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Manitoba postsecondary graduates from the Class of 2000 : how did they fare?

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Culture, Tourism and the Centre for Education Statistics Research papers

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Chantal Vaillancourt

Statistics Canada

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Highlights

- Manitoba graduates were just as likely to be employed as graduates in the rest of the country, but they tended to have lower incomes, a reflection of the Manitoba labour market in general.
- Manitoba graduates were less likely to have incurred debt during their studies than the average Canadian graduate, and the average debt for college graduates in the province was lower than their national counterparts' average debt.

Summary

Graduates from the province of Manitoba shared many characteristics with graduates from all Canadian institutions. However, there were a few notable differences. Graduates from Manitoba were more likely to be of Aboriginal origin, but were less diverse than graduates from the Class of 2000 in terms of visible minorities, citizenship and mother tongue. Graduates from Manitoba were also more likely than graduates from all Canadian institutions to have completed a bachelor degree. They generally took longer to complete their program and college graduates in Manitoba were more likely to delay entry into postsecondary education.

While most Manitoba graduates from the Class of 2000 stayed in the province after graduation, Manitoba lost more students and graduates than it gained, because they were attracted to educational institutions or labour markets outside the province. Master and doctoral graduates were the most mobile. In addition, there were high levels of mobility among bachelor and master graduates who pursued further studies after graduation.

In most cases, Manitoban graduates were just as likely to find employment as graduates in the rest of the country, but they tended to have lower incomes, a reflection of the Manitoba labour market in general. In contrast with Canadian graduates at the college, bachelor and master level, only female college graduates working in Manitoba in 2002 had lower earnings than their male counterparts.

Manitoba graduates were less likely to have incurred debt during their studies than the average Canadian graduate. The debt incurred by college graduates in Manitoba was lower than that of the Canadian average, but the ratio of their debt repayment to their income was higher. However, they were not more likely than Canadian college graduates overall to report difficulties in repaying their loans.

Debts to other loans were paid off more quickly than debts to student loans: by 2002, about twice as many graduates completely paid off their debts to other loans. This was true for both graduates from Manitoba and all graduates from Canadian institutions.

Aboriginal graduates in Manitoba were generally more likely than non-Aboriginal graduates in the province to have obtained a college diploma, and this proportion roughly reflected the proportion of Aboriginal people in the general population. In contrast, Aboriginal people were under-represented at the bachelor level, and hardly represented at higher levels of study. As well, the fields of study chosen by both Aboriginal college and bachelor graduates were not the same as those chosen by their non-Aboriginal counterparts in the province and this choice may have had an impact on labour market outcomes of college Aboriginal graduates. They were less likely to be employed than their non-Aboriginal counterparts in the province and, compared with their Aboriginal counterparts outside the province, their earnings were lower.

Introduction

The system of postsecondary education in Manitoba plays an important role in the social and economic health of the province. Colleges and universities strive to meet the lifelong learning needs of Manitobans and to ensure the availability of individuals with the right skills to support a growing and changing economy.

This report uses data from the National Graduates Survey (Class of 2000) and asks who are the graduates of Manitoba's universities and colleges, what do they do after graduation, and how well do they integrate into the labour market? In particular, the report provides a portrait of the graduates from Manitoba's postsecondary institutions, analyses the mobility of students and graduates into and out of the province, looks at graduates' outcomes in the work force, and examines the student debt load of graduates. In addition, the report includes a special analysis of Aboriginal graduates.

The National Graduates Survey

The National Graduates Survey (NGS) is designed to measure the short to medium-term labour market outcomes of graduates from Canadian publicly-funded university, college and trade/vocational programs. NGS interviews graduates two and five years after graduation. To date, five graduating classes have been surveyed: 1982, 1986, 1990, 1995 and 2000. Data collected from the NGS can examine graduates' initial transitions from school to the labour market in order to see how complex these transitions are, whether graduates moved in relation to their education or their work, how successful they are in the workforce after graduation and the cost of their postsecondary education. The survey therefore provides relevant data not only on the outcomes related to higher education, but also on the experience of completing postsecondary education in Canada.

This report looks at graduates who, in 2000, completed the requirements or obtained their degree, diploma or certificate from a college or university program such as bachelor (including first professional degrees such as Law and Medicine), master and doctorate. Unless otherwise noted, the results for graduates from Manitoba institutions (columns marked "Manitoba – 2000 province of study") are compared to those for all graduates from Canadian institutions in 2000 (columns marked "All graduates"). For reference purposes, tables may also contain data on graduates from any Canadian institution who lived in the province of Manitoba in 2002 (columns marked "Manitoba – 2002 province of residence"). These graduates may or may not have studied in the province.

Section 1: Who were the graduates?

In 2000, an estimated 7,700 students graduated from postsecondary college and university programs in the province of Manitoba. They represented 3% of the nearly 270,000 graduates in Canada from that same year. This proportion is slightly lower than the proportion of the population in Manitoba in comparison with the entire Canadian population (3.7%).

College and university graduates from Manitoba shared many characteristics with the Class of 2000 graduates nationally. However, there were a few notable differences. While graduates from Manitoba were more likely than graduates from Canadian institutions to have Aboriginal origins, they had less diversity in terms of visible minorities, citizenship and mother tongue.

In Manitoba and in Canada overall, women made up the majority of graduates at all levels of study except the doctorate. Women made up about 60% of all college, bachelor and master graduates and 40% of doctoral graduates.

Graduates from Manitoba finished their program at about the same age as other graduates from Canadian institutions. Median and average ages at graduation were very similar. As well, there was a significant number of older graduates at the college and at the bachelor level, accounting for approximately 40% of all graduates at each of these levels for both graduates from Manitoba and graduates from all Canadian institutions (see Table 1).

Table 1

Age characteristics of 2000 postsecondary graduates by level of study

	Manitoba – 2000 province of study	All graduates
College		
Average age at graduation (years)	27	27
Median age at graduation (years)	24	23
Under age 25 at graduation (%)	57	59
Bachelor		
Average age at graduation (years)	26	26
Median age at graduation (years)	23	23
Under age 25 at graduation (%)	66	63
Master		
Average age at graduation (years)	33	32
Median age at graduation (years)	31	29
Under age 25 at graduation (%)	11	17
Doctorate		
Average age at graduation (years)	36	35
Median age at graduation (years)	34	33
Under age 25 at graduation (%)	X	4

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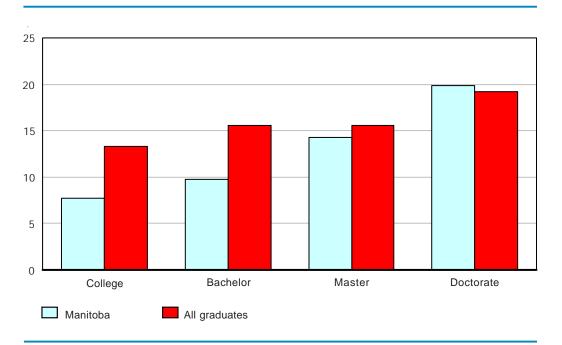
Note: Caution is advised when comparing estimates. High sampling variability errors for some estimates means that many apparent differences are not statistically significant. When differences are significant, they are generally noted in the text.

Graduates from Manitoba were more likely to have Aboriginal origins, but fewer were members of visible minorities or foreign-born.

The Aboriginal population makes up a greater proportion of the population in Manitoba than in Canada overall. One in seven (14%) Manitobans identified themselves as Aboriginal in the 2001 Census, compared to only 3% nationally. This difference was also reflected in the Class of 2000. At the college level, Aboriginal graduates accounted for 17% of all college graduates from Manitoba, compared with 4% of college graduates nationally. At the bachelor level, the proportion of Aboriginal graduates in Manitoba was 7%, compared with only 2% of bachelor graduates nationally. There were few Aboriginal graduates at the higher levels of university study. (A more detailed discussion of Aboriginal graduates from the Class of 2000 is presented later in this report.)

Compared with college and bachelor graduates in Manitoba, there were proportionally more members of visible minorities at the master and doctoral levels in the province. They were about equally as likely to be members of visible minorities as graduates in Canada overall. In contrast, college and bachelor graduates from Manitoba were less likely to be members of visible minorities than the national average (see Figure 1).

Figure 1
Proportion of graduates who were members of visible minorities from the Class of 2000, by level of study



Graduates from Manitoba were less diverse than graduates from Canadian institutions overall. At all levels except the doctorate, graduates from Manitoba were more likely to be Canadian citizens by birth, while graduates at the national level had higher proportions of Canadian citizens by naturalization (see Table A-1)¹.

Manitoba graduates were more likely to be Anglophone than graduates outside Quebec.

In some ways, Manitoban graduates were typical of graduates from Canadian institutions outside of Quebec when it came to their mother tongue. At all levels of study, English was the most common mother tongue for both groups. At higher levels of study, graduates in both groups also closely resembled each other in their linguistic profile. However, at the lower levels of study, there were some differences. Manitoba graduates were more likely than graduates outside Quebec to have English as a mother tongue at the college and bachelor levels.

Having a mother tongue other than English or French was another point of difference between the graduates from Manitoba and graduates from Canadian institutions outside of Quebec. College and bachelor graduates outside of Quebec were more likely than Manitobans to have a mother tongue other than English and French, but master and doctoral graduates outside of Quebec were as likely as Manitobans to have a mother tongue other than English or French (see Table 2).

Analysis of languages in Canada

Mother tongue is the first language spoken and still understood at the time of the interview. French is considered a minority language in all provinces except Quebec, where the majority of the residents indicate French as a mother tongue. Because Quebec has a large number of graduates, Canadian results in the proportion of French as a mother tongue are influenced by that fact. It therefore becomes difficult to directly compare Manitoba's results to that of Canada overall. To circumvent this problem, analysis is done on graduates from Canadian institutions excluding those who graduated from a Quebec program in 2000. However, for reference purposes, results from graduates from all Canadian institutions are presented along with those of the "Graduates excluding Quebec."

Table 2
Language characteristics of 2000 postsecondary graduates by level of study

	Manitoba – 2000 province of study	Manitoba – 2002 province of residence	All graduates	Graduates excluding Quebec
College				
Mother tongue				
English (%)	86	86	66	77
French (%)	3	3	19	6
Other than English and French (%)	11	12	15	17
Bachelor				
Mother tongue				
English (%)	84	84	61	78
French (%)	5	5	23	5
Other than English and French (%)	11	11	16	18
Master				
Mother tongue				
English (%)	70	72	54	71
French (%)	7*	7*	26	6
Other than English and French (%)	23	21	20	23
Doctorate				
Mother tongue				
English (%)	67	72	48	66
French (%)	Х	Х	26	5
Other than English and French (%)	33	25*	27	29

x suppressed to meet confidentiality requirements of the Statistics Act

 $\bf Notes:$ Proportions may not add up to 100 due to multiple responses.

Caution is advised when comparing estimates. High sampling variability errors for some estimates means that many apparent differences are not statistically significant. When differences are significant, they are generally noted in the text.

^{*} numbers marked with this symbol have a coefficient of variation between 16.6% and 25% and are less reliable than unmarked numbers

Section 2: What was the graduates' experience during postsecondary studies?

Compared with Canadian graduates overall, a college education was less common in Manitoba. Reflecting this, graduates from Manitoba were more likely than graduates from all Canadian institutions to have completed a bachelor degree. Nearly six out of ten graduates from Manitoba completed the requirements for a bachelor degree in 2000, compared with only half of graduates from the Class of 2000.

Postsecondary education in Manitoba

The province of Manitoba has a variety of postsecondary institutions. It has four universities and four colleges², a number of private religious institutions and private vocational institutions, as well as a distance education delivery network. The current analysis does not include information on graduates from private institutions as only publicly-funded institutions are part of the National Graduates Survey.

For more information on postsecondary education in Manitoba, visit the government's website at www.edu.gov.mb.ca or the Council on Post-Secondary Education (COPSE) website at www.copse.mb.ca.

Bachelor and master graduates from Manitoba took a longer time to complete their program of study.

At the college level, Manitoban graduates on average took less time to complete their program³, but they took more time at the bachelor and master levels. Among graduates who pursued their studies full-time, college graduates in the province of Manitoba took an average of 16 months to complete their program of study, compared with 21 months at the national level. At the higher levels, Manitoban graduates took an average of 4 months longer at the bachelor level and 13 months longer at the master level (Table A-1).

The reasons behind these differences are not easily explained. While it is possible to control for certain factors, other information such as the normal length of the programs, was not available for analysis. While only graduates who pursued their studies full-time were included in the calculation, it is possible that some graduates did not take the full load of courses, which would affect the length of time to complete the program⁴. Programs were also separated by level of study (college, bachelor, master and doctorate), because different lengths of time are needed to complete them. Although the proportions of the different diplomas, certificates and degrees within a level of study were the same, it was not possible to control for non-standard programs (such as accelerated programs) within the level the study. Finally, graduates from Manitoba were no more likely than graduates from Canadian institutions overall to take a leave of absence from their studies.

College graduates from Manitoba were more likely to delay entry into postsecondary education.

Past analysis of the NGS showed that graduates tend to take a variety of pathways into and through postsecondary education. The flow of young graduates from secondary school directly into postsecondary education and then directly into the workforce is not necessarily the most common pathway taken⁵. Other analysis on youth transitions after secondary school also shows that the transition from school into the workforce is made through a complex set of pathways⁶.

Analysis of postsecondary education pathways in Canada

At the Canada level, the percentage of graduates who had completed postsecondary activities prior to enrolment in the 2000 reference program is driven by Quebec graduates, where completion of CEGEP is generally required for entry into university. In fact, 60% of bachelor graduates from Quebec universities reported that they had previously completed college or CEGEP, and another 12% reported having some college or CEGEP. Outside of Quebec, only 6% of graduates reported having completed college or CEGEP prior to entering their program.

For this reason, comparison of activities prior to graduation at the college and at the bachelor level between Manitoba graduates and all graduates from Canada should be made with caution. To help clarify this issue, national data excluding Quebec graduates are used for the analysis, but both are presented (see Table A-2).

Complex pathways through postsecondary education were also typical of the Class of 2000 and of Manitoba graduates. Slightly less than a third of graduates had some postsecondary experience prior to the 2000 program. Although the majority did not have any previous postsecondary experience, many did not enter into their postsecondary education directly after secondary school. In fact, college graduates from the province of Manitoba were less likely to enter into postsecondary education directly after secondary school, when compared to other graduates outside of Quebec. They were also three times more likely than bachelor graduates within the province to delay their entry into postsecondary education (see Figures 2a and 2b and Table A-2).

Figure 2a

Postsecondary pathways of college graduates from Manitoba, prior to entry into their program

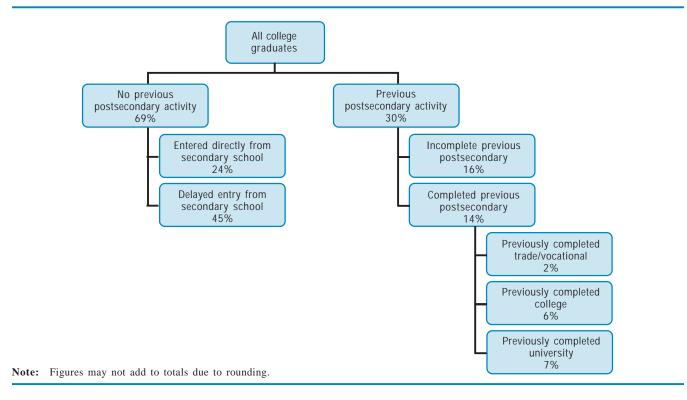
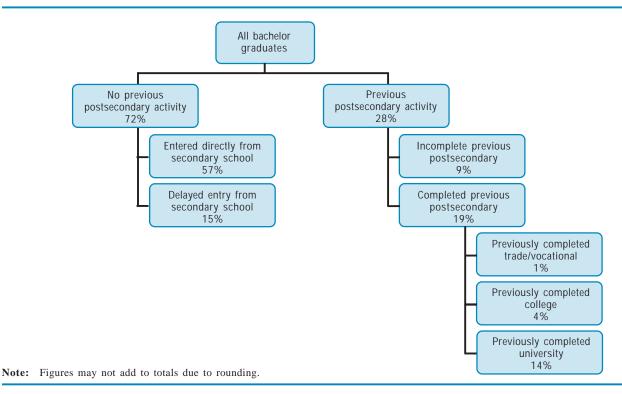


Figure 2b
Postsecondary pathways of bachelor graduates from Manitoba, prior to entry into their program



Section 3: Did graduates remain in Manitoba?

In a knowledge-based global economy, the skills and competencies of workers within a province are very valuable. Losing these skills may mean shortages in specific occupations and may limit economic growth. On the other hand, it can be anticipated that some individuals will leave a province, particularly those in fields where jobs are clustered in other locations or those who pursue advanced postsecondary education. Therefore, understanding mobility into and out of the province is important for understanding the relationship between the postsecondary system, the educational needs of the population and the labour market. Traditional transition surveys generally cannot measure the full mobility within a jurisdiction as they focus on a single geographic area (e.g. province) and are thus only able to only measure how many leave. However, the National Graduates Survey (NGS), with its national scope, can look at graduates from other jurisdictions who are attracted to the province of Manitoba, as well as those who leave. Information on the specific provinces these graduates come from or go to is also available, but not analysed in detail in this report.

Student mobility and graduate mobility

The National Graduates Survey (NGS) collects information on principal residence of graduates at three points in time. The first is the principal residence in the twelve months prior to enrolment in their program; the second is the province or territory in which they studied and the third is the location of the primary residence at the time of the 2002 interview. With this information, it is possible to measure the mobility prior to enrolment, that is, "student mobility" and the mobility after obtaining or completing the degree, diploma or certificate in 2000, that is, "graduate mobility."

The Class of 2000 is the first NGS to collect information on mobility to the United States after graduation. Therefore, "graduate mobility" includes graduates who moved south of the border. For this reason, mobility of graduates presented in this report is not comparable to reported mobility data using previous NGS data.

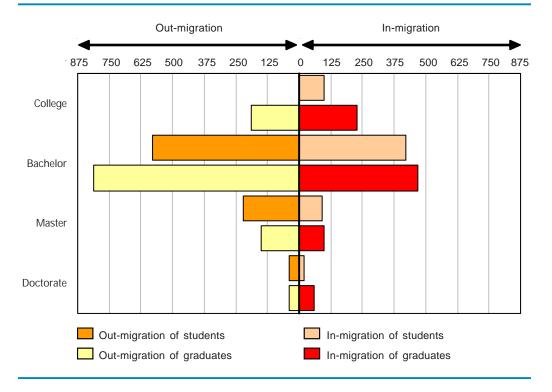
The majority of graduates who ever lived in Manitoba were residents over time.

About 9,300 graduates from the Class of 2000 lived in Manitoba either prior to enrolment, during their studies or after graduation. About 7,700 of these graduated from college and university programs in Manitoba in 2000, and about two-thirds of the 9,300 Manitoban residents lived in the province at all three points in time. Therefore, only about a third were mobile. Mobility may be either entering or leaving the province, and may have been done either prior to their studies (student mobility) or after graduation (graduate mobility).

Manitoba lost more students and graduates than it gained.

While the majority of students and graduates lived in Manitoba at all three points in time, the province did, however, lose more students and graduates than it gained. Prior to enrolment in their program, 8,000 students from the Class of 2000 lived in Manitoba. Of these, about 1,000 left the province to study elsewhere for their 2000 program. About 600 came into the province from elsewhere to complete their studies, resulting in a net loss. At the time of graduation, there were 7,700 graduates in Manitoba, but two years later, there were about 7,400. After graduation, about 1,200 graduates moved to a location outside of the province, while about 900 moved into the province (see Table A-3).

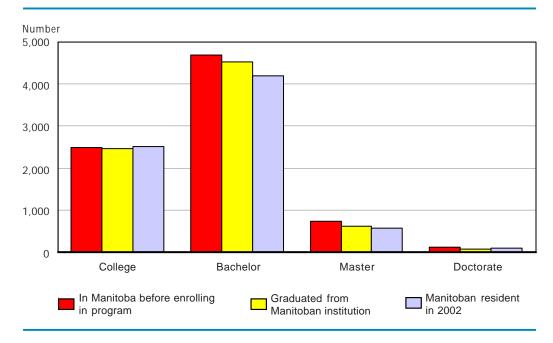
Figure 3
Mobility characteristics of the Class of 2000, Manitoba graduates, by level of study



There was no net migration out of the province at the college level.

Based on the level of study obtained in 2000, the number of residents in Manitoba at the college level remained fairly constant over time, so that there was no net migration out of the province over time. At each of the three points in time, there were about 2,500 college graduates from the Class of 2000 living in Manitoba (see Figure 4). The greatest proportion of net migration out of the province was at the master level. In 2002, there were 24% less graduates from this level living in Manitoba, when compared with the number of those at this level who lived in the province prior to enrolment. At the bachelor level, the net migration out of the province was 11% (see Table A-3).

Figure 4
Number of students and graduates living in Manitoba, by level of study and time of residence



Section 4: Who were the mobile students and graduates from Manitoba?

With data on the residence of graduates from prior to enrolment, during their studies and at the time of the 2002 interview, it is possible to track those who come from, study in or settle in the province of Manitoba. With the aid of these residential flows (see Table 3), it is possible to focus on particular patterns of mobility, and therefore describe the characteristics of the mobile students and graduates from the province.

Comparison of graduates in Manitoba based on residence flows

All graduates:

These were the 9,300 graduates from the Class of 2000 who had ever lived in the province of Manitoba (all lines in Table 3). However, it does not include graduates who may have lived in Manitoba at a point prior to the three periods presented. For example, it would not include doctoral graduates who completed their master program outside of Manitoba, but who were originally from the province or may have completed their bachelor degree in Manitoba.

Non-migrants:

These were the 6,200 graduates from the Class of 2000 who lived in Manitoba at all three reference points: prior to enrolment, during their studies and after graduation (1st line in Table 3).

Migrants:

Three groups of migrants can be created based on their flows through the province.

- 1) Graduates who left Manitoba and did not yet return: These were the graduates who were in Manitoba prior to enrolment but were no longer living in the province in 2002. They include a) the 890 graduates who lived in Manitoba prior to enrolment and during their studies, but lived elsewhere in 2002 and b) the 720 graduates who left the province to study elsewhere and had not returned after their studies (2nd and 5th lines in Table 3).
- 2) Graduates who entered the province and did not leave: These were graduates who did not live in Manitoba prior to enrolment but were residents of the province in 2002. They include a) the 330 students who moved to Manitoba from elsewhere to enrol in their 2000 program and who still lived in the province in 2002 and b) the 590 who were new to the province in 2002, having moved to the province after their 2000 graduation (3rd and 7th lines in Table 3). About two-thirds of the graduates in this category are those who studied elsewhere and were new to the province in 2002.
- 3) Graduates who have both left and entered the province: These were a) the 270 graduates who did not study in the province, but who were residents of Manitoba both prior to their studies and in 2002 or b) the 300 graduates who lived in the province to study, but were not residents either before their studies or after graduation (4th and 6th lines in Table 3).

Table 3

Number of graduates by level of study in 2000 and residence flows through the province of Manitoba

Residence in Manitoba		Level of study - 2000					
Prior to enrolment in 2000 program	During studies (2000 program)	At time of interview (2002)	College	Bachelor	Master	Doctorate	All levels
é	<u>é</u>	ê	2,210	3,510	420	40	6,180
è			160	600	100	30*	890
	<u>e</u>	ē	70	210	Х	Х	330
<u> </u>			50**	170*	Х	Х	270
			F	410*	180* *	* 30*	720
	<u> </u>		30*	210	50	10*	300
		<u> </u>	180**	300*	60*	50*	590
Total			2,790	5,415	890	180	9,260

- x suppressed to meet confidentiality requirements of the Statistics Act
- * numbers marked with this symbol have a coefficient of variation between 16.6% and 25% and are less reliable than unmarked numbers
- ** numbers marked with this symbol have a coefficient of variation greater than 25% and less or equal to 33.3% and are very unreliable
- F too unreliable to be published (coefficient of variation surpasses 33.3%)

Notes: Numbers are rounded to the nearest 10, but analysis is carried out on unrounded numbers.

Caution is advised when comparing estimates. High sampling variability errors for some estimates means that many apparent differences are not statistically significant. When differences are significant, they are generally noted in the text.

Those who left the province were more likely to be graduates at the master and doctoral level.

While the majority of graduates did not change provinces, there is an interest in any loss of skilled individuals. Therefore, it is important to look at those who were in the province originally, and who left the province. About 1,600 college and university graduates from the Class of 2000 lived in Manitoba prior to their enrolment in the 2000 program, but were no longer residents of the province in 2002. They represented 17% of those who ever lived in Manitoba.

Those who left the province were more likely to be graduates at the master or doctoral level. At the college level, 10% of those living in Manitoba prior to enrolment eventually left the province and were no longer residents in 2002. This was true for 22% of bachelor graduates, 38% of master graduates and 54% of doctoral graduates⁷.

Those who moved out of the province were as likely to move east as west.

With the exception of graduates at the master level, graduates from the Class of 2000 who left Manitoba and were no longer residents of the province in 2002 were as likely to have moved east of the province as to have moved more to the west. Graduates from the master level were more likely to move east. However, doctoral graduates also had a third location to which they were as likely to move to: the United States (see Table 4).

Table 4
2002 location of residence of Class of 2000 graduates who left Manitoba

	College	Bachelor	Master	Doctorate
			%	
East of Manitoba	38**	42	67	34*
West or North of Manitoba	55*	47	25**	37*
United States	F	11*	8**	29*

^{*} numbers marked with this symbol have a coefficient of variation between 16.6% and 25% and are less reliable than unmarked numbers

Note: Caution is advised when comparing estimates. High sampling variability errors for some estimates means that many apparent differences are not statistically significant. When differences are significant, they are generally noted in the text.

About one in ten graduates ever living in Manitoba entered the province from elsewhere.

Mobility is not only about leaving the province. Even as graduates left the province and were no longer residents of Manitoba by 2002, a number of graduates entered the province over time. About 900 or one in ten graduates who ever lived in Manitoba arrived in the province from elsewhere, and were still in the province in 2002. Of these, six out of ten entered the province after graduation.

Manitoba attracted graduates wanting to pursue additional education.

Bachelor graduates were typically the most likely to pursue further education, and many bachelor graduates who entered the province after graduation were there to pursue further education. About 40% of the 300 bachelor graduates who entered after graduation were enrolled full-time in postsecondary education at the time of the 2002 interview. In contrast, 15% of the 3,510 who lived in the province at all three points in time and 25% of the 600 who lived in the province both prior to enrolment and during their studies, but who left after graduation were enrolled full-time in postsecondary education at the time of the 2002 interview.

At the master level, those who moved into the province to study and were still there in 2002 were more likely than those who did not move to have pursued further education. About 25% of the 40 master students who moved into the province to enrol for the 2000 program and remained after graduation were enrolled in full-time education in the province in 2002. In contrast, 8% of the 420 from this level who lived in the province at all three points in time were enrolled in full-time education in the province in 2002.

Mobility is often encouraged in the pursuit of graduate education, such as master and doctoral degrees. Doctoral graduates may therefore have previously moved to enrol in either their bachelor or their master degree. Those who moved to the province after graduation, but completed their studies elsewhere, may have originated from the province, but information in the current NGS does not allow us to track these previous movements. However, with the follow-up of the NGS, it

^{**} numbers marked with this symbol have a coefficient of variation greater than 25% and less or equal to 33.3% and are very unreliable

F too unreliable to be published (coefficient of variation surpasses 33.3%)

will be possible to track the current bachelor and master graduates who pursue further education, and to see whether those who left the province to study elsewhere return to Manitoba after completing their studies.

Impact of considering province of study versus province of residence at interview

The National Graduates Survey (NGS) interviews graduates of postsecondary programs from a given reference year and also obtains information on the graduates' location of residence at the time of the interview, approximately two years after graduation. This information can allow comparison of graduates from a given province to the graduates who live in that province two years after graduation, if such a comparison is warranted. In this particular instance, Class of 2000 graduates from the province of Manitoba can be compared to graduates who are living in Manitoba at the time of the 2002 interview.

The two profiles closely resemble each other in many instances, but some differences can be noted at the doctoral level. With the analysis of mobility, it becomes clear that these differences are likely due to the fact that doctoral graduates who studied in the province are not the same people as the doctoral graduates who live in the province in 2002.

Section 5: Were educational activities pursued after graduation?

Many graduates choose to continue their studies after graduation, particularly bachelor graduates. However, college and bachelor graduates from the province of Manitoba were slightly less likely than graduates from Canadian institutions overall to have pursued further education. Graduates living in Manitoba in 2002 were, however, as likely as graduates from all Canadian institutions to be enrolled in full-time education in 2002 (see Table 5).

Table 5
Educational activities of the Class of 2000 after their graduation, by level of study

	Manitoba – 2000 province of study	All graduates
		%
College		
Pursued further education after 2000 graduation	21	26
Completed further education after 2000 graduation	5	9
Enrolled in full-time education in 2002	8	8
Bachelor		
Pursued further education after 2000 graduation	36	41
Completed further education after 2000 graduation	10	15
Enrolled in full-time education in 2002	16	15
Master		
Pursued further education after 2000 graduation	23	28
Completed further education after 2000 graduation	4	7
Enrolled in full-time education in 2002	12	14
Doctorate		
Pursued further education after 2000 graduation	Х	11
Completed further education after 2000 graduation	X	4
Enrolled in full-time education in 2002	X	6

x suppressed to meet confidentiality requirements of the Statistics Act

Note: Caution is advised when comparing estimates. High sampling variability errors for some estimates means that many apparent differences are not statistically significant. When differences are significant, they are generally noted in the text.

Pursuit of further education after their 2000 graduation may have an impact on the labour market outcomes of graduates in 2002. Graduates who completed further education may have a higher level of education than the one obtained in 2000, and so may have different labour market experiences than those of the same level in 2000 who did not continue on to further education. Also, graduates who pursued further education, whether they have completed it or not, may not have been in the work force as long as those graduates who did not. Finally, graduates who were enrolled full-time in 2002 may or may not be working or looking for work. Therefore, their outcomes are likely to be affected by this pursuit of education, and not be comparable to those with similar levels of study from the Class of 2000. For these reasons, all those who pursued further education after their 2000 graduation are excluded from the analysis of outcomes in the labour force.

Section 6: How did graduates fare in the workforce?

This section looks at labour market outcomes of graduates living in Manitoba in 2002 relative to graduates elsewhere. Some graduates in Manitoba did well compared to the national average. Doctoral graduates in Manitoba and male college graduates in Manitoba were more likely to be working and employed full-time in 2002, when compared to their counterparts from all Canadian institutions. Otherwise, the labour market activity of Manitoban graduates was typical of other Canadian graduates.

While employment levels in Manitoba were typical of Canadian graduates overall, earnings⁸ were not. With the exception of graduates from the master level, earnings for graduates living in Manitoba in 2002 were lower than those of the average Canadian graduate. There were few differences in earnings between male and female graduates working in the province in 2002 with one exception: male graduates at the college level had higher earnings than their female counterparts. Female graduates at the university level working full-time in Manitoba in 2002 had earnings similar to those of female graduates from Canadian institutions overall.

By 2002, there were 6,400 graduates from the Class of 2000 working in Manitoba, 89% of whom had graduated from the province's colleges and universities. The majority of graduates from Canadian institutions were working in 2002, as were those living in Manitoba. This held true for all levels of study and for both women and men. At least 88% of all graduates in each group were employed (see Table 6 and Table A-5).

Doctoral graduates living in Manitoba in 2002 were more likely to be employed and working full-time than the Canadian average.

While the majority of graduates were employed, doctoral graduates living in Manitoba in 2002 were more likely to be employed than national graduates from all Canadian institutions. This was true for both male and female doctoral graduates. Furthermore, both male and female doctoral graduates in Manitoba in 2002 were more likely to be employed full-time.

Graduates at the bachelor and the master level in Manitoba in 2002 were as likely to be employed as their counterparts nationally and as likely to be working full-time. This held true for both male and female graduates at these levels. Overall, college graduates in Manitoba fared as well in the labour market as their national counterparts, but male graduates in Manitoba fared better, as they were more likely to be employed in 2002, as well as working full-time (see Table 6).

Table 6
Employment of 2000 graduates in 2002 by gender and level of study

	Manitoba – 2000 province of residence	All graduates
		%
College		
All graduates		
Employed	91	90
Employed full-time	82	81
Male		
Employed	93	89
Employed full-time	90	84
Female	0.0	0.4
Employed	89	91
Employed full-time	77	78
Bachelor		
All_graduates		
Employed	91	9(
Employed full-time	82	8
Male	0.4	0.0
Employed	94	89
Employed full-time Female	87	83
	90	9(
Employed Employed full-time	79	79
	19	7 3
Master		
All_graduates		
Employed	92	9.
Employed full-time	85	84
Male		
Employed	95	9,
Employed full-time	91	90
Female	0.0	0.4
Employed	89	89
Employed full-time	81	71
Doctorate		
All graduates		
Employed	97	9(
Employed full-time	95	82
Male		
Employed	100	92
Employed full-time	100	86
Female		
Employed	95	88
Employed full-time	90	76

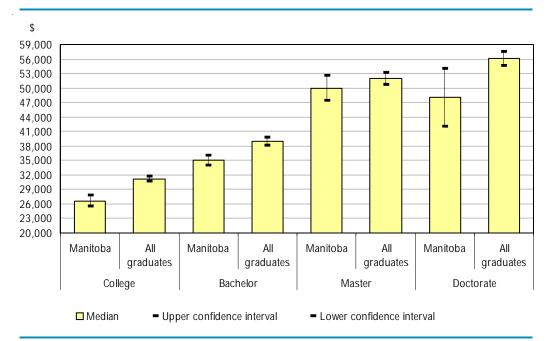
Notes: Graduates who pursued further education after their 2000 graduation are excluded from this table, as are graduates for whom a labour force status could not be calculated.

Caution is advised when comparing estimates. High sampling variability errors for some estimates means that many apparent differences are not statistically significant. When differences are significant, they are generally noted in the text.

With the exception of the master level, graduates earned less in Manitoba.

Overall, graduates at the national level tended to earn more than graduates living in Manitoba⁹. This was most striking at the doctoral level. While doctoral graduates in Manitoba were more likely to be employed and working full-time, the difference in earnings between those working in Manitoba in 2002 and those from the entire Class of 2000 was the largest (see Figure 5 and Table A-6).

Figure 5
Estimated gross annual earnings of 2000 graduates working full-time in 2002, by level of study



Note: The bar indicates median earnings and the dashes indicate the 95% confidence interval around the median.

Median earnings of full-time workers

Information on earnings is for graduates working full-time who have not pursued or completed any further education. Earnings information is calculated from the salaries and wages of graduates who were working full-time (30 hours or more) in the week prior to the survey and assumes that they worked for the entire year.

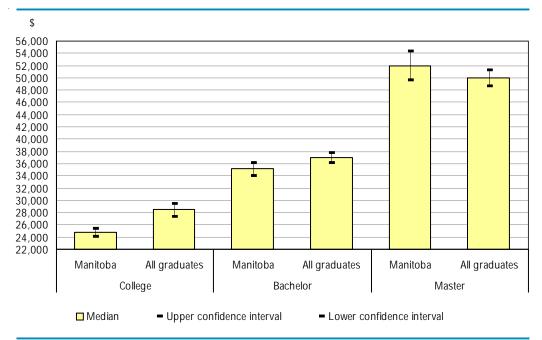
The analysis of earnings uses medians and quartiles to present the typical earnings of graduates. "Median earnings" is the amount which divides the top earning graduates (50%) from the lower earning graduates (50%). In order to present a measure of the range of earnings, quartiles are presented. The range between the bottom and top quartile represents the range of earnings of the "**middle-earning**" half of graduates. A quarter of graduates had earnings below the bottom quartile threshold and another quarter of graduates earn more than the top quartile threshold.

Female bachelor and master graduates in Manitoba had earnings similar to their national counterparts.

In Canada, female graduates from the college, bachelor and master level earned less than their male counterparts¹⁰, but this was not the case in Manitoba. In fact, only male graduates at the college level had earnings that were statistically significantly higher than their female counterparts.

While overall trends in earnings for graduates in Manitoba tended to show lower earnings when compared to those at the national level, this was not necessarily true for female graduates in the province. While female college graduates in Manitoba earned less than their national counterparts, earnings for female bachelor and master graduates were similar in both groups (see Figure 6).

Figure 6
Estimated gross annual earnings of 2000 female graduates working full-time in 2002, by level of study



Note: The bar indicates median earnings and the dashes indicate the 95% confidence interval around the median.

Section 7: How did graduates finance their studies?

An important issue concerning access to education is the affordability of postsecondary education. This can be examined in part by looking at how studies are financed, how much debt is incurred, as well as how these debts are being repaid.

Information on education-related loans in the National Graduates Survey (Class of 2000)

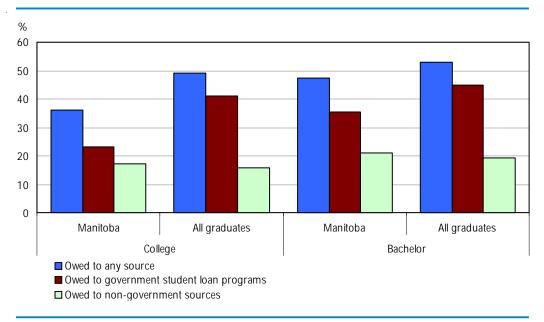
Graduates were asked if they had ever borrowed money to finance **any** of their education through a government-sponsored student loan program. They were then asked how much they owed for all their government-sponsored student loans at the time of graduation (for all programs). In addition, graduates were asked if they had ever borrowed for their education from other sources that they would have to pay back (such as private bank loans, family, etc). They were then asked how much they owed to these sources at the time of graduation. Because some students may have borrowed and paid off loans from previous postsecondary programs prior to graduating from their most recent program, this analysis focuses only on those graduates who reported an amount owing upon graduation. Moreover, debt was not necessarily incurred during the most recent program pursued, but may have been accumulated from previous studies. Therefore the analysis is also restricted to those graduates who have not pursued any further education and who have thus been required to pay off their loan in the two years since graduation.

Students who pursue postsecondary education may borrow money from a variety of sources in order to finance their education. These sources can be federal, provincial or territorial government student loans or other sources such as a bank loan, line of credit or family.

Manitoban graduates were less likely to owe money.

College and bachelor graduates from Manitoba were less likely to owe money for their education at the time of their 2000 graduation than Canadian graduates overall. Manitobans were less likely than their Canadian counterparts to owe money to any source and they were also less likely to owe money to student loan programs (see Table A-10). However, they were as likely as graduates from Canadian institutions overall to owe money to non-government sources (see Figure 7).

Figure 7
Proportion of college and bachelor graduates owing money for their education, by source of financing



Note: Graduates who pursued further education after their 2000 graduation are excluded.

College graduates in Manitoba generally owed less.

As well as being less likely to owe money, the debt owed by Manitoban graduates from the college level was below the national average. This was true both for loans owed to any source as well as for loans owed to student loan programs (see Table 7).

Table 7
Average debt owed at time of graduation, by source of debt and level of study (Class of 2000)

	Manitoba – 2000 province of study	All graduates
		\$
College		
Average debt owed to all sources	10,100	12,700
Average debt owed to government student loan programs	10,500	12,600
Average debt owed to non-government sources	6,500	6,800
Bachelor		
Average debt owed to all sources	19,100	20,500
Average debt owed to government student loan programs	18,900	19,500
Average debt owed to non-government sources	10,700	10,800

Notes: Graduates who pursued further education after their 2000 graduation are excluded from this table.

Averages are rounded to the nearest 100, but analysis is carried out on unrounded values.

Caution is advised when comparing estimates. High sampling variability errors for some estimates means that many apparent differences are not statistically significant. When differences are significant, they are generally noted in the text.

Measures of indebtedness to government student loans by province

Students who obtain government student loans can obtain them either from the federal government, a provincial or territorial government, or both sources. Federal loans are managed in the same way throughout the country, but provincial and territorial loans management differs from jurisdiction to jurisdiction. The system has undergone some changes in recent years, moving to a system of direct government loans, but graduates from the Class of 2000 have borrowed through the older system of government-sponsored bank loans.

The province that lends the money is determined by the province of residence at the time of application. Generally, this is the province where the applicant has most recently lived for twelve consecutive months before the study period, not including time spent as a full-time postsecondary student. However, the National Graduates Survey (NGS) does not collect data on the lending province; it only collects data on residence at certain points in time, such as the principal residence in the twelve months prior to enrolment, the province or territory of the institution for the 2000 program and the principal residence at the time of the 2002 interview. Graduates are extremely mobile, and many have pursued various pathways through postsecondary education. For these reasons, it is not possible to precisely determine from which province or territory the student loans originate. Because each province has its own set of rules in terms of eligibility and limits and the province of comparison may not actually be the province from which student loans were obtained, some variability may exist within a cohort when looking at student loans by province.

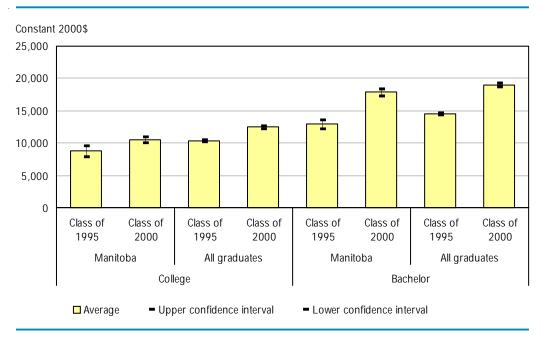
To facilitate analysis, the focus of provincial comparison will be on graduates who obtained their 2000 college or bachelor degree, diploma or certificate from an institution in Manitoba. This will focus only on those graduates where the issue of mobility is not as great, such as college and bachelor graduates. However, results for master and doctoral graduates, as well as those living in the province in 2002 are also presented in the tables.

The increase in student loan amounts was higher for bachelor graduates.

At both the provincial and the national level, student loans owed by bachelor graduates were higher for the Class of 2000 than for the Class of 1995. Increases in student loan amounts between the Class of 1995 and the Class of 2000 for college graduates in Manitoba were not statistically significant, but they were at the national level (see Figure 8 and Table A-7).

Figure 8

Average amount of government student debt at time of graduation (\$ constant 2000), Class of 1995 and Class of 2000



Note: The bar indicates the average government student debt and the dashes indicate the 95% confidence interval around the average.

Section 8: How much debt did graduates repay by 2002?

The ability to pay off debt is influenced by a number of factors, not the least being the level of income. College graduates' debt in Manitoba was lower, but they also earned less. Therefore, their ability to pay off debt may have been affected. An examination of debt-servicing ratios, however, can help evaluate the relationship of loans to income.

Interpretation of debt-servicing ratios

Debt-servicing ratios are a measure of debt payments as a proportion of income. Debt-servicing ratios are a function of both payment size and income and are therefore only rough indicators of the ability to pay. In some cases they are high because payments are high (often more than the required minimum payment). In other cases they are high because income is low.

To put these values in context, there are a variety of similar measures used by creditors (including student loan programs) to identify possible debt burden. For example, American studies on student loan debt burden often use a benchmark of 8% as the threshold beyond which student debt becomes difficult to manage. The 8% threshold is cited by a variety of American sources on student debt. See, for example, the National Association of Student Financial Aid Administrators (NASFAA), Scherschel (2000), and Choy (2000).

In Canada, the debt-servicing ratios in the Canadian Student Loan Program (CSLP) interest relief program vary depending on the size of the monthly loan repayment, household income and family size. To be eligible for interest relief, the borrower may revise the terms of payment to reflect a 15-year amortization period. For example, a \$20,000 debt will require a monthly payment of approximately \$185. Based on the interest relief table, this payment is approximately 10% of the monthly income for a single person or about 6.5% for a family of two or 5% for a family of three.

In spite of their lower debts, college graduates from Manitoba had slightly higher debt-servicing ratios than graduates from all Canadian institutions. The typical ratio was 8% for graduates from Manitoba, compared with 6% for graduates from Canadian institutions. College graduates in Manitoba therefore seemed to be making larger payments on their government student loans in relation to their earnings. It is not known whether these payments were made by choice or by obligation.

While college graduates in Manitoba had higher debt-servicing ratios, they were no more likely than graduates from all Canadian institutions to indicate difficulty in making their payments. Nearly three out of ten college graduates in both Manitoba and in Canada reported difficulties in repaying their student loans. There were no statistical differences between the province and the nation for bachelor graduates, either in the amount owed, the debt-servicing ratio or in the reported difficulties.

Calculation of debt repayment

All debt values are provided in current dollars as reported by respondents. No conversion is made to constant dollars. This is because the use of constant dollar values for calculating debt repayment tends to overstate the amount of debt repaid. The value of the debt remains constant over time and is therefore always in "current" dollars.

Consider, for example, a respondent who owes \$1,000 upon graduation and reports remaining debt of \$1,000 two years later; that is, a respondent who has not paid off any of his/her debt. If these values were converted to constant dollars of the graduating year, using say a 3% inflation rate, the remaining debt would be converted to \$943. While the respondent has, in reality, paid off none of his debt, a 0% repayment, a repayment calculation based on constant dollars would make it appear that he has paid off about 5% of his debt.

Constant dollars are used, however, for the comparison of amounts owed at graduation for 1995 and 2000 graduates. For comparison of debts between cohorts, debt at graduation (1995) is converted from 1995 to 2000 constant dollars.

Manitoba graduates paid off their government student loans at the same rate.

By two years after graduation, graduates in Manitoba had paid off a similar proportion of their graduate student loan as had all Canadian graduates. Although they had smaller debts, they were essentially paying it off at the same rate as the rest.

Graduates from Canadian institutions overall who managed to pay off their student loan debt tow years after graduation started out with lower debts than those with debt remaining and fewer started out with debts of \$25,000 or more. They also had higher incomes after graduation and fewer reported having children. College graduates were more likely to be employed in 2002 (although no employment difference was noted at the bachelor level) and were less likely to be in a partnered relationship (see Table A-8).

In Manitoba, there were similar differences between graduates who paid off their debt and those who still owed, but the parallel is not complete. Graduates in Manitoba who managed to pay off their student loan debt also started out with lower debts, were less likely to have debts of \$25,000 or more and had higher incomes. However, in contrast to the national trend, they were equally as likely to have children as graduates who had not managed to pay off their student loan debt. In addition, Manitoban college graduates who owed money in 2002 were as likely to be employed as those who paid them off. Therefore, in Manitoba, the ability of college graduates to pay off student loans was not clearly linked to employment (see Table A-8).

More graduates paid off other sources of education financing.

By the time of the 2002 interview, there were about twice as many graduates who paid off their debt to non-government sources than there were who had paid off their government student loans (approximately 40% compared with 20%). This was true for both graduates from Manitoba and all Canadian graduates. In addition, the amount of debt owed to non-government sources was considerably lower than the amount owed to government student loans, which may be the reason why debt to non-government sources was paid off more quickly. It should also be noted that these sources are varied and may include private bank loans as well as family loans. Information on how these debts are repaid (i.e. interest rates and amortization periods) or whether these debts were forgiven (i.e. family loans) is not available (see Table A-10).

Section 9: How did Aboriginal graduates fare?

The Council on Post-Secondary Education (COPSE) in Manitoba has developed specific strategies to overcome barriers to postsecondary education for Aboriginal people in the province. This section provides an overview of the profile of Aboriginal graduates and their outcomes in the workforce.

Aboriginal people in Manitoba make up an important part of the province's population. According to the 2001 Census, 13.6% of all Manitobans reported Aboriginal identity compared with 3.3% of all Canadians. For Canada as a whole, Aboriginal graduates from the Class of 2000 represented 3% of all graduates. In 2002, an estimated 900 graduates living in Manitoba reported an Aboriginal identity, representing 12% of all graduates from the Class of 2000 living in Manitoba at the time.

The majority (six out of ten) of college and bachelor graduates living in Manitoba in 2002, whether Aboriginal or not, were women. Aboriginal graduates had an even greater share of women at the bachelor level, when compared to their non-Aboriginal counterparts in the province. Women accounted for over 80% of all Aboriginal bachelor graduates, compared with 60% for non-Aboriginal graduates (see Table A-11).

College was the level of choice for Aboriginal graduates.

Aboriginal graduates in Manitoba accounted for 17% of college-level graduates in the province and 9% of Manitoban graduates at the bachelor level. The proportion of college graduates with Aboriginal identity roughly reflected the proportion of Aboriginal people in the general population in Manitoba. In contrast, Aboriginal people were under-represented at the bachelor level.

Aboriginal graduates living in Manitoba in 2002 chose fields of study that differed from their non-Aboriginal counterparts. This was true at both the college and at the bachelor level. At the college level, Aboriginal graduates were more likely to study in Health, Parks, Recreation and Fitness, and less likely to study in Engineering Technologies. More than one-third of Aboriginal graduates studied in Health, Parks, Recreation and Fitness, compared with a quarter of non-Aboriginal graduates. A little more than two non-Aboriginal college graduates in ten studied in Engineering Technologies, compared with only one in ten Aboriginal college graduates. At the bachelor level, about half of Aboriginal bachelor graduates studied in Social Sciences and Law (of which more than four out of ten specialized in Child Care and Support Services Management), compared with 20% of non-Aboriginal graduates.

Aboriginal graduates tended to delay entry into postsecondary.

Aboriginal graduates were less likely than non-Aboriginal graduates to have entered their program directly from secondary school. This was true for graduates at both the college and bachelor level, but college Aboriginal graduates were the least likely to have moved to postsecondary education directly from secondary school. About 17% of Manitoban Aboriginal graduates had gone on to college directly from secondary school, compared with 25% of non-Aboriginal graduates. At the bachelor level, about 30% of Aboriginal graduates were enrolled in secondary school in the twelve months prior to enrolment in their 2000 program, compared with nearly 60% of non-Aboriginal graduates.

Not only did college Aboriginal graduates delay entry into postsecondary, they were also less likely to have pursued a postsecondary program prior to the one completed in 2000. About 20% of college Aboriginal graduates had previous postsecondary experience, compared with about 30% of their non-Aboriginal counterparts. About 20% in both groups pursued further education after the 2000 program (see Table A-11).

Aboriginal graduates were older, and at the bachelor level, less likely to be single and more likely to have children.

Because they were more likely to delay their entry into postsecondary education, it is not surprising that Aboriginal graduates living in Manitoba were older than their non-Aboriginal counterparts. At the college level, only 24% of Aboriginal graduates were under age of 25, compared with 61% of their non-Aboriginal counterparts. At the bachelor level, 38% of Aboriginal graduates were under age 25, compared with 67% of non-Aboriginal bachelor graduates. These results were particularly interesting given that the average age of the Aboriginal population in Manitoba is much lower than the non-Aboriginal population.

Perhaps because they were older, there were also greater proportions of Aboriginal graduates at the bachelor level living with a partner or having dependent children. Overall, slightly less than half of Aboriginal graduates lived with a partner. In comparison, about a third of non-Aboriginal graduates living in Manitoba lived with a partner. More than half of Aboriginal graduates living in Manitoba had dependent children, compared with only about a quarter of non-Aboriginal college graduates and 14% of non-Aboriginal bachelor graduates living in Manitoba (see Table A-11).

Aboriginal college graduates in Manitoba were twice as likely as those outside the province to have an Aboriginal language as a mother tongue.

While English continued to be the most common mother tongue, the use of Aboriginal languages among recent graduates was more prominent in Manitoba than outside the province. When compared to Aboriginal college graduates living outside of Manitoba, Aboriginal graduates living in the province were about twice as likely to report an Aboriginal language as their mother tongue (see Table 8). Differences for bachelor graduates were not statistically significant.

Table 8

Mother tongue of Class of 2000 Aboriginal college and bachelor graduates by 2002 location of residence

	Aboriginal graduates living in Manitoba – 2002	Aboriginal graduates not living in Manitoba – 2002	Aboriginal graduates not living in Manitoba or in Quebec – 2002
		%	
College			
English	79	77	82
French	X	11*	6**
Aboriginal	25	13	12
Bachelor			
English	71	72	81
French	Х	14*	F
Aboriginal	29	13*	15*

x suppressed to meet confidentiality requirements of the Statistics Act

Notes: Proportions may not add up to 100 due to multiple responses.

Caution is advised when comparing estimates. High sampling variability errors for some estimates means that many apparent differences are not statistically significant. When differences are significant, they are generally noted in the text.

Aboriginal college graduates in Manitoba were less likely to be employed and had lower earnings.

Aboriginal bachelor graduates in Manitoba had similar employment levels to those of non-Aboriginal graduates in the province. At least nine out of ten graduates in each group were employed in 2002.

When compared to their non-Aboriginal counterparts in the province, the employment level was slightly lower among Aboriginal college graduates in Manitoba. About 80% of Aboriginal college graduates were employed in Manitoba in 2002, compared with more than 90% of their non-Aboriginal counterparts and 85% of Aboriginal college graduates living outside the province (see Table A-12).

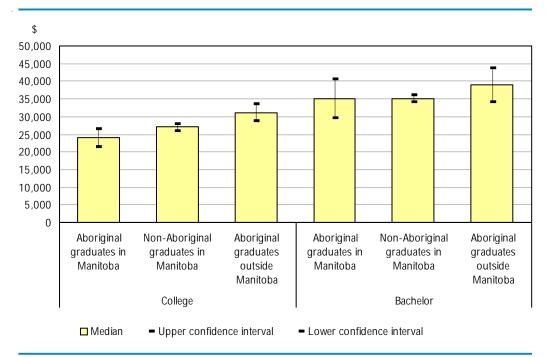
As was the case for Manitoba graduates overall, Aboriginal graduates outside the province of Manitoba earned more than Aboriginal graduates within the province. Within Manitoba, Aboriginal graduates had similar levels of earnings compared to their non-Aboriginal counterparts. This was true for both college and bachelor graduates (see Figure 9 and Table A-13).

^{*} numbers marked with this symbol have a coefficient of variation between 16.6% and 25% and are less reliable than unmarked numbers

^{**} numbers marked with this symbol have a coefficient of variation greater than 25% and less or equal to 33.3% and are very unreliable

F too unreliable to be published (coefficient of variation surpasses 33.3%)

Figure 9
Estimated gross annual earnings of college and bachelor 2000 graduates working full-time in 2002, by Aboriginal status



Note: The bar indicates median earnings and the dashes indicate the 95% confidence interval around the median.

Conclusion

Graduates from the province of Manitoba shared many characteristics with graduates from all Canadian institutions. However, there were a few notable differences. In comparison with Canadian graduates overall, graduates from Manitoba were more likely to be of Aboriginal origin, but were less diverse than graduates from the Class of 2000 in terms of visible minorities, citizenship and mother tongue. Graduates from Manitoba were also more likely than graduates from all Canadian institutions to have completed a bachelor degree. They generally took longer to complete their program and college graduates in Manitoba were more likely to delay entry into postsecondary education.

While the majority of Manitoba residents from the Class of 2000 did not leave the province, Manitoba lost more students and graduates than it gained during the period from before their program began to two years after graduation, particularly at the bachelor and master level. Mobility was linked to the pursuit of education. Manitoba attracted a number of bachelor graduates from the Class of 2000 who, although they obtained their degree elsewhere, chose the province to pursue additional postsecondary studies. While there was a loss of students and graduates from bachelor and master levels, it is possible that some of this loss is short-term. It will be possible to see in the Follow-up Survey of Graduates (FOG) whether those who left the province to study elsewhere return to Manitoba once their studies are completed.

While employment levels in Manitoba were typical of Canadian graduates overall, earnings were not. With the exception of graduates from the master level, earnings for graduates living in Manitoba in 2002 were lower than those of the average Canadian graduate. However, there were few differences in earnings between male and female graduates working in the province in 2002. Only male graduates at the college level had higher earnings than their female counterparts. In addition, female graduates at the university level working full-time in Manitoba in 2002 had similar earnings to those of female graduates from Canadian institutions overall.

College and bachelor graduates in Manitoba were less likely to have incurred a debt during their studies. The debt incurred by college graduates in Manitoba was lower than that of college graduate from Canadian institutions, but the ratio of their debt repayment to their income was higher. However, they were no more likely than college graduates from all Canadian institutions to report difficulties in repaying their loans.

Debts to other loans were paid off more quickly than debts to student loans: by 2002, about twice as many graduates completely paid off their debts to other loans. This was true for both graduates from Manitoba and all graduates from Canadian institutions.

Aboriginal graduates in Manitoba were generally more likely to have obtained a college diploma, and this proportion roughly reflected the proportion of Aboriginal people in the general population. In contrast, Aboriginal people were underrepresented at the bachelor level, and had lower representation at higher levels of study. As well, the fields of study chosen by both Aboriginal college and bachelor graduates differed from those of their non-Aboriginal counterparts in the province. Aboriginal college graduates were less likely to be employed and, compared with their Aboriginal counterparts outside the province, their earnings were lower.

This analysis looked at the activities of Manitoban graduates two years after graduation (in 2002). These graduates will be interviewed again in 2005. This follow-up survey will provide a more complete picture of the transition from education to stable employment.

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Endnotes

- 1. Graduates who were living outside of Canada and the United States at the time of the 2002 interview were not part of the scope of the survey; therefore, the only foreign-born graduates who were interviewed were those who were living in Canada or in the United States at the time of the 2002 interview.
- 2. On July 1, 2004, one of the colleges became a university college.
- 3. Graduates were asked to give the month and year when they started their program, as well as the month and year when they completed all the requirements for their program. The length of time taken to complete postsecondary studies is calculated using the number of months between the start date of the program and the end date of the program for full-time students only.
- For example, full-time studies may be defined as pursuing three courses, while a full load is pursuing five courses.
- 5. Allen, Harris and Butlin, 2003.
- 6. Zeman, Knighton and Bussière, 2004.
- 7. The difference between graduates at the master and doctoral levels was not statistically significant.
- 8. Annual earnings are estimated based on values reported on questions on number of hours of work per week, number of days per week worked and the easiest way to report earnings (hourly, weekly, annually, etc). For example, gross annual earnings are estimated by multiplying hourly salaries by the number of hours worked per week, then by 52, for the number of weeks in a year.
- The difference in earnings at the master level between graduates living in Manitoba and all graduates was not statistically different.
- The difference in earnings between male and female doctoral graduates at the national level was not statistically different.

Appendix A: Data tables

The enclosed tables are based on the National Graduates Survey (Class of 2000).

Symbols and abbreviations

- ... not applicable
- x suppressed to meet confidentiality requirements of the Statistics Act
- * numbers marked with this symbol have a coefficient of variation between 16.6% and 25% and are less reliable than unmarked numbers.
- ** numbers marked with this symbol have a coefficient of variation greater than 25% and less or equal to 33.3% and are very unreliable
- F too unreliable to be published (coefficient of variation surpasses 33.3%)

Coefficients of variation (CV) provide a measure of the reliability of the estimate, taking into account sampling variability. In order to estimate whether two values are statistically significantly different, the following formula can be applied to approximate a 95% confidence interval:

$$Y \pm 2$$
 (CV x Y)/100, where Y is the estimate

This approximate confidence interval gives a range within which the true value in the population is likely to fall. If two confidence intervals do no overlap, then there is a significant statistical difference between the two estimates. It should be noted that this formula is approximate because it estimates a confidence interval that is slightly higher than the 95% level of confidence. As a result, there is a small risk that a significant difference will be identified as insignificant.

For example, with a coefficient of variation of 16%, an estimate such as "30% of graduates" would be accurate $\pm 9.6\%$, 95 times out of 100 [\pm 2 (16 x 30)/100]. With a coefficient of variation of 33%, this estimate would be accurate $\pm 19.8\%$, 95 times out of 100 [\pm 2 (33 x 30)/100].

Table A-1
Characteristics of 2000 postsecondary graduates by level of study

	Manitoba – 2000 province of study	Manitoba – 2002 province of residence	All graduates
College			
Number of graduates	2,500	2,500	101,400
Gender Women (%)	61	61	57
Age at graduation Average age (years) Median age (years)	27 24	27 24	27 23
Under age 25 (%)	57	55	59
Field of study (2000 program) Education (%) Visual and Performing Arts, and Communications Technologies (%)	3 4	F 5**	6
Humanities (%) Social and Behavioural Sciences, and Law (%)	1* 2	1 2**	2 5
Business, Management and Public Administration (%) Physical and Life Sciences, and Technologies (%) Mathematics, Computer and Information Sciences (%)	27 1* 7	26 1* 7	26 1 10
Architecture, Engineering and Related Technologies (%) Agriculture, Natural Resources and Conservation (%) Health, Parks, Recreation and Fitness (%) Personal, Protective and Transportation Services (%)	21 5 27 2	21 4 27 2**	19 3 16 6
Other (%)	X	X	X
Family characteristics in 2002 Married or living common-law (%) With dependent children (%)	39 31	38 31	35 25
Employment equity groups in 2002 Aboriginal people (%) Disabled persons (%) Visible minorities (%)	17 6 8	17 6 7	4 7 13
Citizenship at registry in program Canadian citizen by birth (%) Canadian citizen by naturalization (%) Landed immigrant (%) Visa or foreign student (%)	92 4* 4 x	92 4* 4 x	84 8 7 F
Citizenship in 2002 Canadian citizen by birth (%)	92	92	84
Canadian citizen by birth (%) Canadian citizen by naturalization (%) Landed immigrant (%) Visa or foreign student (%)	6 2* x	6 2* x	12 3 F
No status in Canada (%)	X	X	X
Average duration of program if taken full-time (months)	16	16	21
In secondary school 12 months prior to entering program (%)	24	23	36
Educational activities after graduation Pursued further education after 2000 graduation (%) Completed further education after 2000 graduation (%) Enrolled in full-time education in 2002 (%)	21 5 8	20 5 8	26 9 8

Table A-1 (continued)

Characteristics of 2000 postsecondary graduates by level of study

	Manitoba –	Manitoba –	
	2000	2002	
	province of study	province of residence	All graduates
Bachelor			
Number of graduates	4,500	4,200	132,600
Gender Women (%)	61	62	61
Age at graduation			
Average age (years)	26	26	26
Median age (years)	23	23	23
Under age 25 (%)	66	65	63
Field of study (2000 program)			
Education (%)	13	14	12
Visual and Performing Arts, and Communications Technologies (%)	6	6	5
Humanities (%)	16	16	11
Social and Behavioural Sciences, and Law (%)	20	22	23
Business, Management and Public Administration (%)	13	12	17
Physical and Life Sciences, and Technologies (%)	5	6	9
Mathematics, Computer and Information Sciences (%)	1	1*	4
Architecture, Engineering and Related Technologies (%)	6	4	7
Agriculture, Natural Resources and Conservation (%)	7	7	3
Health, Parks, Recreation and Fitness (%)	12	12	10
Personal, Protective and Transportation Services (%)	1**	2**	F
Other (%)	Х	Х	Х
Family characteristics in 2002			
Married or living common-law (%)	35	35	32
With dependent children (%)	15	17	15
Employment equity groups in 2002			
Aboriginal people (%)	7	9	2
Disabled persons (%)	4	4	5
Visible minorities (%)	10	9	16
Citizenship at registry in program			
Canadian citizen by birth (%)	93	92	85
Canadian citizen by naturalization (%)	3	4	9
Landed immigrant (%)	3	3	5
Visa or foreign student (%)	Х	1**	1
Citizenship in 2002			
Canadian citizen by birth (%)	93	93	85
Canadian citizen by naturalization (%)	6	6	12
Landed immigrant (%)	1**	1	2
Visa or foreign student (%)	Х	Х	F
No status in Canada (%)	Х	Х	Х
Average duration of program if taken full-time (months)	4 4	43	40
In secondary school 12 months prior to entering program (%)	57	55	4 4
Educational activities after graduation			
Pursued further education after 2000 graduation (%)	36	37	41
Completed further education after 2000 graduation (%)	10	9	15
Enrolled in full-time education in 2002 (%)	16	17	15

Table A-1 (continued)

Characteristics of 2000 postsecondary graduates by level of study

	Manitoba – 2000 province of study	Manitoba – 2002 province of residence	All graduates
Master			
Number of graduates	600	600	29,200
Gender Women (%)	60	60	58
Age at graduation Average age (years) Median age (years) Under age 25 (%)	33	34	32
	31	31	29
	11	10*	17
Field of study (2000 program) Education (%) Visual and Performing Arts, and Communications Technologies (%) Humanities (%) Social and Behavioural Sciences, and Law (%) Business, Management and Public Administration (%) Physical and Life Sciences, and Technologies (%) Mathematics, Computer and Information Sciences (%) Architecture, Engineering and Related Technologies (%) Agriculture, Natural Resources and Conservation (%) Health, Parks, Recreation and Fitness (%) Personal, Protective and Transportation Services (%) Other (%)	26	28	15
	x	x	3
	12	14	10
	12	12	16
	11	13	27
	9	9	6
	x	x	4
	13	7	8
	7	7*	3
	9	7	8
	x	x	x
Family characteristics in 2002 Married or living common-law (%) With dependent children (%)	62	60	56
	34	36	31
Employment equity groups in 2002 Aboriginal people (%) Disabled persons (%) Visible minorities (%)	6	7	2
	5	5	4
	14	10	16
Citizenship at registry in program Canadian citizen by birth (%) Canadian citizen by naturalization (%) Landed immigrant (%) Visa or foreign student (%)	85	73	79
	6*	14*	10
	4*	x	6
	5	x	4
Citizenship in 2002 Canadian citizen by birth (%) Canadian citizen by naturalization (%) Landed immigrant (%) Visa or foreign student (%) No status in Canada (%)	85	85	79
	11	11	15
	3	4	5
	x	x	1
	x	x	F
Average duration of program if taken full-time (months)	39	36	26
In secondary school 12 months prior to entering program (%)			
Educational activities after graduation Pursued further education after 2000 graduation (%) Completed further education after 2000 graduation (%) Enrolled in full-time education in 2002 (%)	23	22	28
	4	6*	7
	12	10	14

Table A-1 (concluded)

Characteristics of 2000 postsecondary graduates by level of study

	Manitoba –	Manitoba –	
	2000 province	2002 province	
	of study	of residence	All graduates
Doctorate			
Number of graduates	100	100	4,200
Gender Women (%)	42	52	43
Age at graduation			
Average age (years)	36	36	35
Median age (years)	34	34	33
Under age 25 (%)	Х	Х	4
Field of study (2000 program)			,
Education (%)	X	X	6
Visual and Performing Arts, and Communications Technologies (%)	X	X	1
Humanities (%)	X	19*	12
Social and Behavioural Sciences, and Law (%)	14	19*	19
Business, Management and Public Administration (%)	X	X	3
Physical and Life Sciences, and Technologies (%)	33	16*	24
Mathematics, Computer and Information Sciences (%)	X	Х	4
Architecture, Engineering and Related Technologies (%)	19	Х	13
Agriculture, Natural Resources and Conservation (%)	X	X	4
Health, Parks, Recreation and Fitness (%)	12	Х	16
Personal, Protective and Transportation Services (%)	Х	Х	X
Other (%)	8	Х	F
Family characteristics in 2002			7.1
Married or living common-law (%)	64	66	71
With dependent children (%)	49	38	45
Employment equity groups in 2002	v		1
Aboriginal people (%)	X	X	1
Disabled persons (%)	X 20*	X 1.F.*	3
Visible minorities (%)	20*	15*	19
Citizenship at registry in program Canadian citizen by birth (%)	73	82	68
Canadian citizen by naturalization (%)	7.5 1.4*		13
Landed immigrant (%)		X	8
Visa or foreign student (%)	X X	X X	11
Citizenship in 2002			
Canadian citizen by birth (%)	73	82	68
Canadian citizen by naturalization (%)	21*	12**	25
Landed immigrant (%)	X	X	5
Visa or foreign student (%)	X	X	1
No status in Canada (%)	X	X	X
Average duration of program if taken full-time (months)	68	55	62
In secondary school 12 months prior to entering program (%)			
Educational activities after graduation			
Pursued further education after 2000 graduation (%)	Х	Х	11
Completed further education after 2000 graduation (%)	X	Х	4
Enrolled in full-time education in 2002 (%)	Х	Х	6

Notes: Numbers of graduates are rounded to the nearest 100.

Table A-2
Educational activity of the Class of 2000 prior to entry into program

	Manitoba – 2000 province of study	Manitoba – 2002 province of residence	All graduates	Graduates excluding Quebec
College				
No previous postsecondary activity (%)	69	70	64	63
Entered directly from secondary school (%)	24	23	36	31
Delayed entry from secondary school (%)	45	47	28	32
Previous postsecondary activity (%)	30	30	35	36
Incomplete previous postsecondary (%)	16	15	15	14
Completed previous postsecondary (%)	14	14	20	22
Previously completed trade/vocational (%)	2*	2*	2	2
Previously completed college (%)	6	6	9	9
Previously completed university (%)	7	6	10	11
Bachelor				
No previous postsecondary activity (%)	72	70	53	68
Entered directly from secondary school (%)	57	55	4 4	58
Delayed entry from secondary school (%)	15	15	8	10
Previous postsecondary activity (%)	28	30	47	32
Incomplete previous postsecondary (%)	9	10	10	8
Completed previous postsecondary (%)	19	20	37	23
Previously completed trade/vocational (%)	1**	F	1	1
Previously completed college (%)	4	6*	20	6
Previously completed university (%)	14	13	16	17

Table A-3
Mobility of the Class of 2000 graduates

	Residence before enrolling	Student m	igration	Province of institution	Graduate m	igration	Residence	Stude	ent mobility ¹		Grad	uate mobility [;]	2	Overall mobility ³
	in 2000			(2000			t interview			et student			graduate	Net overall
	program	Out	In	program)	Out	In	(2002)	Out (%)	In (%) mo	obility (%)	Out (%)	In (%) mo	bility (%)	mobility (%)
College														
Newfoundland and Labrador	1,720	150*	110	1,670	420	160**	1,420	9 *	6	-2	25	10	-16	-17
Prince Edward Island	760	F	300	980	380	90**	690	F	39	F	39	9	-30	-9
Nova Scotia	4,070	490*	210	3,790	480	680	3,990	12	5	-7	13	18	5	-2
New Brunswick	2,700	260*	190	2,630	340	350	2,640	10	7	-3	13	13	F	-2
Quebec	16,340	890*	170*	15,620	400	960*	16,170	5 *	1	-4	3	6	4	-1
Ontario	49,300	230	2,190	51,250	2,350	870	49,770	1	4	4	5	2	-3	1
Manitoba	2,500	F	100	2,460	190	230**	2,510	F	4	F	8	9	2	F
Saskatchewan	2,680	230*	100	2,550	330	250*	2,470	9*	4	-5	13	10	-3	-8
Alberta	5,440	420*	450	5,470	410	1,450	6,510	8	8	1*	8	27	19	20
British Columbia	14,430	360*	520	14,590	1,070	820*	14,350	3 *	4	1	7	6	-2	-1
Territories	440	150**	F	300	30**	100*	370	33 *	F	F	9**	33	23	-16
United States	F	F				440 *	440*	100						
Other Countries	820*	820*						100						
Bachelor														
Newfoundland and Labrador	2,220	500	100	1,830	520	350	1,660	22	5	-18	29	19	-9	-25
Prince Edward Island	740	320**	90	510	180	230*	560	44	12	-31	35	45	10	-24
Nova Scotia	4,530	720	1,610	5,410	2,390	730	3,750	16	36	20	44	13	-31	-17
New Brunswick	3,090	800*	860	3,150	1,280	640*	2,510	26	28	2	41	20	-20	-19
Quebec	32,210	1,240*	2,260	33,220	2,810	1,650	32,070	4	7	3	8	5	-3	F
Ontario	51,050	2,480	3,790	52,360	4,140	5,030	53,250	5	7	3	8	10	2	4
Manitoba	4,690	580*	420	4,530	810	470*	4,190	12 *	9	-3	18	10	-8	-11
Saskatchewan	4,450	500	540	4,490	1,370	470	3,590	11	12	1	30	10	-20	-19
Alberta	10,540	980	1,480	11,040	1,430	2,480	12,090	9	14	5	13	22	10	15
British Columbia	16,120	1,780	1,500	15,840	2,210	1,900	15,530	11	9	-2	14	12	-2	-4
Territories	230*	210*	Х	Х	Х	350*	370*	91	Х	Х	Х	Х	Х*	* 61
United States	540*	540*				2,840	2,840	100						
Other Countries	1,980	1,980		**	• •		• •	100			**			
Master														
Newfoundland and Labrador	460	170	50	340	100	140	380	38	11	-26	28	41	12	-17
Prince Edward Island	60*	50*	F	20 *	F	40 *	50*	79**	Х	Х	Х	Х	Х	-17
Nova Scotia	860	250*	370	980	450	180	720	29	43	14	46	18	-28	-16
New Brunswick	540	210*	90	430	140	130 *	420	38 *	17	-22	33	30	-2*	-22
Quebec	8,260	490*	940	8,710	1,040	560*	8,230	6	11	5	12	6	-6	F
Ontario	11,090	870	1,900	12,120	1,410	1,600	12,300	8	17	9	12	13	2	11
Manitoba	740	220**	90	610	150	100	560	30 *	12	-18	24	16	-8	-24
Saskatchewan	640	140*	190	690	230	100*	550	22	30	8	34	14	-19	-14
Alberta	1,770	400*	580	1,950	540	500	1,910	23	33	10	28	26	-2	8
British Columbia	3,080	500	670	3,250	710	470	3,020	16	22	6	22	14	-7	-2
Territories	50**	50**				90**	90**	100						F
United States	210*	210*				860	860	100						
Other Countries	1,340	1,340					• •	100						

Table A-3 (concluded)

Mobility of the Class of 2000 graduates

	Residence before enrolling	Student m	igration	Province of institution	Graduate mi	gration	Residence	Stud	lent mobility ¹		Gra	duate mobility²	!	Overall mobility ³
	in 2000 program	Out	In	(2000 program)	Out	In	nt interview (2002)	Out (%)	Ne In (%) mo	t student bility (%)	Out (%)	Net In (%) mol	graduate bility (%)	Net overall mobility (%)
Doctorate														
Newfoundland and Labrador	40	20*	10	30	10	30**	40*	54	25	-25	х	100	67	F
Prince Edward Island	10**	10**	F	10**	10**	Х	х	Х	х	Х	Х	Х	Х	х
Nova Scotia	60	30*	40**	70	40 *	60	90	53	67	17	55*	86	29	50
New Brunswick	70	60	20 *	40	20 *	50	60	77	29	-57	60 *	125	75	-14
Quebec	1,290	90	250	1,450	330	110*	1,230	7	19	12	23	8	-15	-5
Ontario	1,320	170	300	1,450	440	290	1,300	13	23	10	30	20	-10	-2
Manitoba	110	40	20*	80	40	60*	100	40	18	-18	46	75	25	-9
Saskatchewan	90	20	40 *	100	50 *	30	80	26	44	22	46	30	-20	-11
Alberta	400	70	130	460	170	120	420	17	33	15	36	26	-11	5
British Columbia	320	60	200	460	200	100	360	18	63	44	43	22	-22	13
Territories	Х	Х				Х	х	Х						
United States	90**	90**				460	460	100						
Other Countries	340	340						100						
Total college and univers	ity													
Newfoundland and Labrador	4,450	850	270	3,870	1,050	670	3,500	19	6	-13	64	17	-10	-21
Prince Edward Island	1,570	450*	400	1,520	570	370	1,320	29	26	-3	65	24	-13	-16
Nova Scotia	9,520	1,500	2,230	10,250	3,350	1,650	8,550	16	23	8	49	16	-17	-10
New Brunswick	6,410	1,320	1,160	6,240	1,780	1,170	5,630	21	18	-3	66	19	-10	-12
Quebec	58,090	2,700	3,610	59,000	4,580	3,280	57,700	5	6	2	72	6	-2	-1
Ontario	112,760	3,750	8,170	117,180	8,340	7,790	116,620	3	7	4	93	7	-1	3
Manitoba	8,040	980	630	7,690	1,180	850	7,360	12	8	-4	72	11	-4	-9
Saskatchewan	7,860	890	860	7,830	1,980	840	6,690	11	11	F	42	11	-15	-15
Alberta	18,140	1,860	2,650	18,920	2,550	4,550	20,920	10	15	4	178	24	11	15
British Columbia	33,950	2,700	2,890	34,150	4,190	3,290	33,250	8	9	1	79	10	-3	-2
Territories	720	410	F	320	30**	540	830	57	F	-56	F	169	159	15
United States	970	970				4,590	4,590	100						
Other Countries	4,480	4,480						100						

- 1. Student mobility is defined as a percentage of students residing in the province before enrolling.
- 2. Graduate mobility is defined as a percentage of graduates residing in the province at graduation.
- 3. Overall mobility is defined as the difference between the number of graduates two years after graduation and the number of students before enrolling, as a percentage of the number of students residing in the province before enrolling.

Notes: Numbers are rounded to the nearest 10, but analysis is carried out on unrounded numbers.

Table A-4

Profile of graduates living in Manitoba, by migration into and out of the province

			Migrants		
	Non-migrants	Out of Manitoba	Into Manitoba	Both out of and into Manitoba	All graduates in Manitoba
Gender Women (%)	62	55	52	60	60
Age at graduation					
Average age (years)	27	26	27	29	2
Median age (years)	23	24	24	26	24
Under age 25 (%)	58	51	51	36	55
Level of study					
College (%)	36	15*	28*	14*	30
Bachelor (%)	57	63	56	67	58
Master (%)	7	18*	11	15	1(
Doctorate (%)	1	4	5**	4*	2
Family characteristics in 2002					
Married or living common-law (%)	39	36	32	42	38
With dependent children (%)	23	12*	19	31	21
Employment equity groups in 2002					
Aboriginal people (%)	11	F	F	19* *	•
Disabled persons (%)	4	4*	6*	F	2
Visible minorities (%)	9	10	9*	9**	ç
Mother tongue					
English (%)	84	85	87	72	84
French (%)	4	6*	F	F	4
Other than English and French (%)	12	11	11**	24*	12
Citizenship in 2002					
Canadian citizen by birth (%)	92	92	89	93	92
Canadian citizen by naturalization (%)	6	6	F	4*	
Landed immigrant (%)	1*	F	3*	2**	
Visa or foreign student (%)	Х	Х	Х	Х	2
No status in Canada (%)	Х	Х	Х	Х)
Educational activities after graduation		_			
Pursued further education after 2000 graduation (%)	29	36	36	27	3
Completed further education after 2000 graduation (%)	7	15* *	7 * *	9*	9
Enrolled in full-time education in 2002 (%)	12	20*	21* *	8**	14

Notes: This table includes only graduates who have ever lived in Manitoba, either prior to enrolling to their studies, during their studies or at the time of the 2002 interview.

Table A-5
Labour force activity of 2000 graduates in 2002 by gender and level of study

	Manitoba — 2000 province	Manitoba – 2002 province	
	of study	of residence	All graduates
College			
Number of graduates	1,900	2,000	75,000
Employed (%)	91	91	90
Employed full-time (%) Employed part-time (%)	82 9	82 8	81 9
Out of the labour force (%)	4	4	3
Unemployment rate	6	6	7
Number of male graduates	800	800	32,100
Employed (%)	93	93	89
Employed full-time (%)	89	90	84
Employed part-time (%) Out of the labour force (%)	X X	X X	4 3 *
Unemployment rate	6	6*	9
Number of female graduates	1,200	1,200	42,900
Employed (%)	89	89	91
Employed full-time (%)	77	77	78
Employed part-time (%)	12	11	12
Out of the labour force (%) Unemployment rate	5 6	6 6	4
Bachelor			
Number of graduates	2,900	2,600	78,900
Employed (%)	93	91	90
Employed full-time (%)	84	82	81
Employed part-time (%) Out of the labour force (%)	8 4	9 3*	8
Unemployment rate	4	6*	7
Number of male graduates	1,100	1,000	31,300
Employed (%)	95	94	89
Employed full-time (%)	90	87	83
Employed part-time (%) Out of the labour force (%)	5*	6* V	5 3*
Unemployment rate	X 3**	X F	8
Number of female graduates	1,800	1,700	47,500
Employed (%)	91	90	90
Employed full-time (%)	81	79	79
Employed part-time (%) Out of the labour force (%)	10 5*	10 4*	10 5
Unemployment rate	3 4*	6*	6
Master			
Number of graduates	500	400	20,900
Employed (%)	92	92	91
Employed full-time (%)	85	85	84
Employed part-time (%) Out of the labour force (%)	7* X	X X	7
Unemployment rate	X	X	5
Number of male graduates	200	200	8,800
Employed (%)	97	95	94
Employed full-time (%)	93	91	90
Employed part-time (%) Out of the labour force (%)	X	X	3 2*
	X	X	.,

Table A-5 (concluded)

Labour force activity of 2000 graduates in 2002 by gender and level of study

	Manitoba – 2000 province of study	Manitoba – 2002 province of residence	All graduates
Master (concluded)			
Number of female graduates Employed (%) Employed full-time (%) Employed part-time (%) Out of the labour force (%) Unemployment rate	300 89 80 x x	300 89 81 x x	12,100 89 79 9 5
Doctorate	۸		0
Number of graduates Employed (%) Employed full-time (%) Employed part-time (%) Out of the labour force (%) Unemployment rate	100 99 94 x x	100 97 95 x x	3,700 90 82 6 3 6
Number of male graduates Employed (%) Employed full-time (%) Employed part-time (%) Out of the labour force (%) Unemployment rate	F 100 100 x x	F 100 100 x x x	2,200 92 86 4 2 5
Number of female graduates Employed (%) Employed full-time (%) Employed part-time (%) Out of the labour force (%) Unemployment rate	F 97 x x x x	100* 95 90 x x x	1,600 88 76 9 5 8

Notes: The sum of full-time employed and part-time employed may not add up to total employed because data on hours worked are not always reported.

Graduates who pursued further education after their 2000 graduation are excluded from this table, as are graduates for whom a labour force status could not be calculated.

The unemployment rate is the percentage unemployed out of the total of employed and unemployed.

Numbers of graduates are rounded to the nearest 100. Totals may not add up due to rounding.

Table A-6
Estimated gross annual earnings of 2000 graduates working full-time in 2002, by gender and level of study

	Manitoba –	Manitoba –	
	2000	2002	
	province	province	
	of study	of residence	All graduates
College			
All graduates			
25th percentile	21,800	21,600	24,000
Median	26,500	26,700	31,200
75th percentile	35,000	35,000	40,000
Male	05.000	0.4.700	07.000
25th percentile	25,000	24,600	27,000
Median	31,200	31,200	35,000
75th percentile	41,600	40,000	44,000
Female 25th percentile	20.000	20.000	22.400
25th percentile	20,800	20,800	22,400
Median	24,500	24,800	28,600
75th percentile	30,300	31,000	35,600
Bachelor			
All graduates 25th percentile	28,100	26,000	31,000
Median	36,000	35,100	39,000
75th percentile	44,200	43,000	49,000
	44,200	43,000	49,000
Male 25th percentile	28,800	27,000	33,600
Median	36,400	35,100	42,000
75th percentile	45,000	43,300	53,000
Female			
25th percentile	28,000	26,000	30,000
Median	36,000	35,100	37,000
75th percentile	42,900	42,000	45,000
Master			
All graduates			
25th percentile	40,000	40,000	41,000
Median	50,000	50,000	52,000
75th percentile	60,000	60,000	66,000
Male		07.000t	
25th percentile	39,300	37,000*	44,200
Median	48,000	48,000	57,200
75th percentile	60,000	60,000	75,000
Female	44.000	40.000	20.000
25th percentile	41,300	40,000	39,000
Median	52,000	52,000	50,000
75th percentile	58,700	58,900	60,000
Doctorate			
All graduates	47.000	40.000**	40 500
25th percentile	47,000	40,000**	43,500
Median	56,500	48,000	56,100
75th percentile	73,000	62,000	71,500
Male 25th percentile	V	41,000*	45,000
Median	X	50,000	57,800
75th percentile	X	70,000	73,000
75th percentile	Х	70,000	73,000

Table A-6 (concluded)

Estimated gross annual earnings of 2000 graduates working full-time in 2002, by gender and level of study

	Manitoba – 2000 province of study	Manitoba – 2002 province of residence	All graduates
Doctorate (concluded)			
Female			
25th percentile	Х	X	42,000
Median	X	X	55,000
75th percentile	X	Х	68,000

Notes: Graduates who pursued further education after their 2000 graduation are excluded from this table.

All numbers are rounded to the nearest 100, but analysis is carried out on unrounded values.

Caution is advised when comparing estimates. High sampling variability errors for some estimates means that many apparent differences are not statistically significant. When differences are significant, they are generally noted in the text.

Table A-7
Incidence and average amount of government student debt at time of graduation (\$ constant 2000)

		Class of 1995			Class of 2000	
	Manitoba – 1995 province of study	Manitoba – 1997 province of residence	All graduates	Manitoba – 2000 province of study	Manitoba – 2002 province of residence	All graduates
College						
Owed at graduation (%) Amount owed at graduation (\$) % increase between the two classes	21 8,800 	22 9,100 	41 10,300 	24 10,400 19	24 10,700 18	40 12,500 21
Bachelor						
Owed at graduation (%) Amount owed at graduation (\$) % increase between the two classes	33 12,900 	32 12,700 	43 14,500 	34 17,900 39	34 18,200 43	44 19,000 31
Master						
Owed at graduation (%) Amount owed at graduation (\$) % increase between the two classes	21 13,900 	20 14,100 	35 14,700 	25 18,500 33	25 17,400 23	39 18,300 24
Doctorate						
Owed at graduation (%) Amount owed at graduation (\$) % increase between the two classes	х х 	x x 	25 13,800 	28* 10,300 	23 18,000 	39 19,700 45

Notes: For comparability, data include only graduates in Canada who have not completed any further education.

Amounts were rounded to the nearest 100 but ananalysis is carried out on unrounded values.

Table A-8

Profile of 2000 graduates who owed money to government student loans at graduation, by level of study and status of debt two years after graduation

	Manitoba province		Manitoba province of		All gra	duates
	Graduates with debt remaining two years after graduation	Graduates without debt two years after graduation	Graduates with debt remaining two years after graduation	Graduates without debt two years after graduation	Graduates with debt remaining two years after graduation	Graduates without debt two years after graduation
College						
Number of graduates	400	100	400	100	23,500	5,100
Average debt at graduation (\$) Large debt at graduation – \$25,000 and over (%) Average debt two years after graduation (\$) Large debt two years after graduation – \$25,000 and over (%)	11,900 5* 9,400 6*		12,500 5* 10,100 6*		13,600 14 10,300 6	7,900 F
Percentage of debt paid off two years after graduation	21	100	19	100	24	100
Reported difficulties repaying debt (%)	35	Х	39	х	34	9 '
Employed in 2002 (%)	93	93	94	93	88	94
Without income in 2001 (%)	Х	Х	Х	Х	1*	* X
Average amount paid in 2001 (\$) Average income in 2001 (\$)	2,000 23,000	 29,700	2,000 23,800	27,300	1,900 25,800	32,000
Ratio of debt payments to income Debt servicing ratio – 25th percentile	9	•••	8 4 *	•••	7	• • •
Debt servicing ratio – Median	8		8	***	6	•••
Debt servicing ratio – 75th percentile	13		12		10	
Average age at graduation (years)	27	27	27	26	26	26
Median age at graduation (years)	24	23	25	23	24	23
Married or living common-law (%)	38	50	35	48	37	34
With dependent children (%)	31	29 *	30	27 *	28	21
With previous postsecondary education (%)	23	25 *	21	31	30	38
Bachelor						
Number of graduates	800	200	700	200	26,400	7,400
Average debt at graduation (\$)	21,100	10,600	21,500	10,100	21,200	13,200
Large debt at graduation – \$25,000 and over (%)	34	17 *	38	16**	35	18
Average debt two years after graduation (\$)	16,700		17,200		16,300	
Large debt two years after graduation – \$25,000 and over (%)			25		22	
Percentage of debt paid off two years after graduation Reported difficulties repaying debt (%)	21 28	100 8**	20 31	100 9	23 28	100
Employed in 2002 (%)	93	o 96	90	9 95	90	90
Without income in 2001 (%)	5*		4*		1*	
Average amount paid in 2001 (\$)	2,900		3,000		2,900	
Average income in 2001 (\$)	30,200	36,300	30,100	35,900	32,500	36,700
Ratio of debt payments to income	10		10		9	
Debt servicing ratio – 25th percentile	5		5		4	
Debt servicing ratio – Median	9		10		8	
Debt servicing ratio – 75th percentile	15		15		13	•••
Average age at graduation (years)	26	25	25	25	26	26
Median age at graduation (years)	24	24	24	24	24	24
Married or living common-law (%)	40	42	36	43	37	38
With dependent children (%)	18	15**	20	16**	18	14
With previous postsecondary education (%)	44	52	44	51	32	40

Table A-8 (concluded) Profile of 2000 graduates who owed money to government student loans at graduation, by level of study

and status of debt two years after graduation

Manitoba - 2000 Manitoba - 2002 province of study province of residence All graduates Graduates with Graduates Graduates with Graduates Graduates with Graduates debt remaining without debt debt remaining without debt debt remaining without debt two years after graduation graduation graduation graduation graduation graduation Master Number of graduates 100 F 100 F 5.600 2.100 Average debt at graduation (\$) 19.300 12.900 19,300 9,000 20.600 11.800 Large debt at graduation - \$25,000 and over (%) 30 28 103 Χ Х 32 Average debt two years after graduation (\$) 15,300 15,700 16,100 Large debt two years after graduation - \$25,000 and over (%) 23 24 * 21 Percentage of debt paid off two years after graduation 21 100 19 100 22 100 Reported difficulties repaying debt (%) 27 * 28* 25 F Х Х Employed in 2002 (%) 98 100 98 93 89 92 F Without income in 2001 (%) Х Χ Х Х F Average amount paid in 2001 (\$) 3,700 3,600 3,000 37,700 Average income in 2001 (\$) 34,000 41,000 33,600 39,400 48,700 Ratio of debt payments to income 11 11 8 4** 4** Debt servicing ratio - 25th percentile 3 6** Debt servicing ratio - Median 6** 6 Debt servicing ratio - 75th percentile 14 14 11 Average age at graduation (years) 30 30 30 31 29 30 Median age at graduation (years) 30 28 28 28 27 28 Married or living common-law (%) 54 41 49 48 59 61 With dependent children (%) 193 20 * 20 27 Χ Х With previous postsecondary education (%) Χ Χ F Χ Χ Χ **Doctorate** F F F Number of graduates 1,000 400 Average debt at graduation (\$) 7,700 18,500 17,100 21,200 13,700 Χ Large debt at graduation - \$25,000 and over (%) 21 25 32 15 Х Average debt two years after graduation (\$) 13,700 16,400 Х Large debt two years after graduation - \$25,000 and over (%) 22 Percentage of debt paid off two years after graduation 100 26 100 23 100

Notes: Graduates who pursued further education after their 2000 graduation are excluded from this table.

Averages and numbers are rounded to the nearest 100, but analysis is carried out on unrounded values. Caution is advised when comparing estimates. High sampling variability errors for some estimates means that many apparent differences are not statistically significant. When differences are significant, they are generally noted in the text.

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Х

100

2.600

49.200

12

100

41,200

35

38

Χ

Χ

Х

F

With previous postsecondary education (%)

Reported difficulties repaying debt (%)

Employed in 2002 (%)

Without income in 2001 (%)

Average income in 2001 (\$)

Debt servicing ratio - Median

Average amount paid in 2001 (\$)

Ratio of debt payments to income

Debt servicing ratio - 25th percentile

Debt servicing ratio - 75th percentile

Average age at graduation (years)

Median age at graduation (years)

With dependent children (%)

Married or living common-law (%)

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Table A-9

Profile of 2000 graduates who owed money to government student loans at graduation, by level of study

	Manitoba — 2000 province of study	Manitoba – 2002 province of residence	All graduates
Callaga	or study	of residence	All gladdates
College	500	500	00.400
Number of graduates	500	500	28,600
Average debt at graduation (\$) Large debt at graduation – \$25,000 and over (%)	10,500 x	11,000 x	12,600 12
Average debt two years after graduation (\$)	7,500	8,100	8,500
Large debt two years after graduation – \$25,000 and over (%)	X	χ	5
Percentage of debt paid off two years after graduation	29	26	33
Reported difficulties repaying debt (%)	29	32	30
Employed in 2002 (%)	93	94	89
Without income in 2001 (%)	Х	Х	1**
Average income in 2001 (\$)	24,400	24,500	26,900
Average age at graduation (years)	27	27	26
Median age at graduation (years)	24	24	24
Married or living common-law (%) With dependent children (%)	41 31	37 30	36 27
With previous postsecondary education (%)	33	36	39
Bachelor			
Number of graduates	1,000	900	33,900
Average debt at graduation (\$)	18,900	19,100	19,500
Large debt at graduation – \$25,000 and over (%)	31	33	31
Average debt two years after graduation (\$)	13,100	13,600	12,700
_arge debt two years after graduation – \$25,000 and over (%)	18	20	18
Percentage of debt paid off two years after graduation	31	29	35
Reported difficulties repaying debt (%)	23 94	26 91	24 90
Employed in 2002 (%) Nithout income in 2001 (%)	4**	У X	1*
Average income in 2001 (\$)	31,500	31,200	33,400
Average age at graduation (years)	26	25	26
Median age at graduation (years)	24	24	24
Married or living common-law (%)	40	38	38
Nith dependent children (%) Nith previous postsecondary education (%)	18	19	17
, , , , , , , , , , , , , , , , , , ,	39	41	57
Master	400	400	7.700
Number of graduates	100	100	7,700
Average debt at graduation (\$)	17,800	17,000	18,200
Large debt at graduation – \$25,000 and over (%) Average debt two years after graduation (\$)	25 11,700	x 12,200	26 11,700
Large debt two years after graduation – \$25,000 and over (%)	11,700 X	12,200 X	15
Percentage of debt paid off two years after graduation	34	28	36
Reported difficulties repaying debt (%)	X	Х	20
Employed in 2002 (%)	99	97	90
Nithout income in 2001 (%)	Х	Х	Х
Average income in 2001 (\$)	35,600	34,500	41,900
Average age at graduation (years)	30	30	29
Median age at graduation (years)	29	28	27
Married or living common-law (%) Nith dependent children (%)	56 x	43 x	51 22
	V	Y	, ,

Table A-9 (concluded)

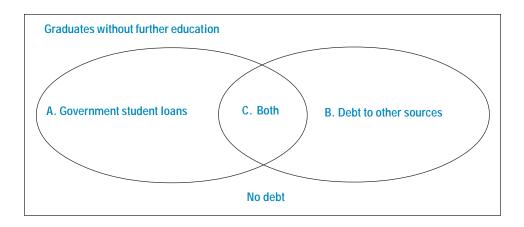
Profile of 2000 graduates who owed money to government student loans at graduation, by level of study

	Manitoba – 2000 province of study	Manitoba – 2002 province of residence	All graduates
Doctorate			
Number of graduates	х	х	1,400
Average debt at graduation (\$)	Х	Х	19,000
Large debt at graduation – \$25,000 and over (%)	Х	Х	27
Average debt two years after graduation (\$)	Х	Х	11,600
Large debt two years after graduation - \$25,000 and over (%)	Х	Х	15
Percentage of debt paid off two years after graduation			39
Reported difficulties repaying debt (%)	Х	Х	17
Employed in 2002 (%)	Х	Х	91
Without income in 2001 (%)	Х	Х	1**
Average income in 2001 (\$)	Х	Х	57,600
Average age at graduation (years)	Х	Х	33
Median age at graduation (years)	Χ	Х	32
Married or living common-law (%)	Х	Х	68
With dependent children (%)	Х	Х	41
With previous postsecondary education (%)	Х	Х	99

Notes: Graduates who pursued further education after their 2000 graduation are excluded from this table.

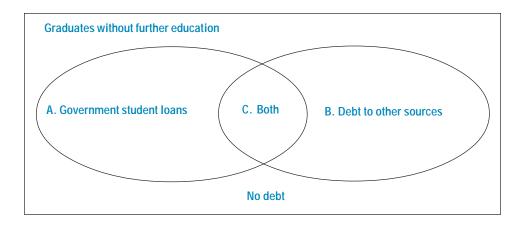
Averages and numbers are rounded to the nearest 100, but analysis is carried out on unrounded values.

Table A-10
Student debt from all sources, by level of study (Class of 2000)



	Manitoba – 2000 province of study	Manitoba – 2002 province of residence	All graduates
College			
Graduates who owed money for their education to any source (government or non-government) (A+B+C)			
Percentage of graduates who owed student debt to any source	36	35	49
Average debt owed to all sources at time of graduation (\$)	10,100	10,200	12,700
Percentage of graduates with debt who had paid it off two years after graduation	26	25	20
Average debt remaining two years after graduation for those who still owed (\$)	9,200	9,500	10,600
Graduates who owed student debt to government student loan programs (A+C)			
Percentage of graduates who owed government student loans	24	24	41
Large debt at graduation – \$25,000 and over (%)	Х	Х	4
Average debt owed to government student loan programs at time of graduation (\$)	10,500	11,000	12,600
Percentage of graduates with debt who had paid it off two years after graduation	20	20	18
Average debt remaining two years after graduation for those who still owed (\$)	9,400	10,100	10,300
Graduates who owed money to non-government sources for their education (B+C)			
Percentage of graduates who owed non-government student debt	17	16	16
Average debt owed to non-government sources at time of graduation (\$)	6,500	6,000	6,800
Percentage of graduates with debt who had paid it off two years after graduation	42	41	40
Average debt remaining two years after graduation for those who still owed (\$)	5,800	5,300	6,800
Graduates who owed ONLY government student loan programs (A)			
Percentage of graduates who owed ONLY government student loans	19	19	33
Average debt owed to government student loan programs at time of graduation (\$)	10,300	10,900	12,500
Percentage of graduates with debt who had paid it off two years after graduation	17	18	17
Average debt remaining two years after graduation for those who still owed (\$)	9,300	10,200	10,400
Graduates who owed ONLY to non-government sources for their education (B)			
Percentage of graduates who owed ONLY non-government student debt	11	11	8
Average debt owed to non-government sources at time of graduation (\$)	6,400	5,800	7,100
Percentage of graduates with debt who had paid it off two years after graduation	40	39	42
Average debt remaining two years after graduation for those who still owed (\$)	5,500	5,000	7,200
Graduates who owed to BOTH government and non-government sources for			
their education (C) Percentage of graduates who owed BOTH government and non-government student debt	6	5	8
Average debt owed to both sources at time of graduation (\$)	17,100	16,800	19,200
Percentage of graduates with debt who had paid it off two years after graduation	17,100	16,800	19,200
Average debt remaining two years after graduation for those who still owed (\$)	16,800	16,100	16,300
- Average dept remaining two years after graduation for those who still owed (\$)	10,000	10,100	10,300

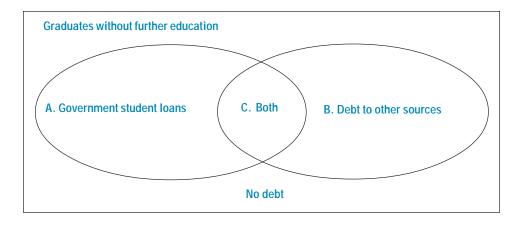
Table A-10 (continued)
Student debt from all sources, by level of study (Class of 2000)



Manitoba – 2002	
province	
of residence	All graduates
45	53
19,600	20,500
24	23
17,700	17,200
35	45
12	13
19,100	19,500
21	22
17,200	16,300
20	19
10,800	10,800
39	38
10,900	10,600
25	34
19,000	19,300
22	22
17,500	16,300
10	8
10,300	9,500
	45
10,100	8,600
10	11
	32,200
	· ·
	28,300
0	7 48 0 10,100 0 10 0 30,200 3** 6* 0 27,700

Table A-10 (continued)

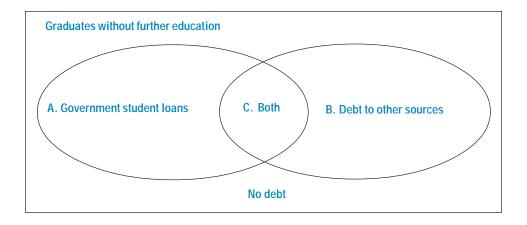
Student debt from all sources, by level of study (Class of 2000)



	Manitoba – 2000 province of study	Manitoba – 2002 province of residence	All graduates
Master	,		
Graduates who owed money for their education to any source			
(government or non-government)(A+B+C)			
Percentage of graduates who owed student debt to any source	36	36	45
Average debt owed to all sources at time of graduation (\$)	17,800	18,600	20,300
Percentage of graduates with debt who had paid it off two years after graduation	20	Х	27
Average debt remaining two years after graduation for those who still owed (\$)	14,600	16,300	17,500
Graduates who owed student debt to government student loan programs (A+C)			
Percentage of graduates who owed government student loans	26	26	38
Large debt at graduation – \$25,000 and over (%)	7	X	9
Average debt owed to government student loan programs at time of graduation (\$)	17,800	17,000	18,200
Percentage of graduates with debt who had paid it off two years after graduation	Х	Х	28
Average debt remaining two years after graduation for those who still owed (\$)	15,300	15,700	16,100
Graduates who owed money to non-government sources for their education (B+C)			
Percentage of graduates who owed non-government student debt	18	19	15
Average debt owed to non-government sources at time of graduation (\$)	9,500	12,200*	14,100
Percentage of graduates with debt who had paid it off two years after graduation	36	Х	39
Average debt remaining two years after graduation for those who still owed (\$)	10,000*	12,600	14,000
Graduates who owed ONLY government student loan programs (A)			
Percentage of graduates who owed ONLY government student loans	19	17	30
Average debt owed to government student loan programs at time of graduation (\$)	19,700	18,000	17,600
Percentage of graduates with debt who had paid it off two years after graduation	21	21*	27
Average debt remaining two years after graduation for those who still owed (\$)	17,000	17,500	15,300
Graduates who owed ONLY to non-government sources for their education (B)			
Percentage of graduates who owed ONLY non-government student debt	10	10	7
Average debt owed to non-government sources at time of graduation (\$)	9,600	12,700	14,400
Percentage of graduates with debt who had paid it off two years after graduation	29*	22*	47
Average debt remaining two years after graduation for those who still owed (\$)	9,100* *	10,300*	14,300
Graduates who owed to BOTH government and non-government sources for			
their education (C) Percentage of graduates who owed BOTH government and non-government student debt	8*	9*	8
Average debt owed to both sources at time of graduation (\$)	24,000	26,600	35,100
Percentage of graduates with debt who had paid it off two years after graduation	24,000 X	20,000 X	10*
Average debt remaining two years after graduation for those who still owed (\$)	16,800	26,600	33,500
Average debt remaining two years after graduation for those who still owed (\$)	16,800	26,600	33,500

Table A-10 (concluded)

Student debt from all sources, by level of study (Class of 2000)



	Manitoba – 2000 province of study	Manitoba – 2002 province of residence	All graduates
Doctorate			
Graduates who owed money for their education to any source			
(government or non-government)(A+B+C)			
Percentage of graduates who owed student debt to any source	43	34	45
Average debt owed to all sources at time of graduation (\$) Percentage of graduates with debt who had paid it off two years after graduation	20,700*	24,600	23,900 28
Average debt remaining two years after graduation for those who still owed (\$)	X X	X X	20,700
Graduates who owed student debt to government student loan programs (A+C)			-
Percentage of graduates who owed government student loans	Х	Х	38
Large debt at graduation – \$25,000 and over (%)	X	Х	10
Average debt owed to government student loan programs at time of graduation (\$)	Х	Х	19,000
Percentage of graduates with debt who had paid it off two years after graduation	Х	X	29
Average debt remaining two years after graduation for those who still owed (\$)	Х	Х	16,400
Graduates who owed money to non-government sources for their education (B+C)			
Percentage of graduates who owed non-government student debt	Х	Х	19
Average debt owed to non-government sources at time of graduation (\$)	X	Х	19,300
Percentage of graduates with debt who had paid it off two years after graduation Average debt remaining two years after graduation for those who still owed (\$)	X X	X X	34 17,900
	^	Λ	17,700
Graduates who owed ONLY government student loan programs (A)	14*	16*	2.4
Percentage of graduates who owed ONLY government student loans Average debt owed to government student loan programs at time of graduation (\$)	15,600	18,200	26 17,900
Percentage of graduates with debt who had paid it off two years after graduation	13,000 X	10,200 X	32
Average debt remaining two years after graduation for those who still owed (\$)	X	X	15,300
Graduates who owed ONLY to non-government sources for their education (B)			
Percentage of graduates who owed ONLY non-government student debt	16*	11**	7
Average debt owed to non-government sources at time of graduation (\$)	30,000**	34,300*	15,400
Percentage of graduates with debt who had paid it off two years after graduation	Х	X	39
Average debt remaining two years after graduation for those who still owed (\$)	21,500*	Х	14,400
Graduates who owed to BOTH government and non-government sources for their education (C)			
Percentage of graduates who owed BOTH government and non-government student debt	13**	Х	12
Average debt owed to both sources at time of graduation (\$)	15,000	X	42,800
Percentage of graduates with debt who had paid it off two years after graduation	Х	Х	10
Average debt remaining two years after graduation for those who still owed (\$)	Х	Х	38,800

Notes: Graduates who pursued further education after their 2000 graduation are excluded from this table.

Averages and numbers are rounded to the nearest 100, but analysis is carried out on unrounded values.

Table A-11
Characteristics of 2000 college and bachelor graduates by Aboriginal status and 2002 location of residence

	Aboriginal graduates living in Manitoba – 2002	Non-aboriginal graduates living in Manitoba – 2002	Aboriginal graduates not living in Manitoba – 2002
College			
Number of graduates	400	2,100	3,400
Gender Women (%)	69	59	66
Age at graduation			
Average age (years)	32	26	29
Median age (years)	29	23	26
Under age 25 (%)	24	61	41
Field of study (2000 program)			
Education (%)	5*	F	6**
Visual and Performing Arts, and Communications Technologies (%)	Х	4	6**
Humanities (%)	2*	1**	F
Social and Behavioural Sciences, and Law (%)	Х	2**	3*
Business, Management and Public Administration (%)	23	27	26
Physical and Life Sciences, and Technologies (%)	Х	1*	X
Mathematics, Computer and Information Sciences (%)	11	6	9*
Architecture, Engineering and Related Technologies (%)	10	23	16
Agriculture, Natural Resources and Conservation (%)	X	5	4 *
Health, Parks, Recreation and Fitness (%)	36	25	16
Personal, Protective and Transportation Services (%)	4	2	9*
Other (%)	Х	X	Х
Family characteristics in 2002			
Married or living common-law (%)	46	37	45
With dependent children (%)	56	25	47
In secondary school 12 months prior to entering program (%)	17	25	26
With previous postsecondary education (%)	20	32	23
Average duration of program if taken full-time (months)	F	F	F
Distance education taken during reference program (%)	F	5	6**
Educational activities after graduation			
Pursued further education after 2000 graduation (%)	19	21	30
Completed further education after 2000 graduation (%)	5*	5	10*
Enrolled in full-time education in 2002 (%)	8*	8	12*

Table A-11 (concluded)

Characteristics of 2000 college and bachelor graduates by Aboriginal status and 2002 location of residence

	Aboriginal graduates living in Manitoba – 2002	Non-aboriginal graduates living in Manitoba – 2002	Aboriginal graduates not living in Manitoba – 2002
Bachelor			
Number of graduates	400	3,800	2,500
Gender Women (%)	82	60	68
Age at graduation Average age (years) Median age (years) Under age 25 (%)	30 28 38	25 23 67	29 26 39
Field of study (2000 program) Education (%) Visual and Performing Arts, and Communications Technologies (%) Humanities (%) Social and Behavioural Sciences, and Law (%) Business, Management and Public Administration (%) Physical and Life Sciences, and Technologies (%) Mathematics, Computer and Information Sciences (%) Architecture, Engineering and Related Technologies (%) Agriculture, Natural Resources and Conservation (%) Health, Parks, Recreation and Fitness (%) Personal, Protective and Transportation Services (%) Other (%)	15* x 12* 51 x x x x x x x x	14 6 16 19 12 6 1* 4 7 12 2** x	16* F 18** 19* 17* F F 5** F 12** x
Family characteristics in 2002 Married or living common-law (%) With dependent children (%)	47 51	34 14	51 36
In secondary school 12 months prior to entering program (%)	30	58	29
With previous postsecondary education (%)	28	30	52
Average duration of program if taken full-time (months)	F	F	F
Distance education taken during reference program (%)	24*	23	15*
Educational activities after graduation Pursued further education after 2000 graduation (%) Completed further education after 2000 graduation (%) Enrolled in full-time education in 2002 (%)	33* x 9**	38 10 18	34 10* 17*

Notes: Numbers of graduates are rounded to the nearest 100.

Table A-12
Labour force activity of 2000 college and bachelor graduates in 2002 by Aboriginal status and location of residence

	Aboriginal	Non-aboriginal	Aboriginal
	graduates	graduates	graduates
	living in	living in	not living in
	Manitoba –	Manitoba –	Manitoba –
	2002	2002	2002
College			
Number of graduates Employed (%) Employed full-time (%) Employed part-time (%) Out of the labour force (%) Unemployment rate	300	1,700	2,400
	81	93	85
	75	84	78
	6**	8	8**
	8*	3*	7**
	11*	4	8*
Number of male graduates Employed (%) Employed full-time (%) Employed part-time (%) Out of the labour force (%) Unemployment rate	100	700	900
	90	93	84
	89	90	82
	x	4**	2*
	x	2**	F
	x	5*	11**
Number of female graduates Employed (%) Employed full-time (%) Employed part-time (%) Out of the labour force (%) Unemployment rate	200	1,000	1,500
	77	92	87
	68	80	75
	9**	12	11**
	11*	4*	8*
	14*	4*	6**
Bachelor			
Number of graduates Employed (%) Employed full-time (%) Employed part-time (%) Out of the labour force (%) Unemployment rate	300 92 81 F x	2,400 91 83 8 4* 6*	1,600 91 79 F 5** F
Number of male graduates Employed (%) Employed full-time (%) Employed part-time (%) Out of the labour force (%) Unemployment rate	F 100 100 x x x	900 93 87 7* F F	500* 93 88 x x
Number of female graduates Employed (%) Employed full-time (%) Employed part-time (%) Out of the labour force (%) Unemployment rate	200	1,400	1,100
	91	90	90
	78	80	74
	F	10	F
	X	5*	F
	F	6*	F

Notes: The sum of full-time employed and part-time employed may not add up to total employed because data on hours worked are not always reported.

Graduates who pursued further education after their 2000 graduation are excluded from this table, as are graduates for whom a labour force status could not be calculated.

The unemployment rate is the percentage unemployed out of the total of employed and unemployed.

Numbers of graduates are rounded to the nearest 100.

Table A-13
Estimated gross annual earnings of 2000 college and bachelor graduates working full-time in 2002, by Aboriginal status and location of residence

	Aboriginal graduates living in Manitoba –	Non-aboriginal graduates living in Manitoba –	Aboriginal graduates not living in Manitoba –
	2002	2002	2002
College			
All graduates 25th percentile Median 75th percentile	18,700 24,000 32,300	22,100 27,000 35,000	23,400 31,200 39,000
Male	·	· ·	<u> </u>
25th percentile Median 75th percentile	F 22,300* 36,000	25,000 31,500 40,000	27,300 37,700 46,500
Female 25th percentile	21,600	20,800	22,900
Median 75th percentile	25,000 30,000	24,800 31,200	28,100 32,800
Bachelor			
All graduates			
25th percentile Median 75th percentile	26,000 35,100 40,600	27,000 35,100 43,000	33,800 39,000 48,000
Male			
25th percentile	35,100	27,000	30,000
Median 75th percentile	38,000 40,800	35,000 43,700	36,000 49,400
Female 25th percentile	25,000	27,300	33,800
Median 75th percentile	32,000 40,000	35,900 42,000	40,000 45,800

Notes: Graduates who pursued further education after their 2000 graduation are excluded from this table.

All numbers are rounded to the nearest 100, but analysis is carried out on unrounded values.

Appendix B: Methodology

Objectives

The 2002 National Graduates Survey (Class of 2000), (NGS2000), seeks to profile the transition of 2000 postsecondary graduates from school to the labour market and their acquisition of their first work experience. The 2000 version of the survey follows on past surveys of graduates, conducted approximately every five years since the early 1980s.

Target population

The population of interest for NGS2000 consists of all persons graduating from a recognized Canadian postsecondary institution who completed an eligible program or obtained their diploma during the 2000 calendar year.

These include:

- any graduate of a university program leading to a bachelor, master or doctoral degree or a specialized certificate or diploma;
- any graduate of a postsecondary program (i.e., a program of one year's
 duration or longer which normally requires secondary school completion
 or its equivalent for admission) offered by a college of applied arts and
 technology (CAAT), Collège d'enseignement général et professionnel
 (CEGEP), a community college, a technical school or a similar institution;
- any graduate of skilled trades (i.e., graduate of a pre-employment program usually of three months' duration or longer). A vocational or trade school is a public educational institution that offers courses to prepare for employment in a given trade, such as that of a heavy machine operator, an automobile mechanic or an upholsterer. Many community colleges and technical institutions offer trade certificates or diplomas.

The survey excludes:

- graduates of private postsecondary educational institutions (i.e., computer training schools or commercial secretarial schools);
- persons who completed continuing education courses at a university or college (unless these led to a degree or diploma);
- individuals who took part-time trade courses (e.g., adult education evening courses) while employed full-time;
- persons who completed vocational training programs lasting less than three months or programs not offered in the skilled trades (e.g., basic training or skill development programs) and
- persons in apprenticeship programs.

Survey methodology

The sampling frame of NGS2000 was constructed from lists of graduates, supplied by participating institutions in response to information requests that Statistics Canada sent them in order to cover the target population. The sampling frame includes nearly 315,000 graduates.

The sampling plan for NGS2000 is based on a stratification of the graduate population by province of institution, education level and major field of study. The province of institution can be any of Canada's ten provinces or three territories. Education levels include five classes: trade/vocational training, college, bachelor degree or its equivalent, master degree or its equivalent, and doctorate or its equivalent. Major fields of study, which number either eight or nine depending on the education level, group together study programs according to the associated codes, based on the Classification of Instructional Programs.

The sample was distributed among the strata in such a way as to meet analytical needs. The resulting sampling ratios per stratum are fairly high. They range between 20% and 100% in some cases, such as for holders of a doctorate or its equivalent. A random selection of graduates within each stratum was then carried out to obtain a representative sample large enough to meet the main needs of the survey.

The information required from the approximately 60,000 graduates in the sample was collected by computer assisted telephone interviewing during the summer of 2002. The information collected then underwent extensive validation to determine its consistency.

Data quality and limitations on scope of data

The figures presented in this report are estimates based on the information collected from NGS2000 respondents. As in any statistical survey process, the NGS2000 estimates contain two types of error: sampling error and non-sampling error.

The sampling error of an estimate results from the random composition of the sample, which never yields exactly the estimate that would be obtained if the data were collected from the entire population. The magnitude of the sampling error may be evaluated and measured, and this report provides such measurements for each of the estimates based on the data collected from the sample of graduates for NGS2000.

If the sampling error measurement for an estimate exceeds 33%, then the estimate is not considered sufficiently reliable to be released. An estimate with an associated measurement that lies between 16.5% and 33% must be used with caution, since its reliability does not allow for firm conclusions.

All types of error other than that resulting from the random composition of the sample are known as non-sampling errors. In general, these types of error are difficult to detect or measure adequately, and it is also hard to mitigate their effects when developing estimates.

The unweighted response rate for NGS2000 was approximately 70%. This rate is not uniform, differing notably from one province to another and from one education level to another. To mitigate the effects of non-response, adjustments

were made to the data collected, and these adjustments affect the variability of the estimates calculated.

In the sampling frame of NGS2000, graduates of colleges in southern Alberta are undercovered. Unlike with non-response, the undercoverage of this group cannot be offset by a reweighting adjustment. This is because the characteristics relating to graduates in this part of Alberta may reasonably be thought to differ considerably from those of Alberta graduates for whom the coverage is appropriate, and therefore a reweighting of the graduates covered would only introduce a bias in the estimate of the characteristics of graduates from colleges in southern Alberta.

Appendix C: Aboriginal languages

The following codes were used to determine Aboriginal languages:

116	Cree	149	Bella Coola
117	Ojibway	150	Comox
118	Blackfoot	151	Halkomelem
119	Malecite	152	Lillooet
120	Micmac	153	Okanagan
121	Montagnais-Naskapi	154	Sechelt
122	Delaware	155	Shuswap
123	Abenaki	156	Squamish
124	Potawatomi	157	Thompson (Ntlakapamux)
125	Algonquin	158	Other Salish languages
126	Other Algonquian languages	159	Tsimshian
127	Chipewyan	160	Gitksan
128	South Slavey language	161	Haisla
129	Carrier	162	Heiltsuk
130	Sarcee	163	Kwakiutl
131	Beaver	164	Nootka (Nuu-Chah-Nulth)
132	Tagish	165	Other Wakashan languages
133	Sekani	166	Haida
134	Chilcotin	167	Dakota (Sioux)
135	Dogrib	168	Tlingit
136	North-slavey language (Hare)	169	Chillok
137	Kutchin-Gwich'in (Loucheux)	170	Kutenai
138	Kaska-Nahani	171	Other Aboriginal languages
139	Tahltan	172	Inuktitut (Eskimo)
140	Tutchone	185	Attikamekw
141	Other Athapaskan languages	188	Mitchif
142	Mohawk	189	Oji-Cree
143	Cayuga	190	Dene
144	Oneida	191	Han
145	Onondaga	192	Straits Salish
146	Seneca	193	Nishga
147	Tuscarora	194	Assiniboin
148	Other Iroquoian languages	195	Stoney

Culture, Tourism and the Centre for Education Statistics

Research Papers

Cumulative Index

Statistics Canada's **Division of Culture, Tourism and the Centre for Education Statistics** develops surveys, provides statistics and conducts research and analysis relevant to current issues in its three areas of responsibility.

The **Culture Statistics Program** creates and disseminates timely and comprehensive information on the culture sector in Canada. The program manages a dozen regular census surveys and databanks to produce data that support policy decision and program management requirements. Issues include the economic impact of culture, the consumption of culture goods and services, government, personal and corporate spending on culture, the culture labour market, and international trade of culture goods and services. Its analytical output appears in the flagship publication *Focus on Culture* (www.statcan.ca/english/IPS/Data/87-004-XIE.htm) and in *Arts*, *culture and recreation* – *Research papers*.

The **Tourism Statistics Program** provides information on domestic and international tourism. The program covers the Canadian Travel Survey and the International Travel Survey. Together, these surveys shed light on the volume and characteristics of trips and travellers to, from and within Canada. Its analytical output appears in the flagship publication *Travel-log* (www.statcan.ca/english/IPS/Data/87-003-XIE.htm) and in *Travel and tourism – Research papers*.

The **Centre for Education Statistics** develops and delivers a comprehensive program of pan-Canadian education statistics and analysis in order to support policy decisions and program management, and to ensure that accurate and relevant information concerning education is available to the Canadian public and to other educational stakeholders. The Centre conducts fifteen institutional and over ten household education surveys. Its analytical output appears in the flagship publication *Education quarterly review* (www.statcan.ca/english/IPS/Data/81-003-XIE.htm), in various monographs and in *Education*, *skills and learning* – *Research papers* (www.statcan.ca/english/IPS/Data/81-595-MIE.htm).

Following is a cumulative index of Culture, Tourism and the Centre for Education Statistics research papers published to date

Research papers	
81-595-MIE2002001	Understanding the rural-urban reading gap
81-595-MIE2003002	Canadian education and training services abroad: the role of contracts funded by international financial institution
81-595-MIE2003003	Finding their way: a profile of young Canadian graduates
81-595-MIE2003004	Learning, earning and leaving – The relationship between working while in high school and dropping out
81-595-MIE2003005	Linking provincial student assessments with national and international assessments
81-595-MIE2003006	Who goes to post-secondary education and when: Pathways chosen by 20 year-olds
81-595-MIE2003007	Access, persistence and financing: First results from the Postsecondary Education Participation Survey (PEPS)
81-595-MIE2003008	The labour market impacts of adult education and training in Canada
81-595-MIE2003009	Issues in the design of Canada's Adult Education and Training Survey
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81-595-MIE2003011	A new understanding of postsecondary education in Canada: A discussion paper
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81-595-MIE2004013	Salaries and salary scales of full-time teaching staff at Canadian universities, 2001-2002: final report
81-595-MIE2004014	In and out of high school: First results from the second cycle of the Youth in Transition Survey, 2002
81-595-MIE2004015	Working and Training: First Results of the 2003 Adult Education and Training Survey
81-595-MIE2004016	Class of 2000: Profile of Postsecondary Graduates and Student Debt
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Research papers	
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81-595-MIE2004020	Culture Goods Trade Estimates: Methodology and Technical Notes
81-595-MIE2004021	Canadian Framework for Culture Statistics
81-595-MIE2004022	Summary public school indicators for the provinces and territories, 1996-1997 to 2002-2003
81-595-MIE2004023	Economic Contribution of Culture in Canada
81-595-MIE2004024	Economic Contributions of the Culture Sector in Ontario
81-595-MIE2004025	Economic Contribution of the Culture Sector in Canada – A Provincial Perspective
81-595-MIE2004026	Who pursues postsecondary education, who leaves and why: Results from the Youth in Transition Survey
81-595-MIE2005027	Salaries and salary scales of full-time teaching staff at Canadian universities, 2002-2003: final report
81-595-MIE2005028	Canadian School Libraries and Teacher-Librarians: Results from the 2003/04 Information and Communications Technologies in Schools Survey
81-595-MIE2005029	Manitoba postsecondary graduates from the Class of 2000: how did they fare?