SOCIOECONOMIC AND DEMOGRAPHIC PROFILES OF IMMIGRANTS IN ATLANTIC CANADA

by

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EXECUTIVE SUMMARY

INTRODUCTION

This document constitutes a series of reports based on a project that analyzed the socioeconomic and demographic profiles of immigrants in Atlantic Canada. Analyses of immigrant inflows for the period 1981-2005, and of resident immigrants for the period 1981-2001, were conducted using descriptive tools of statistical analysis. The main source of immigrant inflow data was Citizenship and Immigration Canada (CIC). Data on resident immigrants were based on five Canadian population censuses (1981, 1986, 1991, 1996, 2001) and were obtained from Statistics Canada. Only some 2006 census-based data were available at the time of writing this report and have been analyzed. Also, some data used in this study are not available in the public domain and were obtained either through direct purchase or through various agreements with data providers.

For interpretation of some results, discussions were also held with immigrant settlement agencies, relevant officials of provincial and federal governments, and community organizations.

CURRENT DEMOGRAPHIC TRENDS IN ATLANTIC CANADA

In the post World War II period, population growth rates in Atlantic Canada declined continuously, turning negative at the end of the last century. Declining fertility rates and net out-migration have been the major factors for population growth decline. During 2001-2006, the Atlantic population remained unchanged at 2.3 million, largely due to population decline in Newfoundland and Labrador. In 2006, the natural population growth was almost zero in the region (See Charts 1 and 2 and related discussion).

n responding to the declining population growth rates, which could have adverse economic and political impacts on the region (see Section II), each Atlantic province has developed a population growth strategy, with international immigration as an important component.

IMMIGRATION TRENDS IN ATLANTIC CANADA

Immigrants comprise only 3.4 percent of the population in Atlantic Canada, while the national average is 18 percent. While it is home to 7.2 percent of all Canadians, the region receives only about 2 percent of immigrants coming to Canada each year, with most of them arriving in Nova Scotia. Recent policy attempts to increase immigrant inflows are showing results as each Atlantic province has experienced a rise in its immigrant inflows since 2003 (see Chart 4 and related discussion).

IMMIGRANTS' SETTLEMENT PATTERNS

In 2001, while about 55 percent of non-immigrants lived in urban Atlantic Canada, 70 percent of all immigrants and 80 percent of recent immigrants (those who had arrived within five years of the 2001 census) lived there. However, half of the recent immigrants who lived in rural Atlantic Canada were in areas considered highly rural. The top five source countries of these immigrants included the United States, the United Kingdom, Germany, India and China. Immigrants from the United States and Europe were engaged in farming operations, as well as in small businesses in the service sector, while those from India and China may be provincial nominees located in rural areas to fill in shortages of professionals (see Charts 5-7 and related discussion). A more

complete investigation of their occupations is lacking.

AGE DISTRIBUTION AMONG RECENT ARRIVALS

Among immigrants who arrived in Atlantic Canada during 2001-05, more than 75 percent were under 44, while less than half the resident population in 2006 was in that age group. Therefore, newly arrived immigrants increase the number of young Atlantic Canadians who are potential members of the region's labour force (see Chart 8 and related discussion).

CLASS COMPOSITION OF IMMIGRANTS

Although most immigrants arrive under the family class category, the number of skilled class immigrants has been rising in recent years and that of business class immigrants has been falling. This drop is mainly due to changes in the admission rules for business class immigrants. The number of refugees has stayed steady since 1981 (see Chart 9 and related discussion).

SOURCE COUNTRIES OF IMMIGRANTS

Since the early 1990s, the source country composition of immigrants to Atlantic Canada has shifted from those of Western Europe to those of Asia, including the Middle East. Other regions of Canada began experiencing the shift to countries of Asia, Africa, and Central and South America in the early 1970s due to changes in 1) the Canadian immigration rules, and 2) the world's political and economic environment. In the aftermath of the first Gulf War (1991), many immigrants to Atlantic Canada came from the Middle East. Most were destined for Nova Scotia, where the immigrant inflow doubled to about 3,600 per year in the mid-1990s, mainly due to aggressive immigration consultant activity, but was short lived.

The top five source countries of origin for immigrants since 2003 have been China, the United States, the United Kingdom, Korea, and Egypt (see Section VII).

IMMIGRANT RETENTION

In Atlantic Canada, the immigrant retention rate has dropped significantly since the 1980s (see Chart 10 and related discussion). This drop could be explained by the larger immigrant population from the source countries of newer immigrants living in central and western Canada, which attracts others towards those regions. Retention rates based on the 2006 census data, when available, will indicate if the recent policy initiatives aimed at increasing the retention of immigrants have been successful.

IMMIGRANTS' CONTRIBUTION TOWARDS POPULATION AND LABOUR FORCE GROWTH

During 1996-2001, the latest period for which resident immigrant data are available, the population in Atlantic Canada dropped by about 51,000. This drop would have been about 16.5 percent higher had 9,940 recent immigrants not been in the region in 2001. Recent immigrants also accounted for about 45 percent of the growth in Atlantic Canada's labour force during 1996-2001 – nine times higher than immigrants' contribution during 1981-86 (see Sections IX and XI).

EDUCATION LEVELS AND LABOUR MARKET PERFORMANCE

More immigrants arrive with higher educational levels than 1) those who came in the past, and 2) non-immigrants (see Charts 11-12 and related discussion).

In 1981, immigrants formed 4.5 percent of the labour force in Atlantic Canada while accounting for 19 percent of the national labour force. In 2001, immigrants formed only

3.6 percent of the regional labour force and 20 percent of the national labour force, but their contribution towards labour force growth rose nine times during 1996-2001, the result of a slower growth in the non-immigrant labour force. However, labour force participation rates have been declining among new arrivals since the early 1990s, probably because larger percentages of their families have youth who are attending post-secondary institutions. By contrast, participation rates among non-immigrants have increased since the early 1990s, although remaining below those of recent immigrants (see Charts 13 and14 and related discussion).

Immigrants generally earn more income, have a lower unemployment rate, and receive a lower percentage of income as government transfers than non-immigrants do. However, among recent immigrants, incomes have been falling and unemployment rates have been rising over time, indicating difficulties faced by new arrivals in labour market integration (see Charts 15-17 and related discussion).

Atlantic Canada experienced a decline in the inflows of highly skilled immigrants (professionals and managers) from the mid-1990s until 2002. Since then, there has been a rising trend in their inflows to the region, probably the outcome of Provincial Nominee Program (PNP) agreements reached between the federal government and each Atlantic province. Most of the highly skilled immigrants are employed in the service sector (see Table 3 and related discussion). Immigrant professionals earn more, while immigrant managers earn less, than their non-immigrant counterparts (see Table 5 and related discussion).

During 1995-2005, total business investment in the region was about $40 million, 90 percent of which was invested in Nova Scotia (see Table 8 and related discussion). However, business immigration has been very low since the late 1990s, partly due to the stricter rules introduced by the federal government on admission of business immigrants. Most immigrant businesspersons are small investors.

INTERNATIONAL STUDENTS IN ATLANTIC CANADA

During 1996-2005, the annual inflows of international students in Atlantic Canada more than doubled, from 1,500 to 3,000. In 2005, the top five source countries of international students in Atlantic Canada were China, the United States, Bermuda, Korea, and Japan. Most arrive as university students and take about three years to finish their education. International students are potentially highly skilled immigrants who also possess high degree of acculturation. Therefore, universities should offer more language programs for incoming students and attract students from countries that are major source countries of immigrants in the region.

I. INTRODUCTION

This document comprises a series of reports from a project aimed at compiling and analyzing the socioeconomic and demographic profiles of immigrants in Atlantic Canada. The primary objectives of this project were

- the collection and tabulation of data on immigration to the Atlantic provinces between 1981 and 2005, with a focus on economic immigration
- a descriptive analysis of the data to highlight the socioeconomic, demographic and geographic dimensions of immigration to the Atlantic provinces
- the identification of some gaps in research that can provide necessary information to implement immigrant attraction, integration and retention strategies in the Atlantic provinces
- a written report for each province and one for the region bringing all these elements together.

The research team for this project comprised four research partners, one from each province.

By pursuing the above objectives, the study analyzed the relevance, implications and effectiveness of immigration as a potential economic development mechanism to address demographic and socioeconomic challenges faced by Atlantic Canada in general and by each of the four provinces in particular. The collective regional analysis presented in this report is important for several reasons. First, the four Atlantic provinces share many demographic characteristics: for example, all have low fertility and international immigration and are generally below the break-even point in their migration exchanges with the rest of Canada. Second, on many fronts, the Atlantic provinces have adopted unified policies and cooperate in providing many public services. For example, the sales tax is harmonized across three of the four provinces, and there is also cooperation in selected health care and education services. Businesses have also developed linkages across the region, especially in professional services. Very recently, the Council of Atlantic Premiers (CAP) established a unified goal to increase international immigration in the Atlantic region. The launching of the Atlantic Population Table is another example of cooperation between federal and provincial governments to address the demographic issues of the region. Proposals for removing inter-provincial trade barriers in the region have also been tabled (Atlantic Provinces Economic Council Atlantic Report, Winter 2007).

A unique feature of this report is the analysis of labour market performance of resident immigrants in Atlantic Canada over five census years: 1981, 1986, 1991, 1996, and 2001. Such an analysis permits an understanding of how changing immigration policies and world events may have affected the economic performance of new immigrants in the region over time.

The analysis is presented in several parts. Sections II-IX analyze data on broad demographic trends in the region and their potential economic consequences, trends of

immigrant inflows over the period 1980-2006, immigrants' contribution to population growth, immigrants' geographic distribution in the region, including their contribution to rural population growth, and retention rates. Educational attainments of immigrants at the time of arrival are also compared with those of the resident non-immigrant population in Section X. After this comparison, an average immigrant's labour performance is analyzed in Sections XI and XII, using data from five population censuses (1981–2001) and annual data obtained from Citizenship and Immigration Canada (CIC). There are also separate analyses of the economic performance of highly skilled and business immigrants. Finally, the report also analyzes the trends of the international student population (Section XIII) in the region as they represent a pool of potential immigrants.

Following the previous literature, the term "immigrant" is used in this study to refer to all foreign-born individuals who are permanent residents of Canada. The primary data sources for this study were CIC and Statistics Canada.

Some data used in this study were obtained from the web sites of the above government sources. However, much of the required data were not available in the public domain and had to be acquired through different channels. Some data were made available to the authors under the specific data sharing agreements of the Metropolis project team with Statistics Canada and CIC, while some Statistics Canada data were accessed through the Internet Data Library System (IDLS). Being a member of the Canadian Association of Research Libraries Data Consortium (CARLDC), the Patrick Power Library at Saint Mary's University shares this access with the University of Western Ontario under the Data Liberation Initiative (DLI). Some data were also purchased from Statistics Canada through a customized request, and Statistics Canada also provided some as a courtesy, for which we are grateful. We also thank CIC for providing data from its data warehouse and digital library.

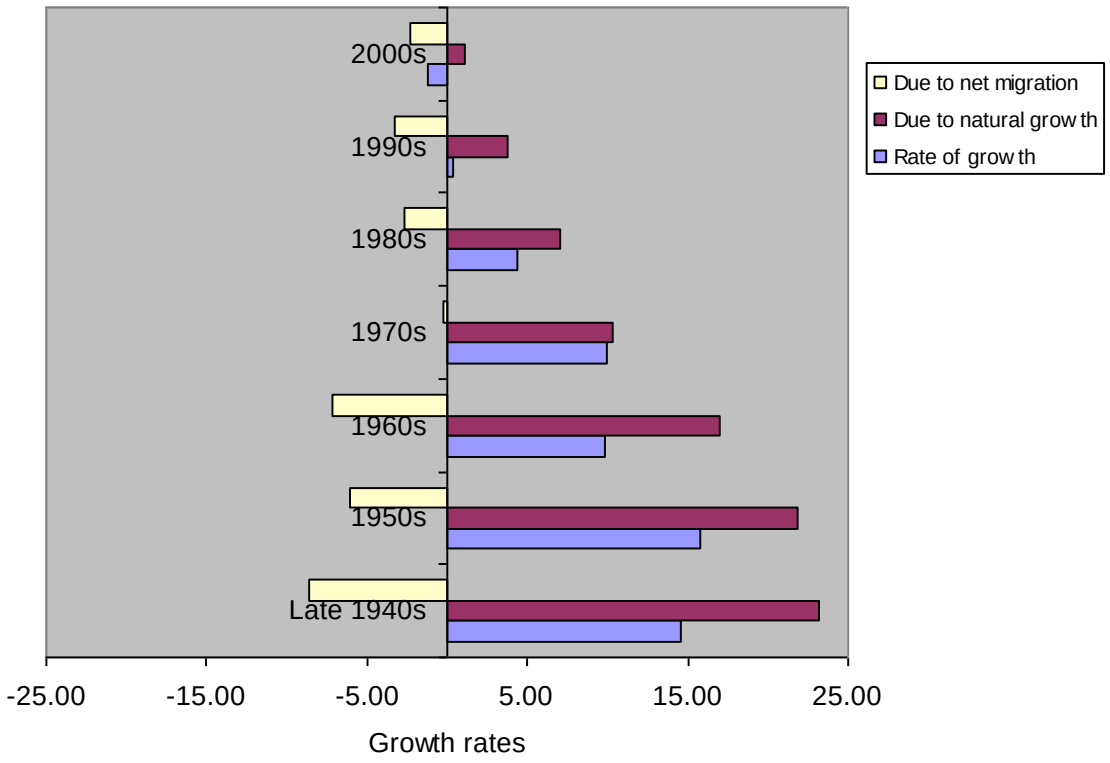
The analysis we conducted is based primarily on descriptive tools. A distinction was made between immigrants destined for each Atlantic province and those who actually stayed in the province. Among those who stayed, separate data were also analyzed for more recent immigrants, i.e., those who arrived within five years before a population census, when possible. Some parts of the analysis also use data on the non-immigrant population to facilitate comparisons with immigrants.

The period of analysis of this study is 1981-2005. Some data available for 2006 are also analyzed. The CIC data are based on the landing documents of immigrants and are for immigrant inflows. Most of these data are available for the entire period of analysis and on an annual basis. The Statistics Canada data are drawn from the five population censuses conducted during the period up to and including 2001. Immigrant-related data from the 2006 census was not scheduled for release until late in 2007. The census data provide information on the resident immigrant and non-immigrant populations. Thus, whenever immigrant inflows had to be compared with resident immigrants and non-immigrants, the period of analysis ended in 2001.

II. SOME DEMOGRAPHIC TRENDS IN ATLANTIC CANADA AND THEIR POTENTIAL ECONOMIC CONSEQUENCES

The population growth rate in Atlantic Canada has been in continuous decline for most of the post World War II period. The most drastic decline took place after the 1970s. Net out-migration from the region has been a permanent factor. This means that to maintain some population growth, the region relied solely on natural increase (births minus deaths). However, this component of the population growth has declined continuously, falling below the out-migration rate in the new millennium, thereby causing the population growth rate to become negative. Chart 1 shows these trends.

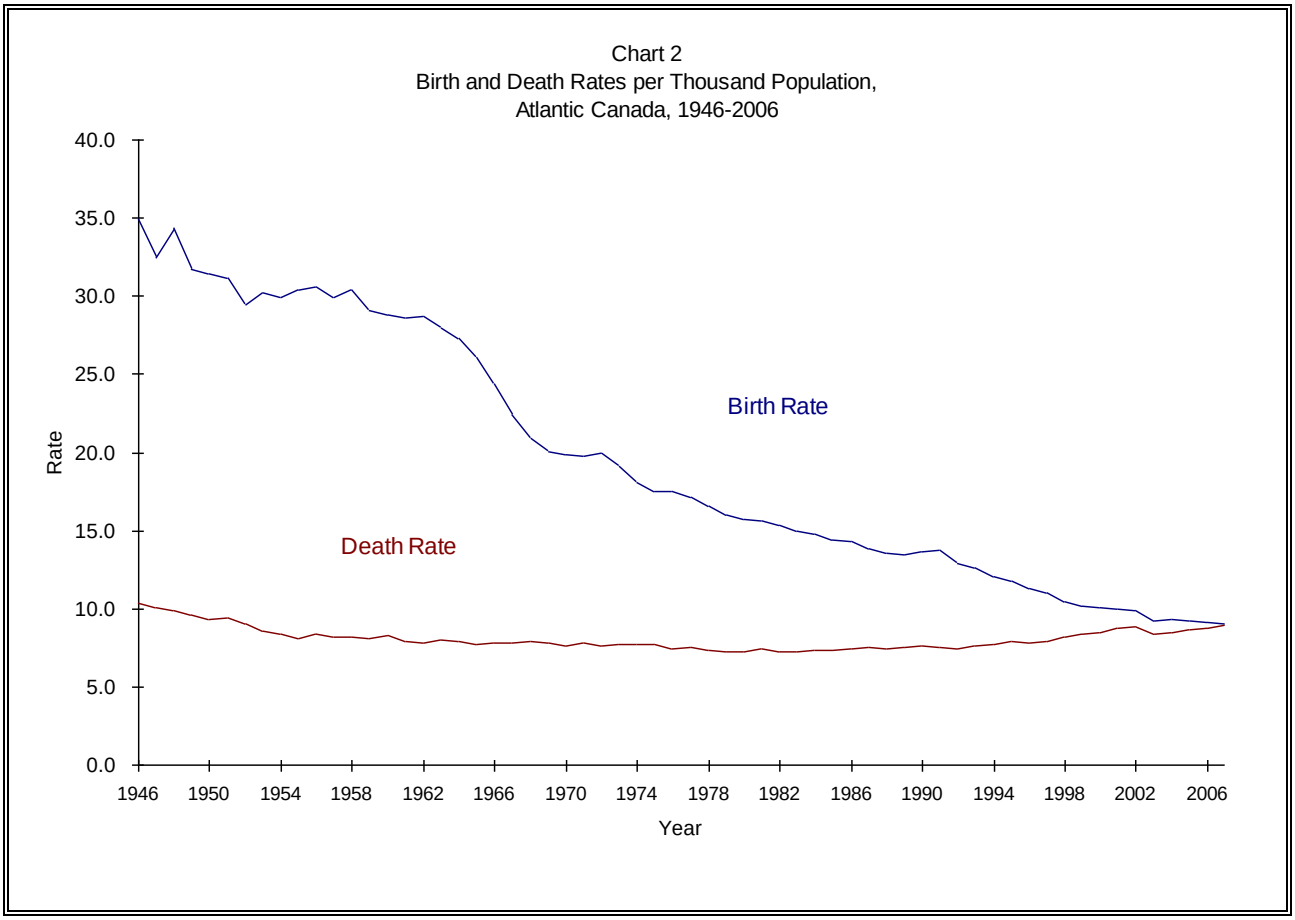
Chart 1
Components of Population Growth in Atlantic Canada in the Post World War II Period (per Thousand Population)



Source: Table A1. Data are based on the annual population *estimates* provided by Demography Division of Statistics Canada, which are different from census-based population data. Thus for example, preliminary estimates based on census 2006 data indicate that Atlantic Canada's population growth rate was zero during 2001-2006 while Table A2 data report a slightly negative rate. These data will be corrected by the Demography Division after census based data have been finalized.

Chart 2 shows that the declining natural population growth rate in Atlantic Canada is due mainly to declining birth rates because death rates remained stable over the entire period. With the current trends, the birth rate in the region is expected to fall

below the death rate very soon; it has already done so in Newfoundland and Labrador. This phenomenon also indicates an aging regional population trend.



Source: Table A2.

Population decline and population aging can have at least six economic consequences for the region:

1. Population decline can lead to the creation of incentives for re-structuring the economy to provide the goods and services demanded by a growing elderly population. However, such restructuring cannot have a long-lasting effect since the death rate is soon expected to exceed the birth rate in Atlantic Canada (Chart 2).
2. An aging population can result in fewer labour force participants, thereby causing shortages of different types of labour demanded by employers in the region. For example, Competencies Canada identifies shortages of construction workers, especially bricklayers and electricians, in Atlantic Canada (Skills Shortages and Labour Market Trends in the Construction Industry, Issue 2). Shortages of professionals such as health care providers in the region are also well known.

3. An aging population can also create increased pressure on younger labour force participants to provide the social programs for the elderly (for example, higher contributions to Canada / Quebec Pension Plans, and higher taxes).
4. Population decline can result in shrinking markets for goods and services, thereby creating an adverse impact on incentives for business investments.
5. Population decline can also result in a decline of federal funds transfers to the region because these are determined largely by population size.
6. As noted in a recent study published by the Atlantic Provinces Economic Council (APEC, Where Have all Workers Gone? April, 2007), rural Atlantic Canada has been affected the most by regional population decline. This phenomenon is of concern because most natural resource-based industries are located in rural Atlantic Canada. When populations decline, the cost of public, as well as private, services does not adjust immediately, and there is a point below which base costs cannot go, regardless of population size. As a result, the economic feasibility of providing such services becomes questionable. Loss of hospitals, mail services, and banking services, and consolidation of schools in rural Atlantic Canada have become more and more common. Closure of public and private services further accelerates rural population decline as people move closer to metropolitan areas in search of those services.

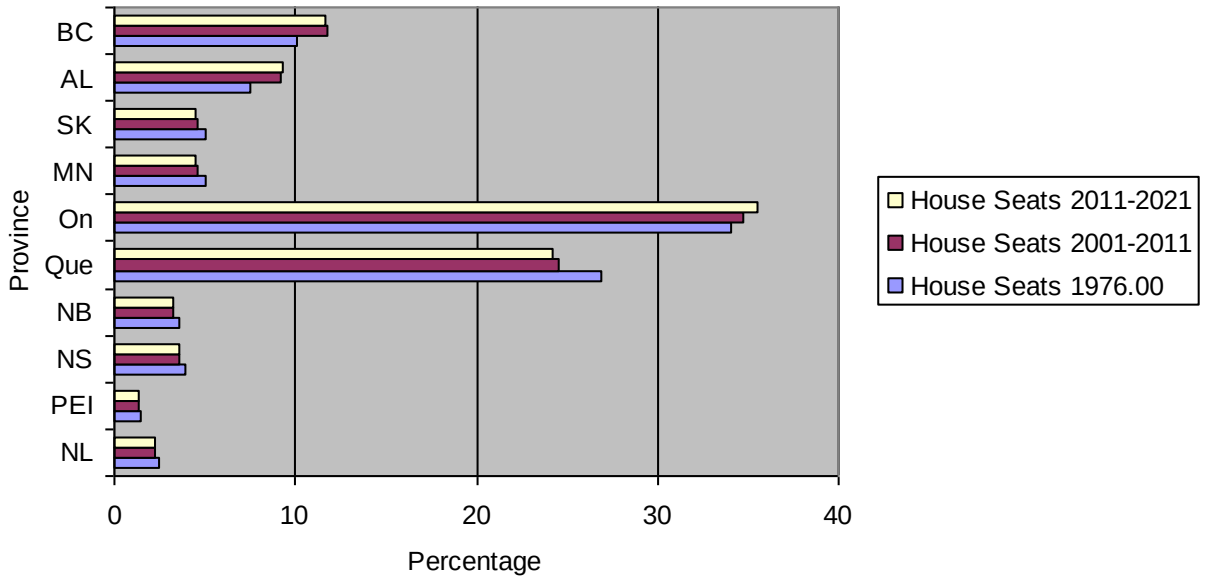
Another potential consequence of population decline that can also have an indirect adverse economic impact in the region is the weakening political representation of each province in the Canadian House of Commons. According to the *Constitution Act* 1985, each province's representation is based on its population size. A "Grand Father" clause, however, protects each province from losing seats in the House below its1976 level. This method of determining a province's number of seats in the House implies that as the population of a province grows, not only would the number of seats allocated to that province grow, but so also would its total number of seats in the House above its 1976 level. In turn, proportionate representation of other provinces, whose population either remains stable or falls, would decline.

A study published by the C.D. Howe Institute notes the current imbalance in provincial representations in the Canadian House of Commons that has resulted from population imbalance between Canadian provinces. The study also projects that if the current uneven trends in population growth rates across Canadian provinces continue, the imbalance in provincial representations will worsen by 2021. As Chart 3 shows, each Atlantic province had below 4 percent of the total seats in the House of Commons in 1976. By 2021, declining population is projected to further weaken this representation.

The negative economic consequences of population decline and aging have not gone unnoticed by policymakers in Atlantic Canada. Each province has now launched a population strategy to help reverse its negative demographic trends. Increasing the provincial share of annual Canadian immigrant inflows is an important component of this strategy. Separate government departments have been formed with the mandate to increase 1) the level of skilled worker immigration as a way to deal with skill shortages, and 2) the retention rate of annual immigrant inflows, which has been low in most Atlantic provinces since the mid-1990s. Each government is now 1) a signatory to the Provincial Nominee Programs (PNPs), federal-provincial bilateral agreements that allow

each participating Canadian province to target and recruit immigrants to meet its own particular needs and who are then fast-tracked through the system by CIC, and 2) collaborating with other provincial governments in the region through the CAP in

Chart 3
Provincial Representations in the Canadian House of Commons
Based on Current Rules and Projected Population Growth Rates



Source: Table A3.

developing promotional material, participating in overseas marketing missions, conducting research, doing credential assessment and recognition, and sharing information.

The Atlantic Canada Opportunities Agency (ACOA), a federal government agency with a regional economic development mandate, also recognizes the importance of immigration in the economic development of the region. It works closely with the governments of the region, as well as settlement organizations, to facilitate settlement and integration of immigrants. ACOA has also established an Atlantic Population Table with representation from the CIC, Human Resources and Social Development (HRSD) and the four Atlantic provincial governments. Another department of the federal government, the Rural Secretariat, has launched a rural re-population strategy, with immigrant settlement in rural regions as one component of rural economic development.

Given the above initiatives, it is clear that immigration will soon play an enhanced role in both population growth and the economic development of Atlantic Canada. As a result, issues relating to social and economic impacts of immigration, which are often raised in public circles of the immigrant-abundant regions of western and central Canada, are expected to occupy a central place in public policy discussions in this

region as well. Some issues include the impacts of immigrants on the public treasury, poverty, employment and the wages of the native-born.

This project is an effort to build a broader and deeper stock of knowledge relating to the many economic issues that increased immigration to Atlantic Canada raises. By providing this information, we expect to provide input to immigration policy discussions and design. This information will also be useful for policymakers, immigrant settlement organizations, and academic researchers in the region who may wish to pursue some immigration-related issues in greater depth. Our special interest is to outline the economic dimensions of immigration because our primary focus is on the role of immigration in promoting economic growth and development in the region.

III. IMMIGRATION TRENDS IN ATLANTIC CANADA

Unlike provinces such as Ontario, provinces in Atlantic Canada are immigrant scarce because immigrants comprise of only 3.4 percent of the regional population, compared to the Canadian national average of about 18 percent. The region also has a small share of annual immigrant inflows to Canada. While its population is about 7.2 percent of the total Canadian population, it attracted only about 2 percent of immigrants who arrived in Canada in 2006 – nevertheless the highest share since 1997.

Chart 4 provides immigration trends in the four Atlantic provinces for the period 1981-2006. Nova Scotia is the most popular destination province of immigrants to Atlantic Canada each year. During the mid-1990s, Nova Scotia experienced a sudden rise in its immigrant inflows, reaching a peak at about 3,600 in 1995 from about 1,500 in 1991. This dramatic rise in immigrant inflow took place soon after the first Gulf War, which resulted in the emigration of Palestinians and several expatriate groups from Kuwait and its neighboring countries and had some specific reasons (see box entitled The Rise and Fall of Immigration in Nova Scotia in the 1990s). Towards the end of the 1990s, however, annual inflows to the province returned to their early 1990s level, averaging about 1,700.

Since 2002, the annual immigrant inflow has started to rise again in Nova Scotia, as well as in New Brunswick and Prince Edward Island. These increases may be largely attributed to PNP agreements and several immigrant integration and settlement initiatives adopted in these provinces. Growth in Newfoundland and Labrador has been slow and was almost stagnant during 2005-06. With the adoption of a new immigration strategy in 2007, however, this province is also expected to experience rising trends in its immigrant landings.

The Rise and Fall of Immigration in Nova Scotia in the 1990s

In the aftermath of the first Gulf War, many Palestinian and expatriate groups resident in Kuwait and in its neighboring countries started to leave. Rising emigration from the Middle East caught the attention of some aggressive immigration consultants who began to promote Nova Scotia as a province with a more conservative family lifestyle that was safer than big Canadian cities, and with nationally ranked educational institutions. As a result, immigration peaked at 3,600 in 1995 and remained close to 3,000 per year until 1997 (see Charts 1 and 2 of the text). Most of the immigrants from the Middle East came as business class immigrants. The federal entrepreneur program at the time had fairly relaxed requirements (start a business within two years and employ one Canadian). Many immigration consultants even helped clients write business plans so that they could get into the country. However, many of these immigrants were actually professionals with no prior business experience but were told by consultants that it would be easy to do business in Nova Scotia. They had the money to invest, and Nova Scotia appealed to them. However, they encountered the following problems:

- many found that there were not as many business opportunities and settled for small retail operations, which they could not manage properly.
- even those with some business experience had mostly done international trade (import/export business), which was not a lucrative business in Nova Scotia.
- incomplete or erroneous information was provided by consultants about business opportunities in the province.

As a result, many immigrants started to leave the province, and may have also advised potential newcomers not to immigrate to Nova Scotia.

Therefore, by 1999, the province had returned to its pre-1991 level of annual immigrant inflows.

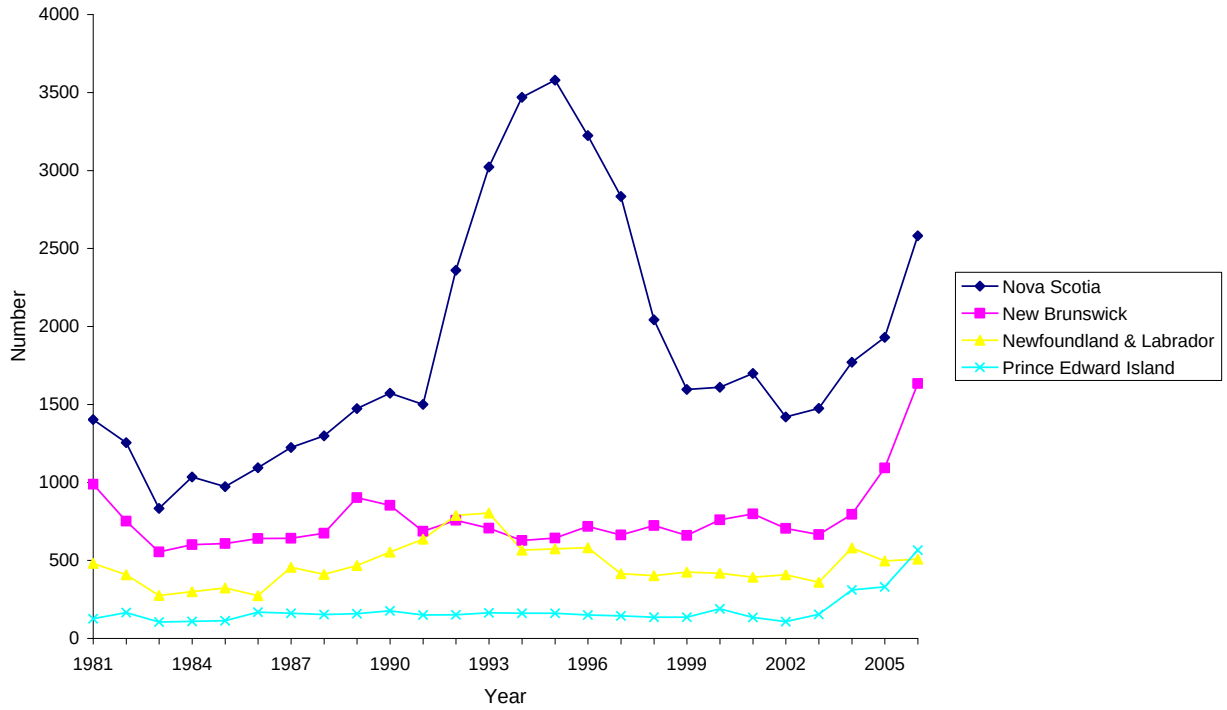
In 2002, the federal government, concerned about the abuses of the system, changed the entrepreneur program drastically, requiring recent entrepreneurial experience, a large initial investment, and more direct involvement in the business, etc. to be eligible under the program. As a result, business immigration to the province, which had already declined significantly since the 1990s, has now dropped to below its 1981 level (Chart 9). The federal government has also taken major steps to monitor immigration consultant activity throughout the country

The consultants' attention was also diverted away from business immigrants when Nova Scotia signed a PNP agreement with the federal government in 2002.

Source: Based on information collected from Metropolitan Immigrant Settlement Association (Halifax).

The present rising trends of immigrant arrivals are expected to be sustainable as they are based on coordinated efforts of all governments, the private sector, and settlement agencies. However, a systematic research study could investigate whether the increase in immigrant inflows would have occurred even without specific initiatives.

Chart 4
Immigrants (Principal Applicants and Dependents) Destined for the Atlantic Provinces, 1981-2006



Source: Table A4.

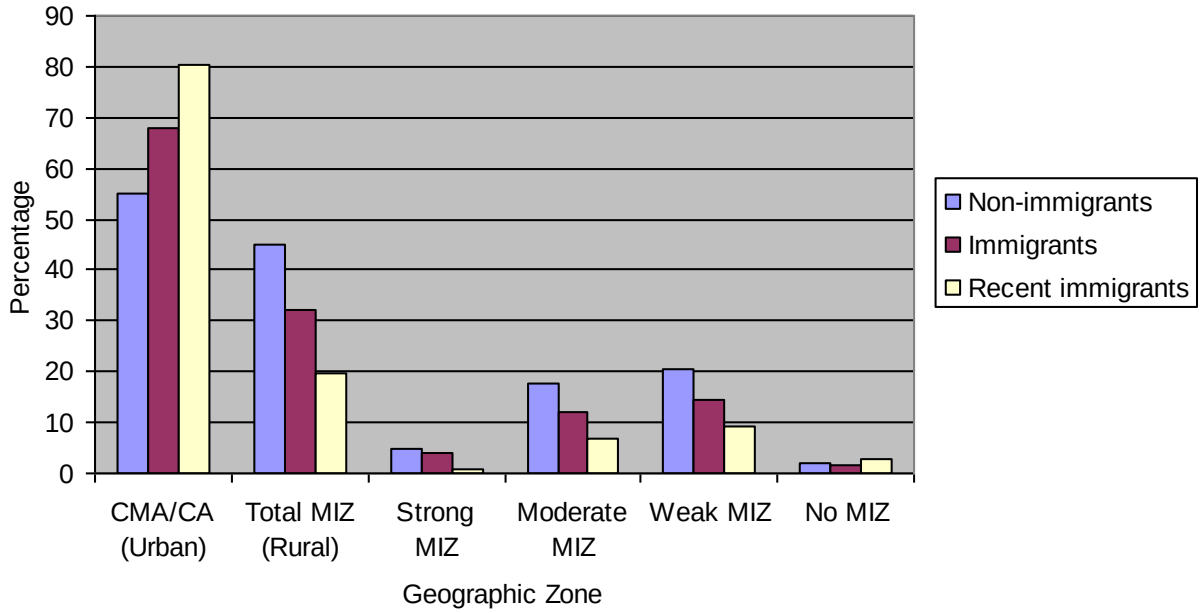
IV. THE RURAL-URBAN SETTLEMENT PATTERN OF THE IMMIGRANT POPULATION

Immigrants to Canada tend to prefer urban regions to rural ones: in 2001, they made up 27 percent of the population in predominantly urban regions, compared with 6 percent of the population in predominantly rural regions. This urban trend has been intensified by immigrants who arrived between 1981 and 2001 as they made up just less than 2 percent of the predominantly rural regional population but more than 13 percent of the predominantly urban regional population. Between 1996 and 2001, rural metro adjacent communities in Canada gained immigrant population, but rural non metro adjacent communities and northern communities lost immigrant population. In 1993, immigration to rural areas peaked at 23,200; in 2001 and 2002, immigration was just over 12,000 (Immigrants in Rural Canada, Statistics Canada Catalogue no. 21-006-XIE).

Responding to the declining rural population trends, which can cause 1) a decline of natural resource industries such as agriculture and mining, 2) a decline in public and

private services in rural regions, and 3) increased pressures on the provision of services in metropolitan (urban) areas as rural population moves there, federal and provincial governments have adopted rural re-population strategies. One component is the initiative to attract immigrants to rural regions using the Provincial Nominee Program and community-based initiatives as tools to achieve this goal.

Chart 5
Population Distribution in Atlantic Canada, 2001

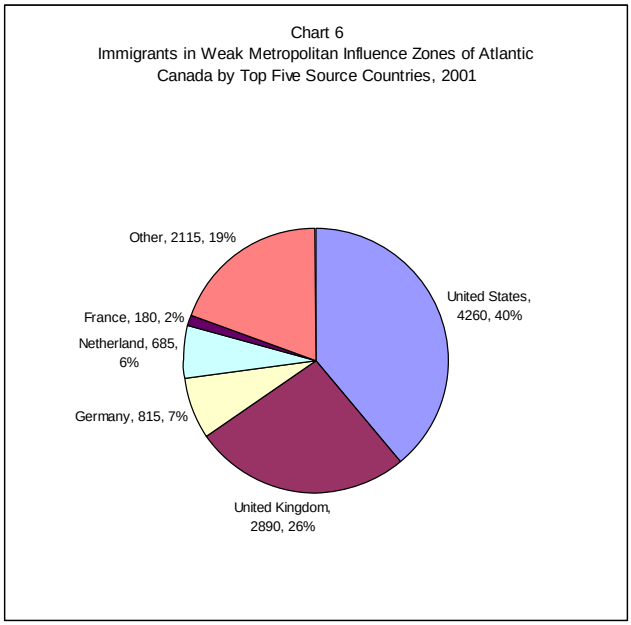


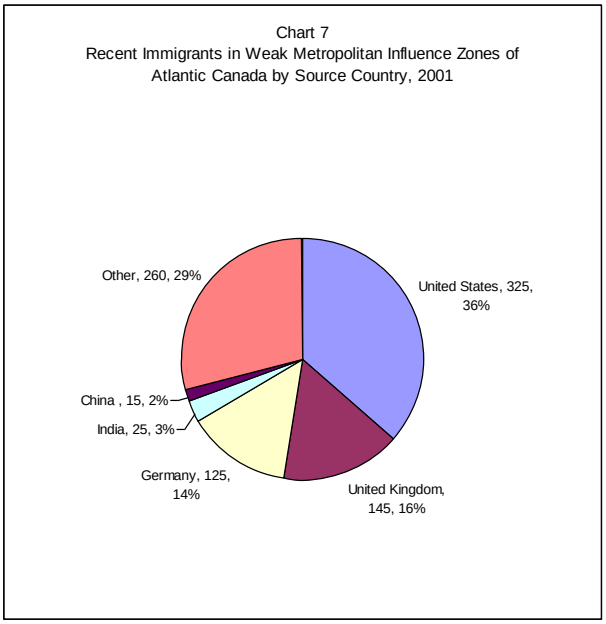
Source and notes: Based on census 2001 Table CO-0861, 2001 Basic Profile (relevant data reproduced in Table A5). We thank the Rural Secretariat for providing us these tables. MIZ = Metropolitan Influenced Zone. Strong MIZ can be interpreted as a region outside of a CMA/CA strongly influenced by the CMA/CA in terms of the importance of the CMA/CA's labour market. Moderate MIZ is a region moderately influenced by the CMA/CA, while weak MIZ is only weakly influenced by the CMA/CA. Immigrants in regions classified as No MIZ live in rural or remote areas well outside of the influence of any CMA/CA. For a detailed explanation of the MIZ classification system, please see Chuck McNiven, Henry Puderer and Darryl Janes. 2000. Census Metropolitan Area and Census Agglomeration Influenced Zones (MIZ): A description of the Methodology , Statistics Canada catalogue no. 92F0138MIE, no. 2000-2.

As shown in Chart 5, about 45 percent of the Atlantic Canadian population is rural, i.e. lives outside of Census Metropolitan Area (CMA) or Census Agglomeration Area (CA). Therefore, any change in the composition of the rural population in the total population is expected to significantly impact the region's economy. As expected, a larger percentage of immigrants (68 percent) lives in urban Atlantic Canada than non-immigrants (55 percent). However, that about 32 percent of immigrants and 20 percent of recent immigrants also choose to live in rural areas indicates that they can be destinations of new immigrants. Interestingly, about half of recent immigrants who choose to live in rural areas go to those with high degrees of rurality (weak MIZ, see detailed explanations in the notes accompanying Chart 5). To obtain more insights, Charts 6 and 7 provide a breakdown of immigrants and recent immigrants, respectively,

by the top five source countries, who live in highly rural areas (weak MIZ). The United States and four Western European countries constitute the top five source countries of immigrants living in the weak MIZ. However, the composition of recent immigrants is slightly different. While the United States, the United Kingdom, and Germany are still on the list, the Netherlands and France have been replaced by India and China. Therefore, the overall shift in the source country composition of immigrant inflows to Canada (to be discussed later) is also felt in rural regions.

We do not have data on the labour market characteristics of immigrants living in rural areas. However, anecdotal evidence (based on discussions with the Rural Secretariat and with some community organizations) suggests that most American and Western European immigrants are engaged in variety of occupations, for example, in farming, the hotel industry, retail, and professional occupations. Many involved in farming were attracted to Atlantic Canada because of the highly competitive land prices. Recent immigrants from India and China may have come under the PNP, aimed at meeting the shortages of professionals in rural areas. The Indian immigrants are located in Newfoundland and Labrador while Chinese immigrants are in Nova Scotia. Finally, the dominance of the United States and Western European countries among new immigrants may be attributed to the presence of large existing immigrant populations from those countries.





Source: Census 2001 Table CO-0861, 2001 Basic Profile. We thank the Rural Secretariat for providing these tables for each Atlantic province.

V. AGE DISTRIBUTION AMONG NEW IMMIGRANTS

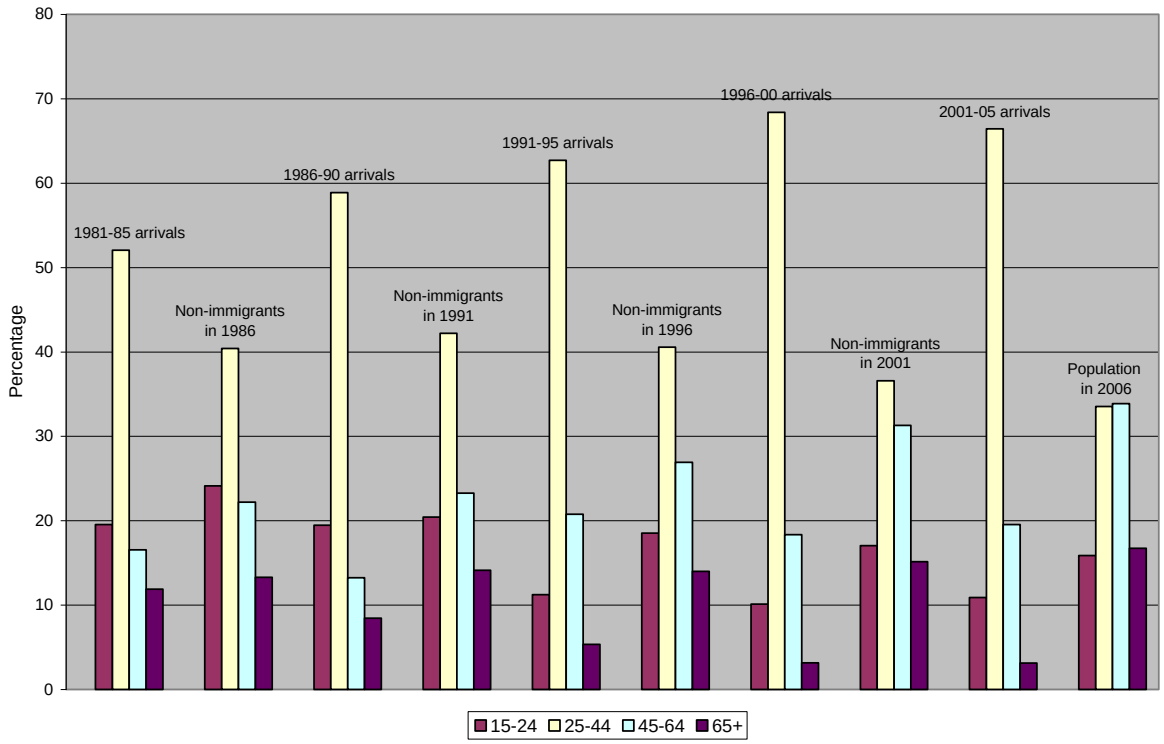
It is usually the young who migrate because young individuals can reap the benefits of their migration investment for a longer time at their destination than can the elderly. The young are also usually healthier, and less settled in, or tied to, their places of origin.

Chart 8 confirms that immigrants to Atlantic Canada are indeed younger than resident non-immigrants at the time of arrival (those who arrived within a given five-year period). Most immigrants and non-immigrants are aged 25-44, the prime working age group. However, among non-immigrants, the composition of this age group in total population has been declining since 1991, and by 2006, the size of this group fell below the 45-64 age group, which is considered to be close to retirement age. On the other hand, since 1991, more than 60 percent of immigrants have been arriving in Atlantic Canada in their prime working age.

Chart 8 also reveals the aging trend of the Atlantic population. The composition of the elderly population (aged 65 and above) among non-immigrants has been rising throughout the period, while the composition of youth (aged 15-24) has been on the decline. These trends partly reflect declining birth rates, as discussed in a previous section. On the other hand, more and more immigrants are arriving in this region with fewer elderly. The composition of youth among each arrival is lower because only principal applicants are considered in these data.

The results of this section indicate that immigration can be used to 1) meet the labour shortages in the region, and 2) reverse the aging trend in the Atlantic population. However, the present levels of immigration are too small to help offset the aging trend of the regional population. Research is needed to determine what level of immigration would reverse the aging trend among Atlantic Canadians over the next ten years.

Chart 8
Age Distributions of New Immigrants (Principal Applicants) and Non-immigrants in Atlantic Canada, 1981-2006



Source: Table A6 (reported for population aged 15 and over).

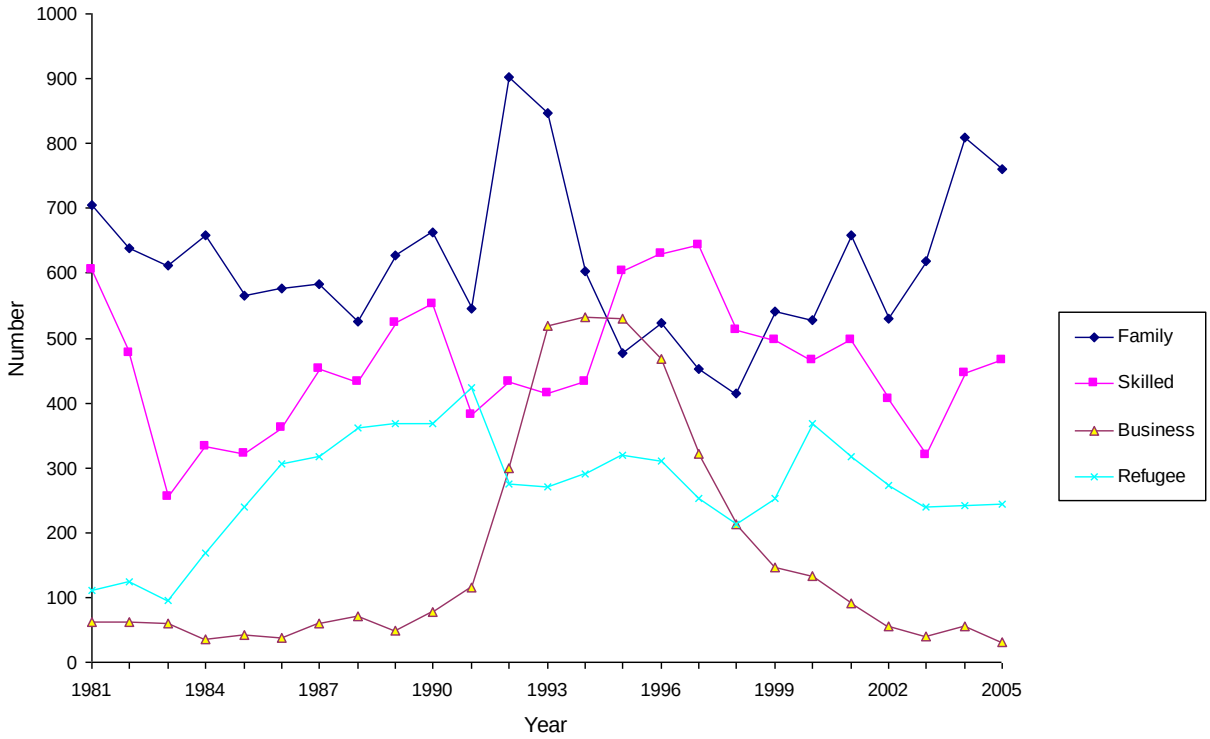
VI. COMPOSITION OF IMMIGRANT CLASSES

Immigrants come to Canada under different classes. Applications filed under each class are evaluated under different eligibility rules. ***Refugee class*** immigration reflects Canada's commitment to humanitarian principles, while ***family class*** immigration is intended to foster family re-unification – that is, facilitating individuals to enter Canada who have close relatives who are already permanent residents/citizens. ***Economic immigrants***, on the other hand, are those expected to make a direct positive economic contribution to Canada through the skills, expertise, entrepreneurship, or capital they bring with them. The economic class category itself comprises two major sub-categories: skilled workers and business immigrants. In this study, the primary (but by no means exclusive) focus is on economic immigrants.

Table A1 (Appendix) provides annual immigration inflows (of principal applicants) by class of immigrant destined for Atlantic Canada over the 1981-2005 period. These trends are also provided in Chart 9 below.

During the period 1981–2005, the Atlantic region experienced an increase in family and refugee classes among principal immigrant applicants (Chart 9). Family class immigrants dominated all other immigrant classes for most of that period. Immigrants admitted under the skilled worker class were second, although their numbers exceeded family class immigrants for a short time in the middle 1990s. The period of surge among business class immigrants coincided with that of overall immigrant inflows in Nova Scotia, as described in an earlier section. In recent years, numbers of immigrants admitted under business class have dropped, however (see Chart 9).

Chart 9
Immigrants (Principal Applicants) Destined for Atlantic Canada by Class, 1981-2005



Source: Table A7.

VII. IMMIGRANT SOURCE COUNTRIES

Since the early 1970s, Canada has experienced a shift in the source country mix of its immigrant inflows from the countries of Western Europe to those of Asia, Africa, and South and Central America (see Box entitled Shifting Source Regions of Immigrants to Canada).

Changes in source country mix of immigrants have become more prominent in Atlantic Canada only since the1990s, when China and some countries of the Middle East entered the list of top five immigrant source countries (Table 1). As discussed

previously, the entry of Middle Eastern countries in the 1990s can be attributed to the first Gulf War, which adversely affected some groups and prompted them to leave their countries of residence. These countries became more prominent in the list of top five source countries in the 1990s when both principal applicants and dependents were considered, likely due to the larger family sizes of immigrants originating from there.

In recent years, the prominence of Middle Eastern immigrants among the top five source countries has diminished; instead, China has consistently been on the top of the list. The United States and the United Kingdom (despite the general fall in immigrant inflows from Western Europe to Canada since the 1970s) are permanent members of this list, which is probably due to their traditional ties to Canadian society, shared history, common language, and nearness. The presence of the large immigrant population that came from those countries in the past may be another factor attracting them to the region.

Finally, it is also noteworthy that the top five source countries of immigrants have formed less than half of total immigrant inflows to the region, especially in the case of principal applicants, for most of the period under study. This means that immigrants to the region also arrive in small numbers from diverse source countries.

Shifting Source Regions of Immigrants to Canada

In 1961, the Canadian government abolished the “preferred country” clause, which had given preference to immigrants from Western European countries. This clause had formed the basis of a 1910 Immigration Act. With the abolishment of this clause, all immigrant applications are now evaluated using a “Point System” under which importance is given to such criteria as an applicant’s age, education, and suitability for the Canadian labour market, presence of family members in Canada, etc., regardless of the country of origin. The new rules were fully promulgated in 1967. One reason for this change was that Canadians wanted to play a greater role on the international front in the post World War II era. Another reason was that the economic prosperity that followed soon after the War resulted in increased demand for skilled labour.

The period of the early 1960s was also a time when economic conditions in Europe, adversely affected by World War II, had begun to improve. More labour was in demand and incomes were rising. As a result, immigration from Europe to North America generally slowed down. It slowed further with the formation of European Union and re-unification of Germany, which allowed for greater mobility of workers within Europe.

As a consequence of the above changes, as well as of the greater mobility of workers in a globalized world and continuing political discourse in the third world countries, Canada has seen a shift in source countries of its immigrant inflows from the countries of Western Europe to those of Asia, Africa, and South and Central America over the past three decades.

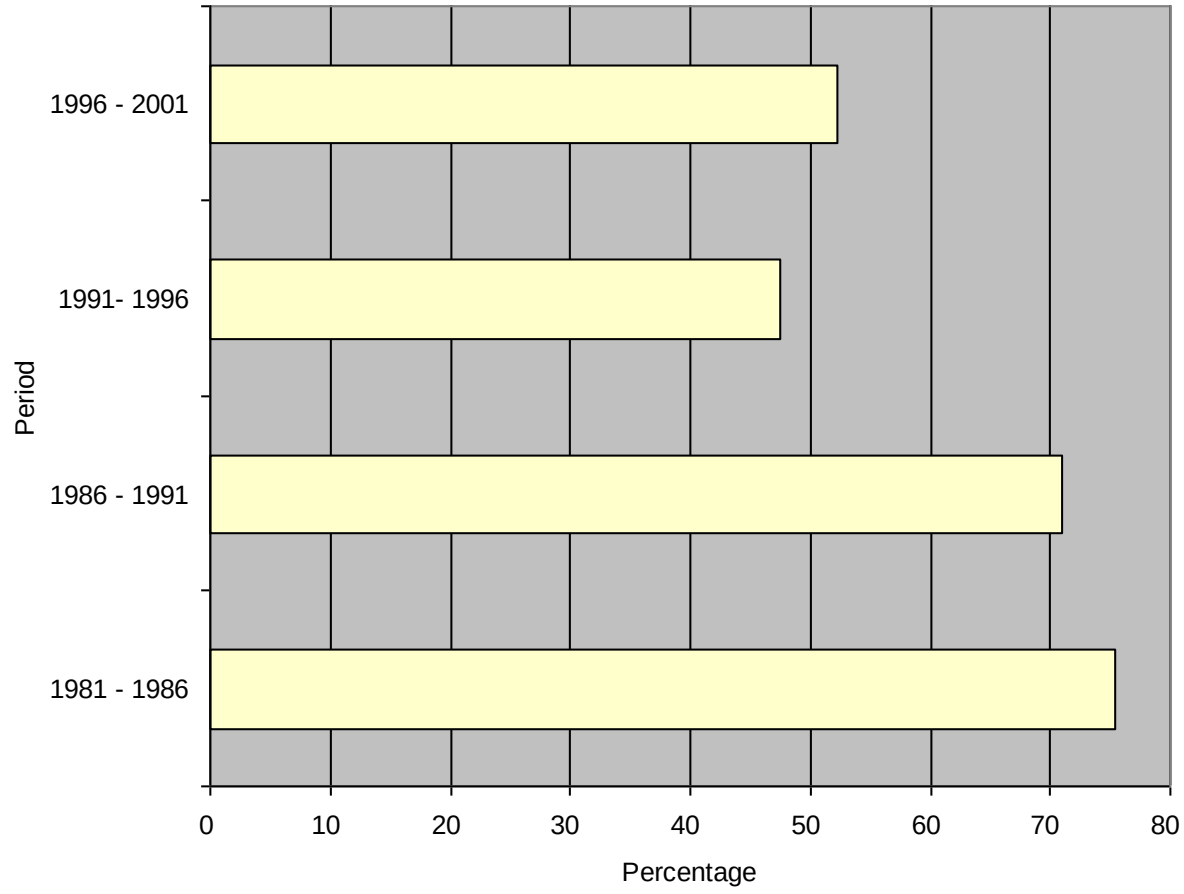
Table 1: Top five source countries of immigrants destined for Atlantic Canada, by year, 1981-2005																
Period	1981-1985		1986-1990		1991-1995		1996-2001		2002		2003		2004		2005	
	Country	Count	Country	Count	Country	Count	Country	Count	Country	Count	Country	Count	Country	Count	Country	Count
Principal Applicants																
Rank																
1	USA	2151	USA	1706	USA	1121	China	1070	China	165	USA	193	USA	243	China	242
2	UK	1075	UK	858	China	715	USA	958	USA	148	China	185	China	241	USA	226
3	Vietnam	351	Vietnam	526	UK	674	UK	505	UK	95	UK	112	UK	115	UK	150
4	India	200	Poland	382	Egypt	368	Kuwait	421	India	70	India	52	India	57	Korea	80
5	Poland	180	Lebanon	298	Kuwait	287	Germany	243	Kuwait	31	Lebanon	35	Lebanon	33	Egypt	44
Total for 5 countries		3957		3770		3165		3197		509		577		689		742
Total arrivals		6728		7752		9501		9596		1427		1508		1836		1919
Principal Applicants & Dependents																
Rank																
1	USA	3284	USA	2620	Egypt	1519	China	1948	China	272	China	257	China	394	China	388
2	UK	1931	UK	1606	USA	1510	Kuwait	1629	UK	151	USA	238	USA	345	USA	330
3	Vietnam	748	Poland	693	Kuwait	1247	Jordan	828	India	130	UK	162	UK	280	Korea	262
4	Poland	331	Vietnam	617	Hong Kong	1224	Korea	783	USA	107	Saudi Arabia	88	Saudi Arabia	110	UK	240
5	Germany	321	Lebanon	444	Saudi Arabia	887	Saudi Arabia	677	Kuwait	91	UAE	82	Egypt	96	Egypt	109
Total for 5 countries		6615		5980		6387		5865		751		827		1225		1329
Total arrivals		11398		13340		21495		20841		2638		2651		3452		3840

Source: Permanent Resident Data System (PRDS) micro-data as provided to AMC under contract with CIC. Principal applicant is based on variable "f_stat2", and source country is based on variable "f_clpr".

VIII. IMMIGRANT RETENTION IN ATLANTIC CANADA

It is now well known that most immigrants who arrive in Canada aim to settle in Alberta, British Columbia, Ontario, and Quebec. Reasons for attraction to these provinces include greater economic opportunities, existence of larger immigrant populations from source countries of recent immigrants, and larger family networks than those offered by smaller provinces. Many immigrants, who initially settle in a different province, eventually end up in one of these four major provinces. As a result, smaller provinces such as those of Atlantic Canada, that aim to increase their share in total immigrant inflows face the twofold challenge of not only attracting new immigrants but also retaining them.

Chart 10
Five-Year Immigrant Retention Rates in Atlantic Canada,
1981-2001



Source: Table A9.

Chart 10 provides five-year immigrant retention rates in the Atlantic region. Calculations are based on the number of recent immigrants living in the region (obtained from census data) as a percentage of those destined to the region in a given five-year

period (these later data are based on PRDS). Retention rates calculated in this manner may be underestimated because census data are affected by undercoverage, while PRDS data are complete. Therefore, it is more meaningful to analyze the changes in these retention rates over time because the bias can be assumed to affect all census-based data equally.

Atlantic Canada has faced difficulty retaining its new immigrants since the early 1990s when the retention rate among recent immigrants plunged from more than 70 percent to about 45 percent. In the late 1990s, the rate rose slightly to about 52 percent. The sharp decline in retention rates may be attributed to the changing composition of immigrant source countries. As discussed in the previous section, a large number of immigrants now arrive in Atlantic Canada from non-western European countries with different ethnicity and language. It appears that once they arrive, they move towards the four major immigrant receiving provinces because 1) a larger number of immigrants originating from their own source countries live in those provinces, 2) larger provinces offer greater economic opportunities and 3) immigrants arriving in Atlantic Canada face labour market barriers. It will be useful to investigate these reasons in a systematic research study.

In Appendix Table A8, more detailed data are provided on the in-migration and out-migration rates of different categories of immigrants who were destined for Atlantic Canada over the period 1988-2003. These calculations are based on the International Migration Database (IMDB) compiled by Statistics Canada and CIC, and can be viewed as more complete than the census-based data. The IMDB is for immigrants destined for a particular Canadian province in a given year who are followed for a period of 15 years in Canada, according to the information they provide while filing their tax returns with Canada Customs and Revenue Agency (CCRA). One such piece of information is the province of residence at the time of filing tax return. Hence, using this database, it is possible to determine what percentage of immigrants destined for a particular province in a given year were living in another province at the time of filing a tax return. Separate data are provided for refugees, economic immigrants, family class immigrants, and others. Only aggregate data are available for Atlantic Canada due to small numbers in each Atlantic province, which can give rise to confidentiality matters.

Data reported in Table A8 indicate that most immigrants destined for Atlantic Canada during 1988-2003 came as economic immigrants while those who came as refugees or under family class were evenly divided. Overall, about 43 percent of immigrants destined for Atlantic Canada during this period were living outside the region in the taxation year 2003. In other words, over the 15-year period, the region retained about 57 percent of immigrants who were destined there. Following our previous (census-based) results, immigrant retention rates declined in the later part of the15-year period.

Table A8 data also reveal that refugees had the highest out-migration rate while the family class immigrants were the least likely to leave the region. The out-migration rate among economic class immigrants was 45 percent.

In recent years, Atlantic Canadian provinces have begun to adopt new initiatives to increase their immigrant retention rates. For example, in its immigration strategy,

Nova Scotia has a stated objective of raising its retention rate to 70 percent by 2010. The province of Newfoundland and Labrador has also stated the objective of increasing its immigrant retention rate in its recently announced immigration strategy. To pursue this objective, all provinces now actively provide, among other things, job counselling, help in settlement, and English language training to new immigrants. Some services are provided through immigrant settlement agencies, which receive funding from federal and provincial governments. The need to create more welcoming communities to attract more immigrants to the region is also emphasized in public circles. When data are available, retention rates based on the 2006 census will help shed some light on the impact of these initiatives.

IX. IMMIGRANTS' CONTRIBUTION TO POPULATION GROWTH

Despite the small number of immigrants the Atlantic region receives and retains, immigration has been an important source of its population growth, although not as much as nationally. This is revealed in Table 2, which presents the growth of regional population with and without immigration. During the period 1996-2001, the region's population declined, but it would have been a much greater decline had there been no immigration. The contribution of immigration in the Atlantic region's population growth is attributed mainly to the decline in its natural growth rate, which was discussed in a previous section.

The findings of this section clearly indicate the need to attract more immigrants to the region to avert a population decline.

Table 2: Atlantic Population Net Growth Rate and Contribution of Recent Immigrants to the Growth of the Provincial Population

Period	1981-1986	1986-1991	1991-1996	1996-2001
End of period population	2,255,060	2,299,480	2,309,610	2,258,750
Population change	40,920	44,420	10,130	-50,860
Change without immigration (1)	31,720	34,220	-875	-60,800
Recent immigrants (2)	9,200	10,200	11,005	9,940
Contribution of immigration to population growth [(2/1)×100] (%)	29.0	29.8	1257.7*	16.3*

Sources and notes:
1) For end of year population, Statistics Canada Catalogue number 97F0009XCB2001001.
2)For recent immigrant data a) in 2001 census: Statistics Canada Catalogue number 97F0009XCB-2001004,
b) in the 1996 census: Statistics Canada Catalogue number 93F0023XDB96003,
c) in the 1991 census: Citizenship & Immigration Canada Recent Immigrants in the Halifax Metropolitan Area (Selected charts) 1991 census (October 2002).
d) in the 1986 census: Census 1986 PUMF-microdata, individual file, variable used: Year of immigration and immigrant status indicator.
3) Recent immigrants include those who arrived within five years prior to the census date.
4) PUMF data are not adjusted for undercoverage. Statistics Canada advises that trends exhibited in adjusted and unadjusted data are identical.
*Measures percentage of population decline averted by new immigrants. Absolute value of (1) is used in the denominator.

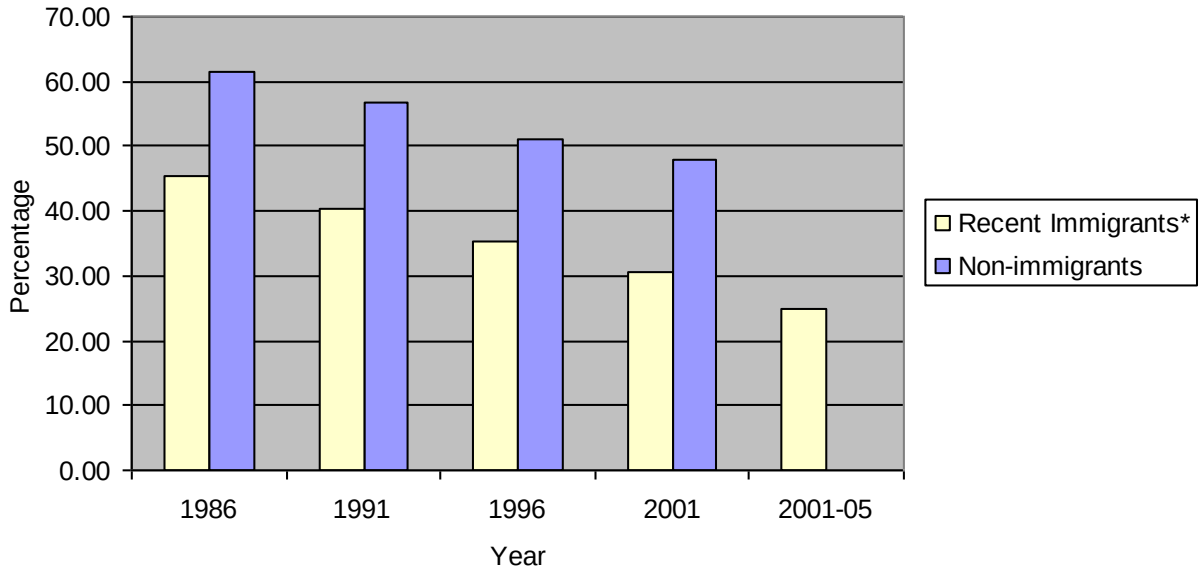
X. EDUCATION LEVELS AMONG RECENT IMMIGRANTS

Education is an important predictor of economic success. Research has shown that individuals with higher education levels generally experience lower unemployment rates and earn higher levels of income than do those with lower education levels.

With the introduction of the "point system" in 1967, education has become one of the key requirements for the success of an immigrant's application filed under the economic class. As a result, educational levels among annual immigrant inflows to Canada have risen. Based on Charts 11 and 12, clearly education levels among immigrant arrivals in Atlantic Canada have also been rising.

Chart 11 shows declining percentages among immigrants who arrived with only a high school or lower level of education. The same trend is observed among non-immigrants. However, throughout the period, lower percentages of new arrivals had only high school or lower education than did non-immigrants.

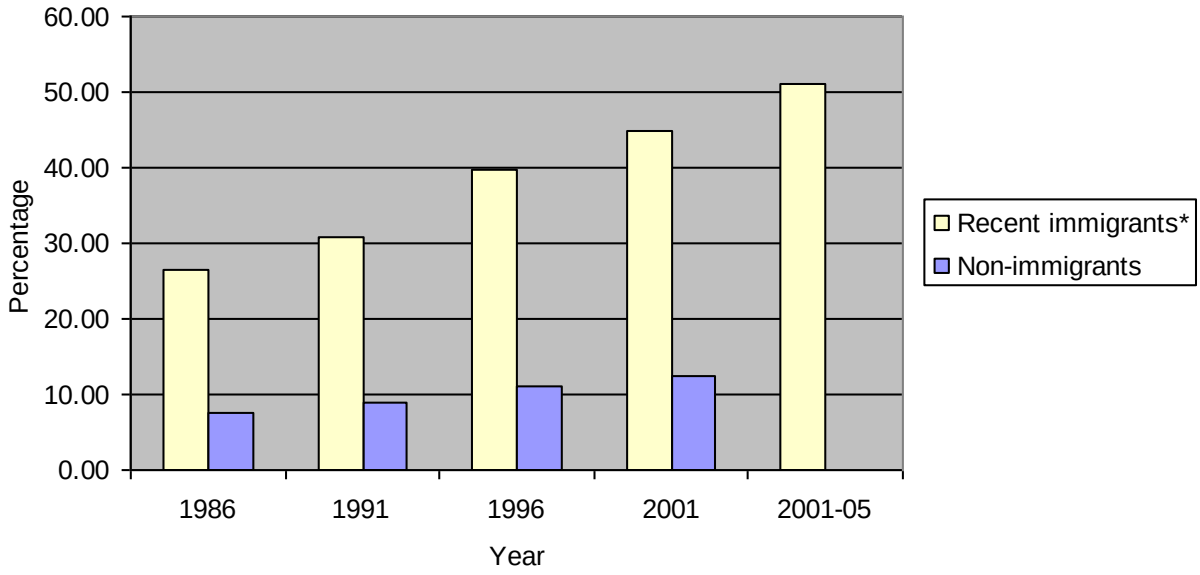
Chart 11
Immigrants Destined for Atlantic Canada and Non-immigrants with High School or Less Education, 1986-2005



*Those who arrived within five years of the census year.
Source: Table A10.

On the other hand, Chart 12 shows a sharp increase in the percentages of university degree holders among new immigrant arrivals. Although a similar trend is observed for non-immigrants, their percentages have risen slowly and have been below those of recent arrivals throughout the period.

Chart 12
Immigrants Destined for Atlantic Canada and Non-immigrants with a University Degree, 1986-2005

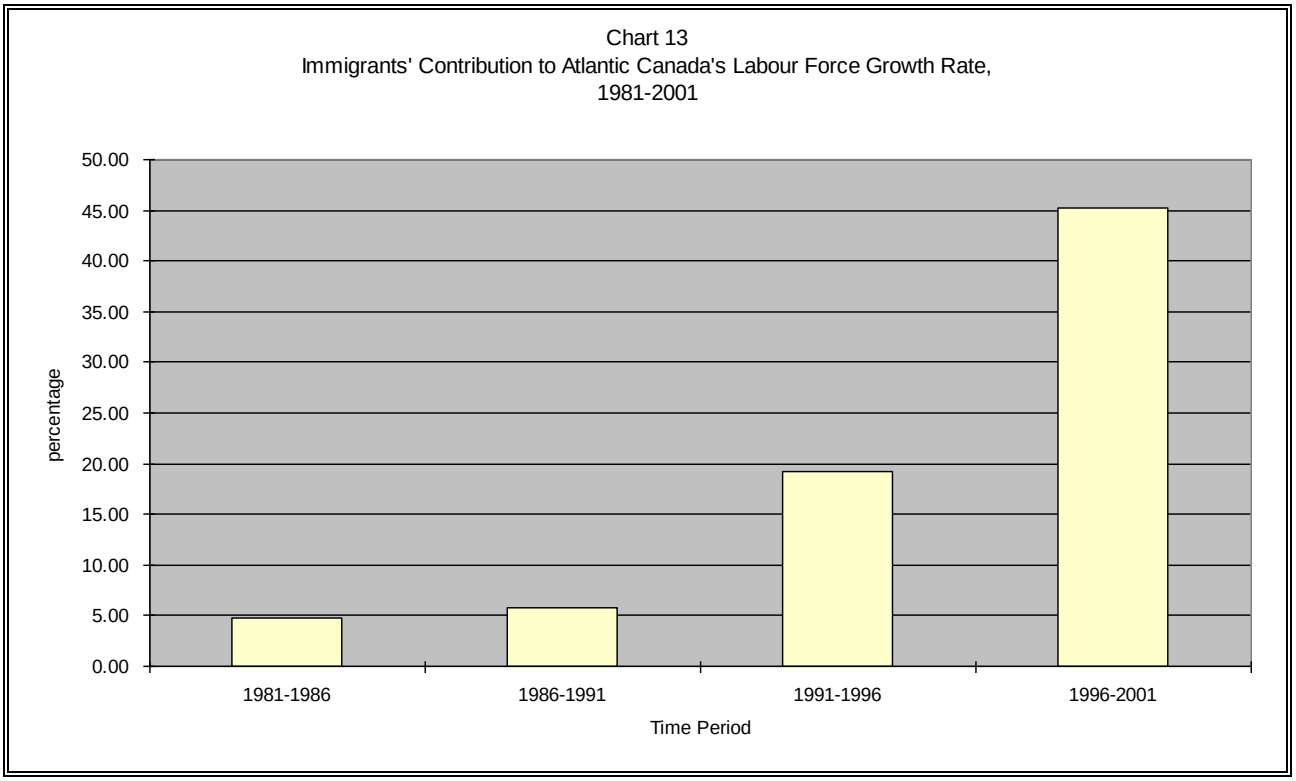


*Those who arrived within five years of the census year.
Source: Table A10.

Higher education levels among new immigrant arrivals can predict their labour market success only if their educational credentials are recognized in Canadian labour markets. Studies conducted at Statistics Canada have shown that many new immigrant arrivals in Canada face difficulty finding employment because their foreign educational credentials are not recognized in labour markets. As a result, the labour market performance of new arrivals may be adversely affected, making it necessary to analyze data on the labour market performance of recent immigrants. We do this analysis for immigrants in Atlantic Canada in the next section. We also analyze immigrants' contribution to labour force growth.

XI. IMMIGRANTS IN THE LABOUR FORCE OF ATLANTIC CANADA

Declining population growth in Atlantic Canada has also increased the role of immigration in the growth of its labour force. As Chart 13 shows, labour force participation of new immigrants caused the Atlantic labour force to grow by only about 5 percent in the early 1980s. During 1996-2001, however, new immigrants increased the labour force in this region by about 45 percent, almost nine times their earlier contribution. However, the composition of immigrants in the total labour force declined between 1981 and 2001 from 4.5 to 3.6 percent, while it increased nationally from 19 to 20 percent (data not shown here). These results imply slower growth in the non-immigrant labour force in recent years.



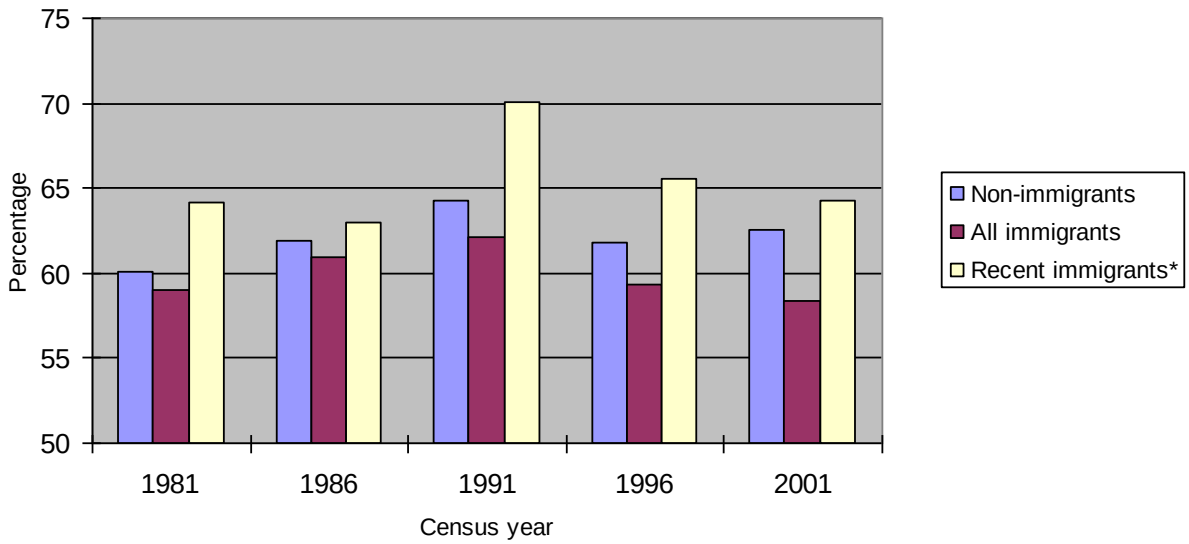
Source: Table A11.

As discussed in a previous section, at the time of arrival, immigrants are generally younger than the resident population. Most new immigrants are in the working age who either have a job offer prior to arrival or become a member of the labour force by looking for a job immediately after arrival, thereby increasing the region's labour force. Chart 14 (which provides data for the year prior to a census year) confirms a higher labour force participation rate among recent immigrants (those who arrived within five years of the corresponding census year) than among resident non-immigrants throughout the period 1981-2001. However, participation rates among recent immigrants declined substantially between 1991 and 1996 (from 70 percent to 66 percent) and then again between 1996 and 2001 (down to 64 percent). One reason may be that a large number of the immigrants during the1991-95 period arrived towards the end of that period (mostly in 1995) and thereafter. By the 1996 census, these newcomers were still adjusting to the labour market in Atlantic Canada. The decline in participation rates between 1996 and

2001 may be because most such immigrants arrived from the Middle East and tend to have large families (as discussed earlier) that may have youth members who, instead of entering the labour force, enrolled in post-secondary educational institutions. There is some evidence, based on the author's observations in Halifax, that 1) the enrolment of immigrant students who came from the Middle East increased in Nova Scotian universities during 1996-2001, and 2) in many Middle Eastern families, the family head may have returned to the country of origin for employment. A more formal research study should investigate these possibilities.

Chart 14 also shows that the labour force participation rate among the entire immigrant population was 4 percent lower, on average, than that among non-immigrants in 2001.

Chart 14
Labour Force Participation Rates among Immigrants and Non-immigrants in Atlantic Canada, 1981-2001



*Those who arrived within the past five years of the census date. Labour force activity data are reported for the year prior to the census year.
Source: Table A12.

Most immigrants in Atlantic Canada arrived before 1996, and the composition of the retirement-aged population (those over 65) is higher among them.

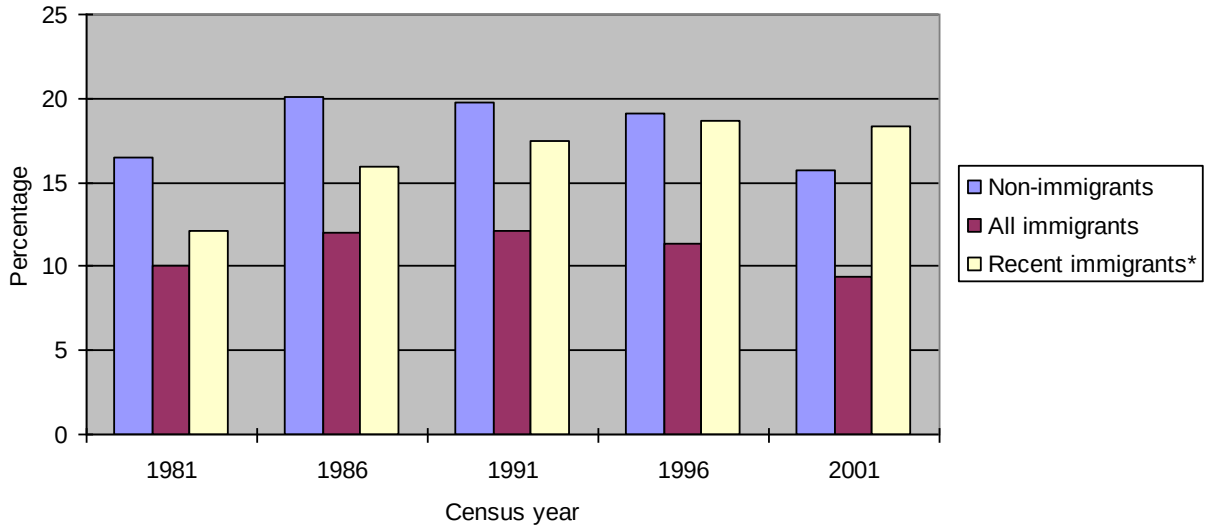
Unemployment rates among immigrants and non-immigrants are shown in Chart 15 for the period 1981-2001. This chart indicates that once they are in the labour force, immigrants do better overall in terms of finding a job than do non-immigrants. The unemployment rates are consistently lower among immigrants and have fallen since 1991, as have these rates among non-immigrants.

Recent immigrants, however, are experiencing higher unemployment rates than

their counterparts reported in previous censuses. In 1981 and 1986, unemployment rates among recent immigrants were 4 percent lower than among non-immigrants. However, the gap narrowed over time, and in 2001, unemployment among recent immigrants was 2.5 percentage points higher than among non-immigrants.

That unemployment rates fell among both immigrant and non-immigrant populations towards the end of the 1981-2001 period indicates that the higher rates among recent immigrants in the 2001 census cannot be attributed only to the prevailing economic conditions of the region at that time. Possibilities of employment barriers faced by recent immigrants due to their lack of knowledge of official languages (English or French), lack of credential recognition, or possible employer discrimination should be investigated in a more formal research study.

Chart 15
Unemployment Rates among Immigrants and Non-immigrants in Atlantic Canada, 1981-2001



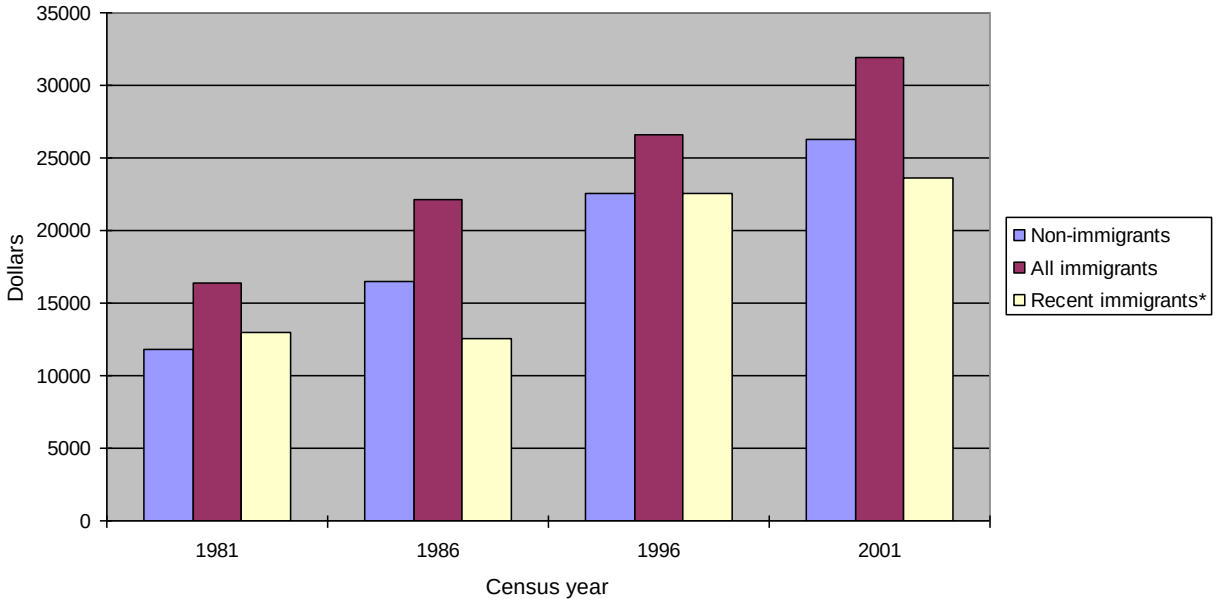
*Those who arrived within the past five years of census date. Labour force activity data are reported for the year prior to the census year.
Source: Table A12.

Chart 16 compares the labour market earnings of an average immigrant and average recent immigrant with those of an average non-immigrant in the year prior to each census year. Actual dollar amounts are not comparable over time because they may be affected by inflation. Instead, it is more meaningful to analyze the earning gap between groups within a given census year and also the changes in this gap between census years.

An average employed immigrant in the region had higher earnings than an average employed non-immigrant throughout the 1981-2001 period. However, the earnings of a recent average immigrant, relative to those of a non-immigrant, have fluctuated over the period. In short, a recent immigrant in 1981 earned 10 percent more

than an average non-immigrant in Atlantic Canada, but earned 10 percent less than a non-immigrant in 2001.

Chart 16
Employment Incomes of Immigrants and Non-immigrants in Atlantic Canada, 1981-2001



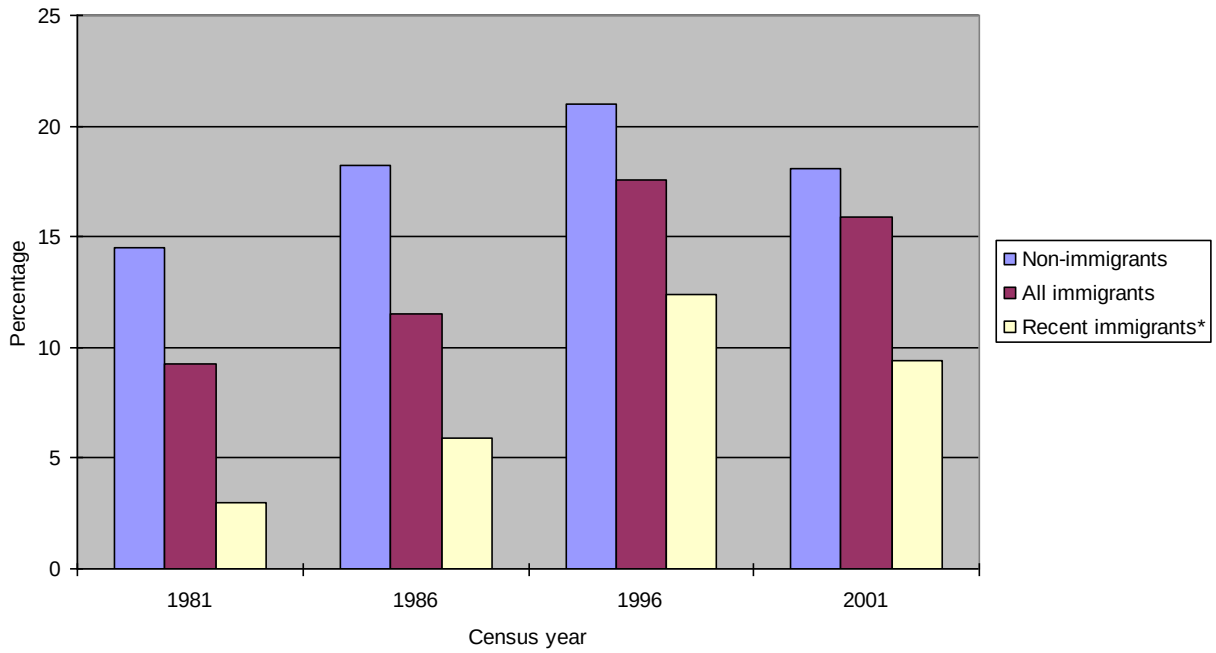
*Those who arrived within five years of the census year. Data on recent immigrants in the 1991 census were not available in the census PUMF for Atlantic provinces. Labour force activity data are reported for the year prior to the census year.
Source: Table A12.

A common public misperception about the economic impact of immigrants is that they tend to rely more on government transfers, such as public assistance income, employment insurance benefits, welfare payments, and old age security income. Rather, the fact that immigrants have higher employment incomes suggests that their reliance on government transfer payments would be lower, as confirmed in Chart 17. In fact, immigrants, overall, as well as recent immigrants, received lower percentages of total incomes as government transfers than did non-immigrants throughout the period.

A large component of government transfer incomes is age related. For example, income received in the form of Old Age Security and Canada / Quebec Pension Plan income is available only to those over 65. Since immigrants are young at the time of arrival, they do not become eligible for such transfer incomes for a long time after arrival into Canada. Another component of government transfer payments is employment insurance income, which 1) is available only to those who have worked for a certain number of weeks in Canada, 2) supplements the income of the unemployed who contributed to the program while employed, and 3) is determined on the basis of the contribution made by the recipient when he / she was employed and his/her employer.

As recent immigrants may not have accumulated sufficient work experience in Canada and may not have contributed enough into the program, many may not be eligible to receive employment insurance.

Chart 17
Percentage of Total Income Received as Government Transfers by Immigrants and Non-immigrants in Atlantic Canada,1981-2001



*Those who arrived within five years of the census year. Data on recent immigrants in the 1991 census were not available in the census PUMF for the Atlantic provinces. All income data are reported for the year prior to each census year.
Source: Table A12.

XII. SKILLED AND BUSINESS IMMIGRANTS IN THE ATLANTIC ECONOMY

Skilled workers and business immigrants make up the so-called "economic" immigrant class. CIC defines the skilled worker class of immigrants as "people who may become permanent residents because they are able to become economically established in Canada." (www.cic.gc.ca)

"Business immigrants are people who can invest in, or start businesses in Canada and are expected to support the development of a strong and prosperous Canadian economy. The Business Immigration Programs seek to attract to Canada people experienced in business. Business immigrants are selected based on their ability to become economically established in Canada." (www.cic.gc.ca)

CIC also divides business immigrants into three classes: investor, entrepreneur, and self employed. Investors are experienced persons who must demonstrate business experience, have a minimum net worth of $800,000, and make an investment of

$400,000. Entrepreneurs are experienced persons who will own and actively manage a business in Canada that will contribute to the economy and create jobs. Entrepreneurs must have business experience and a minimum net worth of $300,000 and are subject to conditions on arrival in Canada that include creation of at least one job for original Canadians. Finally, the self employed must have the intention and ability to create their own employment by operating a business or a farm in Canada. They are also expected to contribute to the cultural or athletic life of Canada.

Immigration policy falls under federal jurisdiction. While each Atlantic province abides by national objectives that allow immigration on humanitarian grounds for refugees and others for family re-unification, the main need is to foster economic immigration suited to the long-term needs of each province. Provinces can and do work out special agreements with the federal government to promote immigration perceived to be in their interest. For example, Quebec has had such an arrangement for many years. Smaller provinces such as Saskatchewan, Manitoba, and all four Atlantic provinces have begun engaging in such initiatives since the late 1990s. The PNP reflects this new thinking of enhancing the positive impact of immigration in each province.

Since economic immigration is likely to be central to policy in the Atlantic region, it is important to examine it in detail. Therefore, this section analyzes data from a number of sources to shed light on the various dimensions of economic immigration to Atlantic Canada. Our discussion will be divided into two parts – one dealing with skilled workers and the other with business immigrants.

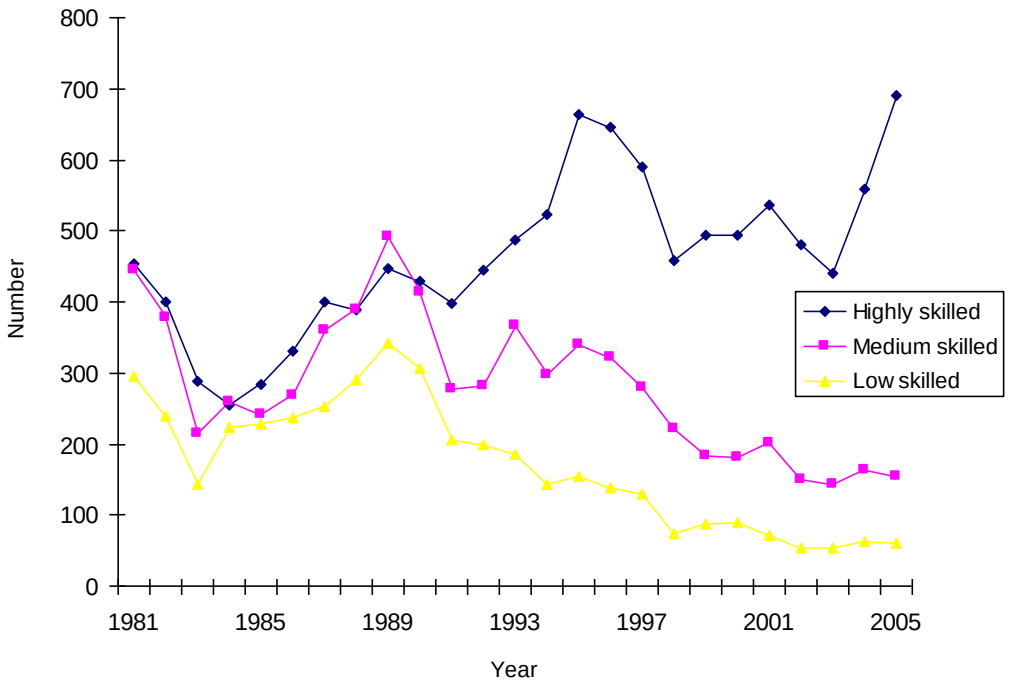
While PRDS provides data on the arrival of immigrants under the skilled and business classes, no direct data are available on the economic performance of those who arrived under these classes to compare with data on non-immigrants as a reference group. However, the economic performance of immigrants who practiced different occupations in Canada can be assessed using information from censuses. Since the present part of this study focuses on those immigrants who are able to establish themselves economically in Canada, census data are analyzed only for those who worked as professionals and managers. The occupational matrix (Table A19) prepared by Human Resources and Social Development Canada (HRSDC) lists these two occupations (“O” and “A”) among the top in terms of educational and skill requirements. Finally, to assess the performance of immigrants in the business sector, data are analyzed for those who declared themselves “self-employed” on the census questionnaire.

XII.1 Immigration of Highly Skilled Workers to Atlantic Canada

Chart 18 shows the trends of three occupational groups of immigrants destined for Atlantic labour force. These include “highly skilled”, “medium skilled”, and “low skilled” immigrants. Their groupings are based on the occupational classifications used by HRSD (see Table A19). Throughout the period 1981-2005, highly skilled immigrants (i.e., groups “O and “A”, managers and professionals), comprised a significant proportion of those destined for the labour force of Atlantic Canada. Since the early 1990s, their levels have exceeded those of medium- and low-skilled immigrants. However, their numbers declined between 1994 and 2002 but have risen since then.

Chart 18

Immigrants Destined for Atlantic Canada's Labour Force by Skill Classifications[1], 1981-2005



[1]National Occupational Classifications (NOC) were further classified as Highly skilled = "O" and "A"; medium skilled = "B", low skilled = "C" and "D". Detailed definitions of NOC are provided in Table A20.
Source: Table A13.

Table 3 captures the 1990s trend of highly skilled immigrant inflows by providing the distribution of one sub-group of resident highly skilled immigrants, i.e., professionals, across the 1991, 1996 and 2001 census years in selected occupations. The numbers of non-immigrant professionals are also provided for comparison. These data are based on a 20 percent sample of individuals, as noted at the bottom of that table. Statistics Canada cautions that some numbers in Table 3 may not be accurate due to some miscoding of occupations; however, the data do permit general comparisons between immigrants and non-immigrants and also between these groups and recent immigrants.

Overall, immigrants constitute a significant proportion of the selected professionals in Atlantic Canada whose data are reported in Table 3. However, due to declining immigrant inflows, the number of non-immigrant professionals grew at a faster rate during 1991-2001, with the strongest growth coming in the latter half of that period.

The dramatic difference between immigrant and non-immigrant groups is reflected in the sub-categories within the professions. For instance, during 1996-2001, the growth in the number of non-immigrant professionals was quite broadly based, with solid growth among those in the categories of computers and information systems (132

percent), business and finance (70 percent), health professionals other than nurses (57 percent), physicians, veterinarians, and dentists (28 percent), and professionals in arts, culture, recreation and sports (28 percent) leading the way. As Table 3 shows, all other categories grew with the exception of teachers and professors, which fell almost 9 percent.

In contrast to the above, the growth of immigrant professionals took place only in five broad occupations: computer & information systems (92 percent), business and finance (59 percent), judges and lawyers (54 percent), auditors, accountants and other investment professionals (31 percent), and health professionals other than nurses (22 percent). Numbers of all other immigrant professionals living in Atlantic Canada went down between 1991 and 2001.

XII.1.1 Where immigrant managers and professionals work

Table 4 depicts the distribution of managers (subdivided into two subgroups) and professionals by industry of employment in Atlantic Canada in 2001. These immigrants may or may not have entered the Atlantic provinces as skilled immigrants so may or may not be included in Chart 9. However, their current occupations are described as highly skilled occupations as they conform to the HRSD definitions. Several facts emerge from this table. First, immigrant professionals and managers are overwhelmingly engaged in the service sector, accounting for about 83 percent of all highly skilled immigrant worker employment. Public administration, manufacturing, and agriculture, mining and utilities, respectively, account for about 9.3 percent, 3.1 percent and 2.1 percent of all such workers. The most important employer of highly skilled immigrants is the education sub-sector, which employed a solid 24.3 percent in 2001. Professionals constitute the largest sub-group, about 68.5 percent, among the highly skilled immigrants. Middle and other managers account for about 27 percent, with senior managers making up the rest (4.5 percent). Each sub-group of highly skilled immigrants is concentrated mainly in the service industries. Thus, about 87.3 percent of professionals, almost 78.6 percent of middle and other managers, and 56.5 percent of senior managers work in the service sector.

The second most important industry that employs highly skilled immigrants is public administration (26 percent for senior managers, about 10 percent for middle managers and about 8 percent for professionals). The primary sector (agriculture, mining and utilities), construction and manufacturing account for the remaining employment among the highly skilled.

Table 3: Professionals in Atlantic Canada by Selected Occupations: Immigrants and Non-immigrants, 1991-2001 Censuses

	Census Year		
PROFESSIONALS BY OCCUPATIONS	**1991**	**1996**	**2001**
Business and Finance			
Auditors, accountants & other investment professionals			
Non-immigrants	6610	7170	11395
Immigrants	370	370	485
Recent immigrants	10	10	40
Other professionals in business and finance*			
Non-immigrants	1865	2275	2985
Immigrants	90	125	245
Recent immigrants	5	0	10
Natural and Applied Science and Related			
Engineers			
Non-immigrants	6465	5960	6520
Immigrants	970	640	870
Recent immigrants	135	110	100
Computer & information systems			
Non-immigrants	6315	6870	14675
Immigrants	540	650	1065
Recent immigrants	85	100	200
Other scientists*			
Non-immigrants	3815	3860	4375
Immigrants	610	445	585
Recent immigrants	80	25	85
Health Professionals*			
Physicians, dentists, and veterinarians			
Non-immigrants	3185	3660	4080
Immigrants	1455	1290	1420
Recent immigrants	295	220	145
Other health professionals*			
Non-immigrants	3165	3900	4980
Immigrants	295	355	360
Recent immigrants	25	55	20

Contd…

Contd Table 3

Social Science, Education, Government Services & Religion*			
Judges, lawyers, Quebec notaries			
Non-immigrants	2665	2910	3155
Immigrants	140	175	215
Recent immigrants	20	0	10
Teachers and professors			
Non-immigrants	40490	40080	37525
Immigrants	3795	3765	3485
Recent immigrants	255	385	240
Other professionals in social science, education, government services and religion*			
Non-immigrants	21105	22350	24440
Immigrants	1445	1540	1445
Recent immigrants	130	150	140
Arts, Culture, Recreation, and Sports			
Musicians and singers			
Non-immigrants	1210	1575	1495
Immigrants	215	170	170
Recent immigrants	45	25	25
Other professionals in art and culture*			
Non-immigrants	5340	5905	6870
Immigrants	775	805	750
Recent immigrants	100	35	75

*Computed total of all other professionals. **Excludes nurse supervisors and registered nurses.
Source: "Occupation - 1991 Standard Occupational Classification (Historical) (707B), Selected Labour Force, Demographic, Cultural, Educational and Income Characteristics (252) and Sex (3) for Population 15 Years and Over, for Canada, Provinces, Territories and Census Metropolitan Areas 1, 1991 to 2001 Censuses - 20% Sample Data". Statistics Canada. Catalogue number 97F0012XCB2001048.

Table 4: Immigrant Managers and Professionals in Atlantic Canada by Industry of Employment, 2001

Industry	Managers				Professionals	
	Senior		Middle & Other		No.	%
	No.	%	No.	%		
Agriculture, Mining and Utilities	37	4.4	148	2.9	222	1.7
Construction	0	0.0	185	3.6	147	1.1
Manufacturing	111	13.1	222	4.3	260	2.0
Services :	480	56.5	4061	78.6	11419	87.3
Wholesale & Retail	110	12.9	1071	20.7	222	1.7
Transportation, Warehousing, Information & Culture	0	0.0	147	2.8	480	3.7
Finance & Insurance	74	8.7	111	2.1	111	0.8
Real Estate, Rental & Leasing	0	0.0	147	2.8	0	0.0
Professional, Scientific, & Technical	74	8.7	296	5.7	1774	13.6
Admn. Support, Waste Management & Remediation	73	8.6	258	5.0	147	1.1
Education	37	4.4	333	6.4	4283	32.7
Health Care & Social Assistance	0	0.0	148	2.9	3294	25.2
Arts, Entertainment & Recreation	0	0.0	148	2.9	518	4.0
Accommodation & Food Services	0	0.0	1181	22.8	0	0.0
Other (excluding Public Administration)	112	13.2	221	4.3	590	4.5
Public Administration	222	26.1	516	10.0	1034	7.9
Other (not specified)	0	0.0	37	0.7	0	0.0
TOTAL	850	100.0	5169	100.0	13082	100.0

Source: Special tabulations based on the Canadian population census, 2001 (PUMF, individual file). Variables used: "Immigrant Status Indicator", "Occupation – Employment Equity Designations – Based On The National Occupational Classification", and "Industry – Based on the 1997 North American Industry Classification System [Naics]".

Within the service sector, highly skilled immigrants are concentrated in two or three sub-sectors. For instance, almost 66 percent of the professionals working in the industry are engaged in the education, health care, and social assistance sub-sectors, while 69 percent of all senior managers in services are employed in the wholesale and retail trade; finance and insurance; professional, scientific and technical; and administrative support, waste management and remediation sub-sectors. About 55 percent of middle and other managers work in the wholesale and retail trade, as well as in accommodation and food services. The remaining middle and other managers are somewhat more evenly distributed across other service industries. The presence of immigrant scientists and technicians is also highlighted in Table 3 (Natural and Applied Science and Related).

XII.1.2 Employment income, unemployment rates and country of origin of highly skilled immigrants

Table 5 shows that an average immigrant manager earned about 8 percent less, while an average immigrant professional earned 16 percent more, than the corresponding non-immigrants in 2001. Senior managers earned about the same as their non-immigrant counterparts, but the middle and senior managers earned less. Unemployment rates were higher among immigrant managers but lower among immigrant professionals than among their non-immigrant counterparts.

Table 5 also shows that the United States and the United Kingdom are the primary source countries of highly skilled immigrants, accounting for 61 percent of senior managers, 53 percent of middle level and other managers, and 57 percent of professionals. The second largest source region is Asia, where about 17 percent of senior managers and 16 percent of middle level managers and professionals originated.

Table 5: Managers and Professionals in Atlantic Canada by Employment Income, Unemployment Rate, and Country/Region of Birth, 2001

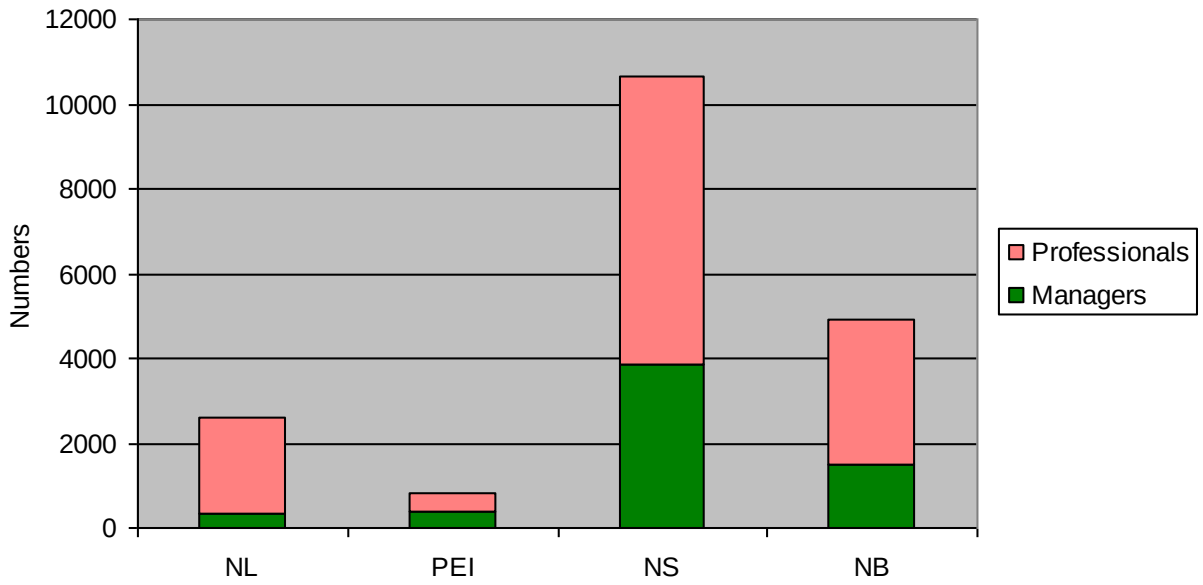
	Senior Managers	Other Managers	All Managers	Professionals
Employment income ($)				
Immigrants	57238	34583	38097	46076
Non-immigrants	58692	38889	41251	39665
Unemployment rate (%)				
Immigrants	17.0	7.0	6.7	3.7
Non-immigrants	1.7	4.0	3.7	4.0
Immigrants' country/region of birth				
United States	185	1111	1296	3620
United Kingdom	333	1624	1957	3766
Germany	37	297	334	407
Netherlands	37	221	258	480
Other Europe	111	663	774	1551
Asia	147	848	996	2072
Other countries/regions	0	406	406	1073
Total immigrants	850	5170	6021	12969
Non-immigrants	11422	88372	99794	147864

Source & notes: Special tabulations based on the Canadian population census (PUMF, 2001, individual file). Mean employment income is calculated only for those who were employed in the reference week and includes wages and salaries and self-employment incomes. The unemployment rate is calculated as the percentage of the labour force that is unemployed. Total immigrants and non-immigrants include employed, unemployed, and not in the labour force. Variables used: “Province or territory”, Place of birth”, “Immigrant status indicator”, "Labour Force Activity – In Reference Week", "Occupation – Employment Equity Designations – Based on the National Occupational Classification", "Wages and Salaries", "Self-Employment Income".

XII.1.3 Provincial distribution of highly skilled immigrants

Most highly skilled immigrants in Atlantic Canada live in Nova Scotia (Chart 19), more than twice as many as in New Brunswick. Relative to managers, the number of professionals living in Newfoundland and Labrador is the highest in the region, while Prince Edward Island has an even distribution of managers and professionals.

Chart 19
Provincial Distribution of Highly Skilled Immigrants in Atlantic Canada, 2001

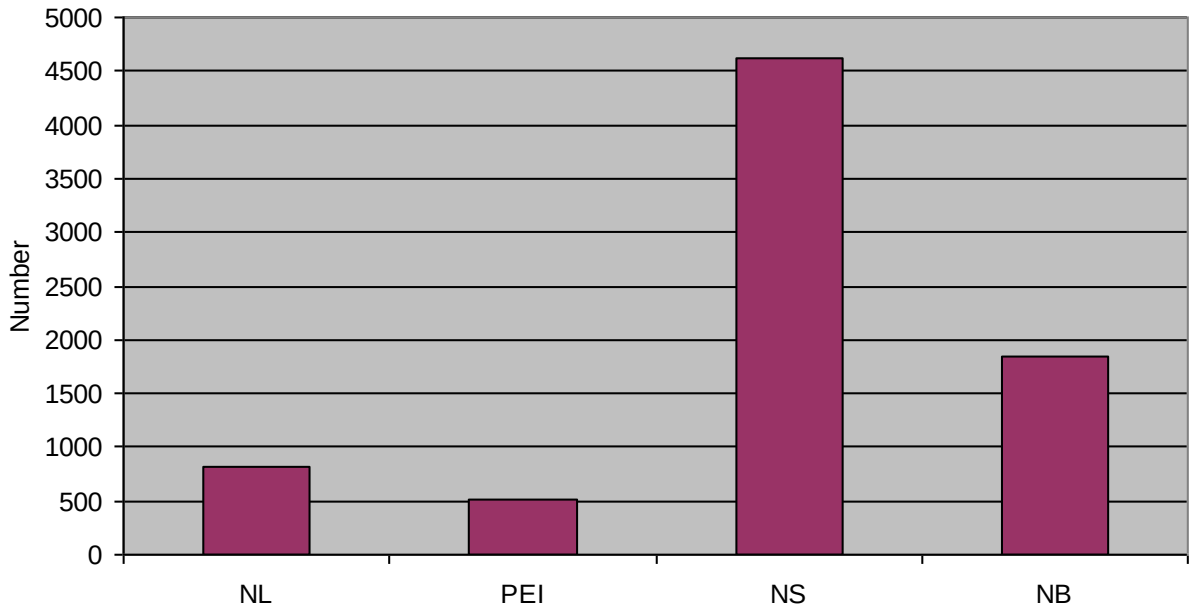


Source: A14.

XII.2 Business Immigration

As noted earlier in Section II, business immigration to Atlantic Canada has shown dramatic shifts over the 1981-2005 interval. Data on their performance are not directly available. However, census micro data permit the analysis of the performance of self-employed immigrants, some of whom may not have arrived in Canada as business immigrants. The self-employed reported under the census terminology are those who were actually running their own business, incorporated or unincorporated, at the time of the census. Since the purpose of this section is to review the contribution of resident immigrants to Atlantic Canada's business sector, census data on the performance of self-employed immigrants are appropriate for analysis.

Chart 20
Distribution of Immigrant Businesspersons in Atlantic Canada, 2001



Source: A15.

As Chart 20 shows, most business immigrants live in Nova Scotia, probably due to its larger population; therefore, the province provides for better infrastructure and closer markets for establishing a business.

About 54 percent of immigrant businesspersons originated in the English-speaking countries of the United States and United Kingdom, and only about 15 percent came from Asia (Table 6), possibly because immigration to the region from Asia has increased only recently since the mid-1990s.

Table 6: Immigrant Businesspersons in Atlantic Canada by Source Country / Region, 2001	
Country / Region	Number
United States	2069
United Kingdom	2396
Germany	554
Netherlands	590
Other Europe	884
Asia	1255
Other	553
Total	8301

Source: Special tabulations based on the Canadian population census (PUMF, 2001, individual file). Variables used: “Province or territory”, Immigrant status indicator”, “Class of worker”, “Place of birth.”

Most business immigrants are concentrated in health and social services, business services, and retail trade (Table 7).

Table 7: Immigrant Businesspersons by Industry in Atlantic Canada, 2001	
Industry	Number
Agriculture	590
Other Primary	222
Manufacturing	369
Construction	295
Transportation & Storage	184
Communication & Other Utilities	37
Wholesale Trade	74
Retail Trade	812
Finance, Insurance, & Real Estate	405
Business Services	1364
Educational Services	222
Health & Social Services	1477
Accommodation, Food & Beverage Services	628
Other Services	1622
Total	8302

Source & notes: Special tabulations based on the Canadian population census (PUMF, 2001, individual file). Variables used: “Province or territory”, “Immigrant status indicator”, “Class of worker”, “Industry-based on the 1980 Standard Industrial Classification.” Data are reported for those who reported as being self-employed in 2000.

XII.2.1 Entrepreneur investment in Atlantic Canada by industry

An important category under business immigration is the entrepreneur. CIC defines entrepreneurs as "experienced persons that will own and actively manage businesses in Canada that will contribute to the economy and create jobs. Entrepreneurs must demonstrate business experience, a minimum net worth of CDN $300,000 and are subject to conditions upon arrival in Canada." The previous section viewed all self-employed individuals as business immigrants. Therefore, given CIC's definition of an entrepreneur, the self-employed in the census data could also include some entrepreneurs who manage their own business. However, since entrepreneurial immigrants are also required to present evidence of compliance with certain conditions established by the province, some industry-level data are available for the period 1995-2005 on the amounts of their investment. These data were obtained from CIC through special request and are presented in Table 8. Over the ten-year period ending 2005, immigrant entrepreneurs invested about $40 million in the economy of Atlantic Canada. From this amount, about $35 million was invested in the province of Nova Scotia. One factor that stands out above all, however, is the extreme volatility of investment over time.

Investment is by nature volatile, but in this case, the substantial fluctuations also likely reflect the small number of entrepreneurs, so small changes in their number can bring about large swings in investment. In light of this volatility, much caution is needed in drawing conclusions. However, what seems reasonably clear is that immigrant entrepreneurs invest predominantly in the service industry, although amounts fluctuate yearly.

In conclusion, immigrants who run businesses appear to be small investors who put their resources primarily in services, rather than manufacturing, but the amounts invested by incoming immigrant entrepreneurs show a great deal of volatility over time. Most business enterprises owned by immigrants tend to be unincorporated, which is consistent with the nature and types of their businesses.

Table 8: Entrepreneur Program, Dollars Invested by Industry, Atlantic Canada, 1995-2005											
	1995	1996	1997	1998	1999	2000	2001	2002	2003	2004	2005
Agriculture, Fishing & Trapping, Forestry	575,000	898,000			222,000			70900			1,000,000
Manufacturing	125,000	150,000	333,000		95,000	362,000	21,000	570,269	540,000	95,961	200,000
Service	1,923,445	5,210,322	1,145,000	30,000	432,000	8,028,550	3,293,800	10,395,239	1,633,280	443,308	1,298,827
Communication & Other Utilities						380,000	40,000				120,000
Total	2,623,445	6,258,322	1,478,000	30,000	749,000	8,770,550	3,354,800	11,036,408	2,173,280	539,269	2,618,827

Source: CIC data warehouse extraction.

The Immigrant Investor Program

There has been some form of Immigrant Investor Program (IIP) in Canada since 1986. IIP seeks to promote economic growth in all regions of Canada by attracting experienced business persons and new investment capital. Before 1999, each province administered its own funds, competing aggressively with other provinces for available capital. Between 1986 and 2002, the total amount of capital attracted was $8.7 billion from about 27,500 investors. Factoring in the dependents of these applicants means that IIP has attracted about 82,500 people to Canada.

IIP was modified in 1999 to tighten eligibility criteria and to bring the flow of capital into a single Canada Fund administered by the CIC. This replaced the provincially administered funds except in Quebec, which still runs its own fund independently of the Canada Fund. The other provinces can sign agreements with CIC to participate in, and receive allocations from, the Canada Fund. CIC allocates half of available funds, equally divided, to approved provincial funds. The other half is distributed according to provincial shares of gross domestic product (GDP).

Potential immigrant investors can approach, or be recruited by, financial institutions that have signed agreements with CIC to act as facilitators for the application process. These institutions are all members of the Canada Deposit Insurance Corporation. Currently, 11 institutions carry out this agency role, including most of Canada's biggest banks. Each receives a fee of $28,000 for each immigrant investor on issuance of a visa, a fee paid from the $400,000 an investor contributes to the fund.

Eligibility criteria now state that an applicant must pay $400,000 to the Receiver General of Canada, have a net worth of at least $800,000, and demonstrate the successful operation, management, and control of a business. Previous criteria were more modest, with a tier system that set required investment levels higher for the three biggest provinces. This system made it easier for smaller provinces to attract immigrant investors. Under the IIP, the amount of the principal ($400,000) is repaid to investors about five years after payment into the fund. The repayment is guaranteed by the participating province, which effectively means that the province also pays the agent's fee ($28,000) to attract the investor in the first place.

Most parts of Canada have benefited from the flow of funds under IIP since the program's inception but especially Quebec, which attracted 62% of the total capital that flowed into Canada between 1896 and 2005. In Atlantic Canada, Prince Edward Island did particularly well for its size, attracting almost 4% of the total capital flows. Nova Scotia also benefited from the program. Not all provinces have applied for participation in the re-designed fund, however; neither Nova Scotia nor New Brunswick was a participant in 2005.

After IIP was re-designed, there was a dip in capital flows to individual provinces, but these have since recovered. Prince Edward Island received $5.4 million in 2000 but $32 million in 2005. Participating provinces have considerable leeway in how they invest the funds they receive, the only constraint being that the money be used for economic development. The funds IIP raises have been used by provinces to undertake investments without placing further burdens on fiscal capacities. In Prince Edward Island, funds that began in the early 1990s have been used to invest in both public and private projects, including golf courses, resorts and other tourism infrastructure, diversified manufacturing, and commercial real estate. There is no requirement under IIP that investors actually live in the province where their capital is invested, which raises the question: Is IIP used to attract immigrants or to attract capital?

XIII. INTERNATIONAL STUDENTS IN ATLANTIC CANADA

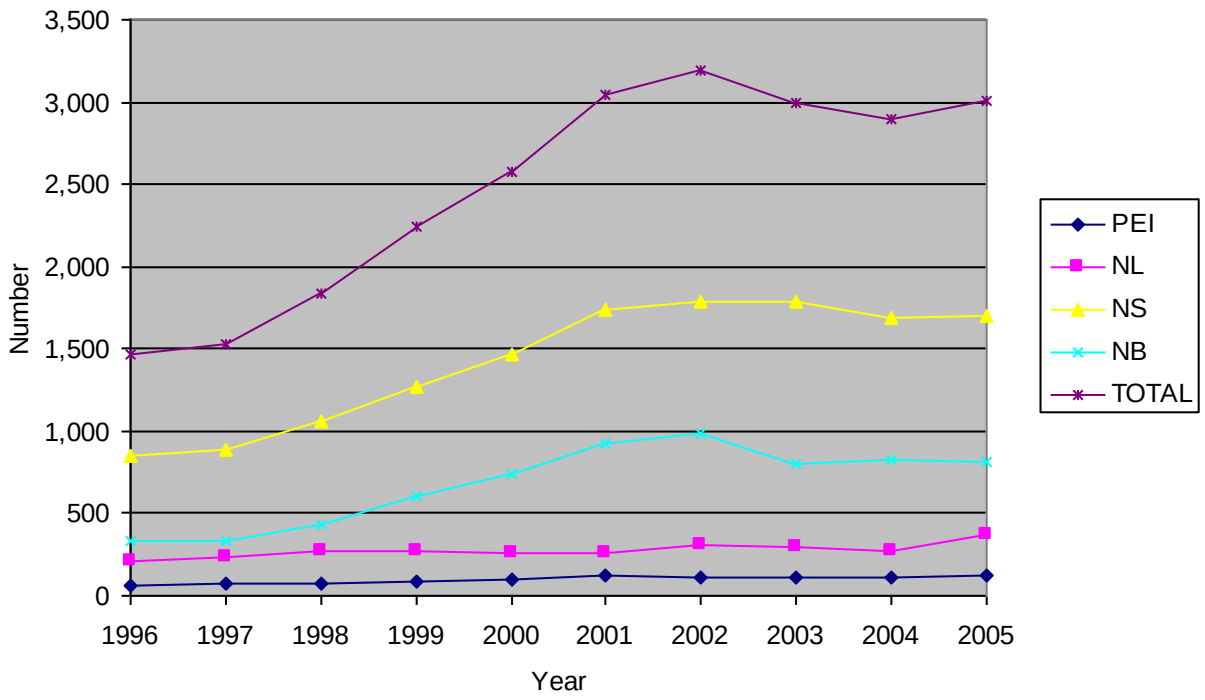
International students are viewed as potential new immigrants. “International graduates are “young, with advanced English language skills, with fully recognized qualifications, locally relevant professional training and a high degree of acculturation” (Hawthorne, L.2005. “Picking Winners: The Recent Transformation of Australia’s Skill Migration Policy.” International Migration Review, 39(2)).These characteristics are believed to facilitate integration into both the labour market and the social sphere.

On average, according to CIC, between 15 and 20 per cent of international students can be expected to eventually settle and work in Canada (data presented by Martha Justus, CIC at the 11th International Metropolis Conference in Lisbon, 4 October 2006).

Attracting international students and retaining them on graduation is one of the goals of immigration strategies adopted by provincial governments in Atlantic Canada. For example, the province of Nova Scotia recently added a component of “International Graduate Stream” to its Provincial Nominee Program that fast tracks the landing process for those international students who wish to stay in the province after finishing their studies. The immigration strategy launched by the province of Newfoundland and Labrador supports the efforts of post-secondary institutions and K-12 schools in attracting an increased number of international students. Memorial University of Newfoundland is a key partner in that strategy. The province of New Brunswick has also signed an agreement with the federal government that makes it easier for foreign graduates in New Brunswick to gain an additional year of work experience in their field of study. This change is expected to help graduates who wish to apply for permanent residence status as skilled workers by providing them with additional points on the selection grid in the area of experience.

Consistent data on the annual inflow of international students into the Atlantic provinces are available for the period 1996-2005. During this period, educational institutions in Atlantic Canada increased their share of annual inflows of international students in total Canadian inflows from 3.7 percent in 1996 to 5.2 percent in 2005. The annual share increased consistently over the period. In terms of actual numbers, annual inflows began rising at an accelerating pace even before September 11, 2001, as shown in Chart 21. During this period, national inflows of international students were also rising rapidly as the Canadian government 1) introduced expedited procedures for medical screening of international students, and 2) established Canada Education Centers in two major source countries of international students: China and Korea. The slight decline in actual inflows since 2002 is consistent with the decline in national inflows.

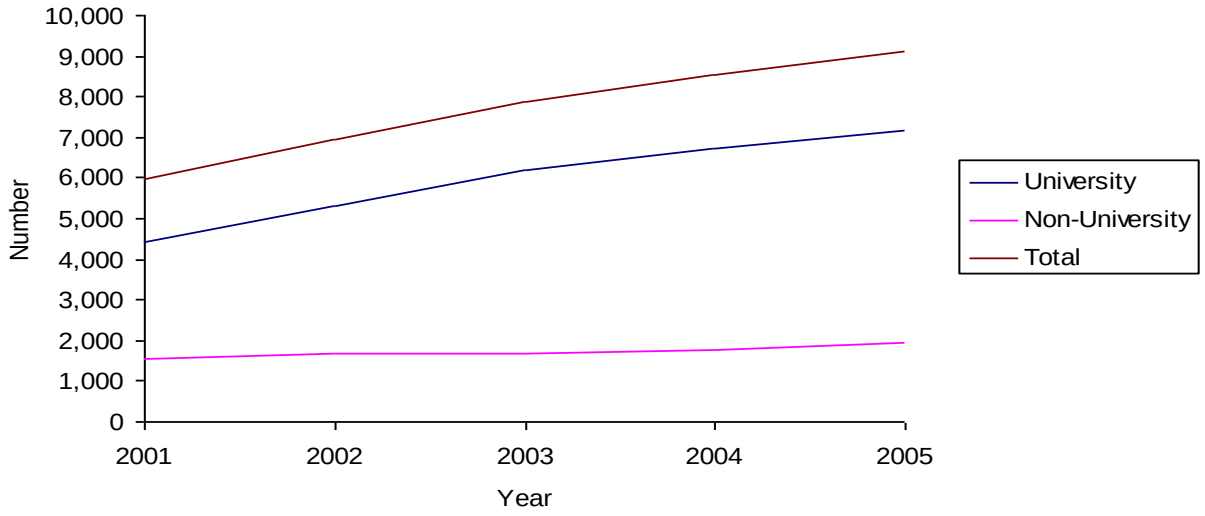
Chart 21
Inflows of International Students in Atlantic Canada, 1996-2005



Source: Table A16.

Chart 22 shows the number of international students studying in Atlantic Canada by their level of study. These data are available for all four provinces only since 2001. Most are university students whose numbers are more than four times those of non-university students, whose numbers in turn have not changed over the five-year period. The population of international students grew rapidly over the period, and while in 2001 about 5 percent of international students in Canada studying nationwide were in Atlantic Canada, by 2005, this percentage had risen to about 6 percent. That the number studying in the region in a given year is greater than their inflow means that each international student takes more than one year to finish his / her studies, which is also true nationally. On average, an international student takes about 2.7 years to finish his / her education in Canada generally and about 3 years in Atlantic Canada specifically (calculations based on Charts 21 and 22 data).

Chart 22
International Students Studying in Atlantic Canada by Level of Study, 2001-2005



Source: Table A17.

XIII.1 Source Countries of International Students

The contribution of the leading source countries to the Atlantic region's international student population differed only slightly from that to Canada as a whole in 2005 (Charts 23 and 24). A decade earlier, the US, China, Bermuda, Malaysia and Hong Kong were among the top five source countries of international students studying in Canada. The increased inflow of Korean students can be attributed to the expedited medical procedures for international students beginning in 1997 and the establishment of Canadian Education Centers in the capital cities of both China and Korea.

Chart 23
Top Five Source Countries of Foreign Students Studying in Atlantic Canada in 2005

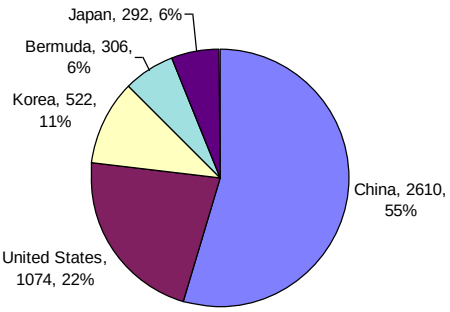
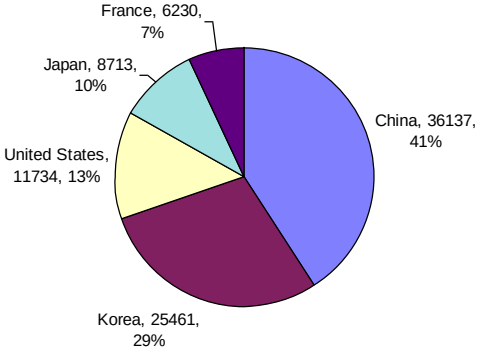


Chart 24
Top Five Source Countries of Foreign Students Studying in Canada in 2005



Source: Table A18.

International Students in Atlantic Canada
(Results of a Survey)

In 2005, more than 7,000 international students were studying in universities across Atlantic Canada, which represented 6 percent of all international students in Canada, 1 percent higher than five years ago. A survey of 135 international students studying in universities across Atlantic Canada was commissioned by ACOA in 2005. That survey revealed that about 67 percent of international students wanted to stay in Atlantic Canada after finishing their education. This result was corroborated by another survey commissioned by the Maritime Provinces Higher Education Commission (MPHEC) whose findings were recently released. The MPHEC survey found that 90 percent of graduates of Maritime universities tend to stay in the Maritime provinces. The employment rate among the graduates of 2003 was 95 percent, indicating that opportunities for the young and educated do exist in the region.

The ACOA survey also indicated that almost half of the international students cited full employment, a welcoming community, social supports, cost of living, and quality of life when considering applying for permanent residence status, factors that can be included in the international marketing efforts of Atlantic universities.

XIV. MAJOR FINDINGS AND DIRECTIONS FOR FUTURE RESEARCH

According to the initial population counts based on the 2006 Canadian census, Canada's population grew by about 5.4 percent over the period 2001-06 (Statistics Canada, Portrait of the Canadian Population in 2006: Findings). However, the population in Atlantic Canada remained virtually unchanged at 2.3 million, caused by slight increases in populations of Nova Scotia (0.6 percent), Prince Edward Island (0.4 percent), and New Brunswick (0.1 percent) that were offset by the decline in the population of Newfoundland and Labrador (1.5 percent). As a result, Atlantic Canada's share in the national population declined from 7.6 percent to 7.2 percent between 2001 and 2006, while that in other parts of the country grew. Due to declining fertility rates and aging, since 1946, the natural growth of population in the region has been on a more rapid decline than it has nationally, since 1946. During 2005-06, natural population growth was almost zero in the region.

Rough estimates indicate that international immigration over the 2001-06 period contributed two-thirds of the Canadian population growth. Over this period, an average of about 240,000 newcomers arrived in Canada each year, for a total of some 1.2 million immigrants in five years. Less than 2 percent of these newcomers arrived in Atlantic Canada, enough to offset just one-sixth of the regional population decline.

Governments in Atlantic Canada view population decline and aging as resulting in adverse economic impacts for the region, which could include skill shortages, declining markets for goods and services, increased pressure on the future labour force to provide for programs for elderly, and declining federal transfers. Population decline could also weaken the political representation of the region in the federal government, which could also indirectly have an adverse impact on the economy. As a result, provincial governments in the region have launched population strategies with the goal to reverse population decline and aging. Increasing the region's share of international immigration as one of the tools to reverse population decline and aging is a unified goal of all provincial governments. Various initiatives have been adopted to attract and retain immigrants in the region. Municipal governments, non governmental organizations (NGOs), the private sector, and the federal government have formed partnerships in implementing these initiatives.

As a result of the above initiatives, immigration is expected to play an important role in shaping future population growth in Atlantic Canada. In fact, immigrant arrivals have increased in all four provinces in recent years. Between 2001 and 2006, international immigration in the province of New Brunswick was double what it was in the previous period, reaching its highest level since the 1976-1981 period. However, immigration targets set by provincial governments are too low to match the region's share of national population. To maintain an even share in annual Canadian immigrant inflow relative to its population, the region should receive between 16,000 and 18,000 new immigrants each year. These numbers correspond to the region's share in national population (which is 7.2 percent of national population) and the national intake (which is 0.8 percent of population). Achieving this target may be difficult in the short term, but current initiatives are steps in the right direction.

With increased immigration, issues relating to the social and economic impacts of

immigration that are often raised in public circles of immigrant-abundant regions of western and central Canada could occupy a central place in public policy discussions in this region as well. Some issues include the impacts of immigrants on the public treasury, poverty, and employment and wages of the native-born. This report provides some broad information that can provide useful input to public policy discussions around these issues.

Just as in other regions of Canada, immigrants tend to settle in urban areas of Atlantic Canada, where about 55 percent of the population lives. However, about 30 percent of immigrants also live in rural Atlantic Canada. The top five source countries of these immigrants are the United States, United Kingdom, Germany, the Netherlands and France. Separate data on their labour market performance are not available, but some evidence suggests that a large number of these immigrants are involved in farming occupations. Interestingly, 20 percent of recent immigrants to the region also live in rural Atlantic Canada with half of them in highly rural areas. The top five source countries of these recent immigrants are the United States, the United Kingdom, Germany, China and India. Because of the large existing population of immigrants from the first three countries who are involved in farming occupations, it is possible that recent immigrants from those countries are also engaged in farming. However, there is also evidence that some of them engage in small businesses. Immigrants from China and India are more likely to be professionals who came under the PNP to alleviate shortages of professionals such as doctors in rural areas.

Several policy implications emerge from these findings: 1) rural areas can be developed as immigrant destinations; 2) farming opportunities and the presence of immigrant communities in Atlantic Canada should be promoted in the United States and Europe to attract more immigrants from there; 3) job availability for professionals should be promoted in all countries around the world by referring to the shortages of skilled labour; and 4) assistance with immigrant settlement in the form of language programs and cultural events should be a priority, especially for immigrants from countries other than the United States and those in Europe. Further investigation into the motivation for choosing a rural destination can provide information that can be used to attract future immigrants. During the 1920s and 1930s, the Canadian government succeeded in using immigration in its rural population strategy applied to Western Canada. Given Atlantic Canada's relative proximity to Europe and the United States, a similar strategy for rural re-population in Atlantic Canada may be considered. Promotional materials being designed jointly by all the provinces to attract immigrants to the region should also promote farming opportunities and the presence of an immigrant population to potential immigrants from the United States and Europe. These materials could also be designed to inform potential immigrants from non-European countries, such as China and India, about available job opportunities for professionals.

Over the 1981-2005 period, larger proportions of immigrants have arrived in Atlantic Canada with higher educational attainments than non-immigrants. For example, during 2001-05, more than half of the immigrants arrived with a university degree, while the latest data for non-immigrants reveals only 12 percent had a university degree in 2001. However, immigrants who arrived in the late 1990s have faced greater difficulties in labour markets since their unemployment rates are higher not only than the rates of those who came in the past but also than those of non-immigrants. Therefore, Atlantic

Canada is not reaping the full potential of the human capital of its recent immigrants, possibly because of the lack of foreign credential recognition, especially since more recent immigrants come from non-western countries whose educational and training systems are not well known to local employers. It is important to facilitate dissemination of more information about the educational systems of those countries to also facilitate employers' hiring decisions. Canadian universities are experienced in assessing foreign credentials as they admit large numbers of international students, most of whom successfully finish their education. Therefore, they can be a useful resource in assessing the education of an immigrant in a foreign country. Many Atlantic universities also have immigrant faculty members, whose knowledge can enhance the resourcefulness of those universities in assessing international credentials.

In addition to the universities, professional organizations and employers can also be involved in evaluating foreign education and experience.

Business immigration in the region has been traditionally low. The significant increase in business immigrants during the mid-1990s had special causes. Most immigrant businesspersons live in Nova Scotia and work in the service sector, with the largest concentration in health, social, and business services. Many are also found in the retail trade. Immigrant businesses are dominated by those coming from the United States, the United Kingdom, Germany and the Netherlands. Many have also originated in Asia, but their country composition is not known. Over the ten-year period 1995-2005, immigrant businessmen and women invested about $40 million in the economy of Atlantic Canada, mostly in Nova Scotia.

The Atlantic provinces need to do better in attracting business immigrants. Business immigrants need confidence before investing in the local economy. The experience of the1990s with business class immigrants, whose annual inflows rose and fell rapidly due to the frustration of their expectations, suggests more government involvement is necessary in the settlement and integration of new business immigrants and their families. Assistance should also be provided in developing contacts with the existing network of entrepreneurs. The recent launching of the "Entrepreneur Forum" by the province of Nova Scotia is a step in the right direction. Immigrant entrepreneurs may also be included in the promotional programs to market the region to potential immigrant entrepreneurs in foreign countries. Due to possible abuse of the system, however, close government monitoring of the local connections established by new arrivals is essential. Partnerships with local private banks also should be sought to facilitate the financial credit available to new arrivals under business class.

More highly skilled immigrants arrived in 2005 than did in 1981. However, their numbers had declined between 1995 and 2003. The effect of this decline was quite broad based among professionals in the region. Since the adoption of certain initiatives, such as the PNP, directed towards attracting skilled immigrants, the numbers of highly skilled immigrants have started to rise again. Most of these nominated immigrants are working in rural areas through special arrangements. Data on the occupational distribution of these immigrants and their economic performance should be analyzed to understand how well they have integrated into the region.

International students in Canada offer a large pool of potential highly skilled

immigrants. On average, an international student takes about three years to finish his/her education in Atlantic Canada. Since most are university students (four times higher than non-university students), conversion of their residency status into that of landed immigrant will increase the supply of highly skilled immigrants who do not face the same labour market challenges as those who acquired their education in a non-Canadian university. They can also more easily integrate into Canadian society after completion of their education due to their proficiency in English or French (or both) and knowledge of Canadian culture.

In 2005, more than 7,000 international students were studying in universities across Atlantic Canada, which represented 6 percent of all international students in Canada, 1 percent higher than five years ago. To attract more international students, universities could focus more on students from the countries that have existing communities in Atlantic Canada. As the United States and the United Kingdom have been among the top five permanent immigrant source countries to the region, a large immigrant population from these countries lives here. Due to proximity to Atlantic Canada, it may be easier to attract more students from them. Some other factors that should be strongly promoted among students in these two countries about university education in Atlantic Canada can include the competitive tuition fees, high quality of education, and proximity to their source countries. Another dominant immigrant community in the region is Middle Eastern. Members of this community could help attract students from their countries of former residence. Also, some Middle Eastern countries including Saudi Arabia, Kuwait, and the United Arab Emirates, do not permit children of expatriates to attend local universities. Atlantic Canadian universities can also target those students.

Today, most international students, as well as immigrants, come from China. As the population of Chinese immigrants grows, it is expected that more Chinese students will also be attracted towards the region. Strengthening of English as a Second Language (ESL) programs and industry-specific language training as part of university curricula will also attract students from China and other non-English speaking countries.

At present, from the time of entry into Canada, it takes about ten years for an international student to acquire landed immigrant status. The federal government can help facilitate, as much as possible for international students, the process of landing and the procedures for obtaining a work permit after graduation. More provincial governments could also allow universities to participate in the PNP in collaboration with private employers.

The resident immigrants' analysis of this study can be updated when detailed 2006 census-based data are available. Such an analysis will also shed light on the effectiveness of recent policy initiatives aimed at attracting and retaining immigrants in the region.

APPENDIX

A Note on Estimates of Population Published by Statistics Canada

Charts 1 and 2 of this report are based on population estimates published by the Demography Division of Statistics Canada. These data are different from the more accurate census data used elsewhere in the report.

To explain the discrepancy, the following information is reproduced from Statistics Canada's web site (August 12, 2007) under the title Estimates of Population by Age and Sex for Canada, Provinces and Territories

The estimates program of Statistics Canada provides annual estimates of population by age and sex for Canada, provinces and territories. Demographic estimates can be categorized as either intercensal or postcensal. Intercensal estimates correspond to estimates between censuses, whereas postcensal estimates correspond to non-census years after the most recent census. In producing up-to-date figures, postcensal estimates are obviously more timely, albeit less accurate. The production of intercensal estimates involves the retrospective adjustment of past figures with the availability of new census data.

Estimation

Postcensal estimates are obtained by adding the number of births, subtracting the number of deaths and by adding or subtracting the net impact of international and internal migration on the most recent census population adjusted for census coverage error (i.e. both census undercount and census overcount). The inclusion of non-permanent residents in the target population dictates that net change in the size of this subpopulation in Canada be added or subtracted from the base period.

Quality evaluation

The Census is considered to be a reliable benchmark for validating the postcensal population estimates. The error of closure (the difference between the postcensal estimate and the enumerated census population, adjusted for net undercoverage) provides a measure of accuracy for the postcensal estimates. It should be noted that it represents errors that have accumulated over the five-year period since the previous census.

At the national level, the differences are small (0.32% for 1986, 0.15% for 1991 and 0.61% for 1996). At the provincial/territorial level, however, the differences are understandably larger, since the provincial/territorial estimates are affected by errors in estimating interprovincial migration, in addition to the other components which affect the total population estimates. Nevertheless, excluding the territories, the provincial postcensal estimates fall within 1% of the census counts with few exceptions (Newfoundland and Labrador in 1986, 1991 and 1996; Alberta in 1986; Prince Edward Island and Saskatchewan in 1991; and Quebec in 1996.

Data accuracy

The estimates of population by age and sex contain certain inaccuracies stemming from (1) errors in corrections for net census undercoverage and (2) imperfections in other data sources and the methods used to estimate the components. Errors due to estimation methodologies and data sources other than censuses are difficult to quantify but not insignificant. The more detailed the breakdown of the data, the larger the

inaccuracy coefficient becomes. The component totals contain a certain amount of initial error, and the methodology used to classify them by sex and age, produces additional error in the figures at each stage. Nevertheless, the components can be divided into two categories according to the quality of their data sources: births, deaths, immigration and non-permanent residents, for which the sources of final data may be considered very good; emigrants, returning emigrants, net temporary emigrants and interprovincial migration for which the methods used may be a more substantial source of error. Lastly, the size of the error due to component estimation may vary by province, sex, and age and errors in some components (births and emigration) may have a greater impact on a given age group or sex. Intercensal estimates contain the same types of errors as postcensal estimates, as well as errors resulting from the way in which the errors present at the end of the period were distributed, that is, on the basis of the time elapsed since the reference Census.

Table A1: Components of Population Growth Rates in Atlantic Canada in the Post World War II Period (per Thousand Population)							
	Late 1940s	1950s	1960s	1970s	1980s	1990s	2000-06
Rate of growth	14.59	15.77	9.80	10.00	4.35	0.42	-1.26
Due to natural growth	23.22	21.87	16.97	10.25	7.01	3.72	1.08
Due to net migration	-8.63	-6.10	-7.17	-0.26	-2.66	-3.30	-2.34

Source: Table A2.

Table A2: Birth and Death Rates in Atlantic Canada (per Thousand Population) 1945-2006			
Year	**Population ('000)**	**Birth Rate**	**Death Rate**
1945	321.576	34.9	10.4
1946	1,509.671	32.5	10.1
1947	1,534.227	34.3	9.9
1948	1,560.201	31.8	9.6
1949	1,575.972	31.4	9.3
1950	1,597.040	31.1	9.4
1951	1,617.869	29.4	9.0
1952	1,652.839	30.2	8.5
1953	1,680.144	29.9	8.4
1954	1,708.595	30.4	8.1
1955	1,736.529	30.6	8.3
1956	1,764.057	30.0	8.2
1957	1,786.238	30.4	8.2
1958	1,811.924	29.1	8.1
1959	1,843.250	28.8	8.3
1960	1,866.581	28.6	7.9
1961	1,896.714	28.7	7.8
1962	1,925.826	27.9	8.0
1963	1,944.636	27.3	7.9
1964	1,957.895	26.1	7.7
1965	1,968.079	24.4	7.8
1966	1,975.475	22.4	7.8
1967	1,988.767	20.9	7.9

Contd.

Table A2 (Contd.)

Year	Population ('000)	Birth Rate	Death Rate
1968	2,008.719	20.1	7.8
1969	2,027.834	19.9	7.6
1970	2,035.008	19.8	7.9
1971	2,066.051	20.0	7.7
1972	2,103.301	19.1	7.7
1973	2,127.306	18.1	7.7
1974	2,087.519	17.5	7.7
1975	2,176.233	17.5	7.5
1976	2,204.598	17.1	7.5
1977	2,184.522	16.6	7.4
1978	2,181.156	16.0	7.2
1979	2,244.369	15.8	7.2
1980	2,254.259	15.7	7.4
1981	2,259.357	15.3	7.2
1982	2,265.880	15.0	7.3
1983	2,287.407	14.8	7.3
1984	2,303.796	14.4	7.3
1985	2,314.985	14.3	7.4
1986	2,318.657	13.9	7.5
1987	2,323.675	13.5	7.4
1988	2,330.929	13.4	7.5
1989	2,343.857	13.6	7.6
1990	2,356.859	13.7	7.6
1991	2,368.937	12.9	7.5
1992	2,377.343	12.6	7.6
1993	2,384.233	12.1	7.7
1994	2,384.247	11.8	7.9
1995	2,381.153	11.3	7.9
1996	2,378.370	11.0	7.9
1997	2,371.889	10.5	8.2
1998	2,359.228	10.2	8.4
1999	2,353.543	10.1	8.5
2000	2,349.341	10.0	8.7
2001	2,341.410	9.9	8.8

Contd.

Year	Population	Birth Rate (Per '000)	Death Rate (Per '000)
2002	2340.773	9.3	8.3
2003	2,343.142	9.3	8.5
2004	2,337.414	9.2	8.6
2005	2,340.422	9.1	8.8
2006	2,332,812	9.0	8.9
Source: Statistics Canada CANSIM Tables.			

Table A3: Provincial Representations in the Canadian House of Commons Based on Current Rules and Projected Population Growth, 1976-2021		
House Seats 1976-2000	House Seats 2001-2011	House Seats 2012-2021
2.51	2.30	2.26
1.43	1.31	1.29
3.94	3.61	3.55
3.58	3.28	3.23
26.88	24.59	24.19
34.05	34.75	35.48
5.02	4.59	4.52
5.02	4.59	4.52
7.53	9.18	9.35
10.04	11.80	11.61

Source: Based on Tomlin, B. The Seat Shortage: Changing Demographics and Representation in the House of Commons C.D. Howe Institute (e-brief, May 29, 2007).

Table A4: Immigrants (Principal Applicants and Dependents) Destined for Each Atlantic Province, 1981-2006

Prov.	Year																									
	1981	1982	1983	1984	1985	1986	1987	1988	1989	1990	1991	1992	1993	1994	1995	1996	1997	1998	1999	2000	2001	2002	2003	2004	2005	2006
NL	480	407	275	299	323	274	455	410	466	552	636	788	804	565	573	581	414	402	424	417	392	407	359	579	496	508
PEI	126	165	105	109	113	168	160	152	158	176	150	151	163	161	161	150	144	136	135	189	134	107	153	310	330	565
NS	1403	1254	833	1035	972	1094	1223	1298	1473	1571	1499	2360	3022	3469	3579	3224	2833	2042	1595	1610	1699	1419	1474	1770	1929	2580
NB	988	751	554	600	607	640	641	674	902	853	686	757	706	627	643	717	663	723	660	759	798	705	665	795	1092	1633
Total	2997	2577	1767	2043	2015	2176	2479	2534	2999	3152	2971	4056	4695	4822	4956	4672	4054	3303	2814	2975	3023	2638	2651	3454	3847	5286

Source: Data from 1981-2005 are from Permanent Resident Data System (PRDS), micro-data, CIC (variables used: province). The 2006 data are from Facts and Figures (2006, CIC; www.cic.gc.ca, accessed May 4, 2007).

Table A5: Population Distribution in Atlantic Canada, 2001-2005				
	Total population	Non-immigrants	Immigrants	Recent immigrants
CMA/CA (Urban)	55.47	55.03	67.98	80.35
Total MIZ (Rural)	44.53	44.97	32.02	19.65
Strong MIZ	4.82	4.85	4.04	0.86
Moderate MIZ	17.45	17.64	11.90	6.85
Weak MIZ	20.22	20.43	14.41	9.17
No MIZ	2.04	2.05	1.67	2.77

Source: Source and notes: Based on census 2001 Table CO-0861, 2001 Basic Profile. We thank the Rural Secretariat for providing us these tables. MIZ = Metropolitan Influenced Zone. The degree of rurality is the lowest for “Strong MIZ” and the highest for “No MIZ.” For detailed explanation of the MIZ classification system, please see Chuck McNiven, Henry Puderer and Darryl Janes. 2000. Census Metropolitan Area and Census Agglomeration Influenced Zones (MIZ): A description of the Methodology , Statistics Canada Catalogue no. 92F0138MIE, no. 2000-2.

Table A6: Age Distribution of Recent Atlantic Canada Immigrants (Principal Applicants) and Non-immigrants, 1981-2006 (%)										
	1986		1991		1996		2001		2006	
Age group	Recent immigrants	Non-immigrants	Recent immigrants	Non-immigrants	Recent immigrants	Non-immigrants	Recent immigrants	Non-immigrants	Recent immigrants	Non-immigrants
15-24	19.53	24.13	19.46	20.43	11.22	18.53	10.12	17.02	10.88	15.86
25-44	52.06	40.40	58.86	42.19	62.69	40.57	68.38	36.57	66.44	33.54
45-64	16.53	22.19	13.24	23.27	20.75	26.91	18.35	31.28	19.55	33.88
65+	11.89	13.28	8.43	14.11	5.33	13.99	3.15	15.13	3.13	16.73
Total	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00

Sources and notes: 1) Immigrant data are from PRDS-microdata (CIC) and based on variables "f_stat2" and "fage". 2) Non-immigrant data are based on Canadian population censuses (PUMF, 1986-2001, individual files), Statistics Canada. For the period 1991-2001, the non-immigrant data are based on the variable "immigrant status indicator", while for 1986, these are based on the variable "year of immigration" since the "immigrant status indicator" was not provided with 1986 census PUMF. Hence, 1986 data also include non-permanent residents. For 2006, non-immigrant data are not available as the release of census-based data is not yet complete. Hence, total population data are used for that year as they emulate non-immigrant data (Statistics Canada catalogue number: 97-551-XCB2006005).

Table A7: Immigrants (Principal Applicants) Destined for Atlantic Canada by Class, 1981-2005				
Year	Family	Skilled	Business	Refugee
1981	706	606	63	111
1982	638	476	63	125
1983	611	255	59	96
1984	658	332	35	169
1985	565	321	42	240
1986	576	362	37	307
1987	584	452	59	316
1988	526	433	71	362
1989	628	524	48	368
1990	664	552	78	369
1991	545	381	115	424
1992	903	433	300	275
1993	846	415	519	270
1994	602	432	532	291
1995	477	604	530	319
1996	524	630	468	311
1997	452	642	322	252
1998	415	513	212	213
1999	540	497	147	252
2000	527	466	132	369
2001	659	496	91	318
2002	529	405	56	273
2003	618	320	39	239
2004	810	446	56	241
2005	760	465	32	244

Source: Permanent Resident Data System (PRDS), micro-data, CIC (variables used: province, lev_a, f_stat).

Table A8: Migration of Immigrants Destined for the Atlantic Provinces, 1988-2003							
	Number of immigrants				As percentage of number destined		
	Destined at landing	Out-migration	In-migration	Net out-migration	Out-migration	In-migration	Net out-migration
By Category							
Refugee	5545	4030	370	3660	73	7	66
Economic - Principal Applicants	6580	3885	1670	2215	59	25	34
Economic - Spouses & Dependents	8695	5915	1330	4585	68	15	53
Economic – Total	15275	9800	3000	6800	64	20	45
Family	5505	1905	950	955	35	17	17
Other	1145	575	235	340	50	21	30
Overall	42745	26110	7555	18555	61	18	43

Note: Numbers based on data for the 2003 tax year.
Source: International Migration Data Base (IMDB) 2003 Compendium, Statistics Canada.

Table A9: Immigrant Retention Rates in Atlantic Canada, 1986-2001*			
Period	New immigrants arriving**	New immigrants residing at end of period	Retention rate (%)
	(1)	(2)	(3)=(2)/(1)×100
1981 – 1986	12212	9200	75
1986 – 1991	14359	10200	71
1991 – 1996	23136	11005	48
1996 – 2001	19031	9940	52

*Retention rates may be slightly higher than reported because no provision for deaths among new arrivals can be made.
**Data for the census year are only for the first five months.

Source: Data in column (1) are based on Permanent Resident Data System (PRDS - microdata) as provided to AMC under contract with CIC, while those in column (2) are based on Canadian population censuses obtained from the following sources:
1. For 1996-2001 data, Statistics Canada Catalogue number 97F0009XCB-2001004.
2. For 1991-96 data, Statistics Canada Catalogue number 93F0023XDB96003.
3. For 1986-91 data, Citizenship and Immigration, Recent Immigrants in the Halifax Metropolitan Area (Selected Charts) Census 1991 (October 2002).
4. For 1981-86 data, Statistics Canada population census 1986, PUMF-microdata. Variables used: "prov" in PRDS, "province" and "year of immigration" in Census PUMF.
Because censuses are conducted in June, new immigrants residing in the province in the last year of each period do not include those who arrived in the latter half of those years, i.e. 1986, 1991, 1996 and 2001. Data for the first five months were obtained from CIC through special request.

Table A10: Recent Immigrants Destined for Atlantic Canada and Non-immigrants by Education Levels, 1986-2005				
	High School or Less		University Degree	
Year	Immigrants (%)	Non-Immigrants (%)	Immigrants (%)	Non-Immigrants (%)
1986	45.43	61.44	26.56	7.58
1991	40.37	56.74	30.76	8.83
1996	35.30	51.23	39.61	10.98
2001	30.63	47.84	44.83	12.47
2001-05	24.78	NA	51.04	NA

Recent immigrants are those who arrived within five years of the census year.
Source: 1) Permanent Resident Data System (PRDS - microdata, CIC) for immigrants. Variables used: "prov", "ed_qua", "fage". High School or Less Education = None + Secondary or less.
2) The Canadian population censuses (PUMF, 1986-2001, individual files) for non-immigrants. Variables used: "province or territories", "immigrant status indicator", "age", "highest level of schooling". For the 1986 census, "place of birth" is used instead of "immigrant status indicator" because the latter is not available to determine whether the individual is a non-immigrant. High School or Less Education = less than grade 5 + grades 5-8 + grades 9-13 + secondary school graduation certificate. All data are reported for individuals aged 25 and over. Data from the 2006 census on non-immigrants are not yet available.

Table A11: Labour Force Net Growth Rate and Contribution of Recent Immigrants to the Growth of the Labour Force, Atlantic Canada, 1981-2001				
Period	Total growth of labour force	Growth owed to new immigrants	Growth without new immigrants	Immigrants' contribution to population growth (%)
	(1)	(2)	(3)	(4)=(2)/(3)×100
1981-1986	83320	3790	79530	4.77
1986-1991	88610	4795	83815	5.72
1991-1996	-20850	4975	-25825	19.26
1996-2001	13630	4245	9385	45.23

Source: Calculations based on population census data provided in Statistics Canada Catalogue 97F0012XCB2001003, accessed May 5, 2007, on web site www.statcan.ca

Table A12: Atlantic Canada Labour Market Statistics: Participation Rate, Unemployment Rate, Employment Income, and Government Transfer Payments as a Percentage of Total Income for Immigrants and Non-immigrants, 1981-2001					
Census year	1981	1986	1991	1996	2001
Labour force participation rate					
Non-immigrants	60.05	61.89	64.24	61.76	62.53
Immigrants	59.00	60.98	62.12	59.35	58.41
Recent immigrants[1]	64.21	63.02	70.05	65.55	64.32
Unemployment rate (%)					
Non-immigrants	16.46	20.04	19.80	19.09	15.75
Immigrants	10.09	11.98	12.17	11.34	9.38
Recent immigrants[1]	12.17	15.92	17.52	18.69	18.37
Employment income ($)					
Non-immigrants (1)	11776	16450	21432	22510	26265
Immigrants (2)	16339	22101	29102	26572	31890
Recent immigrants[1] (3)	12990	12583	N/A	22532	23660
Ratio (3/1)	1.10	0.76	N/A	1.00	0.90
Government transfers (% of total income)					
Non-immigrants	14.48	18.22	18.36	20.99	18.09
Immigrants	9.25	11.55	12.61	17.55	15.90
Recent immigrants[1]	2.99	5.87	N/A	12.41	9.40

1 Recent immigrants include those arriving within five years of the census year. They include those who arrived in the census year and in the prior year; hence, their entire year's performance is not reflected.
Source and notes:
1. Labour force participation and unemployment rates are based on "Historical Labour Force Activity (Based on the 1971 Concepts) (8), Immigrant Status and Period of Immigration (10), Age Groups (18), Marital Status (7) and Sex (3) for Population 15 Years and Over, for Canada, Provinces and Territories, 1971, 1981 to 2001 Censuses - 20% Sample Data". Ottawa: Statistics Canada, March 25, 2003, Census of Canada, Catalogue number 97F0012XCB2001003. The rest of the data are based on special tabulations performed by the author based on population censuses (PUMF, 1981-2001, individual files).
2. All income data are averages. Data on recent immigrants include those who arrived in the census year and in the year prior to it, so do not reflect their entire year's performance. Employment income is equal to the sum of wages and salaries and self-employment income and is reported only for those who were employed.
3. The following variables were used to obtain government transfers as a percentage of total income: For the 1991, 1996 and 2001 censuses, "total income" and "total government transfer payments" were available directly. For the 1986 census, "total income", "Old age sec pension & guaranteed income supplement (OASGIP)", "Canada, Quebec pension plan benefits (CQPPBP)", "Family allowances (FAMALP)", "Federal child tax credits (CHDCRP), "Unemployment insurance benefits (UICBNP)" and "Other government transfer payments (GOVTIP)" were added. For the 1981 census, "total income", "OAS, GIS, CQPP", "Unemployment insurance benefits (UICBN)" and "Other government transfer payments (GOVTI)" were added.
4. All labour force and income information are for the year prior to the census year.
5. The 1991 PUMF does not does not provide separate data on recent arrivals in the Atlantic provinces.

Table A13: Immigrants Destined for Atlantic Canada's Labour Force by Skill Classifications, 1981-2005			
Year	Highly skilled	Low skilled	Medium skilled
1981	454	294	445
1982	401	238	377
1983	289	144	214
1984	255	223	259
1985	283	227	241
1986	330	236	268
1987	400	253	360
1988	389	290	388
1989	447	343	491
1990	428	307	414
1991	397	206	277
1992	444	199	282
1993	487	186	366
1994	522	142	297
1995	664	155	339
1996	645	139	322
1997	589	130	279
1998	458	73	221
1999	493	88	183
2000	494	89	181
2001	536	71	202
2002	480	53	150
2003	441	53	142
2004	559	63	163
2005	690	61	154

[1]National Occupational Classifications (NOC) were further classified as Highly skilled = "O" and "A"; medium skilled = "B"; low skilled = "C" and "D". Detailed definitions of NOC are provided in Table A5.
Source: PRDS – microdata, CIC. Variables used: "NOC2", "PROV".

Table A14: Provincial Distribution of Highly Skilled Immigrants in Atlantic Canada, 2001		
Province	Managers	Professionals
NL	333	2261
PEI	374	448
NS	3836	6823
NB	1478	3437

Source: Census 2001 Target Group Profile, Statistics Canada (customized tabulations).

Table A15:: Provincial Distribution of Immigrant Businesspersons in Atlantic Canada, 2001	
Province	Number
NL	810
PEI	520
NS	4625
NB	1840

Source: Census 2001 Target Group Profile, Statistics Canada (customized tabulations).

Table A16 : Inflows of International Students in the Atlantic Provinces, 1996-2005										
PROVINCE	YEAR									
	1996	1997	1998	1999	2000	2001	2002	2003	2004	2005
PEI	64	69	79	91	101	124	112	113	109	122
NL	209	237	273	273	264	256	305	298	269	368
NS	856	890	1,057	1,271	1,469	1,732	1,788	1,788	1,686	1,705
NB	337	335	427	608	738	926	985	801	830	814
TOTAL	1,466	1,531	1,836	2,243	2,572	3,038	3,190	3,000	2,894	3,009
CANADA TOTAL	39,732	42,244	40,574	50,061	60,032	69,420	65,029	58,723	55,579	57,481

Source: Facts and Figures (2005), Digital Library (CIC).

Table A17: International Students Studying in Atlantic Canada by Level of Study, 2001-2005, as of December 1					
	2001	2002	2003	2004	2005
University	4,436	5,292	6,190	6,735	7,186
Non-University	1,558	1,670	1,681	1,785	1,935
Total	5,994	6,962	7,871	8,520	9,121

Source: Facts and Figures (2005), Digital Library (CIC).

Table A18: International Students Studying in Atlantic Canada by Top Five Source Countries, 2005, as of December 1		
Source Country	Atlantic Canada	Canada
China	2610	36137
United States	1074	11734
Korea	522	25461
Bermuda	306	X
Japan	292	8713
France	X	6230

Source: Facts and Figures (2005), Digital Library (CIC).

Table A19: Immigrants (Principal Applicants) Destined for Atlantic Canada in the Defined Period by Year, Category, Education, Language Ability (English, French or Both), Age, Gender, and Occupation, 1981-2005

Year	1981	1982	1983	1984	1985	1986	1987	1988	1989	1990	1991	1992	1993	1994	1995	1996	1997	1998	1999	2000	2001	2002	2003	2004	2005
Age group and gender																									
Under 15																									
Male	16	11	14	9	13	15	3	13	11	25	28	26	22	43	23	12	16	13	17	25	24	30	27	27	30
Female	12	19	19	13	10	12	14	21	6	14	12	31	28	41	36	39	35	56	66	63	88	74	92	105	129
16-24																									
Male	139	153	110	152	151	253	192	203	193	220	117	109	98	78	81	74	87	54	83	98	89	73	91	91	74
Female	203	179	181	155	173	134	171	147	143	159	113	159	143	112	103	93	79	76	71	101	131	111	96	119	113
25-44																									
Male	626	514	361	502	499	592	629	655	815	785	649	698	721	750	911	916	821	711	722	718	730	644	613	762	822
Female	320	261	228	279	225	250	274	272	325	372	310	453	449	364	342	408	350	338	328	375	444	335	424	486	547
45-64																									
Male	252	218	135	119	118	143	135	140	127	163	161	280	342	359	342	315	254	199	161	181	185	172	170	247	325
Female	106	85	73	98	77	66	69	68	104	99	94	96	106	92	71	92	88	70	75	86	119	106	107	120	133
65 & up																									
Male	85	99	75	67	68	73	75	78	53	58	61	74	72	34	47	30	32	18	14	23	32	17	21	42	37
Female	99	101	82	97	76	79	77	97	91	77	64	69	85	53	38	34	26	27	36	28	27	23	31	31	14
TOTAL	1858	1640	1278	1491	1410	1615	1639	1694	1868	1972	1609	1995	2066	1926	1994	2013	1788	1562	1571	1698	1869	1585	1672	2030	2224
Major Occupations*																									
High skilled	405	368	269	247	272	304	331	344	364	321	261	307	308	401	510	522	513	473	504	490	579	502	433	559	777
Medium skilled	502	388	217	268	247	281	356	392	528	425	235	238	300	237	275	260	252	211	168	187	197	152	155	174	148
Low skilled	259	209	148	226	227	257	243	300	293	309	192	164	169	116	101	107	105	66	72	89	70	54	56	73	63
Total for work force	1166	965	634	741	746	842	930	1036	1185	1055	688	709	777	754	886	889	870	750	744	766	846	708	644	806	988
Total not for work force	686	662	634	721	626	761	675	618	647	868	831	1064	900	725	649	720	665	670	732	838	968	852	1001	1185	1200
TOTAL	1856	1627	1268	1462	1372	1603	1605	1654	1832	1923	1519	1773	1677	1479	1535	1609	1535	1420	1476	1604	1814	1560	1645	1991	2188

Continued on next page.

Table A19 (Contd.): Immigrants (Principal Applicants) Destined for Atlantic Canada in the Defined Period by Year, Category, Education, Language Ability (English, French or Both), Age, Gender, and Occupation, 1981-2005

Year	1981	1982	1983	1984	1985	1986	1987	1988	1989	1990	1991	1992	1993	1994	1995	1996	1997	1998	1999	2000	2001	2002	2003	2004	2005
Educational Level																									
No education	48	30	40	46	41	36	34	46	38	69	66	76	60	86	48	47	43	54	96	98	140	130	139	165	173
High school or less	879	711	536	597	604	700	673	735	772	819	694	751	749	623	573	633	550	407	379	476	486	404	365	398	434
Post secondary	409	425	265	350	306	312	364	379	511	425	282	379	406	311	313	395	284	314	335	323	312	221	288	349	415
Some university	116	93	101	121	111	147	149	118	113	128	125	142	154	124	144	85	98	87	75	105	124	108	135	143	84
University degree	404	378	335	374	348	424	418	416	434	531	442	647	697	782	916	853	813	702	690	696	807	722	745	975	1118
TOTAL	1856	1637	1277	1488	1410	1619	1638	1694	1868	1972	1609	1995	2066	1926	1994	2013	1788	1564	1575	1698	1869	1585	1672	2030	2224
Language ability																									
English only	1335	1191	929	1015	922	1026	1002	1033	1150	1246	1044	1487	1435	1280	1364	1418	1269	1013	1016	1036	1143	980	1054	1363	1550
French only	33	25	37	29	21	30	41	44	52	64	37	61	56	40	58	71	59	48	50	75	63	50	68	63	59
Both English & French	144	152	103	122	96	141	128	119	120	130	83	101	111	94	97	91	72	101	111	111	165	121	165	292	288
Neither English nor French	344	272	209	325	371	422	468	496	545	532	444	346	464	512	474	433	388	402	398	476	498	434	385	312	327
TOTAL	1856	1640	1278	1491	1410	1619	1639	1692	1867	1972	1608	1995	2066	1926	1993	2013	1788	1564	1575	1698	1869	1585	1672	2030	2224
Category																									
Family	816	739	700	776	617	684	635	619	716	789	630	963	904	676	532	603	517	485	625	582	762	614	697	940	909
Skilled Workers	687	505	265	349	325	395	451	438	578	551	369	432	413	449	620	629	691	590	552	510	563	426	337	470	491
Business	80	84	83	50	65	46	63	76	54	88	119	316	534	541	547	486	325	224	156	148	101	65	44	58	32
Refugees	128	128	115	200	303	376	387	450	445	433	334	183	184	246	279	271	237	232	240	431	362	270	238	248	245
Other immigrants	147	184	115	116	100	118	103	111	75	111	157	101	31	14	16	24	18	33	2	27	81	210	356	314	547
TOTAL	1858	1640	1278	1491	1410	1619	1639	1694	1868	1972	1609	1995	2066	1926	1994	2013	1788	1564	1575	1698	1869	1585	1672	2030	2224

Source: PRDS (Microdata, CIC).
*Based on NOC classifications provided at the bottom of Table A12.

TABLE A20

Human Resources Development Canada / Développement des ressources humaines Canada

NATIONAL OCCUPATIONAL CLASSIFICATION MATRIX 2001

The National Occupational Classification (NOC) matrix provides an ov
level, skill type, or on a combination of these two criteria. The four skill
tenth skill type category (0 Management Occupations) is organized ac

	1 BUSINESS, FINANCE AND ADMINISTRATION OCCUPATIONS	2 NATURAL AND APPLIED SCIENCES AND RELATED OCCUPATIONS	3 HEALTH OCCUPATIONS	4 OCCUPATIONS IN SOCIAL SCIENCE, EDUCATION, GOVERNMENT SERVICE AND RELIGION	5 OCCUPATIONS IN ART, CULTURE, RECREATION AND SPORT	6 SALES AND SERVICE OCCUPATIONS	7
0 MANAGEMENT OCCUPATIONS					**Major Group 00** SENIOR MANAGEMENT OCCUPATIONS 001 Legislators and Senior Management		
	011 Administrative Services Managers 012 Managers in Financial and Business Services 013 Managers in Communication (Except Broadcasting)	021 Managers in Engineering, Architecture, Science and Information Systems	031 Managers in Health, Education, Social and Community Services 041 Managers in Public Administration		051 Managers in Art, Culture, Recreation and Sport	061 Sales, Marketing and Advertising Managers 062 Managers in Retail Trade 063 Managers in Food Service and Accommodation 064 Managers in Protective Service 065 Managers in Other Services	071 Ma 072 Fa
SKILL LEVEL A Occupations usually require university education.	**Major Group 11** PROFESSIONAL OCCUPATIONS IN BUSINESS AND FINANCE 111 Auditors, Accountants and Investment Professionals 112 Human Resources and Business Service Professionals	**Major Group 21** PROFESSIONAL OCCUPATIONS IN NATURAL AND APPLIED SCIENCES 211 Physical Science Professionals 212 Life Science Professionals 213 Civil, Mechanical, Electrical and Chemical Engineers 214 Other Engineers 215 Architects, Urban Planners and Land Surveyors 216 Mathematicians, Statisticians and Actuaries 217 Computer and Information Systems Professionals	**Major Group 31** PROFESSIONAL OCCUPATIONS IN HEALTH 311 Physicians, Dentists and Veterinarians 312 Optometrists, Chiropractors and Other Health Diagnosing and Treating Professionals 313 Pharmacists, Dietitians and Nutritionists 314 Therapy and Assessment Professionals 315 Nurse Supervisors and Registered Nurses	**Major Group 41** PROFESSIONAL OCCUPATIONS IN SOCIAL SCIENCE, EDUCATION, GOVERNMENT SERVICES AND RELIGION 411 Judges, Lawyers and Quebec Notaries 412 University Professors and Assistants 413 College and Other Vocational Instructors 414 Secondary and Elementary School Teachers and Educational Counsellors 415 Psychologists, Social Workers, Counsellors, Clergy and Probation Officers 416 Policy and Program Officers, Researchers and Consultants	**Major Group 51** PROFESSIONAL OCCUPATIONS IN ART AND CULTURE 511 Librarians, Archivists, Conservators and Curators 512 Writing, Translating and Public Relations Professionals 513 Creative and Performing Artists		
SKILL LEVEL B Occupations usually require college education or apprenticeship training.	**Major Group 12** SKILLED ADMINISTRATIVE AND BUSINESS OCCUPATIONS 121 Clerical Supervisors 122 Administrative and Regulatory Occupations 123 Finance and Insurance Administrative Occupations 124 Secretaries, Recorders and Transcriptionists	**Major Group 22** TECHNICAL OCCUPATIONS RELATED TO NATURAL AND APPLIED SCIENCES 221 Technical Occupations in Physical Sciences 222 Technical Occupations in Life Sciences 223 Technical Occupations in Civil, Mechanical and Industrial Engineering 224 Technical Occupations in Electronics and Electrical Engineering 225 Technical Occupations in Architecture, Drafting, Surveying and Mapping 226 Other Technical Inspectors and Regulatory Officers 227 Transportation Officers and Controllers 228 Technical Occupations in Computer and Information Systems	**Major Group 32** TECHNICAL AND SKILLED OCCUPATIONS IN HEALTH 321 Medical Technologists and Technicians (Except Dental Health) 322 Technical Occupations in Dental Health Care 323 Other Technical Occupations in Health Care (Except Dental)	**Major Group 42** PARAPROFESSIONAL OCCUPATIONS IN LAW, SOCIAL SERVICES, EDUCATION AND RELIGION 421 Paralegals, Social Services Workers and Occupations in Education and Religion, n.e.c.	**Major Group 52** TECHNICAL AND SKILLED OCCUPATIONS IN ART, CULTURE, RECREATION AND SPORT 521 Technical Occupations in Libraries, Archives, Museums and Art Galleries 522 Photographers, Graphic Arts Technicians and Technical and Co-ordinating Occupations in Motion Pictures, Broadcasting and the Performing Arts 523 Announcers and Other Performers 524 Creative Designers and Craftpersons 525 Athletes, Coaches, Referees and Related Occupations	**Major Group 62** SKILLED SALES AND SERVICE OCCUPATIONS 621 Sales and Service Supervisors 622 Technical Sales Specialists, Wholesale Trade 623 Insurance and Real Estate Sales Occupations and Buyers 624 Chefs and Cooks 625 Butchers and Bakers 626 Police Officers and Firefighters 627 Technical Occupations in Personal Service	**Major Grou** TRAD EQUI 721 Contr 722 Supe 723 Mach 724 Elect 725 Plumb 726 Metal 727 Carpe 728 Maso 729 Other 731 Mach (Exce 732 Autor 733 Other 734 Upho and F 735 Static Syste 736 Train 737 Crane 738 Printi Other
SKILL LEVEL C Occupations usually require secondary school and/or occupation-specific training.	**Major Group 14** CLERICAL OCCUPATIONS 141 Clerical Occupations, General Office Skills 142 Office Equipment Operators 143 Finance and Insurance Clerks 144 Administrative Support Clerks 145 Library, Correspondence and Related Information Clerks 146 Mail and Message Distribution Occupations 147 Recording, Scheduling and Distributing Occupations		**Major Group 34** ASSISTING OCCUPATIONS IN SUPPORT OF HEALTH SERVICES 341 Assisting Occupations in Support of Health Services			**Major Group 64** INTERMEDIATE SALES AND SERVICE OCCUPATIONS 641 Sales Representatives, Wholesale Trade 642 Retail Salespersons and Sales Clerks 643 Occupations in Travel and Accommodation 644 Tour and Recreational Guides and Casino Occupations 645 Occupations in Food and Beverage Service 646 Other Occupations in Protective Service 647 Childcare and Home Support Workers 648 Other Occupations in Personal Service	**Major Grou** INTE EQUI AND 741 Moto 742 Heav 743 Other 744 Other 745 Longs

Table A21: Definitions of Skill Levels in Canadian Labour Markets

Skill Level (Alpha)	Skill Level (Digit)	Nature of Education/Training
A Occupations usually require university degree	**1**	• University degree at the bachelor's or master's level.
B Occupations usually require college education or apprenticeship training	**2 or 3**	• Two to three years of post-secondary education at a community college, institute of technology or CEGEP; or • Two to five years of apprenticeship training; or • Three to four years of secondary school and more than two years of on-the-job training, specialized training courses or specific work experience. • Occupations with supervisory responsibilities and occupations with significant health and safety responsibilities, such as those of firefighters, police officers and registered nursing assistants, are all assigned skill level B.
C Occupations usually require secondary school and/or occupation-specific training	**4 or 5**	• One to four years of secondary school education; or • Up to two years of on-the-job training, specialized training courses or specific work experience.
D On-the-job training is usually provided for occupations	**6**	• Short work demonstration or on-the-job training; or • No formal educational requirements.

Source: Human Resources and Skills Development Canada.