# Innovation Systems Research Network City-Region Profile, 2006

# **Halifax**

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#### **Summary and Highlights**

Key Indicators	H	lalifax	C	anada
Population, 2006		372,855	31,	612,890
Population Change, 2001-2006		3.8%		5.4%
% Foreign Born		7.4%		19.8%
% BA Degree or higher		24.0%		18.1%
# Employed		198,800	15,	958,195
Employment Growth 1996-2006		19.0%		19.8%
Employment Rate		64.5%		62.4%
Unemployment Rate		6.3%		6.6%
% 'Creative' occupations		38.0%		33.2%
% Science & Tech. Occupations		7.0%		6.6%
'Bohemians' per 1,000 Labour Force		15.3		14.2
Number of Industrial Clusters	+	6		255
% Employment in Clusters		19.0%		22.1%
Average FT Employment Income	\$	48,092	\$	51,221
% Change Average Income 2000-2005		3.3%		5.5%

### 1 - Demographics

Population	2001	2006	% Change 2001-2006
Halifax	359,170	372,855	3.8%
Canada	30,007,085	31,612,890	5.4%

Age Groups	Under 15	15 to 64	65 and over	% 15 to 64
Halifax	94,490	215,190	44,970	60.7%
Canada	9,800,715	17,476,925	4,335,250	55.3%

Figure 1.1 - Population by age and gender, 2006

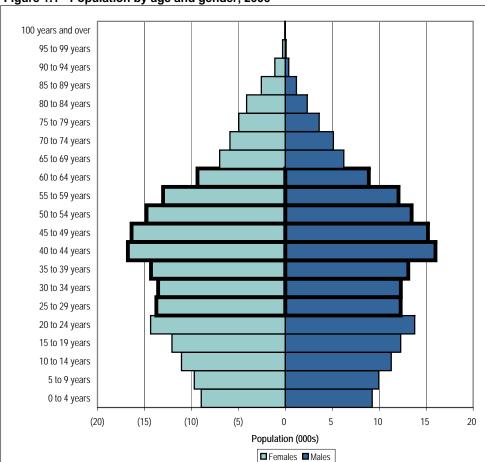


Figure 1.2 - Population by age group, 2001-2006

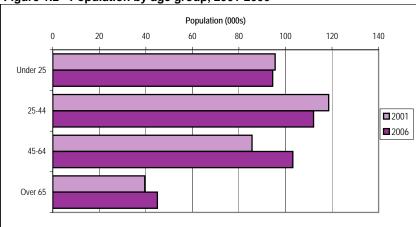
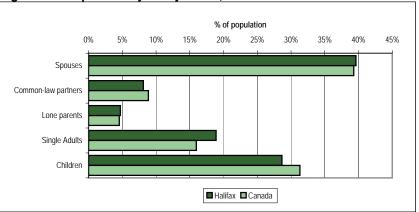


Figure 1.3 - Population by family status, 2006



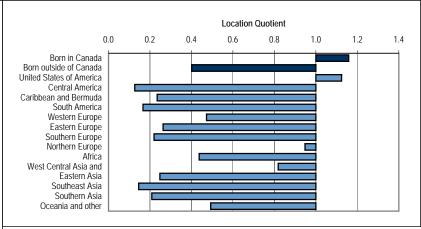
# 2 - Migration & Population Change

	Intra-	Inter-	
Domestic Migration	provincial	provincial	Total
In-flows, 2001-2006	13,300	26,440	39,740
Out-flows, 2001-2006	12,130	29,275	41,405
Net, 2001-2006	1,170	(2,835)	(1,665)

	% Foreign born	Migrated post-1991	Migrated pre- 1991
Halifax	7.4%	2.9%	4.5%
Canada	19.8%	8.9%	10.9%

Figure 2.1 - Domestic migration flows between 2001 and 2006 by age





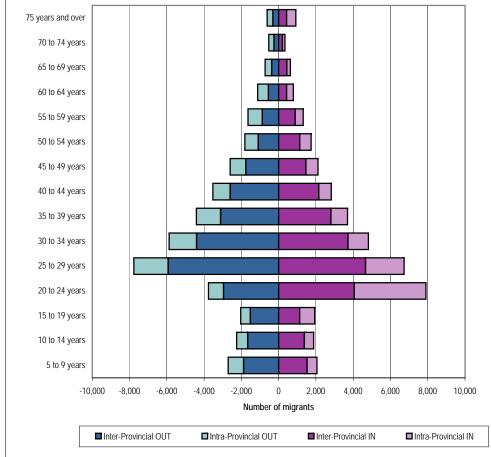
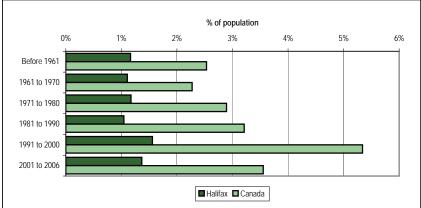
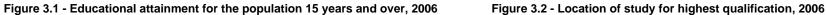


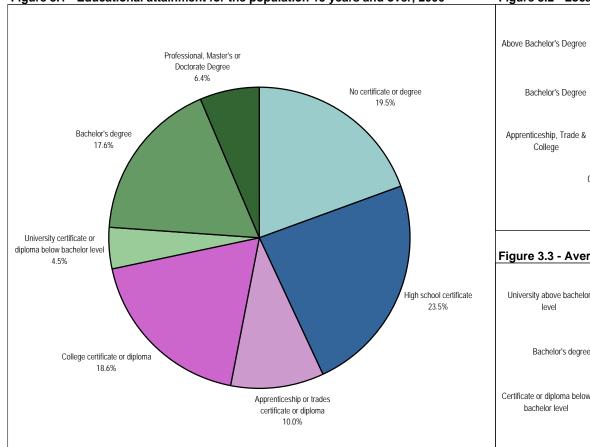
Figure 2.3 - Immigrant population by period of immigration, 2006



### 3 - Education Halifax

	% College degree or	% BA degree % MA degree	PhDs per		_	% BA degr	ee or high	
	higher <sup>1</sup>	or higher <sup>1</sup>	or higher <sup>1</sup>	1,000 <sup>1</sup>	_		2001	2006
Halifax	47.1%	24.0%	6.4%	10.7		Halifax	21.1%	24.0%
Canada	39.8%	18.1%	4.6%	6.9	_	Canada	15.4%	18.1%





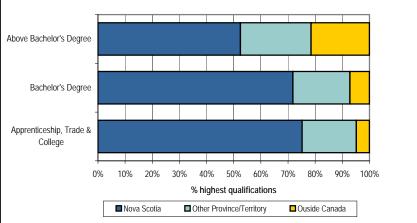
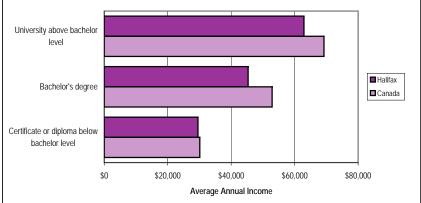


Figure 3.3 - Average annual income by level of qualification, 2006



## 4 - Employment Halifax

_	Е	mployment Ra	ite
	1996	2001	2006
Halifax	61.4%	63.0%	64.5%
Canada	58.9%	61.5%	62.4%

 Unemployment Rate

 1996
 2001
 2006

 Halifax
 8.7%
 7.2%
 6.3%

 Canada
 10.1%
 7.4%
 6.6%

Figure 4.1 - Labour force status of the population 15 and over, 1996 & 2006

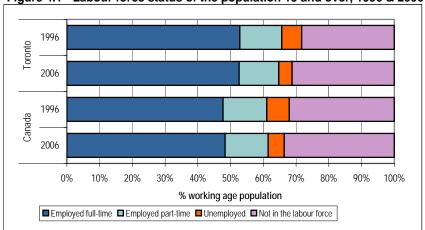


Figure 4.2 - Employment Rate by Educational Attainment, 2006

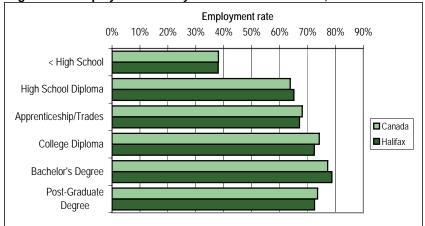


Figure 4.3 - Employment rate<sup>2</sup> by age, 2006

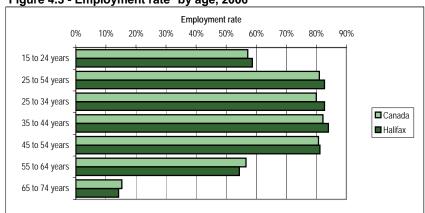
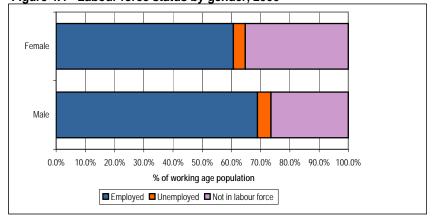


Figure 4.4 - Labour force status by gender, 2006

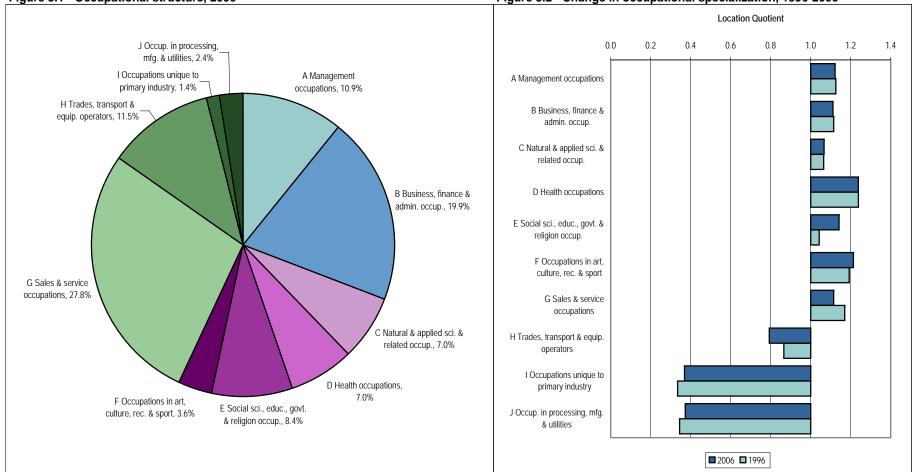


# 5 - Occupational Structure

	A-B Manage	A-B Management, business & finance occupations			F Natural/social science, health, G-J Sales/service, trades & manu lucation & artistic occupations labour occupations		•		
	1996	2001	2006	1996	2001	2006	1996	2001	2006
Halifax	31.1%	31.5%	30.8%	22.2%	24.3%	26.0%	46.8%	44.2%	43.2%
Canada	27.8%	28.2%	27.6%	19.8%	21.3%	22.6%	52.4%	50.5%	49.8%







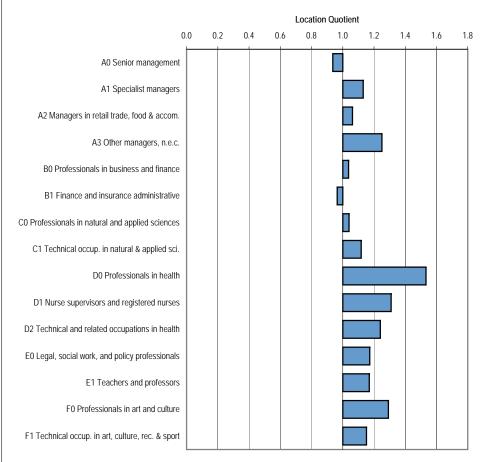
# 6 - Creative Occupations

-		Bohemians		% S&T
	Bohemians	per 1000 <sup>5</sup>	S&T Workers	Workers <sup>6</sup>
Halifax	3,225	15.3	14,730	7.0%
Canada	240,170	14.2	1,108,050	6.6%

Occupational Groups <sup>7</sup>	Creative	Service	Trades & Manual	Agricultural & Resources
Halifax	38.0%	46.6%	14.5%	0.8%
Canada	33.2%	41.9%	21.9%	2.9%







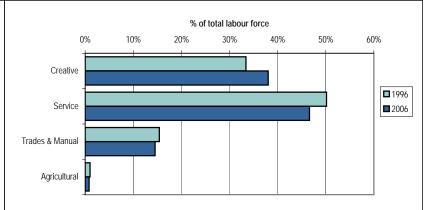
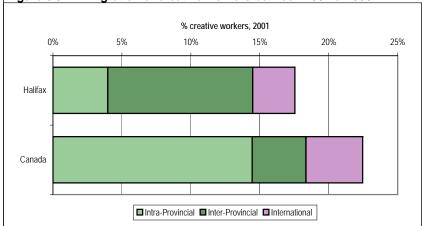


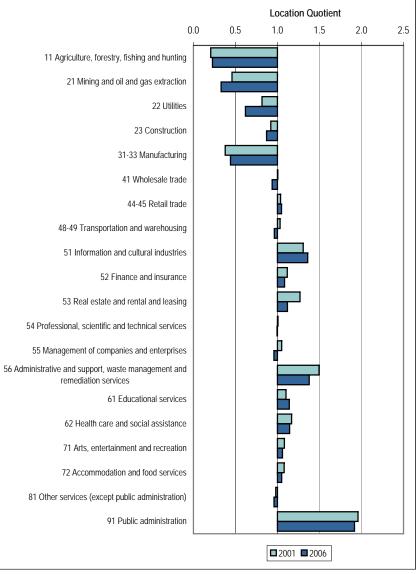
Figure 6.3 - In-migration of creative workers between 2001 & 2006



#### 7 - Industrial Structure Halifax

Figure 7.1 - Industry cha	Figure 7.1 - Industry characteristics								
	# Labour force	% Labour force	% Change 2001-2006	% BA or higher		verage FT income			
All industries	210,135	100.0%	8.5%	28.4%	\$	48,092			
11 Agr., forestry, fish. & hunt.	1,480	0.7%	2.1%	10.2%	\$	34,304			
21 Mining & oil/gas extraction	980	0.5%	1.0%	24.5%	\$	79,676			
22 Utilities	1,025	0.5%	-14.9%	31.9%	\$	65,746			
23 Construction	11,590	5.5%	15.1%	8.6%	\$	43,687			
31-33 Manufacturing	11,015	5.2%	7.7%	17.6%	\$	52,069	İ		
41 Wholesale trade	8,630	4.1%	0.8%	21.3%	\$	52,291			
44-45 Retail trade	25,045	11.9%	10.7%	15.5%	\$	34,778			
48-49 Transport & warehousing	9,840	4.7%	-0.9%	13.2%	\$	48,409			
51 Information & cultural ind.	7,070	3.4%	4.3%	34.6%	\$	54,445			
52 Finance and insurance	9,310	4.4%	5.5%	35.4%	\$	57,163			
53 Real estate/rental & leasing	4,230	2.0%	3.4%	21.9%	\$	42,655			
54 Prof., sci. & tech. services	13,920	6.6%	13.3%	53.4%	\$	61,771			
55 Mgmt. of companies	245	0.1%	22.5%	49.0%	\$	144,670	56		
56 Admin./support, & wst. mgt.	12,410	5.9%	10.2%	14.6%	\$	28,695			
61 Educational services	16,355	7.8%	17.0%	67.8%	\$	51,708			
62 Health care & soc. assist.	24,485	11.7%	11.5%	36.3%	\$	46,462			
71 Arts, entertainment & rec.	4,575	2.2%	11.9%	33.3%	\$	34,039			
72 Accom. & food services	14,750	7.0%	5.1%	12.4%	\$	25,189			
81 Other services	9,800	4.7%	7.5%	21.2%	\$	34,889			
91 Public administration	23,375	11.1%	6.1%	32.3%	\$	59,645			

Figure 7.2 - Change in industrial specialization, 2001-2006



#### 8 - Clusters Halifax

Number of clusters8 6 % employment in clusters8 19.0%

	# Labour force	Labour force LQ	% Industry LQs > 1	% Growth 2001-2006	Cluster (yes/no)
Resource-based					
Agriculture	1,585	0.18	0.0%	12.8%	NO
Mining	1,710	0.45	12.5%	-11.6%	NO
Oil and Gas	1,465	0.47	0.0%	2.8%	NO
Wood & Wood Products	1,330	0.34	10.0%	-7.3%	NO
Maritime	3,715	2.02	100.0%	26.6%	YES
Manufacturing					
Textiles & Apparel	470	0.28	8.3%	10.6%	NO
Food	5,045	0.86	50.0%	6.4%	NO
Steel	1,695	0.42	0.0%	3.7%	NO
Automotive	885	0.16	0.0%	1.7%	NO
Plastics & Rubber	2,240	0.45	0.0%	4.7%	NO
Biomedical	2,165	1.14	50.0%	25.9%	YES
ICT Manufacturing	1,750	0.69	11.1%	-8.9%	NO
Service-based					
ICT Services	14,700	1.47	60.0%	6.2%	YES
Finance	14,055	1.07	43.8%	3.7%	NO
Business Services	27,640	1.36	52.9%	8.2%	YES
Creative & Cultural	9,140	1.14	58.8%	15.3%	YES
Higher Education	10,835	1.57	66.7%	14.8%	YES
Other					
Construction	15,740	0.90	33.3%	15.5%	NO
Logistics	10,890	1.06	34.6%	-5.7%	NO

Figure 8.2 - Employment by industry category, 20069

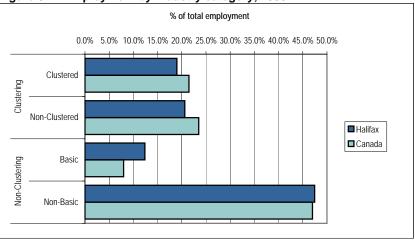
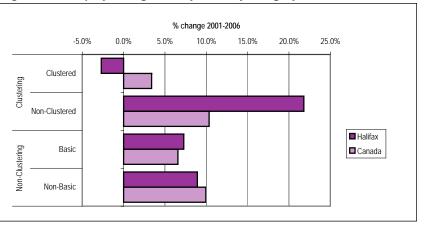


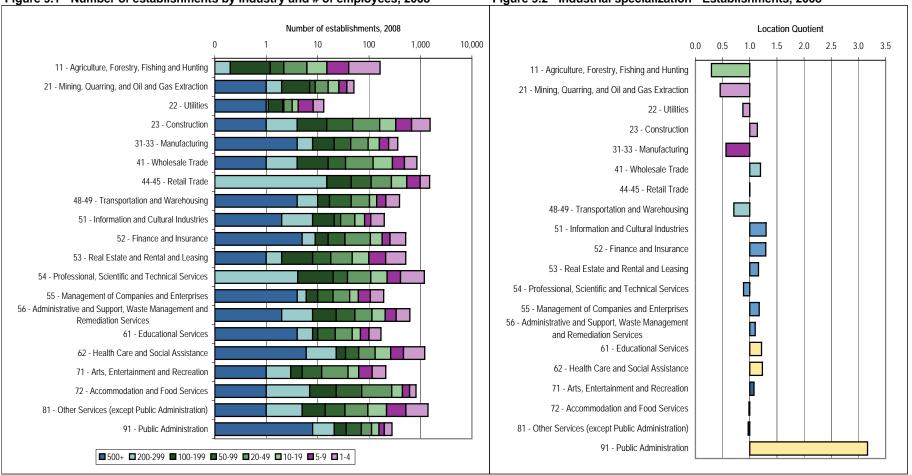
Figure 8.3 - Employment growth by industry category, 2001-2006<sup>9,10</sup>



### 9 - Establishments Halifax

	% of establishments by number of employees								
	1-4	5-9	10-19	20-49	50-99	100-199	200-299	500+	
Halifax	50.0%	20.8%	13.3%	9.7%	3.4%	1.6%	0.8%	0.4%	
Canada	55.0%	20.2%	12.1%	7.8%	2.7%	1.2%	0.6%	0.3%	

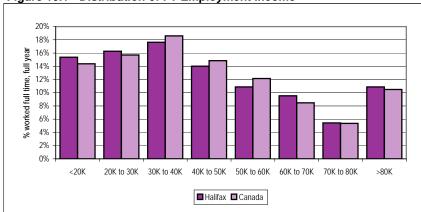


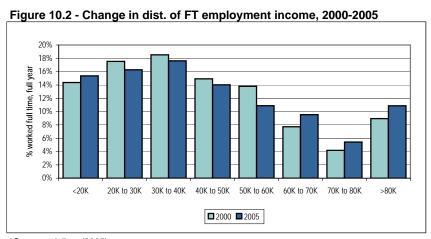


#### 10 - Income Halifax

Full Time Employment								
Income, 2005	Average		Median					
Halifax	\$	48,092	\$	40,247				
Canada	\$	51,221	\$	41,401				

Figure 10.1 - Distribution of FT Employment Income



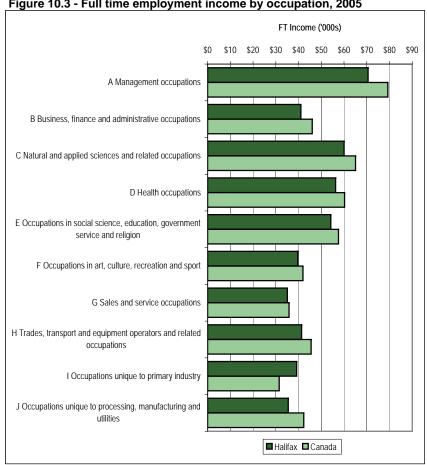


<sup>\*</sup>Constant dollars (2005)

% Change in FT Emp.							
Income 2000-2005 <sup>11</sup>	Average	Median					
Halifax	3.3%	2.1%					
Canada	5.5%	2.4%					

\*Constant dollars (2005)

Figure 10.3 - Full time employment income by occupation, 2005



#### **Notes**

- <sup>1</sup> All educational attainment statistics are calculated for the population 15 years and over.
- <sup>2</sup> The employment rate refers to the number of persons employed expressed as a percentage of the total population 15 years of age and over (excluding institutional residents).
- <sup>3</sup> The unemployment rate refers to the number of unemployed persons expressed as a percentage of the total labour force 15 years of age and over.
- <sup>4</sup> Self-employment is defined as persons 15 years of age and over for whom the job reported consisted mainly of operating a business, farm or professional practice, alone or in partnership. Examples include: operating a farm; working on a freelance or contract basis to do a job (e.g. architects, private duty nurses); or operating a direct distributorship selling and delivering products (e.g. cosmetics, newspapers). Respondents were asked to specify if their business was incorporated or unincorporated, as well as if they had paid help or no paid help.
- <sup>5</sup> Bohemians are defined as artistic occupations and include the following occupational categories: F021 Authors and writers; F031 Producers, directors, choreographers and related occupations; F032 Conductors, composers and arrangers; F033 Musicians and singers; F034 Dancers; F035 Actors and comedians; F036 Painters, sculptors and other visual artists; F121 Photographers; F141 Graphic designers and illustrators; F142 Interior designers; F143 Theatre, fashion, exhibit and other creative designers; F144 Artisans and craftspersons; and F145 Patternmakers, textile, leather and fur products. See Florida (2002) and Gertler et al. (2002).
- <sup>6</sup> Science and technology workers include the following occupational categories: C0 Professional occupations in natural and applied sciences; and C1 Technical occupations related to natural and applied sciences. See Feinstein and McAlinden (2002).
- <sup>7</sup> Following the method outlined in Florida (2002), we have divided the Canadian occupational structure into four broad categories: creative occupations; service occupations; trade and manual labour occupations; and agricultural and related occupations. These are defined using the National Occupational Classification for Statistics (NOCS) at the 2-digit level.
- Creative occupations include: A0 Senior management occupations; A1 Specialist managers; A2 Managers in retail trade, food and accommodation services; A3 Other managers, n.e.c.; B0 Professional occupations in business and finance; B1 Finance and insurance administrative occupations; C0 Professional occupations in natural and applied sciences; C1 Technical occupations related to natural and applied sciences; D0 Professional occupations in health; D1 Nurse supervisors and registered nurses; D2 Technical and related occupations in health; E0 Judges, lawyers, psychologists, social workers, ministers of religion, and policy and program officers; E1 Teachers and professors; F0 Professional occupations in art and culture; and F1 Technical occupations in art, culture, recreation and sport.
- Service occupations include: B2 Secretaries; B3 Administrative and regulatory occupations; B4 Clerical supervisors; B5 Clerical occupations; D3 Assisting occupations in support of health services; E2 Paralegals, social services workers and occupations in education and religion, n.e.c.; and G Sales and Service Occupations.

- Trades and manual labour occupations include: H Trades, Transport and Equipment Operators and Related Occupations; I2 Primary production labourers; and J Occupations Unique to Processing, Manufacturing and Utilities.
- Agriculture and related occupations include: I0 Occupations unique to agriculture, excluding labourers; and I1 Occupations unique to forestry operations, mining, oil and gas extraction and fishing, excluding labourers.
- <sup>8</sup> The method for identifying and defining cluster is based on previous ISRN work (see Spencer and Vinodrai 2005). Clusters are defined as constellations of industries defined using the North American Industrial Classification Systems (NAICS) at the 4-digit level based on patterns of location and colocation within the Canadian space economy. Constellations of industries must meet three criteria within a particular place to be defined as a cluster: 1) there must be 1,000 or more employees; 2) the overall employment LQ must be greater than or equal to 1; and 3) at least half of the industries that comprise a particular cluster in a particular place must have an individual employment LQ greater than or equal to 1.
- <sup>9</sup> The method for identifying and defining cluster is based on previous ISRN work (see Spencer, Vinodrai, Gertler and Wolfe 2010). We divide industries and employment into four categories: Non-basic, basic, non-clustered, and clustered. Non-Basic industries are those industries which do not demonstrate a pattern of geographic concentration in particular places. Basic industries are those industries which are geographically concentrated in particular places but do not exhibit patterns of systematic co-location with other industries. The remaining industries have the potential to cluster but do not always do so. Therefore, non-clustered employment is in those industries which do co-locate with other industries, but do not exhibit cluster characteristics in a particular location (see above). Clustered employment is that employment in industries which co-locate with other industries and exhibit cluster characteristics (see above).
- <sup>10</sup> Growth is calculated as % change in total employment between 2001 and 2006.

<sup>&</sup>lt;sup>11</sup> Canadian censuses were conducted in 2001 and 2006. Income data relate to the calendar year prior to the census year, i.e. 1995 and 2000 respectively.

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