



Sarnia Lambton's In-Demand Skilled Trades:
Results of Consultations, Interviews and Online Surveys

February 2020



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The results of this report are based on research gathered from all four trade sectors (Motive Power, Service, Construction and Industrial) through focus groups, one-one consultations (in person and by phone) and online survey.

In attempting to gather data, we reached out to union groups and associations, industries, union contracting companies, large companies, and small- to medium-sized businesses. We attempted to contact as many employers and business types as possible; ultimately, the results are based on 115 engagements. We have also included resources from the Government of Canada and the Government of Ontario.

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Purpose and Background

Currently, there is a great deal of public discussion about the growing demand for skilled tradespeople in Ontario. Canadian employers may face difficulty finding the skills they need in the current labour market and filling positions in the skilled trades. Although statistics are available at the national and provincial levels, it is helpful to have an understanding of labour market conditions for the skilled trades at the local level.

In May 2019, The Sarnia Lambton Workforce Development Board received funding from the Ministry of Labour, Training and Skills Development (MLTSD) to engage with the local community on the in-demand skilled trades in our region. The purpose of the research was twofold: to examine whether local employers are experiencing issues in recruiting, training and retaining apprentices and journeypersons and to examine how local employers are addressing the demand for skilled tradespeople. The evidence collected from the community will help inform how government, industry, and local communities can work together to support business growth and industry competitiveness.

Part 1 of this report is dedicated to describing what an apprenticeship involves, and the process to follow if interested in beginning an apprenticeship. Part 2 is focused on the results of the research project exploring the in-demand skilled trades in Sarnia-Lambton. The appendices provide information on the names of local unions as well as links to financial resources available for employers and apprentices.

Part 1: What is a Skilled Trade?

A skilled trade refers to the apprenticeable trades that are currently prescribed under the Ontario College of Trades and Apprenticeship Act, 2009. There are 144 skilled trades in Ontario, categorized into four sectors: Motive Power, Service, Construction and Industrial. A complete listing of all the regulated trades in Ontario can be found at: <https://www.ontario.ca/page/list-skilled-trades-ontario>. Additionally, businesses often require tradespeople that have a set of specialized skills that does not fall under the 144 skilled trades but is a combination of several skilled trades.

There are jobs in the Sarnia Lambton area that are skilled and require special training but do not specifically fall under one of the 144 regulated trades in Ontario. Someone may register as an apprentice in the skilled trade that best matches the job, but will utilize and train for other required skill sets. For example, Heating, Ventilation and Air Conditioning (HVAC) mechanic is not an apprenticeable trade, but it is a job title. Local employers usually hire apprentices in the Refrigeration and Air Conditioning Systems Mechanic or Sheet Metal Worker skilled trades for these positions. Similarly, Personal Support Worker is a job title but not an apprenticeable trade.

What is an Apprenticeship?

An apprenticeship is formal training for those who want a career in the skilled trades. It involves both on-the-job training and classroom-based learning at a college campus or union training centre. As an apprentice, you learn a skilled trade from an experienced worker while getting paid on the job. For most trades, you work for a year and then switch to studying in class for eight to twelve weeks, either full-time or part-time. It takes between two to five years to complete an apprenticeship, as you must gain the required skill sets over a scheduled period of time and successfully complete the required in-class coursework and exams.

The Routes to Apprenticeship

Apprenticeship in High School

Ontario Youth Apprenticeship Program (OYAP)

OYAP is a School to Work program that allows grade 11 or 12 students to become registered apprentices and work towards becoming certified journeypersons while completing their secondary school diplomas. OYAP is facilitated by the school Guidance Counselor, Co-op Teacher and/or Technological Studies teacher. Students must have at least 16 credits completed and be registered to take co-op in order to get a placement. Additional information is available on the OYAP website: <https://oyap.com/en/>

Specialist High Skills Major Programs (SHSM)

This program allows students to complete a specific bundle of eight to ten courses in a selected field depending on their long-term post secondary goals. The student can earn field credits, industry certifications such as first aid and CPR, and gain important skills on the job through co-op placements. SHSM programs vary among the school boards and individual secondary schools and may include: Agriculture, Construction, Energy, Health and Wellness, Hospitality and Tourism, Horticultural and Landscaping, Information and Communication Technology, Manufacturing, and Transportation. Additional information is available on each school board's website.

Dual Credit Program (DCP)

The DCP provides opportunities for secondary school students to experience learning at Lambton College while still in high school. The DCP programs include: Introduction to HVAC (sheet metal, refrigeration and air conditioning, gas fitting and heating), Introduction to Residential Electrical Installations, Styling and Cutting Techniques - Hair, Bakeshop Techniques, Supporting People with Developmental Disabilities, Horticulture - Arboriculture, and Chainsaw Practices and Renovation Tools and Techniques. Additional information is available at: https://www.lambtoncollege.ca/SCWI/Dual_Credit_Program/

Apprenticeship in College

A person may enter a pre-apprenticeship training program and/or complete a college program related to a skilled trade. Currently, Lambton College offers a Pre-Trades and Technology one-year program. Students learn about careers in the skilled trades and the two- and three-year technician and technology programs at Lambton College. They also have the opportunity to upgrade their knowledge and skills in chemistry and math. Some employers recruit directly from some programs, including: Process Operator: Refinery, Chemical and Liquid Processes, Instrumentation and Control Technician, Industrial Mechanic Millwright, and the Mechanical Technician Industrial Maintenance program (a combination diploma/apprenticeship programs). Additional information is available at:

https://www.lambtoncollege.ca/Admissions/How_to_Apply/Apprentices/

Direct Employer Sponsorship

A person may also start an apprenticeship by finding an employer sponsor. Key community resources exist to support this endeavor including: The Job Bank (<https://on.jobbank.gc.ca/home>), local Employment Ontario offices, unions and trade associations, and community job boards. Once accepted by a sponsor, the apprentice registers through the Ministry of Labour, Training and Skills Development. For anyone under 18 years of age, a paper form is required. For people 18 years and older, an online form can be accessed at: <https://www.eoss.tcu.gov.on.ca/AOL/training/prerequisites>. Upon approval, the apprentice must register with the Ontario College of Trades, and will receive a training agreement detailing the rights and responsibilities of both the apprentice and employer.

Local Unions

A person may apply directly to one of the local trade unions (listed in Appendix 1). Union contracting companies, in turn, draw skilled tradespeople from the unions. Some trades can be both union and non-union. For instance, someone interested in being a Brick and Stone Mason could apply for a job with a local non-union employer or apply to be accepted into their local Bricklayers and Tile Setters union, Local Union 23.

Recent Skilled Trades and Apprenticeship Changes

In the past, new apprentices registered with the Ontario College of Trades when they began their apprenticeship, with both apprentices and apprentice sponsors (local business owners, unions and others) reporting and paying annual membership fees.

At the time of the present report, the Ontario College of Trades is undergoing a period of transition and a new structure for the skilled trades and apprenticeship system is being established. The Modernizing the Skilled Trades and Apprenticeship Act, 2019, passed on May 29, 2019 has set out a new legislative framework governing the practice of skilled trades in Ontario and the apprenticeship training and certification.

The Ontario College of Trades continues to issue skilled trades licenses and collect dues according to a new payment structure. In April 2019, the membership fees for apprentices have been eliminated and membership fees for journeypersons have been reduced by 50%. More information can be found at: <https://www.collegeoftrades.ca/membership/become-a-member/classes-of-members-fees>

At the time of this report, apprentices and sponsors are to report directly to MLTSD. The most current information can be found on their website: <https://www.ontario.ca/page/skilled-trades>

Part 2: The Skilled Trades in Sarnia Lambton

To create a snapshot of the in-demand skilled trades in Sarnia Lambton, 115 employers from the Motive, Service, Construction, and Industrial sectors were recruited to take part in the study. In total, 95 interviews and 20 online surveys were completed between August and January 2020. The employers were asked about three key areas: the important issues impacting the skilled trades in Sarnia-Lambton; key issues with recruitment and retention; and strategies to support the recruitment of new apprentices and journeypersons, and to improve apprenticeship training. The interview responses were examined to determine the key themes or categories that were pertinent to employers. Overall, according to local employers, the issues impacting the skilled trades can be grouped into two broad categories: fear for the future of skilled trades and the impact of technological change.

Fear for the Future of Skilled Trades

Supply and demand

Across all four sectors, employers consistently stated that there will be a shortage of skilled tradespeople over the next five years and beyond, and that they are fearful for the future of the skilled trades. Employers outlined the substantial growth in the Sarnia-Lambton economy due to major expansions in the petrochemical industry and additional housing needs of the aging population. These construction projects combined with planned shutdowns will create job opportunities for skilled tradespeople.

In addition to these local needs, there will also be a demand for skilled tradespeople for projects outside of Sarnia-Lambton. These include Ontario Power Generation (OPG) projects such as the Darlington Refurbishment Project, the Bruce Power refurbishments as well as the construction of the Gordie Howe International Bridge in Windsor. Employers suggested that these projects might also contribute to a local shortage of skilled tradespeople.

Age of journeypersons

Many employers suggested that the average age of journeypersons is higher than ever before, with many approaching retirements. Employers who are struggling to find qualified workers fear the problem will only get worse as many of the current supply of skilled tradespeople retire.

The upcoming retirements, in combination with the entrance of relatively young apprentices, has created an experience gap. As it takes between three and five years to become licensed in a skilled trade, employers are concerned that their journeypersons will retire before their apprentices are full trained.

Interest in the skilled trades

Most employers felt that there was an overall lack of interest in joining the skilled trades today, and a negative perception of the skilled trades, in general. They identified many possible reasons including: insufficient knowledge of the actual skills required for specific skilled trades, the physical demands of some of the skilled trades, a lack of opportunities for students to experience hands-on opportunities in schools because of fewer hands-on classes, and a lack of understanding of the excellent salary and career potential.

Wages

Non-union employers expressed difficulty in competing with the higher wages and benefits that unions can offer; therefore, potential apprentices may gravitate to the unions. This may create greater difficulty for non-union companies to attract new apprentices and skilled tradespeople.

The Role of Technological Change

The impact of technological change depends on the sector, the specific trade, and the size of company. In both the Motive and Industrial sectors, employers highlighted many new technologies that extensively changed the nature and scope of their work. For example, in the past, new automotive diagnostic scanners created the need to have a knowledge of computers and created a more efficient process to scan a car's engine. Thus, especially in the Motive sector, employers suggested new apprentices possess technological aptitudes to excel.

Employers in the Construction sector suggested that the changes in technology were more adaptable changes. For example, the addition of GPS for heavy equipment operators and the use of tablets for logging work orders.

In the Service sector, there have been very few recent technological advancements. Some restaurants previously adopted the use of a tablet-based ordering system to increase the speed in which the assistant cooks/chefs receive orders.

Generally, smaller companies across all sectors cited the fact that some upgrades or replacement of equipment to be more technologically advanced were prohibitive due to cost and subsequent training. This is especially true when the training is not offered locally, leading to additional costs for travel and accommodations for training.

In-Demand Skilled Trades

Employers across all four sectors specifically highlighted several trades they consider to be the most in-demand in Sarnia-Lambton. As noted in Table 1 below, depending on the sector and the size of the business (union or non-union), the shortage of skilled tradespeople was more substantial. Smaller employers tended to suggest a greater need for skilled tradespeople and few options for hiring apprentices. Some larger businesses, especially those with a union presence, suggested the shortage might be less detrimental to their business. Employers suggested that the shortage of skilled tradespeople might be less impactful on businesses with union presence as they can draw on skilled tradespeople from outside the province in times of great need.

Table 1: In-Demand Skilled Trades by Sector

Sector	In-Demand Trade
Motive	Auto Body and Collision Damage Repairer, Auto Body Repairer, Automotive Service Technician, Heavy Duty Equipment Technician, and Marine Engine Mechanics.
Service	Assistant Cooks, Chef, Child and Youth Workers, and Hairstylists.
Construction	Heavy Equipment Operators (Dozer, Excavator, Tractor Loader Backhoe and Mobile Crane Operators), Laborers (Cement Finisher and Construction Craft Worker), Carpenters, Electricians, Pipefitters/Steamfitters; Pipe Welders and Construction Boilermakers and Boilermaker Welders, Construction Millwrights, Plumbers, Carpenters, Painter, Brick and Stone Mason, Insulators
Industrial	Process Operator: Refinery, Chemical and Liquid Processes, Instrumentation and Control Technician, Industrial Mechanic Millwrights, Ironworkers, Welder, Metal Fabricator Fitter

The Apprenticeship Model

Most employers saw the value in offering apprenticeships in order to allow for economic growth. In the Motive, Construction, and Industrial sectors, the majority of the employers have in the past or are currently sponsoring apprentices. In the Service sector, only three of 29 employers have sponsored an apprentice in the past (none are currently).

Employers identified several barriers that may be related to the shortage of apprentices. Several employers suggested that there were less youth entering the trades due to several factors including a lack of understanding about the apprenticeship process and the financial supports available for employers and apprentices (see Appendix 2 for links to math and literacy supports available for apprentices). Other barriers identified were; competition for apprentices from larger businesses; especially those with a union presence, fear of the apprenticeship exams, issues with language and math literacy skills required for the apprenticeship classroom training, and a lack of local training facilities for some trades. Several strategies were offered to improve these

barriers. Employers highlighted the importance of local organizations that can support the literacy of apprentices. To reduce anxiety surrounding the Red Seal exam it was suggested that the exam be offered where the apprentice has spent their in-class learning portion. Finally, employers stressed the importance of expanding local training facilities to help attract and retain youth.

Employers also highlighted that some small business owners might stray away from sponsoring an apprentice due to the significant time commitment that can often take away from their other work. Employers suggested that if business owners were aware of the benefits of having an apprentice; decreasing their own future work load, building a relationship with a potential new employee, sharing their vast knowledge, and the financial supports available, they might be open to sponsoring more apprentices. Some employers suggested that the current 8-week session, done three times over four years to train as a journeyman, might be difficult for some employers to manage, especially in busy times. Other employers suggested that by reducing enrollment restrictions, this would allow more apprentices to begin training. Some employers in the Industrial sector mentioned that training for some trades could be combined, such as a combined millwright/machinist program. By combining these two programs, you will give potential apprentices more options while better meeting the needs of employers in the sector.

Generally, employers suggested that once apprentices are registered in the apprenticeship program they tend to complete the training as long as they have consistent work available and a path towards advancement and promotion. If apprentices do not get enough hours, they may leave prior to completing their apprenticeship, believing they will not amass enough hours to become licensed journeymen.

Summary

Of the 115 employers who took part in the research, the majority suggested there is a drastic need for skilled tradespeople in Sarnia-Lambton. Employers anticipate the current shortage will continue and likely increase in the next five years as the current workforce retires and/or large-scale projects move forward.

There is a need to attract more youth to the skilled trades to combat this shortage. Some strategies identified include better promotion of the skilled trades and better promotion of the opportunities presented by a career in the skilled trades. Other strategies revolve around better promotion of the financial resources available and more local facilities to attract and retain youth.

Although there may be issues, the apprenticeship model overall was highlighted as a good way to learn with a balance of on-the-job and in-school training, which has proven to be a valuable approach to increasing the number of skilled tradespeople at a business. When learning directly relates to the work being done in a business, a pipeline of new skilled tradespeople is created. It was stated that apprentices are the basis of all expansion in the future as they enable a business to grow from within and retain employees.

Appendix 1: Local Unions and Contact Email

Boilermakers: Local Union No. 128 Email: dquinn@ibblocal128.org	Millwrights: Local Union No. 1592 Email: dmcintosh@millwrightont.com
Bricklayers and Tile Setters: Local Union No. 23 Email: brickandtile@bellnet.ca	Operating Engineers: Local Union No. 793 Email: sbooze@iuoelocal793.org
Carpenters: Local Union No. 1256 Email: bob@carpentersunionsarnia.com	Painters: District Council 46, Local Union No. 1494-1590 Email: sarnia@1590.iupat.org
Cement Masons: Local Union No. 598 Email: tmollica@local598.ca	Plasterers: Local Union 124 Email: local124@idirect.com
Electricians: Local Union No. 530 Email: frank@lu530.com	Pipefitters: Local Union No. 663 Email: rtius@local663.com
Insulators: Local Union No. 95 Email: john.swart@insulators95.com	Sheet Metal Local Union No. 235 Email: mike@smw235.com
Ironworkers: Local Union No. 700 Email: dsmith@iw700.com	Teamsters: Local Union No. 879 Email: dhogan@teamsters879.ca
Labourers: Local Union No. 1089 Email: dani@liuna1089.org	

Source: Sarnia Construction Association Membership and Trade Directory 2019/2020

Appendix 2: Web Links of Incentives and other supports for Employers and Apprentices

Employer Incentives

1. **Apprenticeship Completion Employer Bonus** - How to qualify and apply for an apprenticeship as well as a complete listing of the 27 eligible trades - <https://www.ontario.ca/page/hire-apprentice#section-0>.
2. **Apprenticeship Job Creation Tax Credit** - Apprentice must be registered in a Red Seal Trade - <https://www.canada.ca/en/revenue-agency/services/tax/individuals/topics/about-your-tax-return/tax-return/completing-a-tax-return/deductions-credits-expenses/line-41200-investment-tax-credit/apprenticeship-job-creation-tax-credit.html>

Apprentice Incentives

1. **Starting an Apprenticeship** - Resources for apprentices including eligibility requirements and application procedures - <https://www.ontario.ca/page/start-apprenticeship#section-4>
2. **Finishing An Apprenticeship** - Steps to completing an apprenticeship program, information on loans for tools and the Apprenticeship Completion Bonus (non Red Seal trades, up to \$2000) - <https://www.ontario.ca/page/finish-apprenticeship#section-4>
3. **Canada Apprentice Loan** - Financial support to complete the apprenticeship (for Red Seal trades, up to \$4000 in loans) - <https://www.canada.ca/en/employment-social-development/services/apprentices/grants.html>
4. **Apprenticeship Grants for Women** - Information on Grants for Women in Red Seal trades with low female representation (up to \$6000) - <https://www.canada.ca/en/employment-social-development/services/apprentices/grants.html>

Employment Insurance for Apprentices

1. Provincial funding during apprenticeship classroom training (up to \$1500) - <https://www.ontario.ca/page/start-apprenticeship>
2. Federal support during apprenticeship classroom training - <https://www.canada.ca/en/employment-social-development/services/apprentices/ei-apprentices.html>

Math and Literacy Supports for Apprentices

1. Organization for Literacy in Lambton - www.readsarnia.com
180 College Avenue N., Room 103, Sarnia, ON N7T 7X2
Phone: 519-332-4876
2. Lambton-Kent District School Board - <http://www.lkdsb.net>
Alternative and Continuing Education Centre
660 Oakdale Avenue, Room 30, Sarnia, ON N7V 2A9
Phone: 519-383-8787, Ext. 4
3. Lambton College - www.lambtoncollege.ca/upgrading
1457 London Rd., Sarnia, ON N7S 6K4
Phone: 519-542-7751 Ext. 3535
4. Aamjiwnaang First Nation Administration Office, 978 Tashmoo Avenue, Sarnia, ON Phone (519) 336 – 8410