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Automotive Industry Labour Market Analysis: Preliminary Insights: Labour Market Challenges in Canada's Automotive Manufacturing Sector

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

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This report was prepared for the Auto Labour Market Information (LMI) Project.

The goal of the Auto LMI 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 LMI 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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Automotive Policy Research Centre, automotivepolicy.ca

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Executive Summary

This report summarizing our preliminary insights into labour market challenges faced by employers in Canada's automotive sector is part of the Auto Labour Market Information (LMI) Project, which is a collaborative effort of the Canadian Skills Training and Employment Coalition (CSTEC), Prism Economics (Prism) and the Automotive Policy Research Centre (APRC). The Project will ultimately produce industry validated, regional forecasts of the supply and demand for key industry occupations, it will produce reports on various labour market trends, and it will engage industry and disseminate its findings widely. Significantly, the Project defines the industry broadly to include its extensive and complex supply chain and illustrate the economic importance of the sector by demonstrating how many jobs across this supply chain are dependent on the success of the sector.

This report is based on our review of literature released by governments, think tanks, employers and industry associations that have highlighted projected labour market shortages for certain occupations and attributed them to demographic and labour force-related factors and of various reports examine the future of automotive manufacturing in Canada. This report is also based on preliminary feedback we received during our initial consultations with industry representatives and stakeholders.

In recent months we have formally and informally engaged a broad range of automotive manufacturing firms, from large automotive assemblers to small and medium sized parts manufacturers, as well as other industry stakeholders. Many of the issues outlined in the growing body of Canadian labour market research which we have reviewed on the impact of disruptive technology, demographic change, and skills mismatches were confirmed during our conversations with employers in the sector. A number of key themes emerged:

1. Automotive manufacturers recognize that they have an aging workforce. Retirements are already a pressing concern and the challenge is expected to greatly intensify over the next five to ten years. This is true of both skilled trades/occupations and production workers.

2. In most automotive manufacturing regions of Canada – competition for skilled workers (both within the sector and with other sectors such as construction and utilities) is intense. While youth and recent graduates from school remain an important recruitment source; automotive manufacturers are having to increasingly looking towards other labour pools for talent.

3. Many of the industry representatives we spoke to indicate a belief that the automotive manufacturing sector's recruiting challenges are exacerbated by misconceptions about working conditions and career opportunities. We heard that the industry would benefit from efforts to give youth, parents, and the school system an updated and better understanding about the skills required and career opportunities available in the automotive sector.

4. We also heard that as the automotive manufacturing sector adopts more automation and robotics, there needs to be a better alignment between post-secondary education and the skill requirements of the sector, both technical and soft skills. Most automotive manufacturers articulated the need to strengthen the connections and partnerships between industry, government and educational institutions.

5. Human resource professionals in the automotive manufacturing sector often mentioned housing costs and public transportation as impediments to the recruitment and retention of employees. While these issues were not unexpected in large urban areas, they were also raised by a broad range of firms in smaller communities as well.

As the Project proceeds over the next two years, we will continue to examine the challenges and barriers related to the automotive manufacturing labour market.

Introduction

With the recent wave of retirements of the baby-boomer generation, the growth in the Canadian labour force is forecasted to remain minimal at +0.2% for the upcoming 10-years (CBC, 2019; BDC, 2018). Continued economic growth in

Canada and the record-low unemployment rates suggests labour markets will be tight. Recent studies of the Canadian labour market show that on average, 40% of Canadian employers have cited difficulties in hiring new employees (CME, 2017). In a 2018 report released by the Business Development Bank of Canada, the manufacturing sector, among all other surveyed sectors, had the most difficulties finding new employees with 56% of the surveyed manufacturing companies indicating difficulties finding new employees (BDC, 2018). In addition, according to companies surveyed by the CME, the two occupations with the highest shortages in 2016/2017 were skilled production workers and general labour, with 63% and 45% of employers citing they have current shortages in these occupations respectively. By 2022, 75% of the businesses expect to face shortages in the skilled production workers occupation while 38% of the businesses expect to face shortages in the general labour occupation (CME, 2017).

Some of the literature suggests that labour force shortages, especially in manufacturing occupations, can impact the growth of companies, which can lead to slower economic growth rates in Canada. This may lead to the loss of competitiveness of the Canadian market and subsequently to an unattractive environment for business (House of Commons, 2012).

Our review that indicates some strategies have been implemented to address labour shortages. These methods include improving the efficiency of processes (streamlining processes, increasing machine availability per employee, automating processes), along with increasing hours of work and increasing retention efforts for current employees, including senior employees (BDC, 2018).

Methodology

The purpose of this working paper is to identify and examine the workforce challenges facing Canada's automotive manufacturing sector through an extensive literature and document review. We summarized and collated previous findings from these studies/reports along thematic lines as a way of better understanding the dynamics of the automotive manufacturing skills gap. In order to further

comprehend the skills challenges within the sector and to test a number of assumptions and better appreciate how these issues are playing out across regions with a high concentration of automotive manufacturing, we conducted semi-structured interviews with a broad range of human resource staff in automotive firms. These discussions were complemented by regional consultations with representatives of automotive manufacturing plants, industry associations, economic/workforce development agencies, and educational institutions. In total, we engaged over fifty human resource and operations staff from thirty different employers in the broader automotive manufacturing sector.

One of the objectives of this three-year Project is to provide industry, educators and policy makers with solutions for identified skill gaps and labour shortages. To this end, this working paper summarizes some of the complex challenges facing the automotive sector. This is an important first step in building toward solutions that can help meet the sector's future labour market and skills needs.

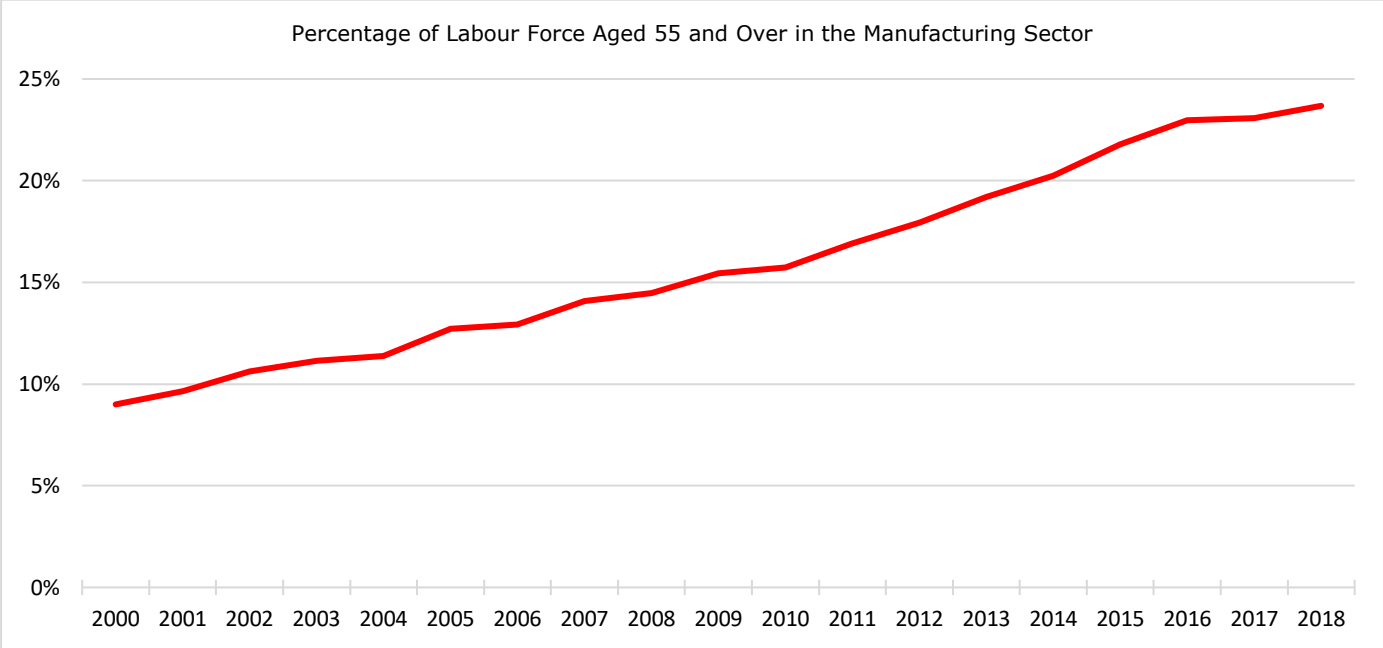
Main Challenges and Barriers

Following our initial consultations and literature review we identify the following challenges.

Demographics in Canada

Canada is a developed country with an aging population and a low fertility rate. Since the year 2000, the percentage of the labour force in the manufacturing sector aged 55+ has approximately tripled. Moreover, by the year 2031, the number of "working age" (18-64 years old) Canadians for every senior in Canada is expected to see a significant drop to 2.7 from 4.9 in 2011 (House of Commons, 2012). These demographic changes will lead to slower labour force growth in the upcoming years. It seems clear that the automotive industry faces the erosion of a highly experienced generation of workforce and will experience challenges in achieving smooth workforce transitions. Figure 1 presents the recent increase in the labour force aged 55 and over in the manufacturing sector since the year 2000 (Statistics Canada).

Figure 1. Percentage of Labour Force Aged 55+ in the Manufacturing Sector.



Source: Statistics Canada. Labour force characteristics by industry, annual Table: 14-10-0023-01 (formerly CANSIM 282-0008).

While the severity of the demographic challenge varies somewhat by occupation, virtually all automotive assemblers and parts manufacturers we spoke with expressed serious concern about the age of their workforce. Most employers, particularly those outside of the Golden Horseshoe, are already having significant challenges related to retirements in both skilled and production work. Furthermore, employers expect the wave of retirements to intensify over the next decade. Finding strategies to replace or retain the skills and experience of employees slated to retire is a priority for most automotive assemblers and parts manufacturers and is seen to be both an immediate and long-term issue. Some additional commentary from firms indicated:

- Numerous automotive manufacturers have a workforce comprised largely of workers over the age of 45. Several firms noted that over 20% of their employees are over 60. It was not uncommon to hear of production employees working into their 70's.

- The challenge of replacing older workers is worsened by what appears to be shrinking interest in automotive manufacturing employment among youth. Employers indicated this is the case for skilled trades (millwrights/industrial mechanics, industrial electricians, general machinists, tool and die makers), supervisors and production staff.
- Strategies for dealing with existing and impending retirements vary. Some automotive manufacturers are modifying job descriptions/responsibilities/work schedules in order to support and encourage older workers to stay on the job. Other firms are phasing in technology and automation to replace retirees. A few companies use retirees on an "as needed basis" as independent contractors to orient or train new recruits. Finally, employers across all auto manufacturing regions recognized that recruitment challenges are serious enough to warrant discussion about sector wide strategies and government policy at regional, provincial and national levels.

Emerging Technology & Industry 4.0

The rapid pace of emerging technologies, incorporation of automation and the developing enterprise resource planning (ERP) strategies in the workplace represent challenges to the current workforce as well as to employment seekers. These fast-paced technological developments in the manufacturing environment require current employees to update their skills on a constant basis (Deloitte, 2018). Traditional production occupations might be altered to become more specialized occupations requiring a single, multiple or a flexible set of developing skills (Yates & Holmes 2019). This might also affect general labour occupations in which one or more skills might be needed to complete workplace tasks. For those in the employed labour force, employers might also expect them to upgrade their skills on their own time.

Additionally, for entry-level jobs, challenges lie within employees' transferable sets of skills during the transition from school to industry. While education may have equipped them with relevant and up-to-date skills to the jobs they are seeking, disruptive technologies may induce changes in the workplace making some skills

irrelevant within a short period of time. Additionally, entry-level job seekers are increasingly less equipped with skills to handle long-term changes and disruptions in the rapidly changing industry or sector. This might lead employers to seek candidates with more relevant backgrounds and more years of experience to fill junior positions (House of Commons, 2012).

The impact of robotics, automation, and digitization of production processes in automotive assembly and parts manufacturing echoed throughout our conversations with both individual auto manufacturers and industry associations. The effects of emergent technology on the automotive workforce very considerably by company based on the amount and type of technology being introduced. Despite this variability, a number of salient points can be drawn from our conversations with automotive assemblers and parts manufacturers. These include:

In a significant number of cases, new technology is necessitating firms to increase the number of skilled employees in the production of vehicles and automotive parts. Many companies noted that they will need to recruit additional millwrights, CNC operators, tool and die makers, and industrial technicians in the foreseeable future.

- Representatives of several automotive manufacturing firms talked about the emerging job of 'automation technologist' to deal and fix problems on automated production lines. Often, these positions are trained "in-house", but many firms are constantly recruiting employees with the skills and aptitude to work with new production processes.
- Changes to the production workforce caused by automation is less clear. A number of firms have been slowly phasing out the number of production workers as new technology is introduced on the plant floor (however it is worth noting that some firms we talked to have no immediate plans to introduce any significant new forms of automation).
- The changing skill requirements for general labour and production work caused by automation also varied by company. While some manufacturers articulated the need for production workers to have better problem-solving

and other transferable skills, many suggested that this work was likely to still require physicality and dexterity.

School-to-Work

In the literature we reviewed and during consultations we engaged in, we found plenty of evidence that employers in the manufacturing sector feel that recent graduates are not job-ready, and that manufacturing employment and the skilled trades are not sufficiently promoted as career options. Some literature also suggests that some employers are not willing enough to provide on-the-job-training for entry level positions. Despite these challenges, many employers indicated they have productive working relationships with educators and are interested in developing these relationships further.

Reports from the Canadian Manufacturers & Exporters (CME) suggests there is a gap between the skills acquired throughout education and the skills required for a job. Students are seldom offered material which develops their skills and readiness for the challenges of the workplace and are not exposed to activities and experiences which raise their curiosity about manufacturing careers (CME, 2017). Modern industries, especially the highly dynamic field of advanced manufacturing, now require employees with flexible skill sets which will allow them to innovate and adapt to rapidly evolving work environments. These skills sets can be acquired throughout the stages of education and can assist in adjusting for long-term changes and challenges of the manufacturing sector.

In addition, students are not often encouraged during their early stages of education to consider career paths in manufacturing. Manufacturing jobs are frequently perceived as demanding and dangerous. Manufacturing workplaces are perceived as dirty mediums (CME, 2017). Thus, there is a bias toward education to prepare students for 'professional', and perhaps higher-paying, careers that are less physically demanding. These and other misconceptions about the manufacturing sector might limit the engagement of youth and women in such industries.

A recent House of Commons report suggests many employers are not willing to provide on-the-job training even for entry-level jobs, and that recent graduates lack industry-relevant skills or experience (House of Commons, 2012).

Some literature suggests that the rise of technology and automation could alter and eliminate certain occupations and that there could be a rise in the demand for skilled occupations and lower demand for employees who perform repetitive semi-skilled tasks (Yates & Holmes, 2019). This uncertainty and fear that skills might gradually become irrelevant or outdated over time could discourage youth from pursuing careers in manufacturing.

Other literature suggests that some production jobs are not appreciated by society as much as professional jobs or jobs requiring more technical skills. People tend to value the complexity of tasks over the execution of tasks, which further deters youth from taking on such jobs (Bronson, 2015).

We also heard that apprenticeships and skilled trades are critical to manufacturing sector and that maintaining the inflow of apprenticeships is very important. However, several issues have been raised related to the availability and challenges of apprenticeships and skilled trades in Canada. We heard that governmental support is critical in helping the employers ensure enough young people are trained to meet demand. We also heard that existence of subsidies and training programs may induce employers to upgrade their production processes and innovate.

Moreover, the enrollment process in apprenticeship programs is perceived to be a complex process which requires youth to secure employers willing to sponsor their apprenticeships (Ontario, 2019). Provincial websites which facilitate college applications for students might not cater to apprenticeship programs (Franklin, 2018). These complicated procedures discourage students and lead to a decrease in the rate of youth entering skilled trades and thus a consequent shortage in these occupations.

Despite the many challenges transitioning young people from school to work, many automotive assemblers and parts manufacturers we engaged with told us they have good relationships with local school boards and community colleges, and some are

developing strategic partnerships with universities. While these developing relationships are encouraging, there was broad consensus that partnerships between the automotive manufacturing sector, educational institutions and government need to be strengthened. Discussions with the sector yielded the following insights:

- Many automotive manufacturers feel that the public-school system's perception of the industry is both dated and incomplete. Some indicated that some educators do not appreciate/understand that the automotive manufacturing sector now requires high-skilled employees for occupations that provide the potential for solid earnings and substantial career progression.
- The work habits and expectations of young people came up often during formal and informal discussions with automotive manufacturing employers. Some expressed frustration with the attitudes and priorities of young people and others indicated that manufacturing employers need to change in order to better recruit young people.
- Improving employer - educator relationships may improve curriculum so that the skill requirements of industry are more successfully met.
- There was strong recognition, across all automotive manufacturing regions in which we have consulted to date, that the apprenticeship system requires improvement. Numerous employers talked about:
  - Stronger efforts need to be in place across high schools and community colleges to encourage youth to enter into the apprenticeship system.
  - The apprenticeship system is too complex, and its rules and regulations are difficult to understand.
  - More flexibility is required to manage classroom learning around production schedules.
  - There is great frustration associated with losing apprentices to other employers and to other sectors after investing time and money to train them.

  - Many firms recruit apprentices in-house from their production workforce. However, existing employees are often reticent about entering the apprenticeship system due to concerns about income loss during such training.
- The industry needs to work with educational institutions and government to generate interest in automotive sector job opportunities and to more clearly explain the career paths available in the automotive manufacturing sector.

Workforce Diversity

Encouraging increased labour market participation and employment of under-represented groups in the market may assist in reducing labour shortages in general or in specific occupations. Under-represented groups comprise women, Indigenous people, persons with disabilities, immigrants, youth and senior workers. However, some challenges exist which are yet to be addressed to increase the participation and employment levels of such groups. In the manufacturing sector, the percentage of women employees in manufacturing occupations has been almost steady at 28% for the past 20 years (Statistics Canada). Despite initiatives by academic institutions and organizations to encourage and increase the involvement of women in fields such as science and engineering, and despite the changes in the perceptions about certain industries, the participation and employment levels of women in the manufacturing occupations and skilled trades remain low.

In addition, youth remain an under-represented group within the automotive manufacturing sector. Challenges facing youth in the manufacturing sector include the lack of industry-relevant skills and experience, declining entry-level wages, the industry's image and career aspirations of youth (Women, Youth, and Indigenous Persons in Canada's Automotive Industry, 2019). These factors and others contribute to the complexity of the youth participation in the sector.

Finally, as noted in the above noted report, Indigenous persons are well-represented group in the automotive manufacturing sector (in some regions) however, there are relatively few programs in place which encourage and assist Indigenous persons to access manufacturing careers.

Given the labour force and skill shortages faced by automotive assemblers and parts manufacturers, there is a strong impetus and desire among employers to diversify their workforce. More specifically automotive assembly and supply manufacturers noted:

- There is a need to increase the number of women in both skilled trades and production occupations. Several manufacturers talked about the importance of working in cooperation with government and educational institutions to promote skill trades to women and building talent pipelines into the automotive manufacturing sector. While these efforts are beginning to pay dividends in the recruitment and retention of woman, there was consensus that more needs to be done to achieve gender parity.
- Representatives of some employers talked about the positive results achieved when they worked with employment services specializing in working with persons with disabilities. These (and other) firms felt that they needed to replicate and expand these efforts.
- While responses varied by region, several employers noted that they are increasingly working with Indigenous groups, educational institutions and training centres for recruitment purposes and to support employment retention.

Immigration

it is clear that there are significant opportunities for immigrants to fill the shortages in certain occupations in the automotive sector. However, according to BDC, hiring immigrants is the least likely strategy to be followed by employers to tackle labour shortages. Despite the choices of companies, the unemployment rates gap between "Born in Canada" residents and "Landed Immigrant" residents have been closing. The gap has dropped from a 2% difference in 2010 to a 0.5% difference in 2017. Yet there continue to be significant challenges and barriers to helping immigrants fine opportunities in sectors with labour shortages (BDC, 2018).

The Canadian immigration system tends to require applicants to possess high levels of education or years of experience in a certain occupation in order to be admitted

to the pool of applicants. These immigration programs, which bring in highly skilled labour, do not cater to the high demand for entry-level or semi-skilled jobs of SMEs (Small and Medium-Sized Enterprises) and LEs (Large Enterprises). This leads to gaps between the qualifications of new immigrants and industry needs, which contributes to labour shortages.

Additionally, employers are sometimes faced with challenges of accurately and fairly assessing the foreign experience, skills, degrees and certifications of immigrants. It is often difficult for employees to match the backgrounds, education and experience of newcomers with a Canadian equivalent. In other occupations, it is also hard to employ immigrants as they might not bring relevant skills, experience or training to a job. Also, important to consider is the length of time it may take for foreign certificates and degrees to be assessed and recognized (SDC, 2019).

Finally, language may also be a challenge to some newcomers who are not fluent in English or French. As oral and written communication are necessary skills in assessment processes, newcomers might have less chances of being hired.

During our discussions with automotive assemblers and parts manufacturers, it was evident that immigration and recent immigrants are a critical source of both skilled and production work. Some observations drawn from our discussion with automotive manufacturing firms include:

- Most automotive manufacturers rely heavily on newcomers for their labour force. This is particularly true in the Golden Horseshoe and for production work.
- Automotive manufacturers have a range of views on immigration policy and levels. In some cases, their views seemed to reflect an individual plant's occupational needs and its local economy. A number of automotive employers facing skilled trades recruitment challenges feel that Canada and/or their region/province needed strengthen efforts to recruit skilled immigrants. Conversely, several companies with have problems in recruiting and retaining production workers or general labourers,

indicated that Canada should relax the skills criteria for individuals who immigrate to Canada.

- Efforts to recognize and validate foreign credentials need to be better supported by government and educational institutions. Too often, newcomers with foreign credentials have to be retrained because their skills do not match the 'hands-on skills' required on the plant floor.

Labour Market Information (LMI)

Accurate and accessible labour market information plays a central role in identifying specific labour force shortages and can assist companies in developing hiring strategies and making capital investment decisions. According to the CME, companies place a high value on the availability of skilled labour and a labour force of quality when determining the location of their upcoming investments (CME, 2017). However, several LMI data-related issues may add to the complexities of responding to labour market shortages. The North American Industry Classification System (NAICS) codes assigned to automotive manufacturing activities might not capture the broader spectrum of the automotive manufacturing supply chain. Other automotive parts manufacturing activities may be listed under NAICS codes which do not directly relate to automotive manufacturing. Therefore, conducting labour market analyses and studies might not render accurate outcomes which reflect the full labour force of the sector (Automotive Manufacturing Wage Report, 2019). Moreover, the low "granularity" of regional LMI data makes it more difficult to clearly understand shortages in specific and narrowly defined occupations.

In addition, some issues and limitations may exist within the LMI data itself. Ensuring data integrity and accuracy is a factor to consider when utilizing such information to build policies and strategies upon (Parkinson, 2019). For this reason, building LMI on robust methodologies and credible data sources is essential to the ultimate purpose of the data's utility.

During our consultations with automotive manufacturers it was noted that LMI data should be clear, practical and usable, and while significant amounts of information might currently be available on various governmental and nongovernmental

organization websites, it should be more proactively shared and disseminated among stakeholders.

Infrastructure: Housing and Transportation

Labour availability in a region can be affected by several factors related to logistics and mobility, which may further pose challenges and contribute to labour shortages. While companies tend to locate their facilities in regions of high labour force availability (experienced or general labour), regions where the housing affordability is low have a lower potential to accommodate low-wage employees. According to a recent study by the Canadian Centre for Policy Alternatives, a minimum of $20.20 an hour wage is required to afford an averagely priced one-bedroom apartment in Canada (Lundy 2019). For such reasons, and based on the regional variations in rental prices, employees may have to commute for longer periods of time to get to their jobs. Public transportation can also be a barrier to employees commuting to their jobs, as some industrial locations may not have public transit systems or be served by an existing public transit system (Bono, 2018). This lack of public transit connectivity may lead to hiring issues as candidates may not be able to reach these locations or to do so in the timely fashion required by manufacturing workplace.

Issues concerning housing affordability and public transportation emerged during our regional discussions and during our interviews with automotive manufacturers. Unexpectedly, these concerns were not limited to just employers in large urban areas. Automotive assemblers and parts manufacturers across all auto manufacturing regions indicated that shortages of affordable housing and insufficient public transportation are negatively affecting the recruitment and retention of employees. More specifically:

- In some regions, there is insufficient affordable housing for sector employees. This is particularly true for automotive manufacturers undergoing expansion in mid-sized communities.
- Zoning restrictions often force automotive manufacturers to the "outskirts" of city and town boundaries (and often far from where

people live). Public transportation routes do not serve these industrial areas well and are not conducive to shift work. Several employers felt that poor public transportation infrastructure caused production workers to quit in order to take up service sector jobs that were more centrally located and accessible by public transit.

Skill and Wage Segmentation

Recent technological developments in various industries have led to reconfigurations and adjustments in the skill sets required for many occupations. These developments have also initiated a split in the workforce: a highly educated, highly experienced workforce with a flexible set of skills and a labour force with lower qualifications and a limited set of skills (Porter, 2019). Several studies and reports have attributed this bifurcation to the accelerating rate of computerization and automation in the workplace. Highly skilled employees will be capable of keeping up with the changes induced by automation and technology in the workplace, while ensuring a higher level of productivity growth in the industry through their flexible skills. Traditional jobs of repetitive nature continue to be supported by the increasing automation in the workspace, thus maintaining or decreasing the amount of labour required to complete a task. This bifurcation has also contributed to the income inequality. While wages for higher skilled occupations have been on the rise, wages of lower skilled jobs have been stagnant or even declining (Automotive Manufacturing Wage Report, 2019; Aeppel, 2019).

As well, low-skilled jobs applicants face challenges in ensuring that they possess the minimum skills for entry-level jobs. These requirements include, but are not limited to, basic literacy, communication skills and some technical skills which might not require formal education or training (House of Commons, 2012). For some jobs, physical attributes can be requirements for such occupations. The ability to lift heavy objects, stand for long periods of time, work in noisy environments and keep up with repetitive work are the requirements, especially in production occupations in the manufacturing sector. It may be more difficult to find candidates with such attributes as jobseekers' preferences have shifted toward professional jobs which are less physically demanding (Forbes, 2018).

While conversations with automotive assemblers and parts manufacturers about wages were somewhat limited, several themes emerged:

- Automotive manufacturers have significant and ongoing challenges in competing with other sectors (such as utilities and construction) in the recruitment and retention of skilled workers. There is consensus that these sectors do not face the same competitive realities that automotive assemblers and parts manufacturers do and are thus able to pay higher wages.
- In some cases, automotive manufacturers feel that they are losing production workers and general labour to retail and hospitality sectors. While automotive production occupations tend to pay higher wages than occupations in retail and hospitality; representatives of several automotive employers told us that higher wages were not enough to offset misconceptions about the working conditions, shift requirements and physicality associated with manufacturing.

Further Discussion and Conclusion

While there is some disagreement to the extent and nature of Canada's skills mismatches and labour shortages, the Project's literature review and consultations with automotive assemblers and parts manufacturers indicate that the sector is facing serious immediate and long-term workforce challenges that threaten its sustainability and future growth. Although the sector is complex, displays a broad range of production activities and occupations and faces challenges related to specific regional demographics, a number of broadly applicable key workforce themes and issues have emerged.

Automotive manufacturers are aware of the fact that they have an aging workforce with current and looming waves of workplace exits due to retirement. This demographic crunch is being felt across all occupations and manufacturing regions associated with the sector. At the same time, there are real challenges in respect of

recruitment of sufficient levels of general labour and skilled workers to automotive manufacturing workplaces. In most automotive manufacturing regions of Canada, competition with other industrial sectors for skilled workers is intense. Competition for less skilled production workers is also an issue. This challenge of retaining the existing workforce, as well as bringing new expertise to the workplace is among the priorities of automotive manufacturing employers to ensure a sustained skilled production environment.

In addition, automotive manufacturing stakeholders have agreed that the sector suffers from misconceptions about its working conditions and career prospects. Given such misconceptions, most automotive manufacturers agree that the sector needs to develop improved strategies and partnerships in order to better attract youth and jobseekers. Moreover, as the automotive manufacturing sector moves towards automation and robotics, there needs to be a better alignment between post-secondary education and the skill requirements of the sector. Many of the employers we spoke to and several of the industry association reports reviews indicated that this is particularly true for Canada's apprenticeship system. Finally, insufficient supplies of housing and public transportation act as significant impediments to the recruitment and retention of employees in regions where automotive manufacturing is prevalent.

Over the next two years we will continue to explore these labour market issues with automotive manufacturers and other key stakeholders. In future reports we will explore and articulate practical solutions for the workforce challenges facing this critically important industry.

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Appendix A. List of Participating Employers in the Consultations

Automotive Manufacturers

A Raymond Tinnerman Engineered Products

AGS Automotive Systems

Buhler Industries Inc., Winnipeg

Canadian General Tower Ltd.

Cavalier Tool & Manufacturing

CpK Interior Products

FCA Canada

Ford Motor Company of Canada

General Motors of Canada

Kromet International

MacDon Industries Ltd.

Magna International Inc.

Martinrea Canada

Mechtron Innovations

NFI Group, Winnipeg

Niagara Brakes International

Oakgroup Automotive Corp.

Orlick Industries Ltd.

Plasman Group

Precision Resource Canada

Reko Tool & Mold/Reko Automation

Samuel, Son & Co.

Stackpole International - Powder Metal Division

Tenneco Canada Inc.

Toyota Motor Manufacturing Canada (TMMC)

Toyota Motor Manufacturing Canada Inc.

Trillium Metal Stampings

Windsor Mold Group

Woodbridge Foam

Other sectoral Stakeholders and Non-Governmental Organizations

Automotive Parts Manufacturers Association (APMA)

Canadian Association of Mold Makers (CAMM)

Canadian Tooling & Machining Association (CTMA)

City of Hamilton, Economic Development Division

Conestoga College

G&S Budd Consulting Ltd

Halton Industry Education Council (HIEC)

Institute for Border Logistics and Security (IBLS)

Magnet

Manitoba Vehicle Technology Centre Inc. (VTC)

Niagara Economic Development Commission

Ontario Auto Mayors Group

Ontario East Economic Development Corporation

Ontario Ministry of Economic Development, Job Creation and Trade (MEDJCT)

Quinte Economic Development Commission

Red River College

Skilled Trades Regional Training Centre, St. Clair College

Town of Oakville, Economic Development Department

Trillium Network for Advanced Manufacturing

Trillium Network for Advanced Manufacturing

UNIFOR

Waterloo Region Manufacturing Innovation Network

WindsorEssex Economic Development Corporation

Workforce Planning Board of Waterloo Wellington Dufferin

Workforce WindsorEssex