

OCTOBER 2021 (based on September 2021 Starts Stats)

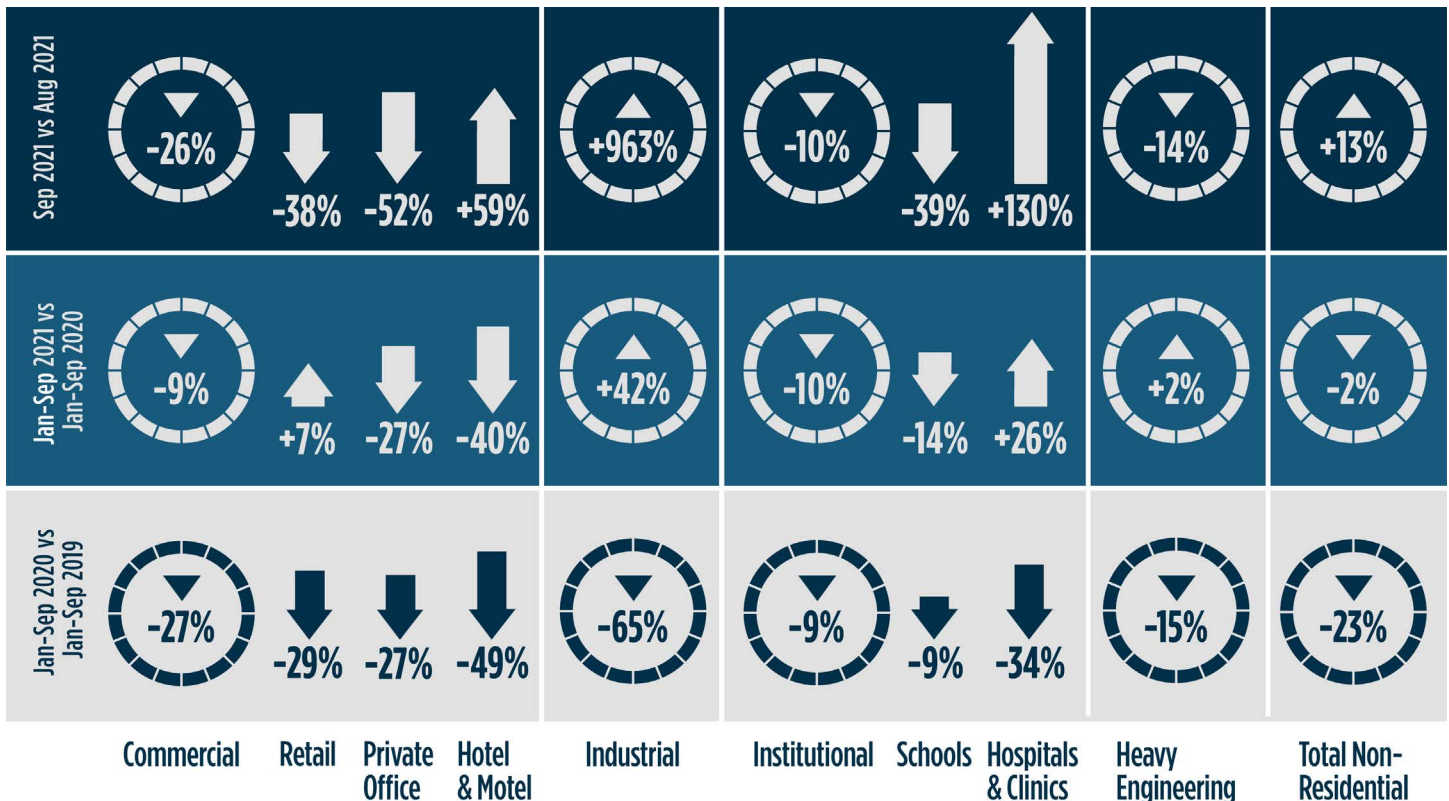
# Construction Industry Snapshot

IN THIS ISSUE:

## September's Nonresidential Construction Starts +13% M/M, +31% Y/Y & -2% YTD

ConstructConnect announced today that September 2021's volume of construction starts, excluding residential work, was \$38.0 billion, an increase of +12.7% vs August 2021's level.

Compared with September 2020, they were +31.1%. On a year-to-date basis, they were -2.3%. GRAND TOTAL starts in September 2021 (i.e., including residential activity) were +7.4% m/m, +19.6% y/y and +7.3% ytd.



For more information or media inquiries please contact: [PR@ConstructConnect.com](mailto:PR@ConstructConnect.com)

To subscribe on a complimentary basis, visit: [www.constructconnect.com/subscribe-constructconnects-economic-reports](http://www.constructconnect.com/subscribe-constructconnects-economic-reports)

3825 Edwards Road, Ste. 800, Cincinnati, OH 45209 P. 1-800-364-2059 [www.constructconnect.com/blog](http://www.constructconnect.com/blog)

## September's Nonresidential Construction Starts +13% M/M, +31% Y/Y & -2% YTD

### A Chipmaker to the Rescue

ConstructConnect announced today that September 2021's volume of construction starts, excluding residential work, was \$38.0 billion (see shaded green box, bottom of Table 10, page 11), an increase of +12.7% compared with August 2021's level of \$33.7 billion (originally reported as \$33.0 billion).

Compared with September 2020, the latest month's nonresidential starts were +31.1%. On a year-to-date basis, they were -2.3%. GRAND TOTAL starts in September 2021 (i.e., including residential activity) were +7.4% m/m, +19.6% y/y and +7.3% ytd.

The latest month's starts statistics feature three mega-sized projects of a billion dollars or more each, adding to \$10.3 billion. At \$1.3 billion and \$1.0 billion are a plastics plant in Louisiana and a university medical complex in California (see Top 10 project starts list on page 8). But those two projects, big as they are, take back seats to the estimated \$8.0 billion undertaking being launched by computer chipmaker Intel Corporation in Maricopa County (Phoenix), Arizona. The company has announced capital spending of \$20 billion on two plants, but major portions of the bill will be directed towards equipment. Especially important in high-tech chip plants are ultra-'clean' rooms to avoid micro-fiber and other forms of contamination in the production process.

The most prominent mega project in last year's September starts statistics was the Tesla cybertruck gigafactory in Austin, Texas, for \$1.1 billion.

### Up, Down and Sideways

ConstructConnect's 'starts' statistics through the first three quarters of 2021 hiked along markedly different routes. Versus results for Jan-Sept 2020, residential starts pulled ahead by a fifth, +21.1%; heavy engineering/civil was little better than flat, +1.7%; and nonresidential building stumbled, -4.9%.

On a month-to-month basis in September, however, it was nonresidential building that took the lead, +31.0%. Residential was in a holding pattern, +1.3%; and heavy engineering/civil fell behind, -14.4%.

### Progression of Trailing 12-Month (TTM) Starts Clearly Healthier

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 10 on page 11 of this report. Grand Total TTM starts in September on a month-to-month basis were +1.5%, compared with -0.1% in August and +1.0% in July. On a year-over-year basis in September, GT TTM starts were +1.2% versus -1.7% in August and -4.0% in July. The progression of y/y GT TTM starts, from significant decline to mild decline to marginally positive, is clearly in a healthier direction.

### Census Bureau's PIP Numbers Highlight Homebuilding Surge

'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 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 making up two-fifths (about 40%) of the total and nonresidential, three-fifths (i.e., the bigger portion, at around 60%). Presently, though, according to the Census Bureau's August 2021 not-seasonally-adjusted (NSA) PIP numbers for total U.S., the year-to-date mix has shifted dramatically. The residential to nonresidential relationship has become approximately half and half (i.e., 49.5%-to-50.5% respectively). The Census Bureau's August 2021 NSA ytd PIP results are +7.0%

Continued on page 3

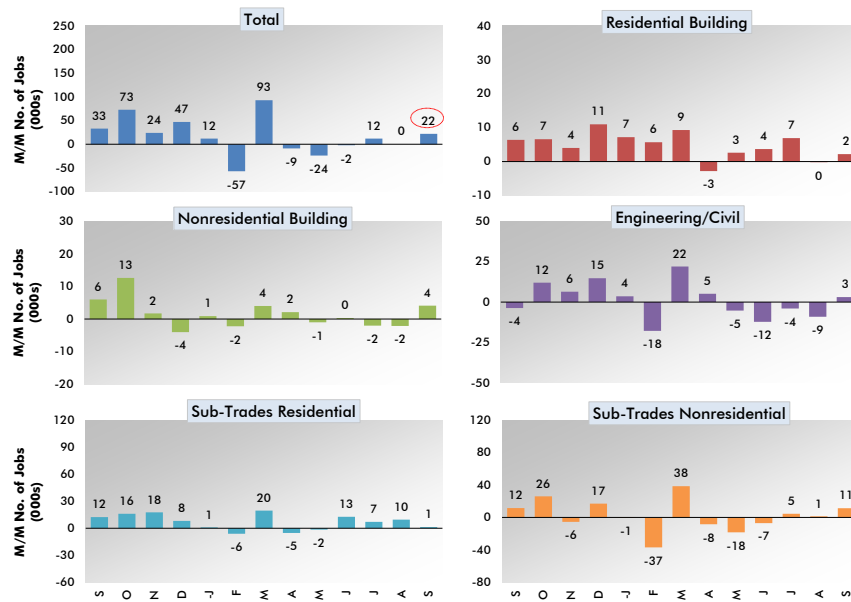
TABLE 1: VALUE OF UNITED STATES NONRESIDENTIAL CONSTRUCTION STARTS — SEPTEMBER 2021 (ConstructConnect®)

	Jan-Sept 2021 (\$ billions)	% Change Jan-Sept 21 vs Jan-Sept 20	% Change Sept 21 vs Sept 20	% Change Sept 21 vs Aug 21
Hotel/Motel	5.028	-39.9%	2.4%	58.6%
Retail/Shopping	10.152	7.0%	-7.8%	-37.6%
Parking Garage	1.339	-4.8%	-39.6%	-45.8%
Amusement	5.153	7.5%	-47.6%	-50.2%
Private Office	13.747	-26.8%	-7.6%	-51.9%
Government Office	9.466	12.0%	-43.0%	-21.9%
Laboratory	1.758	6.4%	-34.1%	-39.4%
Warehouse	18.298	-7.6%	26.8%	12.3%
Miscellaneous Commercial *	6.569	10.0%	-17.1%	-26.0%
<b>COMMERCIAL (big subset)</b>	<b>71.509</b>	<b>-9.1%</b>	<b>-12.2%</b>	<b>-26.3%</b>
<b>INDUSTRIAL (Manufacturing)</b>	<b>23.793</b>	<b>41.6%</b>	<b>389.5%</b>	<b>963.0%</b>
Religious	0.757	-35.5%	-65.0%	-69.3%
Hospital/Clinic	12.157	25.9%	88.9%	130.4%
Nursing/Assisted Living	4.364	-23.1%	-57.9%	-41.3%
Library/Museum	1.947	-39.1%	116.2%	34.5%
Fire/Police/Courthouse/Prison	5.654	-0.5%	-10.5%	-4.7%
Military	6.507	-3.8%	2.3%	55.6%
School/College	47.754	-14.1%	-13.9%	-39.1%
Miscellaneous Medical	5.197	-14.5%	59.8%	61.0%
<b>INSTITUTIONAL</b>	<b>84.337</b>	<b>-10.1%</b>	<b>1.7%</b>	<b>-9.7%</b>
Miscellaneous Non-residential	4.452	5.3%	-8.9%	9.0%
<b>NONRESIDENTIAL BUILDING</b>	<b>184.091</b>	<b>-4.9%</b>	<b>40.1%</b>	<b>31.0%</b>
Airport	4.353	-8.8%	-20.3%	-13.3%
Road/Highway	53.856	8.0%	20.7%	-21.3%
Bridge	14.237	-20.9%	20.6%	-20.6%
Dam/Marine	5.244	-10.9%	134.9%	43.8%
Water/Sewage	26.704	8.2%	-10.0%	-8.6%
Miscellaneous Civil (power, pipelines, etc.)	19.298	4.8%	38.3%	-16.9%
<b>HEAVY ENGINEERING (Civil)</b>	<b>123.691</b>	<b>1.7%</b>	<b>14.4%</b>	<b>-14.4%</b>
<b>TOTAL NONRESIDENTIAL</b>	<b>307.781</b>	<b>-2.3%</b>	<b>31.1%</b>	<b>12.7%</b>

\* Includes transportation terminals and sports arenas.

Source: ConstructConnect Research Group/Table: ConstructConnect.

GRAPH 1: CHANGE IN LEVEL OF U.S. CONSTRUCTION EMPLOYMENT, MONTH TO MONTH (M/M) – TOTAL & BY CATEGORIES – SEPTEMBER 2021



In the 9 months of 2021 so far, there have been 4 months of increases, 4 of decreases and one month of no change. Half of Sept's +22,000 for total jobs arose with nonresidential sub-trade contractors.

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

for total; +25.8%, residential; and -6.7%, nonresidential (i.e., nonresidential buildings plus engineering).

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.

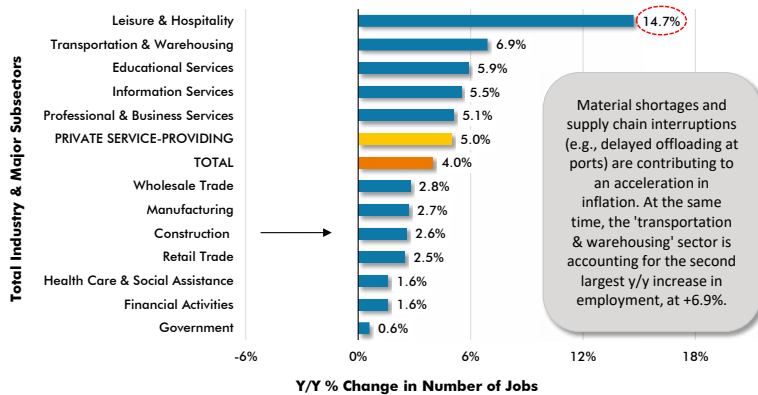
## Construction Jobs +47,000 Year to Date

Total employment in U.S. construction rose by +22,000 jobs in September, with half of the increase due to net hiring of +11,000 by nonresidential sub-contractors. Residential work played a minimal role in jobs creation in the latest month. Construction has still not recovered all the jobs it lost between February and April of last year. The sector's jobs 'claw back' ratio is currently 81.9%, slightly ahead of the 77.8% figure for total employment in the country.

Among major sectors, 'transportation and warehousing' has the best jobs recovery ratio, at 112.5%. The T&W segment of the economy has

Continued on page 4

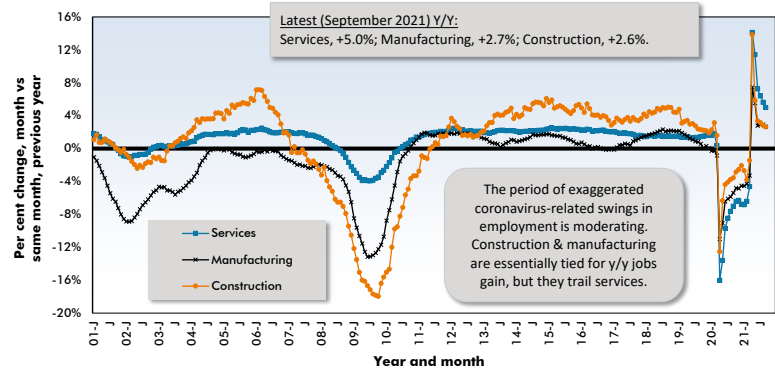
GRAPH 3: Y/Y JOBS CHANGE, U.S. TOTAL INDUSTRY & MAJOR SUBSECTORS – SEPTEMBER 2021 (BASED ON SEASONALLY ADJUSTED PAYROLL DATA)



Sept 2021's y/y changes in employment within the hardest-hit sector, 'leisure & hospitality', were: 'hotels/motels', +22.5%; 'amusements/gambling', +20.6%; and 'restaurants & bars', +11.7%.

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

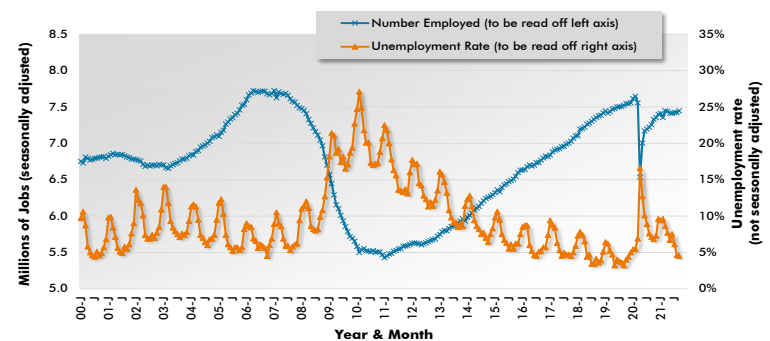
GRAPH 2: U.S. EMPLOYMENT SEPTEMBER 2021 – % CHANGE Y/Y BASED ON SEASONALLY ADJUSTED (SA) DATA



The latest data points are for September, 2021.

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

GRAPH 4: U.S. CONSTRUCTION EMPLOYMENT (SA) & UNEMPLOYMENT RATE (NSA)



Current through September, 2021. SA is seasonally adjusted / NSA is not seasonally adjusted.

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

TABLE 2: MONITORING THE U.S. EMPLOYMENT RECOVERY — SEPTEMBER 2021

The Big Drop (revised data)		Change in Number of Jobs (Millions)		% Change		Jobs Recovery Since Apr 2020, Millions	
April 2020 vs Feb 2020 (Feb 2020 was last month unaffected by COVID-19)		Sept 2021 vs Feb 2020 (Feb 2020 was last month unaffected by COVID-19)	Sept 2021 vs Aug 2021 (i.e., vs previous month)	Sept 2021 vs Feb 2020 (Feb 2020 was last month unaffected by COVID-19)	Sept 2021 vs Aug 2021 (i.e., vs previous month)	Recovery Since Apr 2020, Millions	Claw Back Ratio
Millions							
-22.362	-14.7%	Grand Total	-4.970	0.194	-3.3%	17.392	77.8%
-18.787	-17.3%	Private Services-Providing	-3.522	0.265	-3.2%	15.265	81.3%
-1.385	-10.8%	Manufacturing	-0.353	0.026	-2.8%	1.032	74.5%
-1.113	-14.6%	Construction	-0.201	0.022	-2.6%	0.912	81.9%
-2.375	-15.2%	Retail Trade	-0.202	0.056	-1.3%	2.173	91.5%
-0.575	-9.9%	Transportation & Warehouse	0.072	0.048	1.2%	0.647	112.5%
-0.279	-3.1%	Financial Activities	-0.025	0.002	-0.3%	0.254	91.0%
-2.387	-11.1%	Professional & Business	-0.385	0.060	-1.8%	2.002	83.9%
-0.281	-9.6%	Information Services	-0.108	0.032	-3.7%	0.173	61.6%
-2.843	-11.6%	Education and Health	-0.900	-0.007	-3.7%	1.943	68.3%
-8.224	-48.6%	Leisure & Hospitality	-1.594	0.074	-9.4%	6.630	80.6%
-1.009	-4.4%	Government	-0.851	-0.123	-3.7%	0.158	15.7%

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

Continued from page 3

fully replaced the big jobs drop in Spring of last year, plus added more workers. Nevertheless, big logistical problems remain unresolved. Delayed offloading at West Coast ports is a particular headache at present, causing supply chain gaps and contributing to the ballooning of general price inflation (+5.4% year over year for the 'all-items' Consumer Price Index in September).

Other corners of the economy with close ties to construction have managed the following year over year increases in employment: architectural and engineering services, +5.2%; machinery and equipment rental and leasing, also +5.2%; real estate firms, +4.3%; oil and gas extraction, +2.8%; cement and concrete product manufacturing, -1.6%; and building material and supplies dealers, -2.6%. The solid increase of +5.2% y/y for employment with project design firms augurs well for eventual sitework construction employment resulting from the lead-lag relationship.

### Pluses and Minuses among the Type of Structure Sub-categories

September's +12.7% month-to-month (m/m) increase in total nonresidential starts was entirely due to a big jump in industrial work (+963.0%). Starts volumes in the other three major sub-categories moved in the other direction: commercial, -26.3%; engineering, -14.4%; and institutional, -9.7%. Industrial's leap upwards was thanks to the groundbreaking ceremony for Intel's two new chipmaking plants (see the Top 10 list, page 8).

The +31.1% climb in September 2021's total nonresidential starts versus September 2020 (y/y) resulted from a large advance in industrial, +389.5%, and a decent step forward by heavy engineering, +14.4%. Institutional was barely more than flat, +1.7%. Commercial, though, took a tumble, -12.2%.

The small pullback of -2.3% in total nonresidential starts year to date (Jan-Sept 2021/Jan-Sept 2020) has flowed from declines of almost equal magnitude in institutional (-10.1%) and commercial (-9.1%). Year-to-date gains in industrial (+41.6%) and engineering (+1.7%) haven't quite been able to make up the difference.

There are two dominant sub-categories of total nonresidential starts. When the nearly equal volumes of 'roads/highways' (with a 17.5% share) and 'schools/colleges' (with a 15.5% share) are added together, they account for one-third of total nonresidential. The key time-frame metrics for street starts in September were -21.3% m/m; but +20.7% y/y; and +8.0% ytd. The percentage changes for school starts were weaker: -39.1% m/m; -13.9% y/y; and -14.1% ytd.

The next largest contributor (with an 8.7% share) to total nonresidential starts is the 'water/sewage' sub-category, which in September managed a +8.2% gain ytd despite contractions of -8.6% m/m and -10.0% y/y.

A combined health care sub-category, comprised of 'hospitals/clinics', 'nursing/assisted living' and 'miscellaneous medical', turned in sterling percentage changes of +60.6% m/m; +32.9% y/y; and +1.5% ytd in September. The 'hospital/clinic' sub-category on its own was +130.4% m/m; +88.9% y/y; and +25.9% ytd (see Top 10 list for some of the biggest groundbreakings.)

Within commercial, the 'hotel/motel' sub-category remained deeply negative ytd in September, -39.9%, although the month-to-month performance was +58.6%. 'Private office building' starts were -51.9% m/m; -7.6% y/y; and -26.8% ytd. 'Retail/shopping' was -37.6% m/m; and -7.8% y/y; but +7.0% ytd. Warehouse starts may have been -7.6% ytd, but they were +12.3% m/m; and +26.8% y/y. 'Government office building' starts have been a sleeper success at +12.0% ytd.

### A More Normal Pattern in Latest JOLTS Results

The latest *Job Openings and Labor Turnover Survey* (JOLTS) report shows job vacancies in the construction

Continued on page 5

TABLE 3: CONSTRUCTION STARTS IN SOME ADDITIONAL TYPE OF STRUCTURE SUB-CATEGORIES — ConstructConnect®

	Jan-Sep 2021 (\$ billions)	% Change vs Jan-Sep 2020
Sports Stadiums/Convention Centers	\$3.236	-17.4%
Transportation Terminals	\$3.333	62.2%
Courthouses	\$1.813	39.7%
Police Stations & Fire Halls	\$2.171	-10.3%
Prisons	\$1.670	-15.0%
Pre-School/Elementary	\$13.475	-20.0%
Junior & Senior High Schools	\$21.674	-7.5%
K-12 (sum of above two categories)	\$35.149	-12.8%
Special & Vocational Schools	\$1.408	-17.6%
Colleges & Universities	\$11.197	-17.6%
Electric Power Infrastructure	\$7.670	133.3%

Source: ConstructConnect/Table: ConstructConnect.

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

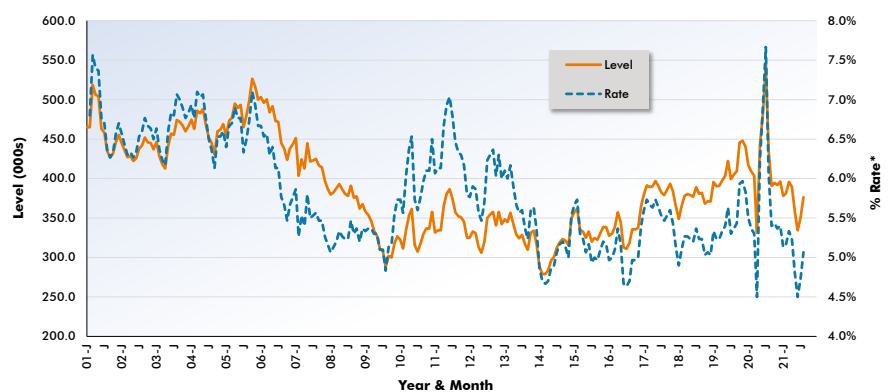


Construction job 'openings', as both a level and a rate, have lately risen back near their peaks of early 2019. One response by employers to the challenge of numerous open positions has been a notable uptick in wages paid.

\*Rate is number of job openings end-of-month as % of 'construction employment plus number of job openings'. Latest seasonally adjusted data points are for August 2021. ... JOLTS = Job Openings and Labor Turnover Survey.

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

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



Recent pick-ups in hiring, both as a level and a rate (although still far short of where they were at times in 2019) are finally addressing the abundance of jobs that are on offer in the U.S. construction sector.

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

Latest seasonally adjusted data points are for August 2021. ... JOLTS = Job Openings and Labor Turnover Survey.

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



Continued from page 4

sector, both as a level and rate, edging back up towards the peaks they reached in early 2019. Theoretically, lots of 'openings' should lead to a burst of 'hiring', but in many recent months, that hasn't automatically followed. In September, though, 'hiring' did suddenly perk up.

Undoubtedly, one aid to a higher level and rate of worker sign-ups has been significant improvement in pay packages. In September, construction worker earnings were +5.8% y/y hourly and a stunning +10.2% weekly. It should be added that the outsized weekly increase was partly triggered by existing workers staying on the job longer to compensate for a labor shortage.

## Many Trend Graphs on Cusp of Reversing Course

Many of the 12-month moving average trend graphs on page 9 are preparing to reverse direction from descending to ascending.

Both nonresidential and heavy engineering are showing mild upticks after declining noticeably throughout 2020, then flattening earlier this year.

Within nonresidential building, the slide in institutional starts came to a halt in the latest month, while a recent pattern of upticks in the commercial curve suffered a setback. The 'private office buildings' sub-category is still falling, but not as steeply as in 2020. 'Retail', which has had an extremely difficult time since 2016, is now working on a barely perceptible comeback.

The trend line for 'school/college' starts continues angling downwards. 'Hospital/clinic' starts, though, have leveled off and appear to be contemplating a climb.

The 'roads/highways' curve is maintaining expansionary momentum, as is 'water/sewage' work, although not to quite the same positive degree. The retreat by 'miscellaneous civil' appears to have run its course, with the curve now moving sideways. Finally, the easing in 'bridge' starts has, at least momentarily, altered course.

## Y/Y Weekly Construction Wages +10.2%

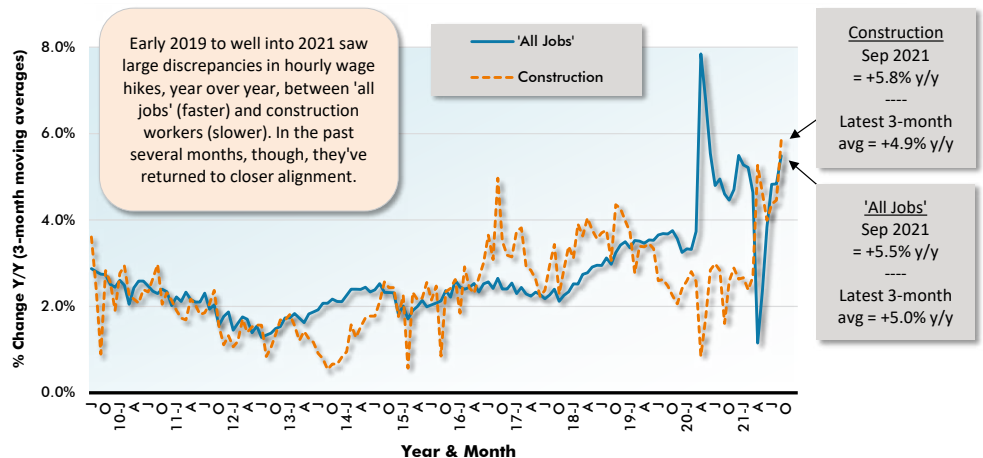
Tables B-3 and B-8 of the monthly *Employment Situation* report record average hourly and average weekly wages for industry sectors. B-3 is for all employees (i.e., including bosses) on non-farm payrolls. B-8 is for 'production and non-supervisory personnel' only (i.e., it excludes bosses). For 'all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

From Table B3 (including bosses), 'all jobs' earnings y/y in September were +4.6% both hourly and weekly. For construction workers, the compensation climb was about even with 'all jobs' hourly, +4.5%, but considerably more impressive weekly, +7.2%. There's more dramatic news to relate. From Table B8 (excluding bosses), the 'all jobs' year-over-year earnings gains were +5.5% hourly and +5.8% weekly. Construction workers sped a little ahead of 'all jobs' hourly +5.8%, and left 'all jobs' in their dust weekly, at +10.2%.

Earlier during the past decade, wage increases, both generally and in construction, ranged between +2.0% and +3.0% y/y. Such days of moderation, temporarily at least, have slipped into history. Lately, when considering the challenges facing the contracting community, there's been a tendency to

Continued on page 6

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



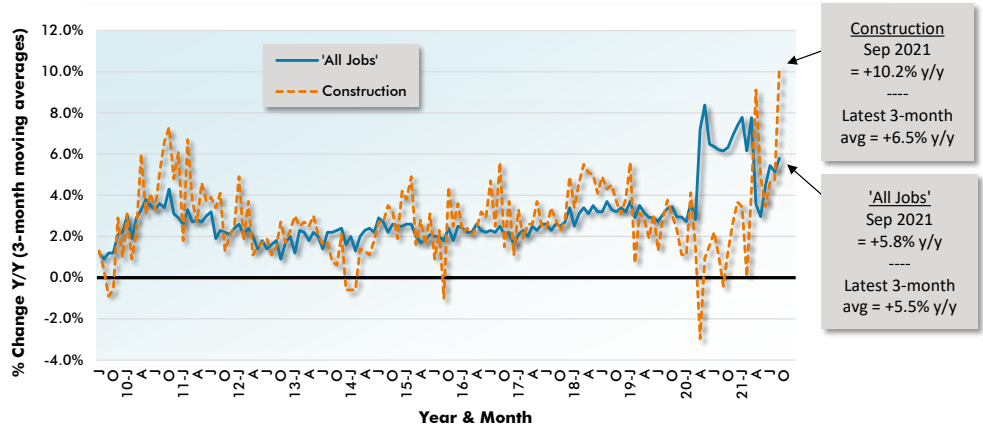
Analysts will be keeping a sharp eye on earnings. They're a reflection of overall economic activity. Perhaps more important, though, they can provide an early warning of mounting behind-the-scenes inflationary pressure.

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

The latest data points are for September, 2021.

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

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



The weekly earnings of U.S. construction workers went into orbit in September, increasing by a double-digit percentage change year over year, +10.2%. The NSA construction unemployment rate is currently quite low, at 4.5%.

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

The latest data points are for September, 2021.

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

Continued from page 5

fixate on rising material costs. Also warranting a careful look are rising charges for the other key input component, labor.

## Ongoing Cost Pressure from Material Inputs

August's y/y results for three structures-related BLS Producer Price Index (PPI) series were as follows: 'construction materials special index', +31.1% (an enormous increase, but not quite as high as July's +33.1%); 'inputs to new construction index, excluding capital investment, labor and imports', +21.0% (again, a huge jump, but also a small step back from the previous month's figure, +25.4%) and 'final demand construction', designed to capture bid prices, +5.0% (a little more robust than July's +4.5%).

Concerning the cost of some major construction material inputs, as revealed in the Producer Price Index (PPI) data set published by the Bureau of Labor Statistics (BLS), softwood lumber in August was -9.8% year over year (it had been +154.3% three months earlier in May); asphalt, +50.9%; hot rolled steel bars, plates and structural shapes, +49.0%; aluminum sheet and strip, +41.7%; copper wire and cable, +31.4%; and gypsum products, +22.9%.

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.

## September 2021's 'Grand Total' Starts +7.3% Ytd

From Table 10 on page 11 of this report, ConstructConnect's total residential starts in September were +1.3% m/m, +7.7% y/y and +21.1% ytd. Multi-family starts in September were quite weak, -38.5% m/m and -33.8% y/y, but ytd they were +5.8%. Single-family starts, though, continued to shine in the latest period, +14.3% m/m, +21.1% y/y and +27.1% ytd. Including home building with all nonresidential categories, **Grand Total starts in September 2021 were +7.4% m/m, +19.6% y/y and +7.3% ytd.** ♦

Alex Carrick

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.

## Expansion Index Monitors Construction Prospects

The economy may be in recovery mode, but nonresidential work is usually a lagging player. 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. Also, it helps if profits are abundant. (Today's greater tendency to work from home has made office occupancy much more difficult to assess.)

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 4: 2021 YTD RANKING OF TOP 20 STATES BY \$ VOLUME OF NONRESIDENTIAL CONSTRUCTION STARTS — ConstructConnect®

	Jan-Sept 2021	% Change vs Jan-Sept 2020
1 Texas	\$36,062,955,735	-7.0%
2 California	\$26,222,026,616	-15.4%
3 Florida	\$17,885,946,387	0.9%
4 New York	\$16,241,235,836	11.3%
5 Arizona	\$14,094,761,007	112.7%
6 Ohio	\$10,881,621,127	-12.1%
7 Pennsylvania	\$10,847,462,628	25.1%
8 North Carolina	\$10,478,313,791	32.2%
9 Illinois	\$10,006,747,640	-16.2%
10 Massachusetts	\$9,214,623,103	19.6%
11 Georgia	\$9,176,715,480	-11.0%
12 Minnesota	\$8,170,896,538	18.6%
13 Tennessee	\$7,779,264,272	29.4%
14 Virginia	\$7,312,994,654	-13.0%
15 Missouri	\$7,131,437,408	-10.1%
16 Michigan	\$7,129,981,070	10.5%
17 Washington	\$6,651,198,132	-42.6%
18 Wisconsin	\$5,799,856,713	-24.9%
19 Indiana	\$5,724,401,430	-15.9%
20 Colorado	\$5,541,100,954	-8.1%

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

TABLE 5: 2021 YTD RANKING OF TOP 20 STATES BY \$ VOLUME OF NONRESIDENTIAL BUILDING CONSTRUCTION STARTS — ConstructConnect®

	Jan-Sept 2021	% Change vs Jan-Sept 2020
1 Texas	\$20,909,900,315	-19.9%
2 California	\$15,094,807,137	-6.9%
3 Arizona	\$13,099,653,690	159.7%
4 Florida	\$11,262,208,370	-3.4%
5 New York	\$10,153,944,161	-0.6%
6 North Carolina	\$7,770,058,563	26.7%
7 Pennsylvania	\$7,530,510,542	55.5%
8 Ohio	\$6,648,793,206	-19.3%
9 Georgia	\$6,111,044,917	-13.8%
10 Tennessee	\$5,897,648,868	36.4%
11 Virginia	\$5,353,263,150	3.6%
12 Illinois	\$4,803,928,902	-24.6%
13 Missouri	\$4,714,008,747	-21.2%
14 Massachusetts	\$4,260,414,088	-24.2%
15 Washington	\$4,128,977,192	-18.7%
16 Alabama	\$3,728,834,516	43.4%
17 Louisiana	\$3,566,700,220	171.5%
18 Maryland	\$3,553,894,365	-18.4%
19 Colorado	\$3,520,670,971	-12.6%
20 Michigan	\$3,152,109,391	-11.2%

TABLE 6: 2021 YTD RANKING OF TOP 20 STATES BY \$ VOLUME OF HEAVY ENGINEERING/CIVIL CONSTRUCTION STARTS — ConstructConnect®

	Jan-Sept 2021	% Change vs Jan-Sept 2020
1 Texas	\$15,153,055,420	19.6%
2 California	\$11,127,219,479	-24.7%
3 Florida	\$6,623,738,017	9.3%
4 New York	\$6,087,291,675	38.8%
5 Minnesota	\$5,754,369,250	61.3%
6 Illinois	\$5,202,818,738	-6.7%
7 Massachusetts	\$4,954,209,015	137.4%
8 Ohio	\$4,232,827,921	2.1%
9 Michigan	\$3,977,871,679	37.1%
10 Pennsylvania	\$3,316,952,086	-13.4%
11 Wisconsin	\$3,070,050,114	7.3%
12 Georgia	\$3,065,670,563	-4.8%
13 North Carolina	\$2,708,255,228	50.8%
14 Indiana	\$2,609,706,356	-7.3%
15 New Jersey	\$2,540,145,017	-8.3%
16 Washington	\$2,522,220,940	-61.2%
17 Missouri	\$2,417,428,661	24.1%
18 Oklahoma	\$2,082,041,712	29.1%
19 Iowa	\$2,056,825,614	-10.6%
20 Colorado	\$2,020,429,983	0.9%

Data source and Tables: ConstructConnect.

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

# INSIGHT view of starts statistics

TABLE 7: VALUE OF UNITED STATES CONSTRUCTION STARTS  
ConstructConnect® INSIGHT VERSION — SEPTEMBER 2021  
ARRANGED TO MATCH THE ALPHABETICAL CATEGORY DROP-DOWN MENUS IN INSIGHT

	Jan-Sept 2021 (\$ billions)	% Change Jan-Sept 21 vs Jan-Sept 20	% Change Sept 21 vs Sept 20	% Change Sept 21 vs Aug 21
<b>Summary</b>				
CIVIL	123.691	1.7%	14.4%	-14.4%
NONRESIDENTIAL BUILDING	184.091	-4.9%	40.1%	31.0%
RESIDENTIAL	265.358	21.1%	7.7%	1.3%
GRAND TOTAL	573.139	7.3%	19.6%	7.4%
<b>Verticals</b>				
Airport	4.353	-8.8%	-20.3%	-13.3%
All Other Civil	11.627	-23.1%	46.9%	-34.9%
Bridges	14.237	-20.9%	20.6%	-20.6%
Dams / Canals / Marine Work	5.244	-10.9%	134.9%	43.8%
Power Infrastructure	7.670	133.3%	18.9%	272.0%
Roads	53.856	8.0%	20.7%	-21.3%
Water and Sewage Treatment	26.704	8.2%	-10.0%	-8.6%
<b>CIVIL</b>	<b>123.691</b>	<b>1.7%</b>	<b>14.4%</b>	<b>-14.4%</b>
Offices (private)	13.747	-26.8%	-7.6%	-51.9%
Parking Garages	1.339	-4.8%	-39.6%	-45.8%
Transportation Terminals	3.333	62.2%	-24.0%	15.2%
<b>Commercial (small subset)</b>	<b>18.419</b>	<b>-17.1%</b>	<b>-13.3%</b>	<b>-45.6%</b>
Amusement	5.153	7.5%	-47.6%	-50.2%
Libraries / Museums	1.947	-39.1%	116.2%	34.5%
Religious	0.757	-35.5%	-65.0%	-69.3%
Sports Arenas / Convention Centers	3.236	-17.4%	-0.3%	-55.8%
<b>Community</b>	<b>11.092</b>	<b>-15.2%</b>	<b>-24.9%</b>	<b>-43.9%</b>
College / University	11.197	-17.6%	-41.4%	-43.9%
Elementary / Pre School	13.475	-20.0%	3.6%	-22.3%
Jr / Sr High School	21.674	-7.5%	17.6%	-45.3%
Special / Vocational	1.408	-17.6%	-41.7%	-21.1%
<b>Educational</b>	<b>47.754</b>	<b>-14.1%</b>	<b>-13.9%</b>	<b>-39.1%</b>
Courthouses	1.813	39.7%	15.0%	22.8%
Fire and Police Stations	2.171	-10.3%	-1.9%	9.7%
Government Offices	9.466	12.0%	-43.0%	-21.9%
Prisons	1.670	-15.0%	-29.4%	-28.5%
<b>Government</b>	<b>15.120</b>	<b>6.9%</b>	<b>-34.1%</b>	<b>-16.3%</b>
Industrial Labs / Labs / School Labs	1.758	6.4%	-34.1%	-39.4%
Manufacturing	23.793	41.6%	389.5%	963.0%
Warehouses	18.298	-7.6%	26.8%	12.3%
<b>Industrial</b>	<b>43.848</b>	<b>14.6%</b>	<b>216.0%</b>	<b>309.6%</b>
Hospitals / Clinics	12.157	25.9%	88.9%	130.4%
Medical Misc.	5.197	-14.5%	59.8%	61.0%
Nursing Homes	4.364	-23.1%	-57.9%	-41.3%
<b>Medical</b>	<b>21.718</b>	<b>1.5%</b>	<b>32.9%</b>	<b>60.6%</b>
<b>Military</b>	<b>6.507</b>	<b>-3.8%</b>	<b>2.3%</b>	<b>55.6%</b>
Hotels	5.028	-39.9%	2.4%	58.6%
Retail Misc.	4.452	5.3%	-8.9%	9.0%
Shopping	10.152	7.0%	-7.8%	-37.6%
<b>Retail</b>	<b>19.632</b>	<b>-11.1%</b>	<b>-5.3%</b>	<b>-14.3%</b>
<b>NONRESIDENTIAL BUILDING</b>	<b>184.091</b>	<b>-4.9%</b>	<b>40.1%</b>	<b>31.0%</b>
Multi-Family	64.685	5.8%	-33.8%	-38.5%
Single-Family	200.672	27.1%	21.1%	14.3%
<b>RESIDENTIAL</b>	<b>265.358</b>	<b>21.1%</b>	<b>7.7%</b>	<b>1.3%</b>
<b>NONRESIDENTIAL</b>	<b>307.781</b>	<b>-2.3%</b>	<b>31.1%</b>	<b>12.7%</b>
<b>GRAND TOTAL</b>	<b>573.139</b>	<b>7.3%</b>	<b>19.6%</b>	<b>7.4%</b>

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 7 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 8: ConstructConnect's TOP 10 PROJECT STARTS IN SEPTEMBER 2021

LOCATION (EAST TO WEST)	TYPE OF CONSTRUCTION	DESCRIPTION	SQUARE FEET 000S*	DOLLARS 000,000S
<b>New York</b> Rochester	Institutional	University of Rochester Medicine Orthopedics & Physical Performance Center (2 structures) 10 Miracle Mile Dr University of Rochester Campus Planning, Design, & Construction Management	330	\$240
<b>Virginia</b> Alexandria	Institutional	Innovation Campus Academic Building - Building One (2 structures; 11 stories) 1021 Prince St Virginia Tech - Facilities	300	\$302
<b>North Carolina</b> Eden	Industrial	Nestle Purina Petcare / Eden (1 structure) 863 E Meadow Rd Nestle Purina Petcare Co- Main Office	1,300	\$450
<b>Georgia</b> Pooler	Industrial	Amazon Fulfillment Center / Pooler (1 structure) 800 Pine Meadow Dr Amazon	640	\$260
<b>Florida</b> Tallahassee	Industrial	Amazon Fulfillment Center - Project Mango / Tallahassee (2 structures; 4 stories) 6720 Mahan Dr Seefried Industrial Properties - Corporate	2,800	\$300
<b>Tennessee</b> Nashville	Commercial	Circle South (2 structures; 30 stories) 410 8th Ave S Lincoln Property Company - Corporate	538	\$250
<b>Louisiana</b> Plaquemine	Industrial	Shintech Louisiana Expansion (plastics/PVC) (1 structure) 28245 LA-1 Shintech Louisiana	*	\$1,300
<b>Texas</b> Tatum	Civil/Engineering	Oak Hill Solar Facility Rusk County Vistra	*	\$250
<b>Arizona</b> Chandler	Industrial	Intel Chandler Ocotillo Campus Expansion (2 structures) 4500 S Dobson Rd Intel Corporation	3,200	\$8,000
<b>California</b> Irvine	Institutional	Irvine Campus Medical Complex and Center for Advanced Care - University of California at Irvine (2 structures) Multiple Locations University of California at Irvine - Design and Construction Services	800	\$1,000
<b>TOTALS:</b>			<b>9,908</b>	<b>\$12,352</b>

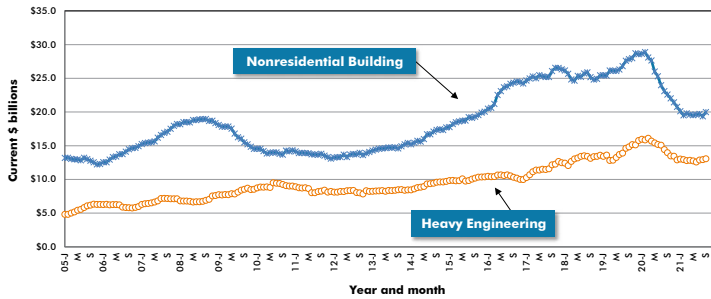
\*A square footage measure does not apply for alteration, some forms of industrial (e.g., petrochemical) and most engineering/civil work.

Source: ConstructConnect/Table: ConstructConnect.

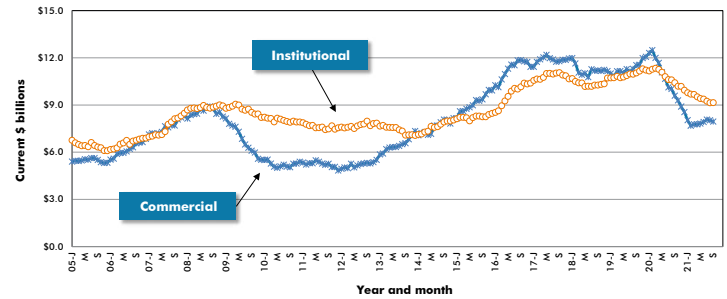


## Trend graphs for 12 key categories

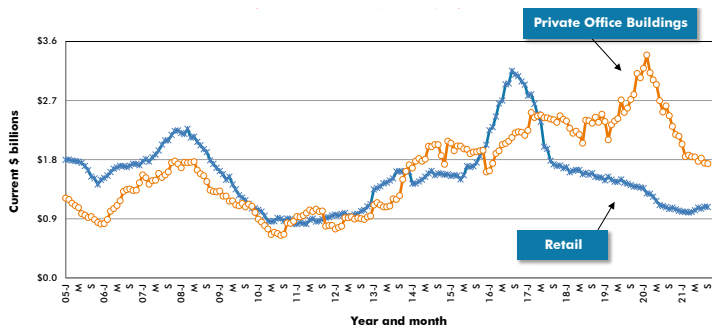
**GRAPH 9: U.S. NONRESIDENTIAL CONSTRUCTION STARTS — ConstructConnect® (12-MONTH MOVING AVERAGES)**



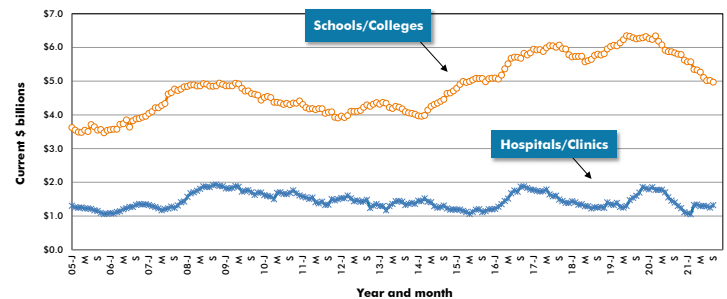
**GRAPH 10: U.S. COMMERCIAL AND INSTITUTIONAL CONSTRUCTION STARTS — ConstructConnect® (12-MONTH MOVING AVERAGES)**



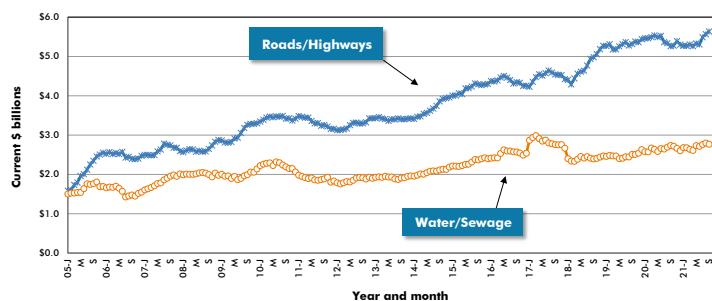
**GRAPH 11: U.S. RETAIL AND PRIVATE OFFICE BUILDING CONSTRUCTION STARTS — ConstructConnect® (12-MONTH MOVING AVERAGES)**



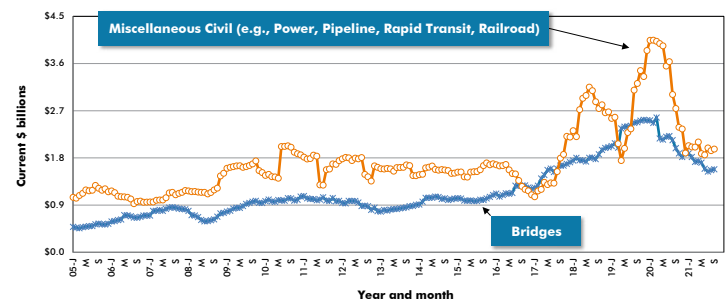
**GRAPH 12: U.S. HOSPITAL/CLINIC AND SCHOOL/COLLEGE CONSTRUCTION STARTS — ConstructConnect® (12-MONTH MOVING AVERAGES)**



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



**GRAPH 14: U.S. BRIDGES AND MISCELLANEOUS CIVIL CONSTRUCTION STARTS — ConstructConnect® (12-MONTH MOVING AVERAGES)**



The last data points in all the graphs on this page are for September, 2021.

Source: ConstructConnect/Charts: ConstructConnect.

## Regional starts table

TABLE 9: U.S. YEAR-TO-DATE REGIONAL STARTS, NONRESIDENTIAL CONSTRUCTION\* — ConstructConnect®

	Jan-Sept 2020	Jan-Sept 2021	% Change
Connecticut	\$3,037,463,954	\$2,235,812,575	-26.4%
Maine	\$1,404,561,889	\$2,585,764,499	84.1%
Massachusetts	\$7,703,936,654	\$9,214,623,103	19.6%
New Hampshire	\$790,538,617	\$1,066,197,954	34.9%
Rhode Island	\$636,131,445	\$805,285,996	26.6%
Vermont	\$468,987,403	\$327,379,490	-30.2%
<b>Total New England</b>	<b>\$14,041,619,962</b>	<b>\$16,235,063,617</b>	<b>15.6%</b>
New Jersey	\$5,974,760,848	\$4,982,630,936	-16.6%
New York	\$14,596,441,910	\$16,241,235,836	11.3%
Pennsylvania	\$8,672,125,675	\$10,847,462,628	25.1%
<b>Total Middle Atlantic</b>	<b>\$29,243,328,433</b>	<b>\$32,071,329,400</b>	<b>9.7%</b>
<b>TOTAL NORTHEAST</b>	<b>\$43,284,948,395</b>	<b>\$48,306,393,017</b>	<b>11.6%</b>
Illinois	\$11,948,186,425	\$10,006,747,640	-16.2%
Indiana	\$6,802,678,573	\$5,724,401,430	-15.9%
Michigan	\$6,451,883,946	\$7,129,981,070	10.5%
Ohio	\$12,385,461,942	\$10,881,621,127	-12.1%
Wisconsin	\$7,718,206,789	\$5,799,856,713	-24.9%
<b>Total East North Central</b>	<b>\$45,306,417,675</b>	<b>\$39,542,607,980</b>	<b>-12.7%</b>
Iowa	\$4,319,095,964	\$4,421,188,643	2.4%
Kansas	\$3,912,766,547	\$2,359,364,661	-39.7%
Minnesota	\$6,886,581,623	\$8,170,896,538	18.6%
Missouri	\$7,933,474,279	\$7,131,437,408	-10.1%
Nebraska	\$3,632,560,475	\$3,075,371,606	-15.3%
North Dakota	\$2,050,017,481	\$1,930,980,764	-5.8%
South Dakota	\$1,013,605,828	\$1,525,874,826	50.5%
<b>Total West North Central</b>	<b>\$29,748,102,197</b>	<b>\$28,615,114,446</b>	<b>-3.8%</b>
<b>TOTAL MIDWEST</b>	<b>\$75,054,519,872</b>	<b>\$68,157,722,426</b>	<b>-9.2%</b>
Delaware	\$1,368,499,277	\$861,333,122	-37.1%
District of Columbia	\$708,564,070	\$725,804,706	2.4%
Florida	\$17,725,449,479	\$17,885,946,387	0.9%
Georgia	\$10,306,198,660	\$9,176,715,480	-11.0%
Maryland	\$5,624,898,413	\$4,515,666,915	-19.7%
North Carolina	\$7,926,830,245	\$10,478,313,791	32.2%
South Carolina	\$4,326,303,068	\$3,936,015,027	-9.0%
Virginia	\$8,409,555,933	\$7,312,994,654	-13.0%
West Virginia	\$2,049,944,391	\$933,355,705	-54.5%
<b>Total South Atlantic</b>	<b>\$58,446,243,536</b>	<b>\$55,826,145,787</b>	<b>-4.5%</b>
Alabama	\$3,855,836,528	\$5,256,131,414	36.3%
Kentucky	\$2,668,803,953	\$2,834,496,163	6.2%
Mississippi	\$2,282,281,681	\$1,720,886,712	-24.6%
Tennessee	\$6,012,438,048	\$7,779,264,272	29.4%
<b>Total East South Central</b>	<b>\$14,819,360,210</b>	<b>\$17,590,778,561</b>	<b>18.7%</b>
Arkansas	\$3,042,946,740	\$2,299,504,202	-24.4%
Louisiana	\$3,547,967,326	\$5,457,469,004	53.8%
Oklahoma	\$3,327,751,542	\$3,567,635,351	7.2%
Texas	\$38,779,576,587	\$36,062,955,735	-7.0%
<b>Total West South Central</b>	<b>\$48,698,242,195</b>	<b>\$47,387,564,292</b>	<b>-2.7%</b>
<b>TOTAL SOUTH</b>	<b>\$121,963,845,941</b>	<b>\$120,804,488,640</b>	<b>-1.0%</b>
Arizona	\$6,627,550,703	\$14,094,761,007	112.7%
Colorado	\$6,030,841,509	\$5,541,100,954	-8.1%
Idaho	\$1,175,580,892	\$964,968,579	-17.9%
Montana	\$1,316,508,026	\$864,611,823	-34.3%
Nevada	\$3,082,113,761	\$3,163,880,722	2.7%
New Mexico	\$1,645,569,785	\$1,536,810,979	-6.6%
Utah	\$5,536,630,087	\$3,833,524,790	-30.8%
Wyoming	\$786,457,807	\$836,928,148	6.4%
<b>Total Mountain</b>	<b>\$26,201,252,570</b>	<b>\$30,836,587,002</b>	<b>17.7%</b>
Alaska	\$1,173,619,542	\$989,855,272	-15.7%
California	\$30,999,960,284	\$26,222,026,616	-15.4%
Hawaii	\$1,524,904,354	\$1,495,447,610	-1.9%
Oregon	\$3,371,764,260	\$4,317,702,880	28.1%
Washington	\$11,579,104,448	\$6,651,198,132	-42.6%
<b>Total Pacific</b>	<b>\$48,649,352,888</b>	<b>\$39,676,230,510</b>	<b>-18.4%</b>
<b>TOTAL WEST</b>	<b>\$74,850,605,458</b>	<b>\$70,512,817,512</b>	<b>-5.8%</b>
<b>TOTAL U.S.</b>	<b>\$315,153,919,666</b>	<b>\$307,781,421,595</b>	<b>-2.3%</b>

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

Source: ConstructConnect/Table: ConstructConnect.

## Detailed national table

TABLE 10: VALUE OF U.S. NATIONAL CONSTRUCTION STARTS — SEPTEMBER 2021 — ConstructConnect®  
BILLIONS OF CURRENT \$\$, NOT SEASONALLY ADJUSTED (NSA)

	Latest month actuals			Moving averages (placed in end month)						Year to Date.	
	Jul 21	Aug 21	Sep 21	Jul 21	Aug 21	Sep 21	Jul 21	Aug 21	Sep 21	Jan-Sep 2020	Jan-Sep 2021
Single Family	24.024	22.350	25.546	24.212	24.007	23.973	21.313	21.465	21.836	157.926	200.672
month-over-month % change	-6.3%	-7.0%	14.3%	2.5%	-0.8%	-0.1%	1.3%	0.7%	1.7%		
year-over-year % change	16.0%	8.9%	21.1%	33.8%	19.9%	15.4%	28.3%	27.4%	27.2%	4.8%	27.1%
Apartment	6.558	7.323	4.507	7.357	7.225	6.129	7.252	7.311	7.119	61.112	64.685
month-over-month % change	-15.8%	11.7%	-38.5%	-13.1%	-1.8%	-15.2%	-0.6%	0.8%	-2.6%		
year-over-year % change	-7.9%	10.7%	-33.8%	4.3%	2.0%	-10.5%	-9.5%	-5.9%	-5.5%	-12.4%	5.8%
<b>TOTAL RESIDENTIAL</b>	<b>30.582</b>	<b>29.672</b>	<b>30.053</b>	<b>31.569</b>	<b>31.232</b>	<b>30.102</b>	<b>28.565</b>	<b>28.776</b>	<b>28.955</b>	<b>219.039</b>	<b>265.358</b>
month-over-month % change	-8.5%	-3.0%	1.3%	-1.6%	-1.1%	-3.6%	0.8%	0.7%	0.6%		
year-over-year % change	9.9%	9.3%	7.7%	25.5%	15.2%	9.0%	16.0%	16.9%	17.3%	-0.7%	21.1%
Hotel/Motel	0.696	0.363	0.576	0.693	0.600	0.545	0.592	0.573	0.574	8.364	5.028
month-over-month % change	-6.1%	-47.8%	58.6%	3.5%	-13.4%	-9.2%	-1.1%	-3.3%	0.2%		
year-over-year % change	-10.1%	-38.9%	2.4%	24.1%	-4.7%	-15.3%	-59.6%	-58.9%	-55.5%	-49.1%	-39.9%
Retail/Shopping	0.828	1.535	0.958	1.186	1.298	1.107	1.053	1.085	1.078	9.487	10.152
month-over-month % change	-45.9%	85.3%	-37.6%	-7.3%	9.4%	-9.2%	-1.6%	3.1%	-0.6%		
year-over-year % change	-20.3%	34.0%	-7.8%	20.4%	21.0%	3.0%	-3.8%	0.8%	2.9%	-29.3%	7.0%
Parking Garages	0.177	0.145	0.079	0.144	0.150	0.134	0.147	0.144	0.139	1.407	1.339
month-over-month % change	40.4%	-18.1%	-45.8%	40.1%	4.2%	-10.6%	4.6%	-2.2%	-3.0%		
year-over-year % change	78.6%	-20.9%	-39.6%	0.6%	10.9%	-2.9%	-15.5%	-15.7%	-19.6%	-43.5%	-4.8%
Amusement	1.167	0.602	0.300	0.791	0.818	0.690	0.558	0.578	0.555	4.795	5.153
month-over-month % change	70.4%	-48.4%	-50.2%	47.4%	3.4%	-15.7%	13.4%	3.6%	-3.9%		
year-over-year % change	208.6%	65.4%	-47.6%	80.9%	90.9%	57.4%	-1.6%	3.9%	-0.7%	-15.6%	7.5%
Office	1.887	2.783	1.338	1.288	1.869	2.003	1.822	1.747	1.738	18.770	13.747
month-over-month % change	101.7%	47.5%	-51.9%	6.2%	45.1%	7.2%	2.7%	-4.1%	-0.5%		
year-over-year % change	43.1%	-24.4%	-7.6%	-6.4%	-16.4%	-6.8%	-27.8%	-33.3%	-29.6%	-27.0%	-26.8%
Governmental Offices	2.085	1.257	0.982	1.283	1.375	1.441	1.004	1.034	0.973	8.455	9.466
month-over-month % change	166.5%	-39.7%	-21.9%	35.3%	7.1%	4.9%	11.4%	3.0%	-6.0%		
year-over-year % change	145.3%	40.9%	-43.0%	56.5%	55.0%	24.8%	10.6%	17.0%	2.4%	-3.9%	12.0%
Laboratories	0.370	0.253	0.153	0.228	0.269	0.258	0.200	0.211	0.205	1.652	1.758
month-over-month % change	101.5%	-31.6%	-39.4%	34.7%	18.0%	-3.8%	10.4%	5.4%	-3.1%		
year-over-year % change	156.9%	107.3%	-34.1%	53.9%	64.2%	55.7%	-7.8%	8.7%	9.6%	-9.6%	6.4%
Warehouse	1.624	1.892	2.124	1.893	1.845	1.881	2.060	2.021	2.059	19.808	18.298
month-over-month % change	-19.4%	16.4%	12.3%	-21.5%	-2.6%	2.0%	-0.8%	-1.9%	1.9%		
year-over-year % change	-10.7%	-19.6%	26.8%	-17.9%	-20.5%	-3.5%	-4.1%	-4.9%	-3.0%	17.1%	-7.6%
Misc Commercial	0.304	0.698	0.517	1.103	1.205	0.506	0.634	0.632	0.623	5.971	6.569
month-over-month % change	-88.4%	129.9%	-26.0%	-8.2%	9.3%	-58.0%	-7.9%	-0.3%	-1.4%		
year-over-year % change	-68.1%	-3.4%	-17.1%	66.0%	63.0%	-33.9%	-38.1%	-36.9%	-21.4%	-65.0%	10.0%
<b>TOTAL COMMERCIAL</b>	<b>9.139</b>	<b>9.530</b>	<b>7.028</b>	<b>8.608</b>	<b>9.427</b>	<b>8.560</b>	<b>8.069</b>	<b>8.025</b>	<b>7.944</b>	<b>78.708</b>	<b>71.509</b>
month-over-month % change	-4.9%	4.3%	-26.3%	0.9%	9.5%	-9.1%	1.9%	-0.5%	-1.0%		
year-over-year % change	23.9%	-5.3%	-12.2%	15.7%	9.5%	1.0%	-20.3%	-19.9%	-17.2%	-27.3%	-9.1%
<b>TOTAL INDUSTRIAL (Manufacturing)</b>	<b>2.137</b>	<b>0.996</b>	<b>10.587</b>	<b>1.766</b>	<b>1.429</b>	<b>4.573</b>	<b>1.891</b>	<b>1.683</b>	<b>2.385</b>	<b>16.801</b>	<b>23.793</b>
month-over-month % change	85.5%	-53.4%	963.0%	21.0%	-19.1%	220.1%	4.6%	-11.0%	41.7%		
year-over-year % change	88.6%	-71.5%	389.5%	16.5%	-21.1%	102.0%	-28.8%	-12.1%	18.2%	-65.3%	41.6%
Religious	0.040	0.148	0.046	0.088	0.093	0.078	0.104	0.108	0.101	1.173	0.757
month-over-month % change	-55.7%	269.8%	-69.3%	-14.3%	5.2%	-16.1%	-3.8%	3.3%	-6.6%		
year-over-year % change	-55.5%	38.3%	-65.0%	-21.6%	-13.5%	-28.5%	-25.0%	-20.1%	-24.7%	-19.7%	-35.5%
Hospitals/Clinics	0.915	0.773	1.780	0.886	0.958	1.156	1.287	1.251	1.320	9.657	12.157
month-over-month % change	-22.9%	-15.5%	130.4%	-4.5%	8.1%	20.7%	-1.4%	-2.8%	5.6%		
year-over-year % change	-19.8%	-36.2%	88.9%	-20.2%	-15.3%	5.3%	-17.0%	-14.2%	-5.8%	-33.9%	25.9%
Nursing/Assisted Living	0.343	0.531	0.312	0.573	0.568	0.395	0.572	0.551	0.515	5.675	4.364
month-over-month % change	-58.8%	55.0%	-41.3%	-8.0%	-0.9%	-30.5%	-0.8%	-3.8%	-6.5%		
year-over-year % change	-13.2%	-32.9%	-57.9%	15.7%	-5.6%	-38.5%	-10.6%	-18.2%	-20.5%	-24.4%	-23.1%
Libraries/Museums	0.352	0.157	0.211	0.294	0.237	0.240	0.210	0.204	0.213	3.195	1.947
month-over-month % change	74.6%	-55.3%	34.5%	39.0%	-19.5%	1.4%	5.1%	-3.2%	4.6%		
year-over-year % change	53.3%	-33.7%	116.2%	-1.4%	-10.3%	27.6%	-44.8%	-48.0%	-40.4%	7.4%	-39.1%
Fire/Police/Courthouse/Prison	0.618	0.607	0.578	0.675	0.705	0.601	0.710	0.677	0.671	5.683	5.654
month-over-month % change	-30.5%	-1.8%	-4.7%	0.9%	4.4%	-14.7%	0.2%	-4.6%	-0.8%		
year-over-year % change	2.8%	-39.4%	-10.5%	33.4%	0.0%	-19.8%	13.5%	2.9%	6.9%	11.8%	-0.5%
Military	0.567	0.628	0.977	0.846	0.812	0.724	0.744	0.744	0.746	6.765	6.507
month-over-month % change	-54.4%	10.8%	55.6%	14.4%	-3.9%	-10.9%	-0.3%	0.0%	0.3%		
year-over-year % change	-4.4%	-0.5%	2.3%	45.5%	29.7%	-0.3%	9.9%	5.9%	3.5%	113.3%	-3.8%
Schools/Colleges	5.177	5.826	3.546	6.479	6.240	4.850	5.019	5.021	4.973	55.583	47.754
month-over-month % change	-32.9%	12.5%	-39.1%	-4.3%	-3.7%	-22.3%	-1.8%	0.0%	-1.0%		
year-over-year % change	-17.8%	0.5%	-13.9%	-16.3%	-13.8%	-10.3%	-14.6%	-14.5%	-14.8%	-9.5%	-14.1%
Misc Medical	0.452	0.533	0.858	0.564	0.580	0.614	0.589	0.585	0.611	6.075	5.197
month-over-month % change	-40.2%	18.0%	61.0%	-12.6%	2.9%	5.9%	-4.8%	-0.8%	4.6%		
year-over-year % change	-44.3%	-9.1%	59.8%	-20.4%	-6.7%	-4.8%	-18.5%	-16.8%	-11.3%	-15.0%	-14.5%
<b>TOTAL INSTITUTIONAL</b>	<b>8.462</b>	<b>9.203</b>	<b>8.308</b>	<b>10.405</b>	<b>10.192</b>	<b>8.658</b>	<b>9.236</b>	<b>9.139</b>	<b>9.151</b>	<b>93.806</b>	<b>84.337</b>
month-over-month % change	-34.5%	8.8%	-9.7%	-2.6%	-2.0%	-15.1%	-1.5%	-1.0%	0.1%		
year-over-year % change	-16.7%	-11.2%	1.7%	-9.9%	-9.8%	-9.5%	-13.0%	-13.7%	-12.2%	-9.2%	-10.1%
Misc Non Residential	0.541	0.395	0.431	0.550	0.463	0.456	0.513	0.505	0.501	4.229	4.452
month-over-month % change	19.4%	-27.0%	9.0%	2.9%	-15.7%	-1.6%	2.6%	-1.6%	-0.7%		
year-over-year % change	40.2%	-20.3%	-8.9%	22.8%	-2.3%	0.9%	-10.2%	-10.3%	-9.2%	-19.7%	5.3%
<b>TOTAL NON-RES BUILDING</b>	<b>20.280</b>	<b>20.124</b>	<b>26.353</b>	<b>21.328</b>	<b>21.511</b>	<b>22.252</b>	<b>19.710</b>	<b>19.352</b>	<b>19.980</b>	<b>193.544</b>	<b>184.091</b>
month-over-month % change	-16.0%	-0.8%	31.0%	0.6%	0.9%	3.4%	0.5%	-1.8%	3.2%		
year-over-year % change	6.4%	-17.6%	40.1%	1.8%	-3.0%	7.2%	-17.8%	-16.2%	-11.5%	-27.1%	-4.9%
Airports	0.563	0.639	0.554	0.737	0.697	0.585	0.486	0.479	0.468	4.771	4.353
month-over-month % change	-36.6%	13.4%	-13.3%	6.7%	-5.4%	-16.0%	-2.0%	-1.4%	-2.4%		
year-over-year % change	-17.6%	-11.5%	-20.3%	4.4%	-9.0%	-16.4%	-8.5%	-10.4%	-13.9%	-15.5%	-8.8%
Roads/Highways	8.115	6.147	4.835	7.519	7.020	6.366	5.489	5.567	5.636	49.856	53.856
month-over-month % change	19.4%	-24.2%	-21.3%	4.5%	-6.6%	-9.3%	3.5%	1.4%	1.2%		
year-over-year % change	37.1%	17.9%	20.7%	13.8%	15.5%	26.2%	2.4%	4.3%	7.1%	-4.1%	8.0%
Bridges	1.493	1.463	1.162	1.566	1.500	1.373	1.539	1.566	1.583	18.008	14.237
month-over-month % change	-3.4%	-2.0%	-20.6%	-9.6%	-4.2%	-8.5%	-3.4%	1.8%	1.1%		
year-over-year % change	-30.3%	28.5%	20.6%	-33.7%	-27.7%	-3.0%	-30.5%	-26.8%	-20.4%	-26.0%	-20.9%
Dams/Marine	0.574	0.643	0.925	0.568	0.625	0.714	0.606	0.593	0.637	5.883	5.244
month-over-month % change	-12.8%	12.1%	43.8%	0.4%	10.0%	14.2%	0.5%	-2.2%	7.5%		
year-over-year % change	6.5%	-20.2%	134.9%	-18.0%	-7.1%	23.2%	-10.9%	-16.5%	-8.7%	-2.9%	-10.9%
Water/Sewage	3.436	3.109	2.841	3.460	3.268	3.129	2.762	2.798	2.772	24.686	26.704
month-over-month % change	5.4%	-9.5%	-8.6%	8.8%	-5.6%	-4.3%	1.7%	1.3%	-0.9%		
year-over-year % change	18.8%	16.2%	-10.0%	21.1%	8.7%	7.6%	4.4%	3.8%	1.3%	5.3%	8.2%
Misc Civil (Power, etc.)	4.142	1.558	1.295	2.333	2.469	2.332	1.989	1.938	1.967	18.407	19.298
month-over-month % change	142.7%	-62.4%	-16.9%	32.6%	5.8%	-5.5%	7.1%	-2.6%	1.5%		
year-over-year % change	62.3%	-28.5%	38.3%	-16.3%	9.7%	23.4%	-45.3%	-35.6%	-28.2%	-41.9%	4.8%
<b>TOTAL ENGINEERING (Civil)</b>	<b>18.322</b>	<b>13.560</b>	<b>11.612</b>	<b>16.184</b>	<b>15.579</b>	<b>14.498</b>	<b>12.872</b>	<b>12.941</b>	<b>13.063</b>	<b>121.610</b>	<b>123.691</b>
month-over-month % change	23.3%	-26.0%	-14.4%	7.0%	-3.7%	-6.9%	2.4%	0.5%	0.9%		
year-over-year % change	24.4%	6.5%	14.4%	1.1%	4.9%	15.6%	-14.6%	-10.3%	-6.5%	-15.1%	1.7%
<b>GRAND TOTAL</b>	<b>69.184</b>	<b>63.357</b>	<b>68.018</b>	<b>69.081</b>	<b>68.322</b>	<b>66.853</b>	<b>61.147</b>	<b>61.069</b>	<b>61.999</b>	<b>534.192</b>	<b>573.139</b>
month-over-month % change	-4.5%	-8.4%	7.4%	1.0%	-1.1%	-2.2%	1.0%	-0.1%	1.5%		
year-over-year % change	12.3%	-1.5%	19.4%	11.2%	6.5%	9.7%	-4.0%	1.7%	1.2%	-15.1%	7.3%
<b>NON-RES BLDG + ENGINEERING</b>	<b>38.602</b>	<b>33.684</b>	<b>37.969</b>	<b>37.512</b>	<b>37.091</b>	<b>36.751</b>	<b>32.582</b>	<b>32.293</b>	<b>33.043</b>	<b>315.154</b>	<b>307.781</b>
month-over-month % change	-1.0%	-12.7%	12.7%	3.2%	-1.1%	-0.9%	1.2%	-0.9%	2.9%		
year-over-year % change	14.3%	-9.3%	31.1%	1.5%	0.2%	10.4%	-16.5%	-15.9%	-9.6%	-22.9%	-2.3%