

October 2023 (based on September 2023 Starts Stats)

# Construction Industry Snapshot

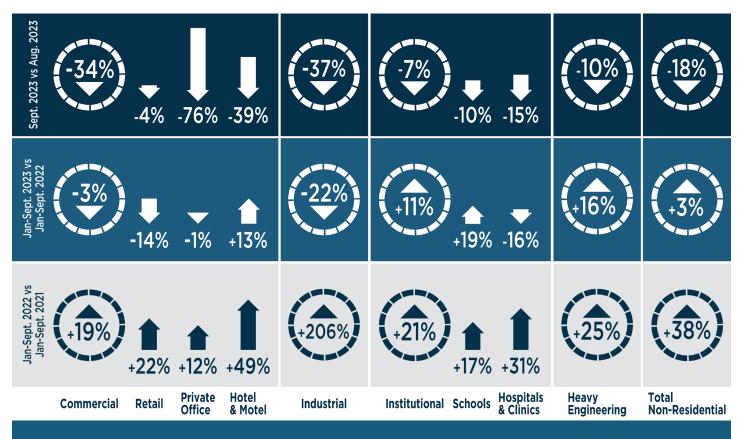


# September's Nonresidential Construction Starts -18% M/M, -26% Y/Y, and +3% Ytd

ConstructConnect announced today that September 2023's volume of construction starts, excluding residential work, was \$39.3 billion, a decrease of -17.8% versus August 2023's figure of \$47.8 billion.

September 2023 vs September 2022 was -25.8%. Year-to-date nonres starts have been +3.4% vs Jan-Sep 2022. Grand total starts (i.e., including residential) have been -14.4% m/m; -26.2% y/y; and -7.3% ytd.





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## CONSTRUCTION INDUSTRY SNAPSHOT

## September's Nonresidential Construction Starts -18% M/M, -26% Y/Y, and +3% Ytd

## Megas Account for 1/6th of Total Nonres Starts Ytd

ConstructConnect announced today that September 2023's dollar volume of construction starts, excluding residential work, was \$39.3 billion (green shaded box, bottom of page 12), a decrease of -17.8% versus August 2023's figure of \$47.8 billion (originally reported as \$46.2 billion).

The dollar volume of September 2023 total nonresidential starts was down by a quarter (-25.8%) when set next to September 2022. The latest month's yearto-date result for total nonresidential starts, however, was +3.4% when compared with the first three quarters (Jan-Sept) of last year.

As has been the case in many months over the past couple of years, the mega projects story has made an exaggerated impact on the 'starts' percentagechange statistics. (A 'mega project' carries an estimated value of a billion dollars or more.) September of last year featured four megas, led by a giant computer chip making plant in Texas, that summed to \$14.2 billion. September of this year included three megas (two in the electric power area, and the other, a prison) that combined for \$4.1 billion. The shortfall of \$10.1 billion put the year-over-year total nonresidential starts comparison at a disadvantage. Leaving aside megas, total nonresidential starts in the latest month, rather than being -25.8%, were -9.3% versus September 2022.

While the latest month may not have kept up with its counterpart month last year in the mega project field, it is interesting to note that the total dollar volume of nonresidential megas through the first three quarters of 2023, at \$74.8 billion, has been a little higher than during January-September 2022. Furthermore, and rather remarkably, the year-todate 2023 and 2022 shares of total nonresidential starts owing to mega project groundbreakings have been the same, 16.2%.

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 September 2023 was -14.4% m/m, -26.2% y/y, and -7.3% ytd. Weakness in the residential category of starts (-23.6% ytd, or down by nearly a quarter) has been holding back Grand Total starts year to date.

#### TTM Starts Negative Both M/M & Y/Y

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 12 of this report.

Grand Total TTM starts in September, on a monthto-month basis, took a bigger step backwards, -2.4%, after being -0.9% in August and -0.3% in July.

On a year-over-year basis, Grand Total TTM starts finally ceased being positive. They extended a slowdown that saw +3.9% in July become +1.8% in August, then -1.9% in the latest month.

### Double-Digit Percent Gains by Many Nonres PIP Categories

'Starts' compile the total estimated dollar value and square footage of all projects on which ground

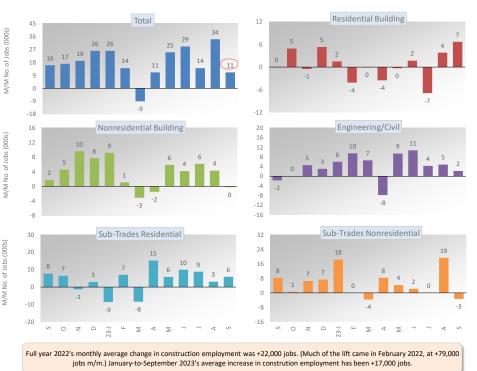
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TABLE 1: VALUE OF UNITED STATES NONRESIDENTIAL CONSTRUCTION STARTS — SEPTEMBER 2023 (ConstructConnect®)

	Jan-Sep 2023 (\$ billions)	% Change Jan-Sep 23 vs Jan-Sep 22	% Change Sep 23 vs Sep 22	% Change Sep 23 vs Aug 23
Hotel/Motel	9.431	12.9%	73.8%	-38.8%
Retail/Shopping	11.004	-14.2%	-28.4%	-3.8%
Parking Garage	1.599	-12.7%	-7.4%	197.6%
Amusement	7.277	25.1%	-9.5%	-41.2%
Private Office	17.467	-1.2%	-37.1%	-75.5%
<sup>n</sup> Government Office	12.333	24.7%	-11.0%	-33.9%
6 Laboratory	2,952	-29.3%	60.4%	1164.2%
- Warehouse	16.441	-29.8%	-41.5%	-23.9%
Miscellaneous Commercial *	12.913	23.7%	-56.2%	-21.7%
COMMERCIAL (big subset)	91.417	-3.2%	-21.2%	-33.9%
ואסט <b>INDUSTRIAL</b> (Manufacturing)	63.923	-21.8%	-75.5%	-36.9%
, Religious	0.792	3.0%	13.1%	106.6%
- Hospital/Clinic	15.310	-16.1%	-6.0%	-15.1%
Nursing/Assisted Living	1.893	-50.3%	-43.1%	-36.5%
t Library/Museum	3.597	36.4%	62.4%	-29.2%
Fire/Police/Courthouse/Prison	9,899	55.3%	103.0%	106.3%
_ Military	13.710	91.6%	-14.3%	-1.9%
School/College	68.718	19.4%	22.7%	-10.4%
Miscellaneous Medical	5.942	-48.2%	-84.2%	-65.3%
INSTITUTIONAL	119.861	10.9%	0.9%	-7.0%
<sup>D</sup> Miscellaneous Non-residential	5.329	-15.5%	-31.5%	17.9%
	280.531	-3.4%	-33.6%	-22.5%
ç,    Airport	7.548	22.6%	-40.1%	-13.4%
_ Road/Highway	76.292	10.4%	-31.6%	-22.8%
Bridgo	18.643	-16.3%	-49.1%	-24.6%
Dam/Marina	8.976	34.7%	-5.1%	-40.1%
Water/Sewage	36.229	10.1%	-9.3%	-17.6%
<sup>S</sup> Miscellaneous Civil (power, pipelines, etc.)	32.224	80.2%	321.0%	86.3%
HEAVY ENGINEERING (Civil)	179.912	16.1%	-10.5%	-9.7%
t TOTAL NONRESIDENTIAL	460.443	3.4%	-25.8%	-17.8%

\* Includes transportation terminals and sports arenas (see Table 2, Page 4).

GRAPH 1: CHANGE IN LEVEL OF U.S. CONSTRUCTION EMPLOYMENT, MONTH TO MONTH (M/M) — TOTAL & BY CATEGORIES — SEPTEMBER 2023



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

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

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 seized 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 form, residential's year-to-date share of total PIP dollars through August of this year has retreated to 45.2%. The other 54.8% belongs to nonresidential. (Through the first three quarters of last year, the shares were 51.6% residential and 48.4% 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 August 2023 was +4.2%, thanks to nonresidential realizing a gain of +17.9%, while residential was retreating by -8.7%.

Nonresidential construction's leading PIP sub-category for year-to-date percentage change has been 'manufacturing', climbing +71.5% versus January-August 2022. By dollar volume year to date, 'manufacturing' has become the largest sub-category within PIP nonresidential work.

Other PIP nonresidential sub-categories that have recorded significant gains year to date in 2023 have been 'conservation and development', +25.8%; 'lodging', +23.7%; 'waste disposal and water delivery', +20.1%; 'highways and streets', +15.8%; and 'health care', +13.7%.

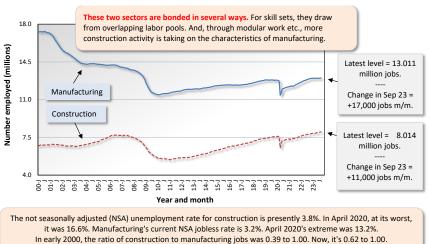
PIP numbers, being more spread out, have smaller peakover-trough percent-change amplitudes than the 'starts' series. As an additional valuable service for clients and powered by its extensive 'starts' database, ConstructConnect, in partnership with Oxford Economics, a world-leader in econometric modeling,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

#### Construction's Jobs Count +11,000 in September

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) sits at slightly more than 5.0%. Accordingly, to claim its rightful share of September's +336,000 economy-wide number-of-jobs advance, the figure for construction would have needed to be +17,000. Unfortunately, there was failure to meet that target, as the actual increase came in at +11,000. Interestingly, the ninemonth average count for construction hiring this year has been +17,000 jobs. But last year, the comparable figure was +23,000 jobs. Graph 1 shows that month-to-month construction sector hiring in September was most active among residential general contractors (+7,000 jobs).

Construction's not seasonally adjusted (NSA) unemployment rate (U) in September of this year, at 3.8%, was down slightly from the reading of 3.9% in the month prior, but above the 3.4% in September of last year. The current NSA U rate of 3.8% for construction was almost a match for the

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

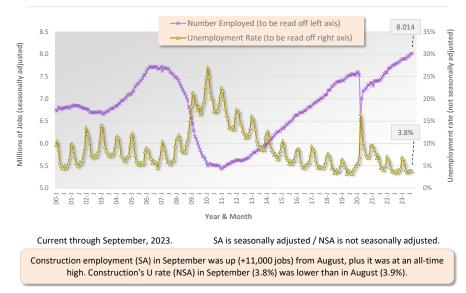


In early 2000, the ratio of construction to manufacturing jobs was 0.39 to 1.00. Now, it's

Latest data points are for September, 2023.

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

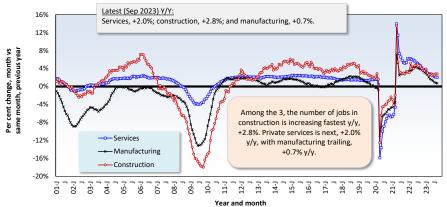
#### GRAPH 3: U.S. CONSTRUCTION EMPLOYMENT (SA) & UNEMPLOYMENT RATE (NSA)



Current through September, 2023.

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

#### GRAPH 4: U.S. EMPLOYMENT SEPTEMBER 2023 — % CHANGE Y/Y BASED ON SEASONALLY ADJUSTED (SA) DATA



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

Continued on page 4

The latest data points are for September, 2023.

ality of construction's U rate.

Manufacturing's NSA U rate in September, at 3.2%, was tighter than for construction. Both the manufacturing and construction sectors are in the goods-producing segment of the economy (i.e., as opposed to private servicesproviding) and there is considerable overlap between their labor pools. Staffing by manufacturers in September, advanced by +17,000 jobs (Graph 2). The current surge in capital spending being undertaken by manufacturers will eventually lead to much more hiring, although ever greater adoption of automation and robotics will act as restraints.

In September, U.S. total employment was +2.1% year over year. The y/y bump in the number of 'private services-providing' jobs was a tad less, +2.0%. The advance in the construction industry's worker count was a solid +2.8% y/y. But leading all sectors was 'health care and social assistance', +4.4% y/y, with 'social assistance' alone at +6.5% y/y. Indicative of a slowing economy, staffing by 'transportation and warehousing' firms was -0.3% y/y (see Graph 5).

In other segments of the economy with close ties to construction, the latest y/y changes in employment were as follows: cement and concrete product manufacturing, +4.5%; machinery and equipment rental and leasing, +3.9%; architectural and engineering design services, +3.7%; oil and gas exploration and development, +2.8%; real estate, +1.4%; and building materials and supplies dealers, -3.6% (high bor-

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 +3.7% y/y advance in the number of jobs in the sector is welcome news. But the September Architecture Billings Index (ABI) from the American Institute of Architects (AIA) and Deltek was a bearish 44.8, descending to its lowest point since December 2020, when the business condition ravages from the coronavirus pandemic were at their worst. Below 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. Another index from AIA/Deltek measures inquiries into new projects. In September, that index stood at 53.7.

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

The -17.8% drop in the value of total nonresidential starts in September versus August (m/m) resulted from weakness in all the major sub-categories, with industrial (-36.9%) and commercial (-33.9%) at the extreme end. Engineering (-9.7%) and institutional (-7.0%) weren't as bad.

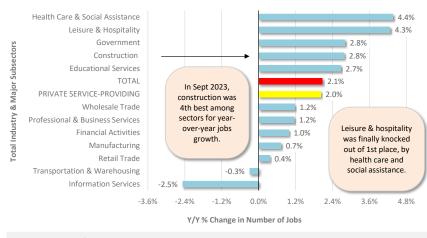
The -25.8% decline in total nonresidential starts in September 2023 versus September 2022 (y/y) originated TABLE 2: CONSTRUCTION STARTS IN SOME ADDITIONAL first in industrial (-75.5%), although commercial also had a severe setback (-21.2%). Engineering was down by a relatively small amount (-10.5%). Institutional was flat (+0.9%).

The year-to-date climb (+3.4%) of total nonresidential starts in the latest month was due to pickups in engineering (+16.1%) and institutional (+10.9%) that were able to more than withstand contractions in industrial (-21.8%) and commercial (-3.2%).

Usually, about a third of all nonresidential starts derive from just two sub-category type-of-structure designations, 'roads/highways' and 'schools/colleges'. Through the first three guarters of 2023, their shares of total were 16.6% and 14.9% respectively, combining for 31.5%.

The three percentage-change metrics for street starts in September were -22.8% m/m, and -31.6% y/y, but +10.4% ytd. For school starts, the results were -10.4% m/m, but +22.7% y/y, and +19.4% ytd. Among types of educational facilities, 'colleges and universities' (+35.5% ytd) and 'junior

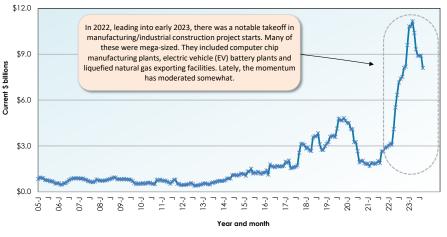
all-jobs NSA U rate of 3.6%. Graph 3 highlights the season- GRAPH 5: Y/Y JOBS CHANGE, U.S. TOTAL INDUSTRY & MAJOR SUBSECTORS -SEPTEMBER 2023 (BASED ON SEASONALLY ADJUSTED PAYROLL DATA)



September 2023's y/y changes in employment within the pandemic's initially hardest-hit sector, 'leisure & hospitality', were: 'amusements/gambling', +6.4%; 'hotels/motels', +5.3%; and 'restaurants/bars', +3.7%.

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

#### rowing costs cut into new and renovation residential work). GRAPH 6: U.S. MANUFACTURING/INDUSTRIAL CONSTRUCTION STARTS -CONSTRUCTCONNECT



The last data point is for September 2023.

Data source: ConstructConnect. Graph: ConstructConnect.

# TYPE OF STRUCTURE SUB-CATEGORIES — ConstructConnect®

	Jan-Sep 2023	% Change vs
	(\$ billions)	Jan-Sep 2022
Sports Stadiums/Convention Centers	\$7.103	30.4%
Transportation Terminals	\$5.810	16.4%
Courthouses	\$1.602	33.1%
Police Stations & Fire Halls	\$3.588	15.0%
Prisons	\$4.708	129.5%
Pre-School/Elementary	\$19.198	7.9%
Junior & Senior High Schools	\$27.749	18.8%
K-12 (sum of above two categories)	\$46.947	14.1%
Special & Vocational Schools	\$1.654	4.3%
Colleges & Universities	\$20.117	35.5%
Electric Power Infrastructure	\$13.227	64.8%

Source: ConstructConnect/Table: ConstructConnect

and senior' high schools (+18.8% ytd) have been out front for 'starts' (Table 2).

Important beyond roads within the engineering sub-category are 'water/sewage' and 'bridge' starts. The results for the former in September were -17.6% m/m, and -9.3% y/y, but +10.1% ytd. For the latter, they were -24.6% m/m, -49.1% y/y, and -16.3% ytd (i.e., all on the downside).

Among all sub-categories of starts, one of the few (along with prisons) with an outstanding record of starts in September was the 'miscellaneous civil' designation, which includes pipeline, electric power, and railroad projects. Its three metrics in the latest month were +86.3% m/m, +321.0% y/y, and +80.2% ytd (see Top 10 Projects of the Month, Table 7, page 9 of this report).

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 September were across-the-board dismal: -39.4% m/m, -59.3% y/y, and -31.0% ytd. 'Hospital' starts on their own in the latest month were -15.1% m/m, -6.0% y/y, and -16.1% ytd.

The 'fire/police/courthouse/prison' sub-category turned in good starts results in September: +106.3% m/m; +103.0% y/y; and +55.3% ytd. While courthouse starts have been ahead by one-third ytd (+33.1%), they pale beside prison starts (+129.5% ytd) (see Top 10, page 9).

Among commercial sub-categories in September, 'amusement' (+25.1%), 'government offices' (+24.7%), and 'miscellaneous' (+23.7%) were each up between a fifth and a quarter ytd. Within 'miscellaneous', 'sports stadiums' were +30.4% and 'transportation terminals', +16.4%.

But several of commercial's sub-categories continued to be down in dramatic fashion ytd in the latest month: 'ware-houses', -29.8%; 'laboratories', -29.3%; 'retail', -14.2%; and 'parking garages', -12.7%. Starts on private office buildings through September, however, while being hammered m/m (-75.5%) and y/y (-37.1%), stayed respectable ytd (-1.2%)

Also in September, the dollar volume of 'hotel/motel' starts, coming off minimal activity during the pandemic, and despite being -38.8% m/m, were upbeat at +73.8% y/y, and +12.9% ytd.

#### Off-key Notes Delivered by Trend Lines

Page 10 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 movingaverage approach is designed to capture trends. As a technical note, the calculated number is graphed (i.e., placed) in the ending month.

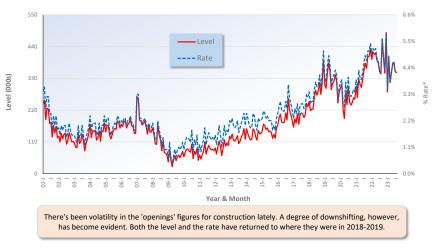
The main takeaways are that the 'nonresidential building' curve is faltering and the 'heavy engineering' curve, at least temporarily, has come to the end of a steadily climbing path. The 'institutional', 'commercial', 'private office building', and 'water/sewage' curves have all been moving sideways. The 'roads/highways' curve, after showing much strength, has recently taken a dip. The 'retail', 'hospitals/clinics', and 'bridges' curves are in descent. The 'schools/colleges' and 'miscellaneous civil' curves are the only ones still offering upwards-sloping positivity.

#### Moderation in 'All Jobs' Wage Hikes

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 September 2023's Table B-3 (including bosses), y/y all-jobs earnings were +4.2% hourly and +3.5% weekly. Compensation hikes for construction workers, as a subset of 'all *Continued on page 6* 

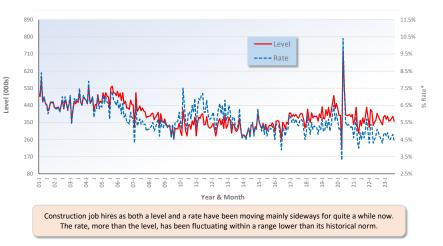




\*Rate is number of job openings end-of-month as % of 'construction employment plus number of job openings'. Latest seasonally adjusted data points are for August 2023. ... JOLTS = Job Openings and Labor Turnover Survey.

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





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

Latest seasonally adjusted data points are for August 2023. ... JOLTS = Job Openings and Labor Turnover Survey. Data source: Bureau of Labor Statistics (Dept of Labor)/Chart: ConstructConnect.

jobs', were notably better, at +5.1% y/y hourly and +6.0% y/y weekly. From Table B-8 for production and nonsupervisory workers (i.e., excluding bosses), the y/y 'all-jobs' paycheck hikes were +4.3% hourly and +3.7% weekly. Construction workers, though, once again found themselves on a faster track, with stipend hikes of +5.5% y/y hourly and the same +5.5% y/y weekly.

The latest wage advances, while still lofty, need to be placed in perspective. Graphs 9 and 10 show that moderation is clearly underway in the year-over-year hourly and weekly earnings going to 'all jobs'. Construction worker compensation, however, is proving less pliable.

September 2023's CPI-U 'all items' inflation rate was +3.7% y/y. (The 'core' rate, which omits volatile food and energy items, was +4.1% 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. While pay hikes are barely signaling purchasing power upticks for 'all jobs', they are saying good things about the progress being made by construction workers.

#### Material Input Costs Lose Their Sting

September 2023's y/y results for three building related BLS Producer Price Index (PPI) series were: (A) 'construction materials special index', -1.2% (less negative than August's -2.4%); (B) 'inputs to new construction index, excluding capital investment, labor, and imports', +0.5% (back in plus territory after the previous month's -0.3%); and (C) 'final demand construction', designed to capture bid prices, +3.7% (not straying far from the +3.9% of 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 September, there were only a few materials showing y/y price increases: cement, +10.8%; ready-mix concrete, +9.8%; and copper wire and cable, +3.6%. There were far more items with negative y/y price performances: asphalt, -25.7%; number 2 diesel fuel, -18.6%; softwood lumber, -15.2%; hot rolled steel bars, plates, and structural shapes, -10.5%; aluminum mill shapes, -4.2%; and gypsum, -1.7%. Also, there's an 'inputs to highways and streets' index, +0.9% y/y. Unleaded regular gasoline in the PPI data series is +6.9% y/y; as a subset in the Consumer Price Index (CPI), it's +3.0% 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 superlarge, has a history of being more volatile than many other leading indicators for the economy.

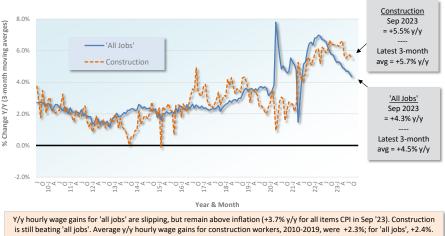
#### Sept. 2023's 'Grand Total' Starts -7.3% Ytd

From Table 6 on page 8 (and also from Table 9 on page 12) of this report, ConstructConnect's total residential starts in September 2023 were -7.9% m/m, -26.9% y/y, and -23.6% ytd. Multi-family starts were -2.1% m/m, -54.3% y/y, and -32.9% ytd. Completing the picture, single-family starts were -9.9% m/m, -5.0% y/y, and -17.9% ytd.

Including home building with all nonresidential categories, Grand Total starts in September 2023 were -14.4% m/m, -26.2% y/y, and -7.3% 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.

jobs', were notably better, at +5.1% y/y hourly and +6.0% GRAPH 9: AVERAGE HOURLY EARNINGS Y/Y — 'ALL JOBS' & CONSTRUCTION

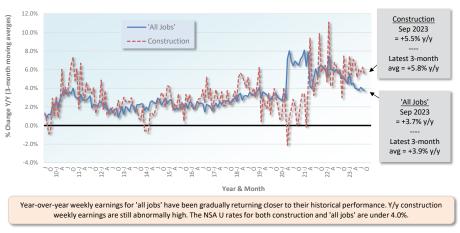


From 'Production Workers and Non-supervisory Personnel' Table (B8).

The latest data points are for September, 2023.

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

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



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

The latest data points are for September, 2023.

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

#### **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.

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.constructconnect.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.

## CONSTRUCTION INDUSTRY SNAPSHOT

#### Is Pressure for Higher Wages Nearing an End or **Becoming Entrenched?**

Over the last 12 months, several unions have made headlines thanks to their negotiations of historically high compensation packages. According to an analysis by Bloomberg, union negotiations during the first quarter of 2023 resulted in an average first-year pay raise of 7%. This accomplishment marked the highest average payout in a single quarter in decades. Such wage gains have continued through to the present.

For the construction industry, wages have increased only slightly less dramatically when compared to the average gains being made by unions. In the second through fourth quarters of 2022, average hourly construction wages increased by as much as 5.9% year-over-year.

However, the first three guarters of 2023 witnessed a fall in construction job openings which deflated some of labor's negotiating power at the bargaining table. At its last peak in late-2022, total U.S. construction job openings neared a record 500,000. However, as of the end of August, that figure had fallen by almost 30% to 350,000 openings. This decline was paralleled by the movement of year-overyear wage growth which fell over the same period to 5.2%. While wage growth remains above 5%, this latest decline represents a nearly 20% decrease in the rate of wage growth for workers.

Multiple issues will impact the future demand for construction labor and how much firms will be willing to pay in wages. This year's depressed volumes for new home and office construction may result in fewer construction jobs and more laborers competing for alternative construction work, reducing current wage pressures.

Conversely, the limited growth of specialty contractors since COVID has meant that for some specialized labor groups, there is little likelihood of wage pressures significantly letting up.

Historically, construction earnings have grown at between 0% and 2% above the rate of inflation. This has generally enabled construction workers to maintain a fixed to slightly increasing standard of living. This close relationship between inflation and wages also implies that the success of the Federal Reserve in further reducing inflation in 2023 and beyond will have a strong influence on the growth rate of future construction wages.

Thus far, in the second half of 2023, the Fed has not only failed to lower inflation, but has actually seen inflation increase from 3.0% to 3.7%. If the Fed is unable to further lower inflation, then construction wage growth could normalize somewhere between 3% and over 5%. This would be substantially higher than the average 1.8% growth rate in the decade prior to COVID. Most importantly, it could establish new long-run expectations on both sides of the negotiating table regarding what is acceptable wage growth.

- Michael Guckes, ConstructConnect Senior Economist

#### TABLE 3: 2023 YTD RANKING OF TOP 20 STATES BY \$ VOLUME OF NONRESIDENTIAL CONSTRUCTION STARTS — ConstructConnect®

	Jan-Sep 2023	% Change vs Jan-Sep 2022
1 Texas	\$75,776,725,158	-4.0%
2 California	\$36,657,193,558	3.5%
3 New York	\$24,944,704,148	4.3%
4 Florida	\$21,964,823,102	-3.3%
5 North Carolina	\$16,825,972,116	0.2%
6 Ohio	\$16,339,344,794	52.8%
7 Georgia	\$14,436,249,678	37.6%
8 Indiana	\$14,208,880,169	30.2%
9 Pennsylvania	\$13,087,903,896	-2.8%
10 Illinois	\$12,548,638,154	-6.1%
11 Michigan	\$12,258,563,178	-28.4%
12 Virginia	\$11,923,795,747	28.7%
13 Massachusetts	\$10,112,853,830	24.0%
14 Alabama	\$9,589,764,433	39.5%
15 Arizona	\$8,970,860,737	13.4%
16 Washington	\$8,059,682,832	-9.6%
17 Tennessee	\$8,023,123,015	22.4%
18 Colorado	\$7,964,000,166	42.0%
19 Kansas	\$7,788,454,381	104.4%
20 Maryland	\$7,340,803,335	22.0%

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® Ian Son 2023 % Change ve Jan Sen 2022

	Jan-Sep 2023	% Change vs Jan-Sep 2022
1 Texas	\$50,631,037,649	-12.5%
2 California	\$20,525,447,283	-11.0%
3 New York	\$16,819,129,660	11.7%
4 Florida	\$12,608,152,908	-18.9%
5 North Carolina	\$12,494,095,202	1.1%
6 Ohio	\$11,087,926,454	84.5%
7 Indiana	\$10,742,034,711	58.3%
8 Georgia	\$9,694,412,592	31.0%
9 Virginia	\$8,379,767,708	46.7%
10 Alabama	\$7,632,278,136	52.0%
11 Pennsylvania	\$7,178,243,945	-14.3%
12 Arizona	\$6,962,725,220	18.9%
13 Massachusetts	\$6,941,407,046	18.6%
14 Illinois	\$6,033,673,271	-3.8%
15 Michigan	\$5,943,264,593	-52.9%
16 Tennessee	\$5,877,765,429	35.2%
17 Kansas	\$5,736,643,211	169.6%
18 Maryland	\$4,778,771,957	9.9%
19 Washington	\$4,413,276,667	-10.5%
20 Colorado	\$4,390,552,485	52.7%

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

	Jan-Sep 2023	% Change vs Jan-Sep 2022
1 Texas	\$25,145,687,509	19.0%
2 California	\$16,131,746,275	30.7%
3 Florida	\$9,356,670,194	30.4%
4 New York	\$8,125,574,488	-8.3%
5 Illinois	\$6,514,964,883	-8.2%
6 Michigan	\$6,315,298,585	39.7%
7 Pennsylvania	\$5,909,659,951	16.2%
8 Ohio	\$5,251,418,340	12.2%
9 Georgia	\$4,741,837,086	53.4%
10 North Carolina	\$4,331,876,914	-2.5%
11 Alaska	\$3,996,312,960	415.9%
12 Minnesota	\$3,939,501,421	-15.8%
13 Washington	\$3,646,406,165	-8.6%
14 Louisiana	\$3,589,418,454	20.4%
15 Colorado	\$3,573,447,681	30.8%
16 Virginia	\$3,544,028,039	-0.2%
17 Wyoming	\$3,522,976,228	104.7%
18 Indiana	\$3,466,845,458	-16.0%
19 New Mexico	\$3,447,172,411	219.1%
20 Wisconsin	\$3,189,586,857	-3.8%

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<sup>®</sup> INSIGHT VERSION — SEPTEMBER 2023 ARRANGED TO MATCH THE ALPHABETICAL CATEGORY DROP-DOWN MENUS IN INSIGHT

	Jan-Sep 2023 (\$ billions)	% Change Jan-Sep 23 vs Jan-Sep 22	% Change Sep 23 vs Sep 22	% Change Sep 23 vs Aug 23
Summary				
CIVIL	179.912	16.1%	-10.5%	-9.7%
NONRESIDENTIAL BUILDING	280.531	-3.4%	-33.6%	-22.5%
RESIDENTIAL	224.862	-23.6%	-26.9%	-7.9%
GRAND TOTAL	685.305	-7.3%	-26.2%	-14.4%
Verticals				
Airport	7.548	22.6%	-40.1%	-13.4%
All Other Civil	18.998	92.9%	46.0%	-33.6%
Bridges	18.643	-16.3%	-49.1%	-24.6%
Dams / Canals / Marine Work	8.976	34.7%	-5.1%	-40.1%
Power Infrastructure	13.227	64.8%	2395.9%	819.1%
Roads	76.292	10.4%	-31.6%	-22.8%
Water and Sewage Treatment	36.229	10.1%	-9.3%	-17.6%
CIVIL	179.912	16.1%	-10.5%	-9.7%
Offices (private)	17.467	-1.2%	-37.1%	-75.5%
Parking Garages	1.599	-12.7%	-7.4%	197.6%
Transportation Terminals	5.810	16.4%	-69.4%	43.5%
Commercial (small subset)	24.876	1.5%	-42.9%	-63.5%
Amusement	7.277	25.1%	-9.5%	-41.2%
Libraries / Museums	3.597	36.4%	62.4%	-29.2%
Religious	0.792	3.0%	13.1%	106.6%
Sports Arenas / Convention Centers	7.103	30.4%	-1.1%	-50.8%
Community	18.769	27.9%	11.2%	-36.1%
College / University	20.117	35.5%	67.4%	21.1%
Elementary / Pre School	19.198	7.9%	-16.2%	-39.2%
Jr / Sr High School	27.749	18.8%	18.3%	-3.5%
Special / Vocational	1.654	4.3%	2.8%	-73.6%
Educational	68.718	19.4%	22.7%	-10.4%
Courthouses	1.602	33.1%	-52.9%	-70.1%
Fire and Police Stations	3.588	15.0%	-15.2%	-9.7%
Government Offices	12.333	24.7%	-11.0%	-33.9%
Prisons	4.708	129.5%	511.5%	1032.7%
Government	22.232	36.7%	36.3%	14.0%
Industrial Labs / Labs / School Labs	2.952	-29.3%	60.4%	1164.2%
Manufacturing	63.923	-21.8%	-75.5%	-36.9%
Warehouses	16.441	-29.8%	-41.5%	-23.9%
Industrial	83.317	-23.8%	-63.4%	-18.0%
Hospitals / Clinics	15.310	-16.1%	-6.0%	-15.1%
Medical Misc.	5.942	-48.2%	-84.2%	-65.3%
Nursing Homes	1.893	-50.3%	-43.1%	-36.5%
Medical	23.145	-31.0%	-59.3%	-39.4%
Military	13.710	91.6%	-14.3%	-1.9%
Hotels Detail Miss	9.431	12.9% -15.5%	73.8%	-38.8%
Retail Misc.	5.329		-31.5%	17.9%
Shopping Retail	11.004 25.764	-14.2% -6.2%	-28.4% -8.6%	-3.8% -18.2%
NONRESIDENTIAL BUILDING	23.764	-6.2%	-33.6%	-18.2%
Multi-Family	74.890	-3.4%	-54.3%	-22.5%
Single-Family	149.973	-32.9%	-5.0%	-2.1%
RESIDENTIAL	224.862	-17.9% -23.6%	-26.9%	-9.9%
NONRESIDENTIAL	460.443	-23.6%	-25.8%	-17.8%
GRAND TOTAL	685.305	-7.3%	-26.2%	-14.4%

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'.

# "Top Ten" projects of the month

TABLE 7: ConstructConnect's TOP 10 PROJECT STARTS IN SEPTEMBER 2023

LOCATION (EAST TO WEST)	TYPE OF CONSTRUCTION	DESCRIPTION	SQUARE FEET 000S*	DOLLARS 000,000S
Massachusetts Boston	Industrial	Harvard University Enterprise Research Campus Phase A (Laboratories and Residences) (6 structures) 100 Western Ave Tishman Speyer / New York	900	\$750
Maryland Baltimore	Civil/Engineering	Criterion Wind Farm Replacement Multiple Locations Constellation Energy	*	\$350
South Carolina Florence	Industrial	Envision AESC Battery Cell Gigafactory (1 structure) John C Calhoun Rd & E Old Marion Hwy Envision AESC US LLC	1,500	\$810
<b>Georgia</b> Atlanta	Industrial	Tilford Yards Phase 2 (4 structures) 1968 Marietta Rd NW TPA Group LLC	1,246	\$324
Tennessee Nashville	Residential	Nashville Yards Apartment Towers and Entertainment District (9 structures; 35 stories; 696 units) 952 Commerce St Anschutz Entertainment Group (AEG) - California Office	2,440	\$668
<b>Alabama</b> Tallassee	Institutional	Specialized Men's Prison Facility (2 structures) AL-229 & Rifle Range Rd CoreCivic	1,449	\$1,000
<b>Louisiana</b> New Iberia	Industrial	First Solar Module Manufacturing Facility (1 structure) 1404 Hangar Dr First Solar, Inc.	2,000	\$1,100
<b>Minnesota</b> Bloomington	Civil/Engineering	MNDOT I-494 Airport to Highway 169 Design Build (5 structures) I-494 Minnesota Department of Transportation (MnDOT)	*	\$377
<b>New Mexico</b> Tularosa	Civil/Engineering	SunZia Southwest Transmission / White Sands Multiple Locations Pattern Energy Group	*	\$2,000
<b>California</b> San Diego	Institutional	The Triton Center - University of California San Diego (5 structures; 9 units) 9500 Gilman Dr UC-San Diego - Facilities Design and Construction	387	\$428
TOTALS:			9,922	\$7,807

\*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

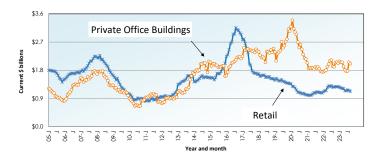
GRAPH 11: U.S. NONRESIDENTIAL CONSTRUCTION STARTS — ConstructConnect<sup>®</sup> (12-MONTH MOVING AVERAGES)



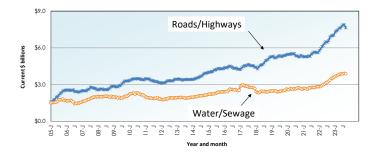
GRAPH 12: U.S. COMMERCIAL AND INSTITUTIONAL CONSTRUCTION STARTS — ConstructConnect® (12-MONTH MOVING AVERAGES)



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

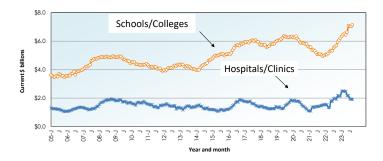


GRAPH 15: U.S. ROAD/HIGHWAY AND WATER/SEWAGE CONSTRUCTION STARTS — ConstructConnect® (12-MONTH MOVING AVERAGES)

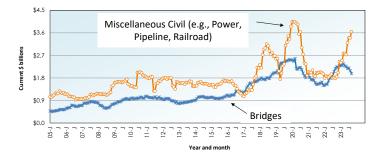


The last data points in all the graphs on this page are for September, 2023.

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



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



Source: ConstructConnect/Charts: ConstructConnect.

# **Regional starts table**

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

	Jan-Sep 2022	Jan-Sep 2023	% Change
Connecticut	\$2,222,277,517	\$3,781,135,185	70.1%
Maine	\$3,284,175,911	\$1,223,636,671	-62.7%
Massachusetts	\$8,158,462,063	\$10,112,853,830	24.0%
New Hampshire	\$711,670,014	\$867,338,375	21.9%
Rhode Island	\$1,093,313,673	\$572,324,471	-47.7%
Vermont	\$473,918,151	\$659,986,832	39.3%
Total New England	\$15,943,817,329	\$17,217,275,364	8.0%
New Jersey	\$7,327,234,325	\$5,140,542,166	-29.8%
New York	\$23,922,988,796	\$24,944,704,148	4.3%
Pennsylvania	\$13,464,496,819	\$13,087,903,896	-2.8%
Total Middle Atlantic TOTAL NORTHEAST	\$44,714,719,940	\$43,173,150,210	-3.4%
	\$60,658,537,269	\$60,390,425,574	-0.4% -6.1%
Indiana	\$13,368,539,904	\$12,548,638,154	-0.1%
Michigan	\$10,913,604,403 \$17,129,396,225	\$14,208,880,169 \$12,258,563,178	-28.4%
Ohio	\$10,692,098,467	\$16,339,344,794	52.8%
Wisconsin	\$9,217,494,001	\$6,647,636,557	-27.9%
Total East North Central	\$61,321,133,000	\$62,003,062,852	1.1%
lowa	\$4,185,810,676	\$5,412,604,803	29.3%
Kansas	\$3,809,898,064	\$7,788,454,381	104.4%
Minnesota	\$7,665,514,449	\$6,731,862,939	-12.2%
Missouri	\$7,517,622,471	\$5,956,582,822	-20.8%
Nebraska	\$4,645,427,211	\$4,307,003,263	-7.3%
North Dakota	\$3,569,188,088	\$2,768,607,303	-22.4%
South Dakota	\$3,566,823,524	\$3,270,402,283	-8.3%
Total West North Central	\$34,960,284,483	\$36,235,517,794	3.6%
TOTAL MIDWEST	\$96,281,417,483	\$98,238,580,646	2.0%
Delaware	\$1,408,126,858	\$958,764,292	-31.9%
District of Columbia	\$2,019,322,140	\$1,496,709,653	-25.9%
Florida	\$22,717,229,429	\$21,964,823,102	-3.3%
Georgia	\$10,489,822,593	\$14,436,249,678	37.6%
Maryland	\$6,015,355,029	\$7,340,803,335	22.0%
North Carolina	\$16,798,633,930	\$16,825,972,116	0.2%
South Carolina	\$6,101,762,591	\$6,821,498,862	11.8%
Virginia	\$9,265,207,975	\$11,923,795,747	28.7%
West Virginia	\$1,495,901,832	\$2,838,259,645	89.7%
Total South Atlantic	\$76,311,362,377	\$84,606,876,430	10.9%
Alabama	\$6,874,345,381	\$9,589,764,433	39.5%
Kentucky	\$12,559,180,968	\$5,646,560,600	-55.0%
Mississippi Tennessee	\$2,331,467,001	\$3,040,303,894	30.4%
Total East South Central	\$6,555,279,554 \$28,320,272,904	\$8,023,123,015 \$26,299,751,942	22.4% -7.1%
Arkansas	\$2,943,804,373	\$4,276,594,019	45.3%
Louisiana	\$16,253,629,327	\$7,150,557,835	-56.0%
Oklahoma	\$4,937,408,681	\$5,967,790,592	20.9%
Texas	\$78,968,269,940	\$75,776,725,158	-4.0%
Total West South Central	\$103,103,112,321	\$93,171,667,604	-9.6%
TOTAL SOUTH	\$207,734,747,602	\$204,078,295,976	-1.8%
Arizona	\$7,909,769,283	\$8,970,860,737	13.4%
Colorado	\$5,606,807,885	\$7,964,000,166	42.0%
Idaho	\$1,862,351,481	\$1,969,798,950	5.8%
Montana	\$1,397,555,810	\$1,535,984,615	9.9%
Nevada	\$3,815,274,651	\$4,335,404,704	13.6%
New Mexico	\$2,343,932,230	\$4,682,431,659	99.8%
Utah	\$4,194,102,937	\$5,025,332,468	19.8%
	\$2,140,555,044	\$4,223,396,630	97.3%
Wyoming	*** *** * * * * * *	\$38,707,209,929	32.2%
	\$29,270,349,321	+///	
Total Mountain	\$29,270,349,321 \$1,313,256,014	\$4,432,634,291	237.5%
Total Mountain Alaska			
Total Mountain Alaska California	\$1,313,256,014	\$4,432,634,291	3.5%
Total Mountain Alaska California Hawaii Oregon	\$1,313,256,014 \$35,405,522,487 \$1,290,415,123 \$4,618,444,982	\$4,432,634,291 \$36,657,193,558 \$4,914,217,535 \$4,964,701,209	3.5% 280.8% 7.5%
Total Mountain Alaska California Hawaii Oregon Washington	\$1,313,256,014 \$35,405,522,487 \$1,290,415,123 \$4,618,444,982 \$8,916,694,292	\$4,432,634,291 \$36,657,193,558 \$4,914,217,535 \$4,964,701,209 \$8,059,682,832	3.5% 280.8% 7.5% -9.6%
Wyoming Total Mountain Alaska California Hawaii Oregon Washington Total Pacific TOTAL WEST	\$1,313,256,014 \$35,405,522,487 \$1,290,415,123 \$4,618,444,982	\$4,432,634,291 \$36,657,193,558 \$4,914,217,535 \$4,964,701,209	237.5% 3.5% 280.8% 7.5% -9.6% 14.5% 20.9%

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

	Lates	t month actu	als			averages (p	laced in end m		I	Year to D	
	Jul 23	Aug 23	Sep 23	Jul 23	3-months Aug 23	Sep 23	Jul 23	12-months Aug 23	Sep 23	Jan-Sep, 2022	Jan-Sep, 2023
Single Family month-over-month % change	19.326 2.0%	17.904 -7.4%	16.135 -9.9%	19.323 4.2%	18.723 -3.1%	17.788 -5.0%	16.146 0.3%	16.096 -0.3%	16.026 -0.4%	182.623	149.973
year-over-year % change	2.9%	-3.3% 6.320	-5.0% 6.187	-6.6% 8.175	-4.7% 7.278	-1.7%	-23.2% 10.729	-22.3%	-21.3% 9.306	-6.9% 111.533	-17.9% 74.890
month-over-month % change year-over-year % change	-20.3%	-8.2% -60.6%	-2.1%	0.0%	-11.0%	-11.2% -52.6%	-3.3%	-7.5% -10.8%	-6.2% -20.1%	45.6%	-32.9%
TOTAL RESIDENTIAL	26.207	24.223	22.322	27.498	26.001	24.251	26.876	26.015	25.332	294.156	224.862
month-over-month % change year-over-year % change	-4.9% -12.8%	-7.6% -29.9%	-7.9% -26.9%	3.0% -17.7%	-5.4% -23.2%	-6.7% -23.5%	-1.2% -15.4%	-3.2% -18.3%	-2.6% -20.8%	7.9%	-23.6%
Hotel/Motel month-over-month % change	1.974 67.3%	1.463 -25.9%	0.895	1.303 45.0%	1.539 18.2%	1.444 -6.2%	0.974 1.7%	0.979 0.5%	1.011 3.2%	8.352	9.431
year-over-year % change Retail/Shopping	11.3% 1.410	4.1% 0.869	73.8% 0.836	14.4% 1.235	12.9% 1.143	17.3% 1.038	26.1% 1.174	15.9% 1.158	21.7% 1.130	49.5% 12.824	12.9% 11.004
month-over-month % change year-over-year % change	22.5% 33.1%	-38.4% -18.1%	-3.8% -28.4%	-19.8% -11.8%	-7.4% 0.8%	-9.2% -5.3%	2.6% -10.0%	-1.4% -7.9%	-2.4% -10.9%	22.2%	-14.2%
Parking Garages month-over-month % change	0.206	0.118	0.351	0.203	0.143	0.225	0.182	0.175	0.173	1.832	1.599
year-over-year % change	-3.0%	-39.6%	-7.4%	37.3%	-16.9%	-14.2%	16.8%	10.7%	-4.5%	28.4%	-12.7%
Amusement month-over-month % change	0.655 -18.4%	1.040 58.8%	0.611 -41.2%	0.664 -22.1%	0.832 25.4%	0.769 -7.6%	0.765	0.784 2.5%	0.779 -0.7%	5.817	7.277
year-over-year % change Office	-31.5% 2.543	28.5% 4.227	-9.5% 1.035	0.5% 1.816	8.3% 2.938	-5.5% 2.602	38.9% 1.780	38.2% 2.057	31.2% 2.006	10.9% 17.679	25.1% 17.467
month-over-month % change year-over-year % change	24.4% 6.0%	66.2% 367.7%	-75.5% -37.1%	23.5% -23.1%	61.8% 50.6%	-11.5% 57.7%	0.7% -16.3%	15.6% 7.2%	-2.5% 5.3%	12.1%	-1.2%
Governmental Offices month-over-month % change	1.388 -31.4%	1.747 25.9%	1.155 -33.9%	1.670 5.4%	1.719 2.9%	1.430 -16.8%	1.287 0.7%	1.320 2.6%	1.308 -0.9%	9.888	12.333
year-over-year % change	8.3%	29.2%	-11.0% 1.129	30.6%	30.0%	9.1%	30.2%	33.7%	27.3%	6.8% 4.178	24.7% 2.952
month-over-month % change year-over-year % change	15.2%	-51.8%	1164.2% 60.4%	-9.3% -42.3%	-34.4%	222.4% -33.4%	-3.9%	-22.7%	13.0% -24.3%		-29.3%
Warehouse	2.049	2.259	1.720	2.377	-77.8% 1.985	2.009	22.1% 2.009	2.003	1.901	137.1% 23.413	-29.3%
month-over-month % change year-over-year % change	24.5% -45.1%	10.3% -3.2%	-23.9% -41.5%	12.7% -23.7%	-16.5% -30.5%	1.2% -33.1%	-6.5% -19.8%	-0.3% -19.4%	-5.1% -24.2%	8.7%	-29.8%
Misc Commercial month-over-month % change	0.870 -74.5%	0.602	0.471	1.626 -5.6%	1.625 0.0%	0.648 -60.1%	1.330 -2.1%	1.334 0.3%	1.284 -3.8%	10.441	12.913
year-over-year % change	-28.0%	9.2% 12.415	-56.2% 8.204	-10.2% 11.115	73.1% 12.071	-31.5% 10.633	-17.0% 9.852	-16.4% 10.082	-16.2% 9.898	29.4% 94.424	23.7% 91.417
month-over-month % change year-over-year % change	-9.9%	10.1%	-33.9% -21.2%	4.8%	8.6% 8.2%	-11.9%	-1.4%	2.3%	-1.8% -3.5%	19.3%	-3.2%
TOTAL INDUSTRIAL (Manufacturing)	12.515	4.876	3.078	8.347	7.872	6.823	8.900	8.892	8.103	81.779	63.923
month-over-month % change year-over-year % change	101.1% -0.1%	-61.0% -2.0%	-36.9% -75.5%	47.1% -41.8%	-5.7% -18.0%	-13.3% -31.9%	0.0% 24.4%	-0.1% 20.1%	-8.9% 7.9%	206.0%	-21.8%
Religious month-over-month % change	0.112 0.3%	0.045	0.094	0.108 11.2%	0.090 -17.2%	0.084 -6.7%	0.095 5.4%	0.088 -7.5%	0.089 1.0%	0.769	0.792
year-over-year % change Hosptials/Clinics	106.2% 0.830	-65.2% 1.022	13.1% 0.868	32.1% 1.534	-7.7% 1.031	-6.1% 0.907	-2.8% 1.953	-5.9% 1.914	-7.7% 1.909	-7.9% 18.246	3.0% 15.310
month-over-month % change year-over-year % change	-33.1% -76.0%	23.2%	-15.1% -6.0%	-10.6% -58.1%	-32.8% -50.1%	-12.1% -53.8%	-10.1%	-2.0% -4.1%	-0.2% -0.7%	31.2%	-16.1%
Nursing/Assisted Living	0.170	0.271	0.172	0.155	0.189	0.205	0.264	0.233	0.222	3.807	1.893
month-over-month % change year-over-year % change	35.2% -63.6%	59.2% -57.4%	-36.5% -43.1%	-4.7% -58.2%	21.8% -60.8%	8.1% -56.4%	-8.6% -39.0%	-11.5% -46.6%	-4.7% -46.8%	-20.0%	-50.3%
Libraries/Museums month-over-month % change	0.383 -39.6%	0.731 90.7%	0.517	0.419 4.1%	0.583 39.3%	0.544 -6.7%	0.328	0.363 10.7%	0.379 4.6%	2.637	3.597
year-over-year % change Fire/Police/Courthouse/Prison	6.4% 2.821	135.0% 0.907	62.4% 1.871	47.7%	91.3% 1.518	64.8% 1.866	0.1%	7.5% 0.952	36.8% 1.031	-9.1% 6.375	36.4% 9.899
month-over-month % change year-over-year % change	242.0% 254.3%	-67.9% -8.2%	106.3% 103.0%	88.1% 90.1%	4.8% 74.6%	23.0% 107.0%	21.4% 51.5%	-0.7% 43.0%	8.3% 47.7%	11.1%	55.3%
Military month-over-month % change	1.145 -72.2%	1.342 17.2%	1.316	2.107 8.5%	2.200 4.4%	1.268 -42.4%	1.319 3.2%	1.375 4.2%	1.357 -1.3%	7.155	13.710
year-over-year % change	73.6%	99.6%	-14.3%	202.7%	287.1%	32.7%	69.8%	75.3%	61.2%	14.2%	91.6%
Schools/Colleges month-over-month % change	6.727 -49.6%	7.131 6.0%	6.386 -10.4%	9.911 0.7%	9.071 -8.5%	6.748 -25.6%	7.032	7.041 0.1%	7.139 1.4%	57.569	68.718
year-over-year % change Misc Medical	-9.2% 0.564	1.5% 0.987	22.7% 0.343	31.1% 0.618	22.5% 0.749	3.1% 0.631	27.1% 0.801	25.4% 0.837	25.4% 0.684	17.2%	19.4% 5.942
month-over-month % change year-over-year % change	-19.1% -31.0%	75.0% 77.2%	-65.3% -84.2%	-30.4% -70.4%	21.3% -61.4%	-15.8% -46.6%	-2.6% -20.8%	4.5% -17.3%	-18.2% -38.5%	105.0%	-48.2%
TOTAL INSTITUTIONAL month-over-month % change	12.753 -39.6%	12.437 -2.5%	11.567 -7.0%	16.300 3.1%	15.431 -5.3%	12.252 -20.6%	12.751 -0.8%	12.802 0.4%	12.811 0.1%	108.035	119.861
year-over-year % change Misc Non Residential	-9.1% 0.586	5.2% 0.487	0.9% 0.575	5.2% 0.630	12.3% 0.552	-1.5% 0.549	18.5% 0.639	17.0%	15.8% 0.585	21.2%	10.9% 5.329
month-over-month % change year-over-year % change	0.7%	-16.8% -44.4%	17.9% -31.5%	-2.1% -12.1%	-12.5% -30.8%	-0.4% -36.3%	-3.6% 6.9%	-5.1% -4.3%	-3.6% -10.5%	31.3%	-15.5%
TOTAL NON-RES BUILDING	37.134	30.215	23.424	36.393	35.925	30.258	32.142	32.383	31.397	290.543	280.531
month-over-month % change year-over-year % change	-8.1% -8.1%	-18.6% 10.6%	-22.5% -33.6%	11.1% -15.1%	-1.3% 1.8%	-15.8% -11.9%	-0.8% 11.6%	0.7% 11.1%	-3.0% 6.5%	45.4%	-3.4%
Airports month-over-month % change	0.695 -56.1%	0.782 12.6%	0.678	1.133 -1.1%	1.020 -10.0%	0.718 -29.6%	0.775 -2.0%	0.790 1.9%	0.752 -4.8%	6.159	7.548
year-over-year % change Roads/Highways	-21.3% 9.201	28.7% 7.358	-40.1% 5.682	13.9% 9.588	22.4% 8.814	-17.8% 7.414	43.9% 7.885	47.2% 7.862	26.9% 7.643	44.8% 69.084	22.6% 76.292
month-over-month % change year-over-year % change	-6.9% 18.6%	-20.0% -3.6%	-22.8% -31.6%	-4.6% 12.9%	-8.1% 12.2%	-15.9% -6.1%	1.6% 22.0%	-0.3% 19.3%	-2.8% 11.2%	27.9%	10.4%
Bridges month-over-month % change	2.024 20.4%	1.830	1.379	2.019	1.845	1.744	2.194 0.6%	2.089	1.978	22.269	18.643
year-over-year % change	8.8%	-40.8%	-49.1%	-15.0%	-25.4%	-31.7%	15.4%	1.7%	-9.2%	57.5%	-16.3%
Dams/Marine month-over-month % change	0.816 37.2%	1.341 64.4%	0.804 -40.1%	0.662 -47.6%	0.917 38.5%	0.987 7.6%	1.007 0.9%	0.981 -2.6%	0.977 -0.4%	6.666	8.976
year-over-year % change Water/Sewage	15.1% 4.346	-19.2% 4.214	-5.1% 3.474	9.3% 4.485	-1.1% 4.394	-7.9% 4.012	33.4% 3.883	17.0% 3.914	17.8% 3.884	26.9% 32.890	34.7% 36.229
month-over-month % change year-over-year % change	-5.9% 3.6%	-3.0% 9.6%	-17.6% -9.3%	-0.6% 4.5%	-2.0% 6.9%	-8.7% 1.4%	0.3% 21.6%	0.8% 19.3%	-0.8% 15.5%	24.6%	10.1%
Misc Civil (Power, etc.) month-over-month % change	4.991 -37.0%	2.077 -58.4%	3.870 86.3%	4.759 24.8%	4.998 5.0%	3.646 -27.0%	3.404 6.6%	3.398 -0.2%	3.644 7.2%	17.878	32.224
year-over-year % change	101.5%	-3.2%	321.0%	113.9%	113.2%	97.3%	89.2%	87.2%	104.2%	-10.4%	80.2%
TOTAL ENGINEERING (Civil) month-over-month % change	22.073 -16.0%	17.603 -20.3%	15.887 -9.7%	22.647 -1.8%	21.988 -2.9%	18.521 -15.8%	19.147 1.9%	19.033 -0.6%	18.878 -0.8%	154.946	179.912
year-over-year % change GRAND TOTAL	23.4% 85.415	-7.2% 72.041	-10.5% 61.633	19.3% 86.538	18.6% 83.914	1.7% 73.030	30.7% 78.165	25.9% 77.431	20.9% 75.606	25.0% 739.645	16.1% 685.305
month-over-month % change year-over-year % change	-9.4% -3.3%	-15.7% -10.9%	-14.4% -26.2%	4.9% -9.2%	-3.0% -4.3%	-13.0% -13.3%	-0.3% 3.9%	-0.9% 1.8%	-2.4% -1.9%	24.0%	-7.3%
NON-RES BLDG + ENGINEERING month-over-month % change	59.207 -11.3%	47.818 -19.2%	39.311 -17.8%	59.040 5.8%	57.913 -1.9%	48.779 -15.8%	51.290 0.2%	51.416 0.2%	50.274 -2.2%	445.489	460.443
year-over-year % change	1.6%	3.3%	-25.8%	-4.5%	7.6%	-7.1%	18.0%	16.2%	11.5%	37.6%	3.4%

Source: ConstructConnect/Table: ConstructConnect.