# Innovation Systems Research Network City-Region Profile, 2006

# Saint John

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### **Summary and Highlights**

Key Indicators	Saint John	Canada			
Population, 2006	122,390	31,612,890			
Population Change, 2001-2006	-0.2%	5.4%			
% Foreign Born	4.2%	19.8%			
% BA Degree or higher	14.1%	18.1%			
# Employed	58,830	15,958,195			
Employment Growth 1996-2006	10.2%	19.8%			
Employment Rate	59.2% 62.49				
Unemployment Rate	8.0%	6.6%			
% 'Creative' occupations	33.0%	33.2%			
% Science & Tech. Occupations	7.1%	6.6%			
'Bohemians' per 1,000 Labour Force	9.4	14.2			
Number of Industrial Clusters	-	255			
% Employment in Clusters	0.0%	22.1%			
Average FT Employment Income	\$ 46,190	\$ 51,221			
% Change Average Income 2000-2005	3.0%	5.5%			

# 1 - Demographics

## Saint John

Population	2001	2006	% Change 2001-2006
Saint John	122,680	122,390	-0.2%
Canada	30,007,085	31,612,890	5.4%

Age Groups	Under 15	15 to 64	65 and over	% 15 to 64
Saint John	31,115	67,965	17,070	58.5%
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 Population (000s)

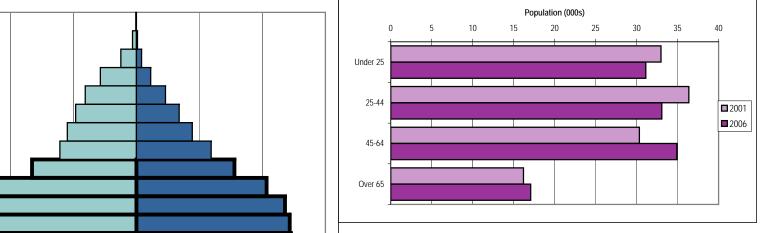
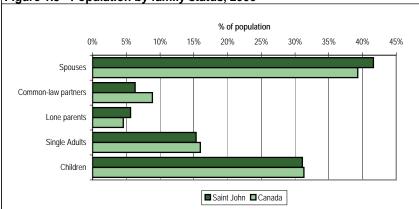
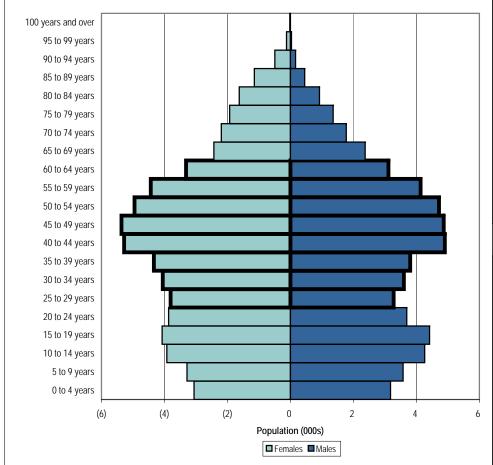


Figure 1.3 - Population by family status, 2006





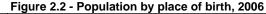
# 2 - Migration & Population Change

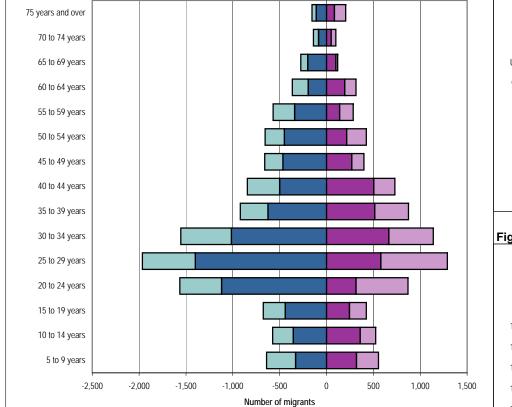
### **Saint John**

	Intra-	Inter-	
Domestic Migration	provincial	provincial	Total
In-flows, 2001-2006	3,700	4,560	8,260
Out-flows, 2001-2006	3,930	7,630	11,560
Net, 2001-2006	(230)	(3,070)	(3,300)

	% Foreign born	Migrated post-1991	Migrated pre- 1991
Saint John	4.2%	1.3%	2.8%
Canada	19.8%	8.9%	10.9%

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





■ Intra-Provincial OUT

■ Inter-Provincial IN

■ Intra-Provincial IN

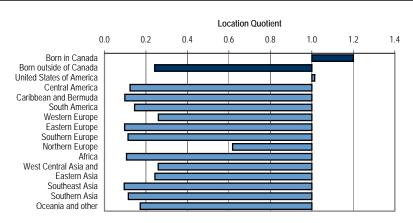
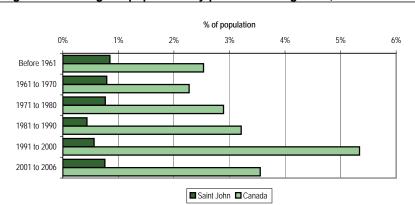


Figure 2.3 - Immigrant population by period of immigration, 2006

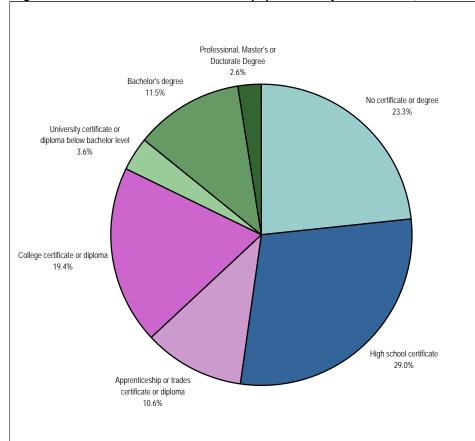


■ Inter-Provincial OUT

# 3 - Education Saint John

	% College degree or	% BA degree	% MA degree	PhDs per	_	% BA degre	ee or hig
	higher <sup>1</sup>	or higher <sup>1</sup>	or higher <sup>1</sup>	1,000 <sup>1</sup>		2001	200
Saint John	37.0%	14.1%	2.6%	2.9	Saint John	12.8%	14.19
Canada	39.8%	18.1%	4.6%	6.9	Canada	15.4%	18.19





Above Bachelor's Degree

Bachelor's Degree

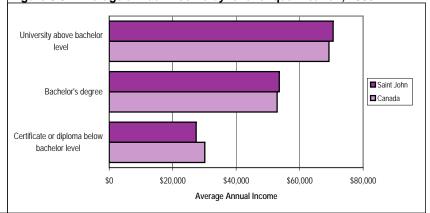
Apprenticeship, Trade &
College

0% 10% 20% 30% 40% 50% 60% 70% 80% 90% 100%

% highest qualifications

New Brunswick Other Province/Territory Outside Canada

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



#### 4 - Employment **Saint John**

_	E	mployment Ra	te
	1996	2001	2006
Saint John	54.2%	57.1%	59.2%
Canada	58.9%	61.5%	62.4%

**Unemployment Rate** 1996 2001 2006 Saint John 13.1% 9.2% 8.0% Canada 10.1% 7.4% 6.6%

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

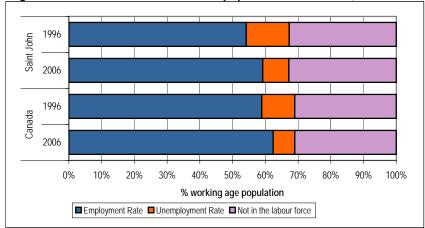


Figure 4.2 - Employment Rate by Educational Attainment, 2006 **Employment rate** 10% 20% 30% 40% 50% 60% 70% 80% 90% < High School High School Diploma Apprenticeship/Trades ■ Canada ■ Saint John College Diploma Bachelor's Degree Post-Graduate

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

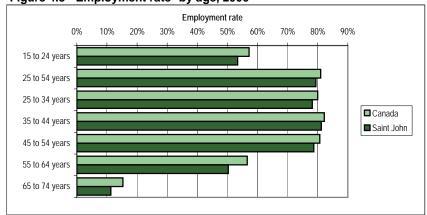
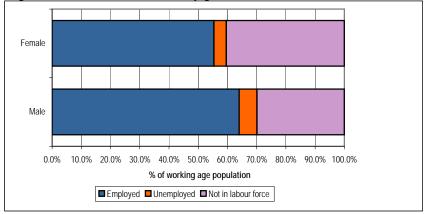


Figure 4.4 - Labour force status by gender, 2006

Degree

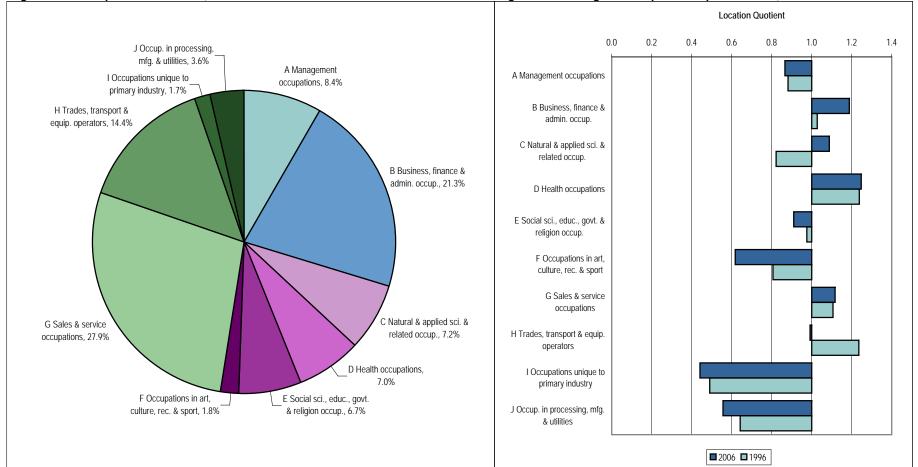


# 5 - Occupational Structure

**Saint John** 

	A-B Manage	ement, busines occupations	ss & finance	C-F Natural/social science, health, education & artistic occupations				G-J Sales/service, trades & manu labour occupations	
	1996	2001	2006	1996	2001	2006	1996	2001	2006
Saint John	27.2%	28.6%	29.7%	19.4%	20.4%	22.7%	53.4%	50.9%	47.6%
Canada	27.8%	28.2%	27.6%	19.8%	21.3%	22.6%	52.4%	50.5%	49.8%





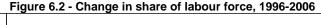
# 6 - Creative Occupations

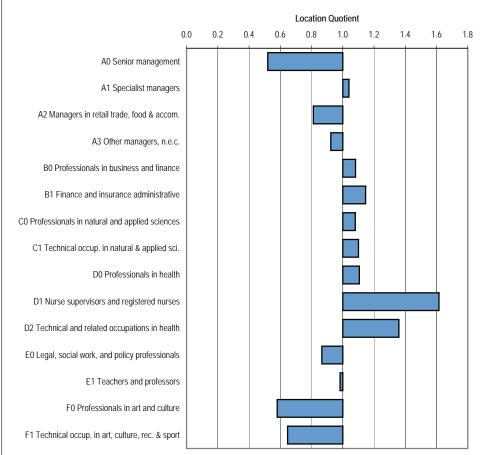
### **Saint John**

•	Bohemians % S&T						
	Bohemians	per 1000 <sup>5</sup>	S&T Workers	Workers <sup>6</sup>			
Saint John	590	9.4	4,505	7.1%			
Canada	240,170	14.2	1,108,050	6.6%			

Occupational Groups <sup>7</sup>	Creative	Service	Trades & Manual	Agricultural & Resources
Saint John	33.0%	47.3%	18.9%	0.8%
Canada	33.2%	41.9%	21.9%	2.9%







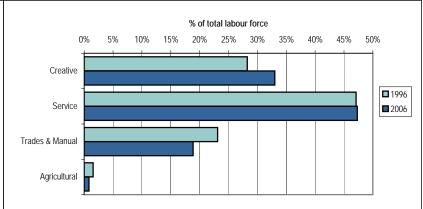
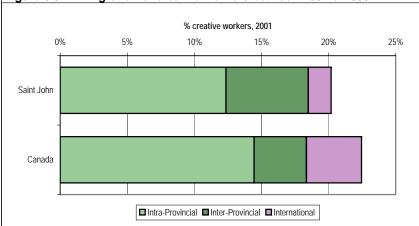


Figure 6.3 - In-migration of creative workers between 2001 & 2006



#### 7 - Industrial Structure Saint John

Figure 7.1 - Industry characteristics

Figure 7.2 - Change in industrial specialization, 2001-2006

# Labour force 63,075	% Labour force	% Change 2001-2006	% BA or higher		•			Location	n Quotient				
63,075				Average FT income		•		0.0		1.0	1 5	2.0	2.5
63,075						U	.0 0.5	1.0	1.5	2.0	2.5		
	100.0%	4.6%	18.1%	\$	46,190	11 Agriculture, forestry, fishing and hunting							
						21 Mining and oil and gas extraction							
680	1.1%	-32.3%	12.5%	\$	55,324	00 1 11/11/1					ıl		
						22 Utilities					'		
						23 Construction							
						21.22 Manufacturing							
4,410	7.0%	11.4%	5.1%	\$	46,191	51-55 Mahulactuling							
						41 Wholesale trade							
5,385	8.5%	-1.7%	14.9%	\$	57,885	44-45 Retail trade							
3,285	5.2%	32.5%	14.5%	\$	45,808	48-49 Transportation and warehousing							
7,865	12.5%	7.0%	7.0%	\$	33,392	E1 Information and cultural industries							
3,035	4.8%	-10.6%	6.8%	\$	42,228	51 information and cultural industries							
						52 Finance and insurance							
1,890	3.0%	1.1%	29.0%	\$	53,030	52 Deal ectate and rental and leacing							
1,910	3.0%	5.8%	25.1%	\$	69,534	55 Iveal estate and rental and leasing							
820	1.3%	-12.3%	7.9%	\$	36,514	54 Professional, scientific and technical services							
3,600	5.7%	23.3%	40.2%	\$	65,541	55 Management of companies and enterprises							
75	0.1%	150.0%	13.3%	N/A				<u> </u>					
5,415	8.6%	14.1%	7.3%	\$	28,840	remediation services							
						61 Educational services		_					
3,730	5.9%	3.3%	62.2%	\$	50,912				1				
8,020	12.7%	2.8%	24.4%	\$	40,856	62 Health care and social assistance			-				
						71 Arts, entertainment and recreation							
980	1.6%	-7.5%	21.5%	\$	30,400	72 Accommodation and food commodation							
3,960	6.3%	3.4%	4.4%	\$	25,723	72 Accommodation and lood services							
						81 Other services (except public administration)							
3,110	4.9%	-8.3%	8.7%	\$	31,294	91 Public administration		ď					
3,300	5.2%	-2.9%	28.0%	\$	55,039			2001	2006	<u> </u>			
	625 975 4,410 5,385 3,285 7,865 3,035 1,890 1,910 820 3,600 75 5,415 3,730 8,020 980 3,960 3,110	625 1.0% 975 1.5% 4,410 7.0% 5,385 8.5% 3,285 5.2% 7,865 12.5% 3,035 4.8% 1,890 3.0% 1,910 3.0% 820 1.3% 3,600 5.7% 75 0.1% 5,415 8.6% 3,730 5.9% 8,020 12.7% 980 1.6% 3,960 6.3% 3,110 4.9%	625       1.0%       247.2%         975       1.5%       -7.6%         4,410       7.0%       11.4%         5,385       8.5%       -1.7%         3,285       5.2%       32.5%         7,865       12.5%       7.0%         3,035       4.8%       -10.6%         1,890       3.0%       1.1%         1,910       3.0%       5.8%         820       1.3%       -12.3%         3,600       5.7%       23.3%         75       0.1%       150.0%         5,415       8.6%       14.1%         3,730       5.9%       3.3%         8,020       12.7%       2.8%         980       1.6%       -7.5%         3,960       6.3%       3.4%         3,110       4.9%       -8.3%	625       1.0%       247.2%       11.2%         975       1.5%       -7.6%       20.5%         4,410       7.0%       11.4%       5.1%         5,385       8.5%       -1.7%       14.9%         3,285       5.2%       32.5%       14.5%         7,865       12.5%       7.0%       7.0%         3,035       4.8%       -10.6%       6.8%         1,890       3.0%       1.1%       29.0%         1,910       3.0%       5.8%       25.1%         820       1.3%       -12.3%       7.9%         3,600       5.7%       23.3%       40.2%         75       0.1%       150.0%       13.3%         5,415       8.6%       14.1%       7.3%         3,730       5.9%       3.3%       62.2%         8,020       12.7%       2.8%       24.4%         980       1.6%       -7.5%       21.5%         3,960       6.3%       3.4%       4.4%         3,110       4.9%       -8.3%       8.7%	625         1.0%         247.2%         11.2%         \$           975         1.5%         -7.6%         20.5%         \$           4,410         7.0%         11.4%         5.1%         \$           5,385         8.5%         -1.7%         14.9%         \$           3,285         5.2%         32.5%         14.5%         \$           7,865         12.5%         7.0%         7.0%         \$           3,035         4.8%         -10.6%         6.8%         \$           1,890         3.0%         1.1%         29.0%         \$           1,910         3.0%         5.8%         25.1%         \$           820         1.3%         -12.3%         7.9%         \$           3,600         5.7%         23.3%         40.2%         \$           75         0.1%         150.0%         13.3%         N/A           5,415         8.6%         14.1%         7.3%         \$           3,730         5.9%         3.3%         62.2%         \$           8,020         12.7%         2.8%         24.4%         \$           980         1.6%         -7.5%         21.5%         \$	625         1.0%         247.2%         11.2%         \$ 48,648           975         1.5%         -7.6%         20.5%         \$ 80,841           4,410         7.0%         11.4%         5.1%         \$ 46,191           5,385         8.5%         -1.7%         14.9%         \$ 57,885           3,285         5.2%         32.5%         14.5%         \$ 45,808           7,865         12.5%         7.0%         7.0%         \$ 33,392           3,035         4.8%         -10.6%         6.8%         \$ 42,228           1,890         3.0%         1.1%         29.0%         \$ 53,030           1,910         3.0%         5.8%         25.1%         \$ 69,534           820         1.3%         -12.3%         7.9%         \$ 36,514           3,600         5.7%         23.3%         40.2%         \$ 65,541           75         0.1%         150.0%         13.3%         N/A           5,415         8.6%         14.1%         7.3%         \$ 28,840           3,730         5.9%         3.3%         62.2%         \$ 50,912           8,020         12.7%         2.8%         24.4%         \$ 40,856           9	22 Utilities 625 1.0% 247.2% 11.2% \$ 48,648 975 1.5% -7.6% 20.5% \$ 80,841 4,410 7.0% 11.4% 5.1% \$ 46,191  5,385 8.5% -1.7% 14.9% \$ 57,885  44.45 Retail trade 44.45 Retail trade 3,285 5.2% 32.5% 7.0% 7.0% \$ 33,392 3,035 4.8% -10.6% 6.8% \$ 42,228  1,890 3.0% 1.1% 29.0% \$ 53,030 1,910 3.0% 5.8% 25.1% \$ 69,534 820 1.3% -12.3% 7.9% \$ 36,514 3,600 5.7% 23.3% 40.2% \$ 65,541 75 0.1% 150.0% 13.3% N/A 5,415 8.6% 14.1% 7.3% \$ 28,840  3,730 5.9% 3.3% 62.2% \$ 50,912 8,020 12.7% 2.8% 24.4% \$ 40,856  980 1.6% -7.5% 21.5% \$ 30,400 3,960 6.3% 3.4% 4.4% \$ 25,723  3,110 4.9% -8.3% 8.7% \$ 31,294	22 Utilities 625 1.0% 247.2% 11.2% \$ 48,648 975 1.5% -7.6% 20.5% \$ 80,841 4,410 7.0% 11.4% 5.1% \$ 46,191  5,385 8.5% -1.7% 14.9% \$ 57,885  44.45 Retail trade  3,285 5.2% 32.5% 14.5% \$ 45,808 7,865 12.5% 7.0% 7.0% \$ 33,392 3,035 4.8% -10.6% 6.8% \$ 42,228  1,890 3.0% 1.1% 29.0% \$ 53,030 1,910 3.0% 5.8% 25.1% \$ 69,534 820 1.3% -12.3% 7.9% \$ 36,514 3,600 5.7% 23.3% 40.2% \$ 65,541 3,600 5.7% 23.3% 40.2% \$ 665,541 75 0.1% 150.0% 13.3% N/A 5,415 8.6% 14.1% 7.3% \$ 28,840  3,730 5.9% 3.3% 62.2% \$ 50,912 8,020 12.7% 2.8% 24.4% \$ 40,856  980 1.6% -7.5% 21.5% \$ 30,400 3,960 6.3% 3.4% 4.4% \$ 25,723  81 Other services (except public administration)  3,110 4.9% -8.3% 8.7% \$ 31,294	22 Utilities  625 1.0% 247.2% 11.2% \$ 48,648 975 1.5% -7.6% 20.5% \$ 80,841 4,410 7.0% 11.4% 5.1% \$ 46,191  5.385 8.5% -1.7% 14.9% \$ 57,885  3,285 5.2% 32.5% 14.5% \$ 45,808 7,865 12.5% 7.0% 7.0% \$ 33,392 3,035 4.8% -10.6% 6.8% \$ 42,228  1,890 3.0% 1.1% 29.0% \$ 53,030 1,910 3.0% 5.8% 25.1% \$ 69,534 820 1.3% -12.3% 7.9% \$ 36,514 3,600 5.7% 23.3% 40.2% \$ 65,541 75 0.1% 150.0% 13.3% N/A 7,5415 8.6% 14.1% 7.3% \$ 28,840  3,730 5.9% 3.3% 62.2% \$ 50,912 8,020 12.7% 2.8% 24.4% \$ 40,856  980 1.6% -7.5% 21.5% \$ 30,400 3,960 6.3% 3.4% 4.4% \$ 25,723  3,110 4.9% -8.3% 8.7% \$ 31,294	625 1.0% 247.2% 11.2% \$ 48,648 975 1.5% -7.6% 20.5% \$ 80,841 4,410 7.0% 11.4% 5.1% \$ 46,191 5.1% \$ 46,191 31.33 Manufacturing 41 Wholesale trade 44.45 Retail trade 44.45 Retail trade 44.45 Retail trade 44.87 Transportation and warehousing 7,865 12.5% 7.0% 7.0% \$ 33,392 3,035 4.8% -10.6% 6.8% \$ 42,228 51	22 Utilities 23 Construction 31-33 Manufacturing 41 Wholesale trade 44-410 7.0% 11.4% 5.1% \$ 46,191 5.385 8.5% -1.7% 14.9% \$ 57,885 7.885 8.5% -1.7% 14.9% \$ 57,885 7.88		

#### 8 - Clusters Saint John

Number of clusters8 0 % employment in clusters8 0.0%

	# Labour force	Labour force LQ	% Industry LQs > 1	% Growth 2001-2006	Cluster (yes/no)
Resource-based					
Agriculture	785	0.30	13.3%	-17.4%	NO
Mining	1,340	1.19	12.5%	15.0%	NO
Oil and Gas	1,895	2.04	33.3%	36.3%	NO
Wood & Wood Products	1,675	1.41	30.0%	-1.2%	NO
Maritime	830	1.50	55.6%	-41.5%	NO
Manufacturing					
Textiles & Apparel	80	0.16	0.0%	60.0%	NO
Food	1,385	0.79	33.3%	-2.1%	NO
Steel	1,400	1.14	25.0%	5.3%	NO
Automotive	425	0.25	15.4%	-19.8%	NO
Plastics & Rubber	820	0.55	7.1%	-11.8%	NO
Biomedical	215	0.38	0.0%	59.3%	NO
ICT Manufacturing	545	0.72	11.1%	32.9%	NO
Service-based					
ICT Services	3,165	1.05	20.0%	-5.5%	NO
Finance	3,005	0.76	25.0%	5.1%	NO
Business Services	7,445	1.22	23.5%	11.1%	NO
Creative & Cultural	1,500	0.63	5.9%	11.5%	NO
Higher Education	1,280	0.62	33.3%	3.6%	NO
Other					
Construction	5,345	1.02	16.7%	14.5%	NO
Logistics	3,540	1.15	26.9%	27.1%	NO

Figure 8.2 - Employment by industry category, 20069

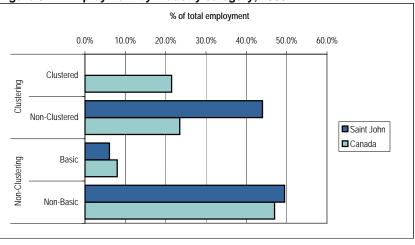
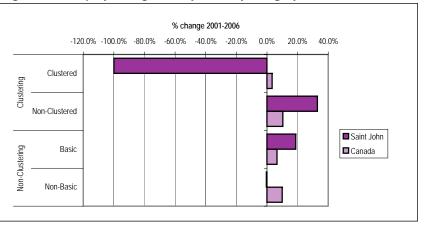


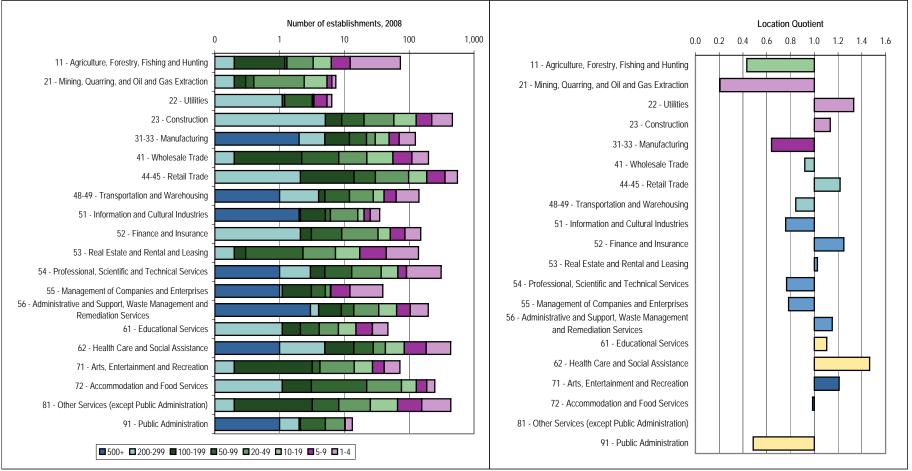
Figure 8.3 - Employment growth by industry category, 2001-2006<sup>9,10</sup>



# 9 - Establishments Saint John

•	% of establishments by number of employees									
	1-4	5-9	10-19	20-49	50-99	100-199	200-299	500+		
Saint John	51.1%	21.1%	12.9%	9.1%	3.2%	1.6%	0.7%	0.3%		
Canada	55.0%	20.2%	12.1%	7.8%	2.7%	1.2%	0.6%	0.3%		

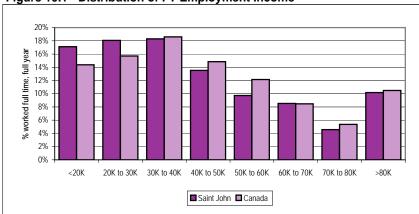


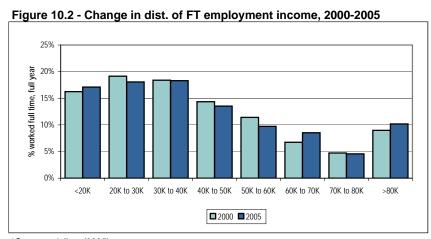


#### 10 - Income **Saint John**

Full Time Employment											
Income, 2005	Average		Median								
Saint John	\$	46,190	\$	37,608							
Canada	\$	51,221	\$	41,401							

Figure 10.1 - Distribution of FT Employment Income



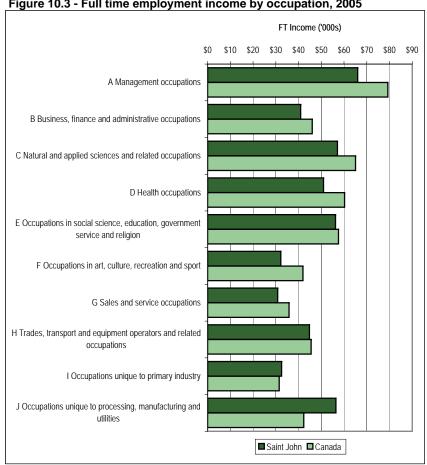


<sup>\*</sup>Constant dollars (2005)

% Change in FT Emp. Income 2000-2005<sup>11</sup> Average Median Saint John 3.0% -0.7% 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>&</sup>lt;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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