

Skilled & Ready: Polytechnic Solutions for Canada's Labour Market Demand

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POLYTECHNICSCANADA

Acknowledgements

We thank The Conference Board of Canada for collecting and analyzing data related to 2023 online job postings, including skills in high demand and the degree to which these skills are developed at Canada's polytechnics. The Conference Board of Canada is an independent, not-for-profit research organization that equips Canada's leaders with insights and information in policy areas of critical interest.

The cover photo is courtesy of the School of Applied Computer Science & Information Technology at Conestoga College.

About

Polytechnics Canada is the voice of leading research-intensive, publicly supported polytechnics and institutes of technology. We advocate for federal action in areas where polytechnics provide solutions for a more innovative, productive and globally competitive country. Polytechnics Canada members play a critical role in addressing some of the country's greatest challenges. Through their facilities and networks, our members provide meaningful solutions to industry problems and accelerate knowledge transfer.





Table of Contents

Executive Summary	
Key Findings	2
Overview	
Healthcare	6
Employment Outlook	8
Educational Requirements	8
Policy Recommendations	11
Skilled Trades and Adjacent Occupations	13
Provincial Disparities	16
Employment Outlook	17
Policy Recommendations	20
Information and Technology	22
Hiring Demand	24
Employment Outlook	25
Spectrum of Skills	26
Educational Requirements	27
Policy Recommendations	28
Tourism and Hospitality	30
Employment Outlook	30
Provincial Disparities	31
Educational Requirements	32
Skills for Success	33
Policy Recommendations	34
Care Economy	35
Childcare and Early Learning	35
Educational Requirements	36
Employment Outlook	37
Social Services	38
Policy Recommendations	
Appendix: Methodology and Data Sources	41
Economic Analysis	41
Data Sources	41
Program Review	42
Occupation Groupings	42
In-demand Skilled Occupation Clusters, 2023	42



Unarouped Occupation	Clusters by Ranking (1-100)43
		,

Table of Figures

Figure 1: Hiring demand in all occupations (share of 2023 postings, per cent)	4
Figure 2: Breakdown of hiring demand in skilled occupations (share of all postings, per cent)	5
Figure 3: Top healthcare job postings in 2023 (ranking in top 100)	7
Figure 4: Share of healthcare postings by province	7
Figure 5: Employment outlook for in-demand healthcare occupations (2023 - 2028)	8
Figure 6: Demand for credentials	9
Figure 7: Top 10 skills for in-demand healthcare occupations	10
Figure 8: Top skilled trades job postings in 2023 (ranking in top 100)	14
Figure 9: Most in-demand skilled trades occupations in 2023	14
Figure 10: Rate of apprentice unionization by province (2013 - 2017)	15
Figure 11: Share of skilled trades job postings by province	17
Figure 12: Demand for credentials	18
Figure 13: Top 10 skills for in-demand construction occupations	18
Figure 14: Top 10 skills for in-demand industrial occupations	19
Figure 15: Top IT job postings in 2023 (ranking in top 100)	23
Figure 16: Sectors seeking IT talent in 2023 (proportion of job postings)	23
Figure 17: Share of IT job postings by province	24
Figure 18: Average hourly wage by province	24
Figure 19: Employment outlook for in-demand IT occupations (2023 - 2028)	25
Figure 20: Certifications required for in-demand IT occupations	
Figure 21: Top 10 skills for in-demand IT occupations	26
Figure 22: Top tourism and hospitality job postings in 2023 (ranking in top 100)	31
Figure 23: Employment outlook for in-demand food services occupations (2023 - 2028)	31
Figure 24: Demand for food services roles	
Figure 25: Demand for credentials	33
Figure 26: Top 10 skills required in food services roles	33
Figure 27: Share of job postings for childcare and early learning occupations	36
Figure 28: Employment outlook by province (2023 – 2028)	37
Figure 29: Top 10 skills for in-demand childcare and early learning occupations	37
Figure 30: Certificates required for childcare and early learning roles	38

Executive Summary

With a focus on strategic workforce development, the polytechnic model of education combines theory and practice, enabling learners to use the tools and equipment required in today's workplaces while learning directly from industry professionals. Experiential and hands-on training provides graduates with both relevant competencies and the confidence to apply them, positioning them for immediate and long-term success in the labour market. Opportunities to build a professional network while in school support smooth transitions into the workforce.

In a fast-paced world of work, the ability of polytechnics to combine the development of technical and employability skills with pragmatic experience and insights about the challenges and realities of today's employers is a key differentiator. Maintaining that value proposition requires vigilance and flexibility, consistent communication with and input from employers, as well as the ability to update and renew technology, equipment and other infrastructure to stay ahead of emerging trends. These are the ingredients that make a polytechnic education uniquely responsive to the labour market.

To better illustrate the extent to which polytechnic education responds to labour market demand for talent, Polytechnics Canada contracted The Conference Board of Canada to assess skill requirements for the top 100 in-demand occupations in the five provinces where its members are located. Using data from Vicinity Jobs, Statistics Canada and its proprietary Model of Occupations, Skills and Technology, The Conference Board assessed more than 2 million job postings in 2023, compared wages by credential and provided five-year job forecasts.

For context about the nature of labour market demand across Canada, Polytechnics Canada considered sector-specific information and forecasts, assessing the degree to which polytechnic programs are responsive to local, regional and national requirements. We further considered the role of continuing education and lifelong learning – a critical factor in ensuring mid-career workers are able to maintain their skillsets and adapt to occupational change over time. We found that our members have substantial program offerings that cater both to individuals seeking upgrading and employers looking to upskill their workforce in these critical areas of labour market demand.

This report is divided into occupational clusters, offering insights into the degree to which polytechnics serve foundational sectors of the Canadian economy, including healthcare, skilled trades, information and technology, tourism and hospitality, and care occupations. According to the analysis conducted by The Conference Board of Canada, these sectors are experiencing high demand for roles for which post-secondary credentials are generally required.

The report includes:

- Hiring demand analysis related to the most in-demand occupations by examining frequency and growth trends in online job postings in clusters of interest
- **Multi-dimensional analysis** to determine the educational requirements of in-demand jobs and identify the skills employers are seeking
- Employment projections for in-demand occupations over the next five years using The Conference Board of Canada's proprietary forecasting model
- Labour market gap analysis to provide insight on the labour market dynamics of the indemand skilled occupations
- **Policy recommendations** that stand to enable and support Canada's polytechnics in their efforts to address critical labour market demand in key sectors

Key Findings

- The most in-demand skilled occupations can be found in five clusters: healthcare, skilled trades, information and technology, tourism and hospitality, and care occupations including childcare, social services and early education. All five clusters demonstrate robust hiring demand in 2023, despite cooling in the overall job market. Employment in these fields is projected to experience steady growth in the next five years.
- Employment and job postings data reveal significant labour shortages in the five high-demand occupation clusters, particularly for skilled workers with post-secondary education. Job postings requiring apprenticeships, diplomas or certificates offered substantial wage premiums and increases in 2023.
- Polytechnics Canada member institutions offer programming that prepares graduates to work in 86 per cent of in-demand skilled occupations within these five clusters.
- Polytechnics offer programming that equip graduates to work in six of nine in-demand healthcare occupations (registered nurses and licensed practical nurses, home support workers and caregivers, nurse aides and patient service associates, pharmacy technical assistants and dental assistants). In-demand healthcare roles are expected to increase by 8.4 per cent over the next five years.
- Polytechnics are well-equipped to meet hiring demand for skilled construction occupations, an industry that is forecasted to experience ongoing high demand with projected retirements and acute need for new entrants. As the sector evolves to meet the demands of a green transition, polytechnics are developing programming for both active apprentices and for those at mid-career.
- In the IT sector, 85 per cent of polytechnics offer at least one degree program and all offer at least one diploma program to prepare graduates for careers.
- Food service roles (cooks, bakers, chefs and food service supervisors and managers) account for 18.5 per cent of skilled job postings. This group experienced a 6.6 per cent rise



in job postings from 2022 to 2023. This is just one category within the broader tourism and hospitality sector where the Canadian labour market is in critical shortage.

In 2023, care occupations were in high and increasing demand. While the population is aging and elder care is becoming critical, the other end of the age spectrum has also been experiencing growth. For example, childcare and early education accounted for approximately 6 per cent of in-demand skilled roles, with job postings rising by 10.9 per cent and the average wage increasing by 5.9 per cent. As the federal government pursues \$10/day daycare across the country, the need for skilled workers in this sector will continue to increase.

Policy recommendations included in each section of this report outline opportunities to overcome existing barriers and enable Canada's polytechnics to maximize their labour market impact. While post-secondary education is a jurisdictional responsibility, the federal government is primarily responsible for workforce development – a fundamental focus of polytechnic education. As a result, our recommendations largely speak to federal policy levers. Common themes include upskilling, infrastructure and equipment, and the better utilization of international talent.



Overview

Canada's job market shows a stark concentration in hiring demand. Of the 515 occupations tracked by Vicinity Jobs, the top 100 occupations accounted for more than 80 per cent of all online job postings in 2023.¹ Notably, 42.3 per cent of the overall hiring demand was for skilled occupations typically requiring post-secondary education and classified under TEER 1-3.²

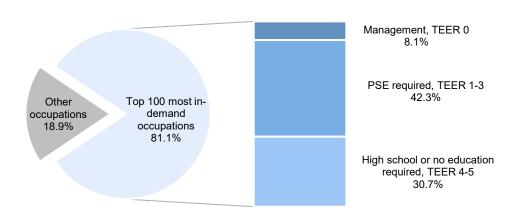


Figure 1: Hiring demand in all occupations (share of 2023 postings, per cent)

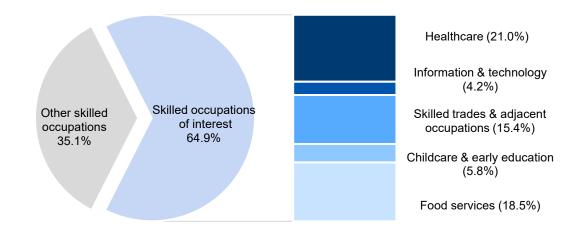
Source: The Conference Board of Canada; Vicinity Jobs

Among the top 100 most in-demand skilled occupations, five occupational clusters were particularly noteworthy – healthcare, skilled trades, information and technology, hospitality and tourism, and care occupations. These sectors play an indispensable role in Canada's economic future. Collectively, these five occupational clusters accounted for 65 per cent of the most sought-after skilled roles and represented a fifth of all job postings in 2023.

¹ Vicinity Jobs is a Canadian big data analytical platform that gathers real-time online job postings data from across the country. It tracks 515 occupations nationwide.

² In the context of the National Occupational Classification (NOC), a TEER category corresponds to the type and/or amount of training, education, experience and responsibility typically required to work in an occupation. The NOC consists of six TEER categories, identified 0 through 5, which are expressed as the second digit of the NOC code.

Figure 2: Breakdown of hiring demand in skilled occupations (share of all postings, per cent)



Source: The Conference Board of Canada; Vicinity Jobs

Even as Canada's overall job market began to cool in 2023, the five in-demand skilled occupation clusters identified in this report defied the trend, demonstrating relative growth and resilience. From 2022 to 2023, the total number of online job postings dropped by 14.3 per cent overall, but the share of job postings for these occupation clusters increased by 2.3 percentage points. Hiring demand was particularly strong in tourism and hospitality and care sectors.

Moreover, in a year where many industries saw stagnation or marginal gains in labour productivity, these occupations experienced substantial growth in the hourly wage offered, signaling strong competition for talent. The wage hikes reflect both a scarcity of skilled workers and the importance of these roles. In the case of IT, healthcare and skilled trades occupations, hourly wages were well above the average for all job postings. Given the degree to which these occupations dominated Canadian job postings, it is important to consider whether training programs are providing a sufficient pipeline of talent.

This research indicates that Polytechnics Canada member institutes offer programming that prepares graduates to work in 86 per cent of in-demand skilled occupations within these clusters.³ The study identifies barriers to meeting the growing need for skilled labour and offers policy recommendations that stand to further support polytechnics in their efforts to build a robust talent pipeline to meet current and future labour needs.

³ Unless otherwise specified, all data and analysis presented in this report are restricted to the five provinces where Polytechnics Canada members are located: British Columbia, Alberta, Saskatchewan, Manitoba and Ontario.



Healthcare

Healthcare is a cornerstone of the Canadian labour market, accounting for nearly one-fifth of the most indemand skilled occupations in 2023. The demand is incredibly diverse, including both frontline workers and those who fill technical roles that Canadians rarely realize make up the sector's critical support system. While doctors, registered nurses and licenced nurse practitioners continue to be indispensable – amplified by an aging population and the enduring strain of the pandemic – these occupations rely on a series of other specialized roles, including technicians, paramedics, therapists and administrators.

While Polytechnics Canada member institutions offer training in a wide variety of healthcare occupations, this analysis considered the nine in highest demand in 2023. Of these, member institutions offer programming that equips graduates to work in six, namely registered nurses and licensed practical nurses, home support workers and caregivers, nurse aides and patient service associates, pharmacy technical assistants and dental assistants.

KEY FINDINGS

- Provinces served by Canadian polytechnics are expected to see robust employment growth in healthcare occupations at an average rate of 8.4 per cent over the next five years
- Occupations requiring a certificate or diploma saw the highest increase in wages between 2022 and 2023, though workers with Bachelor's degrees remain the highest paid
- Most job postings (73.2 per cent) sought workers with one to five years' experience

Polytechnics do not currently train pharmacists, occupational therapists or physiotherapists. Notably, 85 per cent of Polytechnics Canada members offer programming designed to train registered nurses, the most in-demand role in the occupational cluster.

Illustrating the broader shortage of healthcare professionals, recent federal efforts to initiate and expand the Canadian Dental Care Plan have prompted the Canadian Dental Association to note a severe shortage of dental assistants across Canada. In testimony before the House of Commons Standing Committee on Human Resources, Skills and Social Development and the Status of Persons with Disabilities in April 2022, the association noted that dental office hours are being altered or reduced to accommodate a staffing shortage.⁴

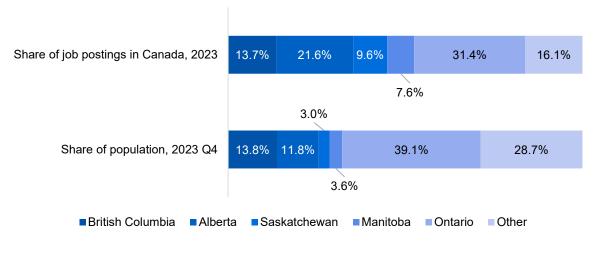
⁴ Canadian Dental Association, "CDA Addresses HUMA Committee on Dental Assistants Labour Shortage in Canada." Apr 2022. <u>https://www.cda-adc.ca/EN/about/media_room/news_releases/2022/HUMA_labour_shortage.asp</u>

Figure 3: Top healthcare job postings in 2023 (ranking in top 100)

Occupation	Rank in demand
Registered nurse and registered psychiatric nurse	4
Home support worker, caregiver and related occupations	14
Nurse aide, orderly and patient service associate	18
Licensed practical nurse	19
Pharmacy technical assistant and pharmacy assistant	48
Pharmacist	68
Dental assistant and dental laboratory assistant	72
Occupational therapist	83
Physiotherapist	98

The analysis showed an acute need for skilled healthcare workers in Manitoba, Saskatchewan and Alberta. Despite smaller population sizes, these provinces post a disproportionate number of job vacancies in the sector.

Figure 4: Share of healthcare postings by province



Note: Population share is calculated from Statistics Canada - <u>Quarterly Population Estimates</u> Source: The Conference Board of Canada; Vicinity Jobs; Statistics Canada



Employment Outlook

In-demand healthcare roles are expected to experience a significant boom, with employment levels projected to increase sharply over the next five years. Across the provinces where Polytechnics Canada member institutions are located, the number of people working in these roles is expected to increase by 8.4 per cent. This surge underscores a growing need for skilled professionals to meet the rising healthcare demands of an aging population and pressures on the public health system.

Alberta is projected to experience a pronounced increase in healthcare employment due to rapid population growth and an expanding healthcare infrastructure (13.1 per cent). In Ontario, growth is forecasted at 7.4 per cent. According to the Dalla Lana School of Public Health at the University of Toronto, by 2040, roughly one-quarter of adults over the age of 30 will be living with a major illness, underscoring the need for a robust continuum of care.⁵

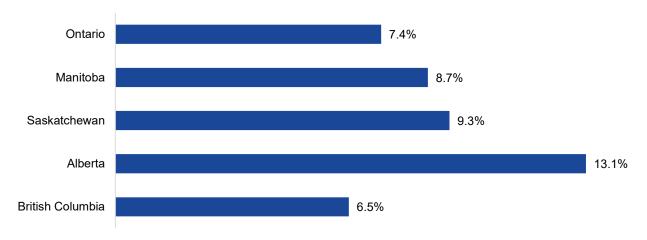


Figure 5: Employment outlook for in-demand healthcare occupations (2023 - 2028)

Source: The Conference Board of Canada

Educational Requirements

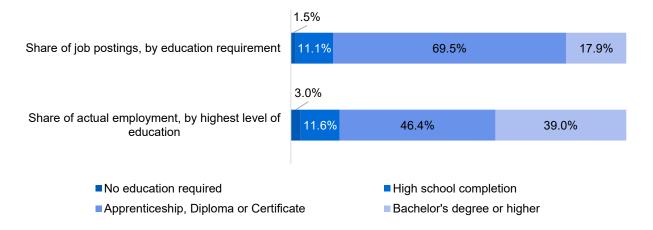
In 2023, approximately 70 per cent of job postings for in-demand healthcare roles specified the need for a college diploma or graduate certificate, while 18 per cent were seeking qualifications at the Bachelor's level or above. This contrasts sharply with the educational composition of the actual workforce as recorded in the 2021 census, where 46 per cent held diplomas or certificates and 39 per cent possessed Bachelor's degrees or advanced credentials.

⁵ Dalla Lana School of Public Health, "Projected patterns of illness in Ontario." University of Toronto, Oct 2024. <u>https://www.dlsph.utoronto.ca/2024/10/16/new-study-shows-significant-strain-on-health-care-system-over-the-next-two-decades/</u>

This disparity highlights a skill mismatch between the qualifications sought by employers and the educational realities of the current workforce. The preference for diploma or certificate holders reflects an emphasis on specialized, practical training, as well as hands-on skills and sector-specific expertise.

In 2023, healthcare workers with diplomas or certificates experienced the highest increase in wage offerings compared to candidates with other educational backgrounds, with an average growth rate of 5.7 per cent. Every Canadian polytechnic within the membership offers at least one certificate or diploma program for in-demand healthcare roles, with most offering training in several occupations.

Figure 6: Demand for credentials



Note: Data on the share of those employed in the high-demand healthcare occupations originate from the 2021 census – Occupation unit group by labour force status and highest level of education

Source: The Conference Board of Canada; Vicinity Jobs; Statistics Canada

A closer look at the healthcare job market shows that certifications in high demand include CPR, Basic Cardiac Life Support, First Aid, Health Care Aide and Personal Support Worker certificates. Patient care is a top priority for employers, alongside strong communication and teamwork capabilities. Decision-making and problem-solving are also crucial, reflecting the need for swift, effective responses in complex situations. Leadership, organizational and interpersonal skills illustrate the importance of coordination and empathy in healthcare settings. Flexibility and planning complete the list, emphasizing the dynamic nature of the field and the necessity for proactive, adaptable professionals.



Figure 7: Top 10 skills for in-demand healthcare occupations

Technical skills	Appearance in job postings
Patient care	61.8%
Decision-making	33.9%
Problem-solving	33.1%
Organizational skills	28.4%
Planning	22.6%

Soft skills	Appearance in job postings
Communication skills	59.7%
Teamwork	51.5%
Leadership	29.7%
Interpersonal skills	28.2%
Flexibility	23.9%

Source: The Conference Board of Canada; Vicinity Jobs

While the hiring demand analysis indicates strong employment prospects, it does not reflect existing pressures within the sector. According to the Fraser Institute, wait times in 2022 were the longest recorded and had ballooned by 195 per cent since 1993.⁶ According to Statistics Canada, in 2021, 92 per cent of nurses reported feeling more stressed at work and 24.4 per cent intended to leave their job within the next three years.⁷ These systemic pressures must be considered in labour market responses.

The current challenges require solutions beyond the typical prescriptions for acute labour market demand, which generally rely on expanded immigration pathways, accelerated educational programming, additional training seats and career promotion efforts. To make long-term progress in this sector, these approaches should be accompanied by policy levers designed to support long-term success. For example, mid-career upskilling has a role to play when it comes to workforce retention, ensuring healthcare providers have the necessary skills and support to deal both with technical advancements and day-to-day stresses. Polytechnics have well-established continuing

 ⁶ Mackenzie Moir and Bacchus Barua, "Waiting Your Turn: Wait Times for Health Care in Canada, 2022 Report." Fraser Institute, Dec 2022. <u>https://www.fraserinstitute.org/studies/waiting-your-turn-wait-times-for-health-care-in-canada-2022</u>
⁷ Statistics Canada, "Experiences of health care workers during the COVID-19 pandemic, September to November 2021." Jun 2022. <u>https://www150.statcan.gc.ca/n1/daily-quotidien/220603/dq220603a-eng.htm</u>



education departments able to develop and deliver curated training to meet new and emerging needs, as many did during the COVID-19 pandemic. This is a solution that should accompany any move toward accelerated programming.

There are further benefits to considering how to retain healthcare workers by engaging them in the training ecosystem. As demand for new entrants increases, one of the most significant challenges faced by post-secondary institutions is the ability to source highly qualified instructors. There may be opportunities to remediate both issues with cooperative arrangements that enable nurses to use their skills in a post-secondary environment during term assignments. Such an approach supports program expansion objectives and stands to ensure critical skillsets continue to serve the labour market.

Given the jurisdictional complexities of healthcare funding and the related training ecosystem, these approaches require ongoing cooperation between levels of government equally committed to finding long-term solutions to Canada's healthcare crisis.

Policy Recommendations

Given intense labour market demand in Canada's healthcare occupations, Polytechnics Canada offers the following policy recommendations designed to increase workforce supply and maximize the contributions that polytechnics are making to this sector. We believe these are levers available to the federal government.

Ensure federal infrastructure funding supports public institutions with technology and equipment purchases required to train Canadians for a rapidly evolving labour market

Training equipment is both expensive and necessary to the technical and hands-on programming offered by Canada's polytechnic institutions. In the healthcare sector, it is essential to provide learners with spaces that reflect the realities of their future workplaces and opportunities to practice new skills without risk. This approach has innumerable benefits, not least of which is the ability to transition seamlessly into work with the competencies and confidence to hit the ground running. Training equipment includes high-fidelity mannequins and simulators, as well as industry-standard tools and materials, an investment that often costs hundreds of thousands of dollars. Institutions have well-established relationships with industry vendors and suppliers, as well as philanthropic sources that can help offset the cost of new equipment. To maximize program flexibility, federal funding should not be prescriptive about the source of matching or offset financing. Because investments in training equipment are required on an ongoing basis, long-term funding programs are required.



Fast track foreign credential recognition

Canada continues to rely on immigration to meet its workforce needs. The healthcare sector is one of the most difficult when it comes to recognizing foreign credentials and enabling newcomers to make seamless labour market transitions. Many Canadian polytechnics are having considerable success with programs designed to support these transitions, preparing foreign-trained nurses and other healthcare workers for Canadian regulatory exams and filling skills gaps related to professional practice, language and cultural expectations. These programs require ongoing funding and streamlined immigration processes to be effective. Challenges related to training spaces, technologically advanced equipment, sufficient work-integrated learning placements and the availability of industry-informed instructors require ongoing coordination and communication between the healthcare sector, institutions and all levels of government.

Support accelerated healthcare programming

C.D. Howe Institute recently recommended⁸ that governments work with the educational sector and relevant stakeholders to accelerate programs in areas and skills in particularly high demand. This work requires the further involvement of regulators and sector stakeholders to determine an appropriate balance as new entrants develop their skills, recognizing that learners need time to absorb theory, engage in hands-on practice and prepare themselves to work in a sector under intense pressures. Polytechnic education focuses on providing opportunities for workers destined for the healthcare sector to make mistakes in a safe and supportive environment. While accelerated training stands to move more people into the sector faster, it will be important to pair initiatives with sufficient oversight and training within the workplace. This may require additional training for supervisors, managers and for those overseeing work placements. Combined with prescheduled, deliberate upskilling, there are ways to ensure that healthcare personnel can both move into the sector more quickly and develop the necessary competencies to succeed there long-term.

⁸ C.D. Howe Institute, "Troubles in Canada's Health Workforce: The Why, the Where, and the Way out of Shortages." Nov 2022. <u>https://www.cdhowe.org/publication/troubles-canadas-health-workforce-why-where-and-way-out-shortages/</u>

Skilled Trades and Adjacent Occupations

Of the top 100 in-demand skilled occupations, 15.4 per cent are within skilled trades and adjacent occupations – an occupational group that saw a marked increase in its share of overall job postings between 2022 and 2023. While Canada's polytechnics have risen to meet the challenge, demand remains acute. Aging infrastructure, housing shortages and retirements among an olderthan-average workforce are driving labour market shortages in these fields.

Skilled trades and adjacent occupations are broadly divided into four categories: construction, industrial, transportation and service. The Conference Board of Canada's analysis extended beyond occupations generally defined as skilled trades, including truck drivers and transit operators, among others. This is due to the intertwined nature of these occupations in the data reviewed, including the Canadian Occupational Projection System.⁹ Given pressing housing, advanced manufacturing and infrastructure needs across Canada and the nature of skilled trades training at its member institutions, Polytechnics Canada focuses its commentary in this section on construction and industrial skilled trades.

KEY FINDINGS

- Alberta and British Columbia account for 39.8 per cent of the hiring demand for skilled trades and related occupations
- Polytechnics Canada members offer programs in all highdemand occupations
- The effects of the pressing labour shortages are clear: consistent growth in wages and shifting educational requirements
- The demand for the skilled tradespeople is reflected in the construction, transportation, industrial and service sectors

Skilled trades occupations are in high demand, reflecting their vital role in building and maintaining Canada's physical infrastructure. Canada's ambitious housing development targets only stand to make labour market pressures more urgent. The construction sector is one of the largest in the Canadian economy, representing \$165 billion or 8.0 per cent of GDP.¹⁰ According to a report by the Canadian Federation of Independent Business, the shortage of tradespeople cost Canadian construction firms over \$9 billion in 2022 alone, more than any other sector surveyed.¹¹ Reflecting the level of demand, hourly wages offered for these roles rose from an average of \$28.10 in 2022 to \$29.40 in 2023.

⁹ Canadian Occupational Projection System (COPS), "COPS Occupational Groupings."

¹⁰ Adam McDowell, "The skilled trades shortage is now a threat to Canada's economy—and we're not doing enough to fill the gap." The Hub, Aug 2024. <u>https://thehub.ca/2024/08/07/adam-mcdowell-the-skilled-trades-shortage-is-now-a-threat-to-canadas-economy-and-were-not-doing-enough-to-plug-the-gap/</u>

¹¹ Canadian Federation of Independent Business, "Small Businesses in Canada Hit Hard: The Big Financial Toll of Labour Shortages." Nov 2023. <u>https://www.cfib-fcei.ca/en/research-economic-analysis/financial-impact-labour-shortages-in-canada</u>



Figure 8: Top skilled trades job postings in 2023 (ranking in top 100)

Occupation	Rank in demand
Carpenters	30
Automotive service technicians, truck and bus mechanics and mechanical repairers	36
General building maintenance workers and building superintendents	43
Welders and related machine operators	59
Plumbers	69
Construction millwrights and industrial mechanics	71
Heavy equipment operators	75
Hairstylists and barbers	85
Plasterers, drywall installers and finishers and lathers	86
Estheticians, electrologists and related occupations	93
Machinists and machining and tooling inspectors	94

Figure 9: Most in-demand skilled trades occupations in 2023



Source: The Conference Board of Canada; Vicinity Jobs



Polytechnics Canada member institutions offer programming in all skilled trades categories, making them an important component of the apprenticeship system and critical to meeting labour market demand. Most institutions offer trades discovery programming geared to attracting young people, women and other underrepresented groups. Pre-apprenticeship programming includes full-time certificates designed to provide foundational skills and practical experience, often enabling learners to enter the workforce with their first level of technical training complete. Apprenticeship training is largely delivered in "blocks" that alternate with periods of on-the-job training. This requires workforce attachment with an employer who is committed to training, provides a journeyperson mentor and is able to offer experience in the full scope of the trade. The provision of regular and ongoing work has proven to be a challenge in the construction sector, which is often characterized by project-driven and seasonal employment.

While the federal Canadian Apprenticeship Service has focused on providing wage subsidies to employers who hire first-year apprentices, it fails to address the ongoing challenges presented by poor retention and completion rates. According to a 2020 report published by Statistics Canada, just over a third of all apprentices (36 per cent) achieve certification in double the nominal time to program completion, even in trades experiencing high labour market demand.¹² According to an April 2024 analysis of Registered Apprentices hip Information System data, in the 15 largest Red Seal trades, 46 per cent of male apprentices and 36 per cent of female apprentices completed their training in 2022.¹³

In recent years, governments at both the federal level and in some provinces have shifted funding to support apprenticeship training from public post-secondary institutions to union training centres. The rate of apprentice unionization suggests this strategy is unlikely to result in better rates of completion as it focuses resources on a relatively small proportion of apprentices.

Region	Rate of apprentice unionization
Canada	36.3%
Ontario	36.4%
Manitoba	23.3%
Saskatchewan	23.7%
Alberta	25.1%

Figure 10: Rate of apprentice	unionization by n	$r_{0}/ince (2013 - 2017)$
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¹² Hyeongsuk Jin, Manon Langevin, André Lebel and Michael Haan, "Factors associated with the completion of apprenticeship training in Canada." Statistics Canada, Dec 2020. <u>https://www150.statcan.gc.ca/n1/pub/75-006-x/2020001/article/00008-eng.htm</u>

¹³ Canadian Apprenticeship Forum and Prism Economics & Analysis, "Apprenticeship Registration Trends and Completion Rates." Apr 2024.



Region	Rate of apprentice unionization
British Columbia	26.4%

Source: Statistics Canada

Instead, it is useful to consider how the entirety of the apprenticeship training ecosystem can work together to better support attraction, retention and completion. Where union training centres and post-secondary institutions can collaborate to ensure there are not lengthy waitlists for training and apprentices have access to necessary wraparound supports, the system will be better geared to high-quality outcomes and fewer apprentices likely to succumb to the barriers to certification. There are further opportunities for collaboration in consideration of upskilling as skilled tradespeople navigate the introduction of new technologies, digitization, green transition and climate adaptation. The ongoing requirement for training and upskilling in skilled trades occupations suggests robust capacity across a variety of training partners is essential.

Provincial Disparities

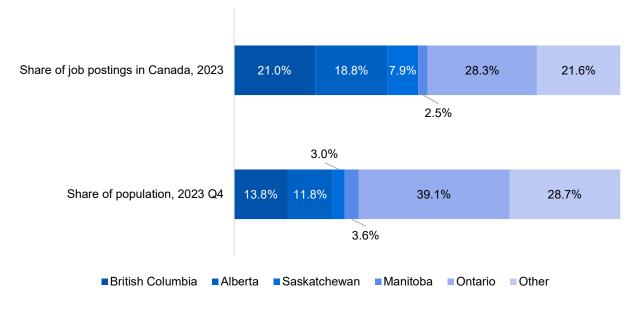
Saskatchewan, Alberta and British Columbia stand out in Canada's job market for in-demand roles in skilled trades and adjacent occupations, with a disproportionately high share of job postings. Moreover, employers in these provinces offer higher wages to attract talent, a clear sign of shortage.

Factors driving the shortage include an aging workforce. According to BuildForce Canada's April 2025 forecast, 268,900 people are expected to retire from construction jobs by 2034. Although the industry is expected to recruit approximately 272,200 new entrants during this period, it is forecasted that the industry will be short 108,300 workers by 2034.¹⁴

For policymakers and educators, addressing the gap in skilled trades and related occupations is not just about filling job vacancies; it's about ensuring the economic health of regions critical to Canada's prosperity. Polytechnics, with their focus on applied learning, have a crucial role to play. Polytechnics Canada member institutions offer programming that prepare graduates to work in five of six in-demand occupations (see Figure 8) in the construction sector, the most in-demand sector within skilled trades and adjacent occupations cluster. Most member institutions also offer programming that prepares graduates for careers in the industrial skilled trades.

¹⁹ BuildForce Canada, "Canada: Construction and Maintenance Looking Forward." Apr 2025.

Figure 11: Share of skilled trades job postings by province



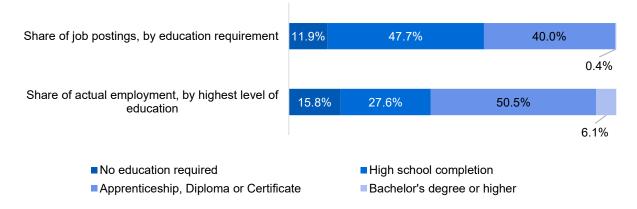
Source: The Conference Board of Canada; Vicinity Jobs; Statistics Canada

Employment Outlook

On average, demand for skilled trades and related occupations is projected to increase by 4.5 per cent. This growth is heavily concentrated in construction trades, where employment is projected to grow by 4.8 per cent. The average hourly wage offered ranges from a low of \$27.70 in Ontario to a high of \$30.60 in Alberta and British Columbia. Given the urgent demand for new housing and an aging skilled trades workforce across the country, it is anticipated that wages will continue to increase.

The pressing labour shortage has impacted educational requirements in high-demand positions. While employers generally prefer to hire fully certified skilled trades professionals, job posting data in 2023 illustrate a greater willingness to hire apprentices. Forty per cent of postings require previous apprenticeship training or certification, with almost half asking only for a high school diploma. In many skilled trades, high school completion is an appropriate starting point for an apprenticeship, suggesting that employers are increasingly willing to train internally to fill workforce vacancies. Those with post-secondary credentials, however, command a 13 per cent higher hourly wage.

Figure 12: Demand for credentials



Source: The Conference Board of Canada; Vicinity Jobs; Statistics Canada

Construction occupations are among those in highest demand, with employers seeking a blend of technical and interpersonal attributes in their new hires. While specialized skills and certifications are in high demand, Red Seal certification is the most likely to drive a wage premium. On average, those with a Red Seal endorsement receive an hourly wage of \$39.00.

Given the urgent need to increase Canada's housing stock, it is worth considering that apprenticeship training and Red Seal certification may not meet the need for tradespeople in the residential construction sector. This sector, made up of a preponderance of small- and microbusiness enterprises, is neither well positioned to hire and train apprentices to the point of certification nor does it require the same workforce make-up as other segments of the construction sector. To meet this need, there are opportunities to utilize polytechnic capacity to develop and deliver targeted diploma programs designed for residential construction and interspersed with meaningful work-integrated learning opportunities. Graduates could be encouraged to consider completing their apprenticeship training over time, challenging the Red Seal exam once they have the requisite experience or embarking on other career pathways, including supervisory or safety roles. Skilled workers are required in all of these areas.

Figure 12 Top	10 alvilla for in domand construction accur	otiono
<i>гідиге із.</i> тор	10 skills for in-demand construction occupation	alions

Technical skills	Appearance in job postings
Repairs/corrective maintenance	53.3%
Blueprint reading	35.4%
Handling heavy loads	24.8%



Technical skills	Appearance in job postings
Installation of building fixtures and components	17.9%
Machinery/equipment repairs	37.2%
Attention to detail	16.5%
Welding	16.3%

Soft skills	Appearance in job postings
Teamwork	44.8%
Communication skills	27.3%
Customer service	18.6%

Source: The Conference Board of Canada; Vicinity Jobs

Figure 14: Top 10 skills for in-demand industrial occupations

Technical skills	Appearance in job postings
Blueprint reading	32.5%
Repairs/corrective maintenance	29.6%
Attention to detail	28.2%
CNC machining	25.6%
Excavator operation	22.9%
Handling heavy loads	18.2%
Lathe operation	17.5%

Soft skills	Appearance in job postings
Teamwork	40.4%
Communication skills	25.4%
Ability to work in a fast-paced setting	19.4%

Source: The Conference Board of Canada; Vicinity Jobs

Policy Recommendations

Training a sufficient number of workers to competency in the skilled trades is more complex than other post-secondary pathways. While training institutions deliver the necessary space, equipment and expert instructors to support technical training, roughly 80 per cent of apprenticeship training is undertaken in the workplace. Unfortunately, many apprentices exit the system due to insufficient support, inconsistent work and/or poor workplace training. The commitment and involvement of employers – who identify, hire, register and mentor workers – is critical to training that is largely work-based.

Canada's Apprenticeship Service has primarily focused on attracting new apprentices and subsidizing first-year training. However, little support exists for progression and completion, despite high rates of attrition before certification.

Apprentices tend to be older than their post-secondary counterparts, at an average age of 27 at the time of registration. They are, as a result, at a stage of life when the costs associated with housing, transportation and family obligations make it difficult to persist without wraparound supports when disruptions occur. Meanwhile, such disruption is commonplace due to the often-seasonal nature of work and procyclical demand, both of which lend instability to the training process.

Offer wage subsidies for journeyperson trainers

Apprenticeship training depends on experienced journeypersons to pass their skills to the next generation. However, with an aging workforce and early retirement trends, Canada faces a critical skilled labour shortage. Reports indicate that, by 2028, more than one million skilled tradespeople will be needed.

We recommend Canadian Apprenticeship Service wage subsidies be extended to include wage support for journeypersons who delay retirement to transition into a role focused on apprentice training. Retaining experienced journeypersons ensures skill and knowledge transfer, while also enabling mentors to transition "off the tools" in the final years of employment. Retaining journeypersons beyond active service to focus on training is beyond the means of most employers. Meanwhile, given the complexities of skill development requirements at each level of an apprenticeship, polytechnics are well-positioned to train the trainers.

Allow tradespeople and apprentices to deduct travel expenses for training and work

We recommend allowing tradespeople and apprentices to deduct travel expenses when employed at a job site or attending technical training more than 100 km from home. This will encourage tradespeople to consider working further away, which is often a requirement of consistent work in these fields. By supporting apprentices, this tax credit benefits those who might otherwise delay training or decline work outside of their geographical area.



Fund apprenticeship intermediaries

Among our G7 counterparts, including Germany, Australia and the United Kingdom, apprenticeship systems include intermediaries to organize, operate and actively encourage employers to engage in apprenticeship training. The government's primary role is to ensure there are organizations – post-secondary institutions, unions or other non-profits – to usher apprentices toward certification. This is a strategy that has the potential to move the needle on apprentice completion.

We propose the federal government establish apprenticeship intermediaries in critical skilled trades occupations, prioritizing trades that experience low completion rates despite strong labour market demand. Intermediaries should assist employers by identifying prospective hires, reducing the administrative burden and pointing to existing subsidies and credits. For apprentices, the intermediaries stand to support placement, encourage a return to technical training when appropriate and offer assistance when obstacles arise. Most importantly, when an apprentice finds themselves unemployed, they have a place to turn for support.



Information and Technology

Demand in information and technology (IT) occupations stood out in 2023. Positions such as business/information systems specialist, data analyst, software developer, engineer and designer experienced heightened demand, a growth trajectory that is expected to continue. Information and technology roles are not confined to a single sector. Instead, demand can be seen in professional services, finance, healthcare and retail, among others. This widespread distribution highlights the extensive need for skilled professionals capable of navigating an increasingly digitized world of work.

While the number of job postings for these roles tends to fluctuate with market conditions, the overall trend is one of solid and continuing growth. Even as the job market cooled in 2023, hourly wages in these positions increased from \$41.40 in 2022 to \$44.00 in 2023. This increase underscores demand for specialized IT skills.

KEY FINDINGS

- While IT job postings as a share of in-demand occupations are comparatively low (2.4 per cent), employment growth is expected to surge
- In addition to technical skills, job postings speak to a consistent need for teamwork and communication skills in these roles
- IT talent is in demand across all sectors as businesses increasingly digitize operations

At the end of 2023, approximately 1.18 million people worked in the IT sector, accounting for roughly 5.8 per cent of the Canadian workforce.¹⁵ Canada's IT sector accounts for 5.7 per cent of the Canadian economy (\$125.5 billion) and is estimated to account for 26.8 per cent of service exports (\$33.7 billion), an increase of 14.8 per cent from 2021.¹⁶ Further, this sector accounts for just under half of all R&D investment in Canada, generally outperforming other sectors.¹⁷

Given the growth of this sector, a steady pipeline of talented professionals is critical. IT skills must increasingly be paired with sector-specific knowledge as both new and traditional sectors move to digitize operations. The fast-moving nature of information technology also suggests that upskilling and professional development will be ongoing requirements.

The advanced technical and technological nature of polytechnic education positions members of Polytechnics Canada to play an increasingly important role in labour market development in the IT sector and by embedding IT skills in training for a wide range of other occupations.

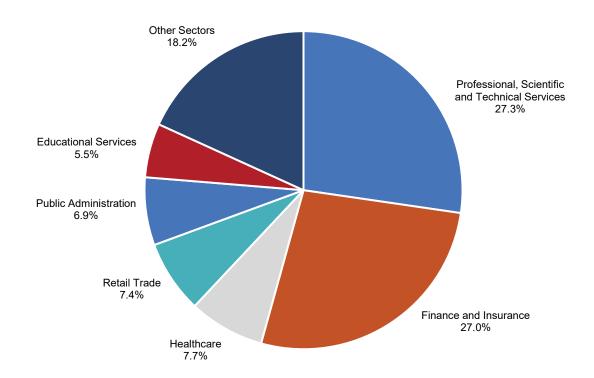
¹⁵ Information and Communications Technology Council, "Charting the Course: The Future of Higher Education in Canada." Jul 2024. <u>https://ictc-ctic.ca/reports/charting-course-future-higher-education-canada</u>

 ¹⁶ Innovation, Science and Economic Development, "Canadian ICT Sector Profile 2023." Government of Canada, Oct
2024. <u>https://ised-isde.canada.ca/site/digital-technologies-ict/en/canadian-ict-sector-profile</u>
¹⁷ Ibid.

Figure 15: Top IT job postings in 2023 (ranking in top 100)

Occupation	Rank in demand
Business systems specialists	41
Software developers and programmers	64
Database analysts and data administrators	76
Software engineers and designers	77
Information systems specialists	87

Figure 16: Sectors seeking IT talent in 2023 (proportion of job postings)



Source: The Conference Board of Canada; Vicinity Jobs

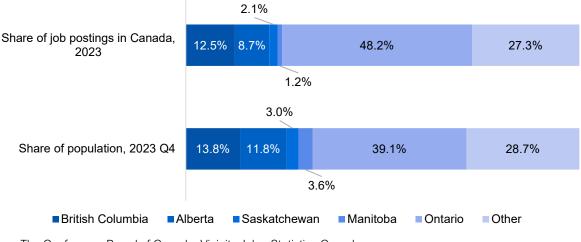


Hiring Demand

IT is a competitive, high-paying field in all provinces where Polytechnics Canada members are located. The tech sector has a strong presence across Canada, driving a robust demand for skilled IT professionals, though Ontario stands out as a hotspot. In Ontario, wages are generally higher (\$45.50 per hour against a national average of \$43.60).

Member institutions located in Ontario offer diverse programming for all in-demand IT occupations, many with multiple options for each. Pathways for information systems specialists, database analysts and administrators are particularly robust.

Figure 17: Share of IT job postings by province



Source: The Conference Board of Canada; Vicinity Jobs; Statistics Canada

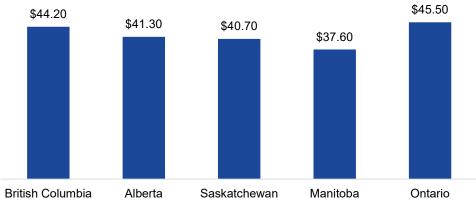


Figure 18: Average hourly wage by province

Source: The Conference Board of Canada; Vicinity Jobs

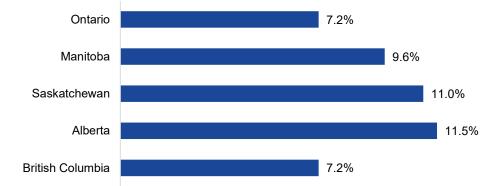
Employment Outlook

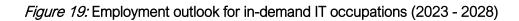
In the rapidly evolving job market, skilled IT occupations stand out with a forecasted employment growth rate of 7.8 per cent over the next five years, with the fastest increases occurring in Manitoba, Saskatchewan and Alberta. This increase underscores the sector's role in the future economy.

As digital transformation accelerates, businesses across all industries are increasingly reliant on advanced technologies. From cybersecurity experts to data analysts, the scope of these roles is expanding, driven by the need to navigate an ever-more complex technological environment. This growth represents a sustained trend.

In a field that is constantly evolving, this demand presents both a challenge and an opportunity. Learners require the practical skills for today's job market and will be expected to stay up-to-date as technology and equipment changes. Aligning curricula with these needs will likely require ongoing employer input, strong instructor-industry connections and the capacity to offer upskilling over the course of a learner's career. In a highly competitive field, those who are most successful are likely to have knowledge about and an understanding of the sector in which they work, as well as complementary employability skills (e.g. teamwork, communication) that enable them to develop effective solutions. Cybersecurity threats, particularly as artificial intelligence makes it more difficult to discern them from regular online communication, represent just one example of an area where IT professionals will require ongoing professional development.

Across Canada, Polytechnics Canada member institutions offer programming that equips graduates to work in all occupations experiencing high demand. Strong emphasis on work-integrated and team-based projects also serves to develop required ancillary skills. Continuing education departments are well-equipped to offer ongoing training throughout an IT professional's career.





Source: The Conference Board of Canada



Spectrum of Skills

Certifications that appeared frequently in IT job postings included Project Management Professional, Six Sigma, Chartered Professional Accountant, Scrum certification and Certified Financial Analyst. These suggest demand for proficiency in project oversight, process improvement, financial acumen and agile methodologies in high-demand IT roles. Skills such as teamwork, communication and problem-solving abilities were also common though less technical in nature. Expertise in Structured Query Language (SQL) and Cascading Style Sheets (CSS) reflect current technologies, though leadership and analytical prowess reflect the need for well-rounded professionals who can navigate both strategic and operational challenges.

While artificial intelligence is likely to transform how the IT sector operates, research from the World Economic Forum suggests employers are already beginning to prioritize the development of soft skills in their technical employees.¹⁸

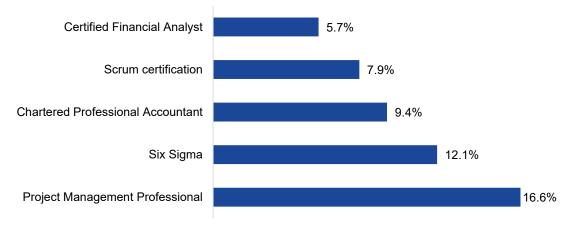


Figure 20: Certifications required for in-demand IT occupations

Source: The Conference Board of Canada; Vicinity Jobs

Figure 21: Top 10 skills for in-demand IT occupations

Technical skills	Appearance in job postings
Problem-solving	30.3%
SQL	30.1%
CSS	28.1%

¹⁸ World Economic Forum, "Future of Jobs 2023." Apr 2023. <u>https://www.weforum.org/publications/the-future-of-jobs-report-2023/</u>



Technical skills	Appearance in job postings
Project management	26.2%
Analytical skills	24.9%
Planning	23.9%
Business analysis	23.6%

Soft skills	Appearance in job postings
Teamwork	59.7%
Communication skills	51.5%
Leadership	28.3%

Source: The Conference Board of Canada; Vicinity Jobs

Educational Requirements

The educational requirements for high-demand IT occupations are consistent with the qualifications of the current IT workforce. Approximately 70 per cent of the job postings require a Bachelor's degree or higher, underscoring a preference for candidates with advanced academic credentials. More than a quarter (26.8 per cent) of job postings indicate a requirement for diplomas or certificates, highlighting the need for specialized skills and practical knowledge to which these often cater.

Polytechnics across Canada offer the full breadth of credentials, with 85 per cent offering one or more degree-level programs. In Ontario, all polytechnics offer at least one degree program to prepare graduates to work in the IT sector while, across the country, all Polytechnics Canada members offer at least one relevant diploma program. Further, all polytechnics offer continuing education options in this field, some geared to non-IT professionals whose workplaces are adopting new systems and technologies, and others designed for those who are looking to stay relevant in key IT roles.

The wage trajectories for skilled candidates show a significant upward trend. Between 2022 and 2023, average hourly wages increased considerably for all credentials, reflecting growing competition for talent.



Policy Recommendations

Polytechnics Canada offers the following policy recommendation to support the ongoing development of sufficient labour market supply in the IT sector.

Engage employers in upskilling targeted to mid-career workers

The IT workforce tends to be relatively young, often relying heavily on recent graduates with training and experience related to the newest technologies and systems. As the sector matures and evolves, the skill profile in IT job postings has broadened, reflecting a desire for those with leadership experience, financial acumen and project management credentials. Given the pace of technological change, continuing education will likely be required to an even greater extent as the IT workforce ages.

Though Canada is home to many institutions that offer workplace-relevant training and development, knowledge about and access to this training is a critical gap. Policymakers should consider funding training vouchers that enable post-secondary institutions to offer appropriate upskilling to a broad range of employers, including those who rely on IT professionals. Given the close relationships polytechnics have with industry partners and program advisory committees, they are well positioned to hold vouchers and navigate stakeholders to programs appropriate to identified gaps.

Ensure federal infrastructure funding supports public institutions with technology and equipment purchases required to train Canadians for a rapidly evolving labour market

Training equipment is both expensive and necessary to the technical and hands-on programming offered by Canada's polytechnic institutions. Ensuring information technology and systems are up to date is a particular challenge and, as other sectors seek to digitize operations, an exceptionally broad one. Yet, both new entrants and mid-career upskillers need access to cutting-edge systems and equipment. Given that these same groups will lead technology adoption in their workplaces, exposure to a wide variety of technical solutions stands to ensure businesses make the right investments for their particular needs. Institutions have well-established relationships with industry vendors and suppliers, as well as philanthropic sources that can help offset the cost of new equipment. To maximize program flexibility, federal funding should not be prescriptive about the source of matching or offset financing. Because investments in training equipment are required on an ongoing basis, long-term funding programs are required.

Establish Applied AI Research Centres at Canada's polytechnics

While polytechnics excel at derisking technology adoption more broadly, artificial intelligence (AI) has been generating intense interest among businesses regardless of sector or size for its potential to increase productivity and streamline operations. Many polytechnics are already actively engaged in applied research collaborations focusing on experimentation with and adoption of AI. As a result, they are well positioned to host applied research hubs that provide access to compute



power for a broad range of stakeholders looking to engage and experiment with AI tools and processes. These centres stand to accelerate and derisk AI integration by providing subsidized and centralized resources designed to solve industry challenges, improve AI acquisition and strengthen partnerships within Canada's AI ecosystem. Centres would address the pressing need for more compute resources to support applied research that translates AI discoveries into market-ready solutions, accelerate and derisk AI adoption and integration by providing subsidized and centralized resources, and strengthen partnerships and innovation within Canada's AI ecosystem.

Tourism and Hospitality¹⁹

Canada has a wealth of natural beauty. Its mountains and oceans, prairies and lakes, forests and cities offer an exciting array of tourist destinations. In the context of a trade war, Canadians are increasingly choosing to spend their travel budgets domestically. In a sector that has faced considerable labour market challenges over the last few years, from the COVID-19 pandemic to devastating wildfires, it is more important than ever to ensure there is a reliable talent pipeline.

Among the many occupations in the tourism sector, food service roles – including cooks, bakers, chefs and food service supervisors and managers – account for 18.5 per cent of the 100 most in-demand skilled occupations. This group witnessed a 6.6 per cent rise in job postings from 2022 to 2023, indicating a significant need for skilled labour in this sector.

The restaurant industry is the fourth largest private employer in Canada, employing more people than real estate, mining, oil and gas, agriculture, utilities, forestry and fishing industries combined.²⁰ The food service industry is interconnected with many others, creating more than 287,100 jobs in agriculture, transportation, wholesale trade and finance, among others. Every \$1 of output in the restaurant industry generates \$1.80 in the broader economy.²¹

KEY FINDINGS

- Tourism revenue was \$129.6B in 2024, \$98.4B of which was domestic
- As of the end of 2024 Q3, an estimated 83,600 (4.1%) tourism jobs were unfilled
- Tourism businesses include travel services, recreation and entertainment, accommodation, and food and beverage services
- In 2024 Q3, Canada was ranked as a top three destination in six of eight priority markets (UK, France, Germany, Australia, Japan and Mexico)
- Americans ranked Canada as their #1 choice for their next vacation requiring air travel

Employment Outlook

In the next five years, the labour market for skilled food service occupations is forecasted to rise by an average of 4.2 per cent across the five provinces in which Polytechnics Canada members are located. Alberta is poised to experience particularly strong gains, buoyed by interprovincial migration.

¹⁹ Key Findings drawn from "Quarterly Tourism Snapshot, Q3 2024." Destination Canada, Canadian Tourism Data Collective. <u>www.tourismdatacollective.ca</u>

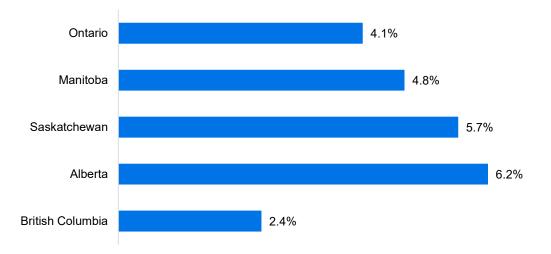
 ²⁰ Restaurants Canada, "2024 Fast Facts." Jun 2024. <u>https://www.restaurantscanada.org/fast-facts/</u>
²¹ Ibid.

Occupation	Rank in demand
Cooks	1
Food service supervisors	8
Restaurant and food service managers	28
Bakers	51
Chefs	57
Hotel clerks	61

Figure 22: Top tourism and hospitality job postings in 2023 (ranking in top 100)

Source: The Conference Board of Canada; Vicinity Jobs; Statistics Canada

Figure 23: Employment outlook for in-demand food services occupations (2023 - 2028)

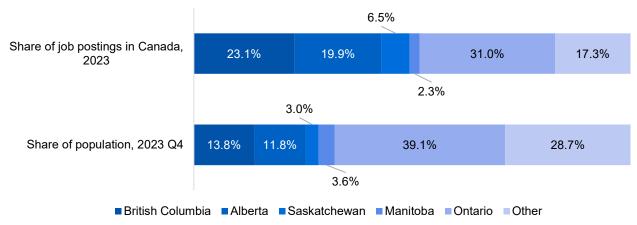


Source: The Conference Board of Canada

Provincial Disparities

The demand for food services skilled labour is not spread evenly across the country. British Columbia and Alberta have a disproportionate share of job postings relative to their population. The two provinces are home to only one-quarter of Canada's population but account for 43 per cent of the food services job postings in the country, highlighting a particularly acute need for talent.

This concentration reflects broader economic trends, including a booming tourism sector and a growing appetite for diverse culinary experiences.²² It may also signal a labour market struggling to keep pace with a rapidly expanding food services industry.





Note: The share of population is calculated from the Statistics Canada - <u>Quarterly Population Estimates</u> Source: The Conference Board of Canada; Vicinity Jobs; Statistics Canada

Educational Requirements

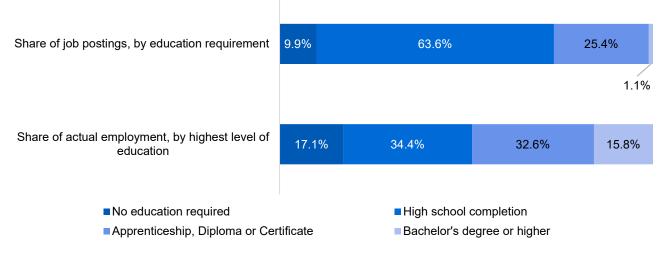
There is a discrepancy between job posting requirements for new hires and the education levels of the current workforce. In 2023, only a quarter of the in-demand food service roles required post-secondary education though, in 2021, nearly half of the workforce held a diploma, certificate or degree. Labour shortages often drive employers to reduce upfront educational requirements but this approach suggests that workplace training and/or upskilling will be needed. This trend emphasizes the need for the innovative and flexible learning pathways offered by Canada's polytechnics.

Workers with formal qualifications saw the highest wage growth in 2023. Wages for diploma and certificate holders, including those who completed an apprenticeship, increased by 4.5 per cent. Polytechnics are well-positioned to deliver a diverse range of programs aligned with occupations in high demand and, for those pursuing a long-term career in the sector, these educational pathways are likely to result in higher paying jobs.

²² Statistics Canada, "Travel and Tourism Statistics." <u>https://www.statcan.gc.ca/en/subjects-start/travel_and_tourism</u>



Figure 25: Demand for credentials



Note: Data on the share of employed in the high-demand food services occupations are collected from 2021 census – Occupation unit group by labour force status and highest level of education

Source: The Conference Board of Canada; Vicinity Jobs; Statistics Canada

Skills for Success

Among the food service skilled occupations, certain certifications stand out as pivotal for in-demand roles. Online job postings reveal a clear preference for candidates with cook certification, Red Seal certification and food safety certification. Specific skills are also frequently emphasized in job postings as being essential for these occupations including culinary prowess and teamwork.

Figure 26: Top 10 skills required in food services roles

Technical skills	Appearance in job postings
Cooking/meal preparation	62.8%
Records management	48.1%
Ordering supplies and equipment	37.2%
Inventory management	34.0%

Soft skills	Appearance in job postings
Supervisory skills	51.6%
Ability to work in a fast-paced setting	49.9%



Soft skills Appearance in job posting	
Teamwork	48.1%
Teaching and training	42.3%
Customer service	33.8%
Flexibility	30.6%

Source: The Conference Board of Canada; Vicinity Jobs

Policy Recommendations

To better take advantage of the polytechnic model of education in tourism and hospitality, Polytechnics Canada encourages the federal government to consider the following policy suggestions.

Recruit and retain international students to top-ranked tourism and hospitality programs

Canada has a thriving tourism and hospitality industry, though one plagued by consistent labour market shortage. This is one of the reasons that the accommodation and food services sector has the highest rate of temporary foreign workers in Canada,²³ with work permits in 2020 representing 17.3 per cent of the total. Top-ranked international programs for tourism, hospitality and food service at Canada's polytechnics have traditionally attracted foreign students looking to study and work in an area of robust labour market demand. However, recent changes to international study permits have failed to recognize these occupations among the ones eligible for post-graduate work permits. We recommend a more substantive review of regional and local labour market conditions when considering post-secondary programs that qualify for post-graduate work permits.

Offer training vouchers to help employees access ongoing skills development opportunities

Employment in the tourism and hospitality sector tends to be more vulnerable to disruption than many other parts of the Canadian economy, evidenced most recently by a global pandemic and a devastating wildfire season. Further, young people are particularly exposed, with many beginning association with this sector even before entering post-secondary education. Training vouchers that enable upskilling in the off-season or during dry spells will help employers retain their experienced staff and enable employees to advance their careers. The result is greater economic stability for both parties. Polytechnics are well positioned to hold vouchers and direct people to the training options best suited to industry demand and individual interests.

²³ Yuqian Lu and Feng Hou, "Foreign workers in Canada: Distribution of paid employment by industry." Statistics Canada, Dec 2023. <u>https://www150.statcan.gc.ca/n1/pub/36-28-0001/2023012/article/00005-eng.htm</u>



Care Economy

Though discussion about critical skills gaps in the labour market often focuses on technical occupations, the tendency to overlook Canada's care economy is shortsighted. Without daycare and elder care support, for example, it would be virtually impossible for families to balance the demands of home and work. Workforce participation among women in particular would be substantially undermined.

In 2023, childcare and early education was one of the most sought-after skilled occupations in the five provinces, accounting for approximately 6.0 per cent of in-demand skilled roles. Job postings in this occupation group rose by 10.9 per cent from 2022 to 2023. The average wage offered increased by 5.9 per cent.

In the context of Canada's national daycare program, childcare and early learning occupations are in high demand. Achieving 250,000 additional childcare spaces by 2026 requires Canada to rethink how roles such as these are staffed.²⁴

Childcare and Early Learning

British Columbia and Alberta have a disproportionately large share of job postings in the high demand occupations in this sector, far exceeding their population share in Canada.

KEY FINDINGS

- The care economy encompasses paid and unpaid work to support the well-being of individuals, including childcare, eldercare, education and social services
- Childcare and early learning roles are in high demand given policy efforts associated with \$10/day childcare
- BC and Alberta have a disproportionately large share of early learning job postings
- Social care, including community service workers and social workers, has seen a significant surge in job postings

Employers in British Columbia also offer the highest wages for skilled talent in the sector, at \$26.30 per hour compared to the national average of \$23.00. The premium wage reflects the critical role that childcare and early education play in the province's socio-economic landscape.

Several factors drive the high demand for childhood and early education skilled workers in British Columbia. Demographic shifts, including a growing population of young families, have heightened

²⁴ Centre for the Study of Living Standards, "Addressing the Early Childhood Educators Labour Shortage in Canada: Challenges, Solutions, and Impacts." May 2024. <u>https://www.csls.ca/reports/csls2024-02.pdf</u>

the need for quality childcare services. Meanwhile, the province has introduced policies that invest in the training, recruitment and retention of early childhood educators across the province.²⁵

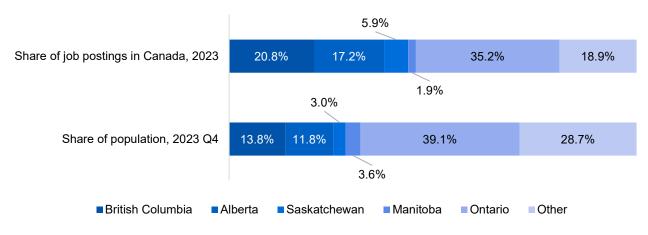


Figure 27: Share of job postings for childcare and early learning occupations

Source: The Conference Board of Canada; Vicinity Jobs; Statistics Canada

Educational Requirements

Childcare and early education occupations are mostly filled with skilled workers. According to the 2021 census, more than 80 per cent of positions in this sector were filled by individuals with post-secondary training, reflecting the specialized nature of the work and the value employers place on post-secondary education.

As in other fields, the struggle to find qualified candidates has led employers to lower the educational requirements in job postings. In 2023, some 60 per cent of job postings required a diploma or certificate and approximately 10 per cent required a Bachelor's degree or above. Those who possess academic credentials in childcare or early education saw one of the highest wage increases among skilled occupations, suggesting both a premium on skilled labour and significant gaps in the talent pipeline.

Polytechnics Canada members across the country offer programs to prepare graduates for careers for three of four high-demand occupations in the sector, with 85 per cent of institutions offering programs to prepare graduates for careers as early childhood educators. Just more than half (54 per cent) offer programs for primary and secondary school teaching assistants. Polytechnics do not train elementary teachers.

²⁵ Ministry of Education and Child Care, "Our Plan: ChildCareBC - Province of British Columbia." Aug 2024. <u>https://www2.gov.bc.ca/gov/content/family-social-supports/caring-for-young-children/child-care-strategy</u>



Notably, 38.4 per cent of postings indicate a willingness to hire individuals with no experience or less than one year of experience. Polytechnics, which offer a vast array of shorter credentials are well positioned to meet this demand with accelerated pathways, flexible learning options and part-time courses. Work-integrated learning opportunities stand to provide relevant exposure and the experience valued by employers.

Employment Outlook

The employment levels for childcare and early education skilled roles are poised for significant growth. Over the next five years, employment in this sector is expected to increase by 5.3 per cent. Leading the charge is Alberta, where employment in these occupations is projected to surge by 10.6 per cent between 2023 and 2028.

Such growth in projected employment highlights the increasing recognition of early childhood educators. On the other hand, the risk of a workforce shortfall could challenge provinces to meet the needs of families, especially in fast-growing areas like Alberta. As the sector grows, so too will the need for skilled educators.

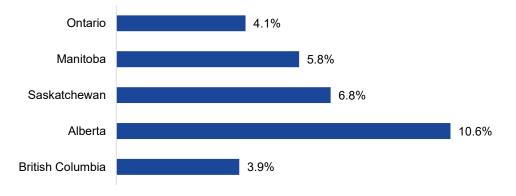


Figure 28: Employment outlook by province (2023 - 2028)

Source: The Conference Board of Canada

Figure 29: Top 10 skills for in-demand childcare and early learning occupations

Technical skills Appearance in job posting	
Teaching and training	42.4%
First Aid	41.2%
Childcare	37.2%



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Technical skills Appearance in job pos	
Organizational skills	29.2%
CPR	23.0%
Cooking and meal preparation	16.4%

Soft skills Appearance in job posting	
Teamwork	47.7%
Communication skills	40.6%
Interpersonal skills 30.3%	
Flexibility	24.4%

Source: The Conference Board of Canada; Vicinity Jobs

Figure 30: Certificates required for childcare and early learning roles

Certification	Requirement in job postings	
First Aid	44.3%	
Early childhood educator certificate/licence	38.4%	
CPR certification 28.8%		
Provincial teaching certificate	20.5%	
Driver's licence	15.7%	

Source: The Conference Board of Canada; Vicinity Jobs

Social Services

While childcare and early learning roles dominated demand in the care economy, social and community service workers and social workers also saw a significant surge in demand. Many social care roles (69.7 per cent) appear in the healthcare and social assistance industry, with most of the remainder in education and public administration. Demand for social support services are on the rise, with Canadians increasingly reporting mental health challenges²⁶ for which counselling is required or desirable.

²⁶ Mental Health Research Canada. "Poll 23: Understanding the Health Challenges of Canadians." Apr 2025. <u>https://www.mhrc.ca/findings-of-poll-23</u>



Compared to its population, British Columbia has a disproportionately high share of job postings in social care roles. Alberta, meanwhile, is projected to witness the highest employment growth in social care skilled occupations.

More than half of the job postings in 2023 required a diploma or certificate and another third required a Bachelor's degree or higher. Between 2022 and 2023, the average hourly wage offered to diploma or certificate holders jumped by 6.2 per cent. More than three-quarters of Polytechnics Canada member institutions offer programming that prepares graduates for social and community service roles.

Policy Recommendations

The care economy plays an important role in Canada's social fabric, keeping society running, driving economic growth, supporting gender equality and building human potential. The occupations that fall under this sector are in high and growing demand, particularly as the federal government pursues affordable daycare options and considers the growing needs of an aging population. Polytechnics develop the skills required in these roles and could do so even more efficiently with consideration of these policy recommendations.

Recruit and retain international students for care occupations

Polytechnic programming to develop early childhood educators, personal support workers and others for the care economy have been heavily reliant on international students who respond to labour market demand in these fields. Recent changes to international study permits and post-graduate work permits have put these programs in jeopardy, with too few Canadian students interested in care roles. Where programs are relatively short, the impact of changes are already being felt and caretakers are becoming harder for Canadians to find. We recommend a more substantive review of regional and local labour market conditions when considering post-secondary programs that qualify for post-graduate work permits. Institutions are well positioned to speak to graduate employment outcomes and should be engaged in identifying where work permits are critical to attracting those interested in care roles.

Double federal funding for polytechnic applied research to better support social innovation activity

Federal ambitions to create \$10/day daycare spaces are up against the dual challenges of sufficient labour and enough regulated facilities. An aging population requires a range of care services, from homecare support to community resources for those who are aging in place. Polytechnics, many of which deliver both early learning and eldercare programs, have found success with onsite facilities that offer work-integrated learning opportunities to students while providing services in the regions they serve. Further, strong community and industry connections empower faculty and learners to address current and emerging challenges in these fields through applied research partnerships –



from neonatal care to addressing cognitive decline in Canada's elderly population. The federal government should double the amount of funding available for polytechnic and college applied research to expand the impact of social innovation occurring on campuses.

Appendix: Methodology and Data Sources

Economic Analysis

Statistical analysis techniques on labour market data were used to identify and examine the most in-demand occupations in the five provinces where Polytechnics Canada members are located.

The following steps were taken:

- Hiring demand analysis: Identification of the most in-demand skilled occupations in each province where Polytechnics Canada has members based on frequency and growth trends in online job postings.
- Multi-dimensional analysis: Exploration of the hiring demand in these occupations at a granular level through analyzing online job postings by province, industry, skills and/or certifications required, educational requirement, as well as average wage offered.
- Employment projections: The Conference Board of Canada used its in-house projection model The Model of Occupations, Skills and Technology (MOST)²⁷ to forecast employment levels for the identified occupations over the next five years.
- Labour market gap analysis: Provision of insights on the labour market dynamics of the indemand skilled occupations by analyzing the discrepancies between the education requirement of the hiring demand and the educational backgrounds of those employed in identified occupations.

Data Sources

Findings in this report are primarily based on the following data sources:

- High-frequency online job postings data from Vicinity Jobs, a data and analytics company that provides up-to-date, reliable, community-specific labour market information based on artificial intelligence algorithms. It collects job posting data from company websites and online job boards using natural language processing. Job postings are then classified and structured into groups based on job title and description. Data on online job postings represents a subset of all job postings. Some employers do not advertise available positions online.
- The five-year projections of employment for in-demand occupations are derived from MOST, an in-house medium- to long-term forecast model for aggregate employment projections (by four-digit NAICS,²⁸ four-digit NOC²⁹, and province and territory).
- Employment levels by highest level of education are collected from Statistics Canada, 2021 Census of Population.

²⁷ The Conference Board of Canada, <u>The Model of Occupations, Skills and Technology (MOST)</u>.

²⁸ Statistics Canada, <u>North American Industry Classification System</u> (NAICS).

²⁹ Government of Canada, <u>The National Occupational Classification</u> (NOC).



Program Review

The research team conducted online searches to identify program offerings at each member institute. Program offerings were cross-referenced with the educational requirements listed in the NOC codes to ensure alignment with industry standards. Programs were evaluated based on their relevance to specific occupational roles. In cases where programs slightly exceeded the qualifications needed for a particular NOC code, the programs were still included in order to provide a comprehensive overview of the training options available.

Occupation Groupings

This analysis identifies the top 100 most in-demand occupations in the five provinces where Polytechnics Canada has member institutions, using the frequency of online job postings in 2023 as the primary criterion. Skilled roles, specifically those requiring post-secondary education and classified under TEER categories 1 to 3 according to NOC definition, were emphasized. Skilled, indemand occupations were categorized into five clusters based on industry and the skillset required. Outliers that cannot be categorized within these occupation clusters were removed for clarity.

Occupation group	Occupation	Rank	# Postings
	Cooks	1	62,177
	Food service supervisors	8	34,269
Tourism & hospitality	Restaurant and food service managers	28	16,145
	Bakers	51	7,195
	Chefs	57	6,696
	Registered nurses	4	48,947
	Home support workers	14	24,073
	Nurse aides, patient service associates	18	21,982
	Licensed practical nurses	19	21,874
Healthcare	Pharmacy assistants	48	7,985
	Pharmacists	68	5,659
	Dental assistants	72	5,095
	Occupational therapists	83	4,474
	Physiotherapists	98	3,687
	Business systems specialists	41	8,791
lafa ana ati'a a Q	Software developers and programmers	64	5,863
Information &	Database analysts	76	4,850
technology	Software engineers and designers	77	4,671
	Information systems specialists	87	4,372
Care accurations	Social and community service workers	24	18,077
Care occupations	Early childhood educators and assistants	26	16,433

In-demand Skilled Occupation Clusters, 2023



Occupation group	Occupation	Rank	# Postings
	Elementary and secondary school teacher assistants	40	9,170
	Home childcare providers	53	7,075
	Elementary and kindergarten teachers	56	6,893
	Social workers	60	6,555
	Carpenters	30	14,621
	General building maintenance workers	43	8,703
Skilled trades &	Welders and related machine operators	59	6,572
adjacent occupations –	Plumbers	69	5,569
construction	Construction millwrights and mechanics	71	5,488
	Plasterers, drywall installers and finishers and lathers	86	4,417
Skilled trades &	Heavy equipment operators	75	4,875
adjacent occupations – industrial	Machinists	94	3,852
Skilled trades &	Transport truck drivers	12	27,623
adjacent occupations –	Automotive service technicians	36	11,252
transportation	Subway operators and transit operators	95	3,835
Skilled trades &	Hairstylists and barbers	85	4,427
adjacent occupations – service	Estheticians and electrologists	93	4,005

Source: The Conference Board of Canada; Vicinity Jobs

Ungrouped Occupation Clusters by Ranking (1-100)

Rank	Occupation
1	63200 - Cooks
2	13110 - Administrative assistants
3	64100 - Retail salespersons and visual merchandisers
4	31301 - Registered nurses and registered psychiatric nurses
5	65201 - Food counter attendants, kitchen helpers and related support occupations
6	60020 - Retail and wholesale trade managers
7	13100 - Administrative officers
8	62020 - Food service supervisors
9	75101 - Material handlers
10	65310 - Light duty cleaners
11	64409 - Other customer and information services representatives
12	73300 - Transport truck drivers
13	75201 - Delivery service drivers and door-to-door distributors
14	44101 - Home support workers, caregivers and related occupations

Rank	Occupation
15	65102 - Store shelf stockers, clerks and order fillers
16	14101 - Receptionists
17	75110 - Construction trades helpers and labourers
18	33102 - Nurse aides, orderlies and patient service associates
19	32101 - Licensed practical nurses
20	12200 - Accounting technicians and bookkeepers
21	62010 - Retail sales supervisors
22	64101 - Sales and account representatives - wholesale trade (non-technical)
23	14100 - General office support workers
24	42201 - Social and community service workers
25	65100 - Cashiers
26	42202 - Early childhood educators and assistants
27	60010 - Corporate sales managers
28	60030 - Restaurant and food service managers
29	65200 - Food and beverage servers
30	72310 - Carpenters
31	14200 - Accounting and related clerks
32	11202 - Professional occupations in advertising, marketing and public relations
33	10029 - Other business services managers
34	41210 - College and other vocational instructors
35	64410 - Security guards and related security service occupations
36	72410 - Automotive service technicians, truck and bus mechanics and mechanical
	repairers
37	63102 - Financial sales representatives
38	14400 - Shippers and receivers
39	12013 - Supervisors, supply chain, tracking and scheduling coordination occupations
40	43100 - Elementary and secondary school teacher assistants
41	21221 - Business systems specialists
42	10019 - Other administrative services managers
43	73201 - General building maintenance workers and building superintendents
44	95109 - Other labourers in processing, manufacturing and utilities
45	41220 - Secondary school teachers
46	54100 - Program leaders and instructors in recreation, sport and fitness
47	10022 - Advertising, marketing and public relations managers
48	33103 - Pharmacy technical assistants and pharmacy assistants
49	33109 - Other assisting occupations in support of health services
50	11200 - Human resources professionals
51	63202 - Bakers
52	64301 - Bartenders
53	44100 - Home childcare providers
54	65312 - Janitors, caretakers and heavy-duty cleaners

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Rank	Occupation
55	10021 - Banking, credit and other investment managers
56	41221 - Elementary school and kindergarten teachers
57	62200 - Chefs
58	62101 - Retail and wholesale buyers
59	72106 - Welders and related machine operators
60	41300 - Social workers
61	64314 - Hotel front desk clerks
62	10010 - Financial managers
63	75119 - Other trades helpers and labourers
64	21232 - Software developers and programmers
65	41200 - University professors and lecturers
66	11100 - Financial auditors and accountants
67	11101 - Financial and investment analysts
68	31120 - Pharmacists
69	72300 - Plumbers
70	70012 - Facility operation and maintenance managers
71	72400 - Construction millwrights and industrial mechanics
72	33100 - Dental assistants and dental laboratory assistants
73	12100 - Executive assistants
74	41201 - Post-secondary teaching and research assistants
75	73400 - Heavy equipment operators
76	21223 - Database analysts and data administrators
77	21231 - Software engineers and designers
78	00012 - Senior managers - financial, communications and other business services
79	13111 - Legal administrative assistants
80	64400 - Customer services representatives - financial institutions
81	94219 - Other products assemblers, finishers and inspectors
82	30010 - Managers in health care
83	31203 - Occupational therapists
84	14404 - Dispatchers
85	63210 - Hairstylists and barbers
86	73102 - Plasterers, drywall installers and finishers and lathers
87	21222 - Information systems specialists
88	22114 - Landscape and horticulture technicians and specialists
89	62024 - Cleaning supervisors
90	12101 - Human resources and recruitment officers
91	85121 - Landscaping and grounds maintenance labourers
92	14403 - Purchasing and inventory control workers
93	63211 - Estheticians, electrologists and related occupations
94	72100 - Machinists and machining and tooling inspectors
95	73301 - Bus drivers, subway operators and other transit operators

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Rank	Occupation
96	11102 - Financial advisors
97	63100 - Insurance agents and brokers
98	31202 - Physiotherapists
99	70010 - Construction managers
100	64300 - Maîtres d'hôtel and hosts/hostesses



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