

January 2023 (based on December 2022 Starts Stats)

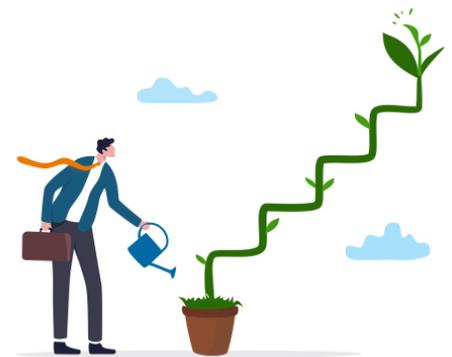
Construction Industry Snapshot



December's Nonresidential Construction Starts +58% M/M, +78% Y/Y & +33% Ytd

ConstructConnect announced today that Dec 2022's volume of construction starts, excluding residential work, was \$50.1 billion, an increase of +58.1% compared with Nov 2022's figure of \$31.7 billion. Once again, mega projects took a starring role.

Dec 2022 nonresidential compared with Dec 2021 was +77.6%. The 2022 full year performance of nonresidential starts was +33.0% vs Jan-Dec 2021. Grand total starts (i.e., including residential) on an annual basis, 2022/2021, were +16.7%.



Comparison	Commercial	Retail	Private Office	Hotel & Motel	Industrial	Institutional	Schools	Hospitals & Clinics	Heavy Engineering	Total Non-Residential
Dec 2022 vs Nov 2022	+2%	-22%	-29%	-7%	+40%	+9%	+15%	+47%	+28%	+58%
Jan-Dec 2022 vs Jan-Dec 2021	+3%	+9%	-4%	+39%	+204%	+18%	+23%	+27%	+27%	+33%
Jan-Dec 2021 vs Jan-Dec 2020	+5%	+5%	-19%	-29%	+61%	-5%	-11%	+40%	+1%	+4%

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December's Nonresidential Construction Starts +58% M/M, +78% Y/Y & +33% Ytd

Mega Projects were 2022's Story of the Year

ConstructConnect announced today that December 2022's volume of construction starts, excluding residential work, was \$50.1 billion (green shaded box, bottom of page 11), an increase of +58.1% compared with November's figure of \$31.7 billion (originally reported as \$31.1 billion). After a relatively quiet month for mega project starts (i.e., those of a billion dollars or more each) in November, they came roaring back in the latest month.

Total nonresidential starts in December 2022 were +77.8% when compared with December of 2021. December's year-to-date starts in all designations, type and/or regional, are the annual figures. The full year results for nonresidential starts in 2022 were +33.0% (i.e., ahead by a third) compared with full year 2021.

The story of construction starts in 2022 was the proliferation of mega projects. Many of them originated in the manufacturing sector. December offered a prime example. Three of its four 'megs' were production plants: a computer chipmaking facility in Arizona; and battery plants in Tennessee and Arizona (see Top 10 list, page 8). The other mega was the laying of an underground electric power cable from Canada to New York.

By quarter, the number and dollar volumes of mega project starts in 2022 were: 1 for \$2.0 billion in Q1; 12 for \$44.9 billion in Q2; 9 for \$27.5 billion in Q3; and 9 for \$30.9 billion in Q4. Last year, 2021, established a new annual record for mega project starts, 31 such undertakings for a total dollar volume of \$105.3 billion. The previous best year was in 2019 when there were 35 megas summing to \$79.1 billion.

The recent abundance of mega construction jobs has been a wonderful post-pandemic

development. But there's a potential catch. Their dominance may be obscuring what is happening in the rest of the marketplace. As a percentage of grand total starts dollar-wise, the limited number of megas was 16.2% in Q2; 11.5% in Q3; and 15.1% in Q4. As a percentage of total nonresidential starts, measured in dollar volume, in those same three quarters, the shares claimed by megas ranged from about one-fifth to one-quarter.

At least at an aggregated level, however, the distortion with respect to non-mega starts does not appear to be as severe as one might expect. 2022's Q4 versus Q3 dollar-volume results for starts were -11.6% for total nonresidential and -14.1% for grand total. Excluding mega projects, the Q4 over Q3 findings were -17.0% for nonresidential and -17.5% for grand total.

To complete the overview picture, the GRAND TOTAL dollar volume (i.e., adding residential to nonresidential activity) of starts in December 2022 was +32.5% m/m, +26.7% y/y and +16.7% ytd.

Nonresidential Building Starts Shone Brightly in December

There are three major sub-categories of total starts: residential, nonresidential building and heavy engineering/civil. On a percentage-change basis for full years 2022 and 2021, non-residential building was the winner, +36.7%, with heavy engineering/civil also doing quite well, +26.9%. Only residential struggled, -2.2%.

On a month-to-month basis in December, non-residential building was again in the captain's seat, +79.3%. Engineering also distinguished itself nicely, +28.0%. Residential, though, recorded slippage, -5.3%.

TTM Grand Total Starts Back on a Better Track

Other statistics often beloved by analysts are trailing twelve-month (TTM) results and these are set out for all the various type-of-structure categories in Table 9 on page 11 of this report.

Grand Total TTM starts in December, on a month-to-month basis, swung back into positive territory, +1.7%, after being -1.4% in November. In October, they had been +2.0%.

On a year-over-year basis in December, Grand Total TTM starts were +16.7%, better than in November, +15.6%, but not as upbeat as in October, +18.4%.

Some Nonresidential PIP Categories Show Uplift

'Starts' compile the total estimated dollar value and square footage of all projects on which ground is broken in any given month. They lead, by nine months to as much as two years, put-in-place (PIP) statistics from the Census Bureau which are analogous to work-in-progress payments as the building of structures proceeds to completion.

PIP numbers cover the 'universe' of construction, new plus all manner of renovation activity, with residential traditionally (i.e., over the decade preceding the pandemic) making up two-fifths (about 40%) of the total and nonresidential, three-fifths (i.e., the bigger portion, at around 60%).

During the past several years, however, there has been a dramatic change in the first- to second-place ordering. In 2021's full year PIP results, the residential to nonresidential relationship was about half and half. Through November of 2022, it was residential with the larger slice of total, at 51.2%. Nonresidential was left with the smaller share, 48.8%.

The January-November 2022 over January-November 2021 total dollar volume of PIP construction was +10.5%. Residential was beating nonresidential, +14.7% ytd to +6.5% ytd. But there were some nonresidential type-of-structure sub-categories that were setting pretty hot paces. Manufacturing was +33.6% ytd and store/warehouse and water supply/clean-up were both exhibiting double-digit percentage-change gains.

PIP numbers, being more spread out, have smaller peak-over-trough percent-change

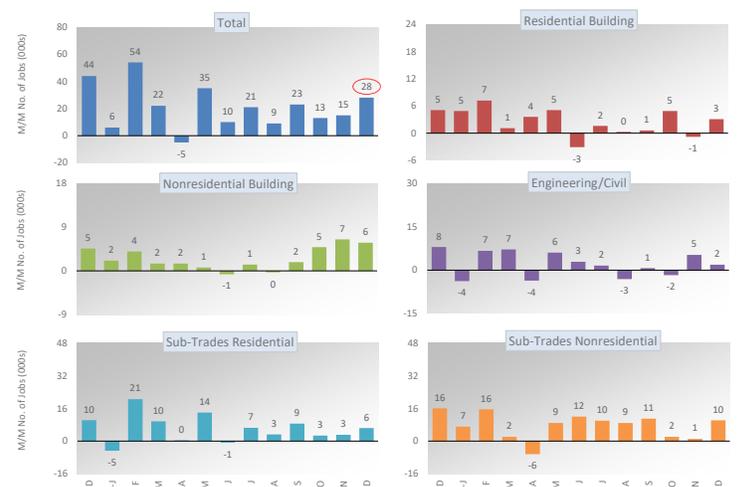
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TABLE 1: VALUE OF UNITED STATES NONRESIDENTIAL CONSTRUCTION STARTS — DECEMBER 2022 (ConstructConnect®)

	Jan-Dec 2022 (\$ billions)	% Change Jan-Dec 22 vs Jan-Dec 21	% Change Dec 22 vs Dec 21	% Change Dec 22 vs Nov 22
Hotel/Motel	10.005	38.8%	-16.0%	-7.1%
Retail/Shopping	14.060	9.1%	20.2%	-21.8%
Parking Garage	2.218	25.5%	126.7%	26.8%
Amusement	7.399	12.9%	0.3%	-17.6%
Private Office	20.127	-4.0%	-43.8%	-29.1%
Government Office	13.451	14.9%	38.1%	8.7%
Laboratory	4.479	82.6%	-59.5%	-71.3%
Warehouse	27.323	-3.2%	-3.8%	47.0%
Miscellaneous Commercial *	12.220	-23.7%	-76.4%	60.1%
COMMERCIAL (big subset)	111.284	3.3%	-37.0%	2.3%
INDUSTRIAL (Manufacturing)	106.585	203.8%	1096.7%	400.9%
Religious	1.010	-17.0%	111.9%	58.5%
Hospital/Clinic	23.870	27.4%	56.2%	47.4%
Nursing/Assisted Living	3.982	-33.2%	-21.7%	117.0%
Library/Museum	3.477	-3.2%	-51.9%	-1.6%
Fire/Police/Courthouse/Prison	9.094	17.4%	5.6%	-4.1%
Military	9.965	8.2%	-51.6%	-60.7%
School/College	73.505	22.7%	43.3%	14.9%
Miscellaneous Medical	8.996	20.3%	-38.7%	-20.5%
INSTITUTIONAL	133.900	17.6%	18.8%	9.1%
Miscellaneous Non-residential	7.665	21.1%	29.9%	25.9%
NONRESIDENTIAL BUILDING	359.434	36.7%	70.6%	79.3%
Airport	7.371	41.7%	55.9%	-21.8%
Road/Highway	83.696	24.2%	15.0%	-22.5%
Bridge	27.566	53.2%	75.5%	26.9%
Dam/Marine	9.197	7.7%	-2.1%	-0.2%
Water/Sewage	43.627	28.8%	62.7%	23.3%
Miscellaneous Civil (power, pipelines, etc.)	27.114	15.5%	747.5%	181.3%
HEAVY ENGINEERING (Civil)	198.572	26.9%	93.5%	28.0%
TOTAL NONRESIDENTIAL	558.006	33.0%	77.6%	58.1%

* Includes transportation terminals and sports arenas.

GRAPH 1: CHANGE IN LEVEL OF U.S. CONSTRUCTION EMPLOYMENT, MONTH TO MONTH (M/M) — TOTAL & BY CATEGORIES — DECEMBER 2022



2022's monthly average increase in construction employment was +19,000 jobs, comparing well with 2021's January-to-December month-to-month mean pattern of +16,000. A slight shift in favor of nonresidential as opposed to residential construction jobs appears to be underway.

For each month, 'net' = zero. 'Sub-trade' in BLS data referred to as 'specialty' trade.

Data Source: Bureau of Labor Statistics (BLS)/Chart: ConstructConnect.

Continued from page 2

amplitudes than the 'starts' series. As an additional valuable service for clients and powered by its extensive 'starts' database, ConstructConnect, in partnership with Oxford Economics, a world-leader in econometric modeling, has developed put-in-place construction statistics by types of structure for U.S. states, cities and counties, actuals and forecasts. ConstructConnect's PIP numbers are being released quarterly and are featured in a separate reporting system.

Construction Walks the Middle Ground among Sectors

Construction's share of U.S. total non-farm employment in the monthly labor market report issued by the Bureau of Labor Statistics (BLS) is slightly more than 5.0%. To claim its exact proportional share of December's economy-wide number-of-jobs increase of +223,000, the figure for construction would have needed to be +11,000. Instead, at an actual level of +28,000, the +11,000 figure was easily surpassed.

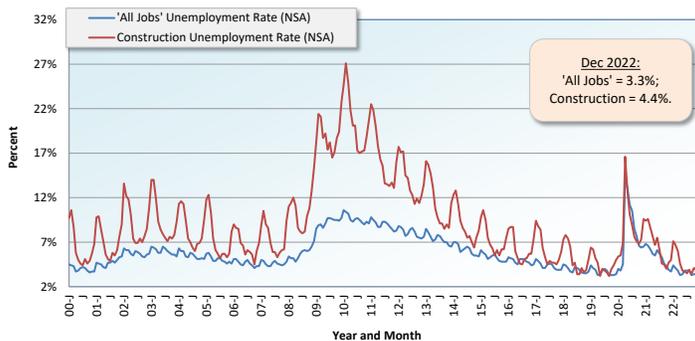
The monthly average increase in construction employment throughout 2022 was +19,000, which exceeded 2021's comparable number of +16,000.

Construction's not seasonally adjusted (NSA) unemployment rate in December was 4.4%, up from November's 3.9%. That's to be expected due to what's known as seasonality. The arrival of cold winter weather usually bites into outdoors onsite activity. Compared with December 2021's NSA U reading of 5.0%, the 4.4% for the latest month looks pretty good.

December's NSA U rate for construction of 4.4% was a bit higher than the nation's 'all jobs' figure of 3.3%. More strikingly, it was well above manufacturing's minimal reading of 1.9%. Both the manufacturing and construction sectors are in the goods-producing segment of the economy (i.e., as opposed to services-producing) and there is considerable overlap between their labor pools.

In December, the U.S. construction sector managed a slightly faster rate

GRAPH 3: U.S. UNEMPLOYMENT RATES: HEADLINE (I.E., 'ALL JOBS') & CONSTRUCTION (NOT SEASONALLY ADJUSTED (NSA))

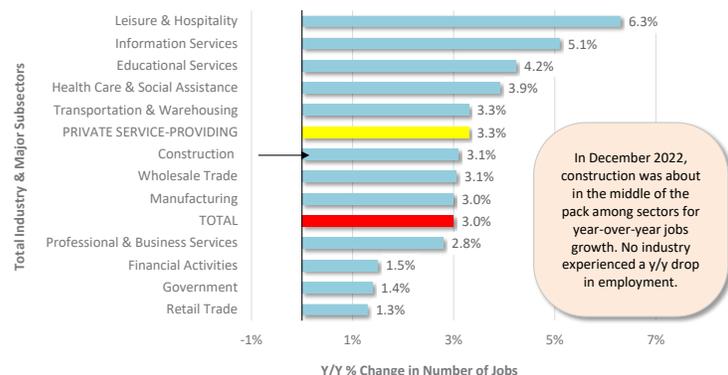


There used to be wide seasonal discrepancies between the unemployment rates for 'all jobs' and for construction, indicating that a career in the latter was more precarious. In recent times, though, the gap has largely disappeared, which should be a help in recruiting drives to sign up more onsite workers.

Current through December, 2022.

Data source: Bureau of Labor Statistics (BLS) / Chart: ConstructConnect.

GRAPH 5: Y/Y JOBS CHANGE, U.S. TOTAL INDUSTRY & MAJOR SUBSECTORS — DECEMBER 2022 (BASED ON SEASONALLY ADJUSTED PAYROLL DATA)



December 2022's y/y changes in employment within the pandemic's initially hardest-hit sector, 'leisure & hospitality', were: 'hotels/motels', +9.1%; 'amusements/gambling', +8.1%; and 'restaurants & bars', +5.5%.

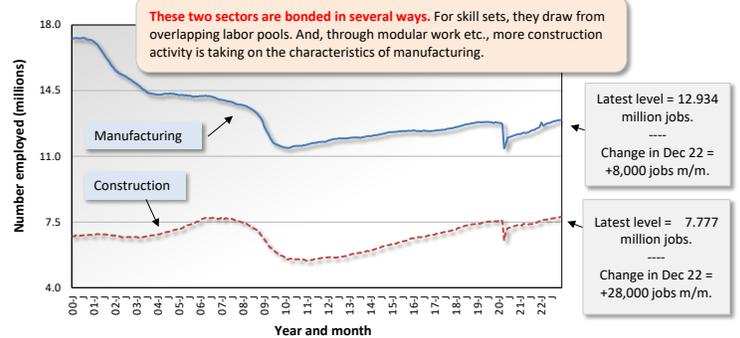
Data source: Payroll Survey, U.S. Bureau of Labor Statistics (Dept of Labor)/Chart: ConstructConnect.

of year-over-year jobs growth, +3.1%, than either the economy as a whole or the manufacturing sector, each at +3.0%. By further way of comparison, however, staffing by the private services-providing sector was +3.3%, and by the leisure and hospitality sub-set industry, +6.3%.

In other segments of the economy with close ties to construction, the latest (December 2022) year-over-year percentage changes in employment were as follows: oil and gas exploration and development, +9.2%; architectural and engineering design services, +4.9%; machinery and equip-

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GRAPH 2: U.S. MANUFACTURING VS CONSTRUCTION EMPLOYMENT DECEMBER, 2022 — SEASONALLY ADJUSTED (SA) PAYROLL DATA

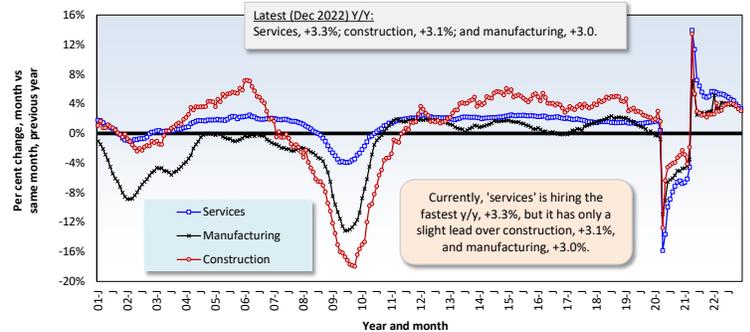


The not seasonally adjusted (NSA) unemployment rate for construction is presently 4.4%. In April 2020, at its worst, it was 16.6%. Manufacturing's current NSA jobless rate is a mere 1.8%. April 2020's extreme was 13.2%. In early 2000, the ratio of construction to manufacturing jobs was 0.4 to 1.0. Now, it's 0.6 to 1.0.

Latest data points are for December, 2022.

Source: Payroll Survey, U.S. Bureau of Labor Statistics (BLS) / Chart: ConstructConnect-CanaData.

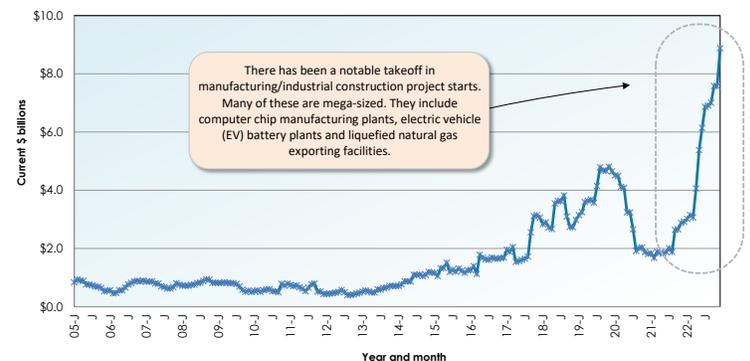
GRAPH 4: U.S. EMPLOYMENT DECEMBER 2022 — % CHANGE Y/Y BASED ON SEASONALLY ADJUSTED (SA) DATA



The latest data points are for December, 2022.

Data source: Payroll Survey, Bureau of Labor Statistics (U.S. Department of Labor)/Chart: ConstructConnect.

GRAPH 6: U.S. MANUFACTURING/INDUSTRIAL CONSTRUCTION STARTS — CONSTRUCTCONNECT



The last data point is for December 2022.

Data source: ConstructConnect. Graph: ConstructConnect.

Continued from page 3

ment rental and leasing, +4.3%; real estate, +2.4%; cement and concrete product manufacturing, +2.0%; and building materials and supplies dealers, -0.2%. The latter reflects less robust residential prospects, in both the new and renovation fields.

Design services work at architectural and engineering firms leads into later onsite activity. Therefore, the +4.9% jobs jump for the industry would seem to be a positive sign concerning future in-the-field employment. But it may relate more to the extraordinarily high level of backlog built up by firms in the industry, as pointed out in the press release accompanying the latest Architecture Billings Index (ABI) from the American Institute of Architects (AIA). The Billings Index has sunk into a range between 45.0 and 50.0 of late. For the ABI, 50.0 is the demarcation point where a descent below indicates fewer rather than more sales month to month.

Pluses and Minuses among Type of Structure Sub-categories

The +58.1% month-to-month (m/m) increase in December's total nonresidential starts was helped along mightily by the industrial sub-category, +400.9%. Engineering also extended a strong helping hand, +28.0%. Institutional and commercial recorded gains as well, but they were of a modest nature, +9.1% and +2.3% respectively.

The +77.6% pickup in total nonresidential starts in December 2022 versus December 2021 (y/y) arose, prodigiously, in industrial, +1096.7% (see manufacturing projects among the Top 10 on page 8), but it wasn't the only sub-category to sing sweetly. Engineering was +93.5% and institutional, +18.8%. Commercial, though, hit a sour note relative to its year-before performance, -37.0%.

December's +33.0% year-to-date (ytd) advance in total nonresidential starts was thanks to an astonishing improvement in industrial (+203.8%), a good leap forward by engineering (+26.9%), a solid outreach by institutional (+17.6%), and a test-the-waters approach by commercial (+3.3%).

There are two dominant sub-categories of total nonresidential starts. When the volumes of 'roads/highways' and 'schools/colleges' are added together, they accounted for 28.2% of 2022's total nonresidential starts (i.e., shares of 15.0% and 13.2% respectively).

The three percentage-change metrics for street starts in December 2022 were -22.5% m/m, but +15.0% y/y, and +24.2% ytd. For educational facility starts, the results were all encouraging: +14.9% m/m, +43.3% y/y, and +22.7% ytd. At the various levels of education, and for full year 2022 vs full year 2021, the 'pre-school and elementary' designation did best, +39.5%, although 'colleges and universities' also made a good showing, +23.3% (see Table 2).

Important beyond roads within the engineering sub-category are 'water/sewage' and 'bridge' starts. The results for the former in December were +23.3% m/m, +62.7% y/y, and +28.8% ytd. For the latter, there were uplifting figures of +26.9% m/m, +75.5% y/y and +53.2% ytd.

Important beyond schools in institutional are three medical sub-categories - i.e., 'hospitals/clinics', 'nursing/assisted living' and 'miscellaneous medical'. Their combined starts in December 2022 were all healthy at +32.4% m/m, +16.1% y/y, and +14.4% ytd. On their own, 'hospital/clinic' starts in December were +47.4% m/m, +56.2% y/y, and +27.4% ytd.

Also performing well in full year 2022 were the 'police station/fire hall' (+43.5% ytd) and 'prison' (+31.6% ytd) sub-categories of starts. 'Courthouses' were the flip side (-27.3% ytd).

Looking at commercial starts and concentrating on full year 2022 over full year 2021 results, the 'hotel/motel' sub-category was a standout, +38.8%, but there were also noteworthy jumps by 'government offices' (+14.9%), 'amusement' (+12.9%), and 'retail/shopping' (+9.1%). Two smaller-dollar categories also had good years, 'laboratories' (+82.6%) and 'parking garages' (+25.5%). On the downside were 'warehouses' (-3.2%), 'private offices' (-4.0%), and 'miscellaneous', which includes 'transportation terminals' (-39.5%).

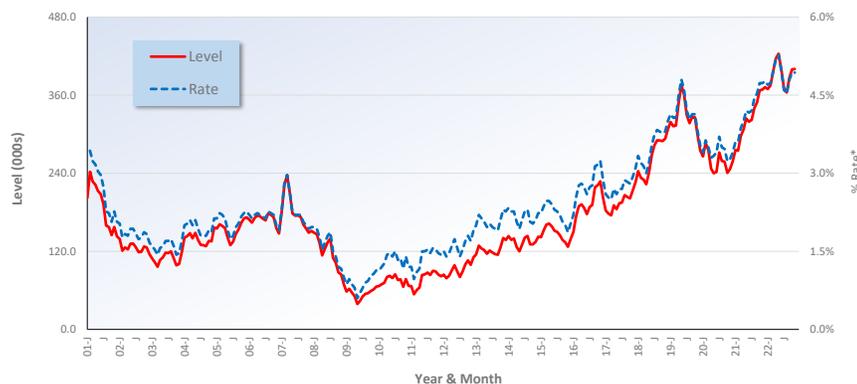
Finally, there are industrial starts to consider. Its three metrics for December were off the charts: +400.9% m/m; +1096.7% y/y; and +203.8% ytd. Graph 6 illustrates how construction

TABLE 2: CONSTRUCTION STARTS IN SOME ADDITIONAL TYPE OF STRUCTURE SUB-CATEGORIES — ConstructConnect®

	Jan-Dec 2022 (\$ billions)	% Change vs Jan-Dec 2021
Sports Stadiums/Convention Centers	\$6.189	2.4%
Transportation Terminals	\$6.031	-39.5%
Courthouses	\$1.802	-27.3%
Police Stations & Fire Halls	\$4.357	43.5%
Prisons	\$2.935	31.6%
Pre-School/Elementary	\$22.043	39.5%
Junior & Senior High Schools	\$30.574	13.6%
K-12 (sum of above two categories)	\$52.617	23.2%
Special & Vocational Schools	\$2.269	9.2%
Colleges & Universities	\$18.619	23.3%
Electric Power Infrastructure	\$14.288	58.2%

Source: ConstructConnect/Table: ConstructConnect.

GRAPH 7: U.S. CONSTRUCTION JOB OPENINGS (FROM JOLTS REPORT) (3-MONTH MOVING AVERAGES PLACED IN LATEST MONTH)

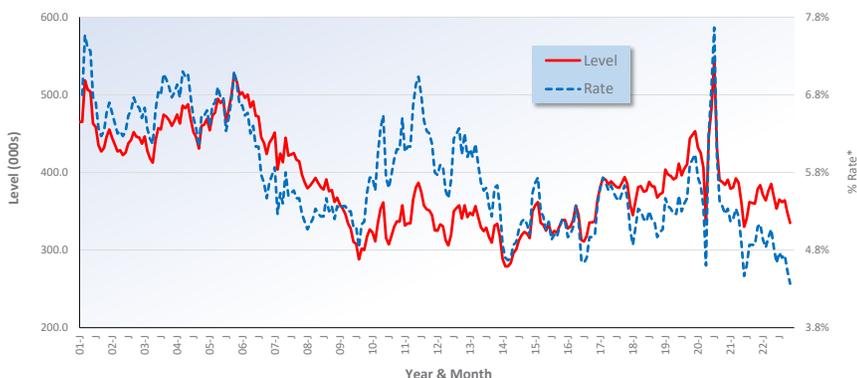


To date, there's been little impact on job openings in construction, both as a level and rate, from climbing interest rates and talk of possible recession. Available positions are plentiful.

*Rate is number of job openings end-of-month as % of 'construction employment plus number of job openings'. Latest seasonally adjusted data points are for November 2022. ... JOLTS = Job Openings and Labor Turnover Survey.

Data source: Bureau of Labor Statistics (Dept of Labor)/Chart: ConstructConnect.

GRAPH 8: U.S. CONSTRUCTION JOB HIRES (FROM JOLTS REPORT) (3-MONTH MOVING AVERAGES PLACED IN LATEST MONTH)



A longstanding problem of attracting new entrants to the construction workforce has become considerably more alarming in recent times. The rate of hires is in crisis, sinking to a new low.

*Rate is number of hires during month as % of construction employment.

Latest seasonally adjusted data points are for November 2022. ... JOLTS = Job Openings and Labor Turnover Survey.

Data source: Bureau of Labor Statistics (Dept of Labor)/Chart: ConstructConnect.

Continued on page 5

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starts in the manufacturing/industrial area launched into orbit in 2022. Fueling the climb were projects in computer chipmaking, the production of electric vehicles and batteries, and energy-related undertakings (e.g., ammonia plants and carbon capture and storage).

Texas as a Significant Regional Sidebar

Earlier it was stated that mega project starts were the major story in 2022. Then mention was also made of the exceptional strength coming from the manufacturing sector last year. As a natural outgrowth of those interrelated trends, there's an interesting regional sidebar on Texas.

Table 3, which ranks states, shows that nonresidential construction starts in first-place Texas in 2022 were nearly double in dollar volume versus 2021, +87.9%. Even more impressive, at a level of \$94.2 billion, Texas exceeded second-place California, at \$40.2 billion, by a vast margin.

From Table 4, the gap between leading-state Texas and runner-up California was even more extreme in nonresidential building starts, \$66.7 billion to \$24.8 billion. And the y/y increase managed by Texas was +122.1%.

From Table 5, Texas was again out front, this time in engineering starts (\$27.4 billion), but its lead wasn't quite as exaggerated over the two states that were nearly tied for second, New York (\$15.6 billion) and California (\$15.4 billion). In engineering starts, it was N.Y. that achieved the near doubling in dollar volume, 2022 over 2021 (+95.0%).

Trend Lines Exude Surprising Optimism

Page 9 of this Industry Snapshot sets out the history, January 2005 to the present, of 12-month moving 'starts' averages (derived from ConstructConnect's database) for a dozen construction types-of-structure. The moving-average approach is designed to capture trends. (As a technical note, the moving average is graphed in the ending month.)

Almost all the graphs, in their recent-month phases, are trending upwards. Where they are not (e.g., private office buildings), it's the lingering effects of the pandemic that, for the moment at least, are exerting negative influences more than higher interest rates and worries of recession.

Earnings Gains Keep On Rolling

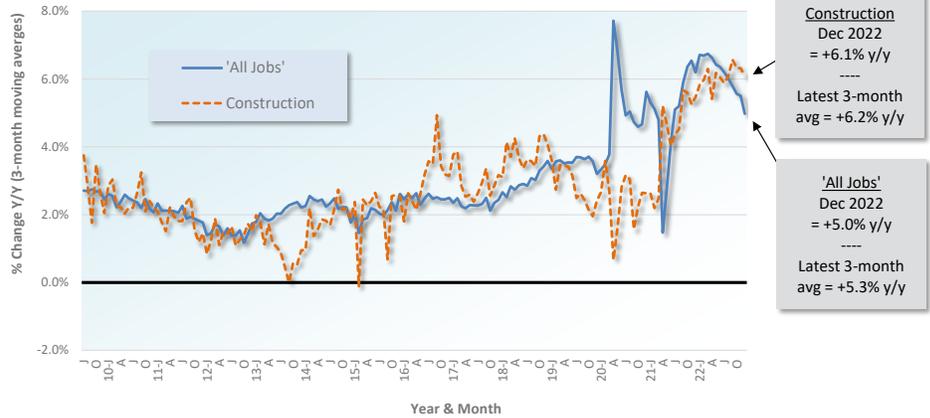
Tables B-3 and B-8 of the monthly *Employment Situation* report, from the BLS, record average hourly and average weekly wages for industry sectors. B-3 is for all employees (i.e., including bosses) on non-farm payrolls. B-8 is for 'production and non-supervisory personnel' only (i.e., it excludes bosses). For 'all jobs' and construction, there are eight percentage changes to follow.

From December 2022's Table B-3 (including bosses), y/y all-jobs earnings were +4.6% hourly and +3.1% weekly. Construction workers, as a subset of 'all jobs', did better on both fronts, +5.8% hourly and +3.9% weekly. From Table B-8 for production and non-supervisory workers (i.e., excluding bosses), the y/y all-jobs paycheck advances were +5.0% hourly and +4.1% weekly. Again, construction workers over-achieved, +6.1% hourly and +4.2% weekly.

Apparent Moderation in Material Cost Increases

This 2022 yearend Industry Snapshot is being written ahead of when December construction material cost information, as captured by the Producer Price Index data set, will be released (Jan 18, 2023).

GRAPH 9: AVERAGE HOURLY EARNINGS Y/Y — 'ALL JOBS' & CONSTRUCTION



The y/y advances in hourly wages are in line with, or not far away from, the present 'core' rate of inflation, +6.0%. The average annual hourly wage increase for construction workers, 2010 to 2019, was +2.3%; for 'all jobs', +2.4%.

From 'Production Workers and Non-supervisory Personnel' Table (B8). The latest data points are for December, 2022.

Data Source: Bureau of Labor Statistics (BLS)'s Employment Situation report/Chart: ConstructConnect.

GRAPH 10: AVERAGE WEEKLY EARNINGS Y/Y — 'ALL JOBS' & CONSTRUCTION



The December y/y changes for 'all jobs' and construction, both hourly and weekly, were somewhat slower than their 3-month moving averages. Currently, the NSA unemployment rate in construction is 4.4%; the 'all jobs' figure is 3.3%.

From 'Production Workers and Non-supervisory Personnel' Table (B8). The latest data points are for December, 2022.

Data Source: Bureau of Labor Statistics (BLS)'s Employment Situation report/Chart: ConstructConnect.

Therefore, the following paragraph is a repeat from a month ago.

November 2022's y/y results for three building related BLS Producer Price Index (PPI) series were: (A) 'construction materials special index', +0.6% (easing back from October's +3.5%); (B) 'inputs to new construction index, excluding capital investment, labor, and imports', +9.8% (a small moderation from the previous month's +10.5%); and (C) 'final demand construction', designed to capture bid prices, +19.0% (not much different from +19.2% in the period prior).

(A) comes from a data series with a long history, but it's confined to a limited number of major construction materials. (B) has a shorter history, but it's more comprehensive in its coverage, although it includes some items (e.g., transportation) that aren't strictly materials.

The value of construction starts each month is derived from ConstructConnect's database of all active construction projects in the U.S. ConstructConnect's non-residential construction starts series, because it is comprised of total-value estimates for individual projects,

some of which are super-large, has a history of being more volatile than many other leading indicators for the economy.

December 2022's 'Grand Total' Starts +16.7% Ytd

From Table 6 on page 7 (also Table 9 on page 11) of this report, ConstructConnect's total residential starts in December 2022 were -5.3% m/m, -25.7% y/y, and -2.2% ytd. Multi-family starts were -23.1% m/m and -29.5% y/y, but +20.9% ytd. Single-family starts were +4.3% m/m, but -24.1% y/y and -11.6% ytd.

Including home building with all nonresidential categories, **Grand Total** starts in December 2022 were +32.5% m/m, +26.7% y/y, and +16.7% ytd. **(Remember that, in December, the ytd results are equivalent to the annual results.)**

ConstructConnect adopts a research-assigned 'start' date. In concept, a 'start' is equivalent to ground being broken for a project to proceed. If work is abandoned or re-bid, the 'start' date is revised to reflect the new information.

What Can Multiple Views of the Market Tell Us About 2023?

Receiving multiple opinions about a situation or condition is often helpful and almost always relieving. Whether it be in health-care, purchasing a used car, or something else, a variety of opinions from subject matter experts (SMEs) generates more insights than their simple sum. A fuller and richer view allows for better decision making.

Seeking foresight into the 2023 nonresidential construction market is no different. Overlaying the outlook from Wall Street analysts who granularly study and monitor the publicly-traded firms in the nonresidential construction industry with insights from the American Institute of Architects (AIA), the Association of General Contractors (AGC), and ConstructConnect's own repository of construction project data, construction leaders can gain a strong and confidence-inspiring view of 2023.

The latest 2023 SME outlooks generally align, with all of them pointing to a tepid new year for the industry. Wall Street's collective outlook for large publicly-traded firms in the nonresidential space is generally stolid as the industry is expected to take a pause following seven quarters of booming growth ending Q3 2022. Year-on-year revenue growth measured quarterly is expected to decline over the next four quarters from +3% to -6% as the industry comes off a recent revenue peak.

The forward-looking Architecture Billings Index (ABI), a product of the AIA, upholds a similar view for the industry based on late-2022 data. The latest (Q4) Billings, and Design Contracts activity readings both fell below '50', indicating shrinking architecture service activity for the first time in nearly two years. Inquiries activity remains above '50'; but the latest readings mark a 2-year low for the series.

ConstructConnect's own repository of construction projects and spending data portends a cooling-off period for the industry after a prolonged expansion of the North American construction market. Contemplated construction spending activity across Canada, as measured by the Expansion Index, slowed through the second half of 2022 as readings transitioned from strong double-digit growth to low single-digit growth. Adjusted for inflation, these rate figures would fall further. In the U.S. the construction landscape is signaling moderation, with fewer geographies and verticals providing the same robust readings as were prevalent just 6-months ago.

Michael Guckes, Senior Economist

Expansion Index Monitors Construction Prospects

A rule of thumb is that nonresidential construction is a lagging indicator among economic measures. Companies are hesitant to undertake capital spending until their personnel needs are rapidly expanding and their office square footage or plant footprints are straining capacity. Plus, it helps if profits are abundant.

The 'rule' doesn't always hold true, however. For example, under present circumstances, weakness in some (mainly cyclical) areas of construction investment may well be offset by rich veins of large industrial and engineering projects to be unearthed.

Each month, ConstructConnect publishes information on upcoming construction projects at its Expansion Index web location, to be found by clicking on this link, <https://www.construct-connect.com/expansion-index>

The Expansion Index, for hundreds of cities in the U.S. and Canada, calculates the ratio, based on dollar volume, of projects in the planning stage, at present, divided by the comparable figure a year ago. The ratio moves above 1.0 when there is currently a larger dollar volume of construction 'prospects' than there was last year at the same time. The ratio sinks below 1.0 when the opposite is the case. The results are set out in interactive maps for both countries.

TABLE 3: 2022 YTD RANKING OF TOP 20 STATES BY \$ VOLUME OF NONRESIDENTIAL CONSTRUCTION STARTS — ConstructConnect®

	Jan-Dec 2022	% Change vs Jan-Dec 2021
1 Texas	\$94,186,561,241	87.9%
2 California	\$40,245,549,468	-1.7%
3 New York	\$33,136,439,323	47.5%
4 Florida	\$27,303,098,858	7.3%
5 North Carolina	\$21,015,866,131	39.7%
6 Georgia	\$19,214,280,196	70.2%
7 Michigan	\$18,667,037,354	99.3%
8 Arizona	\$18,331,367,153	9.7%
9 Louisiana	\$17,315,519,058	118.6%
10 Illinois	\$16,505,838,626	20.8%
11 Pennsylvania	\$15,839,049,921	16.7%
12 Tennessee	\$13,898,590,129	45.8%
13 Ohio	\$12,786,379,305	-13.6%
14 Massachusetts	\$12,663,479,817	6.7%
15 Indiana	\$12,341,705,937	37.9%
16 Kentucky	\$11,714,081,804	94.8%
17 Virginia	\$11,441,089,493	16.3%
18 Washington	\$10,837,612,839	38.4%
19 Wisconsin	\$9,836,709,813	20.4%
20 Missouri	\$9,314,571,554	8.1%

Figures are comprised of non-res building & engineering (residential is omitted).

TABLE 4: 2022 YTD RANKING OF TOP 20 STATES BY \$ VOLUME OF NONRESIDENTIAL BUILDING CONSTRUCTION STARTS — ConstructConnect®

	Jan-Dec 2022	% Change vs Jan-Dec 2021
1 Texas	\$66,746,664,804	122.1%
2 California	\$24,835,786,379	-6.0%
3 Florida	\$17,658,936,795	5.0%
4 New York	\$17,521,920,230	21.2%
5 Arizona	\$15,817,384,710	7.0%
6 Georgia	\$15,211,384,716	102.4%
7 North Carolina	\$14,578,496,361	29.6%
8 Louisiana	\$13,516,924,492	148.8%
9 Michigan	\$13,172,896,273	161.1%
10 Tennessee	\$10,676,505,309	52.7%
11 Pennsylvania	\$9,670,858,996	3.7%
12 Massachusetts	\$9,589,240,740	52.7%
13 Kentucky	\$9,479,758,433	147.9%
14 Illinois	\$8,065,441,396	8.6%
15 Indiana	\$7,625,915,668	36.3%
16 Virginia	\$7,088,379,052	5.0%
17 Ohio	\$6,795,463,148	-31.0%
18 Washington	\$6,665,374,147	34.8%
19 Wisconsin	\$5,888,571,525	31.7%
20 Missouri	\$5,683,329,939	-4.0%

TABLE 5: 2022 YTD RANKING OF TOP 20 STATES BY \$ VOLUME OF HEAVY ENGINEERING/CIVIL CONSTRUCTION STARTS — ConstructConnect®

	Jan-Dec 2022	% Change vs Jan-Dec 2021
1 Texas	\$27,439,896,437	36.7%
2 New York	\$15,614,519,093	95.0%
3 California	\$15,409,763,089	6.3%
4 Florida	\$9,644,162,063	11.9%
5 Illinois	\$8,440,397,230	35.3%
6 North Carolina	\$6,437,369,770	69.7%
7 Pennsylvania	\$6,168,190,925	45.1%
8 Ohio	\$5,990,916,157	21.1%
9 Michigan	\$5,494,141,081	27.2%
10 Minnesota	\$5,055,526,641	-19.1%
11 New Jersey	\$4,971,256,010	57.4%
12 Indiana	\$4,715,790,269	40.4%
13 Virginia	\$4,352,710,441	41.2%
14 Washington	\$4,172,238,692	44.6%
15 Georgia	\$4,002,895,480	6.0%
16 Wisconsin	\$3,948,138,288	6.7%
17 Louisiana	\$3,798,594,566	52.7%
18 Missouri	\$3,631,241,615	34.4%
19 Nevada	\$3,519,654,907	100.3%
20 Colorado	\$3,262,689,205	2.2%

Data source and Tables: ConstructConnect.

Alex Carrick is Chief Economist for ConstructConnect. He has delivered presentations throughout North America on the U.S., Canadian and world construction outlooks. Mr. Carrick has been with the company since 1985. Links to his numerous articles are featured on [Twitter @ConstructConnx](#), which has 50,000 followers.

INSIGHT view of starts statistics

TABLE 6: VALUE OF UNITED STATES CONSTRUCTION STARTS
ConstructConnect® INSIGHT VERSION — DECEMBER 2022
ARRANGED TO MATCH THE ALPHABETICAL CATEGORY DROP-DOWN MENUS IN INSIGHT

	Jan-Dec 2022 (\$ billions)	% Change Jan-Dec 22 vs Jan-Dec 21	% Change Dec 22 vs Dec 21	% Change Dec 22 vs Nov 22
Summary				
CIVIL	198.572	26.9%	93.5%	28.0%
NONRESIDENTIAL BUILDING	359.434	36.7%	70.6%	79.3%
RESIDENTIAL	354.420	-2.2%	-25.7%	-5.3%
GRAND TOTAL	912.426	16.7%	26.7%	32.5%
Verticals				
Airport	7.371	41.7%	55.9%	-21.8%
All Other Civil	12.826	-11.2%	24.8%	-21.9%
Bridges	27.566	53.2%	75.5%	26.9%
Dams / Canals / Marine Work	9.197	7.7%	-2.1%	-0.2%
Power Infrastructure	14.288	58.2%	4436.5%	343.0%
Roads	83.696	24.2%	15.0%	-22.5%
Water and Sewage Treatment	43.627	28.8%	62.7%	23.3%
CIVIL	198.572	26.9%	93.5%	28.0%
Offices (private)	20.127	-4.0%	-43.8%	-29.1%
Parking Garages	2.218	25.5%	126.7%	26.8%
Transportation Terminals	6.031	-39.5%	-95.4%	-65.0%
Commercial (small subset)	28.376	-13.2%	-77.2%	-33.4%
Amusement	7.399	12.9%	0.3%	-17.6%
Libraries / Museums	3.477	-3.2%	-51.9%	-1.6%
Religious	1.010	-17.0%	111.9%	58.5%
Sports Arenas / Convention Centers	6.189	2.4%	103.4%	589.6%
Community	18.076	3.8%	20.6%	73.9%
College / University	18.619	23.3%	83.1%	101.5%
Elementary / Pre School	22.043	39.5%	83.3%	12.6%
Jr / Sr High School	30.574	13.6%	19.7%	-12.0%
Special / Vocational	2.269	9.2%	-59.5%	-24.0%
Educational	73.505	22.7%	43.3%	14.9%
Courthouses	1.802	-27.3%	-68.8%	30.3%
Fire and Police Stations	4.357	43.5%	120.3%	22.3%
Government Offices	13.451	14.9%	38.1%	8.7%
Prisons	2.935	31.6%	107.5%	-35.9%
Government	22.545	15.9%	21.6%	2.7%
Industrial Labs / Labs / School Labs	4.479	82.6%	-59.5%	-71.3%
Manufacturing	106.585	203.8%	1096.7%	400.9%
Warehouses	27.323	-3.2%	-3.8%	47.0%
Industrial	138.388	110.4%	489.9%	296.7%
Hospitals / Clinics	23.870	27.4%	56.2%	47.4%
Medical Misc.	8.996	20.3%	-38.7%	-20.5%
Nursing Homes	3.982	-33.2%	-21.7%	117.0%
Medical	36.848	14.5%	16.1%	32.4%
Military	9.965	8.2%	-51.6%	-60.7%
Hotels	10.005	38.8%	-16.0%	-7.1%
Retail Misc.	7.665	21.1%	29.9%	25.9%
Shopping	14.060	9.1%	20.2%	-21.8%
Retail	31.731	20.1%	11.5%	-5.6%
NONRESIDENTIAL BUILDING	359.434	36.7%	70.6%	79.3%
Multi-Family	126.679	20.9%	-29.5%	-23.1%
Single-Family	227.741	-11.6%	-24.1%	4.3%
RESIDENTIAL	354.420	-2.2%	-25.7%	-5.3%
NONRESIDENTIAL	558.006	33.0%	77.6%	58.1%
GRAND TOTAL	912.426	16.7%	26.7%	32.5%

Table 1 conforms to the type-of-structure ordering adopted by many firms and organizations in the industry. Specifically, it breaks nonresidential building into ICI work (i.e., industrial, commercial and institutional), since each has its own set of economic and demographic drivers.

Table 6 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: ConstructConnect/Table: ConstructConnect.

“Top Ten” projects of the month

TABLE 7: ConstructConnect's TOP 10 PROJECT STARTS IN DECEMBER 2022

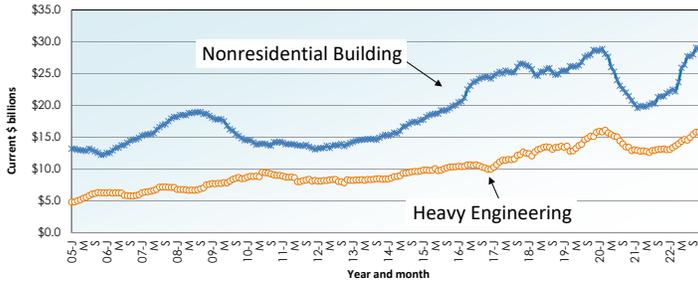
LOCATION (EAST TO WEST)	TYPE OF CONSTRUCTION	DESCRIPTION	SQUARE FEET 000S*	DOLLARS 000,000S
Connecticut New Haven	Institutional	Yale-New Haven Hospital Neuroscience Center (3 structures; 7 stories; 201 units) 659 George St Yale-New Haven Hospital Saint Raphael Campus	505	\$838
New York Albany	Civil/Engineering	Champlain Hudson Power Express Project (underground cable, Canada to New York) (3 structures) Multiple Locations Transmission Developers, Inc	*	\$4,500
New Jersey East Orange	Residential	The Crossings at Brick Church Station Phases 1 and 2 (6 structures; units 820) 533 Main St Triangle Equities	1,000	\$500
North Carolina Durham	Industrial	Industrial Site, Junction & Ferrell (3 structures) 2410 Ferrell Rd Joven Properties	1,000	\$537
Ohio Oak Run Township	Civil/Engineering	Fox Squirrel Solar (1 structure) Madison County EDF Renewables Corporate	*	\$678
Tennessee Stanton	Industrial	Blue Oval City Manufacturing Facility - Ford Motor Company (2 structures) TN-222 SK Innovation	7,500	\$5,600
Texas Frisco	Residential	Hall Park (7 structures; 9 stories; 1,736 units) Gaylord Pkwy & Warren Pkwy Hall Group	1,000	\$500
Arizona Phoenix	Industrial	Taiwan Semiconductor Manufacturing Company - Fab 2 / Phoenix (2 structures) Loop 303 and I-17 TSMC North America	2,500	\$8,000
Buckeye	Industrial	KOREplex Manufacturing Facility (Batteries) (1 structure) Baseline Rd KORE Power Inc	2,000	\$1,250
Washington Auburn	Industrial	Auburn 18 Business Park New Buildings (1 structure) 400 15th St SW Industrial Realty Group, LLC	1,000	\$537
TOTALS:			16,505	\$22,940

*A square footage measure does not apply for alteration, some forms of industrial (e.g., petrochemical) and most engineering/civil work.

Source: ConstructConnect/Table: ConstructConnect.

Trend graphs for 12 key categories

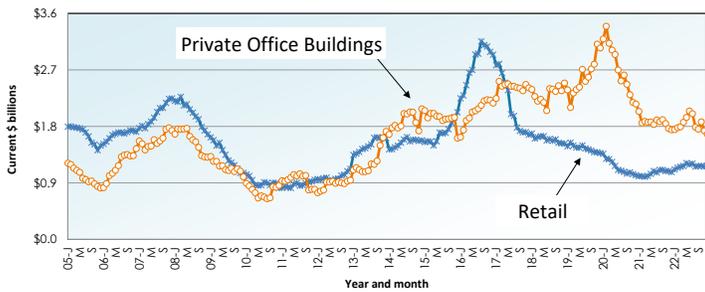
GRAPH 11: U.S. NONRESIDENTIAL CONSTRUCTION STARTS — ConstructConnect® (12-MONTH MOVING AVERAGES)



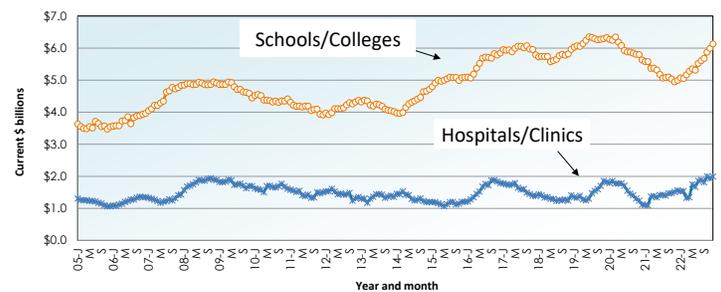
GRAPH 12: U.S. COMMERCIAL AND INSTITUTIONAL CONSTRUCTION STARTS — ConstructConnect® (12-MONTH MOVING AVERAGES)



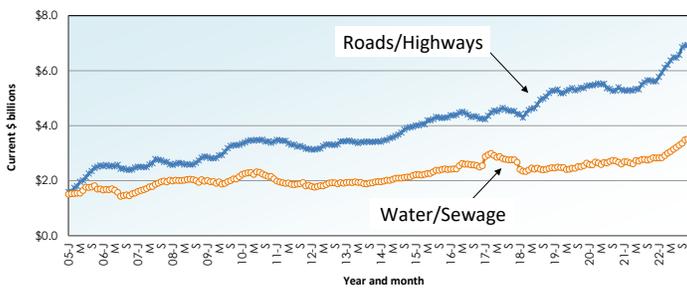
GRAPH 13: U.S. RETAIL AND PRIVATE OFFICE BUILDING CONSTRUCTION STARTS — ConstructConnect® (12-MONTH MOVING AVERAGES)



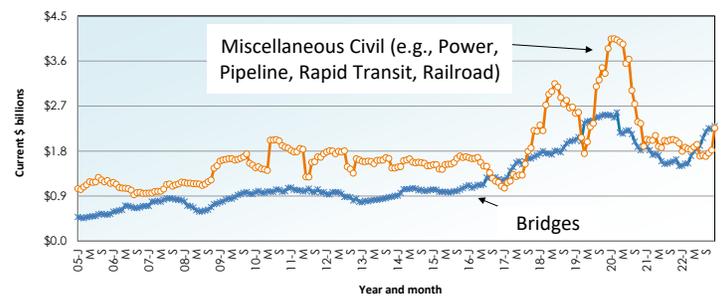
GRAPH 14: U.S. HOSPITAL/CLINIC AND SCHOOL/COLLEGE CONSTRUCTION STARTS — ConstructConnect® (12-MONTH MOVING AVERAGES)



GRAPH 15: U.S. ROAD/HIGHWAY AND WATER/SEWAGE CONSTRUCTION STARTS — ConstructConnect® (12-MONTH MOVING AVERAGES)



GRAPH 16: U.S. BRIDGES AND MISCELLANEOUS CIVIL CONSTRUCTION STARTS — ConstructConnect® (12-MONTH MOVING AVERAGES)



The last data points in all the graphs on this page are for December, 2022.

Source: ConstructConnect/Charts: ConstructConnect.

Regional starts table

TABLE 8: U.S. YEAR-TO-DATE REGIONAL STARTS, NONRESIDENTIAL CONSTRUCTION* — ConstructConnect®

	Jan-Dec 2021	Jan-Dec 2022	% Change
Connecticut	\$2,843,832,280	\$4,100,922,375	44.2%
Maine	\$3,078,783,370	\$3,491,362,330	13.4%
Massachusetts	\$11,873,095,140	\$12,663,479,817	6.7%
New Hampshire	\$1,467,762,225	\$826,621,715	-43.7%
Rhode Island	\$1,261,411,023	\$1,372,073,719	8.8%
Vermont	\$396,526,907	\$557,743,246	40.7%
Total New England	\$20,921,410,945	\$23,012,203,202	10.0%
New Jersey	\$7,321,702,145	\$9,000,171,605	22.9%
New York	\$22,460,514,336	\$33,136,439,323	47.5%
Pennsylvania	\$13,575,741,882	\$15,839,049,921	16.7%
Total Middle Atlantic	\$43,357,958,363	\$57,975,660,849	33.7%
TOTAL NORTHEAST	\$64,279,369,308	\$80,987,864,051	26.0%
Illinois	\$13,668,041,044	\$16,505,838,626	20.8%
Indiana	\$8,952,407,604	\$12,341,705,937	37.9%
Michigan	\$9,366,130,254	\$18,667,037,354	99.3%
Ohio	\$14,795,857,257	\$12,786,379,305	-13.6%
Wisconsin	\$8,171,930,341	\$9,836,709,813	20.4%
Total East North Central	\$54,954,366,500	\$70,137,671,035	27.6%
Iowa	\$5,204,417,197	\$5,042,782,357	-3.1%
Kansas	\$3,826,826,963	\$5,101,558,781	33.3%
Minnesota	\$10,079,209,586	\$9,131,793,772	-9.4%
Missouri	\$8,618,474,700	\$9,314,571,554	8.1%
Nebraska	\$3,744,798,587	\$6,000,044,715	60.2%
North Dakota	\$2,084,617,615	\$4,003,821,288	92.1%
South Dakota	\$1,903,647,957	\$3,782,569,860	98.7%
Total West North Central	\$35,461,992,605	\$42,377,142,327	19.5%
TOTAL MIDWEST	\$90,416,359,105	\$112,514,813,362	24.4%
Delaware	\$1,125,934,287	\$1,687,393,965	49.9%
District of Columbia	\$1,085,432,544	\$2,261,633,887	108.4%
Florida	\$25,435,519,032	\$27,303,098,858	7.3%
Georgia	\$11,291,910,040	\$19,214,280,196	70.2%
Maryland	\$6,033,921,787	\$7,498,323,926	24.3%
North Carolina	\$15,041,151,164	\$21,015,866,131	39.7%
South Carolina	\$5,527,315,488	\$7,832,935,292	41.7%
Virginia	\$9,834,750,514	\$11,441,089,493	16.3%
West Virginia	\$1,284,531,074	\$1,911,048,372	48.8%
Total South Atlantic	\$76,660,465,930	\$100,165,670,120	30.7%
Alabama	\$6,576,687,812	\$6,578,133,210	0.0%
Kentucky	\$6,014,484,828	\$11,714,081,804	94.8%
Mississippi	\$2,706,063,363	\$3,252,870,136	20.2%
Tennessee	\$9,533,625,687	\$13,898,590,129	45.8%
Total East South Central	\$24,830,861,690	\$35,443,675,279	42.7%
Arkansas	\$2,947,722,352	\$3,601,461,747	22.2%
Louisiana	\$7,920,065,808	\$17,315,519,058	118.6%
Oklahoma	\$4,485,589,027	\$7,035,437,819	56.8%
Texas	\$50,132,043,235	\$94,186,561,241	87.9%
Total West South Central	\$65,485,420,422	\$122,138,979,865	86.5%
TOTAL SOUTH	\$166,976,748,042	\$257,748,325,264	54.4%
Arizona	\$16,714,949,248	\$18,331,367,153	9.7%
Colorado	\$7,544,163,434	\$7,339,324,463	-2.7%
Idaho	\$1,390,921,585	\$3,163,017,232	127.4%
Montana	\$1,124,209,602	\$1,884,656,927	67.6%
Nevada	\$4,292,069,300	\$6,198,501,423	44.4%
New Mexico	\$2,453,730,207	\$2,965,709,424	20.9%
Utah	\$4,993,384,261	\$5,346,339,361	7.1%
Wyoming	\$994,099,112	\$1,454,300,189	46.3%
Total Mountain	\$39,507,526,749	\$46,683,216,172	18.2%
Alaska	\$1,303,616,394	\$1,723,383,938	32.2%
California	\$40,929,962,169	\$40,245,549,468	-1.7%
Hawaii	\$2,792,499,086	\$1,792,996,939	-35.8%
Oregon	\$5,449,388,047	\$5,472,551,240	0.4%
Washington	\$7,830,297,158	\$10,837,612,839	38.4%
Total Pacific	\$58,305,762,854	\$60,072,094,424	3.0%
TOTAL WEST	\$97,813,289,603	\$106,755,310,596	9.1%
TOTAL U.S.	\$419,485,766,058	\$558,006,313,273	33.0%

*Figures above are comprised of non-res building and engineering (i.e., residential is omitted).

Source: ConstructConnect/Table: ConstructConnect.

Detailed national table

TABLE 9: VALUE OF U.S. NATIONAL CONSTRUCTION STARTS — DECEMBER 2022 — ConstructConnect®
BILLIONS OF CURRENT \$\$, NOT SEASONALLY ADJUSTED (NSA)

	Latest month actuals			Moving averages (placed in end month)						Year to Date	
	Oct 22	Nov 22	Dec 22	Oct 22	Nov 22	Dec 22	Oct 22	Nov 22	Dec 22	Jan-Dec 2021	Jan-Dec 2022
Single Family	16.611	14.046	14.645	17.353	15.899	15.101	19.955	19.365	18.978	257.699	227.741
month-over-month % change	-2.5%	-15.4%	4.3%	-3.7%	-8.4%	-5.0%	-1.9%	-3.0%	-2.0%		
year-over-year % change	-21.6%	-33.5%	-24.1%	-19.7%	-25.0%	-26.5%	-6.7%	-10.1%	-11.6%	17.5%	-11.6%
Apartment	14.562	7.476	5.745	13.213	10.987	9.261	11.069	10.757	10.557	104.818	126.679
month-over-month % change	33.3%	-48.7%	-23.1%	12.2%	-16.8%	-15.7%	4.5%	-2.8%	-1.9%		
year-over-year % change	64.7%	-33.3%	-29.5%	42.9%	20.9%	-1.5%	34.8%	26.0%	20.9%	27.6%	20.9%
TOTAL RESIDENTIAL	31.173	21.522	20.390	30.565	26.886	24.362	31.024	30.122	29.535	362.517	354.420
month-over-month % change	11.5%	-31.0%	-5.3%	2.6%	-12.0%	-9.4%	0.3%	-2.9%	-1.9%		
year-over-year % change	3.8%	-33.5%	-25.7%	-0.9%	-11.3%	-18.6%	4.8%	0.2%	-2.2%	20.3%	-2.2%
Hotel/Motel	1.012	0.409	0.380	0.985	0.655	0.600	0.842	0.840	0.834	7.207	10.005
month-over-month % change	86.3%	-59.6%	-7.1%	-17.8%	-33.6%	-8.3%	2.9%	-0.3%	-0.7%		
year-over-year % change	38.7%	-6.4%	-16.0%	51.2%	6.2%	11.2%	34.1%	45.1%	38.8%	-29.3%	38.8%
Retail/Shopping	0.962	0.816	0.638	1.050	0.977	0.805	1.172	1.163	1.172	12.885	14.060
month-over-month % change	-16.6%	-15.2%	-21.8%	-1.2%	-6.9%	-17.6%	0.2%	-0.8%	0.8%		
year-over-year % change	2.9%	-11.8%	20.2%	-12.5%	1.5%	1.1%	7.6%	6.8%	9.1%	4.9%	9.1%
Parking Garages	0.052	0.178	0.226	0.192	0.185	0.152	0.167	0.174	0.185	1.768	2.218
month-over-month % change	-84.1%	245.0%	26.8%	-21.8%	-3.6%	-17.9%	-4.5%	4.1%	6.0%		
year-over-year % change	-64.4%	84.7%	126.7%	39.1%	59.6%	33.5%	13.5%	18.1%	25.5%	1.6%	25.5%
Amusement	0.736	0.499	0.412	0.713	0.639	0.549	0.607	0.617	0.617	6.555	7.399
month-over-month % change	7.7%	-32.1%	-17.6%	-9.5%	-10.3%	-14.2%	3.2%	1.6%	0.0%		
year-over-year % change	43.9%	29.3%	0.3%	44.4%	52.4%	25.9%	11.0%	12.5%	12.9%	4.1%	12.9%
Office	2.293	1.139	0.807	1.510	1.622	1.413	1.873	1.730	1.677	20.957	20.127
month-over-month % change	59.8%	-50.3%	-29.1%	17.0%	7.5%	-12.9%	6.6%	-7.6%	-3.0%		
year-over-year % change	153.7%	-60.1%	-43.8%	-25.7%	-12.6%	-18.4%	1.4%	-2.1%	-4.0%	-19.1%	-4.0%
Governmental Offices	1.518	0.943	1.026	1.411	1.261	1.162	1.093	1.097	1.121	11.703	13.451
month-over-month % change	14.7%	-37.8%	8.7%	6.0%	-10.6%	-7.9%	5.7%	0.4%	2.2%		
year-over-year % change	88.4%	5.5%	38.1%	41.8%	50.8%	42.8%	13.5%	12.5%	14.9%	9.8%	14.9%
Laboratories	0.292	0.288	0.083	0.566	0.398	0.221	0.384	0.383	0.373	2.453	4.479
month-over-month % change	-52.4%	-1.4%	-71.3%	-3.7%	-29.6%	-44.5%	2.2%	-0.2%	-2.6%		
year-over-year % change	53.0%	-2.5%	-59.5%	224.9%	104.2%	-4.0%	91.0%	81.8%	82.6%	4.3%	82.6%
Warehouse	2.720	1.001	1.472	2.548	2.196	1.731	2.437	2.282	2.277	28.230	27.323
month-over-month % change	-5.1%	-63.2%	47.0%	-10.7%	-13.8%	-21.2%	1.5%	-6.4%	-0.2%		
year-over-year % change	18.4%	-65.1%	-3.8%	1.7%	-15.9%	-22.4%	5.2%	-2.2%	-3.2%	7.7%	-3.2%
Misc Commercial	0.853	0.613	0.982	0.860	0.855	0.816	1.282	1.283	1.018	16.012	12.220
month-over-month % change	-22.3%	-28.1%	60.1%	-1.0%	-0.6%	-4.5%	-13.1%	0.1%	-20.6%		
year-over-year % change	-73.1%	1.4%	-76.4%	-54.3%	-54.5%	-69.2%	30.2%	28.2%	-23.7%	132.8%	-23.7%
TOTAL COMMERCIAL	10.438	5.887	6.026	9.834	8.789	7.450	9.858	9.568	9.274	107.769	111.284
month-over-month % change	3.9%	-43.6%	2.3%	-3.8%	-10.6%	-15.2%	0.6%	-2.9%	-3.1%		
year-over-year % change	7.6%	-37.1%	-37.0%	-2.3%	-7.4%	-21.9%	13.0%	10.6%	3.3%	5.1%	3.3%
TOTAL INDUSTRIAL (Manufacturing)	10.312	3.418	17.121	8.409	8.711	10.284	7.586	7.575	8.882	35.082	106.585
month-over-month % change	-16.9%	-66.9%	400.9%	-4.1%	3.6%	18.1%	8.3%	-0.2%	17.3%		
year-over-year % change	206.3%	-3.9%	1096.7%	52.2%	43.9%	269.2%	185.2%	163.4%	203.8%	61.4%	203.8%
Religious	0.146	0.046	0.074	0.118	0.090	0.089	0.087	0.081	0.084	1.217	1.010
month-over-month % change	90.7%	-68.3%	58.5%	36.1%	-23.7%	-1.1%	-7.6%	-6.7%	4.0%		
year-over-year % change	-36.9%	-59.9%	111.9%	-23.8%	-32.2%	-30.3%	-25.1%	-28.5%	-17.0%	-25.0%	-17.0%
Hospitals/Clinics	3.458	1.402	2.067	1.888	1.928	2.309	1.996	1.927	1.989	18.730	23.870
month-over-month % change	273.9%	-59.5%	47.4%	1.0%	2.1%	19.7%	10.0%	-3.4%	3.2%		
year-over-year % change	172.1%	-37.1%	56.2%	41.2%	9.1%	43.6%	35.6%	27.6%	27.4%	40.3%	27.4%
Nursing/Assisted Living	0.328	0.114	0.248	0.280	0.224	0.230	0.345	0.338	0.332	5.965	3.982
month-over-month % change	42.4%	-65.2%	117.0%	-10.8%	-20.1%	2.6%	-8.0%	-2.2%	-1.7%		
year-over-year % change	-52.3%	-44.8%	-21.7%	-53.1%	-52.7%	-43.0%	-37.5%	-35.1%	-33.2%	-20.3%	-33.2%
Libraries/Museums	0.476	0.187	0.184	0.381	0.347	0.282	0.306	0.306	0.290	3.591	3.477
month-over-month % change	25.6%	-60.8%	-1.6%	8.7%	-8.9%	-18.7%	10.6%	0.1%	-5.4%		
year-over-year % change	287.8%	1.4%	-51.9%	-15.6%	-22.7%	22.9%	4.7%	6.6%	-3.2%	-5.7%	-3.2%
Fire/Police/Courthouse/Prison	1.057	0.842	0.807	1.007	0.954	0.902	0.731	0.754	0.758	7.743	9.094
month-over-month % change	9.9%	-20.3%	-4.1%	7.1%	-5.3%	-5.4%	4.6%	3.1%	0.5%		
year-over-year % change	57.8%	48.1%	5.6%	68.1%	61.5%	35.1%	7.3%	17.7%	17.4%	-4.2%	17.4%
Military	1.431	0.934	0.367	1.238	1.318	0.911	0.883	0.863	0.830	9.211	9.965
month-over-month % change	-9.9%	-34.8%	-60.7%	26.0%	6.4%	-30.9%	4.1%	-2.3%	-3.8%		
year-over-year % change	41.0%	-20.5%	-51.6%	52.0%	30.2%	-7.3%	21.2%	17.3%	8.2%	0.0%	8.2%
Schools/Colleges	5.868	4.783	5.493	6.004	5.253	5.381	5.871	5.987	6.125	59.892	73.505
month-over-month % change	14.9%	-18.5%	14.9%	-8.2%	-12.5%	2.4%	3.4%	2.0%	2.3%		
year-over-year % change	65.7%	41.3%	43.3%	30.2%	41.0%	50.1%	16.8%	21.0%	22.7%	-11.3%	22.7%
Misc Medical	0.408	0.580	0.461	1.017	1.031	0.483	0.769	0.774	0.750	7.479	8.996
month-over-month % change	-80.6%	42.1%	-20.5%	-11.8%	1.3%	-53.2%	-2.1%	0.6%	-3.1%		
year-over-year % change	-32.4%	10.2%	-38.7%	44.5%	48.0%	-23.0%	20.0%	23.6%	20.3%	-8.9%	20.3%
TOTAL INSTITUTIONAL	13.172	8.887	9.700	11.934	11.145	10.586	10.989	11.030	11.158	113.829	133.900
month-over-month % change	15.8%	-32.5%	9.1%	-2.5%	-6.6%	-5.0%	4.0%	0.4%	1.2%		
year-over-year % change	61.8%	5.9%	18.8%	28.7%	26.0%	28.6%	15.5%	17.6%	17.6%	-4.6%	17.6%
Misc Non Residential	0.537	0.439	0.552	0.720	0.583	0.509	0.637	0.628	0.639	6.330	7.665
month-over-month % change	-30.6%	-18.3%	25.9%	-13.1%	-19.1%	-12.6%	-0.3%	-1.4%	1.7%		
year-over-year % change	-3.5%	-19.8%	29.9%	34.4%	1.9%	0.0%	20.4%	18.3%	21.1%	9.3%	21.1%
TOTAL NON-RES BUILDING	34.459	18.631	33.399	30.898	29.228	28.830	29.070	28.802	29.953	263.010	359.434
month-over-month % change	-0.4%	-45.9%	79.3%	-3.6%	-5.4%	-1.4%	3.8%	-0.9%	4.0%		
year-over-year % change	58.4%	-14.7%	70.6%	21.6%	17.1%	36.9%	35.7%	34.4%	36.7%	5.5%	36.7%
Airports	0.566	0.527	0.412	0.800	0.766	0.502	0.579	0.602	0.614	5.204	7.371
month-over-month % change	-53.0%	-6.8%	-21.8%	-11.7%	-4.3%	-34.5%	1.9%	4.0%	2.0%		
year-over-year % change	29.4%	112.8%	55.9%	56.9%	100.2%	58.6%	26.5%	41.5%	41.7%	-13.7%	41.7%
Roads/Highways	5.801	5.111	3.961	7.155	6.384	4.958	6.913	6.932	6.975	67.384	83.696
month-over-month % change	-29.6%	-11.9%	-22.5%	-8.4%	-10.8%	-22.3%	0.9%	0.3%	0.6%		
year-over-year % change	15.1%	4.5%	15.0%	33.3%	28.7%	11.2%	22.5%	23.6%	24.2%	5.9%	24.2%
Bridges	2.192	1.334	1.694	2.667	2.082	1.740	2.258	2.236	2.297	17.994	27.566
month-over-month % change	-19.4%	-39.1%	26.9%	3.9%	-21.9%	-16.4%	3.4%	-1.0%	2.7%		
year-over-year % change	68.3%	-16.2%	75.5%	111.5%	51.4%	35.3%	41.7%	36.8%	53.2%	-20.9%	53.2%
Dams/Marine	0.938	0.968	0.966	1.021	0.900	0.957	0.805	0.768	0.766	8.541	9.197
month-over-month % change	17.9%	3.2%	-0.2%	7.5%	-11.8%	6.3%	0.5%	-4.5%	-0.2%		
year-over-year % change	5.0%	-31.2%	-2.1%	22.3%	-16.9%	-12.6%	32.4%	15.8%	7.7%	3.1%	7.7%
Water/Sewage	4.064	3.005	3.706	3.854	3.587	3.592	3.486	3.517	3.636	33.868	43.627
month-over-month % change	10.1%	-26.1%	23.3%	-1.8%	-6.9%	0.1%	3.8%	0.9%	3.4%		
year-over-year % change	59.4%	13.7%	62.7%	41.5%	34.2%	44.2%	25.8%	24.1%	28.8%	8.4%	28.8%
Misc Civil (Power, etc.)	2.192	2.131	5.994	1.795	1.784	3.439	1.760	1.819	2.260	23.485	27.114
month-over-month % change	112.8%	-2.8%	181.3%	15.2%	-0.6%	92.7%	3.9%	3.4%			