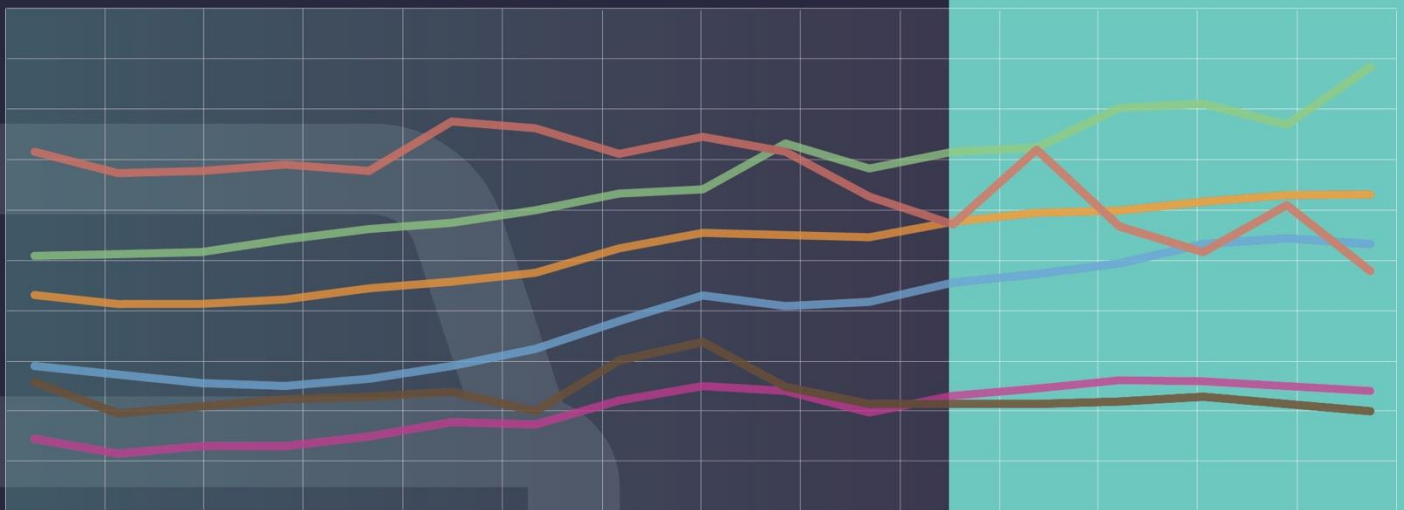


AUTOMOTIVE INDUSTRY LABOUR MARKET ANALYSIS

An Examination of the Use of Intermediaries: Increasing Skilled Trades in Automotive Manufacturing



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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(FOCAL) Initiative, futureautolabourforce.ca

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Table of Contents

1. Executive Summary	3
2. Apprenticeship in Automotive Manufacturing	5
3. The Challenge of Apprenticeship Registrations and Completions in Canada.....	6
4. The Potential of Third-Party Intermediaries	11
5. Selected Description of Apprenticeship Intermediaries.....	14
6. Common Characteristics of Successful Apprenticeship Intermediaries.....	23
7. Conclusion	27

| 1. Executive Summary

Throughout last year, we talked to dozens of automotive manufacturers about their workforce challenges. Many conversations were punctuated by ongoing concerns around shortages related to skills trades and a general dissatisfaction with the apprenticeship system.

Based on what we heard during our regional consultations and through earlier research done by Canadian Skills Training and Employment Coalition (CSTEC) and the Canadian Manufacturers' and Exporters (CME), employers in the automotive manufacturing sector clearly face significant challenges with filling vacancies for industrial electricians, millwrights, tool and die makers and other skilled trades. Although apprenticeship is a post-secondary pathway that depends on the participation of employers, only 19% of skilled trades employers participate in apprenticeship training (CAF, 2018). The challenge is especially acute for small and medium sized employers which typically find the apprenticeship system very complex to navigate, and often lack the time and human resources required to train and supervise apprentices.¹

Canada's automotive manufacturers are not alone in facing a skills trade shortage along with real challenges with our apprenticeship systems. Manufacturers in the United States, Australia and the United Kingdom are facing similar problems.

In order to address these issues, and in response to the growing need for qualified skilled tradespersons, a new type of workforce intermediary has emerged in a few regions and sectors. These entities, while varying in size and scope, respond to the specific needs of both employers and apprentices. This paper will review a select number of such intermediary organizations that are operating in other countries and Canada. The paper proposes some possible directions for a more coherent use of apprenticeship intermediaries in Canada.

¹ Apprenticeship in Canada, Data, Trends and Observations, Canadian Apprenticeship Forum, 2016, pg. 37.

The key functions of these intermediary organizations include marketing the apprenticeship brand in a region, persuading employers to support apprenticeships, helping employers through the design and administrative tasks required for an apprenticeship, and conducting or arranging for the off-the-job training related to the apprenticeship occupation.

Many apprenticeship intermediaries employ apprentices directly or undertake other apprentice support activities on behalf of an employer or a specified group of employers. Finally, some of the more successful intermediaries take responsibility for individually supporting apprentices to navigate the complex apprenticeship system and bureaucracy, assisting and mentoring apprentices towards program completion, and mediating challenges on behalf of the apprentice with employers and post-secondary institutions.

A number of studies and evaluations have found that intermediary organizations in apprenticeship systems provide a useful conduit for the dissemination of information from governments and relevant bodies to employers, apprentices and other parties. In its recent publication, *Intermediary Organizations in Apprenticeship*, the International Labour Organization found that these types of entities:¹

- provide a useful conduit for the dissemination of information from governments and relevant bodies to employers, apprentices and other parties,
- encourage employers to recruit more apprentices and, specifically, to recruit more apprentices from disadvantaged groups,
- improve retention and completion rates in apprenticeships,
- possess expertise in matters specific to young people and to disadvantaged groups.

Currently, both the federal government and Ontario's provincial government are in process of examining how our apprenticeship system(s) can better meet the needs of employers and workers alike. Given the challenges facing employers in automotive and advanced manufacturing and the weak completion rates of apprentices enrolled in industrial trades, a further exploration of the applicability of third-party entities designed to support apprentices in achieving completion of their trade is warranted.

¹ Intermediaries Organizations in Apprenticeship, the International Labour Organization, Employment Policy Division, 2019, pg. 5.

| 2. Apprenticeship in Automotive Manufacturing

Skilled tradespeople are critical to Canada's automotive manufacturing sector. Access to skilled millwrights, industrial electricians, tool and die makers, welders and other skilled occupations boosts output and productivity. Skilled tradespeople also enhance innovation and the sector's ability to take advantage of new technologies and production methods.¹

Despite the importance of skilled workers in automotive and advanced manufacturing, the shortage of tradespeople and apprentices in Canada is well documented. During our consultations with automotive manufacturers in 2019, we continually heard about serious difficulties in finding, recruiting, and retaining skilled workers². These challenges were seen to undermine productivity, competitiveness and drive up costs. A recent survey of the manufacturing sector conducted by KPMG and the Canadian Manufacturers and Exporters (CME), echoed our findings. The survey of 240 manufacturing firms indicated that a majority of companies said that they had difficulty in recruiting and filling job vacancies in skilled trades.³ The biggest barrier to hiring was the lack of qualified candidates with skilled qualifications. These barriers persisted despite persistent and aggressive actions taken by manufacturers, including increasing wages, partnering with recruiting agents and post-secondary institutions.⁴

Skilled trades in automotive manufacturing include a wide range of occupations that generally require documentation in the form of a certification, two-year degree and/or an apprenticeship. While not all skilled

¹ Preliminary Insights: Labour Market Challenges in Canada's Automotive Manufacturing Sector, Canadian Skills Training and Employment Coalition, 2019. pg. 3.

² Preliminary Insights: Labour Market Challenges in Canada's Automotive Manufacturing Sector, Canadian Skills Training and Employment Coalition, 2019.

³ We're Hiring, Manufacturing Workforce Survey Report, Canadian Manufacturers and Exporters and KPMG, 2019, pg. 10.

⁴ Ibid. Pg. 13.

trades require an apprenticeship, the concerns about Canada's apprenticeship systems arose in the many conversations we had with automotive manufacturing employers. There was general consensus that the apprenticeship system is quite complex, and that its rules and regulations are confusing and difficult to understand for both employers and workers alike. Furthermore, our apprenticeship system, despite ongoing reforms, does not have strong appeal to youth or the kind of flexibility required to manage classroom learning around production schedules.¹ Indeed, our recent consultations with automotive manufacturers and the CME's survey of manufacturers show that automotive sector employers' concerns around skilled trades and apprenticeship is becoming more acute.

Much of the dialogue in relation to apprenticeship focuses on strategies to encourage youth and other population groups to enter into the skilled trades. Canadian manufacturers, post-secondary institutions and government have worked towards helping youth better understand the opportunities within skilled trades and apprenticeship.² To date there has been some positive impact through these efforts with moderate increases in registering industrial apprentices over the past decade.³ Yet while registration in apprenticeship programs has been increasing, the growth in the number of completions has not kept pace. So, while there is substantial policy momentum to promote apprenticeships, these efforts are hampered by low completion rates with less than half of registered industrial apprentices likely to ever complete the training for their chosen trade.

3. The Challenge of Apprenticeship Registrations and Completions in Canada

¹ Preliminary Insights: Labour Market Challenges in Canada's Automotive Manufacturing Sector, Canadian Skills Training and Employment Coalition, 2019. pg. 7.

² Skilled Trades are in Need of Apprenticeship Program, Policy Options, Sean Speer and Brian Dijkema, 2020 Pg. 1.

³ Statistics Canada. Table 37-10-0023-01

Apprenticeship is a post-secondary pathway that is largely carried out in the workplace. In Canada, apprenticeship focuses primarily on skilled trades occupations, teaching people the skills and competencies needed to perform hands-on tasks to industry standards. The training typically combines alternating periods of on-the-job and technical training. Technical training occurs at colleges, union training centres, private training providers or online. Apprenticeship programs are typically four years long and lead to trade certification. Once an apprentice has completed the required hours and technical training for their trade, they may write a Certificate of Qualification exam. Those who achieve a passing grade (normally 70%) become certified journeypersons.

Apprenticeship is regulated by the provinces and territories, creating thirteen unique systems geared to the labour market needs and conditions in each region of Canada. Advantages to the apprenticeship form of training include the ability to earn a wage while you learn and the development of practical, hands-on skills. Apprentices benefit from the guidance of a journeyperson mentor (certified tradesperson). Apprenticeship systems are much more complex and nuanced than most other post-secondary options.

Apprenticeship training is generally less straightforward, more subject to gaps in employment, and often suffers delays due to market disruptions. Because apprentices are employees, they are strongly affected by market and economic forces while participants in many other types of post secondary education may have more insulation from these forces.

The total number of people registered in apprenticeship programs in Canada has grown sharply since the end of the 1990s, rising from 199,074 in 2000 to 405,699 in 2017. In 2018, the number of new registrations in apprenticeship programs rose 11.6% from 2017 to 79,860.¹ In its 2018 report on

¹ Pathways and earnings indicators for registered apprentices in Canada, Statistics Canada, 2018 and, Registered Apprenticeship Training, Statistics Canada 2019

apprenticeship, the Ontario Chamber of Commerce (OCC), noted that there are pervasive barriers to attracting youth to the trades. The perception that careers in the trades offer limited opportunities for learning, growth and social mobility is still evident among youth and their parents. The OCC found some evidence to suggest that these perceptions were changing, citing a survey of Ontario residents that it commissioned. The survey found that 93 percent of Ontarians indicated that it was important for the government to provide access to everyone to learn a trade or skill. In comparison, only 82 percent of respondents indicated that it was important that government provide access for everyone to university education.¹

While there is some evidence that the skilled trades careers are drawing increasing interest and enrollment, Statistics Canada notes that the increasing number of registrations have been offset by declining completion rates. Indeed, the number of certificates awarded to individuals who completed the necessary steps to become qualified in a trade has consistently declined over the past decade.² Moreover, data from the census suggest the workforce is aging at a faster pace in the trades. Among workers who had a certificate of apprenticeship or a certificate of qualification, 26.1% were aged 55 years and older in 2016, up from 23.2% in 2011.³

While most post-secondary programs have challenges with student retention and completion, the problem is particularly acute with respect to apprenticeship, where completion rates generally fall below 50%.⁴ Thus, a key lever to increase the number of skilled tradespeople available to automotive manufacturing is to improve apprenticeship completion rates. As noted in a recent report on shared apprenticeship models in Ontario (OCWI 2019), there has been a significant downward trend in apprenticeship completions in

¹ Talent in Transition: Addressing the Skills Mismatch in Ontario, the Ontario Chamber of Commerce, 2018. Pg 34.

² Pathways and earnings indicators for registered apprentices in Canada, Statistics Canada, 2018.

³ Ibid.

⁴ Skills Beyond School. Canadian Commentary; OECD Study of Postsecondary Vocational Education and Training, 2017, Pg. 8.

industrial trades in Ontario, the heart of Canada's automotive manufacturing sector. The paper goes on to note that these low completion rates are lower than what might be expected in non-compulsory trades or in trades with industrial exemptions. For apprentice cohorts entering into Industrial Trades from 2000 to 2010, completion rates dropped from 47% for the year 2000 cohort to 30% for the 2010 cohort. During the same time period, completion rates for General Machinists dropped from 35% to 23%, for Tool & Die Makers from 52% to 42%, for Industrial Mechanic Millwrights from 59% to 41%, and for Industrial Electricians fell 68% to 22%.¹

Apprenticeship completion is not only critical to employers that need an ongoing talent supply, but also to apprentices themselves who invest their time and energy. Results from the 2015 Statistics Canada National Apprenticeship Survey show that, overall, there were significant benefits for apprentices in completing their programs. Those who completed an apprenticeship program were more likely to have a permanent job, employment benefits and income than those who left their programs before completion. For example, 81% of those who completed their apprenticeships had a permanent job, compared with 77% who had not completed their programs.²

Yet, despite the importance of completion, the overall body of research and data is not sufficiently conclusive or granular to be definitive about why apprenticeship completion rates remain so low and are declining. The Ontario's Auditor General has consistently raised the issue of low apprenticeship completion rates and asked why the provincial government does not collect data on why there are so many exits.³ The National Apprenticeship Survey conducted by Statistics Canada in 2015 looked at who

¹ Final Report on OCWI's Shared Apprenticeship Model, pg. 13, Ontario Centre for Workforce Innovation, 2019.

² National Apprenticeship Survey: Canada Overview Report 2015. Statistics Canada, 2017.

³ In 2018 the Auditor General of Ontario noted that the Ministry had been previously asked to "identify key reasons individuals fail to progress through their apprenticeships and apply intervention techniques system-wide; Status: Little or no progress" Auditor General Ontario, Employment Ontario 2018, Chapter 1, Section 3.04. Auditor General of Ontario,

did and did not complete their apprenticeship. It noted that those who did not complete their programs were more likely (44%) to have experienced difficulty than those who completed their programs (27%). When asked what the main reason was for not completing their apprenticeship programs, job instability was the most commonly cited barrier (17%), followed by the fact that they had received a better job offer (16%). Financial constraints were cited as the third most common reason for failure to complete (11%).¹

The Canadian Apprenticeship Forum conducted a series of focus groups with a broad cross-section of stakeholders to investigate reasons for non-completion and to solicit suggestions about how completion could be enhanced (Canadian Apprenticeship Forum, 2011). Reasons for non-completion included lack of fit with the workplace environment, lack of variety in work, a younger generation that wants to explore various career options, unreported harassment and fear of failure.

A series of papers issued by the Higher Education Quality Council of Ontario (HEQCO) showed a variety of demographic and apprenticeship variables are related to completion, discontinuation, or long-term continuation in programs. Its work found that the educational backgrounds of apprentices are important, with those having at least a high school education more likely to complete. Of note, the HEQCO found that economic conditions were not an important factor in apprenticeship completion rates for most occupations. Using data from both the National Apprenticeship Survey (NAS) and data linkages to the Labour Force Survey (LFS), the HEQCO studies found only a weak correlation between the unemployment rate and apprenticeship completions. They determined that while macroeconomic conditions have a significant impact on registration, the results suggest that these have only a small negative impact on long-term continuation, and no statistically significant effects on completion and discontinuation. The HEQCO reports found additional details

¹ National Apprenticeship Survey: Canada Overview Report 2015

when examining technical apprenticeship, such as a correlation between the number of apprentices who stalled or discontinued their efforts and long-block releases to employers. ¹

Canada is not alone in the challenge of apprenticeship completion. Studies, research and data from other jurisdictions with apprenticeship systems similar to Canada's indicate that employment-related reasons are the most commonly cited factors for not completing an apprenticeship. These employment-related issues include experiencing interpersonal difficulties with employers or colleagues, being made redundant, not liking the work and changing careers. There is general agreement that the employment experience, rather than the off-the-job-training experience, carries greater weight in whether an apprentice completes. There is conflicting evidence on the importance of wages. Most studies find that low wages are not the most common reason for non-completion, but they are nonetheless an important factor. There is general agreement among researchers in the field of apprenticeship studies that those apprentices who leave their apprenticeship do so early on, with most leavers doing so within the first year. Finally, employer size seems to play a critical factor. Australia and the UK apprenticeship data indicate that the highest apprenticeship completion rates occur with larger, experienced employers with well-organised systems for managing and supporting apprentices.²

| 4. The Potential of Third-Party Intermediaries

In response to the growing need for qualified skilled tradespersons who can adapt to emerging technologies in advanced manufacturing, and in response

¹ The Apprentice Retention Program Evaluation and Implications for Ontario, Ron Hansen and Catharine Dishke Hondzel, HECQO, 2015 and Apprenticeship in Ontario: An Exploratory Analysis @ Issue Paper No. 20 January 13, 2015 Erica Refling and Nicholas Dion Higher Education Quality Council of Ontario

² Understanding the Non-completion of Apprentices, Alice Bednarz, National Centre for Vocational Education Research, Australia, 2014.

to the previously identified challenges faced by employers including low completion rates, a new type of workforce entity has emerged in countries which do not have a strong history or culture of apprenticeship. While the governance of the apprenticeship system resides with government and delivery of training remains with a post-secondary institutions and employers, an apprenticeship intermediary undertakes a range of functions. They include marketing the apprenticeship brand in a region, persuading employers to support apprenticeships, helping employers through the design and administrative tasks required for an apprenticeship, and conducting or arranging for the off-the-job training related to the apprenticeship occupation. Some intermediaries employ act as third-party employers and retain apprentices directly or undertake other apprentice support activities on behalf of an employer or a specified group of employers. Finally, some of the more successful intermediaries take responsibility for individually supporting apprentices to navigate the complex apprenticeship system and bureaucracy, assisting and mentoring apprentices towards program completion, and mediating challenges on behalf of the apprentice with employers and post secondary institutions.

Reports and evaluations have found that intermediary organizations in apprenticeship systems have been shown to provide a useful conduit for the dissemination of information from governments and relevant bodies to employers, apprentices and other parties. These organisations have also been found to improve retention and completion rates in apprenticeships (ILO 2019). Using apprenticeship completion data, reviewing government sponsored evaluations, and stakeholder interviews, the ILO notes that these intermediaries reduce the inherent risk of employing apprentices, especially young apprentices, due to the extra services that they provide, which make the apprenticeship more likely to succeed. They also find that the role of

intermediaries in interpreting the apprenticeship system is especially helpful for small and medium sized employers (SMEs).¹

Some countries looking to expand apprenticeships are increasingly relying on third party intermediary organizations. Even in Germany and Austria, where apprenticeships are widespread and employers understand apprenticeships, intermediaries play a significant role. Chambers of commerce encourage firms to operate programs, hire apprentices, help apprentice trainers in companies, assess apprentices' skill levels, and award certificates when apprentices complete their training.²

In Australia and the United Kingdom, two countries attempting to scale up their apprenticeship systems over the past decade, intermediaries appear to be making critical contributions. One reason is that few companies are knowledgeable enough about apprenticeship to build their own programs without assistance. The U.K.'s third party intermediaries have persuaded many employers to start apprenticeship programs, helped employers implement apprenticeship programs, screened applicants for available apprenticeship openings, and provided the off-job training required of apprenticeships.³

In an effort to expand apprenticeships In the United States, the Federal Department of Labor (DOL) in 2016 decided to expand on existing third-party apprenticeship intermediaries and create new ones. The initiative required intermediaries to assist employers in developing apprenticeship programs, to meet standards required for registration, work with colleges and union-based trainers to promote and align apprenticeships with growing occupations, to assist potential apprentices to register and complete their program through mentoring and navigational support, and provide financial support of up to \$75,000 per employer to expand or create new apprenticeship programs. Industry associations, labor-management partnership organizations, consortia

¹ Federal Reserve Bank of Philadelphia, Cascade: No. 92, Summer 2016.

² Let's Help Intermediaries Expand U.S Apprenticeships, American Institute for Innovative Apprenticeships, 2016.

³ Ibid.

of employers, and consortia of community colleges were eligible for these funds.¹ Last year, the U.S. Department of Labor awarded nearly \$100 million to 28 public-private apprenticeship partnerships to continue to build third party apprenticeship system support with the goal of increasing the number of registered apprentices by 78,000 by 2022.²

5. Selected Description of Apprenticeship Intermediaries

Australia GTOs:

Australian Group Training Organizations (GTOs) employ apprentices and “lease” them to host employers. GTOs were established in Australia during the early 1980s by industry leaders in the Manufacturing, Automotive and Building sectors with support from the Australian Federal government. The concept was a response to the needs of many small businesses which found it challenging to commit to employ apprentices for the full duration of their apprenticeship. The Australian Government recognized the model as a separate legal entity, in which the GTO became the employer of record and arranged for the other “group of employers” to participate. GTOs are funded through administrative funding from the Australian National Government, through individual State Governments (normally targeting certain sectors and occupations) supplemented by nominal fees from participating employers. There are now approximately 180 non-profit GTOs throughout Australia, employing approximately 48,000 apprentices and pre-apprentices who are placed with more than 35,000 host employers.

GTOs have come to occupy a pivotal role in many Australian communities through their links with employers and training providers. GTOs are seen as critically important entities in smaller and more remote communities where

¹ National Skills Coalition. Retrieved from: <https://m.nationalskillscoalition.org/news/blog/dol-requests-information-on-industry-intermediaries-to-expand-apprenticeship>.

² Apprenticeships: Closing the Skills Gap. US Dept. of Labour. Retrieved from: <https://www.dol.gov/featured/apprenticeship/grants>.

larger employers may not exist. GTOs have also had some level of success in Indigenous and remote communities where more traditional forms of apprenticeship have failed.¹ GTOs take a dual customer approach - they provide intensive support services to employers with the objective of easing administrative and regulatory burdens while also taking responsibility for ensuring that apprentices find appropriate work experience and case managing them through to completion of their program. More specifically, GTOs:

- Work with local small and medium sized employers to forecast and determine what types of apprenticed occupations are/will be in demand,
- Select and recruiting apprentices and trainees, matching them to host businesses, meeting all employer obligations including paying wages and entitlements, arranging formal training and assessment
- Employ apprentices and trainees and place them with host employers.
- Provide for continuity of employment of apprentices and trainees through to the completion of their Apprenticeship/Traineeship Training Contract.
- Improve the quality and range of training available to apprentices and trainees, particularly within small and medium businesses.
- Provide advice and additional financial supports (when required) to the apprentice or traineeship.
- Assist apprentices and trainees to make a successful transition into the skilled workforce once qualified.

¹ Intermediary Organizations in Apprenticeship Systems, International Labour Organization, 2019. Pg. 10.

- Rotate apprentices and trainees among host employers to ensure continuity of their Training Contract and enhance the quality and range of the training experience.
- Provide financial incentives to employers that access and provide opportunities for trainees who are disadvantaged in the labour market.
- Provide services to the community which contribute to the promotion of vocational education and training and encourage employment growth.

Independent evaluations indicate that GTOs have demonstrated success in conducting initial screening and assessment that ensures a good match between apprentices and employers and ongoing management of support arrangements. Completion rates for regulated and non-regulated trades have remained fairly constant at 61%. There is consensus among evaluations that GTOs are more successful at apprenticeship completions than traditional or direct employer apprenticeships when it comes to small and medium sized employers. However, GTOs are less successful when it comes to employers with a large workforce. Finally, GTOs have had more successful completion outcomes than traditional apprenticeship approaches for Aboriginals, women and youth (21 years of age and younger) than the more traditional apprenticeship system had with these groups. ¹

There is some criticism of Australian GTOs. Namely, the performance of individual GTOs varies greatly across regions. Some GTOs have had uneven performance over the past decade and have occasionally alienated some industrial sectors or organized labour. There is also some indication that GTOs

¹ Completion Rates for Group Training Organisations and Direct Employers: How do They Compare? Lisel O'Dwyer and Patrick Korbel, National Centre for Vocational Education Research, 2019.

are more susceptible to economic shocks because of their focus on small and medium sized employers.¹

United Kingdom GTA/ATAs:

The United Kingdom's apprenticeship system has two main types of intermediary organizations involved with apprenticeships: Group Training Associations (GTAs), which are basically training centres formed by groups of employers, and Apprenticeship Training Agencies (ATAs), which employ apprentices and "lease" them to employers in the same way that Group Training Organizations do in Australia. There is some overlap between these types of organization, with some agencies fulfilling both roles. Unlike Australian GTOs, Group Training Associations directly provide training. Sometimes they complement college-based training and sometimes they provide all of the off-the-job training for apprentices. Initially, GTA/ATAs operated mainly in the manufacturing and construction sectors until 2010 when government funding to support the expansion of ATA/GTAs grew. The key strengths of GTA/ATAs are seen to be their evolution over time, their response to specific regional needs, their trustworthiness and their focus on sectoral and specific skill areas.

There are currently 40 GTA/ATAs operating in industrial regions of the UK with approximately 24,000 associated and participating employers. These organizations describe themselves as the "first truly public-private learning partnerships where employers subscribe to off-the-job training centres in order to provide efficient, expertly delivered skills." Typically, a GTA/ATA is an incorporated entity and a registered charity whose objects require that surpluses be reinvested into services. There is usually a group of subscribing member employers from which senior executives are drawn to form an

¹ Ibid, Pg. 9

ATA/GTA board. The alternative approaches to employer engagement represented by the ATA/GTA pilot projects have been found to be well-received by employers and training providers and have encouraged higher levels of participation by employers. ATA/GTAs have been found to have had significant positive effects on encouraging employers to engage with apprenticeships for the first time. ¹

While no formal evaluation of the UK's GTA/ATAs with respect to completion rates has been completed, the National Organization for GTAs report 61% completion rate for all trades. To keep this in perspective, in 2016/17, the completion rate within the traditional apprenticeship system in the United Kingdom was 32%.²

GTA/ATA's are funded primarily from government contracts to deliver apprentice training. Most also undertake fee-for-service training for employers.

Wisconsin Regional Training Partnership

The Wisconsin Regional Training Partnership (WRTP) is a non-profit workforce intermediary dedicated to connecting people to family-sustaining jobs. Its mission is to enhance the ability of public and private sector organizations to recruit, develop, and retain a more diverse, qualified workforce in manufacturing and emerging sectors of the regional economy.

By being industry-led, worker-centered, and community-focused, the WRTP helps under-employed, under-served, and under-represented individuals succeed in well-paying careers while exceeding industry's workforce needs. As a workforce intermediary, the WRTP works with the public sector to develop resources, services, processes and programs for their member companies to expand employment and advancement opportunities by upgrading the skills of

¹ Apprenticeship Review, The National Apprenticeship Service and the Department for Business Innovation and Skills, 2012.

² The Apprenticeship Program UK, Report by the Comptroller and Auditor General, 2019.

current employees; and recruiting, training and placing community residents in family-supporting jobs to meet employers' needs for new workers. The WRTP is funded through grants from the Federal Department of Labour and through partnership fees from employers.

The WRTP is dedicated to strengthening the manufacturing sector of the regional economy while expanding access to family-sustaining careers and developing a more diverse, qualified workforce. By starting with the industry's most urgent workforce needs and challenges, it carries out recruitment and training opportunities to connect industry with diverse and skilled workers. As part of this approach, the WRTP has been instrumental in the creation and implementation of the Industrial Manufacturing Technician Registered Apprenticeship (IMT) which is a hybrid apprenticeship program that combines on-the-job training with classroom instruction and creates a new pathway to manufacturing career. With a flexible curriculum based on specific employers' needs, IMT trains workers for employers ranging from automotive manufacturing to food production, and is an important source of apprentices with large manufacturing firms such as Harley-Davidson Motor Company and Kellogg, as well as smaller manufacturers which are part of the WRTP's regional employer consortia.

The IMT is a DOL-registered, employer-based program which builds skills of manufacturing workers. Compared to traditional manufacturing apprenticeships, the IMT is shorter and provides a step up from a production job. For employers, the hallmark of the IMT is its adaptability to unique firm production processes and its ability to quickly increase skills of manufacturing workers. Its adaptability derives from a combination of on-the-job learning and related classroom training that takes, on average, 18 to 24 months to complete. The program consists of 2,736 hours of on-the-job learning and 264 hours of related instruction over two semesters. Program participants have

monthly meetings with WRTP mentors who provide advice and guidance in terms of the participants progress, retention, and credential attainment.

Early signs indicate that WRTP is meeting its goals of increasing skills for employers and helping workers gain trades related credentials. Since enrollment into the apprenticeship program started with two companies in Wisconsin in mid-2013, eight more companies in Wisconsin and six in Minnesota and Michigan adopted the program by 2015. Total enrollment across all firms rose rapidly from 6 apprentices in 2013 to 485 in 2019. The IMT dropout rate is 24 percent, which is substantially lower when compared to other apprenticed trades in manufacturing. The IMT also appears to be making manufacturing skills more broadly accessible to a diverse population. To date 60% of its apprentices are people of colour and nearly half are women.¹

A quasi experimental study of WRTP by IMPAQ International found that the program had large effects on employment. In the six quarters after program entry, 72.1 percent of participants were employed, exceeding the employment rates of matched comparison group members by 11 percentage points. The program was found to be effective in helping participants to obtain manufacturing jobs and had large effects on job retention. Finally, the program had large effects on earnings. In the six-quarter follow-up period, participants had \$16,661 (134 percent) higher earnings than the matched comparison group.²

Apprenticeship Carolina

Apprenticeship Carolina operates within the South Carolina Technical College System, a small state agency that oversees the technical colleges in an effort to mirror the German model apprenticeship, which creates partnerships between the state programs and companies looking to utilize apprenticeships.

¹ Moving Apprenticeship into Manufacturing's Future. Cows Think Tank, University of Wisconsin Madison, 2017. Pg. 8-10.

² Quasi-Experimental Impact Study of NFWS/SIF Workforce Partnership Programs, Evidence on the Effectiveness of Workforce Partnership Programs in Ohio and Wisconsin, IMPAQ International, 2016. Pg. vii.

Apprenticeship Carolina helps companies understand, use, and register apprenticeship programs by providing free consultation and supports eligible businesses to receive a tax credit of \$1,000 for each registered apprentice employed for at least seven months during each year of an apprenticeship program, for up to four years. The Apprenticeship Carolina consultants essentially become project managers for the business with the sole purpose of expanding and retaining apprenticeship programs in the state. Since Apprenticeship Carolina began in 2007, the number of apprentices grew from 415 to 3,910 in 2019. Meanwhile, the number of employer sponsors rose from 79 in 2007 to 345 in 2019.¹ Much of its expansion has occurred in South Carolina's growing manufacturing and construction sectors. A critical factor for Apprenticeship Carolina's success has been its ability to coordinate public and private sectors of the state, based in part on its partnerships with the SC Chamber of Commerce, SC Department of Commerce, Small Business of Commerce, and the SC Technical School system.

Aside from directly matching pre-apprentices and apprentices with suitable employers, Apprenticeship Carolina also continuously works with employers and individual apprentices to ensure that the placement is on-track for long-term success. Apprenticeship Carolina, while focussed on the demands of employers, also provides high touch supports to youth who register for an apprenticeship, identify challenges early on and work to resolve them before the apprentice drops out. As one employer noted "the biggest factor in a successful apprenticeship program is having mediators to connect students with employers."²

Apprenticeship Carolina has been nationally recognized for its ability to support women and racialized groups to enter into technical trades. An analysis by the Urban Institute found that about one-third of registered

¹ Retrieved from <https://www.apprenticeshipcarolina.com/>

² Retrieved from <http://www.ccdaily.com/2018/08/south-carolina-supports-apprenticeships/>

apprentices in technical trades in South Carolina were women, almost five times the share of women in apprenticeships nationwide.¹ Because the agency is fairly young and a number of its cohorts still in early stages, there is little data to indicate gains in apprenticeship completion and credential attainment. The Urban Institute did however note that the vast majority of apprenticeship starters were still enrolled, progressing and on track to complete. Because credentials are closely tied to progression through and to completion of the apprenticeship itself, the Urban institute felt that credential attainment is likely to occur for most apprentices.

Canadian Skills Training and Employment Coalition

The Canadian Skills Training and Employment Coalition (CSTEC)² and the steel industry, created the “CSTEC Apprenticeship Program”. The program was a response to the economic challenges that limit apprenticeship training among small-and medium-sized manufacturers. CSTEC developed the Hamilton Skilled Trades Apprenticeship Consortium (HSTAC) in July 2009 to help with apprenticeship training and completion. The consortium consists of large and small manufacturers, the local community college, and other stakeholders.

CSTEC/HSTAC acts as a sponsor when registering students for seven industrial trades. Under the program, apprentices can move from employer to employer and do not have to register again. Registering students is intended to encourage employers to participate since they are more likely to offer work placements to an already-registered apprentice. In addition, CSTEC staff mentor, motivate and monitor apprentices towards certificate completion. One of the key features of the approach is to provide support to both employers and apprentices in navigating the complex administrative regulations in respect to Ontario’s apprenticeship system.

¹ Diversity and Inclusion in Apprenticeship Expansion, Urban Institute, Daniel Kuehn, 2017, pg. 3-6.

² Formerly known as the Steel Trade and Employment Congress

Based on the success in supporting apprenticeship in Hamilton Region, CSTEC has recently expanded the employer consortia model to the Kitchener-Waterloo, Peel-Halton and Sault Ste. Marie regions of the province. CSTEC conducts its work primarily through a patchwork of federal and provincial grants.

Over the past decade CSTEC has supported 1,134 students and participants to register for an industrial apprenticeship and approximately 250 manufacturers to have access to pool of apprenticeship talent. Studies by the Canadian Apprenticeship Forum (2017) and the Ontario Centre for Workforce Innovation (2019) suggested that replicating the CSTEC model in other regions and industries has the potential to both increase apprenticeship registration and completions.¹ In its Report, *Talent in Transition: Addressing the Skills Mismatch in Ontario* (2018), the OCC recommended that the province replicate CSTEC's employer consortiums; "the experiences of these communities suggest that apprenticeship consortiums enhance the flexibility of the apprenticeship system while improving alignment among key stakeholders to support the development of a workforce that is responsive to local labour market needs. We recommend that government collaborate with stakeholders to increase employers' awareness of the consortium model and to encourage employers to engage in the process by making information on supports more accessible."²

6. Common Characteristics of Successful Apprenticeship Intermediaries

Despite their relatively brief history, third-party apprenticeship intermediaries have gained the attention of a number of think-tanks, researchers and policy

¹ Final Report on OCWI's Shared Apprenticeship Model, pg. 13, Ontario Centre for Workforce Innovation, 2019. Pg.21 and Investigating Apprenticeship Completion in Canada: Reasons for Non-Completion and Suggested Initiatives for Improving Completion, Canadian Apprenticeship Forum, Pg. 47.

² Talent in Transition: Addressing the Skills Mismatch in Ontario, the Ontario Chamber of Commerce, 2018. Pg. 29.

departments in government.¹ Unlike, their counterparts in Australia, the United Kingdom and the United States, these organizations exist largely outside the traditional apprenticeship system and are not yet mandated, regulated or formally recognized as apprenticeship entities by government.

The funding for these types of entities varies by jurisdiction, however, most receive government contracts and/or outcomes-based payments based on the number of apprenticeship starts and completions, and are supplemented by membership fees and purchase of service from groups of employers.

While these intermediary organizations vary by scope and purpose, various studies on apprenticeship intermediaries arrive at a similar set of conclusions about organizational functions and characteristics associated with successfully supporting individuals to enter and complete the apprenticeship journey.

There is agreement that effective apprenticeship intermediaries:

- 1. Understand the needs of small and medium sized employers:**

Understanding the needs of small employers within a specific industry sector eases the administrative burdens of delivering support and mentorship for both small employers and colleges and/or other training providers. Intermediaries build bridges among multiple employers in a region to create an economy of scale in developing apprenticeship programs. As conveners, intermediaries help smaller employers in a regional industry sector aggregate their skill needs. The intermediary reduces the outreach and coordination work for training providers to provide work-related classes to smaller employers

- 2. Provide high-touch and individualized services to apprentices:**

Through ongoing case management, apprentices are supported

¹ Jobs For the Future, International Labour Organization, United States Dept. of Labour, and the OECD have each conducted some form of analysis of 3rd party apprenticeship intermediaries.

through all phases of their apprenticeship. Case managers have industry/sector experience and are former tradespersons. They monitor apprentices' progress toward receiving their credential, coordinate between related training instructors and worksite supervisors, provide follow-up and supportive services, check attendance, provide motivation, and address challenges that surface. Staff also connect both apprentices and employers to funding sources to support completion of their apprenticeship.

3. **Are both sector-based and regionally sensitive:** Successful apprenticeship intermediaries have a deep understanding and knowledge of the industry, its companies, occupations and associated apprenticeships. Intermediaries normally have staff who have worked in the sector and have substantive industry knowledge. These staff are also aware of industry challenges and how apprenticeships work in the sector and region. Finally, they are aware of points where an apprenticeship is likely to falter within the industry sector.
 4. **Connect business and industry groups to colleges and/or organized labour:** Intermediary staff often make connections among employers, educational institutions and the regional workforce system. They provide technical assistance in navigating the complex apprenticeship process. They understand the culture and values of employers, educational institutions and unions with an eye to facilitating processes that meet the priorities of both groups.
 5. **Take the long view:** Both apprentices and employers are often faced by immediate challenges that can undermine long term planning. For apprentices, the immediate need to collect a paycheque or some other life event will supersede the desire to complete their apprenticeship. For employers, the immediate need to meet production schedules can often override the ability to release an apprentice to go back to school.
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A third-party intermediary can explain and advocate the mutual return on investment (ROI) benefits of apprenticeship completion to both the apprentice and employer.

6. **Have the ability to sponsor apprenticeships:** In a newly emergent practice, the intermediary acts as the apprenticeship sponsor, saving employers from obtaining individual approval from the provincial apprenticeship agency. The intermediary assumes responsibility for ensuring that each apprentice completes the registration process, finds a suitable employer, receives on-the-job learning, registers for and completes related classroom instruction, and ensure that supporting documentation of apprentice progress is provided to the relevant apprenticeship agency. Intermediary sponsorship has the added benefit of providing an alternative option to small employers that do not have the personnel resources to register/support an apprenticeship.
 7. **Build partnerships of substance with community colleges and/or other trainers:** Intermediary staff work with their regional community colleges to develop quality instruction that directly relates to the apprentices' on-the-job success.
 8. **Have capacity to collect and analyze their data for the purposes of improving apprenticeship completion:** By virtue of their work with apprentices, multiple employers, unions, community colleges and government, these intermediaries are in a position to inform stakeholders about what is working for whom and why. They help spread effective practice and policies that improve outcomes for apprentices, employers, colleges, and government.
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| 7. Conclusion

Apprenticeship intermediaries should be regarded as potentially major contributors to our apprenticeship system. They can perform functions that governments and post-secondary institutions find difficult, such as working directly with small and medium sized employers, and both current and would-be apprentices.

While a few apprenticeship intermediary organizations have emerged in Canada over the past decade, all emerged organically and most are not widely known, even by those in the apprenticeship system. Given the evidence from elsewhere, an apprenticeship intermediary organization in regions with high concentrations of automotive or advanced manufacturing could form an important component of our apprenticeship system.
