

**Innovation Systems Research Network  
City-Region Profile, 2006**

# Barrie

**Gregory M. Spencer<sup>a</sup> and Tara Vinodrai<sup>b</sup>**

<sup>a</sup>Post Doctoral Research Fellow  
Program on Globalization and Regional Innovation Systems (PROGRIS)  
Munk Centre for International Studies  
University of Toronto

<sup>b</sup>Assistant Professor  
Department of Geography and Environmental Management  
and Centre for Environment and Business  
University of Waterloo

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## Summary and Highlights

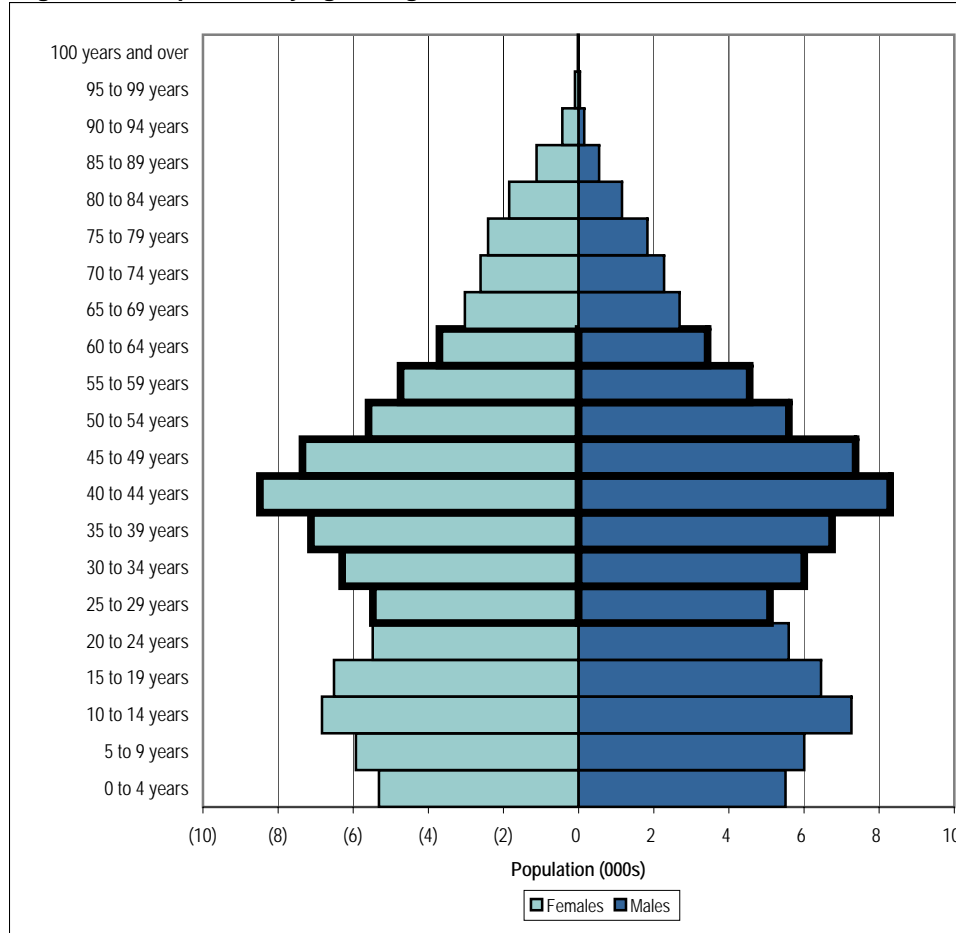
<b>Key Indicators</b>	<b>Barrie</b>	<b>Canada</b>
Population, 2006	177,060	31,612,890
Population Change, 2001-2006	19.2%	5.4%
% Foreign Born	12.8%	19.8%
% BA Degree or higher	12.6%	18.1%
# Employed	93,310	15,958,195
Employment Growth 1996-2006	64.0%	19.8%
Employment Rate	67.4%	62.4%
Unemployment Rate	5.9%	6.6%
% 'Creative' occupations	29.7%	33.2%
% Science & Tech. Occupations	4.8%	6.6%
'Bohemians' per 1,000 Labour Force	10.9	14.2
Number of Industrial Clusters	4	255
% Employment in Clusters	24.4%	22.1%
Average FT Employment Income	\$ 51,695	\$ 51,221
% Change Average Income 2000-2005	5.1%	5.5%

# 1 - Demographics Barrie

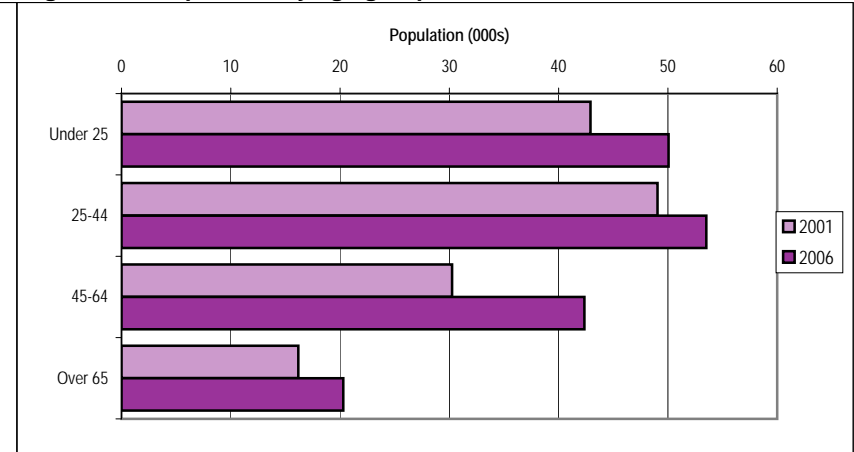
Population	2001	2006	% Change 2001-2006
<b>Barrie</b>	148,480	177,060	19.2%
<b>Canada</b>	30,007,085	31,612,890	5.4%

Age Groups	Under 15	15 to 64	65 and over	% 15 to 64
<b>Barrie</b>	50,065	95,875	20,295	57.7%
<b>Canada</b>	9,800,715	17,476,925	4,335,250	55.3%

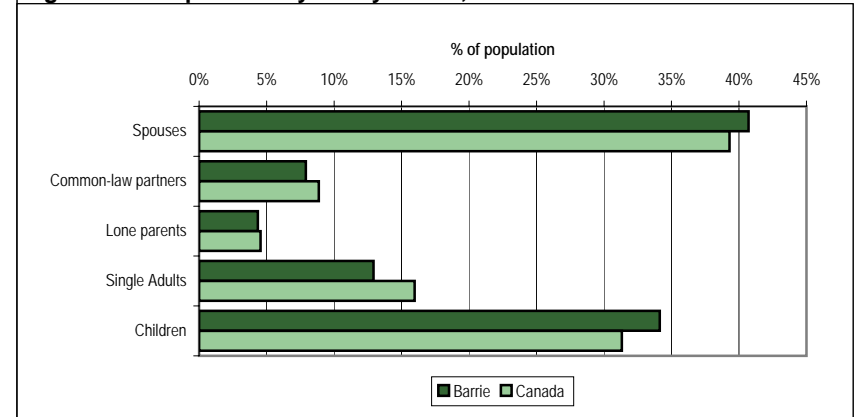
**Figure 1.1 - Population by age and gender, 2006**



**Figure 1.2 - Population by age group, 2001-2006**



**Figure 1.3 - Population by family status, 2006**



## 2 - Migration & Population Change

## Barrie

Domestic Migration	Intra-provincial	Inter-provincial	Total
<b>In-flows, 2001-2006</b>	35,190	2,835	38,025
<b>Out-flows, 2001-2006</b>	18,685	3,230	21,915
<b>Net, 2001-2006</b>	16,505	(395)	16,110

	% Foreign born	Migrated post-1991	Migrated pre-1991
<b>Barrie</b>	12.8%	3.3%	9.6%
<b>Canada</b>	19.8%	8.9%	10.9%

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

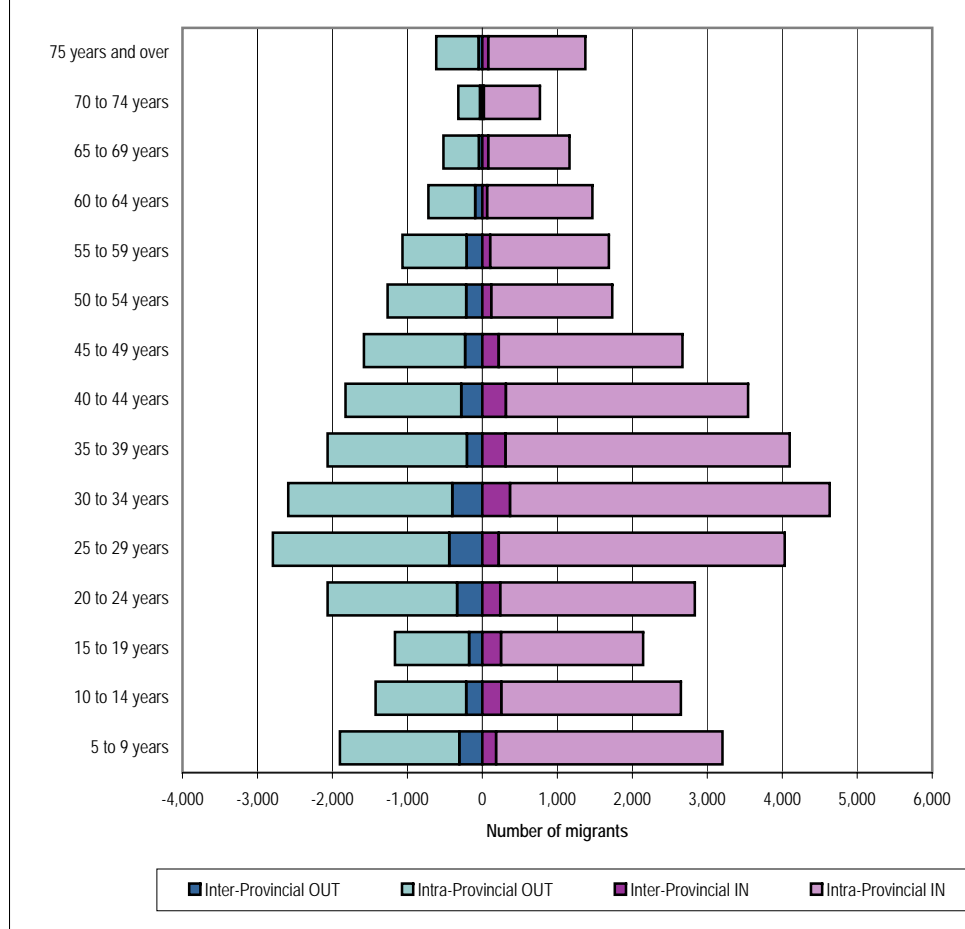


Figure 2.2 - Population by place of birth, 2006

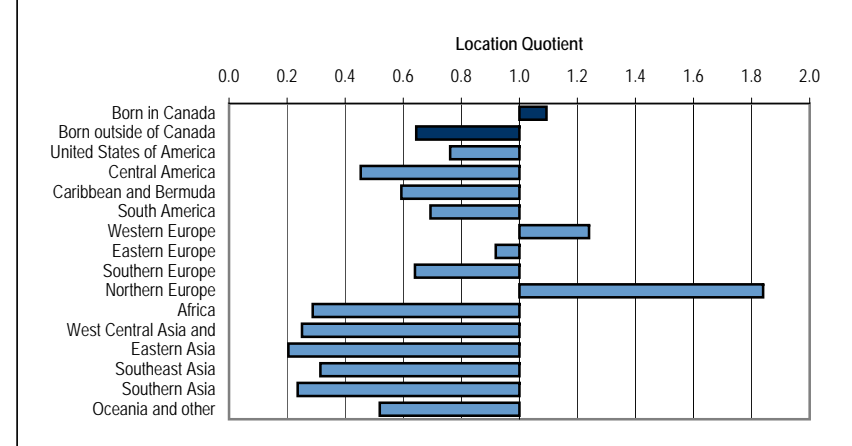
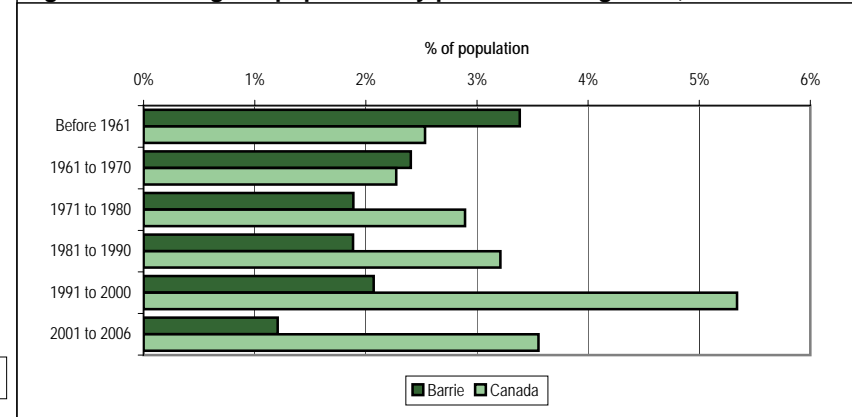


Figure 2.3 - Immigrant population by period of immigration, 2006

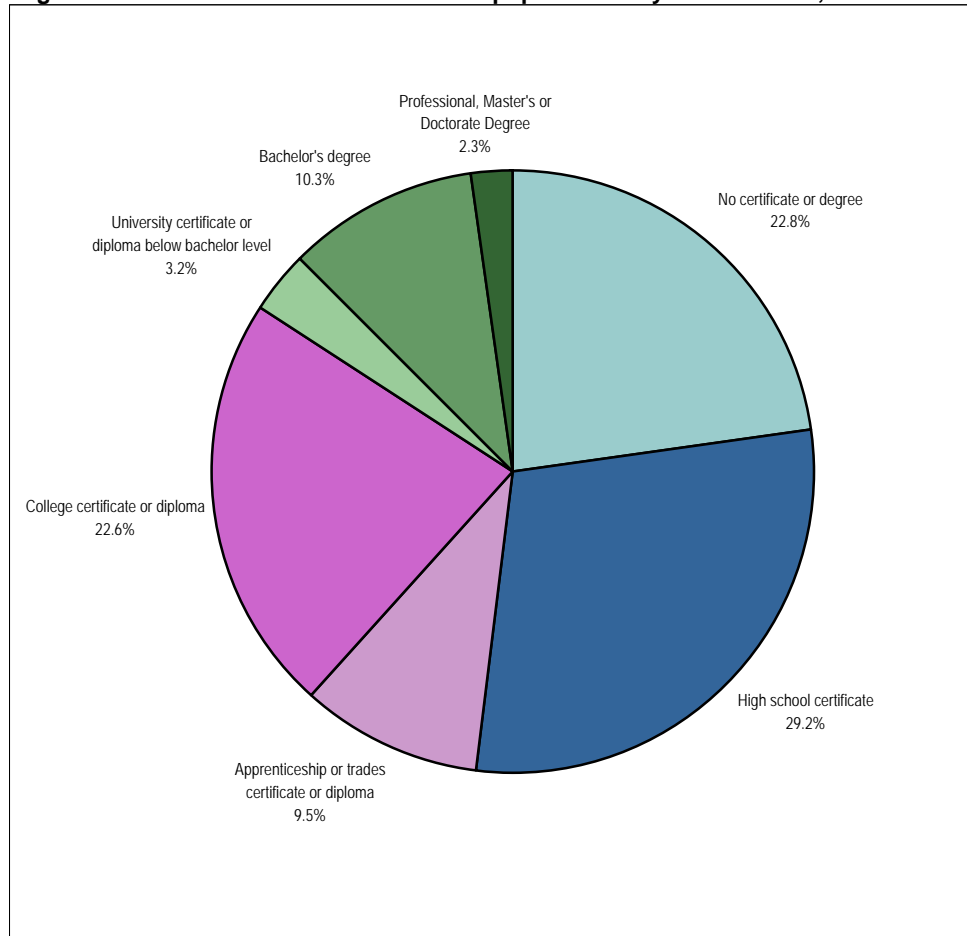


### 3 - Education Barrie

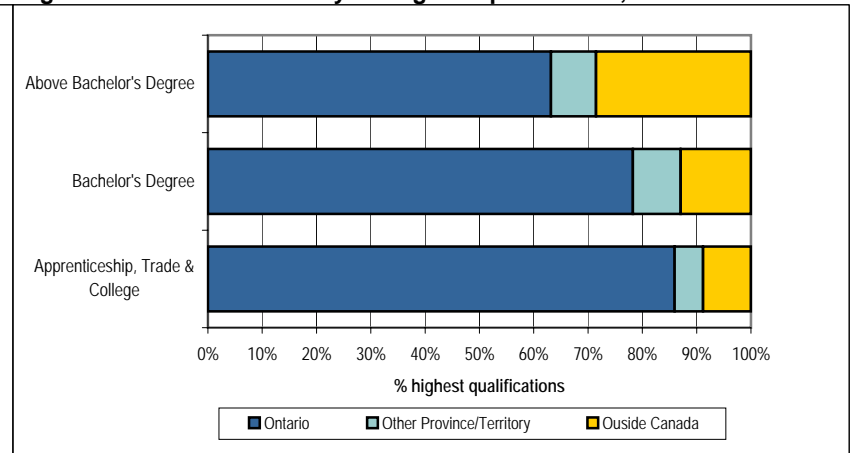
	% College degree or higher <sup>1</sup>	% BA degree or higher <sup>1</sup>	% MA degree or higher <sup>1</sup>	PhDs per 1,000 <sup>1</sup>
<b>Barrie</b>	38.5%	12.6%	2.3%	1.9
<b>Canada</b>	39.8%	18.1%	4.6%	6.9

	% BA degree or higher	
	2001	2006
<b>Barrie</b>	10.2%	12.6%
<b>Canada</b>	15.4%	18.1%

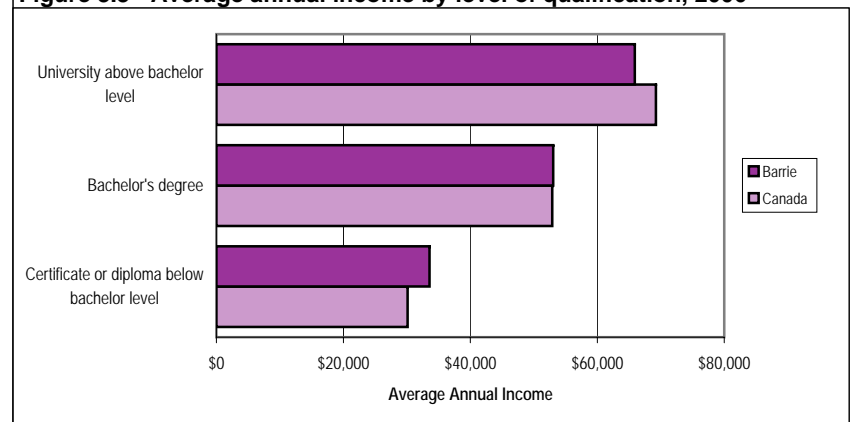
**Figure 3.1 - Educational attainment for the population 15 years and over, 2006**



**Figure 3.2 - Location of study for highest qualification, 2006**



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



## 4 - Employment

## Barrie

Employment Rate			
	1996	2001	2006
<b>Barrie</b>	63.8%	67.4%	67.4%
<b>Canada</b>	58.9%	61.5%	62.4%

Unemployment Rate			
	1996	2001	2006
<b>Barrie</b>	8.6%	5.3%	5.9%
<b>Canada</b>	10.1%	7.4%	6.6%

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

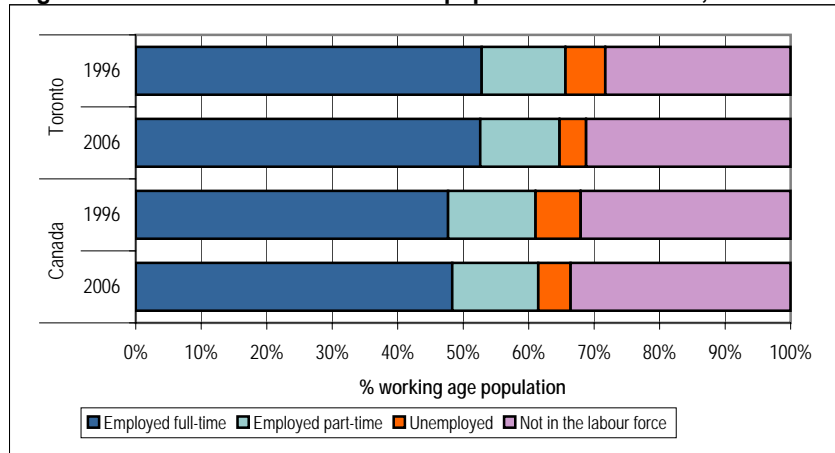


Figure 4.2 - Employment Rate by Educational Attainment, 2006

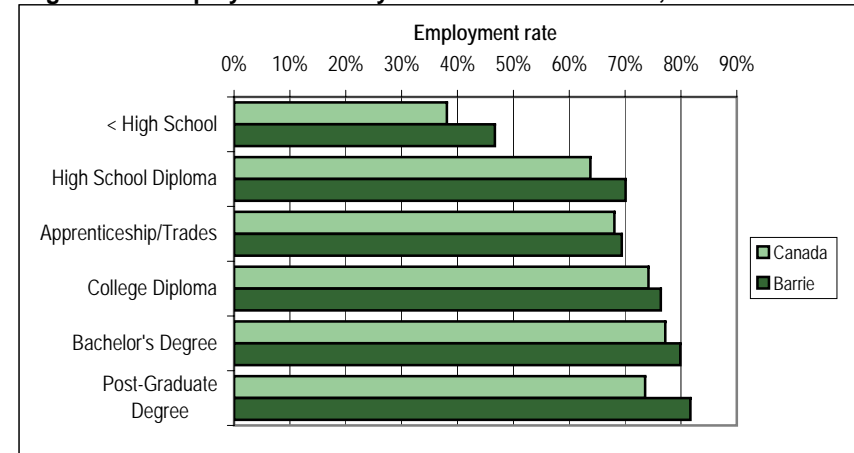


Figure 4.3 - Employment rate<sup>2</sup> by age, 2006

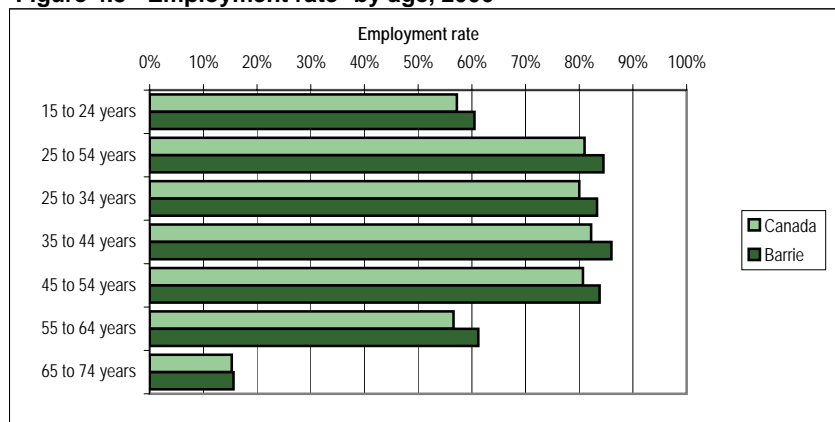
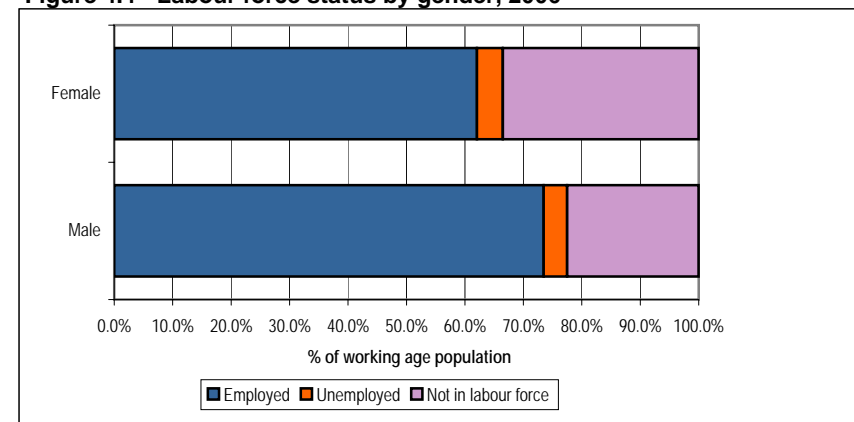


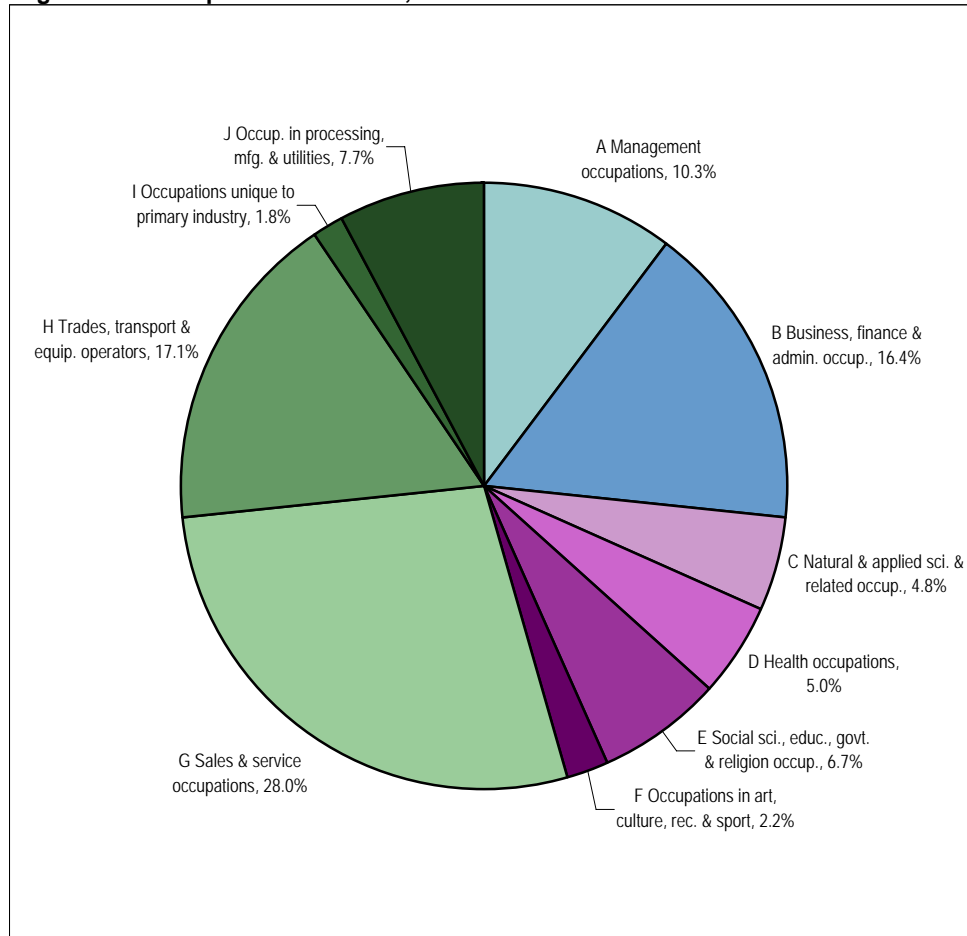
Figure 4.4 - Labour force status by gender, 2006



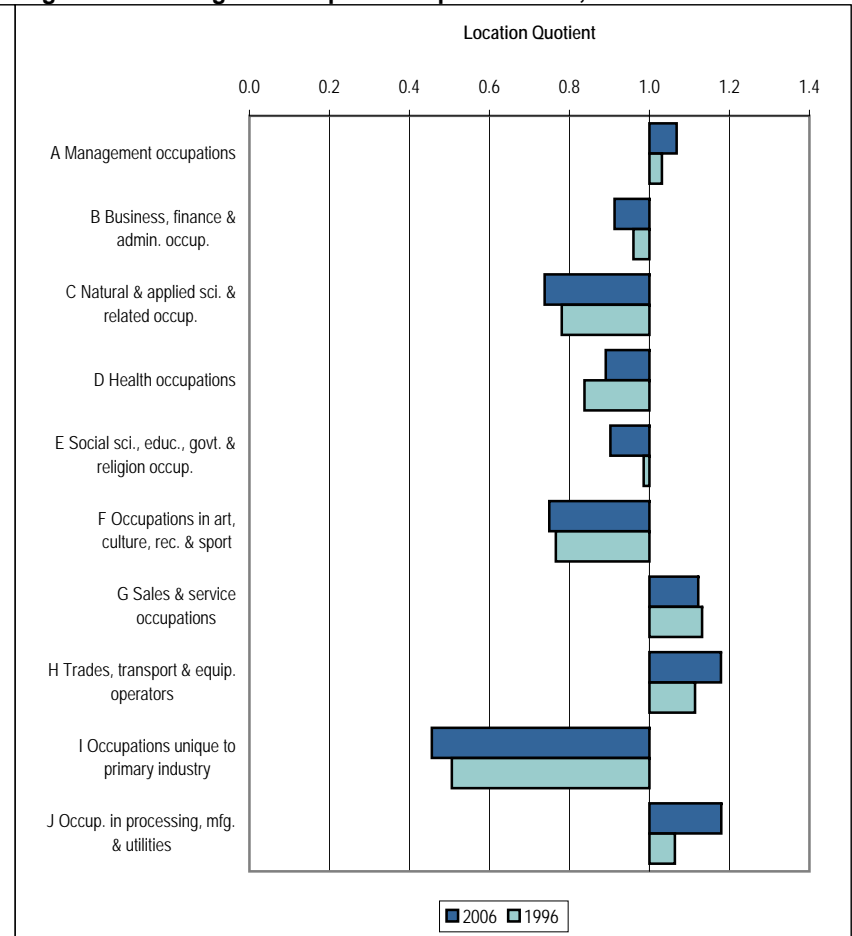
## 5 - Occupational Structure Barrie

	A-B Management, business & finance occupations			C-F Natural/social science, health, education & artistic occupations			G-J Sales/service, trades & manual labour occupations		
	1996	2001	2006	1996	2001	2006	1996	2001	2006
<b>Barrie</b>	27.3%	28.2%	26.7%	17.1%	17.3%	18.8%	55.6%	54.4%	54.5%
<b>Canada</b>	27.8%	28.2%	27.6%	19.8%	21.3%	22.6%	52.4%	50.5%	49.8%

**Figure 5.1 - Occupational structure, 2006**



**Figure 5.2 - Change in occupational specialization, 1996-2006**



## 6 - Creative Occupations

## Barrie

	Bohemians	Bohemians per 1000 <sup>5</sup>	S&T Workers	% S&T Workers <sup>6</sup>
<b>Barrie</b>	1,065	10.9	4,750	4.8%
<b>Canada</b>	240,170	14.2	1,108,050	6.6%

Occupational Groups <sup>7</sup>	Creative	Service	Trades & Manual	Agricultural & Resources
<b>Barrie</b>	29.7%	43.8%	25.6%	0.9%
<b>Canada</b>	33.2%	41.9%	21.9%	2.9%

Figure 6.1 - Specialization in creative occupations

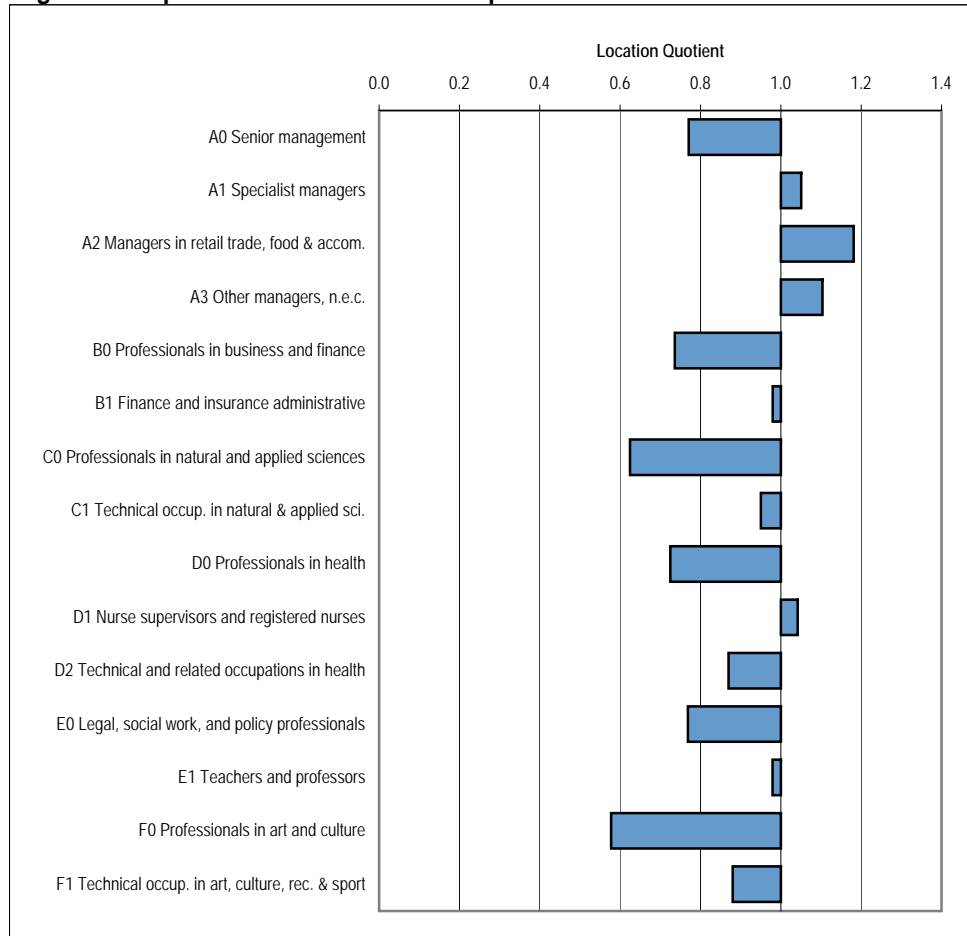


Figure 6.2 - Change in share of labour force, 1996-2006

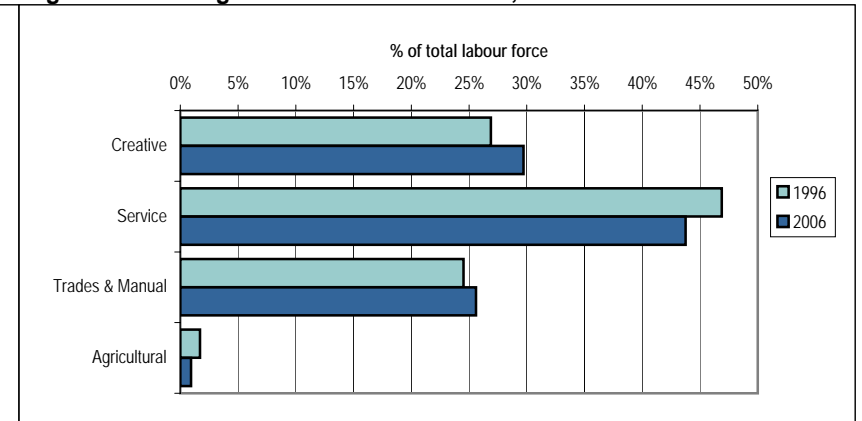
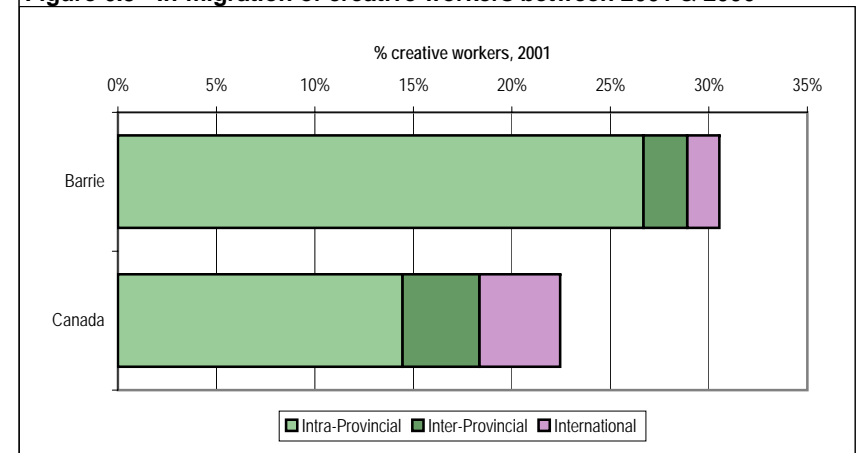


Figure 6.3 - In-migration of creative workers between 2001 & 2006

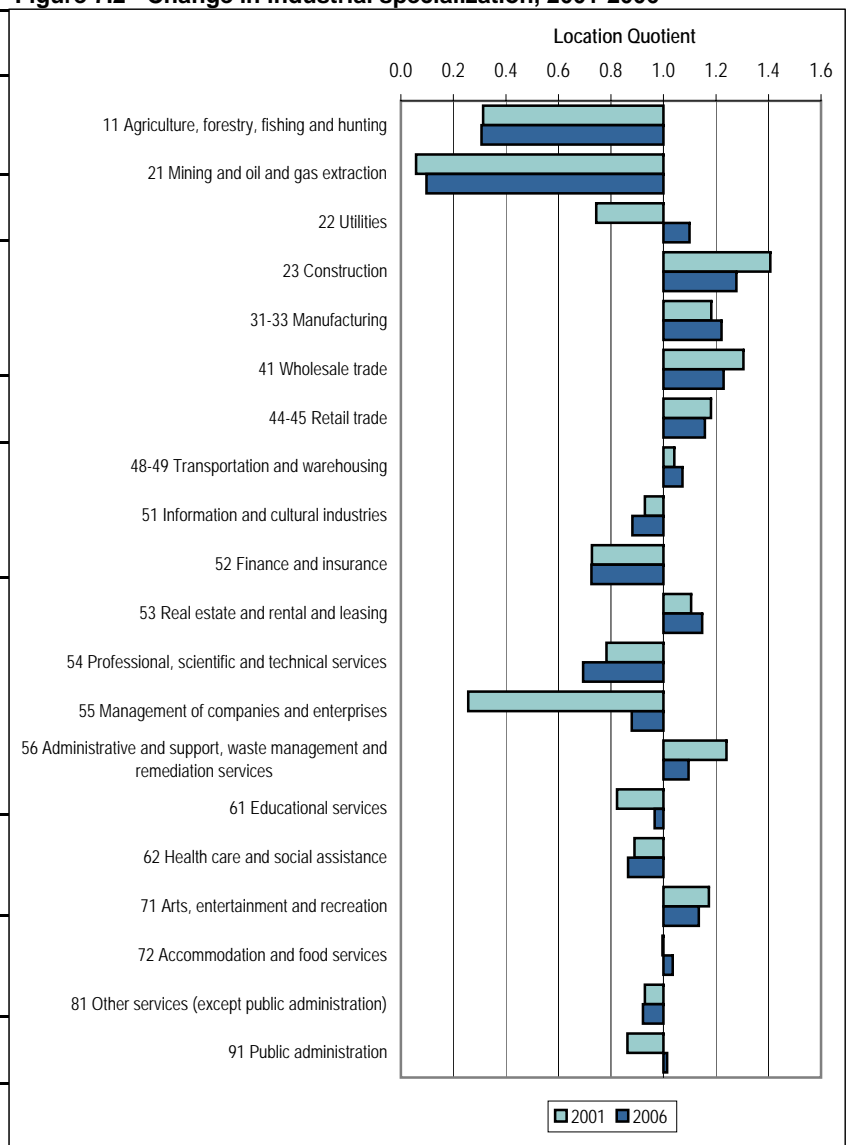


## 7 - Industrial Structure Barrie

**Figure 7.1 - Industry characteristics**

	# Labour force	% Labour force	% Change 2001-2006	% BA or higher	Average FT income
<b>All industries</b>	<b>98,070</b>	<b>100.0%</b>	<b>23.6%</b>	<b>14.8%</b>	<b>\$ 51,695</b>
11 Agr., forestry, fish. & hunt.	935	1.0%	3.3%	10.6%	\$ 29,835
21 Mining & oil/gas extraction	135	0.1%	170.0%	N/A	N/A
22 Utilities	850	0.9%	88.9%	12.4%	\$ 67,843
23 Construction	7,945	8.1%	26.1%	4.0%	\$ 47,997
31-33 Manufacturing	14,245	14.5%	8.9%	8.6%	\$ 57,961
41 Wholesale trade	5,285	5.4%	15.9%	9.6%	\$ 56,832
44-45 Retail trade	12,910	13.2%	22.4%	7.4%	\$ 39,856
48-49 Transport & warehousing	5,115	5.2%	24.6%	4.2%	\$ 52,173
51 Information & cultural ind.	2,140	2.2%	8.4%	18.2%	\$ 57,493
52 Finance and insurance	2,910	3.0%	23.6%	21.6%	\$ 61,674
53 Real estate/rental & leasing	2,025	2.1%	38.7%	11.3%	\$ 49,914
54 Prof., sci. & tech. services	4,530	4.6%	15.7%	28.2%	\$ 58,203
55 Mgmt. of companies	105	0.1%	425.0%	9.1%	N/A
56 Admin./support, & wst. mgt.	4,605	4.7%	20.4%	6.8%	\$ 40,105
61 Educational services	6,465	6.6%	51.1%	58.8%	\$ 56,270
62 Health care & soc. assist.	8,635	8.8%	26.2%	23.3%	\$ 52,477
71 Arts, entertainment & rec.	2,285	2.3%	25.9%	12.3%	\$ 37,885
72 Accom. & food services	6,785	6.9%	27.9%	4.7%	\$ 27,542
81 Other services (except public administration)	4,395	4.5%	24.2%	7.7%	\$ 35,819
91 Public administration	5,770	5.9%	45.2%	25.1%	\$ 64,547

**Figure 7.2 - Change in industrial specialization, 2001-2006**





# 8 - Clusters Barrie

Number of clusters<sup>8</sup> 4  
 % employment in clusters<sup>8</sup> 24.4%

Figure 8.1 - Cluster characteristics, 2006<sup>8</sup>

	# Labour force	Labour force LQ	% Industry LQs > 1	% Growth 2001-2006	Cluster (yes/no)
<i>Resource-based</i>					
<b>Agriculture</b>	<b>1,910</b>	0.47	6.7%	2.1%	NO
<b>Mining</b>	<b>1,070</b>	0.61	25.0%	64.6%	NO
<b>Oil and Gas</b>	<b>565</b>	0.39	44.4%	43.0%	NO
<b>Wood &amp; Wood Products</b>	<b>490</b>	0.27	10.0%	18.1%	NO
<b>Maritime</b>	<b>110</b>	0.13	0.0%	-45.0%	NO
<i>Manufacturing</i>					
<b>Textiles &amp; Apparel</b>	<b>510</b>	0.65	25.0%	24.4%	NO
<b>Food</b>	<b>1,660</b>	0.61	25.0%	4.7%	NO
<b>Steel</b>	<b>1,975</b>	1.04	41.7%	36.7%	NO
<b>Automotive</b>	<b>7,010</b>	2.69	61.5%	7.5%	YES
<b>Plastics &amp; Rubber</b>	<b>3,970</b>	1.70	57.1%	9.1%	YES
<b>Biomedical</b>	<b>870</b>	0.98	33.3%	17.6%	NO
<b>ICT Manufacturing</b>	<b>905</b>	0.76	22.2%	13.8%	NO
<i>Service-based</i>					
<b>ICT Services</b>	<b>2,970</b>	0.64	20.0%	18.1%	NO
<b>Finance</b>	<b>4,805</b>	0.79	18.8%	21.0%	NO
<b>Business Services</b>	<b>6,730</b>	0.71	17.6%	20.8%	NO
<b>Creative &amp; Cultural</b>	<b>3,015</b>	0.81	11.8%	15.5%	NO
<b>Higher Education</b>	<b>1,800</b>	0.56	11.1%	37.9%	NO
<i>Other</i>					
<b>Construction</b>	<b>9,560</b>	1.18	50.0%	24.8%	YES
<b>Logistics</b>	<b>5,190</b>	1.08	65.4%	9.8%	YES

Figure 8.2 - Employment by industry category, 2006<sup>9</sup>

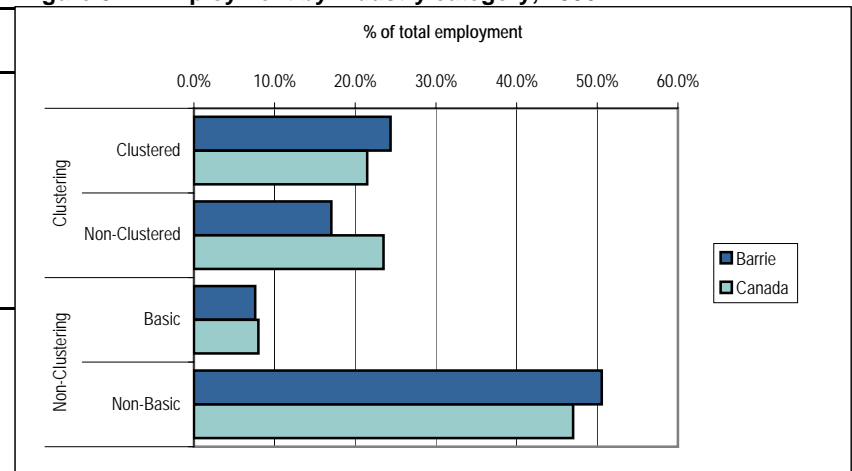
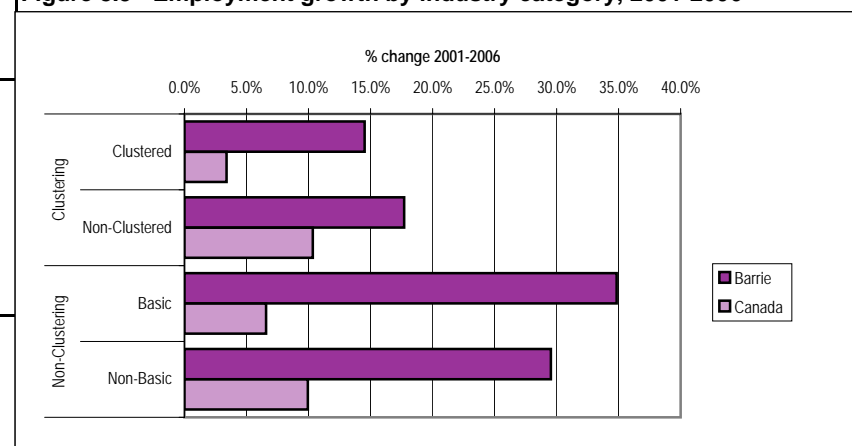


Figure 8.3 - Employment growth by industry category, 2001-2006<sup>9,10</sup>



# 9 - Establishments

# Barrie

	% of establishments by number of employees							
	1-4	5-9	10-19	20-49	50-99	100-199	200-299	500+
<b>Barrie</b>	51.7%	22.7%	13.1%	8.0%	2.2%	1.4%	0.6%	0.2%
<b>Canada</b>	55.0%	20.2%	12.1%	7.8%	2.7%	1.2%	0.6%	0.3%

Figure 9.1 - Number of establishments by industry and # of employees, 2008

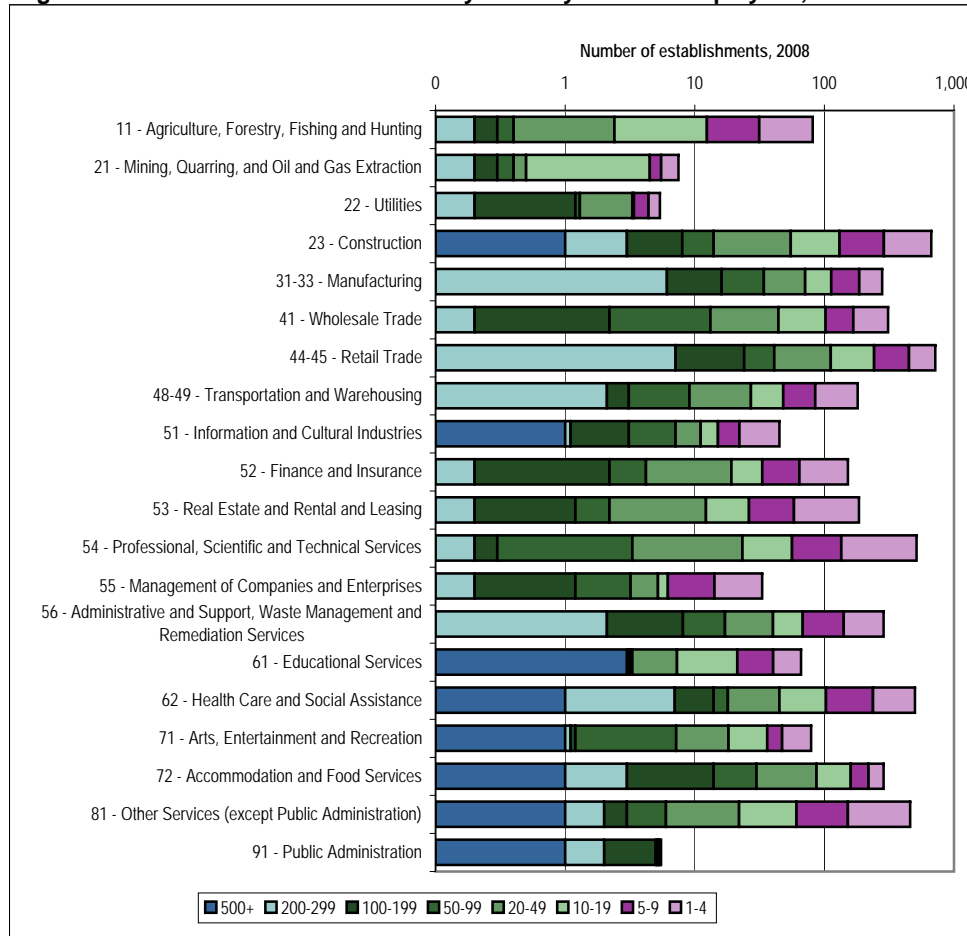
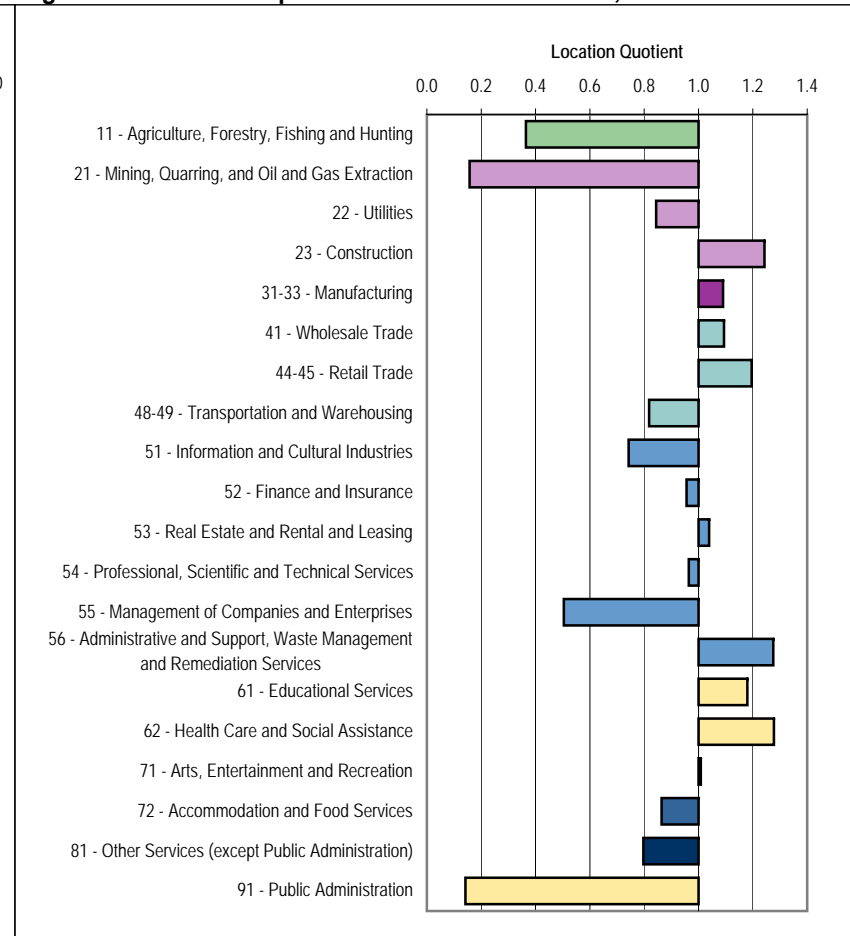


Figure 9.2 - Industrial specialization - Establishments, 2008



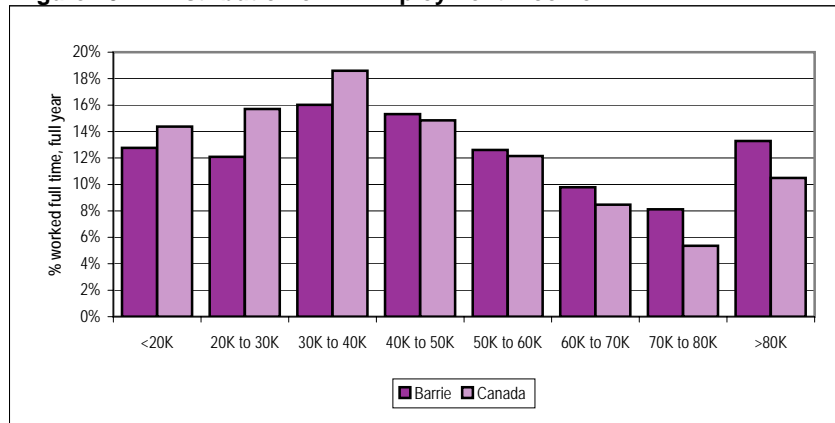
# 10 - Income Barrie

Full Time Employment Income, 2005			
	Average	Median	
<b>Barrie</b>	\$ 51,695	\$ 45,668	
<b>Canada</b>	\$ 51,221	\$ 41,401	

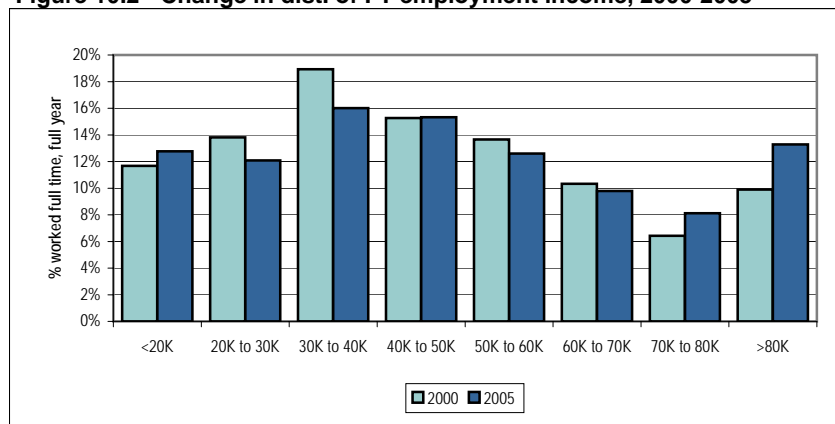
% Change in FT Emp. Income 2000-2005 <sup>11</sup>		
	Average	Median
<b>Barrie</b>	5.1%	4.7%
<b>Canada</b>	5.5%	2.4%

\*Constant dollars (2005)

**Figure 10.1 - Distribution of FT Employment Income**

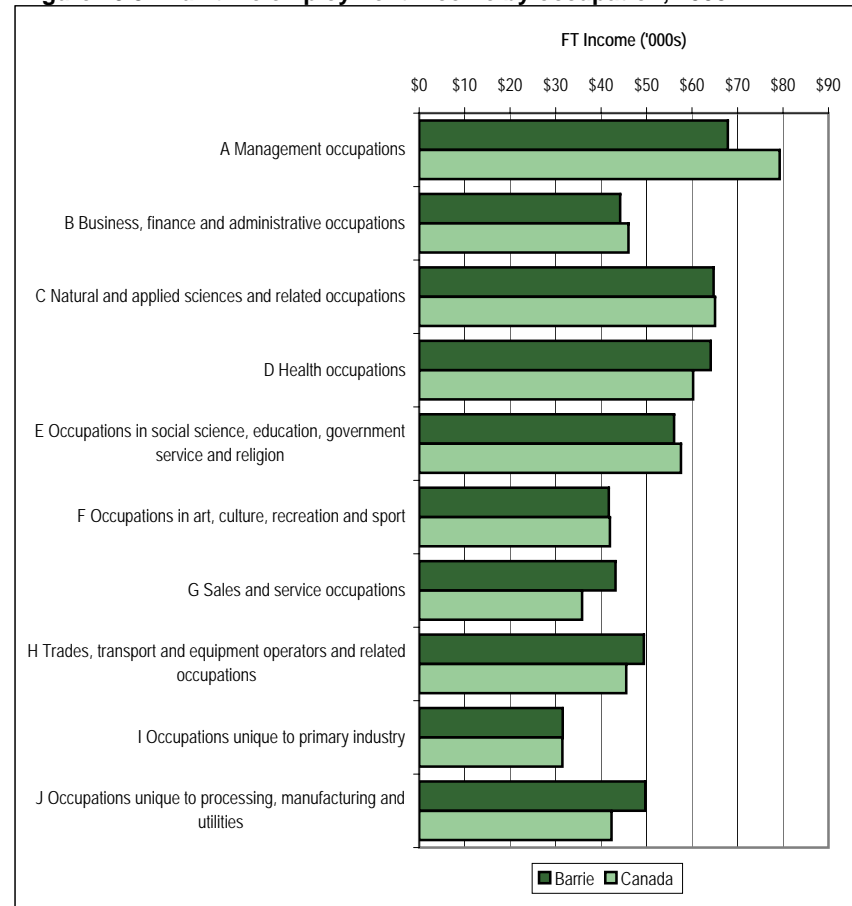


**Figure 10.2 - Change in dist. of FT employment income, 2000-2005**



\*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 co-location 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>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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For further information, please contact:

Greg Spencer: (416) 946-8921 or [greg.spencer@utoronto.ca](mailto:greg.spencer@utoronto.ca)

Tara Vinodrai: (519) 579-3475 ext. 33278 or [vinodra@uwaterloo.ca](mailto:vinodra@uwaterloo.ca)

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