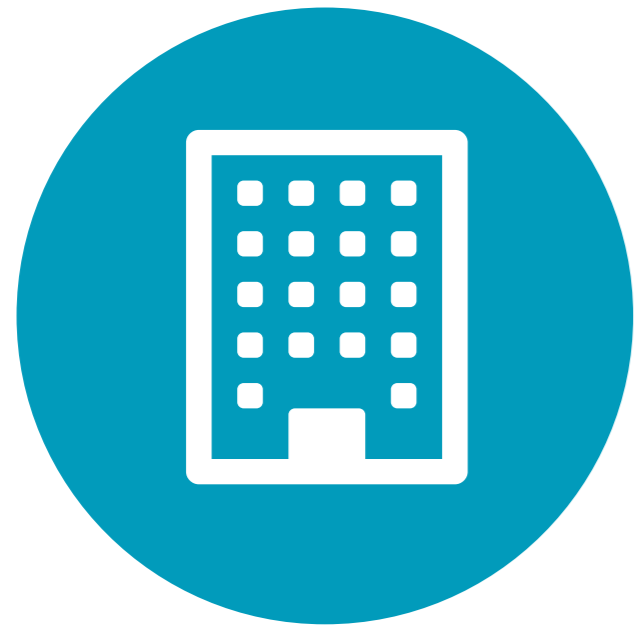




labour market

Workforce Attraction



Ranking of 150
global cities



Calgary ranked in the
global **Top 10 Most
Attractive Cities for
Workers**



Financial (salary
levels, living costs,
taxes) + Lifestyle
(quality of living,
social benefits)

Key Stats



Of 8 peer cities assessed, Calgary has the highest level of **educational attainment**.

- Deloitte, *Benchmarking Calgary's Competitiveness*, 2015



Calgary has the highest **labour force productivity and labour force participation** of major Canadian cities.

- The Conference Board of Canada and Statistics Canada, 2019



Calgary has the highest proportion of **STEM graduates** of major Canadian cities.

- Census 2016, Statistics Canada



Calgary has the highest **millionaires per capita** of major Canadian cities.

- Statistics Canada, 2017



Calgary has the highest number of **engineers and geoscientists per capita** of major Canadian cities.

- Statistics Canada, 2018



Calgary has the **highest concentration of high-tech workers** of Canadian cities

- *Who Are Canada's Tech Workers*, Brookfield Institute, January 2019

Labour Demand



ICTC forecasts Alberta will see demand for nearly 9,000 **digital jobs** by 2023.

- ICTC, *A Digital Future for Alberta*, June 2019



The **Logistics** sector in Alberta will grow by about 7,470 workers from 2016 to 2025.

- APGC, 2016



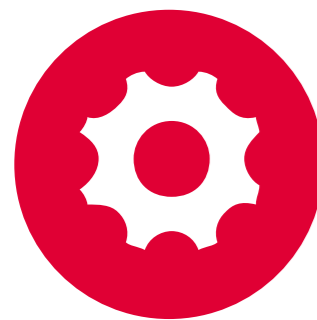
Finance, Insurance & Real Estate will grow by 1.6% annually, reaching 4.8% of total employment in 2019 and gain 68,100 jobs by 2024.

- Government of Alberta, 2016; Statistics Canada, 2016



Oil and Gas employment in Canada is expected to shrink by 7%, or 12,500 positions, to 173,300 workers in 2019 from 185,800 workers in 2018.

- 2019 Oil and Gas Labour Market Update, PetroLMI, April 2019



Manufacturing accounts for 5.2% of total employment in Alberta and is expected to grow at an average rate of 1.0% from 2017 to 2021.

- *Industry Profiles 2018, Manufacturing*, Government of Alberta, 2018



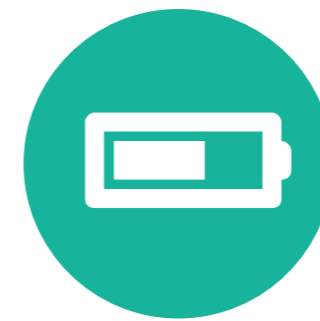
Clean Tech and Clean Resources in Canada will see a demand for approximately 25,500 and 10,500 workers respectively, by 2023.

- *Canada's Growth Currency: Digital Talent Outlook 2023*, ICTC, 2019



Agriculture will need to fill 23,300 potential jobs in Alberta by 2025.

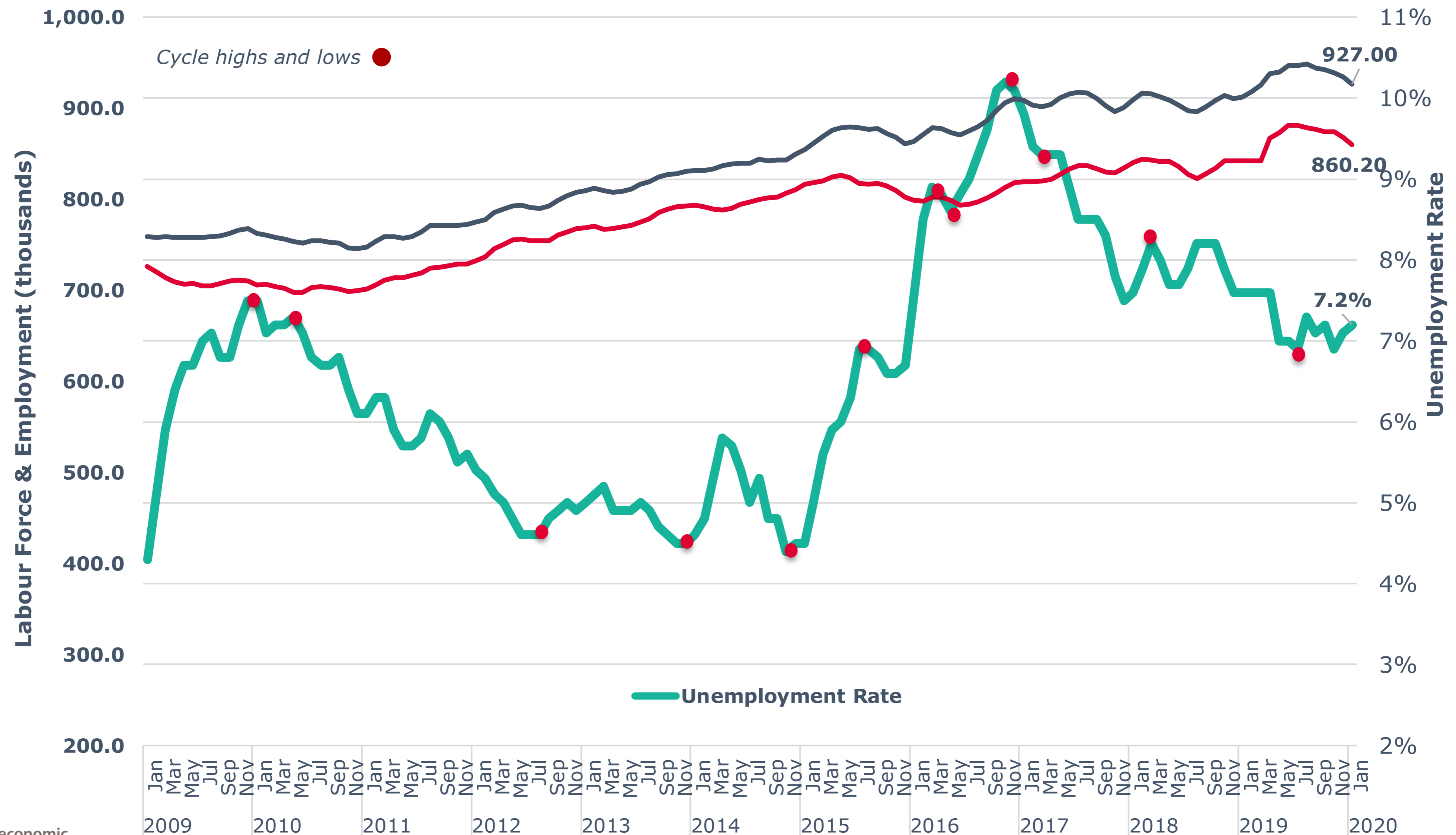
- AgriLMI CAHRC, 2016



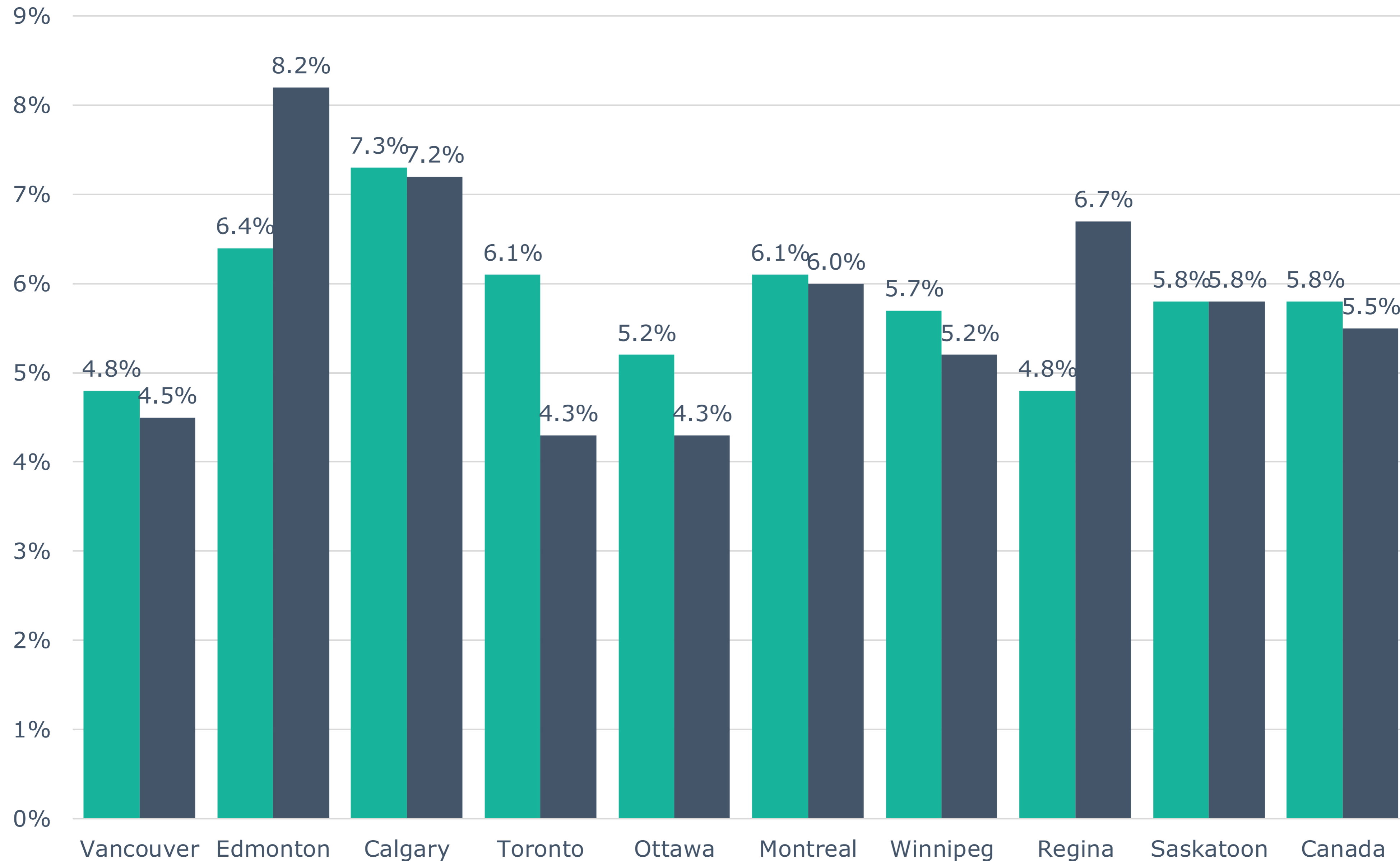
Energy Efficiency employed 436,000 permanent workers in Canada in 2018, with expected growth of 8.3% in 2019, creating over 36,000 jobs.

- *Energy Efficiency Employment in Canada*, ECO Canada, April 2019

Calgary CMA Historical Unemployment Rate, Labour Force & Employment

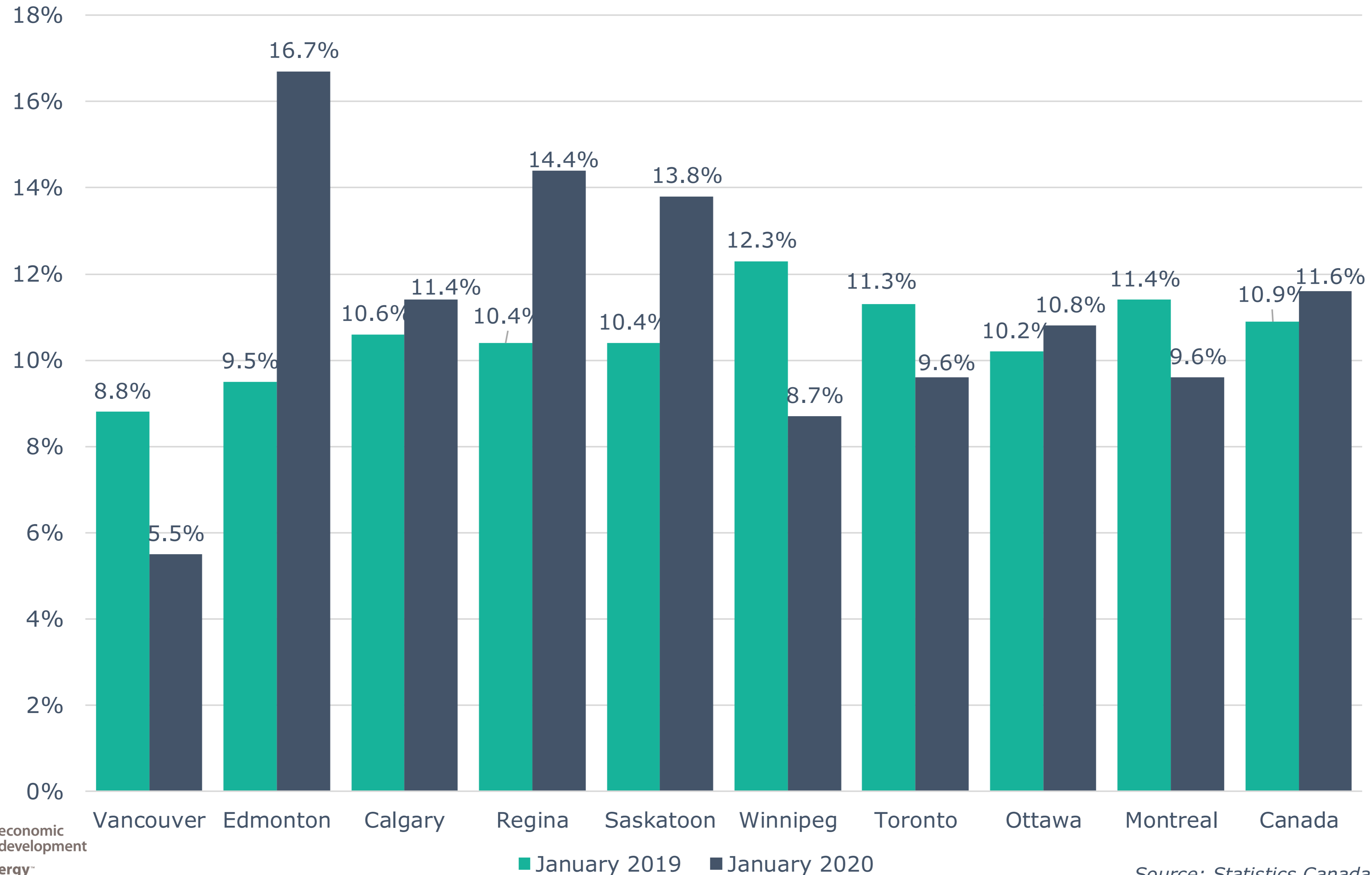


Unemployment Rate Across Canada

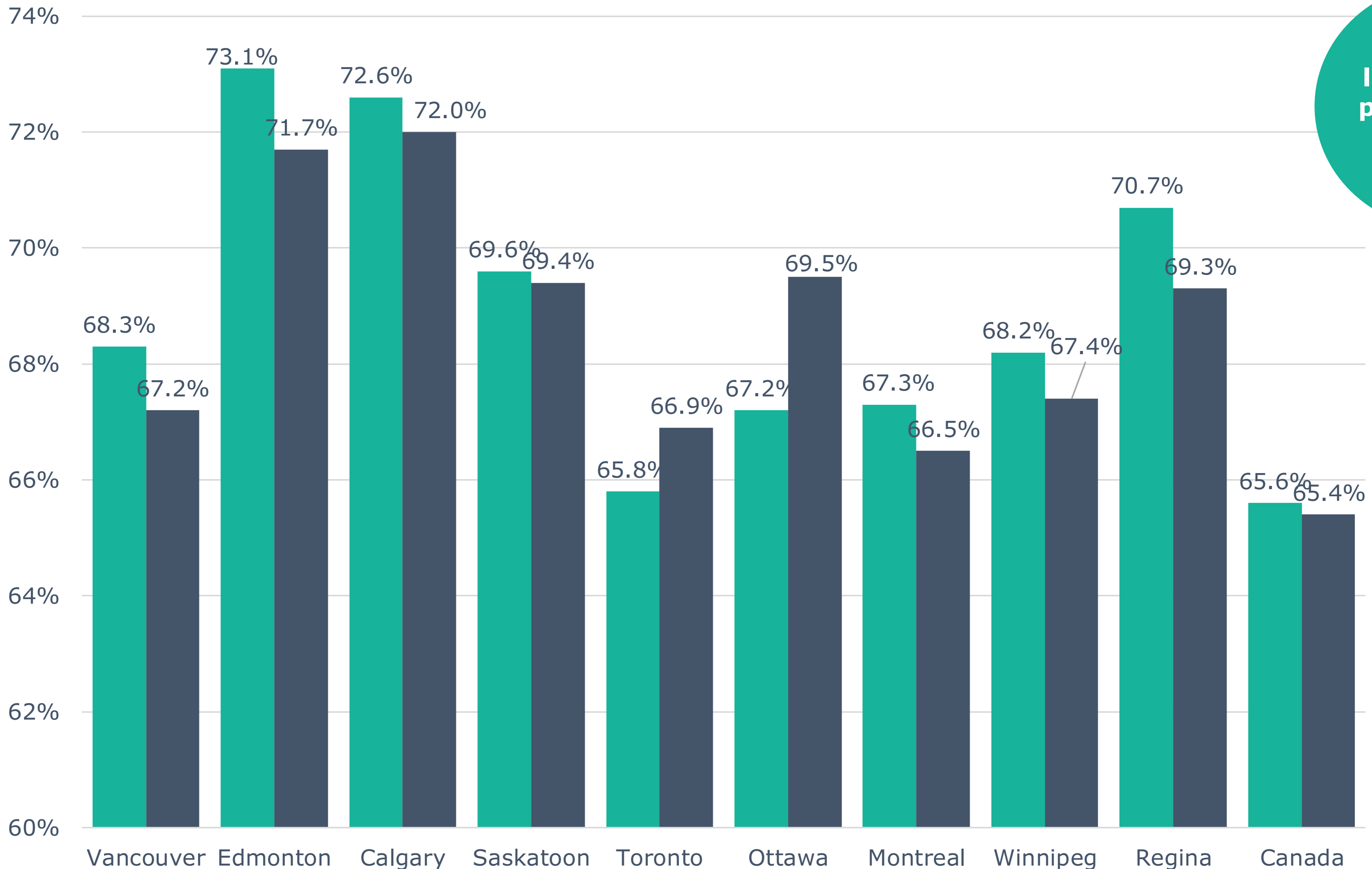


Youth Unemployment Rate Across Canada

(Ages: 15 to 24 Years)



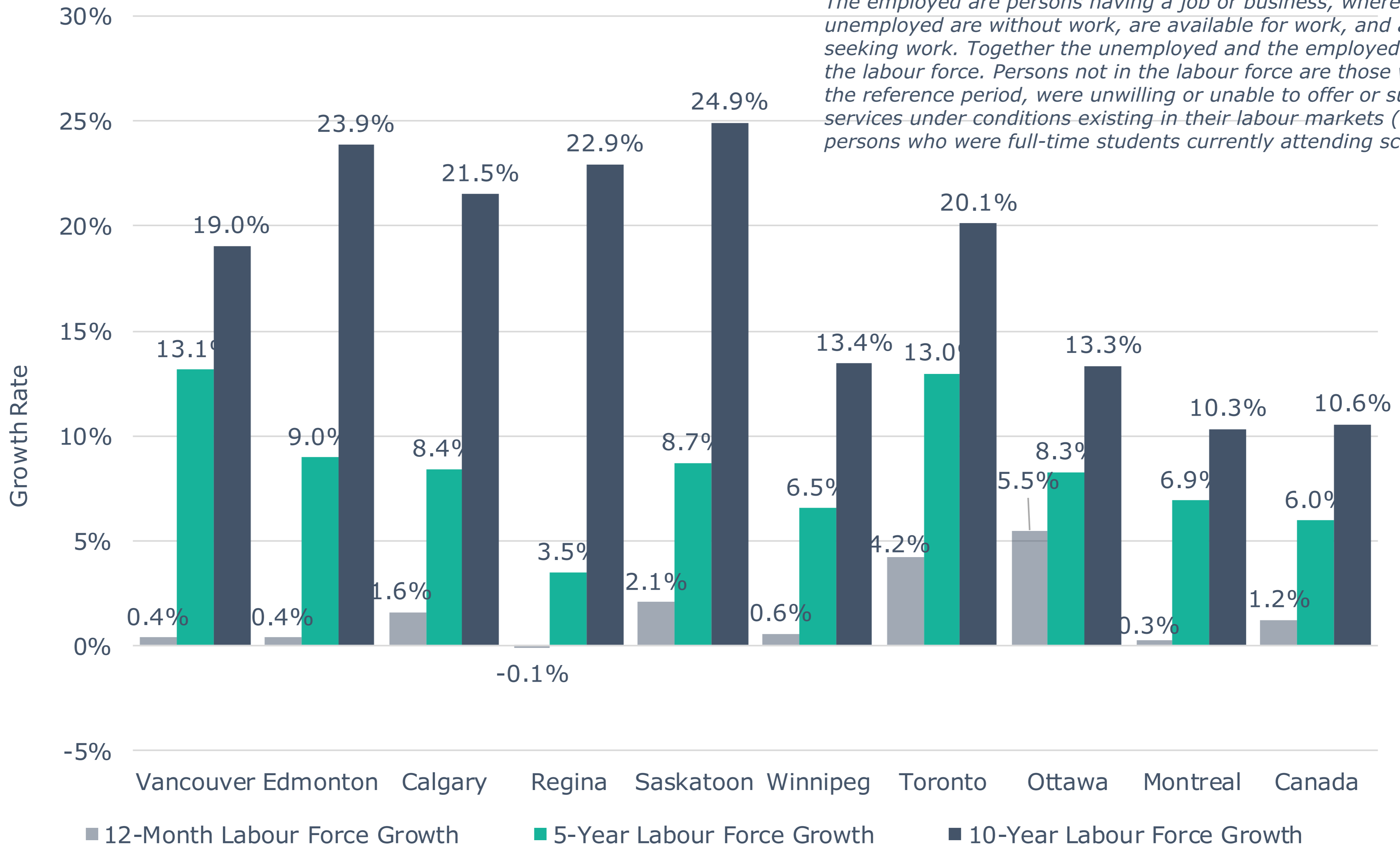
Labour Force Participation Rate Across Canada



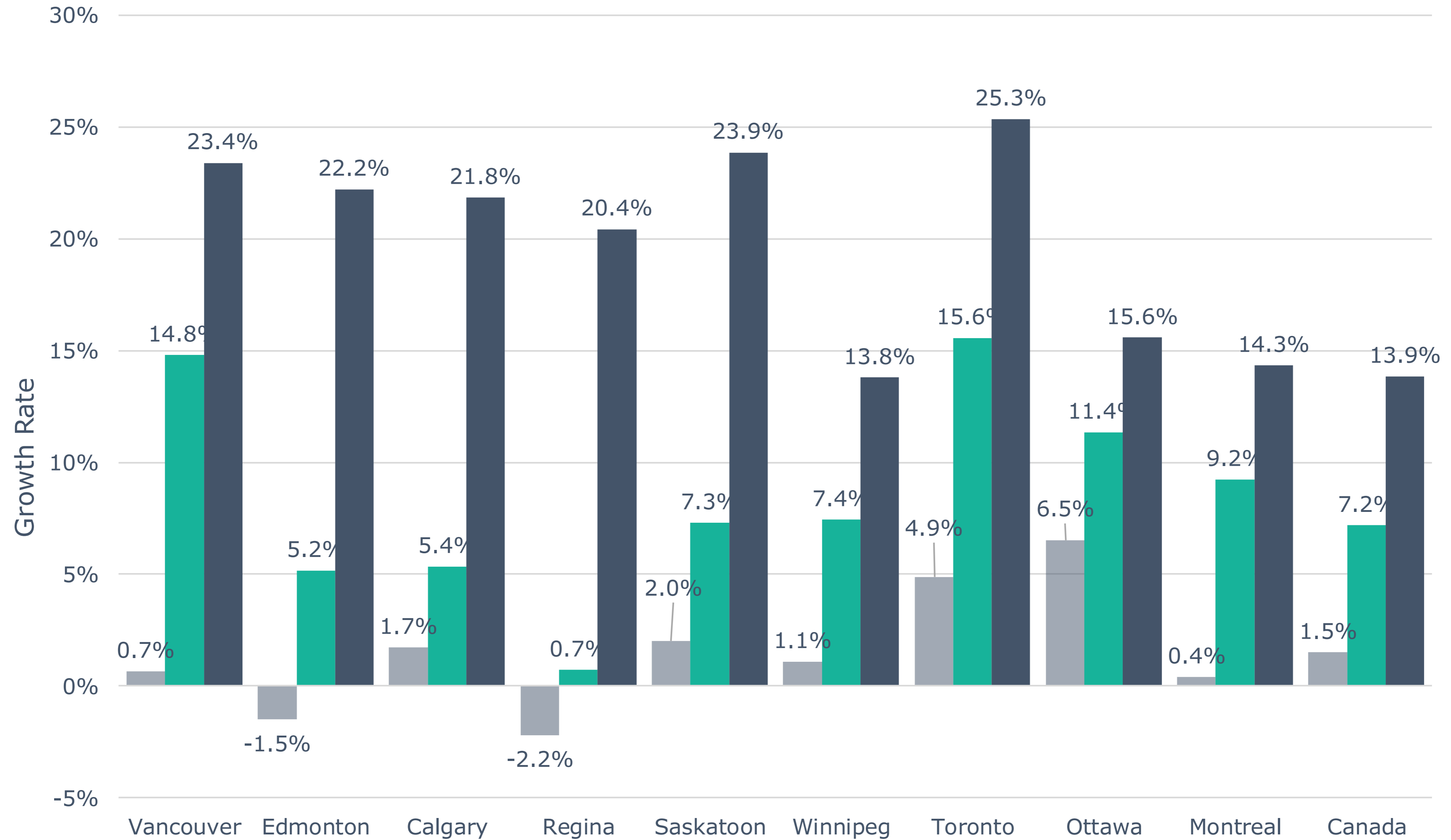
Highest labour force participation rate in Canada

Labour Force Growth Across Canada

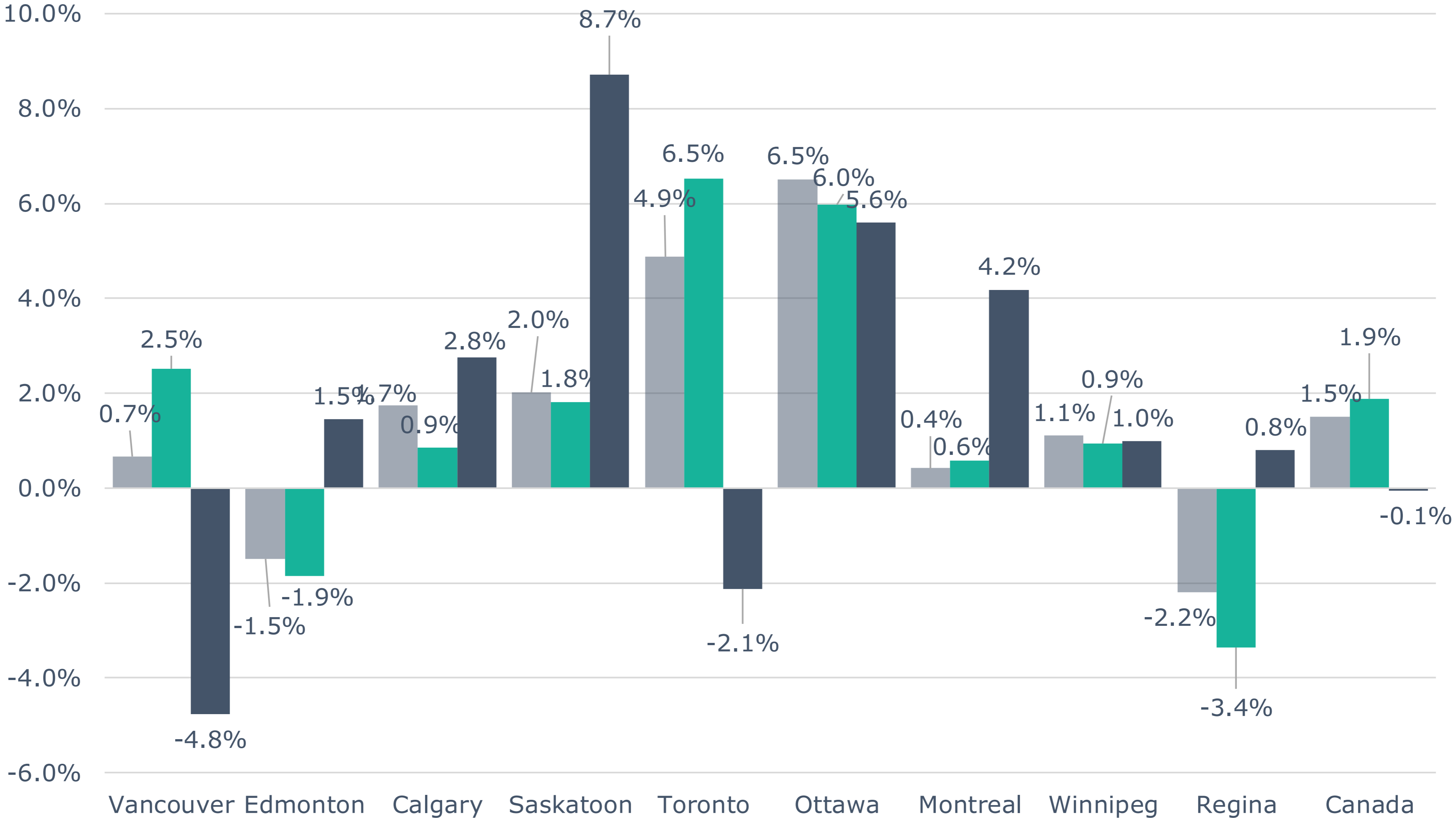
The employed are persons having a job or business, whereas the unemployed are without work, are available for work, and are actively seeking work. Together the unemployed and the employed constitute the labour force. Persons not in the labour force are those who, during the reference period, were unwilling or unable to offer or supply labour services under conditions existing in their labour markets (this includes persons who were full-time students currently attending school).



Employment Growth Across Canada



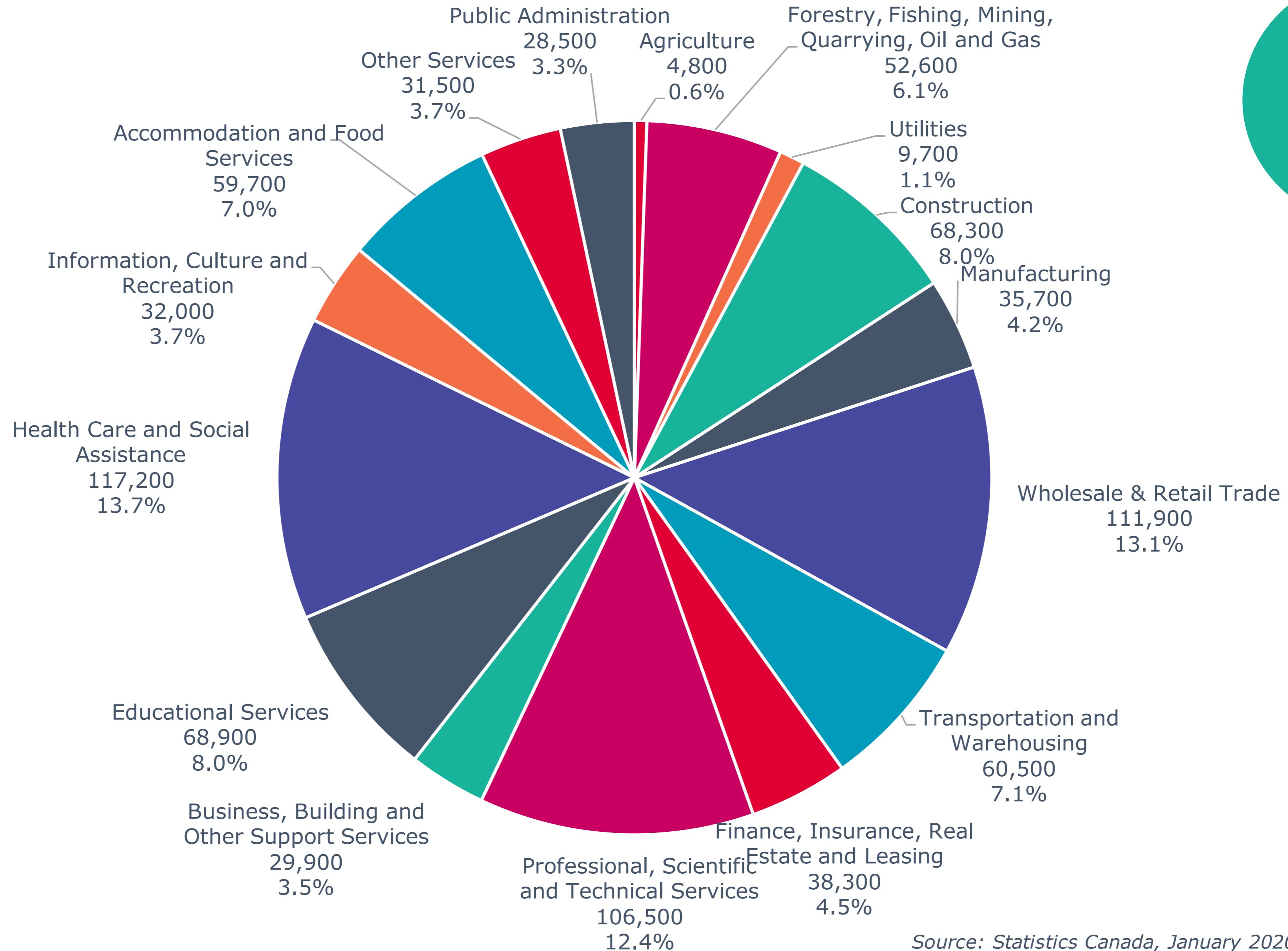
Annual Employment Growth



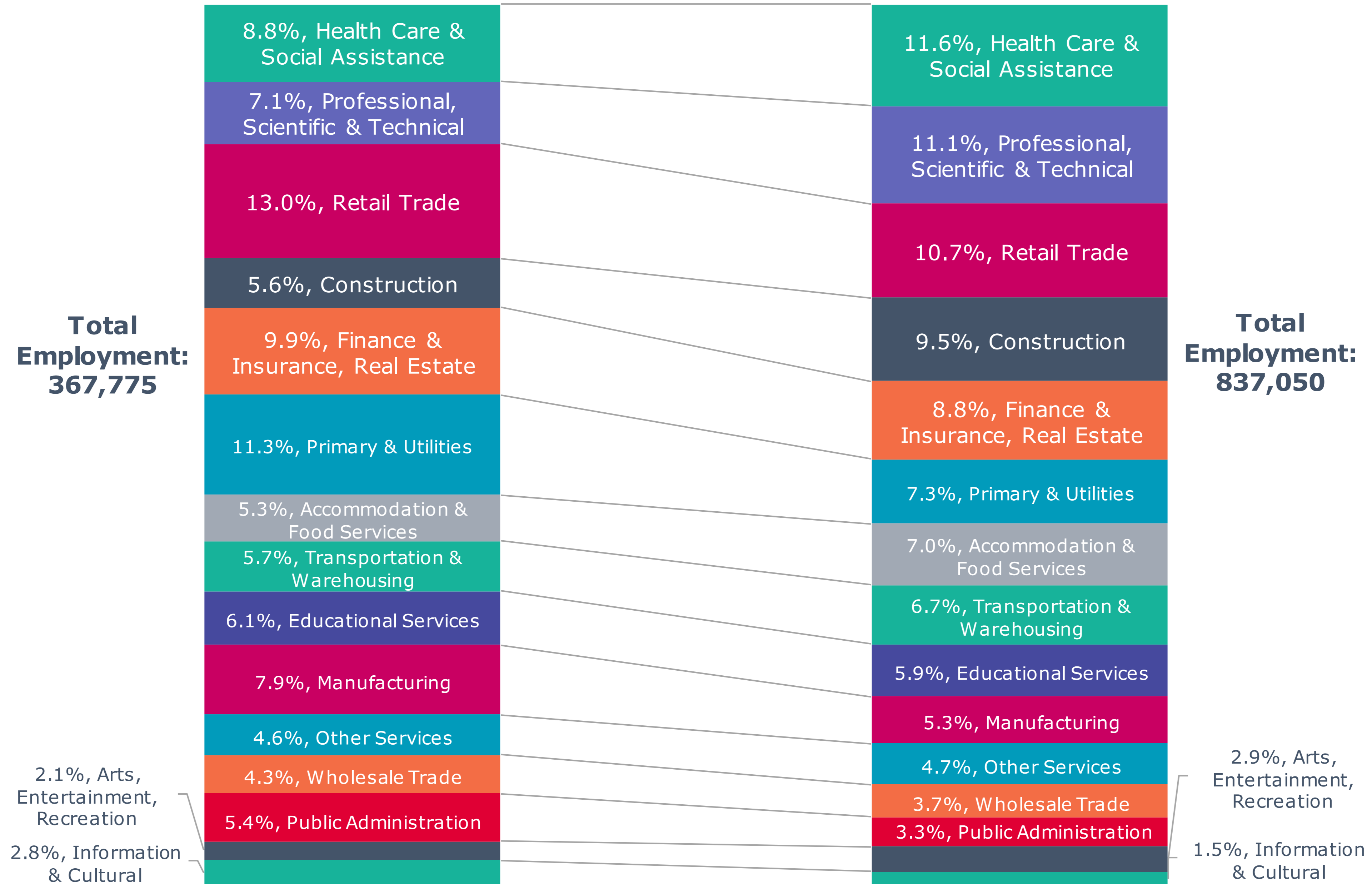
■ Total Employment Growth Rate ■ Full-Time Employment Growth Rate ■ Part-Time Employment Growth Rate

Calgary CMA Employment by Industry (855,900)

Diverse employment



Calgary Historical Employment by Industry



**Total Employment:
367,775**

**Total Employment:
837,050**

1987

Source: Conference Board of Canada, October 2019

2018

Forecast Employment by Industry

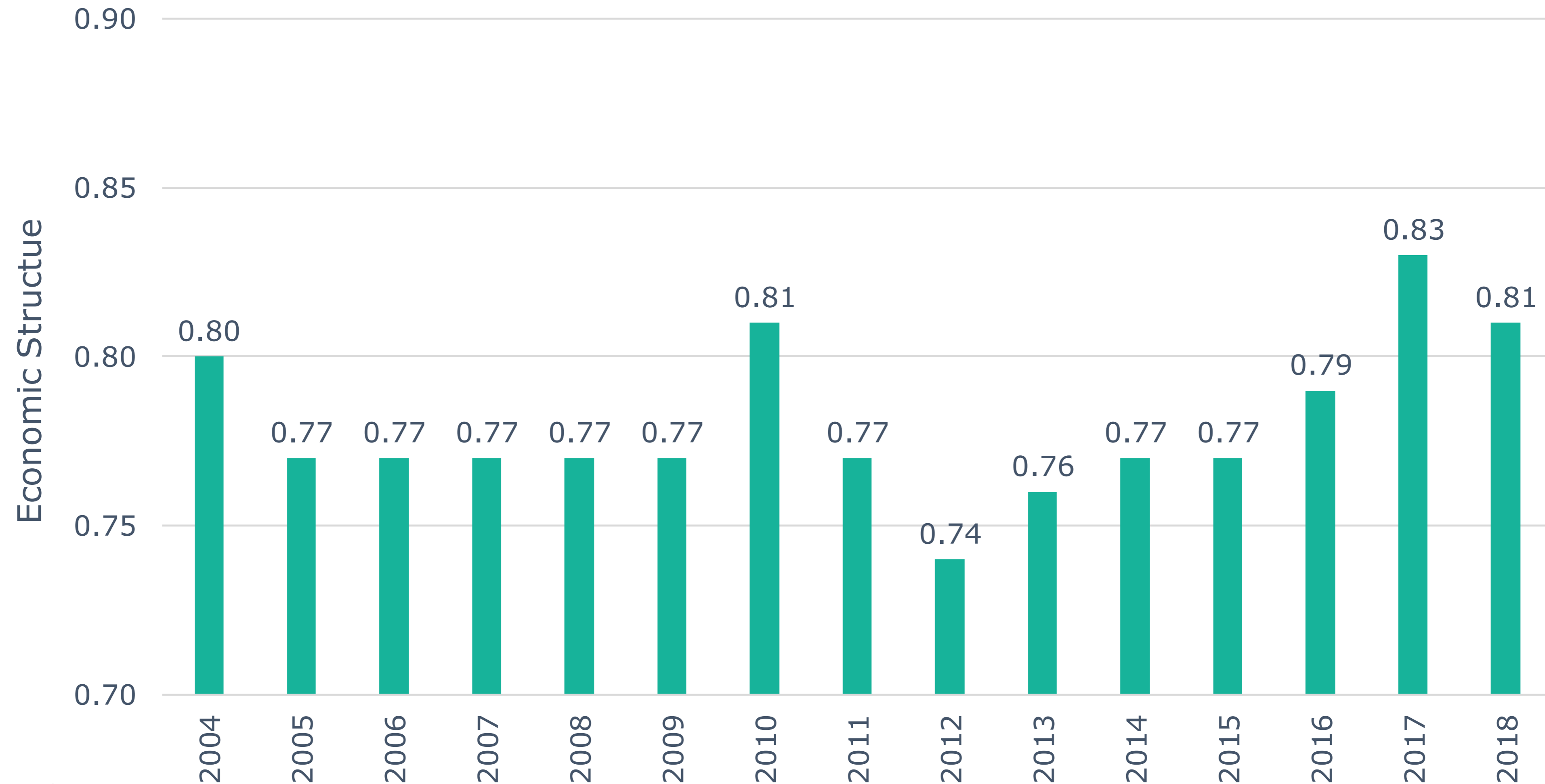


Calgary CMA Employment Forecast by Industry	2019	2022	Total Change 2019-2022 (%)
<u>Goods-Producing Industries</u>	187,830	190,285	1.3%
Manufacturing	48,655	47,463	-2.4%
Construction	73,452	78,638	7.1%
Primary and utilities	65,724	64,184	-2.3%
<u>Services-Producing Industries</u>	552,713	580,124	5.0%
Wholesale Trade	29,592	31,629	6.9%
Retail Trade	90,383	93,519	3.5%
Transportation and Warehousing	56,760	65,203	14.9%
Information and Cultural Industries	12,298	11,819	-3.9%
Finance and Insurance, Real Estate and Rental and Leasing, and Building, Business and Other Support Services	80,883	80,011	-1.1%
Professional, Scientific and Technical Services	95,487	96,830	1.4%
Educational Services	50,040	52,893	5.7%
Health Care and Social Assistance	99,818	109,300	9.5%
Arts, Entertainment and Recreation	21,768	23,403	7.5%
Accommodation and Food Services	60,539	65,146	7.6%
Other Services	43,355	43,787	1.0%
Public Administration	31,765	31,732	-0.1%
All Industries	860,518	895,558	4.1%

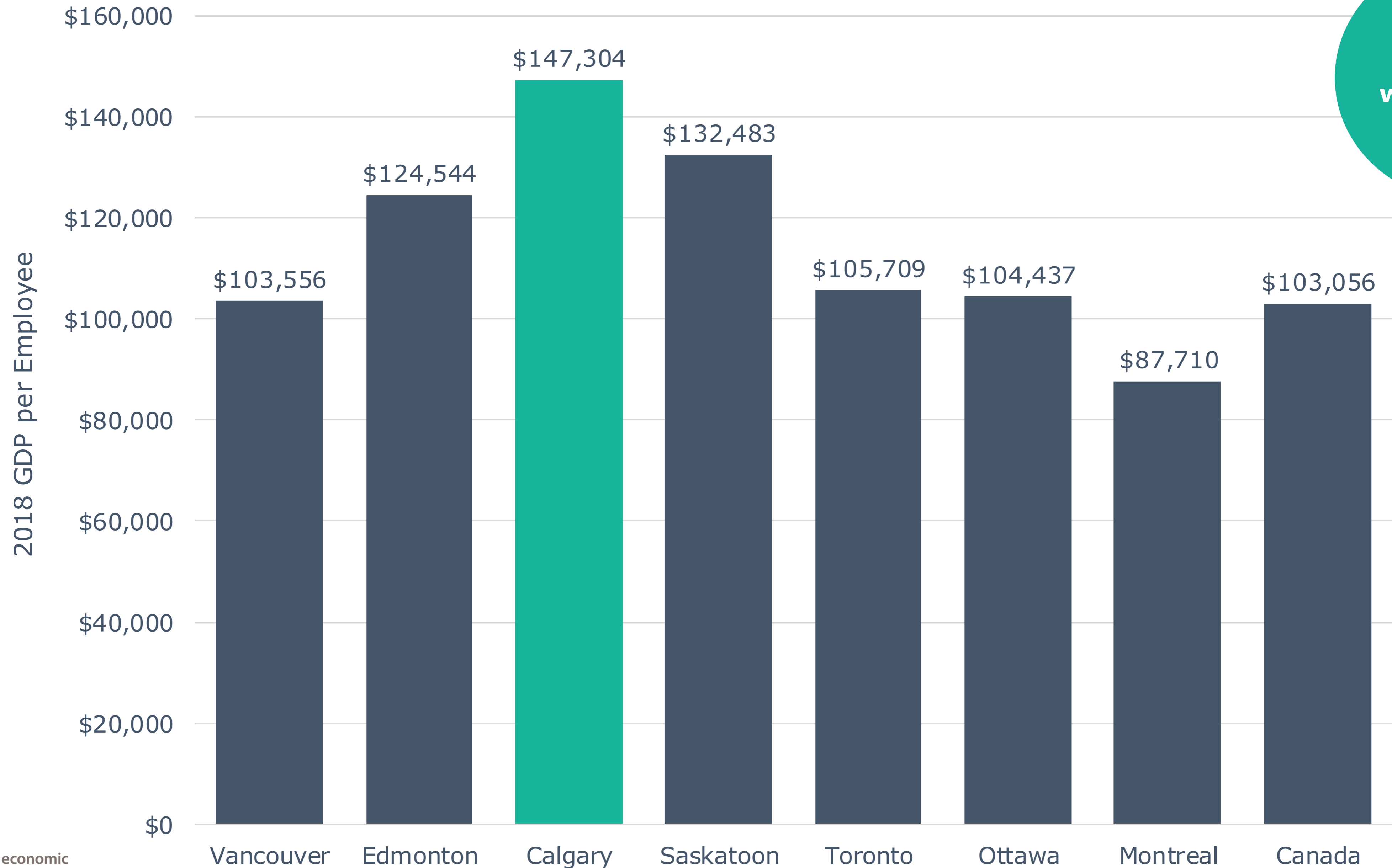
Source: The Conference Board of Canada, October 2019

Calgary's Economic Diversity

Economic Structure is a measure of **economic diversity**. Using the Hachman Index and employment by industry data, this measure benchmarks the economic structure of Calgary to that of Canada as a whole. The higher the number the higher the implied diversity in employment (highly diverse =1 and not diverse =0). For example, if Calgary's economic structure were exactly like Canada's then it would score a 1. If it were nothing like Canada's it would score a 0. We can say, **over the years Calgary has become more diverse in employment - more than it has ever been before!**

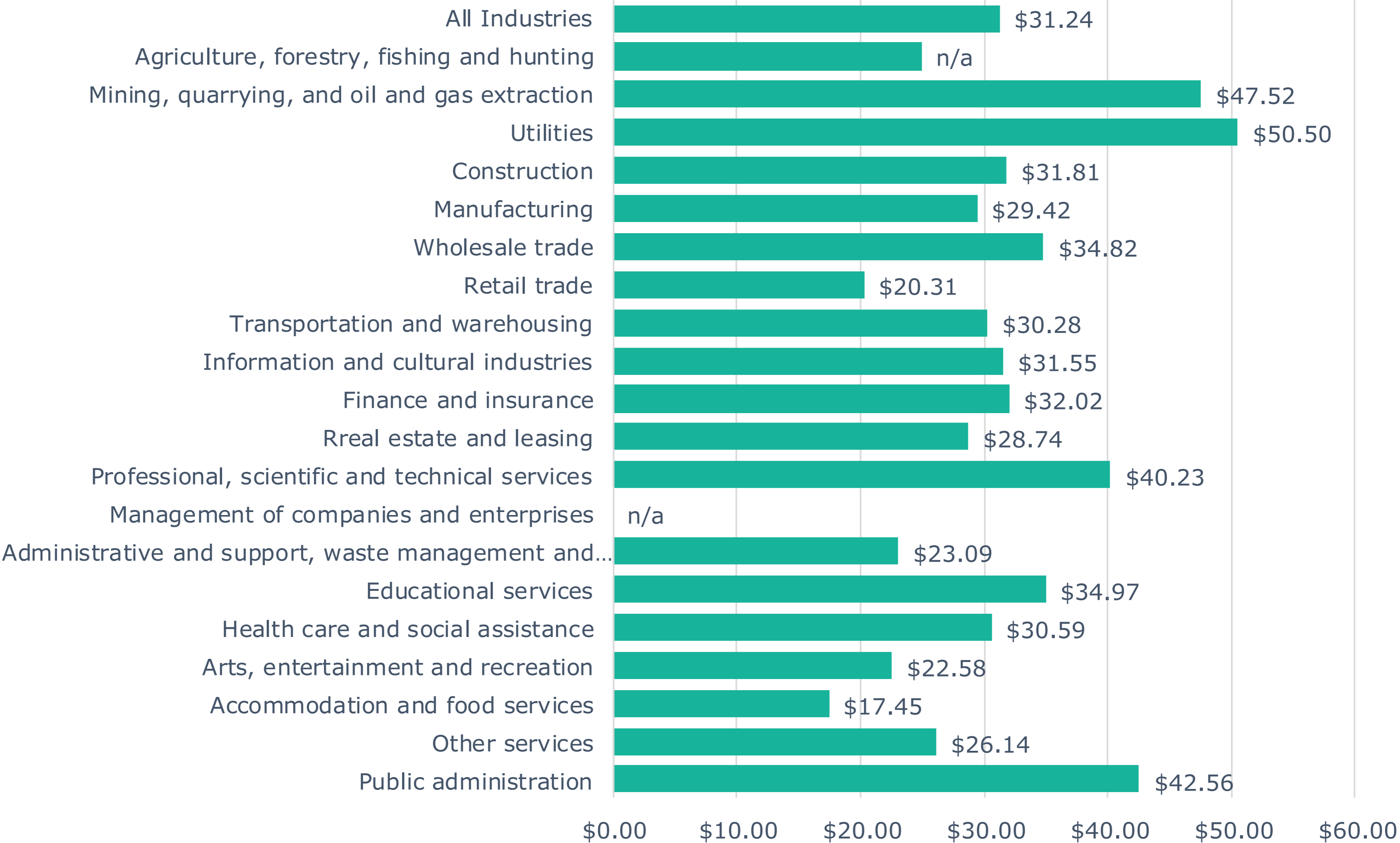


Labour Force Productivity

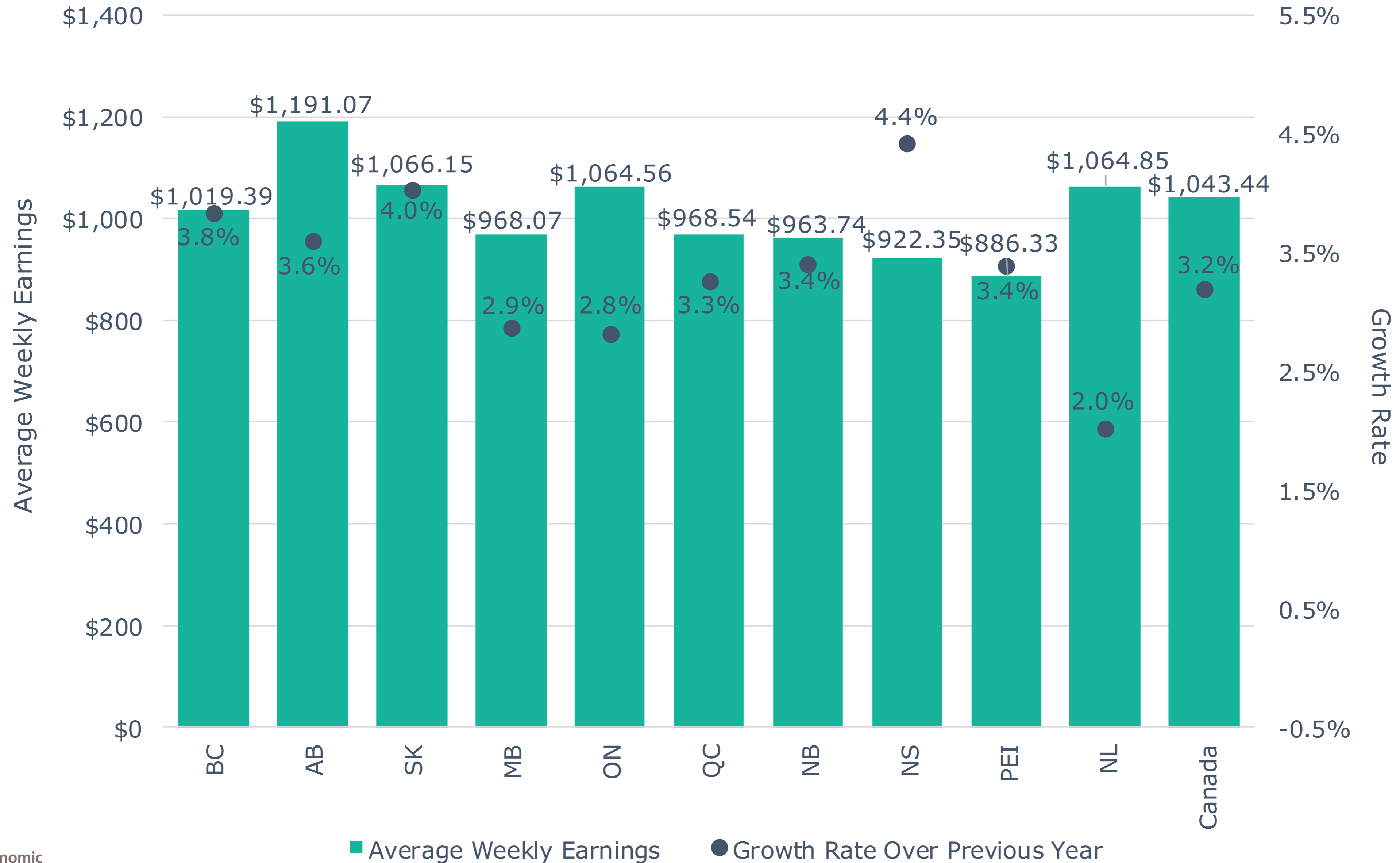


**Most
productive
workforce in
Canada**

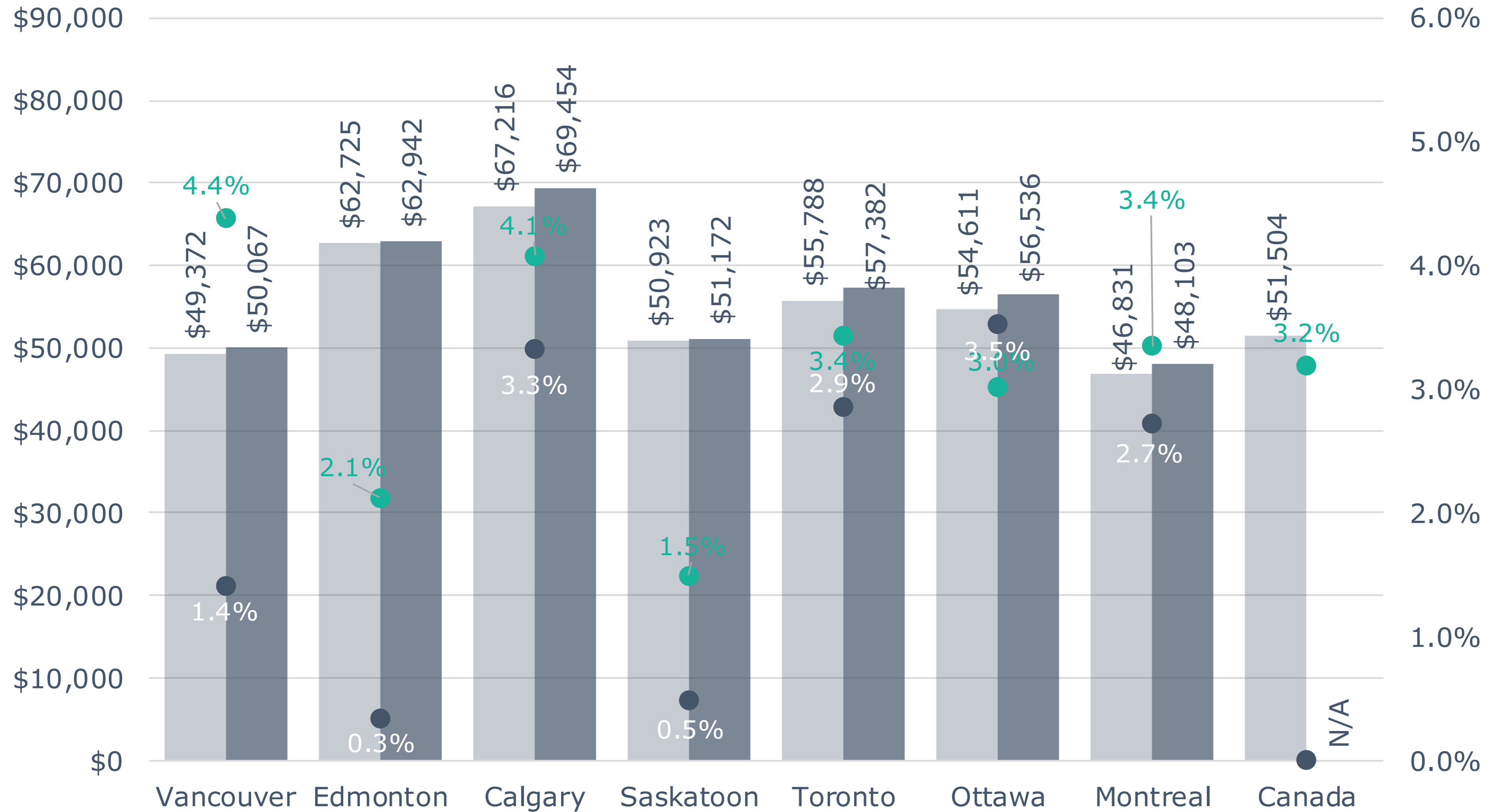
Calgary CMA Average Overall Hourly Wages by Industry



Average Weekly Earnings Across Canada and Growth Rates



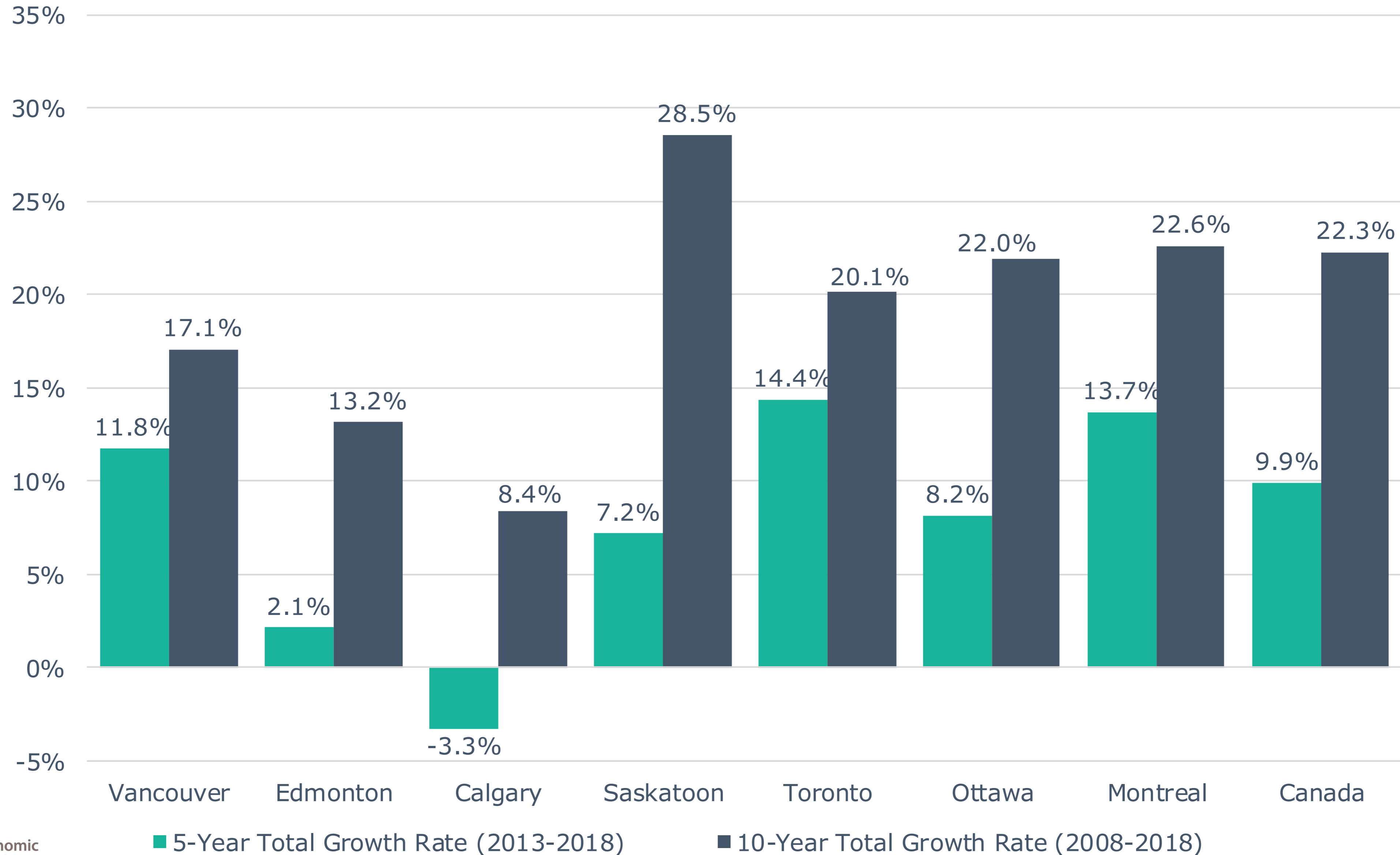
Average Wages and Salaries Across Canada



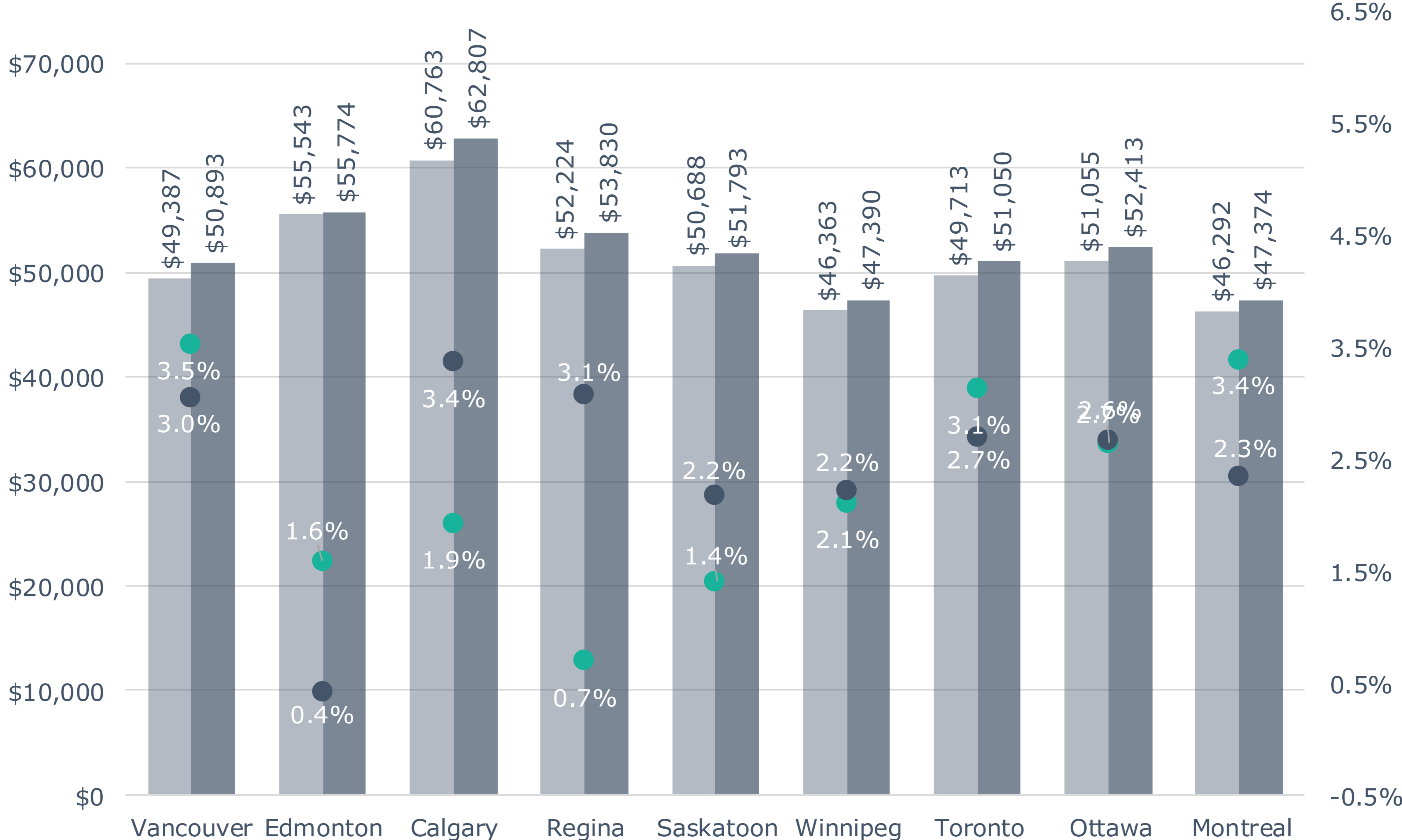
■ 2018 Average Wages and Salaries per Employee
● 2018 Growth Rate

■ 2019F Average Wages and Salaries per Employee
● 2019F Growth Rate

Average Wages and Salaries Growth Rates Across Canada

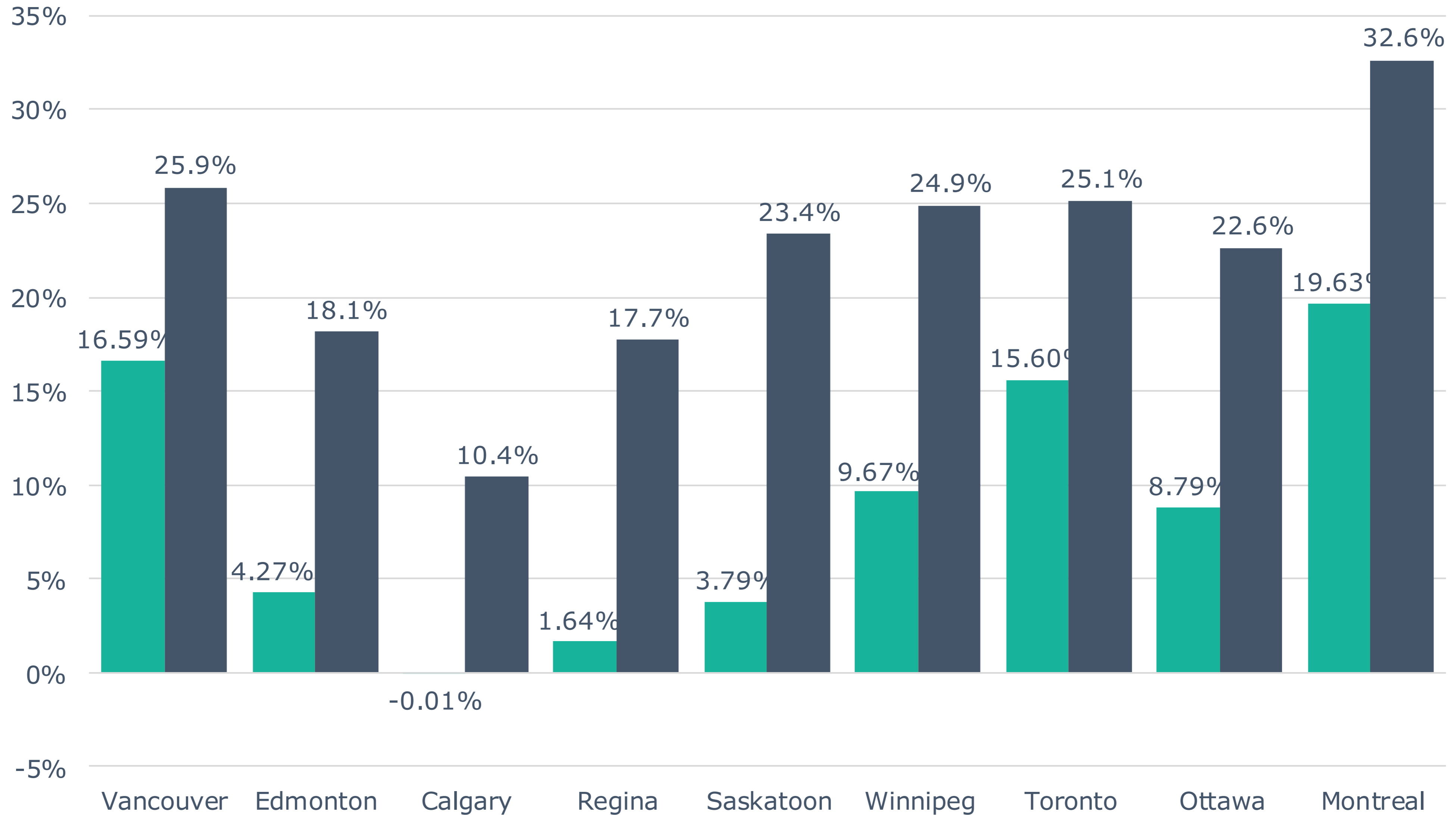


Personal Income per Capita

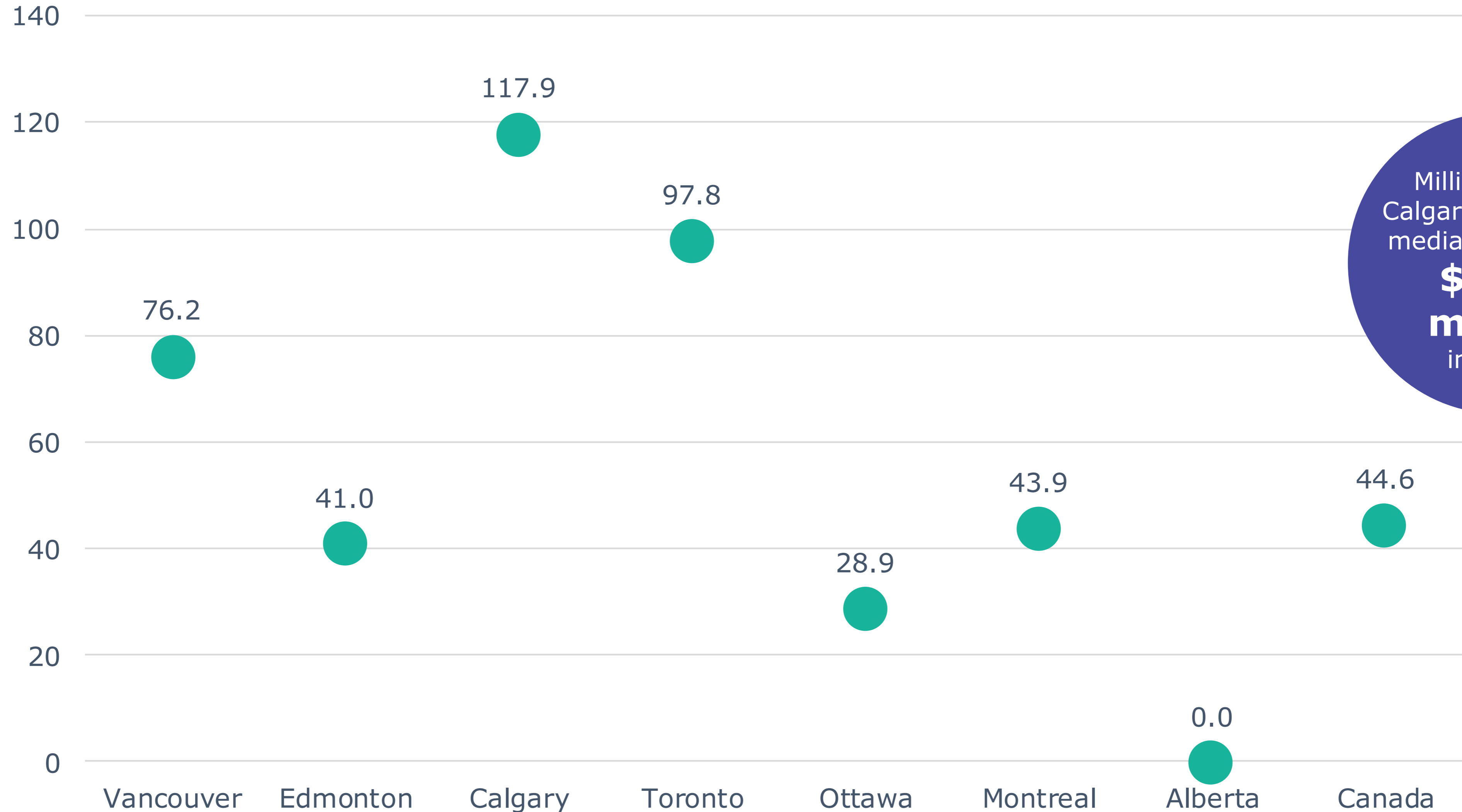


■ 2018 Personal Income per Capita ■ 2019F Personal Income per Capita ● 2018 Growth Rate ● 2019F Growth Rate

Personal Income per Capita Historical Growth Rates



Millionaires Per Capita



Millionaires in Calgary reported a median income of **\$1.49 million** in 2017.

● 2017 Millionaires Per Capita (per 100,000 population)

Calgary Companies Hiring Tech



Software Engineer / Developer

February 2020

Glassdoor

Indeed

Boast Capital

Attabotics

Hexagon

Autodesk

Max Technologies Inc

Cisco Systems

NovAtel

ITRES Research Limited

P2 Energy Solutions

MRF Geosystems Corporation

Showpass

NE2 Technology Inc.

SkipTheDishes

thirdstream inc.

Synopsys

Two Hat

TEEMA

Verdazo

Trapeze Group Limited

VMG, A Schlumberger Technology

Computer Programmer / Web Developer

February 2020

Glassdoor

Indeed

AppDirect

Arcurve

BlackSquare

Athennian

CGG

Clarity.ca Inc.

Critical Mass

MVP Talent Corp

GeoMetrix Rail Logistics
4.0

New World Interactive LLC

Languages in Motion (LIM)

Provision Analytics

Neo Financial

Solium Capital

Omega AS

TGT Solutions Inc

Seequent

Veribuy

West Works Group Inc.

Vivid Theory

Glassdoor

Indeed