

Executive Summary: Economic Impact and Labour Market Outlook of Ontario's Engineering Technology Professionals

Presented to Ontario Association of Certified Engineering Technicians and Technologists (OACETT)

Prepared by
The Conference Board of Canada



Economic Impact and Labour Market Outlook of Ontario's Engineering Technology Professionals

Professionals represented by the Ontario Association of Certified Engineering Technicians and Technologists (OACETT) span a diverse range of roles, each requiring specialized skills and expertise. They are a vital part of Ontario's workforce, bringing specialized technical expertise to key sectors—such as manufacturing, construction, utilities, and professional services—and helping to drive innovation, strengthen infrastructure, and grow employment across the province.

OACETT-supported¹ professionals are advancing innovation across Ontario by applying research and integrating emerging technologies. At Niagara College's Walker Advanced Manufacturing Innovation Centre, they support cutting-edge manufacturing and process optimization. In Windsor, technologists use data-driven tools like digital twins to simulate and mitigate flood risks. Their expertise also supports major infrastructure projects such as the Gordie Howe International Bridge, Windsor's Coastal Flood Protection Master Plan, and Peel Region's wastewater expansion—enhancing connectivity, sustainability, and climate resilience.

This report examines employment and wage trends and estimates the economic impact of OACETT-supported engineering and applied science technicians and technologists.

¹ "OACETT-supported" refers to professionals in disciplines where the association offers certification. While not all are members, their occupations and competencies align with OACETT's framework.



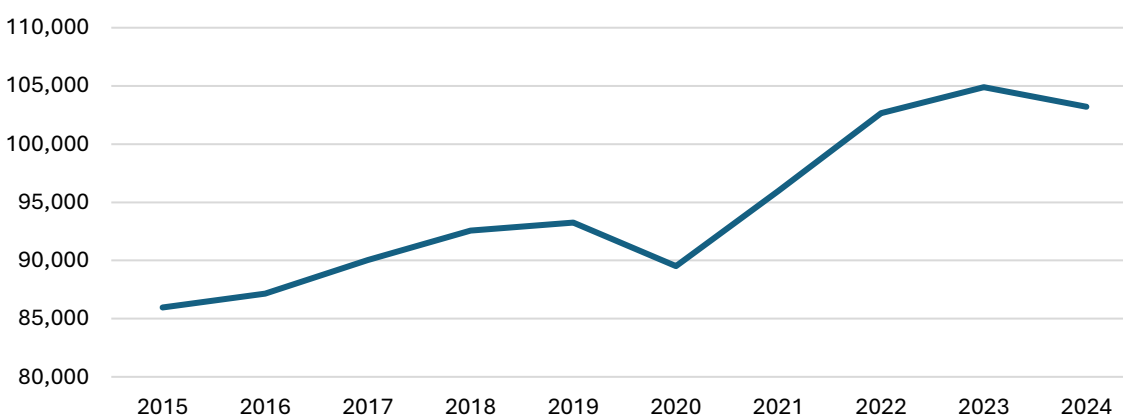
Labour Market Outlook

Steady growth in OACETT-supported occupations

In 2024, Ontario's workforce included 103,215 engineering and applied science technicians and technologists across 53 occupational categories represented by OACETT. The OACETT-supported workforce has grown steadily since 2015, except for the disruptions caused by the COVID-19 pandemic. (See Chart 1.) Between 2015 and 2024, annual employment growth of this group averaged 2.0 per cent, slightly outpacing the provincial average of 1.9 per cent over the same period.²

Chart 1: Steady growth in employment of OACETT-supported technicians and technologists in Ontario

(employment level in OACETT-supported occupations, Ontario, 2015–2024)



Sources: Statistics Canada; The Conference Board of Canada.

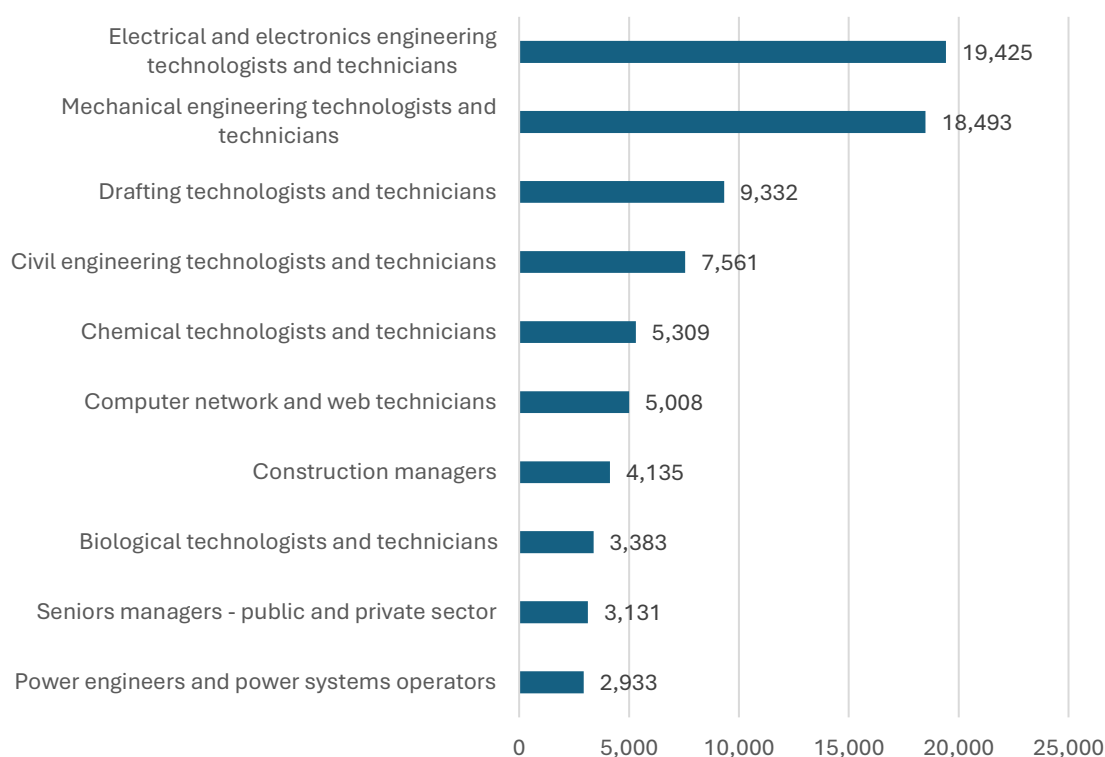
² All average annual growth rates are reported as compound annual growth rates.



OACETT-supported employment is concentrated in 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. (See Chart 2.) Together, these four occupations accounted for more than half of all OACETT-supported employment in 2024, driven by strong demand in advanced manufacturing, infrastructure, energy, and housing.

Chart 2: OACETT-supported roles in engineering dominate Ontario's technical workforce in 2024

(employment level, Ontario, 2024)



Sources: Statistics Canada; The Conference Board of Canada.

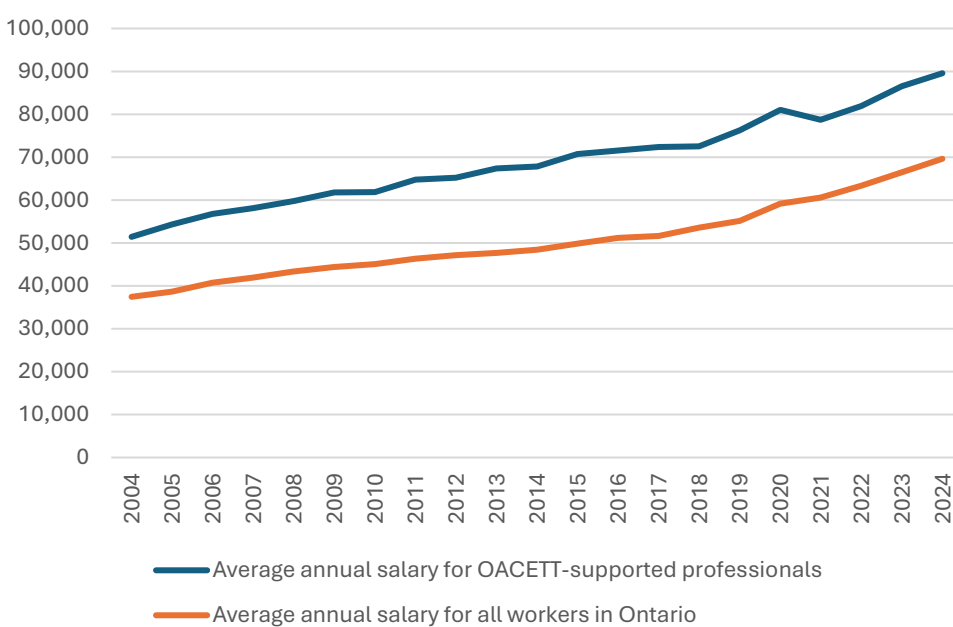


A clear wage premium for engineering technology professionals

Professionals supported by OACETT are highly valued. In 2024, the average annual salary for OACETT-supported technicians and technologists was nearly 29 per cent higher than the provincial average. (See Chart 3.) This salary premium reflects the value placed on advanced technical knowledge, specialized credentials, and applied problem-solving skills.

Chart 3: Engineering and applied science technologist and technicians earned nearly 29 per cent more than the provincial average in 2024

(average annual salary, Ontario, dollars, 2004–2024)



Sources: Statistics Canada; The Conference Board of Canada.

Across the broader group of OACETT-supported occupations, steady employment growth and strong wages underscore their strategic importance to Ontario's economy.

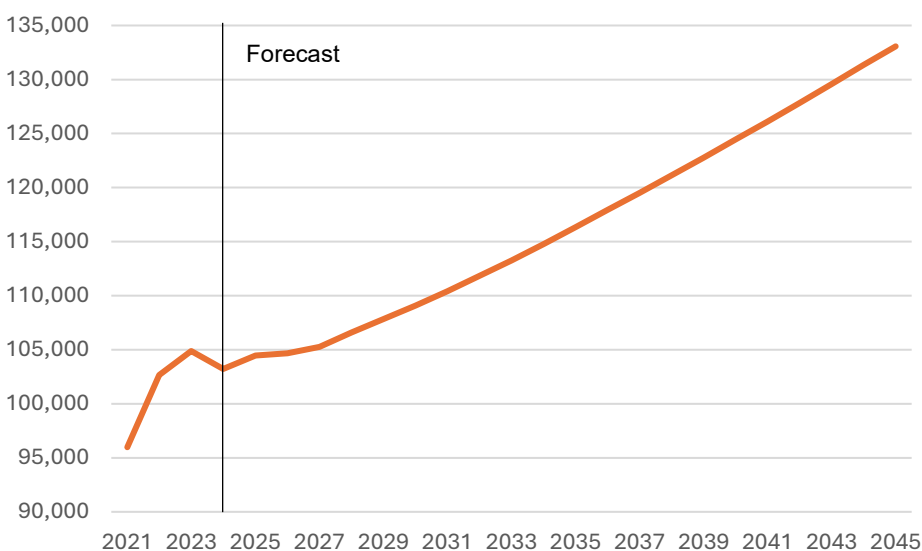


Employment demand that outpaces the broader Ontario economy

Employment in OACETT-supported occupations is projected to rise from 104,500 in 2025 to nearly 133,100 in 2045—a net increase of nearly 28,600 new positions. (See Chart 4.) The projected increase in OACETT-supported employees represents 1.4 per cent of the total expected employment growth in Ontario over the forecast period.

Chart 4: The number of engineering and applied science technicians and technologists supported by OACETT will surpass 133,000 by 2045

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



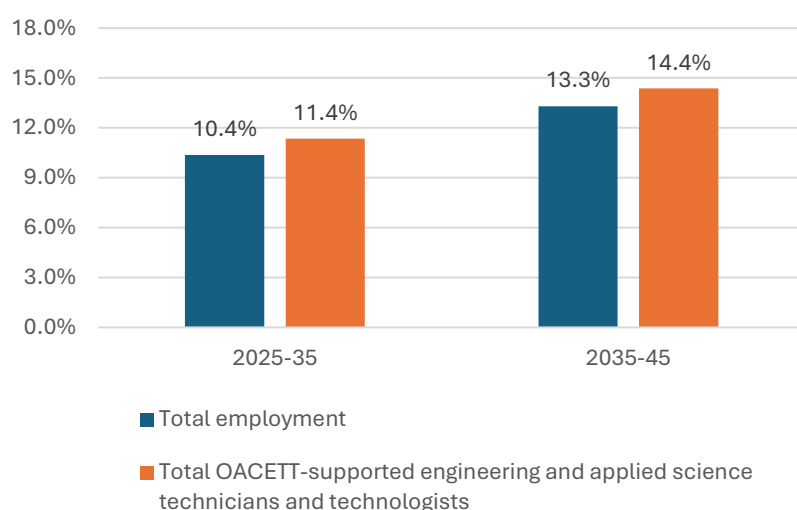
Sources: Statistics Canada; The Conference Board of Canada.



In addition, employment in OACETT-supported occupations is projected to expand faster than overall employment in Ontario. (See Chart 5.) This highlights the vital role these skilled professionals will play as the provincial economy grows. As technological innovation and sectoral investment grow, demand for highly trained engineering and applied science technicians and technologists will be crucial to sustaining Ontario's economic development and ensuring it can handle future challenges.

Chart 5: OACETT-supported engineering, technicians, and technologist employment to slightly outpace total employment growth in Ontario

(percentage change, OACETT-supported employment, Ontario)



Sources: The Conference Board of Canada; Statistics Canada.

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 75 per cent of employment growth in OACETT-supported occupations.



Retirements are reshaping the OACETT- supported workforce

In addition to net new jobs, replacement demand will play an increasingly important role in shaping the future of OACETT-supported occupations. Beginning in 2025, the pace of retirements is expected to rise steadily, increasing from 10.7 per cent between 2025 and 2035 to 11.8 per cent between 2035 and 2045, with total retirements projected to exceed 5,000 by 2045.

As these experienced professionals exit the workforce, there will be strong demand for new entrants with the necessary certified skills and technical knowledge. OACETT is well positioned to support this transition—through certification pathways, professional development, and its promotion of consistent standards across industries.³

³ Ontario Association of Certified Engineering Technicians and Technologists. “2025-27 Strategic Plan.” January 2025. <https://oacett.org/getmedia/6de301f1-591c-4bad-8644-0d63c31c5cf2/OACETT-Strategic-Plan-final-2025-2027.pdf>

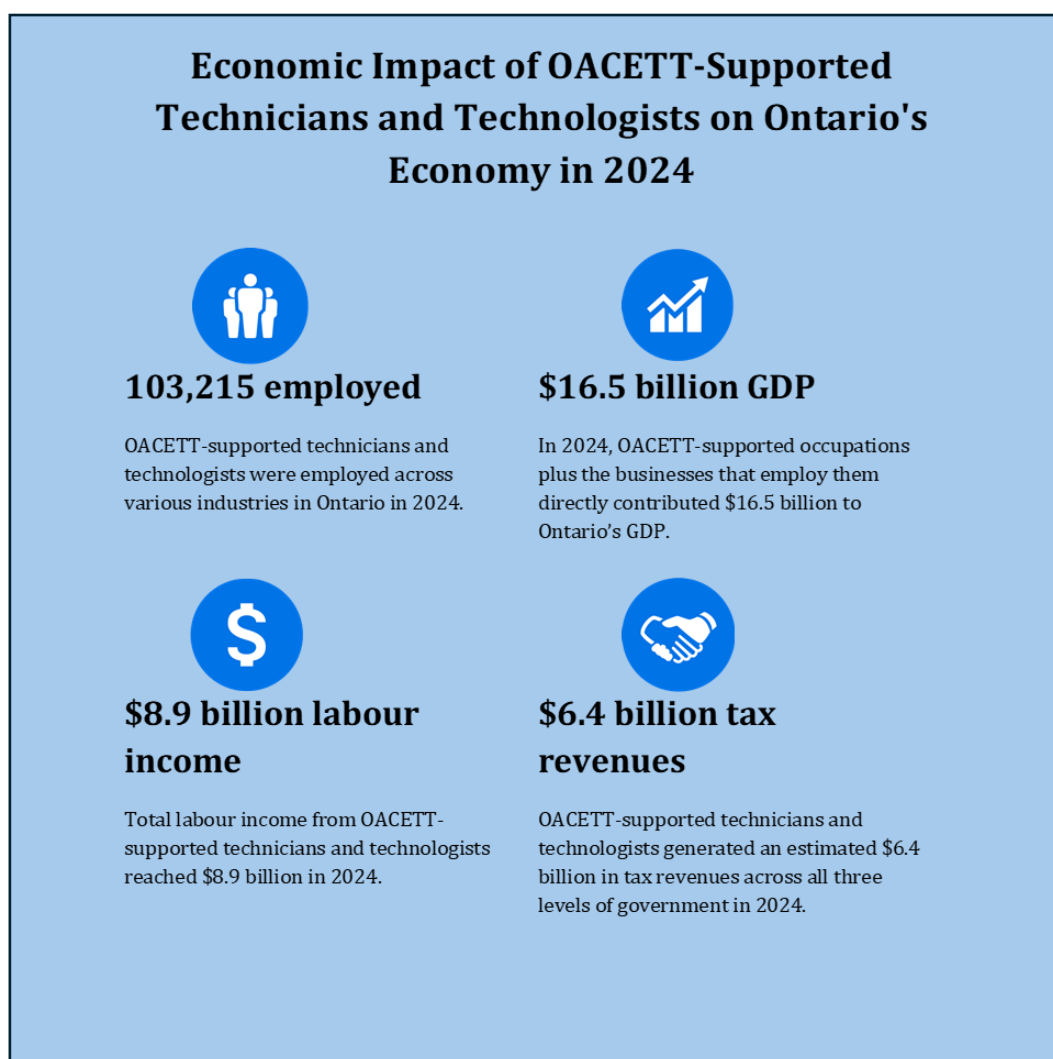


Economic Impact

Economic contributions that exceed their numbers

OACETT-supported occupations generate significant added-value for the Ontario economy. While making up 1.3 per cent of the total workforce, they generate 1.9 per cent of the province's GDP. In 2024, this translated into a \$16.5 billion direct contribution to provincial GDP. This is comparable to the output of Ontario's accommodation and food services sector and is about half the size of the province's mining, quarrying, and oil and gas extraction sector.

The largest GDP contributions from OACETT-supported occupations were in manufacturing (\$4.6 billion), followed by professional, scientific, and technical services (\$2.1 billion), and construction and utilities (\$1.8 billion each). These sectors are foundational to Ontario's economic development, and the productivity gains enabled by technicians and technologists are key to driving growth.





OACETT-supported jobs generate billions in income and tax revenue

Labour income from OACETT-supported occupations in 2024 totalled \$8.9 billion. This income was concentrated in the manufacturing sector (\$2.3 billion), the professional services sector (\$2 billion), the construction sector (\$1.1 billion), and the utilities and public administration sectors (\$0.6 billion each).

In 2024, tax revenues associated with this workforce reached \$6.4 billion—including \$3.3 billion paid to the federal government, \$2.6 billion to the provincial government, and \$0.5 billion to municipalities.

Ontario's engineering technology professionals are foundational to growth

Technicians and technologists supported by OACETT are more than just part of Ontario's workforce—they are catalysts for economic resilience and growth. Although they represent only 1.3 per cent of the province's labour force, they generate 1.9 per cent of Ontario's GDP, contributing an estimated \$16.5 billion in 2025. Their presence is most concentrated in manufacturing, professional and scientific services, and construction, sectors that form the backbone of Ontario's economy.

This workforce is growing—and so is its impact. Strong employment and income growth, a consistent wage premium, and sustained demand through 2045 make the value of these professionals clear. With more than 28,000 new positions expected and retirements on the rise, Ontario's long-term economic strength will depend on its ability to train, certify, and support the next generation.