Innovation Systems Research Network City-Region Profile, 2006

Kitchener

Gregory M. Spencer^a and Tara Vinodrai^b

^aPost Doctoral Research Fellow Program on Globalization and Regional Innovation Systems (PROGRIS) Munk Centre for International Studies University of Toronto

^bAssistant Professor Department of Geography and Environmental Management and Centre for Environment and Business University of Waterloo

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Summary and Highlights

Key Indicators	Kitchener	Canada
Population, 2006	451,240	31,612,890
Population Change, 2001-2006	8.9%	5.4%
% Foreign Born	23.1%	19.8%
% BA Degree or higher	18.4%	18.1%
# Employed	242,830	15,958,195
Employment Growth 1996-2006	26.4%	19.8%
Employment Rate	67.5%	62.4%
Unemployment Rate	5.6%	6.6%
% 'Creative' occupations	32.1%	33.2%
% Science & Tech. Occupations	7.5%	6.6%
'Bohemians' per 1,000 Labour Force	12.2	14.2
Number of Industrial Clusters	7	255
% Employment in Clusters	20.3%	22.1%
Average FT Employment Income	\$ 53,510	\$ 51,221
% Change Average Income 2000-2005	6.1%	5.5%

65 and over

52.280

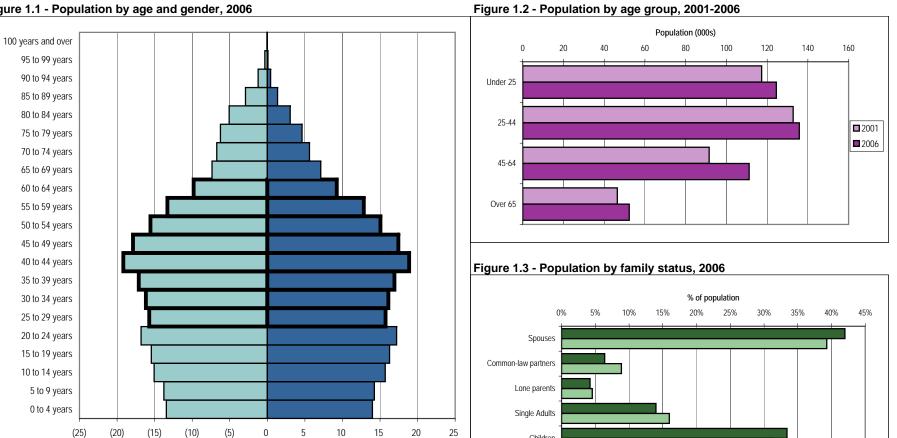
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1 - Demographics

Population	2001	2006	% Change 2001-2006
Kitchener	414,285	451,240	8.9%
Canada	30,007,085	31,612,890	5.4%

Population (000s) Females Males

Figure 1.1 - Population by age and gender, 2006



Children

Age Groups

Kitchener

Canada

Under 15

124,530

9.800.715

15 to 64

Kitchener Canada

246,980

17.476.925

Kitchener

% 15 to 64

58.3%

55.3%

Migrated pre-

1991

13.8%

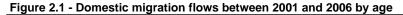
10.9%

Kitchener

2 - Migration & Population Change

Domestic Migration	Intra- provincial	Inter- provincial	Total
In-flows, 2001-2006	40,540	6,690	47,230
Out-flows, 2001-2006	35,600	6,850	42,450
Net, 2001-2006	4,940	(160)	4,780

Net, 2001-2006	4,940	(160)	4,780



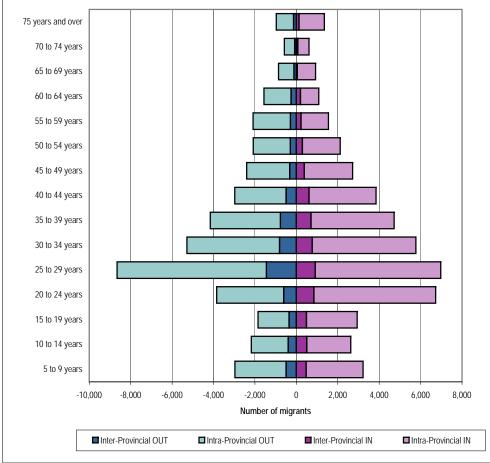


Figure 2.2 - Population by place of birth, 2006

Kitchener

Canada

% Foreign

born

23.1%

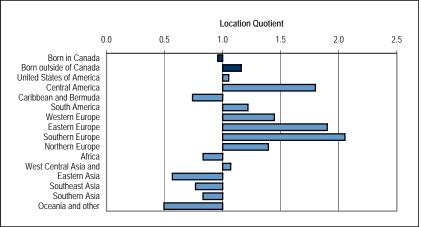
19.8%

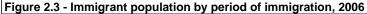
Migrated

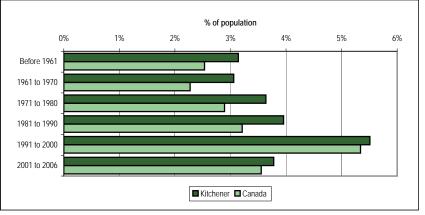
post-1991

9.3%

8.9%



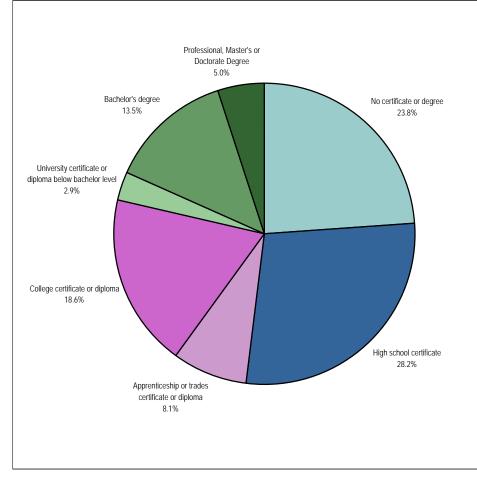




3 - Education

	% College degree or higher ¹	% BA degree or higher ¹	% MA degree or higher ¹	PhDs per 1,000 ¹
Kitchener	39.9%	18.4%	5.0%	9.5
Canada	39.8%	18.1%	4.6%	6.9

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



% BA degree or higher 2001 2006 Kitchener 15.5% 18.4% Canada 15.4% 18.1%

Figure 3.2 - Location of study for highest qualification, 2006

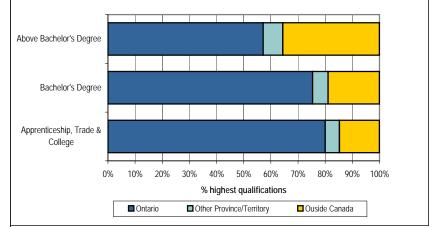
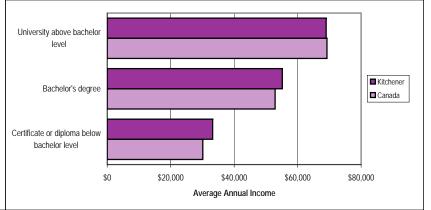


Figure 3.3 - Average annual income by level of qualification, 2006



4 - Employment

—	Employment Rate						
	1996	2001	2006				
Kitchener	64.8%	67.8%	67.5%				
Canada	58.9%	61.5%	62.4%				

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

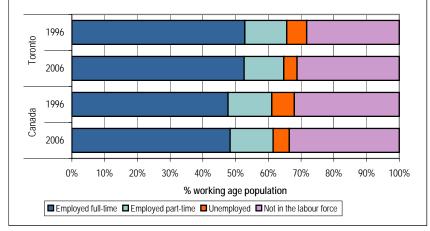
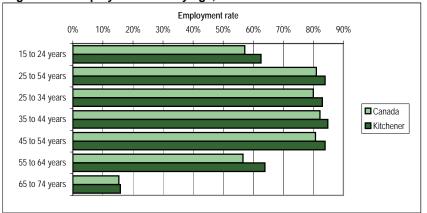
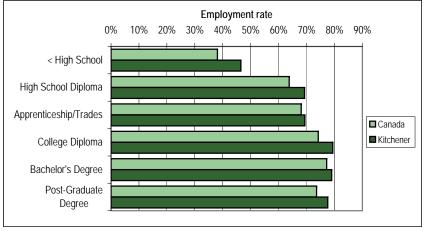


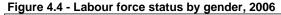
Figure 4.3 - Employment rate² by age, 2006

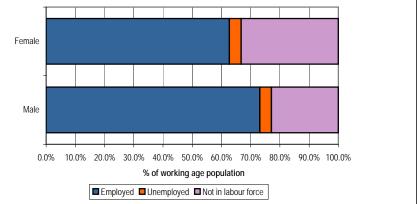


_	Unemployment Rate						
	1996	2001	2006				
Kitchener	8.1%	5.5%	5.6%				
Canada	10.1%	7.4%	6.6%				

Figure 4.2 - Employment Rate by Educational Attainment, 2006





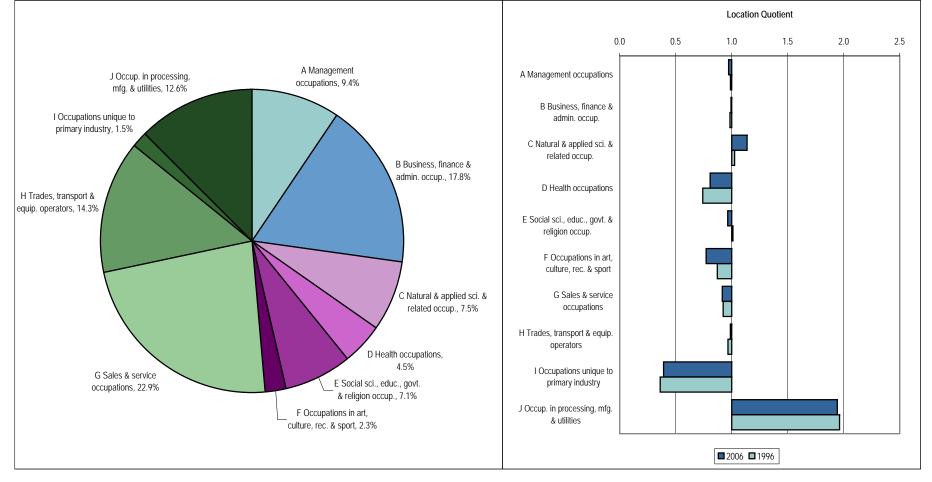


5 - Occupational Structure

	A-B Manage	ement, busines occupations	ss & finance		al/social scien	, ,		service, trades	
	1996	2001	2006	1996	2001	2006	1996	2001	2006
Kitchener	27.4%	27.9%	27.2%	18.3%	19.5%	21.4%	54.3%	52.6%	51.3%
Canada	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



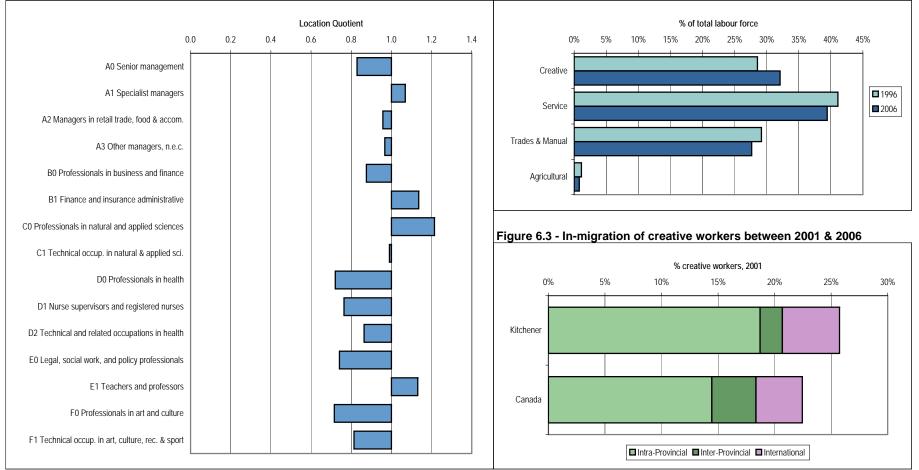
6 - Creative Occupations

	Bohemians	% S&T Workers ⁶		
Kitchener	3,105	12.2	19,015	7.5%
Canada	240,170	14.2	1,108,050	6.6%

Figure 6.1 - Specialization in creative occupations

Occupational Groups ⁷	Creative	Service	Trades & Manual	Agricultural & Resources
Kitchener	32.1%	39.4%	27.7%	0.8%
Canada	33.2%	41.9%	21.9%	2.9%

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



7 - Industrial Structure

Kitchener

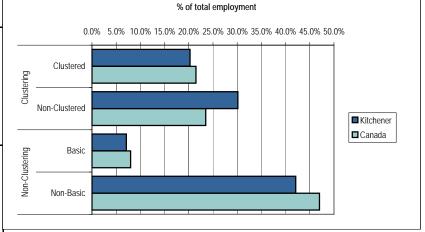
	# Labour	% Labour	% Change	% BA or	Av	erage FT						Loca	tion	n Qua	otient	i		
	force	force	2001-2006	higher	i	ncome		0.0	0.5	1.0	1.5	2.0	2.5	5 3.	03	.5 4.0	J 4.	.5 E
All industries	254,520	100.0%	10.7%	21.3%	\$	53,510	11 Agriculture, forestry, fishing and hunting	Ī					1					
							21 Mining and oil and gas extraction											
11 Agr., forestry, fish. & hunt.	2,240	0.9%	3.7%	10.3%	\$	32,591	22 Utilities		Ľ,									
21 Mining & oil/gas extraction	275	0.1%	41.0%	18.2%	\$	52,068												
22 Utilities	1,330	0.5%	54.7%	15.8%	\$	60,883	23 Construction			Ľ								1
23 Construction	15,525	6.1%	19.7%	6.4%	\$	52,310	31-33 Manufacturing											
							41 Wholesale trade											
31-33 Manufacturing	57,730	22.7%	-3.5%	13.1%	\$	56,149	44-45 Retail trade			Ī								
41 Wholesale trade	13,030	5.1%	18.7%	14.7%	\$	58,537	48-49 Transportation and warehousing											
44-45 Retail trade	27,960	11.0%	12.3%	10.3%	\$	43,025												1
48-49 Transport & warehousing	10,190	4.0%	8.4%	7.8%	\$	46,645	51 Information and cultural industries											
							52 Finance and insurance											1
51 Information & cultural ind.	5,160	2.0%	11.0%	30.0%	\$	53,217	53 Real estate and rental and leasing			q								1
52 Finance and insurance	14,140	5.6%	14.4%	33.0%	\$	63,402	55 Real estate and rental and leasing			_								1
53 Real estate/rental & leasing	4,105	1.6%	28.5%	16.1%	\$	49,987	54 Professional, scientific and technical services											1
54 Prof., sci. & tech. services	15,570	6.1%	23.8%	47.0%	\$	75,811	55 Management of companies and enterprises											٦
55 Mgmt. of companies	345	0.1%	-67.1%	36.2%	\$	67,569												-
56 Admin./support, & wst. mgt.	10,910	4.3%	36.0%	11.7%	\$	36,152	56 Administrative and support, waste management and remediation services			Ц								
							61 Educational services			L								1
61 Educational services	19,485	7.7%	20.3%	65.3%	\$	58,684				┍┛								1
62 Health care & soc. assist.	20,725	8.1%	21.1%	27.0%	\$	49,495	62 Health care and social assistance											
							71 Arts, entertainment and recreation											1
71 Arts, entertainment & rec.	3,305	1.3%	-2.8%	23.8%	\$	37,193	72 Accommodation and food services			P								1
72 Accom. & food services	14,570	5.7%	13.0%	7.4%	\$	25,056												
81 Other services	10,635	4.2%	3.5%	16.4%	\$	37,690	81 Other services (except public administration)			ď								l
OI OUIEI SEIVICES	10,035	4.270	3.0%	10.470	φ	37,090	91 Public administration											
91 Public administration	7,295	2.9%	6.0%	27.9%	\$	59,503	4						01	200	×			

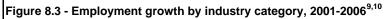
8 - Clusters

Number of clusters ⁸	7
% employment in clusters ⁸	20.3%

Figure 8.1 - Cluster characteristics, 2006⁸

	# Labour force	Labour force LQ	% Industry LQs > 1	% Growth 2001-2006	Cluster (yes/no)
Resource-based					
Agriculture	10,065	0.95	60.0%	6.8%	NO
Mining	1,105	0.24	0.0%	39.0%	NO
Oil and Gas	1,490	0.40	22.2%	-7.5%	NO
Wood & Wood Products	1,450	0.30	0.0%	12.8%	NO
Maritime	285	0.13	0.0%	-3.4%	NO
Manufacturing					
Textiles & Apparel	2,470	1.21	50.0%	-44.6%	YES
Food	9,945	1.40	41.7%	20.5%	NO
Steel	7,395	1.50	66.7%	-4.9%	YES
Automotive	21,475	3.18	84.6%	-2.9%	YES
Plastics & Rubber	10,660	1.76	78.6%	-4.1%	YES
Biomedical	2,840	1.24	50.0%	10.5%	YES
ICT Manufacturing	8,135	2.65	88.9%	13.7%	YES
Service-based					
ICT Services	15,405	1.27	30.0%	14.9%	NO
Finance	19,570	1.23	37.5%	11.8%	NO
Business Services	27,620	1.12	29.4%	25.8%	NO
Creative & Cultural	7,685	0.79	5.9%	9.2%	NO
Higher Education	12,265	1.47	44.4%	30.7%	NO
Other					
Construction	20,320	0.96	33.3%	21.5%	NO
Logistics	13,035	1.05	50.0%	23.7%	YES





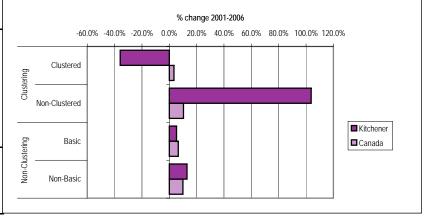
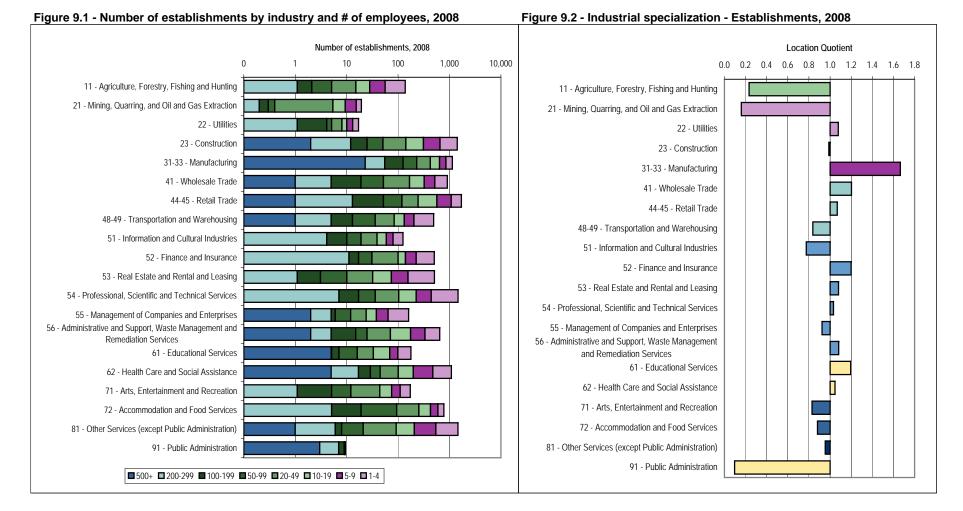


Figure 8.2 - Employment by industry category, 2006⁹

9 - Establishments

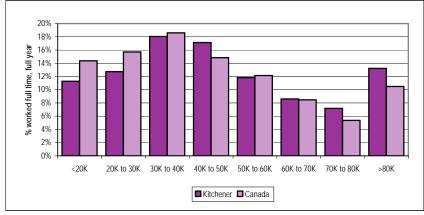
	% of establishments by number of employees							
	1-4	5-9	10-19	20-49	50-99	100-199	200-299	500+
Kitchener	49.6%	21.7%	13.3%	9.0%	3.4%	1.7%	0.9%	0.4%
Canada	55.0%	20.2%	12.1%	7.8%	2.7%	1.2%	0.6%	0.3%



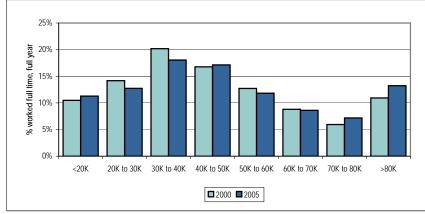
10 - Income

Full Time Employment					
Income, 2005		Average		Median	
Kitchener	\$	53,510	\$	44,274	
Canada	\$	51,221	\$	41,401	

Figure 10.1 - Distribution of FT Employment Income





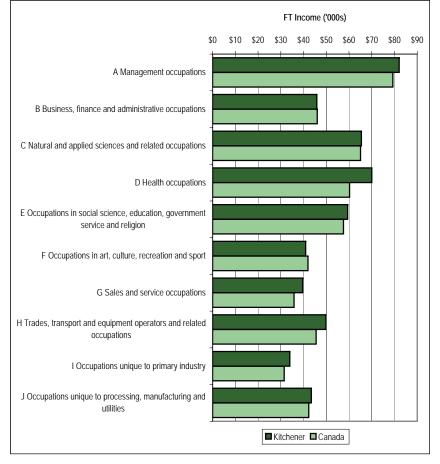


*Constant dollars (2005)

% Change in FT Emp.			
Income 2000-2005 ¹¹	Average	Median	
Kitchener	6.1%	3.6%	
Canada	5.5%	2.4%	

*Constant dollars (2005)

Figure 10.3 - Full time employment income by occupation, 2005



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 at 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: 10 Occupations unique to agriculture, excluding labourers; and 11 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 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.

⁹ 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. Basic industries for 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 (see above).

¹⁰ Growth is calculated as % change in total employment between 2001 and 2006.

¹¹ 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 <u>greg.spencer@utoronto.ca</u> Tara Vinodrai: (519) 579-3475 ext. 33278 or <u>tvinodra@uwaterloo.ca</u>

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