

**November 2023** (based on October 2023 Starts Stats)

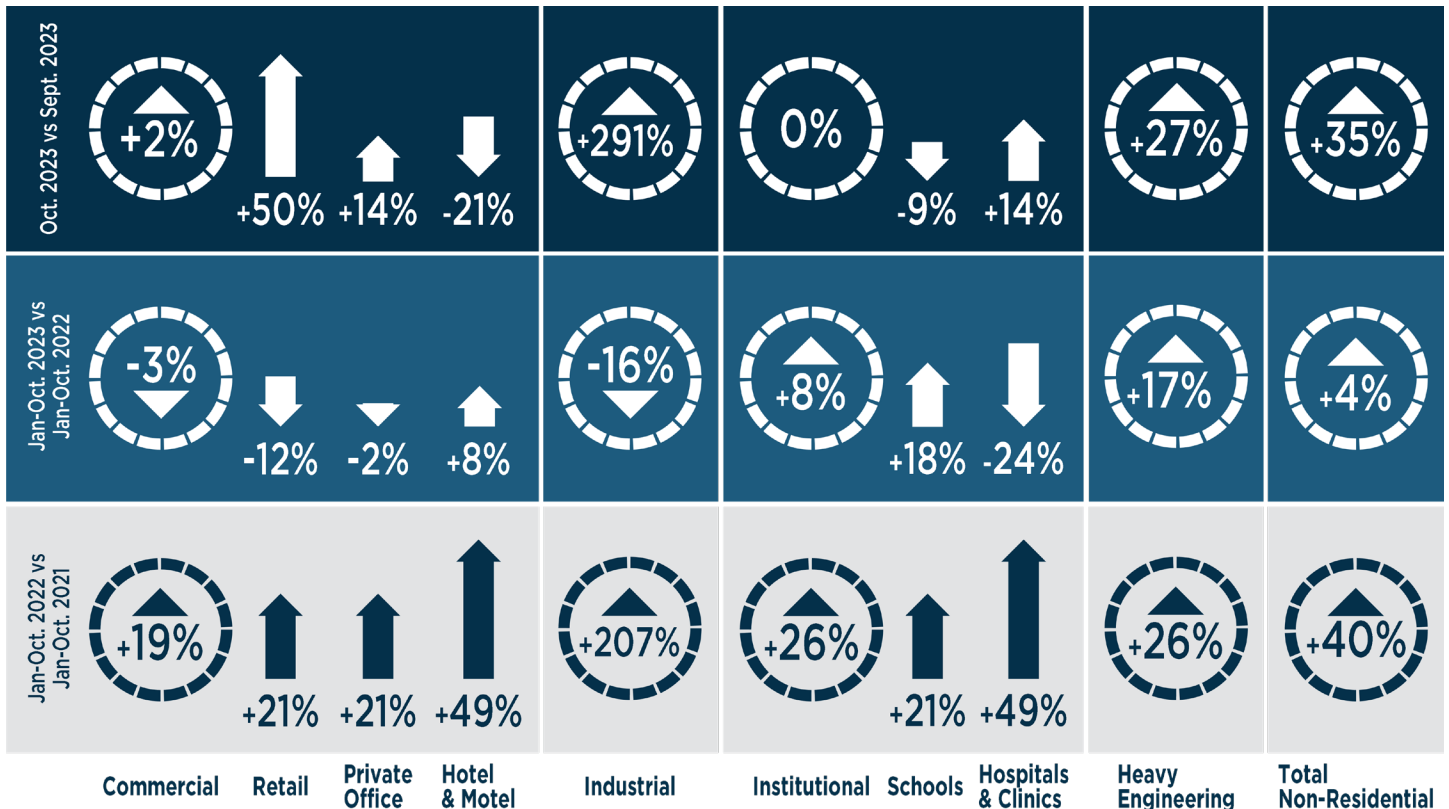
# Construction Industry Snapshot

IN THIS ISSUE:

## October's Nonresidential Construction Starts 35% M/M, 0% Y/Y, and +4% Ytd

ConstructConnect announced today that October 2023's volume of construction starts, excluding residential work, was \$53.2 billion, an increase +34.6% versus September 2023's figure of \$39.5 billion.

October 2023 vs October 2022 was flat (-0.2%). Year-to-date nonres starts have been +4.0% vs Jan-Oct 2022. Grand total starts (i.e., including residential) have been +15.0% m/m; -13.7% y/y; and -6.7% ytd.



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## October's Nonresidential Construction Starts +35% M/M, 0% Y/Y, and +4% Ytd

### This Year's Mega Projects Beat Last Year's

ConstructConnect announced today that October 2023's dollar volume of construction starts, excluding residential work, was \$53.2 billion (green shaded box, bottom of page 12), an increase of +34.6% versus September 2023's figure of \$39.5 billion (originally reported as \$39.3 billion).

The dollar volume of October 2023 total nonresidential starts was flat (-0.2%) when held up against October 2022. The latest month's year-to-date result for total nonresidential starts, however, was +4.0% when compared with the first ten months (Jan-Oct) of last year.

The mega project story favored October of this year versus the same month of last year. In the latest month, there were four mega project groundbreakings with estimated values summing to \$11.9 billion. In October of last year, the mega project tally was three for \$9.4 billion. (A mega project carries an estimated price tag of at least a billion dollars.) The latest month's super-sized projects featured a semiconductor fabrication facility (Boise, Idaho); a sheet steel mill (Apple Grove, West Virginia); a battery manufacturing plant (Tucson, Arizona); and a major league soccer stadium (Miami, Florida) (see Top 10 Projects list, Table 7, page 9).

The year-to-date dollar volume of all nonresidential mega projects this year has been +6.0% compared with the same time frame last year, \$86.7 billion over \$81.7 billion.

Nonresidential starts in October of this year, exclusive of mega projects, were +16.6% month to month, -5.9% year over year, and +3.6% year to date.

The share of total nonresidential starts claimed by megas year to date in 2023 has been 16.7%, not much different than the 16.4% piece of the pie taken through the first ten months of last year.

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 October 2023 was +15.0% m/m, -13.7% y/y, and -6.7% ytd. Weakness in the residential category of starts (-23.0% ytd, or down by nearly a quarter) has been holding back Grand Total starts year to date.

(October 2023's dollar volume of multi-family starts was the lowest monthly figure since September 2015, eight years ago.)

### No Joy from TTM Starts

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 October, on a month-to-month basis, at -1.3%, weren't quite as negative as in September, -2.0%, but were a tad worse than in August, -0.8%.

On a year-over-year basis, Grand Total TTM starts downshifted again, to -4.1%, after being -0.5% in September and +2.9% in August.

### Nonres PIP Statistics Set Blazing Path

'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-

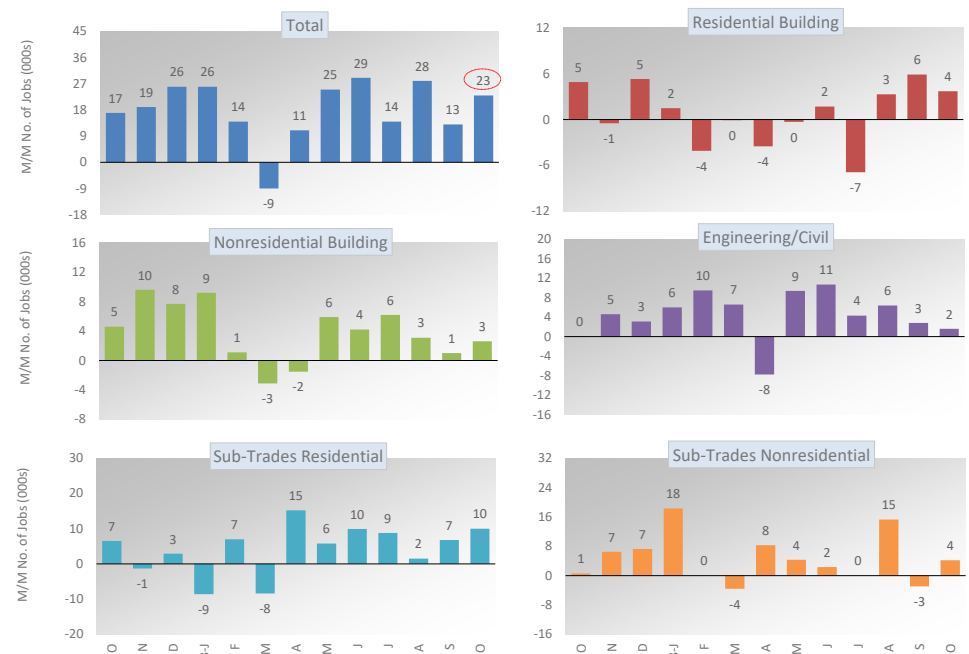
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TABLE 1: VALUE OF UNITED STATES NONRESIDENTIAL CONSTRUCTION STARTS — OCTOBER 2023 (ConstructConnect®)

	Jan-Oct 2023 (\$ billions)	% Change Jan-Oct 23 vs Jan-Oct 22	% Change Oct 23 vs Oct 22	% Change Oct 23 vs Sep 23
Hotel/Motel	10.193	8.0%	-36.2%	-21.0%
Retail/Shopping	12.170	-12.0%	21.0%	50.2%
Parking Garage	1.590	-14.9%	176.7%	-71.5%
Amusement	7.877	19.6%	-17.6%	11.7%
Private Office	19.894	-1.6%	-51.2%	14.3%
Government Office	13.602	19.5%	-27.5%	-6.9%
Laboratory	3.824	-17.5%	65.7%	-32.5%
Warehouse	18.560	-29.5%	-59.7%	-34.6%
Miscellaneous Commercial *	14.360	27.9%	92.2%	219.7%
<b>COMMERCIAL (big subset)</b>	<b>102.069</b>	<b>-3.3%</b>	<b>-24.1%</b>	<b>2.0%</b>
<b>INDUSTRIAL (Manufacturing)</b>	<b>77.390</b>	<b>-16.2%</b>	<b>20.7%</b>	<b>290.7%</b>
Religious	0.836	-9.1%	-54.7%	11.1%
Hospital/Clinic	17.134	-24.0%	-68.9%	14.3%
Nursing/Assisted Living	2.175	-48.4%	-25.4%	76.4%
Library/Museum	3.978	29.8%	-33.3%	-46.6%
Fire/Police/Courthouse/Prison	10.859	45.8%	4.3%	-35.7%
Military	15.018	74.6%	7.8%	28.4%
School/College	75.228	17.6%	-9.7%	-9.1%
Miscellaneous Medical	7.403	-38.1%	150.9%	204.9%
<b>INSTITUTIONAL</b>	<b>132.631</b>	<b>8.1%</b>	<b>-20.7%</b>	<b>0.1%</b>
Miscellaneous Non-residential	5.866	-15.7%	-29.3%	-23.9%
<b>NONRESIDENTIAL BUILDING</b>	<b>317.956</b>	<b>-2.9%</b>	<b>-10.1%</b>	<b>39.9%</b>
Airport	8.460	25.7%	58.3%	36.0%
Road/Highway	83.280	10.2%	8.4%	24.1%
Bridge	20.866	-14.3%	6.2%	60.7%
Dam/Marine	10.080	32.6%	20.4%	40.4%
Water/Sewage	41.081	11.2%	23.0%	44.8%
Miscellaneous Civil (power, pipelines, etc.)	37.118	85.1%	68.9%	-3.1%
<b>HEAVY ENGINEERING (Civil)</b>	<b>200.885</b>	<b>17.3%</b>	<b>22.3%</b>	<b>26.6%</b>
<b>TOTAL NONRESIDENTIAL</b>	<b>518.841</b>	<b>4.0%</b>	<b>-0.2%</b>	<b>34.6%</b>

\* 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 — OCTOBER 2023



Full year 2022's monthly average change in construction employment was +22,000 jobs. (Much of the lift came in February 2022, at +79,000 jobs m/m.) January-to-October 2023's monthly average increase in construction employment has been +17,000 jobs.

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

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

Continued from page 2

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 non-residential, 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 September of this year has retreated to 44.8%. The other 55.2% belongs to nonresidential. (Through September of last year, the shares were 51.3% residential and 48.7% non-residential.)

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 September 2023 was +4.6%, thanks to nonresidential realizing a gain of +18.5%, while residential was retreating by -8.5%.

Nonresidential construction's leading PIP sub-category for year-to-date percentage change has been 'manufacturing', climbing +70.5% versus January-September 2022. By dollar volume year to date, 'manufacturing' has become (by a considerable margin) the largest sub-category within PIP nonresidential work.

Other PIP nonresidential sub-categories that have recorded double-digit percentage gains year to date in 2023 have been 'conservation and development', +25.9%; 'lodging', +23.5%; 'waste disposal and water delivery', +20.5%; 'highways and streets', +15.4%; 'health care', +14.1%; and 'educational', +11.1%.

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

### Construction's Jobs Count +23,000 in October

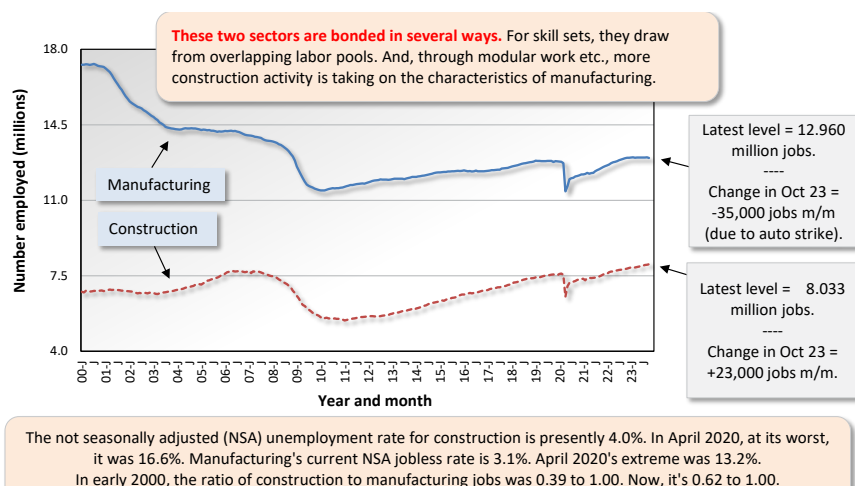
Construction's current share of U.S. total non-farm employment in the monthly labor market report issued by the Bureau of Labor Statistics (BLS) sits at slightly more than 5.0%. Accordingly, to claim its rightful share of October's +150,000 economy-wide number-of-jobs advance, the figure for construction would have needed to be +8,000. Happily, the actual increase came in much better, at +23,000. The ten-month average count for construction hiring this year has been +17,000 jobs. Last year, the comparable figure was +22,000 jobs. Graph 1 shows that month-to-month construction sector hiring in October was most active among residential general contractors, +10,000 jobs.

Construction's not seasonally adjusted (NSA) unemployment rate (U) in October of this year, at 4.0%, was up slightly from the reading of 3.8% in the month prior, but down a smidge from the 4.1% in October of last year. Construction's most recent NSA U rate of 4.0% was only a bit higher than the all-jobs NSA U rate of 3.6%. Graph 3 highlights the seasonality of construction's U rate.

Manufacturing's NSA U rate in October was 3.1% (based on a household survey). Manufacturing's job-generating

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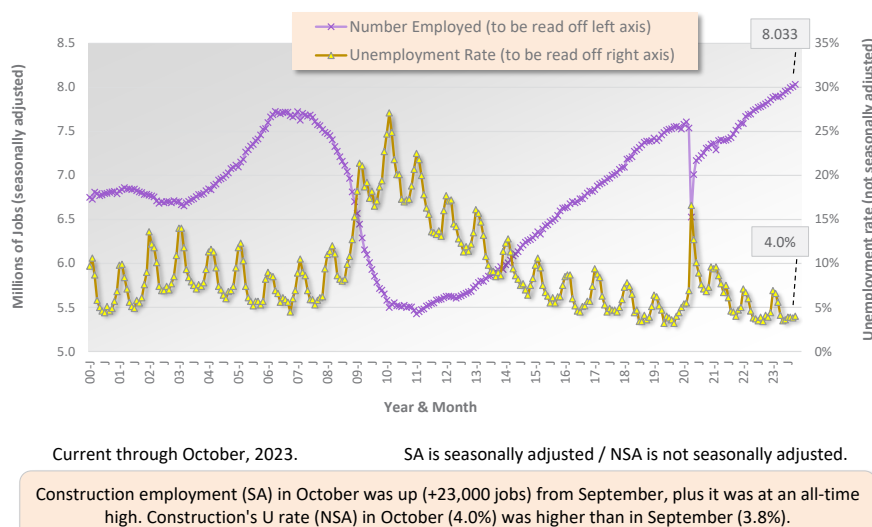
GRAPH 2: U.S. MANUFACTURING VS CONSTRUCTION EMPLOYMENT OCTOBER, 2023 — SEASONALLY ADJUSTED (SA) PAYROLL DATA



Latest data points are for October, 2023.

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

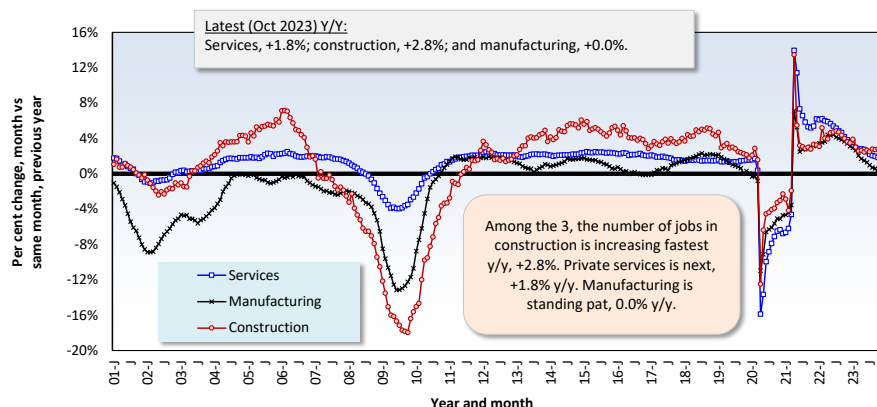
GRAPH 3: U.S. CONSTRUCTION EMPLOYMENT (SA) & UNEMPLOYMENT RATE (NSA)



Current through October, 2023.

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

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



The latest data points are for October, 2023.

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



Continued from page 3

performance, however, went backwards, -35,000 (based on an employer survey). There was a specific unique reason, though, the auto sector strike that was underway, and has since been resolved.

Both the manufacturing and construction sectors are in the goods-producing segment of the economy (i.e., as opposed to private services-providing) and there is considerable overlap between their labor pools. The current surge in capital spending being undertaken by manufacturers will eventually lead to much more hiring, although ever greater adoption of automation and robotics will act as restraints.

In October, U.S. total employment was +1.9% year over year. The y/y bump in the number of 'private services-providing' jobs was about the same, +1.8%. 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 +6.4% 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, +5.5% (thanks to the wealth of infrastructure work that is underway); machinery and equipment rental and leasing, +5.3%; architectural and engineering design services, +3.3%; oil and gas exploration and development, +2.1%; real estate, +1.1%; and building materials and supplies dealers, -3.6% (high borrowing costs are cutting into new and renovation residential work).

Design services work at architectural and engineering firms is an early-stage step in the entire building process that culminates in job site field activity. The +3.3% y/y advance in the number of jobs in the sector is interesting news, but it seems unlikely to hold up. The October Architecture Billings Index (ABI) from the American Institute of Architects (AIA) and Deltek was a bearish 44.3, dipping below the previous month's 44.8. 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 October, that index was also less than encouraging, descending to 48.8.

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

The +34.6% incline in the value of total nonresidential starts in October versus September (m/m) occurred thanks to big strength in the industrial sub-category (+290.7%), accompanied by solid uplift in engineering (+26.6%), with commercial (+2.0%) and institutional (+0.1%) staying quiet.

The -0.2% stand-pat record of total nonresidential starts in October 2023 versus October 2022 (y/y) was the net result of one-fifth to one-quarter increases in engineering (+22.3%) and industrial (+20.7%) that were offset by one-fifth to one-quarter declines in commercial (-24.1%) and institutional (-20.7%).

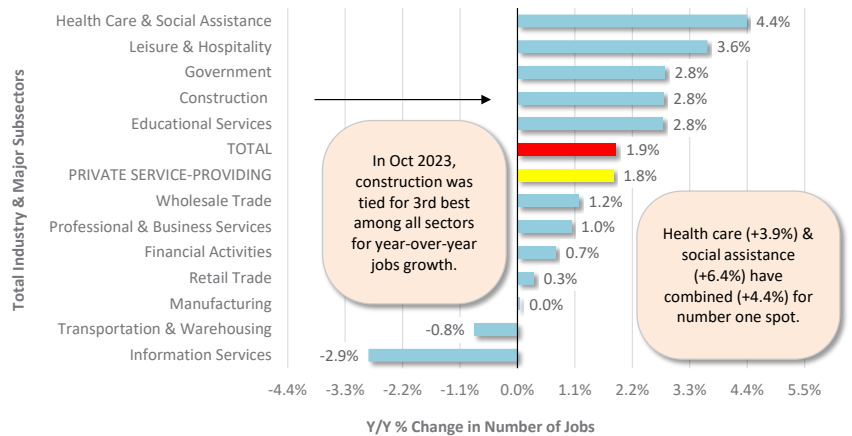
The year-to-date climb (+4.0%) of total nonresidential starts in the latest month was due to pickups in engineering (+17.3%) and institutional (+8.1%) that were able to more than withstand contractions in industrial (-16.2%) and commercial (-3.3%).

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 ten months of 2023, their shares of total were 16.1% and 14.5% respectively, combining for 30.6%.

The three percentage-change metrics for street starts in October were +24.1% m/m, +8.4% y/y, and +10.2% ytd. For school starts, the results were -9.1% m/m, and -9.7% y/y, but +17.6% ytd. Among types of educational facilities, 'colleges and universities' (+38.3% ytd) and 'junior and senior high schools' (+14.9% ytd) have been riding point for 'starts' (Table 2).

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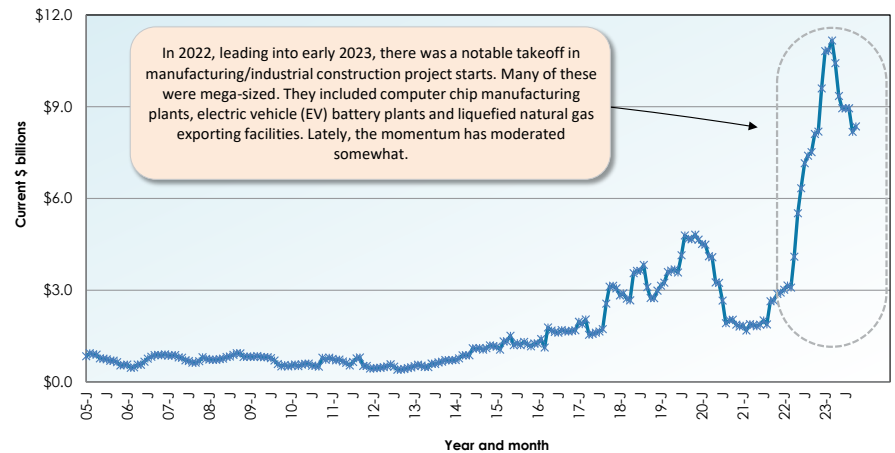
GRAPH 5: Y/Y JOBS CHANGE, U.S. TOTAL INDUSTRY & MAJOR SUBSECTORS — OCTOBER 2023 (BASED ON SEASONALLY ADJUSTED PAYROLL DATA)



October 2023's y/y changes in employment within the pandemic's initially hardest-hit sector, 'leisure & hospitality', were: 'amusements/gambling', +5.2%; 'hotels/motels', +4.0%; and 'restaurants/bars', +3.1%.

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

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



The last data point is for October 2023.

Data source: ConstructConnect. Graph: ConstructConnect.

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

	Jan-Oct 2023 (\$ billions)	% Change vs Jan-Oct 2022
Sports Stadiums/Convention Centers	\$8.592	46.3%
Transportation Terminals	\$5.768	7.7%
Courthouses	\$1.774	18.1%
Police Stations & Fire Halls	\$4.132	15.5%
Prisons	\$4.954	109.2%
Pre-School/Elementary	\$20.507	8.1%
Junior & Senior High Schools	\$30.199	14.9%
K-12 (sum of above two categories)	\$50.706	12.1%
Special & Vocational Schools	\$1.825	-20.2%
Colleges & Universities	\$22.697	38.3%
Electric Power Infrastructure	\$15.311	68.9%

Source: ConstructConnect/Table: ConstructConnect.

Continued from page 4

Important beyond roads within the engineering sub-category are 'water/sewage' and 'bridge' starts. The results for the former in October were +44.8% m/m, +23.0% y/y, and +11.2% ytd. For the latter, they were +60.7% m/m and +6.2% y/y, but -14.3% ytd.

The 'miscellaneous civil' designation, in October, was unremarkable m/m, -3.1%, but it was impressive y/y, +68.9%, and ytd, +85.1%. This category includes pipeline, electric power, and railroad projects.

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 October were +63.7% m/m, but -45.2% y/y, and -31.0% ytd. 'Hospital' starts on their own in the latest month were +14.3% m/m, but -68.9% y/y, and -24.0% ytd.

The 'fire/police/courthouse/prison' sub-category of starts experienced a setback m/m in October, -35.7%, but it was okay y/y, +4.3%, and was up by nearly half ytd, +45.8%. Prison starts, specifically, have been the driving force. They're more than double (+109.2%) what they were in Jan-Oct 2022, with major new correctional facilities underway in Alabama, Indiana, and New York City.

Among commercial sub-categories in October, 'amusement' (+19.6%), 'government offices' (+19.5%), and 'miscellaneous' (+27.9%) were each up in a commendable way ytd. Within 'miscellaneous', 'sports stadiums' were +46.3% (due to Beckham Soccer Stadium in Miami - see Top 10 list, page 9) and 'transportation terminals', +7.7%.

But several of commercial's sub-categories continued to be laggards ytd in the latest month: 'warehouses', -29.5%; 'laboratories', -17.5%; 'parking garages', -14.9%; and 'retail', -12.0%. Starts on private office buildings were down ytd, although only by -1.6%; but keep in mind that the Jan-Oct number last year was relatively low.

Also in October, the dollar volume of 'hotel/motel' starts, coming off minimal activity during the pandemic, and despite being -21.0% m/m and -36.2% y/y, were modestly perky at +8.0% ytd.

### Highlight Patterns from the 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.

The discernible patterns from the trend lines are as follows. The 'private office buildings' curve is distressed, but perhaps not as severely as one might suppose. It is managing to move sideways, aided by a nearly unbounded need for data center space. The slide in 'retail' is on the verge of flattening but hasn't quite reached that status yet. The 'schools/colleges' category is staying elevated even as 'hospital/clinic' starts are failing to find traction. There's been a recent and rare downwards jog in the 'roads/highways' curve. The 'water/sewage' curve, though, is still arcing upwards in a decent manner. The 'miscellaneous civil' curve is once again heading skyward like a rocket ship. And finally, the 'bridges' trend line has come off its peak.

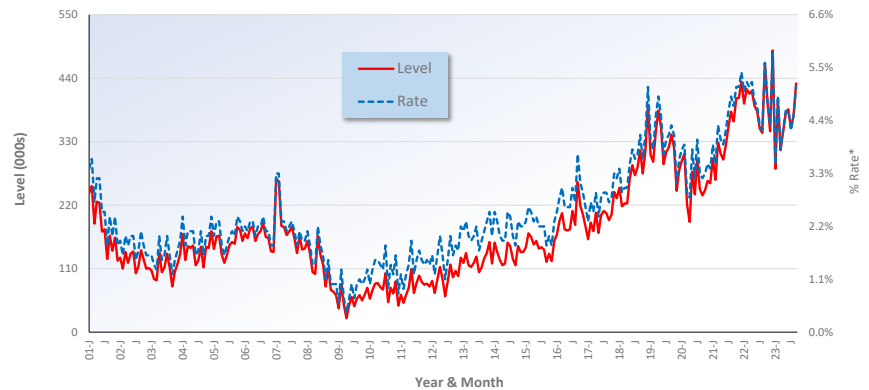
### Pay Hikes Provide Purchasing Power Advances

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 October 2023's Table B-3 (including bosses), y/y all-jobs earnings were +4.1% hourly and +3.2% weekly. Compensation hikes for construction workers, as a subset of 'all jobs', were markedly better, at +5.0% y/y hourly and +5.5% y/y weekly. From Table B-8 for production and non-sup-

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

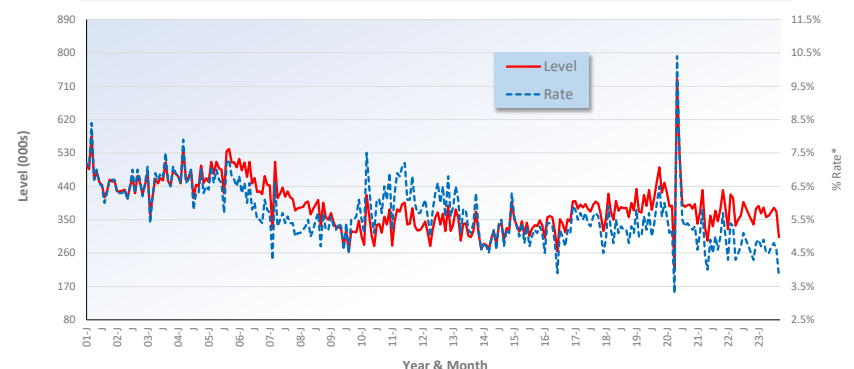


Logic would suggest a rough correlation between construction job 'openings' and 'hires', with the former 'pulling' the latter. Recently, though, openings (up) & hires (down) have been going their own separate ways.

\*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 September 2023. ... 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)



While the 'openings' numbers (level & rate) have been climbing to perches about as high as they have ever reached, the 'hires' numbers (level & rate) have been falling to valleys about as low as they have ever descended.

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

Latest seasonally adjusted data points are for September 2023. ... JOLTS = Job Openings and Labor Turnover Survey.

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

Continued from page 5

visory workers (i.e., excluding bosses), the y/y 'all-jobs' paycheck hikes were +4.4% hourly and +3.5% weekly. Construction workers, once again, were relative over-achievers with stipend hikes of +5.4% y/y both hourly and weekly.

The latest wage advances, while still exceeding 'normal', need to be placed in perspective. Graphs 9 and 10 show that moderation is noticeably underway in the y/y hourly and weekly earnings going to 'all jobs'. For construction workers, there's some indication of y/y hourly rates gradually easing, but y/y weekly earnings are continuing to be quite robust.

October 2023's CPI-U 'all items' inflation rate was +3.2% y/y. (The 'core' rate, which omits volatile food and energy items, was +4.0% y/y). Improvements in purchasing power, a key ingredient in the consumer spending that drives gross domestic product (GDP), are realized when wage gains exceed inflation. Pay hikes are now barely registering purchasing power upticks for 'all jobs'; but they are providing solid and welcome advances for construction workers.

## Most Material Costs Normalizing

October 2023's y/y results for three building related BLS Producer Price Index (PPI) series were: (A) 'construction materials special index', -1.2% (about the same as September's -1.3%); (B) 'inputs to new construction index, excluding capital investment, labor, and imports', -0.2% (dipping into minus territory after the previous month's +0.6%); and (C) 'final demand construction', designed to capture bid prices, +0.7% (slowing from the +3.7% 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 October, there were only a few materials showing y/y price increases: ready-mix concrete, +11.3%; cement, +8.5%; and copper wire and cable, +2.7%. There were far more items with negative y/y price performances: number 2 diesel fuel, -32.9%; asphalt, -22.7%; softwood lumber, -16.3%; hot rolled steel bars, plates, and structural shapes, -10.3%; aluminum mill shapes, -1.7%; and gypsum, -1.2%. Also, there's an 'inputs to highways and streets' index, +0.4% y/y. Unleaded regular gasoline in the PPI data series is -14.2% y/y; as a subset in the Consumer Price Index (CPI), it's -5.3% y/y.

The value of construction starts each month is derived from ConstructConnect's database of all active construction projects in the U.S. The non-residential construction starts series, because it is comprised of total-value estimates for individual projects, some of which are super-large, has a history of being more volatile than many other leading indicators for the economy.

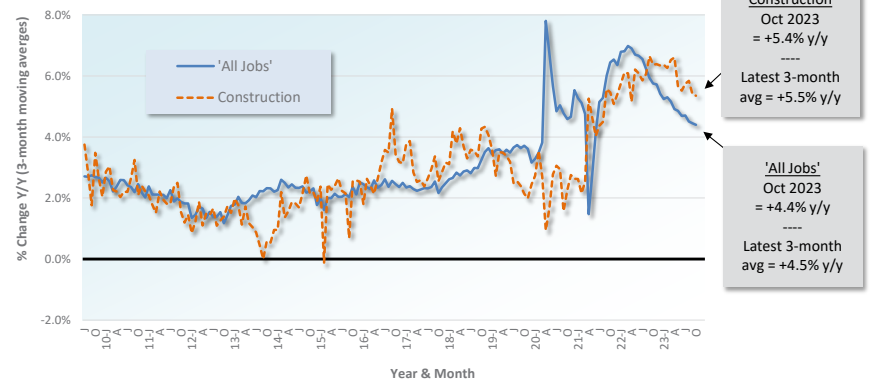
## October 2023's 'Grand Total' Starts -6.7% Ytd

From Table 6 on page 8 (and also from Table 9 on page 12) of this report, ConstructConnect's total residential starts in October 2023 were -16.1% m/m, -35.8% y/y, and -23.0% ytd. Multi-family starts were -33.9% m/m, -70.8% y/y, and -34.3% ytd. (October 2023's dollar volume of multi-family starts was the lowest monthly figure in eight years.) Completing the picture, single-family starts this October were -8.7% m/m, +1.2% y/y, and -15.7% ytd.

Including home building with all nonresidential categories, Grand Total starts in October 2023 were +15.0% m/m, -13.7% y/y, and -6.7% 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



Y/y hourly wage gains for 'all jobs' are easing, but remain above inflation (+3.2% y/y, all items CPI-U in Oct '23). Construction is still beating 'all jobs'. Average y/y hourly wage gains for construction workers, 2010-2019, were +2.3%; for 'all jobs', +2.4%.

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

The latest data points are for October 2023.

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

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



Y/y weekly earnings for 'all jobs' have been gradually returning closer to their historical performance. Y/y construction weekly earnings are still abnormally high & moving sideways. The NSA U rate for construction is 4.0%; for 'all jobs', 3.6%.

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

The latest data points are for October 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.



## Historic Appeal of Apartment Market may be about to Change

A forthcoming surge in the supply of new rental units may mark the end of a decade-long building boom. Few markets have been more reliable over the last decade than the residential market. Between 2010 and 2022, multi-family starts grew by an astronomical 590%, or 17% on a compounded annual growth-rate basis, according to ConstructConnect's Insight data results. Similarly, single-family home-building exploded with starts and unit prices both more than doubling over the same period.

In response to this rapid and enduring growth, many contractors sought to service this segment of the construction industry, if not also expand operations. According to the Census Bureau, the annualized number of two-plus unit structures, started for the purpose of rental, increased from 99,000 in 2010 to well over 500,000 by 2022. This explosive addition of new supply was met with ready demand as evidenced by the steady decline in rental vacancy rates, an increase in the number of occupied units from 37 million to over 44 million, and a decline in the number of single-family homes for rent. However, what lies ahead for the rental market and multi-family construction more broadly looks far less benign.

COVID brought about several headwinds to the rental market, some of which have yet to deliver their full impact. Although difficult to measure, a slew of single-family homes is believed to have been purchased shortly after the onset of the pandemic, adding to the stock of rental units. More importantly, shifting financial market conditions have severely hampered the apartment market specifically. According to MSCI's commercial property price index report, released September 2023, apartment CRE prices over the last year contracted by 13%, more than any other commercial property sector including retail, industrial and offices.

Falling property prices, combined with rising interest rates and high loan-to-value ratios make this CRE category one of the most financially disadvantaged in 2023. This outlook is corroborated in the *October 2023 National Multifamily Housing Quarterly Survey of Apartment Conditions*, whose index of debt and equity financing conditions has, in recent quarters, descended to levels near or below the worst depths of the Great Recession (2008-09). The survey further dampened the category's outlook by citing rising vacancies and softening pricing power, leading nearly 2/3rds of those surveyed to cite weakening apartment market conditions.

Falling property prices, challenging financing conditions, falling rent pricing power, and recently rising vacancy rates make now a particularly poor time for the completion of record levels of new housing units for rent. The fact that the gap between starts and completions between 2021 and 2022 rose to historic levels may have been a function of limited labor and disrupted supply chains. Unfortunately, the completion of these delayed units in late-2023 and 2024 will bring the potential for further CRE devaluations and lower per-unit revenues. Today's developers with work-in-progress may have few options, including either abandoning potentially unprofitable projects mid-construction and facing immediate consequences, or completing their in-progress units despite market conditions and hoping for the best.

— Michael Guckes, ConstructConnect Senior Economist

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

	Jan-Oct 2023	% Change vs Jan-Oct 2022
1 Texas	\$83,214,559,892	-5.0%
2 California	\$40,591,008,802	3.1%
3 New York	\$27,845,703,991	5.5%
4 Florida	\$25,806,547,086	3.0%
5 North Carolina	\$18,655,573,827	-2.0%
6 Ohio	\$17,391,930,349	46.5%
7 Georgia	\$15,396,168,520	-9.7%
8 Indiana	\$14,643,258,851	22.4%
9 Pennsylvania	\$13,999,713,261	-2.6%
10 Illinois	\$13,729,908,402	-4.4%
11 Virginia	\$13,075,331,589	28.0%
12 Michigan	\$12,824,187,246	-28.1%
13 Arizona	\$11,791,638,704	32.0%
14 Massachusetts	\$11,016,967,016	-5.7%
15 Alabama	\$10,689,296,209	46.7%
16 Tennessee	\$10,487,371,612	40.8%
17 Colorado	\$9,246,257,898	52.1%
18 Idaho	\$9,163,301,182	222.0%
19 Washington	\$8,495,963,398	-10.1%
20 Maryland	\$8,148,499,859	20.1%

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

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

	Jan-Oct 2023	% Change vs Jan-Oct 2022
1 Texas	\$53,986,010,753	-14.7%
2 California	\$22,770,834,789	-12.0%
3 New York	\$18,333,606,894	10.6%
4 Florida	\$15,357,960,731	-10.3%
5 North Carolina	\$13,779,590,492	3.7%
6 Ohio	\$11,606,985,158	68.5%
7 Indiana	\$10,988,710,518	43.9%
8 Georgia	\$10,218,055,080	-25.5%
9 Arizona	\$8,938,446,545	41.2%
10 Virginia	\$8,882,316,875	41.9%
11 Alabama	\$8,606,589,345	62.8%
12 Idaho	\$7,842,941,752	326.6%
13 Pennsylvania	\$7,565,573,800	-14.8%
14 Tennessee	\$7,394,067,576	55.2%
15 Massachusetts	\$7,376,829,940	-19.5%
16 Illinois	\$6,737,842,371	-2.0%
17 Michigan	\$6,294,832,664	-51.2%
18 Kansas	\$5,919,934,249	104.3%
19 Maryland	\$5,209,338,843	5.1%
20 Colorado	\$4,820,991,326	51.1%

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

	Jan-Oct 2023	% Change vs Jan-Oct 2022
1 Texas	\$29,228,549,139	20.1%
2 California	\$17,820,174,013	31.9%
3 Florida	\$10,448,586,355	31.7%
4 New York	\$9,512,097,097	-3.2%
5 Illinois	\$6,992,066,031	-6.6%
6 Michigan	\$6,529,354,582	32.2%
7 Pennsylvania	\$6,434,139,461	16.9%
8 Ohio	\$5,784,945,191	16.0%
9 Georgia	\$5,178,113,440	55.5%
10 North Carolina	\$4,875,983,335	-15.2%
11 Colorado	\$4,425,266,572	53.1%
12 Louisiana	\$4,294,966,081	33.1%
13 Minnesota	\$4,250,020,787	-11.6%
14 Virginia	\$4,193,014,714	6.1%
15 Alaska	\$4,144,073,245	319.9%
16 Washington	\$4,064,967,003	-5.7%
17 Indiana	\$3,654,548,333	-15.5%
18 Massachusetts	\$3,640,137,076	44.2%
19 Wyoming	\$3,578,185,446	104.3%
20 New Mexico	\$3,539,910,759	196.2%

Data source and Tables: ConstructConnect.

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

# INSIGHT view of starts statistics

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

	Jan-Oct 2023 (\$ billions)	% Change Jan-Oct 23 vs Jan-Oct 22	% Change Oct 23 vs Oct 22	% Change Oct 23 vs Sep 23
<b>Summary</b>				
CIVIL	200.885	17.3%	22.3%	26.6%
NONRESIDENTIAL BUILDING	317.956	-2.9%	-10.1%	39.9%
RESIDENTIAL	251.709	-23.0%	-35.8%	-16.1%
GRAND TOTAL	770.550	-6.7%	-13.7%	15.0%
<b>Verticals</b>				
Airport	8.460	25.7%	58.3%	36.0%
All Other Civil	21.806	98.5%	73.6%	78.8%
Bridges	20.866	-14.3%	6.2%	60.7%
Dams / Canals / Marine Work	10.080	32.6%	20.4%	40.4%
Power Infrastructure	15.311	68.9%	63.8%	-36.7%
Roads	83.280	10.2%	8.4%	24.1%
Water and Sewage Treatment	41.081	11.2%	23.0%	44.8%
<b>CIVIL</b>	200.885	17.3%	22.3%	26.6%
Offices (private)	19.894	-1.6%	-51.2%	14.3%
Parking Garages	1.590	-14.9%	176.7%	-71.5%
Transportation Terminals	5.768	7.7%	-64.0%	-50.6%
<b>Commercial (small subset)</b>	27.252	-0.7%	-50.0%	-13.5%
Amusement	7.877	19.6%	-17.6%	11.7%
Libraries / Museums	3.978	29.8%	-33.3%	-46.6%
Religious	0.836	-9.1%	-54.7%	11.1%
Sports Arenas / Convention Centers	8.592	46.3%	227.7%	566.5%
<b>Community</b>	21.282	29.4%	33.9%	73.1%
College / University	22.697	38.3%	26.1%	-18.3%
Elementary / Pre School	20.507	8.1%	11.4%	15.8%
Jr / Sr High School	30.199	14.9%	-20.4%	-12.7%
Special / Vocational	1.825	-20.2%	-81.1%	21.7%
<b>Educational</b>	75.228	17.6%	-9.7%	-9.1%
Courthouses	1.774	18.1%	-42.4%	79.9%
Fire and Police Stations	4.132	15.5%	24.2%	38.4%
Government Offices	13.602	19.5%	-27.5%	-6.9%
Prisons	4.954	109.2%	19.4%	-69.4%
<b>Government</b>	24.461	29.9%	-14.2%	-24.2%
Industrial Labs / Labs / School Labs	3.824	-17.5%	65.7%	-32.5%
Manufacturing	77.390	-16.2%	20.7%	290.7%
Warehouses	18.560	-29.5%	-59.7%	-34.6%
<b>Industrial</b>	99.774	-19.1%	5.2%	136.8%
Hospitals / Clinics	17.134	-24.0%	-68.9%	14.3%
Medical Misc.	7.403	-38.1%	150.9%	204.9%
Nursing Homes	2.175	-48.4%	-25.4%	76.4%
<b>Medical</b>	26.712	-31.0%	-45.2%	63.7%
<b>Military</b>	15.018	74.6%	7.8%	28.4%
Hotels	10.193	8.0%	-36.2%	-21.0%
Retail Misc.	5.866	-15.7%	-29.3%	-23.9%
Shopping	12.170	-12.0%	21.0%	50.2%
<b>Retail</b>	28.228	-6.6%	-13.5%	3.5%
<b>NONRESIDENTIAL BUILDING</b>	317.956	-2.9%	-10.1%	39.9%
Multi-Family	84.316	-34.3%	-70.8%	-33.9%
Single-Family	167.393	-15.7%	1.2%	-8.7%
<b>RESIDENTIAL</b>	251.709	-23.0%	-35.8%	-16.1%
<b>NONRESIDENTIAL</b>	518.841	4.0%	-0.2%	34.6%
<b>GRAND TOTAL</b>	770.550	-6.7%	-13.7%	15.0%

Table 1 conforms to the type-of-structure ordering adopted by many firms and organizations in the industry. Specifically, it breaks nonresidential building into ICI work (i.e., industrial, commercial and institutional), since each has its own set of economic and demographic drivers. Table 6 presents an alternative, perhaps more user-friendly and intuitive type-of-structure ordering that matches how the data appears in ConstructConnect's on-line product 'Insight'.

Source: ConstructConnect/Table: ConstructConnect.



## “Top Ten” projects of the month

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

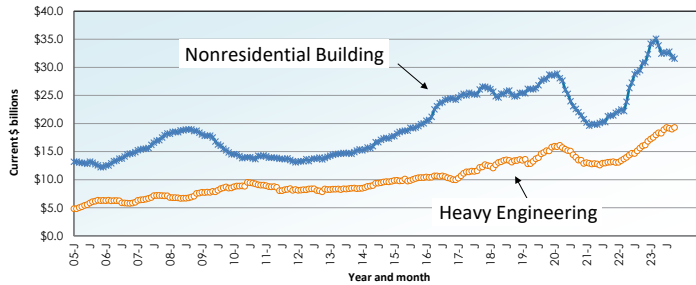
LOCATION (EAST TO WEST)	TYPE OF CONSTRUCTION	DESCRIPTION	SQUARE FEET 000S*	DOLLARS 000,000S
<b>North Carolina</b> Winston Salem	Industrial	Innovation Quarter Phase II (9 structures; 450 units) Research Pkwy Wake Forest University School of Medicine / Wexford Science and Technology LLC	1,500	\$500
<b>Florida</b> Miami	Commercial	Beckham's Miami Freedom Park - United Major League Soccer Stadium (7 structures; 25,750 seats) 1802 NW 37th Ave Mastec North America Inc	1,000	\$1,000
<b>West Virginia</b> Apple Grove	Industrial	Nucor Sheet Mill /Apple Grove (1 structure) Huntington Rd Nucor Corporation	2,000	\$2,700
<b>Tennessee</b> Stanton	Industrial	Magna at BlueOval City Supplier Facilities (2 structures) Blue Oval City Dr Becknell Industrial - Chicago	940	\$750
<b>Wisconsin</b> Milwaukee	Commercial	Northwestern Mutual Milwaukee Headquarters (1 structure; 19 stories) 818 E Mason St Northwestern Mutual Life Insurance Co.	540	\$500
<b>Texas</b> Pecos	Civil/Engineering	Rodeo Ranch Energy Storage Facility / Reeves County (1 structure) Reeves County Plus Power	*	\$488
<b>Colorado</b> Denver	Civil/Engineering	I-70 Floyd Hill to Veterans Memorial Tunnels West Section I-70 Colorado Department of Transportation (CDOT)	*	\$700
<b>Idaho</b> Boise	Industrial	Micron Technology Semiconductor Fabrication Facility (1 structure; 1 story) 8000 S Federal Way Micron Technology Inc	1,500	\$7,000
<b>Arizona</b> Tucson	Industrial	American Battery Factory Manufacturing Plant (1 structure) I-10 & S Rita Rd American Battery Factory	2,000	\$1,200
Avondale	Civil/Engineering	Sierra Estrella Energy Storage Facility (1 structure) W Broadway Rd & S Avondale Blvd Plus Power	*	\$707
<b>TOTALS:</b>			<b>9,480</b>	<b>\$15,545</b>

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

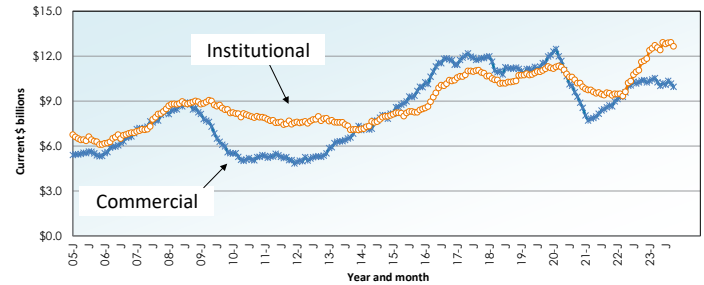
Source: ConstructConnect/Table: ConstructConnect.

## Trend graphs for 12 key categories

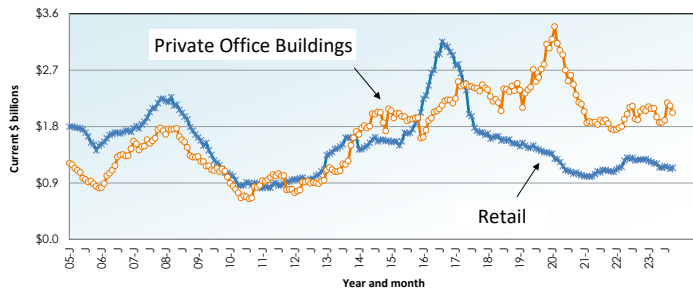
**GRAPH 11: U.S. NONRESIDENTIAL CONSTRUCTION STARTS — ConstructConnect® (12-MONTH MOVING AVERAGES)**



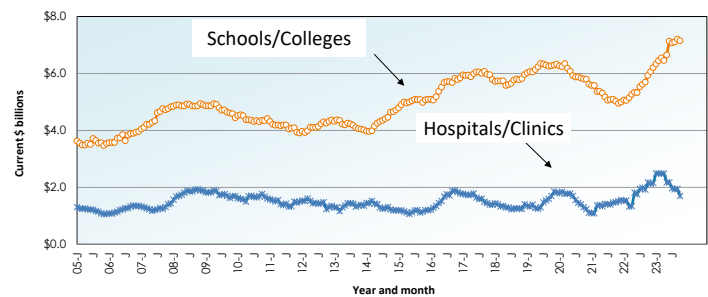
**GRAPH 12: U.S. COMMERCIAL AND INSTITUTIONAL CONSTRUCTION STARTS — ConstructConnect® (12-MONTH MOVING AVERAGES)**



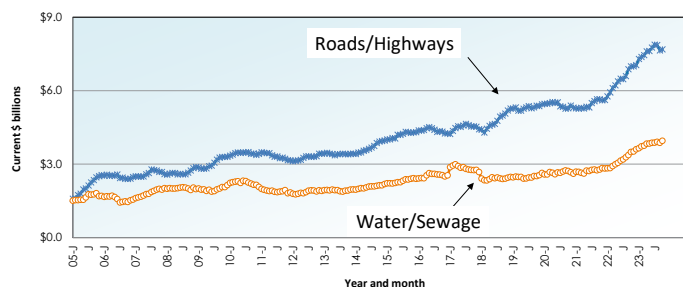
**GRAPH 13: U.S. RETAIL AND PRIVATE OFFICE BUILDING CONSTRUCTION STARTS — ConstructConnect® (12-MONTH MOVING AVERAGES)**



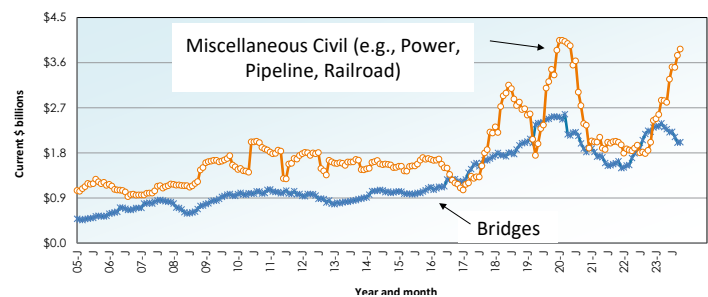
**GRAPH 14: U.S. HOSPITAL/CLINIC AND SCHOOL/COLLEGE CONSTRUCTION STARTS — ConstructConnect® (12-MONTH MOVING AVERAGES)**



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



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



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

Source: ConstructConnect/Charts: ConstructConnect.

## Regional starts table

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

	Jan-Oct 2022	Jan-Oct 2023	% Change
Connecticut	\$2,568,639,129	\$4,107,602,828	59.9%
Maine	\$3,338,864,893	\$1,375,049,647	-58.8%
Massachusetts	\$11,683,989,771	\$11,016,967,016	-5.7%
New Hampshire	\$748,800,533	\$995,060,669	32.9%
Rhode Island	\$1,454,020,379	\$662,126,578	-54.5%
Vermont	\$498,017,530	\$729,776,483	46.5%
<b>Total New England</b>	<b>\$20,292,332,235</b>	<b>\$18,886,583,221</b>	<b>-6.9%</b>
New Jersey	\$8,166,654,034	\$5,630,879,492	-31.1%
New York	\$26,400,651,118	\$27,845,703,991	5.5%
Pennsylvania	\$14,378,699,097	\$13,999,713,261	-2.6%
<b>Total Middle Atlantic</b>	<b>\$48,946,004,249</b>	<b>\$47,476,296,744</b>	<b>-3.0%</b>
<b>TOTAL NORTHEAST</b>	<b>\$69,238,336,484</b>	<b>\$66,362,879,965</b>	<b>-4.2%</b>
Illinois	\$14,362,533,711	\$13,729,908,402	-4.4%
Indiana	\$11,960,693,714	\$14,643,258,851	22.4%
Michigan	\$17,833,798,960	\$12,824,187,246	-28.1%
Ohio	\$11,873,545,729	\$17,391,930,349	46.5%
Wisconsin	\$9,960,983,372	\$7,506,292,141	-24.6%
<b>Total East North Central</b>	<b>\$65,991,555,486</b>	<b>\$66,095,576,989</b>	<b>0.2%</b>
Iowa	\$4,646,512,215	\$5,784,409,198	24.5%
Kansas	\$4,688,119,086	\$8,064,714,990	72.0%
Minnesota	\$8,386,537,433	\$7,219,762,409	-13.9%
Missouri	\$8,094,561,590	\$7,137,948,097	-11.8%
Nebraska	\$5,248,678,411	\$4,607,170,980	-12.2%
North Dakota	\$3,851,018,621	\$3,086,058,795	-19.9%
South Dakota	\$3,802,033,936	\$3,569,801,547	-6.1%
<b>Total West North Central</b>	<b>\$38,717,461,292</b>	<b>\$39,469,866,016</b>	<b>1.9%</b>
<b>TOTAL MIDWEST</b>	<b>\$104,709,016,778</b>	<b>\$105,565,443,005</b>	<b>0.8%</b>
Delaware	\$1,591,052,726	\$1,225,389,095	-23.0%
District of Columbia	\$2,162,359,067	\$2,002,436,545	-7.4%
Florida	\$25,051,614,935	\$25,806,547,086	3.0%
Georgia	\$17,050,217,010	\$15,396,168,520	-9.7%
Maryland	\$6,782,286,849	\$8,148,499,859	20.1%
North Carolina	\$19,039,735,366	\$18,655,573,827	-2.0%
South Carolina	\$7,332,633,275	\$7,252,936,385	-1.1%
Virginia	\$10,213,172,239	\$13,075,331,589	28.0%
West Virginia	\$1,678,269,582	\$5,776,346,530	244.2%
<b>Total South Atlantic</b>	<b>\$90,901,341,049</b>	<b>\$97,339,229,436</b>	<b>7.1%</b>
Alabama	\$7,285,158,632	\$10,689,296,209	46.7%
Kentucky	\$12,965,217,555	\$6,564,980,680	-49.4%
Mississippi	\$2,800,060,237	\$3,440,297,344	22.9%
Tennessee	\$7,448,827,285	\$10,487,371,612	40.8%
<b>Total East South Central</b>	<b>\$30,499,263,709</b>	<b>\$31,181,945,845</b>	<b>2.2%</b>
Arkansas	\$3,123,497,858	\$4,671,938,804	49.6%
Louisiana	\$16,670,671,947	\$8,083,446,379	-51.5%
Oklahoma	\$5,497,156,036	\$6,409,826,791	16.6%
Texas	\$87,632,566,257	\$83,214,559,892	-5.0%
<b>Total West South Central</b>	<b>\$112,923,892,098</b>	<b>\$102,379,771,866</b>	<b>-9.3%</b>
<b>TOTAL SOUTH</b>	<b>\$234,324,496,856</b>	<b>\$230,900,947,147</b>	<b>-1.5%</b>
Arizona	\$8,933,993,135	\$11,791,638,704	32.0%
Colorado	\$6,080,387,016	\$9,246,257,898	52.1%
Idaho	\$2,846,026,916	\$9,163,301,182	222.0%
Montana	\$1,516,327,838	\$1,767,980,319	16.6%
Nevada	\$4,779,606,318	\$4,780,046,756	0.0%
New Mexico	\$2,608,530,588	\$4,891,658,694	87.5%
Utah	\$4,580,219,629	\$5,555,331,451	21.3%
Wyoming	\$2,208,293,803	\$4,339,369,007	96.5%
<b>Total Mountain</b>	<b>\$33,553,385,243</b>	<b>\$51,535,584,011</b>	<b>53.6%</b>
Alaska	\$1,567,495,207	\$4,691,861,660	199.3%
California	\$39,386,853,983	\$40,591,008,802	3.1%
Hawaii	\$1,559,234,958	\$5,138,039,013	229.5%
Oregon	\$4,956,273,575	\$5,559,410,238	12.2%
Washington	\$9,451,387,367	\$8,495,963,398	-10.1%
<b>Total Pacific</b>	<b>\$56,921,245,090</b>	<b>\$64,476,283,111</b>	<b>13.3%</b>
<b>TOTAL WEST</b>	<b>\$90,474,630,333</b>	<b>\$116,011,867,122</b>	<b>28.2%</b>
<b>TOTAL U.S.</b>	<b>\$498,746,480,451</b>	<b>\$518,841,137,239</b>	<b>4.0%</b>

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

	Latest month actuals			Moving averages (placed in end month)						Year to Date	
	Aug 23	Sep 23	Oct 23	Aug 23	3-months Sep 23	Oct 23	Aug 23	12-months Sep 23	Oct 23	Jan-Oct, 2022	Jan-Oct, 2023
Single Family	17,686	17,584	16,058	18,694	18,242	17,110	16,089	16,139	16,155	198,489	167,393
month-over-month % change	-9.1%	-0.6%	-8.7%	-3.5%	-2.4%	-6.2%	-0.4%	0.3%	0.1%		
year-over-year % change	-4.4%	3.6%	1.2%	-4.9%	0.9%	0.0%	-22.3%	-20.7%	-18.9%	-8.7%	-15.7%
Apartment	7,390	7,400	4,893	7,919	7,443	6,561	10,222	9,710	8,722	128,280	84,316
month-over-month % change	-1.9%	0.1%	-33.9%	-7.1%	-6.0%	-11.8%	-6.6%	-5.0%	-10.2%		
year-over-year % change	-53.9%	-45.4%	-70.8%	-44.2%	-45.4%	-57.5%	-8.1%	-16.6%	-29.1%	50.1%	-34.3%
<b>TOTAL RESIDENTIAL</b>	<b>25,076</b>	<b>24,985</b>	<b>20,952</b>	<b>26,613</b>	<b>25,685</b>	<b>23,671</b>	<b>26,311</b>	<b>25,849</b>	<b>24,877</b>	<b>326,768</b>	<b>251,709</b>
month-over-month % change	-7.1%	-0.4%	-16.1%	-4.6%	-3.5%	-7.8%	-2.9%	-1.8%	-3.8%		
year-over-year % change	-27.4%	-18.1%	-35.8%	-21.4%	-19.0%	-27.3%	-17.3%	-19.2%	-22.8%	7.9%	-23.0%
Hotel/Motel	1,422	0,874	0,690	1,555	1,457	0,996	0,988	1,018	0,985	9,434	10,193
month-over-month % change	-31.4%	-38.5%	-21.0%	16.7%	-6.3%	-31.7%	0.1%	3.0%	-3.2%		
year-over-year % change	1.2%	69.8%	-36.2%	14.1%	18.3%	-0.5%	16.9%	22.5%	14.5%	49.3%	8.0%
Retail/Shopping	0,919	0,814	1,223	1,149	1,037	0,985	1,155	1,126	1,143	13,835	12,170
month-over-month % change	-33.3%	-11.4%	50.2%	-6.7%	-9.7%	-5.0%	-1.0%	-2.5%	1.6%		
year-over-year % change	-13.4%	-30.3%	21.0%	1.3%	-5.4%	-8.8%	-8.1%	-11.2%	-10.3%	21.0%	-12.0%
Parking Garages	0,119	0,351	0,100	0,113	0,195	0,190	0,166	0,164	0,169	1,868	1,590
month-over-month % change	2.7%	195.3%	-71.5%	-34.5%	72.5%	-2.7%	-3.7%	-1.4%	3.3%		
year-over-year % change	-39.2%	-7.5%	176.7%	-34.2%	-25.6%	-6.7%	4.9%	-9.6%	-1.7%	18.8%	-14.9%
Amusement	1,047	0,567	0,633	0,830	0,751	0,749	0,785	0,776	0,765	6,586	7,877
month-over-month % change	63.4%	-45.8%	11.7%	25.6%	-9.5%	-0.3%	2.6%	-1.1%	-1.5%		
year-over-year % change	29.3%	-16.0%	-17.6%	8.0%	-7.7%	-0.3%	38.3%	30.7%	24.3%	14.4%	19.6%
Office	4,252	1,083	1,239	3,216	2,716	2,191	2,178	2,131	2,023	20,216	19,894
month-over-month % change	51.2%	-74.5%	14.3%	49.2%	-15.6%	-19.3%	14.7%	-2.2%	-5.1%		
year-over-year % change	370.4%	-34.2%	-51.2%	64.8%	64.6%	29.2%	13.5%	11.8%	-0.9%	21.3%	-1.6%
Governmental Offices	1,730	1,159	1,080	1,727	1,430	1,323	1,335	1,324	1,289	11,378	13,602
month-over-month % change	23.5%	-33.0%	-6.9%	0.4%	-17.2%	-7.5%	2.4%	-0.9%	-2.6%		
year-over-year % change	28.0%	-10.7%	-27.5%	30.6%	9.1%	-4.1%	35.3%	28.8%	18.9%	13.0%	19.5%
Laboratories	0,209	1,125	0,760	0,184	0,506	0,698	0,281	0,316	0,342	4,637	3,824
month-over-month % change	13.8%	438.2%	-32.5%	-16.4%	174.2%	37.9%	-19.8%	12.5%	7.9%		
year-over-year % change	-80.0%	59.9%	65.7%	-71.8%	-27.9%	-5.1%	-20.8%	-22.0%	-20.2%	137.4%	-17.5%
Warehouse	2,588	1,809	1,183	2,093	2,144	1,860	2,131	2,036	1,891	26,344	18,560
month-over-month % change	27.2%	-30.1%	-34.6%	-15.1%	2.5%	-13.2%	1.0%	-4.4%	-7.2%		
year-over-year % change	10.9%	-38.5%	-59.7%	-26.7%	-28.6%	-32.0%	-14.3%	-18.8%	-26.2%	10.5%	-29.5%
Misc Commercial	0,602	0,473	1,513	1,657	0,680	0,863	1,332	1,281	1,342	11,228	14,360
month-over-month % change	-37.6%	-21.4%	219.7%	1.8%	-58.9%	26.8%	0.3%	-3.8%	4.7%		
year-over-year % change	9.2%	-56.1%	92.2%	76.5%	-28.0%	7.2%	-16.6%	-16.3%	0.7%	-0.2%	27.9%
<b>TOTAL COMMERCIAL</b>	<b>12,888</b>	<b>8,256</b>	<b>8,421</b>	<b>12,524</b>	<b>10,916</b>	<b>9,855</b>	<b>10,352</b>	<b>10,173</b>	<b>9,949</b>	<b>105,525</b>	<b>102,069</b>
month-over-month % change	11.0%	-35.9%	2.0%	8.1%	-12.8%	-9.7%	2.7%	-1.7%	-2.2%		
year-over-year % change	33.4%	-20.7%	-24.1%	12.3%	-0.9%	-5.1%	1.8%	-0.8%	-4.1%	18.8%	-3.3%
<b>TOTAL INDUSTRIAL (Manufacturing)</b>	<b>4,962</b>	<b>3,252</b>	<b>12,706</b>	<b>8,003</b>	<b>6,920</b>	<b>6,973</b>	<b>8,949</b>	<b>8,174</b>	<b>8,356</b>	<b>92,306</b>	<b>77,390</b>
month-over-month % change	-60.5%	-34.5%	290.7%	-5.3%	-13.5%	0.8%	0.0%	-8.7%	2.2%		
year-over-year % change	-0.3%	-74.1%	20.7%	-16.6%	-30.9%	-25.4%	20.9%	8.8%	3.1%	206.7%	-16.2%
Religious	0,050	0,062	0,069	0,092	0,076	0,060	0,088	0,086	0,080	0,920	0,836
month-over-month % change	-56.8%	23.7%	11.1%	-15.7%	-18.1%	-20.6%	-7.1%	-2.0%	-8.0%		
year-over-year % change	-61.8%	-25.5%	-54.7%	-5.0%	-15.2%	-50.6%	-5.3%	-9.9%	-10.8%	-13.7%	-9.1%
Hospitals/Clinics	1,041	1,172	1,339	1,091	1,064	1,184	1,929	1,950	1,702	22,557	17,134
month-over-month % change	6.4%	12.6%	14.3%	-31.2%	-2.5%	11.3%	-1.9%	1.1%	-12.7%		
year-over-year % change	-30.4%	27.0%	-68.9%	-47.2%	-45.7%	-47.2%	-3.4%	1.4%	-21.8%	48.6%	-24.0%
Nursing/Assisted Living	0,243	0,172	0,303	0,178	0,193	0,239	0,232	0,221	0,212	4,213	2,175
month-over-month % change	46.8%	-29.3%	76.4%	15.9%	8.5%	23.7%	-12.4%	-4.7%	-3.9%		
year-over-year % change	-61.9%	-43.3%	-25.4%	-63.1%	-58.8%	-46.7%	-47.0%	-47.2%	-46.3%	-22.6%	-48.4%
Libraries/Museums	0,729	0,533	0,284	0,582	0,548	0,515	0,369	0,387	0,375	3,064	3,978
month-over-month % change	91.4%	-27.0%	-46.6%	39.3%	-5.9%	-5.9%	10.4%	4.8%	-3.1%		
year-over-year % change	134.5%	67.2%	-33.3%	90.9%	66.0%	46.4%	9.5%	39.7%	24.1%	1.3%	29.8%
Fire/Police/Courthouse/Prison	0,894	1,741	1,119	1,513	1,823	1,251	0,950	1,018	1,022	7,449	10,859
month-over-month % change	-68.5%	94.8%	-35.7%	4.6%	20.5%	-31.4%	-0.8%	7.2%	0.4%		
year-over-year % change	-9.5%	89.0%	4.3%	74.0%	102.2%	25.9%	42.7%	45.8%	39.7%	16.2%	45.8%
Military	1,344	1,215	1,560	2,184	1,235	1,373	1,363	1,336	1,345	8,602	15,018
month-over-month % change	17.3%	-9.7%	28.4%	4.5%	-43.4%	11.2%	4.3%	-2.0%	0.7%		
year-over-year % change	99.9%	-20.9%	7.8%	284.3%	29.3%	12.7%	73.7%	58.7%	53.3%	18.2%	74.6%
Schools/Colleges	7,375	6,345	5,764	9,234	6,825	6,495	7,107	7,202	7,150	63,954	75,228
month-over-month % change	9.2%	-14.0%	-9.1%	-8.2%	-26.1%	-4.8%	0.4%	1.3%	-0.7%		
year-over-year % change	5.0%	21.9%	-9.7%	24.7%	4.3%	4.7%	26.6%	26.5%	20.6%	21.4%	17.6%
Misc Medical	1,021	0,395	1,205	0,776	0,674	0,874	0,854	0,706	0,766	11,957	7,403
month-over-month % change	68.8%	-61.3%	204.9%	21.7%	-13.2%	29.7%	4.7%	-17.4%	8.6%		
year-over-year % change	83.4%	-81.8%	150.9%	-60.0%	-43.0%	-18.4%	-15.6%	-36.6%	-30.5%	92.8%	-38.1%
<b>TOTAL INSTITUTIONAL</b>	<b>12,698</b>	<b>11,634</b>	<b>11,644</b>	<b>15,650</b>	<b>12,438</b>	<b>11,992</b>	<b>12,892</b>	<b>12,906</b>	<b>12,653</b>	<b>122,717</b>	<b>132,631</b>
month-over-month % change	-2.2%	-8.4%	0.1%	-5.2%	-20.5%	-3.6%	0.6%	0.1%	-2.0%		
year-over-year % change	7.4%	1.5%	-20.7%	13.9%	0.0%	-5.2%	17.8%	16.7%	9.0%	26.2%	8.1%
Misc Non Residential	0,501	0,604	0,460	0,562	0,573	0,522	0,611	0,591	0,575	6,956	5,866
month-over-month % change	-18.5%	20.7%	-23.9%	-11.6%	2.0%	-9.0%	-4.9%	-3.2%	-2.7%		
year-over-year % change	-42.8%	-28.0%	-29.3%	-29.5%	-33.5%	-33.8%	-3.7%	-9.5%	-12.9%	29.8%	-15.7%
<b>TOTAL NON-RES BUILDING</b>	<b>31,049</b>	<b>23,746</b>	<b>33,230</b>	<b>36,739</b>	<b>30,848</b>	<b>29,342</b>	<b>32,803</b>	<b>31,843</b>	<b>31,533</b>	<b>327,505</b>	<b>317,956</b>
month-over-month % change	-17.7%	-23.5%	39.9%	-1.2%	-16.0%	-4.9%	1.0%	-2.9%	-1.0%		
year-over-year % change	13.6%	-32.6%	-10.1%	4.1%	-10.1%	-11.6%	12.5%	8.0%	2.6%	47.8%	-2.9%
Airports	0,787	0,666	0,906	1,025	0,716	0,786	0,791	0,752	0,780	6,731	8,460
month-over-month % change	13.1%	-15.3%	36.0%	-9.9%	-30.1%	9.8%	1.9%	-4.9%	3.7%		
year-over-year % change	29.4%	-41.1%	58.3%	23.0%	-18.1%	2.0%	47.4%	27.0%	29.2%	43.5%	25.7%
Roads/Highways	7,460	5,643	7,002	8,833	7,424	6,702	7,861	7,639	7,684	75,545	83,280
month-over-month % change	-18.6%	-24.4%	24.1%	-7.7%	-15.9%	-9.7%	-0.2%	-2.8%	0.6%		
year-over-year % change	-2.2%	-32.1%	8.4%	12.5%	-6.0%	-10.3%	19.3%	11.2%	9.9%	27.9%	10.2%
Bridges	1,822	1,376	2,212	1,840	1,740	1,803	2,116	2,004	2,015	24,352	20,866
month-over-month % change	-9.9%	-24.4%	60.7%	-8.6%	-5.5%	3.7%	-4.8%	-5.3%	0.5%		
year-over-year % change	-41.0%	-49.2%	6.2%	-25.6%	-31.9%	-31.4%	3.0%	-7.9%	-10.1%	57.7%	-14.3%
Dams/Marine	1,314	0,805	1,130	0,909	0,979	1,083	0,978	0,975	0,991	7,605	10,080
month-over-month % change	61.1%	-38.7%	40.4%	37.2%	7.7%	10.7%	-2.9%	-0.4%	1.6%		
year-over-year % change	-20.8%	-4.9%	20.4%	-2.1%	-8.7%	-5.6%	16.7%	17.5%	18.9%	23.7%	32.6%
Water/Sewage	4,156	3,458	5,006	4,364	3,978	4,207	3,902	3,871	3,949	36,960	41,081
month-over-month % change	-3.8%	-16.8%	44.8%	-2.4%	-8.8%	5.7%	0.7%	-0.8%	2.0%		
year-over-year % change	8.1%	-9.7%	23.0%	6.2%	0.5%	7.5%	19.0%	15.1%	13.1%	27.7%	11.2%
Misc Civil (Power, etc.)	2,051	3,787	3,668	5,139	3,754	3,168	3,505	3,744	3,869	20,049	37,118
month-over-month % change	-62.2%	84.7%	-3.1%	4.6%	-27.0%	-15.6%	-0.2%	6.8%	3.3%		
year-over-year % change	-4.5%	311.9%	68.9%	119.2%	103.2%	81.5%	93.2%	109.8%	109.4%	-6.1%	85.1%
<b>TOTAL ENGINEERING (Civil)</b>	<b>17,590</b>	<b>15,735</b>	<b>19,925</b>	<b>22,110</b>	<b>18,591</b>	<b>17,750</b>	<b>19,154</b>	<b>18,986</b>	<b>19,288</b>	<b>171,242</b>	<b>200,885</b>
month-over-month % change	-21.6%	-10.5%	26.6%	-2.9%	-15.9%	-4.5%	-0.6%	-0.9%	1.6%		
year-over-year % change	-7.3%	-11.4%	22.3%	19.2%	2.1%	0.4%	26.7%	21.6%	20.5%	26.3%	17.3%
<b>GRAND TOTAL</b>	<b>73,715</b>	<b>64,466</b>	<b>74,107</b>	<b>85,462</b>	<b>75,123</b>	<b>70,763</b>	<b>78,267</b>	<b>76,679</b>	<b>75,698</b>	<b>825,515</b>	<b>770,550</b>
month-over-month % change	-15.5%	-12.5%	15.0%	-2.7%	-12.1%	-5.8%	-0.8%	-2.0%	-1.3%		
year-over-year % change	-8.8%	-22.8%	-13.7%	-2.5%	-10.8%	-15.2%	2.9%	-0.5%	-4.1%	25.1%	-6.7%
<b>NON-RES BLDG + ENGINEERING</b>	<b>48,638</b>	<b>39,482</b>	<b>53,155</b>	<b>58,489</b>	<b>49,438</b>	<b>47,092</b>	<b>51,957</b>	<b>50,829</b>	<b>50,821</b>	<b>498,746</b>	<b>518,841</b>
month-over-month % change	-19.2%	-18.8%	34.6%	-1.8%	-16.0%	-4.7%	0.4%	-2.2%	0.0%		
year-over-year % change	5.0%	-25.5%	-0.2%	9.3%	-5.9%						