## Construct connect<sup>®</sup>

Marketing Analytics Team





# Issued: June 2019 (based on May 2019 Starts Stats)

### Contents

Commentary and latest starts statistics 2
<b>INSIGHT</b> view of starts statistics4
"Top Ten" projects of the month5
Trend graphs for 12 key categories6
Regional starts table7
Detailed national table8

### **May's Notable Points**

- May's massive +35.2% m/m leap in total nonresidential starts was mainly due to an outsized gain in manufacturing (i.e., the \$10 billion LNG facility in Texas). Heavy engineering/civil starts also climbed (+13.9%), while commercial (+1.5%) and institutional (-0.2%) stayed flat.
- The -5.9% pullback in total nonresidential starts in May 19 versus May 18 (i.e., y/y) originated in commercial (-30.4%) and institutional (-14.3%), while industrial remained the same (+0.1%) and heavy engineering/ civil perked up by more than a fifth, but less than a quarter (+22.2%).

3825 Edwards Road, Ste. 800 Cincinnati, OH 45209 P. 1-800-364-2059 www.constructconnect.com/blog

For more information or media inquiries please contact our Public Relations Team at: <u>PR@ConstructConnect.com</u>

@2019 ConstructConnect\*, Inc. All rights reserved. The contents of this document cannot be reproduced without the permission of its authors and attribution to ConstructConnect\*, Inc.



### Mega Projects Lift May U.S. Nonresidential Construction Starts by One-third

#### **A Wealth of Mega Projects**

ConstructConnect announced today that the latest month's volume of construction starts, excluding residential work, was \$52.2 billion (green shaded box, Table 5, page 8). The month-to-month percentage change versus April was +35.2%, or more than one-third. The large jump resulted from start-ups on five mega projects (see page 5) valued at more than \$1 billion each. The combined value of the five mega project initiations in May of this year was \$18.6 billion.

The latest month of 2019 included one \$10 billion project, an LNG export terminal to be built for Golden Pass Products at Sabine Pass, near Port Arthur, Texas. May of last year, however, also included a \$10 billion project, a new plant for Foxconn Technology in Racine Wisconsin. Therefore, due to an offsetting effect, May 2019's total nonresidential dollar volume wasn't much greater than in May 2018. Rather, it was -5.9%. Year-to-date starts in 2019 have been -10.6% compared with the same January-to-May period 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 average basis, May 2019's total nonresidential starts were -4.3% compared with the previous 12 months (i.e., June-2018-to-May-2019 vs June-2017-to-May- 2018). Type-of-structure sub-category starts on the same 12-month-over-prior-12-month basis in May 2019 were: commercial, -8.6%; industrial, -6.2%; institutional, +0.3%; and engineering, -3.5%.

'Smoothed' grand total starts, which include residential activity, were -6.6%. Total homebuilding so far this year has been -10.1% on a smoothed basis, but the single-family component, at -5.7%, has not experienced nearly the same degree of difficulty as the multi-family segment, -18.9%.

#### '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 April, 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 (May 2019) is one month ahead of the reporting period for the investment series (April 2019).

#### **Construction Overview**

The number of jobs in the U.S. construction sector rose by only +4,000 in May, according to the latest *Employment Situation* report from the Bureau of Labor Statistics (BLS). Monthly average 'on site' hiring through the first five months of this year, at +16,000, has been less than half (-52.9%) of what was maintained through the same January-to-May time frame of last year, +35,000.

On a year-over-year basis, construction is still in top spot for jobs growth (+3.0%) among all major industrial sectors. Bunched closely behind construction are 'transportation and warehousing' (+2.7%), 'leisure and hospitality', (+2.6%) and 'education and health', (+2.5%). The latest year-over-year jobs growth in construction (+3.0%) has been twice as fast as in manufacturing (+1.5%) and nearly double the pace of increase recorded by 'all jobs' (+1.6%).

Construction's NSA unemployment rate in May, at 3.2%, was the lowest it's been this century. Furthermore, it was below the latest national unemployment rate, which was just 3.4% NSA.

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

	Jan-May 2019 (\$ billions)	% Change Jan-May 19 vs Jan-May 18	% Change May 19 vs May 18	% Change May 19 vs Apr 19
Hotel/Motel	7.253	-44.5%	-80.6%	-19.9%
Retail/Shopping	6.801	-19.6%	-6.0%	7.6%
Parking Garage	1.252	0.3%	-46.6%	2.9%
Amusement	2,195	-34.9%	-45.5%	-5.3%
Private Office	9.551	-24.5%	-48.3%	-69.9%
Government Office	3,799	-1.9%	-10.1%	-3.1%
Laboratory	0.789	-26.8%	-75.1%	-21.5%
Warehouse	7.391	-17.2%	-73.0%	-72.6%
Miscellaneous Commercial *	7.890	46.0%	397.1%	787.6%
COMMERCIAL (big subset)	46.921	-19.2%	-30.4%	1.5%
INDUSTRIAL (Manufacturing)	22.171	25.6%	0.1%	1484.5%
Religious	0.710	-17.1%	-39.9%	6.4%
Hospital/Clinic	4.672	-39.0%	-69.6%	-42.5%
Nursing/Assisted Living	3.734	-21.1%	-45.1%	-25.0%
Library/Museum	1.163	5.0%	-66.1%	-52.0%
Fire/Police/Courthouse/Prison	2.472	-9.5%	-7.1%	15.6%
Military	1.379	-14.5%	-55.5%	-1.2%
School/College	30.288	3.1%	8.0%	6.2%
Miscellaneous Medical	3.054	-32.6%	-21.2%	10.8%
INSTITUTIONAL	47.472	-9.7%	-14.3%	-0.2%
Miscellaneous Non-residential	2.529	-12.0%	-22.5%	-23.9%
NONRESIDENTIAL BUILDING	119.093	-9.2%	-16.1%	50.0%
Airport	3.167	-3.1%	-22.8%	-9.3%
Road/Highway	26.593	-2.1%	10.6%	-0.8%
Bridge	10.424	-0.8%	-2.3%	-35.9%
Dam/Marine	3.444	57.2%	216.4%	442.7%
Water/Sewage	13.197	-5.2%	-21.2%	-13.5%
Miscellaneous Civil (power, pipelines, etc.)	8.439	-53.2%	141.6%	135.2%
HEAVY ENGINEERING (Civil)	65.264	-13.1%	22.2%	13.9%
TOTAL NONRESIDENTIAL	184.356	-10.6%	-5.9%	35.2%

Source: ConstructConnect Research Group/Table: ConstructConnect.

Year-over-year employment changes in other corners of the economy important to construction in May were: 'machinery and equipment rental', +11.1%; 'oil and gas extraction', +7.5%; 'architectural and engineering services', +3.3%; 'real estate firms', +3.1%; 'building material and supplies dealers', -1.0%; and 'cement and concrete product manufacturing', -1.5%.

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

May's massive +35.2% m/m leap in total nonresidential starts was mainly due to an outsized gain in manufacturing (i.e., the \$10 billion LNG facility in Texas). Heavy engineering/civil starts also climbed (+13.9%), while commercial (+1.5%) and institutional (-0.2%) stayed flat.

The -5.9% pullback in total nonresidential starts in May 19 versus May 18 (i.e., y/y) originated in commercial (-30.4%) and institutional (-14.3%), while industrial remained the same (+0.1%) and heavy engineering/civil perked up by more than a fifth, but less than a quarter (+22.2%).

The latest month's year-to-date (ytd) total nonresidential starts decrease of -10.6% was caused by drops in commercial (-19.2%), engineering (-13.1%) and institutional (-9.7%). Unfortunately, industrial's positive performance (+25.6%) was not able to overcome the negativity elsewhere.

#### Year-to-date for Sub-Sectors

Within institutional work so far this year, the 'school/college' sub-category has been dominant, accounting for nearly two-thirds (64%) of the total. Educational facility starts in May were upbeat according to the three yardsticks: +6.2% m/m; +8.0% y/y; and +3.1% ytd. Medical facility starts — combining 'hospital/clinic', 'nursing/assisted living' and 'miscellaneous medical' starts — have been about one-quarter (24%) of total institutional initiations to date in 2019. In May, such health care groundbreakings were -19.2% m/m; -48.0% y/y; and -32.3% ytd.

#### Continued from page 2

Five sub-categories have accounted for substantial and similar-sized shares of commercial starts so far in 2019: private offices, 20%; 'miscellaneous' (e.g., transportation terminals), 17%; warehouses, 16%; hotels and motels, 15%; and retail and shopping, 14%. The metrics for private office building start-ups in May were -69.9% m/m; -48.3% y/y; and -24.5% ytd. For warehouses, the numbers were -72.6% m/m; -73.0% y/y; and -17.2% ytd. Hotels and motels also served up some grim statistics in May: -19.9% m/m; -80.6% y/y; and -44.5% ytd. Retail and shopping starts did somewhat better: -19.6% ytd and -6.0% y/y, but +7.6% m/m. Finally, 'miscellaneous commercial', was all good: +787.6% m/m; +397.1% y/y; and +46.0% ytd (*see Top 10 on page 5*).

Roads and highways have accounted for the largest slice of engineering starts to date this year, 41%. Street starts in May were -0.8% m/m and -2.1% ytd, but +10.6% y/y. Water and sewage facility starts (with a 20% share of total engineering) have been -13.5% m/m; -21.2% y/y; and -5.2% ytd. Bridge starts (16% share) in May were -35.9% m/m; -2.3% y/y; and -0.8% ytd.

#### Trend Graphs and Big JOLTS

Page 6 sets out 12-month moving average trend graphs for key type-ofstructure categories. The nonresidential building and heavy engineering curves in Graph 3 and the commercial and institutional curves in Graph 4 are all demonstrating slight downward-shifting tendencies. Within commercial (Graph 5), retail is still plummeting, but with less abandon, and private office building starts, after a long ascent, have eased off a bit. The school and hospital curves in Graph 6 are moving in opposite directions, the former up and the latter down. Graphs 7 and 8 showcase strength in highway and bridge starts, along with perhaps a minor uplift in water and sewage work. After achieving an extraordinary peak, 'miscellaneous civil' has returned to its normal level.

The job opportunities in construction keep expanding. Graph 1 utilizes data from the JOLTS report, published by the BLS, to show construction job openings, as levels and rates. Both measurements have climbed to new heights over the available history of the series. The ratio of construction to manufacturing jobs in the U.S. is currently 0.58. The ratio of 'openings', construction to manufacturing, is 0.81. Graph 2 records 'hires' levels and rates in construction. The hires-level curve displays a mild rising trend. The shape of the hires-rate curve, though, has been flat. Contractors are hitting a brick wall in their attempts to take on more workers.

#### But Earnings Growth Not Out of the Ordinary

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.

Including supervisory personnel, the y/y 'all-jobs' compensation gains for the entire U.S. in May were +3.1% hourly and +2.8% weekly. For construction workers as a subset, they did a little better hourly, +3.2%, but not as well weekly, +2.2%. Excluding supervisory personnel (i.e., omitting bosses), the all-jobs earnings gains in May were +3.4% hourly and +2.7% weekly. Construction workers kept pace hourly, also at +3.4%, but trailed significantly weekly, +1.9%.

#### **Further on Costing and Grand Total Starts**

Further on costing, May 2019's y/y results for three BLS Producer Price Index (PPI) series were: 'construction materials special index', +0.3% (down from +2.2% in April); 'inputs to new construction index, excluding capital investment, labor and imports', +1.3% (down from +2.9% in April); and 'final demand construction', +5.3% (about even with April's +5.4%).

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 April, 2019.



GRAPH 2: U.S. CONSTRUCTION JOB HIRES (FROM JOLTS REPORT) (3-MONTH MOVING AVERAGES PLACED IN LATEST MONTH)

\*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 April, 2019.

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

ConstructConnect's nonresidential 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 -13.4% m/m; -22.4 y/y and -12.8% ytd. (The multi-family market so far in 2019, at -23.6% ytd, has fallen into decline more than the single-family market, -8.2% ytd). 'Grand total' construction starts in May were +16.0% m/m; -11.5% y/y and -11.5% ytd.

#### Alex Carrick

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.

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.

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

		Jan-May 2019 (\$ billions)	% Change Jan-May 19 vs Jan-May 18	% Change May 19 vs May 18	% Chang May 19 Apr 1
-					
Summary CIVIL		<b>CE 264</b>	12.4%	22.2%	12.0
CIVIL NONRESIDENTIA		65.264 119.093	-13.1% -9.2%	22.2% -16.1%	13.9 50.0
RESIDENTIAL	LBOILDING	108.272	-9.2%	-16.1%	-13.4
GRAND TOTAL		292.628	-12.8%	-22.4%	-13.4 16.0
		2021020	11.570	110/0	2010
/erticals					
	Airport	3.167	-3.1%	-22.8%	-9.
	All Other Civil	6.791	-48.3%	191.0%	94.
	Bridges	10.424	-0.8%	-2.3%	-35.
	Dams / Canals / Marine Work	3.444	57.2%	216.4%	442.
	Power Infrastructure	1.647	-66.3%	60.7%	509.
	Roads Water and Sewage Treatment	26.593 13.197	-2.1% -5.2%	10.6% -21.2%	-0. -13.
	Water and Sewage Treatment	65.264	-5.2%	-21.2%	-13.
	Offices (private)	9.551	-24.5%	-48.3%	-69.
	Parking Garages	1.252	0.3%	-46.6%	2.
	Transportation Terminals	5.482	83.0%	1107.3%	1519.
Com	nercial (small subset)	16.285	-3.6%	135.4%	78.
	Amusement	2.195	-34.9%	-45.5%	-5.
	Libraries / Museums	1.163	5.0%	-66.1%	-52.
	Religious	0.710	-17.1%	-39.9%	6.
	Sports Arenas / Convention Centers	2.408	-0.1%	-56.3%	-1.
Com	nunity	6.476	-16.4%	-52.6%	-16.
	College / University	8.011	-2.7%	-7.0%	20.
	Elementary / Pre School	9.088	5.3%	16.3%	15.
	Jr / Sr High School	12.394	5.5%	11.7%	-4.
<u></u>	Special / Vocational	0.796	5.2%	-0.9%	-42.
Educ	ational	30.288	3.1%	8.0%	6.
	Courthouses Fire and Police Stations	0.459 1.286	15.3% 21.3%	-58.9% 45.6%	-59. 41.
	Government Offices	3.799	-1.9%	-10.1%	-3.
	Prisons	0.726	-42.9%	-36.6%	-5.
Gove	rnment	6.271	-5.0%	-8.8%	3.
	Industrial Labs / Labs / School Labs	0.789	-26.8%	-75.1%	-21
	Manufacturing	22.171	25.6%	0.1%	1484.
	Warehouses	7.391	-17.2%	-73.0%	-72.
Indus	strial	30.351	9.7%	-15.2%	255.
	Hospitals / Clinics	4.672	-39.0%	-69.6%	-42.
	Medical Misc.	3.054	-32.6%	-21.2%	10.
	Nursing Homes	3.734	-21.1%	-45.1%	-25.
Medi		11.459	-32.3%	-48.0%	-19.
Milit		1.379	-14.5%	-55.5%	-1.
	Hotels Rotail Miss	7.253	-44.5%	-80.6%	-19.
	Retail Misc.	2.529	-12.0%	-22.5%	-23.
Retai	Shopping	6.801 16.583	-19.6% -32.1%	-6.0% -60.7%	7. -8.
		119.093	-32.1%	-16.1%	-8.
	Multi-Family	28.184	-23.6%	-54.9%	-49.
	Single-Family	80.087	-8.2%	-9.9%	-0.
RESIDENTIAL		108.272	-12.8%	-22.4%	-13.
NONRESIDENTIA	L	184.356	-10.6%	-5.9%	35.2
GRAND TOTAL		292.628	-11.5%	-11.5%	16.0

Table 1 conforms to the type-of-structure ordering adopted by many firms and organizations in the industry. Specifically, it breaks nonresidential building into ICI work (i.e., industrial, commercial and institutional), since each has its own set of economic and demographic drivers. Table 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 MAY 2019

LOCATION (EAST TO WEST)	TYPE OF CONSTRUCTION	DESCRIPTION	SQUARE FEET 000S* DOLL	ARS 000,000S
Massachusetts Boston	Commercial	L338 Terminal E Modernization - Massport (2 structures) 1 Harborside Dr Massachusetts Port Authority (Massport)	400	\$800
<b>Pennsylvania</b> Monongahela	Civil/Engineering	Lower Mon Project - Charleroi Dam Stilling Basin Extension Multiple Locations US Army Corps of Engineers	*	\$1,685
<b>Georgia</b> Commerce	Industrial	SK Innovation Factory, Motor Vehicle Battery Plant (1 structure) SK Innovation	10,962	\$1,670
<b>Ohio</b> Hannibal	Civil/Engineering	Long Ridge Energy Generation Project (formerly known as Center Port Terminal) (2 structures; 20 units) Fortress Transportation and Infrastructure Investors LLC (FTAI)	*	\$500
<b>Minnesota</b> Eden Prairie	Civil/Engineering	Green Line Light Rail Transit Extension (Southwest Light Rail Transit) Civil Construction Multiple Locations Metropolitan Council Environmental Services (MCES)	*	\$2,000
<b>Nebraska</b> Sutherland	Civil/Engineering	345 kV Transmission Line Project (Gerald Gentleman Station to Thedford and Thedford to Holt County) Multiple Locations Nebraska Public Power District	*	\$265
<b>Texas</b> Sabine Pass	Industrial	Golden Pass LNG Export Terminal (3 structures) 3752 S Gulfway Dr Golden Pass Products	*	\$10,000
Washington Seattle	Commercial	Lynnwood Link Extension - Sound Transit, Alterations (3 structures) Multiple Locations Sound Transit	*	\$3,200
<b>California</b> Friant	Commercial	New Table Mountain Rancheria Hotel & Casino (6 structures; 19 stories; 1651 units) Sky Harbour Dr & Millerton Rd Table Mountain Rancheria	600	\$300
<b>Hawaii</b> Ewa Beach	Commercial	Wai Kai at Hoakalei (5 structures; 150 units) 91-1621 Keoneula Boulevard Haseko Development	295	\$300
TOTALS:			12,257	\$20,720

\*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.







GRAPH 6: U.S. HOSPITAL/CLINIC AND SCHOOL/COLLEGE CONSTRUCTION STARTS — ConstructConnect® (12-MONTH MOVING AVERAGES)





GRAPH 8: 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 May, 2019.

Source: ConstructConnect/Charts: ConstructConnect.

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

	Jan-May 2018	Jan-May 2019	% Chang
Connecticut	\$1,543,497,705	\$2,276,398,978	47.5%
Maine	\$504,286,445	\$718,352,456	42.49
Massachusetts	\$3,637,095,589	\$4,831,314,407	32.89
New Hampshire	\$635,164,517	\$614,384,365	-3.39
Rhode Island	\$913,821,146	\$402,620,459	-55.9%
Vermont	\$256,534,642	\$170,197,071	-33.7%
Total New England	\$7,490,400,044	\$9,013,267,736	20.3%
New Jersey	\$3,575,366,966	\$2,612,183,229	-26.9%
New York	\$9,760,812,005	\$8,167,371,086	-16.3%
Pennsylvania	\$5,789,836,401	\$7,644,407,193	32.0%
Total Middle Atlantic	\$19,126,015,372	\$18,423,961,508	-3.7%
TOTAL NORTHEAST	\$26,616,415,416	\$27,437,229,244	3.19
Illinois	\$5,675,835,476	\$5,202,299,071	-8.3%
Indiana	\$3,327,427,320	\$2,782,016,891	-16.4%
Michigan	\$4,976,244,568	\$3,140,645,242	-36.9%
Ohio	\$6,428,312,975	\$4,917,698,437	-23.5%
Wisconsin	\$14,004,372,104	\$3,991,209,295	-71.59
Total East North Central	\$34,412,192,443	\$20,033,868,936	-41.89
lowa	\$2,522,115,369	\$1,994,113,242	-20.9%
Kansas	\$2,667,574,852	\$1,641,653,707	-38.5%
Minnesota	\$3,880,893,444	\$5,070,974,664	30.7%
Missouri	\$4,046,157,775	\$2,664,132,943	-34.29
Nebraska	\$1,184,963,124	\$1,595,079,522	34.6%
North Dakota	\$1,284,185,746	\$632,618,697	-50.7%
South Dakota	\$848,211,833	\$732,294,213	-13.79
Total West North Central	\$16,434,102,143	\$14,330,866,988	-12.89
TOTAL MIDWEST	\$50,846,294,586	\$34,364,735,924	-32.49
Delaware	\$446,300,803	\$423,859,212	-5.09
District of Columbia	\$2,125,543,439	\$776,740,872	-63.5%
Florida	\$12,708,530,444	\$10,441,212,293	-17.89
Georgia	\$5,454,167,256	\$8,599,870,441	57.79
Maryland	\$3,355,004,760	\$3,151,650,169	-6.19
North Carolina	\$5,818,038,154	\$4,827,607,637	-17.09
South Carolina	\$2,759,681,555	\$2,911,320,815	5.5%
Virginia	\$8,152,744,362	\$3,396,217,917	-58.3%
West Virginia	\$5,975,475,431	\$760,389,718	-38.37
Total South Atlantic	\$46,795,486,204	\$35,288,869,074	-24.6%
Alabama	\$2,747,895,315	\$4,861,481,859	76.9%
Kentucky	\$2,150,631,832	\$2,910,235,593	35.3%
Mississippi	\$1,037,262,604	\$1,159,049,443	11.79
Tennessee	\$3,193,635,078	\$3,020,228,785	-5.49
Total East South Central	\$9,129,424,829	\$11,950,995,680	30.9%
Arkansas	\$1,369,683,822	\$1,073,192,368	-21.6%
Louisiana	\$2,561,686,099	\$1,790,179,684	-21.07
Oklahoma	\$2,484,301,850	\$2,408,172,688	-30.17
Texas	\$2,484,301,830	\$31,423,313,519	-3.17 48.99
Total West South Central	\$27,512,634,233	\$36,694,858,259	33.49
TOTAL SOUTH	\$83,437,545,266	\$83,934,723,013	0.6%
Arizona	\$5,363,162,901	\$2,608,816,258	-51.49
Colorado			-51.47 43.79
Idaho	\$2,959,094,087	\$4,253,318,090	-16.79
	\$989,556,782	\$824,686,571	
Montana	\$588,711,958	\$526,744,904	-10.5%
Nevada New Mexico	\$2,647,986,527	\$2,524,524,070 \$594,620,852	-4.79
New Mexico Utah	\$944,085,703	. , ,	-37.09
	\$3,224,011,756	\$2,145,241,004	-33.5%
Wyoming Total Mountain	\$533,579,108	\$364,307,187	-31.79
Total Mountain	\$17,250,188,822	\$13,842,258,936	-19.8%
Alaska	\$919,950,997	\$433,850,227	-52.8%
California	\$18,608,458,736	\$14,844,139,259	-20.29
Hawaii	\$1,033,747,712	\$1,305,157,255	26.3%
Oregon	\$3,015,315,952	\$1,863,226,462	-38.29
Washington	\$4,555,073,976	\$6,331,050,144	39.0%
Total Pacific	\$28,132,547,373	\$24,777,423,347	-11.9%
TOTAL WEST	\$45,382,736,195	\$38,619,682,283	-14.9%
TOTAL U.S.	\$206,282,991,463	\$184,356,370,464	-10.69

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

TABLE 5: VALUE OF U.S.	NATIONAL CONSTRUCTION START	S — MAY 2019 — ConstructConnect <sup>®</sup>
BILLION	S OF CURRENT \$S, NOT SEASONA	LLY ADJUSTED (NSA)

	Late	Latest month actuals Moving averages (place			placed in end month) 12-months			Year to Date. Jan-May Jan-May			
	Mar 19	Apr 19	May 19	Mar 19	3-months Apr 19	May 19	Mar 19	Apr 19	May 19	2018	Jan-May 2019
ingle Family	15.612	18.305	18.290	14.497	15.561	17.402	16.569	16.437	16.269	87.283	80.0
month-over-month % change year-over-year % change	22.3% -10.5%	17.2% -8.0%	-0.1% -9.9%	8.0% -7.6%	7.3% -11.0%	11.8% -9.4%	-0.9% -2.4%	-0.8% -3.8%	-1.0% -5.7%	8.9%	-8.2
partment	5.962	6.870	3.504	5.937	6.301	5.445	7.484	7.386	7.030	36.908	28.1
month-over-month % change year-over-year % change	-1.8% -14.5%	15.2% -14.6%	-49.0% -54.9%	-8.8% -15.6%	6.1% -10.6%	-13.6% -28.3%	-1.1% -16.3%	-1.3% -15.6%	-4.8% -18.9%	-27.4%	-23.
DTAL RESIDENTIAL month-over-month % change	21.574 14.5%	25.175 16.7%	21.794	20.434 2.5%	21.862 7.0%	22.848 4.5%	24.053 -1.0%	23.823 -1.0%	23.299 -2.2%	124.191	108.2
year-over-year % change	-11.7%	-9.9%	-22.4%	-10.1%	-10.9%	-14.8%	-7.2%	-7.8%	-10.1%	-5.2%	-12.
otel/Motel month-over-month % change	2.132 56.9%	1.371 -35.7%	1.098	1.595 8.7%	1.621 1.6%	1.534 -5.4%	2.135 2.0%	2.078 -2.7%	1.697 -18.4%	13.070	7.2
year-over-year % change	30.4%	-33.3%	-80.6%	-10.4%	-7.1%	-50.9%	1.5%	4.8%	-24.8%	-10.7%	-44.
atail/Shopping month-over-month % change	1.255	1.466 16.8%	1.577 7.6%	1.253	1.362	1.432	1.397	1.359	1.351 -0.6%	8.462	6.8
year-over-year % change	-34.3%	-23.5%	-6.0%	-22.8%	-17.5%	-21.9%	-14.3%	-17.3%	-17.8%	-3.3%	-19.
arking Garages month-over-month % change	0.420 296.3%	0.245	0.252	0.252	0.257 2.0%	0.305 18.9%	0.257 9.2%	0.254	0.236	1.248	1.2
year-over-year % change	164.6%	-12.5%	-46.6%	52.0%	37.0%	0.7%	-6.0%	1.8%	-5.6%	-29.1%	0.
nusement month-over-month % change	0.440 25.0%	0.425	0.403	0.456	0.406	0.423	0.659	0.640 -2.9%	0.612	3.372	2.
year-over-year % change	-26.5%	-35.4%	-45.5%	-30.8%	-32.4%	-36.5%	-2.7%	-5.7%	-10.1%	10.4%	-34
ffice month-over-month % change	4.360 433.2%	2.568	0.773	2.070	2.582 24.7%	2.567	2.250 10.7%	2.249	2.189	12.649	9.5
year-over-year % change	148.1%	-0.5%	-48.3%	-27.6%	-11.1%	32.0%	2.2%	0.7%	0.3%	-18.1%	-24
overnmental Offices month-over-month % change	0.632	0.922	0.894	0.661	0.741	0.816	0.900	0.898	0.889 -0.9%	3.873	3.3
year-over-year % change	21.9%	-3.6%	-10.1%	3.2%	-3.3%	-0.9%	10.3%	9.3%	7.4%	-14.1%	-1.
Iboratories month-over-month % change	0.292 286.4%	0.124	0.098	0.189 8.6%	0.164	0.171 4.5%	0.251	0.239 -4.8%	0.215 -10.2%	1.078	0.3
year-over-year % change	-14.5%	-53.7%	-75.1%	35.6%	-23.5%	-48.7%	3.5%	3.6%	-7.4%	-16.4%	-26
arehouse month-over-month % change	1.390 14.0%	2.773 99.5%	0.759	1.286 22.3%	1.794 39.5%	1.641 -8.6%	1.733 -0.9%	1.833 5.7%	1.662 -9.3%	8.923	7.:
year-over-year % change	-11.6%	75.5%	-73.0%	-14.9%	20.8%	-17.4%	1.2%	8.3%	-7.1%	-1.1%	-17
isc Commercial month-over-month % change	0.546 78.4%	0.534	4.736	0.874 -0.1%	0.462	1.938 319.6%	1.044 -3.2%	0.904	1.220 34.9%	5.405	7.1
year-over-year % change	-43.3%	-75.9%	397.1%	16.9%	-58.0%	40.9%	-25.4%	-34.6%	5.4%	-50.2%	46
DTAL COMMERCIAL month-over-month % change	11.466 82.8%	10.428 -9.1%	10.589 1.5%	8.635 14.9%	9.389 8.7%	10.828 15.3%	10.628 1.6%	10.455 -1.6%	10.070 -3.7%	58.082	46.9
year-over-year % change	21.3%	-16.6%	-30.4%	-14.7%	-11.9%	-12.6%	-3.9%	-4.2%	-8.6%	-16.2%	-19
OTAL INDUSTRIAL (Manufacturing) month-over-month % change	4.080 65.4%	0.767	12.150 1484.5%	3.085	2.438 -21.0%	5.665 132.4%	3.387 7.4%	3.330 -1.7%	3.331 0.0%	17.653	22.
year-over-year % change	221.1%	-47.0%	0.1%	127.8%	68.4%	14.4%	24.4%	24.7%	-6.2%	50.0%	25
eligious month-over-month % change	0.151 76.0%	0.129	0.137	0.148	0.122	0.139 14.2%	0.185	0.178 -3.9%	0.170 -4.3%	0.857	0.1
year-over-year % change	-21.2%	-39.8%	-39.9%	7.3%	-26.9%	-34.2%	0.7%	1.3%	-4.3%	-11.8%	-17
osptials/Clinics month-over-month % change	1.518 158.9%	0.723	0.416	1.177 -22.4%	0.943 -19.9%	0.886 -6.0%	1.348 4.3%	1.222 -9.3%	1.143 -6.5%	7.656	4.
year-over-year % change	78.3%	-67.6%	-69.6%	-12.9%	-30.1%	-40.3%	1.1%	-9.7% 0.844	-11.7%	-12.5%	-39
ursing/Assisted Living month-over-month % change	-2.9%	0.754	0.566	0.805 -9.1%	0.754 -6.3%	0.688 -8.8%	0.863	-2.2%	0.805 -4.6%	4.735	3.3
year-over-year % change	-2.4%	-23.1%	-45.1%	-11.4%	-5.6%	-25.6%	-16.3%	-15.5%	-19.4%	1.7%	-21
braries/Museums month-over-month % change	0.378 274.8%	0.313	0.150	0.233 45.3%	0.264 13.0%	0.280 6.2%	0.249 8.2%	0.259 4.3%	0.235 -9.4%	1.108	1.
year-over-year % change re/Police/Courthouse/Prison	147.3% 0.448	69.9% 0.555	-66.1%	45.7% 0.425	72.4%	7.8% 0.548	-4.9% 0.688	3.8%	-9.0% 0.661	-30.4%	5
month-over-month % change	38.9%	24.0%	0.642	-19.9%	3.9%	24.1%	0.688	-3.3%	-0.6%	2.731	2.4
year-over-year % change	12.7%	-33.2%	-7.1%	5.4%	-13.3%	-14.3%	21.0%	17.7%	16.1%	-37.1%	-9
iilitary month-over-month % change	0.244	0.292	0.288	0.266 -16.9%	0.282 5.9%	0.275	0.436 -0.8%	2.2%	0.415 -6.7%	1.613	1.3
year-over-year % change	-15.4%	64.1% 7.530	-55.5% 8.000	1.5%	6.2% 5.759	-26.0% 7.099	4.5% 5.876	10.1%	2.3% 5.959	6.3% 29.364	-14 30.1
chools/Colleges month-over-month % change	44.9%	30.6%	6.2%	4.920	17.1%	23.3%	-0.8%	0.6%	0.8%	29.304	30.
year-over-year % change lisc Medical	-8.9% 0.476	5.5% 0.704	8.0% 0.780	-0.4%	-0.5% 0.499	2.0% 0.653	2.4%	3.0% 0.833	6.9% 0.815	-8.0% 4.534	3 3.0
month-over-month % change	50.5%	47.9%	10.8%	-12.3%	-4.6%	31.0%	-2.7%	-5.8%	-2.1%	4.334	3.
year-over-year % change OTAL INSTITUTIONAL	-38.0%	-46.7% 11.000	-21.2% 10.979	-29.4%	-40.0%	-36.4% 10.568	0.7%	-8.9% 10.356	-8.5% 10.204	-4.4% 52.597	-32 47.4
month-over-month % change	50.3%	13.1%	-0.2%	-1.2%	6.7%	16.6%	0.0%	-1.6%	-1.5%		
year-over-year % change isc Non Residential	-0.2% 0.554	-15.9% 0.576	-14.3% 0.438	-4.6%	-8.1% 0.566	-11.0%	1.1%	-0.4%	0.3%	-10.1%	-9 2.
month-over-month % change	-2.1%	3.9%	-23.9%	12.3%	11.9%	-7.6%	-0.8%	-0.9%	-1.8%		
year-over-year % change OTAL NON-RES BUILDING	-9.1% 25.825	-10.1%	-22.5% 34.156	-9.1% 20.722	0.0%	-13.6% 27.583	-9.8% 25.129	-10.6%	-7.1% 24.173	-9.8% 131.205	-12 119.0
month-over-month % change	63.7%	-11.8%	50.0%	6.6%	3.5%	28.6%	1.6%	-1.6%	-2.2%		
year-over-year % change irports	22.5%	-17.7%	-16.1% 0.413	-1.0%	-4.8%	-7.5%	0.604	0.3%	-4.7% 0.588	-8.1% 3.267	-9 3.
month-over-month % change	62.6%	-59.1%	-9.3%	52.0%	-1.7%	-12.1%	3.5%	-1.0%	-1.7%		
year-over-year % change oads/Highways	27.8%	-13.6% 7.181	-22.8% 7.120	4.3%	28.8%	2.5%	-37.7% 5.158	-38.3%	-37.9% 5.225	-26.5% 27.176	-3 26.
month-over-month % change	42.0%	41.1%	-0.8%	15.4%	29.0%	22.3%	-2.8%	0.2%	1.1%		
year-over-year % change ridges	-25.9%	1.9%	10.6% 1.809	-10.2%	-6.5% 2.302	-4.8% 2.096	16.1% 1.949	13.2%	13.3% 1.997	9.1% 10.507	-2 10.
month-over-month % change	-31.6%	70.3%	-35.9%	-2.1%	19.2%	-8.9%	-4.2%	2.6%	-0.2%		
year-over-year % change ams/Marine	-38.0%	28.0% 0.375	-2.3% 2.034	-10.2%	2.8%	-6.6% 0.912	11.1%	13.9% 0.543	15.3% 0.659	1.7% 2.191	-0 3,
month-over-month % change	-1.2%	14.7%	442.7%	-13.6%	-0.3%	165.0%	0.1%	-3.2%	21.4%		
year-over-year % change ater/Sewage	3.1%	-36.2% 3.419	216.4% 2.957	7.7%	-16.6% 2.514	76.8% 2.791	26.3%	23.5% 2.466	47.2% 2.399	14.6% 13.915	57 13.1
month-over-month % change	-6.0%	71.1%	-13.5%	0.1%	10.6%	11.0%	-0.6%	0.3%	-2.7%		
year-over-year % change isc Civil (Power, etc.)	-8.3%	2.5%	-21.2% 3.692	0.0%	3.4%	-9.7% 2.252	5.3% 2.014	3.3%	-2.4% 1.859	-15.5% 18.021	-5 8.4
month-over-month % change	56.2%	5.0%	135.2%	24.2%	26.6%	68.0%	-21.1%	-16.6%	10.7%		
year-over-year % change OTAL ENGINEERING (Civil)	-81.2% 11.684	-71.9% 15.822	141.6% 18.026	-70.9%	-71.8% 12.538	-55.2%	-26.0%	-42.8%	-37.8% 12.727	112.5% 75.078	-53 65.
month-over-month % change	15.6%	35.4%	13.9%	9.7%	19.7%	21.0%	-5.7%	-2.3%	2.2%		
year-over-year % change	-44.0%	-18.0%	22.2%	-23.4%	-22.0%	-17.1%	0.6%	-4.6%	-3.5%	12.8% 330.474	-13
RAND TOTAL month-over-month % change	59.082 32.1%	63.767 7.9%	73.977 16.0%	51.628 5.5%	55.856 8.2%	65.609 17.5%	61.926 -1.0%	60.997 -1.5%	60.200 -1.3%		292.0
year-over-year % change	-11.0%	-14.9%	-11.5%	-10.0%	-11.5%	-12.5%	-2.4%	-4.0%	-6.6%	-2.9%	-11 184.3
ION-RES BLDG + ENGINEERING month-over-month % change	37.508 44.9%	38.592 2.9%	52.182 35.2%	31.194 7.6%	33.994 9.0%	42.761 25.8%	37.873 -1.0%	37.174 -1.8%	36.900 -0.7%	206.283	184.3
year-over-year % change	-10.6%	-17.8%	-5.9%	-9.9%	-11.9%	-11.2%	1.0%	-1.4%	-4.3%	-1.4%	-10.

Source: ConstructConnect/Table: ConstructConnect.