Summary and Highlights

Innovation Systems Research Network
City-Region Profile

Kitchener

Key Indicators	Kitchener	Canada
Population, 2001	414,275	30,007,085
Population Change 1996-2001	8.2%	4.0%
% Foreign Born	21.9%	18.2%
% BA Degree or higher	15.5%	15.4%
Labour Force	324,615	23,901,360
Employment Rate	67.8%	61.5%
Unemployed Rate	5.5%	7.4%
% 'Creative' occupations	32.1%	29.2%
% Science & Tech. Occupations	6.8%	6.4%
Bohemians' per 1,000 Labour Force	11.1	13.1
Number of Clusters	10	263
% Employment in Clusters	35.0%	22.1%
% Establishments in Clusters	25.9%	19.9%
Establishments	12,473	1,048,286
Compound Annual Growth 1998-2005	2.8%	1.1%
Average Household Income	$ 65,737	$ 58,360
Average Employment Income	$ 33,985	$ 31,757

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4/19/2006

1 - Demographics   Kitchener

Population	1996	2001	% Change 1996-2001
Kitchener	382,925	414,275	8.2%
Canada	28,846,770	30,007,085	4.0%

Age Groups	Under 15	15 to 64	65 and over	% 15 to 64
Kitchener	85,065	282,790	46,430	68.3%
Canada	5,725,540	20,393,000	3,888,545	68.0%

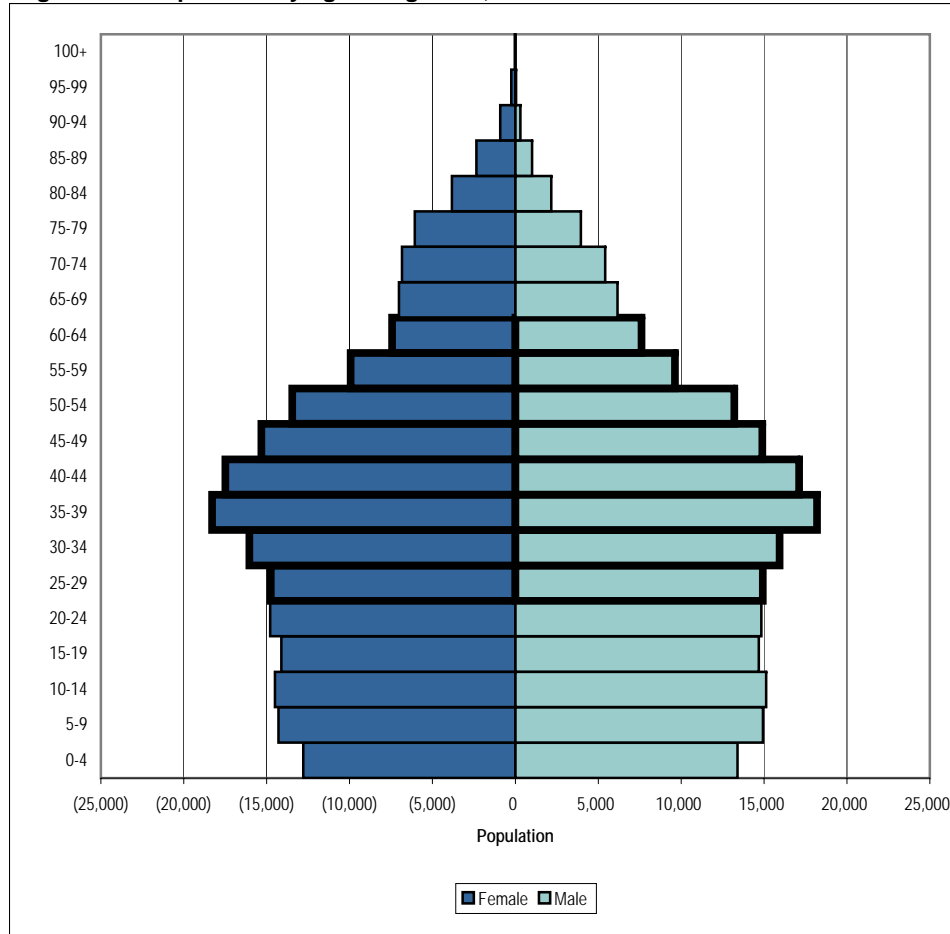**Figure 1.1 - Population by age and gender, 2001**

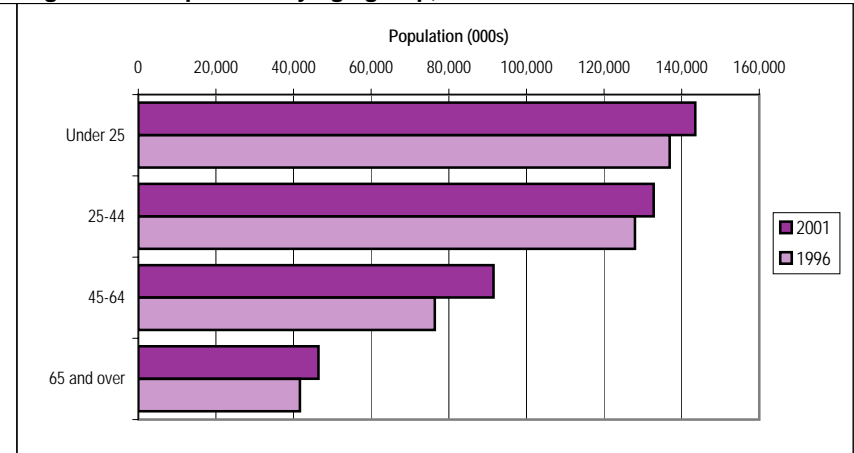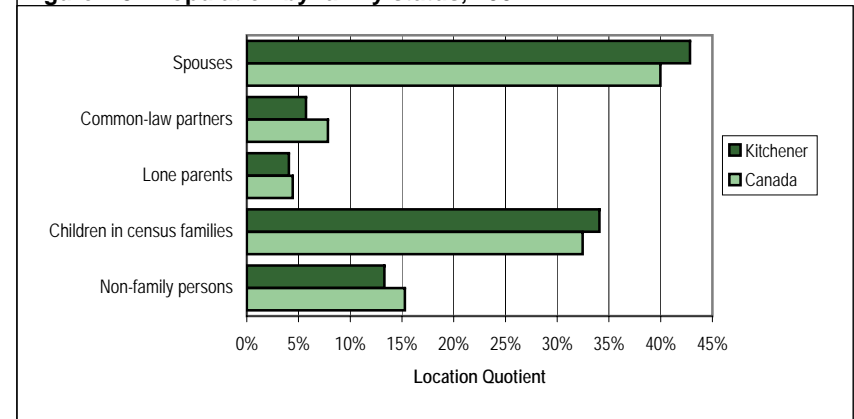**Figure 1.2 - Population by age group, 1996-2001**

Figure 1.3 - Population by family status, 2001

2 - Migration & Population Change — Kitchener

Domestic Migration	Intra-provincial	Inter-provincial	Total
In-flows, 1996-2001	37,660	9,240	46,900
Out-flows, 1996-2001	33,300	5,945	39,245
Net, 1996-2001	4,360	3,295	7,655

	% Foreign born	Migrated post-1991	Migrated pre-1991
Kitchener	21.9%	6.3%	15.6%
Canada	18.2%	6.1%	12.1%

Figure 2.1 - Domestic migration flows between 1996 and 2001 by age

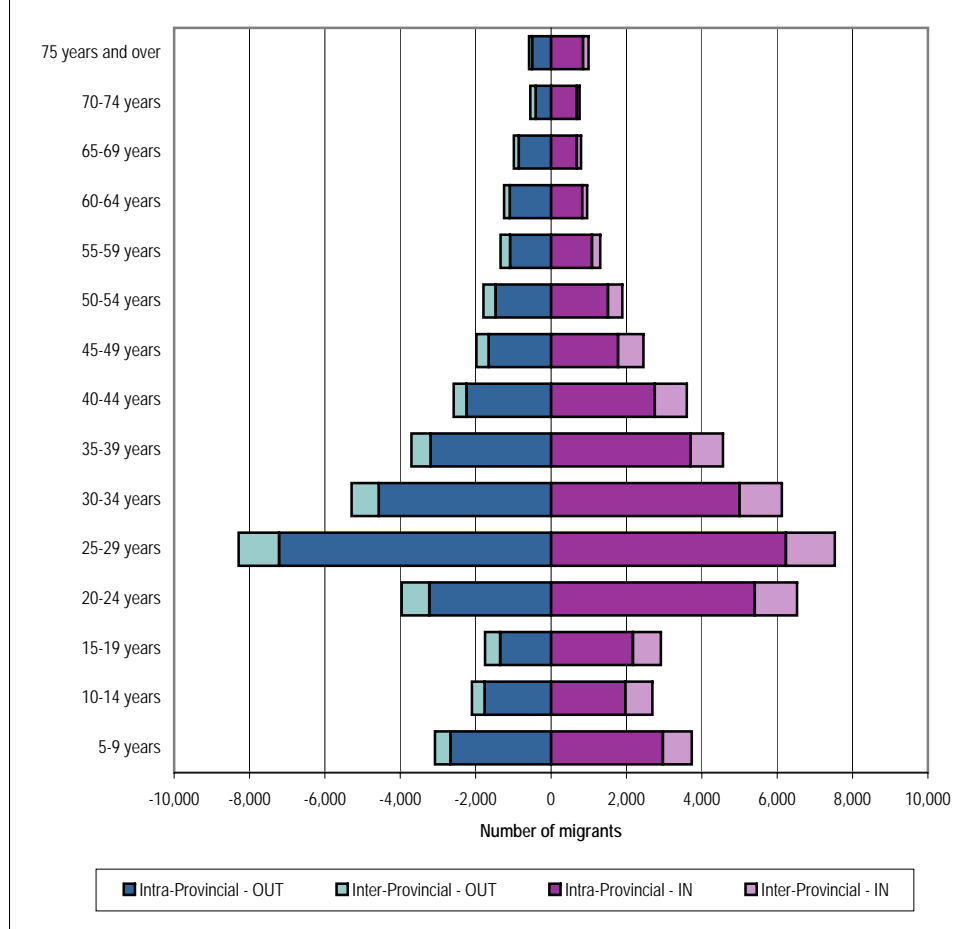### Figure 2.2 - Population by place of birth, 2001

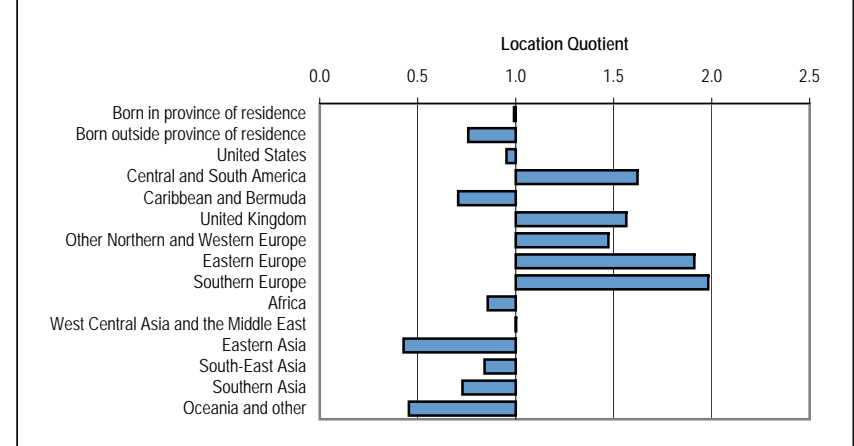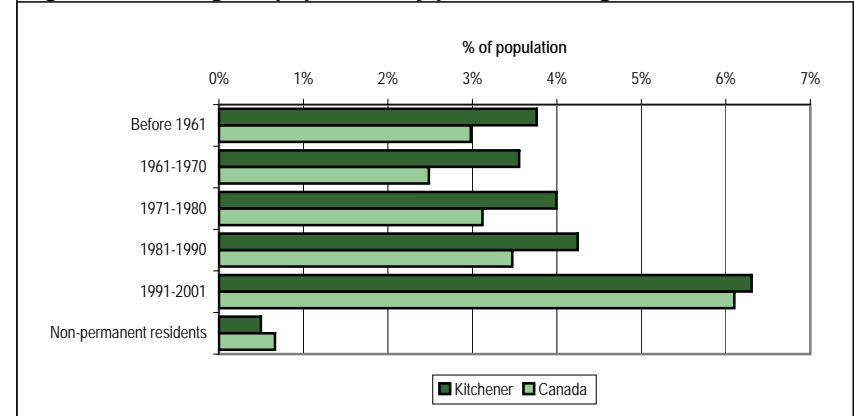### Figure 2.3 - Immigrant population by period of immigration, 2001

3 - Education   Kitchener

	% College degree or higher[1]	% BA degree or higher[1]	% MA degree or higher[1]	PhDs per 1,000[1]
Kitchener	32.6%	15.5%	3.5%	7.8
Canada	32.9%	15.4%	3.2%	5.4

	Average years of schooling[1]		
	1991	1996	2001
Kitchener	12.3	12.6	13.0
Canada	12.0	12.3	12.8

Figure 3.1 - Educational attainment for the population 15 years and over, 2001
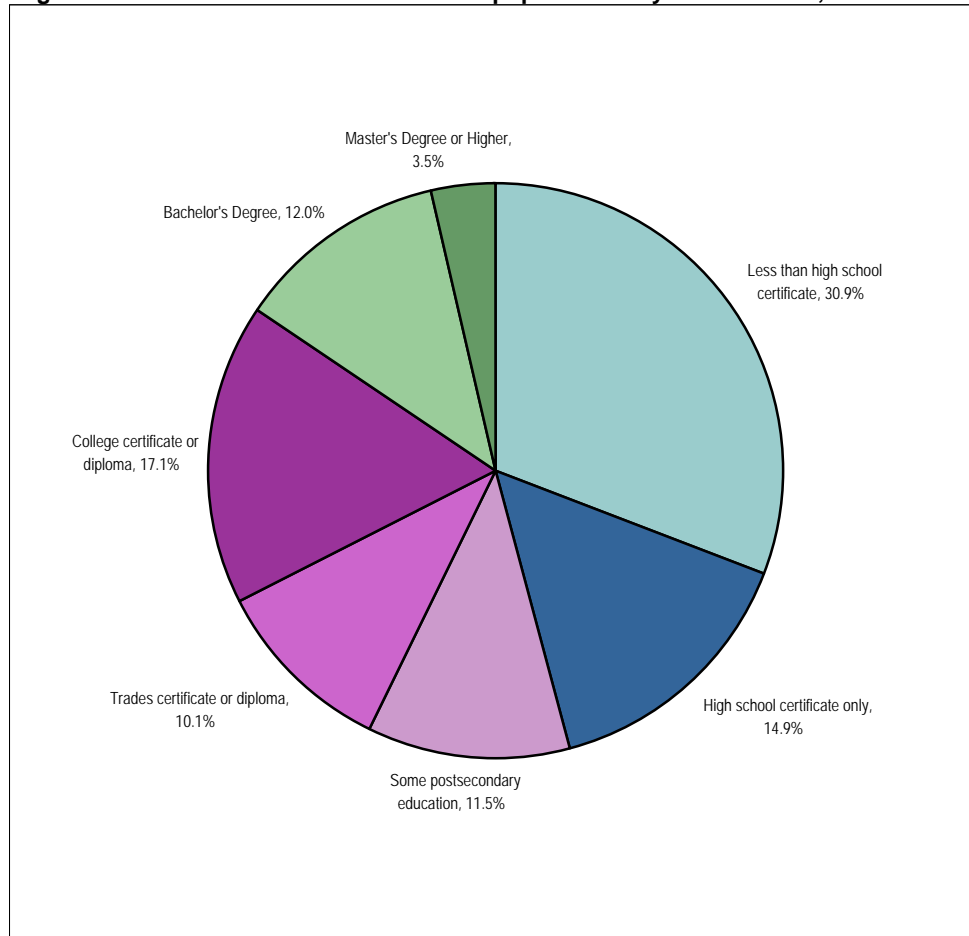

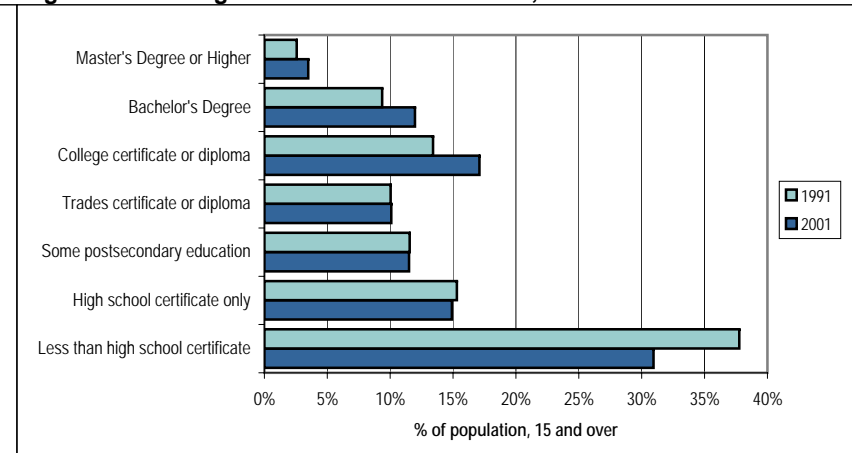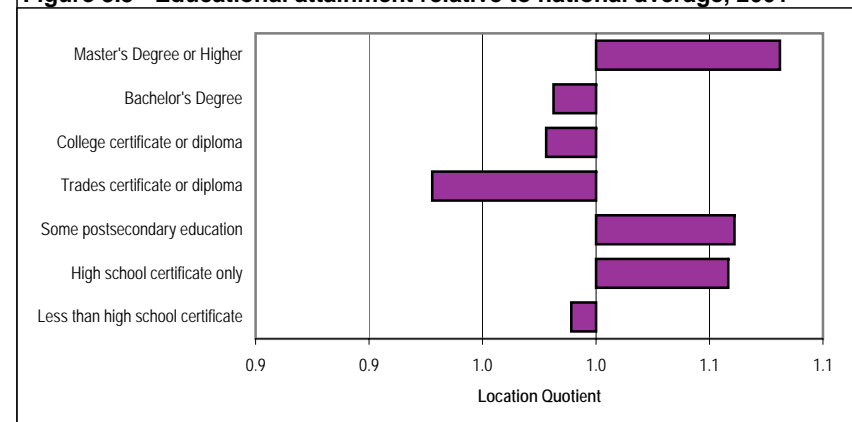
Figure 3.2 - Change in educational attainment, 1991-2001

Figure 3.3 - Educational attainment relative to national average, 2001

4 - Employment   Kitchener

	Employment Rate[2]		Unemployment Rate[3]	
	1991	**2001**	**1991**	**2001**
Kitchener	66.3%	67.8%	9.0%	5.5%
Canada	61.0%	61.5%	10.2%	7.4%

Average hours worked per	Female		Male	
week	**1991**	**2001**	**1991**	**2001**
Kitchener	33.3	34.7	40.7	42.2
Canada	34.0	34.7	41.6	42.1

Figure 4.1 - Labour force status of the population 15 and over, 2001
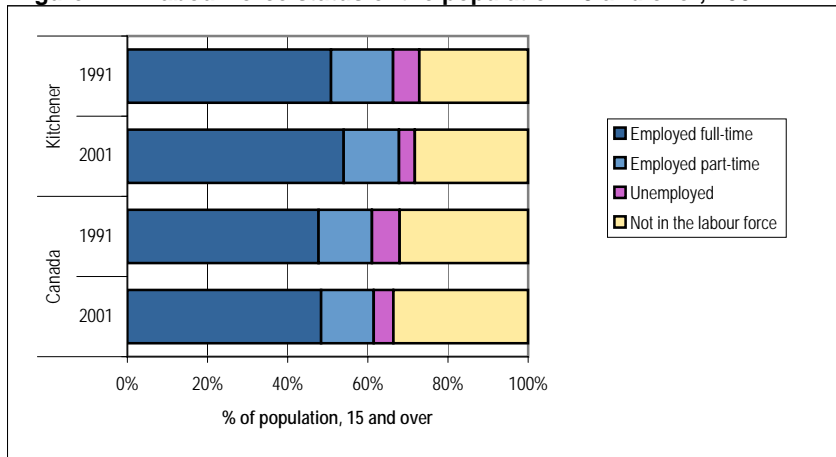

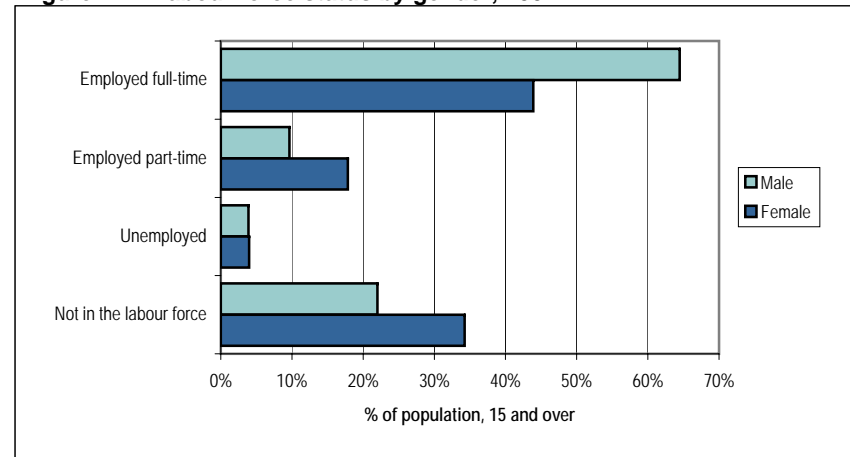**Figure 4.2 - Labour force status by gender, 2001**

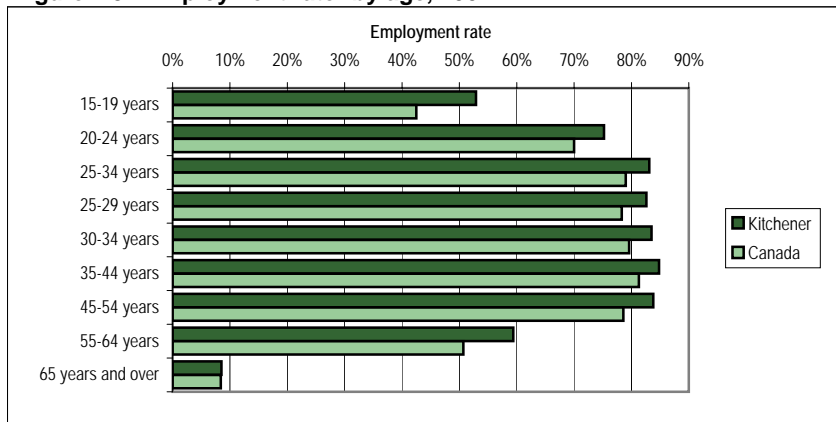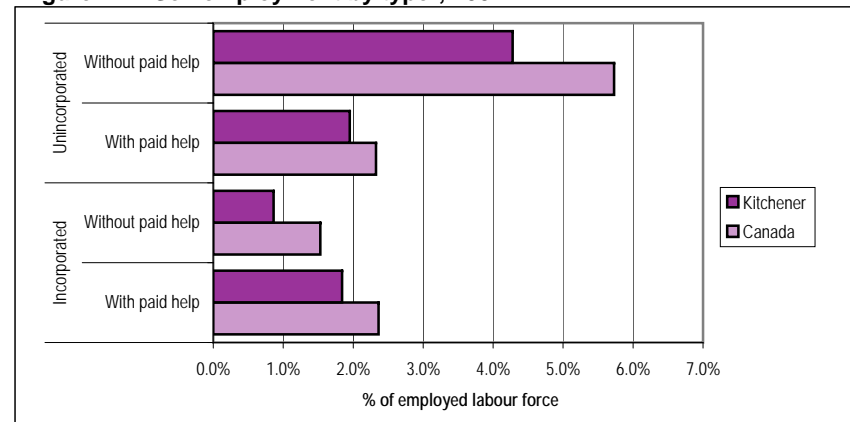**Figure 4.3 - Employment rate[2] by age, 2001**

Figure 4.4 - Self employment by type[4], 2001

5 - Occupational Structure Kitchener

	A-B Management, business & finance occupations			C-F Natural/social science, health, education & artistic occupations			G-J Sales/service, trades & manual labour occupations		
	1991	**1996**	**2001**	**1991**	**1996**	**2001**	**1991**	**1996**	**2001**
Kitchener	27.8%	27.4%	27.9%	17.2%	18.3%	19.5%	55.0%	54.3%	52.6%
Canada	28.6%	27.8%	28.2%	18.8%	19.8%	21.3%	52.5%	52.4%	50.5%

Figure 5.1 - Occupational structure, 2001

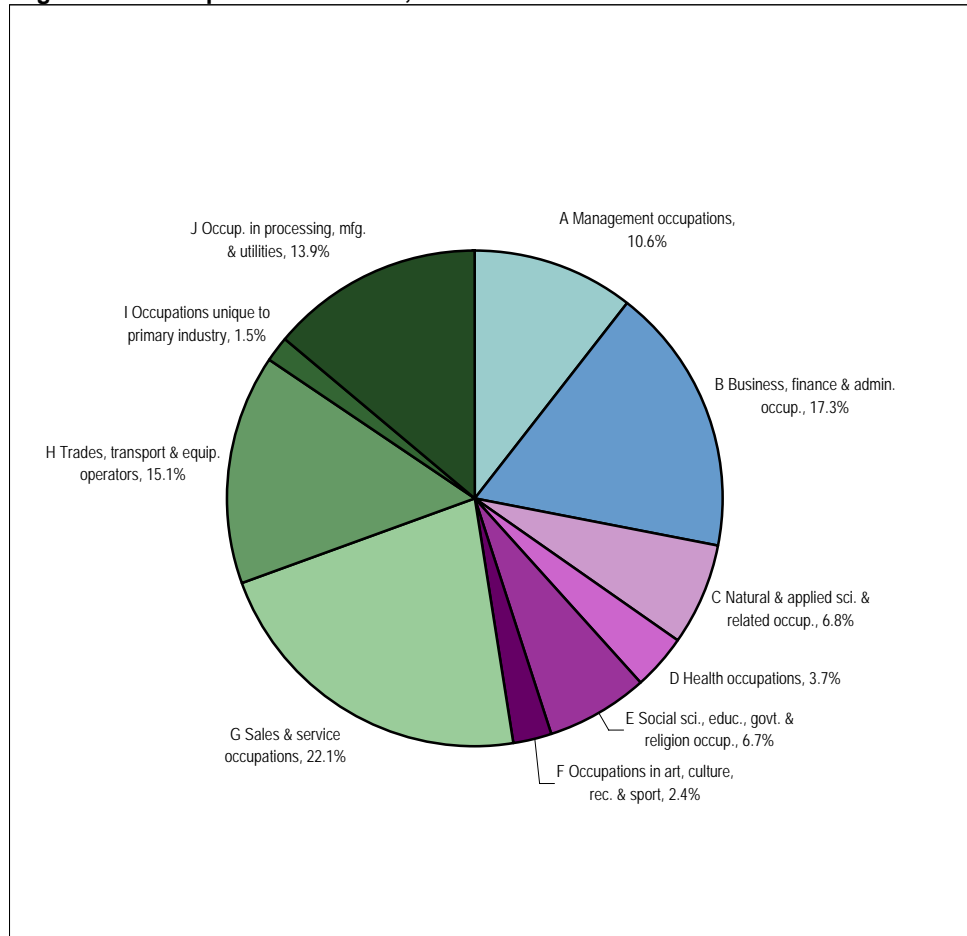**Figure 5.2 - Change in occupational specialization, 1991-2001**
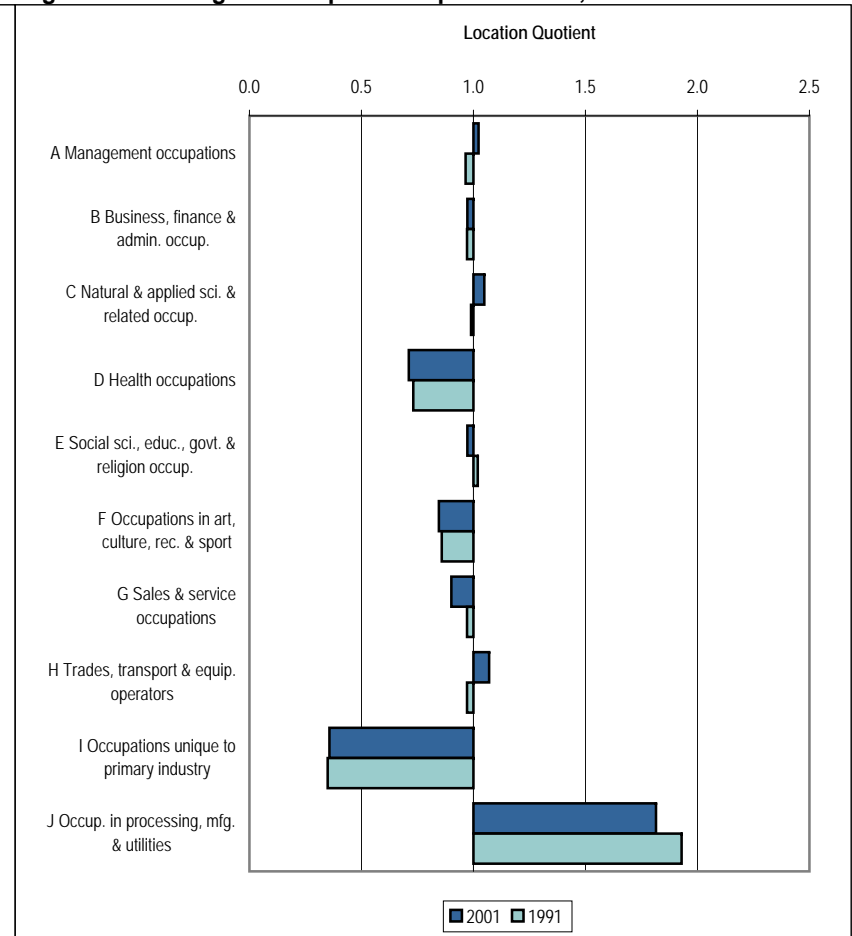
6 - Creative Occupations   Kitchener

	Bohemians	Bohemians per 1000[5]	S&T Workers	% S&T Workers[6]
Kitchener	2,555	11.1	15,540	6.8%
Canada	204,305	13.1	1,003,810	6.4%

Occupational Groups[7]	Creative	Service	Trades & Manual	Agricultural
Kitchener	32.1%	37.4%	29.5%	0.9%
Canada	29.2%	42.7%	23.9%	4.3%

Figure 6.1 - Specialization in creative occupations

Figure 6.2 - Change in share of labour force, 1991-2001

Figure 6.3 - In-migration of creative workers between 1996 & 2001

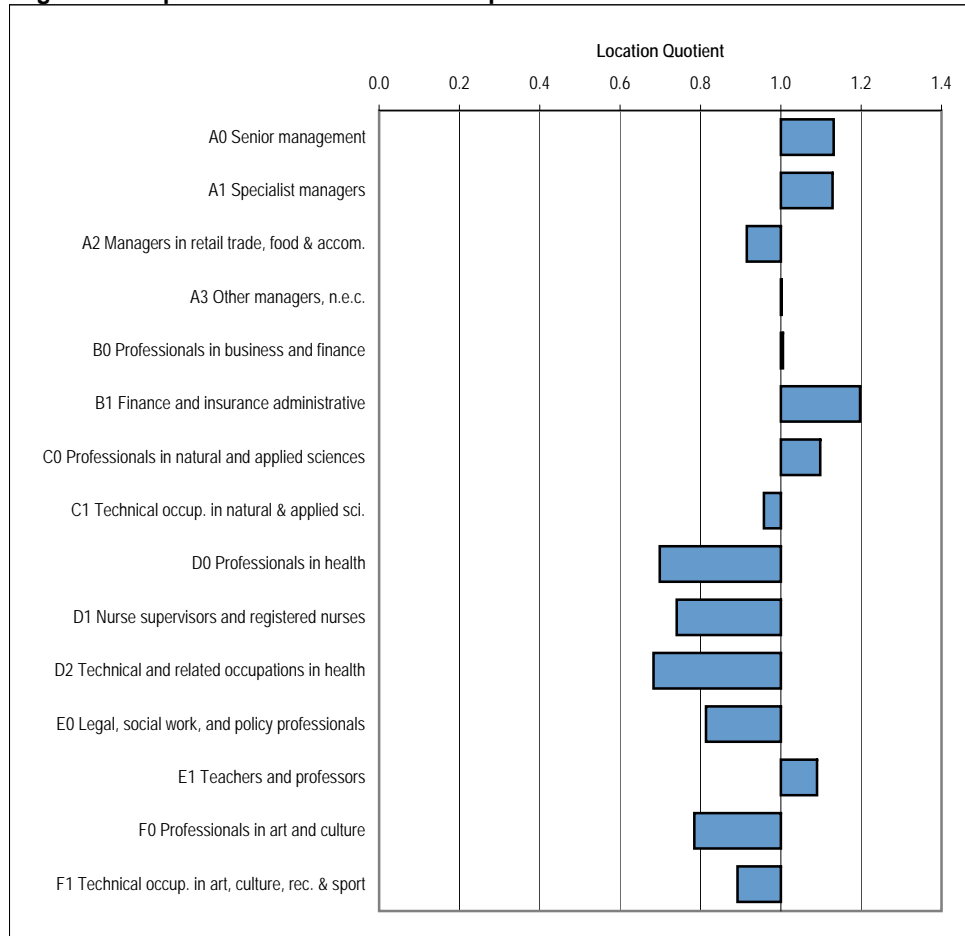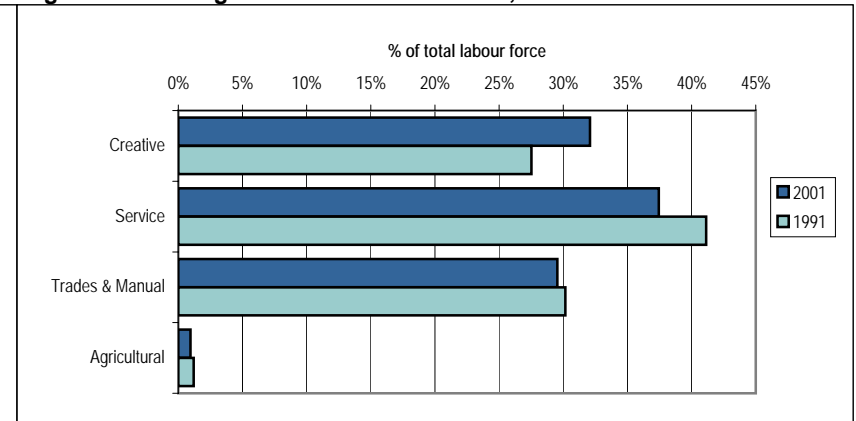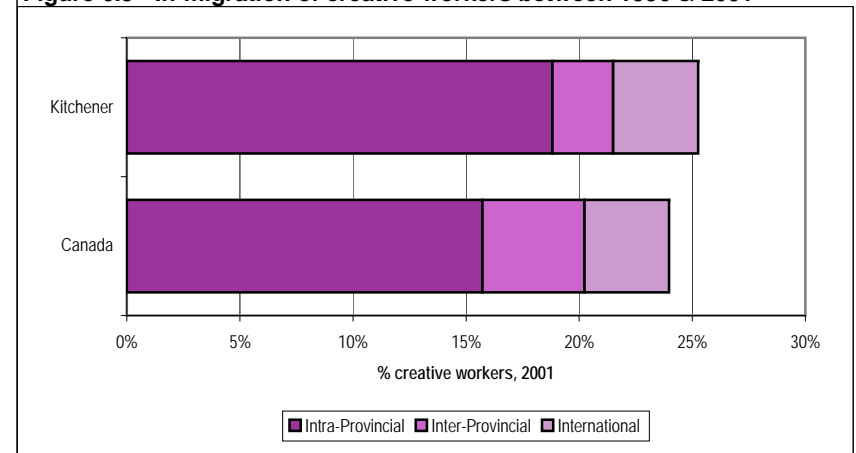# 7 - Industrial Structure — Kitchener

Figure 7.1 - Industry characteristics

	# Labour force	% Labour force	% BA or higher	% Creative occups.	Average income
All industries	248,315	100.0%	18.0%	32.1%	$ 34,274
11 Agr., forestry, fish. & hunt.	2,350	0.9%	7.4%	6.9%	$ 21,494
21 Mining & oil/gas extraction	200	0.1%	17.9%	23.1%	$ -
22 Utilities	890	0.4%	15.2%	29.2%	$ 48,268
23 Construction	13,765	5.5%	4.9%	17.9%	$ 38,674
31-33 Manufacturing	63,345	25.5%	9.5%	19.9%	$ 40,475
41 Wholesale trade	11,655	4.7%	13.1%	29.4%	$ 40,856
44-45 Retail trade	27,360	11.0%	8.9%	21.8%	$ 21,705
48-49 Transport & warehousing	9,885	4.0%	6.0%	12.9%	$ 36,945
51 Information & cultural ind.	5,070	2.0%	26.6%	52.7%	$ 35,286
52 Finance and insurance	13,115	5.3%	29.1%	56.2%	$ 44,386
53 Real estate/rental & leasing	3,410	1.4%	13.8%	20.8%	$ 35,042
54 Prof., sci. & tech. services	13,745	5.5%	41.7%	72.8%	$ 45,348
55 Mgmt. of companies	1,120	0.5%	39.5%	65.6%	$ 43,607
56 Admin./support, & wst. mgt.	9,270	3.7%	8.8%	13.4%	$ 20,223
61 Educational services	17,740	7.1%	62.2%	73.7%	$ 37,290
62 Health care & soc. assist.	18,415	7.4%	24.5%	44.5%	$ 32,539
71 Arts, entertainment & rec.	3,945	1.6%	19.7%	49.3%	$ 19,729
72 Accom. & food services	14,345	5.8%	5.7%	14.7%	$ 12,150
81 Other services	11,200	4.5%	12.5%	24.4%	$ 25,999
91 Public administration	7,500	3.0%	27.4%	37.9%	$ 39,408

Figure 7.2 - Industrial specialization - Employment
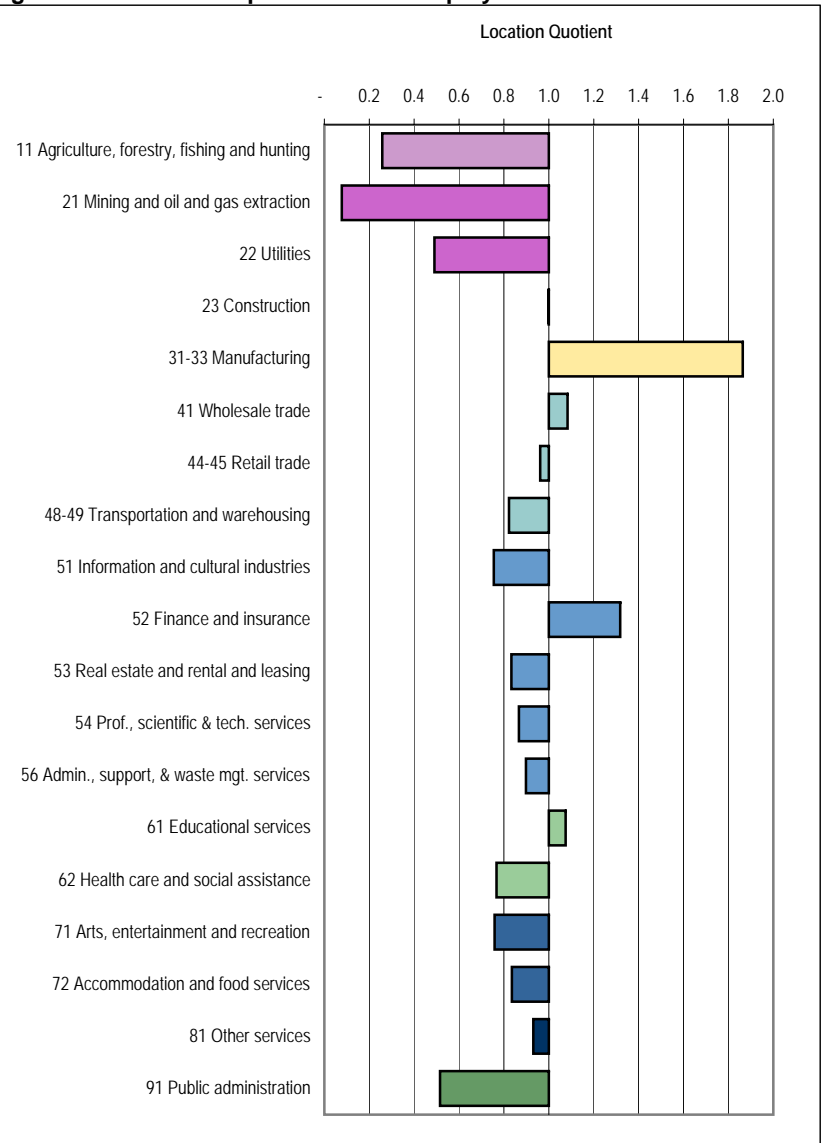
8 - Clusters

Kitchener

Number of clusters[8]	10
% employment in clusters[8]	35.0%
% establishments in clusters[8]	25.9%

Figure 8.1 - Cluster characteristics, 2001[8]

	# Labour force	Labour force LQ	% Industry LQs > 1	Cluster (yes/no)
Resource-based				
Agriculture	9,425	0.88	46.7%	NO
Mining	800	0.21	0.0%	NO
Oil and Gas	1,610	0.61	11.1%	NO
Wood & Wood Products	1,285	0.24	10.0%	NO
Maritime	295	0.13	0.0%	NO
Manufacturing				
Textiles & Apparel	4,480	1.58	75.0%	YES
Food	8,250	1.28	33.3%	NO
Steel	7,780	1.62	58.3%	YES
Automotive	22,130	3.30	92.3%	YES
Plastics & Rubber	11,125	1.81	85.7%	YES
Biomedical	2,565	1.33	50.0%	YES
ICT Manufacturing	7,165	2.00	55.6%	YES
Service-based				
ICT Services	11,615	1.25	66.7%	YES
Finance	15,710	1.26	60.0%	YES
Business Services	20,395	1.07	56.3%	YES
Creative & Cultural	5,250	0.80	25.0%	NO
Higher Education	7,840	1.46	50.0%	YES
Other				
Construction	6,745	0.89	16.7%	NO
Logistics	10,560	0.92	50.0%	NO

Figure 8.2 - Employment by industry category, 2001[9]
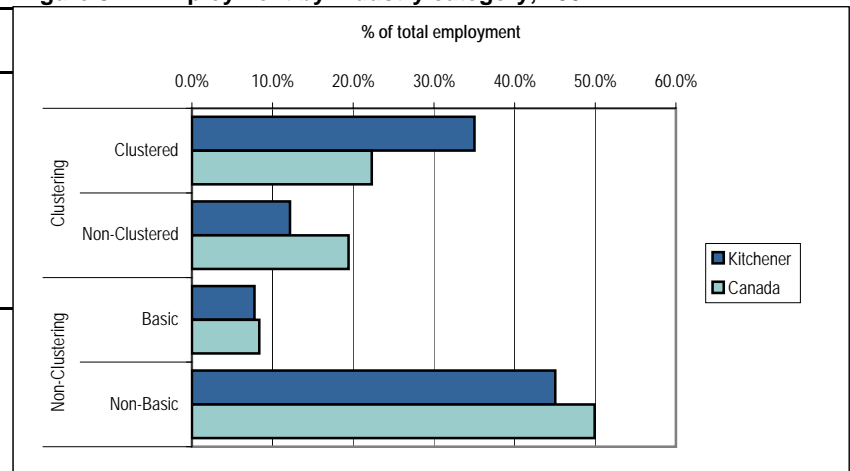
Figure 8.3 - Establishment growth by industry category, 1998-2005[9,10]
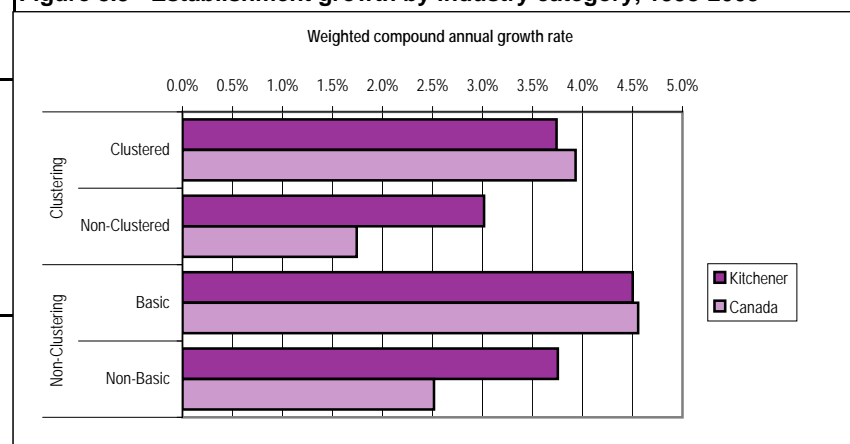
9 - Establishments

Kitchener

	Establishments		
	1998	**2005**	**Growth[11]**
Kitchener	11,065	12,349	1.58%
Canada	1,001,517	1,048,286	0.65%

	Less than 5 emp.	**5 to 199 emp.**	**More than 500 emp.**
Kitchener	49.2%	49.5%	41
Canada	56.5%	42.5%	2,916

Figure 9.1 - Establishment growth by industry, 1998-2005[11]

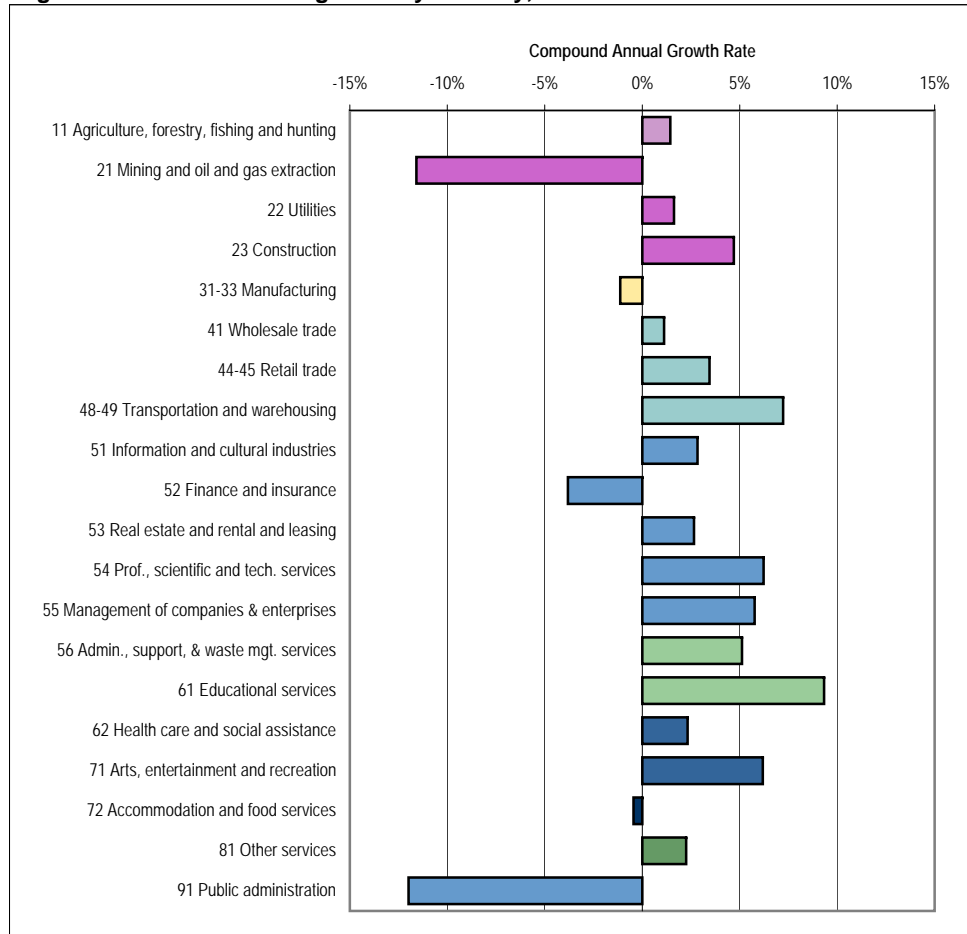### Figure 9.2 - Industrial specialization - Establishments, 2005

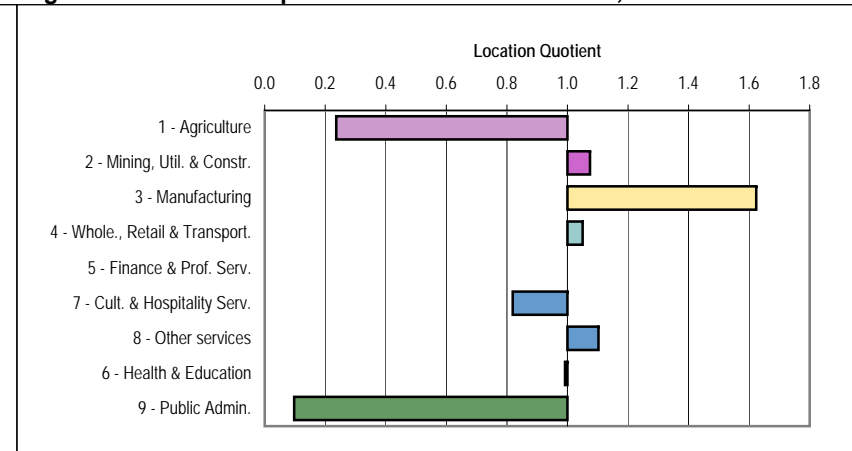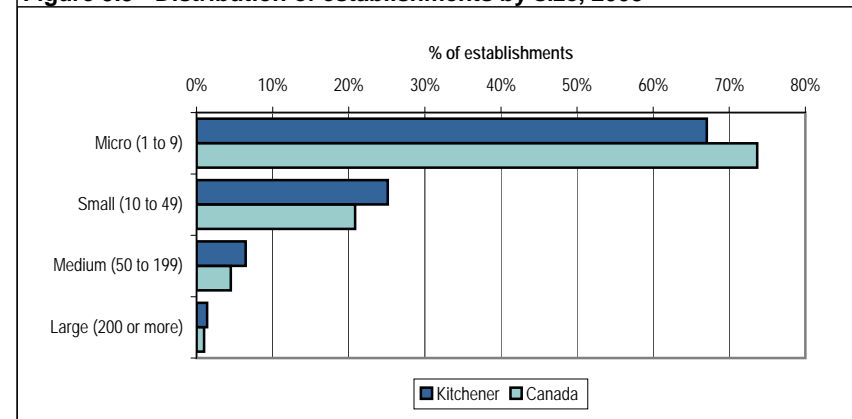### Figure 9.3 - Distribution of establishments by size, 2005

10 - Income   Kitchener

Household income[12]	Average		Median		% below LICO[13]
Kitchener	$	65,737	$	55,528	11.3
Canada	$	58,360	$	46,752	16.2

Individual income[12]	Average total		Average emp.	
Kitchener	$	32,457	$	33,985
Canada	$	29,769	$	31,757

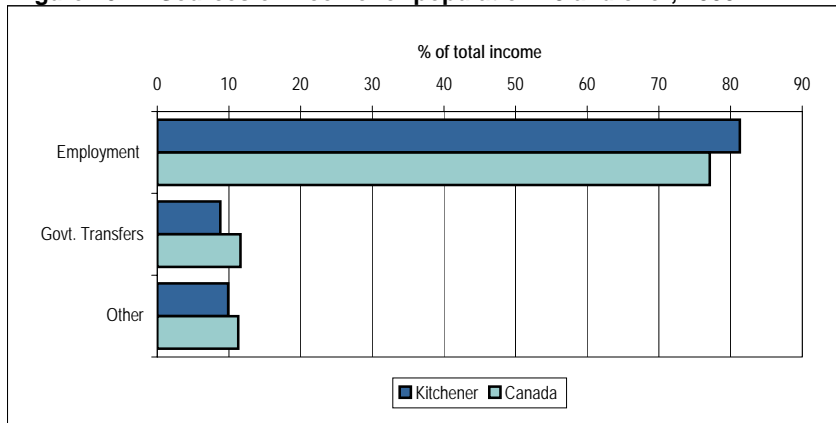### Figure 10.1 - Sources of income for population 15 and over, 2000

Figure 10.2 - Distribution of total income for pop. 15 and over, 2000
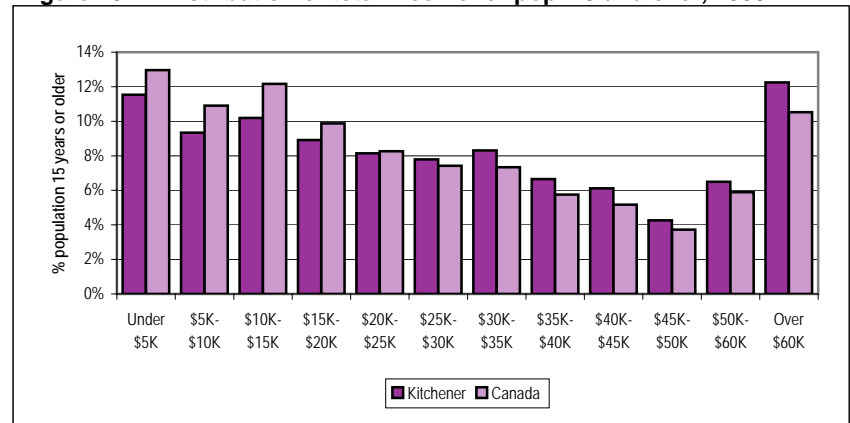

Figure 10.3 - Distribution of household income, 2000
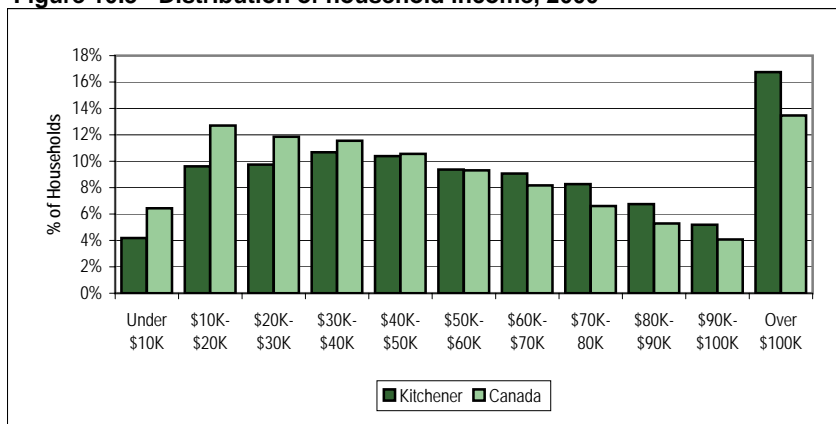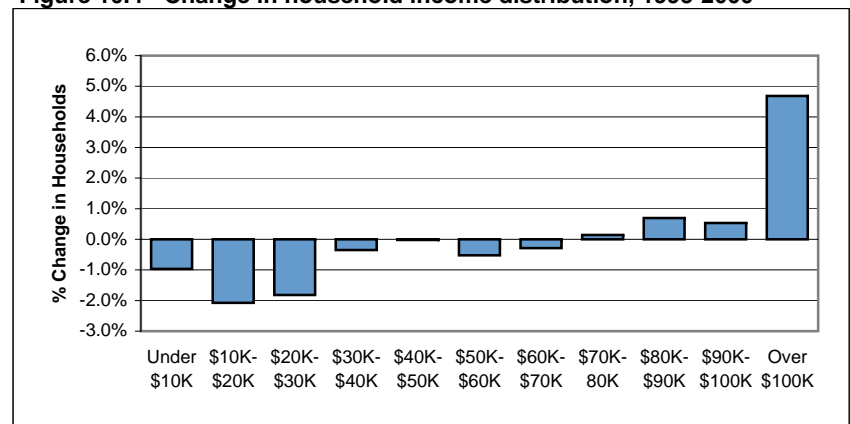

Figure 10.4 - Change in household income distribution, 1995-2000*

*Constant dollars (2000)

Notes

[1] All educational attainment statistics are calculated for the population 15 years and over.

[2] 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).

[3] 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.

[4] 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.

[5] 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).

[6] 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).

[7] 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.

[8] 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.

[9] The method for identifying and defining cluster is based on previous ISRN work (see Spencer and Vinodrai 2005). 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).

[10] Growth is calculated as a weighted compound annual growth rate (CAGR). The growth rate is weighted according to the size distribution of establishments within a particular group of industries in a place.

[11] Growth is measured as a compound annual growth rate (CAGR).

[12] Canadian censuses were conducted in 1996 and 2001. Income data relate to the calendar year prior to the census year, i.e. 1995 and 2000 respectively.

[13] Low income cut-offs (LICO) are established by Statistics Canada based on national family expenditure patterns on food, shelter, and clothing. LICOs reflect a consistent and well-defined methodology that identifies those who are substantially worse-off than average.

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Last Updated: April 19, 2006