2000 Follow-up Survey with the Class of 1996 Maritime University Graduates

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The survey instrument can be found at www.mphec.ca, under Publications.

EXECUTIVE SUMMARY

In 1997, the Maritime Provinces Higher Education Commission (MPHEC), in partnership with the governments of the four Atlantic Provinces, conducted a survey of 1996 university graduates. This "one-year after" survey was designed to build on the biennial national survey of post-secondary graduates that has been conducted by Statistics Canada since 1978, and to provide more timely access to specific information about graduates in the Atlantic Region.

The MPHEC decided to pursue a second stage of research with the same 1996 graduating class (excluding Newfoundland) approximately four years after they had completed their university studies. This 2000 longitudinal study was the first for the MPHEC, and is considered a pilot project. The MPHEC commissioned Ipsos-Reid to conduct the research.

WORK & EDUCATION

Labour Force Status

The overall labour force status of 1996 graduates appears to have improved since 1997. While there has been a slight drop in the overall proportion of graduates in the labour force, more graduates are employed in 2000 than in 1997.

Among graduates not in the labour force in 2000, most are in school or at home. Since 1997, there has been a significant increase in the proportion of graduates in school, and a significant drop in those not working, and not looking or unavailable for work.

 89% of graduates were in the labour force during the reference week (compared to 92% in 1997); 11% were not in the labour force (8% in 1997).

- Among graduates in the labour force in 2000, 93% percent are employed (up from 88% in 1997); 7% of graduates were unemployed (12% in 1997).
- Among graduates not in the labour force in 2000, 69% were in school (50% in 1997); 8% were not working (33% in 1997); and 17% were "at home" (10% in 1997).

Nature of Employment

Four years after their graduation, graduates have been largely successful in securing full-time, permanent employment positions. Indeed, there has been a notable increase in the proportion of graduates who have more secure employment. While employed graduates are working in a wide variety of occupations in 2000, the teaching profession seems to be the strongest magnet for graduates.

- Among employed graduates, 89% were employed full-time (30+ hours) at their main job during the reference week (up from 83% in 1997), 11% worked part-time (14% in 1997). On average, they worked 39.9 hours per week at their main job (up from 35.7 in 1997).
- 76% of employed graduates held permanent positions at their main job (up from 64% in 1997); 13% worked on contract (14% in 1997); and 11% had temporary or casual positions (22% in 1997).
- While employed Maritime graduates worked in a variety of fields in 2000, most worked in the following fields: teaching (25%); administrative or clerical (10%), financial/accounting (9%); management (7%); nursing (6%), and computer-related (5%).

Joblessness Since 1996 Graduation

Being without a job is a common experience for many 1996 graduates. However, it is a fairly infrequent occurrence. For the most part, joblessness is linked to a personal decision to leave the labour force rather than a result of being laid off.

- 44% of employed graduates said they were unemployed at least once since 1996. Still, 23% were without a job only once during this period. The average graduate has been out of work 0.9 times.
- 65% of graduates left their job voluntarily (e.g. returning to school, caring for child, illness);
 32% said they were unemployed as a result of being laid off (e.g. contract ended, seasonal job, layoff).

Relatedness of Job and Education

Overall, there is a definite relationship between what 1996 graduates do for a living and the perceptions they have of their university education. Not only do graduates value having a job related to their studies, they are, by and large, working in a job that is related to their studies (and this has increased since 1997). They also believe their university education helped them obtain their job, and feel they are using the skills they learned while at university. When this occurs, as it does for many, graduates tend to be more satisfied with their job, and consider their university education worth the financial investment and time spent studying.

83% of employed graduates feel it is important their job be directly related to their field of study; only 17% say this is not important to them.

- 80% of employed graduates were working in a
 job in 2000 that is in some way related to their
 1996 graduation studies (up from 70% in
 1997); 20% say their job is not at all related to
 their field of study (down from 30% in 1997).
- Employed graduates from certain programs are more likely to have employment directly related to their studies. This is particularly true of those who studied in: Health (86%) Education (72%), Information Technology (63%), Engineering (59%) and Commerce (56%).
- 78% of employed graduates believe their educational program helped them to some extent in obtaining their job; 22% feel it helped them little or not at all.
- 76% of employed graduates say they are using skills they learned from their educational program completed in 1996 at their job; 24% state they are using their learned skills very little or not at all.
- Employed graduates who studied in the following fields are more likely than others to be using the skills they learned at least to some extent: Health (93%), Information Technology (84%), Education (84%), Commerce (83%), and Engineering (80%).
- Employed graduates from the following fields are using their skills little: Agriculture/Biology (41%), Mathematics/Physical Sciences (34%), Social Sciences (31%), and Humanities (29%).
- Among those whose job is directly related to their field of study, 46% believe spending the money for their studies was well worth the investment. This drops to 21 percent among graduates whose job is not at all related to what they studied.
- 56% of employed graduates who have a job directly related to their studies feel the time they spent on their studies was well worth it,

- compared to only 32 percent of those whose job is not at all related to their studies.
- 50% of employed graduates using their learned skills feel the money they committed was well worth the investment, and 62 percent perceive the time they spent in the same fashion.

Post-1996 Studies

Nature of Program

- ♦ Since completing their university program in 1996, many graduates have returned to study:
 - 50% returned to study at a university, community college, or private training school to work towards a specific degree, diploma, or certificate other than an apprenticeship program (this is up from 35% in 1997)
 - 38% have taken courses unrelated to a particular degree
 - 14% have taken courses through distance education.
- 69% of graduates who returned to study for a degree did so on a full-time basis, 27% were part-time students, 3% undertook a combination of both.
- 58% of graduates who took courses unrelated to a particular degree did so full-time, 39% were part-time, and 2% did a combination of both.

Reasons for Pursuing Post-1996 Studies

Most graduates who pursued any type of further studies in the years following their graduation selected their courses with an eye to the labour force, and to upgrade their degree status.

- ◆ 23% took post-1996 studies "to get a job"; 18% did so "to get a better job"; 15% did so "to do my present job better"; 5% said "to keep or change a job"; 4% took other studies to "earn more"; and 4% did so for professional development.
- 28% of those who graduated in 1996 with a Bachelor's degree decided to pursue Master's (23%) or Doctoral (5%) studies. Another 11 percent returned to undertake a professional degree. A further one-in-ten returned to get a graduate level certificate (10%).

Field of Study in Post-1996 **Period**

- ♦ 18% percent of 1996 graduates who returned to study after graduating did so in the Education field, 12% returned in Commerce.
- Many employed graduates pursued post-1996 studies in Education; this is true for those whose 1996 degree was in the following fields: Humanities (44%), Math/Physical Sciences (25%), Social Sciences (17%), Agriculture/Biology (14%).

MOBILITY OF GRADUATES

Graduate mobility on a regional and province-byprovince basis shows that most Maritime graduates in each province remained in their "home" province to study, and continued to live there four years after graduation. However, the proportion of graduates who remained in their province of origin dropped off somewhat between 1996 and There are provincial differences in the scope of graduate movements, more significant in Prince Edward Island, less significant in Nova Scotia.

Mobility on Regional Basis

- ♦ 85% of 1996 Maritime graduates lived in the region prior to beginning their pre-1996 studies; 15% came from other parts of Canada (mostly Ontario – 5%) and abroad.
- In 2000, 73% of graduates were still in the region; 27% left to live elsewhere (again mostly Ontario − 11%).
- 36% of graduates who came from elsewhere in Canada or abroad to study in the Maritimes to obtain their 1996 degree continued to live in the region in 1997. By 2000, this proportion had dropped to 30%.
- When combined, movements of graduates into and out of the Maritime region show there has been a net *outflow* of 14 percent of graduates to other Canadian provinces and abroad in the pre-1996 to 2000 period.

Mobility on a Provincial Basis

- 94% of graduates originally from Nova Scotia obtained their degree from a Nova Scotia institution; 86% were in the province in 1997; 76% remained in Nova Scotia in 2000.
- 86% of graduates originally from New Brunswick graduated from a New Brunswick institution; 85% were in the province in 1997; 77% were in the province in 2000.
- ◆ 55% of graduates originally from Prince Edward Island graduated from a Prince Edward Island institution; 75% were in the province in 1997; 61% remained in the province in 2000.
- Among those who graduated from an institution in their province of origin, the proportion still in their province of origin is as follows:
 Nova Scotia (77%), New Brunswick (81%), and Prince Edward Island (72%).

 Most graduates not living in their province of origin in 2000 resided in Ontario or a Western Canadian province (mostly Alberta or British Columbia).

FINANCIAL STATUS OF 1996 GRADUATES

Earnings

1996 Maritime graduates are doing better overall as they move beyond their early post-graduation life. However, some groups of graduates are doing much better than others; differences emerge according to gender, home language, and field of study.

- Employed graduates earn on average \$3,047 per month or \$36,564 on an annual basis; this is up 35% or \$9,472 from 1997 (\$2,258 per month or \$27,092 annually).
- Employed male graduates earned, on average, \$3,530 per month in 2000. This is \$726 more than the average monthly earnings of employed female graduates (\$2,804). On an annualized basis, the gender gap in earnings is \$8,712.
- The gender gap is dependent somewhat upon whether graduates work part-time or full-time. Men working full-time earn, on average, \$654 more than women with full-time employment. The gap is smaller for part-time earnings; men working part-time earn, on average, \$268 more than women with part-time employment. The gender gap in full-time earnings is consistent across both degree and field of study categories.
- There is also an earnings gap between French- and English-speaking Maritime graduates. Average monthly employment earnings of Anglophones are \$261 greater

than Francophones (\$3,075 vs. \$2,814). This is somewhat dependent upon whether graduates are working full-time or part-time. English-speaking graduates working full-time earn, on average, \$280 more than Frenchspeaking graduates with full-time employment. The gap for part-time earnings is somewhat smaller; Anglophone graduates earn \$122 more, on average, than Francophone graduates.

- Earnings levels are also related to what studies a person undertook. Following is a list of average monthly earnings based on field of study (only those with adequate sample size for reliable results are included):
 - Information Technology (\$4,079)
 - Engineering (\$3,769)
 - Health (\$3,701)
 - Education (\$3,214)
 - Commerce (\$3,162)
 - Mathematics/Physical Sciences (\$2,874)
 - Social Sciences (\$2,810)
 - Humanities (\$2,529)
 - Agriculture/Biology (\$2,387)

Financing the 1996 Degree

Generally speaking, graduates who borrowed money to finance pre-1996 graduation studies have been successful in reducing their overall debt load to both government and other sources. However, between 1996 and 2000, average pre-1996 debt outstanding to other sources has dropped more rapidly than to government. And, success in debt reduction is spread unevenly across the graduate population, with some groups paying off their debt more rapidly than others.

 Overall, 51% of graduates borrowed money from various sources to finance their pre-1996 studies. On average, they borrowed \$16,187. Fully 89% turned to government to finance their 1996 degree, borrowing an average of \$15,287. Another 28% obtained money from other sources, borrowing an average of \$9,246.

- On average, overall debt outstanding for pre-1996 studies from all sources has dropped 39% since 1996. With average borrowing of \$16,187 to finance their pre-1996 studies, graduates owe an average of \$9,860 in 2000, a \$6,327 reduction in the average debt load graduates carry since graduating four years ago.
- Average debt outstanding to other sources has dropped 55% since 1996 (\$9,246 to \$4,115). By comparison, the pace of repayment for government loans has been slower (-36%, from \$15,287 borrowed pre-1996 to \$9,772 outstanding in 2000).
- Graduates who borrowed heavily to finance pre-1996 studies still owe substantial amounts on their loans. For example, among those who borrowed \$30,000 or more, fully 31% remain indebted to this extent in 2000, and owed an average of \$23,613; only 6% have paid off their loans completely.
- Graduates with a Master's or Doctorate have reduced their average pre-1996 debt load by a full 53% over the past 4 years (\$16,824 to \$7,871), compared to 37% and 36%, respectively, for those with a Bachelor's or some other Certificate or Diploma.
- Graduates who obtained a degree in Health or in Commerce are repaying their pre-1996 loans more quickly than graduates in other fields (reductions of 49% and 48%, respectively).
- Male graduates not only borrowed less than female graduates overall to finance their 1996 degree (\$15,654 vs. \$16,453), but men have been paying off their loans at a faster pace (-43% or -\$6,728 for men vs. -37% or -\$6,122 for women).

Financing Post-1996 Studies

Many graduates who pursued further studies after graduating in 1996 borrowed to finance their post-1996 studies. This includes a good number of people who had already incurred substantial debt to pay for their pre-1996 studies. Still, graduates who borrowed from a single source to pursue post-1996 studies have had some success in paying off the debt they incurred.

- ◆ 41% of graduates who pursued post-1996 studies say they needed to borrow money to finance their studies. They have an average of \$10,295 remaining to pay on their post-1996 loans; this is \$2,737 less than the average amount borrowed to finance these studies (\$13,032), a drop of 21 percent.
- 80% of graduates who borrowed to finance their post-1996 studies looked to government student aid programs for financial help; 48% turned to financial institutions. In addition, 32% looked to family for financial aid to continue their studies and a few asked their employer (3%), friends (2%) or sought funds elsewhere (4%).
- 37% of those who returned to school after graduating in 1996 had already borrowed money to finance their 1996 degree, including 25 percent who borrowed money in the pre-1996 period only, and 11 percent who obtained loans for both the pre- and post-1996 periods. Only 7 percent borrowed money solely in the post-1996 period (one source). Meanwhile, 56 percent of 1996 graduates who continued studying in the post-1996 period did not borrow in either period.
- Graduates who borrowed in both periods accumulated a total average debt load of \$28,253 for their studies. They have been fairly successful to date in paying off a good portion of their loans; in 2000, their average cumulative debt outstanding is \$21,979, which

represents a 22 percent reduction in average debt load (or \$6,274 less).

- 39 percent of those who borrowed money to pay for their post-1996 studies had no debt prior to their 1996 graduation. These first time debtors borrowed, on average, \$13,506 from one source to pay for their post-1996 studies. Fully 31 percent borrowed \$15,000 or more, including 7 percent who took on \$30,000 or more in debt to pay for post-1996 studies.
- 48% of graduates with a lower annual personal income (less than \$20,000) borrowed \$15,000 or more, compared to 25 percent of graduates with middle incomes. On average, these less well off graduates borrowed \$15,062 from one source to finance their post-1996 studies, significantly more than those earning middle incomes (\$10,834).
- Graduates who were not working during the reference week were more likely than employed graduates to have borrowed \$15,000 or more to finance their post-1996 studies (46% vs. 30%). And, those not working incurred substantially more post-1996 debt, borrowing \$15,592 from a single source, on average, compared to \$11,683 for employed graduates.

Overall Debt Status

- In 2000, the total average debt incurred by graduates for pre- and post-1996 studies stands at \$18,161. The total average debt still outstanding is significantly lower at \$10,685, a 41 percent drop over the past four years.
- The total average debt incurred by graduates for pre-1996 studies only is \$16,187. Total average debt outstanding for these studies in 2000 is \$9,860, a 39% reduction in debt load.

In 2000, the total average debt incurred from a single source by graduates from a single source for post-1996 studies is \$13,032 while average debt outstanding is \$10,295, a 21% reduction in debt load.

Loan Repayment Experience

- The vast majority of graduates with government or other debt outstanding (67% and 65%, respectively) say they have little difficulty making their loan payments on time. A further one-in-six claim to miss making a payment "only occasionally".
- Certain groups of graduates do find debt repayment somewhat more troublesome. For example, 38 percent of employed graduates whose job is not permanent find some difficulty in making regular payments to government, compared to only 24 percent of those with permanent positions. A similar pattern exists for making payments to other sources (30% vs. 19%, respectively).
- Most graduates who have missed payments to cover government or other loans for pre-1996 studies do so largely because of an insufficient level of income to cover the payments. This appears to be tied to a lack of adequate employment, which prevents them from earning enough to meet their loan payments.
- 36% of graduates with outstanding pre-1996 government debt state they are aware of government programs to assist graduates in repaying their student loans. Of these, 50% applied, and 86% of the applicants were successful.
- Among the programs they'd heard of, 58 percent mention "Interest Relief", by far the most common and widely known; 10% talk about "Loan Remission"; 8% mention "Loan For-

- giveness". Fewer still mention "tax credit/relief" (5%) or the Millennium Fund (2%). In all, 15 percent could not mention any specific program, even though they had heard of some type of government assistance for loan repayment.
- A very small proportion of 1996 graduates have found themselves in a situation since graduating where they had to declare bankruptcy (1%) or file for an orderly payment of debt (1%).

Becoming Debt Free

- 15% of 1996 graduates who took out government student loans to finance their pre-1996 studies have paid off their loan. On average, it took about 2 years for them to do so.
- For the 85% of Maritime graduates with government debt still outstanding for their 1996 graduation studies, they have, on average, 5.9 years remaining in their debt repayment schedules.
- The three main avenues for graduates becoming debt free from pre-1996 loans are: having work (particularly well-paying work), receiving financial help from family, and making some personal sacrifices.
- 31% of 1996 graduates who borrowed money from other sources to finance their pre-1996 studies say they have paid off these loans On average, it took about 2.5 years for them to do SO.
- For the 64% of graduates who still have outstanding debt owed to other sources for their 1996 degree, they have, on average, another 3.6 years before they will have paid off these loans.
- 12% of 1996 graduates say they have completely paid off their post-1996 main loan. On

average, it took about 11 months for them to do so.

For the 87% of graduates who still have post-1996 debt outstanding, findings show they have, on average, 6.5 years remaining to pay off these loans.

Impact of Debt on Graduate **Well-Being**

- On average, employed 1996 graduates pay about \$286 per month to cover all their loan payments. This represents 11.3 percent of their monthly earnings.
- Employed 1996 graduates earning higher incomes tend to have higher monthly debt payments, but a lower debt to earnings ratio. Debt is less of a burden for them despite a heavier debt load.
- Employed 1996 graduates earning lower incomes tend to have lower monthly debt payments, but these payments represent a greater proportion of their monthly earnings. For these graduates, debt appears to be more of an issue.
- Employed 1996 graduates with the lowest debt to earnings ratio are those most satisfied with their current employment situation. This is true despite their having a higher monthly debt payment.

GRADUATE OUTLOOK

Evaluating the University Experience

Broadly speaking, 1996 Maritime graduates give their institutions a high grade both in terms of the personal time required for their courses and the money invested in their studies. Still, the extent to which graduates feel positively about their university experience is linked to whether or not they have been able to obtain secure employment, in a well-paying job, and in a field related to their studies.

- 80% of 1996 graduates say the university program they took was worth their personal investment of time required for classes and studies. Six percent believe their education was not worth the time they devoted to their university program.
- 67% of 1996 graduates believe their university education was worth the financial investment required; 13 percent do not believe it was worth it.
- 87% of graduates say they would choose to go to university again if they could do it over again, including 72% of graduates who say they would definitely choose to go back. Only 5% report they would choose not to go back to university, while 8% are neutral in this regard.
- 68% report that if they could choose again, they would select the same field of study or specialization they completed in 1996. A third, however, say they would likely not choose to study in the same field. Personal interest and usefulness in the job market are the key reasons for choosing the same field of study.
- 82% of graduates say they would choose to go to the same institution if they had a choice. 17% say they would not return to their alma mater. Location and the quality of the program are the two main reasons for going back to the same institution.

Outlook on Personal Lives

Four years after graduation, 1996 Maritime graduates have a generally positive outlook on the direction of their lives. However, favourable views seem dependent upon what aspect of their lives one is addressing, and the socio-demographic characteristics of the graduates. On the one hand, while most are happy with their level of education, fewer are as content with their employment situation, and significantly fewer think positively about their financial status. On the other hand, overall satisfaction with the direction of one's life is conditioned by graduates' financial and employment situation.

- 81% of 1996 graduates are satisfied with the direction of their lives. Only 4% say they are dissatisfied with the direction of their life. 14% hold more neutral views, being neither satisfied or dissatisfied with the direction of their lives.
- 84% report being satisfied with their level of education while 3% say they are dissatisfied. By comparison, two-thirds (65%) of graduates are satisfied with their employment situation and 14% report dissatisfaction. About half the 1996 graduate population (48%) expresses satisfaction with its financial situation; two-inten (21%) say they are dissatisfied
- Graduates most satisfied with their life situation tend to have more secure financial and employment situations (i.e. employed, higher income), and have completed a post-graduate degree. Education and IT graduates tend to be satisfied more than others on all fronts.

CONCLUSIONS AND MPLICATIONS

What is the nature of the transitions Maritime graduates have experienced between their studies and the labour force, and back again since their graduation, and since the last time they were interviewed? In order to answer this question, and bring some sense to the complexity of these transitions, we have grouped the conclusions thematically according to subjects treated in the analysis.

Work & Education

Labour Force Activity

Broadly speaking, when it comes to labour force activity, findings show that 1996 Maritime graduates have by and large experienced a successful transition from their post-secondary studies to the labour force. And, evidence suggests their situation has improved since the last time they were interviewed in 1997. Broadly speaking, they are earning more money, have more stable jobs, carry a lighter debt load, and are more secure financially than they were at any time since their graduation in 1996.

However, this mostly positive portrait hides a real diversity of graduate experiences. Indeed, findings show that the success in the transition from postsecondary education to the labour force has not been shared equally by all graduates. Those who have been more successful include people with a professional or graduate degree; graduates in the Commerce, Engineering, Education, Health, and Information Technology fields; and men. These graduates are more likely to have permanent, well-paying jobs, have less debt or be in a better position to pay off their debt, and have higher levels of job satisfaction. As a result, their overall outlook on life is distinctly more positive than other graduates.

Those who have been less successful in their transition include people with Bachelor's degrees; graduates in the Humanities, Social Sciences, and Agriculture-Biology fields; and women. graduates are more likely to have less permanent employment or be unemployed, have less well-paying jobs, more outstanding debt or in a worse position to pay off their debt, and have lower levels of job satisfaction. Consequently, their overall outlook on life is distinctly less positive than other graduates.

What seems to further differentiate these two groups of graduates is the relative success they have had at securing "relevant" employment, that is, a job that is in some way related to their university program, and one at which they are using the skills they learned from their university program. The more this is the case, the more positive the graduate transitions (permanent work, job satisfaction, earnings, etc.). On this level, there has been clear progress; findings show an overall 10point improvement since 1997 in the proportion of graduates who have secured employment in a job related to their studies (from 70% to 80%). Again, however, the experience has not been shared equally by all graduates; many graduates are using their education, are presumably happier in their work, performing better, and thus may well enjoy more favourable opportunities for career advancement. Meanwhile others are not working in positions where they're using their learned skills, may not be as happy in the job they're doing, and thus may be more apt to think about transitions within the workforce or back to school. These latter graduates may thus take some time to "settle in" to the labour force, possibly putting off making more definitive decisions about career choices. The risk, of course, is that their transitions become a part of their regular labour force experience rather than a means to more secure employment.

Why should all of this matter? The answer is that the diversity of graduate transition experiences has two implications for the type of labour market information students can or may be provided in advance of making their decisions about pursuing post-secondary education, and selecting the programs they will study.

First, there is a clear implication that providing students with guidance in planning their postsecondary studies should be undertaken with some degree of thought given to potential possibilities for employment. It is evident that those fortunate enough to find themselves both interested in and trained in certain fields that are "in demand" in the labour force will experience a more successful transition to the labour force. This is, of course, not new. What may be new, however, is the challenge to identify the "in demand" fields. Meeting this challenge is made all the more difficult because what may be in demand at the beginning of a 4-year degree for students may not be by its end. Hence, how are graduates to plan? Clearly, there is a need to develop more sophisticated labour market information models that will not only track important shifts in employment reguirements, but will also look into the future and "predict" fields that might be in demand over different time horizons.

This will meet only half the challenge. The other half of the equation is to provide students with appropriate opportunities to assimilate the information, and in the proper context and format. For example, graduating high school students will likely need and want different types of information than students in the final year of a 4-year university degree program. Further, graduating high school students may or may not see the relevance of learning about job opportunities four to five years away while it will be (or should be) quite obvious for graduating university students. Clearly, the challenge will be to help all students at all levels to appreciate the relevance of this information.

Second, there is an implication that the transition from post-secondary education to the labour force is not necessarily or always a linear path, suggesting that a closer look at career mobility is warranted. Students are moving in and out of the labour force and the education system with somewhat more fluidity than in the past. For the time being, those with established jobs appear to have

been more successful in making the transition. But for how long? Indeed, is it appropriate to draw definitive conclusions about graduate transitions and careers after 3 to 4 years, when it may take longer for graduates to grow and flourish in a career? Many may well decide upon a change in direction; is this necessarily a bad thing? The whole question of what a career is per se may need to be redefined. An analysis of career path mobility should be done to shed light on the lack of success of graduates in certain fields of study who, from our findings, may be finding it more difficult to secure more permanent positions in the labour market, and thus see fit to change direction through further studies. At what point do they decide to change? What prompts them to choose specific careers over others? Are they any more or less successful once they have switched? Answers to these questions, and studies of all graduates over time will shed additional light upon the success or failure of policies designed to assist graduates in the transitions they experience between the education system and the labour force.

Graduate Mobility

Institutions of higher education in the Maritimes educate not only Maritimers, but also students from other parts of Canada. Findings on graduate mobility are clear in suggesting that over the past four years since students from the 1996 graduating class obtained their degrees, there has been some movement of graduates into and out of the Maritimes. However, it is clear that, for the most part, a vast majority of graduates have remained in their province of origin in 2000.

Still, it is useful to talk about two types of graduate movements: one from the province of graduation to outside the Maritimes; another within the Maritimes. The first type of movement shows that 27% of graduates left the Maritimes by 2000, though the net outflow is 14%. Hence, to a certain degree, the Maritime region is losing some of its educated population to other provinces in Canada (mostly Ontario).

When it comes to movement within the Maritimes, approximately three-quarters of graduates originally from Nova Scotia and New Brunswick remained in their home province in 2000; this falls to 61% for Prince Edward Island. Clearly, movement between provinces have been such that Prince Edward Island suffers somewhat more than the other provinces in terms of graduate mobility.

Importantly, findings indicate that graduate employment opportunities are the clear driving factor for moving, either within or outside the region, underlining yet again the importance of the labour market in determining graduate outcomes. Among those who leave their province of graduation, a greater proportion are high-income earners, presumably being lured away or seeking greener pastures. This is particularly notable, because it is also these graduates who tend to have less debt, secure jobs, and a generally positive outlook on their life. While the number of graduates in this situation is not yet overwhelming, the trend needs to be monitored to bring some understanding as to what drives these graduates to leave the Maritimes.

Financial Status

Managing Debt

The overall debt picture for 1996 Maritime graduates in 2000 has improved quite substantially in the years following their graduation. On average, there has been a 41% reduction in student debt load since 1996. This suggests that, despite the fact that graduates have needed to borrow large amounts of money to finance their studies, they have been generally quite successful in paying off their loans.

However, this positive picture does hide two important trends which have implications for the nature and scope of the transitions graduates make between post-secondary education and the labour force.

First, not all graduates have been successful in lightening their debt burden. Those with lower incomes and those who've been less successful in the labour force are having a more difficult time of things, with debt making up a greater proportion of earnings than those with higher incomes and more permanent employment. This should not be too surprising; intuitively, students who earn less, and have non-permanent jobs are more likely to face an uphill battle when it comes to debt repayment. While many graduates are "living with" their debt reality, others (about a third) are missing payments or stopping them altogether.

Second, the overall debt portrait fails to highlight the fact that some graduates are either becoming indebted for the first time, or are accumulating even greater debt loads as they return to school to upgrade their 1996 degree, or gain additional education to improve their chances in the labour market. Indeed, 39% who borrowed for post-1996 studies had no debt prior to their 1996 graduation; 37% of those who returned to study post-1996 had already borrowed money to finance their 1996 degree. The fact that many graduates returned to study for employment reasons, and are prepared to take on more debt to do so, suggests a fairly close relationship between debt management and the choices graduates make as they define, and redefine, their careers. This means that many graduates are prepared to make the transition from post-secondary education to the labour force with an "educational mortgage" that will take years to pay off. Findings show graduates currently have, on average, five or more years to pay off their current debt. As career mobility and transitions into and out of the labour force continue, this "mortgage" will only grow. Inevitably, this will have, and is having, repercussions on graduates' outlook on their lives, the value they place on their

university education, and, ultimately, where and how they might enter the labour force, and whether or not they will succeed.

Third, despite the reality that some graduates are having trouble managing their debt load, government debt management programs are not being used. Relatively few graduates with debt are aware they exist, and even fewer apply for them (18% of total graduate population with government debt). The question is why, especially if these programs are designed to alleviate some of the student debt burden.

The implications of these trends are three-fold. First, given the potential for post-secondary education debt to follow graduates well into their working careers, it is imperative that students gain a full understanding of the nature of the "educational mortgage" they are undertaking, and how it will affect them. This will undoubtedly mean providing students with various scenarios (based on existing evidence) of what it will take financially to complete their post-secondary degree in a specific field, what they can expect in terms of employment opportunities and earnings in that field, and how much of an impact their debt load could have on their social and economic well-being once they have graduated. Having this "informed choice" should hopefully encourage students to think more broadly and seriously about post-secondary education, and thus ease their experience through the transitions from the education system to the labour force, and back.

Second, it is important that some thought be given to providing students who accumulate a certain amount of debt access to training or advice in debt management strategies. This could take many forms: putting the reality of their debt into the context of their monthly earnings and helping devise an appropriate budget; talking more strategically about the balance between additional debt for educational purposes and the potential for improving employment opportunities; encouraging students to seek other avenues for financing (e.g. working first, study later, family, etc.) where re-

payment schedules are either more flexible or non-existent. The goal of this information would be to make debt "real" for students who perhaps do not readily appreciate the extent of the "educational mortgage" they are taking out.

Third, some effort should be made to understand students' lack of awareness of government student debt programs, and their apparent unwillingness to apply for these programs. This is particularly critical for graduates who have accumulated large amounts of debt to finance their studies. Are there any systemic barriers to graduates that prevent them from applying? Do graduates have specific perceptions of or attitudes towards these programs which impede them taking part?

Graduate Outlook

Satisfaction With Direction of Life

Four years after graduation, 1996 Maritime graduates have a generally positive outlook on the direction of their lives. While they are not overly enthusiastic (only a third are very satisfied), graduates generally tend to be more optimistic than pessimistic. However, graduates' favourable views are very dependent upon what aspect of their lives one is addressing, and the particular socio-demographic characteristics of the graduates.

On the one hand, while most graduates are happy with the level of education they have attained, fewer are as content with their employment situation, and significantly fewer think positively about their financial status at the present time. And, of the three, employment is the key driver of overall satisfaction with one's life, affecting how much one earns, and, indirectly, whether or not one is happy about the education they obtained (i.e. did it help them get a job related to their studies?).

On the other hand, satisfaction with the direction of one's life is tied to how well or poorly one is

doing financially, and to their employment situation. Lower income, higher debt, and nonpermanent employment are part of the recipe for a less optimistic view of life. As this is so consistent with findings on other fronts, it reinforces the idea that the 1996 graduating class should be described more aptly as graduating "classes", one further ahead in terms of outcomes and outlook. the other further behind on both these fronts.

Graduates' Education Experience

The value graduates place on their university experience is really a measure of the success of the "system" to prepare students for the transition into the labour force. Broadly speaking, 1996 Maritime graduates give their institutions a high grade in terms of both the personal time required for their courses and the money they invested in their studies. Given the amount of debt load reported, this is a significant finding. The fact that more than eight-in-ten would return to study if they had to do it all over again, and that most would also choose the same institution and same field of study is, of course, another endorsement of their university experience.

Still, the extent to which graduates feel positively about their university experience is linked to whether or not they have been able to obtain secure employment, in a well-paying job, and in a field related to their studies. Once again, the impact of the labour market on graduates' perspectives is quite clear.

The implication here is that graduates' expectations need to be managed in terms of likely employment opportunities (i.e. what types of jobs are available based on the education they have obtained), possible career paths (i.e. where certain jobs can lead to in terms of career mobility), and potential further requirements (i.e. what might be expected of graduates in terms of retraining or skills development). When graduates do not find a job, or not quickly enough, many are as likely to write off their university program as ineffective or useless, and move on to something else, or worse still, begin down a path which tends to stop at different jobs or educational programs. Our findings show that this is only a recipe for more negative graduate experiences in the transition from post-

secondary education to the labour force. Hence, it is imperative to identify those most likely to head in this direction, as is the need to design strategies for re-directing their energies and managing their expectations.

INTRODUCTION

In 1997, the Maritime Provinces Higher Education Commission (MPHEC), in partnership with the governments of the four Atlantic Provinces, conducted a survey of 1996 university graduates. This "one-year after" survey was designed to build on the biennial national survey of post-secondary graduates that has been conducted by Statistics Canada since 1978, and to provide more timely access to specific information about graduates in the Atlantic Region.

In 1999, the MPHEC decided to pursue a second stage of research with the same 1996 graduating class (excluding Newfoundland) approximately four years after they had completed their university studies. This 2000 longitudinal study is the first for the MPHEC, and is considered a pilot project. The MPHEC commissioned lpsos Reid to conduct the research.

The main objective of the research is to provide the MPHEC with up-to-date and tracking data in the following areas:

- Graduates' labour force activities
- Graduates' progress in repaying the debt they incurred to finance their pre-1996 and post-1996 studies
- Graduates' current overall financial status, including earnings, overall debt load from their studies, and the impact of debt on their personal lives
- Graduates' post-1996 education experience
- Graduates' mobility since their 1996 graduation
- Graduates' evaluation of their pre-1996 university experience
- Graduates' outlook on their personal lives

METHODOLOGY

Ipsos Reid conducted a telephone survey of 1996 graduates from universities in the three Maritime provinces (Nova Scotia, New Brunswick, Prince Edward Island).¹ A total of 2,380 interviews were completed with these graduates between February 2nd and April 2nd, 2000.

The margin of error for findings from this sample of 2,380 is ± 1.3 percentage points, 19 times out of 20.² This means that we can be 95 percent confident that results from this study will fall within plus or minus 1.3 percentage points of what they would be had we sampled the entire 1997 graduate cohort. The table on the following page provides an overview of the final 2000 sample broken down by province and educational institution, and compares it with that obtained in 1997, and the overall 1996 graduating class. The final data were weighted by province to accurately reflect the actual distribution of the 1996 graduate population (i.e. NB graduates = 35.07%; NS graduates = 60.75%; PEI graduates = 4.17%).³

All survey participants were selected from a list of 4,100 graduates who had agreed to be re-contacted after the 1997 study. Interviews were completed in the official language of choice of the graduate. All interviewing was done from Ipsos Reid telephone facilities in Winnipeg and Montreal. In total, 2,145 interviews were completed in English and 235 in French for a total of 2,380 interviews. In all, 93 percent of respondents (n=2,213) agreed to be re-contacted in two years time (2002).

For tracking purposes, the questionnaire for the 2000 study included a block of questions from the base-line 1997 study. A series of additional questions was added to obtain information in other specific areas. The Ipsos Reid Group was responsible for putting together the final survey instrument in close consultation with representatives from the Maritime Provinces Higher Education Commission.

The survey questionnaire was pre-tested twice to ensure respondents had no problems with any of the questions, to verify that the questionnaire script worked in the intended manner (e.g. skip patterns, importing of 1997 data), and to test questionnaire length.

Responses to all survey items were analysed for the production of basic descriptive statistics, and/or the generation of frequency distributions and crosstabulations. In the tables, shading indicates statistically significant results (such as major field of study, degree level, and mother tongue). Statistical signficance was determined using the Student's t-test, and a variation of this test for tests of proportions. The confidence level determining significance was set at 95%. More details on Ipsos Reid's methodology can be found in the Analytical Notes at the end of this report. Unless otherwise specified, in cases where percentages do not total 100, the "Don't know" and "Refused" responses have not been included in the findings.

¹ The 1997 study included graduates from Memorial University in Newfoundland; they were not included in the 2000 study.

 $^{^2}$ Based on the 4,100 records obtained from the 4,204 sample universe of the 1997 study. Given this sample universe, we applied the Finite Population Sample Correction Factor (FPSCF) to the margin of error on a 2,380 sample. In a normal survey, the margin of error for this sample size is ± 2.0 ; taking into account the relatively small sample universe, the FPSCF is .648, which reduces the overall margin of error to $\pm 1.\overline{3}$.

³ Due to the exclusion of Newfoundland graduates from the 2000 study, the 1996 distribution of graduates was recalculated based on the three Maritime provinces only. In the 2000 sample, the proportion of NB graduates was weighted up slightly (33.95% to 35.07%); the proportion of NS graduates was also weighted up (58.40% to 60.75%). This was done to correct for a slight undersampling of graduates from these two provinces in 2000. By comparison, due to oversampling of PEI graduates, the proportion of PEI graduates was weighted down (from 7.65% to 4.17%).

MARITIME PROVINCES TOTAL

12136

100%

Maritime Provinces 1996 Graduate Population Sample Comparison 1996 Graduates 1997 Study 2000 Study % of **Total** % of Sample % of Sample % of Weighted Institution Weighted Graduates Graduates Size Sample Size Sample Sample Sample **NEW BRUNSWICK** Mount Allison University 175 4.16% 4.58% 4.41% 534 4.40% 109 105 St. Thomas University 370 3.04% 140 3.33% 3.19% 73 3.07% 76 10.34% 235 Université de Moncton 1255 350 8.33% 9.87% 246 10.34% University of New Brunswick 2098 17.28% 700 16.65% 388 17.27% 411 17.27% Sub-total — New Brunswick 4257 35.07% 1365 32.47% 808 33.95% 835 35.08% **NOVA SCOTIA** Acadia University 927 7.64% 302 7.18% 178 7.48% 182 7.65% Atlantic School of Theology 0.24% 7 0.29% 5 0.21% 24 0.20% 10 2454 17.56% 20.21% Dalhousie University 19.98% 825 19.62% 418 481 Mount Saint Vincent University 638 5.26% 250 5.95% 144 6.05% 125 5.25% 75 NS Agricultural College 202 1.78% 50 2.10% 40 1.68% 1.66% NS College of Art and Design 133 1.10% 45 1.07% 26 1.09% 26 1.09% 1000 350 8.33% 181 8.24% 196 8.24% Saint Mary's University 8.24% 5.95% 6.84% St. Francis Xavier University 830 6.84% 250 152 6.39% 163 155 3.69% 77 3.24% 72 3.03% Technical University of NS 369 3.04% University College of Cape Breton 587 4.16% 4.16% 115 4.83% 4.84% 175 99 University of King's College 151 1.24% 76 1.81% 39 1.64% 30 1.26% Université Sainte-Anne 58 0.48% 25 0.59% 19 0.80% 11 0.46% Sub-total - Nova Scotia 7373 60.75% 2538 60.37% 60.76% 1390 58.40% 1446 PRINCE EDWARD ISLAND University of PEI (PEI Total) 506 4.17% 301 7.16% 182 7.65% 99 4.16%

4204

100%

2380

100%

2380

100%

4

How to Read the Tables

There are a large number of tables in the report. To facilitate the reading of tables we have included the base size in the tables. That is, when the base size appears beside a given category in the left column of a table (as below), all proportions should be read from left to right, with the percentages adding to 100% (unless "Don't know" responses are not shown, or statistical rounding means the total is slightly above or below 100%).

Importance of Job Being Related to Studies For Employed Male & Female Graduates						
(Weighted base)	Important (%)	Not Important (%)				
Male (671)	77	22				
Female (1311)	85	14				

When the base size appears underneath a category on the top of a table (as below), all proportions should be read from top to bottom, with the percentages adding to 100% (unless "Don't know" responses are not shown, or statistical rounding means the total is slightly above or below 100%).

	Pre-1996 Studies Residence					
	Originally from*					
(Weighted Base)	Maritimes Outside Maritim (2024) (356) %					
1997 Residence						
Maritimes	90	36				
Outside Maritimes	10	65				
2000 Province of Residence						
Maritimes	81	30				
Outside Maritimes	19	70				
* 12 months prior to starting pre-1996 studies.						

1997 and 2000 Graduate Sample Population Comparisons

For the purposes of this longitudinal study, all comparisons made between 1996 graduates as surveyed in 1997 and 2000 graduates are with the same 2,380 people surveyed in 2000. Nonetheless, it is useful here to sketch a socio-demographic outline of the 1997 and 2000 cohorts in order to highlight any major differences in the two populations.⁴

⁴ Please note that for the purposes of a more accurate comparison, data for the 1997 graduate population includes only those for whom records were provided in the original data set (n=4,100); this excludes the Newfoundland population. Also, comparisons are made on the unweighted sample in both years in order to compare actual respondents interviewed. In these tables, all

This comparison shows that, from a socio-demographic perspective, the two sample populations are very similar in terms of their gender and language spoken most often at home on a daily basis. The 2000 population is, on average, three years older, which is to be expected given the three years between the two populations. Graduates are also more likely to be married in 2000 than in 1997, and to have dependent children, again an expected outcome given normal life stage developments.

Socio-Demographic Profile								
1997 and 2000 Graduate Sample Population								
(Unweighted Sample)								
1997 2000 (4,100) (2,380) % (n) % (n)								
Gender								
Male Female	36 (1489) 64 (2611)	34 (798) 66 (1582)						
Age								
24 – 29 30 – 34 35 – 39 40 – 49 50+ Average Age Marital Status Single Married	77 (3146) 7 (293) 5 (190) 7 (303) 3 (139) 29 years 69 (2833) 28 (1154)	67 (1579) 13 (306) 6 (136) 10 (230) 5 (123) 31 years 49 (1161) 48 (1146)						
Separated, Widowed, Divorced	3 (107)	3 (72)						
Dependent Children?								
Yes No	16 (655) 84 (3440)	24 (570) 76 (1793)						
Language Spoken Most Often	00 (0044)	00 (0000)						
English French French/English Other	89 (3641) 8 (335) 2 (66) 1 (58)	88 (2098) 10 (247) 1 (17) 1 (18)						

Both samples are similar in terms of institution attended, field of study, and degree obtained. There are marginally fewer people in 2000 whose highest degree achieved in 1996 is a Bachelor's or Professional degree, but more with a Master's or Doctorate, or Other certificate/diploma. There are marginally more people in 2000 with a degree in Education, Social Studies, and Health (+1 in each case). There are marginally fewer people in 2000 with a degree in Commerce (-2), Humanities (-1), and Engineering (-1).

Education Profile							
1997 and 2000 Graduate Cohorts							
(Unweighted Sample)							
(Unweighted base)	1997 (n=4100) %	2000 (n=2380) %					
Institution	/0	70					
Nova Scotia		_					
Dalhousie University	19 (795)	18 (418)					
Saint Mary's University	8 (346)	8 (181)					
Acadia University	7 (299)	8 (178)					
St. Francis Xavier University	6 (248)	6 (152)					
Mount Saint Vincent University	6 (244)	6 (144)					
University College of Cape Breton	4 (169)	4 (99)					
Technical University of Nova Scotia	4 (152)	3 (77)					
Nova Scotia Agricultural College	2 (71)	2 (50)					
University of King's College	2 (73)	2 (39)					
Nova Scotia College of Art and Design	1 (44)	1 (26)					
Université Sainte-Anne	1 (25)	1 (19)					
Atlantic School of Theology	0.2 (10)	0.3 (7)					
New Brunswick							
University of New Brunswick	17 (682)	16 (388)					
Université de Moncton	8 (340)	10 (235)					
Mount Alison University	4 (172)	5 (109)					
St. Thomas University	3 (136)	3 (76)					
Prince Edward Island	,	,					
University of Prince Edward Island	7 (294)	8 (182)					
Field of Study	(- /	- (-)					
General Arts	1 (27)	1 (12)					
Education	16 (658)	17 (409)					
Fine Arts	2 (94)	2 (53)					
Humanities	12 (487)	11 (268)					
Social Studies	22 (908)	23 (552)					
Commerce	15 (599)	13 (310)					
Agriculture/Biology	10 (411)	10 (237)					
Engineering	7 (271)	6 (153)					
Health	7 (297)	8 (193)					
Mathematics/Physical Sciences	4 (163)	4 (96)					
Information Technology	3 (141)	3 (81)					
Community College Programs*	1 (44)	1 (16)					
Degree							
Bachelor's	76 (3122)	74 (1772)					
Professional	3 (134)	2 (50)					
Master's/Doctorate	11 (490)	12 (282)					
Certificate/Other	9 (354)	12 (276)					
*Some institutions offer community college type programs.							

Overall, the two sample populations are very similar across the different socio-economic and education variables. The fact that this is true with the unweighted sample means that no undue bias is being introduced to the samples through weighting procedures. This provides a higher degree of confidence in the findings, and, notably, when making comparisons between the two sample populations.

1 WORK AND EDUCATION

1.1 LABOUR FORCE ACTIVITY

In order to ensure clarity and understanding in the information presented in this chapter, it is useful to provide the following definitions of terms:

Labour Force Status: Whether graduates are employed, unemployed, or not in the labour force during the study's reference week. The study was conducted from February 2 to April 2, 2000. Respondents were asked about their labour force status for the week prior to being interviewed.

In Labour Force: Graduates working, not working but looking for work, and not working but who have accepted a full-time job due to start at a definite date in the future.

Not in Labour Force: Graduates not working full-time or part-time during reference week (i.e. week prior to completing interview) and not looking for work or unavailable for work.

Employed: Graduates working at main job or business full-time or part-time during reference week (i.e. week prior to completing interview).

Employed Full-time: Graduates working at a job or business 30 hours or more per week.

Employed Part-time: Graduates working at a job or business less than 30 hours per week.

Unemployed: Graduates not working during reference week (i.e. week prior to completing interview), but looking for work, as well as those who had accepted a full-time job to start within a 4-week period from time of interview).

Currently Not Working: Graduates not working during reference week (i.e. week prior to completing interview), but have had a job since their 1996 graduation. They may or may not be looking for work or may or may not be available for work.

Unemployment Rate: The number of unemployed graduates expressed as a percentage of total graduates in the labour force (employed plus unemployed).

The following table provides the actual distribution of the 1996 graduate class according to the various labour force activity profile categories, with the weighted sample size.

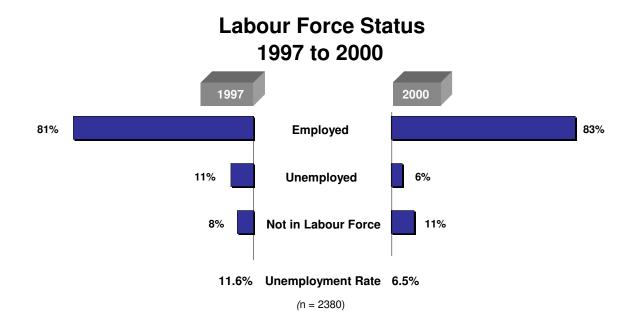
Labour Force Status Profile 1997 – 2000 (Weighted Sample)						
	1997	2000				
In Labour Force	2185	2120				
Not in Labour Force	195	259				
In Labour Force	n=2185	n=2120				
Employed	1931*	1982				
Full-time	1604	1757				
Part-time	261	226				
Unemployed	254	138				
Not working, looking or available for work	212	78				
In school, looking or available for work	27	44				
At home, looking or available for work	14	12				
Disabled/Retired, looking or available for work	1	3				
Unemployment Rate	11.6	6.5				
Not in Labour Force	n=195	n=259				
Not working, not looking, unavailable for work	65	22				
In school, not looking, unavailable for work	99	178				
At home, not looking, unavailable for work	20	44				
Disabled/Retired, not looking, unavailable for work	12	16				

Among the employed in 1997; note that 66 respondents were classified as "Not Applicable". This represents 3% of the total whowere in the labour force.

Labour Force Status of 1996 Graduates in 2000

Labour Force Status

The vast majority of 1996 Maritime graduates were in the labour force during the reference week (89%); just over one-in-ten (11%) were not in the labour force. Most graduates were employed either full-time or part-time (83%). Overall, 6 percent were unemployed. The unemployment rate for 1996 graduates in 2000 stood at 6.5 percent during the reference week.



When we compare these 2000 findings to those in the 1997 study, we note some movement over the past three years. Overall, the number of graduates in the labour force (employed and unemployed) has dropped slightly (92% in 1997 to 89% in 2000), while the number of those not in the labour force has increased by the same 3 percentage points (8% to 11%). The greatest change is in the proportion of unemployed graduates; this has dropped 5 percentage points since 1997 (11% to 6%). There has been a commensurate drop in the graduate unemployment rate (from 11.6% in 1997 to 6.5% in 2000).

A closer look at shifts between 1997 and 2000 reveals graduate transitions both into and out of the labour force were multi-directional. For example, while 86 percent of those employed in 1997 remained employed in 2000, 9 percent were out of the labour force, and 5 percent were unemployed. Among those unemployed in 1997, 11 percent were also unemployed in 2000, 14 percent were out of the labour force, but the vast majority (76%) were employed. And, of those not in the labour force in 1997, 68 percent were employed in 2000, 27 percent were out of the labour force, and 6 percent were unemployed.

It is important to put these findings in the context of the overall Maritime population. On this basis, we find 1996 graduates faring quite well. Indeed, unemployment rates for the general population in each of the three Maritime provinces during the survey reference week reveals significantly higher overall unemployment rates for Nova Scotia (9.6%), New Brunswick (10.2%), and PEI (14.4%).⁵

In Labour Force

Among graduates who are in the labour force in 2000, we find 93 percent are employed, including 83 percent working full-time, and 10 percent with part-time jobs. This profile shows overall improvement for graduates since 1997. Indeed, three years ago, 88 percent were employed, including 73 percent with fulltime positions, and 12 percent working part-time.⁶

Labour Force Status Among Those in the Labour Force 1997 – 2000						
	1997 (2185)	2000 (2120)				
Employed	88%*	93%				
Full-time Part-time	73% 12%	83% 10%				
Unemployed	12%	7%				
Not working, looking or available for work In school, looking or available for work At home, looking or available for work Disabled/Retired, looking or available for work Unemployment Rate	10% 1% 0.6% 0.1% 11.6%	4% 2% 0.6% 0.1% 6.5%				

This represents 3% of the total who were in the labour force.

Overall, unemployed graduates represent 7 percent of the labour force in 2000, a drop of 5 percentage points since 1997 (12%).

⁵ Statistics Canada unemployment rates taken for period during which 2000 survey was conducted – February to April 2000. Respondents answered labour force activity questions based on their status in the week prior to their interview.

6 Among those employed in 1997, 68 respondents were classified as "Not applicable". This represents 3 percent of the total

who were in the labour force, and accounts for the discrepancy in the totals.

Not In Labour Force

The profile of graduates who are not in the labour force shows that 69 percent were "in school" in 2000, while far fewer were at home (17%), not working and not looking for work (8%), or disabled/retired (6%).

Labour Force Status Among Those NOT in the Labour Force 1997 – 2000					
1997 2000 (195) (259)					
Not working, not looking or unavailable for work	33%	8%			
In school, not looking or unavailable for work	50%	69%			
At home, not looking or unavailable for work 10% 17%					
Disabled/Retired, not looking or unavailable for work	6%	6%			

While the 2000 findings are generally consistent with the overall pattern found in 1997, there are significant differences between the two periods. For example, a far greater proportion of graduates were in school in 2000 than was the case in 1997 (69% vs. 50%). On the other hand, far fewer 2000 graduates were not working and not looking or unavailable for work (8% vs. 33% in 1997). Further, while 17 percent of graduates not in the labour force in 2000 indicated they were "at home", only 10 percent were in this situation in 1997. These findings suggest that many graduates have taken themselves out of the labour force to return to school or stay at home. Findings focused further down show that many graduates returned to study in the post-1996 period in order to improve their chances in the labour market.

There are some significant variations in labour force status depending upon the particular characteristics of graduates. For example, as the table on the next page shows, while there are no statistically significant differences based on gender or home language, we do find that a greater proportion of those with a graduate degree (Master's or Doctorate) are employed in 2000 than is the case with graduates at the Bachelor's level (94% vs. 82%). Not surprisingly, then, a much larger proportion of graduates with some other Certificate or Diploma are either unemployed or not in the labour force (10% and 14%, respectively).

Similarly, graduates who obtained a degree in certain fields of study are more likely to be employed than others. This is true for those who studied Education, Fine Arts, Commerce, and Information Technology. On the other hand, Engineering students are those most likely to be unemployed. Meanwhile, graduates who are out of the labour force in 2000 are more likely to have completed a degree in Agriculture/Biology or Mathematics/Physical Sciences.

Labour Force Status in 2000						
(Weighted base)	Employed %	Unemployed %	Not in Labour Force %			
Overall (2380)	83	6	11			
Gender						
Male (809)	84	7	9			
Female (1571)	83	5	12			
Language Spoken Most Often at Home*						
French (2092)	83	6	11			
English (253)	83	5	12			
Degree						
Bachelor's (1756)	82	6	12			
Professional (50)	96	1	3			
Master's/Doctorate (296)	94	1	4			
Certificate/Diploma (278)	75	10	14			
Field of Study						
General Arts (12)	-	-	-			
Education (408)	93	3	4			
Fine Arts (54)	90	4	6			
Humanities (260)	79	8	13			
Social Sciences (555)	80	6	14			
Commerce (310)	90	5	6			
Agriculture/Biology (217)	71	7	22			
Engineering (153)	82	11	7			
Health (207)	86	5	9			
Mathematics/Physical Sciences (101)	72	6	21			
Information Technology (84)	91	4	5			
Community College Programs (19)	-	-	-			

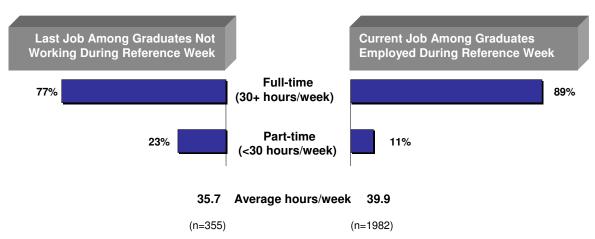
^{*} Total n does not equal 2380, as findings for "French/English" and "Other" responses are not shown here.

⁻ Cell size too small (<50) for reliable analysis.

Full-time vs. Part-time Employment

The vast majority of employed graduates – 89 percent – worked full-time (30+ hours per week) at their main job during the study's reference week. Approximately one-in-ten (11%) worked part-time hours (less than 30 hours per week) at their main job. Interestingly, fully one-fifth of employed graduates said they worked 50 or more hours at their place of employment. On average, employed graduates worked 39.9 hours during the reference week.





Graduates not working during the study's reference week also worked mostly full-time hours at their last job (77% did so). However, about a quarter (23%) did work part-time, which is more than double the proportion of currently employed graduates working part-time (11%). On average, graduates currently not working worked 35.7 hours per week at their last job, a full 4.2 hours less than those employed during the reference week.

Generally speaking, employed graduates working the longest hours are in permanent positions (41 hours, on average vs. 36.8 hours for those with non-permanent positions). Graduates from Engineering (44.5 hours), Education (42.6), and Commerce (42.5) tend to work longer hours than graduates of other programs. Men are also more likely to be working longer hours than women (43 hours a week as opposed to 38.4 for women).

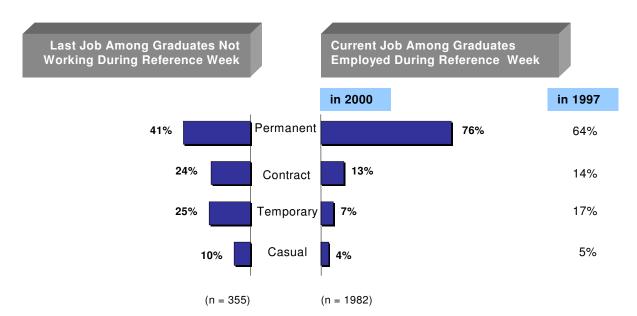
Nature of Graduate Employment

The vast majority of employed graduates (76%) held permanent positions at their place of employment. Far fewer were working on contract (13%), or had temporary (7%) or casual (4%) positions. By comparison, graduates not currently working, but who have worked since their 1996 graduation, were much less likely to have held a permanent position in their last job (only 41% did). A much greater proportion were on contract (24%) or in temporary (25%) and casual (10%) positions.

A look back to 1997 also shows that significantly fewer graduates were working in permanent jobs one year following their graduation (64% vs. 76% in 2000). While as many were working on contract three years ago, a much greater proportion held temporary positions at their place of employment three years ago (17% vs. 7% in 2000).

Type of Employment Position

"Is your job a permanent, temporary, contract or casual position?"

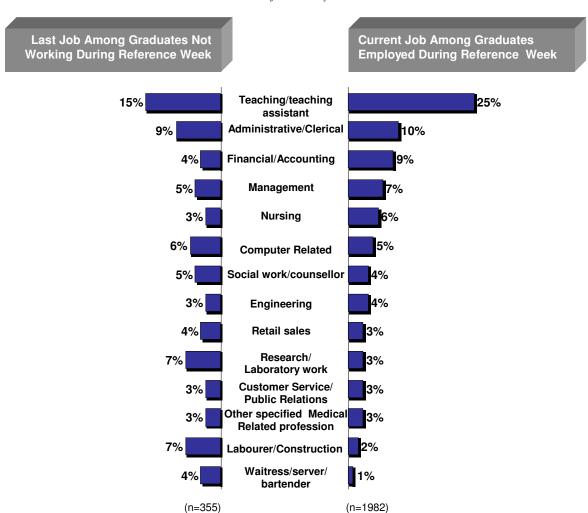


Type of Occupation

Employed Maritime graduates are working in a wide variety of occupations from teaching to nursing, and from public relations to engineering. Most, however, have secured employment as teachers or teaching assistants (25%). Less than half as many have jobs in the administrative or clerical (10%), and financial/accounting (9%) fields. A good number are also employed in management (7%), nursing (6%), and computer-related occupations (5%). This same picture is drawn for the last job of graduates not currently working, but who have worked since their 1996 graduation. However, many more of this latter group did so in research and laboratory fields, or as general labourers, particularly in construction.

Type of Occupation

"What kind of work did you do?"



Note: Totals do not add to 100% due to exclusions of occupations with less than 1% of graduates.

As the previous chart shows, there is a notable 10-point difference between the proportion of graduates not working who worked in teaching at their last job and those currently working in this field. Further analysis reveals that the difference may be tied somewhat to 1996 graduates returning to school after graduation to pursue a degree in Education, and subsequently finding work in the profession. Indeed, among employed graduates who did undertake post-1996 studies, 22 percent did so in Education. And, of these, 69% held a 1996 degree in a field other than Education.

The following table details the differences among employed graduates with respect to the type of job they were working in during the study's reference week in 2000.

Those with a 1996 degree in Education are most likely to be teaching in some capacity (i.e. as teachers or teaching assistants). Still, a good proportion of graduates from other fields, notably Humanities and Mathematics/Physical Sciences were also employed as teachers.

Type of Occupation*							
Among employed graduates							
(Weighted base) Teaching/ Admin./ Financial/ Accounting Mgmt. Nursing Comput							
	%	%	%	%	%	%	
Overall (1982)	25	10	9	7	6	5	
Gender							
Male (671)	18	7	12	9	-	8	
Female (1311)	28	12	7	6	8	3	
Degree							
Bachelor's (1444)	25	9	10	6	6	5	
Professional (49)	-	-	-	-	-	-	
Master's/Doctorate (276)	37	11	7	9	3	1	
Certificate/Diploma (214)	12	18	4	12	9	5	
Field of Study							
General Arts (10)	-	-	-	-	-	-	
Education (375)	72	7	2	3	0	1	
Fine Arts (47)	-	-	-	-	-	-	
Humanities (209)	34	14	4	7	1	5	
Social Sciences (447)	14	15	6	7	2	2	
Commerce (276)	3	14	41	16	-	4	
Agriculture/Biology (156)	12	10	2	5	3	3	
Engineering (119)	4	2	1	9	0	7	
Health (181)	5	3	0	7	52	0	
Mathematics/Physical Sciences (173)	31	2	7	1	0	<u>11</u>	
Information Technology (74)	13	9	7	6	1	35	
Community College Programs (14)	-	-	-	-	-	-	

^{*} Included here are occupations with 5% or more employed graduates.

⁻ Cell size too small (<50) for reliable analysis.

Given the relatively high proportion of employed graduates working in the teaching field in 2000, it is interesting to note that many graduates opted to pursue an Education degree in the post-1996 period. This is true for 44 percent of Humanities graduates employed in 2000, 25 percent of Mathematics/Physical Sciences graduates, 17 percent of those graduating from Social Sciences, and 14 percent of Agriculture/Biology graduates.

Teaching and teaching assistant positions are a dominant profession for graduates with more advanced degrees (Master's and Doctorate). Women were also more likely than men to be engaged in this type of work in 2000.

Administrative and clerical positions were most likely to be held by women (12% vs. 7% men), and by those who graduated from liberal arts (Social Sciences, Humanities) and Commerce programs.

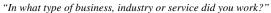
Jobs in the area of finance and accounting were more likely to be occupied by men, and by graduates who obtained a degree in Commerce. This pattern is repeated for jobs in management.

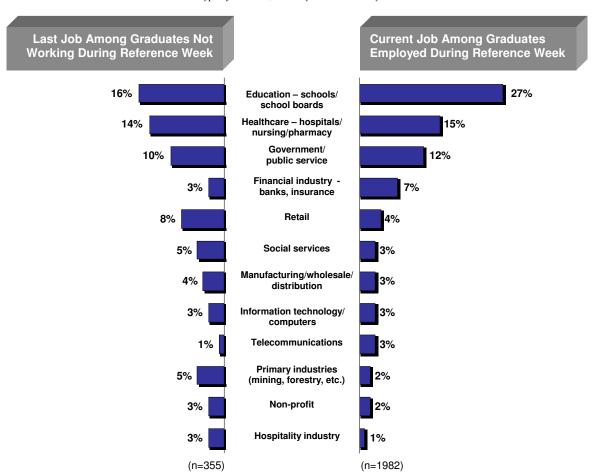
Employment positions in computer-related fields were much more likely to be held by men and by those who completed studies in Information Technology.

Type of Business, Industry or Service

Graduates are working in a variety of different business or industry sectors. Topping the list is the education sector, consistent with the findings that teaching and teaching assistant jobs are a major form of employment for graduates. Aside from education, employed graduates are also working in healthcare (15%), government or public service (12%) and the financial industry (7%).

Type of Business, Industry or Service





Note: Totals do not add to 100% due to exclusions of occupations with less than 1% of graduates.

A similar distribution exists for graduates not working during the study's reference week, but who did have a job following their 1996 graduation. Still, in their last job, a greater proportion of these graduates worked in the retail sector when compared to the employed.

The table below details differences among specific groups of employed graduates with respect to the type of business or industry in which they worked.

Overall, women were more likely than men to be working in the education and healthcare sectors. This is consistent with previous findings showing a greater proportion employed in education and health-related jobs. Similarly, graduates with advanced degrees were much more likely than those with a Bachelor's degree or Certificate/Diploma to be employed in the education sector. Those with an Certificate/Diploma are more likely than others to have employment in a health-related field.

Type of Business, Industry or Service * Among employed graduates						
(Weighted base)	Education	Health- care	Gov't/ Public Service	Financial	Retail	Information Technology
	%	%	%	%	%	%
Overall (1982)	27	15	12	7	4	3
Gender						
Male (671)	19	6	13	8	5	5
Female (1311)	31	19	12	6	4	2
Degree						
Bachelor's (1444)	26	14	12	7	5	3
Professional (49)	-	-	-	-	-	-
Master's/Doctorate (276)	44	12	12	4	-	1
Certificate/Diploma (214)	14	20	18	6	5	2
Field of Study						
General Arts (10)	-	-	-	-	-	-
Education (375)	72	5	9	1	1	2
Fine Arts (47)	-	-	-	-	-	-
Humanities (209)	39	3	11	6	4	4
Social Sciences (447)	16	12	18	5	5	2
Commerce (276)	5	4	14	28	8	5
Agriculture/Biology (156)	18	22	10	4	6	1
Engineering (119)	4	0	11	0	2	4
Health (181)	5	83	7	0	2	-
Mathematics/Physical Sciences (73)	31	10	9	7	-	5
Information Technology (74)	15	4	21	1	9	15
Community College Programs (14)	-	-	-	-	-	-

^{*} Included here are sectors with 3% or more graduates.

Further, graduates who obtained a degree in Education are those most likely to be working in this sector. However, a significant proportion of graduates in other fields were also employed in this sector, notably Humanities and Mathematics/Physical Sciences graduates.

By comparison, graduates from the fields of Health, Commerce, and Information Technology were those most likely to be working in their respective sectors.

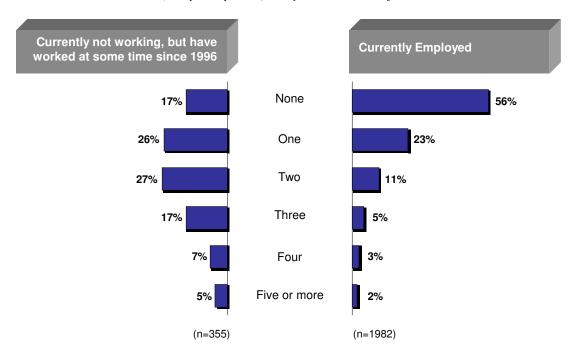
⁻ Cell size too small (<50) for reliable analysis.

Frequency of Joblessness Since 1996 Graduation

While overall unemployment figures are fairly low, it is not unusual for employed graduates to have experienced some period of joblessness at some point since their graduation. Indeed, 44 percent said they were unemployed at least one time since 1996. Still, most (23%) were without a job only once during this period (on average 0.9 times).

Joblessness Since Graduation

"Since your graduation in 1996, how many times (or separate periods) have you been without a job?"



By comparison, among graduates not working during the reference week, but who did have a job at some point since their graduation, fully 82 percent said they experienced at least one period of unemployment between 1996 and 2000 (2.0 times on average). Most (53%) experienced one or two periods where they were without a job. Curiously, 17 percent of graduates who were not working when contacted for this study said they had not experienced any periods of time since 1996 when they were without a job.

Employed graduates most likely to have experienced at least one period of joblessness since obtaining their degree in 1996 are those with a Bachelor's Degree (50%). Graduates from Agriculture/Biology (61%) and the Humanities (60%) were more likely than others to have been unemployed since graduating.

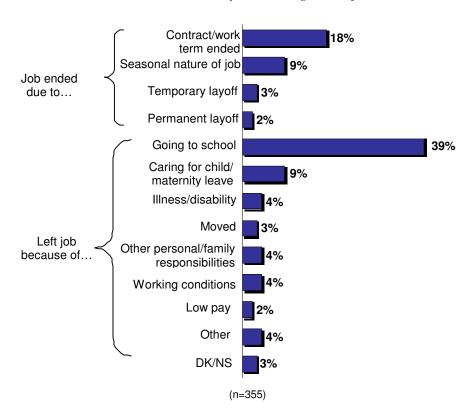
Graduates least likely to have experienced unemployment since their 1996 graduation include those with a professional (69%) or graduate (73%) degree (compared to 50% of Bachelor's graduates). Also, those who obtained a degree in Health (79%), Information Technology (69%), and Commerce (63%) were those most likely to have had no periods of unemployment since graduating.

Reasons for Not Working

Graduates not working during the reference week, but who have worked since their 1996 graduation, give a variety of reasons for being without a job. Broadly speaking, they were more likely to have left their job voluntarily rather than as a result of being laid off (65% mentions vs. 32%). More specifically, the most prominent reason graduates gave for being without a job is that they decided to return to school (39% mention this). Just under half as many – 18 percent – were without a job because of the end of a contract (18%).

Reasons for Current Non-Working Status

"What is the main reason you are no longer in this job?"*



*Percentages do not add to 100% because multiple responses possible.

In addition to these two key reasons for not working, many graduates left for personal reasons (17%), either to care for a child, due to illness or disability, or for family responsibilities. Meanwhile, 14 percent mentioned being laid off, or blamed the seasonal nature of their work.

1.2 RELATEDNESS OF JOB AND EDUCATION

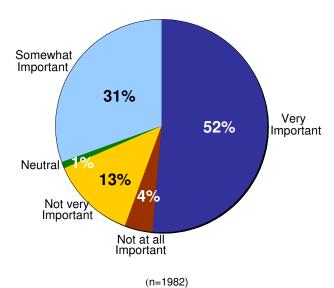
Overall, there is a definite relationship between what 1996 graduates do for a living and the perceptions they have of their university education. Not only do graduates value having a job related to their studies, they are, by and large, working in a job that is related to their studies (and this has increased since 1997). They also believe their university education helped them obtain their job, and feel they are using the skills they learned while at university. When this occurs, as it does for many, graduates tend to be more satisfied with their job, and consider their university education worth the financial investment and time spent studying.

Importance of Job Being Related to Studies

Employed Maritime graduates place a great deal of importance on having a job related to what they studied at university. Fully 83 percent of 1996 graduates feel it is important that their job be directly related to their field of study; this includes 52 percent for whom this is very important. Comparatively few – only 17 percent – say it is not important that their job be directly related to their field of study.

Importance of Related Job

"Is it important or not important to you that your job be directly related to your field of study?"



While the vast majority of employed graduates from all walks of life and educational experience think it is important to have work related to one's education, certain groups share this sentiment more strongly. For example, the table below shows that employed female graduates place more importance than men on having a job related to their studies.

Importance of Job Being Related to Studies Among different groups of employed graduates*					
(Weighted base)	Important Not Importa (%) (%)				
Overall (1982)	83	17			
Gender					
Male (671) Female (1311)	77 85	22 14			
Degree					
Bachelor (1444) Professional (49) Masters/Doctorate (276) Certificate/Diploma (214)	81 - 89 84	19 - 10 15			
Field of Study	Ç.				
General Arts (10) Education (375) Fine Arts (47)	- 90 -	- 9 -			
Humanities (209)	72	27			
Social Sciences (447) Commerce (276)	80 82	20 18			
Agriculture/Biology (156) Engineering (119)	80 76	20 23			
Health (181)	95	5			
Mathematics/Physical Sciences (73) Information Technology (74)	83 83	17 17			
Community College Programs (14)	-	-			

^{*} Categories for the 4-point semantic scale for this question were collapsed. Here "Important" = Very + Somewhat Important; and "Not Important" = Not Very + Not at all Important. Statistically significant variations in the findings remain essentially the same as with the full set of response categories.

- Cell size too small (<50) for reliable analysis.

In addition, more French-speaking graduates attach value to a job that is in some way related to what they learned while at university.

Further, employed graduates with different degrees and fields of study place varying levels of importance on having a job related to their education. Here, those who pursued studies beyond the undergraduate level (Professional or graduate degree) are somewhat more emphatic about working in a job that is somehow connected to their studies.

It is also notable that graduates in Health and Education fields stand out for expressing stronger views about having work that is related to their studies. Fewer Humanities and Engineering graduates feel as strongly in this regard.

Do Graduates Have Jobs Related to Their Education?

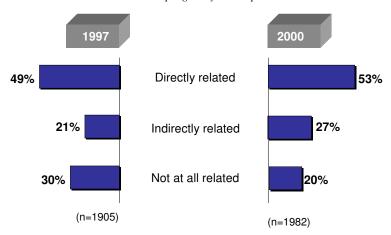
1996 Maritime graduates appear to have been quite successful in securing employment relevant to their studies. Not only are most employed graduates working in jobs that are directly or indirectly related to their education, but most are also using the skills they learned at university. And, more importantly, the employment situation for graduates in this regard has improved since 1997.

Most graduates (80%) are currently working in a job they feel is in some way related to their 1996 graduation studies. While a sizeable minority (20%) say their job is not at all related to their field of study, over half (53%) say it is directly related.

Relationship Between Program and Employment

Among Those Currently Employed

"Would you say that your job is/was directly related, indirectly related, or not at all related to the program you completed in 1996?"



(Excludes "Don't know" responses)

A comparison with the 1997 study reveals a significant shift in graduates' employment experience when it comes to how closely their jobs are related to their university program. Since 1997, there has been a 10-point increase in the proportion of graduates who report their job is in some way related to the university program they completed in 1996. Three years ago, 70 percent of graduates reported their job at that time was related in some way to the program they completed in 1996; in 2000, this jumped to 80 percent. Overall, the proportion of graduates who are in jobs directly related to their university education has increased a statistically significant 4 percentage points in three years (49% in 1997 to 53% in 2000).

At the other extreme, the shift has been somewhat more significant. The proportion of graduates who believe their job is not at all related to their university studies has dropped 10 points since 1997. While 30 percent held this view three years ago, only 20 percent of graduates do so currently.

Findings also suggest that employed graduates who have jobs related to their studies do value this part of their job. Fully 93 percent of those whose job is directly related to their studies say this is important. This drops to 79 percent among graduates whose job is only indirectly related to their studies.

Importance of Job Being Related to Field of Study Among employed graduates who feel job is related/not related to studies*							
(Weighted base) Important Not Important (%) (%)							
Overall (1982)	Overall (1982) 83 17						
Relevance of Program (Job	Relevance of Program (Job is to studies)						
Directly related (1041) 93 6							
Indirectly related (545) 79 20							
Not at all related (396)	65	35					

^{*} Note that the categories for the 4-point semantic scale for this question were collapsed. Here "Important" = Very + Somewhat Important; and "Not Important" = Not Very + Not at all Important. Statistically significant variations in the findings remain essentially the same as with the full set of response categories.

In 2000, we find that graduates with certain educational experiences are more likely to be working in a job that is related to what they studied at university. This is particularly true for students who graduated in 1996 with a Master's, Doctorate or a Professional degree. By comparison, graduates with a Bachelor's degree or some other Certificate are more likely than others to say their job is not at all related to their 1996 degree field of study. The findings thus suggest there is a strong correlation between obtaining a degree beyond the undergraduate level and being successful in finding a job related to one's study.

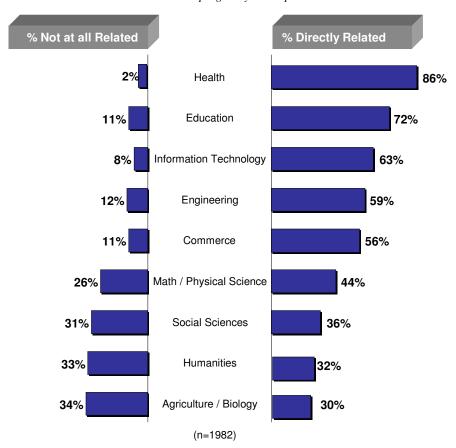
Job Related to Field of Study? By Degree								
Job isto studies (Weighted base) Overall (1982) Overall (1982) Overall (1444) Bachelor's (1982) Professional (49) Master's / Doctorate (276) (276)								
	(%) (%) (%) (%)							
Directly Related	53	48	-	68	52			
Indirectly Related	27	29	-	24	28			
Not at all Related 20 23 - 8 20								
- Cell size too small (<50) for rea	liable analysis	S.						

26

Further, graduates from certain programs are more likely to have employment directly related to their education. This is particularly true of those who studied in Health (86%) and Education (72%). However, a majority of graduates in the Information Technology (63%), Engineering (59%) and Commerce (56%) fields also find themselves employed in jobs directly related to their studies. Far fewer in the Humanities, Social Sciences, and Agriculture/Biology are in the same situation.

Work in Fields Directly Related to Studies - by Field of Study* Among Those Currently Employed**

"Would you say that your job is/was directly related, indirectly related or not at all related to the program you completed in 1996?"

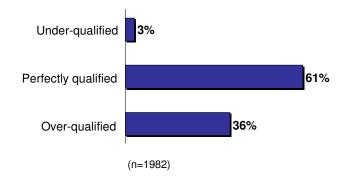


^{*}Does not include General Arts, Fine Arts, or CC Programs due to small cell size (<50). ** Totals do not add to 100% because for presentation purposes chart does not include percentages for "indirectly related" responses.

Do Graduates Feel Qualified for their Job?

Considering their level of education, field of study and work experience, six in ten (61%) employed graduates reported they were perfectly qualified for their current or most recent employment. Over a third (36%) said they were over-qualified. Only 3 percent felt they were under-qualified.

Qualification for EmploymentAmong Graduates Employed



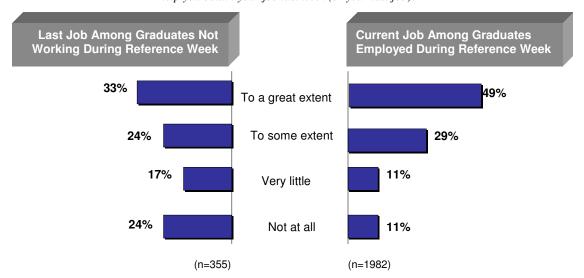
(Categories for 5-point numeric scale were collapsed for analysis purposes. Here, 1,2=Underqualified; 3=Perfectly qualified; 4,5=Over-qualified.)

Did Education Help Graduates Obtain their Job?

In large measure, employed graduates are convinced their university education helped them get their job. Fully 78 percent believe this to be the case, including half (49%) who believe their educational program helped them to a great extent in obtaining their job and 29 percent who feel it helped them to some extent.

Extent Educational Program (Completed in 1996) Helped to Obtain

"To what extent did your educational program completed in 1996 help you obtain your job last week (or your last job)?"



The remaining (22%) are not so positive. Eleven percent say their education did very little to help them in obtaining their job, and just as many (11%) feel it did nothing at all to help them in obtaining their job.

It is interesting, and significant, that 57 percent of graduates not working during the study's reference week, who have been employed since their 1996 graduation, also feel their university education helped them obtain their last job (33% to a great extent, 24% to some extent). However, far fewer feel this way than those who are currently employed (57% vs. 78%). Moreover, the currently unemployed are distinctly more negative than employed graduates; they are more than twice as likely to feel their education program did nothing at all to help them find a job (24% vs. 11% of the employed).

Certain groups of employed graduates hold more positive views about their university education and its importance in helping them secure employment. In particular, a larger proportion of those who studied in Information Technology (92%), Engineering (87%) Commerce (84%), and Health (84%) speak more favourably in this regard. On the other hand, a greater number of employed graduates who completed degrees in Agriculture/Biology (34%), Social Sciences (28%), and Mathematics/Physical Sciences (27%) believe their university program did very little or nothing at all to help them obtain their job.

There are no statistically significant differences in this regard between graduates with different types of 1996 degrees.

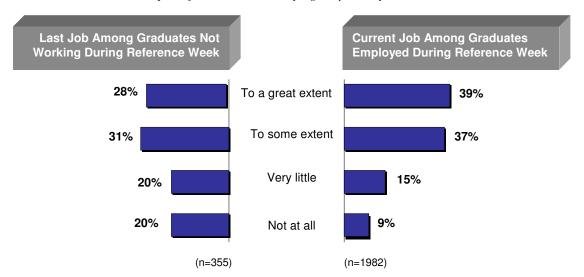
Lastly, it is graduates of New Brunswick institutions who feel most strongly that their education contributed to their success in the labour market (78% compared to 72% of Nova Scotia graduates, and 73% in Prince Edward Island).

Are Graduates Using the Skills they Learned from their Educational Program Completed in 1996?

A key measure of whether or not graduates' education is related to their job is if they are using the skills they learned at university in the work they are doing. Findings show that the vast majority of employed graduates – 76 percent – say they are using the skills they learned from their educational program completed in 1996 at their job. This includes 39 percent who are using them to "a great extent", and another 37 percent using them to "some extent". Comparatively fewer – 24 percent – state that they are not using their learned skills.

Using Skills Learned in Educational Program Completed in 1996

"In your job last week (your last job), to what extent did you use any of the skills required from the educational program you completed in 1996?"



A similar pattern is evident for graduates not working during the reference week, but who have had a job since graduating in 1996. However, in their last job, these graduates were somewhat less likely than the employed to have used the skills they learned; 59 percent did so, compared to 76 percent of employed graduates currently using their skills.

Graduates who studied in certain fields are more likely than others to be using the skills they learned at least to some extent. This is particularly true of those who graduated with a degree in Health (93%, including 74% to a "great extent"), Information Technology (84%), Education (84%, including 51% to a "great extent"), Commerce (83%), and Engineering (80%). By comparison, graduates from other fields are using their skills much less – Agriculture/Biology (41% little or very little), Mathematics/Physical Sciences (34%), Social Sciences (31%), and Humanities (29%).

Further, graduates with a Master's or Doctorate degree are more likely than those with other degrees to say they are using the skills they learned at university in their job. Fully 87 percent share this view, compared to three-quarters of graduates with a Bachelor's (74%) or a Certificate or Diploma (73%).

Impact of Having Work Related to Studies on Valuing Education

Generally speaking, the value employed graduates place on the time and money they spent at university seems to be tied to whether or not they have employment that is related to their studies. For example, the table below shows that, among those whose job is directly related to their field of study, fully 46 percent believe spending the money for their studies was well worth the investment. This drops to 21 percent among graduates whose job is not at all related to what they studied.

Further, employed graduates who are using the skills they learned at university are also more likely to value the time and money they invested in their education. Among those using their skills to a great extent, 50 percent feel the money they committed was well worth the investment, and 62 percent perceive the time they spent in the same fashion.

Among those not using their learned skills at all, only 18 percent place a high value on the money they invested in their university education, and 23 percent feel the same way about the time they spent studying.

Value Placed on University Education based on Whether Work is Related to Studies and Skills Learned are Being Used* Among employed graduates							
	% Who say Education was Well Worth Personal Investment Financial Investment of Time						
(Weighted base)	%	%					
Overall (1982)	38	48					
How Much Job is Related to Studies	?						
Directly related (1041)	46	56					
Indirectly related (545)	34	44					
Not at all related (396)	21	32					
Degree to Which Using Skills Acquire	ed From Educational Progr	ram?					
To a great extent (782)	50	62					
To some extent (736)	35	46					
Very little (289)	22	29					
Not at all (175)	18	23					
* In order to highlight significant variations, c	only the "Well worth it" responses	s are shown here.					

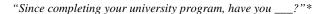
A similar, if not stronger, relationship emerges when it comes to valuing the time one has spent at university. Fifty-six percent of employed graduates who have a job directly related to their studies feel the time they spent was well worth it, compared to only 32 percent of those whose job is not at all related to their studies.

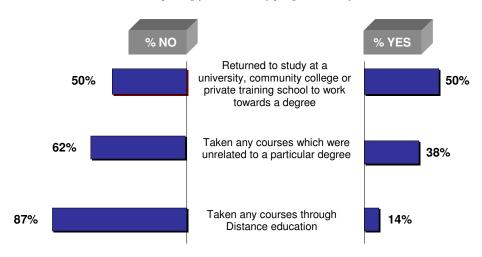
1.3 Post-1996 Studies

Did Graduates Return to Study After 1996 Graduation?

The 1996 Maritime provinces' graduating class has shown a high degree of interest in pursuing studies beyond their 1996 graduation. They have done so at different levels and in different programs. Since completing their university program in 1996, for example, fully one-half (50%) of graduates have returned to study at a university, community college, or private training school to work towards a specific degree, diploma, or certificate other than an apprenticeship program. This number has increased since 1997 when just over a third (35%) had returned to school in order to complete a program or take courses for credit.

Education Experience Since 1996 Graduation





*Among all 1996 graduates (n=2380).

Meanwhile, since 1996, nearly four-in-ten (38%) graduates have taken courses that were unrelated to a particular degree, and 14 percent have taken courses through distance education.

Further analysis reveals that among graduates who pursued post-1996 studies to work towards a degree or take courses unrelated to a degree,⁷ 72 percent followed a single educational path, returning to either work towards a degree (45%) or taking courses unrelated to a degree (27%). The remaining 28 percent did both.

⁷ n=1626.

Among those who returned to study at a university, community college, or private training school, fully 69 percent did so on a full-time basis. Another 27 percent were part-time students, while 3 percent undertook a combination of both. For graduates who took courses unrelated to a particular degree, a similar pattern emerges, though fewer opt to study on a full-time basis (58% full-time, 39% part-time, 2% combination).

Generally speaking, graduates most likely to have returned to study for another degree after their 1996 graduation studied in certain fields for their degree. In particular, the next table shows that Mathematics/Physical Sciences, and Agriculture-Biology graduates were more likely to have pursued courses for a degree in the post-1996 period than those in other fields of study. By comparison, graduates in the Information Technology, Commerce, Social Sciences, and Education fields of study for their 1996 degree were more likely than others to have enrolled in courses unrelated to a degree.

Further, students who graduated in 1996 with a Bachelor's degree were more likely than those who obtained other degrees or certificates to have made the decision to pursue post-1996 degree studies. On the other hand, 1996 Master's and Doctorate graduates were more likely than others to have taken courses unrelated to a degree.

A greater proportion of graduates from Prince Edward Island institutions decided to return to study for a degree following their 1996 graduation than is the case with graduates from other provinces. In all, 61 percent of Prince Edward Island graduates pursued post-1996 studies, compared to 51 percent who obtained their degree from a Nova Scotia institution, and 47 percent of those who graduated in New Brunswick.

Lastly, it is interesting that students with the highest levels of debt outstanding for their pre-1996 studies (\$15,000 or more) are those most likely to have returned to study for a degree at a university or college.

Education Experience Since 1996 Graduation*							
Among all graduates							
(Weighted base)	Returned to Study for a Degree at University or College?	Taken any Courses Unrelated to Par- ticular Degree?	Taken any Courses Through Distance Education?				
	% Yes	% Yes	% Yes				
Overall (2380)	50	38	14				
Degree							
Bachelor (1756) Professional (50) Master's/ Doctorate (296)	56 44 20 47	37 34 46 36	14 13 9 14				
Certificate/Diploma (278) Field of Study	47	30	14				
General Arts (12) Education (408) Fine Arts (54) Humanities (26) Social Sciences (555) Commerce (310) Agriculture/Biology (217) Engineering (153) Health (207) Mathematics/Physical Sciences (101) Information Technology (84) Community College Programs (19)	36 37 65 58 46 67 42 30 79 31	29 36 32 34 51	- 15 4 9 12 26 10 7 11 8 14				
Total Pre-1996 Debt Outstanding**	Total Pre-1996 Debt Outstanding**						
Zero (301) Less than \$5,000 (146) \$5,000 to \$14,999 (315) \$15,000 to \$\$29,999 (270) \$30,000 or more (58)	40 43 45 54 66	46 30 37 32 33	13 12 12 12 9				

^{*} Only % Yes responses are shown for each type of post-1996 education. Row percentages will not total 100%.

^{**} As of March 2000. Includes only those who borrowed money for pre-1996 studies (n=1215), but excludes "lumped with other loans" (n=89), "unable to classify" (n=33), and "Don't know" (n=3) responses. Therefore, the effective n=1090, and not 2380.

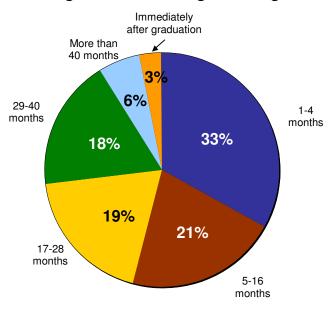
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Length of Time Between 1996 Graduation and Starting Post-1996 Studies Leading to a Degree or Diploma

Graduates returning to study for a particular degree or diploma spent an average of 19 months away from school before returning. However, graduates exhibited a greater tendency to return sooner rather than later. At the extremes, 36 percent spent four months or less out of school before returning to school while 24 percent waited almost two-and-a-half years (29+ months). Given the normal enrolment and registration process, this suggests that a good number of graduates likely planned to pursue further studies while they were completing the final year of their 1996 degree. Others waited a somewhat longer period; 21 percent returned after 5 to 16 months.

Length of Time Between Graduating in 1996 and Going Back to School*

Among Those Returning for a Degree



Mean=19 months

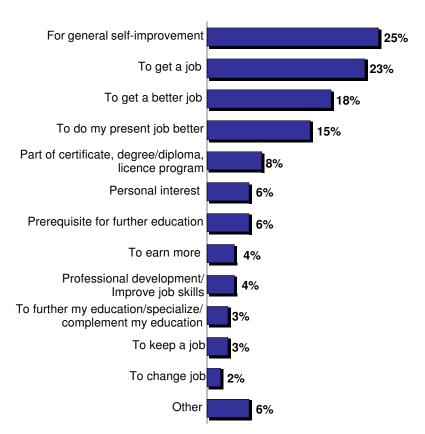
*Among those who pursued post-1996 studies to work towards a degree (n=1186).

Among those who did return, Engineering, Humanities, and Agriculture-Biology graduates waited the shortest period of time before returning to study (about 16 months, though many returned after only four months). By comparison, graduates in the Education, Social Sciences, Commerce, and Health fields took the longest period of time before returning (about 20 months, though many returned after two years or more).

Reason for Pursuing All Post-1996 Studies

Most 1996 graduates who pursued any type of further studies in the years following their graduation selected their courses with an eye to the labour force. For example, about a quarter (23%) say they took courses since 1996 in order "to get a job", two-in-ten (18%) say "to get a better job", and nearly as many (15%) say "to do my present job better." Further, 3 percent say the reason for taking on more studies was "to keep a job" and 2 percent say "to change a job." A further 4 percent of graduates say they have taken other courses in order to earn more and just as many report professional development as the reason (4%).

Reason for Another Degree/Other Courses*



*Among those who've taken other courses and/or pursued a degree in the post-1996 period (n=1673).

A further segment of graduates – 25 percent – took on additional studies out of a desire for personal improvement. And, 6 percent say they have a personal interest in what they were studying.

Lastly, we find that some 1996 graduates pursued further studies in a particular field due to some educational reasons. About one-in-ten (8%) say they have taken courses as part of a certificate, degree, diploma, or license program. Six percent say these courses were a prerequisite for further education.

Field of Study in Post-1996 Period

Findings show that a good number of 1996 graduates pursued studies in the post-1996 period as a means to "up-grade" their degree status. For example, 28 percent of those who graduated in 1996 with a Bachelor's degree decided to pursue Master's (23%) or Doctoral (5%) studies. Another 11 percent returned to undertake a professional degree. A further one-in-ten returned to get a graduate certificate or diploma (10%). Meanwhile, 9 percent sought to obtain a community college certificate or diploma, and 8 percent returned for hi-tech or other private training certificate. By comparison, 29 percent of 1996 graduates with a Bachelor's degree undertook post-1996 studies for an undergraduate certificate or diploma.

Graduates who returned to study were also asked what is or was the major field of study or specialization in their most recent program. Responses include:

- Education (19%)
- Health professions and occupations (17%)
- Commerce (12%)
- Social sciences (10%)
- Information Technology (9%)
- Engineering and applied sciences (6%)

Other fields of study for returnees include: Humanities (5%), Mathematics or Physics (3%), Law (3%), Accounting (3%), Agriculture or biological studies (2%), Fine or Applied arts (2%), and General arts (1%).

Broadly speaking, many graduates who pursued post-1996 studies did so in the same field of study as their 1996 degree, though many graduates did change the focus of their studies. Overall, among 1996 graduates who pursued post-1996 studies, 32 percent returned to study in virtually the same field. This included those in the following fields (in order):

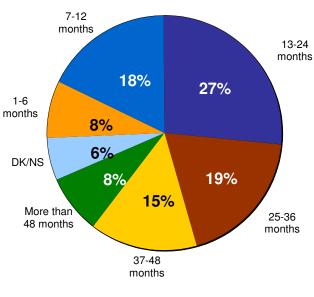
- Health (74% returned to study in health professions and occupations)
- Engineering (58%)
- Education (45%)
- Commerce (41%)
- Social Sciences (26%)
- Mathematics/Physical Sciences (19%)
- Humanities (16%)
- Agriculture/Biology (11%)

Of graduates who returned to study in the post-1996 period but not in a similar field of study as the one they graduated with in 1996, Education and Commerce were the most common fields of study, with 18 percent and 10 percent respectively choosing to study in these areas following their graduation in 1996.

Length of Post-1996 Program

In making the decision to undertake another degree in the post-1996 period, most 1996 graduates were prepared to devote a good amount of time to the endeavour. Fully 42 percent registered in a program that would take 2 or more years to complete. Another 27 percent report their program as being between 13 months and 2 years in length. Overall, 26 percent pursued a program of 1 year or less in duration.

New Program Length*

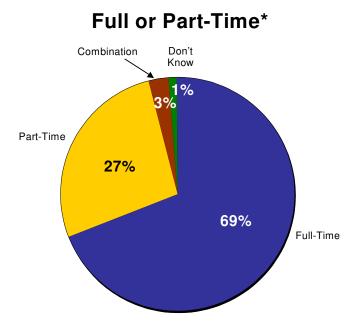


Mean=26 months

*Among 1996 graduates who pursued post-1996 studies to work towards a degree (n = 1186).

Full-time or Part-time Studies in Post-1996 Period

Of those 1996 graduates who returned to pursue another degree, more than two-thirds (69%) say they are or were in school full-time and just over a quarter (27%) are or were in school part-time. Just 3 percent of returnees say they are or were in school a combination of full-time and part-time.



*Among 1996 graduates who pursued post-1996 studies to work towards a degree (n=1186).

The table on the next page shows that 1996 graduates with a Bachelor's Degree or Certificate/Diploma are more likely than those with a Master's or Doctorate to have returned to study full-time while this latter group shows a greater inclination to do so on a part-time basis.

Further, graduates from Prince Edward Island and Nova Scotia institutions who returned to study in the post-1996 period are more likely to have done so on a full-time basis than those who obtained a degree from a New Brunswick university. On the other hand, a significantly greater proportion of New Brunswick graduates are enrolled in post-1996 studies part-time.

There are no statistically significant differences based on gender or language.

Returned to School Full or Part Time for Another Degree							
in Post-1996 Period*							
Amon	g different grou	ps of graduates					
Full-Time Part-Time of Both (Weighted base) (%) (%)							
Overall (1186)	69	27	3				
Province of Graduation							
Nova Scotia (735) New Brunswick (390) Prince Edward Island (61)	72 61 77	22 34 24	3 4 2				
Degree							
Bachelor's (985) 70 25 3 Professional (8) - - - Master's/Doctorate (60) 50 43 7 Certificate/Diploma (132) 67 31 1							
* Among those who pursued post - Cell size too small (<50) for relia	* Among those who pursued post-1996 studies to work towards a degree (n=1186).						

1.4 MOBILITY OF GRADUATES

Graduate Mobility on a Regional Basis

Overall, 85 percent of 1996 Maritime graduates lived in the region prior to beginning their pre-1996 studies, while 15 percent came from other parts of Canada (mostly Ontario – 5%) and abroad. Four years after graduating in 1996, most graduates (73%) were still in the region, though a good number - 27 percent – left to live elsewhere (again mostly Ontario – 11%).9

Further analysis reveals that, since 1996, there has been some movement among graduates originally from the Maritimes. While most originally from the Maritimes remained in the region a year after graduating, there was a certain exodus out of the region by the year 2000. In 1997, for example, 90 percent of graduates originally from the region were still living in a Maritime province. However, 10 percent had moved outside the region, mostly to Ontario (5%). By the year 2000, the number of original Maritimers still in the region had dropped to 81 percent. Nineteen percent had moved outside the region, again largely to Ontario (8%).

	Pre-1996 Studies Residence Originally from*				
(Weighted Base)	Maritimes Outside Maritime (2024) (356) %				
1997 Province of Residence					
Maritimes	90	36			
Outside Maritimes	10	65			
2000 Province of Residence					
Maritimes	81	30			
Outside Maritimes	19	70			
* 12 months prior to starting pre-1996 studie	s.				

To contrast, 36 percent of graduates who came from elsewhere in Canada or abroad to study in the Maritimes to obtain their 1996 degree continued to live in the region a year after their graduation. By the year 2000, this had dropped to 30 percent.

When combined, movements of graduates into and out of the Maritime region show there has been a net outflow of 14 percent of graduates to other Canadian provinces and abroad in the pre-1996 to 2000 period.

 $^{^8}$ Taken from 1997 variable p121f1 "Residence 12 Months Prior". 9 Taken from 2000 variable q140b "Province of residence".

Graduate Mobility on a Provincial Basis

When we take a look at graduate mobility on a province-by-province basis, we find a pattern similar to what is found on the regional level; most Maritime graduates in each province remained in their "home" province to study, and continued to live there four years after graduation. However, the proportion of graduates who remained in their province of origin dropped off somewhat between 1996 and 2000, indicating that some decided to leave. There are nonetheless provincial differences in the scope of graduate movements, more significant in Prince Edward Island, less significant in Nova Scotia.

Graduated from...

A majority of Maritime graduates from all provinces in the region studied at an institution in their province of origin. There are, however, significant variations from province to province. In Nova Scotia, for example, 94 percent of people originally from the province obtained their degree from a Nova Scotia institution. To contrast, 86 percent of graduates who were originally New Brunswick residents studied in the province, while far fewer graduates originally from Prince Edward Island (only 55%) remained in their home province to study.

	Pre-1996 Studies Province of Residence Originally from*						
	NS NB PEI Maritimes (356) %						
Province of Graduation	1996						
Nova Scotia	94	14	30	73			
New Brunswick	6	86	15	25			
Prince Edward Island	1	1 1 55 2					
* 12 months prior to starting pre	e-1996 studies.						

Among those originally from outside the Maritimes, most (73%) obtained their degree from a Nova Scotia post-secondary institution.

One Year After Graduation...

In 1997, a year after graduation, the vast majority of graduates originally from a Maritime province still lived in their original province of residence. However, there are differences across the provinces. On the one hand, in New Brunswick, the proportion of graduates originally from the province and still in the province in 1997 remained unchanged from 1996 to 1997 (86% vs. 85%). On the other hand, this is not the case in Nova Scotia where a smaller proportion of graduates originally from the province were still living there a year after graduation (94% in 1996 vs. 86% in 1997). To contrast, in Prince Edward Island, we find a greater proportion of Maritime graduates originally from Prince Edward Island in the province in 1997 (55% in 1996 vs. 75% in 1997).

	Pre-1996 Studies Province of Residence Originally from*					
	NS NB PEI Maritime (1111) (769) (145) (356) %					
1997 Province of Residence						
Nova Scotia	86	4	9	27		
New Brunswick	3	85	4	7		
Prince Edward Island	1	1	75	1		
Newfoundland	1	-	-	19		
Québec	-	1	1	4		
Ontario	5	4	6	27		
Western Canadian provinces	4	3	4	12		
Outside Canada	1	1	1	2		
* 12 months prior to starting pre-1996 studies - Less than 0.5 percent	- 1					

Ontario is the province of choice of most Maritime graduates who left their province of origin a year following their 1996 graduation. Many did, however, venture further west into a Prairie province or British Columbia.

Maritime graduates originally from outside the region did not, by and large, remain in the Maritimes a year after graduating. Thirty-five percent did so, but two-thirds did not. Most of those who left settled in Ontario (27%) or in a Western Canadian province (12%). A good number did, however, remain in the Atlantic region, moving to Newfoundland (19%).

Four Years After Graduation...

By the year 2000, there was a notable drop across all three Maritime provinces in the number of graduates who remained in their province of origin. The greatest shift occurred in Prince Edward Island where 61 percent of graduates originally from the province still lived there in 2000; this is fully 14 points fewer than in 1997 (75%), though still greater than the number who studied in the province (55%). In Nova Scotia, the proportion dropped 10 points, from 86 percent in 1997 to 76 percent in 2000, while in New Brunswick the number of original New Brunswick residents fell 8 points, from 85 to 77 percent between 1997 and 2000.

	Pre-1996 Studies Province of Residence Originally from*						
	NS NB PEI Maritimes (1111) (769) (145) (356) % % %						
2000 Province of Residence							
Nova Scotia	76	6	10	22			
New Brunswick	4	77	5	6			
Prince Edward Island	1	1	61	2			
Newfoundland	1	-	-	15			
Québec	1	4	1	3			
Ontario	9	6	11	31			
Western Canadian provinces	7	4	8	15			
Outside Canada	3	2	5	5			
* 12 months prior to starting pre-1996 studies - Less than 0.5 percent.							

Ontario has been the main point of destination for most Maritime graduates no longer residing in their "home" province in 2000. Many have, however, settled in Western Canada (mostly in Alberta and BC).

Graduates not originally from the Maritimes have largely left the region by 2000. Fully 70 percent were no longer there, 30 percent stayed, mostly in Nova Scotia (22%). Most of these non-Maritime graduates had moved to Ontario by the year 2000, though a good number also settled in Western Canada (largely Alberta, 7%, and BC, 6%).

Retention of Graduates Originally From Maritimes

When we talk about graduate mobility, it is important to understand the degree to which those who graduated from an institution in their province of origin remained there four years after graduating. In other words, what proportion of Maritime graduates are being retained in their province of origin?

Generally speaking, most 1996 Maritime graduates who completed studies in their province of origin remained or returned there four years after graduation. This is slightly more the case with New Brunswick graduates originally from that province; 81 percent resided there four years after graduation. In Nova Scotia, just over three-quarters (77%) of graduates originally from the province continued to live there in 2000. And, in Prince Edward Island, just under three-quarters of its graduates (72%) who lived there prior to their studies ended up there four years after graduating.

	Province of Origin Among Graduates of Each Maritime Province Originally from & Graduated from*					
	NS NB PEI (1041) (660) (80) %					
2000 Province of Residence						
Nova Scotia	77	4	6			
New Brunswick	3	81	3			
Prince Edward Island	1	1	72			
Newfoundland	1	-	-			
Québec	1	4	-			
Ontario	8	5	10			
Western Canadian provinces	6	3	6			
Outside Canada	3 1 3					

Most 1996 graduates from each of the provinces who are not living in their Maritime province of origin in 2000 resided in Ontario or a Western Canadian province (mostly Alberta and BC). Ontario has been the favoured destination particularly for Nova Scotia and Prince Edward Island graduates who started out in each of these provinces, but who no longer live there.

FINANCIAL STATUS OF 1996 GRADUATES

2.1 EARNINGS

1996 Maritime graduates are doing better overall as they move beyond their early post-graduation life. In 2000, employed 1996 Maritime province graduates earned on average \$3,047 per month or \$36,564 on an annual basis. 10 Three years ago, average monthly earnings totaled \$2,258 or \$27,092 annually. 11 Thus, the average 1996 graduate income has increased by 35 percent or \$9,472 since 1997.

Average monthly earnings in 2000, do, however, hide some overall variation in the range of earnings. For example, fully 41 percent of employed graduates obtain more than \$3,000 per month, including 20 percent who earn above \$4,000 on a monthly basis. At the other end of the spectrum, one-in-five graduates (21%) have monthly employment earnings of less than \$2,000, including 6 percent with less than \$1,000 per month.

Employment earnings data suggest further that some groups of graduates are much better off than others. From a demographic perspective, for example, there are significant differences in earnings based on gender and home language. Employed male graduates earned, on average, \$3,530 per month in 2000. This is some \$726 more than the average monthly earnings of employed female graduates (\$2,804). On an annualized basis, the gender gap in earnings is \$8,712.

Monthly Employment Earnings* By Gender							
<\$1000 \$1000 - \$2000 - \$3000 - \$4000+ Average							
Overall (1929)	Overall (1929) 6 15 30 21 20 \$3,047						
Gender							
Male (644)	6	8	26	24	28	\$3,530	
Female (1285)	7	19	31	20	15	\$2,804	

*All findings are only for those respondents who were employed during the study's reference week. This is standardized to include people with varying types of payment schedules (weekly, bi weekly, monthly, yearly). "Don't know" data are not included in table; hence row percentages do not total 100%.

¹⁰ Standardized monthly wages for employed graduates' main job last week from 2000 data set (Q.56), excluding respon-

dents whose monthly wages were above \$29,000 (n=41), or who gave a "don't know" response.

Based on \$521 per week average from 1997 data set (variable Gross Wages P170f1), excluding non-applicable respondents [(\$521 x 52 weeks)/12 months].

This male-female earnings gap among 1996 graduates is most evident at the upper and lower income ranges. While 15 percent of women earn more than \$4,000 per month, almost twice as many men have earnings at this level (28). The reverse is true at the lower income range; 26 percent of women earn \$2,000 or less on a monthly basis compared to only 14 percent of men.

The specific nature of the gender gap appears to depend somewhat on whether graduates work part-time or full-time. Men working full-time earn, on average, \$654 more than women with full-time employment. The gap is smaller for part-time earnings; men working part-time earn, on average, \$268 more than women with part-time employment.

Average Monthly Income For Male & Female Graduates*							
Full-Time vs. Part-Time Wages							
(Weighted base) Overall Male Graduates FemaleGraduates (1930) (651) FemaleGraduates (1279) Male-Female Earnings Gap							
Full-time Wages**	\$3,256	\$3,680	\$3,026	\$654			
Part-time Wages	\$1,462	\$1,673	\$1,405	\$268			

^{*} All findings are only for those respondents who were employed during the study's reference week. This is standardized to include people with varying types of payment schedules (weekly, bi weekly, monthly, yearly).

** Full-time = 30 or more hours per week.

The gender gap in full-time earnings is consistent across both degree and field of study categories. However, the size of the gap does vary, depending upon the degree type and the specific field of study. For example, male graduates with a Bachelor's degree earn \$589 more, on average, than female graduates with the same type of degree. The gap is somewhat smaller at the Master's/Doctorate degree level (\$523).

Similarly, male graduates who obtained their degree in Social Sciences earn, on average \$1,091 more than female graduates who studied in the same field. We also find a particularly large earnings gap between male and female graduates who studied Commerce (\$707). This gap drops to \$267 in Education.

Findings also reveal an earnings gap between French- and English-speaking Maritime graduates. Average monthly employment earnings of Anglophones are \$261 greater than Francophones (\$3,075 vs. \$2,814). Further, almost twice as many employed English-speaking graduates earn \$4,000 or more per month (21% vs. 13%).

Monthly Employment Earnings* By Home Language										
<\$1000 \$1000 - \$2000 - \$3000 - \$4000+ Average										
Overall (1929)	Overall (1929) 6 15 30 21 20 \$3,047**									
Language Spoken Most Often										
English (1693)	6									
French (207)	7	19	34	20	13	\$2,814				

^{*}All findings are only for those respondents who were employed during the study's reference week. This is standardized to include people with varying types of payment schedules (weekly, bi weekly, monthly, yearly). Full-time = 30 or more hours per week. "Don't know" data are not included in table; hence row percentages do not always total 100%.

Much like with gender differences in earnings, further exploration of the earnings gap between language groups suggests the nature of the gap is somewhat dependent upon whether graduates are working full-time or part-time. English-speaking graduates working full-time earn, on average, \$280 more than French-speaking graduates with full-time employment. The gap for part-time earnings is somewhat smaller; Anglophone graduates earn \$122 more, on average, than Francophone graduates.

Average Monthly Income For English & French Graduates* Full-Time vs. Part-Time Wages**								
English-speaking French-speaking English- Overall Graduates Graduates French								
(Weighted base)	Veighted base) (1930)*** (1693) (207) Earnings Ga							
Full-time Wages**	\$3,256	\$3,285	\$3,005	\$280				
Part-time Wages	\$1,462	\$1,488	\$1,366	\$122				

^{*} All findings are only for those respondents who were employed during the study's reference week. This is standardized to include people with varying types of payment schedules (weekly, bi weekly, monthly, yearly). "Don't know" data are not included in the table; hence row percentages do not always total 100%

^{**}Includes all graduates, while average "French/English" and "Other" language group earnings are not in the table breakouts. Total n does not equal n for English plus French, because people with French and English or Other home language are excluded from table.

^{**} Full-time = 30 or more hours per week.

^{***}Total n does not equal n for English plus French, because people with French & English or Other home language are excluded from table.

Overall, employed graduates working full-time or part-time who pursued Master's or Doctoral studies earn, on average, \$4,046 per month; this is significantly more than those who obtained a Bachelor's (\$2,830) or some other Certificate or Diploma (\$2,682). This suggests that investing in studies beyond an initial degree can pay off in terms of higher earnings.

Monthly Employment Earnings* By Degree and Field of Study								
	<\$1000	\$1000 - \$1999	\$2000 - \$2999	\$3000 - \$3999	\$4000+	Average		
Degree								
Bachelor's (1407)	6	18	33	21	13	\$2,830		
Professional (47)	-	-	-	-	-	-		
Master's/Doctorate (268)	3	4	14	19	49	\$4,046		
Certificate/Diploma (208)	10	15	29	23	16	\$2,682		
Field of Study								
General Arts (10)	_	_	_	_	_	_		
Education (368)	2	11	34	18	26	\$3,214		
Fine Arts (45)	_	_	_	-	_	_		
Humanities (203)	10	22	39	16	6	\$2,529		
Social Sciences (432)	10	22	27	18	14	\$2,810		
Commerce (268)	3	11	34	25	18	\$3,162		
Agriculture/Biology (154)	9	25	33	17	8	\$2,387		
Engineering (116)	3	2	18	24	43	\$3,769		
Health (178)	3	6	17	41	29	\$3,701		
Mathematics/Physical Sciences (68)	7	12	38	17	21	\$2,874		
Information Technology (73)	2	9	15	26	39	\$4,079		
Community College Programs (14)	_	_	-	-	_	_		

^{*} All findings are only for those respondents who were employed during the study's reference week. This is standardized to include people with varying types of payment schedules (weekly, bi weekly, monthly, yearly). "Don't know" data are not included in table; hence row percentages do not always total 100%.

When it comes to field of study, it is pretty clear that earnings levels are related to what studies a person undertook, and the differences are quite significant. For example, Information Technology graduates hold the most favourable earnings position among 1996 graduates, earning \$4,079 per month, on average in 2000. These monthly earnings are well above people who graduated from the more liberal arts programs of Social Sciences (\$2,810), Humanities (\$2,529), or Education (\$3,214). Meanwhile, Agriculture-Biology graduates obtain the lowest overall average monthly earnings (\$2,387). Findings thus suggest that certain graduates are likely better able than others to meet their debt obligations from their studies. In fact, our discussions further down reveal that Engineering graduates have among the lowest debt to earnings ratios.

Generally speaking, there also seems to be a strong correlation between average monthly earnings and job satisfaction. Graduates who are very satisfied with their current job earn substantially more per month than those who are dissatisfied with the work they do (\$3,295 vs. \$2,517).

⁻ Cell size too small (<50) for reliable analysis.

There are no statistically significant differences in the average monthly earnings of graduates based on province of graduation. Employed graduates from Nova Scotia institutions earned, on average, \$3,075 per month during the reference week, compared to \$3,057 for New Brunswick graduates, and \$2,794 for Prince Edward Island graduates. Nonetheless, a greater proportion of Nova Scotia graduates earned income in the upper \$4,000 or more range (22% vs. 17% of New Brunswick graduates and 12% of Prince Edward Island graduates).

Whether or not one's job is related to one's studies is also related to average monthly earnings. Graduates who are working in a job that is directly related to what they studied have significantly higher average monthly earnings than those graduates whose job is not at all related to their studies (\$3,337 vs. \$2,333).

Monthly Employment Earnings* By Job Satisfaction & Relevance of Studies										
<\$1000 \$1000 - \$2000 - \$3000 - \$3999 \$4000+ Average										
Overall (1929)	6	15	30	21	21	\$3,047				
Job Satisfaction										
Very satisfied (627)	4	12	27	24	24	\$3,295				
Somewhat satisfied (1118)	6	16	31	21	18	\$2,998				
Dissatisfied** (184)	15	26	36	15	12	\$2,517				
Job Related to Studies	Job Related to Studies									
Directly related (1019) 2 11 29 26 23 \$3,337										
Indirectly related (527)	6	15	31	20	19	\$3,010				
Not at all related (383)	17	26	28	12	9	\$2,333				

^{*} All findings are only for those respondents who were employed during the study's reference week. This is standardized to include people with varying types of payment schedules (weekly, bi weekly, monthly, yearly). "Don't know" data are not included in table; hence row percentages do not always total 100%.

^{**} Includes those who were somewhat and very dissatisfied with their job.

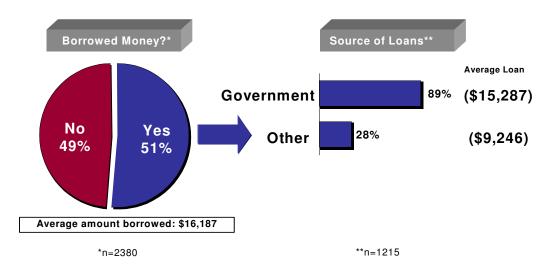
2.2 FINANCING THE 1996 DEGREE

Generally speaking, graduates who borrowed money to finance pre-1996 graduation studies have been successful in reducing their overall debt to both government and other sources. However, between 1996 and 2000, average pre-1996 debt outstanding to other sources has dropped more rapidly than to government. And, success in debt reduction is spread unevenly across the graduate population, with some groups paying off their debt more rapidly than others.

Borrowing to Finance the 1996 Degree

Before examining current overall debt status, it is useful to draw a picture of how much 1996 Maritime graduates borrowed, and from which source. Findings reveal that 51 percent of graduates borrowed money from various sources to finance their pre-1996 studies. On average, they borrowed \$16,187.

Borrowing To Finance Pre-1996 Studies



Of those who did borrow money, the vast majority – fully 89 percent – turned to government student loans for financing their studies, borrowing an average of \$15,287 from government to finance their 1996 degree. Another 28 percent of borrowers obtained money from other sources. On average, they borrowed \$9,246 from these sources.

A look at the range of borrowing from various sources shows that while 49 percent of graduates borrowed \$15,000 or more from government, far fewer (only 18%) turned to other sources for loans of this magnitude. Notably, twice as many turned to government rather than other sources for \$30,000 or more (10% vs. 5%).

Range of Borrowing for Pre-1996 Studies*							
Source of Loan							
Range of Amount Borrowed	Total % (1215)	Government % (1085)	Other % (346)				
Less than \$5,000	11	12	25				
\$5,000 to \$14,999	37	37	54				
\$15,000 to \$29,999	40	39	13				
\$30,000 or more	12	10	5				
Don't know	-	1	4				
Average	\$16,187	\$15,287	\$9,246				
*Includes government and other loans for pre-	· /	Ψ10,207	Ψ0,210				

Debt Outstanding for 1996 Degree

Maritime graduates have had some success in reducing their overall debt. On average, overall debt outstanding for pre-1996 studies from all sources has dropped 39 percent since 1996. With average borrowing of \$16,187 to finance their pre-1996 studies, graduates owe an average of \$9,860 in 2000, a \$6,327 reduction in the average debt load graduates carry since graduating four years ago. Meanwhile, among graduates who have *not paid off* their pre-1996 loans, the average amount still owing on these loans is \$13,612. On average, these graduates had borrowed \$18,356 to finance their 1996 degree.

Average Student Debt Outstanding for Pre-1996 Studies 1997 to 2000							
Average Amount Outstanding					nding		
	Total Amount Borrowed 1996	\$ Change					
Total Overall	\$16,187	\$13,478	\$9,860	- \$6,327	- 39%		
Government (1085)	\$15,287	\$13,118	\$9,772	- \$5,515	- 36%		
Other (346)	\$9,246	\$6,367	\$4,115	- \$5,131	- 55%		

While graduates have been successful in repaying their loans to both government and other sources, average debt outstanding to other sources for pre-1996 studies has dropped much more rapidly. On average, debt outstanding to other sources has dropped 55 percent since 1996 (\$9,246 to \$4,115). By comparison, the pace of repayment for government loans has been slower (-36%).

This trend to repay other loans off more quickly is confirmed further by the fact that, in our 2000 study, 44 percent of graduates have completely paid off their loans to other sources. When it comes to graduates

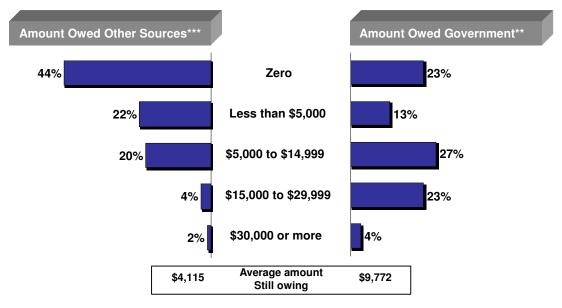
who borrowed from government to pay for their 1996 graduation studies, half as many – 23 percent – are currently debt free from these loans.

The more rapid repayment of debt to other sources may be explained by the different financial arrangements graduates establish with government and other sources. Typically, interest rates for other loans are higher than those negotiated for government loans; hence, graduates have a financial interest in repaying other loans first to reduce the amount of interest they might pay. Further, repayment schedules for government loans typically extend over a longer period of time than other loans, again making it easier for graduates to take a longer time to repay their government loans.

In terms of the level of debt outstanding, it is clear that pre-1996 debt from government continues to represent a greater overall financial burden to graduates than debt from other sources. Indeed, while 27 percent of graduates have government debt outstanding of \$15,000 or more, only 6 percent of graduates with debt outstanding to other sources owe at this same level.

Current Debt Outstanding For Loans Taken To Finance 1996 Graduation Studies*

Government vs. Other Sources



^{*}As of March 2000, among students who borrowed to finance pre-196 studies (n=1215). Totals do not add to 100% because the chart excludes students whose loans are lumped with other loans or who don't know, or who were unable to classify due to their responses to the debt outstanding question. For pre-1996 government loans, this includes a total of 104 people or 10% of those with outstanding loans, and 29 people or 8% of those with other loans outstanding.

A closer look at the level of government debt outstanding reveals that the 27 percent of graduates who owe between \$5,000 and \$15,000 is split fairly evenly across the full range (15 percent owe amounts between \$5,000 and \$10,000, and 12 percent are in the \$10,000 to \$15,000 range). For the 23 percent who owe between \$15,000 and \$30,000 to government, a greater proportion is found at the lower end of the

^{**(}Weighted base=1085).

^{***(}Weighted base=346).

range (11% between \$15,000 and \$20,000, 7% between \$20,000 and \$25,000, and 5% between \$25,000 and \$30,000).

Despite overall progress in debt repayment, we find that certain graduates have been more successful than others. Two main patterns emerge in this regard.

First, graduates who borrowed heavily to finance pre-1996 studies still owe substantial amounts on their loans, especially when compared to those who borrowed relatively little. For example, among those who borrowed \$30,000 or more, fully 31 percent remain indebted to this extent in 2000, owing an average of \$23,613; only 6 percent have paid off their loans completely. By comparison, 27 percent of graduates who borrowed less than \$5,000 still owe amounts in this range, averaging only \$864; and fully 66 percent have paid off their loans.

Total Amount Borrowed Pre-1996 Compared to Total Outstanding in 2000 for Pre-1996 Debt										
	Total Amount Borrowed*									
Total Debt Outstanding in 2000**	TOTAL Less than \$5,000 to \$15,000 to \$30,000 or more									
Weighted Base: Borrowed Money Pre-1996	(1215) (128) (450) (482) (141)									
	%	%	%	%	%					
Zero	25	66	31	14	6					
Less than \$5,000	12	27	22	2	3					
\$5,000 to \$14,999	26	1***	35	30	10					
\$15,000 to \$29,999	22	-	2***	42	40					
\$30,000 or more	5	5 1*** 1*** 2 31								
Average debt outstanding	\$9,860	\$864	\$4,565	\$13,382	\$23,613					

^{*}Includes government and other loans for studies in pre-1996 period.

Second, graduates from certain segments of the population have been more successful in reducing their overall debt load. In particular, as the following table illustrates, graduates who left university with a graduate degree are paying off their debt at a much faster pace than those with a Bachelor's or Professional degree. Those with a Master's or Doctorate have reduced their average pre-1996 debt load by a full 53 percent over the past four years (\$16,824 to \$8,953), compared to 37 percent and 36 percent, respectively, for those with a Bachelor's or a Certificate or Diploma.

^{**}Includes debt still outstanding from government and other sources for studies in pre-1996 period. Totals in columns do not add to 100%, because results for respondents who don't know, whose loan payments are lumped with other loans, and who were unable to be classified are not shown here (n=125, or 10%).

^{***} Respondents here appear to owe more money than they borrowed. This can only be explained by respondent error, i.e. misunderstanding the question asked, over-estimation of amount outstanding, having lumped their outstanding debt with other loans, or factoring in the interest owed on their capital. Further analysis shows there are a total of 24 respondents for whom this was an issue. The small number of respondents suggests that this error is neither significant nor systematic.

⁻ No respondents in this category.

Average TOTAL Debt Outstanding in 2000 for Pre-1996 Studies 1996 to 2000 (Among Graduate Groups)

		Average Amount Outstanding					
	Total Amount Borrowed Pre-1996	1997	2000	Change 1996-2000	% Change	% Paid Off Loan	
Overall (1215)	\$16,187	\$13,478	\$9,860	- \$6,327	- 39	25	
Gender							
Male (404)	\$15,654	\$12,768	\$8,926	- \$6,728	- 43	29	
Female (811)	\$16,453	\$13,834	\$10,331	- \$6,122	- 37	22	
Language Spoken Most Often							
English (1065)	\$15,964	\$13,175	\$9,660	- \$6,304	- 39	25	
French (138)	\$17,906	\$15,605	\$11,286	- \$6,620	- 37	21	
Employment Status							
Employed Last Week (1021)	\$16,188	\$13,366	\$9,512	- \$6,676	- 41	25	
Not Working** (177)	\$16,431	\$14,017	\$11,978	- \$4,453	- 27	22	
Personal Annual Income	1		l		Ī		
<\$20K (354)	\$15,744	\$13,985	\$12,378	- \$3,366	- 21	19	
\$20K to \$39K (510)	\$15,849	\$13,287	\$9,638	- \$6,211	- 39	23	
\$40K or more (299)	\$17,553	\$13,628	\$7,862	- \$9,691	- 55	33	
Degree*			I		1		
Bachelor's (972)	\$16,006	\$13,445	\$10,085	- \$5,921	- 37	24	
Master's/Doctorate (91)	\$16,824	\$13,881	\$7,871	- \$8,953	- 53	32	
Certificate/Diploma (110)	\$13,468	\$11,527	\$8,628	- \$4,840	-36	22	
Major Field of Study*			ı	_			
Education (207)	\$15,846	\$12,574	\$8,969	- \$6,877	- 43	28	
Humanities (126)	\$16,193	\$14,942	\$11,243	- \$4,950	- 31	23	
Social Sciences (300)	\$16,002	\$13,615	\$10,884	- \$5,118	- 32	23	
Commerce (147)	\$14,032	\$11,293	\$7,315	- \$6,717	- 48	26	
Agriculture/Biology (115)	\$15,134	\$13,324	\$11,126	- \$4,008	- 26	18	
Engineering (90)	\$17,551	\$14,250	\$10,366	- \$7,185	- 41	22	
Health (101)	\$21,919	\$17,171	\$11,151	- \$10,768	- 49	23	

^{*} Certain fields of study and degrees are excluded from table because cell size was too small (<50) for reliable analysis.

Graduates in certain fields, including Health (-49%), and Commerce (-48%) are repaying their pre-1996 loans more quickly than graduates in other fields. This is particularly significant for graduates in Healthrelated fields as they were among the highest average borrowers (\$21,919), while Commerce graduates borrowed less than all others (\$14,032). Both are among the top income earners.

Overall, male and female graduates have had slightly different experiences in repaying their loans over the past four years. Indeed, there appears to be somewhat of a gender gap. Male graduates not only

^{**} But worked at some time since 1996.

borrowed less than female graduates overall to finance their 1996 degree (\$15,654 vs. \$16,453), but men have been paying off their loans at a faster pace (43% or -\$6,728 for men vs. 37% or -\$6,122 for women). This is likely due in part to higher male earnings as noted earlier (\$3,530 vs. \$2,804).

English- and French-speaking graduates are paying down their debt at about the same pace (39% vs. 37% reductions in debt outstanding). However, because Francophone graduates have a higher average debt load to begin with, their 2000 debt outstanding remains higher (\$11,286 vs. \$9,660 for Anglophones).

Also, graduates with lower overall personal annual income (less than \$20,000) have had a much more difficult time paying off their pre-1996 loans than those earning higher incomes (21% drop compared to 55% for those earning \$40,000 or more). This is perhaps not too surprising. What is interesting is that lower income graduates are paying off their loans at a slower pace despite having borrowed less money, which suggests their debt load is weighing more heavily upon them.

Employed graduates have been much more successful reducing their pre-1996 debt load than those not working. Both borrowed a similar level of money to finance their studies, but, by 2000, employed graduates had reduced their debt by 41 percent, while those not working had only paid off 27 percent of the amount they borrowed.

Graduates from different provincial institutions are paying off their pre-1996 debt at about the same rate; (debt loads have dropped 38% for Nova Scotia graduates, 40% for New Brunswick graduates, and 42% for Prince Edward Island graduates). However, graduates from Nova Scotia and New Brunswick borrowed more on average than Prince Edward Island graduates (\$16,309 and \$16,235 vs. \$13,937) to finance their pre-1996 studies; hence Prince Edward Island graduates have paid off less money in absolute terms (\$5,811 vs. \$6,520 New Brunswick and \$6,243 Nova Scotia). Further, while 25 percent of graduates from Nova Scotia and New Brunswick institutions have paid off their pre-1996 loans, only 18 percent of Prince Edward Island graduates have done so.

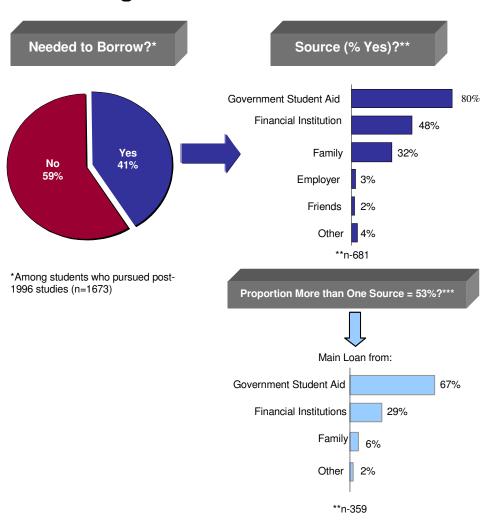
2.3 FINANCING POST-1996 STUDIES

Many graduates who pursued further studies after graduating in 1996 borrowed to finance their post-1996 studies. This included a good number of people who had already incurred substantial debt to pay for their pre-1996 studies. The overall pattern is one of increased cumulative debt, and extended overall debt repayment schedules.

Borrowing to Finance Post-1996 Studies

Overall, 41 percent of graduates who pursued post-1996 studies say they needed to borrow money to finance their studies. The vast majority of student borrowers – 80 percent – looked to government student aid programs for financial help, while almost half (48%) turned to financial institutions. Another 32 percent looked to family for financial aid to continue their studies, and a few asked their employer (3%), friends (2%) or sought funds elsewhere (4%).

Borrowing to Finance Post-1996 Studies

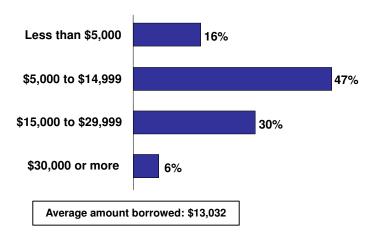


Just over half of post-1996 student borrowers – 53 percent – obtained money from more than one source. The principal source of funds for these graduates was again government; 67 percent had their main loan with government, compared to 25 percent whose main source was a financial institution. Far fewer considered family or other loans as their main source of financial aid.

Borrowing patterns reveal that 1996 graduates who borrowed from a single source¹² to pursue further studies in the post-1996 period were quite prepared to incur a substantial amount of debt to do so. On average, they borrowed \$13,032 to pay for their studies. Just over a third (35%) obtained \$15,000 or more to continue their studies, with 6 percent borrowing \$30,000 or more. The other two-thirds (63%) borrowed less than \$15,000, with 16 percent borrowing less than \$5,000.

Range of Amounts Borrowed to Finance Post-Graduate Studies*

Borrowed From Single Source*



*Among those who borrowed from one source only to finance post-1996 studies (weighted base=316).

Total does not add to 100%, because "Don't know" responses not shown here.

Among the 47 percent of graduates who borrowed between \$5,000 and \$14,999 for their post-1996 studies, 22 percent borrowed in the lower range (\$5,000 to \$9,999) while 25 percent borrowed amounts in the upper range (\$10,000 to \$14,999). For the 30 percent who borrowed between \$15,000 and \$29,999, most are found at the middle to lower end of this range (13% borrowed \$15,000 to \$19,999, 12% between \$20,000 and \$24,999, and 5% between \$25,000 and \$29,999).

Which groups of graduates were likely to have borrowed the most money to finance their post-1996 studies? Findings from this survey show that socio-economic status is a fairly good predictor of who took on the highest level of debt from a single source in order to pursue further studies following their 1996 graduation.

¹² In the questionnaire, respondents are asked how much they borrowed from all sources to finance their post-1996 studies. Then, when asked to consider how much they still owed for post-1996 loans, respondents who borrowed from multiple sources considered *only those amounts still owing on their main loan*. All other amounts owed on other loans were not to be considered. Thus, in order to estimate the relationship between amount borrowed and amount outstanding for post-1996, it was necessary to establish a common ground upon which to base the calculations. To do this, the following decision was made: for the post-1996 contribution to Total Debt Borrowed and Outstanding, only debt borrowed and outstanding from one source only would be included.

For example, 1996 graduates in less secure financial and employment situations are those who tended to borrow greater amounts of money to finance their post-1996 studies. Fully 48 percent of graduates with a lower annual personal income (less than \$20,000) borrowed \$15,000 or more, compared to 25 percent of graduates with middle incomes. On average, these less well off graduates borrowed \$15,062 from one source to finance their post-1996 studies, significantly more than graduates earning middle incomes (\$10,834).

Total Student Borrowing From One Source Post-1996 Among Different Population Groups					
		Amount Borrowed*			
	Less than \$5,000	\$5,000 to \$14,999	\$15,000 to \$29,999	\$30,000 or more	Average
	%	%	%	%	\$
Overall (316)	16	47	29	6	\$13,032
Gender					
Male (107)	18	49	26	7	\$12,446
Female (208)	16	47	31	5	\$13,337
Personal Income					
<\$20K (143)	13	39	41	7	\$15,062
\$20K to \$39K (115)	20	54	20	5	\$10,834
\$40K+ (43)	-	-	-	-	-
Employment Status	•			,	
Employed (223)	20	48	26	4	\$11,683
Not working** (89)	7	47	39	7	\$15,592
Field of Study					
Social Sciences (104)	14	47	35	4	\$13,303
Agriculture/Biology (50)	17	56	14	13	\$13,976

*Among graduates who borrowed money from one source only to finance their post-1996 studies (n=316). Some categories are excluded, because cell size is too small (<50) for reliable analysis. Totals do not always add to 100%, because "Don't know" responses are not shown here.

Graduates who were not working during the reference week were more likely than employed graduates to have borrowed \$15,000 or more to finance their post-1996 studies (46% vs. 30%). And, those not working incurred substantially more post-1996 debt, borrowing \$15,592 from a single source, on average, compared to \$11,683 for employed graduates.

And, while small sample size prevents a broad analysis of findings across all fields of study, it appears that Agriculture-Biology graduates had a greater tendency than others to borrow heavily for their post-1996 studies; 13 percent borrowed \$30,000 or more from a single source, averaging \$13,976.

There are no statistically significant differences in the range of borrowing based on graduates' province of graduation.

^{**}But had a job since 1996.

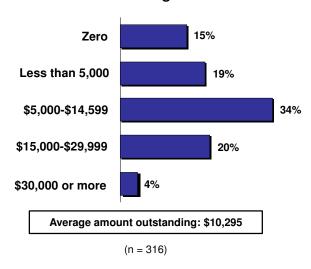
⁻ Cell size too small (<50) for reliable analysis.

Debt Outstanding for Post-1996 Studies

1996 graduates who borrowed from a single source to pursue post-1996 studies have had some success in paying off the debt they incurred. In all, they have an average of \$10,295 remaining to pay on their post-1996 loans; this is \$2,737 less than the average amount borrowed to finance these studies (\$13,032), a drop of 21 percent.

Current Debt Outstanding for Loans Taken to Finance Post-1996 Studies

Borrowed from Single Source



Among the 34 percent of graduates who have \$5,000 to \$14,999 post-1996 debt still outstanding in 2000, 19 percent owe between \$5,000 and \$9,999 while 15 percent owe amounts in the \$10,000 to \$14,999 range. By comparison, for the 20 percent who owe between \$15,000 and \$29,999 on post-1996 loans to a single source, most are the lower and middle end of the range (8% borrowed between \$15,000 and \$19,999, 8% between \$20,000 and \$24,999) while 4% still have between \$25,000 and \$30,000 in outstanding debt for their post-1996 loan.

Specific groups of graduates have been more successful than others in reducing post-1996 debt outstanding from a single source. For example, men owe less than women (\$9,201 vs. \$10,858); middle income earners have been much more successful in paying of post-1996 loans than those earning lower incomes (\$7,867 vs. \$13,870); and employed graduates still owe \$8,196 compared to \$14,772 among those not working during the reference week.

There are no statistically significant differences in post-1996 debt outstanding based on graduates' province of graduation.

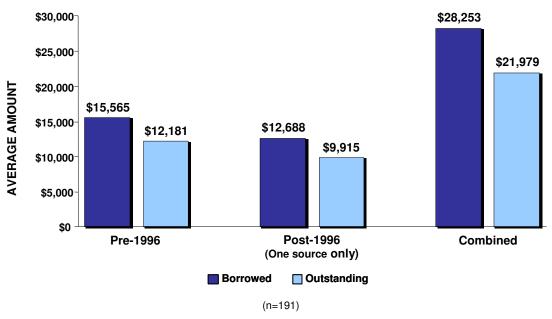
2.4 Borrowing in Both Pre- and Post-1996

A certain proportion of 1996 Maritime province graduates continued to borrow to pursue studies in the post-1996 period, even if they had already accumulated debt to pay for their 1996 degree. Overall, 70 percent of graduates pursued post-1996 studies. Among graduates who continued to study after their graduation, 37 percent had already borrowed money to finance their 1996 degree, including 25 percent who borrowed money in the pre-1996 period only, and 11 percent who obtained loans for both the pre-and post-1996 periods. Only 7 percent borrowed money solely in the post-1996 period (one source). Meanwhile, 56 percent of 1996 graduates who continued studying in the post-1996 period did not borrow in either period. Among graduates who continued studying in the post-1996 period did not borrow in either period.

Overall, graduates who borrowed in both periods accumulated a total average debt load of \$28,253 for their studies. They have been fairly successful to date in paying off a good portion of their loans; in 2000, their average cumulative debt outstanding is at \$21,979, which represents a 22 percent reduction in average debt load (or \$6,274 less).

Average Amount Borrowed & Outstanding in 2000

Among Graduates Who Borrowed in Both Pre-1996 and Post-1996 Periods



Note: all post-1996 debt figures are for single source loans only.

Graduates who borrowed money in both periods have had the same degree of success in reducing their post-1996 debt as their pre-1996 debt. Having borrowed an average of \$12,688 from one source post-1996, their debt outstanding is at \$9,915 in 2000, or a 22 percent drop in debt outstanding (\$2,773 less).

¹⁴ Sample size for borrowing profile of graduates who pursued post-1996 studies: already borrowed pre-1996 n=611 of 1673; borrowed in pre-1996 only, but not post-1996 n=420; borrowed both pre-1996 and post-1996 (one source) n=191; borrowed post-1996 (one source) n=121; did not borrow in either pre- or post-1996 n=941.

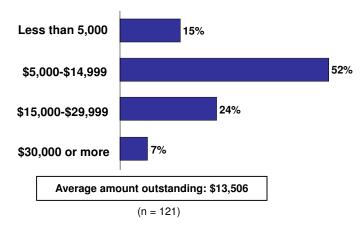
¹³ Studies leading towards a degree or courses unrelated to a degree (n=1626).

By comparison, these same graduates have borrowed an average of \$15,565 for their pre-1996 studies, and still owe \$12,181 in 2000, a 22 percent reduction in debt outstanding for these pre-1996 loans (or \$3,384 less).

While some graduates borrowed money in order to pursue studies in both periods (one source post-1996), for other graduates, the decision to pursue studies in the post-1996 period meant incurring debt for the first time. In many cases, this meant substantial debt. Findings show that 39 percent of those who borrowed money to pay for their post-1996 studies had no debt prior to their 1996 graduation. These first time debtors borrowed, on average, \$13,506 from one source to pay for their post-1996 studies. Fully 31 percent borrowed \$15,000 or more, including 7 percent who took on \$30,000 or more in debt to pay for post-1996 studies. This is likely not the complete picture, as many will continue to study for one or more years and continue to borrow.

Range of Borrowing for Post-1996 Studies

Among Graduates Who DID NOT Borrow to Finance Pre-1996 Studies



Total does not add to 100%, because "Don't Know" responses are not shown here.

For the 52 percent of graduates who borrowed between \$5,000 and \$14,999, 25 percent took on debt at the lower end of this range (\$5,000 to \$9,999) while 27 percent borrowed amounts in the upper range.¹⁵

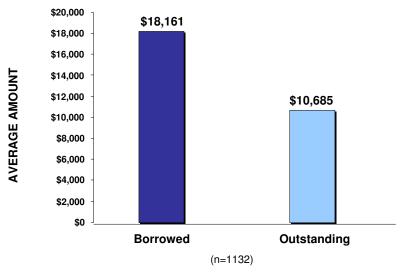
¹⁵ Cell size is too small (n=30) for reliable analysis of findings for those who borrowed between \$15,000 and \$30,000. Directional evidence suggests that most are found at the lower end of this range.

2.5 CURRENT OVERALL FINANCIAL STATUS

Total Borrowed & Outstanding in 2000 for all Studies

The 2000 financial status profile of the 1996 Maritime provinces graduating class shows that the total average debt incurred by graduates for pre- and post-1996 studies stood at \$18,161 in 2000. However, the total average debt still outstanding is significantly lower at \$10,685, a 41 percent drop over the past four years.

Average Total Amount Borrowed & Outstanding in 2000



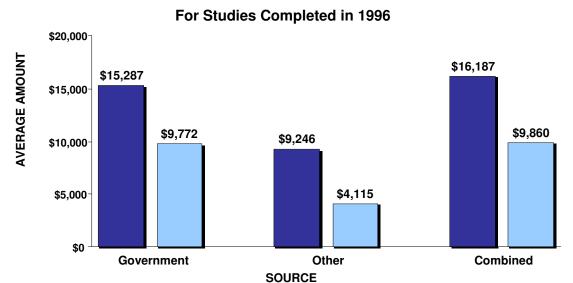
Includes all graduates who borrowed in pre-or post-1996 period or both. For the post-1996 period, this includes only those who borrowed from one source.

This includes debt incurred from both government and other sources in the pre-1996 period, and from one source only in the post-1996 period. When total debt borrowed from *all* post-1996 and pre-1996 sources is taken into consideration, the average amount borrowed is \$20,605. The \$2,444 discrepancy between this latter figure and the amount borrowed shown in the above chart is explained by the need to bring some consistency to the numbers for the post-1996 period. In the questionnaire, respondents are asked how much they borrowed from all sources to finance their post-1996 studies. Then, when asked to consider how much they still owed for post-1996 loans, respondents who borrowed from multiple sources considered *only those amounts still owing on their main loan*. All other amounts owed on other loans were not to be considered. Thus, in order to estimate the relationship between amount borrowed and amount outstanding for post-1996, it was necessary to establish a common ground upon which to base the calculations. To do this, the following decision was made: for the post-1996 contribution to Total Debt Borrowed and Outstanding, only debt borrowed and outstanding from one source only would be included.

Total Borrowed & Outstanding in 2000 for Pre-1996 Studies

Maritime graduates borrowed an average of \$16,187 from all sources to finance their pre-1996 studies. Overall, in 2000, they still owed an average of \$9,860, which means they have paid off \$6,327 thereby reducing their debt load by 39 percent.

Average Amount Borrowed & Outstanding in 2000



A look at graduates' financial status based on loan source shows that they obtained an average of \$15,287 from government to finance their pre-1996 studies, and still owe \$9,772 in 2000. Graduates have thus succeeded in reducing their pre-1996 government debt load by 36 percent, on average, over the past 4 years (or \$5,515).

Outstanding

Borrowed

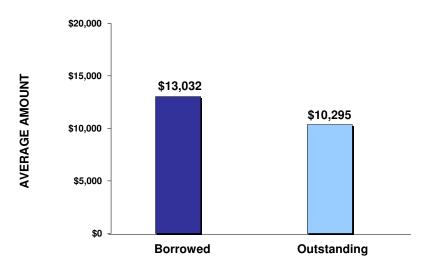
By comparison, graduates borrowed an average of \$9,246 from other sources to help pay for studies leading to their 1996 degree. In 2000, they still have an average of \$4,115 to pay on these loans, a drop of 55 percent, on average, since 1996 (or \$5,131). It is also clear from these findings that 1996 graduates are having much more success in reducing debt to other sources than to government.

Total Borrowed & Outstanding in 2000 for Post-1996 Studies (Single Source)

Graduates who borrowed money from a single source to pursue studies following their 1996 graduation took on an average of \$13,032 in debt. It is clear from our findings that they have been somewhat successful in paying off what they borrowed. In all, debt outstanding to the single source in 2000 stands at \$10,295, a 21 percent reduction in debt load (or \$2,737).

Average Amount Borrowed & Outstanding in 2000*

For Post-1996 Studies



^{*} Among those who borrowed from a single source (n = 316).

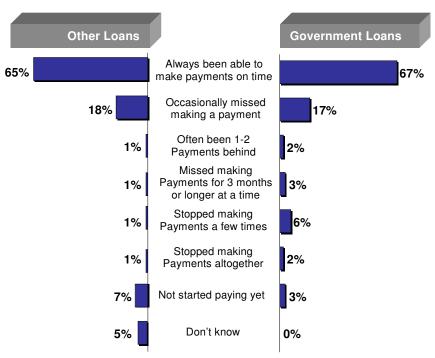
2.6 REPAYMENT EXPERIENCE FOR PRE-1996 LOANS

Paying Back Loans

Paying back debt does not seem to burden most graduates who borrowed money from government or other sources to finance their pre-1996 studies. Indeed, the vast majority of graduates with government or other debt outstanding (67% and 65%, respectively) say they have little difficulty making their loan payments on time. A further one-in-six claim to miss making a payment "only occasionally".

Repayment Experience*





*Among those with outstanding loans and still making payments; n=815 for government loans; n=286 for other loans.

Relatively few graduates with outstanding government or other debt for pre-1996 studies are often one or two payments behind. And, not very many graduates have missed making payments for three months or longer at a time to either government or other sources. Interestingly, graduates seem more prepared to stop payments to government than to other sources (8% vs. 2%).

A closer look at the results, however, shows that certain groups of graduates do find debt repayment somewhat more troublesome. For the most part, these are people who tend to be in a more precarious financial and employment situation. For example, 38 percent of employed graduates whose job is not permanent find some difficulty in making regular payments to government, compared to only 24 percent of those with permanent positions. A similar pattern exists for making payments to other sources (30% vs. 19%, respectively).

Similarly, while 39 percent of graduates with lower personal annual incomes (i.e., less than \$20,000) have missed or stopped pre-1996 government loan payments, fewer high income earners have done so (25%). And, when it comes to payments to other sources, the gap is even greater; 32 percent of lower income earners have missed or stopped payments for other loans, compared to only 9 percent of graduates earning \$40,000 or more annually.

Most graduates who have missed payments to cover government or other loans for pre-1996 studies do so largely because of an insufficient level of income to cover the payments. This appears to be tied to a lack of adequate employment, which prevents them from earning enough to meet their loan payments.

In all, a full 56 percent of graduates who missed a government loan payment did so mostly for a workrelated reason; 33 percent say it was due to "unstable work or source of income"; 13 percent say they were unemployed; and another 10 percent were either out of the labour force completely or had returned to school.

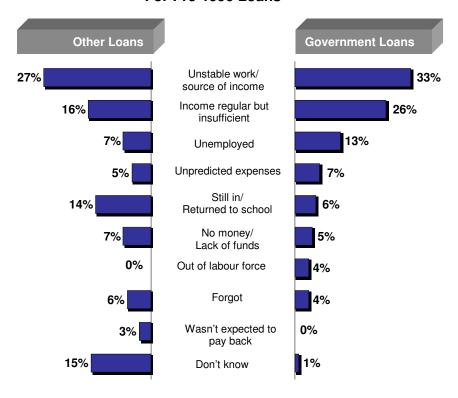
Work-related reasons are also prominent explanations for missing payments for other loans; fully 48 percent tied this to "unstable work or source of income" (27%); 14 percent missed payments because they were in school; and 7 percent simply say they were unemployed.

Graduates who have missed payments do, nonetheless, tie loan payment difficulties more directly to their income flow, though this is more the case for government loans than for other loans. In all, 26 percent mention that their level of income is "regular, but insufficient" to cover government loan payments, compared to 16 percent for other loans. A smaller number say they had unpredicted expenses (7% for government loans vs. 5% for other loans). And, a further 5 percent of graduates said they had "no money" to pay government loans, while 7 percent gave this reason for missing other loan payments.

Findings also show that 6 percent of graduates who missed payments for other loans simply "forgot" about the payments (4% for government loans), while another 15 percent could not say why they had not made their payments to these sources (1% for government loans).

Reasons Missed Loan Payments*

For Pre-1996 Loans



*Among those who missed making payments. n=271 for government loans; n=100 for other loans.

Coincident with their precarious employment situation, graduates with non-permanent employment positions are much more likely than those employed on a permanent basis to give "unstable work" as a reason (45% vs. 26%) for missing loans payments to government.¹⁷ This reinforces the argument that missing a loan payment may be directly tied to graduates' labour force activities.

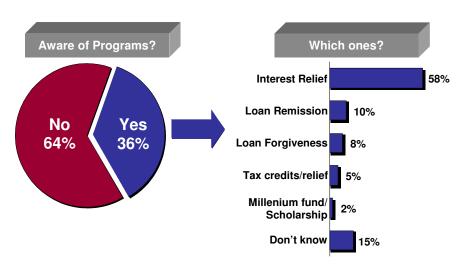
Similarly, graduates who earn a lower personal annual income are more likely than those with greater financial means to mention "regular, but insufficient income" (30% vs. 23%) to explain why they had missed a loan payment for their pre-1996 government loan.

¹⁷ Sample size for respondents who missed payments to Other sources is too small (n=100) to draw reliable conclusions about different socio-demographic categories.

Government Assistance for Pre-1996 Government Loan Repayment

Over a third of graduates with outstanding pre-1996 government debt – 36 percent – claim to be aware of government programs to assist graduates in repaying their student loans. Among the programs they had heard of, 58 percent mention "Interest Relief", by far the most common and widely known. To compare, only one-in-ten talk about "Loan Remission" (10%) or "Loan Forgiveness" (8%). Fewer still mention "tax credit/relief" (5%) or the Millennium Fund (2%). In all, 15 percent could not mention any specific program, even though they had heard of some type of government assistance for loan repayment.

Programs For Student Loan Repayment* Awareness of Government Assistance



*Among those with Government Student Loans to finance 1996 graduation studies (weighted base =987)

The lowest level of awareness of these programs is found among graduates with low government debt outstanding; only 28 percent say they have heard of this assistance. Presumably, their debt load is not enough for them to inquire into any form of government assistance.

Further, somewhat fewer graduates originally from New Brunswick are aware of government assistance; 32 percent say they know of these programs, compared to 36 percent in Nova Scotia, and 41 percent in Prince Edward Island.

Among graduates who are aware of government assistance programs, 50 percent say they have applied to one of the programs. Of these, 86 percent said their application was successful. In the vast majority of cases, the program mentioned most often was "Interest Relief" (78%); only 6 percent say they had a successful application with either the "Loan Remission" or "Loan Forgiveness" program.

Among graduates aware of government assistance programs, those with higher pre-1996 government debt outstanding (\$30,000+-69%) or lower annual personal income (less than \$20,000-65%) are those most likely to apply for government assistance. This confirms further the findings that graduates in a more

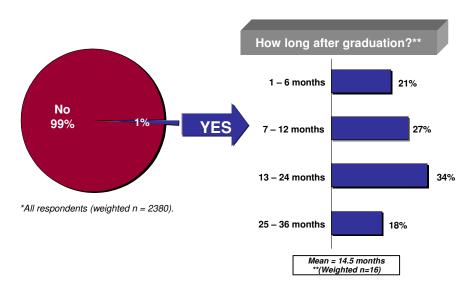
precarious financial situation are those most likely to be struggling to repay government loans and, as a result, to seek assistance.

Declaring Bankruptcy or Orderly Payment of Debt

A very small proportion of 1996 graduates have found themselves in a situation since graduating where they had to declare bankruptcy (1%) or file for an orderly payment of debt (1%). For this reason, all findings here must be considered as directional only, and any conclusions should be drawn with some caution.

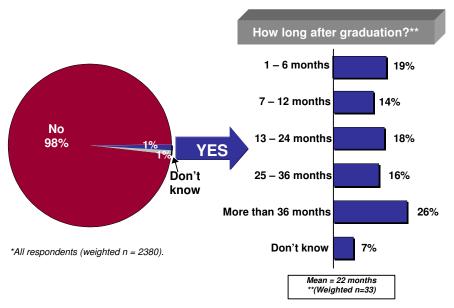
Of those who declared bankruptcy, a fifth (21%) did so within six months of their 1996 graduation, while another 27 percent did so between 7-12 months. It took more than two years for 18 percent of graduates who took this route. The average length of time from graduation was 14.5 months.

Declared Bankruptcy Since 1996 Graduation*



Graduates took a longer time before filing for an orderly payment of debt, on average 22 months. A third did so within the first year (33%), while 42 percent waited until 2 years had passed.





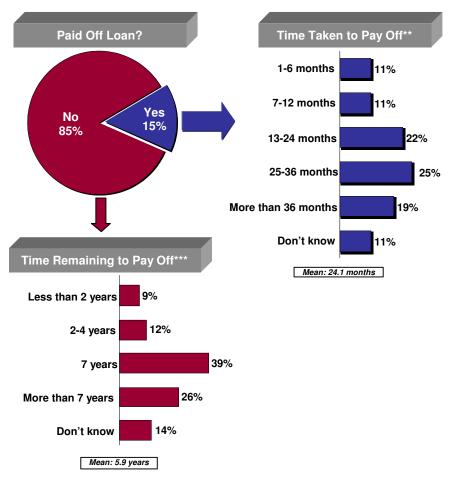
Becoming Debt Free

Paying Off Pre-1996 Government Loans

In total, 15 percent of 1996 graduates who took out government student loans to finance their pre-1996 studies say they have paid off their loan. On average, it took about 2 years for them to do so. About a fifth of those surveyed (22%) said it took less than a year to pay off their government loan, while a similar proportion (19%) took more than three years.

Debt Repayment for Loans Taken to Finance Studies for 1996 Graduation*

Pre-1996 Government Student Loan



^{*}Among those with outstanding debt from pre-1996 government loans as per 1997 study (n=987).

Among those who have paid off government debt for their 1996 degree, we find a large percentage of men (21%), people with higher annual personal income (23%), and those who borrowed less than \$5,000 (51%). Further, findings show that graduates from Engineering (21%), Social Sciences (19%), and Commerce (19%) fields have been more successful in becoming debt free. Interestingly, Engineering and Commerce graduates also have higher than average annual employment earnings, confirming again that labour force activities are a key factor in determining overall graduate financial status.

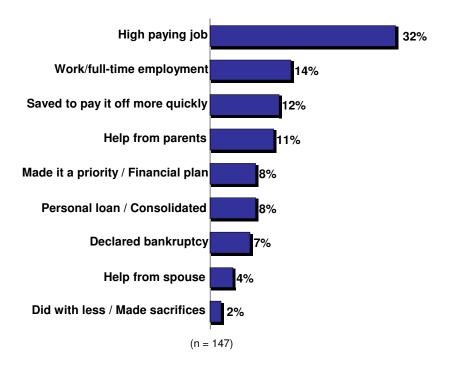
^{**(}Weighted base=147).

^{***(}Weighted base=589. Includes those making payments. Does not include respondents with the following responses: lumped with other loans, don't know in Q.94, not started to repay, not sure of month of year. Total n for excluded respondents=249.

For the 85 percent of Maritime graduates with government debt still outstanding for their 1996 graduation studies, findings show they will not likely see the end of their debt for some time to come. On average, they have 5.9 years remaining in their debt repayment schedules. Fully one-in-four (26%) still have more than seven years before their payments stop. About one-in-ten (9%) will be finished paying their pre-1996 government loan in less than 2 years.

What circumstances prevailed in graduates' lives to make it possible for them to pay off their government student loans? Findings show that having work (particularly well-paying work), receiving financial help from family, and making some personal sacrifices stand out as the three main avenues for becoming debt free from government for pre-1996 loans.

Why Successful in Paying Off Pre-1996 Government Student Loan?



The single most important reason some graduates give for being able to pay off their pre-1996 government student loans is that they have a high paying job which permitted them to pay their loan off more quickly. In all, 32 percent of those with no government debt outstanding mentioned this as a main reason. Another 14 percent talked about having "full-time employment".

Meanwhile, 22 percent adjusted their lifestyle in some way to pay the loan more quickly. In particular they "saved to pay it off" (12%), "made it a priority and developed a financial plan" (8%), or simply "did with less or made sacrifices" (2%).

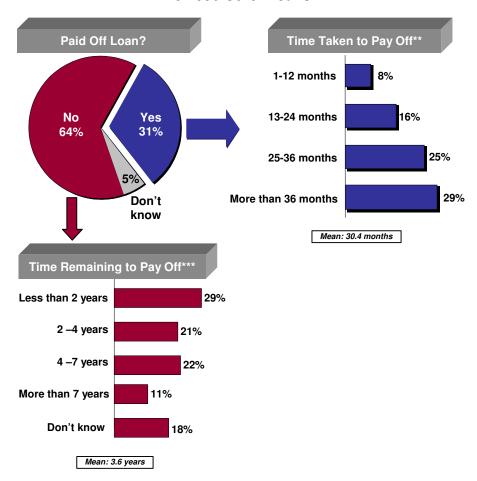
Overall, 15 percent say their parents (11%) or spouse (4%) helped them to pay off their loan. Seven percent say they paid off their government student loan by declaring bankruptcy.

Paying Off Pre-1996 Loans From Other Sources®

In all, 31 percent of 1996 graduates who borrowed money from other sources to finance their pre-1996 studies say they have paid off these loans. ¹⁹ On average, it took about 2 and a half years for them to do so. About a quarter of those surveyed (24%) said it took less than a year to pay off the loans, while 29 percent took more than three years.

Debt Repayment for Loans Taken to Finance 1996 Graduation Studies*





^{*}Among those with outstanding debt from "other" loans as per 1997 study (n=287).

For the 64 percent of graduates who still have outstanding debt owed to other sources for their 1996 degree, findings show they have, on average, another 3.6 years before they will have paid off these loans. This is about 2 years faster than people who have government debt outstanding (5.9 years). Relatively

^{**}Weighted base=89

^{***}Weighted base=133. Includes those who still have debt outstanding from pre-1996 "other" loans as per the 1997 study and are making payments. Does not include respondents with the following responses: lumped with other loans, don't know, not started to repay, not sue of month or year. Total n for excluded respondents = 184.

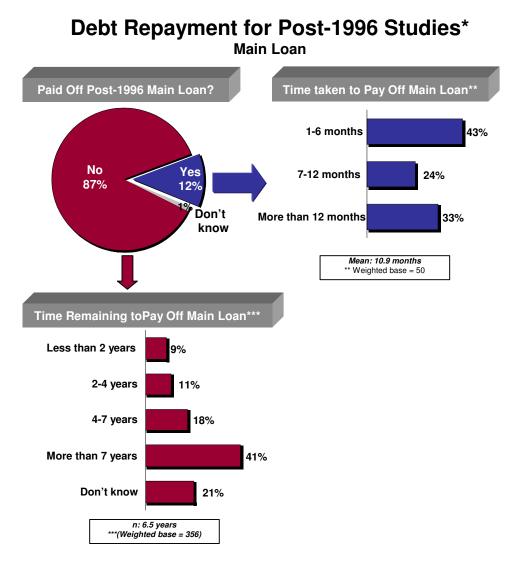
¹⁸ Cell sizes for demographic breakouts are too small to provide reliable subgroup analysis in this section.

¹⁹ This percentage is derived from an overall total n of 287, that includes graduates who "Don't know" how much they owe, as well as graduates whose loan payments for other pre-1996 loans are lumped together with several loans. Excluding these two groups for analysis purposes pushes the percentage of graduates who have completely paid off their other loans to 35%.

few graduates will take seven years or more to pay off debt to other sources (11%), which is much better than the 26 percent who plan to take this amount of time to pay off their government debt. In all, 29 percent say they will be finished paying their other loans in less than 2 years (compared to 9% for government loans).

Paying Off Post-1996 Main Loan

Overall, 12 percent of 1996 graduates say they have completely paid off their post-1996 main loan. On average, it took about 11 months, which is a much shorter period of time than it took for graduates to pay off pre-1996 loans, from either government (2 years) or other sources (2.5 years). More than 4-in-10 of those surveyed said it took them 6 months or less to completely pay off their post-1996 loan. Another quarter (24%) spent between 7 and 12 months to do so, while a third (33%) took more than a year.



^{*}Among those who borrowed money to finance post-1996 studies, and have started to repay (n=408).

For the 87 percent of graduates who still have post-1996 debt outstanding, findings show they have, on average, 6.5 years remaining to pay off these loans. Overall, about one-in-ten graduates say they will have paid their post-1996 debt (main loan) in a short time (less than 2 years), while a full 41 percent will not be debt free from their post-1996 debt for at least 7 years.

2.7 IMPACT OF DEBT LOAD ON EMPLOYED GRADUATES' ECONOMIC WELL-BEING

One of the key measures of the impact debt has on graduates once they leave their studies and move into the labour force is how onerous debt payments are in relation to what they earn. In order to capture some sense of what 1996 Maritime graduates face in this regard, a simple "debt to earnings ratio" was created to calculate the proportion of employed graduates' monthly earnings that goes towards paying down student debt.²⁰

Overall, there are three trends in the data that merit some mention. First, employed 1996 graduates earning higher incomes tend to have higher monthly debt payments, but a lower debt to earnings ratio. This means that despite a heavier debt load, debt is less of a burden for them.

Second, employed 1996 graduates earning lower incomes tend to have lower monthly debt payments, but these payments represent a greater proportion of their monthly earnings. For these graduates, debt appears to be more of an issue.

Third, employed 1996 graduates with the lowest debt to earnings ratio are those most satisfied with their current employment situation. This is true despite their having a higher monthly debt payment.

A more detailed look at these trends shows us, first, that, on average, employed 1996 graduates pay about \$286 per month to cover all their loan payments. This represents 11.3 percent of their monthly earnings.

We find, however, that monthly loan payments have a greater impact on certain groups of graduates. For example, graduates earning less than \$20,000 per year pay, on average, \$88 less per month to cover their loans than those earning \$40,000 or more annually (\$254 vs. \$342). However, for lower income earners, these debt payments represent 14.6 percent of their earnings compared to only about 9 percent for those with higher annual incomes.

 $^{^{\}rm 20}$ The debt to earnings ratio includes the following three components:

First, the total average monthly debt payment for graduates employed in the week prior to being interviewed. This includes payments for government and other loans in the pre-1996 period, and loans from a single source in post-1996. Only employed graduates who make monthly payments in any of three loan categories are included in the calculation; "Don't know" responses, and graduates whose loan payments are lumped with other loans are excluded as there is no way of determining the precise amounts.

Second, the total standardized monthly earnings. This includes earnings from employment, recalculated on a monthly basis for those whose earnings are reported weekly, bi-weekly, or annually in the survey.

[•] Third, the debt to earnings ratio. This is the debt expressed as a percentage of earnings.

Total Monthly Loan Repayments and Debt to Earnings Ratio For Employed Graduates				
	Average Total Monthly Payment* (\$ Dollars)	Monthly Debt Payment as a Proportion of Monthly Earnings (%)		
Overall (672)	\$286	11.3		
Gender				
Male (231)	\$303	10.2		
Female (441)	\$277	11.6		
Personal Income				
<\$20K (139)	\$254	14.6		
\$20K to \$39K (318)	\$272	11.1		
\$40K+ (189)	\$342	8.8		
Language Spoken Most Often**				
English (588)	\$283	8.6		
French (79)	\$294	11.3		
Province of Graduation				
Nova Scotia (392)	\$304	11.8		
New Brunswick (247)	\$264	10.2		
Prince Edward Island (33)	-	-		

^{*} Includes average monthly payment of graduates employed during study's reference week, made for government student loans and other loans made for 1996 graduation studies, and payments made for single source loans for post-1996 studies.

And, while English- and French-speaking graduates have very similar average monthly loan payments, these payments make up a slightly greater proportion of Francophone employment earnings (11.3% vs. 8.6% for Anglophones).

There are virtually no real differences in the average monthly payment male and female graduates make to cover their loans (\$303 vs. \$277). However, loan payments make up a somewhat larger proportion of monthly earnings for female graduates. While the difference in the debt to earnings ratio is not statistically significant, the findings show directional evidence that debt is a slightly greater burden for female graduates.

Graduates from Nova Scotia institutions have a higher average monthly loan payment than do graduates from New Brunswick universities (\$304 vs. \$264).²¹ And, this loan payment is having a greater impact on their economic well-being than is the case for New Brunswick graduates (11.8 vs. 10.2).

^{**} Total n for Language Spoken Most Often does not equal total n, because people with both English and French, or Other languages are excluded.

⁻ Cell size too small (<50) for reliable analysis.

²¹ Cell size is too small (<50) for a reliable analysis of Prince Edward Island graduates.

For employed graduates, only \$16 separates graduates with permanent and non-permanent employment (\$291 vs. \$275). However, people with less stable employment are more likely to feel the impact of their loan payments; for them, debt represents 11.9 percent of monthly earnings, compared to 10.8 percent for those with permanent employment.

Total Monthly Loan Repayments and Debt to Earnings Ratio For Employed Graduates				
	Average Total Monthly Payment* (\$)	Monthly Debt Payment as a Proportion of Monthly Earnings (%)		
Overall (672)	\$286	11.1		
Permanent Position				
Yes (484)	\$291	10.8		
No (188)	\$275	11.9		
Job Satisfaction				
Very satisfied (203)	\$312	10.7		
Somewhat satisfied (409)	\$282	11.2		
Unsatisfied (60)	\$219	12.4		
Degree				
Bachelor's (557)	\$282	11.5		
Professional (19)	-	-		
Master's/Doctorate (38)	-	-		
Certificate/Diploma (58)	\$284	11.3		
Field of Study				
General Arts (2)	-	-		
Education (111)	\$278	11.3		
Fine Arts (17)	-	-		
Humanities (80)	\$293	12.9		
Social Sciences (154)	\$260	11.1		
Commerce (90)	\$241	9.6		
Agriculture/Biology (63)	\$260	11.8		
Engineering (53)	\$346	10.4		
Health (53)	\$349	9.3		
Mathematics/Physical Sciences (30)	-	-		
Information Technology (15)	-	-		
Community College Programs (5)		-		

^{*} Includes average monthly payment of graduates employed during study's reference week, made for government student loans and other loans made for 1996 graduation studies, and payments made for single source loans for post-1996 studies.

It is also notable that job satisfaction varies with the financial impact of monthly loan payments. While graduates who are very satisfied with their job have higher average monthly payments than those who are dissatisfied with what they are doing for a living (\$312 vs. \$219), their payments make up an overall lower proportion of earnings (10.7% vs. 12.4%).

⁻ Cell size too small (<50) for reliable analysis.

Directional evidence suggests that graduates who pursued studies in particular fields are less affected by debt than others, even if they have higher monthly loan payments. For example, graduates who studied in Health-related fields have one of the highest average monthly debt payments (\$349), but among the lowest debt to earnings ratios (9.3%). By comparison, graduates in the liberal arts fields (Social Sciences, Humanities) tend to pay out less to cover their debt on a monthly basis, but their payments take up a greater proportion of their earnings; Humanities graduates have the highest debt to earnings ratio of all graduates (12.9%). However, differences in the debt to earnings ratios across fields of study are not statistically significant, but do provide directional evidence of variation.

3 GRADUATE OUTLOOK

3.1 EVALUATING THE UNIVERSITY EXPERIENCE

Was the Financial and Time Investment in University Education Worth It?

Generally speaking, the value graduates place on their university experience is really a measure of the success of the "system" to prepare students for their adult years, be it for entry into the labour force or for becoming informed and thinking citizens. Broadly speaking, 1996 Maritime graduates give their institutions a high grade for the experience they rendered, both in terms of the personal time required for their courses and the money invested in their studies. Still, the extent to which graduates feel positive about their university experience seems dependent upon whether or not they have been able to obtain secure employment, in a well-paying job, and in a field related to their studies.

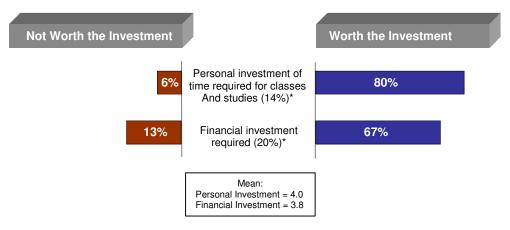
Maritime graduates hold quite positive views of the time and money they invested in the university program from which they graduated in 1996. They do, however, feel more positively about the time they spent than the money they invested. Overall, 80 percent of 1996 graduates feel the university program they took was worth their personal investment of time required for classes and studies. This includes close to half (48%) who specify that their university program was well worth it. Six percent believe their education was not worth the time they devoted to their university program.

On the other hand, two-thirds (67%) of 1996 graduates believe their university education was worth the financial investment required, including more than a third (36%) who feel it was well worth it. However, 13 percent do not believe it was worth it.²²

Respondents were asked twice to report on the value they placed on the time and financial investment made in their 1996 education, once at the beginning of the survey, and once at the end. In this way, we could compare top-of-mind impressions of this question with reactions respondents had after considering their experiences as they passed through the survey. Interestingly, slightly more 1996 graduates placed value on the financial and personal investment in their university education after they have discussed their employment and financial experiences during the survey. In fact, by the end of the survey, fully eight in ten (80%) people reported their education was worth the personal investment of time required for classes and studies, a 5-point increase over results from the beginning of the survey. Further, at the end of the survey, two-thirds (67%) of people believed their education to be worth the financial investment required, an increase of 3 points from when they were asked at the outset of the questionnaire. These findings suggest that when graduates are asked to think about their university experience, they tend to think more positively about it than in the absence of discussion. *Findings presented in this chapter are based on the question asked at the end of the survey.*

Value of Investment in 1996 University Education

"When you look back at the university education you completed in in 1996, and your experience since, would you say your university education was worth or not worth the ____?"**



*Neutral.

Graduates with a more secure financial situation stand out from others in their evaluation of their university experience. Notably, they are more likely to say their personal investment of time and money was "well worth it". For example, while 86 percent of higher income earners (\$40,000+) are happy with the time they invested at university, somewhat fewer graduates with lower income (73% with less than \$20,000) share this same positive view. And, when it comes to the financial investment made, the gap between the two groups is even greater; 79 percent of graduates with higher personal incomes feel it was worth it, compared to only 55 percent of those earning lower incomes.

Degree holders at all levels place a similar value on the time they spent at university obtaining their degree. However, when it comes to the amount of money they invested, those with a graduate or professional degree are more likely than others to say it was "well worth" the financial investment (81% Professional, 74% Master's/Doctorate vs. 66% Bachelor's).

^{**5-}point scale, where 1 means it was not at all worth the investment, and 5 means it was well worth the investment. Here, 1,2 means not worth the investment and 4,5 means worth the investment. Findings for 3 are in brackets. Asked of all graduates (n=2380).

Value of Investment in 1996 Education				
(Weighted base)	Investment of Time (%)		Financial Investment (%)	
	Worth It*	Not Worth It**	Worth It*	Not Worth It**
Overall (2380)	80	6	67	13
Gender				
Male (809)	78	7	66	13
Female (1571)	81	6	67	13
Language Spoken Most Often***				
English (2091)	81	6	68	13
French (253)	75	8	60	13
Personal Income****				
< \$20K (667)	73	9	55	21
\$20K to \$39K (897)	81	5	66	12
\$40K + (676)	86	4	79	7
Degree				
Bachelor's (1756)	80	6	66	14
Professional (50)	89	0	81	6
Master's/Doctorate (296)	84	6	74	9
Certificate/Diploma (278)	79	5	63	14
Field of Study				
General Arts (12)	-	-	-	-
Education (408)	79	6	67	10
Fine Arts (54)	81	4	62	15
Humanities (260)	84	7	65	14
Social Sciences (555)	78	6	62	17
Commerce (310)	79	5	70	12
Agriculture/Biology (217)	79	7	65	14
Engineering (153)	82	7	69	11
Health (207)	86	4	79	10
Mathematics/Physical Sciences (101)	80	3	67	12
Information Technology (84)	79	9	74	13
Community College Programs (19)	-	-	-	-
Labour Force Status	Labour Force Status			
Employed (1982)	80	6	68	12
Unemployed (139)	72	8	52	25
Not in Labour Force (259)	83	7	69	14

^{* 4,5} on a 5-point scale, where 1=Not at all worth it and 5=Well worth it.

^{** 1,2} on a 5-point scale, where 1=Not at all worth it, and 5=Well worth it.

^{***} Total n does not equal 2380 because results for "French/English" and "Other" not shown.

^{****} Total n does not equal 2380, because of Unsure or Refused responses.

⁻ Cell size too small (<50) for reliable analysis.

Graduates who studied in certain fields also express more positive sentiments about the time and money they spent for their university program. For example, Humanities and Health graduates are among those most likely to value the time they spent studying while those in the Information Technology and Health fields stand out for the positive things they have to say about the financial investment they made in their post-secondary education. To contrast, Social Sciences graduates are more likely than others to feel the financial investment they made in their university education was not worth it (17%).

Employed graduates and graduates not in the labour force tend to place a greater value on the time and money they put into their university education than those who are unemployed.

Further, English-speaking graduates feel more positively than French-speaking graduates about the time and financial commitment they made to complete their degree.

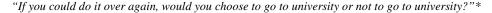
Lastly, female graduates are slightly more likely than male graduates to have valued the time they spent at university (81% worth it vs. 78%), while both share the same degree of positive attitudes about the money they invested. There are no statistically significant differences based on province of graduation.

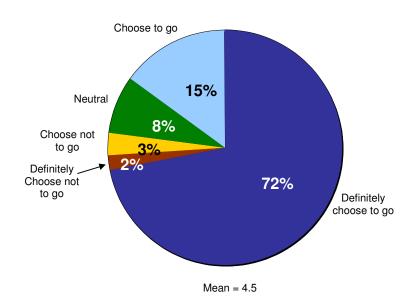
Would Graduates Return to University?

If willingness to return to university can be a measure of the value graduates place on their experience, then 1996 graduates express very positive views. While some have reservations about the time and dollar value of their university program, this does not appear to prevent them from saying they would return to university if they could do it all over again.

In all, close to nine-in-ten graduates (87%) say they would choose to go to university if they could do it over again. In fact, nearly three-quarters (72%) of graduates say they would definitely choose to go back. Comparatively, far fewer – 6 percent – report they would choose not to go back to university, while 8 percent are neutral in this regard.

Choose to Return to University?





*5-point scale, where 1 means definitely choose not to go and 5 means definitely choose to go. Asked of all graduates (n=2380).

Among those most likely to say they would "definitely choose" to return to university are those with overall more positive financial outcomes. For example, 82 percent of higher income earners (\$40,000 or more) say they would be definitely committed to going to university again, compared to 66 percent of those at the lower end of the income scale.

Choose to Return to University?*				
(Weighted base)	Definitely Choose to Go (%)	Definitely Choose to Not Go (%)		
Overall (2380)	72	2		
Language Spoken Most Often**				
English (2091) French (253)	73 55	2 4		
Personal Income***				
< \$20K (667) \$20K to \$39K (897) \$40K + (676)	66 68 82	4 1 1		
Job Satisfaction****				
Very Satisfied (648) Somewhat Satisfied (1148) Dissatisfied (186)	80 69 60	0 1		

^{*} Respondents answered question on a 5-point scale, where 1=Definitely would not choose to return, and 5=Definitely would choose to return. Results for 5 and 1 are presented here.

Further, graduates with high job satisfaction are more likely to say they would return to university than those who are dissatisfied with their current employment (80% vs. 60%). And, a greater proportion of graduates in the labour force working or not in the labour force at all would choose to return to university than is the case for those who are unemployed.

Whether or not graduates would choose to return to university does depend somewhat on the province from which they graduated. While 75 percent of Nova Scotia graduates say they would return to university, fewer New Brunswick (67%) and Prince Edward Island (68%) graduates would be as inclined to do SO.

Lastly, English-speaking graduates exhibit more enthusiasm for a return to university than French speakers (73% vs. 55%).

It is notable that there are no statistically significant differences between graduates with different degrees or fields of study in the expressed willingness to return to university to study.

^{**} Total n does not equal 2380, because findings for French/English and Other languages are not shown here.

^{***} Total n does not equal 2380, because of Unsure or Refused responses.

^{****} Among graduates employed during reference week (n=1982).

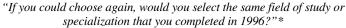
Would Graduates Follow the Same Path at University?

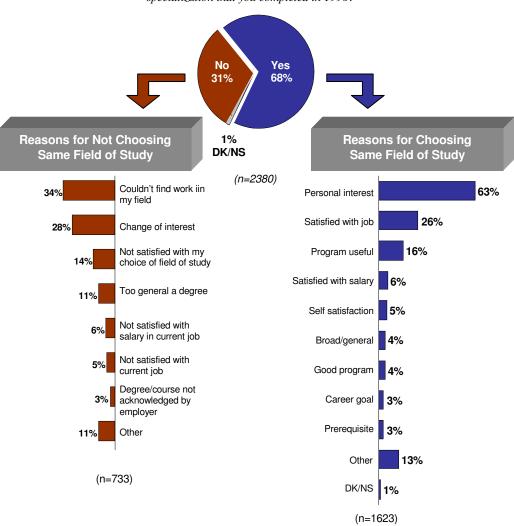
For 1996 Maritime graduates who would return to university had they to do it over again, most would choose to do so at the same institution, and in the same field of study. This confirms the overall positive sentiments they express about their university experience more generally. We learn, however, that employment prospects, job satisfaction, and personal interest are all key factors conditioning graduates' views in this regard.

Choose Same Field of Study Again?

Over two-thirds (68%) of 1996 graduates report that if they could choose again, they would select the same field of study or specialization that they completed in 1996. About a third, however, say they would likely not choose to study in the same field.

Same Field Of Study?





^{*} Percentages do not add to 100% because multiple responses possible.

Reasons for Choosing Same Field of Study

Graduates give a wide variety of reasons for wanting to choose the same field of study the second time around. Mostly, however, they relate their decision to personal interest; nearly two-thirds (63%) express their satisfaction in these terms, while 5 percent say it is because their field of study gave them a sense of self-satisfaction.

Many other graduates would choose the same field of study because they are satisfied with the job or career they feel their studies made possible. Just over one-quarter (26%) talk about their studies in this fashion, while 16 percent say the program they took is useful in the job market. Somewhat fewer people mention they are satisfied with the salary they earn (6%), the general nature of the field (4%), and career advancement (3%).

The table on the following page indicates that different groups of graduates are more enthusiastic than others about wanting to return to university to study the same subject. This is particularly true of Information Technology, Fine Arts, Engineering, and Health graduates. Meanwhile, Social Sciences, Agriculture/Biology, and Mathematics/Physical Sciences graduates are those most likely to say they would not return to study in the same field.

Employment status, job satisfaction and the relevance of a graduate's program to their current job are also fairly good predictors of willingness to return to study in the same field of study. While 69 percent of employed graduates say they would want to study the same subject if they could do it again, somewhat fewer graduates not working (59%) share the same view.

When it comes to job relevance, 82 percent of employed graduates whose job is directly related to what they studied say they would choose the same field of study. This drops to 40 percent among those whose job is not at all related to their studies.

Choose the Same Field of Study or Specialization?				
Among different graduate groups				
(Weighted base)	Yes (%)	No (%)		
Overall (2380)	68	31		
Field of Study		<u>. </u>		
General Arts (12)	-	-		
Education (408)	73	26		
Fine Arts (54)	77	23		
Humanities (260)	69	31		
Social Sciences (555)	60	40		
Commerce (310)	70	29		
Agriculture/Biology (217)	61	39		
Engineering (153)	77	23		
Health (207)	77	20		
Mathematics/Physical Sciences (101)	59	40		
Information Technology (84)	83	17		
Community College Programs (19)	-	-		
Employment Status				
Employed (1982)	69	30		
Not working (355)*	59	41		
Relevance of Program to Current Job**				
Directly Related (1041)	82	17		
Indirectly Related (545)	66	33		
Not at all Related (396)	40	59		
Job Satisfaction**				
Very Satisfied (648)	80	19		
Somewhat Satisfied (1148)	67	32		
Dissatisfied (186)	46	51		
* Not working during reference week, but have worke				
** Among graduates employed during reference week	k (n=1982)			

Reasons for Not Choosing Same Field of Study

- Cell size too small (<50) for reliable analysis.

Overall, nearly a third of 1996 graduates (31%) say they would not choose the same field of study if given the chance. The reasons they give for this fall under three main categories: can't get a related job, changed personal interest, and not satisfied with related work.

Can't Get a Related Job: A third (34%) of people who say they would not choose the same field of study if given the chance say this because they could not find work in their field. This is particularly true of Social Sciences, Humanities, and Agriculture/Biology graduates. A further 11 percent say it is because their degree was too general or not specific enough, and 3 percent say their employer does not acknowledge their degree or course. Overall, 57 percent of graduates who say their job is "not at all related" to what they studied would not choose the same field of study.

Changed Personal Interest: Over one-quarter (28%) of people who say they would not choose the same field of study say it is because their interests have changed. Half as many (14%) say it is because they are not satisfied with their choice of field of study.

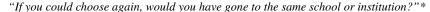
Not Satisfied with Related Work: Six percent of people who say they would not choose the same field of study again say it is because they are not satisfied with their salary in their current job. A further 5 percent say they are not satisfied with their current job in general. Four-in-ten graduates (42%) not satisfied with their job would not choose the same field again. Half as many with high job satisfaction (21%) express the same sentiment.

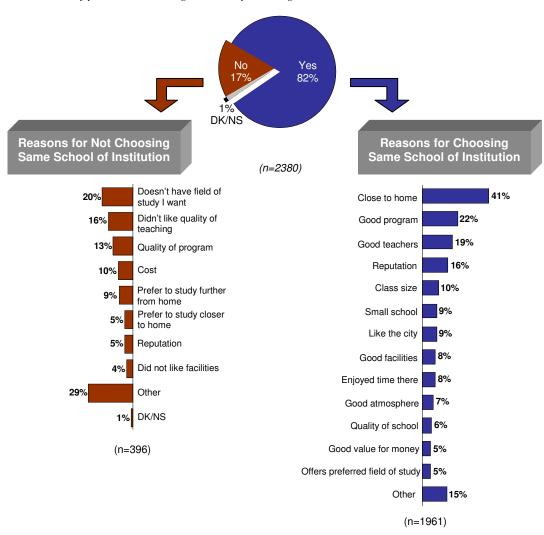
Similarly, employed graduates with a high degree of job satisfaction are significantly more likely to say they would choose the same field of study than those who express some dissatisfaction with their current employment situation (80% vs. 58%).

Would Graduates Choose Same Institution Again?

Maritime graduates seem to like the institution they graduated from more than their field of study. A greater proportion would choose the same institution over again than would choose the same university program. Overall, eight-in-ten (82%) graduates say they would choose to go to the same school or institution if they had a choice. Nearly two in ten (17%) graduates say they would not return to their alma mater were they to return to university.

Same School or Institution?





^{*} Percentages do not add to 100% because multiple responses possible.

There are no statistically significant differences in graduates' choosing or not choosing to return to the same institution based on province of graduation.

Graduates give three main reasons for *wanting to return* to study at the same institution: quality of education received, location, and program offered.

Quality of School/Education (65% of mentions): Two-in-ten (19%) graduates would choose the same school because of the quality of its teachers, while 16 percent value its reputation. Another 10 percent mention the student-teacher ratio, and 9 percent said it was a small school. A further 6 percent specified the quality of school and education and 5 percent mentioned that it was good value for their money.

School Location (50% of mentions): Four in ten (41%) people say they would choose the same school or institution again if given the choice, because it is close to home. This is the most frequently mentioned

reason for returning to one's alma mater. Another 9 percent say it is because they liked the city or area in which the school is located.

Type of Program Offered (27% of mentions): Two-in-ten (22%) graduates would choose the same school or institution again, because they feel it offered a good program; and 5 percent say that the institution they attended in 1996 offered their preferred field of study.

Other reasons included atmosphere (8% "enjoyed their time", 8% "good facilities", 7% "good atmosphere").

Overall, 17 percent of graduates say they would *not go* to the same institution if they could choose to do it over again. They give three main reasons for this:

Quality/Value (43% of mentions): Sixteen percent of graduates surveyed say they would not choose the same school because they did not like the quality of teaching; 13 percent are critical of the quality of the program. One in ten (10%) graduates say the cost would keep them from attending the same school; and 5 percent say it is the school's reputation.

Field of Study (20% of mentions): Two-in-ten (20%) people who say they would not choose the same school again say so because the school they attended in 1996 does not have the field of study they want.

Location (14% of mentions): One-in-ten (9%) people say they would prefer to study further from home while 5 percent say they would prefer to study closer to home.

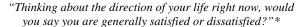
3.2 GRADUATE OUTLOOK ON PERSONAL LIFE

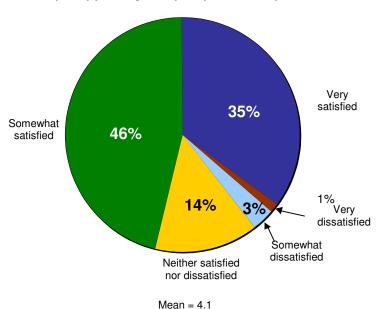
Generally speaking, four years after graduation, 1996 Maritime graduates have an overall positive outlook on the direction of their lives. However, favourable views seem dependent upon what aspect of their lives one is addressing, and the socio-demographic characteristics of the graduates. On the one hand, while most are happy with their level of education, fewer are as content with their employment situation, and significantly fewer think positively about their financial status. On the other hand, overall satisfaction with the direction of one's life is conditioned by graduates' financial and employment situation, being tied more directly to how well or poorly one is doing on these two issues.

Satisfaction with Direction of Life

Fully eight-in-ten (81%) 1996 graduates are satisfied with the direction of their lives right now, including a third (35%) who report that they are very satisfied. Only 4 percent of graduates say they are dissatisfied with the direction of their life. Fourteen percent hold more neutral views, being neither satisfied nor dissatisfied with the direction of their lives.

Satisfaction With Direction of Life





*5-point scale, where 1 means very dissatisfied and 5 means very satisfied. Asked of all graduates (n=2380).

Graduates' satisfaction with the direction of their life seems to be very much tied to how well or how poorly they are doing financially, and to their employment situation. Middle to high income graduates, for example, (i.e. those with personal income of \$20,000 or more) are more likely than those with lower incomes to be satisfied with the overall direction of their lives.

Further, graduates with less than \$15,000 of total debt outstanding are more likely to be satisfied with the direction of their lives than graduates with higher levels of debt.

Satisfaction with Direction of Life					
Among different graduate groups					
	Satisfied with Direction of Life?*				
(Weighted base)	Very/Somewhat Satisfied (%)	Very/Somewhat Dissatisfied (%)			
Overall (2380)	81	5			
Personal Income**					
< \$20K (667) \$20K to \$39K (897) \$40K + (676)	71 82 88	9 4 3			
Total Average Debt Outstanding as of 2000***					
Zero (517) Less than \$5,000 (180) \$5,000 to \$14,999 (390) \$15,000 to \$29,999 (314) \$30,000 or more (84)	83 84 82 74 72	4 3 5 5 11			
Employment Status					
Employed (1982) Not working (355)****	82 55	4 17			
Job Satisfaction*****	<u>_</u>				
Very Satisfied (648) Somewhat Satisfied (1148) Dissatisfied (186)	95 81 37	1 3 27			

^{*} Respondents answered on a 5-point scale, where 1=Very dissatisfied and 5=Very satisfied. Here, 1,2=Very/Somewhat Dissatisfied and 4,5=Very/Somewhat Satisfied; findings for the middle ranking (3) are not

Looking at employment status, employed graduates are much more satisfied with the direction of their lives than those not working. And, among graduates with a job, it is those who have higher job satisfaction who are most likely to be satisfied with how their life is going more generally.

There are no statistically significant differences in graduates' outlook on life based on their province of graduation.

^{**} Total n does not equal 2380, because of Unsure or Refused responses.

^{***} For all pre-1996 and post-1996 loans.

^{****} Not working during reference week, but have worked since 1996.

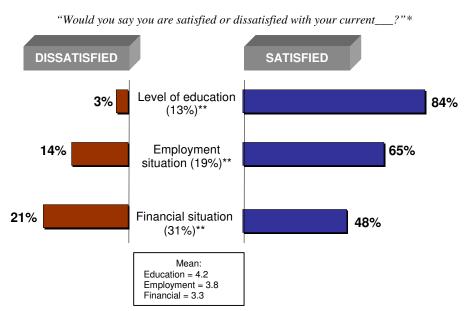
^{*****} Among graduates employed during the reference week (n=1982).

Satisfaction with Specific Aspects of Current Life Situation

When asked to consider specific aspects of their lives, graduates tend to be much happier with their level of education than with the job they have or with their current financial situation. It is, however, one's employment that is the key factor affecting graduates' overall satisfaction with the direction of their lives.

Overall, eight-in-ten (84%) people report being satisfied with their level of education while 3 percent say they are dissatisfied. By comparison, two-thirds (65%) of graduates are satisfied with their employment situation; 14 percent report dissatisfaction with this aspect of their lives. And, about half the 1996 graduate population (48%) expresses satisfaction with its financial situation; two-in-ten (21%) say they are dissatisfied.

Satisfaction With Current Situation



*5-point scale, where 1 means very dissatisfied and 5 means very satisfied. Here, 1,2=dissatisfied; 3=neither satisfied nor dissatisfied; 4,5=satisfied. Findings for 3 are in brackets. Asked of all graduates (n=2380).

**Neither satisfied nor dissatisfied.

Further analysis of the findings suggests that while all three of these components of graduates' life experience are significantly correlated with views of the current direction of their lives, graduates' employment situation is very likely the key driving factor.²³

And, findings show that certain groups of graduates have a more well-rounded sense of satisfaction with all three aspects of their current life situation. In particular, these include graduates who are more secure financially (i.e. higher income, lower debt), and are employed in jobs they like.

²³ Employment situation: Pearson's R=.593, R square=.352.

Satisfaction with Current Life Situation							
		vel of Education* (%) Employment Situation* (%)		Financial Situation* (%)			
(Weighted base)	Satisfied	Dis- satisfied	Satisfied	Dis- satisfied	Satisfied	Dis- satisfied	
Overall (2380)	84	3	65	14	48	21	
Personal Income**							
< \$20K (667) \$20K to \$39K (897) \$40K + (676)	81 84 88	4 3 1	44 69 82	27 11 5	21 47 74	42 16 6	
Total Debt Outstanding							
Zero (517) Less than \$5,000 (180) \$5,000 to \$14,999 (390) \$15,000 to \$29,999 (314) \$30,000 or more (84)	85 80 84 82 83	3 2 2 4 6	63 67 66 56 59	13 12 15 20 22	46 45 44 31 30	22 20 23 35 44	
Employment Status							
Employed (1982) Unemployed (355)***	84 83	3 3	71 38	10 33	52 27	16 41	
Job Satisfaction****							
Very Satisfied (648) Somewhat Satisfied (1148) Unsatisfied (186)	91 83 70	1 3 8	91 68 49	2 7 55	67 49 22	8 17 40	

^{*} Respondents answered on a 5-point scale, where 1=Very dissatisfied and 5=Very satisfied. Here, 1,2=Dissatisfied and 4,5=Satisfied; findings for the middle ranking (3) are not shown.

More specifically, from a socio-economic perspective, 74 percent of graduates with higher personal income are satisfied with their financial situation, while only 21 percent of lower income earners feel as positively; twice as many are dissatisfied (42%).

Similarly, high income earners are close to twice as likely as those with lower incomes to be happy with their employment situation (82% vs. 44%).

There are no statistically significant differences based on province of graduation when it comes to satisfaction with level of education and employment situation. When it comes to financial matters, New Brunswick graduates are slightly more likely than others to be satisfied with their financial situation (51% vs. 46% Nova Scotia, and 43% PEI).

From an educational achievement viewpoint, graduates from all degree categories express a high level of satisfaction with the level of education they have obtained. However, there are some real differences among them when it comes to perceptions of employment and financial status. Indeed, graduate and professional degree holders are not only happier than those with a Bachelor's degree when it comes to education level (93% and 97%, respectively vs. 83%), they also report a higher degree of satisfaction with their job (73% and 75%, respectively vs. 65%), and their financial status (64% and 73%, respectively).

^{**} Total n does not equal 2380, because of Unsure or Refused responses.

^{***}Not working during reference week, but have worked since 1996.

^{****} Among graduates employed during reference week (n=1982).

Satisfaction with Current Life Situation							
(Weighted base)	Level of Education* (%)		Employment Situation* (%)		Financial Situation* (%)		
	Satisfied	Dis- satisfied	Satisfied	Dis- Satisfied	Satisfied	Dis- satisfied	
Overall (2380)	84	3	65	14	48	21	
Degree**							
Bachelor (1756)	83	3	65	14	44	22	
Professional (50)	97	0	75	8	73	9	
Masters/ Doctorate (296)	93	0	73	8	64	14	
Certificate/Diploma (278)	78	5	61	18	48	24	
Field of Study							
Education (408)	88	2	74	11	55	18	
Engineering (153)	89	1	71	11	55	20	
Health (207)	89	0	75	7	63	10	
Information Technology (84)	80	1	80	7	61	10	
Commerce (310)	85	3	65	16	59	13	
Mathematics/Physical Sciences (101)	85	2	61	13	44	21	
Humanities (260)	85	2	60	14	35	26	
Agriculture/Biology (217)	82	4	59	15	37	26	
Social Sciences (555)	80	4	60	18	40	26	
Fine Arts (54)	75	10	45	19	23	36	
General Arts (12)	-	-	-	-	-	-	
Community College Programs (19)	-	-	-	-	-	-	

^{*} Respondents answered on a 5-point scale, where 1=Very dissatisfied and 5=Very satisfied. Here, 1,2=Dissatisfied and 4,5=Satisfied; findings for the middle ranking (3) are not shown.

The greatest gap in satisfaction between different degree holders exists when it comes to financial matters. While close to two-thirds of Master's and Doctorate graduates (64%), and three-quarters of those with a Professional degree, express satisfaction with their financial situation, the number drops to only 44 percent of Bachelor's graduates. This sizeable gap may well be explained by the fact that those with graduate and professional degrees tend to have higher average annual earnings.

Field of study is also related to graduates' perspectives on their current life situation. Those who studied in the Engineering, Health, Education, and Information Technology fields tend to express more satisfaction than others with the different aspects of their lives. Not surprisingly, perhaps, these are also graduates who have the highest average personal income and, in most cases, the lowest level of overall debt outstanding. Those most likely to be unhappy with their current life situation are those who graduated from Fine Arts and Social Sciences programs.

^{**} Total does not equal 2380, because results for "Certificate/Diploma" are not shown.

⁻ Cell size too small (<50) for reliable analysis

CONCLUSIONS AND IMPLICATIONS

What is the nature of the transitions Maritime graduates have experienced between their studies and the labour force, and back again since their graduation, and since the last time they were interviewed? In order to answer this question, and bring some sense to the complexity of these transitions, we have grouped the conclusions thematically according to subjects treated in the analysis.

Work & Education

Labour Force Activity

Broadly speaking, when it comes to labour force activity, findings show that 1996 Maritime graduates have by and large experienced a successful transition from their post-secondary studies to the labour force. And, evidence suggests their situation has improved since the last time they were interviewed in 1997. Broadly speaking, they are earning more money, have more stable jobs, carry a lighter debt load, and are in more secure financial shape than they were at any time since their graduation in 1996.

However, this mostly positive portrait hides a real diversity of graduate experiences. Indeed, findings show that the success in the transition from post-secondary education to the labour force has not been shared equally by all graduates. Those who have been more successful include people with a professional or graduate degree; graduates in the Commerce, Engineering, Education, Health, and Information Technology fields; and men. These graduates are more likely to have permanent, well-paying jobs, have less debt or are in a better position to pay off their debt, and have higher levels of job satisfaction. As a result their overall outlook on life is distinctly more positive than other graduates.

Those who have been less successful in their transition include people with Bachelor's degrees; graduates in the Humanities, Social Sciences, and Agriculture-Biology fields; and women. These graduates are more likely to have less permanent employment or are unemployed, have less well-paying jobs, more outstanding debt or are in a worse position to pay off their debt, and have lower levels of job satisfaction. Consequently, their overall outlook on life is distinctly less positive than other graduates.

What seems to further differentiate these two groups of graduates is the relative success they have had at securing "relevant" employment, that is, a job that is in some way related to their university program, and one at which they are using the skills they learned from their university program. The more this is the case, the more positive the graduate transitions (permanent work, job satisfaction, earnings, etc.). On this level, there has been clear progress; findings show an overall 10-point improvement since 1997 in the proportion of graduates who have secured employment in a job related to their studies (from 70% to 80%). Again, however, the experience has not been shared equally by all graduates; many graduates are using their education, are presumably happier in their work, performing better, and thus may well enjoy more favourable opportunities for career advancement. Meanwhile others are not working in positions where they're using their learned skills, may not be as happy in the job they're doing, and thus may be more apt to think about transitions within the workforce or back to school. These latter graduates may thus take some time to "settle in" to the labour force, possibly putting off making more definitive decisions about career choices. The risk, of course, is that their transitions become a part of their regular labour force experience rather than a means to more secure employment.

Why should all of this matter? The answer is that the diversity of graduate transition experiences has two implications for the type of labour market information students can or may be provided in advance of making their decisions about pursuing post-secondary education, and selecting the programs they will study.

First, there is a clear implication that providing students with guidance in planning their post-secondary studies should be undertaken with some degree of thought given to potential possibilities for employment. It is evident that those fortunate enough to find themselves both interested in and trained in certain fields that are "in demand" in the labour force will experience a more successful transition to the labour force. This is, of course, not new. What may be new, however, is the challenge to identify the "in demand" fields. Meeting this challenge is made all the more difficult, because what may be in demand at the beginning of a 4-year degree for students may not be by its end. Hence, how are graduates to plan? Clearly, there is a need to develop more sophisticated labour market information models that will not only track important shifts in employment requirements, but will also look into the future and "predict" fields that might be in demand over different time horizons.

This will meet only half the challenge. The other half of the equation is to provide students the appropriate opportunities to assimilate the information, and in the proper context and format. For example, graduating high school students will likely need and want different types of information than students in the final year of a 4-year university degree program. Further, graduating high school students may or may not see the relevance of learning about job opportunities four to five years away while it will be (or should be) quite obvious for graduating university students. Clearly, the challenge will be to help all students at all levels to appreciate the relevance of this information.

Second, there is an implication that the transition from post-secondary education to the labour force is not necessarily or always a linear path, suggesting that a closer look at career mobility is warranted. Students are moving in and out of the labour force and the education system with somewhat more fluidity than in the past. For the time being, those with established jobs appear to have been more successful in making the transition. But for how long? Indeed, is it appropriate to draw definitive conclusions about graduate transitions and careers after 3 to 4 years, when it may take longer for graduates to grow and flourish in a career? Many may well decide upon a change in direction; is this necessarily a bad thing? The whole question of what a career is *per se* may need to be redefined. An analysis of career path mobility should be done to shed light on the lack of success of graduates in certain fields of study who, from our findings, may be finding it more difficult to secure more permanent positions in the labour market, and thus see fit to change direction through further studies. At what point do they decide to change? What prompts them to choose specific careers over others? Are they any more or less successful once they have switched? Answers to these questions, and studies of all graduates over time will shed additional light upon the success or failure of policies designed to assist graduates in the transitions they experience between the education system and the labour force.

Graduate Mobility

Institutions of higher education in the Maritimes educate not only Maritimers, but also students from other parts of Canada. Findings on graduate mobility are clear in suggesting that over the past four years since students from the 1996 graduating class obtained their degrees, there has been some movement of graduates into and out of the Maritimes. However, it is clear that, for the most part, a vast majority of graduates have remained in their province of origin in 2000.

Still, it is useful to talk about two types of graduate movements: one from the province of graduation to outside the Maritimes; another within the Maritimes. The first type of movement shows that 27% of graduates left the Maritimes by 2000, though the net outflow is 14%. Hence, to a certain degree, the Maritime region is losing some of its educated population to other provinces in Canada (mostly Ontario).

When it comes to movements within the Maritimes, approximately three-quarters of graduates originally from Nova Scotia and New Brunswick remained in the province in 2000; this falls to 61% for Prince Edward Island. Clearly, movements between provinces have been such that Prince Edward Island suffers somewhat more than the other provinces in terms of graduate mobility.

Importantly, findings indicate that graduate employment opportunities are the clear driving factor for moving, either within or outside the region, underlining yet again the importance of the labour market in determining graduate outcomes. Among those who leave their province of graduation, a greater proportion are high-income earners, presumably being lured away or seeking greener pastures. This is particularly notable, because it is also these graduates who tend to have less debt, secure jobs, and a generally positive outlook on their life. While the number of graduates in this situation is not yet overwhelming, the trend needs to be monitored to bring some understanding as to what drives these graduates to leave the Maritimes.

2.0 **Financial Status**

Managing Debt

The overall debt picture for 1996 Maritime graduates in 2000 has improved quite substantially in the years following their graduation. On average, there has been a 41% reduction in student debt load since 1996. This suggests that, despite the fact that graduates have needed to borrow large amounts of money to finance their studies, they have been generally quite successful in paying off their loans.

However, this positive picture does hide two important trends which have implications for the nature and scope of the transitions graduates make between post-secondary education and the labour force.

First, not all graduates have been successful in lightening their debt burden. Those with lower incomes and those who have been less successful in the labour force are having a more difficult time of things, with debt making up a greater proportion of earnings than those with higher incomes and more permanent employment. This should not be too surprising; intuitively, students who earn less, and have nonpermanent jobs are more likely to face an uphill battle when it comes to debt repayment. While many graduates are "living with" their debt reality, others (about a third) are missing payments or stopping them altogether.

Second, the overall debt portrait fails to highlight the fact that some graduates are either becoming indebted for the first time, or are accumulating even greater debt loads as they return to school to upgrade their 1996 degree, or gain additional education to improve their chances in the labour market. Indeed, 39% who borrowed for post-1996 studies had no debt prior to their 1996 graduation; 37% of those who returned to study post-1996 had already borrowed money to finance their 1996 degree. The fact that many graduates returned to study for employment reasons, and are prepared to take on more debt to do so, suggests a fairly close relationship between debt management and the choices graduates make as they define, and redefine, their careers. This means that many graduates are prepared to make the transition from post-secondary education to the labour force with an "educational mortgage" that will take years to pay off. Findings show graduates currently have, on average, five or more years to pay off their current debt. As career mobility and transitions into and out of the labour force continue, this "mortgage" will only grow. Inevitably, this will have, and is having, repercussions on graduates' outlook on their lives, the value they place on their university education, and, ultimately, where and how they might enter the labour force, and whether or not they will succeed.

Third, despite the reality that some graduates are having trouble managing their debt load, relatively few graduates with debt are aware that thre are government debt management programs, and even fewer apply for them (18% of total graduate population with government debt). The question is why, especially if these programs are designed to alleviate some of student debt burden.

The implications of these trends are three-fold. First, given the potential for post-secondary education debt to follow graduates well into their working careers, it is imperative that students gain a full understanding of the nature of the "educational mortgage" they are undertaking, and how it will affect them. This will undoubtedly mean providing students with various scenarios (based on existing evidence) of what it will take financially to complete their post-secondary degree in a specific field, what they can expect in terms of employment opportunities and earnings in that field, and how much of an impact their debt load could have on their social and economic well-being once they have graduated. Having this "informed choice" should hopefully encourage students to think more broadly and seriously about post-secondary education, and thus ease their experience through the transitions from the education system to the labour force, and back.

Second, it is important that some thought be given to providing students, who accumulate a certain amount of debt, access to training or advice in debt management strategies. This could take many forms: putting the reality of their debt into the context of their monthly earnings and helping devise an appropriate budget; talking more strategically about the balance between additional debt for educational purposes and the potential for improving employment opportunities; encouraging students to seek other avenues for financing (e.g. working first, study later, family, etc.) where repayment schedules may be more flexible. The goal of this information would be to make debt "real" for students who perhaps do not readily appreciate the extent of the "educational mortgage" they are taking out.

Third, some effort should be made to understand why students are generally unaware of government student debt management programs and why even fewer apply for them. This is particularly critical for graduates who have accumulated large amounts of debt to finance their studies. Are there any systemic barriers to graduates that prevent them from applying? Do graduates have specific perceptions of, or attitudes towards, these programs which impede them taking part?

Graduate Outlook 3.0

Satisfaction With Direction of Life

Four years after graduation, 1996 Maritime graduates have a generally positive outlook on the direction of their lives. While they are not overly enthusiastic (only a third are very satisfied), graduates generally tend to be more optimistic than pessimistic. However, graduates' favourable views are very dependent upon what aspect of their lives one is addressing, and the particular socio-demographic characteristics of the graduates.

On the one hand, while most graduates are happy with the level of education they have attained, fewer are as content with their employment situation, and significantly fewer think positively about their financial status at the present time. And, of the three, employment is the key driver of overall satisfaction with one's life, affecting how much one earns, and, indirectly, whether or not one is happy about the education they obtained (i.e. did it help them get a job related to their studies?).

On the other hand, satisfaction with the direction of one's life is tied to how well or poorly one is doing financially, and to one's employment situation. Lower income, higher debt, and non-permanent employment are part of the recipe for a less optimistic view of life. As this is so consistent with findings on other fronts, it reinforces the idea that the 1996 graduating class should be described more aptly as graduating "classes", one further ahead in terms of outcomes and outlook, the other further behind on both these fronts.

Graduates' Education Experience

The value graduates place on their university experience is really a measure of the success of the "system" to prepare students for the transition into the labour force. Broadly speaking, 1996 Maritime graduates give their institutions a high grade in terms of both the personal time required for their courses and the money they invested in their studies. Given the amount of debt load reported, this is a significant finding. The fact that more than eight-in-ten would return to study if they had to do it all over again, and that most would also choose the same institution and same field of study is, of course, another endorsement of their university experience.

Still, the extent to which graduates feel positively about their university experience is linked to whether or not they have been able to obtain secure employment, in a well-paying job, and in a field related to their studies. Once again, the impact of the labour market on graduates' perspectives is quite clear.

The implication here is that graduates' expectations need to be managed in terms of likely employment opportunities (i.e. what types of jobs are available based on the education they have obtained), possible career paths (i.e. where certain jobs can lead to in terms of career mobility), and potential further requirements (i.e. what might be expected of graduates in terms of retraining or skills development). When graduates do not find a job, or not quickly enough, many are as likely to write off their university program as ineffective or useless, and move on to something else, or worse still, begin down a path, which tends to stop at different jobs or educational programs. Our findings show that this is only a recipe for more negative graduate experiences in the transition from post-secondary education to the labour force. Hence, it is imperative to identify those most likely to head in this direction, as is the need to design strategies for re-directing their energies and managing their expectations.

ANALYTICAL NOTES

1. Tests of Statistical Significance

The Ipsos Reid Group conducts a special t-test on all data to determine statistical significance between variables. This test is generated through Quantum, the firm's Data Collection, Analysis, and Management software. Quantum compares the t-statistic calculated from the data with a figure from a standard statistical table of t-values. If the number calculated from the data is greater than the number from the standard table of t-values, the relationship between two variables (in this case, the gap in percentages) is considered to be statistically significant.¹

To show statistical significance in a cross-tabulation, Quantum assigns letters (A to Z) to specific categories in the variables. When the gap in percentages between two categories is statistically significant based on the special t-test, the letter assigned to the lower percentage appears below the higher percentage to indicate the gap between it and the category with the lower percentage is statistically significant. For example, in the table, we see that female graduates are more likely than male graduates to say it is important to have a job related to one's studies.

Importance of Job Being Related to Studies – For Employed Male & Female Graduates –							
(Weighted base)	Important (%)	Not Important (%)					
A Male (671)	77	22 B					
B Female (1311)	85 A	14					

The question is: is the 8-point gap statistically significant? Through the special t-test, we find that it is. Hence an "A" (from the lower percentage for male graduates) appears below the 85 percent for females. This says that the fact that female graduates place more importance than male graduates on having a job related to their studies is a relationship unlikely to have occurred by chance, and that one can therefore be confident in generalizing this finding to the entire population of 1996 Maritime graduates.

Conversely, male graduates are more likely than female graduates to say it is not important to have a job related to one's studies. Again, the 8-percentage point difference is considered statistically significant based on the special t-test, and a "B" (for the lower female percentage) appears below the 22 percent for male graduates.

When tables are more complex, that is, using cross-tabulations with more than two categories, the presentation of the statistically significant relationships can become more cumbersome. That is, for the average reader, seeing numerous letters below many different numbers can be confusing and hard on the eyes. The example below serves to illustrate this purpose.

¹ This T-Test is also known as the Student's T-Test. For statistical significance testing, there are 2 variations of the (Students) T-Test being used. For the test of proportions, the T-Test uses the standard T-Test, but it has been slightly modified to incorporate weighting (i.e. it uses the effective base instead of the actual sample size), and uses the proportions to calculate a mean and variance (this is a standard calculation used for binomial distributions – not in cell = 0 and in cell =1). For the test of means, the standard T-Test has been slightly modified to incorporate weighting (i.e. uses the effective base instead of the actual sample size.

Importance of Job Being Related to Studies – By Field of Study –							
(Weighted base)	Important	Not Important					
	%	%					
A General Arts (12)	-	-					
B Education (408)	90 DEFGHK	10					
		1					
C Fine Arts (54)	87	13					
, ,	D	I					
D Humanities (260)	73	26					
2 118.118.118.118.1	. •	BCEFGIJ					
E Social Sciences (555)	80	19					
L docial deletices (555)	D	BI					
F Commerce (310)	83	16					
1 Commerce (310)	D	BI					
C. Appliculture/Diplomy (017)	82	18					
G Agriculture/Biology (217)	D	BI					
II. Facility with a (4.50)	77	22					
H Engineering (153)	77	BI					
I Health (207)	95 BCDEFGHJKL	4					
	BODEFGHJKL						
I Mathamatica (Dharical Ocionas a (101)	86	14					
J Mathematics/Physical Sciences (101)	D	1					
IZ IT (04)	79	20					
K IT (84)	79	BI					
L CC Programs (19)		-					
- Cell size too small (<50) for reliable result	- Cell size too small (<50) for reliable results.						

Health and Education graduates are more likely than those in most other fields to say having a job related to their studies is important. And, based on the special t-test, the percentage-point difference between Health and Education graduates and others are statistically significant, though the list is somewhat longer for Health graduates than for Education graduates.

This suggests that the fact that Health and Education graduates are more likely than others to hold this view is a relationship unlikely to have occurred by chance, and that one can therefore be confident in generalizing this finding to the entire population of 1996 Maritime graduates. Of course, there are many other statistically significant relationships that also exist. For example, Commerce graduates are also more likely than Humanities graduates to place importance on having a job related to their studies. The same is true between Fine Arts, Social Sciences, Agriculture/Biology, and Mathematics/ Physical Sciences graduates and Humanities graduates.

2. Presenting Statistically Significant Findings in the Tables

For presentation purposes in this report, we use shading to highlight statistically significant relationships. In essence, the shading of specific figures in all tables means two things: it singles out the categories with higher percentages and it indicates there are statistically significant differences between categories with the higher and lower percentages. Thus, using the same example from above, the table focusing on gender differences would appear as follows:

Importance of Job Being Related to Studies – For Employed Male & Female Graduates –						
(Weighted base)	Important (%)	Not Important (%)				
Male (671)	77	22				
Female (1311)	85	14				

This is a fairly straightforward and simple two-by-two table, which leaves no ambiguity as to which gaps are statistically significant, and which categories of variables are at play in the calculation of statistically significant relationships.

To contrast, in cases where variables with a large

number of categories (notably Field of Study, which has 12 categories) are analyzed with other variables, there is almost always more than one statistically significant finding. This is true because significance tests are done on each category paired with all others. In presenting the findings, then, the challenge is to provide as much information as

possible in a table to show statistically significant relationships without overly confusing the average reader. A couple of decisions were made to meet this challenge:

- First, the tables in the report do not intend to be exhaustive in highlighting each and every instance where differences are statistically significant; this would be far too cumbersome to put into a single table, and would be very difficult to make sense of for the average reader. The full set of statistically significant differences can be found in the study's data tables, available at the MPHEC office.
- ♦ Second, in order to avoid having too much shading in the more complex tables, a decision was made to shade only those categories whose higher percentages were statistically significant against a minimum of three other categories whose percentages were lower. This procedure was followed for all complex tables where appropriate. Therefore, in complex tables, where shading exists, readers will know that the higher percentages indicate that respondents in those categories are more likely to hold a given view or behaviour than those in categories with lower percentages. Further, readers will know that the gap between the higher and lower percentages is statistically significant. And, at a minimum, the reader will know the gap is statistically significant with at least the three lowest percentages in the same column or row (depending upon how the table is read see below "How to Read the Tables). Again, for more detail, the reader can consult the study's data tables.

To illustrate what has been done, we provide the example using the Field of Study variable. The table using the shading would appear as follows:

In this table, because the percentages are shaded, the findings show that Health and Education graduates are more likely than others to feel it is important to have a job related to their studies. Further, based on our approach for presenting statistically significant findings, the table shows that the gap between the percentage of Health graduates and graduates in fields with the three lowest percentages is statistically significant; in this case, it is Humanities, Engineering, and Information Technology graduates. We know from the example given earlier that other gaps are also statistically significant. These can be found in the data tables provided with the study.

% - 90 87	Not Important % - 10 13
90 87	- 10 13
87	13
87	13
_	1
73	26
80	19
83	16
82	18
77	22
95	4
86	14
79	20
	-
	86



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		lave browsed through the entil lave browsed through the doci lave read the entire document	ume		spec	ific chap	oters			
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	a. b. c. d. e.	Length Clarity/readability Organization/format Use of figures Quality of data and analysis		Too short Excellent Excellent Excellent Excellent		Good Good Good Good	About r	Fair Fair		Too long Poor Poor Poor Poor
Usef	ulnes	ss of the Report								
4.	Ma sch	e overall goal of the report is to ritime graduates have experies sool since their graduation in 1 ne report in achieving that goa	nced 996	d between th	eir s	tudies a	nd the la	bour force	e, and I	back again to
		Very successful Fairly successful Limited success Not successful								

5.	How have you, or are you likely to, use the information in this report?
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