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The Five Solitudes of Ontario

A Regional Analysis of Labour Market Performance in Post-Recession Ontario

by Ben Eisen and Joel Emes

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Executive Summary

Ontario has experienced more than its share of economic pain in recent years. Between 2003 and 2014, real economic growth per person in Ontario has averaged just 0.3% annually. That's less than one third of the rate of real per-person economic growth in the rest of the country, which averaged 1.1% annually. The economic pain in Ontario, however, has not been spread evenly: there has been significant regional variation in economic performance within the province.

It is not clear that these important differences among the regions, and the related variation in their economic performance are recognized throughout the province. For example, an up-beat press release from the Office of the Premier celebrates the recent up-tick in provincial economic growth over the past year. And, it may well be that people living in more successful parts of the province are not aware of the extent of the economic troubles in other regions. We suggest that these misperceptions across the province's regions have created five distinct "solitudes" of Ontario in which residents of certain regions are not fully aware of economic conditions and challenges elsewhere.

The five solitudes of Ontario as defined in this paper are: the Greater Golden Horseshoe; Southwestern Ontario; Ottawa and the surrounding area; Eastern Ontario; and Northern Ontario. The first major section of this paper provides a description of each and breaks down regional employment by industry. The study then compares recent economic performance in the five solitudes of Ontario with a particular focus on labour-market performance in the years during and since the 2008/09 recession. We find that, while the Greater Golden Horseshoe and the Ottawa region have fared comparatively well, labour market performance in each of the other solitudes has been considerably worse than the provincial average.

Principal findings

- As of 2015, total employment in Ontario outside the Greater Golden Horseshoe (GGH) had still not recovered to pre-recession levels. In 2008, total employment in Ontario outside the GGH stood at 2.237 million; in 2015, total employment in the rest of Ontario stood at 2.173 million.
- Even since the end of the recession, job growth outside the GGH has been poor. Average annual net employment growth has been negative in Eastern and Northern Ontario between 2010 and 2015. Average employment growth in Southwestern Ontario during this time has been positive, but only barely (0.4% annually). For several of Ontario's regions there has been almost no job growth during the period of "recovery" from the 2008/09 recession.

• Employment rates and labour force participation rates have been much lower in Eastern, Northern, and Southwestern Ontario than in Ottawa and the Greater Golden Horseshoe in recent years (2010–2015). The economic dependency ratio in Eastern, Northern, and Southwestern Ontario has also been consistently higher than the provincial average.

Each of Ontario's five solitudes includes a significant number of Canadians and represents an important regional economy within Canada. Even Northern Ontario, the least populated of Ontario's solitudes, has more people than Prince Edward Island, Newfoundland & Labrador, or New Brunswick. Southwestern Ontario's population of 1.6 million residents is nearly as large as all of Maritime Canada combined.

However, because the smaller regions are located in the same province as the highly populous GGH, which includes the metropolis of Toronto, economic trends and challenges in these regions can sometimes be overlooked by those who look only at provincial-level economic statistics, which are heavily influenced by the economy of the GGH. Considering provincial statistics alone may give rise to misconceptions among people—even policy makers—who live in Ontario's five solitudes and often face significantly different economic circumstances and challenges. Our aim in this report is to shed light on regional economic circumstances across the province in the hope of reducing these information gaps.

Introduction

Ontario's economic woes in recent years are well documented. The provincial economy was hit hard by the recession of 2008/09 and the subsequent economic recovery was generally slow. Taking a slightly longer view, we see that, between 2003 and 2014, real economic growth per person in Ontario has averaged just 0.3% annually. That is less than one third of the rate of real per-person economic growth in the rest of the country, which averaged 1.1% annually (Statistics Canada, 2016n).

Ontario has experienced more than its share of economic pain in recent years but it has not been spread evenly across the province. Instead, there has been significant regional variation in economic performance within Ontario. Ontario's economy is not homogenous, and its economic regions vary considerably in their economic make-up and the importance of specific economic and industrial sectors within them.

It is not clear that these important differences among the regions, and the related variation in their economic performance are recognized throughout the province. For example, an up-beat press release from the Office of the Premier celebrates the recent up-tick in provincial economic growth over the past year compared to Canada, the United States, and G7 countries (Ontario, Office of the Premier, 2016). And, it may well be that people living in more successful parts of the province are not aware of the extent of the economic troubles in other regions (Paikin, 2016). We suggest here that these misperceptions across the province's regions have created five distinct "solitudes" of Ontario, [1] in which residents of certain regions are not fully aware of economic conditions and challenges elsewhere.

This may be particularly true given the size of the city of Toronto and the surrounding area, which together contain a very large share of the province's total population and economic output. As a result, economic developments in that region exert a major influence on overall provincial statistics and, therefore, if one considers overall provincial statistics alone, mask markedly different economic developments and performance levels in other parts of the province.

Examining labour markets

For this reason, this short study provides a regional analysis of Ontario's economic performance in recent years, examining labour-market performance in different parts of the province with a particular focus on employment growth.

^{[1] &}quot;Solitudes" is taken from "two solitudes of Canada", an historical notion popularized in Hugh MacLennan's 1945 novel *Two Solitudes*. It refers to divisions and the lack of communication between Anglophone and Francophone Canadians.

The plan of the paper is as follows. First, we describe the five solitudes of Ontario, providing a brief description of the local economies and identifying key industries within each. Next, we compare the economic performance of the five regions in recent years with a particular emphasis on labour market performance and, more specifically, job creation. Finally, we give a brief summary and conclusion in the final section of the paper.



The Five Solitudes of Ontario

With an estimated population of 13.8 million, Ontario is by far Canada's most populous province (Statistics Canada, 2016a). Given the province's large land area, diverse geography, and population, it is unsurprising that there are multiple distinct economic regions within the province. The provincial government and Statistics Canada track some economic indicators using a set of 11 "economic regions". [2] In this paper, we group geographically proximate and economically intertwined economic regions with similar types of economic activity into five distinct "solitudes" of the province. Our grouping of economic regions—and indeed, the creation of those regions themselves by Statistics Canada for statistical purposes—is, of course, an inexact science. In creating these groupings, we have also considered commuting patterns and common usage by residents—like "Greater Golden Horseshoe" and "Southwestern Ontario"—that suggests that they think of themselves as living and working in the broader region. The five "solitudes" of Ontario are, in order of population in 2015:

- the Greater Golden Horseshoe (66.7%);
- Southwestern Ontario (11.7%);
- Ottawa and surrounding area (9.6%);
- Eastern Ontario (6.2%);
- Northern Ontario (5.8%).

Table A1 (p. 24) shows the connections between Ontario's solitudes, economic regions, and census divisions. These solitudes differ considerably one from the next in the nature of their economies and their industrial make-up, and so it is not surprising that their economic fortunes may at times diverge. [3]

The first thing that jumps out when considering the population distribution shown above is the dense concentration of people in the province's Greater Golden Horseshoe and the relatively small share of the provincial population in other often geographically larger regions. However, it is important to recognize that because Ontario's population is so large—representing 38% of

^[2] According to Statistics Canada: "An Economic Region (ER) is a grouping of complete census divisions (CDs) (with one exception in Ontario) created as a standard geographic unit for analysis of regional economic activity" (Statistics Canada, 2015).

^[3] It is also of course true that there is variation within each economic region and therefore within each broader solitude, both in terms of the nature of local economic activity and economic performance. In Southwestern Ontario, for example, there are significant population centers such as London as well as substantial rural areas, which are largely focused on agriculture.

Canada's total—even its smaller regions have large populations and significant economic activity by national standards (Statistics Canada, 2016a). Consider, for example, Southwestern Ontario with its 1.6 million inhabitants. If this "solitude" of Ontario were its own province, it would be the fifth most populous in Canada, behind only the rest of Ontario, Quebec, British Columbia, and Alberta. Its population would be approximately as large as Nova Scotia and New Brunswick combined. Similarly, the Ottawa region with its population of approximately 1.3 million would be home to more people than most Canadian provinces. Even the least populated of Ontario's regions as we've defined them represent significant shares of the Canadian population. Northern and Eastern Ontario each have populations that are larger than the populations of any one of Prince Edward Island, Newfoundland & Labrador, or New Brunswick.

In this section of the report, we describe each of the solitudes of Ontario, identify their major industries, and describe their economic make-up with a particular emphasis on the ways in which each differs from the provincial average. [4]

The Greater Golden Horseshoe

The Greater Golden Horseshoe (GGH) is Ontario's most populous and most densely populated region. The region's anchor city is Toronto and the region also includes Oshawa, which sits just to that city's east. The GGH then extends south and west to Hamilton, wraps around the end of Lake Ontario, and stretches to the American border, including the cities of St. Catharines and Niagara Falls. This report uses a somewhat broader definition of the Greater Golden Horseshoe, including the Kitchener-Waterloo-Cambridge region to the west and slightly north of Hamilton, as well as Barrie to the north. A large majority of this solitude encompasses a combination of the GTA and areas within commuting distance of Toronto, much of which is serviced by GO Transit.

The Greater Golden Horseshoe is by far Ontario's most populous region, with approximately two thirds of the province's residents living in the region. It is therefore unsurprising that the region's economic make-up and key industries are closely aligned with provincial averages. Manufacturing has historically been a significant industry in the regional economy, though (in keeping with provincial trends) the share of regional employment concentrated in the manufacturing sector has dropped considerably in recent years. In 2007, manufacturing represented 15.3% of all employment in the Greater Golden Horseshoe. By 2015, that share had fallen to 11.2%. [5]

^[4] In the main text, we provide a broad overview of the composition of the labour force of each solitude by industry, identifying important distinctive features in each. Where it is useful, we also draw attention to significant demographic features. For a complete breakdown of employment by industry in each solitude, see **table A2**.

^[5] The role of manufacturing varies considerably within the Greater Golden Horseshoe: some metropolitan areas like St. Catharines and Oshawa have economies based more on manufacturing while in Toronto, by contrast, manufacturing accounts for less than 10% of employment.

The GGH is a diversified regional economy. In fact, measuring the diversification of each region using the Herfindahl Index (a measure of economic diversification) shows that the GGH is the most diversified regional economy in Ontario with respect to employment (Statistics Canada, 2016j). In addition to its large manufacturing sector, the GGH is also home to a significant financial services industry based in Toronto. In fact, Toronto accounts for roughly one third of the financial services sector for all of Canada (Burt, 2015). Professional, scientific, and technical services also represents a greater share of employment in the GGH than in Ontario as a whole.

Figure 1 shows employment shares by industry in both the Greater Golden Horseshoe and the provincial economy of Ontario taken as a whole. This figure illustrates how the industrial make-up of the Greater Golden Horseshoe closely mirrors that of the provincial economy taken as a whole (a predictable result given that it represents two thirds of the population), while also illustrating some subtle differences between the GGH and the provincial economy in certain industries. For example, despite the presence of the provincial capital in Toronto, public administration represents a significantly smaller share of employment in the GGH (3.4%) than in the province taken as a whole (5.0%).

In summary, because the Greater Golden Horseshoe represents such a large share of the province's population and employment, the composition of the regional employment is closely aligned with provincial averages. However, as we will show in the following subsections, the make-up of the region's (and the province's) employment differs substantially from the other regions of the province when those regions are considered separately.

Southwestern Ontario

We define this large region of 1.6 million people as including the economic region of London and its surrounding area, along with Windsor-Sarnia and the Stratford-Bruce Peninsula region.

Southwestern Ontario was historically an engine of economic growth in Ontario, powered by vibrant manufacturing and food-processing industries. The region's reputation as a historical driver of growth was reflected in a recent commentary in the Globe & Mail, which referred to Southwestern Ontario as having long been "the goose that laid generation after generation of golden eggs" (Ibbitson, 2016). Of course, this has changed in recent years beginning with losses in the manufacturing sector that started two years before the 2008/09 recession. These developments will be discussed in detail in a subsequent section. Here, we will simply note that Southwestern Ontario remains today heavily reliant on its manufacturing sector as a major employer in the region. This is in fact true to a far larger extent than any other part of Ontario.

This fact is reflected in figure 2, which shows manufacturing employment as a share of total employment in Ontario and each of its five solitudes.

Ontario and the Greater Golden Horseshoe, 2015 Forestry, fishing, mining, quarrying, oil and gas Utilities Agriculture Other services (except public administration) Information, culture and recreation Transportation and warehousing Business, building and other support services Public administration Accommodation and food services Construction Educational services Finance, insurance, real estate, rental and leasing Professional, scientific and technical services Manufacturing Health care and social assistance Wholesale and retail trade 8 4 12 16 Percentage of total employment

Figure 1: Employment by industry (% of total employment) for

Source: Statistics Canada, 2016j.

15 Percentage 10 5 0 Ottawa and Northern Eastern Ontario Greater Southwestern surrounding Ontario Ontario Golden Ontario area Horseshoe

Figure 2: Employment in manufacturing (% of total employment), 2015

Source: Statistics Canada, 2016j.

Figure 2 shows that, in 2015, manufacturing employment represented 16.3% of all employment in Southwestern Ontario, compared to 10.8% in the province as a whole. In each of Eastern Ontario, Northern Ontario, and Ottawa, manufacturing as a share of all employment was less than half as large as in Southwestern Ontario.

Its heavy reliance on manufacturing is the most striking feature of Southwestern Ontario's industrial composition, but there are other significant differences between this region and the province as a whole. Agriculture, for example, represents 4% of employment in Southwestern Ontario compared to just 1.1% elsewhere in the province. Further, as is the case in the GGH, public administration is a relatively minor industry in this region compared to the province as a whole. Just 3.2% of jobs in Southwestern Ontario are in public administration, compared to 5.0% across the province. Certain white-collar industries are also relatively smaller in Southwestern Ontario compared to the rest of the province. Finance, insurance, and real estate, for example, represent 5.3% of jobs in Southwestern Ontario, compared to 7.9% in the rest of the province. The share of all jobs found in professional, scientific, and technical services (4.3%) in Southwestern Ontario is also about half as large as the share of all jobs found in that industry in the province (8.4%).

Ottawa and surrounding area

The Ottawa region includes Canada's capital city and the surrounding area. As defined here, it has a population of 1.3 million people, approximately 9.6% of the provincial population.

The most striking feature of the composition of employment in the Ottawa region is the heavy concentration of jobs in public administration in the region, owing primarily to the presence of the national capital. **Figure 3** shows that, in Ottawa, 16.2% of all jobs are in the public administration sector, compared to a provincial average less than a third as large, at just 5.0%.

While the heavy concentration of jobs in the public administration sector is the defining characteristic of the economy of the Ottawa region, there are other noteworthy features. For example, as was shown in figure 2, Ottawa has fewer jobs as a share of all employment in the manufacturing sector than any other region: just 4.9% of Ottawa's jobs are in manufacturing, compared to 10.8% across the province. More broadly, Ottawa's economy is concentrated on the provision of services as opposed to goods to a greater extent than any other region. Just 13% of jobs in Ottawa are in the goods-producing sector, compared to 20% across the province.

Eastern Ontario

We define Eastern Ontario as including the Kingston-Pembroke and Muskoka-Kawarthas regions. Taking these together, Eastern Ontario has a population of approximately 853,000, or about 6.2% of Ontario's population.

The single most distinct feature of the employment mix in Eastern Ontario is that 16.5% of jobs are found in the health care and social assistance. This compares to a province-wide rate of nearly 12% of jobs found in this field. Unfortunately, data to distinguish public from private employers are not readily available at the level of economic regions. However, we can say from the readily available data presented here that the economy of Eastern Ontario is, to a greater extent than the province as a whole, centered on industries that are dominated by the public sector. Specifically, in Eastern Ontario, educational services, health care, and social assistance, and public administration combined represent 29.9% of total employment. By comparison, province wide, 24.1% of all jobs are found in these sectors.

Another important feature of Eastern Ontario is the region's low rate of labour-force participation. Eastern Ontario's labour-force participation rate in 2015 stood at 56.7%, the lowest level of any of our five solitudes. This compares to a province-wide labour-force participation rate of 65.2%. [6] This low rate of labour-force participation is partly a function of the fact that the demographics of this region skew older than the provincial average. Figure 4 shows that

^[6] Labour-force participation rates and other indicators of economic performance will be discussed in greater detail in the next section of this paper.

20 15 Percentage 10 Southwestern Ontario Greater Eastern Northern Ottawa and Ontario Golden Ontario Ontario surrounding Horseshoe area

Figure 3: Employment in public administration (% of total employment), 2015

Source: Statistics Canada, 2016j.

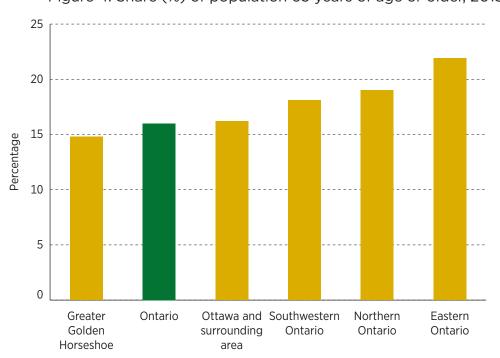


Figure 4: Share (%) of population 65 years of age or older, 2015

Source: Statistics Canada, 2016b.

Eastern Ontario's share of population that is 65 years of age or older is larger than any other region in the province. In Eastern Ontario, 21.9% of residents are 65 or older compared to a province-wide rate of 16%.

In summary, Eastern Ontario is characterized by a somewhat older population than the provincial average and, partly as a result, a lower rate of labour-force participation. Further, employment in the region is more heavily concentrated in industries dominated by the public sector than is the case in the province of Ontario considered as a whole.

Northern Ontario

The final solitude of Ontario examined in this paper is the North. This solitude is geographically vast, with significant distances between population centers. The largest city found within this solitude is Greater Sudbury, followed closely by Thunder Bay. Other significant population centers include Sault Ste. Marie, North Bay, and Timmins. In total, the northern solitude of Ontario has a population of approximately 798,000 people (5.8% of Ontario's population). Although this is the least populated of Ontario's solitudes, its population is still larger than that of three Canadian provinces (Prince Edward Island, Newfoundland & Labrador, and New Brunswick).

A distinct feature of Northern Ontario is that natural-resource extraction represents a significant share of the regional economy. Statistics Canada groups together forestry, fishing, mining, quarrying, and oil and gas as a single category in its industry-level labour-force estimates for employment. In Northern Ontario, this sector represented 7.0% of all employment in 2015. In comparison, this sector represents just 0.6% of employment province wide.

Aside from this fact, Northern Ontario's economy and demographics in many respects resemble Eastern Ontario's. As shown in figure 4, the demographics of Northern Ontario skew older than the provincial average: 19% of residents are 65 years of age or older, compared to 16% province wide. Partly as a result, Northern Ontario also has a relatively low labour-force participation rate of 59.3% compared to 65.2% in the province as a whole. Further, Northern Ontario's economy also has relatively high rates of employment in industries generally dominated by the public sector. In Northern Ontario, public administration, health care and social assistance, and educational services represent 31.1% of employment, compared to 24.1% province wide.

In summary, the economy of Northern Ontario is unique within the province in the extent to which its economy includes a significant industry involved in extracting natural resources. In other respects, including an older population and a high concentration of employment in industries generally dominated by the public sector, Northern Ontario resembles Eastern Ontario.

The Great Recession and Its Impact on the Five Solitudes of Ontario

The analysis in this paper focuses primarily on the period since 2009, during which Ontario has been recovering from the recession of 2008/09. However, we shall briefly discuss the recession itself and its impact on the province and its regions, as these are the context for the recovery. Ontario was among the provinces hardest hit by the recession of 2008/09. Between 2007 and 2009, total employment in Ontario fell by approximately 112,000 jobs. [7] Across the rest of the country, total employment actually increased by 71,000 jobs (Statistics Canada, 2016h). Real gross domestic product per person in Ontario contracted by approximately 4.9% over these two years. By comparison, real output per person across Canada declined by 4.1% during the same two-year period (Statistics Canada, 2016n).

Although Ontario as a whole was among the provinces hardest hit, some regions of the province were hit harder than others (**figure 5**). In 2009, total employment in Ontario shrank by 2.7%. Regionally, however, there was substantial variation. In Ottawa and the Greater Golden Horseshoe, the percentage of jobs lost was less than the percentage for the province as a whole. In the other three regions, however, employment losses were substantially greater. In Southwestern Ontario, total employment fell by 5.0% in 2009 from 2008 levels. In Northern and Eastern Ontario, the employment losses were nearly as bad, at 4.5 and 4.0%.

A consideration of regional unemployment rates tells a similar story. **Figure 6** shows the percentage-point increase in unemployment in each of the five solitudes and in Ontario as a whole from 2008 to 2009. Across Ontario, the unemployment rate jumped by 2.5 percentage points in that year, from 6.6% in 2008 to 9.1% in 2009. The spike in unemployment was even more severe, however, in Southwestern Ontario, where unemployment climbed from 7.1%

[7] For our analysis in the main body of the text, we focus on the years during and after the 2008/09 recession. Readers interested in trends over a longer time period may consult **table A3**, which provides a time-series for all of the major indicators of labour-market performance discussed in this report going back to 2001 (with the exception of the economic dependency ratio, for which we do not have consistent data across the entire time period).

to 10.3%, an increase of 3.2 percentage points. In Ottawa, the unemployment rate increased by just 1.2 percentage points and only climbed to 6.3% in 2009, the lowest level in the province. [8]

Clearly, there were important differences in the impact the great recession had on each regional economy within Ontario. Broadly, the data suggest that Southwestern Ontario's labour market was the hardest hit during the recession, while the impact was lightest in Ottawa. [9]

^[8] In our analysis of post-recession economic performance in the next section, we exclude the unemployment rate as a metric. We do this because there is a growing body of literature suggesting that, particularly in the years since the recession, unemployment rates are a flawed measure of economic performance particularly in the medium term, thanks largely to the prevalence of discouraged searchers among the long-term unemployed (see, for example, Zmitrowic and Khan, 2014). However, comparing the up-ticks in unemployment rates in 2009 relative to 2008 levels as well as the unemployment rate in the worst year of the recession (2009) provides us with a useful measure of the extent of the shock resulting from the great recession in that year from region to region.

^[9] It should also be noted that, although Northern Ontario's unemployment rate did not increase as dramatically as the Ontario average or some other regions during the recession, this may be partly because unemployment rates in that region were by a relatively large margin the highest in the province in the years leading into the recession. The first decade of the century, during which the forest sector struggled, saw major shutdowns in Northern Ontario's manufacturing sector as pulp mills, saw mills, and similar plants closed. The larger increases in the unemployment rate in other regions during the recessions itself therefore may partly be a function of the fact that those regions had not seen similar rates of unemployment in the years leading up to the recession.

0 -1 -2 Percentage -3 -4 -5 Ontario Northern Southwestern Eastern surrounding Golden Ontario Ontario Ontario area Horseshoe

Figure 5: Change (%) in employment, 2008-2009

Source: Statistics Canada, 2016i.

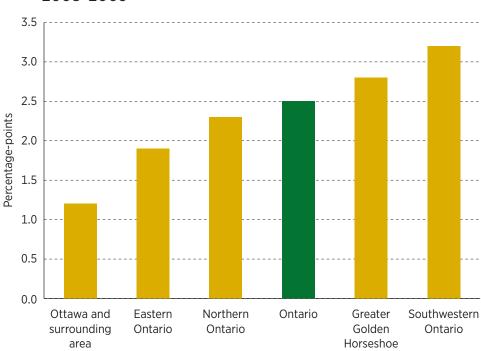


Figure 6: Percentage-point increase in unemployment rate, 2008-2009

Source: Statistics Canada, 2016i.

Labour Market Performance in Ontario and Its Solitudes since 2009

Given the severity of the economic downturn in Ontario in 2009, the economic recovery in the years since has been slow and disappointing. While some other manufacturing jurisdictions, including the neighbouring state of Michigan, have experienced economic resurgences (Murphy, Emes, and Eisen, 2016), Ontario's growth has been relatively weak. Between 2010 and 2014, Ontario averaged real per-person economic growth of just 1.0%, compared to 1.4% in the rest of the country (Statistics Canada, 2016n).

While Ontario's economic recovery overall has been slow, the economy has remained especially sluggish in some regions of the province while it has performed somewhat better in others. In this section, we compare economic performance in the province's five solitudes. Since regional-level macroeconomic indicators like GDP are unavailable at the regional or city level, our analysis here focuses on available metrics of labour-market performance. Specifically, we focus on employment growth, which in the absence of GDP data, is useful for measuring overall economic performance (Ontario Chamber of Commerce, 2016).

Growth in employment

Figure 7 illustrates how rates of job creation in the solitudes have diverged since the end of the 2009 recession. Employment growth in Ontario has been heavily concentrated in the Greater Golden Horseshoe and very little employment growth (and in some cases negative employment growth) has occurred in the rest of the province. Annual growth in employment in the GGH has averaged 1.8% between 2010 and 2015, somewhat higher than the provincial average of 1.2%. In contrast, there has been negative net employment growth over this period in Eastern Ontario (-0.6%) and Northern Ontario (-0.2%). Southwestern Ontario and Ottawa have experienced very little employment growth, averaging 0.4% and 0.6% annually since the recession.

These data show that job creation in Ontario has been heavily concentrated in the GGH since the great recession and very little has taken place in any other region of the province. This fact can be further illustrated by considering the fact that, in all of Ontario outside of the GGH, average annual employment growth from 2010 to 2015 was just 0.2%. In other words, there has been almost no employment growth at all in Ontario outside of the GGH during the province's "recovery" from the 2009 recession.

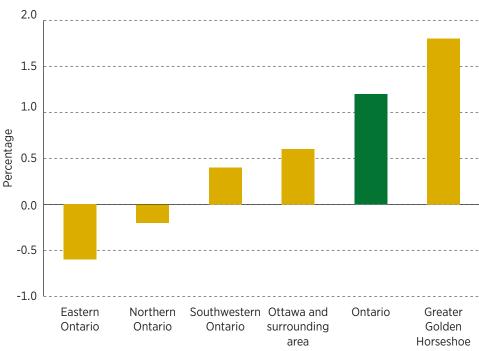


Figure 7: Average employment growth (%), 2010-2015

Source: Statistics Canada, 2016i.

Going back one year further to before the recession provides further context: consider that, in 2008, total employment in Ontario outside the GGH stood at 2.237 million. In 2015, total employment in Ontario outside the GGH stood at 2.173 million (Statistics Canada, 2016i). In other words, as of 2015, total employment in the rest of Ontario has still not recovered to pre-recession levels. This reality is clear when total employment, by solitude, is shown as an index using 2008 as the base year in which employment is set at 100 (figure 8). This index allows us to show the extent to which the employment growth in each region documented in figure 7 has been sufficient to erase the employment losses that occurred during the 2008/09 recession. Figure 8 shows that, in the GGH and Ottawa, employment recovered to above pre-recession levels by 2011. In the GGH, employment in 2015 stood 9% higher than in 2008; in Ottawa, employment in 2015 was very slightly higher (1%) than in 2008. In all the other solitudes, employment was still below 2008 levels as of 2015.

Employment rate

Partly as a result of this sluggish job growth, the employment rate has remained consistently higher in the GGH (and in Ottawa, where the recession was considerably more mild than elsewhere in the province) during the period from 2010 to 2015 than in Southwestern Ontario, Northern Ontario, and Eastern Ontario. Figure 9 shows the employment rate in Ontario and

Greater Golden Horseshoe 105 Ottawa & surrounding area <u>8</u> 100 Southwestern Ontario 95 Northern Ontario Eastern Ontario 90 2008 2009 2010 2011 2012 2013 2014 2015

Figure 8: Employment as an index of levels in 2008, 2008-2015

Source: Statistics Canada, 2016i.

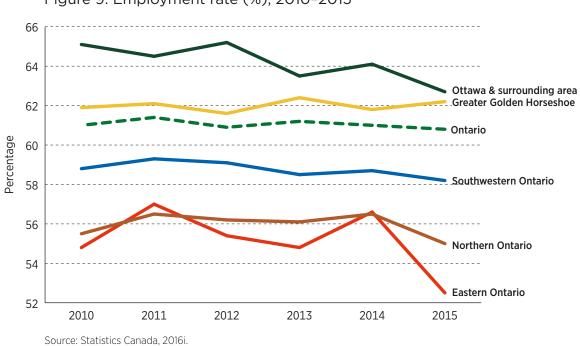


Figure 9: Employment rate (%), 2010-2015

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each of its solitudes from 2010 to 2015. While Ontario and Ottawa [10] were both above the provincial average throughout this period, the employment rate was substantially below the provincial average in each of the remaining three regions.

Labour-force participation rate

Figure 10 examines a closely related statistic, showing the labour-force participation rate in Ontario and each of its solitudes. It presents the average participation rate from 2010 to 2015. The participation rate is an important metric because, although strongly influenced by demographics, it is also partially shaped by real job creation and perceptions about job prospects among the unemployed. In depressed labour markets, more long-term unemployed individuals abandon their search for employment and become "discouraged searchers" who are no longer included in labour-force participation rates. Figure 10 shows that, while Ottawa and the GGH have maintained relatively

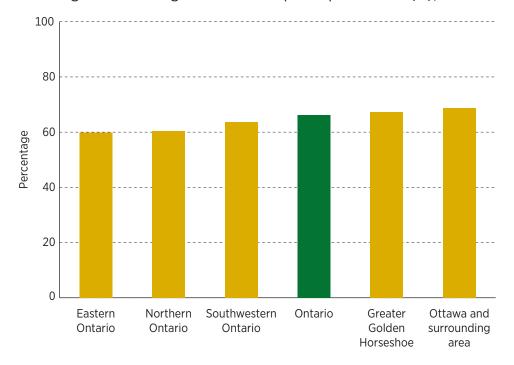


Figure 10: Average labour-force participation rate (%), 2010-2015

Source: Statistics Canada, 2016i.

[10] It should be noted, that while Ottawa's employment rate was still the highest in Ontario as of 2015, the participation rate has been trending downwards throughout the analysis period whereas the golden horseshoe has been approximately stable. Indeed, extending the analysis slightly further back in time shows that Ottawa's employment rate has fallen by 4.7 percentage points from its recent peak in 2008. By comparison, the employment rate in the golden horseshoe has fallen by less than half as much (1.8%) during this period.

high labour-force participation rates, in Southwestern, Northern, and Eastern Ontario participation rates have been substantially lower than the provincial average throughout this period.

Although Southwestern Ontario has generally had a lower labour-force participation rate than the rest of the province over the 2010–2015 period analyzed here, it is now much lower in relation to the rest of the province than it was in the early 2000s. Southwestern Ontario's participation rate was 0.7 percentage points below Ontario's, on average, between 2001 and 2007 but the average rate was 2.3 percentage points lower from 2008 to 2015. It is important to note that the decline in Southwestern Ontario's labour-force participation rate actually predates the recession and that the labour-force participation rate has been declining at a relatively smooth rate since 2006. While the sharp recession in 2008/09 and weak recovery since have undoubtedly contributed to this ongoing trend, the beginning of the trend predates the recession.

Economic dependency ratio

A final indicator that helps illustrate key differences among the regional economies in the post-recession years is the economic dependency ratio, which calculates the share of all income that comes from government transfers rather than from employment income. A higher economic dependency ratio means that the local economy is more dependent on government transfers (including public pension benefits, social assistance, and other transfers). [11]

As **figure 11** shows, the average economic dependency ratio since 2010 closely reflects the participation rates shown in figure 10. **[12]** The regions with high labour-force participation rates, Ottawa and the GGH, also have low economic dependency ratios. Conversely, the solitudes with lower participation rates—Southwestern Ontario, Northern Ontario and Eastern Ontario— have much higher economic dependency ratios that are also substantially above the

[11] Specifically, an economic dependency ratio (EDR) is the sum of transfer-payment dollars received as benefits in a given area, compared to every \$100 of employment income for that same area. For example, Ontario's 2014 EDR of 16.9 means that residents received \$16.90 in total government transfers for every \$100 of employment income for the area. Government transfer payments include: Employment Insurance (EI), Goods and Services Tax Credit (GST) and Harmonized Tax Credit (HST), Canada Child Tax Benefit, Old Age Security (OAS) and net federal supplements, Canada Pension Plan (CPP) and Quebec Pension Plan (QPP), Workers' Compensation, Social Assistance and provincial refundable tax credits, Family Benefits and Other Government Transfers. Other Government Transfers (new in 2010) includes the Working Income Tax Benefit (Statistics Canada, 2016g). [12] Unfortunately, income data are not readily available by economic region. For this indicator, we have combined income data from the Census Metropolitan Areas (CMA) and Census Agglomerations (CA) found within each solitude. Unlike labour-force data, our income data have gaps as areas designated "Non CMA-CA" are not included. See table A4 for a list of all CMAs and CAs we have included in each solitude for our analysis of this indicator.

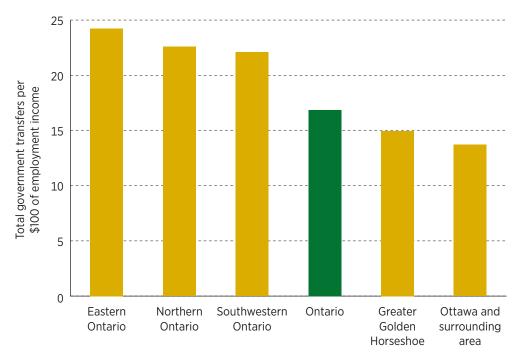


Figure 11: Economic dependency ratio, average of 2010-2014

Source: Statistics Canada, 2016g.

provincial average. Each has an economic dependency ratio above 20, meaning that transfers from governments represent a substantial share of income in those solitudes. [13]

Again, Southwestern Ontario stands out as deserving special attention. Although there are gaps in the data that mean we must temper our interpretation of the results, the available data suggest that the much higher economic dependency ratios in Southwestern Ontario compared to the rest of the province is a relatively new phenomenon. Income data from the early part of the decade are available for the London and Windsor Census Metropolitan Areas (CMAs) [14] and from this data we can see that in the early years of the decade, the region's economic dependency ratio was actually closely aligned with the provincial average. In the year 2000, for example, the economic dependency ratio in Southwestern Ontario stood at 14.0%, just 0.7 percentage points higher than the provincial average. By 2014, that spread had opened to 4.0 percentage points. Further, we know that, in the post-2008 period where we have

^[13] Additional analysis, which is beyond the scope of this paper, suggests that for Ontario as a whole roughly 59% of the transfer increase (in dollars) is for OAS and CPP payments but that EI, social assistance, and provincial refundable tax credits and benefits are also important.

^[14] The London and Windsor CMAs combined accounted for 30.7% and 20.7%, respectively, of 2011 population in the Southwestern economic region.

more complete data, [15] the economic dependency ratio in Southwestern Ontario increased from 18.5 in 2008 (4.0 percentage points above the provincial average) to 22.1 in 2009 (5.7 percentage points above average), where it has remained (on average) through 2014.

As noted, these data should be treated with some caution, as the introduction of smaller urban areas and Non CMA/CA areas in 2008 means that the EDR in later years (for both Ontario and each of the solitudes) is calculated using a different set of population centres than is the case in the early years of the analysis. Caveats aside, we are comfortable asserting that the data suggest that the emergence of economic dependency rates much higher than the provincial average in Southwestern Ontario is likely a relatively recent development.

Summary

The data presented in this section demonstrates that there are important differences in how the labour market performed in Ontario's various solitudes in the years since the end of the great recession. Whereas the GGH has produced relatively strong employment growth over this period, job creation rates in all of the other solitudes has been poor. The analysis here also shows that, while Ontario and Ottawa have generally posted relatively high labour-market participation rates and low economic dependency ratios during the period under analysis, the opposite is the case in the remaining three solitudes. Each of Southwestern Ontario, Eastern Ontario and Northern Ontario have shown labour-force participation rates substantially lower than the provincial average as well as economic dependency ratios substantially above the provincial average between 2010 and 2015.

^[15] Data for the period after 2008 includes Woodstock, Tillsonburg. Stratford Chatham-Kent, Leamington, Sarnia and Owen Sound along with London and Windsor. Combined, these areas accounted for 74.7% of Southwestern Ontario's 2011 population.

Conclusion

Ontario's economy has struggled in recent years. The province was hit harder than most by the 2009 recession and has not recovered strongly in the years since, with real economic growth per capita significantly below the national average between 2010 and 2015. While Ontario's overall economic performance has been weak, this paper has shown that the economic pain has not been spread equally across the province. In particular, through an analysis of labour-market performance and, specifically, net job creation, we have shown that, while the Greater Golden Horseshoe has enjoyed a somewhat stronger economic recovery since 2010, several other regions of the province have struggled much more. In fact, we find that, in Ontario outside the GGH, there has been almost no net job creation at all between 2010 and 2015. Further, as of 2015, the province outside the GGH still had not returned to pre-recession employment levels. We find that both Northern Ontario and Eastern Ontario experienced net job losses since 2010 and, although Southwestern Ontario's job creation rate was positive, it was close to zero so that this region also had not recovered to pre-recession employment levels as of 2010.

While our main findings center on employment growth, we also provide analysis of other labour market indicators to highlight important differences among Ontario's regions. We find that the Greater Golden Horseshoe and Ottawa have posted relatively high labour-force participation rates and low economic dependency ratios over the course of the period in question. Conversely, Southwestern Ontario, Eastern Ontario, and Northern Ontario all had much lower labour-force participation rates and much higher economic dependency ratios compared to the provincial average over the course of this period.

This paper has sought to define major economic regions of Ontario and to document important differences in how their labour markets performed during and following the 2008/09 recession. The differences among the regions and their challenges are large. The analysis presented here suggests policy makers and commentators should not think about Ontario as a homogenous economy and should explore the economic patterns of its various sub-regions.

This paper does not address issues surrounding *why* some regions have underperformed others, leaving those for future analysis. Possible avenues for future research include addressing the following questions:

• Why have some regions of the province fared so much worse than others economically in recent years?

- Are high energy prices in the province having a disproportionate impact on regions that rely heavily on electricity-intensive industries such as resource extraction and manufacturing?
- What are the implications of the changing demographics of various regions for the provincial health system and the allocation of resources within it?
- What are the implications of higher levels of dependency on public-sector institutions both for employment and for direct cash transfers to individuals in Northern, Eastern, and Southwestern Ontario for the growth prospects of those regional economies?

Ontario represents 38% of Canada's population and each of its various regions is substantially larger than some provinces. The economic challenges of the province's smaller regions, however, can sometimes be overlooked by those who look only at provincial-level economic statistics, which are heavily influenced by the economy of the GGH. Considering provincial statistics alone may give rise to misconceptions among people—even policy makers—who live in Ontario's five solitudes and often face significantly different economic circumstances and challenges. Our aim in this report is to shed light on regional economic circumstances across the province in the hope of reducing these information gaps.

Appendix

Table A1	Ontario's solitudes, economic regions and census divisions / 24
Table A2	Employment (%) by sector in Ontario, 2015 / 25
Table A3	Labour market performance metrics, 2001-2015 / 26-27
Table A4	Ontario's solitudes, economic regions and census metropolitan areas and census agglomerations / 28

Table A1: Ontario's solitudes, economic regions, and census divisions

Table A1 shows which Census Divisions make up Ontario's Economic Regions and, in turn, which Economic Regions we have combined to create Solitudes. For example, the Greater Golden Horseshoe Solitude includes the Toronto, Kitchener-Waterloo-Barrie, and Hamilton-Niagara Peninsula Economic Regions. The Toronto Economic Region includes the Durham, York, Toronto, Peel, and part of the Halton Census Divisions. Based on: 35 - Ontario, economic regions, Economic Regions, Standard Geographical Classification (SGC) 2006, http://stds.statcan.gc.ca/sgc-cgt/2006/erss-rers1-fin-eng.asp?criteria=35.

Greater Golden Horseshoe

Toronto

Durham

York Toronto

Peel Halton (Toronto part)

riaitori (Toronto part)

Kitchener-Waterloo-Barrie

Dufferin Wellington Waterloo Simcoe Hamilton-Niagara Peninsula

Halton (Hamilton-Niagara Peninsula part)

Hamilton Niagara

Haldimand-Norfolk

Brant

Perth Huron

Bruce Grey

Southwestern Ontario

London Stratford-Bruce Peninsula

Oxford
Elgin
Middlesex
Windsor-Sarnia

Chatham-Kent Essex Lambton

Ottawa and Surrounding Area

Ottawa

Stormont, Dundas and Glengarry

Prescott and Russell

Ottawa

Leeds and Grenville

Lanark

Eastern Ontario

Kingston-Pembroke Muskoka-Kawarthas

Frontenac Northumberland
Lennox and Addington Peterborough
Hastings Kawartha Lakes
Prince Edward Muskoka
Renfrew Haliburton

Northern Ontario

Northeast Northwest

Nipissing Thunder Bay
Parry Sound Rainy River
Manitoulin Kenora
Sudbury

Greater Sudbury Timiskaming Cochrane Algoma

Table A2: Employment (%) by sector in Ontario, 2015

	Ontario	Greater Golden Horseshoe	Southwestern Ontario	Ottawa and Surrounding Area	Eastern Ontario	Northern Ontario
Goods-producing sector	20.2%	19.6%	29.4%	12.9%	20.2%	22.9%
Agriculture	1.1%	0.6%	4.0%	0.8%	2.0%	0.6%
Forestry, fishing, mining, quarrying, oil and gas	0.6%	0.3%	0.2%	0.0%	0.0%	7.0%
Utilities	0.7%	0.7%	1.1%	0.3%	0.5%	0.6%
Construction	7.0%	6.9%	7.5%	6.8%	8.6%	6.9%
Manufacturing	10.8%	11.2%	16.2%	4.9%	8.1%	7.3%
Services-producing sector	79.8%	80.4%	70.6%	87.1%	79.8%	77.1%
Wholesale and retail trade	15.1%	15.2%	14.5%	13.6%	16.2%	16.2%
Transportation and warehousing	4.6%	4.9%	4.4%	3.4%	4.0%	4.7%
Finance, insurance, real estate, rental and leasing	7.9%	9.3%	5.3%	4.9%	4.6%	3.4%
Professional, scientific and technical services	8.4%	9.5%	4.3%	9.1%	5.2%	4.3%
Business, building and other support services	4.8%	5.0%	5.0%	4.7%	3.7%	3.9%
Educational services	7.4%	7.4%	7.2%	7.7%	7.5%	7.6%
Health care and social assistance	11.7%	10.5%	13.4%	13.3%	16.5%	16.7%
Information, culture and recreation	4.5%	4.7%	3.3%	4.6%	4.2%	3.4%
Accommodation and food services	6.4%	6.4%	6.5%	6.0%	7.5%	6.5%
Other services (except public administration)	4.0%	4.1%	3.6%	3.7%	4.4%	3.8%
Public administration	5.0%	3.4%	3.2%	16.3%	5.9%	6.7%

Source: Statistics Canada, 2016j.

Table 3A: Labour market performance metrics, 2001-2015

Employment (000s)

	Ontario	Greater Golden Horseshoe	Southwestern Ontario	Ottawa and Surrounding Area	Eastern Ontario	Northern Ontario
2001	5,921.3	3,871.9	755.1	592.5	344.1	357.7
2002	6,034.2	3,950.3	767.2	596.3	355.6	364.7
2003	6,212.9	4,067.6	778.3	619.2	376.1	371.8
2004	6,314.3	4,136.8	806.4	613.9	387.2	369.9
2005	6,381.0	4,210.1	801.7	623.4	377.8	368.0
2006	6,452.3	4,250.6	813.4	640.6	384.1	363.6
2007	6,545.5	4,323.7	800.3	657.7	394.8	369.0
2008	6,610.3	4,373.5	791.3	678.2	400.0	367.2
2009	6,432.7	4,279.7	752.0	666.2	384.0	350.8
2010	6,537.8	4,370.1	761.7	676.4	375.8	354.0
2011	6,658.4	4,454.3	771.1	679.4	393.1	360.4
2012	6,702.6	4,492.7	772.9	695.0	384.7	357.3
2013	6,823.4	4,631.2	769.4	684.5	382.4	355.9
2014	6,877.9	4,652.0	775.0	697.8	396.4	356.6
2015	6,923.2	4,750.1	770.5	688.2	368.8	345.5

Employment rate (%)

	Ontario	Greater Golden Horseshoe	Southwestern Ontario	Ottawa and Surrounding Area	Eastern Ontario	Northern Ontario
2001	63.0%	64.4%	62.2%	64.3%	54.9%	56.9%
2002	62.9%	64.2%	62.3%	63.7%	55.8%	58.0%
2003	63.7%	64.8%	62.5%	65.2%	58.2%	58.9%
2004	63.8%	64.7%	64.1%	64.0%	59.0%	58.3%
2005	63.5%	64.6%	63.1%	64.4%	56.9%	57.8%
2006	63.3%	64.1%	63.5%	65.4%	57.3%	56.9%
2007	63.4%	64.2%	62.3%	66.3%	58.6%	57.8%
2008	63.3%	64.0%	61.5%	67.4%	59.0%	57.5%
2009	60.9%	61.7%	58.3%	65.2%	56.4%	55.0%
2010	61.0%	61.9%	58.8%	65.1%	54.8%	55.5%
2011	61.4%	62.1%	59.3%	64.5%	57.0%	56.5%
2012	60.9%	61.6%	59.1%	65.2%	55.4%	56.2%
2013	61.2%	62.4%	58.5%	63.5%	54.8%	56.1%
2014	61.0%	61.8%	58.7%	64.1%	56.6%	56.5%
2015	60.8%	62.2%	58.2%	62.7%	52.5%	55.0%

Table 3A, continued: Labour market performance metrics, 2001-2015

Unemployment rate (%)

	Ontario	Greater Golden Horseshoe	Southwestern Ontario	Ottawa and Surrounding Area	Eastern Ontario	Northern Ontario
2001	6.3%	6.2%	6.2%	6.2%	6.8%	8.0%
2002	7.1%	7.1%	6.7%	7.4%	6.9%	8.1%
2003	6.9%	7.1%	6.7%	6.9%	5.7%	7.4%
2004	6.8%	6.9%	6.3%	6.6%	5.4%	7.8%
2005	6.6%	6.6%	6.4%	6.7%	6.4%	7.0%
2006	6.3%	6.3%	6.5%	5.5%	6.2%	7.4%
2007	6.4%	6.5%	6.5%	5.5%	5.8%	6.9%
2008	6.6%	6.7%	7.1%	5.1%	6.3%	6.7%
2009	9.1%	9.5%	10.3%	6.3%	8.2%	9.0%
2010	8.7%	8.9%	9.1%	7.0%	8.5%	8.3%
2011	7.9%	8.0%	8.1%	6.4%	8.1%	7.8%
2012	7.9%	8.2%	7.8%	6.4%	7.4%	7.2%
2013	7.6%	7.8%	7.7%	6.5%	7.5%	7.4%
2014	7.3%	7.5%	7.0%	6.6%	7.4%	6.6%
2015	6.8%	6.7%	6.9%	6.5%	7.5%	7.2%

Participation rate (%)

	Ontario	Greater Golden Horseshoe	Southwestern Ontario	Ottawa and Surrounding Area	Eastern Ontario	Northern Ontario
2001	67.3%	68.7%	66.3%	68.6%	58.9%	61.8%
2002	67.8%	69.1%	66.8%	68.7%	60.0%	63.1%
2003	68.5%	69.8%	67.0%	70.0%	61.7%	63.6%
2004	68.4%	69.5%	68.4%	68.5%	62.4%	63.2%
2005	68.0%	69.2%	67.4%	69.0%	60.8%	62.1%
2006	67.5%	68.4%	67.9%	69.2%	61.1%	61.5%
2007	67.7%	68.7%	66.7%	70.2%	62.2%	62.0%
2008	67.7%	68.6%	66.2%	71.0%	63.0%	61.6%
2009	67.0%	68.1%	65.0%	69.6%	61.4%	60.4%
2010	66.8%	68.0%	64.7%	70.1%	59.9%	60.5%
2011	66.6%	67.6%	64.5%	69.0%	62.1%	61.3%
2012	66.2%	67.1%	64.1%	69.7%	59.9%	60.5%
2013	66.3%	67.7%	63.4%	67.9%	59.2%	60.6%
2014	65.8%	66.8%	63.1%	68.7%	61.1%	60.5%
2015	65.2%	66.7%	62.5%	67.1%	56.7%	59.3%

Source: Statistics Canada, 2016i.

Table A4: Ontario's solitudes, economic regions, and census metropolitan areas and census agglomerations

Table A4 shows which Census Metropolitan Areas (CMAs) and Census Agglomerations (CAs) make up Ontario's Economic Regions and, in turn, which Economic Regions we have combined to create Solitudes. For example, the Greater Golden Horseshoe Solitude includes the Toronto, Kitchener-Waterloo-Barrie, and Hamilton-Niagara Peninsula Economic Regions. The Toronto Economic Region includes the Toronto and Oshawa CMAs. Based on: 35 - Ontario, metropolitan areas, Metropolitan areas, Standard Geographical Classification (SGC) 2006, http://stds.statcan.gc.ca/sgc-cgt/2006/ss-rs1-fin-eng.asp?criteria=35.

Greater Golden Horseshoe

Toronto

Toronto Oshawa

Kitchener-Waterloo-Barrie

Kitchener-Cambridge-Waterloo

Centre Wellington

Ingersoll Guelph Orilia Colingwood Barrie

Hamilton-Niagara Peninsula

Hamilton

St. Catharines-Niagara

Brantford Norfolk

Southwestern Ontario

Midland

London

London Woodstock Tillsonburg

Windsor-Sarnia

Windsor Chatham-Kent Sarnia Leamington

Stratford-Bruce Peninsula

Owen Sound Stratford

Ottawa and Surrounding Area

Ottawa

Ottawa Cornwall Brockville Hawkesbury

Eastern Ontario

Kingston-Pembroke Kingston Pembroke Belleville Petawawa

Muskoka-Kawarthas

Peterborough Kawartha Lakes Port Hope Cobourg

Northern Ontario

Northeast

Greater Sudbury Timmins Temiskaming Shores

Elliot Lake

North Bay

Northwest

Thunder Bay Sault Ste. Marie Kenora

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Statistics Canada (2016j). CANSIM Table 282-0125. *Labour force survey estimates (LFS), employment by economic region based on 2011 Census boundaries and North American Industry Classification System (NAICS), annual (persons x 1,000)(1)*. http://www5.statcan.gc.ca/cansim/a26?lang=eng&id=2820125.

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