

January 2024 (based on December 2023 Starts Stats)

Construction Industry Snapshot



December's Nonresidential Construction Starts -34% M/M, -37% Y/Y, but +4% Ytd

ConstructConnect announced today that December 2023's volume of construction starts, excluding residential work, was \$33.6 billion, a decrease of -34.1% versus November 2023's figure of \$51.0 billion. (Latest Dec's mega project tally was quite low.)

December 2023 vs December 2022 was -37.0%. Full year 2023 nonres starts were +3.6% vs full year 2022. Grand total starts (i.e., including residential) in December 2023 were -28.8% m/m; -28.5% y/y; and -4.9% ytd. (In Dec, ytd and full year are the same.)



Comparison	Commercial	Retail	Private Office	Hotel & Motel	Industrial	Institutional	Schools	Hospitals & Clinics	Heavy Engineering	Total Non-Residential
Dec. 2023 vs Nov. 2023	-32%	-18%	-50%	-40%	-83%	-17%	0%	+5%	+1%	-34%
Jan-Dec. 2023 vs Jan-Dec. 2022	-1%	-11%	+8%	+26%	-16%	+11%	+22%	-27%	+13%	+4%
Jan-Dec. 2022 vs Jan-Dec. 2021	+14%	+19%	+17%	+54%	+229%	+25%	+24%	+38%	+29%	+41%

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December's Nonresidential Construction Starts -34% M/M, -37% Y/Y, but +4% Ytd

A December Slump in Megas, but a Fine Ytd

ConstructConnect announced today that December 2023's dollar volume of construction starts, excluding residential work, was \$33.6 billion (green shaded box, bottom of page 11), a decrease of -34.1% versus November 2023's figure of \$51.0 billion (originally reported as \$50.4 billion).

The dollar volume of December 2023 total nonresidential starts was -37.0% when compared with December 2022. The latest month's year-to-date result for total nonresidential starts was +3.6% relative to the entire 12 months (Jan-Dec) of last year. With respect to the terminology used throughout this report, year to date in December is the same as the annual or full-year result.

November of 2023 was an outstanding month for mega project initiations. There were four such undertakings of a billion dollars or more each, adding to \$16.2 billion. December of 2022 also served up a wealth of 'megas', with four of them summing to \$19.4 billion. December of this year, however, fell well short (i.e., only one for \$1.0 billion, a battery component manufacturing plant in Ohio). The reduction in the number and volume of megas in December 2023 accounted for the big percent-change drops in the month-to-month and year-over-year statistics.

Nevertheless, the total dollar volume of non-residential mega project starts in full year 2023, at \$103.9 billion, was almost exactly the same as the total dollar volume of nonres megas during all of 2022, \$103.2 billion. The mega project count in 2023 was 41 compared with 31 in 2022.

There were no months in 2023 that did not include a mega project groundbreaking go-ahead.

Leaving aside megas, 2023's annual non-residential starts, in dollar volume, were +4.2% versus 2022's comparable figure, only slightly improving on the 'all-in' percent change of +3.6%.

Megas as a share of the annual nonresidential total in 2023 were 17.0%; in 2022, 17.5%.

To complete the overview picture, the GRAND TOTAL dollar volume (i.e., adding residential to nonresidential activity; and including all projects, megas and non-megas) of starts in December 2023 was -28.8% m/m, -28.5% y/y, and -4.9% ytd. Striking weakness in the residential category of starts, -18.3% for full year 2023 versus full year 2022, held back annual Grand Total starts.

TTM Results Fall off the Pace

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 percent-change basis, fell below zero once again, to -2.3%, after being +1.5% in November. In October, they had been nearly flat, -0.8%. On a year-over-year percent-change basis, Grand Total TTM starts were -4.9% in December, a deterioration from November's -0.5%, and a worse reckoning than October's -2.5%.

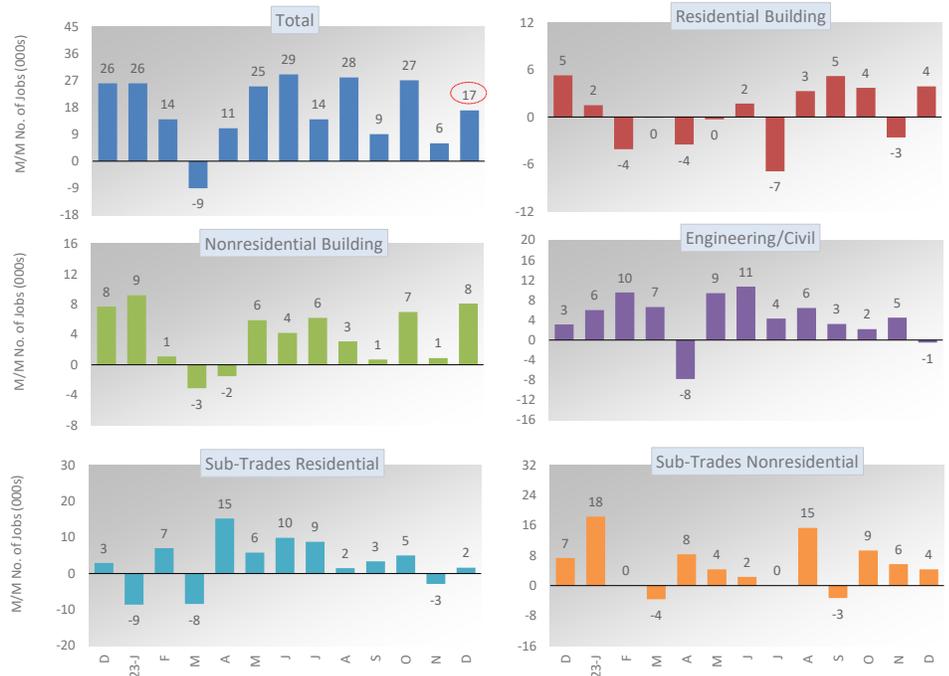
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TABLE 1: VALUE OF UNITED STATES NONRESIDENTIAL CONSTRUCTION STARTS — DECEMBER 2023 (ConstructConnect®)

	Jan-Dec 2023 (\$ billions)	% Change Jan-Dec 23 vs Jan-Dec 22	% Change Dec 23 vs Dec 22	% Change Dec 23 vs Nov 23
Hotel/Motel	13.986	26.3%	48.8%	-39.5%
Retail/Shopping	13.630	-11.4%	-1.1%	-17.7%
Parking Garage	2.011	-16.8%	-67.6%	-55.5%
Amusement	8.946	13.7%	-31.6%	-22.0%
Private Office	26.662	8.4%	91.5%	-50.1%
Government Office	16.070	21.3%	54.9%	25.2%
Laboratory	4.534	-7.7%	197.2%	28.3%
Warehouse	20.591	-32.4%	-73.8%	10.7%
Miscellaneous Commercial *	15.910	22.7%	-46.7%	-50.4%
COMMERCIAL (big subset)	122.340	-0.5%	-5.5%	-31.5%
INDUSTRIAL (Manufacturing)	96.532	-16.4%	-87.1%	-83.4%
Religious	0.998	-4.0%	84.0%	20.4%
Hospital/Clinic	18.805	-27.2%	-56.1%	4.6%
Nursing/Assisted Living	2.518	-45.1%	-47.6%	-9.6%
Library/Museum	4.252	18.2%	-7.5%	102.3%
Fire/Police/Courthouse/Prison	14.721	66.5%	42.0%	-71.4%
Military	16.329	67.8%	93.7%	-42.1%
School/College	90.707	21.7%	25.4%	-0.1%
Miscellaneous Medical	8.565	-37.5%	-44.6%	45.4%
INSTITUTIONAL	156.895	10.6%	3.6%	-16.9%
Miscellaneous Non-residential	6.713	-16.0%	-46.9%	-33.2%
NONRESIDENTIAL BUILDING	382.480	-1.5%	-45.2%	-46.7%
Airport	9.636	26.2%	61.2%	105.8%
Road/Highway	95.186	12.7%	37.5%	-11.1%
Bridge	24.440	-11.6%	-3.3%	32.1%
Dam/Marine	11.458	21.7%	-35.3%	-29.9%
Water/Sewage	47.969	10.5%	6.0%	8.2%
Miscellaneous Civil (power, pipelines, etc.)	40.212	37.0%	-79.7%	4.4%
HEAVY ENGINEERING (Civil)	228.901	13.3%	-19.0%	1.4%
TOTAL NONRESIDENTIAL	611.381	3.6%	-37.0%	-34.1%

* 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 2023



Full year 2022's monthly average change in construction employment was +22,000 jobs. (Much of the lift came in February 2022, at +79,000 jobs m/m.) Full year 2023's monthly average increase in construction employment was somewhat lower, at +16,000 jobs.

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

Big Annual Gains among PIP Nonres Sub-categories

'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%).

In 2021 and 2022, there were dramatic changes in the proportional shares of the total put-in-place dollar volumes taken by residential versus nonresidential. In 2021's full year PIP results, the relationship was about half and half, with residential at 49.4% and nonresidential, 50.6%. In 2022, residential finally claimed the larger share of total, 50.7% to 49.4% for nonresidential.

This altered relationship, given the boosts to interest rates, could not be expected to last. Higher interest rates, which harm affordability, have an almost immediate detrimental impact on housing demand. True to historical norm, residential's year-to-date share of total PIP dollars through November 2023 fell back to 44.5%. The other 55.5% belonged to nonresidential. (In 2022, year to date through November, the shares were 50.6% residential and 49.4% nonresidential.)

The reported PIP numbers from the Census Bureau are always a month behind the 'starts' data. The total dollar volume of construction put-in-place through November 2023 was +6.2%, thanks to nonresidential leaping forward by +19.3%, while residential was in retreat by -6.6%.

Nonresidential construction's leading PIP sub-category for year-to-date percent change in November 2023 was 'manufacturing', +71.0% over Jan-Nov 2022. By dollar volume ytd in November 2023, 'manufacturing' was the largest sub-category within PIP nonresidential work. (Next closest, but with only 70% of manufacturing's ytd PIP figure was roads.)

Other PIP nonresidential sub-categories that recorded double-digit percent gains year to date in November 2023 included 'conservation and development', +23.1%; 'waste disposal and water delivery', +22.3%; 'lodging', +20.6%; 'highways and streets', +16.1%; 'health care', +14.2%; 'educational', +12.9%; 'religious', +13.0%; and 'public safety', +12.1%.

PIP numbers, being more spread out, have smaller peak-over-trough percent-change 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, set out as actuals and forecasts. ConstructConnect's PIP numbers are being released quarterly and are featured in a separate reporting system.

Construction's Jobs Count +17,000 in November

Construction's current share of U.S. total non-farm employment in the monthly labor market report issued by the Bureau of Labor Statistics (BLS) is about 5.0%. Accordingly, to claim its rightful share of December's +216,000 economy-wide number-of-jobs advance, the figure for construction would have been +11,000. The actual number turned out to be better at +17,000.

The monthly average increase in construction hiring in 2023 was +16,000 jobs. In the year prior, 2022, the comparable figure was +22,000 jobs. Graph 1 shows that month-to-month construction sector hiring in December was best among nonresidential building contractors, +8,000 jobs.

Construction's not seasonally adjusted (NSA) unemployment rate (U) in December 2023 was 4.4%, which was down from November 2023's 4.8%, but was even with December 2022, also at 4.4%. Construction's most recent NSA U rate of 4.4% was just a little above the all-jobs NSA U rate of 3.5%.

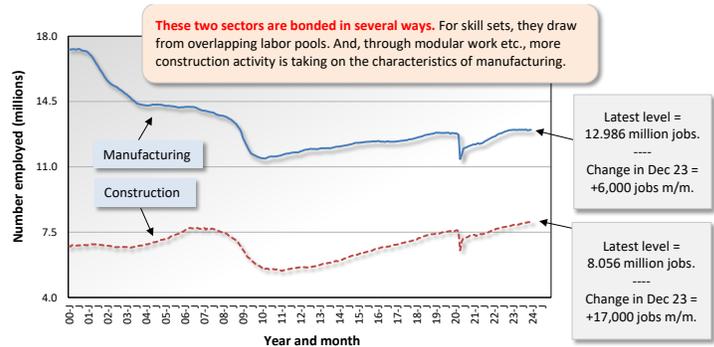
Manufacturing's NSA U rate in recent December was 3.0%, versus 3.1% in November and 1.8% in December of a year ago. The sector's latest jobs count change was +6,000. Both the manufacturing and construction sectors are in the goods-producing segment of the economy (i.e., as opposed to private services-providing) and there is considerable overlap between their labor pools. The current surge in capital spending by manufacturers (see Graph 4) will eventually lead to more hiring, although ever greater adoption of automation and robotics will act as inhibitors.

In November, U.S. total employment was +1.7% year over year. The y/y bump in the number of 'private services-providing' jobs was close to the same, +1.6%. The advance in the construction industry's worker count was a solid +2.5% y/y. But leading all sectors was 'health care and social assistance', +4.4% y/y, with 'social assistance' alone at +6.1% y/y (see Graph 3).

In other segments of the economy with close ties to construction, the latest y/y changes in employment have been as follows: cement and concrete product manufacturing, +4.1% (thanks to the wealth of infrastructure work that is underway); architectural and engineering design services, +2.8%; machinery and equipment rental and leasing, +2.8%; oil and gas exploration and development, +1.6% (the U.S. has stepped

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GRAPH 2: U.S. MANUFACTURING VS CONSTRUCTION EMPLOYMENT DECEMBER, 2023 — SEASONALLY ADJUSTED (SA) PAYROLL DATA

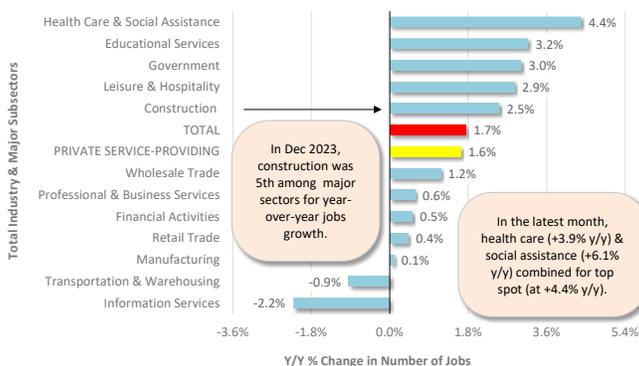


The not seasonally adjusted (NSA) unemployment rate for construction is presently 4.4%. In April 2020, at its worst, it was 16.6%. Manufacturing's current NSA jobless rate is 3.0%. April 2020's extreme was 13.2%. In early 2000, the ratio of construction to manufacturing jobs was 0.39 to 1.00. Now, it's 0.62 to 1.00.

Latest data points are for December, 2023.

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

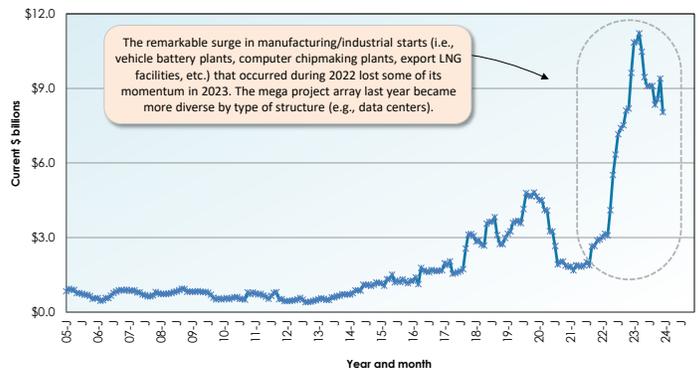
GRAPH 3: Y/Y JOBS CHANGE, U.S. TOTAL INDUSTRY & MAJOR SUBSECTORS — DECEMBER 2023 (BASED ON SEASONALLY ADJUSTED PAYROLL DATA)



December 2023's y/y changes in employment within the pandemic's initially hardest-hit sector, 'leisure & hospitality', were: 'amusements/gambling', +2.5%; 'hotels/motels', +2.8%; and 'restaurants/bars', +2.5%.

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

GRAPH 4: U.S. MANUFACTURING/INDUSTRIAL CONSTRUCTION STARTS — CONSTRUCTCONNECT



The last data point is for December 2023.

Data source: ConstructConnect. Graph: ConstructConnect.

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ahead of Saudi Arabia and Russia to become the largest oil producer in the world); real estate, +0.8%; and building materials and supplies dealers, -4.1% (high borrowing costs are cutting into new and renovation residential work).

Design services work at architectural and engineering firms is an early-stage step in the entire building process that culminates in job site field activity. The +2.8% y/y advance in the number of jobs in the sector is mildly encouraging but seems a bit at odds with what is being suggested by the latest Architecture Billings Index (ABI) from the American Institute of Architects (AIA) and Deltek. The ABI in November did improve a small degree to 45.3 from 44.3 in October but remained under 50.0 for the fourth month in a row. Less than 50.0 for the ABI means revenues for design firms are shrinking; at 50.0, they're flat; and above that yardstick, they're expanding.

Pluses and Minuses among Type-of-structure Sub-categories

The -34.1% decline in the dollar volume of total nonresidential starts month to month (m/m) in December resulted from a big drop in industrial work (-83.4% caused by the absence of new megas), combined with sizable pullbacks in commercial (-31.5%) and institutional (-16.9%) as well. Only engineering escaped a drop, but the headway it made was minor (+1.4%).

The -37.0% performance of total nonresidential starts in December 2023 versus December 2022 (y/y) was also due to a big chunk taken out of industrial (-87.1%), but with engineering (-19.0%) also falling into a pit. Commercial (-5.5%) was a bit down and institutional a bit up (+3.6%)

The +3.6% ytd or annual rise in total nonresidential starts in the latest month was thanks to gains by engineering (+13.3%) and institutional (+10.6%) that more than counterbalanced weakness from industrial (-16.4%). Commercial (-0.5%) stood on the sidelines with virtually no change.

Usually, about a third of total nonresidential starts year to date derive from just two sub-category type-of-structure designations, 'roads/highways' and 'schools/colleges'. In full year 2023, their shares of total were 15.6% and 14.8% respectively, combining for a shade under normal, 30.0%.

The three percent-change metrics for street starts in December were -11.1% m/m, but +37.5% y/y, and +12.7% ytd. For school starts, the results were -0.1% m/m, but +25.4% y/y, and +21.7% ytd. Among types of educational facilities, the leader for annual growth in 2023 was 'colleges and universities', +48.0%. Junior and senior high school starts were also up smartly, +17.9%.

Important beyond roads within the engineering sub-category are 'water/sewage' and 'bridge' starts. The results for the former in December were all pluses: +8.2% m/m, +6.0% y/y, and +10.5% ytd. For the latter, they were mixed: +32.1% m/m, but -3.3% y/y, and -11.6% ytd.

The 'miscellaneous civil' sub-category designation (including pipeline, electric power, and railroad projects) in December showed great variety: +4.4% m/m; -79.7% y/y; and +37.0% ytd.

Important beyond schools within institutional work are three medical sub-categories - i.e., 'hospitals/clinics', 'nursing/assisted living' and 'miscellaneous medical'. Their combined starts in December were +16.6% m/m, -51.2% y/y, and -32.3% ytd. 'Hospital' starts on their own in the latest month were +4.6% m/m, but -56.1% y/y, and -27.2% ytd, not the best track record.

The 'fire/police/courthouse/prison' sub-category of starts in December was -71.4% m/m, but +42.0% y/y, and +66.5% ytd. Prison starts on their own in 2023 were spectacular, more than doubling at +140.2%. Prison projects were prominent in the monthly Top 10 lists throughout the year. Courthouse starts were also lively, with an annual gain of +48.1% ytd (see Table 2).

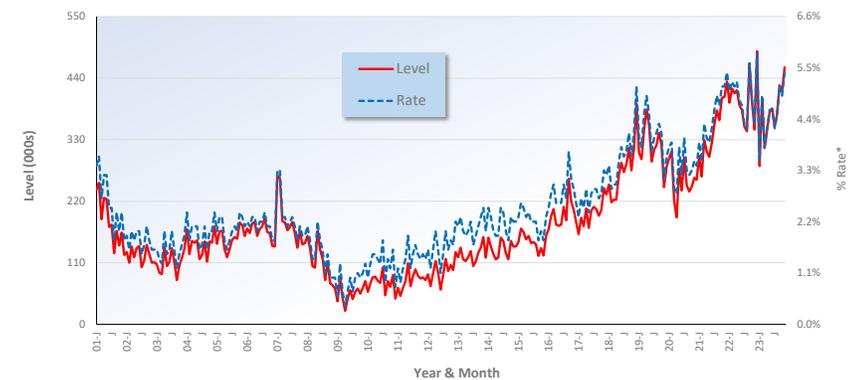
Often due to really low starts numbers in 2022, there were numerous winners among 2023's commercial yearend starts results: 'hotels/motels' (+26.3%), 'government offices' (+21.3%), 'amusement' (+13.7%), and 'miscellaneous' (+22.7%). Within 'miscellaneous', 'sports stadiums' (+29.6%) were up

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

	Jan-Dec 2023 (\$ billions)	% Change vs Jan-Dec 2022
Sports Stadiums/Convention Centers	\$9.054	29.6%
Transportation Terminals	\$6.856	14.6%
Courthouses	\$2.452	48.1%
Police Stations & Fire Halls	\$5.153	22.0%
Prisons	\$7.117	140.2%
Pre-School/Elementary	\$24.114	9.6%
Junior & Senior High Schools	\$36.442	17.9%
K-12 (sum of above two categories)	\$60.556	14.4%
Special & Vocational Schools	\$2.003	-22.9%
Colleges & Universities	\$28.148	48.0%
Electric Power Infrastructure	\$15.807	-5.1%

Source: ConstructConnect/Table: ConstructConnect.

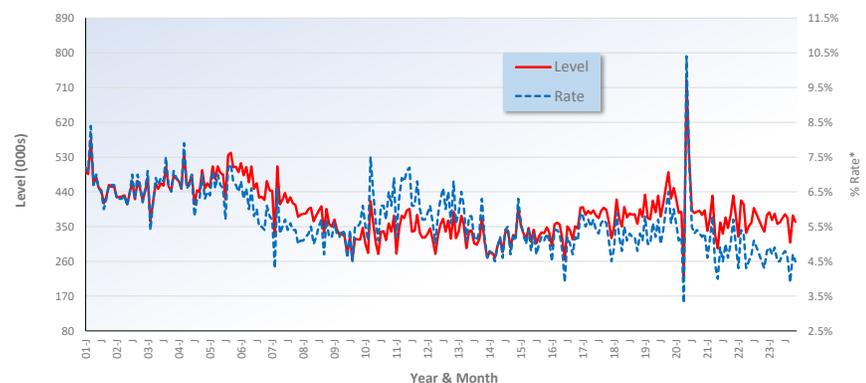
GRAPH 5: U.S. CONSTRUCTION JOB OPENINGS (FROM JOLTS REPORT) (3-MONTH MOVING AVERAGES PLACED IN LATEST MONTH)



'All job' openings & hires have been on descending paths. Similarly, construction job hires have been declining; but not so with openings. While 'all job' openings in Nov '23 were -18.2% y/y, construction job openings were +31.9% y/y.

*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 2023. ... JOLTS = Job Openings and Labor Turnover Survey.
Data source: Bureau of Labor Statistics (Dept of Labor)/Chart: ConstructConnect.

GRAPH 6: U.S. CONSTRUCTION JOB HIRES (FROM JOLTS REPORT) (3-MONTH MOVING AVERAGES PLACED IN LATEST MONTH)



There are plenty of construction job openings (level and rate - see Graph 5), but this isn't leading to corresponding upticks in hires. This is a conundrum given there are good pay premiums for construction jobs vs 'all jobs' & manufacturing jobs.

*Rate is number of hires during month as % of construction employment.
Latest seasonally adjusted data points are for November 2023. ... JOLTS = Job Openings and Labor Turnover Survey.
Data source: Bureau of Labor Statistics (Dept of Labor)/Chart: ConstructConnect.

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more than 'transportation terminals' (+14.6%).

Also, interesting to note, is that 'private office building' starts in 2023 staged the beginnings of a recovery (-50.1% m/m, +91.5% y/y, and +8.4% ytd in December). Data center groundbreakings, including two large ones in the latest Top 10 list (Table 7 on page 8), provided the uplift.

Elsewhere in commercial, 'retail/shopping' stayed in the doldrums in December (-17.7% m/m; -1.1% y/y; and -11.4% ytd), as did 'warehouses' (+10.7% m/m, but -73.8% y/y, and -32.4% ytd).

Several Trend Lines Display Ambivalence

Page 9 of this Industry Snapshot sets out the history, January 2005 to the present, of 12-month 'starts' moving averages (in dollar volumes), 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 calculated number is graphed (i.e., placed) in the ending month.

Many of the curves are moving sideways. Such 'ambivalence' is actually good news for 'private office buildings' and 'retail', after previous periods of sharp plunges. The 'hospitals/clinics' and 'miscellaneous civil' trajectories are heading downwards. But continuing along ascending paths are 'schools/colleges', 'roads/highway', and in more gentle fashion, 'water/sewage'.

Pay Hikes Deliver More Purchasing Power

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 2023's Table B-3 (including bosses), y/y all-jobs earnings were +4.1% hourly and +3.8% weekly. Compensation hikes for construction workers, as a subset of 'all jobs', were notably better, at +4.6% y/y hourly and +6.0% y/y weekly (partly thanks to more hours worked). From Table B-8 for production and non-supervisory workers (i.e., excluding bosses), the y/y 'all-jobs' paycheck hikes were +4.3% hourly and +4.0% weekly. Construction workers were far more handsomely rewarded with stipend hikes of +5.1% y/y hourly and +6.2% y/y weekly.

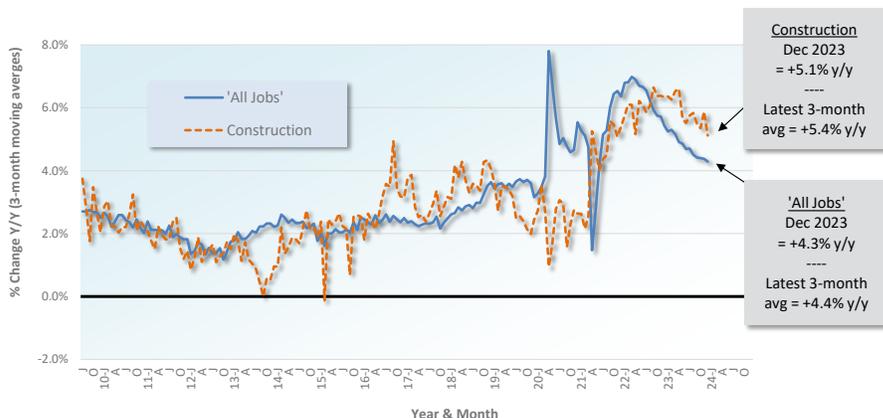
From Table B3 (including bosses), December 2023's hourly rate premium paid to construction workers versus 'all job' workers was +8.7% and versus manufacturing workers, +12.0%. From Table B8 (production workers only) December 2023's hourly rate premium paid to construction workers versus 'all job' workers was +18.7% and versus manufacturing workers, +28.6%.

December 2023's CPI-U 'all items' inflation rate was +3.4% y/y. The 'core' rate, which omits volatile food and energy items, was +3.9% y/y. Improvements in purchasing power, a key ingredient in the consumer spending that drives gross domestic product (GDP), are realized when wage gains exceed inflation. Pay hikes are now delivering small purchasing power upticks for 'all jobs'; but they are providing substantial standard of living gains for construction workers.

A Muting of Material Input Costs

December 2023's y/y results for three building related BLS Producer Price Index (PPI) series were: (A) 'construction materials special index', +0.8% (flipping to positive after November's -1.0%); (B) 'inputs to new construction index, excluding capital investment, labor, and imports', +1.7% (also turning to the upside from the previous month's -0.4%); and (C) 'final demand construction', designed to capture

GRAPH 7: AVERAGE HOURLY EARNINGS Y/Y — 'ALL JOBS' & CONSTRUCTION



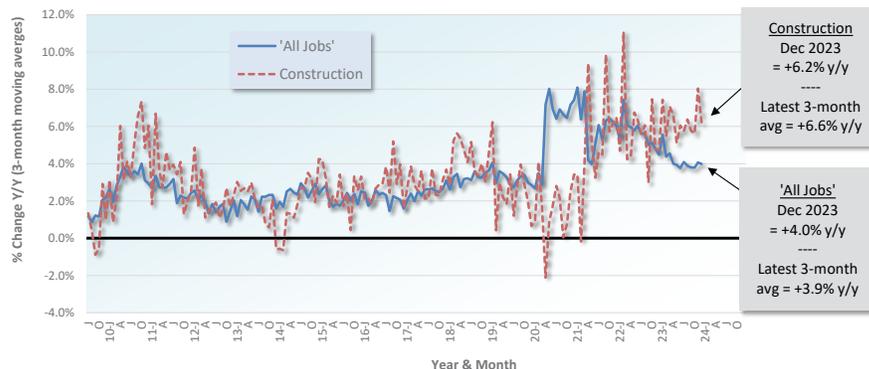
Y/y hourly wage gains for 'all jobs' are sliding, but remain above inflation which has dropped near +3.0%. Construction pay increases are still beating 'all jobs'. Avg y/y hourly wage bumps in construction, 2010-2019, were +2.3%; for 'all jobs', +2.4%.

From 'Production Workers and Non-supervisory Personnel' Table (B8).

The latest data points are for December, 2023.

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

GRAPH 8: AVERAGE WEEKLY EARNINGS Y/Y — 'ALL JOBS' & CONSTRUCTION



Y/y weekly earnings for 'all jobs' have eased back down to around +4.0% y/y. For construction workers as a subset of 'all jobs', weekly earnings have been fluctuating around +6.0% y/y. The NSA U rate for construction is 4.4%; for 'all jobs', 3.5%.

From 'Production Workers and Non-supervisory Personnel' Table (B8).

The latest data points are for December, 2023.

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

bid prices, +0.5% (staying the same as in the prior month.)

(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.

There are also PPI indices for specific construction inputs. For December 2023, the general pattern of y/y changes became more muted, generally shifting away from extreme positives or negatives: asphalt, +23.9%; cement, +8.2%; ready-mix concrete, +7.8%; copper wire and cable, +0.7%; aluminum mill shapes, -1.7%; gypsum, -1.7%; hot rolled steel bars, plates, and structural shapes, -4.7%; softwood lumber, -14.6%; and number 2 diesel fuel, -18.7%. Also, there's an 'inputs to highways and streets' index, +2.7% y/y. Unleaded regular gasoline in the PPI data series is -5.7% y/y; as a subset in the Consumer Price Index (CPI), it's -1.9% y/y.

The value of construction starts each month is derived from ConstructConnect's database of all active construction projects in the U.S.

The 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.

Full Year 2023's 'Grand Total' Starts -4.9% Ytd

From Table 6 on page 7 (and also from Table 9 on page 11) of this report, ConstructConnect's total residential starts in December 2023 were -18.3% m/m, -8.9% y/y, and -18.3% ytd. Multi-family starts were -25.7% m/m, -43.3% y/y, and -31.1% ytd. Completing the picture, single-family starts in December weren't as alarmingly bad: -15.3% m/m, +15.4% y/y, and -9.8% ytd.

Including home building with all non-residential categories, **Grand Total** starts in December 2023 were -28.8% m/m, -28.5% y/y, and -4.9% ytd.

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.

Supply Chains Begin 2024 With Host of Challenges

In recent months, organized militias operating within Yemen have attacked ships navigating through the Red Sea and the Gulf of Aden. The targets of these attacks have often been ships owned by U.S. firms and America's allies. In response to these attacks, many ocean shipping firms are now adding weeks and many thousands of miles to their transits as they sail around Africa's Cape of Good Hope to avoid the conflict zone.

On the other side of the world, historic drought is forcing ships to choose between bypassing the Panama Canal and sailing around South America or waiting in queue potentially for weeks to pass through while abiding by restricted draft depth conditions. The existing bottleneck at the canal is likely to worsen in the coming months as the area recently entered its annual dry season, which can be expected to last into late-April or even May.

The culmination of both events happening simultaneously certainly raises 2024's supply chain risks and has the potential to affect the pricing and availability of key construction goods worth many billions of dollars. At greatest risk are steel, glass, stone, and bituminous products. More broadly, the disruption of the international flow of energy products across the world could lift global energy prices which would both directly and indirectly raise construction costs.

Thus far markets have been seemingly dismissive of these risks based on recent prices for energy and construction materials products. Supporting this trend is ConstructConnect's monitor of a broad basket of construction materials, which continues to point to flat to contracting year-on-year prices.

Furthermore, measures of global supply chain conditions remain exceptional. In nine of the last ten months the Federal Reserve's *Global Supply Chain Pressure Index* has registered negative readings, indicating that supply chains have ample capacity relative to the volume of goods requiring transit.

However, should conditions worsen at either of these chokepoints, they could prime markets for a bout of pricing volatility. Given this possibility, industry leaders should be aware of which products they either sell or consume that are exposed to these bottlenecks and have contingency plans ready.

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: 2023 YTD RANKING OF TOP 20 STATES BY \$ VOLUME OF NONRESIDENTIAL CONSTRUCTION STARTS — ConstructConnect®

	Jan-Dec 2023	% Change vs Jan-Dec 2022
1 Texas	\$93,691,763,847	-5.2%
2 California	\$48,136,681,505	7.3%
3 Florida	\$30,794,778,127	2.3%
4 New York	\$30,450,972,824	-10.7%
5 North Carolina	\$21,531,800,979	-1.3%
6 Ohio	\$21,368,567,335	40.5%
7 Georgia	\$19,770,272,348	-1.6%
8 Arizona	\$18,617,312,358	-2.3%
9 Illinois	\$18,387,018,441	4.4%
10 Virginia	\$16,213,599,233	35.8%
11 Pennsylvania	\$16,054,481,380	-5.0%
12 Indiana	\$15,458,500,129	18.1%
13 Michigan	\$15,175,910,049	-20.3%
14 Alabama	\$13,226,160,664	68.8%
15 Massachusetts	\$13,115,532,137	0.8%
16 Utah	\$12,975,646,512	142.0%
17 Tennessee	\$11,900,524,332	-15.8%
18 Washington	\$10,326,474,788	-9.7%
19 Colorado	\$9,877,257,764	34.7%
20 Louisiana	\$9,463,421,982	-45.9%

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

TABLE 4: 2023 YTD RANKING OF TOP 20 STATES BY \$ VOLUME OF NONRESIDENTIAL BUILDING CONSTRUCTION STARTS — ConstructConnect®

	Jan-Dec 2023	% Change vs Jan-Dec 2022
1 Texas	\$60,928,132,722	-13.8%
2 California	\$26,814,436,677	-9.1%
3 New York	\$19,858,297,216	6.4%
4 Florida	\$18,764,084,205	-7.3%
5 North Carolina	\$15,654,521,673	1.5%
6 Arizona	\$15,472,523,550	-4.6%
7 Ohio	\$14,628,726,829	93.0%
8 Georgia	\$13,779,538,556	-13.8%
9 Indiana	\$11,361,894,059	35.1%
10 Virginia	\$11,104,549,506	45.0%
11 Utah	\$11,050,924,211	181.2%
12 Alabama	\$10,737,940,637	90.4%
13 Illinois	\$10,719,984,933	14.9%
14 Pennsylvania	\$8,812,805,541	-18.3%
15 Massachusetts	\$8,544,535,119	-14.8%
16 Michigan	\$7,965,897,743	-41.3%
17 Idaho	\$7,905,049,071	282.8%
18 Tennessee	\$7,865,489,588	-28.3%
19 Kansas	\$6,898,947,208	112.4%
20 Maryland	\$6,082,787,936	3.3%

TABLE 5: 2023 YTD RANKING OF TOP 20 STATES BY \$ VOLUME OF HEAVY ENGINEERING/CIVIL CONSTRUCTION STARTS — ConstructConnect®

	Jan-Dec 2023	% Change vs Jan-Dec 2022
1 Texas	\$32,763,631,125	16.4%
2 California	\$21,322,244,828	38.9%
3 Florida	\$12,030,693,922	22.1%
4 New York	\$10,592,675,608	-31.4%
5 Illinois	\$7,667,033,508	-7.4%
6 Pennsylvania	\$7,241,675,839	18.4%
7 Michigan	\$7,210,012,306	31.5%
8 Ohio	\$6,739,840,506	-11.6%
9 Georgia	\$5,990,733,792	45.7%
10 North Carolina	\$5,877,279,306	-7.9%
11 Washington	\$5,279,913,031	14.6%
12 Virginia	\$5,109,049,727	19.3%
13 Louisiana	\$4,822,604,734	27.7%
14 Colorado	\$4,650,238,502	45.8%
15 Massachusetts	\$4,570,997,018	53.8%
16 Minnesota	\$4,488,456,382	-10.8%
17 Alaska	\$4,235,903,748	280.8%
18 Indiana	\$4,096,606,070	-12.5%
19 Tennessee	\$4,035,034,744	27.3%
20 New Mexico	\$3,813,044,236	184.7%

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 X/Twitter @ConstructConnx, which has 50,000+ followers.

INSIGHT view of starts statistics

TABLE 6: VALUE OF UNITED STATES CONSTRUCTION STARTS
ConstructConnect® INSIGHT VERSION — DECEMBER 2023
ARRANGED TO MATCH THE ALPHABETICAL CATEGORY DROP-DOWN MENUS IN INSIGHT

	Jan-Dec 2023 (\$ billions)	% Change Jan-Dec 23 vs Jan-Dec 22	% Change Dec 23 vs Dec 22	% Change Dec 23 vs Nov 23
Summary				
CIVIL	228.901	13.3%	-19.0%	1.4%
NONRESIDENTIAL BUILDING	382.480	-1.5%	-45.2%	-46.7%
RESIDENTIAL	305.259	-18.3%	-8.9%	-18.3%
GRAND TOTAL	916.640	-4.9%	-28.5%	-28.8%
Verticals				
Airport	9.636	26.2%	61.2%	105.8%
All Other Civil	24.405	92.0%	41.1%	-8.1%
Bridges	24.440	-11.6%	-3.3%	32.1%
Dams / Canals / Marine Work	11.458	21.7%	-35.3%	-29.9%
Power Infrastructure	15.807	-5.1%	-96.0%	187.7%
Roads	95.186	12.7%	37.5%	-11.1%
Water and Sewage Treatment	47.969	10.5%	6.0%	8.2%
CIVIL	228.901	13.3%	-19.0%	1.4%
Offices (private)	26.662	8.4%	91.5%	-50.1%
Parking Garages	2.011	-16.8%	-67.6%	-55.5%
Transportation Terminals	6.856	14.6%	72.5%	-73.1%
Commercial (small subset)	35.529	7.7%	51.9%	-54.0%
Amusement	8.946	13.7%	-31.6%	-22.0%
Libraries / Museums	4.252	18.2%	-7.5%	102.3%
Religious	0.998	-4.0%	84.0%	20.4%
Sports Arenas / Convention Centers	9.054	29.6%	-64.5%	26.9%
Community	23.249	19.3%	-41.0%	5.4%
College / University	28.148	48.0%	73.2%	46.2%
Elementary / Pre School	24.114	9.6%	4.9%	3.8%
Jr / Sr High School	36.442	17.9%	5.9%	-31.4%
Special / Vocational	2.003	-22.9%	-5.4%	71.5%
Educational	90.707	21.7%	25.4%	-0.1%
Courthouses	2.452	48.1%	135.7%	-73.3%
Fire and Police Stations	5.153	22.0%	27.5%	-32.1%
Government Offices	16.070	21.3%	54.9%	25.2%
Prisons	7.117	140.2%	36.7%	-84.1%
Government	30.791	39.4%	49.9%	-44.1%
Industrial Labs / Labs / School Labs	4.534	-7.7%	197.2%	28.3%
Manufacturing	96.532	-16.4%	-87.1%	-83.4%
Warehouses	20.591	-32.4%	-73.8%	10.7%
Industrial	121.657	-19.3%	-84.0%	-78.1%
Hospitals / Clinics	18.805	-27.2%	-56.1%	4.6%
Medical Misc.	8.565	-37.5%	-44.6%	45.4%
Nursing Homes	2.518	-45.1%	-47.6%	-9.6%
Medical	29.889	-32.3%	-51.2%	16.6%
Military	16.329	67.8%	93.7%	-42.1%
Hotels	13.986	26.3%	48.8%	-39.5%
Retail Misc.	6.713	-16.0%	-46.9%	-33.2%
Shopping	13.630	-11.4%	-1.1%	-17.7%
Retail	34.329	-0.3%	6.5%	-33.3%
NONRESIDENTIAL BUILDING	382.480	-1.5%	-45.2%	-46.7%
Multi-Family	102.453	-31.1%	-43.3%	-25.7%
Single-Family	202.805	-9.8%	15.4%	-15.3%
RESIDENTIAL	305.259	-18.3%	-8.9%	-18.3%
NONRESIDENTIAL	611.381	3.6%	-37.0%	-34.1%
GRAND TOTAL	916.640	-4.9%	-28.5%	-28.8%

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 2023

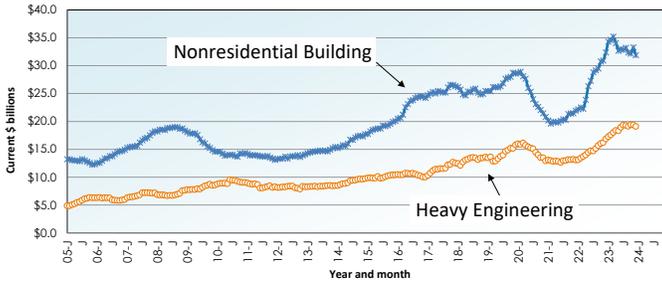
LOCATION (EAST TO WEST)	TYPE OF CONSTRUCTION	DESCRIPTION	SQUARE FEET 000S*	DOLLARS 000,000S
New York Flushing	Residential	Willets Point Redevelopment Phase 1 (3 structures; 880 units) 16th St & Roosevelt Ave The Related Companies	1,000	\$400
Ohio Sidney	Industrial	The SEMCORP Battery Component Plant / Sidney Industrial Park (1 structure) Millcreek & Kuther Rds SEMCORP HQ	850	\$1,000
Georgia Locust Grove	Industrial	Andersen Manufacturing Facility / Locust Grove (1 structure) Price Dr Andersen Corporation	638	\$420
Michigan Ann Arbor	Institutional	Central Campus Residence Hall - University of Michigan (1 structure; 7 stories) 336 Hill St University of Michigan	650	\$631
Alabama Huntsville	Commercial	Meta Data Center Expansion / Huntsville (1 structure) 100 Profile PI NW Meta / Facebook	1,500	\$750
Minnesota Saint Paul	Institutional	MN State Office Building Renovation & Expansion (2 structures) 100 Rev Dr Martin Luther King Jr Blvd JE Dunn Construction - Minneapolis	166	\$500
Texas San Antonio	Institutional	University Health Vida (2 structures) South Zarzamora & Jaguar Pkwy University Health System - Facilities Development	600	\$475
Austin	Institutional	TDEM Headquarters and State Emergency Operations Center - Texas A & M University (2 structures; 5 stories) Travis County Texas A&M University - Department of Utilities & Energy Services	296	\$361
Nevada McCarran	Commercial	Novva Tahoe Reno Data Center (1 structure) 1 Astro Way NOVVA, INC.	300	\$500
California Bakersfield	Commercial	Hard Rock Hotel & Casino Tejon Indian Tribe (7 structures; 400 units) Wild Flower St & S Sabodan St Hard Rock International	484	\$600
TOTALS:			6,484	\$5,637

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

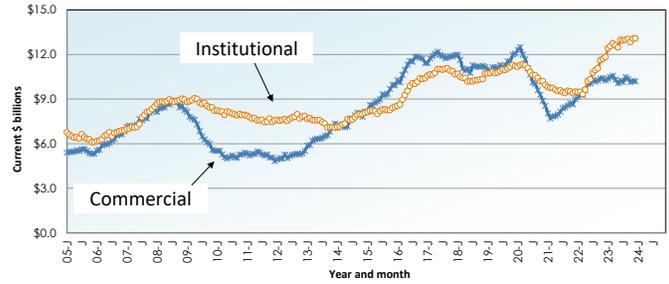
Source: ConstructConnect/Table: ConstructConnect.

Trend graphs for 12 key categories

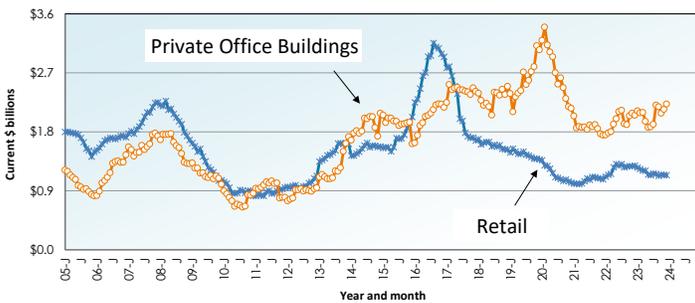
GRAPH 9: U.S. NONRESIDENTIAL CONSTRUCTION STARTS — ConstructConnect® (12-MONTH MOVING AVERAGES)



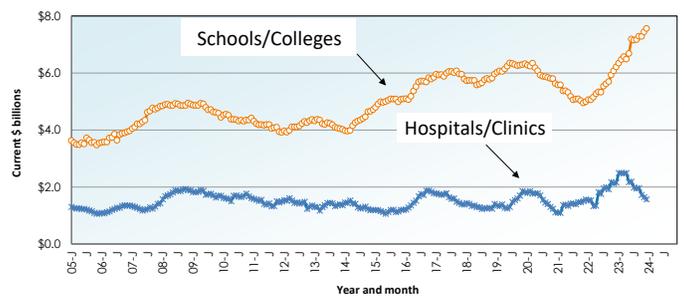
GRAPH 10: U.S. COMMERCIAL AND INSTITUTIONAL CONSTRUCTION STARTS — ConstructConnect® (12-MONTH MOVING AVERAGES)



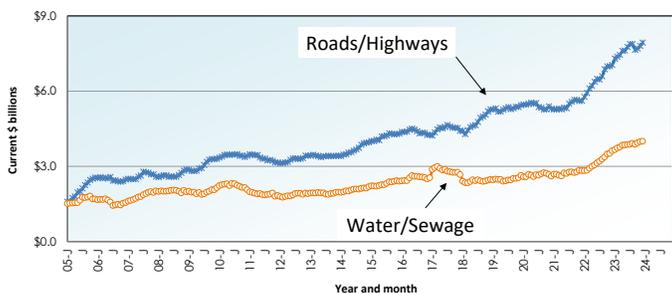
GRAPH 11: U.S. RETAIL AND PRIVATE OFFICE BUILDING CONSTRUCTION STARTS — ConstructConnect® (12-MONTH MOVING AVERAGES)



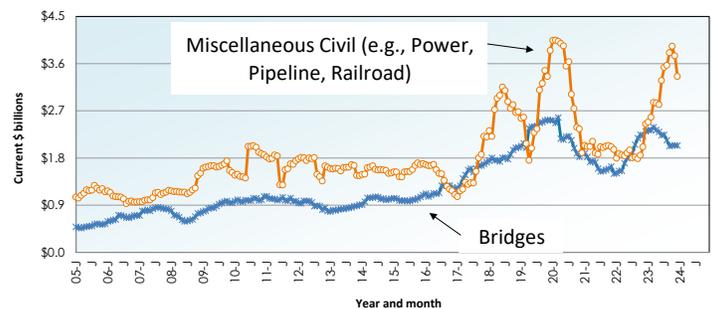
GRAPH 12: U.S. HOSPITAL/CLINIC AND SCHOOL/COLLEGE CONSTRUCTION STARTS — ConstructConnect® (12-MONTH MOVING AVERAGES)



GRAPH 13: U.S. ROAD/HIGHWAY AND WATER/SEWAGE CONSTRUCTION STARTS — ConstructConnect® (12-MONTH MOVING AVERAGES)



GRAPH 14: 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, 2023.

Source: ConstructConnect/Charts: ConstructConnect.

Regional starts table

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

	Jan-Dec 2022	Jan-Dec 2023	% Change
Connecticut	\$4,106,092,069	\$4,604,306,417	12.1%
Maine	\$3,570,413,548	\$1,591,352,336	-55.4%
Massachusetts	\$13,005,811,160	\$13,115,532,137	0.8%
New Hampshire	\$1,076,033,069	\$1,323,691,663	23.0%
Rhode Island	\$1,499,126,019	\$917,126,792	-38.8%
Vermont	\$566,820,760	\$789,777,561	39.3%
Total New England	\$23,824,296,625	\$22,341,786,906	-6.2%
New Jersey	\$9,100,159,079	\$6,882,756,224	-24.4%
New York	\$34,105,820,050	\$30,450,972,824	-10.7%
Pennsylvania	\$16,898,633,963	\$16,054,481,380	-5.0%
Total Middle Atlantic	\$60,104,613,092	\$53,388,210,428	-11.2%
TOTAL NORTHEAST	\$83,928,909,717	\$75,729,997,334	-9.8%
Illinois	\$17,609,469,992	\$18,387,018,441	4.4%
Indiana	\$13,090,446,555	\$15,458,500,129	18.1%
Michigan	\$19,050,926,719	\$15,175,910,049	-20.3%
Ohio	\$15,206,764,234	\$21,368,567,335	40.5%
Wisconsin	\$10,831,885,601	\$8,457,885,031	-21.9%
Total East North Central	\$75,789,493,101	\$78,847,880,985	4.0%
Iowa	\$5,400,671,055	\$6,189,071,782	14.6%
Kansas	\$5,187,507,959	\$9,207,848,723	77.5%
Minnesota	\$9,390,746,349	\$8,389,164,744	-10.7%
Missouri	\$9,549,255,096	\$8,293,312,850	-13.2%
Nebraska	\$5,950,835,202	\$4,842,255,927	-18.6%
North Dakota	\$4,067,022,896	\$3,360,638,966	-17.4%
South Dakota	\$4,063,802,100	\$3,882,120,932	-4.5%
Total West North Central	\$43,609,840,657	\$44,164,413,924	1.3%
TOTAL MIDWEST	\$119,399,333,758	\$123,012,294,909	3.0%
Delaware	\$1,762,705,953	\$1,474,652,030	-16.3%
District of Columbia	\$2,328,933,887	\$2,368,173,735	1.7%
Florida	\$30,089,463,083	\$30,794,778,127	2.3%
Georgia	\$20,098,232,877	\$19,770,272,348	-1.6%
Maryland	\$8,251,177,836	\$9,354,399,035	13.4%
North Carolina	\$21,808,099,021	\$21,531,800,979	-1.3%
South Carolina	\$8,149,590,002	\$8,425,158,991	3.4%
Virginia	\$11,939,730,617	\$16,213,599,233	35.8%
West Virginia	\$1,940,279,889	\$6,070,454,470	212.9%
Total South Atlantic	\$106,368,213,165	\$116,003,288,948	9.1%
Alabama	\$7,833,323,294	\$13,226,160,664	68.8%
Kentucky	\$14,171,702,181	\$7,820,210,654	-44.8%
Mississippi	\$3,222,549,728	\$4,154,048,613	28.9%
Tennessee	\$14,135,261,885	\$11,900,524,332	-15.8%
Total East South Central	\$39,362,837,088	\$37,100,944,263	-5.7%
Arkansas	\$3,812,475,749	\$5,069,966,303	33.0%
Louisiana	\$17,483,823,046	\$9,463,421,982	-45.9%
Oklahoma	\$6,625,941,661	\$7,717,248,225	16.5%
Texas	\$98,795,940,257	\$93,691,763,847	-5.2%
Total West South Central	\$126,718,180,713	\$115,942,400,357	-8.5%
TOTAL SOUTH	\$272,449,230,966	\$269,046,633,568	-1.2%
Arizona	\$19,049,898,836	\$18,617,312,358	-2.3%
Colorado	\$7,332,958,165	\$9,877,257,764	34.7%
Idaho	\$3,173,412,141	\$9,385,679,092	195.8%
Montana	\$1,822,129,890	\$1,949,121,313	7.0%
Nevada	\$6,363,851,368	\$6,230,940,577	-2.1%
New Mexico	\$2,883,859,126	\$5,405,379,141	87.4%
Utah	\$5,360,824,303	\$12,975,646,512	142.0%
Wyoming	\$2,524,606,881	\$4,410,353,904	74.7%
Total Mountain	\$48,511,540,710	\$68,851,690,661	41.9%
Alaska	\$1,745,900,153	\$4,804,152,490	175.2%
California	\$44,857,271,345	\$48,136,681,505	7.3%
Hawaii	\$1,823,772,962	\$5,458,464,387	199.3%
Oregon	\$6,018,285,065	\$6,014,919,688	-0.1%
Washington	\$11,438,187,234	\$10,326,474,788	-9.7%
Total Pacific	\$65,883,416,759	\$74,740,692,858	13.4%
TOTAL WEST	\$114,394,957,469	\$143,592,383,519	25.5%
TOTAL U.S.	\$590,172,431,910	\$611,381,309,330	3.6%

*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 2023 — ConstructConnect®
BILLIONS OF CURRENT \$\$, NOT SEASONALLY ADJUSTED (NSA)

	Latest month actuals			Moving averages (placed in end month)						Year to Date	
	Oct 23	Nov 23	Dec 23	Oct 23	3-months Nov 23	Dec 23	Oct 23	12-months Nov 23	Dec 23	Jan-Dec, 2022	Jan-Dec, 2023
Single Family	17,256	18,203	15,416	17,804	17,823	16,958	16,305	16,729	16,900	224,961	202,805
month-over-month % change	-4.2%	5.5%	-15.3%	-4.0%	0.1%	-4.8%	0.7%	2.6%	1.0%		
year-over-year % change	8.8%	38.8%	15.4%	4.0%	16.3%	20.2%	-18.1%	-13.1%	-9.8%	-12.7%	-9.8%
Apartment	6,961	7,195	5,345	7,679	7,330	6,501	9,196	8,878	8,538	148,718	102,453
month-over-month % change	-11.1%	3.4%	-25.7%	-3.3%	-4.5%	-11.3%	-8.1%	-3.5%	-3.8%		
year-over-year % change	-58.4%	-34.7%	-43.3%	-50.3%	-46.8%	-47.6%	-25.3%	-27.7%	-31.1%	41.9%	-31.1%
TOTAL RESIDENTIAL	24,217	25,398	20,761	25,482	25,152	23,459	25,501	25,607	25,438	373,679	305,259
month-over-month % change	-6.3%	4.9%	-18.3%	-3.8%	-1.3%	-6.7%	-2.7%	0.4%	-0.7%		
year-over-year % change	-25.7%	5.3%	-8.9%	-21.7%	-13.5%	-11.5%	-20.8%	-18.8%	-18.3%	3.1%	-18.3%
Hotel/Motel	0,677	2,015	1,220	1,150	1,271	1,304	1,032	1,132	1,165	11,070	13,986
month-over-month % change	-39.7%	197.9%	-39.5%	-28.5%	10.6%	2.6%	-3.2%	9.7%	2.9%		
year-over-year % change	-37.5%	146.9%	48.8%	14.9%	58.0%	43.9%	20.0%	26.9%	26.3%	53.6%	26.3%
Retail/Shopping	1,233	0,789	0,649	1,010	0,953	0,891	1,145	1,136	1,136	15,383	13,630
month-over-month % change	47.3%	-36.0%	-17.7%	-4.5%	-5.6%	-6.6%	1.6%	-0.7%	-0.1%		
year-over-year % change	22.0%	-11.5%	-1.1%	-6.5%	-6.9%	4.4%	-10.1%	-10.6%	-11.4%	19.4%	-11.4%
Parking Garages	0,106	0,271	0,120	0,200	0,242	0,166	0,181	0,189	0,168	2,418	2,011
month-over-month % change	-69.9%	156.8%	-55.5%	-1.7%	21.3%	-31.7%	3.3%	4.3%	-11.1%		
year-over-year % change	191.6%	52.3%	-67.6%	-1.9%	22.5%	-15.2%	5.1%	5.4%	-16.8%	36.8%	-16.8%
Amusement	0,582	0,579	0,452	0,732	0,576	0,537	0,767	0,763	0,745	7,871	8,946
month-over-month % change	2.4%	-0.4%	-22.0%	-2.1%	-21.2%	-6.7%	-2.0%	-0.5%	-2.3%		
year-over-year % change	-24.3%	-7.3%	-31.6%	-2.6%	-16.4%	-21.5%	24.6%	20.1%	13.7%	20.1%	13.7%
Office	1,327	4,062	2,025	2,361	2,245	2,471	2,080	2,141	2,222	24,596	26,662
month-over-month % change	-1.3%	206.0%	-50.1%	-17.9%	-4.9%	10.1%	-4.6%	3.0%	3.8%		
year-over-year % change	-47.7%	22.2%	91.5%	39.2%	-10.3%	7.2%	1.8%	2.9%	8.4%	17.4%	8.4%
Governmental Offices	1,049	1,114	1,395	1,311	1,107	1,186	1,286	1,298	1,339	13,250	16,070
month-over-month % change	-9.4%	6.2%	25.2%	-9.0%	-15.5%	7.1%	-2.8%	0.9%	3.2%		
year-over-year % change	-29.6%	14.8%	54.9%	-5.0%	-11.6%	5.9%	18.6%	19.0%	21.3%	13.2%	21.3%
Laboratories	0,812	0,284	0,364	0,717	0,742	0,487	0,347	0,358	0,378	4,911	4,534
month-over-month % change	-28.2%	-65.0%	28.3%	41.2%	3.5%	-34.4%	9.3%	3.2%	5.6%		
year-over-year % change	77.1%	87.3%	197.2%	-2.5%	69.5%	99.3%	-19.0%	-14.0%	-7.7%	100.2%	-7.7%
Warehouse	1,371	0,516	0,572	2,068	1,271	0,820	1,969	1,850	1,716	30,472	20,591
month-over-month % change	-28.8%	-62.3%	10.7%	-9.7%	-38.5%	-35.5%	-6.2%	-6.0%	-7.3%		
year-over-year % change	-53.2%	-73.4%	-73.8%	-24.4%	-51.2%	-65.2%	-23.1%	-25.5%	-32.4%	7.9%	-32.4%
Misc Commercial	1,475	1,036	0,513	0,872	1,024	1,008	1,342	1,363	1,328	12,971	15,910
month-over-month % change	163.1%	-29.8%	-50.4%	24.8%	17.3%	-1.5%	4.5%	1.6%	-2.7%		
year-over-year % change	87.3%	32.8%	-46.7%	8.3%	16.1%	19.5%	0.7%	1.2%	22.7%	-19.0%	-22.7%
TOTAL COMMERCIAL	8,632	10,666	7,311	10,421	9,432	8,870	10,148	10,231	10,195	122,942	122,340
month-over-month % change	-4.1%	23.6%	-31.5%	-8.8%	-9.5%	-6.0%	-2.0%	0.8%	-0.3%		
year-over-year % change	-22.2%	10.2%	-5.5%	0.3%	-9.3%	-6.7%	-2.1%	-1.6%	-0.5%	14.1%	-0.5%
TOTAL INDUSTRIAL (Manufacturing)	13,237	14,387	2,395	7,273	10,377	10,008	8,571	9,392	8,044	115,403	96,532
month-over-month % change	277.5%	8.7%	-83.4%	3.2%	42.7%	-3.6%	2.7%	9.6%	-14.3%		
year-over-year % change	25.7%	217.6%	-87.1%	-22.2%	12.8%	-10.7%	5.7%	14.7%	-16.4%	229.0%	-16.4%
Religious	0,069	0,075	0,090	0,061	0,069	0,078	0,079	0,080	0,083	1,039	0,998
month-over-month % change	9.3%	9.2%	20.4%	-20.3%	12.9%	13.3%	-8.0%	0.6%	4.3%		
year-over-year % change	-54.6%	7.9%	84.0%	-49.8%	-32.0%	-13.3%	-11.2%	-6.7%	-4.0%	-14.7%	-4.0%
Hospitals/Clinics	1,366	0,706	0,738	1,194	1,078	0,937	1,721	1,648	1,567	25,847	18,805
month-over-month % change	17.4%	-48.3%	4.6%	10.8%	-9.7%	-13.1%	-12.5%	-4.4%	-4.8%		
year-over-year % change	-68.3%	-56.1%	-56.1%	-46.8%	-52.7%	-63.0%	-20.9%	-22.5%	-27.2%	38.0%	-27.2%
Nursing/Assisted Living	0,302	0,146	0,132	0,259	0,265	0,193	0,218	0,220	0,210	4,587	2,518
month-over-month % change	-13.0%	-51.9%	-9.6%	21.5%	2.5%	-27.1%	-3.8%	0.9%	-4.5%		
year-over-year % change	-25.5%	19.1%	-47.6%	-42.3%	-4.2%	-25.6%	-44.8%	-43.3%	-45.1%	-23.1%	-45.1%
Libraries/Museums	0,283	0,100	0,203	0,506	0,313	0,195	0,373	0,358	0,354	3,596	4,252
month-over-month % change	-49.2%	-64.5%	102.3%	-6.1%	-38.0%	-37.7%	-3.1%	-4.7%	-0.4%		
year-over-year % change	-33.7%	-67.9%	-77.5%	43.6%	-11.1%	-38.9%	23.4%	13.6%	18.2%	0.1%	18.2%
Fire/Police/Courthouse/Prison	1,193	2,831	0,808	1,274	1,921	1,611	1,040	1,207	1,227	8,841	14,721
month-over-month % change	-31.4%	137.3%	-71.4%	-29.6%	50.8%	-16.2%	-1.0%	16.1%	1.6%		
year-over-year % change	11.2%	244.0%	42.0%	28.2%	104.6%	96.0%	42.0%	60.3%	66.5%	14.2%	66.5%
Military	1,485	0,824	0,477	1,332	1,166	0,929	1,346	1,342	1,361	9,729	16,329
month-over-month % change	24.9%	-44.6%	-42.1%	4.2%	-12.5%	-20.4%	0.2%	-0.4%	1.4%		
year-over-year % change	2.6%	-6.5%	93.7%	9.4%	-9.5%	8.2%	53.4%	57.2%	67.8%	5.6%	67.8%
Schools/Colleges	6,288	6,980	6,974	6,703	6,618	6,748	7,278	7,441	7,559	74,536	90,707
month-over-month % change	-4.5%	11.0%	-0.1%	-3.4%	-1.3%	2.0%	-0.1%	2.2%	1.6%		
year-over-year % change	-1.5%	39.0%	25.4%	8.0%	19.5%	19.3%	22.7%	22.6%	21.7%	24.5%	21.7%
Misc Medical	1,225	0,427	0,621	0,894	0,696	0,757	0,772	0,755	0,714	13,702	8,565
month-over-month % change	179.6%	-65.2%	45.4%	29.6%	-22.1%	8.7%	8.7%	-2.1%	-5.5%		
year-over-year % change	154.9%	-31.6%	-44.6%	-16.5%	-36.3%	2.1%	-30.0%	-32.0%	-37.5%	83.2%	-37.5%
TOTAL INSTITUTIONAL	12,211	12,089	10,043	12,223	12,128	11,448	12,827	13,046	13,075	141,877	156,895
month-over-month % change	1.0%	-1.0%	-16.9%	-3.3%	-0.8%	-5.6%	-1.6%	1.7%	0.2%		
year-over-year % change	-16.8%	27.8%	3.6%	-3.4%	2.2%	1.5%	10.5%	11.5%	10.6%	24.6%	10.6%
Misc Non Residential	0,473	0,442	0,295	0,546	0,518	0,403	0,585	0,581	0,559	7,996	6,713
month-over-month % change	-25.8%	-6.7%	-33.2%	-7.6%	-5.2%	-22.1%	-2.5%	-0.6%	-3.7%		
year-over-year % change	-27.2%	-8.8%	-46.9%	-30.7%	-21.3%	-28.4%	-11.5%	-11.3%	-16.0%	26.3%	-16.0%
TOTAL NON-RES BUILDING	34,553	37,584	20,044	30,463	32,454	30,727	32,130	33,249	31,873	388,217	382,480
month-over-month % change	37.0%	8.8%	-46.7%	-3.9%	6.5%	-5.3%	-0.6%	3.5%	-4.1%		
year-over-year % change	-6.5%	55.6%	-45.2%	-8.2%	1.0%	-5.6%	4.5%	7.5%	-1.5%	47.6%	-1.5%
Airports	1,144	0,309	0,635	0,873	0,703	0,696	0,800	0,783	0,803	7,633	9,636
month-over-month % change	74.3%	-73.0%	105.8%	22.1%	-19.4%	-1.0%	6.3%	-2.1%	2.6%		
year-over-year % change	99.8%	-39.2%	61.2%	13.2%	-4.7%	41.6%	32.5%	25.2%	26.2%	46.7%	26.2%
Roads/Highways	7,121	6,181	5,493	6,775	6,296	6,265	7,704	7,807	7,932	84,475	95,186
month-over-month % change	27.5%	-13.2%	-11.1%	-9.1%	-7.1%	-0.5%	0.7%	1.3%	1.6%		
year-over-year % change	10.2%	25.3%	37.5%	-9.3%	-4.2%	22.1%	10.2%	11.6%	12.7%	25.4%	12.7%
Bridges	2,209	1,428	1,887	1,797	1,666	1,841	2,036	2,042	2,037	27,658	24,440
month-over-month % change	62.2%	-35.3%	32.1%	3.8%	-7.3%	10.5%	0.5%	0.3%	-0.3%		
year-over-year % change	6.0%	5.5%	-3.3%	-31.6%	-18.7%	2.5%	-9.2%	-8.1%	-11.6%	53.7%	-11.6%
Dams/Marine	1,090	0,843	0,591	1,067	0,910	0,842	0,986	0,982	0,955	9,414	11,458
month-over-month % change	36.9%	-22.7%	-29.9%	9.4%	-14.7%	-7.5%	1.3%	-0.4%	-2.7%		
year-over-year % change	16.2%	-5.9%	-35.3%	-7.1%	1.8%	-8.1%	18.4%	24.2%	21.7%	10.2%	21.7%
Water/Sewage	4,781	3,470	3,756	4,147	3,891	4,003	3,933	3,980	3,997	43,414	47,969
month-over-month % change	39.8%	-27.4%	8.2%	3.8%	-6.2%	2.9%	1.5%	1.2%	0.4%		
year-over-year % change	17.5%	19.3%	6.0%	5.9%	8.0%	14.1%	12.7%	13.3%	10.5%	28.2%	10.5%
Misc Civil (Power, etc.)	3,644	1,157	1,208	3,360	2,886	2,003	3,930	3,747	3,351	29,361	40,212
month-over-month % change	-5.6%	-68.3%	4.4%	-15.4%	-14.1%	-30.6%	3.2%	-4.7%	-10.		