

Article

Emigration from Canada to the United States from 2000 to 2006

by *Patrice Dion and Mireille Vézina*



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- ... not applicable
- 0 true zero or a value rounded to zero
- 0^s value rounded to 0 (zero) where there is a meaningful distinction between true zero and the value that was rounded
- ^p preliminary
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- x suppressed to meet the confidentiality requirements of the *Statistics Act*
- E use with caution
- F too unreliable to be published

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Introduction

The United States has long been a huge draw for Canadians. The geographical closeness, the economic opportunities, the relationship the two countries have built over the years and their common cultural features make it easy for thousands of Canadians, individually or with their families, to move south of the border each year.

With the exception of slight increases in the 1970s and 1990s, the number of Canadians living in the United States has gradually decreased since 1930, when it peaked at 1,310,000. The most recent increase in emigrants from Canada is attributable to the growing number of skilled Canadian workers who left Canada to work in the United States.¹ Overall, however, this phenomenon, dubbed the 'brain drain,' remained small, both from a historic perspective as well as relative to the Canadian workforce.²

Globally, migration exchanges between developed countries continues, however these exchanges have changed in nature. Today there is increasing talk about brain 'churn,' rather than brain drain. For example, while migration between the Organization for Economic Co-operation and Development (OECD) countries is on the rise, it is

characterized mainly by the temporary flow of researchers, students, managers and computer specialists.³

In this context, and since no recent studies have delved into this matter specifically, it is important to understand what migration exchanges have taken place from Canada to the United States. More specifically, has emigration increased, decreased or remained stable compared to the late 1990s? Additionally, what is the nature of this emigration? For example, does it still consist mainly of skilled and highly educated workers? The purpose of this article is to answer these questions and provide a more current depiction of Canadian emigration to the United States.

Canadian emigration is not subject to compulsory registration, as is the case for births, deaths (through vital statistics registries) and immigration (through Citizenship and Immigration Canada). Although some Canadian data sources provide an overview of the emigrant flow from Canada, they do not allow for an exhaustive review of emigration by country of destination. It is therefore often preferable to use data from the receiving countries.⁴ This is the approach chosen for the current study, which benefits mainly from data from the American Community Survey (ACS), conducted in the United States.

The number of emigrants from Canada decreased between 2000 and 2006

One of the advantages of the American Community Survey (ACS) is that it can be used to estimate the number of individuals residing in the United States and who lived in Canada one year earlier. In other words, the ACS estimates the number of individuals emigrating from Canada to the United States in the course of a year. The ACS data show that from 2000 to 2006, the annual number of individuals who left Canada to live in the United States on a temporary or permanent basis fell by approximately 35%, dropping from 113,100 in 2000 to 73,000 in 2006 (Chart 1). Specifically, it was early in this period, i.e., between 2000 and 2002, that the annual flows decreased, and then remained relatively stable from 2002 to 2006. The rate of emigration to the United States went from 3.7 per 1000 in 2000 to 1.9 per 1000 in 2002, and then settled at 2.2 per 1000 in 2006.

Among the three groups of emigrants to the United States from Canada (the Canadian born, those born originally in the United States, those born outside of Canada or the United States), the decrease in the number of emigrants between 2000 and 2002 was observed only among individuals born in the

What you should know about this study

The American Community Survey (ACS)

The American Community Survey (ACS) is an annual survey carried out by the U.S. Census Bureau. The purpose of the ACS is to replace the long questionnaire of the American census conducted every 10 years. Since it contains questions on the demographic and economic characteristics of the population as well as on the place of birth and migration of respondents, it provides a more comprehensive socio-economic picture of immigrants from Canada (Canadian emigrants to the United States.)

The collection of ACS data is ongoing. The resulting estimates therefore correspond to aggregate data collected throughout the year. They represent, on the whole, the average characteristics of the population over the course of a year, and not to one specific date.

Although the ACS started in 2000, it only reached its full implementation starting in 2005, the year in which the sample was expanded to nearly three million households. The analyses in this study are, for the most part, based on Public Use Microdata Sample (PUMS) files. In 2006, the sample of the ACS PUMS file consisted of 2,969,741 people.

Note that more recent ACS files have been released since this study was conducted.

Concepts

Populations studied

Depending on the topics covered, two populations are looked at in this article, namely individuals making up the annual migratory flows from Canada to the United States and Canadian-born persons residing in the United States.

The first is defined in this study using ACS information on place of residence one year earlier. This population consists of those living in the United States at the time of the survey who reported that they resided in Canada one year earlier. However, there is nothing in the ACS to indicate the status these individuals in Canada before migrating—they might have been immigrants or non-permanent residents.

Lastly, although it is an appropriate criterion when measuring emigration, the place of residence one year earlier is less so when creating a picture of recent emigrants to the United States, since the number of emigrants and sample sizes are too small to support detailed analyses. This is why a second population, 'Canadians residing in the United States,' is also examined. This population is limited to individuals

born in Canada who do not have American citizenship or who obtained it through naturalization.¹ For the sake of brevity, we have used the term 'Canadian' to refer to Canadian-born persons.

Temporary emigration and permanent emigration

With a few exceptions, the ACS covers only individuals residing in the United States at the time of the survey and wanting to stay for a period of over two months. Canadians travelling in the United States are therefore generally excluded from the survey.

Moreover, Canadians who spend a number of months in the United States and have a residence there, like 'snowbirds,' who live for part of the winter in some of the warmer states, are a special case. Since data are collected throughout the year, some of these Canadians could be included in the ACS, although often the type of residence they occupy makes it improbable.

Moreover, emigration is normally determined to be temporary or permanent according to the duration of residence or legal residence status, information not found in the ACS.² As a result, although ACS data provide information on both temporary and permanent movements, the data do not distinguish between the two. In this study, the figures from the ACS therefore pertain to both permanent and temporary emigration, as long as it is for a period of at least two months.

Year of entry into the United States

The year of entry into the United States, available in the ACS, is very useful in identifying Canadians who have recently emigrated to the United States. We must point out, nonetheless, that there is some inaccuracy in cases where an individual entered the United States more than once. Although, in theory, the respondent must provide the most recent year in which he or she entered the United States, the wording of the question is not very clear.³

1. United Nations. 1998. *Recommendations on Statistics of International Migration* – Revision I, United Nations Publication ST/ESA/STAT/SER.M/58/ Rev.1, New York.

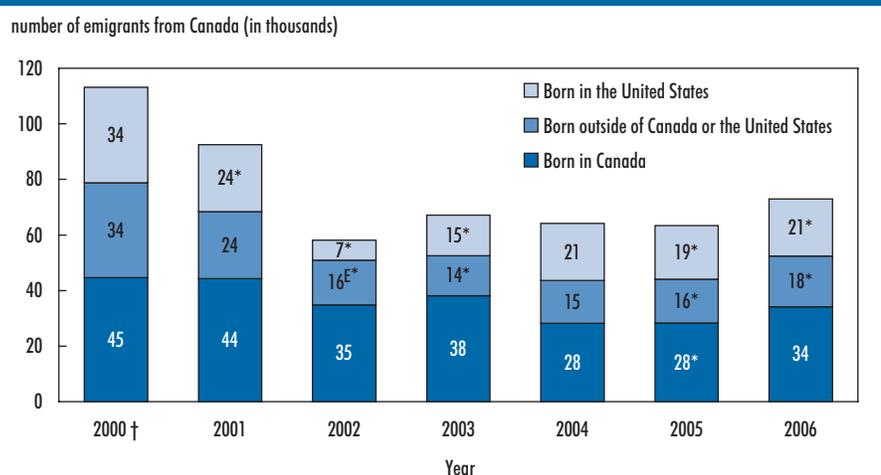
This definition matches the UN recommendations, according to which the foreign population of a country includes persons who have their place of residence in that country but whose place of birth is in another country. Furthermore, by excluding individuals with American citizenship at birth, only those people eligible to be admitted for permanent residence in accordance with the immigration laws can be considered, and this exclusion is also in conformance with these recommendations. These individuals

What you should know about this study (continued)

represented 8.7% of all people born in Canada and who entered the United States between 2000 and 2006.

- United Nations. 1998. The United Nations suggests a distinction based on the length of stay, distinguishing between 'long-term' migrants (those who have been living in the country of destination for one year or more) and 'short-term' migrants (those who have been living in the country of destination for at least three months but less than twelve months). However, this criterion does not
- apply to annual migratory flows in the ACS since, by definition, the migrants cannot have migrated more than one year earlier.
- The question is worded as follows: "When did this person come to live in the United States?" Although the interviewers were instructed to ask for the most recent year, it is uncertain whether the question was interpreted correctly if the respondent did not ask for clarification from the interviewer or if responses were sent by mail.

Chart 1 The number of persons residing in the United States whose place of residence one year earlier was Canada decreased from 2000 to 2002 and remained relatively stable from 2002 to 2006



† reference group

* statistically significant from reference group at $p < 0.05$

Note: Since 2006, the American Community Survey has included persons living in community dwellings. For comparison purposes with previous years, these persons were excluded. However, the proportion of those living in a collective dwelling in 2006 and who were living in Canada one year earlier was minimal.

Sources: U.S. Census Bureau, data from the 2000-2003 American Community Survey.

U.S. Census Bureau, Public Use Microdata Files from the 2004-2006 American Community Survey.

United States and those born outside of the United States and Canada. The number of individuals born in the United States and making a 'return migration' to their country of birth dropped between 2000 and 2001 as well as between 2001 and 2002, but subsequently increased between 2002 and 2003. The number of individuals born outside the United States and Canada and making a 'secondary' migration to the United States was

lower in 2002 than in 2000, but has stabilized since then.

The observed drop in emigration from Canada to the United States is supported by the findings of the Canadian census' Reverse Record Check (RRC),⁵ which shows that the number of emigrants to the United States decreased significantly from 2001 to 2006. According to RRC data, approximately 167,000 individuals living in the United States in 2006

resided in Canada five years earlier, compared to 214,000 individuals in 2001 (Chart 2).

As a result of the recent decrease in the number of emigrants from Canada to the United States, Canada's net migration resulting from migratory exchanges with its neighbour to the south improved from 2001 to 2006, with the number of emigrants from the United States to Canada remaining very stable (Table 1). A comparison of data from the ACS on annual flows with data from the 2001 and 2006 Canadian Censuses shows that although total migration from Canada to the United States was larger than migration from the United States to Canada, the gap has narrowed. For each emigrant from the United States to Canada, there were 2.2 individuals crossing in the opposite direction in 2001; however, this number dropped to 1.7 in 2006.⁶

The 2006 RRC shows that Canadian emigrants to the United States accounted for one-third of emigrants in the intercensal period from 2001 to 2006. Although this is a significant decrease compared to the previous intercensal period (in which 45.5 % of emigration was to the United States), the United States has nonetheless remained the most popular destination for Canadian emigrants.⁷

Fewer temporary emigrants among recent emigrants

The decrease in the number of emigrants to the United States observed in the ACS data may conceal

differences between permanent and more temporary emigration trends. Using the RRC, it is possible to examine if emigrants intend to return to their homeland, which can then be used to estimate permanent and

temporary emigrants.⁸ Indeed, recent RRC data indicate that the decrease in emigration to the United States was observed for both temporary and permanent emigrants. However, the proportion of temporary emigrants

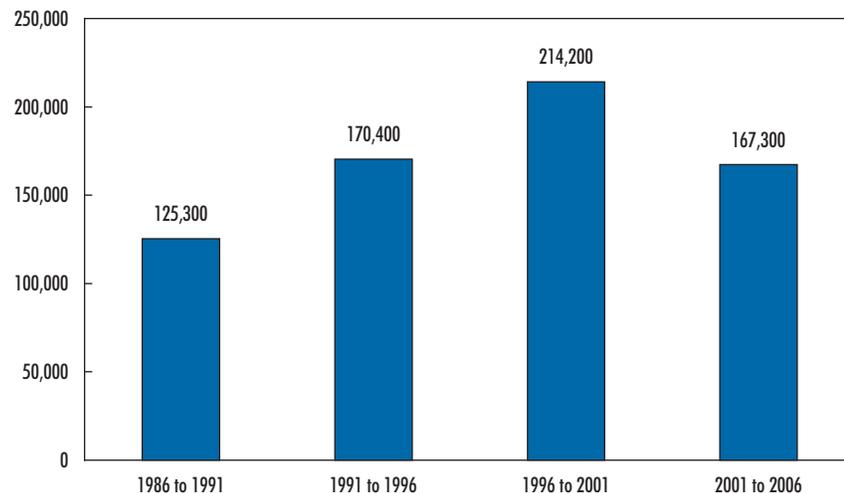
out of total emigration to the United States decreased slightly compared to the previous intercensal period. That is, RRC data indicate that in 2006, approximately one-third of emigrants from Canada to the United States intended to return to Canada, compared to 37% in 2001.

Permanent emigration tends to remain more stable over time, due to the limited number of permanent immigrants the United States permits per country.⁹ As a result, since 2000, the number of individuals from Canada that were granted permanent resident status remained relatively unchanged and close to the limit.¹⁰

The terms of the North American Free Trade Agreement (NAFTA) greatly facilitate the temporary emigration of individuals wanting to work in the United States. Since visas can be obtained relatively quickly and renewed indefinitely, temporary emigration has become a viable option for many Canadians.¹¹ Moreover, the significant increase in the number of emigrants from Canada to the United States observed in the 1990s, and mainly since 1994, the year NAFTA came into effect, is mainly attributable to a higher

Chart 2 The number of emigrants to the United States increased between 1986 and 2001 and decreased after 2001

number of emigrants to the United States



Note: The totals for 1996 to 2001 and 2001 to 2006 were revised in order to exclude those whose emigration date preceded the period covered. Since the totals for 1986 to 1991 and 1991 to 1996 could not be corrected, they were probably slightly overstated.

Source: Statistics Canada, Reverse Record Check for the Census of Population (1991, 1996, 2001 and 2006).

Table 1 Annual migratory exchanges between Canada and the United States, 2001 and 2006

		Place of birth							
		Canada		United States		Country other than Canada or the United States		Total	
		number	percentage	number	percentage	number	percentage	number	percentage
Migrants									
2001	from the United States to Canada	9,900	23.9	19,700	47.5	11,900	28.6	41,600	100.0
	from Canada to the United States	44,300	47.9	24,200	26.1	24,100	26.0	92,500	100.0
2006	from the United States to Canada	11,100	25.9	19,300	44.8	12,500	29.2	42,900	100.0
	from Canada to the United States	34,200	47.6	20,500	28.0	18,300	24.4	73,000	100.0

Sources: U.S. Census Bureau, data from the American Community Survey, Public Use Microdata Files from the 2006 American Community Survey, and the 2001 and 2006 Censuses, Statistics Canada.

number of Canadians entering the United States with a temporary visa.¹²

Nowadays, although there is still a distinction between temporary and permanent migration from a legal point of view, the line is blurring. Some temporary visa holders can apply for permanent resident status.¹³ In fact, emigrating to the United States by transitioning from temporary to permanent status is increasingly popular for a growing number of workers.¹⁴

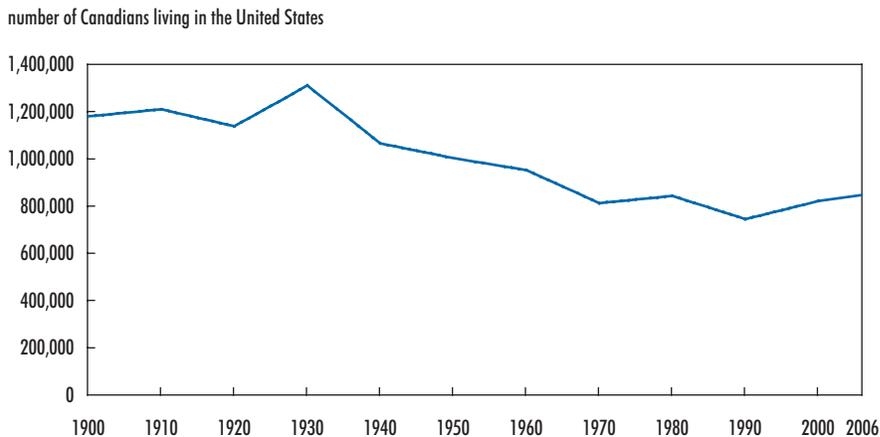
The number of Canadian-born persons in the United States continued to increase between 2000 and 2006, but at a slower pace

In addition to measuring annual migratory flows from Canada, ACS data can be used to provide a picture of individuals born in Canada who reside in the United States. According to the ACS, approximately 847,200 persons born in Canada resided in the United States in 2006. Their numbers have increased since 2000, but this growth has been slower than the rate recorded in the decade ending in 2000 (Chart 3). Since 2000, the number of Canadians residing in the United States has grown at an annual average rate of 0.5%, one-half the rate observed during the 1990s. This decrease may be the result of a number of factors, such as a decrease in migratory flows from Canada to the United States, increased return or secondary migration of Canadian-born persons, or simply deaths.

Canadian-born persons who emigrated to the United States between 2000 and 2006 were relatively young

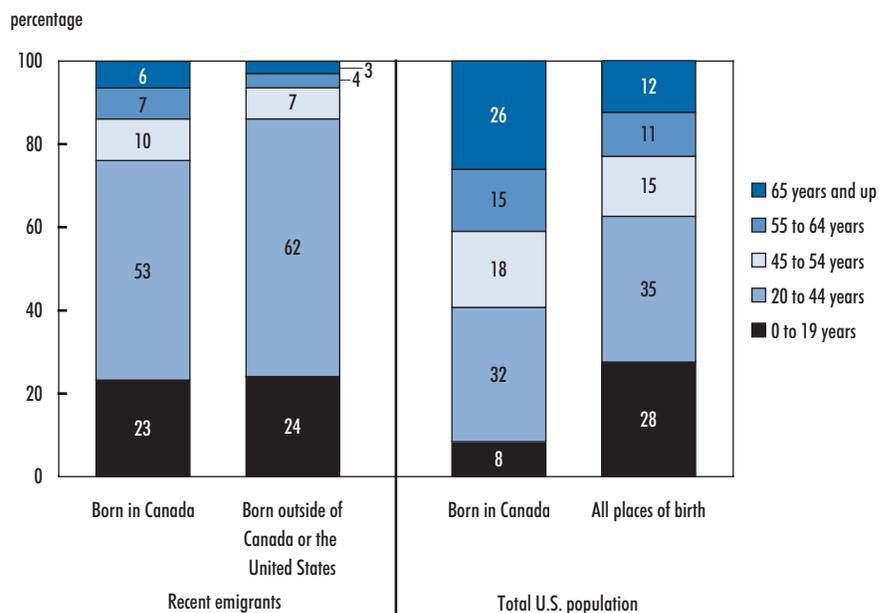
The age profile of Canadians residing in the United States is somewhat different from those born in the United States. Overall, Canadians residing the United States are under-represented within the youngest groups and over-represented in the oldest groups (Chart 4). One of the reasons for the under-representation at the youngest ages is because when

Chart 3 The number of Canadians living in the United States rose from 1990 to 2006, but remained under the peak reached in 1930



Note: Some conceptual and methodological differences bias the comparisons between the data from the American Community Survey (ACS) and those from the U.S. censuses. For example, census data are collected on a set date every 10 years, whereas ACS data are collected throughout the year. Therefore, seasonal variations are possible. In addition, the ACS excludes persons who are only living at their address temporarily, that is, for less than two months.
Sources: U.S. Census Bureau, ten-year data from the U.S. censuses (1900 to 2000). U.S. Census Bureau, Public Use Microdata Files from the 2006 ACS.

Chart 4 The recent Canadian-born emigrants living in the United States are younger than the total U.S. population



Source: U.S. Census Bureau, Public Use Microdata Files from the 2006 American Community Survey.

emigrants give birth to children in the United States, the children are not considered emigrants. At the older end of the age continuum, the Canadian emigrant cohorts who arrived in the United States prior to 1980 continue to have considerable demographic weight in relation to the younger age groups.

The most recent cohort is younger, however, much like other recent immigrants to the United States. While the median age of all Canadians residing in the United States was 49 in 2006, the median age was only 31 for Canadians who emigrated between 2000 and 2006. In addition, many of these recent emigrants were of prime working age: over one-half (approximately 53%) were between 20 and 44 years of age. Only around 10% were aged 60 or older.

Lastly, Canadians who emigrated recently were also generally very young compared to the Canadian population where the median age according to the 2006 Census was 39.5.

Nearly 60% of Canadian emigrants who arrived in the United States between 2000 and 2006 lived in just seven states

Canadians who live in the United States have certain location preferences. In 2006, nearly 60% of Canadians who had emigrated to the United States between 2000 and 2006 had chosen to take up residence in one of the following seven states: Florida, California, New York, Texas, Arizona, Washington and Michigan (Table 2). In comparison, these seven states contained approximately 40% of the total U.S. population in 2006.

Florida tops the list for recent emigrants from Canada with a total of 27,500 Canadians who emigrated between 2000 and 2006 (17.8% of all recent Canadian emigrants). With a median age of 47, recent emigrants living in Florida were relatively older.¹⁵ California had the second highest number of recent Canadian emigrants. Approximately 19,000 Canadians who migrated to the United States between 2000 and 2006 were living there, accounting for more than one-tenth (12.3%) of all recent emigrants

to the United States. California is also the state with the highest number of Canadian residents irrespective of the period of arrival.

With a median age of 31, Canadians who recently emigrated to California were much younger than those who chose to reside in Florida. These comparisons highlight the diversity of Canada's emigration. For example, employment and education are likely the most frequent reasons for migrating to the states with relatively young emigrants. Most of these states have major cities or universities that are likely to attract a population of skilled workers or students. This is particularly true in California, New York, Texas and Michigan. In addition, the geographic closeness of urban centres, such as New York, Syracuse and Detroit, may have also contributed to the influx of Canadians.

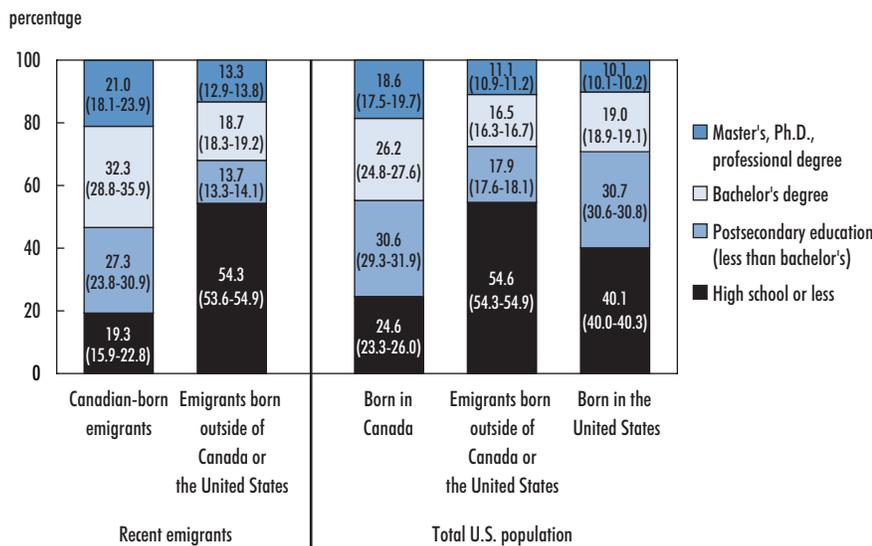
Conversely, recreational activity during or near retirement is likely a greater factor in migrations to Florida and Arizona, two states known for their warm climates.

Table 2 Canadian-born emigrants to the United States by residence status

State of residence	Recent emigrants to the United States (2000 to 2006)			Residing in the United States in 2006		
	number	percentage	Median age	number	percentage	Rank by population size
Florida	27,500	17.8	47	120,100	14.2	2
California	19,100	12.3	31	133,800	15.8	1
New York	13,800	8.9	32	55,600	6.6	3
Texas	10,100	6.5	32	42,600	5.0	6
Arizona	8,800 ^E	5.7 ^E	57	33,500	4.0	8
Washington	7,000 ^E	4.5 ^E	33	49,400	5.8	4
Michigan	5,900 ^E	3.8 ^E	27	45,600	5.4	5
Other states	62,800	40.5	...	366,600	43.3	...
Total	155,000	100.0	31	847,200	100.0	...

Note: For states where the proportion of Canadians who emigrated between 2000 and 2006 is one of the highest.
Sources: U.S. Census Bureau, Public Use Microdata Files from the 2006 American Community Survey.

Chart 5 Among recent emigrants, there are proportionately more Canadian-born with a postsecondary diploma or higher than emigrants born outside of Canada or the United States



Note: Professional degree includes, for example, diplomas in medicine, dentistry, chiropractic, optometry, osteopathy, pharmacy, podiatry, veterinary medicine, law and theology. Generally, the professional level is between a Master's and Ph.D.
The confidence intervals shown in brackets are 95%.
Source: U.S. Census Bureau, Public Use Microdata Files from the 2006 American Community Survey.

reasons like pursuing an education or accompanying or joining a spouse. The results of a survey conducted in 1999 with Canadian college and university graduates of the class of 1995 who were living in the United States in 1997 tend to confirm this hypothesis. According to this survey, 17% of the new graduates had emigrated mainly for marriage or relationships, and 23% had immigrated to attend college or university. Those who had emigrated for employment accounted for only 57% of this emigrant population.¹⁸

These data suggest that a large number of Canadians who did not specifically emigrate to the United States for work decided to stay and find work there. For example, according to the findings from the Survey of Earned Doctorates, 2004/2005, over 61% of Canadian doctoral students in American universities intended to stay in the United States upon completion of their studies.¹⁹

More than one-half of recent Canadian emigrants to the United States aged 25 to 64 in 2006 had a university degree

Canadian-born residents of the United States are highly educated. According to ACS data for the population aged 25 to 64, close to 45% had a university degree in 2006 (Chart 5). In comparison, the proportion for the total U.S. population was only 29%.

Canadian-born emigrants aged 25 to 64 who relocated to the United States between 2000 and 2006 were also highly educated. More than one-half (53%) had a university degree in 2006, compared to 20% of Canadian-born residents remaining in Canada.¹⁶

Regardless of birthplace, recent emigrants from Canada to the United States were highly educated. The ACS data indicate that in 2006, 52.4% of individuals aged 25 to 64 who had emigrated from Canada to the United States in the previous year had a bachelor's degree or higher (results not shown).

Nearly two-thirds of recent Canadian emigrants to the United States were employed

Canadians living in the United States are generally well integrated into the labour market. In fact, in 2006, nearly three-quarters (72.9%) of those aged 25 to 64 were employed. Although slightly lower, this finding is similar to that observed among people who were born in the United States (73.9%) (Table 3). In addition, proportionately less unemployment is observed among Canadians living in the United States than among American-born persons. Conversely, the percentage of people not in the labour force¹⁷ is slightly higher.

Recent emigrants stand out in the emigrant population with higher rates of labour force inactivity, and this is particularly true of recent Canadian-born emigrants. A possible explanation stems from the fact that the cohort of recent emigrants could consist of a relatively higher proportion of people who emigrated for non-work-related

Recent Canadian emigrants to the United States work in fields that are often highly specialized and related to the knowledge-based economy

The ACS sample sizes do not allow for a detailed analysis of the types of occupations held by Canadian-born persons residing in the United States. A review by occupational group to which they belong does, however, show that a high proportion of recent emigrants work in fields where the occupations are often highly specialized and related to the knowledge-based economy, such as management, health, education, and business and financial operations (Table 4).

In 2006, the largest number of Canadians residing in the United States and in the labour market worked in management (67,000). A smaller proportion were working in this field among Canadians who emigrated to the United States before the 1990s (13.8%) than among Canadians who emigrated in the 1990s (17.9%) or later (18.0%).

Table 3 Employment status of the population 25 to 64 years residing in the United States, by place of birth, for the total population and recent emigrants, 2006

Employment status	Recent emigrants (2000 to 2006)				Total U.S. population					
	Born in Canada		Born outside of Canada or the United States		Born in Canada		Born outside of Canada or the United States		Born in the United States	
	%	confidence interval	%	confidence interval	%	confidence interval	%	confidence interval	%	confidence interval
Employed	66.1	(62.1 to 70.1)	68.0	(67.5 to 68.5)	72.9	(71.5 to 74.4)	73.0	(72.8 to 73.3)	73.9	(73.8 to 74.0)
Unemployed	F	...	4.5	(4.3 to 4.8)	2.8	(2.2 to 3.4)	3.9	(3.8 to 4.0)	3.8	(3.8 to 3.9)
Not in the labour force	31.1	(27.1 to 35.0)	27.5	(27.0 to 28.0)	24.2	(22.9 to 25.6)	23.1	(22.9 to 23.3)	22.3	(22.2 to 22.4)

Note: Confidence levels are 95%.

Source: U.S. Census Bureau, Public Use Microdata Files from the 2006 American Community Survey.

Table 4 Occupational groups of Canadians residing in the United States, by emigration period, 2006

Occupational group	Workforce by cohort and proportion within the cohort							
	Before 1990		1990 to 1999		2000 to 2006		Total	
	number	percentage	number	percentage	number	percentage	number	percentage
Management	34,200	13.8	19,800	17.9*	13,000	18.0	67,000	15.5
Administrative support	37,700	15.1	11,400	10.3**	6,100	8.5	55,100	12.8
Sales and related occupations	27,900	11.2	12,200	11.1	6,100	8.4	46,200	10.7
Health	21,200	8.5	14,700	13.3**	7,000	9.7	42,900	10.0
Education, training and library occupations	15,900	6.4	7,000	6.4	5,600	7.8	28,600	6.6
Business and financial operations	12,900	5.2	4,600	4.2	4,700 ^E	6.5 ^E	22,200	5.1
Arts, sports, recreation, design, media	7,700	3.1	6,200	5.6*	F	F	18,600	4.3
Other occupations	91,200	36.7	34,700	31.4*	25,000	34.7	151,000	35.0
Total	248,700	100.0	110,600	100.0	72,100	100.0	431,600	100.0

* difference with the proportion observed in the previous cohort statistically significant at $p < 0.05$

** difference with the proportion observed in the previous cohort statistically significant at $p < 0.01$

Note: Includes the population 16 years and over with a job for the seven most prevalent occupations in 2006.

Source: U.S. Census Bureau, Public Use Microdata Files from the 2006 American Community Survey.

However, more than for any other occupational group, it was the emigration of physicians and health specialists that was most publicized and controversial in the 1990s. The fear of a doctor shortage in Canada and the increase in emigration of Canadian doctors certainly contributed, in part, to this phenomenon.^{20,21} The ACS data reflect this increase in the

number of emigrating health care professionals.²² Although they only represented 8.5% of those who emigrated from Canada to the United States prior to 1990, Canadians residing in the United States and working in the health field accounted for 13.3% of those who emigrated in the 1990s. The ACS data show, however, that the increased emigration of health professionals did

not persist between 2000 and 2006.²³

Nonetheless, health professionals are over-represented in the population of Canadians residing in the United States. In 2006, approximately 43,000 were working in a health occupation, representing one-tenth of all Canadians living in the United States with a job (Table 4). In comparison, in 2006, 4.3% of Canadian workers worked in a health

Table 5 Industry sectors of Canadians residing in the United States, by emigration period, 2006

Industry sector	Canadians residing in the United States								Canada
	Cohort								Total
	Before 1990		1990 to 1999		2000 to 2006		Total		
	%	confidence interval	%	confidence interval	%	confidence interval	%	confidence interval	
Health and social services	14.7	(13.0 to 16.4)	15.8	(13.6 to 18.1)	12.9	(9.6 to 16.3)	14.7	(13.5 to 16.0)	10.2
Manufacturing	10.8	(9.3 to 12.4)	11.4	(9.1 to 13.7)	12.4	(10.1 to 14.6)	11.2	(10.1 to 12.4)	11.9
Educational services	10.3	(8.9 to 11.7)	9.6	(7.6 to 11.6)	13.1	(10.1 to 16.0)	10.6	(9.5 to 11.6)	6.8
Professional, scientific and technical services	8.7	(7.5 to 9.9)	12.0	(10.0 to 14.0)	14.0	(10.7 to 17.4)	10.4	(9.3 to 11.5)	6.7
Retail trade	9.5	(8.0 to 11.0)	8.1	(6.2 to 10.0)	6.8	(4.9 to 8.7)	8.7	(7.7 to 9.7)	11.4
Construction	6.7	(5.5 to 7.9)	5.2	(3.7 to 6.7)	F	...	6.0	(5.1 to 6.9)	6.3
Finance and insurance	5.9	(5.0 to 6.8)	5.9	(4.1 to 7.7)	5.6 ^E	(3.6 to 7.5)	5.9	(5.1 to 6.6)	4.1
All other industry sectors	33.3	(31.3 to 35.3)	31.9	(28.3 to 35.4)	30.5	(26.6 to 34.5)	25.7	(24.3 to 27.1)	38.1
Total	100.0	...	100.0	...	100.0	...	100.0	...	100.0

Notes: Includes the population aged 16 years and over with a job for the seven most prevalent industry sectors in 2006. The confidence intervals are 95%.

Sources: U.S. Census Bureau, Public Use Microdata Files from the 2006 American Community Survey. Statistics Canada, Topic-based Tabulations, Catalogue No. 97-559-XCB2006009, 2006 Census.

occupation. The contrast is even greater if technician jobs are excluded from the health field group.²⁴ While they averaged only about 2.9% of the entire Canadian workforce in 2006, doctors and other health specialists, made up 8.2% of all Canadians residing in the United States with a job.²⁵

There were also differences in the industries that recent emigrants from Canada worked in compared to the industrial breakdown of workers in Canada. For example, in 2006, the highest proportion of Canadians having recently immigrated to the United States was in the professional, scientific and technical service sector (14%). In comparison, the proportion in the total Canadian population, based on the 2006 Census, was 6.7% (Table 5). Canadians who were recent emigrants to the United States were also significantly over-represented in the education sector.

Summary

The United States remains the most important destination for Canadian emigrants. However, the most recent data available show a decrease in migratory flows. Indeed, the number of migrants from Canada decreased between 2000 and 2006, and the annual growth in the number of Canadian-born persons in the United States declined.

This outcome was perhaps predictable considering the relative prosperity Canada enjoyed over the study period. Emigration tends to decrease in Canada when the economy is strong.^{26,27} Policies encouraging skilled workers to stay in the country likely contributed to this phenomenon.²⁸

Recently, much of the flow of Canadian-born individuals to the United States has been made up of young, highly educated individuals who work in areas with high skill

requirements. Indeed, the ACS data show that 53% of emigrants from Canada between the ages of 25 and 64 had a university degree.

While the increasing emigration of health professionals was of great concern in the 1990s, the ACS data indicate that the rise in the emigration of health professionals has not persisted since 2000, although emigration for this group of professionals remains relatively high.



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1. Zhao, John, Doug Drew and Scott Murray. 2000. "Brain drain and brain gain: The migration of knowledge workers into and out of Canada." *Education Quarterly Review*. Vol. 6, no. 3. Statistics Canada Catalogue no. 81-003-XIE.
DeVoretz, Don and Samuel A. Layrea. 1998. *Canadian Human Capital Transfers: The United States and Beyond*. Commentary 115. C.D. Howe Institute.
2. Zhao et al. 2000. The losses represented approximately 0.1% of persons with employment income and less than 1% of the labour force in a given occupation. In addition, a comparison of the migration losses to the United States with the migration gains from international migration exchanges made it possible to put the extent of the brain drain into perspective.
3. Cervantes, Mario and Dominique Guellec. 2002. "The brain drain: Old myths, new realities." *OECD Observer*. No. 230. Available at <http://www.oecdobserver.org/news/fullstory.php/aid/673/> (accessed June 17, 2010).
4. Michalowski, Margaret and Kelly Tran. 2008. "Canadians abroad." *Canadian Social Trends*. No. 85. Statistics Canada Catalogue no. 11-008-XIE. Since Canadian emigrants are also immigrants elsewhere, the authors examined the Canadian emigrant population in five countries, using data sources from these countries.
5. The purpose of this survey is mainly to measure census coverage, especially undercounting. It seeks to collect various data from people who were not enumerated in the census. An estimate of the number of individuals residing outside the country during a census year but who resided in Canada during the preceding census can be obtained from this survey.
6. There are a few conceptual differences between ACS data and Canadian census data, particularly with respect to the two-month duration of residence ACS rule and the way in which data are collected (throughout the year for the ACS compared to a set date for the census).
7. The substantial increase in emigration to Asia, due in part to the economic development of China and other Asian countries, is one of the main reasons for this decrease. According to census Reverse Record Check data, while 17.9% of Canadian emigrants chose a country in Asia from 1996 to 2001, this proportion jumped to 33.7% for the 2001 to 2006 period.
8. Temporary emigrants are those who resided outside Canada for at least six months with the intention of returning to Canada as well as those who resided outside Canada for less than two years but whose intentions of returning to Canada were unknown. Permanent emigrants are persons with no intention of returning to Canada as well as those who resided outside Canada for two years or more but whose intentions of returning to Canada were unknown.
9. Jefferys, Kelly and Randall Monger. 2008. "U.S. legal permanent residents: 2007." *Annual Flow Report*. Office of Immigration Statistics, Policy Directorate. For example, in 2007, this limit was set at 26,120.
10. Office of Immigration Statistics. 2008. *Yearbook of Immigration Statistics*. U.S. Department of Homeland Security. Available at <http://www.dhs.gov/files/statistics/publications/yearbook.shtm> (accessed June 17, 2010). The Office of Immigration Statistics releases data on the number of permanent resident admissions by country of birth and country of origin.
11. Since October 16, 2008, the length of stay allowed between each renewal for work visa holders for Canadian and Mexican workers under NAFTA has been three years (instead of one year).
12. Nadeau, S., L. Whewell and S. Williamson. 2000. "Beyond the headlines on the 'brain drain.'" *Canadian Journal of Policy Research*. Vol. 1, no. 1. ISUMA.
13. U.S. Citizenship and Immigration Services. 2006. *Temporary Migration to the United States: Nonimmigrant Admissions Under U.S. Immigration Law*. January. Office of Policy and Strategy.
14. Batalova, Jeanne. 2006. "The growing connection between temporary and permanent immigration systems." *Insight*. Migration Policy Institute.
15. The ACS data may include a percentage of Canadians who spend several winter months in the United States. Since these Canadians are generally relatively older, their presence could raise the median age of the Canadian population, mainly in warm-climate states. This is particularly the case for Florida and Arizona. See the details on temporary and permanent emigration in the methodology section for further details.
16. Statistics Canada. 2008. *Educational Portrait of Canada, 2006 Census*. Statistics Canada Catalogue no. 97-560-X. Ottawa.
17. The people who are not in the labour force include students, homemakers, seasonal workers, and persons living in institutions.
18. Frank, Jeffrey and Éric Bélair. 1999. *South of the Border: Graduates from the Class of '95 Who Moved to the United States*. Statistics Canada Catalogue no. 81-587. Ottawa. Statistics Canada and Human Resources Development Canada.
19. King, Darren. 2008. *Doctoral Graduates in Canada: Findings from the Survey of Earned Doctorates, 2004/2005*. Statistics Canada Catalogue no. 81-595. Ottawa.
20. Zhao et al. 2000. The study showed that, in 1996 and 1997, the highest rates of emigration were observed among physicians.
21. Skinner, Brett J. 2002. *Medicare, the Medical Brain Drain and Human Resource Shortages in Health Care*. Atlantic Institute for Market Studies. <http://www.aims.ca/library/BrainDrain.pdf> (accessed June 17, 2010). Skinner, using Canadian Institute for Health Information data, showed that the total emigration of physicians from Canada, considering all destinations, climbed during the 1990s, peaking at 777 in 1994. Among them, 319 physicians were admitted as permanent residents to the United States and it is conceivable that most of the others were temporary emigrants who were also bound for the United States. The number of physicians admitted to the United States as permanent residents also grew considerably in the 1990s, reaching a peak of 522 in 1996. According to this study, by considering the total temporary and permanent emigration of physicians on the one hand and emigrants returning to Canada and new immigrants on the other hand, Canada recorded a net loss of physicians from 1994 to 1997.
22. The health professional group includes physicians as well as a number of other health specialists such as chiropractors, dentists, optometrists, pharmacists, audiologists, therapists, graduate nurses and veterinarians. It also includes technicians working in the health field.
23. Canadian Health Services Research Foundation. 2008. "Myth: Canadian doctors are leaving for the United States in droves." *Myth Busters*. March. http://www.chsrf.ca/mythbusters/html/myth29_e.php. (accessed June 17, 2010). This study looks at physicians only and reveals that far fewer of them have been admitted to the United States as permanent residents lately. This number was over 500 in 1996, but dropped to 169 in 2003, 138 in 2004, and to only 122 in 2005 as well as in 2006.

24. ACS data show that approximately 1,300 physicians and other health specialists, excluding technicians, living in the United States were living in Canada one year earlier.
25. According to census data, close to 719,000 Canadians were working in the health sector in 2006, out of which 484,000 were not working as technicians. These estimates were obtained by associating the occupational groups in the National Occupational Classification (NOC) used in the ACS with the occupational codes of the National Occupational Classification for Statistics (NOC-S) used in the 2006 Census. Since the two classifications do not match perfectly, these estimates are somewhat uncertain. The conclusions drawn from these figures, however, are still conservative. At most, the proportion of Canadians working in a health occupation, as defined in the SOC used in the ACS, could rise to 5.8% and 3.1% if technicians were excluded from the calculation. Furthermore, although the match-up between classifications in the NOC (used in the ACS) and NOC-S (used in the census) proves to be relatively simple for health occupations, this is not the case for other occupational groups. This is why the comparisons are limited to this group of occupations.
26. Finnie, Ross. 2006. *International Mobility: Patterns of Exit and Return of Canadians, 1982 to 2003*. Statistics Canada Catalogue no. 11F0019. Research paper.
27. Statistics Canada. 2008. *Canada's Changing Labour Force, 2006 Census*. Statistics Canada Catalogue no. 97-559-X. Ottawa. For example, according to 2006 Census data, total employment in Canada increased at an annual average rate of 1.7% between 2001 and 2006, ranking Canada as leader among the Group of Seven (G7) nations.
28. For example, in 2000, the Government of Canada created the Canada Research Chairs Program, a permanent program aimed at attracting and retaining some of the world's most accomplished and promising researchers.