



THE DEMOGRAPHICS OF THE SKILLED TRADES WORKFORCE IN CANADA:

INSIGHTS FROM THE 2021 CENSUS

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ABOUT

The Canadian Apprenticeship Forum

The Canadian Apprenticeship Forum – Forum canadien sur l'apprentissage (CAF-FCA) is a national, not-for-profit organization working with stakeholders in all regions of Canada. We influence pan-Canadian apprenticeship strategies through research, discussion and collaboration sharing insights across trades, across sectors and across the country. We promote apprenticeship as an effective model for training and education. Our Board of Directors has representatives from business, labour, the jurisdictional apprenticeship authorities, education and equity-priority groups. Through our work, CAF-FCA has shed light on several key issues affecting apprenticeship, such as the perceived barriers to accessing and completing apprenticeship and the business case for apprenticeship training. For more information, visit the CAF-FCA website at www.caf-fca.org.

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The opinions and interpretations in this publication are those of the author and do not necessarily reflect those of the Government of Canada.

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Key Findings

- This report focuses on the Red Seal workforce which includes apprentices, certified journeypersons and non-certified tradespeople working in all 50 plus Red Seal trades. The results are based on an analysis of the 2021 Census. Comparisons are made to the 2016 Census.
- The Red Seal workforce has not kept pace with Canada's overall workforce growth. In 2021, fewer Canadians worked in a Red Seal trade than in 2016. At the same time, Canada's overall workforce increased by nearly 6%.
- There were more self-employed, unemployed and non-participant individuals in the workforce in 2021 compared to 2016.
- The slowing growth rate among youth has widened the age gap between baby boomers and the new generation entering the workforce. From 2016 to 2021, the number of workers aged 55 and older rose by 2.3% to 454,900. Over the same period, the number of youth (aged 15 to 24) in the workforce declined by 1.5% to 285,000.
- Canada's working-age population has never been older. As of 2021, more than 1 in 5 Red Seal workers were nearing or were at retirement age (age 55 or older).
- There have been few gains in the number of women in Red Seal trades. Between 2016 and 2021, some 14,300 women exited the labour market, marking a decline of 4.7%. Over the same period, the number of men declined by 2.4%, resulting in a contraction in the share of women in the workforce.
- From 2016 to 2021, the share of immigrants in the workforce remained unchanged. This trend contrasts with the overall workforce, which saw an increase in the share of immigrants by 1.2% over the same period.
- During the same period, the share of Indigenous Peoples working in a Red Seal trade has doubled, reaching 5.8% in 2021, up from 2.8% in 2016. The share of Indigenous Peoples in the Red Seal workforce is nearly two percentage points higher than the share in the overall workforce.
- Although the share of visible minorities in the Red Seal workforce increased by 3.3% from the 2016 Census, the share of visible minorities in the Red Seal workforce was nearly 10% below the share in the overall workforce in 2021.
- The extent of diversity in Canada's Red Seal trades workforce varies by region. British Columbia and Ontario have the highest shares of immigrant workers and visible minorities in the Red Seal workforce. The Prairies have a higher share of Indigenous Peoples represented in the Red Seal trades than the rest of Canada. Atlantic Canada has the highest share of people with disabilities represented in the Red Seal workforce.
- The Red Seal workforce is more educated now than it was five years ago. Approximately a quarter (24.6%) of the Red Seal workforce reported having a college diploma or a university degree as their highest form of education in 2021, up from 22.8% in 2016.
- Between the highest and lowest-paying Red Seal trade there is a wage gap of \$155,000.

Introduction

This report aims to establish a comprehensive profile of Canada's Red Seal workforce based on the 2021 Census of Population.¹ Comparisons to the 2016 Census are provided, when available. The analysis considers several socio-demographic characteristics of the Red Seal workforce:

- | | |
|-----------------------------|-----------------------------------|
| • Age Distribution | • Visible Minorities |
| • Gender | • People with Disabilities |
| • Immigrant Status | • Educational Attainment |
| • Indigenous Peoples | • Income |

The profile encompasses all 50 plus Red Seal trades. Those working as apprentices, certified journeypersons and non-certified tradespeople are included in the analysis. At this time, it is not possible to provide separate data on apprentices and certified journeypersons due to the way the Census data is organized and analyzed by Statistics Canada.

References to the “workforce” in this report include those participating in the labour force as well as non-participants. Since COVID-19 restrictions significantly impacted participation in the labour force in 2021, it can be assumed that many non-participating individuals were only temporarily removed from the workforce.

This report uses the Statistics Canada definition of geographic regions. These areas are groupings of provinces and territories that have been established for the purpose of statistical reporting. The geographic regions of Canada are Atlantic, Quebec, Ontario, the Prairies, British Columbia and the Territories.² The Territories region is not included in this report due to data suppression for the geographic area.

In this report, the category “women” includes women, as well as some non-binary persons.³ Given that the non-binary population is small, data aggregation to a two-category gender variable is sometimes necessary to protect the confidentiality of responses provided.

¹ For a list of Red Seal trades in Canada, see: [Trades in Canada \(red-seal.ca\)](https://www.red-seal.ca/trades-in-canada)

² The geographic areas of Canada are defined by Standard Geographical Classification and geographic code. The Standard Geographical Classification is the primary classification used at Statistics Canada to classify statistical information by geographic area. See: <https://www12.statcan.gc.ca/census-recensement/training-formation/videos/Geographic-areas-of-Canada.htm>

³ See: <https://www150.statcan.gc.ca/n1/pub/12-581-x/2022001/sec7-eng.htm>

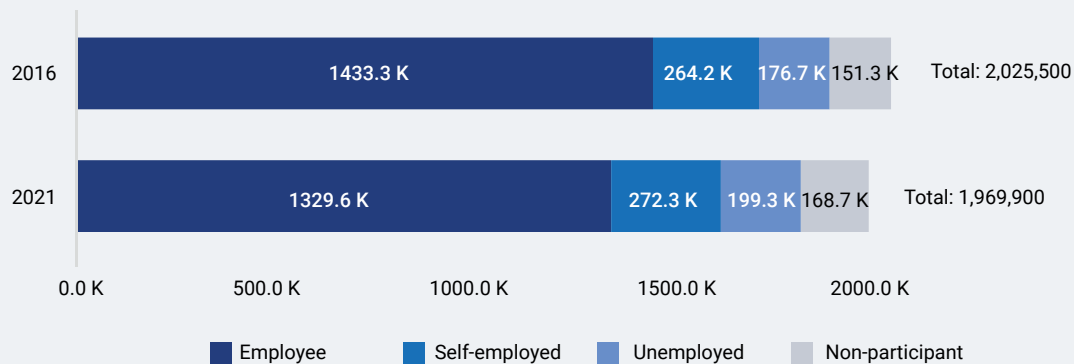
Canada's Red Seal Workforce

Canada's Red Seal workforce has contracted over the past five years.

In 2021, Canada's Red Seal workforce totalled 1,969,900, a reduction of 55,600 or 2.8% from 2016. This trend contrasts with the overall workforce, which saw the addition of 1,692,900 individuals in 2021, an increase of 5.9% from 2016.

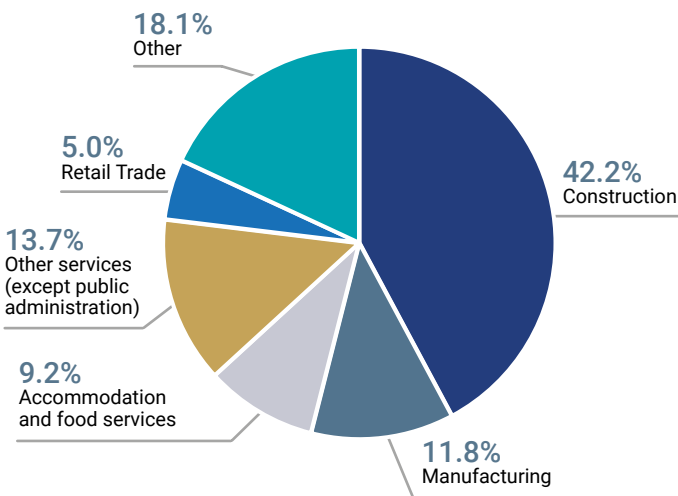
There were more self-employed, unemployed, and non-participant individuals in the workforce in 2021 compared to 2016. There were 1,601,900 individuals employed in a Red Seal trade in 2021. Nearly one-fifth (17%) of employed workers were self-employed. The national unemployment rate for Red Seal trades was 11.1% in 2021, slightly higher than the rate of 10.3% observed in the overall workforce and approximately two percentage points above the rate of 9.4% in 2016.

Figure 1 – Canada's Red Seal Workforce, Thousands (000s)



The skilled trades play an integral role in the Canadian economy and Red Seal trades are an essential subset of the skilled trades. In 2021, nearly 1 in 10 employed Canadians worked in a Red Seal trade. Red Seal workers are employed in many sectors of the Canadian economy, as illustrated in Figure 2. The construction industry is the largest employer of the Red Seal trades, as four in ten people in a Red Seal trade work in this sector.

Figure 2 – Distribution of the Red Seal Workforce Across Industries, 2021



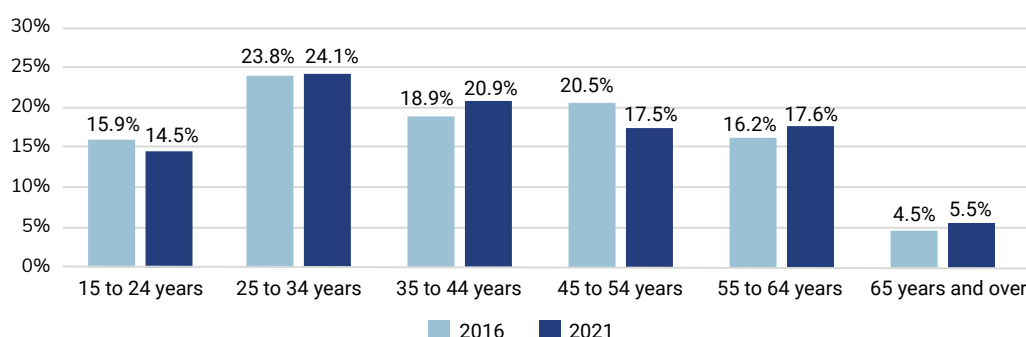
Age Profile

The age gap between youth and baby boomers has widened.

Canada's working-age population has never been older. As of 2021, more than 1 in 5 Red Seal workers were nearing or were at retirement age (aged 55 or older). From 2016 to 2021, the number of workers aged 55 and older rose by 2.3% to a total of 454,900. Over the same period, the number of youth (aged 15 to 24) in the workforce declined by 1.5% to a total of 285,000 (Figure 3).

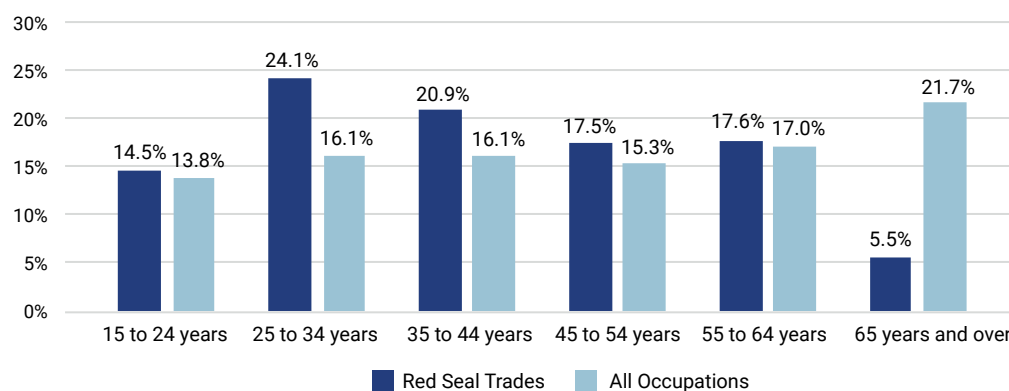
Challenges associated with an aging workforce include knowledge transfer and retaining experienced employees. These challenges are even more apparent in the skilled trades, where apprentices require the supervision of one or more journeypersons to complete their training and become certified. According to the 2021 Census, approximately 35,200 people working in a Red Seal trade cited retirement as the main reason they did not work the full year in 2020. This figure accounts for nearly 2% of the 2021 Red Seal workforce.

Figure 3 – Age Distribution of Canada's Red Seal Workforce, 2021



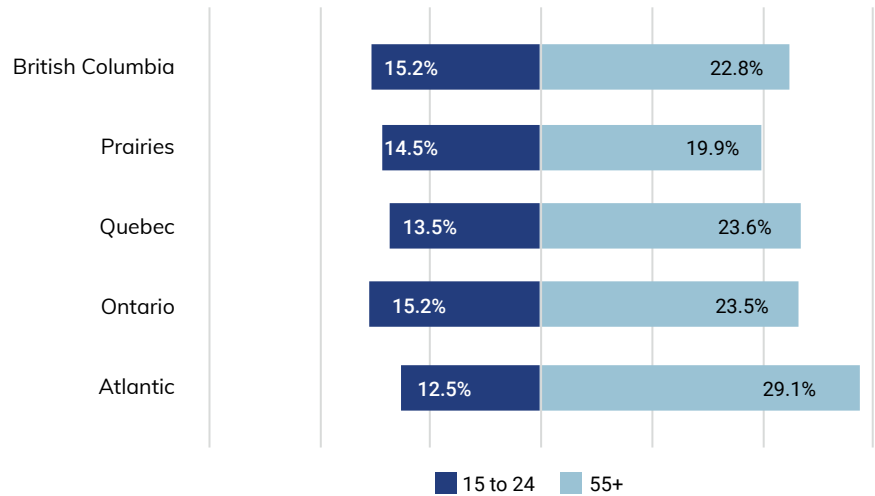
The aging workforce is not a concern unique to the skilled trades. The share of workers approaching retirement age (age 55 to 64 years) is consistent with the share across all occupations (Figure 4). Compared to the overall workforce, the Red Seal workforce is well positioned, as it has a notably larger share of the core-aged workforce (age 25 to 54). The share of workers employed in Red Seal trades tends to decline with age as many younger workers advance to supervisory, sales and management positions. Although they may no longer work in the Red Seal trade, many will continue to work in related occupations which draw on their trade skills and knowledge throughout their careers. As the skilled trades are typically physically demanding, fewer people work in the trades past the age of 65 relative to the overall workforce.

Figure 4 - Age Distribution of Canada's Workforce, Red Seal Trades and All Occupations, 2021



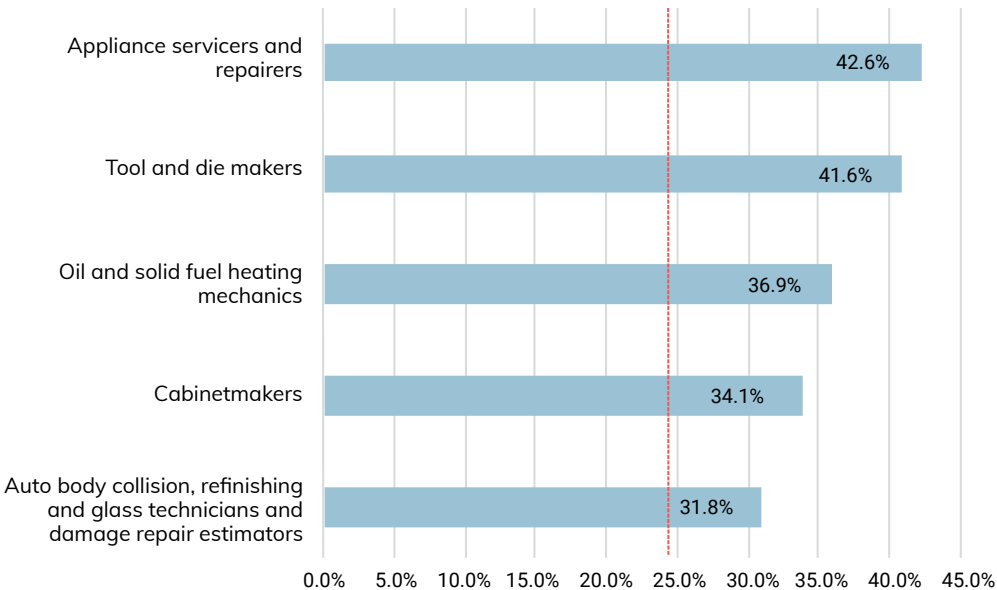
The age structure of the workforce differs across regions. Atlantic Canada has a notably older workforce than the rest of the country, with nearly 3 in 10 workers aged 55 or older (Figure 5). The Prairie provinces have a younger workforce, primarily due to a higher fertility rate in Manitoba and Saskatchewan. In contrast, Newfoundland and Labrador has one of the lowest fertility rates in Canada.

Figure 5 – Proportion of Youth (15 to 24) and Workers Nearing or at Retirement Age (55 or Older) in Red Seal Trades by Region, 2021



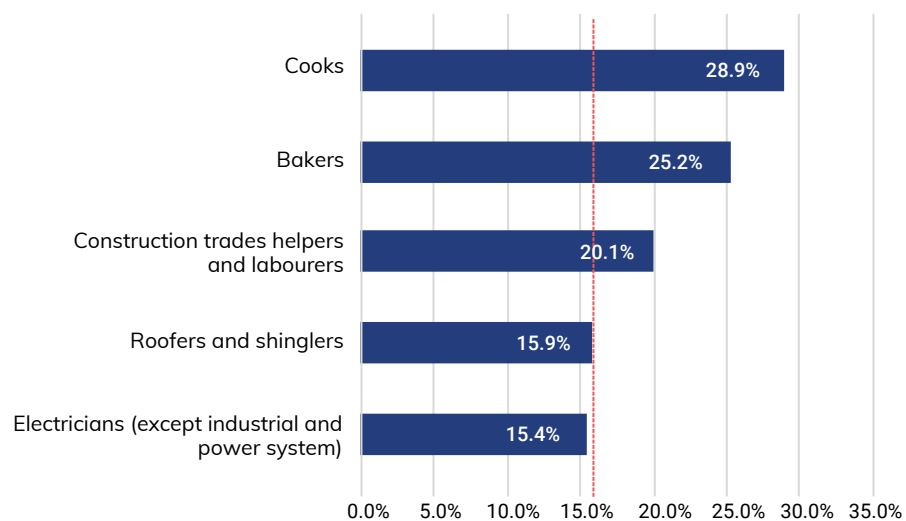
The age composition of the workforce also varies considerably by occupation. The average share of workers aged 55 or older is 24.6% across Red Seal trades. Figure 6 highlights the trades with the largest proportion of workers who are nearing or are at retirement age. The share of workers in this age group is nearly double the average rate for appliance service technicians (43%) and tool and die makers (42%).

Figure 6 – Red Seal trades with the Highest Share of Workers Nearing Retirement (age 55+), 2021



The gap has widened between baby boomers already in the workforce and the new generation that is entering it. This gap is increasing because of a slower growth rate in the number of younger workers entering the workforce. However, select trades have a notably higher share of youth relative to the overall Red Seal workforce (Figure 7). The proportion of youth is highest among cooks, bakers and construction labourers. These trades traditionally do not require certification to work or have shorter apprenticeship programs, which could result in the higher share of youth in these trades.

Figure 7 – Red Seal Trades with the Highest Share of Youth (15 to 24) Workers, 2021



Women in Red Seal Trades

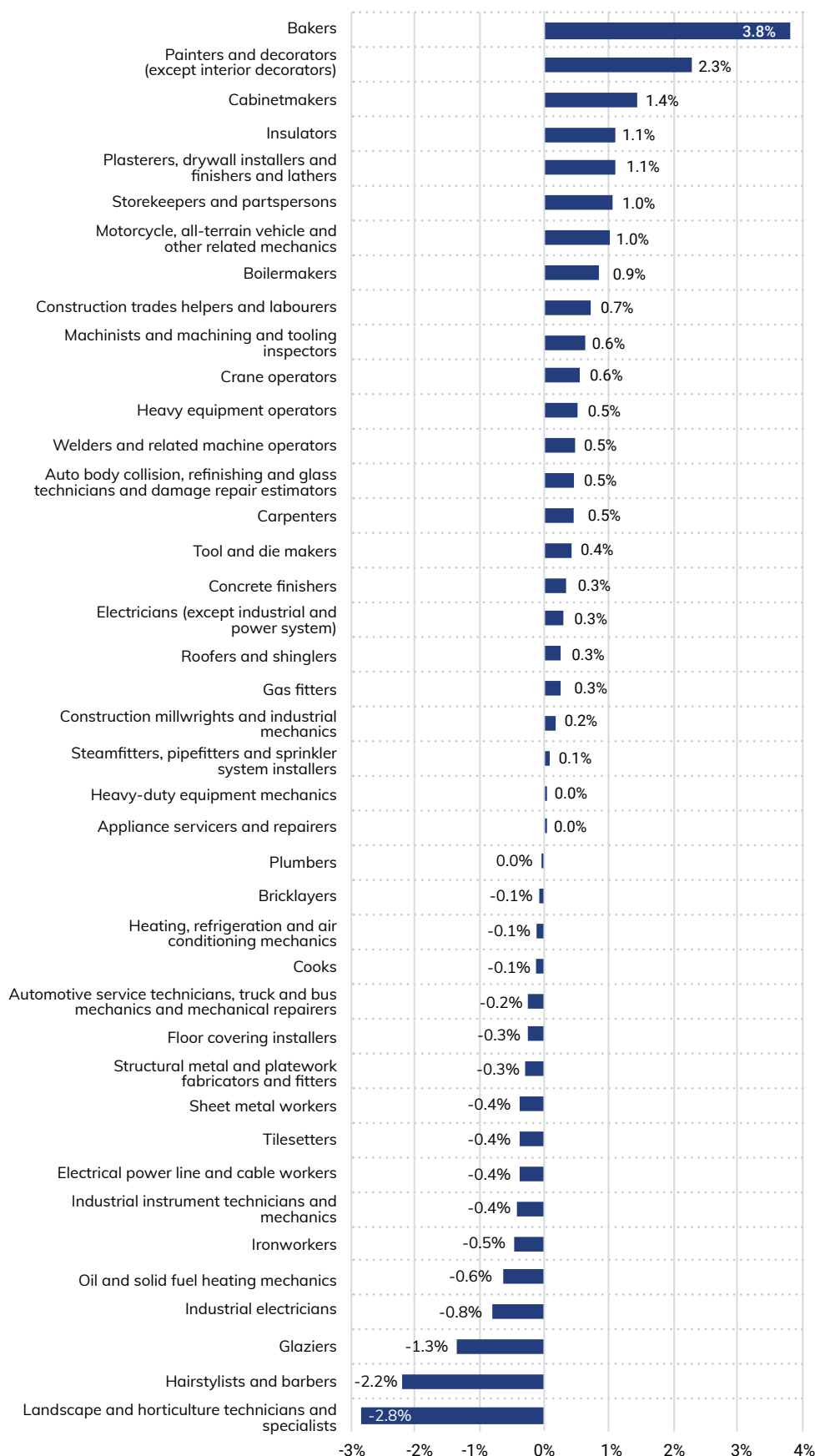
Women account for nearly half of Canada's workforce, but only 15% of Red Seal workers.

Women comprise 14.8% of Canada's Red Seal workforce. This figure is notably lower than the 48.2% of women across all occupations. Traditionally, women are overrepresented in the tourism, hospitality, and retail sectors. When select service trades (e.g., cook, baker, and hairstylist) are removed, the share of women in the workforce falls to 5.2%.

There have been few gains in the number of women in Red Seal trades. From 2016 to 2021, there were 14,300 fewer women in the labour market, marking a decline of 4.7%. The number of men declined by 2.4% over the same period, resulting in a contraction in the share of women in the workforce.

Bakers and painters and decorators – trades that have significantly higher shares of women – were the only occupations that saw notable gains in the share of women in the workforce from 2016 to 2021. Cabinetmakers (+1.4%), insulators (+1.1%), plasterers (+1.1%), storekeepers and parts persons (+1.0%), and motorcycle mechanics (+1.0%) reported an increase of at least one percentage point over the same period. The remaining trades saw gains of less than one percentage point.

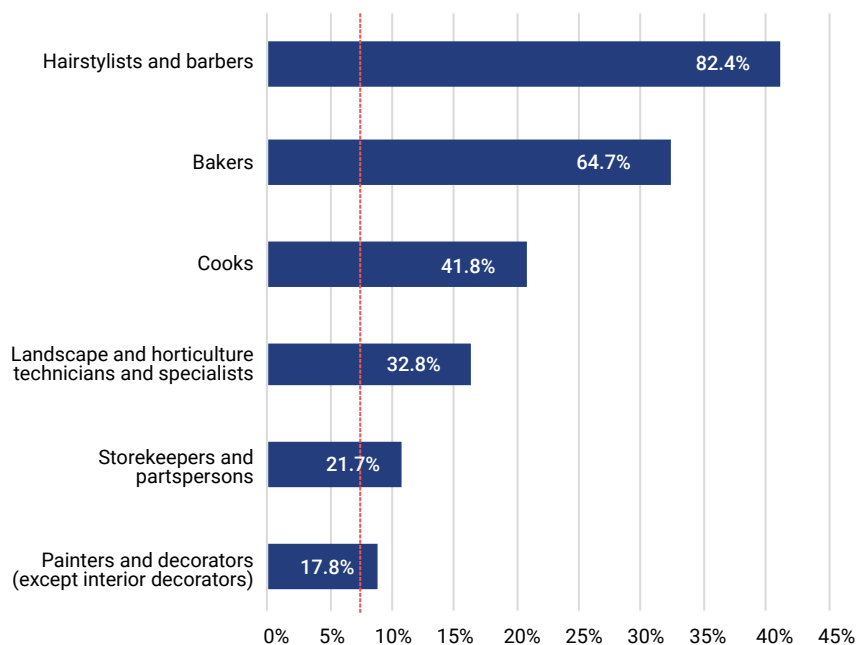
Figure 8 – Change in Share of Women in a Red Seal Trade, 2016 to 2021



When expressed as an average across the Red Seal workforce, women comprise 9.2% of the Red Seal workforce. As shown in Figure 9, there are select trades where women account for a significantly higher share than the average. For example, women account for more than half of the workforce in hairstylist and barber and baker occupations.

There are nine trades where women comprise less than 2% of the workforce: industrial electrician, automotive service technician, electrical powerline worker, heating and refrigeration and A/C mechanic, construction millwright, plumber, oil and fuel mechanic, bricklayer and heavy-duty equipment mechanic.

Figure 9 - Red Seal Trades with the Highest Share of Women in the Workforce, 2021



Workforce Diversity

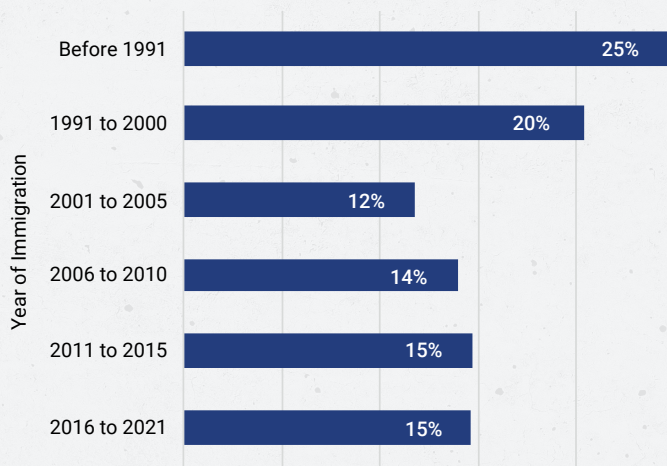
Other equity groups are underrepresented in the trades compared to their share in the overall population, except for Indigenous Peoples. The European and North American ethnic groups still dominate in the Red Seal workforce.

Immigration

In 2021, more than 379,100 people, or almost one-fifth (19.2%) of Canada's Red Seal workforce, were immigrants. From 2016 to 2021, the share of immigrants in the workforce remained unchanged. This trend contrasts with the overall workforce, which saw the share of immigrants reach 26%, a slight increase of 1.2% from 2016.

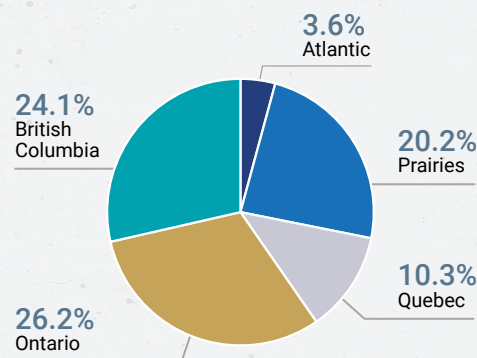
Approximately 15% of immigrants in the Red Seal workforce are recent immigrants. Recent immigrants arrived between 2016 to 2021.

Figure 10 – Share of Immigrants in the Red Seal Workforce by Year of Immigration, 2021



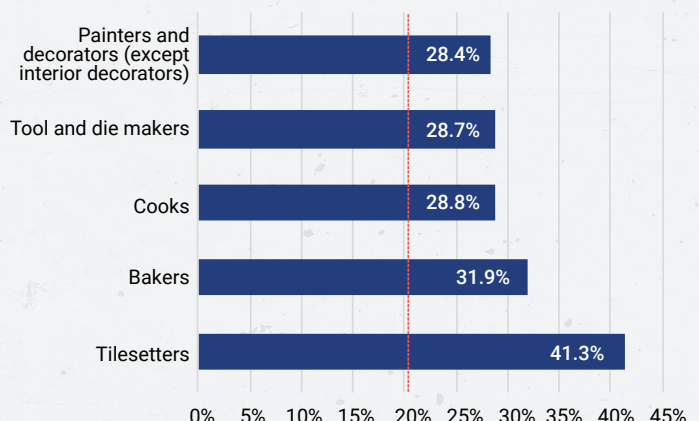
Canada's three largest urban centres, Toronto, Montreal and Vancouver, continued to welcome the largest number of immigrants in 2021.⁴ As a result, regions that include these areas have a notably higher proportion of immigrants. More than a quarter (26.2%) of Ontario's Red Seal workforce is comprised of immigrant workers. British Columbia follows closely, with immigrant workers accounting for just under a quarter (24.1%) of the workforce. Atlantic Canada has a significantly lower share of immigrants, accounting for approximately 4% of the workforce.

Figure 11 – Share of Immigrants in the Red Seal Workforce by Region, 2021



The share of immigrants in the workforce varies considerably across Red Seal trades. Figure 12 highlights the trades with the highest share of immigrant workers. On average, immigrants account for 18.7% of the workforce (indicated by the red line in the figure below). There are several trades where immigrants account for less than 10% of the workforce, including boilermaker, heavy-equipment operator, and electrical power line and cable worker.

Figure 12 – Red Seal Trades with the Highest Share of Immigrants in the Workforce, 2021



⁴ See: <https://www150.statcan.gc.ca/n1/daily-quotidien/221026/dq221026a-eng.htm>.

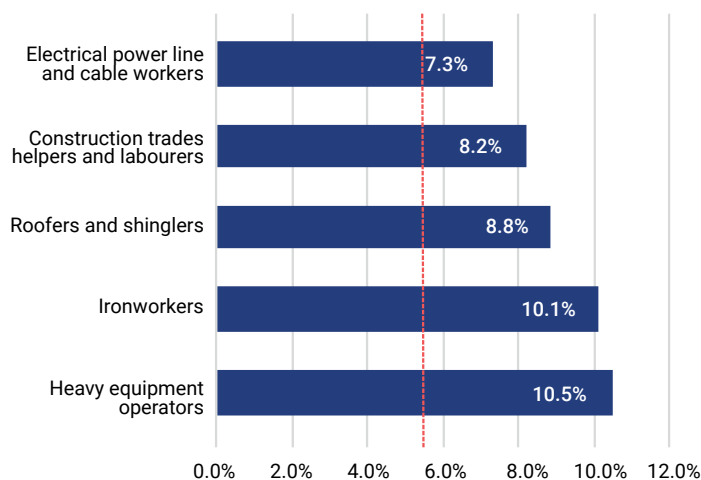
Indigenous Peoples

In 2021, nearly 114,300 people, or 5.8% of Canada's Red Seal workforce, were Indigenous Peoples. This is more than double the share of 2.8% reported in 2016. The share of Indigenous Peoples in the Red Seal workforce is nearly two percentage points higher than the share of 4.2% in the overall workforce.

The Prairie provinces and British Columbia have a higher share of Indigenous Peoples in the Red Seal workforce than the rest of Canada, comprising 11% and 7% of the workforce respectively. Indigenous Peoples comprise a smaller share (less than 6%) of the Red Seal workforce in the remaining Canadian regions.

On average, Indigenous Peoples account for 5.3% of the workforce across the Red Seal trades. Figure 13 highlights the five trades with the highest share of Indigenous Peoples. Indigenous Peoples account for less than 3% of the workforce in the following trades: cabinetmakers, machinists, tilesetters and tool and die makers.

Figure 13 - Red Seal Trades with the Highest Share of Indigenous People in the Workforce, 2021



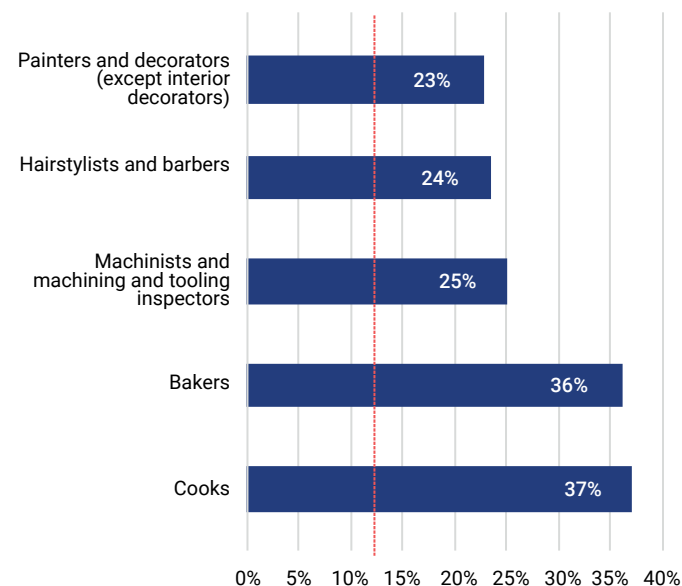
Visible Minorities⁵

Approximately 358,500 people, or nearly one-fifth (18.2%) of Canada's Red Seal workforce, identified as a visible minority in 2021. This is an increase of 3.3% from the 2016 Census. The share of visible minorities in the Red Seal workforce, however, is nearly 10% below the share in the overall workforce (26.8%).

British Columbia has the highest share of visible minorities working in a Red Seal trade, accounting for more than a quarter (26.3%) of the workforce. Ontario follows closely, with visible minorities accounting for just under a quarter (23.3%) of the workforce. Atlantic Canada has a significantly lower share of visible minorities, accounting for approximately 5% of the workforce.

Expressed as an average, visible minorities account for 15.8% of the Red Seal workforce. Figure 14 highlights the five trades with the highest share of visible minorities. Several trades fall well below this average, including heavy duty equipment mechanic (7.4%), motorcycle mechanic (6.1%), electrical power line and cable worker (4.7%) and heavy-equipment operator (4.3%).

Figure 14 - Red Seal Trades with the highest Share of Visible Minorities in the Workforce, 2021



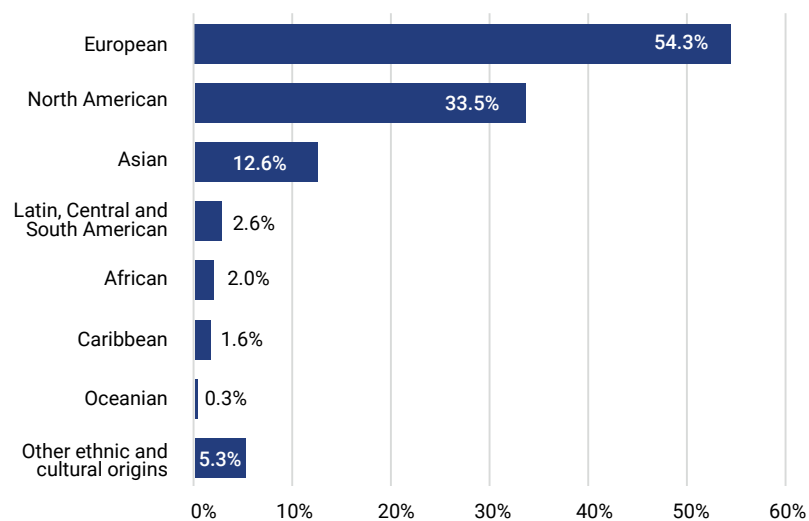
⁵ According to Statistics Canada, the main groups designated as visible minorities are South Asian, Chinese, Black, Filipino, Arab, Latin American, Southeast Asian, West Asian, Korean and Japanese. See: <https://www12.statcan.gc.ca/census-recensement/2021/ref/98-500/006/98-500-x2021006-eng.cfm>.



Ethnocultural Diversity

Although the Red Seal workforce has many diverse groups, two of these, European and North American, continue to dominate the trades. In 2021, “European” was the top origin identified by the Red Seal workforce. More than half (54.3%) or 1,070,200 persons in Canada reported this origin. “North American” was the second most reported origin, cited by a third (33.5%) of the Red Seal workforce.

Figure 15 – Most Common Ethnic or Cultural Origin Reported, Red Seal Workforce, 2021



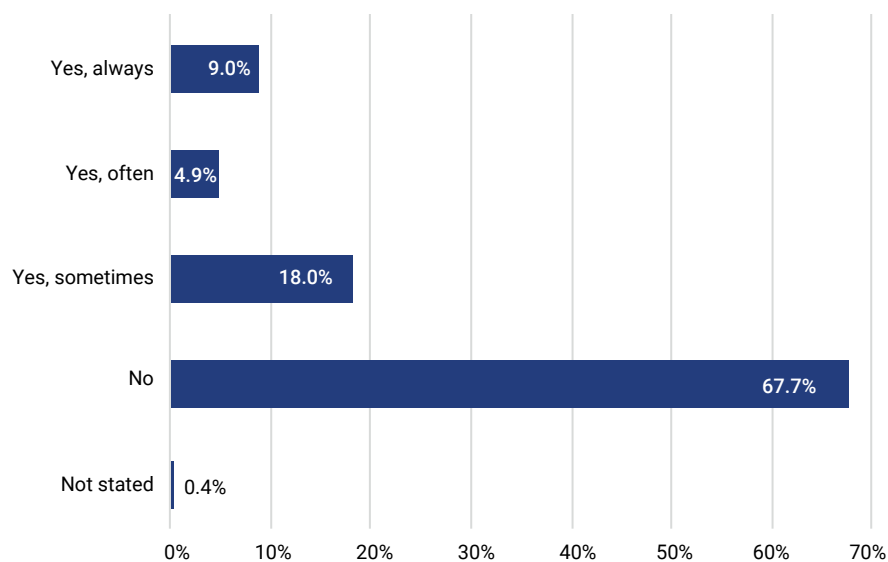
In the 2021 Census a considerable number of modifications were made to the question on ethnic or cultural origin. Considering the extent of these modifications, the 2021 Census data on ethnic or cultural origin are not comparable with data from previous censuses.

People with Disabilities

For this report, people with disabilities are defined as individuals in the workforce who report they “often” or “always” have difficulties with the activities of daily living (e.g., seeing, hearing, walking, learning, etc.).

There were 272,800 people with disabilities in Canada's Red Seal workforce in 2021, and they accounted for 13.8% of the workforce (Figure 16). This figure is approximately five percentage points lower than the share across all occupations. Data were not available for comparison to the 2016 Census.

Figure 16 – Difficulties with Activities of Daily Living in Red Seal Workforce, 2021



Atlantic Canada has the highest share of people working in a Red Seal trade with a disability, accounting for nearly one-fifth (18.1%) of the workforce. The Prairies and British Columbia follow closely, with people with disabilities accounting for approximately 15% of the Red Seal workforce. Ontario and Quebec have a lower share of people with disabilities, accounting for 13.5% and 11.1% of the workforce respectively.

Expressed as an average, people with disabilities account for 13.5% of the Red Seal workforce. Several trades have a notably higher share than the average: oil and solid fuel heating (17.6%), storekeepers and parts persons (17.2%), bakers (16.6%), cooks (16.2%), structural metal and platework fabricators (15.2%), heavy equipment operators (15.3%) and painters and decorators (15.2%).

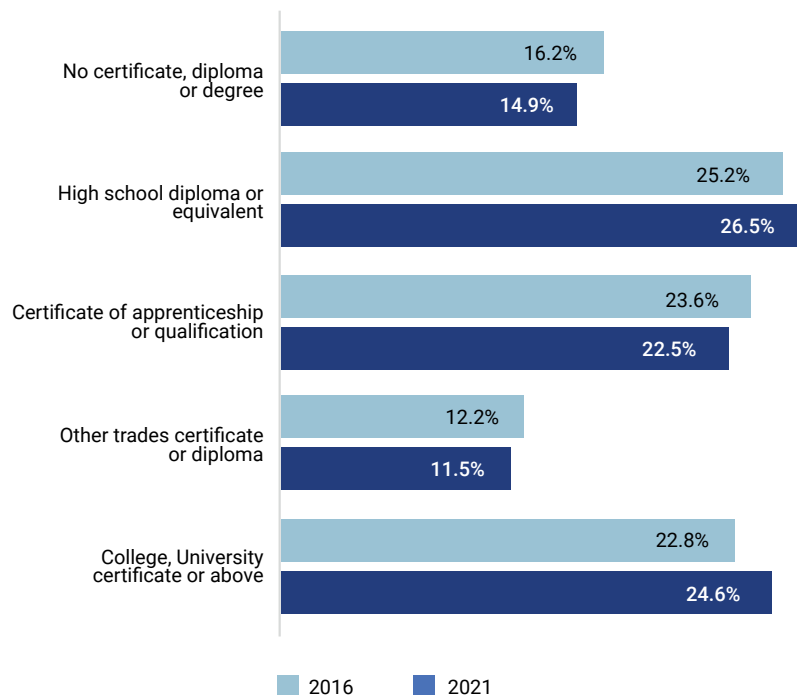
Education Attainment

The Red Seal Workforce is More Educated than Five Years Ago.

In 2021, approximately a quarter (24.6%) of the Red Seal workforce reported having a college diploma or a university degree as their “highest” form of education, up from the 22.8% reported in 2016. In contrast, the share of the workforce with an apprenticeship certificate or Certificate of Qualification as their highest form of education fell by 1.1% to 22.5% in 2021 possibly reflecting the trend of individuals pursuing university or college after high school and then entering the trades later. It is important to note that the Census ranks educational credentials based on a hierarchy. A university degree or college diploma is ranked “higher” than a Certificate of Qualification in their system. For individuals who obtained a university degree or college diploma first and then pursued a trade later, their Certificate of Qualification is not “counted.” When taken together, the proportion of the workforce with either a Certificate of Qualification, a college diploma or a university degree as their “highest” level of education account for almost half (47.1%) of the Red Seal workforce.

Education credentials and qualifications vary depending on individual trade requirements. As Figure 17 illustrates, compulsory trades have a higher share of the workforce with a Certificate of Apprenticeship or Certificate of Qualification as their highest form of education, including steamfitter, pipefitters and sprinkler fitters (55.1%), plumbers (49.6%), boilermakers (49.5%), and electricians (48.9%).

Figure 17 – Educational Attainment of Red Seal Workforce, 2021

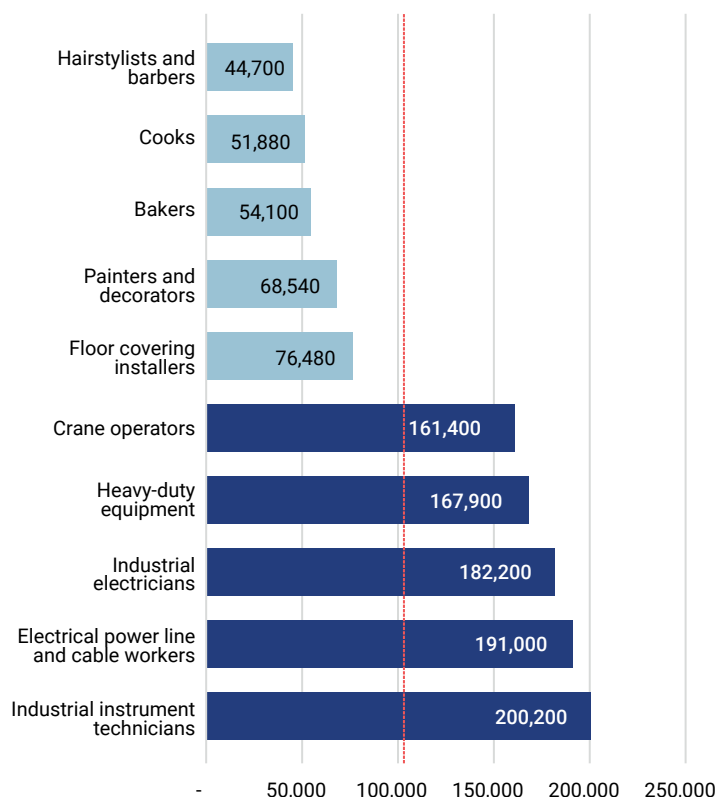


Employment Income

Based on the 2021 Census, the average employment income for a Red Seal Trade in Canada is \$111,500 per year. Between the highest and lowest-paying Red Seal trade there is a wage gap of \$155,000. Industrial instrument technician and mechanic is the highest paying trade occupation, earning an average of \$200,200 annually (Figure 18). Service-based trades have a significantly lower average annual income at close to \$50,000.

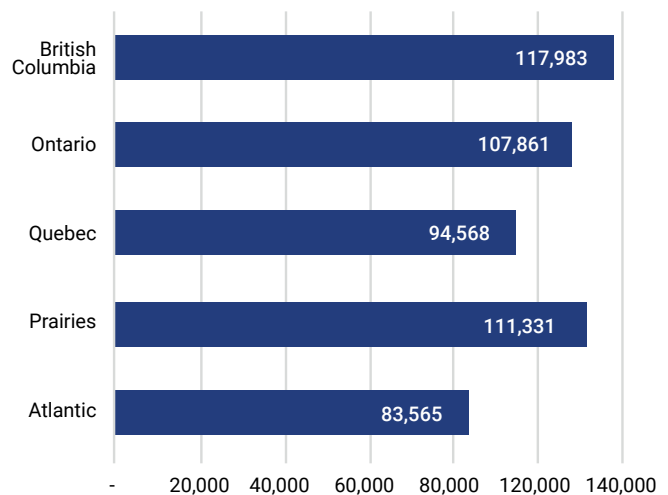
Those that are self-employed and have their own business are included in the analysis possibly increasing the income. From 2016 to 2021, there was an increase in self-employed individuals in most trades. There are separate occupational categories for contractors, managers and supervisors in construction trades so these occupations were not included in the analysis.

Figure 18 – Five Highest-Earning and Lowest-Earning Red Seal Trades, 2021



British Columbia is the highest paying region, with an average employment income of \$117,330. Employment income is notably lower in Atlantic Canada, averaging \$83,570 annually.

Figure 19 – Average Employment Income by Region, Red Seal Workforce, 2021



Summary

This report aims to establish a comprehensive profile of Canada's Red Seal workforce based on the 2021 Census of Population.

Compared to 2016, there are fewer Canadians working in a Red Seal trade in 2021. The gap has widened between baby boomers already in the workforce and the new generation that is entering it. As of 2021, more than 1 in 5 Red Seal workers were nearing or were at retirement age (aged 55 or older).

Within Red Seal trades, women, immigrants, visible minorities and persons with disabilities continue to be underrepresented compared to their overall share in the population while the share of Indigenous Peoples in the Red Seal workforce is nearly two percentage points higher than the share of 4.1% in the overall workforce.

A higher number of individuals are either going to university or college prior to entering into an apprenticeship or pursuing additional post-secondary schooling after completing their apprenticeship. In 2021, approximately a quarter (24.6%) of the Red Seal workforce reported having a college diploma or a university degree as their "highest" form of education, up from the 22.8% reported in 2016. The proportion of the workforce with either a Certificate of Qualification, a college diploma or a university degree as their "highest" level of education account for almost half (47.1%) of the Red Seal workforce.

Based on the 2021 Census, the average employment income for a Red Seal Trade in Canada is \$111,500 per year. Industrial instrument technician and mechanic is the highest paying trade occupation, earning an average of \$200,200 annually.



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