/training institute to coordinate PLAR implementation.
- Enhance existing linkages and partnerships throughout regions and among Aboriginal and non-Aboriginal community partners to dialogue, problem solve and coordinate initiatives.
- Create flexibility for conducting assessments at various times of the year to accommodate the demand.
- Develop web-based documents – self-audit guide and information bulletin.

The executive summary of this report can be accessed by contacting Saskatchewan Learning, Sector Partnerships Unit.

4.1.2 *Hunting, Fishing and Tour Guide (Outfitters)*

Outfitting is a sub-sector of the Saskatchewan Tourism industry and is the largest single source of export dollars in the industry. The outfitting sector consists primarily of small owner-operated businesses, which are responsible for providing equipment, guides and accommodations for hunting, angling and touring experiences in the province. There are approximately 600 registered outfitters in Saskatchewan and they provide about 2,000 person-years of direct employment each year. There are also the spin-off support service industries, such as motels, restaurants, food processing and taxidermy that benefit from this sector. One third of the northern population works seasonally in the outfitting industry.

Three studies of the industry have been completed in the past few years. Phase I was the partnering with key stakeholders to identify, develop and validate professional standards for the industry. Phase II was the development of a PLAR process. Phase III tested and evaluated a certification process within the industry.

Recent Trends

- Big game and bird outfitting occurs more in the southern area of the province.
- Angling outfitting occurs more in the northern area of the province.
- A growing number of outfitting operations are owned by Metis or First Nations individuals.
- Outfitters have an inherent interest in the sustained management of Saskatchewan's natural environment and have been leaders in this area.
- The Saskatchewan Outfitters Association (SOA) recognizes that many of the outfitter owners have not completed an official training program.

Recommendations

- Phase I recommended
 - The development of a prior learning assessment and recognition (PLAR) process.
 - The establishment of an outfitter licensing commission that would reflect industry standards in the licensing process.
- Phase II activities included
 - The development of outcomes and key indicators from the eight developed professional standards categories.
 - The development of assessment tools and a process to measure the key indicators.
 - The development of an implementation strategy for the PLAR process
- Phase III recommended
 - The incorporation of standards into the licensing process in the industry.
 - The establishment of a Master Outfitter Certification program as well as a committee to oversee the program.
 - The identification of assessors and advisors for the industry and the development of policies and procedures for the positions.
 - The results of the phase III study to be presented to the Minister of Saskatchewan Environment.

The executive summary of this report can be accessed by contacting Saskatchewan Learning, Sector Partnerships Unit.

4.1.3 *Information Technology*

With the constant new inventions in technology, the Information Technology sector conducted phase two of a study to determine the effect the role of information technology has on business and other factors that impact on today's economy. A number of initiatives were identified in the phase one 2001 study. An initiative of that 2001 study was to undertake a follow-up assessment of the human resource and training needs for the information technology sector. The phase two study was conducted in 2003/04 and the report will be finalized in 2004. The findings below are taken from the draft report.

A database of 498 companies, agencies, organizations and government departments was established and Trimension Training and Consulting Group Inc. developed a questionnaire and surveyed the companies. A mail-out survey was conducted in late 2003, followed by a telephone survey in January 2004, with an overall response rate of 31 percent.

Recent Trends

Information technology companies provide goods and services to other clients on a fee for service or contract basis. Also, many companies employ information technology personnel to support in-house computer support services. These include large corporations, crown corporations, government departments, education and training providers, and consulting firms.

The information technology sector is expected to continue the growth in the following occupations:

- Program/software development
- Computer support and network administration
- Helpdesk
- Multi-task resource
- Application support
- Management

Major Key Findings

- Eighty-four percent of information technology employees in the responding companies were full-time.
- Over half of the companies had fewer than six employees.
- Three quarters of the companies were located in the major cities in the province.
- The majority of employees were 25-44 years of age.
- Over the next two years, companies expected to increase the employee base by 13 percent.
- Over 95 percent of companies indicated that retention of employees is not an issue
- Over 90 percent stated that graduates from education and training institutes in the province meet the on-going training needs
- Slightly more than one percent of the workforce were Aboriginal.
- Ninety-four percent of employers reported that they do not have strategies in place in the areas of Aboriginal awareness training and education, strategic planning, career development, mentorship or succession planning.
- Slightly more than two percent of the companies reported that they were interested in learning more about initiatives to establish a representative work force that is reflective of the population in the province.

Major Recommendations

- Develop strategies to increase the participation of the under-represented groups in the industry.
- Expand the delivery options for education and training to alleviate the high costs of sending employees to training centres.
- The sector partner to work with industry and educators to address the growth forecast.

The executive summary of this report can be accessed by contacting Saskatchewan Learning, Sector Partnerships Unit.

4.1.4 Nursing Sector

Saskatchewan Learning approached the deans of nursing at the University of Saskatchewan and SIAST to consider undertaking an assessment of the need for a PLAR process within the Nursing Education Program of Saskatchewan (NEPS). NEPS is a collaborative academic venture between the College of Nursing at the University of Saskatchewan, and the Nursing Division at SIAST. Both

deans supported the study to investigate the potential use of PLAR as one possible strategy that might facilitate the progression of students through the program.

The needs assessment study included three stages of research:

- Stage one involved a literature review to determine if PLAR was utilized in any other nursing programs in Canada.
- Stage two focused on examining the need for developing a PLAR process in the program – included a student survey.
- Stage three consisted of a focus group session that included student representation from specific occupational groups identified in the student survey in stage two.

Key Findings

- Post-secondary institutions across Canada were in varying stages on the 'learning curve' with respect to developing and implementing a successful PLAR process.
- Several best practices to consider adopting when implementing or revising a PLAR process were identified.
- The majority of students surveyed supported the PLAR process to enable them to obtain credit.
- The students from the different health programs that participated in the focus group session indicated that they would appreciate the opportunity to utilize flexible forms of assessment that would enable them to obtain credit for learning that they feel meets course requirements.

Recommendations

- That NEPS continue with activities around the implementation and monitoring of a pilot course for PLAR in 2003-04.
- That NEPS seek funding for and implement a cost/benefit analysis of undertaking a PLAR process.
- NEPS seek funding for PLAR development and implementation of selected NEPS courses, if the cost/benefit analysis indicates it feasible to proceed.
- NEPS conduct an ongoing review of transfer credit for formal learning from accredited post-secondary institutions.
- NEPS demonstrate continued commitment to processes that acknowledge prior learning of NEPS students.

The executive summary of this report can be accessed by contacting Saskatchewan Learning, Sector Partnerships Unit.

4.1.5 Plumbing and Pipefitting Trades

The challenges that the industry is experiencing are:

- Changes to the provincial apprenticeship system
- Varying government regulatory systems
- Emerging gas and building technologies
- Expansion of gas lines in the province
- Increasingly diverse customers
- Fluctuating market demand for labour

The human resource challenges facing the plumbing and pipefitting industry are: the aging workforce; employers from many industries competing for plumbers and pipefitters; finding and retaining good skilled, learning-oriented employees; and the shifting demographics of the labour force.

An initial review of the industry, phase one, was conducted in 2000. The mechanical contractors association and the provincial pipe trades association developed a strategy to address the fourteen recommendations from the phase one study. The employers in the industry were surveyed to examine the need for industry education in human resource practices, as well as Aboriginal work force issues.

Phase two of the strategic plan enabled the execution of key strategic recommendations as well as a review of the apprenticeship activity of the piping trades in the province. The phase two study was conducted in 2002/03 with the release of the final report in the fall of 2003.

Recent Trends

- In June 2002, there were 407 plumbers and 68 steamfitter-pipefitters apprentices registered with the Saskatchewan Apprenticeship and Trade Certification Commission (ATCC).
- Approximately 35 plumbers and seven steamfitter-pipefitters become journeypersons each year.
- The plumbing trade ranked fourth in the number of apprentices.
- After several years of rapid growth, registrations had leveled for both plumbers and apprentices.
- Apprenticeship activity fluctuated with economic conditions and opportunities.

Key Findings

- Employers needed to attract and retain new employees that are representative of the population demographics in the province.
- Along with the Apprenticeship and Trade Certification Commission, develop a representative workforce strategy.
- A lack of career related information on piping sector careers

Recommendations

- Proceed with an action plan that will prioritize communications activities and partnerships with all stakeholders to:
 - Expand awareness of industry careers
 - Strengthen industry human resource practices
 - Implement Aboriginal employment strategies
 - Renew labour force data
 - Explore the feasibility of establishing a coordinator position to work with schools, the Aboriginal community and all stakeholders in a communications and education role
 - Support a training initiative in the Regina market for 2004

The executive summary of this report can be accessed by contacting Saskatchewan Learning, Sector Partnerships Unit.

4.1.6 Saskatchewan Home Builders' Association: Human Resource and Training Strategy for the Residential Construction Industry in Saskatchewan

The housing industry in Saskatchewan and across Canada is becoming increasingly concerned about the potential of skilled labour shortages and its effect on the economic performance of the residential construction industry; as well as, the ability of builders to competitively meet consumer demand and maintain housing quality and safety. The average age of skilled workers is creeping closer to that of retirement, and younger workers are not stepping forward to replace them. Participation by women, Aboriginals and persons with disabilities has also been limited to date.

At present, the residential construction industry generally does not have any attractive image and is not widely promoted within the current education system as a suitable career choice. Moreover, there are few training programs available for specialty and general workers in the low-rise residential construction sector. Existing apprenticeship and provincial training programs have significant portions devoted to commercial construction.

In order to address these issues, a study was conducted by the Saskatchewan Residential Construction Industry Sector partnership to identify human resource and training needs in the residential construction industry (Phase I). A human resource and training strategy was subsequently

developed that called for the residential construction industry, in partnership with the Apprenticeship and Trade Certification Commission, to develop occupations, which will lead to training and certification. The goal was to ensure that all people entering the industry have the opportunity to work toward a designation within the provincial apprenticeship system.

A second phase of the project was completed in March 2001, which included a review of job functions within the residential construction industry and potential training programs for residential occupations. From this work it was determined that the designation of particular sub trades would help to promote a more professional image of the industry and provide enhanced educational and training opportunities for young people.

The third and latest phase of the project consisted of:

- 1) Completing the steps required to have four areas of carpentry designated as subtrades – framing, concrete forming, interior finishing and exterior finishing.
 - a. Application to Saskatchewan Apprenticeship and Trade Certification Commission.
Application requirements included:
 - i. The development of a committee of employers and employees from both residential and commercial construction sectors to oversee survey of industry.
 - ii. Review of findings from phase I and II
 - iii. Development and execution of an industry survey to determine which employers and employees were prepared to support that application for subtrade designation.
 - iv. Meeting with representatives of the Saskatchewan Construction Association and with the Carpenter's Union to garner support, as well as letter from various industry stakeholders.
 - v. Literature review to address other sections of the application such as how the designation of subtrades will affect the Saskatchewan economy, increase public/consumer protection and safety, and current employment opportunities for proposed subtrades.
 - vi. Generation of a detailed description of proposed subtrades.
 - vii. Determination of number of training days and hours required for the proposed subtrade programs (SIAST's carpentry program was used as a proxy).
 - viii. Collection of information about programs to enhance opportunities for Aboriginal people.
 - ix. Presentation to the Apprenticeship Commission.
- 2) Coordinate the development and integration of designated subtrades in the residential construction sector.
- 3) Develop and implement a communication plan to inform the industry and other stakeholders about the training strategy.
- 4) Produce a presentation package that can be used by schools and career counselors.

Key Survey Findings

- Based on the results of the study, the designation of framer, concrete former, interior finisher and exterior finisher is supported by the industry.
- 96 percent of employers surveyed supported a training system and an apprenticeship program for framers.
- 91 percent of employers surveyed supported a training system for concrete formers, while 93 percent supported an apprenticeship program.
- 93 percent of employers surveyed supported a training system for interior finishers, while 83 percent supported an apprenticeship program.
- 94 percent of employers surveyed supported a training system for exterior finishers, while 91 percent supported an apprenticeship program.

- In total employers indicated they would have 47 to 52 framers, 44 concrete formers, 16 interior finishers, and 36 exterior finishers willing to attend technical training.
- The current SIAST program for apprenticeship carpentry covers all four subtrade designation areas, although not equally in terms of time allotted.

Next Steps

A number of steps to ensure the training strategy initiative is continued have been identified for the Saskatchewan Home Builders' Association:

- Continue to work with the Apprenticeship Commission to develop curriculum and training details for proposed subtrade programs, and to develop an understanding of the current process that allows and individual to be credited for prior experience and training.
- Work with employers to prepare job opportunities for new entrants requesting subtrade apprenticeship.
- Interface with other provinces that are developing similar initiatives to provide consistency throughout Canada.
- Prepare materials required for designated subtrades in other trade areas.
- Undertake presentations to the industry, schools, Aboriginal groups and other stakeholders in the province to encourage enrollment in subtrades.
- Produce communications materials, such as a high quality booklet.
- Develop programs to improve image of residential construction industry.

The executive summary of this report can be accessed by contacting Saskatchewan Learning, Sector Partnerships Unit.

4.2 Summary of SIAST needs assessment studies

The SIAST program, planning and development department conducted the following needs assessment studies to research the potential demand for new programs or major revisions to existing programs. The following needs assessment studies were completed in 2003-04:

4.2.1 Advanced Addictions Counselling

The potential for a new program for advanced training in the Chemical Dependency Worker program began in 2000. A survey was conducted that supported the proposed program. The advanced training was endorsed by the Chemical Dependency Worker program advisory committee, the Saskatchewan Association of Boards of Addiction Services and the Saskatchewan Association of Chemical Workers. In the winter of 2003, data were collected from three major sources to refresh and validate the results of the March 2000 survey, and included a questionnaire to chemical dependency practitioners/employers in Saskatchewan.

The study supported the development of advanced level training and certification in the Chemical Dependency Worker program, specifically towards advanced skills in addictions counseling.

SIAST approved the offering of an advanced certificate in Addictions Counselling. Completion of the Chemical Dependency Worker diploma program is the admission requirement for the new program in addictions counseling. Graduates of the program are prepared for enhanced employability in the addictions industry. This includes government and non-government agencies, employee assistance programs and private companies.

4.2.2 *Multi-Media Communications (expanding the current offering of a one year certificate program in New Media Communications)*

When the New Media Communications program was first approved, year one was completed with the intention to complete the implementation for year two. In 2002 and 2003, a series of focus group meetings were held, as well as a survey to practitioners. Industry experts validated the need for a number of specialized streams in this program.

Currently, SIAST offers the New Media Communications certificate program at two campuses. A survey of experts and employers in the media communications field as well as attendees at focus group sessions identified that the current eight-month program is not long enough to prepare graduates for all entry-level jobs in new media occupations. SIAST graduates from the one year certificate program are competing for jobs with graduates from other provinces that have specialized additional training. The study supported the offering of additional specialized training in the new media industry.

SIAST approved the offering of a diploma level program and a series of advanced level programs in specific specialties. Completion of the certificate level is the admission requirement for the following new programs.

- 1) New Media Communications (Diploma)
- 2) Digital Graphic Design (Advanced Certificate)
- 3) Interactive Media Production (Advanced Certificate)
- 4) Dynamic Web Development (Advanced Certificate)

4.2.3 *Dialysis Nursing Program*

The potential for a new program in Dialysis training within the continuing nursing education unit was identified in the SIAST Business Plan 2003-2008, as an increasing need for specialty training in the health field. A needs assessment was undertaken in January 2004. A mail-out survey, followed by a follow-up phone call survey, was conducted with employees and employers at health locations with dialysis units. The following were contacted:

- 251 registered nurses and licensed practical nurses currently working in dialysis settings
- 200 registered nurses and 200 licensed practical nurses (randomly selected) working in health care units other than the dialysis units (with the purpose of determining if they wished to transfer or were being transferred to dialysis units)
- 7 employers of registered and licensed practical nurses in the dialysis units

Employers from all seven of Saskatchewan's health care facilities that have dialysis units in the province responded to the survey (100 percent). One hundred and seventy-nine of the 651 nurses who received the nurses survey participated (98 registered nurses and 81 licensed practical nurses).

The study results revealed a notable interest from nurses to take a dialysis program, if training is subsidized by their employer, and if they will be recognized and compensated for the training.

- Thirty-seven percent of nurses surveyed reported that they were interested in taking formal dialysis training.
- Only 7 percent of nurses were willing to pay for training, while 58 percent (102 nurses) felt employers should pay for the training and another 20 percent simply indicated they were not willing to pay. The remaining nurses were unsure if they would be willing to pay.

The employer responses indicated there is some interest in having SIAST develop an educational program related to dialysis training, however issues of training support, and staff compensation and benefits for acquiring the additional training need to be explored further.

- Six of the seven employers indicated that they currently provide an orientation session for new dialysis nursing staff.
- Four of the seven employers felt there was a need for SIAST to develop an educational program

related to dialysis training.

- Five of the seven employers indicated they would be willing to hire SIAST graduates over the next three years, translating to approximately 50 full time and part-time nurses.
- Only three of the seven employers reported they would be prepared to provide some level of tuition funding for their staff.

Based on previous experience with health districts in utilizing a SIAST program to replace existing orientation training, the study recommended that the program planning not proceed until further employer support has been confirmed.

4.2.4 Neo-Natal Nursing Program

The potential for a new program in Neo-natal training within the continuing nursing education unit was identified in the SIAST Business Plan 2003-2008, as an increasing need for specialty training in the health field. A needs assessment was undertaken in January 2004. A mail-out survey, followed by a follow-up phone call survey, was conducted with employees and employers at health locations with neo-natal units.

One hundred and fifty-nine registered nurses currently working in neo-natal settings, and the employers of registered nurses in the province's two neo-natal units, located in Regina and Saskatoon, were contacted. Both employers responded to the survey (100 percent) and 38 of the 159 registered nurses in the neo-natal units responded.

The majority of the nurses that participated in the survey had full-time employment in a neo-natal unit (30 of 38). Approximately, two-thirds of the nurses surveyed (25 of 38) felt there is a need for SIAST to develop a neonatal program. One-quarter of respondents (10 of 38) indicated they would be interested in taking a neonatal training program, translating into a minimum of 20 existing neonatal nurses in the province. Only 5 of the 38 nurses stated they would be willing to pay for a neonatal training program.

Only one of the employers showed a firm interest in having SIAST develop a neonatal training program, and stated they would be willing to hire 6 graduates per year over the next three years. This employer also indicated they would be willing to consider providing tuition support and arrange for leave of absences or shift changes for nurses willing to take the training.

Given the lack of firm employer support for a neonatal program and its graduates, and an insufficient number of nurses to support the program over the long-term, the report recommended that SIAST not proceed with the development and implementation of a neonatal program at this time.

4.3 Other Reports

4.3.1 Saskatoon Labour Market Committee, Saskatoon Work Force & Employer Needs Study

The Saskatoon Labour Market Committee contracted Fast Consulting to conduct the Saskatoon Work Force and Employer Needs Study in the spring of 2004. The study serves to profile the Saskatoon labour market, identify issues and challenges facing employers and highlight successful recruitment and retention strategies. The study involved a survey of 750 employers, four focus groups and 22 high-level interviews. The number of employees covered by the survey was 25,603, which represents approximately 19.9 percent of the Saskatoon labour force. The final report was released to the public on May 11, 2004.

Highlights of the key findings include:

- Saskatoon's economy is strong, with 95 percent of employers surveyed reporting that their business has either been stable or growing. Thirty-eight percent of employers are in the growth stage.

- Top growth sectors are Construction, Health Services, and Primary Industries.
- Twenty-two percent of the employees within the businesses surveyed are under the age of 25, while 23.5 percent are over the age of 45.
- Of the 750 respondents, 40.5 percent (or 304 respondents) expect to have job vacancies within the next 12 months, which translates into 1,945 jobs.
- Approximately 37 percent of vacant positions are general labour, 16.2 percent are sales/consultant positions, 13.0 percent are retail or customer services jobs and 12.9 percent are business services positions.
- Forty percent of respondents are planning to hire additional workers in the next 12 months.
- Shortages of experienced and/or skilled workers is a challenge faced by two thirds of employers.
- Although recruitment is a challenge for most employers, the majority (86.5 percent) are not concerned about their turnover rates.
- Over one-half of respondents (52.0 percent) say employees leave for better opportunities, which includes better jobs and/or jobs that offer full-time work.
- Only 13 percent of respondents have experienced an increase in employee out migration to other provinces/countries.
- The most common retention strategies utilized by employers are competitive wages and salaries (24.9 percent), competitive commissions and bonuses (19.1 percent) and providing a positive work environment (18.3 percent).

Based on the findings, the study suggests some recommended actions the Saskatoon Labour Market may choose to pursue:

- Partnerships with the government, businesses and educational institutes to develop and implement job creation strategies;
- Partnerships with employers, industry association and the government to develop employer-friendly programs that support training;
- Relationships with industry associations and training institutes to mitigate the skills gaps, lack of experience and inadequate training issues facing some employers;
- Positive promotion of undervalued vocations;
- Exploring options around recruitment of foreign and immigrant workers
- Increased promotion and advertising of the SLMC and the services it offers
- Distribution of human resources-related material to employers
- Development of a Human resources toolkit for employers
- Promote Saskatoon success stories
- Development of a promotional recruitment package to aid employers in recruiting employees from out of province

The complete study may be accessed at www.saskatoonwork.com.

(Source: Saskatoon Labour Market Committee, Saskatoon Work Force and Employer Needs Study, Executive Summary and Backgrounder.)

4.3.2 *Regional Planning Partnership Report, Prince Albert*

The Prince Albert Regional Planning Partnership (RPP) is a network of community based, government and educational institutions working together with a mandate that includes identifying gaps in career and employment services to clients and employers in the Prince Albert area.

A report, released May 2004, analyzed the following industries and their impact for the future in the Prince Albert area:

- Agriculture
- Forestry/Wood Products

- Diamond Exploration
- Ethanol
- Construction
- Retail Trades
- Commercial Fishing

The report acknowledged a) the Downtown Strategic Plan for Prince Albert that is focused on development and incremental projects that will emphasize the rehabilitation and renovation of existing facilities and space and b) the reorganization of the Prince Albert REDA that better positions the authority to work with the City of Prince Albert and surrounding rural municipalities and communities to address economic development opportunities for the area.

With the potential for growth in the area, the report outlined a number of training needs for Prince Albert and area.

(Source: Regional Planning Partnership Report, Prince Albert, Saskatchewan, May 2004. Contact person: Mr. Gerry Stroshein, Trimension Consulting)

February 2004

«First_Name» «Last_Name»
«Company»
«Address»
«City» «Postal_Code»

RE: BUSINESS AND INDUSTRY TRAINING NEEDS

We invite your organization to participate in the important process of training people to suit your needs for qualified, skilled employees.

Participants will address changing or emerging training needs. A 2003 Provincial Training Needs Summary is attached for your reference.

Join us:

DATE: Wednesday, March 17
TIME: 1:00 to 4:30 PM
LOCATION: Room 150 – SIAST Kelsey Campus
Idylwyld Drive & 33rd St West, Saskatoon

Please note that the questions on the enclosed SIAST Training Needs Questionnaire will form the basis for discussion at the upcoming meeting. If a representative of your organization is unable to attend, please complete and return the questionnaire at your earliest opportunity.

Your input is vital to determining what training best meets your productivity and profit goals. Confirm your attendance to Jackie Cates **by March 10** at cates@siast.sk.ca, or call Jackie at 933-6518.

Barb Heise, Director
Skills Initiatives

Gerlinde Sarkar, Director
Planning, Research & Development

Companies that participated in SUTNA meetings/surveys

Company	City
ACCESS Communications	Regina
Bright Beginnings Early Childhood Centre	Regina
Bushwakker Brewing Company Ltd.	Regina
C & S Builders	Moose Jaw
Cameco Corporation	SK
Canada-Saskatchewan Career & Employment Services	Saskatoon
Cardinal Construction Co. Ltd.	Moose Jaw
Carrier Forest Products Ltd	Prince Albert
Casino Regina	Regina
Consumers Co-operative Refineries Limited	Regina
Crestline Coach Ltd.	Saskatoon
CSCES Regina, Sask Community Resources & Employment	Regina
Dee-Jacks Custom Metal & Welding	Prince Albert
Delta Regina	Regina
Doepker Industries	Annaheim
EDS Canada Inc.	Regina SK
Ens Lexus Toyota	Saskatoon
Federated Co-op	Saskatoon
Five Hills Health Region	Moose Jaw & area
Frontier Peterbilt Sales Ltd.	Regina SK
Government of SK	Prince Albert
Human Resources and Skills Development	Saskatoon
Industrial Welding	Saskatoon
Joey's Only Seafood Restaurant	Regina
Meidl Honda	Saskatoon
Mnemonic Enterprises	Moose Jaw
Parkland Ambulance Care	Prince Albert
Parkland Health Region	Prince Albert
Ranch Ehrlo Society	Pilot Butte
Regina Qu'Appelle Health Region EMS	Regina
Roadbuilders & Heavy Construction Assoc.	
Saskatchewan Assoc. of Automotive Repairers	SK
Saskatchewan Dental Assistants' Association	Kenaston
Saskatchewan Dental Hygienist Assoc.	SK
Saskatchewan EMS Assoc.	Nipawin (head office)
Saskatchewan Environment – Forest Ecosystems Branch	Prince Albert
Saskatchewan Home Builders' Assoc.	Regina
Saskatchewan Motion Picture Assoc.	Regina
Saskatchewan Outfitters Assn.	Prince Albert
Saskatchewan Society of Nutrition Management	Regina
Saskatchewan Society of Occupational Therapists	Saskatoon
Saskatchewan Tourism Education Council	Saskatoon
Saskatoon Hyundai	Saskatoon
SaskTel	Regina
Sherwood Chev/Olds	Saskatoon
Simpson Seeds Inc.	Moose Jaw
Thrifty Care Rental Systems	Regina
Tourism Regina	Regina
Tunnels of Moose Jaw	Moose Jaw
VCom Inc. (formerly WaveCom Electronics)	Saskatoon
Wapawekka Lumber	Prince Albert
Weldfab Ltd.	Saskatoon
Welldone Mechanical Services Inc.	Regina
Westcan Bulk Transport	Saskatoon/Moose Jaw
Weyerhaeuser	Prince Albert



Return to:
SIAS Administrative Offices
400 – 119 4th Ave South
Saskatoon SK S7K 5X2
ATTENTION: Jackie Cates
Or Fax to Jackie at 933-5988

Your Company Name:	Location:
---------------------------	------------------

1. What industry do you represent? _____

2. Approximately how many employees do you represent?
 as a representative of your business? _____
 as a representative of the industry? _____

3. Roughly define the geographic area that your company serves by selecting **one** of the following:
 - City (please specify) _____
 - Region (please specify) _____
 - Province

4. Name the **types** of occupations employed at your business:

5. Do you have difficulty hiring **qualified** staff? Yes No

6. **IF YES,**
 For what specific occupations: How many could you hire in **1 year:** **3 years:**

Appendix C

7. Why might it be difficult to hire staff?
- Working conditions are considered unattractive
 - Wages are considered too low
 - There are not enough trained people in the area
 - People are not willing to relocate

Other potential reasons (please elaborate)

8. What major barriers impact on the retention of staff in your industry?

9. What are the major trends (i.e. new technology, etc.) currently affecting your industry?

10. What are the major challenges that will affect your industry over the next 3 years?

11. What specific training challenges will your industry encounter over the next 3 years?

12. How can SIAST assist in overcoming some of these challenges?

References

- Bank of Montreal. BMO Financial Group Economics Department. "Prospects for Canada's Industries". Sectoral Outlook. October 2003. <http://www.bmo.com/economics>.
- Bank of Montreal. BMO Financial Group Economics Department. "Prospects for Canada's Provinces to 2005". Regional Outlook. October 2003. <http://www.bmo.com/economics>.
- Canadian Education Statistics Council. Education Indicators in Canada: Report of the Pan-Canadian Education Indicators Program 2003 November 2003 <http://www.cesc.ca/pceipE.html>
- Canadian Millennium Scholarships. Aboriginal Peoples and Post-Secondary Education : What Educators Have Learned <http://www.millenniumscholarships.ca/en/research/Aboriginal.html>
- Citizenship and Immigration Canada. Facts and Figures 2002, Immigration Overview. <http://www.cic.gc.ca/english/pub/facts2002>.
- Council of Ministers of Education. Canada (CMEC). A Report on Public Expectations of Post-Secondary Education in Canada February 1999. ISN 0-88987-118-3
- Department of Human Resources and Skills Development Canada. Saskatchewan Regional Services, Employment Prospects. http://www.hrsdc.gc.ca/en/sk/lmi/employment_prospects.shtml)
- SaskTrends Monitor. Volume XXI, Number 4. April 2004; Volume XX, April 2003; Volume XIX, April 2002. www.sasktrends.ca.
- Economic Analysis Branch, Saskatchewan Industry and Resources. Saskatchewan Monthly Economic Indicators Report. February 2004.
- Government of Australia. Department of Education, Science and Training, National Skills Shortages Strategy. http://www.skillsinitiative.gov.au/2nd_round_rural_summary.pdf
- Government Relations and Aboriginal Affairs. Demographic Trends in Saskatchewan, A Statistical Analysis of Population, Migration, and Immigration. August 2003. http://www.iaa.gov.sk.ca/PDFs/Demographic_Trends.pdf.
- Government Relations and Aboriginal Affairs. Saskatchewan Expanding Immigration Program. May 6, 2004. http://www.graa.gov.sk.ca/2004_releases.htm.
- Government of Saskatchewan Bureau of Statistics, Saskatchewan <http://www.gov.sk.ca/bureau.stats/pop/saskpopbyage.pdf>
- Government of Saskatchewan, Bureau of Statistics. Components of Population Growth, Saskatchewan November 2003 <http://www.gov.sk.ca/bureau.stats/pea/rbpop5.pdf>)
- Government of Saskatchewan Bureau of Statistics. Economic Review 2003. Number Fifty-Seven. December 2003. www.gov.sk.ca/bureau.stats
- Government of Saskatchewan Bureau of Statistics. Labour Force Surveys. April 2004. March 2004. March 2003. March 2002. March 2001. <http://www.gov.sk.ca/bureau.stats/lfs/lfsindx.htm>

Appendix D

- Saskatchewan Bureau of Statistics. Saskatchewan Interprovincial In-migration, by Age Group, 1979-80 to 2002-03. <http://www.gov.sk.ca/bureau.stats/pop/inmigrationby age.pdf>
- Government of Saskatchewan Bureau of Statistics. Monthly Statistical Review. March 2004, Volume 30, No 3. <http://www.gov.sk.ca/bureau.stats/monthly/monindx.htm>
- Government of Saskatchewan Bureau of Statistics. Saskatchewan Interprovincial Out-migration, by Age Group, 1979-80 to 2002-03. <http://www.gov.sk.ca/bureau.stats/pop/outmigrationby age.pdf>
- Government of Saskatchewan. Bureau of Statistics, Saskatchewan. Statistical Profiles of Cities – Volumes 1 and 2 <http://www.gov.sk.ca/bureau.stats/census/cities2.pdf>
- High School Lever Consortium. 1999 and 2003 Saskatchewan High School Leaver Studies, 2000 and 2003. Saskatchewan Learning
- Manpower. Manpower Employment Outlook Survey Canada, 2nd Quarter 2004. http://www.manpower.com/mpcom/viewMeos?name=CA_2Q04Brochure_English_FINAL.pdf
- Saskatchewan Chamber of Commerce. Action Saskatchewan: A Blueprint for 2005 – It's All About Growth. May 2002.
- Saskatchewan Industry and Resources. Saskatchewan Economic News. March 2004. <http://www.ir.gov.sk.ca/Default.aspx?DN=3369,3088,3087,2936,Documents>
- Saskatchewan Institute of Applied Science and Technology. Advanced Addictions Counselling November 2003
- Saskatchewan Institute of Applied Science and Technology Dialysis.
- Saskatchewan Institute of Applied Science and Technology Multimedia. Communications November 2003
- Saskatchewan Institute of Applied Science and Technology Neo-Natal.
- Saskatchewan Learning. Enrollment Projections for Kindergarten to Grade 12, 2004-05 to 2013-14 February 2004 Update
- Saskatchewan Learning. High School Leaver Consortium. 1999 and 2003, Saskatchewan High School Leaver Studies, 2000 and 2003.
- Saskatchewan Learning. Saskatchewan Education Indicators : Kindergarten to Grade 12. 2002
- Saskatchewan Learning. Sector Partnerships Unit. Early Childhood Care and Education Sector Study : Prior Learning Assessment and Recognition September 2003
- Saskatchewan Learning. Sector Partnerships Unit. Human Resource and Training Strategy for the Residential Construction Industry in Saskatchewan. April 2004.
- Saskatchewan Learning. Sector Partnerships Unit. Hunting, Fishing and Tour Guide (Outfitters) October 2003
- Saskatchewan Learning. Sector Partnerships Unit. Information Technology May 2004 – draft report

- Saskatchewan Learning. Sector Partnerships Unit. Nursing Sector March 2003
- Saskatchewan Learning. Sector Partnerships Unit. Plumbing and Pipefitting Trades Fall 2003 – draft report
- Saskatoon Labour Market Committee. Saskatoon Work Force and Employer Needs Study. March 2004. <http://www.saskatoonwork.com/slmc.html>
- SaskNetWork. “Labour Market Trends”. Labour Market Information. <http://www.sasknetwork.gov.sk.ca/html/Home/lmi/overviewdoc/section3.2.htm>.
- Statistics Canada. Aboriginal Peoples Survey 2001 – Initial Release, December 2003. Catalogue no. 89-595-XIE
- Statistics Canada, Analytical Studies Branch research paper series. Access to College and University : Does Distance Matter? Catalogue No. 11F0019MIE – No. 201
- Statistics Canada. Adult Education and Training Survey 2003. <http://www.stat.ca/daily/English/040430/d040430b/htm>
- Statistics Canada, A Profile of Disability in Canada, 2001 – Tables. 2001 Participation and Activity Limitation Survey December 2002. Catalogue no. 89-579-XIE)
- Statistics Canada. “Canadian Economic Accounts. First Quarter 2004”. The Daily. Monday, May 31, 2004.
- Statistics Canada, Census of Agriculture, Modified 2003-11,20 <http://www.statcan.ca/english/pgdb/econo141a.htm>
- Statistics Canada. 2001 Census : analysis series – Education in Canada: Raising the Standard Catalogue no. 96F0030XIE2001012.
- Statistics Canada. Census 2001: Immigrant Status by Period of Immigration, 2001 Counts, for Canada, Provinces and Territories – 20% sample data, modified March 2004, <http://www12.statcan.ca/english/census01/products/highlight/Immigration/Page.cfm?Lang=E&Geo=PR&View=1&Table=1&St.htm>
- Statistics Canada. 2001 Census: Level of Educational Attainment for the Age Group 25 to 64, 2001 Counts for Both Sexes, for Canada, Provinces, Territories, Census Metropolitan Areas and Census Agglomerations <http://www12.statcan.ca/english/census01/products/highlight/Education/Page.cfm?Lang=E&Geo=PR&View=1b&Table=1a&StartRec=1&Sort=2&B1=Counts01&B2=Both>
- Statistics Canada. Employment by Major Industry Groups and Province, Seasonally Adjusted, Saskatchewan. April 2004. <http://www.statcan.ca/english/Pgdb/labour67i.htm>
- Statistics Canada. Experienced Labour Force by Occupational Skill Group. 2001 Counts for Both Sexes, for Canada, Provinces and Territories. <http://www12.statcan.ca/english/census01/products/highlight/PaidWork/Page.cfm?Lang=E&Geo=PR&View=1b&Table=1a&StartRec=1&Sort=2&B1=Counts01&B2=Both>

Appendix D

- Statistics Canada. Full-time and Part-time Employment. <http://www.statcan.ca/english/Pgdb/labor12.htm>
- Statistics Canada. Labour Force Activity, Age Groups, Sex, Immigrant Status and Period of Immigration and Marital Status for Population 15 Years and Over, for Canada, Provinces, and Territories, 1981 to 2001 Censuses. Catalogue No. 97F0012XCB01001. <http://www12.statcan.ca/english/census01/products/standard/themes>
- Statistics Canada. Labour Force Activity, Aboriginal Status, Age Groups and Sex for Population 15 Years and Over, for Canada, Provinces, Territories, 1996 and 2001 Censuses. Catalogue No. 97F0012XCB01007. <http://www12.statcan.ca/english/census01/products/standard/themes/>
- Statistics Canada. "Labour Force Survey April 2004". The Daily. Friday, May 07, 2004.
- Statistics Canada. "Labour Force Survey March 2004". The Daily. Thursday, April 8, 2004.
- Statistics Canada. "Labour Force Survey May 2004". The Daily. Friday, June 04, 2004.
- Statistics Canada. "Labour Market Year-end Review 2003". The Daily. Friday, January 23, 2004.
- Statistics Canada. Occupational Classification - Selected Labour Force, Demographic, Cultural, Educational and Income Characteristics and Sex for Population 15 Years and Over, For Canada, Provinces, Territories. 1991 to 2001 Censuses. Catalogue No. 97F0012XCB01048. <http://www12.statcan.ca/english/census01/products/standard/themes>
- Statistics Canada. Census 2001. Population Projections. The Daily. <http://www.statcan.ca/Daily/English/010313/d010313a.htm>
- Statistics Canada. Population reporting an Aboriginal identify by age groups, provinces and territories. <http://www.statcan.ca/english/Pgdb/demo38b.htm>
- Statistics Canada, Census 2001. Population by Sex and Age Group. CANSIM, Table 051-0001, <http://www.statcan.ca/english/Pgdb/popula.htm#pop>
- Statistics Canada. Census 2001. Population 5 Years and Over by Mobility status, provinces and territories <http://www.statcan.ca/english/Pgdb/demo42c.htm>
- Statistics Canada. Census 2001: Proportion of Foreign Born Population, Provinces and Territories, modified May 2003, <http://www.statcan.ca/english/Pgdb/demo46a.htm>
- Statistics Canada. "Provincial and Territorial Gross Domestic Product". The Daily. Wednesday, April 28, 2004. <http://www.statcan.ca/english/dai-quo/>.
- Statistics Canada. Selected Educational Characteristics, Aboriginal Origin, Age Groups, Sex, and Area of Residence for Population 15 Years and Over, for Canada, Provinces, Territories, 2001 Census. Catalogue No. 97F0011XCB01050. <http://www12.statcan.ca/english/census01/products/standard/themes/>
- Statistics Canada. Selected Income Characteristics, Aboriginal Identity, Age Groups and Sex for Population 15 Years and Over, for Canada, Provinces, Territories, 2001 Census. Catalogue No. 97F0011XCB01047. <http://www12.statcan.ca/english/census01/products/standard/themes/>

- Statistics Canada. The Changing Profile of Canada's Labour Force. Catalogue No. 96F0030XIE2001009. <http://www12.statcan.ca/english/census01/products/standard/themes>
- Statistics Canada. The Daly. Wednesday, April 28, 2004. Provincial and Territorial Gross Domestic Product
- Statistics Canada. "The Economy: Year-end Review 2003". The Daily. Wednesday, April 14, 2004.
- TD Bank Financial Group. "Rattled by the Loonie, But Still Hanging On". Quarterly Economic Forecast. March 11, 2004. <http://www.td.com/economics>.
- TD Bank Financial Group. Quarterly Economic Forecast. March 11, 2004
- The Canadian Press. Census Forecasts Job Shortages Within a Decade. 2003. <http://www.canada.com/national/features/census/story.html?id=3A2C6DEC-8AC1-47FB-B599-76FC59F6E048>.
- The Saskatchewan Institute of Public Policy, University of Regina. Demographic Trends and Socio-Economic Sustainability in Saskatchewan : Some Policy Considerations October 2003. ISBN# 0-7731-0459-3
- Trimension Consulting Group Inc. Regional Planning Partnership Report, Prince Albert, Saskatchewan, May 2004. Contact person: Mr. Gerry Stroshein, Trimension Consulting