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#### ABSTRACT

The Saskatchewan Institute of Applied Science and Technology (SIAST) Planning, Research and Development Division conducted three studies of the geographic origins of applicants to the Institute. The analyses of the places of origin provided SIAST with solid information to assist in planning program delivery in the province. The studies used the home address postal codes of the applicants to SIAST credit programs. The analyses consisted of those programs offered on-campus at the four campus locations. Knowledge of the geographic distribution patterns assist in determining the program base campus locations and the need for distributed distance education delivery. For example, the results determined that students applying to programs in the technology division tend to be young unattached males who are willing to relocate to study a program at a single delivery site. On the other hand, students applying to programs in the community services division tend to be older, predominantly female, have families, and therefore have reduced mobility. Educational opportunities should be provided for these students at their home communities. The studies are useful in identifying regions of the province that need to be targeted by SIAST's marketing personnel. The current study conducted similar analyses to the two previous studies, and in addition focused on the age, gender, and marital status of the applicants. Enrollment data of the first year students were also analyzed for comparison with the application data. (VWC)



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## Geographic Distribution of Applicants to the Saskatchewan Institute of Applied Science and Technology

8<sup>th</sup> Annual CIRPA Conference Quebec City, October 24-26, 1999

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## Saskatchewan Institute Of Applied Science and Technology

# Geographic Distribution of Applicants to the Saskatchewan Institute of Applied Science and Technology

Presented at the 8<sup>th</sup> Annual Conference Canadian Institutional Research and Planning Association, October 1999

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## Geographic Distribution of Applicants to the Saskatchewan Institute of Applied Science and Technology

The Saskatchewan Institute of Applied Science and Technology (SIAST) provides career-related education, training and re-training for adults throughout Saskatchewan. SIAST offers one hundred and twenty five programs at four urban campuses located in Moose Jaw (Palliser Campus), Prince Albert (Woodland Campus), Regina (Wascana Campus) and Saskatoon (Kelsey Campus). Many of the SIAST programs are offered in rural Saskatchewan in partnership with Saskatchewan's Regional Colleges.

The SIAST Planning, Research and Development Division conducted three studies of the geographic origins of applicants to the Institute. The analyses of the places of origin provided SIAST with solid information to assist in planning program delivery in the province. The studies used the home address postal codes of the applicants to SIAST credit programs. The analyses consisted of those programs offered on-campus - at the four campus locations.

Knowledge of the geographic distribution patterns assist in determining the program base campus locations and the need for distributed distance education delivery. For example, the results determined that students applying to programs in the technology division tend to be young unattached males who are willing to relocate to study a program at a single delivery site. On the other hand, students applying to programs in the community services division tend to be older, predominantly female, with families, and therefore have reduced mobility. Educational opportunities should be provided for these students at their home communities.

The studies are useful in identifying regions of the province that need to be targeted by SIAST's marketing personnel.

The 1997-98 study conducted similar analyses to the two previous studies and in addition focussed on the age, gender, and marital status of the applicants. Enrollment data of the first year students were also analyzed for comparison with the application data.

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## Geographic Distribution of Applicants to the Saskatchewan Institute of Applied Science and Technology

#### **Executive Summary**

The Planning, Research and Development Division at the Saskatchewan Institute of Applied Science and Technology (SIAST) conducted three studies which determined the origin of the Institute's student population. The purpose of the studies was to ascertain the regional breakdown of the applications throughout the province so that SIAST could adapt its marketing strategy. The third of the three studies, conducted in the spring of 1999, included a comparison of the data for the applicants and enrolled students in 1997-98. By comparing these two groups, SIAST wanted to determine if the home locations of the enrolled students were similar to the actual application breakdowns.

#### Review of the Geographic Studies

The Planning, Research and Development Division at SIAST reviewed the applications to the Institute overall, as well as applications to each of the four campuses for the periods 1992-93, 1995-96 and 1997-98. The review of the studies included a comparison of urban and rural applications. *Urban* was defined as any city in the province with a population greater than 7,000, therefore, the ten larger cities in the province.

#### **Applications to SIAST**

Applications to SIAST increased over the three study periods – an increase of 7% between 1992-93 and 1995-96, and an increase of 9% between 1995-96 and 1997-98. The percentage of the total applications to SIAST from the four campus cities (Saskatoon, Regina, Moose Jaw and Prince Albert) in 1992-93, 1995-96, and 1997-98, were 50%, 51%, and 46% respectively.

#### **Applications to the Four Campuses**

Kelsey Campus: an increase in applications of 59% between 1992-93 and 1997-98 (1183 to 2953). Compared to the other three campuses, Kelsey Campus consistently had the largest pool of applicants to SIAST. In 1995-96 and 1997-98, the majority of applicants to this campus were from the urban regions – the ten larger cities.

Palliser Campus: of the three periods under review, applications were the largest in 1995-96 and lowest in 1997-98. The decrease in applications in 1997-98 may be the result of poor technology job prospects in the province or aggressive recruitment from post-secondary colleges in neighboring provinces. The urban/rural split has consistently been in the 50/50 range. This is not typical of the urban/rural applications to the other SIAST campuses.

Wascana Campus: the majority of applications to this campus came from the home campus city. Of the three study periods, the largest number of applicants was in 1992-93. In 1997-98, applications from locations in Saskatchewan, other than the four campus cities, had risen by 13% since 1992-93 and 8% since 1995-96. In 1997-98, 70% of applications were from the south eastern area of the province.

Woodland Campus: applications from rural Saskatchewan to this campus have consistently remained in the range of 39-46%, with the majority having identified home addresses in the northern two-thirds of the province. In the three study periods, a large percentage of the applicants to Woodland Campus came from the home campus city. The 1997-98 applications from the city of Prince Albert, though, at 36%, were lower by 10% from the 1995-96 figures. This was balanced by a significant increase in applications from other locations in the province that year.

#### Additional Analysis of the 1997-98 Study

The 1997-98 study conducted similar analyses to the two previous studies and in addition focussed on the age, gender, and marital status of the applicants. Enrollment data on first year students were also analyzed for comparison with the application data.



Sequential versus Non-Sequential Applicants

Sequential is defined as those who apply directly or within one year from high school; non-sequential, those who have been out of high school for more than one year.

SIAST applicants ranged in age from 17 and 60 years of age, with an average age of 25. Thirty-seven percent of applicants were between 17 and 19 years of age. Therefore, 63% of applicants to SIAST were non-sequential applicants (older than 19 years of age).

The majority (53%) of applicants to Palliser Campus were sequential students; with Kelsey Campus at 37%. [Palliser and Kelsey Campuses offer the majority of the two-year diploma programs]. Applications from sequential students to Wascana and Woodland Campuses were 34% and 21% respectively.

#### Mobility to Re-Locate for Study at SIAST

Overall, 69% of applicants were mobile and willing to re-locate to one of the campus cities to take post-secondary training at SIAST. At Palliser Campus, the mobility figure was 84%. This campus is identified as offering the majority of technology programs. Since students enrolled in technology programs tend to be young males, with no family attachments, they are, for the most part, able to re-locate to attend their programs of choice.

The sequential applicants are likely to be more mobile in attending SIAST than non-sequential applicants.

#### Enrolled First Year Students at SIAST

44% of all applicants and 41% of all first year enrolled students to SIAST came from rural locations. A larger percentage (24%) of first year enrolled students came from Regina than the percentage (18%) of applicants. The trend was similar in Prince Albert, at 10% of first year enrolled students compared to 7% of applicants. In Saskatoon, the opposite occurred, with 17% of applications compared to 14% of first year enrolled students at SIAST originating from Saskatoon. There was little difference between the percentages of applications and enrollments of first year students from Moose Jaw.

Though not significantly different, the percentage of applicants to enrolled students does warrant further review.

#### Use of the results of the studies

The data from the studies will be one instrument used to assist senior management at SIAST in making decisions regarding program offerings across the province of Saskatchewan. The standardization of similar programs provincially is one area that is currently underway. The Institute offers many multi-site programs and is reviewing these offerings to determine if a smaller number of site offerings would be appropriate. Because of the nature of the programming and the characteristics of the study body applying to some programs, the Institute is cognizant that, in some divisions, it may not be expedient to reduce program location offerings.

SIAST needs to address those geographic regions of the province where there are low numbers of applications. As well, now that the Institute is aware of the differences in the percentages of applications to first year rural enrolled students from the rural regions, further marketing of SIAST programs will be required in the rural locations. To this end SIAST has established two new positions – a Manager of Marketing and Communications and a Student Recruitment Liaison Officer.



#### Geographic Distribution of Applicants to the Saskatchewan Institute of Applied Science and Technology

#### The Saskatchewan Institute of Applied Science and Technology

The Saskatchewan Institute of Applied Science and Technology (SIAST) is a post-secondary educational institution with a broad province-wide perspective. The Institute provides career-related education, training and re-training for adults throughout the province of Saskatchewan. SIAST consists of four campus locations strategically positioned in the province, and located in Moose Jaw (Palliser Campus); Prince Albert (Woodland Campus); Regina (Wascana Campus); and Saskatoon (Kelsey Campus).

As well as offering programs at the four campuses, SIAST programs are offered in many locations of the province, in partnership with Saskatchewan's Regional Colleges.

In 1997-98, SIAST offered 125 programs, comprised of applied certificates, certificates, advanced certificates, diplomas, and post-diploma certificates. A number of the programs are offered through a variety of delivery modes – traditional, distance education, work-based training, and now the Institute is preparing to move into virtual teaching. SIAST also offers Apprenticeship and Basic Education programs.

#### Demographics of Saskatchewan

According to Statistics Canada, the population of the province of Saskatchewan in 1992-93, 1995-96 and 1997-98 was 976,000; 1,014,200; and 1,022,400 respectively. The population base of the province has been increasing slightly over the years – an increase of 4.5% in the five years, 1992-1997.

Though at a slower pace than its neighbors Alberta and Manitoba, over the last number of years the urban/rural demographics of the province has been changing. The general population of the province is moving into the urban centres and away from rural Saskatchewan [Statistics Canada, 1996 Census).

The province of Saskatchewan is 651,900 square kilometers and is sparsely populated by standards in many other provinces - 1.6 persons per square kilometer compared to 10 persons per square kilometer in Ontario [Source: Government of Ontario - a look at Ontario - Geography, <a href="http://www.gov.on.ca/MBS/english/look/geo/index.html">http://www.gov.on.ca/MBS/english/look/geo/index.html</a>]. The northern half of the province is predominantly pre-Cambrian shield wilderness with many rivers, lakes, and forests. The majority of the population resides in the southern half of the province in the fertile, agricultural prairies.

#### Purpose of the Geographic Studies

Over the past seven years, the Planning, Research and Development Division at SIAST conducted three studies that determined from where the Institute's student population originated. The purpose of the studies was to ascertain the regional breakdown of the applications across the province and for SIAST to adapt its marketing strategy accordingly.

The initial study, in 1992-93, was undertaken with a view to the rationalization and reorganization of SIAST's programs. Though the rationalization of the programs did not take place, the data were used extensively by SIAST's management and marketing staff as supporting documentation for future directions for the Institute, such as where to locate new programs and where to increase or decrease student intake capacities.

The second study, conducted in 1995-96, was undertaken to establish if a trend existed and if the home locations of students were similar to that determined in 1992-93.

The studies also had a major impact in where to locate the provincial deans when SIAST reorganized in 1997.



Geographic Distribution of Applicants to the Saskatchewan Institute of Applied Science and Technology CIRPA Presentation, October 26, 1999

The third study, conducted in the spring of 1999, also included a comparison of applicants and enrolled students in 1997-98. In comparing these two areas, SIAST wanted to determine if the home locations of the enrolled students were similar to the actual application breakdown.

#### Methodology of the Geographic Studies

Though SIAST offers many programs throughout the province, through a variety of delivery methods, extension, distance education, Saskatchewan Communications Network (SCN), and in partnership with the Regional Colleges, the three studies under discussion reviewed only the on-campus credit programs at the four SIAST campuses.

Data for the three studies were obtained from the SIAST BANNER Student Registration and Reporting System. The postal code for the home addresses, as listed on the application forms, was used to determine the geographical origin of the applicant population.

For all three studies, SIAST determined that the ten largest cities in the province (all with a population greater than 7,000) be selected as the urban areas. The rest of the province was considered rural Saskatchewan

When students complete an application form to study at SIAST, there is a section to enter the postal code. In all three reports, a small percentage of applicants did not complete the postal code on the application forms. The studies were conducted using the percentage of students that did include a postal code. In the 1997-98 study, for instance, this was 85% of all applications to the on-campus credit programs at SIAST.

All applications to SIAST are from Canadian residents. SIAST programs are always oversubscribed. The average ratio is 1.7 applicants per available seat. SIAST's Admission Policy states that Admission priority will be given to residents of Saskatchewan. Provision may be made for other residents of Canada and International students [SIAST Admission Policy #318, 1999]. In the three reports, approximately 98% of applicants were from the province of Saskatchewan. Therefore, approximately 2% of applicants were from other provinces in Canada.

#### **Review of the Geographic Studies**

#### Applications to SIAST

Applications to SIAST increased over the period of the three studies, as illustrated in Figure 1, and ranged from 5785 (in 1992-93) to 6196 (in 1995-96) – an increase of 7%, to 6769 (in 1997-98) – an increase of 9%, for those applicants who indicated a postal code.

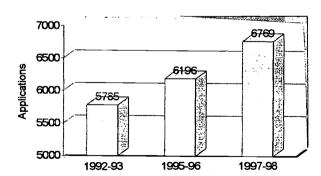


Figure 1: Applications to SIAST

Table 1, below, lists the percentages of total applications to SIAST from the four campus cities, as well as from other locations in Saskatchewan. The percentages of applications from the four major cities



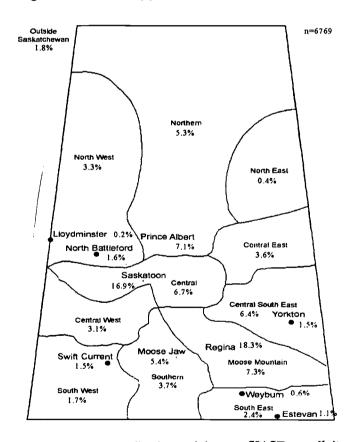
fluctuated somewhat over the three study periods. Applications from other locations in Saskatchewan, besides the four major cities, increased 4% in 1997-98 from 1995-96. Applications from Regina decreased slightly over the three study periods.

Table 1: Applications to SIAST from the Four Campus Cities

Applications to SIAST	1992-93	1995-96	1997-98
From Regina	22%	19%	18%
From Saskatoon	10%	17%	16%
From Prince Albert	11%	7%	7%
From Moose Jaw	7%	8%	5%
From other locations in Saskatchewan	49%	48%	52%
Outside Saskatchewan	1%	1%	2%
Total Applications to SIAST	5785	6196	6769

The map of the province, Figure 2, identifies the 1997-98 percentages of applications to SIAST from the different regions in the province. Note that 46% of applicants came from the four SIAST campus cities in the province. 8% of applicants to SIAST were from the remaining six cities identified within 'urban', or outside Saskatchewan. Therefore, 46% registered a home address from rural Saskatchewan.

Figure 2: 1997-98 Applications to SIAST, by Region



In addition to understanding from where applications originate to SIAST overall, it was also useful to extend the analysis to the four SIAST campuses. The next sections examined whether the proportion of applicants from the four campus cities (Saskatoon, Regina, Moose Jaw, and Prince Albert) varied over the three study periods.

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#### Applications to SIAST Kelsey Campus (Saskatoon)

Applications to Kelsey Campus increased over the period of the three studies, as illustrated in Figure 3, and ranged from 1183 (in 1992-93) to 1895 (in 1995-96) – an increase of 60%, to 2953 (in 1997-98) – an increase of 55%.

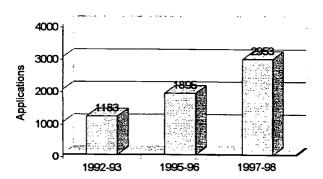


Figure 3: Applications to Kelsey Campus

Table 2, below, identifies the percentage of total applications for Kelsey Campus from the four campus cities. In examining applications from the four major cities in the province to Kelsey Campus, the percentage of applications increased over the three study periods from the province's capital city, Regina. Applications from Prince Albert decreased in 1995-96 and in Moose Jaw increased slightly in 1997-98. The applications fluctuated from Saskatoon, with a significant increase in 1995-96. This peak may be the result of:

- a) a decline of student enrollment at the University of Saskatchewan, located in Saskatoon, [Source: Ensuring Our Future, University of Saskatchewan 1995-96 Annual Report];
- b) the increase in the University of Saskatchewan tuition fees for the 1992-1994 years [Source: University of Saskatchewan Registrar's Office];
- an increase in the Saskatoon population of 2.2% in 1994-95 [Source: Sask. Trends Monitor, Volume VII, Number 8, August 1995];
- d) the positive economic growth of the city in 1995, with investment in high growth sectors, including manufacturing, agricultural biotechnology and information technology [Source: Saskatoon Regional Economic Development Authority, Inc. (SREDA), 1995 Economic Situation Report].

Table 2: Applications to Kelsey Campus from the Four Campus Cities

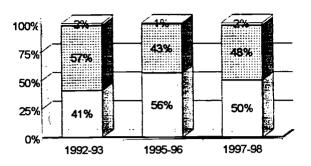
Applications to Kelsey Campus	1992-93	1995-96	1997-98
From Regina	2%	. 4%	6%
From Saskatoon *	26%	44%	31%
From Prince Albert	4%	3%	3%
From Moose Jaw	1%	1%	2%
From other locations in Saskatchewan	65%	47%	55%
Outside Saskatchewan	2%	1%	2%
Total Applications to Kelsey Campus	1183	1895	2953

<sup>\*</sup> Campus City

Figure 4, below, illustrates the applications to Kelsey Campus from urban, rural and outside Saskatchewan locations. Urban locations are defined as the ten major cities in the province. Rural locations are defined as the rest of the province. With the demographic shift of the population to urban locations, the rural applications to Kelsey Campus for both the 1995-96 and 1997-98 years were less than in 1992-93.



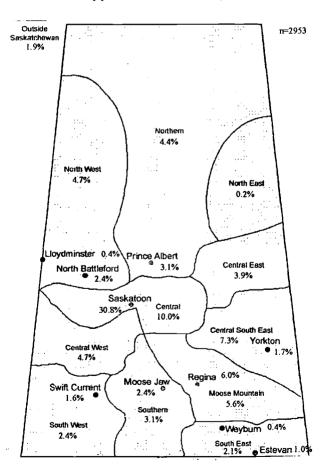
Figure 4: Urban and Rural Applications to Kelsey Campus



□ Urban □ Rural □ Outside Saskatchewan

The map of the province, in the following Figure 5, identifies the percentages of applications from the different regions in the province to Kelsey Campus for 1997-98. SIAST is aware that applications to Kelsey Campus from the western portion of the province, particularly the north west, are low. Almost 60% of applications to SIAST Kelsey Campus originate from the central third of the province (Central regions). Recruitment and marketing strategies are being implemented to address these issues.

Figure 5: 1997-98 Applications to Kelsey Campus, by Region



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#### Applications to SIAST Palliser Campus (Moose Jaw)

Figure 6 demonstrates that applications to Palliser Campus increased noticeably in 1995-96 and decreased considerably in the 1997-98 study. The figures ranged from 1653 (in 1992-93) to 2469 (in 1995-96) – an increase of 50%, to 1477 (in 1997-98) – a decrease of 40%.

Palliser Campus, at Moose Jaw, offers primarily technology, business and industrial programs. Programs in health, community services or agriculture do not originate from this campus. The decrease in applications at Palliser Campus was primarily due to a decrease in the demand for technology programs, which in itself is a troubling phenomenon. Poor job prospects in the province and very aggressive recruitment from post-secondary colleges in neighboring provinces (mainly Alberta) may have had an impact.

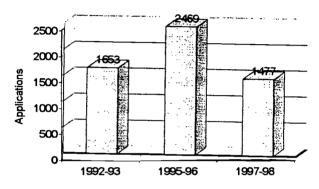


Figure 6: Applications to Palliser Campus

Table 3, below, reports the applications from the four major cities in the province to Palliser Campus. The percentage of applications increased noticeably from Regina for each study period. The majority of the applications to Palliser Campus have consistently been from Regina, also called the Queen City. Applications from Saskatoon and Prince Albert remained at the average of 5% and 2% respectively. From the home city of Moose Jaw, applications varied slightly but were consistently in the area of 17%.

**Applications to Palliser Campus** 1992-93 1995-96 1997-98 From Regina 17% 21% 28% From Saskatoon 6% 4% 5% From Prince Albert 3% 1% 2% From Moose Jaw \* 17% 17% 16% From other locations in Saskatchewan 54% 56% 47% Outside Saskatchewan 3% 1% 1% Total Applications to Palliser Campus 1653 2469 1477

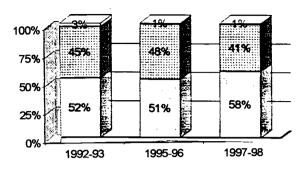
Table 3: Applications to Palliser Campus from the Four Campus Cities

Applications from the urban, rural and outside Saskatchewan locations to Palliser Campus are illustrated in Figure 7. Figures for this campus record that, although there was a 7% increase in applications in 1997-98 from the urban centres, there has always been a close 50/50 split in applications from both the rural and urban centres. The reason for this might be that the majority of technology programs are offered at this location. Therefore, applications to this campus are from throughout Saskatchewan. The campus draws more applications from further afield than an 80-160 kilometer radius of the campus than the other campuses.



<sup>\*</sup> Campus City

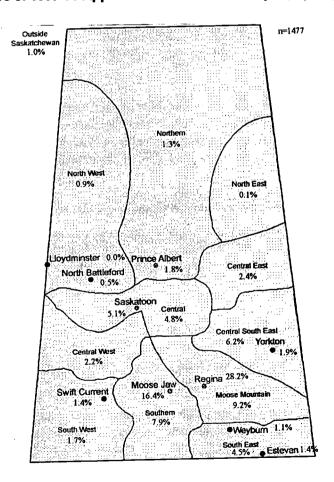
Figure 7: Urban and Rural Applications to Palliser Campus



☐ Urban ☐ Rural ☐ Outside Saskatchewan

Figure 8, the map of the province below, identifies the percentages of applications in 1997-98 from the different regions in the province to Palliser Campus. Note that 16% of applicants are from the City of Moose Jaw. With the other campuses, the majority of applications are from the home cities.

Figure 8: 1997-98 Applications to Palliser Campus, by Region



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#### Applications to SIAST Wascana Campus (Regina)

In Figure 9, the data illustrates that applications to Wascana Campus were the largest in the 1992-93 study. The figures ranged from 1691 (in 1992-93) to 1129 (in 1995-96) – a decrease of 33%, to 1376 (in 1997-98) – an increase of 22%.

The drop in applications may be explained in part to the reduction of seats in the Nursing program, a major program at Wascana Campus. The Nursing Education Program of Saskatchewan (NEPS), a joint program with the University of Saskatchewan, is offered in both Saskatoon and Regina, but the capacity cutback in seats in the program was more pronounced in Regina.

2000 1600 1200 1200 1129 400 1992-93 1995-96 1997-98

**Figure 9: Applications to Wascana Campus** 

Table 4, below, illustrates the applications from the four major cities in the province and records that the downward trend of applications to Wascana Campus from the cities of Moose Jaw and Regina continues. Applications from the host city, Regina, dropped from 56% in 1992-93 to 45% in 1997-98. Applications from Prince Albert have consistently been low, at 1-2%. The percentage of Saskatoon applications remained around 6%.

**Table 4: Applications to Wascana Campus from the Four Campus Cities** 

Applications to Wascana Campus	1992-93	1995-96	1997-98
From Regina *	56%	51%	45%
From Saskatoon	6%	5%	6%
From Prince Albert	1%	2%	1%
From Moose Jaw	5%	4%	3%
From other locations in Saskatchewan	30%	35%	43%
Outside Saskatchewan	2%	3%	2%
Total Applications to Wascana Campus	1691	1129	1376

<sup>\*</sup> Campus City

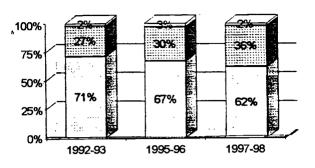
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Applications from the urban, rural and outside Saskatchewan locations are indicated in Figure 10. Unlike the urban versus rural migration trend in the province overall, Wascana Campus consistently drew fewer applicants from rural areas than any of the other SIAST campuses. Nevertheless, applications to Wascana Campus from rural Saskatchewan increased 3% and 6% in 1995-96 and 1997-98 respectively.





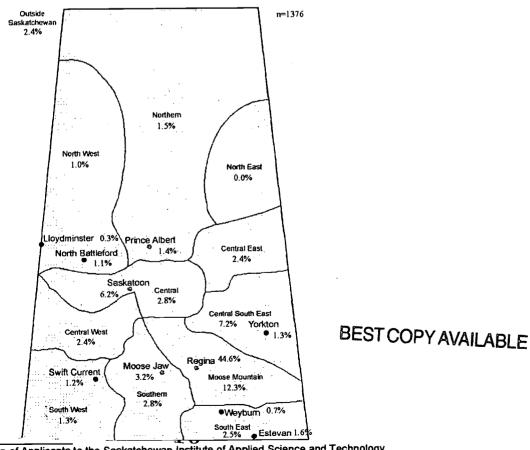
Figure 10: Urban and Rural Applications to Wascana Campus



□ Urban □ Rural □ Outside Saskatchewan

In Figure 11, below, the map of the province identifies the 1997-98 percentages of applications from the different regions in the province to Wascana Campus. Note that 70% of applications are from the south eastern portion of the province. The similarity of programs offered at other campus locations, as well as Wascana Campus, may be a factor for the applications to this campus being fairly localized. For example, the Nursing Education Program of Saskatchewan is offered in two locations in the province, a northern location (Kelsey Campus) and a southern location (Wascana Campus). The Early Childhood Education program is offered in three locations in the province, the two northern campuses and Wascana Campus. There are four welding programs at SIAST, one located at each of the four campuses. All SIAST agriculture programs are located at Wascana Campus, and the southern portion of the province is mainly agricultural land. Over 95% of applicants to Wascana Campus originate in the lower two-thirds of the province (Central and South regions).

Figure 11: 1997-98 Applications to Wascana Campus, by Region





Geographic Distribution of Applicants to the Saskatchewan Institute of Applied Science and Technology CIRPA Presentation, October 26, 1999

#### Applications to SIAST Woodland Campus (Prince Albert)

In examining the three study periods, Figure 12 illustrates that the applications to Woodland Campus decreased in 1995-96 and rebounded in 1997-98. The figures ranged from 1258 (in 1992-93) to 703 (in 1995-96) – a decrease of 44%, to 963 (in 1997-98) – an increase of 37%.

1200 1200 1258 800 400 1992-93 1995-96 1997-98

Figure 12: Applications to Woodland Campus

The percentages of applications from Saskatoon, Regina and Moose Jaw have been fairly stable over the three study periods, as illustrated in Table 5. The 1997-98 applications from the home city of Prince Albert, at 36%, were lower by 10% from 1995-96, though this was balanced by a significant increase in applications from other locations in the province besides the four major cities.

**Table 5: Applications to Woodland Campus from the Four Campus Cities** 

Applications to Woodland Campus	1992-93	1995-96	1997-98
From Regina	2%	1%	4%
From Saskatoon	7%	8%	8%
From Prince Albert *	42%	46%	36%
From Moose Jaw	1%	1%	1%
From other locations in Saskatchewan	47%	40%	49%
Outside Saskatchewan	1%	4%	2%
Total Applications to Woodland Campus	1258	703	963

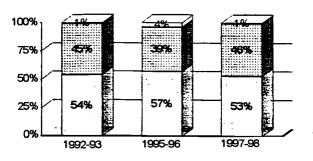
<sup>\*</sup> Campus City

Figure 13, below, identifies the applications to Woodland Campus from the urban, rural and out of Saskatchewan locations. The applications from rural Saskatchewan to Woodland Campus have consistently remained in the range of 39-46%.

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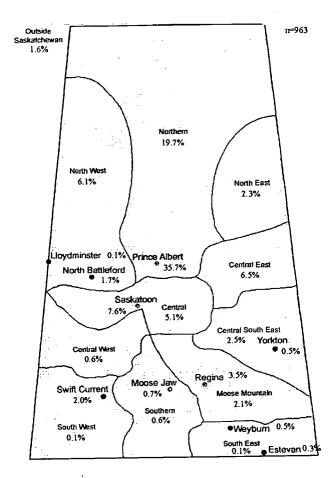
Figure 13: Urban and Rural Applications to Woodland Campus



□ Urban □ Rural □ Outside Saskatchewan

In the map of the province, Figure 14, the applications from across the province to Woodland Campus are identified for 1997-98. Noticeably, 28% of applications came from the rural Northern, North East, and North West regions of the province, as well as 36% from Prince Albert. Almost 90% of applications to Woodland Campus originated from the northern two-thirds of the province (North and Central regions).

Figure 14: 1997-98 Applications to Woodland Campus, by Region



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#### Additional Analysis of the 1997-98 Geographic Study

The 1997-98 geographic study was more detailed than the previous two studies and collected additional information on applicants, including age, gender and marital status. Enrollment data on first year students were also collected for comparison with the application data. As the student population is getting older, SIAST wanted to track whether students were entering directly from high school, or whether they consistently waited for a few years before continuing post-secondary education – often in order to qualify for student loans.

#### Sequential versus Non-Sequential Applications

By using the age distribution of applicants, SIAST was able to determine the extent of applications from sequential students. The following definitions were used to identify which applicants applied directly from high school and which applicants were older.

Sequential: those who apply to SIAST directly or within one year from high school

Non-Sequential: those who have been out of high school for more than one year

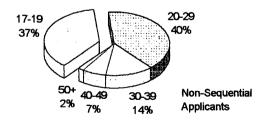
Table 6 and Figure 15 illustrate that, overall, SIAST applicants ranged in age between 17 and 60 years of age, with the average age at 25 years. Thirty-seven percent of the applications to SIAST in 1997-98 were between the ages of 17 and 19. This represents the sequential students applying for entry into SIAST. Therefore, 63% of applicants to SIAST were non-sequential applicants (older than 19 years of age).

Table 6: Age Category of Applications to SIAST in 1997-98

Age Category of Applicants	Number of Applicants	Percentage of Applicants
17-19 years of age	2525	37.3%
20-29	2715	40.1%
30-39	943	13.9%
40-49	473	7.0%
50+	113	1.7%
Total	6769	100%

Figure 15: 1997-98 Sequential/Non-Sequential Applications to SIAST





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The majority (53%) of applicants to Palliser Campus were from sequential students; with Kelsey Campus at 37%. At Wascana and Woodland Campuses, applications from sequential students were 34% and 21% respectively. Both Palliser and Kelsey Campuses offer the majority of the two-year diploma programs and



Geographic Distribution of Applicants to the Saskatchewan Institute of Applied Science and Technology CIRPA Presentation, October 26, 1999

it might be that the younger sequential applicants may be more willing to commit that length of time to study, than the older students.

#### **Mobility of Applicants**

SIAST is aware that there are many factors in an applicant's selection of a specific program of study. Some of the factors may be:

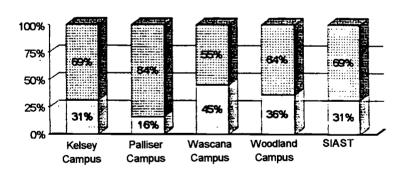
- interest in the field of study;
- potential employment opportunities;
- financial situation;
- family responsibilities
- personal reasons
- willingness to re-locate

Table 7 and Figure 16 compare the applications to the four campuses from the campus cities and from the rest of the province. In this instance, the percentages identified within the rest of the province include the applications from outside Saskatchewan. With the variety of factors involved in re-locating to study a program at SIAST, the Institute was pleased to note that both overall at SIAST and at the four campuses, the majority of applicants were willing to re-locate to study.

Table 7: Comparison of 1997-98 Applications from Campus City to Rest of Province

	Campus	Rest	
	City	of Province	Total
Kelsey Campus	31%	69%	2953
Palliser Campus	16%	84%	1477
Wascana Campus	45%	55%	1376
Woodland Campus	36%	64%	963
SIAST	31%	69%	6769

Figure 16: Comparison of 1997-98 Applications, by Campus



☐ Campus City ☐ Rest of Province

It is reasonable to assume that the sequential students would have a different priority list of factors in attending SIAST than the non-sequential students. This could be due to different financial situations, family responsibilities or personal reasons. In questioning how mobile the applicants are, one would have to consider the differences in reasons to attend SIAST by both the sequential and non-sequential applicants. These differences would require further study. In Table 8, below, the breakdown of applications to each campus by sequential/non-sequential age categories is illustrated. The table also identifies the percentage of applicants from the campus cities and from the rest of the province.



Table 8: 1997-98 Sequential and Non-Sequential Applications to the Four Campuses

	Sequ	ential Applicant	ts	Non-Sequ	iential Applicant	ts
	Campus	Rest		Campus	Rest	
	Čity	of Province	Total	City	Of Province	Total
Kelsey Campus	23%	77%	1079	35%	65%	1874
Palliser Campus	13%	87%	781	20%	80%	696
Wascana Campus	31%	69%	463	51%	49%	913
Woodland Campus	31%	69%	202	37%	63%	761
SIAST	22%	78%	2525	37%	63%	4244

Of all the applicants to SIAST in 1997-98, 69% were willing and able to travel to campus locations to study their programs of choice. Palliser Campus is characterized with offering the majority of SIAST technology programs. Since students enrolled in technology programs tend to be young males with no family attachments, they are, for the most part, able to re-locate to attend their programs of choice. Therefore, Palliser Campus would have a significantly higher percentage of applicants from outside Moose Jaw (84%) as the majority of the technology programs are only offered at Palliser or Kelsey Campuses. Both Woodland and Wascana Campuses offer more programs in Community Services and Office Education. These programs are generally taken by women who are often married and/or with children, and therefore mobility is greatly reduced.

The sequential applicants are likely to be more mobile in attending SIAST than non-sequential applicants. For each campus and for SIAST overall, the percentage of applicants from the rest of the province was higher for sequential applicants than non-sequential applicants.

#### Enrolled First Year Students at SIAST

The 1997-98 study included an analysis of first year enrolled students following application to SIAST. As with the applications, the postal codes of the students' home addresses were used to determine their origins.

The theory behind comparing the enrollment to application figures was that the distribution of applicants' origins should be relatively the same as the distribution of enrolled students' origins. In other words, from what locations SIAST applications come should not differ from the locations of the SIAST first year enrolled students.

Table 9 illustrates the percentage regional breakdown of the applications and enrollment for SIAST as well as the rural/urban/outside Saskatchewan totals.



Table 9: Comparison of Location of Origin of SIAST Applicants and First Year Enrollment in 1997-98

Region	Applicants	1 <sup>st</sup> Year Enrolled
Central	6.7%	6.2%
Central East	3.6%	2.6%
Central South East	6.4%	6.0%
Central West	3.1%	2.3%
Moose Mountain	7.3%	9.0%
North East	0.4%	0.2%
North West	3.3%	2.4%
Northern	5.3%	5.2%
South East	2.4%	2.5%
South West	1.7%	1.2%
Southem	3.7%	3.5%
Total Rural	44.0%	40.6%
Estevan	1.1%	0.6%
Lloydminster	0.2%	0.0%
Moose Jaw	5.4%	5.5%
North Battleford	1.6%	0.5%
Prince Albert	7.1%	9.9%
Regina	18.3%	24.0%
Saskatoon	16.9%	14.4%
Swift Current	1.5%	1.6%
Weyburn	0.6%	0.5%
Yorkton	1.5%	1.1%
Total Urban	54.3%	58.0%
Outside Saskatchewan	1.8%	1.4%
Total	6769	3761

As the data indicates, 44% of all applications to SIAST came from rural locations. Approximately 41% of first year students enrolled at SIAST came from rural Saskatchewan. 54% of applications to SIAST came from an urban location. 58% of first year students enrolled at SIAST were from urban locations. From the data it would appear that there is some variation between applications and enrollments on an urban/rural basis.

It should be noted that when examining the locations of the origin for applicants and enrollments, the data is identified for all SIAST campuses. The percentage of applicants to SIAST from Saskatoon was for students who applied to attend programs at any of SIAST's four campuses. The figures for first year enrollments at SIAST from Saskatoon were students enrolled at all four SIAST campuses.

Examining the data in greater detail at the four SIAST campus cities showed differences. A larger percentage (24%) of first year enrolled students at SIAST came from Regina than the percentage (18%) of applicants from Regina. The trend was similar in Prince Albert, with 10% of enrolled students compared to 7% applicants. In Saskatoon, the opposite occurred, but on a smaller scale - 17% of applicants to SIAST came from Saskatoon compared to 14% of first year enrolled students at SIAST originating from Saskatoon. There was very little difference between applications and enrollments of first year students originating from Moose Jaw.



Table 10 illustrates that, at the Kelsey, Palliser and Wascana Campuses, there was less than 4% difference between applications and enrollment percentages from urban/rural/outside Saskatchewan locations. Woodland Campus was higher, at approximately 7%. Focusing in on each SIAST campus and whether the applications or first year enrollments came from an urban, rural or outside Saskatchewan location produced the following results, as shown in Table 10.

Table 10: 1997-98 Urban and Rural breakdown of Applications and Enrollments

	Location of Origin			
	Outside			
	Urban	Rural	Sask.	Total
SIAST Kelsey Campus				
Applications	49.7%	48.4%	1.9%	2953
1 <sup>st</sup> Year Enrollment	49.1%	48.9%	2.0%	945
SIAST Palliser Campus				
Applications	57.7%	41.3%	1.0%	1477
1 <sup>st</sup> Year Enrollment	56.1%	43.5%	0.3%	889
SIAST Wascana Campus				
Applications	61.6%	36.0%	2.4%	1376
1 <sup>st</sup> Year Enrollment	65.2%	33.1%	1.7%	1193
SIAST Woodland Campus				
Applications	52.6%	45.8%	1.6%	963
1 <sup>st</sup> Year Enrollment	59.9%	38.6%	1.5%	734
SIAST				
Applications	54.3%	44.0%	1.8%	6769
1 <sup>st</sup> Year Enrollment	58.0%	40.6%	1.4%	3761

Explanation of these differences in applications to enrolled students could be that:

- the programs reached seat capacity and students were, therefore, unable to obtain seats
- students, having applied to multiple post-secondary institutions, decided at the last minute, not to attend SIAST
- the rural students decided to attend the first year of post-secondary training closer to their home locations, possibly at one of the province's nine regional colleges
- applicants decided not to attend post-secondary training at that particular time.

Though not glaringly high, there are some differences in the percentages of applications and enrolled students from the rural locations and SIAST is aware that further study to determine the reasons is required in this area.



#### Use of the Results of the Studies

In the last eighteen months, SIAST has undertaken a re-organization of the Institute and become more provincial than campus focussed. Programs have been categorized into six provincial divisions rather than four separate campus locations with a variety of divisions within each. The standardization of similar programs provincially is an area that is currently underway. For example, the four Welding programs at SIAST. The Institute offers many multi-site programs and is reviewing these offerings to determine if a smaller number of site offerings would be appropriate.

The data from the geographic distribution studies will be one instrument used to assist senior management at SIAST in making decisions regarding program offerings across the province. Because of the nature of the programming and the characteristics of the student body applying to some programs, the Institute is cognizant of the fact that, in some divisions, it may not be expedient to reduce program location offerings, particularly in the Community Services Division. Programs in this division include Chemical Dependency Worker, Teacher Assisstant, Early Childhood Education, and Library and Information Technology. The majority of students enrolled in these programs are older females with family responsibilities and, therefore, not particularly mobile. The geographic distrubution data will be used to support the decisions made in this regard.

SIAST is now much more aware that it needs to market its programs extensively throughout the province. The Institute needs to address those geographic areas of the province where there are low numbers of applications, for example, the north western region of the province. As well, now that the Institute is aware of the differences in the percentages of rural applications to first year rural enrolled students, further marketing of SIAST programs will be required in the rural locations. To this end SIAST has established two new positions – a Manager of Marketing and Communications and a Student Recruitment Liaison Officer.

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