

## New Possibilities for Creative Class Workers Who Work in Declining Industries

There were 20 industries at the 3 digit NAICS code level that experienced net employment loss of over 50 workers between 2001 and 2006 in Waterloo Region. A total of 19% of the region's workforce was employed in industries that had experienced significant employment loss in the previous five years.



### DECLINING INDUSTRIES Waterloo Region (2001 to 2006)

Industry	Employment Change	Creative Class Content
Fabricated metal product manufacturing	-1,425	Low
Clothing manufacturing	-1,350	Low
Transportation equipment manufacturing	-590	Low
Textile mills	-510	Low
Electrical equipment, appliance and component manufacturing	-345	Average
Machinery manufacturing	-245	Average
Miscellaneous manufacturing	-220	Average
Farms	-165	Low
Credit intermediation and related activities	-130	High

Seven of the top 20 declining industries were in manufacturing.

Common creative class occupations in these declining manufacturing industries are:

- Mechanical engineers
- Industrial engineering and manufacturing technologists and technicians
- Sales, marketing and advertising managers
- Industrial and manufacturing engineers
- Senior managers - goods production, utilities, transportation and construction
- Mechanical engineering technologists and technicians



Common growth industries where creative class workers in declining manufacturing industries could possibly seek work are:

- Professional, scientific and technical services
- Computer and electronic product manufacturing
- Plastics and rubber products manufacturing
- Insurance carriers and related activities
- Specialty trade contractors
- Furniture and related product manufacturing
- Machinery, equipment and supplies wholesaler-distributors
- Construction of buildings
- Educational services
- Food manufacturing

## Project Partners



A copy of the full report is available for download from [www.workforceplanningboard.com](http://www.workforceplanningboard.com)



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# Creative Class Workers in Waterloo Region



Summary Report - September 2010

## What is the Creative Class?

The creative class is a socio-economic class identified as the key driving force for economic development of post-industrial cities. It is comprised of:

### Creative Professionals

These professionals are classic knowledge-based workers. They draw on complex bodies of knowledge to solve specific problems, using high degrees of education to do so. They include:

- Management occupations
- Business and financial operations occupations
- Legal occupations
- Healthcare practitioners and technical occupations
- High-end sales and sales management



### Super-Creative Core

Those belonging to this group fully engage in creative and innovative processes. Along with problem solving, their work may entail problem finding. They include:

- Computer and mathematical occupations
- Architecture and engineering occupations
- Life, physical, and social science occupations
- Education, training, and library occupations
- Arts, design, entertainment, sports, and media occupations

The employment growth rate of the creative class has been higher in Waterloo Region than Ontario, and in both geographies it has grown faster than the average of all occupations. Examined on its own, the super-creative core of the creative class had a higher growth rate than any class both provincially and locally. The creative class represents 31% of total employment in Waterloo Region and 34% of total employment in Ontario.

### WORKERS BY CLASS, 2006

	Workers in Waterloo Region	Share of Workforce		Growth Rate 2001 to 2006	
		Waterloo Region	Ontario	Waterloo Region	Ontario
Total All Occupations	238,465			12%	6%
Creative Class	74,115	31%	34%	14%	8%
Super Creative Core	39,325	17%	17%	23%	12%
Service Class	100,900	42%	45%	16%	9%
Working Class	59,210	25%	18%	3%	-2%
Fishing/Farming/Forestry	4,255	2%	2%	1%	-5%

# Concentrations of Creative Class Workers

## High Concentrations

Compared to provincial averages, the creative class occupations listed below are highly concentrated in Waterloo Region. Nearly half are found in Natural and applied science.

- Systems testing technicians
- Industrial engineering and manufacturing technologists and technicians
- Industrial and manufacturing engineers
- Software engineers
- Construction estimators
- Other professional occupations in physical sciences
- Other technical occupations in therapy and assessment
- Urban and land use planners
- Computer programmers and interactive media developers
- Electrical and electronics engineers
- Mechanical engineering technologists and technicians
- Medical sonographers
- Drafting technologists and technicians
- Electrical and electronics engineering technologists and technicians

- Sports officials and referees
- Dancers
- Graphic arts technicians
- Insurance, real estate and financial brokerage managers
- Engineering managers
- Land surveyors
- Optometrists
- Veterinarians
- Other professional occupations in health diagnosing and treating
- University professors
- Post-secondary teaching and research assistants
- Educational counselors
- Insurance underwriters
- Insurance adjusters and claims examiners



## Low Concentrations

There are many creative class occupations with an expectably low local concentration because the area's industrial composition doesn't support their employment. However certain occupations may be essential to any workforce and may be under-represented in Waterloo Region. These include:

- Architects
- Editors
- Occupational therapists
- Pharmacists
- Denturists
- Specialist physicians
- Chemists
- Medical laboratory technicians
- Medical laboratory technologists and pathologists' assistants
- Specialists in human resources
- Professional occupations in public relations and communications

- Professional occupations in business services to management
- Database analysts and data administrators
- Respiratory therapists, clinical perfusionists and cardio-pulmonary technologists
- Painters, sculptors and other visual artists
- General practitioners and family physicians
- Industrial instrument technicians and mechanics
- Head nurses and supervisors
- Veterinary and animal health technologists and technicians
- Registered nurses



# Creative Class Workers by Industry

## HIGH CREATIVE CLASS CONTENT INDUSTRIES Waterloo Region

Industry	Total Employment	Creative Class Employment	Creative Class Employment Share
Educational services	19,645	14,185	72.2%
Professional, scientific and technical services	15,510	11,860	76.5%
Insurance carriers and related activities	9,835	5,300	53.9%
Ambulatory health care services	5,865	3,295	56.2%
Hospitals	4,905	3,285	67.0%
Computer and electronic product manufacturing	5,585	2,890	51.7%

Amongst the most prominent local industries with high creative class concentrations, Professional, scientific and technical services and Insurance carriers have significantly higher shares of creative class workers compared to the provincial level of that industry.

## LOW CREATIVE CLASS CONTENT INDUSTRIES Waterloo Region

Industry	Total Employment	Creative Class Employment	Creative Class Employment Share
Social assistance	4,505	985	21.9%
Administrative and support services	7,610	950	12.5%
Transportation equipment manufacturing	9,990	910	9.1%
Fabricated metal product manufacturing	6,575	875	13.3%
Food and beverage stores	6,925	855	12.3%
Specialty trade contractors	5,190	650	12.5%

Administrative and support services, Transportation equipment manufacturing, Clothing and clothing accessories stores, and Food manufacturing are each industries with low creative class content locally, and compared to that industry at the provincial level.

# Creative Class Commuter Flows

The composition of the Waterloo Region workforce by place of work compared to the workforce by place of residence reveals different concentrations of certain occupational groups. The following are creative class occupations where Waterloo Region gains or loses workers on a daily basis.

### Net Surplus of Inward Commuters

- Computer Programmers and Interactive Media Developers
- Information Systems Analysts and Consultants
- User Support Technicians
- Software Engineers
- Insurance Adjusters and Claims Examiners
- Insurance Underwriters
- University Professors, Post-Secondary Teaching and Research Assistants

### Net Surplus of Outward Commuters

- Industrial and Manufacturing Engineers
- Electronic Service Technicians (household and business equipment)
- Air Pilots, Flight Engineers and Flying Instructors
- Industrial Engineering and Manufacturing Technologists and Technicians
- Family, marriage and other related counselors
- Chemists
- Musicians and Singers