Issued: August 2019 (based on July 2019 Starts Stats)

Constructconnect®

Bolstered by Mega Projects, July's Nonresidential Starts almost Matched June

ConstructConnect announced today that the latest month's volume of construction starts, excluding residential work, was \$45.4 billion.

The month-to-month change versus June was -1.7%. July's basket of mega projects, however, was a little better than June's. July included 4 projects of more than \$1 billion each for a total of \$8.7 billion. June had 3 such projects for \$7.1 billion. July featured ultra-large LNG terminal, refinery, hospital and airport work.



Marketing Analytics Team

61 und sv. 61 lnd	+14% -27% -25%	+2220%	-23% +48	% -21%	(-2%)
81 Int-net so 61 Int-net	-24% -16% -37%	(+46%)	(-6%) A -10	-1%)	(-3%)
71 lut-net sv 81 lut-net	-6% -1% -11%	+48%	-7% -3% -16	* 14%	+2%
Commercial	Retail Private Hotel Office & Motel	Industrial	Institutional Schools Hosp & Clir	tals Heavy ics Engineering	Total Non- Residential

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July's Notable Points

- The July 2019 versus July 2018 (y/y) climb of +6.9% in total nonresidential starts owed thanks to industrial (+424.6%) and engineering (+17.4%), as institutional remained flat (-0.6%) and commercial fell into retreat (-28.6%).
- The -3.2% year-to-date setback in total nonresidential starts has originated in the commercial (-14.7%), institutional (-5.7%) and heavy engineering/civil (-1.3%) type-of-structure categories, while industrial has shone brightly (+46.4%).

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Bolstered by Mega Projects, July's Nonresidential Starts almost Matched June

July Featured Mega Project Strength

ConstructConnect announced today that the latest month's volume of construction starts, excluding residential work, was \$45.4 billion (green shaded box, Table 5, page 8). The month-to-month change versus June was -1.7%. July's basket of mega projects, however, was a little better than June's. July included 4 projects of more than \$1 billion each for a total of \$8.7 billion. June had 3 such projects for \$7.1 billion. July featured ultra-large LNG terminal, refinery, hospital and airport work (see page 5).

On a year-over-year basis, July 2019's nonresidential starts appear upbeat, +6.9%. They were also ahead by more than one-quarter (+29%) versus their previous five-year average for July from 2014 through 2018. On a year-to-date basis, nonresidential starts so far in 2019 have been -3.2% compared with the same January-to-July time frame of 2018.

'SMOOTHED' SERIES

Since large project groundbreakings can often introduce notable volatility in the monthly 'starts' numbers and their period-to-period percentage changes, it is informative to also study 'smoothed' series, such as are set out in the middle columns of Table 5 on page 8.

On a 12-month moving average basis, July 2019's total nonresidential starts were -2.9% versus the previous 12 months (i.e., August-2018-to-July-2019 vs August-2017-to-July- 2018). Type-of-structure sub-category starts on the same 12-month-over-prior-12-month basis in July 2019 were: commercial, -10.8%; industrial, +4.3%; institutional, +1.0%; and engineering, -0.5%.

"Smoothed" grand total starts, which include residential activity, were -5.7% in July. Residential activity has been -10.2% on a 12-month moving average basis, with multi-family starts (-18.0%) languishing more than single-family (-6.4%) groundbreakings.

'Starts' as a Leading Indicator

The 'starts' figures appearing in this report's tables and graphs are not seasonally adjusted (NSA). Nor are they altered for inflation. They are expressed in what are termed 'current' as opposed to 'constant' dollars.

'Nonresidential building' plus 'engineering/civil' work accounts for a larger share of total construction than residential activity. The former's combined proportion of total put-in-place construction in the Census Bureau's latest report, for June, was 59%; the latter's share was 41%.

ConstructConnect's construction starts are leading indicators for the Census Bureau's capital investment or put-in-place series. Also, the reporting period for starts (July 2019) is one month ahead of the reporting period for the investment series (June 2019).

Construction Overview

Employment in the U.S. construction sector in July moved a shade higher (+4,000 jobs) than in May. The average monthly gain in 'hard hat' jobs to date in 2019 has been exactly half what it was through the first seven months of last year, +15,000 down from +30,000. The year-over-year change in construction employment has been +2.8%, nearly twice as fast as for all jobs in the economy, at +1.5%. Construction is still leading all sectors in year-over-year hiring, but only by a thread. 'Transportation and warehousing' is at +2.7% and 'education and health', +2.6%.

Construction's NSA unemployment rate dipped a bit in July to 3.8% from 4.0% in May, but it did not fall as low as in July 2018 (3.4%). The national NSA unemployment rate in the latest month was 4.0%. (Seasonally adjusted (SA), the economy-wide jobless rate in July was 3.7%.)

July's year-over-year employment changes in other corners of the economy with close ties to construction were: 'machinery and equipment rental', +11.7%; 'oil and gas extraction', +7.6%; 'architectural and engineering services', +3.0%;

TABLE 1: VALUE OF UNITED STATES CONSTRUCTION STARTS — JULY 2019 (ConstructConnect®)

	Jan-Jul 2019	% Change Jan-Jul 19 vs	% Change Jul 19 vs	% Change Jul 19 vs
	(\$ billions)	Jan-Jul 18	Jul 18	Jun 19
	(\$ Dillions)	Jan-Jul 16	JUI 10	Jun 19
Hotel/Motel	10.502	-36.5%	-38.2%	-25.3%
Retail/Shopping	8.843	-23.8%	-36.1%	14.0%
Parking Garage	2.020	23.3%	77.5%	34.4%
Amusement	3.855	-18.7%	125.7%	86.1%
Private Office	16.417	-16.2%	-52.5%	-27.2%
Government Office	6.625	14.7%	88.6%	28.6%
Laboratory	0.985	-46.9%	-78.8%	9.1%
Warehouse	11.054	-13.4%	-49.8%	-39.4%
Miscellaneous Commercial *	11.513	19.5%	-5.6%	266.8%
COMMERCIAL (big subset)	71.814	-14.7%	-28.6%	3.9%
INDUSTRIAL (Manufacturing)	30.954	46.4%	424.6%	2220.1%
Religious	0.953	-26.1%	-28.4%	-30.7%
Hospital/Clinic	8.944	-9.5%	172.5%	47.9%
Nursing/Assisted Living	5.152	-20.5%	-17.9%	53.8%
Library/Museum	2.247	45.5%	176.0%	142.3%
Fire/Police/Courthouse/Prison	3.560	-18.5%	-41.8%	-18.0%
Military	2.371	1.0%	-6.3%	-33.0%
School/College	46.975	1.0%	-12.3%	-38.9%
Miscellaneous Medical	4.550	-33.7%	-54.2%	-46.8%
INSTITUTIONAL	74.753	-5.7%	-0.6%	-22.8%
Miscellaneous Non-residential	3.639	-19.1%	-30.4%	9.6%
NONRESIDENTIAL BUILDING	181.161	-4.2%	2.0%	13.5%
Airport	4.170	-2.9%	51.6%	63.3%
Road/Highway	40.842	0.9%	4.6%	12.8%
Bridge	15.778	8.1%	12.6%	-21.9%
Dam/Marine	5.095	63.7%	5.0%	-52.0%
Water/Sewage	18.980	0.1%	21.5%	20.9%
Miscellaneous Civil (power, pipelines, etc.)	17.026	-21.8%	127.0%	-75.6%
HEAVY ENGINEERING (Civil)	101.890	-1.3%	17.4%	-21.3%
TOTAL NONRESIDENTIAL	283.051	-3.2%	6.9%	-1.7%

Source: ConstructConnect Research Group/Table: ConstructConnect.

'real estate firms', +2.8%; 'cement and concrete product manufacturing', +0.6%; and 'building material and supplies dealers', -0.5%.

Month-to-Month, Year-over-Year and Year-to-Date Results

* Includes transportation terminals and sports arenas

July's -1.7% pullback in total nonresidential starts month-over-month (m/m) resulted from almost equal declines in institutional (-22.8%) and engineering (-21.3%) that weren't quite counterbalanced by commercial (+3.9%) and industrial (+2220%). Industrial is particularly susceptible to outsized swings arising from mega project work. July manufacturing/industrial work featured a \$4.5 billion LNG facility in Louisiana and a \$1.2 billion refinery in Texas.

The July 2019 versus July 2018 (y/y) climb of +6.9% in total nonresidential starts owed thanks to industrial (+424.6%) and engineering (+17.4%), as institutional remained flat (-0.6%) and commercial fell into retreat (-28.6%).

The -3.2% year-to-date setback in total nonresidential starts has originated in the commercial (-14.7%), institutional (-5.7%) and heavy engineering/civil (-1.3%) type-of-structure categories, while industrial has shone brightly (+46.4%).

Year-to-date for Sub-Sectors: Engineering Performing Best

Within commercial starts to date in 2019, the 'private office buildings' subcategory has accounted for the largest share (23%). July's three percentage-change metrics for 'private office buildings' were: -27.2% m/m; -52.5% y/y; and -16.2% ytd. Also prominent within commercial, each with 15% slices, have been 'hotel/motel' and 'warehouse' work. But their results have also been uniformly negative, with the former at -25.3% m/m, -38.2% y/y and -36.5% ytd, and the latter at -39.4% m/m, -49.8% y/y and -13.4% ytd. On the plus side, 'miscellaneous commercial' (which includes airport passenger terminal work - *see page 5*), has provided some sizzle. In July, 'miscellaneous civil' was +266.8% m/m and +19.5% ytd, although -5.6% y/y.

Continued on page 3



Continued from page 2

Dominant, with a nearly two-thirds share, in institutional starts is the 'schools/colleges' sub-category. Educational facility starts in July were -38.9% m/m and -12.3% y/y, but +1.0% ytd. Accounting for one-quarter of institutional starts so far this year have been health care projects, combining 'hospitals/clinics', 'nursing/assisted living' and 'medical miscellaneous'. Medical facility starts in the seventh month of 2019 were: +22.6% m/m and +34.5% y/y, but -19.7% ytd.

The percentage changes for key engineering sub-categories have generally been more encouraging than for nonresidential building markets. 'Road/highway' starts (with a 40% share of engineering to date in 2019) were +12.8% m/m, +4.6% y/y and +0.9% ytd in July. 'Water/sewage' starts (19% slice) in the latest month were +20.9% m/m, +21.5% y/y and +0.1% ytd. Bridges (15% share) were -21.9% m/m, but +12.6% y/y and +8.1% ytd.

Infrastructure Strength in Trend Graphs and Project Delays from JOLTS Data

Among the 12-month moving average graphs on page 6, the nonresidential buildings curve has leveled off during the past couple of years after a long upward climb, while the engineering curve is still gradually rising (Graph 3). From Graph 4, institutional and commercial have been tapering off. What is remarkable, though, is how similar their values have become. Graph 5 shows retail plunging, but private office buildings holding up nicely. Graph 6 has school starts flattening after an upswing, but hospital starts being weak and going nowhere. Road and bridge 'starts' in Graphs 7 and 8 have been on sharp inclines, implying good things about the renewal of America's infrastructure, although water and sewer starts haven't been improving to the same degree. Finally, portions of the 'miscellaneous civil' curve are spikey due to mega projects.

Job openings in the construction sector, whether measured as a level or a rate, continue to be exceptionally elevated, as is highlighted in Graph 1. 'Hires' statistics (Graph 2), however, are a tale of frustration. They are slowly increasing as a level, but they are stuck in neutral as a rate. The availability of qualified workers to fill positions is an ongoing problem for contractors and it partially explains why pick-ups in some categories of construction are being delayed.

Construction Workers among the 'Have Nots' in Wage Gains

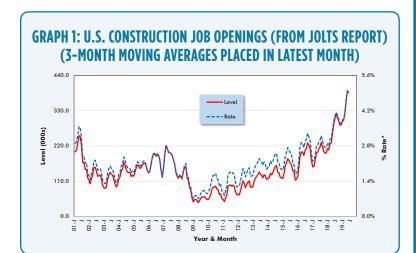
Tables B-3 and B-8 of the monthly *Employment Situation* report record average hourly and average weekly wages for industry sectors. B-3 is for all employees (i.e., including bosses) on non-farm payrolls. B-8 is for 'production and non-supervisory personnel' only (i.e., it excludes bosses). For 'all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

From July's BLS Table B-3 (including supervisory personnel), the 'all-jobs' compensation increases were +3.2% hourly and +2.6% weekly. By comparison, construction workers as a subset of 'all-jobs' fared relatively poorly, +2.8% hourly and +2.0% weekly. From the latest Table B-8 (excluding bosses), the all-jobs earnings gains were +3.3% hourly and +2.4% weekly. Again, construction workers were 'on the outs', at only +2.5% hourly and +1.4% weekly.

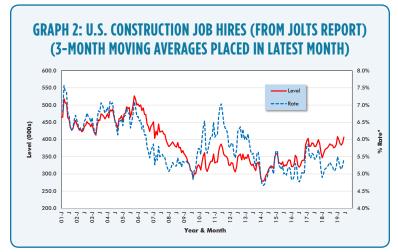
Further on Costing and Grand Total Starts

Further on costing, July 2019's y/y results for three BLS Producer Price Index (PPI) series were: 'construction materials special index', -1.5% (down further from -1.1% in June); 'inputs to new construction index, excluding capital investment, labor and imports', +0.2% (ahead marginally from +0.1% in June); and 'final demand construction', +5.5% (up slightly from June's +5.3%).

The value of construction starts each month is summarized from Construct-Connect's database of all active construction projects in the U.S. Missing project values are estimated with the help of RSMeans' building cost models.



*Rate is number of job openings end-of-month as % of 'construction employment plus number of job openings'. JOLTS – Job Openings and Labor Turnover Survey. Latest seasonally adjusted (SA) data points are for June, 2019.



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

JOLTS – Job Openings and Labor Turnover Survey. Latest seasonally adjusted (SA) data points are for June, 2019.

Data source: Bureau of Labor Statistics/Charts: ConstructConnect.

ConstructConnect's non-residential construction starts series, because it is comprised of total-value estimates for individual projects, some of which are ultra-large, has a history of being more volatile than many other leading indicators for the economy.

ConstructConnect's total residential starts (i.e., single-family plus multi-family starts) in the latest month were -11.7% m/m; -19.9 y/y and -13.0% ytd. To date in 2019, it's been the multi-family component of residential (-24.6%) that's been lost in the bushes more than singles (-8.0%). 'Grand total' construction starts in July were -5.1% m/m; -3.2% y/y and -6.9% ytd. ◆

Alex Carrick

ConstructConnect has moved to a better-targeted and research-assigned 'start' date. (Prior to January 2017, the 'start' date was recorded as occurring within 30 to 60 days of the announced bid 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.

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.



TABLE 2: VALUE OF UNITED STATES CONSTRUCTION STARTS — ConstructConnect® INSIGHT VERSION — JULY 2019 ARRANGED TO MATCH THE ALPHABETICAL CATEGORY DROP-DOWN MENUS IN INSIGHT

		Jan-Jul 2019 (\$ billions)	% Change Jan-Jul 19 vs Jan-Jul 18	% Change Jul 19 vs Jul 18	% Chang Jul 19 v Jun 1
		(\$ cillions)	Jan-Jul 18	JUI 16	Jun
Summary					
CIVIL		101.890	-1.3%	17.4%	-21.3
NONRESIDENTIAL BI	JILDING	181.161	-4.2%	2.0%	13.5
RESIDENTIAL		154.690	-13.0%	-19.9%	-11.7
GRAND TOTAL		437.742	-6.9%	-3.2%	-5.1
Verticals					
verticals	Airport	4.170	-2.9%	51.6%	63.3
	All Other Civil	10.823	-33.4%	55.2%	-66.8
	Bridges	15.778	8.1%	12.6%	-21.9
	Dams / Canals / Marine Work	5.095	63.7%	5.0%	-52.0
	Power Infrastructure	6.203	12.4%	762.7%	-82.8
	Roads	40.842	0.9%	4.6%	12.8
	Water and Sewage Treatment	18.980	0.1%	21.5%	20.9
CIVIL		101.890	-1.3%	17.4%	-21.
	Offices (private)	16.417	-16.2%	-52.5%	-27.:
	Parking Garages	2.020	23.3%	77.5%	34.
	Transportation Terminals	7.950	97.7%	707.1%	1178.
Comme	rcial (small subset)	26.387	4.5%	-23.3%	13.
	Amusement	3.855	-18.7%	125.7%	86.
	Libraries / Museums	2.247	45.5%	176.0%	142.
	Religious	0.953	-26.1%	-28.4%	-30.
	Sports Arenas / Convention Centers	3.563	-36.5%	-78.4%	-1.
Commu		10.618	-19.5%	-23.7%	54.
	College / University	11.044	-7.5%	-28.8%	-30.
	Elementary / Pre School	14.349	2.7%	8.7%	-23.
	Jr / Sr High School	20.490	5.6%	-16.9%	-50. 5.
Educatio	Special / Vocational	1.093 46.975	-10.5% 1.0%	-10.8% -12.3%	
Educatio	Courthouses	0.629	-24.1%	-64.9%	-38. 235.
	Fire and Police Stations	1.883	4.7%	-58.1%	-61.
	Government Offices	6.625	14.7%	88.6%	28.
	Prisons	1.048	-39.9%	113.0%	51.
Governr		10.186	0.4%	21.6%	12.
	Industrial Labs / Labs / School Labs	0.985	-46.9%	-78.8%	9.
	Manufacturing	30.954	46.4%	424.6%	2220.
	Warehouses	11.054	-13.4%	-49.8%	-39.
Industria		42.993	20.2%	93.2%	248.
	Hospitals / Clinics	8.944	-9.5%	172.5%	47.
	Medical Misc.	4.550	-33.7%	-54.2%	-46.
	Nursing Homes	5.152	-20.5%	-17.9%	53.
Medical		18.646	-19.7%	34.5%	22.
Military		2.371	1.0%	-6.3%	-33.
	Hotels	10.502	-36.5%	-38.2%	-25.
	Retail Misc.	3.639	-19.1%	-30.4%	9.
	Shopping	8.843	-23.8%	-36.1%	14.
Retail		22.984	-29.6%	-35.9%	-6.
NONRESIDENTIAL B		181.161	-4.2%	2.0%	13.
	Multi-Family	40.198	-24.6%	-46.9%	-25.
	Single-Family	114.493	-8.0%	-8.7%	-7.
RESIDENTIAL		154.690	-13.0%	-19.9%	-11.
NONRESIDENTIAL		283.051	-3.2%	6.9%	-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 2 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.

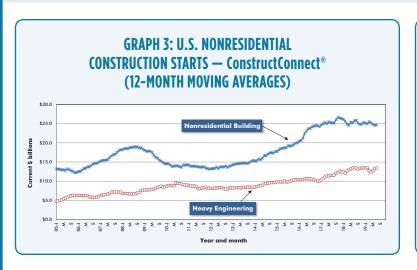


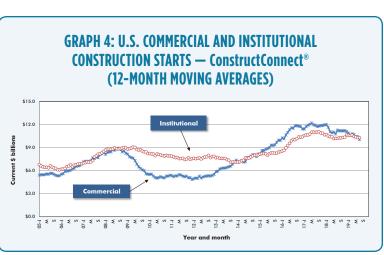
TABLE 3: ConstructConnect's TOP 10 PROJECT STARTS IN JULY 2019

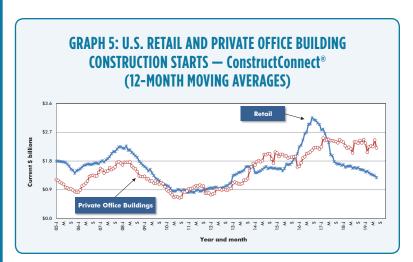
LOCATION (EAST TO WEST)	TYPE OF CONSTRUCTION	DESCRIPTION	SQUARE FEET 000S* DO	DLLARS 000,000S
Virginia Fredericksburg	Civil/Engineering	I-95 Express Lanes Fredericksburg Extension (1 structure) I-95 Virginia Department of Transportation (VDOT) - Procurement	*	\$500
Georgia Brookhaven	Institutional	Children's Healthcare of Atlanta Replacement Hospital Campus (1 structure; 19 stories; 446 units) I-85 & N Druid Hills Rd Children's Healthcare of Atlanta at Scottish Rite	1,800	\$1,500
Florida Miami	Commercial	Skyrise Miami (4 structures; 90 stories) 2665 S Bayshore Dr J. Berkowitz Development Group	171	\$540
Miami	Commercial	Royal Caribbean Cruises Headquarters (1 structure; 10 stories) 1080 Caribbean Way Royal Caribbean International / Royal Caribbean Cruises Ltd.	350	\$300
Tennessee Nashville	Commercial	Broadwest Development (5 structures; 62 stories) 1600 West End Ave Propst Properties	635	\$500
Michigan Lansing	Civil/Engineering	Natural Gas Power Plant - Lansing Board of Water and Light (1 structure) 3725 S Canal Rd Lansing Board of Water & Light	*	\$500
Missouri Kansas City	Commercial	Kansas City International Airport - New Single Terminal (1 structure) 601 Brasilia Ave City of Kansas City - Aviation Department	1,000	\$1,500
Louisiana Cameron	Industrial	Calcasieu Pass (1 structure) Davis Rd Venture Global LNG Inc.	*	\$4,500
Texas Texas City	Industrial	Marathon Galveston Bay Refinery (1 structure) 502 10th St S BP Products North America	*	\$1,200
Nevada Reno	Industrial	Makita Manufacturing Facility / Reno Military Rd & Echo Ave Prologis - Reno	819	\$440
TOTALS:			4,775	\$11,480

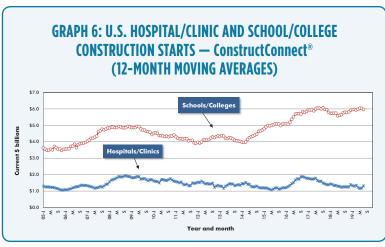
^{*}A square footage measure does not apply for alteration, some forms of industrial (e.g., petrochemical) and most engineering/civil work.

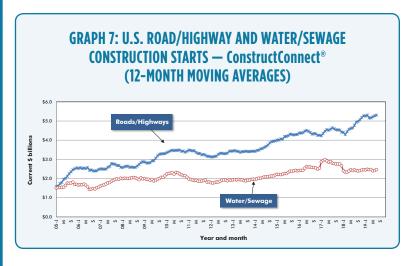


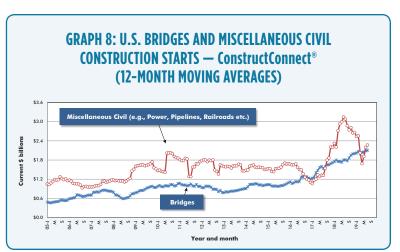












The last data points in all the graphs on this page are for July, 2019.

Source: ConstructConnect/Charts: ConstructConnect.



TABLE 4: U.S. YEAR-TO-DATE REGIONAL STARTS NONRESIDENTIAL CONSTRUCTION* — ConstructConnect®

	Jan-Jul 2018	Jan-Jul 2019	% Change
Connecticut	\$2,442,250,787	\$3,016,612,183	23.5%
Maine	\$1,534,351,193	\$972,794,599	-36.6%
Massachusetts	\$5,835,939,281	\$7,391,208,717	26.6%
New Hampshire	\$980,824,550	\$893,388,935	-8.9%
Rhode Island	\$1,053,293,665	\$571,569,985	-45.7%
Vermont	\$350,259,940	\$256,148,774	-26.9%
Total New England	\$12,196,919,416	\$13,101,723,193	7.4%
New Jersey New York	\$5,029,976,776	\$4,316,624,046	-14.2%
Pennsylvania	\$17,578,152,749 \$8,190,834,681	\$13,315,967,136 \$9,592,359,868	-24.2% 17.1%
Total Middle Atlantic	\$30,798,964,206	\$27,224,951,050	-11.6%
TOTAL NORTHEAST	\$42,995,883,622	\$40,326,674,243	-6.2%
Illinois	\$8,934,811,371	\$8,394,554,989	-6.0%
Indiana	\$5,064,466,678	\$4,225,442,913	-16.6%
Michigan	\$6,774,418,920	\$5,137,272,184	-24.2%
Ohio	\$9,449,743,997	\$8,018,967,417	-15.1%
Wisconsin	\$16,381,777,185	\$6,084,524,103	-62.9%
Total East North Central	\$46,605,218,151	\$31,860,761,606	-31.6%
Iowa	\$3,492,629,967	\$3,315,581,801	-5.1%
Kansas	\$3,526,946,692	\$2,826,628,492	-19.9%
Minnesota	\$6,150,974,175	\$7,089,487,967	15.3%
Missouri	\$5,590,357,854	\$5,201,618,184	-7.0%
Nebraska	\$1,722,763,450	\$2,177,593,691	26.4%
North Dakota	\$1,853,387,378	\$1,093,622,310	-41.0%
South Dakota	\$1,101,032,718	\$1,044,072,461	-5.2%
Total West North Central	\$23,438,092,234	\$22,748,604,906	-2.9%
TOTAL MIDWEST	\$70,043,310,385	\$54,609,366,512 \$685,189,361	-22.0%
Delaware District of Columbia	\$570,492,474 \$2,557,950,602	\$1,101,631,158	20.1% -56.9%
Florida	\$17,907,221,755	\$16,667,316,810	-6.9%
Georgia	\$7,252,648,643	\$12,066,111,121	66.4%
Maryland	\$4,736,808,849	\$4,449,232,588	-6.1%
North Carolina	\$8,628,376,122	\$7,460,042,738	-13.5%
South Carolina	\$3,786,599,541	\$3,857,242,716	1.9%
Virginia	\$10,389,513,085	\$5,674,173,009	-45.4%
West Virginia	\$6,423,589,798	\$1,079,514,038	-83.2%
Total South Atlantic	\$62,253,200,869	\$53,040,453,539	-14.8%
Alabama	\$3,600,740,716	\$5,536,754,102	53.8%
Kentucky	\$3,142,370,333	\$3,879,605,499	23.5%
Mississippi	\$1,397,963,481	\$1,625,379,021	16.3%
Tennessee	\$5,246,028,116	\$5,108,442,836	-2.6%
Total East South Central	\$13,387,102,646	\$16,150,181,458	20.6%
Arkansas Louisiana	\$1,759,253,906	\$1,739,131,306	-1.1%
Oklahoma	\$3,237,181,067	\$6,818,493,594	110.6% -7.6%
Texas	\$3,618,927,999 \$28,562,467,696	\$3,343,590,540 \$44,445,153,972	55.6%
Total West South Central	\$37,177,830,668	\$56,346,369,412	51.6%
TOTAL SOUTH	\$112,818,134,183	\$125,537,004,409	11.3%
Arizona	\$6,474,378,599	\$4,547,632,893	-29.8%
Colorado	\$4,442,630,096	\$5,342,257,266	20.2%
Idaho	\$1,368,417,552	\$1,272,216,156	-7.0%
Montana	\$864,372,216	\$778,516,199	-9.9%
Nevada	\$3,673,713,777	\$3,502,806,530	-4.7%
New Mexico	\$1,460,193,338	\$901,259,617	-38.3%
Utah	\$3,929,485,922	\$3,060,651,826	-22.1%
Wyoming	\$710,522,325	\$3,736,051,967	425.8%
Total Mountain	\$22,923,713,825	\$23,141,392,454	0.9%
Alaska	\$1,248,300,044	\$735,844,162	-41.1%
California	\$27,656,510,778	\$22,861,366,276	-17.3%
Hawaii	\$1,630,980,334	\$1,346,059,433	-17.5%
Oregon	\$4,170,722,277	\$3,743,743,252	-10.2%
Washington Total Pacific	\$8,806,069,169 \$43,512,582,602	\$10,749,681,850 \$39,436,694,973	22.1% -9.4%
TOTAL WEST	\$66,436,296,427	\$62,578,087,427	-5.8%
TOTAL U.S.	\$292,293,624,617	\$283,051,132,591	-3.2%
	,,,	, ,	

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

Source: ConstructConnect/Table: ConstructConnect.



TABLE 5: VALUE OF U.S. NATIONAL CONSTRUCTION STARTS — JULY 2019 — ConstructConnect®
BILLIONS OF CURRENT SS. NOT SEASONALLY ADJUSTED (NSA)

	BILLIONS OF (URREN	IT \$S, I	NOT SE	ASONA	LLY AD	JUSTED) (NSA))		
	Late	st month actua	ıls		Moving 3-months	averages (pl	laced in end mo	onth) 12-months		Year to D Jan-Jul	ate. Jan-Jul
	May 19	Jun 19	Jul 19	May 19	Jun 19	Jul 19	May 19	Jun 19	Jul 19	2018	2019
ingle Family month-over-month % change	17.438 -5.2%	17.977 3.1%	16.614 -7.6%	17.341 9.9%	17.939 3.4%	17.343 -3.3%	16.253 -1.4%	16.176 -0.5%	16.044 -0.8%	124.389	114.493
year-over-year % change	-14.1%	-4.9%	-8.7%	-9.8%	-9.0%	-9.4%	-5.8%	-5.8%	-6.4%	4.9%	-8.09
partment month-over-month % change	4.652 -36.9%	5.381 15.7%	4.015 -25.4%	6.120 -7.5%	5.801 -5.2%	4.683 -19.3%	7.286 -3.4%	6.995 -4.0%	6.699 -4.2%	53.346	40.198
year-over-year % change	-40.1%	-39.3%	-46.9%	-19.5%	-29.5%	-42.0%	-16.0%	-15.5%	-18.0%	-27.2%	-24.69
OTAL RESIDENTIAL month-over-month % change	22.090 -14.3%	23.358 5.7%	20.629 -11.7%	23.461 4.7%	23.739 1.2%	22.025 -7.2%	23.539 -2.1%	23.171 -1.6%	22.743 -1.8%	177.736	154.690
year-over-year % change otel/Motel	-21.3% 1.383	-15.9% 1.453	-19.9% 1.086	-12.5% 1.702	-15.0% 1.409	-19.0% 1.307	-9.2% 1.754	-9.0% 1.732	-10.2% 1.677	-7.4% 16.540	-13.09 10.502
month-over-month % change	-0.5%	5.1%	-25.3%	-2.8%	-17.2%	-7.2%	-16.9%	-1.2%	-3.2%		
year-over-year % change etail/Shopping	-75.6% 1.422	-15.2% 1.004	-38.2% 1.144	-45.5% 1.378	-55.2% 1.288	-57.1% 1.190	-22.3% 1.366	-21.1% 1.337	-24.3% 1.283	-11.1% 11.605	-36.59 8.843
month-over-month % change	-1.1%	-29.4%	14.0%	1.0%	-6.5%	-7.6%	-1.5%	-2.1%	-4.0%		-23.89
year-over-year % change arking Garages	-15.3% 0.250	-25.7% 0.302	-36.1% 0.405	-24.9% 0.296	-21.9% 0.257	-25.9% 0.319	-16.8% 0.243	-15.2% 0.254	-19.8% 0.269	-6.5% 1.639	2.020
month-over-month % change year-over-year % change	13.9% -47.1%	20.8% 86.0%	34.4% 77.5%	19.2% -2.3%	-13.3% -15.6%	24.2% 11.0%	-7.1% -3.0%	4.8%	5.8% -0.1%	-14.6%	23.39
musement	0.450	0.564	1.049	0.435	0.478	0.688	0.614	0.586	0.634	4.741	3.85
month-over-month % change year-over-year % change	7.3% -39.1%	25.3% -37.6%	86.1% 125.7%	7.1% -34.7%	9.8% -37.7%	43.9% -2.1%	-3.8% -9.8%	-4.6% -15.3%	8.3% -2.9%	-0.3%	-18.79
office	1.236	3.722	2.708	2.658	2.608	2.555	2.251	2.457	2.208	19.587	16.41
month-over-month % change year-over-year % change	-56.9% -17.4%	201.1% 199.6%	-27.2% -52.5%	3.5% 36.7%	-1.9% 47.1%	-2.0% -9.1%	-1.0% 3.2%	9.2% 19.7%	-10.1% -8.1%	-0.8%	-16.29
overnmental Offices	0.873	1.225	1.575	0.826	1.016	1.224	0.914	0.927	0.989	5.777	6.625
month-over-month % change year-over-year % change	-8.0% -12.1%	40.3% 14.6%	28.6% 88.6%	9.5% 0.4%	22.9% 0.9%	20.6% 26.7%	-1.1% 10.4%	1.4% 13.6%	6.6% 27.9%	-18.3%	14.79
aboratories	0.098 -49.5%	0.109 11.3%	0.119 9.1%	0.163	0.134 -17.8%	0.109 -18.7%	0.216	0.207 -4.1%	0.170 -17.8%	1.855	0.98
month-over-month % change year-over-year % change	-75.0%	-49.5%	-78.8%	-51.2%	-54.2%	-72.1%	-7.1%	0.2%	-28.8%	-6.7%	-46.99
arehouse month-over-month % change	1.243 -56.7%	1.863 50.0%	1.129 -39.4%	1.846 -0.5%	1.993 8.0%	1.412 -29.2%	1.726 -7.0%	1.748 1.3%	1.655 -5.3%	12.770	11.05
year-over-year % change	-55.7%	16.8%	-49.8%	-7.1%	-0.1%	-36.3%	-3.5%	-0.5%	-6.0%	-3.4%	-13.49
lisc Commercial month-over-month % change	4.760 569.8%	0.543 -88.6%	1.992 266.8%	2.278 178.9%	2.005 -12.0%	2.432 21.3%	1.310 31.9%	1.179 -10.0%	1.169 -0.8%	9.633	11.51
year-over-year % change	399.6%	-74.3%	-5.6%	65.6%	13.9%	40.8%	13.3%	-2.7%	-13.9%	-24.0% 84.147	19.59
OTAL COMMERCIAL month-over-month % change	11.715 5.9%	10.785 -7.9%	11.209 3.9%	11.582 16.8%	11.187 -3.4%	11.236 0.4%	10.393 -2.7%	10.428 0.3%	10.054 -3.6%	84.14/	71.81
year-over-year % change DTAL INDUSTRIAL (Manufacturing)	-23.0% 12.305	4.0% 0.286	-28.6% 6.626	-6.5% 6.154	-11.9% 4.579	-18.3% 6.405	-5.7% 3.504	-3.1% 3.342	-10.8% 3.789	-8.9% 21.139	-14.79 30.95
month-over-month % change	974.2%	-97.7%	2220.1%	109.1%	-25.6%	39.9%	0.4%	-4.6%	13.4%		
year-over-year % change Higious	1.3% 0.142	-87.2% 0.141	424.6% 0.098	24.2% 0.142	-13.1% 0.137	23.0% 0.127	-1.4% 0.170	-7.9% 0.157	4.3% 0.154	47.8% 1.291	46.49 0.95
month-over-month % change	10.4%	-0.4%	-30.7%	13.6%	-3.4%	-7.4%	-4.1%	-7.6%	-2.1%		
year-over-year % change osptials/Clinics	-37.8% 0.564	-52.4% 1.658	-28.4% 2.453	-32.7% 0.918	-44.3% 0.973	-42.4% 1.558	-4.1% 1.158	-10.9% 1.186	-10.1% 1.315	-12.8% 9.878	-26.19 8.94
month-over-month % change	-19.1%	194.0%	47.9%	-1.2%	6.0%	60.1%	-5.5%	2.4%	10.9%		-9 59
year-over-year % change ursing/Assisted Living	-58.8% 0.770	25.4% 0.429	172.5% 0.660	-38.2% 0.792	-40.7% 0.655	30.2% 0.620	-10.5% 0.827	-8.3% 0.784	7.2% 0.772	-16.1% 6.484	5.15
month-over-month % change year-over-year % change	0.3% -25.3%	-44.2% -54.6%	53.8% -17.9%	0.2% -14.2%	-17.3% -33.5%	-5.5% -33.1%	-2.6% -17.2%	-5.2% -19.0%	-1.5% -18.8%	-7.1%	-20.59
braries/Museums	0.538	0.205	0.497	0.407	0.355	0.413	0.264	0.260	0.286	1.545	2.24
month-over-month % change year-over-year % change	67.4% 21.5%	-61.9% -20.2%	142.3% 176.0%	55.6% 56.7%	-12.9% 20.4%	16.5% 40.9%	3.1% 2.3%	-1.6% 3.7%	10.2% 23.7%	-34.3%	45.59
re/Police/Courthouse/Prison	0.626	0.626	0.514	0.532	0.591	0.589	0.652	0.641	0.610	4.369	3.56
month-over-month % change year-over-year % change	20.6% -9.3%	0.0% -17.2%	-18.0% -41.8%	23.7% -16.9%	11.1% -22.2%	-0.3% -24.2%	-0.8% 14.4%	-1.7% 10.5%	-4.8% -0.7%	-19.6%	-18.59
lilitary	0.276	0.525	0.352	0.337	0.364	0.384	0.426	0.440	0.438	2.348	2.37
month-over-month % change year-over-year % change	-4.8% -57.4%	90.5% 45.9%	-33.0% -6.3%	1.1% -9.2%	7.9% -8.0%	5.7% -16.6%	-6.8% 5.0%	3.2% 10.0%	-0.4% 9.2%	1.5%	1.09
chools/Colleges	8.141 6.6%	10.076 23.8%	6.159	7.244 23.7%	8.617 19.0%	8.125 -5.7%	6.040 1.0%	6.034 -0.1%	5.963 -1.2%	46.529	46.97
month-over-month % change year-over-year % change	9.9%	-0.7%	-38.9% -12.3%	4.1%	4.7%	-0.8%	8.3%	7.6%	5.5%	-3.4%	1.09
isc Medical month-over-month % change	0.924 17.3%	0.797 -13.8%	0.423 -46.8%	0.743 37.4%	0.836 12.5%	0.715 -14.5%	0.835 -0.7%	0.784 -6.1%	0.742 -5.3%	6.869	4.55
year-over-year % change	-6.6%	-43.5%	-54.2%	-27.6%	-32.6%	-35.5%	-6.3%	-14.7%	-20.8%	5.1%	-33.79
DTAL INSTITUTIONAL month-over-month % change	11.981 7.5%	14.457 20.7%	11.156 -22.8%	11.115 19.9%	12.528 12.7%	12.531 0.0%	10.373 -0.7%	10.286 -0.8%	10.281 -0.1%	79.313	74.75
year-over-year % change	-6.4%	-6.7%	-0.6%	-6.4%	-9.2%	-4.9%	2.0%	0.9%	1.0%	-6.8%	-5.79
lisc Non Residential month-over-month % change	0.450 -23.1%	0.507 12.8%	0.556 9.6%	0.532 -7.4%	0.514 -3.4%	0.504 -1.9%	0.575 -1.6%	0.548 -4.6%	0.528 -3.7%	4.496	3.63
year-over-year % change	-20.5%	-38.4%	-30.4% 29.546	-12.1%	-24.0%	-30.8%	-6.1%	-12.0%	-16.3%	-1.9%	-19.19
DTAL NON-RES BUILDING month-over-month % change	36.450 52.3%	26.035 -28.6%	13.5%	29.383 29.4%	28.807 -2.0%	30.677 6.5%	24.844 -1.4%	24.605 -1.0%	24.652 0.2%	189.095	181.16
year-over-year % change rports	-10.5% 0.679	-9.9% 0.576	2.0% 0.940	-1.5% 0.486	-11.2% 0.572	-6.7% 0.732	-2.0% 0.544	-2.4% 0.558	-4.1% 0.585	-3.7% 4.294	-4.29 4.17
month-over-month % change	47.0%	-15.2%	63.3%	-1.5%	17.8%	27.8%	2.2%	2.6%	4.8%		
year-over-year % change oads/Highways	26.8% 7.080	41.7% 6.728	51.6% 7.586	-24.7% 6.434	16.8%	40.5% 7.131	-42.6% 5.219	-41.0% 5.275	-38.0% 5.303	-22.1% 40.481	-2.99 40.84
month-over-month % change	-0.8%	-5.0%	12.8%	22.0%	8.5%	2.1%	1.0%	1.1%	0.5%		
year-over-year % change idges	9.9% 2.016	11.1% 2.645	4.6% 2.065	-5.2% 2.164	7.2% 2.490	8.4% 2.242	13.1%	13.6%	11.2% 2.102	11.4% 14.591	15.77
month-over-month % change year-over-year % change	-28.2% 8.9%	31.2% 17.6%	-21.9% 12.6%	-5.9% -3.6%	15.1% 18.4%	-10.0%	0.7%	1.6% 15.6%	0.9%	7.9%	8.19
ams/Marine	2.057	1.144	0.549	0.898	1.191	13.3% 1.250	18.4% 0.655	0.717	16.4% 0.719	3.113	5.09
month-over-month % change year-over-year % change	454.5% 220.0%	-44.4% 186.7%	-52.0% 5.0%	178.4% 74.1%	32.6% 119.3%	5.0% 139.7%	21.9% 46.4%	9.5% 55.3%	0.3% 59.6%	11.4%	63.79
ater/Sewage	2.955	2.624	3.171	2.782	2.992	2.917	2.403	2.419	2.465	18.961	18.98
month-over-month % change year-over-year % change	-13.0% -21.3%	-11.2% 7.7%	20.9% 21.5%	11.0% -10.0%	7.6% -5.8%	-2.5% -0.6%	-2.7% -2.2%	0.6%	1.9% 0.5%	-12.0%	0.19
isc Civil (Power, etc.)	4.171	6.469	1.579	2.439	4.074	4.073	1.909	2.195	2.269	21.759	17.02
month-over-month % change year-over-year % change	163.6% 172.9%	55.1% 112.6%	-75.6% 127.0%	78.7% -51.5%	67.0% 20.2%	0.0% 132.0%	13.0% -36.2%	15.0% -30.3%	3.4% -26.4%	95.3%	-21.89
OTAL ENGINEERING (Civil) month-over-month % change	18.957	20.186	15.890	15.202	18.301	18.344	12.780	13.246	13.443	103.199	101.89
	20.3% 28.5%	6.5% 38.4%	-21.3% 17.4%	24.0% -17.0%	20.4% 12.9%	0.2% 28.4%	2.8% -3.1%	3.6% -1.3%	1.5% -0.5%	13.6%	-1.39
							61.164	61.022	60.838	470.029	437.74
year-over-year % change	77.497 18.4%	69.579	66.065	68.046	70.847	71.047				470.027	
year-over-year % change RAND TOTAL month-over-month % change year-over-year % change	18.4% -7.2%	-10.2% -2.4%	-5.1% -3.2%	18.6% -9.2%	4.1% -7.5%	0.3% -4.5%	-0.8% -5.1%	-0.2% -4.8%	-0.3% -5.7%	-1.9%	-6.99
year-over-year % change BRAND TOTAL month-over-month % change	18.4%	-10.2%	-5.1%	18.6%	4.1%	0.3%	-0.8%	-0.2%	-0.3%		-6.99 283.051

Source: ConstructConnect/Table: ConstructConnect.