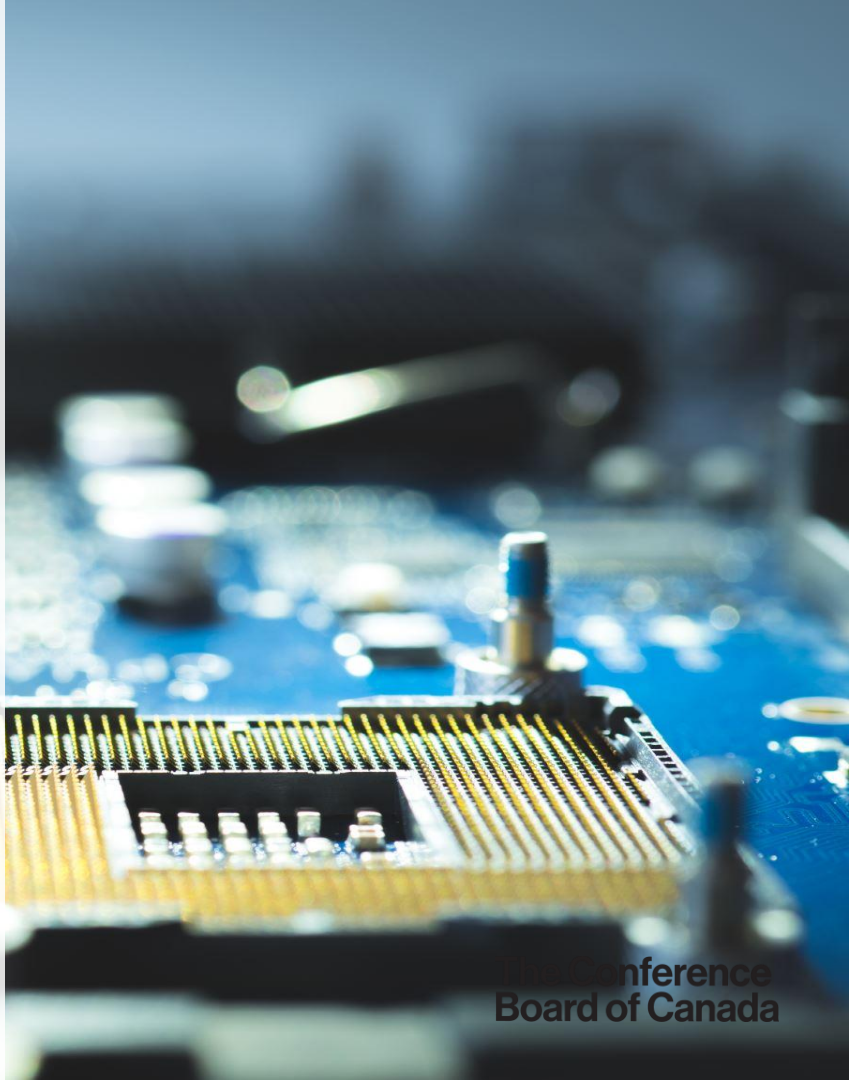
Ontario’s Technical Workforce: Economic Impact and Outlook

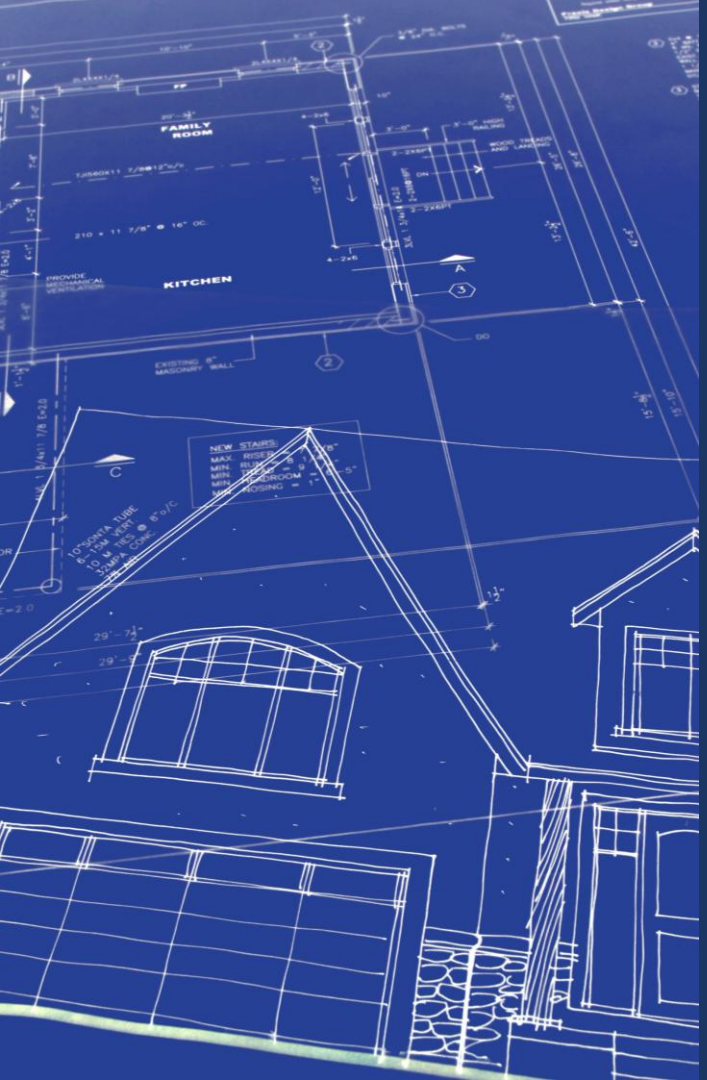
Analyzing workforce contributions and future economic trends

Alan Chaffe, Associate Director, Economic Research
Greg Hermus, Principal Economist, Economic Research
Alishba Rasheed, Economist, Economic Research

November 2025



The Conference Board of Canada



Agenda

- Introductions
- Project Overview
- Labour Market Trends
- Long-Term Outlook
- Economic Impact
- Discussion/Q&A

Labour Market Trends

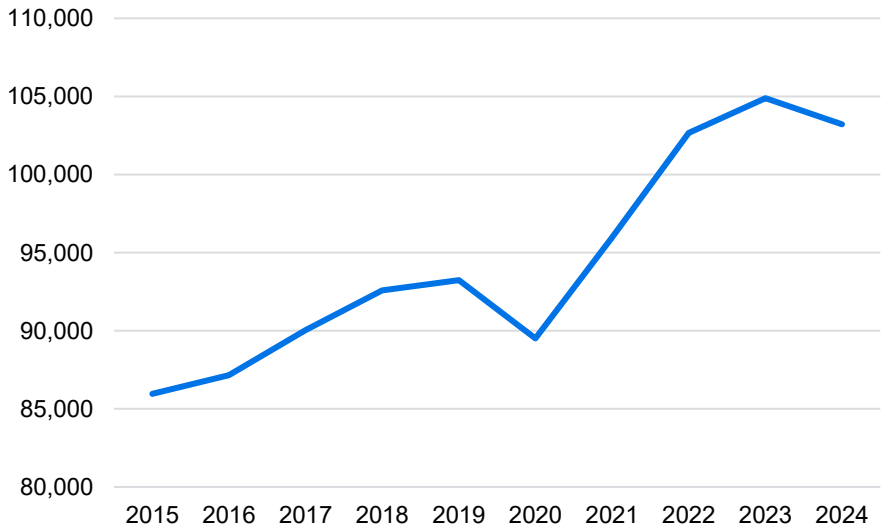
The Conference Board of Canada

Employment of OACETT supported professionals has shown steady growth

- OACETT-supported employment grew faster (2 per cent) than the provincial average (1.9 per cent) over the 2015 to 2024 period.
- Post-COVID-19, employment rebounded and has continued a steady upward trend.
- By 2024, 103,215 engineering and applied science technicians and technologists were employed in OACETT-supported occupations.

OACETT-supported employment

(employment level, 2015-2024)



Source: The Conference Board of Canada.

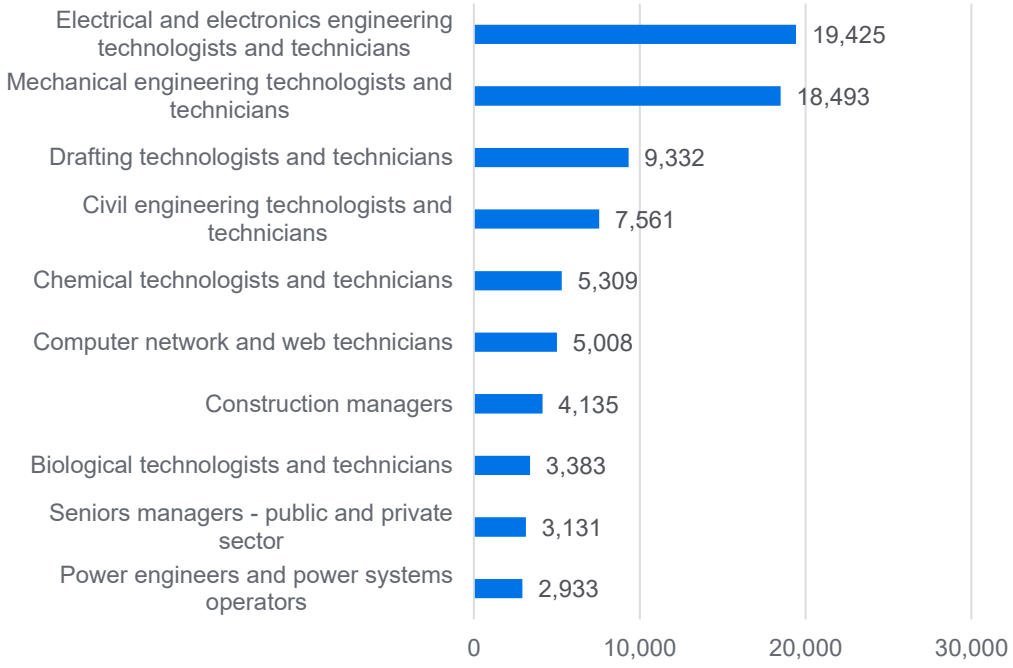
The Conference Board of Canada

OACETT-supported employment is concentrated in key occupations

- More than half of OACETT-supported employment in 2024 came from four key occupations:
  - electrical and electronics engineering technologists and technicians,
  - mechanical engineering technologists and technicians,
  - drafting technologists and technicians, and
  - civil engineering technologists and technicians.

Employment by occupation

(employment level, 2024)



Source: The Conference Board of Canada.

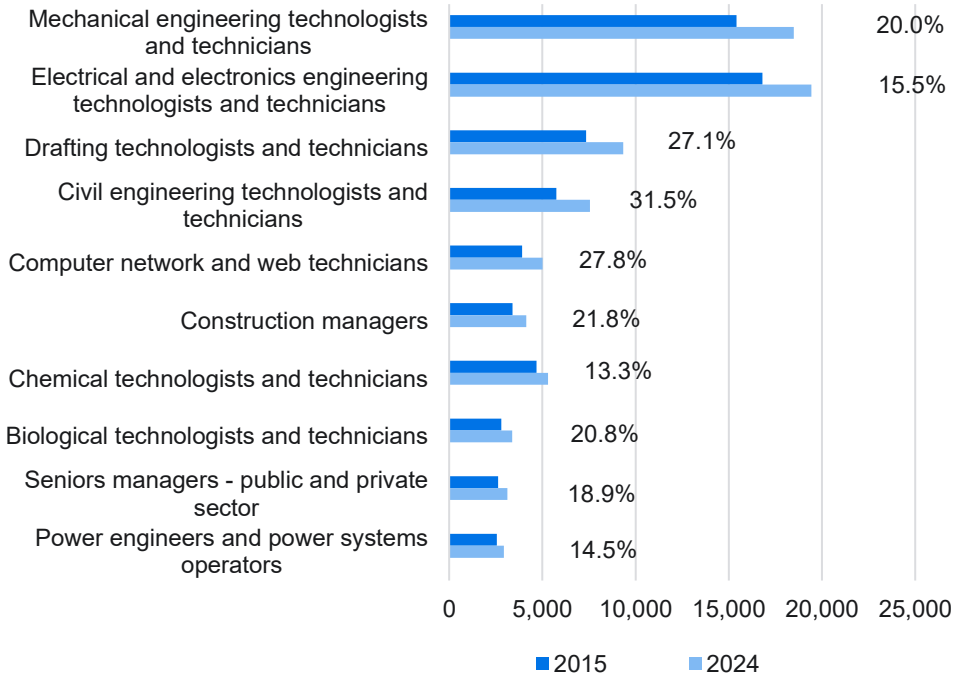
The Conference Board of Canada

Engineering technologists and technicians are key drivers of employment growth

- Between 2015 and 2024, employment in OACETT-supported occupations grew 20.1 per cent.
- In level terms, four occupations accounted for roughly 55.0 per cent of OACETT-supported employment growth: mechanical, electrical and electronics, drafting, and civil engineering technologists and technicians.
- The strong growth in these roles highlights rising demand for technical skills in digitalization, broadband expansion, rising demand for IT and digital infrastructure expertise, and construction management.

Top ten occupations

(employment growth, per cent, and level by occupation)



Source: The Conference Board of Canada.

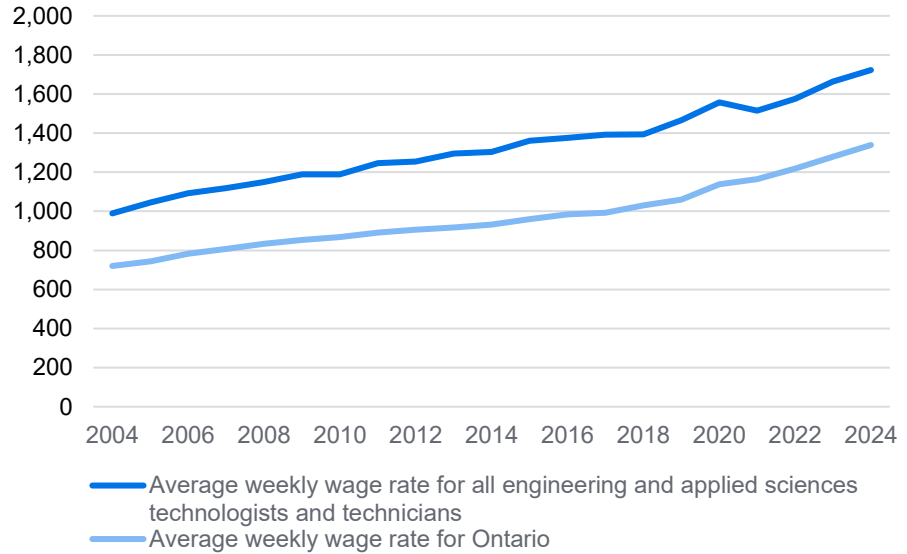
The Conference Board of Canada

Technicians and technologists maintain as strong wage premium

- Over the past twenty years (2004-2024), the average weekly wage rate for engineering and applied science technicians and technologists in Ontario has consistently exceeded the provincial average.
- In 2024, engineering and applied science technicians earned 29 per cent more than the provincial average.

Average weekly wages

(dollars)



Source: The Conference Board of Canada.

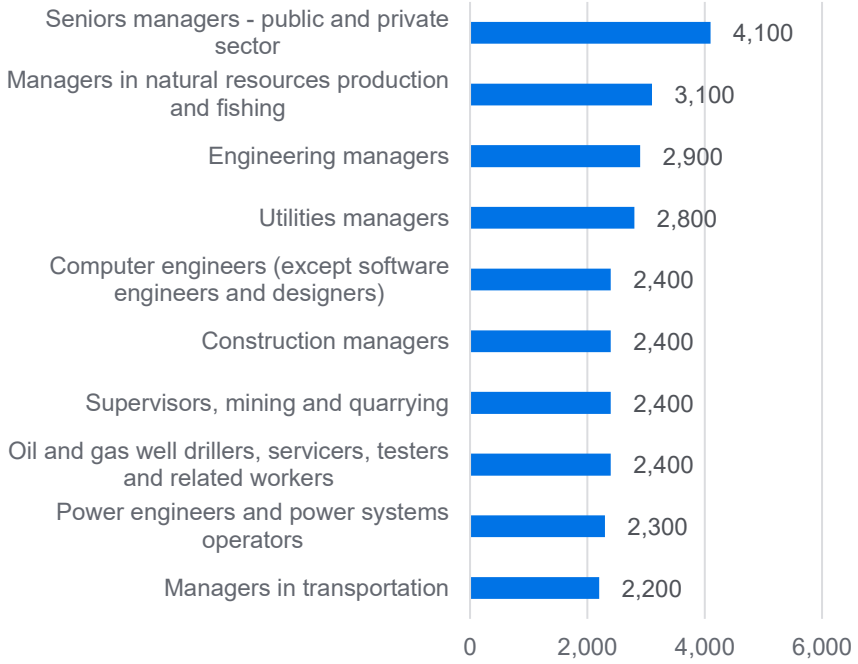
The Conference Board of Canada

OACETT certification can lead to higher paying leadership roles

- The top three occupations with the highest weekly wages in 2024 were senior managers in both the public and private sectors, earning roughly $4,100, followed by managers in natural resources production and fishing ($3,100), and engineering managers ($2,900).
- Premium pay reflects advanced technical expertise, leadership skills, and ability to oversee complex operations.

Average wages by occupation

(weekly wages, dollars, 2024)



Source: The Conference Board of Canada.

The Conference Board of Canada

Long-Term Outlook

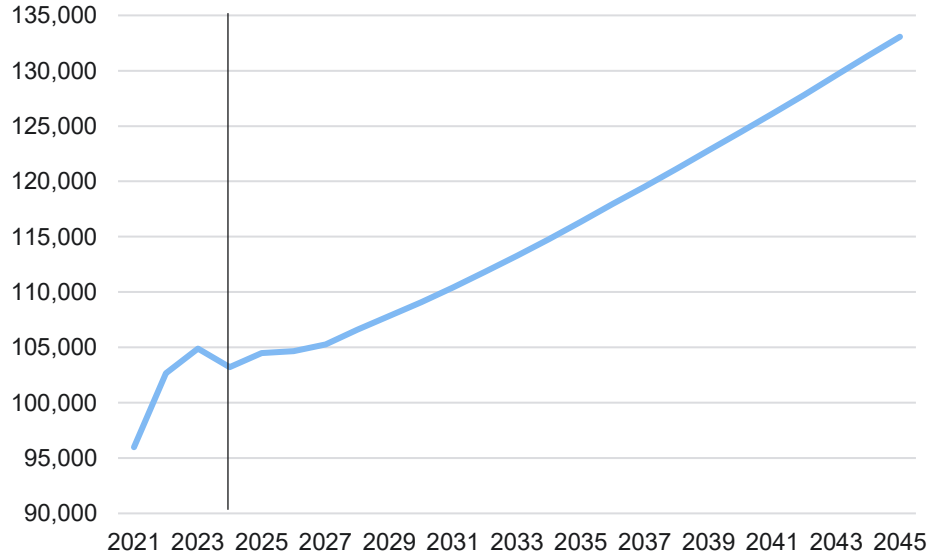
The Conference Board of Canada

Strong demand for OACETT-supported roles expected to continue

- Employment in OACETT-supported occupations is forecast to increase by just over 28,600 positions by 2045.
- This represents 1.4 per cent of the total employment growth in Ontario over the forecast period.
- The strong long-term employment trajectory reflects Ontario's ongoing shift toward a more technology-intensive and digitally connected economy.

Employment demand

(employment level, OACETT-supported occupations, Ontario, 2021-2045)



Source: The Conference Board of Canada.

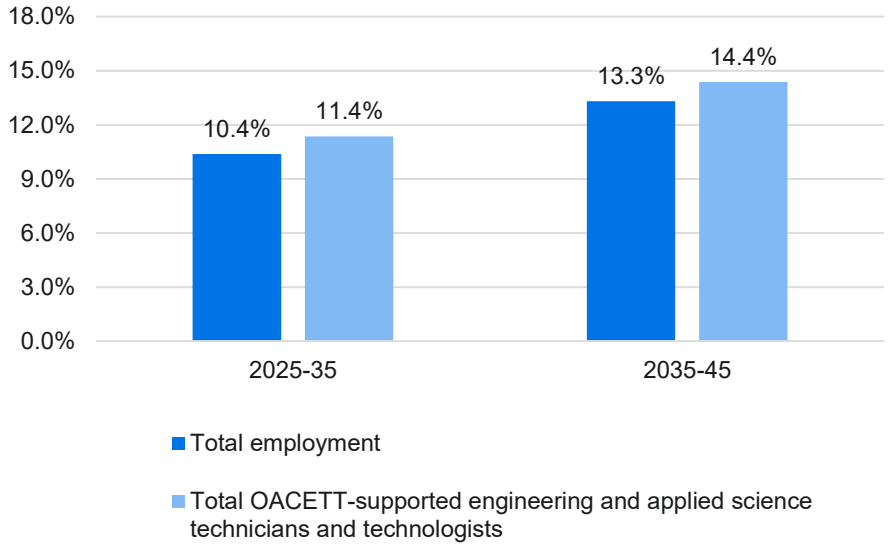
The Conference Board of Canada

Employment demand outpaces the broader Ontario economy

- Employment in OACETT-supported occupations is expected to expand faster than overall employment in Ontario.
- Employment growth from 2025 to 2045 will be concentrated in three sectors: professional, scientific, and technical services; construction; and manufacturing.
- Together, these sectors will account for nearly 78.1 per cent of employment growth in OACETT-supported occupations.

Employment demand

(OACETT-supported employment, percentage change, Ontario)



Source: The Conference Board of Canada.

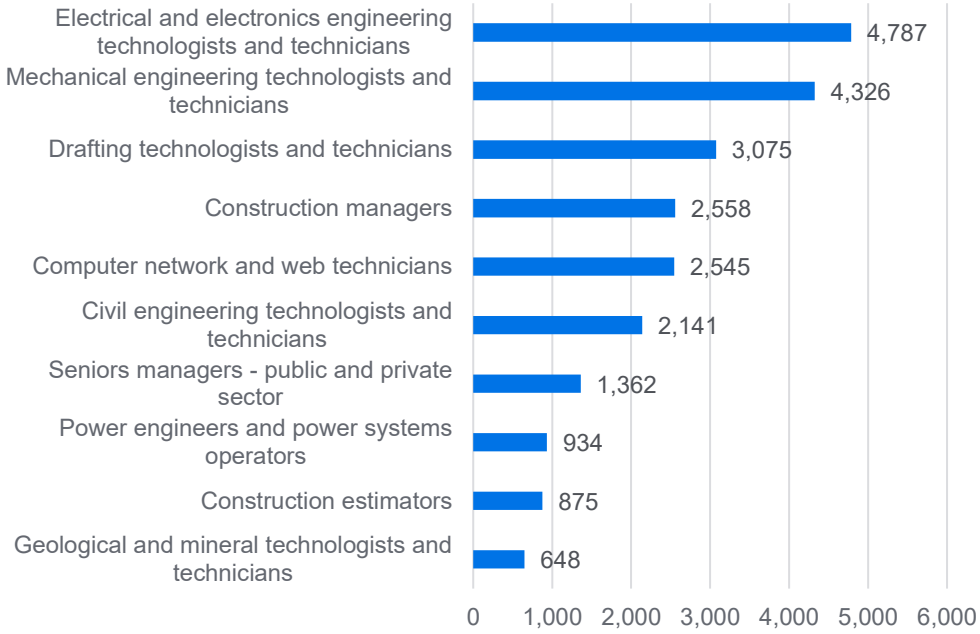
The Conference Board of Canada

Electrical and electronics technologists and technicians lead growth

- Electrical and electronics technologists and technicians show the strongest increase (24.2 per cent).
- Growth for mechanical engineering technologists and technicians occurs mainly between 2035-2045.
- Drafting technologist and technicians have their strongest gains occur 2025–2035.

Highest growth occupations

(employment change, 2025-2045)



Source: The Conference Board of Canada.

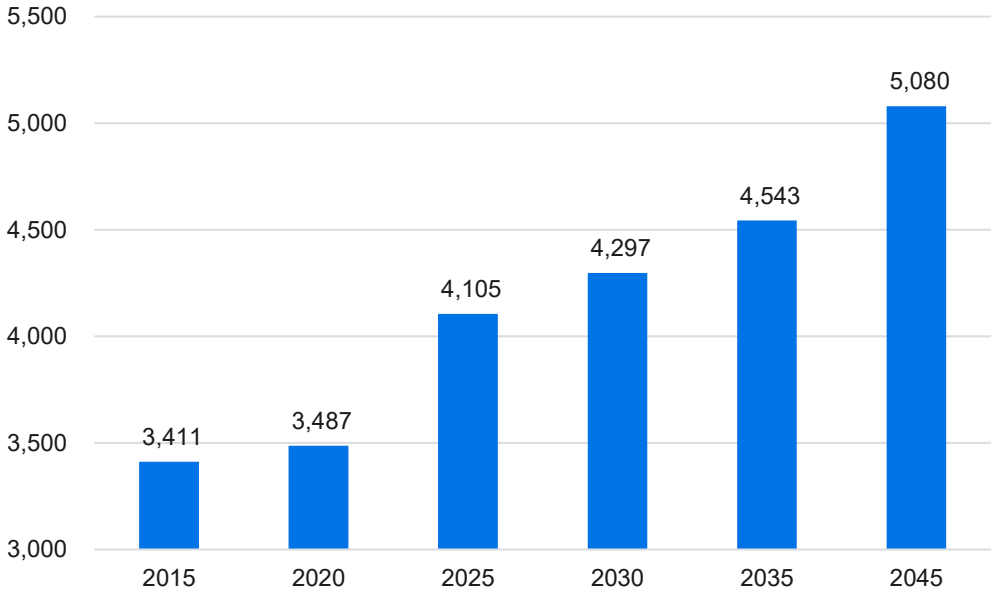
The Conference Board of Canada

Steady growth in retirements of OACETT-supported occupations

- The pace of retirements accelerates from 10.7 per cent per year between 2025 and 2035 to 11.8 per cent per year between 2035 and 2045.
- This shift highlights the need for a strong pipeline of qualified professionals and nimble certification and training pathways.

Number of retirements

(OACETT-supported retirements, 2015-2045)



Source: The Conference Board of Canada.

The Conference Board of Canada

Economic Impact

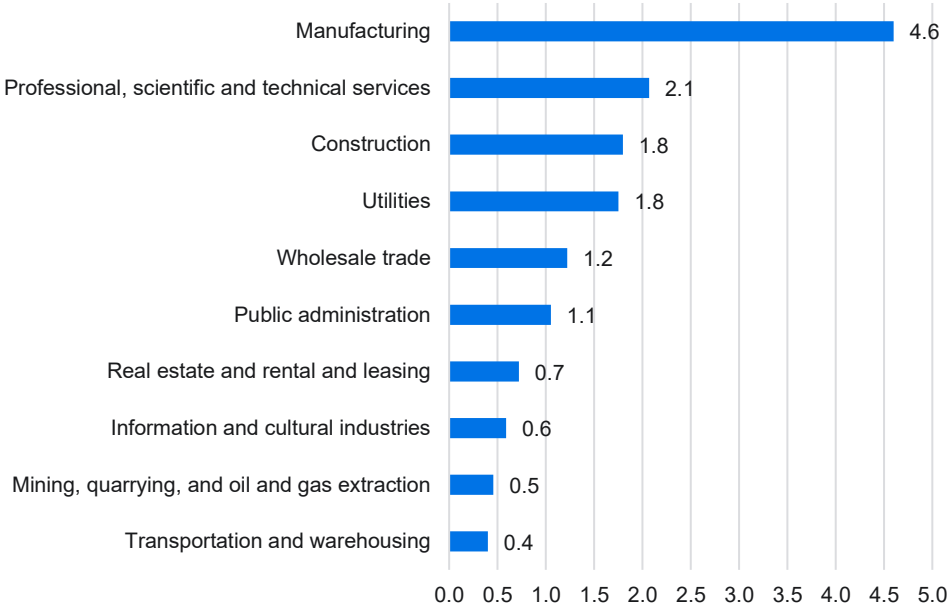
The Conference Board of Canada

Businesses employing OACETT-supported technicians and technologists generated $16.5 billion in provincial GDP

- In 2024, GDP generated by OACETT-supported technicians and technologists was equal to 1.9 per cent of the provincial economy.
- Their GDP contributions exceeds their 1.3 per cent share of total employment, highlighting above average productivity.
- The largest contribution (28 per cent) came in the manufacturing sector.

GDP impact

(direct GDP contributions by industry, 2024 billion dollars)



Source: The Conference Board of Canada.

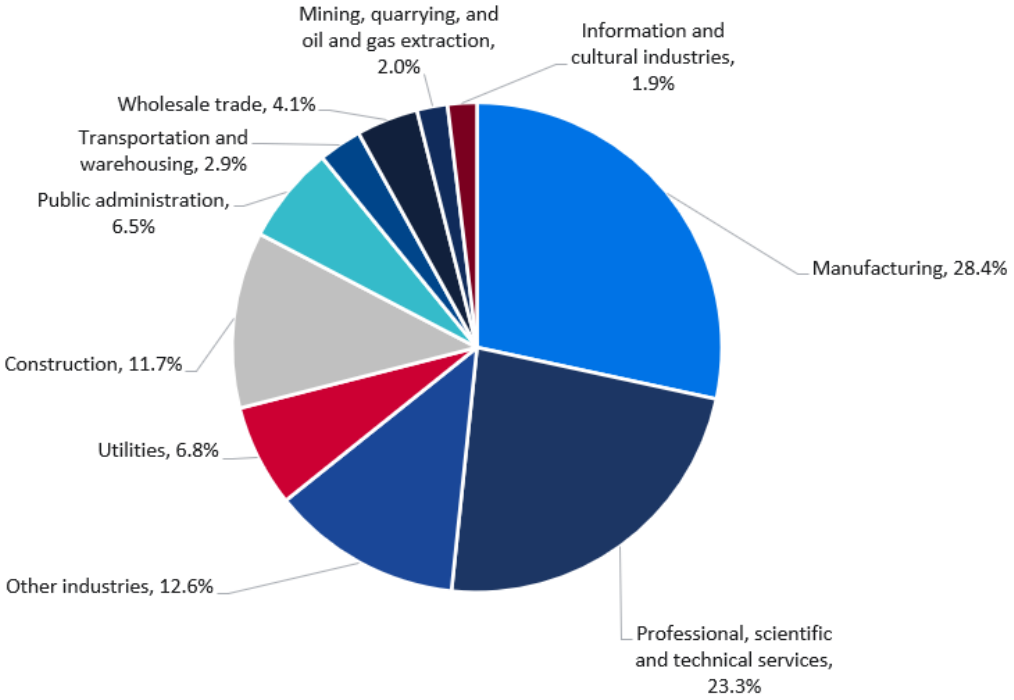
The Conference Board of Canada

103,215 OACETT-supported jobs were generated

- In 2024, OACETT-supported professionals accounted for 1.3 per cent of the province's total workforce.
- More than a quarter of these jobs are in the manufacturing sector.
- Persistent demand for skilled technicians and technologists across both industrial and knowledge-based sectors is driving this employment picture.

Employment impact

(direct employment, percentage share, 2024)



Source: The Conference Board of Canada.

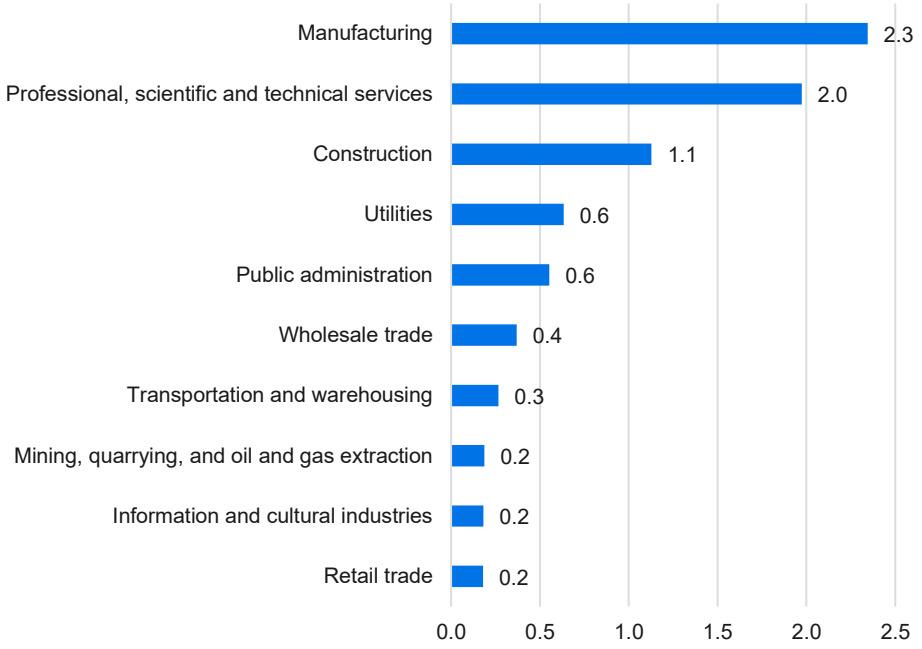
The Conference Board of Canada

OACETT-supported employment generated $8.9 billion in labour income

- Manufacturing sector contributed the largest share at $2.3 billion, reflecting the central role of technicians and technologists in driving industrial productivity, automation, and innovation.
- The professional, scientific, and technical services sector followed closely, generating $2.0 billion.

Labour income contributions

($ billions, 2024)



Source: The Conference Board of Canada.

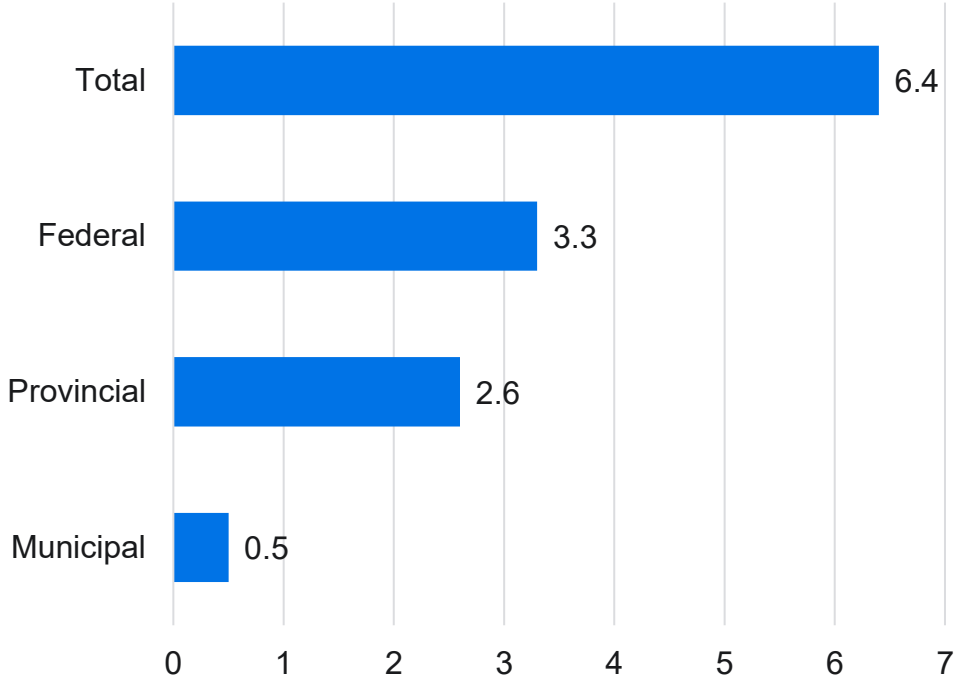
The Conference Board of Canada

OACETT-supported employment generated nearly $6.4 billion in tax revenue

- A breakdown of the total fiscal impact by tax type shows that income taxes and sales taxes were the biggest contributors, together representing around 65 per cent of total revenues to government.

Tax impact

(2024 $ billions)



Source: The Conference Board of Canada.

The Conference Board of Canada

About Us

The Conference Board of Canada is our country's foremost independent organization for applied research. We deliver unique, evidence-based insights to help Canada's leaders shape a more prosperous future.

Since 1954, our work has helped guide decision-makers to solve complex issues and navigate a better path for organizations and Canadian society.

Drawing on deep academic and practical experience, we provide unparalleled objectivity and rigour in our analysis. As researchers and economists with profound subject matter expertise, we bring applied insights to our key focus areas of Immigration, Health, Economics, Indigenous & Northern Communities, Human Resources & Leadership, Education & Skills, Sustainability, Inclusion, and Innovation.

Through sophisticated data modelling, best-in-class forecasting, and multi-method approaches, we deliver research that helps leaders take action. Our relationships are built on the trust in the validity and objectivity of our work. Leaders know they can turn to us to help solve Canada's most wicked problems.

An accessible version of this document for the visually impaired is available upon request.
Accessibility Officer, The Conference Board of Canada
Tel.: 613-526-3280 or 1-866-711-2262
Email: accessibility@conferenceboard.ca

The Conference Board of Canada


Where insights
meet impact
The Conference
Board of Canada
conferenceboard.ca