

TWO LANGUAGES: IT'S GOOD FOR BUSINESS

**STUDY ON THE ECONOMIC BENEFITS AND POTENTIAL
OF BILINGUALISM IN NEW BRUNSWICK**

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Executive Summary

This report was prepared to highlight the economic benefits of bilingualism in New Brunswick. It reveals that our province's bilingual character and workforce has played a key role in the development of key industries such as customer contact centres, language industries and professional services. The report also finds that unilingual New Brunswickers have benefited as most of the firms attracted to the province by the bilingual workforce only require a portion of their employees to speak both languages. The bilingual workforce has also helped build stronger trade, investment and tourism activity with French-speaking jurisdictions. Being a bilingual province makes it easier to attract French speaking post-secondary education students and immigrants.

New Brunswick needs to find new industries and new opportunities to facilitate economic growth. This report also reviews potential ways the province could leverage its bilingual workforce for future economic growth.

EIGHT ECONOMIC BENEFITS ARISING FROM NEW BRUNSWICK'S BILINGUALISM ADVANTAGE

- ⇒ **Benefit #1: The bilingual workforce has been a key reason why New Brunswick has attracted big corporate players including ExxonMobil, Xerox, IBM, FedEx, UPS, RBC, TD Insurance, Unilever and SNC-Lavalin to set up in the province.**
 - New Brunswick has a customer contact centre and back office industry generating \$1.4 billion worth of interprovincial and international export revenue annually for the province. The province also has the highest proportion of people employed in this industry compared to all other provinces.
 - Of the 15,400 people employed in the New Brunswick administrative services sector, only 32 percent speak both English and French. The rest speak either English (66 percent) or French (2 percent) only. The development of the customer contact centre and back office industry in New Brunswick has benefitted thousands of unilingual New Brunswickers.

- ⇒ **Benefit #2: Bilingualism has led to the development of a vibrant language industry in the province.**
 - We have the second highest concentration of translators, terminologists and interpreters in the workforce among the 10 provinces across Canada.
 - There are 65 registered business establishments in the industry group Translation and Interpretation Services.

Executive Summary (cont.)

- ⇒ **Benefit #3: Bilingualism has been key to developing the Quebec market for trade and investment.**
- The ability to serve the Quebec market in French is one of the key reasons why New Brunswick firms are able to build their markets in Quebec.
 - On a per capita basis, no other province generates more export revenue from Quebec than does New Brunswick.
 - Between 2007 and 2011, New Brunswick generated nearly \$1.2 billion worth of services revenue per year from the Quebec market. On a per capita basis, only Ontario generates more services sector revenue from Quebec than does New Brunswick.
 - New Brunswick's transportation sector also derives significant revenue from Quebec. Between 2007 and 2011, the transportation and related services sector generated an average \$148 million in revenue per year.
- ⇒ **Benefit #4: Bilingualism has been a major reason why national finance and insurance firms are serving their customers across the country from New Brunswick.**
- According to a recent study, half of insurance carriers in New Brunswick are serving markets outside the province. The survey asked insurance carriers to describe the value proposition for their New Brunswick operations. The bilingual workforce was one of the top cited reasons why the firms were expanding in the province.
 - Being able to serve Francophone customers has been a key reason why the insurance carriers have expanded their employment in the province by 55 percent between 2006 and 2013.
 - Because of the province's bilingual workforce, New Brunswick has attracted the back offices and customer support centres for a number of Canada's national banks.
- ⇒ **Benefit #5: Bilingualism has been key to developing the Quebec market for New Brunswick's professional services.**
- New Brunswick ranks eighth among the 10 provinces across Canada for interprovincial professional services revenue. By contrast, New Brunswick ranks second among the 10 provinces for professional services export revenue from the Quebec market - 53 percent more than the average across Canada when adjusted for population size. It is clear the province's bilingualism enables increased professional services-based trade in the Quebec market.

Executive Summary (cont.)

- ⇒ **Benefit #6: Bilingualism has been an important reason why New Brunswick has been able to attract significant tourism revenue from the Quebec market.**
 - In 2011, the accommodation and food services sector generated \$123.3 million in revenue from Quebec tourists (classified as interprovincial export revenue). This was second behind Prince Edward Island in the amount of revenue generated from Quebec in this sector adjusted for the size of the population. It was more than twice as much revenue compared to Ontario and three times as much compared to Nova Scotia on a per capita basis.
- ⇒ **Benefit #7: Bilingualism has been an important reason why New Brunswick has attracted national and international post-secondary students to study in the province.**
 - New Brunswick already ranks 3rd among the 10 provinces in Canada for interprovincial export revenue from the educational services sector (students bringing revenue to the province).
 - In 2013-2014, New Brunswick's universities had 13.2 percent international students.
 - The percentage of international students studying at New Brunswick universities has increased by 53 percent between 2009-10 and 2013-14.
- ⇒ **Benefit #8: Bilingualism has been an important reason why New Brunswick has attracted a higher share of bilingual immigrants compared to most other provinces.**
 - In 2006, of the 26,400 immigrants living in New Brunswick, nearly a quarter spoke both English and French, twice the national average

KEY FACTS ABOUT NEW BRUNSWICK'S BILINGUALISM ADVANTAGE

- ⇒ **New Brunswick has a large proportion of bilingual adults.**
 - New Brunswick ranks second among the 10 provinces with respect to the percentage of adults with a knowledge of English and French, at 35.1 percent.
 - It has nearly double the percentage of bilingual adults as Canada as a whole.
- ⇒ **Bilingualism is generally correlated with educational achievement.**
 - Nearly half of adults with a university certificate, diploma or degree at the bachelor level or above are bilingual. The trend is that bilingualism decreases for lower levels of educational achievement.
- ⇒ **Not all sectors have a similar proportion of bilingual workers.**
 - Eight of the province's 20 economic sectors (NAICS 2-digit) have a proportion of bilingual workers above the provincial average, led by public administration, educational services, finance and insurance, and arts, entertainment and recreation.

Executive Summary (cont.)

- The public administration sector¹ does not have the greatest proportion of bilingual workers, compared to the national average. Several sectors managed by the private sector have a relatively higher proportion of bilingual workers, compared to the Canadian average.

⇒ **There is a bilingual occupational labour market advantage.**

- It is the case for the participation rate (percentage of adult population employed or looking for a job) and for the employment rate (percentage of adult population employed).
- It is generally more important in New Brunswick than in Canada, and more important when compared to French only speakers as opposed to English only speakers.
- The advantage has increased more importantly, over the past 25 years, when compared to English only speakers as opposed to French only speakers.

NEW BRUNSWICK'S BILINGUALISM ADVANTAGE: FUTURE OPPORTUNITIES

New Brunswick's bilingual workforce and communities could be leveraged to develop a number of future economic opportunities that would boost the province's GDP, employment and tax base. These include:

- ⇒ **Customer contact centres and social media.** Social media is driving the development of a multi-channel next generation customer contact centre industry. New Brunswick could leverage its bilingual workforce to provide services to national and international markets.
- ⇒ **Language industries and information technologies.** The new trade agreement with Europe opens up potential new markets. The integration of new information technologies (IT) into language industries also creates new opportunities that build on New Brunswick's bilingualism.
- ⇒ **Bolstering international tourism, trade and investment.** While New Brunswick has generated incremental trade and investment benefits as a result of its bilingual workforce, there is much more potential for growth outside Canada.
- ⇒ **Strengthening economic ties with Quebec.** The report shows New Brunswick already generates significant benefits from its economic relationship with Quebec. There are additional opportunities to expand investment, increase exports and foster more tourism from the Quebec market.

¹ The North American Industrial Classification System (NAICS) defines the public administration sector as: "establishments primarily engaged in activities of a governmental nature, that is, the enactment and judicial interpretation of laws and their pursuant regulations, and the administration of programs based on them. Legislative activities, taxation, national defence, public order and safety, immigration services, foreign affairs and international assistance, and the administration of government programs are activities that are purely governmental in nature."
(<http://www23.statcan.gc.ca/imdb/p3VD.pl?Function=getVD&TVD=118464&CVD=118465&CPV=91&CST=01012012&CLV=1&MLV=5>). It essentially includes federal, provincial and municipal administration, but not, for example, health or education workers.

- ⇒ **Expanding educational services export revenue.** The local population base for New Brunswick’s post-secondary education system is in decline. Attracting significantly more international students could be a good source of export revenue for the province and ensure a high quality post-secondary education system into the future.
- ⇒ **Attracting more immigrants, including French-speaking entrepreneurs.** For French-speaking immigrants, New Brunswick’s bilingualism helps make the province an attractive option within North America. This applies to the many French-speaking entrepreneurs who move to North America each year to set up new businesses.

1. Introduction

Bilingualism is one of New Brunswick’s main competitive differentiators. Just like the province’s forests, fish and other natural resources, bilingualism has been responsible for substantial levels of business investment and job creation over the past 30 years. The industries for which bilingualism was a key decision for expansion in New Brunswick include customer contact centres, regional head offices and language industries. Yet, little information exists to document this contribution. The present study aims to address, at least partially, this gap.

Having a workforce that features two languages also increases the potential for trade as the ability to offer sales and support personnel with at least two languages helps develop markets in Canada and around the world. As this report will show, bilingualism is also an important asset that helps support the development of other strategic industries such as educational services and tourism. In addition, it can support the province as it looks to increase immigration in the coming years.

The ability to offer a bilingual workforce has not just benefited those with knowledge of both official languages. In fact, it is quite the opposite. Most of the firms that were attracted to New Brunswick to benefit from bilingual workers only require a limited number of their staff to speak both languages. The main industry group in which most customer contact centre employment is classified by Statistics Canada is “administrative and support services”. Across the province, only 31.5 percent of the workers in this industry are bilingual (i.e. have knowledge of both official languages), less than the average number of bilingual New Brunswickers which is 35.1 percent. This means the vast majority of the workers in this field are unilingual English speaking. In other words, for every bilingual essential job created by these firms, two jobs requiring competence in English only were created.

Across the province, only 31.5 percent of the workers in this industry are bilingual (i.e. have knowledge of both official languages), less than the average number of bilingual New Brunswickers which is 35.1 percent. This means the vast majority of the workers in this field are unilingual English speaking. In other words, for every bilingual essential job created by these firms, two jobs requiring competence in English only were created.

This report is broken into three sections. The first section provides a profile of bilingualism in New Brunswick. The second section demonstrates the economic benefits to New Brunswick from having this

advantage. The final section proposes some additional ways the province could leverage bilingualism for further economic development in the future.

New Brunswick will need new industries and new economic opportunities in the years ahead in order to generate the taxes needed to pay for our public services and infrastructure. We will need to attract many more immigrants to rebalance our demographic situation. Bilingualism is an important and strategic asset to help build this stronger economy.

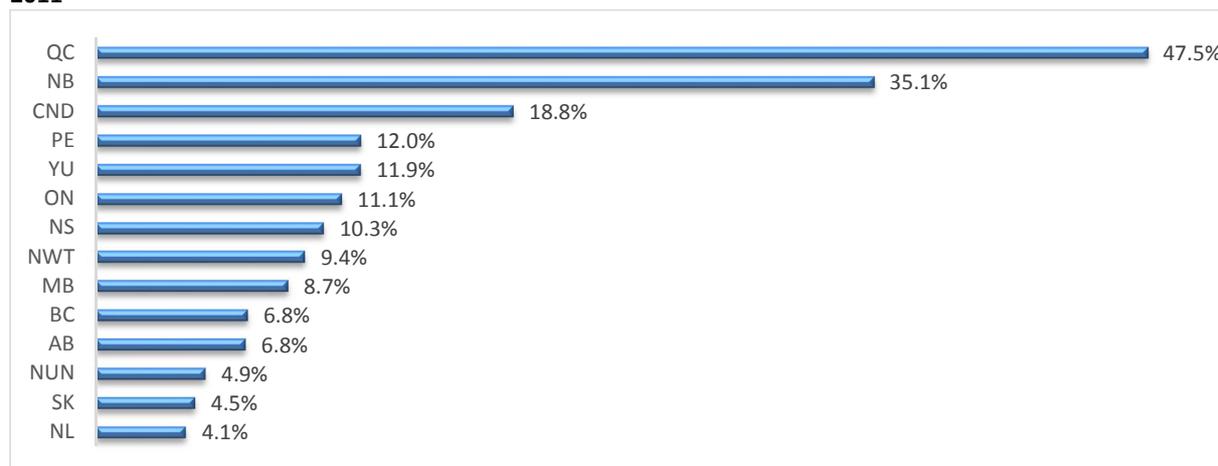
2. Profile of bilingualism in New Brunswick

New Brunswick is the only officially bilingual province in Canada. In this second section, we present the profile of bilingualism in New Brunswick compared to other provinces as well as to the Canadian average. Using Statistics Canada data, we present bilingualism levels by age, education achievement, economic sectors, and professions, including an analysis of the trend over the past 25 years.

2.1 Percentage of adult population with knowledge of English and French

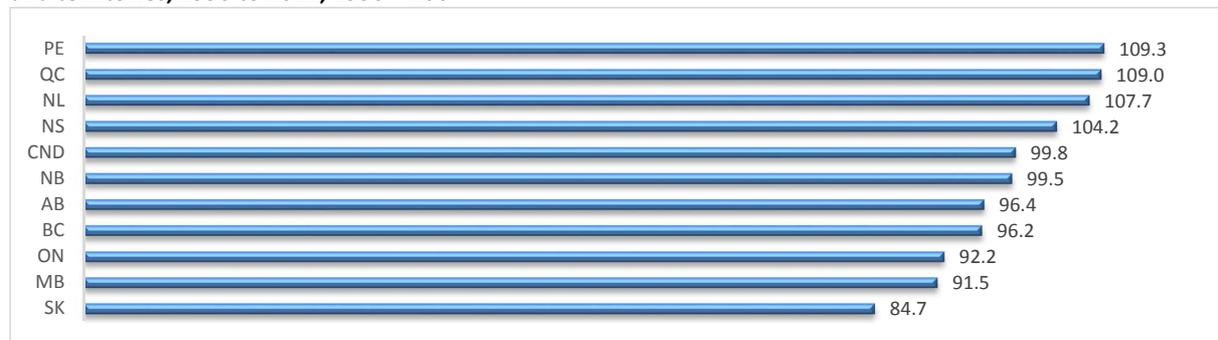
New Brunswick is second amongst Canadian provinces with respect to percentage of its adult population that is bilingual, defined as those reporting in the *Canadian National Household Survey* as having knowledge of English and French (Figure 1). While Quebec is first with 47.5 percent of its population being bilingual, New Brunswick, with 35.1 percent of its adult population being bilingual, is nearly “twice as bilingual” as Canada as a whole. It is nearly three times as bilingual as the province in third place, Prince Edward Island. The percentage share of bilingual adults in New Brunswick has been essentially constant during the past 25 years (Figure 2).

Figure 1: Percentage of adult population with knowledge of English and French, Canada, provinces and territories, 2011



Source: Statistics Canada National Household Survey 2011.

Figure 2: Evolution of percentage of adult population with knowledge of English and French, Canada, provinces and territories, 1996 to 2011, 1996 = 100

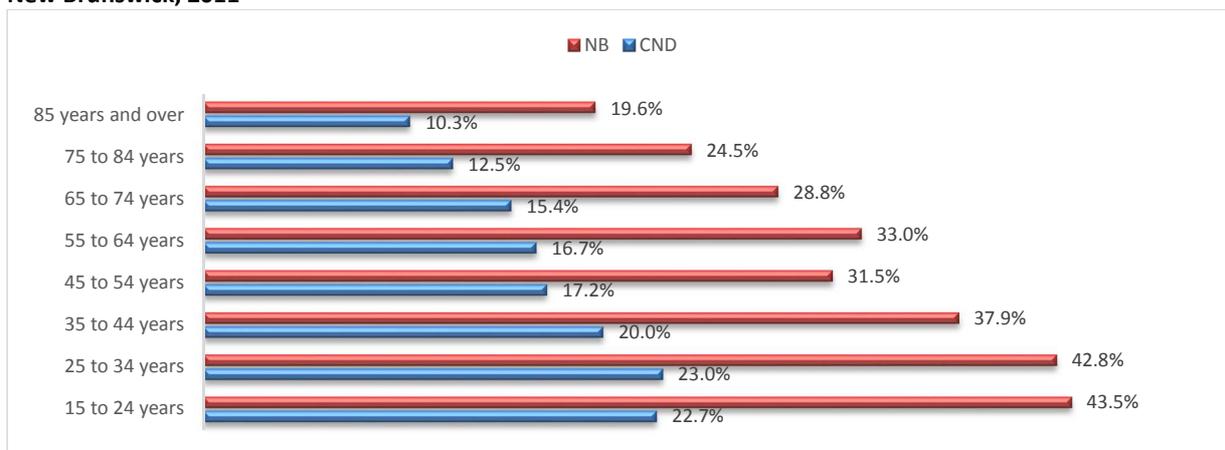


Source: Statistics Canada National Household Survey 2011.

2.2 Bilingualism by age

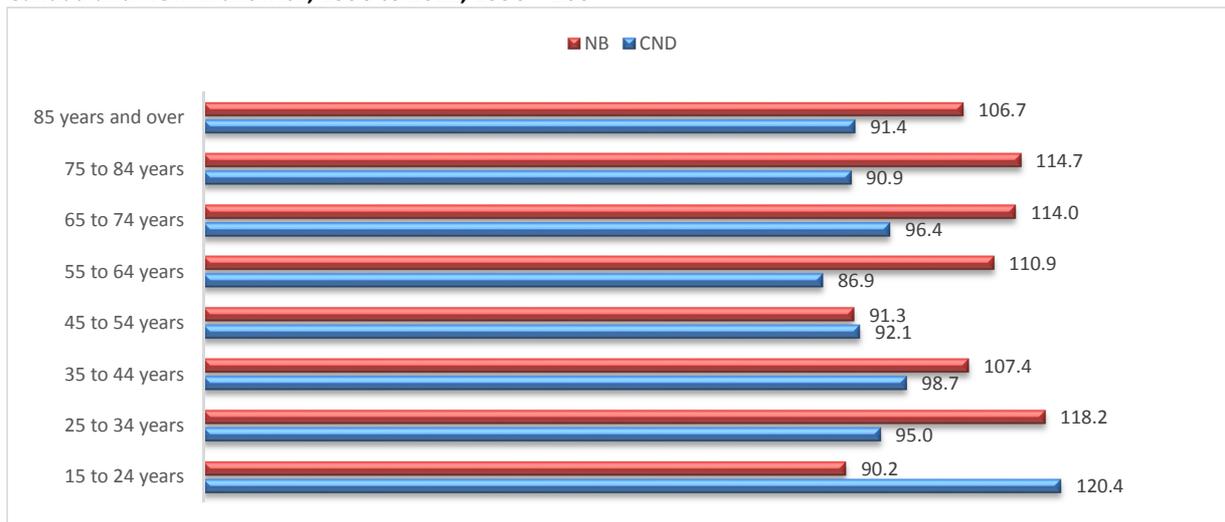
The proportion of bilingualism is much higher for younger segments of the population both for New Brunswick and to a less extent for Canada as a whole (Figure 3). For all age groups, New Brunswick in general is approximately twice as bilingual as Canada. The percentage of bilingual individuals, by age group, has generally increased in New Brunswick during the past 25 years (Figure 4). The exceptions are the 45 to 54 years of age and the 15 to 24 years of age groups. In this latter age group, the percentage of bilingual individuals has increased by 20 percent in Canada as a whole over the past 25 years.

Figure 3: Percentage of adult population with knowledge of English and French by age categories, Canada and New Brunswick, 2011



Source: Statistics Canada National Household Survey 2011.

Figure 4: Evolution of percentage of adult population with knowledge of English and French by age categories, Canada and New Brunswick, 1996 to 2011, 1996 = 100

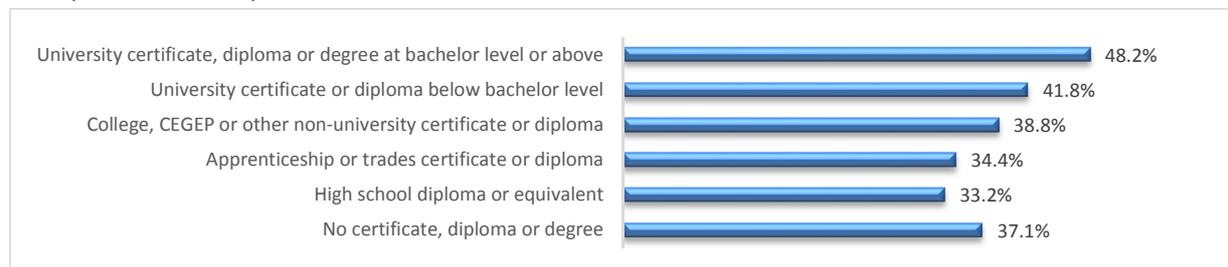


Source: Statistics Canada National Household Survey 2011.

2.3 Bilingualism by educational achievement

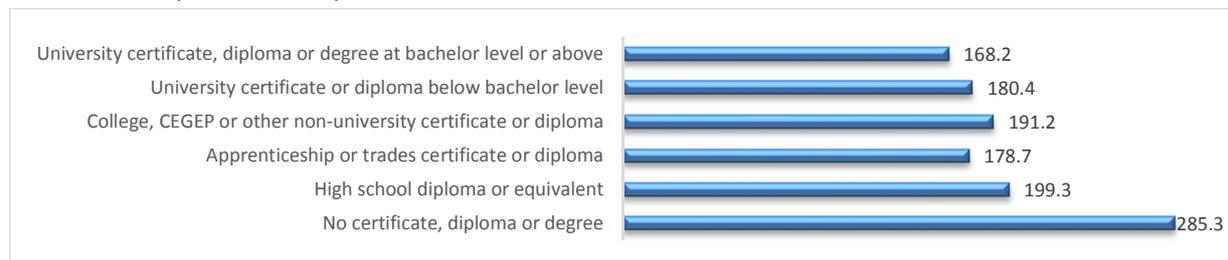
Bilingualism is generally correlated with higher educational achievement (Figure 5). The higher the level of educational achievement, the higher the proportion of bilingual individuals. The exception, it is interesting to note, is for the group of adults with no certificate, diploma or degree, where we find a higher proportion of bilingual individuals than for the group with a high school diploma or equivalent and with an apprenticeship or trades certificate or diploma. The proportion of bilingual individuals with no certificate, diploma or degree is by far the group – based on educational achievement – with the largest gap compared to the Canadian average, at nearly three times this average (Figure 6). No other group is over twice the national average. This suggests that in Canada being bilingual is more correlated with educational achievement than in New Brunswick, a reflection that in the province a second language is not only learned sitting in a classroom. We can also observe that over the past 25 years the proportion of bilingual individuals with no certificate, diploma or degree has increased by 14.5 percent in New Brunswick, the highest increase of any educational achievement category (Figure 7). Overall, over the past 25 years, for both Canada and New Brunswick, the proportion of bilingual individuals with a university education has generally decreased, or in the case of New Brunswick increased by only four percent for individuals with a university degree at the bachelor level or above. On the other hand, with the exception of the category with a high school diploma and for Canada of “college” diploma the proportion of bilingual individuals without a university education has increased in both New Brunswick and Canada.

Figure 5: Percentage of adults (15 years +) with knowledge of English and French by educational achievement levels, New Brunswick, 2011



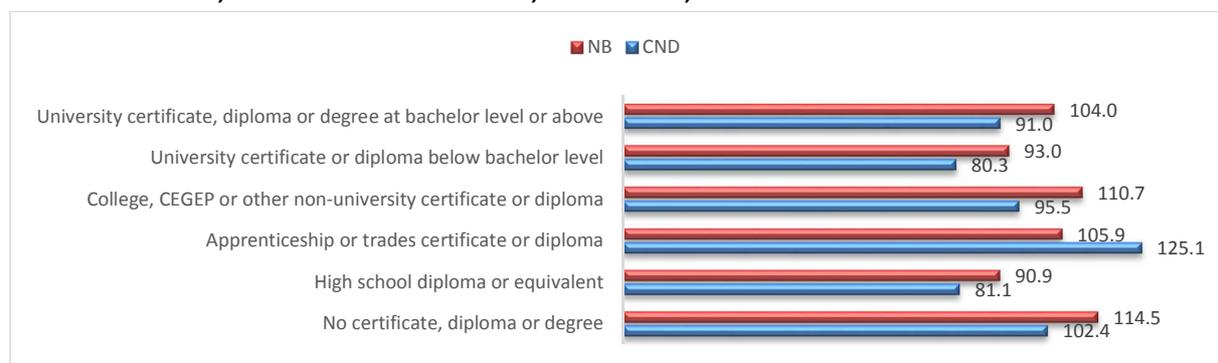
Source: Statistics Canada National Household Survey 2011.

Figure 6: Percentage of adults (15 years +) with knowledge of English and French by educational achievement, New Brunswick, Canada = 100, 2011



Source: Statistics Canada National Household Survey 2011.

Figure 7: Evolution of percentage of adults (15 years +) with knowledge of English and French by educational achievement levels, Canada and New Brunswick, 1996 to 2011, 1996 = 100

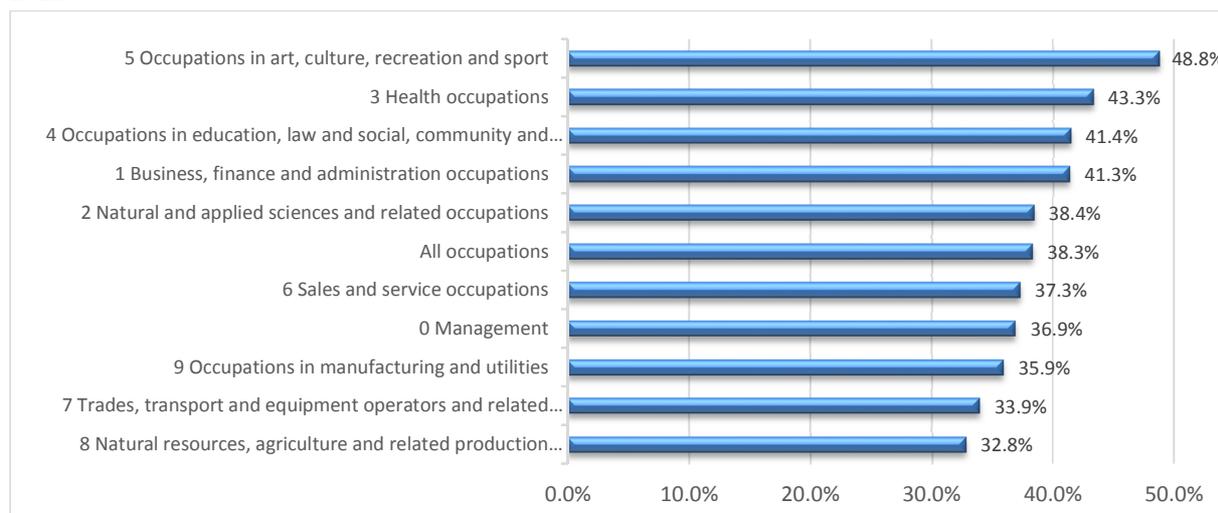


Source: Statistics Canada National Household Survey 2011.

2.4 Bilingualism by profession

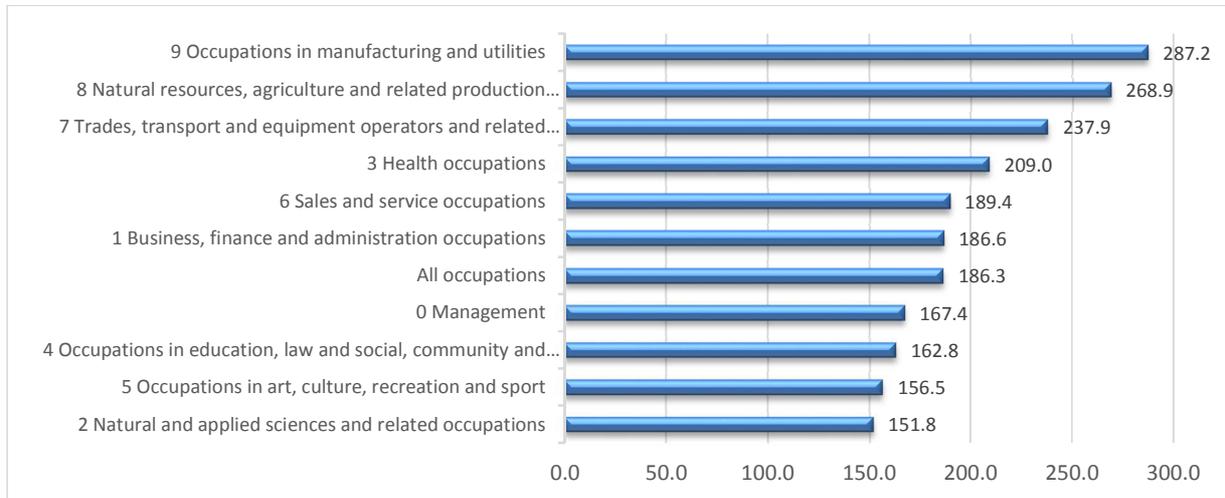
Not all professions have a similar proportion of bilingual workers (Figure 8). The professions with the highest percentage of bilingual workers are occupations in art, culture, recreation and sports, health occupations and occupations in education, law and social, community and government services. Compared to the Canadian average, the three professions in New Brunswick with the greatest difference with respect to the proportion of bilingual workers are occupations in manufacturing and utilities, natural resources, agriculture and related production occupations, and trades, transport and equipment operators and related occupations (Figure 9). These are also the three professions in New Brunswick with the lowest percentage of bilingual workers. The knowledge of English and French has not varied much for most professions over the past 25 years both for New Brunswick and for Canada (Figure 10).

Figure 8: Percentage of adults (15 years +) with knowledge of English and French by profession, New Brunswick, 2011



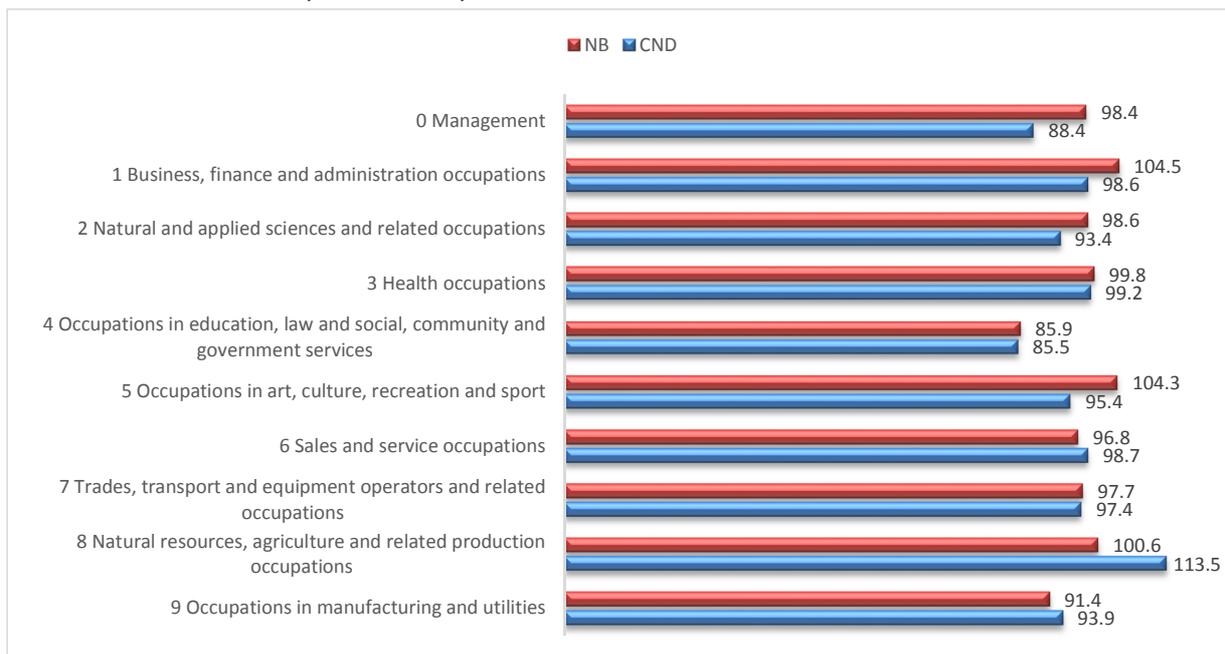
Source: Statistics Canada National Household Survey 2011.

Figure 9: Percentage of adults (15 years +) with knowledge of English and French by profession, New Brunswick, Canada = 100, 2011



Source: Statistics Canada National Household Survey 2011.

Figure 10: Evolution of percentage of adults (15 years +) with knowledge of English and French by profession, Canada and New Brunswick, 1996 to 2011, 1996 = 100



Source: Statistics Canada National Household Survey 2011.

2.5 Bilingualism by economic sectors

As is the case for professions, not all sectors have an equivalent proportion of bilingual workers (Figure 11). Eight of the province's 20 economic sectors (NAICS² 2-digit) have a proportion of bilingual workers above the provincial average, led by public administration, educational services, finance and insurance, and arts, entertainment and recreation. Management of companies and enterprises, utilities, and agriculture, forestry, fishing and hunting are the three sectors with the lowest percentage of bilingual workers.

Compared to Canada, New Brunswick has more bilingual workers in all of the province's economic sectors (NAICS 2-digit), with the exception of management of companies and enterprises (Figure 12). The sector with the highest presence of bilingual workers compared to the Canadian average is mining, quarrying and oil and gas extraction. Using 3-digit NAICS data (Figure 33, in appendix A) confirms that this is the result of a relatively very high presence of bilingual workers in the oil and gas extraction sector, nearly 5.5 times the Canadian average. This could in part reflect the high number of Francophones commuting to western Canada to work in the oil and gas sector.

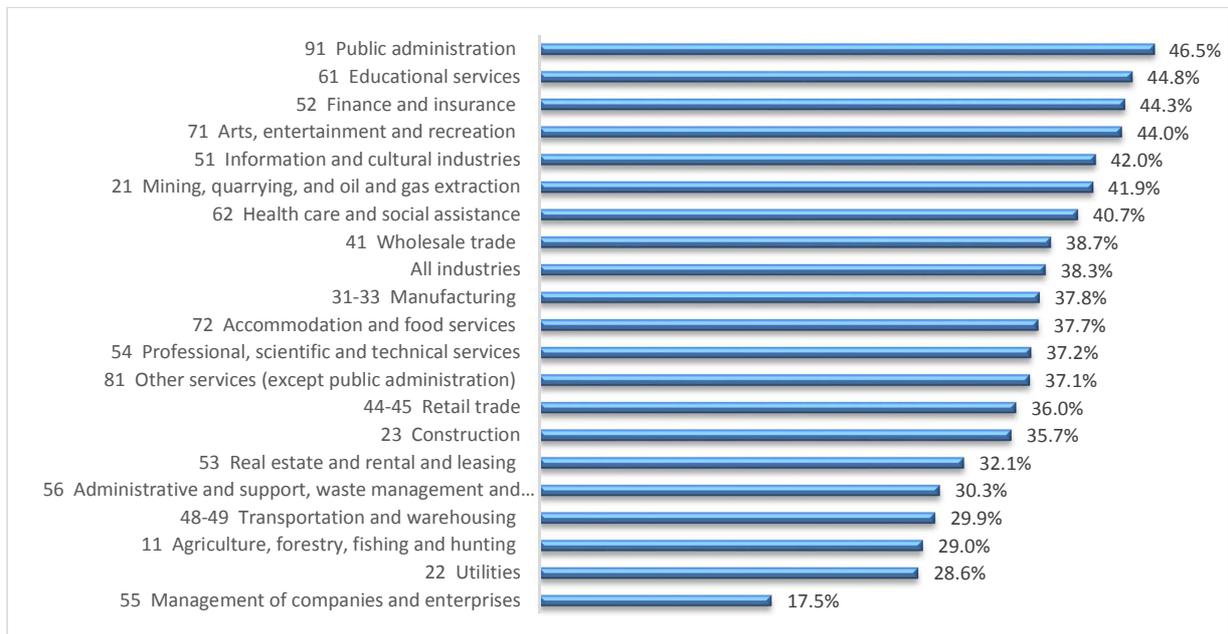
Public Administration in New Brunswick: Not the highest relative proportion of bilingual workers

Public administration also offers interesting results when we compare the relative presence of bilingual workers in New Brunswick and in Canada as a whole. Since New Brunswick is the only officially bilingual province, one could think that the relative presence of bilingual workers would be much larger in the public administration sector compared to the national average, but also compared to industrial sectors where offering bilingual services is generally not regulated. We find that the relative presence of bilingual workers in public administration is actually below the relative provincial average³. Indeed, 15 of the 19 sectors (other than public administration) have a relative proportion of bilingual workers higher – comparing the presence in New Brunswick and Canada – than the public administration sector.

² "The North American Industry Classification System (NAICS) is an industry classification system developed by the statistical agencies of Canada, Mexico and the United States. Created against the background of the North American Free Trade Agreement, it is designed to provide common definitions of the industrial structure of the three countries and a common statistical framework to facilitate the analysis of the three economies. [...] It has a hierarchical structure. At the highest level [the 2-digit level], it divides the economy into 20 sectors. At lower levels, it further distinguishes the different economic activities in which businesses are engaged." <http://www.statcan.gc.ca/subjects-sujets/standard-norme/naics-scian/2012/introduction-eng.htm>

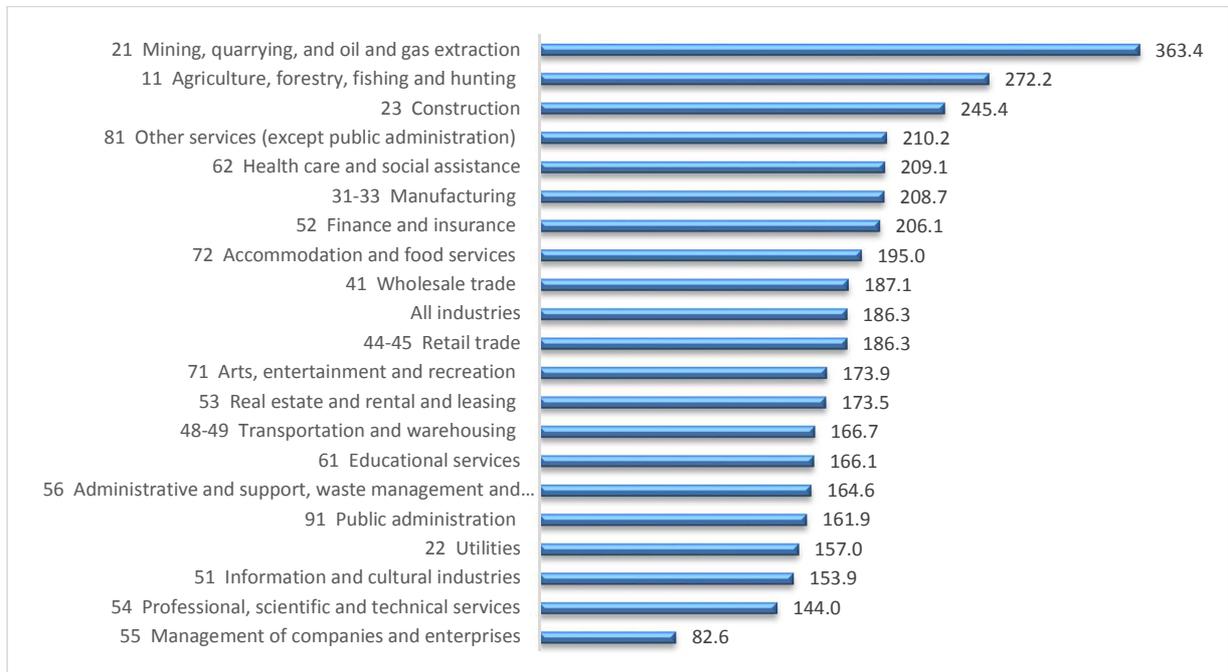
³ At the 2-digit NAICS level, where all levels of government are aggregated

Figure 11: Percentage of employees with knowledge of English and French by Sector (NAICS 2-digit), New Brunswick, 2011



Source: Statistics Canada National Household Survey 2011.

Figure 12: Relative concentration of employees with knowledge of English and French by Sector (NAICS 2-digit), New Brunswick compared to Canada (Canada = 100), 2011



Source: Statistics Canada National Household Survey 2011.

3. Economic benefits of bilingualism

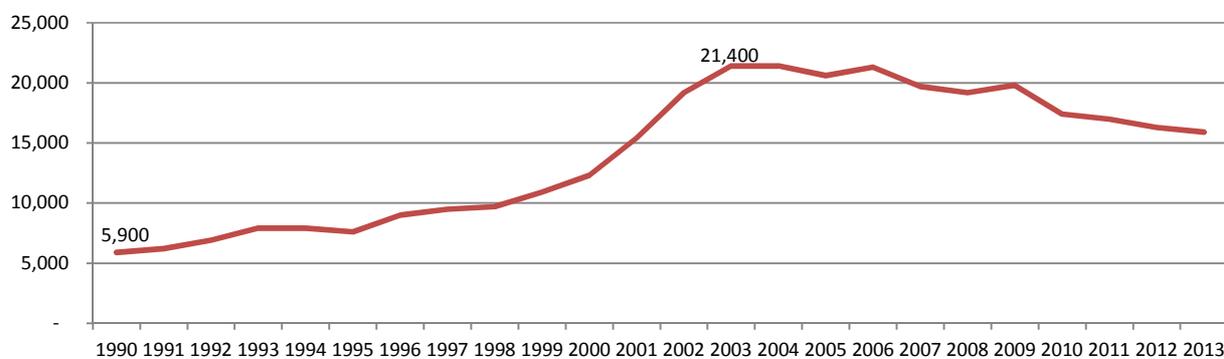
New Brunswick has derived considerable economic benefit from its status as a bilingual province. It has had positive effects on investment attraction, trade, tourism and immigration. This section will outline some of the economic benefits from bilingualism while Section 4 will expand on the potential for bilingualism to support economic development in the province in the years ahead.

3.1 Bilingualism and attracting national contact centres and back offices

In the 1990s, New Brunswick's bilingual workforce, excellent telecommunications network and competitive operating cost environment led to the attraction of over 40 national and international customer contact centres and back office operations. Some of the biggest corporate players including ExxonMobil, Xerox, IBM, FedEx, UPS, RBC, TD Insurance, Unilever and SNC-Lavalin set up in the province. The industry group that contains much of the customer contact centre and back office employment is the business, building and other support services sector. Between 1990 and 2003, this industry group in New Brunswick added 15,500 workers (Figure 13). New Brunswick's share of the national industry rose from 1.9 percent in 1990 to 3.5 percent in 2003.

Even today, despite some consolidation and technological change in the industry, it continues to employ more than 15,000 people in New Brunswick.

Figure 13: Total employment in the business, building and other support services sector, New Brunswick, 1990-2013



Source: Statistics Canada CANSIM Table 282-0008.

The 2011 National Household Survey provides another source of data that shows the impact of this industry on the New Brunswick labour market. There were over 10,600 people who listed their occupation as a customer or information services representative. Adjusted for the size of the workforce, New Brunswick had more people employed in this sector than all other provinces by a wide margin (Figure 14).

According to the National Household Survey, New Brunswick had nearly four times as many people working in the business support services sector in 2011 than Canada as a whole.

Bilingualism was an important reason why these firms chose New Brunswick:

“To provide service that meets the needs of customers across Canada, you need a dedicated, capable and bilingual workforce. ING DIRECT found that workforce in Moncton, New Brunswick and established a contact center there in July 2011 – their first one in Atlantic Canada.”⁴

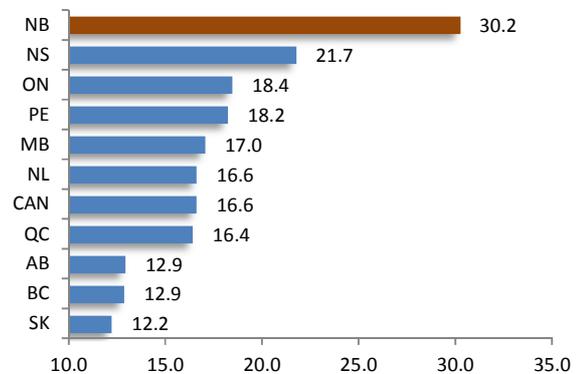
Derek Vanstone, Air Canada's vice-president, corporate strategy and government affairs, noted a main reason to expand the company's Saint John customer service call centre in 2014 was to expand its ability to service English and French markets across Canada. He said “We are thrilled to be expanding our customer service call centre in Saint John...”. “This is great news for our customers as we continue to improve our response times and overall bilingual service levels.”⁵

“Located in Moncton, the [RBC] contact center is the largest of its kind in Atlantic Canada – 800 employees provide bilingual sales and service support and advice to clients.”⁶

“... the chief operating officer of Rogers Cable, John Tory, has identified the presence of a bilingual workforce to explain his company's new investment [600 job contact centre] in Moncton...”⁷ [Translation]

It is important to point out that these industries were indeed attracted here in large part because of bilingualism but at the same time virtually all of the firms do not require the majority of the staff to be bilingual: “Just as you don't need to speak French for every call centre position, nor do you have to speak English for every job.”⁸ In fact, many only require 25-30 percent to speak both languages – meaning that the population of New Brunswick that does not speak French also has benefitted directly from the positive economic impacts of bilingualism.

Figure 14: Customer and information services representatives (NOC 655) per 1,000 in the workforce



Source: Statistics Canada National Household Survey 2011.

In fact, many only require 25-30 percent to speak both languages – meaning that the population of New Brunswick that does not speak French also has benefitted directly from the positive economic impacts of bilingualism. [...] A significant percentage of the 10,160 workers in this sector who only speak English would not have their jobs if this industry was not attracted to New Brunswick.

⁴ Invest NB. 2014. *ING Direct*. Case studies. www.investnb.ca/casestudies/ing-direct/.

⁵ Invest NB. Air Canada adding employees at Saint John Customer Service Call Centre. April 14, 2014. http://www2.gnb.ca/content/gnb/en/news/news_release.2014.04.0376.html

⁶ Invest NB. 2014. *The Royal Bank of Canada banks on New Brunswick*. Case Studies. www.investnb.ca/casestudies/royal-bank-of-canada/

⁷ Ricard, Philippe. 2002. « Rogers créera 600 emplois à Moncton. » *L'Acadie Nouvelle*. February 13, 2002. p. 5.

⁸ Foster, James. 2007. “Students bridge language barrier.” *Times & Transcript*. June 30, 2007. P. B1.

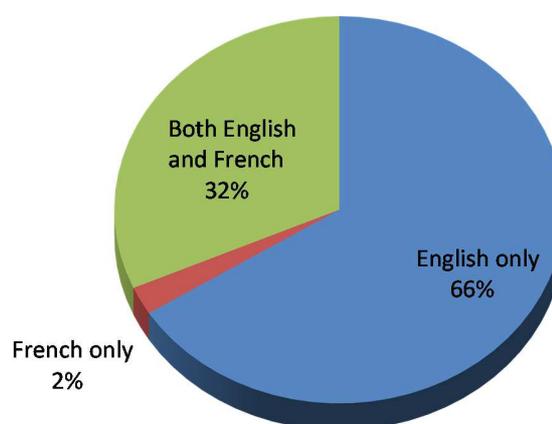
Figure 15 shows the breakdown of workers in the industry group administrative and support services (NAICS 561⁹) by knowledge of official languages. Among the 15,400 workers in this industry, 10,160 speak only English and another 360 speak only French. There were 4,865 who claimed to be able to speak both English and French or 32 percent of the total.

A significant percentage of the 10,160 workers in this sector who only speak English would not have their jobs if this industry was not attracted to New Brunswick.

Interprovincial and international services export data from Statistics Canada indicate this industry has had a substantially positive impact on New Brunswick's trade in services. In 2011, the most recent year for which data is available, the administrative and support and head office sector in New Brunswick generated \$1.26 billion worth of interprovincial export revenue. The sector generated another \$109 million worth of international exports bringing the total value of exports to \$1.37 billion.

Adjusted for population size, New Brunswick generates more than twice as much export revenue from this sector compared to the country as a whole (Table 1). Isolating only interprovincial export revenue, New Brunswick generates three times as much as the national average. No other province comes close to the export revenue generated from administrative and support services on a per capita basis.

Figure 15: Employment in NAICS 561 Administrative and support services by knowledge of official languages, New Brunswick (2011)



Source: Statistics Canada National Household Survey 2011.

Table 1: Per capita export revenue from the administrative and support and head office sector (2011)*

	Interprovincial per capita <u>export revenue</u>	International per capita <u>export revenue</u>	Total per capita <u>export revenue</u>	As a % of the national <u>total</u>
Canada	\$553	\$316	\$869	
Newfoundland and Labrador	\$294	\$82	\$376	43%
Prince Edward Island	\$831	\$160	\$991	114%
Nova Scotia	\$497	\$219	\$716	82%
New Brunswick	\$1,672	\$145	\$1,816	209%
Quebec	\$434	\$284	\$718	83%
Ontario	\$634	\$486	\$1,120	129%
Manitoba	\$468	\$120	\$588	68%
Saskatchewan	\$265	\$98	\$363	42%
Alberta	\$598	\$118	\$717	82%
British Columbia	\$433	\$233	\$665	77%

*This sector grouping includes waste management and remediation services.

Source: Statistics CANSIM Table 386-0003.

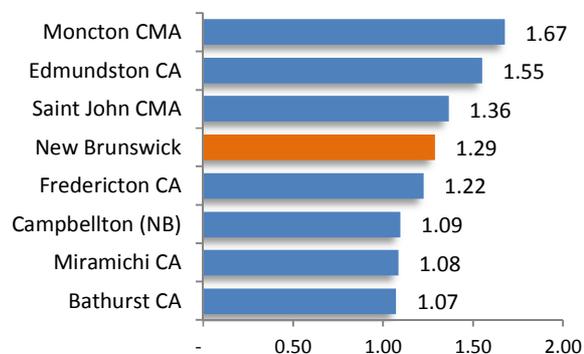
⁹ Examples of sub-sectors found in NAICS 561, aside from contact centres, are investigation and security services and services to buildings and dwellings.

3.2 Bilingualism and regional economic benefits within New Brunswick

The bilingual workforce has been used to attract firms across New Brunswick from SNC-Lavalin in Campbellton to Minacs in Bathurst and TD Insurance in Saint John. Using occupational data from the National Household Survey, all of New Brunswick's urban centres have a higher concentration of workers in administrative and customer service roles compared to the national workforce.

Table 2 shows total employment in selected administrative, support and customer service roles around New Brunswick. Among these eight occupational groups, there were 27,500 workers across the province in 2011.

Figure 16: Administrative Occupational Location Quotient (2011) Canadian labour market = 1.00



Source: Statistics Canada National Household Survey 2011.

A location quotient (LQ) analysis compares employment intensity in various jurisdictions relative to the national labour market. When combining employment in the eight administrative occupations of Table 2, a location quotient can be developed to compare New Brunswick's urban centres to the national labour market (Figure 16). On a relative basis, Moncton has 67 percent more people working in these occupations compared to the national labour market. Across the province there are 29 percent more. Table 3 below shows the LQ for each of the eight occupational groups.

Table 2: Employment by Occupation – Selected services occupations where bilingualism is a key advantage (2011)*

Occupational group:	New Brunswick	Moncton CMA	Saint John CMA	Fredericton CA	Bathurst CA	Miramichi CA	Campbellton (NB)	Edmundston CA
121 Administrative services supervisors	1,845	460	300	195	85	35	-	145
1241 Administrative assistants	7,695	1,370	1,150	1,005	375	195	110	355
143 Financial, insurance & related admin. support workers	4,425	1,335	730	695	100	145	80	95
1454 Survey interviewers and statistical clerks	895	165	80	95	40	20	25	20
2282 User support technicians	1,670	585	545	265	-	25	-	-
5125 Translators, terminologists and interpreters	380	185	35	75	-	-	-	-
6551 Customer services reps. - financial institutions	2,205	585	320	290	45	45	40	55
6552 Other customer and information services reps.	8,425	2,770	1,945	1,075	295	330	115	260
Total – Selected services occupations	27,540	7,455	5,105	3,695	940	795	370	930

*The National Household Survey publishes employment levels in increments of five.

Source: Statistics Canada National Household Survey 2011.

Table 3: Location Quotient for Selected Services Occupations (2011)

Canadian labour market = 1.00

Occupational group:	New Brunswick	Moncton CMA	Saint John CMA	Fredericton CA	Bathurst CA	Miramichi CA	Campbellton (NB)	Edmundston CA
121 Administrative services supervisors	1.12	1.35	1.05	0.84	1.26	0.62	-	3.15
1241 Administrative assistants	1.10	0.95	0.94	1.02	1.31	0.82	1.00	1.82
143 Financial, insurance & related admin. support workers	0.94	1.36	0.89	1.05	0.52	0.90	1.08	0.72
1454 Survey interviewers and statistical clerks	1.17	1.04	0.60	0.88	1.28	0.76	2.07	0.93
2282 User support technicians	1.47	2.48	2.75	1.66	-	0.64	-	-
5125 Translators, terminologists and interpreters	1.06	2.49	0.56	1.49	-	-	-	-
6551 Customer services reps. - financial institutions	1.17	1.50	0.97	1.10	0.59	0.70	1.35	1.04
6552 Other customer and information services reps.	<u>2.13</u>	<u>3.36</u>	<u>2.81</u>	<u>1.93</u>	<u>1.82</u>	<u>2.43</u>	<u>1.84</u>	<u>2.34</u>
LQ for eight occupations combined	1.29	1.67	1.36	1.22	1.07	1.08	1.09	1.55

Source: Statistics Canada National Household Survey 2011.

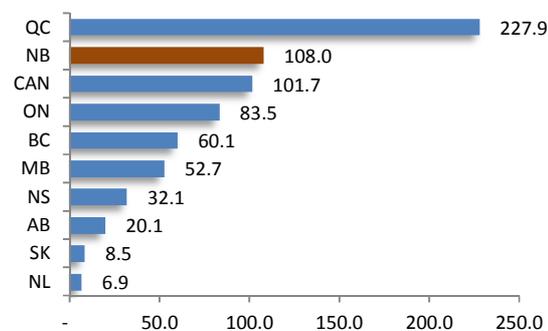
3.3 Bilingualism and language industries

According to the *Canadian Association de l'industrie de la langue/language industry association (AILIA)*, language industries can be grouped into four broad categories: translation, interpretation, language training and language technologies.

Quebec leads on this industry in Canada with 52 percent of the national total of workers in the occupational group NOC 5125 Translators, terminologists and interpreters.

However, New Brunswick ranks second in the country behind Quebec adjusted for population size. There are 65 registered business establishments in the industry group NAICS 541930 - Translation and interpretation services¹⁰, and 380 people employed in the occupational group NOC 5125 Translators, terminologists and interpreters - more than any other province in Canada except Quebec – adjusted for the size of the overall workforce (Figure 17).

Figure 17: Translators, terminologists and interpreters (NOC 5125) per 100,000 in the workforce



Source: Statistics Canada National Household Survey 2011.

¹⁰ Source: Canadian Business Patterns. Statistics Canada (June 2014).

Although they are not reflected in these figures as they are located in universities, New Brunswick has a number of institutions that are language based and are nationally and internationally renowned by, thus making language an exported service. These include the *Canadian Institute for Research on Linguistic Minorities*, the *Centre de traduction et de terminologie juridique* and the *International Observatory on Language Rights*¹¹.

3.4 Bilingualism and professional services exports

Language is not only an exported service it is also a tool used by exporters of “more traditional” goods and services. Exporting in markets using similar languages increases the chances of success¹². A recent study by The Conference Board of Canada concludes that “Bilingual Canada trades much more with French-speaking countries than Less Bilingual Canada.”¹³

New Brunswick ranks eighth among the 10 provinces across Canada for interprovincial professional services

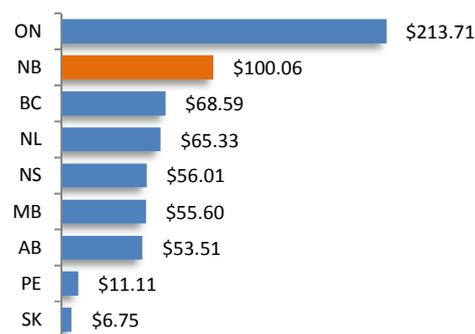
revenue. Professional services include such activities as engineering, architectural, legal and marketing services. Other than engineering services the province has struggled to build export markets for these services. On a per capita basis, export revenue for New Brunswick from this sector is 38 percent below national average.

By contrast, New Brunswick ranks second among the 10 provinces for professional services export revenue from the Quebec market, 53 percent more than the average across Canada when adjusted for population size. It is clear the province’s bilingualism enables increased professional services-based trade in the Quebec market. We will discuss in further details how New Brunswick is leveraging its bilingualism to foster business in Quebec in Section 4 below.

3.5 Using bilingualism to provide insurance services across Canada

New Brunswick has attracted an increasing amount of insurance industry back office and customer service support activity in recent years. One of the main reasons firms such as The Co-operators in Moncton and TD Insurance in Saint John have expanded in New Brunswick has been to take advantage of the bilingual workforce. A 2011 study published by the Insurance Bureau of Canada found that 47 percent of the New Brunswick insurance carrier operations generated export revenue – mostly by

Figure 18: Per capita export revenue from the Quebec market – professional services sector (2011)



Source: Statistics Canada, CANSIM Table 386-0003.

*New Brunswick’s bilingual workforce has been one of the **top cited reasons** why national insurance firms have been expanding in the province.*

¹¹ <http://www.icrml.ca/en/>; http://www.cttj.ca/?page_id=228; and

http://www.droitslinguistiques.ca/index.php?option=com_content&view=article&id=13&Itemid=14&lang=en

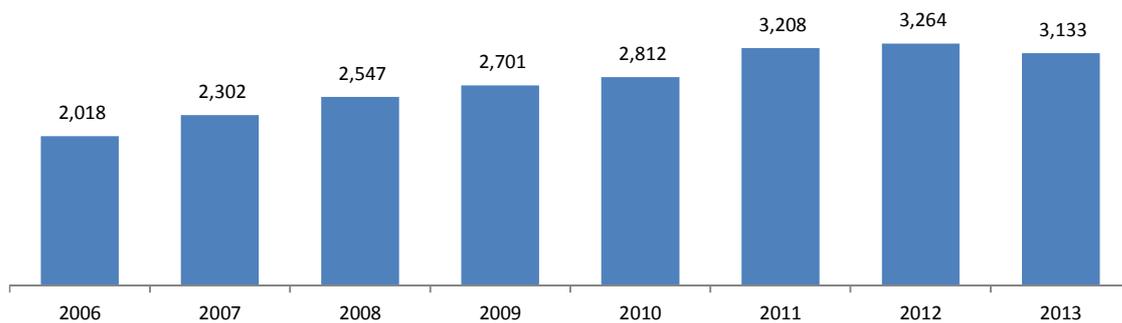
¹² See, for example, Desjardins, Pierre-Marcel. 2003. *Atlantic Canada’ Exports, with a Focus on SMEs and Rural Regions*. Maritime Collection. Moncton: Canadian Institute for Research on Regional Development. P. 104.

¹³ The Conference Board of Canada. 2013. *Canada, Bilingualism and Trade*. Presented to RDÉE Canada, CEDEC and Industry Canada. P. 36.

providing back office and customer services to clients across Canada¹⁴. According to the study, four insurance firms in New Brunswick attributed more than 50 percent of their employment to markets outside the province. A number of firms said they handle overflow claims management and customer service for markets in Quebec, Ontario and western Canada. The survey asked insurance carriers to describe the value proposition for their New Brunswick operations. The bilingual workforce was one of the top cited reasons why the firms were expanding in the province.

Being able to serve Francophone customers has been a key reason why the insurance carriers have expanded their employment in the province by 55 percent between 2006 and 2013 (Figure 19).

Figure 19: Insurance carrier employment in New Brunswick (2006-2013)



Source: Statistics Canada CANSIM Table 281-0024.

3.6 Bilingualism and tourism

The three main reasons why Quebec tourists visit New Brunswick has to do with the ability to be served in the language of their choice along with geography and the province’s unique tourism assets. As an example, in 2011 the accommodation and food services sector in New Brunswick generated \$123.3 million in revenue from Quebec tourists (classified as interprovincial export revenue). This was second behind Prince Edward Island in the amount of revenue generated from Quebec in this sector adjusted for the size of the population (Figure 20). It was more than twice as much revenue compared to Ontario and three times as much compared to Nova Scotia on a per capita basis.

Figure 20: Per capita export revenue from the Quebec market – accommodation and food services sector (2011)



Source: Statistics Canada, CANSIM Table 386-0003.

New Brunswick generates more accommodation and food services sector revenue from Quebec than any other province – twice as much as from Nova Scotia visitors.

To read more about how New Brunswick is leveraging its bilingualism to foster business in Quebec refer to Section 4 below.

¹⁴ Source: Insurance Bureau of Canada. *New Brunswick’s Insurance Industry: An Economic Growth Engine (2011)*.

3.7 Bilingualism and post-secondary education

New Brunswick's post-secondary education institutions are not bilingual. Having distinct institutions offering programs in English and in French nevertheless increases the number of potential markets from which to attract students. Furthermore, offering a bilingual environment is a characteristic which makes New Brunswick post-secondary education institutions even more attractive for potential students.

New Brunswick ranks third amongst Canadian provinces with respect to interprovincial exports of education services, and fifth for international exports (Table 4). The data relative to the origin of community college students was not available. With respect to the attraction of interprovincial university students, more than 20 percent of Canadian students attending New Brunswick universities come from other provinces, mostly from Atlantic Canada and central Canada (Table 5). Data at this level is not available on a linguistic basis or by university. On the other hand, data by university is available for international students (Table 6). The University of New Brunswick – Saint John is the campus with the largest percentage of international students, reaching 22 percent in 2013-2014. It is followed by the Moncton campus of the Université de Moncton and the Fredericton campus of the University of New Brunswick. As the number of international students has increased (from 2,325 to 2,793) since 2011, the last year for which export revenues data is available, we can assume that the performance of the province has improved.

On all university campuses in the province, the proportion of international students has increased between 2009-2010 and 2013-2014 (Table 7). The Université de Moncton's Moncton campus has seen the largest increase. Given our declining population, for New Brunswick's universities and their contribution to the province's economy, attracting international students is essential as domestic enrollment has decreased on all campuses.

Table 4: Education services export revenue by province (2011)

	<i>Interprovincial exports</i>		<i>International exports</i>		<i>Total export revenue</i>	
	<u>\$Million</u>	<u>Per Capita</u>	<u>\$Million</u>	<u>Per Capita</u>	<u>\$Million</u>	<u>Per Capita</u>
Prince Edward Island	\$7.6	\$52.76	\$19.7	\$136.77	\$27.3	\$189.53
Nova Scotia	\$105.5	\$111.70	\$31.4	\$33.25	\$136.9	\$144.95
Ontario	\$514.6	\$38.80	\$986.8	\$74.40	\$1,501.4	\$113.20
British Columbia	\$98.3	\$21.85	\$348.8	\$77.53	\$447.1	\$99.37
New Brunswick	\$39.8	\$52.68	\$27.2	\$36.00	\$67.0	\$88.68
Alberta	\$168.6	\$44.48	\$114.5	\$30.21	\$283.1	\$74.69
Newfoundland and Labrador	\$16.0	\$30.47	\$12.5	\$23.81	\$28.5	\$54.28
Quebec	\$107.6	\$13.44	\$250.6	\$31.30	\$358.2	\$44.73
Saskatchewan	\$17.3	\$16.22	\$17.6	\$16.50	\$34.9	\$32.73
Manitoba	\$11.5	\$9.32	\$17.4	\$14.10	\$28.9	\$23.42

Source: Statistics CANSIM Table 386-0003.

Table 5: Total Enrollment in New Brunswick Universities, Province of Origin and International Students, 2009-2010 to 2013-14

	2009-2010	2010-2011	2011-2012	2012-2013	2013-2014
Canadian/Permanent Residents	20 400	20 198	19 921	19 372	18 430
Newfoundland and Labrador	252	228	208	204	227
Prince Edward Island	539	540	519	506	524
Nova Scotia	1 632	1 633	1 644	1 587	1 534
New Brunswick	15 969	15 793	15 559	15 016	14 153
Québec	455	423	390	426	411
Ontario	906	948	901	920	903
Manitoba	43	45	48	47	46
Saskatchewan	41	43	38	41	38
Alberta	256	239	243	240	237
British Columbia	170	182	183	186	164
Nunavut	8	6	17	6	5
Northwest Territories	8	9	9	7	12
Yukon	8	8	6	6	9
Outside Canada	87	85	146	163	160
Unknown	26	16	10	17	7
International	1 826	2 057	2 325	2 609	2 793
Total	1 826	22 255	22 246	21 981	21 223

Source: http://www.mph.ec.ca/media/84307/Enr_Table7_2013_2014E.pdf

Table 6: Total Enrollment in New Brunswick Universities, International Students, 2009-2010 to 2013-14

	2009-2010		2010-2011		2011-2012		2012-2013		2013-2014	
	#	% of total	#	% of total	#	% of total	#	% of total	#	% of total
Campus universitaire de Moncton	489	9.9%	544	11.2%	579	12.1%	663	13.7%	787	16.9%
Campus universitaire de Shippagan	18	2.9%	20	3.4%	24	4.3%	24	4.7%	32	6.8%
Campus universitaire d'Edmundston	34	4.9%	39	6.2%	23	3.9%	30	5.0%	39	7.1%
Mount Allison University	184	7.4%	210	8.1%	201	7.9%	241	9.0%	231	9.3%
St. Thomas University	81	3.2%	72	2.8%	78	3.0%	102	4.1%	121	5.2%
University of New Brunswick – Fredericton	654	7.7%	716	8.5%	816	9.8%	914	11.2%	1 033	12.6%
University of New Brunswick – Saint John	366	14.7%	456	17.9%	604	21.9%	635	23.1%	550	22.0%
New Brunswick Total	1 806	8.2%	2 057	9.2%	2 325	10.5%	2 609	11.9%	2 793	13.2%

Source: http://www.mph.ec.ca/media/84301/Enr_Table5_2013_2014E.pdf

Table 7: Growth in Total Enrollment in New Brunswick Universities, National and International Students, 2009-2010 to 2013-14

	National Students	International Students
Campus universitaire de Moncton	-12,5%	60,9%
Campus universitaire de Shippagan	-26,7%	77,8%
Campus universitaire d'Edmundston	-22,7%	14,7%
Mount Allison University	-1,4%	25,5%
St. Thomas University	-9,6%	49,4%
University of New Brunswick – Fredericton	-8,5%	58,0%
University of New Brunswick – Saint John	-8,3%	50,3%
New Brunswick Total	-9,7%	53,0%

Source: http://www.mphec.ca/media/84301/Enr_Table5_2013_2014E.pdf and http://www.mphec.ca/media/84289/Enr_Table1_2013_2014E.pdf

3.8 Bilingualism and immigrant attraction

As of the 2011 National Household Survey, there were approximately 2,465 immigrants living in New Brunswick who indicated that French was their mother tongue. New Brunswick ranks fifth among the 10 provinces for the total number of francophone immigrants. However, adjusted for population size, New Brunswick ranks second behind Quebec with 33 francophone immigrants living in the province out of every 10,000 residents. In the five year period 2006 to 2011 there were 500 francophone immigrants who settled in Canada and were living in New Brunswick in 2011.

Expanding the analysis to immigrants who can speak French (expanding beyond mother tongue), there were 7,290 living in New Brunswick in 2011.

It is clear New Brunswick is having more success attracting and retaining Francophone immigrants than most other provinces but the level of immigration is still well below the national average. In other words, New Brunswick is home to 3.4 percent of Canada's Francophone population but only 1.1 percent of Francophone immigrants. The opportunity to expand Francophone and bilingual immigration is explored further in Section 4 below.

3.9 Bilingualism and trade with Quebec

There is strong evidence that bilingualism has helped New Brunswick firms build their business in Quebec. According to Statistics Canada, in 2011 New Brunswick generated over \$4.8 billion worth of export revenue from Quebec. Over the five year period between 2007 and 2011, the average annual export revenue generated from Quebec was \$3.9 billion. On a per capita basis, no other province generates more export revenue from Quebec than does New Brunswick.

While commodities are a big part of this export revenue for New Brunswick so are services. Between 2007 and 2011, New Brunswick generated nearly \$1.2 billion worth of services revenue per year from the Quebec market. On a per capita basis, only Ontario generates more services sector revenue from Quebec than does New Brunswick.

Figure 21: Per capita export revenue from the Quebec market - administrative and support and head office sectors* (annual average 2007-2011)



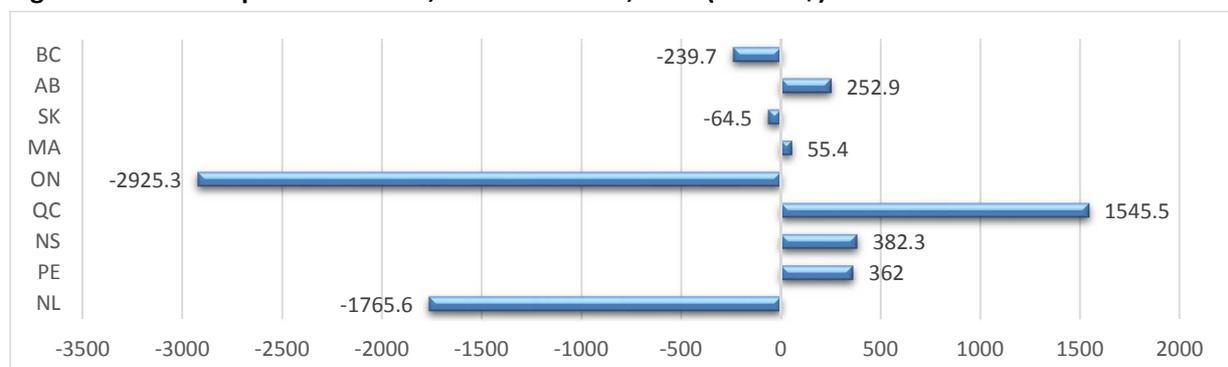
*Includes waste management.

Source: Statistics CANSIM Table 386-0003.

The customer contact centre sector discussed above generates significant revenue from the Quebec market. Revenue from Quebec in the administrative and support, head office, waste management and remediation services sector grouping was worth \$433 million to New Brunswick in 2011. While this sector is not broken down in greater detail the bulk of that revenue must come from the administrative and support sector. This represents bilingual New Brunswickers doing business with Quebec businesses and residential customers from the customer contact centre environment. As shown in Figure 21, on a per capita basis, New Brunswick generates more than twice as much revenue from Quebec in this sector compared to its nearest competitor, Ontario.

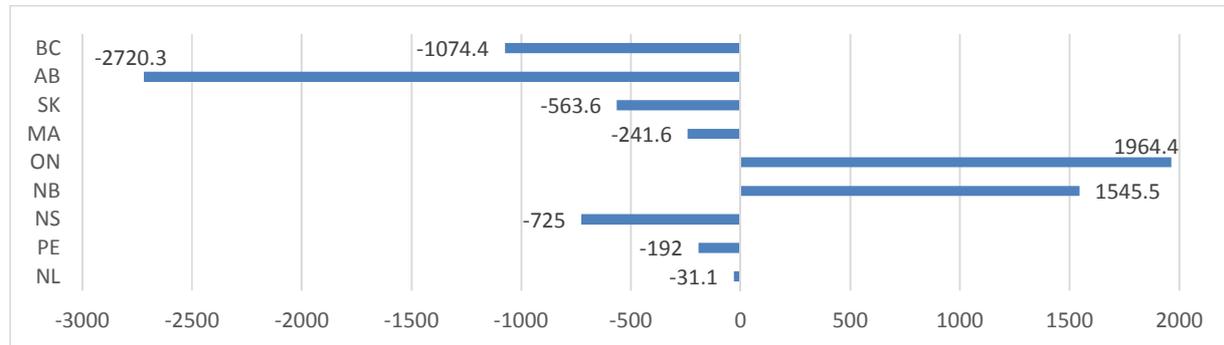
New Brunswick's transportation sector also derives significant export revenue from Quebec. Between 2007 and 2011, the transportation and related services sector generated an average \$148 million in revenue per year. On a per capita basis this was larger than all other provinces, except Ontario and Manitoba.

Figure 22: Net interprovincial trade, New Brunswick, 2011 (million \$)



Source: Authors' Calculations from Statistics Canada: CANSIM 386-0003.

Figure 23: Net interprovincial trade, Canadian provinces with Québec, 2011 (million \$)



Source: Authors' Calculations from Statistics Canada: CANSIM 386-0003.

New Brunswick's overall presence on the Québec market is quite impressive. It is the province with which New Brunswick has its largest interprovincial trade surplus (Figure 22). In fact, only two provinces have an interprovincial trade surplus with Québec (Figure 23). Ontario had, in 2011, a nearly two billion dollar trade surplus, but New Brunswick, with a much smaller economy, had a surplus of more than \$1.5 billion dollars.

There are considerable opportunities to expand the trade relationship with Quebec and this topic is discussed further in Section 4 below.

3.10 Bilingualism and trade with la Francophonie

New Brunswick's principal international trade partner is the United States. In 2013, the province exported more than \$13 billion dollars of goods to its southern neighbor, representing 90 percent of the province's total international exports. For the same period, Canada's exports to the United States represented 75.9 percent of the country's international exports¹⁵. To analyze the province's international exports to francophone countries, we can focus on member countries of the International Organization of La Francophonie, of which New Brunswick is a member. The International Organization of La Francophonie was created in 1970. "Its mission is to embody the active solidarity between its [80] member states and governments (57 members and [23] observers)...¹⁶"

The newly elected head of La Francophonie is Michaëlle Jean, Canada's former Governor General, which could be an additional benefit for New Brunswick's efforts to boost exports with French-speaking countries.

Focusing on la Francophonie's members, we find that the countries are the destination of one percent of New Brunswick's international exports compared to 2.1 percent for Canada as a whole (Table 8), but if we exclude exports to the United States, it is 10.4 percent of New Brunswick's international exports which go to Francophonie countries, above the Canadian average of 8.6 percent. As cultural similarity has a positive impact on international trade, we can assume that bilingualism in New Brunswick is an important factor to explain the province's success on members of the Francophonie's markets¹⁷.

¹⁵ Source: Industry Canada Trade Data Online.

¹⁶ <http://www.francophonie.org/Welcome-to-the-International.html>

¹⁷ Desjardins, Pierre-Marcel. 2003. *Atlantic Canada's Exports, with a Focus on SMEs and Rural Regions*. Maritime Collection. Moncton: Canadian Institute for Research on Regional Development. 128 pages.

Table 8: Francophonie’s Share in Canada’s and New Brunswick’s Goods Exports, 2013

	Percentage of Total Goods Exports to Francophonie Members	Percentage of Total Goods Exports to Francophonie Members, Excluding United States from Calculations
Canada	2.1%	8.6%
New Brunswick	1.0%	10.4%

Source: authors’ calculations from Industry Canada Trade Data Online.

3.11 The bilingual occupational labour market

Bilingualism is a skill that is valued in the marketplace in the same way as post-secondary education or specific occupational skills. This skill has provided positive labour market benefits. From the National Household Survey we find that in New Brunswick persons who could speak both English and French were more active in the labour market (with a higher participation rate - percentage of adult population employed or looking for a job) than those speaking only English (Figure 24) or only French (Figure 25) for all age groups. This is also the case for Canada.

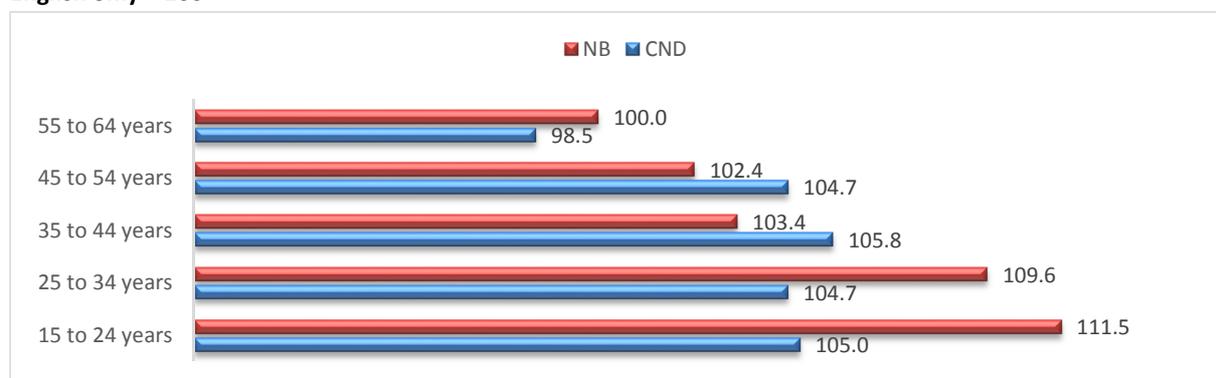
Bilingualism is a skill that is valued in the marketplace in the same way as post-secondary education or specific occupational skills

In New Brunswick, the comparison of bilingual individuals to those speaking English only reveals that the advantage is much greater for younger age group. The participation rate for the 15 to 24 years age group, for example, is 11.5 percent higher. At the same time, we find that it is much more

important compared to those speaking French only as opposed to those speaking English only.

Over the past 25 years, the difference in participation rate between bilingual individuals and those speaking English only has increased – both for New Brunswick and Canada as a whole – while it has decreased between bilingual individuals and those speaking French only (Figures 26 and 27).

Figure 24: Participation rate advantage, English and French vs English only, Canada and New Brunswick, 2011, English only = 100



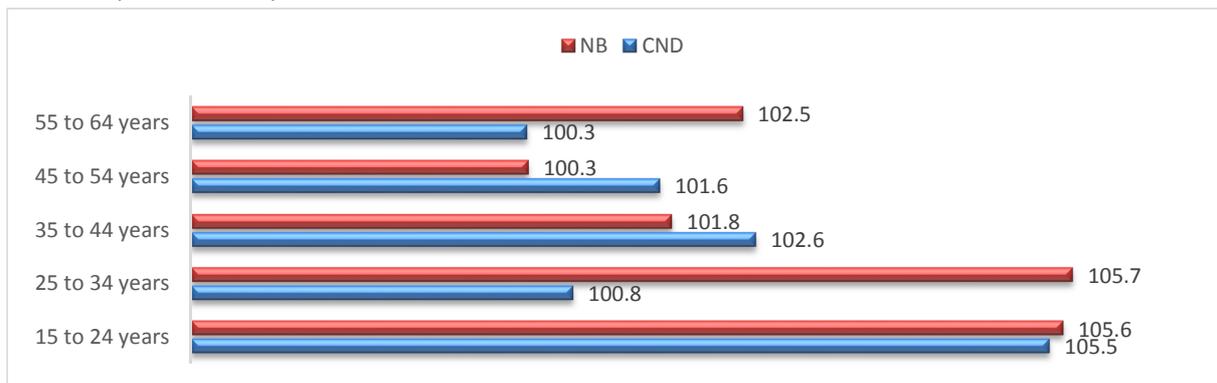
Source: Statistics Canada National Household Survey 2011.

Figure 25: Participation rate advantage, English and French vs French only, Canada and New Brunswick, 2011, French only = 100



Source: Statistics Canada National Household Survey 2011.

Figure 26: Variation of participation rate advantage, English and French vs English only, Canada and New Brunswick, 1996 vs 2011, 1996 = 100



Source: Statistics Canada National Household Survey 2011.

Figure 27: Variation in participation rate advantage, English and French vs French only, Canada and New Brunswick, 1996 vs 2011, 1996 = 100

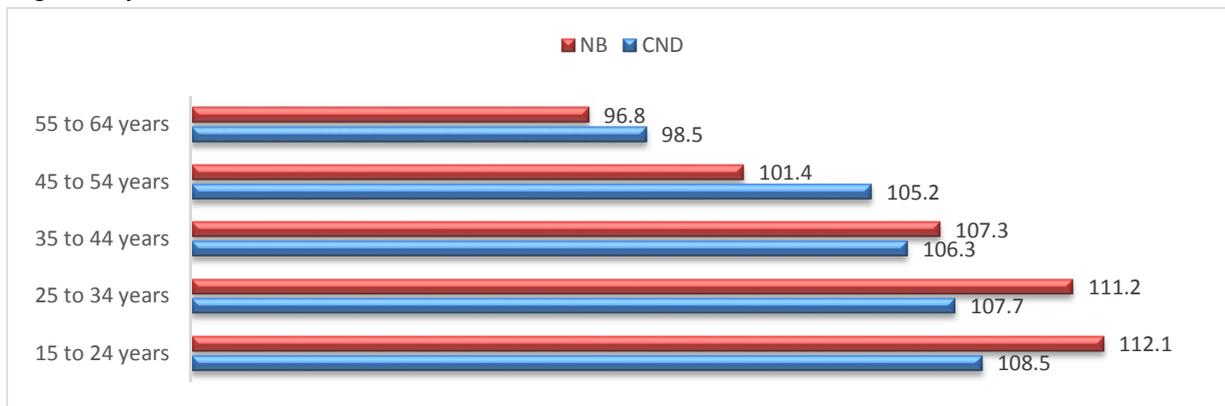


Source: Statistics Canada National Household Survey 2011.

Results for employment rate (percentage of adult population with a job) are similar to those for the participation rate. While the difference between the employment rates of bilingual individuals compared to those speaking English only increases with younger age groups (going up to 12.1 percent higher for the

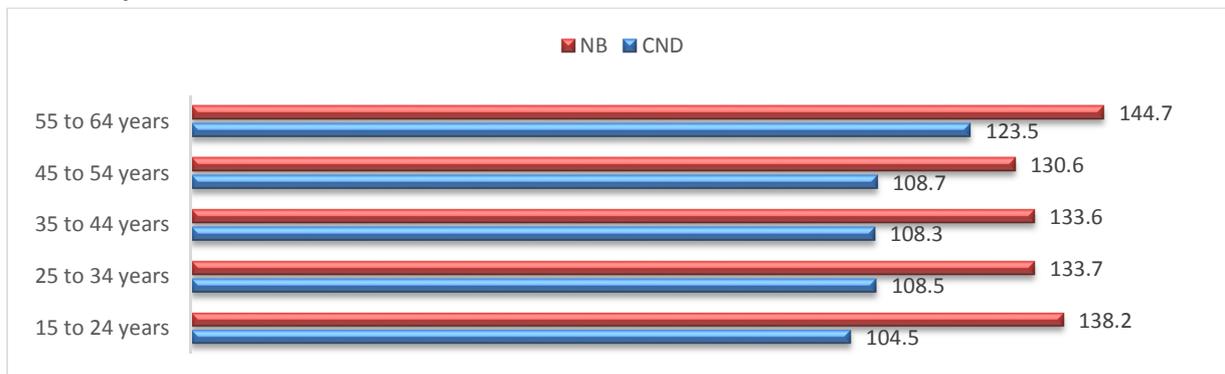
15 to 24 years of age group), it is essentially constant for all age groups when we compare bilingual individuals with those speaking French only (Figures 28 and 29). The difference is nevertheless much higher for bilingual individuals compared to those speaking French only, being as high as 44.7 percent higher for individuals between 55 and 64 years of age. In New Brunswick, the difference between the employment rates of bilingual individuals and those speaking English only has increased over the past 25 years, especially in the younger categories (Figure 30). This is also true for Canada but generally to a lesser extent. On the other hand, the difference between bilingual individuals and those speaking French only has decreased over the past 25 years, in Canada, but especially in New Brunswick (Figure 31).

Figure 28: Employment rate advantage, English and French vs English only, Canada and New Brunswick, 2011, English only = 100



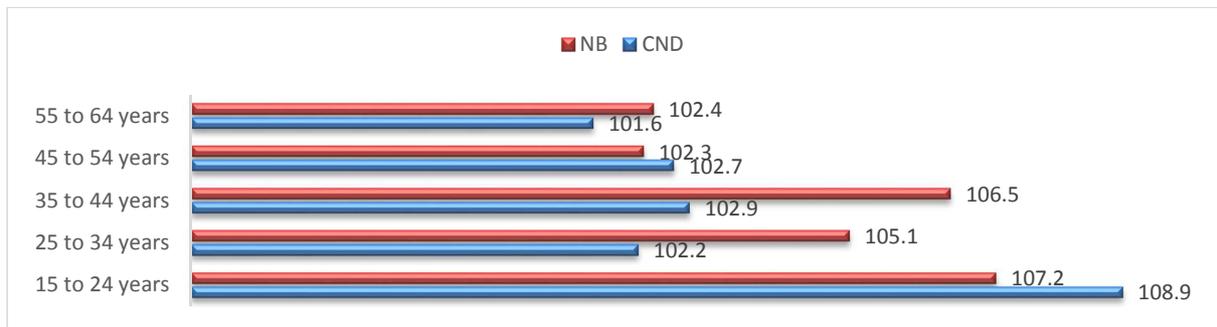
Source: Statistics Canada National Household Survey 2011.

Figure 29: Employment rate advantage, English and French vs French only, Canada and New Brunswick, 2011, French only = 100



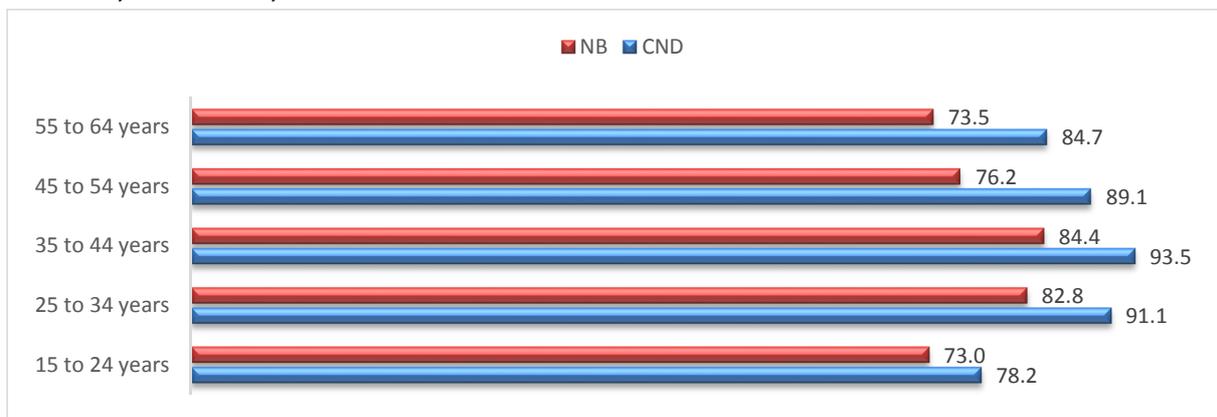
Source: Statistics Canada National Household Survey 2011.

Figure 30: Variation of employment rate advantage, English and French vs English only, Canada and New Brunswick, 1996 vs 2011, 1996 = 100



Source: Statistics Canada National Household Survey 2011.

Figure 31: Variation in employment rate advantage, English and French vs French only, Canada and New Brunswick, 1996 vs 2011, 1996 = 100



Source: Statistics Canada National Household Survey 2011.

We can conclude that there is indeed a bilingual occupational labour market advantage. It is the case for the participation rate and for the employment rate. It is generally more important in New Brunswick than in Canada, and more important when compared to French only speakers as opposed to compared to English only speakers. In addition the advantage has increased more importantly, over the past 25 years, when compared to English only speakers as opposed to French only speakers. We can also conclude that it is more difficult for those speaking French only to find employment compared to those speaking English only or those speaking English and French.

4. Future economic opportunities: Leveraging bilingualism 2.0

New Brunswick has generated considerable economic benefits from its bilingual population and labour market including the attraction of national customer contact centres and back offices, the development of language industries, and the fostering of interprovincial and international export opportunities. Our commitment to fostering both official languages has supported the development of a number of key industry clusters. There is potential to use this key competitive advantage to further economic development in the years ahead. As an indication, a recent study has estimated that in Switzerland multilingualism (as there are four official languages in Switzerland) accounted for 10 percent of the country's gross domestic product (GDP)¹⁸. There are many components to these opportunities. Some are linked to activities in new economy sectors such as contact centres or language industries. Others are relevant in traditional sectors such as forestry or the fisheries where the bilingual salesforce increases our opportunities in many markets where communicating in the local language improves export potential.

4.1 Future opportunity: Customer contact centres and social media

New Brunswick now has the largest customer contact and back office industry in Canada as a share of its total employment. However, the structure of the industry is changing. More transactions are occurring online and there is less need for telephone-based customer service agents. However, there is a growing demand for Internet-based customer interaction through email, Web chats and social media. A number of the province's customer contact centres are adapting and employees are now communicating through these innovative methods.

This requires a different skillset. Social media connections require writing and keyboard skills. This can be additionally challenging in a bilingual environment where the customer service agent is required to write quickly and with high quality.

However, the ability to service English and French clients through email, Web chats and social media should represent the next generation of the industry and New Brunswick should work to take advantage of this evolution. Workers will need to be trained with a broader set of skills and technologies. One could even argue that having a certain number of employees speaking other languages such as Spanish could further enhance the sector's growth potential in New Brunswick.

In the future there may be fewer workers in the customer contact and back office industry but they will be higher paid and servicing customers across many different channels.

¹⁸ Grin, François, Claudio Sfreddo et François Vaillancourt. 2009. *Langue étrangère dans l'activité professionnelle (« LEAP »)*. Programme national de recherche 56 : Multilinguisme et compétences linguistiques en Suisse. Rapport final de recherche. 53 pages.

4.2 Future opportunity: Language industries and information technologies

New Brunswick has the second largest language industry in Canada among the 10 provinces adjusted for population size. However, many of our firms are small and lack the scale to develop new markets. In addition, there have not been many firms developing innovative new services and technologies for the industry from New Brunswick.

Government should encourage more collaboration among the smaller firms to achieve the scale necessary to compete for contract work outside New Brunswick. This could be facilitated through a “LearnSphere” model¹⁹. LearnSphere, established in 1995, is an organization that aggregates the training capabilities of New Brunswick firms and then competes for larger projects inside and outside the province. Alianco, the network of certified translators in New Brunswick and across the Maritimes is an excellent platform to bring enough scale to allow local translators to compete together for larger projects²⁰.

The new Canada and European Union (EU) Comprehensive Economic and Trade Agreement (CETA) opens up the \$26 billion European translation market to the local translation and interpretation industry. Other technology-enabled language industries (such as telephone-based interpreting which is one of the fastest growing segments) also hold potential for New Brunswick translators and interpreters.

On the language technologies front, government and economic development agencies should promote entrepreneurial activity at the intersection of language industries and technology. In 2014, the New Brunswick government announced it would be supporting a new language industry development centre in Shippagan on the Université de Moncton campus. According to the press release announcing the project, its goal is to “capitalize on the expertise at the Laboratoire de recherche en interaction Humain-Système of the Shippagan campus of the Université de Moncton in cooperation with a translation company, Transmed of Campbellton, for the purpose of developing, validating, adapting, and marketing new language technologies²¹”.

This is a good first step but more can be done. There are multiple entrepreneur incubation centres around the province that could be used to support the development of language-based technologies. In addition, the province could be doing much more to attract technology entrepreneurs from Francophone countries. These entrepreneurs could be attracted to New Brunswick to develop North American markets from here.

4.3 Future opportunity: International trade and investment

New Brunswick generates relatively little international export revenue outside of the United States. Ninety percent of the value of all international merchandise exports comes from the U.S. market. A review of twelve countries that have significant French speaking populations (primary or secondary language) shows that New Brunswick generated \$145 million worth of merchandise exports in 2013 (Table 9).

¹⁹ http://www.learnsphere.ca/?page_id=29&lang=en

²⁰ <http://alianco.ca/about-us/>

²¹ Government of New Brunswick. 2014. *Provincial government helping to establish a language industry development centre in Shippagan*. http://www2.gnb.ca/content/gnb/en/news/news_release.2014.05.0575.html

Only about one percent of the value of total international merchandise exports comes from these French speaking markets (Table 10). The top export categories are recyclable metal distribution (\$57.6 million), refined petroleum products (\$52 million) and seafood (\$16.2 million).

When compared to other provinces, New Brunswick ranks behind five and ahead of four provinces for export revenue from these 12 countries adjusted on a per capita basis (Table 9). New Brunswick could be more deliberate in its efforts to develop Francophone markets. Quebec has trade and investment offices located in multiple Francophone countries. New Brunswick does not. There is indeed potential for increased exports to members of la Francophonie as can be observed in Table 10. We can observe that the province’s presence in these markets is often not very significant. New Brunswick should take advantage of its membership in la Francophonie to increase trade relations.

There is also more potential to develop foreign direct investment opportunities as well as immigrant investor/entrepreneur attraction. These two activities can stimulate more two-way trade with Francophone countries. New Brunswick has not been particularly successful attracting investment from French-speaking countries. Quebec and Ontario attract the lion’s share but even Nova Scotia has successfully attracted French firms such as Michelin, LaFarge and Composites Atlantic (a subsidiary of France-based Sogerma).

Table 9: Value of international goods exports to countries with significant French-Speaking populations (2013)*

	<u>Value of Exports (2013)</u>	<u>Per Capita</u>
Newfoundland and Labrador	\$564,729,888	\$1,076
Saskatchewan	\$845,100,992	\$793
Quebec	\$2,428,337,000	\$303
Ontario	\$3,037,342,000	\$229
Prince Edward Island	\$30,409,640	\$211
New Brunswick	\$145,425,248	\$192
Manitoba	\$217,092,808	\$176
Nova Scotia	\$144,852,906	\$153
Alberta	\$465,296,000	\$123
British Columbia	\$416,748,000	\$93

**Countries included are: Belgium, Egypt, France, Haiti, Libya, Mauritius, Morocco, Romania, Switzerland, Tunisia, Ukraine and Vietnam.*

Source: Industry Canada Trade Data Online.

Table 10: New Brunswick's Goods Exports to Selected Francophonie Members, 2013

Country	\$	Share of Canadian Total
Albania	\$1 536	0,0%
Belgium	\$30 710 924	1,2%
Benin	\$1 203 303	5,2%
Bulgaria	\$95 721	0,1%
Burkina Faso	\$14 000	0,0%
Cameroon	\$90 000	0,2%
Congo (formerly Brazzaville)	\$22 178	0,1%
Congo (formerly Zaire)	\$7 678	0,0%
Côte-d'Ivoire	\$107 896	0,3%
Dominica	\$283 160	5,7%
Egypt	\$59 274 412	12,0%
France (incl. Monaco, French Antilles)	\$37 646 768	1,2%
Gabon	\$59 044	0,2%
Haiti	\$12 230 326	32,2%
Lebanon	\$431 035	0,6%
Maurice	\$170 620	3,0%
Mauritius	\$2 043	0,0%
Niger	\$2 000	0,0%
Romania	\$25 591	0,0%
Rwanda	\$4 545	0,1%
Saint Lucia	\$1 681 608	15,5%
Switzerland	\$1 840 613	0,1%
Togo	\$70 519	0,4%
Tunisia	\$1 302 874	1,2%
Turkey	\$110 879 023	12,5%
Turks and Caicos Islands	\$12 277	0,6%
Vietnam	\$2 113 328	0,5%
Total All Countries	\$14 472 447 460	3,1%

Source: Industry Canada Trade Data Online.

4.4 Future opportunity: Economic ties with Quebec

As discussed above, bilingualism in New Brunswick has been an important tool in the development of Quebec as an export market for both goods and services. In 2011, New Brunswick exported \$1.3 billion worth of services to the Province of Quebec.

However, there are a number of untapped opportunities to bolster the trade and investment relationship between the two provinces. According to Statistics Canada, between 2007 and 2011 New Brunswick exported only \$17.5 million worth of arts, entertainment and recreation services to Quebec. Despite not having the language skills or geographic proximity, Nova Scotia and Prince Edward Island did better in this area.

New Brunswick is also not generating a lot of export revenue from the information and cultural services sector. On a per capita basis, New Brunswick ranks behind Nova Scotia, Ontario, Manitoba, Alberta and British Columbia in the amount of export revenue generated from Quebec. Between 2007 and 2011, the Quebec market for information and cultural services from New Brunswick was worth only an average of \$17.1 million per year.

The government and economic development agencies should determine potential Quebec markets for services and look for ways to leverage our language skills and historical ties to build those markets. There could be more potential to develop customer service, back office, IT support and engineering services support for the Quebec market from New Brunswick by leveraging our bilingualism.

⇒ **Quebec investment into New Brunswick**

Quebec firms have been buying up New Brunswick food manufacturers in recent years. The Agropur Co-operative recently announced it would be purchasing Miramichi-based Northumberland Dairy along with its distribution centres and brands. Agropur also purchased Sussex-based Dairytown Products Ltd. New Brunswick's only other dairy manufacturing firm, Baxter, was purchased by Montreal-based Saputo Foods.

There is potential to leverage this investment for further economic opportunity in New Brunswick. Historically there are examples where these kind of acquisitions led to slow decline and ultimately closure of the New Brunswick plants. However, this doesn't have to be the case. New Brunswick government and economic development officials should work with these firms to encourage further expansion and new market development from their New Brunswick operations.

4.5 Future opportunity: Educational services

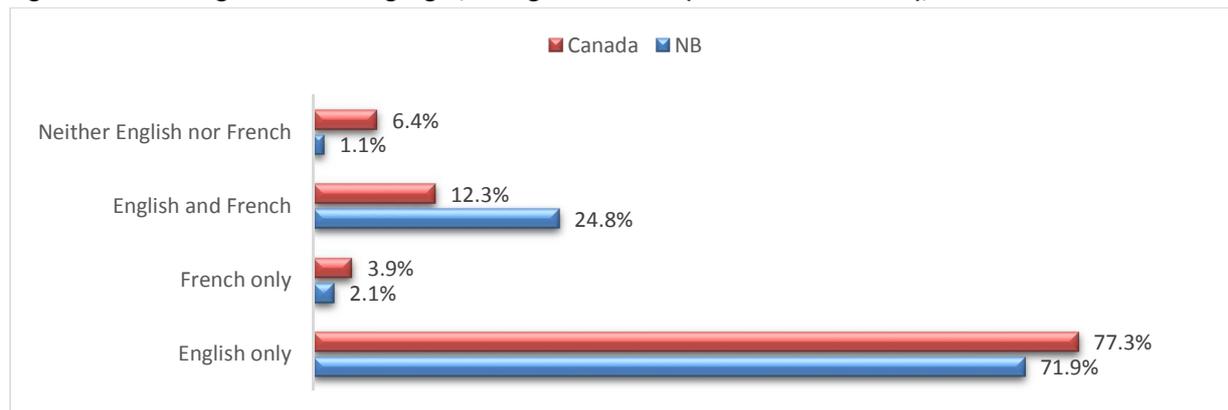
New Brunswick's bilingualism is also an opportunity to attract Francophone and bilingual students from across Canada and around the world. As shown in Section 3.7 above, New Brunswick already ranks 3rd among the 10 provinces in Canada for interprovincial export revenue from the educational services sector (students bringing revenue to the province). This should be extended to reach broader Francophone markets.

Every \$10 million in increased revenue to New Brunswick’s university sector supports 126 full time equivalent (FTE) jobs, \$6.5 million worth of labour income and approximately \$2.4 million worth of tax revenue for governments. In addition, these post-secondary international students become a source of talent for New Brunswick industries.

4.6 Future opportunity: Immigration

New Brunswick should also use its bilingualism as a draw for more Francophone and bilingual immigrants and immigrant entrepreneurs. Demographic realities will require the province to attract many more immigrants in the coming years. The data is not available from the 2011 National Household Survey, but based on the 2006 Census, we find that of the 26, 400 immigrants living in New Brunswick (recent and not so recent immigrants), nearly a quarter spoke both English and French, twice the national average (Figure 32). We can thus assume that bilingualism in New Brunswick is an attractive characteristic for potential immigrants. New Brunswick should be even more aggressive marketing its status as the only officially bilingual province in Canada to attract more immigrants to help it face its demographic challenge.

Figure 32: Knowledge of official languages, Immigrants in 2006 (Born outside Canada), Canada and New Brunswick



Source: Statistics Canada Census 2006.

5. Conclusion: Enhancing the economic benefits from bilingualism

New Brunswick needs new growth industries. Most of the top line economic indicators such as GDP growth, employment and population growth have been flat or in decline. This has been the main reason why the provincial government has been running significant annual budget deficits. In order to address the structural budget deficits, the provincial government has embarked on a cost containment effort but it has also recognized the critical need to get back on a path of solid economic growth.

The bilingual workforce and the province's commitment to ensuring public services are available in both official languages could be an important tool to help foster new economic growth. As outlined above there are a number of opportunities, but deliberate steps need to be taken to ensure they are developed.

Recommendation: The creation of an industry/government council with the objective of further leveraging the economic benefits of bilingualism.

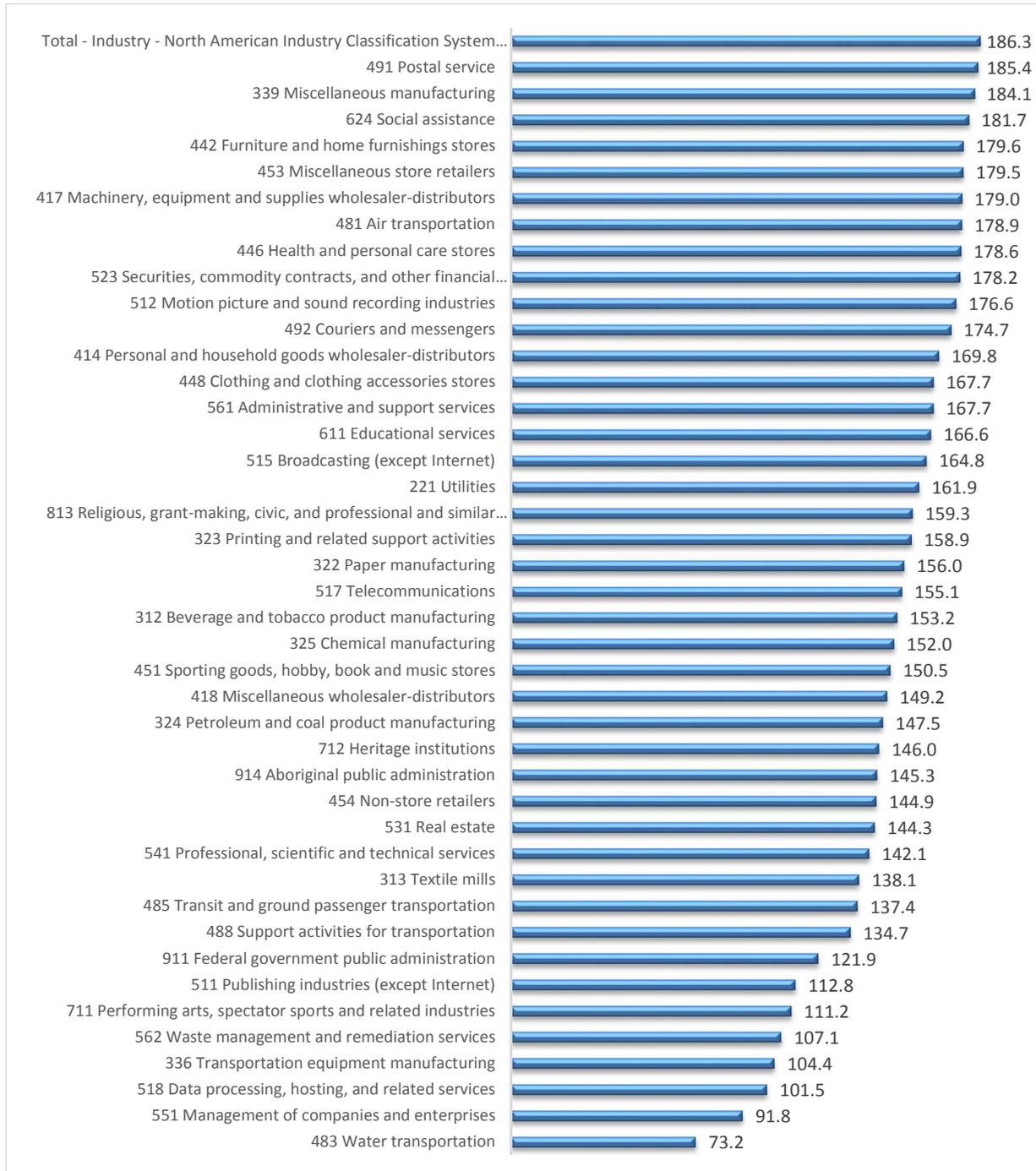
Our study has highlighted many economic benefits of bilingualism and has identified areas with additional potential. The creation of an industry/government council with a mandate of identifying concrete measures to increase the benefits of bilingualism is desirable. The council could contribute to the development of industries for which bilingualism is a key factor and to increasing exports to francophone markets in Canada and abroad. This council should also be responsible for a strategy to accompany and support businesses that want to contribute to enhancing the province's competitive advantage generated by bilingualism. This strategy could be successfully incorporated in a branding exercise for New Brunswick.

The council should also be a key player in the province's efforts to maximize the benefits for New Brunswick of the Francophonie's economic strategy²². This is especially true for the strategy's second axis which aims at reinforcing the francophone economic space to make it fertile for trade, cooperation and solidarity.

²² http://www.francophonie.org/IMG/pdf/sommet_xv_strategie_economique_2014.pdf

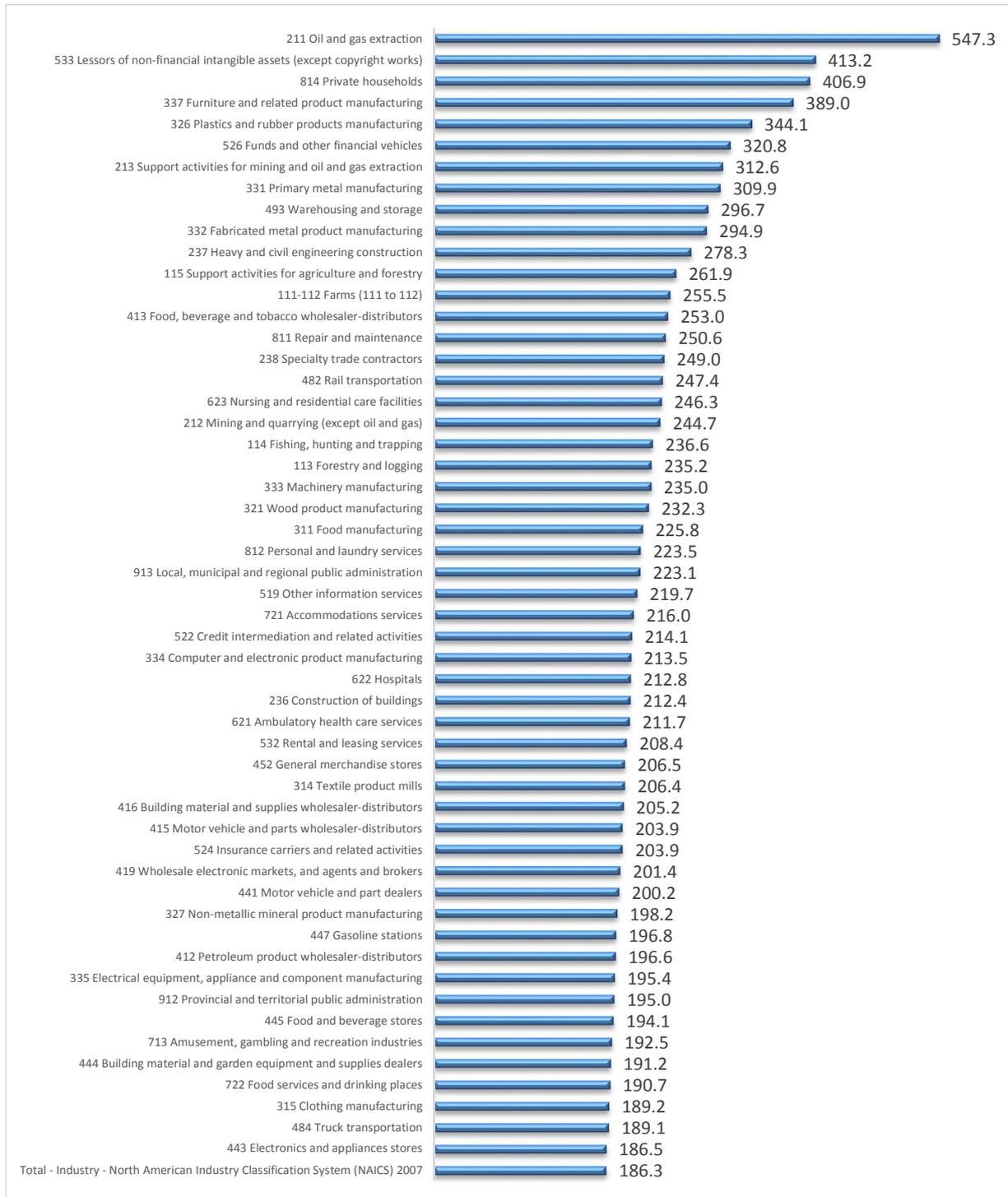
Appendix A

Figure 33: Relative importance of bilingual employees by industrial sector (NAICS 3-digit), New Brunswick vs Canada, 2011, Canada = 100 (sectors below provincial average)



Source: Statistics Canada National Household Survey 2011.

Figure 34: Relative importance of bilingual employees by industrial sector (NAICS 3-digit), New Brunswick vs Canada, 2011, Canada = 100 (sectors above provincial average)



Source: Statistics Canada National Household Survey 2011.

Appendix B: Definitions

Bilingual: In our study, bilingual refers to knowledge of English and of French.

Educational achievement: Refers to the highest level of schooling that a person has reached. At the primary and secondary school level, educational attainment refers to the number of grades completed. At the postsecondary level, it refers to institutions attended and certificates, degrees or diplomas obtained

Employment rate: Percentage of adult population (15 years+) employed.

Export revenue: Revenues from export sales.

Francophonie, La: The International Organisation of La Francophonie was created in 1970. Its mission is to embody the active solidarity between its 80 member states and governments (57 members and 23 observers), which together represent over one-third of the United Nations' member states and account for a population of over 890 million people, including 220 million French speakers. <http://www.francophonie.org/Welcome-to-the-International.html>

International exports: Sales of goods or services outside the country.

Interprovincial exports: Sales of goods or services in other provinces or territories, but not outside the country.

Knowledge of English: Refers to whether the person can conduct a conversation in English. For a child who has not yet learned to speak, this includes languages that the child is learning to speak at home. <http://www.statcan.gc.ca/concepts/definitions/language-langue04-eng.htm>

Knowledge of French: Refers to whether the person can conduct a conversation in French. For a child who has not yet learned to speak, this includes languages that the child is learning to speak at home. <http://www.statcan.gc.ca/concepts/definitions/language-langue04-eng.htm>

The National Occupational Classification (NOC): The nationally accepted taxonomy and organizational framework of occupations in the Canadian labour market. <http://www.statcan.gc.ca/subjects-sujets/standard-norme/noc-cnp/2011/introduction-eng.htm>

North American Industry Classification System (NAICS): An industry classification system developed by the statistical agencies of Canada, Mexico and the United States. Created against the background of the North American Free Trade Agreement, it is designed to provide common definitions of the industrial structure of the three countries and a common statistical framework to facilitate the analysis of the three economies. [...] It has a hierarchical structure. At the highest level [the 2-digit level], it divides the economy into 20 sectors. At lower levels, it further distinguishes the different economic activities in which businesses are engaged." <http://www.statcan.gc.ca/subjects-sujets/standard-norme/naics-scian/2012/introduction-eng.htm>

Participation rate: Percentage of adult population (15 years+) either employed or looking for a job.