PEEL-HALTON WORKFORCE CHARACTERISTICS REPORT

LEPC PEEL-HALTON LOCAL EMPLOYMENT PLANNING COUNCIL

PEEL HALTON WORKFORCE DEVELOPMENT GROUP

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MESSAGE FROM THE

EXECUTIVE DIRECTOR

PEEL
City of Mississauga
City of Brampton
Town of Caledon

HALTON
City of Burlington
Town of Oakville
Town of Milton
Halton Hills

On behalf of the Peel Halton Workforce Development Group, I am pleased to present the 2016 Peel-Halton Workforce Characteristics Report.

This report provides an informative snapshot of the workforce characteristics specific to Peel and Halton. This information is intended to help the community work in collaboration to better improve future labour market outcomes.

We would like to gratefully acknowledge the support of our Regional Partners; the Region of Peel and Halton Region, along with the Economic Development offices of Missisauga, Brampton, Caledon and Halton. Their participation and responsiveness was greatly appreciated throughout the project.

Shalini da Cunha,
Executive Director

Peel Halton Workforce Development Group

Census Data in Canada is collected every five years

1.1 THE CONCEPTUAL APPROACH OF THE STUDY

The process of exploiting local economic opportunities and aligning the resident workforce with employers' needs requires a data-driven interdisciplinary approach. This workforce characteristics report was, in part, informed by the input of various stakeholder groups, along the principles underpinning collective impact initiatives (Kania & Kramer, 2011) and participatory action research (Anderson et al., 2007).

The ultimate goal is to empower stakeholder groups to work in a coordinated manner so that they can address the specific needs in their local context (Kania & Kramer, 2011). In turn, the empowerment that produces lasting change requires ongoing data collection and thorough reflection on the collected data (Anderson et al., 2007; Kania & Kramer, 2011).

The purpose of this workforce characteristics report is to inform the Peel and Halton communities about the labour market. This data and its analysis may evoke reflection on ways to better align the capabilities of the

workforce with employers who are presently located in Peel or Halton as well as potential employers who may be joining the Peel or Halton communities in the near future.

1.2 THE LEAD ORGANIZATION

This workforce characteristics report was prepared by the Peel Halton Workforce Development Group (PHWDG), a non-profit organization and the secretariat for the Peel-Halton Local Employment Planning Council (LEPC) project. In brief, the purpose of the LEPC is to address local labour market needs through research, education, and an integrated network of the following four stakeholder groups:

- The Peel and Halton communities
- Employers
- Employment and training service providers
- Government

Manufacturing was a key source of jobs throughout Halton *(page 48)*

The LEPC is funded by the Ontario Ministry of Advanced Education and Skills Development. In order to write a report that meets the information needs of the Peel and Halton communities, the PHWDG sought direction from economic development professionals and community members who attended the organization's labour market fundamentals webinar. Both groups expressed a need for data about workforce and job trends in their city or town. The needs of these stakeholder groups shaped the content of the workforce characteristics report. A critical element of the PHWDG's research practices is to consult with the communities of Peel and Halton so that the scope of inquiry is grounded in what these stakeholders find meaningful.

1.3 OVERVIEW OF KEY TERMS

In order to support the reader's full comprehension of the workforce characteristics report, a number of important terms are defined in the text that follows.

CENSUS AND NATIONAL HOUSEHOLD DATA

Census data is collected every five years, and it provides a quantitative picture of the Canadian population at varying levels of geography (from an area covering a few city blocks to the entire country). In 2011, there was a shorter census questionnaire and a longer National Household Survey (NHS). The NHS replaced the mandatory long-form census questionnaire and had a sampling rate of one in three households. In regard to respondents, the shorter census questionnaire was distributed to every household while the NHS was distributed to 33% of Canadian households. Together, the questionnaire and survey captured quantitative data on the demographic and social characteristics of the Canadian population. The mandatory long-form questionnaire was reinstated for the 2016 Census of Canada.

FIELDS OF STUDY

The Classification of Instructional Programs (CIP) outlines the disciplines that people take time to learn formally. For the National Household Survey (NHS), the 2011 version of the CIP guided the way that major fields of study were labeled. Analogously, the 2000 version of the CIP was the basis for labeling fields of study in the education data from the 2006 Census of Canada. Each field of study, as it is conceptualized within the CIP, refers to a cluster of programs that are related in content and training purpose. The cluster of architecture, engineering, & related technologies is one such field of study within which city or community planning, computer engineering, and industrial production technologies are located. Even though the NHS and 2006 Census relied on different versions of the CIP, the same 12 fields of study were specified across both instruments. In general, the 2011 CIP was more reflective of recent trends in the programs that postsecondary institutions offer; for example, nanotechnology was not in the 2000 version of the CIP, but it was added to architecture, engineering, & related technologies in the 2011 CIP.

On the Ontario Ministry of Advanced Education and Skills Development website, data about the fields that college graduates studied are organized into four large clusters or “occupational divisions”: applied arts, business, health, and technology. Of these four clusters, applied arts and technology are the largest categories, with behavioural science, community planning, and graphic design belonging to the former category whereas architectural technology and computer engineering technology belong to the latter category. The Ministry’s occupational divisions are distinct from the CIP. Data about college graduates can be found in the job seeker characteristics section of this report.

GROSS DOMESTIC PRODUCT

The gross domestic product (GDP) is a measure of economic health (Callen, 2012). To elaborate, the GDP describes the well-being of a geographical area by focusing on the combined value of all final products and services provided within that area over a given period, with a year being the most commonly selected unit of time. In order to assess the economic health of a geographical area or country across multiple years, the real GDP is used because it takes inflation into account. Increases in real GDP are viewed as signs of greater economic health whereas decreases in real GDP are viewed as signs of poorer health. When looking at industry-specific contributions to economic health within a year, GDP at basic prices may be used, and this type of GDP is based on the market price of products and services minus net taxes (i.e., the amount of taxes that remain after the inclusion of production-related subsidies) (Statistics Canada).

INDUSTRIES AND OCCUPATIONS

The North American Industry Classification System (NAICS) is used to organize data on employers and their involvement in the various economic outputs of a community or geographical area. For the Halton Region Employment Survey and the National Household Survey (NHS), the 2007 version of the NAICS was the frame of reference whereas for the 2006 Census of Canada, the 2002 version of the NAICS was the frame of reference. The more recent Canadian Business Counts provided a tally of active companies and utilized the 2012 version of the NAICS as its frame of reference. Essentially, the NAICS divides employers or businesses in terms of the products and services they provide. For example, manufacturing and wholesale trade are two industries or families of subsectors, with food manufacturing belonging to the former industry while building material and supplies merchant wholesalers belong to the latter industry. The term “primary industry” appeared in the Halton Region Employment Survey, and it is a designation for business entities that are focused on the extraction of natural resources, such as agriculture, forestry, and mining. As a source of industry data, the Halton Region Employment Survey elucidated the characteristics of businesses and jobs.

There are impediments to comparing the 2011 NHS industry data with the 2006 census industry data because industries were merged in the archived 2006 census data. To illustrate, “business services” in the 2006 census data is equivalent to three separate industries in the 2011 NHS data, and these industries are listed below:

- Professional, scientific, & technical services
- Management of companies and enterprises
- Administrative, support, waste management, & remediation services

By and large, the differences between the 2012 and 2007 versions of the North American Industry Classification System (NAICS) are minor. For example, both versions of the NAICS identify the same 20 industries, but video game publishers are distinguished from other software publishers in the 2012 version of the NAICS. The National Occupational Classification (NOC) complements the NAICS in that it organizes the data on members of the workforce and the duties associated with their lines of work. Whereas the 2011 NHS occupational data was arranged in accordance with the 2011 version of the NOC, the 2006 census occupational data was arranged in accordance with the 2006 NOC for Statistics (NOC-S), which has the same content as the 2006 version of the NOC but longer alphanumeric codes for specific lines of work. Bookkeepers are highlighted to clarify this difference as they are coded as B111 in the 2006 NOC-S and 1231 in the 2006 version of the NOC.

As a parallel to the NAICS, the NOC divides employees in terms of the tasks they perform and the requirements of their positions. Financial analysts and the aforementioned bookkeepers are examples of positions that belong to the same occupational category—namely, business, finance, & administration. As with the evolution of the NAICS, little has changed in the NOC between 2006 and 2011. Both versions of the NOC identify the same nine occupational categories, but public relations, advertising, and communications professionals were moved from the art, culture, recreation, & sport category to the business, finance, & administration category for the 2011 version of the NOC.

LABOUR MARKET

The labour market refers to the interactions between the workforce and employers as well as the conditions under which these interactions occur (The Ministry of Advanced Education and Skills Development, 2005). Employers need workers, and members of the workforce compete for the job openings that employers are trying to fill (Niagara Workforce Planning Board, 2009).

LABOUR MARKET VARIABLES

Three variables are often used to describe the labour market: **labour force (LF) participation rate**, **unemployment rate**, and **employment rate**. The labour force (LF) participation rate is calculated by dividing the workforce or labour force by the total population aged 15 years and older. To clarify, the labour force consists of people who are employed and their unemployed counterparts who are seeking paid work. The unemployment rate is calculated by dividing the jobless portion of the labour force by the entire labour force. As with the LF participation rate, the denominator for the employment rate is the total population aged 15 years and older; thus, the employment rate is the number of people who work for pay divided by all people who are eligible to work.

LEVELS OF GEOGRAPHY

The workforce characteristics report drew upon data from four levels of geography: **municipal**, **regional**, **census metropolitan**, and **provincial**. In general, the municipal level refers to a city, town, or township, such as Mississauga, while the regional level refers to a collection of adjacent cities, towns, or townships, such as Peel. Furthermore, the census metropolitan level refers to a population core of at least 50,000 surrounded by several municipalities and regions; for example, the Toronto Census Metropolitan Area (CMA) has Toronto as its core, and this core is surrounded by both municipalities (e.g., Oakville and Uxbridge) and regions (e.g., Peel and York). Lastly, the provincial level is the largest of the geopolitical units that form the country of Canada.

LOW INCOME

The percentage (%) of people who live on a low income is a common measure of poverty in a geographical area. For the workforce characteristics report, low income is defined as any sum of earnings, benefits, and investments that is half or less of the median income for a given household size with corresponding basic expenses (e.g., food) after taxes are paid. According to Statistics Canada, this definition of low income is widely used in many countries.

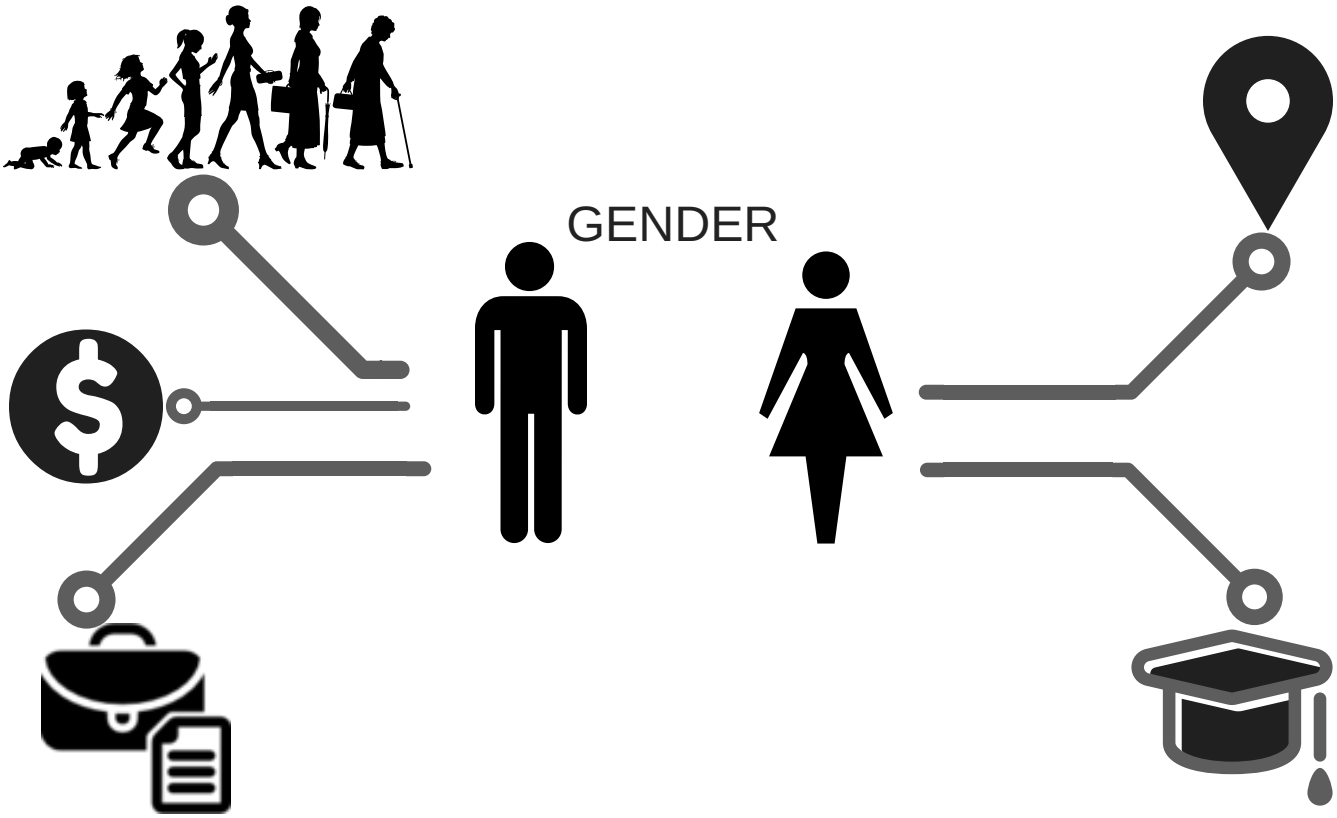
Oakville is one of four municipalities located in Halton Region.

PEEL AND HALTON

The Regions of Peel and Halton are located west of Toronto. Each region consists of multiple municipalities. More specifically, Peel is comprised of Brampton, Caledon, and Mississauga, and Halton is comprised of Burlington, Halton Hills, Milton, and Oakville. Of the seven Peel and Halton municipalities, Burlington is the only city or town that is not included in the larger Toronto Census Metropolitan Area (CMA) (see Figure 1)

Figure 1: Map of Toronto CMA

Source: *Peel Halton Workforce Development Group (PHWDG)*



THE DEMOGRAPHICS OF THE PEEL AND HALTON POPULATIONS

2.1 DEMOGRAPHIC HIGHLIGHTS

- The immigrant and total populations experienced greater growth in Peel and Halton than in the Toronto CMA and Ontario.
- The racialized or visible minority (VM) population experienced greater growth in Halton than in Peel, the Toronto CMA, and Ontario.
- Milton was distinguished from the other Peel and Halton municipalities by strikingly higher increases in its immigrant, racialized, and total populations. Brampton was the site of the second highest immigrant population increase.
- In general, the Peel population was younger than the Halton, Toronto CMA, and Ontario populations.
- The proportion of the population with postsecondary education was larger in Halton than in Peel, the Toronto CMA, and Ontario.
- Within Peel and Halton, Milton experienced the greatest increase in its proportion of university degree holders.

2.2 REGIONAL POPULATION GROWTH

The population growth in the regions of Peel and Halton was greater than the population growth in the Toronto Census Metropolitan Area (CMA) and Ontario (see Table 1).

During the 2006 to 2011 period, Peel and Halton experienced population increases of 11.9% and 14.2% respectively. To phrase it succinctly, the population increases in Peel and Halton were 1.3 to 2.5 times the population increases in the Toronto CMA and Ontario. Likewise, Peel and Halton were projected to increase in population by 10.9% and 11.5% respectively during the 2011 to 2015 period . In other words, the population growth in Peel and Halton was expected to outpace the population growth in the Toronto CMA and Ontario.

Table 1: *The Total Populations of Peel, Halton, Toronto CMA, and Ontario in 2006, 2011, and 2015*

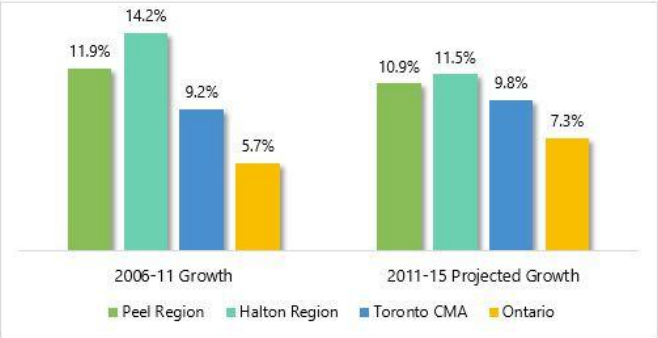
Location	2006	2011	2015 Estimate	2006-11 Change	2011-15 Change
Peel	1,159,405	1,296,815	1,438,770	11.9%	10.9%
Halton	439,205	501,665	559,213	14.2%	11.5%
Toronto CMA*	5,113,145	5,583,065	6,129,934	9.2%	9.8%
Ontario*	12,160,285	12,851,820	13,792,052	5.7%	7.3%

Sources: *Statistics Canada, 2011 Census Profile, 2006 Community Profiles, Table 051-0056 Estimates of Population by Census Metropolitan Area, and Table 051-0062 Estimates of Population by Census Division.*

** Peel and Halton regions data is included in Toronto CMA and Ontario data*

Across the two periods of 2006 to 2011 and 2011 to 2015, the largest change in population growth was projected to occur in Halton (that is, its growth rate dropped by 2.7%), while the smallest change was projected to occur in the Toronto CMA, with a 0.6% gain in growth (see Figure 2). Additionally, it was predicted that the gap in population growth between the regions and the Toronto CMA would be cut by at least three-fifths, or more than one-half. Even though the projected population increases in Peel and Halton were less than the actual increases from 2006 to 2011, both regions were expected to experience more growth than the Toronto CMA and Ontario.

Figure 2: *Total Population Growth in Peel, Halton, Toronto CMA, and Ontario during 2006 to 2011 and 2011 to 2015*



[1] Since the 2016 census data has not been released, estimates of 2015 population sizes were used to provide a more recent overview of total population trends.

Key Observation: Peel and Halton continue to benefit from significant population growth. This contributes to local demand for goods and services, including public services, and thus expanding employment.

2.2.1 MUNICIPAL POPULATION GROWTH

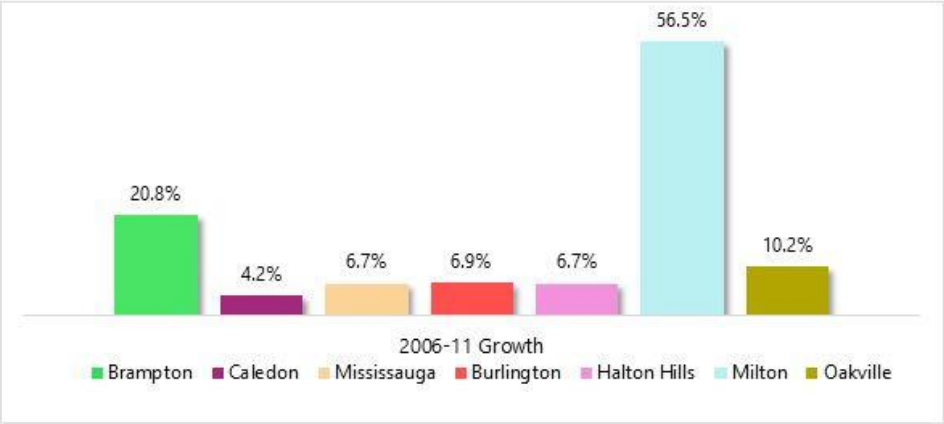
Within Peel, the city of Brampton was the site of the greatest total population increase during the 2006 to 2011 period (see Table 2). To elaborate, the Brampton population grew by 20.8% or over 90,000 between 2006 and 2011; in contrast, Caledon was the site of the smallest population increase (4.2%). There was similar variation in growth among the Halton municipalities as the Milton population increased the most (56.5%) while the Halton Hills population increased the least (6.7%). Most of the population growth in Peel and Halton could be attributed to increases in Brampton and Milton respectively (see Figure 3).

Table 2: *The Peel and Halton Municipal Populations in 2006 and 2011*

Location		2006	2011	2006-11 Change (%)
Peel	Brampton	433,805	523,910	20.8%
	Caledon	57,050	59,460	4.2%
	Mississauga	668,550	713,450	6.7%
Halton	Burlington	164,415	175,775	6.9%
	Halton Hills	55,290	59,010	6.7%
	Milton	53,890	84,360	56.5%
	Oakville	165,615	182,520	10.2%

Sources: *Statistics Canada, 2011 Census Profile and 2006 Community Profiles.*

Figure 3: *Peel and Halton Municipal Population Growth during 2006 to 2011*



2.2.2 GENDER

In 2011, females outnumbered males across Peel, Halton, the Toronto CMA, and Ontario (see Table 3). The Toronto CMA was the site of the greatest difference in the proportions of each gender (3.0%).

Table 3: *The Gender Composition of Peel, Halton, Toronto CMA, and Ontario in 2011*

Location	Female	Male
Peel	50.9%	49.1%
Halton	51.4%	48.6%
Toronto CMA	51.5%	48.5%
Ontario	51.3%	48.7%

Source: Statistics Canada, 2011 Census Profile.

2.3 AGE

An age comparison of Peel, Halton, the Toronto CMA, and Ontario, based on 2006 and 2011 data, revealed that the youngest population was located in Peel (see Table 4). More specifically, the median age of the Peel population was, on average, 2.5 to 2.7 years lower than the median ages of the other three populations.

A distribution of numeric data, such as the ages of the people who live in a given area, can be summarized by identifying the median or number in the middle of the distribution. In turn, the median can be used to compare large populations. All four populations grew older between 2006 and 2011.

Table 4: *The Median Ages of the Peel, Halton, Toronto CMA, and Ontario Populations in 2006 and 2011*

Location	2006	2011
Peel	35.6	36.9
Halton	38.4	39.3
Toronto CMA	37.5	38.6
Ontario	39.0	40.4

Sources: *Statistics Canada, 2011 Census Profile and 2006 Community Profiles.*

Within Peel, the youngest population was located in Brampton whereas the oldest population was located in Caledon (see Table 5). Correspondingly, the youngest Halton population resided in Milton while the oldest Halton population resided in Burlington. Milton was further distinguished from the other Halton and Peel municipalities in that the median age of its population did not increase between 2006 and 2011. In contrast, the median ages of the other municipalities increased by 1 to 2.7 years during the 2006 to 2011 period.

Table 5: *The Median Ages of the Peel and Halton Municipal Populations in 2006 and 2011*

Location	2006	2011
Brampton	33.7	34.7
Caledon	37.7	40.4
Mississauga	36.7	38.5
Burlington	40.3	41.8
Halton Hills	37.9	39.9
Milton	34.4	34.1
Oakville	38.4	40.2

Sources: *Statistics Canada, 2011 Census Profile and 2006 Community Profiles.*

The data concerning population age groups can identify the need to prepare for the retirement of older workers and replenish the talent pool of the workforce. 2011 census data revealed that the 30-to-39 and 40-to-49-year-old groups were the largest age groups in Halton while the 10-to-19 and 40-to-49-year-old groups were the largest groups in Peel (see Figure 4). Furthermore, the proportions of 15-to-24-year-old people were 3.2% and 1.3% larger than the proportions of 55-to-64-year-old people in Peel and Halton respectively. The size difference between the youngest and oldest working age groups highlights the importance of equipping youth with the education, skills, and habits to fill the positions of their elders, while at the same time ensuring that best use is made of older workers while also engaging in appropriate succession planning.

Figure 4: *The Age Distribution of the Peel and Halton Populations in 2011*

Source: *Statistics Canada, 2011 Census Profile*

Key Observation: Together with their population growth, Milton and Brampton have notably younger populations as well, who may well have more challenges accessing local jobs, given the increases in the local labour force and the challenges of generating more local employment. Even more so than elsewhere, these two communities would likely benefit from enhanced local youth employment strategies.

2.4 IMMIGRANT STATUS

The immigrant population growth in Peel and Halton surpassed the immigrant population growth in the Toronto CMA and Ontario (see Table 6). More specifically, the immigrant population increases in Peel and Halton were 1.7 to 3.1 times the immigrant population increases in the Toronto CMA and Ontario. The percentage of recent immigrants in Peel and Toronto CMA were also 1.7 to 2.7 times the percentage of recent immigrants in Halton and Ontario. Within Peel and Halton, the sites of the largest immigrant population increases were Brampton and Milton (see Table 7). Divergently, Halton Hills was the site of no increase and Caledon was the site of the smallest immigrant population increase.

Table 6: *The Immigrant and Recent Immigrant Populations of Peel, Halton, Toronto CMA, and Ontario in 2011*

Location	2011 Immigrants	% of Immigrants	2011 Recent Immigrants	% of Recent Immigrants	2006-11 Change in Immigrants population(%)
Peel	650,525	50.5%	100,910	7.8%	15.9%
Halton	128,740	26.0%	14,575	2.9%	19.3%
Toronto CMA	2,537,410	46.0%	381,750	6.9%	9.4%
Ontario	3,611,365	28.5%	501,060	4.0%	6.3%

Sources: *Statistics Canada, 2011 National Household Survey (NHS) and 2006 Community Profiles.*

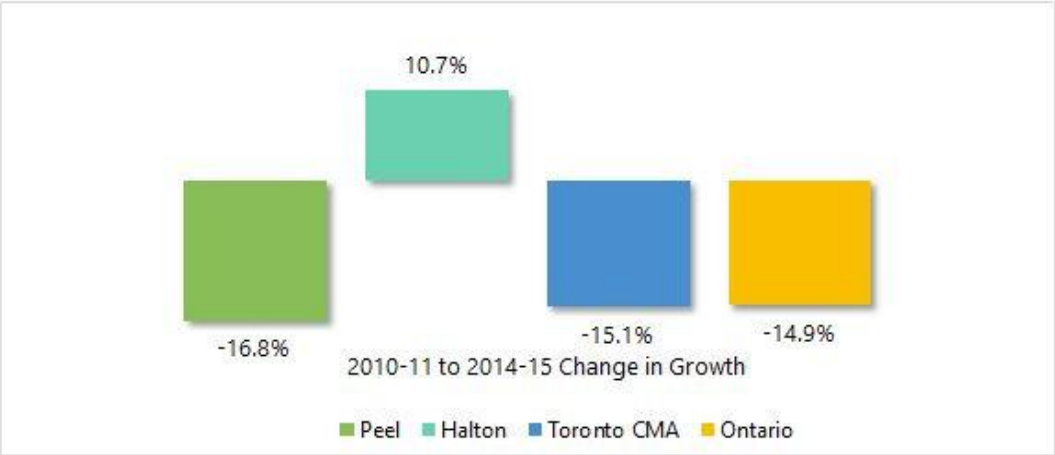
Table 7: *The Peel and Halton Municipal Immigrant Populations in 2006 and 2011*

Location	2006	2011	2006-11 Change (%)
Brampton	206,190	263,670	27.9%
Caledon	11,805	12,285	4.1%
Mississauga	343,245	374,575	9.1%
Burlington	36,280	37,860	4.4%
Halton Hills	8,360	8,360	No Change
Milton	13,030	24,705	89.6%
Oakville	50,250	57,815	15.1%

Sources: *Statistics Canada, 2011 National Household Survey (NHS) and 2006 Community Profiles.*

More recent data about immigrant population growth allows for an analysis of the change in this growth over time at different geographical levels. Over the 2010-11 to 2014-15 period, the change in immigrant population growth was not the same across Peel, Halton, the Toronto CMA, and Ontario (see Figure 5). To phrase it in another way, the amount of growth in the Halton immigrant population increased while the amount of growth in the other three immigrant populations decreased. This finding suggests that Halton is successfully attracting people from other countries and has the capacity to absorb more residents.

Figure 5: *Change in Peel, Halton, Toronto CMA and Ontario Immigrant Population Growth during 2010-11 to 2014-15*



Sources: *Statistics Canada, Table 051-0057 Components of Population Growth by Census Metropolitan Area and Table 051-0063 Components of Population Growth by Census Division.*

Peel and Halton appeared to attract different groups of immigrants. In regard to places of birth, there were more immigrants from Asian countries (e.g., India) in Peel and more immigrants from European countries (e.g., the United Kingdom) in Halton (see Table 8). Within Peel, Caledon was the preferred place to live among European immigrants.

Table 8: *Top Three Places of Birth among Peel and Halton Municipal Immigrant Populations in 2011*

Location	Top 3 Places of Birth
Brampton	India, Jamaica, Pakistan
Caledon	Italy, United Kingdom, India
Mississauga	India, Pakistan, Philippines
Burlington	United Kingdom, India, Poland
Halton Hills	United Kingdom, Portugal, Netherlands
Milton	Pakistan, United Kingdom, India
Oakville	United Kingdom, India, Poland

Source: *Statistics Canada, 2011 National Household Survey (NHS).*

Key Observation: For some time now, Peel has been a major settlement area for newcomers, in particular Mississauga and Brampton. Halton has been home to a smaller proportion of immigrants, but the rate of increase in the immigrant population has been growing, with Milton leading the way, followed by healthy growth in Oakville as well.

2.5 VISIBLE MINORITY (VM)[2] STATUS

People who belong to visible minority (VM) groups are usually categorized as racialized or non-Caucasian in Canada; however, they are not members of First Nations groups (Government of Canada, Employment Equity Act). During the 2006 to 2011 period, the magnitude of the visible minority (VM) population growth was much larger in Halton (56.6%) than in Peel, the Toronto CMA, and Ontario (19.4% to 27.1%) (see Table 9). South Asians were the largest VM group in Peel, Halton, the Toronto CMA, and Ontario, representing 29.5% to 48.6% of the entire VM populations across the aforementioned geographical areas; furthermore, Black people were the second largest VM group in Peel while Chinese people were the second largest VM group in the other three areas (see Table 10 and Figure 6). Filipino people joined Black, Chinese, and South Asian people to form the four largest VM groups across all stated areas. Of the four largest VM groups, Filipino and South Asian people experienced the largest population increases at the regional (Peel and Halton), census metropolitan, and provincial levels (see Table 11).

Table 9: *The Visible Minority Populations of Peel, Halton, Toronto CMA, and Ontario in 2006 and 2011*

Location	2006	2011	% of Population in 2011	2006-11 Change (%)
Peel	576,665	732,805	56.8%	27.1%
Halton	57,360	89,850	18.1%	56.6%
Toronto CMA	2,174,070	2,596,420	47.0%	19.4%
Ontario	2,745,200	3,279,570	25.9%	19.5%

Sources: *Statistics Canada, 2011 National Household Survey (NHS) and 2006 Community Profiles.*

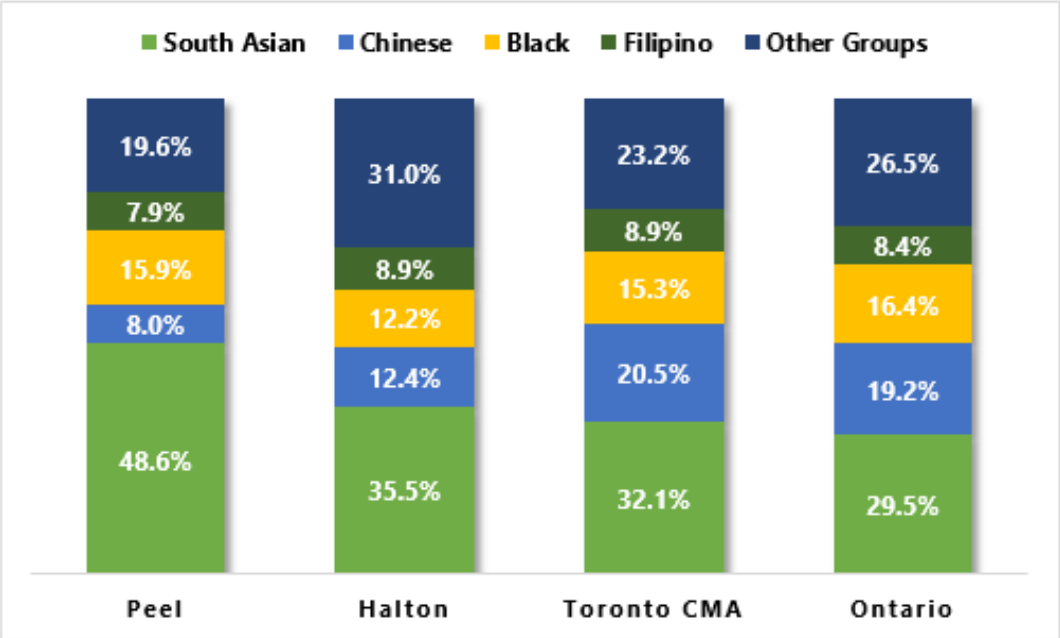
Table 10: *The Proportions of Visible Minority Groups across Peel, Halton, Toronto CMA, and Ontario in 2011*

Visible Minority (VM) Group	Peel	Halton	Toronto CMA	Ontario
South Asian	48.6%	35.5%	32.1%	29.5%
Chinese	8.0%	12.4%	20.5%	19.2%
Black	15.9%	12.2%	15.3%	16.4%
Filipino	7.9%	8.9%	8.9%	8.4%
Latin American	3.7%	7.0%	4.5%	5.3%
Arab	4.0%	6.6%	2.9%	4.6%
Southeast Asian	3.4%	3.2%	3.5%	4.2%
West Asian	1.6%	2.7%	3.7%	3.7%
Korean	0.9%	4.1%	2.3%	2.4%
Japanese	0.4%	1.6%	0.8%	0.9%
VM not included elsewhere	3.1%	2.0%	2.6%	2.5%
Multiple VM	2.5%	3.8%	2.9%	2.9%
Total	100.0%	100.0%	100.0%	100.0%
Total VM Population Size	732,805	89,850	2,596,420	3,279,570

Source: *Statistics Canada, 2011 National Household Survey (NHS).*
Note: *The four largest VM groups in each location are highlighted in an aqua blue colour.*

[2] Visible minority refers to persons who are non-Caucasian in race or non-white in colour and who do not report being Aboriginal. (Statistics Canada)

Figure 6: *The Proportions of largest Visible Minority Groups in Peel, Halton, Toronto CMA, and Ontario in 2011*



Source: *Statistics Canada, 2011 National Household Survey (NHS).*

Table 11: *Growth in the Four Largest VM Groups across Peel, Halton, Toronto CMA, and Ontario during 2006 to 2011*

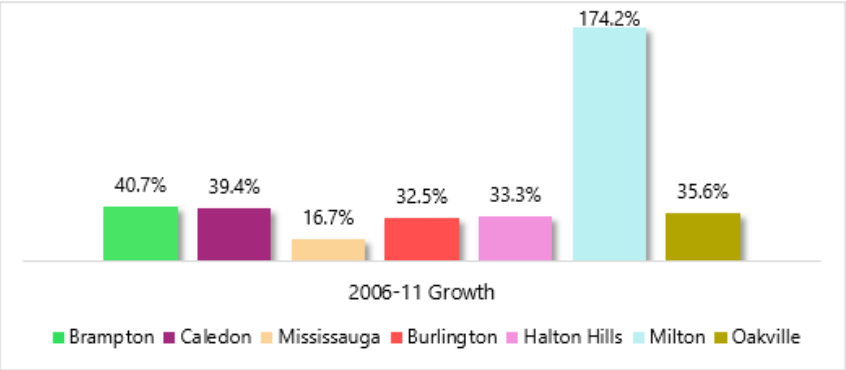
Visible Minority (VM) Group	Peel	Halton	Toronto CMA	Ontario
South Asian	30.7%	71.6%	21.8%	21.6%
Chinese	8.0%	28.9%	9.3%	9.0%
Black	21.7%	35.4%	12.8%	13.8%
Filipino	35.3%	79.3%	33.8%	35.5%

Sources: *Statistics Canada, 2011 National Household Survey (NHS) and 2006 Community Profiles..*

Moving below the regional level, the visible minority (VM) population growth in Milton easily exceeded the VM population growth in the other Peel and Halton municipalities; in other words, the Milton VM population almost tripled in size between 2006 and 2011 (see Figure 7). In contrast, the Mississauga VM population experienced the smallest population increase. An examination of the three largest VM groups across the Peel and Halton municipalities highlighted that South Asian people were the fastest growing group in Caledon, Mississauga, Halton Hills, and Milton while Filipino people were the fastest growing group in Brampton (see Table 12).

Most of the tremendous growth in the Milton VM population (54.0%) was tied to the upsurge in the number of South Asian residents. As for the remaining municipalities, the VM groups with the highest growth rates in Burlington and Oakville were Chinese and Black people respectively. Across all Peel and Halton municipalities, South Asian people were clearly the largest VM group in 2011; for example, Black people were Brampton's second largest VM group, but there were 129,930 more South Asian people than Black people.

Figure 7: The Visible Minority Population Growth in the Peel and Halton Municipalities during 2006 to 2011



Sources: *Statistics Canada, 2011 National Household Survey (NHS) and 2006 Community Profiles.*

Table 12: *Growth in the Three Largest VM Groups of each Peel and Halton Municipality during 2006 to 2011*

Location	Top 3 Visible Minority (VM) Groups	2011 Population Size	2006-11 Change (%)
Brampton	South Asian	200,220	46.4%
	Black	70,290	31.8%
	Filipino	17,905	49.5%
Caledon	South Asian	1,995	57.7%
	Black	1,205	40.1%
	Latin American	595	24.0%
Mississauga	South Asian	154,210	14.4%
	Chinese	50,120	8.7%
	Black	44,775	8.2%
Burlington	South Asian	6,325	25.8%
	Chinese	2,850	26.4%
	Black	2,830	15.5%
Halton Hills	South Asian	920	85.9%
	Black	585	39.3%
	Chinese	370	12.1%
Milton	South Asian	11,685	276.3%
	Filipino	2,755	137.5%
	Black	2,740	61.7%
Oakville	South Asian	12,925	30.0%
	Chinese	6,240	18.6%
	Black	4,820	36.4%

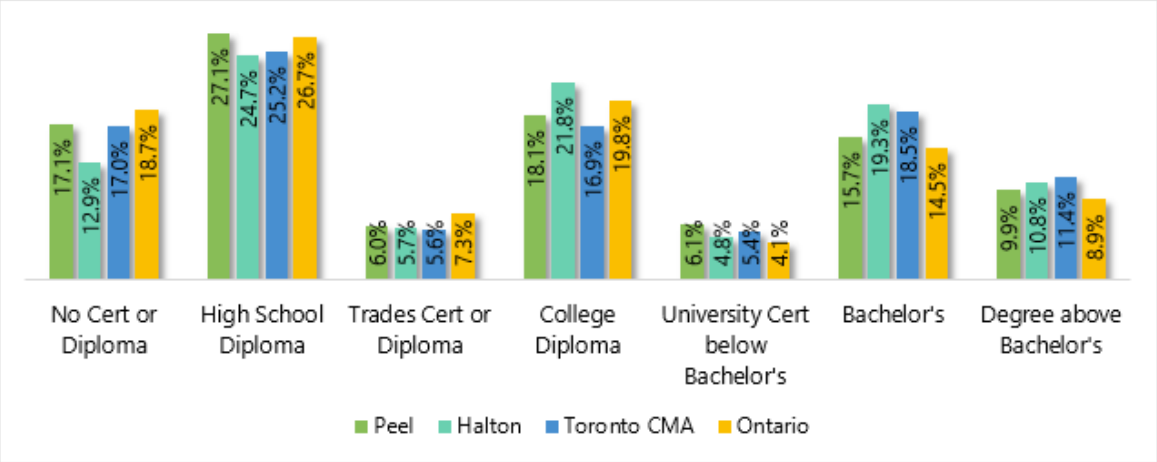
Sources: *Statistics Canada, 2011 National Household Survey (NHS) and 2006 Community Profiles.*

Key Observation: Population growth is characterized by significant increases in the proportion of visible minority populations across Peel and Halton, reflecting a great diversity of racial backgrounds, with South Asians being by far the largest racial category across all municipalities in both regions.

2.6 EDUCATION

Education is a consistent predictor of economic well-being (Ontario Ministry of Education, Student Success Strategy); accordingly, the educational attainment of a population is pivotal to business growth in the area the population inhabits. In 2011, the percentage (%) or proportion of the population with no certificate or diploma was smaller in Halton (12.9%) than in Peel, the Toronto CMA, and Ontario (17.0% to 18.7%) (see Figure 8). Concurrently, the proportions of bachelor's and graduate degree holders were larger in Halton and the Toronto CMA than in Peel and Ontario. There was also variation in the proportion of college diploma holders as Halton was distinguished from the other three areas by its more widespread representation of college graduates. In general, the Halton population had more formal education than the Peel, Toronto CMA, and Ontario populations.

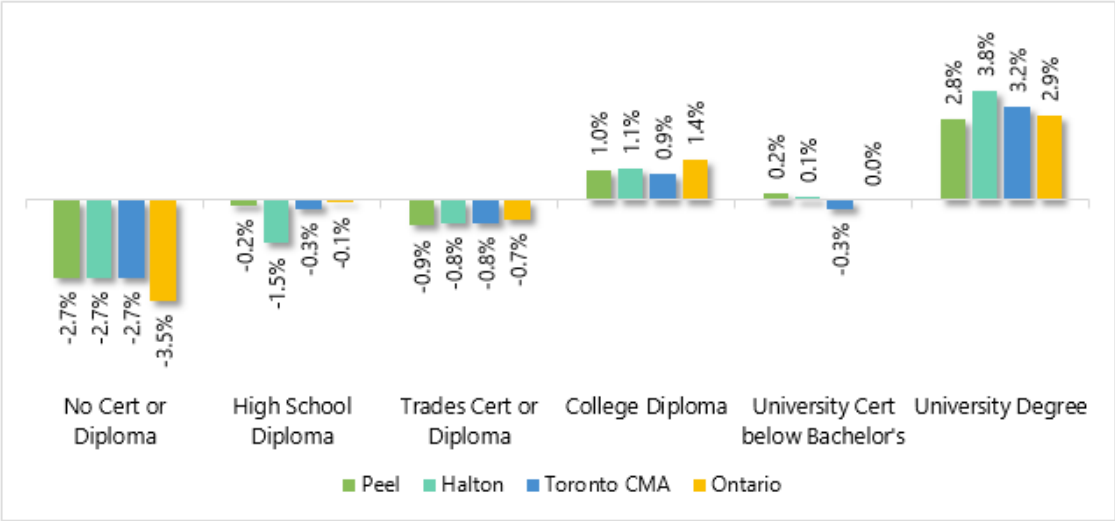
Figure 8: *The Educational Attainment of the Peel, Halton, Toronto CMA, and Ontario Populations in 2011*



Source: *Statistics Canada, 2011 National Household Survey (NHS).*
Note: *Cert is the shortened form of certificate.*

The main trend in educational attainment during the 2006 to 2011 period was that the proportions of college diploma and university degree holders increased across the regional, census metropolitan, and provincial levels whereas the proportion of people with no certificate or diploma decreased across the same levels (see Figure 9). More recent provincial data confirmed the rising number of people with a university degree; to elaborate, the estimated amount of growth for the university graduate population between 2012 and 2015 was 12.0% (see Table 13).

Figure 9: *Proportional Change in the Educational Attainment of the Peel, Halton, Toronto CMA, and Ontario Populations during 2006 to 2011*



Sources: *Statistics Canada, 2011 National Household Survey (NHS) and 2006 Community Profiles.*

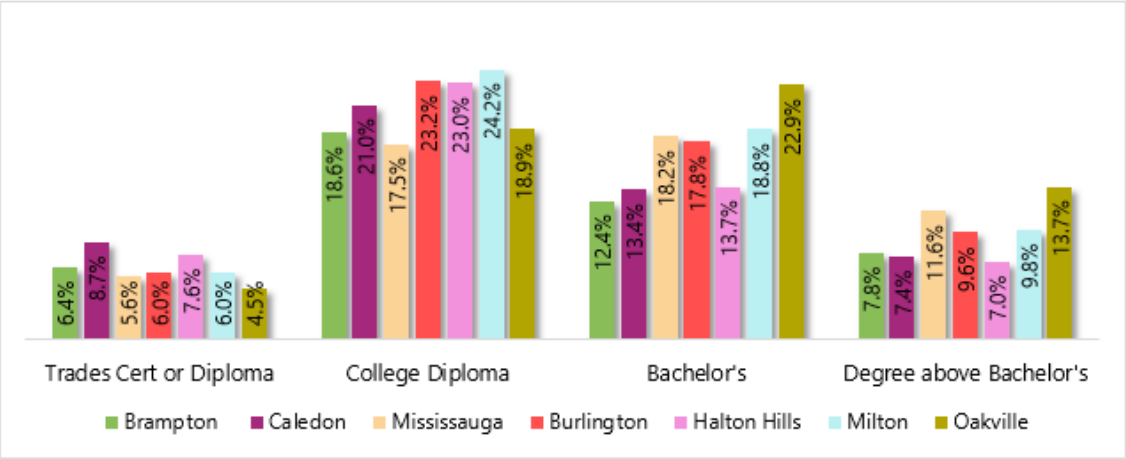
Table 13: *The University Graduate Population of Ontario in 2012 and 2015*

Location	Education	2012 Number of Degree Holders	2015 Number of Degree Holders	2012-15 Change (%)
Ontario	University Degree	2,674,200	2,994,500	12.0%

Source: *Statistics Canada, Table 282-0004 Labour Force Survey (LFS) Estimates.*

Among the Peel and Halton municipalities, bachelor's degree holders were more common in Oakville, Milton, and Mississauga than in Brampton, Burlington, Caledon, and Halton Hills (see Figure 10). Furthermore, the proportion of graduate degree holders was larger in Oakville and Mississauga than in the other five municipalities.There was also greater representation of college diploma holders in Milton, Burlington, and Halton Hills than in the other municipalities. In contrast, there was sparse representation of trades certificate holders across the Peel and Halton municipalities. Using college diplomas and university degrees as indices of educational attainment, the residents of Oakville and Milton were the most educated populations in Peel and Halton.

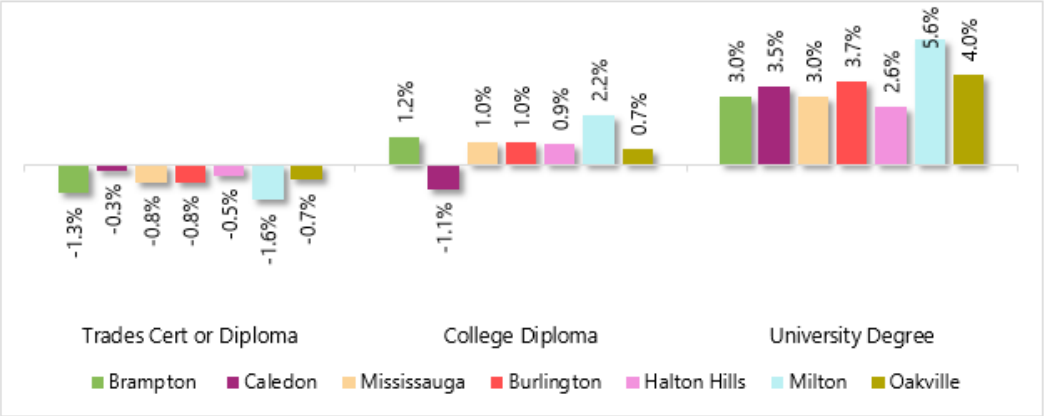
Figure 10: *The Educational Attainment of the Peel and Halton Municipal Populations in 2011*



Source: *Statistics Canada, 2011 National Household Survey (NHS).*

Between 2006 and 2011, Milton increased the most in its proportions of college diploma and university degree holders (see Figure 11). The proportion of college diploma holders in Caledon decreased (the number had increased slightly, but the increase of university degree holders was enough to shift the proportions overall). The proportion of university degree holders in Halton Hills increased the least. Regardless of municipality, the proportion of trades certificate holders experienced minimal change over time.

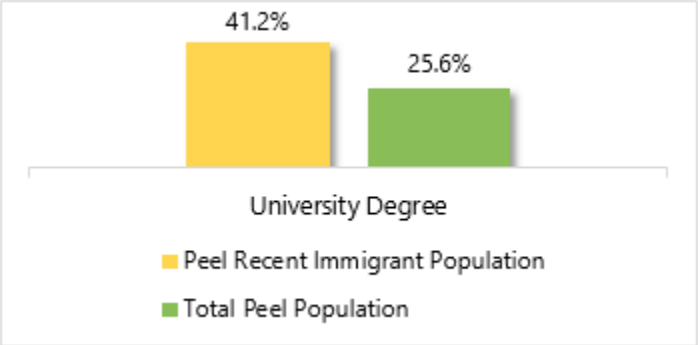
Figure 11: *Proportional Change in the Educational Attainment of the Peel and Halton Municipal Populations during 2006 to 2011*



Sources: *Statistics Canada, 2011 National Household Survey (NHS) and 2006 Community Profiles.*

2011 data about recent immigrants in Peel confirmed the intellectual capital that newcomers bring to the labour market. For example, the attainment of a university degree was more common among recent immigrants who arrived between 2006 and 2011 than among the entire Peel population (see Figure 12). The knowledge and experience of recent immigrants has the potential to fuel labour market expansion.

Figure 12: *The Attainment of University Degrees among Recent Immigrants and the Total Peel Population in 2011*



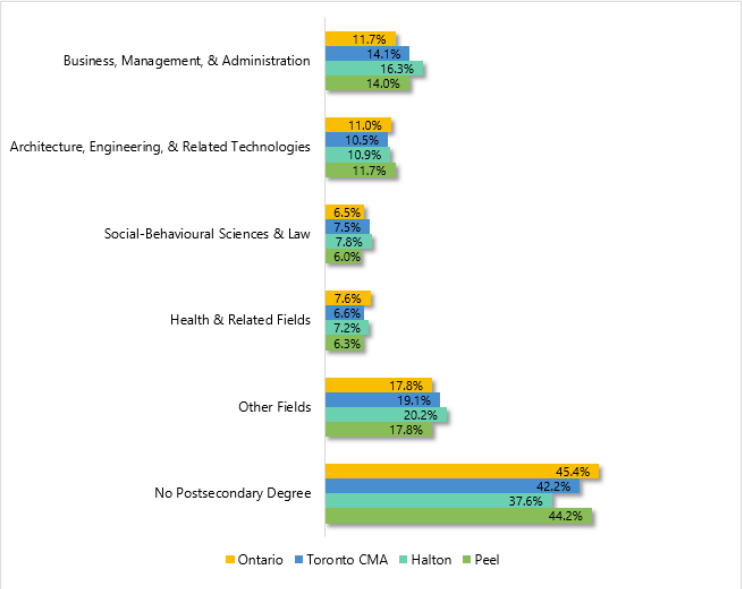
Source: *The Social Planning Council (SPC) of Peel.*

Key Observation: The residents of the municipalities of Peel and Halton reflect a range of educational attainment. Oakville, Mississauga, Milton and Burlington are distinguished by a higher proportion of residents with a Bachelor's degree or higher. Milton, Burlington, Halton Hills and Caledon have higher proportions of individuals with college diplomas. Caledon, Burlington and Brampton have slightly higher proportions of individuals with a trades certificate. These findings demonstrate a diversity of populations by educational attainment, in part sorted by geography. Different areas have a different mix of education, offering a variety of options to employers looking to rely on a local workforce, depending what skill levels they are seeking.

2.6.1 MAJOR FIELD OF STUDY

The 2011 data on the field of study of residents shows a remarkable consistency, with variations between areas of only a few percentage points, at most (see Figure 13). In many respects, the figures for Peel often match those for the Toronto CMA, while Halton stands a part in a number of the categories.

Figure 13: *Top Four Disciplinary Fields of the Peel, Halton, Toronto CMA, and Ontario Populations in 2011*



Source: *Statistics Canada, 2011 National Household Survey (NHS).*
Note: *The category of Other Fields includes disciplines, such as education, the humanities, and mathematics & computer sciences.*

The most commonly studied field was business, management, & public administration at the regional, census metropolitan, and provincial levels.

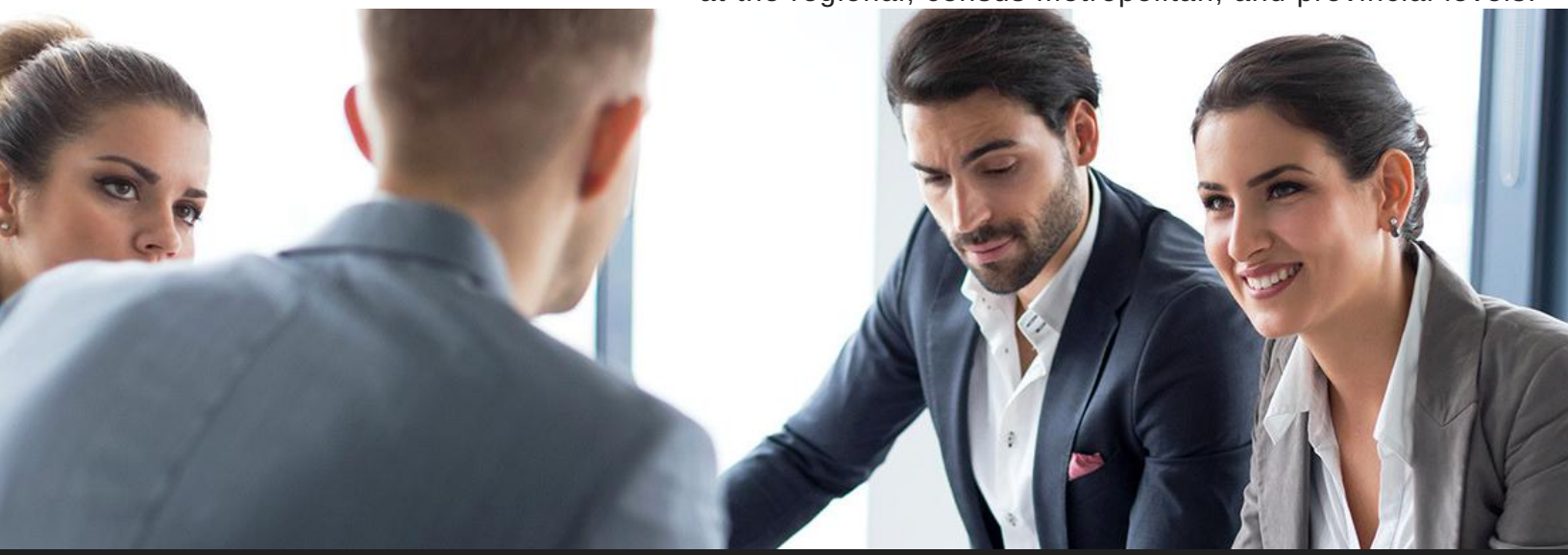
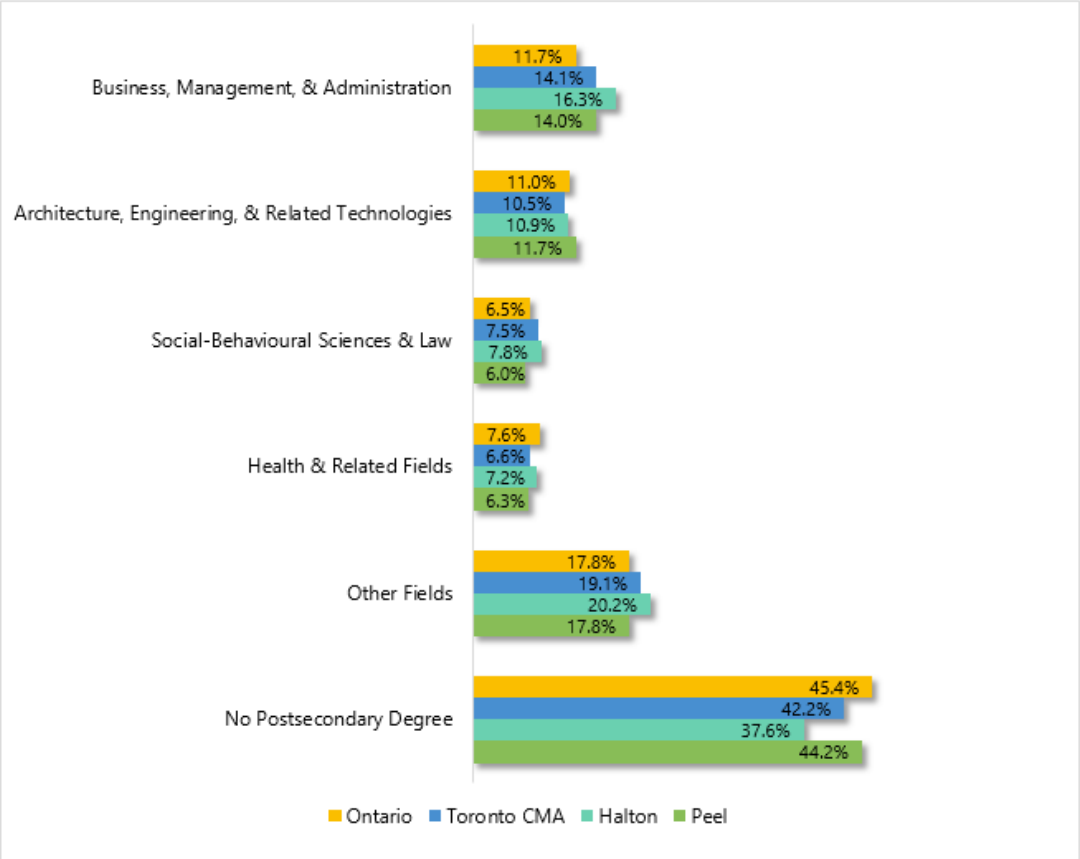


Figure 13: *Top Four Disciplinary Fields of the Peel, Halton, Toronto CMA, and Ontario Populations in 2011*

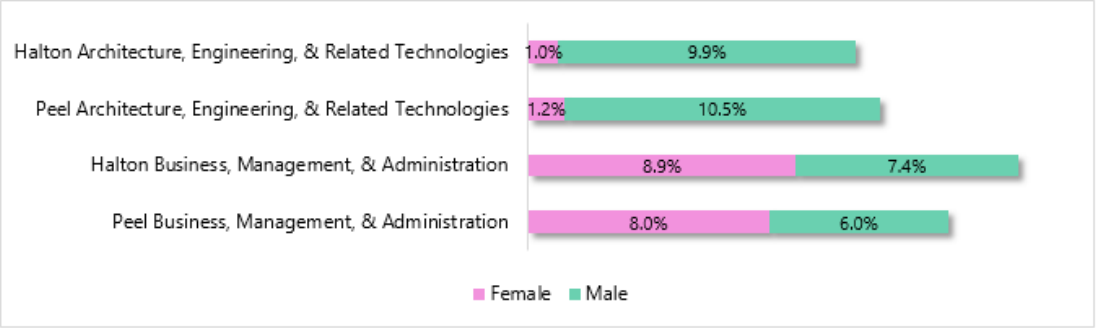


Source: *Statistics Canada, 2011 National Household Survey (NHS).*
Note: *The category of Other Fields includes disciplines, such as education, the humanities, and mathematics & computer sciences.*

The most commonly studied field was business, management, & public administration at the regional, census metropolitan, and provincial levels. The proportion of people who studied business, management, & administration was larger in Halton than in Peel, the Toronto CMA, and Ontario. One other way that Halton stood apart: it had a considerably smaller proportion of people with no postsecondary degree (37.6% vs. 42.2% to 45.4%).

The cluster of architecture, engineering, & related technologies was the second most commonly studied field in Peel, Halton, the Toronto CMA, and Ontario. Nevertheless, there was a gender gap in architecture, engineering, & related technologies (see Figure 14). To phrase it in another way, females represented roughly one-tenth of the Peel and Halton residents who studied architecture, engineering, & related technologies. The gender difference was also striking in 2014 Canada-wide undergraduate data as the number of male engineering students was 4.2 times greater than the number of female engineering students (The Ontario Network of Women in Engineering). In contrast, females and males were more evenly represented in business, management, & administration.

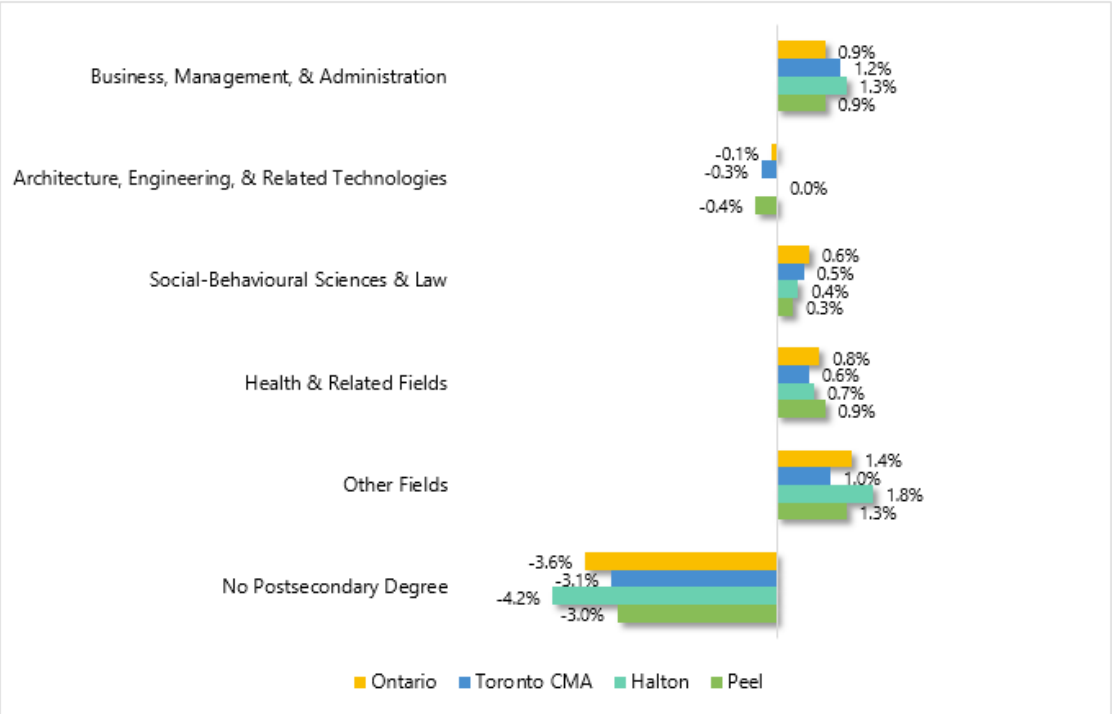
Figure 14: *Disciplinary Fields and Gender of the Peel and Halton Populations in 2011*



Source: *Statistics Canada, 2011 National Household Survey (NHS).*

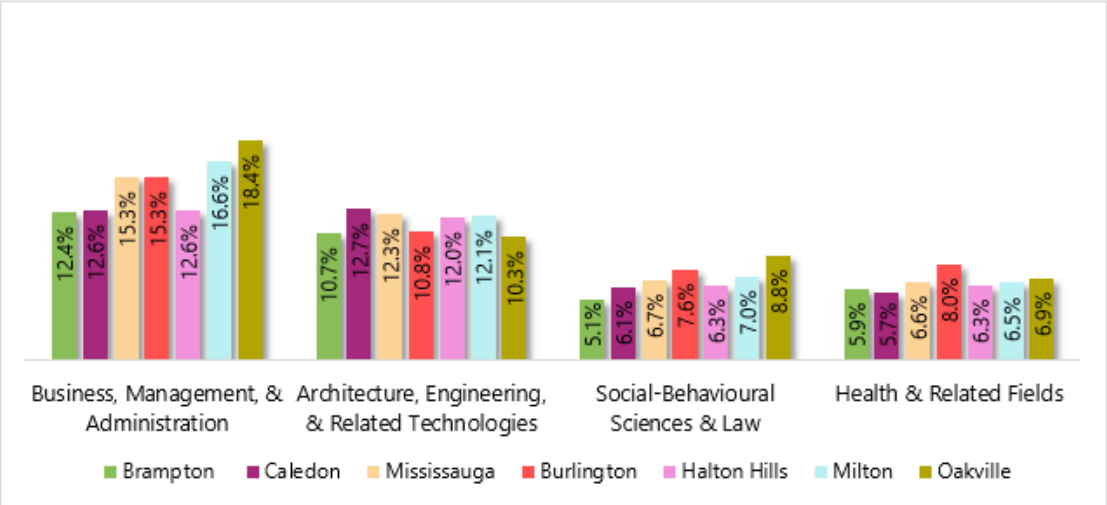
From 2006 to 2011, there was little change in the proportions of people who studied specific fields (see Figure 15). With regards to the direction of change, the proportions of people who studied business, management, & administration and less popular fields increased whereas the proportion of people who had no postsecondary degree decreased. As a parallel to the findings at the regional level and above, there was a preference for studying business, management, & administration across the Peel and Halton municipalities (see Figure 16). In particular, Oakville and Milton had the largest proportions of people who studied business, management, & administration while Caledon and Mississauga had the largest proportions of people who studied architecture, engineering, & related technologies. Oakville also had the largest proportion of people who studied social-behavioural sciences and law.

Figure 15: *Proportional Change in the Disciplinary Fields of the Peel, Halton, Toronto CMA, and Ontario Populations during 2006 to 2011*



Source: *Statistics Canada, 2011 National Household Survey (NHS).*

Figure 16: *The Top Four Disciplinary Fields of the Peel and Halton Municipal Populations in 2011*



Source: *Statistics Canada, 2011 National Household Survey (NHS).*

Key Observation: Halton has a slightly higher proportion of post-secondary graduates in the fields of business, management and administration. The proportion of graduates in the field of architecture, engineering and related technologies is similar to the provincial average, with Peel holding a slight lead. Males greatly outnumber females in the latter field, while females hold a slight edge among grads in business, management and administration.

THE LABOUR MARKET CHARACTERISTICS OF PEEL AND HALTON

3.1 LABOUR MARKET HIGHLIGHTS

- Employment was higher, and unemployment was lower, in Halton than in Peel, the Toronto CMA, and Ontario.
- The 2008 financial crisis resulted in a 14% cut to Ontario's manufacturing workforce that still exists over seven years later. This loss was especially detrimental to the Brampton workforce.
- Burlington and Milton had the lowest unemployment rates in Peel and Halton.
- The proportion of people with managerial jobs was higher in Halton than in Peel, the Toronto CMA, and Ontario. For example, nearly one in five Oakville residents was a manager.
- The industries with the most establishments or companies were transportation & warehousing in Peel and professional, scientific, & technical services in Halton.
- Manufacturing was a key source of jobs throughout Peel and Halton. Some of the other industries that accounted for many local jobs were health care & social assistance and retail trade.

3.2 FORCE VARIABLES

- During the 2010 to 2015 time-period, the labour force (LF) participation and employment rates were higher in Halton than in Peel, the Toronto CMA, and Ontario (see Table 14 and Figure 17). Correspondingly,

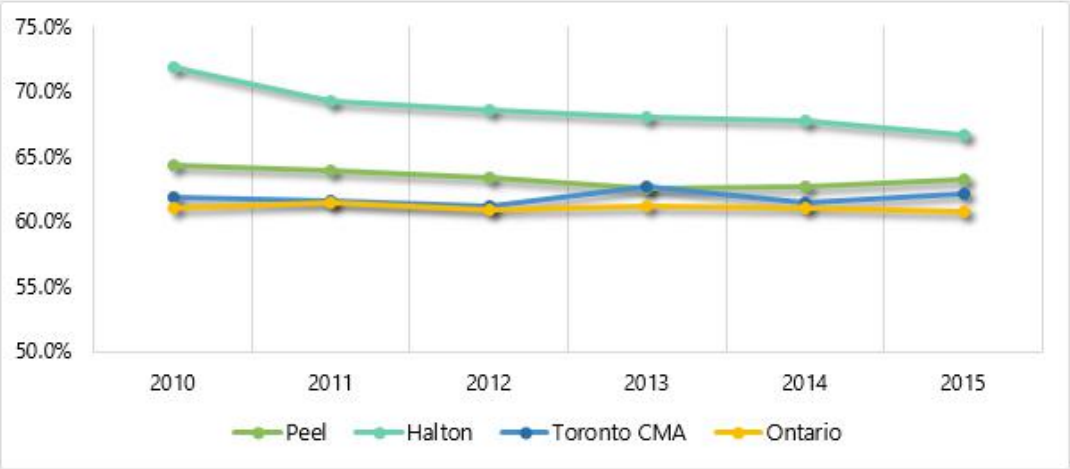
the unemployment rate was consistently lower in Halton than in the other three areas (see Figure 18). A likely reason for these differences is that Halton is a more affluent region and is home to residents who work in better-paying and more secure jobs.

Table 14: *The Labour Force Participation Rates in Peel, Halton, Toronto CMA, and Ontario from 2010 to 2015*

	2010	2011	2012	2013	2014	2015
Peel	71.4%	69.8%	69.6%	68.5%	68.2%	68.6%
Halton	76.1%	73.6%	72.6%	71.5%	71.3%	70.4%
Toronto CMA	68.1%	67.3%	67.0%	68.2%	66.8%	66.9%
Ontario	66.8%	66.6%	66.2%	66.3%	65.8%	65.2%

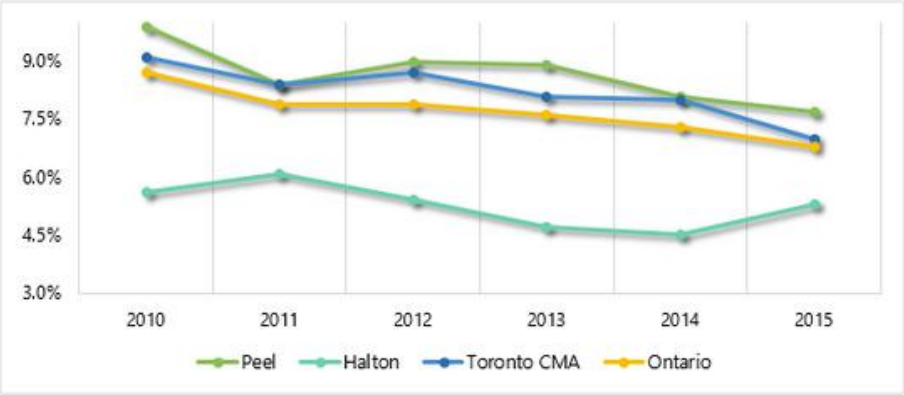
Sources: *Halton Economic Development Quarterly Reports, Peel Data Centre Annual Labour Force Characteristics, and Statistics Canada Table 282-0102 Labour Force Survey (LFS) Estimates.*

Figure 17: *The Employment Rates in Peel, Halton, Toronto CMA, and Ontario from 2010 to 2015*



Sources: *Halton Economic Development Quarterly Reports, Peel Data Centre Annual Labour Force Characteristics, and Statistics Canada Table 282-0102 Labour Force Survey (LFS) Estimates.*

Figure 18: *The Unemployment Rates in Peel, Halton, Toronto CMA, and Ontario from 2010 to 2015*



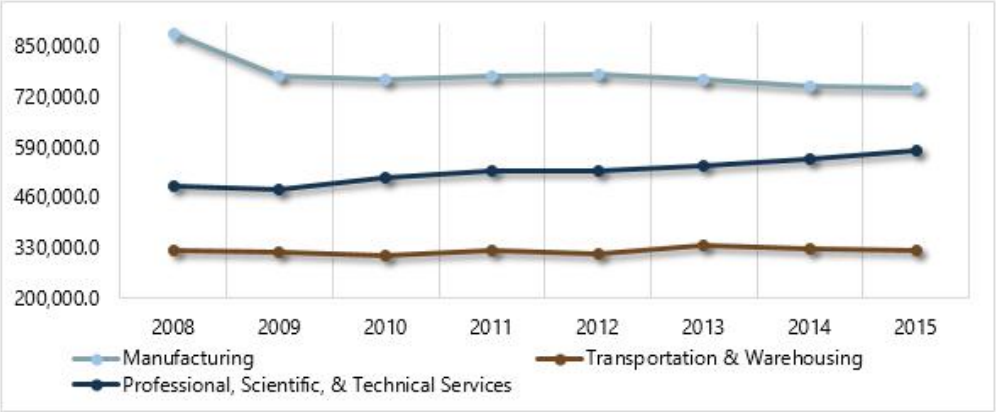
Sources: *Halton Economic Development Quarterly Reports, Peel Data Centre Annual Labour Force Characteristics, and Statistics Canada, Table 282-0102 Labour Force Survey (LFS) Estimates.*

Peel's higher unemployment rate and lower employment rate may be explained by the 2008 financial crisis that began in the United States and spread globally. Manufacturing is a vital part of the Peel economy and the crisis, along with the fairly strong Canadian dollar at the time , resulted in a loss of export revenue from a major trade partner (i.e., the US). The reduced demand for Canadian manufactured goods, in turn, led to the loss of 109,600 manufacturing jobs at the provincial level in 2009 (see Figure 19). As of 2015, the Ontario manufacturing industry had not reversed the 14.0% cut to its employed workforce. In contrast, the 2008 crisis had a much smaller impact on professional, scientific, & technical services and transportation & warehousing.

[2] CanadianForex (http://www.canadianforex.ca/forex-tools/historical-rate-tools/yearly-average-rates)

[3] Trade Data Online

Figure 19: *Changes in the Size of Ontario Industry-Specific Employed Workforces from 2008 to 2015*



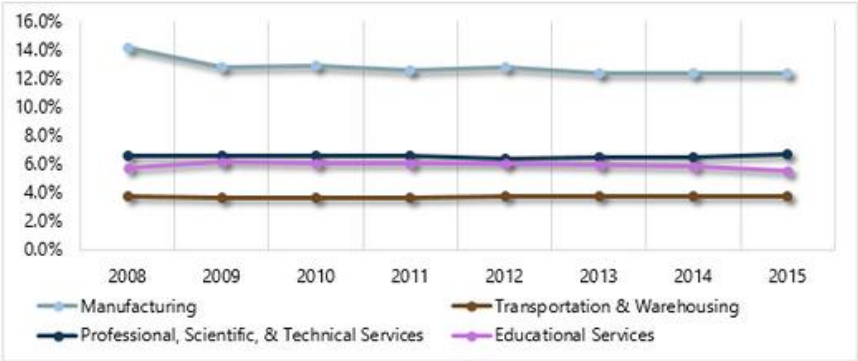
Source: *Statistics Canada, Table 282-0008 Labour Force Survey (LFS) Estimates.*

The impact of the 2008 financial crisis or collapse was evident in the contributions of different industries to Ontario's gross domestic product (GDP) (see Figure 20). Between 2008 and 2015, manufacturing accounted for conspicuously more of the provincial GDP (12.3% to 14.1%) than did other notable industries, three of which are listed below:

- Professional, scientific, & technical services (6.4% to 6.7%)
- Educational services (5.5% to 6.2%)
- Transportation & warehousing (3.7% to 3.8%)

However, the manufacturing industry's contribution to the provincial GDP dropped 1.3% in 2009 and decreased another 0.5% between 2009 and 2015. In contrast, the contributions of the other aforementioned industries remained quite stable over the 2008 to 2015 period. To reiterate, manufacturing in Ontario suffered when the US could no longer purchase massive amounts of Canadian goods.

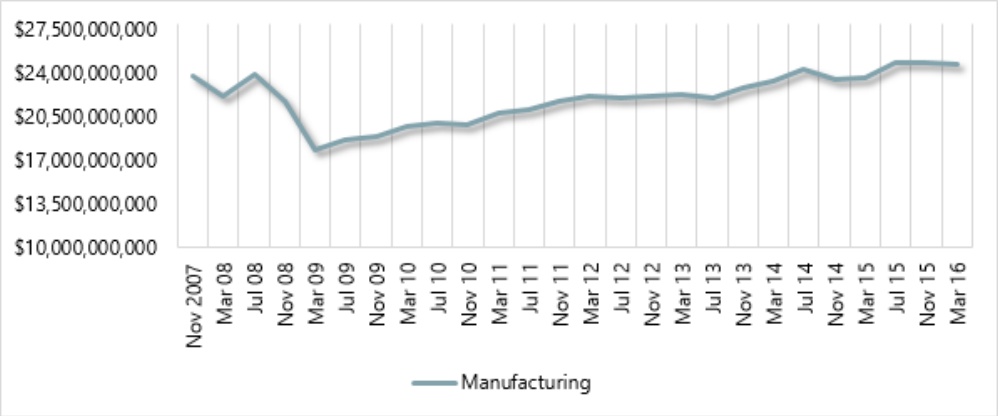
Figure 20: *The Proportions of Industry Contributions to Ontario's Gross Domestic Product (GDP) from 2008 to 2015.*



Source: *Statistics Canada, Table 379-0028 Gross Domestic Product (GDP) at Basic Prices.*

The consequence of Canada's dependence on the US as a trade partner was a loss of almost 36 billion dollars in provincial manufacturing sales between November 2007 and March 2009 (see Figure 21). Ontario manufacturing sales returned to their pre-crisis levels (i.e., over $23 billion per month) in 2014 and began to surpass these levels around July 2015. The discrepancy between the growth in sales and the sustained reduction in the manufacturing workforce may be explained by the weaker Canadian dollar and the cost-saving mindset of manufacturers. When the Canadian dollar has less value, the raw materials that are obtained from other countries cost more, and manufacturers may offset this expense with a smaller workforce. As an adaptation to the uncertainty caused by the financial crisis, manufacturers became less inclined to assume the cost of hiring new workers while relying more on computers and automated processes. If the manufacturing industry continues to experience high revenue without any setbacks, it is possible that owners will add to their rosters of workers.

Figure 21: *Ontario Monthly Manufacturing Sales from November 2007 to March 2016*



Source: *Statistics Canada, Table 304-0015 Manufacturing Sales by North American Industry Classification System (NAICS) and Province.*

Among the Peel and Halton municipalities, Milton experienced the most growth in its labour force (LF) between 2006 and 2011 (see Table 15), because of the great increase in its residential base. The labour force growth in Milton was 2.8 to 15.5 times the growth in the other Peel and Halton municipalities. Burlington and Milton had the lowest unemployment rates in 2011 and 2016 whereas Brampton had the highest unemployment rate in both years. One reason for the elevated unemployment in Brampton may be the combination of lower levels of education attainment (Figure 9) and the higher reliance on manufacturing jobs. As manufacturing jobs declined, those individuals who lost their employment might have had a harder time transitioning into other fields of work. Just as an example, Brampton has a larger proportion of people with no diploma or other educational credential (20.0%, compared to 12.7% in Milton).

The trend of declining unemployment suggests that the Peel and Halton labour markets are gradually recovering from the 2008 financial crisis, like the rest of the province.

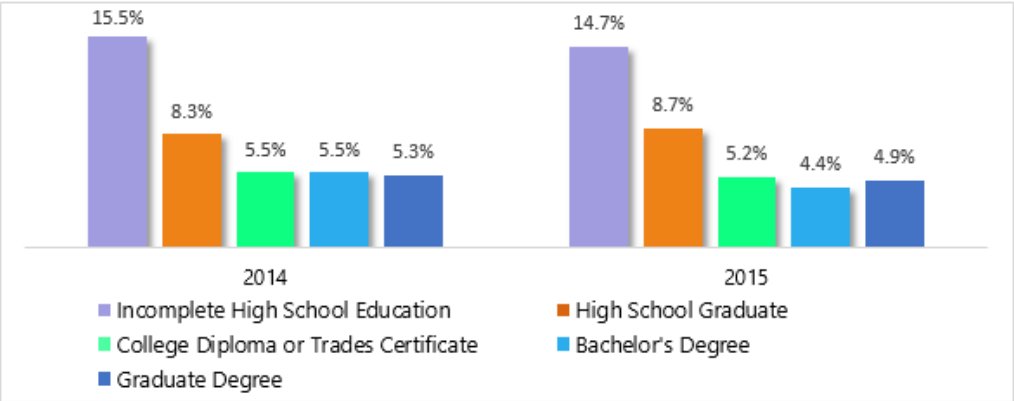
Table 15: *The Peel and Halton Municipal Labour Forces and Unemployment Rates*

Location	2011 Labour Force (LF) Pop	2006-11 Change in Pop (%)	2011 Unemployment Rate	2016 1st Quarter Unemployment Rate
Brampton	281,250	16.7%	9.5%	8.1%
Caledon	34,125	3.0%	6.5%	5.6%
Mississauga	395,805	5.0%	8.7%	7.5%
Burlington	98,785	6.7%	5.8%	4.9%
Halton Hills	34,220	6.7%	6.6%	5.7%
Milton	48,055	46.4%	5.6%	4.8%
Oakville	100,565	9.0%	7.0%	6.0%

Sources: *MoneySense 2016 Canada's Best Places to Live Data Set, Statistics Canada, 2011 National Household Survey (NHS), and 2006 Community Profiles.*
Note: *Pop is the shortened form of population.*

Educational attainment is inversely correlated with unemployment. Labour force survey (LFS) data from 2014 and 2015 illustrates this pattern by showing that the unemployment rate was higher among Ontarians who did not complete high school (14.7% to 15.5%) than among Ontarians with a postsecondary credential (4.4% to 5.5%) (see Figure 22). In other words, a college diploma, university degree, or trades certificate is predictive of lower unemployment.

Figure 22: *Unemployment Rate and Educational Attainment in Ontario from 2014 to 2015*

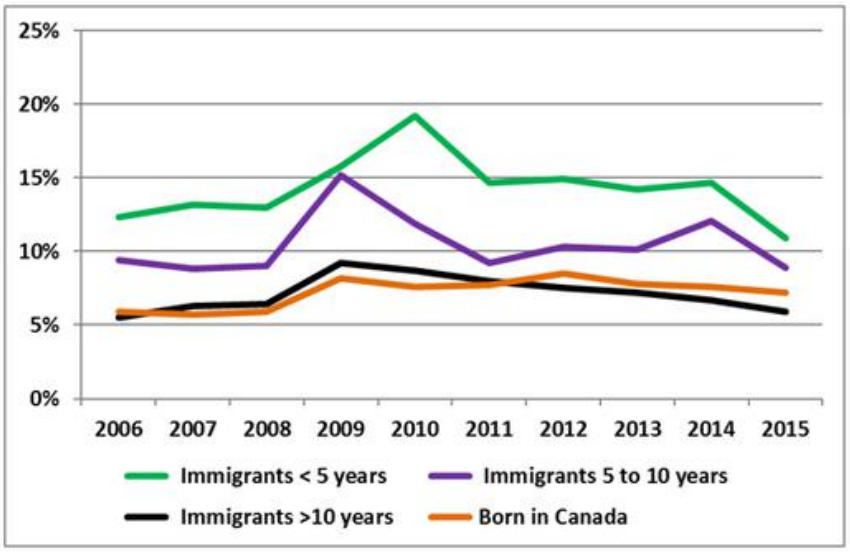


Source: *Statistics Canada, Table 282-0004 Labour Force Survey (LFS) Estimates.*

Unemployment rates vary with the period of immigration. Immigrants who have been living in Canada for less than five years have the highest unemployment rate (Figure 23). Their rate increased significantly as a consequence of the 2008 recession and stayed high for some time. The unemployment rate of immigrants who have been in Canada between five and ten years also is higher, had shot up with the 2008 recession, but came down sooner. For both these categories, the unemployment rate dropped noticeably between 2014 and 2015. The unemployment rate for immigrants in Canada for more than ten years is very similar to that of Canadian-born residents, and for the last four years has actually been lower than that of Canadian-born.

Newcomers may experience a range of challenges on arrival to Canada that can have an impact on their labour market outcomes. These outcomes can be influenced by their language proficiency and their understanding of Canadian business practices, or can be negatively affected by the discounting of their foreign work experience or non-recognition of their professional credentials. And of course there is also the potential for discrimination, particularly in relation to racialized immigrants (John Shields et al).

Figure 23: *Unemployment Rate by period of immigration and for Canadian-born, Toronto CMA, 2006 to 2015.*



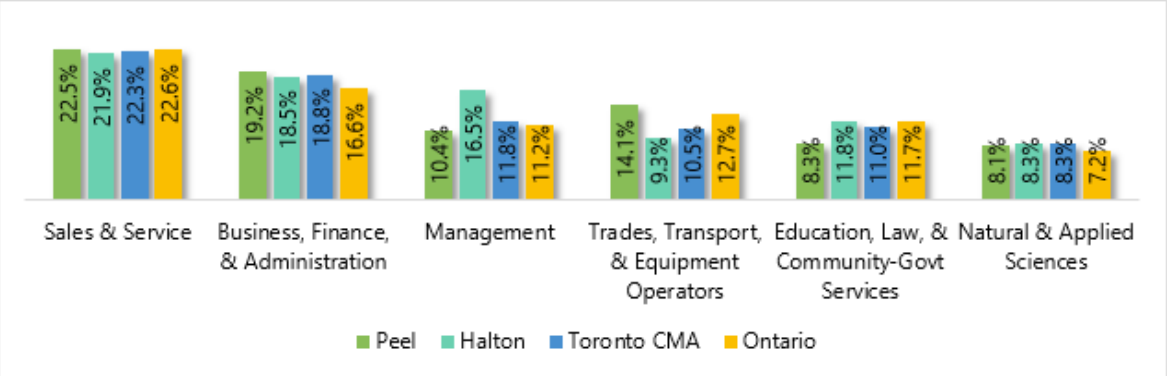
Source: *Statistics Canada, Table 282-0102 Labour Force Survey (LFS) Estimates.*

Key Observation: Employment and unemployment rates reflect a complex dynamic in the labour market. Certainly higher levels of education contribute to better labour market outcomes, however factors such as one's period of immigration also have a bearing on labour market success, given the challenges and barriers that newcomers face. Better labour market outcomes depend on more effective workforce development (working with employers to meet skill needs) and better employment supports to meet the special needs of different population groups.

3.3 OCCUPATIONS

In 2011, the most common occupational categories at the regional, census metropolitan, and provincial levels were sales & service and business, finance, & administration (see Figure 24). Halton was distinguished from Peel, the Toronto CMA, and Ontario by its larger proportion of residents with managerial jobs. In turn, Peel was distinguished from the other three areas by its higher percentage of residents in the trades, transport, & equipment operator category. Another unique aspect of Peel was that a smaller proportion of its population worked in education, law, & community-government services. In general, the knowledge economy was more apparent in Halton and the Toronto CMA while the physical production economy was more apparent in Peel and Ontario as a whole.

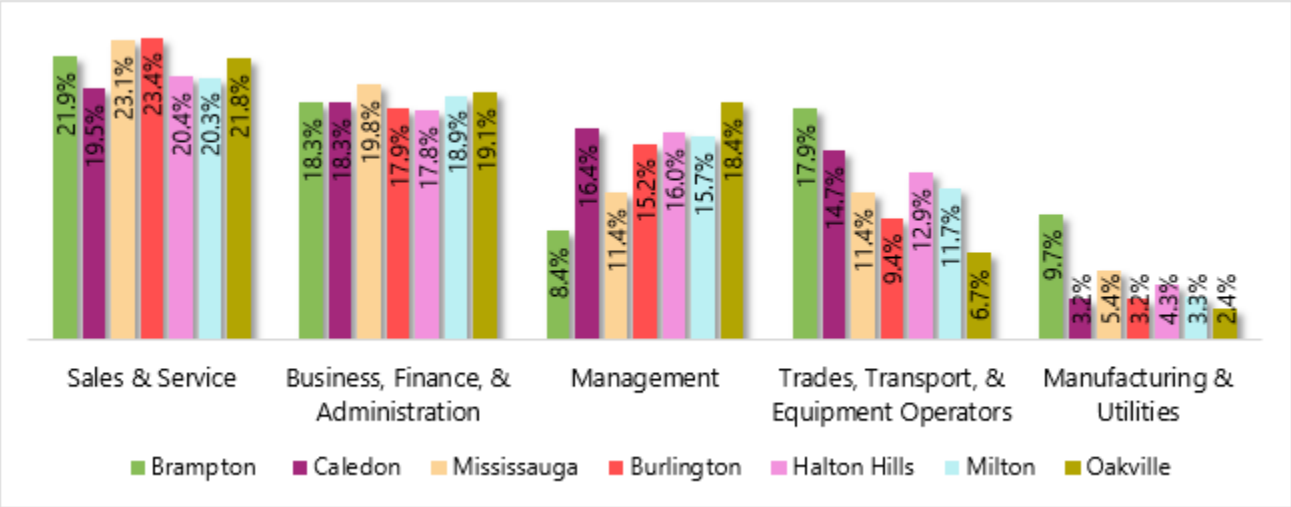
Figure 24: *The Occupations of the Peel, Halton, Toronto CMA, and Ontario Populations in 2011*



Source: *Statistics Canada, 2011 National Household Survey (NHS).*
Note: *Govt is the shortened form of Government.*

As a parallel to the pattern observed in the broader geographical areas (e.g., Ontario), most residents of the Peel and Halton municipalities worked in sales & service or business, finance, & administration (see Figure 25). Brampton and Mississauga differed from the other five municipalities by having smaller proportions of people in management. In Caledon and the Halton municipalities, the management occupation category was prominent, and this trend was exemplified in Oakville where almost 1 in 5 people had a managerial position. Brampton was also unique in that it had larger proportions of residents in manufacturing & utilities and the trades, transport, & equipment operator category. The greater representation of Brampton residents in the aforementioned categories was consistent with Chrysler Canada (automobile manufacturing) and Maple Lodge Farms (food manufacturing) being two of the largest local employers in 2011 and 2013 (Brampton Economic Development Office, 2011 and 2013 Employer Surveys). Of all the Peel and Halton municipalities, Oakville had the smallest proportion of residents in the trades, transport, & equipment operator category.

Figure 25: *The Occupations of the Peel and Halton Municipal Populations in 2011*



Source: *Statistics Canada, 2011 National Household Survey (NHS).*

By and large, the proportions of residents in various occupational categories changed slightly between 2006 and 2011 (see Figure 26). The most notable changes were decreases in the proportions of Brampton residents in business, finance, & administration (-4.0%) and manufacturing & utilities (-2.8%). These declines in Brampton were reflective of the 2008 financial crisis, which had a more severe impact on the manufacturing industry than on other industries. For example, Chrysler Canada (or Fiat Chrysler Canada) had a workforce of 2,900 people three years after the crisis, but as the manufacturing industry regained momentum, the workforce grew to 3,437 seven years after the crisis (Brampton Economic Development Office, 2011 and 2015 Employer Surveys). Brampton was especially affected by the financial crisis because the manufacturing industry was responsible for almost one-quarter of all local jobs in 2011 and 2013.

Figure 26: *Proportional Change in the Occupations of the Peel and Halton Municipal Populations during 2006 to 2011*

Source: *Statistics Canada, 2011 National Household Survey (NHS) and 2006 Community Profiles.*

Key Observation: The choice of where to live reflects both one's circumstances in the labour market and one's income level. Oakville is home to many managers. Brampton has a higher proportion of workers working in manufacturing plants and logistics operations. Where people chose to live is a decision that is affected by local employment options as well as their attraction to a particular location (for example, its amenities, the quality of homes, or affinity with a neighbourhood), so that the choice of residency is only partly a function of labour market considerations.

3.4 INDUSTRIES

One of the findings from the 2011 National Household Survey (NHS) was the similarities in the distribution of the labour force across various industries between the regional and provincial levels. For example, the largest proportions of the Peel, Halton, and Ontario workforces were currently or formerly employed in the manufacturing and retail trade industries (see Table 16). At the regional and provincial levels, more than one in five people were employed, or had been employed, in manufacturing or retail trade establishments. There was a different pattern of workforce distribution in the Toronto CMA where more people were linked to either retail trade or professional, scientific, & technical services. On a related note, the professional, scientific, & technical service industry was more prominent in Halton

than in Peel and Ontario. Peel was also unique in that a higher percentage of its workforce participated in transportation & warehousing while a lower percentage participated in health care & social assistance.

Table 16: *Labour Force Distribution across Industries in 2011*

Industry	Location (2011)			
	Peel	Halton	Toronto CMA	Ontario
Retail Trade	11.2%	11.1%	10.4%	10.9%
Accommodation & Food Services	5.0%	5.4%	5.6%	6.1%
Finance & Insurance	6.2%	7.7%	7.6%	5.3%
Health Care & Social Assistance	7.4%	8.3%	8.6%	10.1%
Manufacturing	13.1%	10.1%	9.7%	10.2%
Professional, Scientific, & Technical Services	7.7%	9.7%	9.9%	7.4%
Transportation & Warehousing	8.4%	4.5%	4.8%	4.5%
Other Industries	41.0%	43.2%	43.4%	45.5%
Total	100.0%	100.0%	100.0%	100.0%
Total Labour Force (LF) Population	711,175	281,620	3,042,645	6,864,985

Source: *Statistics Canada, 2011 National Household Survey (NHS).*
Note: *The four largest industries, based on number of resident workers, are highlighted in an aqua blue colour.*

If one were to use the number of business establishments as a measure of industry size, three of the four largest industries in Peel and Halton would be the following:

- Professional, scientific, & technical services (e.g., consultants, accountants, lawyers, engineers and information systems analysts)
- Real estate, rental, & leasing (large number of landlords)
- Construction (large number of contractors and skilled tradespersons)

However, it should be noted that the high numbers of businesses in these categories are driven by a high proportion of solo operators (that is, firms without any employees; in these categories, this would include consultants, landlords and individual contractors). Health care & social assistance (offices of health care professionals, from family doctors to dentists) completed the list of top four industries in Halton whereas transportation & warehousing (truck transportation firms) held a comparable rank in Peel (see Table 17). Again, in both cases there is a large proportion of small operators, from a doctor's office to a truck driver. Among these top four lists, the two largest industries in Peel were transportation & warehousing and professional, scientific, & technical services. Halton's two largest industries were professional, scientific, & technical services and real estate, rental, & leasing. The top four industries in both regions grew at least 3.9% between 2014 and 2015; furthermore,

the industries that grew the most were transportation & warehousing in Peel (7.7%) and real estate, rental, & leasing in Halton (8.9%). In both regions, the industry that grew the least was retail trade (0.7% to 1.4%). Overall, the total number of business establishments increased 4.9% in Peel and 4.5% in Halton between December 2014 and December 2015.

This level of business formation has only a limited effect on local employment levels, in large part because the businesses reflect local economic activity, while the unemployment rate relates to the labour force outcomes of residents, many of whom do not work in the region where they live.

Table 17: *Distribution of Business Establishments across Industries in December 2014 and December 2015*

Industry	Peel			Halton		
	2014	2015	2014-15 Change	2014	2015	2014-15 Change
Retail Trade	8,751	8,872	1.4%	3,955	3,984	0.7%
Construction	12,226	12,705	3.9%	4,873	5,080	4.3%
Health Care & Social Assistance	6,248	6,566	5.1%	4,125	4,340	5.2%
Professional, Scientific, & Technical Services	18,489	19,504	5.5%	10,319	10,760	4.3%
Transportation & Warehousing	23,227	25,024	7.7%	2,320	2,438	5.1%
Real Estate, Rental, & Leasing	17,032	18,221	7.0%	8,098	8,822	8.9%
Other Industries	59,102	61,295	3.7%	27,367	28,371	3.7%
Total	145,075	152,187	4.9%	61,057	63,795	4.5%

Source: *Statistics Canada, Canadian Business Counts.*
Note: *The four largest industries, based on number of businesses, are highlighted in an aqua blue colour.*

Statistics Canada uses three size categories to sort business establishments: small (1 to 99 employees), medium (100 to 499 employees), and large (500 or more employees). Across Peel and Halton, most establishments in 2015 were small with rosters of less than 100 employees (see Table 18 and Figure 26). To elaborate, the vast majority of transportation & warehousing (96.3%) and professional, scientific, & technical service (95.2%) establishments in Peel had less than 20 employees. Similarly, 95.8% of the professional, scientific, & technical service establishments in Halton had less than 20 employees. The manufacturing industry in both Peel and Halton had the most medium and large business establishments with rosters of 100 or more employees. Manufacturing was also strongly represented among establishments with 20 to 99 employees.

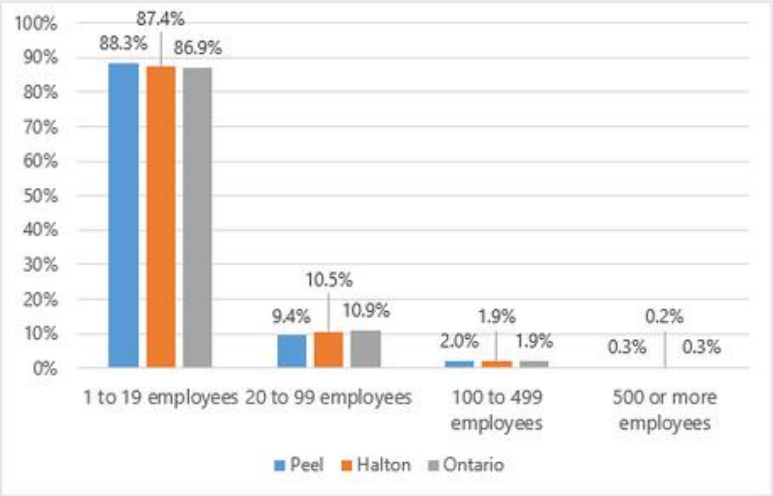
Table 18: *Size and Number of Business Establishments across Industries in December 2015*

Industry	Number of Employees							
	Peel				Halton			
	1 to 19	20 to 99	100 to 499	500+	1 to 19	20 to 99	100 to 499	500+
Construction	3,513	319	54	8	1,541	114	16	4
Health Care & Social Assistance	2,815	199	49	4	1,747	132	30	4
Manufacturing	1,901	624	188	19	639	218	62	6
Professional, Scientific, & Technical Services	6,097	260	40	9	3,100	121	15	1
Transportation & Warehousing	10,242	285	95	12	745	78	22	1
Real Estate, Rental, & Leasing	1,392	105	20	3	644	41	2	1

Source: *Statistics Canada, Canadian Business Counts.*
Note: *The largest industry in each size category is highlighted in an aqua blue colour.*

There is a great similarity in the distribution of firms by employee size between Peel, Halton and Ontario (Figure 27). Close to 90% of all business establishments with employees have between 1 and 19 employees, while the percentage of establishments with 100 to 499 employees is around 2%.

Figure 27: *Distribution of business establishments by number of employees, Peel, Halton and Ontario in December 2015*



Source: *Statistics Canada, Canadian Business Counts.*

Key Observation: Small business establishments are not only different in size, but often qualitatively different from larger establishments in the same industry sector. A dentist's office, a construction contractor, a truck driver and a landlord are different from a nursing home, a subdivision developer, a logistics firm and a property management business. Differently sized establishments require qualitatively different kinds of financial, business development and human resources support.

3.4.1 INDUSTRIES IN THE REGION OF HALTON

The manufacturing and retail trade industries were the two largest sources of employment in Halton at three different points in time (2011, 2014, and 2015) (see Table 19). In other words, 28.6% to 29.8% of all local jobs were manufacturing or retail trade positions. Health care & social assistance was the third largest source of local employment in 2011, 2014, and 2015. Between 2014 and 2015, the industry that changed the most as a source of jobs was professional, scientific, & technical services. The number of professional, scientific, & technical service jobs in Halton decreased by 0.6% or 1,123. Concurrently, there was no decrease in the number of professional, scientific, & technical establishments. Most professional, scientific, & technical service establishments were small businesses; therefore, the observed decline in jobs may reflect a struggle to retain employees or a tendency to hire people for short-term projects.

Table 19: *Jobs and Workers across Halton Industries in 2011, 2014, and 2015*

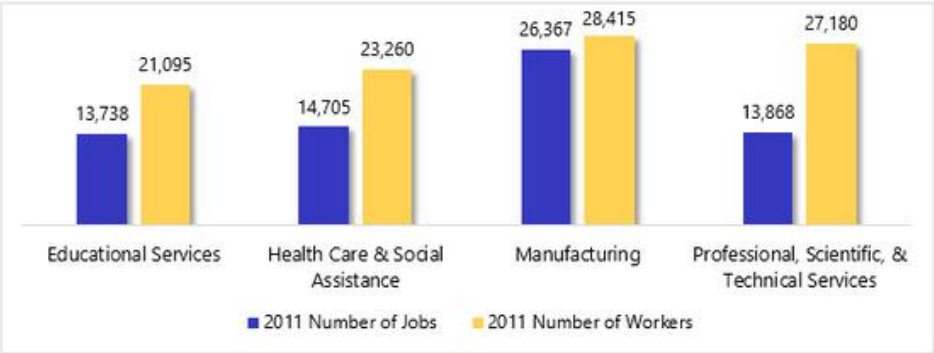
Industry	Halton				
	2011 Number of Jobs	2011 Number of Workers	2014 % of All Jobs in Halton	2015 % of All Jobs in Halton	2014-15 Change
Retail Trade	25,919	31,255	14.8%	14.6%	-0.2%
Educational Services	13,738	21,095	8.4%	8.7%	0.3%
Health Care & Social Assistance	14,705	23,260	9.1%	9.5%	0.4%
Manufacturing	26,367	28,415	14.3%	14.0%	-0.3%
Professional, Scientific, & Technical Services	13,868	27,180	7.3%	6.7%	-0.6%
Other Industries	80,761	150,415	46.1%	46.5%	0.4%
Total	175,358	281,620	100.0% (218,093)	100.0% (220,026)	

Sources: *Statistics Canada, 2011 National Household Survey (NHS) and the Halton Region Employment Survey (2011, 2014, and 2015).*

Notes:
-The largest industry in each year or time category is highlighted in an aqua blue colour. In the last row of the table, the total number of jobs in 2014 and 2015 are written in parentheses.
-This table indicates both part-time and full-time employment.

Commuting patterns were revealed when the number of jobs were compared with the number of resident workers. In 2011, the most striking discrepancy was that there were 13,312 more Halton residents linked to the professional, scientific, & technical service industry than local jobs in that industry (see Table19 and Figure 28). The implication of this discrepancy is that many people in professional, scientific, & technical services would appear to commute out of Halton for work. Similar discrepancies were also apparent in educational services and health care & social assistance. The results of the 2011 Transportation Tomorrow Survey pinpointed the destinations of Halton residents who commuted in the morning as 72.1% of these individuals traveled to Etobicoke, Mississauga, or the City of Toronto for work (Halton Region Data Centre, 2011). In contrast, the majority of Halton residents who worked in manufacturing did not appear to commute out of the region.

Figure 28: *A Comparison of Jobs and Workers in Halton*



Sources: *Statistics Canada, 2011 National Household Survey (NHS) and the Halton Region Employment Survey (2011).*

The common feature among the Burlington, Halton Hills, and Milton workforces was that the largest proportions of these three groups were active in manufacturing or retail trade on a regular or less than regular basis (see Table 20). There was also greater workforce representation in the wholesale trade industry among Halton Hills and Milton residents than among Burlington and Oakville residents. Oakville differed from the other three Halton municipalities by having the largest proportion of its workforce linked to professional, scientific, & technical services. Furthermore, people who participated in finance & insurance constituted a distinctly larger proportion of the Oakville workforce and relatively smaller proportions of the other municipal workforces. Correspondingly, the proportion of graduate degree holders was higher in Oakville (13.7% in 2011) than in the other Halton municipalities (7.0% to 9.8% in 2011) (see Figure 9).

Table 20: *Distribution of Workers across Halton Industries at the Municipal Level in 2011*

Industry	% of Labour Force (LF) Population in a Municipality Location (2011)			
	Burlington	Halton Hills	Milton	Oakville
Retail Trade	12.0%	10.9%	10.6%	10.6%
Accommodation & Food Services	6.2%	4.0%	4.5%	5.6%
Educational Services	7.8%	7.8%	7.5%	7.1%
Finance & Insurance	7.2%	3.9%	6.8%	9.9%
Health Care & Social Assistance	9.0%	7.3%	7.7%	8.2%
Manufacturing	10.1%	13.2%	11.0%	8.6%
Professional, Scientific, & Technical Services	9.0%	7.3%	7.9%	12.0%
Wholesale Trade	6.6%	8.4%	8.2%	6.5%
Other Industries	32.1%	37.2%	35.8%	31.5%
Total	100.0%	100.0%	100.0%	100.0%

Source: *Statistics Canada, 2011 National Household Survey (NHS).*
Note: *The four largest industry-specific workforces are highlighted in an aqua blue colour.*

Over the 2014 to 2015 period, manufacturing and retail trade were, on average, the sources of almost one in three local jobs across Burlington, Halton Hills, Milton, and Oakville (see Table 21). The wholesale trade industry was the third largest source of local jobs in Milton while health care & social assistance fulfilled the same role in Burlington and Oakville. In Halton Hills, educational services overtook health care & social assistance and became the third largest source of local jobs in 2015. Likewise, the number of educational service jobs increased in Burlington and Milton. Halton experienced a loss of professional, scientific, & technical service jobs (see Table 19), and this drop-off was concentrated in Burlington. More specifically, positions in Burlington accounted for three out of every four professional, scientific, & technical service jobs that were lost between 2014 and 2015. The decline in Burlington as a source of professional, scientific, & technical service jobs may reflect competition with Mississauga where the same type of job was increasing.

A notable finding from the 2013 Conference Board of Canada report on labour shortages was that the lack of aerospace and electronics engineers in Ontario posed a challenge for not only the manufacturing industry but also professional, scientific, & technical services. The paucity of aerospace and electronics engineers is especially relevant as two of the region's largest employers in 2014 were manufacturing establishments—namely, Ford Canada & UTC Aerospace Systems—that may need those specific groups of professionals (2014 Halton Region Employment Survey).

Table 21: *Distribution of Jobs across Halton Industries at the Municipal Level in 2014 and 2015*

Industry	Burlington		Halton Hills		Milton		Oakville	
	2014	2015	2014	2015	2014	2015	2014	2015
Retail Trade	15.4%	15.1%	21.6%	22.2%	14.0%	13.0%	12.9%	12.7%
Accommodation & Food Services	7.8%	7.9%	7.6%	7.2%	7.7%	8.3%	7.2%	7.4%
Educational Services	8.0%	8.6%	6.9%	7.3%	7.3%	9.3%	9.6%	9.0%
Health Care & Social Assistance	8.7%	9.1%	7.4%	6.5%	7.5%	7.7%	10.5%	11.2%
Manufacturing	15.0%	14.8%	14.7%	14.9%	12.2%	12.1%	14.3%	13.6%
Professional, Scientific, & Technical Services	7.6%	6.6%	2.7%	2.0%	2.9%	2.6%	9.5%	9.5%
Transportation & Warehousing	3.6%	3.7%	5.7%	5.2%	7.8%	7.7%	3.6%	3.7%
Wholesale Trade	6.1%	6.2%	2.0%	3.9%	11.5%	10.7%	5.0%	4.9%
Other Industries	27.8%	28.0%	31.4%	30.8%	29.1%	28.6%	27.4%	28.0%
Total	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%

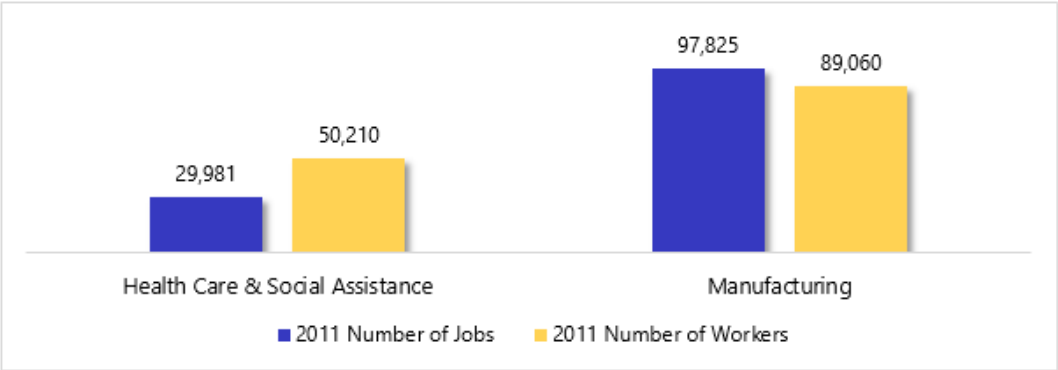
Source: *The Halton Region Employment Survey (2014 and 2015).*
Note: *The four largest industries, based on number of jobs, are highlighted in an aqua blue colour.*

Key Observation: To a large degree, retail trade, educational services, and health care & social assistance serve a resident population. The workforce development opportunities may reside more in industries that represent a distinct cluster or that are "tradable" – serve an economy beyond the local area. These include: manufacturing across all four municipalities; professional, scientific and technical services in Oakville and Burlington; and the logistics sector (transportation & warehousing, and wholesale trade) in Milton.

3.4.2 INDUSTRIES IN THE REGION OF PEEL

In manufacturing, jobs outnumbered workers by 8,765 across Brampton and Mississauga (see Figure 29). The aforementioned difference implies that the labour needs of the Brampton-Mississauga manufacturing industry in 2011 were not met by area residents. Consequently, people who did not live in the Brampton-Mississauga area or perhaps Peel itself were an important part of the local manufacturing workforce. 2011 data about industry-specific jobs in Caledon was not available. The opposite pattern was found in health care & social assistance as many Brampton and Mississauga residents appeared to commute out of Peel for work in this industry. As a source of jobs, manufacturing was the dominant industry in Peel.

Figure 29: *A Comparison of Jobs and Workers in Brampton and Mississauga Combined*



Source: *Statistics Canada, 2011 National Household Survey (NHS), Brampton Employer Survey (2011), and Mississauga Employment Profile (2012).*
Note: *The 2012 edition of the Mississauga Employment Profile presented data from 2011.*

People who were involved in manufacturing and retail trade formed the largest proportions of the Brampton, Caledon, and Mississauga workforces (see Table 22). The Brampton workforce had greater representation in transportation & warehousing while the Mississauga workforce had greater representation in the professional, scientific, & technical service industry. Caledon was unique in that more of its workforce participated in construction and educational services. Health care & social assistance workers were among the top four labour force groups in Brampton and Mississauga but not in Caledon.

Table 22: *Distribution of Workers across Peel Industries at the Municipal Level in 2011*

Industry	% of Labour Force (LF) Population in a Municipality Location (2011)		
	Brampton	Caledon	Mississauga
Retail Trade	11.4%	9.6%	11.2%
Construction	5.2%	9.0%	5.2%
Educational Services	4.6%	8.3%	5.7%
Health Care & Social Assistance	7.3%	7.1%	7.5%
Manufacturing	15.8%	12.8%	11.3%
Professional, Scientific, & Technical Services	5.6%	7.3%	9.3%
Transportation & Warehousing	11.2%	6.1%	6.7%
Other Industries	38.9%	39.8%	43.1%
Total	100.0%	100.0%	100.0%

Source: *Statistics Canada, 2011 National Household Survey (NHS).*
Note: *The four largest industry-specific workforces are highlighted in an aqua blue colour.*

In Brampton and Mississauga, manufacturing and transportation & warehousing were responsible for almost one in three local jobs (see Table 23). Retail trade and health care & social assistance were also sizable sources of jobs in Brampton. However, wholesale trade and professional, scientific, & technical services were analogously critical sources of paid work in Mississauga in 2015. Number of professional, scientific, & technical service jobs increased by 0.8% or 3,535 in one year (2014-2015). Some of the largest employers in Mississauga were professional, scientific, & technical service establishments, such as Accenture (business management and technology consulting services), Hatch (engineering and process development consulting services), and Oracle Corp Canada (business software and database systems) (2016 Mississauga Employment Profile).

Table 23: *Distribution of Jobs across Peel Industries at the Municipal Level in 2015*

Industry	% of All Jobs in a Municipality	
	Brampton	Mississauga
Retail Trade	19.1%	7.2%
Accommodation & Food Services	6.3%	4.8%
Health Care & Social Assistance	7.8%	5.3%
Manufacturing	22.3%	16.1%
Professional, Scientific, & Technical Services	2.8%	9.2%
Transportation & Warehousing	9.6%	11.3%
Wholesale Trade	7.3%	12.6%
Other Industries	24.8%	33.5%
Total	100.0%	100.0%

Sources: *Brampton Employer Survey (2015) and Mississauga Employment Profile (2015 and 2016).*

Note: *The four largest industries, based on number of jobs, are highlighted in an aqua blue colour. In addition, the 2015 and 2016 editions of the Mississauga Employment Profile presented data from 2014 and 2015 respectively. There was no 2014 edition of the Brampton Employer Survey because the data is collected every other year.*

Key Observation: Peel has two significant industry concentrations, manufacturing and logistics (transportation & warehousing, and wholesale trade), with professional, scientific and technical services emerging in Mississauga. Compared to the other municipalities, Mississauga appears to have a considerably lower proportion of local jobs in the health care & social assistance sector.

3.5 COMMUTING PATTERNS

The dynamics of local labour markets are made more complex by the fact that many residents who live in a given municipality may not work in that municipality, and jobs in a municipality may also be filled by many individuals who do not live in that municipality.

Data on commuting flows excludes two categories of employed residents: those who work at home and those whose work has no fixed place. In 2011, in the Toronto CMA, approximately 6.6% of employed residents worked at home, and another 10.9% worked at no fixed workplace (occupations in construction are the most prominent, but also includes performers and certain primary sector jobs).
Table 24 provides the commuting numbers for 2011 for each municipality in Peel and Halton Regions. The following legend outlines the purpose of each column.

Table 24: *Commuting flows by municipality, Peel and Halton Regions, 2011*

	Commuting residents	Commuting to local jobs	Local residents in local jobs	Ratio of local jobs to commuting residents	2006 ratio of jobs to commuting residents	2001 ratio of jobs to commuting residents	% of local residents in local jobs
Mississauga	301,265	380,130	166,025	1.26	1.23	1.16	44%
Brampton	213,510	142,900	78,420	0.67	0.69	0.74	55%
Caledon	24,610	16,130	5,745	0.66	0.62	0.58	36%
Oakville	76,130	70,470	27,270	0.93	0.91	0.95	39%
Burlington	77,350	75,660	34,080	0.98	0.98	0.93	45%
Milton	37,255	24,575	9,725	0.66	0.84	1.18	40%
Halton Hills	25,905	15,265	8,565	0.59	0.59	0.55	56%

1st column	**Municipality**
2nd column	Number of employed residents of that municipality commuting to work (anywhere)
3rd column	Number of workers (from anywhere) commuting to jobs in that municipality
4th column	Number of employed local residents commuting to local jobs in that same municipality
5th column	Ratio of local jobs to employed residents [column (3) divided by column (2)]
6th column	Ratio of local jobs to employed residents in 2006
7th column	Ratio of local jobs to employed residents in 2001
8th column	% of local residents in local jobs [column (4) divided by column (3)]

Sources: *Statistics Canada, National Household Survey, 2011*

To illustrate how to read Table 24: 301,265 Mississauga residents commute to work (this work can be anywhere, except at home or in a job with no fixed workplace), while 380,130 workers commute to jobs in Mississauga. 166,025 Mississauga residents commute to jobs located in Mississauga. The ratio of Mississauga jobs to the total number of Mississauga commuters is 1.26. Put another way, all Mississauga jobs could employ every Mississauga commuting resident plus another 26%. In 2006, the ratio was 1.23, and in 2001 the ratio was 1.16. Finally, 44% of Mississauga jobs are filled by Mississauga residents.

Some observations about Table 24:

- Mississauga is clearly a jobs centre, with a significantly greater number of jobs compared to residents commuting to work; Burlington and Oakville come close to an equal ration of 1.0; only a few other municipalities in the Greater Toronto Area have ratios at 1.0 or higher –Toronto, Vaughan, Newmarket and Markham;
- Indeed, Mississauga has seen its ratio increase over the last 10 years, a testament to the significant growth in local jobs; Milton on the other hand, has seen its ratio fall by a large amount – local jobs have actually increased, but the local population has increased substantially more;
- Even though Mississauga has this high ratio of jobs to commuters, it still has less than 50% of its residents commuting to jobs in Mississauga, while Brampton, even with a smaller ratio, has a notably higher proportion of local residents commuting to jobs in their own municipality; Burlington, with a lower ratio of jobs to commuters, has the same proportion of its residents commuting to jobs in their municipality as Mississauga.

Key Observation: Mississauga is a significant job centre, and Burlington and Oakville also have a healthy ratio of jobs to residents. In both Brampton and Burlington, a majority of commuting residents work in their municipality, while the large population growth in Milton has not yet been matched by a growth in local employment.on of local jobs in the health care & social assistance sector.

WAGES & INCOME

4.1 WAGE AND INCOME HIGHLIGHTS

- In Ontario, there was a gender gap in earnings whereby males were paid more per hour than females.
- The widest gender gap in earnings was seen in professional, scientific, & technical services, where full-time male employees were paid $9.21 more per hour than their full-time female counterparts.
- Among the Peel and Halton municipalities, the largest proportions of people who lived on a low income were located in Brampton and Mississauga.
- We know that when it comes to wages that women, racialized minorities, newcomers and individuals working in precarious employment are disadvantaged, but we do not have the data to illustrate this at the municipal or regional level.

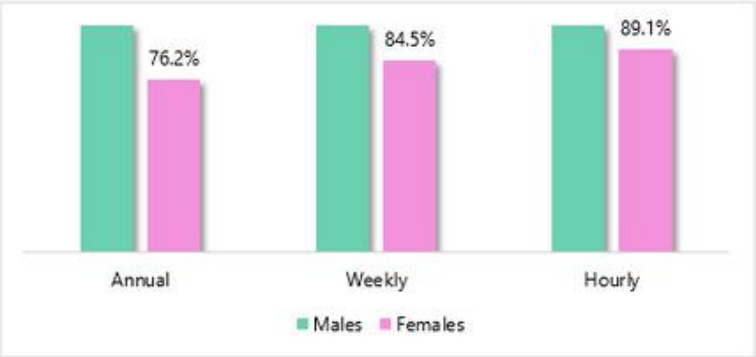
4.2 WAGES

It is well-known that there is a gender gap when it comes to employment income. That gap varies depending on what wage one is comparing. Figure 30 illustrates the female wage as a percentage of the male wage, across three different scenarios: the annual average employment income for someone working full-time for the full year (data is 2011), the average weekly wage for someone working full-time (2015), and the average hourly rate for someone working full-time (2015).

The overall wage difference between the genders can be explained by a number of factors: traditional male occupations have typically attracted higher wages than traditionally female occupations, for example, truck drivers versus childcare workers. This certainly is a reflection of how men's work has been valued in comparison to women's work. There is, in some circumstances, actual discrimination. Women, because they usually take on the primary child-rearing role, often resort to part-time work, or take time away from the labour force.

But the range of differences, when comparing the annual and hourly wages, also suggests another factor: even when working full-time, full-year, it may be that a woman works fewer hours than a man, and thus has a lower weekly or annual wage. And in some careers, the inability to be on-call for longer hours may result in slower career advancement, and thus lower pay, where promotion is partly a reflection of how many hours one can take on (Michael Baker and Marie Drolet, and Claudia Goldin).

***Figure 30**: A Comparison of Female and Male Average Wages in Ontario*



***Source:** Statistics Canada, Table 282-0072 Labour Force Survey (LFS) Estimates, Wages of Employees (Current Dollars) and 2011 National Household Survey.*

The pattern of male employees earning more than female employees could be seen across four significant industries in 2015 (see Figure 31). In particular, the professional, scientific, & technical service industry (e.g., lawyers, engineers and consultants) had the widest gender gap in full-time hourly wage rate ($9.21). The gap in professional, scientific, & technical services was 2.4 times wider than the gap in health care & social assistance. In contrast, transportation & warehousing was the industry where full-time hourly wages differed the least between females and males. Certainly corporate lawyers are an obvious instance where the inability to invest extra long hours because of domestic responsibilities would result in one's career lagging behind that of male peers, with fewer promotions and fewer pay increases.

Figure 31: *A Comparison of Female and Male Average Full-Time Hourly Wages across Four Ontario Industries in 2015*

Source: *Statistics Canada, Table 282-0072 Labour Force Survey (LFS) Estimates, Wages of Employees (Current Dollars).*

In Ontario, males consistently earned more than females on a full-time hourly basis across five essential occupational categories (see Figure 32). The most glaring gender gaps were found in the trades, transport, & equipment operator category ($7.34) and the education, law, & community-government service category ($6.57). Sales & service was the category with the smallest difference in the full-time hourly wages of females and males. One contributor to the gender gap in earnings is that the return on postsecondary education and accumulated work experience is less for women than for men (The Canadian Centre for Policy Alternatives – Ontario, 2016).

Figure 32: *A Comparison of Female and Male Average Full-Time Hourly Wages across Four Ontario Occupational Categories in 2015*

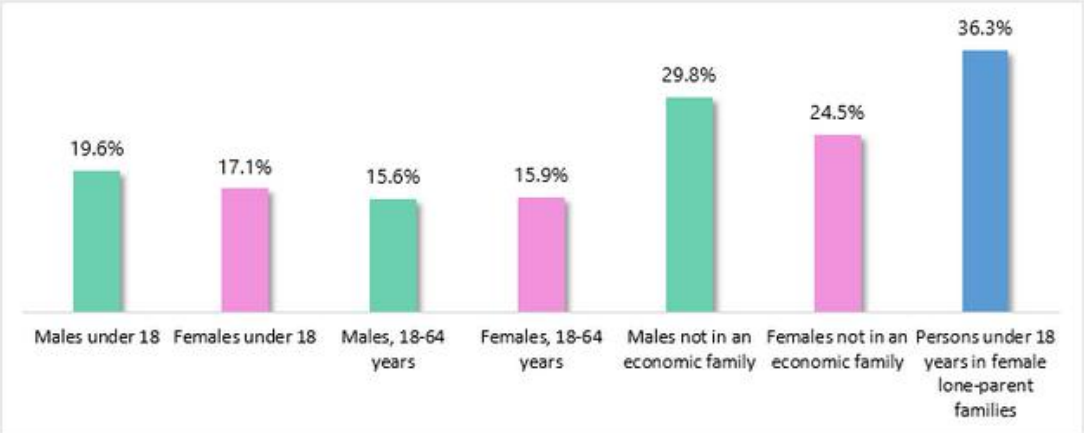
Source: *Statistics Canada, Table 282-0152, Labour Force Survey (LFS) Estimates, Wages of Employees (Current Dollars).*

Key Observation: There is no denying the significant gender wage gap that exists, with a number of likely different causes. In the traditionally male trades, transport and equipment operators' occupations, many of the females are younger, having breeched the gender barrier, and would more likely earn lower rates than older, more experienced males. In the professional, scientific and technical services occupations, certain professions (such as lawyers) place a wage and career advancement premium on workers putting in longer hours, which often places women with young children at a disadvantage. There is need for a variety of strategies to help overcome this continuing wage disparity.

4.3 INCOMES

In the Toronto CMA, the incidence of living on a low income varies by different characteristics Figure 33). Similar proportions of adult (aged 18 to 64 years old) males and females live on a low income (males: 15.6%; females: 15.9%), and that incidence is slightly higher for children and youth under 18. Higher levels of low income are found among individuals not living in an economic family (that is, single) and especially among children and youth living in female lone-parent families (36.3%).

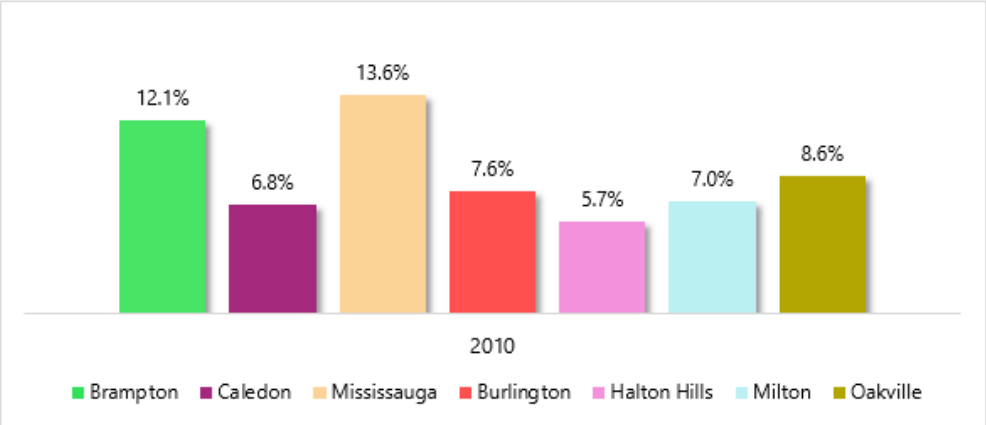
Figure 33: *The Proportions of Females, Males, and Youth Living on a Low Income in the Toronto CMA*



Source: *Statistics Canada, Table 206-0041 Low Income Statistics.*

Brampton and Mississauga were the municipalities in Peel and Halton with the largest proportions of people who lived on a low income (see Figure 34). In contrast, Caledon and Halton Hills had the smallest proportions of people from a low income background. The general trend is that the municipalities with the densest populations and the most competitive labour markets have the largest proportions of people who live in poverty.

Figure 34: The Proportions of People Living on a Low Income in the Peel and Halton Municipalities



Source: *Statistics Canada, 2011 National Household Survey (NHS).*

Key Observation: Family and income support services may have to be bolstered in both regional and municipal planning so that fewer people, especially youth, are hampered by poor living conditions. There is also a need to enhance career mobility, which requires more in the way of workforce development strategies, rather than relying on only more education and better job matching. Mississauga had a well-educated population as well as the largest proportion of people from a low income background in 2010; thus, poverty may be better predicted by a combination of variables (e.g., population density, education, and age) rather than the lone variable of educational attainment.

JOB SEEKER CHARACTERISTICS

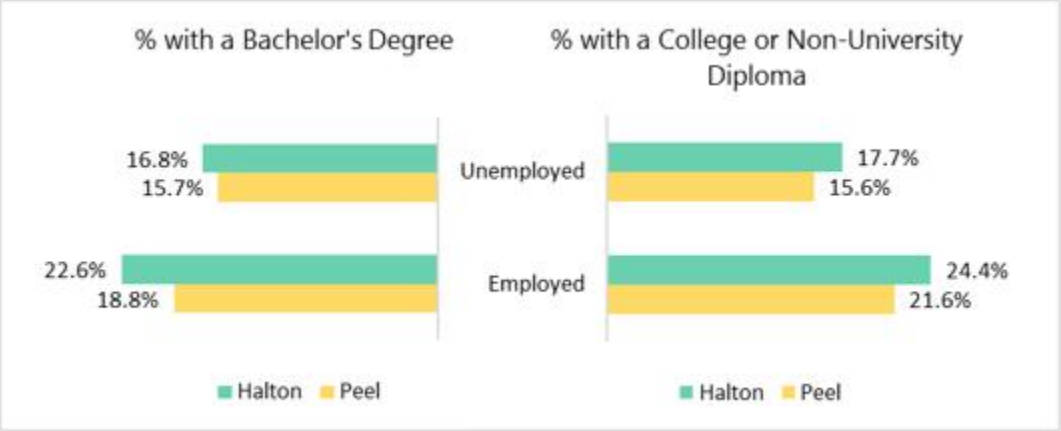
5.1 JOB SEEKER HIGHLIGHTS

- In Peel and Halton, the proportion of college diploma and bachelor's degree holders was lower in unemployed population than employed population.
- In Ontario, the proportion of the unemployed who had been unemployed for six months or more shot up from 15% to almost 25% as a result of the recession, and has only slowly drifted down to 20% by 2015.
- College and university credentials in technology and engineering were associated with more favorable employment outcomes (i.e., securing a full-time job and earning a higher salary).
- For Peel and Halton, university degree holders were more common in the Employment Ontario (EO) assisted service client population than in the entire Ontario labour force (LF) population.

5.2 THE UNEMPLOYED POPULATIONS OF PEEL, HALTON, AND THE TORONTO CMA

The education levels of the unemployed and employed populations were compared across Peel and Halton. In 2011, the unemployed populations had smaller proportions of college diploma or bachelors degree holders than employed populations (see Figure 35). Moreover, in both employed and unemployed populations, Peel had lower percentage of bachelor's degree or college diploma holders than Halton.

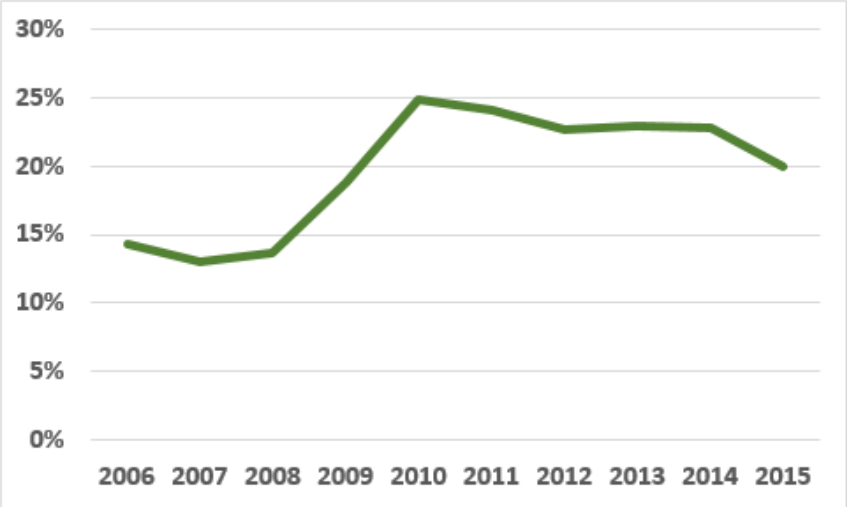
Figure 35: *The Educational Attainment of the Unemployed and Employed Populations at the Regional Level in 2011*



Source: *Customized 2011 National Household Survey (NHS) tabulation.*

The incidence of longer term unemployment illustrates the extent to which unemployment may cause considerable hardship. Figure 36 shows the percentage of the Ontario unemployed population who were unemployed for more than six months. This figure had hovered slightly below 15% before the 2008 recession, which cased that figure to jump to 25%. This figure has stayed stubbornly high, inching down to 20% by 2015.

Figure 36: *Percentage of unemployed who experienced unemployment for six months or more, Ontario, 2006 to 2015*



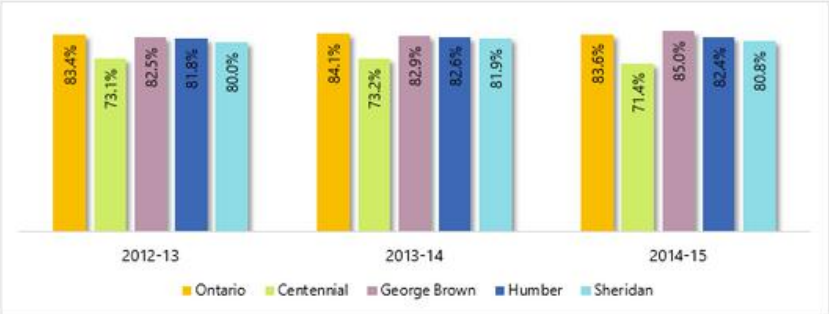
Source: *Statistics Labour Force Survey (LFS).*

Key Observation: Better labour market information would help identify what jobs or potential careers exist for those who are unemployed or who have become discouraged and have dropped out of the labour force, and it would also help identify why certain individuals have dropped out of the labour force and what challenges need to be overcome in order to re-integrate them into the job market.

5.3 POST SECONDARY GRADUATES AND TRADE APPRENTICES

A strong labour market is one in which the graduates of postsecondary programs can find employment. In Ontario and across three out of four well-known colleges that supply talent to the Toronto CMA workforces, 80.0% to 85.0% of graduates were employed six months after earning their educational credential (see Figure 37). Graduates of Centennial College were employed at a lower rate than were graduates of George Brown College, Humber College, and Sheridan College. It is important to note that the reported percentages are based on the college graduates who can be contacted six months after program completion and consent to answering employment-related questions.

Figure 37: *The Employment Rates of College Graduates (6 Months after Graduation)*



Source: *The Ontario Ministry of Advanced Education and Skills Development, College Key Performance Indicators.*

2014-15 Sheridan College graduate data suggests that there may be a gender difference in employment rates. More specifically, employment six months after graduation seemed to be higher among females than among males (see Figure 38). The few exceptions where males experienced higher employment tended to be concentrated in the applied arts (e.g., advertising, community worker, and social service worker programs) and specialized aspects of business (e.g., human resources programs). In programs such as computer engineering technology, females were not present; therefore, no difference between females and males could be measured. The gender difference in employment rates may allude to a greater need for communication or soft skill training among males,

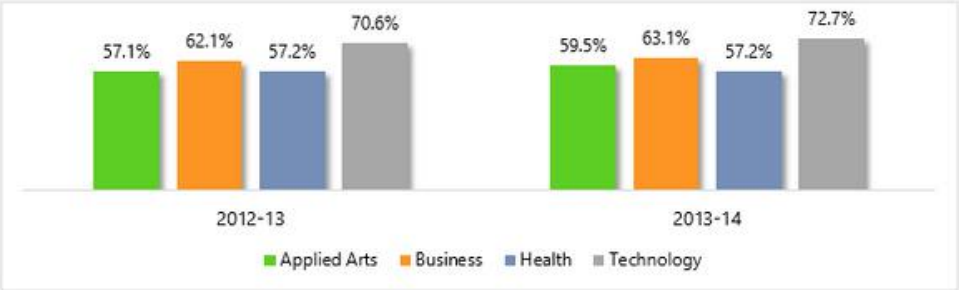
especially during a time when the knowledge economy is expanding as it is in the Toronto CMA. Organizations that would like to see more males in certain jobs —namely, community and social service positions—may be more inclined to hire men who do not have the full repertoire of soft skills but can easily develop that repertoire with the appropriate support.

Figure 38: *Programs and Employment Rates of 2014-15 Female and Male Sheridan College Graduates*

Source: *Sheridan College, Customized Key Performance Indicator Data.*

In both 2012-13 and 2013-14 college graduates, full-time employment was noticeably higher among people who completed technology programs (e.g., architectural technology, telecommunications technology, and welding techniques) than among people who completed applied arts, business, and health programs (see Figure 39). The high demand for expertise in technology and the trades means that graduates who studied these fields may secure full-time employment sooner than their counterparts who studied other fields. In particular, manufacturing establishments need workers with a technology or trades background.

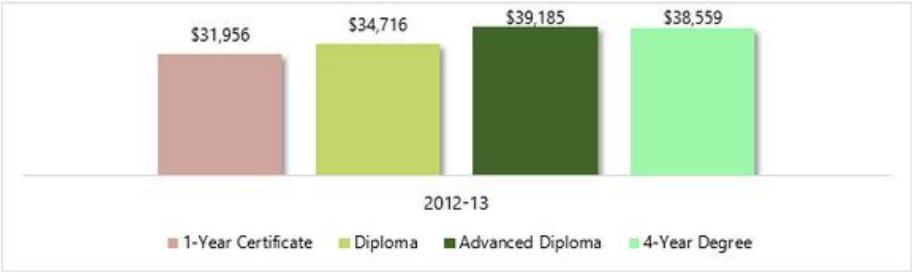
Figure 39: *Fields of Study and the Full-Time Employment Rates of Ontario College Graduates*



Source: *The Ontario Ministry of Advanced Education and Skills Development, Graduates' Employment Status by Credential.*

On average, larger salaries tend to be earned by college graduates with an advanced diploma or four-year degree than by their peers with a one-year certificate or diploma (see Figure 40). Apparently, the salaries of college graduates with full-time employment were more or less proportional to the duration and depth of their programs. Thus, advanced diplomas and four-year degrees have more status than one-year certificates and diplomas.

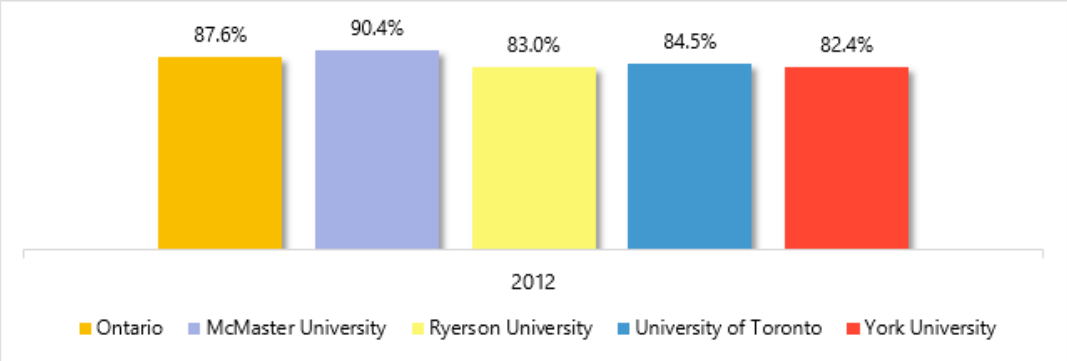
Figure 40: *The Average Annual Salaries of Ontario College Graduates (Employed Full-Time 6 Months after Graduation)*



Source: *Colleges Ontario, 2015 Environmental Scan - Student and Graduate Profiles.*

In Ontario and across four major institutions, at least four out of five individuals who graduated from university with a bachelor's degree were employed six months after earning their credential (see Figure 41). Graduates of McMaster University experienced higher employment than did graduates of Ryerson University, the University of Toronto, and York University. One explanation for this difference is the greater competition for jobs that exists in and around the City of Toronto.

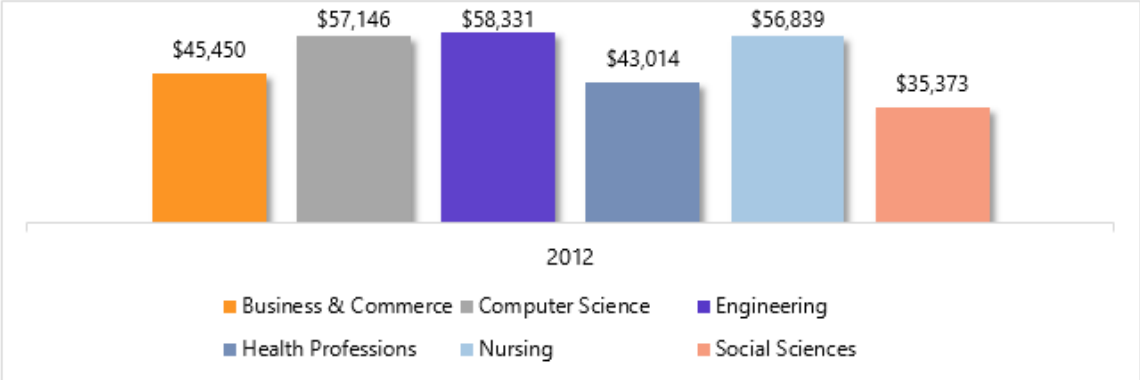
Figure 41: *The Employment Rates of University Graduates (6 Months after Graduation)*



Source: *The Ontario Ministry of Advanced Education and Skills Development, University Employment Outcomes, Graduation and Student Loan Default Rates.*

University graduates enjoyed higher salaries when they held bachelor's degrees in computer science, engineering, and nursing compared to the social sciences, business & commerce, and the health professions (see Figure 42). The Council of Ontario Universities defined health professions in relation to medical science or technology programs as well as epidemiology programs for students who do not intend to become physicians. The advantage afforded by computer science, engineering, and nursing degrees is that they are more tightly aligned with clear roles that need to be filled in the knowledge economy.

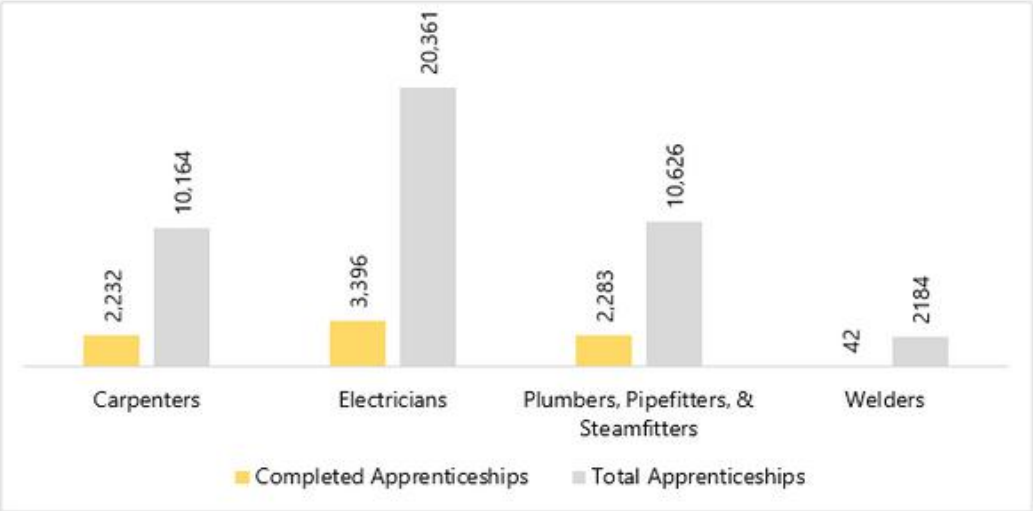
Figure 42: The Average Annual Salaries of Ontario University Graduates (Employed Full-Time 6 Months after Graduation)



Source: *Council of Ontario Universities, Graduate Employment Outcomes Table 3.*

The main theme in the 2013 apprenticeship data was that few trades apprentices completed their programs (see Figure 43). Although the available data does not allow us to follow specific cohorts of apprentices, it was apparent that completed apprenticeships were uncommon. Furthermore, people were not pursuing the trades that would address industry labour shortages, such as the dearth of carpenters, electricians, and welders in the Toronto CMA (Canadian Manufacturers and Exporters & the Canadian Skills Training and Employment Coalition, 2015). One implication of incomplete apprenticeships is that there will not be enough tradespeople with the necessary certification to train the next generation of workers in manufacturing and construction.

Figure 43: *A Comparison of 2013 Completed and Total Registered Apprenticeships in Ontario*



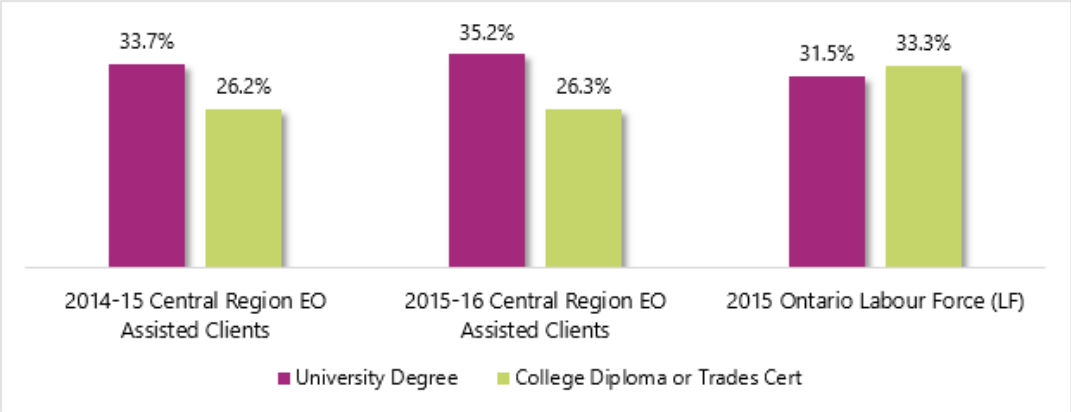
Sources: *Statistics Canada, Table 477-0053 Apprenticeship Training, Registrations and Table 477-0054, Apprenticeship Training, Completions.*
Note: *This figure illustrates only a selected list of the trades programs.*

Key Observation: Among the labour market data that requires more exposure are the labour market outcomes by level of education, by field of study and by educational institution or by type of program. This information could help inform students and career counsellors offering students advice regarding the consequences of various educational pathways.

5.4 EMPLOYMENT ONTARIO (EO) ASSISTED SERVICE CLIENTS

Assisted service clients are defined as individuals who are aided in their job search or job training by Employment Ontario (EO) agencies because they experience barriers, such as a disability, a lack of Canadian work experience, low English language proficiency, and an incomplete high school education (Employment Ontario Service Provider Guidelines, 2014). The EO assisted service client population of the Central Region, which includes Peel and Halton, differed from the Ontario labour force population in terms of having more university level education and less college level or trades education (see Figure 44). It is possible that there are labour markets in Ontario that cannot support the number of university educated job seekers in their respective regions, and the struggle to find employment is worse for university graduates whose degrees do not meet a regional industry need, especially when those graduates are new to Canada. There is very little difference between the figures for 2014-15 and for 1015-16.

Figure 44: *The Educational Attainment of Employment Ontario (EO) Assisted Service Clients and the Ontario Labour Force (LF)*



Sources: *The Ministry of Advanced Education and Skills Development, Employment Ontario Local Board Report (2014-15 and 2015-16), and Statistics Canada, Table 282-0004 Labour Force Survey (LFS) Estimates.*

Note: *The Central Region refers to Peel, Halton, Toronto, York, Durham, Simcoe, and Muskoka. In addition, cert is the shortened form of certificate.*

Key Observation: EO Assisted clients have high levels of educational attainment and in the Central Region there is a notably high proportion of them with university degrees. Many of them are laid off from jobs that have qualifications lower than their stated levels of education. There is a need for strategies that can build on their educational achievements to help them qualify for jobs that are commensurate with the education.

LIMITATIONS

The workforce characteristics report was written to provide the Peel and Halton communities with a detailed overview of demographic, labour market, wage, and job seeker data at multiple geographical levels (e.g., municipal and provincial). The benefit of this report is that stakeholder groups can be better positioned to design programs and take actions that meet local community or industry needs when these programs and actions are informed by relevant data.

The three main limitations of the workforce characteristics report are:

- Current municipal level demographic, labour market, and job seeker data was not available.
- Current data about the experiences and decisions of Peel and Halton job seekers was not available.
- The available data can only suggest what is correlated with, or predictive of, an outcome (e.g., unemployment) rather than what is the actual cause of an outcome.

This workforce characteristics report is a means of disseminating, and encouraging critical reflection on, labour market information (LMI).

KEY FINDINGS

• Municipalities with high population growth areas will require more concerted efforts to increase their employment base

• There will especially be challenges for youth, who are always at risk of being crowded out of the labour market by reason of their lack of work experience; this requires concerted youth employment strategies

• Newcomers also deserve special attention, for despite their higher levels of educational attainment, they experience considerably worse labour market outcomes; historically, as immigrants have been in the country longer their outcomes have improved, but the reliance on jobs below their levels of educational attainment may no longer provide newcomers access to better jobs in the future

• Other population groups that warrant special attention: women (exclusion from traditional male occupations and wage gender gap) and visible minorities (overcoming stereotypes and discrimination)

•There are a number of key industry sectors in Peel and Halton, primarily manufacturing, the logistics sector (transportation & warehousing, and wholesale trade) and professional, scientific and technical services; they are represented to varying degrees across the various municipalities

• Local residents on average exhibit high levels of educational attainment, yet their labour market outcomes do not always reflect this; there is a need for programs that can support better matching of capabilities to job opportunities, and more career advancement; this requires more in the way of workforce development, which means clarifying employer skill needs, customizing employment and training programs, and supporting more mobility via career advancement.

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This report was prepared under the direction of the Peel Halton Workforce Development Group in association with the Peel Halton Local Employment Planning Council. For more information, please visit www.peelhaltonlepc.com