

Spring 2023 (For February 2023 Release)

Construction Starts Forecast

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Link to article here: https://bit.ly/3Yr99TQ

Sources: ConstructConnect®/Oxford Economics. Forecast reflects actual starts through Q4 2022.

Highlights

- Total US construction starts increased by 10.6% year-on-year (y/y) in Q4 2022 and by 16.7% in 2022 overall. Construction in Q4 was supported by nine megaprojects—projects valued at over \$1 billion—with a combined value of \$30.9 billion. Civil engineering and non-residential building underpinned growth, with residential groundbreaking shrinking in y/y terms.
- US GDP grew at an annualized rate of 2.9% in Q4 and 2.1% in 2022 overall. A mild recession is expected to take hold in 2023, with GDP forecast to contract 0.2% on the year. Inflation has eased from recent peaks, but it remains elevated. Recent communication from the Federal Reserve has been hawkish—we forecast a further 25 basis point (bps) increase in March, and the balance of risk to rates is likely to the upside.
- Total construction starts are expected to decline 4.8% in 2023. Rising interest rates and ongoing affordability conditions are expected to weigh on homebuilding. Meanwhile, non-residential building is expected to contract after bumper growth this year. Of the headline sectors, only new engineering construction is expected to post positive growth in 2023, although this is a deceleration from a strong 2022.
- Total Canadian construction starts fell by 12.8% y/y in Q4 2022 and 12.1% for 2022 as a whole. Residential and civil engineering starts fell in y/y terms in Q4, while non-residential building rose. For 2022 as a whole, all three segments posted broadly similar declines.
- Total Canadian constructions starts are forecast to rise 4.7% in 2023, underpinned by a return to growth in civil engineering construction. Non-residential building is expected to post a modest increase of 0.9%, while new residential building will continue to decline.

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Overview

Large projects continued to underpin construction in Q4 2022

Total US construction starts increased by 10.6% year-on-year (y/y) in Q4 2022 and by 16.7% in 2022 as a whole. In Q4, ground breakings took place on nine mega-projects—projects that are valued at more than \$1 billion—for a combined value of \$30.9 billion. There were 31 mega-projects in 2022 overall for a combined value of \$105.3 billion, up from the previous record set in 2019.

New engineering construction starts led growth in Q4, up 40.3% y/y. This was driven by a 715.5% y/y rise in the power infrastructure sector, underpinned by two large projects: a \$1 billion solar array in Nevada and a \$4.5 billion underground power transmission cable from Canada to New York. Outside of the power segment, all other sub-sectors in engineering posted double-digit rates of growth except for dams, canals, and marine work, which declined 12.6% y/y. In 2022 as a whole, civil engineering output grew 26.9% with annual increases in all sub-sectors except for miscellaneous civil engineering.

Total non-residential building grew 36.9% y/y in Q4 2022 and 36.7% for the year. The strongest growth over the last year has been in new factory building—supported by new battery plants, semiconductor fabs, and oil and gas-related projects. Of the nine mega-projects announced in Q4, six were recorded in manufacturing, including three battery plants in Georgia, Tennessee, and Arizona and a new TSMC semiconductor facility in Arizona.

Other non-residential segments posting y/y growth above 40% in Q4 includes elementary schools (+99.8% y/y), prisons (+91.3% y/y), junior and senior high schools (+54% y/y), police and fire (+47.8% y/y), hospitals and clinics (+43.6% y/y), and government offices (+42.8% y/y). Of these, only the hospital segment saw groundbreaking on a mega-project in Q4—a \$1.9 billion facility in Massachusetts. By contrast, construction of new transportation terminals was especially weak in Q4-down 81.9% y/y—as a \$3.4 billion airport project started in the same period last year in San Diego dropped out of the annual calculation

New residential construction was the weakest performer throughout 2022. Residential starts fell by 18.6% y/y in Q4 2022 and 2.2% in 2022 overall. New single-family construction was especially weak, falling 26.5% y/y in Q4 and 11.6% in 2022. While new apartment building declined slightly in Q4 (down 1.5% y/y), it grew strongly in 2022 overall, up 20.9%.

(Anni	Table 1: Summary forecasts (Annual percentage changes unless specified otherwise)											
	2021	2022	2023	2024	2025	2026	2027					
US												
Macro variables												
GDP	5.9	2.1	-0.2	0.9	2.3	2.2	2.0					
Population growth	0.1	0.2	0.4	0.4	0.5	0.5	0.5					
Unemployment rate (%)	5.4	3.6	4.2	4.6	4.0	3.6	3.5					
Real disposable income	1.9	-6.4	8.0	1.9	2.1	1.7	1.4					
Central bank rate (%)	0.1	1.7	4.8	3.4	2.1	2.0	2.0					
10-year government yield (%)	1.4	3.0	3.4	2.8	2.8	2.8	2.8					
Construction starts (% growth in	U.S.\$)											
Total starts	10.8	16.7	-4.8	9.5	10.5	7.2	4.9					
Residential	20.3	-2.2	-6.0	14.0	15.2	8.8	5.3					
Non-res bldg	5.5	36.7	-8.2	6.7	7.9	6.3	4.7					
Civil engineering	1.1	26.9	3.2	6.7	6.6	5.6	4.4					
Canada												
Macro variables												
GDP	5.0	3.4	-1.1	2.1	3.6	3.0	2.4					
Population growth	0.6	1.8	1.3	1.3	1.3	1.2	1.2					
Unemployment rate (%)	7.5	5.3	6.7	7.6	7.0	6.3	6.0					
Real disposable income	1.0	-0.2	0.5	1.3	2.0	2.2	2.1					
Central bank rate (%)	0.3	1.9	4.5	3.5	2.1	2.0	2.0					
10-year government yield (%)	1.4	2.8	3.0	2.9	2.9	2.9	2.9					
Exchange rate C\$ per US\$	1.25	1.30	1.38	1.34	1.26	1.19	1.18					
Construction starts (% growth in	C\$)											
Total starts	15.8	-12.1	4.7	17.7	13.2	7.4	5.4					
Residential	31.3	-12.2	-5.4	13.2	11.0	8.7	6.9					
Non-res bldg	37.3	-13.9	0.9	14.3	7.7	1.7	2.1					
Civil engineering	-14.1	-9.5	21.7	25.5	20.0	11.0	6.8					

Put-in-place (PIP) construction, a measure of work in progress, increased by 5.6% y/y in December (in non-seasonally adjusted terms). Momentum in the residential sector continued to weaken, with construction falling 3.1% y/y in December. By contrast, growth in non-residential construction accelerated towards the back half of 2022, and in December was up 13.9% y/y, although sequential monthly growth in December declined on a seasonally adjusted basis. Construction starts are generally a leading indicator for PIP construction, and this pattern between residential and non-residential construction is consistent with what we have seen in the starts data through 2022. ConstructConnect, in partnership with Oxford Economics, a world-leading economic forecasting firm, have developed 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.

Input price inflation for key building materials has come down from its peak in

early-2022. Construction input cost inflation, excluding capital, labor, and imports, slowed to 7.1% in December, down from more than 20% from January to April. Meanwhile, construction material costs fell 2.4% y/y, down from about 35% y/y growth at the start of 2022. Prices for about half of building materials are now in deflation territory, meaning they are falling in y/y terms. Prices for lumber, metals, and energy products are mostly deflationary, while inflation is at a double-digit rate for most concrete, cement, and related products. Meanwhile, inflation in final demand for construction was 18.5%, a slight deceleration from its peak of 23.1% in July. Through most of 2020 and 2021, construction input price inflation outpaced output price inflation, so the recent pickup in output prices suggests that construction firms are now better able to pass on the higher costs incurred earlier in the recovery phase.

Labor shortages are another constraint; the JOLTS survey of job openings has been hovering around record highs throughout 2022, and the (non-seasonally adjusted) construction sector unemployment rate

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was 5.7% in December 2022, a 0.8 percentage point drop from a year earlier. Annual growth in both hourly earnings and weekly earnings has outpaced the economy-wide average, suggesting firms are raising pay to attract workers.

Mild recession looms but soft landing still possible

US GDP performed well in Q4, expanding at an annualized rate of 2.9% on the quarter, and 2.1% in 2022 overall. The outlook for 2023 is much gloomier, with a mild recession taking hold from Q2. The rate of inflation fell in late-2022 but remains elevated. A key factor throughout 2023 will be whether the downward pressure on goods prices is strong enough to offset the rising services inflation. Our baseline forecast is for the US economy to broadly stagnate in 2023, with GDP contracting 0.2%.

Despite signs of cooling wage pressures, the labor market remains tight. Nonfarm payroll employment rose by an unexpectedly strong 517,000 in January and average hourly earnings growth was recorded at a year-on-year rate of 4.4%, though this was a deceleration from most of 2022. The number of job openings fell towards the end of 2022 amid scepticism that businesses are actively recruiting for all of these roles. We expect the unemployment rate to climb throughout 2023 and end the year around 4.7%.

At its last monetary policy meeting of 2022, the Fed raised the interest rate by 50 basis points (bps) to 4.25%-4.5%. A further 25bps rate hike followed at the February meeting and further modest rate increases may continue throughout the year. We expect another 25bps increase in the policy rate to a range of 4.75-5%, but with the Fed indicating they would rather do too much rather than too little, the risks to this interest rate forecast are to the upside. Borrowing costs are now at their highest level since before the global financial crisis. Hope for a soft landing is still alive, though the Fed does not have an outstanding track record of facilitating this outcome.

Inflation began to ease toward the end of 2022 after rising rapidly throughout the year. Both consumer price index (CPI) and personal consumption expenditure (PCE) inflation fell in December. Headline CPI fell to 6.5% y/y and we forecast the deceleration to continue in 2023, though it will take time for the trend to normalise to that of recent years. Goods inflation is expected to retreat as supply-chain disruptions that have been plaguing producers dissipate and demand for goods cools. However, services inflation will likely prove more stubborn and will be a point of focus for the Fed.

Та	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									

Major construction sub-sectors set to decline in 2023

In 2023, total construction starts in the US are expected to decline 4.8% in current dollar terms, following an expansion of 16.7% in 2022. The weakness will mainly be driven by the residential sector, with a contraction of 6% expected in 2023. Non-residential building construction is also expected to decline in 2023, but this reflects a moderation from strong growth last year rather than underlying weakness. The civil engineering forecast brightens the outlook, with a 3.2% uptick in activity.

Construction in square footage terms is expected to contract by 5.9% in 2023. This will mark a second consecutive year of decline as well as a return to the historical trend of the value and square footage of construction following similar trajectories. The two metrics diverged in 2022 due to a high number of engineering and manufacturing projects, which often have recorded values but no associated square footage. All of the major sub-sectors will experience a decline in square foot terms in 2023, with residential construction facing the biggest slump, of 6.1%.

The rise in interest rates is expected to weigh heavily on residential construction in 2023. Despite declining nearly 100bps since October 2022, the 30-year fixed mortgage rate still sits at a much higher level than in recent years. A continued upward path in interest rates could feed through to a pick-up in mortgage rates again. This, compounded with high inflation, will weigh on household disposable income and reduce the demand for housing, both new and preexisting. However, recent mortgage applications data suggests that home sales may be close to bottoming out, though any convincing recovery is unlikely to occur before

H2 due to the looming recession.

In a reversal of the dynamic of the last two years, multi-family housing starts are set to trail single-family, though both will be in negative territory (-9% and -4.3% respectively). Rising interest rates are pushing up the cost of financing large apartment block projects, while many of those wanting to return to urban areas following the Covid-19 pandemic have already done so.

Following rapid growth of 36.7% in 2022, new non-residential building activity is expected to pull back this year with a decline of 8.2%. The industrial sector is set to weigh on the outlook, with a decline of 33.6% forecast for 2023. This is due to explosive growth of over 200% posted in 2022. Despite many major projects planned throughout the year in a variety of industries such as petrochemicals, liquified natural gas, microchips and semiconductors, activity will taper relative to 2022's impressive showing. Planned developments over the longer term, particularly in liquified natural gas and semiconductors, due to their strategic importance, will support industrial construction from 2024 onwards.

The outlook for commercial construction starts continues to improve, with growth expected to accelerate to 5.7% in 2023, following a 3.3% expansion last year. Performance across the commercial subsectors will be varied, with three experiencing a decline in output-government office building, industrial laboratories, and warehousing. Construction of warehouses is set to continue to decline this year with a similar scale of fall in activity as in 2022. As the recession, job losses and high inflation weigh on household disposable income, demand for goods will fall and firms ultimately will require less storage and logistics space. Interestingly, the recent transition

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to hybrid working schedules and remote working will not prevent the construction of private offices picking up in 2023. Many firms are now encouraging their workforce to return to on-site working and as a result office building will increase 12.1% this year, with similar growth also expected in 2024. However, by the end of our forecast period in 2027, new office construction is expected to remain below its 2019 peak.

Similarly, the civil engineering subsectors will experience mixed performance throughout 2023. The bipartisan Infrastructure Investment and Jobs Act passed in November 2021 funded a range of projects in 2022, meaning the sector will return closer to trend growth this year. The Act will continue to support several projects but sectors including airports, bridges and water and sewage treatment will pull back into negative territory in 2023. The overall civil engineering sector is expected to decelerate to growth of 3.2% in 2023, after rapid growth of 26.9% last year.

Miscellaneous civil activity and power infrastructure are both forecast to expand rapidly in 2023. Several large projects are in various stages of planning, including nuclear projects with support from the White House, as well as an offshore wind project. Also in the works are multiple tunnel projects, including a rail tunnel and a river tunnel. These projects will drive the sector in the coming years due to their huge values and lengthy timeframes. We expect the rate of growth in these sectors to remain strong throughout the forecast period to 2027.

Modest construction growth set to return in Canada in 2023

Total Canadian construction starts fell by 12.8% y/y in Q4 2022. New engineering construction declined 54.1% y/y, while residential construction starts fell 16.3% y/y. By contrast, new non-residential building grew 12.7% y/y, the first annual increase in a year. In 2022 overall, total starts decreased 12.1%, with similar declines in each of the three subsegments of 9.5%, 12.2%, and 13.9% in engineering, residential building, and non-residential building respectively.

After posting quite weak growth for most of the year, a number of sectors in the non-residential building segment posted triple or quadruple-digit paces of annual growth in Q4. These include government offices (+1227% y/y), transportation terminals (+1123% y/y), miscellaneous retail (+480% y/y), hotels, motels (+326% y/y), and miscellaneous medical (+308% y/y). Most of these strong growth rates are off

the back of very low levels a year ago. Only construction of new government offices was underpinned by a large project—a C\$3 billion project in Ottawa. Industrial starts also included a mega-project—a C\$5 billion battery factory in Windsor, Ontario. However, a \$7.5 billion potash mine in Saskatchewan that started in the same period last year fell out of the annual calculation, so manufacturing starts declined 14.9% y/y. There was significant weakness in a number of sectors; private office building, parking garages, and warehouse construction fell more than 70% y/y in Q4. In general, volumes in Canada are smaller than in the US, so growth rates in individual segments are particularly volatile.

New construction of civil engineering projects declined in all sectors in y/y terms in Q4. The least negative sector was new bridge construction, which fell 36% y/y. In 2022 overall, only construction of dams, canals, and marine work increased—by 88%—due to strong growth in Alberta in Q2

In the residential sector, both single-family and multi-family starts fell in Q4. Single-family construction contracted by 14% y/y in Q4 and 12.1% in 2022 overall. Multi-family homebuilding fell by 18.8% y/y in Q4 2022 and 12.4% for the year. New residential construction has declined in y/y terms for the last five quarters.

With regard to Canada's economy, a combination of falling residential investment, rising interest rates and high inflation caused Canada's GDP to shrink 0.4% g/g in Q4 2022. As a result, GDP is estimated to have grown 3.4% for 2022 as a whole. Canada is likely in the early stages of a recession, and we expect this to continue throughout most of 2023. The Bank of Canada raised the overnight interest rate by 25bps to 4.5% in January but indicated its intention to maintain the policy rate at this level to allow time for the impact of the recent rate hikes to become clear. The reasoning for the hikes is, of course, to try and restrain inflation to the 2% annual target. At the turn of the year, inflation was 6.3%. Rising wages are pushing up costs for businesses, while ongoing supply chain disruptions increase the cost of raw materials, though there are signs that these disruptions are easing. The labor market remains tight, with the unemployment rate reaching 5% in December. This is likely to rise as the recession takes hold, but the deterioration will not be as strong as previous economic downturns due to firms wanting to retain workers. The leading driver of Canada's looming recession, however, is the ongoing house price correction. Between February and December of 2022, benchmark home prices fell 13.1%, and this decline is forecast to reach 30% by mid-2023. As prices collapse, residential investment is tumbling with it and dragging on GDP. As a result, we forecast Canada's GDP will fall by 1.1% in 2023

Total construction starts, in Canadian dollar terms, is expected to rise by 4.7% this year after falling 12.1% in 2022. However, construction in square foot terms is expected to fall 5.3%. The divergence occurs because civil engineering projects tend to have values associated with them, but no square foot measurement, and we forecast 21.7% growth in civil engineering starts this year.

As the housing market correction rages on, the contraction in single-family units is forecast to be larger than in multi-family. The 5-year mortgage rate continues to rise alongside the Bank of Canada's policy rate, but the impact on housing affordability is somewhat offset by tumbling house prices. But in times of such economic uncertainty, would-be homebuyers are cautious to commit to purchasing a property that may be worth much less in 6 months' time. The upcoming recession will also weigh on household disposable incomes, and therefore on housing demand. As a result, we expect construction of single-family units and multi-family units to fall 5.8% and 5% respectively.

Non-residential building starts are forecast to rise 0.9% in 2023. Transportation terminals is set for another year of bumper growth in the triple digits, similar to 2021, of 137%. Several light rail and metro projects are in the construction pipeline over the next two years. Industrial construction will return to positive territory after contracting in 2022, with growth of 7.9%. A variety of projects are planned throughout the year, including some liquified natural gas possibilities. However, the outlook for commercial construction is gloomier. Governmental offices, shopping and retail, and miscellaneous retail are all expected to post double digit declines in activity, but this is in part due to their bumper growth rates in 2022.

Power infrastructure is forecast to record explosive triple-digit growth of 115% in 2023, with a large hydrogen and ammonia plant project planned. The 'other civil' sub-sector, which includes oil and gas projects, is also expected to perform well, with a 53.6% increase in construction value. Overall, we forecast civil engineering construction starts will increase by 21.7% in 2023. There is a solid pipeline of civil engineering projects planned over the medium term which will support the sector, including roads, railways, and irrigation projects.

	Table 3: U.S. Type-of-Structure Forecasts (\$ Billions USD)									
	Actua	als			Forecasts					
	2021	2022	2023	2024	2025	2026	2027			
Single-family	257.699	227.741	217.958	251.285	294.285	322.814	337.743			
Multi-family	104.818	126.679	115.310	128.539	143.323	153.429	163.855			
TOTAL RESIDENTIAL	362.517	354.420	333.268	379.824	437.608	476.243	501.598			
(Yr/yr % change)	20.3%	-2.2%	-6.0%	14.0%	15.2%	8.8%	5.3%			
Hotels/Motels	7.207	10.005	11.788	13.878	16.379	18.259	19.802			
Shopping/Retail	12.885	14.060	14.725	16.996	19.558	22.106	24.572			
Parking Garages	1.768	2.218	2.322	2.441	2.657	2.878	3.054			
Amusement	6.555	7.399	7.537	8.084	9.044	9.903	10.416			
Private Offices	20.957	20.127	22.560	25.463	28.862	31.552	33.474			
Govenmental Offices	11.703	13.451	13.109	13.777	14.505	15.262	15.997			
Laboratories (Schools & Industrial)	2.453	4.479	3.408	3.539	3.726	3.841	3.959			
Warehouses	28.230	27.323	26.469	27.897	30.370	31.941	33.410			
Sports Stadium/Convention Center	6.043	6.189	7.162	7.484	7.979	8.343	8.571			
Transportation Terminals	9.969	6.031	8.533	9.400	10.000	10.200	9.600			
TOTAL COMMERCIAL	107.769	111.284	117.611	128.959	143.080	154.285	162.854			
(Yr/yr % change)	5.1%	3.3%	5.7%	9.6%	10.9%	7.8%	5.6%			
TOTAL INDUSTRIAL (manufacturing)	35.082	106.585	70.784	72.876	77.344	81.420	84.654			
(Yr/yr % change)	61.4%	203.8%	-33.6%	3.0%	6.1%	5.3%	4.0%			
Religious	1.217	1.010	1.047	1.123	1.210	1.281	1.343			
Hospitals/Clinics	18.730	23.870	23.975	25.131	26.013	27.076	28.353			
Nursing Homes/Assisted Living	5.965	3.982	4.556	5.432	6.716	7.685	8.397			
Libraries/Museums	3.591	3.477	3.699	3.962	4.167	4.333	4.500			
Courthouse	2.477	1.802	2.002	2.268	2.497	2.699	2.846			
Police/Fire	3.035	4.357	3.774	3.973	4.187	4.373	4.532			
Prisons	2.231	2.935	2.778	3.059	3.364	3.515	3.640			
Military	9.211	9.965	10.767	11.761	12.414	13.031	13.414			
Educational Facilities	59.892	73.505	72.200	75.705	79.312	82.983	85.893			
MED misc	7.479	8.996	9.798	10.602	11.946	13.200	14.166			
TOTAL INSTITUTIONAL	113.829	133.900	134.596	143.015	151.827	160.175	167.083			
(Yr/yr % change)	-4.6%	17.6%	0.5%	6.3%	6.2%	5.5%	4.3%			
Miscellaneous Non-Res Building	6.330	7.665	7.057	7.322	7.629	7.993	8.325			
TOTAL NON-RES BLDG	263.010	359.434	330.049	352.172	379.880	403.873	422.916			
(Yr/yr % change)	5.5%	36.7%	-8.2%	6.7%	7.9%	6.3%	4.7%			
Airport	5.204	7.371	6.929	7.212	7.832	8.479	9.095			
Roads	67.384	83.696	86.992	91.317	96.971	102.050	106.082			
Bridges	17.994	27.566	26.515	27.538	28.688	29.612	30.342			
Dams/Canal/Marine	8.541	9.197	9.666	10.376	10.944	11.557	12.062			
Water & Sewage Treatment	33.868	43.627	39.931	42.303	45.276	48.058	50.194			
Misc Civil (Power, etc.)	23.485	27.114	34.965	39.948	43.443	46.368	49.097			
TOTAL ENGINEERING	156.475	198.572	204.997	218.694	233.155	246.125	256.872			
(Yr/yr % change)	1.1%	26.9%	3.2%	6.7%	6.6%	5.6%	4.4%			
TOTAL NON-RESIDENTIAL	419.486	558.006	535.046	570.866	613.035	649.998	679.788			
(Yr/yr % change)	3.8%	33.0%	-4.1%	6.7%	7.4%	6.0%	4.6%			
GRAND TOTAL	782.003	912.426	868.314	950.689	1,050.643	1,126.242	1,181.386			
(Yr/yr % change)	10.8%	16.7%	-4.8%	9.5%	10.5%	7.2%	4.9%			

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 cate	gory drop-down m	enus in INSIGHT	(\$ Billions USD)		
	Actu 2021		2023	2024	Forecasts 2025	2026	20
Summary	2021	2022	2023	2024	2023	2020	203
CIVIL	156.475	198.572	204.997	218.694	233.155	246.125	256.8
NON-RESIDENTIAL BUILDING	263.010	359.434	330.049	352.172	379.880	403.873	422.9
RESIDENTIAL	362.517	354.420	333.268	379.824	437.608	476.243	501.59
GRAND TOTAL	782.003	912.426	868.314	950.689	1,050.643	1,126.242	1,181.3
Verticals							
Airport	5.204	7.371	6.929	7.212	7.832	8.479	9.0
All Other Civil	14.452	12.826	17.753	22.581	24.996	26.730	27.8
Bridges	17.994	27.566	26.515	27.538	28.688	29.612	30.3
Dams / Canals / Marine Work	8.541	9.197	9.666	10.376	10.944	11.557	12.0
Power Infrastructure	9.033	14.288	17.212	17.367	18.447	19.638	21.2
Roads	67.384	83.696	86.992	91.317	96.971	102.050	106.0
Water and Sewage Treatment	33.868	43.627	39.931	42.303	45.276	48.058	50.
CIVIL	156.475	198.572	204.997	218.694	233.155	246.125	256.8
(Yr/yr % change)	1.1%	26.9%	3.2%	6.7%	6.6%	5.6%	4.
Offices (private)	20.957	20.127	22.560	25.463	28.862	31.552	33.
Parking Garages	1.768	2.218	2.322	2.441	2.657	2.878	3.
Transportation Terminals	9.969	6.031	8.533	9.400	10.000	10.200	9.
Commercial	32.694	28.376	33.415	37.304	41.519	44.631	46.
(Yr/yr % change)	9.0%	-13.2%	17.8%	11.6%	11.3%	7.5%	3
Amusement	6.555	7.399	7.537	8.084	9.044	9.903	10
Libraries / Museums	3.591	3.477	3.699	3.962	4.167	4.333	4
Religious	1.217	1.010	1.047	1.123	1.210	1.281	1.
Sports Arenas / Convention Centers	6.043	6.189	7.162	7.484	7.979	8.343	8
Community	17.407	18.076	19.445	20.653	22.400	23.860	24
(Yr/yr % change)	7.1%	3.8%	7.6%	6.2%	8.5%	6.5%	4
College / University	15.096	18.619	18.982	20.001	20.697	21.918	22
Elementary / Pre School	15.796	22.043	21.013	22.136	23.251	24.371	25
Jr / Sr High School	26.922	30.574	30.137	31.389	33.081	34.342	35
Special / Vocational	2.077	2.269	2.067	2.179	2.283	2.352	2
Educational	59.892	73.505	72.200	75.705	79.312	82.983	85
(Yr/yr % change)	-11.3%	22.7%	-1.8%	4.9%	4.8%	4.6%	3
Courthouses	2.477	1.802	2.002	2.268	2.497	2.699	2
Fire and Police Stations	3.035	4.357	3.774	3.973	4.187	4.373	4
Government Offices	11.703	13.451	13.109	13.777	14.505	15.262	15
Prisons	2.231	2.935	2.778	3.059	3.364	3.515	3
Government	19.446	22.545	21.662	23.077	24.554	25.848	27
(Yr/yr % change)	3.8%	15.9%	-3.9%	6.5%	6.4%	5.3%	_,
Industrial Labs / Labs / School Labs	2.453	4.479	3.408	3.539	3.726	3.841	3
Manufacturing	35.082	106.585	70.784	72.876	77.344	81.420	84
Warehouses	28.230	27.323	26.469	27.897	30.370	31.941	33
Industrial	65.765	138.388	100.660	104.312	111.440	117.202	122
(Yr/yr % change)	30.7%	110.4%	-27.3%	3.6%	6.8%	5.2%	
Hospitals / Clinics	18.730	23.870	23.975	25.131	26.013	27.076	28
Medical Misc.	7.479	8.996	9.798	10.602	11.946	13.200	14
Nursing Homes	5.965	3.982	4.556	5.432	6.716	7.685	- 8
Medical	32.175	36.848	38.330	41.165	44.674	47.961	50
(Yr/yr % change)	10.8%	14.5%	4.0%	7.4%	8.5%	7.4%	
Military	9.211	9.965	10.767	11.761	12.414	13.031	13
(Yr/yr % change)	0.0%	8.2%	8.0%	9.2%	5.6%	5.0%	-
Hotels	7.207	10.005	11.788	13.878	16.379	18.259	19
Retail Misc.	6.330	7.665	7.057	7.322	7.629	7.993	8
Shopping	12.885	14.060	14.725	16.996	19.558	22.106	24
Retail	26.422	31.731	33.570	38.196	43.566	48.358	52
(Yr/yr % change)	-6.5%	20.1%	5.8%	13.8%	14.1%	11.0%	
ION-RESIDENTIAL BUILDING	263.010	359.434	330.049	352.172	379.880	403.873	422
(Yr/yr % change)	5.5%	36.7%	-8.2%	6.7%	7.9%	6.3%	
Multi-Family	104.818	126.679	115.310	128.539	143.323	153.429	163
Single-Family	257.699	227.741	217.958	251.285	294.285	322.814	337
RESIDENTIAL	362.517	354.420	333.268	379.824	437.608	476.243	501
(Yr/yr % change)	20.3%	-2.2%	-6.0%	14.0%	457.008 15.2%	8.8%	501
GRAND TOTAL	782.003	912.426	868.314	950.689	1,050.643	1,126.242	1,181
UNAND IVIAL	/02.003	312.420	000.314	330.003	1,000.040	1,120.242	1,101

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'.

Table 5:	U.S. States,	Total Construction	on Starts –	- ConstructConnec	t		
(I evel	Actuals in \$ Millions USD)	Forecasts (Year versus previous year % change)					
States (alphabetical by 2-letter code)	2022	2023	2024	2025	2026	2027	
Alaska - AK	\$2,157	-11.7%	15.9%	10.0%	7.0%	4.2%	
Alabama - AL	\$12,667	12.9%	10.4%	10.9%	6.5%	4.0%	
Arkansas - AR	\$7,194	13.6%	9.3%	11.3%	7.3%	4.4%	
Arizona - AZ	\$30,852	-24.5%	17.3%	19.2%	11.7%	6.1%	
California - CA*	\$68,391	6.4%	8.4%	10.6%	8.5%	6.6%	
Colorado - CO	\$17,077	14.2%	11.9%	13.8%	8.4%	5.6%	
Connecticut - CT	\$5,819	-6.9%	22.9%	10.0%	5.7%	3.7%	
District Of Columbia - DC	\$3,223	1.1%	9.5%	2.6%	4.9%	4.7%	
Delaware - DE	\$3,156	-20.5%	5.6%	9.4%	6.2%	4.2%	
Florida - FL*	\$68,421	1.8%	6.6%	15.3%	8.8%	5.4%	
Georgia - GA	\$33,895	-1.2%	5.0%	11.3%	7.4%	4.9%	
Hawaii - HI	\$3,425	-4.4%	15.9%	7.2%	6.5%	5.0%	
Iowa - IA	\$7,340	9.0%	7.0%	9.8%	6.2%	4.3%	
Idaho - ID	\$7,088	7.5%	10.6%	10.7%	4.0%	4.2%	
Illinois - IL	\$21,691	9.5%	4.3%	8.8%	5.9%	4.2%	
Indiana - IN	\$19,740	-5.5%	4.3%	9.7%	5.9%	3.9%	
Kansas - KS	\$8,036	-15.6%	4.3%	9.3%	6.5%	4.4%	
Kentucky - KY	\$14,319	-20.5%	10.2%	10.8%	6.9%	4.4%	
Louisiana - LA	\$20,602	-5.4%	18.0%	8.8%	5.4%	3.4%	
Massachusetts - MA	\$15,764	15.1%	8.1%	7.3%	5.7%	5.2%	
Maryland - MD	\$12,285	18.4%	4.8%	10.4%	7.2%	5.1%	
Maine - ME	\$4,541	-27.5%	10.8%	12.4%	5.8%	3.5%	
Michigan - MI	\$23,298	-21.9%	4.5%	9.5%	6.8%	4.3%	
Minnesota - MN	\$15,332	15.7%	9.2%	10.3%	6.7%	4.6%	
Missouri - MO	\$14,574	-1.5%	7.7%	9.7%	6.1%	4.0%	
Mississippi - MS	\$5,365	-10.7%	6.8%	8.9%	5.9%	3.5%	
Montana - MT	\$2,865	-12.4%	11.0%	13.9%	6.9%	4.0%	
North Carolina - NC	\$42,806	-15.7%	4.8%	9.0%	7.4%	4.8%	
North Dakota - ND	\$4,523	-30.8%	14.0%	11.6%	6.3%	4.0%	
Nebraska - NE	\$7,371	-26.8%	10.1%	10.4%	6.5%	4.4%	
New Hampshire - NH	\$1,996	19.7%	10.9%	14.4%	7.3%	4.5%	
New Jersey - NJ	\$13,923	16.0%	-3.3%	11.3%	5.5%	3.7%	
New Mexico - NM	\$4,847	-26.2%	3.9%	9.5%	6.3%	4.0%	
Nevada - NV	\$10,818	-34.4%	12.9%	17.7%	10.7%	6.2%	
New York - NY*	\$45,601	-11.4%	24.5%	-2.4%	2.8%	4.1%	
Ohio - OH	\$20,786	14.9%	4.3%	9.1%	6.2%	4.3%	
Oklahoma - OK	\$10,777	-7.7%	10.7%	12.4%	6.5%	4.0%	
Oregon - OR	\$8,651	17.6%	12.8%	14.0%	8.7%	5.6%	
Pennsylvania - PA	\$23,375	4.6%	6.3%	10.6%	6.7%	4.4%	
Rhode Island - RI	\$1,641	-17.4%	9.4%	9.7%	5.8%	3.9%	
South Carolina - SC	\$16,365	-4.5%	5.2%	12.6%	7.5%	4.6%	
South Dakota - SD	\$4,862	-36.5%	10.8%	10.0%	6.6%	4.3%	
Tennessee - TN	\$25,906	-15.6%	8.1%	12.7%	7.8%	4.8%	
Texas - TX*	\$148,349	-16.9%	7.6%	12.1%	7.6%	5.2%	
Utah - UT	\$12,230	21.4%	17.4%	14.4%	8.2%	4.8%	
Virginia - VA	\$18,721	10.8%	13.3%	12.4%	7.1%	4.8%	
Vermont - VT	\$983	-15.5%	8.5%	11.4%	6.8%	4.1%	
Washington - WA	\$19,877	-8.8%	14.1%	14.8%	8.5%	5.3%	
Wisconsin - WI	\$14,479	-2.4%	8.3%	8.8%	5.6%	4.1%	
West Virginia - WV	\$2,466	6.6%	6.1%	9.2%	5.6%	3.9%	
Wyoming - WY	\$1,957	13.2%	177.9%	-42.7%	6.9%	5.5%	
United States	\$912,426	-4.8%	9.5%	10.5%	7.2%	4.9%	

^{*}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.

	Table 6: U.S. Four Largest States: Type-of-Structure Forecasts (\$ Billions USD)												
		Actua	als			Forecasts							
		2021	2022	2023	2024	2025	2026	2027					
New York	Residential	10.824	12.465	9.870	13.559	13.380	13.362	13.937					
	Non-res Building	14.452	17.522	16.743	19.682	18.028	18.451	19.107					
	Engineering/Civil	8.009	15.615	13.805	17.082	17.730	18.680	19.518					
	Total	33.284	45.601	40.418	50.323	49.138	50.493	52.562					
(Yr vs previou	us yr % Change)	18.6%	37.0%	-11.4%	24.5%	-2.4%	2.8%	4.1%					
Florida	Residential	37.584	41.118	37.217	40.579	48.626	53.706	56.754					
	Non-res Building	16.816	17.659	19.050	20.004	22.223	23.860	25.147					
	Engineering/Civil	8.620	9.644	13.408	13.712	14.833	15.622	16.294					
	Total	63.020	68.421	69.675	74.296	85.682	93.187	98.195					
(Yr vs previou	us yr % Change)	18.2%	8.6%	1.8%	6.6%	15.3%	8.8%	5.4%					
Texas	Residential	55.425	54.162	49.622	55.492	64.152	70.253	74.242					
	Non-res Building	30.059	66.747	48.502	49.971	55.054	58.454	61.394					
	Engineering/Civil	20.073	27.440	25.194	27.250	29.553	31.367	32.774					
	Total	105.557	148.349	123.318	132.713	148.758	160.073	168.410					
(Yr vs previou	us yr % Change)	8.1%	40.5%	-16.9%	7.6%	12.1%	7.6%	5.2%					
California	Residential	24.621	28.145	23.432	27.806	32.270	35.565	38.821					
	Non-res Building	26.429	24.836	30.283	31.176	33.143	35.860	37.667					
	Engineering/Civil	14.501	15.410	19.071	19.889	21.807	23.167	24.340					
	Total	65.551	68.391	72.786	78.871	87.219	94.592	100.828					
(Yr vs previou	us yr % Change)	3.1%	4.3%	6.4%	8.4%	10.6%	8.5%	6.6%					

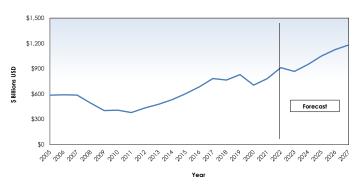
Source of actuals: ConstructConnect "Insight" / Forecasts: Oxford Economics and ConstructConnect.
Table: ConstructConnect.

Tweeted by ConstructConnect:

@ConstructConnx

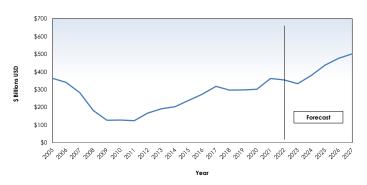
Link to article here: https://bit.ly/3YyOnBK

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



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

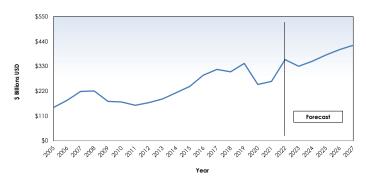
Graph 2: U.S. Total Residential Construction Starts — ConstructConnect



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

Chart: ConstructConnect

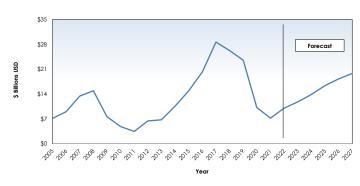
Graph 3: U.S. Total Non-Residential Building Starts — ConstructConnect



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

Chart: ConstructConnect.

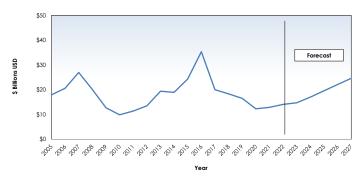
Graph 4: U.S. Hotel/Motel Construction Starts — ConstructConnect



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

Chart: ConstructConnect.

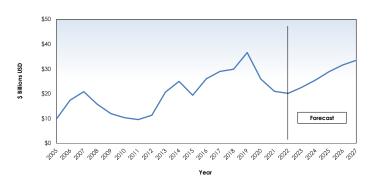
Graph 5: U.S. Shopping/Retail Construction Starts — ConstructConnect



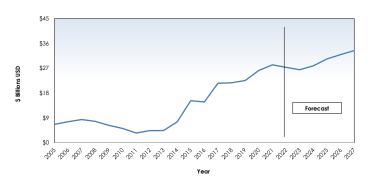
Source of actuals: ConstructConnect "Insight" / Forecasts: Oxford Economics and ConstructConnect.

Chart: ConstructConnect.

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



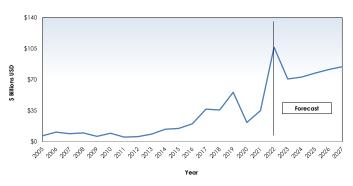
Graph 7: U.S. Warehouse Construction Starts — ConstructConnect



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

Chart: ConstructConnect

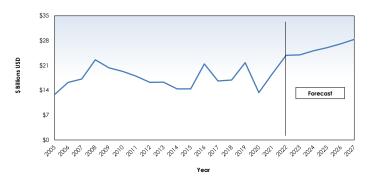
Graph 8: U.S. Industrial/Manufacturing Construction Starts — ConstructConnect



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

Chart: ConstructConnect

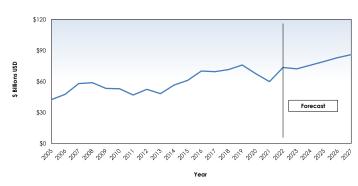
Graph 9: U.S. Hospital and Clinic Construction Starts — ConstructConnect



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

Chart: ConstructConnect.

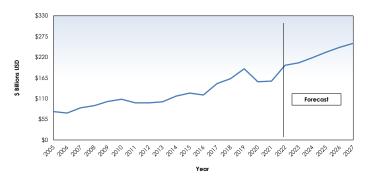
Graph 10: U.S. Total Educational Construction Starts — ConstructConnect



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

Chart: ConstructConnect.

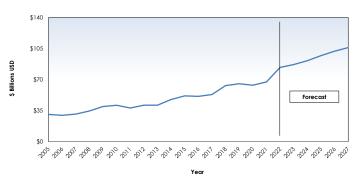
Graph 11: U.S. Total Heavy Engineering/Civil Construction Starts — ConstructConnect



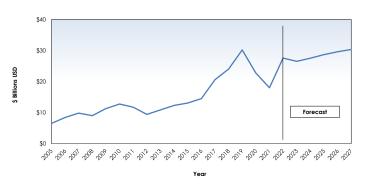
Source of actuals: ConstructConnect "Insight" / Forecasts: Oxford Economics and ConstructConnect.

Chart: ConstructConnect.

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



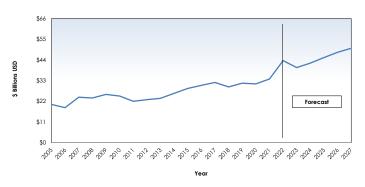
Graph 13: U.S. Bridge Construction Starts — ConstructConnect



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

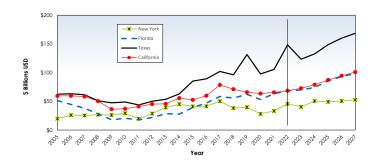
Chart: ConstructConnect

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



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

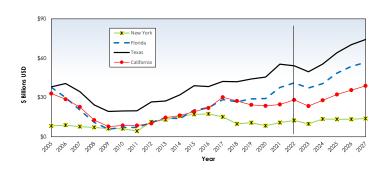
Graph 15: U.S. Four Largest States (by Population): Total Construction Starts — ConstructConnect



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

Chart: ConstructConnect.

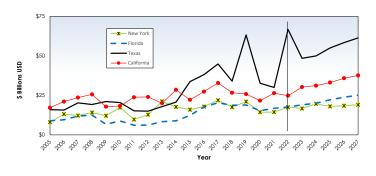
Graph 16: U.S. Four Largest States: Total Residential Construction Starts — ConstructConnect



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

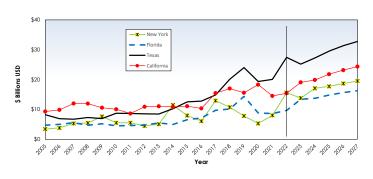


	Table 7: Canada Type-of-Structure Forecasts (\$ Billions CAD)									
	Actua	ıls			Forecasts					
	2021	2022	2023	2024	2025	2026	2027			
Single-family	17.868	15.707	14.792	16.590	18.202	19.344	20.367			
Multi-family	18.395	16.121	15.312	17.474	19.612	21.778	23.579			
TOTAL RESIDENTIAL	36.264	31.827	30.104	34.064	37.814	41.123	43.945			
(Yr/yr % change)	31.3%	-12.2%	-5.4%	13.2%	11.0%	8.7%	6.9%			
Hotels/Motels	0.143	0.179	0.197	0.381	0.511	0.657	0.760			
Private Offices	1.254	0.729	0.807	1.187	1.682	1.973	2.199			
Govenmental Offices	1.180	4.785	2.022	2.044	2.127	2.215	2.298			
Shopping/Retail	0.326	0.640	0.543	0.792	1.038	1.216	1.278			
Retail Miscellaneous	0.070	0.194	0.167	0.190	0.221	0.249	0.268			
Parking Garages	0.157	0.093	0.106	0.147	0.177	0.213	0.236			
Amusement	2.547	2.153	2.101	2.341	2.594	2.861	3.104			
Warehouses	2.317	1.819	1.861	1.999	2.098	2.184	2.255			
TOTAL COMMERCIAL	7.993	10.590	7.804	9.082	10.448	11.570	12.399			
(Yr/yr % change)	-4.0%	32.5%	-26.3%	16.4%	15.0%	10.7%	7.2%			
TOTAL INDUSTRIAL (manufacturing)	11.672	8.368	9.033	9.238	8.946	7.858	7.407			
(Yr/yr % change)	375.8%	-28.3%	7.9%	2.3%	-3.2%	-12.2%	-5.7%			
Religious	0.095	0.031	0.036	0.041	0.047	0.054	0.060			
Hospitals/Clinics	7.977	3.592	3.975	4.870	5.869	6.496	7.229			
MED misc	0.100	0.536	0.343	0.383	0.463	0.541	0.592			
Transportation Terminals*	0.348	1.402	3.321	4.982	4.945	4.265	3.476			
Police/Fire	1.561	1.179	1.209	1.338	1.545	1.731	1.886			
Educational Facilities	7.061	5.996	6.257	6.624	7.117	7.542	7.836			
TOTAL INSTITUTIONAL	17.143	12.736	15.141	18.237	19.987	20.629	21.078			
(Yr/yr % change)	7.0%	-25.7%	18.9%	20.5%	9.6%	3.2%	2.2%			
TOTAL NON-RES BUILDING	36.809	31.694	31.977	36.558	39.382	40.057	40.884			
(Yr/yr % change)	37.3%	-13.9%	0.9%	14.3%	7.7%	1.7%	2.1%			
Bridges	2.332	2.326	2.382	2.824	3.209	3.557	3.865			
Dams/Canal/Marine	0.541	1.019	0.766	0.899	0.984	1.062	1.139			
Water & Sewage Treatment	4.837	4.689	4.833	5.265	5.765	6.232	6.643			
Roads	10.953	10.922	11.446	12.435	13.457	14.429	15.247			
Power Infrastructure	4.397	2.253	4.834	6.351	7.576	8.252	8.930			
All Other Civil (Oil & Gas etc.)	5.773	4.890	7.512	12.093	16.849	19.579	20.886			
TOTAL ENGINEERING	28.833	26.098	31.773	39.867	47.839	53.112	56.710			
(Yr/yr % change)	-14.1%	-9.5%	21.7%	25.5%	20.0%	11.0%	6.8%			
TOTAL NON-RESIDENTIAL	65.642	57.792	63.751	76.425	87.221	93.169	97.594			
(Yr/yr % change)	8.7%	-12.0%	10.3%	19.9%	14.1%	6.8%	4.7%			
GRAND TOTAL	101.906	89.620	93.854	110.489	125.035	134.292	141.539			
(Yr/yr % change)	15.8%	-12.1%	4.7%	17.7%	13.2%	7.4%	5.4%			

^{*} 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'.

	Iable 8 Arranged to match the	: Canada Typ					
	Arranged to match the		gory drop-down in		<u> </u>		
	2021	2022	2023	2024	Forecasts 2025	2026	20
Summary	2021	2022	2020	2027	2020	2020	20
CIVIL	28.833	26.098	31.773	39.867	47.839	53.112	56.
NON-RESIDENTIAL BUILDING	36.809	31.694	31.977	36.558	39.382	40.057	40.
RESIDENTIAL	36.264	31.827	30.104	34.064	37.814	41.123	43.
GRAND TOTAL	101.906	89.620	93.854	110.489	125.035	134.292	141.
Verticals							
All Other Civil	5.773	4.890	7.512	12.093	16.849	19.579	20.
Bridges	2.332	2.326	2.382	2.824	3.209	3.557	3.
Dams / Canals / Marine Work	0.541	1.019	0.766	0.899	0.984	1.062	1.
Power Infrastructure	4.397	2.253	4.834	6.351	7.576	8.252	8
Roads	10.953	10.922	11.446	12.435	13.457	14.429	15.
Water and Sewage Treatment	4.837	4.689	4.833	5.265	5.765	6.232	6.
CIVIL	28.833	26.098	31.773	39.867	47.839	53.112	56.
(Yr/yr % change)	-14.1%	-9.5%	21.7%	25.5%	20.0%	11.0%	6
Offices (private)	1.254	0.729	0.807	1.187	1.682	1.973	2.
Parking Garages	0.157	0.093	0.106	0.147	0.177	0.213	0.
Transportation Terminals	0.348	1.402	3.321	4.982	4.945	4.265	3.
Commercial	1.759	2.223	4.234	6.316	6.804	6.452	5.
(Yr/yr % change)	-77.8%	26.4%	4.254 90.5%	49.2%	7.7%	-5.2%	-8
Amusement	2.547	2.153	2.101	2.341	2.594	2.861	3
Religious	0.095 2.642	0.031	0.036	0.041 2.382	0.047	0.054	0.
Community		2.184	2.137		2.642	2.915	3.
(Yr/yr % change)	<i>126.8%</i> 7.061	<i>-17.3%</i> 5.996	<i>-2.2%</i> 6.257	11.5% 6.624	10.9% 7.117	10.3% 7.542	8
Educational				5.9%		6.0%	7.
(Yr/yr % change) Fire and Police Stations	30.8%	<i>-15.1%</i> 1.179	4.4% 1.209	1.338	7.5% 1.545	1.731	3 1.
	1.561						
Government Offices	1.180	4.785	2.022	2.044	2.127	2.215	2
Government	2.741	5.963	3.231	3.382	3.672	3.946	4.
(Yr/yr % change)	7.1%	117.6%	-45.8%	4.7%	8.6%	7.5%	6
Manufacturing	11.672	8.368	9.033	9.238	8.946	7.858	7.
Warehouses	2.317	1.819	1.861	1.999	2.098	2.184	2
Industrial	13.990	10.187	10.894	11.238	11.045	10.043	9.
(Yr/yr % change)	183.7%	-27.2%	6.9%	3.2%	-1.7%	-9.1%	-3
Hospitals / Clinics	7.977	3.592	3.975	4.870	5.869	6.496	7.
Medical Misc.	0.100	0.536	0.343	0.383	0.463	0.541	0.
Medical	8.077	4.128	4.319	5.253	6.332	7.037	7.
(Yr/yr % change)	103.4%	-48.9%	4.6%	21.6%	20.6%	11.1%	11
Hotels	0.143	0.179	0.197	0.381	0.511	0.657	0.
Retail Misc.	0.070	0.194	0.167	0.190	0.221	0.249	0
Shopping	0.326	0.640	0.543	0.792	1.038	1.216	1.
Retail	0.539	1.012	0.906	1.364	1.770	2.123	2
(Yr/yr % change)	-36.3%	87.7%	-10.4%	50.5%	29.8%	19.9%	8
NON-RESIDENTIAL BUILDING	36.809	31.694	31.977	36.558	39.382	40.057	40
(Yr/yr % change)	37.3%	-13.9%	0.9%	14.3%	7.7%	1.7%	2
Multi-Family	18.395	16.121	15.312	17.474	19.612	21.778	23.
Single-Family	17.868	15.707	14.792	16.590	18.202	19.344	20
RESIDENTIAL	36.264	31.827	30.104	34.064	37.814	41.123	43
(Yr/yr % change)	31.3%	-12.2%	-5.4%	13.2%	11.0%	8.7%	6
TOTAL NON-RESIDENTIAL	65.642	57.792	63.751	76.425	87.221	93.169	97.
(Yr/yr % change)	8.7%	-12.0%	10.3%	19.9%	14.1%	6.8%	4
GRAND TOTAL	101.906	89.620	93.854	110.489	125.035	134.292	141.
(Yr/yr % change)	15.8%	-12.1%	4.7%	17.7%	13.2%	7.4%	5.

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.

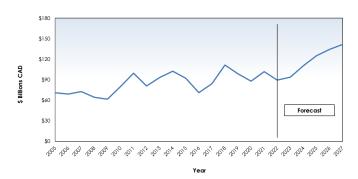
Table 8 presents an alternative, perhaps more user-friendly and intuitive, type-of-structure ordering that matches how the data appears in ConstructConnect's on-line product 'Insight'.

	Table 9: Canadian Provinces, Total Construction Starts — ConstructConnect										
	Actuals (Level in \$ Millions CAD)	Forecasts (Year versus previous year % change)									
Regions/Provinces (East to West)	2022	2023	2024	2025	2026	2027					
Atlantic region	\$4,096	41.2%	15.5%	9.3%	6.2%	3.7%					
Quebec	\$15,128	6.0%	22.5%	14.0%	8.7%	5.6%					
Ontario	\$37,798	-19.0%	14.9%	10.1%	6.4%	4.7%					
Manitoba	\$2,683	-10.5%	12.0%	14.1%	8.8%	7.1%					
Saskatchewan	\$1,622	50.6%	23.3%	16.8%	9.1%	6.0%					
Alberta	\$15,458	10.1%	18.0%	19.2%	11.3%	6.9%					
British Columbia	\$12,833	52.5%	18.7%	12.4%	4.2%	5.0%					
Canada	\$89,620	4.7%	17.7%	13.2%	7.4%	5.4%					

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

	Table 10: Canada Four Largest Provinces: Type-of-Structure Forecasts (\$ Billions CAD)											
				(\$ Billions CAD)								
		Actua	ıls			Forecasts						
		2021	2022	2023	2024	2025	2026	2027				
Quebec	Residential	6.871	4.164	3.573	5.336	6.057	6.850	7.386				
	Non-res Building	9.540	6.097	6.494	7.131	7.853	8.169	8.374				
	Engineering/Civil	5.611	4.867	5.974	7.176	8.478	9.316	9.940				
	Total	22.023	15.128	16.041	19.644	22.388	24.335	25.700				
(Yr vs previous y	r % Change)	30.4%	-31.3%	6.0%	22.5%	14.0%	8.7%	5.6%				
Ontario	Residential	15.874	13.128	12.484	13.932	15.597	16.743	17.736				
	Non-res Building	7.457	16.517	10.193	11.754	12.243	12.494	12.615				
	Engineering/Civil	8.162	8.153	7.921	9.467	10.876	11.945	12.750				
	Total	31.493	37.798	30.599	35.153	38.716	41.182	43.102				
(Yr vs previous y	r % Change)	-11.7%	20.0%	-19.0%	14.9%	10.1%	6.4%	4.7%				
Alberta	Residential	4.720	4.578	5.059	5.458	6.086	6.758	7.268				
	Non-res Building	2.521	3.528	3.809	4.158	4.836	5.240	5.542				
	Engineering/Civil	8.759	7.352	8.152	10.461	13.016	14.643	15.682				
	Total	15.999	15.458	17.019	20.077	23.937	26.641	28.492				
(Yr vs previous y	r % Change)	25.1%	-3.4%	10.1%	18.0%	19.2%	11.3%	6.9%				
British Columbia	Residential	6.113	7.338	7.063	7.222	7.762	8.305	8.908				
	Non-res Building	7.344	3.305	6.840	8.150	8.571	7.939	7.945				
	Engineering/Civil	1.922	2.190	5.664	7.863	9.773	10.955	11.701				
	Total	15.379	12.833	19.567	23.235	26.106	27.199	28.555				
(Yr vs previous y	r % Change)	0.3%	-16.6%	52.5%	18.7%	12.4%	4.2%	5.0%				

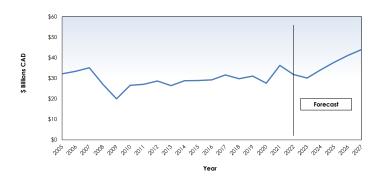
Graph 19: Canadian Grand Total Construction Starts — ConstructConnect



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

Chart: ConstructConnect

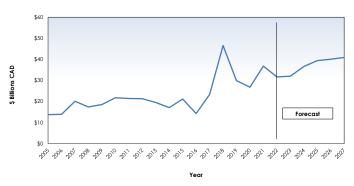
Graph 20: Canadian Residential Construction Starts — ConstructConnect



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

Chart: ConstructConnect

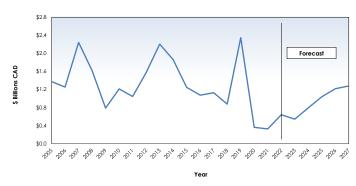
Graph 21: Canadian Non-Residential Building Starts — ConstructConnect



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

Chart: ConstructConnect.

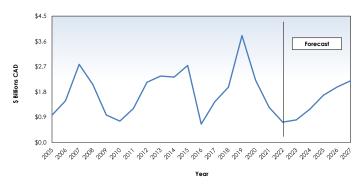
Graph 22: Canadian Shopping/Retail Construction Starts — ConstructConnect



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

Chart: ConstructConnect.

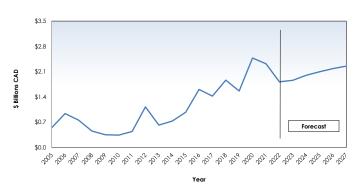
Graph 23: Canadian Private Offices Construction Starts — ConstructConnect



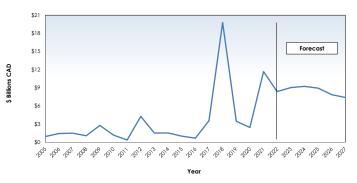
Source of actuals: ConstructConnect "Insight" / Forecasts: Oxford Economics and ConstructConnect.

Chart: ConstructConnect.

Graph 24: Canadian Warehouse Construction Starts — ConstructConnect

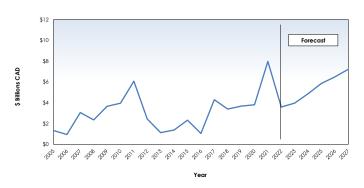


Graph 25: Canadian Industrial/Manufacturing Construction Starts — ConstructConnect



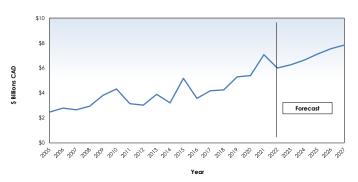
Source of actuals: ConstructConnect "Insight" / Forecasts: Oxford Economics and ConstructConnect.

Graph 26: Canadian Hospital/Clinic Construction Starts — ConstructConnect



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

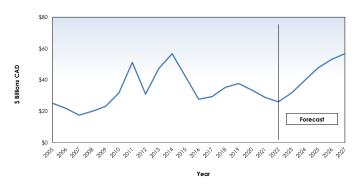
Graph 27: Canadian Education Construction Starts — ConstructConnect



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

Chart: ConstructConnect.

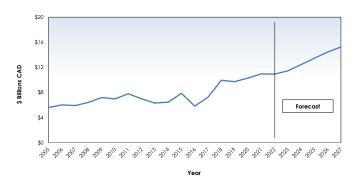
Graph 28: Canadian Engineering Construction Starts — ConstructConnect



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

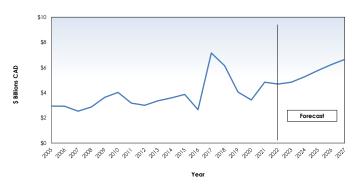
Chart: ConstructConnect.

Graph 29: Canadian Roadwork Construction Starts — ConstructConnect

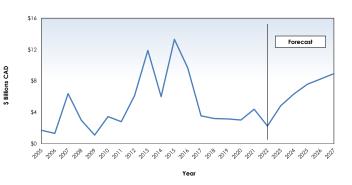


Source of actuals: ConstructConnect "Insight" / Forecasts: Oxford Economics and ConstructConnect. Chart: ConstructConnect.

Graph 30: Canadian Water and Sewage Construction Starts — ConstructConnect

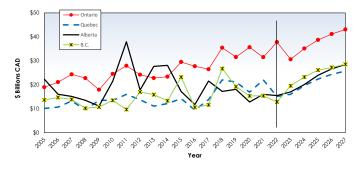


Graph 31: Canadian Power Infrastructure Construction Starts — ConstructConnect



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

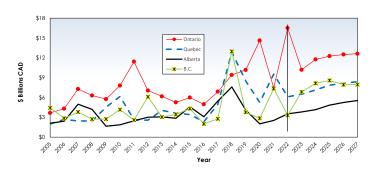
Graph 33: Canada Four Largest Provinces (by Population):
Total Construction Starts — ConstructConnect



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

Chart: ConstructConnect.

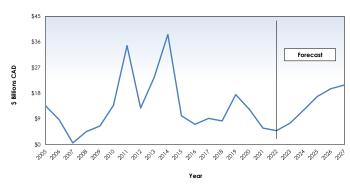
Graph 35: Canada Four Largest Provinces:
Total Non-residential Building Starts — ConstructConnect



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

Chart: ConstructConnect.

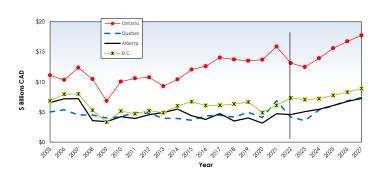
Graph 32: Canada All Other Civil (Oil Sands, Tunnels, RRs)
Construction Starts — ConstructConnect



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

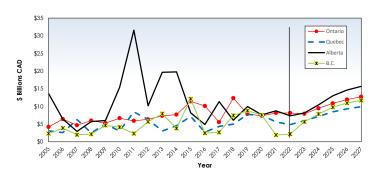
Chart: ConstructConnect.

Graph 34: Canada Four Largest Provinces:
Total Residential Construction 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



	Та	ble 11: U.S. T	ype-of-Struct quare Feet Millions		S		
	Actua	als			Forecasts		
	2021	2022	2023	2024	2025	2026	2027
Single-family	2,130.7	1,883.0	1,802.2	2,077.7	2,433.3	2,669.1	2,792.6
Multi-family	598.5	718.9	640.6	723.0	808.7	866.3	925.3
TOTAL RESIDENTIAL	2,729.2	2,601.9	2,442.8	2,800.7	3,241.9	3,535.5	3,717.9
(Yr/yr % change)	19.3%	-4.7%	-6.1%	14.7%	15.8%	9.1%	5.2%
Hotels/Motels	31.7	40.0	47.7	59.7	73.2	82.0	89.0
Shopping/Retail	49.5	47.7	54.8	65.3	79.2	94.7	108.3
Parking Garages	15.5	20.1	21.3	21.6	23.3	25.1	26.7
Amusement	23.3	22.7	23.1	24.3	27.1	29.7	31.2
Private Offices	72.4	74.2	81.3	92.7	105.4	115.3	122.3
Govenmental Offices	16.8	19.1	17.4	18.9	20.1	21.2	22.2
Laboratories (Schools & Industrial)	5.5	8.2	5.8	6.3	6.8	7.1	7.5
Warehouses	268.8	226.5	212.7	226.1	246.7	259.6	271.6
Sports Stadium/Convention Center	14.8	14.3	15.0	16.6	17.9	18.8	19.3
Transportation Terminals	8.4	6.9	9.6	11.0	12.0	12.2	11.4
TOTAL COMMERCIAL	506.7	479.7	488.7	542.5	611.6	665.7	709.4
(Yr/yr % change)	6.2%	-5.3%	1.9%	11.0%	12.7%	8.8%	6.6%
TOTAL INDUSTRIAL (manufacturing)	93.7	185.4	127.2	134.1	143.2	150.9	157.0
(Yr/yr % change)	30.0%	97.9%	-31.4%	5.4%	6.7%	5.4%	4.0%
Religious	3.4	2.9	3.3	3.7	4.1	4.5	5.0
Hospitals/Clinics	24.5	25.4	25.5	31.0	37.0	43.1	50.2
Nursing Homes/Assisted Living	23.9	15.3	17.8	21.0	25.9	29.7	32.4
Libraries/Museums	6.6	3.6	3.9	4.0	4.2	4.4	4.5
Courthouse	4.4	2.3	2.6	2.8	3.1	3.3	3.5
Police/Fire	7.5	9.3	8.1	8.6	9.1	9.5	9.8
Prisons	1.8	4.6	3.7	4.0	4.3	4.6	4.9
Military	20.8	12.5	12.9	14.7	16.6	18.0	19.5
Educational Facilities	126.0	154.6	153.5	158.8	166.2	173.7	179.6
MED misc	15.6	17.2	19.2	20.5	23.0	25.4	27.3
TOTAL INSTITUTIONAL	234.5	247.8	250.4	269.2	293.4	316.2	336.7
(Yr/yr % change)	-8.9%	5.7%	1.1%	7.5%	9.0%	7.8%	6.5%
Miscellaneous Non-Res Building	21.5	22.2	20.7	21.3	22.2	23.3	24.2
TOTAL NON-RES BLDG	856.4	935.1	887.0	967.2	1,070.3	1,156.1	1,227.3
(Yr/yr % change)	3.6%	9.2%	-5.1%	9.0%	10.7%	8.0%	6.2%
RESIDENTIAL + NON-RES BLDG	3,585.6	3,537.0	3,329.8	3,767.9	4,312.3	4,691.6	4,945.3
(Yr/yr % change)	15.1%	-1.4%	-5.9%	13.2%	14.4%	8.8%	5.4%

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.

 $Source\ of\ actuals:\ Construct Connect\ "Insight"\ / Forecasts:\ Oxford\ Economics\ and\ Construct Connect\ /\ Table:\ Connect\ /\ Ta$

	Ţ	able 12: U.S.	Type-of-Struc	ture Foreca	sts		
	Arranged to match the	he alphabetical cat	egory drop-down m	enus in INSIGHT	(Square Feet Milli	ons)	
		Actuals			Forecasts		
	2021	2022	2023	2024	2025	2026	202
Summary							
ION-RESIDENTIAL BUILDING	856.4	935.1	887.0	967.2	1,070.3	1,156.1	1,227
RESIDENTIAL	2,729.2	2,601.9	2,442.8	2,800.7	3,241.9	3,535.5	3,717
RESIDENTIAL + NON-RESIDENTIAL BUILDING	3,585.6	3,537.0	3,329.8	3,767.9	4,312.3	4,691.6	4,945
/erticals							
Offices (private)	72.4	74.2	81.3	92.7	105.4	115.3	123
Parking Garages	15.5	20.1	21.3	21.6	23.3	25.1	2
Transportation Terminals	8.4	6.9	9.6	11.0	12.0	12.2	1
Commercial	96.4	101.2	112.2	125.3	140.6	152.6	16
(Yr/yr % change)	-2.0%	5.0%	10.9%	11.7%	12.2%	8.5%	5.
Amusement	23.3	22.7	23.1	24.3	27.1	29.7	3
Libraries / Museums	6.6	3.6	3.9	4.0	4.2	4.4	
Religious	3.4	2.9	3.3	3.7	4.1	4.5	
Sports Arenas / Convention Centers		14.3	15.0	16.6	17.9	18.8	1
Community	48.0	43.6	45.4	48.6	53.3	57.3	
(Yr/yr % change)	15.7%	-9.3%	4.1%	7.2%	9.6%	7.6%	4.
College / University	25.5	33.6	34.0	36.1	37.6	39.8	
Elementary / Pre School	36.4	49.0	48.2	49.3	51.4	53.8	
Jr / Sr High School	58.2	67.0	67.2	68.9	72.4	75.1	
Special / Vocational							,
	6.0 126.0	4.9 154.6	4.1 153.5	4.6 158.8	4.8 166.2	5.0 173.7	1.
Educational							11
(Yr/yr % change)	-15.2%	22.6%	-0.7%	3.5%	4.6%	4.5%	3
Courthouses	4.4	2.3	2.6	2.8	3.1	3.3	
Fire and Police Stations	7.5	9.3	8.1	8.6	9.1	9.5	
Government Offices	16.8	19.1	17.4	18.9	20.1	21.2	2
Prisons	1.8	4.6	3.7	4.0	4.3	4.6	
Government	30.6	35.4	31.7	34.3	36.5	38.6	1
(Yr/yr % change)	12.5%	15.8%	-10.4%	8.1%	6.5%	5.7%	4
Industrial Labs / Labs / School Labs	5.5	8.2	5.8	6.3	6.8	7.1	
Manufacturing	93.7	185.4	127.2	134.1	143.2	150.9	15
Warehouses	268.8	226.5	212.7	226.1	246.7	259.6	2
Industrial	368.0	420.2	345.7	366.6	396.7	417.6	4:
(Yr/yr % change)	19.8%	14.2%	-17.7%	6.0%	8.2%	5.3%	4
Hospitals / Clinics	24.5	25.4	25.5	31.0	37.0	43.1	
Medical Misc.	15.6	17.2	19.2	20.5	23.0	25.4	
Nursing Homes	23.9	15.3	17.8	21.0	25.9	29.7	
Medical	63.9	57.9	62.5	72.5	85.9	98.2	1
(Yr/yr % change)	-1.9%	-9.4%	8.0%	16.0%	18.5%	14.3%	11
Military	20.8	12.5	12.9	14.7	16.6	18.0	
(Yr/yr % change)	-7.6%	-40.2%	3.2%	14.6%	12.5%	8.9%	7
Hotels	31.7	40.0	47.7	59.7	73.2	82.0	
Retail Misc.	21.5	22.2	20.7	21.3	22.2	23.3	
Shopping	49.5	47.7	54.8	65.3	79.2	23.3 94.7	10
·							
Retail	102.7	109.9	123.2	146.3	174.6	200.0	2:
(Yr/yr % change) ON-RESIDENTIAL BUILDING	-11.8%	7.0%	12.1%	18.8%	19.3%	14.6%	10
	856.4	935.1	887.0	967.2	1,070.3	1,156.1	1,2
(Yr/yr % change)	3.6%	9.2%	-5.1%	9.0%	10.7%	8.0%	6
Multi-Family	598.5	718.9	640.6	723.0	808.7	866.3	9
Single-Family	2,130.7	1,883.0	1,802.2	2,077.7	2,433.3	2,669.1	2,79
ESIDENTIAL	2,729.2	2,601.9	2,442.8	2,800.7	3,241.9	3,535.5	3,7
						0.10/	_
(Yr/yr % change)	19.3%	-4.7%	-6.1%	14.7%	15.8%	9.1%	
(Yr/yr % change) RESIDENTIAL + NON-RESIDENTIAL BUILDING (Yr/yr % change)	19.3% 3,585.6 15.1%	-4.7% 3,537.0 -1.4%	3,329.8 -5.9%	3,767.9 13.2%	4,312.3 14.4%	4,691.6 8.8%	5. 4,94 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'.

Table 13: Canada Type-of-Structure Forecasts (Square Feet Millions)							
	Actua	ıls					
	2021	2022	2023	2024	Forecasts 2025	2026	2027
Single-family	154.2	135.4	127.6	143.0	156.9	166.8	175.6
Multi-family	84.9	77.7	74.1	84.4	94.7	105.2	113.9
TOTAL RESIDENTIAL	239.0	213.1	201.7	227.5	251.6	272.0	289.5
(Yr/yr % change)	29.7%	-10.8%	-5.4%	12.8%	10.6%	8.1%	6.4%
Hotels/Motels	0.7	0.8	0.8	1.6	2.1	2.7	3.2
Private Offices	5.4	2.8	3.1	4.6	6.4	7.6	8.4
Govenmental Offices	1.2	1.2	1.0	1.3	1.4	1.5	1.5
Shopping/Retail	2.5	3.2	2.4	3.9	5.6	7.4	8.9
Retail Miscellaneous	0.3	0.6	0.5	0.6	0.7	0.9	1.0
Parking Garages	0.5	0.2	0.2	0.3	0.4	0.5	0.5
Amusement	3.7	3.2	3.0	3.4	4.1	4.7	5.4
Warehouses	14.0	12.7	12.8	13.6	14.3	14.9	15.3
TOTAL COMMERCIAL	28.3	24.6	23.9	29.3	35.0	40.1	44.2
(Yr/yr % change)	11.1%	-13.2%	-2.9%	22.5%	19.6%	14.6%	10.2%
TOTAL INDUSTRIAL (manufacturing)	5.5	6.9	4.0	4.6	4.7	4.4	4.0
(Yr/yr % change)	6.1%	24.9%	-42.2%	15.2%	2.1%	-7.4%	-7.5%
Religious	0.3	0.1	0.1	0.2	0.3	0.3	0.3
Hospitals/Clinics	10.1	6.0	6.3	7.8	9.5	10.5	11.7
MED misc	0.2	1.3	0.9	0.9	1.1	1.3	1.4
Transportation Terminals*	0.2	0.7	1.2	1.9	1.8	1.3	1.0
Police/Fire	1.8	1.4	1.4	1.6	1.7	2.0	2.2
Educational Facilities	14.0	9.5	10.3	11.3	12.1	13.0	13.6
TOTAL INSTITUTIONAL	26.6	18.9	20.1	23.7	26.5	28.3	30.3
(Yr/yr % change)	26.0%	-28.9%	6.4%	18.0%	11.8%	6.8%	6.9%
TOTAL NON-RES BLDG	60.5	50.4	48.0	57.6	66.2	72.8	78.6
(Yr/yr % change)	16.7%	-16.6%	-4.8%	20.0%	15.0%	9.9%	7.9%
RESIDENTIAL + NON-RES BLDG	299.5	263.6	249.7	285.1	317.9	344.8	368.0
(Yr/yr % change)	26.8%	-12.0%	-5.3%	14.2%	11.5%	8.5%	6.7%

^{*} 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.

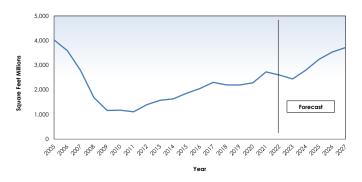
Arranged to match the alphabetical category drop-down menus in INSIGHT (Square Feet Millions)								
	Actua				Forecasts			
•	2021	2022	2023	2024	2025	2026	21	
Summary NON-RESIDENTIAL BUILDING	60.5	50.4	48.0	57.6	66.2	72.8	7	
NON-RESIDENTIAL BUILDING RESIDENTIAL	239.0	213.1	48.0 201.7	227.5	251.6	72.8 272.0	28	
RESIDENTIAL + NON-RESIDENTIAL BUILDING	299.5	263.6	249.7	285.1	317.9	344.8	36	
RESIDENTIAL + NON-RESIDENTIAL DOLLDING	200.0	203.0	243.7	203.1	317.3	344.0		
Verticals .								
Offices (private)	5.4	2.8	3.1	4.6	6.4	7.6		
Parking Garages	0.5	0.2	0.2	0.3	0.4	0.5		
Transportation Terminals	0.2	0.7	1.2	1.9	1.8	1.3		
Commercial	6.1	3.7	4.5	6.7	8.6	9.3		
(Yr/yr % change)	-4.3%	-40.0%	24.0%	48.3%	27.9%	7.8%	7	
Amusement	3.7	3.2	3.0	3.4	4.1	4.7		
Religious	0.3	0.1	0.1	0.2	0.3	0.3		
Community	4.1	3.2	3.1	3.6	4.3	5.0		
(Yr/yr % change)	135.0%	-20.9%	-3.7%	18.0%	18.9%	16.3%	13	
Educational	14.0	9.5	10.3	11.3	12.1	13.0		
(Yr/yr % change)	33.8%	-32.1%	8.3%	10.2%	7.0%	7.0%	Į.	
Fire and Police Stations	1.8	1.4	1.4	1.6	1.7	2.0		
Government Offices	1.2	1.2	1.0	1.3	1.4	1.5		
Government	3.0	2.6	2.4	2.8	3.1	3.4		
(Yr/yr % change)	-16.5%	-11.9%	-7.6%	17.7%	10.5%	9.3%	7	
Manufacturing	5.5	6.9	4.0	4.6	4.7	4.4		
Warehouses	14.0	12.7	12.8	13.6	14.3	14.9		
Industrial	19.5	19.6	16.8	18.2	19.0	19.2		
(Yr/yr % change)	16.6%	0.3%	-14.3%	8.7%	4.1%	1.2%	0	
Hospitals / Clinics	10.1	6.0	6.3	7.8	9.5	10.5		
Medical Misc.	0.2	1.3	0.9	0.9	1.1	1.3		
Medical	10.3	7.2	7.2	8.8	10.6	11.8		
(Yr/yr % change)	24.2%	-29.8%	-1.2%	22.5%	20.9%	11.4%	11	
Hotels	0.7	0.8	0.8	1.6	2.1	2.7		
Retail Misc.	0.3	0.6	0.5	0.6	0.7	0.9		
Shopping	2.5	3.2	2.4	3.9	5.6	7.4		
Retail	3.5	4.6	3.7	6.1	8.4	11.1		
(Yr/yr % change)	-24.7%	31.6%	-19.0%	61.9%	39.2%	30.9%	18	
NON-RESIDENTIAL BUILDING	60.5	50.4	48.0	57.6	66.2	72.8		
(Yr/yr % change)	16.7%	-16.6%	-4.8%	20.0%	15.0%	9.9%	7	
Multi-Family	84.9	77.7	74.1	84.4	94.7	105.2	1	
Single-Family	154.2	135.4	127.6	143.0	156.9	166.8	1	
RESIDENTIAL	239.0	213.1	201.7	227.5	251.6	272.0	2	
(Yr/yr % change)	29.7%	-10.8%	-5.4%	12.8%	10.6%	8.1%	6	
RESIDENTIAL + NON-RESIDENTIAL BUILDING	299.5	263.6	249.7	285.1	317.9	344.8	3	
(Yr/yr % change)	26.8%	-12.0%	-5.3%	14.2%	11.5%	8.5%	6	

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.

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

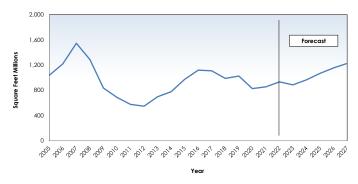
Graph 37: U.S. Residential
Construction Starts — ConstructConnect



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

Chart: ConstructConnect.

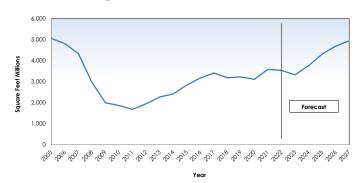
Graph 38: U.S. Non-Residential Building Construction Starts — ConstructConnect



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

Chart: ConstructConnect.

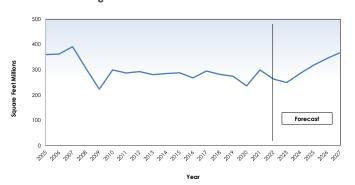
Graph 39: U.S. Residential + Non-Residential Building Construction Starts — ConstructConnect



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

Chart: ConstructConnect.

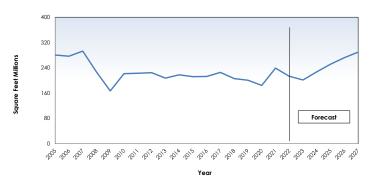
Graph 40: Canada Residential + Non-Residential Building Construction Starts — ConstructConnect



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

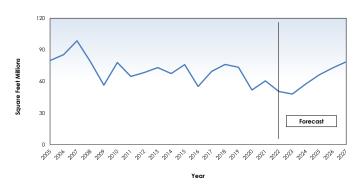
Chart: ConstructConnect.

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.

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