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Student Mobility 2005

Student Mobility
within
Ontario's Postsecondary Sector



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**Association of Colleges of Applied Arts and Technology of Ontario
Association des collèges d'arts appliqués et de technologie de l'Ontario**

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Abstract

Several data sources indicate that the desire to obtain both a college and university credential in Ontario's postsecondary system is considerable. Aspirations at the start of college are high, with at least one quarter of college students having serious intentions of attaining a degree after a diploma. Data sources include the College Student Alliance Survey, the Ministry of Training, Colleges and Universities Student and Graduate Satisfaction Surveys, the Statistics Canada's National Graduate Survey, and both the Ontario college and university application services (OCAS and OUAC). Currently, 7% of Ontario's college students report having a university degree and over 7% of college graduates go on to university within six months of graduating. When adjusted for enrolment, this translates to an estimate of 6000 university graduates attending college annually, and over 4000 college graduates attending university (within six months of college graduation) annually. These values are similar to Statistics Canada's National Graduate Survey, which showed that of the graduating class of 2000, 13% of Ontario college graduates had a degree and 6% of Ontario university graduates had a previous college credential. Mobility patterns indicate that college graduates commonly attend university close to their college of graduation. Although the proportion of college graduates going on to university is increasing, it remains lower than the proportion that go on to university from applied diploma programs in other jurisdictions, such as British Columbia, Quebec and some American states.

Executive Summary

Aspirations

- In 2004-05, 22% of Ontario college students were enrolled in their college program with the main goal of preparing for further college or university study, an increase from 16% in 2000-01.
- About two-thirds of college students have at least some interest in attaining a degree at some point, with about one-third very interested. Many report that the likelihood of pursuing a university education is dependent on whether the studies are available nearby.

Movement from college to university

Based on the most current data available, it can be estimated that over 4000 of the 2004 new Ontario university registrants are students with previous college education. In addition, the number of college graduates pursuing a degree has been increasing.

- **Ontario University Application Centre.** 5.5% (4268) of all first year registrants in 2004 (including full- and part-time, full year) reported on their application that they had previously attended college (credential unknown).
- **Graduate Satisfaction Survey.** Over seven percent of the 2003-2004 Ontario's CAAT graduates were attending university six months after graduation, which translates to over 4100 graduates, an increase from 4.7% of the 1999-2000 graduating class.
 - Of the 2003-04 graduates, 5.6% were specifically enrolled in an Ontario university degree program (excluding OCAD and UOIT), which translates to 3232 individuals.
 - York is the predominant receiving university, accepting 22% of the college graduates attending university full time and 14% of those attending part time. Of the students attending university part time, almost one-third are attending Ryerson. Twelve percent of the graduates attending university full-time are at "Other" universities which consist of UOIT, OCAD and universities outside Ontario
- **National Graduate Survey.** Six percent of Ontario's university graduates in 2000 previously graduated from college, which corresponds to roughly 3250 graduates.

Movement from university to college

Estimates for the numbers of college students with university background can range from almost 5000 to over 12000, and those with a degree from 2100 to over 6000, depending of the timing of the survey, and whether documentation is required.

- **National Graduate survey.** Thirteen percent of Ontario's students who graduated from college in 2000 had a university degree, which translates to 5900 graduates.
- **Student Satisfaction Survey.** In the 2004-05 academic year, 7% of Ontario college students (beyond first semester) had a university degree, and a further 7% had "some" university education. When applied to the number of first year registrants, this percentage

corresponds to over 6000 students with a university degree; a number that closely matches the National Graduate Survey.

- **Ontario College Application Service.** In fall 2004, 5.5% of college registrants provided documentation of previous university attendance (4879 registrants).
- **Ontario University Graduate Survey.** In a survey of 2002 university graduates, 4.1% reported attending college within six months, and 3.4 % reported attending college two years after graduation.

1. Aspirations for further education

a. College Students

The Student Satisfaction Survey, administered in class yearly to all Ontario College of Applied Arts and Technology (CAAT) students beyond first semester, consistently demonstrates that a significant proportion of students are attending college with the primary goal of preparing for further education. Additionally, this proportion is increasing, from 16 to 22% since 2000-01, an increase of 38%. The proportion who have are enrolled in college “to prepare for employment or career” has dropped from 78 to 72% in the same time period.

Table 1 Ontario College Students Main Goal in Enrolling in College Program

	2000-01	2001-02	2002-03	2003-04	2004-05
To prepare for employment/career	78%	75%	74%	72%	72%
To prepare for further college or university study	16%	18%	20%	22%	22%
To pursue an interest or for personal development	4%	5%	5%	5%	5%
Other	2%	2%	2%	2%	2%
Responses	76,367	80,540	87,961	94,189	95,646

Source: MTCU, Student Satisfaction Surveys, 2001-2005

Additional information on student aspirations for a university education can be obtained from individual colleges. Although the question differs, the range of interest in a degree appears to be quite high, at about 25-39%. The following are several examples:

1) Seneca

In 2002, 38.7% of students entering Seneca College agreed with the statement “after graduation I hope to enter university”, compared to 20% in 1992. Forty-seven percent wanted a full time job, and 7% wanted to enter another college program. Over half of those entering Business Administration, Early Childhood Education and General Arts & Science hope to enter university after graduation (Decock, 2004).

2) Sheridan

As part of the 2005 Student Satisfaction survey, Sheridan’s students were asked “At the end of my program, beyond getting a job, it is important for me to be able to....” Over 35% of students thought it was important that they were able enrol in a university program; 47% would like to pursue a professional designation in their field, and the remainder thought it was important to be able to either enrol in an additional college diploma program or post-diploma program.

3) Humber

At Humber, new students are asked to rank their “interest in pursuing a degree after college diploma”, ranging from “not a reason/goal” to a “major reason/goal”. In 1998, 24% thought obtaining a degree was a major reason, which increased to 30% for both fall 2002 and 2003.

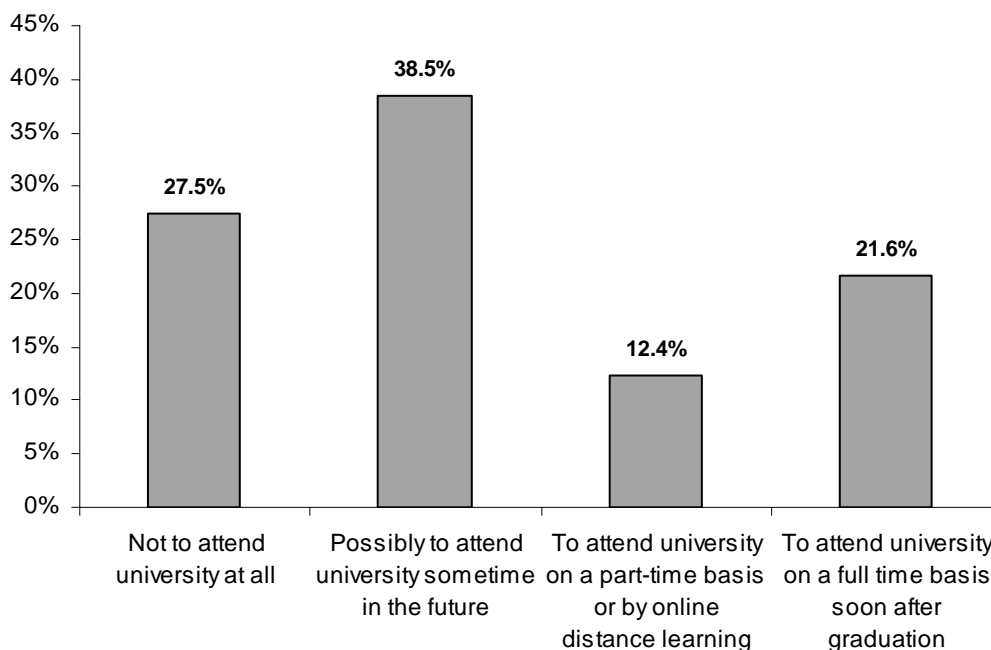
Only 33% in 2003 considered obtaining a degree “not a reason”, indicating that two-thirds of new students at Humber have some interest in obtaining a degree. (Results from the Annual Freshman Integration Tracking System (FITS) ‘Partners in Education’ Survey)

4) Confederation

Confederation College in Thunder Bay also administers the same survey as Humber (FITS). In 2000, 20% reported that obtaining a degree after a diploma was a major goal, which increased to 23% in 2003. 36% of new students have no interest in a degree after their diploma, a drop from 41% in 2000. When asked whether preparation for university was a major or minor reason/goal in enrolling in college, 16% in 2003 thought it was a major reason, up from 11% in 2000.

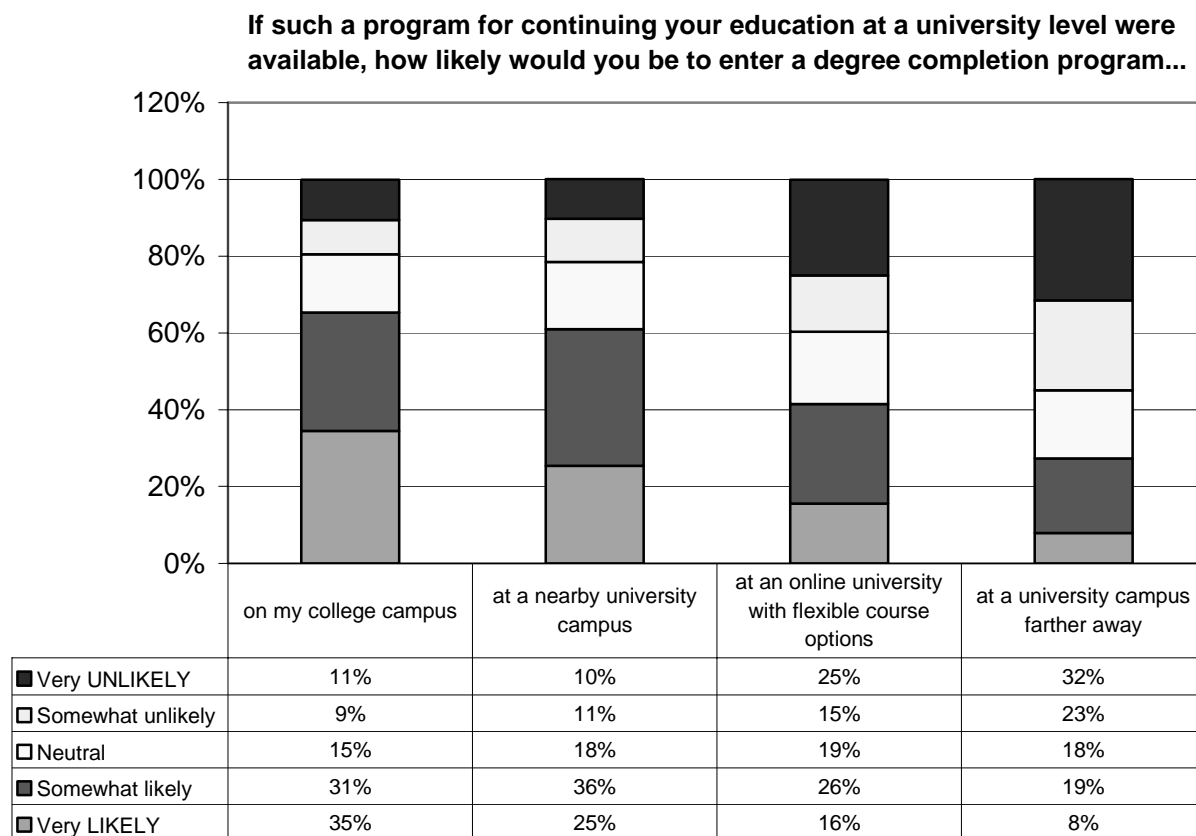
The College Student Alliance survey, conducted in fall 2004, also showed that Ontario college students’ aspirations for a university education were quite high, with the likelihood of continuing their education at a university level dependent on location of studies. Of the 6990 students surveyed, almost 72% of students would consider attending university at some point after graduation, with 22% intending to go to university full-time shortly after graduation (Figure 1). Students were most likely to continue their education at a university level if it was offered either on their college campus or at a nearby university. If it was offered at their college campus, 66% were somewhat or very likely to continue on with a university level education, compared to 61% if it was offered at a nearby university (Figure 2). Only 42% were likely to continue at an “online university with flexible course options”. However, this was still greater than the likelihood of continuing at a university farther away (27%). These results demonstrate that aspirations are partially contingent on local availability of university education. As well, the availability of online distance learning still does not fulfill the demand for a university education for all those interested.

Figure 1. Student Expectations after College Graduation



Source: College Student Alliance Survey, 2004, n = 6990 from 23 colleges participated

Figure 2. Likelihood of continuing education at a university level by location of studies



Source: College Student Alliance Survey, 2004

b. University Applicants

Although there is much less available data on the aspirations for attending college after university, there is data that suggests that university students plan for college after graduation even at the university application stage. In the Ontario University Applicant Survey, 2.1% of applicants in 2002 and 1.5% in 2003 had plans to attend college after completing university.

2. Sources of data on college-university mobility

As seen in the previous section, intentions for further education beyond students' current programs are quite high, particularly for college students desiring to obtain a degree. The data on how many students actually fulfill these aspirations is difficult to obtain for Ontario. Available data comes from several surveys and college and university applications.

The following are the four primary sources of system-wide data that are available:

National Graduate's Surveys. Statistics Canada surveys graduates of colleges and universities every five years, two years after graduation. The respondents are then surveyed again three

years later (five years after they graduated). Although a national survey, there has been some Ontario-only data reported (1990 and 2000).

MTCU's Graduate and Student Satisfaction Surveys. These yearly surveys, mandated by the Ministry of Training, Colleges and Universities, although primarily utilized for KPI data, program evaluation and labour market outcomes, also produce data on previous and further education. The Student Satisfaction Survey, administered in class to all college students beyond their first semester, asks about previous educational background (including university). The Graduate Satisfaction Survey is a telephone survey administered to college graduates six months after graduation, averaging a 75% response rate. The survey asks graduates whether they are currently enrolled in further education, the type of program and where they are enrolled. The response rate of 75% provides a high level of confidence that findings at the system level are representative of the population of all graduates.

Ontario University Graduate Survey. This survey is administered by the Ontario Universities Application Centre on behalf of the Ontario Ministry of Training, Colleges, and Universities. It is administered by mail two years after graduation to all graduates. The most recent survey of 2002 graduates had a 23.8% response rate. Graduates are asked about employment and notably whether they were participating in further education and in what type of institution six months and two years after graduation.

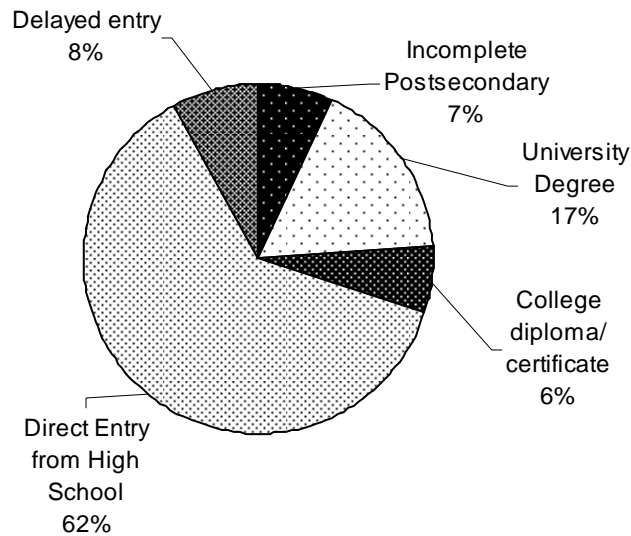
Application Centres. Ontario university application forms (OUAC), asks applicants whether they have attended a CAAT and for how long, providing valuable information on the numbers of university applicants with college background. However, there are several gaps in this data set which include whether the applicant had graduated from a college and in what area. In addition, there is some uncertainty about whether all those who have applied for advanced standing or credit go through the application centre and not all of the universities use OUAC for part-time applications. For example Ryerson, which is responsible for one-third of all college graduates attending university part time, does not use OUAC as yet for its part time applicants. The Ontario college application forms (OCAS) also asks for information regarding previous PSE, but as with the university application, it is not used for all part time applicants nor does it ask whether a credential was obtained.

3. Movement from College to University

National Graduate Survey. The data for Ontario from Statistics Canada's survey of university graduates (bachelor's degree), showed that 6% of the class of 2000 also had a college credential. Since there were 54,258 undergraduate degrees awarded in Ontario that year¹, this can be extrapolated to 3255 graduates with a previous college diploma or certificate. In an earlier National Graduate survey, 10% of Ontario college graduates from the class of 1990 were working towards a university degree within 5 years of graduation. Based on the number of college graduates in 1990, this corresponds to approximately 3000 college graduates attending university in the mid 1990s. (StatsCanada National Graduate Survey Class of 1990).

¹ Council of Ontario Universities, 2005 Facts and Figures

Figure 3. Background of Ontario University Graduates, Class of 2000.



Source: Special Tabulation of National Graduate Survey, Rae Review Discussion paper (October, 2004, p 20)

Graduate Satisfaction Survey. Based on the Graduate Satisfaction Survey, the number of Ontario college graduates attending university (within six months of graduating) since 2001 has almost doubled (Table 2). The proportion of college graduates going directly to university has increased by 55% from 4.7% to 7.3% of college graduates. In an effort to relate these numbers with changes in university enrolment, **Figure 4** provides a comparison of the number of college graduates attending an Ontario university and Ontario university first year enrolment over the past five years. It demonstrates a levelling of the number of graduates attending an Ontario university in 2003-04, during the double cohort, followed by compensation the following year, 2004-05. During the double cohort year, universities were encouraged to accommodate secondary school applicants which appears to have impacted admittance of college graduates. Based on the data for 2004-05, it can be calculated from university enrolment numbers and the estimated number of college graduates attending university that 4.8% of first year students in Ontario universities were recent CAAT graduates, an increase from 3.3% in the previous year.

Table 2. Estimated number of College graduates attending university six months after graduation

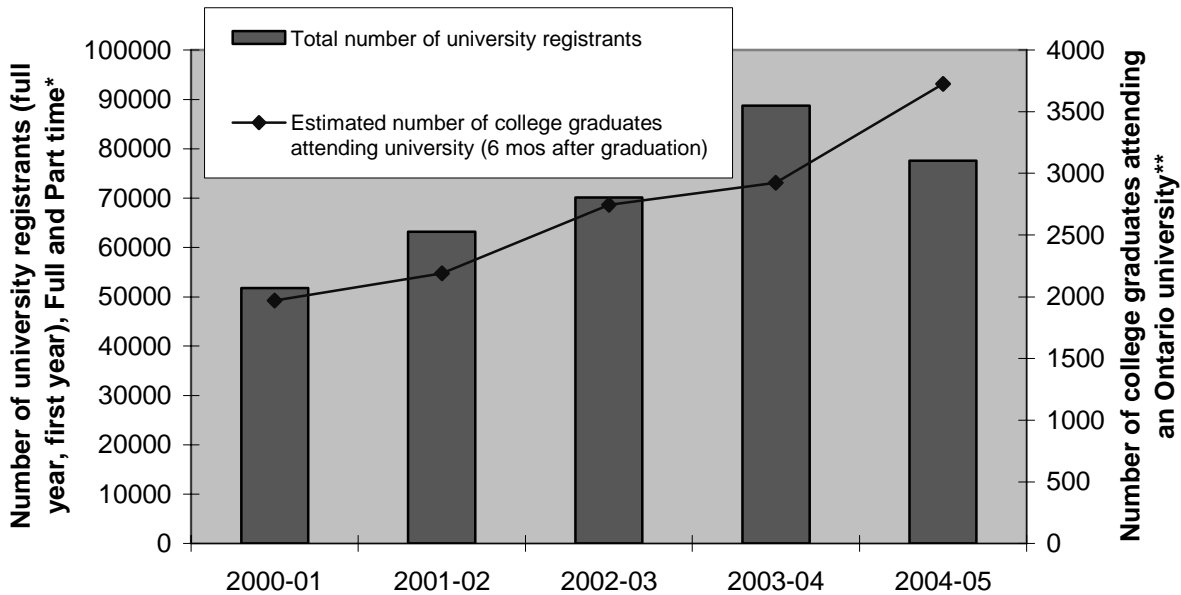
	2001 (1999-00 graduates)	2002 (2000-01 graduates)	2003 (2001-02 graduates)	2004 (2002-03 graduates)	2005 (2003-04 graduates)
Number of graduates attending university full time*	1714	1909	2410	2614	3501
Number of graduates attending university part time*	427	452	587	584	638
% of graduates attending any university	4.7%	5.0%	6.0%	6.1%	7.3%
% of graduates enrolled in an Ontario university degree program	3.9%	4.2%	4.4%	4.6%	5.7%
% Career (Non-GAS) graduates enrolled in Ont. university degree programs**	3.2%	3.5%	4.2%	4.5%	5.6%
% General Arts & Science graduates in Ont. university degree programs	20%	16%	14%	16%	21%
1 yr General Arts and Science	N/A	N/A	12%	13%	18%
2 yr General Arts and Science	N/A	N/A	16%	21%	26%

Source: MTCU Graduate Satisfaction Surveys

* Numbers extrapolated to the entire graduate population (survey response rate 75%)

**Excludes UOIT and OCAD (these institutions are not listed explicitly in the survey)

Figure 4. Comparisons of the number of first year university registrants and the estimated number of Ontario college graduates attending university six months after graduation.



* Source: OUAC;

**Source: Graduate Satisfaction Survey, MTCU; excludes UOIT and OCAD; Numbers extrapolated to the entire graduate population (survey response rate 75%)

Tables 3 and 4 provide a breakdown of university attendance of college graduates by receiving university for the years 1999 to 2004. Numbers were extrapolated to the entire graduate population to achieve a proxy of the actual numbers of graduates at each institution². York is the predominant receiving university, with 22% of the college graduates attending university full-time and 14% of those attending part-time in the past year. Of the students attending university part time, almost one-third are attending Ryerson. Twelve percent of the graduates attending university full time and 13% of those attending part-time are at “Other” universities which include UOIT, OCAD and universities outside the province. Universities increasing the most include Laurentian, Laurier, Carleton and York. The number of college graduates attending university part time has not increased as much as full-time attendance, increasing only 50% since 2000. Ryerson and “other universities” (UOIT, OCAD or universities outside of Ontario) are responsible for the bulk of the increase in part-time attendance.

² Calculated by dividing the number of surveyed graduates attending each institution by the college’s response rate

Table 3. Estimated numbers of Ontario college graduates attending university full-time by university, 1999-2004.*

	1999-00	2000-01	2001-02	2002-03	2003-04	% change
Other University**	172	170	251	276	414	141%
Brock	117	72	153	141	189	62%
Carleton	67	84	106	116	190	184%
Guelph	55	43	66	42	46	-17%
Lakehead	51	79	94	118	123	142%
Laurentian	68	86	77	112	219	219%
McMaster	59	51	64	54	129	118%
Ottawa	85	98	157	143	169	100%
Queens	26	12	30	15	21	-16%
Ryerson	256	299	336	369	351	37%
Toronto	56	72	75	62	125	121%
Trent	62	60	115	104	117	89%
Waterloo	24	35	46	34	35	44%
Western	136	162	176	200	215	58%
Wilfrid Laurier	35	35	38	67	101	188%
Windsor	106	112	130	141	196	85%
York	303	374	436	550	779	157%
Nipissing	36	67	60	71	83	129%
System Total	1714	1909	2410	2614	3501	104%

*Source: Graduate Satisfaction Survey, MTCU; excludes UOIT and OCAD; Numbers extrapolated to the entire graduate population (survey response rate 75%)

**Includes UOIT and OCAD

Table 4. Estimated numbers of Ontario college graduates attending university part-time by university, 1999-2004*.

	1999-00	2000-01	2001-02	2002-03	2003-04	% change
Other university**	24	37	60	82	83	244%
Brock	19	13	13	15	27	43%
Carleton	13	20	17	22	20	50%
Guelph	7	4	4	11	13	100%
Lakehead	4	3	12	11	11	166%
Laurentian	12	21	20	16	24	100%
McMaster	20	28	23	40	35	73%
Ottawa	24	19	34	20	24	0%
Queens	7	12	11	3	7	0%
Ryerson	134	128	191	210	204	52%
Toronto	27	29	36	32	27	0%
Trent	11	8	16	7	9	-13%
Waterloo	7	12	11	8	12	80%
Western	13	17	16	17	21	60%
Wilfrid Laurier	5	3	9	7	5	0%
Windsor	27	19	31	20	19	-30%
York	70	73	75	57	90	29%
Nipissing	3	4	7	7	7	150%
System Total	427	452	587	584	638	50%

*Source: Graduate Satisfaction Survey, MTCU; Numbers extrapolated to the entire graduate population

**Includes UOIT and OCAD

Appendix 1 provides further data on the sending institution (Ontario CAAT) matched with the receiving university for both full- and part-time graduates for the 2003-04 graduates³. As would be expected, universities in close proximity to a college receive much of their college graduates from that institution. For example, Laurentian and Cambrian in Sudbury, Fanshawe and Western in London, and the GTA colleges and York and Ryerson all demonstrate clear student mobility patterns.

As a way of accounting for the relative sizes of the universities, the share of the Ontario university enrolment is compared with the universities' share of college graduates (Appendix 2). Relative to their size, Laurentian, York, Ryerson, Nipissing, Lakehead, Brock and Windsor enrol a higher proportion of college graduates. This may be a function of admission and transfer policies, non-traditional student recruitment practices, location, or the desirability of certain universities or programs.

Ontario University Application Centre. A study commissioned by the College University Consortium Council (CUCC) in 1996 showed that 7.8% of applicants to Ontario universities (through OUAC) had College of Arts and Applied Technology background (7374 applicants) and 5.6% of all registrants had CAAT background. This was considered an underestimate since

³ Previous years are also available but are not included here.

applicants with any university background (and some college) were coded as “university.” In addition, both part-time applicants and some applicants in particular degree completion programs did not apply through OUAC (Cummins, 1998).

To obtain updated data, ACAATO and the CUCC requested OUAC to extract data from 1996 to the present that includes information on the number of applicants, confirmations and registrants to Ontario universities who report a college background, as well as the number of years they attended college (Table 5, Figure 5). Throughout the 90’s there was little change in the numbers applying to or registering in university followed by a gradual increase after 2000. The past year showed the largest change, 5.5% (4268) of all first-year university registrants (including full- and part-time, full year) reported on their application that they had previously attended college (credential unknown) an increase from 3.1% the previous year. It must also be noted that the 2003-04 was the year of the double cohort and spaces to non-secondary applicants were reduced. However, as a proportion of all first year university registrants, this value has changed little since 1996. Therefore, attendance of those with previous college education is merely keeping pace with increases in enrolment in the universities. Figure 5 also includes data on the number of confirmations, which is informative of those who have been accepted. What is interesting is the high proportion of previous college students who do not register after confirming (55%), particularly true for those with longer college attendance. In the current year, of those with two or more years of college attendance only 43% of confirmations registered, which compares with 75% of those with less than one year of college education. Possible reasons may include the current job market (university as plan B), less transfer credit offered than expected, or other life events. To study this group of those who confirm but to not register would provide important information on their decision-making processes.

Comparisons of OUAC data and the Graduate Satisfaction Survey data, although on the surface should produce similar numbers, are inhibited by some key factors which are similar to those discussed in the 1996 report. Although some universities use OUAC for part time applicants, it is still the vast minority. In addition, applicants obtaining transfer credit still may not always go through OUAC; as well, whether a credential was obtained and in what program is not reported. In addition, traditionally all applicants may not have reported their college education; however, in the 2005 application it has been made mandatory.

The disconnected information that is currently available points out the importance of collecting more comprehensive data in the future. Options include further mining of existing data sources to find out the number of transfer students by program of study, collecting data on whether and how much transfer credit was obtained, improving the collection of data on the mobility of part time students, and examining the success and personal experiences of transfer students who have previously attended or graduated from college.

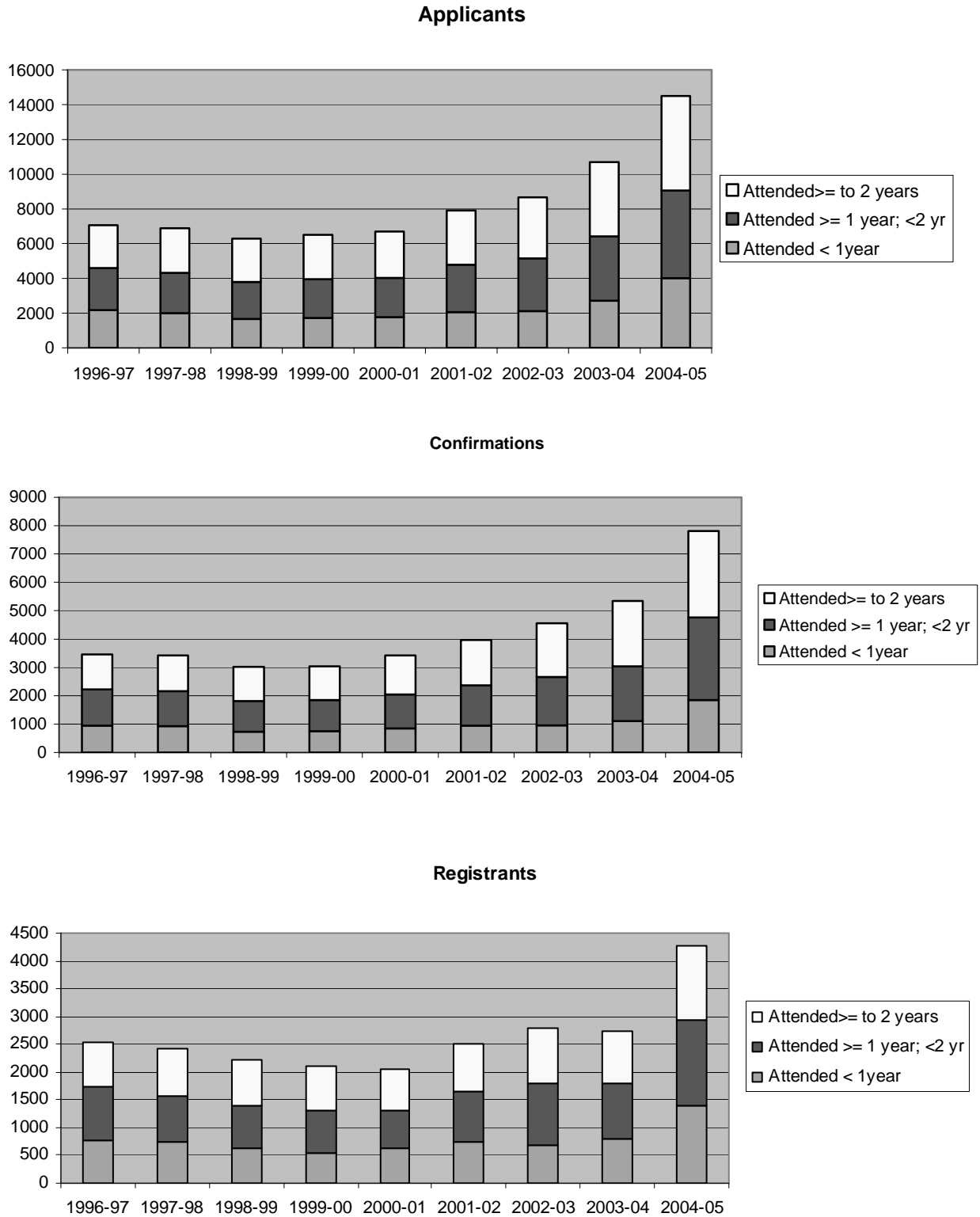
Table 5. Number of Ontario University Registrants and Applicants with previous Ontario CAAT Attendance

	Attended less than one year		Attended 1 to 2 years		Attended 2 years or more		Total university applicant/ registrants		Percent of Total	
	Applicants	Registrants	Applicants	Registrants	Applicants	Registrants	total # applicants	total # registrants	% of applicants	% of registrants
1996-97	2175	772	2412	956	2472	814	93283	51473	7.6%	4.9%
1997-98	1996	748	2327	825	2552	835	90118	50378	7.6%	4.8%
1998-99	1668	615	2125	793	2489	821	88681	51332	7.1%	4.3%
1999-00	1730	553	2236	764	2542	792	91534	52612	7.1%	4.0%
2000-01	1773	615	2262	687	2657	744	93475	51800	7.2%	3.9%
2001-02	2058	727	2725	913	3127	873	107040	63149	7.4%	4.0%
2002-03	2123	697	3023	1107	3522	978	116673	70127	7.4%	4.0%
2003-04	2722	795	3687	1006	4284	945	150760	88733	7.1%	3.1%
2004-05	4024	1389	5037	1558	5429	1316	133049	77591	10.9%	5.5%

Source: Special Tabulation by OUAC

1. The numbers do not include applicants who did not report the college FROM and/or TO attendance dates.
2. For the applicants where the year is reported but the month is '00', a default value '06' (June) was used.
3. For the applicants with a TO date equal to 'current', a default value of the cycle year with month 06 (June) was used.
4. Only some of the universities' part time applications are handled through OUAC
5. It is not known whether a credential was attained at college.
6. There is some question as to whether OUAC handles all advanced standing applicants, or whether some go through the university directly

Figure 5. Number of Ontario university applicants, confirmations, and registrants with previous college attendance (CAAT).

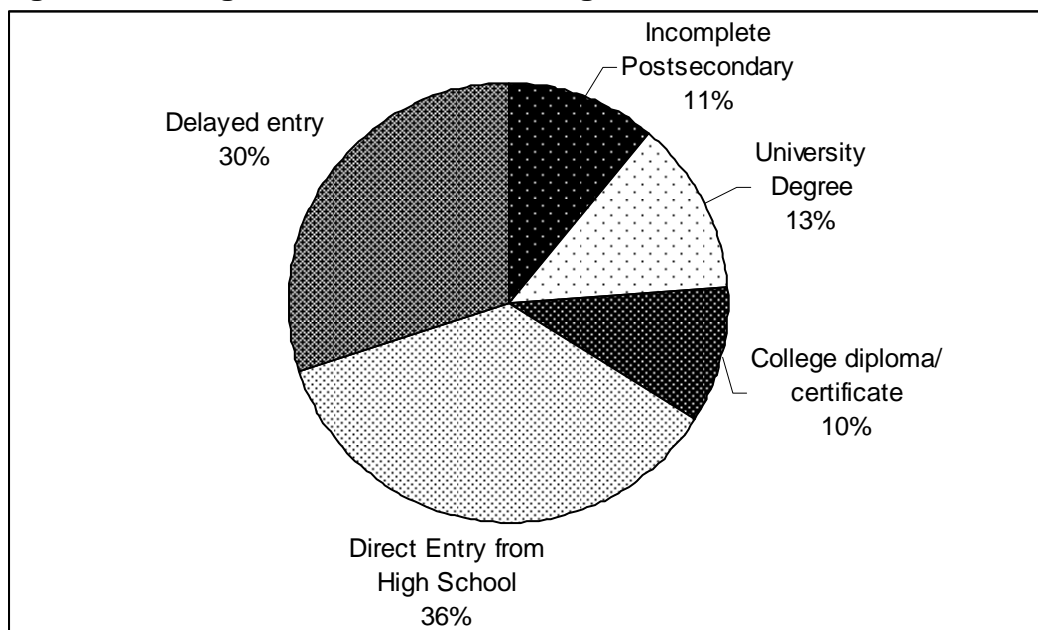


Source: Special tabulation by OUAC.

4. Movement from University to College

College Graduates with previous university degree. In Statistics Canada's National Graduate Survey, 13% of Ontario's college graduates from the class of 2000 also had a university bachelor's degree (Figure 1), which translates to almost 5900 graduates when extrapolated to the total number of college graduates in 2000 (over 45,000). Nationally, 10% of college graduates had previously completed university.

Figure 6. Background of Ontario College Graduates, Class of 2000.



Source: Special Tabulation of National Graduate Survey, Rae Review Discussion paper (October, 2004, p 20)

College Applicants and Registrants. Data provided by OCAS shows that 6.7% of college applicants and 5.6% of college registrants provided documentation (transcript) of previous university education.

Table 6. College applicants and registrants with documented university background

	2000	2001	2002	2003	2004
Applicants:					
With university transcripts	7980 (6.2%)	7746 (5.9%)	7762 (5.5%)	8985 (6.1%)	9458 (6.7%)
Registrants:					
With university transcripts	4249 (5.8%)	4073 (5.4%)	4102 (5.0%)	4,681 (5.7%)	4879 (5.6%)

Source: OCAS, Fall data

Enrolled College Students. In Table 7, data from the college Student Satisfaction surveys shows that 7% of students enrolled in Ontario colleges report having a university degree and 7% report “some university”. This proportion has held steady for the past four years. An estimate of the number of first year students with a university degree was calculated by assuming that the same proportion of first year students have a degree as for the whole student body. This produces an estimate of over 5800 first year college students with a university degree from either inside or outside of Ontario. This number corresponds with the estimated number of college graduates in the 2000 National Graduate Survey with a previous university degree.

Table 7. Previous university education of Ontario college students

	2000-01	2001-02	2002-03	2003-04	2004-05
Some university	8%	8%	7%	7%	7%
University degree	8%	7%	7%	7%	7%
Number of first year registrants*	73,241	75,866	80,542	81,945	83,542
Estimate of first year students with university degree**	5859	5311	5638	5736	5848

Source: Ontario Ministry of Training and Colleges, Student Satisfaction Surveys, 2001-2005

NB. Students were able to check more than one response; therefore students may have checked both “some university” and “university degree”

*Fall registrant data from OCAS data cubes, Marketshare-All

** An extrapolated value, calculated from the percent value of those with a degree and the number of registrants in first year; percent values for those with a university degree include all students beyond first semester; therefore it may not reflect the percent of first year students with a degree

University graduates enrolled in college. As part of the Ontario University Graduate survey, graduates are asked whether they were attending a “community college” six months and two years after graduation. For the 2001-02 graduating class, 4.1% of surveyed graduates were enrolled in a “community college” six months after graduation, and a further 3.4% of graduates were enrolled in a “community college” two years after graduation (OUGS, 2002). Seven percent of each of social science and humanities graduates was attending college at six months and just fewer than 5% were attending college two years after graduation. Graduates from the social science or humanities areas made up the majority of those going on to college. Although these areas made up only 36% of surveyed graduates they are responsible for 60% of the graduates who attended college at six months and 50% at two years. Since the majority of university graduates who started college within six months would have completed their college program by two years out, those attending college at six months and those attending two years after graduation would be two different cohorts. Based on this assumption, over 7% of Ontario university graduates (class of 2002) attended college within two years of graduation, producing an estimate of over 4000 Ontario university graduates.

Table 8. University graduates enrolled in college six months and two years after graduation

Graduation Year	1997	1998	1999	2000	2001	2002
Six months after graduation	3.7%	5.5%	5.0%	4.8%	3.9%	4.1%
Two years after graduation	5.8%	3.6%	3.5%	3.1%	2.7%	3.4%
Number of Graduates*	55169	53441	53664	52977	54258	54981
Estimate of number of graduates attending college 6 months after graduation	2041	2939	2683	2543	2116	2254
Estimate of number of graduates attending college 2 years after graduation	3200	1924	1878	1642	1465	1869

Ontario University Graduate Survey, OUAC, March 2004, Published in Ontario College and University Fact Sheet, COU, May 2004 ; Ontario University Graduate Survey 2002

Observations on university to college movement. Several data sources demonstrate that the percentage of college students with previous university participation or attainment has held fairly steady over the past five years. In terms of the actual volume of students with previous university, the OCAS numbers and the Ontario University Graduate Survey numbers are lower than both the Student Satisfaction Survey and the National Graduate Survey (NGS). One partial explanation is that OCAS requires the applicant to provide transcripts as proof of their university education. Therefore, the numbers reporting a university education may be an underestimate, and the majority who do report would perhaps be degree holders. In terms of the OUGS data, the major difference between the OUGS data and both the Student Satisfaction Survey and the NGS is that the OUGS contains data specifically on graduates with an *Ontario* degree rather than any degree. Additionally, the OUGS asks university graduates whether they attended college at six months or two years after graduation, unlike the other two surveys in which the university degree could have been attained at any time previous to college, opening the door to a potentially higher pool of students.

5. Transfer in other jurisdictions

Ontario's approach to facilitating student mobility and credit transfer can be assessed by reviewing transfer rates in Ontario, compared to other provinces and several American states. While differences in the academic programs in different jurisdictions means that direct comparisons of transfer rates is problematic, a review of the transfer rates for similar types of programs is instructive. A useful analysis is to compare the percent of graduates in two or three year applied or technical degrees/diplomas in other jurisdictions who subsequently enrol in four

year college or universities with the percent of Ontario's non-general arts and science programs who go on to university.

British Columbia

In the 2002 BC College and Institute Student Outcomes Survey (2003), graduates of applied and arts and sciences programs were asked about both their previous and further education since graduation. Applied programs are designed to lead to employment in a relatively specific field (e.g., engineering, business, nursing, education, social work, and criminology), whereas arts and sciences programs (liberal arts, humanities, and social or physical sciences) may lead to an associate or baccalaureate degree). Key results from the survey include:

- 11% of graduates in the applied college programs had previously completed a university degree as compared to 2% of arts and science students
- 8% of those who graduated from applied programs took further courses at a BC university
- 41% of the respondents who were graduates of the arts and science programs took further studies at a BC university, 12% at a BC university college, and 13% at BC college/institute

Alberta

Since Alberta has a college system with many university transfer stream programs, data from the two technical institutes (which are more career oriented) is described here in order to be more comparable to the Ontario college system.

- By using data from the numbers of college graduates and the number of transfers to universities, a rough estimate of the percentage of graduates transferring from Alberta's technical institutes, Southern Alberta Institute of Technology (SAIT) and Northern Alberta Institute of Technology (NAIT) was calculated. In 2003-2004, that calculated value was 6.9% for SAIT and 5.6% for NAIT.
- In the "Five Year Out Survey NAIT Class of 1997", 12 % of graduates (diploma, certificate, or applied degree) had enrolled in university within 5 years of graduation.

Quebec

The postsecondary system in Quebec is unique in Canada. Secondary school graduates cannot enter university directly from high school, and must obtain a Diploma of College Studies (DCS) from a CEGEP or a private subsidized college. The DCS can be either a two year "pre-university" program which leads directly to university or a three year "technical" program intended for direct entry into the labour force but can, under certain conditions, also lead to university. Starting in 2000, Quebec instituted a general student number: a permanent MEQ code that all universities must submit for funding for all student enrolment reports. Therefore, students transferring from college to university within the province can be systematically tracked. As expected, the percentage of pre-university college program graduates enrolled in a Quebec university is quite high; 77.7% of the 2001-2002 graduates under 25 yr of age were enrolled in university the following year. However, the percentage of graduates of the technical programs is also quite high, 20.8% of graduates of college technical programs were enrolled in a Quebec university the following year (MEQ, 2004). Examples of programs with the highest rates of transfer include business, engineering technology, fashion marketing and avionics, which were in the range of 35-50%.

Selected American States

A comparison of transfer rates from applied and associate degrees in various states was performed in the paper “ ‘Terminal’ Students do Transfer” (Townsend, 2002). In Table 6, this data is compared with Canadian results. The range for applied two year programs (i.e. traditionally leading directly to employment) was between 5 and 11 percent, with the exception of Quebec. The Ontario data (based on the Graduate Satisfaction Survey, see Table 2) is at the lower end of the range, particularly for the general arts and science two-year programs.

Table 9. Transfer rate in selected provinces and American states*

	Associate 2 year Graduates (arts and science, pre-university)	Applied 2 year Graduates
Missouri (95-96)	41%	9%
Oregon (95-96)	55%	11%
Texas (98-99)	36%	6%
Washington (1996-97)	52%	5%
British Columbia (2003)	41%**	8%
Alberta (SAIT & NAIT) (2002/03)	--	6.2% (Average)
Quebec (2001-2002)	77%***	20.8%
Ontario** (2003-04)	26%**	5.6%
(2002-03)	21%	4.5%

*American data is based on the percent of graduates from two-year public colleges enrolling in four-year institutions the following academic year within the same state (enrolled in at least one course); The Canadian data is for college graduates enrolled in a university within the same province

**Arts and Science two-year programs

***Quebec’s CEGEP pre-university program is required to enter a Quebec university

6. Conclusions

College students’ goals increasingly include both a diploma and a degree. Surveys of first-year college students show a steady increase in the number of students intending to secure a degree following graduation. Although about 25% of college students would like to attend university shortly after graduation, based on the Graduate Satisfaction Survey currently only 7% do so within six months, and only 5.7% are enrolled in an Ontario university degree program. An analysis of where these graduates are attending university shows that college graduates are mainly attending universities in close proximity to their previous college.

Comparisons to other jurisdictions demonstrate higher transfer rates for graduates from college programs similar to comparable programs at Ontario’s colleges. The number of students going to university after college is similar or higher than the numbers going to college after university, demonstrating that clear pathways in both directions are crucial. Future research should include analyzing the length of time it takes to complete both a diploma and a degree, compared with other jurisdictions that have different transfer systems. It may be that although Ontario college students or graduates are eventually attaining a degree, there may be significant duplication of coursework at a cost to the student, the public institutions involved and the labour market that requires their skills.

Appendix 1. Number of surveyed 2003-04 college graduates attending university full time six months after graduation by institution

	Brock	Carleton	Guelph	Lakehead	Laurentian	McMaster	Ottawa	Queens	Ryerson	Toronto	Trent	Waterloo	Western	Wilfrid Laurier	Windsor	York	Nipissing	Other* University	Total	Number of responses
Algonquin	1	73	1	10	1	2	52	0	0	0	1	1	2	1	1	2	1	25	174	3053
Boréal	0	0	0	1	17	0	0	0	0	0	0	0	0	0	0	1	0	2	21	427
Cambrian	2	3	0	2	70	0	1	0	1	0	1	1	0	0	0	0	3	8	92	1297
Canadore	1	2	0	1	8	1	1	0	0	0	3	0	1	0	0	0	37	12	67	758
Centennial	3	3	1	1	0	3	0	0	31	19	1	1	0	0	3	83	0	9	158	2706
La Cité	0	1	0	3	0	0	50	0	0	0	0	0	0	0	0	0	0	28	82	863
Conestoga	1	1	2	3	0	1	0	0	4	0	0	7	1	15	14	2	3	6	60	1423
Confederation	0	0	0	29	1	2	0	0	0	0	0	0	1	0	0	0	1	4	38	859
Durham	4	2	1	0	2	2	3	0	9	3	10	1	1	1	1	10	0	20	70	1563
Fanshawe	6	3	1	1	1	2	1	0	3	5	2	1	112	5	6	9	0	21	179	2985
George Brown	2	3	3	1	1	3	1	0	40	9	3	1	1	0	3	56	0	11	138	3079
Georgian	2	3	1	1	27	2	0	0	2	2	0	1	3	2	1	28	8	16	99	1562
Humber	7	6	8	0	1	8	2	4	31	11	5	1	5	1	2	132	0	19	243	3302
Lambton	9	2	0	1	1	1	0	0	0	1	0	0	14	1	19	0	0	2	51	767
Loyalist	2	7	0	1	3	0	2	3	0	0	13	0	1	1	0	1	0	7	41	910
Mohawk	35	1	3	2	9	40	0	0	7	0	0	2	3	37	0	7	0	6	152	2648
Niagara	48	0	4	4	2	6	1	0	3	0	0	1	2	2	4	3	1	10	91	1568
Northern	1	0	1	2	3	0	0	0	0	0	0	0	0	0	0	0	2	1	10	591
St. Clair	0	0	0	6	2	1	1	0	2	0	0	0	1	0	82	1	0	15	111	1874
St. Lawrence	1	13	0	2	0	0	5	5	2	0	6	1	0	0	2	1	0	8	46	1294
Sault	0	0	0	4	8	0	0	0	0	0	0	0	0	0	1	1	2	29	45	480
Seneca	3	1	5	11	3	3	2	0	75	21	5	0	5	3	3	163	2	22	327	3578
Sheridan	10	12	2	0	0	19	3	4	50	22	4	3	5	5	4	78	0	17	238	3160
Fleming	3	6	1	6	3	0	1	0	2	0	33	4	2	1	0	3	2	11	78	1585
Total	141	142	34	92	163	96	126	16	262	93	87	26	160	75	146	581	62	309	2611	42332
% of total	5.4%	5.4%	1.3%	3.5%	6.2%	3.7%	4.8%	0.6%	10%	3.6%	3.3%	1.0%	6.1%	2.9%	5.6%	22.3%	2.4%	11.8%		

Source: MTCU Graduate Satisfaction Survey, Special tabulation for ACAATO

Number of surveyed 2003-04 college graduates attending university part time six months after graduation by institution

	Brock	Carleton	Guelph	Lakehead	Laurentian	McMaster	Ottawa	Queens	Ryerson	Toronto	Trent	Waterloo	Western	Wilfrid Laurier	Windsor	York	Nipissing	Other University*	Total	Number of Responses
Algonquin	0	7	0	0	0	0	7	0	0	1	0	0	0	0	0	0	0	8	23	3053
Boréal	0	0	0	0	2	0	0	0	0	0	0	0	0	0	0	0	0	1	3	427
Cambrian	0	0	0	0	8	0	0	0	1	0	0	0	0	0	0	0	0	0	9	1297
Canadore	0	0	0	0	0	0	1	0	0	0	0	0	0	0	0	0	3	1	5	758
Centennial	0	0	1	0	0	1	0	0	17	4	0	0	0	0	0	17	0	2	42	2706
La Cité	0	0	0	0	0	0	6	0	0	0	0	0	0	0	0	0	0	7	13	863
Conestoga	0	0	5	1	0	1	0	0	6	0	0	2	0	1	2	0	0	1	19	1423
Confederation	0	0	0	6	0	0	0	0	1	0	0	0	0	0	0	0	0	4	11	859
Durham	0	0	0	0	0	0	0	0	2	0	2	0	0	1	0	0	1	1	7	1563
Fanshawe	0	1	0	0	2	1	0	0	1	0	0	2	13	0	1	0	0	4	25	2985
George Brown	0	0	0	0	0	1	0	0	36	2	0	1	0	0	0	4	0	2	46	3079
Georgian	0	0	0	0	1	0	0	0	2	0	0	0	0	1	1	3	0	1	9	1562
Humber	1	2	3	0	0	0	0	0	13	2	0	1	0	0	0	11	0	0	33	3302
Lambton	0	0	0	1	0	0	0	0	0	0	0	0	1	0	0	0	0	1	3	767
Loyalist	0	0	0	0	0	0	0	0	0	0	1	1	0	0	0	0	0	2	4	910
Mohawk	4	0	0	0	0	13	0	0	3	1	0	1	0	1	0	0	0	2	25	2648
Niagara	14	0	0	0	1	0	1	0	3	0	0	0	0	0	0	0	0	2	21	1568
Northern	0	0	0	0	3	0	0	0	0	0	0	0	0	0	0	0	1	2	6	591
St. Clair	0	0	0	0	0	0	0	0	1	0	0	0	1	0	9	0	0	4	15	1874
St. Lawrence	0	0	0	0	0	0	3	5	5	1	1	0	0	0	0	0	0	4	19	1294
Sault	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	2	2	480
Seneca	0	0	0	0	0	0	0	0	36	2	0	0	0	0	0	23	0	4	65	3578
Sheridan	1	0	0	0	1	8	0	0	25	7	0	1	1	0	0	9	0	3	56	3160
Fleming	0	5	1	0	0	1	0	0	0	0	3	0	0	0	1	0	0	4	15	1585
Total	20	15	10	8	18	26	18	5	152	20	7	9	16	4	14	67	5	62	476	42332
% of total	1.1%	0.8%	0.6%	0.4%	1.0%	1.4%	1.0%	0.3%	8.4%	1.1%	0.4%	0.5%	0.9%	0.2%	0.8%	3.7%	0.3%	3.4%		

Source: MTCU Graduate Satisfaction Survey, Special tabulation for ACAATO

Appendix 2. A comparison of system wide enrolment share of Ontario universities and university attendance of college graduates, six months after graduation.

	Full-time Status		Part-time Status	
	% of Ontario university undergraduate enrolment (Fall, 2003)*	Percent of college graduates (2004-05)**	% of Ontario university undergraduate enrolment (Fall, 2003)*	Percent of college graduates (2004-05)**
Brock	4.2%	6.1%	4.6%	4.8%
Carleton	5.7%	6.2%	5.7%	3.6%
Guelph	5.6%	1.5%	2.3%	2.4%
Lakehead	2.0%	4.0%	1.9%	1.9%
Laurentian	1.9%	7.1%	4.5%	4.3%
McMaster	6.0%	4.2%	4.1%	6.3%
Ottawa	7.6%	5.5%	8.2%	4.3%
Queens	5.1%	0.7%	4.6%	1.2%
Ryerson	5.0%	11.4%	19.1%	36.7%
Toronto	17.1%	4.0%	12.9%	4.8%
Trent	2.1%	3.8%	1.9%	1.7%
Waterloo	7.3%	1.1%	3.2%	2.2%
Western	8.9%	6.9%	6.2%	3.9%
Wilfrid Laurier	3.5%	3.3%	2.5%	1.0%
Windsor	4.3%	6.3%	4.8%	3.4%
York	12.7%	25.2%	10.3%	16.2%
Nipissing	1.1%	2.7%	3.4%	1.2%

Sources: Facts and Figures 2005, Council of Ontario Universities (data from MTCU);

*2004 data not yet available, undergraduate enrolment includes all years.

**Graduate Satisfaction Survey, 2003-04 graduates

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