



# Niagara Workforce Planning Board

Our Vision is Working



Niagara Community Observatory

## Jobs in Niagara

### Introduction

The mandate of the Niagara Workforce Planning Board is to lead in the creation of innovative labour market solutions by providing authoritative research, identifying employment trends, targeting workforce opportunities, initiating development projects and bringing people together.

In the first in a three-part series of policy briefs presenting findings from the “Niagara 3D: Diversity, Demographics and Density” research initiative, we examined *The Changing Economic Structure of Niagara*. In our second instalment, we narrowed the focus to examine the changing nature of Niagara’s manufacturing sector. Our third and final instalment examines the jobs that comprise Niagara’s workforce.

There are numerous global and local factors that affect the economy and influence local occupational makeup. One such factor that needs to be taken into consideration is the educational attainment levels of Niagara’s labour force and the education demanded by employers for jobs in the local economy. Generally, higher educational attainment within a labour market reflects the presence of jobs that demand higher skill levels. The inverse is also true; labour force



demands for jobs with lower educational attainment levels will reflect a lower educated labour force. Median income levels also warrant consideration. Traditional jobs, particularly those in manufacturing, are still a significant part of our workforce and as such are represented in the median income and education of Niagara. In 2006 the median income of the region’s full-time full year workforce was \$41,087 as compared to the Ontario median of \$44,748, a difference of almost 10%. As traditional, routine jobs are eliminated from the labour market, there will be direct influence on median incomes in Niagara. This brief examines how a variety of factors interact to explain Niagara’s current occupation mix.

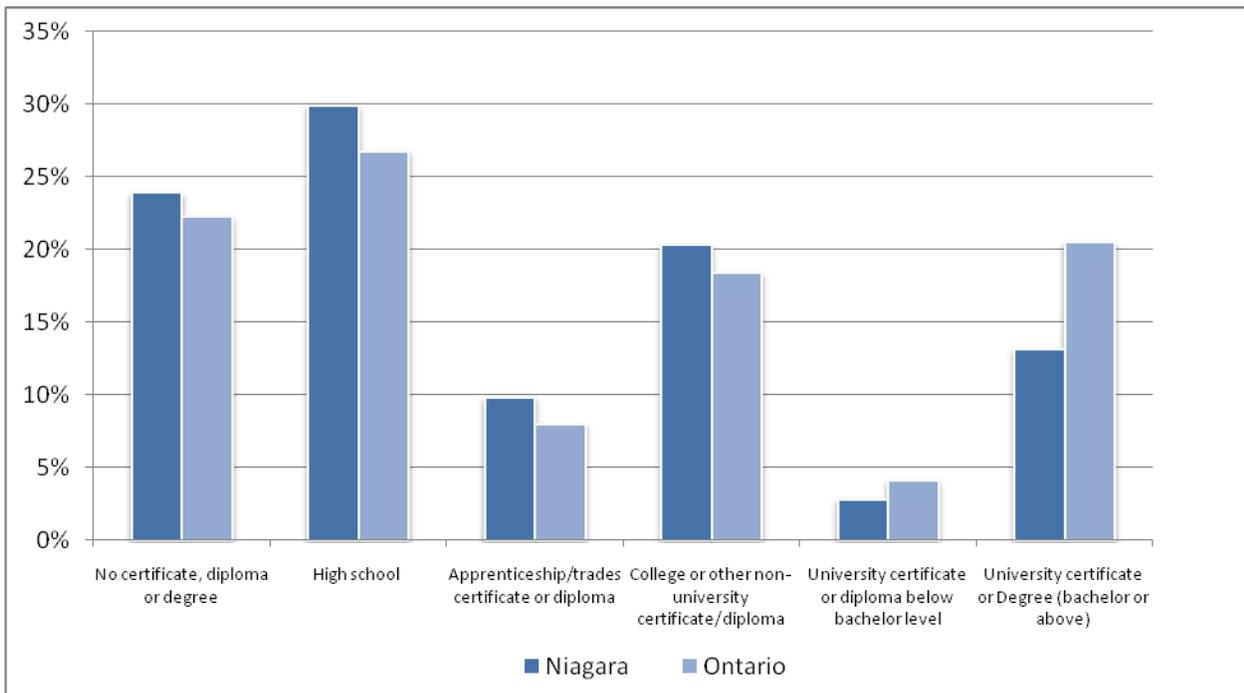
### Educational Attainment

Examining the educational attainment of Niagara’s population is essential to understanding the skills and knowledge that exist in our community. According to the 2006 census, the strength of Niagara’s workforce was in the areas of apprenticeship and trades certification and the population with a college, CEGEP and other non-university certificate. Niagara’s weakness is its high percentage of residents with only a high school certificate or less and its low proportion of residents who have not obtained any

form of university education. The good news is that Niagara’s population is better educated than it was ten years ago. Between 2001 and 2006, the percentage of Niagara’s population aged 20+ with a bachelor’s degree or higher has risen from 12.1% to 14.3%. When we look specifically at Niagara’s workforce, 19% have attained a university certificate, diploma, or degree in comparison to the provincial average of 29%.

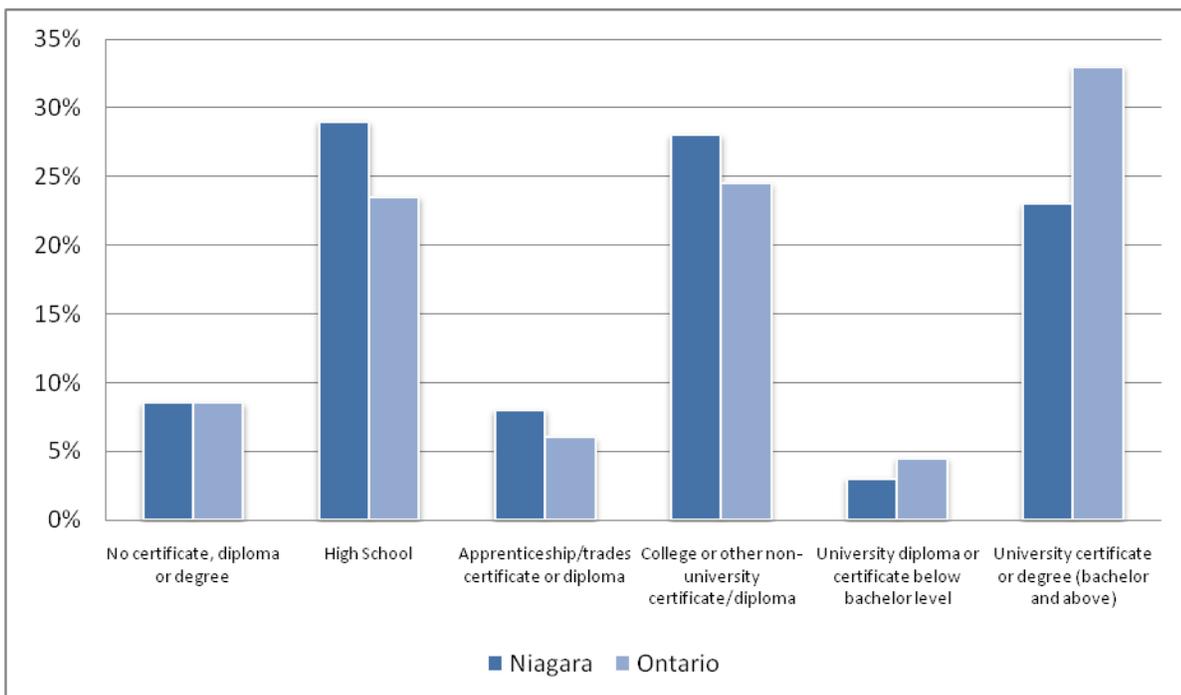
## Jobs in Niagara

Graph 1: Educational Attainment Rates in Niagara Compared to Ontario, 2006 (population aged 15 and older)



Source: Statistics Canada, Niagara and Ontario, 2006

Graph 2: Younger Population's Educational Attainment, Niagara and Ontario (ages 25-34)



Source: Statistics Canada, Niagara and Ontario, 2006

## Jobs in Niagara

The younger generation is changing the educational profile of Niagara as they are more highly educated than their parents. This is an important consideration for employers because these younger people are the foundation of Niagara's future workforce. Graphs 1 and 2 show that the younger population has an increased number of college diplomas and university degrees compared to the general population, leading the provincial average in college diplomas and apprenticeship/trades certificates.

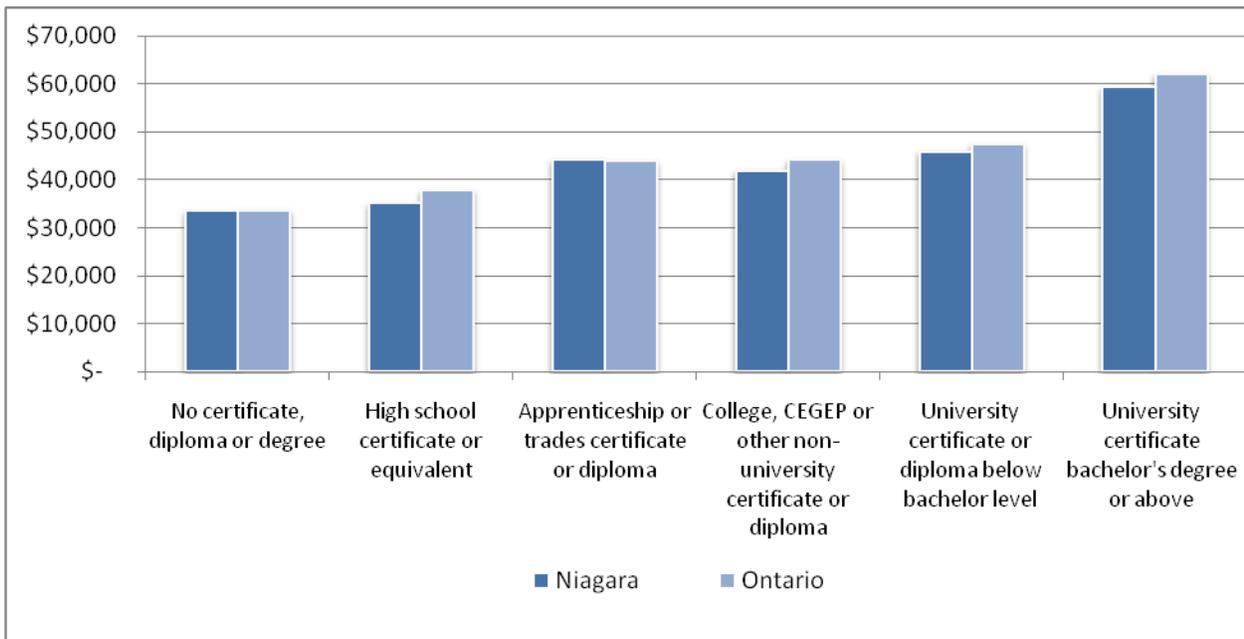
Despite the increased educational attainment of younger residents in Niagara, Niagara still lags the provincial average by approximately 10 percentage points for university degrees and above. Younger people with university education are generally mobile and tend to

explore employment opportunities beyond geographic boundaries. If most jobs in Niagara demand less than a university degree, the pull to other employment areas may be more attractive. What is more troubling is that two out of every five younger (ages 25-34) residents in Niagara hold a high school diploma as their highest level of education.

As Niagara's economy transitions from what has been traditional industry into more advanced, innovative and knowledge-driven sectors, the availability of employment opportunities demanding a highly skilled, educated labour force will also shift. The opportunity before us is to ensure that we are positioning the region to attract and retain this educated workforce to meet these emerging needs.

## Median Income by Educational Attainment

Graph 3: Income by Educational Attainment, 2006



Source: Statistics Canada, Niagara and Ontario, 2006

Graph 3 indicates that there is a strong relationship between level of education and income. This may be one reason why incomes in Niagara are lower than in the province. The above graph also illustrates that at every educational level, except apprenticeship or trades certificates, incomes in Niagara are lower than those in the province.

## Jobs in Niagara

Combining the information on Graphs 1 and 3 points to a significant concern. Graph 1 indicates that 54% of Niagara's population has a high school education or lower and Graph 3 shows that the median income of this large group is only slightly above the low-income cut-off line (LICO). LICO uses the idea of a standard market basket to identify

the level of income needed for a subsistence existence. In 2006 the LICO was \$17,895 for an individual and \$33,251 for a family of four in urban areas comparable to Niagara. This suggests that for those with only a high school education and supporting a family of four, they are barely above the LICO level.

**Table 1: Jobs and Related Median Income in Niagara and Ontario, 2006**

	% Labour Force		Median Income	
	Niagara %	Ontario %	Niagara \$	Ontario \$
Elemental Sales and Service Occupations	12.9	8.7	25,443	25,470
Intermediate Sales and Service Occupations	12.8	9.7	29,960	33,157
Clerical Occupations	9.6	10.9	34,148	37,100
Middle and Other Management Occupations	8.4	9.6	49,443	59,960
Trades and Skilled Transport Occupations	7	6.1	51,009	48,927
Skilled Sales and Service Occupations	6.2	5.2	34,354	37,764
Professional Occupations	5.5	6.8	59,802	62,540
Skilled Administrative and Business Occupations	5.9	6.2	38,641	42,214
<b>% of Total Workforce</b>	<b>68.3</b>	<b>63.2</b>		

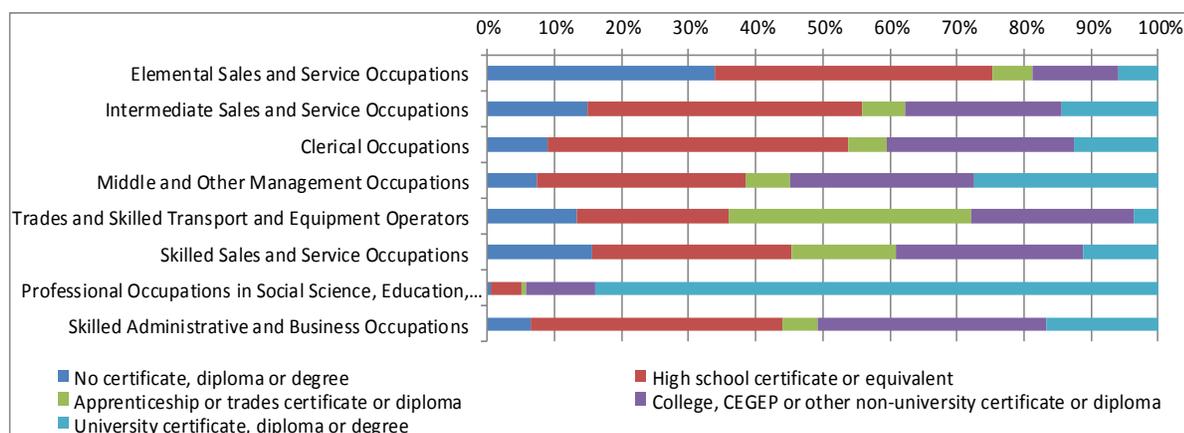
Source: Statistics Canada, Niagara and Ontario, 2006

Table 1 focuses on the most common jobs in Niagara and in Ontario. There are a total of eight occupational areas that comprise over 60% of the workforce. For example, in 2006 the two most common occupational areas in Niagara were “elemental sales and service” and “intermediate sales and service.”

The two columns on the right represent the median incomes associated with the adjacent occupations. The table demonstrates that in every case, except trades and skilled transport occupations, the median income of jobs in 2006 was lower in Niagara than in Ontario. In some cases, the difference was negligible, but in others the gap approached 20%.

Table 1 also demonstrates that Niagara generally has a greater proportion of lower income type jobs in sales and service occupations and a lower proportion of high income occupations such as middle management and other management, skilled administrative and business, and professional occupations. Over 25% of Niagara's workforce was employed in elemental or intermediate sales and service occupations—occupations with low median incomes.

**Graph 4: Occupations by Educational Attainment, Niagara 2006**



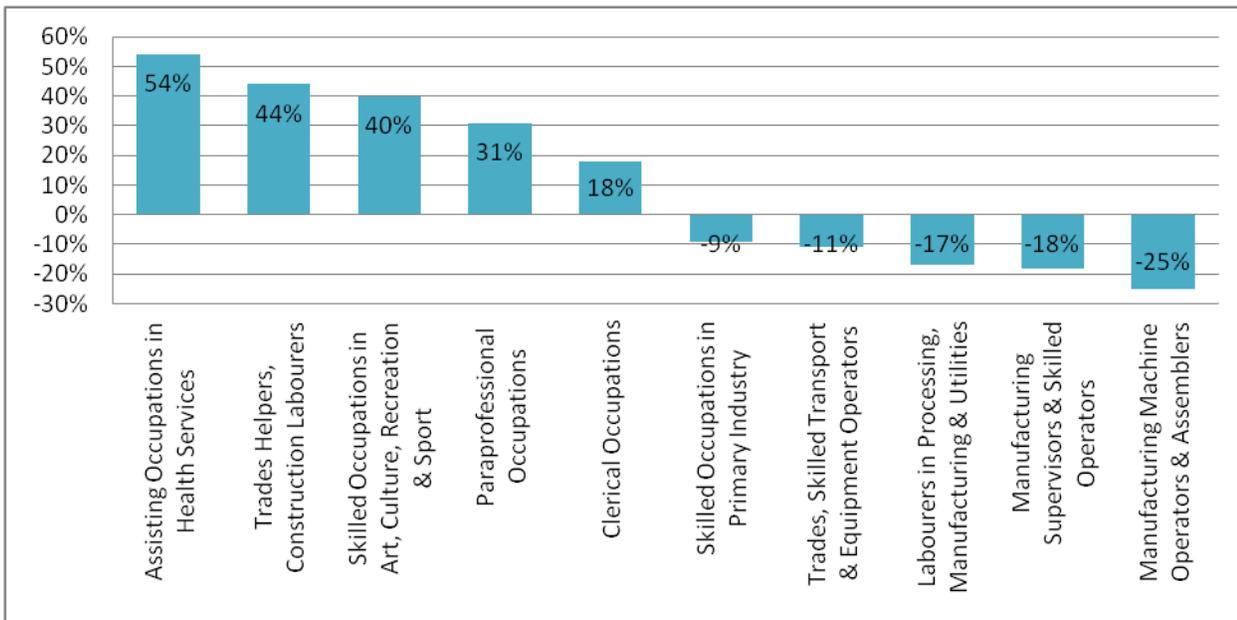
Source: Statistics Canada, Niagara, 2006

## Jobs in Niagara

Graph 4 provides a more in-depth look at the educational attainment of the top occupational areas comprising Niagara's workforce. What is readily apparent is the defining role that education plays in Niagara's labour force. Over 50% of the top three occupational areas are comprised of individuals with little to no education beyond a high school certificate. The reality of this is that a

significant percentage of Niagara's workforce is locked into low income occupations with limited upward mobility due to their lack of post-secondary education. The large presence of jobs requiring minimal educational attainment may have implications regarding the region's ability to attract and retain educated workers.

Graph 5: Top Net Occupational Changes, 2001-2006



Source: Statistics Canada, Niagara, 2006

Graph 5 displays the five occupational areas in Niagara that have experienced the largest percentage of gains and losses from 2001 to 2006. Analysis of changes in Niagara's occupational areas reveals a serious decline in the number of jobs directly related to the manufacturing sector, with over 3,000 net jobs lost. Job growth is evident in a variety of occupational areas that are not directly tied to any specific industrial sector. The *clerical occupations* have seen 2,600 net jobs created, while *assisting occupations in support of health services* have seen growth of over 1,200 net jobs during this same period. Although *trades helpers, construction labourers and related occupations* witnessed an increase of 44%, this only translated into 465 net jobs. An overwhelming number of jobs continued to move from

the goods-producing manufacturing sector to the services sector.

What is troubling about this trend is a shift from higher to lower paying jobs. The average of median incomes for the occupational areas that witnessed the largest growth was \$32,607. In comparison, the occupational areas with the largest job losses had an average of median incomes of \$47,380. This shift to lower paying occupations from higher paying ones is a trend that requires careful attention.

## Jobs in Niagara

### Current Industry Clusters

Although Niagara's occupations are dominant in the manufacturing, tourism and hospitality sectors, there are other important industrial sectors contributing to Niagara's economy. The Niagara Economic Development Corporation identified five current industry clusters in *Navigating Our Future: Niagara's Economic Growth Strategy 2009-2012*. The following chart identifies the top three occupations by number of people employed (in brackets) in each of these five industry clusters.

Industry Cluster	Top 3 occupations
<b>Manufacturing</b>	Motor vehicle assemblers, inspectors & testers (1,570) Welders and related machine operators (940) Machinists and machining and tooling inspectors (845)
<b>Arts, Entertainment and Recreation</b>	Food counter attendants, kitchen helpers and related occupations (4,655) Food and beverage servers (3,540) Cooks (2,575)
<b>Professional, Scientific and Technical Services</b>	Financial auditors and accountants (535) Bookkeepers (385) Lawyers and Québec notaries (375)
<b>Administrative &amp; Support Services</b>	Customer service, information & related clerks (1,855) Other elemental sales occupations (695) Light duty cleaners (490)
<b>Agri-Business</b>	Farmers and farm managers (1,750) Nursery and greenhouse workers (1,610)

### Emerging Industry Clusters

The growth strategy further identified four Emerging Industry Sectors as potential areas of growth. The development of a digital media and software cluster would explore a new virtual environment in education, entertainment, communications and manufacturing. The establishment of a niche bio-product manufacturing cluster could capitalize on high-value-added products in agriculture and plant-factory industries for pharmaceuticals

and chemical manufacturing. An environmental, energy and other 'green' services sector has the potential to add considerably to Niagara's ability to leverage itself as part of the "green economy". Finally, the health, wellness and life sciences cluster has been identified as key to Niagara's future.

## Jobs in Niagara

Emerging Industry Cluster	Potential/Sample occupations
<b>Niche bio-product manufacturing</b>	Clinical Operations Manger Research Scientist Materials Handler
<b>Digital media and software development</b>	2D/3D artist Media Specialist Games Programming
<b>Environmental, energy, and other 'green' services</b>	Computer Controlled Machine Operator Electrical Engineers Home Energy Evaluator
<b>Health, wellness and life sciences</b>	Practical Nurses Research Scientist Geneticist

Already we can see some of these emerging industry clusters taking root in Niagara. For example, *NGen* was established as an interactive media generator for business development in the region and has joined the *Ontario Network of Excellence* or *ONE*. *ONE* is a network of innovation centres across Ontario to give start-up operations access to experts they need to successfully market their ideas. Recently, Niagara has been declared by the *St. Catharines-Thorold Chamber of Commerce* as the “Green Energy Capital of Canada”; this will act as an anchor to bring other environmental and green services to the region. Brock University is currently building the *Cairns Family Health and Bioscience Complex* with \$71.5 million in

provincial and federal funding. The construction of the *Walker Family Cancer Centre* at the Niagara Health System Complex is further evidence that Niagara has the potential to play an important role in the health, wellness, and life sciences industries. Niagara College is in the midst of extensive construction of new facilities at its Welland campus, supporting the delivery of high demand, innovative programs. It will take time to see how these emerging industry clusters add to Niagara’s labour market and economic development, but progress is evident.

## New Education Programs to Tackle the New Economy

### Brock University

Many of Brock’s undertakings including multi-million-dollar capital projects like the Cairns Family Health and Bioscience Complex and Marilyn I. Walker School of Fine and Performing Arts, are collaborations with community partners to help transform the area’s traditional manufacturing economy to a more innovation-driven and knowledge-based economy. And we need the right kind of workforce with the right kind of skills and training to make this happen. To that end, Brock is well poised to educate the next generation of workers in Niagara to be successful in our region’s emerging industry clusters — bioproduct manufacturing, digital media and software development, environmental and ‘green’ sciences, and health and wellness.

## Jobs in Niagara

### Niagara College

Niagara College is a key partner in the economic development and success of the Niagara Region. The College will continue to support economic development by providing highly skilled graduates who are taught by talented and committed faculty in responsive academic programs, supported by services such as workforce development and training initiatives, and applied research and business support. Niagara plans to increase its programming and training activities in areas of strategic importance to the economic success of the region, the province and the country. It will continue to be a leader in the community through the involvement of its students, faculty and staff.

## Conclusion

The Niagara economy is in a state of transition. It is moving from an economy based on manufacturing to one based on services such as digital media, health and wellness, and the green sector. However, currently Niagara is disadvantaged because of lower level of advanced education, a job mix that emphasizes lower-paying jobs, and the fact that comparable jobs receive lower pay in Niagara than in the province. The bright spot in the future is that the educational attainment level of younger people is increasing. This fits well with the emerging industry clusters such as bio-product manufacturing, digital media, green services, and health and wellness.

Data and analysis was provided by:

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**EMPLOYMENT  
ONTARIO**

This Employment Ontario project is funded by the Ontario Government. The views expressed in this document do not necessarily reflect those of Employment Ontario. The employment information represented here is an estimation of the number of jobs in each manufacturing industry. The information expressed here is based upon Statistics Canada business location information using a provincial multiplier and should be used for illustrative purposes only.