Stateward bound

by Jeff Frank and Éric Bélair

oncern over the movement of skilled workers to the United States is not a new development in Canada's history. But the "brain drain" has received greater attention in the late 1990s for a number of reasons. These reasons include the growth of the knowledge economy and the rocketing demand for highly educated and skilled workers on both sides of the border. This demand may be higher in the United States where the economy has been thriving and where many knowledge-based industries are located. The competition for workers has probably been made more fierce by the North American Free Trade Agreement, which makes it easier for Canadians in a range of occupations to enter the United States as temporary workers.

This article describes one group of Canadian postsecondary graduates, the Class of '95, who relocated to the United States between the time they graduated in 1995 and the summer of 1997. It explores why these graduates left for the United States and what they were doing there, and estimates how many returned to Canada between the summer of 1997 and March 1999.

This study is adapted from South of the Border: Graduates from the Class of '95 who moved to the United States. Statistics Canada and Human Resources Development Canada, Statistics Canada Catalogue 81-587-XPB.

The most highly qualified leave

About 4,600 of the 300,000 people who graduated from a Canadian postsecondary institution in 1995 (1.5%) moved to the United States between their graduation and the summer of 1997. The most talented graduates were most likely to leave - about 44% of movers had been in the top 10% of their graduating class¹ and 12% held Ph.D.s.

University graduates degrees in the health professions, engineering and applied sciences were most likely to emigrate. For example, 20% of university graduates who moved to the States were from the health professions compared with only 8% of those who remained in Canada. Similarly, 54% of college graduates who moved to the States were from health-related fields, primarily nursing, while only 15% of those who stayed were from that field. This over-representation of health professionals among graduates who relocated is likely related to the health care reforms in Canada that significantly reduced the number of nursing jobs.

Most move to work

"Work" was the most common reason graduates gave for moving to the United States. Over half (57%) moved south mainly for work, while 23% moved to go to college or university and another 17% moved mainly for marriage or relationship reasons. Men and women were equally likely to move for work-related reasons while most who moved for education reasons were men.

Nearly two-thirds (64%) of all the graduates who moved to the United States had a job already waiting for them. Not surprisingly, 89% of those who moved for work-related reasons had already arranged for a job before moving; however, 32% of those who moved for other reasons had also managed to line one up. Of these 3,000 graduates with jobs, most had found employment through their own initiative: by responding to job advertisements, using personal contacts or by sending out résumés and applications on their own. Very few graduates were contacted directly by an American employer or head-hunter. Thus the popular perception that large numbers of recent graduates are being aggressively recruited by American employers did not apply to the Class of '95; in fact, most grads found work in the United States using traditional job search methods.

Graduates who moved for workrelated reasons also reported what work-related factors had attracted them to the United States. The most common factors shared the theme of "opportunity." Greater availability of jobs, both in particular fields and in general; better chances to gain or develop skills; and better career advancement opportunities: all were among the most common responses. Higher salaries was also a common factor encouraging graduates to emigrate to the States.

^{1.} Self-reported rank in graduating class in graduate's field of study.

CS" What you should know about this study

Data in this article were collected through the Survey of 1995 Graduates Who Moved to the United States (SGMUS) and the National Survey of 1995 Graduates (NGS). The SGMUS was commissioned by Human Resources Development Canada and conducted by Statistics Canada in March 1999. The survey interviewed university and college graduates from the Class of '95 who were living in the United States as of the summer of 1997. The NGS was conducted in the summer of 1997. Graduates who were found to be living in the United States at that time and who were not interviewed for the NGS formed the sample for the SGMUS. American citizens who graduated from Canadian universities and colleges and returned home to the United States are not included in this analysis.

Comparisons of education-job match and annual earnings of graduates who stayed in Canada with those who moved to the United States are imperfect because of differences in the two surveys' reference dates. Graduates who moved to the United States did so at various times between graduation in 1995 and the summer of 1997. They provided information about the job they took upon arriving in the United States. In contrast, graduates who remained in Canada were asked about their job in summer 1997. This difference favours those who remained in Canada because they may have had more time (potentially as much as two years) in which to gain promotions or seniority by the time they were interviewed.

Total 1.5 College 1.4 Bachelor's 3.2 Ph.D. 2 4 6 8 10 12 % of 1995 graduates who moved to the United States

Sources: Statistics Canada, Survey of 1995 Graduates Who Moved to the United States, 1999 and

Surprisingly, given the volume of the debate and the extensive media coverage of this issue, an insignificant proportion of graduates explicitly said that lower income taxes in the United States were a significant factor in their decision to work there. For some, however, lower taxes may have been implicit in identifying higher salaries. Also, differences between Canadian and American personal income tax rates tend to be smaller at the lower income levels common in entry level jobs, and graduates may have been more concerned about finding work in their field than in the level of taxation.

Did they get what they wanted?

Graduates who moved to work in the United States did so to find better work opportunities and higher salaries. For the most part, they were successful. Graduates who moved south acquired jobs more closely matched to their education than those graduates who remained in Canada. For example, 85% of engineering and applied sciences graduates who moved to the United States reported having a job "closely related" to their education compared with 58% of their counterparts who remained in Canada. The gap for graduates from the health field was about the same: 98% of graduates who moved to the U.S. versus 72% of those who remained in Canada.

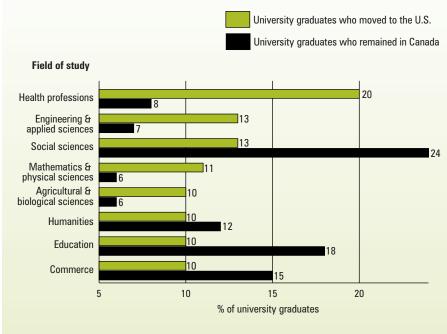
Graduates working in the United States also had higher earnings. The difference was greatest among college graduates where the median annual salary upon arrival in the United States was 76% higher (\$42,600 in 1999 Canadian dollars) than those who remained in Canada (\$24,200). At the bachelor's degree level, the median salary of movers was 42% higher (\$43,400 versus \$30,500).

However, movers to the United States were concentrated in the high-earning engineering and health fields and they were often at the top of their class academically. A comparison of bachelor's degree graduates by occupational group reveals a narrower gap. For instance,

National Survey of 1995 Graduates, 1997.

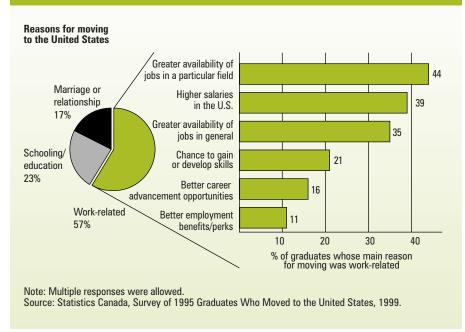


One-third of university graduates who moved to the U.S. had studied health or engineering



Sources: Statistics Canada, Survey of 1995 Graduates Who Moved to the United States, 1999 and National Survey of 1995 Graduates, 1997.

Graduates who moved for work-related reasons cited better job opportunities and higher salaries



in the natural and applied science occupations, those who moved to the United States earned a median \$47,400 while those who remained

in Canada earned a median of \$38,400, or 19% less. A gap of similar size existed between graduates in health occupations.

Plans for the future

The vast majority (82%) of the Class of '95 who had moved to the United States between graduation in 1995 and summer 1997 were still living there as of March 1999. Of these, 85% were working and 10% were going to school. Over half (56%) continued to live there as temporary residents. About 800 people who had originally arrived in the United States as temporary residents had obtained permanent residence or "green card" status.

By March 1999, more than onethird (36%) of the graduates still living in the United States were non-citizen permanent residents. Many others (44%) planned to seek permanent residence there within the next two years. At the same time, about 43% of those who still lived in the U.S. in 1999 planned to return to Canada. In some cases, the same people expressed apparently contradictory intentions. These findings, however, might be expected of a highly skilled and mobile population who may be trying to keep their options open while retaining access to the United States labour market.



Jeff Frank, formerly a senior analyst with the Centre for Education Statistics at Statistics Canada, is now with the Policy Research Secretariat. Éric Bélair, formerly a research officer with the Applied Research Branch of Human Resources Development Canada, is now a project officer with Strategy and Co-ordination, Human Resources Development Canada.

K F F P I N G T R A C K



Religious marriages remain popular

Three-quarters

(76%) of marriage ceremonies in 1997 were conducted by a member of the clergy; the remainder were solemnized by civil officials such as judges, justices of the peace and clerks of the court. Ontario had the highest level of religious marriages, with nearly all marriage ceremonies (94%) conducted by clergy of various faiths. Religious ceremonies were also common throughout the Maritime provinces, ranging between 80% and 86%. In contrast, civil marriages were most popular in the Yukon (71%) and British Columbia (56%). Previous marital status influenced whether couples sought a religious marriage or not; 82% of weddings in which both spouses were marrying for the first time, were conducted by clergy, whereas this was the case in only 58% of marriages where both spouses had been previously divorced.

Health Statistics Division

Marriages, 1997 Client Custom Services (613) 951-1746 Statistics Canada Catalogue 84F0212-XPB



Most women return to work after childbirth

Almost nine out of 10 (86%) working women who gave birth in 1993 or 1994 were back on the job within a year of giving birth. The average amount of time taken off work was a little more than six months, but one in five of these women (21%) were back to work by the end of the first month. Among the women who returned within the first month, 60% received no Employment Insurance benefits, compared with just 9% of women who returned later; and roughly one-third (34%) were selfemployed, compared with just 2% of those who returned later. The 7% of women who had not returned to paid work within two years after childbirth were more likely to have left a non-unionized, non-professional, lower-paid job; in addition, they were more likely to be unmarried and younger than those who did return.

Perspectives on Labour and Income Vol. 11, No.3

Employment after childbirth Statistics Canada Catalogues 75-001-XPE: 75-001-XIE (available from www.statcan.ca)



Canadian youth literacy surpasses US, but behind Europe

In a study of youth literacy in Canada, the US and five European countries, Canadian youth aged 16 to 25 outscored Americans by the equivalent of about two years of schooling. However, a typical Canadian youth fared less well compared with their European counterpart. The study examined literacy skills in relation to the ability to effectively interpret prose text such as newspaper articles, documents such as transportation schedules and the mathematical information found in texts such as loan charts. The Canadians scored behind all of the European countries except Poland in numeracy skills; they scored about the same as youth from Germany and Switzerland on the prose and document tests, but were considerably behind those from Sweden and the Netherlands.

Inequalities in literacy skills among youth in Canada and the United States

Culture, Tourism and the Centre for Education Statistics (613) 951-9037 Statistics Canada Catalogues 89-552-MPE, (No. 6); 89-552-MIE (available at www.statcan.ca)



Infants at greatest murder risk, most killed by parents

Set against a national homicide rate that was at its lowest point in 30 years, infants (children under the age of one) were the age group at the greatest risk of being murdered in 1998. The number of infants murdered in Canada nearly doubled from 13 in 1997 to 23 in 1998. Infants accounted for nearly half (43%) of the children under the age of 12 whose deaths were ruled as homicides. Parents were charged in more than three-quarters of the infant homicides (78%), compared

with less than two-thirds (62%) the year before. Only one child was killed by a stranger, another by a babysitter and in three other cases the assailants were unknown. Some of the increase in the reported rate of infant homicides may be due to more accurate reporting by police and legislated requirements for mandatory coroner inquests into the deaths of young children introduced in most provinces in recent years. It is believed that some infant killings in the past were mis-identified as accidental falls or "sudden infant deaths".

Juristat, Vol. 19, No. 10

Statistics Canada Catalogues 85-002-XPE; 85-002-XIE (available at www.statcan.ca)



Importance of senior travellers will grow in the next century

As baby-boomers enter their golden years in the upcoming years, attention to the travel patterns of seniors will be of increasing importance to the travel and tourism industry. Canada has one of the fastest growing senior populations in the world; by the time the youngest babyboomers turn 66 in 2031, the proportion of Canada's population aged 65 and over is projected to almost double, rising from 12% in 1998 to 22%. The growth in domestic and international travel by seniors over the last decade has outpaced that of most other age groups. And although the number of trips that seniors take declines with age, the trips that they do take tend to be longer. Senior travellers are most likely to travel in pairs, with the majority of travellers to all destinations accompanied by one companion. They are also more likely to be women — between 53% and 58%, depending on the destination. And almost nine in 10 travellers to all destinations (more than 86%), travel for pleasure or to visit friends or relatives. More than half (52%) of the travellers in Canada were visiting friends or relatives, whereas nearly two-thirds (62%) of pleasure trips were to foreign destinations.

Travel-Log, Vol. 18, No.4

Statistics Canada Catalogues 87-003-XPB; 87-003-XIB (available at www.statcan.ca)



Immigration decline slows population growth

In 1998-99 Canada's population grew by less than one percent (0.9%), according to population estimates. The growth in the size of Canada's population was at its lowest rate since 1971, and only half the rate of 1.8% recorded during the most recent peak year of 1988-89. The major factor cited for this slower growth was a decline in the number of immigrants coming to Canada (173,011); about 21,400 fewer newcomers were admitted to Canada in 1998-99 than in the previous year (194,451). Also, the rate of natural increase (the difference between the number of births and deaths) continued its steady decade-long decline. Nationwide, there were about 4,800 fewer births and 4,400 more deaths in 1998-99 than the previous year.

Demography Division Lise Champagne (613) 951-2320



Causes of urban growth vary by region

In 1997-98, approximately 1.2 million individuals moved from one place in Canada to another. Of these, 300,000 changed provinces while 900,000 people moved between census divisions within their province. Inter-provincial migration was most important on the Prairies, accounting for 58% of all people who moved to Calgary and 50% of the inflow to Edmonton; in contrast, only about 16% of migrants to Toronto came from other provinces. International migration was greatest in the largest cities, accounting for about 56% of new arrivals to Toronto, 48% to Vancouver and 35% of those who moved to Montreal.

Small Area and Administrative Data Division

Client Services (613) 951-9720 CANSIM Matrix 6981

S	0 C	I A L	- 11	V D I	C A	T O R	S		
	1990	1991	1992	1993	1994	1995	1996	1997	1998
INCOME*									
Average total money income									
All	19,875	19,310	19,450	18,997	19,351	19,425	19,515	19,528	
Families	58,942	57,537	57,222	56,045	57,095	56,997	57,544	57,146	
Unattached individuals	26,262	24,918	25,273	24,823	25,036	24,931	24,828	25,005	
Percent of income from transfer payments									
All	11.8	13.2	13.8	14.3	14.1	13.5	13.3	12.9	
Families	10.6	11.9	12.5	12.9	12.5	12.1	11.7	11.3	
Unattached individuals	17.7	19.7	20.0	20.9	21.7	20.2	20.8	20.5	
Average income of families, by quintiles									
Lowest quintile	18,871	18,391	18,010	17,884	18,360	18,284	17,729	17,781	
2nd	36,821	35,180	34,914	33,886	35,011	34,545	34,402	34,399	
3rd	52,874	50,692	50,878	49,453	50,914	49,856	50,366	50,548	
4th	70,881	68,861	68,923	67,630	68,710	68,319	69,292	69,059	
Highest quintile	115,291	114,560	113,399	111,371	112,491	113,964	115,938	113,948	
Dual-earner couples as %	· ·	· · ·	· ·	· ·	· ·	, , , , , , , , , , , , , , , , , , ,	· ·	· ·	
of husband-wife families	62.2	61.5	61.2	60.3	60.4	60.5	60.5	61.3	
Women's earning as % of men's									
full-time full-year workers	67.7	69.9	71.9	72.2	69.8	73.1	73.4	72.5	
% of persons below Low Income	• • • • • • • • • • • • • • • • • • • •		7	,			70	, 2.0	
Cut-offs (LICOs)	15.4	16.5	17.0	18.0	17.1	17.8	17.9	17.5	
Families with head aged 65 and ove		8.2	8.7	9.7	7.1	7.8	8.7	6.8	
Families with head less than age 65		13.8	14.4	15.5	14.6	15.4	15.5	15.3	
Two-parent families with children	9.8	10.8	10.6	12.2	11.5	12.8	11.8	12.0	
Lone-parent families	54.4	55.4	52.3	55.0	53.0	53.0	56.8	51.1	
Unattached individuals aged 65 and o		50.9	49.2	51.9	47.6	45.1	47.9	45.0	
Unattached individuals less than age (35.2	36.3	36.2	38.0	37.2	37.1	37.5	
FAMILIES**	05 52.5	33.2	30.5	30.2	30.0	37.2	37.1	37.3	
Marriages and divorces									
Number of marriages ('000)	188	172	165	159	160	160	157	153	
Marriage rate (per 1,000 population)		6.1	5.8	5.5	5.5	5.4	5.3	5.1	
Number of divorces ('000)	78	77	79	78	79	78	72	67	
<u>`</u>									
Crude divorce rate (per 1,000 populati	1011) 2.8	2.7	2.8	2.7	2.7	2.6	2.4	2.2	
FAMILY COMPOSITION**	7.050	7 400	7 501	7 070	7 770	7.070	7.075	0.047	0.117
Total number of families ('000)	7,359	7,482	7,581	7,679	7,778	7,876	7,975	8,047	8,117
Husband-wife families (% of all families)	87.1	87.0	86.7	86.4	86.1	85.8	85.5	85.2	84.9
without children (% of all families)	34.6	35.1	35.1	35.0	35.0	34.9	34.9	34.8	34.7
with children (% of all families)	52.5	51.9	51.7	51.4	51.1	50.9	50.6	50.4	50.1
with children									
(% of husband-wife families)	60.2	59.7	59.6	59.5	60.2	60.2	59.2	59.1	60.2
all children under 18 (% of all families)	35.3	35.0	34.6	34.2	33.9	33.5	33.1	32.8	32.4
all children under 18									
(% of husband-wife with children)	67.3	67.4	67.0	66.6	66.2	65.8	65.4	65.0	64.6
Male lone parents (% of all families)	2.3	2.3	2.3	2.3	2.4	2.4	2.4	2.5	2.5
Female Ione parents (% of all families)	10.6	10.7	11.0	11.2	11.5	11.8	12.1	12.3	12.6
female lone parents (% of lone parents	s) 82.4	82.4	82.6	82.7	82.8	83.0	83.1	83.2	83.3

^{*} All income data in 1997 dollars; families are economic families.

^{**} Family data from Statistics Canada Catalogue 91-213-XPB, *Annual Demographic Statistics*, 1998. Families are census families.

EDUCATORS' NOTEBOOK

Suggestions for using Canadian Social Trends in the classroom

Lesson plan for "Traffic report: Weekday commuting patterns"

Objectives

To discuss reasons for traffic congestion and explore the possible impact on the quality of life of Canadians.

Method

- 1. Take a quick poll of the class to find out how they got to school this morning (what mode of transportation, e.g., walk, bike, car driver, car passenger, school bus, public transit). How long did it take them to get to school? Why do some people travel long distances to school? How many experienced a traffic jam on the way to school?
- 2. Discuss why more people are driving cars now than in the past and why public transit use has not increased.
- 3. A "balanced" community is generally thought of as a self-contained, self-reliant one, within which people live, work, shop and pursue recreational activities. Is your community balanced? Discuss the repercussions of living in a community that is not balanced.
- 4. Survey students to determine if parents work in the neighborhood where they live or if they have to travel far to work. Discuss some of the reasons why traffic jams occur. How can traffic congestion be alleviated?
- 5. Discuss the pros and cons of living in a compact city. Does suburbanization contribute to traffic congestion?

Using other resources

For your next social studies project visit the Education Resources section of the Statistics Canada website at http://www.statcan.ca/english/kits. There are several teaching activities that can help you and your class further explore environmental issues, including automobile use and traffic congestion. In particular, the "Household Environment Survey - School Edition" (at http://statcan.ca/english/kits/houenv.htm) lets you compare your students' environmental practices with those of other Canadians and the "Enviro-Quiz" (at http://www.statcan.ca/english/kits/envir1.htm) introduces environmental data, including global warming trends.

Share your ideas!

Do you have lessons using **CST** that you would like to share with other educators? Share your ideas and we will send you lessons using **CST** received from other educators. For further information, contact Joel Yan, Education Resources Team, Dissemination Division, Statistics Canada, Ottawa K1A 0T6, 1 800 465-1222; fax: (613) 951-4513 or Internet e-mail: yanjoel@statcan.ca.

Educators

You may photocopy "Educators' Notebook" and any item or article in *Canadian Social Trends* for use in your classroom.