

December 2022 (based on November 2022 Starts Stats)

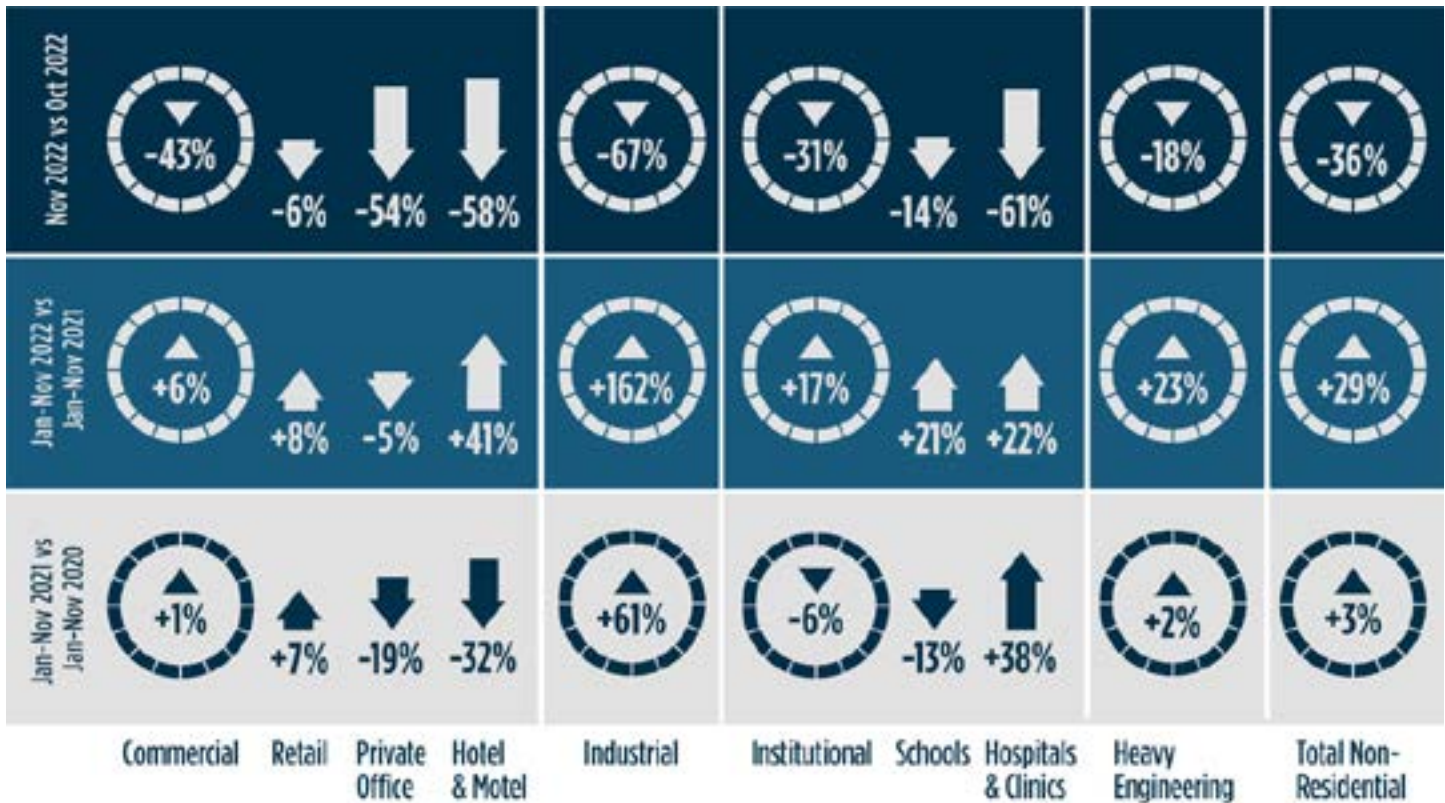
Construction Industry Snapshot

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November's Nonresidential Construction Starts -36% M/M, -9% Y/Y & +29% Ytd

ConstructConnect announced today that Nov 2022's volume of construction starts, excluding residential work, was \$31.1 billion, a decline of -36.3% compared with Oct's figure of \$48.9 billion. Seasonality and fewer mega projects were factors in the dropoff.

November 2022 compared with November 2021 was -8.6%. The year-to-date performance of nonresidential starts has been +28.7% vs Jan-Nov 2021. Through Nov 2022, grand total starts (i.e., including residential) were +15.0%.



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November's Nonresidential Construction Starts -36% M/M, -9% Y/Y & +29% Ytd

Mega Projects Take a Back Seat in November

ConstructConnect announced today that October 2022's volume of construction starts, excluding residential work, was \$31.1 billion (green shaded box, bottom of page 11), a decline of -36.3% compared with October's figure of \$48.9 billion (originally reported as \$47.5 billion; the difference coming mainly in the multi-unit residential sub-category of starts).

Two factors contributing to the month-to-month drop-off were seasonality (i.e., fewer 'starts' in colder weather) and a reduced contribution made by mega projects (i.e., projects of a billion dollars or more each). There were two mega project starts in the latest month, but they were both at the low-end dollar threshold and, at \$2.1 billion combined, were not a match for the \$9.4 billion wrapped up in three such groundbreakings in October.

November's two mega projects (see Top 10 list, page 8) were a carbon capture and storage facility in Texas and a solar power plant in Las Vegas, Nevada. The former as a category of structure is often referred to as a CCUS facility, standing for CO₂ capture, utilization, and sequestration. The Texas project also carries the acronym DAC for direct air capture. To be located in the Permian shale rock and fossil fuel basin, large fans will draw in air and, by means of chemical processes, extract CO₂, which will either be pumped underground for insertion in spongy rock formations or be used as a base ingredient in some manufactured products.

The year-to-date total dollar volume for mega project starts is now \$85.9 billion (from 27 projects), already beating the previous high of \$79.1 billion (from 35 projects), which was set during the full year, 2019.

November 2022's total dollar volume of non-residential construction starts was -8.6% when compared with November 2021's figure. Singing a far sweeter note, though, total nonresidential starts on a year-to-date basis, have been +28.7% versus January to November of last year.

To complete the starts picture, the GRAND TOTAL dollar volume (i.e., adding residential to nonresidential activity) in November 2022 was -31.1% m/m and -18.2% y/y, but +15.0% ytd.

An Extensive Pullback in Starts by Categories M/M

There are three major sub-categories of total starts: residential, nonresidential building and heavy engineering/civil. On a year-to-date percentage-change basis in November, nonresidential building starts were in first place, up by about a third, +32.3%. In second place, not too far back, were heavy engineering/civil starts, +22.9%. In last position and performing poorly were residential starts, -11%.

On a month-to-month basis in November, none of the three categories had anything to brag about. Nonresidential buildings recorded the steepest decline, -45.1%, followed by residential, at -22.6%, and engineering, -17.7%. It wasn't just seasonality and a lack of mega projects that were the downfall of November's starts. There was a pretty general pulling back of new construction project initiations. Fears of recession tied to the Fed's interest rate increases are causing some owners to hesitate when pressed on the question of pushing the button on go-aheads.

TTM Grand Total Starts Show Signs of Wavering

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

Grand Total TTM starts in November, at -1.3% on a month-to-month basis, highlighted some

developing weakness, after they were +1.7% in October and +0.9% in September.

On a year-over-year basis in November, Grand Total TTM starts, at +14.8%, were slower off the mark than in either October, +17.3%, or September, +15.6%.

A Reversal of Importance in the PIP Stats

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

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

During the past several years, however, there has been a dramatic change in the first- to second- place ordering. In 2021's full year PIP results, the residential to nonresidential relationship was about half and half. Through October of the present year, 2022, it's been residential claiming the larger share of the total, 51.8%, with nonresidential left holding the smaller 48.2%.

The January-October 2022 over January-October 2021 total dollar volume of PIP construction was +10.8%. Residential, at +16.4% ytd, remained far ahead of nonresidential, +5.3% ytd. But the latter included one type-of-structure sub-category that was laying out an impressive path forward, manufacturing at +30.0% ytd.

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, ConstructCon-

Continued on page 3

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

	Jan-Nov 2022 (\$ billions)	% Change Jan-Nov 22 vs Jan-Nov 21	% Change Nov 22 vs Nov 21	% Change Nov 22 vs Oct 22
Hotel/Motel	9.490	40.5%	-6.4%	-57.7%
Retail/Shopping	13.293	7.6%	-12.6%	-6.2%
Parking Garage	2.065	23.8%	83.7%	243.1%
Amusement	6.996	13.8%	32.3%	30.6%
Private Office	18.544	-5.0%	-66.3%	-53.5%
Government Office	12.451	13.6%	8.0%	-37.1%
Laboratory	4.280	90.3%	-6.8%	-5.7%
Warehouse	25.184	-5.7%	-68.5%	-63.1%
Miscellaneous Commercial *	11.293	-4.7%	-1.3%	-31.4%
COMMERCIAL (big subset)	103.596	5.5%	-40.1%	-43.0%
INDUSTRIAL (Manufacturing)	88.207	162.1%	-9.9%	-67.3%
Religious	0.897	-24.2%	-60.0%	-63.2%
Hospital/Clinic	21.227	21.9%	-39.8%	-61.2%
Nursing/Assisted Living	3.722	-34.1%	-46.9%	-66.5%
Library/Museum	3.303	2.9%	2.1%	-60.5%
Fire/Police/Courthouse/Prison	8.250	18.2%	50.3%	-19.4%
Military	9.672	14.4%	-19.4%	-35.0%
School/College	67.838	21.0%	45.7%	-13.9%
Miscellaneous Medical	8.511	26.5%	5.0%	32.3%
INSTITUTIONAL	123.418	16.8%	7.0%	-31.3%
Miscellaneous Non-residential	6.768	14.6%	-18.4%	-17.1%
NONRESIDENTIAL BUILDING	321.989	32.3%	-16.6%	-45.1%
Airport	6.798	37.6%	41.9%	-37.2%
Road/Highway	79.765	24.8%	4.5%	-11.1%
Bridge	25.811	51.6%	-20.9%	-42.6%
Dam/Marine	8.384	11.0%	-21.8%	17.3%
Water/Sewage	39.913	26.3%	14.0%	-25.5%
Miscellaneous Civil (power, pipelines, etc.)	21.064	-7.5%	45.6%	-5.7%
HEAVY ENGINEERING (Civil)	181.735	22.9%	5.8%	-17.7%
TOTAL NONRESIDENTIAL	503.724	28.7%	-8.6%	-36.3%

* Includes transportation terminals and sports arenas.

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



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

nect, 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 Unemployment Stays Minimal

Construction's share of U.S. total non-farm employment in the monthly labor market report issued by the Bureau of Labor Statistics (BLS) is slightly more than 5.0%. To claim its proportional share of November's economy-wide number-of-jobs increase of +263,000, the figure for construction would have needed to be +13,000. Instead, it was a better +20,000.

The monthly average increase in construction employment through the first 11 months of this year has been +19,000, nicely outpacing last year's comparable figure of +13,000.

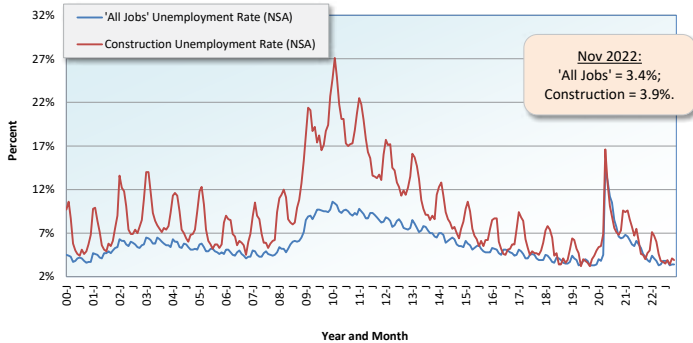
Construction's not seasonally adjusted (NSA) unemployment rate in November was 3.9%, down from October's 4.1% and notably tighter than November of last year's 4.7%.

The latest NSA U rate for construction of 3.9% is a little above the nation's 'all jobs' figure of 3.4%. It's also a rung or two higher than manufacturing's barely-there 2.7%. Both the manufacturing and construction sectors are in the goods-producing segment of the economy (i.e., as opposed to services-producing) and there is considerable overlap between their labor pools.

In the latest month, the U.S. construction sector achieved the same year-over-year advance in number of employees as 'all jobs', +3.3%. The staffing increase by manufacturers was a whisker faster, +3.4%. Private sector services employment was +3.7% y/y. Among all services sub-sectors, 'leisure and hospitality' achieved the greatest y/y pickup in jobs count, +7.3%.

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

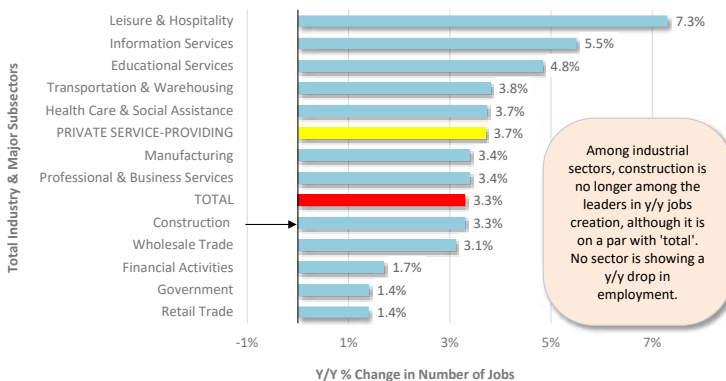


There used to be wide seasonal discrepancies between the unemployment rates for 'all jobs' and for construction, indicating that a career in the latter was more precarious. In recent times, though, the gap has largely disappeared, which should be a help in **recruiting drives** to sign up more onsite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

Current through November, 2022.

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

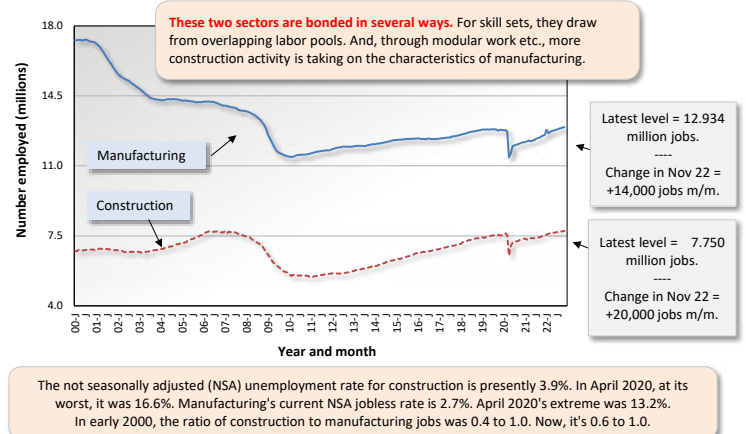
GRAPH 5: Y/Y JOBS CHANGE, U.S. TOTAL INDUSTRY & MAJOR SUBSECTORS — NOVEMBER 2022 (BASED ON SEASONALLY ADJUSTED PAYROLL DATA)



November 2022's y/y changes in employment within the pandemic's initially hardest-hit sector, 'leisure & hospitality', were: 'hotels/motels', +10.2%; 'amusements/gambling', +8.0%; and 'restaurants & bars', +6.6%.

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

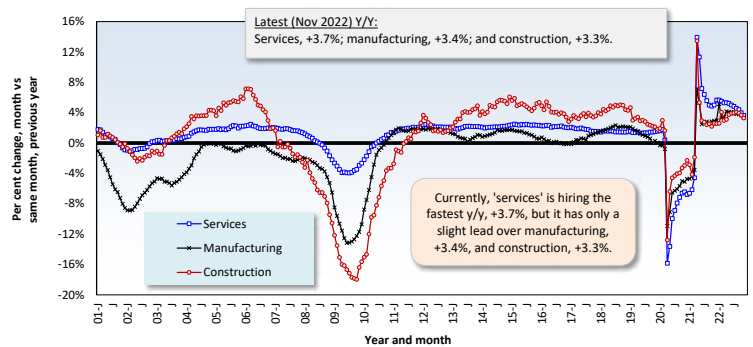
GRAPH 2: U.S. MANUFACTURING VS CONSTRUCTION EMPLOYMENT NOVEMBER, 2022 — SEASONALLY ADJUSTED (SA) PAYROLL DATA



Latest data points are for November, 2022.

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

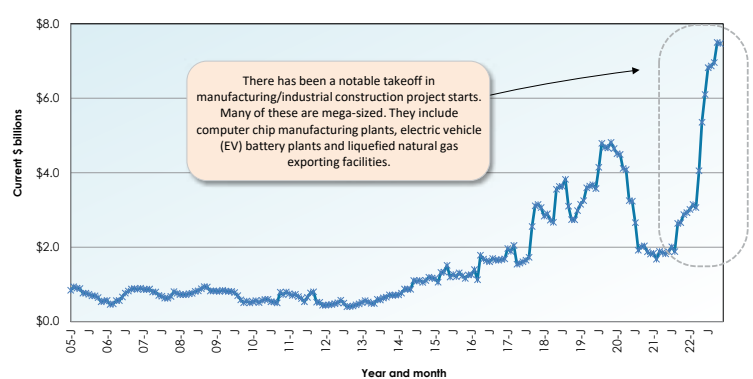
GRAPH 4: U.S. EMPLOYMENT NOVEMBER 2022 — % CHANGE Y/Y BASED ON SEASONALLY ADJUSTED (SA) DATA



The latest data points are for November, 2022.

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

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



The last data point is for November 2022.

Data source: ConstructConnect. Graph: ConstructConnect.

Continued from page 3

In other segments of the economy with close ties to construction, the latest y/y percentage changes in employment have been as follows: oil and gas exploration and development, +12.1%; architectural and engineering design services, +5.5%; cement and concrete product manufacturing, +3.3%; machinery and equipment rental and leasing, +3.0%; real estate, +2.8%; and building materials and supplies dealers, 0.0%.

Design services work at architectural and engineering firms leads into later onsite activity. Therefore, the +5.5% jobs jump for the industry is a positive sign concerning future in-the-field employment. The press release accompanying the latest Architecture Billings Index (ABI) from the American Institute of Architects (AIA) notes that the sector is continuing to be supported by “near record levels of backlogs”. But as for the ABI’s reading in November, it took another turn in the wrong direction, landing at 46.6, after descending to 47.7 in October. For the ABI, above or below 50.0 is the demarcation point that separates more from fewer sales month to month.

Pluses and Minuses among Type of Structure Sub-categories

The -36.3% month-to-month (m/m) drop in November’s total nonresidential starts resulted from declines in all the major type-of-structure sub-categories, with industrial retreating the most (-67.3%), followed by commercial (-43.0%), institutional (-31.3%), then engineering (-17.7%).

The -8.6% step back in total nonresidential starts in November of this year versus November of last year (y/y) was due mainly to a big chunk taken out of commercial (-40.1%), with industrial down as well (-9.9%). Institutional (+7.0%) and engineering (+5.8%) were quite alright.

November’s +28.7% year-to-date (ytd) advance in total nonresidential starts was thanks to an astonishing jump in industrial (+162.1%), a good leap forward by engineering (+22.9%), a decent gain by institutional (+16.8%), and a modest uptick by commercial (+5.5%).

There are two dominant sub-categories of total nonresidential starts. When the volumes of ‘roads/highways’ and ‘schools/colleges’ are added together, they accounted for 29.3% of November’s total nonresidential starts ytd (i.e., shares of 15.8% and 13.5% respectively).

The three percentage-change metrics for street starts in November 2022 were -11.1% m/m, but +4.5% y/y, and +24.8% ytd. For educational facility starts, the results were -13.9% m/m, but +45.7% y/y and +21.0% ytd. At the various levels of education, the ‘pre-school and elementary’ grouping has done best year to date, +38.0%, although the ‘colleges and universities’ designation can’t complain either, +17.4%.

Important beyond roads within the engineering sub-category are ‘water/sewage’ and ‘bridge’ starts. The results for the former in November were -25.5% m/m, but +14.0% y/y and +26.3% ytd. For the latter, there were downturns of -42.6% m/m and -20.9% y/y, but the ytd change was cheery nonetheless, +51.6%.

Important beyond schools in institutional are three medical sub-categories – i.e., ‘hospitals/clinics’, ‘nursing/assisted living’ and ‘miscellaneous medical’. Their combined starts in November 2022 were -52.3% m/m and -32.3% y/y, but +12.3% ytd. On their own, ‘hospital/clinic’ starts in the latest month were -61.2% m/m and -39.8% y/y, but +21.9% ytd.

Also performing well within institutional to date this year have been the ‘police station/fire hall’ (+38.7% ytd) and ‘prisons’ (+24.5% ytd) sub-categories of starts.

Among commercial starts in November, the ‘hotel/motel’ designation was weak m/m (-57.7%), but surprisingly upbeat ytd (+40.5%). Other sub-categories with notable gains ytd were ‘laboratories’ (+90.3%), ‘amusement’ (+13.8%), ‘government offices’ (+13.6%), and ‘retail/shopping’ (+7.6%). On a ytd basis, ‘private offices’ and ‘warehouses’ were off to about the same degree, -5.0% and -5.7% respectively.

Finally, there’s the most dramatic number of all (from Table 1) to place in the spotlight, the +162.1% ytd improvement in industrial/manufacturing. 2022, with only one month still to go, has been overflowing with initiations of giant-sized projects in EV

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

	Jan-Nov 2022 (\$ billions)	% Change vs Jan-Nov 2021
Sports Stadiums/Convention Centers	\$5.380	-4.7%
Transportation Terminals	\$5.913	-4.8%
Courthouses	\$1.674	-17.2%
Police Stations & Fire Halls	\$3.952	38.7%
Prisons	\$2.624	24.5%
Pre-School/Elementary	\$20.594	38.0%
Junior & Senior High Schools	\$28.432	12.9%
K-12 (sum of above two categories)	\$49.026	22.2%
Special & Vocational Schools	\$2.170	21.9%
Colleges & Universities	\$16.642	17.4%
Electric Power Infrastructure	\$8.974	0.6%

Source: ConstructConnect/Table: ConstructConnect.

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

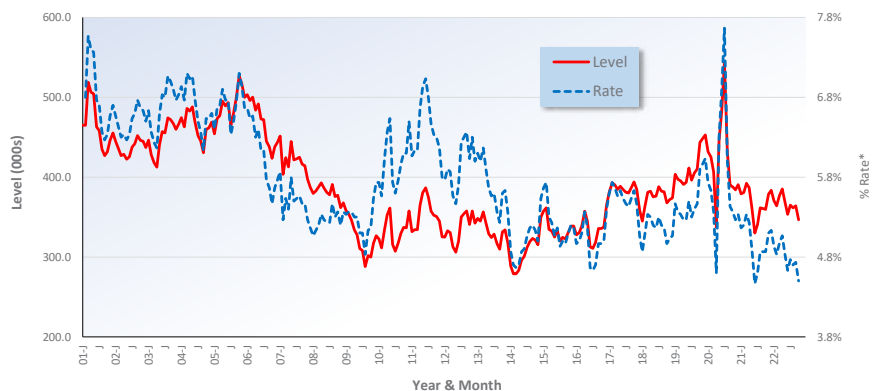


Total job openings economy-wide, both as a level and rate, have been trending down lately. Construction sector openings, however, according to both measures, have remained high.

*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 October 2022. ... JOLTS = Job Openings and Labor Turnover Survey.

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

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



Hires as a level in the construction sector are soft and sliding. As a rate, they’re at a record low. Contractors have struggled to fill openings, but now there may be reluctance to hire with uncertainty about a recession.

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

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

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

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battery production, semiconductor chipmaking, and natural gas compression (i.e., as LNG) and exporting.

Slopes of Trend Lines Striving to Stay Upbeat

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

During 2022, the curve for 'nonresidential buildings' has been showing more uplift than the one for 'engineering'. 'Institutional' has been climbing better than 'commercial'. The 'private office building' curve hasn't managed a turnaround improvement yet, but long-suffering 'retail' is indicating a leveling out.

'Schools/colleges' have taken on a nice upwards slope. 'Hospitals/clinics' have not yet broken away from a sideways path. 'Roads/highways', 'water/sewage' and 'bridges' have all been trending upwards of late. 'Miscellaneous' civil is awaiting another surge from a still-to-be-identified ultra-large project.

Factors at Play in Conflicting JOLTS Results

For ease of viewing, Graphs 7 and 8 show 'smoothed' curves (i.e., based on three-month moving averages, placed in the latest month) for the Job Openings and Labor Turnover Survey (JOLTS) results pertaining to construction industry 'openings' and 'hires'.

As Graph 7 makes clear, vacant positions (i.e., job 'openings') in the construction sector continue to be high. But there hasn't been much success in rectifying the situation through 'hires' (Graph 8). There are a couple of factors at play. The nation's unemployment rate is hovering near a record low and there's an extreme shortage of willing and available workers. Additionally, worries about recession and how deep it may become and how long it may last are undoubtedly causing employers, in the present moment, to be wary about taking on staff too aggressively.

Stellar Wage Increases Continue

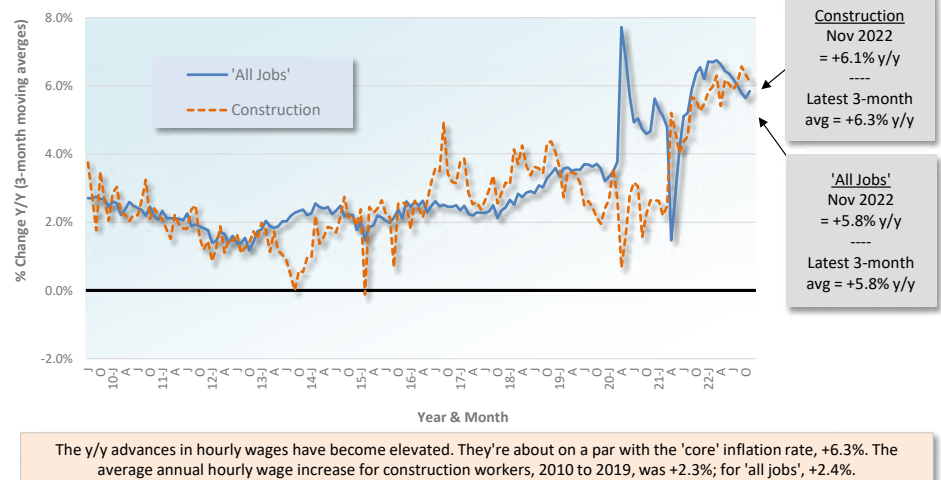
Tables B-3 and B-8 of the monthly *Employment Situation* report, from the BLS, record average hourly and average weekly wages for industry sectors. B-3 is for all employees (i.e., including bosses) on non-farm payrolls. B-8 is for 'production and non-supervisory personnel' only (i.e., it excludes bosses).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

From November 2022's Table B-3 (including bosses), y/y all-jobs earnings were +5.1% hourly and +3.9% weekly. Construction workers, as a subset of 'all jobs', did better on both fronts, +5.8% hourly and +4.1% weekly. From Table B-8 for production and non-supervisory workers (i.e., excluding bosses), the y/y all-jobs paycheck advances were +5.8% hourly and +4.9% weekly. Construction workers jogged ahead a bit hourly, +6.1%, but fell back a tad weekly, +4.5%.

Some Material Cost Increases Have Lost their Sting

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

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

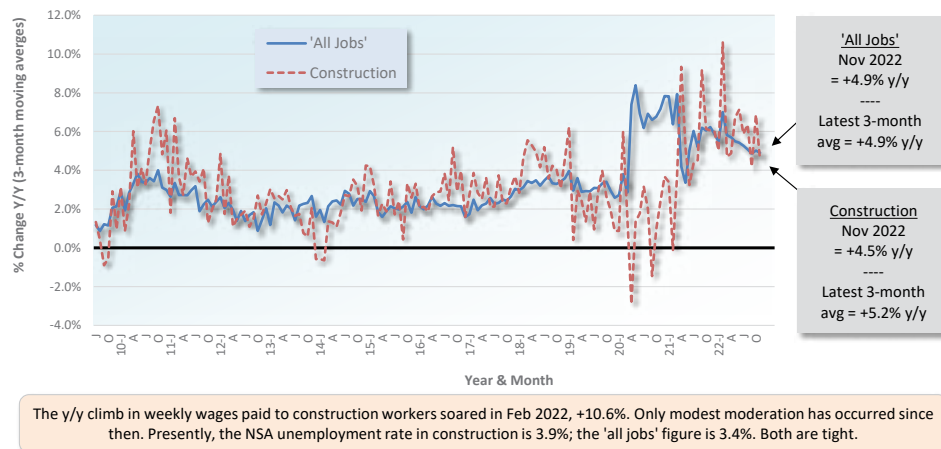


From 'Production Workers and Non-supervisory Personnel' Table (B8).

The latest data points are for November, 2022.

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

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



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

The latest data points are for November, 2022.

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

(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.

Concerning the cost of some major construction material inputs, as revealed in the PPI data set for November 2022 from the BLS, some of the y/y increases have lost their sting. That's not the case for No. 2 diesel fuel, however, +59.6%. Other noteworthy changes have been: gypsum, +16.6%; cement, +12.9%; ready-mix concrete, +12.3%; hot rolled steel bars, plates and structural shapes, +7.1%; asphalt, +3.9%; softwood lumber, -3.9%; copper wire and cable, -12.1%; and aluminum mill shapes, -12.7%. There's an 'inputs to highways and streets' PPI index and it's +10.7% y/y.

The value of construction starts each month is derived from ConstructConnect's database of all active construction projects in the U.S. Missing project values are estimated with the help of RSMeans' building cost models. ConstructConnect's non-residential construction starts series, because it is comprised of total-

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

November 2022's 'Grand Total' Starts +15.0% Ytd

From Table 6 on page 7 (also Table 9 on page 11) of this report, ConstructConnect's total residential starts in November 2022 were -22.6% m/m, -28.4% y/y, and -1.1% ytd. Multi-family starts were -54.5% m/m and -44.7% y/y, but +19.2% ytd. Single-family starts were +4.1% m/m, -19.7% y/y and -9.4% ytd.

Including home building with all non-residential categories, **Grand Total** starts in November 2022 were -31.1% m/m and -18.2% y/y, but +15.0% 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.

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Will Fed's Latest Policy Adjustment Lead to Soft Landing?

Economic data released as of mid-December, representing November's activity, pointed to an economy that is normalizing after years of disruptions. The latest broad-based U.S. inflation reading at an annualized +7.1% marked the fifth consecutive month of slowing price increases, down from June's +9.1%. Slowing inflation is presently resulting from both weakening demand and increasing supply.

Demand as measured by ConstructConnect's Expansion Index has been pointing to generally accelerating starts data in the U.S.; however, in Canada, the last 12 months of expansion readings have generally trended lower after reaching a high of 1.22 in late 2021. The latest Canadian figure of 1.06, once inflation is factored in, could even signal a contraction in real Canadian construction spending. The divergence in national activity trends may be a matter of U.S. starts data, which is measured in dollars, being heavily influenced by billion-dollar or more 'mega' projects. In the U.S., mega projects presently constitute a historically high percentage of all construction starts dollars despite their relatively small count.

The Architectural Billings Index (ABI), produced by the American Institute of Architects (AIA), upholds this view. For much of 2022, architecture firm activity via the ABI has signaled slowing expansion. Break-even is represented by a level of '50'. Unfortunately, October's and November's Billings, and Design Contracts activity readings both fell below '50'. This is ominous for the construction industry because architecture activity is generally considered to be a leading indicator of future onsite construction work.

The other determinant of prices: production and supplies, appears to have generally recovered from COVID's disruptions. The inventory-to-sales ratio of construction materials has returned to the upper bounds of historic levels. The implication is that material availability, measured broadly, is generally no longer a constraint to the operations of construction firms.

Transportation activity measures similarly point to reduced stress on logistics networks after two years of bottlenecks. The Port of Los Angeles and Long Beach in late November had no ships waiting for berths for the first time since COVID initially reared up. Measures of trucking and rail congestion similarly have been trending lower for much of the year.

This combination of tepid demand and a well-stocked supply chain should predispose industry leaders toward creating strategic inventory plans that increase turnover and preserve free cash.

Michael Guckes, Senior Economist

Expansion Index Monitors Construction Prospects

A rule of thumb is that nonresidential construction is a lagging indicator among economic measures. Companies are hesitant to undertake capital spending until their personnel needs are rapidly expanding and their office square footage or plant footprints are straining capacity. Plus, it helps if profits are abundant. Also, today's greater tendency to work from home has made office occupancy and the resulting need for construction much more difficult to assess. The 'rule', however, may not hold true under the present circumstances, with the weakness in such areas as retail capital spending to be offset by a rich deposit of large industrial and engineering construction projects to mine.

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.

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

	Jan-Nov 2022	% Change vs Jan-Nov 2021
1 Texas	\$89,865,896,497	91.6%
2 California	\$36,661,342,064	4.8%
3 New York	\$26,118,334,116	24.8%
4 Florida	\$24,556,956,563	4.8%
5 North Carolina	\$19,388,027,530	37.3%
6 Georgia	\$18,431,001,277	71.6%
7 Michigan	\$18,217,392,619	111.8%
8 Louisiana	\$16,862,450,097	121.0%
9 Illinois	\$15,358,982,290	18.0%
10 Pennsylvania	\$14,345,519,935	10.7%
11 Massachusetts	\$12,200,392,355	14.6%
12 Indiana	\$11,935,087,884	42.5%
13 Kentucky	\$11,305,154,215	119.7%
14 Ohio	\$11,128,591,935	-21.4%
15 Virginia	\$10,155,885,173	9.3%
16 Washington	\$9,877,079,984	29.4%
17 Wisconsin	\$9,257,518,197	19.1%
18 Missouri	\$8,705,830,758	6.1%
19 Minnesota	\$8,651,234,651	-12.6%
20 New Jersey	\$8,540,729,140	21.0%

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

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

	Jan-Nov 2022	% Change vs Jan-Nov 2021
1 Texas	\$64,123,528,885	130.1%
2 California	\$22,412,182,141	4.2%
3 Florida	\$16,061,193,602	4.9%
4 New York	\$15,593,956,380	14.7%
5 Georgia	\$14,795,785,098	103.7%
6 Louisiana	\$13,372,838,184	154.2%
7 North Carolina	\$13,289,449,366	25.5%
8 Michigan	\$13,022,792,656	199.2%
9 Massachusetts	\$9,276,954,716	74.5%
10 Kentucky	\$9,260,804,134	164.0%
11 Pennsylvania	\$8,582,553,653	-3.1%
12 Indiana	\$7,385,186,185	41.2%
13 Illinois	\$7,188,123,559	1.7%
14 Ohio	\$6,113,573,116	-35.2%
15 Arizona	\$6,097,717,822	-58.0%
16 Virginia	\$5,952,503,226	-6.8%
17 Washington	\$5,876,566,683	21.5%
18 Wisconsin	\$5,448,276,523	32.1%
19 Missouri	\$5,311,132,354	-6.0%
20 Tennessee	\$4,872,684,415	-27.2%

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

	Jan-Nov 2022	% Change vs Jan-Nov 2021
1 Texas	\$25,742,367,612	35.2%
2 California	\$14,249,159,923	5.7%
3 New York	\$10,524,377,736	43.6%
4 Florida	\$8,495,762,961	4.7%
5 Illinois	\$8,170,858,731	37.3%
6 North Carolina	\$6,098,578,164	72.7%
7 Pennsylvania	\$5,762,966,282	40.6%
8 Michigan	\$5,194,599,963	22.3%
9 Ohio	\$5,015,018,819	6.3%
10 Minnesota	\$4,944,953,464	-20.0%
11 New Jersey	\$4,771,019,432	57.3%
12 Indiana	\$4,549,901,699	44.5%
13 Virginia	\$4,203,381,947	44.9%
14 Washington	\$4,000,513,301	42.9%
15 Wisconsin	\$3,809,241,674	4.4%
16 Georgia	\$3,635,216,179	4.5%
17 Louisiana	\$3,489,611,913	47.3%
18 Nevada	\$3,412,665,187	108.8%
19 Missouri	\$3,394,698,404	32.8%
20 Colorado	\$3,139,852,803	5.8%

Data source and Tables: ConstructConnect.

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

INSIGHT view of starts statistics

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

	Jan-Nov 2022 (\$ billions)	% Change Jan-Nov 22 vs Jan-Nov 21	% Change Nov 22 vs Nov 21	% Change Nov 22 vs Oct 22
Summary				
CIVIL	181.735	22.9%	5.8%	-17.7%
NONRESIDENTIAL BUILDING	321.989	32.3%	-16.6%	-45.1%
RESIDENTIAL	331.245	-1.1%	-28.4%	-22.6%
GRAND TOTAL	834.969	15.0%	-18.2%	-31.1%
Verticals				
Airport	6.798	37.6%	41.9%	-37.2%
All Other Civil	12.090	-12.8%	-27.2%	-22.0%
Bridges	25.811	51.6%	-20.9%	-42.6%
Dams / Canals / Marine Work	8.384	11.0%	-21.8%	17.3%
Power Infrastructure	8.974	0.6%	773.5%	14.2%
Roads	79.765	24.8%	4.5%	-11.1%
Water and Sewage Treatment	39.913	26.3%	14.0%	-25.5%
CIVIL	181.735	22.9%	5.8%	-17.7%
Offices (private)	18.544	-5.0%	-66.3%	-53.5%
Parking Garages	2.065	23.8%	83.7%	243.1%
Transportation Terminals	5.913	-4.8%	9.4%	38.2%
Commercial (small subset)	26.522	-3.2%	-51.9%	-34.0%
Amusement	6.996	13.8%	32.3%	-30.6%
Libraries / Museums	3.303	2.9%	2.1%	-60.5%
Religious	0.897	-24.2%	-60.0%	-63.2%
Sports Arenas / Convention Centers	5.380	-4.7%	-33.8%	-80.5%
Community	16.575	2.4%	1.0%	-54.3%
College / University	16.642	17.4%	-35.5%	-39.8%
Elementary / Pre School	20.594	38.0%	151.8%	33.0%
Jr / Sr High School	28.432	12.9%	81.7%	-13.1%
Special / Vocational	2.170	21.9%	2.6%	-63.6%
Educational	67.838	21.0%	45.7%	-13.9%
Courthouses	1.674	-17.2%	97.5%	-59.2%
Fire and Police Stations	3.952	38.7%	1.5%	-26.6%
Government Offices	12.451	13.6%	8.0%	-37.1%
Prisons	2.624	24.5%	123.9%	29.8%
Government	20.701	15.4%	24.5%	-29.8%
Industrial Labs / Labs / School Labs	4.280	90.3%	-6.8%	-5.7%
Manufacturing	88.207	162.1%	-9.9%	-67.3%
Warehouses	25.184	-5.7%	-68.5%	-63.1%
Industrial	117.671	88.0%	-34.7%	-65.1%
Hospitals / Clinics	21.227	21.9%	-39.8%	-61.2%
Medical Misc.	8.511	26.5%	5.0%	32.3%
Nursing Homes	3.722	-34.1%	-46.9%	-66.5%
Medical	33.459	12.3%	-32.3%	-52.3%
Military	9.672	14.4%	-19.4%	-35.0%
Hotels	9.490	40.5%	-6.4%	-57.7%
Retail Misc.	6.768	14.6%	-18.4%	-17.1%
Shopping	13.293	7.6%	-12.6%	-6.2%
Retail	29.551	18.1%	-12.9%	-29.7%
NONRESIDENTIAL BUILDING	321.989	32.3%	-16.6%	-45.1%
Multi-Family	115.188	19.2%	-44.7%	-54.5%
Single-Family	216.056	-9.4%	-19.7%	4.1%
RESIDENTIAL	331.245	-1.1%	-28.4%	-22.6%
NONRESIDENTIAL	503.724	28.7%	-8.6%	-36.3%
GRAND TOTAL	834.969	15.0%	-18.2%	-31.1%

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 NOVEMBER 2022

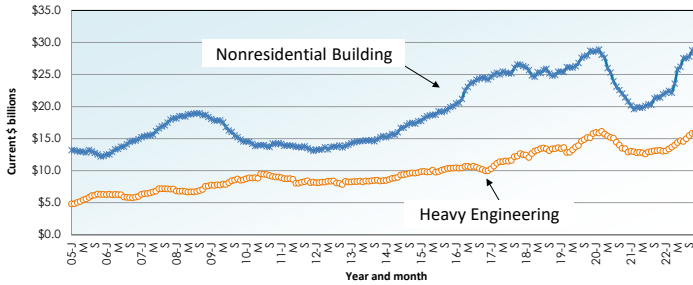
LOCATION (EAST TO WEST)	TYPE OF CONSTRUCTION	DESCRIPTION	SQUARE FEET 000S*	DOLLARS 000,000S
Georgia Savannah	Industrial	Highway 307 Industrial Development (1 structure) 2100-2200 Ga Hwy 307 CenterPoint Properties	650	\$350
Florida Bradenton	Industrial	The Manatee County Logistics Center (1 structure) US-301 & 44th Ave E Imminent Ventures	563	\$303
Indiana Indianapolis	Institutional	Ascension St. Vincent Hospital Expansion - 86th Street Campus (5 structures; units 100) 2001 W 86th St St. Vincent Health	268	\$325
Texas Odessa	Industrial	1PointFive Direct Air Carbon Capture Plant (1 structure) Ector County Occidental Petroleum Corporation	1,500	\$1,100
Austin	Civil/Engineering	I-35 Capital Express South - Texas Department of Transportation (TxDOT) (2 structures) I-35 Texas Department of Transportation (TxDOT) - Austin	*	\$548
Lakeway	Residential	The Square on Lohmans Mixed-Use (10 structures; 11 stories; 407 units) 1931 Lohmans Crossing Rd Legend Communities Occidental Petroleum Corporation	670	\$500
Nevada Las Vegas	Civil/Engineering	The Gemini Solar Array (2 structures) Clark County Quinbrook Infrastructure Partners / Rowan Green Data	*	\$1,000
Colorado Denver	Industrial	PepsiCo Beverages New Manufacturing Facility (1 structure) 7190 Tower Rd Pepsi Bottling Company	1,200	\$640
Washington Pasco	Industrial	Darigold Plant (1 structure) Franklin County Darigold, Inc.	400	\$600
California San Diego	Residential	Mission Gorge Mixed-Use Development (6 structures; 996 units) Mission Gorge Rd G.H. Palmer Associates	4,784	\$385
TOTALS:			10,035	\$5,751

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

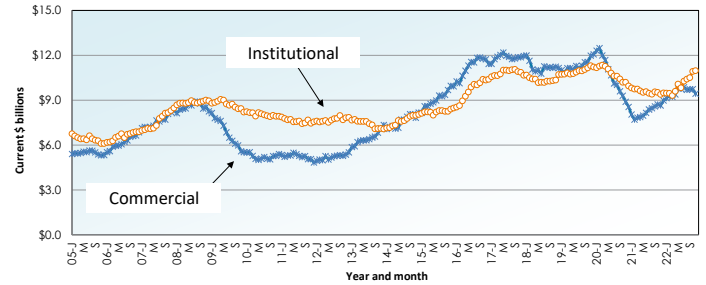
Source: ConstructConnect/Table: ConstructConnect.

Trend graphs for 12 key categories

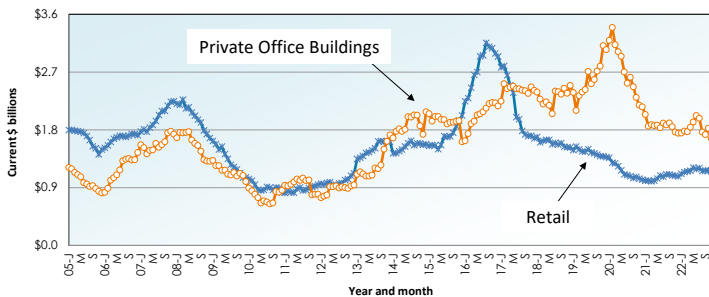
GRAPH 11: U.S. NONRESIDENTIAL CONSTRUCTION STARTS — ConstructConnect® (12-MONTH MOVING AVERAGES)



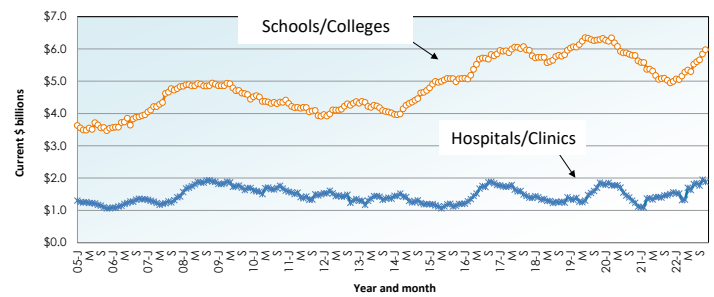
GRAPH 12: U.S. COMMERCIAL AND INSTITUTIONAL CONSTRUCTION STARTS — ConstructConnect® (12-MONTH MOVING AVERAGES)



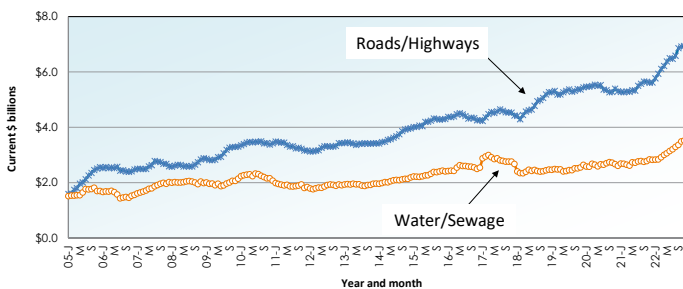
GRAPH 13: U.S. RETAIL AND PRIVATE OFFICE BUILDING CONSTRUCTION STARTS — ConstructConnect® (12-MONTH MOVING AVERAGES)



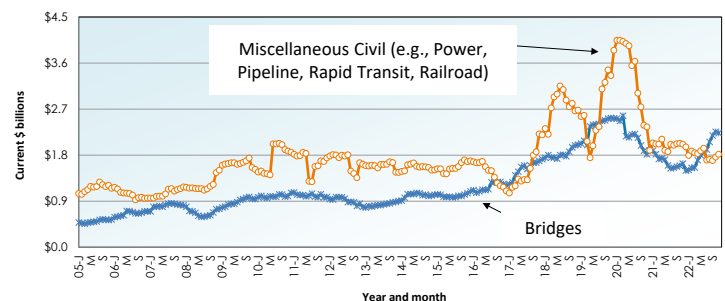
GRAPH 14: U.S. HOSPITAL/CLINIC AND SCHOOL/COLLEGE CONSTRUCTION STARTS — ConstructConnect® (12-MONTH MOVING AVERAGES)



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 November, 2022.

Source: ConstructConnect/Charts: ConstructConnect.

Regional starts table

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

	Jan-Nov 2021	Jan-Nov 2022	% Change
Connecticut	\$2,638,345,315	\$2,980,858,996	13.0%
Maine	\$2,929,202,868	\$3,356,885,072	14.6%
Massachusetts	\$10,648,251,497	\$12,200,392,355	14.6%
New Hampshire	\$1,417,189,747	\$800,064,829	-43.5%
Rhode Island	\$1,224,814,735	\$1,296,055,504	5.8%
Vermont	\$373,948,407	\$531,837,097	42.2%
Total New England	\$19,231,752,569	\$21,166,093,853	10.1%
New Jersey	\$7,058,621,045	\$8,540,729,140	21.0%
New York	\$20,930,521,060	\$26,118,334,116	24.8%
Pennsylvania	\$12,954,970,172	\$14,345,519,935	10.7%
Total Middle Atlantic	\$40,944,112,277	\$49,004,583,191	19.7%
TOTAL NORTHEAST	\$60,175,864,846	\$70,170,677,044	16.6%
Illinois	\$13,019,974,296	\$15,358,982,290	18.0%
Indiana	\$8,378,374,702	\$11,935,087,884	42.5%
Michigan	\$8,601,078,129	\$18,217,392,619	111.8%
Ohio	\$14,150,862,951	\$11,128,591,935	-21.4%
Wisconsin	\$7,771,970,027	\$9,257,518,197	19.1%
Total East North Central	\$51,922,260,105	\$65,897,572,925	26.9%
Iowa	\$5,122,734,135	\$4,867,500,931	-5.0%
Kansas	\$3,634,785,398	\$4,882,511,547	34.3%
Minnesota	\$9,897,898,842	\$8,651,234,651	-12.6%
Missouri	\$8,208,626,193	\$8,705,830,758	6.1%
Nebraska	\$3,606,681,978	\$5,500,051,801	52.5%
North Dakota	\$2,028,721,078	\$4,013,706,684	97.8%
South Dakota	\$1,740,278,149	\$3,641,604,081	109.3%
Total West North Central	\$34,239,725,773	\$40,262,440,453	17.6%
TOTAL MIDWEST	\$86,161,985,878	\$106,160,013,378	23.2%
Delaware	\$1,072,999,018	\$1,635,382,548	52.4%
District of Columbia	\$1,080,792,594	\$2,101,987,561	94.5%
Florida	\$23,421,564,174	\$24,556,956,563	4.8%
Georgia	\$10,743,338,052	\$18,431,001,277	71.6%
Maryland	\$5,694,070,257	\$6,894,838,466	21.1%
North Carolina	\$14,119,411,428	\$19,388,027,530	37.3%
South Carolina	\$5,055,224,436	\$7,461,218,470	47.6%
Virginia	\$9,287,852,222	\$10,155,885,173	9.3%
West Virginia	\$1,128,538,540	\$1,790,184,910	58.6%
Total South Atlantic	\$71,603,790,721	\$92,415,482,498	29.1%
Alabama	\$6,172,895,685	\$6,395,838,093	3.6%
Kentucky	\$5,144,691,127	\$11,305,154,215	119.7%
Mississippi	\$2,633,946,225	\$3,079,074,364	16.9%
Tennessee	\$9,107,850,702	\$7,729,336,024	-15.1%
Total East South Central	\$23,059,383,739	\$28,509,402,696	23.6%
Arkansas	\$2,804,671,468	\$3,087,446,344	10.1%
Louisiana	\$7,629,426,581	\$16,862,450,097	121.0%
Oklahoma	\$4,103,464,613	\$5,989,114,763	46.0%
Texas	\$46,905,116,150	\$89,865,896,497	91.6%
Total West South Central	\$61,442,678,812	\$115,804,907,701	88.5%
TOTAL SOUTH	\$156,105,853,272	\$236,729,792,895	51.6%
Arizona	\$16,382,905,512	\$8,483,780,859	-48.2%
Colorado	\$7,149,457,449	\$6,914,779,241	-3.3%
Idaho	\$1,332,211,586	\$3,070,845,856	130.5%
Montana	\$1,027,727,857	\$1,751,572,759	70.4%
Nevada	\$3,898,781,569	\$6,010,983,102	54.2%
New Mexico	\$2,196,036,216	\$2,855,386,969	30.0%
Utah	\$4,828,770,613	\$5,063,689,965	4.9%
Wyoming	\$962,466,363	\$1,371,422,189	42.5%
Total Mountain	\$37,778,357,165	\$35,522,460,940	-6.0%
Alaska	\$1,254,775,594	\$1,636,044,398	30.4%
California	\$34,975,974,786	\$36,661,342,064	4.8%
Hawaii	\$2,087,017,959	\$1,787,598,625	-14.3%
Oregon	\$5,081,949,914	\$5,178,998,563	1.9%
Washington	\$7,634,453,367	\$9,877,079,984	29.4%
Total Pacific	\$51,034,171,620	\$55,141,063,634	8.0%
TOTAL WEST	\$88,812,528,785	\$90,663,524,574	2.1%
TOTAL U.S.	\$391,256,232,781	\$503,724,007,891	28.7%

*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 — NOVEMBER 2022 — ConstructConnect®
BILLIONS OF CURRENT \$\$, NOT SEASONALLY ADJUSTED (NSA)

	Latest month actuals			Moving averages (placed in end month)						Year to Date	
	Sep 22	Oct 22	Nov 22	Sep 22	3-months Oct 22	Nov 22	Sep 22	12-months Oct 22	Nov 22	Jan-Nov 2021	Jan-Nov 2022
Single Family	17.397	16.297	16.963	18.142	17.367	16.886	20.366	19.959	19.612	238.415	216.056
month-over-month % change	-5.5%	-6.3%	4.1%	-7.2%	-4.3%	-2.8%	-1.6%	-2.0%	-1.7%		
year-over-year % change	-18.4%	-23.1%	-19.7%	-19.2%	-19.6%	-20.4%	-5.1%	-6.6%	-8.9%	19.6%	-9.4%
Apartment	10.108	13.615	6.198	11.277	12.465	9.974	10.299	10.697	10.279	96.664	115.188
month-over-month % change	-26.1%	34.7%	-54.5%	2.2%	10.5%	-20.0%	2.4%	3.9%	-3.9%		
year-over-year % change	40.0%	54.0%	-44.7%	25.3%	34.9%	9.7%	26.6%	30.3%	20.4%	26.6%	19.2%
TOTAL RESIDENTIAL	27.506	29.913	23.161	29.419	29.832	26.860	30.665	30.656	29.890	335.079	331.245
month-over-month % change	-14.3%	8.8%	-22.6%	-3.8%	1.4%	-10.0%	-0.3%	0.0%	-2.5%		
year-over-year % change	-3.6%	-0.4%	-28.4%	-6.5%	-3.3%	-11.4%	3.6%	3.6%	-0.6%	21.5%	-1.1%
Hotel/Motel	0.544	0.967	0.409	1.206	0.974	0.640	0.811	0.829	0.829	6.754	9.490
month-over-month % change	-61.4%	77.9%	-57.7%	-9.8%	-19.3%	-34.3%	-1.4%	2.4%	-0.3%		
year-over-year % change	-20.3%	32.6%	-6.4%	84.6%	49.4%	3.8%	31.2%	32.3%	43.1%	-32.5%	40.5%
Retail/Shopping	1.154	0.861	0.808	1.075	1.025	0.941	1.168	1.162	1.152	12.354	13.293
month-over-month % change	8.8%	-25.4%	-6.2%	-3.3%	-4.7%	-8.2%	0.9%	-0.5%	-0.8%		
year-over-year % change	12.1%	-8.0%	-12.6%	-6.1%	-14.6%	-2.3%	5.5%	6.7%	5.8%	6.8%	7.6%
Parking Garages	0.326	0.052	0.177	0.243	0.190	0.185	0.181	0.174	0.180	1.668	2.065
month-over-month % change	68.7%	-84.1%	243.1%	22.4%	-21.9%	-2.7%	11.2%	-4.3%	3.9%		
year-over-year % change	206.3%	-64.4%	83.7%	63.8%	37.6%	59.3%	23.7%	17.7%	22.2%	1.9%	23.8%
Amusement	0.689	0.736	0.511	0.790	0.716	0.645	0.588	0.607	0.617	6.145	6.996
month-over-month % change	-4.6%	6.8%	-30.6%	7.1%	-9.4%	-9.8%	4.9%	3.2%	1.7%		
year-over-year % change	90.8%	44.0%	32.3%	10.2%	45.0%	53.8%	4.5%	11.0%	12.7%	4.7%	13.8%
Office	1.349	2.070	0.963	1.258	1.405	1.461	1.725	1.823	1.665	19.521	18.544
month-over-month % change	69.6%	53.5%	-53.5%	-23.1%	11.6%	4.0%	-2.2%	5.6%	-8.6%		
year-over-year % change	-25.6%	129.0%	-66.3%	-48.6%	-30.9%	-21.4%	-9.5%	-1.3%	-5.7%	-19.4%	-5.0%
Governmental Offices	1.331	1.534	0.965	1.326	1.419	1.277	1.033	1.094	1.100	10.960	12.451
month-over-month % change	-4.4%	15.2%	-37.1%	-0.2%	7.0%	-10.0%	4.4%	5.9%	0.5%		
year-over-year % change	64.4%	90.4%	8.0%	-4.2%	42.6%	52.7%	8.1%	13.5%	12.7%	10.5%	13.6%
Laboratories	0.562	0.292	0.276	0.575	0.548	0.377	0.367	0.375	0.374	2.249	4.280
month-over-month % change	-29.0%	-47.9%	-5.7%	0.8%	-4.6%	-31.3%	11.8%	2.3%	-0.4%		
year-over-year % change	472.1%	53.0%	-6.8%	141.2%	214.9%	93.1%	78.9%	86.7%	77.2%	8.6%	90.3%
Warehouse	2.857	2.451	0.904	2.763	2.455	2.071	2.377	2.390	2.226	26.699	25.184
month-over-month % change	38.9%	-14.2%	-63.1%	12.0%	-11.2%	-15.6%	0.7%	0.5%	-6.8%		
year-over-year % change	7.0%	6.6%	-68.5%	10.9%	-2.0%	-20.7%	2.1%	3.2%	-4.6%	7.2%	-5.7%
Misc Commercial	1.098	0.870	0.597	0.869	0.866	0.855	1.480	1.288	1.288	11.855	11.293
month-over-month % change	74.3%	-20.8%	-31.4%	13.4%	-0.3%	-1.3%	-4.1%	-13.0%	-0.1%		
year-over-year % change	-40.6%	-72.6%	-1.3%	-10.8%	-54.0%	-54.5%	97.9%	30.9%	28.7%	76.3%	-4.7%
TOTAL COMMERCIAL	9.909	9.833	5.610	10.106	9.597	8.451	9.731	9.743	9.430	98.206	103.596
month-over-month % change	9.5%	-0.8%	-43.0%	-0.5%	-5.0%	-11.9%	0.4%	0.1%	-3.2%		
year-over-year % change	5.2%	1.4%	-40.1%	-0.9%	-4.7%	-11.0%	13.4%	11.7%	9.0%	1.3%	5.5%
TOTAL INDUSTRIAL (Manufacturing)	12.388	9.815	3.206	8.760	8.235	8.470	6.962	7.499	7.470	33.651	88.207
month-over-month % change	395.1%	-20.8%	-67.3%	8.2%	-6.0%	2.8%	1.4%	7.7%	-0.4%		
year-over-year % change	10.2%	191.6%	-9.9%	64.7%	49.0%	39.9%	163.8%	182.0%	159.8%	61.1%	162.1%
Religious	0.077	0.126	0.046	0.087	0.111	0.083	0.092	0.083	0.078	1.183	0.897
month-over-month % change	-41.2%	64.3%	-63.2%	-5.6%	28.3%	-25.2%	2.5%	-9.6%	-6.9%		
year-over-year % change	54.4%	-45.6%	-60.0%	-5.9%	-28.1%	-37.3%	-13.9%	-27.9%	-31.4%	-18.3%	-24.2%
Hospitals/Clinics	0.929	3.460	1.342	1.872	1.890	1.910	1.771	1.953	1.879	17.406	21.227
month-over-month % change	-27.5%	272.6%	-61.2%	-3.1%	1.0%	1.1%	-4.0%	10.3%	-3.8%		
year-over-year % change	-48.5%	172.2%	-39.8%	43.4%	41.3%	8.1%	20.7%	32.7%	24.5%	37.7%	21.9%
Nursing/Assisted Living	0.224	0.328	0.110	0.318	0.284	0.220	0.374	0.345	0.337	5.649	3.722
month-over-month % change	-25.8%	46.4%	-66.5%	-15.1%	-10.7%	-22.5%	-6.4%	-8.0%	-2.3%		
year-over-year % change	-57.7%	-52.3%	-46.9%	-41.8%	-52.5%	-53.5%	-31.6%	-37.7%	-35.3%	-18.1%	-34.1%
Libraries/Museums	0.379	0.476	0.188	0.352	0.381	0.348	0.277	0.307	0.307	3.209	3.303
month-over-month % change	31.2%	25.6%	-60.5%	23.5%	8.4%	-8.8%	-16.6%	10.6%	0.1%		
year-over-year % change	-63.6%	287.8%	2.1%	-33.1%	-15.6%	-22.6%	-5.3%	6.0%	6.9%	-10.1%	2.9%
Fire/Police/Courthouse/Prison	0.976	1.060	0.855	0.942	1.010	0.964	0.695	0.727	0.751	6.979	8.250
month-over-month % change	-2.0%	8.7%	-19.4%	10.7%	7.2%	-4.6%	5.6%	4.7%	3.3%		
year-over-year % change	83.2%	58.3%	50.3%	52.2%	68.6%	63.2%	2.5%	6.7%	17.2%	-5.3%	18.2%
Military	1.591	1.456	0.947	0.995	1.259	1.331	0.851	0.888	0.869	8.454	9.672
month-over-month % change	117.8%	-8.5%	-35.0%	69.2%	26.6%	5.7%	7.9%	4.3%	-2.1%		
year-over-year % change	87.8%	43.4%	-19.4%	49.7%	54.6%	31.5%	17.4%	21.9%	18.1%	-4.2%	14.4%
Schools/Colleges	4.988	5.732	4.933	6.529	5.889	5.218	5.661	5.844	5.973	56.058	67.838
month-over-month % change	-28.2%	14.9%	-13.9%	-10.8%	-9.8%	-11.4%	1.1%	3.2%	2.2%		
year-over-year % change	17.3%	61.9%	45.7%	28.9%	27.7%	40.0%	11.2%	16.2%	20.7%	-12.7%	21.0%
Misc Medical	2.105	0.417	0.552	1.151	1.019	1.025	0.785	0.770	0.772	6.728	8.511
month-over-month % change	293.7%	-80.2%	32.3%	71.8%	-11.5%	0.6%	13.8%	-2.0%	0.3%		
year-over-year % change	119.3%	-30.8%	5.0%	70.3%	44.8%	47.2%	21.8%	20.1%	23.3%	-9.4%	26.5%
TOTAL INSTITUTIONAL	11.268	13.055	8.973	12.247	11.844	11.099	10.507	10.916	10.965	105.666	123.418
month-over-month % change	0.5%	15.9%	-31.3%	1.1%	-3.3%	-6.3%	1.0%	3.9%	0.4%		
year-over-year % change	12.5%	60.4%	7.0%	28.9%	27.7%	25.4%	10.0%	14.8%	16.9%	-6.0%	16.8%
Misc Non Residential	0.775	0.538	0.446	0.733	0.626	0.586	0.609	0.608	0.599	5.905	6.768
month-over-month % change	36.9%	-30.5%	-17.1%	9.1%	-14.5%	-6.4%	2.3%	-0.2%	-1.4%		
year-over-year % change	26.2%	-3.2%	-18.4%	36.3%	16.8%	2.5%	14.8%	14.8%	12.9%	10.8%	14.6%
TOTAL NON-RES BUILDING	34.340	33.241	18.235	31.845	30.303	28.605	27.809	28.766	28.464	243.428	321.989
month-over-month % change	47.2%	-3.2%	-45.1%	2.6%	-4.8%	-5.6%	0.9%	3.4%	-1.0%		
year-over-year % change	9.8%	52.8%	-16.6%	24.6%	19.3%	14.6%	30.5%	34.3%	32.8%	3.4%	32.3%
Airports	1.207	0.560	0.352	0.907	0.799	0.706	0.570	0.580	0.589	4.939	6.798
month-over-month % change	92.0%	-53.6%	-37.2%	28.5%	-12.0%	-11.6%	12.2%	1.8%	1.5%		
year-over-year % change	160.8%	28.2%	41.9%	67.1%	56.6%	84.6%	24.0%	26.8%	38.4%	-15.8%	37.6%
Roads/Highways	8.243	5.752	5.114	7.823	7.143	6.369	6.857	6.916	6.934	63.938	79.765
month-over-month % change	10.9%	-30.2%	-11.1%	0.1%	-8.7%	-10.8%	4.2%	0.9%	0.3%		
year-over-year % change	66.7%	14.1%	4.5%	22.8%	33.0%	28.4%	21.4%	22.5%	23.7%	6.0%	24.8%
Bridges	2.729	2.194	1.259	2.572	2.671	2.061	2.185	2.259	2.231	17.029	25.811
month-over-month % change	-11.6%	-19.6%	-42.6%	3.6%	3.8%	-22.8%	6.1%	3.4%	-1.2%		
year-over-year % change	121.6%	68.4%	-20.9%	94.5%	111.8%	49.8%	38.8%	41.8%	36.5%	-15.6%	51.6%
Dams/Marine	0.796	0.938	1.100	0.955	1.021	0.945	0.803	0.806	0.781	7.555	8.384
month-over-month % change	-40.0%	17.8%	17.3%	15.3%	6.9%	-7.4%	-1.6%	0.5%	-3.2%		
year-over-year % change	-16.2%	5.0%	-21.8%	32.5%	22.3%	-12.8%	25.8%	32.6%	17.8%	-4.1%	11.0%
Water/Sewage	3.682	4.046	3.014	3.932	3.855	3.581	3.360	3.485	3.516	31.589	39.913
month-over-month % change	-4.1%	9.9%	-25.5%	-4.4%	-2.0%	-7.1%	2.2%	3.7%	0.9%		
year-over-year % change	30.4%	58.7%	14.0%	29.3%	41.5%	34.0%	22.4%	25.7%	24.1%	9.6%	26.3%
Misc Civil (Power, etc.)	1.035	2.193	2.068	1.555	1.792	1.765	1.695	1.760	1.814	22.778	21.064
month-over-month % change	-51.8%	111.9%	-5.7%	-22.2%	15.2%	-1.5%	-1.2%	3.9%	3.1%		
year-over-year % change	-19.4%	55.7%	45.6%	-38.0%	15.6%	28.8%	-16.2%	-13.3%	-9.7%	6.5%	-7.5%
TOTAL ENGINEERING (Civil)	17.692	15.684	12.907	17.745	17.281	15.427	15.469	15.806	15.865	147.829	181.735
month-over-month % change	-4.2%	-11.4%	-17.7%	-1.1%	-2.6%	-10.7%	3.3%	2.2%	0.4%		
year-over-year % change	51.3%	34.8%	5.8%	22.3%	41.1%	30.3%	18.2%	20.6%	20.4%	2.3%	22.9%
GRAND TOTAL	79.537	78.837	54.303	79.009	77.416	70.892	73.943	75.228	74.220	726.335	834.969
month-over-month % change	7.7%	-0.9%	-31.1%	-0.7%	-2.0%	-8.4%	0.9%	1.7%	-1.3%		
year-over-year % change	11.2%	24.3%	-18.2%	10.5%	13.0%	5.6%	15.6%	17.3%	14.8%	10.8%	15.0%
NON-RES BLDG + ENGINEERING	52.032	48.925	31.142	49.590	47.584	44.033	43.278	44.572	44.329	391.256	503.724
month-over-month % change	24.5%	-6.0%	-36.3%	1.2%	-4.0%	-7.5%	1.8%	3.0%	-0.5%		
year-over-year % change	21.1%	46.5%	-8.6%	23.8%	26.4%						