

April 2024 (based on March 2024 Starts Stats)

# Construction Industry Snapshot



# March's Nonresidential Construction Starts +43% M/M, -9% Y/Y, and -7% Ytd

ConstructConnect announced today that March 2024's volume of construction starts, excluding residential work, was \$47.5 billion, an increase of +42.5% versus February's figure of \$33.3 billion.

March 2024 vs March 2023 was -8.6%. The latest month's year-to-date result was -7.3%. Grand total starts (i.e., including residential) in March 2024 were +20.6 m/m, -11.4% y/y, and -5.3% ytd.





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# March's Nonresidential Construction Starts +43% M/M, -9% Y/Y, and -7% Ytd

# More Megas in Q1 2024 than in Q1 2023

ConstructConnect announced today that March 2024's dollar volume of construction starts, excluding residential work, was \$47.5 billion, an increase of +42.5% versus February 2024's figure of \$33.3 billion (originally reported as \$32.7 billion).

The dollar volume of March 2024's total non-residential starts was -8.6% when compared with March 2023. As for the latest month's year-to-date performance, it was -7.3%.

February of this year may have been a disappointment for mega project starts (i.e., where a 'mega' is a groundbreaking that carries an estimated eventual price tag of a billion dollars or more), but January at the beginning of 2024 was a banner month and the same can be said for March at the end of the first quarter. Remarkably, given the heightened interest rate scenario still in effect, the mega project tallies in Q1 of this year, in number and dollar volume, beat Q1 in 2023. There were 12 mega project initiations in Q1 2024 versus 7 in Q1 2023. The dollar volume of such work was \$29.0 billion in Q1 of this year (\$25.0 billion when three multi-family residential complexes are left out of the mix) versus \$24.7 billion in Q1 of last year.

Latest March's four mega projects consisted of two manufacturing plants tied to electric vehicle battery production (in Tennessee and Indiana), a hospital project (California), and another in what has been a long string of data centers (Wisconsin). (Top 10 Projects list, Table 7, page 9.)

The share of the total dollar volume of non-residential starts in Q1 of 2023 was 16.4%. The comparable percent slice in Q1 2024 was 17.9%. Year-to-date nonresidential starts through Q1 2024, excluding mega projects, were -8.1% versus the same opening three months of 2023.

Presenting the big picture, the GRAND TOTAL dollar volume (i.e., adding residential to nonresidential activity; and including all projects, megas and non-megas) of starts in March 2024 was +20.6% m/m, -11.4% y/y, and -5.3% ytd. Nonresidential within the grand total has already been covered; residential's results have been -8.6% m/m, -16.9% y/y, and -1.3% ytd.

### TTM Results all in the Negative

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 March, on a month-to-month percent-change basis, were -1.0%, worsening from essentially flat performances in February, -0.1%, and January, -0.2%. On a year-over-year percent-change basis, Grand Total TTM starts in March, at -6.8%, took another step backwards along a retreating path that saw February at -5.1% and January at -4.9%.

### No Letup in PIP Construction Spending

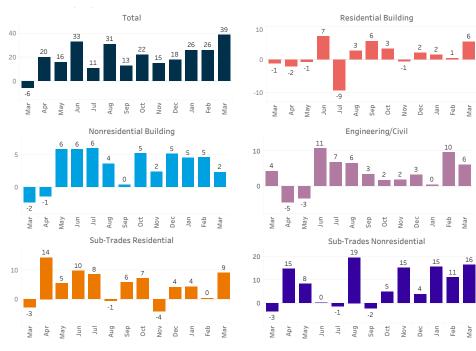
'Starts' compile the total estimated dollar value and square footage of all projects on which ground is broken in any given month. They lead, by nine months to as much as two years, put-in-place (PIP) statistics from the Census Bureau which are anal-

TABLE 1: VALUE OF UNITED STATES NONRESIDENTIAL CONSTRUCTION STARTS MARCH 2024 (ConstructConnect®)

		% Change	% Change	% Change
	Jan-Mar 2024	Jan-Mar 2024 vs	Mar 24 vs	Mar 24 vs
	(\$ Billions)	Jan-Mar 2023	Mar 23	Feb 24
Hotel/Motel	\$ 1.684	-33.3%	-77.3%	-68.2%
Retail/Shopping	\$ 3.380	2.4%	1.6%	29.7%
Parking Garages	\$ 0.457	30.3%	-10.7%	-35.3%
Amusement	\$ 2.674	8.2%	-23.6%	0.3%
Private Office	\$ 6.405	15.9%	85.0%	211.2%
Government Office	\$ 3.574	2.7%	-12.2%	32.6%
Laboratory	\$ 0.908	11.0%	-62.6%	-5.4%
Warehouse	\$ 3.314	-29.8%	10.9%	59.8%
Miscellaneous Commercial	\$ 4.146	-28.5%	40.0%	288.4%
COMMERCIAL (big subset)	\$ 26.541	-8.4%	8.2%	71.3%
INDUSTRIAL (Manufacturing)	\$ 16.331	-40.9%	2.3%	355.1%
Religious	\$ 0.331	33.9%	-21.9%	-49.3%
Hospital/Clinic	\$ 5.660	-24.3%	145.9%	118.2%
Nurshing/Assisted Living	\$ 0.436	-46.3%	-25.2%	247.8%
Library/Museum	\$ 1.197	41.7%	33.7%	106.4%
Fire/Police/Courthouse/Prison	\$ 3.104	52.0%	26.7%	-7.4%
Military	\$ 1.801	-54.8%	-55.0%	111.2%
School/College	\$ 21.889	13.0%	-8.5%	3.7%
Miscellaneous Medical	\$ 2.608	67.7%	203.1%	293.6%
INSTITUTIONAL	\$ 37.026	1.9%	10.5%	35.5%
Miscellaneous Non-residential	\$ 1.494	-16.8%	-3.3%	17.4%
NONRESIDENTIAL BUILDING	\$ 81.392	-14.1%	7.5%	76.2%
Airport	\$ 1.475	-24.6%	-27.4%	51.5%
Road/Highway	\$ 22.627	-5.1%	-13.4%	28.2%
Bridge	\$ 6.194	-6.4%	-28.4%	19.5%
Dam/Marine	\$ 3.327	49.9%	-43.5%	-80.0%
Water/Sewage	\$ 11.561	9.0%	-18.8%	-17.1%
Miscellaneous Civil (power, pipelines, etc.)	\$ 13.223	22.3%	-73.9%	36.3%
HEAVY ENGINEERING (Civil)	\$ 58.406	4.2%	-30.9%	0.9%
TOTAL NONRESIDENTIAL	\$ 139.798	-7.3%	-8.6%	42.5%

<sup>\*</sup> Includes transportation terminals and sports arenas.

# **GRAPH 1: CHANGE IN LEVEL OF U.S. CONSTRUCTION EMPLOYMENT,**MONTH TO MONTH (M-M) CHANGE IN 000'S — TOTAL & BY CATEGORIES — MARCH 2024



'Sub-trade' in BLS data referred to as 'specialty' trade

**1** construct**connect** 

Continued on page 3

ogous 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 succeeded in seizing the larger share, although barely, 50.2% to 49.8%.

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 share of total PIP dollars in the entirety of 2023 reverted to a more normal 44.2%. The bigger portion, at 55.8%, was claimed by nonresidential.

The reported PIP numbers from the Census Bureau are always a month behind the 'starts' data. The latest PIP numbers are for February 2024. The total dollar volume of construction put-in-place through the first two months of this year compared with Jan-Feb 2023 was +11.9%. By the two major sub-sectors, residential was +6.1% and nonresidential, +16.5%. Residential's share of total so far in 2024 has been 42.3%, with nonresidential accounting for the majority, at 57.7%.

Nonresidential construction's leading PIP sub-category for percent change year to date in February was 'public safety', +41.6%, outdistancing runner-up 'manufacturing', +34.3%. By dollar volume, 'manufacturing' was the largest sub-category within PIP nonresidential work in the first two months of this year (19.9%), with 'power' claiming second spot (12.5%).

Besides 'manufacturing' and 'public safety', other PIP nonresidential sub-categories recording double-digit ytd percentage increases in February were: 'religious', +26.3%; 'highway and street', +24.7%; 'educational', +20.2%; 'water supply', +18.0%, 'sewage and waste disposal', +17.7%; 'amusement and recreation', +16.8%; 'power', +14.1%; and 'health care', +14.0%.

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, set out as actuals and forecasts. ConstructConnect's PIP numbers are being released quarterly and are featured in a separate reporting system.

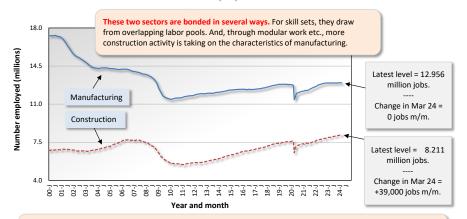
### Construction's Jobs Count +39,000 in March

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 5.2%. Accordingly, to claim its rightful share of March's +303,000 economywide number-of-jobs advance, the figure for construction would have needed to be +16,000. The actual number was more than twice as much, at +39,000.

The monthly average increase in construction hiring in full-year 2023 was +20,000 jobs. In the year prior, 2022, the comparable figure was +24,000 jobs. The outstanding record of jobs creation has been maintained to date in 2024, with a three-month average of +30,000 jobs.

### **GRAPH 2: U.S. MANUFACTURING VS CONSTRUCTION EMPLOYMENT**

MARCH, 2024 — SEASONALLY ADJUSTED (SA) PAYROLL DATA

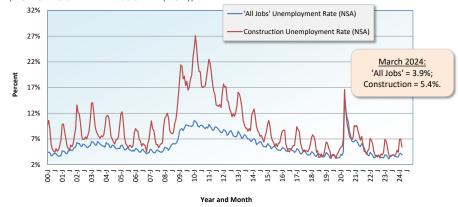


The not seasonally adjusted (NSA) unemployment rate for construction is presently 5.4%. In April 2020, at its worst, it was 16.6%. Manufacturing's current NSA jobless rate is 3.0%. April 2020's extreme was 13.2%. In early 2000, the ratio of construction to manufacturing jobs was 0.39 to 1.00. Now, it's 0.63 to 1.00.

Latest data points are for March, 2024.

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

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



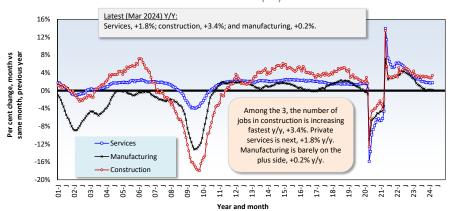
There used to be wide seasonal discrepancies between the unemployment rates for 'all jobs' and for construction, indicating that a career in the latter was more precarious. In recent times, though, the gap has largely disappeared, which should be a help in recruiting drives to sign up more onsite workers.

Current through March, 2024.

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

## GRAPH 4: U.S. EMPLOYMENT — MARCH 2024

% CHANGE Y/Y BASED ON SEASONALLY ADJUSTED (SA) DATA



The latest data points are for March, 2024.

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

Continued on page 4

Graph 1 shows that month-to-month construction sector jobs creation in March 2024 was best among nonresidential sub-trade contractors, +16,000 jobs, with residential sub-trade contractors next at +9,000. Residential and engineering general contractors upped staffing by +6,000 each.

Construction's not seasonally adjusted unemployment rate (NSA U) in March was 5.4%, down from February's winter-influenced 7.0% and a little under March of last year's 5.6%.

Manufacturing's NSA U rate in March 2024 was 3.0%, the same as in February, and not far away from March 2023's 2.9%. Manufacturing's latest month-to-month jobs count change was zero (i.e., no change). Both manufacturing and construction are in the goods-producing portion of the economy (i.e., as opposed to private services-providing) and there is considerable overlap between their labor pools. The current boom in capital spending by manufacturers (see Graph 6) will eventually lead to more hiring, but automation and robotics will restrain the pickup.

In latest March, U.S. total employment was +1.9% year over year. The y/y climb in the number of 'private services-providing' jobs was +1.8%. The jump in the construction industry's worker count was a more substantial +3.4% y/y, placing it next best to 'health care and social assistance' among major industrial sectors, +4.7%. 'Social assistance' on its own was +5.4% (see Graph 5).

In other segments of the economy with close ties to construction, the latest y/y changes in employment have been: oil and gas exploration and development, +2.8%; architectural and engineering design services, +2.5%; machinery and equipment rental and leasing, +2.0%; real estate, +1.9%; cement and concrete product manufacturing, +0.6%; and building materials and supplies dealers, -3.7% (new and renovation residential work is still under wraps.)

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. While the latest (February) Architecture Billings Index (ABI) from the American Institute of Architects (AIA) and Deltek still remained under 50.0, it improved to 49.5 from 46.2 in January and was at its highest level since July of last year. An end to billings weakness appears near. 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.

On a related subject, for information on projects being delayed or put on hold, readers are referred to the weekly Project Stress Index (PSI) write-ups at ConstructConnect's 'Construction Economic News' web location (<a href="https://www.constructconnect.com/construction-economic-news">https://www.constructconnect.com/construction-economic-news</a>)

# Pluses and Minuses among Type-ofstructure Sub-categories

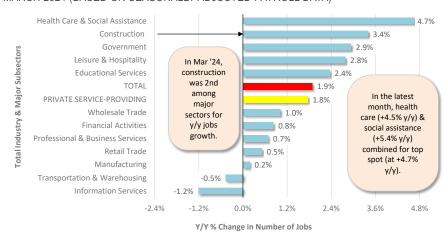
The +42.5% rise in the total dollar volume of nonresidential starts in March vs February (m/m) was due to notable increases in the industrial (+355.1%), commercial (+71.3%), and institutional (+35.5%) sub-categories, while heavy engineering/civil stayed about level (+0.9%).

The -8.6% performance of total nonresidential starts in March 2024 compared with March 2023 (y/y) resulted from a decline in engineering (-30.9%) that more than took away from the joint headway made by institutional (+10.5%), commercial (+8.2%), and industrial (+2.3%).

The -7.3% result for year-to-date (ytd) total nonresidential starts, when held up against January-March 2023, occurred because setbacks in industrial (-40.9%) and commercial (-8.4%) were too much for only minorly upbeat institutional (+1.9%) and engineering (+4.2%) to overcome.

Usually, about a third of total nonresidential starts year

# GRAPH 5: Y/Y JOBS CHANGE, U.S. TOTAL INDUSTRY & MAJOR SUBSECTORS MARCH 2024 (BASED ON SEASONALLY ADJUSTED PAYROLL DATA)

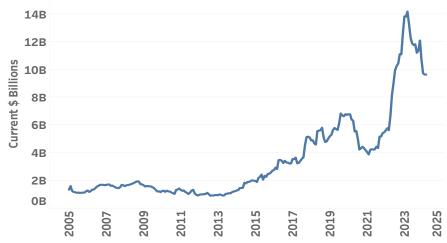


March 2024's y/y changes in employment within the pandemic's initially hardest-hit sector, 'leisure & hospitality', were: 'amusements/gambling', +5.4%; 'hotels/motels', +2.6%; and 'restaurants/bars', +1.8%.

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

# GRAPH 6: U.S. MANUFACTURING/INDUSTRIAL CONSTRUCTION STARTS

12-Month Moving Average — ConstructConnect®



The last data point is for March 2024.

Data source: ConstructConnect. Graph: ConstructConnect.

### TABLE 2: CONSTRUCTION STARTS IN SOME ADDITIONAL

TYPE OF STRUCTURE SUB-CATEGORIES — ConstructConnect®

	Jan-Mar 2024	% Change vs
	(\$ Billions)	Jan-Mar 2023
Sports Stadiums/Convention Centers	1.658	-21.8%
Transportation Terminals	2.488	-32.4%
Courthouses	0.405	-5.2%
Police Stations and Fire Halls	1.429	37.4%
Prisons	1.270	120.9%
Pre-School/Elementary	5.895	2.0%
Junior & Senior High Schools	9.353	24.3%
K-12 (sum of above two categories)	15.248	14.6%
Special and Vocational Schools	0.718	125.1%
Colleges and Universities	5.923	2.9%
Electric Power Infrastructure	1.132	-65.5%

to date derives from just two sub-category type-of-structure designations, 'roads/highways' and 'schools/colleges'. In March '24, their shares of total were 16.2% and 15.7% respectively, combining for a close-to-target 31.8%.

The three percent-change metrics for street starts in March were +28.2% m/m, but -13.4% y/y, and -5.1% ytd. For school starts, the results were +3.7% m/m, -8.5% y/y, and +13.0% ytd. Among types of educational starts, the leader for ytd percent-change in 2024's Q1 was 'special and vocational schools', +125.1%, but based on relatively low volumes. Elsewhere in school starts, the 'junior and senior high school' designation managed a nice pickup, +24.3%, while 'colleges/ universities' and 'pre-school/elementary' were tepid at +2.9% and +2.0% respectively.

Important beyond roads within the engineering sub-category are 'water/sewage' and 'bridge' starts. The results for the former in March were -17.1% m/m and -18.8% y/y, but +9.0% ytd. The key percent-change metrics for the latter were +19.5% m/m, but -28.4% y/y, and -6.4% ytd.

Starts in the 'miscellaneous civil' sub-category — which includes pipelines, power, and railroad projects — were a mix of ups and downs: +36.3% m/m, -73.9% y/y, and +22.3% ytd

Important beyond schools within institutional work are several medical sub-categories – i.e., 'hospitals/clinics', 'nursing/assisted living' and 'miscellaneous medical'. Their combined starts in March, according to the time-comparison metrics, were +158.2% m/m and +131.7% y/y, although -11.6% ytd. 'Hospital' starts on their own in the latest month were +118.2% m/m and +145.9% y/y, but -24.3% ytd (see 3 medical ground-breakings among the Top 10 on page 9).

In March, the 'fire/police/courthouse/prison' sub-category of starts was -7.4% m/m, but +26.7% y/y and +52.0% ytd. There's a breakdown of these 'public safety' starts in Table 2. The dollar volume of new 'prison' groundbreakings throughout last year was spectacular, more than doubling what occurred in 2022, and they're keeping the momentum going so far this year, +120.9% ytd. 'Police station and fire hall' starts are also doing well year to date, +37.4%.

Heading the list of Top 10 projects in March were two manufacturing plants tied to electric vehicle battery production. They helped lift March's industrial starts to +355.1% m/m. But the groundbreaking on a super-sized liquefied natural gas (LNG) exporting facility in Port Arthur, Texas, in January 2023 kept industrial's March ytd percent-change at -40.9%.

Within commercial, several of the sub-categories sent into cyclical decline by the pandemic and/or the Federal Reserve's subsequent interest rate moves are still prone on the canvas. On a year-to-date basis, 'hotel/motel' starts are -33.3%; 'ware-houses', -29.8%, and 'miscellaneous commercial', -28.5% (with 'sports stadiums/convention center' at -21.8% and 'transportation terminals', -32.4%). On an encouraging note, though, 'retail/shopping' is +2.4% ytd; 'amusement', +8.2% ytd; and 'private offices', driven by data center work, +15.9% ytd.

# Mixed Patterns among Type-of-structure 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 moving-average approach is designed to capture trends. As a technical note, the calculated number is graphed (i.e., placed) in the ending month.

From a bird's eye view, the 'nonresidential building' trend line has been on a descending path lately, while 'heavy engineering' has paused its climb and is presently moving sideways. 'Institutional' is still climbing, but 'commercial' has leveled off. 'Retail' is likewise just moseying along, but 'private

office buildings', aided by data centers, is finally perking up nicely.

The 'schools/colleges' trajectory is in a third year of buoyancy. The pattern for 'hospitals/clinics' is struggling to make an upwards breakout, although some recent large medical-related works will help. 'Roads/highways' and 'water/sewage' continue to provide encouragement. 'Bridges' has settled into a flat progression, but at a higher than historical position. Container ship collision damage to the Francis Scott Key bridge in Baltimore places further emphasis on how crucial it is to keep the nation's potential logistical choke points functioning at their best. The 'miscellaneous civil' trend line is displaying a sawtooth pattern, but at a super high level.

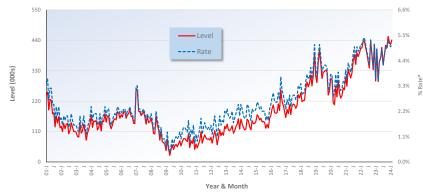
# Leading Edge Compensation Hikes for Construction Workers

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 March 2024's Table B-3 (including bosses), y/y all-jobs earnings both hourly

Continued on page 6

# GRAPH 7: U.S. CONSTRUCTION JOB OPENINGS (FROM JOLTS REPORT) SEASONALLY ADJUSTED & ACTUALS (I.E., NOT SMOOTHED WITH MOVING AVERAGES)

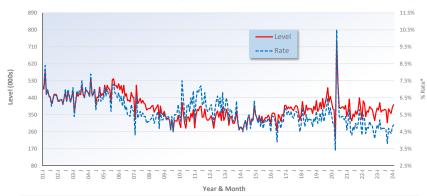


Job openings in the construction sector, both as a level and a rate, continue to be quite high, flirting with record peaks. Interestingly, while openings for 'all jobs' are presently -11.1% year over year, for construction they are +7.8%.

\*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 February 2024. ... JOLTS = Job Openings and Labor Turnover Survey.

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

# GRAPH 8: U.S. CONSTRUCTION JOB HIRES (FROM JOLTS REPORT) SEASONALLY ADJUSTED & ACTUALS (I.E., NOT SMOOTHED WITH MOVING AVERAGES)



In recent years, 'hirings' in the construction sector, as a rate even more than level, have not risen in line with 'openings'. The problem isn't earnings advances, which have been strong; rather, there's a lack of willing and available skilled workers.

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

Latest seasonally adjusted data points are for February 2024. ... JOLTS = Job Openings and Labor Turnover Survey.

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

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and weekly were +4.1%. Pay hikes for construction workers, as a subset of 'all jobs', were rosier, +5.0% y/y hourly and +6.1% y/y weekly. From Table B-8 for production and non-supervisory workers (i.e., excluding bosses), the y/y 'all-jobs' paycheck advances were +4.2% hourly and weekly. Again, construction workers were rewarded more richly, +4.9% y/y hourly and +6.2% y/y weekly.

It does not appear that the staffing problems being encountered by contractors are due to compensation issues. Rather, there's a shortage of willing and adequately-trained workers.

# Limited Movement in Input Costs and Bid Prices

March 2024's y/y results for three building related BLS Producer Price Index (PPI) series were: (A) 'construction materials special index', +0.5% (a relaxation from February's +2.2%); (B) 'inputs to new construction index, excluding capital investment, labor, and imports', +1.8% (almost the same as the previous month's +1.7%); and (C) 'final demand construction', designed to capture bid prices, -1.1% (no different from the -1.1% y/y figures in the prior two months.)

(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 y/y March 2024, the weighting was more towards declines than increases: asphalt, +13.0%; readymix concrete, +7.0%; cement, +5.0%; gypsum, +1.1%; hot rolled steel bars, plates, and structural shapes, -0.9%; copper wire and cable, -3.0%; number 2 diesel fuel, -6.2%; aluminum mill shapes, -6.6%; and softwood lumber, -6.8%. March's special PIP index for 'inputs to highways and streets' was +2.1% y/y.

Unleaded regular gasoline in the PPI data series in March was -2.0% y/y; in the latest Consumer Price Index (CPI) report, the subset line item 'all types of gasoline' was +1.3% y/y.

The 'all items' CPI in March was +3.5% y/y, which is somewhat concerning. The resistance to further decline may cause the Federal Reserve to delay its planned schedule for interest rate cuts.

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.

### March's 'Grand Total' Starts -5.3% Ytd

From Table 6 on page 8 (and also from Table 9 on page 12) of this report, ConstructConnect's total residential starts in March 2024 were -8.6% m/m, -16.9% y/y, and -1.3% ytd. Digging deeper, while multi-family starts were across-the-board gloomy (-49.0% m/m, -62.8% y/y, and -27.2% ytd), single-family starts were all smiles (+13.2% m/m, +18.8% y/y, and +19.7% ytd).

Including home building with all nonresidential categories, Grand Total starts in March 2024 were +20.6% m/m, but -11.4% y/y, and -5.3% 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.

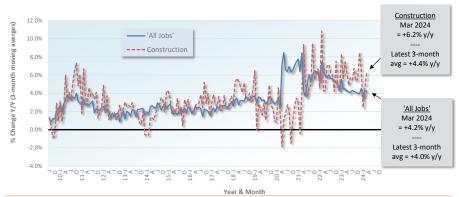
### GRAPH 9: AVERAGE HOURLY EARNINGS Y/Y — 'ALL JOBS' & CONSTRUCTION



From 'Production Workers and Non-supervisory Personnel' Table (B8) The latest data points are for March, 2024.

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

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



While y/y weekly earnings for 'all jobs' have been easing since early 2022, they've mainly maintained strength in construction, with a further sharp uptick in latest March. More time spent on job sites is the main contributing factor.

From 'Production Workers and Non-supervisory Personnel' Table (B8). The latest data points are for March 2024.

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, <a href="https://www.constructconnect.com/expansion-index">https://www.constructconnect.com/expansion-index</a>

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.

### Will 2024 be The Year of Renovation Work?

The release of first quarter 2024 starts data was underwhelming. Total nonresidential starts in the first quarter decreased by 7.3% compared to the same period last year. Starts data in recent months have echoed similarly uninspiring year-on-year performances.

These results may not come as a complete surprise to the industry given several key headwinds in the market. Among those leading the way are the rising cost of new construction since COVID. Furthermore, since 2022, the industry has faced higher financing costs and stagnant to declining commercial real estate (CRE) prices in the US.

The latest available Federal Reserve data indicates an 8.6% decrease in the value of U.S. commercial real estate in the second half of 2023. Copacetic with this is the Green Street Commercial Property Price Index which is down 21.3% since January 2022. However, beneath these top-line results lies a significant growth opportunity for the construction industry: a historically strong increase in recent and near-term renovation spending.

Total nonresidential building renovation spending in the U.S. rose by 30% between 2021 and 2023. Given today's unique market conditions, our 2024 forecast predicts a record-breaking surge in nonresidential building renovation work. Leading this year's gains are expected to be offices (+57%), hotels (+49%), and hospitals (+45%). Furthermore, our latest starts forecast anticipates nonresidential renovation work to outpace new construction and additions over most of the next five years on a percentage basis.

The ConstructConnect team will continue to monitor and analyze this trend and its underlying drivers. Given current and expected economic conditions, this renovation trend may represent an enduring value proposition for CRE owners who want to capitalize on both lack-luster existing CRE prices while also reaping the cost savings of renovating over building new.

The appeal of renovating over building new will certainly intensify should the Federal Reserve opt to maintain higher interest rates for longer, which they seemingly appear inclined to do in their battle to get inflation down to 2% or less. Higher rates would reduce the future profitability of existing CRE, thereby further depressing prices and making renovation work even more financially attractive to owners.

Michael GuckesSenior Economist

# TABLE 3: 2024 YTD RANKING OF TOP 20 STATES BY \$ VOLUME OF NONRESIDENTIAL CONSTRUCTION STARTS — ConstructConnect®

		Jan-Mar 2024	% Change vs Jan-Mar 2023
1	Texas	\$19,623,812,997	-36.5%
2	California	\$12,161,805,120	2.6%
3	Alaska	\$8,290,370,946	140.6%
4	Indiana	\$7,751,546,925	110.4%
5	Florida	\$7,109,333,017	-17.2%
6	Tennessee	\$4,835,761,093	25.6%
7	New York	\$4,695,090,692	-49.6%
8	Virginia	\$4,346,451,373	18.2%
9	Illinois	\$3,931,920,376	9.9%
10	Georgia	\$3,823,121,544	0.6%
11	North Carolina	\$3,759,954,128	-9.2%
12	Wisconsin	\$3,309,490,398	97.2%
13	Arizona	\$3,296,527,222	17.5%
14	Massachusetts	\$2,986,559,430	20.7%
15	Washington	\$2,936,999,132	63.9%
16	Ohio	\$2,712,260,357	-62.3%
17	South Carolina	\$2,668,963,169	40.6%
18	Pennsylvania	\$2,522,633,049	-33.0%
19	Alabama	\$2,445,899,309	-48.0%
20	Colorado	\$2,408,353,914	16.6%

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

# TABLE 4: 2024 YTD RANKING OF TOP 20 STATES BY \$ VOLUME OF NONRESIDENTIAL BUILDING CONSTRUCTION STARTS — ConstructConnect®

		Jan-Mar 2024	% Change vs Jan-Mar 2023
1	Texas	\$12,730,148,677	-43.8%
2	California	\$7,688,035,434	19.0%
3	Indiana	\$6,932,265,826	174.0%
4	Tennessee	\$4,331,956,545	57.2%
5	Florida	\$3,362,180,703	-36.2%
6	Virginia	\$2,856,399,785	13.0%
7	New York	\$2,708,588,838	-53.8%
8	Georgia	\$2,645,707,465	2.0%
9	North Carolina	\$2,465,243,434	-9.3%
10	Wisconsin	\$2,145,119,904	230.2%
11	Illinois	\$2,089,006,052	-3.4%
12	Arizona	\$2,080,147,975	4.3%
13	Massachusetts	\$1,834,453,417	-1.3%
14	Colorado	\$1,620,520,883	32.1%
15	Washington	\$1,602,563,893	59.9%
16	Ohio	\$1,567,781,337	-72.0%
17	South Carolina	\$1,522,202,567	42.6%
18	Pennsylvania	\$1,400,461,558	-26.3%
19	Nebraska	\$1,329,320,371	4.3%
20	New Jersey	\$1,229,063,121	92.7%

# TABLE 5: 2024 YTD RANKING OF TOP 20 STATES BY \$ VOLUME OF HEAVY ENGINEERING/CIVIL CONSTRUCTION STARTS — ConstructConnect®

		Jan-Mar 2024	% Change vs Jan-Mar 2023
1	Alaska	\$8,179,244,065	150.9%
2	Texas	\$6,893,664,320	-16.6%
3	California	\$4,473,769,686	-17.1%
4	Florida	\$3,747,152,314	12.8%
5	New York	\$1,986,501,854	-42.3%
6	Illinois	\$1,842,914,324	30.1%
7	Virginia	\$1,490,051,588	29.4%
8	Alabama	\$1,346,590,316	66.5%
9	Washington	\$1,334,435,239	69.0%
10	North Carolina	\$1,294,710,694	-8.9%
11	Connecticut	\$1,248,903,642	392.4%
12	Arizona	\$1,216,379,247	49.9%
13	Georgia	\$1,177,414,079	-2.3%
14	Wisconsin	\$1,164,370,494	13.2%
15	Michigan	\$1,156,108,913	-14.4%
16	Massachusetts	\$1,152,106,013	87.1%
17	South Carolina	\$1,146,760,602	38.0%
18	Ohio	\$1,144,479,020	-28.6%
19	Pennsylvania	\$1,122,171,491	-39.8%
20	New Jersey	\$985,867,798	18.9%

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 55,000 followers.

# **INSIGHT** view of starts statistics

TABLE 6: VALUE OF UNITED STATES CONSTRUCTION STARTS

ConstructConnect® INSIGHT VERSION — MARCH 2024

ARRANGED TO MATCH THE ALPHABETICAL CATEGORY DROP-DOWN MENUS IN INSIGHT

			% Change	% Change	% Change
		Jan -Mar 2024	Jan -Mar 24 vs	Mar 24 vs	Mar 24 vs
		(\$, billions)	Jan -Mar 23	Mar 23	Feb 24
Summary					
CIVIL		58.406	4.2%	-30.9%	0.9%
NONRESIDENTIAL E	UILDING	81.392	-14.1%	7.5%	76.2%
RESIDENTIAL		73.231	-1.3%	-16.9%	-8.6%
GRAND TOTAL		213.029	-5.3%	-11.4%	20.6%
Verticals					
	Airport	1.475	-24.6%	-27.4%	51.5%
	All Other Civil	12.091	60.7%	-70.5%	49.6%
	Bridges	6.194	-6.4%	-28.4%	19.5%
	Dams / Canals / Marine	e Work 3.327	49.9%	-43.5%	-80.0%
	Power Infrastructure	1.132	-65.5%	-93.2%	-57.3%
	Roads	22.627	-5.1%	-13.4%	28.2%
	Water and Sewage Tre	eatment 11.561	9.0%	-18.8%	-17.1%
CIVIL		58.406	4.2%	-30.9%	0.9%
	Offices (private)	6.405	15.9%	85.0%	211.29
	Parking Garages	0.457	30.3%	-10.7%	-35.3%
	Transportation Termina	als 2.488	-32.4%	269.5%	577.3%
Co	mmercial (small subset)	9.349	-2.1%	120.3%	257.2%
	Amusement	2.674	8.2%	-23.6%	0.3%
	Libraries / Museums	1.197	41.7%	33.7%	106.4%
	Religious	0.331	33.9%	-21.9%	-49.3%
	Sports Arenas / Conve	ntion Centers 1.658	-21.8%	-71.5%	5.5%
Co	mmunity	5.861	3.1%	-36.2%	11.6%
	College / University	5.923	2.9%	-28.6%	-5.1%
	Elementary / Pre School	ol 5.895	2.0%	-19.8%	-11.6%
	Jr / Sr High School	9.353	24.3%	6.1%	12.6%
	Special / Vocational	0.718	125.1%	290.3%	183.3%
Ec	ucational	21.889	13.0%	-8.5%	3.7%
	Courthouses	0.405	-5.2%	-17.6%	11.1%
	Fire and Police Station	s 1.429	37.4%	-9.9%	-10.5%
	Government Offices	3.574	2.7%	-12.2%	32.6%
	Prisons	1.270	120.9%	231.4%	-9.9%
Go	vernment	6.678	20.9%	1.9%	11.19
	Industrial Labs / Labs /	School Labs 0.908	11.0%	-62.6%	-5.4%
	Manufacturing	16.331	-40.9%	2.3%	355.1%
	Warehouses	3.314	-29.8%	10.9%	59.8%
Inc	lustrial	20.553	-38.0%	0.3%	236.4%
	Hospitals / Clinics	5.660	-24.3%	145.9%	118.2%
	Medical Misc.	2.608	67.7%	203.1%	293.6%
<del></del>	Nursing Homes	0.436	-46.3%	-25.2%	247.8%
	dical	8.704	-11.6%	131.7%	158.2%
Mi	itary	1.801	-54.8%	-55.0%	111.2%
	Hotels	1.684	-33.3%	-77.3%	-68.2%
	Retail Misc.	1.494	-16.8%	-3.3%	17.4%
	Shopping	3.380	2.4%	1.6%	29.7%
	tail	6.557	-13.9%	-30.4%	-8.9%
NONRESIDENTIAL		81.392	-14.1%	7.5%	76.2%
	Multi-Family	24.183	-27.2%	-62.8%	-49.0%
	Single-Family	49.047	19.7%	18.8%	13.2%
RESIDENTIAL		73.231	-1.3%	-16.9%	-8.6%
NONRESIDENTIAL		139.798	-7.3%	-8.6%	42.5%
GRAND TOTAL		213.029	-5.3%	-11.4%	20.6%

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 MARCH 2024

LOCATION (EAST TO WEST)	TYPE OF CONSTRUCTION	DESCRIPTION	SQUARE FEET 000S*	DOLLARS 000,000S
<b>Virginia</b> Tysons	Residential	Dominion Square West Mixed-Use (5 structures; 9 stories; 1325 units) Spring Hill Rd Arlington Partnership for Affordable Housing	1,700	\$620
<b>Tennessee</b> Clarksville	Industrial	LG Chem Cathode Materials Plant (1 structure) Charles Bell Rd LG Chemical	1,700	\$3,200
Indiana Olive Township	Industrial	General Motors EV Battery Cell Manufacturing Plant at Indiana Enterprise Center (1 structure) IN-2 & Larrison Blvd General Motors Corp.	3,000	\$3,000
<b>Wisconsin</b> Mount Pleasant	Commercial	Microsoft Data Center Campus / Mount Pleasant (2 structures) Braun Rd Microsoft Corp.	1,110	\$1,000
<b>Nebraska</b> Omaha	Commercial	Eppley Main Terminal Renovation - Omaha Airport Authority (4 structures) 4501 Abbott Dr Omaha Airport Authority	271	\$950
<b>Texas</b> Selma	Institutional	University Health Retama Hospital (2 structures; 5 stories) 16300 Retama Pkwy University Health System	590	\$600
<b>Arizona</b> Mesa	Commercial	EdgeCore Data Center - Buildings 2 and 3 / Mesa (1 structure) 3856 S Everton Terrace Edgecore Digital Infrastructure	1,174	\$630
New Mexico Los Lunas	Commercial	Facebook Los Lunas Data Center Expansion (1 structure) 4250 Messenger Loop Rd Meta / Facebook	2,712	\$800
<b>California</b> Torrance	Institutional	Harbor UCLA Medical Center Replacement / New Hospital Building (3 structures; 9 stories; 347 beds) 1000 W Carson St Los Angeles County	1,500	\$1,700
Berkeley	Institutional	Bayer HealthCare Berkeley Campus Expansion 800 Dwight Way Bayer HealthCare Pharmaceuticals	1,800	\$940
TOTALS:			15,557	\$13,440

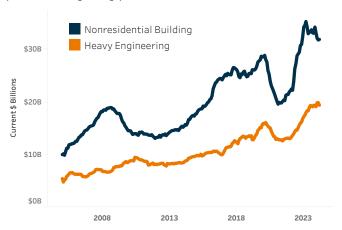
 $<sup>^{\</sup>star}\!A\,square\,footage\,measure\,does\,not\,apply\,for\,alteration,\,some\,forms\,of\,industrial\,(e.g.,\,petrochemical)\,and\,most\,engineering/civil\,work.$ 

Source: ConstructConnect/Table: ConstructConnect.

# **Trend graphs for 12 key categories**

 $\label{lem:Graph 11: U.S. Nonresidential Construction Starts -- Construct Connect$ 

(12-Month Moving Average)



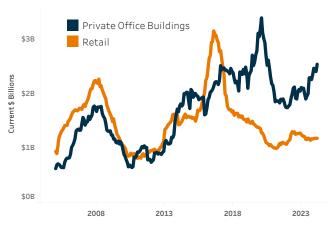
Graph 12: U.S. Commercial and Institutional Construction Starts — ConstructConnect

(12-Month Moving Average)



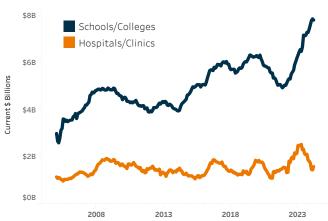
Graph 13: U.S. Retail and Private Office Building Construction Starts — ConstructConnect

(12-Month Moving Average)



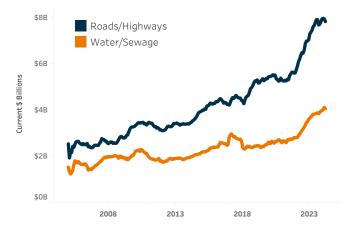
Graph 14: U.S. Hospitals/Clinic and School/College Construction Starts — ConstructConnect

(12-Month Moving Average)



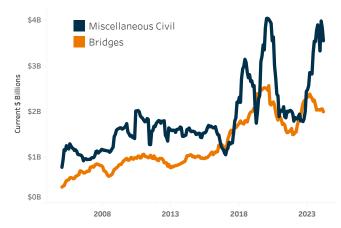
Graph 15: U.S. Roads/Highways and Water/Sewage Construction Starts — ConstructConnect

(12-Month Moving Average)



 $\begin{tabular}{ll} Graph 16: U.S. Bridges and Miscellaneous Civil Construction \\ Starts-ConstructConnect \\ \end{tabular}$ 

(12-Month Moving Average)



The last data points in all the graphs on this page are for March, 2024.

# **Regional starts table**

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

	Jan-Mar 2023	Jan-Mar 2024	% Change
Connecticut	\$1,176,208,570	\$1,906,336,294	62.1%
Maine	\$205,422,464	\$387,127,904	88.5%
Massachusetts	\$2,473,889,583	\$2,986,559,430	20.7%
New Hampshire	\$249,115,064	\$151,125,918	-39.3%
Rhode Island	\$140,979,022	\$396,370,992	181.2%
Vermont	\$120,047,113	\$198,091,446	65.0%
Total New England	\$4,365,661,816	\$6,025,611,984	38.0%
New Jersey	\$1,467,079,950	\$2,214,930,919	51.0%
New York	\$9,312,190,906	\$4,695,090,692	-49.6%
Pennsylvania	\$3,764,678,175	\$2,522,633,049	-33.0%
Total Middle Atlantic	\$14,543,949,031	\$9,432,654,660	-35.1%
Total Northeast	\$18,909,610,847	\$15,458,266,644	-18.3%
Illinois	\$3,578,307,814	\$3,931,920,376	9.9%
Indiana	\$3,685,005,281	\$7,751,546,925	110.4%
Michigan	\$2,752,605,826	\$2,357,296,932	-14.4%
Ohio	\$7,202,172,836	\$2,712,260,357	-62.3%
Wisconsin	\$1,678,559,071	\$3,309,490,398	97.2%
Total East North Central	\$18,896,650,828	\$20,062,514,988	6.2%
lowa	\$1,134,305,814	\$986,807,438	-13.0%
Kansas	\$1,523,434,803	\$1,265,635,878	-16.9%
Minnesota	\$1,218,945,376	\$1,582,496,361	29.8%
Missouri	\$2,233,993,874	\$1,792,398,187	-19.8%
Nebraska	\$1,658,713,051	\$1,686,160,336	1.7%
North Dakota	\$969,169,859	\$494,521,083	-49.0%
South Dakota	\$1,669,363,248	\$505,022,724	-69.7%
Total West North Central	\$10,407,926,025	\$8,313,042,007	-20.1%
Total Midwest	\$29,304,576,853	\$28,375,556,995	-3.2%
Delaware	\$264,629,689	\$212,381,158	-19.7%
DISTRICT OF COLUMBIA	\$417,481,615	\$1,333,028,764	219.3%
Florida	\$8,587,761,976	\$7,109,333,017	-17.2%
Georgia	\$3,799,010,622	\$3,823,121,544	0.6%
Maryland North Carolina	\$3,408,136,478 \$4,138,804,073	\$1,560,408,766 \$3,759,954,128	-54.2% -9.2%
South Carolina	\$1,897,965,384	\$2,668,963,169	40.6%
Virginia	\$3,678,751,655	\$4,346,451,373	18.2%
West Virginia	\$529,589,732	\$487,812,390	-7.9%
Total South Atlantic	\$26,722,131,224	\$25,301,454,309	-5.3%
Alabama	\$4,701,045,889	\$2,445,899,309	-48.0%
Kentucky	\$1,465,568,532	\$1,582,211,682	8.0%
Mississippi	\$1,090,318,285	\$1,084,540,595	-0.5%
Tennessee	\$3,848,743,378	\$4,835,761,093	25.6%
Total East South Central	\$11,105,676,084	\$9,948,412,679	-10.4%
Arkansas	\$1,595,815,231	\$1,315,920,206	-17.5%
Louisiana	\$1,269,976,718	\$1,462,079,818	15.1%
Oklahoma	\$1,682,228,610	\$1,566,445,044	-6.9%
Texas	\$30,898,823,728	\$19,623,812,997	-36.5%
Total West South Central	\$35,446,844,287	\$23,968,258,065	-32.4%
Total South	\$73,274,651,595	\$59,218,125,053	-19.2%
Arizona	\$2,805,138,555	\$3,296,527,222	17.5%
Colorado	\$2,065,739,886	\$2,408,353,914	16.6%
Idaho	\$507,812,652	\$800,272,960	57.6%
Montana	\$338,132,294	\$337,981,900	0.0%
Nevada	\$1,593,703,994	\$1,174,741,986	-26.3%
New Mexico	\$663,563,936	\$1,464,125,054	120.6%
Utah	\$1,665,690,237	\$1,247,939,851	-25.1%
Wyoming	\$513,235,594	\$481,157,240	-6.3%
Total Mountain	\$10,153,017,148	\$11,211,100,127	10.4%
	\$10,133,017,148		
Alaska	\$3,445,652,285	\$8,290,370,946	140.6%
		\$8,290,370,946 \$12,161,805,120	140.6% 2.6%
Alaska California Hawaii	\$3,445,652,285 \$11,854,420,167 \$771,963,092	\$12,161,805,120 \$990,964,944	2.6% 28.4%
California Hawaii Oregon	\$3,445,652,285 \$11,854,420,167 \$771,963,092 \$1,283,386,898	\$12,161,805,120 \$990,964,944 \$1,155,179,913	2.6% 28.4% -10.0%
California Hawaii Oregon Washington	\$3,445,652,285 \$11,854,420,167 \$771,963,092 \$1,283,386,898 \$1,791,969,497	\$12,161,805,120 \$990,964,944 \$1,155,179,913 \$2,936,999,132	2.6% 28.4% -10.0% 63.9%
California Hawaii Oregon Washington Total Pacific	\$3,445,652,285 \$11,854,420,167 \$771,963,092 \$1,283,386,898 \$1,791,969,497 \$19,147,391,939	\$12,161,805,120 \$990,964,944 \$1,155,179,913 \$2,936,999,132 \$25,535,320,055	2.6% 28.4% -10.0% 63.9% 33.4%
California Hawaii Oregon Washington	\$3,445,652,285 \$11,854,420,167 \$771,963,092 \$1,283,386,898 \$1,791,969,497	\$12,161,805,120 \$990,964,944 \$1,155,179,913 \$2,936,999,132	2.6% 28.4% -10.0% 63.9%

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

# **Detailed national table**

TABLE 9: VALUE OF U.S. NATIONAL CONSTRUCTION STARTS — MARCH 2024 — ConstructConnect® BILLIONS OF CURRENT \$\$, NOT SEASONALLY ADJUSTED (NSA)

	Latest	Latest month actuals			Moving averages (placed in end month)				ĺ	Year to	
	Jan 24	Feb 24	Mar 24	Jan 24	3-months Feb 24	Mar 24	Jan 24	12-months Feb 24	Mar 24	Jan -Mar 2023	Jan -Mar 2024
Single Family	14.335	16.284	18.428	15.646	15.188	16.349	16.963	17.253	17.495	40.989	49.047
month-over-month % change year-over-year % change	-4.1% 13.1%	13.6% 27.2%	13.2% 18.8%	-5.7% 19.9%	-2.9% 17.3%	7.6% 19.7%	0.8% -7.1%	1.7% -2.6%	1.4% 2.1%	-32.2%	19.7%
Apartment	10.905	8.795	4.484	9.038	8.990	8.061	9.308	9.257	8.627	33.223	24.18
month-over-month % change year-over-year % change	50.0% -7.4%	-19.3% -6.5%	-49.0% -62.8%	8.5% -15.8%	-0.5% -11.9%	-10.3% -27.2%	-0.8% -25.8%	-0.5% -26.4%	-6.8% -32.0%	11.7%	-27.2%
TOTAL RESIDENTIAL	25.240	25.079	22.912	24.685	24.178	24.410	26.271	26.510	26.123	74.212	73.231
month-over-month % change year-over-year % change	13.6% 3.3%	-0.6% 12.9%	-8.6% -16.9%	-1.0% 3.8%	-2.1% 4.5%	1.0% -1.3%	0.3% -14.7%	0.9% -12.5%	-1.5% -12.4%	-17.7%	-1.3%
Hotel/Motel	0.618	0.809	0.257	1.234	0.950	0.561	1.194	1.187	1.114	2.525	1.684
month-over-month % change year-over-year % change	-56.6% 24.4%	30.8% -9.8%	-68.2% -77.3%	-5.7% 73.6%	-23.0% 28.7%	-40.9% -33.3%	0.9% 34.0%	-0.6% 29.9%	-6.1% 20.2%	2.0%	-33.3%
Retail/Shopping	1.206	0.946	1.227	0.932	0.969	1.127	1.183	1.184	1.186	3.300	3.380
month-over-month % change year-over-year % change	60.2% 4.3%	-21.6% 1.2%	29.7% 1.6%	-4.6% 3.3%	3.9% 5.7%	16.3% 2.4%	0.4% -5.6%	0.1% -3.9%	0.1% -2.8%	-18.6%	2.4%
Parking Garages	0.218	0.145	0.094	0.217	0.175	0.152	0.179	0.183	0.182	0.350	0.457
month-over-month % change year-over-year % change	34.4% 39.8%	-33.8% 61.8%	-35.3%	20.9%	-19.4% -14.9%	-13.1% 30.3%	3.0% -9.4%	2.6% -3.5%	-0.5% -6.0%	-20.7%	30.3%
Amusement	0.990	0.841	-10.7% 0.843	-7.7% 0.719	0.759	0.891	0.786	0.802	0.780	2.473	2.674
month-over-month % change	122.3%	-15.1%	0.3%	20.7%	5.5%	17.5%	3.0%	2.0%	-2.7%	25.00	0.00
year-over-year % change Office	37.9% 1.793	29.1% 1.121	-23.6% 3.490	7.7% 2.891	12.2%	8.2% 2.135	14.0% 2.431	20.4%	9.8% 2.543	36.0% 5.525	8.29 6.40!
month-over-month % change	-28.9%	-37.5%	211.2%	-3.8%	-37.3%	17.8%	-1.6%	-0.9%	5.5%	_	
year-over-year % change Governmental Offices	-20.7% 1.504	-18.6% 0.890	85.0% 1.180	30.6% 1.346	15.8%	15.9% 1.191	14.9%	14.9%	20.9% 1.366	13.3% 3.479	15.9% 3.574
month-over-month % change	5.3%	-40.8%	32.6%	12.9%	-5.3%	-6.5%	2.6%	-1.0%	-1.0%	_	
year-over-year % change Laboratories	39.1%	-15.5% 0.175	-12.2%	36.7%	25.9% 0.420	2.7% 0.303	22.9% 0.425	17.4%	13.3%	53.3% 0.818	0.908
month-over-month % change	0.566 9.3%	-69.0%	0.166 -5.4%	0.458 -18.5%	-8.3%	-27.9%	5.8%	0.433 1.7%	-5.4%	_	
year-over-year % change	98.4%	99.5%	-62.6% 1 297	145.6%	154.1%	11.0%	-0.1%	2.9%	-5.1% 1.692	47.6%	11.09
Warehouse month-over-month % change	1.043 29.0%	0.874 -16.2%	1.397 59.8%	0.828 -11.8%	0.908 9.7%	1.105 21.6%	1.702 -5.5%	1.672 -1.8%	1.683 0.7%	4.720	3.31
year-over-year % change	-53.2%	-29.1%	10.9%	-60.9%	-51.7%	-29.8%	-33.3%	-33.4%	-31.5%	-17.0%	-29.89
Misc Commercial month-over-month % change	1.253 111.0%	0.592 -52.7%	2.301 288.4%	0.965 -13.7%	0.813 -15.8%	1.382 70.0%	1.372 1.3%	1.161 -15.3%	1.216 4.7%	5.798	4.14
year-over-year % change	20.9%	-81.0%	40.0%	4.2%	-52.4%	-28.5%	23.2%	-10.1%	-11.3%	149.5%	-28.5%
TOTAL COMMERCIAL month-over-month % change	9.192 6.2%	6.394 -30.4%	10.955 71.3%	9.591 -2.9%	8.081 -15.7%	8.847 9.5%	10.664 -0.2%	10.410 -2.4%	10.479 0.7%	28.987	26.541
year-over-year % change	-2.4%	-32.3%	8.2%	7.2%	-8.9%	-8.4%	2.8%	-0.8%	-1.3%	18.3%	-8.4%
TOTAL INDUSTRIAL (Manufacturing) month-over-month % change	7.134 162.2%	1.657 -76.8%	7.540	8.115 -20.7%	3.837 -52.7%	5.444 41.9%	7.601 -10.4%	7.526 -1.0%	7.540 0.2%	27.615	16.33
year-over-year % change	-59.7%	-35.3%	355.1% 2.3%	-40.3%	-70.3%	-40.9%	-29.9%	-30.8%	-33.1%	257.8%	-40.9%
Religious	0.097	0.155	0.079	0.086	0.116	0.110	0.093	0.100	0.098	0.247	0.33
month-over-month % change year-over-year % change	0.1% 30.8%	59.7% 114.8%	-49.3% -21.9%	-19.2% 33.2%	35.9% 78.5%	-5.3% 33.9%	2.1% 7.6%	7.4% 11.8%	-1.8% 9.0%	18.0%	33.9%
Hosptials/Clinics	1.390	1.342	2.928	1.056	1.154	1.887	1.465	1.446	1.591	7.474	5.660
month-over-month % change year-over-year % change	90.3% -70.5%	-3.5% -14.5%	118.2% 145.9%	1.8% -60.4%	9.3% -56.5%	63.5% -24.3%	-15.9% -41.1%	-1.3% -42.0%	10.0% -35.8%	109.5%	-24.3%
Nursing/Assisted Living	0.133	0.068	0.236	0.222	0.203	0.145	0.219	0.209	0.202	0.813	0.436
month-over-month % change year-over-year % change	-67.5% -56.2%	-48.8% -65.1%	247.8% -25.2%	-16.2% -1.4%	-8.8% -18.8%	-28.2% -46.3%	-6.1% -40.9%	-4.8% -38.7%	-3.2% -42.1%	-33.1%	-46.3%
Libraries/Museums	0.526	0.219	0.452	0.288	0.327	0.399	0.372	0.374	0.384	0.845	1.197
month-over-month % change	122.0%	-58.3%	106.4%	42.6%	13.8%	22.0%	4.9%	0.7%	2.5%	40.00	44.70
year-over-year % change Fire/Police/Courthouse/Prison	65.5% 1.098	16.2%	33.7% 0.965	1.5%	35.3% 0.945	41.7% 1.035	21.1% 1.234	25.5% 1.277	32.9% 1.294	-13.2% 2.042	41.79 3.10
month-over-month % change	57.9%	-5.1%	-7.4%	-2.4%	-38.5%	9.5%	2.3%	3.5%	1.3%		
year-over-year % change Military	44.0% 0.614	100.8% 0.381	26.7% 0.806	113.9% 0.617	53.2% 0.486	52.0% 0.600	64.9% 1.274	69.4% 1.254	66.4% 1.172	31.5%	52.09 1.80
month-over-month % change	33.0%	-37.9%	111.2%	-31.4%	-21.3%	23.6%	-5.9%	-1.6%	-6.6%	_	
year-over-year % change Schools/Colleges	-60.9% 8.877	-38.6% 6.388	-55.0%	-31.4% 7.771	-40.2% 7.653	-54.8% 7.296	36.9% 7.815	29.4% 7.889	7.5% 7.838	527.5% 19.379	-54.89 21.88
month-over-month % change	15.4%	-28.0%	6.624 3.7%	12.3%	-1.5%	-4.7%	2.4%	0.9%	-0.6%	19.379	21.88
year-over-year % change	33.6%	16.2%	-8.5%	35.3%	29.7%	13.0%	23.2%	21.8%	19.1%	29.5%	13.0%
Misc Medical month-over-month % change	0.874 37.8%	0.351 -59.8%	1.383 293.6%	0.727 -14.2%	0.620 -14.7%	0.869 40.2%	0.781 3.5%	0.766 -2.0%	0.843 10.1%	1.555	2.608
year-over-year % change	56.4%	-35.0%	203.1%	-5.3%	-16.2%	67.7%	-30.9%	-32.3%	-23.6%	-22.9%	67.79
TOTAL INSTITUTIONAL month-over-month % change	13.607 24.2%	9.946	13.473 35.5%	12.303 3.8%	11.503 -6.5%	12.342 7.3%	13.252 -0.8%	13.314 0.5%	13.421 0.8%	36.337	37.02
year-over-year % change	-8.9%	8.1%	10.5%	8.2%	2.0%	1.9%	6.8%	6.1%	5.2%	44.6%	1.99
Misc Non Residential month-over-month % change	0.549 42.0%	0.435	0.510	0.464	0.457 -1.7%	0.498 9.1%	0.563	0.556 -1.2%	0.555 -0.3%	1.795	1.49
year-over-year % change	-26.8%	-20.7% -16.0%	-3.3%	-22.1%	-1.7% -24.9%	-16.8%	-2.9% -16.6%	-1.2% -17.8%	-0.3% -16.7%	-0.4%	-16.89
TOTAL NON-RES BUILDING month-over-month % change	30.482	18.432	32.479	30.474	23.878	27.131	32.081	31.806	31.995	94.735	81.39
year-over-year % change	34.2% -28.8%	-39.5% -15.2%	76.2% 7.5%	-6.0% -11.7%	-21.6% -29.1%	13.6% -14.1%	-3.1% -6.5%	-0.9% -8.1%	0.6% -9.4%	60.2%	-14.19
Airports	0.683	0.315	0.477	0.556	0.562	0.492	0.812	0.807	0.792	1.957	1.47
month-over-month % change year-over-year % change	-0.7% -25.5%	-53.9% -17.8%	51.5% -27.4%	-32.2% -8.3%	1.1% -0.5%	-12.5% -24.6%	-2.3% 18.8%	-0.7% 15.1%	-1.9% 10.4%	98.8%	-24.69
Roads/Highways	8.791	6.063	7.773	6.814	6.781	7.542	7.970	7.947	7.847	23.846	22.62
month-over-month % change year-over-year % change	60.2% 3.1%	-31.0% -4.3%	28.2% -13.4%	9.9% 17.1%	-0.5% 7.8%	11.2% -5.1%	0.3% 9.2%	-0.3% 7.8%	-1.3% 5.4%	25.6%	-5.19
Bridges	2.822	1.536	1.836	1.997	2.072	2.065	2.061	2.060	2.000	6.619	6.19
month-over-month % change year-over-year % change	51.8% 12.3%	-45.6%	19.5%	11.5%	3.8% 3.5%	-0.4%	1.3%	0.0%	-2.9%	47.00	
Dams/Marine	0.800	-0.4% 2.106	-28.4% 0.420	3.0% 0.890	1.309	-6.4% 1.109	-11.6% 1.019	-11.4% 1.113	-16.3% 1.086	17.9% 2.219	-6.49 3.32
month-over-month % change	-21.5%	163.3%	-80.0%	-10.7%	47.0%	-15.3%	2.5%	9.3%	-2.4%	_	
year-over-year % change Nater/Sewage	58.4% 4.277	117.2% 3.981	-43.5% 3.302	15.4% 3.836	64.4% 3.988	49.9% 3.854	32.8% 4.045	35.9% 4.130	35.7% 4.066	9.6%	49.99 11.56
month-over-month % change	15.4%	-6.9%	-17.1%	-3.9%	4.0%	-3.4%	1.5%	2.1%	-1.5%	_	
year-over-year % change  Misc Civil (Power, etc.)	19.7%	34.4%	-18.8%	14.7%	18.7% 4.438	9.0% 4.408	10.5% 3.986	10.7%	8.1%	19.4%	9.09
month-over-month % change	11.071 730.9%	0.911 -91.8%	1.241 36.3%	4.511 123.2%	4.438 -1.6%	4.408 -0.7%	3.986 19.7%	3.824 -4.1%	3.532 -7.7%	10.809	13.22
year-over-year % change	245.4%	-68.0%	-73.9%	8.1%	10.9%	22.3%	60.7%	48.6%	23.6%	83.8%	22.39
FOTAL ENGINEERING (Civil) month-over-month % change	28.445 101.9%	14.912 -47.6%	15.049 0.9%	18.604 17.6%	19.150 2.9%	19.469 1.7%	19.893 4.0%	19.882 -0.1%	19.323 -2.8%	56.054	58.40
year-over-year % change	47.8%	-0.9%	-30.9%	11.7%	12.5%	4.2%	15.5%	13.5%	7.5%	32.3%	4.29
GRAND TOTAL month-over-month % change	84.166	58.423	70.440	73.763	67.205	71.010	78.245	78.199	77.440	225.001	213.02
year-over-year % change	42.6% -2.7%	-30.6% -0.9%	20.6% -11.4%	0.8% -1.6%	-8.9% -9.0%	5.7% -5.3%	-0.2% -4.9%	-0.1% -5.1%	-1.0% -6.8%	17.4%	-5.39
NON-RES BLDG + ENGINEERING	58.926	33.344	47.528	49.078	43.027	46.599	51.974	51.688	51.317	150.789	139.79
month-over-month % change	60.1%	-43.4% -9.3%	42.5% -8.6%	1.8% -4.1%	-12.3%	8.3% -7.3%	-0.5% 0.9%	-0.5% -0.8%	-0.7% -3.7%	48.5%	