HALIFAX: HUB CITY FOR THE MARITIME PROVINCES
A PROFILE OF HUB CITY ATTRIBUTES

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EXECUTIVE SUMMARY

There have been a number of studies across North America in recent years that have looked at the role that hub cities play in regional economic competitiveness and growth over time. A hub city is one that is needed for an entire region, province or country to be successful. Many industries and economic assets require a certain scale of population and economic activity and a hub city provides that scale and passes the benefits on to other jurisdictions in the region. In other words, smaller jurisdictions derive the benefits of proximity to the hub city.

Halifax plays the role of hub city in Nova Scotia and, according to a recent Conference Board of Canada study, for all of Atlantic Canada[1]. There are economic assets, labour force characteristics, niche industries and regional decision makers concentrated in Halifax that benefit all of Nova Scotia and beyond. This report highlights some of those attributes.

The Hub City and its relationship with the rest of Nova Scotia and the Maritime Provinces

The Conference Board study found that GDP per capita across Nova Scotia was converging with the Halifax CMA during the 1987 to 2004 timeframe. In other words, the GDP adjusted for population size was growing faster in the rest of Nova Scotia than it was in the Halifax CMA.

This report finds that almost all of the net employment losses across Nova Scotia outside the Halifax CMA from 1996-2006 were concentrated in occupations related to primary and manufacturing industries (such as forestry and fishing). Employment outside the Halifax CMA in occupations related to business, finance, administration, health, education, arts/culture and other occupational groups witnessed fairly strong increases during the decade.

The Halifax CMA also provides hundreds of millions of dollars worth of employment income for Nova Scotia communities located in proximity to Halifax. Over 13,000 people from outside the Halifax Regional Municipality commute into the community for employment. They come from as far away as Shelburne, Yarmouth and Amherst. East and West Hants residents account for over 6,500 of the commuters into Halifax. There are almost 1,000 from Chester, 500 from Lunenburg, 290 from Cape Breton and 230 from Truro. If this group of employed persons were a city, it would be the third largest in Nova Scotia. Assuming these commuters earn the average employment income for a full time worker (2006), that would translate into over $570 million in annual employment income earned in HRM and taken back to be spent in their home communities (Section 5.18).

The Conference Board concluded hub cities are vital to driving regional economic growth (GDP). This report finds there are five broad categories of benefits Halifax brings to Nova Scotia and the region in its role as hub city. These are:

1. **Halifax provides the scale for regional economic assets**
   There are a wide variety of economic assets that are located in the urban area of Halifax that are used by companies and people located across Nova Scotia. Without the population concentration and urban infrastructure, these assets would not be able to provide the breadth of services they offer to businesses and residents across the province. It is important to point out that a central feature of the hub city concept is the two-way relationship between the hub and the rest of the population in its influence area. The relationship is symbiotic. Examples include:
   - *The Halifax Stanfield International Airport*. The cost of airfare from Halifax to most international jurisdictions is considerably lower than other jurisdictions across Canada that do not have a hub airport. The Halifax Stanfield International Airport offers daily flights to New York, Boston, London, Chicago and a number of other locations (Section 5.2).

[1] Source: Conference Board of Canada. *Canada's Hub Cities: A Driving Force of the National Economy*.

EXECUTIVE SUMMARY (CONT.)

- *The Port of Halifax.* The primary trans-shipment point for cargo into and out of the Maritime Provinces, the Port of Halifax is home to 50% of the region's longshore workers up from only 25% in 1996 (Section 5.5). Only a small percentage of the goods shipped out of the Port of Halifax are produced in Halifax. Wood products manufactured in the province are shipped through the port. The seafood produced up and down the coast of Nova Scotia is shipped through the port as are agricultural products from the province's farms. In 2007, Michelin shipped 4,000 TEUs worth of tires out through the Port of Halifax.
- *R&D Infrastructure.* Nova Scotia is the top province in Canada for university-based R&D spending per capita and the bulk of this activity is in Halifax (Section 5.3). Forty per cent of all organizations in the Maritime Provinces involved in research and development in the physical, engineering and life sciences (NAICS 541710) are located in Halifax. Over 50% of the Maritime Provinces' electrical, geological, petroleum, aerospace and computer engineers are concentrated in Halifax (21% of the Maritimes' population is located in Halifax).
- *Post-Secondary Education.* Halifax has the second highest concentration of university professors and research assistants among all hub cities across Canada (Section 5.14).

2. Halifax is a hub for regional decision making

An important feature of the hub city is that it has senior executive level management for national and international companies, senior leadership within the federal government, and a host of industry associations and trade groups. Many of these senior managers have strong ties and affinity to the region and influence over corporate decision making compared to the typical general manager or branch office operation.

Canada's top banks have their regional offices in Halifax. The majority of national and international insurance firms have their regional office for Atlantic Canada in Halifax. The federal government has a large scale regional presence in the hub city. Halifax is home to over 40% of the Maritime Provinces' head offices.

Compared to other hub cities across Canada (Toronto, Montreal, Winnipeg, Saskatoon, Calgary and Vancouver), Halifax has a higher concentration of senior government managers and officials and senior managers in health, education, social and community services and membership organizations than all other hubs as measured by the number of persons employed in these occupations per 10,000 in the workforce (Section 3.1.1). But Halifax has the second lowest concentration of senior managers in financial, communications carriers and other business services as well as senior managers in goods production, utilities, transportation and construction.

3. Halifax has the scale to foster competitiveness

The hub city fosters regional competitiveness by:

- Retaining economic activity - particularly high value activity - in the region (Section 4). This can include specialized business services, health care, consulting, etc. Without the hub city, companies and individuals all over the Maritime Provinces would have to access these niche offerings elsewhere in Canada at a higher cost and at less convenience. Keeping this high value economic activity in the region retains high paying jobs and high levels of relative taxation for governments.
- Creating the conditions that compel more competitive and innovative practices within industries. The hub city provides the scale needed to foster competitive market conditions across most industries. There are 185 accounting firms in the hub city. There are 125 insurance agencies and brokerages. The hub city is home to 150 local courier and delivery firms. This scale creates the conditions for vigorous competition in the areas of price, quality and innovation. This competitive benefit is extended throughout the hub city influence area. If a company in Amherst, Charlottetown or Digby attempts to overprice a product or service, the client has the alternative of the hub city. This helps maintain competitiveness.

EXECUTIVE SUMMARY (CONT.)

4. Halifax is large enough to nurture niche industry clustering

There are a number of industries that would likely not have a significant presence in the Maritime Provinces if there was no significant urban hub such as Halifax. Examples include:

- *Specialized financial services*. The retail side of the banking industry is dispersed throughout the Maritime Provinces. There are less bank branches per 10,000 population in Halifax than in the rest of the region. However, there is a much higher percentage of firms located in Halifax in the area of more specialized financial services such as 53% of the sales financing firms, over 50% of all the fund management and related activities companies. This translates into a high concentration of financial services industry talent. The hub city is home to almost 50% of the insurance, real estate and financial brokerage managers in the Maritime Provinces and 47% of the securities agents, investment dealers and brokers. Forty-three per cent of the region's senior managers in financial, communications and other business services are located in the hub city (Section 5.10).

- *Specialized legal services.* There is an almost population-based distribution of lawyers across the Maritime Provinces but if a company or resident requires specialized legal services - they will either access that capacity in Halifax or leave the region to find it. The top regional law firms are concentrated in Halifax. Of the top five law firms in Atlantic Canada, almost half of their lawyers (47%) are located in Halifax (Section 5.1). A number of the largest firms outside the Halifax area are using the corporate legal services firms in Halifax. For example, both Oxford Frozen Foods and the Empire Company use Halifax-based Stewart McKelvey Stirling Scales.

- *Specialized business services.* Almost 50% of the firms in the Maritime Provinces that provide graphic design services are based in Halifax. Over 50% of the public relations firms as well. Forty-three per cent of the firms involved in computer systems design and related services are located in Halifax. Without Halifax, businesses would need to access these services in other urban centres such as Montreal and Toronto - leaking this high value economic activity out of the region (Section 5.7).

- *Information technology services*. 43% of the firms across the Maritime Provinces involved in computer systems design and related services are located in Halifax. Over 40% of the computer and information systems managers are in the hub city. The professional class of IT workers is also relatively clustered in Halifax with close to 40% of all IT workers across the Maritime Provinces in the hub city. The cluster of specialized and scaled IT service providers in Halifax means that firms in the Maritime Provinces that would otherwise need to go out of market for IT consulting, customized software development, data centre services, etc. can access it here. There is anecdotal evidence of considerable leakage of the Maritime Provinces IT services industry to firms outside the region (Section 5.8).

- *Cultural and entertainment activity*. Halifax is the hub for media and related activities in the Maritime Provinces. The hub city features a majority of the Maritime Provinces' sound recording studios, record production studios, integrated production studios, television broadcasters, post-production studios and motion picture and video production facilities. Halifax is also home to almost double its share (on a population basis) of book, directory, periodical and music publishers (Section 5.9).

- *Specialized health care.* Halifax is home to 46% of the Maritime Provinces' specialist physicians (NOC D011) and over half of the region's specialized medical technologists and technicians. Almost half of the medical and diagnostic laboratories in the Maritimes are in the hub city as are 45% of the region's offices of mental health practitioners. Halifax has a higher concentration of health care workers (per 10,000 in the workforce) than all other hub cities except Saskatoon (Section 5.12).

- *Industry Associations and Non-Governmental Organizations*. Halifax is home to the vast majority of regional industry association offices and NGO offices that have offices in Atlantic Canada (Section 5.14).

EXECUTIVE SUMMARY (CONT.)

5. Halifax drives tax revenues for government

The average household in Halifax contributed $13,848 in personal income tax to the federal and provincial governments in 2007 or an estimated total of over $2 billion. This does not include HST, corporate income tax, property tax or other taxes and levies. The average Halifax household contributed 70% more in personal income tax to government than the average household in the rest of Nova Scotia (Section 5.16).

Urban areas such as Halifax tend to have much higher income levels which in turn leads to higher levels of taxes paid to governments. Over 20% of the workforce in Halifax earns at least $60,000 per year in employment income. Among the over 30 CMAs in Canada, only Edmonton, Ottawa, Calgary, Hamilton and Toronto have a higher percentage of the workforce earning $60,000 and up.

The Maritime Provinces is the most rural area of Canada. Over 45% of the population lives in rural areas. The region needs an urban hub such as Halifax to help it compete on a national and international scale for business investment, talent and ideas.

1. INTRODUCTION

The objective of this project was to build on the research done by the Conference Board of Canada confirming Halifax as a Hub City for the Maritime Provinces/Atlantic Canada. The report evaluates over two dozen attributes of the hub city ranging from how a hub city fosters competitiveness to how it provides the scale for regional infrastructure.

The data used for this report comes from two broad sources. First, all occupational data is taken from the 1996 and 2006 Census (Statistics Canada). There is no more recent source that allows us to compare occupational and industry data to a very granular level. The monthly labour force survey is a good, high level snapshot of trends but does not provide the depth of the Census. The second main source is the Canadian Business Patterns publication also from Statistics Canada. It provides a detailed breakdown on business establishments in Nova Scotia by detailed industry and size characteristics. Other sources were used in a more limited way and are citied throughout the text.

1.1 Economic Engine vs. Hub

The concept of a hub city is different than that of an economic engine (although the two are related). An economic engine is a city or region that is a fundamental driver of economic growth in a jurisdiction (region, province or country).

A hub city is one that is needed for an entire region, province or country to be successful. Many industries and economic assets require a certain scale of population and economic activity. For example, an international airport with direct flights to Europe and multiple points in the USA requires a certain scale of population. The Halifax Stanfield International Airport plays this role for all of Atlantic Canada.

1.2 Halifax and its Relationship with the Rest of Nova Scotia

- There has been some concentration of specialized occupations in Halifax over the decade but employment losses in Nova Scotia outside the Halifax CMA are limited to primary and manufacturing occupations. Jobs in other sectors are gaining (in Nova Scotia outside the Halifax CMA) - in some cases strongly (see Section 2.2).

- The Halifax CMA is an employment engine for communities within an hour or more commute. Over 13,000 people from outside the Halifax Regional Municipality commute into the community for employment. If this group of employed persons were a city, it would be the third largest in Nova Scotia.
    - Assuming these commuters earn the average employment income for a full time worker (2006), that would translate into over $570 million in annual employment income earned in HRM and taken back to be spent in their home communities.

- The hub city provides the urban scale required for a wide range of infrastructure to be viable in the regional market. This infrastructure is then used by companies and residents in communities large and small. In other words, companies in Kentville and Amherst have access to an international airport, a global port, world class R&D facilities, and many other elements that are vital to their success just the same as those located directly in the hub city.

- Halifax is the hub city for the Maritime Provinces. If Halifax was not assuming this role in the region, the hub city would be elsewhere (Moncton, Saint John, etc.) and the benefits of that status would not accrue to Nova Scotia.

2. The Role of a Hub City

2.1 The Conference Board of Canada Study

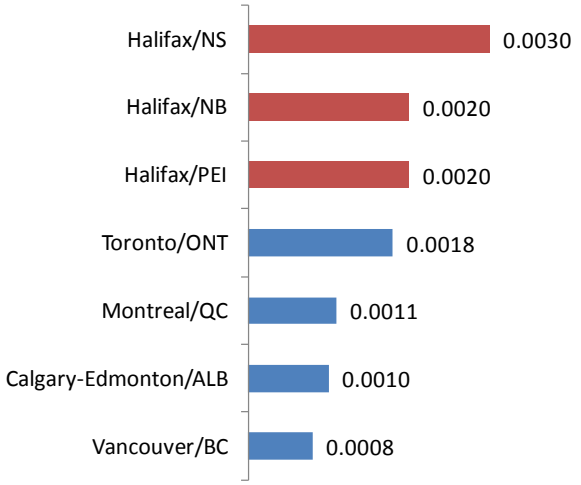
Halifax is the largest regional economy in Atlantic Canada with a wide variety of infrastructure and economic activity that benefits communities throughout the region. This includes business and professional services, training, transportation, employee recruitment, industry associations, etc.

The Conference Board of Canada recently completed a report detailing the hub city concept and quantifying the value of the hub cities to provincial economies across the country[2]. The Conference Board determined there are eight metropolitan areas that function as hub cities for their provinces—Vancouver, Calgary and Edmonton, Regina and Saskatoon, Winnipeg, Toronto and Montréal—and only one, Halifax, that acts as a hub city for the entire Atlantic region.

The most important finding of the Conference Board report was that economic growth in the nine Canadian hub cities drives *an even faster rate of economic growth* in smaller communities within the same province or region. This economic growth convergence trend is particularly strong in the context of Halifax.
The study finds the gap between GDP per capita in Halifax and that of the other communities of Nova Scotia is declining rapidly.

The level of real GDP per capita of every other Atlantic province is also converging to that of Halifax. Convergence is also observed between Halifax and the other CMAs of the Atlantic Provinces, namely St. John's, NL and Saint John, NB.

GDP Per Capita Convergence (1997-2004)
b coefficient comparison (the larger the number the stronger the convergence)



*A positive b coefficient indicates GDP per capita convergence. For the other urban centres, the b coefficients are shown for the hub city and non-CMA communities within the province.
Source: Canada's Hub Cities: A Driving Force of the National Economy (July 2006). Conference Board of Canada.

The Conference Board concluded that investments in hub city infrastructure need to be made in the context of the benefit to the entire region influenced by that hub city.

There are many examples of hub city assets and the symbiotic relationship between the hub and the rest of the province and region and some of these assets are developed in detail below.

[2] Canada's Hub Cities: A Driving Force of the National Economy (July 2006).

2.2 Employment Trending outside the Halifax CMA

While it is true that certain occupations are concentrating in the Halifax CMA due to the clustering effect, there is little evidence this concentration is having a negative impact on the rest of Nova Scotia. A review of top level occupational groups and the change in employment from 1996 to 2006 shows that the employment declines in Nova Scotia outside the Halifax CMA are exclusively in occupations in primary industry and in manufacturing. The two sectors where the Halifax CMA has a very low employment level. Without these two declining sectors, employment in Nova Scotia outside the Halifax CMA was up by a strong 9% from 1996 to 2006.

Table 1 below shows the 10 year employment growth among the two digit occupational groups for the Halifax CMA and the rest of Nova Scotia. Collectively, the rest of Nova Scotia witnessed employment growth in most occupational categories with the exception of those occupations associated with agriculture, forestry and other manufacturing.

In other words, the jobs are not being lost to Halifax with the exception of specific occupations (such as senior management, specialized health occupations, etc.) that are offset by gains in other areas. The challenges in Nova Scotia (outside the Halifax CMA) seem to be restricted to the industries that are primarily rural and small community centered.

Table 1: Employment by Occupation (Nova Scotia less the Halifax CMA)

	Total Employment 1996	Total Employment 2006	Employment # Change (96-06)	Employment % Change (96-06)	Halifax Employment Intensity (2006)
Total labour force	256,000	263,190	7,190	3%	45%
Occupation - Not applicable [1]	9,430	4,730	-4,700	-50%	37%
All occupations	246,570	258,455	11,885	5%	45%
A Management occupations	17,420	18,885	1,465	8%	55%
B Business, finance and administrative occupations	32,425	37,535	5,110	16%	53%
C Natural and applied sciences and related occupations	7,295	10,295	3,000	41%	59%
D Health occupations	13,680	16,455	2,775	20%	47%
E Occupations in social science, education, government service and religion	15,825	17,865	2,040	13%	50%
F Occupations in art, culture, recreation and sport	4,605	5,145	540	12%	60%
G Sales and service occupations	67,735	68,195	460	1%	46%
H Trades, transport and equipment operators and related occupations	41,400	43,440	2,040	5%	36%
I Occupations unique to primary industry	24,860	21,510	-3,350	-13%	12%
J Occupations unique to processing, manufacturing and utilities	21,320	19,135	-2,185	-10%	21%
Employment (less I & J Occupations)	***200,390***	***217,810***	***17,420***	***9%***	

Source: Statistics Canada 1996 and 2006 Censuses. Using the 1991 Standard Occupational Classification.

1. Occupation - Not applicable. Defined as unemployed persons 15 years and over who have never worked for pay or in self-employment or who had last worked prior to January 1, 2005 only.

Table 2: Employment by Occupation: Ten Year Growth Rates (Two Digit SOCs)

	Halifax CMA	Rest of NS
A0 Senior management occupations	56%	30%
A1 Specialist managers	54%	38%
A2 Managers in retail trade, food and accommodation services	16%	7%
A3 Other managers, n.e.c.	13%	-5%
B0 Professional occupations in business and finance	92%	104%
B1 Finance and insurance administrative occupations	6%	-11%
B2 Secretaries	-42%	-21%
B3 Administrative and regulatory occupations	40%	67%
B4 Clerical supervisors	11%	54%
B5 Clerical occupations	11%	16%
C0 Professional occupations in natural and applied sciences	82%	91%
C1 Technical occupations related to natural and applied sciences	14%	12%
D0 Professional occupations in health	49%	20%
D1 Nurse supervisors and registered nurses	3%	4%
D2 Technical and related occupations in health	40%	45%
D3 Assisting occupations in support of health services	57%	23%
E0 Judges, lawyers, psychologists, social workers, ministers of religion, etc.	34%	2%
E1 Teachers and professors	32%	3%
E2 Paralegals, social services workers and occupations in education and religion, n.e.c.	105%	104%
F0 Professional occupations in art and culture	45%	22%
F1 Technical occupations in art, culture, recreation and sport	23%	6%
G0 Sales and service supervisors	52%	34%
G1 Wholesale, technical, insurance, real estate sales specialists, and retail, wholesale	-7%	-6%
G2 Retail salespersons and sales clerks	22%	-3%
G3 Cashiers	39%	33%
G4 Chefs and cooks	16%	3%
G5 Occupations in food and beverage service	10%	-17%
G6 Occupations in protective services	-9%	-11%
G7 Occupations in travel and accommodation, including attendants in recreation and sport	15%	-9%
G8 Child care and home support workers	-2%	-9%
G9 Sales and service occupations, n.e.c.	5%	3%
H0 Contractors and supervisors in trades and transportation	-13%	-16%
H1 Construction trades	23%	12%
H2 Stationary engineers, power station operators and electrical trades and telecom	10%	8%
H3 Machinists, metal forming, shaping and erecting occupations	28%	-1%
H4 Mechanics	7%	5%
H5 Other trades, n.e.c.	6%	-3%
H6 Heavy equipment and crane operators, including drillers	24%	-2%
H7 Transportation equipment operators and related workers, excluding labourers	-3%	7%
H8 Trades helpers, construction and transportation labourers and related occupations	29%	7%
I0 Occupations unique to agriculture, excluding labourers	-11%	-13%
I1 Occupations unique to forestry, mining, oil & gas extraction & fishing, excluding labourers	-1%	-18%
I2 Primary production labourers	23%	2%
J0 Supervisors in manufacturing	6%	-20%
J1 Machine operators in manufacturing	-4%	-15%
J2 Assemblers in manufacturing	20%	33%
J3 Labourers in processing, manufacturing and utilities	27%	-10%

Source: Statistics Canada 1996 and 2006 Censuses. Using the 1991 Standard Occupational Classification.

2.3 The Importance of Clustering

Numerous studies have confirmed that for many industry sectors concentrated economic activity leads to a clustering effect where economic performance and innovation is far higher than in regions where there is not the same level of concentration. According to the Harvard Business School Institute for Competitiveness and Strategy:

> "Clusters are geographic concentrations of interconnected companies, specialized suppliers, service providers, and associated institutions in a particular field that are present in a nation or region. Clusters arise because they increase the productivity with which companies can compete. The development and upgrading of clusters is an important agenda for governments, companies, and other institutions. Cluster development initiatives are an important new direction in economic policy, building on earlier efforts in macroeconomic stabilization, privatization, market opening, and reducing the costs of doing business."

The Halifax CMA is large enough to generate clustering effects in a number of sectors including financial services, life sciences and information technologies.

3. The Importance of Regional Decision Making

Atlantic Canada is a relatively small regional economy within the context of Canada and North America. The population of the four Atlantic Provinces combined represents only 7% of the Canadian population and just over one half of one percent of the North American population (0.6%). Within the national and international companies and organizations operating in the region it is beneficial to ensure there are strong advocates based here in positions of influence and/or authority.

It has long been known that where corporate influence over decision making is located is correlated to firm growth and ultimately regional economic growth over time[3]. That can place smaller economies such as Atlantic Canada at a disadvantage and amplifies the value of a strong regional hub city economy such as Halifax.

An important feature of the hub city is that it has senior executive level management for national and international companies, senior leadership within the federal government, and a host of industry associations and trade groups based here. Many of these senior managers have strong ties and affinity to the region and influence over corporate decision making compared to the typical general manager or branch office operation.

Having this significant local influence over corporate decision making within these firms leads to:

- Championing the Halifax regional office for growth opportunities within the national corporate footprint.
- Advocating for the regional office (and the region) during corporate and strategic plan development.
- Controlling supply chain activity such as office equipment purchases, hosting events, training, etc.
- Making decisions locally over hiring, compensation, partnerships, etc.
- Making decisions locally over corporate philanthropy, event sponsorship, scholarship activity, etc.

3.1 Senior Management Concentration

One proxy for influence and control over decision making is the concentration of senior management in a region. Senior managers in national and international organizations, government departments and other institutions control the decision making process - decisions that influence Nova Scotia and the Maritime Provinces.

Almost 30% of the Maritime Provinces' senior government managers and officials are based in Halifax (Table 4). Over the 1996-2006 period this concentration of government management remained about the same. Halifax is home to 44% of the Maritime Provinces' senior managers in financial, communications carriers and other business services. This is down slightly from 47% in 1996. Halifax has also witnessed a decline in the concentration of senior managers in trade, broadcasting and other services n.e.c. In 1996, 41% of these managers located in the Maritimes were in Halifax - by 2006 that had dropped to 31%. Halifax has witnessed strong growth in the concentration of Maritime Province-based engineering, science and architecture managers as well as insurance, real estate and financial brokerage managers (Table 4).

[3] For an interesting analysis of these effects see *Planning Local Economic Development: Theory and Practice* (2009).

3.1.1 Benchmark Hub Cities Review

Compared to other hub cities across Canada (Toronto, Montreal, Winnipeg, Saskatoon, Calgary and Vancouver), Halifax has a higher concentration of senior government managers and officials and senior managers in health, education, social and community services and membership organizations than all other hubs (Table 3) - as measured by the number of persons employed in these occupations per 10,000 in the workforce.

Among the hub cities, Halifax has the second lowest concentration of senior managers in financial, communications carriers and other business services as well as senior managers in goods production, utilities, transportation and construction. Halifax has an above average concentration of specialist managers compared to the other benchmark cities.

Table 3: Senior Management Concentration and Trending: Hub Cities

	A012 Senior government managers and officials		A013 Senior managers - Financial, communications carriers and other business services		A014 Senior managers - Health, education, social and community services and membership organizations	
	Per 10K	10 Yr Change	Per 10K	10 Yr Change	Per 10K	10 Yr Change
Canada	12.5	12%	32.6	92%	12.8	114%
Toronto	6.4	-22%	57.4	69%	12.0	66%
Montreal	11.9	42%	53.6	108%	15.3	290%
Winnipeg	12.1	-14%	27.3	99%	18.0	124%
Saskatoon	10.6	8%	20.4	116%	15.5	128%
Calgary	4.2	22%	44.9	105%	10.8	137%
Vancouver	6.0	-7%	45.5	82%	12.1	32%
Halifax	**16.0**	**0%**	**29.8**	**90%**	**19.5**	**108%**

	A015 Senior managers - Trade, broadcasting and other services, n.e.c.		A016 Senior managers - Goods production, utilities, transportation and construction		A1 Specialist managers	
	Per 10K	10 Yr Change	Per 10K	10 Yr Change	Per 10K	10 Yr Change
Canada	30.5	44%	35.3	38%	246.7	50%
Toronto	41.0	28%	40.8	24%	374.9	61%
Montreal	61.7	78%	57.3	51%	281.0	31%
Winnipeg	19.2	-14%	25.4	13%	237.8	44%
Saskatoon	15.5	37%	20.0	2%	228.8	73%
Calgary	22.1	33%	54.7	40%	331.4	97%
Vancouver	34.3	7%	32.4	2%	310.3	49%
Halifax	**24.9**	**38%**	**25.8**	**83%**	**279.9**	**54%**

Source: Statistics Canada 1996 and 2006 Censuses. Using the 1991 Standard Occupational Classification.

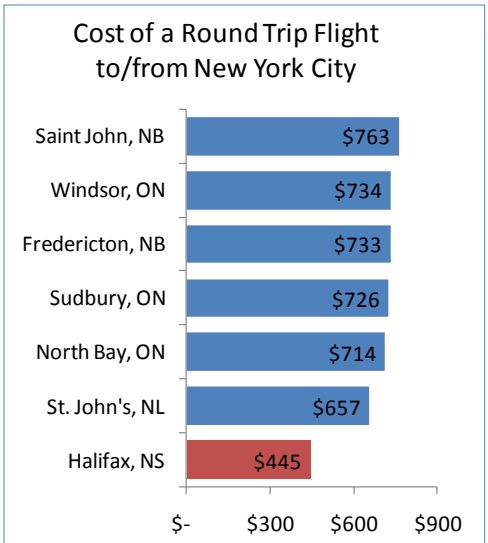
Table 4: Maritime Provinces' Management Concentration in Halifax

	1996	2006	Percentage Point Change
A Management occupations	**27%**	**30%**	**3%**
A012 Senior government managers and officials	**28%**	**29%**	**1%**
A013 Senior managers - Financial, communications carriers and other business services	47%	44%	-3%
A014 Senior managers - Health, education, social and community svcs & membership orgs.	34%	32%	-2%
A015 Senior managers - Trade, broadcasting and other services, n.e.c.	41%	31%	-10%
A016 Senior managers - Goods production, utilities, transportation and construction	23%	28%	5%
A111 Financial managers	31%	30%	-1%
A112 Human resources managers	33%	29%	-3%
A113 Purchasing managers	28%	26%	-2%
A121 Engineering, science and architecture managers	35%	45%	10%
A122 Information systems and data processing managers	35%	41%	6%
A131 Sales, marketing and advertising managers	33%	39%	6%
A141 Facility operation and maintenance managers	25%	30%	5%
A211 Retail trade managers	22%	24%	2%
A221 Restaurant and food service managers	26%	26%	0%
A222 Accommodation service managers	15%	17%	2%
A301 Insurance, real estate and financial brokerage managers	37%	48%	11%
A302 Banking, credit and other investment managers	28%	26%	-2%
A311 Telecommunication carriers managers	40%	29%	-10%
A312 Postal and courier services managers	47%	42%	-5%
A321 Managers in health care	21%	33%	12%
A322 Administrators in post-secondary education and vocational training	32%	33%	1%
A324 Managers in social, community and correctional services	22%	25%	3%
A331 Government managers in health & social policy dev. & program admin.	23%	27%	4%
A332 Government managers in economic analysis, policy dev. program admin.	29%	32%	3%
A333 Government managers in education policy dev. & program administration	32%	20%	-12%
A334 Other managers in public administration	48%	35%	-13%
A341 Library, archive, museum and art gallery managers	25%	33%	8%
A342 Managers in publishing, motion pictures, broadcasting and performing arts	29%	33%	3%
A343 Recreation and sport program and service directors	22%	22%	-1%
A371 Construction managers	20%	30%	10%
A372 Residential home builders and renovators	22%	30%	9%
A373 Transportation managers	22%	29%	7%
A381 Primary production managers (except agriculture)	10%	6%	-4%
A391 Manufacturing managers	15%	19%	4%

Source: Statistics Canada 1996 and 2006 Censuses. Using the 1991 Standard Occupational Classification.

4. The Hub City and Competitiveness

The concentration of economic activity in a hub city has a profound impact on a province and a region's ability to be competitive in the long term. An airport with sufficient scale will attract multiple carriers leading to price, quality and route competition that could never be achieved in a small market. A quick search of communities across Eastern Canada that do not feature hub city airports reveals residents will pay considerably more for airfare to international destinations compared to a hub city airport such as Halifax. Using the meta airfare search engine Kayak.com, persons flying out of non-hub airports to New York City will pay between 48% and 71% more than if they were flying out of Halifax.



Lowest price for a return fare - not including taxes and fees. Search completed on March 16, 2010. Assumes leaving April 12, 2010 returning April 19, 2010.
Source: kayak.com

The transportation industry is more competitive when there is enough scale to have multiple companies vying for the business. That same value from economic concentration can found in virtually every industry sector.

These benefits are extended to the wider region that lies within the influence of the hub city.

The hub city fosters regional competitiveness by:

- **Retaining economic activity - particularly high value activity - in the region.** This can include specialized business services, health care, consulting, etc. Without the hub city, companies and individuals all over the Maritime Provinces would have to access these niche offerings elsewhere in Canada at a higher cost and at less convenience. Keeping this high value economic activity in the region retains high paying jobs and high levels of relative taxation for governments.

- **Creating the conditions that compel more competitive and innovative practices within industries**. The hub city provides the scale needed to foster competitive market conditions across most industries. There are 185 accounting firms in the hub city. There are 125 insurance agencies and brokerages. The hub city is home to 150 local courier and delivery firms. This scale creates the conditions for vigorous competition in the areas of price, quality and innovation. This competitive benefit is extended throughout the hub city influence area. If a company in Amherst, Charlottetown or Digby attempts to overprice a product or service, the client has the alternative of the hub city. This helps maintain competitiveness.

4.1 A Symbiotic Relationship

It is important to point out that a central feature of the hub city concept is the two-way relationship between the hub and the rest of the population in its influence area. The Halifax Stanfield International Airport is larger and offers more flight options than it would if it was only serving a population base of 400,000 people. The relationship is symbiotic.

5. Profiling Hub City Attributes

5.1 Hub City Attribute: Legal Services

Halifax has a slightly higher percentage of law firms compared to the rest of the Maritime Provinces (26% of the total) but has 36% of the region's lawyers (Table 5), 43% of the court clerks and 44% of persons involved in paralegal activity. The hub city has nearly half (45%) of the "other legal services" firms in the Maritimes which includes the kind of specialized legal services that require a relatively large urban market such as patent agent services and title abstract companies. In the 1996-2006 timeframe, the concentration of Maritime Provinces-based judges in Halifax is declining (Table 7) but the concentration of lawyers, paralegals and court clerks is increasing. Nearly half of the persons working as court clerks in the Maritime Provinces are in Halifax.

Table 5: Legal Services Firms Concentration in Halifax

NOC:	# in the Maritime Provinces	# in Halifax	Halifax as a % of Maritime Provinces
541110 - Offices of Lawyers	1,082	278	26%
541120 - Offices of Notaries	2	0	0%
541190 - Other Legal Services	143	64	45%

Source: Statistics Canada - Canadian Business Patterns June 2009.

The top regional law firms are concentrated in Halifax. Of the top five law firms in Atlantic Canada, almost half of their lawyers (47%) are located in Halifax (the Halifax CMA represents only 17% of the Atlantic Canadian population). This concentration of legal activity creates a level of specialization and sophistication that can be drawn upon by the insurance industry without having to leave the region.

Table 6: Atlantic Canada's Top Five Law Firms

	# of the Firm's Lawyers in Halifax	% of the Firm's Total Lawyers in Atl. Canada
Stewart McKelvey Stirling Scales	88	44%
Patterson Palmer	54	34%
McInnes Cooper	64	48%
Cox Hanson O`Reilly Matheson	50	53%
Boyne Clarke	38	100%
Total Lawyers	294	47%

Source: Lexpert directory (2009)

Table 7: Legal Services Employment Concentration in Halifax

NOC:	# in the Maritime Provinces	# in Halifax	Halifax as a % of Maritime Provinces (2006)	Halifax as a % of Maritime Provinces (1996)
E011 Judges	175	55	31%	35%
E012 Lawyers	3,160	1,150	36%	32%
E211 Paralegal and related occupations	1,715	750	44%	28%
B543 Court clerks	105	45	43%	21%

Source: Statistics Canada - 2006 Census.

5.1.1 Benchmark Hub Cities Review

Halifax has an above average concentration of judges compared to the benchmark cities (per 10,000 in the workforce) and is second only to Calgary in the concentration of persons working in paralegal occupations. However, four of the six benchmark hub cities have a higher concentration of lawyers. Halifax led all hub cities for the growth of legal services employment from 1996-2006.

Table 8: Legal Services Employment Concentration and Trending: Hub Cities

Per 10,000 in the Workforce	CAN	TOR	MONT	WIN	SASK	CAL	VAN	**HFX**
E011 Judges	1.5	1.1	1.7	3.4	4.2	1.3	2.0	**2.8**
E012 Lawyers	43.8	68.0	59.1	41.3	47.6	58.8	65.0	**54.0**
E211 Paralegal and related occupations	21.4	34.2	14.5	22.7	22.7	42.4	27.9	**35.2**
B543 Court clerks	2.0	2.3	1.6	3.0	-	1.7	1.6	**2.1**
10 Year Change (1996-2006)								
E011 Judges	14%	-3%	-6%	37%	38%	13%	18%	**71%**
E012 Lawyers	28%	34%	29%	24%	40%	40%	33%	**40%**
E211 Paralegal and related occupations	83%	61%	154%	88%	186%	166%	31%	**226%**
B543 Court clerks	26%	62%	261%	44%	n/a	28%	-31%	**200%**

Source: Statistics Canada 1996 and 2006 Censuses. Using the 1991 Standard Occupational Classification.

5.1.2 Hub City Impact on Nova Scotia: Legal Services

Most communities in Nova Scotia are served by local lawyers. Kentville has 50 lawyers and New Glasgow is home to 80 lawyers. However, for companies and individuals that require specialized legal services (patent lawyers, etc.) they can find these services in the hub city of Halifax. Otherwise they would need to leave the region and take the economic activity with them. A number of the largest firms outside the Halifax area are using the corporate legal services firms in Halifax. For example, both Oxford Frozen Foods and the Empire Company use Halifax-based Stewart McKelvey Stirling Scales.

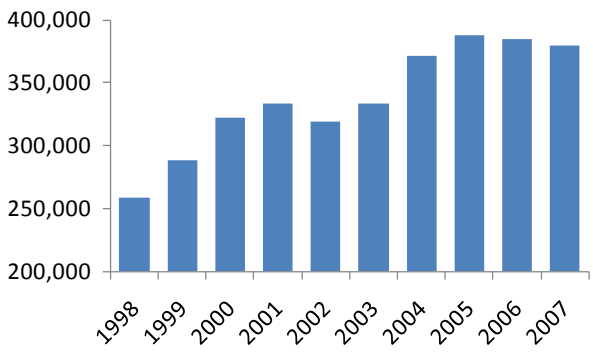
5.2 Hub City Attribute: International Airport

The Halifax Stanfield International Airport is one of the hub city's top attributes connecting businesses and residents to global markets. As shown above, the cost of air travel can be significantly lower in a hub city.

Halifax is growing in its importance as an international air travel hub city. From 1998 to 2007, the number of inbound and outbound travellers heading for international destinations increased by 47%.

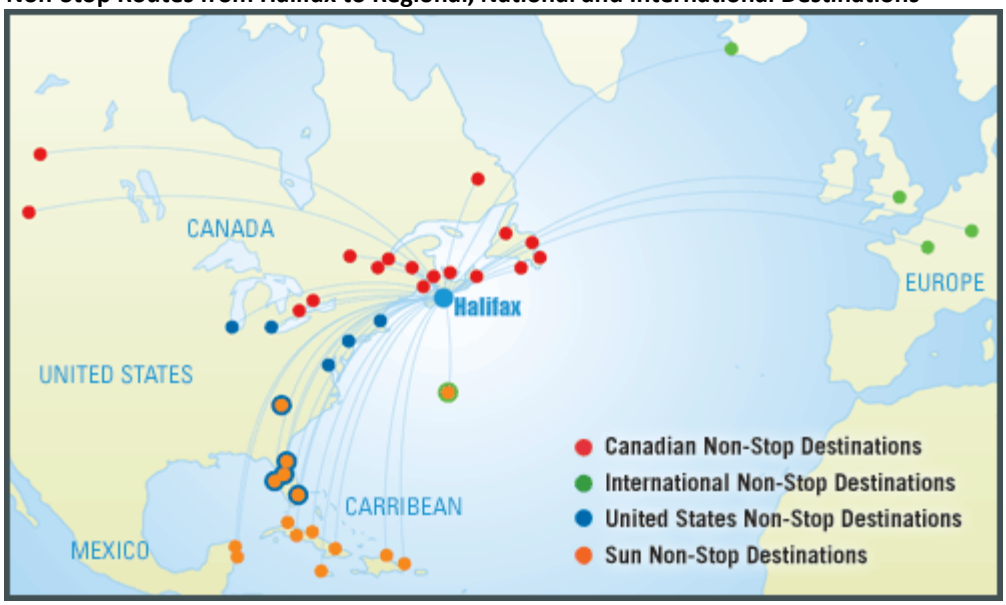
Of the over 450 airports in Canada and the United States, Halifax ranks 23rd overall for the number of passengers on transborder journeys (outbound and inbound passengers). Adjusted for population size, Halifax is among the highest ranking airport on the list. The hub city leverages a regional population base of well over a million people providing the scale for higher level of international connectivity than would be available in smaller, disconnected airports.

International Air Travellers to/from Halifax
Number of outbound and inbound passengers



Source: Statistics Canada. *Table 401-0039 - Air passenger origin and destination, transborder journeys, outbound and inbound passengers.*

Non-Stop Routes from Halifax to Regional, National and International Destinations



Source: Halifax Stanfield International Airport

Table 9 shows that 38% of the scheduled air transportation companies with operations in the Maritimes have their facilities in Halifax. It is also interesting to point out that the bulk of the Maritime Provinces' air transportation-related employment is located in Halifax. Over 50% of the region's pilots and over 75% of flight attendants make their home in Halifax. There has been a concentration of flight attendant employment in Halifax in recent years. From 1996 to 2006, the percentage of Maritime Provinces-based flight attendants in Halifax rose from 49% to 76%. The percentage of pilots in Halifax has dropped slightly over the 10 years.

Table 9: Air Transportation Firms Concentration in Halifax

NAICS:	# in the Maritime Provinces	# in Halifax	Halifax as a % of Maritime Provinces
481110 - Scheduled Air Transportation	24	9	38%
481214 - Non-Scheduled Chartered Air Transportation	18	5	28%

Source: Statistics Canada - Canadian Business Patterns June 2009.

Table 10: Air Transportation-related Employment Concentration in Halifax

NOC:	# in the Maritime Provinces	# in Halifax	Halifax as a % of Maritime Provinces (2006)	Halifax as a % of Maritime Provinces (1996)
C171 Air pilots, flight engineers and flying instructors	505	260	51%	58%
G712 Pursers and flight attendants	480	365	76%	49%
G711 Travel counsellors	1,330	500	38%	38%
H737 Air transport ramp attendants	345	155	45%	41%

Source: Statistics Canada - 2006 Census.

5.2.1 Benchmark Hub Cities Review

Halifax is well above most other hub cities for the concentration of pilots, flight engineers and flying instructors as well as flight attendants (however the other hubs saw faster growth rates from 1996-2006). Halifax also has a slightly higher concentration of air transport ramp attendants.

Table 11: Air Transportation-related Employment Concentration and Trending: Hub Cities

Per 10,000 in the Workforce	CAN	TOR	MONT	WIN	SASK	CAL	VAN	HFX
C171 Air pilots, flight engineers and flying instructors	8.5	5.2	7.3	12.3	9.8	21.6	11.3	12.2
G712 Pursers and flight attendants	6.8	10.1	10.1	5.2	0.8	22.1	20.2	17.1
G711 Travel counsellors	16.7	23.7	22.9	16.5	6.8	17.8	30.9	23.7
H737 Air transport ramp attendants	4.5	7.2	4.5	7.0	3.4	8.4	10.3	7.3
10 Year Change (1996-2006)	CAN	TOR	MONT	WIN	SASK	CAL	VAN	HFX
C171 Air pilots, flight engineers and flying instructors	30%	17%	12%	56%	37%	161%	-4%	-12%
G712 Pursers and flight attendants	8%	1%	-2%	-35%	-82%	246%	11%	14%
G711 Travel counsellors	8%	7%	16%	6%	-50%	-4%	9%	49%
H737 Air transport ramp attendants	-7%	-1%	55%	-2%	-10%	-15%	-17%	-24%

Source: Statistics Canada 1996 and 2006 Censuses. Using the 1991 Standard Occupational Classification.

5.2.2 Hub City Impact on Nova Scotia: International Airport

There are a large number of firms not located in the Halifax CMA that rely on the Halifax Stanfield International Airport to access their clients and markets. This is a benefit for Nova Scotia that is not shared by any other province in Atlantic Canada. Business people in Saint John or Fredericton need to connect in Montreal or Toronto to get to many of the markets that are a direct flight from Halifax. This time (and cost) savings benefits both firms in the Halifax CMA and the rest of Nova Scotia.

5.3 Hub City Attribute: Research & Development

Halifax is a hot-bed of research and development activity. The province features significantly more R&D spending than the other three Atlantic provinces and ranks number one in Canada for university-based R&D spending per capita. The bulk of this research is facilitated in Halifax. Halifax has a high concentration of the Maritime Provinces' engineers and scientists. Over 60% of the region's physicists are located in Halifax as are the majority of specialized engineers (up from 50% in 1996). In fact, this specialized talent is slowing concentrating in the hub city of Halifax (Table 13). Halifax has a higher percentage of Maritime Provinces-based engineers now than in 1996 across all but three engineering occupations. The concentration of geological engineers doubled over the ten year period. The concentration of aerospace engineers dropped due to the rise of the aerospace cluster on PEI. There has been a sharp concentration of Maritime Provinces-based biologists in Halifax. In 1996 there were only 22% in Halifax but by 2006 that had risen to 38% of the regional total.

Forty per cent of all organizations in the Maritime Provinces involved in research and development in the physical, engineering and life sciences (NAICS 541710) are located in Halifax. These entities support research conducted across Atlantic Canada. Critical mass matters - there are certain laboratory and specialized R&D infrastructure that needs scale to be justified.

According to Research Infosource Inc's 2009 ranking of top research universities in Canada, Dalhousie University is the top ranked Atlantic Canadian university. There are a number of world class research organizations in Halifax including the NRC Institute for Marine Biosciences, Defence Research and Development Canada and Petroleum Research Atlantic Canada.

Table 12: R&D and Related Firms Concentration in Halifax

NAICS:	# in the Maritime Provinces	# in Halifax	Halifax as a % of Maritime Provinces
541380 - Testing Laboratories	88	25	28%
541410 - Interior Design Services	93	33	35%
541420 - Industrial Design Services	20	7	35%
541620 - Environmental Consulting Services	166	64	39%
541690 - Other Scientific and Technical Consulting Services	367	143	39%
541710 - R&D in the Physical, Engineering and Life Sciences	146	59	40%

Source: Statistics Canada - Canadian Business Patterns June 2009.

Table 13: R&D-Related Employment Concentration in Halifax

NOC:	# in the Maritime Provinces	# in Halifax	Halifax as a % of Maritime Provinces (2006)	Halifax as a % of Maritime Provinces (1996)
C011 Physicists and astronomers	95	60	63%	50%
C012 Chemists	445	165	37%	48%
C013 Geologists, geochemists and geophysicists	515	230	45%	53%
C015 Other professional occupations in physical sciences	40	25	63%	29%
C021 Biologists and related scientists	915	350	38%	22%
C031 Civil engineers	2,315	740	32%	28%
C032 Mechanical engineers	1,060	320	30%	32%
C033 Electrical and electronics engineers	1,090	575	53%	35%
C034 Chemical engineers	290	125	43%	32%
C042 Metallurgical and materials engineers	25	10	40%	33%
C044 Geological engineers	45	25	56%	29%
C045 Petroleum engineers	140	80	57%	67%
C046 Aerospace engineers	175	85	49%	68%
C047 Computer engineers (except software engineers)	590	285	48%	50%
C048 Other professional engineers, n.e.c.	275	180	65%	29%

Source: Statistics Canada - 2006 Census.

5.3.1 Benchmark Hub Cities Review

Halifax compares well to the other hub cities in Canada for most engineering and scientific occupational categories. Halifax has an above average percentage of physicists, geologists, biologists, civil engineers, electrical engineers, chemical engineers, petroleum engineers and aerospace engineers. Halifax is below compared to the average benchmark hub city for chemists, mechanical engineers and manufacturing engineers. Halifax has witnessed strong growth in most of these occupational categories (1996-2006) particularly in the areas related to the oil and gas industry. There has been a 150% increase in geological engineers and a 300% increase in petroleum engineers. Again, as mentioned above, there has been a sharp increase in biologists (192% increase).

Table 14: R&D-Related Employment Concentration and Trending: Hub Cities

Per 10,000 in the Workforce	CAN	TOR	MONT	WIN	SASK	CAL	VAN	HFX
C011 Physicists and astronomers	1.5	0.9	2.9	0.8	1.5	1.0	1.9	**2.8**
C012 Chemists	10.3	17.4	19.9	6.9	14.7	7.4	11.5	**8.0**
C013 Geologists, geochemists and geophysicists	7.1	2.4	2.4	3.0	14.0	74.7	9.2	**10.8**
C014 Meteorologists	0.7	0.6	1.7	0.9	0.8	0.2	0.6	**3.5**
C015 Other prof. occupations in physical sciences	0.9	0.4	0.8	0.6	2.3	0.5	1.0	**0.9**
C021 Biologists and related scientists	10.2	6.9	11.1	15.7	31.3	8.5	14.1	**16.4**
C022 Forestry professionals	3.8	0.4	0.9	0.4	1.1	0.5	1.9	**0.5**
C023 Agricultural representatives, consultants, etc.	3.2	0.5	2.3	4.8	5.3	1.1	0.6	**1.4**
C031 Civil engineers	24.7	27.1	26.0	22.7	29.8	52.1	34.0	**34.5**
C032 Mechanical engineers	21.0	30.9	19.5	14.0	18.1	49.4	24.6	**15.0**
C033 Electrical and electronics engineers	19.1	26.3	28.0	15.8	17.0	38.0	25.4	**27.0**
C034 Chemical engineers	5.3	6.8	4.8	1.6	5.3	21.9	5.2	**5.9**
C041 Industrial and manufacturing engineers	11.3	14.4	17.0	7.3	9.8	12.5	7.4	**5.4**
C042 Metallurgical and materials engineers	1.3	1.1	1.4	0.4	0.8	2.4	1.6	**0.5**
C043 Mining engineers	1.5	0.8	0.6	-	8.7	2.7	2.7	**0.5**
C044 Geological engineers	1.0	0.8	0.3	1.2	2.6	4.6	2.5	**1.2**
C045 Petroleum engineers	5.4	0.6	0.2	-	0.8	88.9	1.1	**3.8**
C046 Aerospace engineers	3.2	4.3	11.6	5.8	-	0.8	1.4	**4.0**
C048 Other professional engineers, n.e.c.	1.7	1.2	2.1	1.6	1.5	0.5	2.9	**8.5**
10 Year Change (1996-2006)								
C011 Physicists and astronomers	-21%	-32%	-26%	-54%	-33%	30%	2%	**9%**
C012 Chemists	46%	78%	65%	-18%	15%	39%	86%	**-15%**
C013 Geologists, geochemists and geophysicists	60%	81%	72%	10%	76%	62%	79%	**31%**
C014 Meteorologists	7%	29%	94%	-46%	-60%	-33%	-18%	**-17%**
C015 Other prof. occupations in physical sciences	13%	-8%	3%	-38%	200%	0%	26%	**100%**
C021 Biologists and related scientists	63%	59%	59%	49%	48%	67%	106%	**192%**
C022 Forestry professionals	37%	200%	55%	0%	n/a	250%	-14%	**0%**
C023 Agricultural representatives, consultants, etc.	47%	53%	76%	85%	-26%	75%	-13%	**100%**
C031 Civil engineers	30%	40%	12%	18%	46%	113%	37%	**65%**
C032 Mechanical engineers	36%	62%	40%	-20%	-4%	127%	36%	**8%**
C033 Electrical and electronics engineers	-2%	14%	-12%	-29%	18%	41%	11%	**40%**
C034 Chemical engineers	6%	34%	18%	100%	-7%	22%	-1%	**39%**
C041 Industrial and manufacturing engineers	98%	120%	94%	115%	225%	169%	187%	**44%**
C042 Metallurgical and materials engineers	9%	36%	-12%	-50%	n/a	41%	46%	**-33%**
C043 Mining engineers	-3%	7%	28%	n/a	53%	84%	0%	**0%**
C044 Geological engineers	8%	16%	8%	200%	-13%	-6%	40%	**150%**
C045 Petroleum engineers	136%	106%	-64%	n/a	n/a	143%	73%	**300%**
C046 Aerospace engineers	34%	-1%	36%	200%	n/a	400%	100%	**31%**
C048 Other professional engineers, n.e.c.	-43%	-55%	-22%	-14%	-73%	-70%	-25%	**-39%**

Source: Statistics Canada 1996 and 2006 Censuses. Using the 1991 Standard Occupational Classification.

5.3.2 Hub City Impact on Nova Scotia:

Research and development and technical service providers tend to aggregate in urban centres. These service providers are working with firms in Nova Scotia outside the Halifax CMA. Most of the oil and gas exploration activity is outside the CMA as well as most manufacturing, mining and other primary industry activity. These companies rely on the expertise in the hub city.

5.4 Hub City Attribute: Post-Secondary Education

Halifax has the most university students per capita and its universities confer more degrees (adjusted for population size) than any other urban centre across Canada. In addition to its universities, Halifax has a much higher percentage of most other types of post-secondary educational institutions including language schools, professional development and business schools.

Halifax is home to 41% of all university professors in the Maritime Provinces and 48% of all post-secondary teaching and research assistants. There has been an increasing concentration of Maritime Provinces-based post-secondary employment in the Halifax CMA. From 1996-2006, the percentage of Maritime Provinces-based university professors increased from 35% to 41% (Table 16) and the concentration of post-secondary teaching and research assistants rose from 39% to 48% during the ten years.

This intensity and quality of post-secondary education is a feeder system for the Atlantic Canada skilled workforce of the future and key catalyst for advanced research and development. Table 17 below shows that Halifax is ranked 4th out of the 27 largest urban centres in Canada (CMAs) for the percentage of its population who have completed graduate studies (i.e., Masters, earned doctorate degrees, etc.).

Table 15: Post Secondary Educational Institutions Concentration in Halifax

NAICS:	# in the Maritime Provinces	# in Halifax	Halifax as a % of Maritime Provinces
611630 - Language Schools	16	7	44%
611430 - Professional and Management Development Training	75	32	43%
611710 - Educational Support Services	115	45	39%
611410 - Business and Secretarial Schools	11	4	36%
611620 - Athletic Instruction	109	38	35%
611310 - Universities	37	11	30%
611690 - All Other Schools and Instruction	281	81	29%
611210 - Community Colleges and C.E.G.E.P.s	65	16	25%
611510 - Technical and Trade Schools	83	20	24%
611610 - Fine Arts Schools	64	14	22%
611420 - Computer Training	38	7	18%

Source: Statistics Canada - Canadian Business Patterns June 2009.

Table 16: Education Industry Employment Concentration in Halifax

NOC:	# in the Maritime Provinces	# in Halifax	Halifax as a % of Maritime Provinces (2006)	Halifax as a % of Maritime Provinces (1996)
E111 University professors	4,335	1,770	41%	35%
E112 Post-secondary teaching and research assistants	3,650	1,745	48%	39%
E121 College and other vocational instructors	5,155	1,250	24%	23%
E131 Secondary school teachers	7,035	1,320	19%	15%
E132 Elementary school and kindergarten teachers	15,550	3,420	22%	19%
E133 Educational counsellors	1,035	230	22%	20%

Source: Statistics Canada - 2006 Census.

Table 17: Percentage of Adult Population with Graduate Degrees

Ottawa - Gatineau	11.6%	Kitchener	7.0%
Toronto	10.1%	Canada	6.5%
Vancouver	8.9%	Winnipeg	6.5%
Halifax	**8.6%**	Nova Scotia	5.9%
Montreal	7.8%	Regina	5.2%
Calgary	7.4%	Greater Sudbury	5.1%
St. John's	7.0%	Saint John	3.9%

Source: Statistics Canada - 2006 Census.

5.4.1 Benchmark Hub Cities Review

Halifax has the highest concentration of post-secondary employment of any hub city in Canada with the exception of Saskatoon. There are twice as many university professors in Halifax (per 10,000 in the workforce) compared to Montreal and Vancouver. Halifax is at the median for the concentration of college and vocational instructors. The sharp increase in post-secondary teaching and research assistants in Halifax points to either more post-graduate or research-based opportunities (or both) in the Halifax area.

Halifax has witnessed a below average growth rate in secondary school teachers compared to the benchmark communities (1996-2006).

Table 18: Education Industry Employment Concentration and Trending: Hub Cities

Per 10,000 in the Workforce	CAN	TOR	MONT	WIN	SASK	CAL	VAN	**HFX**
E111 University professors	33.2	29.5	43.0	53.4	85.3	27.3	38.6	**82.9**
E112 Post-secondary teaching and research assistants	40.0	39.3	49.1	48.2	125.0	46.0	59.2	**81.9**
E121 College and other vocational instructors	60.2	50.3	87.2	48.9	59.3	53.0	75.1	**58.7**
E131 Secondary school teachers	94.0	88.2	100.7	94.1	88.0	56.6	83.4	**62.2**
E132 Elementary school and kindergarten teachers	152.6	157.6	132.0	170.3	151.4	127.3	123.4	**160.6**
E133 School and guidance counsellors	9.7	6.8	9.4	13.0	11.3	8.6	15.0	**10.6**
10 Year Change (1996-2006)	CAN	TOR	MONT	WIN	SASK	CAL	VAN	**HFX**
E111 University professors	14%	37%	-2%	28%	5%	23%	28%	**27%**
E112 Post-secondary teaching and research assistants	133%	165%	129%	74%	204%	177%	125%	**177%**
E121 College and other vocational instructors	7%	3%	27%	-11%	3%	28%	0%	**9%**
E131 Secondary school teachers	3%	11%	4%	12%	30%	11%	24%	**4%**
E132 Elementary school and kindergarten teachers	14%	29%	30%	5%	14%	30%	16%	**22%**
E133 School and guidance counsellors	38%	45%	17%	54%	76%	113%	51%	**67%**

Source: Statistics Canada 1996 and 2006 Censuses. Using the 1991 Standard Occupational Classification.

5.4.2 Hub City Impact on Nova Scotia: Post-Secondary Education

All of Nova Scotia's residents have access to the cluster of post-secondary educational institutions based in Halifax. Community college training is not concentrated in Halifax. There are 145 college instructors in New Glasgow and 235 in Cape Breton (2006 Census).

5.5 Hub City Attribute: International Port

The Port of Halifax is the primary trans-shipment point for cargo into and out of the Maritime Provinces. The port is one of the largest commercial ports in Canada handling over 10 million metric tonnes of cargo per year. Halifax is an ice-free port offering some of the deepest water on the Eastern Seaboard.

A certain level of scale is required to have cost effective and convenient product shipment to international markets. Ten of the world's 15 top container lines that serve over 150 countries on every continent use the Port of Halifax. Over 40% of the marine shipping agencies with operations in Atlantic Canada are based in Halifax. As an example of the scope of the Port of Halifax, almost 50% of the Maritime Provinces' longshore workers are based in Halifax. A longshore worker in Halifax earned an average of over $80,000 per year in 2006 (full time). It is very interesting to note there has been a sharp increase in the concentration of the Maritime Provinces-based longshore workers in Halifax. In 1996, only 25% of these workers were based in Halifax and by 2006 that had doubled to 49%.

Table 19: Marine Shipping Firms Concentration in Halifax

NAICS:	# in the Maritime Provinces	# in Halifax	Halifax as a % of Maritime Provinces
488511 - Marine Shipping Agencies	28	12	43%

Source: Statistics Canada - Canadian Business Patterns June 2009.

Table 20: Longshore Worker Employment Concentration in Halifax

NOC:	# in the Maritime Provinces	# in Halifax	Halifax as a % of Maritime Provinces (2006)	Halifax as a % of Maritime Provinces (1996)
H811 Longshore workers	740	365	49%	25%

Source: Statistics Canada - 2006 Census.

5.5.1 Benchmark Hub Cities Review

Only Montreal and Vancouver have a significant international port. Halifax has a substantial concentration of longshore workers - relative to the size of the economy. There are 17.1 longshore workers per 10,000 people in the Halifax workforce compared to only 4.5 in Montreal (this is similar to the 17.4 workers in Vancouver). Halifax has witnessed a 9% rise in longshore workers over ten years compared to a slight decline in Halifax (per 10,000 in the workforce).

Table 21: Longshore Worker Employment Concentration and Trending: Hub Cities

Per 10,000 in the Workforce	CAN	TOR	MONT	WIN	SASK	CAL	VAN	**HFX**
H811 Longshore workers	3.7	0.4	4.5	0.4	-	0.4	17.4	**17.1**
10 Year Change (1996-2006)	-17%	-50%	25%	-57%	n/a	150%	-1%	**9%**

Source: Statistics Canada 1996 and 2006 Censuses. Using the 1991 Standard Occupational Classification.

5.5.2 Hub City Impact on Nova Scotia: International Port

The Port is an excellent example of a hub city attribute. Only a small percentage of the goods shipped out of the Port of Halifax are produced in Halifax. Wood products manufactured in the province are shipped through the port. The seafood produced up and down the coast of Nova Scotia is shipped through the port as are agricultural products from the province's farms. In 2007, Michelin shipped 4,000 TEUs (twenty-foot equivalent units) worth of tires out through the Port of Halifax. Shaw Resources wood pellet production facilities in East Hants ships its product to world markets through the Port of Halifax.

Table 22: Top Imports/Exports to/from the Port of Halifax

Top 5 Containerized Imports:	Top 5 Containerized Exports:
1. Manufactured Goods	1. Newsprint and Paper
2. Automobile Parts	2. Manufactured Goods
3. Clothing and Textile	3. Vegetables
4. Furniture	4. Seafood
5. Ceramic Building Products	5. Woodpulp

Source: Port of Halifax.

5.6 Hub City Attribute: Head/Regional Offices

As was pointed out in Section 3 above, local decision making capacity and influence are key to the long term potential of a region. Halifax has long been the head and regional office centre for Atlantic Canada. Canada's big banks have their regional offices here. The vast majority of national and international insurance firms have their regional office for Atlantic Canada in Halifax. The federal government has a large scale regional presence in the hub city (see below).

Halifax is home to over 40% of the Maritime Provinces' head offices[4] (NAICS 551114) and the vast majority of regional offices for national and international firms that have regional offices in Atlantic Canada. On an absolute basis, the bulk of Canada's head offices are in Toronto, Montreal, Vancouver and Calgary but as a percentage of total firms, Halifax has the second highest concentration of head offices in Canada.

This is a hub city attribute because head and regional offices based in Halifax control investment decisions that impact all of the Maritime Provinces. Having that power base stay in the region is critically important to the regional economy (see Section 3 above for more discussion of regional decision making).

Table 23: Head Office Concentration in Halifax

NAICS:	# in the Maritime Provinces	# in Halifax	Halifax as a % of Maritime Provinces
551114 - Head Offices	152	62	41%

Source: Statistics Canada - Canadian Business Patterns June 2009.

Table 24: Head Office Concentration - CMA Comparison

CMA:	Head Offices	Per 10,000 Establishments
602 - Winnipeg	110	27.6
205 - Halifax	62	26.7
825 - Calgary	249	22.4
705 - Regina	27	20.9
725 - Saskatoon	36	20.4
001 - St. John's	20	19.2
462 - Montréal	405	17.8
535 - Toronto	743	17.1
555 - London	44	16.2
835 - Edmonton	128	14.6
933 - Vancouver	269	14.3
310 - Saint John	9	14.3
421 - Québec	54	13.7
505 - Ottawa - Gatineau	82	12.1
935 - Victoria	30	11.5
539 - St. Catharines - Niagara	22	10.4
433 - Sherbrooke	10	9.2

Source: Statistics Canada - Canadian Business Patterns June 2009.

[4] Comprises establishments primarily engaged in providing general management and/or administrative support services to affiliated establishments.

5.6.1 Hub City Impact on Nova Scotia: Head/Regional Offices

Head and regional offices tend to locate in larger urban centres. If there was no Halifax or it was not large enough to play the role of hub city, many of the regional head offices for national and international companies would be located in other Maritime cities or not in the region at all - taking away both influence and decision making power as well as high value economic activity.

5.7 Hub City Attribute: Specialized Business Services

To serve the regional population of 1.8 million people (in the Maritime Provinces), Halifax is the home base of a number of specialized business services - many of which require a certain scale of population and economic activity to be commercially viable. In addition, having a significant number of firms creates a more competitive market which impacts price, quality and innovation.

Almost 50% of the firms in the Maritime Provinces that provide graphic design services are based in Halifax. Over 50% of the public relations firms as well. Forty-three per cent of the firms involved in computer systems design and related services are located in Halifax.

Without Halifax, businesses would need to access these services in other urban centres such as Montreal and Toronto - leaking this high value economic activity out of the region.

Table 25: Specialized Business Service Firms Concentration in Halifax

NAICS:	# in the Maritime Provinces	# in Halifax	Halifax as a % of Maritime Provinces
541830 - Media Buying Agencies	4	3	75%
561450 - Credit Bureaus	3	2	67%
541820 - Public Relations Services	42	23	55%
541860 - Direct Mail Advertising	6	3	50%
541430 - Graphic Design Services	171	84	49%
561310 - Employment Placement Agencies and Executive Search Services	67	32	48%
541490 - Other Specialized Design Services	30	14	47%
541612 - Human Resources Consulting Services	105	49	47%
561910 - Packaging and Labelling Services	11	5	45%
541899 - All Other Services Related to Advertising	45	20	44%
541510 - Computer Systems Design and Related Services	1,091	472	43%
561330 - Professional Employer Organizations	7	3	43%
561410 - Document Preparation Services	51	22	43%
541619 - Other Management Consulting Services	361	152	42%
541810 - Advertising Agencies	133	55	41%
541891 - Specialty Advertising Distributors	37	15	41%
541310 - Architectural Services	162	64	40%
541910 - Marketing Research and Public Opinion Polling	47	19	40%
561440 - Collection Agencies	40	16	40%
561920 - Convention and Trade Show Organizers	52	21	40%
541330 - Engineering Services	824	318	39%
541611 - Administrative Mgmt. and General Mgmt. Consulting Services	896	342	38%
541920 - Photographic Services	164	62	38%
561430 - Business Service Centres	54	20	37%
541840 - Media Representatives	11	4	36%
541360 - Geophysical Surveying and Mapping Services	43	15	35%
541410 - Interior Design Services	93	33	35%
561320 - Temporary Help Services	71	21	30%

Source: Statistics Canada - Canadian Business Patterns June 2009.

The high concentration of specialized business service firms in the hub city translate into a high percentage of workers in these industries. Over 50% of the architects in the Maritime Provinces are located in Halifax. Well over 40% of the management in architecture, science, engineering and computer systems is based in Halifax. Over 40% of all conference and event planners reside in the hub city. There has been an increasing concentration of employment in these areas in Halifax. In 1996, 35% of the Maritime Provinces-based engineering managers were based in Halifax. By 2006, that had risen to 45%.

Table 26: Selected Specialized Business Services Employment Concentration in Halifax

NOC:	# in the Maritime Provinces	# in Halifax	Halifax as a % of Maritime Provinces (2006)	Halifax as a % of Maritime Provinces (1996)
C051 Architects	425	215	51%	47%
A123 Architecture and science managers	335	160	48%	35%
A121 Engineering managers	660	300	45%	35%
A122 Computer and information systems managers	1,525	630	41%	29%
B316 Conference and event planners	645	265	41%	33%
A13 Sales, marketing and advertising managers	5,915	2,295	39%	47%

Source: Statistics Canada - 2006 Census.

5.7.1 Benchmark Hub Cities Review

Halifax has a below average concentration of architects compared to the hub cities across Canada (four have a higher concentration while two have a lower concentration) but has a higher concentration of engineering, science and architecture management. Halifax has not kept pace with the other hub cities for management employment in the information technology field. While there was an 85% increase in employment from 1996-2006 in Halifax, this was a slower growth rate than all other hubs except Winnipeg.

Table 27: Selected Specialized Business Services Employment Concentration and Trending: Hub Cities

Per 10,000 in the Workforce	CAN	TOR	MONT	WIN	SASK	CAL	VAN	**HFX**
C051 Architects	8.1	13.1	13.5	8.3	4.2	13.1	17.1	**10.3**
A121 Engineering, science & architecture managers	14.8	18.3	15.7	12.1	13.2	32.2	16.5	**21.4**
A122 Information systems and data processing managers	26.3	46.5	32.7	20.6	13.2	38.6	32.6	**29.6**
B316 Conference and event planners	9.8	15.7	11.9	9.2	7.2	14.4	12.8	**12.2**
A13 Sales, marketing and advertising managers	91.9	160.1	103.4	92.4	88.3	124.4	134.3	**108.0**

10 Year Change (1996-2006)	CAN	TOR	MONT	WIN	SASK	CAL	VAN	**HFX**
C051 Architects	48%	68%	43%	83%	175%	125%	30%	**76%**
A121 Engineering, science and architecture managers	19%	16%	60%	29%	9%	56%	-13%	**23%**
A122 Information systems and data processing managers	119%	142%	149%	75%	119%	201%	149%	**85%**
B316 Conference and event planners	120%	148%	124%	73%	58%	182%	114%	**93%**
A13 Sales, marketing and advertising managers	49%	60%	13%	50%	66%	101%	57%	**77%**

Source: Statistics Canada 1996 and 2006 Censuses. Using the 1991 Standard Occupational Classification.

5.7.2 Hub City Impact on Nova Scotia: Specialized Business Services

Specialized business services such as media buying, public relations, graphic design and HR consulting tend to be located in larger urban centres but service a wide area. Nova Scotia benefits from having a concentration of these firms in the Halifax CMA. Otherwise firms would need to leave the region to access these services.

5.8 Hub City Attribute: Information Technology Cluster

Halifax has a very high percentage of the Maritime Provinces' IT industry and a highly information technology engaged population. As mentioned above, 43% of the firms across the Maritime Provinces involved in computer systems design and related services are located in Halifax. Over 40% of the computer and information systems managers are in the hub city. The professional class of I.T. workers is also relatively clustered in Halifax with close to 40% of all I.T. workers across the Maritime Provinces in the hub city. There has only been a slight concentration of I.T. workers in Halifax since 1996.

Specialized IT occupations are high wage. The average employment income in Halifax (2006) for a full time worker in NOC C073 Software engineers and designers was over $72,000 per year.

The cluster of specialized and scaled IT service providers in Halifax means that firms in the Maritime Provinces that would otherwise need to go out of market for IT consulting, customized software development, data centre services, etc. can access it here. There is anecdotal evidence of considerable leakage of the Maritime Provinces IT services industry to firms outside the region.

The hub city provides the scale to retain much of that economic activity in the Maritimes at competitive costs.

Table 28: IT Employment Concentration in Halifax

NOC:	# in the Maritime Provinces	# in Halifax	Halifax as a % of Maritime Provinces (2006)	Halifax as a % of Maritime Provinces (1996)
C07 Computer and information systems professionals	9,575	3,620	38%	36%
C071 Information systems analysts and consultants	4,625	1,760	38%	n/a
C072 Database analysts and data administrators	465	205	44%	n/a
C073 Software engineers and designers	755	325	43%	n/a
C074 Computer programmers and interactive media developers	3,015	1,040	34%	n/a
C075 Web designers and developers	710	290	41%	n/a

Source: Statistics Canada - 2006 Census.

5.8.1 Benchmark Hub Cities Review

The evidence across Canada indicates that for the most part the I.T. industries is more concentrated in larger urban centres. Toronto, the largest urban centre, has the highest concentration. Montreal and Vancouver also have high concentrations of I.T. employment. Only Winnipeg and Saskatoon have a lower concentration of I.T. employment compared to Halifax (among the hub cities). However, the growth rate of persons employed in I.T. in Halifax has been stronger than all but Vancouver (1996-2006).

Table 29: IT Employment Concentration and Trending: Hub Cities

Per 10,000 in the Workforce	CAN	TOR	MONT	WIN	SASK	CAL	VAN	**HFX**
C07 Computer and information systems occupations	265.7	440.6	328.6	256.3	154.4	365.9	333.7	**259.9**
10 Year Change (1996-2006)	117%	115%	104%	87%	120%	129%	163%	**137%**

Source: Statistics Canada 1996 and 2006 Censuses. Using the 1991 Standard Occupational Classification.

Table 30: Percentage of Households with Internet Access (%)

CMA:	%	CMA:	%
Ottawa-Gatineau, Ontario part	84.9	London, Ontario	78.1
Calgary, Alberta	84.5	Hamilton, Ontario	77.5
Victoria, British Columbia	83.0	Kitchener, Ontario	76.7
Saskatoon, Saskatchewan	81.8	Toronto, Ontario	73.9
Windsor, Ontario	79.5	Montréal, Quebec	73.7
Oshawa, Ontario	78.8	Winnipeg, Manitoba	73.5
Halifax, Nova Scotia	***78.5***	St. Catharines-Niagara, Ontario	72.7
Québec, Quebec	78.4	Saint John, New Brunswick	71.3
Edmonton, Alberta	78.3	Ottawa-Gatineau, Québec part	70.9
Vancouver, British Columbia	78.3	Greater Sudbury / Grand Sudbury, Ontario	67.5

Source: Statistics Canada - CANSIM Table 358-0122.

5.8.2 Hub City Impact on Nova Scotia: Information Technology Cluster

There are 1,400 people working in I.T. occupations outside the Halifax CMA. Companies such as HB Studios are based outside Halifax (HB Studios is headquartered in Lunenburg) but they access and benefit from services in the hub city such as the industry association (Digital Nova Scotia) as well as other service providers.

5.9 Hub City Attribute: Leading Atlantic Canada's Cultural & Entertainment Sectors

Halifax is home to many of Atlantic Canada's top cultural and entertainment assets. Outside of local market activity, Halifax is the hub for media and related activities in the Maritime Provinces. As Table 31 reveals, the hub city features a majority of sound recording studios, record production studios, integrated production studios, television broadcasters, post-production studios and motion picture and video production facilities. Halifax is also home to almost double its share (on a population basis) of book, directory, periodical and music publishers. It is also interesting to point out that two out of every five software publishing companies in the Maritime Provinces is located in Halifax.

Table 31: Publishing/Production Firms Concentration in Halifax

NAICS:	# in the Maritime Provinces	# in Halifax	Halifax as a % of Maritime Provinces
512290 - Other Sound Recording Industries	3	3	100%
512210 - Record Production	7	5	71%
512220 - Integrated Record Production/Distribution	6	4	67%
515210 - Pay and Specialty Television	9	6	67%
515120 - Television Broadcasting	8	5	63%
512190 - Post-Production and Other Motion Picture and Video Industries	23	14	61%
512110 - Motion Picture and Video Production	453	270	60%
512240 - Sound Recording Studios	16	9	56%
512120 - Motion Picture and Video Distribution	10	5	50%
511130 - Book Publishers	45	21	47%
511140 - Directory and Mailing List Publishers	15	7	47%
511120 - Periodical Publishers	68	29	43%
512230 - Music Publishers	14	6	43%
519110 - News Syndicates	7	3	43%
519190 - All Other Information Services	12	5	42%
511210 - Software Publishers	53	21	40%
519130 - Internet Publishing and Broadcasting and Web Search Portals	52	19	37%
511190 - Other Publishers	10	3	30%

Source: Statistics Canada - Canadian Business Patterns June 2009.

Table 32 below shows that Halifax is also a hub for culture-based entertainment and related activities. The hub city has over 50% of the Maritime Provinces' performing arts promoters (presenters) without facilities, sports presenters and other presenters without facilities, independent writers and authors, dance companies as well as independent actors, comedians and performers.

An occupational review (Table 33) confirms Halifax's dominance in this area. Half of the actors and comedians in the Maritime Provinces are located in Halifax as are 50% of its editors, 44% of its theatre, fashion, exhibit and other creative designers and 43% of its dancers. There has been some concentration of employment in Halifax since 1996 but for a number of related occupations there has been a lessening of concentration. Halifax has increased its concentration of Maritime Provinces-based dancers, musicians, actors and authors. There are relatively more photographers, film and video camera operators, graphic designers and other creative designers outside the Halifax CMA (in 2006 versus 1996).

Table 32: Culture-Related Firms Concentration in Halifax

NAICS:	# in the Maritime Provinces	# in Halifax	Halifax as a % of Maritime Provinces
711321 - Performing Arts Promoters (Presenters) without Facilities	17	10	59%
711329 - Sports Presenters and Other Presenters without Facilities	21	11	52%
711513 - Independent Writers and Authors	85	43	51%
711120 - Dance Companies	6	3	50%
711512 - Independent Actors, Comedians and Performers	86	43	50%
711112 - Musical Theatre and Opera Companies	9	4	44%
711130 - Musical Groups and Artists	83	32	39%
711410 - Agents and Managers for Artists, Athletes, Entertainers and Other Public Figures	20	6	30%
711511 - Independent Artists, Visual Arts	38	11	29%
711190 - Other Performing Arts Companies	8	2	25%
711322 - Festivals without Facilities	42	10	24%

Source: Statistics Canada - Canadian Business Patterns June 2009.

Table 33: Culture-Related Employment Concentration in Halifax

NOC:	# in the Maritime Provinces	# in Halifax	Halifax as a % of Maritime Provinces (2006)	Halifax as a % of Maritime Provinces (1996)
F012 Conservators and curators	140	70	50%	54%
F021 Authors and writers	1,130	380	34%	30%
F022 Editors	590	295	50%	49%
F024 Professional occupations in public relations and communications	1,585	605	38%	37%
F031 Producers, directors, choreographers and related occupations	685	350	51%	42%
F033 Musicians and singers	1,510	630	42%	31%
F034 Dancers	230	100	43%	24%
F035 Actors and comedians	290	145	50%	41%
F036 Painters, sculptors and other visual artists	855	260	30%	24%
F111 Library and archive technicians and assistants	1,105	390	35%	33%
F121 Photographers	640	225	35%	39%
F122Film and video camera operators	210	75	36%	47%
F123 Graphic arts technicians	95	35	37%	17%
F124 Broadcast technicians	130	50	38%	39%
F125 Audio and video recording technicians	365	215	59%	48%
F126 Other technical and co-ordinating occupations in motion pictures, broadcasting and the performing arts	290	170	59%	48%
F127 Support occupations in motion pictures, broadcasting and the performing arts	220	115	52%	45%
F132 Other performers	45	40	89%	44%
F14 Creative designers and craftspersons	3,465	1,070	31%	28%
F141 Graphic designers and illustrators	1,765	610	35%	39%
F142 Interior designers	320	110	34%	37%
F143 Theatre, Fashion, exhibit and other creative designers	205	90	44%	51%
G411 Chefs	1,310	515	39%	25%

Source: Statistics Canada - 2006 Census.

5.9.1 Benchmark Hub Cities Review

Halifax compares quite well to the other hub cities in Canada for the concentration of workers in cultural and artistic occupations. It has a median level of writers, producers/directors, conductors/composers and actors compared to the group. Halifax has an above average concentration of photographers (highest among the group), journalists, musicians (only Vancouver has a higher concentration), painters/visual artists (only Saskatoon has a higher concentration), PR professionals and broadcast technicians. There are more artisans and craftspersons in the Halifax CMA than all other hub cities in Canada. Halifax has a lower concentration of dancers, graphic arts technicians and graphic designers.

The employment concentration trend has been mixed. There has been a relative decline in the number of journalists, film and video operators, graphic arts technicians and broadcast technicians. Even though the concentration is still relatively high (2006), there is clear evidence the media sector is declining in relative importance in the Halifax CMA. Otherwise, the hub city has witnessed strong growth in creative occupations such as dancers, actors, painters and writers - well above most other hub cities (1996-2006).

Table 34: Culture & Artistic Employment Concentration and Trending: Hub Cities

Per 10,000 in the Workforce	CAN	TOR	MONT	WIN	SASK	CAL	VAN	HFX
F021 Writers	14.6	21.5	19.2	11.8	12.8	14.8	22.9	**18.1**
F023 Journalists	7.8	9.8	13.0	7.0	8.7	7.4	6.3	**9.9**
F024 Professional occupations in public relations and communications	21.5	27.4	31.6	18.9	20.0	23.0	22.7	**28.4**
F031 Producers, directors, choreographers and related occupations	13.2	24.7	26.3	9.8	10.6	9.6	25.3	**16.4**
F032 Conductors, composers and arrangers	1.3	2.5	1.9	1.3	0.8	1.5	2.0	**1.6**
F033 Musicians and singers	19.9	23.8	22.7	24.2	23.0	22.2	31.5	**29.6**
F034 Dancers	4.2	5.3	4.7	5.6	3.4	7.5	6.8	**4.5**
F035 Actors	6.0	11.6	9.5	5.7	4.2	4.6	18.9	**6.6**
F036 Painters, sculptors & other visual artists	10.7	11.8	10.5	9.6	12.1	11.8	18.1	**12.0**
F112 Technical occupations related to museums and galleries	3.3	2.1	1.7	2.6	5.3	2.3	2.3	**6.1**
F121 Photographers	7.8	10.4	7.8	8.9	7.6	9.2	9.4	**10.6**
F122 Film and video camera operators	2.8	4.3	3.8	2.9	2.3	2.4	5.5	**3.5**
F123 Graphic arts technicians	4.4	1.9	15.0	1.6	1.9	1.9	2.7	**1.6**
F124 Broadcast technicians	1.6	2.5	1.8	1.9	3.8	2.1	1.8	**2.3**
F125 Audio & video recording techs.	5.7	10.5	10.6	6.0	3.4	5.1	8.2	**10.1**
F141 Graphic designers and illustrating artists	30.3	51.3	34.9	31.9	23.4	34.2	45.7	**28.9**
F143 Theatre, fashion, exhibit and other creative designers	6.7	11.1	17.4	5.2	4.9	5.3	11.1	**4.0**
F144 Artisans and craftspersons	10.3	8.3	7.3	9.6	9.8	7.8	10.7	**12.0**

Source: Statistics Canada 1996 and 2006 Censuses. Using the 1991 Standard Occupational Classification.

Table 34: Culture & Artistic Employment Concentration and Trending: Hub Cities (continued)

10 Year Change (1996-2006)	CAN	TOR	MONT	WIN	SASK	CAL	VAN	**HFX**
F021 Writers	35%	19%	44%	30%	31%	46%	52%	**120%**
F023 Journalists	5%	38%	24%	-16%	53%	70%	-5%	**-14%**
F024 Professional occupations in public relations and communications	36%	36%	34%	15%	36%	54%	25%	**36%**
F031 Producers, directors, choreographers and related occupations	42%	46%	32%	9%	100%	34%	72%	**56%**
F032 Conductors, composers and arrangers	10%	17%	14%	-33%	-50%	82%	-6%	**0%**
F033 Musicians and singers	16%	36%	39%	-1%	-20%	11%	16%	**35%**
F034 Dancers	27%	42%	42%	-4%	-31%	77%	34%	**90%**
F035 Actors	52%	63%	46%	120%	450%	46%	61%	**100%**
F036 Painters, sculptors and other visual artists	38%	44%	15%	23%	100%	57%	53%	**168%**
F112 Technical occupations related to museums and galleries	22%	28%	-46%	-23%	17%	131%	74%	**63%**
F121 Photographers	16%	18%	-4%	17%	5%	78%	7%	**15%**
F122 Film and video camera operators	47%	70%	14%	-4%	200%	113%	63%	**-12%**
F123 Graphic arts technicians	9%	-44%	77%	-60%	-55%	25%	-47%	**-42%**
F124 Broadcast technicians	-17%	23%	-34%	-6%	67%	50%	-21%	**-38%**
F125 Audio & video recording techs.	31%	35%	19%	48%	0%	91%	86%	**59%**
F141 Graphic designers and illustrating artists	47%	44%	31%	63%	19%	73%	54%	**26%**
F143 Theatre, fashion, exhibit and other creative designers	18%	36%	16%	-45%	117%	23%	97%	**-19%**
F144 Artisans and craftspersons	-5%	12%	23%	-9%	-28%	-20%	-16%	**-2%**

Source: Statistics Canada 1996 and 2006 Censuses. Using the 1991 Standard Occupational Classification.

5.9.2 Hub City Impact on Nova Scotia: Culture and Entertainment

This is a hub city attribute because a certain scale is required to generate the economic activity required to sustain specialized cultural, entertainment and shopping assets. Without Halifax, consumers would need to access these cultural and entertainment assets in Montreal and Toronto (or not at all) - leaking this high value economic activity out of the region. It is also worth noting that more disposable income translates into more consumer spending on related activities. The higher levels of disposable income in the hub city create the conditions under which these activities can be sustainable and this benefit is accessible for all residents in the hub city influence area.

5.10 Hub City Attribute: Specialized Financial Services

The retail side of the banking industry is dispersed throughout the Maritime Provinces. There are less bank branches per 10,000 population in Halifax than in the rest of the region. However, there is a much higher percentage of firms located in Halifax in the area of more specialized financial services. For example, 53% of the sales financing firms in the Maritime Provinces are located in the hub city. Over 50% of all the fund management and related activities companies (NAICS 526) with operations in the Maritime Provinces are based in Halifax.

This translates into a high concentration of financial services industry talent. As Table 35 below reveals, the hub city is home to almost 50% of the insurance, real estate and financial brokerage managers in the Maritime Provinces and 47% of the securities agents, investment dealers and brokers. Forty-three per cent of the region's senior managers in financial, communications and other business services are located in the hub city.

There is evidence the more specialized workers in this sector are concentrating in Halifax. In 1996, 39% of the Maritime Provinces-based securities agents, investment dealers and brokers were located in Halifax. By 2006, that percentage had risen to 47%. However, the non-specialized workers in this area are not concentrating in Halifax. The ratio of accountants, insurance adjustors, financial planners, etc. in the rest of the Maritime Provinces in 2006 was similar to 1996.

It is worth noting that these specialized financial services occupations come with high wages. The average employment income in Halifax (2006) for a full time worker in NOC B013 Securities agents, investment dealers and brokers was over $105,000 per year.

This is a hub city attribute because there is a tendency for specialized financial services to cluster in specific urban areas. If it was not for the hub city, a large percentage of this economic activity would be located elsewhere in larger urban centres taking the high value economic activity outside of the region. It would also force consumers of these specialized services to access them outside the local market and, importantly, it would remove the decision making and influence associated with this sector outside the Maritime Provinces.

Table 35: Specialized Financial Service Firms Concentration in Halifax

NAICS:	# in the Maritime Provinces	# in Halifax	Halifax as a % of Maritime Provinces
522210 - Credit Card Issuing	2	1	50%
522220 - Sales Financing	38	20	53%
522299 - All Other Non-Depository Credit Intermediation	207	71	34%
522310 - Mortgage and Non-mortgage Loan Brokers	77	33	43%
522329 - Other Financial Transactions Processing and Clearing House Activities	15	6	40%
523110 - Investment Banking and Securities Dealing	97	36	37%
523120 - Securities Brokerage	62	24	39%
523210 - Securities and Commodity Exchanges	11	6	55%
523910 - Miscellaneous Intermediation	2126	651	31%
523920 - Portfolio Management	673	192	29%
523930 - Investment Advice	168	56	33%
523990 - All Other Financial Investment Activities	500	194	39%
526911 - Equity Funds - Canadian	1	1	100%
526913 - Mortgage Funds	2	1	50%
526989 - All Other Miscellaneous Funds and Financial Vehicles	57	29	51%

Source: Statistics Canada - Canadian Business Patterns June 2009.

Table 36: Financial Services Employment Concentration in Halifax

NOC:	# in the Maritime Provinces	# in Halifax	Halifax as a % of Maritime Provinces (2006)	Halifax as a % of Maritime Provinces (1996)
A013 Senior managers - Financial, communications and other business services	1,460	635	43%	47%
A301 Insurance, real estate and financial brokerage managers	1,555	740	48%	37%
B0 Professional occupations in business and finance	15,845	5,520	35%	34%
B01 Auditors, accountants and investment professionals	11,170	3,840	34%	33%
B011 Financial auditors and accountants	6,820	2,050	30%	31%
B012 Financial and investment analysts	965	425	44%	44%
B013 Securities agents, investment dealers and brokers	660	310	47%	39%
B014 Other financial officers	2,720	1,055	39%	31%
B02 Human resources and business service professionals	4,670	1,680	36%	36%
B021 Specialists in human resources	2,415	830	34%	34%
B022 Professional occupations in business services to management	2,255	855	38%	38%
B113 Insurance adjusters and claims examiners	1,180	420	36%	39%
B114 Insurance underwriters	*620*	*315*	*51%*	47%

Source: Statistics Canada - 2006 Census.

5.10.1 Benchmark Hub Cities Review

Halifax ranks average among the hub cities across most financial services employment categories (Table 37). The Toronto CMA has a very strong concentration of Canada's financial analysts, traders/dealers, etc. Halifax has the lowest concentration of financial auditors and accountants among the hub cities - in some cases by a wide margin. Halifax has the second highest concentration of specialists in human resources among the group (only Montreal has a higher concentration). Halifax also has above average employment in insurance-related occupations.

Halifax led the hub cities for employment growth in securities agents, investment dealers and traders and witnessed very strong growth in most other categories (compared to the other hub cities).

Table 37: Financial Services Employment Concentration and Trending: Hub Cities

Per 10,000 in the Workforce	CAN	TOR	MONT	WIN	SASK	CAL	VAN	**HFX**
A013 Senior managers - Financial, communications and other business services	32.6	57.4	53.6	27.3	20.4	44.9	45.5	**29.8**
A301 Insurance, real estate and financial brokerage managers	23.0	25.8	12.3	27.1	21.9	45.9	64.6	**34.8**
B011 Financial auditors and accountants	105.4	150.5	128.4	125.2	106.8	203.5	144.6	**96.5**
B012 Financial and investment analysts	24.2	55.9	29.8	19.2	9.8	33.4	21.2	**20.2**
B013 Securities agents, investment dealers and traders	13.8	29.2	16.9	10.0	11.3	19.3	24.0	**14.6**
B014 Other financial officers	40.3	52.5	52.6	38.2	38.1	46.6	52.7	**49.3**
B021 Specialists in human resources	29.6	33.8	39.6	35.9	20.4	34.3	26.7	**39.0**
B022 Professional occupations in business services to management	36.1	65.2	37.3	33.9	26.0	56.5	47.6	**40.2**
B113 Insurance adjusters and claims examiners	14.7	18.5	12.7	26.3	14.3	15.3	22.6	**19.7**
B114 Insurance underwriters	8.6	15.1	7.6	10.0	5.3	17.2	8.9	**14.8**
10 Year Change (1996-2006)	CAN	TOR	MONT	WIN	SASK	CAL	VAN	**HFX**
A013 Senior managers - Financial, communications and other business services	92%	69%	108%	99%	116%	105%	82%	**90%**
A301 Insurance, real estate and financial brokerage managers	34%	20%	-29%	19%	107%	124%	58%	**66%**
B011 Financial auditors and accountants	52%	79%	25%	59%	45%	92%	60%	**43%**
B012 Financial and investment analysts	115%	131%	84%	108%	271%	128%	100%	**169%**
B013 Securities agents, investment dealers and traders	16%	6%	37%	-17%	15%	7%	-6%	**55%**
B014 Other financial officers	108%	92%	147%	71%	23%	92%	90%	**209%**
B021 Specialists in human resources	85%	95%	73%	104%	50%	183%	63%	**148%**
B022 Professional occupations in business services to management	71%	77%	30%	93%	103%	92%	74%	**114%**
B113 Insurance adjusters and claims examiners	32%	32%	15%	53%	19%	61%	23%	**24%**
B114 Insurance underwriters	32%	17%	27%	38%	133%	118%	56%	**5%**

Source: Statistics Canada 1996 and 2006 Censuses. Using the 1991 Standard Occupational Classification.

5.10.2 Hub City Impact on Nova Scotia: Specialized Financial Services

The Maritime Provinces has far fewer publicly traded companies and a very limited specialized financial services sector. Halifax is trying to build some capacity for the Maritime Provinces in this area. As mentioned above, the growth in related occupations is above the median hub city across Canada. Most of these jobs will never be located in smaller cities or rural areas. The Maritime Provinces needs Halifax to build this capacity for the entire region.

5.11 Hub City Attribute: Insurance Industry

The insurance industry is a classic example of the role of a hub city in relation to a provincial and regional economy. The infrastructure and concentrated urban economy in Halifax is an enabler for national and international insurance firms to have significant regional offices in the hub city. Insurance brokers, adjusters and a variety of industry support activities, on the other hand, are distributed around the province and the region.

While 45% of insurance carrier (NAICS 5241) employment across the Maritime Provinces is in Halifax only 29% of the insurance agency, brokerage and other related activity employment (NAICS 5242) is in the hub city.

The concentration of economic activity[5] in the hub city enables the broad infrastructure that is necessary to support the success of the industry throughout Nova Scotia and beyond.

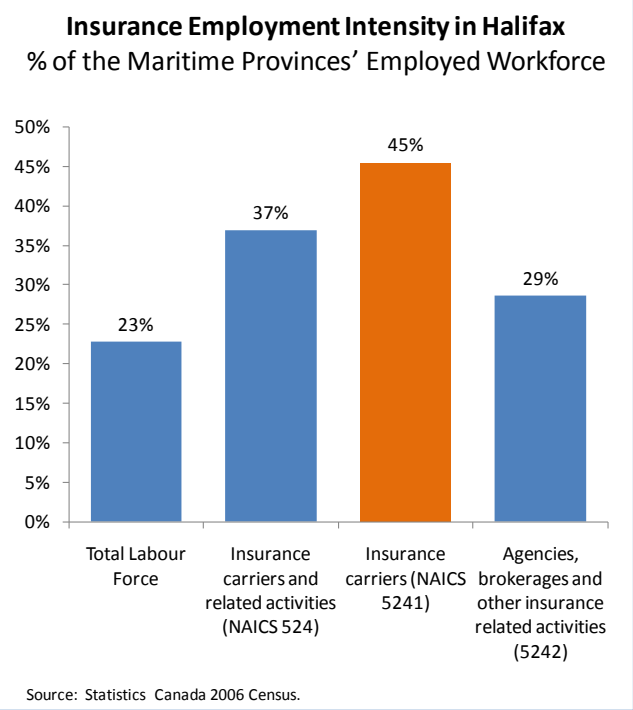


Table 38: Insurance Industry Concentration in Halifax

NAICS:	# in the Maritime Provinces	# in Halifax	Halifax as a % of Maritime Provinces
524111 - Direct Individual Life, Health and Medical Insurance Carriers	25	13	52%
524112 - Direct Group Life, Health and Medical Insurance Carriers	12	4	33%
524121 - Direct General Property and Casualty Insurance Carriers	26	10	38%
524122 - Direct, Private, Automobile Insurance Carriers	1	0	0%
524124 - Direct Property Insurance Carriers	5	0	0%
524129 - Other Direct Insurance (except Life, Health and Medical) Carriers	19	8	42%
524131 - Life Reinsurance Carriers	1	0	0%
524134 - Property Reinsurance Carriers	1	1	100%
524210 - Insurance Agencies and Brokerages	579	125	22%
524291 - Claims Adjusters	66	10	15%
524299 - All Other Insurance Related Activities	50	15	30%

Source: Statistics Canada - Canadian Business Patterns June 2009.

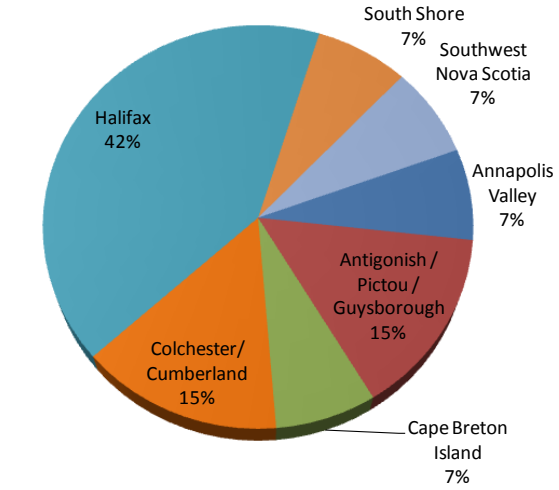
[5] Not only insurance industry activity. Most hub city infrastructure and assets are shared across industries providing the required scale for investment in these infrastructure and assets.

5.11.1 Hub City Impact on Nova Scotia: Insurance Industry

The insurance industry is one that has a very strong relationship between the hub city and the rest of the province. The bulk of the insurance carriers (providers) are in Halifax but the majority of insurance brokers and other service providers are located throughout Nova Scotia.

A January 2010 survey of Insurance Brokers Association of Nova Scotia (IBANS) members found that only 42% of member employment was in the Halifax CMA while the rest was well distributed throughout Nova Scotia.

The figure shows the breakdown of responding insurance brokers by region within Nova Scotia.



Source: Survey of IBANS members January/February 2010. Annapolis Valley includes Kings, Annapolis & West Hants counties; South Shore includes Lunenburg & Queens counties; and Southwest Nova Scotia includes Yarmouth, Shelburne & Digby counties.

5.12 Hub City Attribute: Specialized Health Care

Health care is one of the most important attributes of a hub city. As health care becomes more specialized, the greater need for a concentration of activity. It would be impossible to have brain surgeons in every small city and town in the Maritime Provinces. It would be impossible to have specialized, paediatric health care services in all small markets. The hub city plays this role with the rest of its influence area. Access to specialized health care is an important part of a region's quality of life. The health care cluster also supports economic development through the life and health sciences cluster. Almost half of the doctors affiliated with Capital Health are involved in research activities.

For example, the IWK provides specialized paediatric and obstetric care for patients across the Maritime provinces. Halifax is home to 46% of the Maritime Provinces' specialist physicians (NOC D011). Halifax is home to over half of the region's specialized medical technologists and technicians. Almost half of the medical and diagnostic laboratories in the Maritimes are in the hub city as are 45% of the region's offices of mental health practitioners.

Table 39: Health Care Organization Concentration in Halifax

NAICS:	# in the Maritime Provinces	# in Halifax	Halifax as a % of Maritime Provinces
622112 - Paediatric Hospitals	1	1	100%
621990 - All Other Ambulatory Health Care Services	15	9	60%
621912 - Air Ambulance Services	2	1	50%
623992 - Homes for Emotionally Disturbed Children	4	2	50%
621510 - Medical and Diagnostic Laboratories	67	32	48%
621330 - Offices of Mental Health Practitioners (except Physicians)	73	33	45%
621499 - All Other Out-Patient Care Centres	174	57	33%
621310 - Offices of Chiropractors	116	37	32%
621210 - Offices of Dentists	747	225	30%
622310 - Specialty (except Psychiatric and Substance Abuse) Hospitals	20	6	30%
621390 - Offices of All Other Health Practitioners	253	75	30%
621110 - Offices of Physicians	2585	742	29%
622210 - Psychiatric and Substance Abuse Hospitals	15	4	27%
621340 - Offices of Physical, Occupational, and Speech Therapists and Audiologists	209	54	26%
621610 - Home Health Care Services	133	28	21%
623221 - Residential Substance Abuse Facilities	10	2	20%
621410 - Family Planning Centres	17	3	18%
622111 - General (except Paediatric) Hospitals	74	10	14%
623222 - Homes for the Psychiatrically Disabled	46	6	13%
621320 - Offices of Optometrists	158	20	13%
623991 - Transition Homes for Women	16	2	13%
621911 - Ambulance (except Air Ambulance) Services	82	9	11%
623110 - Nursing Care Facilities	297	30	10%
621420 - Out-Patient Mental Health and Substance Abuse Centres	23	2	9%
621494 - Community Health Centres	95	7	7%
623310 - Community Care Facilities for the Elderly	193	11	6%
623210 - Residential Developmental Handicap Facilities	26	1	4%

Source: Statistics Canada - Canadian Business Patterns June 2009.

There has been some concentration of specialized health care services into Halifax since 1996 (Table 40). The percentage of Maritime Provinces-based specialist physicians has increased from 38% in 1996 to 46% in 2006. There has been similar concentration among medical laboratory technologists, veterinary and animal health technologists, dental technologists, technicians and laboratory bench workers. But for most frontline health care workers, there has been no concentration. The percentage of Maritime Provinces-based general practitioners and family physicians located in Halifax has dropped slightly over the 10 year period.

Table 40: Health Sector Employment Concentration in Halifax

NOC:	# in the Maritime Provinces	# in Halifax	Halifax as a % of Maritime Provinces (2006)	Halifax as a % of Maritime Provinces (1996)
D011 Specialist physicians	1,790	830	46%	38%
D012 General practitioners and family physicians	2,345	925	39%	40%
D022 Chiropractors	180	75	42%	15%
D023 Other professional occupations in health diagnosing and treating	110	40	36%	40%
D031 Pharmacists	1,835	580	32%	32%
D042 Physiotherapists	1,000	325	33%	31%
D043 Occupational therapists	600	185	31%	26%
D044 Other professional occupations in therapy and assessment	160	50	31%	25%
D211 Medical laboratory technologists and pathologists' assistants	1,465	540	37%	24%
D213 Veterinary and animal health technologists and technicians	555	180	32%	18%
D219 Other medical technologists and technicians (except dental health)	190	100	53%	32%
D223 Dental technologists, technicians and laboratory bench workers	310	165	53%	39%
D231 Opticians	370	110	30%	42%
D232 Midwives and practitioners of natural healing	160	60	38%	25%
E039 Health policy researchers, consultants and program officers	850	420	49%	n/a

Source: Statistics Canada - 2006 Census.

5.12.1 Benchmark Hub Cities Review

Halifax has a higher concentration of health care workers (per 10,000 in the workforce) than all other hub cities except Saskatoon (Table 41). There seems to be a scale issue associated with this trend. The larger CMAs (with more population) tend to have fewer health care workers relative to the size of their workforce. Halifax has more specialist physicians per 10,000 workers than all other hub cities except Saskatoon. Halifax has the highest concentration of nurses, medical lab technologists and technicians and medical radiation technologists.

The growth rate of persons working in health care occupations (1996-2006) has been slower than all but two of the other benchmark hub cities. There has been a strong growth in animal health technologists and cardiology technologists over the 10 year period. Another interesting trend, there has been a very strong growth of ambulance attendants and other paramedical occupations.

5.12.2 Hub City Impact on Nova Scotia: Specialized Health Care

There are as many general practitioners/family physicians per capita outside the Halifax CMA as inside. There are similar ratios for other frontline health care workers. The specialists need to be in a concentrated area and Halifax is filling that role not only for Nova Scotia but, in a number of areas, for the Maritime Provinces.

Table 41: Health Occupation Employment Concentration and Trending: Hub Cities

Per 10,000 in the Workforce	CAN	TOR	MONT	WIN	SASK	CAL	VAN	HFX
D Health occupations	**554.3**	**440.6**	**565.6**	**670.8**	**697.6**	**506.4**	**533.9**	**688.7**
D011 Specialist physicians	19.2	22.3	24.8	26.0	39.3	20.0	22.8	**39.0**
D012 General practitioners and family physicians	25.0	27.2	29.4	26.6	31.0	24.8	30.1	**43.4**
D112 Registered nurses	157.4	118.1	136.0	191.6	206.5	146.5	147.4	**209.7**
D211 Medical laboratory technologists and pathologists' assistants	11.4	11.2	10.1	15.4	17.4	12.0	13.0	**25.4**
D212 Medical laboratory technicians	12.8	13.2	15.7	13.0	11.3	13.5	13.8	**12.7**
D213 Animal health technologists	6.5	5.6	5.3	7.6	14.7	7.0	6.6	**8.5**
D214 Respiratory therapists and clinical perfusionists	4.4	2.5	6.8	4.1	2.3	6.1	3.3	**5.4**
D215 Medical radiation technologists	9.5	7.1	10.4	10.4	11.3	9.0	8.4	**11.7**
D216 Medical sonographers	1.9	2.8	0.4	2.2	3.4	2.4	2.0	**1.9**
D217 Cardiology technologists	1.2	1.2	0.6	1.9	2.3	1.9	1.7	**2.3**
D219 Other medical technologists and technicians (except dental health)	2.5	1.4	5.4	0.9	3.8	2.1	1.3	**4.7**
D223 Dental technicians and laboratory bench workers	4.4	4.4	4.5	5.2	8.7	11.2	7.6	**7.7**
D233 Registered nursing assistants	27.6	10.5	24.1	24.6	24.9	21.3	15.5	**31.5**
D234 Ambulance attendants and other paramedical occupations	12.3	5.3	7.0	8.0	9.4	11.1	9.7	**12.7**

10 Year Change (1996-2006)	CAN	TOR	MONT	WIN	SASK	CAL	VAN	HFX
D Health occupations	**30%**	**36%**	**23%**	**27%**	**34%**	**66%**	**34%**	**30%**
D011 Specialist physicians	53%	61%	33%	49%	160%	127%	35%	**91%**
D012 General practitioners & family physicians	14%	13%	9%	0%	39%	35%	31%	**23%**
D112 Registered nurses	16%	28%	5%	15%	14%	50%	18%	**8%**
D211 Medical laboratory technologists and pathologists' assistants	8%	-8%	79%	-27%	-13%	14%	-3%	**59%**
D212 Medical laboratory technicians	2%	-3%	-12%	9%	11%	48%	13%	**-5%**
D213 Animal health technologists	145%	212%	101%	90%	86%	207%	235%	**500%**
D214 Respiratory therapists and clinical perfusionists	41%	37%	46%	0%	-54%	142%	20%	**-32%**
D215 Medical radiation technologists	21%	19%	21%	18%	3%	45%	4%	**14%**
D216 Medical sonographers	64%	99%	0%	21%	80%	129%	64%	**33%**
D217 Cardiology technologists	47%	38%	0%	67%	50%	525%	67%	**400%**
D219 Other medical technologists and technicians (except dental health)	15%	-3%	22%	-42%	43%	27%	-9%	**122%**
D223 Dental technicians and laboratory bench workers	33%	21%	63%	-20%	77%	137%	51%	**57%**
D233 Registered nursing assistants	19%	13%	25%	6%	14%	45%	80%	**9%**
D234 Ambulance attendants and other paramedical occupations	51%	63%	18%	88%	56%	156%	0%	**170%**

Source: Statistics Canada 1996 and 2006 Censuses. Using the 1991 Standard Occupational Classification.

5.13 Hub City Attribute: Specialized Wholesale/Distribution

Just over 28% of all firms across the Maritime Provinces involved in the wholesale/distribution industry are based in Halifax just slightly higher than a representative share (based on population). However, a significantly higher percentage of specialized, niche wholesale/distribution firms are based in Halifax. There are 13 specialized wholesaler-distributors NAICS industries that have at least 50% of firms in the hub city. Over 40% of the region's technical sales specialists in wholesale trade are in Halifax. It is important to continue to point out that these specialized occupations come with higher wages. The average employment income in Halifax (2006) for a full time worker in NOC G12 Technical sales specialists, wholesale trade was over $69,000 per year.

Table 42: Wholesale/Distribution-Related Employment Concentration in Halifax

NOC:	# in the Maritime Provinces	# in Halifax	Halifax as a % of Maritime Provinces (2006)	Halifax as a % of Maritime Provinces (1996)
G11 Sales representatives, wholesale trade	6,840	2,065	30%	31%
G12 Technical sales specialists, wholesale trade	2,320	945	41%	38%

Source: Statistics Canada - 2006 Census.

5.13.1 Benchmark Hub Cities Review

Halifax has a lower concentration of wholesale trade sales reps compared to the other hubs but a higher concentration of technical sales reps in the wholesale area. Employment in these occupations is down across all hub cities from 1996-2006.

Table 43: Wholesale/Distribution-Related Employment Concentration and Trending: Hub Cities

Per 10,000 in the Workforce	CAN	TOR	MONT	WIN	SASK	CAL	VAN	**HFX**
G11 Sales representatives, wholesale trade	89.1	111.3	121.1	96.8	105.3	97.2	117.0	**97.0**
G12 Technical sales specialists, wholesale trade	33.2	42.7	48.4	28.8	40.4	46.5	40.7	**44.4**
10 Year Change (1996-2006)								
G11 Sales representatives, wholesale trade	-15%	-20%	-10%	-24%	-14%	-20%	-13%	**-13%**
G12 Technical sales specialists, wholesale trade	-24%	-32%	-13%	-38%	-15%	-31%	-27%	**-19%**

Source: Statistics Canada 1996 and 2006 Censuses. Using the 1991 Standard Occupational Classification.

Table 44: Selected Wholesaler/Distributors in the Maritime Provinces
At least 40% located in Halifax

NAICS:	# in the Maritime Provinces	# in Halifax	Halifax as a % of Maritime Provinces
418220 - Other Paper and Disposable Plastic Product Wholesaler-Distributors	27	19	70%
413220 - Alcoholic Beverage Wholesaler-Distributors	12	8	67%
414220 - Household Appliance Wholesaler-Distributors	9	6	67%
419110 - Business-to-Business Electronic Markets	3	2	67%
414410 - Jewellery and Watch Wholesaler-Distributors	14	9	64%
414450 - Video Cassette Wholesalers	5	3	60%
414510 - Pharmaceuticals and Pharmacy Supplies Wholesaler-Distributors	21	12	57%
417220 - Mining and Oil and Gas Well Machinery, Equipment and Supplies Wholesaler-Distributors	21	12	57%
417310 - Computer, Computer Peripheral and Pre-Packaged Software Wholesaler-Distributors	61	34	56%
417320 - Electronic Components, Navigational and Communications Equipment and Supplies Wholesaler-Distributors	67	37	55%
414120 - Footwear Wholesaler-Distributors	2	1	50%
414330 - Linen, Drapery and Other Textile Furnishings Wholesaler-Distributors	6	3	50%
414420 - Book, Periodical and Newspaper Wholesaler-Distributors	18	9	50%
417930 - Professional Machinery, Equipment and Supplies Wholesaler-Distributors	107	51	48%
414110 - Clothing and Clothing Accessories Wholesaler-Distributors	30	14	47%
414320 - Floor Covering Wholesaler-Distributors	13	6	46%
418210 - Stationery and Office Supplies Wholesaler-Distributors	29	13	45%
417910 - Office and Store Machinery and Equipment Wholesaler-Distributors	89	39	44%
415110 - New and Used Automobile and Light-Duty Truck Wholesaler-Distributors	35	15	43%
418930 - Second-Hand Goods (except Machinery and Automotive) Wholesaler-Distributors	7	3	43%
413110 - General-Line Food Wholesaler-Distributors	64	26	41%
414390 - Other Home Furnishings Wholesaler-Distributors	20	8	40%

Source: Statistics Canada - Canadian Business Patterns June 2009.

5.13.2 Hub City Impact on Nova Scotia: Specialized Wholesale/Distribution

This is a hub city attribute because without the hub city many of these firms would likely be located in another large urban centre such as Montreal or even Toronto and the economic activity from these activities would accrue outside the region. It would also make it more difficult/complicated for the retailers that access these specialized wholesale/distribution firms.

5.14 Hub City Attribute: Industry Associations/NGOs

There are several thousand industry and professional associations in Canada and many other non-governmental organizations such as advocacy groups. These organizations fill an important function in facilitating the development of industries and professions, as well as advocating on behalf of public policy-related issues. The vast majority of these national groups are based in Ontario (Toronto or Ottawa).

Halifax is the hub for the regional offices of many national organizations as well as being home to many Atlantic Canada specific groups.

While being based in Halifax, these groups are mandated to support activities all across the Atlantic region.

Table 45: Selected Regional Industry and Professional Associations/NGOs in Halifax

- Aircraft Maintenance Engineers Association
- Association Of Atlantic Universities
- Atlantic Association for Research in the Mathematical Sciences
- Atlantic Association of Applied Economists
- Atlantic Association of Broadcasters
- Atlantic Association of CBDCs
- Atlantic Association of Landscape Designers
- Atlantic Association of Planning Technicians
- Atlantic Canada Airports Association
- Atlantic Canada Geocaching Association
- Atlantic Canada Internet Marketing Association
- Atlantic Canada Pipe Band Association
- Atlantic Canada Water & Wastewater Association
- Atlantic Canadian Composers' Association
- Atlantic Cerebral Palsy Association
- Atlantic Chief & Petty Officers Association
- Atlantic Community Newspapers Association
- Atlantic Golf Superintendents Association (AGSA)
- Atlantic Labour Arbitrators Association
- Atlantic Marine Trades Association
- Atlantic Planners Institute
- Atlantic Provinces Art Gallery Association
- Atlantic Provinces Athletic Therapists Association
- Atlantic Provinces Library Association
- Atlantic Publishers Marketing Association
- Automotive Trades Association of Atlantic Canada
- BOMA Atlantic - The Building Owners & Managers Association
- Canadian Association of Petroleum Producers
- Canadian Association of Professional Sommeliers
- Canadian Association of Professional Speakers
- Canadian Assoc. of Special Libraries and Information Services
- Canadian Celiac Association
- Canadian Council Of Grocery Distributors
- Canadian Dance Teachers Association - Atlantic Division
- Canadian Diabetes Association - Regional Leadership Centre
- Canadian Liver Foundation, Atlantic Regional Office
- Canadian Mental Health Association
- Canadian Music Centre - Atlantic
- Canadian Paraplegic Association (Nova Scotia)
- Canadian Plastics Industry Association
- Canadian Red Cross Society
- Canadian Restaurant and Foodservices Association
- Crohn's & Colitis Foundation of Canada - Maritime Region
- Crohn's and Colitis Foundation of Canada
- First Angel Network
- Insurance Bureau of Canada
- Juvenile Diabetes Research Foundation Canada
- Katimavik Regional Office - 5663 Cornwallis, Halifax, NS
- Muscular Dystrophy Canada
- Submariners Association of Canada (Halifax)
- Telefilm Atlantic Region
- The Atlantic Provinces Association of Landscape Architects
- World Wildlife Fund Canada Foundation (WWF)

5.14.1 Hub City Impact on Nova Scotia: Industry Associations/NGOs

This is a significant benefit to Nova Scotia. If it wasn't for the hub city in Halifax, most of these organizations would be located either elsewhere in the Maritime Provinces or not be in the region at all.

5.15 Hub City Attribute: Federal Government

Halifax is the regional hub for the Canadian government. There are various federal government activities across Atlantic Canada but the bulk of the regional federal government offices are located in the hub city. Including military personnel, there are more federal government employees in Halifax than all other major urban centres in Canada with the exception of Ottawa-Gatineau.

Table 46: Selected Federal Government Regional Offices in Halifax

- Department of Justice Atlantic Regional Office
- Canada Customs and Revenue Agency (CCRA) Atlantic Regional Office
- Canadian Human Rights Commission
- Public Prosecution Service of Canada Atlantic Regional Office
- Statistics Canada Eastern Regional Office
- Courts Administration Service
- Citizenship and Immigration Canada
- Indian and Northern Affairs Canada Atlantic Region

Table 47: Federal Government Employment (per 10,000 population)

CMA:	Employment:	CMA:	Employment:
Ottawa-Gatineau, Ontario/Quebec	1,041.5	Windsor, Ontario	63.6
Halifax, Nova Scotia	***429.9***	Montréal, Quebec	62.9
Kingston, Ontario	291.1	Sherbrooke, Quebec	62.5
Victoria, British Columbia	278.3	London, Ontario	47.7
St. John's, Newfoundland and Labrador	263.8	Guelph, Ontario	44.0
Moncton, New Brunswick	223.2	Hamilton, Ontario	39.8
Québec, Quebec	193.6	Toronto, Ontario	38.6
Winnipeg, Manitoba	164.4	Calgary, Alberta	36.6
Regina, Saskatchewan	157.8	Trois-Rivières, Quebec	31.4
Saguenay, Quebec	151.8	St. Catharines-Niagara, Ontario	31.1
Greater Sudbury, Ontario	126.4	Peterborough, Ontario	27.0
Edmonton, Alberta	118.1	Brantford, Ontario	23.0
Saskatoon, Saskatchewan	98.5	Kitchener, Ontario	22.7
Saint John, New Brunswick	88.3	Kelowna, British Columbia	20.5
Abbotsford-Mission, British Columbia	87.8	Barrie, Ontario	11.4
Vancouver, British Columbia	76.4	Oshawa, Ontario	8.3
Thunder Bay, Ontario	64.9		

Includes military personnel. Source: Statistics Canada CANSIM Table 183-0003.

5.15.1 Hub City Impact on Nova Scotia: Federal Government

Federal government employment in Canada is concentrated in cities. It is important for the Maritime Provinces to have a strong share of this employment both for direct economic reasons and for influence related to federal government decision making. Halifax plays this role not only for Nova Scotia but for the wider region as well.

5.16 Hub City Attribute: Tax Generator for Governments

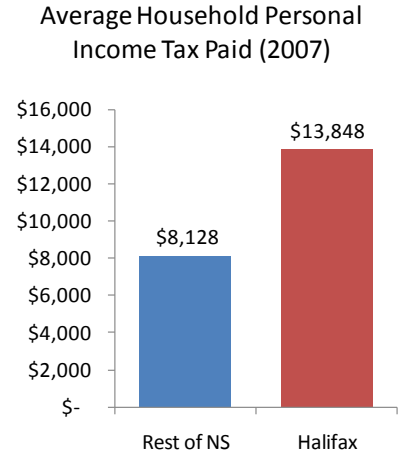
As a hub city and economic engine, Halifax is a significant generator of tax revenue for provincial and federal governments.

The average household in Halifax contributed $13,848 in personal income tax to the federal and provincial governments in 2007 or an estimated total of over $2 billion. This does not include HST, corporate income tax, property tax or other taxes and levies.

The average Halifax household contributed 70% more in personal income tax to government than the average household in the rest of Nova Scotia.

Driving that high level of taxation is the higher average incomes. Halifax accounted for 42% of Nova Scotia residents who earned employment income in 2007, 50% of the people who earned between $50,000 and $59,999 in employment and 56% of those who earned $60,000 and over.

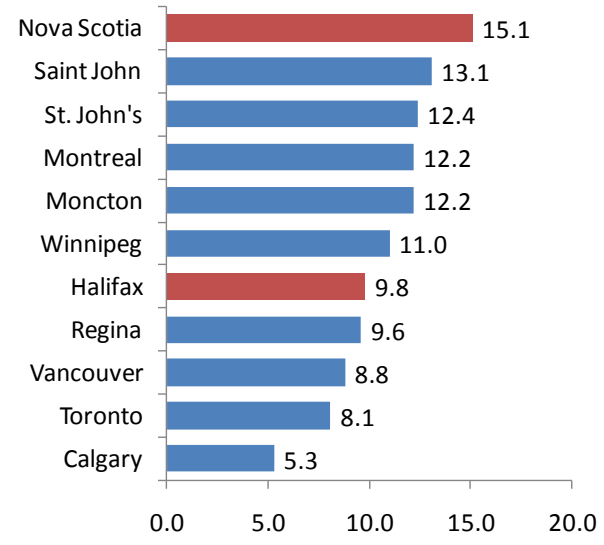
In total, 20% of all employed workers in the hub city earned at least $60,000 in 2007 and that ranks 5th highest among Canada's 30+ CMAs.



Source: Statistics Canada. CANSIM Table 203-0001 - Survey of household spending (SHS), household spending.

Residents of Halifax rely far less on government transfers[6] as a source of income. As of the 2006 Census, government transfers made up only 9.8% of the total income in the Halifax CMA compared to 15.1% across Nova Scotia. Backing out the Halifax numbers, over 18% of the total income in the rest of Nova Scotia comes from government transfers.

Halifax residents rely less on government transfers for personal income than all urban centres east of Ontario and the majority of urban centres across Canada.



Source: Statistics Canada. 2006 Census.

[6] Includes family and youth allowances, child tax benefit or credit, pensions - World Wars I and II, war veterans' allowances, grants to aboriginal persons and organizations, HST tax credit, employment insurance benefits, old age security payments, social insurance benefits, workers' compensation and Canada Pension Plan (CPP) payments.

Table 48: Percentage of Nova Scotia Employment Income Earners Located in Halifax by Income Range

Income Range:	% in Halifax:
Percentage under $5,000	39%
$5,000 to $9,999	39%
$10,000 to $14,999	32%
$15,000 to $19,999	33%
$20,000 to $24,999	36%
$25,000 to $29,999	46%
$30,000 to $34,999	41%
$35,000 to $39,999	45%
$40,000 to $44,999	44%
$45,000 to $49,999	41%
$50,000 to $59,999	50%
$60,000 and over	56%

Source: Statistics Canada CANSIM Table 202-0101.

Table 49: Percentage of Employed Workforce earning over $60,000 per year

CMA:	% of Total:
Edmonton, Alberta	27.3
Ottawa-Gatineau, Ontario/Quebec	26.9
Calgary, Alberta	26.2
Hamilton, Ontario	22.5
Toronto, Ontario	20.8
Halifax, Nova Scotia	***20.0***
St. Catharines-Niagara, Ontario	19.8
Windsor, Ontario	19.3
Kitchener, Ontario	18.8
Vancouver, British Columbia	18.8
Québec, Quebec	17.4
London, Ontario	17.0
Winnipeg, Manitoba	16.7
Victoria, British Columbia	16.7
Montréal, Quebec	16.3

Source: Statistics Canada CANSIM Table 202-0101.

5.17 Hub City Attribute: Immigration

The Maritime Provinces has attracted well below its national share of immigrants for decades. Halifax, however; has attracted a disproportionate share of the region's immigrants in the last 20 years. As of the 2006 Census, there were just over 37,000 people living in the Maritime Provinces who indicated they had immigrated to Canada between 1991 and 2006. Approximately 16,600 of them were living in Halifax in 2006 (or 45% of the total).

As a hub city, Halifax provides a number of attractive features to new immigrants.

Table 50: Percentage of Maritime Province Immigrant Population based in Halifax

Period of Immigration	# in the Maritime Provinces	# in Halifax	Halifax as a % of Maritime Provinces
1991 to 2000	12,605	5,760	46%
1991 to 1995	5,705	2,460	43%
1996 to 2000	6,895	3,300	48%
2001 to 2006	12,050	5,060	42%

Source: Statistics Canada - 2006 Census.

5.18 Hub City Attribute: Employment for Adjacent Communities

Over 13,000 people from outside the Halifax Regional Municipality commute into the community for employment. They come from as far away as Shelburne, Yarmouth and Amherst. East and West Hants residents account for over 6,500 of the commuters into Halifax. There are almost 1,000 from Chester, 500 from Lunenburg, 290 from Cape Breton and 230 from Truro. If this group of employed persons were a city, it would be the third largest in Nova Scotia.

Assuming these commuters earn the average employment income for a full time worker (2006), that would translate into over $570 million in annual employment income earned in HRM and taken back to be spent in their home communities.[7]

Table 51: Halifax as Employment Hub for Adjacent Communities

HRM Labour Force (with a fixed place of work)	175,770
# Commuting into HRM from other Census Divisions	13,135
% of Total	7.5%
Average Employment Income	43,403
Est. Employment Income earned by Commuters into HRM	$570,098,405

Source: Statistics Canada - 2006 Census.

[7] Some of this spending would also accrue in Halifax - another aspect of the symbiotic relationship between the hub city and the region.

5.19 Hub City Attribute: Conferences/Events

Halifax is the hub city for conferences and events in Atlantic Canada. The Halifax World Trade and Convention Centre is the largest of its kind in Atlantic Canada. The region's international airport makes the city attractive for national and international events. The largest musical acts and performers come to Halifax.

This activity is supported by a significant infrastructure. Halifax boasts the best restaurants and the largest number of hotel rooms in the region. Over 40% of the Maritime Provinces' conference and event planners are located in Halifax. While only 17% of the cooks in the Maritime Provinces are located in Halifax, 39% of its chefs are in the hub city.

As mentioned above, the level of entertainment infrastructure in Halifax is also a major draw for regional and national conferences/events.

Table 52: Selected Specialized Employment Concentration in Halifax

NOC:	# in the Maritime Provinces	# in Halifax	Halifax as a % of Maritime Provinces
B316 Conference and event planners	645	265	41%
G411 Chefs	1,310	515	39%

Source: Statistics Canada - 2006 Census.