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Abstract

December housing data denoted the second consecutive month of total starts greater than 1.5 million units. For the fourth consecutive month, total starts exceeded their 61-year historical average. Further, single-family starts were the greatest since September 2006 (1,384,000 units). Aggregate (month-over-month and year-over-year) U.S. housing market data also were positive. The single-family subsector is the primary source of the current uptrend and is progressively gaining momentum. Month-over-month data yielded decreases in three categories: aggregate multifamily starts and permits, and new sales. Year-over-year data indicated declines for multifamily starts and permits. Existing house sales were the greatest quantity since 2006. Residential construction spending was positive month-over-month and year-over-year; and expenditures from October through December were the greatest since 2005–2006 (nominal basis).

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

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United States Housing Brief, December 2020

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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. On month-over-month and year-over-year bases, the U.S. housing market was mostly positive in December.

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”.

December 2020 Housing Scorecard

Category ^a	Month-over-month change	Year-over-year change
Housing starts (total)	▲ 5.8%	▲ 5.2%
Single-family	▲ 12.0%	▲ 27.8%
Multifamily	▼ 13.6%	▼ 38.7%
Housing permits (total)	▲ 4.2%	▲ 17.0%
Single-family	▲ 7.6%	▲ 30.1%
Multifamily	▼ 3.4%	▼ 7.0%
Housing under construction (total)	▲ 1.6%	▲ 7.4%
Single-family	▲ 3.9%	▲ 16.1%
Multifamily	▼ 0.5%	▼ 0.5%
Housing completions (total)	▲ 15.9%	▲ 8.0%
Single-family	▲ 10.2%	▲ 9.0%
Multifamily	▲ 31.2%	▲ 5.9%
New single-family house sales	▲ 1.6%	▲ 15.2%
Private residential construction spending	▲ 3.1%	▲ 20.7%
Single-family construction spending	▲ 5.8%	▲ 23.5%
Existing house sales ^b	▲ 0.7%	▲ 22.2%

^a Data from U.S. Census Bureau–Construction.

^b Data from Federal Reserve Bank of St. Louis. (FRED).

Starts

Total starts in December 2020 were at a seasonally adjusted annual rate (SAAR) of 1,669,000. This was 5.8% greater than in November 2020 and 5.2% greater than December 2019. Single-family (SF) starts were 1,338,000, which was 12.0% greater than in November 2020. Multifamily (MF) starts of two to four units were 19,000 and five units or more were 312,000 (Census Bureau 2020a) (Fig. 1).

Regionally, the South remained the strongest market, where total starts were 858,000, of which 713,000 were SF and 145,000 were MF. The West followed with total starts of 453,000, of which 319,000 were SF and 134,000 were MF. Total Midwest starts were 251,000, of which 227,000 were SF and 24,000 were MF. The Northeast recorded total starts of 107,000, of which 79,000 were SF and 28,000 were MF (Census Bureau 2020a). Table 1 provides housing start data for each start category for December 2020.

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

	Total starts ^a	Single-family	Multi-family (2–4 units) ^b	Multi-family (≥5 units)
Dec-20	1,669,000	1,338,000	19,000	312,000
Nov-20	1,578,000	1,195,000	15,000	368,000
Dec-19	1,587,000	1,047,000	20,000	520,000
Month-over-month change	5.8%	12.0%	26.7%	–15.2%
Year-over-year change	5.2%	27.8%	–5.0%	–40.0%
	Northeast	Midwest	South	West
Dec-20	107,000	251,000	858,000	453,000
Nov-20	164,000	190,000	813,000	411,000
Dec-19	141,000	238,000	796,000	412,000
Month-over-month change	–34.8%	32.1%	5.5%	10.2%
Year-over-year change	–24.1%	5.5%	7.8%	10.0%

^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 December 2020 were at a SAAR of 1,704,000. This was 4.2% greater than November 2020 and 17.0% greater than December 2019. SF permits were 1,223,000, which was 7.6% greater than November 2020. MF permits of two to four units were 46,000 and five units or more were 435,000 (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 881,000, of which 701,000 were SF and 180,000 were MF. The West followed with total permits of 435,000, of which 279,000 were SF and 156,000 were MF. Midwest total permits were 251,000, of which 171,000 were SF and 80,000 were MF. In the Northeast, total permits were 140,000, of which 72,000 were SF and 68,000 were MF (Census Bureau 2020b). Table 2 provides permit data for each permit category for December 2020.

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

	Total permits ^a	Single-family	Multi-family (2–4 units) ^b	Multi-family (≥5 units)
Dec-20	1,704,000	1,223,000	46,000	435,000
Nov-20	1,635,000	1,137,000	52,000	446,000
Dec-19	1,457,000	940,000	43,000	474,000
Month-over-month change	4.2%	7.6%	–11.5%	–2.5%
Year-over-year change	17.0%	30.1%	7.0%	–8.2%
	Northeast	Midwest	South	West
Dec-20	140,000	248,000	881,000	435,000
Nov-20	152,000	221,000	868,000	394,000
Dec-19	147,000	208,000	720,000	382,000
Month-over-month change	–7.9%	12.2%	1.5%	10.4%
Year-over-year change	–4.8%	19.2%	22.4%	13.9%

^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 December 2020 was at a SAAR of 1,271,000. This was a 1.6% increase from November and 7.4% greater than December 2019. SF HUC was 612,000, which was 3.9% greater than November 2020. MF HUC of two to four units were 11,000 and five units or more were 648,000 (Census Bureau 2020a).

Regionally, the South remained the strongest market, where total HUC was 582,000, of which 304,000 were SF and 278,000 were MF. The West followed with a total HUC of 346,000 units, of which 163,000 were SF and 183,000 were MF. The Northeast total HUC was 180,000, of which 59,000 were SF and 121,000 were MF. Midwest total HUC was 163,000, of which 86,000 were SF and 77,000 were MF (Census Bureau 2020a). Table 3 provides HUC data for December 2020.

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

	Total HUC ^a	Single-family	Multi-family (2–4 units) ^b	Multi-family (≥5 units)
Dec-20	1,271,000	612,000	11,000	648,000
Nov-20	1,251,000	589,000	11,000	651,000
Dec-19	1,183,000	527,000	12,000	644,000
Month-over-month change	1.6%	3.9%	0.0%	–0.5%
Year-over-year change	7.4%	16.1%	–8.3%	0.6%
	Northeast	Midwest	South	West
Dec-20	180,000	163,000	582,000	346,000
Nov-20	183,000	162,000	566,000	340,000
Dec-19	171,000	155,000	517,000	340,000
Month-over-month change	–1.6%	0.6%	2.8%	1.8%
Year-over-year change	5.3%	5.2%	12.6%	1.8%

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

^b Multifamily two- to four-unit HUC are not reported directly but are an estimation: 2 to 4 HUC = (Total HUC – (SF HUC + MF ≥5 HUC)).

Housing Completions

Total completions in December 2020 were at a SAAR of 1,417,000. This was 15.9% greater than in November and 8.0% greater than December 2019. SF completions were 984,000, which was 10.2% greater than November 2020. MF completions of two to four units were 11,000 and five units or more were 422,000 (Census Bureau 2020a).

The South remained the strongest market, where total completions were 747,000, of which 557,000 were SF and 190,000 were MF. The West followed with total completions of 365,000 units, of which 230,000 were SF and 135,000 were MF. Midwest total completions were 192,000, of which 141,000 were SF and 51,000 were MF. Total Northeast completions were 113,000, of which 56,000 were SF and 57,000 were MF (Census Bureau 2020a). Table 4 provides housing completion data for December 2020.

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

	Total completions ^a	Single-family	Multi-family (2–4 units) ^b	Multi-family (≥5 units)
Dec-20	1,417,000	984,000	11,000	422,000
Nov-20	1,223,000	893,000	11,000	319,000
Dec-19	1,312,000	903,000	7,000	402,000
Month-over-month change	15.9%	10.2%	0.0%	32.3%
Year-over-year change	8.0%	9.0%	57.1%	5.0%
	Northeast	Midwest	South	West
Dec-20	113,000	192,000	747,000	365,000
Nov-20	112,000	166,000	625,000	320,000
Dec-19	205,000	139,000	644,000	324,000
Month-over-month change	0.9%	15.7%	19.5%	14.1%
Year-over-year change	–44.9%	38.1%	16.0%	12.7%

^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 December 2020 were estimated at a SAAR of 842,000 units. This was an increase of 1.6% from November 2020 and 15.2% greater than December 2019. Regionally, the South remained the strongest market with total new SF house sales of 483,000, followed by the West with 234,000. The Midwest recorded 94,000 sales and the Northeast had 31,000.

The median sales price of new houses sold in December 2020 was \$355,900, and the mean sales price was \$394,900 (Census Bureau 2020c). Table 5 provides new SF sales data for December 2020.

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

	New SF sales ^a	Median price	Mean price	Month's supply
Dec-20	842,000	\$355,900	\$394,900	4.3
Nov-20	829,000	\$343,900	\$393,200	4.2
Dec-19	731,000	\$329,500	\$377,700	5.3
Month-over-month change	1.6%	3.5%	0.4%	2.4%
Year-over-year change	15.2%	8.0%	4.6%	-18.9%

	Northeast	Midwest	South	West
Dec-20	31,000	94,000	483,000	234,000
Nov-20	33,000	72,000	509,000	215,000
Dec-19	39,000	83,000	397,000	212,000
Month-over-month change	-6.1%	30.6%	-5.1%	8.8%
Year-over-year change	-20.5%	13.3%	21.7%	10.4%

^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 December's expenditure data bear this out. Total private residential construction spending for December 2020 was \$691,000 million, a 3.1% increase from November 2020 and a 20.7% improvement from December 2019. SF construction spending was \$365,032 million and MF construction spending was \$91,369 million. Improvement, or remodeling, spending was \$234,599 million (Census Bureau 2020d). Table 6 provides data for each construction spending category for December 2020.

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

	Total private residential construction spending ^{a, b}	Single-family	Multi-family	Improvement ^c
Dec-20	\$691,000	\$365,032	\$91,369	\$234,599
Nov-20	\$670,051	\$345,114	\$91,297	\$233,640
Dec-19	\$572,387	\$295,520	\$77,542	\$199,325
Month-over-month change	3.1%	5.8%	0.1%	0.4%
Year-over-year change	20.7%	23.5%	17.8%	17.7%

^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 December 2020 were at a SAAR of 6,760,000 units. This is a 0.7% increase from November and a 22.8% improvement from December 2019.

Regionally, the South remains the strongest market, with total existing house sales of 2,860,000 units, followed by the Midwest at 1,590,000 units. The West had total existing sales of 1,380,000 units and the Northeast was 930,000 units (FRED 2020). Table 7 provides existing house sales data for December 2020.

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

	Existing sales ^a	Median price	Mean price	Month's supply
Dec-20	6,760,000	\$309,800	\$342,400	1.9
Nov-20	6,710,000	\$310,900	\$342,800	2.3
Dec-19	5,530,000	\$274,500	\$311,000	3.0
Month-over-month change	0.7%	−0.4%	−0.1%	−17.4%
Year-over-year change	22.2%	12.9%	10.1%	−36.7%

	Northeast	Midwest	South	West
Dec-20	930,000	1,590,000	2,860,000	1,380,000
Nov-20	890,000	1,590,000	2,830,000	1,400,000
Dec-19	730,000	1,260,000	2,370,000	1,170,000
Month-over-month change	4.5%	0.0%	1.1%	−1.4%
Year-over-year change	27.4%	26.2%	20.7%	17.9%

^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, 2018.)

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 January 21, 2021.)

Census Bureau. 2020b. New residential construction. Washington, DC: U.S. Department of Commerce, Census Bureau. Available at <https://www.census.gov/construction/nrc/index.html>. (Accessed January 28, 2021.)

Census Bureau. 2020c. New residential sales. Washington, DC: U.S. Department of Commerce, Census Bureau. Available at <https://www.census.gov/construction/nrs/index.html>. (Accessed January 28, 2021.)

Census Bureau. 2020d. 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 February 1, 2021.)

FRED. 2020. Existing home sales. Federal Reserve Bank of St. Louis. Available at <https://fred.stlouisfed.org/series/EXHOSLUSM495S>. (Accessed January 22, 2021.)

Gottlieb, M. 1964. Estimates of residential building, US, 1840-1939. Available at <http://www.nber.org/books/gott64-1840-1939>. (Accessed March 15, 2018.)

National Bureau of Economic Research (NBER). 2020. Federal Reserve Bank of St. Louis. Available at <https://fred.stlouisfed.org/series/USREC>. (Accessed July 8, 2020.)

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 December 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.

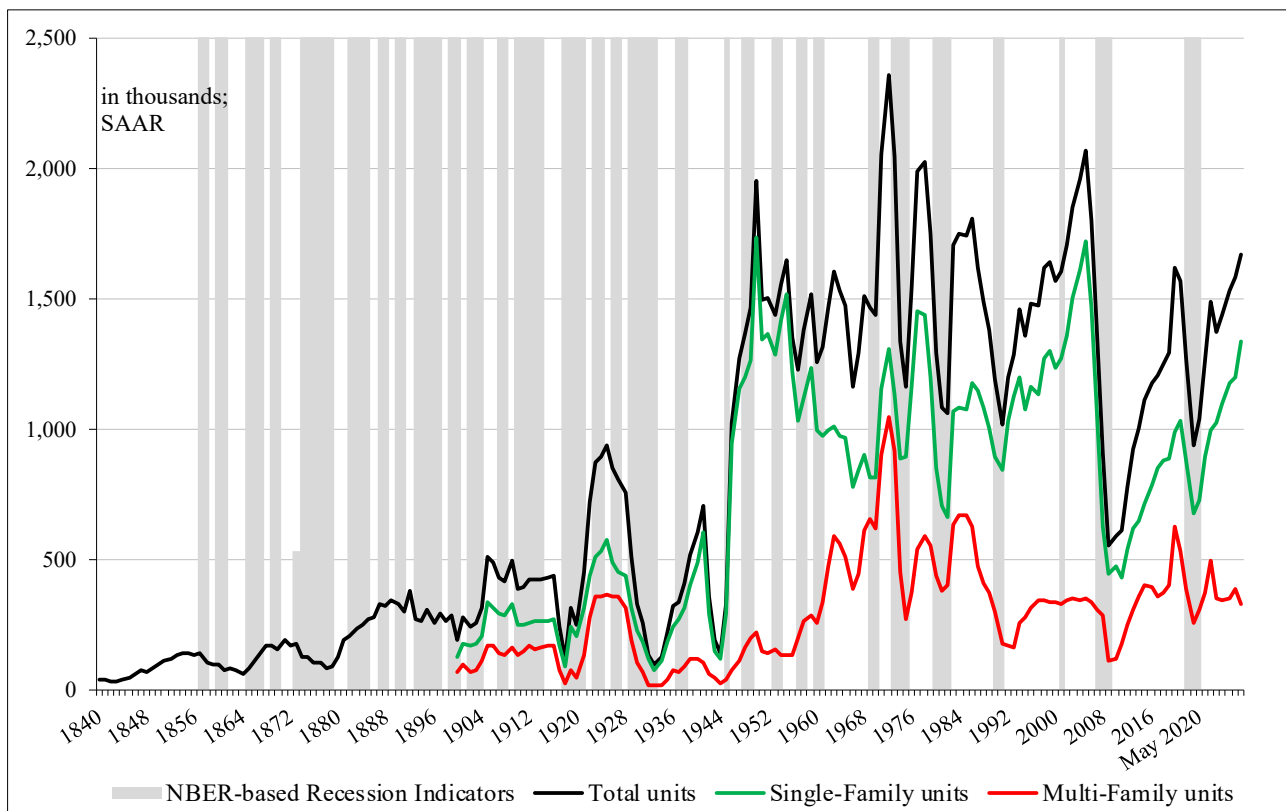


Figure 1. U.S. housing units and starts: 1840 to December 2020. Sources: Carliner (2010), Gottlieb (1964), National Bureau of Economic Research (NBER) (2020), and Census Bureau (2020a).