

# AUTOMOTIVE INDUSTRY LABOUR MARKET ANALYSIS

Youth Employment in Canada's Automotive  
Manufacturing Industry – An Overview of Demographics,  
Attitudes and Employer Commentary



The project is a collaboration of the Canadian Skills  
Training and Employment Coalition, Prism Economics and  
Analysis, and the Automotive Policy Research Centre.

**THIS PAPER** was prepared for the Auto Labour Market Information (LMI) Project, now known as the Future of *Canadian Automotive Labourforce (FOCAL) Initiative*.

The goal of the project is to help stakeholders better understand the automotive labour market. The Project will create industry-validated, regional, occupational supply and demand analyses and forecasts and skill profiles for skilled trades and other key skilled occupations in the broader automotive sector including vehicle assemblers, parts manufacturers and technology companies that supply the industry. The project will also examine various labour market trends in the sector and facilitate discussions among stakeholders about how to address any forecasted skills shortages and other labour market challenges. The planned outcome of the project is enhanced regional labour market information that will support colleges, employers, policy makers and other stakeholders in taking practical steps to address skills shortages and other labour market challenges in the automotive sector.

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## SUMMARY

This paper is part of the FOCAL Initiative's response to commentary we heard about youth recruitment and retention from automotive sector employers during this project's initial round of sectoral engagements in the fall of 2019.

The demographic shift toward an older labour force in Canada presents automotive manufacturing employers with significant challenges. An aging labour force means a loss of the accumulated skill and knowledge of older workers simultaneous along with increased pressure to compete with other sectors in the hiring and retention of young workers.

It is clear that youth recruitment and retention will be a necessary focus for the sector in the coming years. FOCAL's baseline occupational forecasts for automotive manufacturing in Ontario indicate that for the period 2021-2030, the sector's projected recruitment gap<sup>1</sup> is 30,000 employees, almost a fifth of the province's current automotive manufacturing workforce. Our forecast for Quebec's recruitment gap for the same time period is just under 5,000 employees (about a third of the current provincial sectoral workforce).

This paper provides readers with broad context around youth employment and wages in Canada's automotive labour force. It also reviews research literature on public opinion around youth and manufacturing employment and summarizes employer feedback received during this project's sectoral engagements in the autumn of 2019.

The paper does not make specific recommendations to policymakers nor does it advocate for specific changes to employer practices around youth recruitment and retention. Instead it is meant to be a companion piece to other FOCAL Initiative work around possible strategies to mitigate potential sectoral labour shortages.

Other FOCAL work on youth-related issues includes an October 2019 paper on the sector's employment diversity in respect of gender, age and indigenous employee representation and a June 2020 paper on apprenticeship issues.

In this paper, our estimates of employment in the automotive manufacturing sector and its supply chain include the relative levels of inputs from associated industries including as steel, foundries, stamping, textiles, plastics, rubber, glass, computer and electronics, software. Data availability limitations mean that this paper's measures of youth employment are limited to vehicle assembly and automotive parts (North American Industry Classification System/NAICS codes 3361 and 3363), but because these two classifications represent a significant majority of total employment across the entire supply chain, they form a valid proxy for the broader supply chain.

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<sup>1</sup> The sector's recruitment gap is the difference between forecast recruiting needs and historical levels of new entrants to the sector.

As well, unless otherwise noted, data in this paper are drawn from the FOCAL Initiative's report entitled "Women, Youth, and Indigenous Persons in Canada's Automotive Industry"<sup>2</sup> and from its automotive manufacturing profiles for Ontario and for Québec<sup>3</sup>.

## Key points

It is generally well understood that the proportion of employees in Canada's automotive manufacturing industry who are youth (those aged 15-24) is smaller than the youth proportion in the overall working age population. In 2017, youth aged 15-24 comprised 13.3%<sup>4</sup> of all persons employed in Canada, but just 10.5% of vehicle manufacturing employees and only 10.7% of the parts manufacturing employees were aged 15-24.

This paper discusses some less well-known aspects of youth employment in the sector:

- The youth proportions of workforces in both vehicle and parts manufacturing are substantially higher than the youth proportion employed in Canada's overall manufacturing sector.
- Younger employees in Canada's automotive manufacturing sector are more likely to have full time jobs than are youth working in either the overall manufacturing sector or in the workforce as a whole.
- As a proportion of the total automotive workforce, the youth cohort has risen since the year 2000.
- While the average wage for youth in automotive manufacturing has decreased relative to the sector's overall average wage, the average wage for youth in the sector in 2017 exceeded the average wage for youth in the overall manufacturing sector.

The paper reviews regional workforce age distribution data. In Ontario and Québec, the age distributions of automotive manufacturing workforces show significant disparity with the overall employment profile in both provinces. The proportions of employees in the cohorts aged 15 to 24 and 25 to 34 years in the sector are significantly smaller than the same cohorts in the overall provincial employment profiles.

This pattern holds on a regional basis across Ontario's main automotive manufacturing regions, with only the London-Woodstock-Ingersoll area showing a slight variation from this pattern.

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<sup>2</sup> Women, Youth, and Indigenous Persons in Canada's Automotive Industry, FOCAL Initiative, October 2019

<sup>3</sup> Provincial Automotive Manufacturing Profiles for Ontario and for Québec, FOCAL Initiative, October 2019

<sup>4</sup> Statistics Canada: Labour force characteristics by sex and detailed age group, annual, Table: 14-10-0018-01 (formerly CANSIM 282-0002)

In Ontario, growing disparities in the age distributions of the working age populations between larger communities and smaller, more rural communities will likely provide additional pressures on automotive employers in those smaller communities.

This paper briefly notes a few more labour market issues related to youth recruitment/retention, including brief commentary on competition from other employers in other sectors for youth recruitment and developments such as COVID-19 which could have affect labour supply in automotive manufacturing.

Lastly, the paper considers the impact of public and youth opinions:

- North American public opinion surveys and other research find that manufacturing in general has an image problem with respect to attracting young new employees.
- While a significant majority of people in Canada feel that jobs in the automotive sector are not secure, younger people (18 to 34 years of age) are by some measures less pessimistic about the sector than are other age groups.
- Evidence exists of a ‘postsecondary education-for-all’ attitude, which may deter high school students from exploring manufacturing and the skilled trades when making important career decisions.
- There is substantial literature on the possibility that certain aspects of manufacturing employment may not be attractive to a “millennial” workforce, but this phenomenon is not unique to manufacturing or to the automotive sector. In Canada, sectoral organizations in mining and trucking have addressed similar issues in recent years.

# SECTION 1: YOUTH EMPLOYMENT AND WAGES IN CANADA'S AUTOMOTIVE MANUFACTURING SECTOR

## An aging population

Canada's population is aging, and there is increasing public awareness of this trend<sup>5</sup>.

Ontario accounts for approximately 86% of automotive employment in Canada and Québec accounts for about 8%. Both provinces will experience significant shifts in the age distributions of their populations over the next decade. This will place increased pressure on automotive manufacturing employers as they attempt to attract young people as new employees.

By 2030, the share of Ontario's population that is 65 years of age and older will rise from 18% to approximately 22%. For Québec, this oldest cohort will jump from 20% to 23% of the province's population by 2030.

But at the other end of the age spectrum, Ontario's 15 to 24 age cohort is projected to fall from 13% to 11% of overall population from 2020 to 2030. Québec's youth cohort is forecast to remain flat at about 11% of the overall population.

The projected changes in overall population distribution by age for both provinces are seen in Figures A1 and A2 in Appendix A. Both figures display the substantial increases projected in the proportions of the populations in Ontario and Quebec aged 65 and over while youth and prime working age cohorts shrink or show no growth.

A recent forecast by Statistics Canada around labour force (persons who are employed or unemployed) participation rates provides further evidence of this trend.<sup>6</sup>

While overall labour force participation rates in Ontario and Québec are forecast to drop, the cohort of persons aged 55 and over as a percentage of all persons in the labour force is forecast to increase substantially (see Chart 1 on the following page).

*"A large proportion of our employees are aged 60 to 65 years and a large group of employees are in their 20s, with a much smaller number in the 'middle age' group (30 to 45 years of age"*

**Parts Manufacturer, Golden Horseshoe Region  
(from Appendix C)**

<sup>5</sup> Canadian Broadcasting Corporation, "How to prepare the economy for the baby boom bust", Apr 15, 2019

<sup>6</sup> Statistics Canada, The labour force in Canada and its regions: Projections to 2036, March 2019

**Chart 1: Labour force by region, 2017 and 2036**

Regions	Overall participation rate		Aged 55 and over / aged 15 and over	
	2017	2036	2017	2036
Montréal Census Metropolitan Area (CMA)	67.6	65.3	18.6	23.3
Other Québec CMAs	63.8	57.4	20.5	25.3
Québec, outside CMAs	60.8	55	23.3	26.5
Toronto CMA	66.9	65.5	20	25.6
Other Ontario CMAs	64.8	61.5	20.6	26.3
Ontario, outside CMAs	60	57.7	24.5	27.3

Source: The labour force in Canada and its regions: Projections to 2036  
(<https://www150.statcan.gc.ca/n1/pub/75-006-x/2019001/article/00004-eng.htm>)

The approaching wave of retirements by current long service employees means that recruiting and retaining young new employees will continue to be an important challenge for automotive manufacturing employers in Canada.

The entire North American automotive sector faces similar challenges. The US-based Center for Automotive Research (CAR) placed the issue as the centrepiece in the title of its 2017 report about renewing the automotive manufacturing labour force in the US. The report was called *“The Future of U.S. Automotive Human Resources: Beyond the Big Leave”*.<sup>7</sup>

### Youth employment in automotive manufacturing

In 2017, youth aged 15-24 comprised 13.3%<sup>8</sup> of all persons employed in Canada, but just 10.5% of vehicle manufacturing employees and only 10.7% of the parts manufacturing employees were aged 15-24.

Coexistent with that reality is the recognition that younger workers represent an important resource for the Canadian automotive manufacturing sector. The Canadian Automotive Partnership Council’s (CAPSC) 2014 report entitled *A Call for Action II* stated that Canada has *“a well-trained automotive industry workforce. Fully 25 percent of young Canadians 18 to 24 years old are enrolled in university; a further 14 percent are enrolled in colleges or a skilled trade. It is one of the highest rates in the world”*<sup>9</sup>.

*“People graduating into the workforce are better educated and more capable than in the past, but are choosing work outside the manufacturing sector due to its negative narrative.”*

**OEM assembly, Southern Ontario (from Appendix C)**

Forward-looking reports about the future of the automotive sector here in Canada acknowledge the challenge. For example, in 2018’s *“Drive to Win”*, the report of the Automotive Advisor to Canada’s Minister of Innovation, Science, and Economic

<sup>7</sup>CAR, *The Future of U.S. Automotive Human Resources: Beyond the Big Leave*, 2017

<sup>8</sup>Statistics Canada: Labour force characteristics by sex and detailed age group, annual, Table: 14-10-0018-01 (formerly CANSIM 282-0002)

<sup>9</sup>Canadian Automotive Partnership Council (CAPSC), *A Call for Action II*, 2014

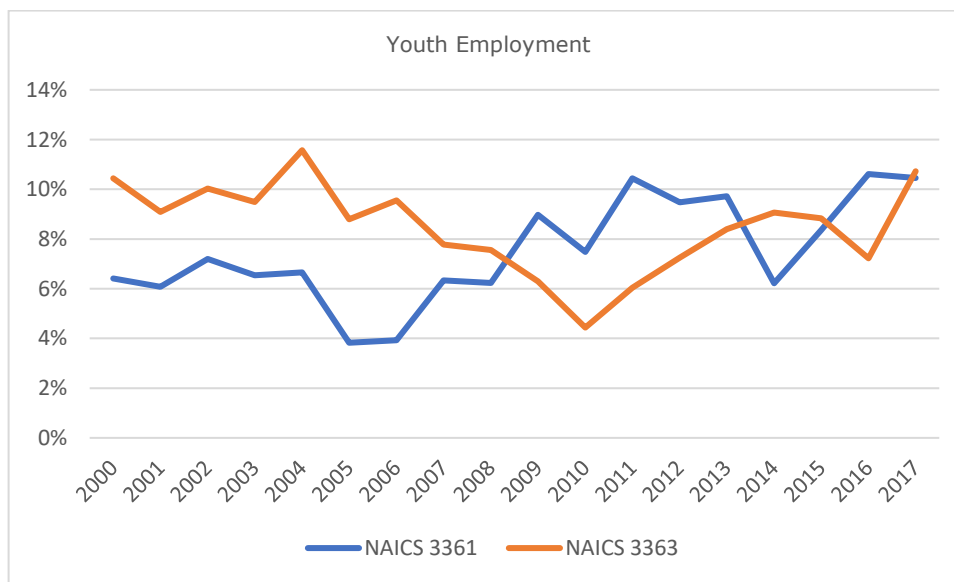


Development and the Ontario Minister of Economic Development and Growth, author Ray Tanguay proposed a series of sweeping policy actions to attract young employees to the sector as part of an effort to support maintain and expand “a culture that celebrates and rewards the power of making things”<sup>10</sup>.

There are some data which indicate that employers’ efforts around youth are succeeding. The youth proportion of the total automotive workforce has increased in the past decade. The youth component of the vehicle manufacturing workforce rose from just over 6% in the early 2000s to over 10% in 2017, a substantial gain. In the automotive parts manufacturing workforce, the youth component has rebounded since 2010.

These data are illustrated in Figure 1 below. Youth employment as a percentage of overall employment in vehicle manufacturing (NAICS code 3361) was higher in 2017 than it had ever been in the previous 17 years while youth employment as a percentage of overall employment in parts manufacturing (NAICS code 3363) had returned to the peak level it reached in 2000.

**Figure 1. Youth Employment as a % of overall employment in Canada's automotive industry, 2000-17**



Source: Statistics Canada (2018a); Labour Force Survey, Table 14-10-0023-01, 2019.

As well, on a comparative basis, the proportions of youth in both vehicle manufacturing and parts manufacturing workforces are higher than the proportion of youth in Canada’s overall manufacturing workforce (8.6%).

Additionally, youth in the automotive manufacturing sector are more likely to be employed on a part-time or temporary basis than their older colleagues, and youth working in the automotive manufacturing industry in 2017 were also nearly twice as likely to be employed full-time as were youth working in other industries. This is an

<sup>10</sup> CAPSC, Drive to Win, 2018

important consideration given the predominance of youth in part-time employment. For context, in 2015 over one third of part-time employees in Ontario were youth aged 15-24<sup>11</sup>.

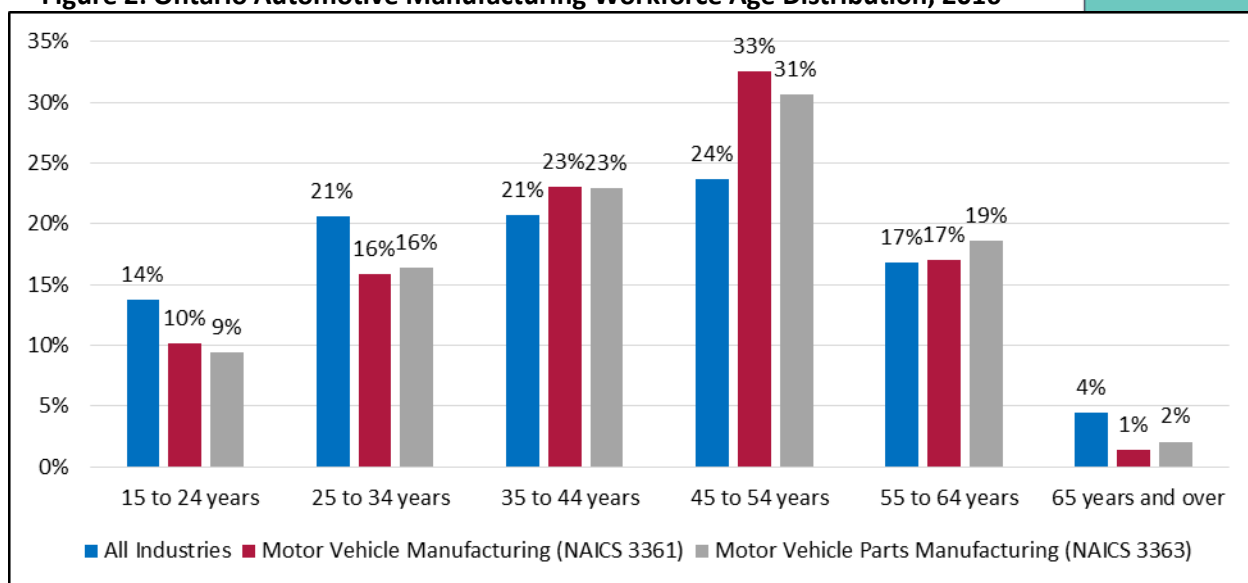
The age distribution of the automotive manufacturing workforce in both Ontario and Québec (seen in Figure 2 and Figure 3 below) is distinct from that of each province’s overall workforce.

In 2016, 14% of Ontario’s overall workforce was between 15 and 24 years of age. But just 10% of Ontario’s motor vehicle manufacturing workers and 9% of motor vehicle parts manufacturing workers were in that same age cohort. A similar disparity exists in the next age cohort: 21% of the overall Ontario workforce was aged 25 to 34 years, while just 16% of Ontario’s automotive manufacturing employees were the same age.

This same contrast is evident in Québec. In 2016, 13% of the overall Québec workforce was aged 15 to 24, but only 9% of motor vehicle manufacturing workers and 8% of parts manufacturing were in that age cohort. In the next age cohort, 21% of the Québec labour force was aged 25 to 34 years, while only between 17% and 18% of automotive manufacturing sector workers were the same age.

The automotive manufacturing workforce in both Ontario and Québec is also characterized by a higher proportion of mid and late-career workers than exists in either of the provinces’ overall workforces. In 2016, 18% of Ontario’s overall workforce was 55 and older, while automotive manufacturing had 21% of its workforce in that age category. The situation was less stark in Québec, with 21% of all workers being aged 55 and over while 20% of automotive manufacturing workers were in the same age cohort.

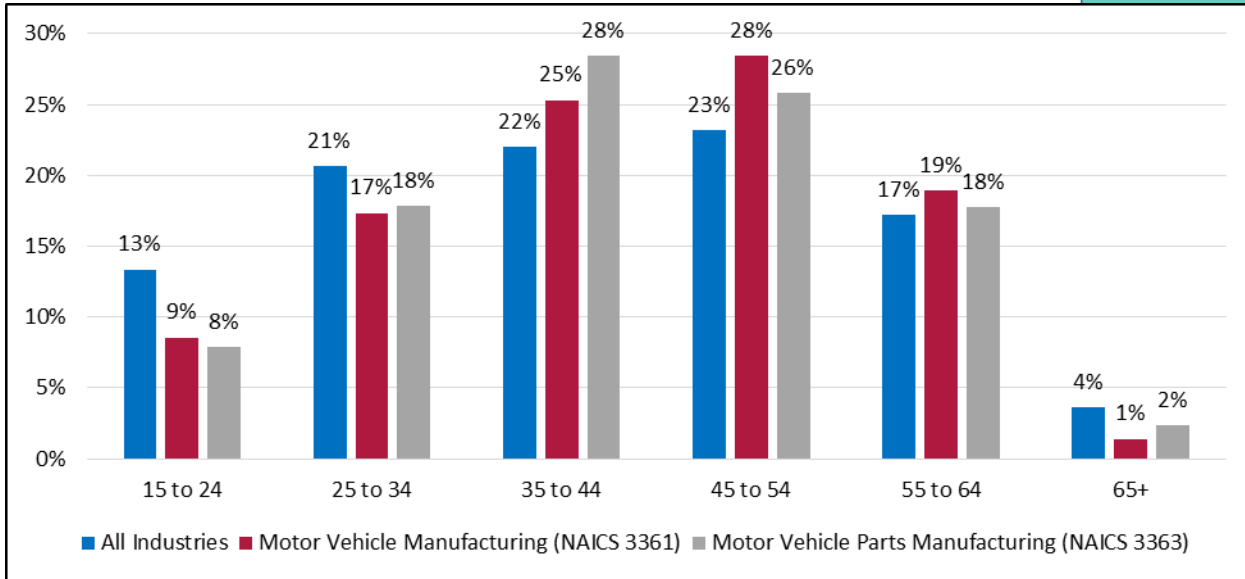
**Figure 2: Ontario Automotive Manufacturing Workforce Age Distribution, 2016**



Source: Canadian Skills Training & Employment Coalition, Statistics Canada

<sup>11</sup> Ontario Ministry of Labour, Changing Workplaces Review Final Report

**Figure 3: Québec Automotive Manufacturing Workforce Age Distribution, 2016**



Source: Canadian Skills Training & Employment Coalition, Statistics Canada

In Ontario, our work focuses on five automotive regions: Windsor-Sarnia; London-Stratford- Bruce Peninsula; the Golden Horseshoe; Kitchener-Waterloo-Barrie; and Eastern Ontario.

Automotive manufacturing employment in these five regions show substantially the same age distribution profile as the overall Ontario automotive manufacturing labour force: generally smaller than average cohorts for youth and for those 25 to 34 years of age, combined with larger than average employee cohorts heading toward retirement. See Figures A3-A7 in Appendix A for these regional breakdowns.

The only Ontario sub-region that appears appreciably different from this pattern is the London-Stratford-Bruce Peninsula area (Figure A4, Appendix A). There, 22% of automotive parts manufacturing employees were in the 25 to 34 year age cohort, as compared to 20% of the overall regional labour force that was in that cohort.

### Youth wages in automotive manufacturing

Hourly earnings in the automotive sector have been declining, particularly in parts manufacturing. In fact, the real earnings of vehicle manufacturing and parts manufacturing employees have decreased by 18% and 21% respectively between 2001 and 2018<sup>12</sup>. This trend is described in more detail in our *Wage Report* released in October 2019 and is seen in Figure 4 below.

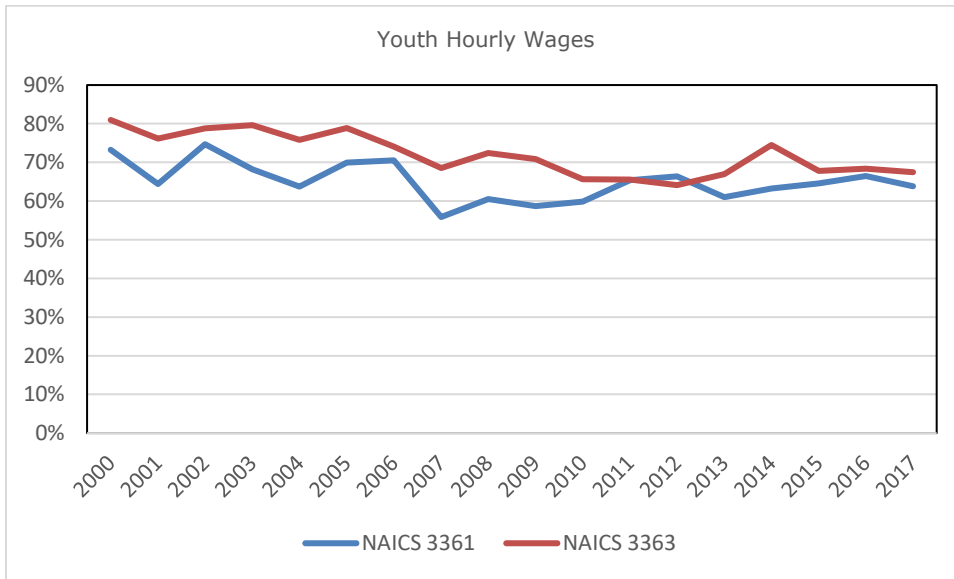
In other FOCAL reports released in October 2019, we explain that winning production mandates in a globally competitive market is

*“For production employees, the current generation prefers digital versus manual work and the company suffers retention problems after 3 to 5 years. Our wage schedule tops out at \$28 an hour for tow motor driving and too many employees are plateauing at that level and not moving up the skill ladder.”*

**Parts manufacturer, Golden Horseshoe Region (from Appendix C)**

<sup>12</sup> Wage Report, November 2019, FOCAL Initiative

**Figure 4. Youth Hourly Wages as a % of Average Hourly Wages, 2000-2017**



Source: Labour Force Survey (2018b); Labour Force Survey, Table 14-10-0064-01.

challenging, and we acknowledge that keeping production costs low is key to being competitive and winning those mandates. However, employers in this sector will have to compete for young employees with other sectors such as utilities and construction. If hourly wages continue to decline relative to other sectors, there is risk that in addition to facing challenges recruiting for higher skilled occupations, some employers in this sector may find it challenging to recruit for lower paid occupations.

During our regional consultations in the late summer and fall of 2019, automotive sector employers in certain regions of Ontario reported significant competition for attracting youth into skilled trades jobs from public utility employers such as Ontario Hydro and Ontario Power Generation.

It is also true that wages paid to youth in the sector are declining relative to average wages in the sector. While youth have less experience and seniority, and are less likely to occupy managerial and professional positions, employers should be aware of this trend when recruiting.

However it is also important to note that the wages of youth in automotive manufacturing in 2017 were still higher than the wages of their peers who work in other industries.

As seen in Chart 2 below, in 2017 youth average hourly wages in both vehicle manufacturing (\$21.76) and in parts manufacturing (\$17.44) were higher than the youth average wage in overall manufacturing (\$17.12) and higher than the youth average wage for all industries (\$15.12).

The youth average wage in vehicle manufacturing substantially outdoes the youth average wage for ‘all industries’ and the youth average wage in manufacturing. The youth average wage in parts manufacturing was also greater than the youth average wage for manufacturing as a whole.

**Chart 2: Youth average hourly wages in Canada (2017)**

Sector	Youth average hourly wage	Percentage greater than youth average wage for all industries	Percentage greater than youth average wage for manufacturing
Motor vehicle manufacturing	\$21.76	43.9%	27.1%
Motor vehicle parts manufacturing	\$17.44	15.36%	1.8%
Manufacturing average	\$17.12	13.2%	
Average for all industries	\$15.12		

Source: Women, Youth, and Indigenous Persons in Canada’s Automotive Industry, FOCAL initiative, October 2019 (NAICS 3361, 3363)

### Other labour market considerations

It is also possible that shifts in labour supply related to COVID-19 could increase pressure on automotive employers to recruit younger employees. A recent study based on US data from early April 2020<sup>13</sup> indicates that while COVID-19 related job losses were large, the related rise in the unemployment rate was smaller than expected due to a reduced labour market participation rate, the most significant cause of which was an increase in older workers choosing early retirement. If this phenomenon exists among automotive manufacturing workers in Canada, it will heighten the need for employers to recruit more young people.

Finally, youth recruitment/retention efforts by Canada’s automotive sector employers will be affected by other issues such as challenges with Canada’s apprenticeship systems and the need to address and expand employment by currently underrepresented groups such as women, Indigenous workers, and immigrants to Canada. Other completed and forthcoming FOCAL Initiative papers focus on these matters.

<sup>13</sup> Coibion, Gorodnichenko, and Weber, Labour Markets During The COVID-19 Crisis: A Preliminary View, April 2020

## SECTION 2: OVERVIEW OF AGE & EMPLOYMENT IN ONTARIO – THE ROLE OF COMMUNITY SIZE

During our project's regional consultation sessions with Ontario automotive manufacturing employers in the fall of 2019, we heard expressions of concern about an 'urban-rural divide' with respect to the recruitment and retention of youth. Some employers expressed worries about smaller communities' abilities to retain young people and about the resulting impact on automotive manufacturing employment in these smaller communities.

Comprehensive work on this topic has been carried out by the Mowat Centre, a public policy think tank that was located at the Munk School of Global Affairs and Public Policy at the University of Toronto.

The Mowat Centre's 2018 series of papers on this topic, entitled *A Different Ontario*, provide empirical support for these concerns. The Mowat Centre's first paper on the topic was entitled *A Different Ontario:- Population - Where and with Whom Do Ontarians Live*. Author Andrew Parkin states:

*"Ontario's population is aging more rapidly in smaller communities, many of which are also losing young people needed to support local economies and the local services on which aging Ontarians rely."<sup>14</sup> ; and "...in Ontario, both growth and aging are unevenly distributed across larger and smaller communities."*

Parkin's paper goes on to detail a number of facts regarding this phenomenon. From 2011 to 2016, Ontario's population growth was concentrated in the province's eight biggest communities (Metropolitan Toronto, Ottawa, Hamilton, Kitchener-Waterloo-Cambridge, London, St. Catharines-Niagara, Oshawa, and Windsor) with most of the rest of the province lagging behind. The Greater Toronto Area (GTA) is the only one of the province's six regions with more children 14-year-old and under than seniors.

Ontario's 'dependency' ratio of children and seniors to working age population is 0.50. The ratio for communities over 500,000 is below this provincial average. But for communities with populations less than 500,000, the ratio is above this provincial average, and the ratio rises steadily as community size falls.

Parkin concludes that these trends of uneven growth and uneven aging will place increased pressure on smaller communities in respect of tax revenues and the provision of local services. These trends will also affect the ability of automotive manufacturing operations in smaller Ontario communities to attract new talent.

The FOCAL Initiative examined more recent census data in order further assess this 'urban-rural divide'. We examined age demographics in three categories of

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<sup>14</sup> Parkin, *A Different Ontario - Population -Where and with Whom Do Ontarians Live*, 2018

communities: large (the Greater Toronto Area), medium-sized (London-Woodstock-Ingersoll and Kitchener-Waterloo) and smaller (Peterborough, Niagara, Chatham-Kent). These were chosen because each is home to a reasonably significant level of automotive manufacturing employment so as to make them useful comparators.

We found that the smaller the community, the larger is the oldest population cohort. Figures B1-B6 in Appendix B provide the data for the 2019 age distribution of working age populations in these comparator communities.

All three of the representative smaller communities (Peterborough, Chatham-Kent, and Niagara) had substantially greater proportions of their working age populations aged 55 to 64 than did the middle and larger sized communities.

Chart 3 below is arranged in order of descending size of the 25 to 34 year age group. It shows that the three smaller example communities (Peterborough, Niagara, and Chatham-Kent) have the smallest 25 to 34 age group cohorts.

**Chart 3: Age Distribution, Example Large, Medium, and Small Communities in Ontario (2019)**

% of working age <b>Region</b>	<b>15-24 age group</b>	<b>25-34 age group</b>	<b>55-64 age group</b>
GTA	19.44%	22.18%	18.42%
Kitchener Waterloo Cambridge	21.24%	22.05%	18.02%
London Woodstock Ingersoll	19.54%	21.81%	18.21%
Peterborough	19.85%	19.76%	24.97%
Niagara	17.43%	18.83%	23.71%
Chatham-Kent	18.65%	17.50%	26.12%

Additionally, we also looked at the trends over time in these comparator Ontario communities and these findings corroborate the trends discussed in the Mowat report and the concerns expressed by some Ontario automotive employers. This data is seen in Figures B7-B12 in Appendix B.

The GTA showed gains over time in the proportion of the working age population the 15 to 24 age cohort. All three smaller representative areas (Chatham – Kent, Niagara, Peterborough) show steady decreases in this youth cohort.

But interestingly, as noted above in Section 1, a region that showed a somewhat divergent development is the London-Woodstock-Ingersoll region (see Figure B2 in Appendix B). There, in contrast to other non-GTA comparator regions, both the 25 to 34 year and 35 to 44 year working age cohorts have grown over each of the three periods examined. Although we have not had this trend validated in our engagements with automotive manufacturing employers in this region, it is possible that employers there have experienced relatively less steep challenges in respect of younger worker recruitment and retention.

In addition to the aging of smaller communities, the Mowat Centre paper discusses an interesting but less well-known trend. The proportion of one-person households in the province has been edging upward and, notably for the purposes of this paper, this is an increasingly common living arrangement for young adults aged 20 to 34.

The proportion of young adults in Ontario living in a couple has fallen from 46% in 2001 to 36% in 2016, while the proportion of young adults who live neither in a couple nor as single-parents rose from 50% to 60%. This increasing proportion of young Ontarians living in one-person households will have implications such as increased demand for housing, already a challenge for some small communities that automotive sector employers commented on during our fall 2019 consultations. As well, Parkin notes that this growth in young, one-person households will likely have a negative effect on the ability of young people to exit the labour market in order to seek training or education.



## SECTION 3: ATTITUDES TOWARD EMPLOYMENT IN AUTOMOTIVE MANUFACTURING – EMPLOYERS, PARENTS AND YOUNG PEOPLE: A REVIEW OF RECENT RESEARCH AND LITERATURE

### Opinions about employment security and working conditions

The demographic challenges facing automotive sector employers cannot be considered separately from the opinions held by the public and by youth in specific toward manufacturing employment.

Of course, such attitudes exist within the context of the very significant sectoral shifts in employment that have taken place across North America in recent decades.

For example, in Ontario, from 2006 to 2016, the number of people employed grew by close to half a million. Most sectors experienced employment gains. But three sectors suffered very significant declines in employment: employment in agriculture, forestry, fishing and hunting declined by 12,270 jobs; employment in wholesale trade dipped by 36,715 jobs; and employment in manufacturing suffered by far the most, with a loss of 216,430 jobs<sup>15</sup>.

Due to automotive manufacturing's significance to Ontario's economy, job losses in the sector often attract significant media attention. Employment in auto assembly and parts manufacturing in Canada fell from 175,000 in the late 1990s to 133,000 people in 2019<sup>16</sup>.

However, this is based only on jobs in vehicle assembly (NAICS code 3361) and automotive parts manufacturing (NAICS code 3363). Our research estimates that in 2018 the entire automotive sector and its supply chain employed 188,500 people, so it is possible that some of the decline noted above was due to outsourcing of work to other producers in the supply chain. We do not currently have the historical data to verify this.

Again, it is important to note that the erosion of manufacturing employment in Canada took place against a backdrop of broad employment growth in healthcare and social assistance, in professional, scientific and technical services, and in education services.

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<sup>15</sup> Parkin, A Different Ontario, Income & Employment: A Decade of Change, by Andrew Parkin, Mowat Centre October 2018

<sup>16</sup> Trillium Centre for Advanced Manufacturing, Canada's Automotive Industry: A Decade in Review, Spring 2020

Similar declines in manufacturing across North America have been well-documented, and these declines have clearly informed public opinion about manufacturing and about employment security in manufacturing.

In our review of the existing research and other literature which examines attitudes toward automotive manufacturing employment, several consistent themes emerged.

There is a wide array of North American survey data confirming what many employers know from their direct, shop-floor experience - that manufacturing has an image problem with respect to attracting young new employees. Jobs in manufacturing are often perceived as precarious, low-tech and involving repetitive work that lacks intellectual stimulation<sup>17</sup>.

A 2012 survey in the United States<sup>18</sup> revealed that despite 90% of respondents viewing manufacturing as the most important industry for maintaining a strong national economy, close to a majority saw the US manufacturing sector as getting weaker (46%), or at best staying the same (32%).

The same survey indicated that only 35% of respondents would encourage their children to pursue careers in manufacturing. Only 20% of respondents felt that schools encouraged encourage students to pursue careers in manufacturing.

However, the survey indicated that the image of manufacturing seemed to show some recent improvements, revealing small increases in Americans' perceptions of manufacturing as being high-tech, clean, safe, and offering interesting and rewarding careers.

Only 43% of respondents believed that a manufacturing career was as secure and stable as careers in other industries, while 80% believed that manufacturing jobs are the first to be moved to other countries.

Similar opinions have been found in Canada. A 2019 survey of over 1,800 adults by Forum Research<sup>19</sup> into opinions about Canada's automotive sector found that:

- 59% said jobs in Canada's auto sector are insecure
- 27% said auto sector jobs are "not secure at all"

Those living in Ontario (65%), 55-64 year olds (63%), males (63%), those earning between \$80,000 - \$100,000 (69%) and those with some college or university education (64%) were most likely to say auto sector jobs are not secure.

Nearly half of respondents believed that the auto sector will decline over the next 10 years (47%), while about a third (31%) believed the Canadian auto sector will stay about the same. Only one in 10 said that it would grow.

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<sup>17</sup> Campbell 2014; McNelly 2016

<sup>18</sup> Manufacturing Institute, Leadership Wanted: US. Public Opinions On Manufacturing, 2012

<sup>19</sup> Forum Research, Majority Of Canadians Do Not Think Jobs In Canada's Auto Sector Are Secure, July 5, 2019

A closer look at the Forum Research poll reveals interesting age-related results. While all age groups were generally pessimistic about the sector's outlook, the survey's youngest respondents (18 to 34 years of age) were by some measures the least pessimistic. Forty three percent (43%) of this youngest group believed that the Canadian automotive sector would decline over the next 10 years, and this was lowest level of 'pessimism' among all age groups (tied with those 65 and over). As well, all other age cohorts believed more strongly than this youngest group that automotive jobs were either not very secure or not secure at all. On the other hand, 20% of this youngest cohort thought that automotive manufacturing jobs were either somewhat or very secure, which was by a small measure the lowest for any age category.

A 2017 study from the Center for Automotive Research (CAR)<sup>20</sup> about the US automotive manufacturing industry concluded that: *"Too few youth and the people who influence their career choices have a clear understanding of the exciting high-tech opportunities in the 21st century automotive industry. It's not a secret that misconceptions about the industry are hampering talent attraction efforts."*

The 2017 CAR study found in general that the automotive industry is not viewed as a growth industry. Only 9% of adults surveyed said that automotive was a growth industry. And notably, only 9% of youth who did not know anyone employed in the auto industry would consider an automotive-related career.

Familiarity with peers who work in the sector likely influences youth attitudes toward automotive sector employment. But of course given general trends toward an expansion of the service sector economy and a reduction in overall manufacturing employment, this peer familiarity is increasingly less likely for most youth. For example, the automotive manufacturing sector in Ontario employed approximately 11,000 workers under 25 years of age in 2016. At the same time, Ontario's restaurant industry employed over 200,000 people under the age of 25.<sup>21</sup> Young people are simply less and less likely to learn about employment in the automotive sector by knowing peers who are employed in automotive manufacturing.

A 2017 survey of US auto engineers found that the US automotive industry had "an image problem", especially given that the variety of skills needed in automotive engineering jobs is broad and that competition is fierce from technology companies that have an inherent "cool factor"<sup>22</sup>. Top concerns among auto engineers as revealed by the survey were: worries about the transition to new ways of working (i.e. automation); the desire to maintain a work/life balance; and competitive pressures from other companies.

*"Our worklife balance is not attractive to youth, so our available labour pool has to expand outside the Windsor region. It can be tough to attract people due to the stigma around manufacturing."*

**OEM Assembly, WindsorEssex area (from Appendix C)**

<sup>20</sup> CAR, Accelerating the Growth of The U.S. Automotive Manufacturing Industry at Home, Rather than Abroad, 2014

<sup>21</sup> Ontario Ministry of Labour, Changing Workplaces Review, Government of Ontario, 2016

<sup>22</sup> Weber Shandwick -- KRC Research, Attracting and Retaining Talent in the Automotive Industry: The Role of the Employer Brand and Employee Experience in the Battle for Talent, 2018

Just as youth and members of the public have attitudes toward employment prospects in manufacturing in general and in automotive manufacturing specifically, employers have views about their younger employees. A 2016 survey of Canadian manufacturers the Canadian Manufacturers and Exporters (CME)<sup>23</sup> examined the level of satisfaction with the young workers they employ. Overall, manufacturers were moderately satisfied, with just 46% of respondents indicating that they were satisfied with their young workers, 18% indicating dissatisfaction and 37% taking a “neutral” stance. With regard to young employees’ work ethic/attitude, 39% of employers were dissatisfied, while 56% were dissatisfied with the industry-specific knowledge displayed by their younger employees. However, a solid majority of employers (56%) were satisfied with the willingness to learn displayed by their young employees.

## The university-for-all mindset and the transition from school to employment

An outlook that favours postsecondary education (mainly university) as the best option for young people may contribute to negative perceptions of manufacturing employment. This outlook is the notion that university is critical to the future success of youth and that, accordingly, every high school graduate should attempt to earn a bachelor’s degree<sup>24</sup>. During our regional consultations in the fall of 2019, a number of automotive manufacturing employers expressed versions of this concern.

This university-for-all inclination serves to encourage students to commit to pursuing this path without a useful level of awareness about other postsecondary options that might better suit their interests, academic ability or career aspirations. Instead, it directs students away from other forms of education offering legitimate pathways to well-paid work that are also shorter and less expensive than a typical four-year degree<sup>25</sup>. Due in part to this bias, some students may never complete a degree but instead go into debt, lose time, feel discouraged and end up searching for employment without a credential<sup>26</sup>.

There is concern that the public school system feeds this inclination and encourages students who are unprepared or who are without specific career goals to pursue occupations without a sense of informed purpose<sup>27</sup>. Career and technical education-related course offerings are also less common at high schools, and where available, tend to come with barriers to enrolling including limited seats, extra paperwork and transportation to other locations<sup>28</sup>.

A 2015 study in Ontario, cited by the Ontario Chamber of Commerce (OCC) in a recent paper, found that only 26 percent of young adults aged 13 to 24 were considering a career in the skilled trades.<sup>29</sup> In contrast to this low level of interest among youth in

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<sup>23</sup> Canadian Manufacturers and Exporters and the Canadian Skills Training and Employment Coalition (CSTEC), *The Future of the Manufacturing Labour Force in Canada*, 2015

<sup>24</sup> Deitrickson 2018; Ryan 2016; Ahearn & Rosenbaum 2016

<sup>25</sup> Deitrickson 2018

<sup>26</sup> Ahearn et al. 2016; Deitrickson 2018; Rosenbaum et. al. 2010

<sup>27</sup> Ahearn & Rosenbaum 2016; Deitrickson 2018

<sup>28</sup> Deitrickson 2018

<sup>29</sup> Ontario Chamber of Commerce, *Talent In Transition, Addressing the Skills Mismatch In Ontario*, 2017

skilled trades training, the OCC paper also outlines the results of a 2017 public opinion survey in which 93% of Ontarians supported the view that it was very important for government “to provide access to everyone to learn a trade or skill”.

Ontario’s Changing Workplace Review, a sweeping examination of provincial employment and labour legislation conducted by special advisors to the Ontario government in 2017, indicated a significant concern about the school to employment transition for Ontario’s youth:

*“There continues to be a problem in Canada of students transitioning from school to work. Many students drop out and this often has very negative implications for their employability and earnings... The problem of youth finding it difficult to successfully transition from school to work is compounded by the fact that the initial negative experience of not being able to get a job when first leaving school can lead to a longer-run legacy of permanent negative “scarring” effects which can lead to lower lifetime earnings. Young people may react negatively to a society and labour market that will not accommodate them, and employers react negatively to the prospect of hiring young people who have a large gap in employment between their leaving school and their first job.”<sup>30</sup>*

A 2017 survey conducted for the Ontario Chamber of Commerce (OCC) showed that 94% of Ontarians felt that it was highly important for Ontario to support the transition of young people from school to employment.<sup>31</sup>

## Workplace culture and generational differences

In the larger discussion about attracting and retaining skilled labour, many commentators have discussed the role of workplace culture and generational differences between incoming millennial workers and the exiting baby boom workforce.

Some authors assert that baby boomers tend to have a “live to work” mentality and hold onto values of consistency, loyalty and not challenging authority and that, in contrast, millennials place value on “work-life balance” and prefer employment arrangements that align with preferences for flexibility, collaboration, innovation and choices<sup>32</sup>. During our consultations, a significant number of employers outlined their challenges with recruiting younger workers who were disinclined to accept challenging shift arrangements.

Other research suggests that youth are predominantly motivated by rapid career advancement, as well as working conditions which support purposefulness (and work-life balance), and that manufacturers face challenges offering employment that provides alignment aligned with

*“Automation means that we are losing some of our middle ground jobs. Either very low level entry jobs or high-end jobs like mechanical designers but much less left in the middle for opportunities for young people without wider skills.”*

**Parts manufacturer, Niagara region (from Appendix C)**

<sup>30</sup> Ontario Ministry of Labour , Changing Workplaces Review Final Report

<sup>31</sup> Ontario Chamber of Commerce, Talent In Transition, Addressing the Skills Mismatch In Ontario, , 2017

<sup>32</sup> Giffi et al 2015; University of Oregon

these aspirations or have not done a good job communicating the opportunities that do to potential youth employees<sup>33</sup>.

At the same time, it is a common and repeated history for younger generations to attract criticism from older strata of society - there are multiple examples of intergenerational criticism by older generations<sup>34</sup>.

Indeed, despite numerous and frequent assertions about the differences between workers of different generations, all age groups are becoming increasingly concerned with work-life balance and work flexibility – albeit for different reasons<sup>35</sup>. Many employers in Canada’s automotive manufacturing sector have recognized these attitudes and have adopted policies in response that better align with these values.

Of course, concerns about attracting youth are not unique to Canada’s automotive manufacturing sector. Indeed, other industry groups engaged in national labour market information (LMI) initiatives have placed a focus on their own sector-specific issues in respect of attracting young people to employment. Two relatively recent examples are the Mining Industry Human Resources Council and Trucking HR Canada.

In 2010 and 2011, the Mining Industry Human Resources Council conducted a series of telephone interviews and on-line questionnaires among youth in order to determine their views about employment in the mining industry. Similar to our considerations for youth opinion research, the Council interviewed both young people currently working in the sector and young people considering seeking employment in the sector. Their findings helped inform a series of recommendations to the mining sector’s employers and stakeholders.<sup>36</sup>

In 2019, Trucking HR Canada released a report entitled “Millennials Have Drive 2” . This report was based in part on research carried out in 2018 which included an online survey of millennials followed by focus groups of millennials in Toronto and Calgary. The results of this research helped inform the recommendations to employers and stakeholders in Trucking HR Canada’s 2019 report.<sup>37</sup>

*“Younger workers in their 20s are sometimes reluctant to take/keep jobs in this plant, partially because of shift work preferences. New hires in production will work the afternoon shift for six or seven years before moving to the day shift.”*

**Parts manufacturer, Eastern Ontario (from Appendix C)**

<sup>33</sup> Harrington et al, How Millennials Navigate Their Careers: Young Adult Views on Work, Life, and Success. Boston College Centre for Work & Family, 2015.

<sup>34</sup> Kitt, Kids These Days: an Analysis of the Rhetoric against Use across Five Generations, 2013

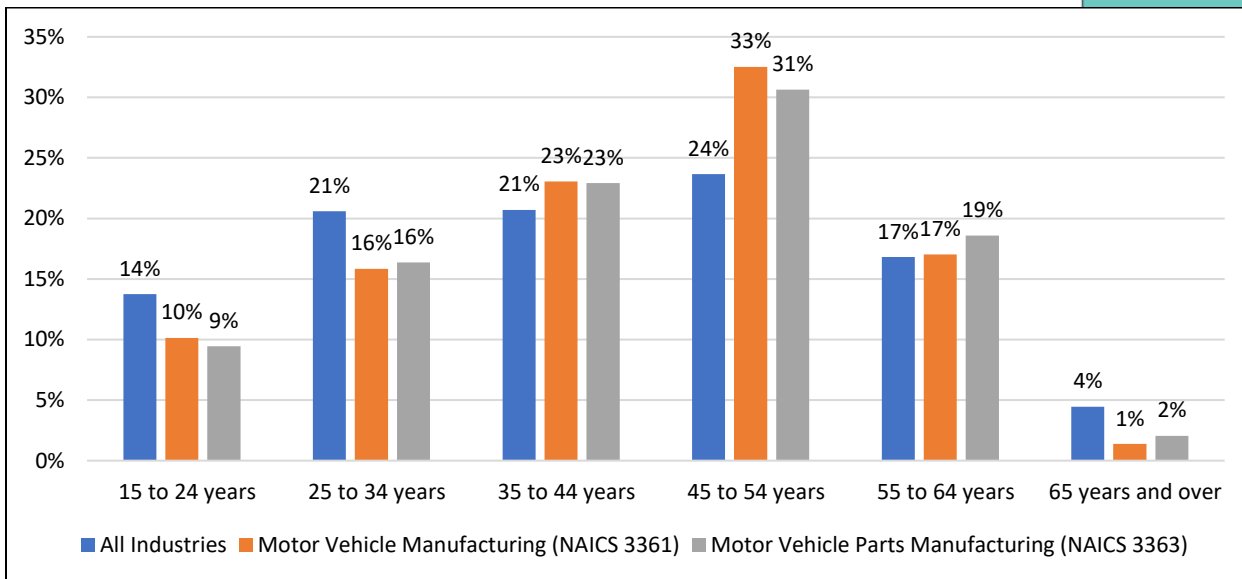
<sup>35</sup> University of Oregon

<sup>36</sup> Mining Industry Human Resources Council, Changing the Face of the Mining Sector: Take Action for Diversity - Research Report, 2011

<sup>37</sup> Trucking HR Canada, Millennials Have Drive 2

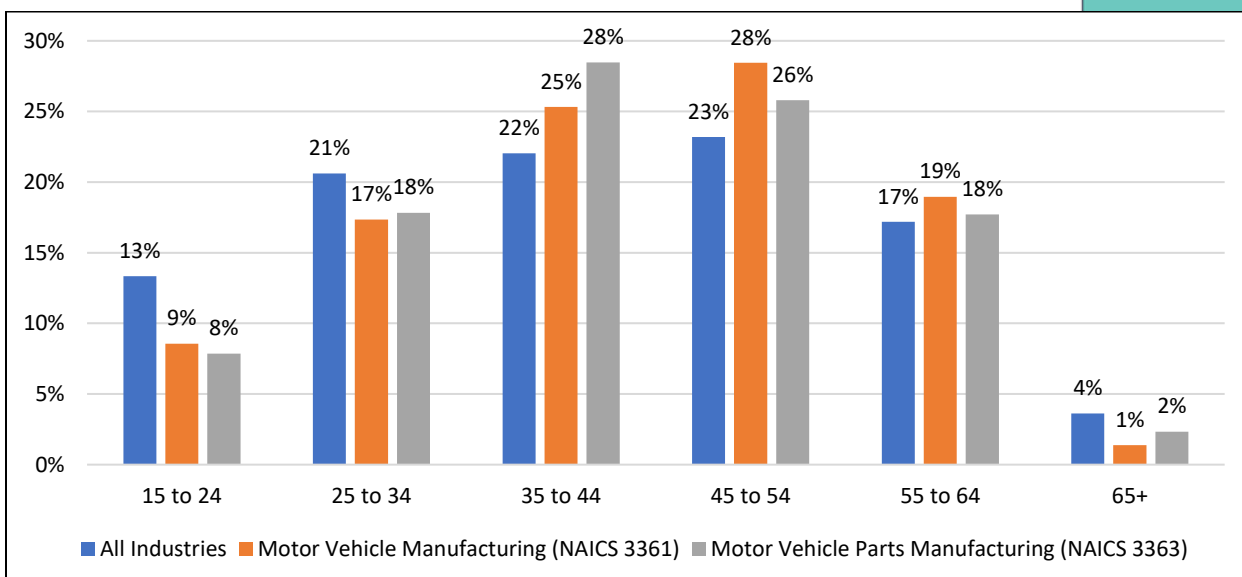
# APPENDIX A - ONTARIO AND QUÉBEC DEMOGRAPHIC DATA and AUTOMOTIVE MANUFACTURING WORKFORCE AGE DISTRIBUTION, ONTARIO REGIONS, 2016

**Figure A1: Ontario Automotive Manufacturing Workforce Age Distribution, 2016**



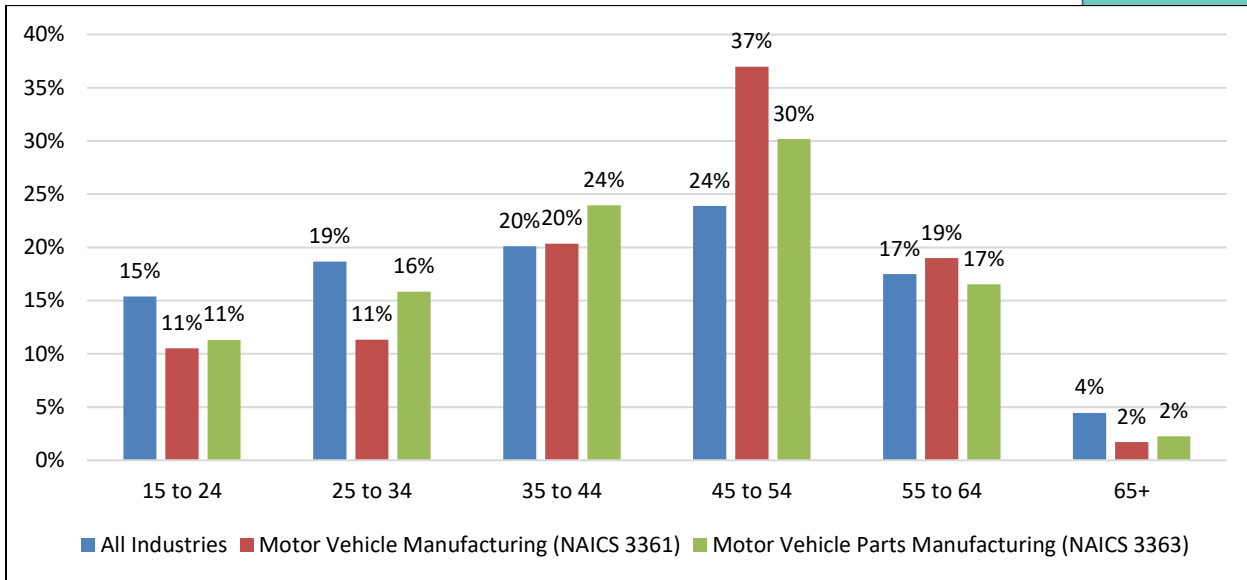
Source: Canadian Skills Training & Employment Coalition, Statistics Canada

**Figure A2: Quebec Automotive Manufacturing Workforce Age Distribution, 2016**



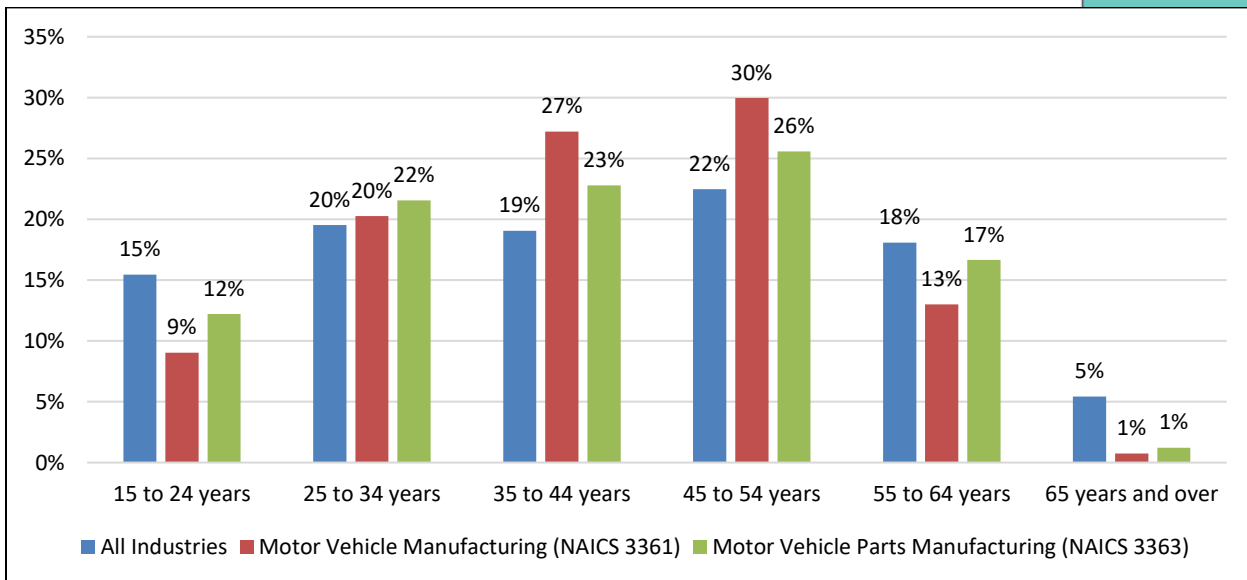
Source: Canadian Skills Training & Employment Coalition, Statistics Canada

**Figure A3: Windsor Sarnia - Automotive Manufacturing Workforce Age Distribution, 2016**



Source: Canadian Skills Training & Employment Coalition, Statistics Canada

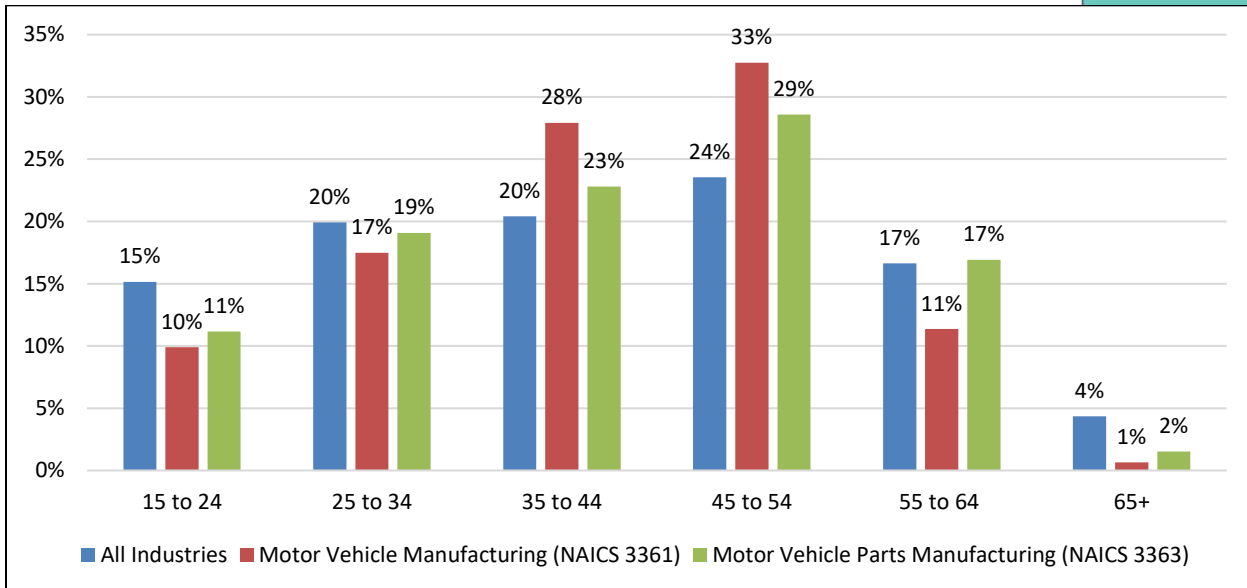
**Figure A4: London - Stratford - Bruce Peninsula - Automotive Manufacturing Workforce Age Distribution, 2016**



Source: Canadian Skills Training & Employment Coalition, Statistics Canada

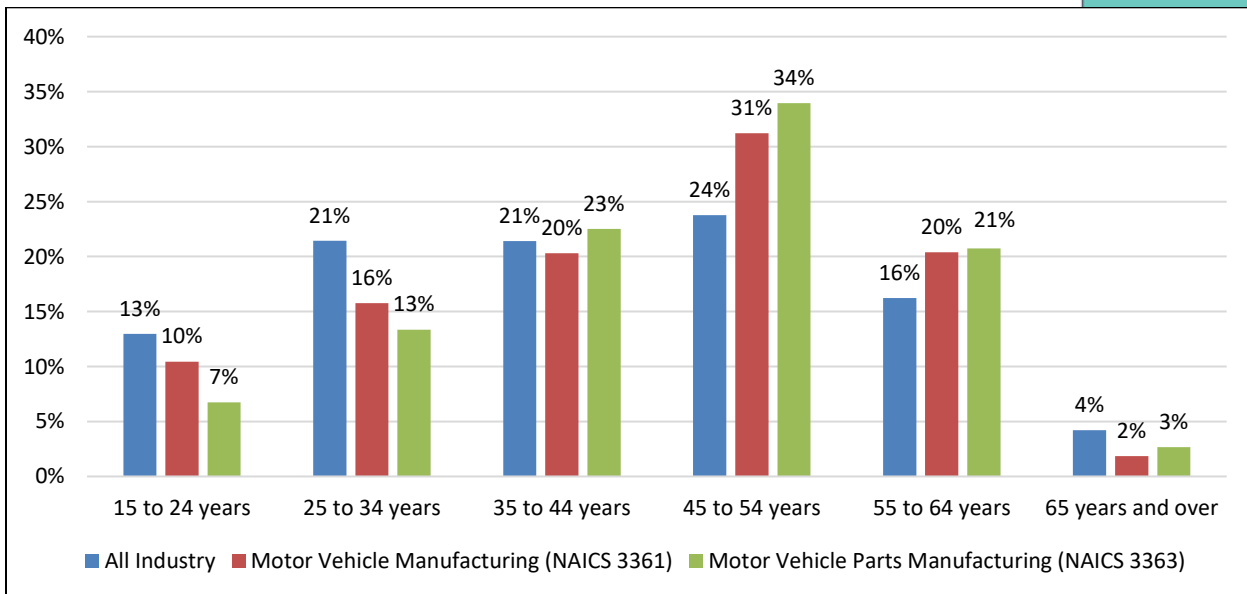


**Figure A5: Kitchener Waterloo Barrie - Automotive Manufacturing Workforce Age Distribution, 2016**



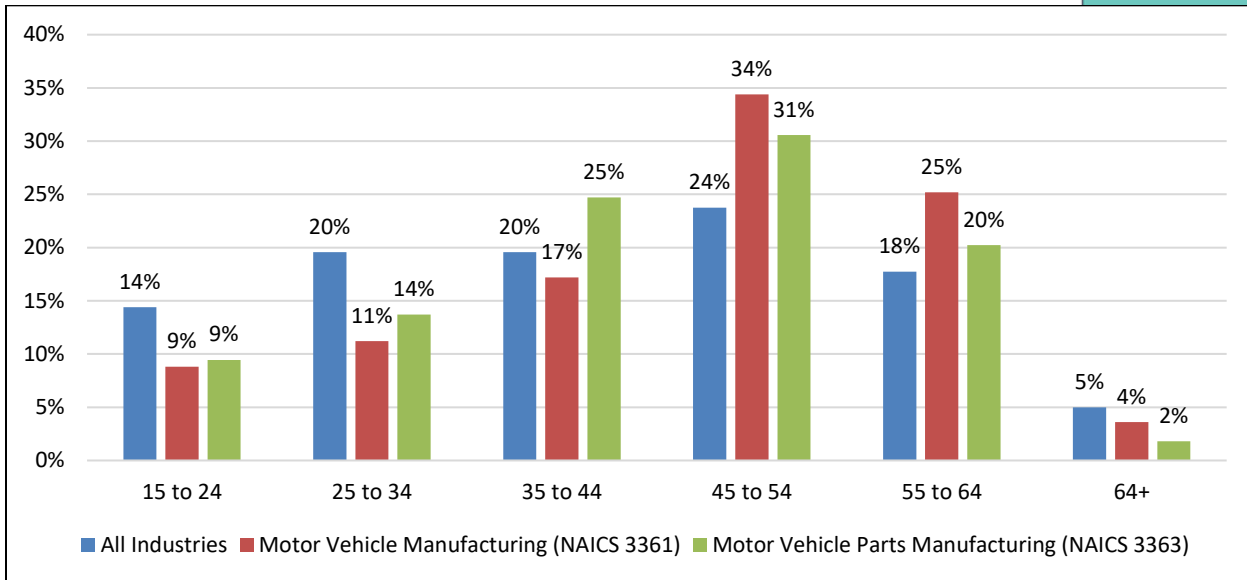
Source: Canadian Skills Training & Employment Coalition, Statistics Canada

**Figure A6: Golden Horseshoe - Automotive Manufacturing Workforce Age Distribution, 2016**



Source: Canadian Skills Training & Employment Coalition, Statistics Canada

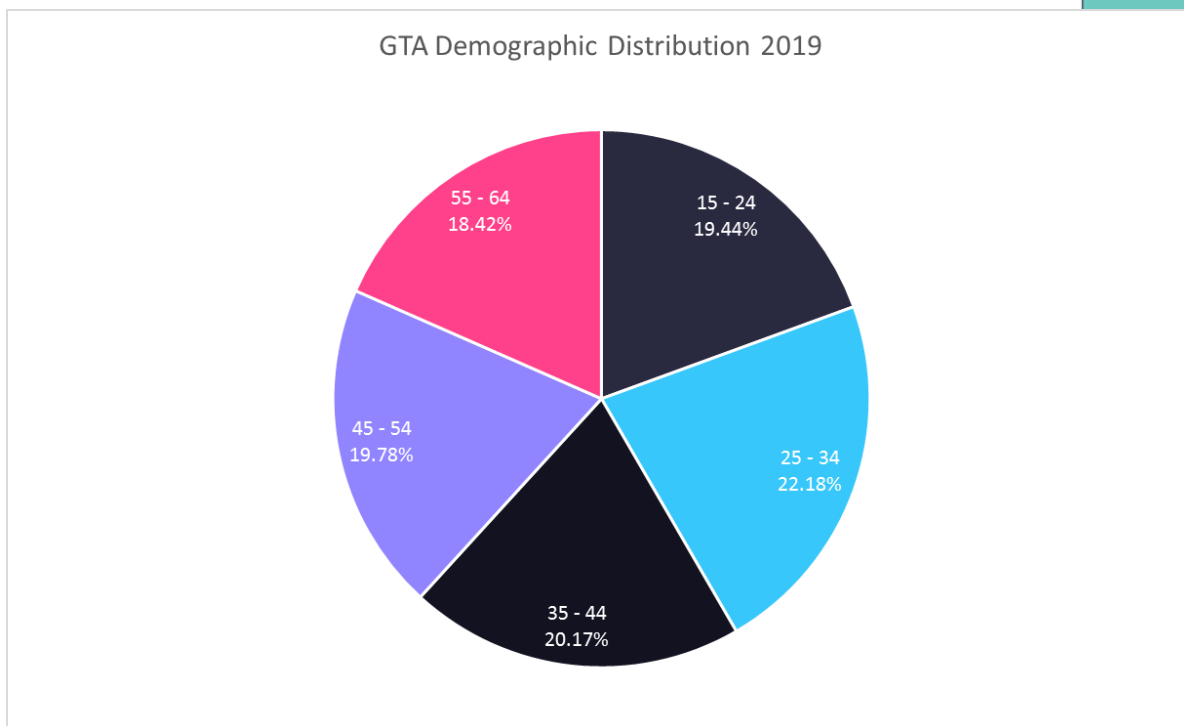
**Figure A7: Eastern Ontario - Automotive Manufacturing Workforce Age Distribution, 2016**



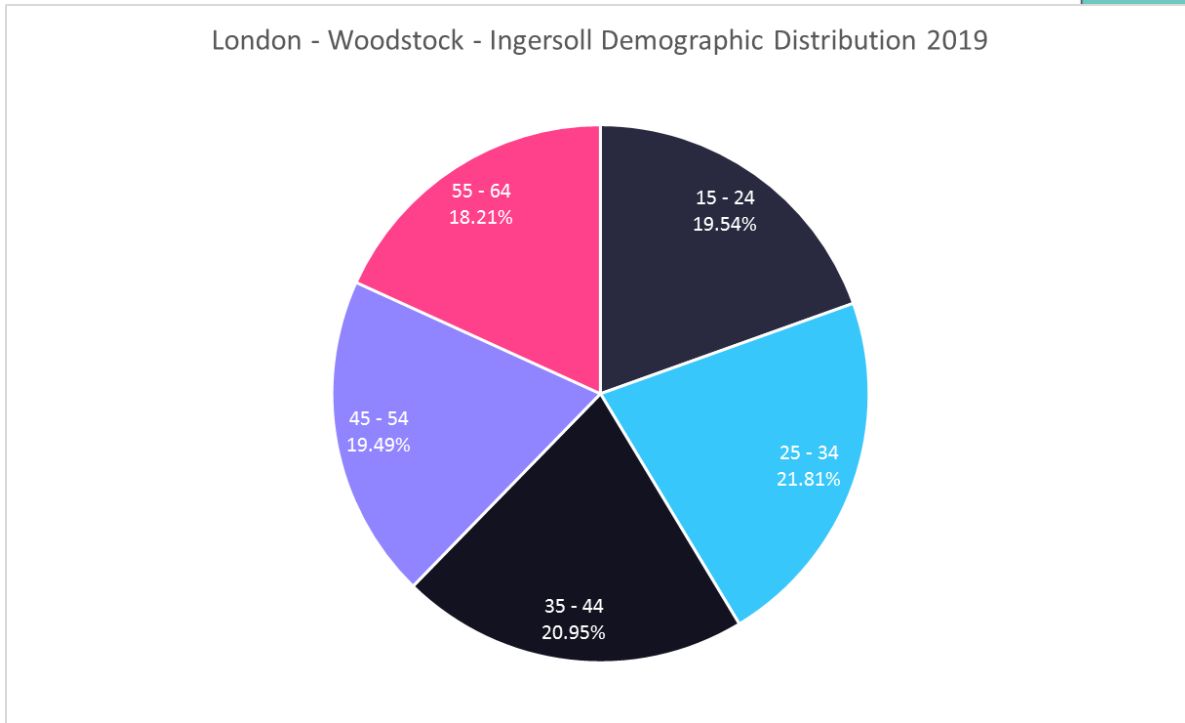
Source: Canadian Skills Training & Employment Coalition, Statistics Canada

## APPENDIX B: WORKING AGE DISTRIBUTION, ONTARIO REGIONS - 2019, AND AGE-RELATED CHANGES - 2001 TO 2019

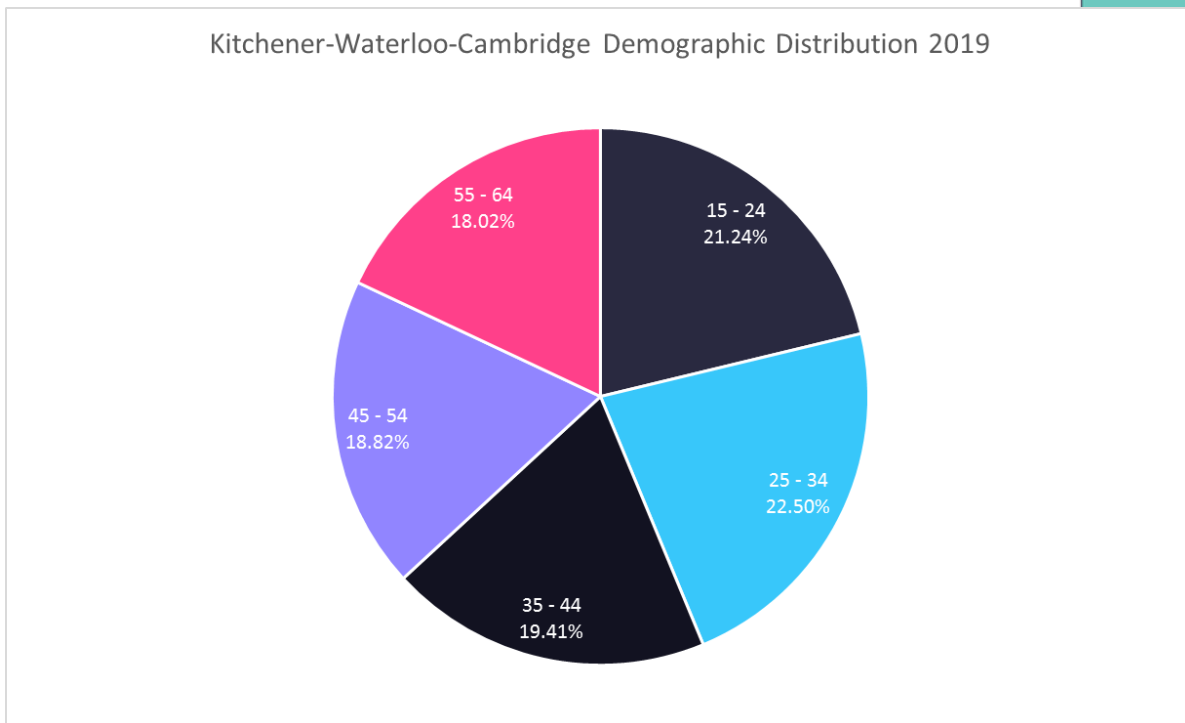
**Figure B1: Greater Toronto Area Working Age Distribution, 2019**



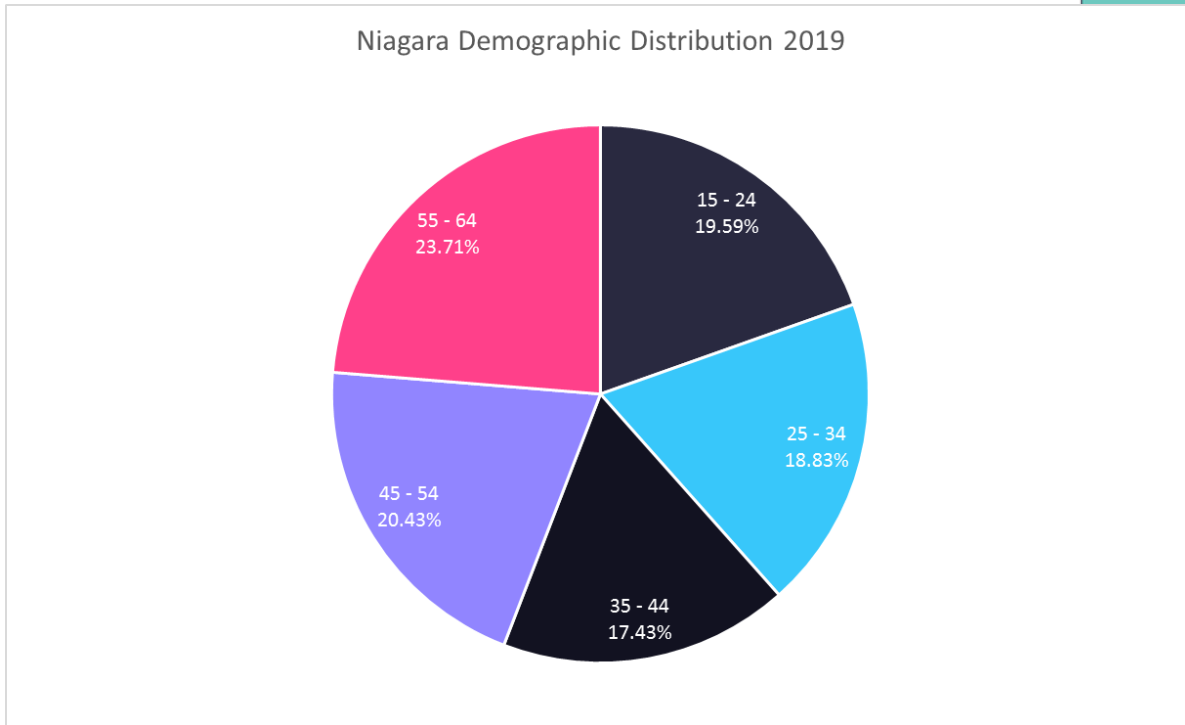
**Figure B2: London-Woodstock-Ingersoll Working Age Distribution, 2019**



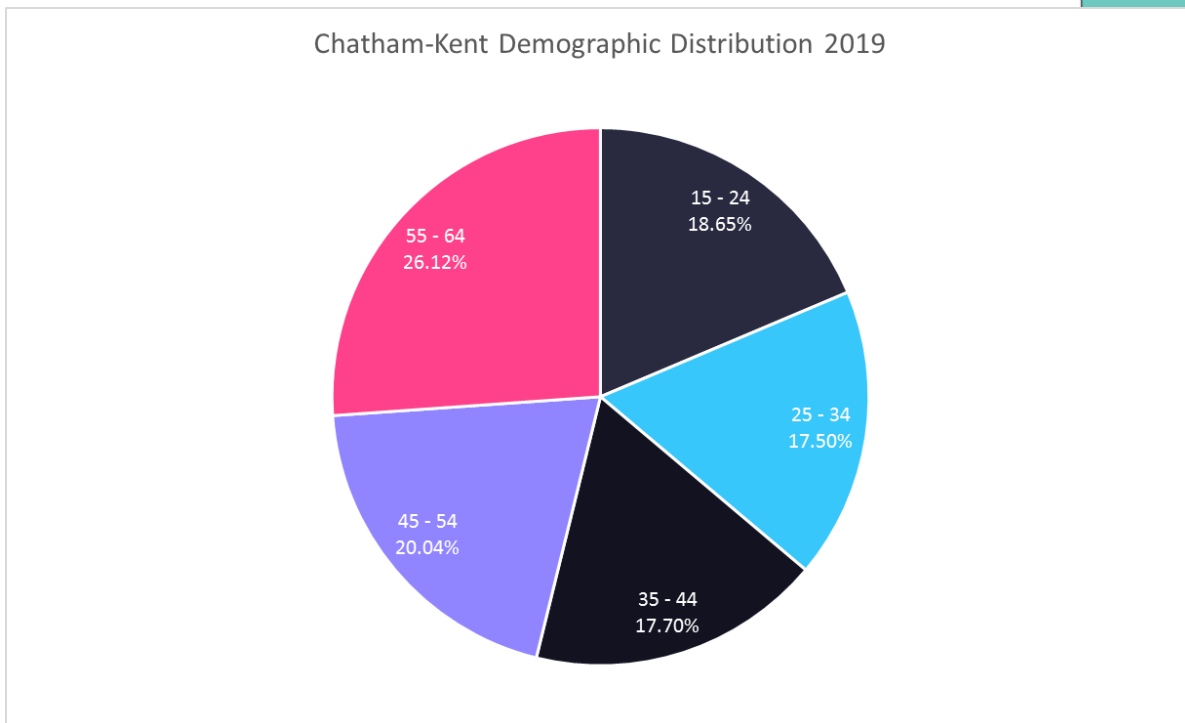
**Figure B3: Kitchener-Cambridge-Waterloo Working Age Distribution, 2019**



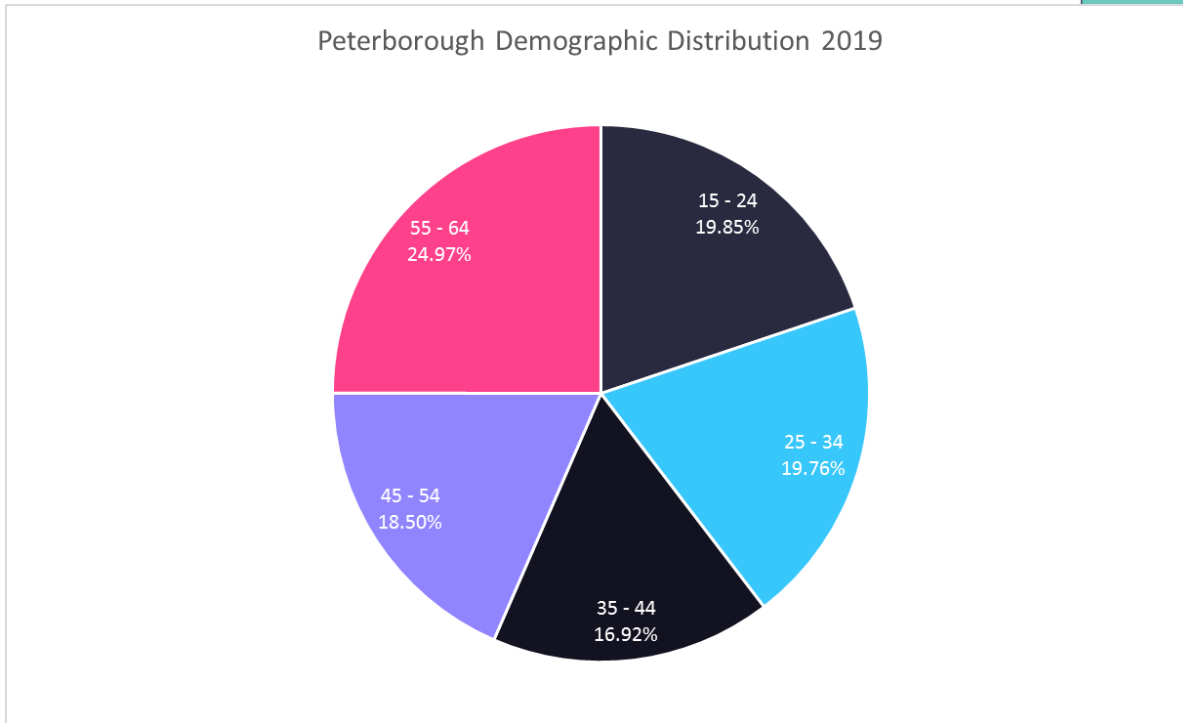
**Figure B4: Niagara Working Age Distribution, 2019**



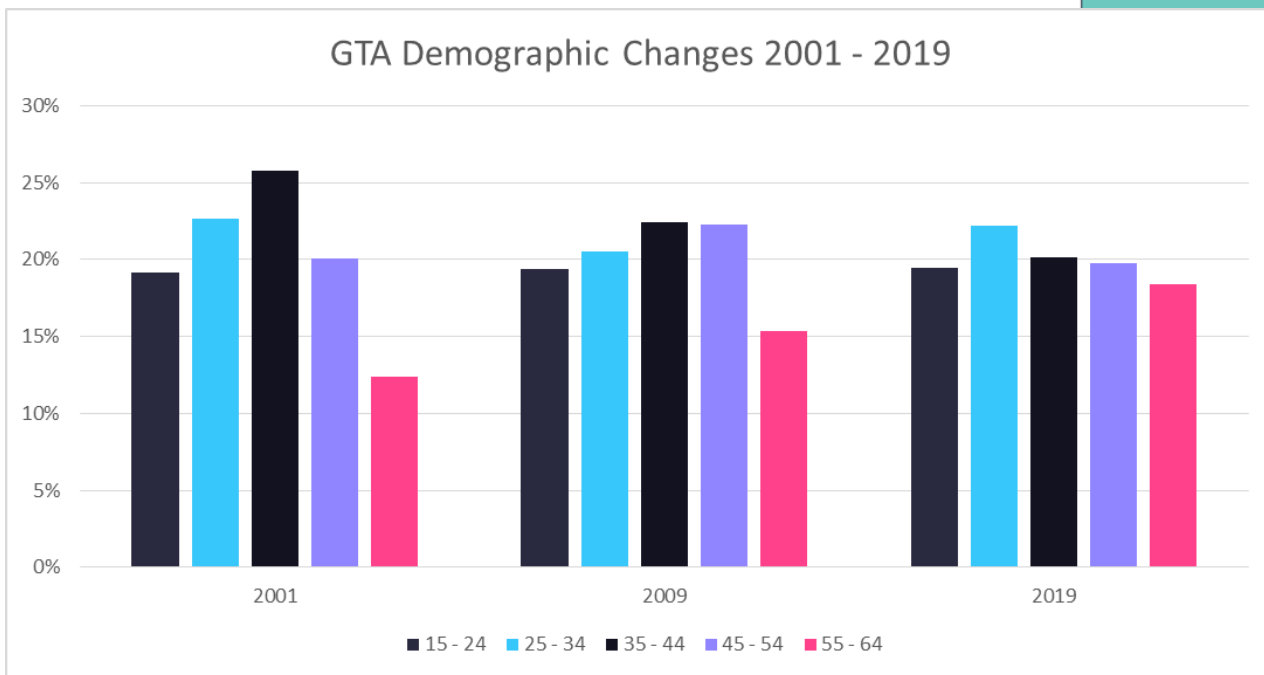
**Figure B5: Chatham-Kent Working Age Distribution, 2019**



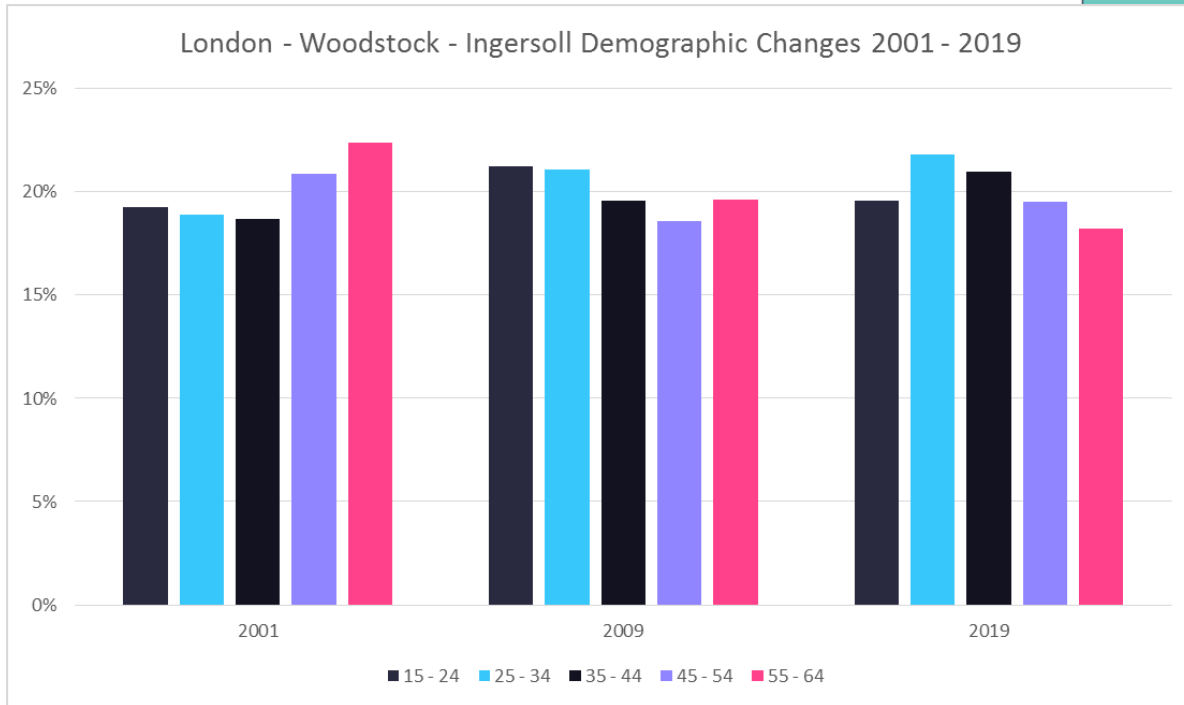
**Figure B6: Peterborough Working Age Distribution 2019**



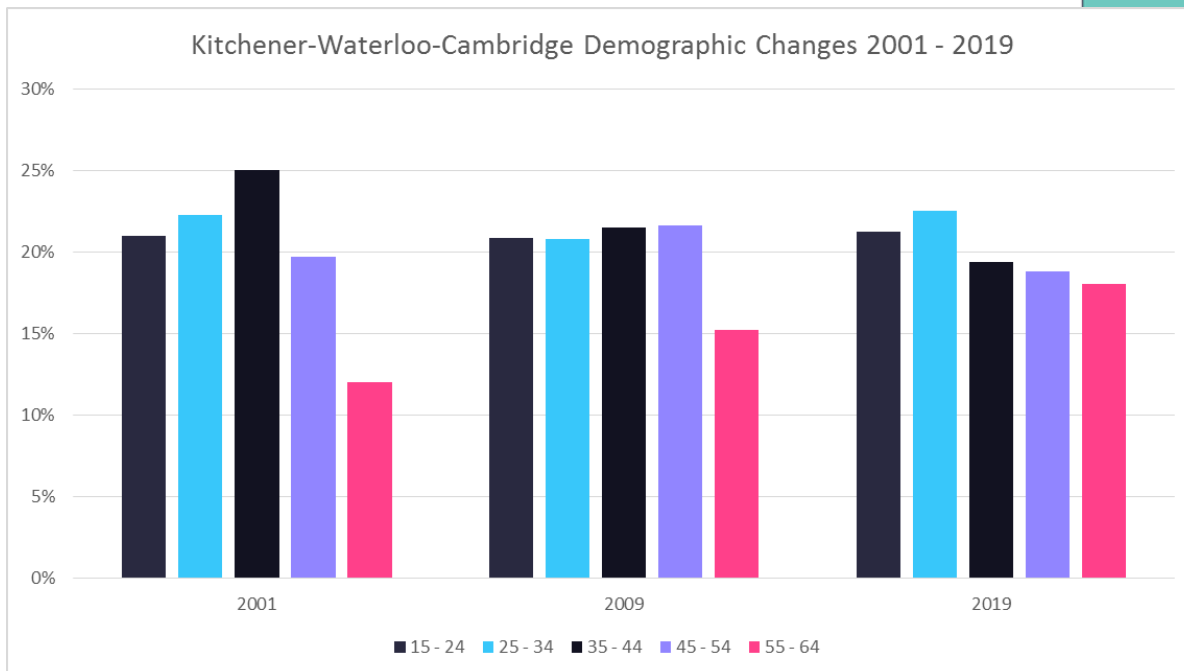
**Figure B7: Age-related changes, GTA working population 2001-2019**



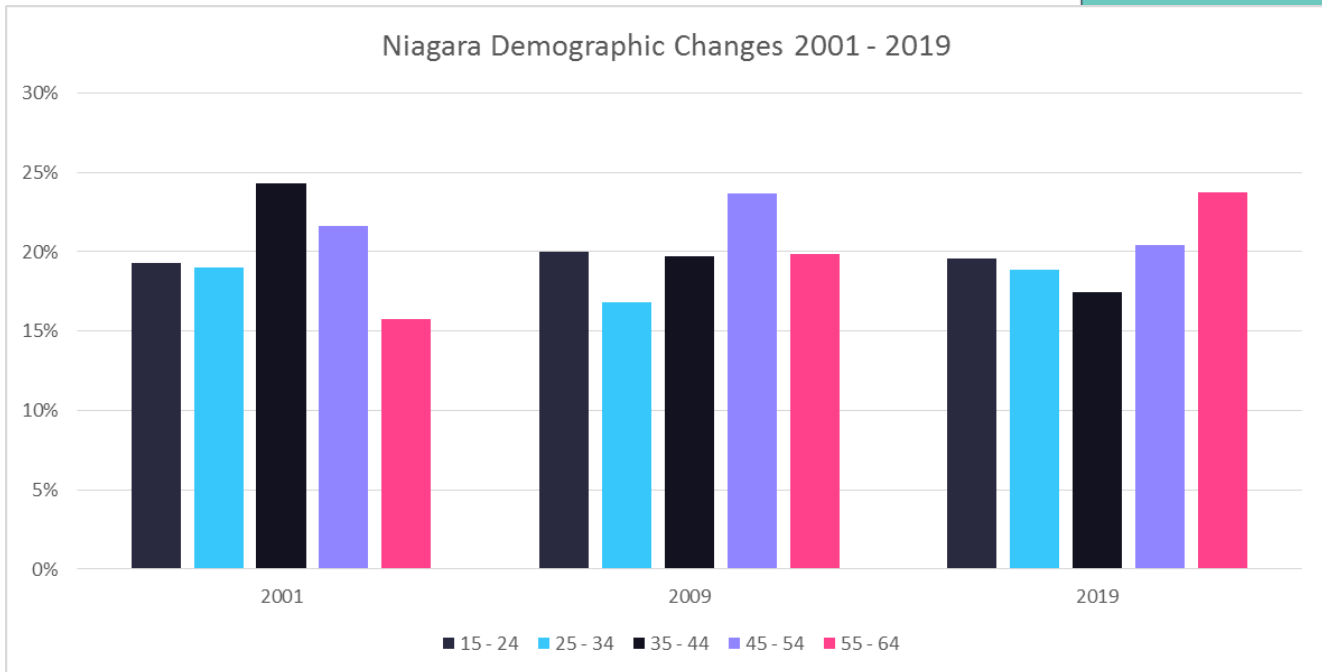
**Figure B8: Age-related changes, London – Woodstock – Ingersoll working population 2001-2019**



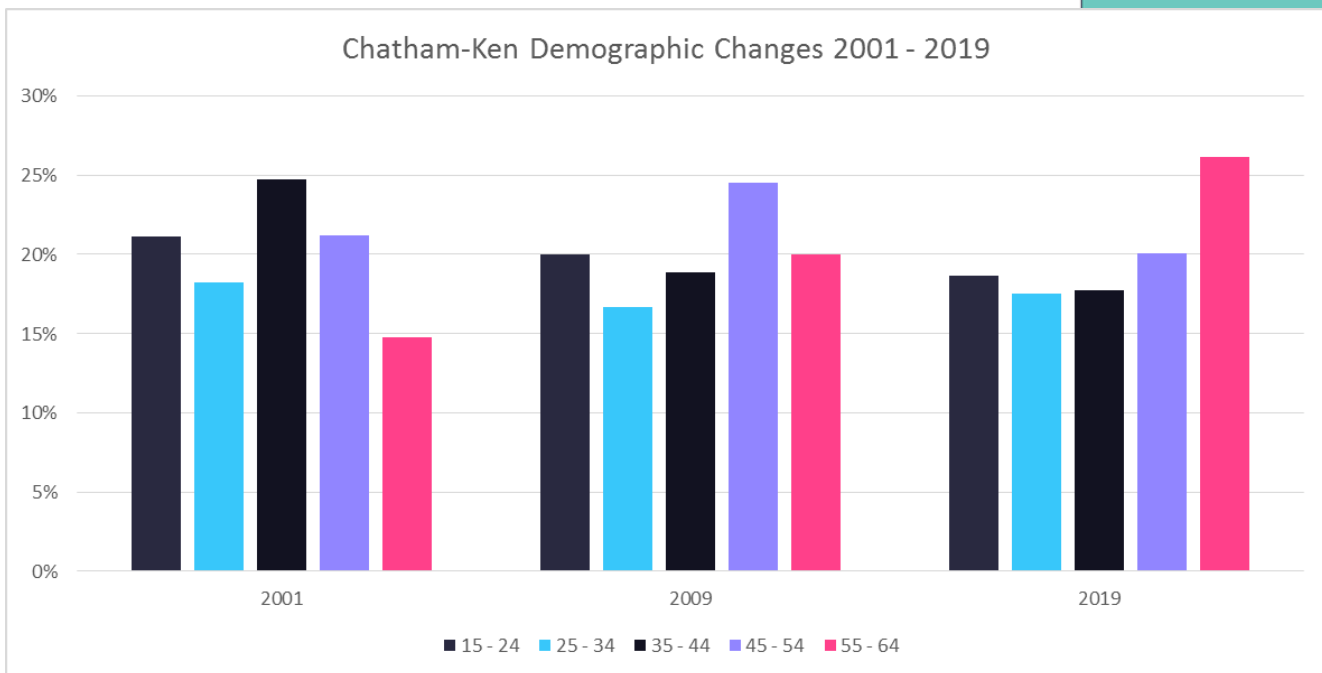
**Figure B9: Age-related changes, Kitchener – Cambridge – Waterloo working population 2001-2019**



**Figure B10: Age-related changes, Niagara working population 2001-2019**

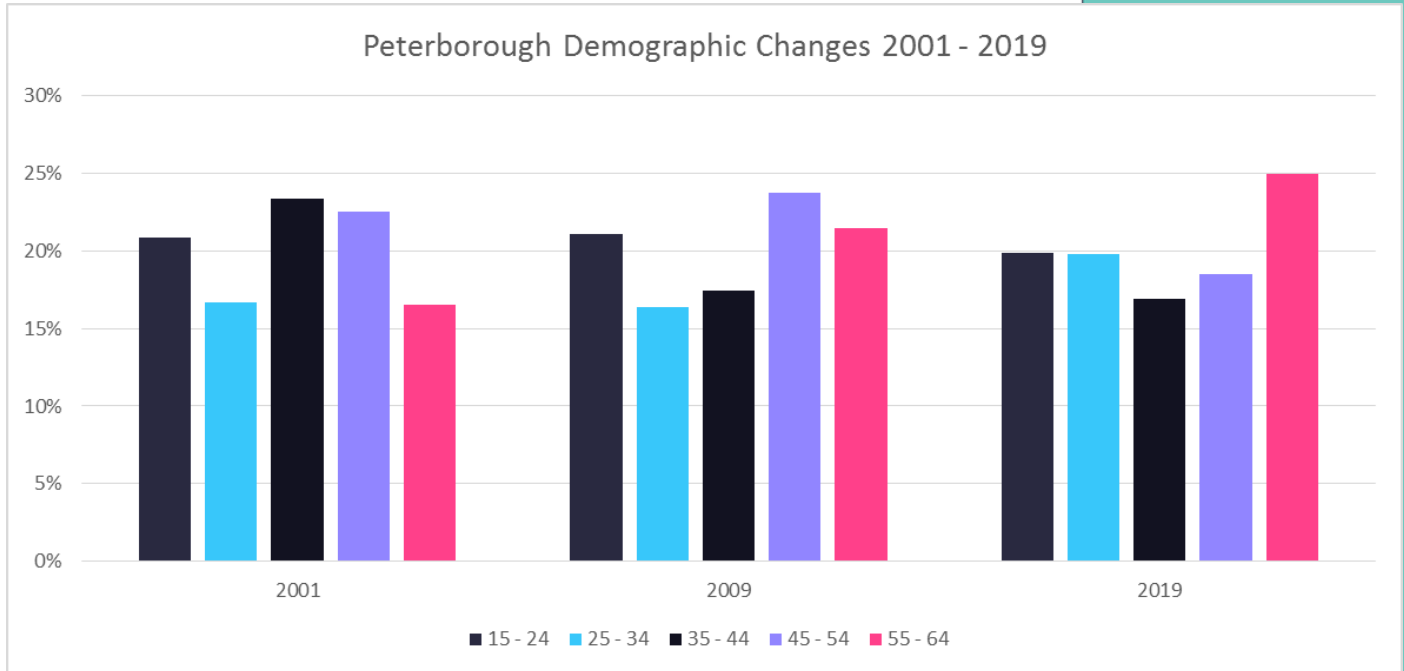


**Figure B11: Age-related changes, Chatham-Kent working population 2001-2019**





**Figure B12: Age-related changes, Peterborough working population 2001-2019**



## APPENDIX C: COMMENTARY FROM CANADIAN AUTOMOTIVE SECTOR EMPLOYERS AND STAKEHOLDERS

During the summer and fall of 2019, the FOCAL Initiative engaged automotive manufacturing employers and other stakeholders in regions with a strong automotive manufacturing presence in a series of well-attended consultation meetings and individual key informant interviews conducted by telephone. FOCAL team members presented this initiative to employers and stakeholders in order to benefit from their input on its key research objectives. Recruitment and retention of young employees was one of the many topics discussed. Below are selected and anonymized comments from those engagements and consultations on the matter of youth attitudes and prospects in the automotive manufacturing sector.

### Comments on the pending retirement wave

*“Many of our production employees are over 50 or quite young with too few employees in the middle.”* **Parts manufacturer, Eastern Ontario**

*“A large proportion of our employees are aged 60 to 65 years and a large group of employees are in their 20s, with a much smaller number in the ‘middle age’ group (30 to 45 years of age)”* **Parts Manufacturer, Golden Horseshoe Region**

*“We are experiencing increasing numbers of our older employees delaying retirement”* **Parts Manufacturer, London Stratford region**

*“Just over 30% of our employees can retire within 5 to 7 years, but many employees are choosing to stay past 65 years because of their need for post-employment benefit coverage.”* **Parts Manufacturer, Golden Horseshoe Region**

### Comments on youth recruitment/retention challenges

*“People graduating into the workforce are better educated and more capable than in the past, but are choosing work outside the manufacturing sector due to its negative narrative.”* **OEM assembly, Southern Ontario**

*“Younger workers in their 20s are sometimes reluctant to take/keep jobs in this plant, partially because of shift work preferences. New hires in production will work the afternoon shift for six or seven years before moving to the day shift.”* **Parts manufacturer, Eastern Ontario**

*“For production employees, the current generation prefers digital versus manual work and the company suffers retention problems after 3 to 5 years. Skill sets of these employees are too low. Our wage schedule tops out at \$28 an hour for tow motor driving and too many employees are plateauing at that level and not moving up the skill ladder.”* **Parts manufacturer, Golden Horseshoe Region**

*“We get great initial interviews but then a high level of absenteeism and quits in our new production hires.”* **Parts Manufacturer, Hamilton Niagara area**

*“Too many new workers are attracted to working in the service sector for \$14 an hour where the implications of a blown shift are not so significant”* **Parts manufacturer, Golden Horseshoe Region**

*“Immigration and automation are very important because younger Canadian workers are increasingly less attracted to the manufacturing workforce – young Canadians want to move up quickly but lack the skills to do so.”* **Winnipeg area manufacturer**

*“Shift concerns are big with new employees - people say they want a ‘life’ .”* **Parts manufacturer, Kitchener Waterloo region**

*“To help with our recruitment and retention, we had good success with a series of trainings that we do for new employees around personal finances, budgeting and other skills”,* **Parts manufacturer, London area**

*“Younger employees want flexible benefits, ones that are relevant to them but perhaps not to our older employees - often a challenge from an HR point of view.”* **Parts manufacturer, Stratford region**

*“Our main labour market challenge is attracting apprentices. Our worklife balance is not attractive to youth, so our available labour pool has to expand outside the Windsor region. It can be tough to attract people due to the stigma around manufacturing.”* **OEM Assembly, WindsorEssex area**

*“We are hiring for experience and are often short on it. Our new hires either have very little experience or are highly experienced. There are very few in between. So we steal people from each other here in the region.”* **Automation/Tooling employer, Windsor Essex region**

*“One of the problems is that young people see manufacturing as an out-of-date sector. So there is a pipeline issue, with a shortage of people coming into the pipeline due to manufacturing’s image problem”.* **Regional employment/economic development organization, Southern Ontario**

*“We can have better cross-pollination. For example some people who used to be 3D animators in the animation industry are now coming into CAD positions in the industry. We need to tell young people that skills learned elsewhere are often transferable to our sector.”* **Industry association representative, Southern Ontario**

*“We need parents, students and guidance counsellors to be working together in events such as Manufacturing Day, but the role of parents is especially important”.*

**Automation/tooling employer, WindsorEssex region**

*“In Sweden there are 14-year-olds who are placed in apprentice jobs such as tool and die makers a day a week not only in manufacturing but also in finance and hotels etc. They learn the soft skills such a showing up on time in addition to the hard technical skills of the particular job. So they show up ready to go at age 19. Yet here in Canada we start training people at age 19. In Europe, people are not expected to stay at one job for a long time. They are expected to leave and change jobs yet still European nations still fund apprenticeship training much better than we do here in Canada.”*

**Industry association representative, Southern Ontario**

*“Automation means that we are losing some of our middle ground jobs. Either very low level entry jobs or high-end jobs like mechanical designers but much less left in the middle for opportunities for young people without wider skills.”* **Parts manufacturer, Niagara region**

*“The digital gap is bigger than you think, many of the new young employees we hire have no email address and no computer at home”* **Parts Manufacturer, Hamilton region**

*“It’s not just older employees who lack the technical skills, we have many young people who have to go to their grandparents’ house just to use a computer, they are reluctant to take the next step to upgrade their skills in an increasingly digital workplace.”* **Parts Manufacturer, Hamilton region**

*“One way we get good new younger employees is through the connections of family and friends, and then new employees will often bring others”* **Parts manufacturer, Kitchener Waterloo region**

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