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The Geography of Immigration in Canada: Settlement, Education, Labour Activity and Occupation Profiles

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The Geography of Immigration in Canada: Settlement, Education, Labour Activity and Occupation Profiles

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Abstract

In 2006, over 6 million immigrants resided in Canada representing 19.8 percent of the total population, with over 200,000 new immigrants admitted annually since the 1990s. Immigration is primarily an urban issue with immigrants settling only in a few CMAs in select provinces. With increasing immigrant concentration primarily in the three gateway cities of Toronto, Montreal and Vancouver, the attention has turned to the settlement of immigrants outside of these three regions.

While humanitarian and family reunification considerations are important components of Canada's immigration policy, economic reasons have come to the forefront. In light of immigration as a driver of population growth coupled with Canada's aging population, immigrants are often tapped as a source of labour. In addition, with regions shifting from traditional to knowledge intensive industries, the admittance of immigrants is targeted towards the well-educated and skilled.

In 2006, over 4 million individuals had a university bachelor's degree in Canada (18.0 percent of the total population). Immigrants have a higher proportion with a university degree in comparison to the Canadian-born population particularly for the most recent arrivals. For example, 42 percent of immigrants who arrived between 2001 and 2006 had a university degree compared to 22 percent of immigrants who arrived prior to 2001, with only 16 percent among the Canadian-born. Canada, in part, has responded to the changing economic needs of the country through the economic immigrant class component of its immigration policy. Canada's point system is designed to attract high-skilled and well-educated immigrants by allocating the largest share of points to education credentials and knowledge of official languages.

Although immigrants in Canada are well-educated their labour force outcomes are worse than their Canadian-born counterparts. Even after a long period of time resident in Canada immigrants have both lower participation rates and average incomes, while they higher rates of unemployment than the Canadian-born. The unemployment rates for immigrants in the three largest immigrant receiving provinces are relatively poor

with immigrants unemployed at much higher rates. The most recent arrivals have the greatest difficulties finding employment with over three times the unemployment rate of the Canadian-born.

Examination across provinces, immigrant university degree holders fare better in provinces that attract smaller numbers of immigrants. Although few in number, immigrants in Newfoundland, New Brunswick, Nova Scotia and Saskatchewan have higher average incomes than their Canadian-born counterparts. Conversely, immigrants in the largest immigrant receiving provinces have the largest income differentials earning \$20,740 less than the Canadian-born in Ontario followed by smaller differentials in Alberta, Quebec and British Columbia. In Ontario, immigrants with university degrees who reside in smaller CMAs such as Sudbury and Kingston earn more than or similar to their Canadian-born counterparts while those in larger CMAs such as Toronto, Hamilton or Ottawa earn less. In the largest immigrant receiving CMA of Toronto, the average income of the immigrant is approximately 60 percent of their Canadian-born counterparts. Therefore, a large number of immigrants who reside in Toronto earn relatively low incomes despite having a university degree. The cost of immigrant skill underutilization in Canada is large and growing.

The industry and occupational profiles of the employed Canadian-born and the immigrant populations differ for all levels of education and those with bachelor's degree. In particular, the profile for the immigrant population differs between immigrants who arrived before 1981 and those who arrived 1981 and later with the pre-1981 cohort profiles more similar to the Canadian-born. Similarly, the Canadian-born and immigrant populations with a university bachelor's degree have the largest shares employed in: educational services; professional, scientific and technical services; and health care and social assistance.

Canada's global competitiveness in the future will be in part determined by the degree that immigrants will be able to integrate into the Canadian labour market. Canadian immigration policy is currently shifting towards easing entry for the foreign-born intending to reside in less immigrant dense regions/provinces through the Provincial Nominee Program and retaining the foreign-born in Canada through the Canadian Experience Class. These are important additions to Canada's immigration policy which aims to admit not only the highly skilled and well-educated into Canada for permanent residence, but those who will most likely be able to integrate into the local labour markets. Provincial and regional multi-sector collaborations that provide programs and services to ease immigrant integration into the labour market have begun to emerge across Canada over the last decade. With changes to immigration policy, and increasing multi-sector collaborations to ease immigrant labour market integration; these will lead to more positive outcomes for immigrants. However, there is much more assistance required to help immigrants to fully achieve success in the Canadian labour market.

Introduction

Canada admits immigrants for permanent residence for primarily three reasons: humanitarian effort through the admittance of protected persons (refugees and others granted protection); family reunification through the sponsorship of selected family members; and economic development and prosperity through the admittance of high-skilled and well-educated individuals. In 2006, there were 6,186,950 immigrants¹ in Canada representing 19.8 percent of the total population (Chui et al 2007). In comparison to other immigrant receiving countries Canada's immigrant proportion is higher than the United States (12.5 percent) and lower than Australia (22.2 percent) (ibid). Since the 1990s Canada has on average admitted over 200,000 immigrants annually with 236,758 immigrants admitted for permanent residence in 2007 (CIC 2008a) with the largest admittance to date 400,870 in 1913 (CIC 1999).

While admittance for humanitarian and family reunification purposes are important components of Canada's immigration policy, recently, economic reasons have taken the forefront. In 2007, economic immigrants comprised of skilled workers, entrepreneurs, self-employed, provincial/territorial nominees and live-in caregivers, were 55.4 percent of all immigrant admittances followed by family sponsorship (28.0 percent) and protected persons (11.8 percent) (CIC 2008a). The shift towards the preference of economic immigrants gained prominence in the late 1980s, with the highest proportion of economic immigrants admitted in 2001 (62.1 percent) (CIC 2007a).

The greater emphasis on admitting immigrants to Canada, and in particular of economic immigrants, has occurred primarily due to three reasons. First, immigration is currently the largest driver of population growth with approximately two-thirds of population growth attributed to net international migration in 2007 (Statistics Canada 2008a). Second, Canada is an aging society; with over 13.0 percent of the population 65 and over in 2008, and growing at a rate more than double of the overall population (ibid). This has raised concern that the demand for skilled and educated individuals in the future will outpace supply. Third, Canada has a growing demand for high-skilled and well-educated labour force as regions shift from more traditional industries into knowledge intensive industries.

With an aging population coupled with changing labour needs, Canada has a growing demand for high-skilled and well-educated labour. Canada's situation is not unique with many countries around the world facing similar demographic and economic changes which has intensified the competition for talent globally. Canada, in part, has responded to the changing economic needs of the country through the economic immigrant class component of its immigration policy. Incorporated into Canada's immigration policy in 1967, the point system is the primary stream that immigrants

¹ The term "immigrant" refers to all categories of foreign-born entering Canada for permanent residence.

enter the economic class. Entry through the point system is assessed on six factors: education, ability in the two official languages, work experience, age, arranged employment in Canada and adaptability; in 2008, the passing mark was 67 out of total possible 100 points (CIC 2008b). Canada's point system is designed to attract the high-skilled and well-educated immigrants with education credentials contributing the largest number of points, followed by ability in the official languages of English and French, and work experience. With almost half of the points allocated from education and language proficiency, the proportion of immigrants entering with a university degree is large and increasing. Of the immigrants who arrived between 2001 and 2006, 51 percent had a university degree compared to 28 percent for immigrants arriving prior to 2001, and 20 percent for the Canadian-born (Statistics Canada 2008b).

However, with growing global competition for talent, Canada has begun to focus not only on the attraction of foreign talent, but the retention of this talent. Citizenship and Immigration Canada recently announced in the fall of 2008 the creation of the Canadian Experience Class. The Canadian Experience Class aims to retain temporary foreign workers and foreign graduates of Canadian post-secondary institutions who have skilled work experience in Canada (CIC 2008b). The creation of this class is especially important as the number of temporary foreigners in Canada entering per year is large with 112,658 temporary workers and 61,703 foreign students admitted in 2006 (CIC 2007b). The key criterion for entry through this class is the skilled work experience in Canada that these foreign talents possess. With skilled Canadian work experience, these foreign workers and university graduates have demonstrated their ability to integrate into the Canadian labour market and be employed in occupations that are in high demand.

The objectives of this study are fourfold.

First, the study examines immigrant settlement patterns across Canada focusing on both provincial and census metropolitan area (CMA) levels.

Second, the study provides an overview of the geography of education comparing the Canadian-born and immigrant populations focusing on university degree holders.

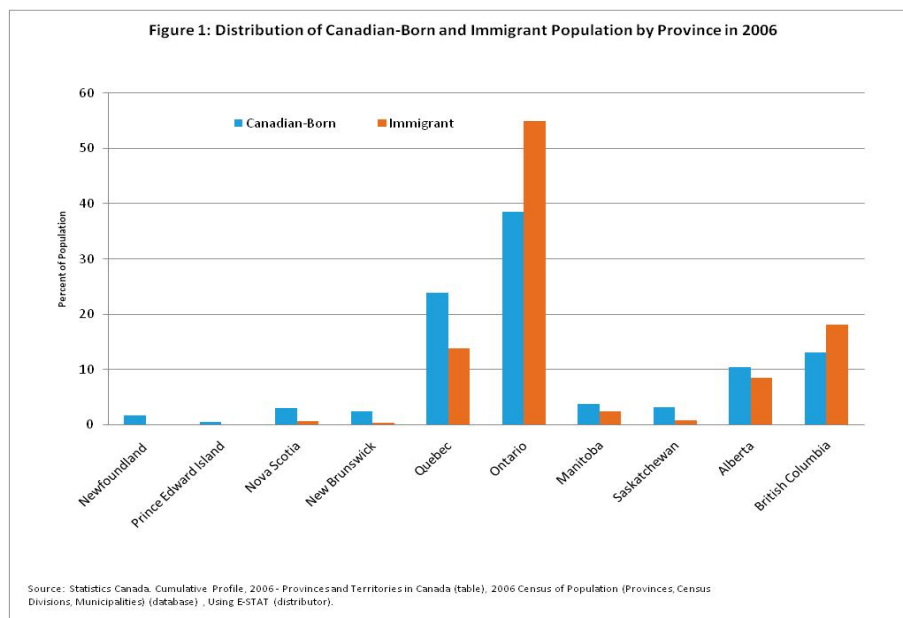
Third, this study examines the labour market activities and outcomes of immigrants who have a university degree.

Fourth, this study examines the occupation and industry employment profiles of both the Canadian-born and immigrant populations focusing on individuals with a university degree.

Immigrant Settlement Patterns Across Canada in 2006

Provincial Immigrant Settlement Patterns

Both established and newly arrived immigrants chose to reside in only a handful of provinces and CMAs (Figure 1). Ontario, British Columbia, Alberta and Quebec have the largest proportions of the immigrant population in Canada with 54.9 percent, 18.1 percent, 16.0 percent and 13.8 percent respectively compared to 38.5 percent, 13.0 percent and 23.8 percent of Canada's total (Canadian-born and immigrant) population. In 2006, Ontario had the highest proportion and number of immigrants with 27.9 percent of its population foreign-born and 3,398,725 immigrants enumerated increasing 368,645 between 2001 and 2006². British Columbia had the second highest proportion of immigrants with 27.2 percent of its population foreign-born in 2006; while Quebec had 851,555 immigrants.



The Atlantic provinces of Newfoundland, Nova Scotia, New Brunswick and Prince Edward Island had 84,750 immigrants which constitute 3.7 percent of their total population. Nova Scotia had the largest number of immigrants of the four Atlantic Provinces. Unlike the other two Prairie Provinces of Manitoba and Alberta, the proportion of immigrants in Saskatchewan is similar to that of the Atlantic Provinces with 5.0 percent. Manitoba is a growing immigrant destination with 151,230 (13.2 percent of their total population) which can be largely attributed to their aggressive

² See Table A: Table A: Distribution of Population in Canada in 2006: Total Population and Immigrant Population and Table B: Distribution of Population in Canada in 2001: Total Population and Immigrant Population in Appendix.

recruitment of immigrants through its Provincial Nominee Program. In 2005, Manitoba admitted 4,619 immigrants through its Provincial Nominee Program which accounted for 57.0 percent of all immigrant admittances in the province; in addition, this represented 57.4 percent of all immigrants entering Canada through the Provincial Nominee Program (CIC 2006a).

Ontario was the major destination province for permanent residents admitted in 2006 with 125,914 (or 50.0 percent of all admitted) (Table 1). Of the admitted, 62,635 (49.7 percent) were economic class, followed by family class with 38,349 (30.4 percent) and 18,700 protected persons (14.9 percent). Closer examination of the economic class, finds the majority of the economic class are entering as skilled workers (86.9 percent). Of all immigrants entering through the economic class in Canada, 45.3 percent chose Ontario as their destination, therefore, not only does Ontario draw a large proportion of new arrivals into Canada it is the destination of choice for the economic class.

Table 1: Permanent Residents Admitted in 2006: Canada and Ontario

Immigrant Entry Class	Total Admitted	Ontario	Total Admitted	Canada
		Proportion of Admitted Percent		Proportion of Admitted Percent
Economic Class				
<i>Skilled Workers</i>	54,445	43.24	105,949	51.39
<i>Business Immigrants</i>	4,303	3.42	12,077	35.63
<i>PNP</i>	470	0.37	13,336	3.52
<i>Live-In Caregivers</i>	3,417	2.71	6,895	49.56
Total Economic Class	62,635	49.74	138,257	45.30
Family Class				
<i>Spouses, Partners, Children and Others</i>	26,001	20.65	50,500	51.49
<i>Parents and Grandparents</i>	12,348	9.81	20,006	61.72
Total Family Class	38,349	30.46	70,506	54.39
Total Protected Persons	18,700	14.85	32,492	57.55
Total All others	6,230	4.95	10,394	59.94
Total	125,914		251,649	

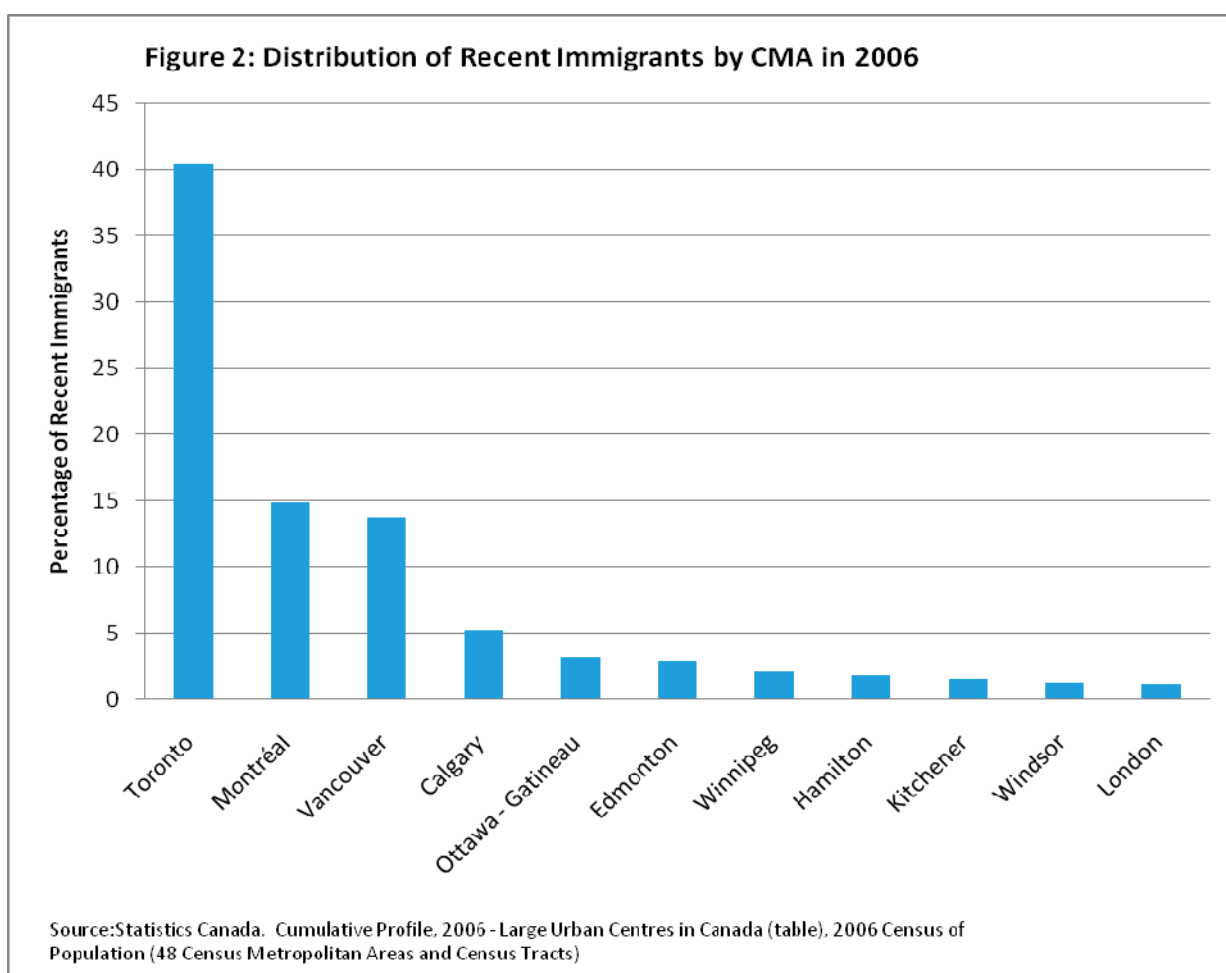
Source: Citizenship and Immigration Canada. 2008. Annual Report to Parliament on Immigration 2007.

Census Metropolitan Area of Residence Immigrant Settlement Patterns

More precisely, immigration is primarily an urban issue with 90.0 percent of immigrants living in one of the 33 CMAs compared to 68.0 percent of the Canadian-born population in 2006 (Table 2). In 2006, the CMAs of Toronto, Vancouver and Montreal were home to 62.9 percent of Canada immigrant population; with immigrants comprising 45.4 percent of Toronto's population, 39.3 percent of Vancouver's population and 20.4 percent of Montreal's population. Toronto has one of the highest immigrant proportions in the world; in comparison other immigrant-receiving cities in

the world have smaller proportions including Miami, Florida (36.5 percent), Los Angeles, CA (34.7 percent), Sydney, Australia (31.7 percent), Melbourne, Australia (28.9 percent), and New York City, NY (24 percent) (Chui et al 2007).

In addition to the three gateway cities of Toronto, Montreal and Vancouver having a large established immigrant population, they also draw a large proportion of recent immigrants, immigrants who arrived between 2001 and 2006 (Figure 2). Examination of recent immigrants shows that there is limited dispersion outside of these three CMAs to: Calgary, Ottawa-Gatineau³, Edmonton, and Winnipeg. To a limited extent there is dispersion to other CMAs proximate to Toronto, such as Hamilton, Kitchener, London, and Windsor. However, there is no evidence of dispersion outside of Canada's CMAs as 94.1 percent of recent immigrants resided in a CMA in 2006.



³ The CMA of Ottawa-Gatineau straddles both Ontario and Quebec.

Table 2: Population Distribution of Canada in 2006: Census Metropolitan Areas (CMAs)

Census Metropolitan Area	Total	Proportion of	Total Immigrant	Proportion of	Proportion of
	Population	Total Population	Population	Immigrant Population	CMA Population
		Percent		Percent	Percent
Abbotsford (B.C.)	159,020	0.50	37,070	0.60	23.31
Barrie (Ont.)	177,061	0.56	22,515	0.36	12.72
Brantford (Ont.)	124,607	0.39	15,935	0.26	12.79
Calgary (Alta.)	1,079,310	3.41	252,765	4.09	23.42
Edmonton (Alta.)	1,034,945	3.27	189,775	3.07	18.34
Greater Sudbury (Ont.)	158,258	0.50	10,450	0.17	6.60
Guelph (Ont.)	127,009	0.40	25,765	0.42	20.29
Halifax (N.S.)	372,858	1.18	27,410	0.44	7.35
Hamilton (Ont.)	692,911	2.19	166,630	2.69	24.05
Kelowna (B.C.)	162,276	0.51	23,720	0.38	14.62
Kingston (Ont.)	152,358	0.48	18,505	0.30	12.15
Kitchener (Ont.)	451,235	1.43	103,055	1.67	22.84
London (Ont.)	457,720	1.45	87,420	1.41	19.10
Moncton (N.B.)	126,424	0.40	4,245	0.07	3.36
Montréal (Que.)	3,635,571	11.50	740,360	11.97	20.36
Oshawa (Ont.)	330,594	1.05	53,920	0.87	16.31
Ottawa - Gatineau (Ont./Que.)	1,130,761	3.58	202,735	3.28	17.93
Peterborough (Ont.)	116,570	0.37	10,800	0.17	9.26
Québec (Que.)	715,515	2.26	26,200	0.42	3.66
Regina (Sask.)	194,971	0.62	14,725	0.24	7.55
Saguenay (Que.)	151,643	0.48	1,755	0.03	1.16
Saint John (N.B.)	122,389	0.39	5,035	0.08	4.11
Saskatoon (Sask.)	233,923	0.74	17,795	0.29	7.61
Sherbrooke (Que.)	186,952	0.59	10,360	0.17	5.54
St. Catharines - Niagara (Ont.)	390,317	1.23	70,320	1.14	18.02
St. John's (N.L.)	181,113	0.57	5,250	0.08	2.90
Thunder Bay (Ont.)	122,907	0.39	12,600	0.20	10.25
Toronto (Ont.)	5,113,149	16.17	2,320,160	37.50	45.38
Trois-Rivières (Que.)	141,529	0.45	3,070	0.05	2.17
Vancouver (B.C.)	2,116,581	6.70	831,265	13.44	39.27
Victoria (B.C.)	330,088	1.04	61,980	1.00	18.78
Windsor (Ont.)	323,342	1.02	74,770	1.21	23.12
Winnipeg (Man.)	694,668	2.20	121,250	1.96	17.45
TOTAL in Canada	31,612,897		6,186,950		

Source: Statistics Canada. Cumulative Profile, 2006 - Large Urban Centres in Canada (table), 2006 Census of Population (48 Census Metropolitan Areas and Census Tracts) (database), Using E-STAT (distributor).

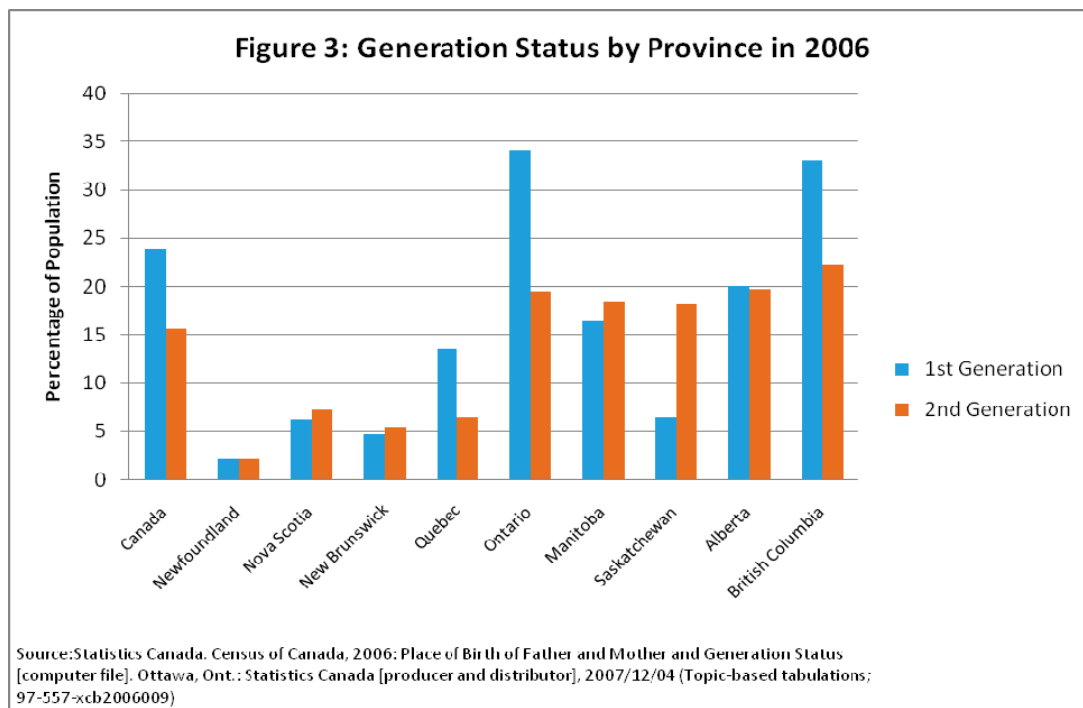
The immigrant geography in Canada can be broadly divided in three categories. Immigrant gateway cities of Toronto, Vancouver and Montreal are the primary choice of settlement. Calgary, Edmonton and Winnipeg, and CMAs geographically proximate to Toronto are secondary immigrant settlement areas. All other CMAs and non-CMA regions are tertiary immigrant settlement choices with only 10.0 percent of immigrants however, the settlement choice of over 30 percent of the Canadian-born.

Ontario's 15 CMAs collectively had 3,195,580 immigrants (51.7 percent of all immigrants in Canada) which represented 94.0 percent of Ontario immigrants. Few immigrants in Ontario are choosing to reside outside of CMAs which poses a challenge to smaller cities and towns in Ontario attempting to attract immigrants. Citizenship and Immigration Canada along with provincial and territorial governments have attempted to encourage immigrant settlement outside of the traditional immigrant destinations. For instance, the Provincial Nominee Program allows provinces to nominate economic immigrants who intend to reside in their province/territory for expedited immigration processing. However, there has been limited success thus far, with only a small fraction of immigrants entering Canada through this program. In 2006, the Provincial Nominee Program settled 13,336 immigrants in Canada out of 251,649 immigrants admitted to Canada in the same year (5.3 percent) and this number was to be increased to an estimated 20,000 to 22,000 in 2008 (CIC 2007b). Ontario has just begun a pilot for its Provincial Nominee Program to attract immigrants working in specific occupations with 470 immigrants entering as a provincial nominee in 2006. However, currently there are few mechanisms in the Provincial Nominee Programs to keep immigrants in their initial settlement location.

Immigrant concentrations are not only due to the recently arrived, but also to some extent post-immigration relocation migration patterns re-enforces these provincial and urban concentrations. Between 1981 and 2001, Canada's immigrant population became more concentrated in Vancouver and Toronto primarily due to the destination choices of new arrivals (Hou 2005). However, post-immigration patterns differ between arrival cohorts, with those arriving in the late 1970s and early 1980s increasing the proportion living in gateway cities and those arriving in the early 1990s decreasing the proportion (ibid). Hou and Bourne (2006) found internal migration increases the concentration of immigrants in Toronto and Vancouver, with immigrants less likely to out-migrate and more likely to in-migrate from these cities than the Canadian-born. Unlike the two gateway cities of Toronto and Vancouver, Montreal does not follow the same pattern; instead, internal migration has lead to the dispersal of immigrants from Montreal (ibid).

Immigrant concentration in Ontario and the three immigrant gateway cities is not only a phenomena of the first generation, but persists through the second generation defined

as an individual born in Canada with one or both parents born outside of Canada. In 2006, there were 4,006,420 second generation immigrants in Canada with almost half in Ontario (Figure 3). Toronto, Montreal and Vancouver had 1,581,520 second generation immigrants; in particular Toronto had the largest number with 882,500⁴. Not only are immigrants choosing to live in few select provinces and CMAs, their children, the second generation, are also choosing the same locations. Toronto is the most popular residential choice of first and second generation immigrants as these two generations comprise 76.3 percent of Toronto's total population.



Educational Levels of the Canadian-born and Immigrant Populations in Canada in 2006

Canada has a well-educated population with a large number with university or college educated residents. In 2006, Canada ranked sixth (24 percent) tied with Australia among the Organization for Economic Co-operation and Development (OECD) countries in terms of the proportion of the population with a university degree or certificate behind the United States (35 percent), Norway (31 percent), Netherlands (28 percent), Denmark (27 percent) and Iceland (26 percent) (OECD 2008). Moreover, Canada had the highest proportion of working age population with a college diploma (23 percent) (ibid). Canada had the largest proportion of working age population with either

⁴ See Table C: Distribution of Population in Canada in 2006: Generational Status in Appendix.

a university or college degree among the OECD countries (47 percent) followed by Japan (40 percent), United States (39 percent), and New Zealand (38 percent) (ibid).

In 2006, 4,570,655 individuals in Canada (18.0 percent of the total population) had a minimum of a university bachelor's degree while another 1,119,350 had a university certificate below a bachelor's degree and 4,407,965 had a college degree (Table 3). Of the 4,570,655 individuals in Canada with university degrees, 3,087,110 (67.5 percent) were Canadian-born while 1,483,545 (32.5 percent) were immigrants. Immigrants have a higher proportion with a university bachelor's degree in comparison to the Canadian-born particularly for the most recent arrivals. While 19.7 percent of immigrants arriving prior to 1991 had a university bachelor's degree or higher, this proportion increased for later arrivals increasing to 41.9 percent for arrivals between 2001 and 2006 (Figure 4). This highly educated immigrant population can be attributed to Canada's shift in preference for immigrants entering through the economic class over the family and protected persons classes over the last two decades. Therefore not only Canada is globally competing for immigrants, Canada is competing for the highly skilled and well-educated.

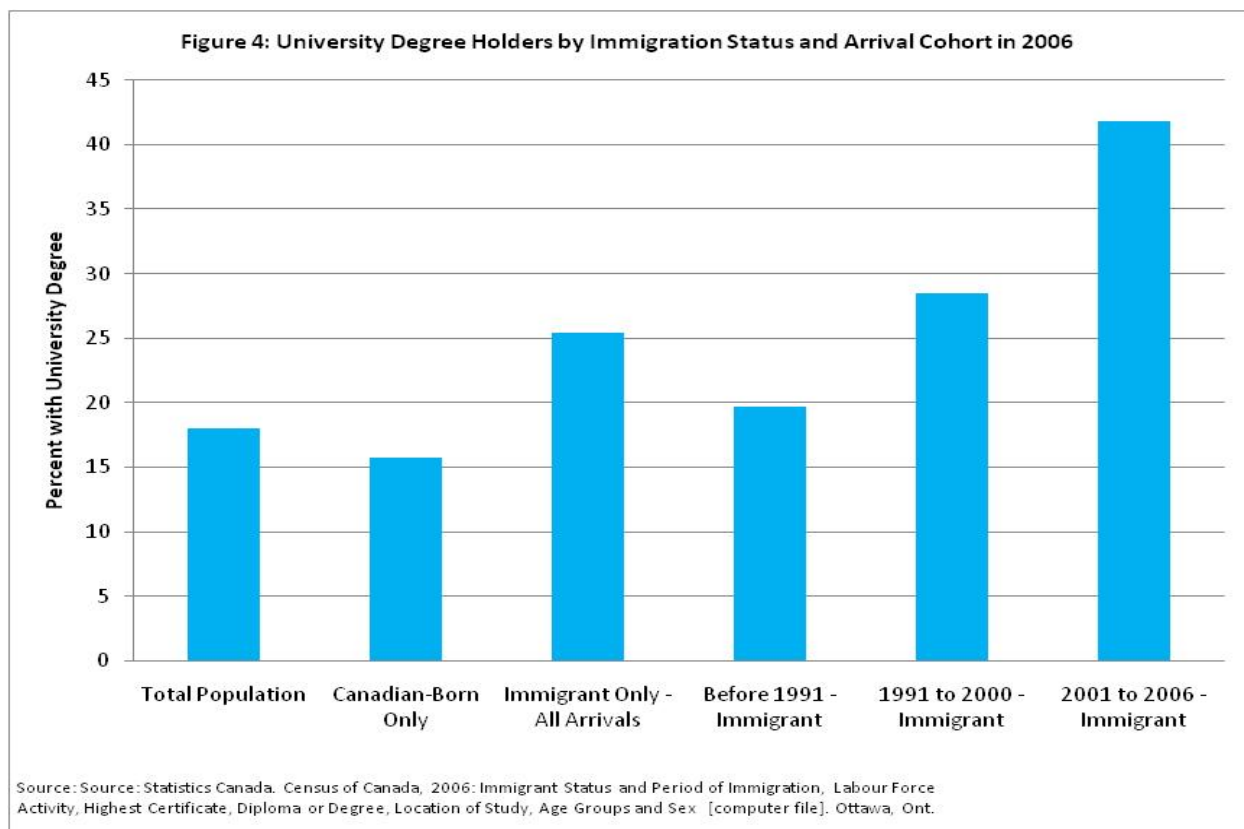


Table 3: Highest Certificate, Diploma or Degree Obtained in 2006

	Total Population		Canadian-Born				Immigrant									
		Percent		Percent	All Arrival Cohorts	Before 1991	1991 to 2000	1991 to 1995	1996 to 2000	2001 to 2006		Percent		Percent		
Total - Highest certificate, diploma or degree	25,433,620	100.00	19,592,380	100.00	5,841,240	100.00	3,408,420	100.00	1,546,035	100.00	801,370	100.00	744,670	100.00	886,795	100.00
No certificate, diploma or degree	6,065,875	23.85	4,820,305	24.60	1,245,570	21.32	806,940	23.67	293,305	18.97	163,320	20.38	129,985	17.46	145,325	16.39
High school certificate or equivalent	6,496,730	25.54	5,171,055	26.39	1,325,675	22.70	765,830	22.47	388,725	25.14	214,860	26.81	173,870	23.35	171,120	19.30
Apprenticeship or trades certificate or diploma	2,773,045	10.90	2,242,375	11.45	530,670	9.08	391,705	11.49	98,635	6.38	58,405	7.29	40,235	5.40	40,325	4.55
College, CEGEP or other non-university certificate or diploma	4,407,965	17.33	3,535,630	18.05	872,335	14.93	576,400	16.91	207,610	13.43	119,050	14.86	88,560	11.89	88,325	9.96
University certificate or diploma below the bachelor level	1,119,350	4.40	735,900	3.76	383,450	6.56	195,810	5.74	117,105	7.57	59,195	7.39	57,910	7.78	70,530	7.95
University certificate, diploma or degree	4,570,655	17.97	3,087,110	15.76	1,483,545	25.40	671,730	19.71	440,650	28.50	186,540	23.28	254,110	34.12	371,165	41.85

Source: Statistics Canada. Census of Canada, 2006: Immigrant Status and Period of Immigration, Labour Force Activity, Highest Certificate, Diploma or Degree, Location of Study, Age Groups and Sex [computer file]. Ottawa, Ont.: Statistics Canada [producer and distributor], 2008/02/027 (Topic-based tabulations; 97-560-xcb2006025)

The Geography of Immigrant Education in 2006

Provincial Distribution of Immigrant Education

While Canada faces global competition for the well-educated, there is internal competition among provinces and regions for these individuals as well. The geographic distribution of the 4,570,655 individuals with a university bachelor's degree varies across Canada. Ontario has the largest proportion of university degree holders in its population, followed by British Columbia and Alberta (Table 4). The provinces with the lowest proportion of university degree holders include Newfoundland, Saskatchewan and New Brunswick. However, these proportions mask the distribution of university degree holders between the Canadian-born and the immigrant populations. In every province across Canada, the proportion of immigrants with a university degree is higher than that of the Canadian-born. Therefore, immigrant settlement is not only an issue of the concentration or dispersion of people but that of university degree holders.

While the immigrant populations residing in the Atlantic Provinces are both low in number, a large proportion of immigrants choosing to reside in these provinces are well-educated. Newfoundland, for example, has only 7,795 immigrants aged 15 years and older, however, 3,210 (41.2 percent of its immigrant population) hold a university degree. In Newfoundland, while its immigrant population represented 1.8 percent of its total population, they were 6.7 percent of its university degree holders. In the Atlantic Provinces, the proportions of immigrant university degree holders are approximately double its proportion of the total population. Manitoba has the lowest proportion of immigrants with university degrees in Canada; however, this exceeds the proportion of Canadian-born in the province. In both British Columbia and Ontario, immigrants comprise a larger proportion of university degree holders with over 40.0 percent in each province in comparison to the overall Canadian proportion of 32.5 percent. The three major immigrant receiving provinces of Quebec, British Columbia and Ontario have large immigrant populations that boast high numbers of individuals with university degrees.

Table 4: University Degree Holders By Province in 2006

	Total Population	Proportion of Provincial Total Population Percent	Canadian-Born	Proportion of Canadian-Born in Province Percent	Immigrant	Proportion of Immigrants in Province Percent
CANADA	4,570,655		3,087,110		1,483,545	
Newfoundland and Labrador	47,690	11.29	44,000	10.64	3,210	41.18
Prince Edward Island	15,530	14.09	14,225	13.49	1,205	26.72
Nova Scotia	123,980	16.39	108,005	15.20	14,825	34.57
New Brunswick	78,105	12.99	71,000	12.36	6,425	26.11
Quebec	1,019,555	16.49	788,850	14.74	213,285	26.97
Ontario	2,012,055	20.49	1,173,180	18.05	804,840	25.01
Manitoba	136,465	15.02	106,840	14.03	27,540	19.66
Saskatchewan	98,755	12.89	85,395	11.91	11,680	25.81
Alberta	458,425	17.46	321,600	15.26	127,050	25.66
British Columbia	654,260	19.27	364,980	15.98	271,705	25.47

Source: Statistics Canada. Census of Canada, 2006: Immigrant Status and Period of Immigration, Labour Force Activity, Highest Certificate, Diploma or Degree, Location of Study, Age Groups and Sex [computer file]. Ottawa, Ont.: Statistics Canada [producer and distributor], 2008/02/027 (Topic-based tabulations; 97-560-xcb2006025)

Table 5: University Degree Holders by Ontario Census Metropolitan Areas in 2006

	Total Population	Proportion of Provincial Degree Holders Percent	Canadian-Born	Proportion of Canadian-Born Degree Holders Percent	Immigrant	Proportion of Immigrant Degree Holders Percent
ONTARIO	2,012,055		1,173,180		804,840	
Ottawa-Gatineau Ontario P	216,740	10.77	149,865	12.77	64,055	7.96
Kingston	26,875	1.34	20,645	1.76	5,705	0.71
Peterborough	14,035	0.70	11,790	1.00	2,040	0.25
Oshawa	34,205	1.70	25,520	2.18	8,425	1.05
Toronto	1,101,265	54.73	493,300	42.05	586,180	72.83
Hamilton	97,895	4.87	67,790	5.78	28,470	3.54
St. Catharines-Niagara	42,040	2.09	31,055	2.65	10,290	1.28
Kitchener	66,415	3.30	44,565	3.80	20,255	2.52
Brantford	11,010	0.55	8,860	0.76	2,090	0.26
Guelph	24,450	1.22	17,665	1.51	6,335	0.79
London	68,050	3.38	49,830	4.25	16,735	2.08
Windsor	46,235	2.30	29,005	2.47	16,350	2.03
Barrie	17,440	0.87	13,880	1.18	3,360	0.42
Greater Sudbury	17,075	0.85	14,985	1.28	1,965	0.24
Thunder Bay	100,870	5.01	88,345	7.53	12,285	1.53
Thunder Bay	14,935	0.74	13,040	1.11	1,810	0.22

Source: Statistics Canada. Census of Canada, 2006: Immigrant Status and Period of Immigration, Labour Force Activity, Highest Certificate, Diploma or Degree, Location of Study, Age Groups and Sex [computer file]. Ottawa, Ont.: Statistics Canada [producer and distributor], 2008/02/027 (Topic-based tabulations; 97-560-xcb2006025)

Census Metropolitan Area Distribution of Immigrant Education in Ontario

The geography of immigrants' education like their settlement patterns varies across each province. In Ontario, 1,752,430 (87.1 percent) university degree holders of the 2,012,055 total in the province resided in a CMA; however, approximately over three-quarters of Ontario's total population resided in a CMA. Therefore not only is Ontario's population largely concentrated in large urban areas, but university degree holders are even more so. Across CMAs in Ontario, the proportion of the population with a university degree varies from a low of 11.1 percent of the total population in Brantford to a high of 31.6 percent in Ottawa-Gatineau⁵ (Table 5). In each of Ontario's CMAs, the share of university degree holders is higher for the immigrant population than the Canadian-born with the exception of Thunder Bay. Ottawa-Gatineau has the largest share of the university degree holders for both the Canadian-born and the immigrant populations among Ontario's CMAs (29.4 percent and 37.8 percent respectively).

Toronto is home to a large share of Ontario's population, immigrants and the university educated. Toronto benefits not only from a large well-educated immigrant population but also a well-educated Canadian-born population. Toronto has approximately 42.0 percent of Ontario's population; however, Toronto has over half of Ontario's university degree holders of which more than half are immigrants.

The geography of university degree holders whether these degree holders are Canadian-born or immigrants is similar. The CMAs with the lowest shares of university degree holders are smaller CMAs including Brantford, Barrie and Thunder Bay. The CMAs with higher shares of university degree holders are the larger CMAs of Ontario including Toronto, Kitchener, Ottawa-Gatineau and Windsor. Smaller CMAs such as Guelph, Peterborough, Kingston, and Greater Sudbury have relatively well-educated immigrant populations; however, this is likely attributed to the presence of universities in these CMAs. Large CMAs in Ontario generally have a large proportion and number of university degree holders; however, there is limited evidence that smaller CMAs are able to attract the relatively well-educated immigrant population.

Labour Outcomes of Immigrants with University Degrees in 2006⁶

Labour Force Activity: Participation and Unemployment Rates

Of the 4,655,770 individuals with a university degree in Canada, 3,736,290 were in the labour force (80.3 percent participation rate) with a 4.5 percent unemployment rate.

⁵ The CMA of Ottawa-Gatineau straddles both Ontario and Quebec, however, only the Ontario portion is discussed in the remainder of the paper.

⁶University degree holders are individuals who have at a minimum a university bachelor's degree.

The Canadian-born had a higher participation rate (82.0 percent) and a lower unemployment rate (3.5 percent) than the immigrant population (77.5 percent and 6.6 percent respectively) (Table 6 and Table 7). The unemployment rates for the immigrant population vary by arrival cohort with those arriving prior to 1991 with the lowest and similar to the Canadian-born (3.7 percent) while the most recent arrivals, arriving between 2001 and 2006, had the highest rates of unemployment (12.0 percent). The high levels of unemployment indicate that the newest arrivals even though are well-educated have difficulties finding employment with over three times the unemployment rate of the Canadian-born. Gilmore and Le Petit (2007) found that employment rates for both recent and established immigrants differ depending on where postsecondary credentials were received; immigrants with credentials from Canada or Europe had comparable rates while immigrants with Latin American, Asian or African credentials had lower employment rates. With the majority of immigrants arriving from countries outside of Europe, the relatively poor labour market outcomes of immigrants especially from Asia will be an even greater issue in the future.

The participation rate of the immigrant population is lower than the Canadian-born in every province. In particular, the difference in participation rates between the Canadian-born and the immigrant populations is the greatest in the Atlantic Provinces especially Prince Edward Island and Nova Scotia; however, these provinces have relatively small immigrant populations. The three primary immigrant-receiving provinces have smaller participation rate differences between the Canadian-born and the immigrant population with Ontario the smallest (3.3 percent), followed by Quebec (6.1 percent) and British Columbia (6.2 percent).

With the exception of Newfoundland, immigrants had higher unemployment rates than the Canadian-born in each province. In addition, unemployment rates were similar to the Canadian-born for immigrants residing in Prince Edward Island and Saskatchewan. The unemployment situation is relatively poor for immigrants in Quebec with an unemployment rate three times higher than the Canadian-born (10.5 percent versus 3.1 percent); however, the situation is poorest for recent arrivals (19.0 percent). In Ontario and British Columbia, the unemployment rates for their immigrant populations are over 65 percent higher than their Canadian-born counterparts (6.3 percent and 5.8 percent respectively). In each province recent immigrants have larger unemployment rates than the overall immigrant population, and earlier arrival cohorts with the exception of New Brunswick where immigrants arriving between 1991 and 1996 fared worse than the recent arrivals. However, for immigrants who arrived prior to 1991, their unemployment rates are lower than the Canadian-born in Newfoundland, Nova Scotia, Manitoba, Saskatchewan and Alberta.

Table 6: University Degree Holders' Labour Force Activity - Participation Rate in 2006

	Total Population	Canadian-Born	Immigrants					
			All Arrival Chorts	Before 1991	1991 to 2000	1991 to 1995	1996 to 2000	2001 to 2006
Canada	80.3	82.0	77.5	74.0	82.7	82.0	83.3	77.4
Newfoundland and Labrador	78.8	79.0	76.9	73.9	89.5	87.2	91.4	78.2
Prince Edward Island	80.4	82.0	65.1	63.0	77.1	46.7	90.5	63.4
Nova Scotia	78.9	80.0	72.8	69.8	81.5	80.7	82.1	74.9
New Brunswick	80.1	81.2	70.3	66.2	80.4	80.4	81.8	74.1
Quebec	80.5	82.1	76.0	72.7	83.5	82.4	84.4	74.4
Ontario	80.3	81.9	78.6	75.2	83.8	83.2	84.2	78.2
Manitoba	81.6	82.6	79.6	74.6	87.3	86.9	87.5	84.1
Saskatchewan	82.3	83.5	76.1	71.1	88.4	86.8	89.6	75.8
Alberta	83.7	84.8	81.4	78.4	87.2	87.3	87.2	81.3
British Columbia	76.8	79.9	73.7	70.2	77.3	76.4	78.0	75.3

Source: Statistics Canada. Census of Canada, 2006: Immigrant Status and Period of Immigration, Labour Force Activity, Highest Certificate, Diploma or Degree, Location of Study, Age Groups and Sex [computer file].
Ottawa, Ont.: Statistics Canada [producer and distributor], 2008/02/027 (Topic-based tabulations; 97-560-xcb2006025)

Table 7: University Degree Holders' Labour Force Activity- Unemployment Rate in 2006

	Total Population	Canadian-Born	Immigrants					
			All Arrival Chorts	Before 1991	1991 to 2000	1991 to 1995	1996 to 2000	2001 to 2006
Canada	4.5	3.5	6.6	3.7	6.2	5.5	6.6	12.0
Newfoundland and Labrador	6.8	6.9	6.3	3.7	7.4	9.8	7.5	15.2
Prince Edward Island	5.5	5.4	5.7	6.7	0.0	0.0	0.0	7.7
Nova Scotia	5.2	5.1	6.0	3.9	7.8	6.2	8.6	11.3
New Brunswick	4.2	4.1	5.6	4.1	7.8	11.0	6.1	8.3
Quebec	4.7	3.1	10.5	5.2	8.7	7.2	9.9	19.0
Ontario	4.8	3.7	6.3	3.7	6.1	5.5	6.5	11.2
Manitoba	3.3	3.0	4.5	2.3	3.1	2.3	3.6	10.2
Saskatchewan	3.2	3.1	3.3	2.6	3.5	4.1	3.1	4.8
Alberta	3.3	2.9	4.2	2.5	3.7	3.1	4.0	7.5
British Columbia	4.5	3.5	5.8	3.5	5.9	5.6	6.1	10.2

Source: Statistics Canada. Census of Canada, 2006: Immigrant Status and Period of Immigration, Labour Force Activity, Highest Certificate, Diploma or Degree, Location of Study, Age Groups and Sex [computer file].
Ottawa, Ont.: Statistics Canada [producer and distributor], 2008/02/027 (Topic-based tabulations; 97-560-xcb2006025)

Labour Force Activity in Ontario

Similar to the provincial levels, immigrants in the CMAs of Ontario have lower participation rates than their Canadian-born counterparts⁷; however, the difference in participation rates exceeds the provincial average of 3.3 percent. The CMAs of Peterborough, St. Catharines-Niagara, Brantford and Thunder Bay have over a 9 percent difference in participation between the immigrant population and the Canadian-born. Indeed, immigrants in Peterborough have the lowest participation rates among the Ontario CMAs (68.6 percent) while Toronto has the largest (80.1 percent).

With the exceptions of Thunder Bay and Sudbury who both have few immigrants, the unemployment rate of the immigrant population is higher than the Canadian-born. The unemployment rates of the immigrant population range from a low in Sudbury (2.0 percent) to a high in Windsor (10.3 percent) with the most recent arrivals experiencing the highest rates of unemployment. Toronto's immigrant population has an unemployment rate of 6.5 percent; however, the immigrant cohort arriving between 2001 and 2006 has the highest unemployment rate with 11.1 percent. As a major immigrant settlement region, Toronto had over 30,000 unemployed immigrants with university degrees with close to half having arrived in the last five years in this CMA alone.

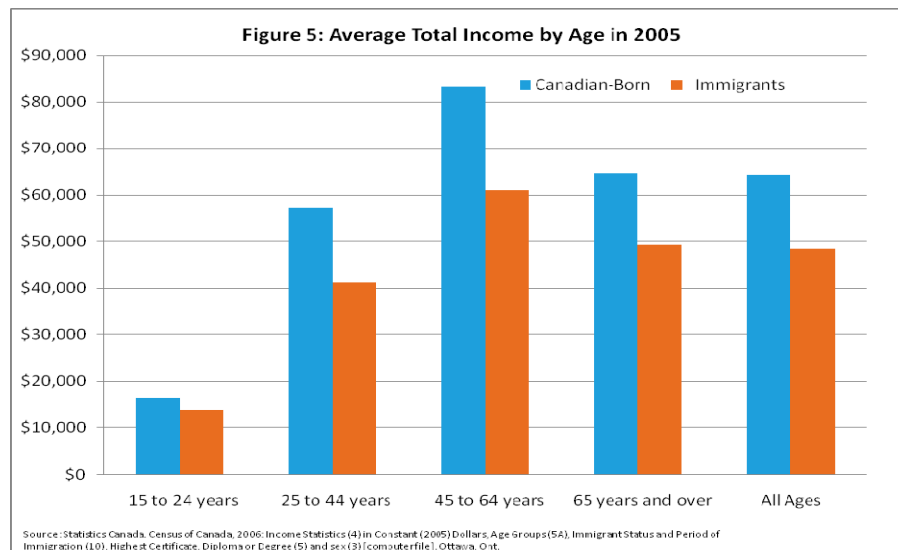
Total Income of University Degree Holders in Canada in 2005

Comparison of Total Income of Canadian-born and Immigrant University Degree Holders

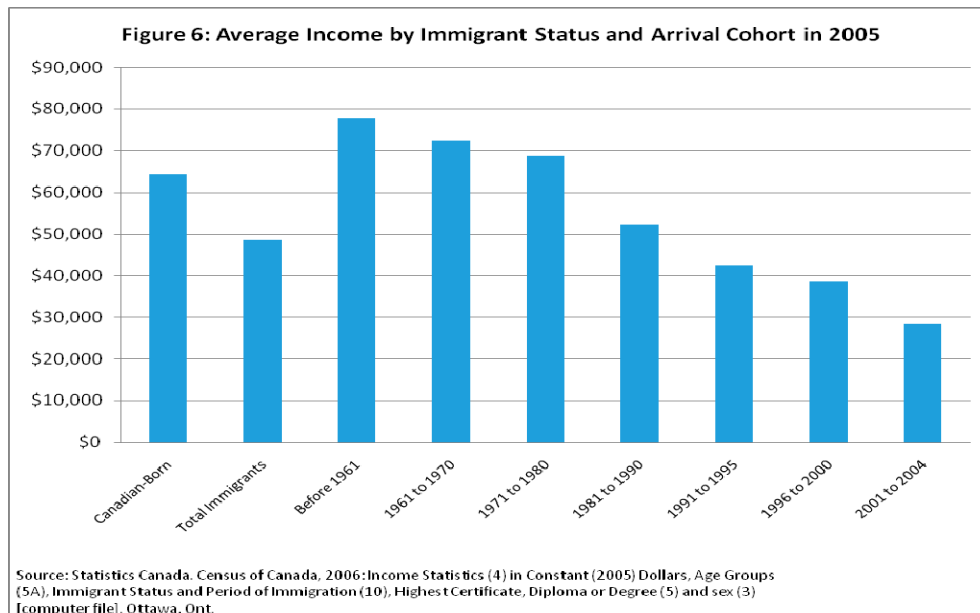
In 2005, the population both Canadian-born and immigrant with minimum a university bachelor's degree had a median income of \$43,822 and average income of \$58,767, in comparison, these incomes were \$25,615 and \$35,498 for all education levels (Statistics Canada 2008e). Examining average incomes of university degree holders suggests a large difference in income earnings between the Canadian-born and the immigrant populations. Immigrants with a university degree earn on average 75.5 percent of the Canadian-born income (\$48,488 versus \$64,239) with an income differential persisting when controlling for age structure (Figure 5). Immigrants aged 25 to 44 years earn \$19,200 less than the Canadian-born with this difference increasing to \$32,699 for the 45 to 64 year olds. Furthermore, among the oldest ages 65 years and older, there is an average income difference of \$21,562. Although this is an examination of university educated immigrants it is likely their education and labour market experience which were taken outside of Canada is being undervalued leading to occupational mismatching

⁷ See Table D: University Degree Holders' Labour Force Activity by Ontario Census Metropolitan Areas in 2006 in Appendix.

resulting in downward occupational mobility (Boyd 1994; Boyd and Schellenberg 2008; Galarneau and Morissette 2004; Girard and Bauder 2007; Grant 2005; Li 2004). From the Longitudinal Survey of Immigrants to Canada, Chui (2003) found over half of the employed newcomers were working in different occupational groups after arrival in Canada indicating occupational mismatch.



When examining average income by arrival cohort, the difference between average incomes between the Canadian-born and immigrants disappears for earlier cohorts (Figure 6). In comparison to the average Canadian-born income of \$64,239, the three immigrant cohorts who arrived prior to 1961 (\$77,848), 1961 to 1970 (\$72,372), and 1971 to 1980 (\$68,788) earn more than their Canadian-born counterparts; however, immigrants who arrived after 1980 earned less. The most recent arrivals, 2001 to 2004, earned an average of \$28,217 while immigrants who arrived between 1996 and 2000 earned \$38,558 and immigrants who arrived 1991 to 1995 earn \$42,380. Therefore even after some time in Canada, immigrants who have university degrees are earning significantly less than their Canadian-born counterparts. These results are supported by existing research findings that there has been decline in immigrant earnings in comparison to the Canadian-born (Aydemir and Skuterud 2005; Frenette and Morissette 2003; Green and Worswick 2004; Wang and Lo 2005). Several reasons have been postulated about the decline of immigrant earnings including lack of foreign credential recognition, unfamiliarity of quality of education attained abroad, language, country of origin, visible minority status and period of entry economic cycle effects (Aydemir and Skuterud 2005; Green and Worswick 2004; Picot and Sweetman 2005; Green and Worswick 2004; Ferrer and Riddell 2004).



Comparison of Total Income of Immigrant University Degree Holders by Province

Across Canada immigrants in Newfoundland, Saskatchewan and Alberta earn the highest incomes with those in Quebec, Prince Edward Island and British Columbia earning the lowest (Table 8). Immigrant university degree holders fare better relative to the Canadian-born in less immigrant dense provinces of Newfoundland, New Brunswick, Nova Scotia and Saskatchewan. For instance, immigrants in Newfoundland earn \$23,992 more than the Canadian-born (\$51,460 versus \$75,452); however, there are only 3,140 of these university degree holders in the province. Conversely, immigrants in the largest immigrant receiving province of Ontario have the largest income differential of \$20,740 with immigrants earning 70.9 percent of the Canadian-born income (\$50,331 versus \$71,035); the income differential is equally large for Alberta (\$17,142), Quebec (\$17,009) and British Columbia (\$16,260). Similar to the national scale, generally, immigrants who arrived prior to 1981 in each of the provinces have average incomes as much or greater than the Canadian-born while the most recent arrivals earn the least. For instance in Ontario, immigrants who arrived between 2001 and 2004 earned \$28,557 (56.7 percent of the average incomes of immigrants or 40.2 percent of the Canadian-born). Though small in number, immigrants in less immigrant dense provinces are faring better than their counterparts choosing the immigrant rich provinces of Ontario, Quebec and British Columbia.

Table 8: Average Total Income of Individuals with a University Bachelor's Degree by Province in 2005

	Total Population	Canadian-Born	Immigrants							
			All Arrival Cohorts	Before 1961	1961 to 1970	1971 to 1980	1981 to 1990	1991 to 1995	1996 to 2000	2001 to 2004
Canada	58,767	64,239	48,488	77,848	72,372	68,788	52,201	42,380	38,558	28,217
Newfoundland and Labrador	53,222	51,460	75,452	77,786	68,526	84,638	97,806		68,999	62,373
Prince Edward Island	46,139	46,444	41,633			39,911				
Nova Scotia	41,467	42,240	36,345	47,559	45,358	51,407	38,473	22,474	28,476	18,981
New Brunswick	51,495	51,691	52,142	60,040	57,472	59,242	61,859	47,894	34,226	37,382
Quebec	54,674	58,577	41,568	70,685	62,314	61,465	46,596	39,758	34,576	23,856
Ontario	62,287	71,035	50,331	83,840	77,838	72,010	53,569	44,960	40,127	28,557
Manitoba	51,977	53,304	48,795	64,585	66,164	61,729	50,982	40,363	39,733	30,039
Saskatchewan	55,003	54,771	59,597	71,597	70,721	72,006	62,804	48,887	45,061	47,944
Alberta	70,296	75,678	58,536	87,499	84,909	82,206	61,017	50,013	47,641	36,134
British Columbia	51,423	58,877	42,617	67,048	62,590	59,284	46,437	34,508	32,537	25,890

Source: Statistics Canada. Census of Canada, 2006: Income Statistics (4) in Constant (2005) Dollars, Age Groups (5A), Immigrant Status and Period of Immigration (10), Highest Certificate, Diploma or Degree (5) and sex (3) [computer file].
Ottawa, Ont.: Statistics Canada [producer and distributor], 2008/08/22 [Topic-based tabulations; 97-563-xcb2006006]

Immigrants residing in the three largest immigrant receiving provinces of Ontario, Quebec and British Columbia have lower average incomes than the Canadian-born across different age cohorts⁸. With the exception of the 15 to 24 year older cohort who generally has low income due to few hours working, the differential is large across each of the age cohorts. In Ontario, the 45 to 64 year old cohort has the highest income differential earning 65.7 percent of the Canadian-born. In Quebec, the largest differential is for the 25 to 44 year old cohort, with immigrants earning 63.1 percent of the income of the Canadian-born with the income gap decreasing to 85.5 percent for the 65 year and older cohort. In British Columbia, immigrants aged 45 to 64 and 65 years and older have approximately 68 percent of the Canadian-born income. Therefore, while immigrants have different average incomes between provinces, income differentials exist by age cohort between the provinces as well.

Controlling both for year of immigration and age, income differentials still persist. For instance in Ontario, the 45 to 64 year old immigrants who arrived between 1981 to 1990, earned 66.5 percent of the Canadian-born income (\$63,392 versus \$95,382) however this income difference increases for the most recent arrivals between 2001 and 2004⁹. The 25 to 44 year old cohort who immigrated between 1981 and 1990 living in Ontario earned 81.8 percent of the Canadian-born income, however, the 25 to 44 year olds who arrived between 2001 and 2004 fared worse earning only 47.1 percent of the Canadian-born income. The average incomes for the 65 years and older are generally poor especially for those immigrated post-1980. Therefore, immigrants who spent a large period of their working careers outside of Canada have lower incomes in their retirement years; however, this is expected due to their shorter time able to accrue both private and public pensions. Considering both the year of immigration and age, the immigrant population even after a significant number of years in Canada earn less than their Canadian-born counterparts.

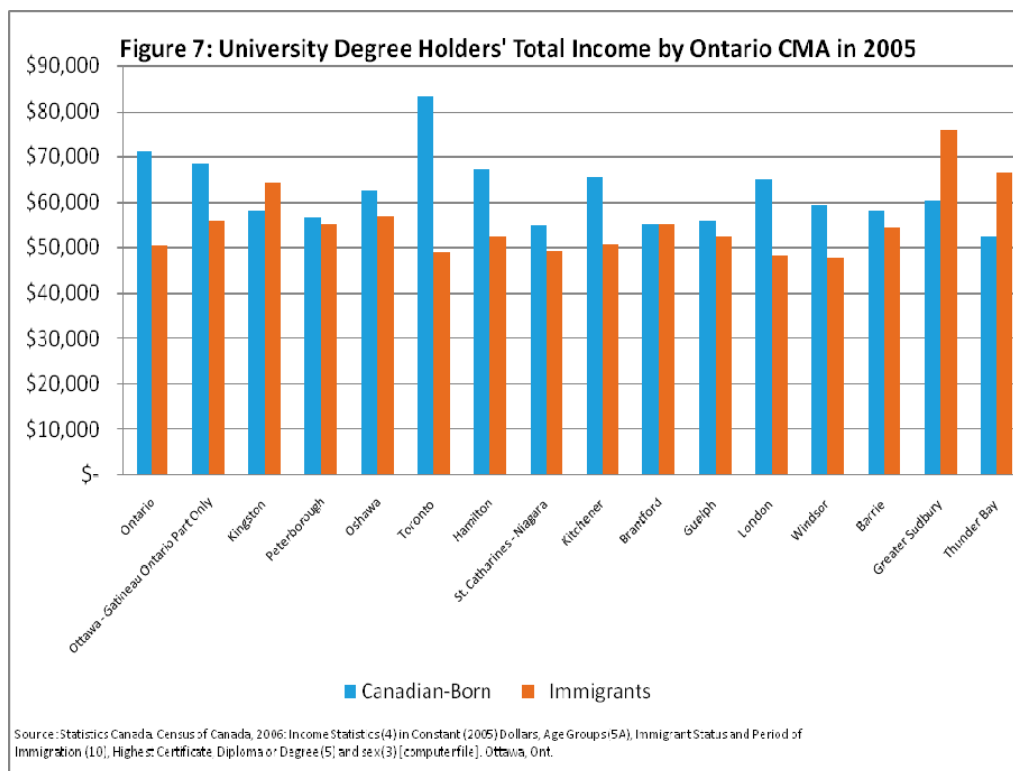
⁸ See Table E: Average Total Income of those with Minimum a University Bachelor's Degree by Age for Selected Provinces in 2005 in Appendix.

⁹ See Table F: Average Total Income of those with Minimum a University Bachelor's Degree by Age and Arrival Cohort for Selected Provinces in 2005 in Appendix.

Total Incomes of Immigrant University Degree Holders in Ontario

Immigrants who reside in smaller CMAs in Ontario earn more or similar to the Canadian-born. This result is likely similar across Canada as Bernard (2008) found although the Canadian-born living in larger urban areas earned higher incomes the opposite is true for immigrants, with immigrant incomes higher in small urban or rural areas. Although few in number, well-educated immigrants earn over 25 percent more than their Canadian-born counterparts in Sudbury and Thunder Bay; in Kingston, immigrants earn close to 11 percent more (Figure 7). The average income of immigrants residing in Peterborough and Brantford is similar to that of the Canadian-born while immigrants in Barrie and Guelph earn about 7 percent less. In the larger CMAs of Hamilton and Ottawa, the immigrants earn approximately 20 percent less than the Canadian-born.

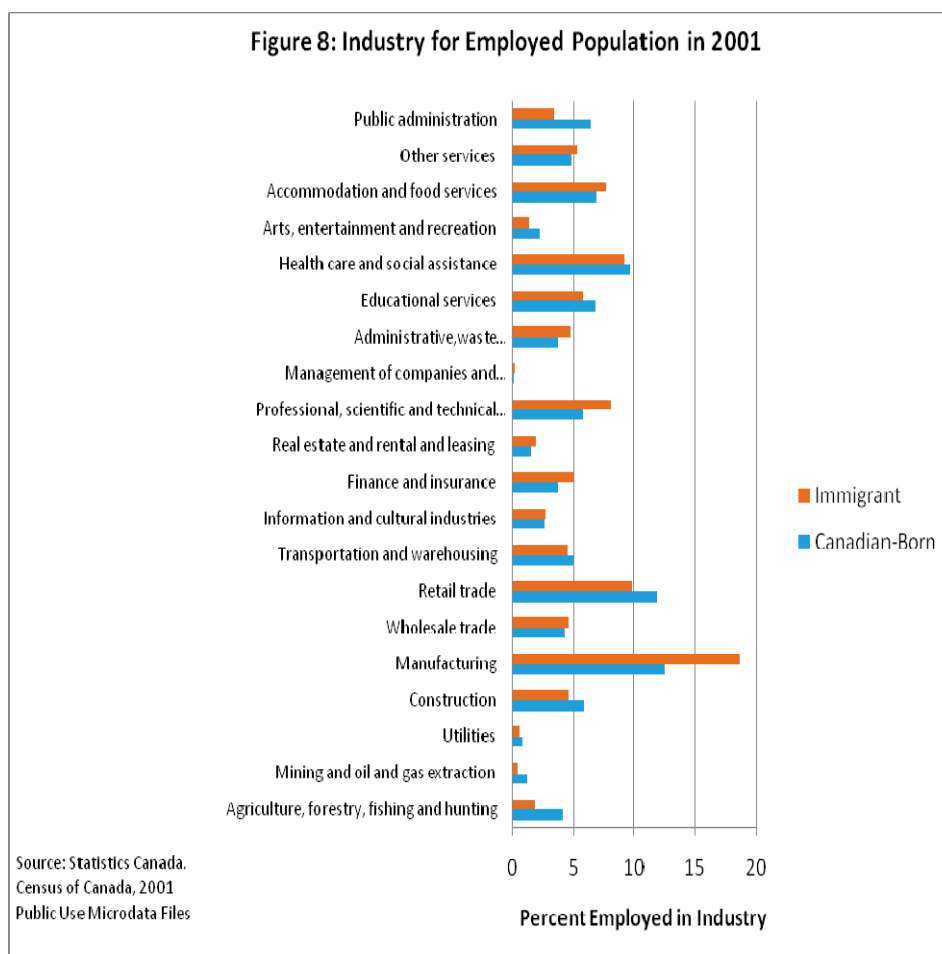
In the largest immigrant receiving CMA of Toronto, the average income of immigrants is 58.8 percent of the Canadian-born, however, the Canadian-born earn less than immigrants who arrived prior to 1961. In addition, the Canadian-born and immigrants who arrived between 1961 and 1970 have similar average incomes. The income differential between the Canadian-born and the immigrant population in Toronto arise for immigrants who arrived after 1970. The average incomes of immigrants who arrived post-1995 are less than half of the Canadian-born population. Therefore, a large number of immigrants who reside in Toronto earn relatively low incomes despite having a university degree.



Industry and Occupation Employment Profiles in 2001

Comparison of Industry Employment Profiles

The following analysis uses the 2001 Census of Canada Public Use Microdata Files (PUMFs) to examine the industry and occupation employment profiles of the Canadian population. Overall, the industries of employment for both the Canadian-born and immigrant populations are similar with employment highest in manufacturing, retail trade and health care and social assistance (Figure 8). While the shares employed in each of the industries are similar between the Canadian-born and immigrant populations, there are differences. The Canadian-born have a larger proportion employed in: agriculture, forestry, fishing and hunting; mining and oil and gas extraction; and public administration industries while the immigrant population has a larger proportion employed in: manufacturing; finance and insurance; and professional, scientific and technical services.



While the proportion employed in each of the industries differ between the Canadian-born and immigrant populations, these differences are most apparent when immigrants are disaggregated by arrival cohorts with differences most pronounced for recent arrivals (Table 9). For example in the accommodation and food services industry, 6.9 percent of the Canadian-born are employed in comparison to 7.7 percent of all immigrants, however, immigrants who arrived prior to 1981 have the smallest proportion in this industry (5.3 percent) increasing for 1981 to 1990 arrivals (9.1 percent), 1991 to 1995 arrivals (10.3 percent) and 1996 to 2001 arrivals (9.6 percent). In manufacturing, 1996 to 2001 arrivals have a greater proportion employed (21.1 percent) in the industry in comparison to the overall immigrant population (18.6 percent) and the Canadian-born (12.5 percent). In the professional, scientific and technical services industry, there is a larger proportion of immigrants employed (8.0 percent) compared to the Canadian-born (5.8) with the 1996 to 2001 arrivals the largest proportion (11.1 percent).

Table 9: Industry (NAICS) for Employed Population in 2001: Canadian-born and Immigrant Arrival Cohorts

	Canadian-Born		Immigrant									
	All Arrival Cohorts		Before 1981	1981 to 1990		1991 to 1995	1996 to 2001					
	Percent	Percent	Percent	Percent	Percent	Percent	Percent					
Agriculture, forestry, fishing and hunting	567,209	4.20	60,982	1.83	29,925	2.05	11,340	1.50	7,962	1.43	10,019	1.94
Mining and oil and gas extraction	164,696	1.22	14,197	0.43	8,295	0.57	2,950	0.39	1,291	0.23	1,476	0.29
Utilities	104,084	0.77	17,502	0.52	11,217	0.77	3,289	0.43	999	0.18	1,590	0.31
Construction	784,991	5.81	153,255	4.59	86,964	5.95	31,328	4.14	19,033	3.43	14,306	2.77
Manufacturing	1,688,069	12.50	622,031	18.63	242,137	16.58	149,363	19.73	118,366	21.32	108,872	21.10
Wholesale trade	574,747	4.26	150,973	4.52	63,221	4.33	33,347	4.40	28,070	5.06	25,190	4.88
Retail trade	1,603,548	11.87	329,007	9.86	127,011	8.70	80,670	10.65	64,027	11.53	52,789	10.23
Transportation and warehousing	667,429	4.94	148,617	4.45	71,327	4.88	34,810	4.60	23,586	4.25	17,049	3.30
Information and cultural industries	351,276	2.60	90,082	2.70	36,760	2.52	19,721	2.60	13,953	2.51	18,501	3.59
Finance and insurance	512,916	3.80	164,269	4.92	74,665	5.11	39,982	5.28	26,564	4.78	22,023	4.27
Real estate and rental and leasing	209,007	1.55	65,085	1.95	36,513	2.50	13,010	1.72	8,020	1.44	6,878	1.33
Professional, scientific and technical services	777,124	5.75	268,562	8.05	113,642	7.78	53,582	7.08	40,607	7.31	57,149	11.08
Management of companies and enterprises	11,684	0.09	4,475	0.13	2,254	0.15	999	0.13	666	0.12	555	0.11
Administrative,waste management,remediation services	510,475	3.78	157,683	4.72	56,645	3.88	36,537	4.83	30,107	5.42	32,401	6.28
Educational services	919,060	6.80	192,015	5.75	105,060	7.19	33,125	4.38	22,162	3.99	25,797	5.00
Health care and social assistance	1,309,884	9.70	308,384	9.24	151,724	10.39	71,899	9.50	45,216	8.14	32,630	6.32
Arts, entertainment and recreation	305,476	2.26	44,893	1.34	20,684	1.42	10,105	1.33	6,776	1.22	6,220	1.21
Accommodation and food services	932,968	6.91	256,676	7.69	77,090	5.28	68,780	9.08	57,104	10.29	49,638	9.62
Other services	648,654	4.80	175,152	5.25	75,847	5.19	41,248	5.45	30,281	5.45	24,490	4.75
Public administration	862,503	6.39	114,285	3.42	69,674	4.77	21,046	2.78	10,396	1.87	8,329	1.61
Total	13,505,800		3,338,127		1,460,656		757,134		555,186		515,903	

Source: Statistics Canada. Census of Canada, 2001 Public Use Microdata Files

Comparison of the Industry Employment Profiles of Individuals with University Degrees

Examination of the industries of employment for individuals who have a university bachelor's degree accentuate differences between the Canadian-born and immigrant populations (Table 10). Similarly, the Canadian-born and immigrant populations with a university bachelor's degree have the largest share employed in: educational services; professional, scientific and technical services; and health care and social assistance. Immigrants who arrived before 1981 have similar industries of employment to that of the Canadian-born, however, the most recent arrivals, 1991 to 1995 and 1996 to 2001 have large proportions employed in the professional, scientific and technical services; and manufacturing industries.

Immigrants arriving between 1996 to 2001 and 1991 to 1995 with a university degree have a much larger proportion in the manufacturing industry than the Canadian-born (17.2 and 15.3 percent respectively versus 6.5 percent). The educational services industry reflects differences in employment shares as the university educated Canadian-born have the largest employment share (23.6 percent) while the overall immigrant population has a much smaller share (13.8 percent). In the retail trade industry, the Canadian-born and pre-1981 arrival cohort have similar employment shares (4.9 and 4.9 percent respectively), however, more recent arrivals have larger shares.

Table 10: Industry (NAICS) for Employed University Degree Holders in 2001: Canadian-born and Immigrant Arrival Cohorts

	Canadian-Born		Immigrant									
	All Arrival Cohorts		Before 1981		1981 to 1990		1991 to 1995		1996 to 2001			
	Count	Percent	Count	Percent	Count	Percent	Count	Percent	Count	Percent		
Agriculture, forestry, fishing and hunting	27,793	1.23	4,665	0.53	2,071	0.62	851	0.49	517	0.38	1,116	0.52
Mining and oil and gas extraction	18,855	0.83	5,348	0.61	2,544	0.77	1,106	0.64	627	0.46	1,071	0.50
Utilities	15,310	0.68	6,132	0.70	3,138	0.95	1,588	0.92	185	0.13	998	0.46
Construction	36,517	1.61	13,850	1.58	4,616	1.39	2,658	1.53	2,254	1.64	4,248	1.96
Manufacturing	146,709	6.47	104,277	11.89	25,923	7.82	19,435	11.22	21,027	15.25	37,227	17.21
Wholesale trade	70,206	3.10	36,750	4.19	10,084	3.04	8,615	4.97	6,804	4.94	11,061	5.11
Retail trade	111,097	4.90	57,156	6.52	16,144	4.87	12,572	7.26	11,498	8.34	16,165	7.47
Transportation and warehousing	36,439	1.61	21,239	2.42	7,532	2.27	4,432	2.56	3,804	2.76	5,140	2.38
Information and cultural industries	87,025	3.84	36,678	4.18	12,010	3.62	6,693	3.86	5,918	4.29	11,466	5.30
Finance and insurance	126,585	5.58	59,131	6.74	19,396	5.85	14,943	8.63	11,245	8.16	13,139	6.07
Real estate and rental and leasing	29,541	1.30	15,812	1.80	7,496	2.26	3,805	2.20	1,997	1.45	2,367	1.09
Professional, scientific and technical services	305,769	13.49	146,284	16.68	53,179	16.04	27,251	15.73	21,811	15.82	42,233	19.53
Management of companies and enterprises	3,956	0.17	1,739	0.20	554	0.17	555	0.32	222	0.16	407	0.19
Administrative, waste management, remediation and other services	43,549	1.92	29,160	3.32	6,427	1.94	5,178	2.99	5,099	3.70	11,905	5.50
Educational services	535,650	23.63	120,667	13.76	64,244	19.38	19,884	11.48	13,133	9.53	18,572	8.59
Health care and social assistance	295,450	13.03	104,295	11.89	47,931	14.46	21,764	12.56	15,440	11.20	15,758	7.29
Arts, entertainment and recreation	47,481	2.09	12,191	1.39	6,017	1.82	1,958	1.13	1,515	1.10	2,145	0.99
Accommodation and food services	43,313	1.91	25,401	2.90	5,249	1.58	4,730	2.73	5,213	3.78	9,728	4.50
Other services	69,556	3.07	29,191	3.33	9,748	2.94	6,469	3.73	4,878	3.54	7,322	3.39
Public administration	216,335	9.54	47,147	5.38	27,138	8.19	8,728	5.04	4,664	3.38	4,218	1.95
Total	2,267,137		877,113		331,442		173,216		137,851		216,286	

Source: Statistics Canada. Census of Canada, 2001 Public Use Microdata Files

Comparison of Occupational Employment Profiles

The comparison of the occupational profile of the Canadian-born and immigrant populations is important to further illuminate differences in employment. The Canadian-born and immigrant populations are employed in similar occupations: sales and service occupations; business, finance and administrative occupations; and trades, transport and equipment operators (Table 11). Examination of occupations by arrival cohort highlights differences between those who arrived prior to 1981 and those who arrived afterwards. For example, the proportion of the pre-1981 cohort in senior management occupations is 2.0 percent which is higher than the Canadian-born (1.2 percent) and the overall immigrant population (1.3 percent) and much higher than the more recent immigrant cohorts. The pre-1981 cohort have a smaller proportion in sales and services occupations (19.0 percent) than both the Canadian-born (24.9 percent), and the post-1980 cohorts 1981 to 1990 (24.9 percent), 1991 to 1995 (27.7 percent) and

1996 to 2001 (26.0 percent). The pre-1981 cohort have a larger proportion in professional health, registered nurses and health supervisors (3.5 percent) than the Canadian-born (2.5 percent), and the post-1980 cohorts 1981 to 1990 (2.5 percent), 1991 to 1995 (1.8 percent) and 1996 to 2001 (1.4 percent).

Table 11: Occupation (NOCS) of Employed Population in 2001: Canadian-born and Immigrant Arrival Cohorts

	Canadian-Born		All Arrival Cohorts		Before 1981		Immigrant					
	Count	Percent	Count	Percent	Count	Percent	Count	Percent	Count	Percent		
Management												
Senior management	167,645	1.24	44,711	1.34	29,266	2.00	7,019	0.93	4,396	0.79	3,069	0.59
Other management	1,152,258	8.53	326,724	9.79	176,529	12.09	65,661	8.67	42,438	7.64	36,378	7.05
Business, Finance, and Administrative												
Professional business and finance	296,155	2.19	92,988	2.79	44,649	3.06	21,487	2.84	12,354	2.23	13,577	2.63
Financial, secretarial, administrative	742,789	5.50	160,090	4.80	89,573	6.13	31,474	4.16	19,641	3.54	16,517	3.20
Clerical occupations/supervisors	1,365,886	10.11	319,961	9.59	138,925	9.51	75,769	10.01	56,179	10.12	45,721	8.86
Natural and applied sciences	756,305	5.60	296,538	8.88	100,730	6.90	62,188	8.21	50,555	9.11	78,962	15.31
Health												
Prof health, registered nurses, supervisors	339,763	2.52	90,439	2.71	50,718	3.47	18,822	2.49	10,169	1.83	7,288	1.41
Technical, assisting, related health occupations	337,463	2.50	84,957	2.55	35,977	2.46	22,984	3.04	14,857	2.68	10,178	1.97
Social Science, Education, Government Service and Religion												
Social science, government, religion	544,961	4.04	116,840	3.50	56,735	3.88	25,521	3.37	16,388	2.95	15,501	3.00
Teachers and professors	525,602	3.89	111,835	3.35	61,548	4.21	18,704	2.47	11,652	2.10	15,577	3.02
Art, culture, recreation, sport	401,798	2.98	86,214	2.58	41,668	2.85	17,983	2.38	12,507	2.25	11,877	2.30
Sales and Service												
Wholesale, technical, insurance, real estate	285,928	2.12	69,792	2.09	36,888	2.53	14,860	1.96	8,504	1.53	8,877	1.72
Retail trade	866,778	6.42	171,847	5.15	55,903	3.83	43,145	5.70	38,840	7.00	31,519	6.11
Chefs and cooks, etc	474,722	3.51	112,600	3.37	34,654	2.37	32,243	4.26	24,677	4.44	19,323	3.75
Protective services	228,739	1.69	32,337	0.97	15,138	1.04	6,069	0.80	4,511	0.81	5,769	1.12
Childcare and home support workers	245,716	1.82	60,629	1.82	20,331	1.39	13,497	1.78	13,893	2.50	11,501	2.23
Travel, accommodation, recreation, sport	1,258,694	9.32	316,558	9.48	114,059	7.81	78,511	10.37	63,423	11.42	57,094	11.07
Trades, Transport and Equipment Operators												
Trades and transportation	110,925	0.82	22,740	0.68	14,500	0.99	4,472	0.59	2,402	0.43	1,035	0.20
Construction trades	304,030	2.25	66,636	2.00	36,679	2.51	14,697	1.94	8,273	1.49	6,211	1.20
Other trades occupations	728,733	5.40	181,010	5.42	94,650	6.48	40,732	5.38	24,785	4.46	19,368	3.75
Transport and equipment operators	554,033	4.10	94,087	2.82	42,906	2.94	21,904	2.89	17,448	3.14	10,795	2.09
Trades helpers, labourers etc	314,749	2.33	58,034	1.74	22,002	1.51	15,128	2.00	10,987	1.98	9,362	1.81
Occupations Unique to Primary Industries	680,432	5.04	68,768	2.06	33,351	2.28	14,403	1.90	8,851	1.59	10,426	2.02
Occupations Unique to Manufacturing and Utilities												
Manufacturing supervisors, operators, etc	588,299	4.36	267,458	8.01	91,706	6.28	69,269	9.15	55,708	10.03	49,961	9.68
Manufacturing, utilities, etc labourers	233,398	1.73	84,338	2.53	21,572	1.48	20,593	2.72	21,749	3.92	20,016	3.88
Total	13,505,800		3,338,127		2,217,789		555,186		515,903		515,903	

Source: Statistics Canada. Census of Canada, 2001 Public Use Microdata Files

Comparison of Occupational Employment Profiles of Individuals with University Degrees

Examination of occupational profiles of the population with a minimum of a bachelor's degree show differences between the Canadian-born and the immigrant populations (Table 12). Analogous to the occupation analysis of the total population, the pre-1981 immigrant cohort has similar occupations to the Canadian-born than to the post-1980 immigrant cohorts. The proportion of the immigrant population employed in natural and applied sciences occupations (20.0 percent) is almost double that of the Canadian-born (11.0 percent), however, the proportion of the 1996 to 2001 arrival cohort is almost

triple the Canadian-born (29.1 percent). There are a comparable proportion of pre-1981 immigrant arrivals who are senior managers (3.5 percent) as the Canadian-born (3.1 percent) with a lower proportion of post-1980 immigrants. There is a larger proportion of pre-1981 immigrants employed in occupations in professional health, registered nurses and supervisors (8.8 percent) than the Canadian-born (7.4 percent); however, there is a smaller proportion employed in these occupations for post-1980 immigrants. A large proportion of the university educated Canadian-born are teachers or professors (19.0 percent) while there is a smaller proportion of immigrants (10.5 percent) and particularly for the post-1980 arrivals. Almost 9 percent of Canadian-born bachelor degree holders are in sales and service occupations while only 7.7 percent of pre-1981 immigrants are in these occupations, however, the proportion for post-1980 immigrants are significantly higher particularly for the 1996 to 2001 cohort (15.1 percent). Specifically, there is almost double the proportion of immigrants (3.3 percent) than the Canadian-born (1.7 percent) in the travel, accommodation, recreation and sport occupations within the sales and services occupations. These findings are complimentary to Galarneau and Morissette (2008) who found from 1991 to 2006 the proportion of immigrants with a university degree in jobs with low educational requirements increased.

Table 12: Occupation (NOCS) of Employed University Degree Holders in 2001: Canadian-born and Immigrant Arrival Cohorts

	Canadian-Born		Immigrant									
	All Arrival Cohorts		Before 1981		1981 to 1990		1991 to 1995		1996 to 2001			
	Count	Percent	Count	Percent	Count	Percent	Count	Percent	Count	Percent		
Management												
Senior management	70,678	3.12	20,753	2.37	11,624	3.51	4,250	2.45	2,513	1.82	1,812	0.84
Other management	305,725	13.49	106,738	12.17	48,125	14.52	22,026	12.72	15,482	11.23	19,223	8.89
Business, Finance, and Administrative												
Professional business and finance	138,522	6.11	50,492	5.76	20,237	6.11	12,616	7.28	7,174	5.20	9,875	4.57
Financial, secretarial, administrative	95,310	4.20	34,906	3.98	14,561	4.39	7,798	4.50	5,473	3.97	6,703	3.10
Clerical occupations/supervisors	127,096	5.61	64,537	7.36	19,067	5.75	13,722	7.92	12,431	9.02	18,540	8.57
Natural and applied sciences	248,968	10.98	175,195	19.97	47,226	14.25	32,717	18.89	30,057	21.80	62,977	29.12
Health												
Prof health, registered nurses, supervisors	167,608	7.39	53,902	6.15	29,132	8.79	10,571	6.10	6,319	4.58	5,402	2.50
Technical, assisting, related health occupations	28,376	1.25	18,326	2.09	5,354	1.62	4,399	2.54	4,099	2.97	4,253	1.97
Social Science, Education, Government Service and Religion												
Social science, government, religion	250,738	11.06	60,455	6.89	30,392	9.17	11,239	6.49	7,658	5.56	9,247	4.28
Teachers and professors	430,813	19.00	92,349	10.53	51,019	15.39	14,892	8.60	9,431	6.84	13,207	6.11
Art, culture, recreation, sport	112,903	4.98	32,599	3.72	14,998	4.52	5,509	3.18	4,621	3.35	6,214	2.87
Sales and Service												
Wholesale, technical, insurance, real estate	52,752	2.33	20,951	2.39	7,754	2.34	5,100	2.94	2,809	2.04	4,919	2.27
Retail trade	47,766	2.11	24,854	2.83	5,948	1.79	5,366	3.10	5,286	3.83	7,625	3.53
Chefs and cooks, etc	21,799	0.96	8,102	0.92	1,481	0.45	1,736	1.00	1,367	0.99	3,407	1.58
Protective services	21,209	0.94	6,837	0.78	2,403	0.72	1,220	0.70	849	0.62	2,291	1.06
Childcare and home support workers	20,654	0.91	10,381	1.18	2,290	0.69	1,883	1.09	2,659	1.93	3,438	1.59
Travel, accommodation, recreation, sport	38,430	1.70	28,943	3.30	5,614	1.69	5,845	3.37	6,025	4.37	11,054	5.11
Trades, Transport and Equipment Operators												
Trades and transportation	4,769	0.21	1,699	0.19	665	0.20	258	0.15	443	0.32	295	0.14
Construction trades	6,839	0.30	2,439	0.28	703	0.21	480	0.28	480	0.35	776	0.36
Other trades occupations	10,908	0.48	12,184	1.39	2,656	0.80	2,510	1.45	2,325	1.69	4,618	2.14
Transport and equipment operators	9,239	0.41	8,864	1.01	1,847	0.56	1,882	1.09	2,216	1.61	2,771	1.28
Trades helpers, labourers etc	6,178	0.27	4,030	0.46	627	0.19	814	0.47	813	0.59	1,740	0.80
Occupations Unique to Primary Industries	28,647	1.26	4,886	0.56	2,329	0.70	851	0.49	444	0.32	1,152	0.53
Occupations Unique to Manufacturing and Utilities												
Manufacturing supervisors, operators, etc	18,026	0.80	26,227	2.99	4,763	1.44	4,499	2.60	5,248	3.81	11,606	5.37
Manufacturing, utilities, etc labourers	3,185	0.14	6,465	0.74	627	0.19	1,033	0.60	1,626	1.18	3,143	1.45
Total	2,267,137		877,113		331,442		173,216		137,851		216,286	

Source: Statistics Canada. Census of Canada, 2001 Public Use Microdata Files

The industry and occupational profiles of the employed Canadian-born and the immigrant populations differ for both all levels of education and those with bachelor's degree. In particular, the profile for the immigrant population differs between the pre-1981 and post-1980 arrivals with the pre-1981 cohort profiles more similar to the Canadian-born. While the most recent immigrant cohort who have lived in Canada less than ten years (1991 to 2001) are dissimilar to the Canadian-born in industry and occupation of employment, immigrants who have lived in Canada between 11 to 20 years (1981 to 1990) have differing profiles as well.

While there is anecdotal evidence that immigrants in Canada are faring poorly in occupational attainment the focus has been on income rather than occupation. There is growing empirical research which substantiates the occupational mismatch of immigrants in Canada. Evidence from the Longitudinal Survey of Immigrants to Canada (LSIC) finds occupational mismatch between pre- and post-migration. Currently the LSIC is the only survey conducted by Statistics Canada which allows for the comparison of pre- and post-arrival occupations of immigrants. After six months in Canada, immigrants have changed from higher to lower skilled occupations (Statistics Canada 2005). For instance, pre-arrival occupations with the largest proportions were those in: natural and applied sciences and related occupations, and business, finance and administrative occupations; however, post-arrival the employed were primarily in sales and service occupations and occupations unique to processing, manufacturing and utilities (ibid). Even the most qualified immigrants entering as a Skilled Worker Principal Applicant (SPAs) had difficulties finding employment in their intended occupations. For example, of the SPAs who intended to work in natural and applied sciences professions, after six month only 12,900 of the 22,000 found employment, and of the employed only 4,900 were in their intended occupation (ibid).

In Ontario, of the almost 60,000 immigrants followed in LSIC only 41 percent of immigrants found work in their intended occupation after two years in Canada (Tran and Chui 2006). Newcomers residing in Toronto had similar results with 32 percent working in their intended occupations in the first year of residence and another 9 percent by the second year of residence (ibid). SPAs fared slightly better than the overall immigrant population with 45 percent working in their intended occupation by the end of their second year in Canada (ibid). However, while immigrants may have found employment in their intended occupation, there is not measure of whether this quality of the employment is similar to their pre-arrival employment in the same occupation. That is, while their pre- and post-arrival occupations may be the same the seniority, responsibilities and compensation may differ. Using the 1996 Census of Canada, Reitz (2001) estimated \$2.4 billion was the economic cost of immigrant skill underutilization. Given the increasing number of highly educated and skilled immigrants and their underemployment, this economic cost is likely higher.

Discussion and Conclusions

In 2006, over 6 million immigrants resided in Canada representing 19.8 percent of the total population; with over 200,000 new immigrants admitted annually since the 1990s (Chui et al 2007). Immigration is primarily an urban issue with immigrants settling only in a few CMAs in select provinces. With increasing immigrant concentration primarily in the three gateway cities of Toronto, Montreal and Vancouver, the attention has turned to the settlement of immigrants outside of these three regions.

While humanitarian and family reunification considerations are important components of Canada's immigration policy, economic reasons have come to the forefront. In light of immigration as a driver of population growth coupled with Canada's aging population, immigrants are often tapped as a source of labour. In addition, with regions shifting from traditional to knowledge intensive industries, the admittance of immigrants is targeted towards the well-educated and skilled.

In 2006, over 4 million individuals had a university bachelor's degree in Canada (18.0 percent of the total population). Indeed, immigrants have a higher proportion with a university degree (25.4 percent) in comparison to the Canadian-born (15.8 percent). Canada, in part, has responded to the changing economic needs of the country through the economic immigrant class component of its immigration policy Canada's point system is designed to attract high-skilled and well-educated immigrants by allocating the largest share of points to education credentials and knowledge of official languages. Of the immigrants who arrived between 2001 and 2006, 41.9 percent had a university degree compared to 22.5 percent for immigrants arriving prior to 2001. Successive arrival cohorts of immigrants increasingly are university degree holders primarily due to the emphasis on the economic immigrant class.

The geography of immigrants' education like their settlement patterns varies across each province. For example, in Ontario, 1,752,430 (87.1 percent) university degree holders of the 2,012,055 provincial's total reside in a CMA. Toronto has over half of Ontario's university degree holders (1,101,265) and half of these degree holders are immigrants. The three major immigrant receiving provinces of Quebec, British Columbia and Ontario have large immigrant populations that boast high numbers of individuals with university degrees.

While the attention thus far has been immigration concentration in Canada, this is not simply a concentration of people, but of the well-educated and skilled. The geography of immigrants' education shows that as immigrants increasingly choose to reside in a few select areas this has resulted in the concentration of university degree holders. Immigration is not only a valuable resource for labour force and population growth; it is also a source of well-educated individuals. With increasing demand for high-skilled and well-educated individuals in Canada, immigrants are a highly sought after group.

Canada thus far has been able to attract large numbers of well educated immigrants, however, with increasing global competition it is unknown how long Canada will be able to do so. There has been increasing attention to the retention of immigrants in Canada. In particular, immigration policy has begun to attempt to retain individuals with Canadian work experience through the new Canadian Experience Class. In this way, Canada attempts to retain the foreign-born who have already succeeded in some degree in the Canadian labour market thus easing labour transitions. Canada will need to focus on the retention of both permanent residents and temporary foreign workers and students currently in Canada in light of growing competition for these individuals both from their home countries and other countries facing similar demographic and economic situations as Canada.

In addition to attracting and retaining the foreign-born, there is internal competition within Canada between provinces and regions for immigrants. Predominately large CMAs are the choice of residence for well-educated immigrants in Canada with few choosing smaller CMAs and even less opting for non-CMAs or rural areas. With Canadian-born moving into large CMAs as well as immigrants, regions outside of these CMAs are facing shortages of well-educated and high-skilled labour. With the target of economic class immigrants, many regions in Canada would benefit if they chose to reside outside of the major immigrant destinations.

The Provincial Nominee Program is one step in this direction allowing for expedited immigration processing for immigrants nominated by provincial governments. The Provincial Nominee Program assists provinces' ability to increase settlement into less immigrant dense regions. However, attraction is only part of the solution. In addition to competing with the immigrant gateway cities and larger CMAs to attract new immigrants, these provinces and regions face continuous pressure to retain their immigrant population. For the Provincial Nominee Program to be successful, it must be coupled with retention policies and programs. Comprehensive retention strategies should consider a broad range of policies and programs aimed to provide assistance for immigrant settlement. While these services are currently delivered, better coordination between providers is likely needed to help ensure long-term retention, as well as ensuring that these services are available outside the major immigrant magnets. Therefore, immigration policies and programs cannot separate the two issues of attraction of new immigrants and their retention.

A component of the Provincial Nominee Program is to nominate those who would most easily integrate into local labour markets. One of the streams of entry through the Provincial Nominee Program is as a foreign-born who has a full-time permanent employment offer from an employer. Therefore, with a full-time permanent employment offer it is likely the potential immigrant will be able to integrate into the local labour market and work in their chosen occupation and field of study. This stream

of the Provincial Nominee Program should be used to a much greater degree, however, in general only a small proportion of immigrants enter through the Provincial Nominee Program.

Although immigrants in Canada are well-educated their labour force outcomes are worse than their Canadian-born counterparts. After a lengthy period of time resident in Canada immigrants have lower participation rates and average incomes and higher rates of unemployment. The unemployment rates for immigrants in the three large immigrant receiving provinces are relatively poor with immigrant unemployed at much higher rates. The most recent arrivals have the greatest difficulties finding employment with over three times the unemployment rate of the Canadian-born.

Examination across provinces, immigrant university degree holders fare better in provinces that attract smaller numbers of immigrants. Although few in number, immigrants in Newfoundland, New Brunswick, Nova Scotia and Saskatchewan have higher average incomes than their Canadian-born counterparts. Conversely, immigrants in the largest immigrant receiving provinces have the largest income differentials from a high of (\$20,740) in Ontario followed by Alberta, Quebec and British Columbia. In Ontario, immigrants with university degrees who reside in smaller CMAs such as Sudbury and Kingston earn more than or similar to their Canadian-born counterparts while those in larger CMAs such as Toronto, Hamilton or Ottawa earn less. In the largest immigrant receiving CMA of Toronto, the average income of the immigrant is only approximately 60 percent of their Canadian-born counterparts, however, with those who arrived post-1995 earning less than half. Therefore, a large number of immigrants who reside in Toronto earn relatively low incomes despite having a university degree.

While Canada readily accepts well-educated immigrants, the labour market outcomes of these immigrants indicate that there is much to be done in regards to the transition into the Canadian labour market. To remain competitive in the global economy, and fully benefit from the skills, education and experience that immigrants bring into Canada, immigrants' integration into the Canadian labour market needs greater attention. Greater efforts to bring together professional associations, private companies, immigrant services and community organizations as well as various levels of government to coordinate program, initiatives and policies to facilitate employment commiserate with the skills, experience and education of immigrants.

The industry and occupational profiles of the employed Canadian-born and the immigrant populations shows some similarities, however, the profile for the immigrant population differs between immigrants who arrived prior to 1980 and those who arrived afterwards with the pre-1981 cohort profiles more similar to the Canadian-born. The Canadian-born and immigrant populations with a university bachelor's degree have the

largest share employed in: educational services; professional, scientific and technical services; and health care and social assistance.

Labour market difficulties are often linked to underemployment with immigrants being unable to work in their chosen occupation after arrival in Canada. This underemployment is due to the mismatch between occupation and education with foreign credentials unrecognized. Policies that would assist to recognize foreign credentials would decrease the income gap between the Canadian-born and immigrants. However, recognition of foreign-credentials would only be effective for occupations that require formal certification or licensing (Li 2001). A systematic review of foreign-credentials as well as resources to bridge foreign-education and training into the Canadian labour market is needed. While there have been some efforts in this direction, these initiatives will need to be more widespread among the professional regulatory bodies. One such example of this is the International Pharmacy Graduate Program in Ontario which bridges foreign and Canadian education. Austin and Dean (2006) found that the success rates on licensing examination of those who completed the program exceeded 95 percent. Along with Canada, several countries have pushed forward with the evaluation of foreign credentials including the United States' National Council on the Evaluation of Foreign Academic Credentials or Australia's National Office of Overseas Skills Recognition (Reitz 2005).

These initiatives to counteract immigrant underutilization are taking place in some form across Canada; however, initiatives need to be more widespread and more accessible to immigrants. In this vein, Citizenship and Immigration Canada's web portal *Going to Canada* provides a tool which enables prospective immigrants to find information on occupations and their skill requirements based on potential place of residence (CIC 2009) or for example, Ontario's *Ontario Immigration* (Government of Ontario 2009). Current initiatives include a wide range of activities such as internships, mentoring, occupation/field specific language training as well as actively seeking employers in the community to participate in these initiatives. One such example is the Toronto Region Immigrant Employment Council (TRIEC) which was created in 2003 to assist immigrants to integrate into Toronto's labour market. For example, its Mentorship Partnership program connects immigrants and established professionals and in 2007 made over 1150 matches (TRIEC 2008). Evaluation of this program found close to 80 percent of immigrants who participated in the program were employed, and of the employed 85 percent were working in their field of choice (ibid). Created in 2002 Employment Access Strategy for Immigrants (EASI) is a multi-sector collaborative which provides an online portal for information for immigrant employment in British Columbia for both immigrants and prospective employers as part of their strategy for labour integration of immigrants (EASI 2008). An example of initiatives in less immigrant dense provinces is Work in Nova Scotia (WINS), a bridging program which

provides services to ease transition into the local labour market with these services primarily located in Halifax however some of these services are available outside of the region (WINS 2008).

Although these multi-sector collaborations are relatively new and little is known about the effectiveness of their initiatives in the long-run, these collaborative initiatives are much needed to assist with immigrants' integration into local labour markets. However, there are two key areas that these collaborative initiatives will need to expand. First, these initiatives and programs will need to be more accessible to service a larger number of immigrants. Second, these initiatives and programs will need to be delivered in areas beyond the tradition immigrant dense regions to attract immigrants to reside outside these areas. With widespread labour market difficulties among the immigrant population, these multi-sector collaborations and their initiatives and programs will need to be funded to be accessed by thousands or tens of thousands of new and existing immigrants annually. Particularly, these initiatives and programs need to be targeted to the most recent arrivals as they have the greatest difficulties facing high rates of unemployment and low incomes.

Canada's global competitiveness in the future will be, in part, determined by the degree that immigrants will be able to integrate into the Canadian labour market. Canadian immigration policy is currently shifting towards easing entry for the foreign-born intending to reside in less immigrant dense regions/provinces through the Provincial Nominee Program and retaining the foreign-born in Canada through the Canadian Experience Class. These are important additions to the Canadian immigration policy which aims to admit not only the highly skilled and well-educated into Canada for permanent residence, but those who will most likely be able to integrate into the local labour markets. Provincial and regional multi-sector collaborations that provide programs and services to ease immigrant integration into the labour market have begun to emerge across Canada over the last decade. With changes to immigration policy, and increasing multi-sector collaborations to ease immigrant labour market integration; these will lead to more positive outcomes for immigrants. However, there is much more assistance required to help immigrants to fully achieve success in the Canadian labour market.

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Appendix

Table A: Distribution of Population in Canada in 2006: Total Population and Immigrant Population

	Total Population	Proportion of Total Population	Total Immigrant Population	Immigrants as Proportion of Provincial Population	Proportion of Immigrant Population
		Percent		Percent	Percent
Newfoundland and Labrador	505,469	1.60	8,380	1.66	0.14
Prince Edward Island	135,851	0.43	4,780	3.52	0.08
Nova Scotia	913,462	2.89	45,190	4.95	0.73
New Brunswick	729,997	2.31	26,400	3.62	0.43
Quebec	7,546,131	23.87	851,555	11.28	13.76
Ontario	12,160,282	38.47	3,398,725	27.95	54.93
Manitoba	1,148,401	3.63	151,230	13.17	2.44
Saskatchewan	968,157	3.06	48,160	4.97	0.78
Alberta	3,290,350	10.41	527,035	16.02	8.52
British Columbia	4,113,487	13.01	1,119,215	27.21	18.09
Yukon Territory	30,372	0.10	3,010	9.91	0.05
Northwest Territories	41,464	0.13	2,815	6.79	0.05
Nunavut	29,474	0.09	455	1.54	0.01
Total	31,612,897		6,186,950	19.57	100.00

Source: Statistics Canada. *Cumulative Profile, 2006 - Provinces and Territories in Canada* (table), 2006 Census of Population (Provinces, Census Divisions, Municipalities) (database), Using E-STAT (distributor).

Table B: Distribution of Population in Canada in 2001: Total Population and Immigrant Population

	Total Population	Proportion of Total Population	Total Immigrant Population	Immigrants as Proportion of Provincial Population	Proportion of Immigrant Population
		Percent		Percent	Percent
Newfoundland and Labrador	512,930	1.62	8,030	1.57	0.13
Prince Edward Island	135,294	0.43	4,140	3.06	0.07
Nova Scotia	908,007	2.87	41,315	4.55	0.67
New Brunswick	729,498	2.31	22,470	3.08	0.36
Quebec	7,237,479	22.89	706,965	9.77	11.43
Ontario	11,410,046	36.09	3,030,080	26.56	48.98
Manitoba	1,119,583	3.54	133,660	11.94	2.16
Saskatchewan	978,933	3.10	47,825	4.89	0.77
Alberta	2,974,807	9.41	438,335	14.73	7.08
British Columbia	3,907,738	12.36	1,009,815	25.84	16.32
Yukon Territory	28,674	0.09	3,025	10.55	0.05
Northwest Territories	37,360	0.12	2,380	6.37	0.04
Nunavut	26,745	0.08	445	1.66	0.01
Total	30,007,094		5,448,485		

Source: Statistics Canada. *Census of Population: All Tables, 2001 - Provinces and Territories in Canada* (table), 2001 Census of Population (Provinces, Census Divisions, Municipalities) (database), Using E-STAT (distributor).

Table C: Distribution of Population in Canada in 2006: Generational Status

	Total - Generation status	1st generation	Proportion of Province/CMA Percent	2nd generation	Proportion of Province/CMA Percent	3rd generation or more	Proportion of Province/CMA Percent
Canada	25,664,220	6,124,565	23.86	4,006,420	15.61	15,533,240	60.52
Newfoundland and Labrador	422,390	9,160	2.17	9,125	2.16	404,100	95.67
Nova Scotia	756,595	47,850	6.32	55,160	7.29	653,585	86.39
New Brunswick	601,425	28,330	4.71	33,240	5.53	539,855	89.76
Quebec	6,184,490	840,970	13.60	403,405	6.52	4,940,110	79.88
Ontario	9,819,420	3,340,205	34.02	1,912,460	19.48	4,566,755	46.51
Manitoba	908,450	148,870	16.39	167,400	18.43	592,175	65.19
Saskatchewan	766,230	50,235	6.56	139,120	18.16	576,875	75.29
Alberta	2,625,145	525,825	20.03	517,805	19.72	1,581,510	60.24
British Columbia	3,394,910	1,121,540	33.04	754,830	22.23	1,518,535	44.73
Yukon Territory	24,490	3,120	12.74	4,060	16.58	17,310	70.68
Whitehorse	18,380	2,380	12.95	3,215	17.49	12,780	69.53
Northwest Territories	31,135	2,910	9.35	2,970	9.54	25,260	81.13
Yellowknife	14,480	2,190	15.12	1,825	12.60	10,465	72.27
Nunavut	19,340	510	2.64	595	3.08	18,235	94.29

Source: Statistics Canada. Census of Canada, 2006: Place of Birth of Father and Mother and Generation Status [computer file]. Ottawa, Ont.: Statistics Canada [producer and distributor], 2007/12/04 (Topic-based tabulations; 97-557-xcb2006009).

Table D: University Degree Holders' Labour Force Activity by Ontario Census Metropolitan Areas in 2006

	Total Population	Canadian-Born	Immigrants					
			All Arrival Cohorts	Before 1991	1991 to 2000	1991 to 1995	1996 to 2000	2001 to 2006
Ontario								
Participation rate	80.3	81.9	78.6	75.2	83.8	83.2	84.2	78.2
Unemployment rate	4.8	3.7	6.3	3.7	6.1	5.5	6.5	11.2
Ottawa - Gatineau Ontario Part Only								
Participation rate	80.1	81.9	76.7	72.2	85.3	86	84.8	74.8
Unemployment rate	4.2	3.5	5.9	3.6	6.5	5.8	7	11.1
Kingston								
Participation rate	74.8	76.5	69.1	63	85.3	86.8	85.8	75.8
Unemployment rate	4.3	4.3	4.4	1.9	4.9	4.5	4.1	11.5
Peterborough								
Participation rate	76.1	77.7	68.6	64.9	83.3	80	86.1	71.4
Unemployment rate	4.8	4.1	7.9	3.2	14.5	29.2	0	25
Oshawa								
Participation rate	82.9	84.2	79.2	77.7	84.2	80.5	86.9	77.8
Unemployment rate	3.8	3.3	5.2	4	5	8.6	2.8	10
Toronto								
Participation rate	81.7	84.2	80.1	77.7	83.8	82.9	84.4	78.9
Unemployment rate	5.3	3.8	6.5	3.9	6	5.3	6.4	11.1
Hamilton								
Participation rate	79.9	81.8	76	72.6	83.1	81.1	84.5	76.3
Unemployment rate	4.3	3.6	5.8	4	5.7	7.1	4.8	10.6
St. Catharines - Niagara								
Participation rate	76.7	79.2	69.9	63.9	79.1	79.9	78.9	80
Unemployment rate	4.1	3.3	6.3	3.6	4.8	4.3	5.2	15.3
Kitchener								
Participation rate	82.3	84.2	79.3	75.8	85.3	84.6	85.6	78.8
Unemployment rate	4.2	3.5	5.9	3.7	6	3.9	7.4	9
Brantford								
Participation rate	80.9	82.8	72.5	69.8	90.4	96.6	84.1	67.1
Unemployment rate	3.5	3.5	4	0	6.1	0	5.4	12.7
Guelph								
Participation rate	82.1	84.2	77.3	72.4	84.4	81.9	86.2	81.5
Unemployment rate	4.3	3.9	5.5	3.4	7.5	6.7	8	7.3
London								
Participation rate	79	80.8	75.1	74.4	79.1	81.6	77.2	72.3
Unemployment rate	4.6	3.7	6.8	3.4	8.8	8	9.5	12.1
Windsor								
Participation rate	78.4	81.9	73.2	70.6	80.3	82.9	78.8	68.2
Unemployment rate	6.2	4	10.3	5.1	10.9	10.9	10.9	18.2
Barrie								
Participation rate	83.7	85.3	78.3	74.6	81.9	82.6	81.4	89.2
Unemployment rate	4.4	4.4	4.9	4.5	4.7	3.5	7.1	6.6
Greater Sudbury								
Participation rate	78.3	78.9	74.6	74.5	73	74.1	69.4	78.1
Unemployment rate	4.2	4.4	2	0	4.3	0	8	16
Thunder Bay								
Participation rate	78.6	79.8	70.2	68.3	88.9	92.3	82.1	58.3
Unemployment rate	4.1	4	3.1	2.7	4.2	8.3	8.7	9.5

Source: Statistics Canada. Census of Canada, 2006: Immigrant Status and Period of Immigration, Labour Force Activity, Highest Certificate, Diploma or Degree, Location of Study, Age Groups and Sex [computer file].
 Ottawa, Ont.: Statistics Canada [producer and distributor], 2008/02/027 (Topic-based tabulations; 97-560-xcb2006025).

Table E: Average Total Income of those with Minimum a University Bachelor's Degree by Age for Selected Provinces in 2005

	Ontario		British Columbia		Quebec	
	Canadian-Born	Immigrant	Canadian-Born	Immigrant	Canadian-Born	Immigrant
Total - Age groups	71,035	50,331	58,877	42,617	58,577	41,568
15 to 24 years	15,789	13,929	17,263	13,048	15,931	12,062
25 to 44 years	62,931	43,731	50,851	37,995	53,476	33,746
45 to 64 years	95,382	62,713	73,976	50,594	72,207	54,622
65 years and over	72,069	50,507	64,437	43,700	57,310	48,976

Source: Statistics Canada. Census of Canada, 2006: Income Statistics (4) in Constant (2005) Dollars, Age Groups (5A), Immigrant Status and Period of Immigration (10), Highest Certificate, Diploma or Degree (5) and sex (3) [computer file].

Ottawa, Ont.: Statistics Canada [producer and distributor], 2008/08/22 (Topic-based tabulations; 97-563-xcb2006006).

Table F: Average Total Income of those with Minimum a University Bachelor's Degree by Age and Arrival Cohort for Selected Provinces in 2005

	All Arrival Cohorts	Before 1961	1961 to 1970	1971 to 1980	1981 to 1990	1991 to 1995	1996 to 2000	2001 to 2004
Quebec								
Total - Age groups	41,568	70,685	62,314	61,465	46,596	39,758	34,576	23,856
15 to 24 years	12,062				12,746	12,524	12,943	10,878
25 to 44 years	33,746		69,238	58,270	46,788	41,338	35,864	23,624
45 to 64 years	54,622	75,497	67,119	66,378	53,427	42,548	35,036	28,192
65 years and over	48,976	65,882	52,502	47,042	24,901	25,783	21,025	22,151
Ontario								
Total - Age groups	50,331	83,840	77,838	72,010	53,569	44,960	40,127	28,557
15 to 24 years	13,929				15,752	14,107	13,269	12,893
25 to 44 years	43,731		87,490	69,050	51,506	49,404	43,076	29,644
45 to 64 years	62,713	97,510	84,687	76,021	63,392	47,729	39,468	28,861
65 years and over	50,507	63,702	60,101	62,252	29,987	19,938	18,984	13,935
British Columbia								
Total - Age groups	42,617	67,048	62,590	59,284	46,437	34,508	32,537	25,890
15 to 24 years	13,048				16,859	11,841	11,966	13,648
25 to 44 years	37,995		70,930	58,891	45,516	38,745	35,932	26,869
45 to 64 years	50,594	77,128	67,809	62,639	54,586	36,500	31,749	25,029
65 years and over	43,700	56,834	51,239	45,030	26,443	21,610	14,248	18,701

stant (2005) Dollars, Age Groups (5A), Immigrant Status and Period of Immigration (10), Highest Certificate, Diploma or Degree (5) and sex (3) [computer file].

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