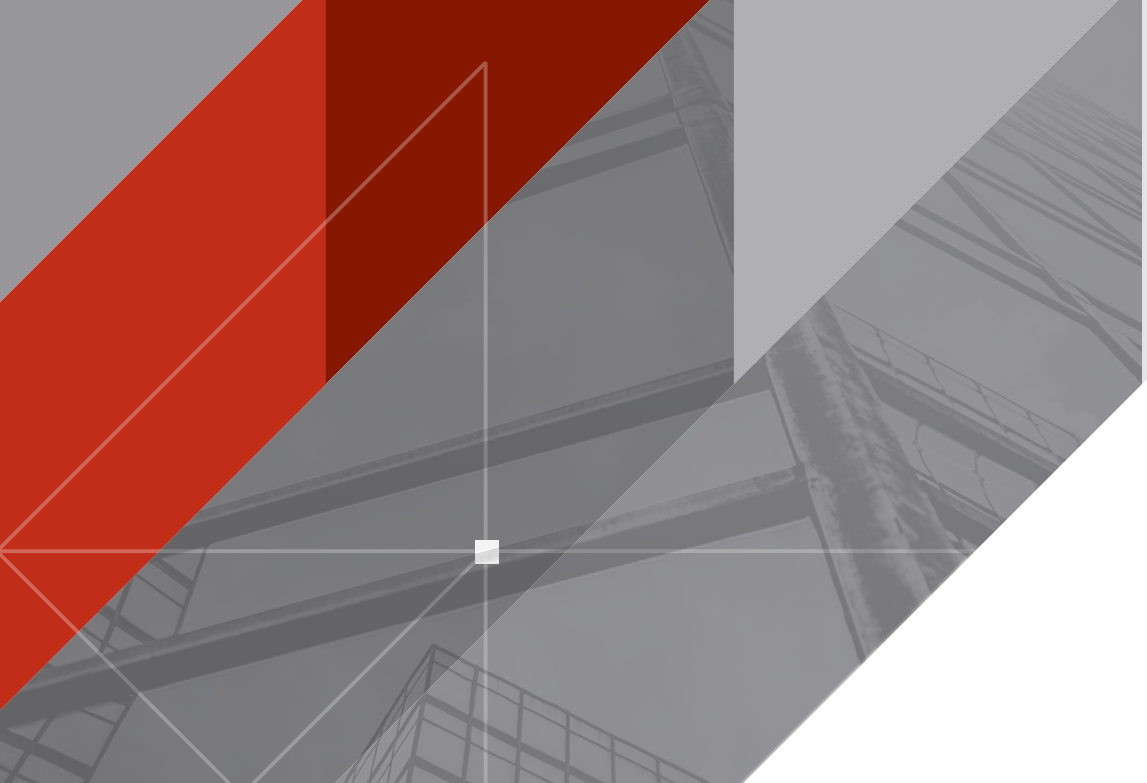


Economic Assessment and 5-Year Forecast of the Engineering and Design Services Industry in Canada

October 2025

acec

Research Conducted by:

ACEC RESEARCH INSTITUTE

Economic Assessment and 5-Year Forecast of the Engineering and Design Services Industry in Canada

TABLE OF CONTENTS

Introduction

This is the second release of the Engineering and Design Services industry forecast for Canada. This study follows the inaugural 2024 report, and it aims to describe, measure, and analyze the economic significance of the Engineering and Design Services industry in Canada and demonstrate the inextricable partnership between engineering, architects, and other design services professionals to deliver the built environment of Canada. The built environment refers to all human-made surroundings that provide the setting for human activity, ranging in scale from buildings and parks/green space to neighborhoods and cities, including their supporting infrastructure, such as water supply or energy networks.

The historical data in this analysis covers 2024, though some measures are limited to 2023 due to availability. All current figures in the report are in Canadian Dollars (CAD) unless specified otherwise. The study was conducted by ACEC Research Institute and Rockport Analytics, an independent market and economic research firm, using both publicly and privately available data and proprietary analysis.

The overarching goals of this research are to:

- Provide a comprehensive view of the size, growth, and composition of the Engineering and Design Services industry using the most current and comprehensive data available.
- Measure the economic contribution of the Engineering and Design Services industry in Canada using established metrics in virtually all economic impact analyses.
- Analyze the current market environment for the Canadian Engineering and Design Services industry, including key challenges and opportunities. This includes modeling key market and macro drivers of the industry to help inform ACEC-Canada's membership on the future performance of the Engineering and Design Services industry. The outlook and modeling assets can be used to forecast industry revenue in the Engineering and Design Services industry and evaluate scenarios surrounding policy, geopolitical, and other future conditions.

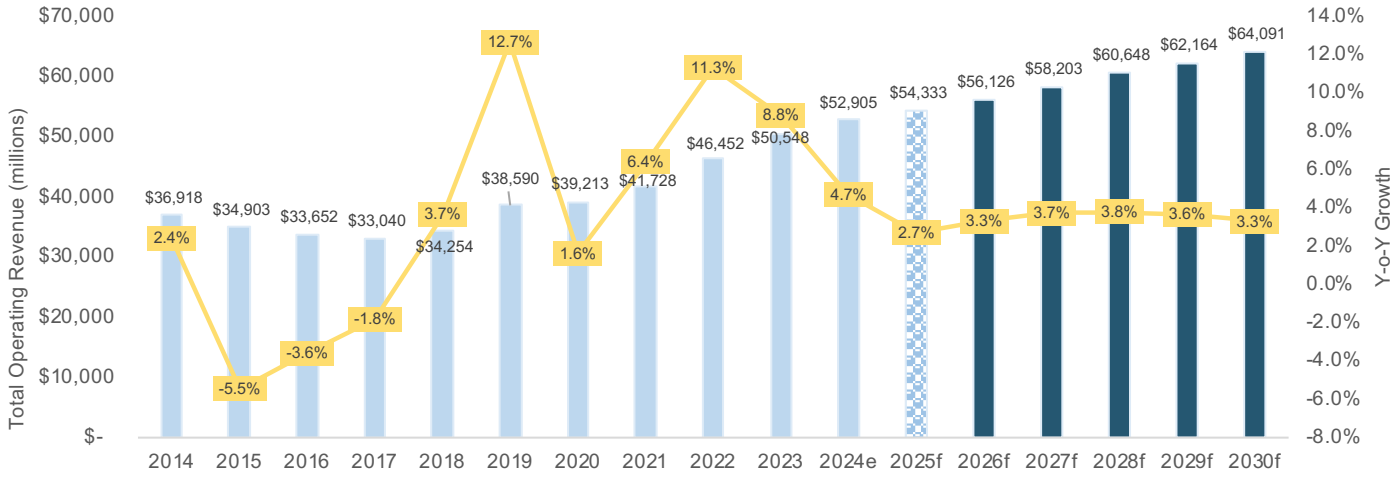
This research is intended to be of value to ACEC-Canada members and their constituents. It will provide industry insight to members and can be leveraged as a planning and educational resource. It will also assist ACEC-Canada advocacy, communications, and other outreach efforts.

Engineering and Design Services Industry Forecast

The Canadian Engineering and Design Services Industry Faces Headwinds Amid Trade Tensions

Continuing trade tensions have weighed heavily on Canadian industries, leading to economic contractions in the first two quarters of 2025 and prompting a downward revision to our industry outlook. While our initial forecast for 2025 projected 3.0 percent growth, we have adjusted this to 2.7 percent, though we expect a moderate snap back in growth in subsequent years. We project that growth will likely stabilize coming out of 2025 after consecutive slowing growth rates since 2023, with an average year-over-year growth rate of 3.4 percent from 2025 to 2030—higher than the average growth of 2.6 percent of the more volatile pre-pandemic years. The outlook is still evolving as negotiations progress, but recent moves by the Canadian government, including the rollback of many counter-tariffs on U.S. goods as of September 1, 2025, have introduced a measure of stability.

Canadian Engineeering and Design Services: Industry Operating Revenue Forecast



2025 Forecast	2024e	2025f	2026f	2027f	2028f	2029f	2030f
Nominal Output Growth	4.7%	2.7%	3.3%	3.7%	3.8%	3.6%	3.3%
Real Output Growth	2.2%	1.1%	-0.8%	3.1%	2.1%	1.5%	1.2%

Sources: Statistics Canada, Moody's Analytics, Rockport Analytics

Key Forecast Drivers

While the Engineering and Design Services industry has shown a level of resilience in past economic downturns, the current tariff landscape introduces significant turbulence and uncertainty. We note several key factors that will influence industry performance over the coming years.

- Trade tensions and tariff uncertainty have weighed on Canada's economy, leading to weaker growth and prompting government efforts to support affected industries and scale back counter-tariffs. These policy shifts are expected to ease some supply chain pressures, but elevated costs in construction and manufacturing remain, and industry performance will likely trail earlier forecasts in the near term.
- Additionally, uncertainty around both public infrastructure funding and interest rate trajectories clouds the industry outlook, with potential implications for both public and private sector project development throughout the forecast period. Public infrastructure investment has been a key driver; however, mounting government debt from previous stimulus may limit federal capacity to intervene during a downturn. Consequently, the responsibility for advancing infrastructure development is likely to shift more towards provincial governments and the private sector.
- Meanwhile, years of underbuilding and construction labor constraints have created significant pent-up housing demand, which could fuel new construction activity as interest rates ease.
- The anticipated softening of monetary policy may gradually improve financial conditions and revive previously shelved projects, though the pace and magnitude of rate reductions remain unsure amid trade pressures.

COMPETING FORCES SHAPING INDUSTRY PROSPECTS

Export Growth Confronts Trade Uncertainty

Canada's Export Diversification Strategy, designed to boost overseas exports 50 percent by 2025 through trade agreements and investment promotion, delivered major gains, most notably in 2023, when service exports surpassed imports for the first time. But this momentum is now at risk, as rising trade tensions and the threat of retaliatory tariffs from Canada's largest trading partner cloud the outlook for 2025. Whether these negotiations lead to a resolution or escalate into a prolonged trade dispute will heavily influence the future of Canada's export growth and its broader economic stability.

Population Growth Outpaces Productivity Gains

Canada's record-setting population growth continued its steep upward trajectory throughout 2023-2024, mainly driven by historic immigration levels. This demographic expansion has generated sustained demand for construction projects across the country, creating a consistent revenue stream for the Engineering and Design Services industry. However, productivity has not kept pace with the population surge, as GDP per capita growth has stalled in recent years.

Public Investment Offsets Sectoral Weaknesses

Despite broader construction sector underperformance in 2023, Canada's public infrastructure investments—spanning over 400 major projects—drove growth in nonresidential construction and sustained demand for Engineering and Design Services. This momentum continued into 2024, with the project count surpassing 500, supporting job growth and deepening backlogs in civil and transportation engineering. However, the residential sector remained sluggish through 2025, and the long-declining commercial sector continued to drag on industry performance.

Clean Goals Meet Rising Costs

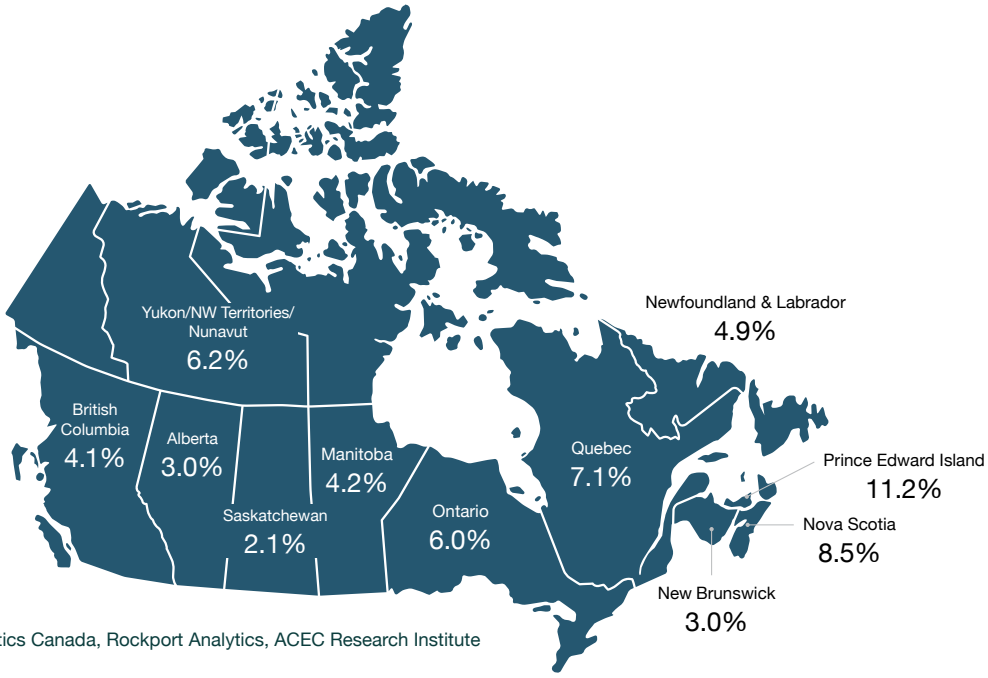
The Canadian government's $20 billion commitment in the 2023 budget toward clean power and building retrofits, alongside the launch of the Canada Green Buildings Strategy and the Departmental Sustainable Development Strategy, signaled a strong push toward decarbonizing the built environment by 2050. However, rising material costs linked to new tariffs—particularly on key construction inputs—and broader economic uncertainty may undermine this momentum. As project expenses increase and fiscal pressures mount, policymakers may need to recalibrate their approach and focus on more immediate economic priorities, slowing the rollout of key retrofitting initiatives in 2025.

Industry Performance in 2024

Engineering and Design Services Revenue by Province

In 2024, Ontario, Alberta, Quebec, and British Columbia generated 92 percent of total industry revenue. Growth slowed in Ontario, Alberta, and B.C., while Quebec accelerated from 4.5 percent to 7.1 percent. This reversed the recent pattern of higher western revenue growth, as higher-value projects now favor central Canada. Prince Edward Island (up 11.2 percent) and Nova Scotia (up 8.5 percent) posted the strongest year-over-year gains. The territories and Nunavut also exceeded the national average growth rate. On a per capita basis, Alberta led at $2,194, followed by B.C. at $1,635.

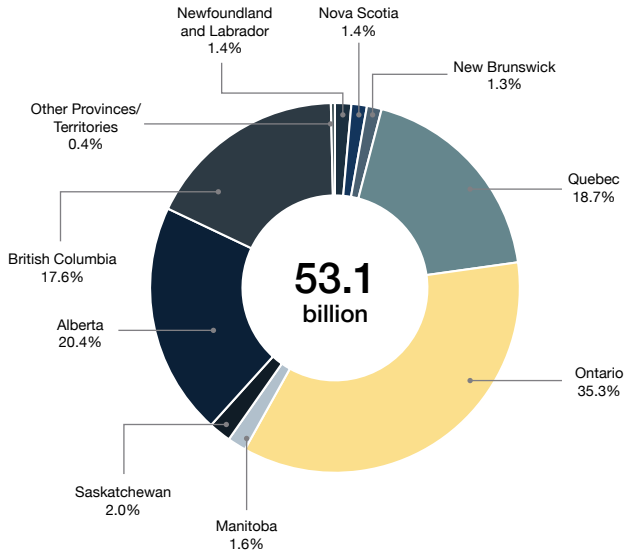
2024 Engineering and Design Services Operating Revenue Growth By Province



Sources: Statistics Canada, Rockport Analytics, ACEC Research Institute

2024 Engineering and Design Services Operating Revenue by Province/Territory

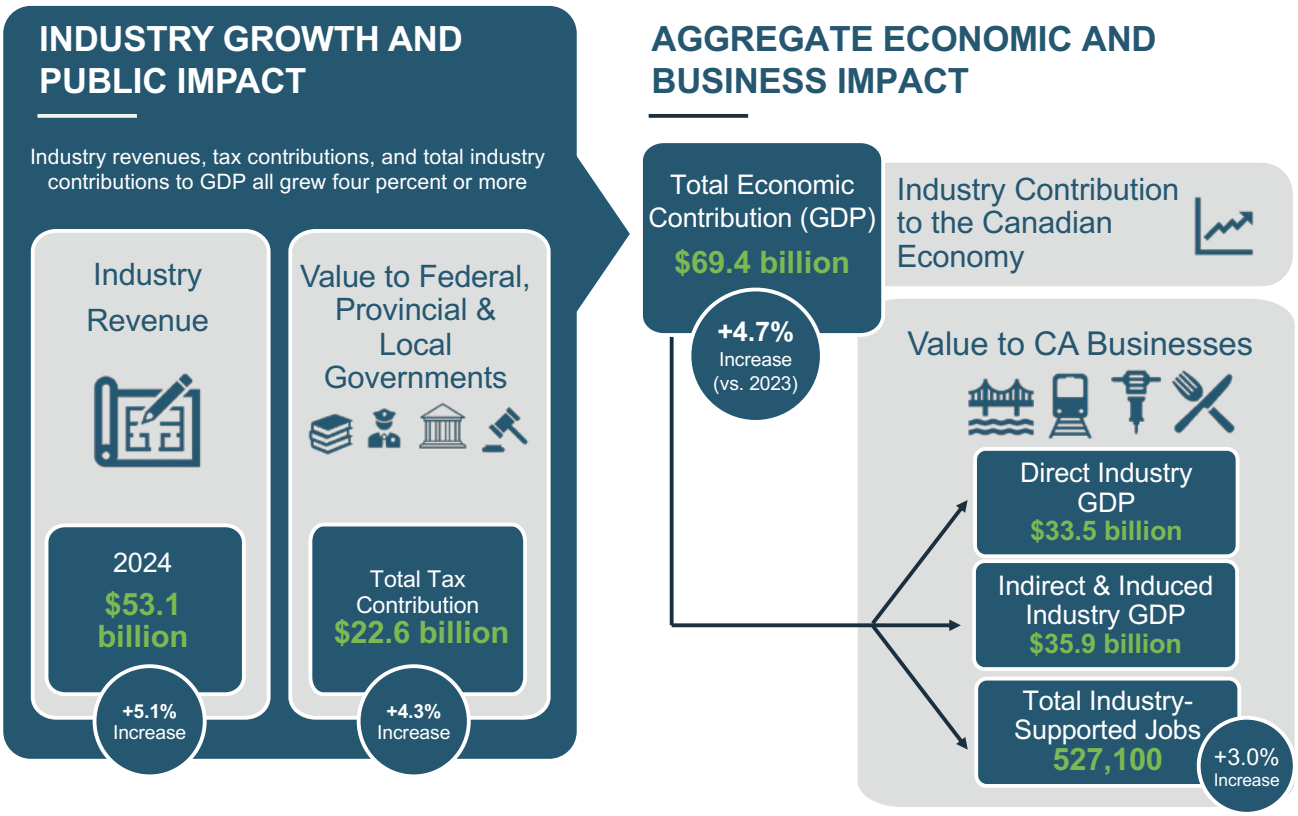
Province/Territory	Operating Revenue (in millions CAD)
Ontario	$18,763
Alberta	$10,819
Quebec	$9,945
British Columbia	$9,351
Saskatchewan	$1,041
Manitoba	$868
Newfoundland and Labrador	$757
Nova Scotia	$719
New Brunswick	$687
Yukon	$63
Prince Edward Island	$58
Northwest Territories	$55
Nunavut	$10
Total Canada	**$53,136**



Engineering and Design Services: Industry Snapshot

The Engineering and Design Services Industry's Economic Footprint in Canada Takes Another Leap Forward in 2024

An industry's economic impact is typically measured by its output, linkages to other sectors, employment, and tax contributions—standard metrics that enable cross-industry comparisons. While the Engineering and Design Services industry plays a vital role in supporting Canada's construction industry, the data below reflect only the industry's direct economic footprint, not the broader value of the built environment it helps create.



Sources: Statistics Canada, Rockport Analytics, IMPLAN, OECD, ACEC Research Institute

Engineering and Design Services generated $53.1 billion in revenue in 2024, up 5.1 percent from 2023. This includes sales to public and private construction, business services, energy, mining, manufacturing, exports, and other end-use sectors.

The industry's total contribution to Canadian GDP amounted to $69.4 billion, a 4.7 percent rise from 2023. This economic contribution comprises $33.5 billion in direct value-added from core industry services (NAICS 5413), alongside $35.9 billion in indirect (supply chain) and induced (re-spent wages) effects.

The industry generated $22.6 billion in tax revenue across all government levels, including Personal Income Taxes ($9.4B), Corporate Profit Taxes ($3.7B), Social Insurance contributions ($4.5B), and Other Taxes ($5.1B).

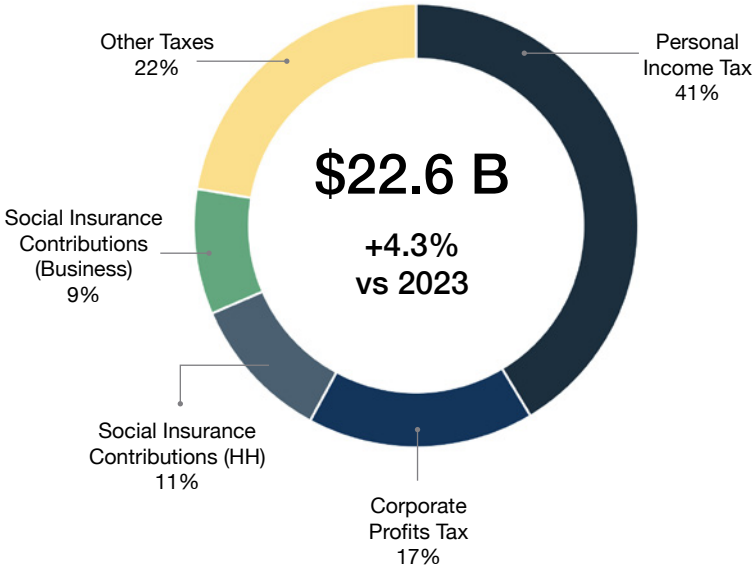
The Engineering and Design Services industry directly employed over 243,000 individuals. Factoring in the broader economic impact of its activities, **the industry supported over 527,000 full- and part-time jobs and** contributed $43.8 billion in payrolls in 2024.

2024 Engineering and Design Services Industry Bottom Line					
For the Canadian Economy *in billions CAD unless otherwise noted*	**Direct**	**Indirect** (Supply Chain)	**Induced** (Ripple Effect)	**Total**	**% vs 2023**
Total Industry Revenue				**$53.1B**	**5.1%**
Total Economic Contribution					
Contribution to GDP	$33.5	$13.3	$22.6	$69.4	4.7%
Jobs Supported (Full & Part-Time)	243,300	116,600	167,200	527,100	3.0%
Contribution to Payrolls	$25.3	$8.5	$10.0	$43.8	4.8%
Total Initiated Tax Receipts	$9.5	$4.2	$8.9	$22.6	4.3%
Source: Bureau of Economic Analysis, Bureau of Labor Statistics, IMPLAN, Rockport Analytics					

2024 Industry Tax Contribution by Source

Source	2024 Tax Collections (in millions CAD)
Personal Income Tax	$9,360.9
Corporate Profits Tax	$3,731.0
Social Insurance Contributions (HH)	$2,401.0
Social Insurance Contributions (Business)	$2,065.3
Other Taxes	$5,052.8
Total	**$22,611.0**

Sources: Rockport Analytics, IMPLAN, Bureau of Economic Analysis, Bureau of Labor Statistics



Economic Contribution by Industry

Measuring the economic impact of the Engineering and Design Services industry involves examining its interconnected relationships with both upstream and downstream industries.

Over Half a Million Canadian Jobs Powered by Engineering and Design Services

In 2024, the industry supported over 527,000 jobs, both full- and part-time, across Canada. Of these, over 243,000 jobs were directly within the industry, accounting for over 46 percent of the total economic impact. The remaining 54 percent was made up of over 116,500 jobs in the industry's supply chain and over 167,200 jobs supported by the re-spent wages of industry workers and supply chain employees.

Engineering and Design Services Contribution to Canadian Employment by Industry

NAICS Code	Industry (NAICS)[1]	Direct	Indirect	Induced	Total
54	Professional, Scientific, and Technical Services	243,255	33,588	7,190	284,034
44	Retail Trade	0	5,539	37,843	43,382
72	Accommodation and Food Services	0	9,394	22,007	31,401
56	Administrative and Support and Waste Management and Remediation Services	0	14,288	8,804	23,093
81	Other Services (except Public Administration)	0	7,597	12,715	20,312
52	Finance and Insurance	0	6,476	13,712	20,188
48	Transportation and Warehousing	0	5,695	8,641	14,336
31	Manufacturing	0	5,686	8,286	13,973
62	Health Care and Social Assistance	0	1,603	11,984	13,587
42	Wholesale Trade	0	4,351	6,587	10,938
51	Information	0	5,538	4,063	9,601
53	Real Estate and Rental and Leasing	0	4,817	3,379	8,196
71	Arts, Entertainment, and Recreation	0	2,341	5,178	7,519
61	Educational Services	0	2,198	4,653	6,851
92	Public Administration	0	3,187	2,785	5,972
23	Construction	0	2,222	3,487	5,709
11	Agriculture, Forestry, Fishing and Hunting	0	429	3,714	4,143
22	Utilities	0	538	1,291	1,830
55	Management of Companies and Enterprises	0	766	508	1,274
21	Mining, Quarrying, and Oil and Gas Extraction	0	315	409	724
	Grand Total	**243,255**	**116,569**	**167,236**	**527,060**

[1]North American Industrial Classification System (NAICS). For specific industry definitions, see www.census.gov

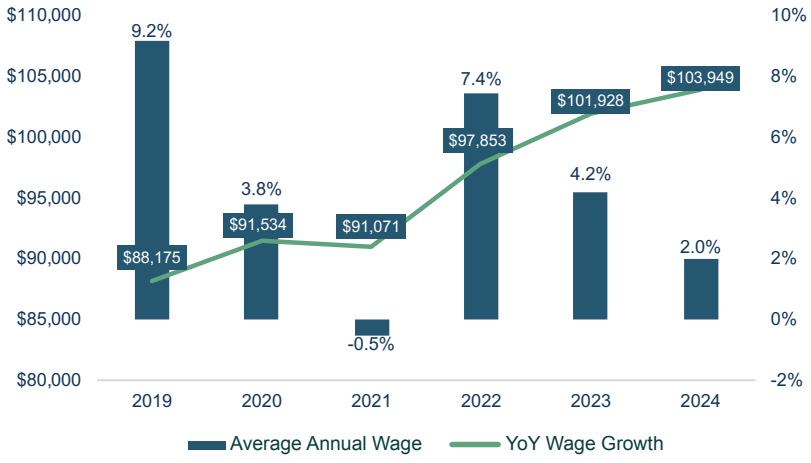
Industry Revenue, Employment, and Wages

Engineering and Design Services Growth Outpaces the Economy, but Momentum Wanes

Canada's Engineering and Design Services industry showed signs of slowing in 2024, even as it continued to outperform the broader economy in terms of revenue and employment growth. The industry maintained its competitive edge through above-average wages and steady expansion, but headwinds from trade uncertainties and stagnant productivity signaled a clear deceleration.

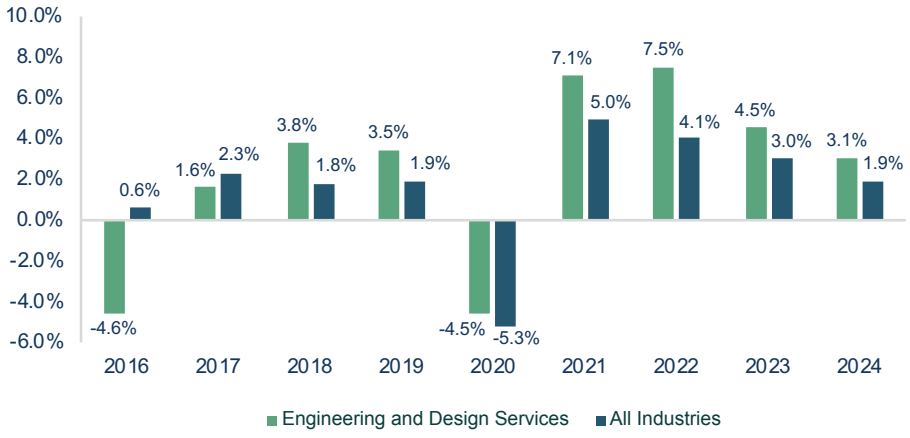
Average annual wages in the industry rose to nearly $104,000 in 2024 — a 2.0 percent increase that, while modest, remains well above the national average of $67,100. The nearly $37,000 average wage differential reflects the industry's sustained market strength despite the slowing economic environment.

Engineering and Design Services Average Wages: All Employees



Sources: Statistics Canada, Rockport Analytics

Engineering and Design Services vs. All Industries Employment Growth Rate

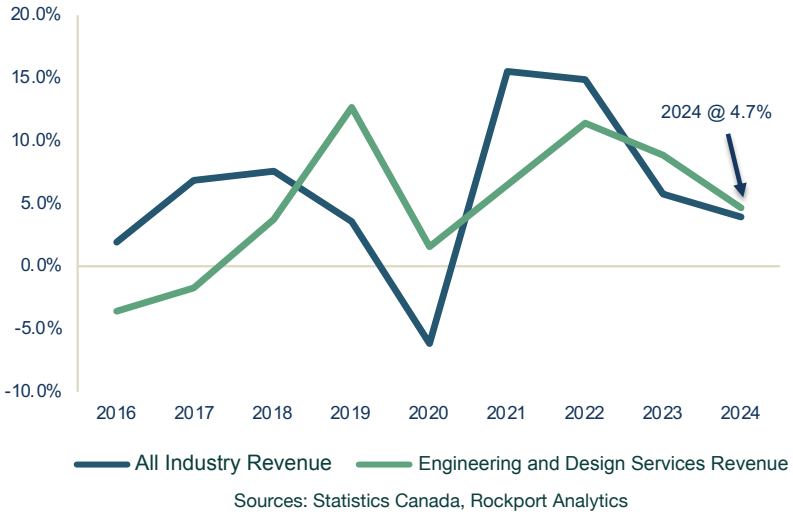


Sources: Statistics Canada, Rockport Analytics

Industry employment showed continued strength, averaging 5.6 percent annual growth between 2021 and 2024, consistently outpacing the all-industry average. However, 2023 marked a noticeable cooling in momentum, with growth slowing from 7.5 percent in 2022 to 4.5 percent. This deceleration continued into 2024, as Engineering and Design Services employment rose just 3.1 percent, compared to the more modest 1.9 percent increase across all industries.

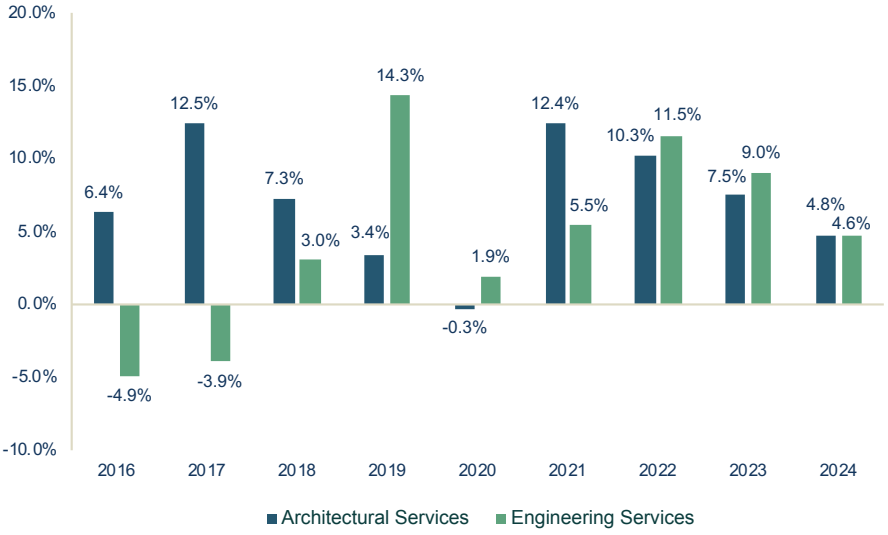
Despite a broader economic slowdown, the Engineering and Design Services industry slightly outpaced average revenue gains across all industries in 2024. Industry-wide revenue growth decelerated from 5.7 percent in 2023 to 4.0 percent in 2024, reflecting the end of the post-pandemic surge. By comparison, revenue growth in the Engineering and Design Services industry also slowed—from 8.8 percent in 2023 to 4.7 percent in 2024—edging above the all-industry average.

Annual Growth in Engineering and Design Revenue vs. All Industry Revenue



Sources: Statistics Canada, Rockport Analytics

Engineering vs. Architecural Services - Y/Y Growth in Revenue



Sources: Statistics Canada, Rockport Analytics

In 2024, Engineering Services generated over $45 billion in revenue, while Architectural Services brought in more than $7.5 billion. Growth in both of these slowed to below five percent, with Architectural Services edging slightly higher at 4.8 percent compared to 4.6 percent for Engineering Services.

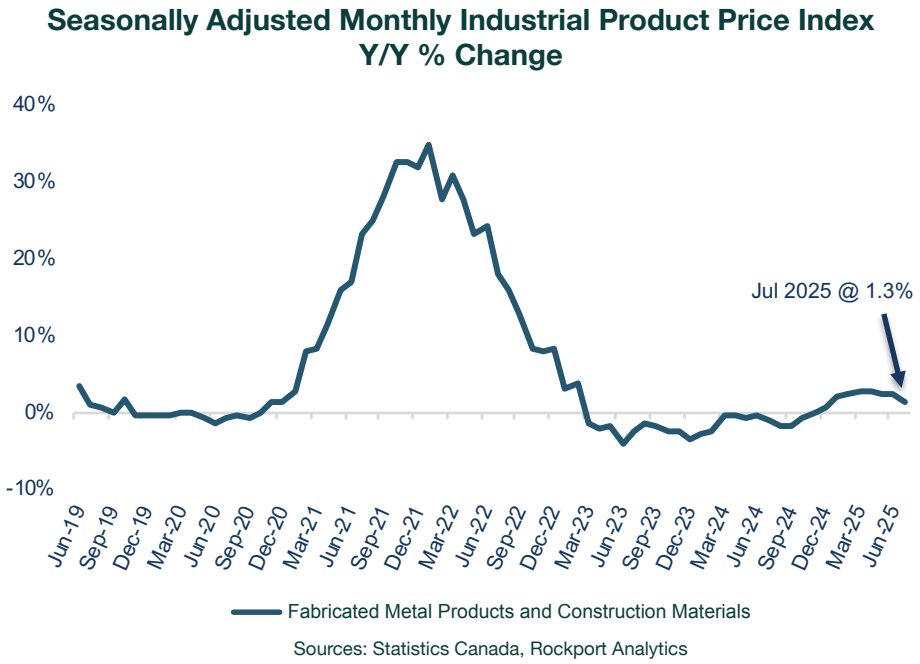
Engineering and Design Services Industry in 2025 and Beyond

Trade Uncertainty Begins to Take Its Toll on the Canadian Economy

The uncertainty surrounding U.S. tariffs has weighed heavily on the Canadian economy through mid-2025. GDP contracted by 2.0 percent in the first quarter and another 1.6 percent in the second—steeper declines than most economists had forecast. In response, the federal government has pledged to reduce reliance on U.S. trade while offering targeted relief to vulnerable industries, including $700 million in loan guarantees for lumber companies and $500 million to help them expand into new export markets.

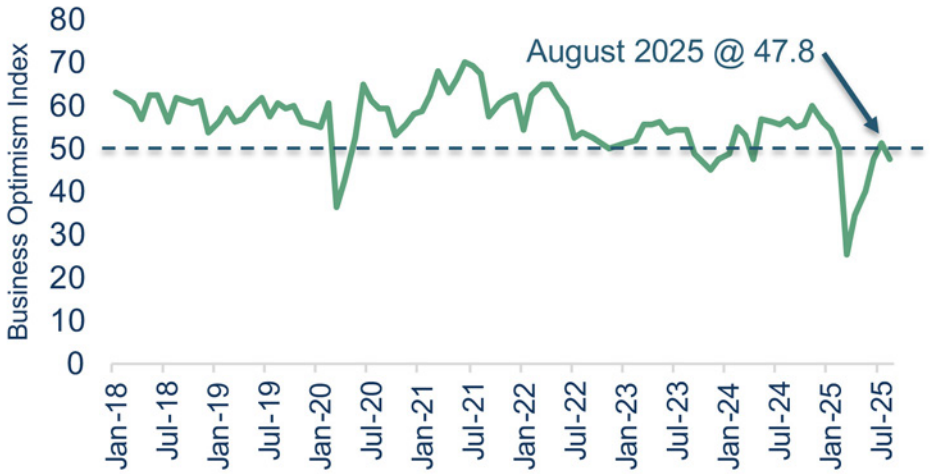
The United States "Liberation Day" tariffs, announced in April 2025 with a sweeping 10 percent levy on all U.S. imports, have created persistent volatility for Canada and its trading partners. The federal government initially countered with 25 percent duties on non-USMCA-compliant goods, but negotiations were slow to advance. A breakthrough came after Prime Minister Carney and President Trump met in late summer, leading Canada to roll back most retaliatory measures on September 1, 2025. Canada's remaining 25 percent tariffs on U.S. steel, aluminum, and automobiles are significantly lower than the 50 percent duties Washington imposed on Canadian goods. The partial easing should relieve some pressure along the supply chain, lowering input costs and helping businesses clear tariff-inflated inventories. Canada also lifted tariffs on softwood lumber, easing construction expenses, though metals remain costly inputs for infrastructure and housing.

Even with these adjustments, pricing pressures are unlikely to fade quickly. Since the April 2025 announcement, the Product Price Index for fabricated metals and construction materials has risen an average of 2.1 percent, reversing the deflationary trend in place since early 2023. While recent policy shifts may gradually stabilize conditions, the construction industry is still expected to underperform earlier forecasts in the near term.



The effect of tariffs on the Canadian business environment remains evident, with business confidence remaining stifled relative to previous years. The Canadian Federation of Independent Businesses' Business Barometer, a key indicator of sentiment, plummeted in early 2025, reaching a low of 25.5. The index, which is based on survey data, has dropped over six points since the beginning of 2025, and remains nine points under the post-pandemic average of 56.8. Notably, the index dropped to 47.8 in August 2025 after regaining some ground in the preceding months. This means that under half of entrepreneurs had a positive outlook on the economy. The partial lifting of tariffs should help bolster business confidence in the remaining months of the year as the trade situation gains a measure of stability.

Monthly Business Optimism Index

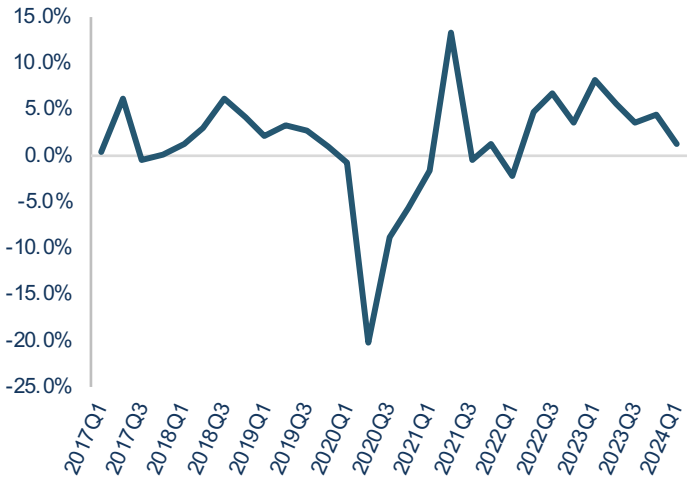


Engineering and Design Services Exports Show Strength Amid Looming Trade Tensions

Despite an impressive run in export gains in 2023 and early 2024, the outlook for Canadian trade is increasingly clouded by economic uncertainty. As Canada's largest trading partner signals a return to aggressive trade policy and fears of a broader recession grow, concerns are rising over the durability of recent export momentum.

Still, 2023 marked a milestone for Canadian exports, as service exports surpassed imports for the first time ever and generated a $2.6 billion surplus. This breakthrough reflects the ongoing success of Canada's 2018 Export Diversification Strategy, which aimed to boost overseas exports 50 percent by 2025 through infrastructure investments, trade services, and targeted business support. Export growth reached 5.5 percent in 2023 and continued to rise in early 2024, defying typical seasonal weakness. But as protectionist pressures mount in the U.S., sustaining that trajectory may become increasingly challenging.

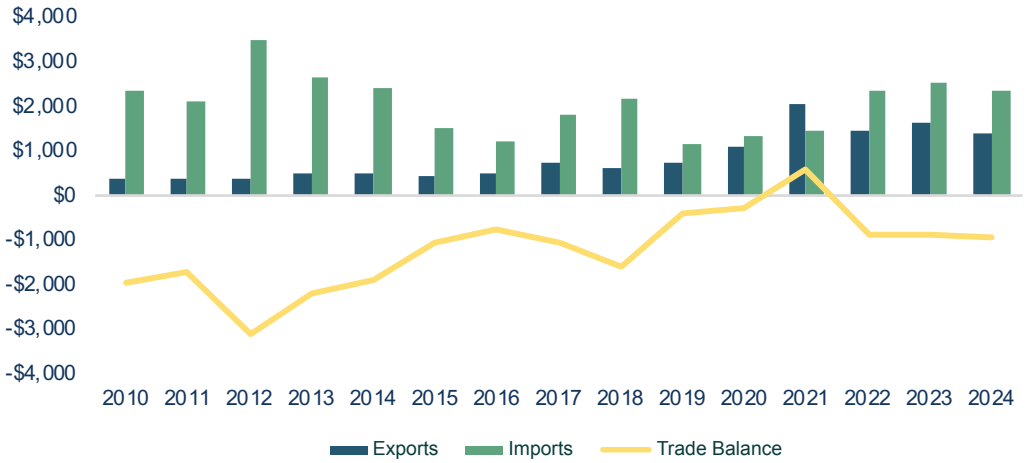
Canadian Exports of Goods and Services Y/Y Growth in Value



Sources: Statistics Canada, Moody's Analytics, Rockport Analytics

This uncertainty is especially relevant for Canada's Engineering and Design Services industry, which has seen a rebalancing of its cross-border trade dynamics. After a dip in 2022, the Engineering and Design exports rebounded strongly in 2023 with 11.2 percent growth, marking a reset of the industry's trade baseline at a higher level than pre-pandemic norms. Exports once again declined in 2024, however, slowing down 13.6 percent. Exports now consistently represent almost 40 percent of the value of total trade, demonstrating deeper U.S. market penetration. The trade balance has been altered as of 2025, so the effect of tariffs on firms as they settle into the "new normal" in terms of cross-border trade remains to be seen.

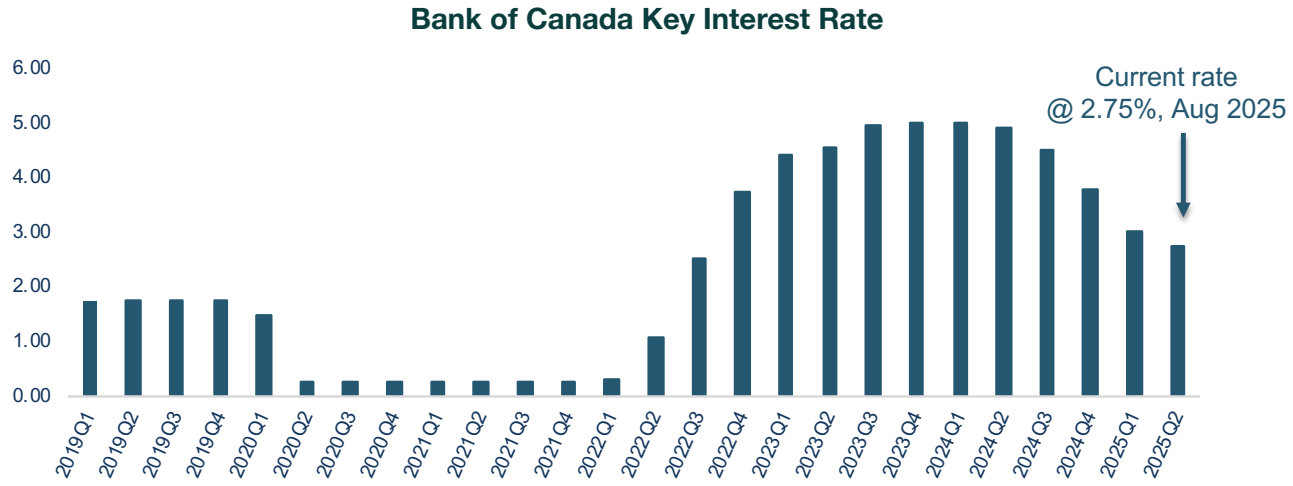
CAN Trade Balance in Engineering and Design Services with U.S. (in Millions CAD)



Sources: Bureau of Economic Analysis, International Services

Interest Rates Should Continue to Normalize, But Uncertainty Persists

While easing inflation and interest rates have provided welcome relief, the growing threat of a trade war casts a long shadow over 2025. New cost pressures from tariffs on materials and equipment may reverse recent gains in price stability, potentially stalling project pipelines and disrupting procurement strategies just as market confidence begins to return. The Bank of Canada held rates steady at 2.75 percent in late-July because of trade war concerns and recessionary fears, however, rates may be cut in September in order to alleviate the economic contraction seen in the first two quarters of 2025.



Sources: Bank of Canada, Rockport Analytics

Construction Growth Slows as Residential and Commercial Sectors Lag

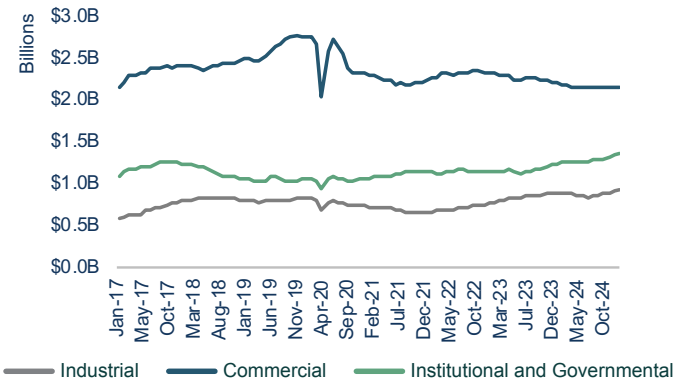
As inflation and interest rates rose, Canada's construction industry slowed in 2023, with divergent performance across sectors. The loose monetary policy that helped the construction industry out of its slump in 2021 and 2022 was tightened to combat rising inflation rates. This led to higher construction loan rates and dried up a lot of the available equity investment, causing construction activity to slow down significantly. This slowdown was primarily driven by a significant decline in residential construction as labor shortages persist, even as earlier supply chain pressures eased. Despite these challenges, the nonresidential construction segment showed resilience, maintaining solid performance, driven by robust activity in the industrial sector.

- Elevated interest rates and persistent labor shortages in the construction industry significantly constrained project development in 2023, impeding growth across various segments.
- Following a difficult 2023, residential construction started to recover in 2024 and is expected to grow slowly, bolstered by pent-up demand—barring any major trade complications or a protracted tariff situation.
- Non-residential construction emerged as the primary growth engine for construction value in 2023, with the manufacturing and transportation sectors recording strong gains and offsetting weaknesses elsewhere in the market.
- Commercial construction faced persistent challenges throughout 2023, posting a modest decline that we expect to continue through 2025 as the sector adjusts to shifting market demands, rising costs, and a growing emphasis on domestic sourcing and supply chain realignment.
- Major public infrastructure projects served as crucial stabilizing factors for the industry, with significant investments in transit systems, healthcare facilities, and energy.

Total Value of Canadian Residential Construction Put in Place

Source: Statistics Canada

Total Value of Canadian Non-Residential Construction Put in Place



Source: Statistics Canada

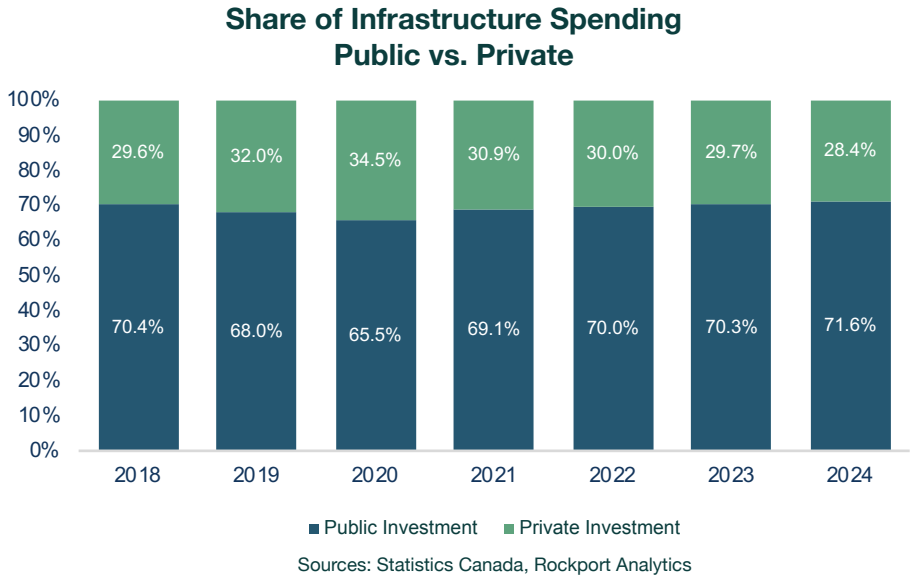
Total Construction Put in Place declined two percent in 2023. However, easing interest rates and moderating construction costs fueled a six percent rebound in 2024. Looking ahead, growth is expected to level off or slow down in the near term, with recovery anticipated by mid- to late 2026.

Construction output grew just 1.6 percent in 2023, down sharply from 2022's 10.6 percent surge. Growth remained moderate at 2.5 percent in 2024, with labor shortages persisting despite higher immigration.

Non-building construction expanded eight percent in 2023, driven by strong gains in highway and street construction (18%) and power construction (5%). Growth cooled in 2024 to two percent, with all subsectors growing below eight percent. Non-building construction is projected to grow faster than residential and non-building construction through 2028.

Residential construction contracted in 2023 under the pressure of high interest rates and ongoing labor shortages. In 2024, more favorable financing conditions helped the sector rebound with five percent growth. Labor shortages and the potential for tighter monetary policy means that residential construction will likely continue to lag in the coming years,

Canadian Infrastructure Investment Trends: Public and Private Sector Dynamics



Sources: Statistics Canada, Rockport Analytics

Since the pandemic, Canada has seen a marked shift in the balance between public and private infrastructure investment. In the wake of COVID-19, the federal government dramatically expanded its share of infrastructure spending, pushing the public sector's share from a pre-pandemic average of 69.2 percent to 70.6 percent post-2020. This shift was driven by successive rounds of stimulus through programs like the Investing in Canada Plan, which catalyzed a surge in public investment during 2020–2022.

While public infrastructure spending remained elevated in 2023 and 2024—growing 8.5 percent and 7.9 percent respectively—its future trajectory is uncertain. The federal government's net debt rose substantially during the pandemic, reducing its fiscal flexibility. With recessionary risks looming in 2025, the ability to further stimulate infrastructure through public spending may be constrained, both financially and politically.

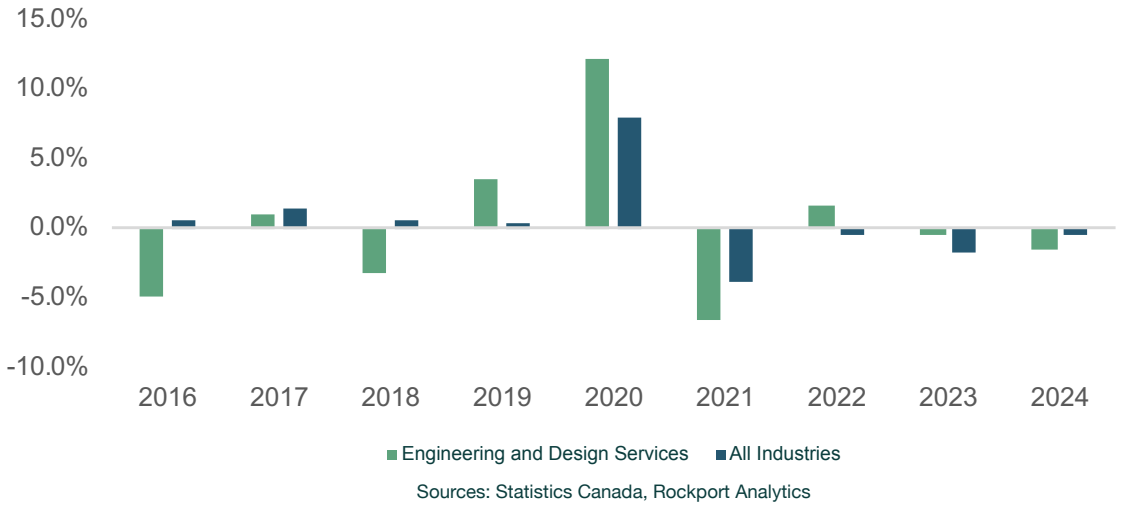
In contrast, private sector infrastructure investment, which rebounded with strong gains in 2022 and 2023, saw momentum slow sharply in 2024, increasing just 1.6 percent. This underscores a potential structural challenge; unless the private sector and provincial governments reengage more fully, overall infrastructure growth may lag in the coming years.

Productivity Has Not Kept Pace with Population Growth

Another headwind the Canadian economy has been dealing with has been a stagnation in the rate of productivity growth. Canadian labor productivity has consistently underperformed since the 1990s, lagging significantly behind most advanced economies in Northern and Western Europe, Australia, and the U.S.[1] This persistent productivity gap stems primarily from insufficient capital investment, particularly in the non-residential construction sector and machinery and equipment. The investment shortfall in non-residential buildings can be partially attributed to the widespread adoption of remote work arrangements, while decreased machinery investment likely reflects reduced market competition, as evidenced by stagnant firm entry rates and minimal changes to industry composition since the mid-2000s. Further complicating this productivity challenge are policy uncertainty and regulatory hurdles that have created additional friction in Canada's economy.

From 2015 to 2019, economy-wide labor productivity in Canada grew at a compound annual growth rate (CAGR) of just 0.7 percent—only half the rate observed in the United States (1.4 percent). Over the same period, labor productivity in the Engineering and Design Services Industry declined slightly, falling one percent. Although productivity appeared to spike in 2020, this was largely a statistical anomaly: hours worked declined more sharply than output due to the pandemic, temporarily inflating productivity metrics. In the post-pandemic years, the Engineering and Design Services industry has seen productivity decline, with a CAGR of -0.1 percent.

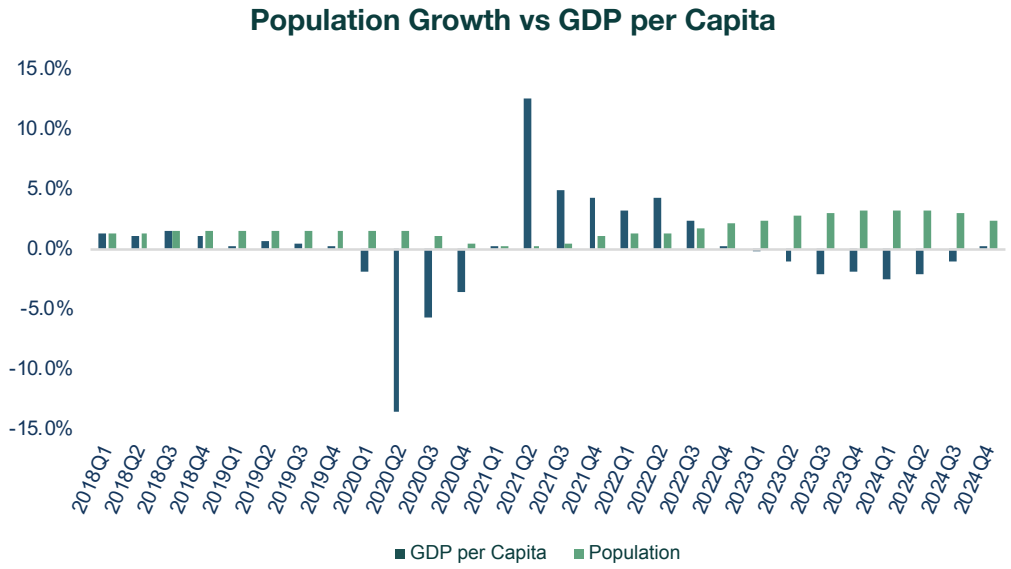
Engineering and Design Services vs. All Industries Labor Productivity Y/Y Growth



Sources: Statistics Canada, Rockport Analytics

1 Sargent, Tim. 2024. Productivity Growth in Canada: What is Going On? Calgary: The School of Public Policy, University of Calgary.

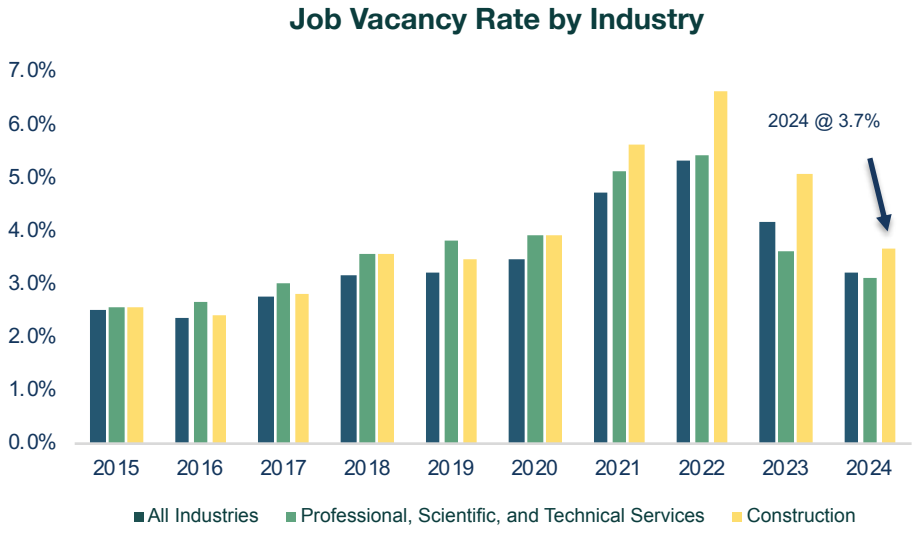
Canada's continued population growth has failed to boost productivity levels. Population growth has outpaced GDP per capita growth in recent years, with per capita GDP declining since 2022 (excluding pandemic years when figures were distorted by elevated public spending). This sluggish productivity trend can be largely attributed to hesitant private investment, frequently blamed on regulatory burdens and excessive bureaucracy. Some policymakers have proposed eliminating interprovincial trade barriers as a strategy to mitigate the negative effects of broader trade uncertainty.[2]



Sources: Statistics Canada, Rockport Analytics

This substantial population influx has significantly intensified demand for housing and infrastructure development, adding to the already substantial amount of pent-up demand. However, labor shortages within the construction industry have created a bottleneck, preventing supply from adequately responding to these heightened demands. Compounding this challenge is the fact that recent immigrants are statistically less likely than Canadian-born individuals to pursue trades occupations such as construction, leaving a skills gap unfilled despite the growing population.

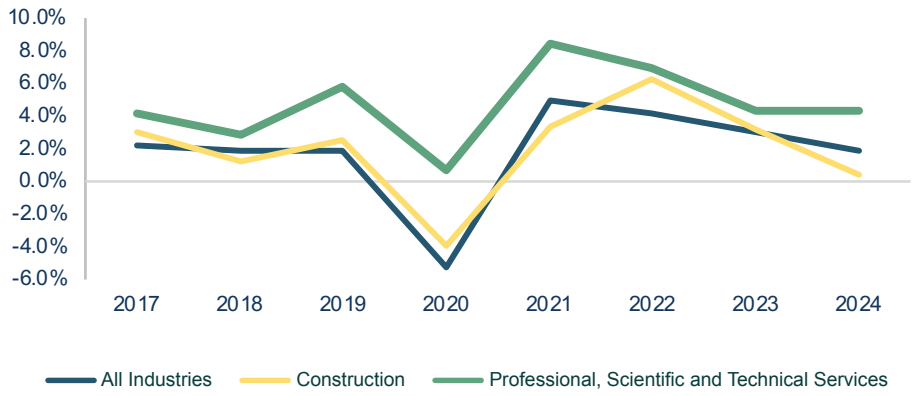
Historically, the construction industry's job vacancy rate—vacancies per total employment—mirrored the all-industry average. However, starting in 2021, construction job vacancies began to exceed the all-industry average, peaking at six percent in 2022 and remaining elevated at 5.1 percent in 2023. While the rate has since moderated, it continues to significantly surpass pre-pandemic levels.



Sources: Statistics Canada, Rockport Analytics

2 Jake Fuss, "Removing Internal Trade Barriers Would Help Mitigate Damage from Trump Tariffs," Fraser Institute

Growth in Construction Employment Starting to Fall Behind



Sources: Statistics Canada, Rockport Analytics

An analysis of construction employment trends in Canada reveals a notable deceleration in recent years. Historically, construction employment growth has closely aligned with the all-industry average, while the professional, scientific, and technical services sector consistently outpaced both. In 2022, construction employment experienced a modest increase of 6.3 percent, but growth slowed to 3.1 percent in 2023 and further to just 0.4 percent in 2024.

This pronounced slowdown in construction workforce expansion presents a potential constraint on residential development and infrastructure projects nationwide. The lack of labor supply could ultimately end up restricting opportunities and impeding momentum within the Engineering and Design Services industry as projects face delays, cancellations, or scope reductions due to insufficient skilled labor availability.

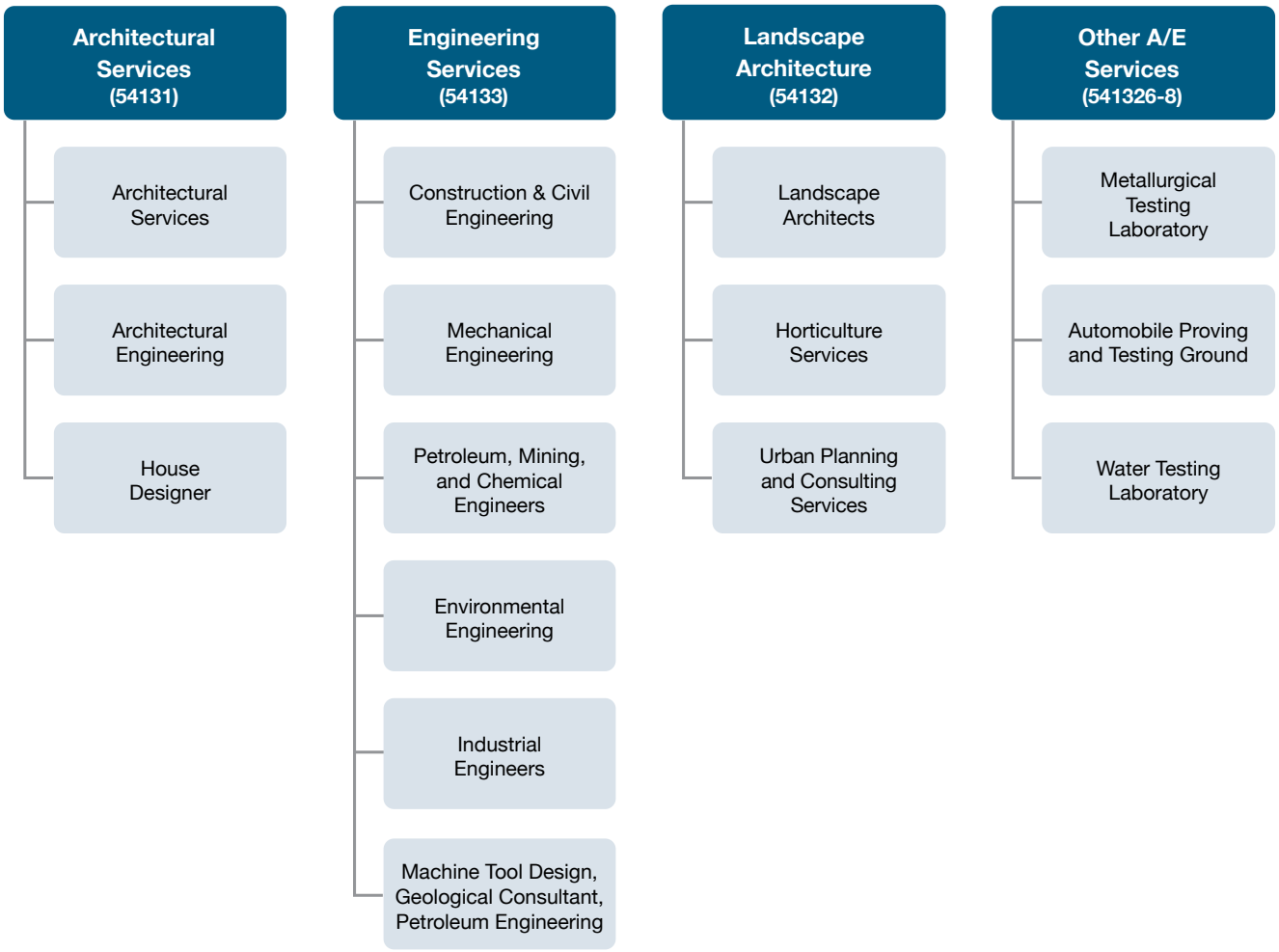
Appendix

Engineering and Design Services Industry Definition

The definition of the Engineering and Design Services industry has been primarily developed based upon the ways in which public and private data sources collect and publish information from all businesses across Canada – the North American Industry Classification System, or NAICS. NAICS is a hierarchical industry taxonomy that provides classification standards for businesses according to their stated activities. Most public and private data collection conforms to these standards.

The NAICS code "5413, Architectural, Engineering, and Related Services" is part of the broad category, "54 -Professional, Scientific, and Technical Services" and includes both private and public sector organizations from a number of sub-sectors including:

- Architectural Services
- Landscape Architectural Services
- Engineering Services
- Drafting Services
- Building Inspection Services
- Geophysical Surveying and Mapping Services
- Surveying and Mapping (except Geophysical) Services
- Testing Laboratories



This study focuses on the all-inclusive NAICS 5413 category to define Engineering and Design Services activity for several reasons::

- More data with higher frequencies and greater regional detail are available at the four-digit (5413) NAICS level. The deeper we drill into the NAICS structure, the less available and robust the data describing sector performance.
- Second, as a result of mergers and/or vertical integration strategies, more and more traditional ACEC-Canada members operate across many of the sub-sectors within 5413.
- Third, given the economic and policy drivers of the Engineering and Design Services industry, it is likely that measured trends for NAICS 5413 will hold for most, if not all, of its member sub-sectors.
- Finally, a broader definition of Engineering and Design may bring more potential members into the ACEC-Canada family.

One important note regarding the analysis and interpretation of the results in this study. Our focus on NAICS 5413 in its entirety is not perfectly representative of board licensed professionals providing engineering services for the built environment (physical infrastructure) and the firms for which they work. Such firms are notable and different for a number of reasons, including:

- Professional licensure creates direct moral and liability considerations for the licensed professional and their firms, regarding the safety and health of people and property.
- Federal and provincial governments have laws and statutes which provide for separate procurement processes that involve the selection of providers of licensed professional and related services based on capability and experience criteria.
- Services can only be provided in disciplines (civil, mechanical, electrical, structural, environmental, etc.) the professionals are qualified to perform, and in many provinces, firm ownership is required to consist of all or a certain percentage of active professionals in the firm. This has the effect of also limiting the size of many such firms.
- Design work usually requires the teaming of firms with varied discipline capabilities and experience.
- Licensing is for individual provinces or territories, resulting in geographical emphasis or limits on where work can be performed by individual firms.
- Since built environment involves facilities and infrastructure that are unique, due to the physical conditions involved, their designs must be correct when complete. Prototypes and beta testing are not an option since the initial construction costs and later corrections are prohibitive. The designs must be right the first time.

Since the definitions of NAICS Code 5413 and 541330 do not distinguish design of built environment from the design of equipment, systems, materials, instruments, software, and similar repeatable products and most data gathering surveys and processes allow for self-determination of NAICS Code reporting, many manufacturing, industrial, and management firms are included in the results. Often these are large enterprises that may skew the results.

While these firms may be "applying physical laws and principles of engineering in their design work", they are essentially operating in a different business sector of the Engineering and Design Services industry. ACEC-Canada represents the business interests of firms across all NAICS Code 5413, but recognizes the difference involved. We have attempted to provide context and insight where we have evidence that the more relevant data might deviate from the broader findings.

It must be emphasized that while the data contained in this report is suitable for many purposes, including understanding the size and impact of the Engineering and Design Services industry, the data available and presented is not suitable for evaluating and establishing guidance for decisions on procurement practices or developing size standards for either the aggregate industry or the portion of the industry focused on design of the built environment. The latter portion is heavily concentrated in physical infrastructure design services provided to federal, provincial, and local governments and entities involved in public works. The firms operating in this sector of the Engineering and Design Services industry make up the largest portion of ACEC-Canada membership.

The 2025 – 2029 Canadian Engineering Industry Forecast Methodology

The Engineering and Design Services industry forecast is developed by analyzing historical correlations between key driver variables of Engineering and Design Services industry with overall industry revenue. Using these mathematical correlations allows us to make inferences around the direction of Engineering and Design Services activity in the future. The forecast is further informed by quantitative data and industry insight to account for additional factors that may not be included in the econometric model.

The goal of this phase of research is to:

(1) Establishing a forecast for Canadian Engineering and Design Services activity over the next five years;

(2) Providing context around the key drivers of the forecast for Canadian Engineering and Design Services; and,

(3) Analyzing key trends, risks, and opportunities.

Data Sources

The data-driven effort to profile the Engineering and Design Services industry took advantage of a comprehensive set of published data from several public and private sources including:

- **Statistics Canada** – demographics, income, employment and business establishment data and trends
- **Moody's Analytics** – CPI, value of construction, industry forecasts
- **S&P Global** – Comparative Industry Rev.4 – nominal output and profit by industry
- **U.S. Bureau of Economic Analysis (BEA)** – International Services – imports, export, trade balance
- **Organization for Economic Cooperation and Development (OECD)** – currency exchange rates
- Other public and private sources

About ACEC Research Institute

The ACEC Research Institute's mission is to deliver knowledge and business strategies that guide and elevate the engineering industry and to be the leading source of knowl¬edge and thought leadership for creating a more sustainable, safe, secure, and technically advanced built environment. The ACEC Research Institute is an independent 501c3 non¬profit organization.

About Rockport Analytics

Rockport Analytics is a research and analytical consulting firm providing high quality quantitative and qualitative research solutions to business, government, and non-profit organization clients across the globe. We provide fast, nimble service in a completely transparent environment. Capabilities include:

- Industry/Market Analysis and Forecasting
- Economic Impact Assessment and Economic Development
- Market Modeling and Decision Support Tools
- Project Feasibility Assessment
- Primary and Secondary Research Synthesis