The disruptive forces of global economic restructuring over the past three decades mean that local communities have become increasingly vulnerable. The regions that successfully combat the threats and exploit the opportunities of these forces are those that can leverage their tangible and intangible economic and social assets to reinvent themselves. The true wealth of a region is no longer measured only by the stock of tangible assets but increasingly, by the pool of its human assets in the knowledge-driven economy of the 21st century. A core element of those human assets is the skills and talents of its young people. How a region cultivates and engages the skills and talents of the younger members of its population is one of the clearest indicators of its socioeconomic destiny in a rapidly changing world. This policy brief is an attempt to explore the nature, challenges and prospects of youth employment in Niagara.

Canada has an aging population with more seniors than children and the characteristic is more acute in Niagara, according to the 2016 Census. The concern at all three levels of government is that this phenomenon will have a negative effect on economic growth and put pressure on a tax system with insufficient revenues generated to support a growing need for services as more people leave the workforce than are entering. According to this narrative, a younger skilled workforce helps attract employers to the region and fuels the economy. This robust workforce supports a community with the tax revenues it generates to fund services and amenities, and the quality of those services is indicative of the quality of life for the residents. The economy stagnates and quality of life worsens if there are not enough workers to continue this cycle.

Niagara Region has recognized this pattern in its 2015 Strategic Priorities Implementation Plan, which seeks to improve economic prosperity. One of its initiatives aims to attract and retain youth as one means to grow the population. One of the keys to this plan is improving job prospects for its youth.

WHY IS THIS A PROBLEM?
An aging population has become of great policy concern as more people leave the workforce due to retirement than those entering the workforce to replace them. Economists fear that not only would this stunt economic growth, but would put pressure on the tax system as insufficient revenue would be generated to support the growing need for services.

The Canadian population is aging, much like Niagara, due to a low birth rate coupled with a low mortality rate (i.e. fewer babies are being born while more people are living longer). In this scenario, Canada’s natural rate of population growth is expected to decline steadily over approximately the next 20 years (Fields 2014). Immigration is now considered a key component to population growth. On a local level, this is expressed as a desire for positive net-migration – that is, more people moving into the area from other cities and provinces, as well as other countries, than are leaving.

THE AIM OF OUR POLICY DISCUSSION
This policy brief is premised on the importance of jobs for youth within local economic growth and job creation strategies. With that focus, we have set out to use the empirical data from our recent Binational Prosperity Initiative (BPI) to illustrate the current local employment landscape. While this data does not allow us to fully analyze strengths and weaknesses of the labour market, we can begin to investigate what employment opportunities exist for young people in Niagara.

The emergence of this policy brief is two-fold. First, it is a progression from our January 2017 demographic study Growing Niagara which took a closer look at the region’s aging population as seniors begin to outnumber children, and its difficulty in keeping residents in the 30-44-year age cohort.

1 For a fuller discussion of this issue, please see the NCO’s Policy Brief #26 Growing Niagara: A closer look at Niagara’s aging population, Jan. 2017, by Carol Phillips and Adam Durrant. See also Fields (2014), Canada (2012) and Conference Board of Canada (2006).

2 The BPI is a joint research undertaking involving the NCO and the University at Buffalo School of Architecture and Planning to explore cross-border economic opportunities for cooperation.

3 Statistics Canada will be releasing 2016 Census data on education, labour, workflow, and mobility/migration on Nov. 29, which is after the publication of this introductory brief. Our aim is to use this brief as a starting point for a deeper analysis once all Census data is available.
Second, it uses primary research conducted by the NCO in partnership with the University at Buffalo School of Architecture and Planning originally used to determine industry sectors ripe for binational collaboration to create jobs and grow the economies on both sides of the border.

The BPI amassed a database of more than 98,000 businesses across five sectors in the Buffalo-Niagara-Hamilton economic region: advanced manufacturing, agribusiness, culture and tourism, goods transportation and warehousing, and life sciences. More than 35,000 of those businesses were based in Niagara.

Although this information is useful for all age cohorts, we will be analyzing the numbers from a youth perspective to support ongoing local government policy goals of youth retention and attraction. After a brief portrait of our 15-29-year-old population, we will review asset maps created to illustrate the density in Niagara of five industry sectors as well as employment trends. We aim to describe where these businesses are located in the region to identify clustering, and how demographic and transit patterns line up with the geographic location of these sectors.

ON YOUTH EMPLOYMENT – THE ISSUES
While Niagara’s overall population grew 3.8 per cent from 2011 to 2016, the region’s proportion of youth (age 15-29) fell to 17.6 per cent. That’s down from 18.3 per cent in 2011. This is consistent with the ongoing narrative that Niagara is getting older and that local policy initiatives, such as job creation, are needed to both retain and attract young people to the region. The unemployment rate for those aged 15-29 in the St. Catharines-Niagara CMA was 9.7 per cent in 2016 with a labour force participation rate of 78.9 per cent. Unemployment for the general population (15 and over) was 7.1 per cent with a labour force participation rate of 63.3 per cent (Statistics Canada 2017).

The BPI’s January 2017 policy brief Growing Niagara, which summarized Niagara’s population characteristics, found that the region tends to begin losing its population to out-migration in the 30-44 age cohort and the 0-14 age cohort is also relatively low, suggesting residents over 30 are leaving for better employment and taking their children with them. Numbers in the 15-29 cohort may also be skewed by the growth of population at post-secondary institutions Brock University and Niagara College.

The importance of youth employment is recognized in national and global forums, particularly since the economic downturn of 2008 and the slower recovery of youth unemployment rates. A 2012 Statistics Canada report determined that the percentage of 15- to 29-years-olds in Canada that had been neither enrolled in education nor employed (NEET) hovered between 12 and 14 per cent in the previous 10 years. That was lower than the average among G7 countries. Still, the report determined that the economic downturn had a disproportionate effect on youth unemployment rates, job stability, and declining job quality. The

4 Those over the age of 65 (seniors) make up 21.4 per cent of Niagara’s population, compared to 14.9 per cent in the under-14 cohort (children). The NCO’s January 2017 policy brief Growing Niagara, which summarized Niagara’s population characteristics, found that the region tends to begin losing its population to out-migration in the 30-44 age cohort and the 0-14 age cohort is also relatively low, suggesting residents over 30 are leaving for better employment and taking their children with them. Numbers in the 15-29 cohort may also be skewed by the growth of population at post-secondary institutions Brock University and Niagara College.

5 A March 26, 2017 press release from Employment and Social Development Canada announced an additional $395.5 million over the next three years to the YES program.
ment across all age groups came right after the recession and

These two observations seem contradictory at first glance - that surely once boomers move out of the workforce there will no longer be a youth employment problem. However, former Statistics Canada chief economist Philip Cross argues that the true challenge comes in achieving "labour market efficiency" (Cross 2015). Does the labour supply match the demand? Does the labour force have the proper education and skills? Are the right people in the right place for employment? This policy brief, with its asset maps and demographic analysis, is merely the first step in answering those questions, as we have set out to describe the current situation in Niagara. Our aim is to use this information to set a path for further research that would answer those questions.

OUR DEFINITION
We define youth as between the ages of 15 and 29. This is the broadest range generally accepted in the literature, which tends to hover from either 15-24 to 15-29 depending on the study.

However, logistical problems occur with our data gathering as some employment numbers are broken down into the 15-24 group, but not usually the 25-29 group (this older group is often lumped in with older cohorts). Also, some data (such as employment numbers) is only available at the level of the St. Catharines-Niagara Census Metropolitan Area, which does not include Grimsby or West Lincoln. Where possible, we have tried to use numbers available at the Niagara Census Division level, which includes the entire Regional Municipality of Niagara. Also, where possible, we have tried to use numbers for the entire 15-29 group. We seek to answer some basic questions within this cohort. What is their educational attainment to prepare them for the labour force? What is their participation rate and where are they working? What jobs are out there that might keep them in the region for the long haul?

A PORTRAIT OF NIAGARA’S YOUTH
Niagara’s percentage of youth in its population is dropping. As of the 2016 Census, the 15-29-year age cohort now makes up 17.6 per cent of Niagara’s population, down from 18.3 per cent in 2011. Table 1 breaks it down in more detail. Our goal in the following section is to provide an understanding of youth labour force characteristics in this region so that decision-makers within the local economy have a clearer picture of this emerging asset.

What do we know about Niagara’s youth?
In a span of the past 10 years, the highest level of unemployment across all age groups came right after the recession and has been gradually falling ever since. However, the economic downturn of 2008 hit youth harder than other age groups and it has taken them longer to return to pre-recession levels (ILO 2015, Cross 2014, TD Economics 2014, Marshall 2012).

Youth unemployment in Canada (defined by Statistics Canada as ages 15-24) sits at 13.1 per cent for 2016 – an improvement from 2009 when it peaked at 15.3 per cent, but still above a pre-recession low of 11.2 per cent in 2007. In comparison, the unemployment rate for Ontario youth was 14.0 per cent in 2016, down from a high of 17.5 per cent in 2009, but still above the pre-recession rate of 12.9 per cent (Statistics Canada 2017).

However, youth in the St. Catharines-Niagara CMA are an anomaly. Our custom tabulation shows 15-24-year-olds have a 2016 unemployment rate of 8.5 per cent, which is better than its pre-recession level of 11.7 per cent in 2007 and a formidable drop from its 2010 peak of 18.4 per cent. The reason for this anomaly is beyond the scope of this research, but we can note that this region’s abundance of jobs in tourism’s food-service and accommodation sector – a strong employer of youth – may have helped. Another indicator of this, is that the youth labour force participation rate for St. Catharines-Niagara CMA is 73.2 per cent, well above Canada’s youth rate of 63.7 per cent. The numbers for the full CMA 15-29 cohort in 2016 are a 9.7 per cent unemployment rate and a 78.1 per cent participation rate, respectively. (Statistics Canada 2017).

Table 1: Statistics Canada 2016 Census of Population, Focus on Geography Series; 2011 Census of Population

<table>
<thead>
<tr>
<th>Age Group</th>
<th>Niagara pop.</th>
<th>Ontario pop.</th>
</tr>
</thead>
<tbody>
<tr>
<td>15-19 years</td>
<td>25,715</td>
<td>811,675</td>
</tr>
<tr>
<td>20-24 years</td>
<td>28,155</td>
<td>894,390</td>
</tr>
<tr>
<td>25-29 years</td>
<td>25,130</td>
<td>874,350</td>
</tr>
</tbody>
</table>

We acknowledge that this holds true for all age groups.
Niagara’s youth are primarily concentrated in the region’s three major urban centres of St. Catharines, Welland, and Niagara Falls. However, there are denser pockets of young people located in the outer areas of the region, specifically in Port Colborne, Fort Erie, and the growing communities of Grimsby and Lincoln. As we will see later in this brief, this does have repercussions for transit accessibility, and the employment accessibility that ensues.

The 20-24-year age cohort represents the primary post-secondary years and the age at which youth typically begin transition into full-time labour-force participation. The 2011 Census shows us that only 8.5 per cent (2,315 youths) of that cohort in Niagara region still needs to complete their high school education. Meanwhile, 45 per cent of that cohort (12,275 youths) has already completed some form of post-secondary certificate, diploma, or degree. Note that those with high school or equivalent includes those still in the middle of their post-secondary education.

### Educational Attainment

Table 2 demonstrates Niagara’s education levels as compared to Ontario. While the region has a greater proportion of residents with at least a high school, college, or apprenticeship/trades education, Niagara falls behind the province in the proportion of its population with a university degree or above.

### Niagara vs Ontario: Percentage of Total Population Aged 15 and Older (2011)

<table>
<thead>
<tr>
<th>Highest Educational Attainment</th>
<th>Niagara %</th>
<th>Ontario %</th>
</tr>
</thead>
<tbody>
<tr>
<td>No certificate, diploma or degree</td>
<td>20.4</td>
<td>18.7</td>
</tr>
<tr>
<td>High school or equivalent</td>
<td>30.2</td>
<td>26.7</td>
</tr>
<tr>
<td>Apprenticeship or trades cert/dipl</td>
<td>9.5</td>
<td>7.4</td>
</tr>
<tr>
<td>College, CEGEP, Non univ cert/dipl</td>
<td>22.2</td>
<td>19.8</td>
</tr>
<tr>
<td>University certificate below bachelor</td>
<td>3</td>
<td>4.1</td>
</tr>
<tr>
<td>University Bachelor’s degree</td>
<td>9.1</td>
<td>14.5</td>
</tr>
<tr>
<td>University certificate, diploma or degree above Bachelor’s (incl. Master’s, Doctorate, degree in medicine, dentistry, optometry, veterinary medicine)</td>
<td>5.6</td>
<td>8.9</td>
</tr>
</tbody>
</table>

Table 2: Statistics Canada - 2011 National Household Survey. Catalogue Number 99-010-X2011048

The 20-24-year age cohort represents the primary post-secondary years and the age at which youth typically begin transition into full-time labour-force participation. The 2011 Census shows us that only 8.5 per cent (2,315 youths) of that cohort in Niagara region still needs to complete their high school education. Meanwhile, 45 per cent of that cohort (12,275 youths) has already completed some form of post-secondary certificate, diploma, or degree. Note that those with high school or equivalent includes those still in the middle of their post-secondary education.

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*Updated education data from the 2016 Census will not be available until Nov. 29, past our publication date. However, we will be publishing a second study on youth employment in the new year, using all current Census data.*
Some 16 per cent of those aged 20–24 years with a post-secondary certificate, diploma or degree, earned it in the “health and related” fields. Meanwhile, only two per cent of them received their education credentials in “math, computer, and information sciences” (Statistics Canada 2011).

Within the 20–24-year-old group across all levels of education, the 2011 Census tells us in which industry they are working.

Accommodation/food services and retail trade employs 39.7 per cent working in this age group in Niagara, or two of every five employed aged 20–24 (Statistics Canada 2011) and is in keeping with the findings of the 2016 Interim Report of the federal government’s Expert Panel on Youth Employment (p. 24). Both sectors are dominated by part-time work, low-wage work and can be seasonal. These numbers should be revisited when the updated 2016 Census numbers in educational attainment are released in late November 2017.

What is noteworthy in these two lists is the juxtaposition between the top fields of study for this age group, and where they are working. If young people cannot find employment in their areas of interest or training, it should not be surprising they search outside the region. The reasons for the disconnect between the lists is worthy of further study.
WHERE ARE THE JOBS? - MAPPING OUR REGION

After having identified the post-secondary credentials and employment taken by those aged 20-24, we now turn toward the future. We want to compare this contemporary situation with industries identified by the Binational Prosperity Initiative as crucial to a binational economy.

Our Niagara asset maps created through the BPI provide visual evidence of where firms in the five selected industry groupings are in this region. These “hot spots” on the map represent the numbers of firms in an area. We have also provided employment numbers for the Niagara region within these groupings via EMSI Analyst to identify where there appears to be job growth versus stagnation or decline over the past five years.

The information can be used to help policy makers view industry clustering in the region so that they may make more informed decisions on matters such as infrastructure and public transit. The information is also presented in the spirit of the ILO’s Global Employment Trends for Youth report (2015) which recognizes, as stated previously, that a youth strategy should be part of an overall economic growth and job creation strategy.

The following NAICS codes were used for each of the five sectors: Advanced Manufacturing (332, 333, 334, 335, 336, 339), Agribusiness (11), Culture and Tourism (71, 72, 487110, 487210, 487990, 5100-5152, 561510, 561520, 561590), Goods Transportation and Warehousing (48-49), Life Sciences (325412-4, 334512, 3391, 41451, 423450, 423460, 541380, 541711, 541940, 611310, 621511, 621512, 622110, 622310, 8132). NAICS Canada 2017 reference at http://www.statcan.gc.ca/pub/12-501-x/12-501-x2016001-eng.pdf

**ADVANCED MANUFACTURING**

**Niagara Job Numbers***

<table>
<thead>
<tr>
<th>Year</th>
<th>2010</th>
<th>2016</th>
<th>2021</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>7,523</td>
<td>7,789</td>
<td>8,119</td>
</tr>
</tbody>
</table>

*Job numbers are approximate only, using 4-digit NAICS codes via EMSI Analyst to illustrate trends.

**GOODS TRANSPORTATION & WAREHOUSING**

**Job Numbers***

<table>
<thead>
<tr>
<th>Year</th>
<th>2010</th>
<th>2016</th>
<th>2021</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>5,696</td>
<td>6,375</td>
<td>6,590</td>
</tr>
</tbody>
</table>

*Job numbers are approximate only, using 2-digit NAICS codes (minus scenic and sightseeing transport) via EMSI Analyst to illustrate trends.
We also looked at transit accessibility as the ability of young people (and all those looking for work, especially “vulnerable” populations) to get to their jobs should also be taken into consideration when discussing the employment landscape, as it is not reasonable to expect everybody to be able to drive a car, or to own one, especially in the 15-29 age cohort. Table 3 illustrates the results of our transit accessibility analysis in which we measured the distance between public transit stops and businesses within each sector under study. It identifies businesses (assets) within a 400-metre, 600-metre and 800-metre walk to the nearest stop.

Our analysis shows:
- Life Sciences and Tourism industries were the most accessible to public transit riders.
- Agribusiness was the least accessible, which is consistent with the concentration of assets outside of the urban areas serviced by public transit.
- Advanced Manufacturing and Goods Transportation presented moderate accessibility.

By expanding the service area from 400 m to 800 m, accessibility increased by an average of 7.6 per cent. Despite the increase, the overall trends in accessibility rankings are consistent across service-area size.
WHAT DOES THIS MEAN FOR OUR YOUTH?
The subject of youth employment is an intrinsically multidimensional problem. It touches on issues of economic prosperity and market efficiencies from the standpoint of leveraging a region’s full human capital to adapt to the rapid changes of a globally-integrated knowledge-driven economy. It is also a question of a community’s sense of social solidarity from the standpoint of poverty alleviation and reduction of income inequality. Finally, and most importantly, it is an existential issue in as much as the capacity of a region to address the challenges of youth unemployment determines its long-term survival and prosperity as a viable community.

This policy brief by the NCO is an attempt to throw light on the complex, multifaceted problem of youth unemployment confronting Niagara, with the aim of generating discussion among public officials and citizens about appropriate measures that are specific to the needs and circumstances of Niagara. It will take systemic and multi-pronged efforts to address this challenge, but fully understanding the nature and nuances of the problem is a first step in that direction.

The data and discussion in this policy brief is descriptive in its nature, but points to several aspects in need of further investigation with more focused data.

1) The creation of an expert panel on youth employment in Niagara could facilitate the link between our understanding of existing data and the core program priorities that should follow, including employment needs and perceived skills mismatches. The complexity of this issue demands a sustained and focused discussion to guard against potential distraction from competing local policy issues.

2) Discussions on expanded public transit accessibility for the region’s residents should link more closely to employment accessibility for its vulnerable populations, including youth.

3) The goal of any public policy input – from post-secondary institutions as well as government initiatives – should include efforts to synchronize youth skills coming out of their education with the region’s growing sectors. Ideally, we want young people to find jobs locally in their chosen fields of study and working for a competitive rate that keeps them from searching outside the region.

One important element of this step would be a further study to understand the reasons for any mismatch between education and local employment (see suggestion #1). Also, undertaking a systemic revamp of our job placements strategies, including coops and internships, would be a vital second element. Several noteworthy job placement initiatives have been taken in the region, but providing a more coherent and synchronized training placement system that minimizes fragmentation, duplication and loopholes would constitute significant milestone on this front.

4) A fourth action step we recommend emerges from the indications of the geospatial maps, pointing to concentrations of certain industry groupings in Niagara. The academic and policy literature indicates regions that successfully adapt to global economic changes are often the ones that build on their current strengths rather than pursuing pies in the sky. We encourage the use of these maps as a starting point for further research into scale-up opportunities.

Also, pursuant to an improved job-placement strategy, the region could strategically link its youth training and employment strategy to the current and emerging human capital needs of these five core economic drivers.
REFERENCES


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