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## Acknowledgements

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# Indigenous journeypersons: Trends and socioeconomic characteristics, 2010 to 2020

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## Overview of the study

The current study, done in collaboration with the Native Women's Association of Canada, examines the socioeconomic characteristics of Indigenous people who certified as journeypersons over the 10-year period of 2010 to 2020, including the trades they chose and income trends using the Education and Labour Market Longitudinal Platform (ELMLP). It further explores socioeconomic characteristics of those who completed certification compared to those who registered but did not complete certification among Indigenous men and women. The findings could inform registered apprenticeship programs and policies to address gender gaps in trades chosen and earnings.

- Trends over time from 2010 to 2020 show that there was an increase in Indigenous journeymen being certified from 2010 to 2013, from 1,580 to 1,990, followed by declines in 2014 and 2015 (1,740 and 1,590, respectively). Subsequently, the number of Indigenous journeymen being certified remained relatively stable until a decline in 2020 to 960, which was during the first year of the pandemic.
- For Indigenous women, the number of those who received their certification was relatively stable from 2010 to 2019, ranging from 240 to 360, followed by a decline in 2020 to 210.
- Trades most often chosen by Indigenous journeymen were electricians (15%), carpenters (10%) and welders (8%), whereas the trades most often chosen by Indigenous journeywomen were hairstylists (40%) and cooks (12%).
- From 2010 to 2020, Indigenous journeymen earned nearly 2.5 times more (\$74,980) on average than their female counterparts (\$30,920). The gap in income between Indigenous journeywomen and journeymen has not only been persistent over the years but has significantly widened at times. The gap reached a peak of \$62,430 in 2017.
- Women from lone-parent families and women of younger age represent a smaller proportion of completers of apprenticeship programs compared to non-completers.

## Introduction

The historical and ongoing impacts of colonization, including the removal from land and traditional livelihoods as well as the barriers to educational opportunities have been well documented and continue to result in less favourable labour market conditions and experiences among Indigenous people (Reading & Wien, 2009; Bleakney et al., 2021). However, among those in the trades, specifically certified journeypersons, overall Indigenous people appear to be well represented (Su & Jin, 2023). Yet differences between First Nations, Métis and Inuit journeypersons are apparent upon closer examination. First Nations people and Inuit were under-represented among Indigenous journeypersons while Métis were over-represented among both men and women.

A study by Su and Jin (2023) shows that between 2008 and 2017, Indigenous journeymen fared better than non-Indigenous journeymen in terms of income earned. Métis (\$73,500) and First Nations (\$68,400) journeymen had a higher median employment income after the first year of certification than non-Indigenous journeymen (\$64,100). However, a large gap in median employment income between Indigenous journeywomen and journeymen was apparent, similar to that seen between their non-Indigenous counterparts. Indigenous journeywomen, on average, earned nearly \$44,000 less annually than Indigenous journeymen. Similar gaps were seen among First Nations people and Métis. Furthermore, Indigenous journeywomen had a median employment income that was \$1,900 lower than their non-Indigenous counterparts, after accounting for trade, region, mobility, trade qualifier status, self-employment, and union membership.

Several Indigenous organizations have developed apprenticeship programs to encourage and facilitate entry into trades. For example, NWAC developed its National Apprenticeships Program to connect Indigenous women, as

well as Two-Spirit, transgender and gender-diverse people, with small and medium-sized businesses, to build trade skills and networks for new career opportunities ([NWAC National Apprenticeships Program](#)).

In collaboration with NWAC, the current study examines Indigenous journeypersons in the Registered Apprenticeship Information System (RAIS) using the Education and Labour Market Longitudinal Platform (ELMLP), which links the RAIS to the 2016 Census of Population. The linked dataset not only enables identification of Indigenous people in the RAIS, but also facilitates an examination of their socioeconomic characteristics. This study aims to enhance understanding of trends over time among certified journeypersons, with a particular focus on gender comparisons. It examines their socioeconomic characteristics, including employment income before and after certification, chosen trades, and factors associated with completion versus non-completion of certification.

## Large gaps persist between the number of Indigenous men and women being certified as journeypersons

The results show that from 2010 to 2020, women were significantly underrepresented among journeypersons. Indigenous women made up a similar share (16%) of journeypersons as non-Indigenous women (13%).

From 2010 to 2020, an estimated 21,030 Indigenous journeypersons received their certification: 17,670 (84%) were men and 3,350 (16%) were women.<sup>1</sup> This included 7,230 First Nations journeymen, 1,460 First Nations journeywomen, 9,580 Métis journeymen, 1,760 Métis journeywomen and a total of 320 Inuit journeypersons.

An examination of trends from 2010 to 2020 shows that the number of Indigenous journeymen being certified trended upwards from 2010, peaking in 2013 with 1,990 registered apprentices receiving their certification that year (Chart 1). Subsequently, from 2014 to 2018, the numbers continued to decline, apart from some stability between 2015 and 2018. However, there was a decline in 2019 to 1,460 journeymen, and a further decline in 2020 to 960, the first year of the COVID-19 pandemic. These trends mirror the trend in numbers of certifications overall (Statistics Canada, 2023).<sup>2</sup>

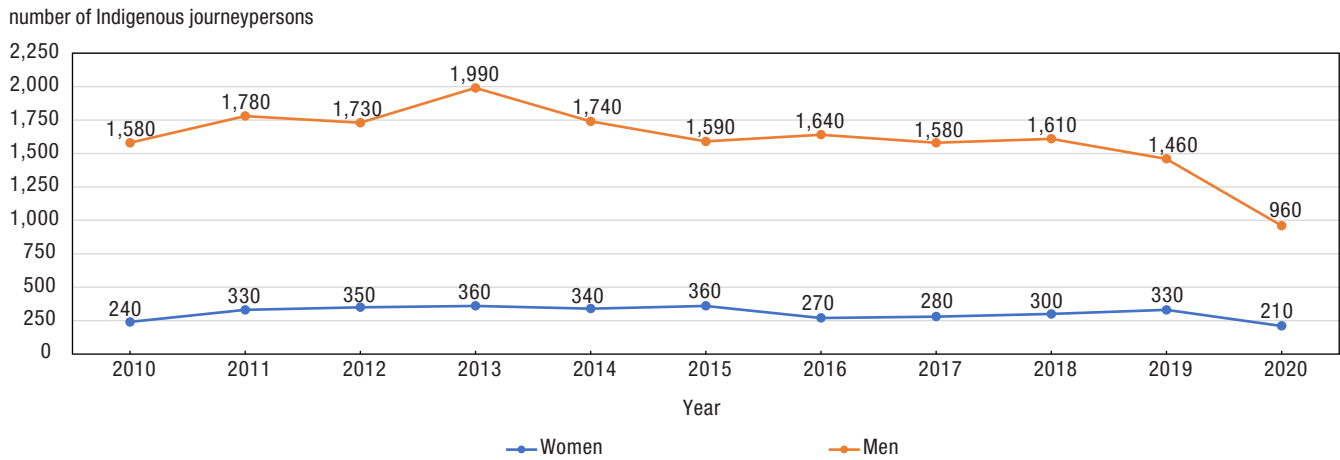
While the sharp decline in the number of Indigenous journeymen from 2019 to 2020 can potentially be explained by the COVID-19 pandemic, a decrease in the number of Indigenous journeymen appears to have started after 2013 (Statistics Canada, 2023). A 20% decline in the number of certifications was observed from 2013 to 2015, followed by a steady period until 2018. From 2019 to 2020, the number of certifications was down 35%.

While the number of Indigenous journeywomen certifying between 2010 and 2020 was relatively stable compared to Indigenous journeymen, the number of certifiers between 2010 and 2011 increased by 37% from 240 to 330 and decreased by 24% from 330 to 210 between 2019 and 2020. The year that recorded the most certifications was 2015, with 360 Indigenous journeywomen.

1. Sums do not add up to the total because of rounding.

2. Table 37-10-0089-01. Number of certificates granted to registered apprentices and trade qualifiers (Statistics Canada, 2023). <https://www150.statcan.gc.ca/t1/tbl1/en/tv.action?pid=3710008901>

**Chart 1**  
**Number of Indigenous journeypersons aged 15 to 64 who were certified between 2010 and 2020, by gender and year of certification, Canada**



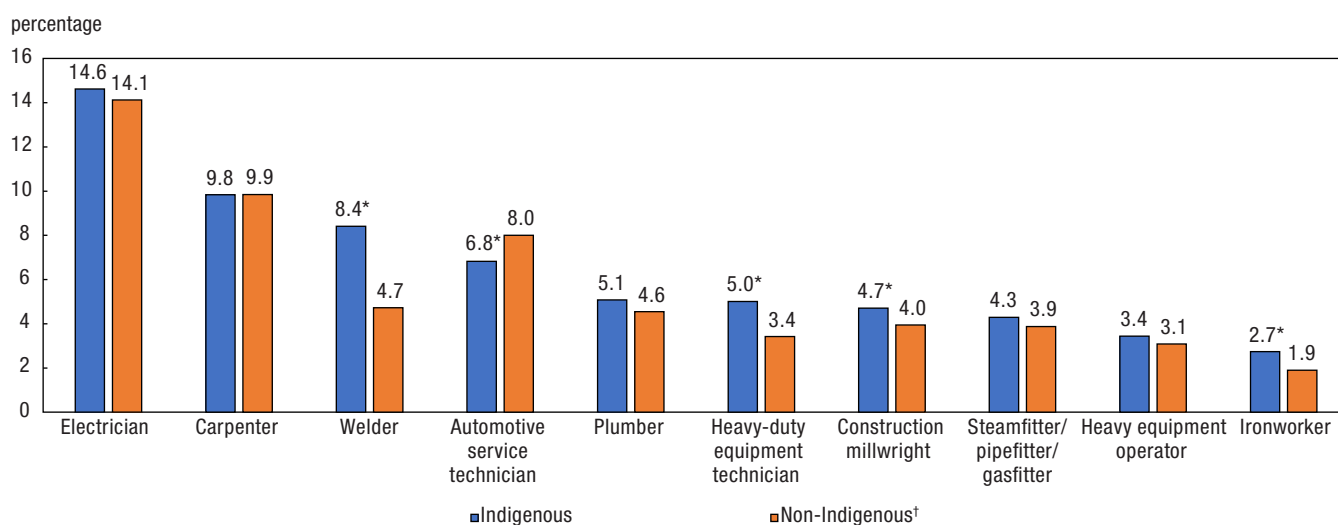
**Source:** Education and Labour Market Longitudinal Platform (Registered Apprenticeship Information System, 2016 Census).

## The top trades for Indigenous journeymen are electricians and carpenters, while hairstylists and cooks are the top trades for Indigenous journeymen

The RAIS, and thus the ELMLP, contains information on apprenticeship completers and trade qualifiers for a total of 385 trades across Canada. These data enable an examination of the trades chosen by Indigenous and non-Indigenous journeypersons.

In line with previous findings (Su & Jin, 2023), differences in trades were observed between Indigenous journeymen and journeymen. Overall, Indigenous men certified in 223 trade categories, while Indigenous women certified in 104 trade categories. Among Indigenous journeymen, electricians and carpenters were the most popular trades, accounting for one-fourth of certifications from 2010 to 2020 (Chart 2). These were followed by welders, automotive service technicians and plumbers. This pattern was similar among non-Indigenous journeymen, though there were some differences. A higher share of Indigenous journeymen certified as welders, heavy-duty equipment technicians and construction millwrights and a lower share certified as automotive service technicians compared with their non-Indigenous counterparts (Chart 2). In particular, 8% of Indigenous men certified as welders compared to 5% of their non-Indigenous counterparts.

**Chart 2**  
**Ten most frequent trades among Indigenous and non-Indigenous journeymen aged 15 to 64, 2010 to 2020, Canada**



\* significantly different from reference category ( $p < 0.05$ )

<sup>†</sup> reference category

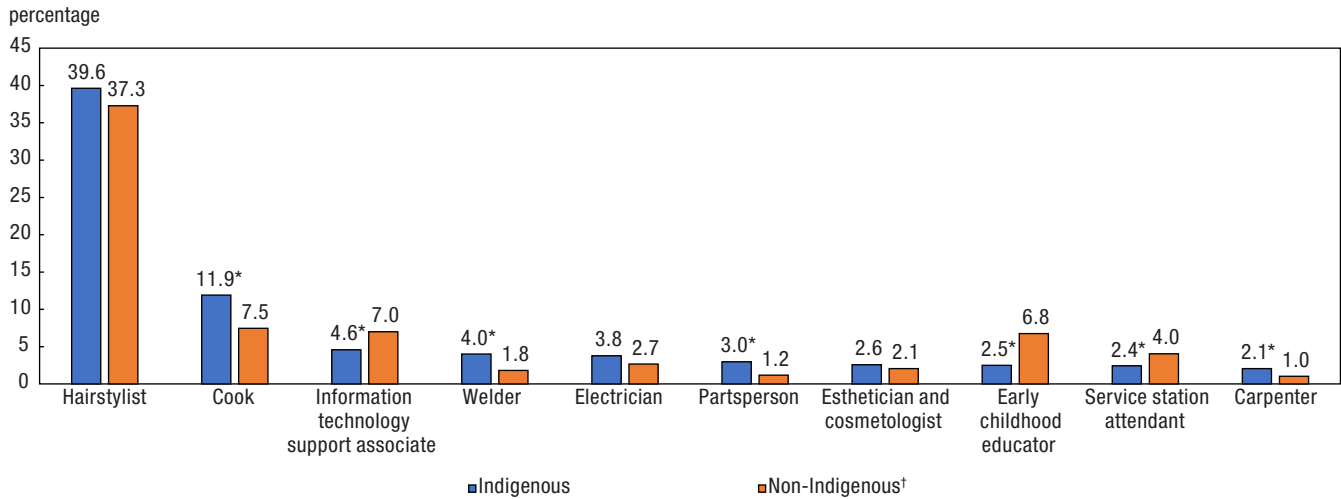
Source: Education and Labour Market Longitudinal Platform (Registered Apprenticeship Information System, 2016 Census).

Nationally, among women, the most popular trade for Indigenous (40%) and non-Indigenous (37%) journeypersons was hairstylist, followed by cook (Chart 3). Among Indigenous women who certified between 2010 and 2020, these two trades made up more than half of all certifications. However, differences were noted between Indigenous and non-Indigenous women for a few trades. A higher proportion of Indigenous journeypersons certified as cooks (12%) compared with non-Indigenous journeypersons (8%). Also, the proportions of Indigenous women who certified as welders (4%) and partspersons (3%) were more than double those of non-Indigenous women (2% and 1%, respectively). Earlier research found that journeypersons who had a father in the trades were overall more likely to choose a male-dominated apprenticeship program (Frank & Frenette, 2019). A lower proportion of Indigenous women certified as information technology support associates (5%) than non-Indigenous women (7%). Similarly, the proportion of Indigenous women who certified as early childhood educators (3%) was less than half that of non-Indigenous women (7%). It is important to note that both information technology support associates and early childhood educators are only available as an apprenticeable trade in Ontario,<sup>3</sup> and that a lower share of the total Indigenous population lives in this province (22% based on the 2021 Census) compared to the non-Indigenous population (39%).<sup>4</sup>

3. Ellis chart: <https://www.ellischart.ca/eng/search/s.2.1rch.shtml>

4. [Indigenous identity population by gender and age: Canada, provinces and territories, census metropolitan areas and census agglomerations.](#)

**Chart 3**  
**Ten most frequent trades among Indigenous and non-Indigenous journeywomen aged 15 to 64, 2010 to 2020, Canada**



\* significantly different from reference category (p < 0.05)

† reference category

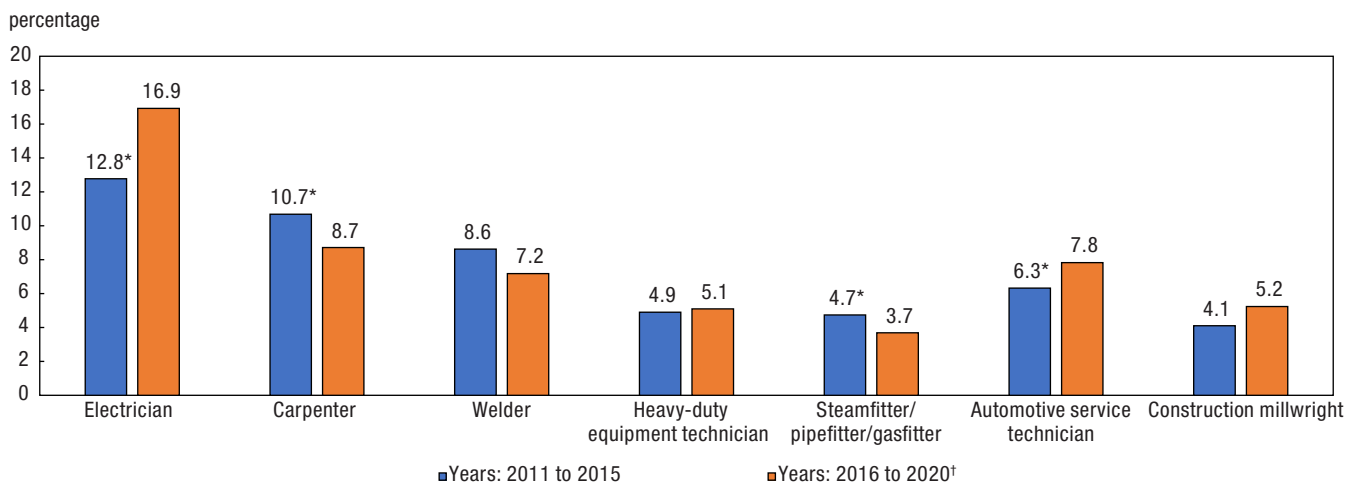
Note: Information technology support associates and early childhood educators are only available as an apprenticesable trade in Ontario.

Source: Education and Labour Market Longitudinal Platform (Registered Apprenticeship Information System, 2016 Census).

## Little change over time in the top trades being selected by Indigenous journeywomen

Data limitations precluded an examination of annual trends by trade and gender. To overcome this limitation, the percentage of journeypersons by trade was compared over two five-year periods: 2011 to 2015 and 2016 to 2020 (Chart 4). In the first half of the decade, around 13% of Indigenous journeymen were electricians, while in the second half of the decade, the proportion increased to 17%. Proportions also increased for automotive service technicians, but only by 2%. By contrast, the proportions of carpenters decreased by 2%.

**Chart 4**  
**Comparison of the top trades among Indigenous journeymen between 2011-2015 and 2016-2020, aged 15 to 64, 2010 to 2020, Canada**



\* significantly different from reference category (p < 0.05)

† reference category

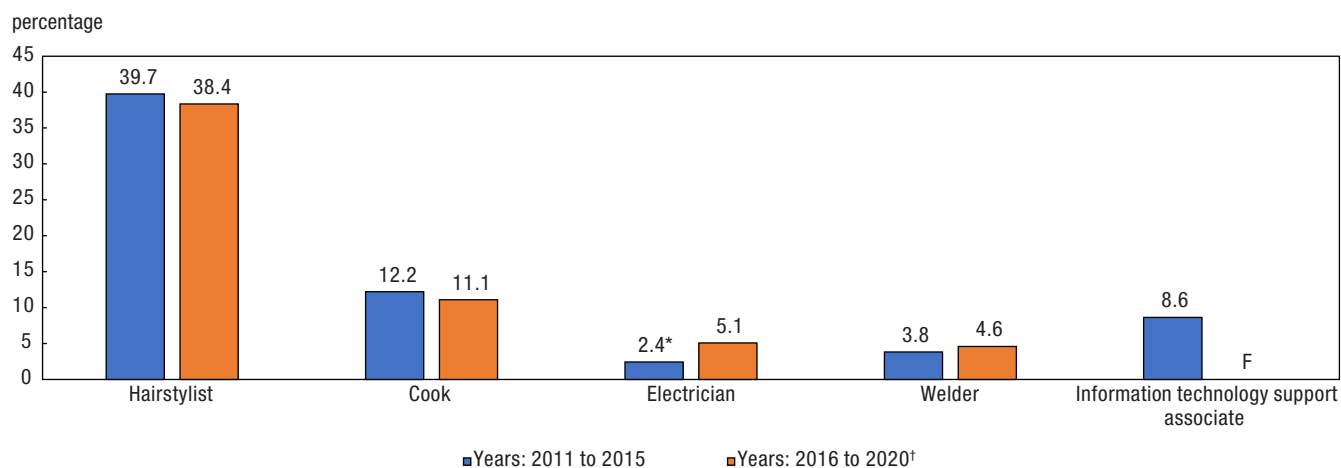
Source: Education and Labour Market Longitudinal Platform (Registered Apprenticeship Information System, 2016 Census).



Similarly, the top trades of Indigenous journeywomen were compared between the two five-year periods (2011 to 2015 and 2016 to 2020) (Chart 5). Nationally, hairstylists was consistently the top trade chosen by Indigenous journeywomen, and the proportion remained relatively unchanged over the two five-year periods. This was similar for the other trades, except for electricians, whose proportion increased from 2% to 5%.

**Chart 5**

**Comparison of the top trades among Indigenous journeywomen between 2011-2015 and 2016-2020, aged 15 to 64, 2010 to 2020, Canada**



F too unreliable to be published

\* significantly different from reference category ( $p < 0.05$ )

† reference category

Source: Education and Labour Market Longitudinal Platform (Registered Apprenticeship Information System, 2016 Census).

## Four in ten Indigenous journeywomen certified with a Red Seal designation which was a higher share than among non-Indigenous journeywomen

In registered apprenticeship programs, individuals can choose to enroll as registered apprentices<sup>5</sup> or challenge the required exam as trade qualifiers or trade challengers.<sup>6</sup> Among the individuals who certified between 2010 and 2020, most Indigenous journeypersons were registered apprentices as opposed to trade qualifiers or trade challengers (82% versus 18%). Registered apprentices made up a smaller percentage of non-Indigenous journeypersons (74%). A gender comparison revealed that a higher share of Indigenous journeywomen were registered apprentices rather than trade qualifiers compared to their male counterparts (90% versus 80%). The share of non-Indigenous journeywomen who were trade qualifiers or trade challengers was nearly twice that of Indigenous journeywomen (19% versus 10%).

Furthermore, journeypersons who get certified can obtain a Red Seal endorsement, which means that the journeyperson has met the national standard in their trade and has passed the Red Seal exam (ESDC, 2023). Between 2010 and 2020, almost 6 in 10 (57%) trade certificates issued to Indigenous journeypersons had a Red Seal designation, although this proportion varied by gender. The share of Indigenous journeywomen with a Red Seal designation was lower compared with Indigenous journeymen (41% versus 60%). By contrast, less than half of non-Indigenous journeypersons had obtained a Red Seal endorsement (23% of women and 47% of men).

5. Registered apprentices are “people who are in a supervised work training program in a designated trade within their provincial or territorial jurisdiction” (Statistics Canada, 2023).

6. Trade qualifiers or trade challengers are “people who have worked in a specific trade for an extended period of time, without necessarily having been an apprentice, and who have received certification from a jurisdiction, usually done via a skills assessment examination in the trade” (Statistics Canada, 2023).

## Large income gaps exist among Indigenous journeypersons, with men earning nearly 2.5 times more on average than women

Between 2010 and 2020, the inflation-adjusted median employment income for Indigenous journeypersons was \$67,120. However, a notable disparity exists, with men earning nearly 2.5 times more on average—\$74,980 compared to \$30,920 for Indigenous journeywomen. In comparison, non-Indigenous journeypersons reported a median employment income of \$65,715, with men earning \$71,420 and women earning \$33,410. Overall, income gaps are largely related to the trades chosen. It is also evident that even within the same apprenticeship programs, women in male-dominated apprenticeship programs often experience poorer labour market outcomes, including receiving lower median hourly wages compared to their male peers (Frank & Frenette, 2019).

A study by Su and Jin (2023) indicates that income disparities between Indigenous and non-Indigenous journeypersons are largely attributed to trade choice, as well as regional factors and interprovincial mobility. Male Indigenous journeypersons reported a median income of \$71,100, approximately \$7,000 higher than their non-Indigenous counterparts; however, these income gaps diminished significantly after controlling for the above factors. Indigenous women earned a median income of \$27,300, which was comparable to non-Indigenous women, but when accounting for trade, earnings were \$1,900 lower. Overall, trade selection significantly influences income outcomes. As the present study and that of Su and Jin (2023) have shown, about half of Indigenous journeywomen received their certification as hairstylists and cooks. These two occupations also tend to have some of the lowest median incomes. A previous study reported that those in these trades in the 2018 cohort earned on average \$24,140 and \$35,970, respectively (Statistics Canada, 2022b). By comparison, the top trade for Indigenous journeymen—electrician—earned two times or more that of hairstylists or cooks (\$69,850). These findings indicate that one important factor explaining the large differences in median employment income between male and female journeypersons is the trade in which they are certified.

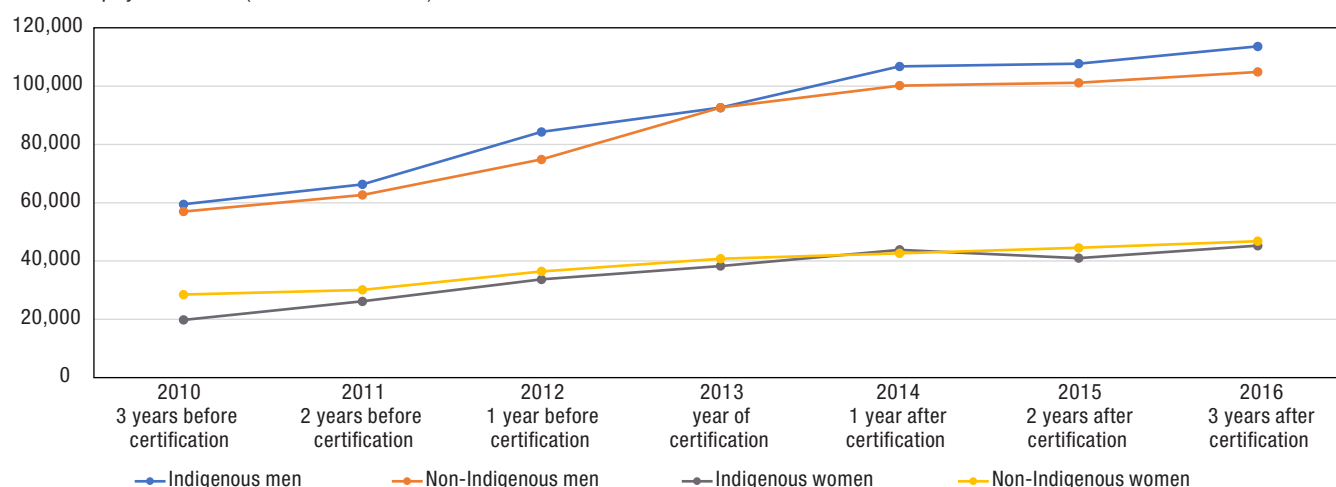
However, factors other than trade and prior experience have also previously been considered in examining the difference in employment income including region, mobility, union membership and self-employment. Research by Haan, Jin and Paul (2022) suggest that interprovincial mobility is a factor that leads to increased income. They found that “migrant and interprovincially mobile journeypersons have higher average and median incomes than stayers” (p. 102). Also, since trade qualifiers are required to have a prescribed number of hours to receive their certification, they are often older and have more work experience by the time they are certified compared with registered apprentices. As a result, trade qualifiers often earn more than apprentices after certification (Boco, Emery and Mokhtar, 2021). Hillman, Paul, Haan and Lehmann (2022) also demonstrated that from 2008 to 2018 trade qualifiers earned consistently more than registered apprentices on average and offered the same hypothesis.

## Some differences in before-certification and after-certification income in the 2013 and 2017 cohorts of Indigenous journeypersons emerge

One of the strengths of the ELMLP, which links the RAIS to annual tax data, is that it enables longitudinal analysis to examine income trends before and after journeypersons receive their certification. This allows the impact of a certification on the median employment income of a specific group to be assessed over multiple years. The income trajectories of two cohorts of Indigenous journeypersons (one that certified in 2013 and the other that certified in 2017) are examined from three years before certification to three years after and are compared with those of their non-Indigenous counterparts (Chart 6 and Chart 7). Analyzing two cohorts allows for the comparison of impacts of certification on different groups of journeypersons over time. This approach provides clearer insights into how certification influences income changes and helps identify any disparities between the cohorts. These cohort years were chosen based on the years of income data available.

**Chart 6**  
**Median employment income for the 2013 cohort before and after the certification year, by gender and Indigenous identity, Canada**

median employment income (2020 constant dollars)



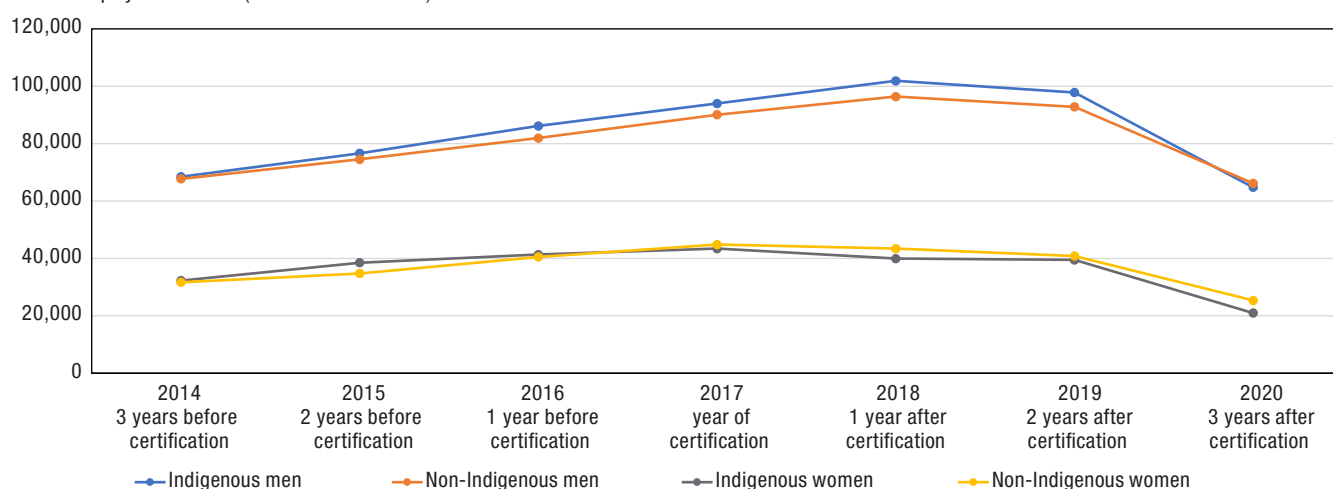
**Note:** Constant dollars are calculated by adjusting for inflation using 2020 as the base year.

**Source:** Education and Labour Market Longitudinal Platform (Registered Apprenticeship Information System, 2016 Census).

For the 2013 cohort, in the three years before Indigenous journeypersons received their certification, their income was continuously rising. For example, in 2010, median employment income for Indigenous journeymen was \$59,460, and it gradually increased each subsequent year. The largest gain was observed the first year after certification: Indigenous journeymen earned an additional \$14,130 from the previous year (from \$92,610 during the certification year to \$106,740 in the following year, or a 15% increase). Indigenous journeywomen in the same cohort followed a similar trend, albeit earning a significantly lower median income: a 15% increase (from \$38,290 during the certification year to \$43,860 in the following year).

**Chart 7**  
**Median employment income for the 2017 cohort before and after the certification year, by gender and Indigenous identity, Canada**

median employment income (2020 constant dollars)



**Note:** Constant dollars are calculated by adjusting for inflation using 2020 as the base year.

**Source:** Education and Labour Market Longitudinal Platform (Registered Apprenticeship Information System, 2016 Census).

By contrast, the same trend was not observed for the 2017 cohort (Chart 7). While there was an 8% increase after certification for Indigenous journeymen, median employment income of Indigenous journeywomen decreased the year after certification by 8% (from \$43,430 to \$39,940), demonstrating that the impact of certification was not the same among men and women. While unadjusted income of Indigenous journey women rose to \$36,320 in the year following certification (from \$26,800 during the certification year), inflation-adjusted income, or real income, decreased by 8%. Reasons for this difference in inflation-adjusted income in the two cohorts may be related to macroeconomic conditions. Overall, for men, there was a large increase in median employment income for the 2017 cohort in the year following certification. The increase in median employment income for Indigenous journeymen from the certification year (2017) to the following year (2018) was close to \$8,000 (from \$94,000 to \$101,900). Unadjusted median employment income continued to increase after the first year of certification (data not shown), but inflation-adjusted income decreased in 2019, two years after certification.

In summary, the differing income trajectories observed between the 2013 and 2017 cohorts of journeypersons suggest that various external factors may be influencing economic outcomes after certification. For example, for the 2013 cohort, both Indigenous journeymen and journeywomen experienced significant income growth immediately after certification, reflecting a strong positive impact of the credential on their financial prospects. In contrast, the 2017 cohort saw an increase in income for men but a decrease for women, highlighting a disparity in outcomes based on gender. This divergence raises questions about the underlying reasons, potentially linked to shifts in labour market trends, macroeconomic conditions, such as inflation rates possibly affecting the different trades pursued by these cohorts.

## Those in lone-parent families and young women make up a smaller share among completers compared to non-completers

Previous research (Jin et al., 2020) found that only a fraction of apprentices in registered apprenticeship programs certified within the duration of their program between 2008 to 2016: 16% of apprentices certified on time (i.e., within the duration of the program), 64% continued with their program, and 20% left their program. Further, those credited with previous work experience, those working in fields closely related to their trade and those who had higher employment incomes throughout their training were more likely to complete their program. Conversely, those who had received employment insurance benefits in the registration year were more likely to discontinue than those who had not.

In the current study, socioeconomic characteristics (median employment income, family status, age) of two cohorts of apprentices who had registered between 2010 to 2020 were compared. The first cohort, 'completers', comprised those who registered in an apprenticeship program and certified within 1.5 times the duration of their program.<sup>7</sup> The second cohort, 'non-completers' comprised those who registered but did not receive any certification. To narrow the focus to these two groups, those who took longer than 1.5 times the program duration to obtain their certification were excluded.

Differences were seen in median employment income at the time of registration between completers and non-completers. Among Indigenous women, completers had a higher median employment income at the time of their registration than non-completers (\$29,127 versus \$18,257). Among Indigenous men, median employment income at the time of their registration was also significantly higher among completers (\$56,658) than non-completers (\$40,225). This is in line with findings by Jin et al. (2020) that found that the probability of discontinuing an apprenticeship program was significantly higher among those living in low-income situations.

A majority of apprentices in both completer and non-completer groups were in couple families at the time of registration; however, the share varied by gender (Chart 8a). Among Indigenous men, a larger share of completers were in a married or common-law relationship compared to non-completers (61% versus 51%). Among Indigenous women, 72% of completers were in married or common-law relationships compared to 66% of non-completers. Conversely, a smaller share of completers amongst both Indigenous men and women were in lone-parent families at the time of registration compared to non-completers. For Indigenous female apprentices who had completed a

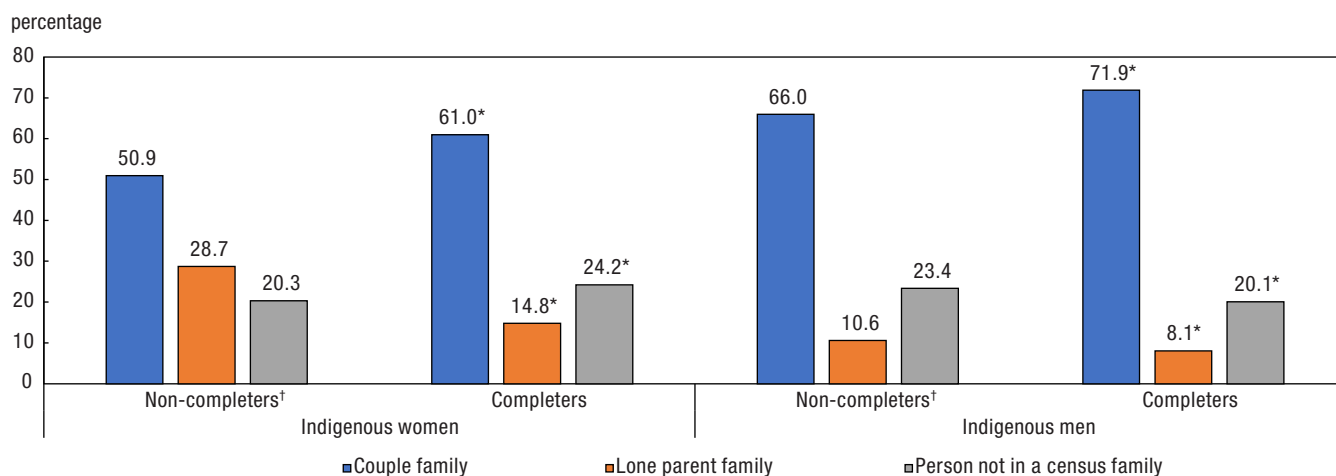
7. This duration was chosen to allow sufficient time for individuals to earn their certification (Jin et al., 2020).

program, the share in lone-parent families was half that of non-completers (15% versus 29%). Among Indigenous men, 8% of completers were in lone-parent families compared to 11% of non-completers.

A notable difference emerged between Indigenous female and male apprentices who were single at the time of registration. Among Indigenous women, a greater share of completers were single compared to non-completers (24% versus 20%), while Indigenous men reported the opposite trend (20% versus 23%). Family status was not fully examined by Jin et al. (2020); however, they noted that single individuals were less likely to certify compared with married or common-law individuals and more likely to continue.

**Chart 8.a**

**Gender comparison of distributions for T1FF family status between non-completers and completers, 2010 to 2020, Canada**



\* significantly different from reference category ( $p < 0.05$ )

† reference category

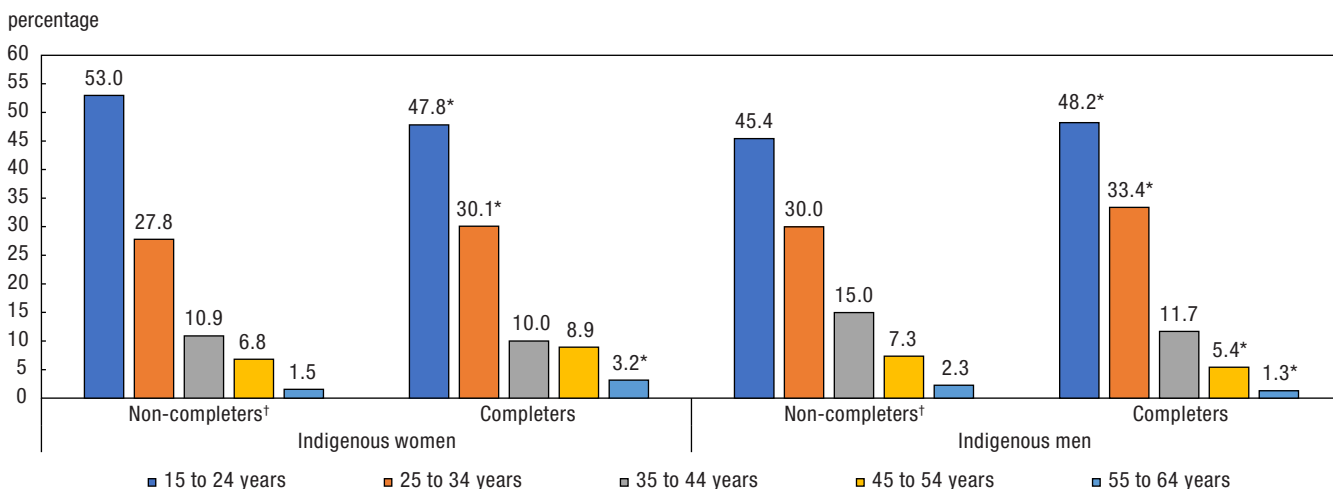
Source: Education and Labour Market Longitudinal Platform (Registered Apprenticeship Information System, 2016 Census).

The majority of registered Indigenous apprentices in both completer and non-completer groups were in the younger age groups at the time of registration (Chart 8b), however some differences by age and gender were observed. A smaller share of Indigenous women who had completed a program were young adults aged 15 to 24 years (48%) compared to non-completers (53%). In contrast, among Indigenous men, a larger share of completers were young adults (48%) compared to non-completers (45%). Among both Indigenous men and women who had completed a program, a larger share were aged 25 to 34 years (30% among women and 33% among men) compared to non-completers (28% among women and 30% among men).

Among Indigenous women, a higher proportion of completers were in the oldest age group (55 to 64 years) compared to non-completers, while no significant differences were observed among the other age groups. For Indigenous men who completed a program, a smaller share were in the two older age groups (45 to 54 years and 55 to 64 years) compared to non-completers.

One limitation of this section is that individuals who were certified by challenging an exam without completing the training were excluded from the analysis, as they did not have a date of registration. Overall, age at registration had a different impact on program completion for men and women. Among Indigenous women who completed the program, a lower proportion were in the youngest age group compared to non-completers, whereas Indigenous men showed the opposite trend.

**Chart 8.b**  
**Gender comparison of distributions for age-at-registration group between non-completers and completers, 2010 to 2020, Canada**



\* significantly different from reference category (p < 0.05)

† reference category

Source: Education and Labour Market Longitudinal Platform (Registered Apprenticeship Information System, 2016 Census).

While the three factors discussed in this section—income, family status, and age at registration—are generally highly correlated (for instance, younger individuals tend to be single, have less work experience and lower incomes), insights can be derived from these findings. The results showed that compared to non-completers, completers were younger (34 years old or younger), were part of coupled families, and had comparatively higher employment incomes. Also, women from lone-parent families and those of younger age represent a smaller proportion of completers compared to non-completers. It is important to note that the decision not to complete the apprenticeship program may have been influenced by other factors rather than being driven solely by income, age at registration, or family status.

## Conclusion

Using data from the ELMLP, this study provides a portrait of male and female Indigenous journeypersons who obtained certification from 2010 to 2020. It also examines potential socioeconomic factors associated with attaining certification among registered apprentices, as well as incomes over time longitudinally among certifiers in two cohorts.

Between 2010 and 2020, the number of Indigenous journeymen showed variability, while the number of Indigenous journeywomen remained relatively stable. Significant differences were noted in the trades chosen by Indigenous journeywomen compared to their male counterparts and non-Indigenous peers. Indigenous journeymen predominantly certified as electricians, carpenters, and welders — comprising one-third of all Indigenous journeymen during this period. While there was some diversity in the types of trades pursued overall, six trades made up 50% of all trades chosen. However, among Indigenous journeywomen, the two leading trades – hairstylists and cooks – accounted for 50% of all trades chosen.

Compared with non-Indigenous journeywomen, notably, a lower proportion of Indigenous journeywomen certified as information technology support associates. However, Indigenous journeywomen made up a larger share certified as welders and partspersons than non-Indigenous journeywomen. The barriers and facilitators to entry into male-dominated trades by Indigenous women, as well as disparities in participation between Indigenous and non-Indigenous women in some trades need further investigation.

Income analysis in this study revealed a consistent income gap between Indigenous journeymen and journeywomen. One contributing factor to the lower earnings of Indigenous journeywomen compared to their male counterparts is the type of trade selected, alongside the potential impact of prior work experience. The finding that fewer



women qualified or challenged for trades compared with men suggests that men are more likely to have existing experience in their chosen fields.

The study also sheds light on specific socio-economic factors at the time of registration that influence certification outcomes, including family status, income, and age group. These findings could help identify specific sub-groups that would benefit from targeted support in Indigenous apprenticeship programs, with the aim of increasing the proportion of Indigenous journeymen and journeywomen who successfully achieve certification. These support systems may need to be tailored based on the age, gender, family status and household income of individuals. Among women, they could include support systems for those with low income and those in one-parent families.

Future research could expand on these findings by examining occupational choices and earnings through more detailed characteristics, such as trade program duration and specific trade categories. Additionally, it could examine barriers and facilitators to completion among Indigenous women who register in male-dominated trades. Further research could also explore the reasons why Indigenous women choose certain trades despite the higher prevalence of post-secondary education than men. In an engagement session about participation in apprenticeship programs, NWAC asked about reasons for the under-representation of women in male-dominated trades. Just over half of Indigenous women and Two-Spirit individuals reported limited access to apprenticeship and training programs, along with the gender stereotypes and societal expectations discouraging women from pursuing trades, as the two most frequent reasons (Native Women's Association of Canada, unpublished data, 2023). In addition, hostile work environments and discrimination against women and unconscious bias in recruitment and hiring processes for trade positions were reported by 4 in 10 respondents. Other reasons included: a lack of awareness and exposure to trade careers during education and early career choices; inadequate support systems for work-life balance; unequal access to mentorship and networking opportunities in the trades; limited representation of women in leadership roles in the trades; a lack of accommodations for women; and pay gaps and unequal opportunities for career progression in the trades (Native Women's Association of Canada, unpublished data, 2023).

## Data sources and methods

This study uses data from the Education and Labour Market Longitudinal Platform (ELMLP) database which allows integration of various data sets, including data from the Postsecondary Student Information System (PSIS), the Registered Apprenticeship Information System (RAIS), the 2016 Census and the T1 Family File (TIFF). Specifically, this study used the ELMLP database that links three datasets: the RAIS, the 2016 Census, and the TIFF.

The RAIS is an administrative dataset that contains information on all individuals who enroll or certify in a registered apprenticeship program. It provides information on certification year, trade categories, and the types of certificates that journeypersons achieved, as well as whether apprenticeship training is compulsory or voluntary. It also compiles data on the number of provincial and interprovincial certificates granted to apprentices or trade qualifiers (challengers).<sup>8</sup> The top trades categories are ordered based on occupational domain, more specifically, according to the minor group (four-digit code) of the National Occupational Occupation (NOC).<sup>9</sup>

The TIFF is derived from T1 income tax returns and built from income tax information and a federal child benefits file. Information on income is obtained from tax filers, for themselves and their non-filing spouses. The income used in this study is total employment income during the calendar year. As there is no information on occupation, part or all of the employment income may have been earned in a job or jobs unrelated to the trade the journeyperson is certified in.

The linked dataset overcomes the limitation of the RAIS dataset which lacks Indigenous identifiers for those who enroll and certify to become journeypersons. This includes Indigenous identity (First Nations, Métis and Inuit). Approximately 25% of journeypersons in the RAIS were linked to the census long-form questionnaire, which includes population group questions, and those records were linked and weighted in the analyses. Finally, the

8. Dictionary of variables in the TIFF associated with the ELMLP in the research data centres (RDCs), 1992 to 2020, Canadian Centre for Education Statistics and Centre for Income and Socioeconomic Well-being Statistics 2023-04-28, Statistics Canada.

9. The minor group (4-digit) of the classification represents the domain in which an occupation is carried out (occupational domain). It aggregates several unit groups and thus represents the four-digit code used by [the NOC](https://www.statcan.gc.ca/en/subjects/standard/noc/2021/introductionV1). <https://www.statcan.gc.ca/en/subjects/standard/noc/2021/introductionV1>

dataset is a longitudinal dataset; that is, it has year-after-year data for individuals including year of enrollment, certification and tax data.

Our study population includes only journeypersons who certified from 2010 to 2020. To get the sample in the RAIS database, firstly, all individuals who did not certify were excluded. Next, only journeypersons aged 15 to 64 years who certified from 2010 to 2020 were included. For journeypersons who received multiple certificates within this period for the same trade or different trades from a given jurisdiction, only the latest record was used.

For the examination of factors associated with completing certification, two cohorts of apprentices were generated. First, a group of individuals who registered from 2010 to 2020 but did not certify was created (non-completers). In the case of multiple records, the record with the earliest date of registration was kept. Second, a group of individuals who were registered between 2010 to 2020 and received a certificate within 1.5 times the program duration was created (completers). This process ensured that each ID was unique by keeping the record with the earliest date of certification. Finally, individuals whose 1.5 times the duration of the program occurs after 2020 were excluded as their completion status could not be determined. Furthermore, individuals registered in apprenticeship programs that were less than one year were excluded because the specific duration of the program was unknown and therefore, whether they completed within 1.5 times the program duration could not be determined.

## Analysis

Estimates were generated using 2016 Census sample weights. The source of data for the descriptive statistics varied by indicator. For estimates of journeypersons, data from the RAIS were used. For socioeconomic characteristics, data from the T1FF were used. The analysis of employment income used the T1FF. The paper also focused on total before-tax employment earnings. These are calculated by combining all paid employment income (wages, salaries, and commissions, before deductions) reported on T4 slips, net income earned from self-employment (business, professional, commission, farming, and fishing income), and other employment income not reported on a T4 slip (such as tips, gratuities, or director's fees). Earnings are adjusted to constant 2020 dollars using the Canada-wide Consumer Price Index (CPI).

## Limitations

The dataset linking the Census, the T1FF and the RAIS allows for (1) the identification of First Nations, Métis, Inuit and non-Indigenous journeypersons among linked individuals in the RAIS; (2) the examination of income at different points in time and over time; and (3) the inclusion of several sociodemographic variables and an analysis of factors associated with certification for Indigenous journeypersons. However, some limitations should be noted. Census data are self-reported, so they may be subject to recall bias and measurement error.

A limitation of the ELMLP data is the insufficient sample of Inuit, which precluded most analysis related to Inuit journeypersons. This issue is potentially related to the smaller population of Inuit, which was estimated at 65,025 in the 2016 Census; the small number of Inuit apprentices; and non-links between the census and the RAIS. Future analysis could explore the potential of using postal code data on the RAIS or tax data to conduct a geography-based analysis of all apprentices and journeypersons thus circumventing the issues related to linkage. This strategy has been used previously to examine mortality by Inuit Nunangat region (Oliver, Peters & Kohen, 2012). However, such analysis would include the small number of non-Inuit in Inuit Nunangat, who may have different levels of participation and outcomes.

Furthermore, as the census only includes individuals living in private dwellings, this study excludes anyone who was living in a collective dwelling at the time of the census data collection.



## References

- Arriagada, P. (2021). [The achievements, experiences and labour market outcomes of First Nations, Métis and Inuit women with bachelor's degrees or higher](#). *Insights on Canadian Society*. Statistics Canada. Catalogue no. 75-006-X.
- Boco, E., Emery, M. H., & Mokhtar, R. (2021). [Retention and labour market outcomes of registered apprentices in New Brunswick: 2009 to 2017](#). Fredericton, NB: New Brunswick Institute for Research, Data and Training.
- Finnie, R., Dubois, M., & Miyairi, M. (2021). [How Much Do They Make? New Evidence on the Early Career Earnings of Canadian Trade Certificate](#). *Journal of Organizational Psychology*, 21(5).
- Frank, K. & Frenette, M. (2019). [How Do Women in Male-dominated Apprenticeships Fare in the Labour Market?](#) *Analytical Studies Branch Research Paper Series*. Statistics Canada. Catalogue no. 11F0019M — No. 420.
- Gordon, C.E. & White, J.P. (2014). [Indigenous Educational Attainment in Canada](#). *The International Indigenous Policy Journal*, 5(3). doi: <https://doi.org/10.18584/iipj.2014.5.3.6>
- Haan, M., Jin, H., & Paul, T. (2023). [The Mobility of Construction Workers in Canada: Insights from Administrative Data](#). *Applied Spatial Analysis and Policy*, 16(1), 91-118. doi: 10.1007/s12061-022-09445-3.
- Hillman, E., Paul, T. N., Haan, M., & Lehmann, W. (2022). [Education trajectories and effects on labour market outcomes of women, and minorities: Evidence from the Education and Labour Market Longitudinal Linkage Platform \(ELMLP\)](#). Canada.
- Oliver, L.N., Peters, P.A. & Kohen, D.E. (2012). [Mortality rates among children and teenagers living in Inuit Nunangat, 1994 to 2008](#). *Health Reports*, 23(3). Statistics Canada, Catalogue no. 82-003-XPE.
- Melvin, A. (2023). [Postsecondary educational attainment and labour market outcomes among Indigenous peoples in Canada, findings from the 2021 Census](#). *Insights on Canadian Society*. Statistics Canada. Catalogue no. 75-006-X.
- Miller, J.R. (1996). *Shingwauk's vision: A history of native residential schools*. Toronto: University of Toronto Press.
- Su, S. & Jin, H. (2023). [Labour market outcomes of Indigenous journeypersons in Canada](#). *Education, learning and training: Research Paper Series*. Statistics Canada. Catalogue no. 81-595-M.
- Jin, H., Langevin, M., Lebel, A., & Haan, M. (2020). [Factors associated with the completion of apprenticeship training in Canada](#). *Insights on Canadian Society*. Statistics Canada. Catalogue no. 75-006-X.
- Statistics Canada. (2018). [Table 13-10-0401-01 Mortality, by Inuit region](#).
- Statistics Canada. (2023). [Index of Remoteness](#).
- Statistics Canada. (2022a). [Indigenous population continues to grow and is much younger than the non-Indigenous population, although the pace of growth has slowed](#).
- Statistics Canada. (2022b). [Earnings and mobility indicators for newly certified journeypersons in Canada, 2019](#).
- Statistics Canada. (2023c). [Table 37-10-0089-01 Number of certificates granted to registered apprentices and trade qualifiers](#).
- The National Indigenous Economic Development Board. (2019). *The Indigenous Economic Progress Report 2019*.