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## ABSTRACT

As part of an annual program planning process, Saskatchewan Institute of Applied Science and Technology (SIAST) conducts a number of formal and informal consultations with various SIAST stakeholders in order to identify and research future program training needs in the province of Saskatchewan, Canada. This Saskatchewan Urban Training Needs Assessment Report (SUTNA) 2003 was produced following the compilation of all research conducted during the spring. The 2001 Census year population of Saskatchewan was 978,933, which is a decline of 11,305 people from the 1996 Census. Saskatchewan has a greater proportion of the population in the 0-14, 15-24, and 65 and older population than does the rest of Canada. The greater abundance of population aged 0-24 should bode well for the province in light of the pending labor shortages expected in the near future. The SUTNA 2003 report is divided into three categories: (1) Demographic and Economic Information, reports on data regarding labor market information and economic activities and trends; (2) Summary of Training Needs Assessment Industry Consultations, reports on the primary research obtained from stakeholder consultations; and (3) Summaries of Relevant Studies and Reports, records the summaries of the sector partnership studies that have been completed within the last year. Research instrument appended. (Contains 68 references.) (NB)



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# **Saskatchewan Urban Training Needs Assessment Report 2003**

**Prepared by:**  
**SIAS Planning, Research and Development Division**

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**April 2003  
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**Saskatchewan Institute of Applied  
Science and Technology**

***Saskatchewan Urban Training Needs  
Assessment Report 2003***

Prepared by:  
SIAST Planning, Research and Development Division

Report #03-03

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

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## Acknowledgments

Thank you to the dedicated team that worked to produce The Saskatchewan Urban Training Needs Assessment (SUTNA) 2003 report. The team collaborated throughout the process to provide valuable input at all levels of the data gathering and report preparation phases. Special mention to the following persons who worked so diligently to put the report together:

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\* \* \* \* \*

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## **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 community representatives). The planning process is to identify and research future program training needs in the province of Saskatchewan. In addition to consultations, a number of publications that report on labour market information, general trends and statistics, and specific industry reports are also examined. Following the compilation of all research conducted this spring, the Saskatchewan Urban Training Needs Assessment Report (SUTNA) 2003 has been produced.

### **1.2 Purpose and objectives of the report**

The purpose of the SUTNA 2003 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 representative of the status of needs that were identified in past consultations. The identified training needs assist SIAST in determining future development of new programs or updating of existing programs.

One objective in undertaking the needs assessment consultation process is to work with organizations such as Canada-Saskatchewan Career and Employment Services (CSCES), and training providers, such as SIIT, DTI and the regional colleges, in order to identify needs, share common data and coordinate the information gathering process. Encouraged by Saskatchewan Learning, the process facilitates integrated planning and avoids duplication of services.

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 Methodology**

The SUTNA 2003 report is divided into three categories and outlined in sections two to four of the report.

Section 2.0 is a demographic and economic scan that reports data gleaned from a variety of sources, such as Statistics Canada. The results of Census 2001 have provided SIAST with updated population, employment and education statistics. The sources of research are referenced throughout the SUTNA 2003 report as well as in the list of references provided at the end of the report, as Appendix D.

Section 2.0 of the report provides relevant demographic swings, labour market information, economic activities and future trends, and includes an international, a national and a provincial perspective.

Section 3.0 reports the primary research obtained from the stakeholder consultations that were held in each SIAST campus city. The letter of invitation and guest list to the consultations are included as Appendices A & B.

SIAST is aware that the dates for the stakeholder consultations may not suit all invitees so this year introduced a questionnaire that non-attendees at the consultations could complete and send in. The questionnaires were compiled and the information added into this section of the report. A copy of the questionnaire is included as Appendix C.

As well as the above method of providing additional information, some organizations gave input by email or letter. The input was also added to this section 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 46 sector partnerships with 31 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 as partnerships continue to be established.

As well, the section includes specific needs assessment reports completed at SIAST and other published reports that identify future training trends. The 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.

Many training needs were identified during the consultation process, the questionnaire submissions and the reviewing 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 curriculum and offering the credential upon completion.



## 2.0 Demographic and Economic Information

### 2.1 Saskatchewan Demographics

#### 2.1.1 General Population Trends

In Census year 2001, Saskatchewan's population stood at 978,933, which is a decline of 11,304 people since the 1996 Census. Of the four major cities, only Saskatoon had experienced an increase in population over the same census period.

Table 1: Demographics of Saskatchewan

Characteristics	Saskatchewan		Saskatoon		Regina		Moose Jaw		Prince Albert	
Population in 2001 <sup>1</sup>	978,933		196,811		178,225		32,131		34,291	
Population in 1996 <sup>2</sup>	990,237		193,653		180,404		32,973		34,777	
Age Groups as % of the Saskatchewan population 2001 <sup>3</sup>										
0-14	20.5%		20.0%		19.2%		18.2%		24.3%	
15-29	21.6%		22.7%		22.4%		21.0%		21.8%	
30-64	43.3%		45.2%		45.8%		42.6%		42.2%	
65+	14.4%		11.9%		12.5%		17.9%		114.4%	
15-64	65.0%		68.0%		68.2%		63.7%		64.0%	
Age Groups by gender 2001 <sup>3</sup> (%)	M	F	M	F	M	F	M	F	M	F
0-14	10.4	10.0	10.2	9.8	9.8	9.4	9.4	8.9	12.5	11.7
15-29	11.1	10.5	11.3	11.4	11.3	11.0	10.6	10.4	10.7	11.1
30-64	21.8	21.5	22.5	22.7	22.7	23.1	21.0	21.5	20.7	21.4
65+	6.29	8.18	4.8	7.1	5.1	7.4	7.2	10.7	4.7	6.9
15-64	32.9	32.0	33.8	34.1	34.0	34.2	31.7	31.9	31.5	32.5
Aboriginal Population 2001 <sup>1</sup>	130,185		20,275		15,685		1,405		11,640	
Visible Minority Population 2001 <sup>1</sup>	27,580		12,410		9,880		n/a		n/a	
Immigrant Population 2001 <sup>1</sup>	47,825		16,865		14,015		1,510		1,440	
Social Assistance Recipients, 2002 <sup>4</sup>	12,245		3,129		2,785		431		740	

(Sources:

<sup>1</sup>Statistics Canada 2001 Census

<sup>2</sup>Statistics Canada 1996 Census

<sup>3</sup>Government of Saskatchewan, Saskatchewan Hospital Services Plan (SHSP), June 2002

<sup>4</sup>Saskatchewan Social Services, Social Services Fully Employable Social Assistance Recipients, December 2002)

Saskatchewan accounted for 3.3 percent of Canada's population in 2001, which is a decline from 1996. Table 2 gives the provincial population totals for Census years 1996 and 2001. When comparing populations, it is interesting to note that 6 of the 11 provinces and territories had experienced some form of population decline over the 1996-2001 period.

Table 2: Demographics of Canada's Provinces

(Source:	NAME	2001	% of Total	1996	% of Total
	Newfoundland & Labrador	512,930	1.7%	551,792	1.9%
	Prince Edward Island	135,294	0.5%	134,557	0.5%
	Nova Scotia	908,007	3.0%	909,282	3.2%
	New Brunswick	729,498	2.4%	738,133	2.6%
	Quebec	7,237,479	24.1%	7,138,795	24.7%
	Ontario	11,410,046	38.0%	10,753,573	37.3%
	Manitoba	1,119,583	3.7%	1,113,898	3.9%
	Saskatchewan	978,933	3.3%	990,237	3.4%
	Alberta	2,974,807	9.9%	2,696,826	9.3%
	British Columbia	3,907,738	13.0%	3,724,500	12.9%
	Yukon Territory	28,674	0.1%	30,766	0.1%
	Northwest Territories	37,360	0.1%	39,672	0.1%
	Nunavut	26,745	0.1%	24,730	0.1%
	<b>CANADA</b>	<b>30,007,094</b>	<b>100.0%</b>	<b>28,846,761</b>	<b>100.0%</b>

Statistics Canada. 2001 Census: population and dwelling counts, for Canada, provinces and territories, 2001 and 1996 censuses

The provincial Census data also shows several other interesting trends which include the following: there continues to be a shift in the demographics of the province with the non-Aboriginal population of Saskatchewan aging; residents moving away from the rural centers to the larger urban centers (thus leading to rural depopulation); net-migration has been on the downward trend resulting in out-migration being greater than in-migration; and the Aboriginal population is young in age and rising. What these trends suggest is that, as the non-Aboriginal population ages, a greater number will be retiring in the next 10 to 15 years and will cause a shortage of workers in what is projected to be a tight labour market. 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 An Aging Population

Table 3 presents the ages of the population for Saskatchewan and Canada, as a whole. As evident, Saskatchewan has a greater proportion of the population in the 0-14, 15-24 and 65 and older population than the rest of Canada. The greater abundance of Saskatchewanians aged 0-14 and 15-24 should bode well for the province in light of pending labour shortages in the near future.

Table 3: Ages of Population, Canada and Saskatchewan, 2001

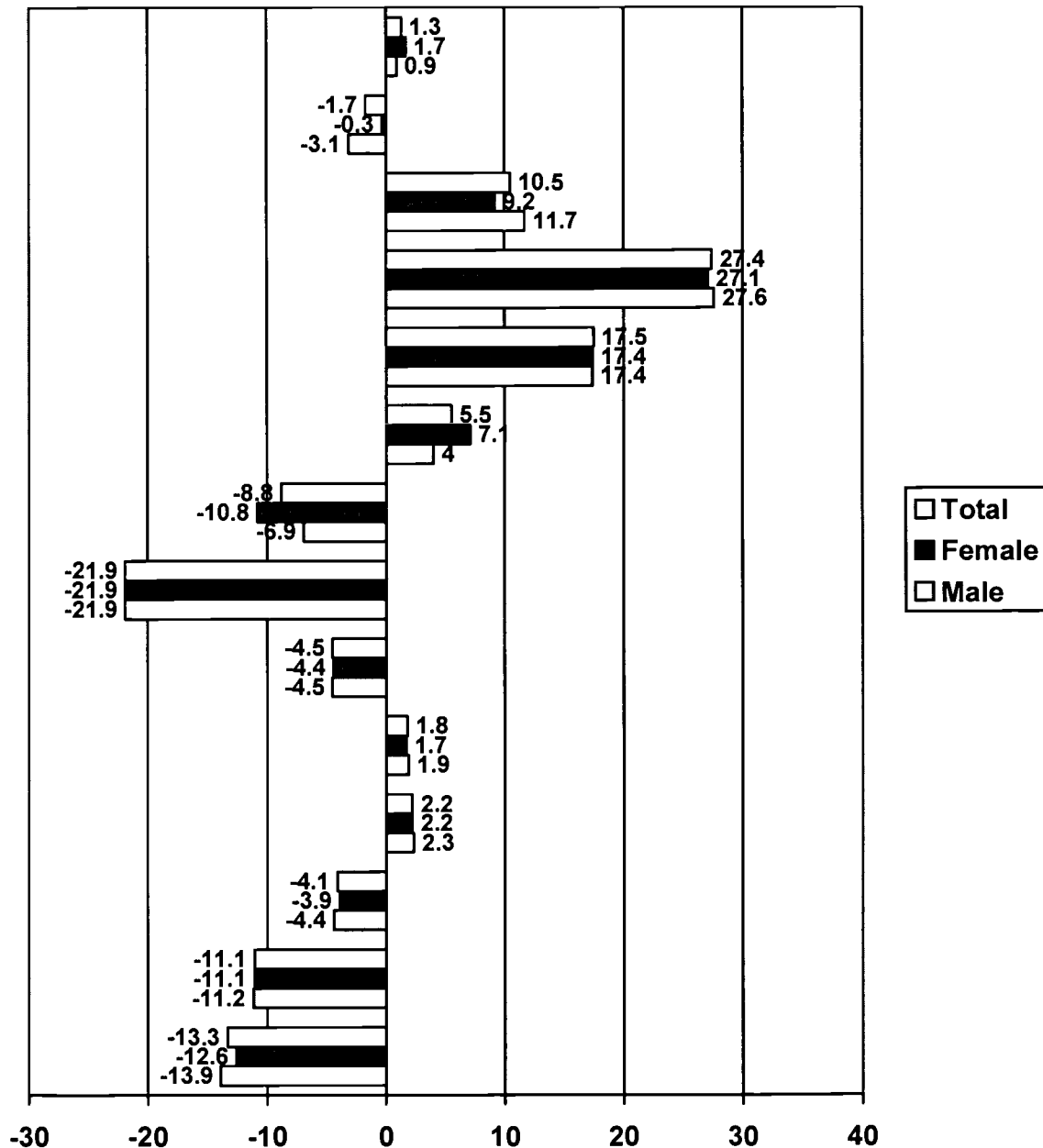
Population Data		2001	1996	% change
Population in Canada		30,007,094	28,846,761	4.0
Population in Saskatchewan		978,933	990,237	-1.1
15 years of age and older		2001	% of total population	1996
Population in Canada aged 15 years and older		24,281,560	80.9%	22,945,480
Population in Saskatchewan aged 15 years and older		771,705	78.8%	761,665
Ages of Population 2001	In Canada	% of Canadian population	In Saskatchewan	% of Saskatchewan population
0-14 years	5,725,535	19.1%	207,230	21.2%
15-24	4,009,140	13.4%	144,240	14.7%
25-34	3,994,940	13.3%	115,125	11.8%
35-44	5,101,625	17.0%	149,330	15.3%
45-54	4,419,290	14.7%	130,885	13.4%
55-64	2,868,015	9.6%	84,560	8.6%
65 and older	3,888,550	13.0%	147,565	15.1%
Total - all ages	30,007,095	100%	978,935	100%

(Source: Statistics Canada. 2001 Census data, adapted)

Figure 1 gives the change in the composition of Saskatchewan's population over the 1996-2001 census period. As Figure 1 shows, the proportion of the population between 40 and 59 years of age had increased while the younger population in the five year age groups between 0-14 had decreased over the 1996-2001 period.

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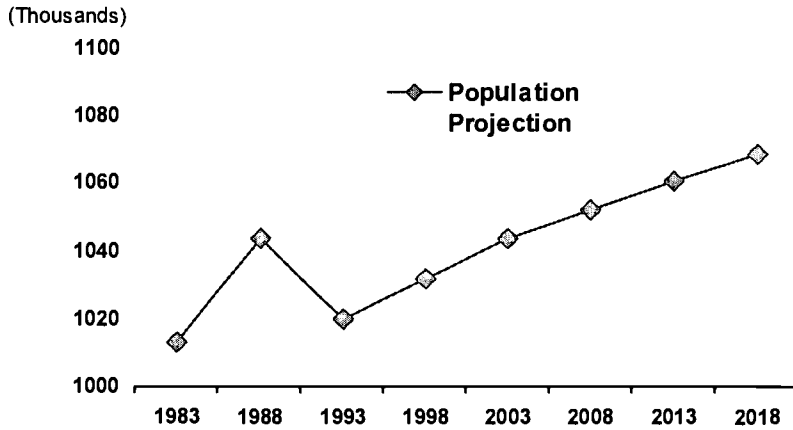
**Figure 1: Saskatchewan Census Population by 5 Year Age Groups  
1996-2001 % Change**



(Source: Statistics Canada. 2001 Census data, prepared by the Saskatchewan Bureau of Statistics)

The population of Saskatchewan, as projected by Saskatchewan Learning, is expected to only grow moderately over the next 15 to 20 years, as shown in Figure 2. Forecasts project an average annual increase of about 0.2%, and are based on the existing migration patterns and constant fertility and mortality rates.

**Figure 2: Saskatchewan Population Projection  
1983-2018 Migration Pattern Assumption**

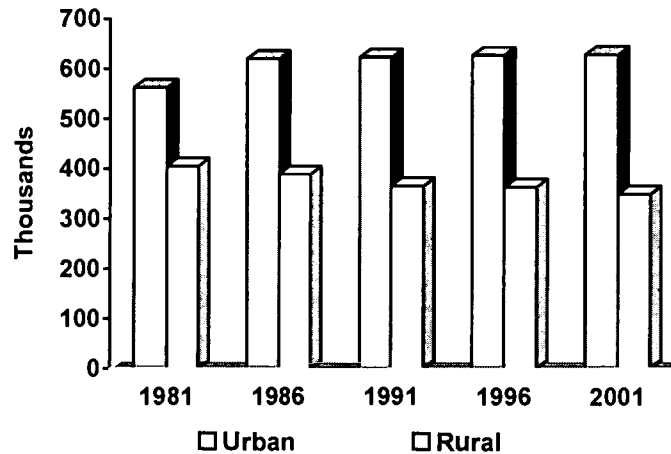


(Source: Saskatchewan Learning and Saskatchewan Economic and Co-operative Development. *An Overview of the Saskatchewan Economy and Labour Market*. May 2001)

### 2.1.3 Rural to Urban Shift in Population

The province's population is becoming increasingly urban as people move to larger centers such as Saskatoon and Regina. Figure 3 shows the shift in the twenty years for the period 1981 to 2001.

**Figure 3: Saskatchewan Population – Urban and Rural 1981-2001**



[Excludes Unenumerated Indian Reserves]  
(Source: Statistics Canada. *Census of Canada*)

Statistics Canada reports that in the 1986-1991 five year span, the population in rural Saskatchewan decreased by 10%, or by 14% since 1981. The population in rural Saskatchewan did remain fairly static between the years 1991 to 1996 (Figure 3). From 1996 to 2001, the rural population declined by nearly 4 percent to 349,897 people.

#### 2.1.4 Inter-provincial Migration

The Saskatchewan Bureau of Statistics reports the inter-provincial migration rates from 1992-2002 via data obtained from Statistics Canada. From the trend, as identified in Table 4 below, Saskatchewan's population has been experiencing a decline in net-migration over this time period. Given these findings, and given the recent downturn in the province's economy (in part due to the sluggish agricultural farm sector), one would suspect that the existing trend is likely to not reverse itself (at least in the short-term).

Table 4: Inter-provincial Migration Figures 1992-2002

Year	Inter-provincial Migration		
	In-Migration	Out-Migration	Net Migration
1992	17,796	26,277	-8,481
1993	17,258	23,606	-6,348
1994	16,828	22,259	-5,431
1995	16,814	20,466	-3,652
1996	17,411	19,572	-2,161
1997	16,771	19,565	-2,794
1998	18,697	20,637	-1,940
1999	15,200	19,533	-4,333
2000	14,556	22,503	-7,947
2001	12,985	21,395	-8,410
2002	18,968	27,603	-8,635

(Source: Statistics Canada. 2001 Census data, prepared by the Saskatchewan Bureau of Statistics)

#### 2.1.5 Immigration to Canada

Statistics Canada reports that Canada grew by 1,830,680 over the 1991-2001 period as a result of immigration. Of this total, 11,365 immigrated to Saskatchewan with the majority locating in Saskatoon and Regina (see Table 5). Cities in Canada that attracted the largest number of immigrants included Montreal, Toronto and Vancouver.

Table 5: Immigrant Status by Period of Immigration, 2001

Name	Total population <sup>1</sup>	Canadian-born population <sup>2</sup>	Foreign-born population <sup>3</sup>	Immigrated before 1991	Immigrated between 1991 and 2001 <sup>4</sup>
Canada	29,639,030	23,991,905	5,448,480	3,617,800	1,830,680
Saskatchewan	963,150	912,220	47,825	36,460	11,365
Moose Jaw	32,510	30,915	1,510	1,225	285
Prince Albert	39,890	38,340	1,440	1,165	275
Regina	190,020	175,135	14,015	10,755	3,260
Saskatoon	222,630	204,395	16,865	11,755	5,115
Calgary	943,310	738,310	197,410	128,550	68,860
Edmonton	927,020	755,965	165,235	120,320	44,915
Montreal	3,380,645	2,724,200	621,890	406,770	215,120
Toronto	4,647,955	2,556,860	2,032,960	1,240,930	792,035
Vancouver	1,967,475	1,199,760	738,550	413,740	324,815
Winnipeg	661,725	548,975	109,390	82,985	26,405

<sup>1</sup> Includes non-permanent residents (not shown as a separate column in this table), as well as the sum of the counts for the Canadian-born and foreign-born population.

<sup>2</sup> Includes persons born in Canada as well as a small number of persons born outside Canada who are Canadian citizens by birth.

<sup>3</sup> This population is also referred to as the "immigrant population", which is defined as persons who are, or have ever been, landed immigrants in Canada.

<sup>4</sup> Includes data up to Census Day, May 15, 2001.

(Source: Statistics Canada. 2001 Census: Immigrant Status by Period of Immigration, 2001 Counts, for Canada, Provinces, Territories, Census Metropolitan Areas and Census Agglomerations - 20% Sample Data)

## 2.1.6 Aboriginal Population

Statistics Canada reports that Saskatchewan's Aboriginal population has grown since 1996. Table 6 gives Saskatchewan's and Canada's Aboriginal population by age group for the Census year 2001 while Table 7 provides the percent of the Aboriginal population in each age group for 2001. As Table 6 shows, Saskatchewan's Aboriginal population increased by 1.9 percent over the 1996-2001 period. However, what is interesting is the younger Aboriginal population which comprises a significant proportion of the overall Aboriginal population (Table 7). The 0-14 age group, for example, represents 24.9 percent of Saskatchewan's population in that age category, while the 15-24 and 25-34 age groups account for 16.5 and 16.4 percent, respectively.

The proportions are similar for Canada's Aboriginal population, which represents 3.3 percent of the total Canadian population. What this implies is that Saskatchewan will have a growing Aboriginal population for some time which will require education and jobs in a tightening Saskatchewan labour market.

*Table 6: Ages of Aboriginal Population, Canada and Saskatchewan, 2001*

Aboriginal Population Data	2001	% of total population	1996	% of total population
Aboriginal Population in Canada	976,305	3.3%	799,010	2.8%
Aboriginal Population in Saskatchewan	130,190	13.3%	111,245	11.4%
<hr/>				
Aboriginal population 15 years of age and older	2001	% of total population aged 15 and older	1996	% of total population aged 15 & older
Aboriginal population in Canada aged 15 years and older	652,350	2.7%	518,590	2.3%
Aboriginal population in Saskatchewan aged 15 years and older	78,660	10.4%	64,885	8.7%

(Source: Statistics Canada. 2001 Census data, adapted)

*Table 7: Percent of Population that is Aboriginal by Age Group, 2001*

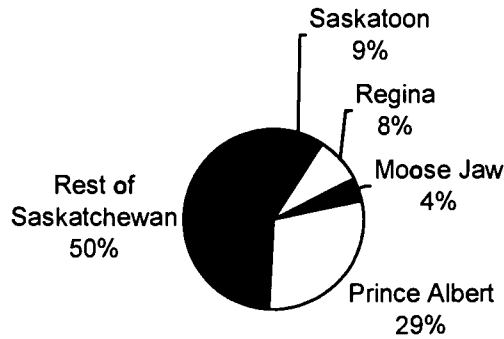
Ages of Aboriginal Population 2001	Aboriginal Population in Canada	% of Canadian Aboriginal population	Saskatchewan Aboriginal Population	% of population in Saskatchewan that is Aboriginal in each age group	Saskatchewan Population	% of overall population in Saskatchewan
0-14 years	323,965	33.2%	51,535	24.9%	207,230	21.2%
15-24	169,070	17.3%	23,965	16.6%	144,240	14.7%
25-34	148,550	15.2%	18,870	16.4%	115,125	11.8%
35-44	145,855	14.9%	16,350	10.9%	149,330	15.3%
45-54	96,365	9.9%	9,890	7.6%	130,885	13.4%
55-64	52,830	5.4%	5,375	6.3%	84,560	8.6%
65 and older	39,680	4.1%	4,210	2.8%	147,565	15.1%
Total - all ages	976,315	100.0%	130,195	13.3%	978,935	100.0%

(Source: Statistics Canada. 2001 Census data, adapted)

Figures 4 and 5 depict the Aboriginal population in the province. Figure 4 shows the Aboriginal population in 2001 in each of the four cities where a SIAST campus is located. The four cities account for 50% of the total Aboriginal population in Saskatchewan (which represents an increase of 15% since 1996). Figure 5 shows the Aboriginal population in 2001 in each of these cities as a percentage of the total population of the cities. The information is taken from the Census 2001 data (as prepared by the Saskatchewan Bureau of Statistics).

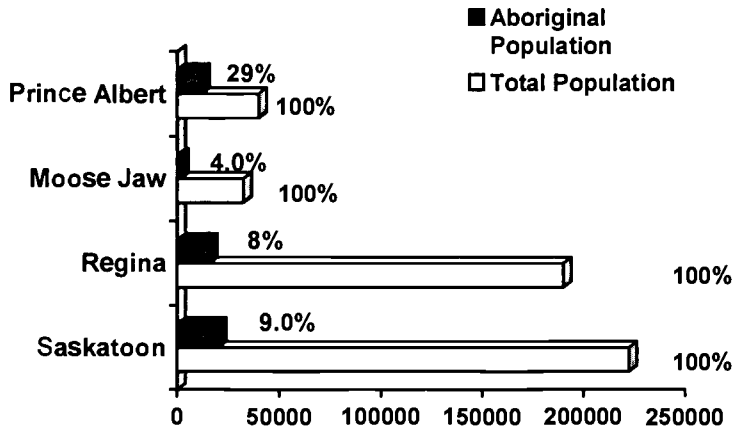


**Figure 4: Aboriginal Population in 2001  
in Saskatoon, Regina, Moose Jaw and Prince Albert  
as % of Total Population in Saskatchewan**



(Source: Statistics Canada. 2001 Census data, prepared by the Saskatchewan Bureau of Statistics)

**Figure 5: Aboriginal Population in 2001  
in Saskatoon, Regina, Moose Jaw and Prince Albert  
as % of Total Population in City**



(Source: Statistics Canada. 2001 Census data, prepared by the Saskatchewan Bureau of Statistics)

## 2.2 Education Levels

### 2.2.1 Kindergarten to Grade 12 Population

In the published *Saskatchewan Education Indicators, Kindergarten to Grade 12, 2000* report, Saskatchewan Learning reports that:

Saskatchewan's school-aged population has been declining in recent years. The number of Aboriginal school-aged children in Saskatchewan has been increasing. 20% of the school-aged population is Aboriginal.

The population trend in the province has implications for all post-secondary institutions. Table 8 below identifies potential post-secondary students for the 1998-2002 period. Province-wide enrollment projection for the 2003-05 period are also presented. The term, *SpSec* refers to a record of students within the secondary division (grades 9 – 12), but who are not specifically in any one particular grade within that division.

*Table 8: Grade 9 to Grade 12 Enrollments Province-wide (1998 to 2005) and in the Four Major Cities, 1998 to 2002*

Province-wide						
Enrollment Year	Gr9	Gr10	Gr11	Gr12	SpSec	Total
1998	15,013	15,554	14,324	15,033	1,130	61,054
1999	14,965	15,477	14,296	15,698	1,124	61,560
2000	14,505	15,659	14,215	15,604	992	60,975
2001	14,146	15,029	14,448	15,632	1,330	60,585
2002	14,385	15,120	14,112	16,098	778	60,493
2003*	14,243	15,147	14,028	15,509	1,071	59,998
2004*	14,272	15,102	14,094	15,465	1,071	60,004
2005*	13,362	15,133	14,052	15,537	1,071	59,155

\* Projected

Note: Enrollments from all publicly funded School Divisions.

#### Saskatoon

Enrollment Year	Gr9	Gr10	Gr11	Gr12	SpSec	Total
1998	2,751	2,868	2,600	3,293	148	11,660
1999	2,941	2,869	2,716	3,337	115	11,978
2000	2,820	3,057	2,666	3,439	135	12,117
2001	3,006	2,951	2,865	3,470	163	12,455
2002	2,988	3,042	2,756	3,721	189	12,696

Note: Enrollments from Saskatoon Public SD 13 (4150000) and St. Paul SSD 20 (4160000) only.

### Regina

Enrollment Year	Gr9	Gr10	Gr11	Gr12	SpSec	Total
1998	2,725	2,685	2,484	2,508	455	10,857
1999	2,733	2,699	2,526	2,727	436	11,121
2000	2,636	2,812	2,628	2,853	313	11,242
2001	2,463	2,782	2,650	2,943	462	11,300
2002	2,560	2,726	2,587	3,127	112	11,112

Note: Enrollments from Regina Public SD 13 (2150000) and Regina Separate SD (2160000) only.

### Moose Jaw

Enrollment Year	Gr9	Gr10	Gr11	Gr12	SpSec	Total
1998	561	586	549	578	58	2,332
1999	539	569	561	654	71	2,394
2000	505	580	563	681	90	2,419
2001	528	537	609	686	15	2,375
2002	498	555	563	672	48	2,336

Note: Enrollments from Moose Jaw SD 1 (2250000) and Moose Jaw RCSSD 22 (2260000) only.

### Prince Albert

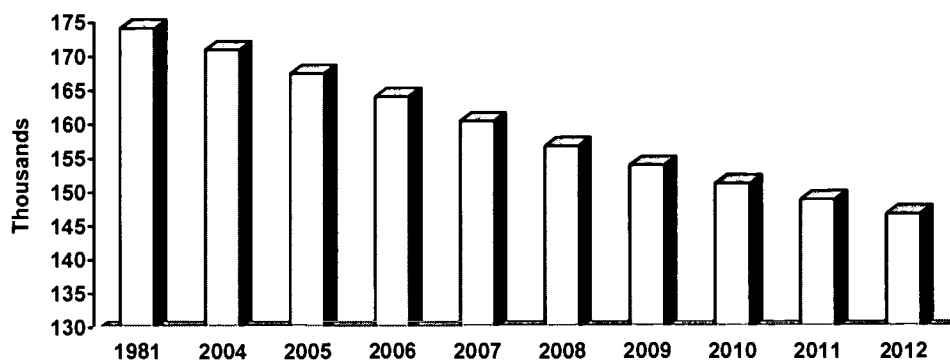
Enrollment Year	Gr9	Gr10	Gr11	Gr12	SpSec	Total
1998	699	870	779	796	171	3,315
1999	688	860	744	811	164	3,267
2000	686	871	773	856	138	3,324
2001	509	645	633	648	212	2,647
2002	539	647	765	670	201	2,822

Note: Enrollments from Prince Albert SD 3 (5650000), Prince Albert RCSSD 6 (5660000) Saskatchewan Rivers SD 119 (7450000) 1997-98 on.

(Source: Saskatchewan Learning. School Grants Database, Regina SK. 2003)

According to the enrollment statistics provided by Saskatchewan Learning in the report entitled, *Saskatchewan Learning Projections for Kindergarten to Grade 12, 2003-2004 to 2012-13*, which was completed in January 2003, the total K-12 provincially funded enrollment in 1980-81 was 203,573 students; in 1990-91, 198,916 students; and in 2002-03; 177,575 students; which indicates a reduction of approximately 26,000 K-12 students in the past twenty plus years (1981-2003) within the province. Projected provincially funded enrollments for the 2003-04 to 2012-13 period are shown in Figure 6 below.

**Figure 6: Saskatchewan K-12 Provincially Funded Enrollment Projection  
2004-2012**



(Source: Saskatchewan Learning. Enrollment Projections for Kindergarten to Grade 12, 2003-04 to 2012-13, January 2003 update)

### 2.2.2 Post-Secondary Education Completion Rates – Canada and Saskatchewan

Table 9 presents the level of educational attainment in Saskatchewan and Canada, for the age group 25 to 64, for the 1991 and 2001 Census years. College and university participation has risen over the 1991-2001 period while the number of people with less than high school education has declined. Overall, 49.9% of Saskatchewan people aged 25 to 64 have some post secondary education which is slightly higher than Canada (at 48.3%). Such trends are reflective of a population that is increasing in education so as to meet the demand requirements in an ever-increasing tight labour market.

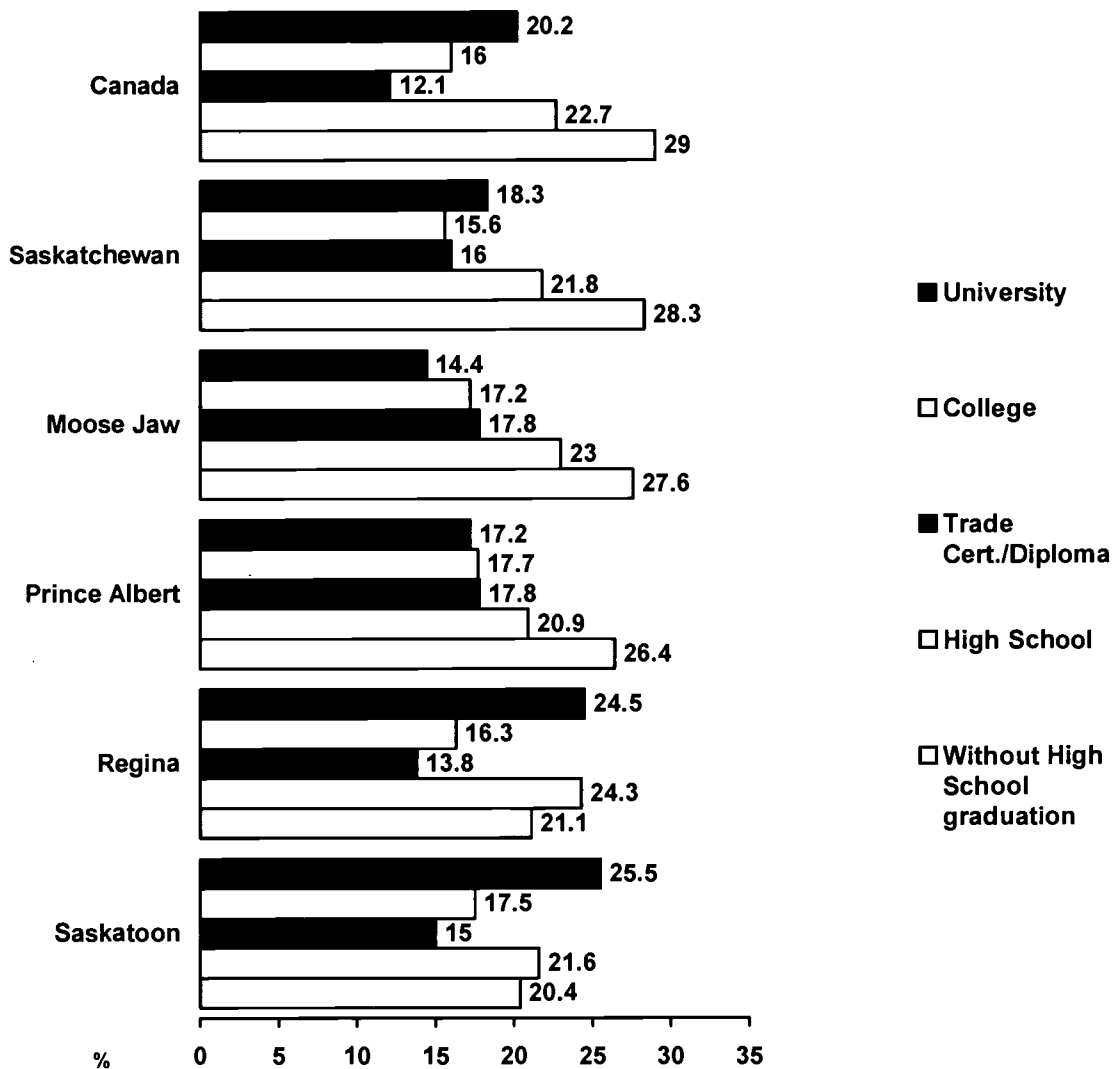
*Table 9: Level of Educational Attainment for the Age Group 25 to 64, Saskatchewan and Canada, 2001*

	Saskatchewan 1991		Saskatchewan 2001		Canada 2001	
	Number	%	Number	%	Number	%
Less than high school	173,285	36.7	134,585	28.3	5,775,010	29.0
High school	102,700	21.8	103,875	21.8	4,511,655	22.7
Trades	69,630	14.8	76,050	16.0	2,415,280	12.1
College	55,725	11.8	74,405	15.6	3,188,580	16.0
University	70,615	15.0	87,005	18.3	4,022,625	20.2
All trades, college and university	195,970	41.5	237,460	49.9	9,626,485	48.3
Population 25 to 64	471,955	100.0	475,920	100.0	19,913,150	100.0

(Source: Statistics Canada. 2001 Census: Level of Educational Attainment for the Age Group 25 to 64, 2001 Counts for Both Sexes, for Saskatchewan - 20% Sample Data)

In Figure 7, the Statistics Canada Census 2001 reports that the majority of the populations in Saskatoon, Regina, Prince Albert and Moose Jaw have some post-secondary education. A comparison to Saskatchewan and Canada, as a whole, is also shown in Figure 7.

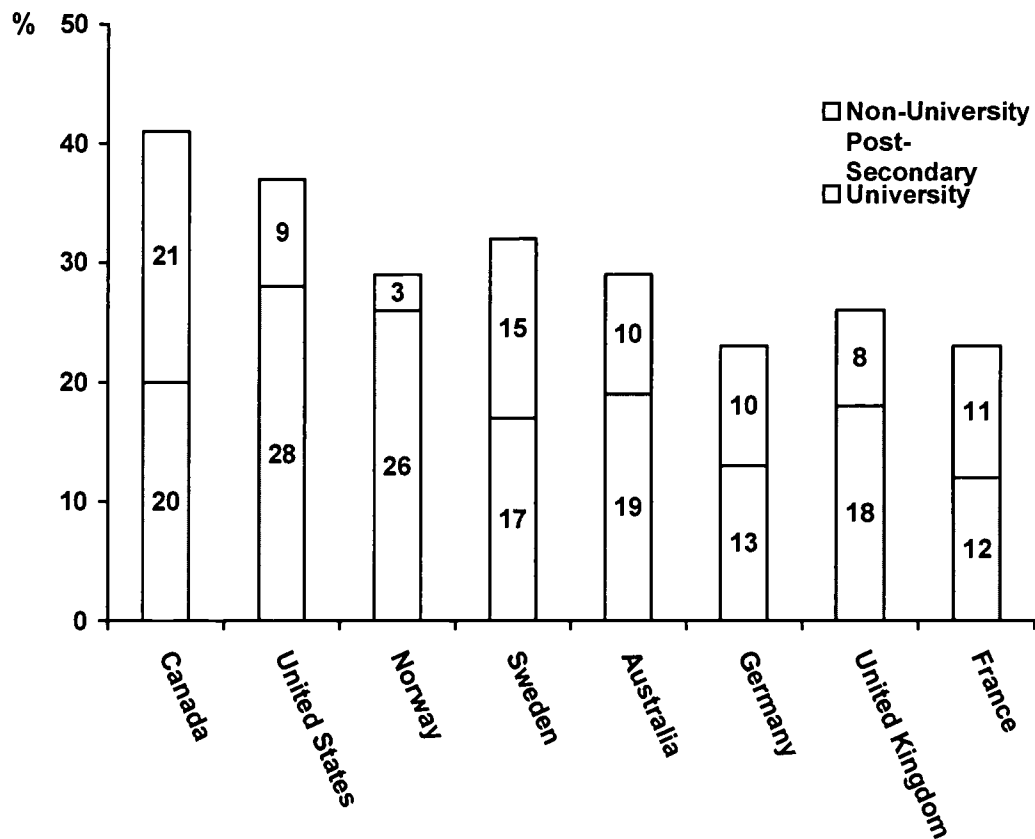
**Figure 7: Education Indicators as Percent of the Population, 2001**



(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 - 20% Sample)

Figure 8 presents the 2001 level of post-secondary education in selected Organization for Economic Co-operation and Development (OECD) countries. Canada is by far the leader in terms of combined post-secondary education levels (university and non-university) of all the countries in the OECD. The United States, though, has a higher percentage of post-secondary students who have completed university education (at 28% compared to 20% in Canada).

**Figure 8: Percentage of Population Aged 25-64 that has Completed Post-secondary Education [Selected OECD Countries 2001]**



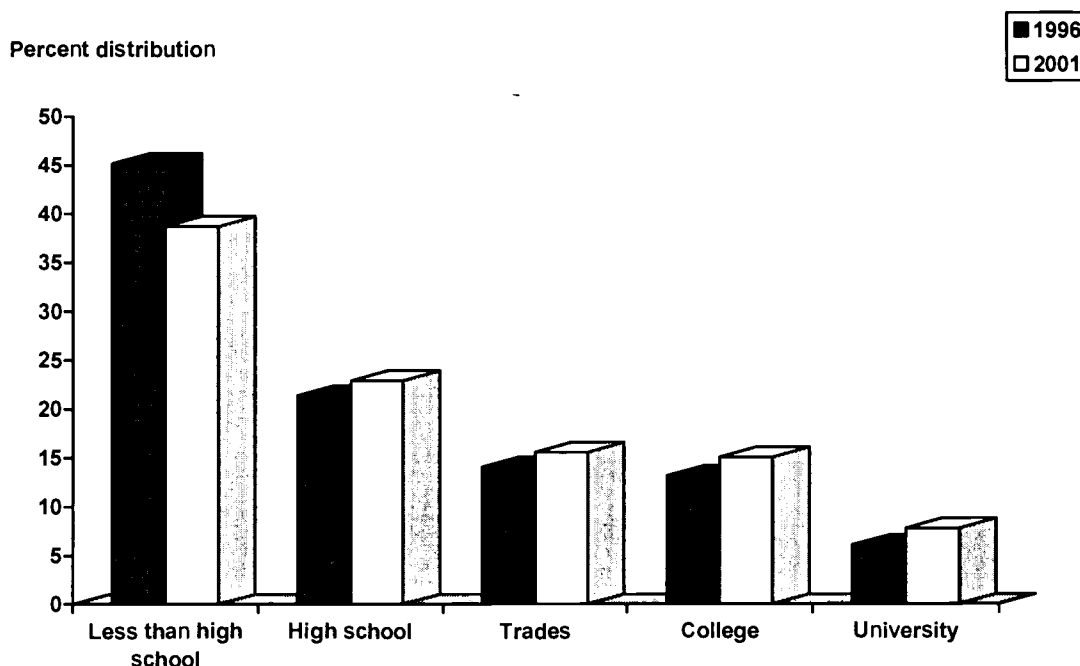
OECD Average, University and non-university post-secondary (24%)  
 OECD Average, University (15%)

(Source: Statistics Canada. 2001 Census: Education in Canada: Raising the Standard, Catalogue no.:96F0030XIE2001012)

### 2.2.3 Education Indicators for Aboriginal Population

Figure 9 presents the levels of educational attainment for Aboriginal people in Canada for Census years 1996 and 2001. As shown in Figure 9, educational attainment has risen since 1996 with more Aboriginal students successfully completing high school, trades, college and university.

**Figure 9: Levels of Educational Attainment Aged 25 to 64, Canada, 1996 and 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 - 20% Sample)

### 2.2.4 Post-Secondary Issues

An *Omnibus Poll* within Saskatchewan is conducted for the Government of Saskatchewan four times per year. Questions on Saskatchewan Learning were part of the November 2002 *Omnibus Poll*. Regarding the issue of post-secondary education and training in Saskatchewan, the poll reported that the population in Saskatchewan, in November 2002, rated the quality of Saskatchewan's training programs as excellent/good (13%/49%). This has been consistent for the last number of quarterly polls.

The results of the *Omnibus Poll* survey of approximately one-thousand of Saskatchewan's population, states that one third (33%) of Saskatchewan residents would (if they were advising a young person today) tell them to attend SIAST or technical training school. Other responses were as follows:

- University (26%)
  - Apprenticeship Program (10%)
  - Out-of-province institution (2%)
  - Regional College (2%)
  - Private vocational school (1%)
  - Unsure (9%)
- (Source: Fast Consulting. Omnibus Provincial Public Opinion Survey. November 2002)

Those who participated in post-secondary education did so for the following reasons: gain new job related skills (33%), increasing knowledge (30%), further education (27%), increased income/job security (22%), required/job related (12%), personal enjoyment (7%), and unsure (2%).

### 2.2.5 Intention to Pursue 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
- to 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)*

Statistics Canada, in the *Report on Adult Education and Training in Canada: Learning a Living*, reported on the results of a survey on adult education and training. The writers of that report stated that approximately 28% of Canadians (more than 6 million people aged 18 and over) were enrolled in adult education and training activities in 1997. Three of every four who did so took the training for job-related purposes. The figure is slightly down from the 29% that was reported in 1991. Adult education and training includes all structured educational (credit and non-credit courses) and training activities taken at work, at school or at any other location for job-related or personal interest reasons. The survey focused on learners not attending regular school or university. Consequently, the population used for the survey did not include all regular full-time students, except those full-time students subsidized by employers; full-time students aged 20 and over who were enrolled in elementary or secondary school programs; and full-time students aged 25 and over enrolled in post-secondary programs. All other students in the 17-24 age range were excluded from the survey.

The report went on to state that, in 1997, the majority of those who took training were from the employed population rather than the unemployed – 29% of employed workers and 20% of unemployed workers. The participation rate of those in the 55+ age categories was 20%, compared to more than 30% in all other age categories. In the age category 17 to 24, the participants spent an average of 451 hours on additional training.

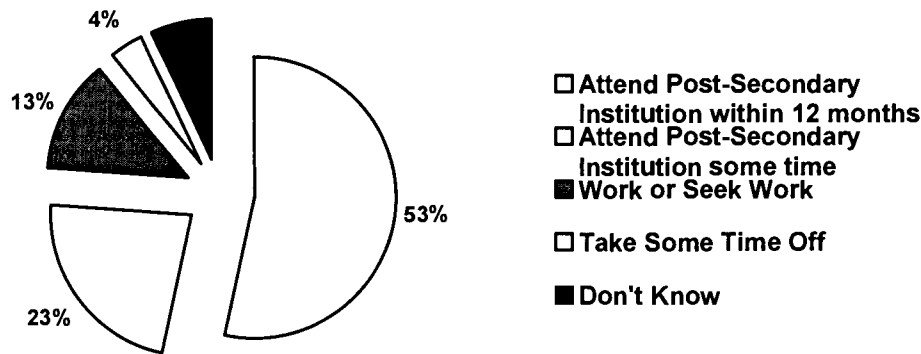
*(Source: Statistics Canada, Daily for 2001-05-10)*

In 1999, 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 (formerly the Saskatchewan Education and Saskatchewan Post-Secondary Education and Skills Training departments), surveyed Grade 11 and 12 students in the province to determine their intentions upon completion of high school. Students in reserve schools were not surveyed at the time given that they operate within the federal jurisdiction of



government. The results of the survey were presented in the *1999 High School Leaver Study* report. A total of 19,396 grade 11 and 12 students responded to the survey. Seventy-seven percent of students indicated that they were considering some form of post-secondary education, either within twelve months or at some time in the future. Figure 10 identifies the future plans of the students, as of spring 1999.

**Figure 10: Future Plans of Grades 11 and 12 Students in Saskatchewan, in 1999**

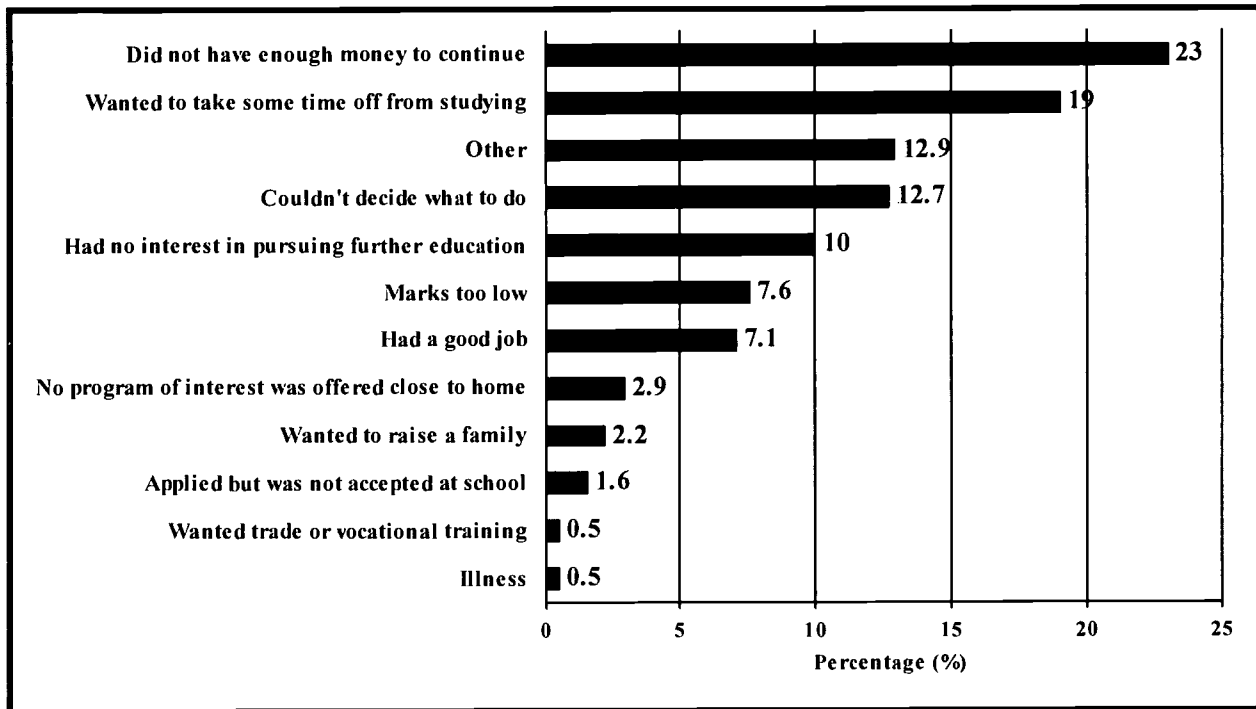


(Source: High School Leaver Consortium. 1999 Saskatchewan High School Leaver Study, 2000)

### 2.2.6 Why Youth are not Attending Post Secondary Education

A 2001 Canada Millennium Research Series report entitled *Why don't they go on?*, gave an account as to the factors that determine why Canadian youth decide not to attend post secondary education in Canada. The major finding of the report was that 77% of the students listed a non-financial reason for not attending post secondary school. The reasons given for not pursuing post secondary education in Canada are presented in Figure 11. The report went on to state that students from the prairie provinces mentioned the most that they wanted to take some time off, when asked about not attending post secondary education. A third interesting finding was that those respondents whose father had a low level of education (i.e., less than high school) were more likely to indicate that their reason for not attending postsecondary school was because they had no interest in further education. Respondents' mother's education level had no effect (statistically speaking) on the most important reason for non-attendance.

**Figure 11: Reasons Given for Not Pursuing Post Secondary Education**



(Source: Canada Millennium Scholarship Foundation, Research Series, Why Don't They Go On? Factors Affecting the Decisions of Canadian Youth Not to Pursue Post-Secondary Education, 2001)

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## 2.3 Labour Force

### 2.3.1 Canadian Labour Force Characteristics

There have been three key characteristics which have shaped Canada's labour force over the past decade. These include: a demand for skills in the face of advancing technologies and an ever-increasing "knowledge based economy"; a working-age population that is increasingly becoming older; and a dependency upon immigration as a source of skills and manpower to meet the labour force shortages that is projected to become increasingly prevalent in the next decade.

The demand for skills has become increasingly apparent in the data from the 2001 Census (Table 10). Between 1991 and 2001, the labour force increased by 1.3 million with nearly half of this growth attributed to high skilled occupations which require post secondary education. New job growth requiring high school or less accounted for only a quarter of the increase.

*Table 10: Occupational skill groups, Canada, Labour force aged 15 and over, 1991, 1996 and 2001*

Both Sexes	1991	1996	2001 <sup>1</sup>	Growth 1991-2001	% Growth 1991-2001	Contribution to labour force growth 1991-2001 <sup>2</sup>
All occupations	14,220,230	14,317,540	15,576,560	1,356,330	9.5	100.0
University	1,904,445	2,082,810	2,530,895	626,450	32.9	46.2
College	3,172,000	3,167,340	3,369,510	197,510	6.2	10.8
Apprenticeship Training	1,343,175	1,192,905	1,292,605	-50,570	-3.8	-3.7
Secondary or less	6,417,200	6,585,370	6,762,640	345,440	5.4	25.5
Managers	1,383,405	1,289,125	1,620,905	237,500	17.2	17.5

<sup>1</sup>Includes the experienced labour force only. The experienced labour force comprises persons who were either employed or unemployed during the week preceding Census Day but who have been employed at some point since January 1 of the year preceding the census year.

<sup>2</sup>Contributions to labour force growth is calculated by dividing the growth for any sex and occupational skill group category by the total labour force growth.

(Source: Statistics Canada, 2001 Census: The changing profile of Canada's labour force, Catalogue no.: 96F0030XIE2001009)

Given the tightening of the Canadian labour supply, Canada has increasingly turned to immigration as a source of meeting the demand for labour. The 2001 Census data shows that immigrants who arrived in the 1990s, and who were in the labour force in 2001, represented almost 70% of the total growth of the labour force over the past decade. If this trend continues, it is quite conceivable that immigration could account for virtually all of the labour force growth by 2011.

The labour force participation rate for Canadian men and women over the 1998-2002 period is presented in Table 11. As evident from Table 11, women are making significant inroads when it comes to participating in the Canadian labour force while a significant percentage of men aged 65 and over continue to participate in the Canadian labour force.

Table 11: Labour force and participation rates, Canada, 15 years and over, 1998-2002

	1998	1999	2000	2001	2002
	Thousand				
Labour Force	15,417.7	15,721.2	15,999.2	16,246.3	16,689.4
Men	8,380.2	8,534.0	8,649.2	8,769.2	8,989.8
Women	7,037.5	7,187.2	7,350.0	7,477.1	7,699.6
	%				
Participation rates					
15 years and over	65.1	65.6	65.9	66.0	66.9
Men	72.1	72.5	72.5	72.5	73.3
Women	58.4	58.9	59.5	59.7	60.7
15-24 years	61.9	63.5	64.4	64.7	66.3
Men	63.5	65.3	65.9	66.1	67.7
Women	60.2	61.7	62.9	63.3	64.9
25-44 years	85.6	85.8	86.0	86.3	86.8
Men	92.2	92.1	92.1	92.1	92.4
Women	79.0	79.6	80.0	80.4	81.2
45 years and over years	47.1	47.8	48.5	48.9	50.3
Men	55.8	56.6	56.9	57.1	58.6
Women	39.2	39.9	40.9	41.5	42.8
65 years and over	6.4	6.2	6.0	6.0	6.7
Men	10.2	9.8	9.5	9.4	10.5
Women	3.5	3.4	3.3	3.4	3.7

(Source: Statistics Canada. 2001 Census: Labour force and participation rates)

Finally, it is significant to report that the work force is older with the average age being 39.0 years in 2001, up from 37.1 years in 1991 (Table 12). Moreover, in Census 2001, 15% of the labour force was within 10 years of retirement age. Coupled with low fertility rates, fewer younger people are entering the work force to replace individuals who are nearing retirement. As a result, in 2001, there were 2.7 persons aged 20 to 34 in the labour force for every participant aged 55 and over – which is down from a ratio of 3.7 in 1981.

### 2.3.2 Saskatchewan Labour Force Characteristics

Saskatchewan had the oldest labour force in Canada in 2001, with an average age of 39.8 years (which is above the national average of 39.0). The primary reason for the age increase is due to the decline in people aged 20 to 34, which had declined by 22.5% over the 1990s, an aging farm population workforce, and a much larger percentage of the labour force who are over 65 years of age (Table 12).

Table 12: Age indicators, Canada and Saskatchewan, 1991 and 2001

	% aged 55 and over		Average age		# of workers aged 20 to 34 for each worker aged 55 & over	
	1991	2001	1991	2001	1991	2001
Canada <sup>1</sup>						
Both sexes	10.6	11.8	37.1	39.0	3.8	2.7
Men	12.1	13.3	37.7	39.5	3.3	2.3
Women	8.8	10.0	36.4	38.5	4.7	3.2
Saskatchewan <sup>1</sup>						
Both sexes	15.0	15.2	38.3	39.8	2.5	1.9
Men	17.0	17.1	38.9	40.4	2.2	1.7
Women	12.4	13.0	37.4	39.1	3.1	2.3

<sup>1</sup>Includes the experienced labour force only. The experienced labour force comprises persons who were either employed or unemployed during the week preceding Census Day but who have been employed at some point since January 1 of the year preceding the census year.

(Source: Statistics Canada. 2001 Census: The changing profile of Canada's labour force, Catalogue no.: 96F0030XIE2001009)

As seen at the national level, the demand for skilled labour is also high in Saskatchewan. The number of occupations seeking university qualifications had increased by 14.7% over the 1991-2001 period while managerial qualifications rose by 5.1% (Table 13). The number of occupations seeking college qualifications dropped somewhat over the same period.

Table 13: Occupational skill groups, Saskatchewan, labour force aged 15 and over, 1991-2001

	1991	2001 <sup>1</sup>	% Growth 1991-2001
Both Sexes			
All occupations	499,770	504,415	0.9
University	56,900	66,680	14.7
College	147,365	142,800	-3.2
Apprenticeship Training	39,800	40,565	1.9
Secondary or less	215,275	211,765	-1.7
Managers	40,430	42,605	5.1

<sup>1</sup>Includes the experienced labour force only. The experienced labour force comprises persons who were either employed or unemployed during the week preceding Census Day but who have been employed at some point since January 1 of the year preceding the census year.

(Source: Statistics Canada. 2001 Census: The changing profile of Canada's labour force, Catalogue no.: 96F0030XIE2001009)

The labour force, as reported in the *February 2003 Labour Force Survey*, published by the Saskatchewan Bureau of Statistics, identifies the following employed labour force by industry for the 2000, 2001 and 2002 years (Table 14).

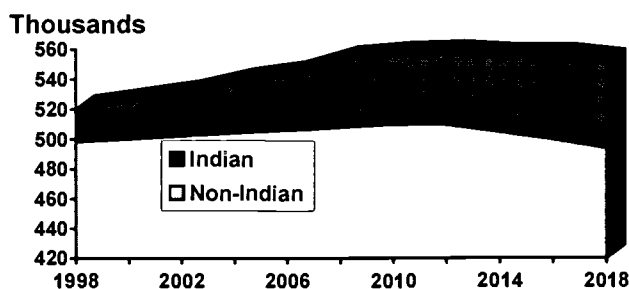
Table 14: Employed Labour Force by Industry 2000-02

Industry	2002 ('000)	2001 ('000)	2000 ('000)
Agriculture	50.7	51.3	62.1
Manufacturing	29.5	29.8	29.2
Construction	25.5	24.9	24.0
Transportation, Communication and Other Utilities	28.8	29.6	31.7
Trade	78.0	73.4	76.3
Finance, Insurance and Real Estate	27.6	26.8	26.6
Service	198.9	191.0	192.6
Public Administration	27.0	28.0	26.7
Other Primary Industries	15.8	17.7	15.9
Total All Industries	482.0	472.4	485.0

(Source: Saskatchewan Bureau of Statistics. *Monthly Labour Force Statistics, February 2003*)

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 (Figure 12). 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 12: Saskatchewan's Labour Supply  
1998 - 2018



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

### 2.3.3 Employment by Industry

Canada had a record employment rate in 2002, increasing by 3.7% or 560,000 people. In December, the proportion of the working age population employed had reached 62.4%, which was the highest on record. A strong economy led to such improvement in the labour market. Most firms were hiring in 2002 with the largest gains being in manufacturing, where employment rose by 125,000 or 5.6%. Overall, the goods-producing sector increased by 5.8% while the service producing sector grew by 3.0%.

It was also reported that there were more part-time jobs for youths in 2002. Youth employment increased 104,000 or 4.5% between December 2001 and December 2002. This expansion was partially attributed to the greater availability of part-time jobs, which increased by 223,000 or 8.1%. A smaller but still notable proportion of the part-time increase came from the education and health care sectors.

The increase in full-time employment was healthy as well. Virtually all of the increase in manufacturing and construction employment came in the form of full-time employment. This helped increase full-time employment by 336,000 or 2.7%. This is a considerable increase over 2001, where full-time employment had fallen by 26,000 or -0.2%.

The April 4, 2003 edition of the *Statistics Canada Daily* reports that employment continued to edge upward by 14,000 in March 2003 while the national unemployment rate dipped 0.1 percentage points to 7.3%. Moreover the article reported that although the employment rate (62.5%) and the participation rate (67.5%) remained at all-time highs, the pace of employment growth has slowed. The modest increase in employment in March 2003 brings gains for the first three months of the year to 67,000, the smallest quarterly increase since the end of 2001 (Table 15).

There were 15,702.8 million employed in the public and private sector at the end of March 2003 which represents an overall increase of 2.9% over March 2002. The bulk of the employment was in the private sector, as shown in Table 16.

Table 15: Employment by Industry, Canada

	February 2003	March 2003	February to March 2003	March 2002 to March 2003	February to March 2003	March 2002 to March 2003
	Seasonally adjusted					
	'000			%		
All industries	15,702.8	15,717.0	14.2	448.9	0.1	2.9
Goods-producing sector	4,006.6	3,989.2	-17.4	90.9	-0.4	2.3
Agriculture	347.8	340.1	-7.7	26.0	-2.2	8.3
Forestry, fishing, mining, oil and gas	279.9	290.8	10.9	6.9	3.9	2.4
Utilities	127.1	131.5	4.4	5.4	3.5	4.3
Construction	903.1	915.2	12.1	58.5	1.3	6.8
Manufacturing	2,348.7	2,311.5	-37.2	-6.0	-1.6	-0.3
Services-producing sector	11,696.2	11,727.8	31.6	358.0	0.3	3.1
Trade	2,448.7	2,447.0	-1.7	9.7	-0.1	0.4
Transportation and warehousing	763.4	766.3	2.9	33.2	0.4	4.5
Finance, insurance, real estate and leasing	934.3	929.3	-5.0	46.5	-0.5	5.3
Professional, scientific and technical services	1,008.6	1,006.3	-2.3	30.3	-0.2	3.1
Management, administrative and other support	612.5	610.4	-2.1	15.5	-0.3	2.6
Educational services	1,051.5	1,054.3	2.8	68.8	0.3	7.0
Health care and social assistance	1,670.7	1,669.8	-0.9	111.1	-0.1	7.1
Information, culture and recreation	685.8	685.7	-0.1	-23.8	0.0	-3.4
Accommodation and food services	1,013.0	1,045.6	32.6	40.6	3.2	4.0
Other services	711.1	723.1	12.0	26.1	1.7	3.7
Public administration	796.5	790.1	-6.4	0.3	-0.8	0.0

(Source: Statistics Canada Daily, Labour Force Survey, Daily for 2003-04-04)



Table 16: Employment by Public and Private Sector, Canada, March 2003

	February 2003	March 2003	Change February to March 2003	March 2002 to March 2003	February to March 2003	March 2002 to March 2003
	'000	'000	%	'000	%	%
Total Employees	15,702.8	15,717.0	14.2	448.9	0.1	2.9
Public sector employees	2,983.5	2,977.6	-5.9	125.8	-0.2	4.4
Private sector	12,719.3	12,739.4	20.1	323.1	0.2	2.6
Private employees	10,340.0	10,347.4	7.4	224.6	0.1	2.2
Self-employed	2,379.3	2,392.0	12.7	98.5	0.5	4.3

(Source: Statistics Canada Daily, Labour Force Survey, Daily for 2003-04-04)

### 2.3.4 Shortage of Skilled Workforce

Nationally, Canada's labour force totaled around 15.6 million people (as of May 15, 2001), which represents an increase of 9.5% from 14.2 million a decade earlier. The number of women in the labour force grew exceedingly, doubling the pace of men. This represented an increase of 13.8% to 7.3 million. The number of men rose by 6.0% to 8.3 million.

Of the 15.6 million people working in the labour force, there were 2.5 million employed in highly skilled occupations. These highly skilled occupations accounted for roughly 50% of the total labour force growth in the last decade. Hence, there has been a change in the skills that are required to participate in the Canadian labour force.

The same trends are being experienced in Saskatchewan in terms of the shortage of skilled labour. This is largely attributable to an aging population, which was alluded to earlier, and the magnitude of the impact is largely dependent upon the occupation in question. Among the occupations at risk, the health care sector is mentioned given the existing shortages already and also because of the health care needs of an aging population.

In March, 2002, a report entitled *Saskatchewan Employment Demand (SED) Forecast 2001*, projected total employment by skill type in Saskatchewan over the 2000-05 forecast period to be around 12,800 jobs. The occupation classifications, where these job openings are projected to occur, are identified as follows:

- Management Occupations.
- Business/Finance/Administration Occupations.
- Natural/Applied Sciences and Related Occupations.
- Health Occupations.
- Social Science/Education/Government Service/Religion Occupations.
- Art/Culture/Recreation/Sport Occupations.
- Sales and Service Occupations.
- Trades/Transport/Equipment Operation Occupations.
- Primary Industry Occupations.
- Processing/Manufacturing/Utilities Occupations.

The report went on to say that 73% of all job opportunities are projected to be in the service-producing sector of the economy, primarily in the Business, Sales and Service and Trades occupations. The report also stressed that many of the occupations will be difficult to fill, particularly in occupations related to the healthcare sector.

A more detailed analysis and description of labour shortages, based on consultations with industry, business and provincial associations is provided in Section 3.

## **2.4 Economic Highlights**

### **2.4.1 Canadian Outlook**

Canada turned in one of the best economic performances during 2002. The Canadian economy was strong, producing solid growth in real gross domestic product (GDP) and a significant increase in job growth. Approximately 560,000 new jobs were added since December 2001 and the economy grew by 3.2% over the year. The economic outlook for Canada looks bright in 2003, with economic growth forecasted to be around 3%.

Low interest rates had led to strong housing sales and increased sales for durable goods and automobiles in 2002. The Conference Board of Canada in its report entitled *Insider Edge*, projects inflation to remain relatively stable, at 2.4%, throughout 2003 while the national unemployment rate is forecasted to be around 7.3%. Real consumer spending is expected to rise by 2.7%, which is directly related to solid income gains by workers. Real disposable income (income after taxes and inflation) is expected to rise by 2.9%, which is reflective of the significant employment gains of 560,000 during 2002. A further employment gain of approximately 400,000 jobs is projected for 2003 which should bode well for a healthy Canadian economy.

### **2.4.2 Saskatchewan Outlook**

The strength of the Canadian economy bodes well for Saskatchewan. As a result of improved economic conditions in our export markets, forecasters are expecting Saskatchewan's economy to gain momentum in 2003. The February 2003 edition of the *Saskatchewan Economic News* reported that January 2003 was the highest on record for people working in the province. A total of 475,500 people were employed in January 2003 (seasonally unadjusted), which surpassed the previous record set three years ago. Non-agricultural employment rose by 16,900 jobs over January 2002 while youth employment (ages 15-24) increased by 5,000 over the same time period.

The report also stated that Saskatchewan's unemployment rate was 6.5% in January 2003, thus resulting in the third lowest unemployment rate in Canada and well below the national average of 8.1%. In addition, the report mentions that forecasters expect Saskatchewan's economy to grow in 2003. Forecasts by Scotiabank (2.6%) and BMO Nesbitt Burns (2.7%) projected a strong real growth rate in GDP. Other financial institutions report similar forecasts for Saskatchewan's economy in 2003 which, in turn, should lead to significant employment growth over the year.

The *Economic Review 2002* highlights the year in review in terms of economic conditions within the province. Some of the highlights are noted as follows:

- The Saskatchewan economy rebounded in 2002 and had solid gains in employment growth.
- Saskatchewan's unadjusted unemployment rate remained as one of the lowest in the country throughout 2002, averaging 5.7% for the year.
- Due to higher crude oil prices, the value of 2002 crude oil sales was strong.
- Consumers continued to drive the economy in Saskatchewan throughout 2002 despite difficulties in the agriculture sector. Buoyed by employment and wage gains, consumers were spending in 2002.
- The value of residential construction rose by over 26% in 2002.
- Drought was problematic in 2002 which had a major impact on the farm sector. The year's harvest was well below the ten year average which resulted in farm cash receipts being substantially lower than in previous years.
- Saskatchewan's inflation rate was higher than the national rate for the 2002 year, at 4.2% compared to 3.9% nationally. This sharp increase was largely attributable to increases in transportation costs (namely, rising fuel prices).

### 2.4.3 Small Business

According to the *Overview*, small business remains one of the strong forces in the provincial economy. Table 17 shows the number of small businesses in the province in 1999. Businesses with less than 20 employees made up 90% of the total businesses in the province throughout 1999. In Canada this figure was 88% of all businesses.

Table 17: Saskatchewan's Small Businesses in 1999

Size of Business	# of Businesses <sup>1</sup>	Employment <sup>2</sup> (000's)	Payroll <sup>2</sup> (\$000,00)
Businesses with <20 employees	36,900	99.5	2,227
Businesses with <5 employees	24,876	44.1	1,006
Businesses with 5 to 29 employees	12,024	55.4	1,221
Total – all businesses	40,802	369.1	10,443

(Source: Statistics Canada, Business Register (1999)<sup>1</sup> and Employment Dynamics<sup>2</sup> - adapted)

### 2.4.4 Employment Demand Growth

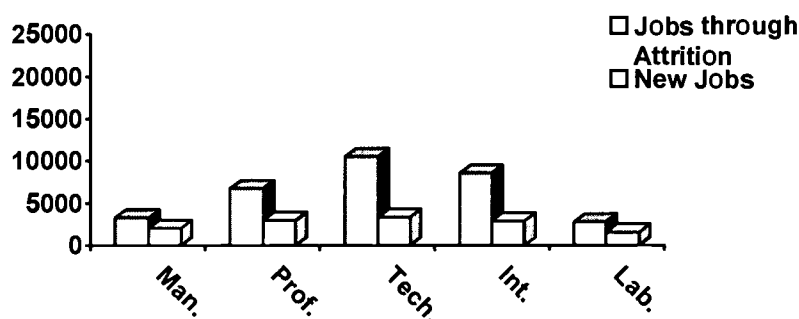
The *Saskatchewan Employment Demand (SED) Forecast 2001*, which reports on key findings, projects changes in the economy of the province over the 2000-2005 five-year period. The report, which was prepared in March 2002, was a collaboration of Saskatchewan Learning and Human Resources Development Canada (HRDC), in partnership with Saskatchewan Economic and Co-operative Development, Saskatchewan Finance and Saskatchewan Labour. The following are the key findings of the forecast:

- Over 44,000 total job opportunities are projected, with an annual average growth rate of 0.5%. Economic activity is projected to account for one-third of total job opportunities, while attrition is expected to account for two-thirds.

- Total industry employment demand is projected to increase by 12,800 individuals or 3% over the forecast period. Most of the gains will occur in the Manufacturing, Business Services and Mining industries.
- It is projected that 65% of all job opportunities over the next five years will require management skills or at least some post-secondary education.
- Job opportunities in occupations requiring a high school diploma or less are still in demand, but occupations requiring post-secondary education are growing.
- The majority of the job opportunities in the Health and Social Sciences, Education, and Government occupations are projected to occur primarily through attrition.
- The fastest growing occupations are expected in the Natural and Applied Sciences and Processing, Manufacturing and Utilities categories, with an annual average growth of 2.8% projected for both.

The *Saskatchewan Employment Demand (SED) Forecast 2001*, projects the following job openings by skill level in the province to 2005, as identified in Figure 13.

**Figure 13: Projected Job Openings by Skill Level in Saskatchewan 2000-2005**



Man. = Management; Prof. = Professional; Tech. = Technical, Paraprofessional & Skilled  
Int. – Intermediate; Lab. = Labouring & Elemental

(Source: Saskatchewan Employment Demand (SED) Forecast 2001, March 2002)

## 2.4.5 Provincial Highlights and Emerging Trends

### 2.4.5.1 Saskatchewan Farms

According to the 2001 Census of Agriculture, Statistics Canada reported that the number of farms in Saskatchewan have declined sharply. The 2001 Census of Agriculture counted 50,598 census farms in Saskatchewan, which represents a decline of 11.2% over the past five years. This decrease is slightly higher than the national average of 10.7%. It was reported that Saskatchewan accounted for 20% of all Canadian farms, down from 25% two decades ago. Only Ontario and Alberta had more farms than Saskatchewan, at 59,728 and 53,652, respectively.

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#### **2.4.5.2 Measuring Retirement**

Statistics Canada in the summer 2002 edition of *Perspectives on Labour and Income* reported in an article entitled, "Fact Sheet on Retirement", that the age of retirement has stabilized in recent years. The median age in the late 1970s and early 1980s was close to 65 but has since declined. After 1988, the trend has become to retire early. The article goes on to state that the popularity of early retirement incentives as a tool for workforce adjustment may have contributed to the early retirement behavior. Over the past two decades, women have retired somewhat earlier than men. In Saskatchewan, the median age at retirement between 1991 and 1995 was 64.1 years while from 1996 to 2000, the median age rose slightly to 64.6 years. For the same periods, the national median retirement ages were 62.2 and 61.0 years, respectively.

#### **2.4.5.3 Education Sector Top Employer**

The Saskatoon Star Phoenix reported on February 13, 2003 in an article entitled *Education sector top employer in Saskatoon in 2001: census* that "more people in Saskatoon worked in educational services than any other sector, according to the latest data from the 2001 census released." Statistics Canada reported 10,550 worked in the education sector, which represents 10.1% of the city's work force. The article also stated that, in Canada, the top job producer was in educational services.

#### **2.4.5.4 Saskatchewan Wage Earners Lagging**

The Saskatoon Star Phoenix reported on March 12, 2003 in an article entitled *Sask. Wage earners lagging*, that "There are more full-time workers earning a measly wage in Saskatchewan than in any other province, thanks in part to the high number of farmers." Statistics Canada reported that Saskatchewan has the highest percentage of fulltime workers earning \$20,000 a year or less, at 73,400 (27% of the fulltime labour force), while Canada had 1.5 million workers (or 17% of the workforce). The article concluded by pointing out that 26% of Saskatoon's labour force claims a university education and that there is a high correlation between the level of education and earnings in Saskatoon.

#### **2.4.5.5 Jobs and Education**

In the January-February 2003 edition of *The Futurist*, it was reported in an article entitled *Success without College*, that "although the labour market requires higher skills than in the past, many good jobs do not require college skills." This statement is based on the reporting from employers who view "soft skills" (noncognitive skill such as attitude, personal interaction, communication, and problem solving) as their greatest need. In another article of the edition entitled *Education in America: The Next 25 Years*, it was reported that the driving force in education over the next 25 years will be choice, fueled by changing roles for teachers, administrators, students, and entire communities. Education in 2025 will be viewed as being decentralized, related to time rather than to place and be accessible 24 hours a day, all year around.

#### **2.4.5.6 Job Retraining Programs**

In the March-April 2003 edition of *The Futurist*, it was reported in an article entitled *Trends Shaping the Future: Technological, Workplace, Management and Institutional Trends* that “a substantial portion of the labour force will be in job retraining programs at any moment.” The reason for this assertion, according to the article, is that many jobs will be opening up in the next decade for people in highly skilled service occupations. Many employers will undertake this training given that they view employee training as a good investment. In the same article, *The Futurist* reports that jobs will become more mobile in the future and that second and third careers are becoming commonplace in the workforce, as more people make mid-life changes in occupation. Along with these new trends comes the work ethic, which is projected to vanish overtime. As a result, tardiness will continue to increase, sick abuse will become commonplace and job security/high pay will not be the motivators that they once were, because social mobility is high and people are seeking job fulfillment.

#### **2.4.5.7 Studying and Working Trends**

In the spring 2003 edition of *Canadian Social Trends*, it was reported that many students are working parttime so as to supplement their incomes while in school. The article, entitled *Studying and working: The busy lives of students with paid employment*, reported that both male and female postsecondary students devote about 2 hours per day to their paid work and approximately 5 hours a day to their educational pursuits. Leisure time is substituted with working and studying, the article reported. Such trends have significant implications for the education sector in the future. What the article concluded is that the transition to the labour market increasingly encroaches on other important life transitions, such as leaving home, union formation or having children. There are also important health issues related to stress, the effects of schedule conflicts, on sleeping patterns, and levels of physical activity that young people experience.

#### **2.4.5.8 The Spirit of Enterprise**

The March 2003 edition of *The Spirit of Enterprise: A Focus on Aboriginal Entrepreneurs*, which was published in the March 22<sup>nd</sup> edition of the *Saskatoon Star Phoenix*, reported a number of significant trends that are or will be taking place within Saskatchewan’s economy and provincial labour force. The edition reported that Saskatchewan is home to an aging workforce and that shortages are projected in many occupations in the not too distant future. What is needed to limit these shortages is increasing “participation rates among Aboriginal people in Saskatchewan.” The report stated that more than 27,000 Aboriginal students are currently enrolled in universities and colleges across Canada.

The report went on to state that forestry is Saskatchewan’s second largest manufacturing industry, contributing \$750 million to the provincial economy and 300 forestry firms pursuing economic opportunities within the 355,000 square kilometers of northern commercial forest. The newly signed Canada-Saskatchewan Northern Development Agreement, which commits \$20 million over five years, was established to “support projects that will improve the living conditions of northerners and enhance the economic opportunities available to them.” By putting projects into action, one would expect improved economic infrastructure and enhanced employment projects for Saskatchewan’s northern residents.



The report also commented on Aboriginal people being a growing power in Saskatoon's workforce. As a result, the Saskatoon Regional Economic Authority (REDA), the Federation of Saskatchewan Indian Nations' Corporate Circle and the Saskatoon Tribal Council had formed in 2002 to promote employment opportunities for Aboriginal people. The Employer Circle works with employers to address cultural sensitivity training issues and how to work cooperatively with First Nations organizations.

#### **2.4.5.9 University and College Graduates**

The October 2002 Canada Millennium Scholarship Foundation Millennium Research Series report entitled *Meta-Analysis of Institutional Graduate Surveys* reported that 85% of all Canadians who attended and graduated from a community college became employed on a full-time or part-time basis within the first year after graduation. The percentage was even higher in Western Canada where nearly nine out of ten graduates were employed within the first year after graduation. In terms of salary, the report stated that the average salary of community college graduates between six months and a year after graduating is \$27,300 annually. The highest paid graduates of a community college program anywhere in Canada are those who had attended a Computing and Information Technology program offered in Western Canada. These graduates had earned, on average, \$34,100 annually.

According to the 2001 SIAST Graduate Employment Survey, over 91% of graduates had become employed with an average monthly salary of \$2,146 (for respondents in full time training related employment).

#### **2.4.5.10 Women and Education Driving the Canadian Labour Force**

The March 2003 edition of the Canadian Economic Observer reported in its *Year-End Review* article that recent trends in the labour force point to the feminization of the workplace. Almost half (46.1%) of the labour force is now female, which, in turn, has been coupled with rising participation rates throughout Canada. The report went on to state that, in 1976, adult women participated in the labour force at only half the rate of men (41% versus 81%). A generation later, we find the participation rates have changed for women between 25 to 44 years (81.2% for women and 92.4% for men). Most of these gains, according to the article, were made by married women.

The article went on to state that not only are more women entering the labour force, but are doing so with increasingly more education. In 2002, more women than men had at least some post-secondary education. In less than a decade, the percentage of women having more than just a high school education had risen from 39.7% to 53.3%. Moreover, the article noted that, since 1999, the number of women aged 25 to 44 with university degrees had exceeded men – growing by an astonishing 100,000 or 10% more than men (in 2002 alone!).

Lastly, the article stressed the importance of education by pointing out that, from 1993 to 1997, the less educated saw steady job losses (totaling almost half a million or 1% in terms of their employment rate), while the more educated worker saw jobs grow by 27%. What this trend shows is that there are fewer people in the labour force with lower levels of education and an increasing proportion of workers with some post-secondary education. Such trends should bode well for those individuals seeking increasing levels of education so that they can be successful in entering a skilled labour market.

#### **2.4.5.11 Biotech Innovative Firms Becoming a Heavy User of Highly Skilled Labour**

The March 28, 2003 edition of the *Statistics Canada Daily* reports that the biotechnology sector has become a heavy user of highly skilled labour over the 1997-2001 period. The total number of biotechnology employees went from 9,019 in 1997 to 11,897 in 2001, for an overall increase of 32%. Other noted findings include the following:

- In 2001, nearly one-half of all biotech jobs were in two categories: scientific research and technician/engineering.
- Approximately 75% of all biotechnology employees work in the human health sector.
- Quebec and Ontario accounted for 62% of all companies involved in biotechnology during 2001 and 81% of total biotechnology revenues.
- Statistics Canada also stated that companies in Quebec had accounted for 40% of all the jobs in 2001 while Ontario represented 28% and those in British Columbia, 15%.
- Of the 11,897 biotechnology employees, 262 were working in Saskatchewan.
- Of the 375 biotechnology firms operating in Canada, 17 were located in Saskatchewan.

#### **2.4.5.12 University Enrollment Increasing**

The March 31, 2003 edition of the *Statistics Canada Daily* reports that university enrollments in fields related to technology, such as engineering had soared in the last three years. Most of the gains have been a direct result of women participating in university education. Other noted findings include the following:

- The total university enrollment in 2000/01 was 861,700, of which 494,700 were women. This represents 57% of the total university population, the highest proportion ever for women.
- The two fields of study with the largest proportion of women in 2000/01 were education, where they represented 72% of total enrollment, and health professions and occupations, at 70%.
- Of the total enrollment in 2000/01, roughly 85%, or 735,300, were undergraduate students, with the remaining 126,300 or 15% being graduate students.
- Enrollment growth at the undergraduate level was driven by two fields of study over the last three years. Undergraduate enrollment increased by 20% in mathematics and physical sciences and 10% in engineering and applied sciences.
- At the graduate level, enrollment also increased in the two aforementioned fields of study.

However, graduate enrollment grew by 14% in social sciences and 12% in agricultural and biological sciences, both of which outpaced graduate enrollment growth in mathematics and physical sciences and in engineering and applied sciences. In fact, of the 8,500 new graduate students since 1997/98, 5,000 were enrolled in social sciences.

#### **2.4.5.13 E-Learning in Canada**

The Conference Board of Canada's Education and Learning Group released on April 2<sup>nd</sup> the findings from a survey that was conducted on E-Learning in Canada. Surveying 570 Conference Board of Canada customers (i.e., organizations), the following summary conclusions were noted:

- Over three-quarters (77%) of respondents' organizations are using e-Learning to some degree;



- The primary uses of e-Learning are for software training, technical skills training and management skills development;
- The primary users of e-Learning are professional and technical employees; clerical, service and support employees; and managers.
- The challenges that e-Learning implementation faces are the cost of developing or purchasing e-Learning solutions; the time required to develop e-Learning; and the need to be convinced of e-Learning's effectiveness as compared to other training delivery modes.

Finally, the survey identified the following benefits of e-Learning:

- the ability to have just-in-time workplace learning
- employees having greater control as when to take training when compared to other modes of learning and training
- that it improves the effectiveness of workplace learning.

## 3.0 Summaries of Training Needs Assessment Industry Consultations

### 3.1 Introduction

Stakeholder consultations were held in March 2003 at the four provincial SIAST campuses [Kelsey (Saskatoon), Palliser (Moose Jaw), Wascana (Regina), and Woodland (Prince Albert)]. Participants at the consultations included representatives from business, industry and professional associations. Some of the invitees to the consultation sessions were unable to attend and presented their views by either submitting written comments or completing a survey questionnaire that had been sent out with the invitation letter. 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 four SIAST campus cities, as identified above, as well as province-wide.

The format of the consultations was similar to that of the last two years. With the invitation letter, invited guests were also provided with a copy of the section of last year's report that identified training needs, as well as a status report on the activities that resulted from the section of the SUTNA 2002 report. 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.

Not all invited stakeholders were able to attend the meetings and therefore some industries lacked representation and input. As a result, the findings may not comprehensively identify the needs of all industries in the province.

### 3.2 Summary of the Findings

The following chart provides a summary of the discussions at the meetings with industry and association representatives. The findings are not necessarily presented in priority order. The check marks in the right hand columns identify the location(s) where the sector-related information was discussed or highlighted as a training need. Some sector discussions focused on provincial needs and are identified as such in the chart. The results are organized by sectors and topic areas. Employment projections, obtained from the *Saskatchewan Economic Demand (SED) Forecast 2002*, are included in the chart for each sector.

Overall, 285 industry representatives were invited to the consultations. Forty-two completed questionnaires were returned from those unable to attend and the information was condensed and incorporated into the chart, along with the written comments received.

Many needs identified throughout the discussions 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 versus urban centers

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.

Industry/Sector	Impact on SIAST Program Delivery	Provincial	Moose Jaw	Regina	Prince Albert	Saskatoon
<p><b>AGRICULTURE</b>  <i>Jobs in this industry continue to decrease and are projected to decline by 9,200 or 15% over the five-year forecast period 2000-05.</i></p>						
<ul style="list-style-type: none"> <li>▪ Transitional training for farmers required to help them identify and enhance the many transferable skills they have into a package that is marketable for business and industry.</li> <li>▪ Training for seed cleaners, specialty crops and feed lot operations.</li> <li>▪ Apprenticeship training to suit self-employed farmers (e.g. welding shop on farm).</li> <li>▪ Succession planning education for farmers required.</li> <li>▪ Horticulture and golf course management programs required.</li> </ul>	<p>In partnership with Canada-Saskatchewan Career &amp; Employment Services and the regional colleges:</p> <ul style="list-style-type: none"> <li>▪ Provide change management workshops.</li> <li>▪ Provide PLAR (prior learning assessment and recognition) for transferable skills.</li> <li>▪ Develop non-core courses and workshops.</li> <li>▪ Develop online delivery as well. Note, however, that online delivery is hampered by broadband availability in rural areas.</li> </ul>	X				
<p><b>BUSINESS SERVICES</b>  <i>Professional business services, which includes advertising, professional business services and other business services, expected to increase by 4,700 jobs, for a total increase of 25% over the 2000-05 forecast period.</i></p>						
<ul style="list-style-type: none"> <li>▪ Short-term, day seminar customer service training required in all industries. These needs extend across all sectors.</li> <li>▪ Courses in time management, marketing, and supervision are needed for management employees.</li> </ul>	<ul style="list-style-type: none"> <li>▪ Consider brokering programs (and providing certification) from University of Guelph, Olds College in Alberta, and other institutions.</li> </ul>	X				
<ul style="list-style-type: none"> <li>▪ Offer courses and workshops.</li> <li>▪ Examine curriculum of appropriate programs.</li> <li>▪ Consider developing a short credit program in customer service (see Retail Sales &amp; Service sector).</li> <li>▪ Offer training on a cost recovery basis.</li> </ul>	<ul style="list-style-type: none"> <li>▪ Offer courses and workshops.</li> <li>▪ Examine curriculum of appropriate programs.</li> <li>▪ Consider developing a short credit program in customer service (see Retail Sales &amp; Service sector).</li> <li>▪ Offer training on a cost recovery basis.</li> </ul>	X				

		Provincial	Moose Jaw	Regina	Prince Albert	Saskatoon
<b>Industry/Sector</b>	<b>Impact on SIAST Program Delivery</b>	X				
<ul style="list-style-type: none"> <li>▪ Employees who have "leadership skills" rather than purely technical skills are required.</li> <li>▪ Need for different approaches to management training in the public sector. This could become a credit program and should include courses in "strategic management," "management development," "risk management" and "risk evaluation".</li> <li>▪ More teleservice customer representatives needed. Training should include an "Internet communications" module.</li> <li>▪ Entrepreneurial courses required, with a special focus on people skills.</li> <li>▪ Canadian Financial Planning certification for Credit Union employees.</li> <li>▪ Case management skills certification required for those working in insurance field.</li> </ul>	<ul style="list-style-type: none"> <li>▪ Offer leadership training workshops.</li> <li>▪ This could be a separate program, available to employees to take in the evening or by distance delivery.</li> <li>▪ Consider developing both basic and advanced public administration programs, with certification levels.</li> <li>▪ Consider brokering programs from other jurisdictions, such as Alberta Public Works Association.</li> <li>▪ Extensive work-based and classroom training continues through JobStart/Future Skills.</li> <li>▪ Offer courses from Entrepreneurship and Small Business program on a cost recovery basis.</li> <li>▪ Three-day workshop continues. Consider expanding training to the certification level.</li> <li>▪ 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.</li> </ul>	X				
				X		
		X				
		X				
		X				

Industry/Sector	Impact on SIAST Program Delivery	Provincial	Moose Jaw	Regina	Prince Albert	Saskatoon
<b>COMMUNITY SERVICES</b>						
<i>Predictions for employment needs in this sector are similar to those in the health sector. The demand for graduates from social service occupations remains high.</i>						
<ul style="list-style-type: none"> <li>▪ Expand Chemical Dependency program to include gambling dependency.</li> <li>▪ Need more corrections and parole officers (200+ in next three years).</li> <li>▪ Offer more childcare programs throughout province. Consider distance education/flexible training.</li> </ul>	<ul style="list-style-type: none"> <li>▪ The Chemical Dependency certificate and diploma programs include courses in addictions counselling, intervention, and therapy, as well as training in gambling and Internet issues.</li> <li>▪ SIAST to monitor employment trends for program.</li> <li>▪ 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.</li> </ul>	X				
<b>CONSTRUCTION AND RELATED OCCUPATIONS</b>						
<i>Employment demand for both commercial and residential construction is projected to increase by more than 1,200 jobs, for a total increase of 5% over the five-year forecast period 2000-05. There will be a need to create awareness in the high schools that the "trades" are a profession and not a second choice.</i>						
<ul style="list-style-type: none"> <li>▪ There is a shortage of skilled journeyperson/ trades people across the province.</li> <li>▪ Access to apprenticeship training an issue.</li> </ul>	<ul style="list-style-type: none"> <li>▪ In addition to pre-employment and apprenticeship programs, SIAST continues to provide training in cabinet making, framing, steel studing and drywall through JobStart/Future Skills, and pre-trade training in some fields.</li> <li>▪ Discuss alternative training and delivery options with Apprenticeship and Trade Certification Commission.</li> </ul>	X				

Industry/Sector	Impact on SIAST Program Delivery	Provincial	Moose Jaw	Regina	Prince Albert	Saskatoon
<ul style="list-style-type: none"> <li>Industry needs "service technicians" who are cross-trained in several trades.</li> <li>More safety and supervisory training required in the curriculum for all the trades, especially in the pre-employment programs.</li> <li>Automotive service industry is experiencing rapid changes with the advent of data streaming technology, exotic materials and computerization.</li> <li>Upgrading of current employees to computerized diagnostic systems also needed.</li> <li>Need replacement technicians - general purpose, mechanical repairers, partspeople, apprentices and journeypersons - for large numbers of retirees in next five years.</li> <li>300 road construction labourers required in next three years.</li> <li>Mentoring program desired.</li> </ul>	<ul style="list-style-type: none"> <li>Currently programming for technicians is trade specific rather than generalized.</li> <li>SIAST working with Department of Labor to consider including core OH&amp;S modules which will be incorporated into all trades programs.</li> <li>SIAST to work with automotive industry to raise awareness for opportunities and enhance industry image.</li> <li>Promote accessing the CARSYOUTH Web site (aptitude testing).</li> <li>Examine curriculum to include new technology requirements.</li> <li>Deliver specific workshops through contract training with employers.</li> <li>SIAST to monitor employment trends in heavy equipment program over next three years.</li> <li>Consider introducing a mentoring program.</li> </ul>	X				X
<p><b>HEALTH</b></p> <p><i>Statistics Canada Labour Force data shows that estimated 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.</i></p> <ul style="list-style-type: none"> <li>Training in patient-related care required, for registered nurses, licensed practical nurses, and home care/special care aides.</li> </ul>	<ul style="list-style-type: none"> <li>Consider increased offerings.</li> <li>Continue outreach programs.</li> <li>Review career ladder opportunities for nurses – especially LPNs.</li> </ul>	X				

Industry/Sector	Impact on SIAST Program Delivery	Provincial	Moose Jaw	Regina	Prince Albert	Saskatoon
<ul style="list-style-type: none"> <li>Short upgrading courses are required for nurses transferring from acute care facilities to community health, and for immigrant nurses who are missing specific modules required to practice in Saskatchewan.</li> </ul>	<ul style="list-style-type: none"> <li>Consider offering upgrading courses and a course on medical terminology for immigrant nurses.</li> </ul>	X				
<ul style="list-style-type: none"> <li>Growing demand for more primary care nurse practitioners across the province, particularly in Prince Albert.</li> </ul>	<ul style="list-style-type: none"> <li>Increase technology-based training; consider increasing distance education offerings.</li> <li>Give employees access close to home communities, to update their education.</li> </ul>	X				
<ul style="list-style-type: none"> <li>Need to address new techniques and diagnostic procedures in Health Information Services (HIS) program.</li> <li>HIS sees the need for a clinical research certificate.</li> <li>More classes in ethics, coding classifications, and privacy act are needed.</li> </ul>	<ul style="list-style-type: none"> <li>Examine curriculum of HIS program.</li> <li>Consider brokering the Clinical Research certificate program from Chicago.</li> <li>Facilitate workshops on these topics.</li> </ul>	X				
<ul style="list-style-type: none"> <li>Nurse practitioner training required.</li> </ul>	<ul style="list-style-type: none"> <li>SIAST is delivering PLAR workshops and assisting in developing PLAR tools for this profession.</li> </ul>	X				
<ul style="list-style-type: none"> <li>Training required for future tele-health call centres.</li> </ul>	<ul style="list-style-type: none"> <li>Monitor tele-health centre development, and resulting occupational needs.</li> </ul>	X				
<ul style="list-style-type: none"> <li>Role of dental assistants and dental hygienists is changing.</li> </ul>	<ul style="list-style-type: none"> <li>Examine changing roles and impact to programs.</li> </ul>	X				
<ul style="list-style-type: none"> <li>Vet techs are required for large animal practices in rural areas (serving livestock producers).</li> </ul>	<ul style="list-style-type: none"> <li>Consider two streams (i.e. small animal training and large [livestock] training).</li> </ul>	X				
<ul style="list-style-type: none"> <li>According to the Massage Therapists' Association, massage therapy is the fastest growing health profession.</li> </ul>	<ul style="list-style-type: none"> <li>Monitor action with Sask Health.</li> </ul>	X				



Industry/Sector	Impact on SIAST Program Delivery	Provincial	Moose Jaw	Regina	Prince Albert	Saskatoon
<ul style="list-style-type: none"> <li>▪ Requesting legislation to regulate the profession.</li> <li>▪ Want to expand the curriculum with a diploma or degree credential, similar to other provinces.</li> <li>▪ Enhancement to mental health training required in the NEPS program.</li> <li>▪ Require specialized clinical training seminars for rehabilitation worker programs.</li> </ul>	<ul style="list-style-type: none"> <li>▪ Ongoing discussions with NEPS partner (University of Saskatchewan).</li> <li>▪ Examine curriculum of program.</li> </ul>	X				
<p><b>HOSPITALITY AND TOURISM</b>  <i>Employment demand for this industry is expected to increase by 1,500, for a total increase of 4% over the 2000-05 period. This is a projected decrease from the Saskatchewan Economic Demand (SED) Forecast of 2000, which 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"> <li>▪ Customer service training required.</li> </ul>	<ul style="list-style-type: none"> <li>▪ Continue to offer JobStart/Future Skills and cost recovery programming in co-operation with STEC.</li> </ul>	X				
<ul style="list-style-type: none"> <li>▪ General tourism training required (ecotourism, adventure tourism).</li> </ul>	<ul style="list-style-type: none"> <li>▪ Continue Ecotourism certificate and Tourism Management diploma programs.</li> </ul>	X				
<ul style="list-style-type: none"> <li>▪ Shortage of cooks, front desk receptionists, food and beverage servers, housekeepers, and fast food workers.</li> </ul>	<ul style="list-style-type: none"> <li>▪ Expand the Food and Beverage Service Worker applied certificate, through JobStart/Future Skills.</li> <li>▪ Continue working with STEC to offer appropriate programs.</li> </ul>	X				
<ul style="list-style-type: none"> <li>▪ Food &amp; Nutrition Management diploma program grads have difficulty finding appropriate full-time employment without work experience.</li> </ul>	<ul style="list-style-type: none"> <li>▪ Examine the appropriateness of the curriculum, and length of the program.</li> </ul>	X				

Industry/Sector	Impact on SIAST Program Delivery	Provincial	Moose Jaw	Regina	Prince Albert	Saskatoon
<b>LOGGING AND FORESTRY</b>						
<i>Anticipated increase of 700 jobs for an overall increase of 47% in the five-year period 2000-05. There will be a need to train and upgrade labourers to management positions. Softwood trading issues between the United States and Canada and the recent slump in global economic conditions could have a negative impact on the industry.</i>						
<ul style="list-style-type: none"> <li>▪ Variety of training needs, such as mill equipment operators, harvesting equipment operators, forestry technicians, etc.</li> <li>▪ Current forestry employees require certification.</li> </ul>	<ul style="list-style-type: none"> <li>▪ Credentials now offered for Mechanical Harvesting and Conventional Harvesting applied certificates.</li> <li>▪ PLAR is an option for certification.</li> </ul>				X	
<b>MANUFACTURING</b>						
<i>Food and beverage processing, oil and gas, and forestry are the main areas of growth for manufacturing. There will be 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% increase over the five-year forecast period 2000-05, as a result of continued diversification of the Saskatchewan economy.</i>						
<b>Food/Beverage Processing</b>						
<i>Employment demand is projected to increase by more than 1000 individuals, for a total increase of 14% over the five-year period 1999-2004.</i>						
<ul style="list-style-type: none"> <li>▪ Meat processing plants continue to provide new jobs in food processing and institutional meat cutting.</li> <li>▪ Meat processing industry changing with new packing regulations and standards for chemical products.</li> <li>▪ Training should include dealing with contaminated goods.</li> <li>▪ Programs in manufacturing industry should include curriculum topics on the Kyoto Agreement, the cost of natural gas, and electronic innovations.</li> </ul>	<ul style="list-style-type: none"> <li>▪ Continue offering institutional meat cutting program.</li> <li>▪ Industry is prepared to seek trade certification status for this program.</li> <li>▪ SIAST has modularized and prepared programs for work-based delivery.</li> <li>▪ Examine curriculum of programs to include content on Kyoto issues.</li> </ul>	X	X	X		X

Industry/Sector	Impact on SIAST Program Delivery	Provincial	Moose Jaw	Regina	Prince Albert	Saskatoon
<p><b>Metal/Machinery</b>  <i>Employment demand is projected to increase by more than 2,300 individuals, for a total increase of 37% over the 2000-05 period.</i></p> <ul style="list-style-type: none"> <li>▪ Need for more machinists and mechanics in all sectors.</li> </ul>	<ul style="list-style-type: none"> <li>▪ Consider expansion of program.</li> </ul>	X				
<p><b>MINING</b>  <i>Employment in mining is expected to increase by 300 individuals (5% 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% unemployed people in northern Saskatchewan).</i></p>	<ul style="list-style-type: none"> <li>▪ Underground Miner program is offered in collaboration with Northlands College.</li> <li>▪ Program under review to develop specialties.</li> </ul>	X				
<p><b>OIL AND GAS</b>  <i>Employment is projected to increase by 3,000 for a total increase of 37% 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"> <li>▪ More process operators required in Western Canada.</li> <li>▪ Along with the Process Operator certificate program, three new Process Operator applied certificates are offered (Levels 1, 2, and 3).</li> </ul>	X				
<p><b>PULP AND PAPER</b>  <i>Employment demand is projected to increase by 200 jobs, or 4% over the 2000-05 period. This moderate forecasted increase is due to lower than expected commodity prices.</i></p> <ul style="list-style-type: none"> <li>▪ Industrial mechanics required.</li> <li>▪ Instrumentation and electrical training needed.</li> </ul>	<ul style="list-style-type: none"> <li>▪ Examine flexible and work-based training.</li> </ul>				X	

Industry/Sector	Impact on SIAST Program Delivery	Provincial	Moose Jaw	Regina	Prince Albert	Saskatoon
<p><b>RETAIL SALES &amp; SERVICE</b>  <i>Sales and service occupations are projected to account for one-fifth of total job opportunities (or 8,900) and just under one-quarter of new job opportunities in the province. Opportunities require a variety of skill levels.</i></p>						
<ul style="list-style-type: none"> <li>▪ Certification for a “sales and service” applied certificate is supported.</li> </ul>	<ul style="list-style-type: none"> <li>▪ Consider developing a “sales and service” applied certificate.</li> </ul>	X				
<p><b>TECHNOLOGY</b>  <i>Occupations in this fastest growing occupational area are highly skilled, with an annual average growth rate of 2.8%. Natural and applied sciences, and related occupations are projected to account for 10% (or 4,400) of total job opportunities, with over three-quarters (77%) arising from new economic activity. Sixty-five per cent of new opportunities will occur in skill level A occupations such as analysts, engineers, and programmers.</i></p>						
<ul style="list-style-type: none"> <li>▪ Motion picture industry training needs are not currently met. Skill sets vary significantly (e.g. set designers, construction crews, producers, writers, project managers).</li> </ul>	<ul style="list-style-type: none"> <li>▪ Expand workshop offerings.</li> <li>▪ Considerable work-based training in this field is offered through JobStart/Future Skills.</li> <li>▪ SIAST to continue discussions with SMP/IA.</li> </ul>	X				
<ul style="list-style-type: none"> <li>▪ Growing need for technicians in telecommunications industry, especially radio frequency technicians.</li> </ul>	<ul style="list-style-type: none"> <li>▪ Examine curriculum of some electronics and engineering programs.</li> </ul>				X	
<ul style="list-style-type: none"> <li>▪ Need training in design. CAD/CAM should be included in several programs. Include packaging design, chassis design, vibration testing.</li> <li>▪ Require mechanical technologists and assemblers.</li> <li>▪ Career laddering from technician to technologist desired.</li> </ul>	<ul style="list-style-type: none"> <li>• Consider offering modules of CAD/CAM program.</li> <li>• A 12-week electronics assembler apprenticeship program is being delivered by industry, through SIAST.</li> </ul>				X	
<ul style="list-style-type: none"> <li>▪ Water treatment plant operators and water and wastewater technicians are required.</li> </ul>	<ul style="list-style-type: none"> <li>▪ Continue offering water resources and wastewater programs, and additional cost recovery courses as required by industry.</li> </ul>	X				

Industry/Sector	Impact on SIAST Program Delivery	Provincial	Moose Jaw	Regina	Prince Albert	Saskatoon
<p><b>Information Technology</b>  <i>It is anticipated that in three years more than 65% of business would be done online, increasing the need for expertise in information technology (IT). Ten to thirty percent job growth in Saskatoon is expected. Up to 2000 vacancies across the province are expected – mostly in project management roles – figures captured in Business Services above.</i></p>						
<ul style="list-style-type: none"> <li>▪ Computer training required in all sectors.</li> <li>▪ Internet/web developers needed in many sectors.</li> </ul>	<ul style="list-style-type: none"> <li>▪ Incorporate computer training when programs are revised.</li> <li>▪ New program offered in Web Site Design and Development.</li> </ul>	X				
<p><b>TRANSPORTATION</b>  <i>Transportation and Storage. Growth of 900 jobs in truck transport/pipelines/storage/warehousing industry is projected over the five-year forecast period 2000-05 (4% 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 on employment in this sector.</i></p>						
<ul style="list-style-type: none"> <li>▪ Younger drivers are needed in the trucking industry.</li> </ul>	<ul style="list-style-type: none"> <li>▪ Offer Driver Training program across the province.</li> </ul>	X				
<ul style="list-style-type: none"> <li>▪ Provincial shortage of heavy equipment mechanics, heavy equipment operators, and truck &amp; transport mechanics.</li> </ul>	<ul style="list-style-type: none"> <li>▪ Continue offering Tri-Trades training in Regina (heavy equipment mechanics, truck &amp; transport, agricultural equipment mechanics).</li> <li>▪ Continue offering Heavy Equipment Operator training as required through the regional colleges.</li> <li>▪ Consider delivering pre-employment or apprenticeship as day release or evening classes, instead of block training.</li> </ul>	X				
<ul style="list-style-type: none"> <li>▪ Motor coach operator training is required.</li> <li>▪ Training required in satellite communications, dispatching, human resource development, chemical hauling, and rules and regulations at US</li> </ul>	<ul style="list-style-type: none"> <li>▪ Monitor the need.</li> <li>▪ Examine curriculum of Truck Driver Training program.</li> </ul>	X				

Industry/Sector	Impact on SIAST Program Delivery	Provincial	Moose Jaw	Regina	Prince Albert	Saskatoon
boundaries.						
<ul style="list-style-type: none"> <li>▪ Train-the-Trainer for industry programs.</li> </ul>	<ul style="list-style-type: none"> <li>▪ SIAST to share Train-the-Trainer manuals.</li> </ul>	X				
<b>OTHER TRAINING NEEDS</b>						
<ul style="list-style-type: none"> <li>▪ Entrepreneurship, communication, risk management, and management skills as options to all programs.</li> </ul>		X				
<ul style="list-style-type: none"> <li>▪ Operations management training required. (i.e. computers, economics, people management, customer service).</li> </ul>		X				
<ul style="list-style-type: none"> <li>▪ General science diploma program.</li> </ul>		X				
<ul style="list-style-type: none"> <li>▪ Grade 12 students are not educationally prepared to enter SIAST programs.</li> </ul>	<ul style="list-style-type: none"> <li>▪ Consider offering a preparatory or bridging program.</li> </ul>	X				
<ul style="list-style-type: none"> <li>▪ Bridging programs required for Aboriginal youth to move into apprenticeship and SIAST credit programs.</li> </ul>		X				
<ul style="list-style-type: none"> <li>▪ Apprenticeship program delivery methods need re-vamping for northern and rural areas.</li> </ul>	<ul style="list-style-type: none"> <li>▪ Electrician Level 1 program delivered online.</li> <li>▪ Continue discussions with Apprenticeship and Trade Certification Commission regarding alternate training and delivery options.</li> </ul>	X				

Sources:

Saskatchewan Urban Training Needs Assessment Report 2002, June 2002 [SIAST Planning, Research and Development Division]  
 Industry training needs consultations, held March 2003, in Saskatoon, Regina, Moose Jaw and Prince Albert  
 Submitted questionnaires and written comments from industry representatives



## 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 implementing partnerships with community stakeholders and training providers. The purpose of the program is to plan and develop human resource strategies to address industry skill shortages in the province. The sector partnership program provides financial assistance to industry sectors in order to improve the province's ability to compete in external markets. Funding is provided by the province's Department of Saskatchewan Learning to implement partnerships with trainers and communities for human resource planning and development of training approaches to meet industry-skilled employment needs.

Currently there are 46 sector studies with 31 industry sectors in the province. The industry sectors are listed below. Many have completed research reports in the past few years. Those that have been completed in 2002-03 and summarized in this section of the report are bolded.

- Aviation Sector
- Apparel and Textile Sector
- Arts and Culture Sector
- Beef/Cattle Feedlot Sector (***Saskatchewan Beef Cattle Feedlot, May 2002***)
- Commercial Fishing Sector
- Cosmetology/ Beauty Sector
- Early Childhood Care and Education Sector
- Environmental Sector (***Northern Saskatchewan Environmental Industry 2002***)
- Export Manufacturing Sector
- Film and Video Sector
- Fire/Rescue Service Sector
- Food Processing Sector
- Forestry Sector
- Floriculture Sector
- Health Sector including: Home Care/Special Care Aide Workforce Sector (***Home Care/Special Care Aides, July 2002***), Mental Health Workforce Sector (***Saskatchewan Mental Health, July 2002***), Nursing Sector Saskatchewan Association of Health Organizations (SAHO)
- Hunting, Fishing and Tour Guide (Outfitters) Sector
- Information Technology Sector
- Immigrant/Refugee Sector
- Implement Manufacturing Sector
- Low-Rise Residential Construction Sector
- Music and Sound Recording Sector (***Music and Sound Recording Industry - Phase 2 March 2003***)
- Occupational Health and Safety Sector (***Building Capacity in Occupational Health and Safety, April 2003***)
- Plastics Industry Sector (***Saskatchewan Plastics, 2002***)
- Plumbing and Pipefitting Trades Sector
- Primary Agriculture production Sector (***Primary Agriculture Production, January 2003***)
- Road Building and Heavy Construction Sector
- Saskatchewan Process Industry Training Network
- Tourism Sector

- Trucking Sector
- Water/Wastewater Systems Operators Sector
- Woodlot/Agroforestry Sector

#### **4.1.1 Saskatchewan Mental Health**

In any one year, approximately 220,000 adults and children (one in five persons) in Saskatchewan suffer from a diagnosable mental disorder. Conservative estimates of the yearly direct and indirect costs to the province are a minimum \$500 million.

##### Recent Trends

- As a result of a perceived stigma, the majority of the province's people with a mental health disorder or problem do not seek out the services of a mental health professional
- Limited resources/programs exist for the support groups: self-help, advocacy, friends/caregivers/families
- A chronic shortage of psychologists and psychiatrists exists in the province
- Significant concerns regarding the quality of mental health services are provided by Saskatchewan family physicians
- There are no advocates for mental health within health districts/authorities, social services, corrections services, or schools

##### Key Findings Re: Future Training

- In the previous two years, only seven new graduates of the Nursing Education Program of Saskatchewan (NEPS) have registered with the Registered Psychiatric Nursing Association of Saskatchewan (RPNAS)
- Critical limitations of NEPS regarding education and training in mental health are: the curriculum only partially meets the RPNAS standards and competencies, and the clinical training is not adequate
- A greater number of advanced training courses in mental health for Licensed Practical Nurses (LPN's) is recommended
- Enhanced continuing training opportunities and funding for Home Care/Special Care Aides

The executive summary of this report can be accessed at [http://www.health.gov.sk.ca/ic sk mhlth sec study es.pdf](http://www.health.gov.sk.ca/ic_sk_mhlth_sec_study_es.pdf)

#### **4.1.2 Saskatchewan Beef Cattle Feedlot**

A potential exists in the province to expand the competitive feedlot industry significantly with increased interest in both value-added activity and diversification.

##### Key Findings Re: Future Training

- The feedlot workforce supports future training
- Feedlot workers include both management and employees
- There are few specific programs/courses available to train workers
- Untrained employees present safety concerns



### Next Steps

- Review current feedlot job functions of feedlot managers/employees through a DACUM process
- Identify unique training needs/opportunities in the feedlot industry for First Nations people
- Inform youth in the high schools about employment opportunities in the cattle industry
- Create a timeline for training

### **4.1.3 Saskatchewan Plastics**

With the support of the Saskatchewan Research Council, the low tech plastics industry's 42 companies, including one that is Aboriginal owned, produce yearly revenues close to \$1 million. Most of these cottage-size companies located in Saskatoon, Regina, and Moose Jaw, each employing fewer than 10 workers, process or fabricate plastic products for local agricultural clients throughout the province or for export to niche markets in the United States. Growth prospects are favourable, mixed with concerns regarding the changing nature of agriculture in the province.

### Recent Trends

The Canadian Plastics Industry Association (CPIA) predicts major shortages of skilled labour within its industry over the next eight years

### Key Findings Re: Future Training

- Most plastics employees are full-time workers and trained on-the-job.
- When new skills are required, the usual practice is to recruit workers who already have the needed skills
- To adequately utilize the Aboriginal workforce potential, Aboriginal workers require life-skills training

### **4.1.4 Home Care/Special Care Aides**

A labour market analysis of Home Care/Special Care Aides reveals that their role continues to be impacted in several ways:

- An expanding scope of practice with increased importance on the health team
- An increasing pace of work and increased workplace stress
- An expanding work environment including acute and integrated care settings

### Key Findings Re: Future Training

- Public sector employers, unlike employers in the private sector, usually require their employees to have certification credentials
- Cost and time are barriers to accessing Home Care/Special Care Aide pre-employment and on-the-job training
- Existing provincial training programs generally meet the needs of both graduates and employers
- Acute care, palliative care, and care for children with special needs are niches that may be filled by Home Care/Special Care Aide training programs
- Need to standardize training programs for pre-employment and on-the-job
- Limited transfer of credit for laddering into other programs such as the LPN

- Many employers and employees are unfamiliar with the process of Prior Learning Assessment and Recognition (PLAR), and indicate that prior learning and on-the-job training is not being recognized

#### **4.1.5 Primary Agriculture Production**

Primary agriculture which includes crops, livestock, poultry, animal products, greenhouse and nursery, Christmas tree and honey farms, is a diverse sector generating sales of \$5 billion annually with approximately 41,590 farms.

##### Recent Trends

- Advances in agriculture technology and globalization in the marketplace
- Changing demographics in the province
- Higher value crops, as a result of the loss of the Crow Benefit in 1995
- Transition away from export grains and moving towards specialty crops, livestock production and certain types of grain processing
- Larger farms to create ongoing and sustainable financial returns
- Labour force size is in transition

##### Key Findings Re: Training

- Coordination of programming and program delivery is lacking
- Shift towards large-scale livestock production requires workers who are skilled in animal agriculture
- Currently no single program meets the training needs of an agribusiness manager
- Agribusiness manager skills are in transition

##### Recommendations Re: the training of Agribusiness Managers

- Develop alliances with training programs in other provinces
- Establish a centre for agribusiness training and education
- An Aboriginal and Metis agribusiness manager training program to be an integral part of a centre for agribusiness training and education
- Training topics include: people in transition, business operations, business development, and human resources
- Create an awareness program so that agribusiness managers are informed of available training programs

#### **4.1.6 Northern Saskatchewan Environmental Industry**

The environment industry is a young, regulated industry with many possible employment and investment opportunities. This industry plays an important role in northern Saskatchewan's economy through investment, job creation, exports, as well as, preservation and conservation of natural resources.

##### Recent Trends

- The environmental industry is a multidisciplinary, emerging sector, dominated by small to medium companies
- Trained/certified human resources personnel from northern Saskatchewan are currently limited
- Environmental work has become complex

- Small businesses will need to network, as the industry expands

#### Key Findings Re: Future Training

- Training needs to be applicable to First Nations and northern issues
- New skill sets are required for workers as a result of recent legislations, regulations, standards, new technology and the prevalence of many small businesses with a broad range of work activities
- Potential shortages of employees exist in these management areas: waste, water, and biological resource management
- Need for environmental health officers and incentives to keep them in northern Saskatchewan
- More training is required in the handling of wastes and dangerous goods
- For the ecotourism sector, business startup and hospitality training is needed, as well as a knowledge of the industry regulations
- Ongoing co-operation between industry and educational facilities is required
- Training programs in the north, in co-operation with business, will improve the qualifications of northern employees

#### Recommendations Re: Future Training

- The industry is to develop an enhanced partnership with Aboriginal education facilities and organizations
- Partnerships within the industry need to be improved
- Businesses need to be informed of the types of training programs offered
- The education system needs to be more aware of the career opportunities within the environment industry

### **4.1.7 Music and Sound Recording Industry**

In the 1990's Human Resource Development Canada (HRDC) completed a major study of the cultural industries in Canada. *A Proposal for a National Professional Development Strategy*, 1995 suggested three phases in the development of a game plan for training in the cultural industry:

- Phase One: Conduct an audit of all training that currently exists across Canada
- Phase Two: Identify what is missing from content and geographical perspectives
- Phase Three: Create and deliver new programs to fill those gaps

#### Key Findings Re: Future Training

- There is an apparent lack of music industry-related educational and training resources in Canada, with an even greater lack identified in Saskatchewan
- Most of the music administration or sound recording courses are available only in the provinces of Ontario and British Columbia
- In 1999, the Saskatchewan Recording Industry Association (SRIA) made the decision to create an online training centre in Saskatchewan for the music industry
- The SRIA has successfully completed the development and testing of two pilot online training programs

#### 4.1.8 Building Capacity in Occupational Health and Safety

In October 2002 the Building Capacity in Occupational Health and Safety (OHS) Advisory Group was organized to reduce risk, injury, and illness in Saskatchewan workplaces. The OHS Advisory Group's purpose is to advise on the development and delivery of education and training opportunities as well as advise on human resource development. The group also facilitates the collaboration, development, and delivery of OHS learning through these formats:

- Needs assessment
- Curriculum components
- Credit transferability and career laddering
- Resource options
- Delivery alternatives

In the winter of 2003, Innovation Consulting Group and Insightrix, the online service bureau of Innovation Consulting Group, with the direction and support of the Building Capacity in OHS Advisory Group conducted a needs assessment study targeting these three audiences:

- OHS practitioners – all current students and graduates of the University OHS Certificate Program, those who attended OHS seminars, and/or practitioners with a Canadian Registered Safety Professional (CRSP) designation
- Employers – categorized by organization size, location, and industry sector
- Occupational Health Committee (OHC) co-chairs – categorized by employee/employer, organization size, location, and industry sector

##### Key Findings Re: Future Training

- OHS practitioners, individuals with the CRSP designation, and OHS Certificate students/graduates are very interested in attaining academically credentialed education and training
- The majority of individuals with the CRSP designation and OHS Certificate students/graduates would like to access online education and training
- Lack of an OHS career pathway is an obstacle to the development of the OHS practice
- A basic entry-level applied OHS certificate as the first step on the OHS career ladder has strong support
- Employers rank the development of an entry level OHS certificate as a top priority
- Employers support their OHS practitioners who wish to further their educational qualifications
- Employers want more customized training available in order to access specialized and advanced expertise in several OHS fields
- Introduction of a prior learning assessment and recognition (PLAR) system into OHS practice is strongly supported
- The OHS human resource system needs to work in a coordinated manner in order that employers, safety associations, and academic institutions do not develop multiple, overlapping credentials and programs

## **4.2 Summaries 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.

### **4.2.1 Health Sciences Preparatory Program**

A needs assessment was conducted to determine the need and merit of a formalized approach to providing a preparation program for students interested in applying to health sciences programs.

The targeted group for this program would be the Aboriginal labour force. Currently, Aboriginal people represent approximately two percent of the work force employed in health districts. There is validation that a relationship exists between preparatory programs and student success. The results of the study indicate the need for improving the success results for First Nations and Metis students.

#### Conclusion

- The research validated the need for a preparatory program for First Nations and particularly for students from the northern part of the province.
- Programming for northern and First Nations students should continue to occur through articulation and customization of different programs.
- Urban campuses must establish similar types of programs in the health science field.
- Few of the programs in health sciences meet the participation goals for Aboriginal students and this is an opportunity for SIAST to validate its commitment to education equity.
- Consultation with the north should occur.

### **4.2.2 Dental Assistant**

In April 2002 a labour market survey was conducted to determine if the dental assistant program capacity should be increased above the 60 current seats.

The survey was sent to 325 dentists in the province and there was a response rate of fifty percent. The results of the survey indicate that vacancy positions exist in both the rural and urban areas, with a higher need identified with city employers. It is difficult to recruit employees since 25% of respondents indicated dental assistants are leaving the province. It is also difficult to recruit to the smaller rural communities. Sixty-three percent of respondents anticipate the employment trend for dental assistants will increase. In the next five years the 300 trained dental assistants will be an inadequate number to meet the need.

#### Conclusion

- Primary research indicates a shortage of dental assistants.
- There is a need to increase program seating for the next few years with continuous monitoring of the employment situation.
- There is a need to better prepare dental assistants to also work as office managers.

### 4.2.3 Dental Hygiene

In May/June 2002, a labour market survey was sent out to determine if the Dental Hygiene Program capacity should be increased from the current twenty-four seats. The survey was sent to 325 Saskatchewan dentists, with a response rate of forty-seven percent.

The dental hygiene program was implemented in 1979 and until 1986, the seat capacity each year ranged between ten to twelve students. The new one year program was not direct entry and was designed to train the graduates of the dental therapist program to work in private practice as dental hygienists. In 1991, a six-month bridging program was established to prepare graduates of the dental assisting program for entry to the dental hygiene program.

In 1987 the Saskatchewan Health Dental Plan was abolished and 411 dental therapists were unemployed. The dental therapist program at SIAST was discontinued. To re-train the unemployed dental therapists, the seat capacity in the one year dental hygiene program was increased to 24. The dental assisting program continued.

In 1994 a two-year direct entry Dental Hygiene program was established with a seat capacity of twenty-four students.

#### Conclusion

- A total of thirty-three percent of respondents reported that they are having difficulty recruiting dental hygienists.
- Sixty-seven percent of respondents anticipate the employment trend for dental hygienists will increase.
- Secondary research indicated SIAST dental hygiene graduates are employed in training related jobs (80% employed in full-time positions Graduate Employment Survey 2001).
- SIAST has the potential to graduate 120 hygienists over the next five years. Assuming a low or non-existent out-of-province migration, the number of graduates will be inadequate to meet respondents' requirements, let alone Saskatchewan employers.

### 4.3 Summaries of other reports

#### 4.3.1 Saskatchewan Immigrant and Refugee Settlement Needs and Retention Study

*Meeting Needs and Making Connections* describes the two major challenges facing governments, service providers, and communities in Saskatchewan: finding better ways of addressing the service and support needs of Saskatchewan's immigrants and refugees; and working more closely to address issues, co-ordinate services, and incorporate newcomers into the social and economic mosaic of Saskatchewan.

#### Key Findings Re: Future Training

- The majority of immigrants and refugees are not receiving the education and training required to improve their career prospects
- 'Better career opportunities' is the most significant factor to improving settlement and retention of immigrants and refugees in Saskatchewan
- Opportunities to improve their language skills are required by immigrants and refugees seeking to advance their employment and career prospects
- Some individuals and families require support services including housing, transportation, counseling and childcare

- Flexible and client-centered program and service delivery models required
- Successful settlement and retention will occur only in the context of a 'welcoming community'

#### Recommendations Re: Future Training

- Provide more opportunities to improve language skills
- Improve access to education and training

For more information on the study, access the Internet link at [http://www.graa.gov.sk.ca/Immigrant\\_Needs.pdf](http://www.graa.gov.sk.ca/Immigrant_Needs.pdf)

#### **4.3.2 Saskatchewan Auto Dealers' Association**

The Saskatchewan Auto Dealers' Association will soon undertake a labour market study in the province. The 158 automotive dealers in Saskatchewan will be surveyed to determine their employment requirements for the next five years. The survey has not yet been finalized or sent to the dealers but the questions will deal with:

- the ages of the present workforce
- the variety of current positions in the dealership
- anticipated retirements
- retention of current employees
- salaries, benefits and classifications of the employees
- emerging trends in industry
- future employment needs - to address the shortfall of retirements; to address continuing vacant positions; and to address anticipated new positions and employees
- new technology and equipment requirements

For further information about the status of the survey and the report, contact Vera Hoffert, at [vhoffert@saskautodealers.com](mailto:vhoffert@saskautodealers.com)

#### **4.3.3 Saskatchewan Road Building and Heavy Construction Association**

The Saskatchewan Road Building and Heavy Construction Association will soon undertake a labour market study in the province. The members of the association will be surveyed to determine their current work situations. Because of the nature of the industry, the survey will commence in May and run until November. Questions in the anticipated survey will include:

- Employment issues regarding:
  - Full- and part-time employment
  - Gender
  - Difficulty in hiring, training
  - Work capacity
- Industry issues - for example:
  - Emerging trends
  - Contract and tendering processes and issues related to these
  - General membership issues



For further information about the status of the survey and the report, contact Val Jakubowski, Executive Administrator at [rb10@sasktel.net](mailto:rb10@sasktel.net)

#### **4.3.4 Independent Business Study**

The Canadian Federation of Independent Business (CFIB) has recently released a labour availability report entitled: *Labour Pains: Results of CFIB Surveys on Labour Availability*, April 2003.

##### Recent Trends

- The downside of a growing economy for the last decade has been persistent labour shortages for small and medium-sized enterprises (SME's)
- Statistics Canada reports that by 2011 there will be potential shortages of workers in certain occupations
- A CFIB survey of its membership in 2002 showed that 265,000 full-time jobs were vacant across Canada due to the lack of suitable candidates
- Towards the end of 2002, one in two businesses (49.6 per cent) indicated they were concerned with a shortage of qualified labour in 2002
- Three out of four small firms have hired youth (young people between ages 15 and 24), especially for employment in agriculture, hospitality, and manufacturing. Several other firms reported hiring seniors, aboriginal workers, new immigrants, or people with disabilities
- Twenty-nine per cent of Saskatchewan firms surveyed indicated that they expected to increase their workforce in the near future
- Six out of every ten Saskatchewan business owners anticipate that it will become harder to find employees in the next three years

##### Key Findings Re: Future Training

- Training is part of the answer to the shortage of labour. Firms provide training to their employees for several reasons: to upgrade their skills in line with the job's requirements, to teach them new skills in order to take on more responsibilities, and to enable them to use new technologies
- Two-thirds of businesses want to increase their participation in co-op/apprenticeship programs
- More than half of the businesses see improving their communication with the education community as part of the solution toward reducing the shortage of labour

##### Conclusion

There is no single solution to the shortage of labour, and no single key player

The full report is available on the CFIB website: [www.cfib.ca](http://www.cfib.ca)



January 2003

**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 2002 Provincial Training Needs Summary is attached for your reference.

Join us:

DATE:  
TIME:  
LOCATION:

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 5** at [cates@siast.sk.ca](mailto:cates@siast.sk.ca), or call Jackie at 933-6518.

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Barb Heise, Director  
Skills Initiatives

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Gerlinda Sarkar, Director  
Planning, Research & Development

**List of Invited Guests to Focus Group Sessions – March 2003**

Addictions Services	Adventure Printing
Agpro Grain	Ag-West Biotech Inc
Alzheimer Society of Sask. Inc	Apparel & Textile Association of Sask.
Apprenticeship & Trade Certification Commission	Aramark Canada Ltd.
ASL Paving	Association of Consulting Engineers of Saskatchewan
Atco Frontec Corporation	Aztex Construction
Bee Line Welding	Bentall Retail Sales
Bergen's Autobody & Collision Centre Ltd.	BICC Phillips Inc
Big Horn Transport Ltd.	Bode Implements Ltd.
Bombardier Aerospace	Brandt Industries (Turf Equipment Division)
Business Improvement District	C & S Construction
C. Duncan Construction Ltd.	Cameco Corporation
CanaDay's Apparel Ltd.	Canadian Federation of Independent Business
Canadian Imperial Bank of Commerce	Canadian Light Source
Canadian Pacific Railway	Cardinal Construction Co Ltd.
Cargill Ltd.	Caribou Auto Body
Carrier Forest Products	Case Corporation
CGI Information Systems	Challenger Geomatics
Chillers Brew Pub & Restaurant	City of Moose Jaw
City of Prince Albert	City of Regina
City of Saskatoon	Cogema Resources Inc.
Continental Construction Ltd	Co-op Upgrader
Consumers' Co-operative Refineries	Corrections Service Canada
Regional Training College	Credit Union Central of Saskatchewan
Crestline Coach Ltd.	Crown Life Insurance Co
CTK Plastics Ltd.	Custom Software Solutions
Danka Canada Inc.	Degelman Industries Ltd.
Dental Surgeons of Saskatchewan	DirectTel
Doepker Industries	East Side Dental Centre
Ecotourism Society of Saskatchewan	EDS Canada Inc.
Environment Canada	Extencicare
Factory 53 Designs	Federated Co-op
Federation of Saskatchewan Indian Nations	Fifth Avenue Collection
Flexi-Coil Ltd.	Focal Point Computers
Forestry Training Sub-committee	Friends of the PA Lodge Inc.
Frontier Peterbilt Sales Ltd.	Gates & Company
Gatx Rail Canada Corp	GDS & Associates Systems Ltd.
GE Noren & Partners	General Cable
Gilroy Homes Inc.	Guaranteed Refrigeration Service
Heartland Agro Services Ltd.	Heartland Livestock
Heritage Inn	Hitachi Canada Industries Ltd.
Hotels Association of Saskatchewan	Houghton Boston Printers
House of Concord	IBM
IMC Kalium Canada	Impact Printers
International Road Dynamics	Intrex OnLine Services
IPSCO Inc.	Ironworkers Association Local 771
ISM	Johns Nursery & Market Garden Ltd.

**List of Invited Guests to Focus Group Sessions – March 2003**

Kelly Services	Kindersley Transport Ltd
KPMG	Kramer Ltd.
Labatt Breweries Sask	Law Society of Saskatchewan
Leipert Financial Group	Lydale Construction Co Ltd
Magna Ford Engineering	Manpower Temporary Services
MarketLinc	MDS Laboratory
Mechanical Contractors Association of Saskatchewan	Mid Con Engineering
Minds Eye Pictures	Mineral Sector Steering Committee
Mitchell's Gourmet Foods	Mnemonic Enterprises
Moose Jaw – Thunder Creek Health District	Moose Jaw Arts in Motion
Moose Jaw Asphalt Ltd.	Moose Jaw Chamber of Commerce
Moose Jaw Construction Association	Moose Jaw Cooperative Ltd.
Moose Jaw Credit Union	Moose Jaw Real Estate Board
Moose Jaw Regional Economic Development Authority	Moose Jaw Sash & Door
Moose Jaw Toyota	Morris Industries
National Refrigeration and Heating	North Saskatoon Business Association
Northern Lights Casino	Northern Resource Trucking
Nu-Fab Building Products Ltd.	Off The Wall Productions
PA Chamber of Commerce Business Opportunities	PA Home Based Business Association
Partners in Motion Inc.	Parts & Service Managers Association c/o Acura
Paul Dojack Youth Centre	PCL Construction Mgmt Inc
PFRA Agriculture Canada	Philom Bios
Pinegrove Correctional Centre	Polar Refrigeration Service
Potash Corp of Saskatchewan	Prairie Implement Manufacturers Association
Prairie Machine & Parts	Prince Albert Chamber of Commerce
Prince Albert Construction Association	Prince Albert Correctional Centre
Prince Albert Credit Union	Prince Albert Grand Council
Prince Albert Health District	Prince Albert Inn
Prince Albert Regional Economic Development Authority	Provincial Exporters Association
Raider Industries	Ram Management
Ranch Ehrlo Society	RCMP
Redhead Equipment Ltd.	Redhead Equipment Mack Division
Regina Chamber of Commerce	Regina Daycare Association
Regina Emergency Medical Services	Regina Health District
Regina Regional Economic Development Authority	Road Builders and Heavy Construction Association of Sask.
Royal Bank of Canada	Sask Forestry Association
Sask Housing Corporation	Sask Steel Fabricators & Erectors Association Inc.
Saskatchewan Agriculture	Saskatchewan Agriculture and Food
Saskatchewan Applied Science Technologists and Technicians	Saskatchewan Association of Architects
Saskatchewan Association of Automotive Repairers	Saskatchewan Association of Child Care Homes
Saskatchewan Association of Health Organizations	Saskatchewan Association of Licensed Practical Nurses
Saskatchewan Association of Recreation Professionals	Saskatchewan Association of Rural Municipalities
Saskatchewan Association of Veterinary Technologists	Saskatchewan Auto Body Association
Saskatchewan Auto Dealers Association	Saskatchewan Aviation Council
Saskatchewan Call Centre Association	Saskatchewan Chamber of Commerce
Saskatchewan College of Physical Therapists	Saskatchewan Construction Association

**List of Invited Guests to Focus Group Sessions – March 2003**

Saskatchewan Council of Independent Forest Industries	Saskatchewan Day Care Directors Association
Saskatchewan Dental Assistants' Association	Saskatchewan Dental Hygienist Association
Saskatchewan Dietetic Association	Saskatchewan Early Childhood Association
Saskatchewan Emergency Medical Services Assoc.	Saskatchewan Environment and Resource Management
Saskatchewan Film & Video Development Corporation	Saskatchewan Food Processors Association
Saskatchewan Gaming Corporation	Saskatchewan Government Insurance
Saskatchewan Graphic Arts Industries Association	Saskatchewan Health Records Association
Saskatchewan Highways and Transportation	Saskatchewan Home Based Business Association
Saskatchewan Home Builders Association Inc	Saskatchewan Industry & Resources
Saskatchewan Justice - Corrections Division	Saskatchewan Labour Force Development Board
Saskatchewan Meat Processors Association	Saskatchewan Mining Association
Saskatchewan Motion Picture Association	Saskatchewan Outfitters Association
Saskatchewan Paramedic Association	Saskatchewan Pharmaceutical Association
Saskatchewan Physiotherapy Association	Saskatchewan Potash Producers Association
Saskatchewan Psychiatric Nurses Association	Saskatchewan Registered Nurses Association
Saskatchewan Research Council	Saskatchewan Society of Nutrition Management
Saskatchewan Society of Occupational Therapists	Saskatchewan Tourism Education Council
Saskatchewan Trade & Export Partnership	Saskatchewan Transportation Company
Saskatchewan Trucking Association	Saskatchewan Veterinary Medical Association
Saskatchewan Water and Wastewater Association	Saskatchewan Water Corp
Saskatchewan Wheat Pool	Saskatchewan Wildlife Federation
Saskatchewan Women in Trades & Technology	Saskatoon Air Services Group
Saskatoon Chamber of Commerce	Saskatoon Construction Association
Saskatoon District Health	Saskatoon Hyundai
Saskatoon Metal Manufacturing	Saskatoon Regional Economic Development Authority
Saskatoon Tribal Council	SaskCan Pulse Trading Inc
SaskEnergy	Saskferco Products Inc.
Sasknative Economic Development Corp	SaskPower
SaskTel	Science Applications International Corporation
SED Systems Inc	Sherwood Co-op
Sherwood Credit Union	Simpson Seeds
Sixth Ave Hair and Beyond	South Central Community Futures Development Corporation
Staples Call Centre	Supreme Office Products Ltd.
Sweeney Electric Ltd	Sweep Rite Manufacturing
Temple Gardens Mineral Spa Inc	Thunder Creek Rehabilitation Association
Tourism Moose Jaw	Tourism Prince Albert
Tourism Regina	Tourism Saskatchewan
Tourism Saskatoon	TransCanada Pipeline Ltd.
Transwest Air	Tricom
Tunnels of Moose Jaw	Wallace Construction
Wapawekka Lumber Ltd.	Wavecom Electronics
Westcan Bulk Transport	Western Business Machines
Western Canada Beef Packers	Western Economic Diversification
Westrum Lumber	Weyerhaeuser Canada
Women Entrepreneurs of Saskatchewan	XL Beef
Yanke Group of Companies	Yvette Moore Fine Art Gallery

## Appendix B



Appendix C

Other potential reasons (please elaborate)

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7. What other major barriers impact on the recruitment and retention of staff in your industry?

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

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9. What are the major challenges that will affect your sector over the next 3 years?

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

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

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