

Spring 2024 (For February 2024 Release)

Construction Starts Forecast

Contents

Summary forecasts (table) and Overview	2
Drivers of headline sectors (table).....	3
US type-of-structure forecasts (table)	5
US type-of-structure forecasts - INSIGHT (table)	6
US states, total construction starts (table)	7
US four largest states: type-of-structure forecasts (table).....	8
US type-of-structure forecasts (charts)	9
Canada type-of-structure forecasts (table)	12
Canada type-of-structure forecasts - INSIGHT (table)	13
Canadian provinces, total construction starts (table) ..	14
Canada four largest provinces: type-of-structure forecasts (table).....	14
Canada type-of-structure forecasts (charts)	15
Appendix A: Square footage forecasts (tables and charts)	18

Highlights

- Total US construction starts fell by 6.6% year-on-year (y/y) in Q4 2023 and 4.9% in 2023 as a whole. Both non-residential and residential building starts fell in y/y terms, and civil engineering construction broadly stagnated. Residential and non-residential both declined in 2023 as a whole, but civil engineering starts rose 13.3%.
- 3.3% annualized growth in GDP in Q4 2023 was stronger than expected and suggests good momentum heading into 2024. We now no longer include a recession in our baseline forecast and instead think that the Fed will be able to successfully engineer a soft landing. We have revised up our GDP growth forecast for 2024 to 2%, from 0.2% in the last update.
- We have pushed up our 2024 forecast for total US construction starts slightly to 4.5%. Total engineering construction is forecast to lead the charge, and new homebuilding is expected to return to growth. Non-residential building, by contrast, is expected to retreat this year, but the level of activity remains high in important sectors like manufacturing.
- Total Canadian construction starts fell 36.1% y/y in Q4 2023 with declines in the three headline sectors of residential building, non-residential building, and civil engineering. However, in 2023 as a whole, Canadian starts grew 5.8% on rises in non-residential building and civil engineering construction, but a decline in new homebuilding.
- We expect modest growth in Canadian construction starts in 2024, before accelerating in 2025 on a stronger outturn in the residential and commercial segments. Civil engineering projects will drive new construction again in 2024. Residential starts are expected to return to modest growth this year, but a small decline is forecast for non-residential building.

Link to podcast here: <http://tinyurl.com/3m49xcd3>

Sources: ConstructConnect®/Oxford Economics.
Forecast reflects actual starts through Q4 2023.

For more information or media inquiries please contact: economics@constructconnect.com

To subscribe on a complimentary basis, visit: www.constructconnect.com/subscribe-constructconnects-economic-reports

3825 Edwards Road, Ste. 800, Cincinnati, OH 45209 P. 1-800-364-2059 www.constructconnect.com/blog

Overview

Total US construction starts declined in 2023

Total US construction starts fell by 6.6% year-on-year (y/y) in Q4 2023 and 4.9% in 2023 as a whole. New residential building led the decline, down 11.5% y/y in Q4, although this was the shallowest annual contraction in a year. Residential construction starts fell 18.3% overall in 2023. Non-residential building contracted 5.6% y/y and 1.5% in 2023. New engineering works stagnated in y/y terms in Q4 but rose 13.3% in 2023 as a whole.

The trend of groundbreaking on mega-projects, or projects valued at more than \$1 billion, continued in Q4 2023 with nine such projects started for a total of \$29.1 billion. However, there were 12 mega-projects started in the same quarter in 2022 for a total of \$30.9 billion, so the value of large projects subtracted slightly from the y/y total.

Six of last quarter’s mega-projects were in the industrial sector, including two semiconductor fabs valued at \$7 billion each and three new battery plants. Despite this, new factory building fell 10.7% y/y in Q4 and 16.4% in 2023. 2022 was a big year for large industrial projects—there were six mega-projects in Q4 alone including an \$8 billion semiconductor fab and two EV battery factories worth around \$5.5 billion each. While factory building has fallen from its peak in 2022, it is still at a high level compared to historic averages. Outside of manufacturing, there were sharp annual declines of over 50% y/y recorded in new special education, warehouses and hospital construction. New hospital building saw a \$1.9 billion project in Q4 2022 fall out of the annual calculation, but it also fell to its lowest level since Q4 2017. Likewise, new warehouse construction had been growing strongly with the rise in e-commerce but weakened considerably in Q4, reaching its lowest level since Q1 2015.

On a more positive note, colleges and universities, courthouses, industrial labs, and prisons all grew by more than 50% y/y. While none of these segments registered a mega-project in Q4, several projects of over \$500 million were started in these segments. New prison construction, in particular, was the best performing category in 2023 after a \$973 million project in Alabama in Q4 and a \$1.6 billion project in New York in Q3. Commercial office building grew 7.2% y/y due to strong construction in new data center projects, categorized in this category, offsetting structural weakness in office real estate.

In the civil engineering segment, new

Table 1: Summary forecasts							
(Annual percentage changes unless specified otherwise)							
	2022	2023	2024	2025	2026	2027	2028
US							
Macro variables							
GDP	1.9	2.5	2.0	1.4	1.9	1.6	1.6
Population growth	0.4	0.4	0.5	0.5	0.5	0.5	0.5
Unemployment rate (%)	3.6	3.6	4.1	4.1	4.2	4.2	4.2
Real disposable income	-6.0	4.2	2.6	2.7	2.4	2.2	1.8
Central bank rate (%)	1.7	5.1	5.0	4.1	3.1	2.3	2.3
10-year government yield (%)	3.0	4.0	3.9	3.6	3.4	3.4	3.4
Construction starts (% growth in U.S.\$)							
Total starts	23.3	-4.9	4.5	7.2	7.0	5.9	4.7
Residential	3.1	-18.3	7.1	11.3	12.4	9.8	6.5
Non-res bldg	47.6	-1.5	-2.4	4.1	3.4	3.1	3.5
Civil engineering	29.1	13.3	12.7	6.5	5.2	4.1	3.6
Canada							
Macro variables							
GDP	3.8	1.0	-0.6	2.2	3.5	3.0	2.5
Population growth	1.7	2.8	3.0	2.0	1.6	1.2	1.1
Unemployment rate (%)	5.3	5.4	7.2	7.1	6.5	6.1	6.0
Real disposable income	-0.2	1.1	1.1	2.5	3.1	3.2	2.5
Central bank rate (%)	1.9	4.7	4.7	3.8	2.8	2.3	2.3
10-year government yield (%)	2.8	3.4	3.4	3.5	3.5	3.5	3.5
Exchange rate C\$ per US\$	1.30	1.35	1.33	1.27	1.20	1.18	1.17
Construction starts (% growth in C\$)							
Total starts	-4.1	5.8	7.9	18.5	9.8	4.3	1.4
Residential	-7.0	-12.7	4.1	12.0	11.6	8.6	5.3
Non-res bldg	-7.7	15.4	-0.8	22.6	7.9	0.0	-4.4
Civil engineering	4.1	16.2	21.2	19.6	10.3	5.3	3.6

miscellaneous civil engineering projects and new airport construction grew by more than 40% y/y. While neither of these was driven specifically by mega-projects, a \$700 million tunnel project in Colorado was classified in the miscellaneous civil engineering category. By contrast, the biggest decline was posted in new power infrastructure, down 77% y/y, after two large projects fell out of the annual calculation. Most other engineering segments posted steady growth in Q4, with only dams, canals, and marine work falling in y/y terms.

New single-family homebuilding turned to y/y growth in Q3 and accelerated to 20.2% in Q4. This followed more than a year of steep y/y declines, resulting in a 9.8% contraction for 2023 as a whole. New multi-family, by contrast, dropped 47.6% y/y in Q4. Rising financing costs and concerns about an oversupply of apartments have started to bite, and new apartment building fell 31.1% in 2023.

Put-in-place (PIP) construction, a measure of work in progress, has been trending up through 2023, and in December 2023,

it increased by 14.5% y/y. In seasonally adjusted terms, it has grown for twelve consecutive months. After falling through the early part of 2023, y/y growth in residential construction activity turned positive in October and accelerated to 6.8% growth in December. Non-residential construction grew 20.5% y/y in December, with positive annual growth posted in all sub-sectors bar the small communications sector. Manufacturing construction, in particular, grew 63.8% y/y. This is consistent with the strong manufacturing construction starts data seen over the last two years since construction starts are a leading indicator for PIP construction. ConstructConnect, in partnership with Oxford Economics, a world-leading economic forecasting firm, offers a service covering PIP by type of structure for US states, cities, and counties. The service includes data and forecasts and uses ConstructConnect’s starts data and forecasts to derive the PIP forecasts.

Having been in deflation territory for most of 2023, construction input cost inflation turned positive towards the end

Cont'd on page 3

Cont'd from page 2

of the year. Construction input costs, excluding capital, labor, and imports, rose 1.7% y/y in December, while construction material costs, a less comprehensive input cost index, increased 0.8%. Final demand inflation for construction was 0.5% in December, a significant easing from the double-digit rises posted through most of 2023. Output prices generally lag input prices by six to nine months, as it takes time for construction firms to adjust prices in response to rising input costs and underlying demand conditions. Slowing output price inflation reflects earlier declines in input prices and weak construction sector activity.

The construction sector added 61,000 jobs in Q4 2023, and 242,000 construction jobs were created in 2023 as a whole. Moreover, construction job openings also crept up towards the end of the year, rising nearly to a record high in November and easing only slightly in December, a sign that labor shortages may be a constraint in the coming quarters. Monthly construction job growth slowed slightly in January 2024, but was still positive. Sector wage inflation has also been high, at 5.2% y/y for hourly earnings and 3.6% y/y for weekly earnings in January, both outpacing the economy-wide average.

Q4 results suggest a better economy than previously thought but it will not be booming in 2024

A 3.3% annualized jump in GDP in Q4 2023 was stronger than expected and suggests good momentum heading into 2024. This is driven by an improvement in real consumer spending expectations, faster growth in real disposable income, inflation moderating quicker than anticipated, and a strong labor market. We now no longer include a recession in our baseline forecast but note that it is a material downside risk. The economy will still endure the cumulative impact of past tightening in monetary policy, less accommodative lending conditions, restrictive fiscal policy, and heightened policy uncertainty. GDP rose by an estimated 2.5% in 2023 and we forecast it will grow by 2% in 2024, up from our previous projection of 0.2%.

The risks around the US outlook have become more balanced as we enter 2024. Among the key upside risks are an easing in financial market conditions, more significant disinflation in core services that leads to a more aggressive easing cycle by the Fed, and a large wealth effect from higher equity prices. Key downside risks include significant weakness in the

Table 2: Drivers of headline sectors

Sector	Short-term drivers	Long-term drivers
Residential	Unemployment rate; Household liabilities; Mortgage interest rates; House prices; Population trends	House prices; Incomes
Non-residential building	Output trends in relevant sector; Population trends; Capacity utilization; Borrowing costs; Employment in relevant sector; Disposable income	Output trends in relevant sector; Employment in relevant sector
Civil engineering	Federal/State/Provincial spending; Government borrowing costs; Employment in government sector; Output trends in relevant sector	Federal/State/Provincial spending; Output trends in relevant sector

supply side of the economy stemming from the geopolitical tensions pushing freight costs and delivery times higher, a sudden shift by households to replenish savings at the expense of spending, and fiscal policy uncertainty weighing more heavily than anticipated on real business investment.

On a six-month annualized basis, core personal consumption expenditure (PCE) inflation—the Fed’s preferred gauge—is now below 2% but the year-over-year rate is still high at 3.2%. This will fall rapidly over the coming months, and we suspect will be close to 2% by the middle of the year, meaning the timing of the Fed’s first rate cut is likely to be in May. On the spending side, we project real federal consumption expenditures and investment will grow by 1.5% this year, down from 4% in 2023. Weaker job growth will put downward pressure on nominal wage growth, and we expect unemployment to peak at 4.25%, slightly up from its current 3.7%, supporting the theory of a soft landing.

Growth in construction starts in 2024 looking a little rosier than last quarter

We have pushed up our growth forecast for total US construction starts in 2024 to 4.5%, up by 1.7% percentage points on the back of a stronger economic outlook. Growth in 2024 will be driven by improvements in the residential, commercial, and some civil engineering subsectors as inflation cools towards the 2% target and the Fed looks to drop interest rates in the second half of the year.

After a tumultuous year in residential building in 2023, we expect a better 2024

with overall growth at 7.1%. Headwinds are subsiding as the economy heads for a soft landing with interest rates falling and easing financial market conditions. We see an increase in single family starts with growth of 7.5% expected while the multi-family subsector will grow at a slightly lower 6.4%. The risks around multi-family construction in particular are to the downside given falling commercial real estate prices in apartment buildings, still high interest rates, and rising apartment vacancy rates, but this year’s rise must be seen in the context of such a steep decline in 2023.

We expect total non-residential building activity to fall 2.4% in 2024, a slightly larger decline compared to 2023. Non-residential building starts, while falling, are still at a very high level historically. New industry construction is expected to fall over the forecast period, but this should be seen in the context of triple-digit growth in 2022 subsequent to the passage of the Inflation Reduction Act and CHIPS Act. Even though annual growth is negative, the level of construction is expected to be high, with groundbreaking expected on multiple new chip fabs, EV factories, and petrochemical projects.

Institutional construction had a positive 2023 and was strongest amongst the non-residential building subsectors but will fall back as last year’s projects fall out of annual calculation. For example, prison projects saw a bumper year in 2023, but we expect a decline of 43.8% in 2024. Commercial construction had a better than previously expected year in 2023, only falling 0.5% and we expect growth of 9.9% in 2024. This can be attributed to the improving macroeconomic situation

Cont'd on page 4

Cont'd from page 3

pushing more investment into warehouse, shopping & retail and large transportation terminal projects. The largest improvement amongst these sectors is in transportation terminals, where there are a few large projects in the pipeline for 2024. Both private and governmental offices are among the worst performing sectors in non-residential building as we continue to see the effects of hybrid working practices diminish office space requirements. However, there is some potential upside to private office building with data centres becoming increasingly important.

Civil engineering had a strong year in 2023, a trend likely to continue in 2024 with growth of 12.7% pencilled in. Miscellaneous civil engineering grew at the strongest pace in 2023 and will continue to grow rapidly in 2024, with growth forecast at 34.4%. The sector includes projects in oil & gas, pipelines, tunnels, and railways, among other things, and plenty of large-scale projects in these categories are expected to get underway over the next two years. New power construction is set to grow at 40.4% this year, an area of focus with funds allocated to green transitional projects such as nuclear power and transmission infrastructure. Airports and dams, canals and marine work were two other rapidly growing sectors in 2023, but both are expected to decline slightly this year. Road building, the largest engineering sector, is expected to grow at a still-healthy 6.5% this year, back to a more normal pace following double-digit growth in 2023. Engineering construction has been boosted by government infrastructure spending in recent years, and while we expect growth in infrastructure to continue, the pace is expected to slow in the medium-term.

Modest acceleration in Canadian construction starts in 2024

Total Canadian construction starts fell 36.1% y/y in Q4 2023 with y/y declines in the three headline sectors of residential building, non-residential building, and civil engineering. Unlike in the US, there were no mega-projects valued above C\$1 billion compared to three such projects in the same period in the previous year. In 2023 as a whole, total construction starts increased 5.8%, driven by a 15.4% rise in new non-residential building and a 16.2% increase in civil engineering starts, but countered by a 12.7% fall in residential starts.

Non-residential building starts fell 56% y/y in Q4 2023. Six sectors declined by more than 50% y/y: transportation terminals, government offices, manufac-

turing, miscellaneous medical, private offices, and parking garages. In government offices and transportation terminals, starts are coming off high growth in Q4 2022. In the manufacturing sector, a C\$5 billion battery factory in Windsor, Ontario fell out of the annual calculation. Commercial office building has been structurally weak since the pandemic and declined for the fourth consecutive year in 2023. By contrast, hotels, warehouses, and police and fire all posted y/y growth above 50% (and in the triple digits in the former two).

New engineering construction fell 21.6% y/y with widespread weakness across most subsectors. Only bridge building grew in Q4 2023, up 114% y/y although this followed a weak reading in the previous year rather than resulting from a large project. Bridge construction rose 61.7% in 2023 thanks to a C\$2 billion project in Quebec in Q2. Dams, canals, and marine work fell 61% y/y in Q4 2023 and 42.8% for the year overall. Miscellaneous civil engineering declined 80.4% y/y, but after a C\$6.8 billion pipeline project in Q3, it grew 62.5% in 2023 as a whole.

Residential starts posted the smallest y/y decline in Q4, down 6.5% y/y. This was the result of a 15.2% y/y decline in single-family starts, but a 1% y/y rise in new apartment building. Both sub-sectors declined in 2023 as a whole, by 23.9% in single-family building and 3.3% in apartment building.

The Canadian economy has been weak moving into the new year after shrinking by 0.3% quarter-on-quarter in Q3, and we estimate there was a further small decline in Q4. A peak-to-trough decline in GDP of 1.1% from Q3 2023 to Q2 2024 is a slightly deeper recession than previously thought with H1 2024 expected to be tough for households. Slightly deeper declines are pencilled in for consumption due to higher debt service costs via mortgage renewals while slowing wage growth, job losses, and employer led reductions to working hours will weigh on real disposable incomes.

Employment flatlined in December, but we expect to see modest declines in H1 2024 as the recession grinds on. A slight decline in the participation rate offset weaker labor supply growth leaving the unemployment rate at 5.8%. Strong immigration-led population growth and falling employment will see the unemployment rate rise to an expected 7.5% by mid-year. H2 2024 should see consumers regain some willingness to spend as interest rates come down and job growth resumes.

CPI inflation rose to 3.4% year on year

in December largely due to unfavourable base effects for gasoline prices in the previous year. Mortgage interest costs and rent inflation have remained high in recent months and these components will continue to place upward pressure on core inflation this year. Nonetheless, growing economic slack from the downturn in H1 2024 will help return CPI to the 2% target by late 2024. The Bank of Canada held the target for the overnight rate at 5% in January 2024 citing potential sticky inflation. We believe the ongoing recession will bring CPI inflation down to the 2% target one year earlier than the BoC predicts, and we therefore expect the easing cycle to begin at the June meeting.

We expect modest growth in Canadian construction starts in 2024 of 7.9%, accelerating to 18.5% in 2025 as residential and commercial building pick up again as recessionary pressures subside.

After falling in 2023, we expect only a modest return to growth in residential starts in 2024 due to the household-led recession in H1 2024. Both single and multi-family starts will grow at around 4%, revised down from a previous forecast of 7.6% for total residential construction. Looking further out, we see strong rebounds in residential building, especially in the single family starts subsector, which sees double-digit growth from 2025 onwards.

Non-residential building starts will fall slightly in 2024 after a strong year in 2023. A large decline in hospital construction and police and fire buildings will put strong downward pressure on total non-residential. But a slew of new transportation projects, to the tune of a 570% increase in 2024, will offset this. We expect increases above 100% in private office building and shopping and retail construction, but this does not stop commercial building starts from falling in 2024. This is accounted for by the sharp decline in hotels and motels, amusement, and warehouses after a bumper 2023.

Another strong year is expected in civil engineering starts with growth sitting at 21.2% in 2024, up from 16.2% in 2023. Large growth in power infrastructure and miscellaneous civil of 75.9% and 58.8% respectively are the main drivers of the performance. Modest growth is expected in all other subsectors bar bridges. Infrastructure spending remains a priority for the government as green investment grows with decarbonisation plans. Bridge construction sees a 32.8% decline after robust growth in 2023 as projects fall out of the pipeline and government spending moves elsewhere.

Table 3: U.S. Type-of-Structure Forecasts
(\$ Billions USD)

	Actuals		Forecasts				
	2022	2023	2024	2025	2026	2027	2028
Single-family	224.961	202.805	217.990	239.008	262.989	288.004	306.006
Multi-family	148.718	102.453	109.003	124.997	145.998	161.005	171.998
TOTAL RESIDENTIAL	373.679	305.259	326.993	364.005	408.987	449.009	478.004
<i>(Yr/yr % change)</i>	<i>3.1%</i>	<i>-18.3%</i>	<i>7.1%</i>	<i>11.3%</i>	<i>12.4%</i>	<i>9.8%</i>	<i>6.5%</i>
Hotels/Motels	11.070	13.986	15.398	16.830	18.165	19.248	20.345
Shopping/Retail	15.383	13.630	17.430	19.280	21.131	22.784	24.216
Parking Garages	2.418	2.011	2.230	2.430	2.636	2.821	2.987
Amusement	7.871	8.946	9.431	9.867	10.284	10.707	11.126
Private Offices	24.596	26.662	26.999	27.713	28.500	30.001	32.499
Governmental Offices	13.250	16.070	15.769	16.550	17.292	17.913	18.514
Laboratories (Schools & Industrial)	4.911	4.534	4.663	4.893	5.138	5.330	5.494
Warehouses	30.472	20.591	23.337	26.442	28.011	29.225	30.286
Sports Stadium/Convention Center	6.988	9.054	9.500	10.200	10.200	10.000	10.000
Transportation Terminals	5.983	6.856	9.740	10.839	11.000	10.500	9.999
TOTAL COMMERCIAL	122.942	122.340	134.496	145.043	152.358	158.529	165.466
<i>(Yr/yr % change)</i>	<i>14.1%</i>	<i>-0.5%</i>	<i>9.9%</i>	<i>7.8%</i>	<i>5.0%</i>	<i>4.1%</i>	<i>4.4%</i>
TOTAL INDUSTRIAL (manufacturing)	115.403	96.532	80.025	75.844	73.431	72.762	74.018
<i>(Yr/yr % change)</i>	<i>229.0%</i>	<i>-16.4%</i>	<i>-17.1%</i>	<i>-5.2%</i>	<i>-3.2%</i>	<i>-0.9%</i>	<i>1.7%</i>
Religious	1.039	0.998	1.070	1.136	1.205	1.257	1.305
Hospitals/Clinics	25.847	18.805	21.499	24.000	25.800	26.999	28.499
Nursing Homes/Assisted Living	4.587	2.518	3.700	4.447	5.073	5.597	5.912
Libraries/Museums	3.596	4.252	3.797	3.961	4.100	4.259	4.389
Courthouse	1.656	2.452	2.098	2.201	2.307	2.401	2.470
Police/Fire	4.223	5.153	5.162	5.396	5.660	5.902	6.126
Prisons	2.963	7.117	3.997	4.138	4.375	4.587	4.748
Military	9.729	16.329	14.812	15.474	16.146	16.839	17.471
Educational Facilities	74.536	90.707	83.871	87.060	90.259	93.255	95.900
MED misc	13.702	8.565	11.386	11.978	12.489	13.023	13.313
TOTAL INSTITUTIONAL	141.877	156.895	151.392	159.791	167.415	174.121	180.134
<i>(Yr/yr % change)</i>	<i>24.6%</i>	<i>10.6%</i>	<i>-3.5%</i>	<i>5.5%</i>	<i>4.8%</i>	<i>4.0%</i>	<i>3.5%</i>
Miscellaneous Non-Res Building	7.996	6.713	7.301	7.792	8.302	8.683	9.006
TOTAL NON-RES BLDG	388.217	382.480	373.215	388.470	401.506	414.094	428.624
<i>(Yr/yr % change)</i>	<i>47.6%</i>	<i>-1.5%</i>	<i>-2.4%</i>	<i>4.1%</i>	<i>3.4%</i>	<i>3.1%</i>	<i>3.5%</i>
Airport	7.633	9.636	9.534	10.129	10.723	11.199	11.680
Roads	84.475	95.186	101.344	106.826	111.930	116.711	121.479
Bridges	27.658	24.440	28.120	30.150	31.911	32.976	33.950
Dams/Canal/Marine	9.414	11.458	11.323	12.343	13.379	14.118	14.729
Water & Sewage Treatment	43.414	47.969	52.745	55.494	58.239	60.772	63.309
Misc Civil (Power, etc.)	29.361	40.212	54.986	59.882	62.840	65.173	66.734
TOTAL ENGINEERING	201.955	228.901	258.053	274.825	289.023	300.949	311.880
<i>(Yr/yr % change)</i>	<i>29.1%</i>	<i>13.3%</i>	<i>12.7%</i>	<i>6.5%</i>	<i>5.2%</i>	<i>4.1%</i>	<i>3.6%</i>
TOTAL NON-RESIDENTIAL	590.172	611.381	631.267	663.295	690.529	715.044	740.503
<i>(Yr/yr % change)</i>	<i>40.7%</i>	<i>3.6%</i>	<i>3.3%</i>	<i>5.1%</i>	<i>4.1%</i>	<i>3.6%</i>	<i>3.6%</i>
GRAND TOTAL	963.852	916.640	958.261	1,027.300	1,099.515	1,164.053	1,218.507
<i>(Yr/yr % change)</i>	<i>23.3%</i>	<i>-4.9%</i>	<i>4.5%</i>	<i>7.2%</i>	<i>7.0%</i>	<i>5.9%</i>	<i>4.7%</i>

EXPLANATION: Table 3 conforms to the type-of-structure ordering adopted by many firms and organizations in the industry. Specifically, it breaks non-residential building into ICI work (i.e., industrial, commercial and institutional), since each has its own set of economic and demographic drivers.

Table 4 presents an alternative, perhaps more user-friendly and intuitive, type-of-structure ordering that matches how the data appears in ConstructConnect's on-line product 'Insight'.

Source of actuals: ConstructConnect "Insight" / Forecasts: Oxford Economics and ConstructConnect / Table: ConstructConnect.

Table 4: U.S. Type-of-Structure Forecasts
 Arranged to match the alphabetical category drop-down menus in INSIGHT (\$ Billions USD)

	Actuals		Forecasts				
	2022	2023	2024	2025	2026	2027	2028
Summary							
CIVIL	201.955	228.901	258.053	274.825	289.023	300.949	311.880
NON-RESIDENTIAL BUILDING	388.217	382.480	373.215	388.470	401.506	414.094	428.624
RESIDENTIAL	373.679	305.259	326.993	364.005	408.987	449.009	478.004
GRAND TOTAL	963.852	916.640	958.261	1,027.300	1,099.515	1,164.053	1,218.507
Verticals							
Airport	7.633	9.636	9.534	10.129	10.723	11.199	11.680
All Other Civil	12.708	24.405	32.792	36.197	38.068	39.759	41.266
Bridges	27.658	24.440	28.120	30.150	31.911	32.976	33.950
Dams / Canals / Marine Work	9.414	11.458	11.323	12.343	13.379	14.118	14.729
Power Infrastructure	16.652	15.807	22.194	23.685	24.772	25.414	25.468
Roads	84.475	95.186	101.344	106.826	111.930	116.711	121.479
Water and Sewage Treatment	43.414	47.969	52.745	55.494	58.239	60.772	63.309
CIVIL	201.955	228.901	258.053	274.825	289.023	300.949	311.880
(Yr/yr % change)	29.1%	13.3%	12.7%	6.5%	5.2%	4.1%	3.6%
Offices (private)	24.596	26.662	26.999	27.713	28.500	30.001	32.499
Parking Garages	2.418	2.011	2.230	2.430	2.636	2.821	2.987
Transportation Terminals	5.983	6.856	9.740	10.839	11.000	10.500	9.999
Commercial	32.997	35.529	38.969	40.981	42.137	43.323	45.485
(Yr/yr % change)	0.9%	7.7%	9.7%	5.2%	2.8%	2.8%	5.0%
Amusement	7.871	8.946	9.431	9.867	10.284	10.707	11.126
Libraries / Museums	3.596	4.252	3.797	3.961	4.100	4.259	4.389
Religious	1.039	0.998	1.070	1.136	1.205	1.257	1.305
Sports Arenas / Convention Centers	6.988	9.054	9.500	10.200	10.200	10.000	10.000
Community	19.494	23.249	23.797	25.164	25.789	26.222	26.820
(Yr/yr % change)	12.0%	19.3%	2.4%	5.7%	2.5%	1.7%	2.3%
College / University	19.022	28.148	22.511	23.566	24.565	25.404	26.134
Elementary / Pre School	22.011	24.114	25.065	25.835	26.612	27.638	28.696
Jr / Sr High School	30.905	36.442	34.065	35.259	36.539	37.556	38.346
Special / Vocational	2.599	2.003	2.231	2.399	2.544	2.657	2.724
Educational	74.536	90.707	83.871	87.060	90.259	93.255	95.900
(Yr/yr % change)	24.5%	21.7%	-7.5%	3.8%	3.7%	3.3%	2.8%
Courthouses	1.656	2.452	2.098	2.201	2.307	2.401	2.470
Fire and Police Stations	4.223	5.153	5.162	5.396	5.660	5.902	6.126
Government Offices	13.250	16.070	15.769	16.550	17.292	17.913	18.514
Prisons	2.963	7.117	3.997	4.138	4.375	4.587	4.748
Government	22.091	30.791	27.026	28.286	29.634	30.804	31.858
(Yr/yr % change)	13.6%	39.4%	-12.2%	4.7%	4.8%	3.9%	3.4%
Industrial Labs / Labs / School Labs	4.911	4.534	4.663	4.893	5.138	5.330	5.494
Manufacturing	115.403	96.532	80.025	75.844	73.431	72.762	74.018
Warehouses	30.472	20.591	23.337	26.442	28.011	29.225	30.286
Industrial	150.786	121.657	108.025	107.179	106.581	107.316	109.798
(Yr/yr % change)	129.3%	-19.3%	-11.2%	-0.8%	-0.6%	0.7%	2.3%
Hospitals / Clinics	25.847	18.805	21.499	24.000	25.800	26.999	28.499
Medical Misc.	13.702	8.565	11.386	11.978	12.489	13.023	13.313
Nursing Homes	4.587	2.518	3.700	4.447	5.073	5.597	5.912
Medical	44.135	29.889	36.585	40.425	43.363	45.618	47.724
(Yr/yr % change)	37.2%	-32.3%	22.4%	10.5%	7.3%	5.2%	4.6%
Military	9.729	16.329	14.812	15.474	16.146	16.839	17.471
(Yr/yr % change)	5.6%	67.8%	-9.3%	4.5%	4.3%	4.3%	3.8%
Hotels	11.070	13.986	15.398	16.830	18.165	19.248	20.345
Retail Misc.	7.996	6.713	7.301	7.792	8.302	8.683	9.006
Shopping	15.383	13.630	17.430	19.280	21.131	22.784	24.216
Retail	34.449	34.329	40.129	43.902	47.599	50.715	53.567
(Yr/yr % change)	30.4%	-0.3%	16.9%	9.4%	8.4%	6.5%	5.6%
NON-RESIDENTIAL BUILDING	388.217	382.480	373.215	388.470	401.506	414.094	428.624
(Yr/yr % change)	47.6%	-1.5%	-2.4%	4.1%	3.4%	3.1%	3.5%
Multi-Family	148.718	102.453	109.003	124.997	145.998	161.005	171.998
Single-Family	224.961	202.805	217.990	239.008	262.989	288.004	306.006
RESIDENTIAL	373.679	305.259	326.993	364.005	408.987	449.009	478.004
(Yr/yr % change)	3.1%	-18.3%	7.1%	11.3%	12.4%	9.8%	6.5%
GRAND TOTAL	963.852	916.640	958.261	1,027.300	1,099.515	1,164.053	1,218.507
(Yr/yr % change)	23.3%	-4.9%	4.5%	7.2%	7.0%	5.9%	4.7%

EXPLANATION: Table 3 conforms to the type-of-structure ordering adopted by many firms and organizations in the industry. Specifically, it breaks non-residential building into ICI work (i.e., industrial, commercial and institutional), since each has its own set of economic and demographic drivers.

Table 4 presents an alternative, perhaps more user-friendly and intuitive, type-of-structure ordering that matches how the data appears in ConstructConnect's on-line product 'Insight'.

Source of actuals: ConstructConnect "Insight" / Forecasts: Oxford Economics and ConstructConnect / Table: ConstructConnect.

Table 5: U.S. States, Total Construction Starts — ConstructConnect

States (alphabetical by 2-letter code)	Actuals	Forecasts (Year versus previous year % change)				
	(Level in \$ Millions USD)	2024	2025	2026	2027	2028
	2023					
Alaska - AK	\$5,040	-56.7%	13.1%	6.5%	4.4%	3.2%
Alabama - AL	\$18,299	-13.7%	8.3%	5.9%	5.2%	3.9%
Arkansas - AR	\$8,008	0.8%	13.6%	8.4%	5.9%	4.1%
Arizona - AZ	\$29,769	-3.2%	9.2%	10.9%	7.7%	5.8%
California - CA*	\$70,498	11.3%	8.3%	6.9%	6.6%	5.4%
Colorado - CO	\$17,635	13.0%	11.3%	8.4%	7.4%	5.7%
Connecticut - CT	\$6,786	-0.3%	8.6%	6.3%	3.9%	3.3%
District Of Columbia - DC	\$2,877	1.6%	22.9%	1.8%	2.1%	4.4%
Delaware - DE	\$2,631	10.9%	11.1%	6.2%	5.5%	4.0%
Florida - FL*	\$70,042	9.9%	9.7%	11.2%	8.0%	5.5%
Georgia - GA	\$31,323	19.6%	5.3%	5.7%	5.4%	4.5%
Hawaii - HI	\$6,599	-42.0%	10.5%	6.8%	5.4%	4.1%
Iowa - IA	\$7,808	7.4%	12.1%	5.0%	4.2%	3.8%
Idaho - ID	\$12,404	-32.2%	4.4%	3.5%	6.0%	6.1%
Illinois - IL	\$23,467	11.8%	5.6%	5.3%	4.0%	3.6%
Indiana - IN	\$21,148	-3.4%	6.0%	3.6%	3.8%	3.8%
Kansas - KS	\$11,308	-33.2%	7.5%	5.2%	4.2%	3.6%
Kentucky - KY	\$9,951	21.9%	12.3%	5.5%	4.8%	4.0%
Louisiana - LA	\$12,150	31.5%	-4.0%	-2.2%	2.6%	2.8%
Massachusetts - MA	\$15,896	4.2%	8.4%	5.6%	5.0%	4.7%
Maryland - MD	\$13,228	19.8%	9.0%	5.8%	5.0%	4.0%
Maine - ME	\$2,557	18.5%	14.4%	6.7%	4.8%	3.9%
Michigan - MI	\$19,393	5.0%	5.1%	4.5%	3.9%	3.6%
Minnesota - MN	\$12,568	5.3%	7.9%	5.5%	4.5%	4.0%
Missouri - MO	\$12,267	16.0%	7.6%	5.4%	4.6%	3.8%
Mississippi - MS	\$6,056	-18.1%	8.7%	5.5%	4.4%	3.4%
Montana - MT	\$2,684	8.8%	8.9%	10.0%	6.1%	3.8%
North Carolina - NC	\$41,646	-9.8%	6.0%	8.6%	7.0%	5.1%
North Dakota - ND	\$3,704	22.5%	21.2%	7.1%	4.9%	3.8%
Nebraska - NE	\$5,989	37.8%	14.3%	5.9%	4.9%	4.1%
New Hampshire - NH	\$2,678	7.0%	4.4%	8.7%	5.9%	4.4%
New Jersey - NJ	\$12,174	18.7%	9.5%	7.7%	6.0%	6.4%
New Mexico - NM	\$6,836	-16.4%	1.3%	5.3%	4.5%	3.7%
Nevada - NV	\$9,544	-14.2%	12.1%	9.4%	7.9%	6.4%
New York - NY*	\$43,341	31.1%	-3.2%	-1.5%	2.3%	3.2%
Ohio - OH	\$26,896	9.2%	-2.8%	3.1%	3.5%	3.6%
Oklahoma - OK	\$11,164	3.1%	9.8%	7.1%	5.4%	3.9%
Oregon - OR	\$9,048	27.2%	10.4%	7.5%	6.2%	5.5%
Pennsylvania - PA	\$22,608	34.1%	-3.7%	5.4%	4.6%	3.7%
Rhode Island - RI	\$1,362	30.7%	-0.2%	5.4%	3.7%	3.3%
South Carolina - SC	\$16,732	1.0%	6.8%	8.1%	6.5%	4.5%
South Dakota - SD	\$4,748	-35.0%	18.3%	8.4%	5.8%	4.3%
Tennessee - TN	\$23,937	0.7%	11.1%	7.2%	6.1%	4.6%
Texas - TX*	\$138,257	-5.6%	11.8%	11.0%	7.5%	5.3%
Utah - UT	\$18,084	-5.4%	14.0%	8.1%	6.4%	5.4%
Virginia - VA	\$23,160	-5.7%	8.1%	7.5%	5.8%	4.5%
Vermont - VT	\$1,359	-23.3%	1.3%	6.8%	5.0%	3.9%
Washington - WA	\$17,226	19.6%	12.6%	9.2%	7.0%	5.8%
Wisconsin - WI	\$12,382	30.1%	6.8%	4.5%	4.1%	3.7%
West Virginia - WV	\$6,634	-48.3%	6.6%	4.7%	3.5%	3.3%
Wyoming - WY	\$4,713	32.2%	-41.8%	6.1%	4.4%	2.7%
United States	\$916,639	4.5%	7.2%	7.0%	5.9%	4.7%

*One in three Americans lives in one of the four shaded states, New York, Florida, Texas or California. Sum of first column may not exactly equal total due to rounding.

Source of actuals: ConstructConnect "Insight" / Forecasts: Oxford Economics and ConstructConnect / Table: ConstructConnect.

Table 6: U.S. Four Largest States: Type-of-Structure Forecasts
(\$ Billions USD)

		Actuals		Forecasts				
		2022	2023	2024	2025	2026	2027	2028
New York	Residential	15.962	12.890	11.885	12.118	12.528	12.888	13.466
	Non-res Building	18.672	19.858	25.293	22.458	20.201	20.296	20.813
	Engineering/Civil	15.434	10.593	19.626	20.394	21.433	22.237	22.922
	Total	50.068	43.341	56.803	54.970	54.162	55.421	57.200
	<i>(Yr vs previous yr % Change)</i>	<i>50.5%</i>	<i>-13.4%</i>	<i>31.1%</i>	<i>-3.2%</i>	<i>-1.5%</i>	<i>2.3%</i>	<i>3.2%</i>
Florida	Residential	44.464	39.248	38.752	43.238	50.264	55.986	59.903
	Non-res Building	20.237	18.764	20.600	22.085	23.569	24.517	25.397
	Engineering/Civil	9.852	12.031	17.615	19.122	20.110	20.960	21.735
	Total	74.554	70.043	76.967	84.444	93.944	101.463	107.034
	<i>(Yr vs previous yr % Change)</i>	<i>18.3%</i>	<i>-6.1%</i>	<i>9.9%</i>	<i>9.7%</i>	<i>11.2%</i>	<i>8.0%</i>	<i>5.5%</i>
Texas	Residential	55.654	44.566	43.830	50.421	57.385	63.728	68.157
	Non-res Building	70.657	60.928	52.291	57.991	64.885	68.936	72.054
	Engineering/Civil	28.139	32.764	34.388	37.540	39.668	41.408	43.044
	Total	154.450	138.258	130.509	145.952	161.938	174.072	183.254
	<i>(Yr vs previous yr % Change)</i>	<i>46.3%</i>	<i>-10.5%</i>	<i>-5.6%</i>	<i>11.8%</i>	<i>11.0%</i>	<i>7.5%</i>	<i>5.3%</i>
California	Residential	31.045	22.362	23.846	26.366	29.908	33.543	36.425
	Non-res Building	29.501	26.814	30.473	32.362	33.225	34.330	35.564
	Engineering/Civil	15.356	21.322	24.130	26.237	27.727	29.008	30.159
	Total	75.902	70.498	78.448	84.965	90.859	96.881	102.147
	<i>(Yr vs previous yr % Change)</i>	<i>15.8%</i>	<i>-7.1%</i>	<i>11.3%</i>	<i>8.3%</i>	<i>6.9%</i>	<i>6.6%</i>	<i>5.4%</i>

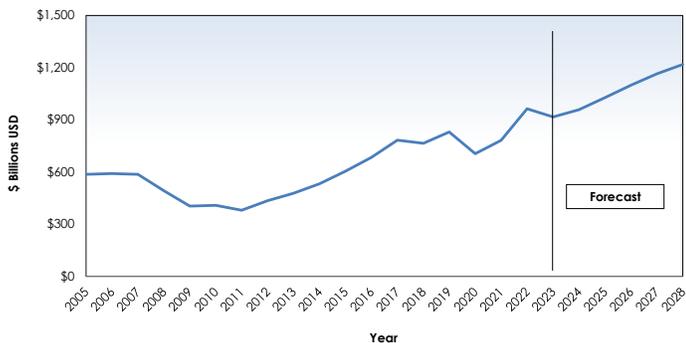
Source of actuals: ConstructConnect "Insight" / Forecasts: Oxford Economics and ConstructConnect.
Table: ConstructConnect.

Tweeted by ConstructConnect:

@ConstructConnx

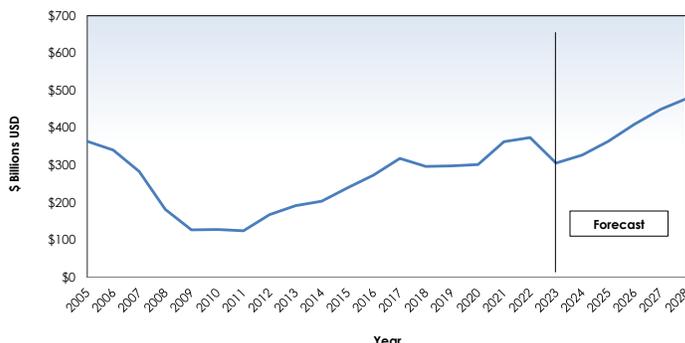
Link to article here: <http://tinyurl.com/48ujcs4z>

Graph 1: U.S. Grand Total Construction Starts — ConstructConnect



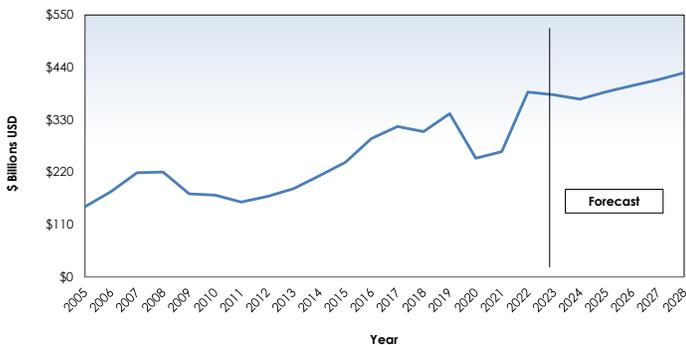
Source of actuals: ConstructConnect "Insight" / Forecasts: Oxford Economics and ConstructConnect. Chart: ConstructConnect.

Graph 2: U.S. Total Residential Construction Starts — ConstructConnect



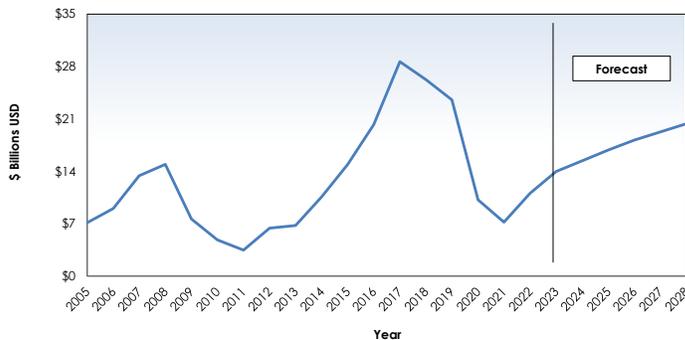
Source of actuals: ConstructConnect "Insight" / Forecasts: Oxford Economics and ConstructConnect. Chart: ConstructConnect.

Graph 3: U.S. Total Non-Residential Building Starts — ConstructConnect



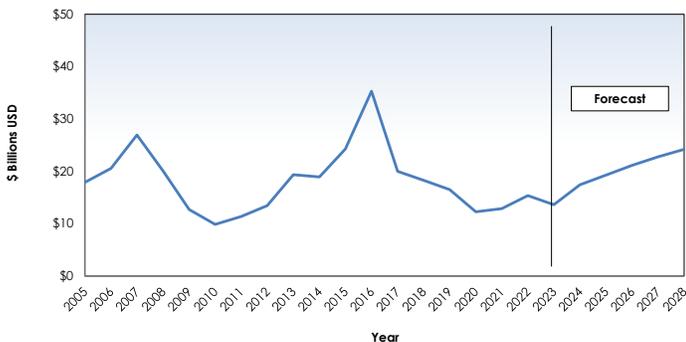
Source of actuals: ConstructConnect "Insight" / Forecasts: Oxford Economics and ConstructConnect. Chart: ConstructConnect.

Graph 4: U.S. Hotel/Motel Construction Starts — ConstructConnect



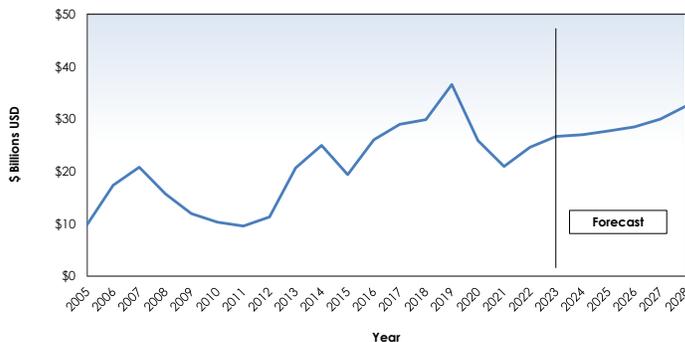
Source of actuals: ConstructConnect "Insight" / Forecasts: Oxford Economics and ConstructConnect. Chart: ConstructConnect.

Graph 5: U.S. Shopping/Retail Construction Starts — ConstructConnect



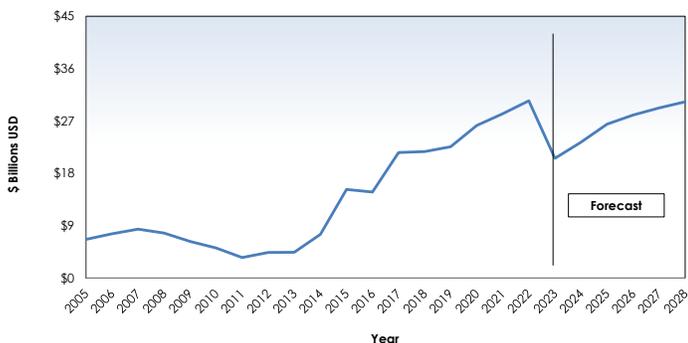
Source of actuals: ConstructConnect "Insight" / Forecasts: Oxford Economics and ConstructConnect. Chart: ConstructConnect.

Graph 6: U.S. Private Office Building Construction Starts — ConstructConnect



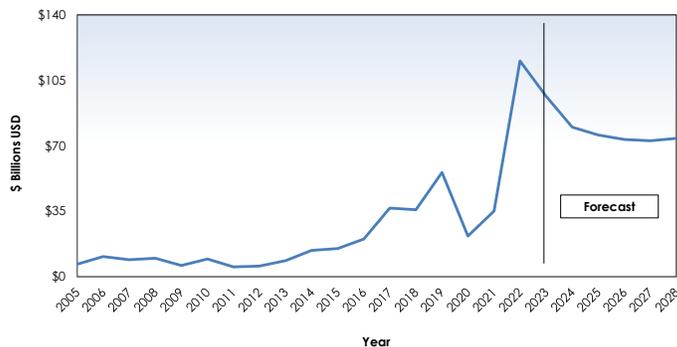
Source of actuals: ConstructConnect "Insight" / Forecasts: Oxford Economics and ConstructConnect. Chart: ConstructConnect.

Graph 7: U.S. Warehouse Construction Starts — ConstructConnect



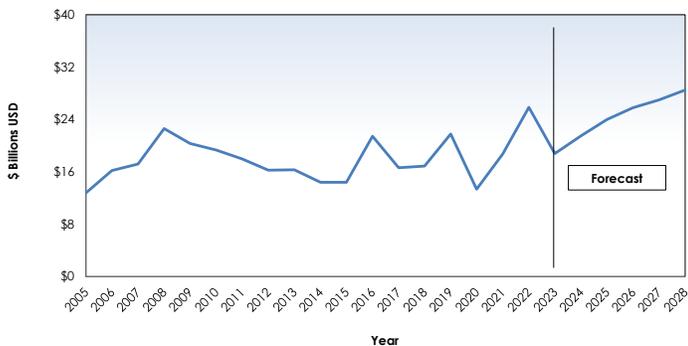
Source of actuals: ConstructConnect "Insight" / Forecasts: Oxford Economics and ConstructConnect. Chart: ConstructConnect.

Graph 8: U.S. Industrial/Manufacturing Construction Starts — ConstructConnect



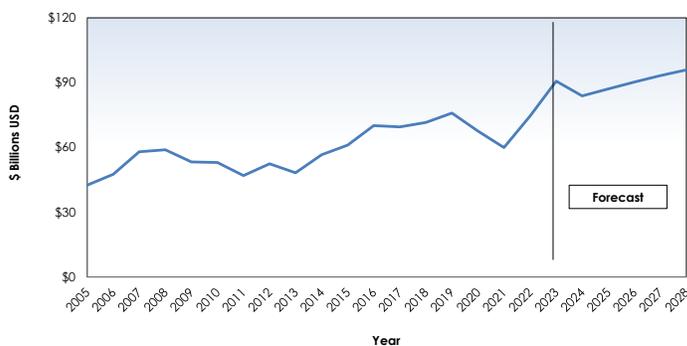
Source of actuals: ConstructConnect "Insight" / Forecasts: Oxford Economics and ConstructConnect. Chart: ConstructConnect.

Graph 9: U.S. Hospital and Clinic Construction Starts — ConstructConnect



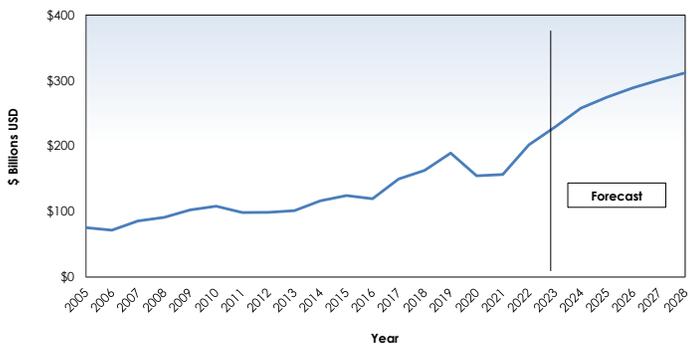
Source of actuals: ConstructConnect "Insight" / Forecasts: Oxford Economics and ConstructConnect. Chart: ConstructConnect.

Graph 10: U.S. Total Educational Construction Starts — ConstructConnect



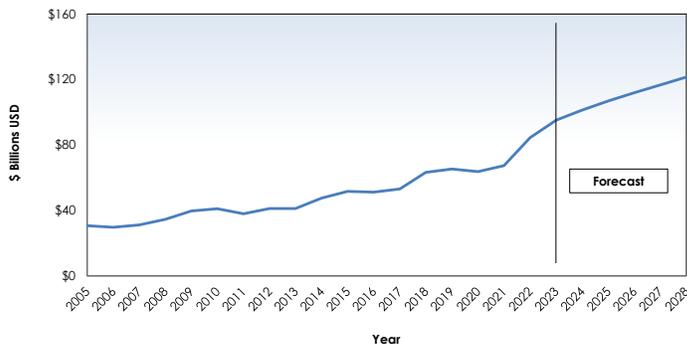
Source of actuals: ConstructConnect "Insight" / Forecasts: Oxford Economics and ConstructConnect. Chart: ConstructConnect.

Graph 11: U.S. Total Heavy Engineering/Civil Construction Starts — ConstructConnect



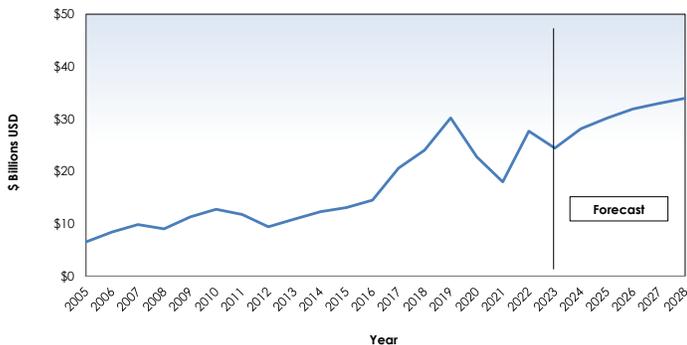
Source of actuals: ConstructConnect "Insight" / Forecasts: Oxford Economics and ConstructConnect. Chart: ConstructConnect.

Graph 12: U.S. Roadwork Construction Starts — ConstructConnect



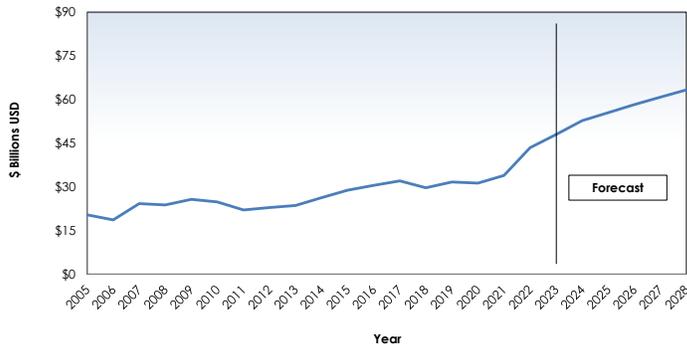
Source of actuals: ConstructConnect "Insight" / Forecasts: Oxford Economics and ConstructConnect. Chart: ConstructConnect.

Graph 13: U.S. Bridge Construction Starts — ConstructConnect



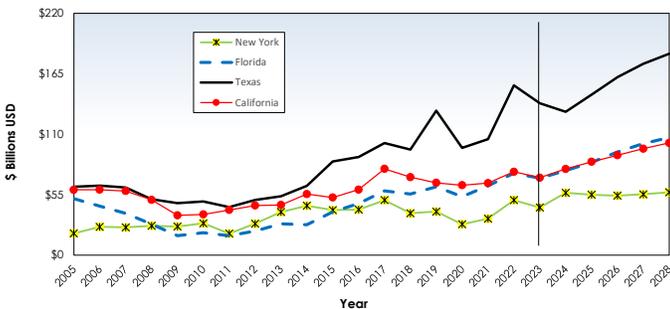
Source of actuals: ConstructConnect "Insight" / Forecasts: Oxford Economics and ConstructConnect. Chart: ConstructConnect.

Graph 14: U.S. Water and Sewage Treatment Construction Starts — ConstructConnect



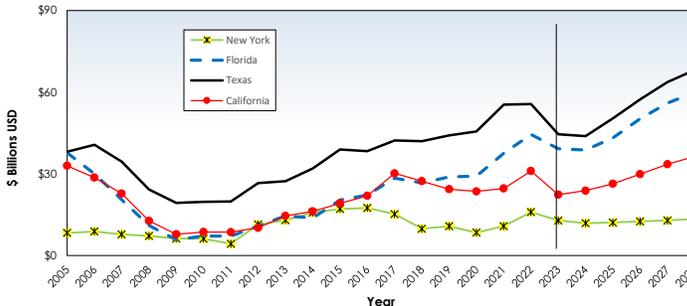
Source of actuals: ConstructConnect "Insight" / Forecasts: Oxford Economics and ConstructConnect. Chart: ConstructConnect.

Graph 15: U.S. Four Largest States (by Population): Total Construction Starts — ConstructConnect



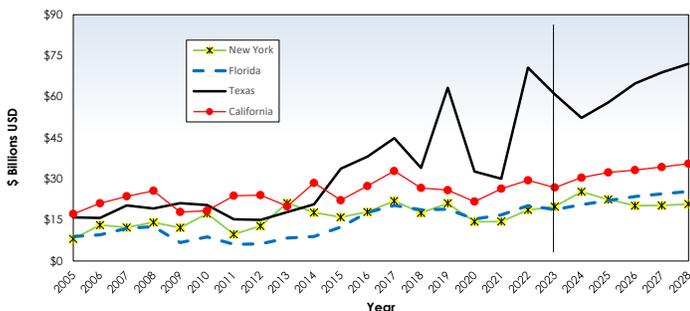
Source of actuals: ConstructConnect "Insight" / Forecasts: Oxford Economics and ConstructConnect. Chart: ConstructConnect.

Graph 16: U.S. Four Largest States: Total Residential Construction Starts — ConstructConnect



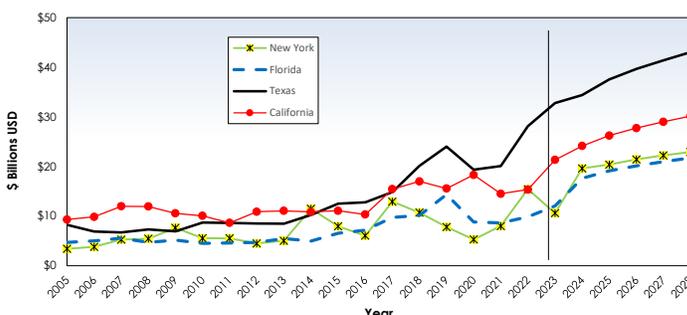
Source of actuals: ConstructConnect "Insight" / Forecasts: Oxford Economics and ConstructConnect. Chart: ConstructConnect.

Graph 17: U.S. Four Largest States: Total Non-residential Building Starts — ConstructConnect



Source of actuals: ConstructConnect "Insight" / Forecasts: Oxford Economics and ConstructConnect. Chart: ConstructConnect.

Graph 18: U.S. Four Largest States: Total Engineering/Civil Construction Starts — ConstructConnect



Source of actuals: ConstructConnect "Insight" / Forecasts: Oxford Economics and ConstructConnect. Chart: ConstructConnect.

Table 7: Canada Type-of-Structure Forecasts
(\$ Billions CAD)

	Actuals		Forecasts				
	2022	2023	2024	2025	2026	2027	2028
Single-family	15.707	11.953	12.422	14.269	16.281	18.089	19.282
Multi-family	18.780	18.154	18.905	20.825	22.882	24.450	25.491
TOTAL RESIDENTIAL	34.486	30.108	31.327	35.094	39.163	42.539	44.773
<i>(Yr/yr % change)</i>	<i>-7.0%</i>	<i>-12.7%</i>	<i>4.1%</i>	<i>12.0%</i>	<i>11.6%</i>	<i>8.6%</i>	<i>5.3%</i>
Hotels/Motels	0.131	0.627	0.500	0.577	0.663	0.720	0.757
Private Offices	0.765	0.235	0.535	0.908	1.307	1.639	1.794
Governmental Offices	5.153	2.024	2.185	2.297	2.395	2.491	2.556
Shopping/Retail	0.708	0.251	0.617	0.872	1.087	1.272	1.353
Retail Miscellaneous	0.209	0.089	0.156	0.204	0.248	0.298	0.331
Parking Garages	0.103	0.211	0.210	0.215	0.225	0.240	0.255
Amusement	2.361	3.124	2.486	2.793	3.150	3.423	3.627
Warehouses	2.290	2.854	2.568	2.763	2.886	2.994	3.071
TOTAL COMMERCIAL	11.720	9.414	9.256	10.629	11.961	13.077	13.743
<i>(Yr/yr % change)</i>	<i>44.5%</i>	<i>-19.7%</i>	<i>-1.7%</i>	<i>14.8%</i>	<i>12.5%</i>	<i>9.3%</i>	<i>5.1%</i>
TOTAL INDUSTRIAL (manufacturing)	8.507	5.673	10.861	15.680	16.469	14.545	10.930
<i>(Yr/yr % change)</i>	<i>-27.3%</i>	<i>-33.3%</i>	<i>91.5%</i>	<i>44.4%</i>	<i>5.0%</i>	<i>-11.7%</i>	<i>-24.9%</i>
Religious	0.043	0.078	0.046	0.054	0.061	0.065	0.069
Hospitals/Clinics	3.699	14.574	7.203	8.506	9.656	10.445	11.014
MED misc	0.556	0.277	0.337	0.382	0.436	0.476	0.502
Transportation Terminals*	1.629	0.379	2.547	3.276	3.193	2.769	2.555
Police/Fire	1.268	2.111	1.701	1.894	2.113	2.271	2.415
Educational Facilities	6.749	6.915	7.146	7.494	7.819	8.058	8.231
TOTAL INSTITUTIONAL	13.945	24.333	18.980	21.605	23.277	24.086	24.786
<i>(Yr/yr % change)</i>	<i>-19.0%</i>	<i>74.5%</i>	<i>-22.0%</i>	<i>13.8%</i>	<i>7.7%</i>	<i>3.5%</i>	<i>2.9%</i>
TOTAL NON-RES BUILDING	34.172	39.420	39.098	47.915	51.707	51.708	49.459
<i>(Yr/yr % change)</i>	<i>-7.7%</i>	<i>15.4%</i>	<i>-0.8%</i>	<i>22.6%</i>	<i>7.9%</i>	<i>0.0%</i>	<i>-4.4%</i>
Bridges	3.076	4.974	3.343	3.531	3.710	3.870	4.009
Dams/Canal/Marine	1.097	0.627	0.643	0.727	0.789	0.826	0.851
Water & Sewage Treatment	5.418	5.075	5.477	6.098	6.745	7.216	7.570
Roads	11.880	11.963	12.781	13.492	14.235	14.987	15.620
Power Infrastructure	3.217	3.590	6.315	8.282	9.419	10.086	10.597
All Other Civil (Oil & Gas etc.)	5.302	8.618	13.685	18.397	20.838	21.704	22.169
TOTAL ENGINEERING	29.990	34.846	42.245	50.527	55.737	58.689	60.815
<i>(Yr/yr % change)</i>	<i>4.1%</i>	<i>16.2%</i>	<i>21.2%</i>	<i>19.6%</i>	<i>10.3%</i>	<i>5.3%</i>	<i>3.6%</i>
TOTAL NON-RESIDENTIAL	64.162	74.266	81.342	98.442	107.444	110.397	110.274
<i>(Yr/yr % change)</i>	<i>-2.6%</i>	<i>15.7%</i>	<i>9.5%</i>	<i>21.0%</i>	<i>9.1%</i>	<i>2.7%</i>	<i>-0.1%</i>
GRAND TOTAL	98.649	104.374	112.669	133.536	146.606	152.937	155.047
<i>(Yr/yr % change)</i>	<i>-4.1%</i>	<i>5.8%</i>	<i>7.9%</i>	<i>18.5%</i>	<i>9.8%</i>	<i>4.3%</i>	<i>1.4%</i>

* With respect to Tables 3 and 7, 'transportation terminals' is the one type-of-structure that is categorized differently in Canada (institutional) than in the U.S. (commercial), for reasons having to do with government statistics.

EXPLANATION: Table 7 conforms to the type-of-structure ordering adopted by many firms and organizations in the industry. Specifically, it breaks non-residential building into ICI work (i.e., industrial, commercial and institutional), since each has its own set of economic and demographic drivers.

Table 8 presents an alternative, perhaps more user-friendly and intuitive, type-of-structure ordering that matches how the data appears in ConstructConnect's on-line product 'Insight'.

Source of actuals: ConstructConnect "Insight" / Forecasts: Oxford Economics and ConstructConnect.
Table: ConstructConnect.

Table 8: Canada Type-of-Structure Forecasts

Arranged to match the alphabetical category drop-down menus in INSIGHT (\$ Billions CAD)

	Actuals		Forecasts				
	2022	2023	2024	2025	2026	2027	2028
Summary							
CIVIL	29.99	34.846	42.245	50.527	55.737	58.689	60.815
NON-RESIDENTIAL BUILDING	34.172	39.420	39.098	47.915	51.707	51.708	49.459
RESIDENTIAL	34.486	30.108	31.327	35.094	39.163	42.539	44.773
GRAND TOTAL	98.649	104.374	112.669	133.536	146.606	152.937	155.047
Verticals							
All Other Civil	5.302	8.618	13.685	18.397	20.838	21.704	22.169
Bridges	3.076	4.974	3.343	3.531	3.710	3.870	4.009
Dams / Canals / Marine Work	1.097	0.627	0.643	0.727	0.789	0.826	0.851
Power Infrastructure	3.217	3.590	6.315	8.282	9.419	10.086	10.597
Roads	11.88	11.963	12.781	13.492	14.235	14.987	15.620
Water and Sewage Treatment	5.418	5.075	5.477	6.098	6.745	7.216	7.570
CIVIL	29.99	34.846	42.245	50.527	55.737	58.689	60.815
(Yr/yr % change)	4.1%	16.2%	21.2%	19.6%	10.3%	5.3%	3.6%
Offices (private)	0.765	0.235	0.535	0.908	1.307	1.639	1.794
Parking Garages	0.103	0.211	0.210	0.215	0.225	0.240	0.255
Transportation Terminals	1.629	0.379	2.547	3.276	3.193	2.769	2.555
Commercial	2.498	0.824	3.293	4.399	4.725	4.648	4.604
(Yr/yr % change)	42.4%	-67.0%	299.4%	33.6%	7.4%	-1.6%	-1.0%
Amusement	2.361	3.124	2.486	2.793	3.150	3.423	3.627
Religious	0.043	0.078	0.046	0.054	0.061	0.065	0.069
Community	2.404	3.202	2.532	2.847	3.211	3.489	3.696
(Yr/yr % change)	-10.0%	33.2%	-20.9%	12.5%	12.8%	8.6%	5.9%
Educational	6.749	6.915	7.146	7.494	7.819	8.058	8.231
(Yr/yr % change)	-4.8%	2.5%	3.3%	4.9%	4.3%	3.1%	2.1%
Fire and Police Stations	1.268	2.111	1.701	1.894	2.113	2.271	2.415
Government Offices	5.153	2.024	2.185	2.297	2.395	2.491	2.556
Government	6.421	4.135	3.886	4.191	4.508	4.762	4.971
(Yr/yr % change)	133.2%	-35.6%	-6.0%	7.9%	7.6%	5.6%	4.4%
Manufacturing	8.507	5.673	10.861	15.680	16.469	14.545	10.930
Warehouses	2.29	2.854	2.568	2.763	2.886	2.994	3.071
Industrial	10.798	8.528	13.429	18.443	19.355	17.540	14.001
(Yr/yr % change)	-23.4%	-21.0%	57.5%	37.3%	4.9%	-9.4%	-20.2%
Hospitals / Clinics	3.699	14.574	7.203	8.506	9.656	10.445	11.014
Medical Misc.	0.556	0.277	0.337	0.382	0.436	0.476	0.502
Medical	4.255	14.851	7.539	8.888	10.092	10.922	11.517
(Yr/yr % change)	-47.5%	249.0%	-49.2%	17.9%	13.5%	8.2%	5.4%
Hotels	0.131	0.627	0.500	0.577	0.663	0.720	0.757
Retail Misc.	0.209	0.089	0.156	0.204	0.248	0.298	0.331
Shopping	0.708	0.251	0.617	0.872	1.087	1.272	1.353
Retail	1.048	0.966	1.273	1.653	1.998	2.290	2.440
(Yr/yr % change)	80.6%	-7.8%	31.7%	29.9%	20.9%	14.6%	6.6%
NON-RESIDENTIAL BUILDING	34.172	39.420	39.098	47.915	51.707	51.708	49.459
(Yr/yr % change)	-7.7%	15.4%	-0.8%	22.6%	7.9%	0.0%	-4.4%
Multi-Family	18.780	18.154	18.905	20.825	22.882	24.450	25.491
Single-Family	15.707	11.953	12.422	14.269	16.281	18.089	19.282
RESIDENTIAL	34.486	30.108	31.327	35.094	39.163	42.539	44.773
(Yr/yr % change)	-7.0%	-12.7%	4.1%	12.0%	11.6%	8.6%	5.3%
TOTAL NON-RESIDENTIAL	64.162	74.266	81.342	98.442	107.444	110.397	110.274
(Yr/yr % change)	-2.6%	15.7%	9.5%	21.0%	9.1%	2.7%	-0.1%
GRAND TOTAL	98.649	104.374	112.669	133.536	146.606	152.937	155.047
(Yr/yr % change)	-4.1%	5.8%	7.9%	18.5%	9.8%	4.3%	1.4%

EXPLANATION: Table 7 conforms to the type-of-structure ordering adopted by many firms and organizations in the industry. Specifically, it breaks non-residential building into ICI work (i.e., industrial, commercial and institutional), since each has its own set of economic and demographic drivers.

Table 8 presents an alternative, perhaps more user-friendly and intuitive, type-of-structure ordering that matches how the data appears in ConstructConnect's on-line product 'Insight'.

Source of actuals: ConstructConnect "Insight" / Forecasts: Oxford Economics and ConstructConnect / Table: ConstructConnect.

Table 9: Canadian Provinces, Total Construction Starts — ConstructConnect

Regions/Provinces (East to West)	Actuals (Level in \$ Millions CAD)	Forecasts (Year versus previous year % change)				
	2023	2024	2025	2026	2027	2028
Atlantic region	\$4,331	58.7%	7.8%	11.4%	4.1%	0.5%
Quebec	\$21,110	5.4%	7.3%	4.6%	7.2%	2.9%
Ontario	\$35,184	2.3%	14.1%	8.5%	2.8%	1.1%
Manitoba	\$2,507	6.1%	10.8%	18.7%	7.6%	3.3%
Saskatchewan	\$2,462	12.3%	49.2%	4.3%	5.5%	0.2%
Alberta	\$14,314	28.7%	26.6%	17.7%	6.0%	3.4%
British Columbia	\$24,466	-3.1%	29.9%	9.0%	2.4%	-0.9%
Canada	\$104,374	7.9%	18.5%	9.8%	4.3%	1.4%

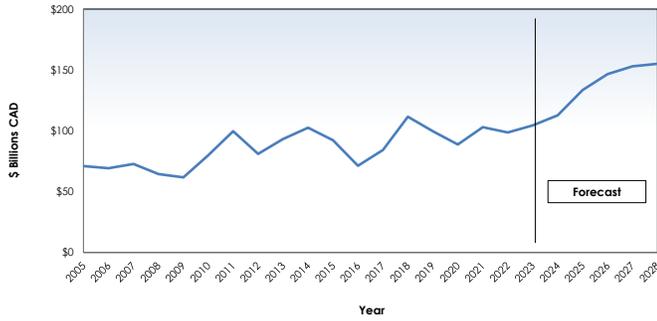
Source of actuals: ConstructConnect "Insight" / Forecasts: Oxford Economics and ConstructConnect.
Table: ConstructConnect.

Table 10: Canada Four Largest Provinces: Type-of-Structure Forecasts
(\$ Billions CAD)

		Actuals		Forecasts				
		2022	2023	2024	2025	2026	2027	2028
Quebec	Residential	4.847	2.884	4.406	4.579	5.318	6.164	6.572
	Non-res Building	7.225	8.398	8.676	9.697	10.005	10.446	10.437
	Engineering/Civil	7.679	9.827	9.160	9.594	9.655	10.158	10.534
	Total	19.751	21.110	22.242	23.870	24.978	26.768	27.544
<i>(Yr vs previous yr % Change)</i>		-10.5%	6.9%	5.4%	7.3%	4.6%	7.2%	2.9%
Ontario	Residential	13.861	13.086	12.509	14.300	15.925	16.711	17.392
	Non-res Building	16.797	14.928	12.353	14.443	15.515	15.315	14.574
	Engineering/Civil	8.442	7.170	11.122	12.305	13.086	13.748	14.314
	Total	39.100	35.184	35.983	41.048	44.526	45.774	46.280
<i>(Yr vs previous yr % Change)</i>		21.9%	-10.0%	2.3%	14.1%	8.5%	2.8%	1.1%
Alberta	Residential	4.601	4.891	5.139	6.105	7.047	7.710	8.233
	Non-res Building	3.740	3.706	4.666	5.950	6.417	6.616	6.543
	Engineering/Civil	7.645	5.716	8.619	11.275	14.001	14.788	15.323
	Total	15.986	14.314	18.424	23.330	27.465	29.114	30.099
<i>(Yr vs previous yr % Change)</i>		-0.8%	-10.5%	28.7%	26.6%	17.7%	6.0%	3.4%
British Columbia	Residential	8.173	6.857	7.823	8.342	8.796	9.558	10.003
	Non-res Building	4.141	8.932	8.228	11.172	12.334	11.681	10.476
	Engineering/Civil	2.507	8.677	7.667	11.288	12.451	13.143	13.577
	Total	14.821	24.466	23.719	30.802	33.581	34.382	34.056
<i>(Yr vs previous yr % Change)</i>		-5.2%	65.1%	-3.1%	29.9%	9.0%	2.4%	-0.9%

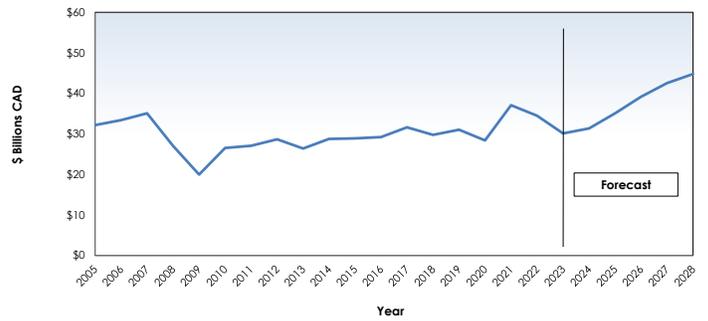
Source of actuals: ConstructConnect "Insight" / Forecasts: Oxford Economics and ConstructConnect.
Table: ConstructConnect.

Graph 19: Canadian Grand Total Construction Starts — ConstructConnect



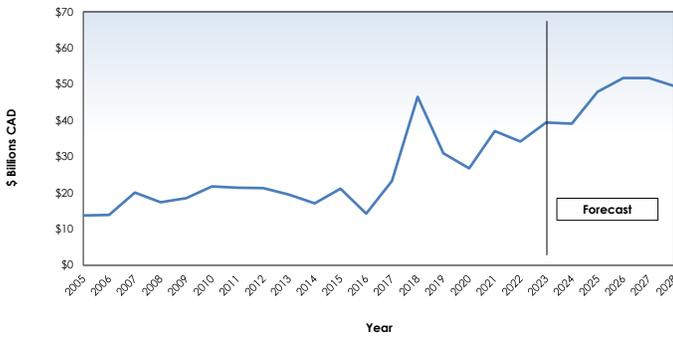
Source of actuals: ConstructConnect "Insight" / Forecasts: Oxford Economics and ConstructConnect. Chart: ConstructConnect.

Graph 20: Canadian Residential Construction Starts — ConstructConnect



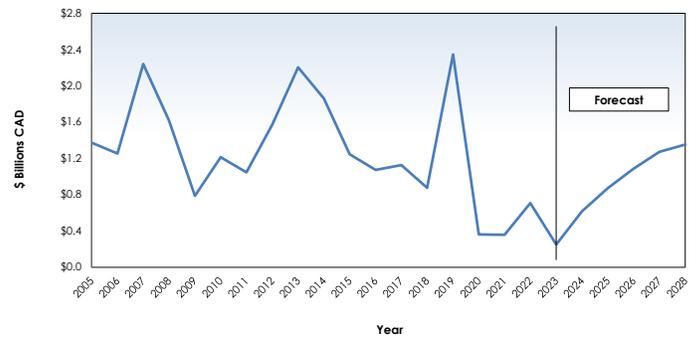
Source of actuals: ConstructConnect "Insight" / Forecasts: Oxford Economics and ConstructConnect. Chart: ConstructConnect.

Graph 21: Canadian Non-Residential Building Starts — ConstructConnect



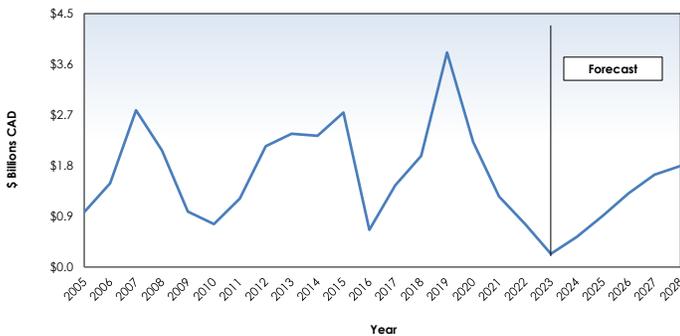
Source of actuals: ConstructConnect "Insight" / Forecasts: Oxford Economics and ConstructConnect. Chart: ConstructConnect.

Graph 22: Canadian Shopping/Retail Construction Starts — ConstructConnect



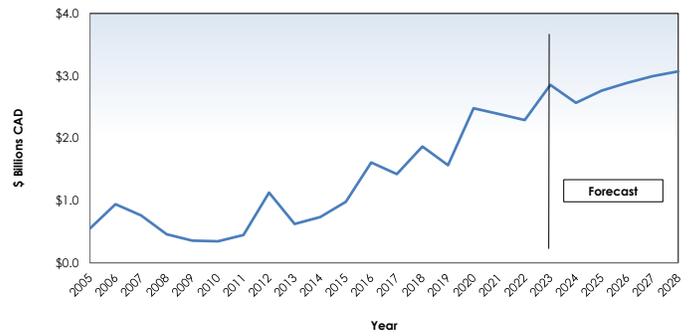
Source of actuals: ConstructConnect "Insight" / Forecasts: Oxford Economics and ConstructConnect. Chart: ConstructConnect.

Graph 23: Canadian Private Offices Construction Starts — ConstructConnect



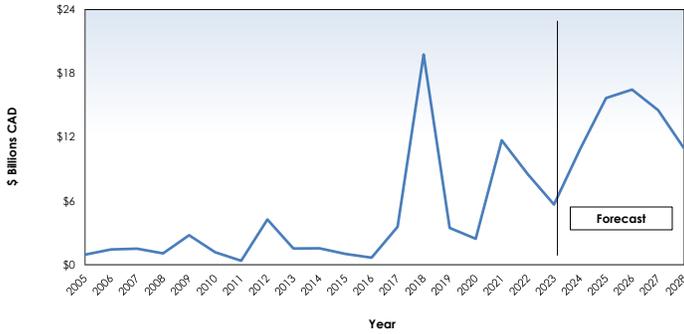
Source of actuals: ConstructConnect "Insight" / Forecasts: Oxford Economics and ConstructConnect. Chart: ConstructConnect.

Graph 24: Canadian Warehouse Construction Starts — ConstructConnect



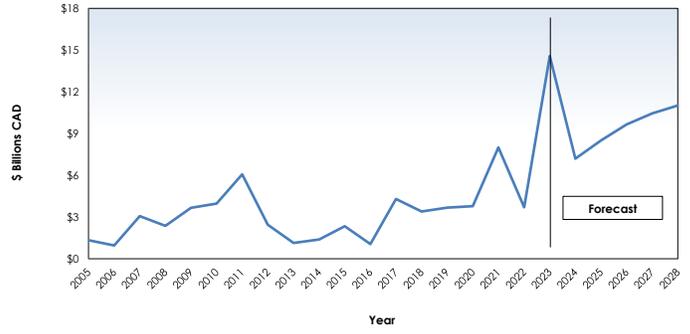
Source of actuals: ConstructConnect "Insight" / Forecasts: Oxford Economics and ConstructConnect. Chart: ConstructConnect.

Graph 25: Canadian Industrial/Manufacturing Construction Starts — ConstructConnect



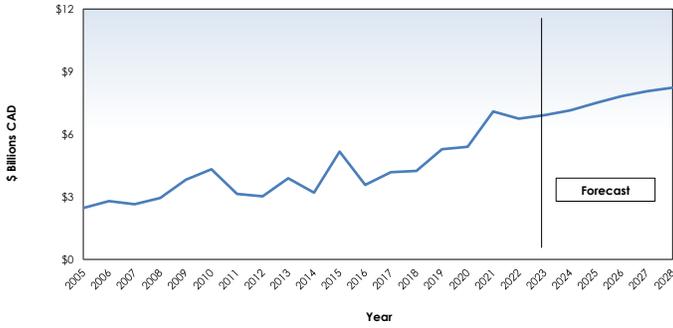
Source of actuals: ConstructConnect "Insight" / Forecasts: Oxford Economics and ConstructConnect. Chart: ConstructConnect.

Graph 26: Canadian Hospital/Clinic Construction Starts — ConstructConnect



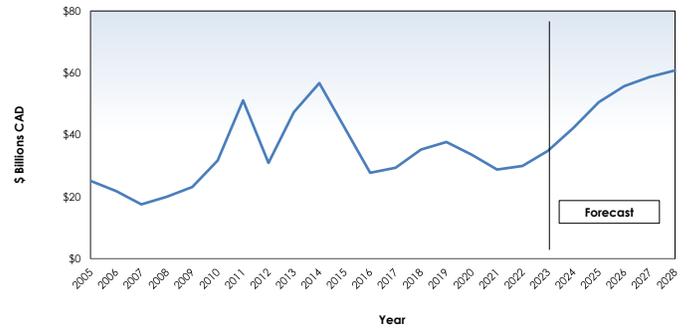
Source of actuals: ConstructConnect "Insight" / Forecasts: Oxford Economics and ConstructConnect. Chart: ConstructConnect.

Graph 27: Canadian Education Construction Starts — ConstructConnect



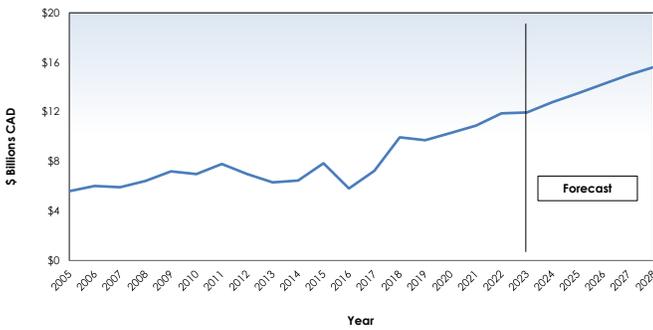
Source of actuals: ConstructConnect "Insight" / Forecasts: Oxford Economics and ConstructConnect. Chart: ConstructConnect.

Graph 28: Canadian Engineering Construction Starts — ConstructConnect



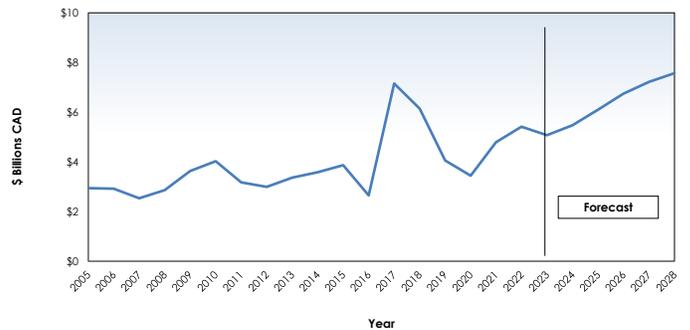
Source of actuals: ConstructConnect "Insight" / Forecasts: Oxford Economics and ConstructConnect. Chart: ConstructConnect.

Graph 29: Canadian Roadwork Construction Starts — ConstructConnect



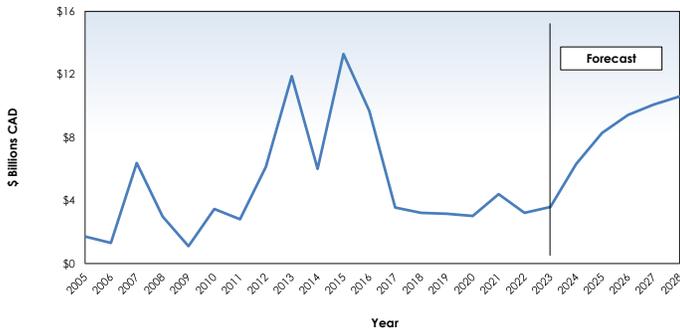
Source of actuals: ConstructConnect "Insight" / Forecasts: Oxford Economics and ConstructConnect. Chart: ConstructConnect.

Graph 30: Canadian Water and Sewage Construction Starts — ConstructConnect



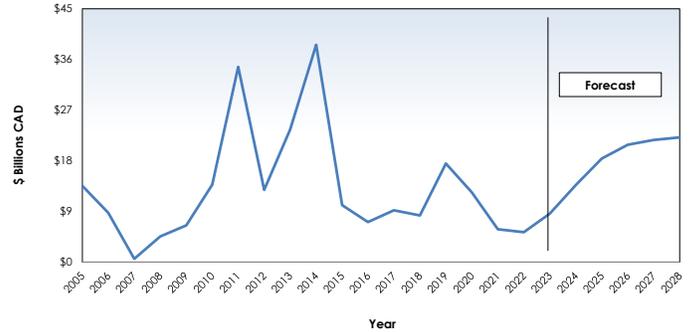
Source of actuals: ConstructConnect "Insight" / Forecasts: Oxford Economics and ConstructConnect. Chart: ConstructConnect.

Graph 31: Canadian Power Infrastructure Construction Starts — ConstructConnect



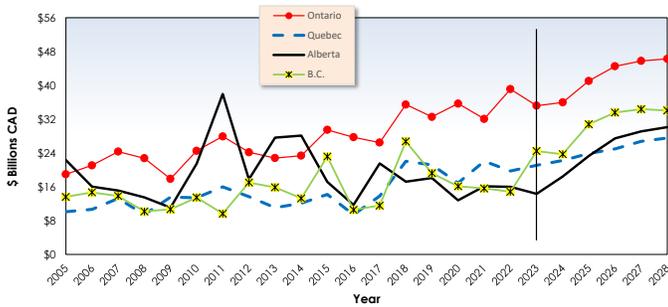
Source of actuals: ConstructConnect "Insight" / Forecasts: Oxford Economics and ConstructConnect. Chart: ConstructConnect.

Graph 32: Canada All Other Civil (Oil Sands, Tunnels, RRs) Construction Starts — ConstructConnect



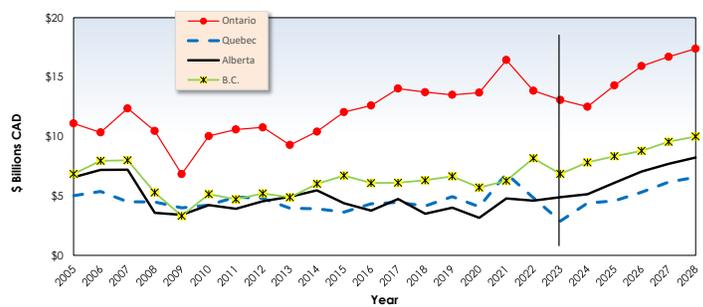
Source of actuals: ConstructConnect "Insight" / Forecasts: Oxford Economics and ConstructConnect. Chart: ConstructConnect.

Graph 33: Canada Four Largest Provinces (by Population): Total Construction Starts — ConstructConnect



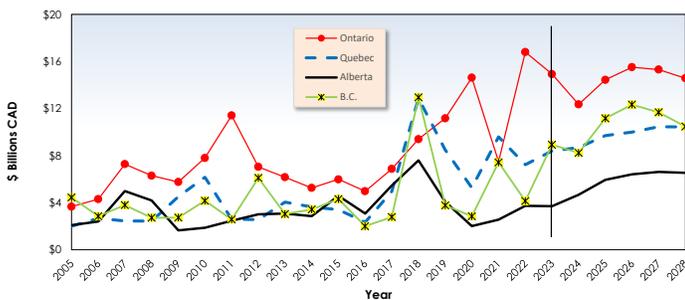
Source of actuals: ConstructConnect "Insight" / Forecasts: Oxford Economics and ConstructConnect. Chart: ConstructConnect.

Graph 34: Canada Four Largest Provinces: Total Residential Construction Starts — ConstructConnect



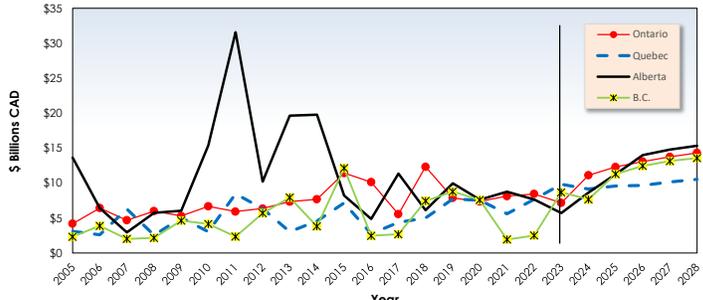
Source of actuals: ConstructConnect "Insight" / Forecasts: Oxford Economics and ConstructConnect. Chart: ConstructConnect.

Graph 35: Canada Four Largest Provinces: Total Non-residential Building Starts — ConstructConnect



Source of actuals: ConstructConnect "Insight" / Forecasts: Oxford Economics and ConstructConnect. Chart: ConstructConnect.

Graph 36: Canada Four Largest Provinces: Total Engineering/Civil Construction Starts — ConstructConnect



Source of actuals: ConstructConnect "Insight" / Forecasts: Oxford Economics and ConstructConnect. Chart: ConstructConnect.

Table 11: U.S. Type-of-Structure Forecasts
(Square Feet Millions)

	Actuals		Forecasts				
	2022	2023	2024	2025	2026	2027	2028
Single-family	1,860.1	1,676.9	1,802.4	1,976.2	2,174.5	2,381.3	2,530.2
Multi-family	765.1	481.0	506.0	583.4	682.3	752.7	804.1
TOTAL RESIDENTIAL	2,625.2	2,157.9	2,308.4	2,559.6	2,856.8	3,134.0	3,334.3
<i>(Yr/yr % change)</i>	<i>-3.0%</i>	<i>-17.8%</i>	<i>7.0%</i>	<i>10.9%</i>	<i>11.6%</i>	<i>9.7%</i>	<i>6.4%</i>
Hotels/Motels	43.8	42.3	46.6	56.2	65.7	74.7	84.7
Shopping/Retail	55.3	42.3	59.3	74.2	88.7	103.4	120.3
Parking Garages	20.4	15.0	17.6	20.9	24.1	27.0	30.0
Amusement	22.0	22.8	25.0	27.5	31.0	32.5	34.0
Private Offices	84.6	68.7	69.0	74.8	86.3	97.1	106.1
Governmental Offices	16.8	17.5	16.2	19.3	20.8	22.2	23.5
Laboratories (Schools & Industrial)	9.6	9.2	9.5	9.7	10.1	10.5	10.8
Warehouses	256.0	162.8	179.9	206.1	218.9	228.6	236.9
Sports Stadium/Convention Center	15.1	16.3	16.6	18.2	18.3	17.9	17.9
Transportation Terminals	6.3	6.6	10.6	13.5	14.2	13.9	12.5
TOTAL COMMERCIAL	529.9	403.4	450.3	520.5	578.1	627.8	676.7
<i>(Yr/yr % change)</i>	<i>5.9%</i>	<i>-23.9%</i>	<i>11.6%</i>	<i>15.6%</i>	<i>11.1%</i>	<i>8.6%</i>	<i>7.8%</i>
TOTAL INDUSTRIAL (manufacturing)	212.5	119.7	104.0	103.0	103.0	105.0	108.0
<i>(Yr/yr % change)</i>	<i>130.0%</i>	<i>-43.7%</i>	<i>-13.1%</i>	<i>-1.0%</i>	<i>0.0%</i>	<i>1.9%</i>	<i>2.9%</i>
Religious	3.0	2.2	2.9	3.6	4.3	5.1	6.1
Hospitals/Clinics	27.3	19.9	25.8	33.5	40.4	47.5	53.6
Nursing Homes/Assisted Living	16.5	7.8	11.9	15.2	19.2	24.1	29.1
Libraries/Museums	3.1	4.5	3.8	3.9	4.1	4.2	4.4
Courthouse	1.9	2.6	2.0	2.6	3.0	3.4	3.7
Police/Fire	8.2	9.9	9.9	10.3	10.8	11.3	11.7
Prisons	4.2	7.8	4.1	5.1	6.0	6.6	7.2
Military	10.8	21.5	18.5	18.6	19.3	20.2	21.0
Educational Facilities	140.7	152.3	145.1	151.2	157.1	164.0	169.3
MED misc	18.8	13.5	17.9	18.8	19.6	20.4	20.9
TOTAL INSTITUTIONAL	234.5	241.9	241.8	262.7	283.9	306.9	327.0
<i>(Yr/yr % change)</i>	<i>2.8%</i>	<i>3.2%</i>	<i>0.0%</i>	<i>8.7%</i>	<i>8.1%</i>	<i>8.1%</i>	<i>6.6%</i>
Miscellaneous Non-Res Building	22.4	19.0	20.9	22.2	23.6	24.7	25.6
TOTAL NON-RES BLDG	999.2	784.1	817.0	908.3	988.6	1,064.4	1,137.2
<i>(Yr/yr % change)</i>	<i>18.7%</i>	<i>-21.5%</i>	<i>4.2%</i>	<i>11.2%</i>	<i>8.8%</i>	<i>7.7%</i>	<i>6.8%</i>
RESIDENTIAL + NON-RES BLDG	3,624.4	2,942.0	3,125.3	3,467.9	3,845.4	4,198.4	4,471.6
<i>(Yr/yr % change)</i>	<i>2.1%</i>	<i>-18.8%</i>	<i>6.2%</i>	<i>11.0%</i>	<i>10.9%</i>	<i>9.2%</i>	<i>6.5%</i>

EXPLANATION: Table 11 conforms to the type-of-structure ordering adopted by many firms and organizations in the industry. Specifically, it breaks non-residential building into ICI work (i.e., industrial, commercial and institutional), since each has its own set of economic and demographic drivers.

Table 12 presents an alternative, perhaps more user-friendly and intuitive, type-of-structure ordering that matches how the data appears in ConstructConnect's on-line product 'Insight'.

The square footage forecasts are largely determined by dividing the dollar value forecasts by an average dollar-per-square-foot value. The underlying dollar-per-square-foot calculation is based on the most relevant of current data. While the projected dollar values are generated through econometric modeling driven by key economic and demographic variables, both the dollar value and square footage forecasts also allow for discretionary overrides when warranted by extraordinary circumstances, such as unique mega project start-ups.

Source of actuals: ConstructConnect "Insight" / Forecasts: Oxford Economics and ConstructConnect / Table: ConstructConnect.

Table 12: U.S. Type-of-Structure Forecasts

Arranged to match the alphabetical category drop-down menus in INSIGHT (Square Feet Millions)

	Actuals		Forecasts				
	2022	2023	2024	2025	2026	2027	2028
Summary							
NON-RESIDENTIAL BUILDING	999.2	784.1	817.0	908.3	988.6	1,064.4	1,137.2
RESIDENTIAL	2,625.2	2,157.9	2,308.4	2,559.6	2,856.8	3,134.0	3,334.3
RESIDENTIAL + NON-RESIDENTIAL BUILDING	3,624.4	2,942.0	3,125.3	3,467.9	3,845.4	4,198.4	4,471.6
Verticals							
Offices (private)	84.6	68.7	69.0	74.8	86.3	97.1	106.1
Parking Garages	20.4	15.0	17.6	20.9	24.1	27.0	30.0
Transportation Terminals	6.3	6.6	10.6	13.5	14.2	13.9	12.5
Commercial	111.3	90.3	97.2	109.2	124.5	138.0	148.6
(Yr/Yr % change)	16.9%	-18.9%	7.7%	12.4%	14.0%	10.9%	7.7%
Amusement	22.0	22.8	25.0	27.5	31.0	32.5	34.0
Libraries / Museums	3.1	4.5	3.8	3.9	4.1	4.2	4.4
Religious	3.0	2.2	2.9	3.6	4.3	5.1	6.1
Sports Arenas / Convention Centers	15.1	16.3	16.6	18.2	18.3	17.9	17.9
Community	43.2	45.8	48.2	53.2	57.7	59.8	62.4
(Yr/Yr % change)	-6.9%	5.9%	5.4%	10.2%	8.5%	3.6%	4.4%
College / University	30.8	39.6	33.0	34.8	36.9	38.9	40.8
Elementary / Pre School	43.9	44.9	47.3	48.5	49.9	51.8	53.8
Jr / Sr High School	60.7	63.6	60.6	63.2	65.3	68.1	69.4
Special / Vocational	5.3	4.1	4.2	4.7	5.0	5.3	5.4
Educational	140.7	152.3	145.1	151.2	157.1	164.0	169.3
(Yr/Yr % change)	14.9%	8.2%	-4.7%	4.2%	3.9%	4.4%	3.2%
Courthouses	1.9	2.6	2.0	2.6	3.0	3.4	3.7
Fire and Police Stations	8.2	9.9	9.9	10.3	10.8	11.3	11.7
Government Offices	16.8	17.5	16.2	19.3	20.8	22.2	23.5
Prisons	4.2	7.8	4.1	5.1	6.0	6.6	7.2
Government	31.1	37.9	32.1	37.3	40.7	43.4	46.1
(Yr/Yr % change)	4.7%	21.7%	-15.1%	16.0%	9.1%	6.7%	6.1%
Industrial Labs / Labs / School Labs	9.6	9.2	9.5	9.7	10.1	10.5	10.8
Manufacturing	212.5	119.7	104.0	103.0	103.0	105.0	108.0
Warehouses	256.0	162.8	179.9	206.1	218.9	228.6	236.9
Industrial	478.1	291.7	293.4	318.8	332.1	344.1	355.7
(Yr/Yr % change)	30.9%	-39.0%	0.6%	8.7%	4.2%	3.6%	3.4%
Hospitals / Clinics	27.3	19.9	25.8	33.5	40.4	47.5	53.6
Medical Misc.	18.8	13.5	17.9	18.8	19.6	20.4	20.9
Nursing Homes	16.5	7.8	11.9	15.2	19.2	24.1	29.1
Medical	62.6	41.1	55.6	67.5	79.3	92.0	103.6
(Yr/Yr % change)	0.0%	-34.3%	35.3%	21.3%	17.4%	16.1%	12.6%
Military	10.8	21.5	18.5	18.6	19.3	20.2	21.0
(Yr/Yr % change)	-45.7%	98.3%	-13.8%	0.5%	3.7%	4.6%	4.2%
Hotels	43.8	42.3	46.6	56.2	65.7	74.7	84.7
Retail Misc.	22.4	19.0	20.9	22.2	23.6	24.7	25.6
Shopping	55.3	42.3	59.3	74.2	88.7	103.4	120.3
Retail	121.5	103.6	126.8	152.6	178.0	202.8	230.5
(Yr/Yr % change)	20.7%	-14.7%	22.4%	20.3%	16.6%	14.0%	13.6%
NON-RESIDENTIAL BUILDING	999.2	784.1	817.0	908.3	988.6	1,064.4	1,137.2
(Yr/Yr % change)	18.7%	-21.5%	4.2%	11.2%	8.8%	7.7%	6.8%
Multi-Family	765.1	481.0	506.0	583.4	682.3	752.7	804.1
Single-Family	1,860.1	1,676.9	1,802.4	1,976.2	2,174.5	2,381.3	2,530.2
RESIDENTIAL	2,625.2	2,157.9	2,308.4	2,559.6	2,856.8	3,134.0	3,334.3
(Yr/Yr % change)	-3.0%	-17.8%	7.0%	10.9%	11.6%	9.7%	6.4%
RESIDENTIAL + NON-RESIDENTIAL BUILDING	3,624.4	2,942.0	3,125.3	3,467.9	3,845.4	4,198.4	4,471.6
(Yr/Yr % change)	2.1%	-18.8%	6.2%	11.0%	10.9%	9.2%	6.5%

EXPLANATION: Table 11 conforms to the type-of-structure ordering adopted by many firms and organizations in the industry. Specifically, it breaks non-residential building into ICI work (i.e., industrial, commercial and institutional), since each has its own set of economic and demographic drivers.

Table 12 presents an alternative, perhaps more user-friendly and intuitive, type-of-structure ordering that matches how the data appears in ConstructConnect's on-line product 'Insight'.

Source of actuals: ConstructConnect "Insight" / Forecasts: Oxford Economics and ConstructConnect / Table: ConstructConnect.

Table 13: Canada Type-of-Structure Forecasts
(Square Feet Millions)

	Actuals		Forecasts				
	2022	2023	2024	2025	2026	2027	2028
Single-family	135.4	103.1	107.1	123.0	140.4	156.0	166.2
Multi-family	88.2	80.2	81.7	91.2	100.5	107.5	112.1
TOTAL RESIDENTIAL	223.62	183.2	188.8	214.2	240.9	263.5	278.3
<i>(Yr/yr % change)</i>	<i>-7.8%</i>	<i>-18.1%</i>	<i>3.0%</i>	<i>13.4%</i>	<i>12.4%</i>	<i>9.4%</i>	<i>5.6%</i>
Hotels/Motels	0.5	1.3	1.0	1.4	1.8	2.3	2.6
Private Offices	3.1	0.6	1.0	1.8	2.9	4.3	5.9
Governmental Offices	1.5	1.4	1.6	1.7	1.8	1.8	1.9
Shopping/Retail	3.6	1.2	3.2	4.9	6.6	7.8	9.1
Retail Miscellaneous	0.7	0.3	0.4	0.6	0.7	0.8	0.9
Parking Garages	0.2	0.8	0.8	0.8	0.8	0.9	1.0
Amusement	3.4	4.2	3.2	3.8	4.5	5.2	5.8
Warehouses	15.7	15.2	12.9	14.4	15.1	15.7	16.1
TOTAL COMMERCIAL	28.9	25.1	24.1	29.3	34.2	38.8	43.4
<i>(Yr/yr % change)</i>	<i>-0.8%</i>	<i>-13.0%</i>	<i>-4.2%</i>	<i>21.6%</i>	<i>16.8%</i>	<i>13.5%</i>	<i>11.9%</i>
TOTAL INDUSTRIAL (manufacturing)	7.5	5.9	7.6	9.0	9.2	8.3	7.3
<i>(Yr/yr % change)</i>	<i>32.7%</i>	<i>-21.2%</i>	<i>28.6%</i>	<i>18.3%</i>	<i>2.7%</i>	<i>-10.2%</i>	<i>-11.0%</i>
Religious	0.1	0.1	0.1	0.2	0.2	0.3	0.3
Hospitals/Clinics	5.8	13.5	8.7	9.5	10.6	11.4	12.0
MED misc	1.3	0.3	0.5	0.6	0.7	0.9	1.0
Transportation Terminals*	1.1	0.1	1.1	1.5	1.5	1.3	1.2
Police/Fire	1.5	2.6	2.0	2.1	2.4	2.5	2.7
Educational Facilities	10.7	10.2	11.5	12.1	12.7	13.3	13.8
TOTAL INSTITUTIONAL	20.5	27.0	23.8	26.0	28.1	29.6	30.9
<i>(Yr/yr % change)</i>	<i>-24.5%</i>	<i>31.6%</i>	<i>-11.5%</i>	<i>9.2%</i>	<i>7.9%</i>	<i>5.4%</i>	<i>4.4%</i>
TOTAL NON-RES BLDG	56.8	58.0	55.5	64.3	71.5	76.7	81.7
<i>(Yr/yr % change)</i>	<i>-8.1%</i>	<i>2.0%</i>	<i>-4.3%</i>	<i>15.8%</i>	<i>11.3%</i>	<i>7.2%</i>	<i>6.5%</i>
RESIDENTIAL + NON-RES BLDG	280.4	241.2	244.3	278.5	312.4	340.1	360.0
<i>(Yr/yr % change)</i>	<i>-7.9%</i>	<i>-14.0%</i>	<i>1.3%</i>	<i>14.0%</i>	<i>12.2%</i>	<i>8.9%</i>	<i>5.8%</i>

* With respect to Tables 11 and 13, 'transportation terminals' is the one type-of-structure that is categorized differently in Canada (institutional) than in the U.S. (commercial), for reasons having to do with government statistics.

EXPLANATION: Table 13 conforms to the type-of-structure ordering adopted by many firms and organizations in the industry. Specifically, it breaks non-residential building into ICI work (i.e., industrial, commercial and institutional), since each has its own set of economic and demographic drivers.

Table 14 presents an alternative, perhaps more user-friendly and intuitive, type-of-structure ordering that matches how the data appears in ConstructConnect's on-line product 'Insight'.

Source of actuals: ConstructConnect "Insight" / Forecasts: Oxford Economics and ConstructConnect / Table: ConstructConnect.

Table 14: Canada Type-of-Structure Forecasts
 Arranged to match the alphabetical category drop-down menus in INSIGHT (Square Feet Millions)

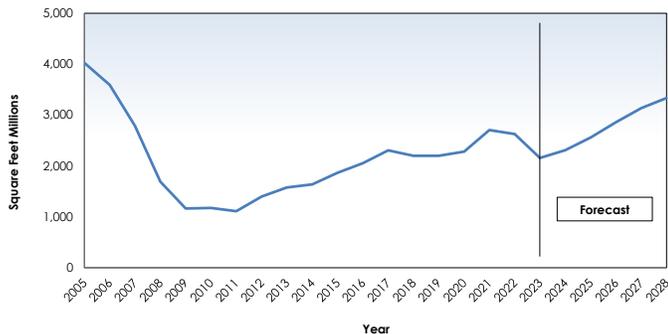
	Actuals		Forecasts				
	2022	2023	2024	2025	2026	2027	2028
Summary							
NON-RESIDENTIAL BUILDING	56.8	58.0	55.5	64.3	71.5	76.7	81.7
RESIDENTIAL	223.6	183.2	188.8	214.2	240.9	263.5	278.3
RESIDENTIAL + NON-RESIDENTIAL BUILDING	280.4	241.2	244.3	278.5	312.4	340.1	360.0
Verticals							
Offices (private)	3.1	0.6	1.0	1.8	2.9	4.3	5.9
Parking Garages	0.2	0.8	0.8	0.8	0.8	0.9	1.0
Transportation Terminals	1.1	0.1	1.1	1.5	1.5	1.3	1.2
Commercial	4.5	1.6	2.9	4.1	5.3	6.5	8.2
(Yr/Yr % change)	-25.8%	-65.7%	85.7%	41.5%	29.5%	24.0%	25.7%
Amusement	3.4	4.2	3.2	3.8	4.5	5.2	5.8
Religious	0.1	0.1	0.1	0.2	0.2	0.3	0.3
Community	3.5	4.3	3.4	4.0	4.7	5.5	6.1
(Yr/Yr % change)	-15.4%	22.7%	-21.9%	19.1%	17.7%	16.2%	11.1%
Educational	10.7	10.2	11.5	12.1	12.7	13.3	13.8
(Yr/Yr % change)	-23.3%	-4.8%	12.0%	5.7%	5.0%	4.5%	3.6%
Fire and Police Stations	1.5	2.6	2.0	2.1	2.4	2.5	2.7
Government Offices	1.5	1.4	1.6	1.7	1.8	1.8	1.9
Government	2.9	4.1	3.5	3.8	4.1	4.4	4.6
(Yr/Yr % change)	-1.1%	37.6%	-12.8%	7.8%	8.1%	5.8%	5.8%
Manufacturing	7.5	5.9	7.6	9.0	9.2	8.3	7.3
Warehouses	15.7	15.2	12.9	14.4	15.1	15.7	16.1
Industrial	23.2	21.1	20.5	23.3	24.3	24.0	23.5
(Yr/Yr % change)	15.0%	-9.0%	-3.0%	13.8%	4.3%	-1.4%	-2.1%
Hospitals / Clinics	5.8	13.5	8.7	9.5	10.6	11.4	12.0
Medical Misc.	1.3	0.3	0.5	0.6	0.7	0.9	1.0
Medical	7.1	13.9	9.2	10.1	11.3	12.3	13.0
(Yr/Yr % change)	-34.3%	96.7%	-34.1%	10.2%	12.0%	8.3%	5.9%
Hotels	0.5	1.3	1.0	1.4	1.8	2.3	2.6
Retail Misc.	0.7	0.3	0.4	0.6	0.7	0.8	0.9
Shopping	3.6	1.2	3.2	4.9	6.6	7.8	9.1
Retail	4.8	2.8	4.6	6.9	9.1	10.8	12.6
(Yr/Yr % change)	29.6%	-41.5%	62.8%	48.8%	31.9%	19.3%	16.1%
NON-RESIDENTIAL BUILDING	56.8	58.0	55.5	64.3	71.5	76.7	81.7
(Yr/Yr % change)	-8.1%	2.0%	-4.3%	15.8%	11.3%	7.2%	6.5%
Multi-Family	88.2	80.2	81.7	91.2	100.5	107.5	112.1
Single-Family	135.4	103.1	107.1	123.0	140.4	156.0	166.2
RESIDENTIAL	223.6	183.2	188.8	214.2	240.9	263.5	278.3
(Yr/Yr % change)	-7.8%	-18.1%	3.0%	13.4%	12.4%	9.4%	5.6%
RESIDENTIAL + NON-RESIDENTIAL BUILDING	280.4	241.2	244.3	278.5	312.4	340.1	360.0
(Yr/Yr % change)	-7.9%	-14.0%	1.3%	14.0%	12.2%	8.9%	5.8%

EXPLANATION: Table 13 conforms to the type-of-structure ordering adopted by many firms and organizations in the industry. Specifically, it breaks non-residential building into ICI work (i.e., industrial, commercial and institutional), since each has its own set of economic and demographic drivers.

Table 14 presents an alternative, perhaps more user-friendly and intuitive, type-of-structure ordering that matches how the data appears in ConstructConnect's on-line product 'Insight'.

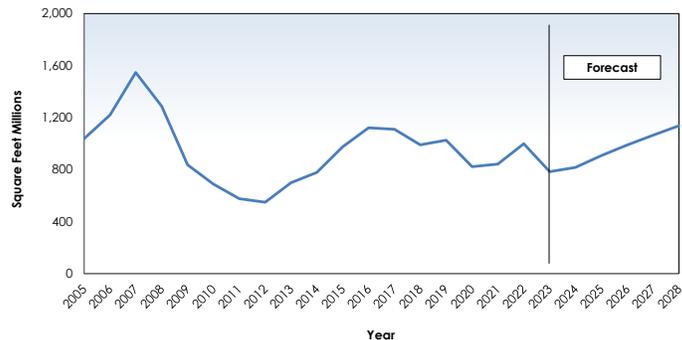
Source of actuals: ConstructConnect "Insight" / Forecasts: Oxford Economics and ConstructConnect / Table: ConstructConnect.

Graph 37: U.S. Residential Construction Starts — ConstructConnect



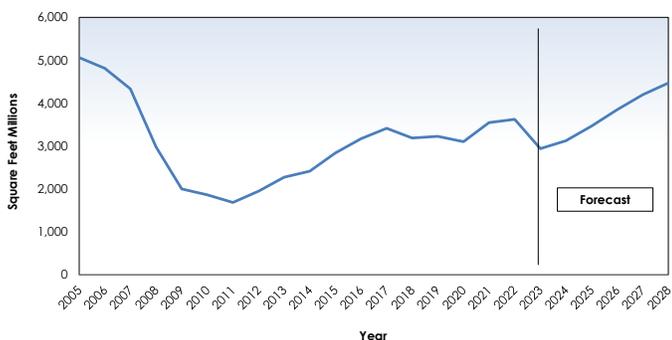
Source of actuals: ConstructConnect "Insight" / Forecasts: Oxford Economics and ConstructConnect.
 Chart: ConstructConnect.

Graph 38: U.S. Non-Residential Building Construction Starts — ConstructConnect



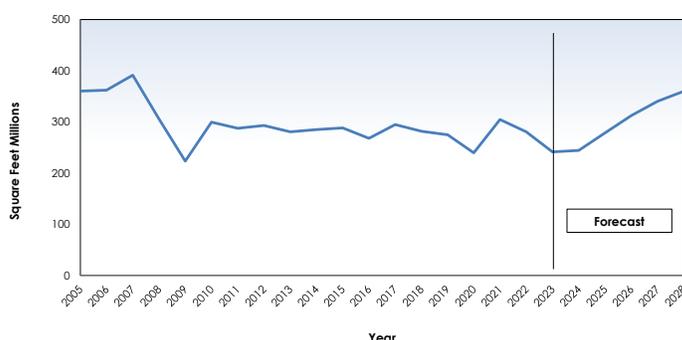
Source of actuals: ConstructConnect "Insight" / Forecasts: Oxford Economics and ConstructConnect.
 Chart: ConstructConnect.

Graph 39: U.S. Residential + Non-Residential Building Construction Starts — ConstructConnect



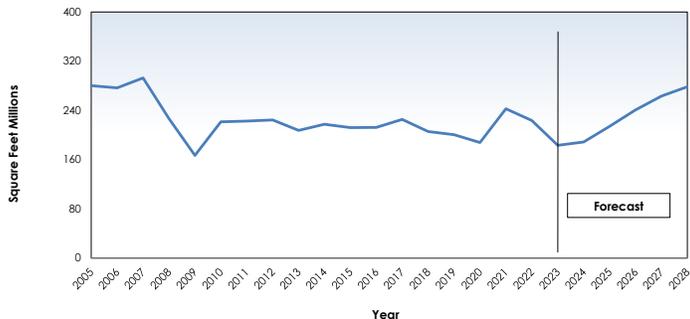
Source of actuals: ConstructConnect "Insight" / Forecasts: Oxford Economics and ConstructConnect.
 Chart: ConstructConnect.

Graph 40: Canada Residential + Non-Residential Building Construction Starts — ConstructConnect



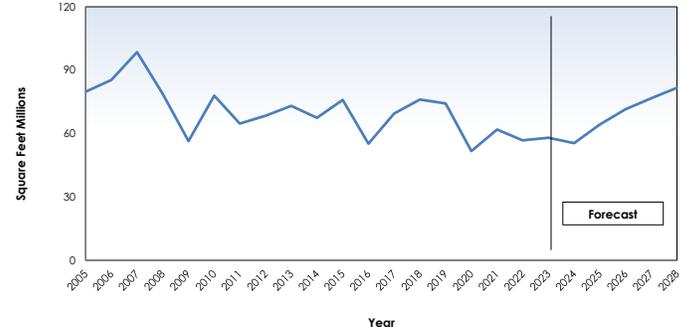
Source of actuals: ConstructConnect "Insight" / Forecasts: Oxford Economics and ConstructConnect.
 Chart: ConstructConnect.

Graph 41: Canada Residential Construction Starts — ConstructConnect



Source of actuals: ConstructConnect "Insight" / Forecasts: Oxford Economics and ConstructConnect.
 Chart: ConstructConnect.

Graph 42: Canada Non-Residential Building Construction Starts — ConstructConnect



Source of actuals: ConstructConnect "Insight" / Forecasts: Oxford Economics and ConstructConnect.
 Chart: ConstructConnect.

Contributors:

Oxford Economics — Abby Samp, Lead Economist; Peter Colson, Economist / ConstructConnect — Alex Carrick, Chief Economist; Michael Guckes, Senior Economist; Edward Bayley, Design Team Lead

Any opinions expressed within our economic commentary are based upon information considered to be reliable, but neither ConstructConnect, nor any of our commentators warrant the completeness or accuracy of, or are under any obligation to update or correct, any information provided to you in connection with their work. Our economic forecasts are a directional indicator, not an exact, explicit guarantee of future economic conditions. We do not guarantee future performance nor provide assurance that forward-looking statements will prove to be accurate, as actual results and future events could differ materially from those anticipated. The economic forecasts are provided as-is, and we make no other representation or warranty, implied or otherwise, related to the forecasts. To the maximum extent permitted by law, we disclaim all liability with respect to the accuracy or completeness of any of the forecasts.