



Building Beyond Today

A special presentation for the
Canadian Institute of Plumbing & Heating

PRESENTED BY

Michael Guckes

Chief Economist

From Acquisition to Innovation

For over 100 years, ConstructConnect's keen insights and market intelligence have empowered commercial construction firms to make data-driven decisions.



Who is ConstructConnect?

The leading pre-construction network and provider of cloud-based, non-residential construction project data and collaboration and estimating solutions to 60,000+ customers across the US and Canada.

400,000

Non-residential Commercial
Construction Projects in the
US and Canada

100,000

Users

800

Employees

Roper
TECHNOLOGIES

Part of Roper Technologies
Group of high performing
companies (55B Market Cap).



Offices in North America
(Cincinnati, Atlanta, Markam).

Our three main lines of business include:



Project Data



Takeoff + Estimating



Bid + Risk Management

What does ConstructConnect do?

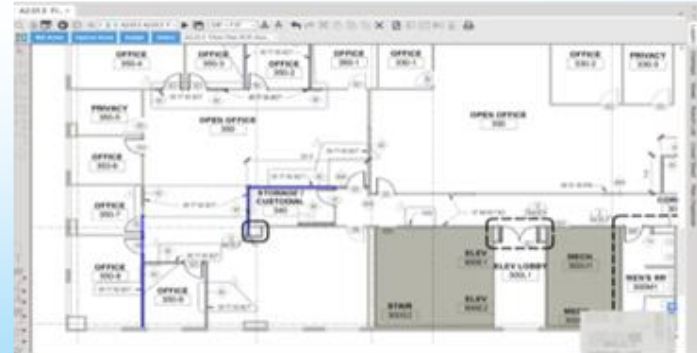
Project Data



Identify the best opportunities for your business and understand the competition.

SaaS application to manage project opportunities and ITBs with access to a database of non-residential construction project and lead data curated by ConstructConnect. Market share analytics, construction starts, and forecasts also available.

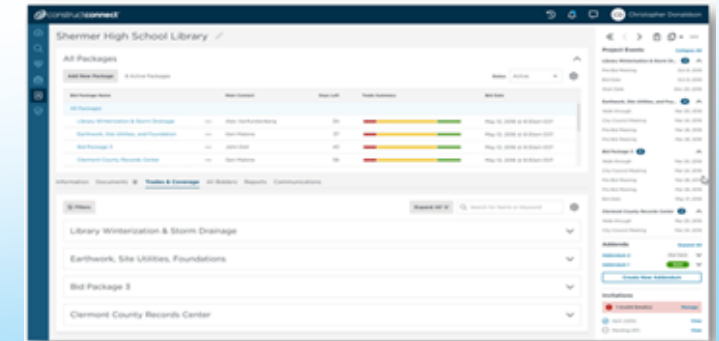
Takeoff + Estimating



Create an accurate, digital takeoff and estimate to put your best bid forward.

Software to scope material and labor needed for a project to create the foundation for a bid. AI-assisted takeoff for interior finishes, walls, and areas.

Bid + Risk Management



Find the right subcontractors to hire for a project.

Software to connect with qualified subcontractors and invite them to bid on upcoming projects.

| Our Mission

Scan Me



To help the **construction industry**
start every project on a **solid foundation.**

| Construction Strategy:

There are four primary categories which will impact every construction firm's success:

1. Macroeconomic Environment
the "terrain"
2. Labor
3. Finance
4. Entrepreneurship / Strategy
(What is possible by bringing the lenses together)

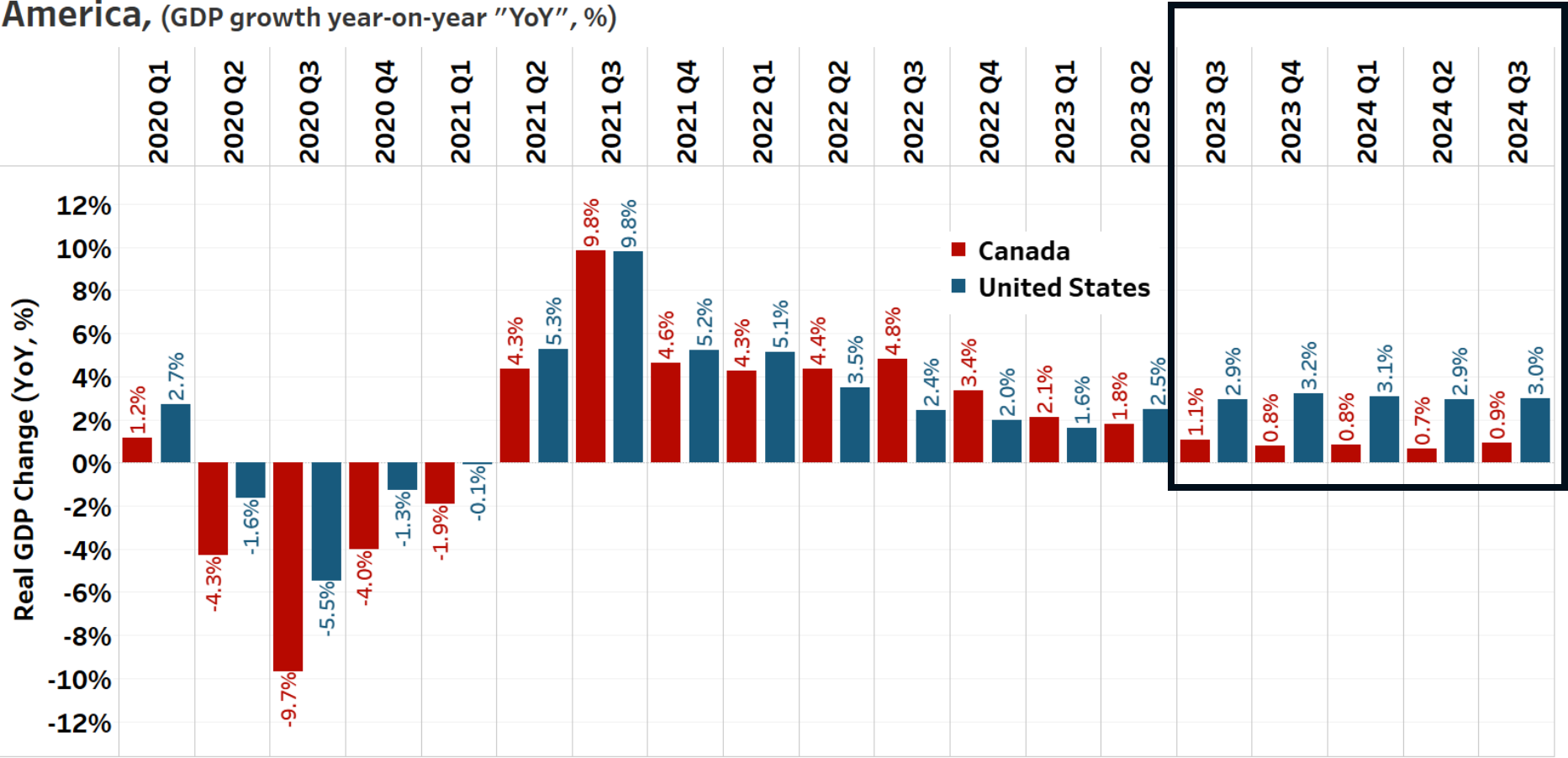


| **Macroeconomic Environment or, “*Economic Terrain*”**

- The economy’s “terrain” varies by:
 - Verticals
 - New/Renovation
 - Sector (private/public)
 - Geography
- To some degree you can “select” your path through this terrain.
- Then through shrewd decision-making you can customize your company’s ability to travel the selected path & terrain.

Macroeconomic Terrain

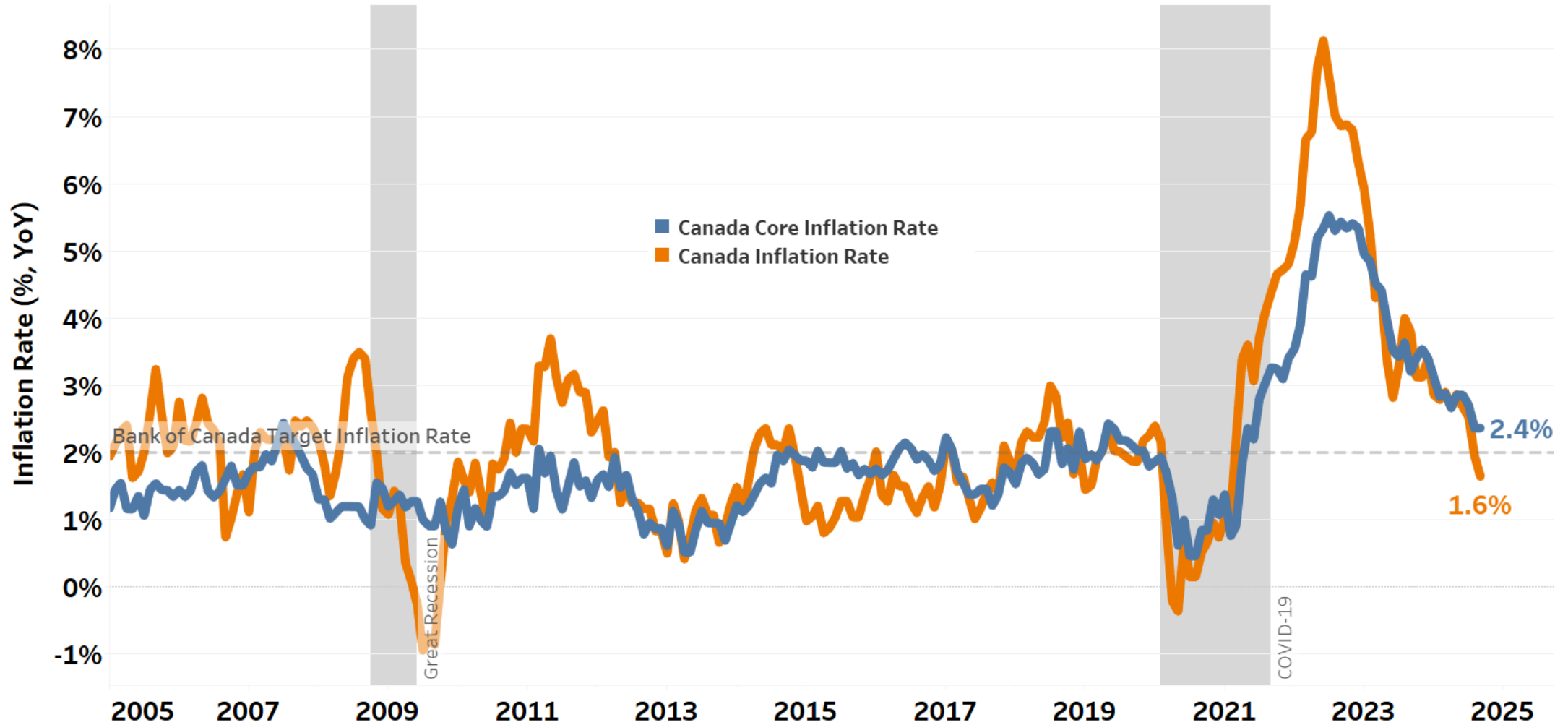
Higher Interest Rates Are Having a Slowing Effect on Economic Growth Across North America, (GDP growth year-on-year "YoY", %)



Source: Bureau of Economic Analysis

Inflation Concerns Have Largely Subsided

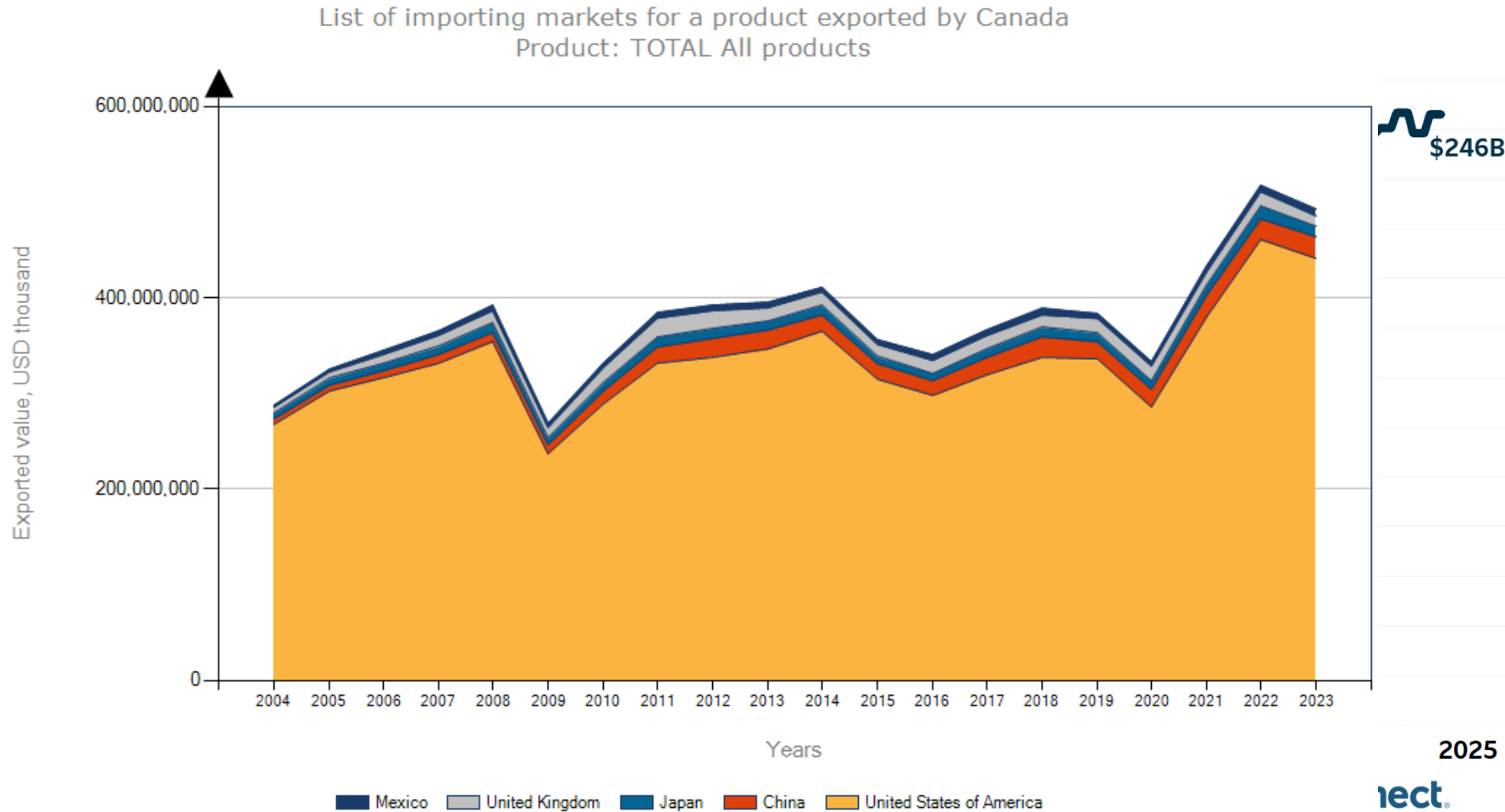
This will give the Bank of Canada Breathing Room to Lower Interest Rates



Source: Statistics Canada

International Trade Impact on Total Economic Activity

- The US remains Canada's overwhelming trade partner, consuming 77% of CAN exports.
- The exchange rate has been very stable at \$1.33 – \$1.38 CADUSD.
- Trade is about 1/4th of all economic activity



A Trade Opportunity That Continues to Knock

Rank	Peak Value of Top 10 Russian Exports (\$ Bil.)	
1	Mineral Fuels & Oils	\$ 386
2	Precious stones/metals	\$ 26
3	Iron and Steel	\$ 24
4	Fertilisers	\$ 21
5	Cereals	\$ 11
6	Aluminum and articles thereof	\$ 10
7	Wood and articles thereof	\$ 10
8	Fish	\$ 8
9	Copper and articles thereof	\$ 8
10	Inorganic chemicals, rare-earths metals	\$ 6

Value of Substituable Russian Exports: \$ 501

Grand total of CAN competitive outputs: \$ 238

All Canadian Exports - Goods & Services: \$ 568

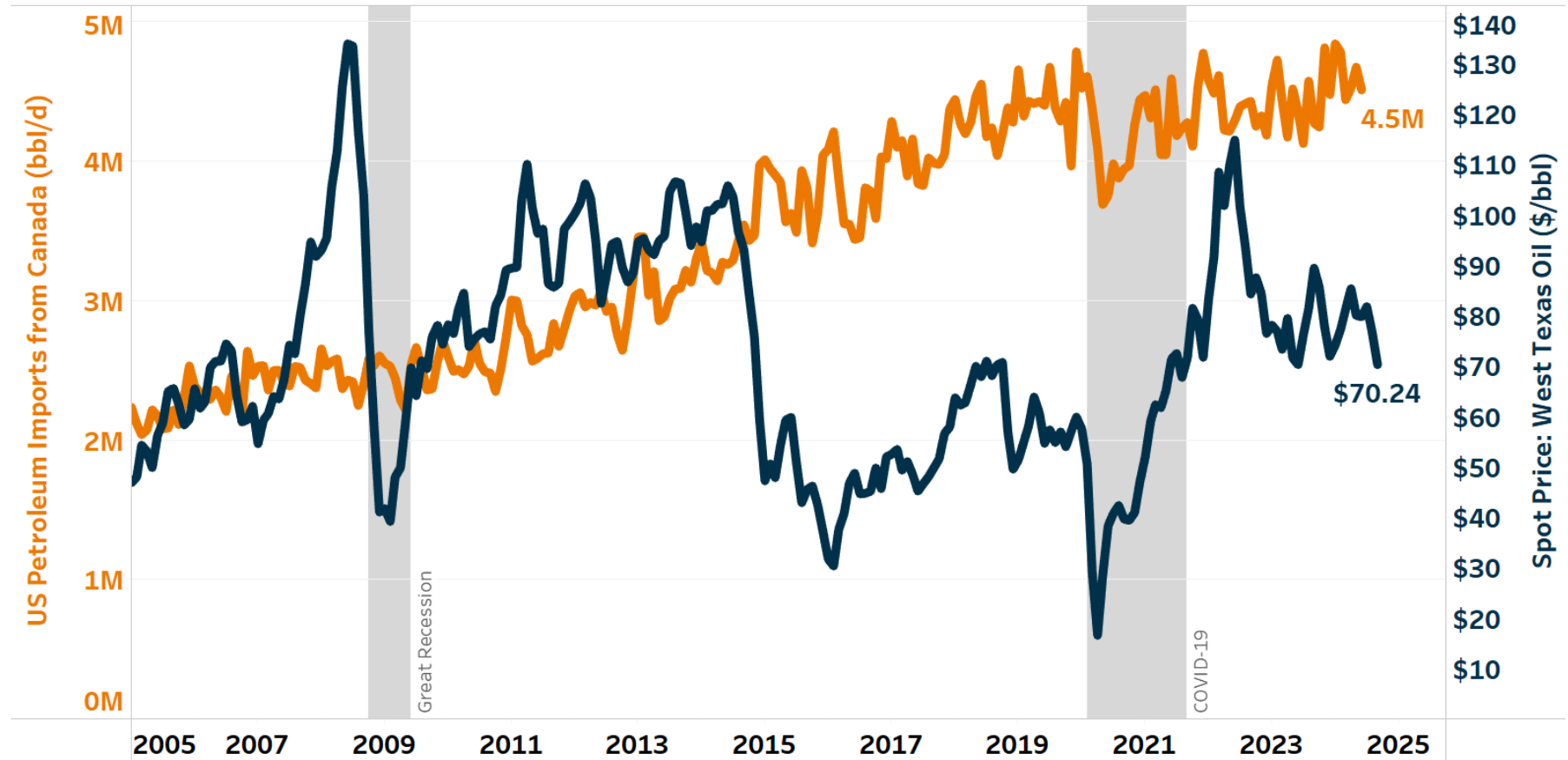
Rank	Top Canadian Exports (Exported, \$ Bil.)	
1	Mineral Fuels & Oils	\$ 143
4	Precious stones/metals	\$ 28
8	Wood and articles thereof	\$ 13
9	Aluminum and articles thereof	\$ 13
12	Cereals	\$ 11
15	Fertilisers	\$ 10
20	Iron and Steel	\$ 10
25	Inorganic chemicals, rare-earths metals	\$ 6
28	Copper and articles thereof	\$ 4

**Russian mineral fuels and oils exports
have decreased by \$120B since YE 2022**

Energy: Canada's #1 Export

- Canada exported over \$140B in petroleum products in 2023.
- Canada exports over 4M bbl/d of oil to the U.S.
- US EIA 2025 oil forecast of \$73/bbl

Energy Plays A Valuable Role in Canada's Export Composition



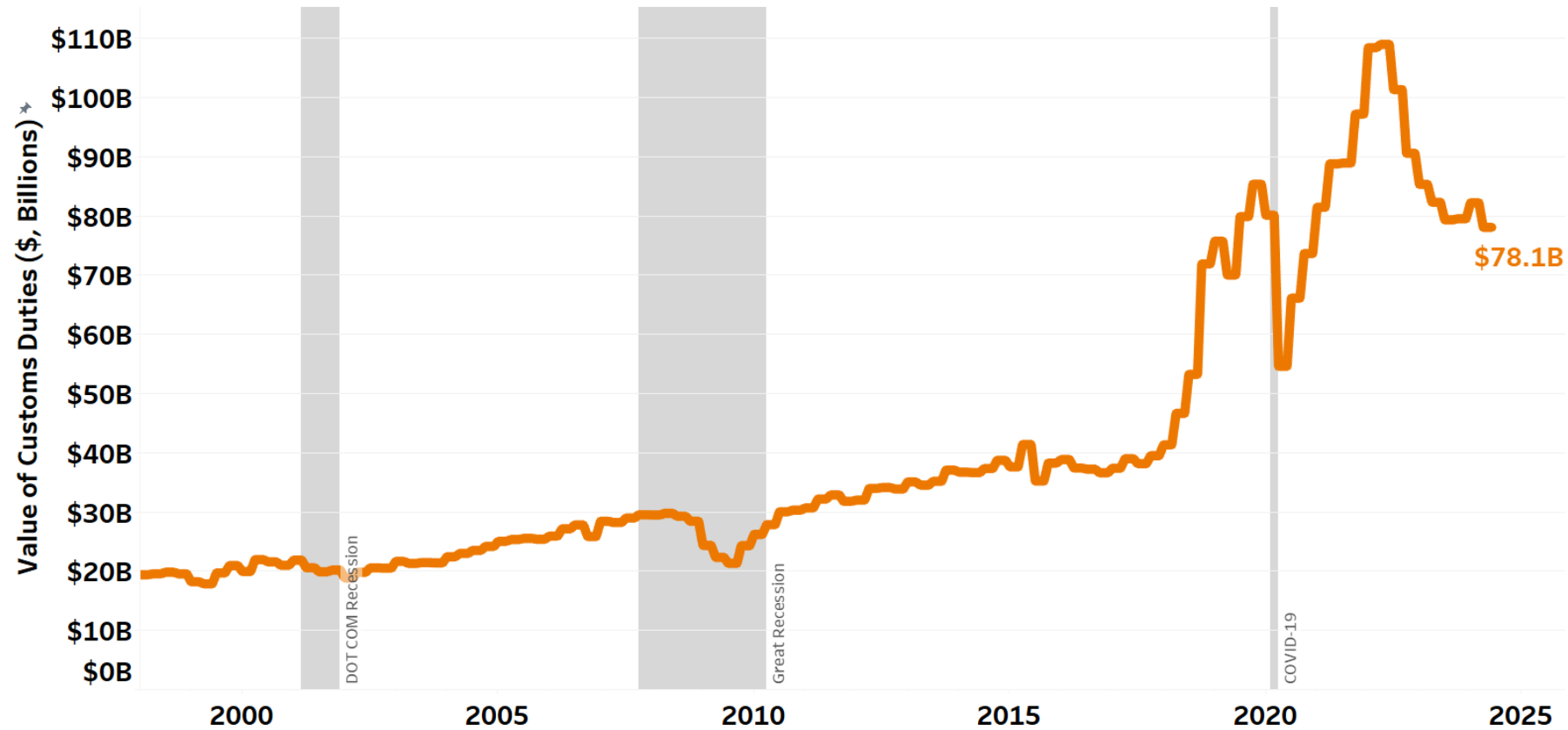
Source: U.S. Energy Information Administration

Trade

- Customs duties could move significantly higher under a Trump presidency, nearing 20% of trade value from less than 5% at present*

US Federal Govt. Customs Duties

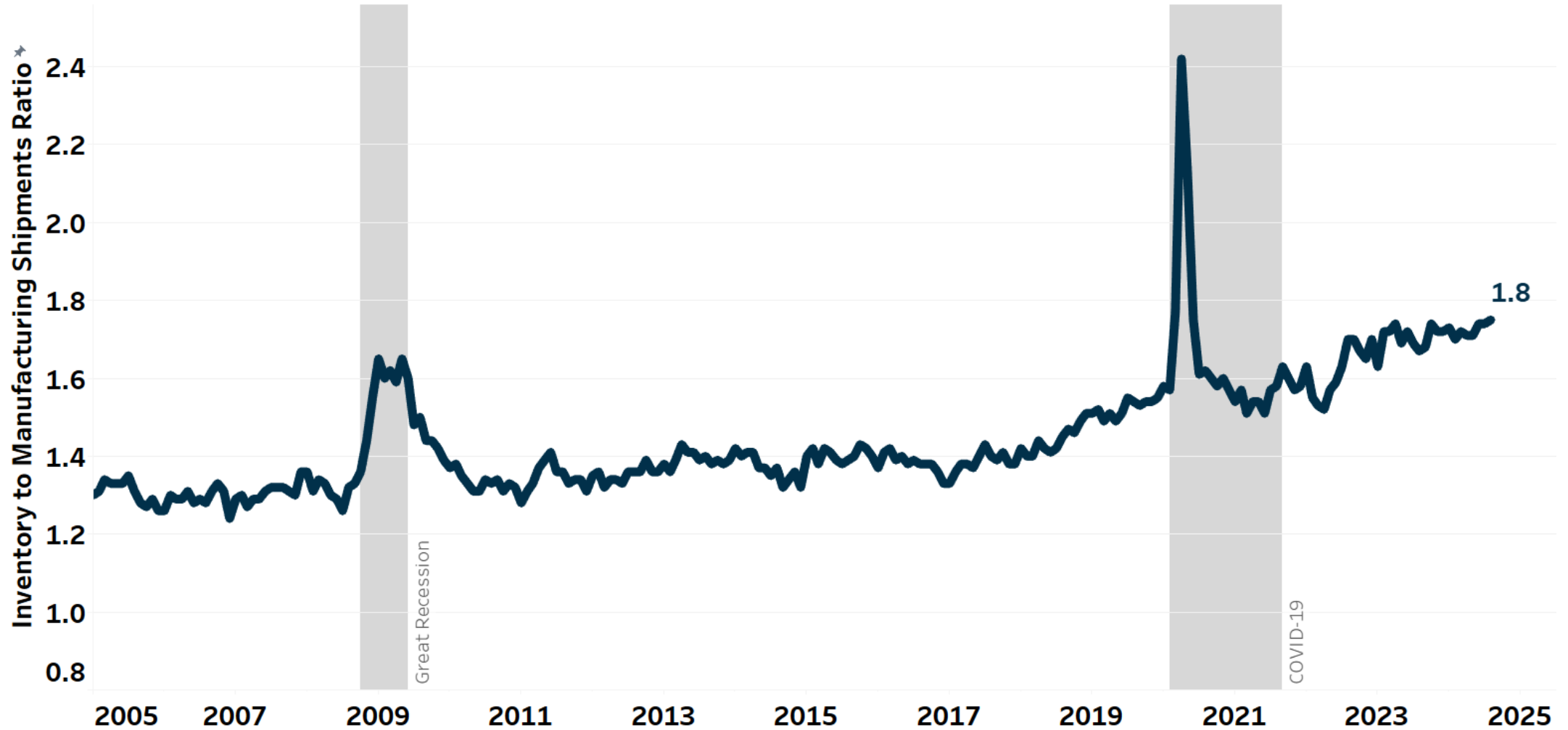
Under a Trump presidency customs duties could return to their highest level (%) since the 1930's.



Source: US Bureau of Economic Analysis

Canadian Inventory and Manufacturing Shipments

Inventory levels have not adjusted to a post-pandemic world and remain concerningly high

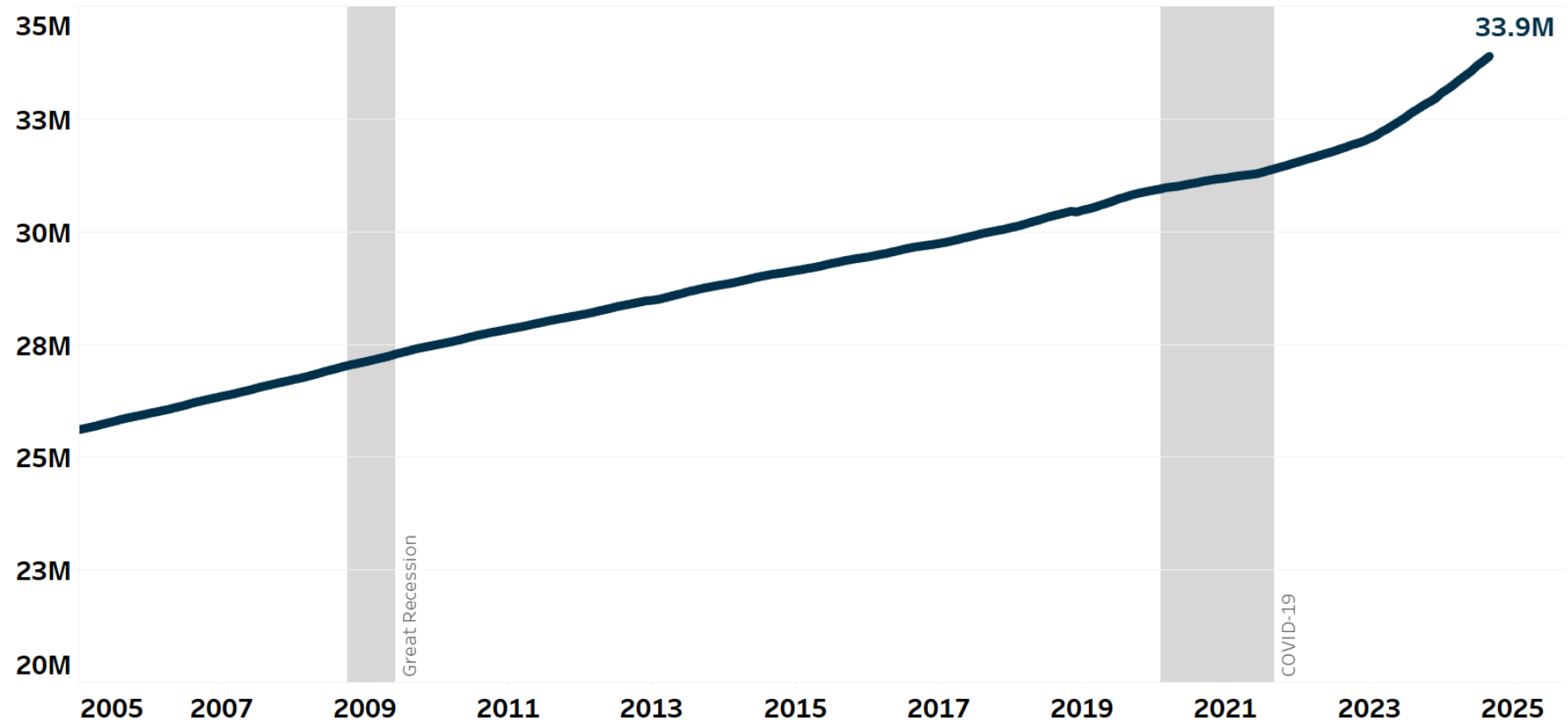


Source: Statistics Canada

Population Trends in Canada

- Population growth of 3.6% in the 12-months ending Sep2024.
- 9.9% growth in last 5-years
- Immigration has been the key contributor to population growth acceleration.

Canada's Population Growth is One of it's Most Significant Assets
 Population growth of those >15 y.o. surged 3.6% in 12-month period ending September 2024



Source: Statistics Canada

Home Prices Have Stabilized Since 2023

Nominal home prices have increased 300% since 2005 and 216% when inflation adjusted.

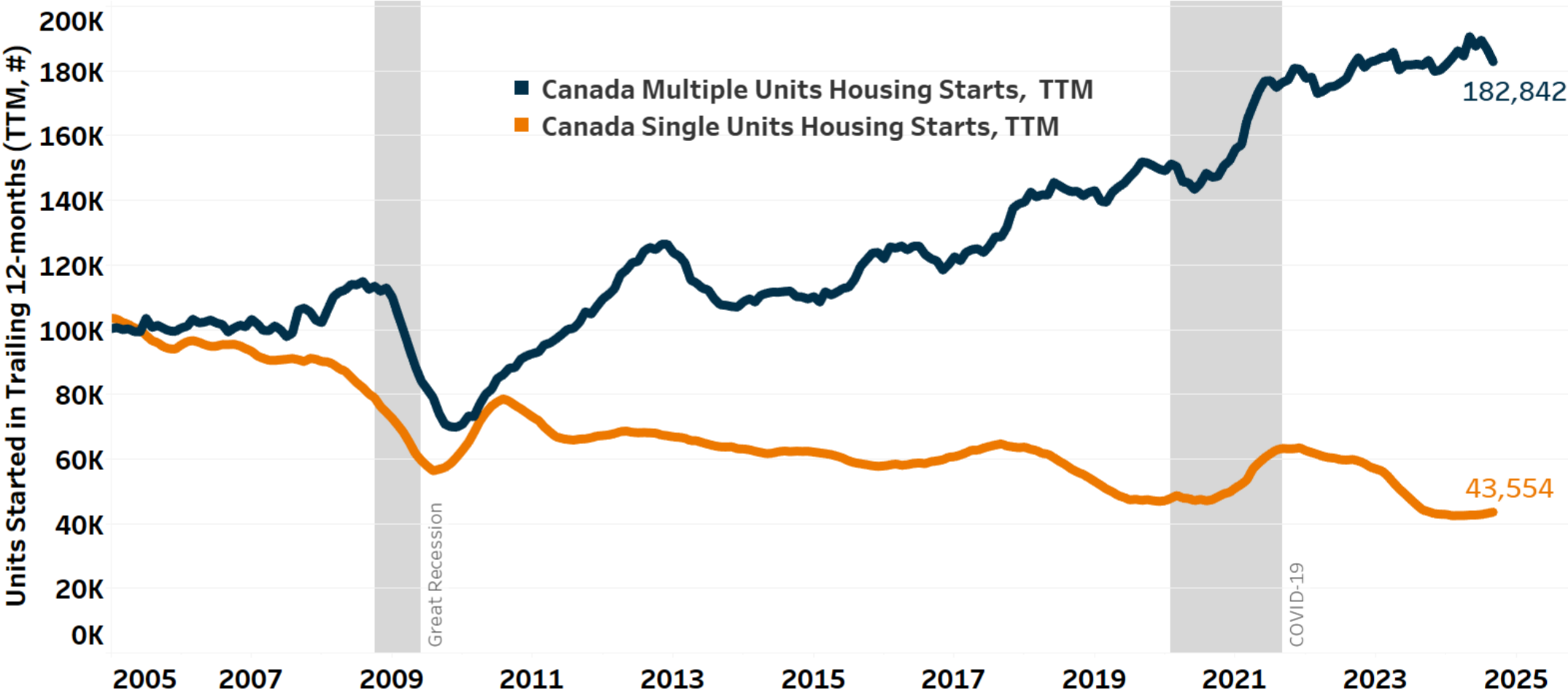


Source: Statistics Canada

Canada's Composition of Homes Skewing Towards Multifamily

Multiple unit starts remain elevated while single family units, down 50% since peaking in late 2021 are at decades lows.

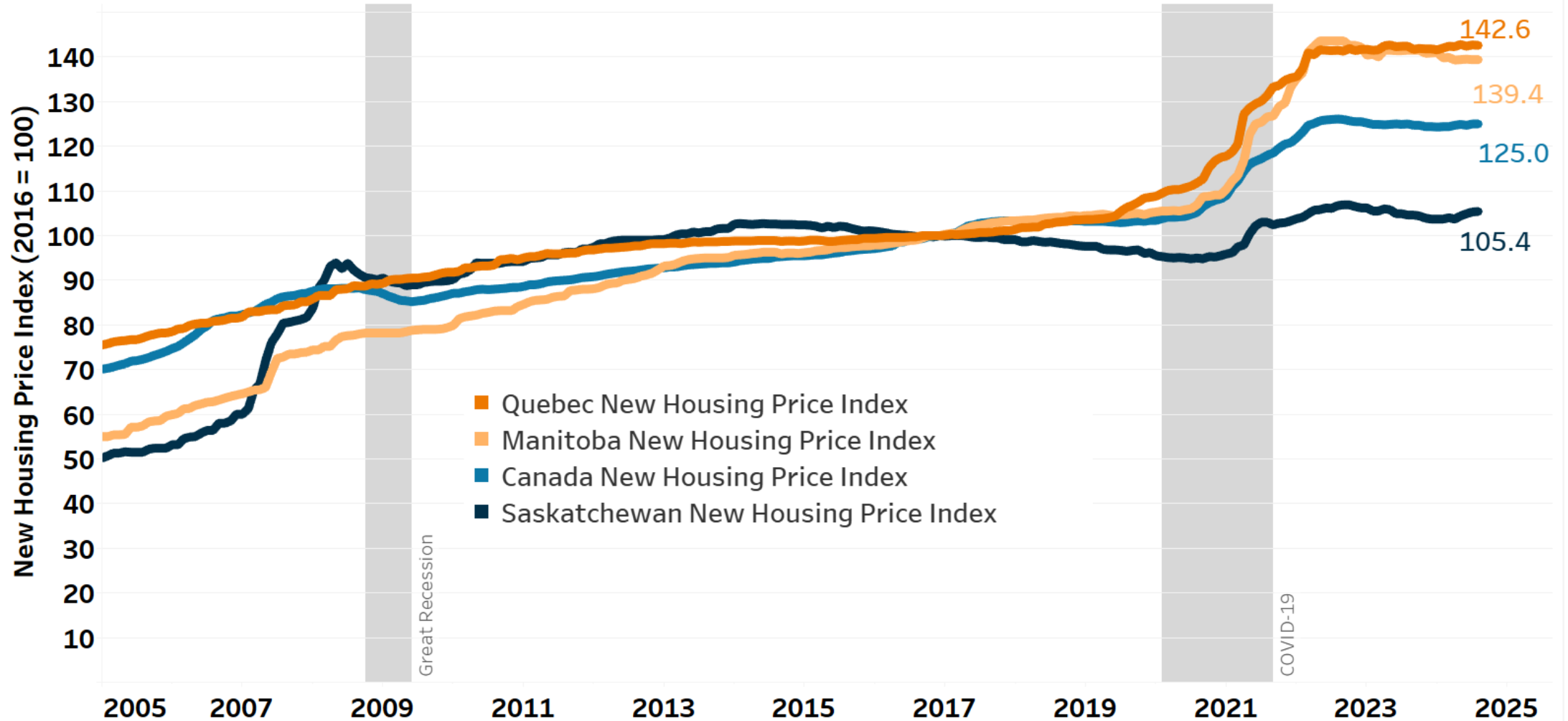
Values represent total starts over trailing 12-months



Source: Canada Mortgage and Housing Corporation

Province Home Prices May Vary Significantly From National Average

Home prices have made the greatest gains in Quebec, Manitoba, and B.C. (Indexed, 2016 = 100)



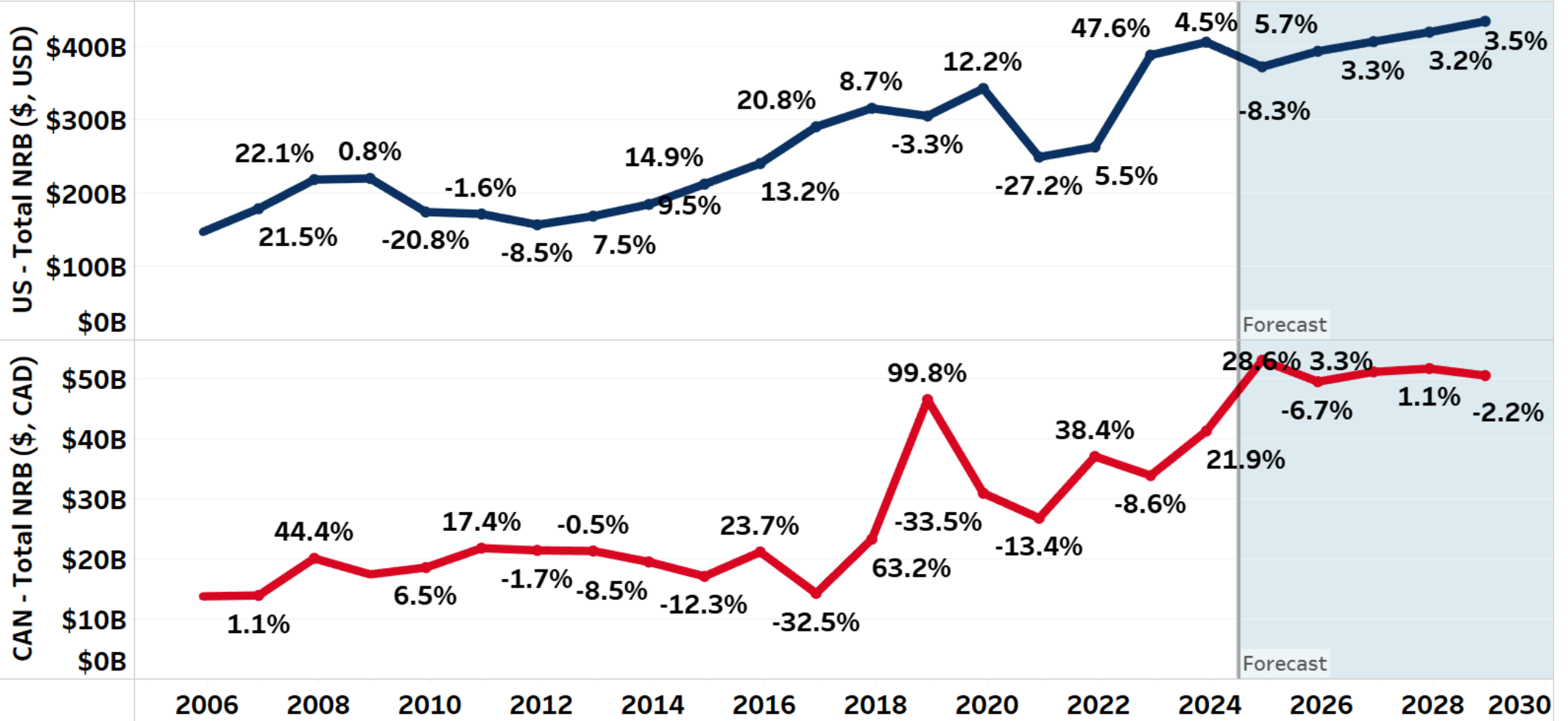
Sources: Statistics Canada

| Canada in the Big Picture:

- Under-investment in oil in past years has curbed today's production opportunities
 - 11% production growth vs. 24% in USA
- The latest trend in Canadian immigrant is of the rise in less skilled/educated workers.
- CAN's central bank is lowering rates faster than the US which will weaken CAN\$ (already down 11% in last 3-years)

Canadian & U.S. Nonresidential Building Historic Starts and Forecast

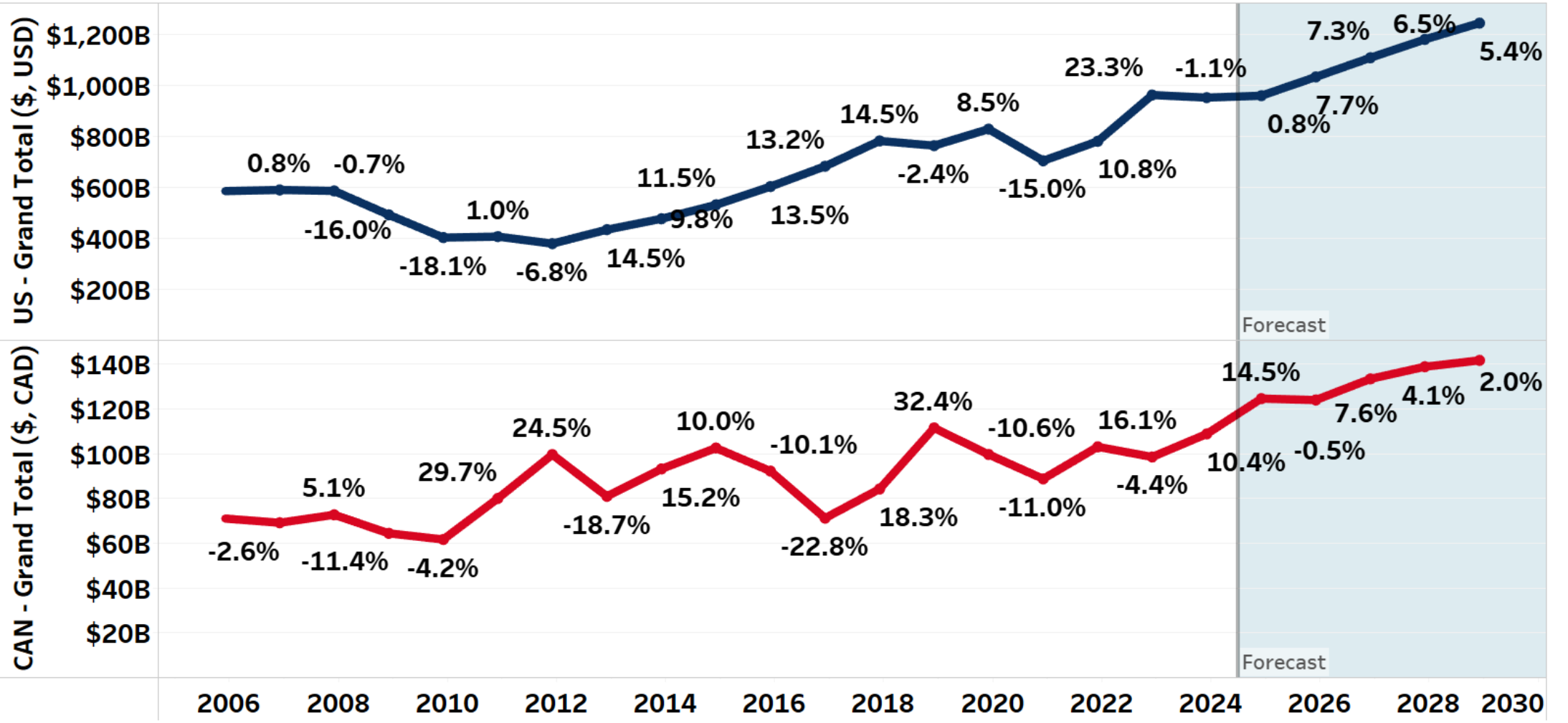
(Billions of \$ in native currency, NSA)



Source: ConstructConnect Starts Forecast, 3Q2024 Release

Canadian & U.S. Grand Total Historic Starts and Forecast

(Billions of \$ in native currency, NSA)



Source: ConstructConnect Starts Forecast, 3Q2024 Release

Macroeconomic conditions a.k.a. the “Economic Terrain”

Canada Type-of-Structure Construction 'Starts' Forecast - Autumn 2024 (\$ Billions CAD)

	Actuals		Forecasts				
	2022	2023	2024	2025	2026	2027	2028
Main Categories							
Residential	34.6	31.9	28.1	31.8	35.3	38.3	41.2
<i>(Yr/yr % change)</i>	-7.0%	-7.7%	-11.9%	12.9%	11.0%	8.7%	7.3%
Commercial	11.8	10.1	8.7	10.8	12.1	13.1	13.8
<i>(Yr/yr % change)</i>	44.9%	-14.1%	-14.5%	25.2%	11.3%	8.9%	5.4%
Industrial (Manufacturing)	8.5	6.0	21.7	12.9	12.6	11.2	8.5
<i>(Yr/yr % change)</i>	-27.1%	-29.3%	259.2%	-40.6%	-2.1%	-11.1%	-23.9%
TOTAL INSTITUTIONAL	13.6	25.1	22.8	25.8	26.5	27.3	28.2
<i>(Yr/yr % change)</i>	-21.2%	85.2%	-9.4%	13.4%	2.6%	3.3%	3.0%
TOTAL NON-RES BLDG	33.9	41.3	53.1	49.5	51.1	51.7	50.5
<i>(Yr/yr % change)</i>	-8.6%	21.9%	28.6%	-6.7%	3.3%	1.1%	-2.2%
TOTAL ENGINEERING	30.1	35.6	43.4	42.7	47.0	48.8	50.0
<i>(Yr/yr % change)</i>	4.4%	18.4%	21.9%	-1.5%	10.0%	3.8%	2.5%
GRAND TOTAL	98.6	108.8	124.6	124.0	133.4	138.9	141.7
<i>(Yr/yr % change)</i>	-4.4%	10.4%	14.5%	-0.5%	7.6%	4.1%	2.0%

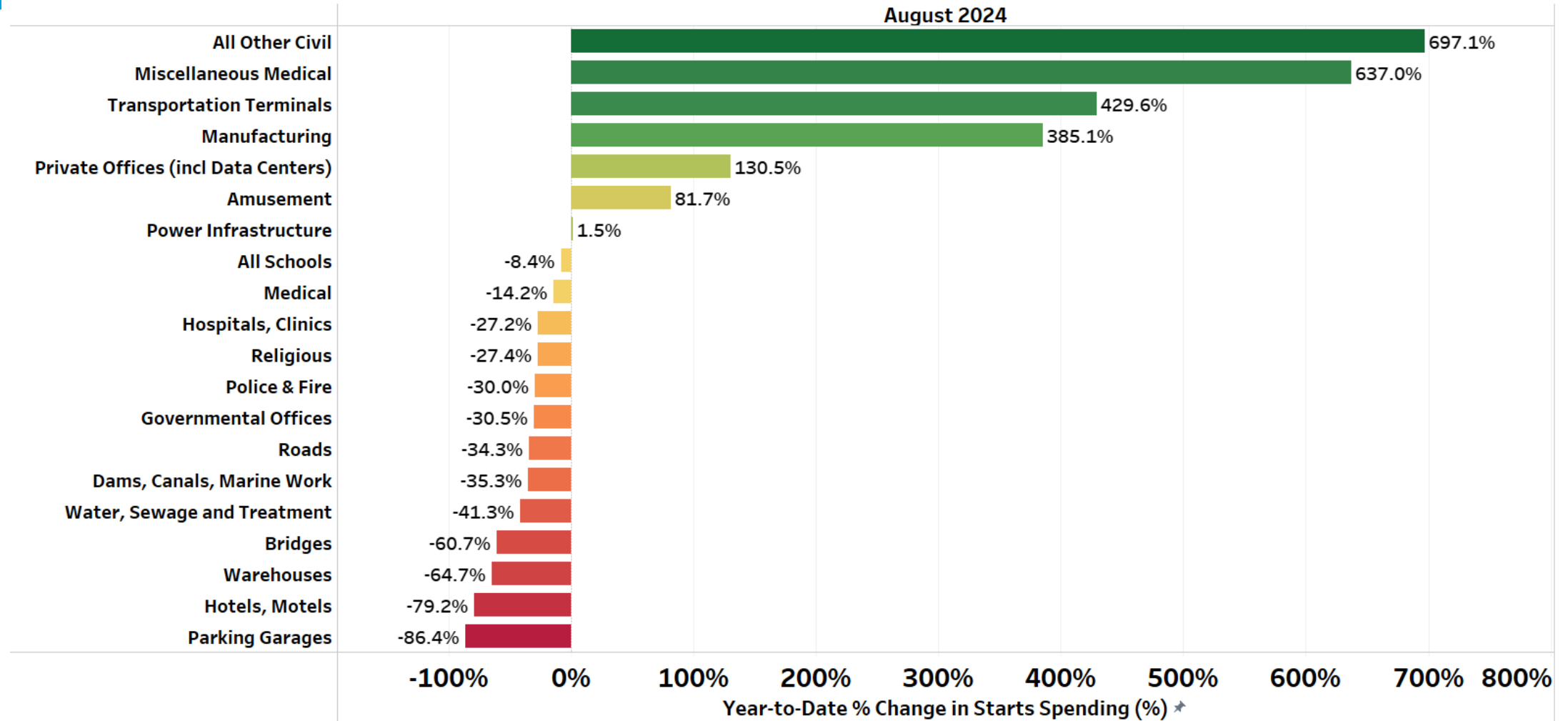
Macroeconomic conditions a.k.a. the “Economic Terrain”

Canada Type-of-Structure Construction 'Starts' Forecast - Autumn 2024							
(\$ Billions CAD)							
Sub-categories	Actuals		Forecasts				
	2022	2023	2024	2025	2026	2027	2028
Shopping	0.7	0.3	0.4	0.6	0.7	0.9	1.0
(Yr/yr % change)	97.4%	-63.0%	44.5%	49.2%	25.7%	20.8%	11.7%
Private Offices	0.6	0.3	0.6	1.1	1.6	1.9	2.1
(Yr/yr % change)	-51.4%	-53.9%	115.6%	77.4%	46.8%	21.9%	8.3%
Warehouses	2.5	2.9	1.9	2.5	2.7	2.8	2.9
(Yr/yr % change)	5.1%	15.4%	-34.5%	34.0%	6.0%	5.8%	2.7%
Hospitals/Clinics	3.3	15.1	10.4	11.1	11.9	12.9	13.6
(Yr/yr % change)	-58.7%	358.2%	-31.2%	6.4%	7.6%	8.6%	5.3%
Educational Facilities	6.8	7.2	7.3	7.6	7.9	8.2	8.4
(Yr/yr % change)	-4.6%	6.3%	1.3%	4.5%	4.3%	3.4%	2.3%
Roads	11.9	12.1	11.7	13.2	14.4	15.2	15.9
(Yr/yr % change)	9.0%	1.8%	-2.8%	12.1%	9.6%	5.5%	4.2%
Water & Sewage Treatment	5.4	5.5	4.2	5.3	6.0	6.4	6.6
(Yr/yr % change)	13.7%	1.0%	-23.6%	26.7%	12.8%	6.2%	4.2%
All Other Civil (Power, Pipelines, etc.)	5.4	8.7	20.2	13.5	15.2	15.8	16.2
(Yr/yr % change)	-7.8%	61.9%	133.2%	-33.3%	12.3%	4.3%	2.3%



Year-to-Date Canadian Construction Starts Spending Varies Widely By Category

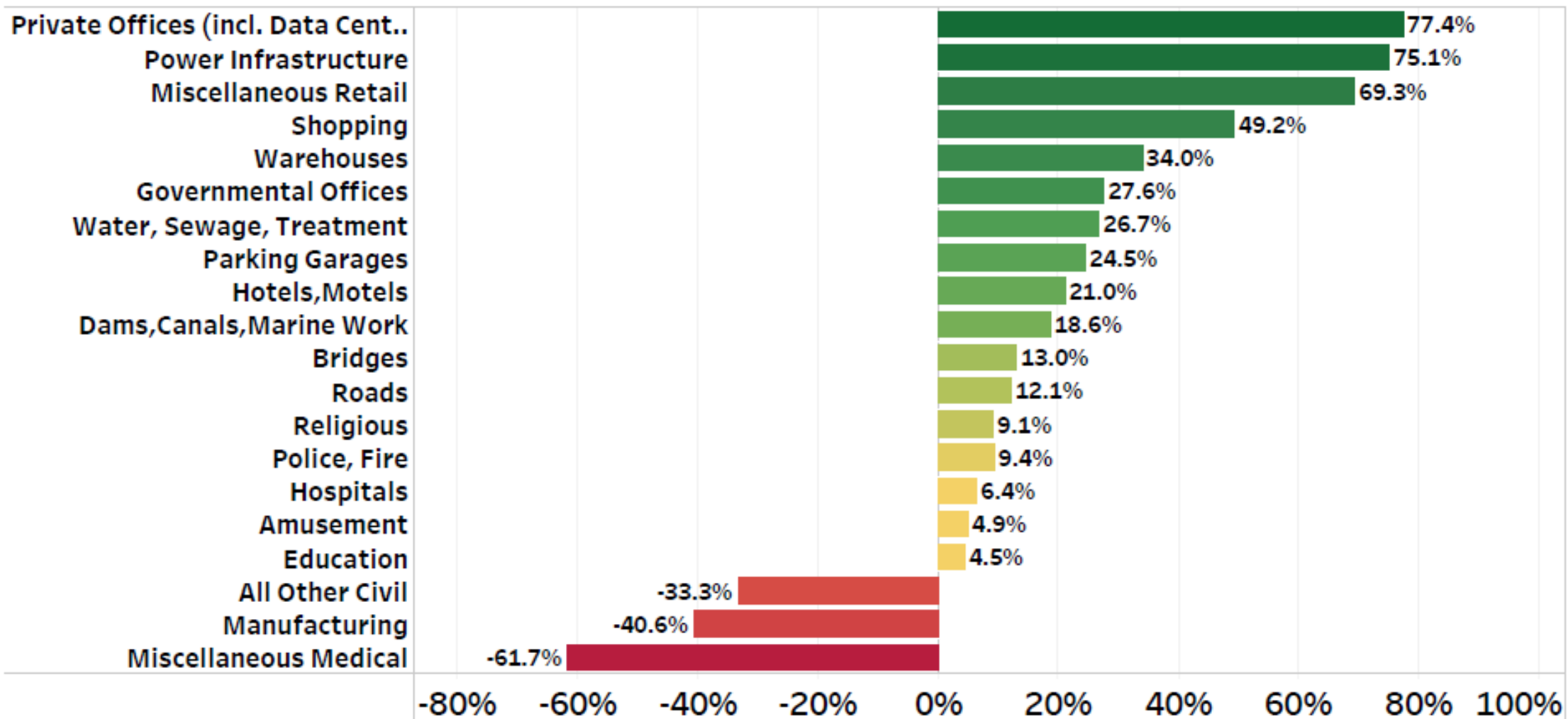
(Year-to-date through August 2024 dollar spending, %)



Source: ConstructConnect Industry Snapshot



2025 Full Year Forecast Outlook by SubCategory

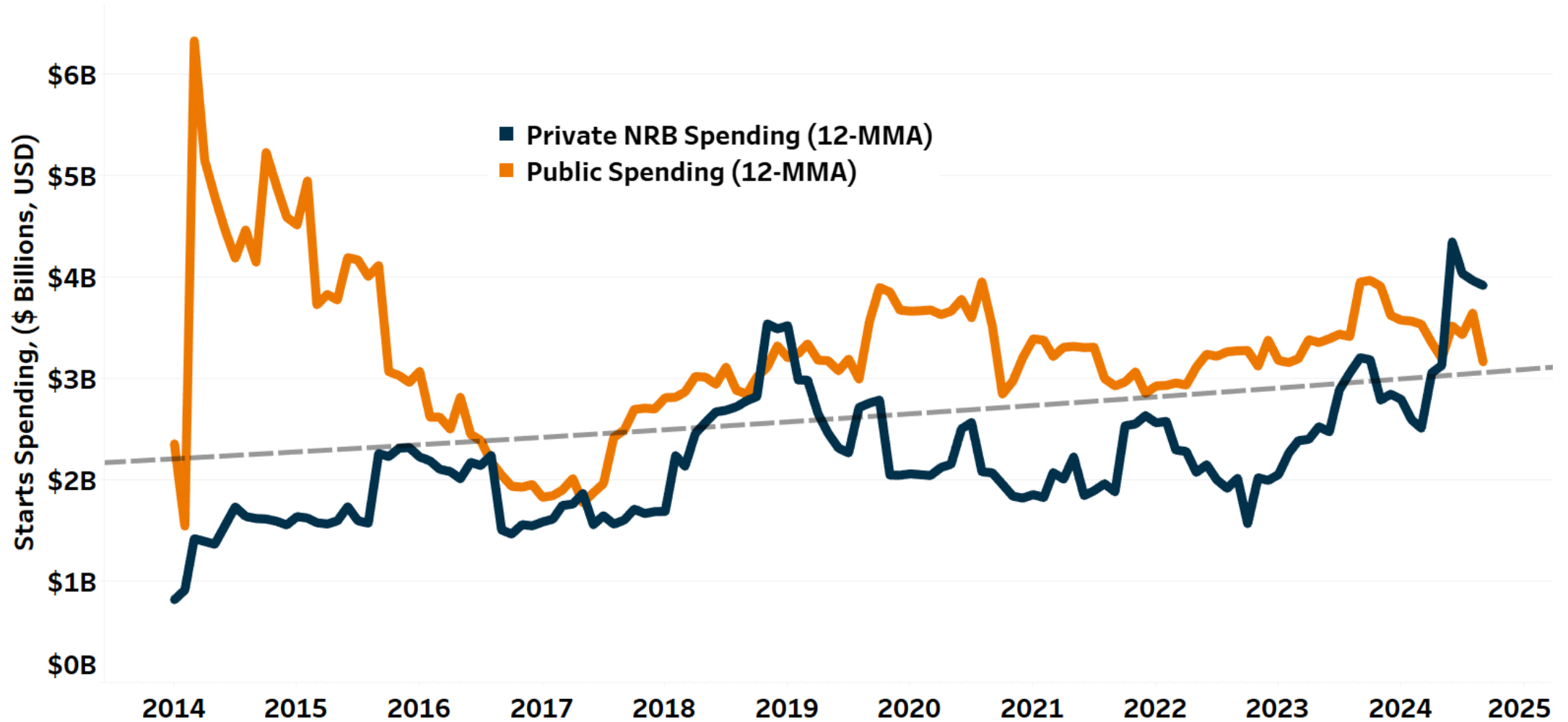


Source: Starts forecast, ConstructConnect

Note: Miscellaneous Civil includes includes Parks, Landscaping, Railroad & Subway, Sidewalks, Curbs, Gutters, Military Non Building, Athletic Fields & Courts, Swimming Pools, Demolition (Civil), Electrical Work (Civil), Fencing, Machinery & Supplies, Pavement Markers, Tunnels, Miscellan..

Canadian Private & Public Construction Spending Trends Have Crossed in 2024

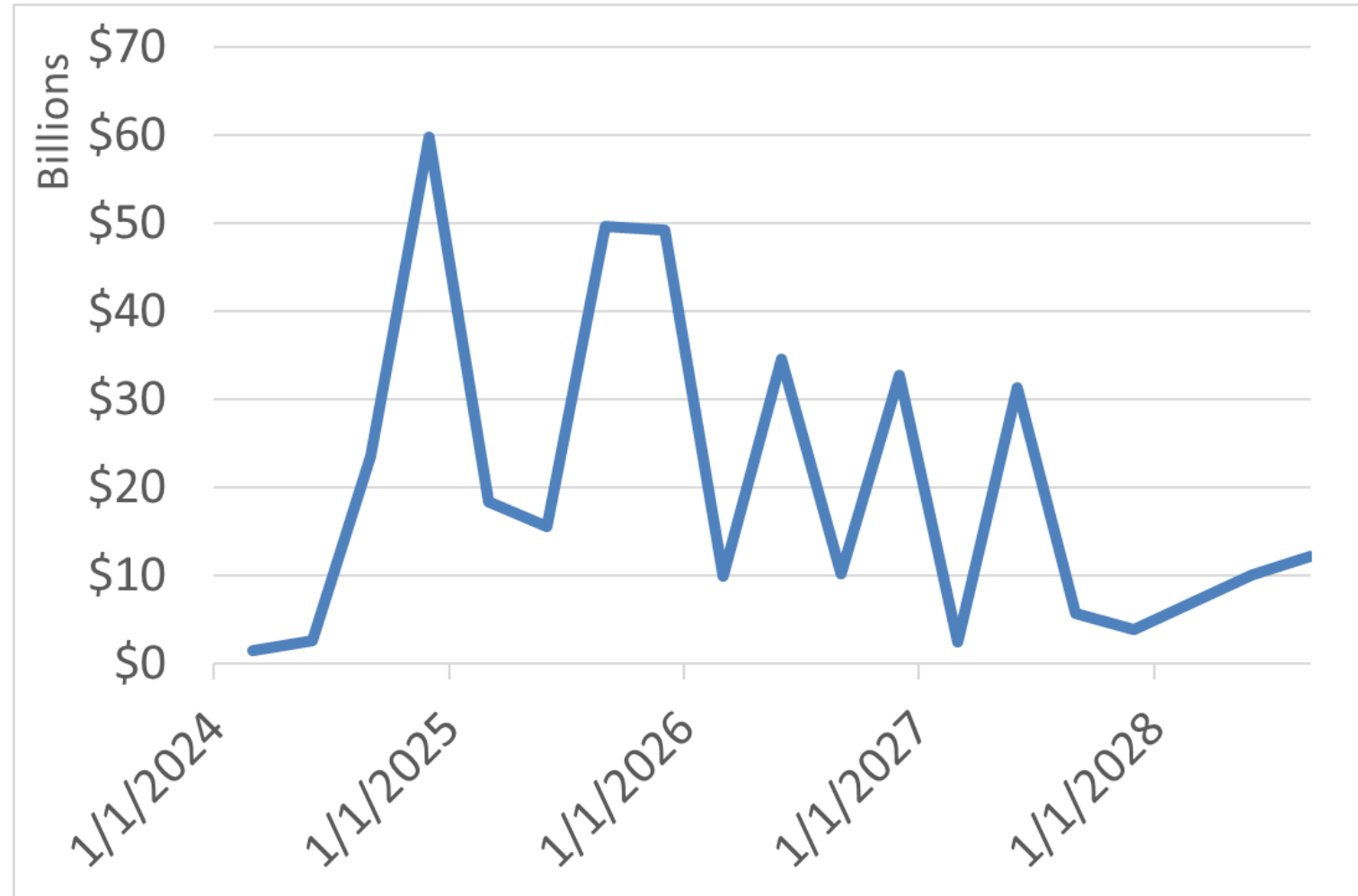
Construction Starts (\$ billions, USD), 12-month moving average



Source: ConstructConnect Industry Snapshot

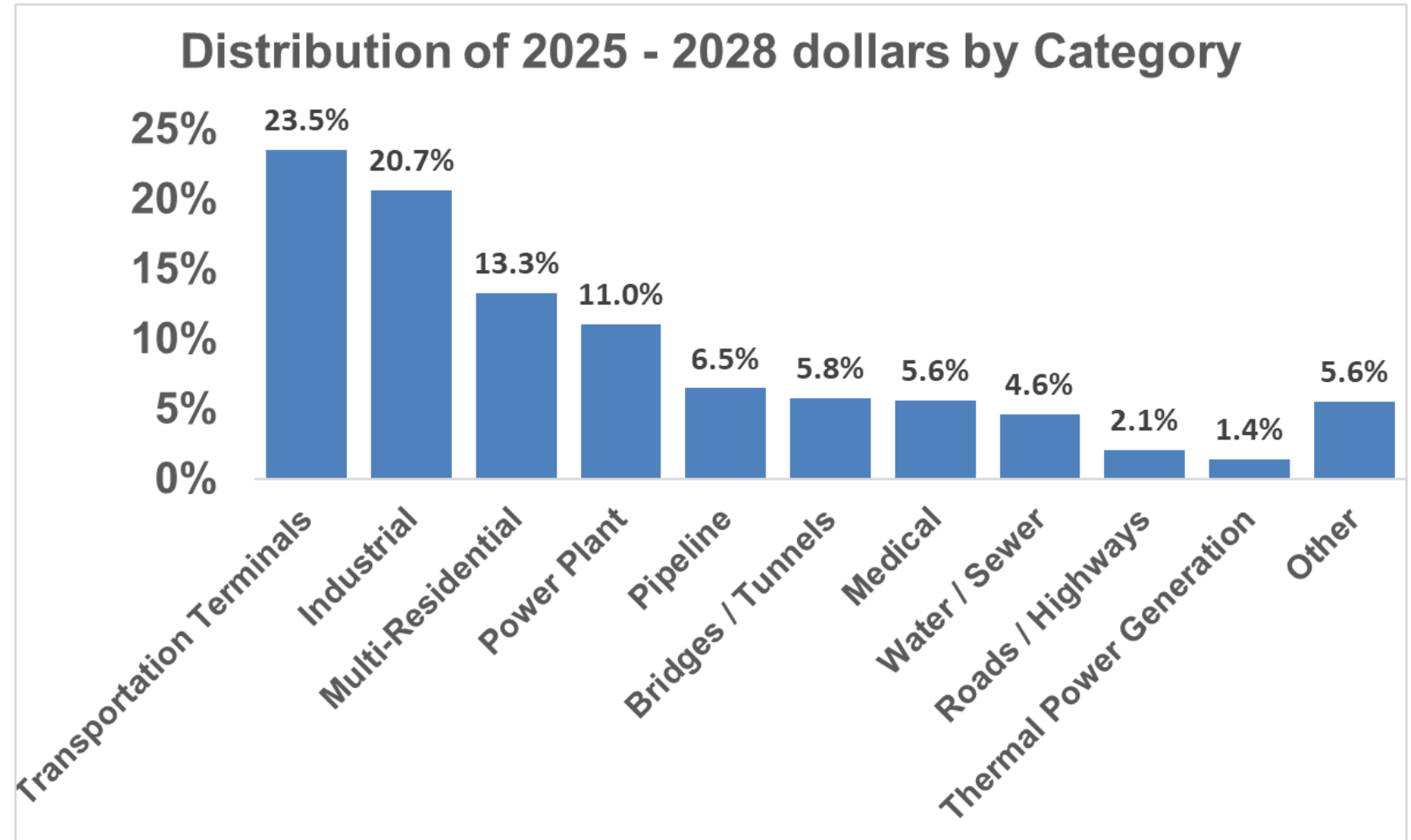
Canadian Mega Project Preconstruction Outlook

- Since 2022, there have been over \$107B in mega projects
- Between Now and 2028 there are nearly \$360B in potential mega projects.
 - 4Q24 has 15 mega projects worth \$61B.
 - 2H25 has 27 mega projects worth a total of \$99B

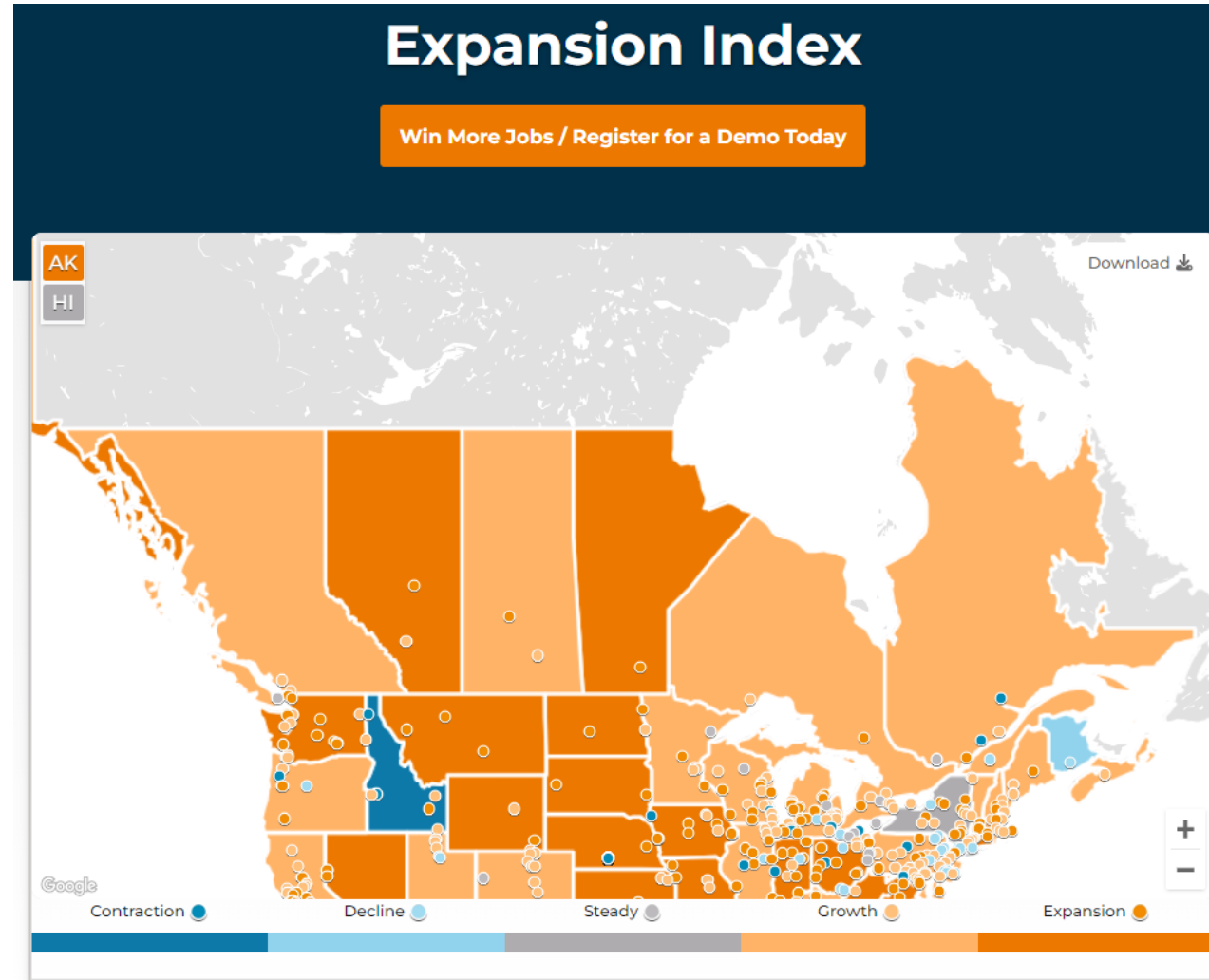


Canadian Mega Project Outlook

- Transportation Terminal and Industrial projects will lead mega project spending in 2025-2028



Future Trends are Available for Free Using Our Expansion Index



Many of the above resources are FREELY available

Economic Insights

Access the latest construction economic news, forecasts, and webinars.

Reporting Project Stress Index Economic Brief Expansion Index Economic Webcast News Media Kit Contact

Construction Economy Reporting

Resource data may be used in publications with attribution to ConstructConnect and, where applicable, the ConstructConnect economist.



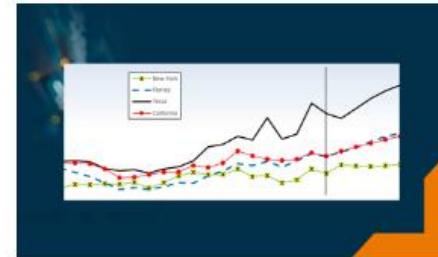
Construction Economy Snapshot

Monthly Construction starts include the total estimated dollar value and square footage of all nonresidential projects on which ground is broken.



Construction Starts Forecast

Quarterly A 5-year forecast of construction starts by type of structure and by state as well as drivers influencing each building sector.



Put-in-Place Forecast

Quarterly A 5-year forecast of work-in-progress payments, created in partnership with Oxford Economics, and covers 18 types of construction across residential, commercial/industrial, and infrastructure.



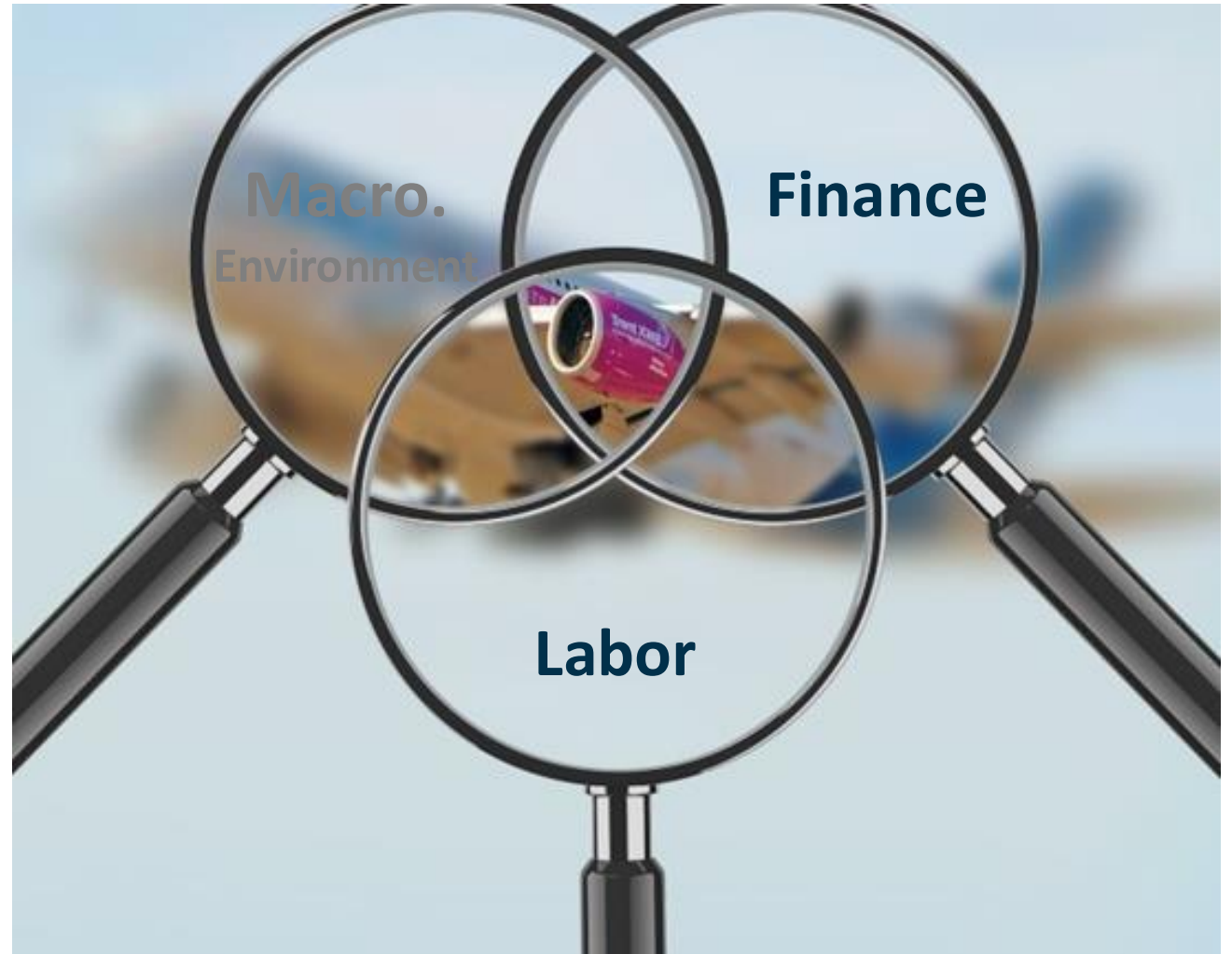
Operational Considerations in the Construction Space

| The Remaining Actionable Pieces of the Puzzle:

Labor: How you find and build-up your labor resources?

Finance: How will you use & access capital?

Strategy: How will use this knowledge to make smart and profitable decisions for your firm?

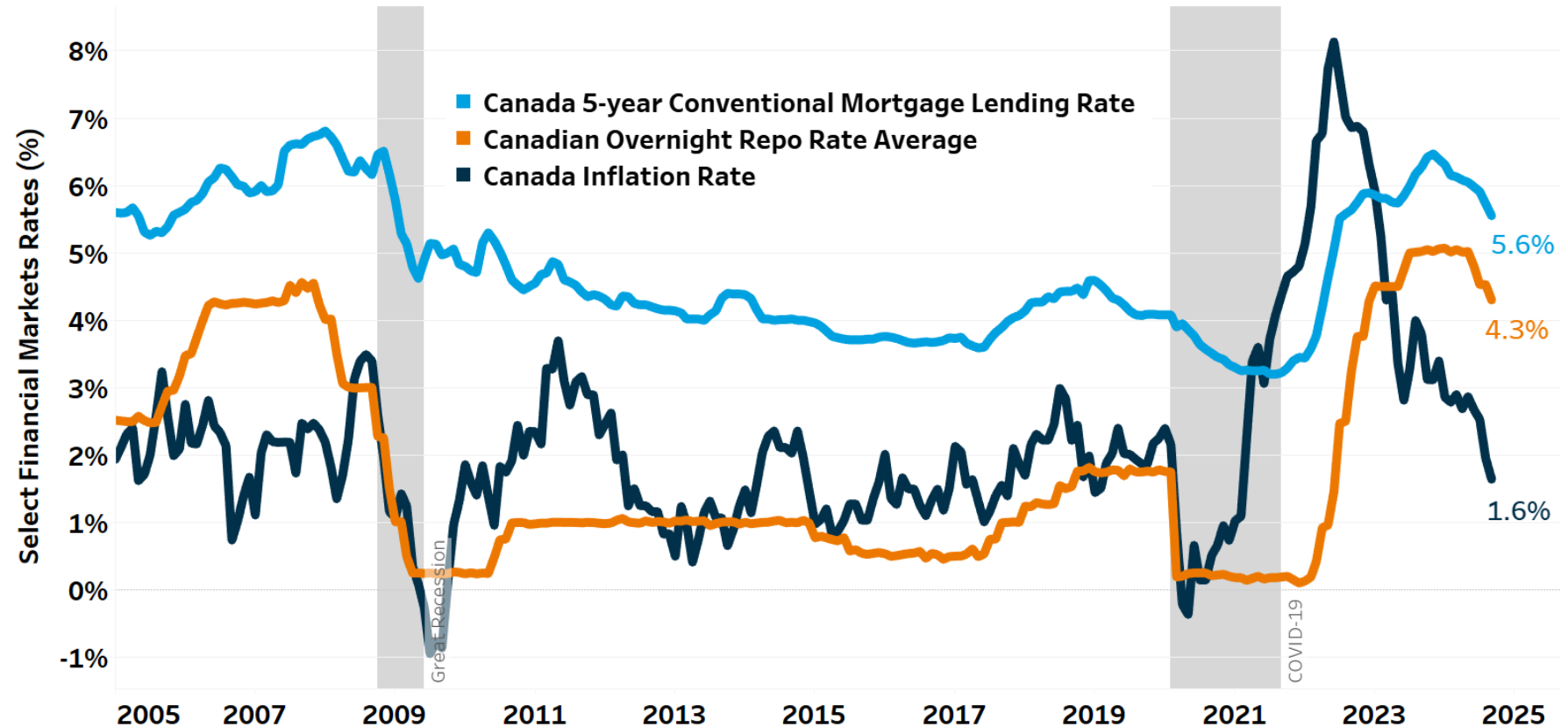


Financial Markets Are Ready For Dovish Policy Support

- Refinancing of home mortgages has sapped Canadian discretionary spending far more than in the U.S. where 30-year mortgages rates have allowed most homeowners to avoid spending more on their housing.

Key Canadian Financial Markets Rates

Quickly falling inflation and historically high mortgage rates will drag on future economic growth

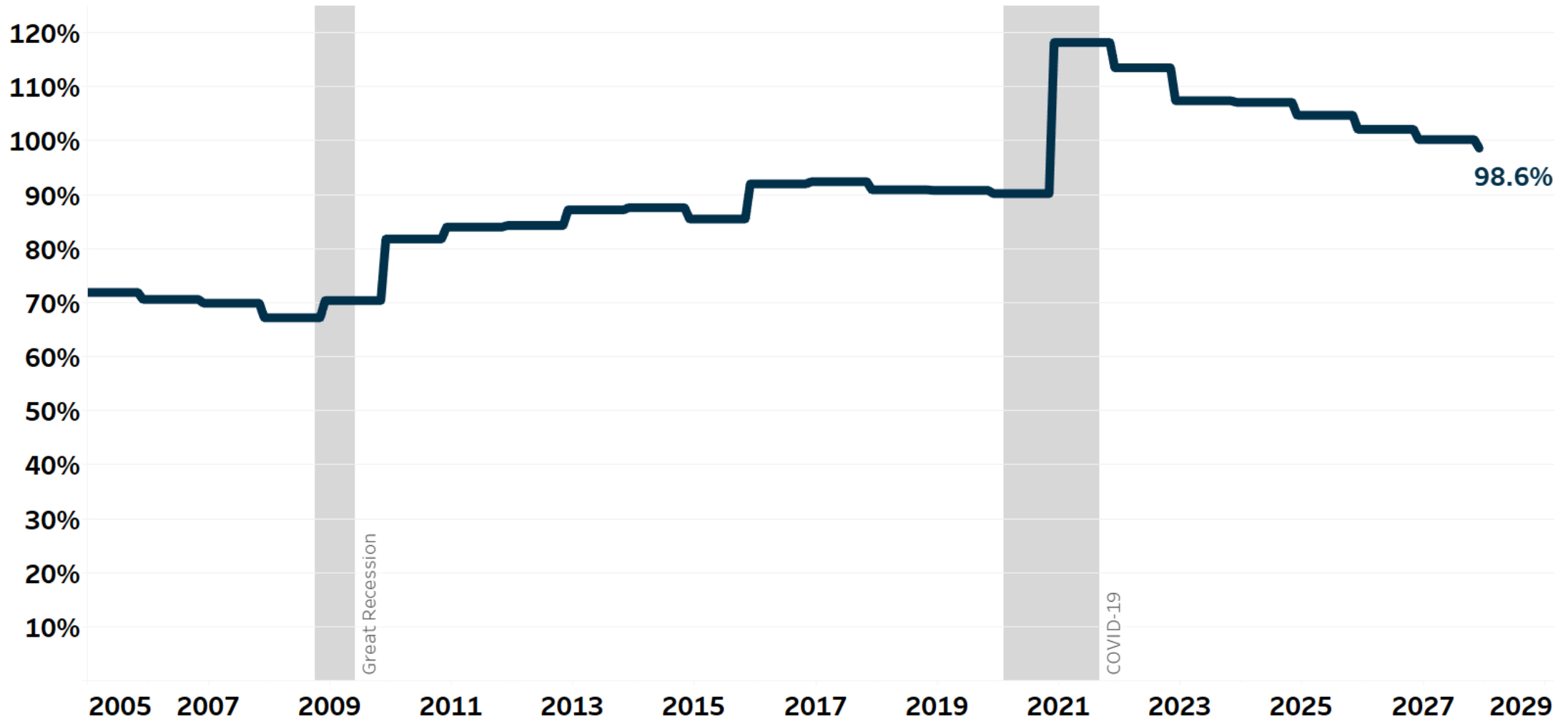


Source: Inflation, Statistics Canada; Banking Rate, Bank of Canada; Mortgage Rate, Canada Mortgage and Housing Corporation



Fiscal Prudence and High Interest Rates Will Temper a Future Economic Resurgence

Public debt as a percent of GDP falls below 100% by 2027

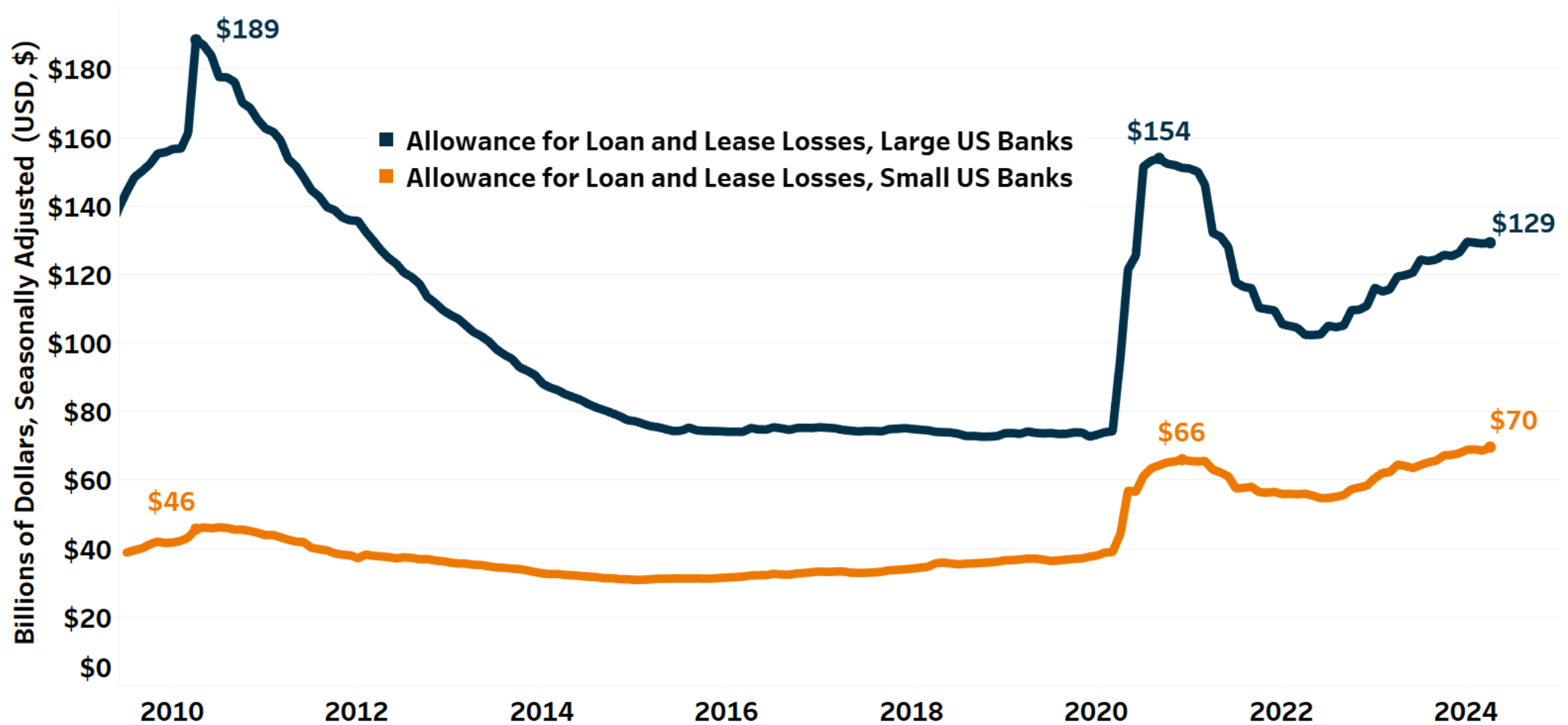


Source: International Monetary Fund



Banks Have Been Quietly Preparing a \$200B "Parachute" Against Bad Debts

Allowance for bad debts is up 76% since late-2019



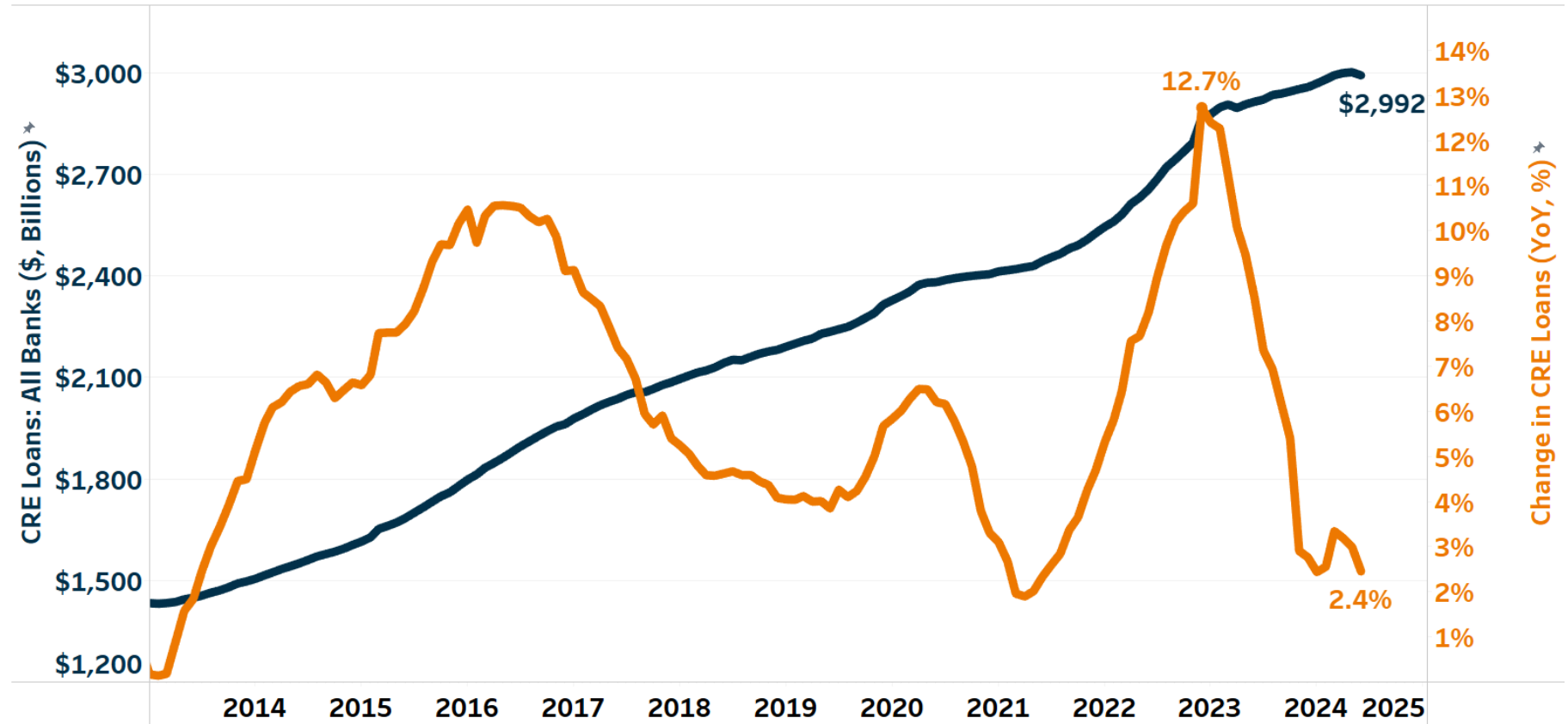
Source: Board of Governors of the Federal Reserve System, Release H.8



Banks Are Correcting As They Move Into Self-Preservation Mode

- Latest “boom” peaked at 12.7% YoY CRE loan growth for all banks & all CRE types.
- Recent CRE growth was the highest since 2006.

Banks Have Severely Throttled Back on CRE Lending
 Banks have been quietly preparing for rough times ahead



Source: Board of Governors of the Federal Reserve System



Banks Have Over \$3T in CRE They Need to Refinance by 2029, yet nearly \$1T of that is due this year.

Commercial Mortgage Maturities by Lender Type (\$ Billion)

Year	Total Due	Banks	CMBS	Life Cos	GSE	Other
2024	\$602.6	\$277.6	\$138.3	\$48.2	\$68.9	\$69.5
2025	\$598.0	\$286.6	\$112.6	\$50.8	\$82.3	\$65.6
2026	\$599.2	\$304.5	\$69.6	\$54.4	\$102.3	\$68.3
2027	\$628.7	\$322.1	\$55.5	\$58.3	\$120.6	\$72.1
2028	\$620.8	\$320.0	\$56.7	\$60.9	\$114.7	\$68.6
2029	\$595.1	\$294.0	\$66.7	\$58.1	\$118.1	\$58.2
2025-2029	\$3,041.8	\$1,527.3	\$361.1	\$282.6	\$538.0	\$332.9

Source: Trepp Inc., based on Federal Reserve Flow of Funds Data

CRE Loans Coming Due in 2024 Balloon by 41%, to \$929 Billion, as Loans that Matured in 2023 Weren't Paid Off but Extended

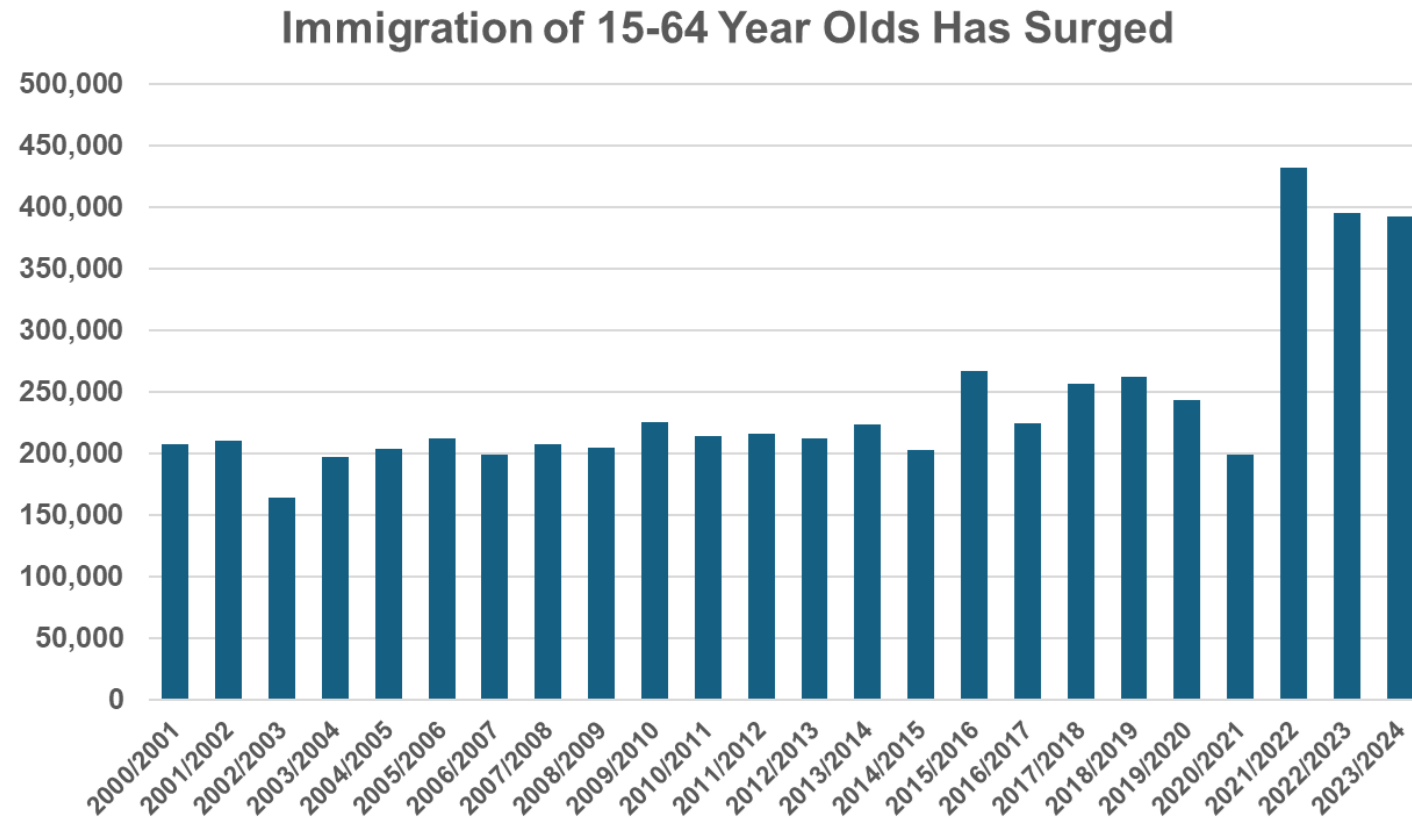
by Wolf Richter • Feb 12, 2024 • [92 Comments](#)

| Labor



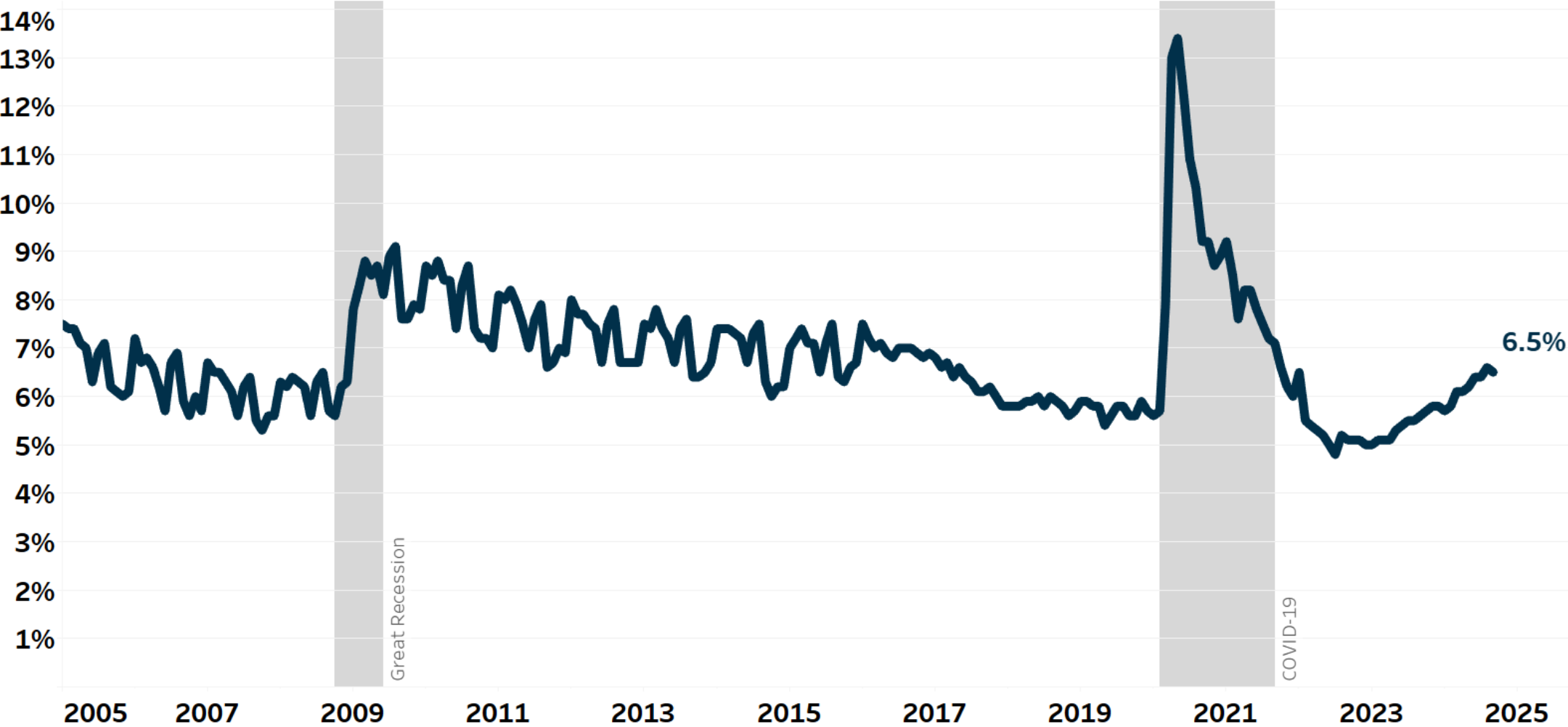
Immigration Trends in Canada

- Immigration presents a significant positive opportunity to Canada's economy overall and within construction specifically.
- What these people look like is changing.



Canada's Economy and Population Growth Give Reason for Lower Rates

Unemployment rate (%)

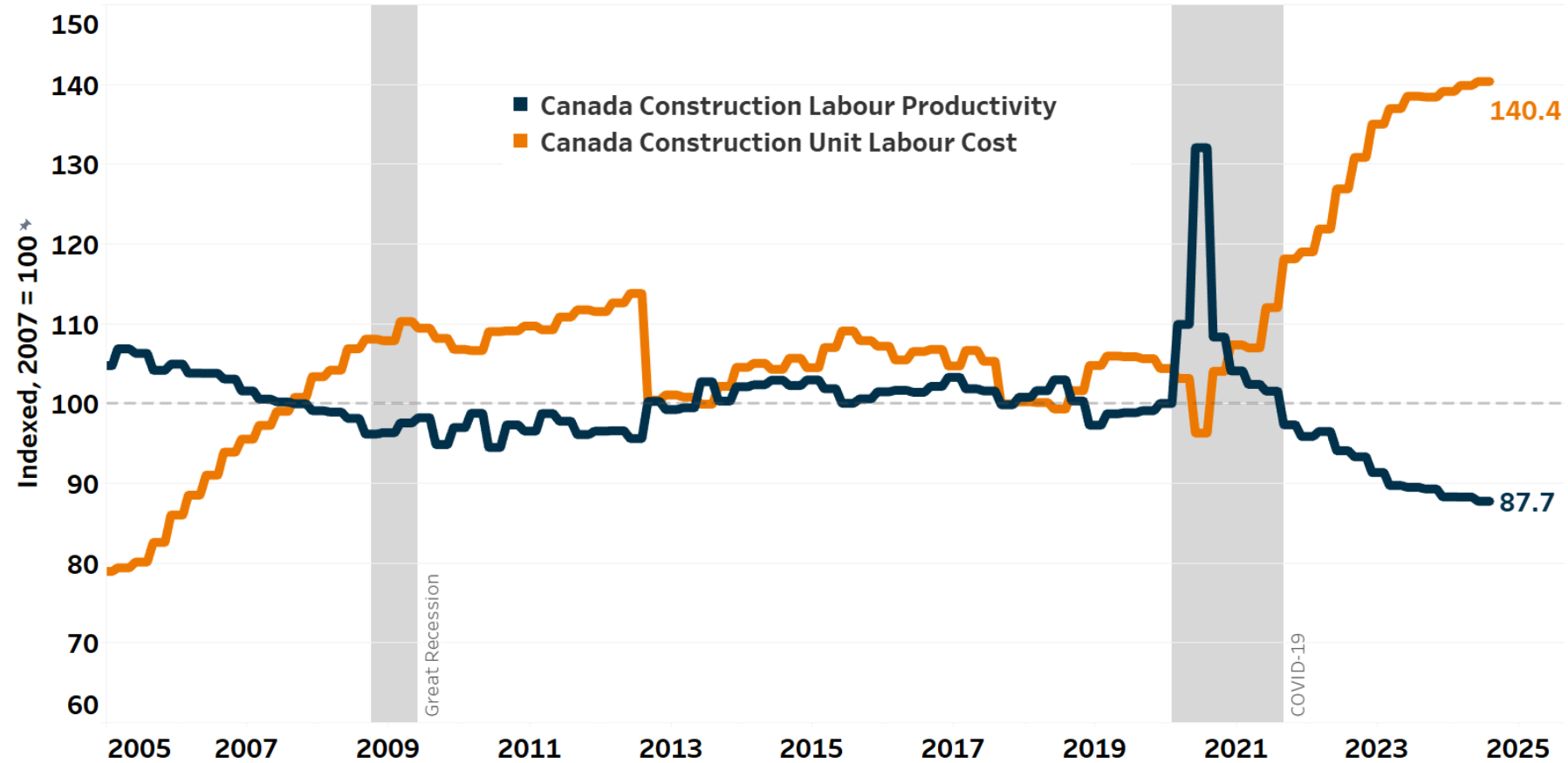


Source: Statistics Canada, Canada Labour Force Survey

Labor Training is a MUST:

- Your most important long-run business decisions in the coming year(s) will be with your HR director.
- The desperation for labor diluted the productivity of the average laborer.

Canadian Construction Labour Productivity Has Fallen While Costs Soar (Indexed, 2007 = 100)

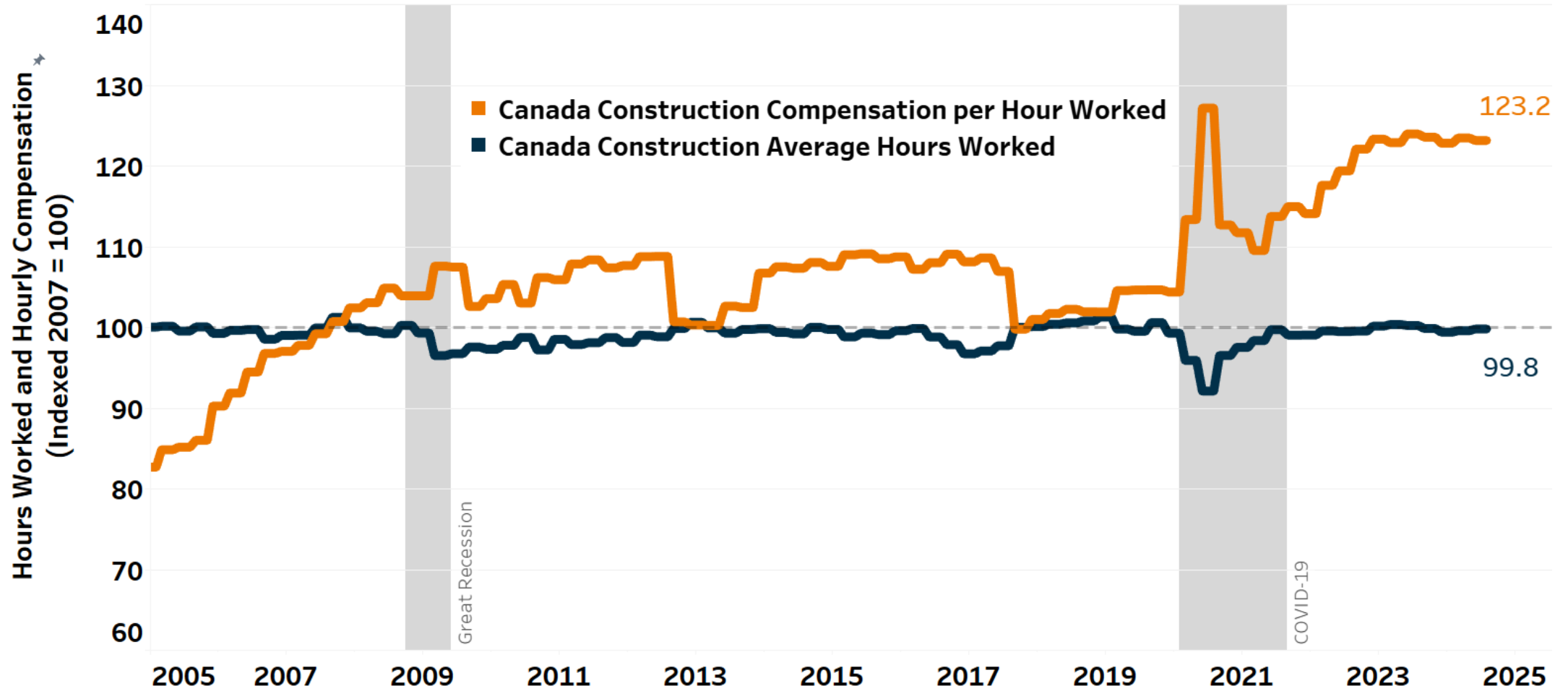


Source: Statistics Canada

Construction Wages Have Risen with Inflation, Hours Remain Unchanged

Workers' wages have moved with inflation while hours remain flat

(hours and wages indexed to 2007 = 100)



Source: Statistics Canada



Average weekly earnings by industry of hourly workers (excl. overtime), current dollars \$CAD

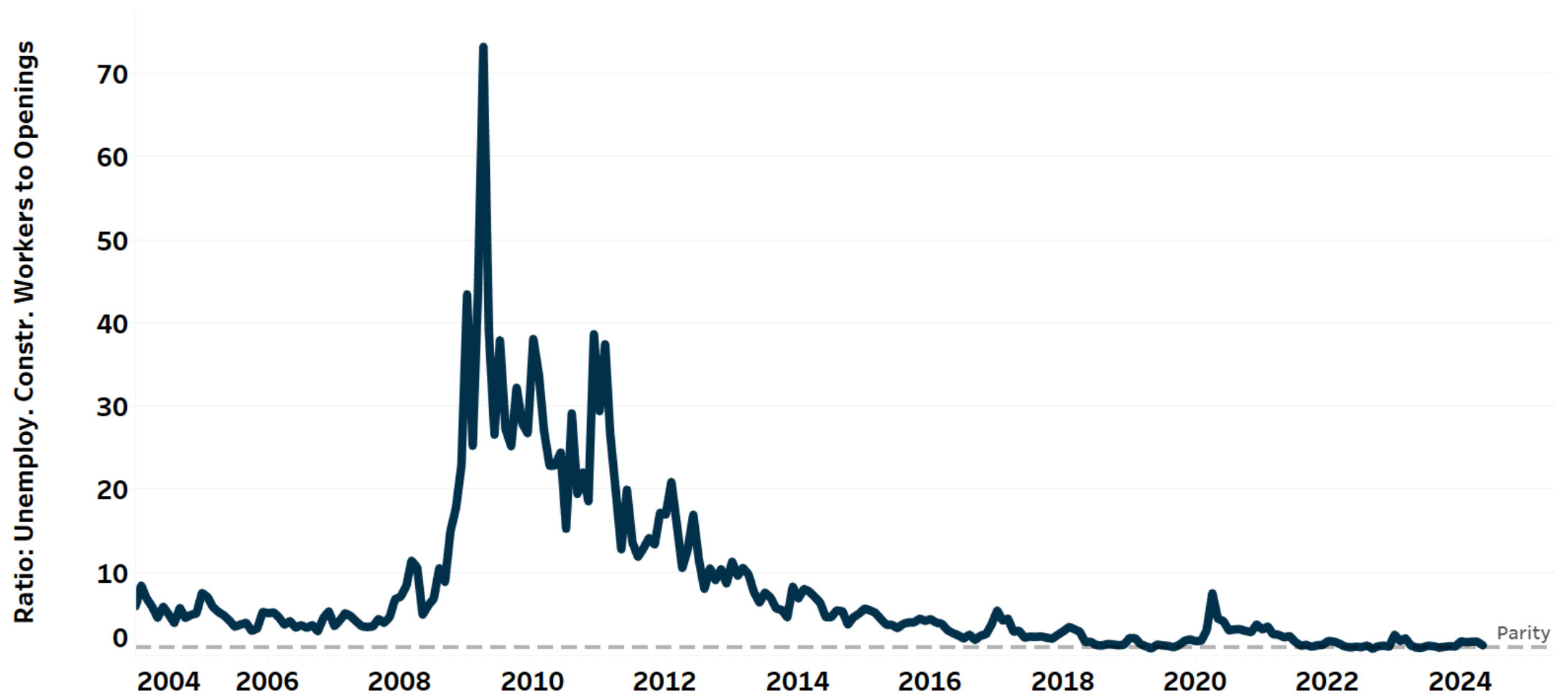
- Construction ranks very high in weekly pay (excl. overtime).
- Ranks near bottom in terms of 5-year wage growth.

North American Industry Classification System (NAICS)	2019	2020	2021	2022	2023
Utilities	1,563.61				1,708.44
Mining, quarrying, and oil and gas extraction	1,431.95	1,491.65	1,559.21	1,536.78	1,675.89
Construction	1,123.72	1,147.08	1,216.14	1,243.54	1,295.88
Information and cultural industries	890.58		1,151.54		1,221.98
Forestry, logging and support	1,074.44	1,049.19	1,117.05	1,196.61	1,214.58
Professional, scientific and technical services	974.68	1,006.29	1,042.32	1,127.39	1,211.89
Goods producing industries	1,028.08	1,052.17	1,099.09	1,140.93	1,207.88
Manufacturing	893.12	909.74	937.24	993.34	1,059.48
Transportation and warehousing	889.24	956.75	948.96	989.12	1,008.54
Finance and insurance	818.54	1,024.91	951.94	970.03	994.99
Health care and social assistance	844.15	907.32	918.43	930.06	955.76
Management of companies and enterprises	772.78	815.03	941.69	894.73	879.54
Industrial aggregate excluding unclassified businesses	738.74	800.5	826.92	843	874.36
Real estate and rental and leasing	700.5	755.61	839.29	867.02	844.05
Other services (except public administration)	662.16	695	762.75	776.21	797.25



The Ratio of Construction Openings to Experienced Job Seekers Stuck Near Parity

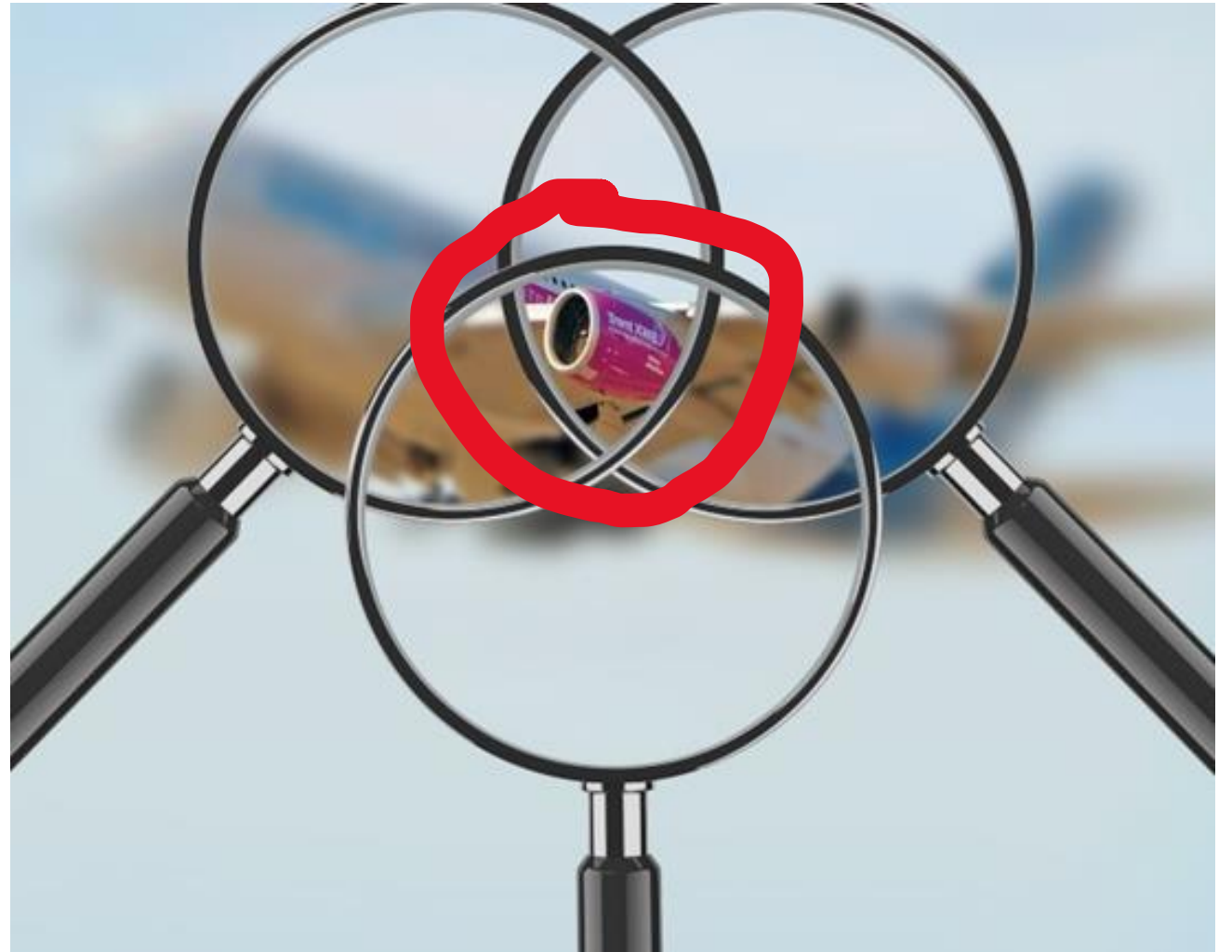
Since 2022 there have frequently been more construction openings than there are job-seeking laborers with construction experience.



Source: Bureau of Labor Statistics

Bringing It All Together: Strategy

Strategy: How you use your market knowledge (*macroeconomics*) along with the resources available to you (*Labor, Finance*) to create outsized returns for your business.



| Strategy: Macroeconomic Conditions

1. Strategically build a diversified Client/Project Portfolio

2. Diversifying your sources of funding:
 - Building relationships with multiple regional banks, also consider creating private equity/private capital relationships.

| Strategy: Finance

1. Banks are highly aware of their precarious situation. They won't help the industry at their expense.
2. Should the Bank of Canada continue to follow policy guidance of the Federal Reserve it will keep interest rates higher and for longer than is likely optimal for Canada's own economy.
3. Beware of the risks in the U.S. banking sector:
 - Banks really have no option but to “Pretend and Extend”

| Strategy: Labor

1. Accept that today's labor challenges are structural and require firms to take a refreshed, long-run approach to one's labor strategy.
 - The ability to rehire former labor is –and will remain– a greater challenge than in the past.
2. You can't force people to stay, but you can work hard to **create steady paychecks, and training program that get them to stay.**

“The worst thing that can happen is NOT that you train someone and they leave, but that you DON'T train them and they stay.”

Special Considerations in this U.S. Election Cycle



| Election Considerations (*economic only*):

Trump

- Reduced legislation
- Higher tariffs raise prices in L-T
- Easier CRE debt access.
- Tighter immigration standards curtail labor force and economic growth.
- S-T economic growth with inflation risk.

• Harris

- Expansion of green energy goals curtails pollution but increases business regulations & costs.
- Construction tailwind from electrification of the economy
- Stronger unions could raise labor costs, but greater immigration could ease L-T labor shortages.

Either way, under both nominees continued deficit spending & further erode the stability of financial markets, creating ever greater future financial dangers.

| Spillover Effects from the U.S. Election

- Under a Trump presidency:
 - Tariffs
 - Harsh immigration
 - Republican control of the house allows for Trump to enact more of his policies.
 - Relaxed regulation bolsters manufacturing & energy production
- Under a Harris presidency:
 - Slower economic growth but less fear of inflation
 - More regulations that could impact trade
 - More predictable world leader and trade partner

| Trade is a Significant Policy Differentiator in Today's U.S. Politics

Under a Trump presidency average tariffs soar to nearly 20%

- Highest average level since the 1930's

Specific implications for Canadian BPMs

- Over 75% of CAN exports go to the US
- Canada's #2 trading partner is China at \$23B
 - \$560M in vehicle related exports.
- As one of America's closest trade partners, Canada may be able to pick up lost activity

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Question & Answer

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