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Abstract

In May, construction data was weak, but improvements were noted. Total starts; total, single-family, and multi-family permits; and new single-family sales increased on a month-over-month basis. On a year-over-year basis, most of the data indicated declines, except for total starts, new single-family sales, and total private residential construction spending. The impact of the Covid-19 virus is still evident in this month's data.

Keywords: housing permits, starts, under construction, completions, construction spending, new sales, existing sales, regional housing data, economic indicators

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Summary

New single-family construction is the largest value-added wood-products-consuming sector and is a leading coincident economic indicator of the U.S. economy. The aggregate U.S. housing construction markets indicated modest improvement in May, on a month-over-month basis.

This housing brief includes housing starts, permits, houses under construction, completions, sales, and construction spending data available from the U.S. Department of Commerce and the National Association of Realtors. The data are compared on month-over-month (M/M) and year-over-year (Y/Y) bases. For more detailed information and commentary, the monthly "Virginia Tech–U.S. Forest Service Housing Commentary" is available at http://woodproducts.sbio.vt.edu/housing-report. Additionally, in-depth semi-annual and annual housing construction research is available via Treesearch (https://www.fs.usda.gov/treesearch/) and inputting "Alderman".

May 2020 Housing Scorecard

Category[a]	Month-over-month change	Year-over-year change
Housing starts (total)	▲ 4.3%	▼ 23.2%
Single-family	▼ 0.1%	▼ 17.8%
Multifamily	▲ 15.0%	▼ 33.1%
Housing permits (total)	▲ 14.4%	▼ 8.8%
Single-family	▲ 11.9%	▼ 9.9%
Multifamily	▲ 18.8%	▼ 7.0%
Housing under construction (total)	▼ 1.4%	▲ 3.8%
Single-family	▼ 2.1%	▼ 3.8%
Multifamily	▼ 0.9%	▲ 10.4%
Housing completions (total)	▼ 7.3%	▼ 9.8%
Single-family	▼ 9.8%	▼ 10.8%
Multifamily	▼ 0.6%	▼ 5.5%
New single-family house sales	▲ 16.6%	▲ 12.7%
Private residential construction spending	▼ 4.0%	▼ 0.7%
Single-family construction spending	▲ 8.5%	▼ 4.4%
Existing house sales[b]	▼ 9.7%	▼ 26.6%

[a] Data from U.S. Census Bureau–Construction.
[b] Data from Federal Reserve Bank of St. Louis (FRED).

Starts

Total starts in May 2020 were at a seasonally adjusted annual rate (SAAR) of 974,000. This was 4.3% more than April 2020 and 23.2% less than May 2019. Single-family (SF) starts were 675,000, which was 0.1% more than April 2020. Multifamily (MF) starts of two to four units were 8,000 and five units or more were 291,000 (Census Bureau 2020a). May 2020 total starts were less than the 58-year average of 1,439,000 (Fig. 1).

Regionally, the South remained the strongest market, where total starts were 479,000, of which 380,000 were SF and 99,000 were MF. The West followed with total starts of 309,000, of which 175,000 were SF and 134,000 were MF. Total Midwest starts were 133,000, of which 84,000 were SF and 49,000 were MF. The Northeast recorded total starts of 53,000, of which 36,000 were SF and 17,000 were MF (Census Bureau 2020a). Table 1 provides housing start data for each start category for May 2020.

Table 1—National and regional U.S. housing starts for May 2020 in comparison to April 2020 and May 2019

	Total starts[a]	Single-family	Multi-family (2–4 units)[b]	Multi-family (≥5 units)
May-20	974,000	675,000	8,000	291,000
Apr-20	934,000	674,000	11,000	249,000
May-19	1,268,000	821,000	12,000	435,000
Month-over-month change	4.3%	0.1%	–27.3%	16.9%
Year-over-year change	–23.2%	–17.8%	–33.3%	–33.1%

	Northeast	Midwest	South	West
May-20	53,000	133,000	479,000	309,000
Apr-20	47,000	135,000	570,000	182,000
May-19	87,000	158,000	708,000	315,000
Month-over - month change	12.8%	–1.5%	–16.0%	69.8%
Year-over-year change	–39.1%	–15.8%	–32.3%	–1.9%

[a] Source: U.S. Department of Commerce–Construction (SAAR).
[b] Multifamily two- to four-unit starts are not reported directly but are an estimation: 2 to 4 starts = (Total starts – (SF starts + MF ≥5 starts)).

Permits

Total building permits issued in May 2020 were at a SAAR of 1,220,000. This was 14.4% more than April 2020 and 8.8% less than May 2019. SF permits were 745,000, which was 11.9% more than April 2020. MF permits of two to four units were 41,000 and five units or more were 434,000 (Census Bureau 2020a). Historically, MF permits can be extremely variable, M/M and Y/Y.

Regionally, the South remained the strongest market, where total permits issued were 659,000, of which 431,000 were SF and 228,000 were MF. The West followed with total permits of 283,000, of which 165,000 were SF and 118,000 were MF. Midwest total permits were 167,000, of which 101,000 were SF and 66,000 were MF. In the Northeast, total permits were 111,000, of which 48,000 were SF and 63,000 were MF (Census Bureau 2020a). Table 2 provides permit data for each permit category for May 2020.

Table 2—National and regional U.S. housing permits for May 2020 in comparison to April 2020 and May 2019

	Total permits[a]	Single-family	Multi-family (2–4 units)[b]	Multi-family (≥5 units)
May-20	1,220,000	745,000	41,000	434,000
Apr-20	1,066,000	666,000	33,000	367,000
May-19	1,338,000	827,000	37,000	474,000
Month-over - month change	14.4%	11.9%	24.2%	18.3%
Year-over-year change	–8.8%	–9.9%	10.8%	–8.4%

	Northeast	Midwest	South	West
May-20	111,000	167,000	659,000	283,000
Apr-20	61,000	141,000	612,000	252,000
May-19	104,000	175,000	713,000	346,000
Month-over-month change	82.0%	18.4%	7.7%	12.3%
Year-over - year change	6.7%	–4.6%	–7.6%	–18.2%

[a] Source: U.S. Census Bureau–Construction (SAAR).
[b] Multifamily two- to four-unit permits are not reported directly but are an estimation: 2 to 4 permits = (Total permits – (SF permits + MF ≥5 permits)).

Housing under Construction

Total housing under construction (HUC) issued in May 2020 was at a SAAR of 1,172,000. This was 1.4% less than April 2020 and 3.8% more than May 2019. SF HUC was 503,000, which was 2.1% less than April 2020. MF HUC of two to four units were 11,000 and five units or more were 658,000 (Census Bureau 2020a).

Regionally, the South remained the strongest market, where total HUC was 520,000, of which 239,000 were SF and 281,000 were MF. The West followed with a total HUC of 340,000 units, of which 140,000 were SF and 200,000 were MF. The Northeast total HUC was 170,000, of which 53,000 were SF and 117,000 were MF. Midwest total HUC was 142,000, of which 71,000 were SF and 71,000 were MF (Census Bureau 2020a). Table 3 provides HUC data for May 2020.

Table 3—National and regional U.S. housing under construction for May 2020 in comparison to April 2020 and May 2019

	Total HUC[a]	Single-family	Multi-family (2–4 units)[b]	Multi-family (≥5 units)
May-20	1,172,000	503,000	11,000	658,000
Apr-20	1,189,000	514,000	13,000	662,000
May-19	1,129,000	523,000	11,000	595,000
Month-over-month change	–1.4%	–2.1%	–15.4%	–0.6%
Year-over-year change	3.8%	–3.8%	0.0%	10.6%

	Northeast	Midwest	South	West
May-20	170,000	142,000	520,000	340,000
Apr-20	174,000	148,000	529,000	338,000
May-19	182,000	139,000	487,000	321,000
Month-over - month change	–2.3%	–4.1%	–1.7%	0.6%
Year-over-year change	–6.6%	2.2%	6.8%	5.9%

[a] Source: U.S. Department of Commerce–Construction (SAAR).
[b] Multifamily two- to four-unit HUC is not reported directly but are an estimation: 2 to 4 HUC = (Total HUC – (SF HUC + MF ≥5 HUC)).

Housing Completions

Total completions in May 2020 were at a SAAR of 1,115,000. This was 7.3% less than April 2020 and 9.3% less than May 2019. SF completions were 791,000, which is 9.8% less than April 2020. MF completions of two to four units were 14,000 and five units or more were 310,000 (Census Bureau 2020a).

The South remained the strongest market, where total completions were 583,000, of which 449,000 were SF and 134,000 were MF. The West followed with total completions of 271,000 units, of which 179,000 were SF and 92,000 were MF. Total Midwest completions were 193,000, of which 115,000 were SF and 78,000 were MF (Census Bureau 2020a). Northeast total completions were 68,000, of which 48,000 were SF and 20,000 were MF. Table 4 provides housing completion data for May 2020.

Table 4—National and regional U.S. housing completions for May 2020 in comparison to April 2020 and May 2019

	Total completions[a]	Single-family	Multi-family (2–4 units)[b]	Multi-family (≥5 units)
May-20	1,115,000	791,000	14,000	310,000
Apr-20	1,203,000	877,000	9,000	317,000
May-19	1,230,000	887,000	4,000	339,000
Month-over-month change	–7.3%	–9.8%	55.6%	–2.2%
Year-over-year change	–9.3%	–10.8%	250.0%	–8.6%

	Northeast	Midwest	South	West
May-20	68,000	193,000	583,000	271,000
Apr-20	61,000	173,000	698,000	271,000
May-19	99,000	200,000	602,000	329,000
Month-over - month change	11.5%	11.6%	–16.5%	0.0%
Year-over-year change	–31.3%	–3.5%	–3.2%	–17.6%

[a] Source: U.S. Department of Commerce–Construction (SAAR).
[b] Multifamily two- to four-unit completions are not reported directly but are an estimation: 2 to 4 completions = (Total completions – (SF completions + MF ≥5 completions)).

New Single-Family House Sales

Total new house sales in May 2020 were estimated at a SAAR of 676,000 units. This was an increase of 16.6% from April 2020 and 12.7% more than May 2019. Regionally, the South remained the strongest market with total new SF house sales of 402,000, followed by the West with 169,000. The Midwest recorded 73,000 sales, and the Northeast had 32,000.

The median sales price of new houses sold in May 2020 was $317,900, and the mean sales price was $368,800 (Census Bureau 2020b). Table 5 provides new SF sales data for May 2020.

Table 5—National and regional new U.S. housing sales for May 2020 in comparison to April 2020 and May 2019

	New SF sales[a]	Median price	Mean price	Month's supply
May-20	676,000	$317,900	$368,800	5.6
Apr-20	580,000	$303,000	$352,300	6.7
May-19	600,000	$312,700	$379,100	6.7
Month-over-month change	16.6%	4.9%	4.7%	–16.4%
Year-over-year change	12.7%	1.7%	–2.7%	–16.4%

	Northeast	Midwest	South	West
May-20	32,000	73,000	402,000	169,000
Apr-20	22,000	78,000	349,000	131,000
May-19	22,000	71,000	378,000	129,000
Month-over - month change	45.5%	–6.4%	15.2%	29.0%
Year-over-year change	45.5%	2.8%	6.3%	31.0%

[a] Source: U.S. Department of Commerce–Construction (SAAR).

Private Residential Construction Spending

New SF starts and sales are vital to the wood products industry because new units consume more value-added products than any other wood-consuming sector. Aggregate new housing construction spending has generally lagged the overall economy since 2010. New construction and spending are two of the factors often mentioned for the subdued economic recovery, and May's expenditure data bear this out. Total private residential construction spending for May 2020 was $535,933 million, a 4.0% decrease from April 2020 and a 0.7% improvement from May 2019. SF construction spending was $261,754 million and MF construction spending was $77,336 million. Improvement, or remodeling, spending was $196,843 million (Census Bureau 2020c). Table 6 provides data for each construction spending category for May 2020.

Table 6—National U.S. housing construction spending for May 2020 in comparison to April 2020 and May 2019

	Total private residential construction spending[a, b]	Single-family	Multi-family	Improve-ment[c]
May-20	$535,933	$261,754	$77,336	$196,843
Apr-20	$558,342	$286,133	$75,632	$196,577
May-19	$532,148	$273,721	$81,923	$176,504
Month-over-month change	–4.0%	–8.5%	2.3%	0.1%
Year-over-year change	0.7%	–4.4%	–5.6%	11.5%

[a] Reported in nominal U.S. dollars, millions of dollars, and SAAR.
[b] Source: U.S. Census Bureau–Construction.
[c] The U.S. DOC Census Bureau does not report improvement spending directly. This is a monthly estimation: Improvement spending = (Total private spending – (SF spending + MF spending)).

Existing House Sales

Existing house sales in May 2020 were at a SAAR of 3,910,000 units. This is a 9.7% decrease from April 2020 and 26.6% less than May 2019. Regionally, the South remained the strongest market, with total existing house sales of 1,730,000 units, followed by the Midwest at 990,000 units. The West had total existing sales of 720,000 units, and the Northeast had 470,000 units (FRED 2020a). Table 7 provides existing house sales data for May 2020.

Table 7—National and regional U.S. existing housing sales for May 2020 in comparison to April 2020 and May 2019

	Existing sales[a]	Median price	Mean price	Month's supply
May-20	3,910,000	$284,600	$319,300	4.8
Apr-20	4,330,000	$286,700	$321,100	4.0
May-19	5,330,000	$278,200	$314,600	4.3
Month-over-month change	–9.7%	–0.7%	–0.6%	20.0%
Year-over-year change	–26.6%	2.3%	1.5%	11.6%
	Northeast	**Midwest**	**South**	**West**
May-20	470,000	990,000	1,730,000	720,000
Apr-20	540,000	1,100,000	1,880,000	810,000
May-19	670,000	1,240,000	2,310,000	1,110,000
Month-over -month change	–13.0%	–10.0%	–8.0%	–11.1%
Year-over-year change	–29.9%	–20.2%	–25.1%	–35.1%

[a] Source: Federal Reserve Bank of St. Louis (FRED).

Literature Cited

Carliner, M. 2010. Census bureau housing and demographic data. Available at http://www.michaelcarliner.com/index.html. (Accessed March 15, 2019.)

Census Bureau. 2020a. New residential construction. Washington, DC: U.S. Department of Commerce, Census Bureau. Available at https://www.census.gov/construction/nrc/index.html. (Accessed June 17, 2020.)

Census Bureau. 2020b. New residential sales. Washington, DC: U.S. Department of Commerce, Census Bureau. Available at https://www.census.gov/construction/nrs/index.html. (Accessed June 23, 2020.)

Census Bureau. 2020c. Value of construction put in place at a glance. Washington, DC: U.S. Department of Commerce, Census Bureau. Available at https://www.census.gov/construction/c30/c30index.html. (Accessed July 1, 2020.)

FRED. 2020a. Existing home sales. Federal Reserve Bank of St. Louis. Available at https://fred.stlouisfed.org/series/EXHOSLUSM495S. (Accessed June 22, 2020.)

FRED. 2020b. NBER based recession indicators for the U.S., 1855 to May 2020. Available at https://fred.stlouisfed.org/series/USREC. (Accessed June 8, 2020.)

Gottlieb, M. 1964. Estimates of residential building, US, 1840-1939. Available at http://www.nber.org/books/gott64-1840-1939. (Accessed March 15, 2019.)

Glossary

Housing completions—A house is defined as completed when all finished flooring has been installed (or carpeting if used in place of finished flooring). If the building is occupied before all construction is finished, it is classified as completed at the time of occupancy. In privately owned buildings with two or more housing units, all the units in the buildings are counted as completed when 50% or more of the units are occupied or available for occupancy. Housing completions are estimated for all areas of the United States, regardless of whether permits are required.

Housing permits—The approval given by a local jurisdiction to proceed on a construction project. Not all areas of the country require a permit for construction.

Housing starts—Start of construction occurs when excavation begins for the footings or foundation of a building. All housing units in a multifamily building are defined as being started when this excavation begins. Beginning with data for May 1992, estimates of housing starts include units in structures being totally rebuilt on an existing foundation.

Housing under construction—Estimates of housing units started, but not yet completed, are estimated for all areas of the United States, whether or not permits are required.

Regions—Northeast: Connecticut, Maine, Massachusetts, New Hampshire, New Jersey, New York, Pennsylvania, Rhode Island, and Vermont. Midwest: Illinois, Indiana, Iowa, Kansas, Michigan, Minnesota, Missouri, Nebraska, North Dakota, Ohio, South Dakota, and Wisconsin. South: Alabama, Arkansas, Delaware, District of Columbia, Florida, Georgia, Kentucky, Louisiana, Maryland, Mississippi, North Carolina, Oklahoma, South Carolina, Tennessee, Texas, Virginia, and West Virginia. West: Alaska, Arizona, California, Colorado, Hawaii, Idaho, Montana, Nevada, New Mexico, Oregon, Utah, Washington, and Wyoming.

Seasonally adjusted annual rate—Seasonal adjustment is the process of estimating and removing seasonal effects from a time series to better reveal certain non-seasonal features such as underlying trends and business cycles. Seasonal adjustment procedures estimate effects that occur in the same calendar month with similar magnitude and direction from year to year. In series whose seasonal effects come primarily from weather, the seasonal factors are estimates of average weather effects for each month.

Single-family housing—Dwellings that include fully detached, semi-detached (semi-attached, side-by-side), row houses, and townhouses.

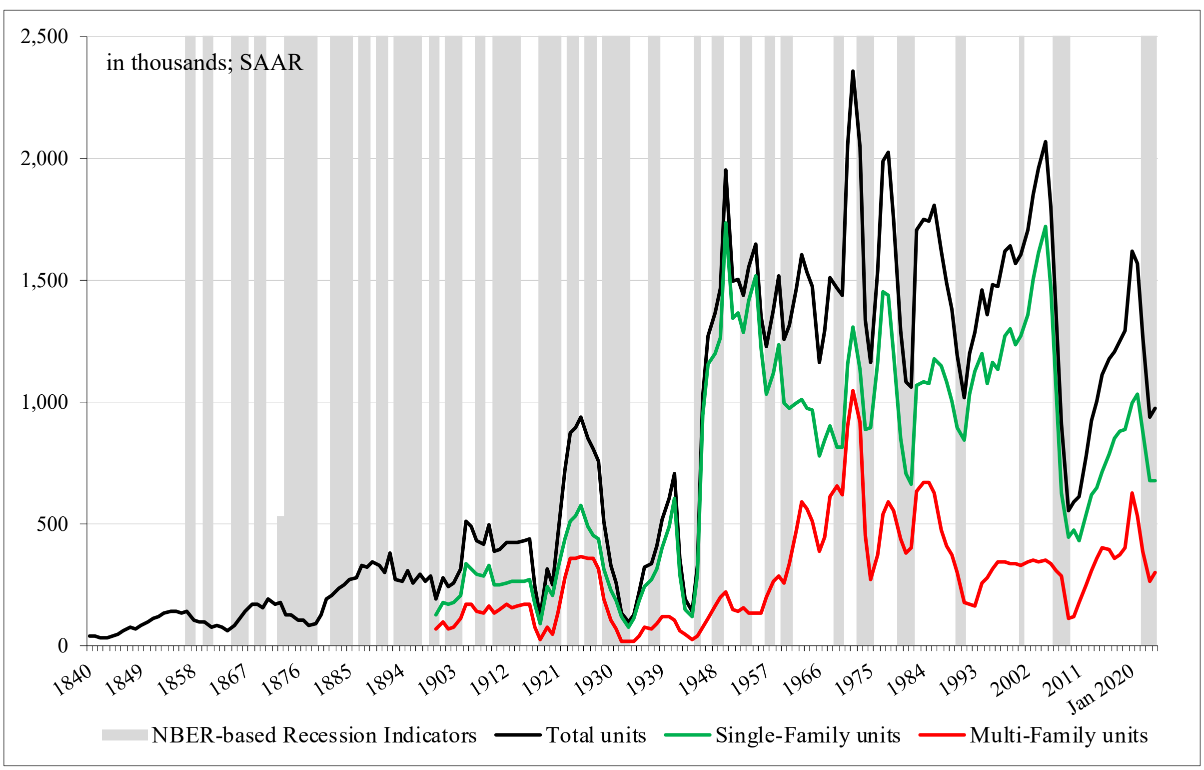

Figure 1. U.S. housing units and starts: 1840 to May 2020. National Bureau of Economic Research (NBER)-based recession bar indicators (RIs) for the U.S. from the period following the peak through the trough (FRED 2020b). Sources: Carliner (2010), Gottlieb (1964), and Census Bureau (2020a).