

The Virginia Tech–USDA Forest Service Housing Commentary: Section I August 2020



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<http://woodproducts.sbio.vt.edu/housing-report>.

To request the commentary, please email: buehlmann@gmail.com or Delton.R.Alderman@usda.gov

Opening Remarks

In August, the United States housing market was mixed. Assessing the month-over-month data yielded increases for single- and multi-family starts; and all permit and housing under construction categories. On a year-over-year basis, most categories were positive, with the exceptions of total multi-family permits and starts, single-family under construction, and single-family completions. New house sales continued upward, recording the largest sales number since 2006. Residential construction spending was positive month-over-month and year-over-year.

The October 16th Atlanta Fed GDPNow™ model for September 2020 forecasts was an aggregate 46.8% increase for residential investment spending in Quarter Three 2020 (September: 38.4%). New private permanent site expenditures were projected at an 16.3% rise; the improvement spending forecast was a 19.0% increase; and the manufactured/mobile expenditures projection was a 54.8% rise (all: quarterly log change and at a seasonally adjusted annual rate).¹

“One of the main drivers of the strong housing recovery is historically low mortgage interest rates. The U.S. weekly average 30-year fixed mortgage rate hit an all-time low of 2.86% in the second week of September. Given weakness in the broader economy, the Federal Reserve’s signal that its policy rate will remain low until inflation picks up, and no signs of inflation, we forecast mortgage rates to remain flat over the next year. From the third quarter of 2020 through the end of 2021, we forecast mortgage rates to remain unchanged at 3%. ... In August, new homes sales surpassed 1 million units at an annualized rate, the highest since Q2 2006. Existing home sales reached 6 million units at an annualized rate in the same month. The recent surge in home sales will help propel total annual sales to 6.2 million in 2020. While construction has rebounded, the slowdown in activity in the spring and early summer of 2020 will translate to fewer new homes available for sale next year. Thus we forecast home sales to decline slightly to 6.1 million in 2021.”² – Freddie Mac, The Economic & Housing Research Group

This month’s commentary contains applicable housing data. Section I contains updated housing forecasts, data, and remodeling commentary. Section II includes regional Federal Reserve analysis, private firm indicators, and demographic information.

Sources: ¹ www.frbatlanta.org/cqer/research/gdpnow.aspx; 9/17/20;

² http://www.freddiemac.com/research/forecast/20201014_quarterly_economic_forecast.page; 10/14/20

August 2020

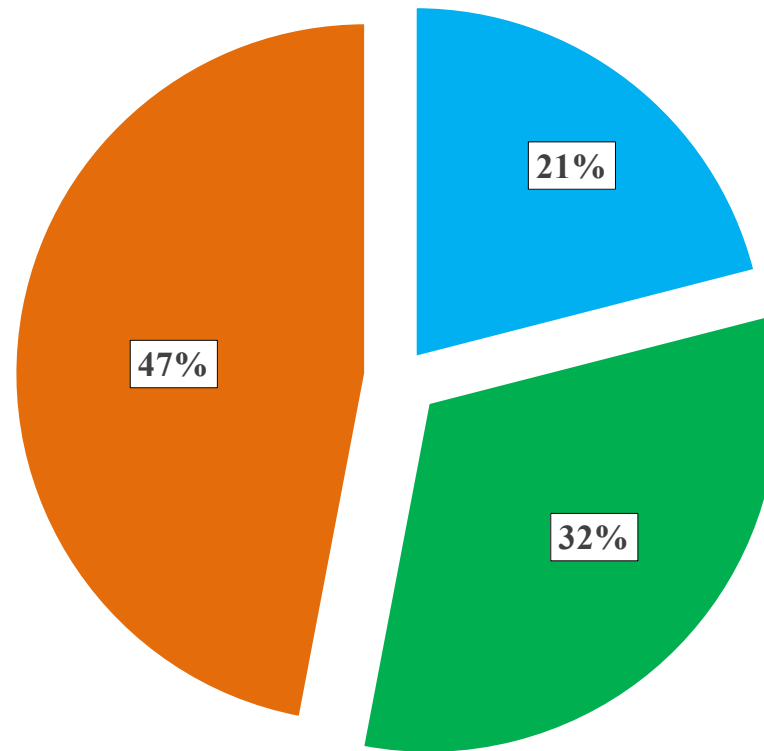
Housing Scorecard

	M/M	Y/Y
Housing Starts	▼ -5.1%	▲ 2.8%
Single-Family (SF) Starts	▲ 4.1%	▲ 12.1%
Multi-Family (MF) Starts*	▼ -22.7%	▼ -15.2%
Housing Permits	▼ -0.9%	▼ -0.1%
SF Permits	▲ 6.0%	▲ 15.6%
MF Permits*	▼ -14.2%	▼ -24.5%
Housing Under Construction	▲ 1.5%	▲ 5.7%
SF Under Construction	▲ 2.0%	▲ 1.0%
Housing Completions	▼ -7.5%	▼ -2.4%
SF Completions	▼ -4.4%	▼ -2.8%
New SF House Sales	▲ 4.8%	▲ 43.2%
Private Residential Construction Spending	▲ 3.7%	▲ 6.7%
SF Construction Spending	▲ 5.5%	▲ 2.9%
Existing House Sales ¹	▲ 2.4%	▲ 10.5%

* All multi-family (2 to 4 + ≥ 5-units)

M/M = month-over-month; Y/Y = year-over-year; NC = no change

New Construction's Percentage of Wood Products Consumption

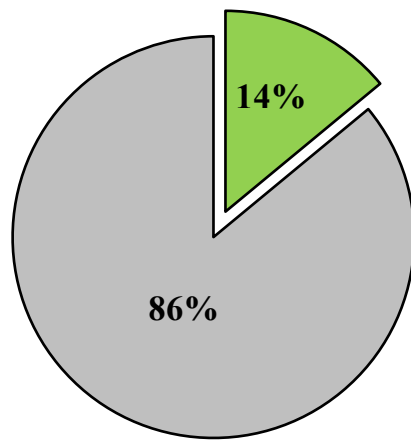


■ Non-structural panels

■ Total Sawnwood

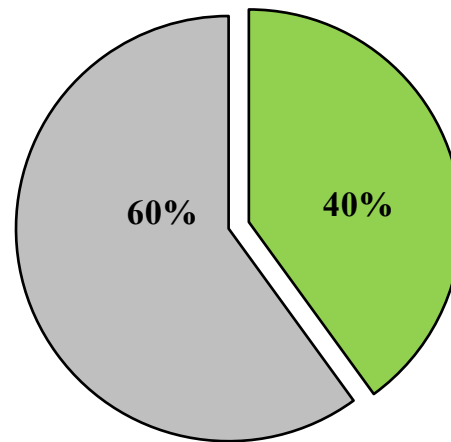
■ Structural panels

New SF Construction Percentage of Wood Products Consumption



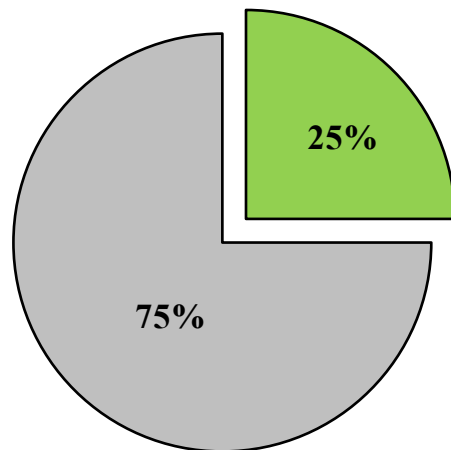
■ Non-structural panels:
New Housing

■ Other markets



■ Structural panels:
New housing

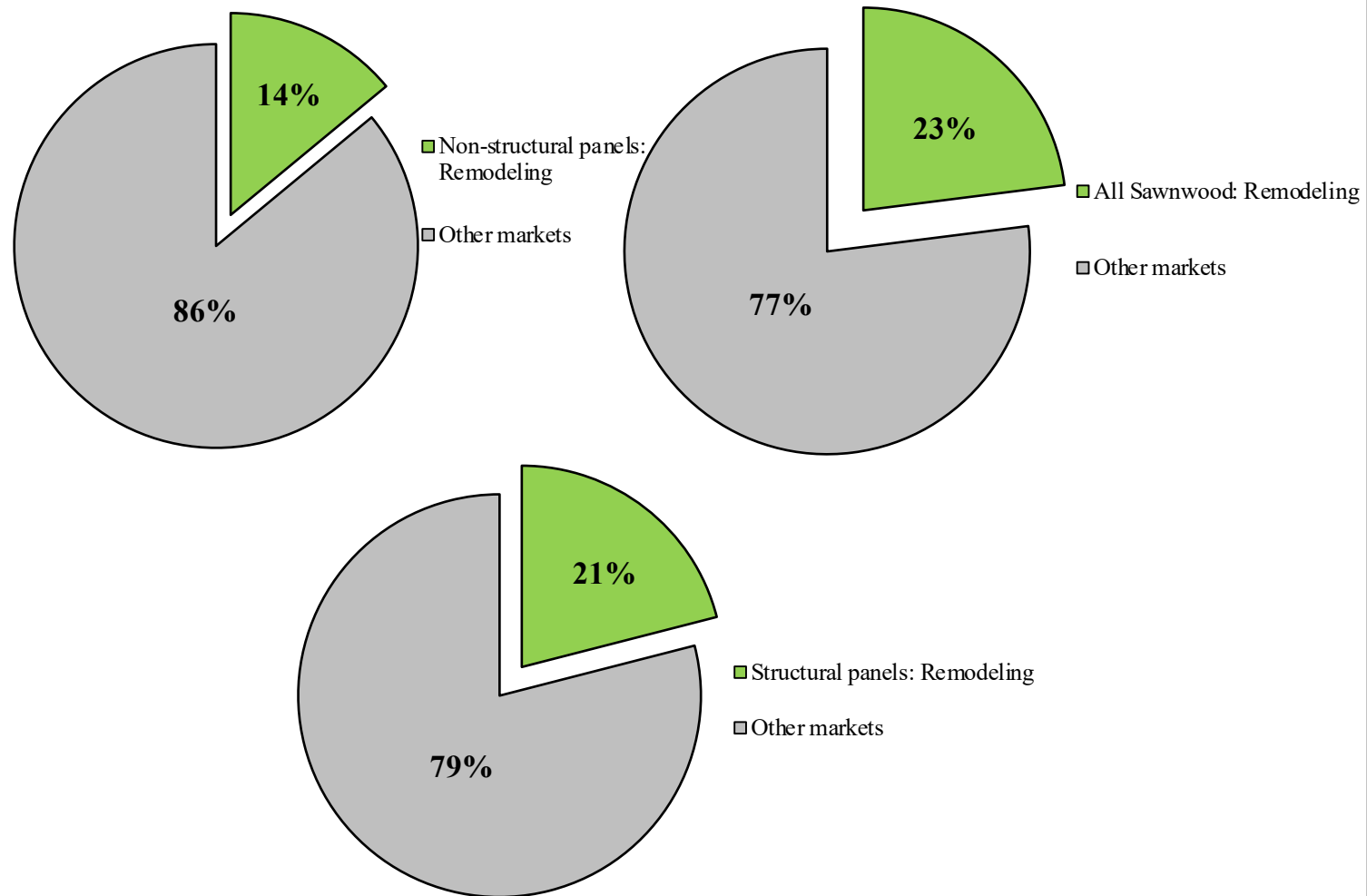
■ Other markets



■ All Sawnwood: New housing

■ Other markets

Repair and Remodeling's Percentage of Wood Products Consumption



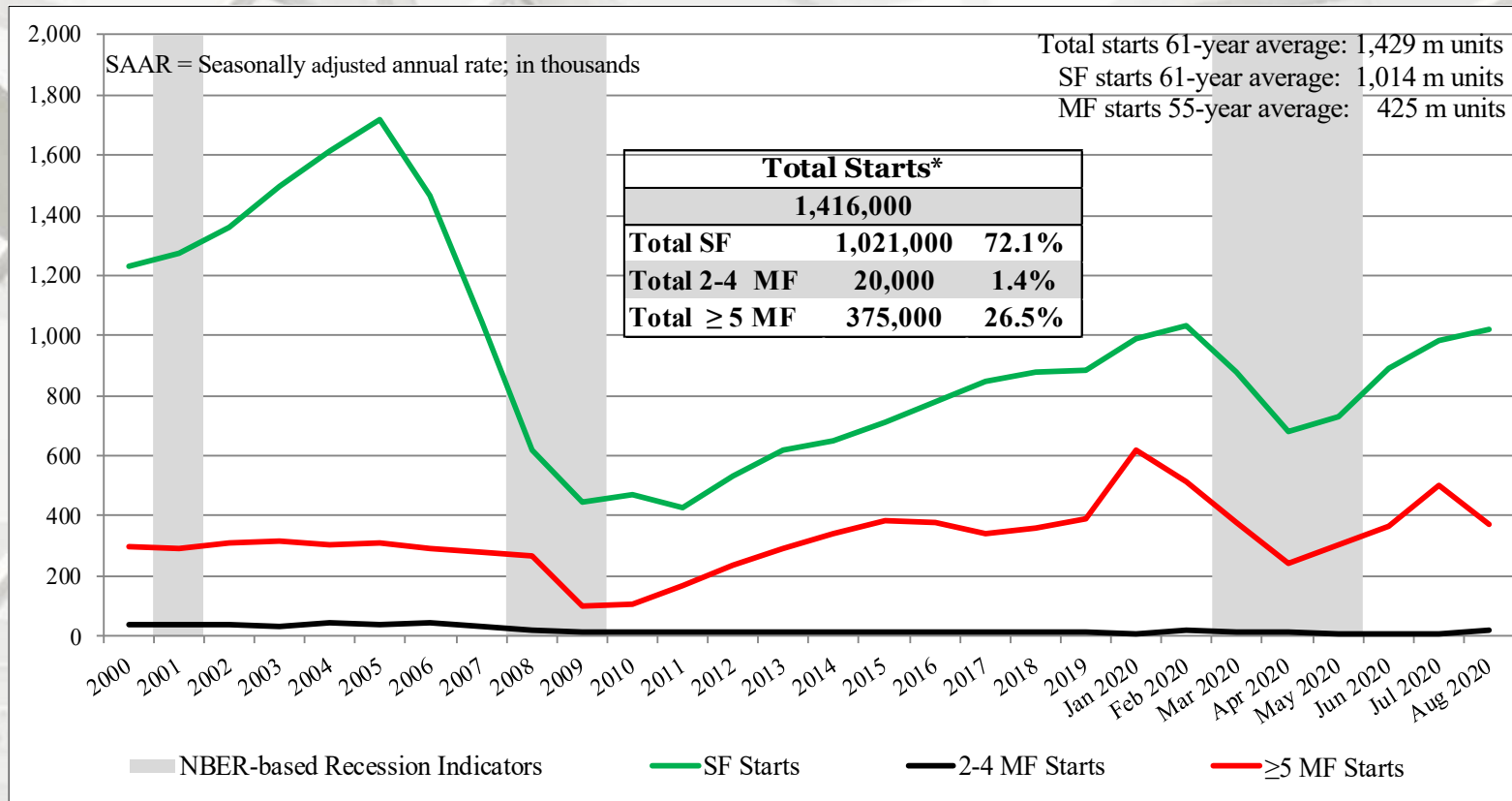
New Housing Starts

	Total Starts*	SF Starts	MF 2-4 Starts**	MF ≥5 Starts
August	1,416,000	1,021,000	20,000	375,000
July	1,492,000	981,000	8,000	503,000
2019	1,377,000	911,000	15,000	451,000
M/M change	-5.1%	4.1%	150.0%	-25.4%
Y/Y change	2.8%	12.1%	33.3%	-16.9%

* All start data are presented at a seasonally adjusted annual rate (SAAR).

** US DOC does not report 2 to 4 multifamily starts directly, this is an estimation
((Total starts – (SF + 5-unit MF)).

Total Housing Starts

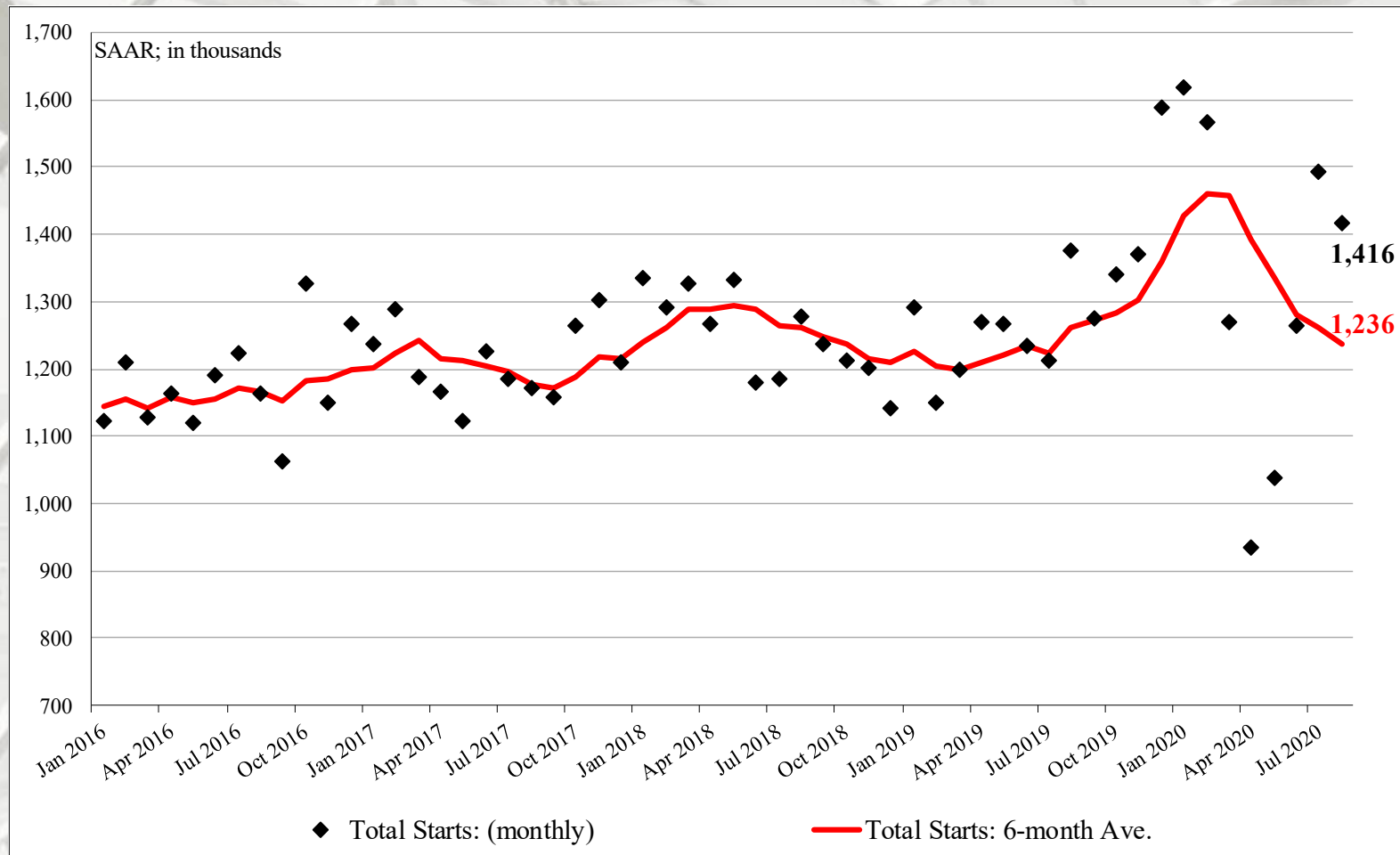


US DOC does not report 2 to 4 multifamily starts directly, this is an estimation: ((Total starts – (SF + ≥ MF)).

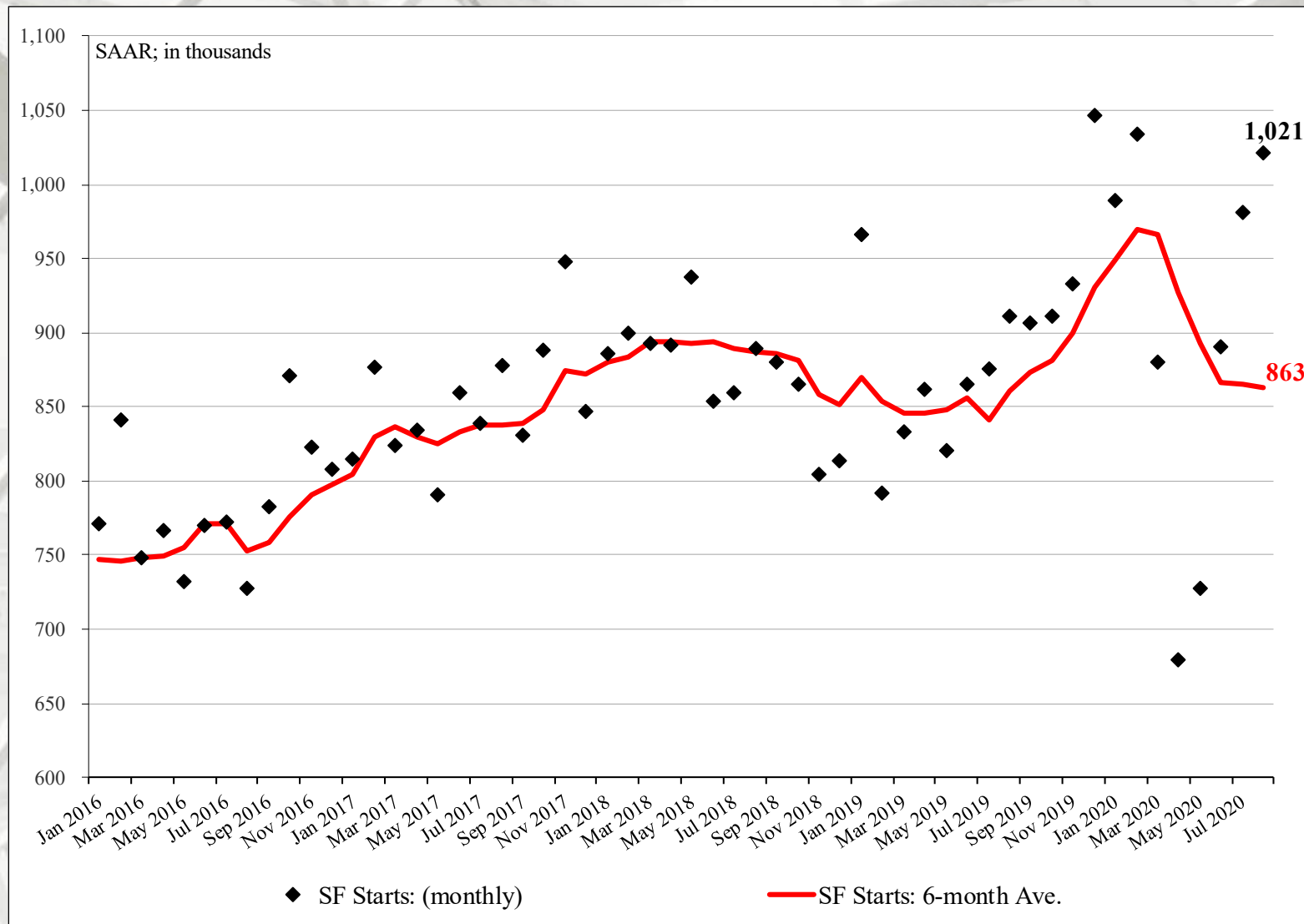
* Percentage of total starts.

NBER based Recession Indicator Bars for the United States from the Period following the Peak through the Trough (FRED, St. Louis).

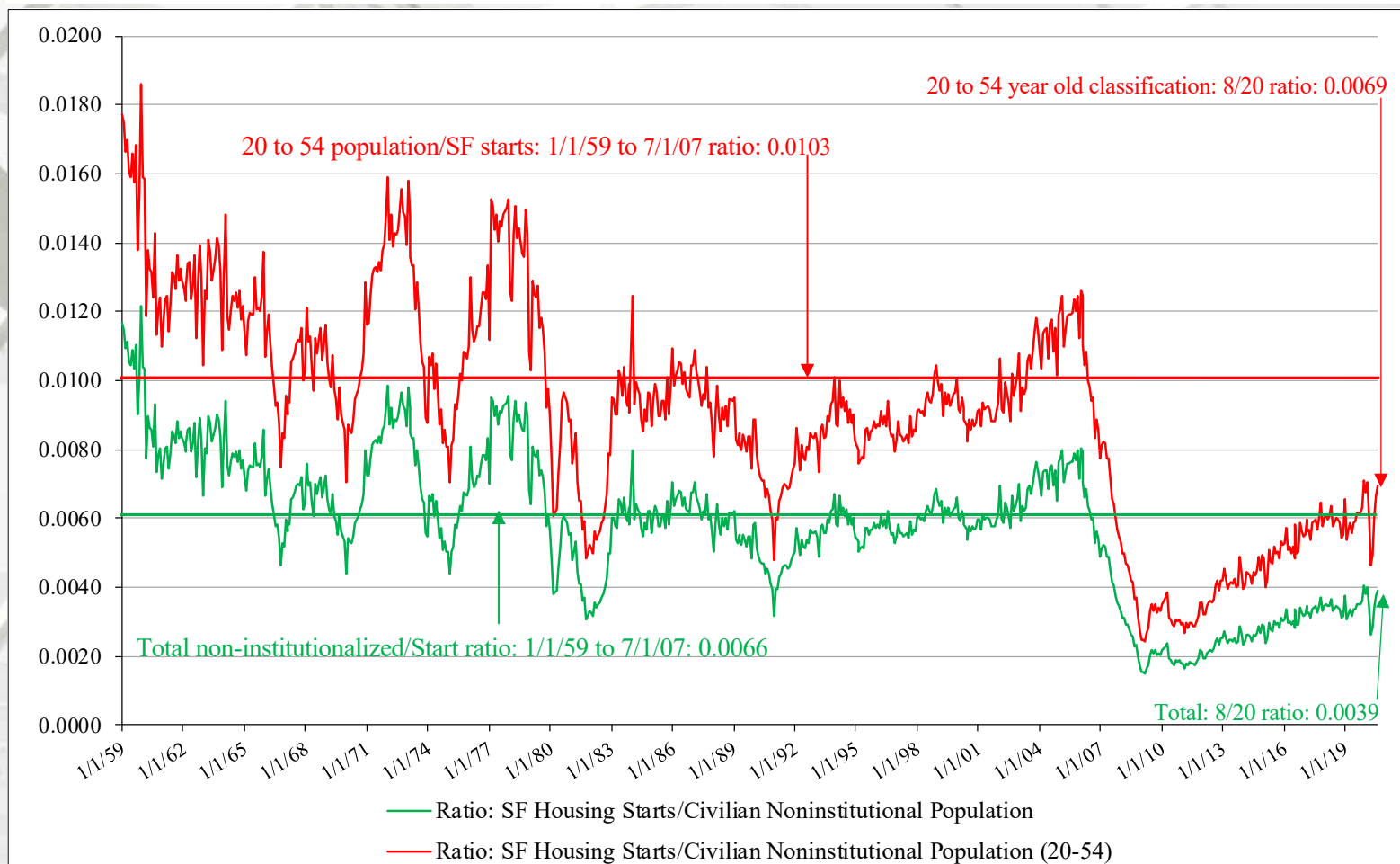
Total Housing Starts: Six-Month Average



SF Housing Starts: Six-Month Average



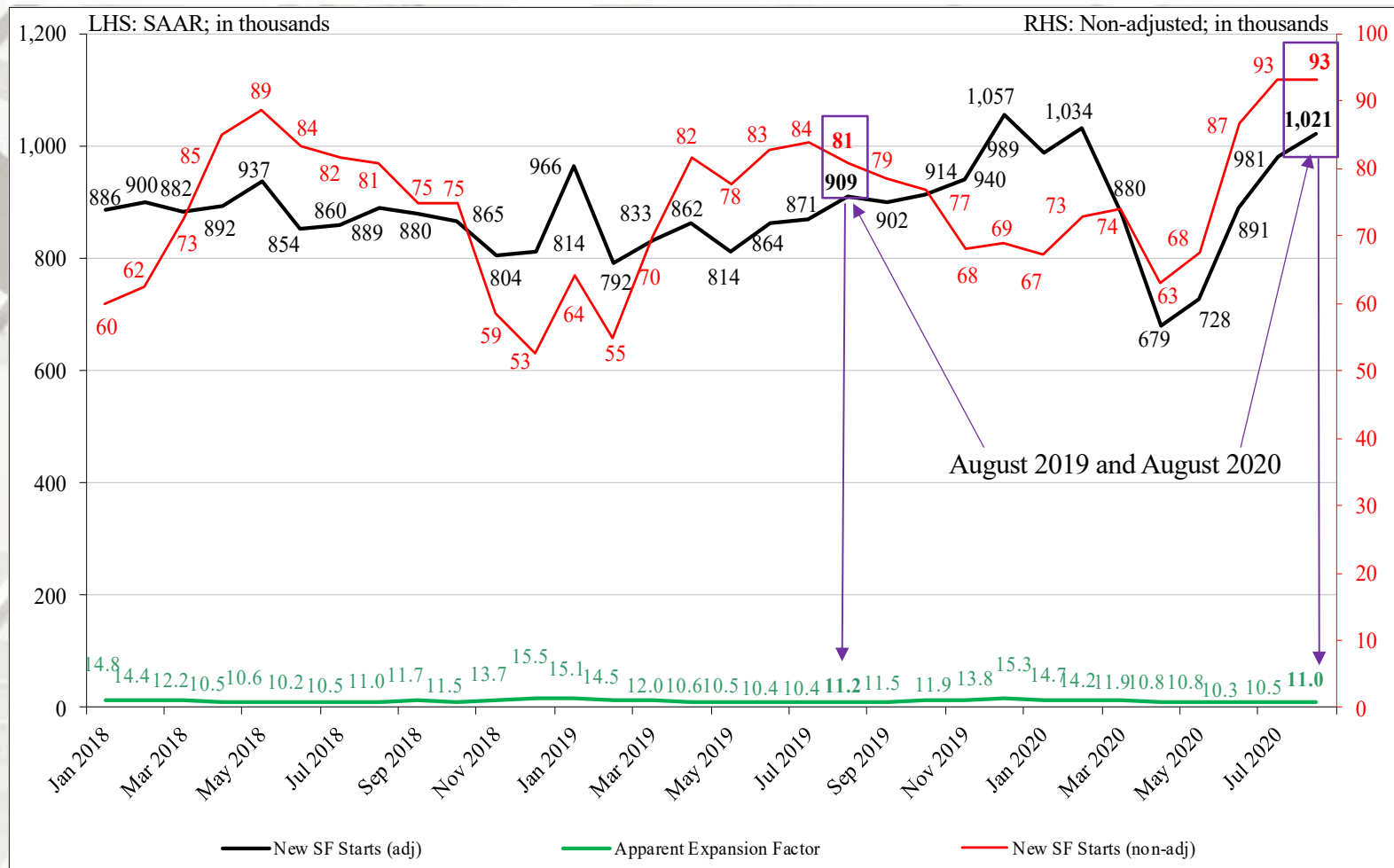
New SF Starts



New SF starts adjusted for the US population

From January 1959 to August 2007, the long-term ratio of new SF starts to the total US non-institutionalized population was 0.0066; in September 2020 it was 0.0039 – a slight increase from July. The long-term ratio of non-institutionalized population, aged 20 to 54 is 0.0103; in September 2020 was 0.0069 – also an increase from July. From a population worldview, new SF construction is less than what is necessary for changes in population (i.e., under-building).

Nominal & SAAR SF Starts



Nominal and Adjusted New SF Monthly Starts

Presented above is nominal (non-adjusted) new SF start data contrasted against SAAR data.

The apparent expansion factor "... is the ratio of the unadjusted number of houses started in the US to the seasonally adjusted number of houses started in the US (i.e., to the sum of the seasonally adjusted values for the four regions)." – U.S. DOC-Construction

New Housing Starts by Region

	NE Total	NE SF	NE MF**
August	89,000	57,000	32,000
July	133,000	73,000	60,000
2019	168,000	61,000	107,000
M/M change	-33.1%	-21.9%	-46.7%
Y/Y change	-47.0%	-6.6%	-70.1%
	MW Total	MW SF	MW MF
August	267,000	162,000	105,000
July	208,000	135,000	73,000
2019	190,000	131,000	59,000
M/M change	28.4%	20.0%	43.8%
Y/Y change	40.5%	23.7%	78.0%

All data are SAAR; NE = Northeast and MW = Midwest.

** US DOC does not report multifamily starts directly, this is an estimation (Total starts – SF starts).

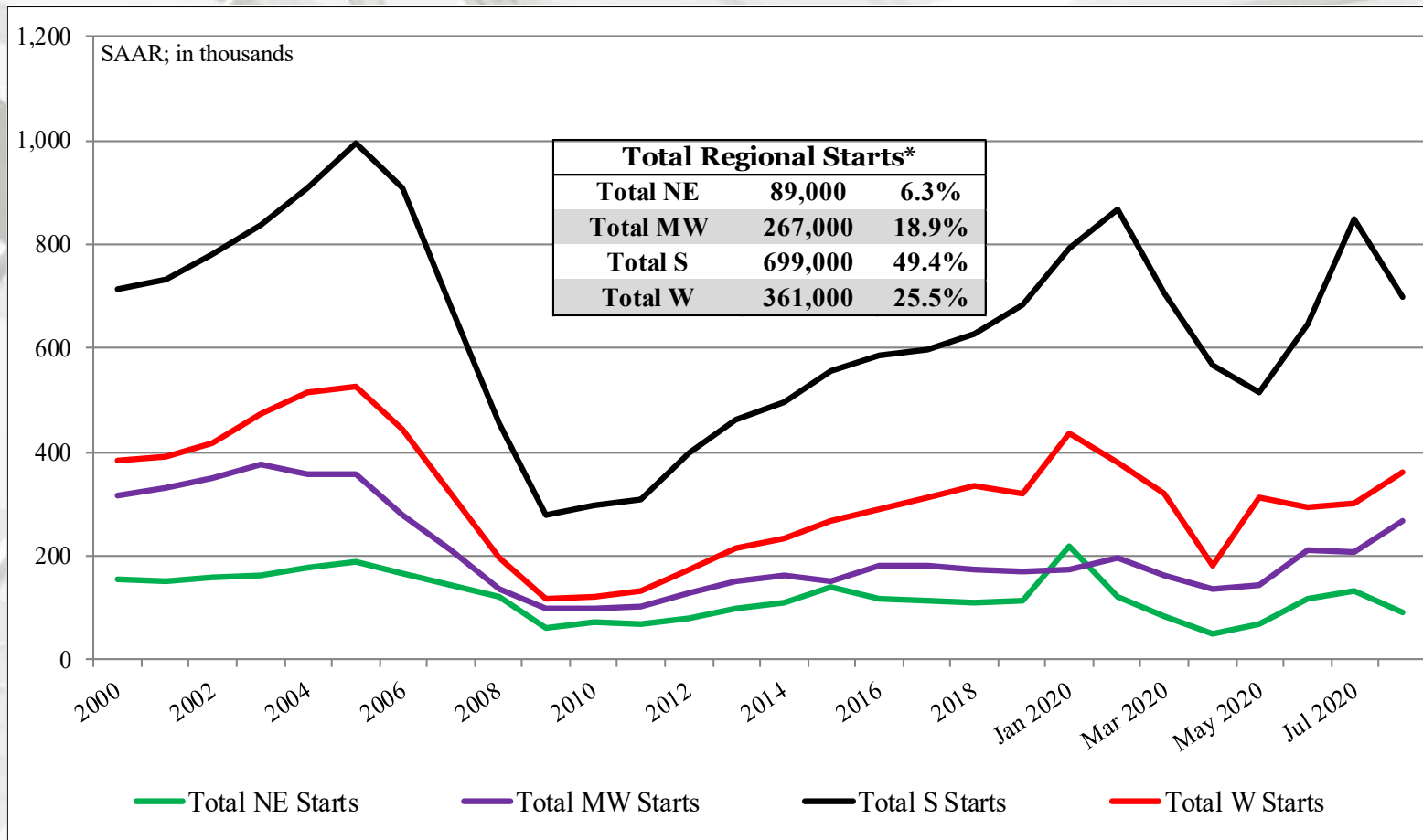
New Housing Starts by Region

	S Total	S SF	S MF**
August	699,000	538,000	161,000
July	849,000	559,000	290,000
2019	718,000	491,000	227,000
M/M change	-17.7%	-3.8%	-44.5%
Y/Y change	-2.6%	9.6%	-29.1%
	W Total	W SF	W MF
August	361,000	264,000	97,000
July	302,000	214,000	88,000
2019	301,000	228,000	73,000
M/M change	19.5%	23.4%	10.2%
Y/Y change	19.9%	15.8%	32.9%

All data are SAAR; S = South and W = West.

** US DOC does not report multifamily starts directly, this is an estimation (Total starts – SF starts).

New Housing Starts by Region

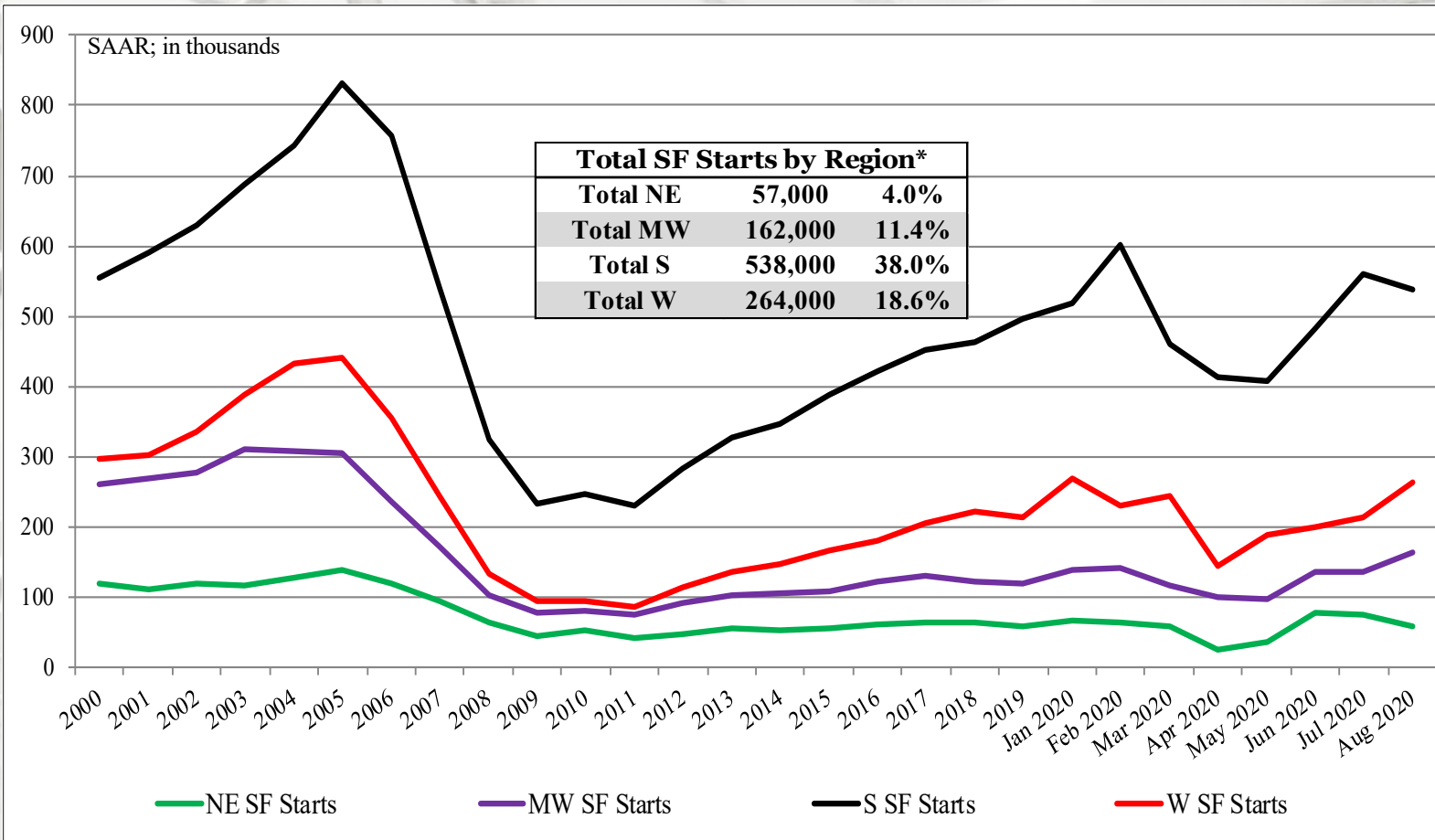


NE = Northeast, MW = Midwest, S = South, W = West

US DOC does not report 2 to 4 multi-family starts directly, this is an estimation (Total starts – (SF + ≥ 5 MF starts)).

* Percentage of total starts.

Total SF Housing Starts by Region

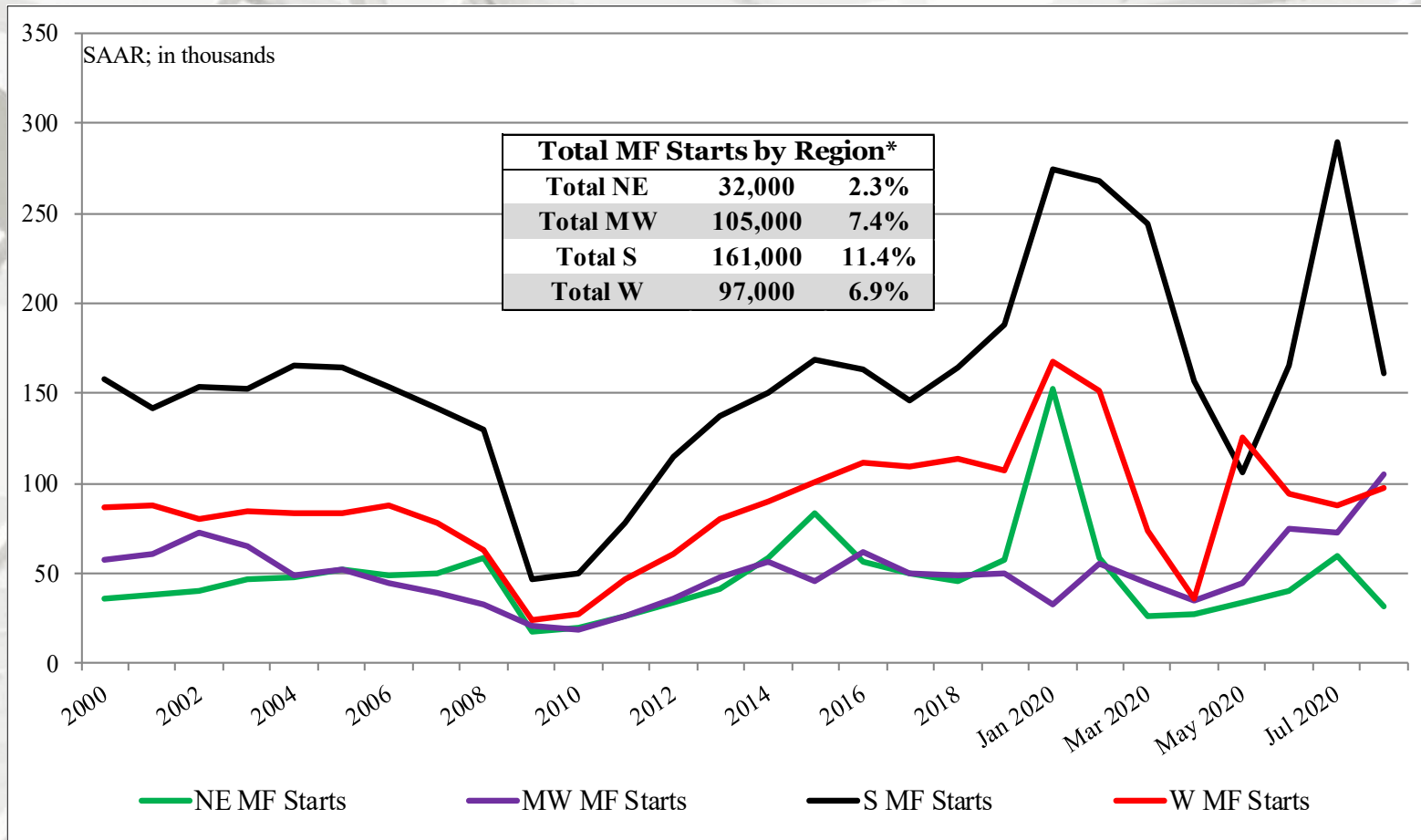


NE = Northeast, MW = Midwest, S = South, W = West

US DOC does not report 2 to 4 multi-family starts directly, this is an estimation (Total starts – (SF + ≥ 5 MF starts)).

* Percentage of total starts.

MF Housing Starts by Region

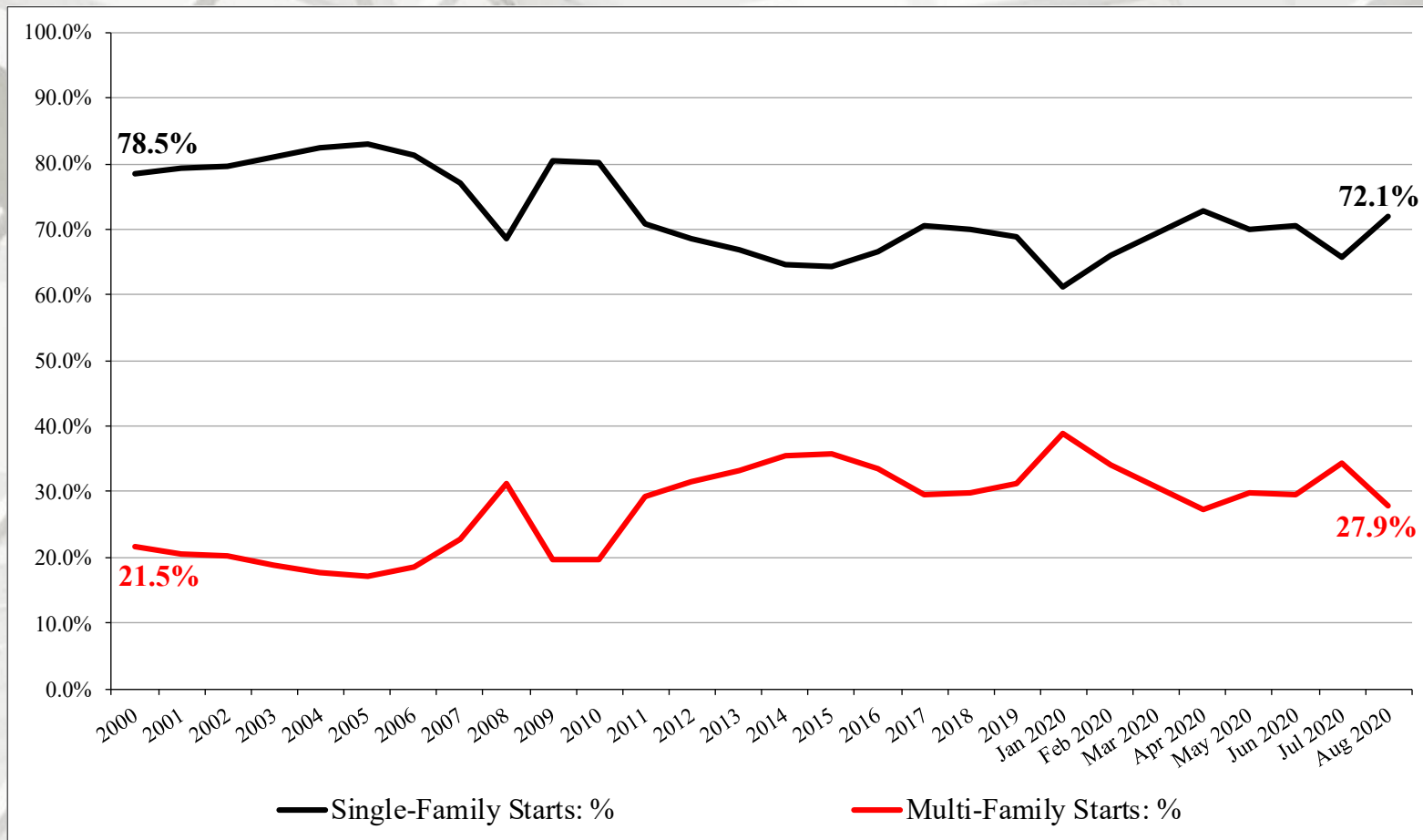


NE = Northeast, MW = Midwest, S = South, W = West

US DOC does not report 2 to 4 multi-family starts directly, this is an estimation (Total starts – (SF + ≥ 5 MF starts)).

* Percentage of total starts.

SF vs. MF Housing Starts (%)



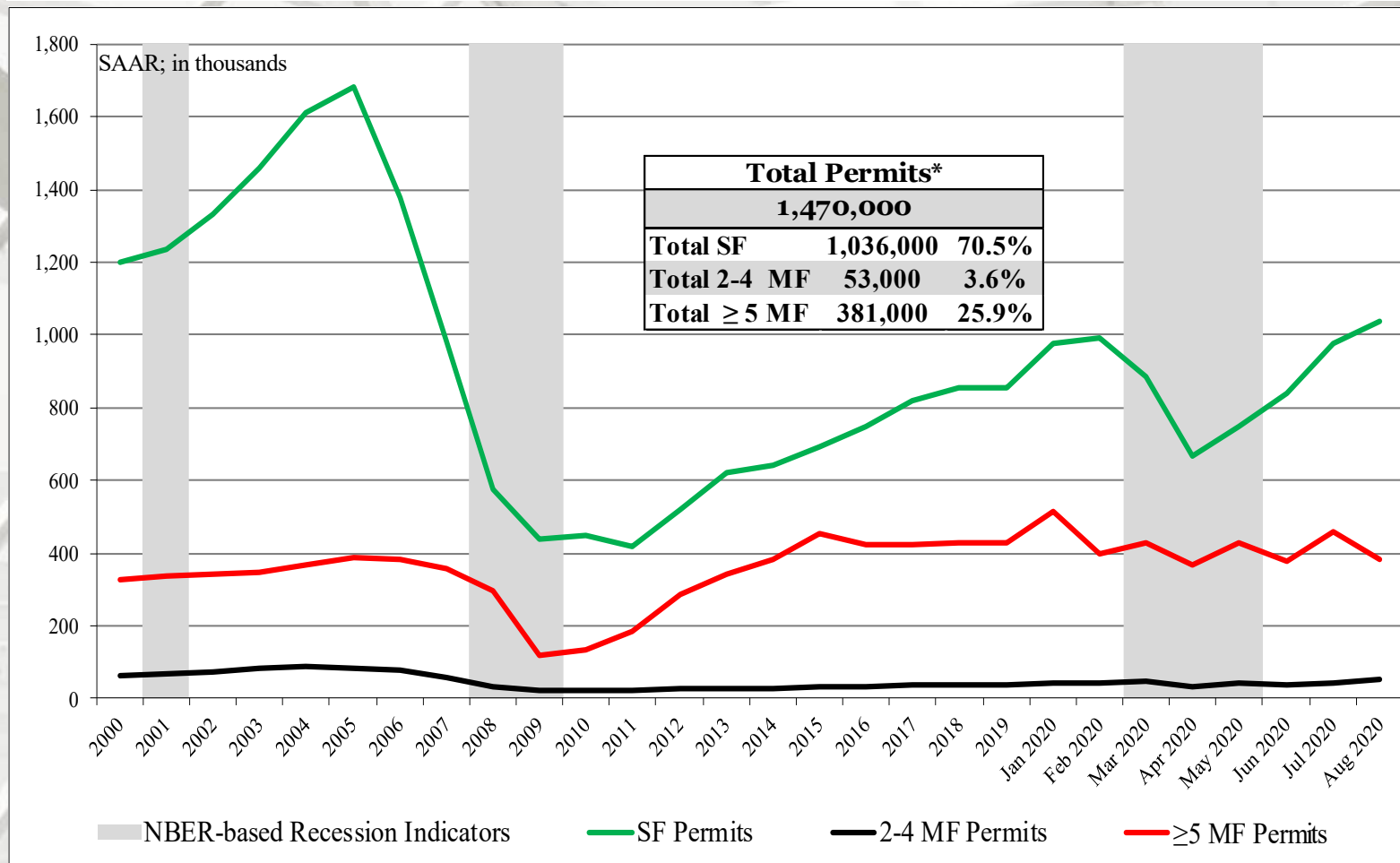
NBER based Recession Indicator Bars for the United States from the Period following the Peak through the Trough (FRED, St. Louis).

New Housing Permits

	Total Permits*	SF Permits	MF 2-4 unit Permits	MF ≥ 5 unit Permits
August	1,470,000	1,036,000	53,000	381,000
July	1,483,000	977,000	45,000	461,000
2019	1,471,000	896,000	42,000	533,000
M/M change	-0.9%	6.0%	17.8%	-17.4%
Y/Y change	-0.1%	15.6%	26.2%	-28.5%

* All permit data are presented at a seasonally adjusted annual rate (SAAR).

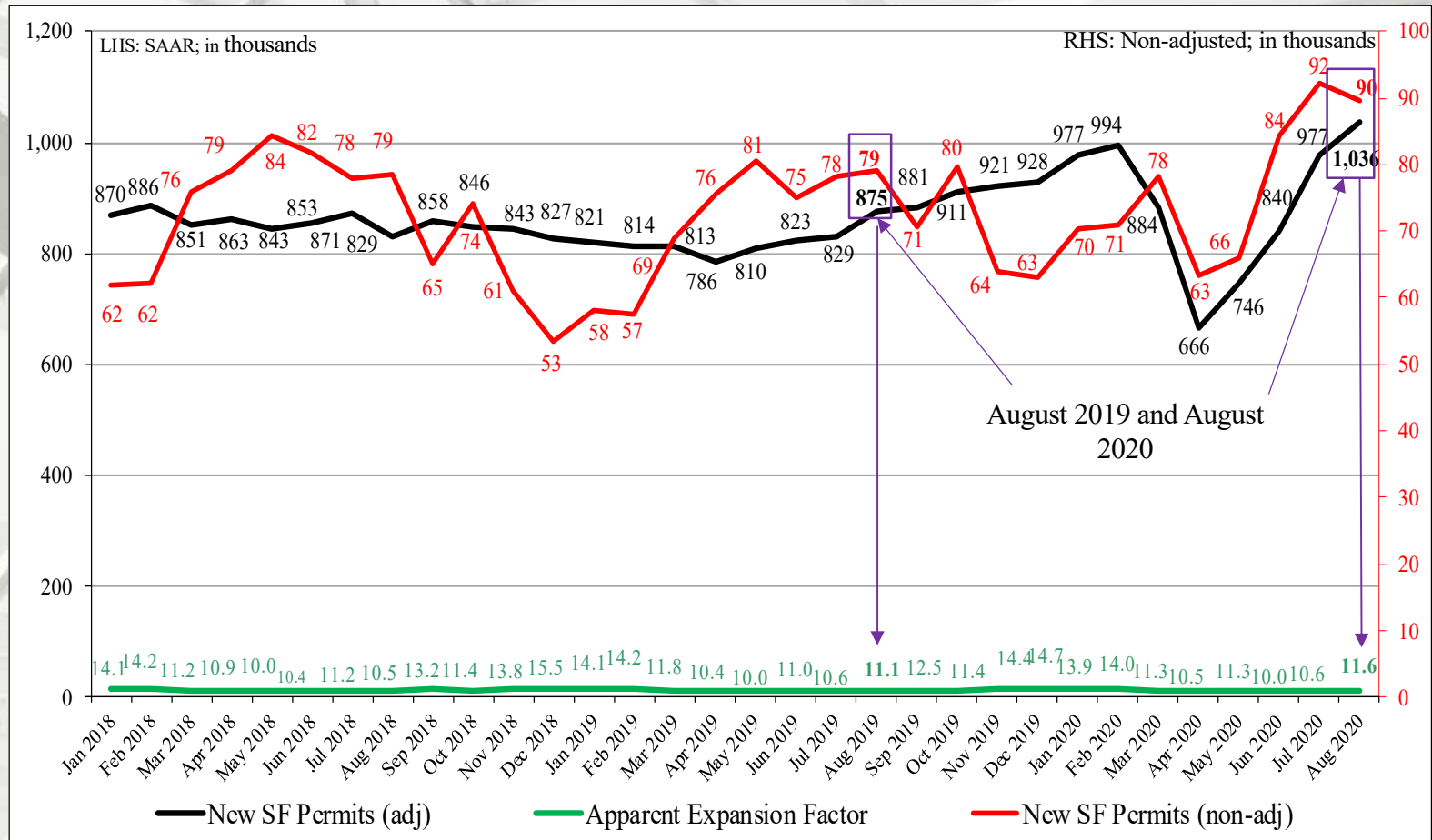
Total New Housing Permits



* Percentage of total permits.

NBER based Recession Indicator Bars for the United States from the Period following the Peak through the Trough (FRED, St. Louis).

Nominal & SAAR SF Permits



Nominal and Adjusted New SF Monthly Permits

Presented above is nominal (non-adjusted) new SF start data contrasted against SAAR data.

The apparent expansion factor "...is the ratio of the unadjusted number of houses started in the US to the seasonally adjusted number of houses started in the US (i.e., to the sum of the seasonally adjusted values for the four regions)." – U.S. DOC-Construction

New Housing Permits by Region

	NE Total*	NE SF	NE MF**
August	119,000	58,000	61,000
July	137,000	58,000	79,000
2019	164,000	57,000	107,000
M/M change	-13.1%	0.0%	-22.8%
Y/Y change	-27.4%	1.8%	-43.0%
	MW Total*	MW SF	MW MF**
August	188,000	137,000	51,000
July	224,000	133,000	91,000
2019	190,000	112,000	78,000
M/M change	-16.1%	3.0%	-44.0%
Y/Y change	-1.1%	22.3%	-34.6%

NE = Northeast; MW = Midwest

* All data are SAAR

** US DOC does not report multifamily permits directly, this is an estimation (Total permits – SF permits).

New Housing Permits by Region

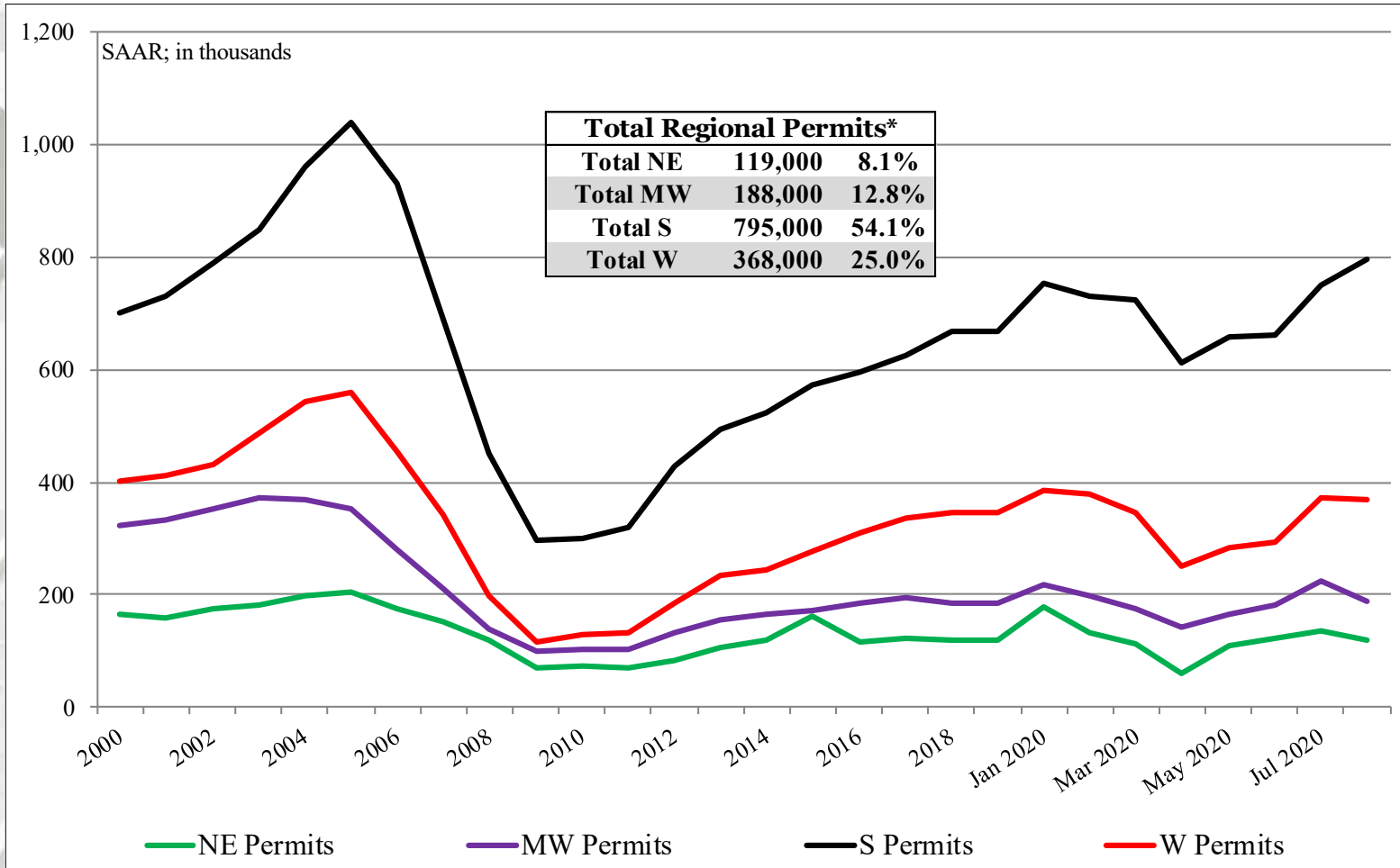
	S Total*	S SF	S MF**
August	795,000	596,000	199,000
July	750,000	557,000	193,000
2019	773,000	511,000	262,000
M/M change	6.0%	7.0%	3.1%
Y/Y change	2.8%	16.6%	-24.0%
	W Total*	W SF	W MF**
August	368,000	245,000	123,000
July	372,000	229,000	143,000
2019	344,000	216,000	128,000
M/M change	-1.1%	7.0%	-14.0%
Y/Y change	7.0%	13.4%	-3.9%

S = South; W = West

* All data are SAAR

** US DOC does not report multifamily permits directly, this is an estimation (Total permits – SF permits).

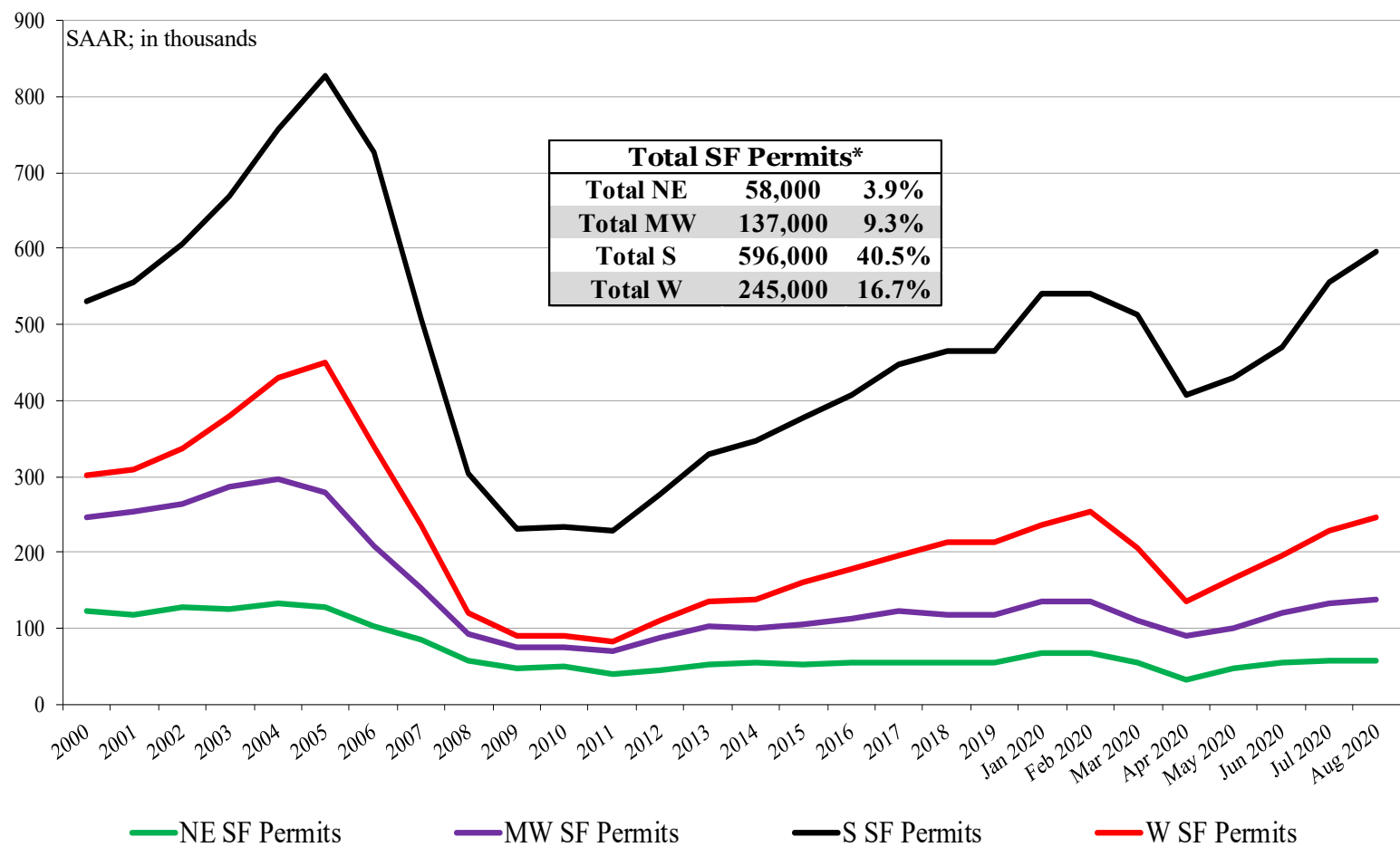
Total Housing Permits by Region



NE = Northeast, MW = Midwest, S = South, W = West

* Percentage of total permits.

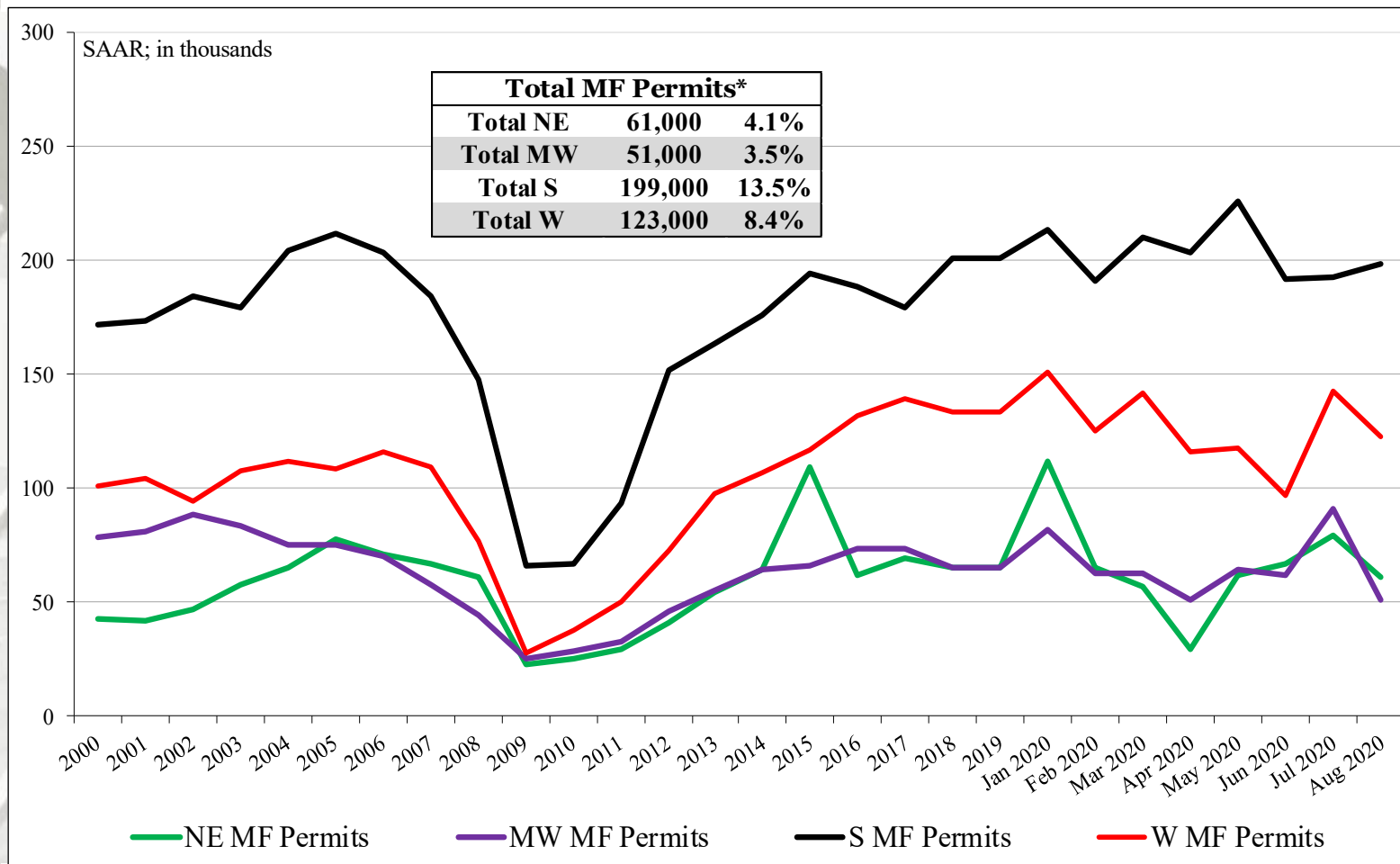
SF Housing Permits by Region



NE = Northeast, MW = Midwest, S = South, W = West

* Percentage of total permits.

MF Housing Permits by Region



NE = Northeast, MW = Midwest, S = South, W = West

* Percentage of total permits.

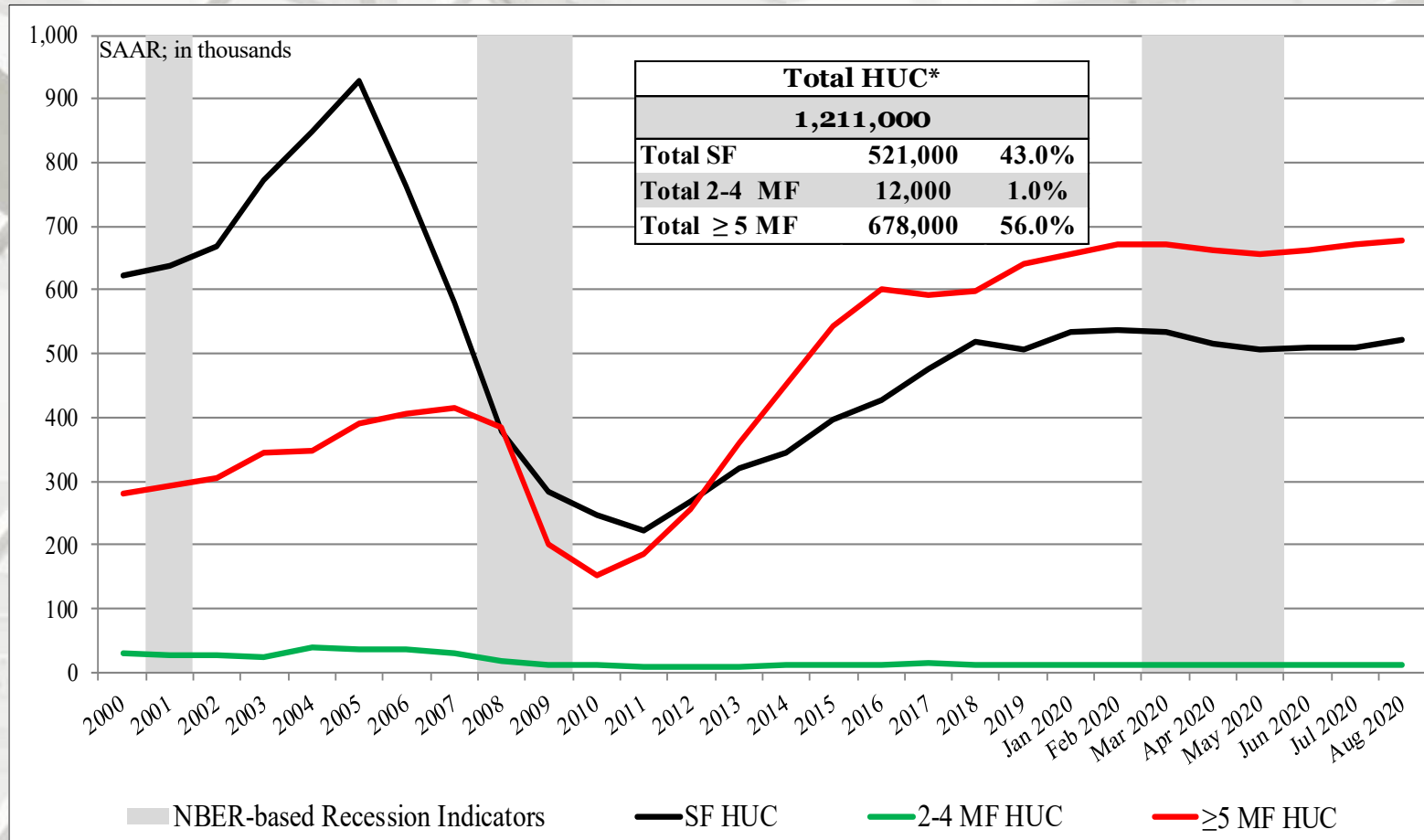
New Housing Under Construction (HUC)

	Total Under Construction*	SF Under Construction	MF 2-4 unit** Under Construction	MF ≥ 5 unit Under Construction
August	1,211,000	521,000	12,000	678,000
July	1,193,000	511,000	11,000	671,000
2019	1,146,000	516,000	11,000	619,000
M/M change	1.5%	2.0%	9.1%	1.0%
Y/Y change	5.7%	1.0%	9.1%	9.5%

All housing under construction data are presented at a seasonally adjusted annual rate (SAAR).

** US DOC does not report 2-4 multifamily units under construction directly, this is an estimation
((Total under construction – (SF + 5 unit MF)).

Total Housing Under Construction



US DOC does not report 2 to 4 multi-family under construction directly, this is an estimation (Total under constructions – (SF + ≥ 5 MF under construction)).

* Percentage of total housing under construction units.

NBER based Recession Indicator Bars for the United States from the Period following the Peak through the Trough (FRED, St. Louis).

New Housing Under Construction by Region

	NE Total	NE SF	NE MF**
August	174,000	55,000	119,000
July	174,000	55,000	119,000
2019	178,000	59,000	117,000
M/M change	0.0%	0.0%	0.0%
Y/Y change	-2.2%	-6.8%	1.7%
	MW Total	MW SF	MW MF
August	160,000	79,000	81,000
July	152,000	75,000	77,000
2019	145,000	75,000	70,000
M/M change	5.3%	5.3%	5.2%
Y/Y change	10.3%	5.3%	15.7%

All data are SAAR; NE = Northeast and MW = Midwest.

** US DOC does not report multifamily units under construction directly, this is an estimation
(Total under construction – SF under construction).

New Housing Under Construction by Region

	S Total	S SF	S MF**
August	539,000	246,000	293,000
July	533,000	242,000	291,000
2019	495,000	245,000	250,000
M/M change	1.1%	1.7%	0.7%
Y/Y change	8.9%	0.4%	17.2%
	W Total	W SF	W MF
August	338,000	141,000	197,000
July	334,000	139,000	195,000
2019	328,000	137,000	191,000
M/M change	1.2%	1.4%	1.0%
Y/Y change	3.0%	2.9%	3.1%

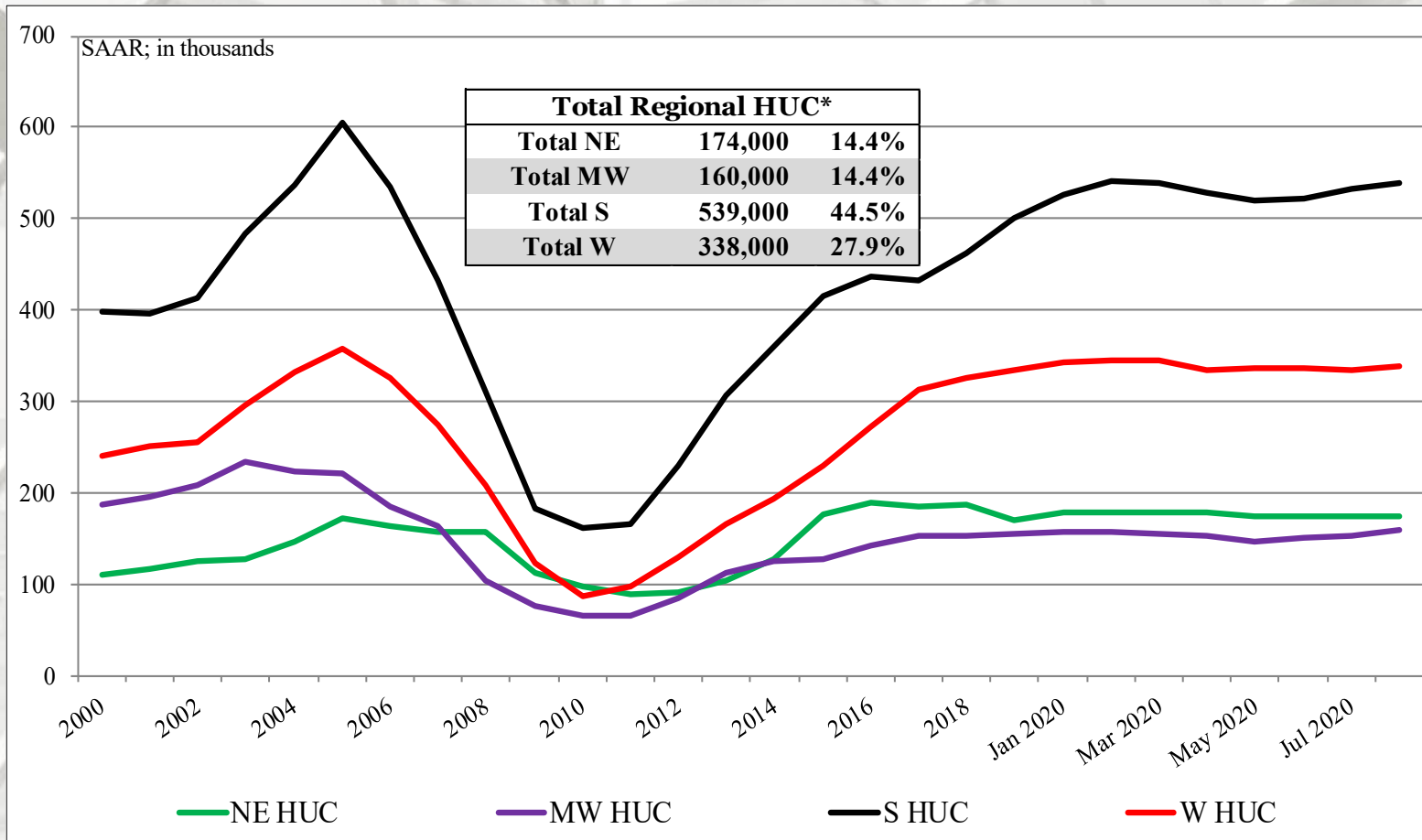
All data are SAAR; S = South and W = West.

** US DOC does not report multifamily units under construction directly, this is an estimation
(Total under construction – SF under construction).

Source: <http://www.census.gov/construction/nrc/pdf/newresconst.pdf>; 9/17/20

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Total Housing Under Construction by Region



NE = Northeast, MW = Midwest, S = South, W = West

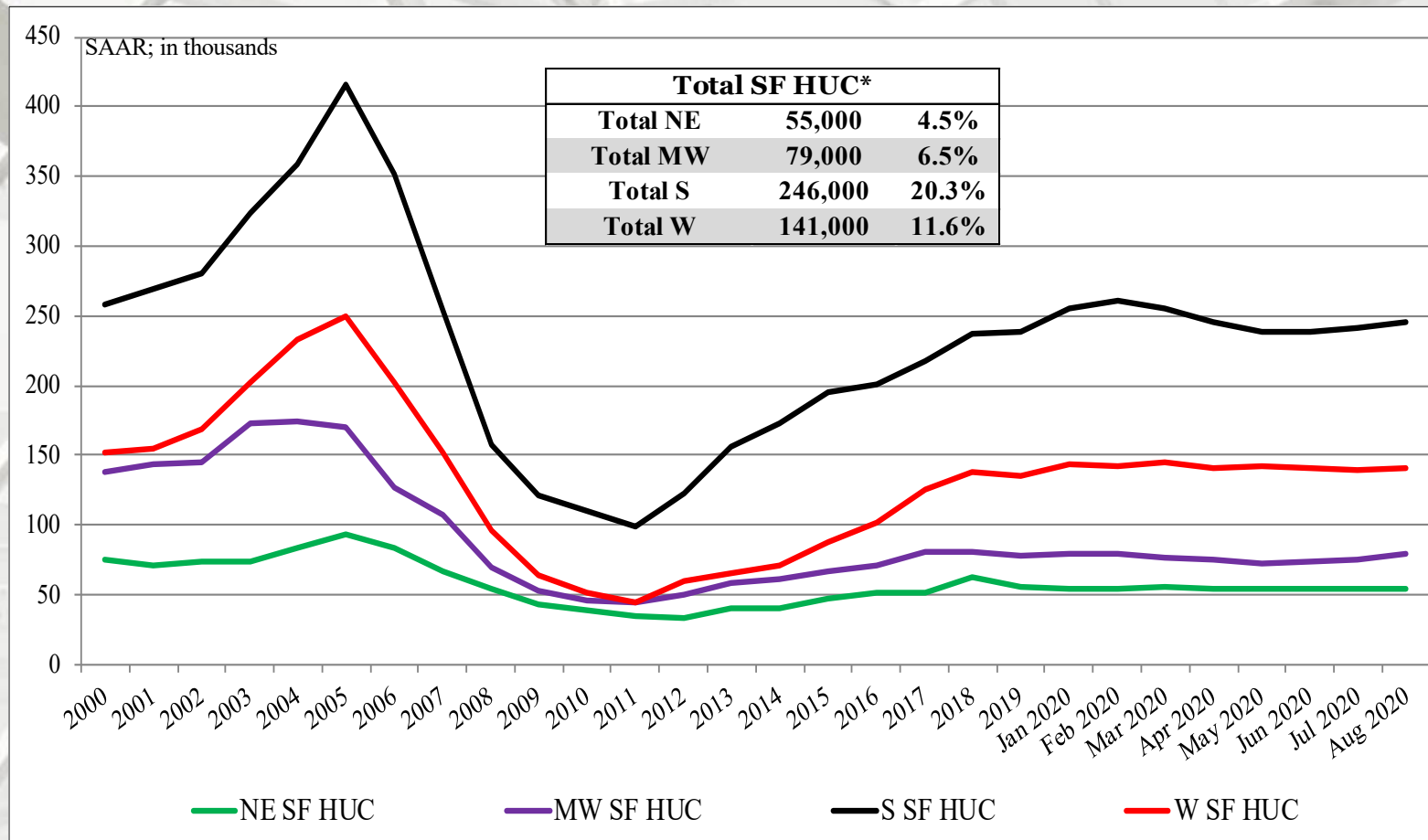
US DOC does not report 2 to 4 multi-family under construction directly, this is an estimation (Total under constructions – (SF + ≥ 5 MF under construction)).

* Percentage of total housing under construction units.

Source: <http://www.census.gov/construction/nrc/pdf/newresconst.pdf>; 9/17/20

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SF Housing Under Construction by Region



NE = Northeast, MW = Midwest, S = South, W = West.

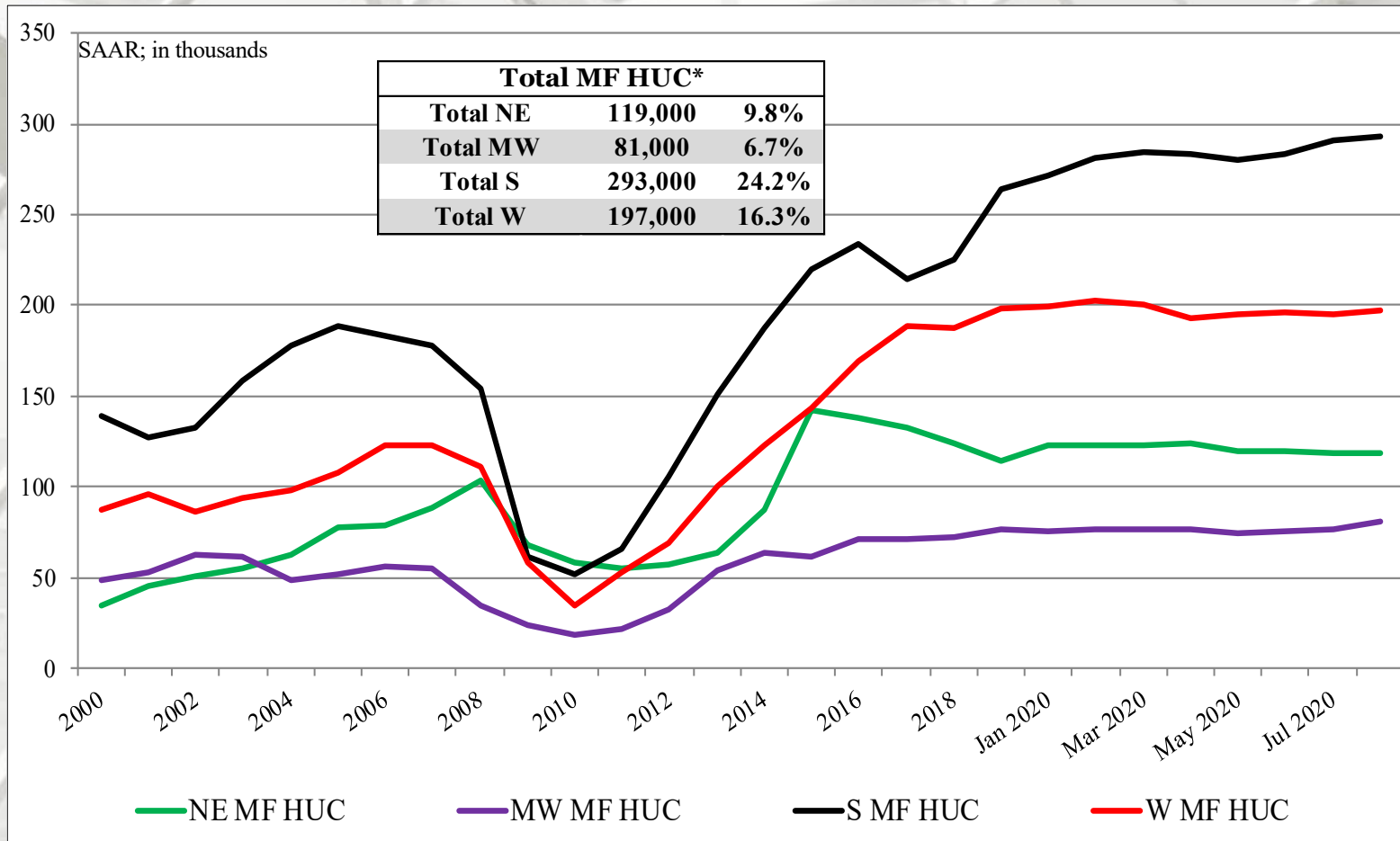
US DOC does not report 2 to 4 multi-family under construction directly, this is an estimation (Total under constructions – (SF + ≥ 5 MF under construction)).

* Percentage of total housing under construction units.

Source: <http://www.census.gov/construction/nrc/pdf/newresconst.pdf>; 9/17/20

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MF Housing Under Construction by Region



NE = Northeast, MW = Midwest, S = South, W = West

US DOC does not report 2 to 4 multi-family under construction directly, this is an estimation (Total under constructions – (SF + ≥ 5 MF under construction)).

* Percentage of total housing under construction units.

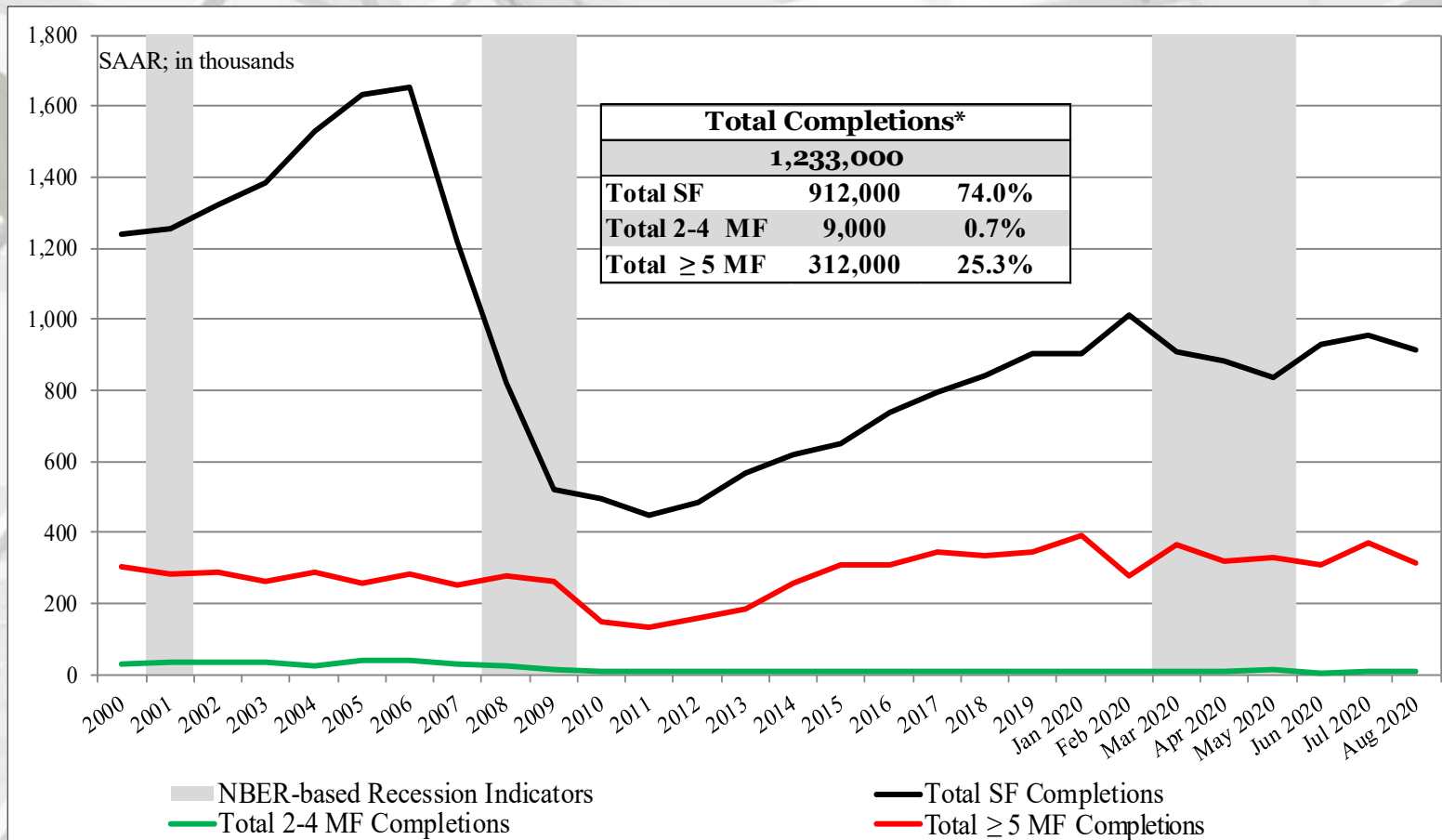
New Housing Completions

	Total Completions*	SF Completions	MF 2-4 unit** Completions	MF ≥ 5 unit Completions
August	1,233,000	912,000	9,000	312,000
July	1,333,000	954,000	10,000	369,000
2019	1,263,000	938,000	10,000	315,000
M/M change	-7.5%	-4.4%	-10.0%	-15.4%
Y/Y change	-2.4%	-2.8%	-10.0%	-1.0%

* All completion data are presented at a seasonally adjusted annual rate (SAAR).

** US DOC does not report multifamily completions directly, this is an estimation ((Total completions – (SF + ≥ 5 unit MF)).

Total Housing Completions



** US DOC does not report multifamily completions directly, this is an estimation ((Total completions – (SF + ≥ 5 unit MF))).

* Percentage of total housing completions

NBER based Recession Indicator Bars for the United States from the Period following the Peak through the Trough (FRED, St. Louis).

New Housing Completions by Region

	NE Total	NE SF	NE MF**
August	97,000	59,000	38,000
July	106,000	74,000	32,000
2019	134,000	69,000	65,000
M/M change	-8.5%	-20.3%	18.8%
Y/Y change	-27.6%	-14.5%	-41.5%
	MW Total	MW SF	MW MF
August	164,000	109,000	55,000
July	146,000	111,000	35,000
2019	187,000	126,000	61,000
M/M change	12.3%	-1.8%	57.1%
Y/Y change	-12.3%	-13.5%	-9.8%

All data are SAAR; S = South and W = West.

** US DOC does not report multifamily units completions directly, this is an estimation
(Total completions – SF completions).

Source: <http://www.census.gov/construction/nrc/pdf/newresconst.pdf>; 9/17/20

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New Housing Completions by Region

	S Total	S SF	S MF**
August	638,000	498,000	140,000
July	719,000	531,000	188,000
2019	625,000	518,000	107,000
M/M change	-11.3%	-6.2%	-25.5%
Y/Y change	2.1%	-3.9%	30.8%
	W Total	W SF	W MF
August	334,000	246,000	88,000
July	362,000	238,000	124,000
2019	317,000	225,000	92,000
M/M change	-7.7%	3.4%	-29.0%
Y/Y change	5.4%	9.3%	-4.3%

NE = Northeast, MW = Midwest, S = South, W = West

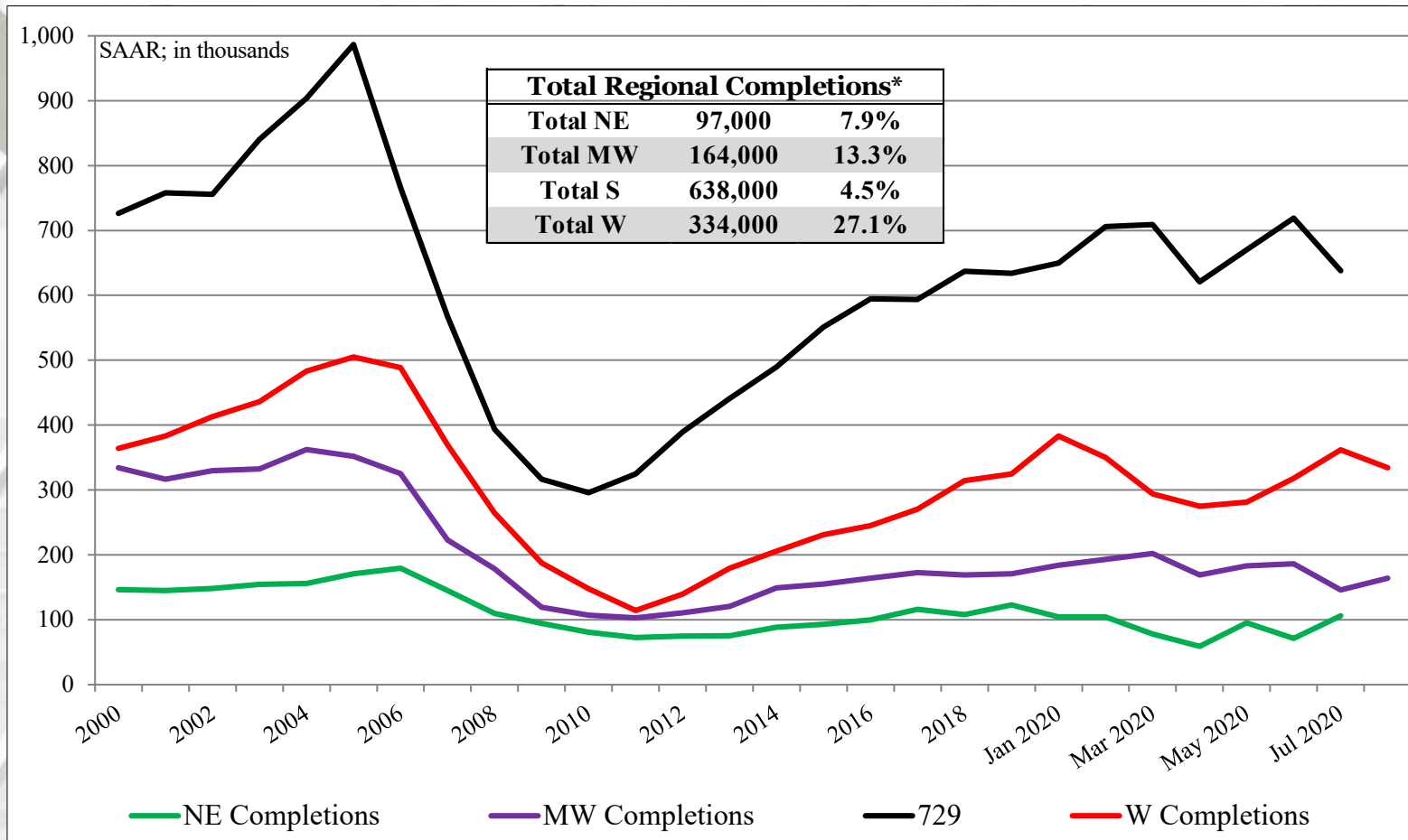
US DOC does not report 2 to 4 multi-family completions directly, this is an estimation (Total completions – SF completions).

* Percentage of total housing completions

Source: <http://www.census.gov/construction/nrc/pdf/newresconst.pdf>; 9/17/20

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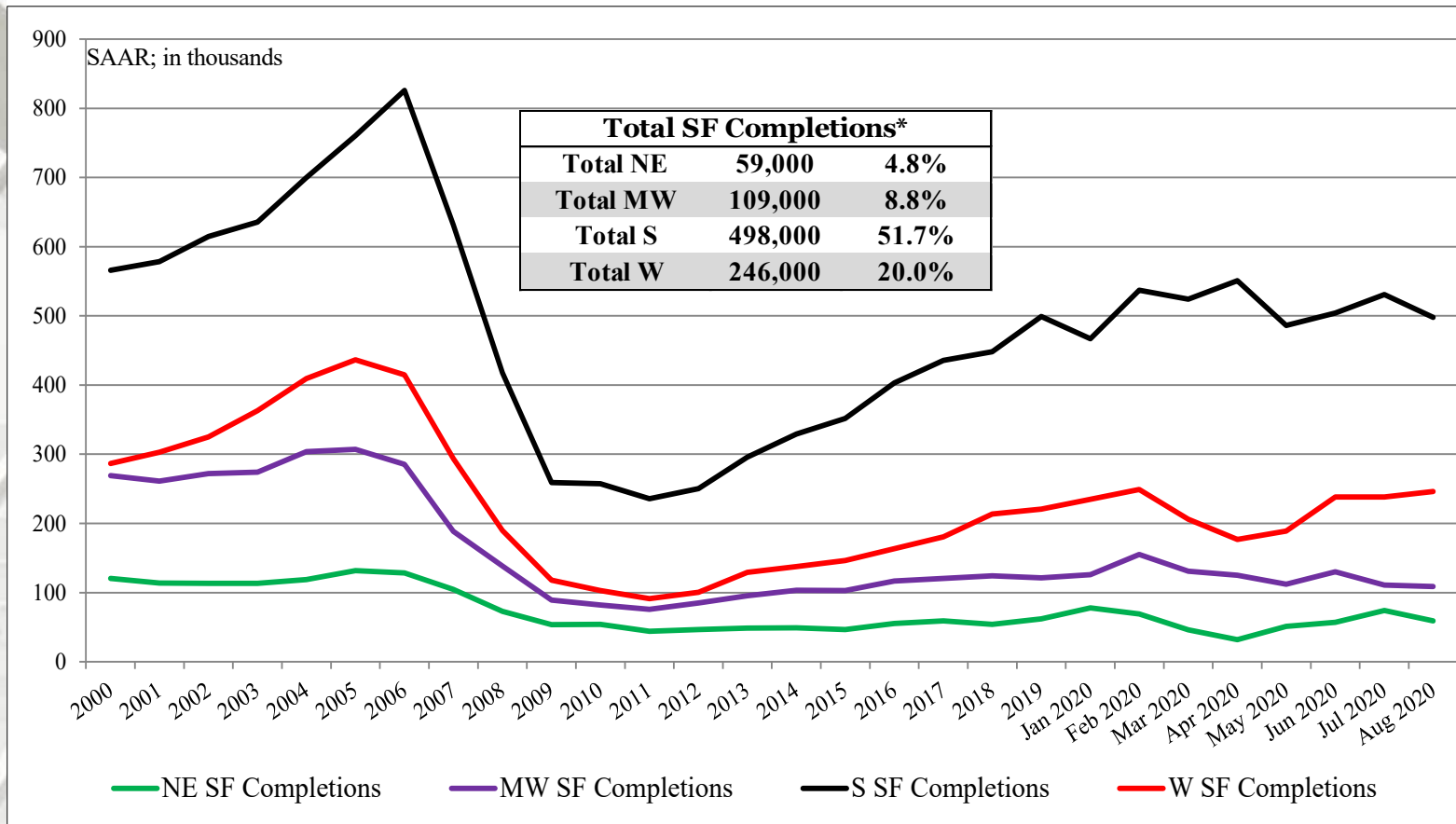
Total Housing Completions by Region



All data are SAAR; NE = Northeast and MW = Midwest.

** US DOC does not report multifamily units completions directly, this is an estimation (Total completions – SF completions).

SF Housing Completions by Region

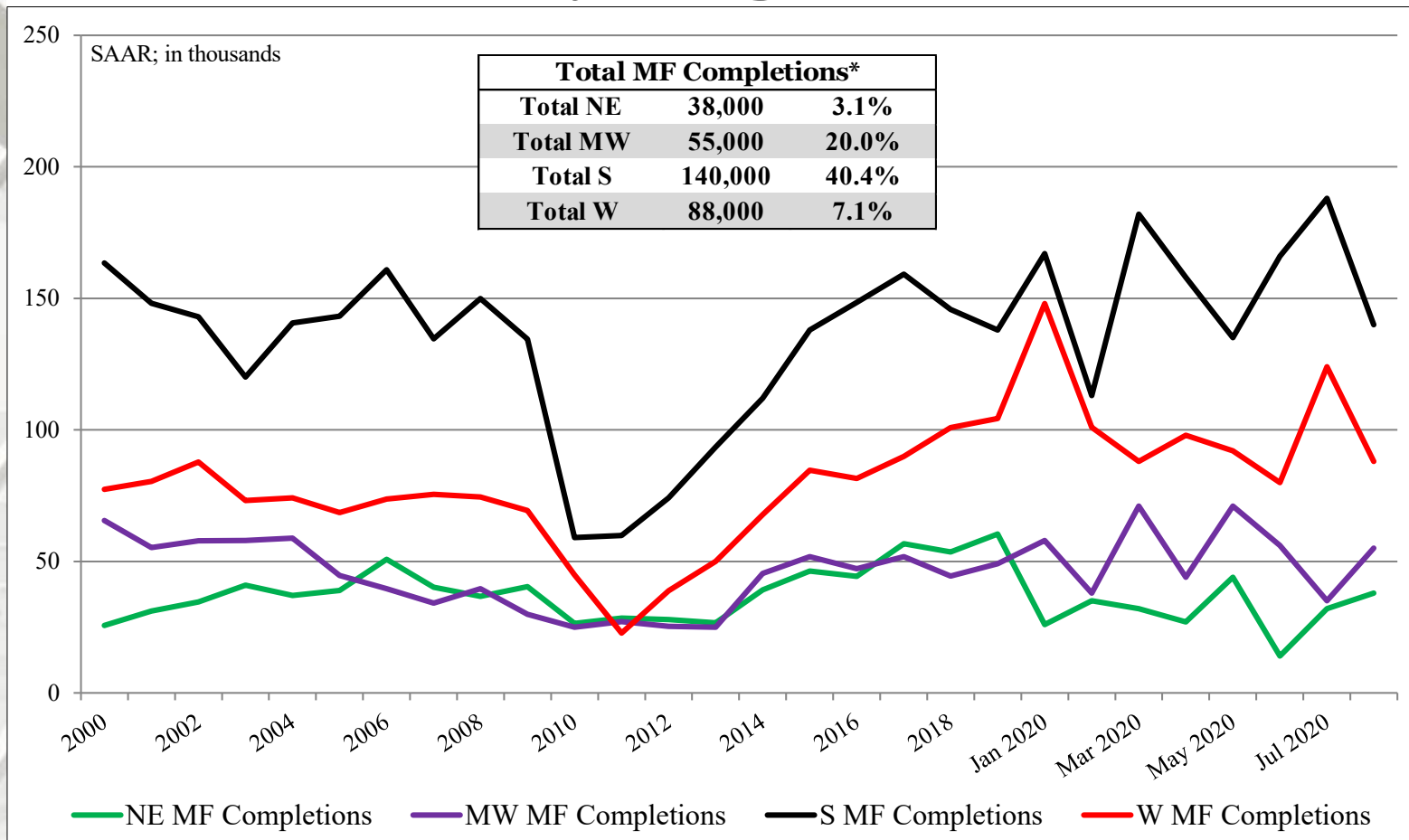


NE = Northeast, MW = Midwest, S = South, W = West

US DOC does not report 2 to 4 multi-family completions directly, this is an estimation (Total completions – SF completions).

* Percentage of total housing completions

MF Housing Completions by Region



NE = Northeast, MW = Midwest, S = South, W = West

US DOC does not report 2 to 4 multi-family completions directly, this is an estimation (Total completions – SF completions).

* Percentage of total housing completions

New Single-Family House Sales

	New SF Sales*	Median Price	Mean Price	Month's Supply
August	1,011,000	312,800	369,000	3.3
July	965,000	327,800	371,900	3.6
2019	706,000	327,000	392,700	5.5
M/M change	4.8%	-4.6%	-0.8%	-8.3%
Y/Y change	43.2%	-4.3%	-6.0%	-40.0%

* All new sales data are presented at a seasonally adjusted annual rate (SAAR)¹ and housing prices are adjusted at irregular intervals².

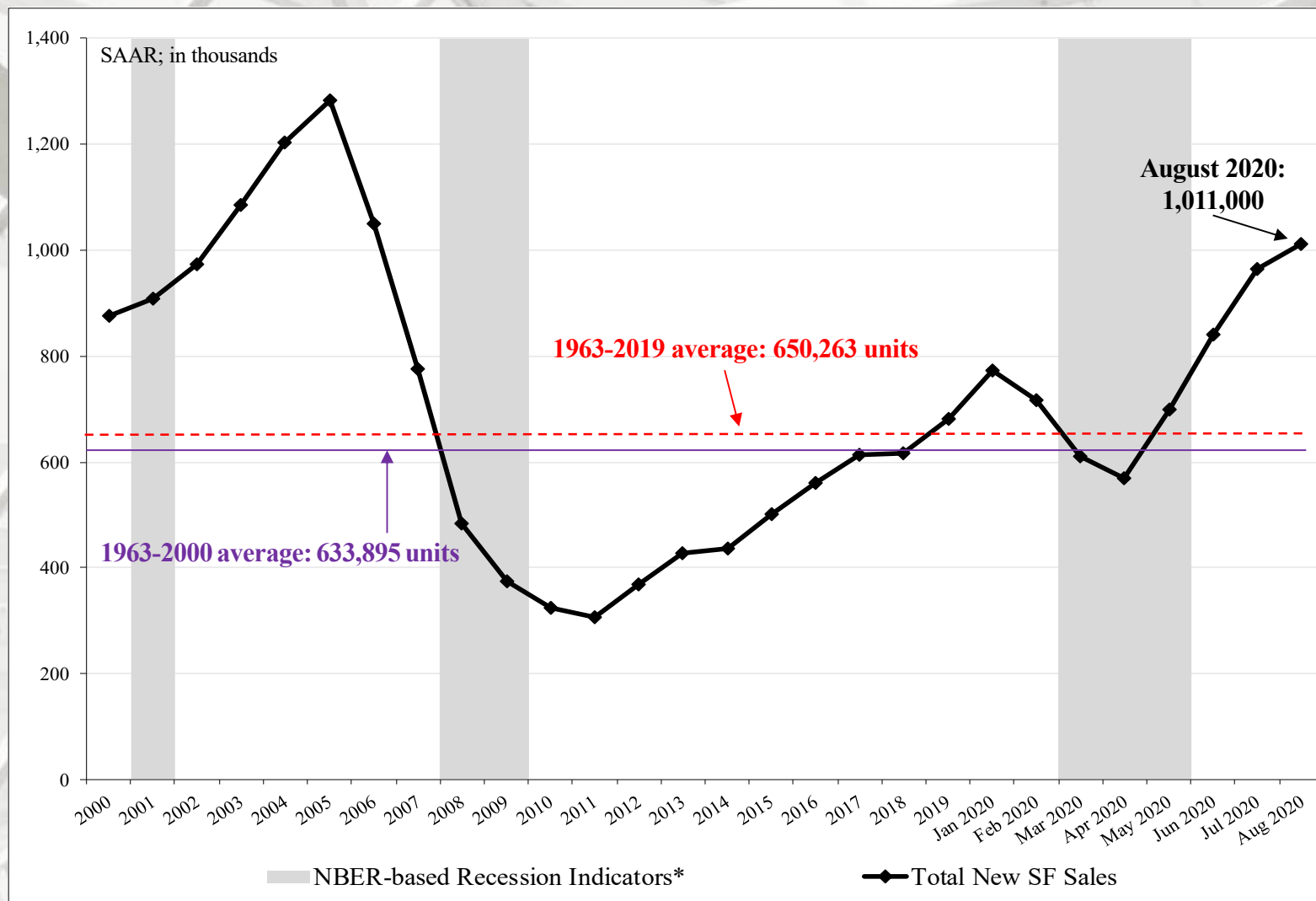
New SF sales were greatly exceeded the consensus forecast³ of 875 m (range: 820 m to 950 m). The past three month's new SF sales data also were revised:

May initial:	676 m revised to 698 m;
June initial:	776 m revised to 841 m;
July initial:	965 m revised to 791 m;

Sources: ¹ <https://www.census.gov/construction/nrs/index.html>; 9/24/20; ² <https://www.census.gov/construction/nrs/pdf/newressales.pdf>
³ <http://us.econoday.com/>; 9/24/20

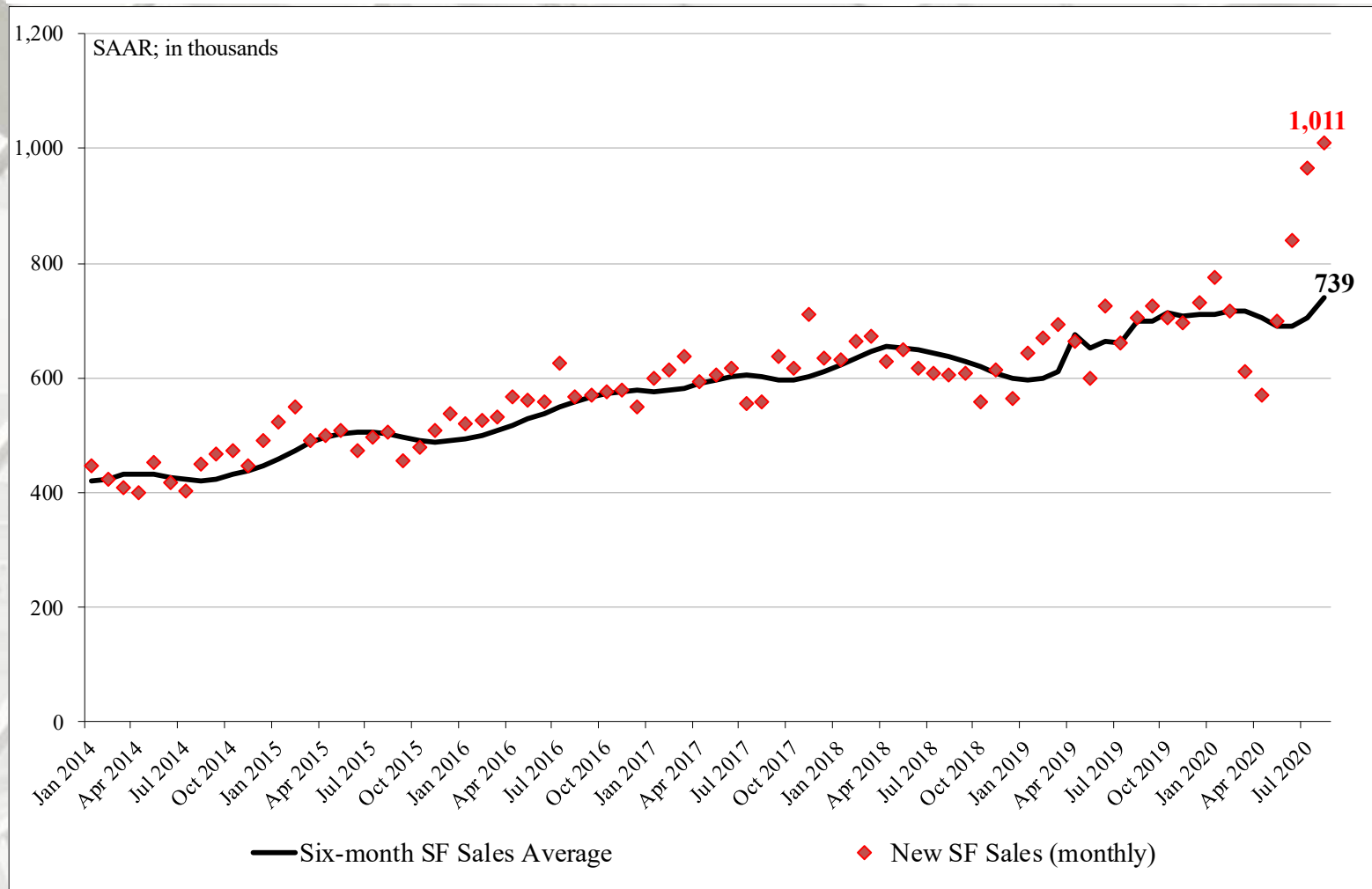
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New SF House Sales



* NBER based Recession Indicator Bars for the United States from the Period following the Peak through the Trough (FRED, St. Louis).

New SF Housing Sales: Six-month average & monthly



New SF House Sales by Region and Price Category

	NE	MW	S	W
August	42,000	99,000	636,000	234,000
July	40,000	126,000	561,000	238,000
2019	33,000	64,000	424,000	185,000
M/M change	5.0%	-21.4%	13.4%	-1.7%
Y/Y change	27.3%	54.7%	50.0%	26.5%

NE = Northeast; MW = Midwest; S = South; W = West

¹ All data are SAAR

² Houses for which sales price were not reported have been distributed proportionally to those for which sales price was reported;

³ Detail August not add to total because of rounding.

⁴ Housing prices are adjusted at irregular intervals.

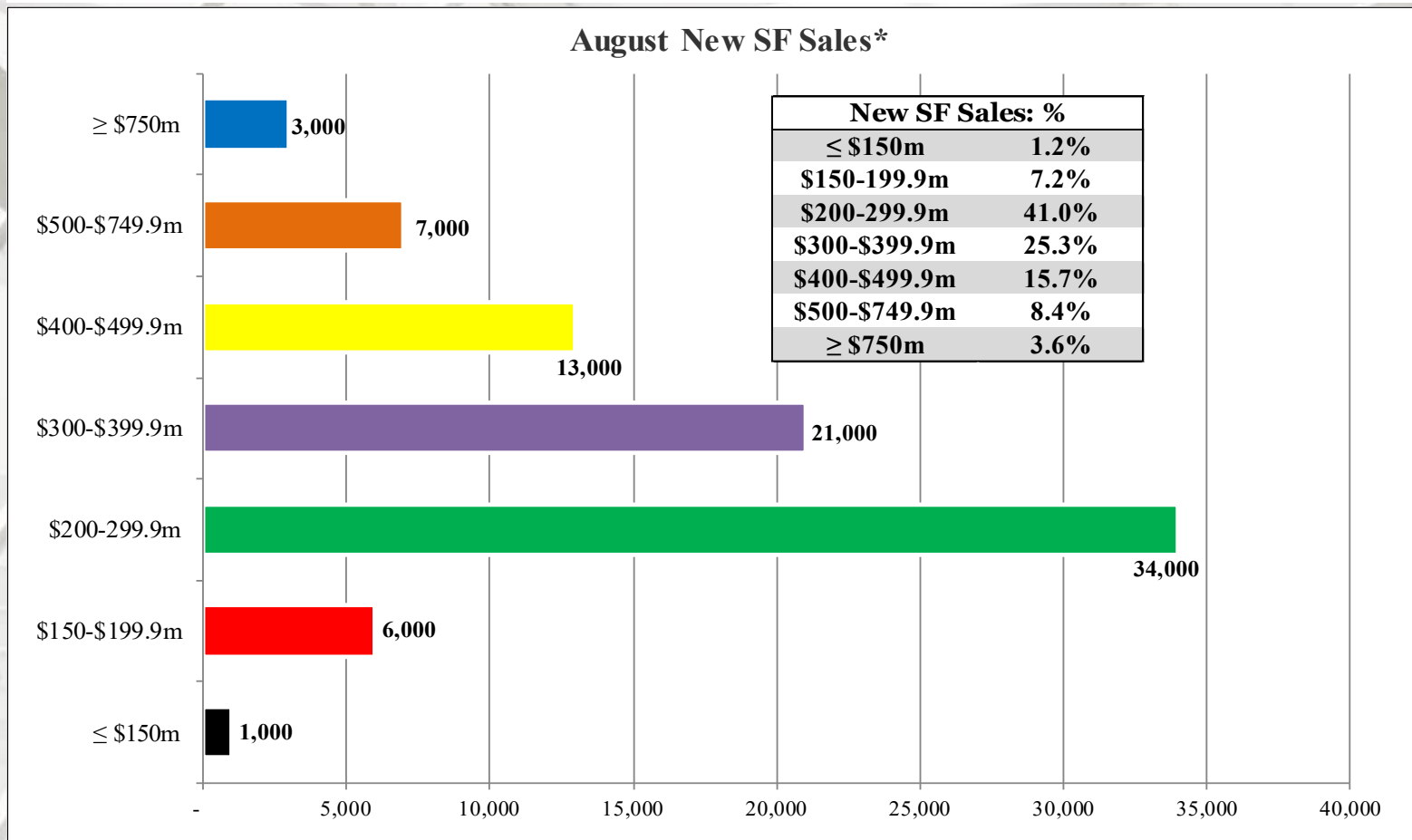
⁵ Z = Less than 500 units or less than 0.5 percent

Sources: ^{1,2,3} <https://www.census.gov/construction/nrs/index.html>; 9/24/20;

⁴ https://www.census.gov/construction/cpi/pdf/descpi_sold.pdf

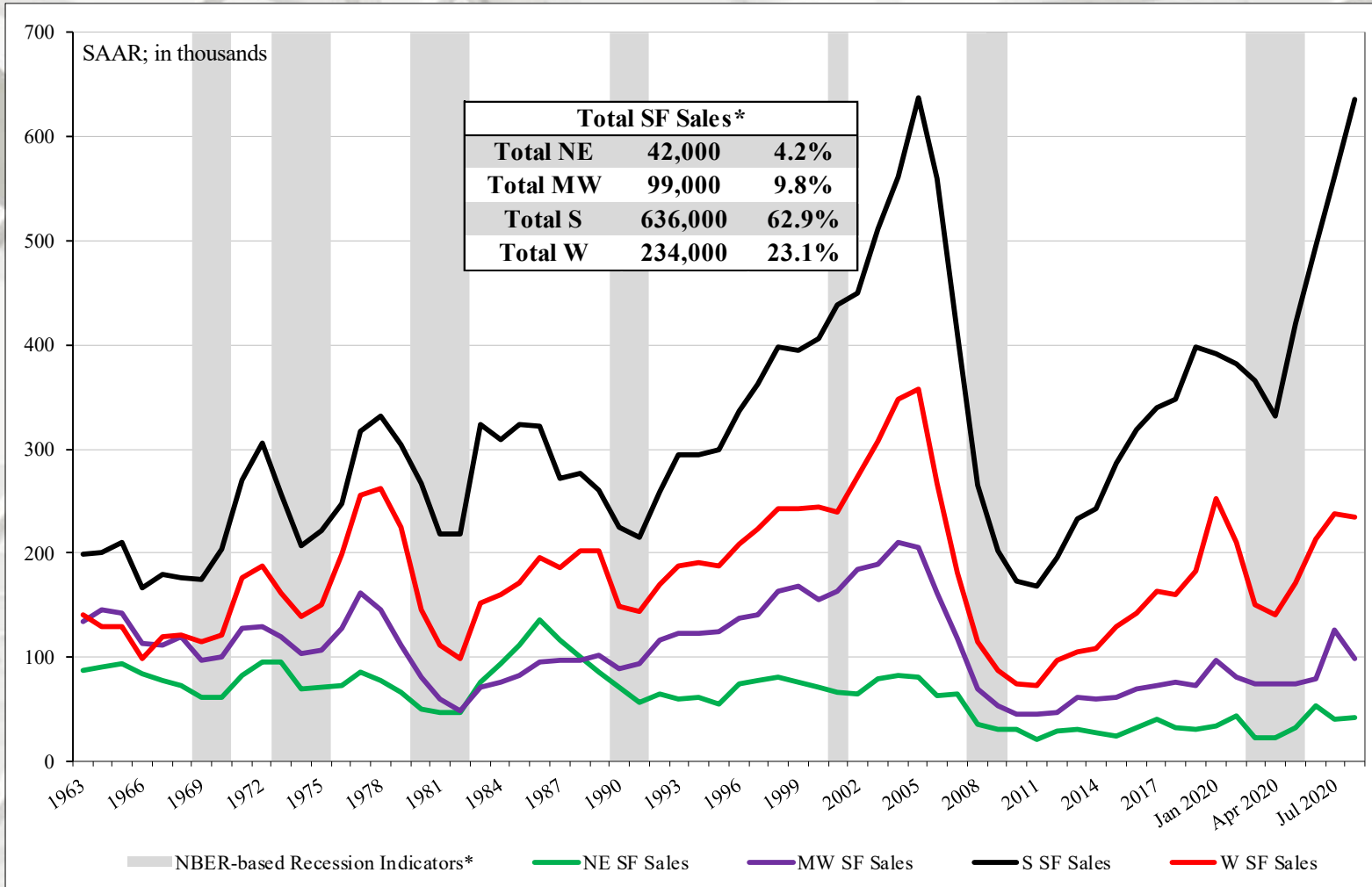
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New SF House Sales



- Total new sales by price category and percent.

New SF House Sales by Region

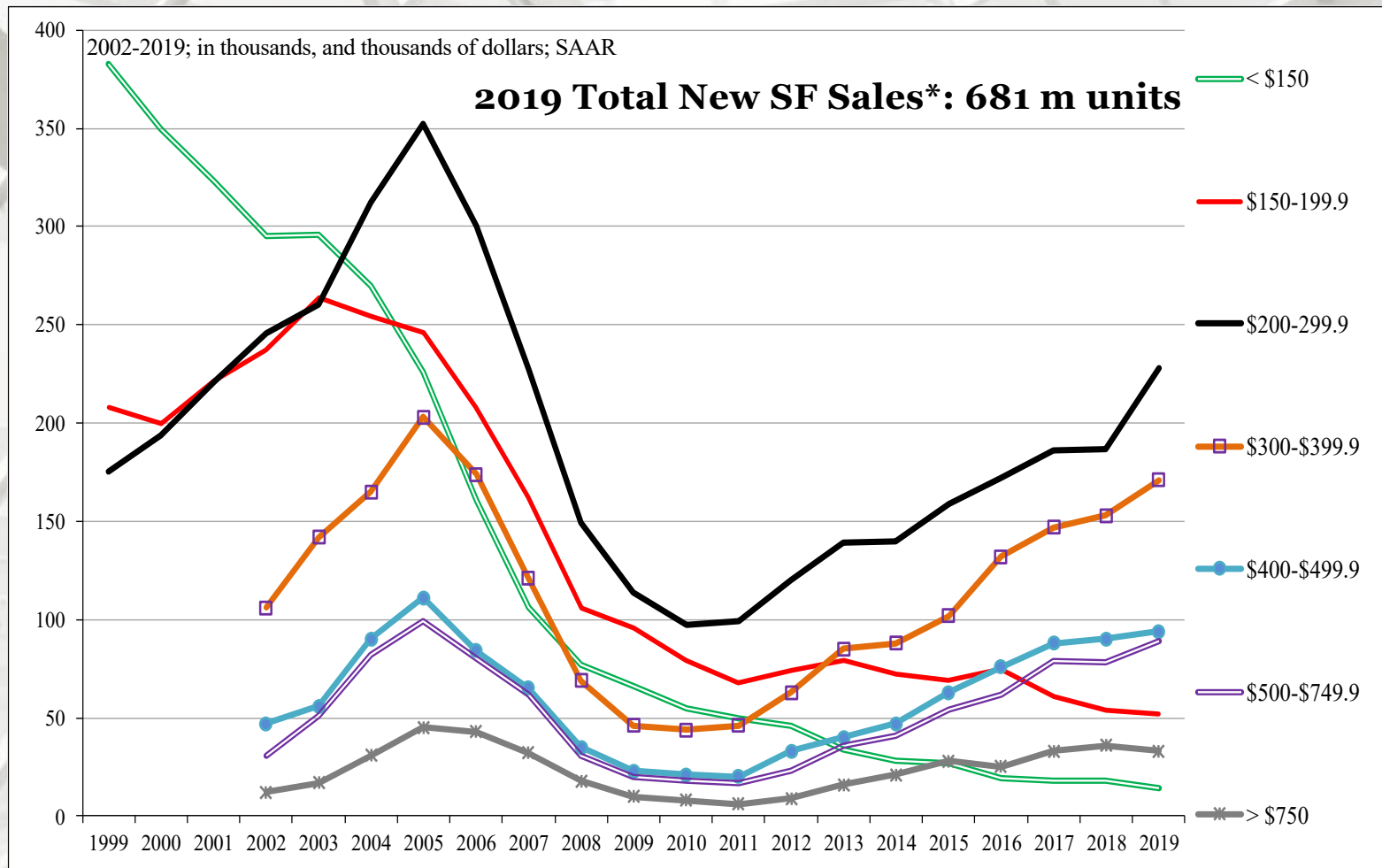


NE = Northeast; MW = Midwest; S = South; W = West

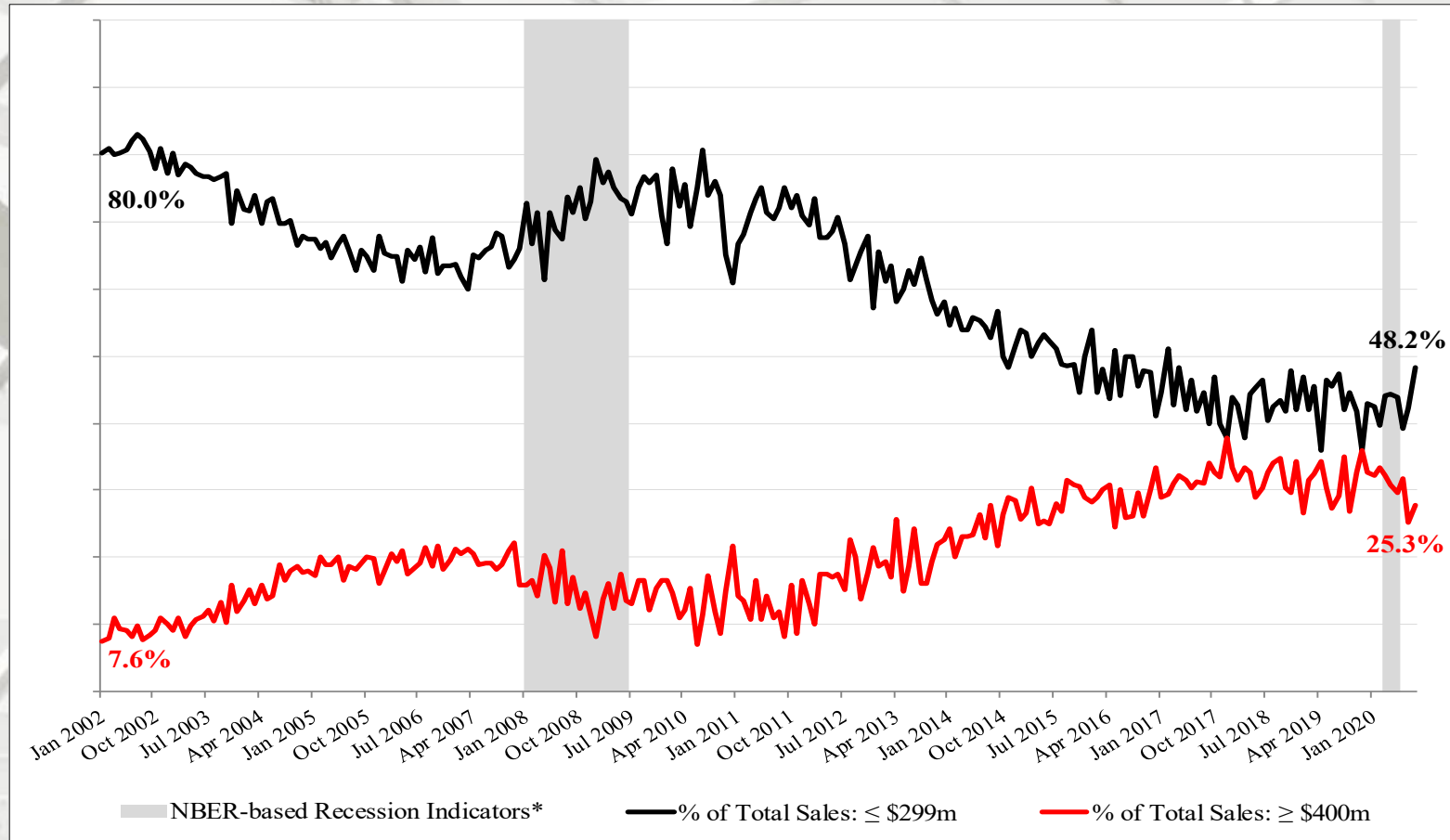
* Percentage of total new sales.

* NBER based Recession Indicator Bars for the United States from the Period following the Peak through the Trough (FRED, St. Louis).

New SF House Sales by Price Category



New SF House Sales

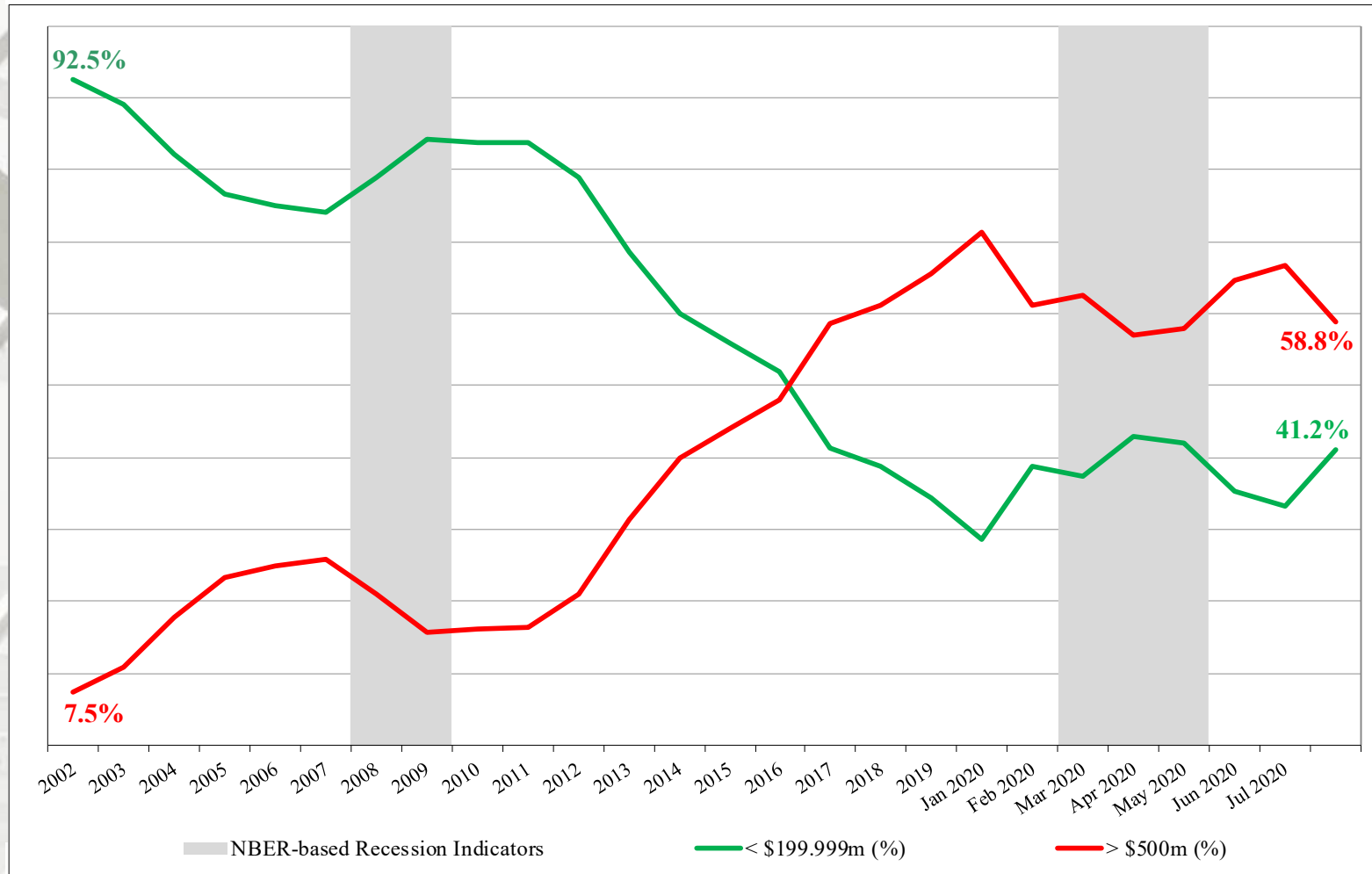


* NBER based Recession Indicator Bars for the United States from the Period following the Peak through the Trough (FRED, St. Louis).

New SF Sales: ≤ \$200m and ≥ \$400m: 2002 – August 2020

The sales share of \$400 thousand plus SF houses is presented above^{1, 2}. Since the beginning of 2012, the upper priced houses have and are garnering a greater percentage of sales. A decreasing spread indicates that more high-end luxury homes are being sold. Several reasons are offered by industry analysts; 1) builders can realize a profit on higher priced houses; 2) historically low interest rates have indirectly resulted in increasing house prices; and 3) purchasers of upper end houses fared better financially coming out of the Great Recession.

New SF House Sales



New SF Sales: $\leq \$200m$ and $\geq \$500m$: 2002 to August 2020

The number of $\leq \$200$ thousand SF houses has declined dramatically since 2002^{1, 2}. Subsequently, from 2012 onward, the $\geq \$500$ thousand class has soared (on a percentage basis) in contrast to the $\leq \$200m$ class. One of the most oft mentioned reasons for this occurrence is builder net margins.

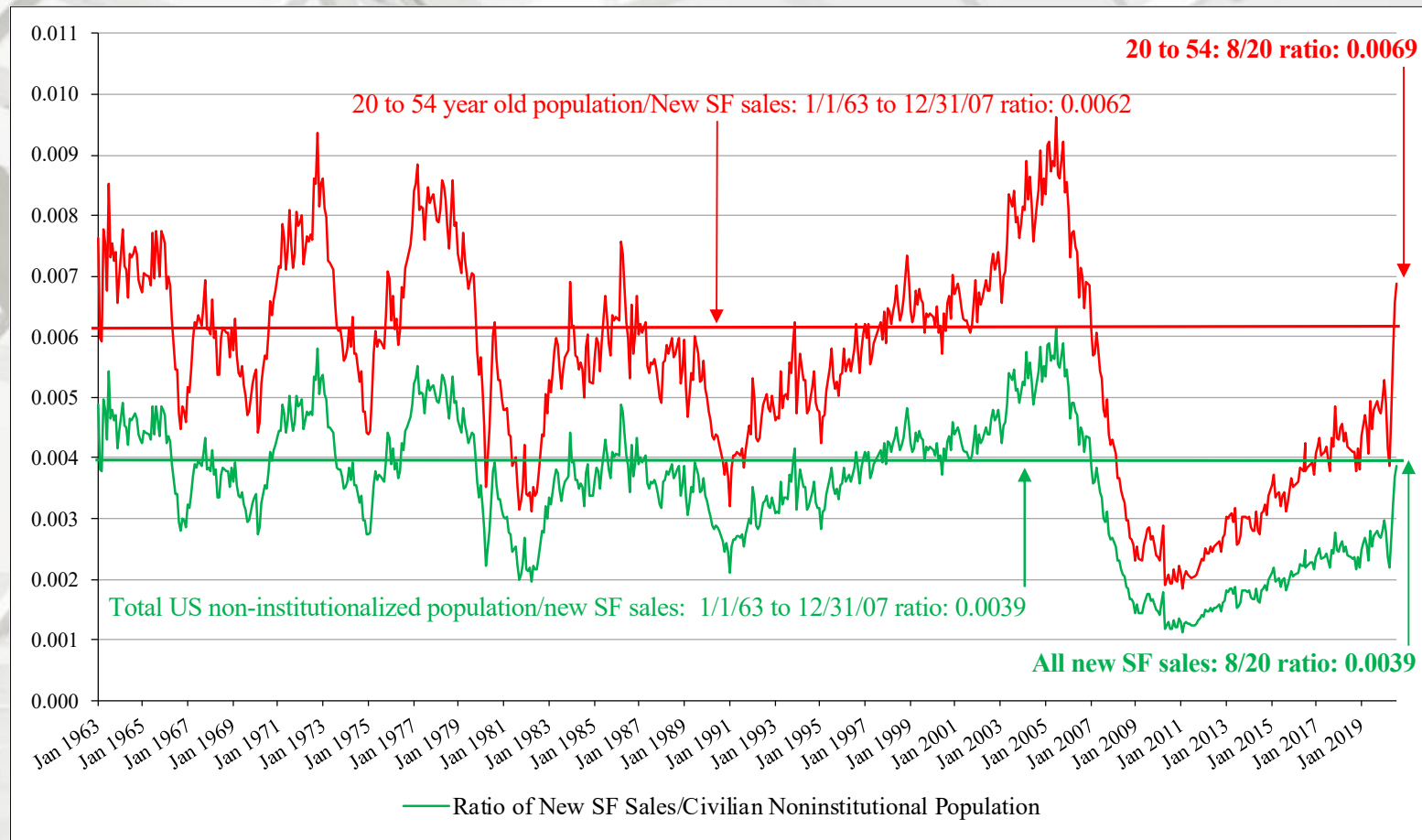
Note: Sales values are not adjusted for inflation.

NBER based Recession Indicator Bars for the United States from the Period following the Peak through the Trough (FRED, St. Louis).

Source: ¹ <https://www.census.gov/construction/nrs/index.html>; ² https://www.census.gov/construction/cpi/pdf/descpi_sold.pdf 9/24/20

[Return TOC](#)

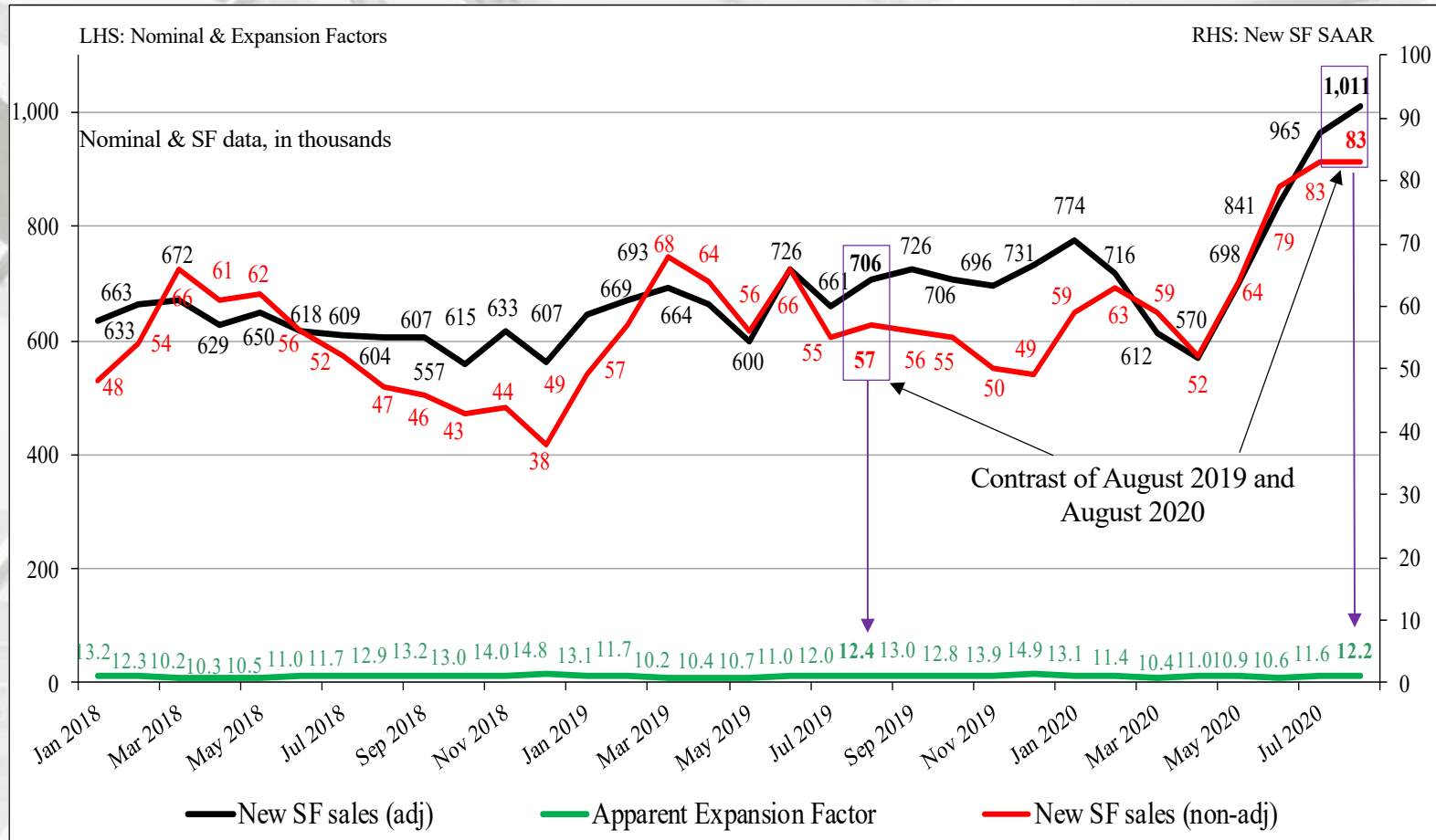
New SF House Sales



New SF sales adjusted for the US population

From January 1963 to January 2007, the long-term ratio of new house sales to the total US non-institutionalized population was 0.0039; in August 2020 it was 0.0035 – an increase from June (0.0030). The non-institutionalized population, aged 20 to 54 long-term ratio is 0.0062; in August 2020 it was 0.0061 – also an increase from June (0.0054). All are non-adjusted data. New house sales for the 20 to 54 class exceeded population for the first time in more than a decade. than what is necessary for changes in the population. From a total population world view, new sales were equivalent to the long-term average.

Nominal vs. SAAR New SF House Sales



Nominal and Adjusted New SF Monthly Sales

Presented above is nominal (non-adjusted) new SF sales data contrasted against SAAR data.

The apparent expansion factor "...is the ratio of the unadjusted number of houses sold in the US to the seasonally adjusted number of houses sold in the US (i.e., to the sum of the seasonally adjusted values for the four regions)." – U.S. DOC-Construction

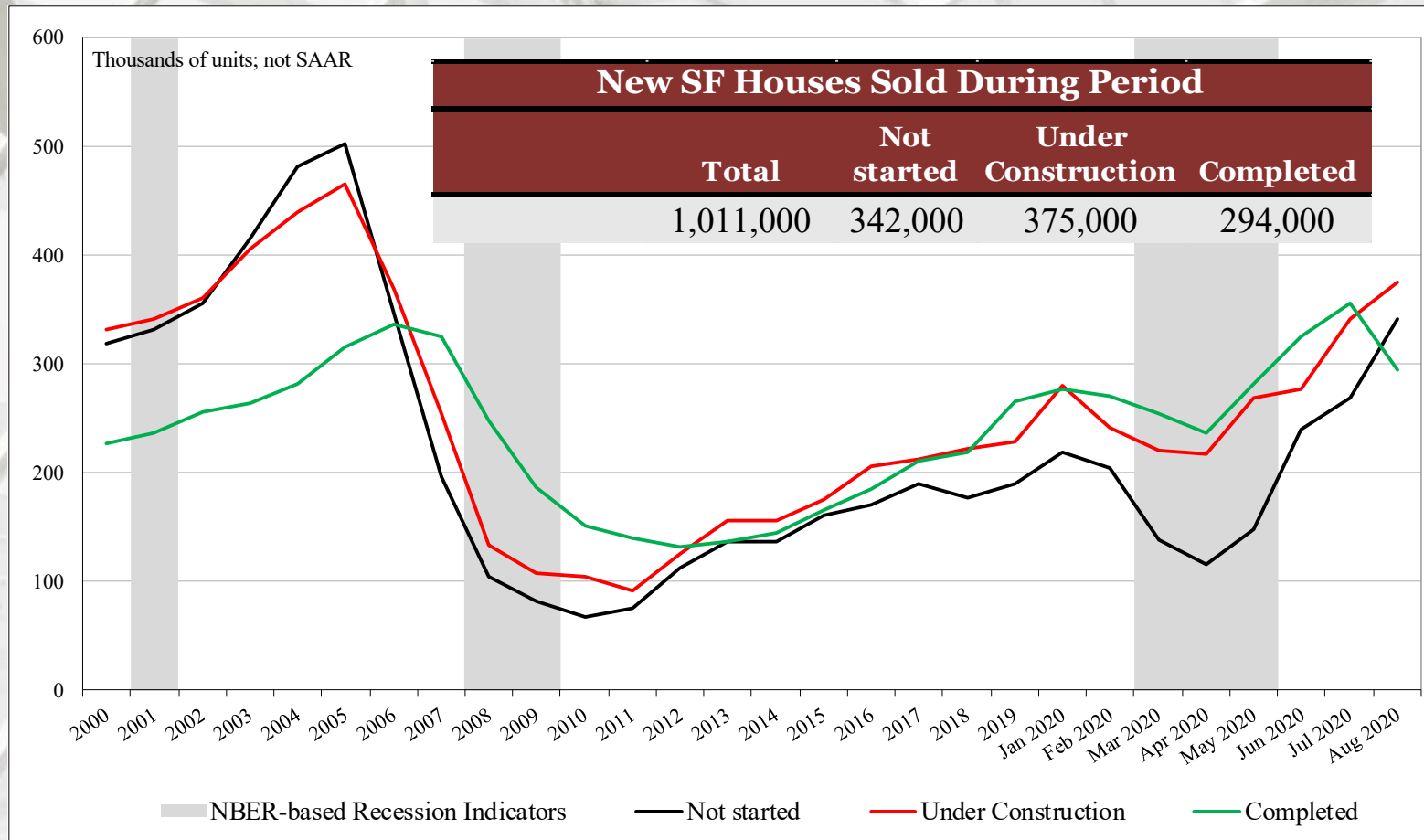
New SF House Sales

New SF Houses Sold During Period

	Total	Not started	Under Construction	Completed
August	1,011,000	342,000	375,000	294,000
July	965,000	268,000	341,000	356,000
2019	706,000	209,000	218,000	279,000
M/M change	4.8%	27.6%	10.0%	-17.4%
Y/Y change	43.2%	63.6%	72.0%	5.4%
Total percentage		33.8%	37.1%	29.1%

Not SAAR

New SF House Sales: Sold During Period



Not SAAR

* NBER based Recession Indicator Bars for the United States from the Period following the Peak through the Trough (FRED, St. Louis).

New SF Houses for Sale at End of Period

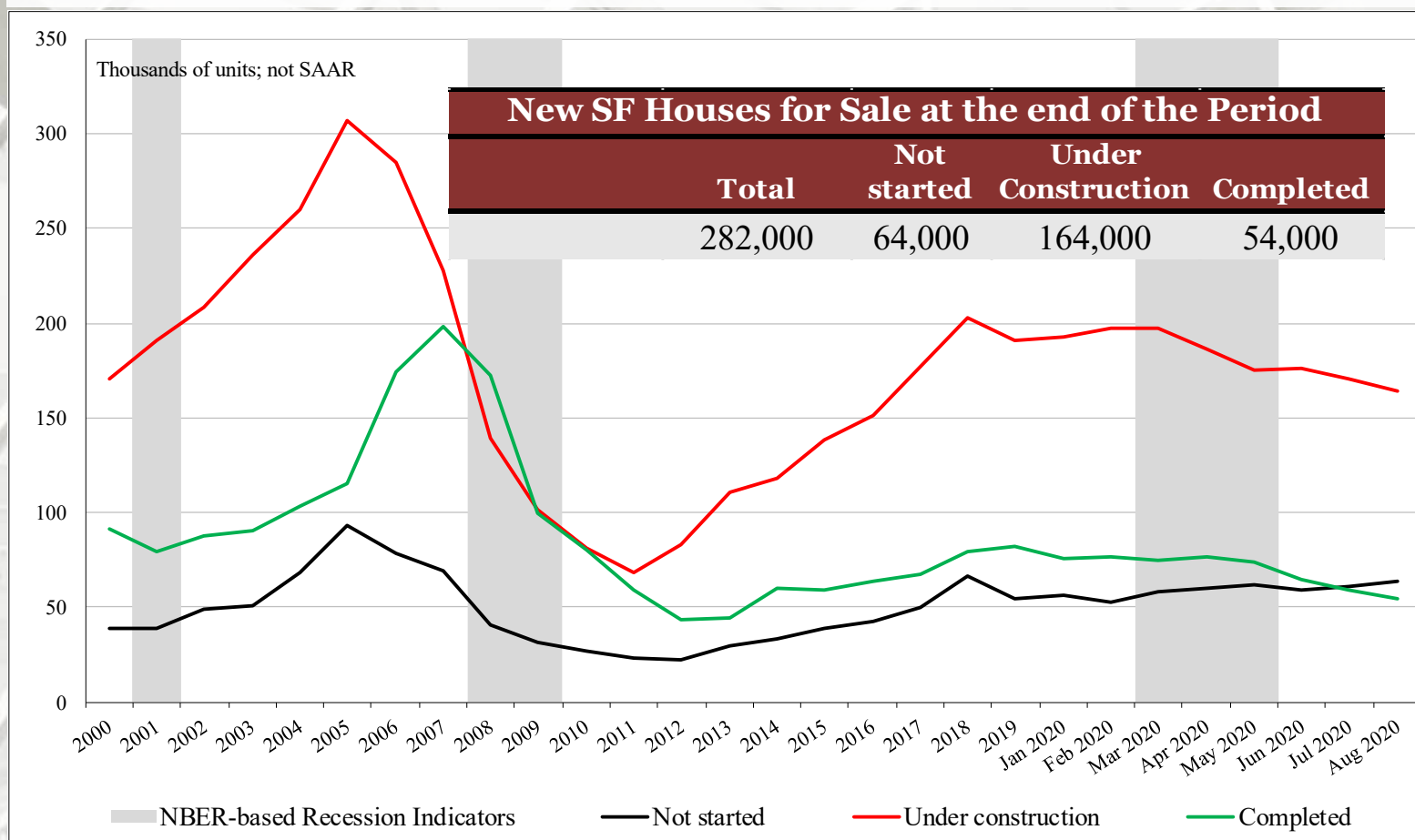
New SF Houses for Sale at the end of the Period

	Total	Not started	Under Construction	Completed
August	282,000	64,000	164,000	54,000
July	291,000	61,000	171,000	59,000
2019	325,000	52,000	194,000	79,000
M/M change	-3.1%	4.9%	-4.1%	-8.5%
Y/Y change	-13.2%	23.1%	-15.5%	-31.6%
Total percentage		22.7%	58.2%	19.1%

Not SAAR

Sales of homes “Not started” registered an increase in August.

New SF House Sales: For Sale at End of Period



Not SAAR

NBER based Recession Indicator Bars for the United States from the Period following the Peak through the Trough (FRED, St. Louis).

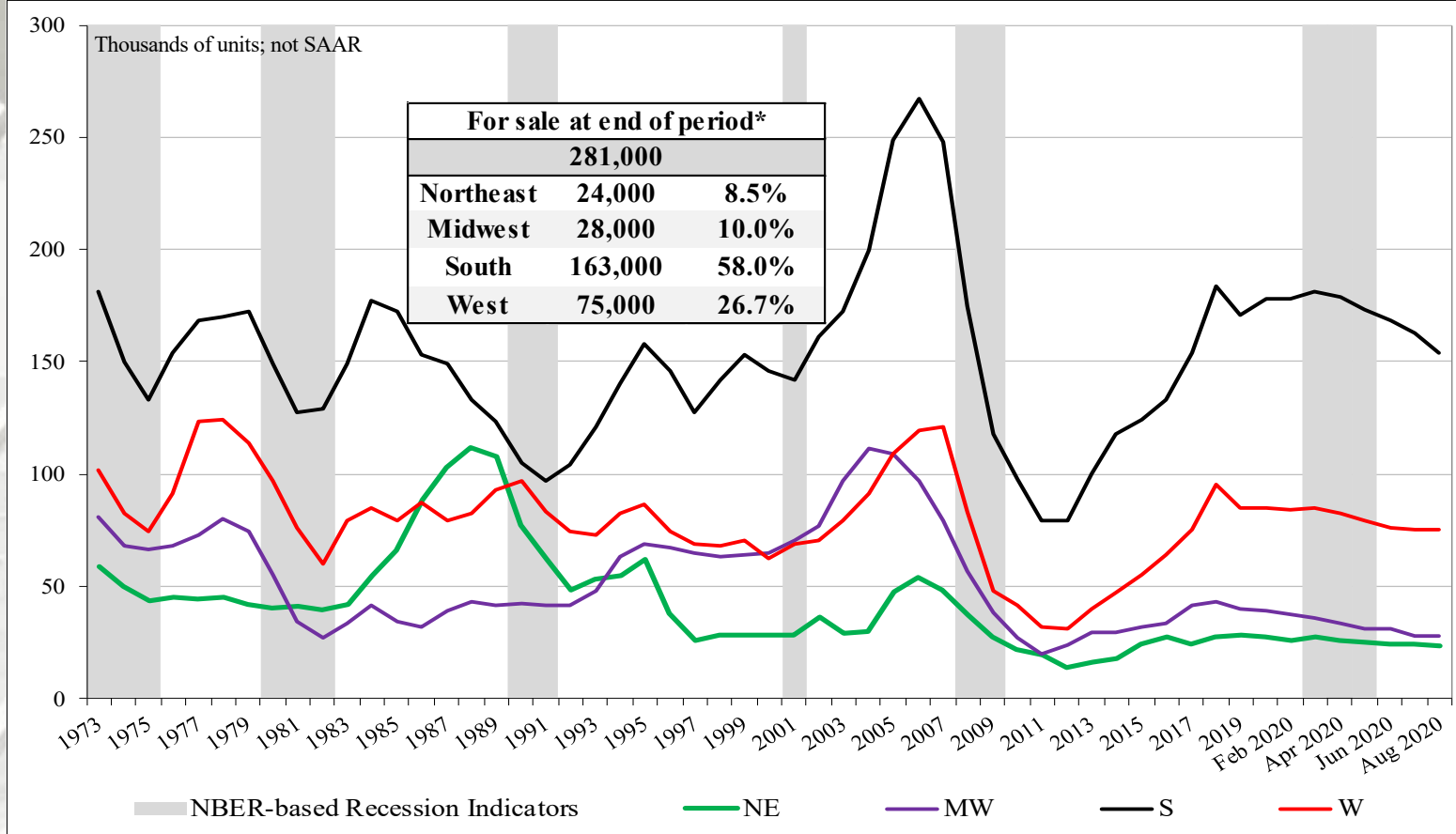
New SF House Sales

New SF Houses for Sale at the end of the Period by Region*

	Total	NE	MW	S	W
Augst	281,000	24,000	28,000	163,000	75,000
July	290,000	24,000	31,000	168,000	76,000
2019	325,000	28,000	37,000	173,000	87,000
M/M change	-3.1%	0.0%	-9.7%	-3.0%	-1.3%
Y/Y change	-13.5%	-14.3%	-24.3%	-5.8%	-13.8%

* Not SAAR

New SF Houses for Sale at End of Period by Region

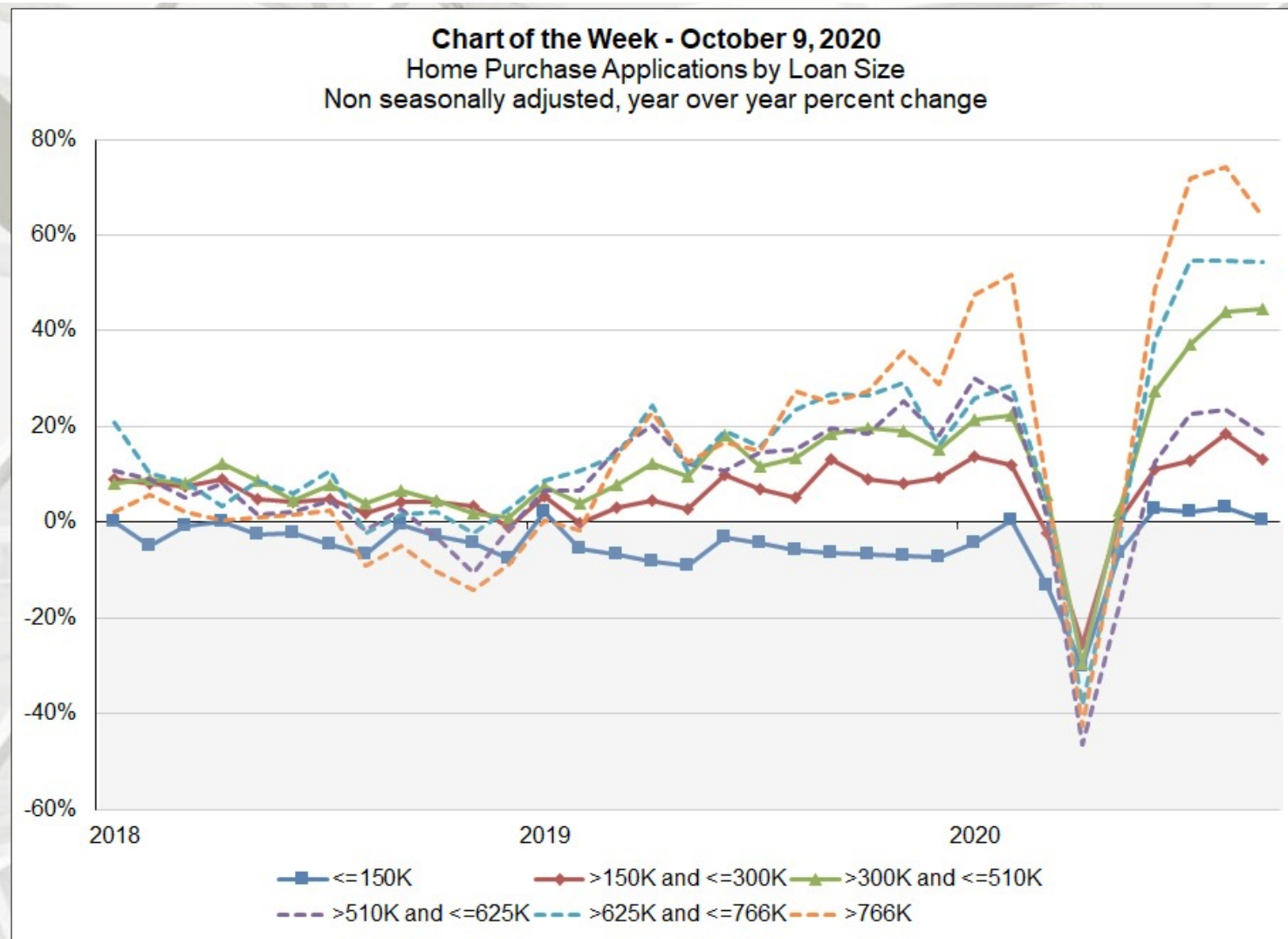


NE = Northeast; MW = Midwest; S = South; W = West

* Percentage of new SF sales.

NBER based Recession Indicator Bars for the United States from the Period following the Peak through the Trough (FRED, St. Louis).

Mortgage Bankers Association: Chart of the Week



Source: Mortgage Bankers Association (MBA) Weekly Applications Survey

Mortgage Bankers Association: Chart of the Week

“This week’s MBA Chart of the Week highlights the year-over-year growth in purchase applications broken down by loan size tiers from 2018 to 2020. The onset of the COVID-19 pandemic caused a sharp drop in purchase activity in April and May, but there has been a sharp rebound in borrower demand. However, the purchase recovery has been driven by larger loan size categories. More households transitioning to remote work and at-home education arrangements is likely adding to this growth.

Between June to September, purchase applications with loan amounts higher than \$766,000 showed growth that ranged between 49 percent to 74 percent, while loans between \$625,000 and \$766,000 grew between 38 percent to 55 percent. In contrast, applications for loans between \$150,000 and \$300,000 climbed from 11 percent to 13 percent, while the smallest loan size tier of \$150,000 or less increased no more than 3 percent in each of those months.

There are several drivers for the uneven housing recovery observed since the summer. The current economic crisis is impacting certain sectors of the economy disproportionately. For example, workers in leisure and hospitality, and education, saw substantial layoffs in the spring that have been slow to recover. They typically make up borrowers seeking mortgages in the lower price tier. Second, the economic and labor market deterioration led to a reduction in mortgage credit supply, including government loans that a high share of entry-level home buyers utilize, further restraining growth. Lastly, housing inventory was tight leading up to the pandemic, especially at the entry-level, and even as new construction has rebounded, there is still a shortage. The result is a more competitive market and greater affordability challenges as prices are bid higher, preventing some of these transactions from happening.

MBA expects the purchase market to continue to grow heading into 2021, but the pace of that recovery, and whether growth will be spready more evenly across price tiers, will depend on how the hardest hit sectors recover – both in terms of workers finding more stable employment and making up for lost income.” – Joel Kan, Associate Vice President of Economic and Industry Forecasting, MBA

August 2019 Construction Spending

	Total Private Residential*	SF	MF	Improvement**
August	\$589,437	\$287,884	\$85,407	\$216,146
July	\$568,285	\$272,870	\$85,489	\$209,926
2019	\$552,508	\$279,716	\$78,412	\$194,380
M/M change	3.7%	5.5%	-0.1%	3.0%
Y/Y change	6.7%	2.9%	8.9%	11.2%

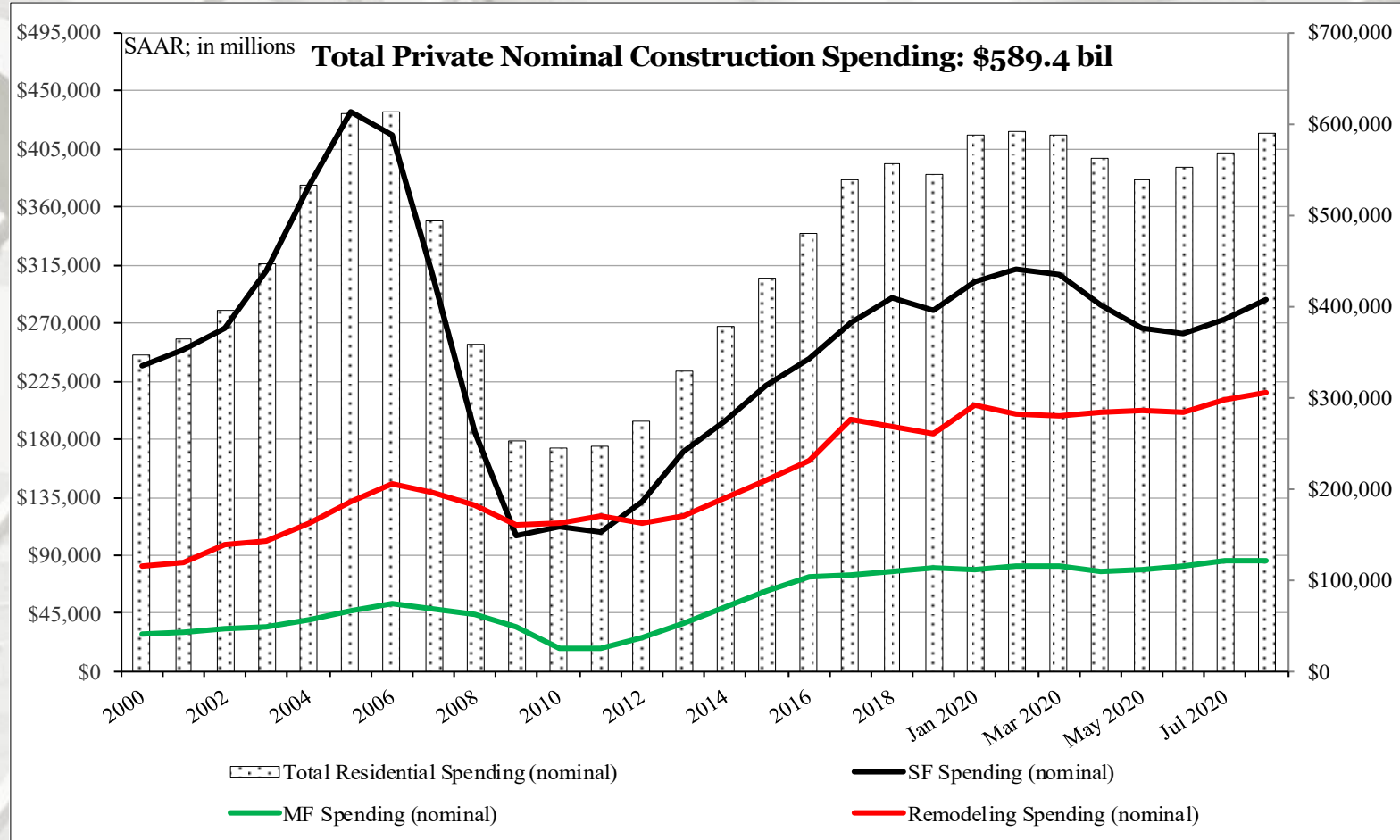
* billion.

** The US DOC does not report improvement spending directly, this is a monthly estimation:

((Total Private Spending – (SF spending + MF spending)).

All data are SAARs and reported in nominal US\$.

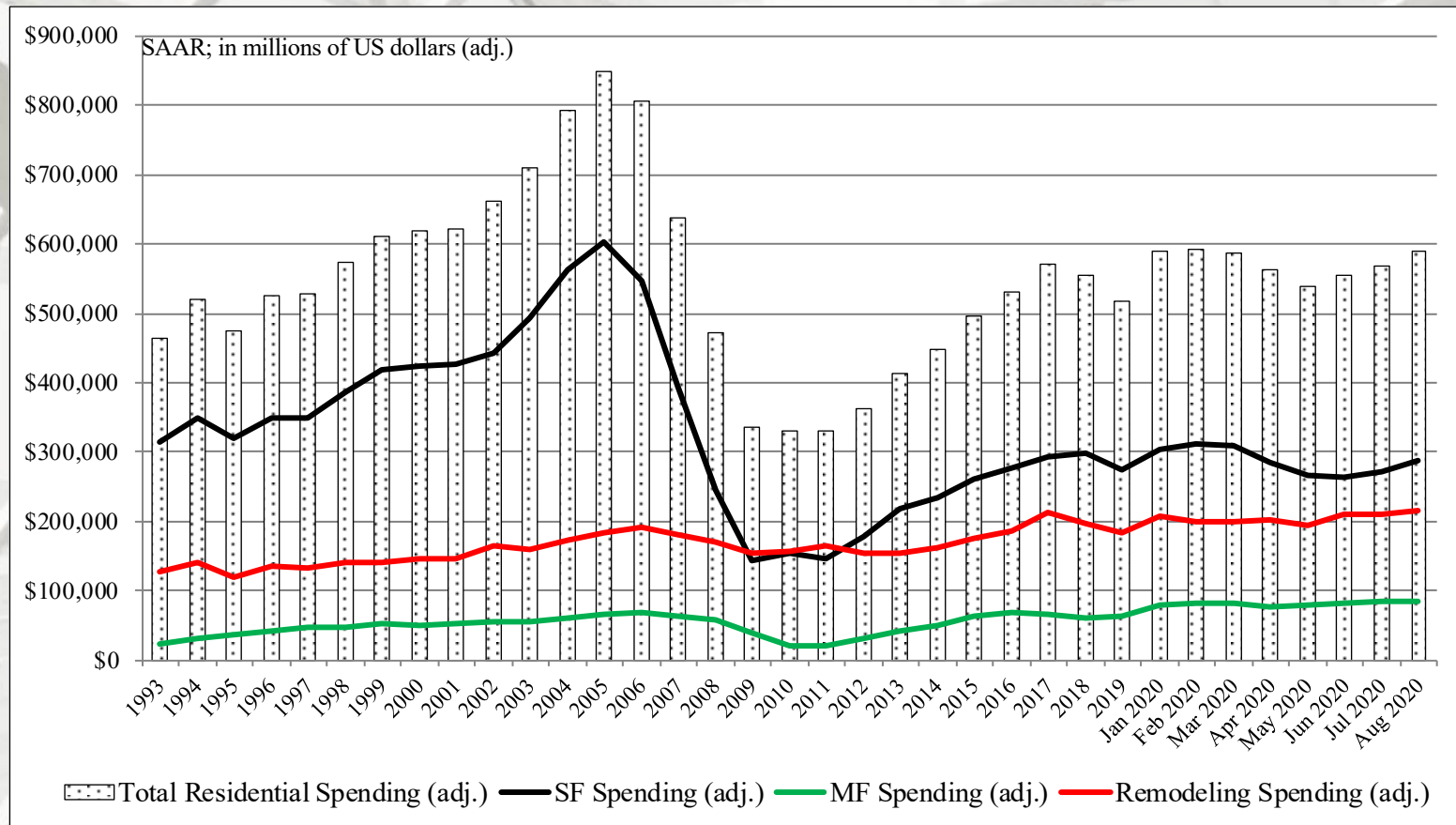
Total Construction Spending (nominal): 2000 – August 2020



Reported in nominal US\$.

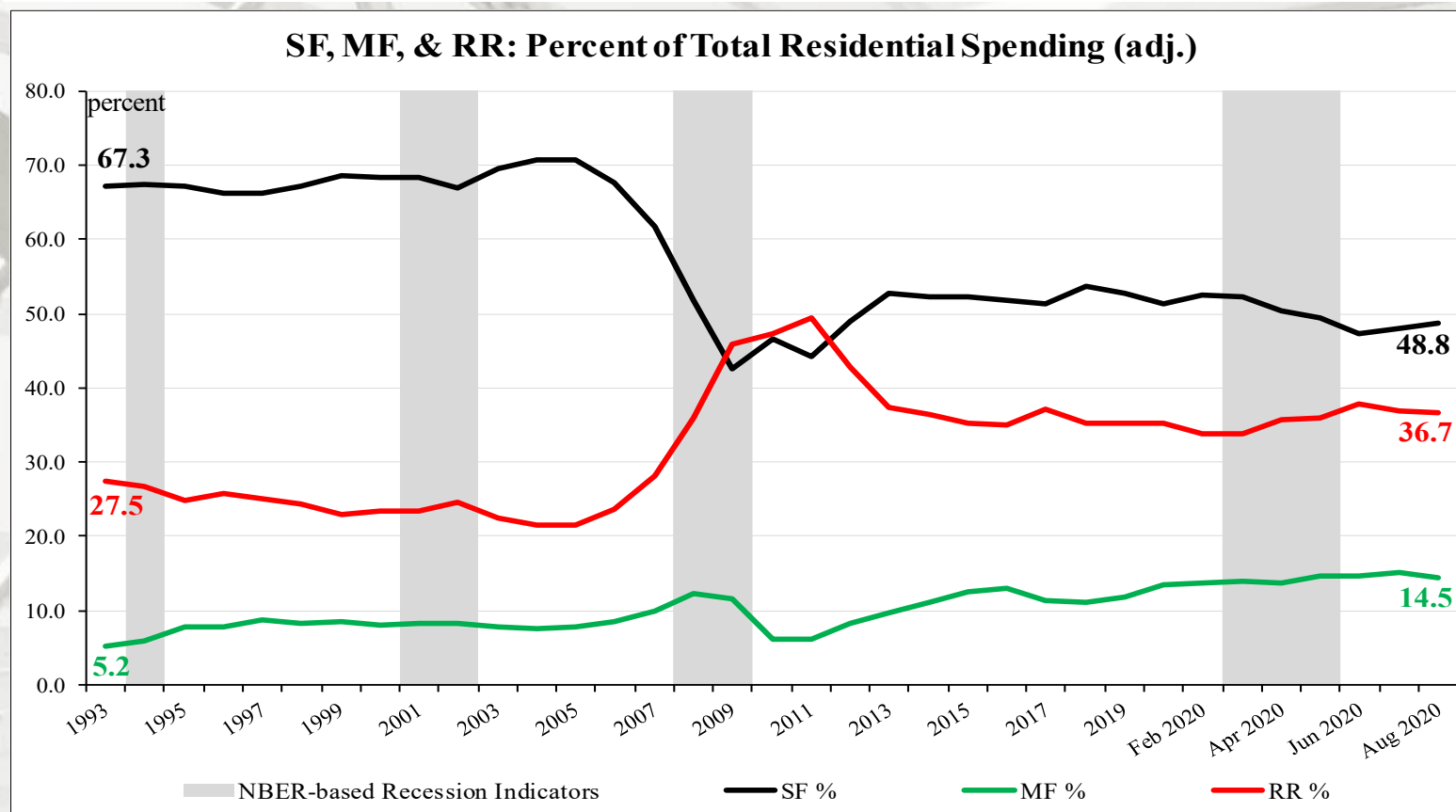
The US DOC does not report improvement spending directly, this is a monthly estimation for 2020.

Total Construction Spending (adjusted): 1993-August 2020



Reported in adjusted US\$: 1993 – 2018 (adjusted for inflation, BEA Table 1.1.9); January to August 2020 reported in nominal US\$.

Construction Spending Shares: 1993 to August 2020



Total Residential Spending: 1993 through 2006

SF spending average: 69.2%

MF spending average: 7.5 %

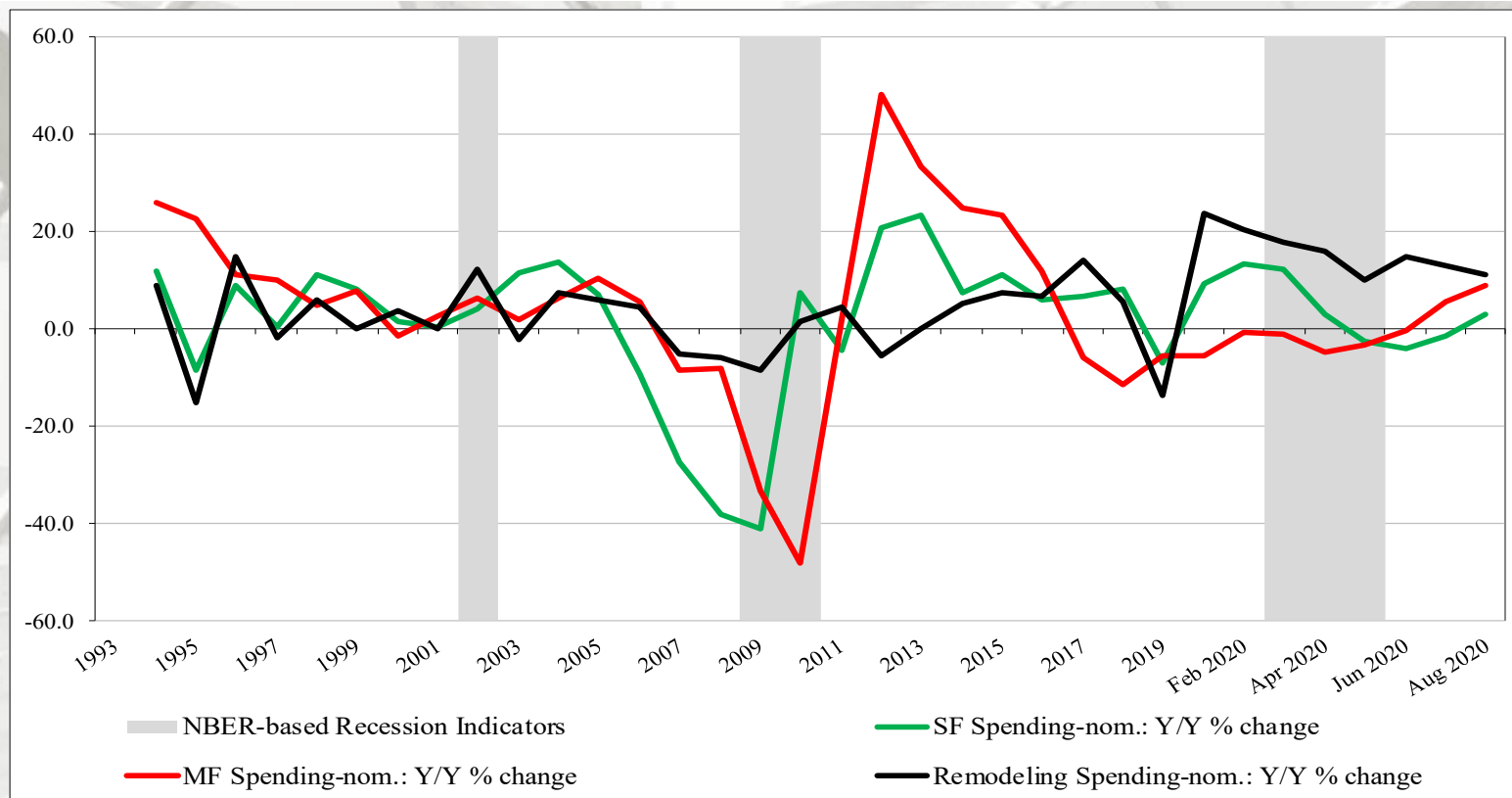
Residential remodeling (RR) spending average: 23.3 % (SAAR).

Note: 1993 to 2019 (adjusted for inflation, BEA Table 1.1.9); January-August 2020 reported in nominal US\$.

* NBER based Recession Indicator Bar s for the United States from the Period following the Peak through the Trough (FRED, St. Louis).

Sources: * <https://fred.stlouisfed.org/series/USREC>, 6/8/20; <http://www.census.gov/construction/c30/pdf/privsa.pdf>; 10/1/20 and <http://www.bea.gov/iTable/iTable.cfm>; 3/2/20

Adjusted Construction Spending: Y/Y Percentage Change, 1993 to August 2020

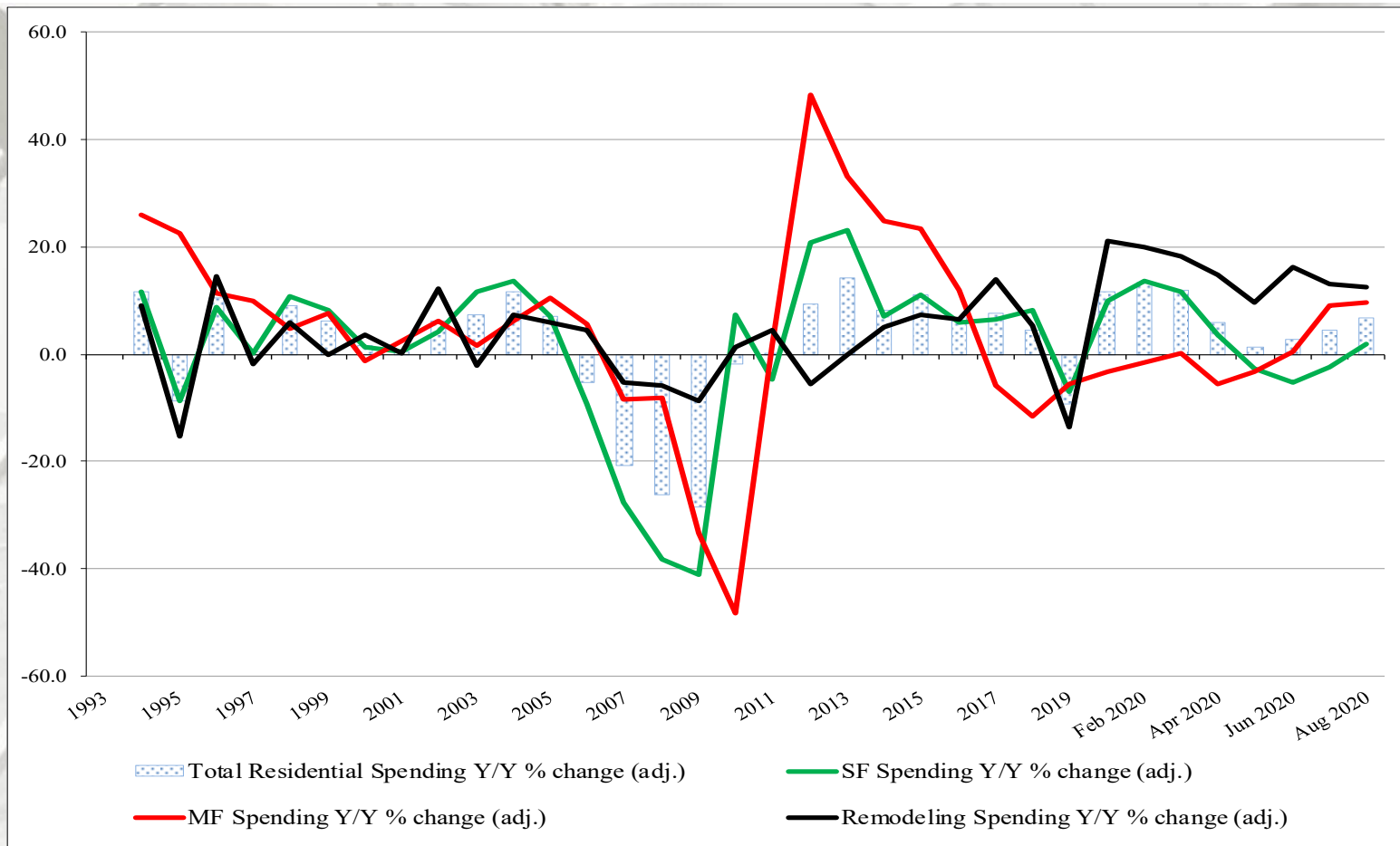


Nominal Residential Construction Spending: Y/Y percentage change, 1993 to August 2020

Presented above is the percentage change of inflation adjusted Y/Y construction spending. SF and RR expenditures were positive on a percentage basis, year-over-year (2020 data reported in nominal dollars).

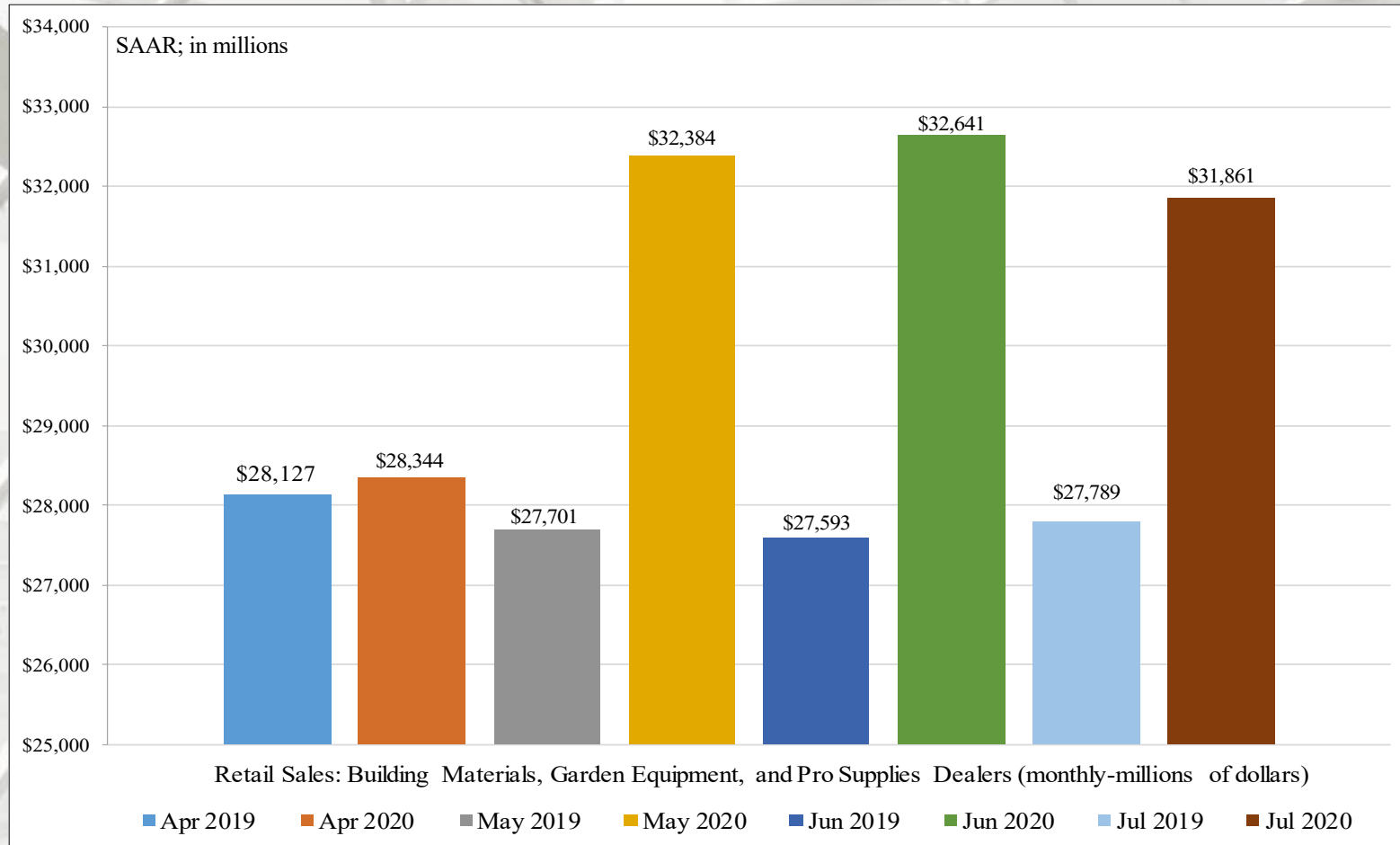
* NBER based Recession Bars for the United States from the Period following the Peak through the Trough (FRED, St. Louis).

Adjusted Construction Spending: Y/Y Percentage Change, 1993 to August 2020



Remodeling

Retail Sales: Building materials, Garden Equipment, & PRO Supply Dealers

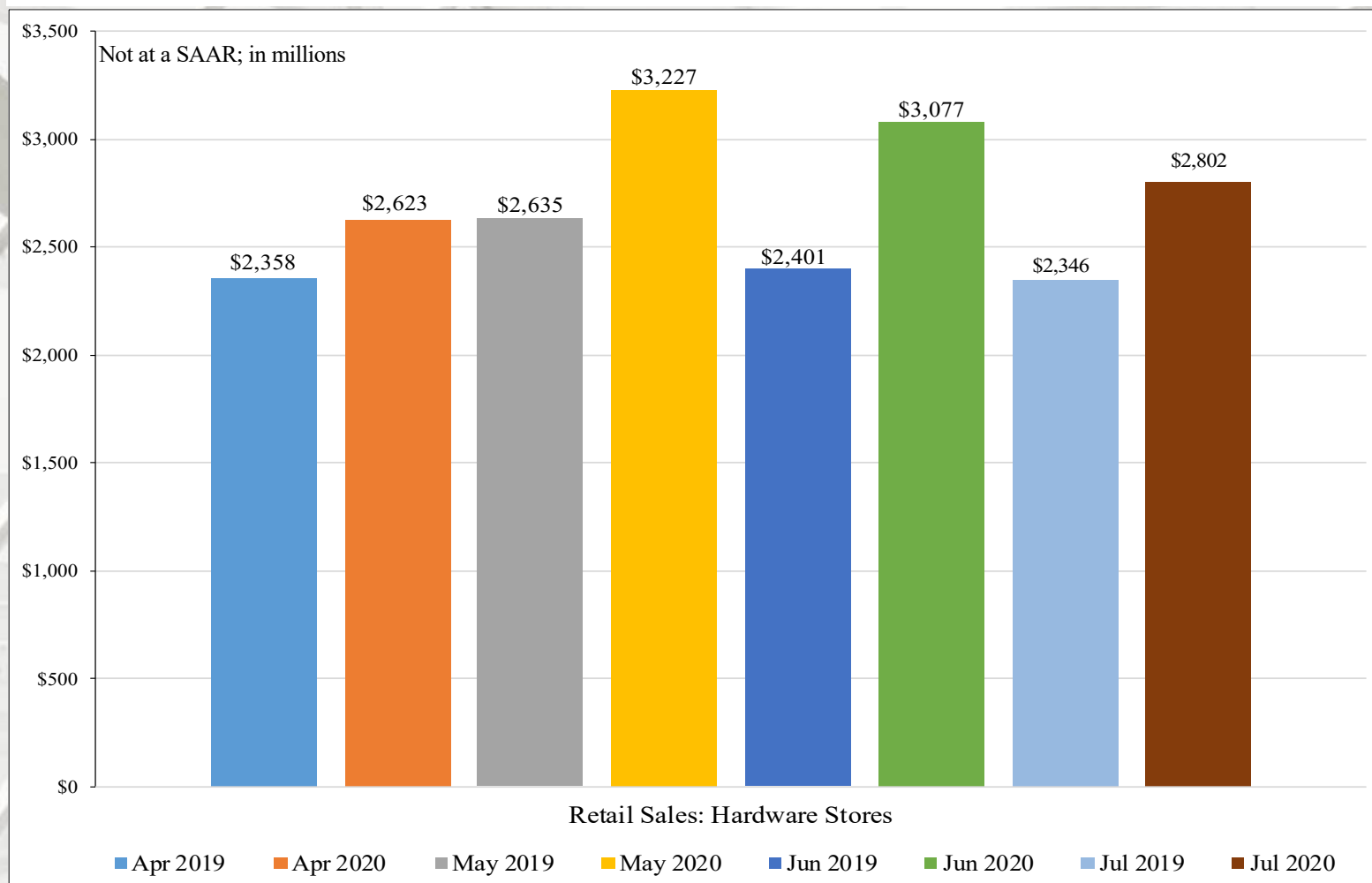


Building materials, Garden Equipment, & PRO Supply Dealers: NAICS 4441

NAICS 4441 sales decreased 2.4% from June and improved 19.4% from June 2019 (on a non-adjusted basis).

Remodeling

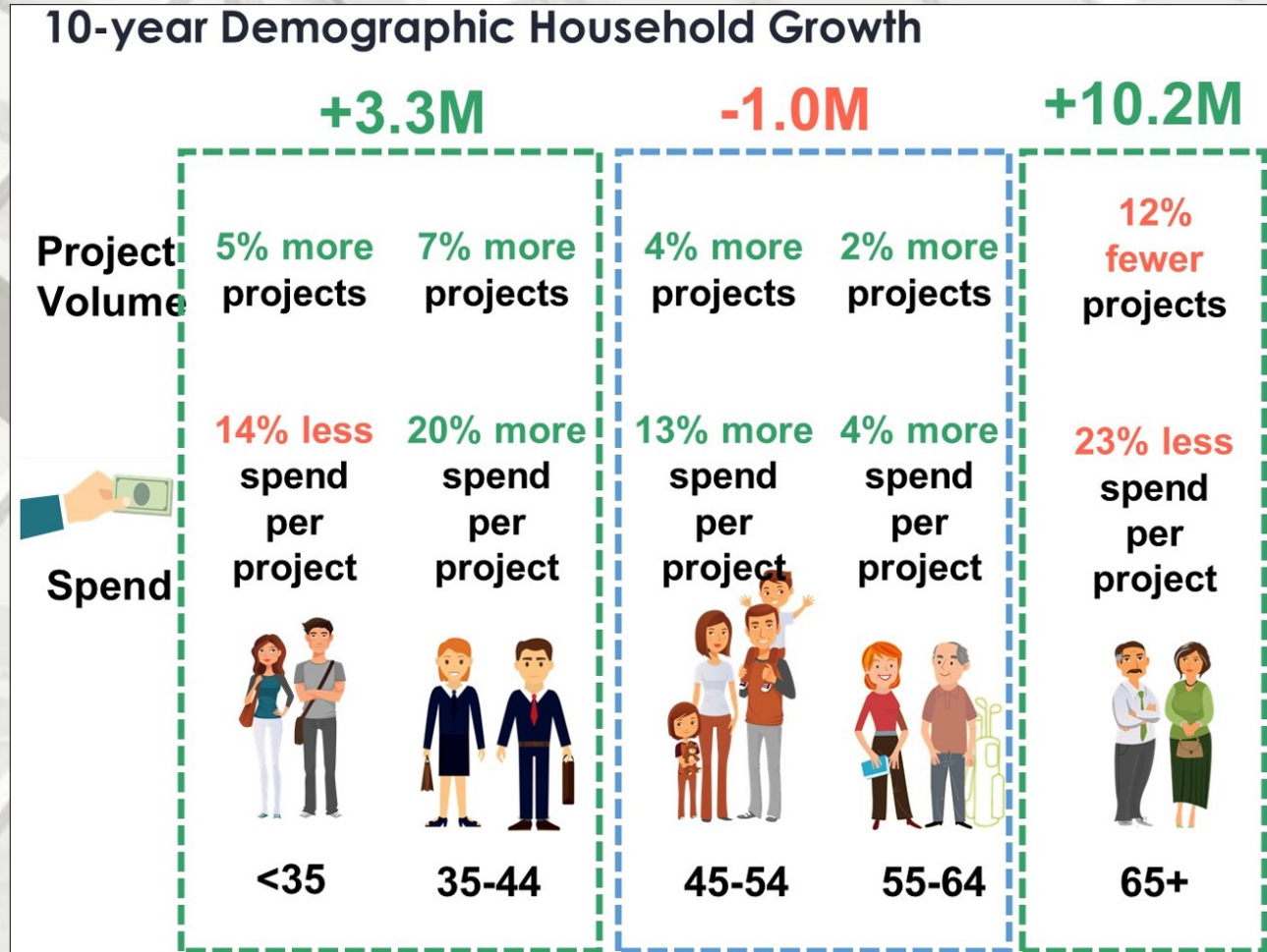
Retail Sales: Hardware Stores



Hardware Stores: NAICS 44413

NAICS 44413 retail sales declined 9.3% from June and increased 19.4% from June 2019 (on a non-adjusted basis).

Remodeling



John Burns Real Estate Consulting LLC

“Remodeling is hot, especially DIY. Younger homeowners do more remodeling & spend less until they hit their late 30s/early 40s. Older homeowners do fewer & cheaper projects, but growth will be so massive, there will still be huge spending.” – John Burns, CEO, John Burns Real Estate Consulting LLC

Remodeling

Harvard Joint Center for Housing Studies

Recent Upturn In DIY Remodeling Projects Unlikely To Continue Long-Term

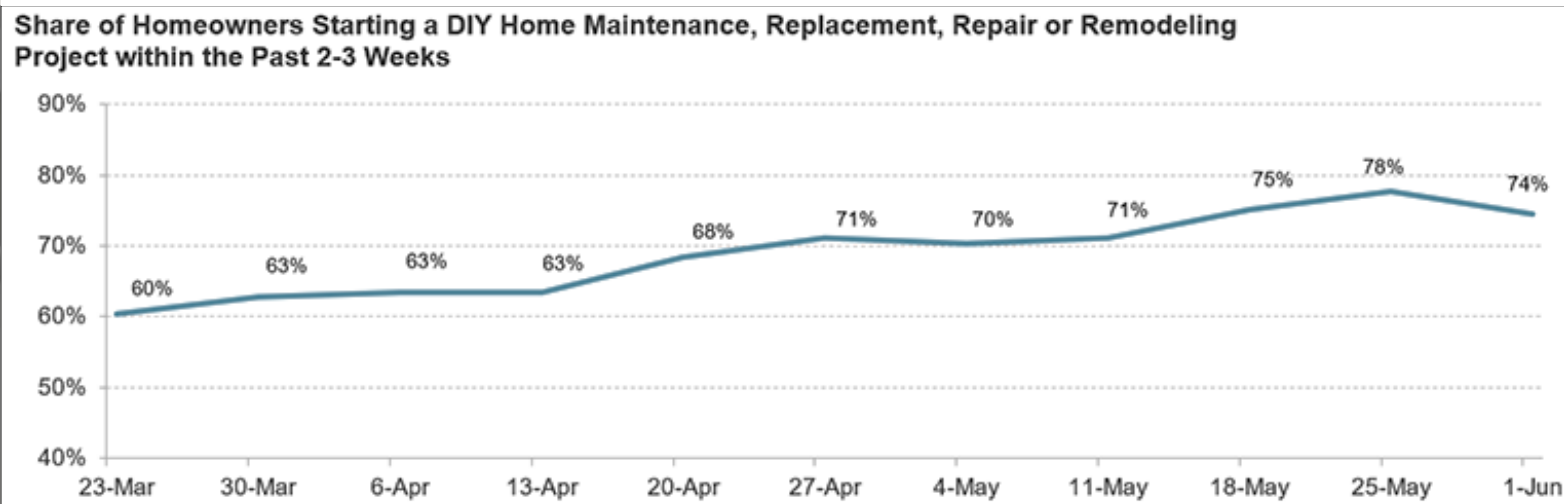
“During the pandemic, there has been a surge in do-it-yourself (DIY) home improvement as people have used some of their extra time at home to undertake projects that accommodate changes to their lifestyle. While the overall home improvement market is expected to remain strong in the future, it is likely that this surge in DIY activity will fade and return to more normal levels.

Given that people have been spending more time in their homes in recent months and expanding their at-home activities for things such as work, schooling, exercise, and outdoor entertainment, many homeowners who have not been adversely affected financially by the recession have been active in upgrading their homes to accommodate their evolving needs. This level of project activity contrasts with the typical pattern of discretionary home improvement spending, which [tends to decline during economic downturns and accelerate during upturns](#).

While there has been strong interest in home improvement projects during the pandemic, a surprisingly large share of this activity has been undertaken by homeowners themselves. A series of [consumer surveys by The Farnsworth Group and the Home Improvement Research Institute \(HIRI\)](#) indicate that, early in the pandemic, fully 60 percent of homeowners reported that they recently started a DIY home maintenance, replacement, repair, or remodeling project, and the share grew to almost 80 percent by early June 2020 (**Figure 1**). When asked why they undertook these projects, the most common responses were that they had more spare time (84 percent), were home more often (81 percent), doing the projects themselves saved them money (34 percent), and they didn’t want contractors in their home (21 percent).” – Kermit Baker, Project Director, Remodeling Futures and Sophia Wedeen, Research Assistant; Joint Center for Housing Studies

Remodeling

Figure 1: Most homeowners started new DIY projects during the pandemic



Notes: Based on weekly homeowner surveys. Approximately 850 owners responded each week, for total response of almost 10,000 homeowner responses over the survey period.

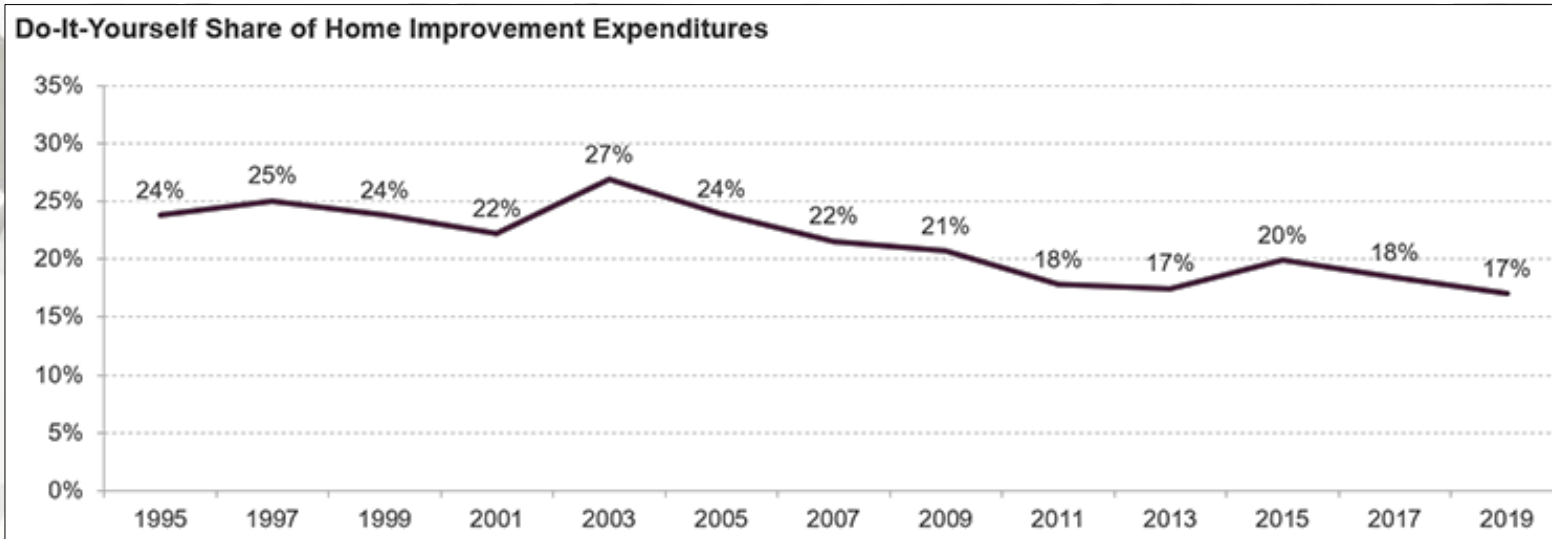
Source: JCHS tabulations of The Farnsworth Group-Home Improvement Research Institute, COVID Home Improvement Impact Tracker, 2020.

Harvard Joint Center for Housing Studies

“However, this increase in DIY activity during the pandemic is at odds with a longer-term trend of a declining DIY share of homeowner spending on home improvement projects. In recent years, fewer than one in five dollars spent annually on home improvement projects (as opposed to more routine maintenance and repair) were for a DIY project [according to our analysis of the American Housing Survey](#). This is down from two decades ago, when roughly one in four dollars spent was on a DIY project (**Figure 2**).” – Kermit Baker, Project Director, Remodeling Futures and Sophia Wedeen, Research Assistant; Joint Center for Housing Studies

Remodeling

Figure 2: The DIY share of homeowner improvement expenditures has been trending down for many years



Notes: Data includes home improvement projects undertaken by homeowners. Expenditures for DIY projects are for materials only.

Source: JCHS tabulations of HUD, American Housing Surveys.

Harvard Joint Center for Housing Studies

“There are many reasons for the longer-term decline in DIY home improvement spending. Growing household incomes encourage more owners to hire professional contractors. Lower rates of mobility, particularly for younger households who more commonly undertake these projects when they move, limits opportunities for DIY projects. Further, more complicated materials and products used in the typical home today often discourages homeowner installation. Finally, a general declining interest in, and exposure to, manual labor among much of the population limits their desire to attempt DIY projects.” – Kermit Baker, Project Director, Remodeling Futures and Sophia Wedeen, Research Assistant; Joint Center for Housing Studies

Remodeling

Harvard Joint Center for Housing Studies

Recent Upturn In DIY Remodeling Projects Unlikely To Continue Long-Term

“However, likely the most critical factor is that our owner population is getting older. In 1995, 26 percent of owner households nationally were age 65 or older. As the baby boom generation has aged, by 2019 over 32 percent of owners were 65 or older. Our research has determined that owners 65 or older spend, on average, only 12 percent of their home improvement dollars on DIY projects. Owners under age 35, by contrast, spend almost a third of their home improvement expenditures on these projects, while owners age 35 to 44 spend over 20 percent.

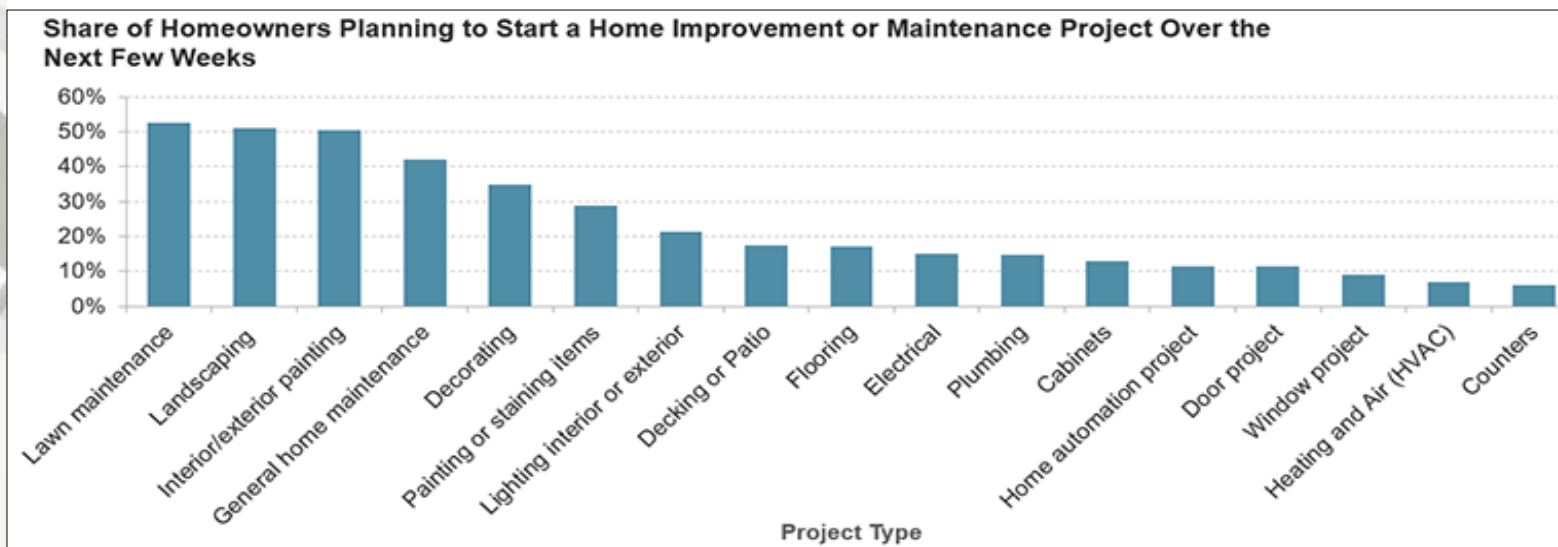
It is not only potential physical limitations that encourage older owners to undertake fewer DIY home improvements. Older owners typically undertake a different mix of projects as well, disproportionally focusing their home improvement activity on exterior replacement projects (roofing, siding, window replacements, etc.) and systems upgrades (HVAC, plumbing, electrical, etc.). Households of all ages are much more inclined to hire professional contractors for these projects, so the project mix is a critical factor in determining the DIY share.

Opportunities presented by the pandemic

Rather than turning homeowners into a new generation of handymen and handywomen, the pandemic has presented the opportunity for many to make progress on their longstanding “to-do” list of home improvement and maintenance projects. Over 71 percent of owners undertaking DIY projects during the pandemic report that they had planned these projects prior to the pandemic. Most of the DIY projects undertaken have been relatively simple discretionary tasks where owners could devote some of their newfound time to sprucing up their home, given that they were spending more time there. The most common projects reported have been lawn maintenance, landscaping, painting and decorating, and general home maintenance (Figure 3), not only relatively simple projects, but ones that reflect the increased outdoor orientation of many households.” – Kermit Baker, Project Director, Remodeling Futures and Sophia Wedeen, Research Assistant; Joint Center for Housing Studies

Remodeling

Figure 3: DIY projects owners plan to undertake in near future are generally smaller scale



Notes: Based on weekly homeowner surveys conducted over the mid-March to early June 2020 period. Results based on pooled responses of almost 7,000 homeowners who responded that they are definitively or probably planning to start a DIY project over the next few weeks.

Source: JCHS tabulations of The Farnsworth Group-Home Improvement Research Institute, COVID Home Improvement Impact Tracker, 2020.

Harvard Joint Center for Housing Studies

“The pandemic has produced unique needs and opportunities for homeowners to undertake home improvement projects. Given [concern about the health risks of bringing contractors or other service providers into their homes](#), many homeowners have been more inclined to undertake projects themselves. Still, while owners have been using the pandemic to tackle their home maintenance and improvement projects, there are no indications of a longer-term reversal in preferences of owners toward undertaking projects themselves, particularly larger and more complicated home improvements. Nevertheless, if the overall home improvement market continues to expand as strongly as it has in recent years, a declining share may still produce overall growth in DIY spending levels.” – Kermit Baker, Project Director, Remodeling Futures and Sophia Wedeen, Research Assistant; Joint Center for Housing Studies

Source: <https://www.jchs.harvard.edu/blog/recent-upturn-diy-remodeling-projects-unlikely-continue-long-term>; 10/13/20

Remodeling

Professional Remodeler

The Money Effect

Private equity firms are investing in home improvement companies. Here's how that will affect the industry.

“Private equity firms are notoriously tight-lipped about their strategies, but even a cursory look at investment activity over the last few years uncovers an accelerating migration into the remodeling market. The trend could signal a significant shift in the industry, specifically for home improvement companies.

“Historically, private equity firms avoided cyclical industries like remodeling,” says Matt Ogden, head of Building Industry Partners, a private equity investor that has until recently avoided residential remodeling companies. “Over time that’s changed.”

An “Unattractive” Industry

Until the turn of the century, private equity activity wasn’t especially robust. In 2000, investments amounted to about \$500 billion globally, while today it’s closer to \$4 trillion, according to McKinsey & Company, a global management-consulting firm. Yet the industry’s prevailing attribute is, and has always been, risk aversion. It’s a guiding principle of the investor type and it’s been the single greatest factor in keeping those funds out of remodeling, an industry assumed to be rife with risk.

“The cyclical, moderate annual growth rate, big upturns and downturns, its fragmentation – these factors of the remodeling industry are risks private equity investors have historically been avoiding,” says Abbe Will, researcher and associate project director of the Remodeling Futures Program at the Joint Center for Housing Studies of Harvard University. Will, who’s done research into the role private equity now plays in remodeling, says that the nature of construction and remodeling doesn’t offer the obvious stability private equity investors tend to prefer. “It’s made the industry unattractive,” she adds.” – James F. McClister, Managing Editor, *Professional Remodeler*

Remodeling

Professional Remodeler

Warming to remodeling

“In the last 20 years, the number of private equity firms has doubled and the amount being invested has increased 700%. It has firms rethinking industries previously avoided, like home improvement.

“Investors used to lump remodeling in with construction, not realizing that while they exist under the same umbrella the industries operate differently,” Ogden says. “The more firms look into remodeling the more nuanced their analysis and thinking has become.”

Investors discovered the industry was not as much of a gamble as they’d previously thought. “They found that remodeling is conducive to 10 percent-plus EBITDA, or 25 percent-plus return on asset profile,” he says. “It’s less cyclical than new construction and more resilient to downturns.”

Ogden, whose firm is currently moving towards investing in the residential remodeling market, is particularly keen on the industry’s low customer concentration. “In private equity, you think a lot about risk. If you’re a production home builder and you have a large part of your business tied up with a single client, that’s a lot of risk exposure to that single customer’s performance and credit worthiness,” he says. “Remodeling has smaller jobs and more clients.”

As private equity has learned the industry, investors have made greater inroads into it. We saw it in 2017 when Huron Capital purchased a controlling stake in 1-800-Hansons, a replacement window, roofing, and siding company founded in Detroit. We saw it last year when York Capital Management backed Florida Home Improvement Associates (FHIA) to expand through the purchase of Statewide Remodeling, the largest specialty remodeler in Texas. We saw it earlier this year in July when West Shore Home made its fourth acquisition in 18 months, made possible by financing from GarMark Partners.” – James F. McClister, Managing Editor, *Professional Remodeler*

Remodeling

Major Private Equity Firms and Associated Companies	
Private Equity Firm	Company
York Capital Management	FHIA
Angeles Equity Partners and Clearlake Capital Group	American Construction Source
GarMark Partners	West Shore Home
Kassel Equity Group	Kassel Enterprises
Providence Equity Partners	EverCommerce
Huron Capital Partners	Huron Capital Partners
Webster Capital and Sorenson Capital	Webster Capital

Remodeling

Professional Remodeler

Finding A Home In Home Improvement

“The attributes private equity investors find attractive in remodeling are most pronounced in home improvement companies. “I can’t say I have a lot of data on the matter, but what we saw was replacement or specialty contractors are more attractive to private equity investors,” researcher Will says. She gives private equity-backed American Exteriors and RF Installations as examples. “They’ve seen success in engaging with those types of companies.”

Home improvement contractors are known for higher numbers of projects, with a lower price per job. Statewide, for instance, purchased by FHIA on private equity’s dime, generated \$61 million in revenue from over 4,000 individual jobs in 2019.

Maybe most compelling, investor Ogden says, is home improvement’s exceptional resistance to recessions, as we saw following the mortgage meltdown. From 2007 to 2011, combined annual spending on kitchen and bath remodels and room additions fell by \$43 billion. Meanwhile, exterior replacement spending not only didn’t drop but increased its share of overall spending by more than a third to 23 percent, according to Harvard’s Joint Center for Housing Studies.

What To Expect Now

Considering the private equity investments already made into the industry, and the effect money like this has had in other industries, home improvement companies can expect considerable changes, some that come with long-term implications.

Here are five outcomes we anticipate:” – James F. McClister, Managing Editor, *Professional Remodeler*

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1. Roll Ups

“Consistency and growth are hallmarks of private equity. Bain & Company’s 2020 Global Private Equity Report found that for the last decade firms have averaged annual returns of 15.3 percent. One avenue for that growth is consolidation, says HomeAdvisor chief economist Mischa Fisher.

“Consolidation is a very common private equity playbook,” says Fisher, who’s observed the inroads private equity has made into home improvement. “They want to find a market they can dominate in order to secure super normal profits.”

In remodeling, the prevailing brand of private equity consolidation, at least so far, is a roll up.

“Private equity investors love the ‘roll up,’” he says. “A firm finds a type of business in an industry it likes and buys up a whole bunch of them.” In other words, a roll up links a number of smaller companies – sometimes under a single brand – and leverages the combined resources and knowledge to gain prominence in the market.

West Shore Home, for instance, is a roll up. FHIA, which since August 2019 has purchased both Statewide Remodeling in Texas and Mad City Windows and Baths in Wisconsin, is another roll up, and one that owner Mel Feinberg says is likely to get bigger. “We are looking to expand in other areas of the country, specifically in hurricane and storm-impact zones.”

Roll ups can look different depending on the private equity firm orchestrating them, and the home improvement field will probably experience more than one. Some investors will retain the original brands, others will combine them, while still others will find a space in between. RF Installations, for example, is a roll up of companies purchased by the same stakeholder where the acquisitions are further linked by a uniform marquee.

FHIA’s businesses “may eventually operate under the same banner,” Feinberg says. For now each company is maintaining its brand.”” – James McClister, Managing Editor, *Professional Remodeler*

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2. Turnarounds and Build Ups

““Not all private equity firms operate the same. “Some investors, called ‘turnaround firms,’ go after more troubled businesses that they can get for less money,” explains Ogden.

A troubled business may be one with strong fundamentals but too much debt, in which case the investor may not make many changes to management or strategy, but rather supply resources and optimization. Some businesses are troubled because of mismanagement. Those companies should expect more changes to the business and its management, Ogden says. “If you’re buying a C business, you’re going to come in with a thesis on how you’re going to improve that business right away.”

That’s not the approach Building Industry Partners takes. “We prefer to buy good businesses at prudent valuations and support their vision,” owner Ogden says. It’s also not an approach popular in home improvement.

Statewide Remodeling, for instance, acquired by FHIA through York Capital Management, is Texas’ largest remodeling company and it’s not the stated intention of FHIA to change much about the business. “Statewide Remodeling is a great company, and we’re not looking to change that,” Feinberg says. The purchase was to bring in Statewide’s bath remodeling expertise, he says, and the strategy moving forward will be to leverage resources across its other businesses – a common private equity tactic. “We will be expanding product lines and services across each company we acquire based on the needs of homeowners in each market.”” – James F. McClister, Managing Editor, *Professional Remodeler*

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3. Improved Resilience

““The home improvement industry’s performance during the Great Recession has been a selling point for private equity investors. The pandemic has only highlighted that resilience. “Exterior contractors are particularly attractive,” Ogden says. “Siding, roofing, windows, landscaping – if you can do it without too much interior work during this time, that’s a good thing.”

Still, despite the industry’s ability to withstand or avoid altogether some of the worst impacts of COVID-19, businesses are not sitting on extra capital. As of June, 27 percent of remodelers said they could operate with lowered revenues for only one to three more months before facing “financial difficulty or possibly closure,” according to data from The Farnsworth Group and Home Improvement Research Institute. Private equity can help ensure financial security in tough times.

A 2017 study from the National Bureau of Economic Research found that private equity-backed businesses tend to outperform industry competitors during economic downturns. It reads: “This result can be explained by the ability of PE-backed companies to... raise equity and debt funding in this difficult period, and to lower their cost of capital.”

West Shore Home is not suffering from a lack of resources, but thanks to its partnership with GarMark, it was able to tap into acquisition credit lines as further protection from the impacts of COVID-19, says West Shore Home owner B.J. Werzyn. “We were lucky to be thinking ahead about this.”” – James F. McClister, Managing Editor, *Professional Remodeler*

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4. Increased Financial Acumen

““In 2014, when private equity was first showing up in remodeling, researcher Abbe Will interviewed a number of remodelers who had used private equity investment to see if it was a viable way to achieve scale in the industry. She reported that in their experience one of the “major benefits” of private equity involvement was human capital in the form of “sophisticated financial acumen and best practices development.”

We still see that benefit today. It has certainly been the case for West Shore Home and now FHIA, Statewide, and Mad City Windows and Baths. “We complement each other,” owner Feinberg says. “We bring industry expertise and [private equity] brings strength in finance and mergers and acquisitions.”

5. Industry Spillover

“If private equity is here to stay, its impact won’t be limited to the businesses seeing investment. There is likely to be what’s called “industry spillovers,” according to a comprehensive evaluation of private equity impacts on industries conducted by professors Serdar Aldatmaz and Gregory Brown of George Mason University and The University of North Carolina, respectively.

The two examined data on 19 industries across 52 countries that had seen private equity investment. They determined that the investment applied pressure to industry competitors to keep pace with performance gains, ultimately elevating the industry overall. The data shows that within one year of private equity investment levels increasing, employment growth in that industry increases 0.6 percent, labor productivity growth increases 0.8 percent, and profitability growth increases by 2.9 percent.”” – James F. McClister, Managing Editor, *Professional Remodeler*

Remodeling

HBS Dealer

Building material spending should boom in 2021

““Almost \$400 billion could be spent on building materials next year, and it will be a big shift toward single-family home construction spending with total growth at about 10%. He said “about 25% of next year’s growth will be spending on single-family home construction materials.” This year took a big hit due to the cycle time of home construction being delayed by the pandemic. “And that cycle time is going to result in a big-time boom next year,” Burns says.

Part of Burns’s overall spending forecast includes a surge in building materials spending due to the number of homes that were built in the early 2000s, soon approaching the age of 15 to 20 years old, and are due for remodeling projects. About 46.4 million homes were due for a remodel in 2015 with about 48.6 million due in 2020. But looking ahead to 2022, more than 51 million homes will require updates and upgrades. “All of that (building) boom from 20 years ago should result in strong repair and remodeling,” Burns says. Burns is projecting big project remodeling to fall 2% next year but rise 8% in 2022. Single-family homes under homeownership should rise 3% next year, however, with the falloff occurring in rental homes. Overall, Burns said repair and remodeling spending “should grow by about 6% in 2021.

Multifamily spending will be a drag on spending, though. Pointing to August indicators, multifamily permits were down 14% as starts declined 3% on a month-over-month basis. In contrast, single-family permits rose 6% as starts increased by 4% in August. Custom home builder orders are strong, Burns said, as multifamily construction declines. Burns notes that his firm was already forecasting a multifamily decline due to previous overbuilding in past decades.”” – Andy Carlo, HBS Dealer

Remodeling

HBS Dealer

Building material spending should boom in 2021

“Another bright spot for residential construction and remodeling is who is unemployed and who is still working. “Generally, people who are well qualified and college-educated are doing better,” Burns said. According to Burns, the current unemployment rate is understated because 3.9 million people between the ages of 24 and 69 have dropped out of the labor force. Burns believes many are staying home due to homeschooling children during the pandemic and will return to the workforce eventually. And while most job losses have been temporary, from 1.4 million near the start of the year to 26 million in April, permanent job losses are about 2.5 million, according to Burns. Roughly 6.8 million workers lost their jobs during the Great Recession compared to about 3.8 million as a result of the pandemic. Permanent unemployment peaked at 10.5% during the Great Recession with that figure standing at 6.1% now. But job losses have been concentrated in lower-income brackets, which have the least impact on home builders, Burns noted.

In the meantime, money is flowing into single-family rental construction. “Rental (home) growth around the country isn’t falling anywhere, unlike apartments,” Burns said. American Homes For Rent is building at least 1,500 homes per year and is now the 40th largest home builder in the country. Burns said that the home rental market is “no longer an existing-home game, it’s a new home game.”

Among current building materials categories, Burns said that “the decking industry is on fire” because consumers are spending money on quality composite decking as they remain in their homes longer. Other strong categories including lumber, HVAC, lawn and garden, and roofing products. But a majority of building material dealers are reporting shortages of materials, especially when it comes to lumber and OSB. That trend could continue for months to come as manufacturers and suppliers continue to play catch-up following COVID-19 shutdowns and restrictions.” – Andy Carlo, HBS Dealer

Existing House Sales

National Association of Realtors

August 2020 sales: 6.000 million

	Existing Sales	Median Price	Mean Price	Month's Supply
August	6,000,000	310,600	342,500	3.1
July	5,860,000	305,500	338,000	3.0
2019	5,430,000	278,800	314,900	4.0
M/M change	2.4%	1.7%	1.3%	3.3%
Y/Y change	10.5%	11.4%	8.8%	-22.5%

All sales data: SAAR

Existing House Sales

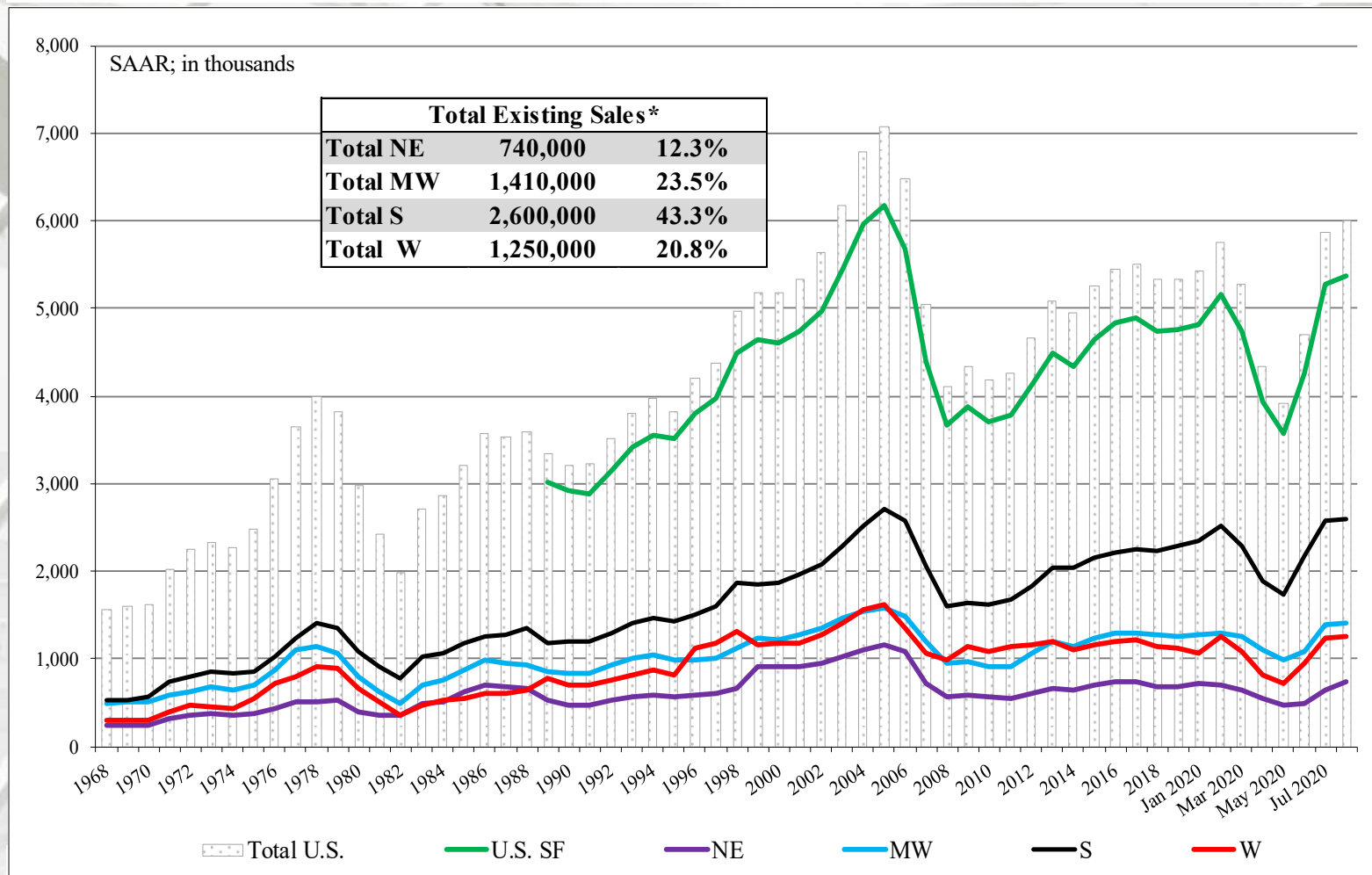
	Existing SF Sales	SF Median Price	SF Mean Price	
August	5,370,000	315,000	345,700	
July	5,280,000	309,500	340,900	
2019	4,840,000	281,900	317,000	
M/M change	1.7%	1.7%	1.4%	
Y/Y change	11.0%	11.7%	9.1%	
	NE	MW	S	W
August	740,000	1,410,000	2,600,000	1,250,000
July	650,000	1,390,000	2,580,000	1,240,000
2019	700,000	1,290,000	2,300,000	1,140,000
M/M change	13.8%	1.4%	0.8%	0.8%
Y/Y change	5.7%	9.3%	13.0%	9.6%

All sales data: SAAR.

Source: <https://fred.stlouisfed.org/series/EXHOSLUSM495S>; 9/22/20

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Existing House Sales



* Percentage of existing sales.

Shift Towards Vacation Home Localities

ZIP Codes with	Market Share in 2019	Market Share in 2020	YoY Change
5% or more vacation home share	12.4%	13.8%	58.6%
10% or more vacation home share	7.4%	8.7%	67.1%
20% or more vacation home share	3.9%	4.9%	79.9%
Nation			42.2%

Note: The vacation (or second home market) home market is a relatively small portion of the total home purchase market (estimated at about 10%). It is currently about 5% of the home purchase loan market today (see later in the report for details). Most vacation homes are purchased for cash. This helps explain how the overall percentage gets to 10%. Distinguishing vacation homes from the rest is challenging. As noted earlier, about 5% of rate locks on home purchase loans pertain to second homes (largely vacation homes). But as noted, most vacation homes are purchased with cash and thus cannot be tracked using closed loans or rate locks. Normally we would use recorded deed transactions. However, this presents two problems: There is no flag in the public records to denote a vacation home. Usually what is used as a proxy is a mailing address that is different from the property address, but this is not fully accurate. Public record data lags a purchase contract to buy a home by a few months. The pandemic has slowed the deed recordation process, thus increasing the lag. To get a solid bead on vacation home trends in real time, we combined two sources: 1) 2010 Census data on the percentage of homes in a zip code that are seasonal dwellings. We used 3 filters: 5%, 10%, or 20% of the dwellings in a zip are seasonal dwellings. 2) We then looked at the change in second home locks on a year-over-year basis compared to non-second homes.

Source: AEI Housing Center, www.AEI.org/housing and Optimal Blue.

AEI Housing Center

“ZIP codes which traditionally have larger vacation home shares have far outpaced the rest of the purchase rate lock market over the last two months. ZIP codes with at least a 5% vacation home share have increased 59% while the market as a whole has only increased 42%. When focusing on zips with 10% or 20% vacation home share, the year-over-year change increases to 67% and 80% respectively. This fits the pattern of Americans moving to less dense places in attractive localities.” – Edward Pinto, Resident Fellow; Director and Tobias Peter, Research Fellow and Director of Research, AEI Housing Center

Source: <https://www.aei.org/economics/aei-housing-market-indicators-september-2020/>; 9/30/20

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U.S. Housing Prices

Federal Housing Finance Agency

FHFA House Price Index Up 1.0 Percent in July; Up 6.5 Percent from Last Year

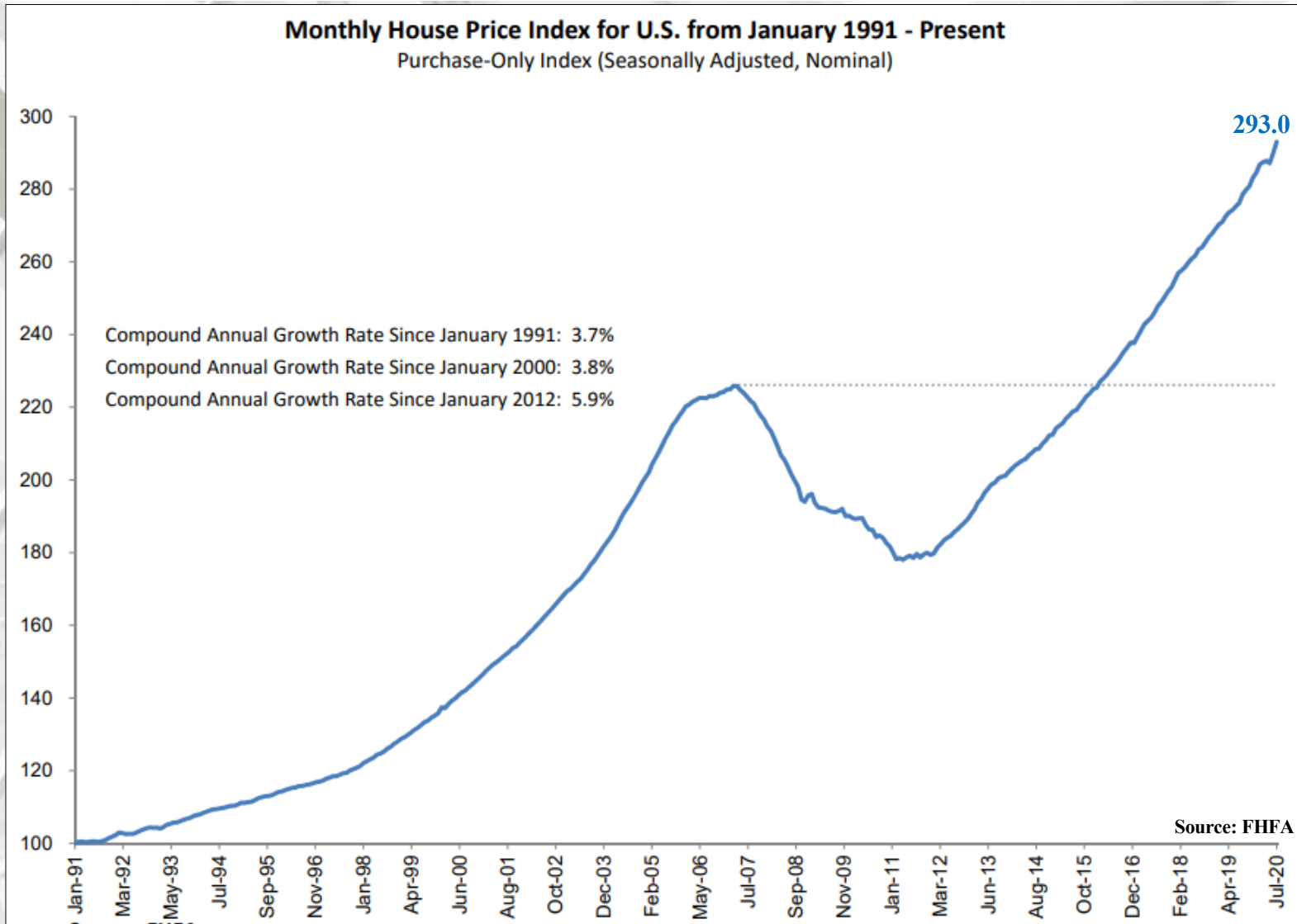
Significant Findings

“House prices rose nationwide in July, up **1.0 percent** from the previous month, according to the latest Federal Housing Finance Agency House Price Index (FHFA HPI). House prices rose **6.5 percent** from July 2019 to July 2020. FHFA also revised its previously reported **0.9 percent** price change for June 2020 to **1.0 percent**.

For the nine census divisions, seasonally adjusted monthly house price changes from June 2020 to July 2020 ranged from **+0.6 percent** in the West North Central division to **+2.0 percent** in the New England division. The 12-month changes ranged from **+5.4 percent** in the West South Central division to **+7.7 percent** in both the Mountain and the East South Central divisions.” – Adam Russell and Raffi Williams, FHFA

“U.S. house prices posted a strong increase in July. Between May and July 2020, national prices increased by over 2 percent, which represents the largest two-month price increase observed since the start of the index in 1991. The dramatic increase in prices this summer can be attributed to the historically low interest rate environment and rebounding housing demand even as the supply of homes for sale remains constrained.” – Dr. Lynn Fisher, Deputy Director of the Division of Research and Statistics, FHFA

U.S. Housing Prices



U.S. Housing Prices

S&P CoreLogic Case-Shiller Index Reports 4.8% Annual Home Price Gain In July

“Data for July 2020 show that home prices continue to increase at a modest rate across the U.S. More than 27 years of history are available for these data series, and can be accessed in full by going to www.spdji.com.

Year-Over-Year

The S&P CoreLogic Case-Shiller U.S. National Home Price NSA Index, covering all nine U.S. census divisions, reported a 4.8% annual gain in July, up from 4.3% in the previous month. The 10-City Composite annual increase came in at 3.3%, up from 2.8% in the previous month. The 20-City Composite posted a 3.9% year-over-year gain, up from 3.5% in the previous month.

Phoenix, Seattle and Charlotte reported the highest year-over-year gains among the 19 cities (excluding Detroit) in July. Phoenix led the way with a 9.2% year-over-year price increase, followed by Seattle with a 7.0% increase and Charlotte with a 6.0% increase. Sixteen of the 19 cities reported higher price increases in the year ending July 2020 versus the year ending June 2020.” – Craig J. Lazzara, Managing Director and Global Head of Index Investment Strategy, S&P Dow Jones Indices

U.S. Housing Prices

S&P CoreLogic Case-Shiller Index Month-Over-Month

“The National Index posted a 0.8% month-over-month increase, while the 10-City and 20-City Composites both posted increases of 0.6% before seasonal adjustment in July. After seasonal adjustment, the National Index posted a month-over-month increase of 0.4%, while the 10-City and 20-City Composites posted increases of 0.5% and 0.6%, respectively. In July, 18 of 19 cities (excluding Detroit) reported increases before seasonal adjustment, while 18 of the 19 cities reported increases after seasonal adjustment.

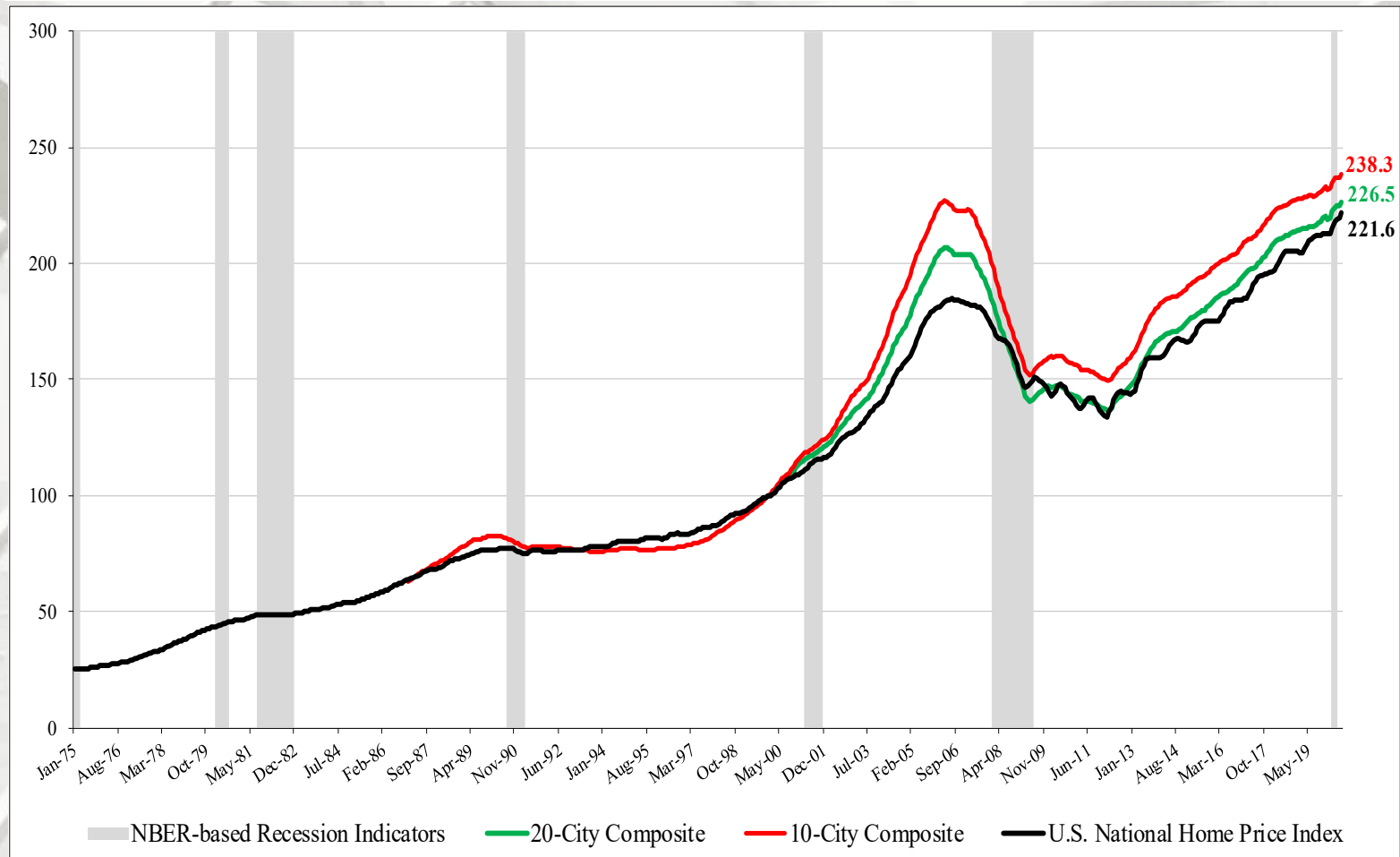
Analysis

Housing prices rose in July. The National Composite Index gained 4.8% relative to its level a year ago, slightly ahead of June’s 4.3% increase. The 10- and 20-City Composites (up 3.3% and 3.9%, respectively) also rose at an accelerating pace in July compared to June. The strength of the housing market was consistent nationally – all 19 cities for which we have July data rose, with 16 of them outpacing their June gains.

In previous months, we’ve noted that a trend of accelerating increases in the National Composite Index began in August 2019. That trend was interrupted in May and June, as price gains decelerated modestly, but now may have resumed. Obviously more data will be required before we can say with confidence that any COVID-related deceleration is behind us.

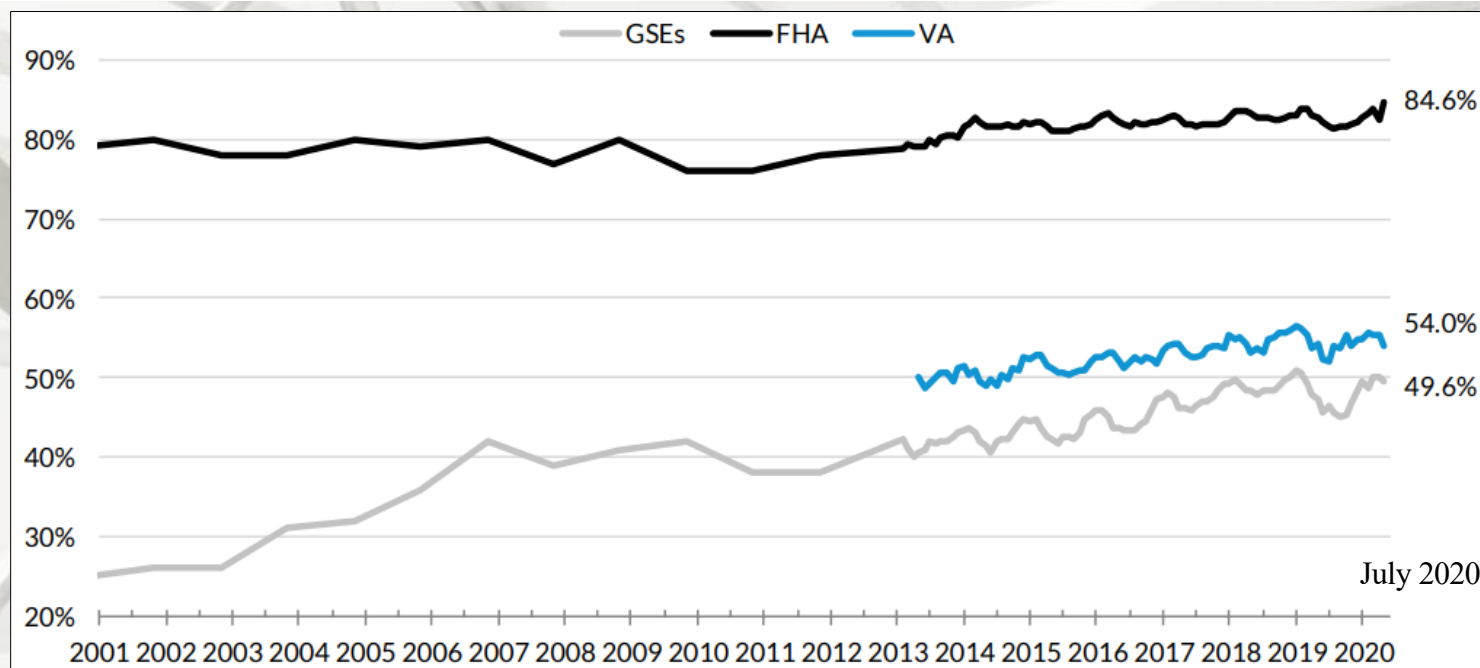
Phoenix’s 9.2% increase topped the league table for July; this is the 14th consecutive month in which Phoenix home prices rose more than those of any other city. Seattle (7.0%), Charlotte (6.0%) and Tampa (5.9%) continue to occupy the next three places, but there was some growth even in the worst performing cities, Chicago (0.8%) and New York (1.3%). Prices were particularly strong in the Southeast and West regions, and comparatively weak in the Midwest and Northeast.” – Craig J. Lazzara, Managing Director and Global Head of Index Investment Strategy, S&P Dow Jones Indices

S&P/Case-Shiller Home Price Indices



* NBER based Recession Indicator Bars for the United States from the Period following the Peak through the Trough (FRED, St. Louis).

First-Time House Buyers



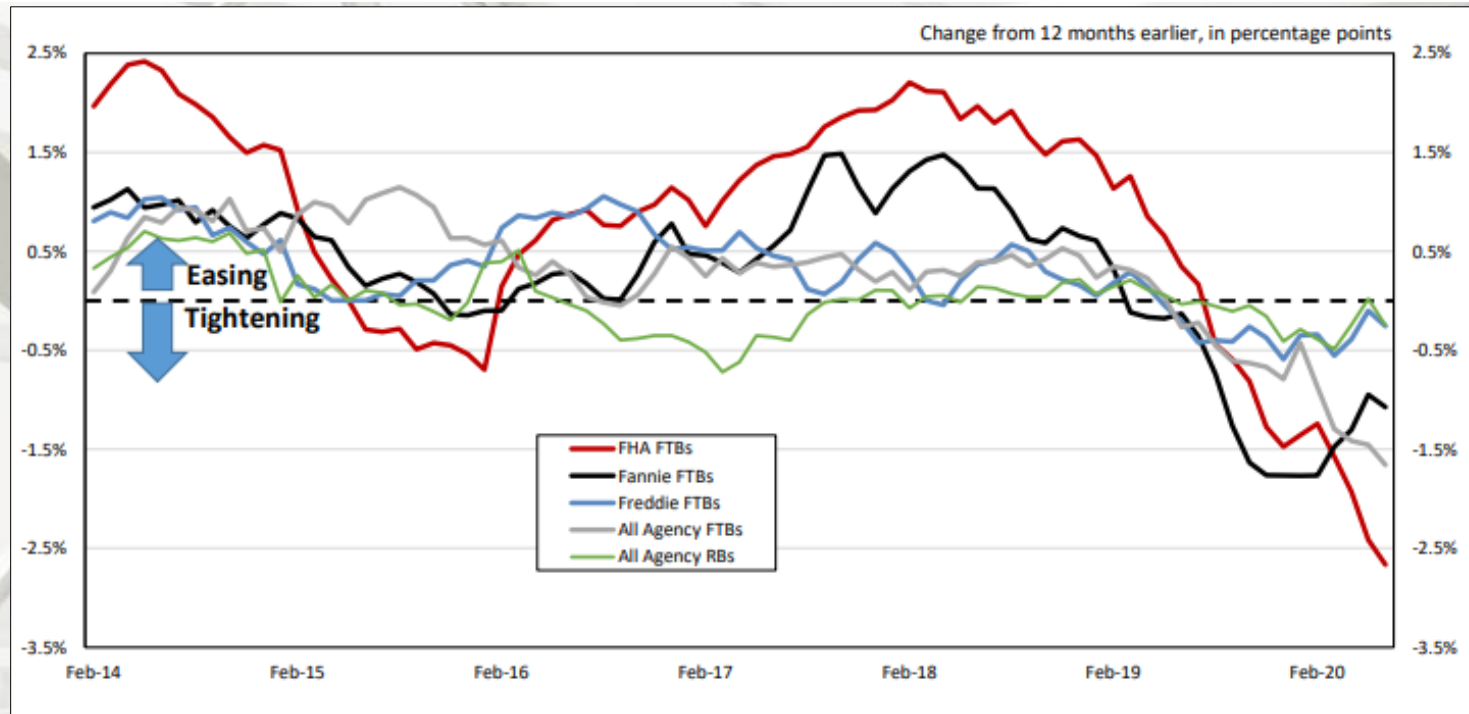
Sources: eMBS, Federal Housing Administration (FHA) and Urban Institute.

Note: All series measure the first-time homebuyer share of purchase loans for principal residences.

Urban Institute

“In July 2020, the FTHB share for FHA, which has always been more focused on first time homebuyers, increased slightly to 84.6 percent. The FTHB share of VA lending declined in July to 54.0 percent. The GSE FTHB share in July was slightly down from June to 49.6 percent. The bottom table shows that based on mortgages originated in July 2020, the average FTHB was more likely than an average repeat buyer to take out a smaller loan, have a lower credit score, and higher LTV, thus paying a higher interest rate.” – Bing Lai, Research Associate, Housing Finance Policy Center

First-Time House Buyers



Note: Includes all types of NMRI purchase loans (primary owner-occupied, second home, and investor loans).

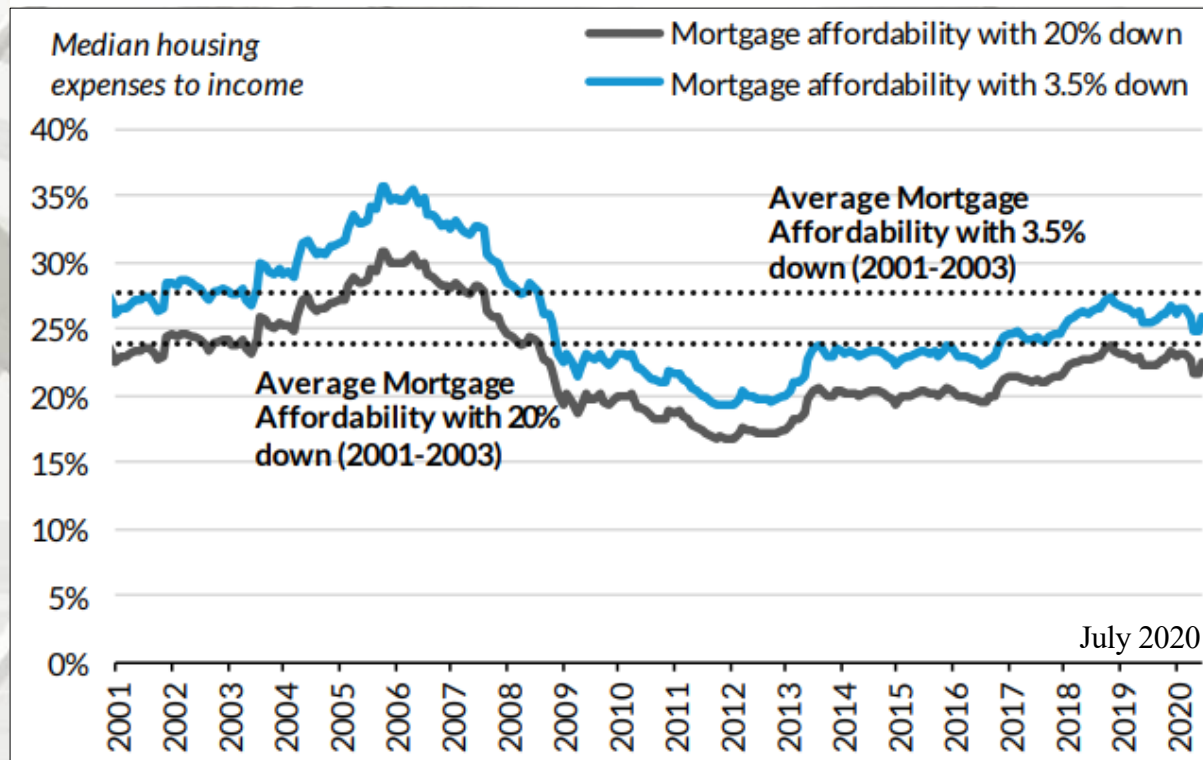
Source: AEI Housing Center, www.AEI.org/housing.

AEI Housing Center

“The First-time Buyer (FTB) MRI continued to decrease led by FHA. Although FHA’s First-time Buyer MRI is still high at 26.0% in June, it is down 2.7 ppts from a year earlier. While this change is encouraging, the agencies should do more to protect first-time buyers from overextending themselves during heightened economic uncertainty.” – Edward Pinto, Resident Fellow; Director and Tobias Peter, Research Fellow and Director of Research, AEI Housing Center

Housing Affordability

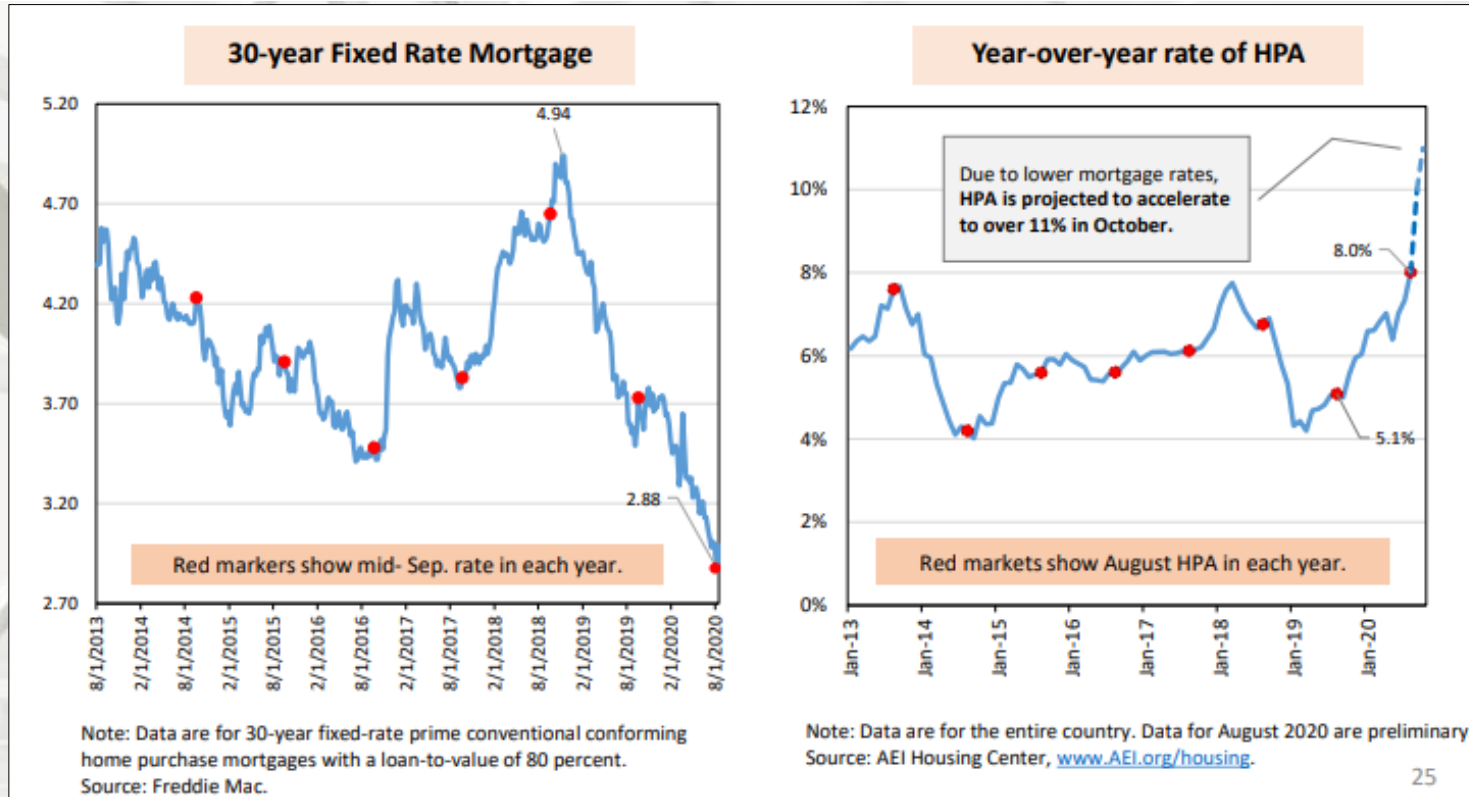
National Housing Affordability Over Time



Urban Institute

“Home prices remain affordable by historic standards, despite price increases over the last 8 years, as interest rates are now near generational lows. As of July 2020, with a 20 percent down payment, the share of median income needed for the monthly mortgage payment stood at 22.6 percent; with 3.5 down, it is 25.8 percent. Since February 2019, the median housing expenses to income ratio has been slightly lower than the 2001-2003 average. ...” – Laurie Goodman, VP, Housing Finance Policy Center

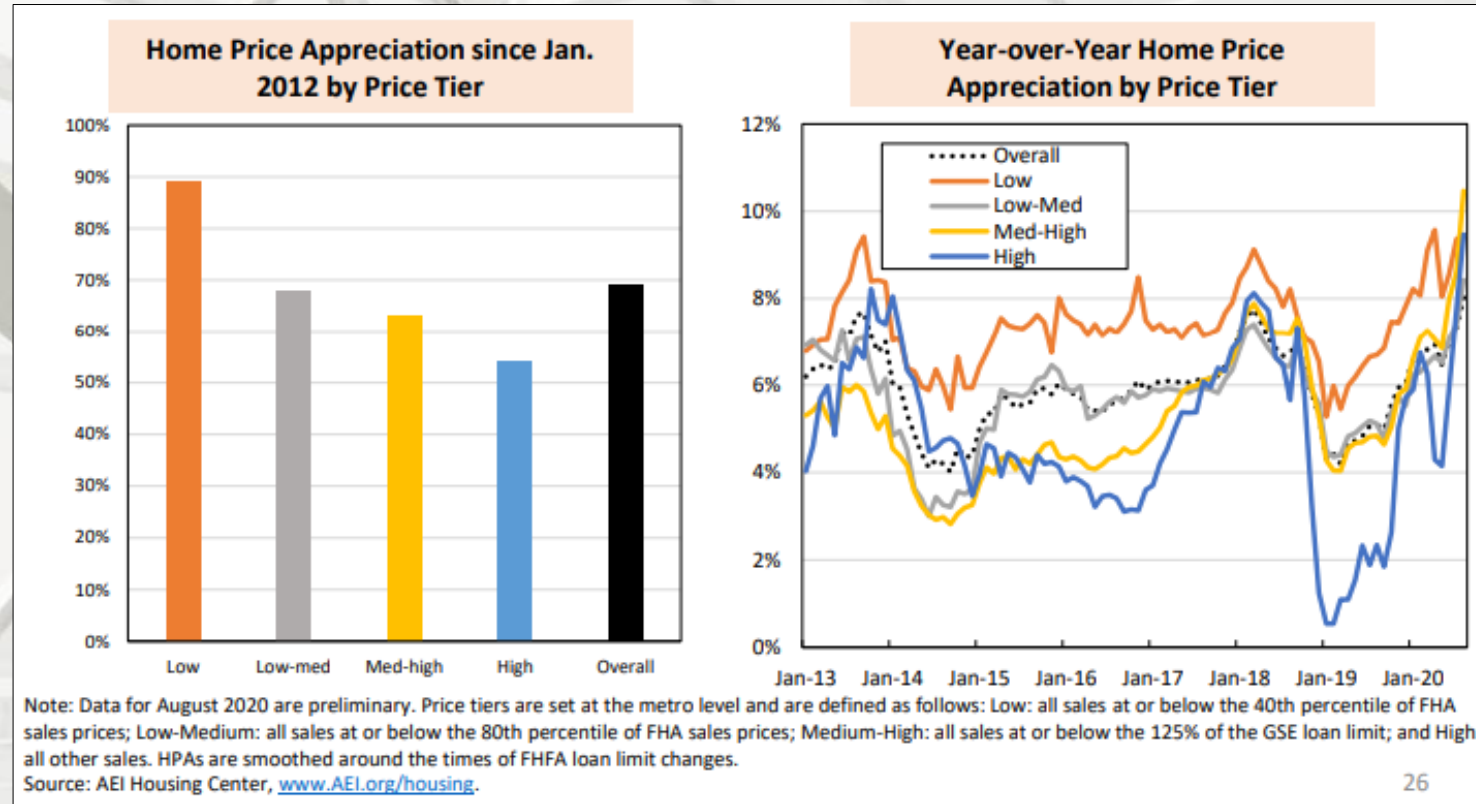
Housing Affordability



AEI Housing Center House Price Appreciation (HPA) by Price Tier

“Preliminary national rate of HPA for August 2020 was 8.0%, up from 5.1% a year ago. Nationally, HPA has ticked up again due to lower mortgage rates. After having increased by 116 basis points from September 2017 to early November 2018, rates have since declined by 206 basis points. Optimal Blue data indicate that the rate of HPA will further accelerate over the coming month.” – Edward Pinto, Resident Fellow; Director and Tobias Peter, Research Fellow and Director of Research, AEI Housing Center

Housing Affordability



AEI Housing Center National House Price Appreciation (HPA) by Price Tier

“There is a large gap in HPA since 2012 between the lower and upper end of the market (left panel). Preliminary numbers for August 2020 indicate that overheating of the low price tier continued (right panel). HPA in the low price tier was 9.4% year-over-year. The med-high and high price tiers are more dependent on the monetary punch bowl and are thus showing strong and accelerating rates of appreciation.” – Edward Pinto, Resident Fellow; Director and Tobias Peter, Research Fellow and Director of Research, AEI Housing Center

Mortgage Credit Availability

Downtrend in mortgage credit availability persisted in September

“The supply of mortgage credit in the US reached another record low in September, continuing a downward trend that was driven by a decline in the conforming loan segment. Mortgage credit availability dwindled by 1.9% to a reading of 118.6 in September, down from 120.9 in August, according to the Mortgage Bankers Association’s Mortgage Credit Availability Index (MCAI). A decline in the MCAI indicates that lending standards are tightening, while increases in the index are indicative of loosening credit.

The MCAI report showed that conventional mortgages decreased by 6.1%, while the government MCAI increased by 1.4%. Within the conventional MCAI component, the jumbo MCAI dipped by 2.1%, and the conforming MCAI slumped by 9.5%.

Mortgage credit supply decreased in September to its lowest level since February 2014, driven in part by a 9.5% decline in the conforming loan segment. This reduction was the result of lenders discontinuing conforming ARM loan offerings in advance of the September 30, 2020, application deadline for GSE-eligible, LIBOR-indexed ARM loans.

Across all loan types, there continues to be fewer low credit score and high-LTV loan programs. The housing market overall is on strong footing, but the data show that lenders are being cautious, given the spike in mortgage delinquency rates in the second quarter, as well as the ongoing economic uncertainty.” – Joel Kan, Associate Vice President of Economic and Industry Forecasting, MBA

Summary

In conclusion:

In August, the United States housing market was mixed. Assessing the month-over-month data yielded increases for single- and multi-family starts; and all permit and housing under construction categories. On a year-over-year basis, most categories were positive, with the exceptions of total multi-family permits and starts, single-family under construction, and single-family completions. New house sales continued upward, recording the largest sales number since 2006. Residential construction spending was positive month-over-month and year-over-year.

Housing, in the majority of categories, remains substantially less than their respective historical averages. The new SF housing construction sector is where the majority of value-added forest products are utilized, and this housing sector has ample room for improvement.

Pros:

- 1) Historically low interest rates are still in place;
- 2) Select builders are beginning to focus on entry-level houses;
- 3) Housing affordability indicates improvement;

Cons:

- 1) Coronavirus19 (Covid19);
- 2) Lot availability and building regulations (according to several sources);
- 3) Laborer shortages;
- 4) Household formations still lag historical averages;
- 5) Changing attitudes towards SF ownership;
- 6) Job creation is improving and consistent but some economists question the quantity and types of jobs being created;
- 7) Debt: Corporate, personal, government – United States and globally;
- 8) Other global uncertainties.

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