

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



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[http://woodproducts.sbio.vt.edu/housing-report.](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 September, most housing indicators were positive. While multi-family housing starts and permits were negative on a month-over-month and a year-over-year basis. Multi-family housing under construction and new house sales were negative on a month-over-month basis. Housing remains a bright spot for the United States economy.

The November 6th Atlanta Fed GDPNow™ model forecast was an aggregate 18.0% increase for residential investment spending in Quarter Four 2020. New private permanent site expenditures were projected at 37.4%; the improvement spending forecast was 6.4%; and the manufactured/mobile expenditures projection was -0.7% (all: quarterly log change and at a seasonally adjusted annual rate).¹

“There are three major reasons why the housing market has held up in 2020. First, low mortgage interest rates provide a significant lift to housing markets. Second, while there are still elevated levels of unemployment, the brunt of the Coronavirus recession has not (yet) hit owner households. The direct effects of the pandemic and associated shutdowns have primarily hit the renter population. In addition, there has been significant support for US housing markets beyond low interest rates in the form of forbearance programs and foreclosure moratoria, which have prevented any fire sales that would lead to possible house price declines. Third, there has been a strong undercurrent of housing demand, driven primarily by demographic forces (the aging Millennial generation, who are entering peak homebuying years), but also possibly accelerated by a shift in preference toward single-family housing and away from apartments and condos in dense urban areas.”² – Len Kiefer, Deputy Chief Economist, The Economic & Housing Research Group, Freddie Mac

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; 11/6/20;

² <http://lenkiefer.com/2020/10/29/october-2020-us-housing-and-mortgage-market-outlook/>; 10/29/20

September 2020

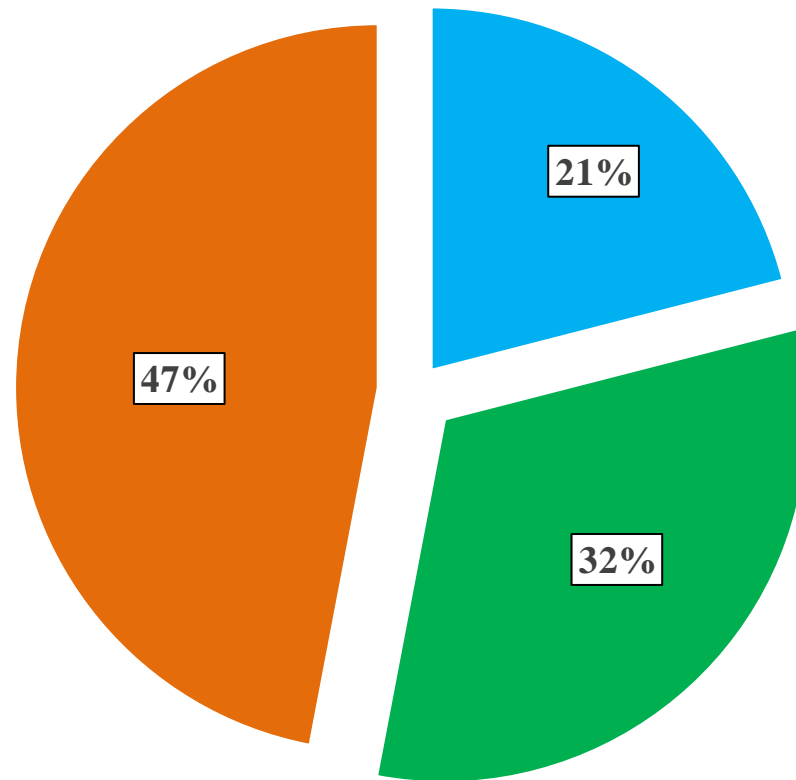
Housing Scorecard

	M/M	Y/Y
Housing Starts	▲ 1.9%	▲ 11.1%
Single-Family (SF) Starts	▲ 8.5%	▲ 22.3%
Multi-Family (MF) Starts*	▼ -16.3%	▼ -16.6%
Housing Permits	▲ 5.2%	▲ 8.1%
SF Permits	▲ 7.8%	▲ 24.3%
MF Permits*	▼ -0.9%	▼ -19.2%
Housing Under Construction	0.0%	▲ 4.6%
SF Under Construction	▲ 2.7%	▲ 3.5%
Housing Completions	▲ 15.3%	▲ 25.8%
SF Completions	▲ 2.1%	▲ 8.1%
New SF House Sales	▼ -3.5%	▲ 32.1%
Private Residential Construction Spending	▲ 2.8%	▲ 9.9%
SF Construction Spending	▲ 5.7%	▲ 8.2%
Existing House Sales ¹	▲ 9.4%	▲ 20.9%

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

M/M = month-over-month; Y/Y = year-over-year

New Construction's Percentage of Wood Products Consumption

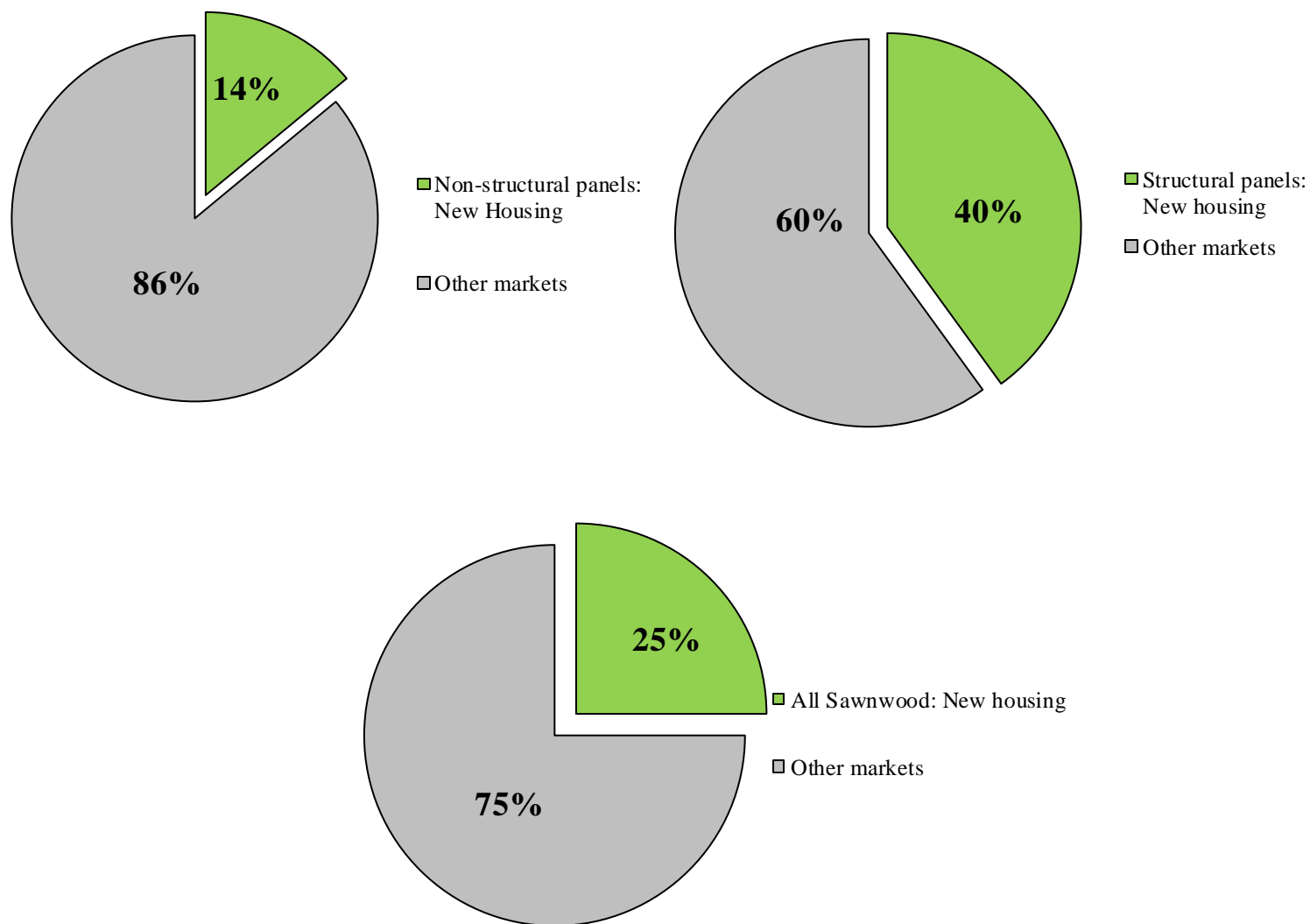


■ Non-structural panels

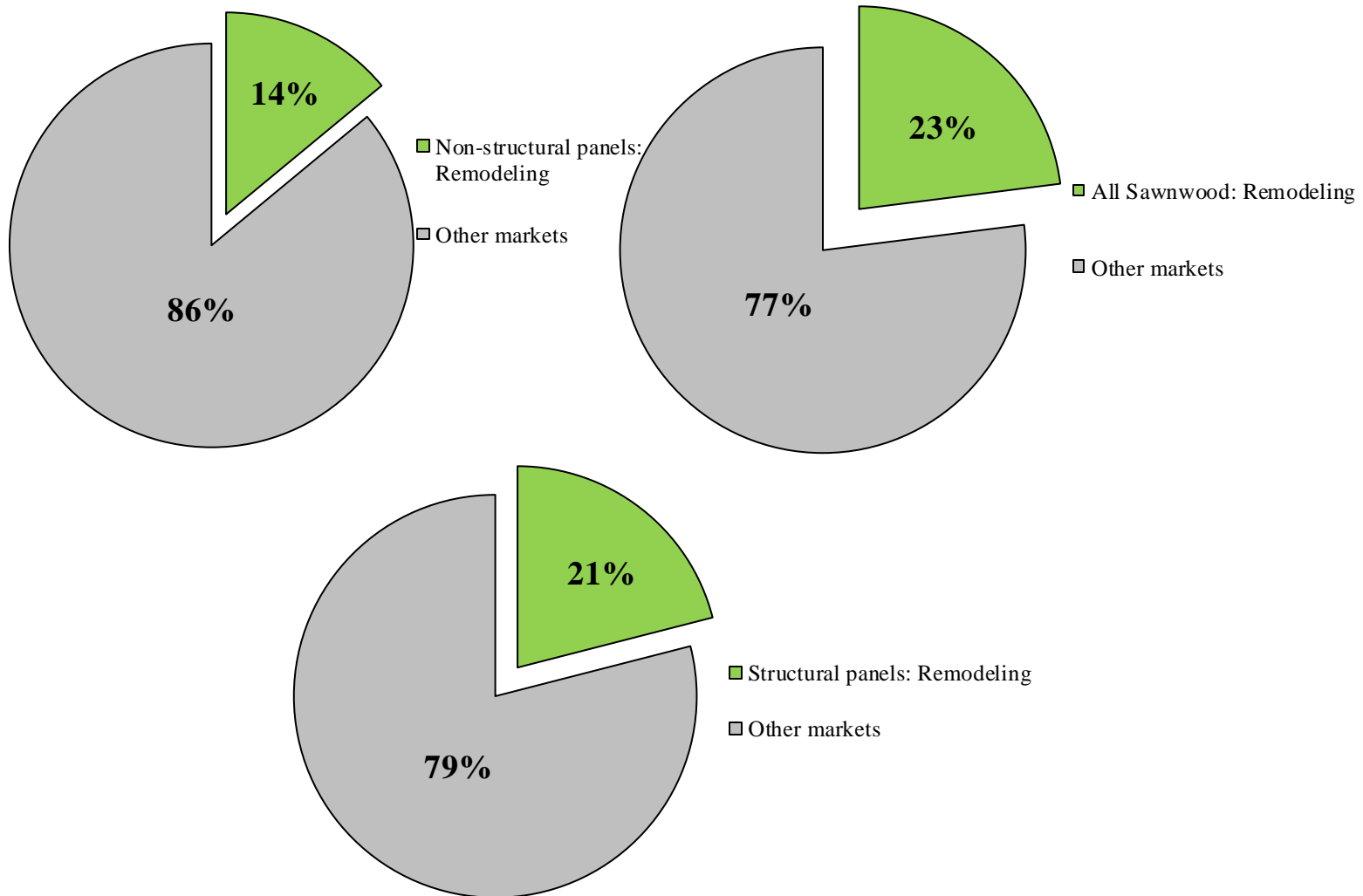
■ Total Sawnwood

■ Structural panels

New SF Construction Percentage of Wood Products Consumption



Repair and Remodeling's Percentage of Wood Products Consumption



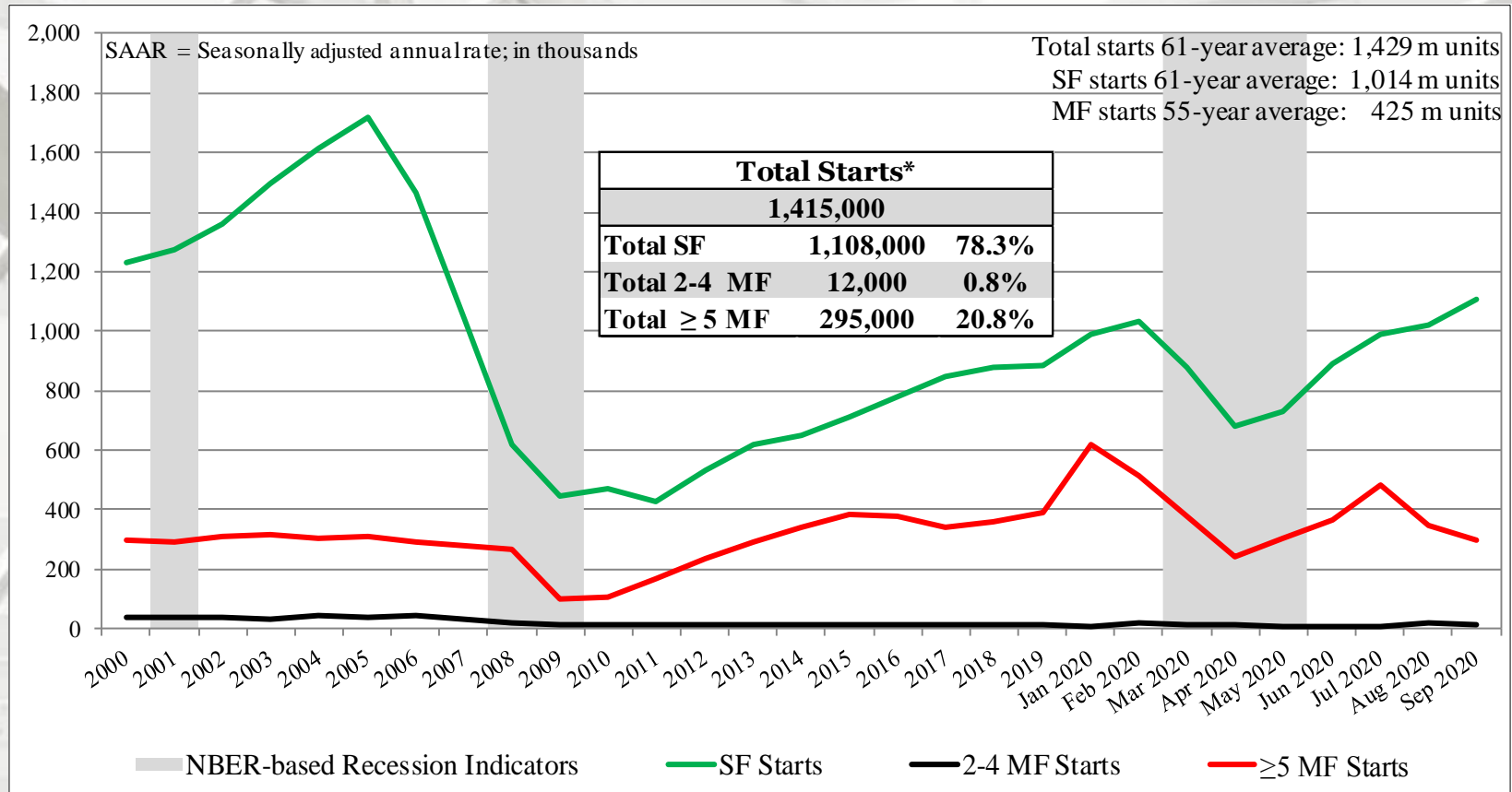
New Housing Starts

	Total Starts*	SF Starts	MF 2-4 Starts**	MF ≥5 Starts
September	1,415,000	1,108,000	12,000	295,000
August	1,388,000	1,021,000	21,000	346,000
2019	1,274,000	906,000	11,000	357,000
M/M change	1.9%	8.5%	-42.9%	-14.7%
Y/Y change	11.1%	22.3%	9.1%	-17.4%

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

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

Total Housing Starts

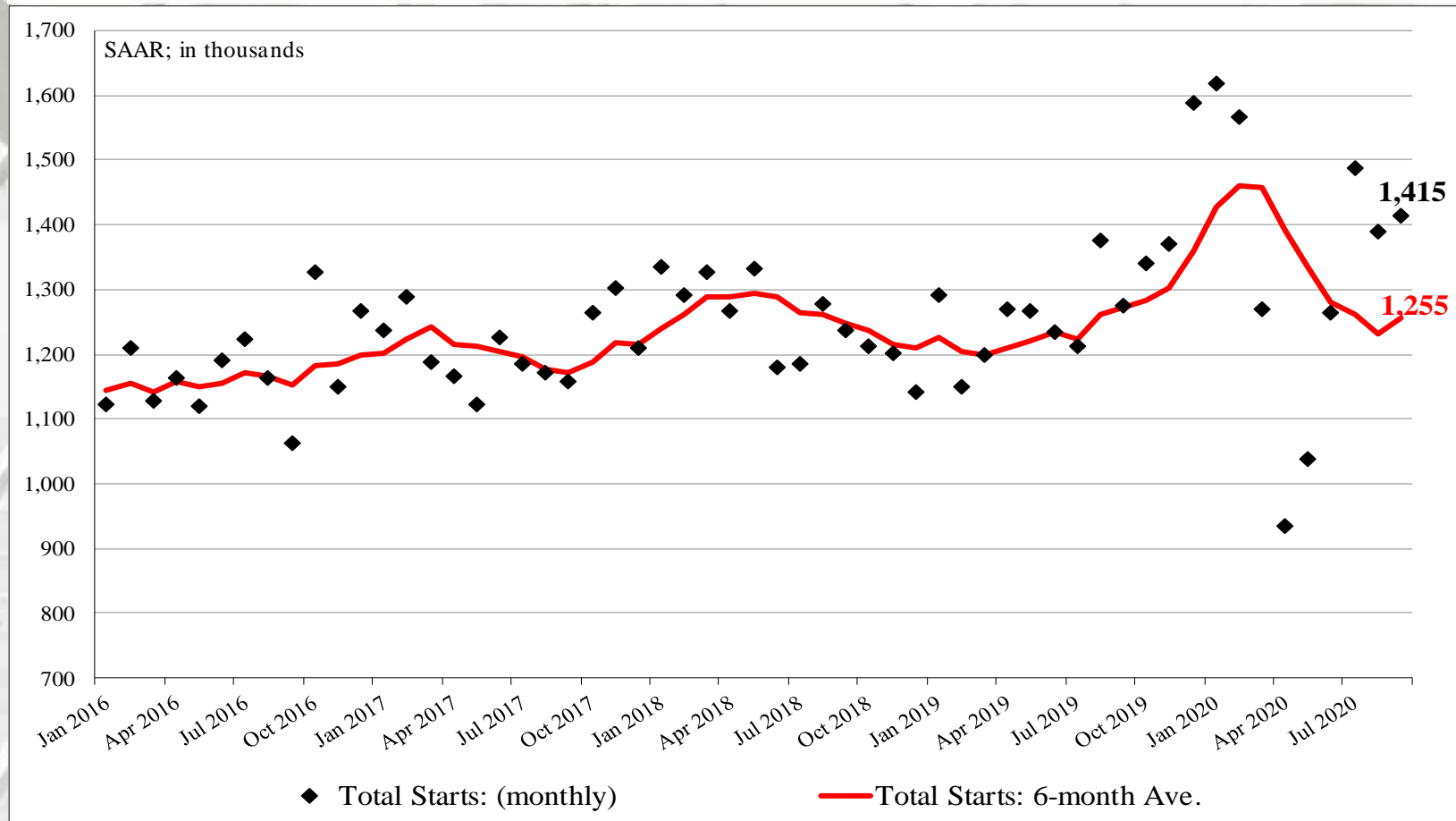


US DOC does not report 2 to 4 multi-family starts directly; this is an estimation: $((\text{Total starts} - (\text{SF} + \geq \text{MF})))$.

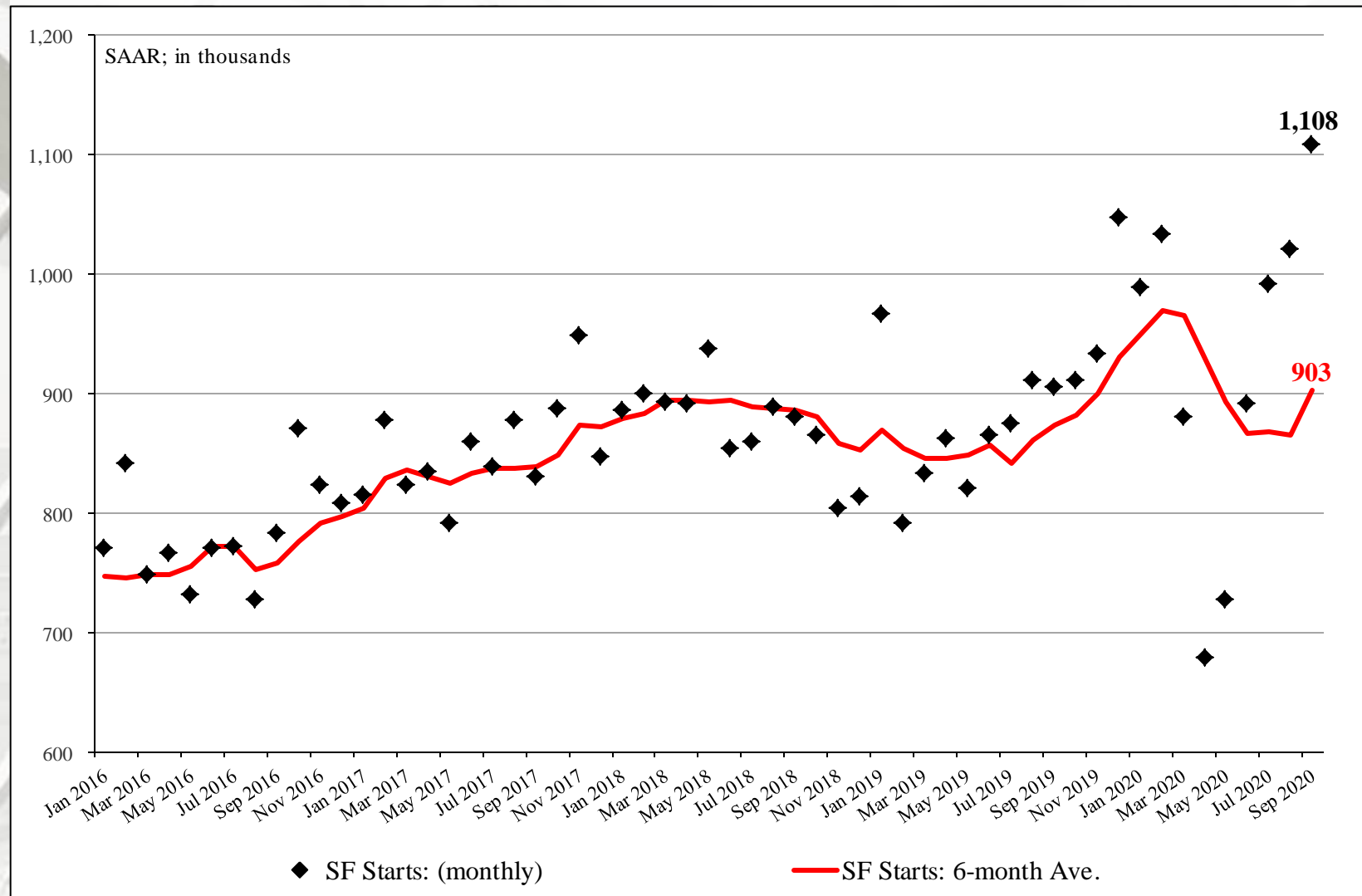
* Percentage of total starts.

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

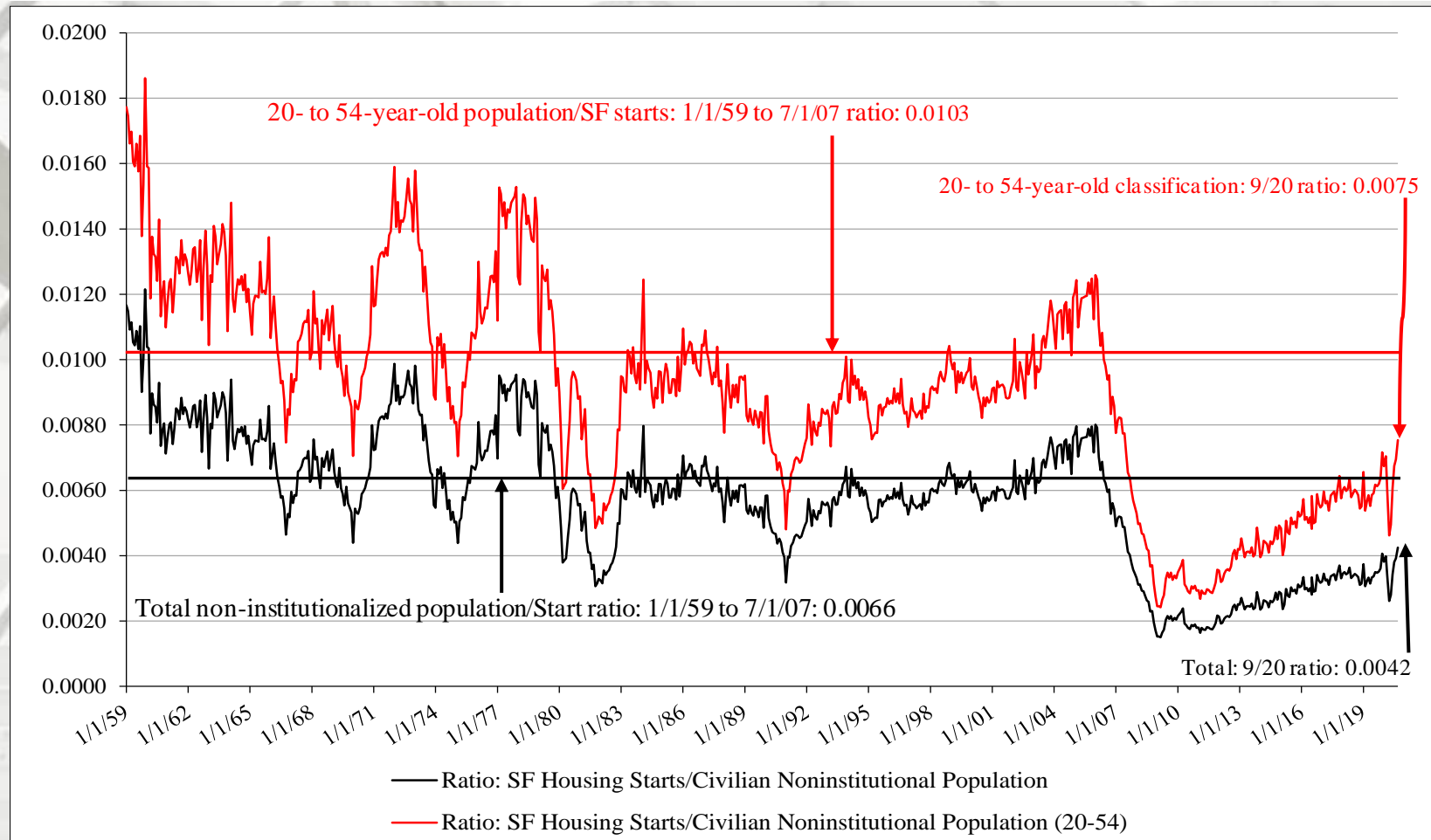
Total Housing Starts: Six-Month Average



SF Housing Starts: Six-Month Average



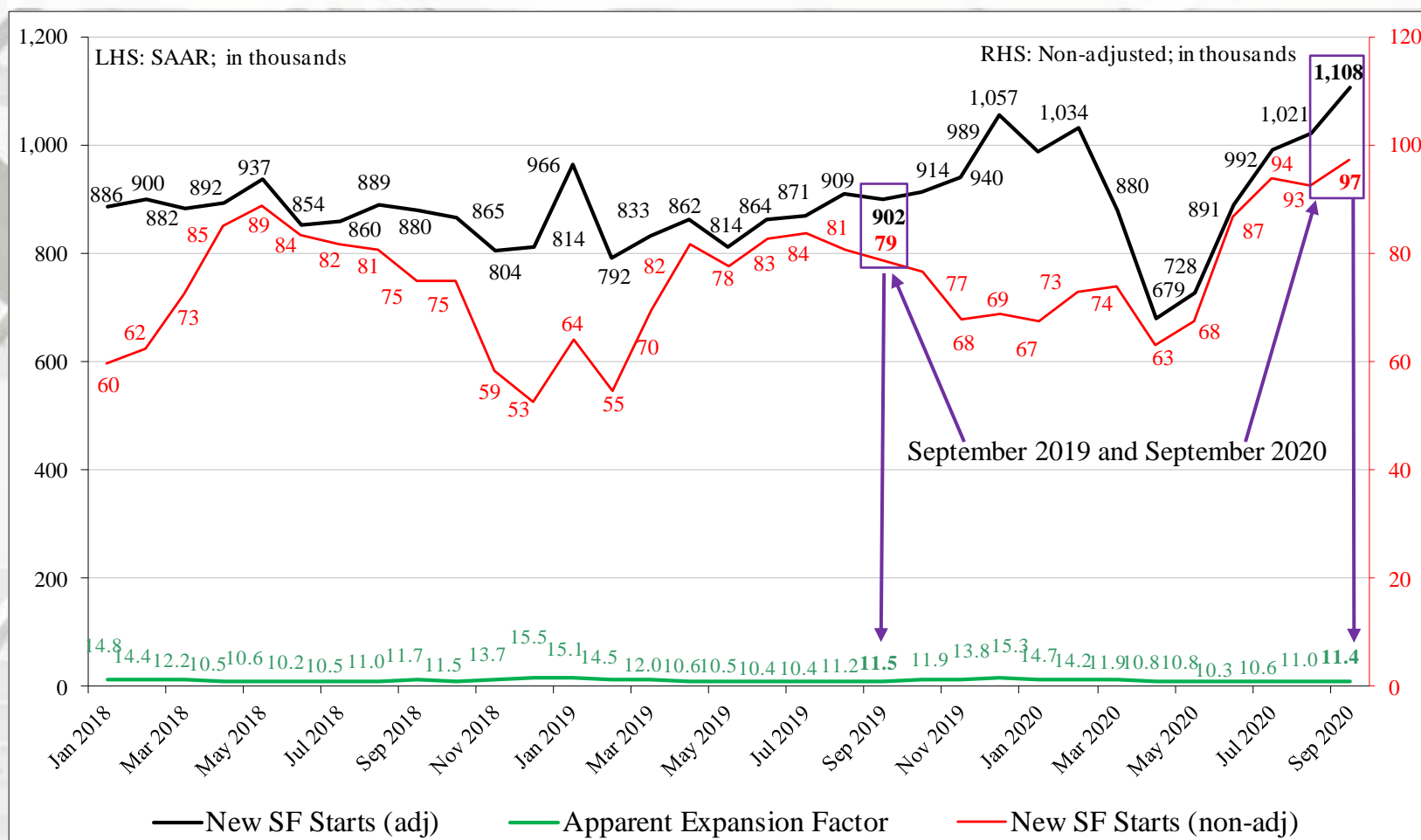
New SF Starts



New SF starts adjusted for the US population

From January 1959 to September 2007, the long-term ratio of the total US non-institutionalized population to new SF starts is 0.0066; in September 2020 it was 0.0042 – an increase from August. The long-term ratio of non-institutionalized population, aged 20 to 54 is 0.0103; in September 2020 was 0.0075 – also an increase from August. 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**
September	145,000	70,000	75,000
August	87,000	58,000	29,000
2019	115,000	60,000	55,000
M/M change	66.7%	20.7%	158.6%
Y/Y change	26.1%	16.7%	36.4%
	MW Total	MW SF	MW MF
September	165,000	133,000	32,000
August	245,000	159,000	86,000
2019	158,000	117,000	41,000
M/M change	-32.7%	-16.4%	-62.8%
Y/Y change	4.4%	13.7%	-22.0%

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

** US DOC does not report multi-family starts directly; this is an estimation (Total starts – SF starts).

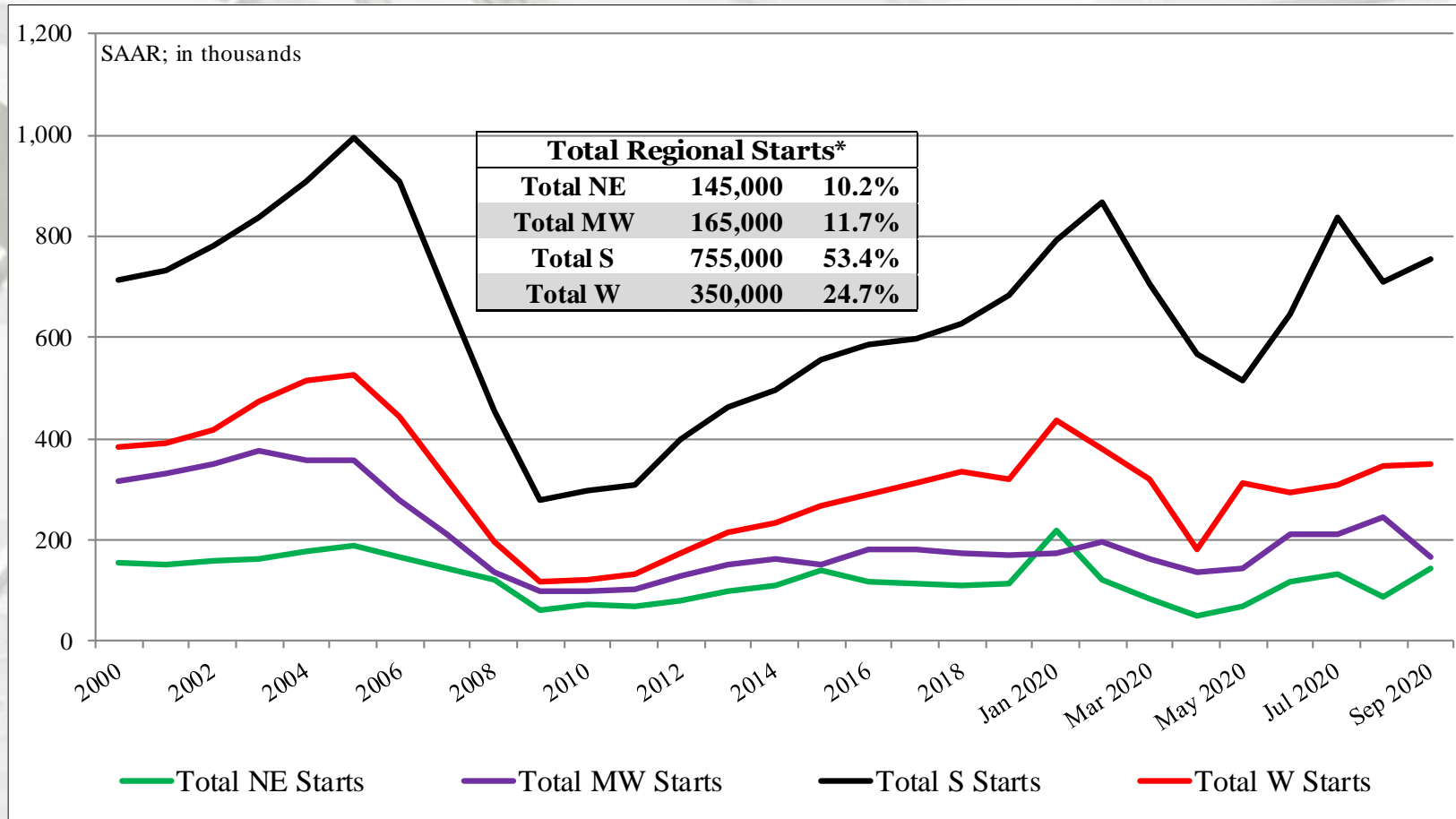
New Housing Starts by Region

	S Total	S SF	S MF**
September	755,000	645,000	110,000
August	711,000	548,000	163,000
2019	693,000	520,000	173,000
M/M change	6.2%	17.7%	-32.5%
Y/Y change	8.9%	24.0%	-36.4%
	W Total	W SF	W MF
September	350,000	260,000	90,000
August	345,000	256,000	89,000
2019	308,000	209,000	99,000
M/M change	1.4%	1.6%	1.1%
Y/Y change	13.6%	24.4%	-9.1%

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

** US DOC does not report multi-family starts directly; this is an estimation (Total starts – SF starts).

New Housing Starts by Region

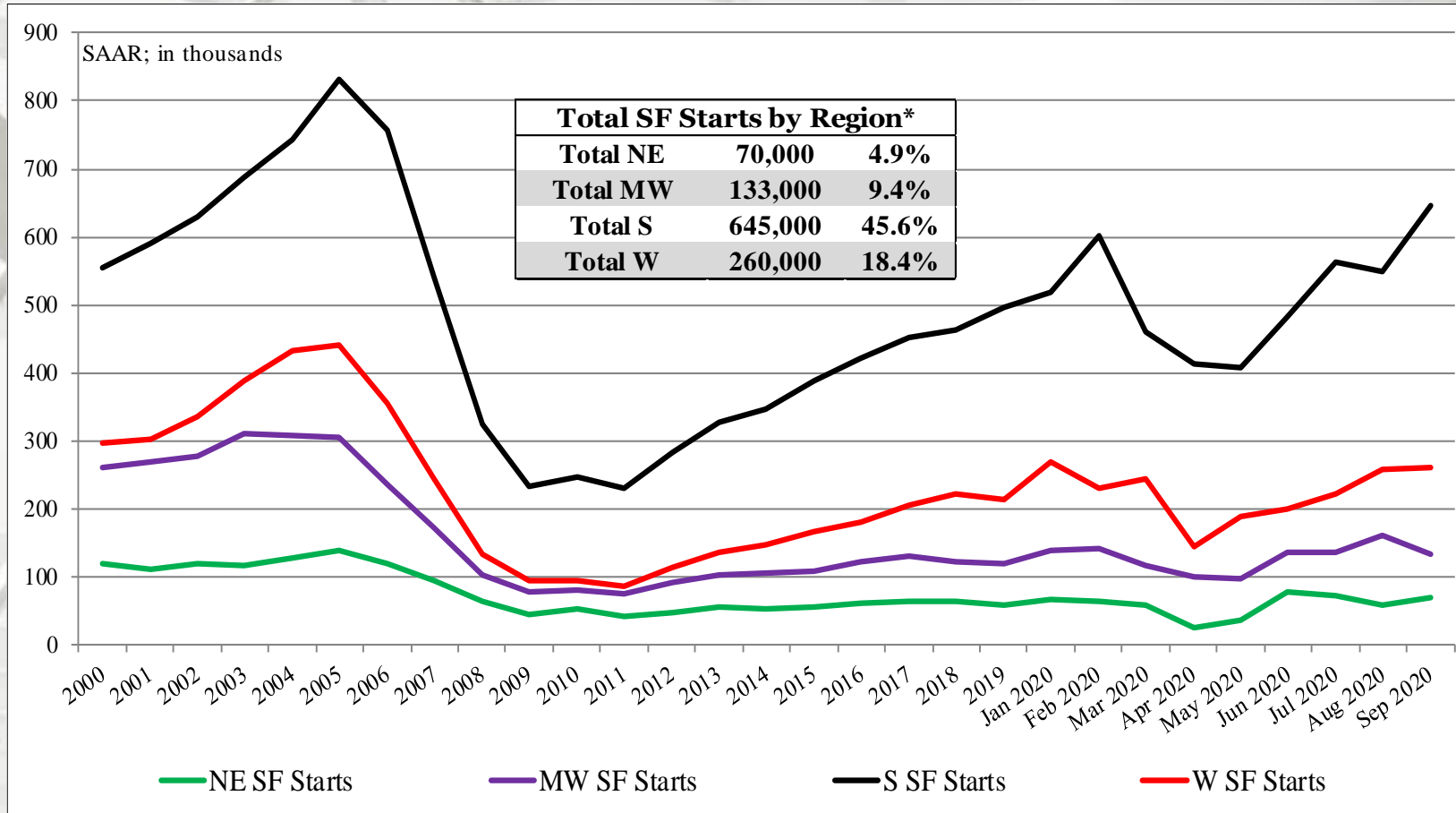


NE = Northeast, MW = Midwest, S = South, W = West

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

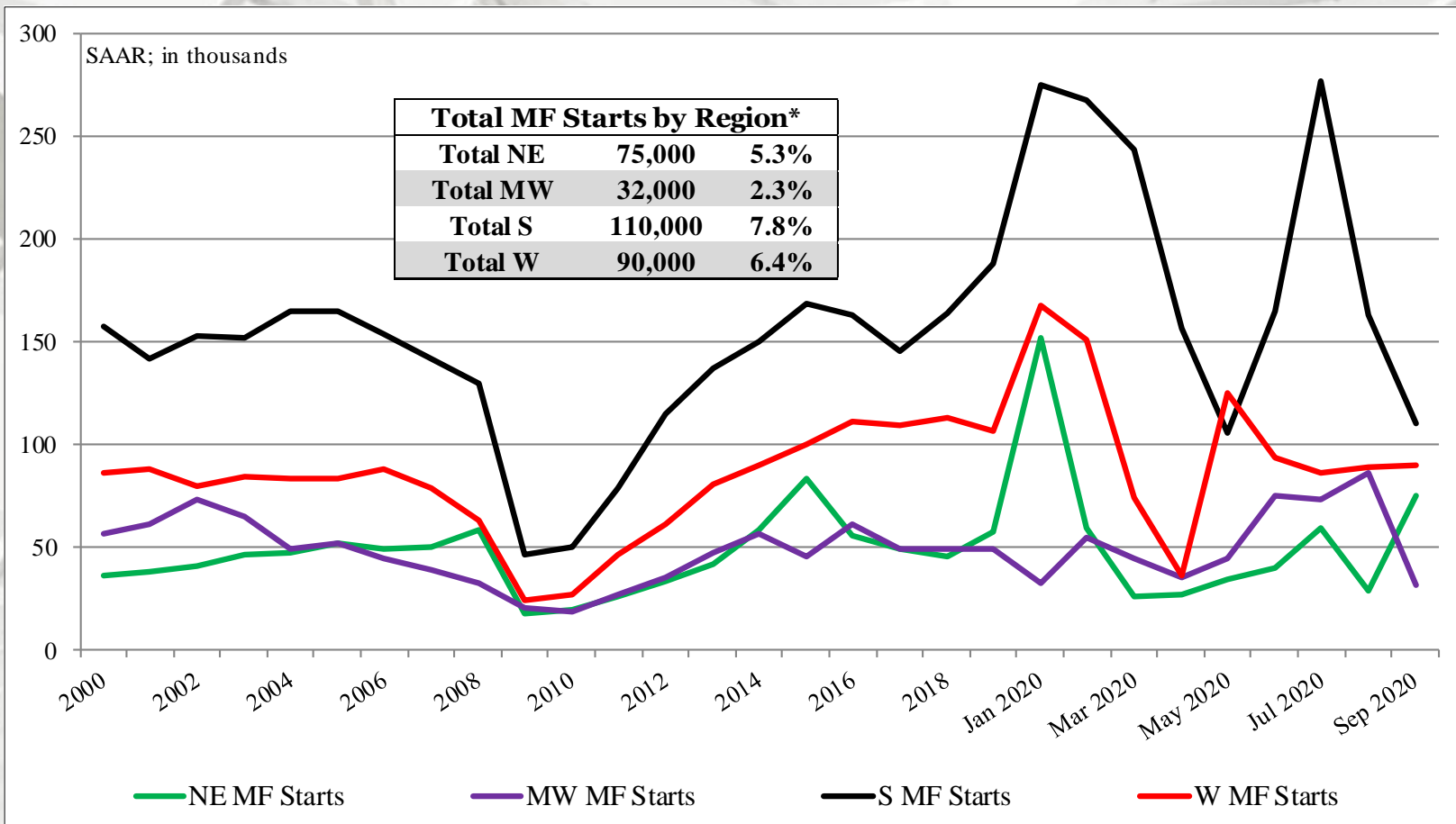


NE = Northeast, MW = Midwest, S = South, W = West

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

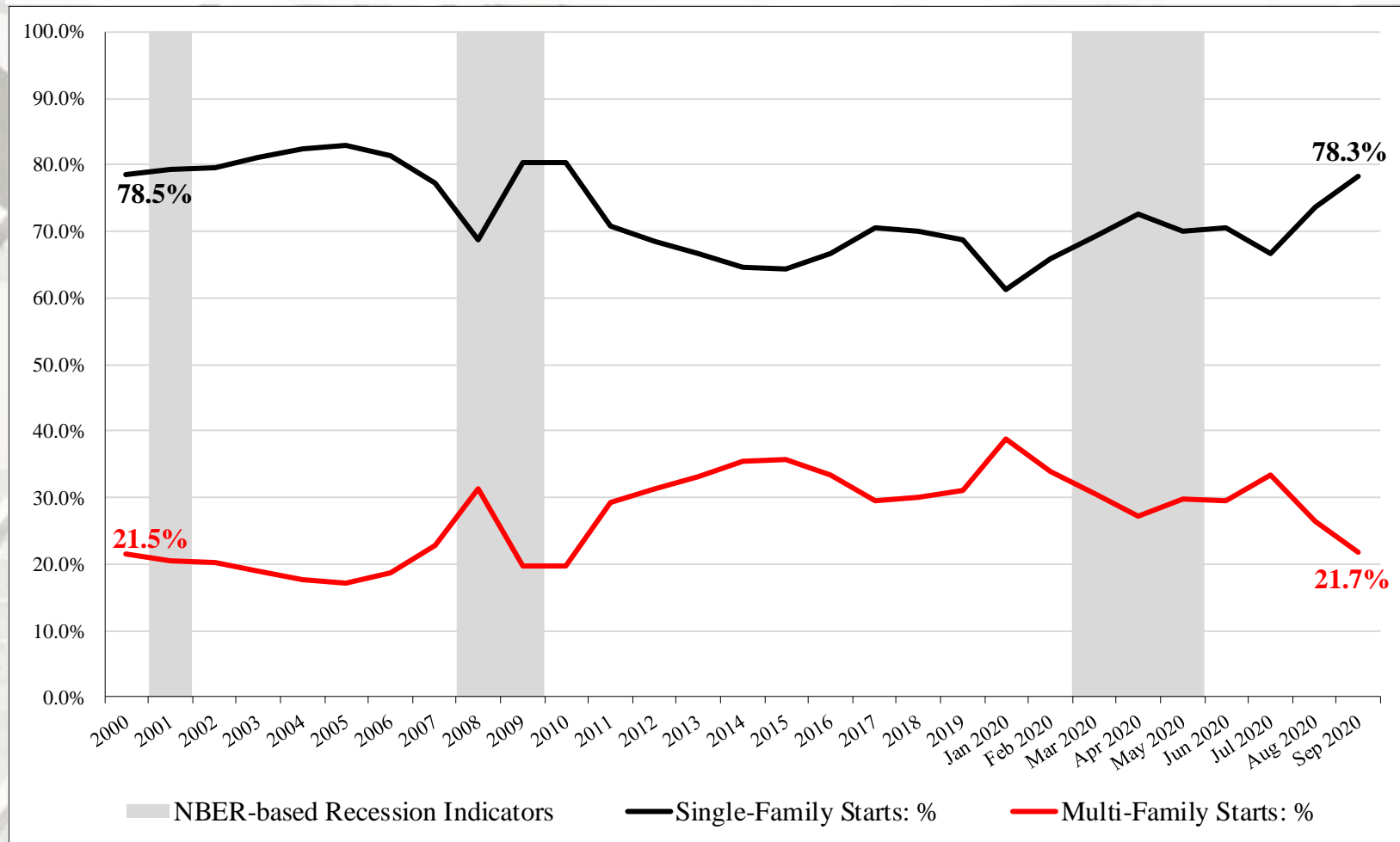


NE = Northeast, MW = Midwest, S = South, W = West

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 (%)



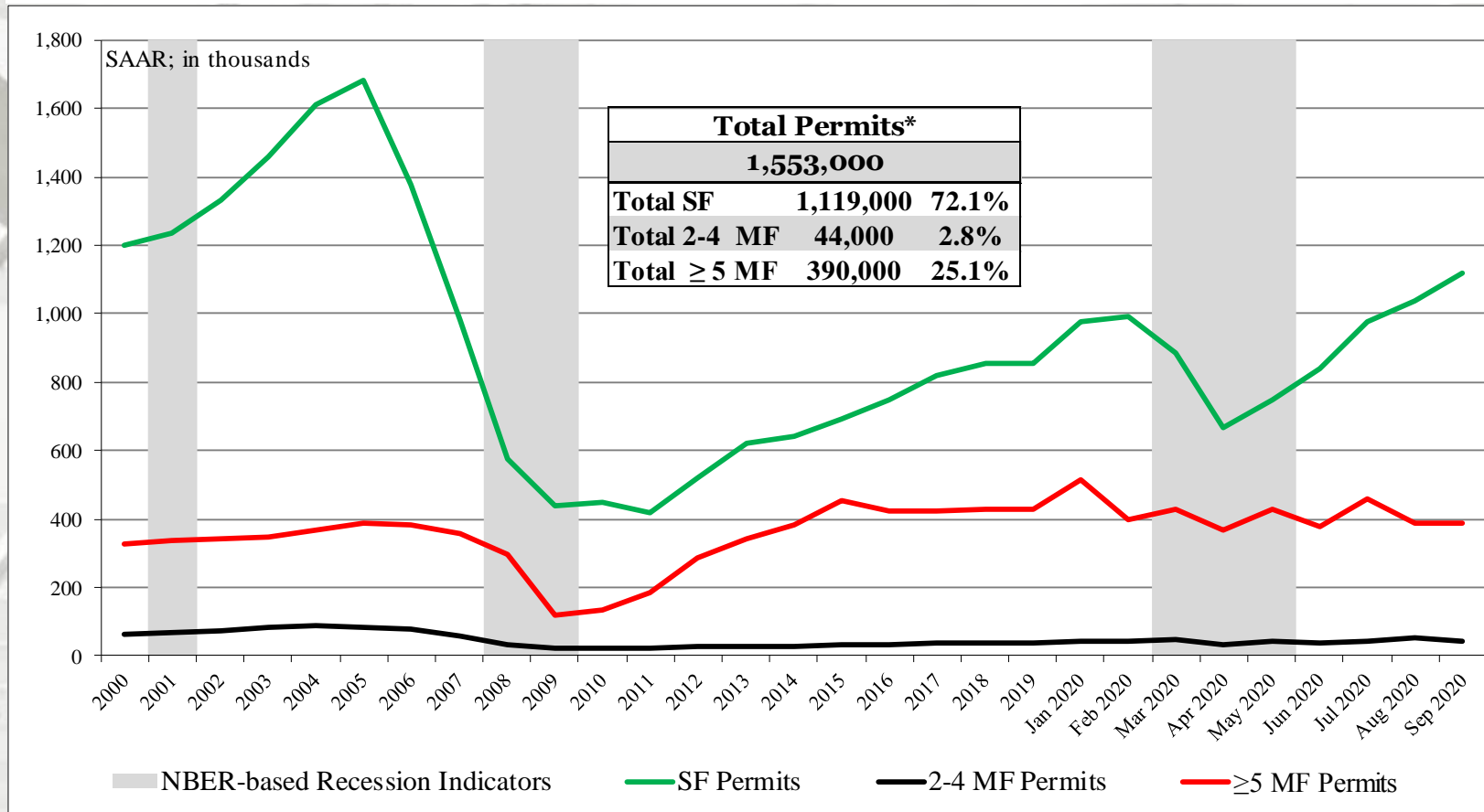
NBER based Recession Indicator Bars for the United States from the Period following the Peak through the Trough (FRED, St. Louis).

New Housing Permits

	Total Permits*	SF Permits	MF 2-4 unit Permits	MF ≥ 5 unit Permits
September	1,553,000	1,119,000	44,000	390,000
August	1,476,000	1,038,000	52,000	386,000
2019	1,437,000	900,000	36,000	501,000
M/M change	5.2%	7.8%	-15.4%	1.0%
Y/Y change	8.1%	24.3%	22.2%	-22.2%

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

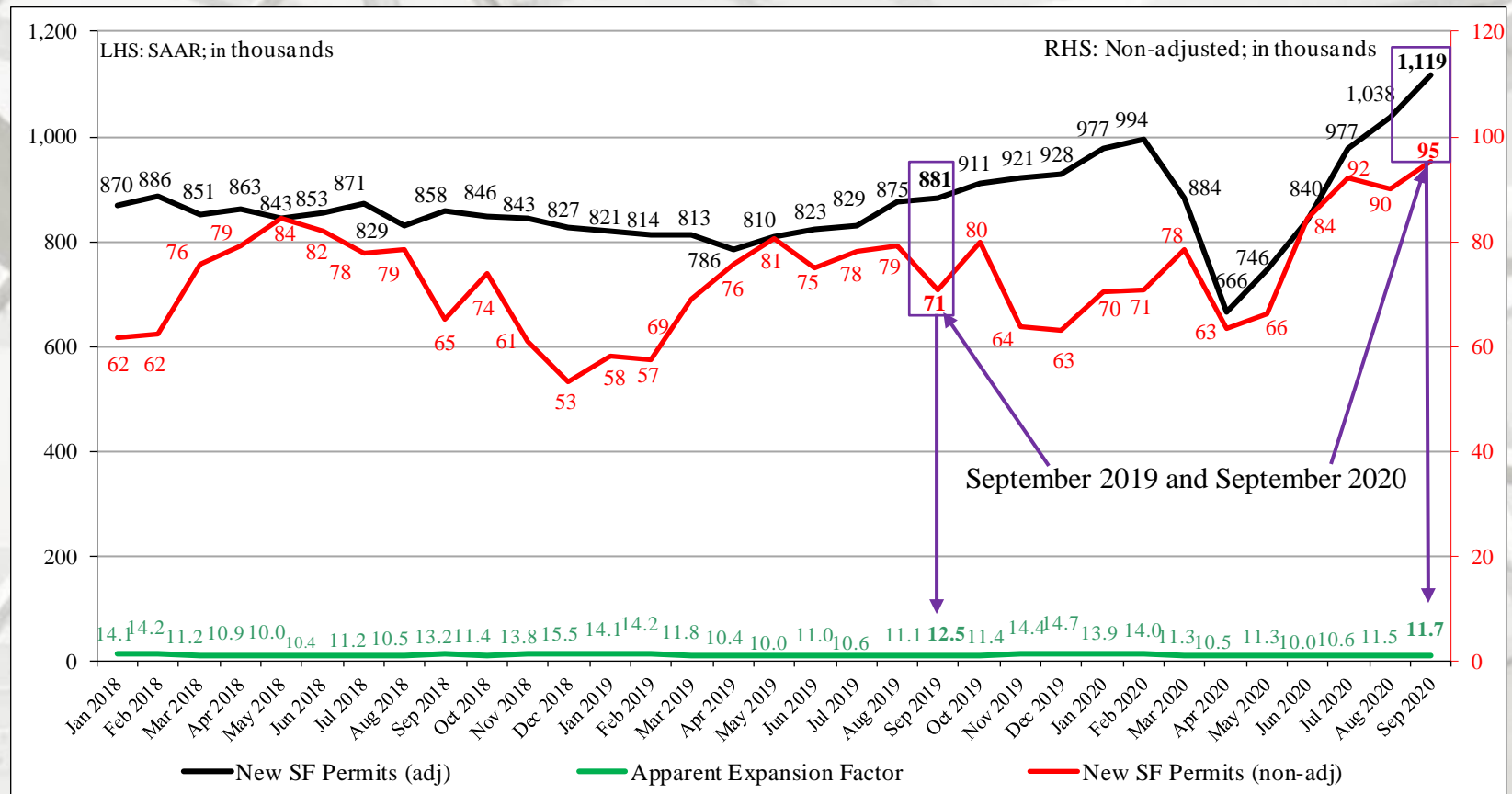
Total New Housing Permits



* 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**
September	151,000	71,000	80,000
August	120,000	59,000	61,000
2019	131,000	48,000	83,000
M/M change	25.8%	20.3%	31.1%
Y/Y change	15.3%	47.9%	-3.6%
	MW Total*	MW SF	MW MF**
September	206,000	146,000	60,000
August	188,000	137,000	51,000
2019	177,000	124,000	53,000
M/M change	9.6%	6.6%	17.6%
Y/Y change	16.4%	17.7%	13.2%

NE = Northeast; MW = Midwest

* All data are SAAR

** US DOC does not report multi-family permits directly; this is an estimation (Total permits – SF permits).

New Housing Permits by Region

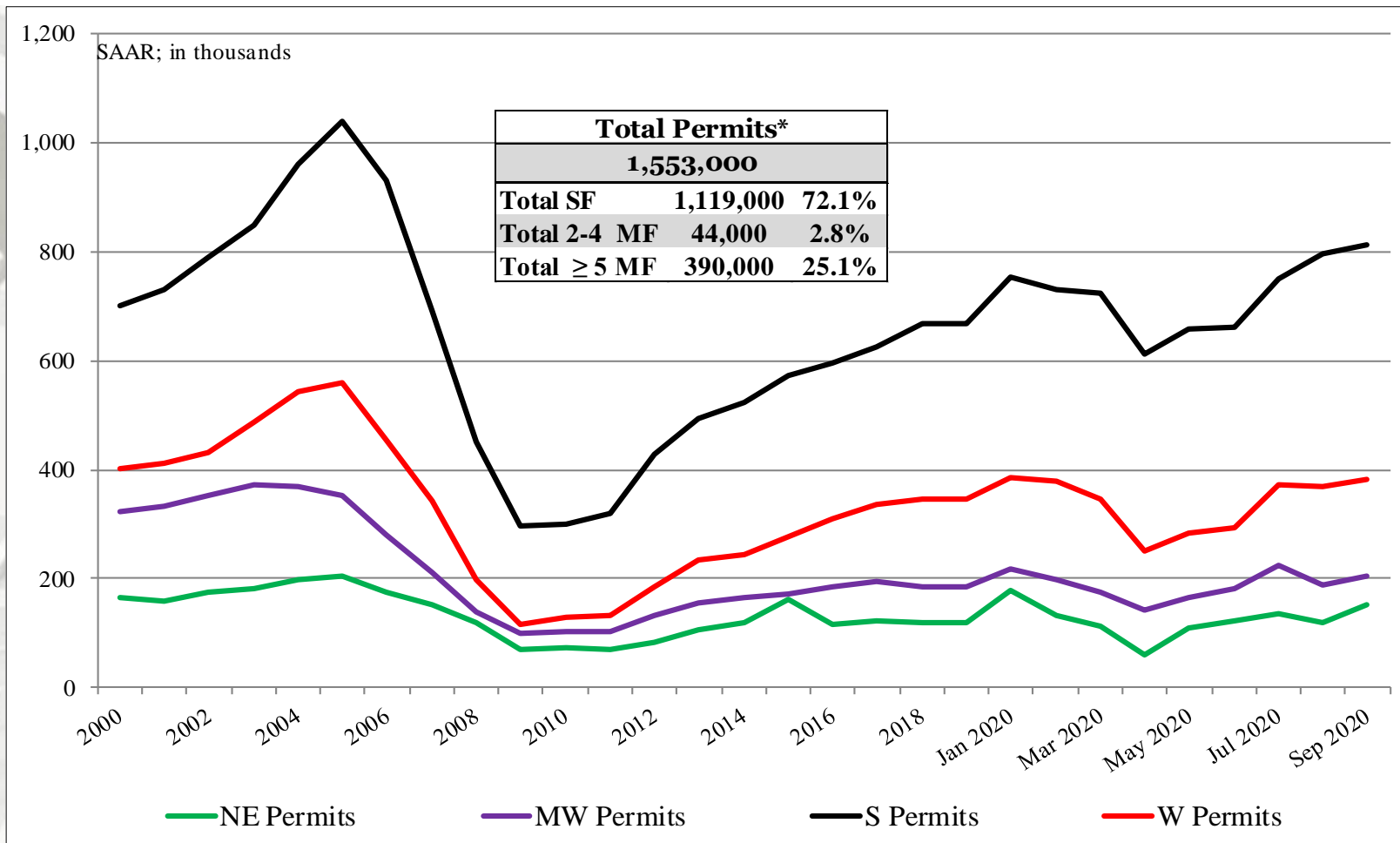
	S Total*	S SF	S MF**
September	814,000	633,000	181,000
August	798,000	597,000	201,000
2019	756,000	518,000	238,000
M/M change	2.0%	6.0%	-10.0%
Y/Y change	7.7%	22.2%	-23.9%
	W Total*	W SF	W MF**
September	382,000	269,000	113,000
August	370,000	245,000	125,000
2019	373,000	210,000	163,000
M/M change	3.2%	9.8%	-9.6%
Y/Y change	2.4%	28.1%	-30.7%

S = South; W = West

* All data are SAAR

** US DOC does not report multi-family permits directly; this is an estimation (Total permits – SF permits).

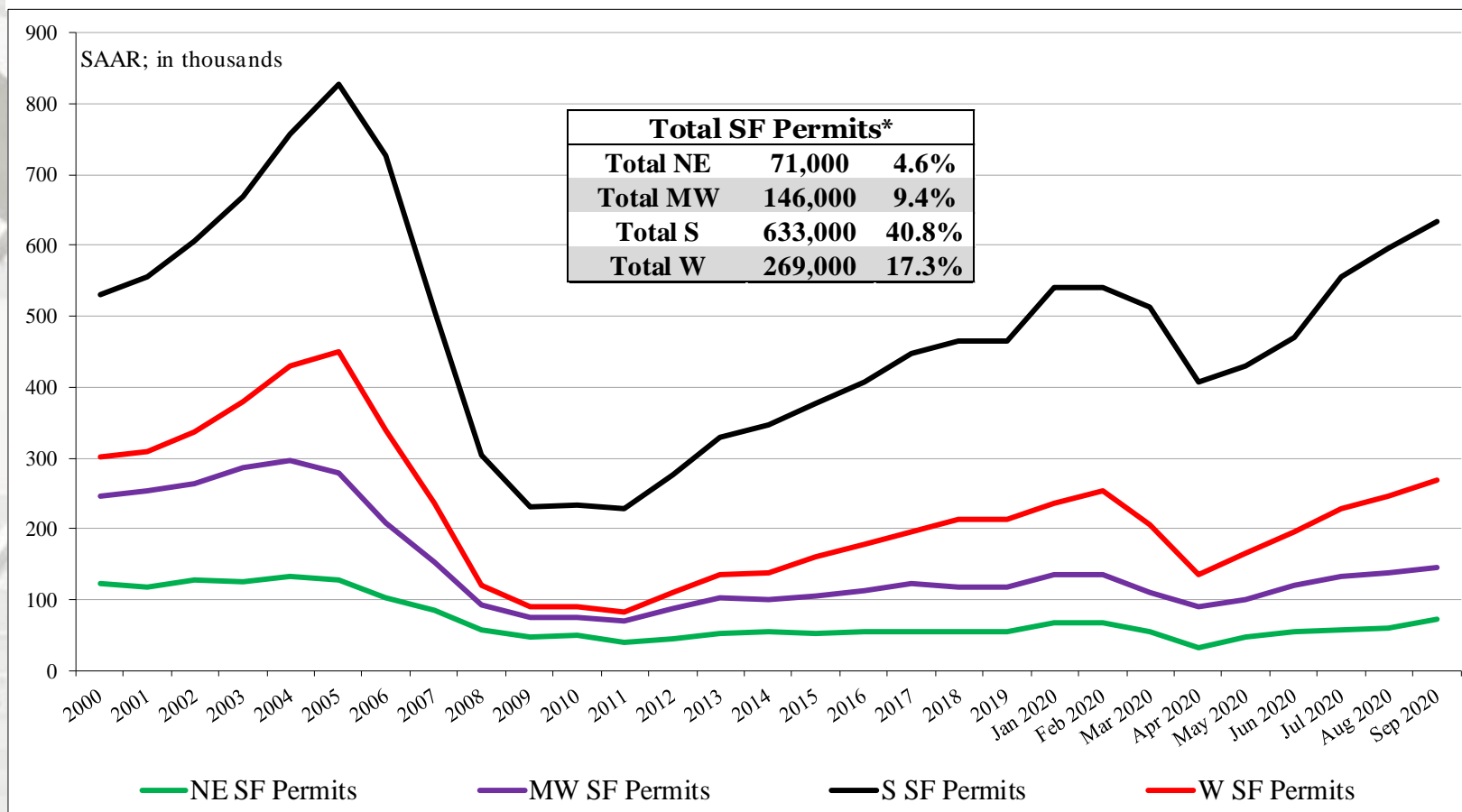
Total Housing Permits by Region



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

* Percentage of total permits.

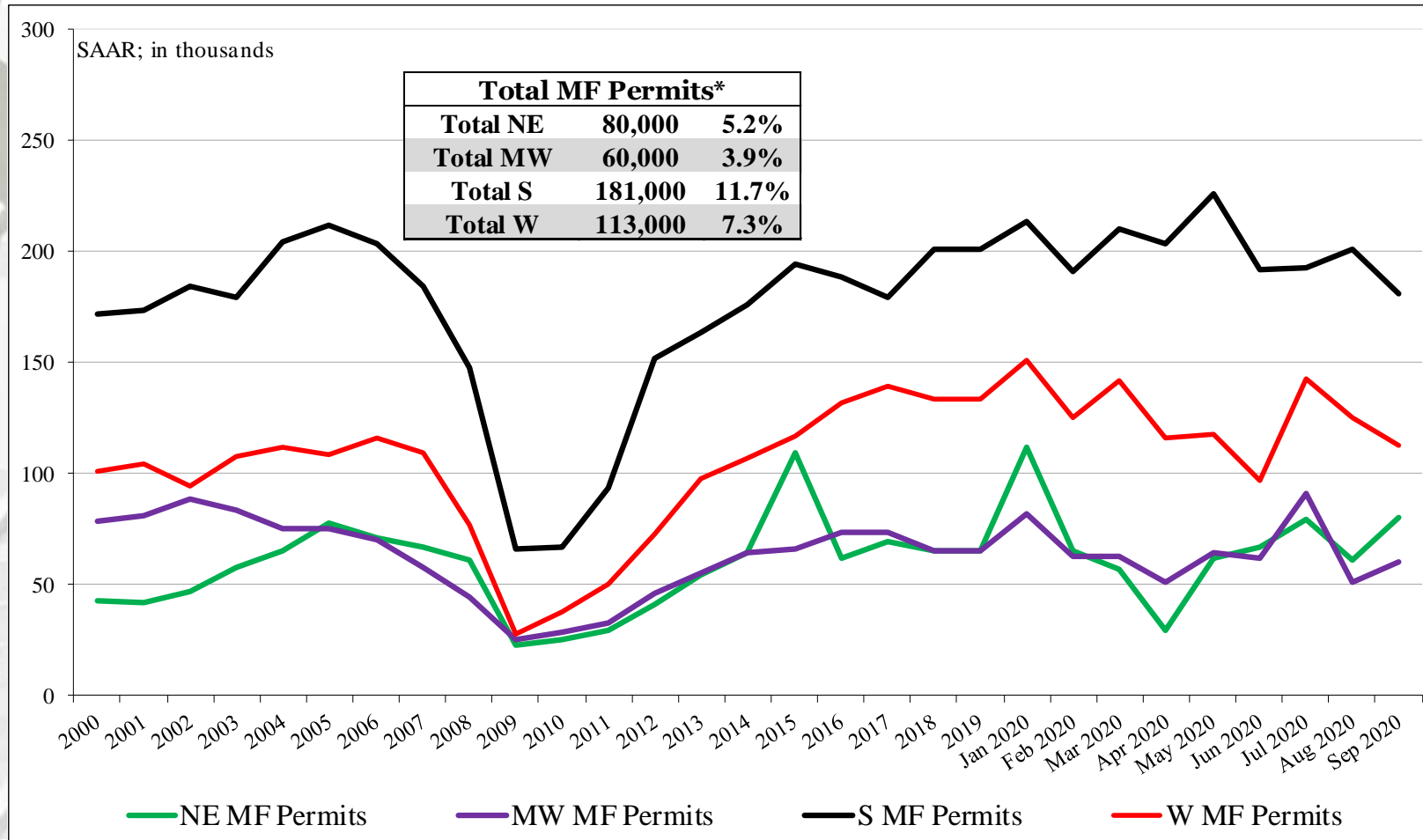
SF Housing Permits by Region



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.

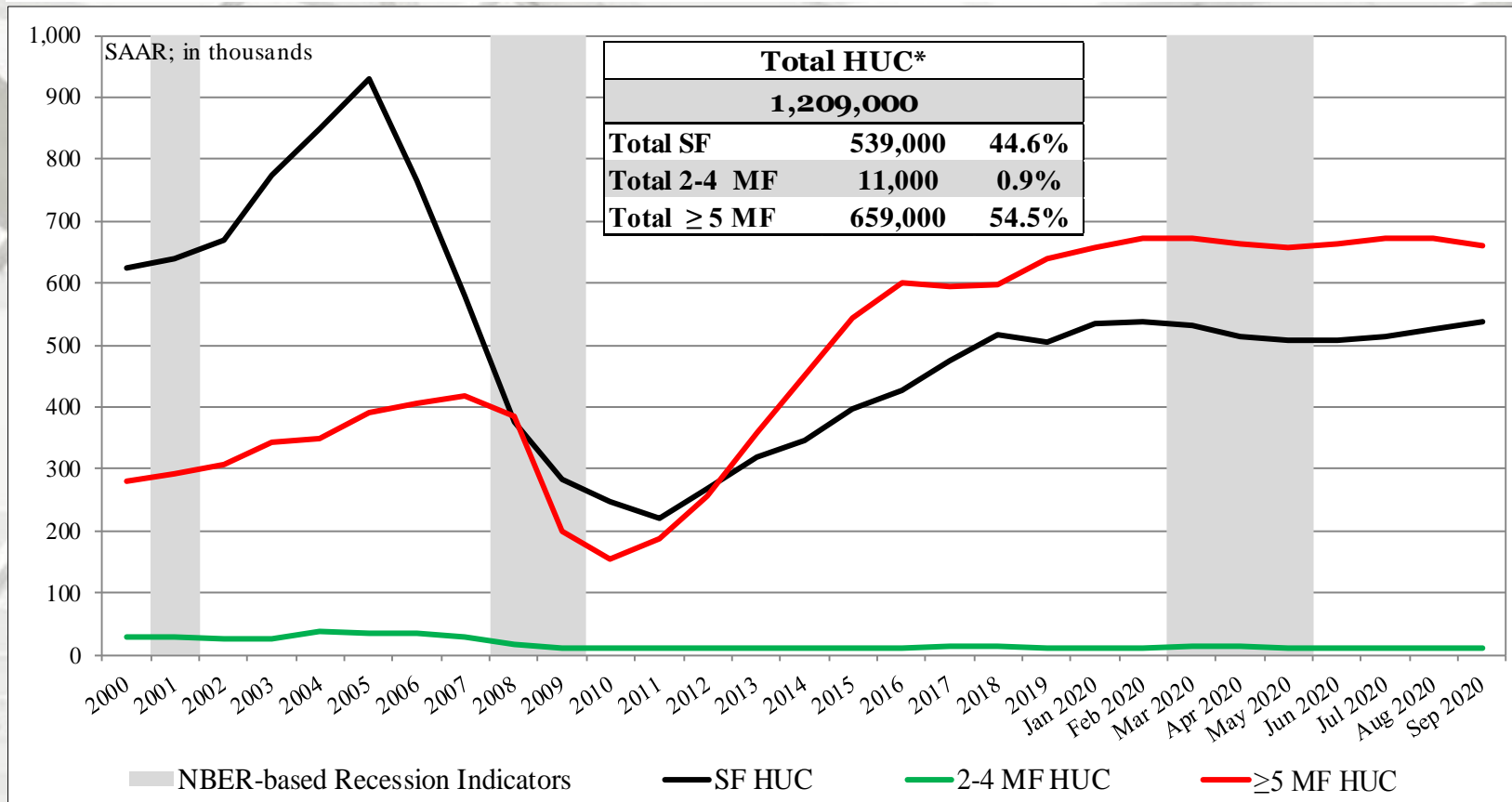
New Housing Under Construction (HUC)

	Total Under Construction*	SF Under Construction	MF 2-4 unit** Under Construction	MF ≥ 5 unit Under Construction
September	1,209,000	539,000	11,000	659,000
August	1,209,000	525,000	12,000	672,000
2019	1,156,000	521,000	11,000	624,000
M/M change	0.0%	2.7%	-8.3%	-1.9%
Y/Y change	4.6%	3.5%	0.0%	5.6%

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

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

Total Housing Under Construction

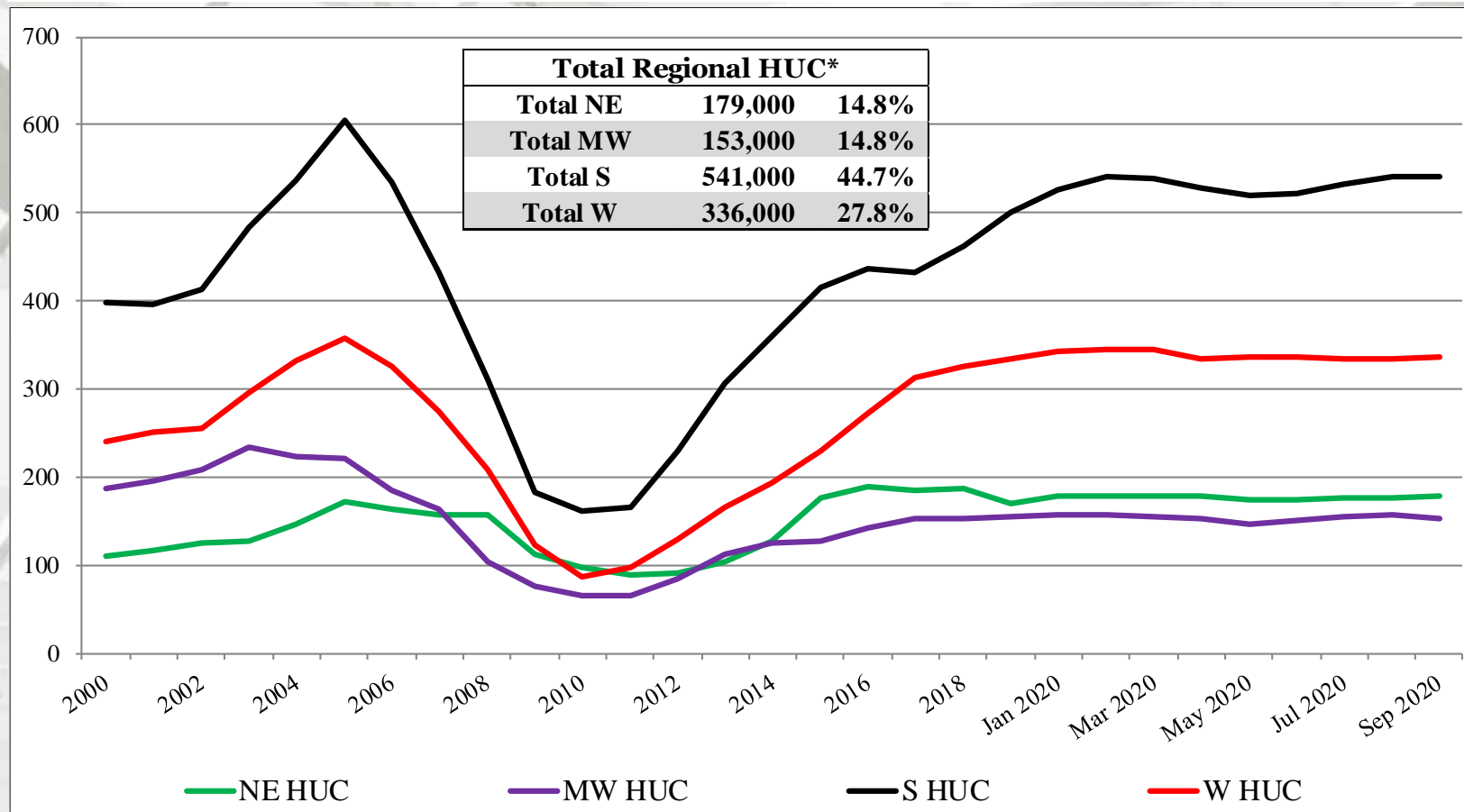


US DOC does not report 2 to 4 multi-family under construction directly, this is an estimation (Total under constructions – (SF + ≥ 5 MF under construction)).

* 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



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

** US DOC does not report multi-family units under construction directly; this is an estimation
(Total under construction – SF under construction).

New Housing Under Construction by Region

	NE Total	NE SF	NE MF**
September	179,000	57,000	122,000
August	176,000	56,000	120,000
2019	178,000	58,000	117,000
M/M change	1.7%	1.8%	1.7%
Y/Y change	0.6%	-1.7%	4.3%
	MW Total	MW SF	MW MF
September	153,000	79,000	74,000
August	157,000	79,000	78,000
2019	146,000	76,000	70,000
M/M change	-2.5%	0.0%	-5.1%
Y/Y change	4.8%	3.9%	5.7%

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

** US DOC does not report multi-family units under construction directly; this is an estimation
(Total under construction – SF under construction).

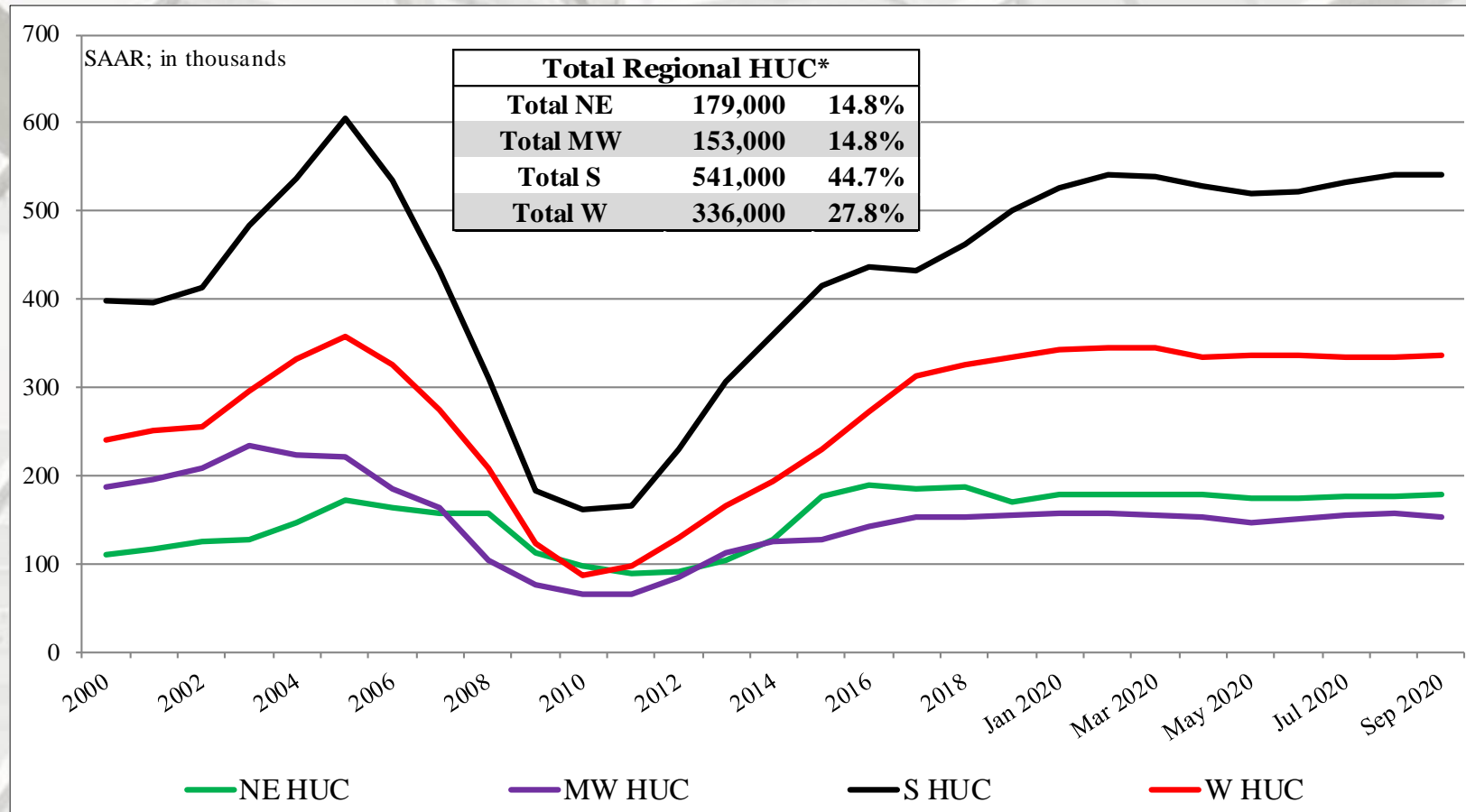
New Housing Under Construction by Region

	S Total	S SF	S MF**
September	541,000	261,000	280,000
August	541,000	250,000	291,000
2019	501,000	249,000	252,000
M/M change	0.0%	4.4%	-3.8%
Y/Y change	8.0%	4.8%	11.1%
	W Total	W SF	W MF
September	336,000	142,000	194,000
August	335,000	140,000	195,000
2019	331,000	138,000	193,000
M/M change	0.3%	1.4%	-0.5%
Y/Y change	1.5%	2.9%	0.5%

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

** US DOC does not report multi-family units under construction directly; this is an estimation
(Total under construction – SF under construction).

Total Housing Under Construction by Region

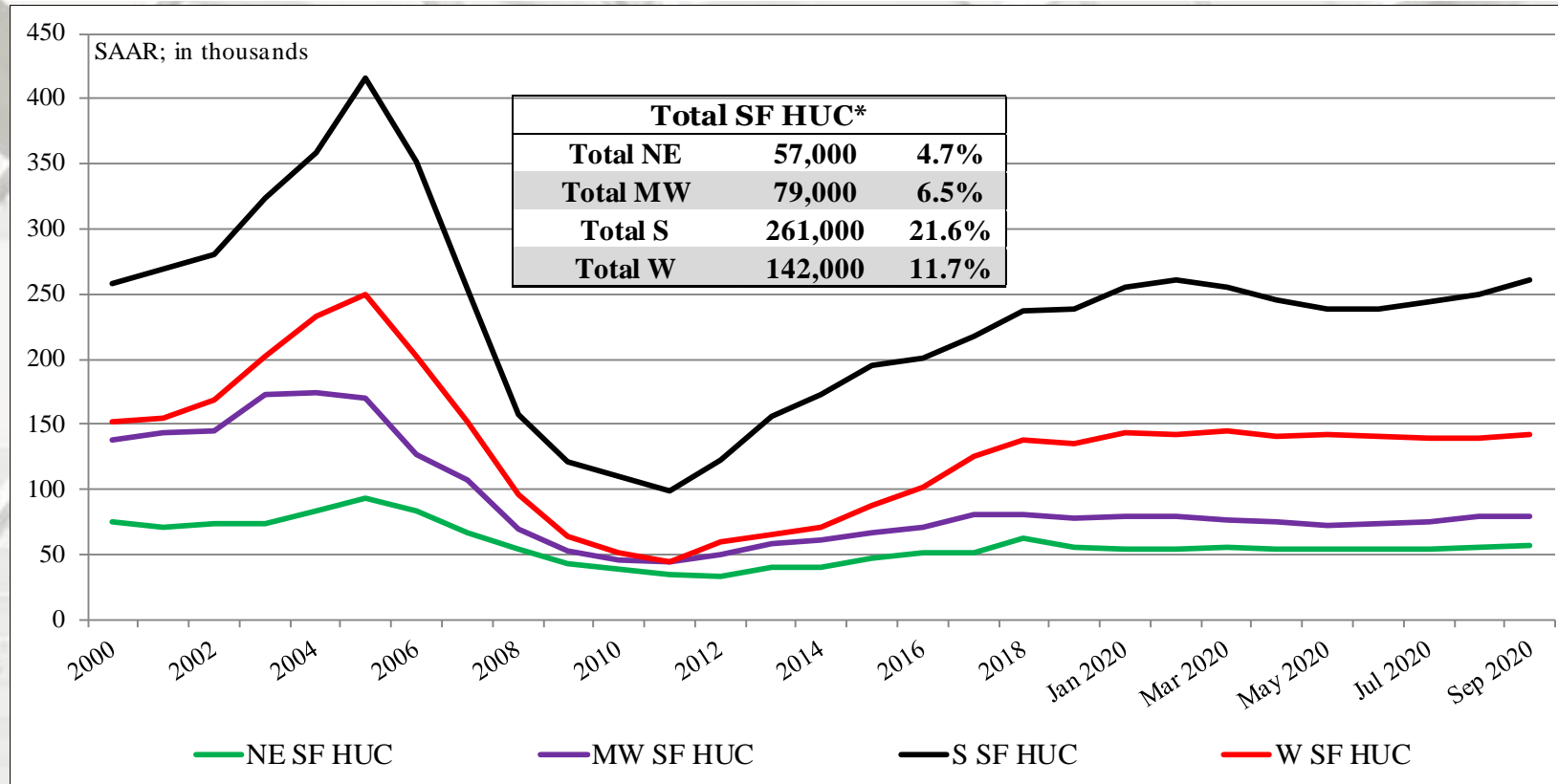


NE = Northeast, MW = Midwest, S = South, W = West

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.

SF Housing Under Construction by Region

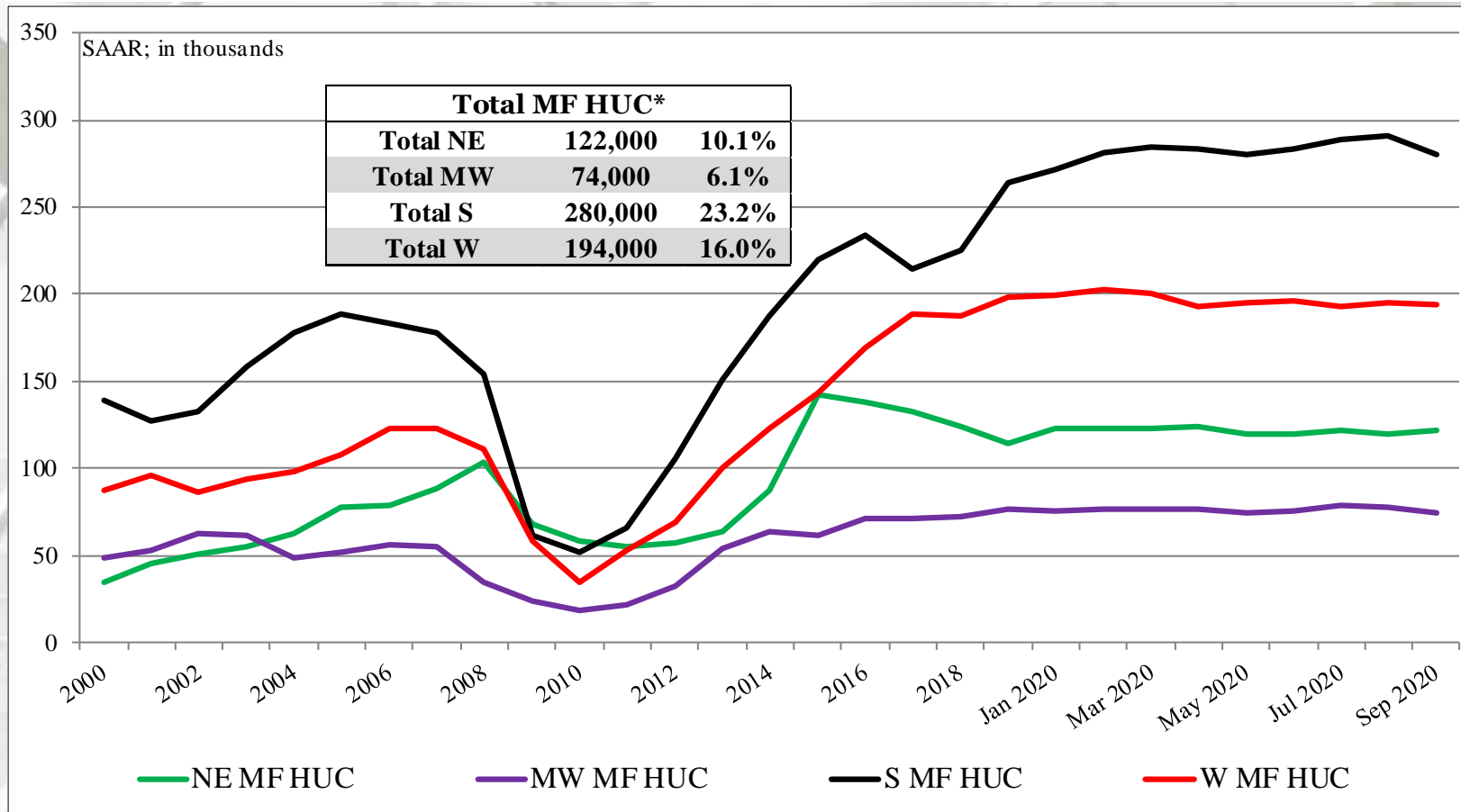


NE = Northeast, MW = Midwest, S = South, W = West.

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.

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.

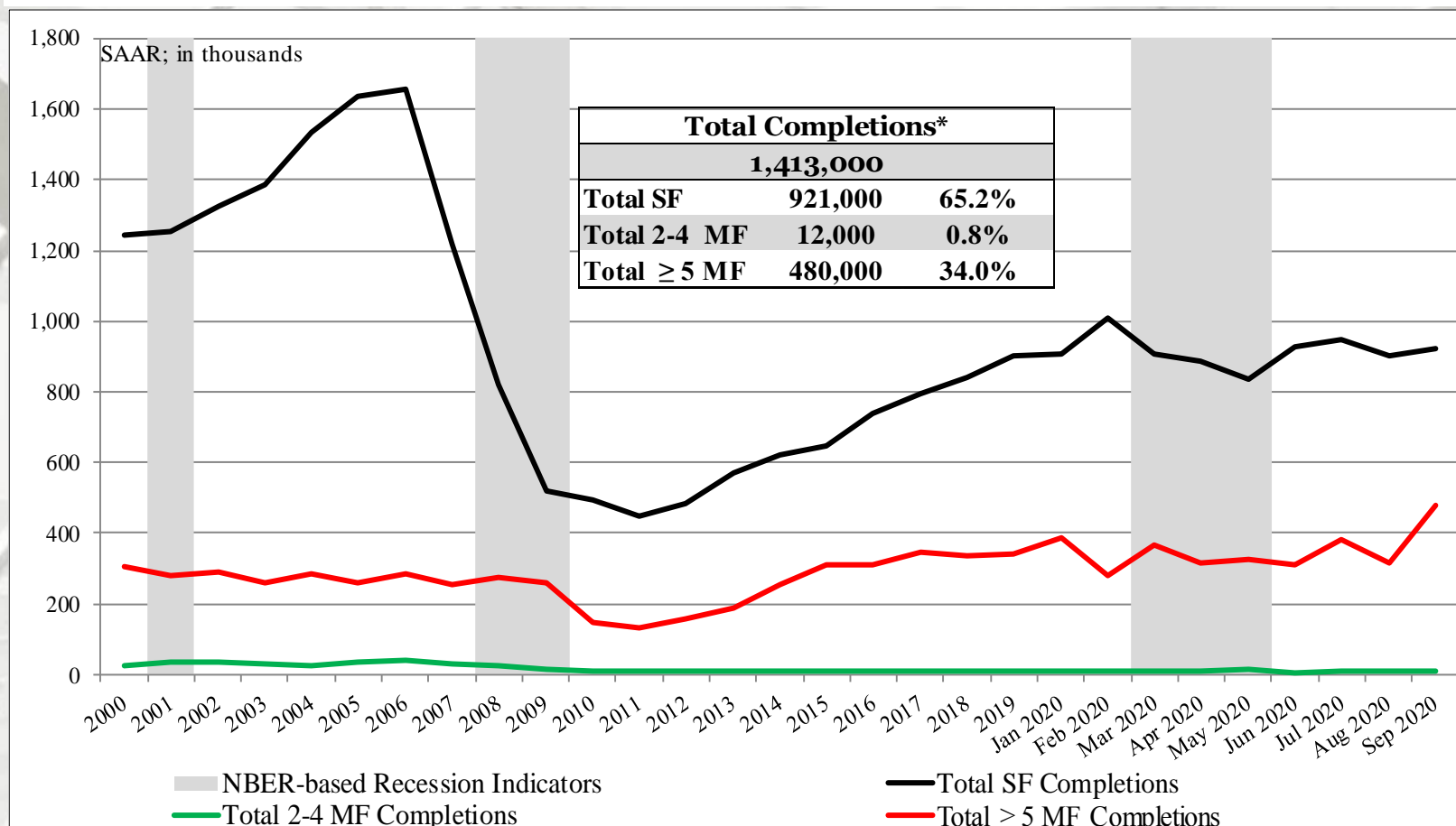
New Housing Completions

	Total Completions*	SF Completions	MF 2-4 unit**	MF ≥ 5 unit Completions
September	1,413,000	921,000	12,000	480,000
August	1,226,000	902,000	9,000	315,000
2019	1,123,000	852,000	3,000	268,000
M/M change	15.3%	2.1%	33.3%	52.4%
Y/Y change	25.8%	8.1%	300.0%	79.1%

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

** US DOC does not report multi-family 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**
September	99,000	48,000	51,000
August	94,000	54,000	40,000
2019	101,000	64,000	37,000
M/M change	5.3%	-11.1%	27.5%
Y/Y change	-2.0%	-25.0%	37.8%
	MW Total	MW SF	MW MF
September	208,000	123,000	85,000
August	167,000	108,000	59,000
2019	146,000	110,000	36,000
M/M change	24.6%	13.9%	44.1%
Y/Y change	42.5%	11.8%	136.1%

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 Housing Completions by Region

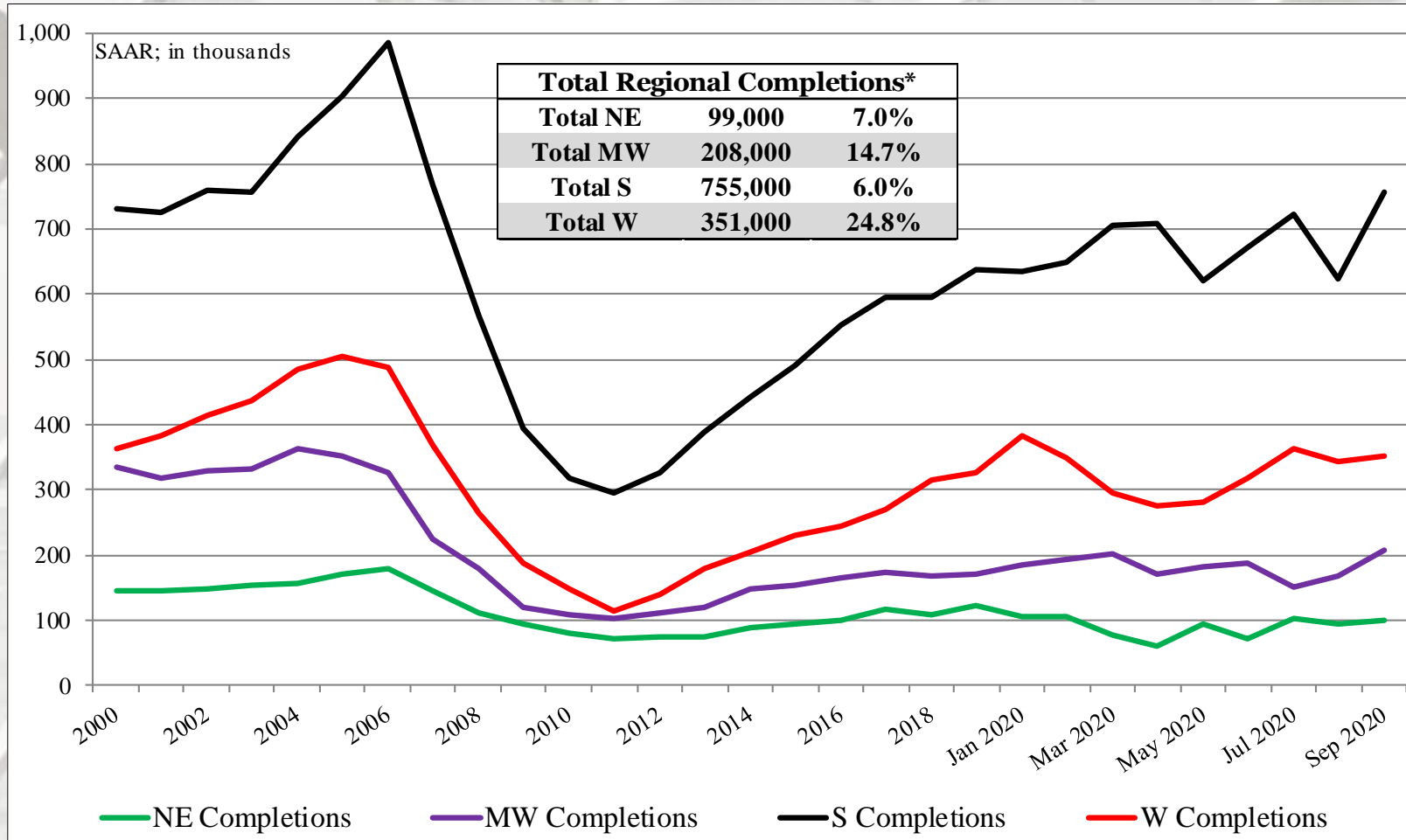
	S Total	S SF	S MF**
September	755,000	501,000	254,000
August	622,000	488,000	134,000
2019	587,000	478,000	109,000
M/M change	21.4%	2.7%	89.6%
Y/Y change	28.6%	4.8%	133.0%
	W Total	W SF	W MF
September	351,000	249,000	102,000
August	343,000	252,000	91,000
2019	289,000	200,000	89,000
M/M change	2.3%	-1.2%	12.1%
Y/Y change	21.5%	24.5%	14.6%

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

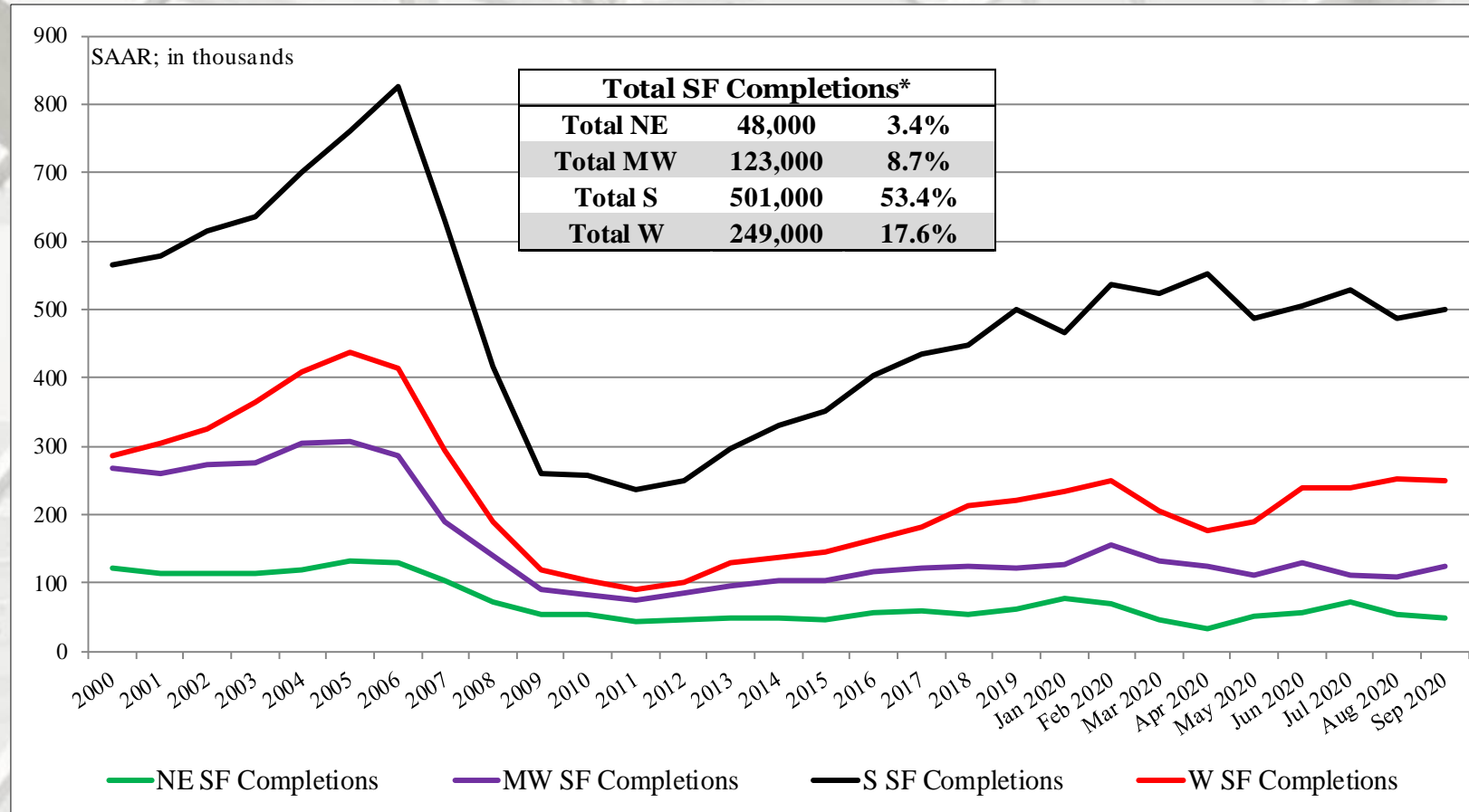
Total Housing Completions by Region



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

** US DOC does not report multi-family units completions directly; this is an estimation
(Total completions – SF completions).

SF Housing Completions by Region

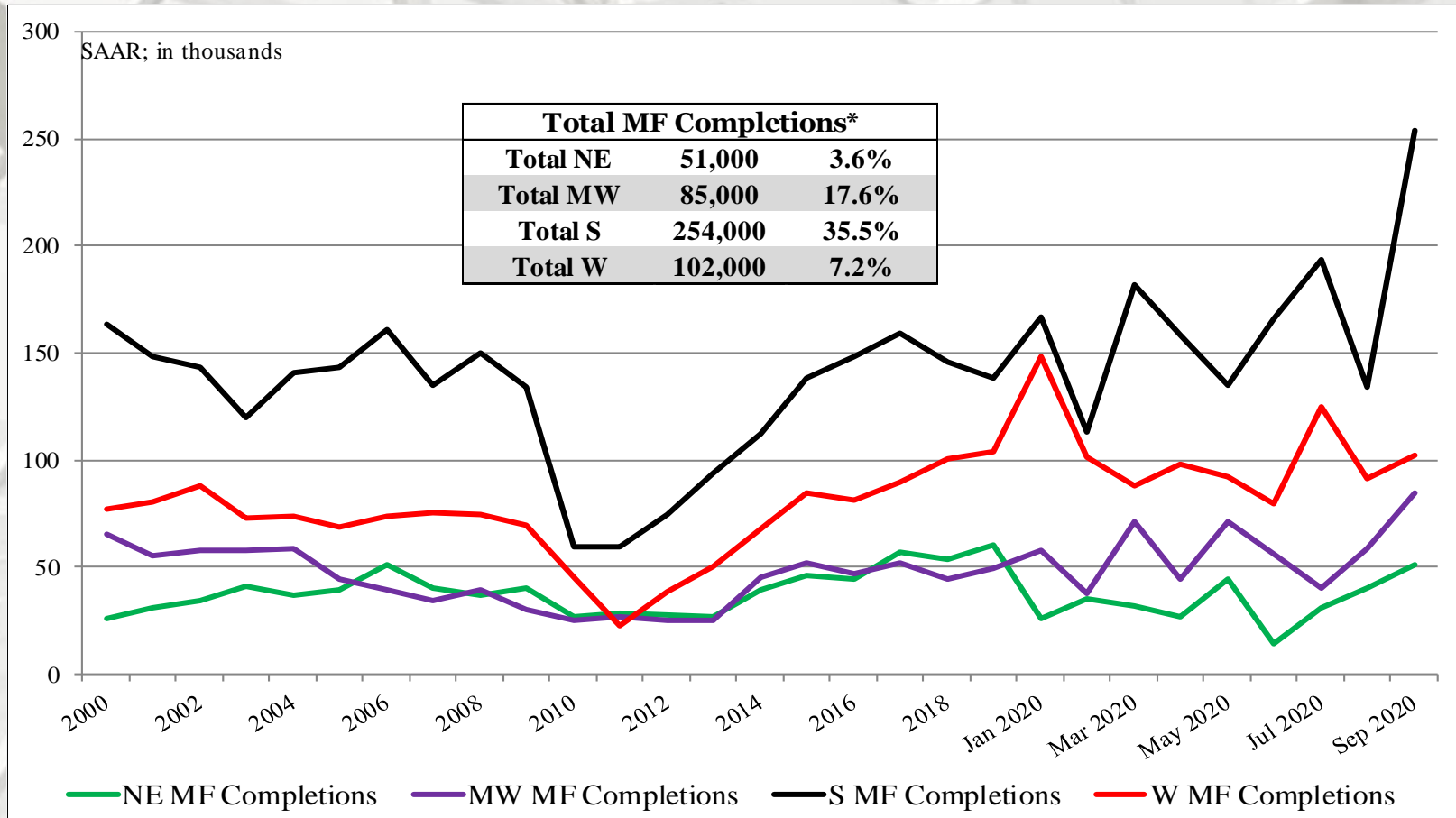


NE = Northeast, MW = Midwest, S = South, W = West

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

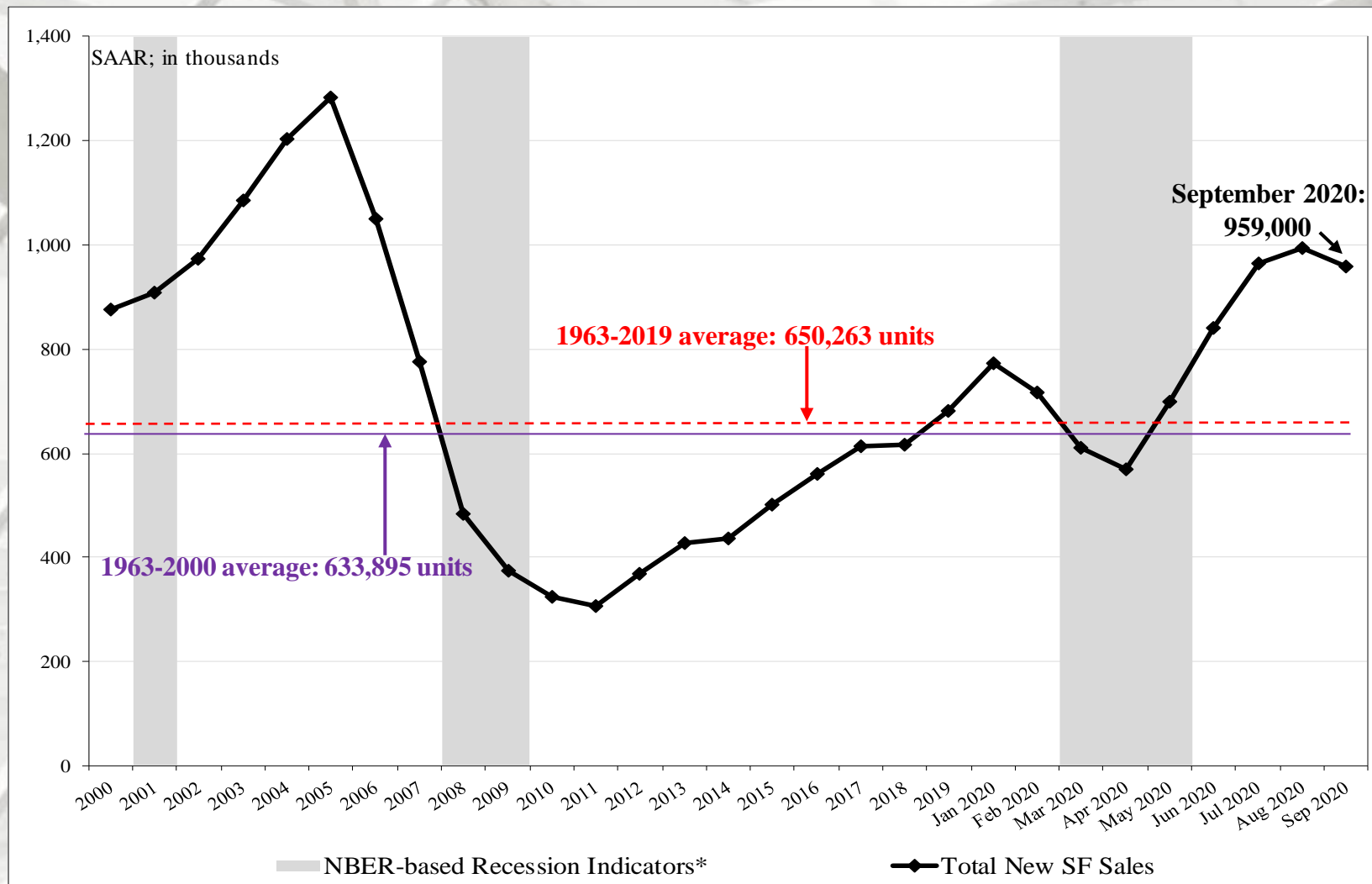
	New SF Sales*	Median Price	Mean Price	Month's Supply
September	959,000	326,800	405,400	3.6
August	994,000	322,400	382,700	3.4
2019	726,000	315,700	372,100	5.3
M/M change	-3.5%	1.4%	5.9%	5.9%
Y/Y change	32.1%	3.5%	8.9%	-32.1%

* 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 less than the consensus forecast³ of 1,016 m (range: 1,000 m to 1,050 m). The past three month's new SF sales data also were revised:

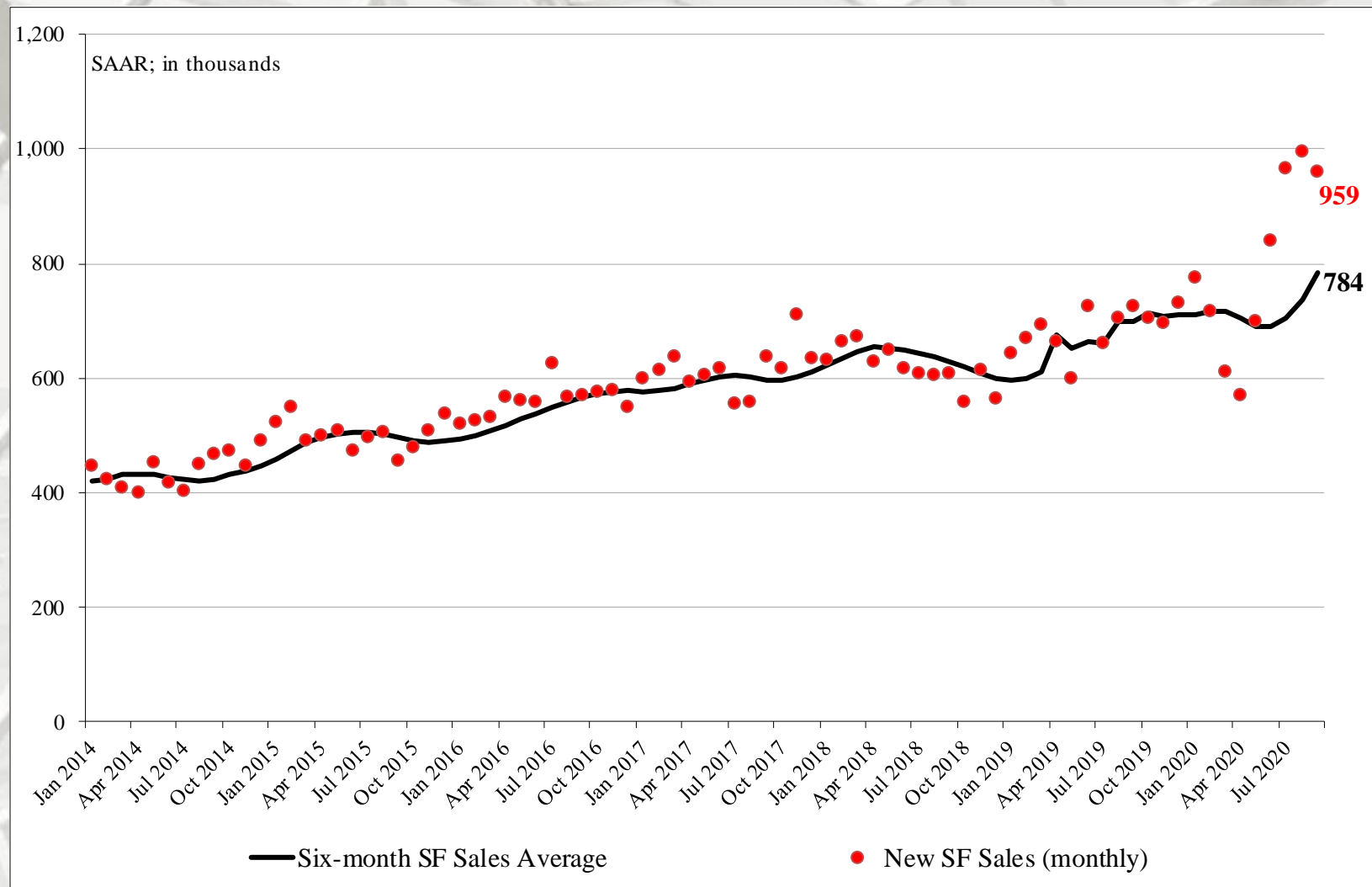
June initial:	776 m revised to 840 m;
July initial:	901 m revised to 965 m;
August initial:	1,011 m revised to 995 m;

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
September	32,000	93,000	563,000	271,000
August	45,000	97,000	591,000	261,000
2019	34,000	69,000	442,000	181,000
M/M change	-28.9%	-4.1%	-4.7%	3.8%
Y/Y change	-5.9%	34.8%	27.4%	49.7%
		</		

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 September not add to total because of rounding.

⁴ Housing prices are adjusted at irregular intervals.

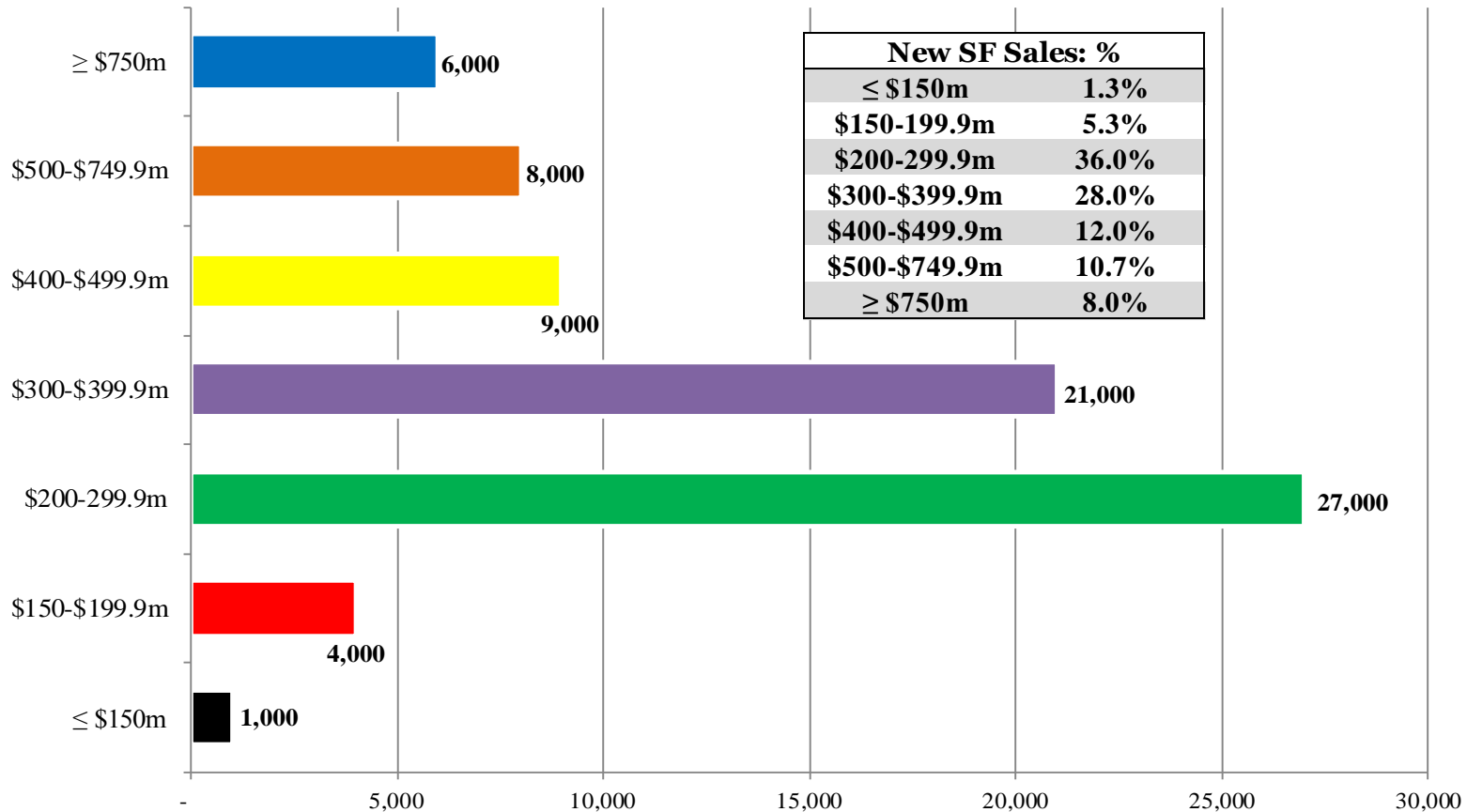
⁵ Z = Less than 500 units or less than 0.5 percent

Sources: ^{1,2,3} <https://www.census.gov/construction/nrs/index.html>; 10/26/20;

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

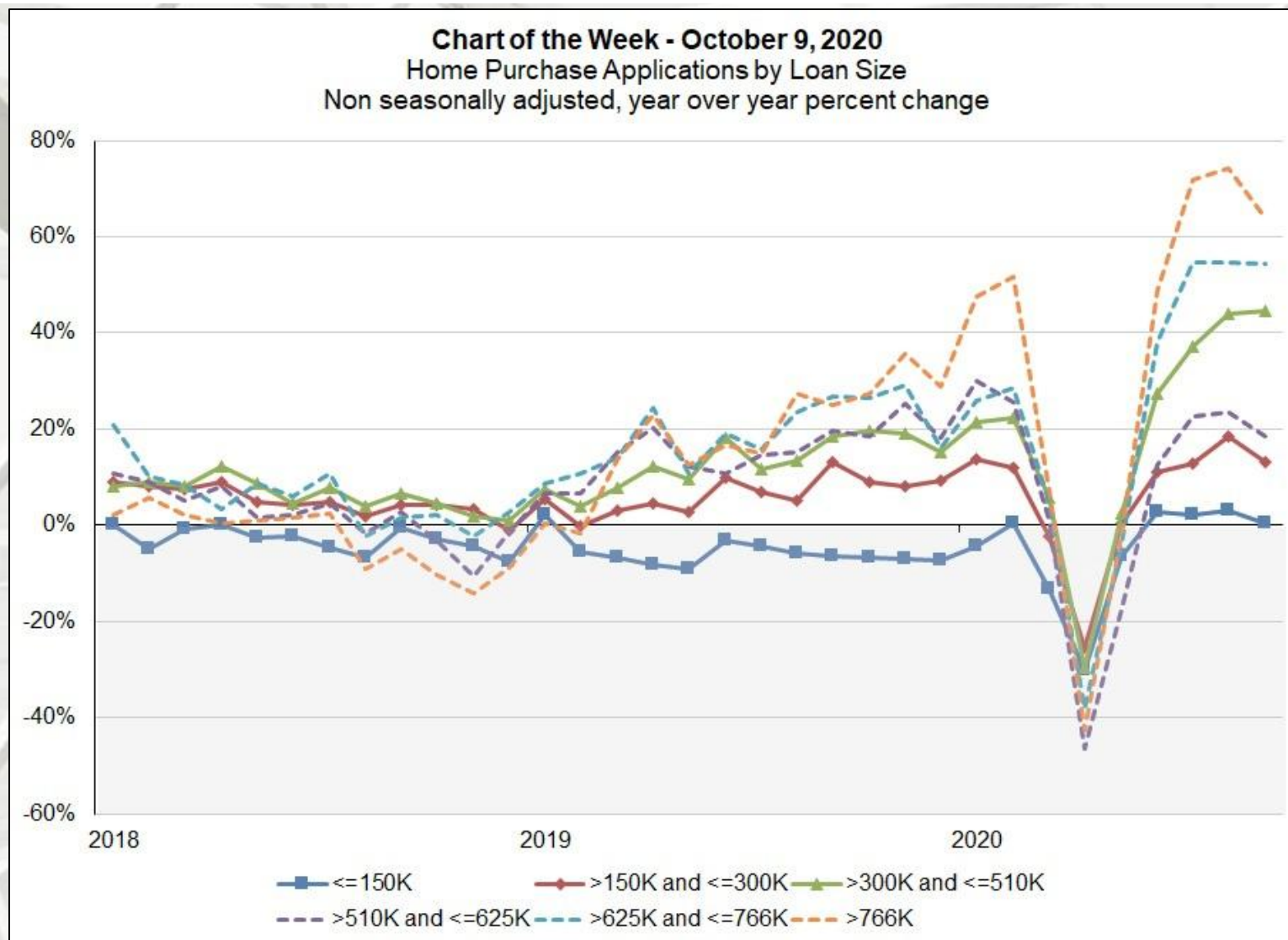
New SF House Sales

September New SF Sales*



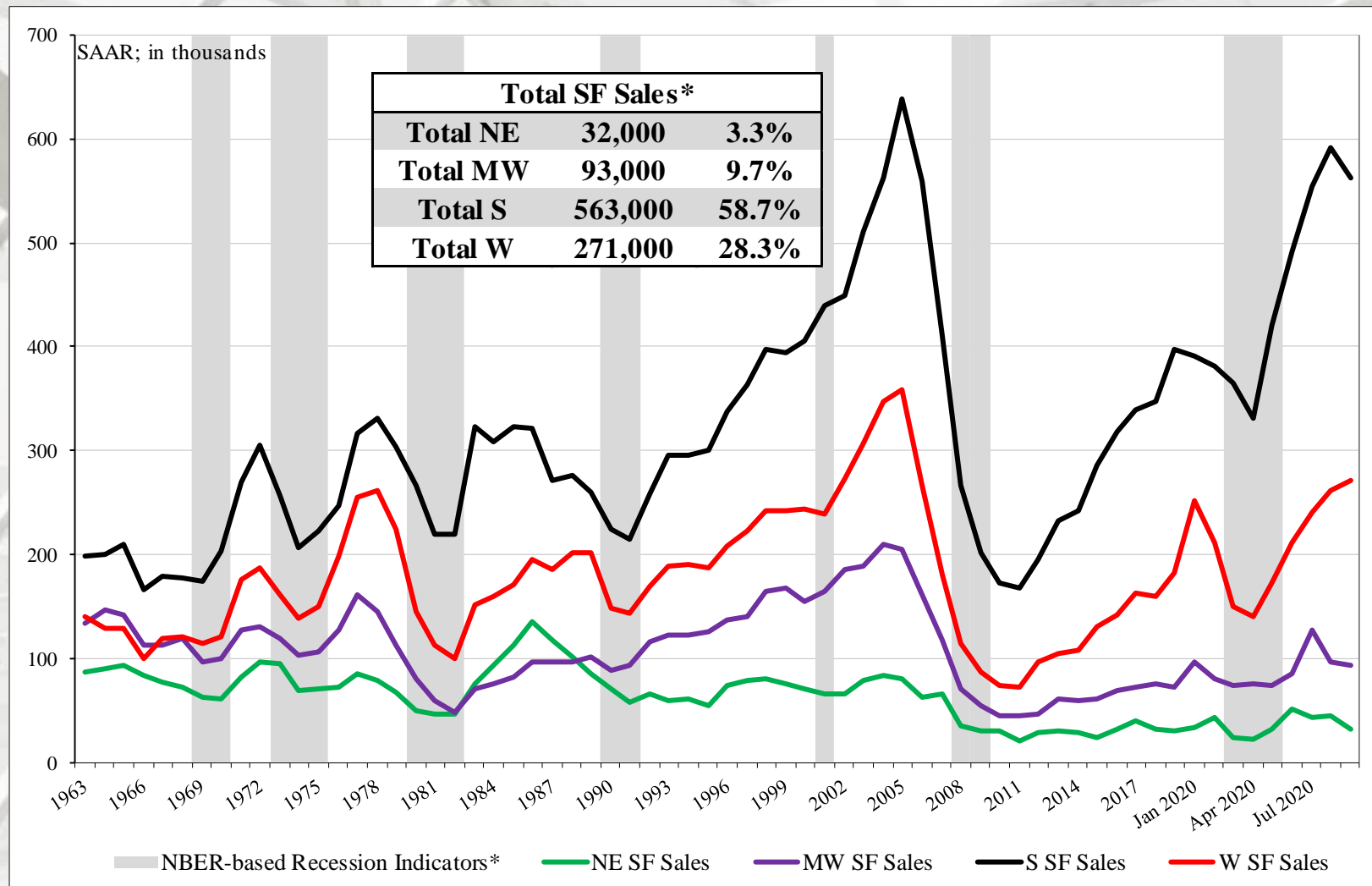
- Total new sales by price category and percent.

Mortgage Bankers Association: Chart of the Week



Source: Mortgage Bankers Association (MBA) Weekly Applications Survey

New SF House Sales by Region

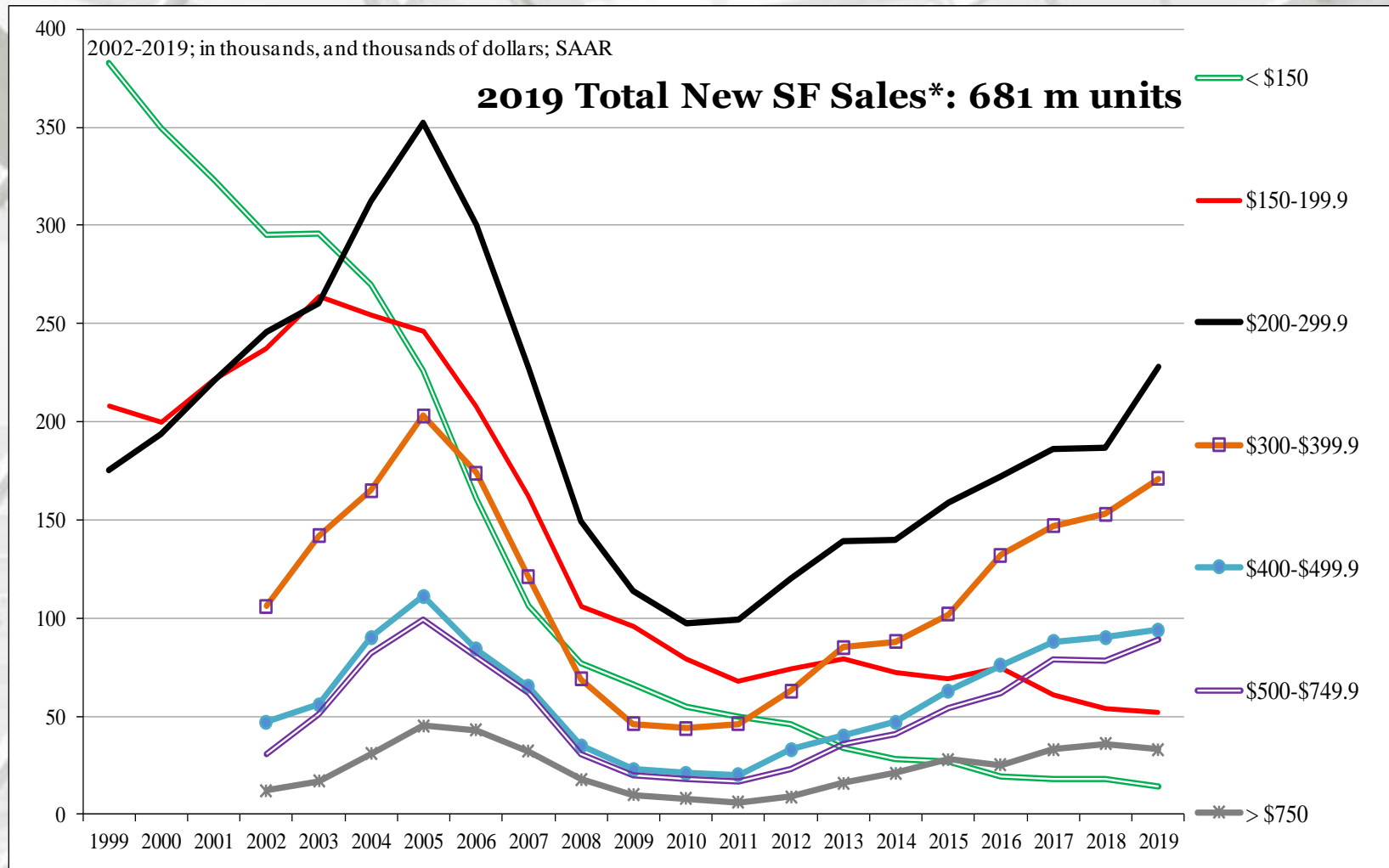


NE = Northeast; MW = Midwest; S = South; W = West

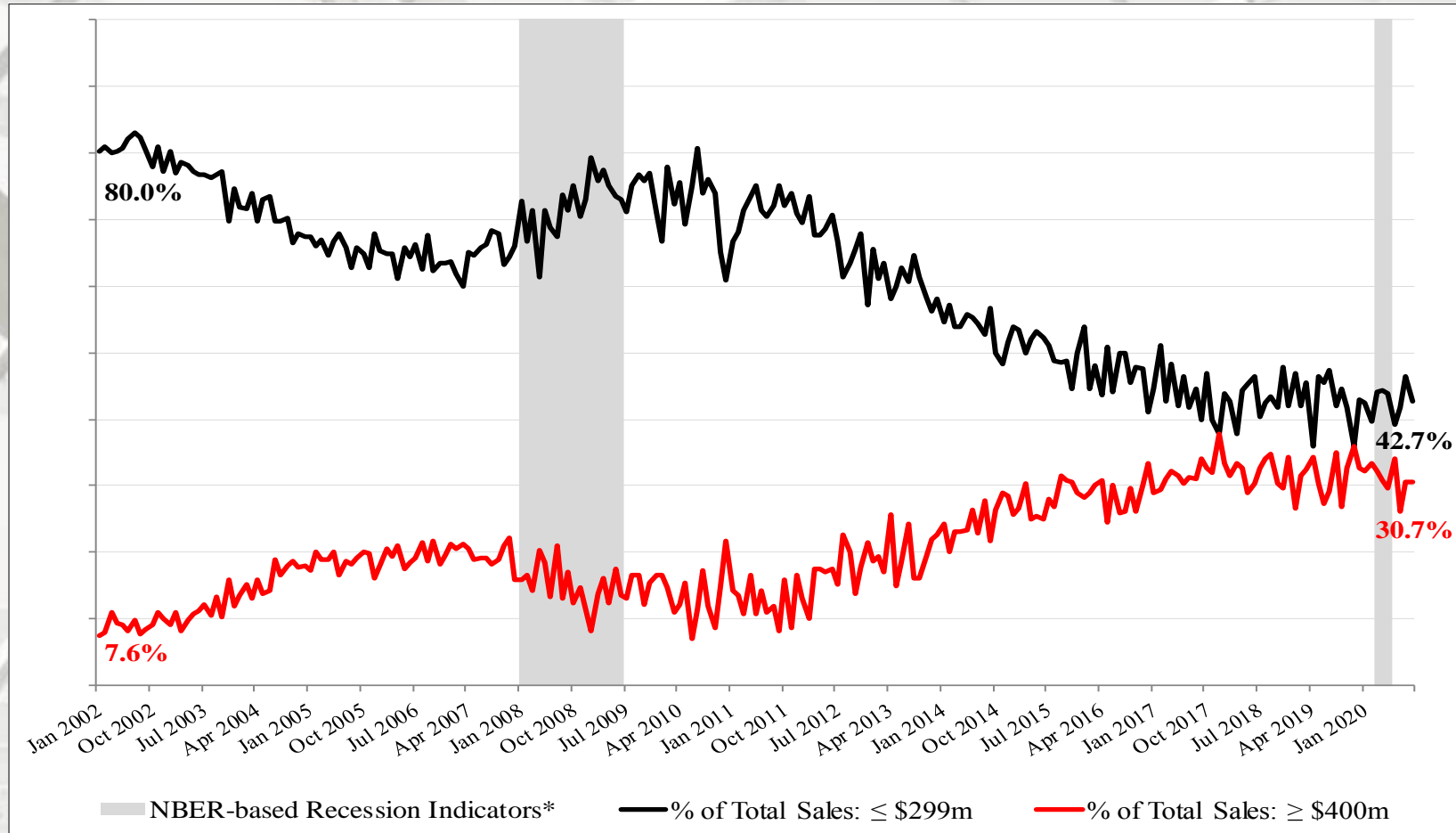
* Percentage of total new sales.

* 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

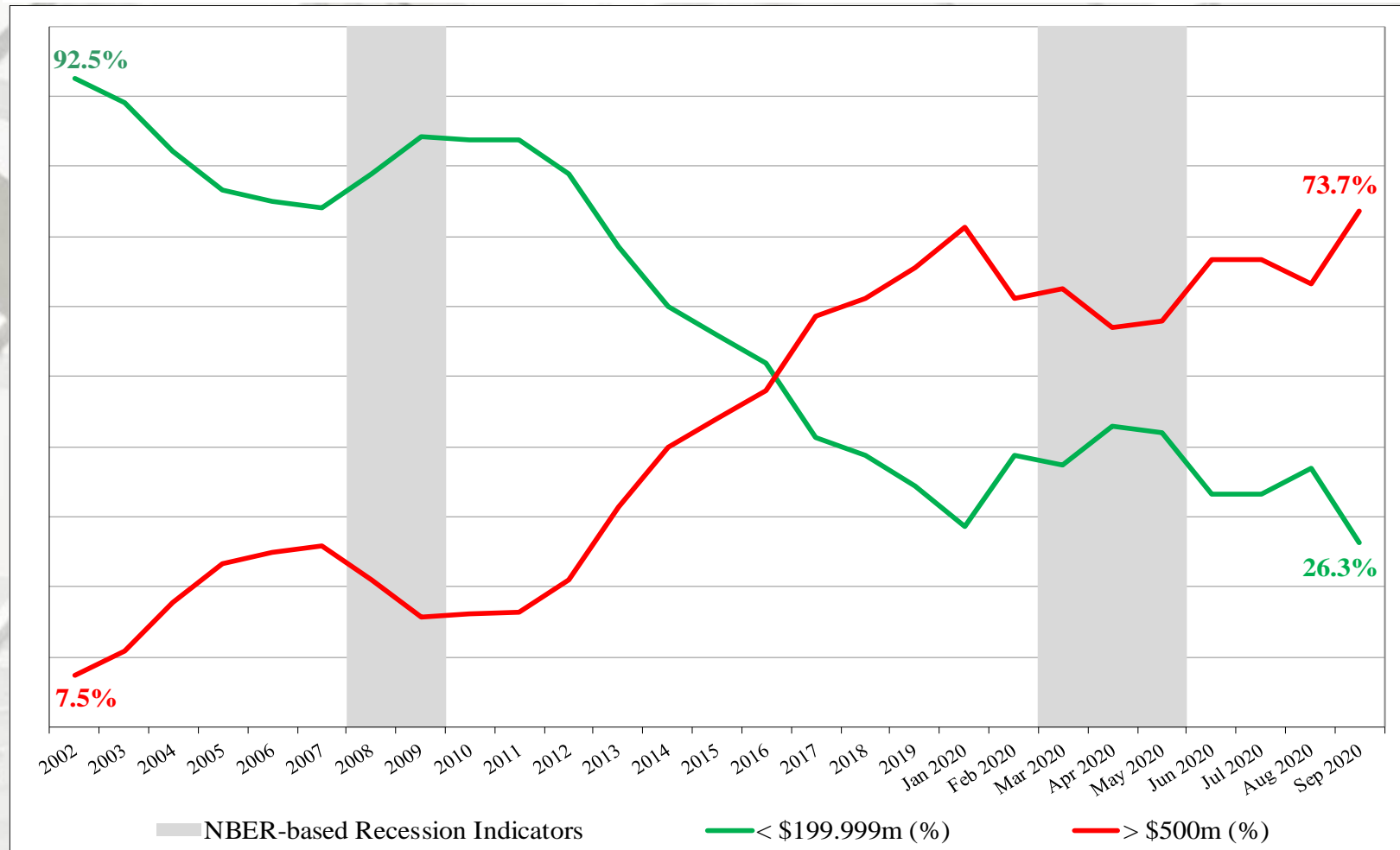


* NBER based Recession Indicator Bars for the United States from the Period following the Peak through the Trough (FRED, St. Louis).

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



* 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 ≥ \$500m: 2002 to September 2020

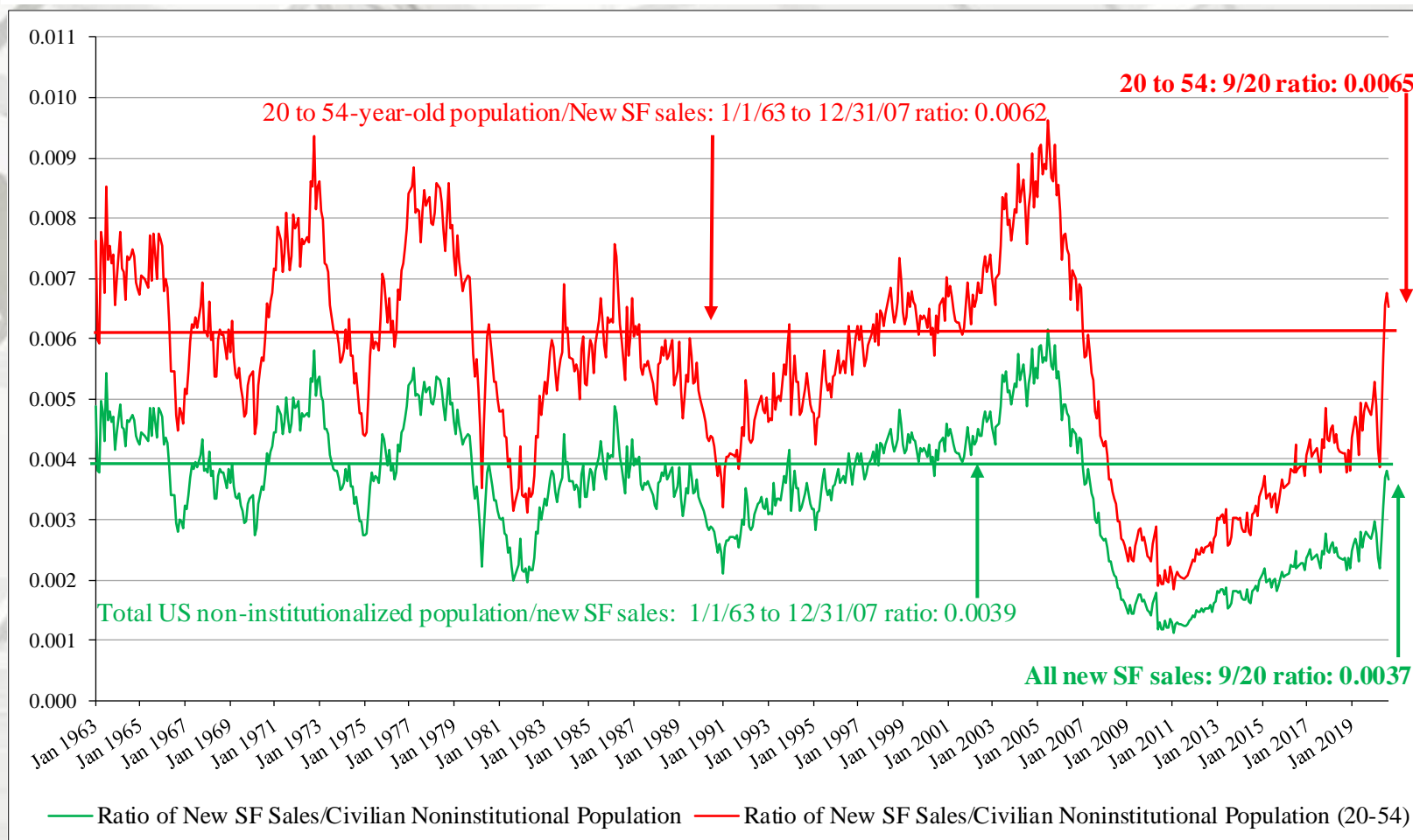
The number of ≤ \$200 thousand SF houses has declined dramatically since 2002^{1,2}. Subsequently, from 2012 onward, the ≥ \$500 thousand class has soared (on a percentage basis) in contrast to the ≤ \$200m class. One of the most oft mentioned reasons for this occurrence is builder net margins.

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 10/26/20

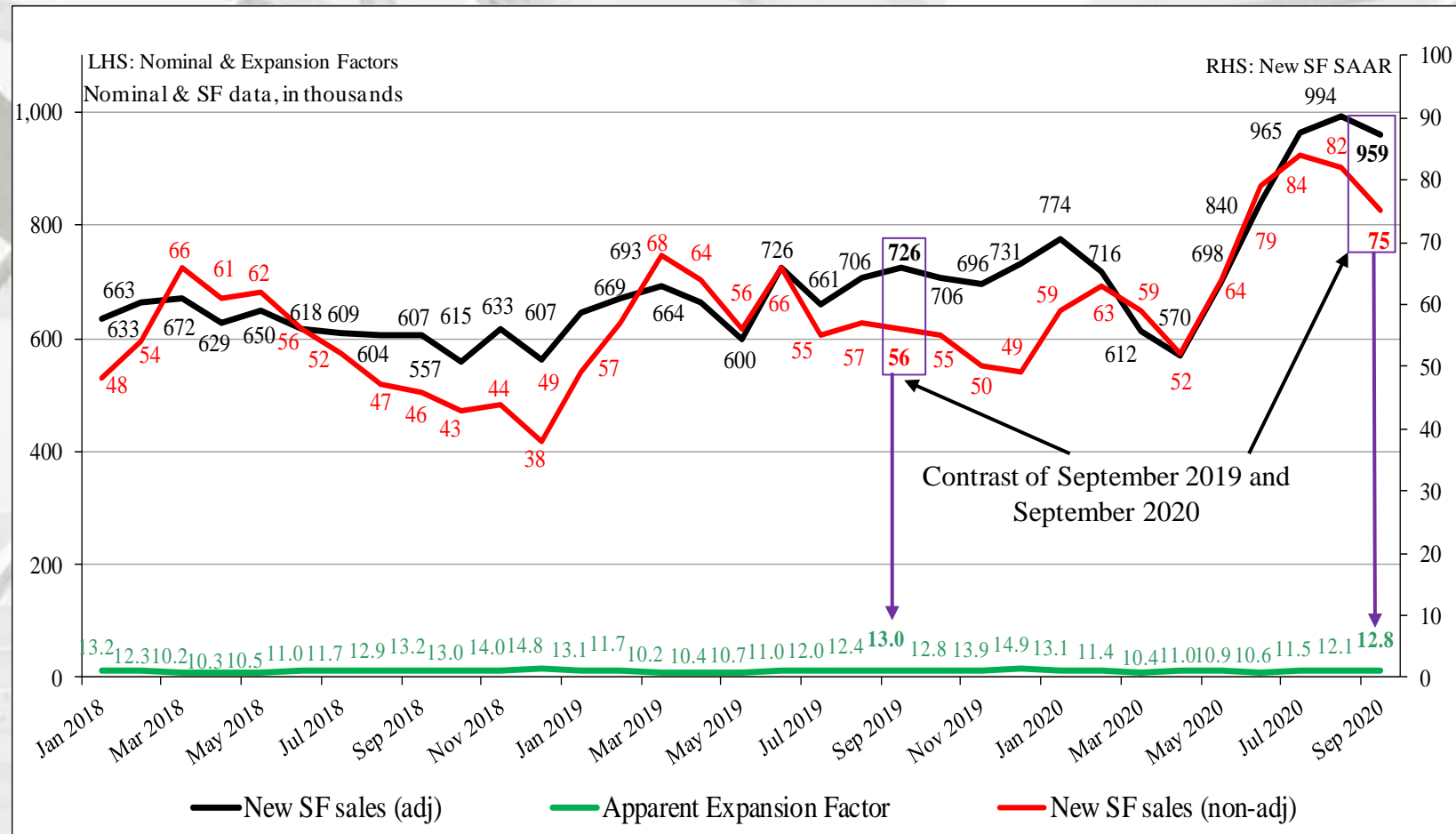
New SF House Sales



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 September 2020 it was 0.0042 – a decrease from August (0.0030). The non-institutionalized population, aged 20 to 54 long-term ratio is 0.0062; in September 2020 it was 0.0075 – also a decrease from August (0.00694). 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

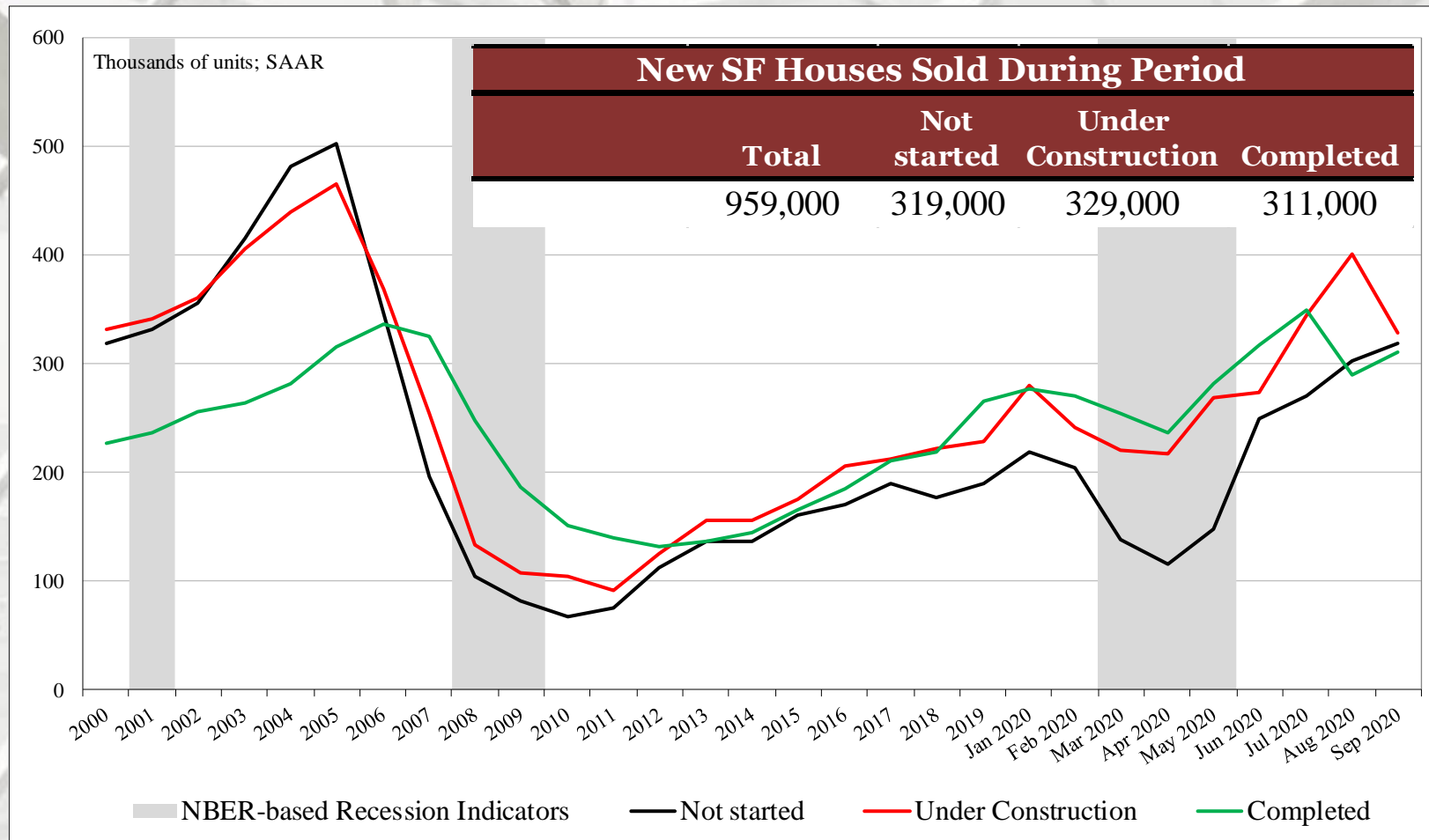
New SF House Sales

New SF Houses Sold During Period

	Total	Not started	Under Construction	Completed
September	959,000	319,000	329,000	311,000
August	994,000	303,000	401,000	290,000
2019	726,000	214,000	242,000	270,000
M/M change	-3.5%	5.3%	-18.0%	7.2%
Y/Y change	32.1%	49.1%	36.0%	15.2%
Total percentage		33.3%	34.3%	32.4%

SAAR

New SF House Sales: Sold During Period



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

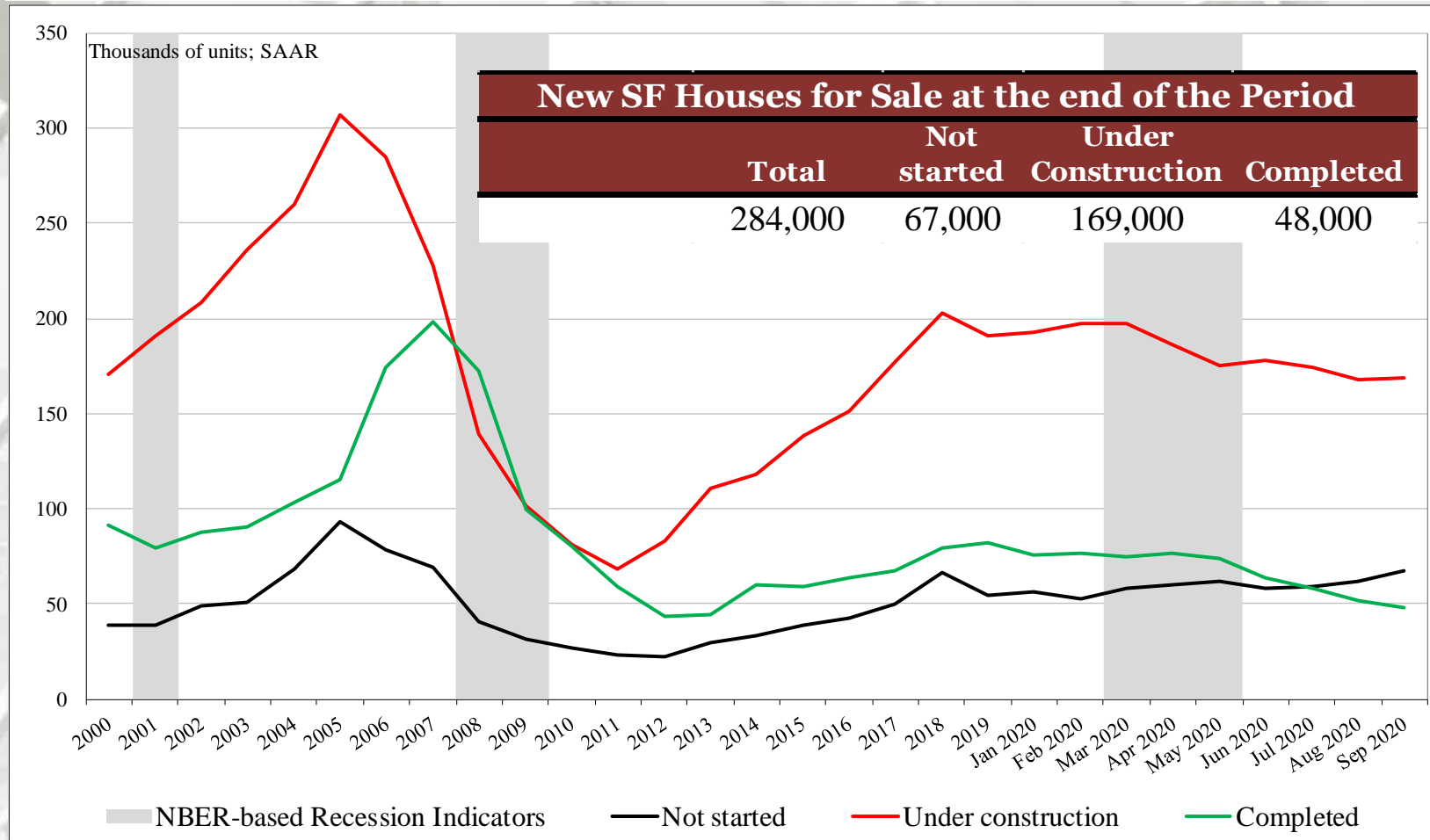
New SF Houses for Sale at End of Period

New SF Houses for Sale at the end of the Period

	Total	Not started	Under Construction	Completed
September	284,000	67,000	169,000	48,000
August	282,000	62,000	168,000	52,000
2019	321,000	51,000	194,000	76,000
M/M change	0.7%	8.1%	0.6%	-7.7%
Y/Y change	-11.5%	31.4%	-12.9%	-36.8%
Total percentage		23.6%	59.5%	16.9%

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

New SF House Sales: For Sale at End of Period



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

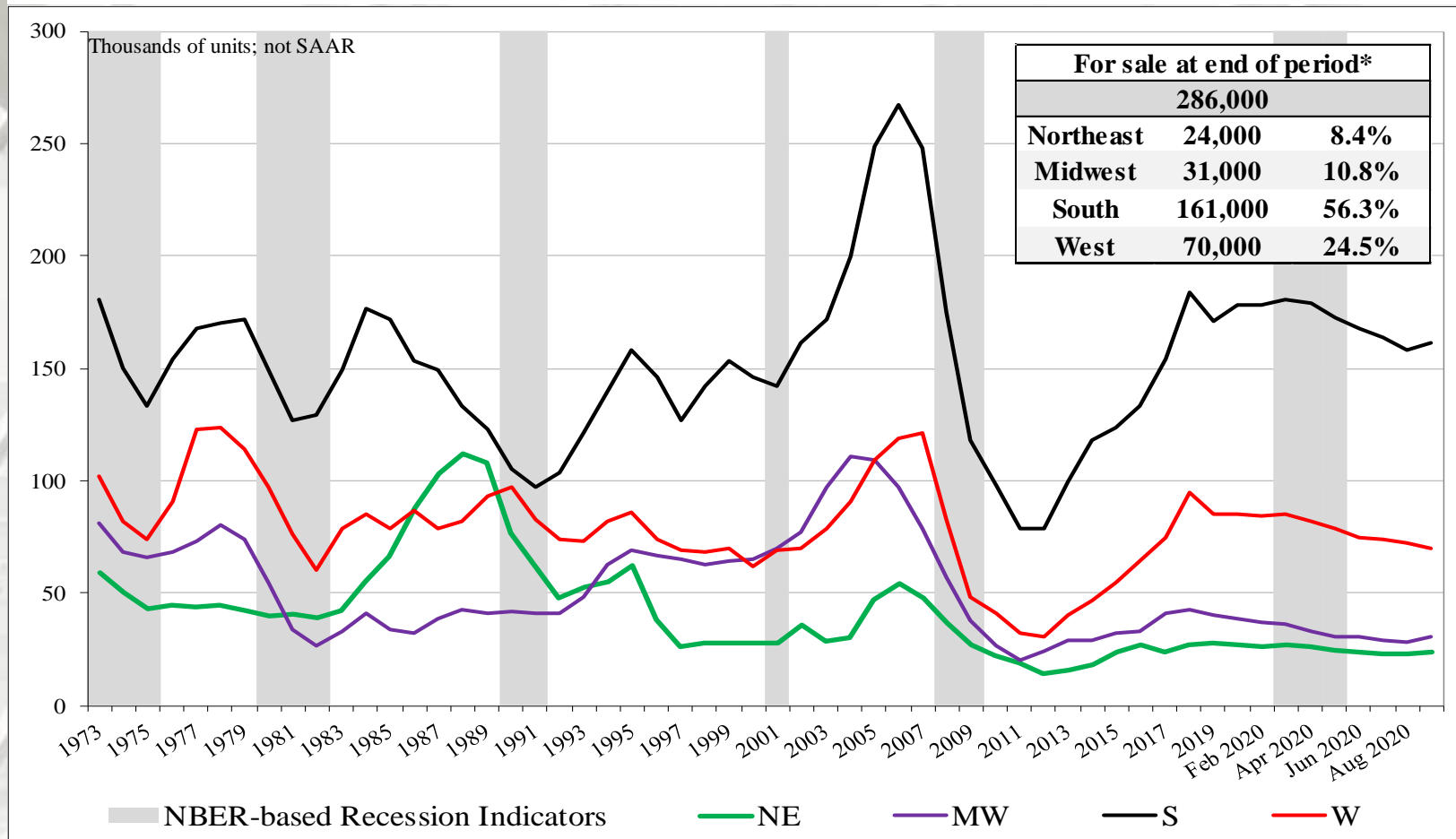
New SF House Sales

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

	Total	NE	MW	S	W
September	286,000	24,000	31,000	161,000	70,000
August	281,000	23,000	28,000	158,000	72,000
2019	322,000	28,000	38,000	170,000	85,000
M/M change	1.8%	4.3%	10.7%	1.9%	-2.8%
Y/Y change	-11.2%	-14.3%	-18.4%	-5.3%	-17.6%

* Not SAAR

New SF Houses for Sale at End of Period by Region

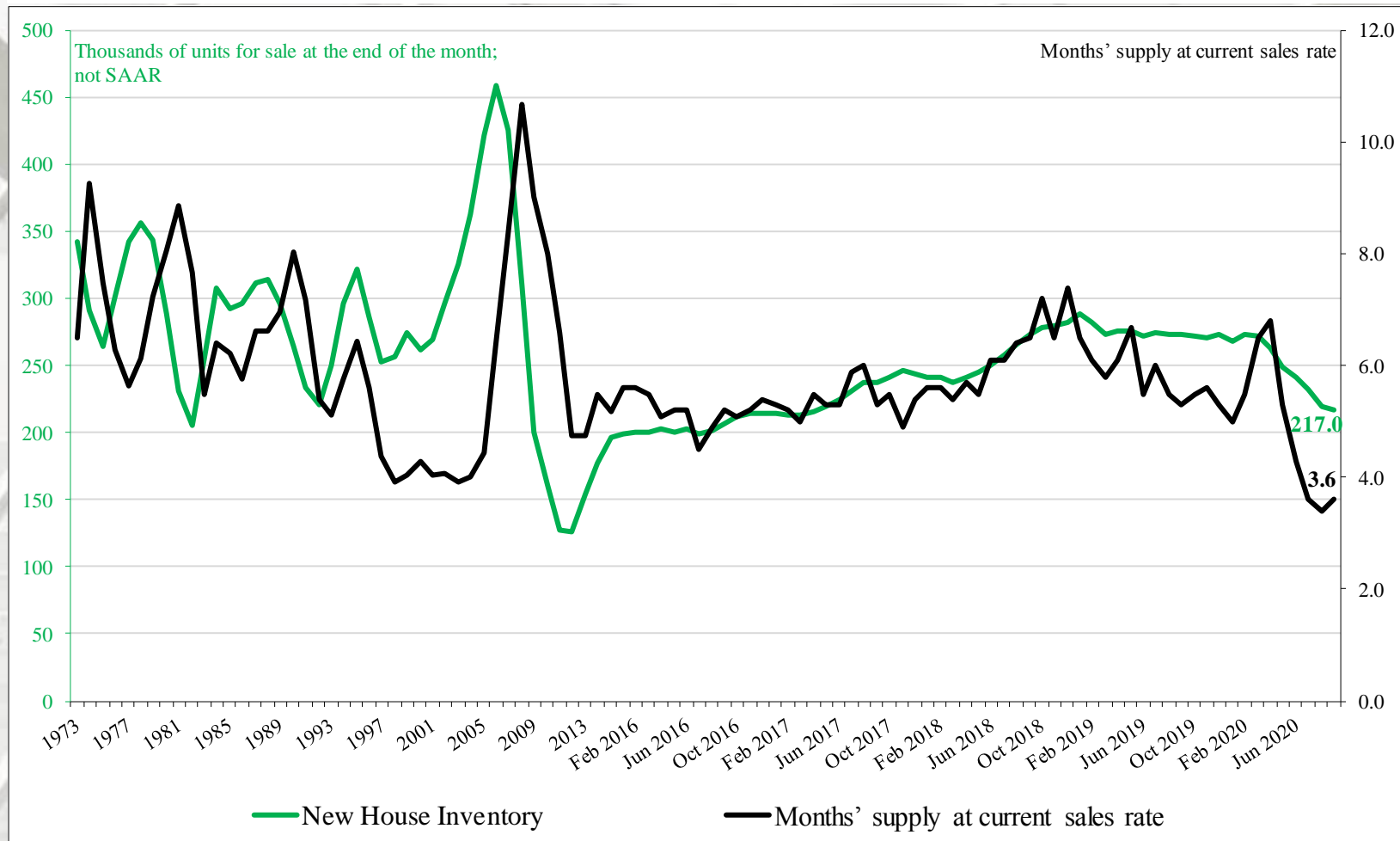


NE = Northeast; MW = Midwest; S = South; W = West

* 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).

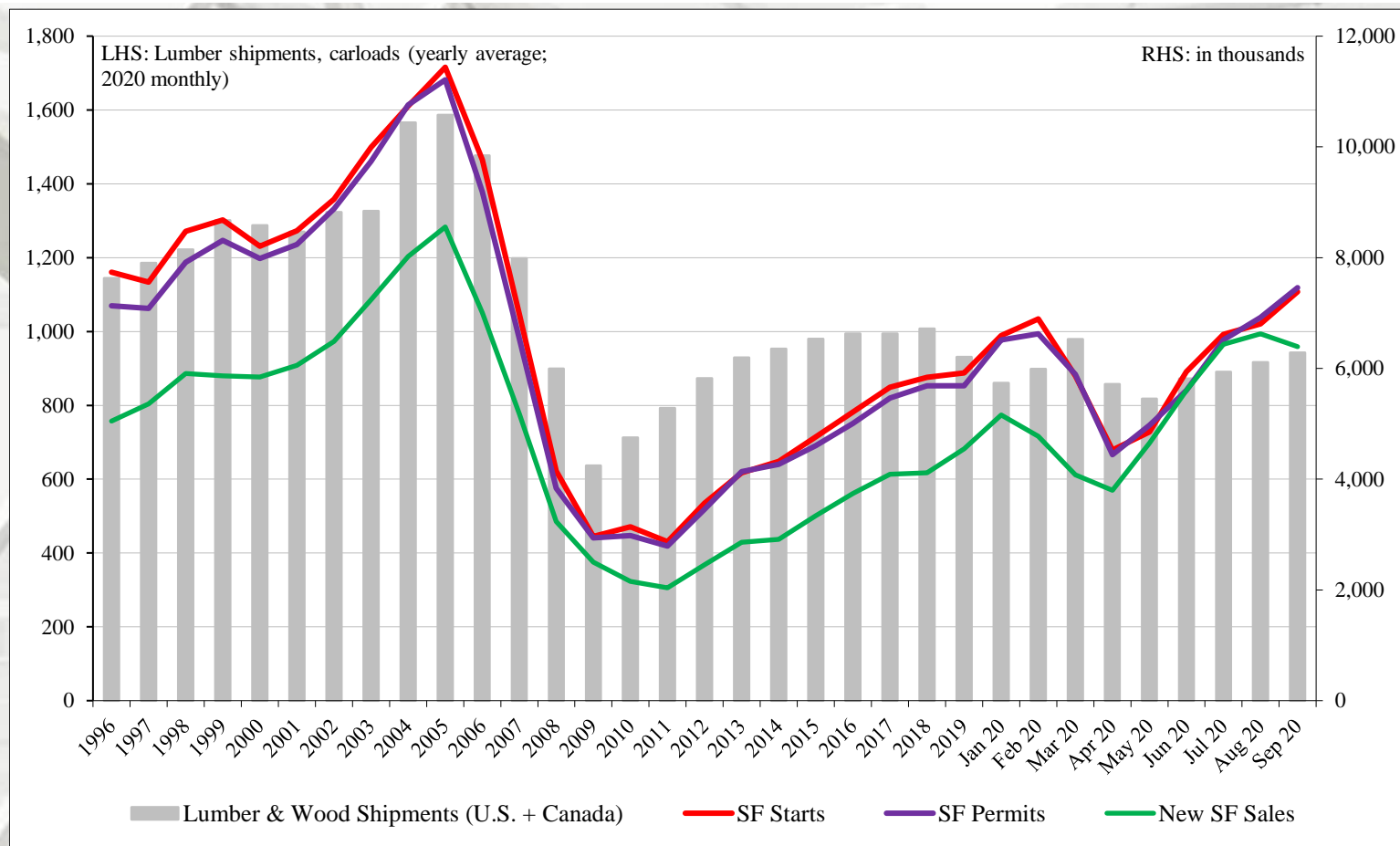
Months' Supply and New House Inventory^a



^a New HUC + New House Completions (sales data only)

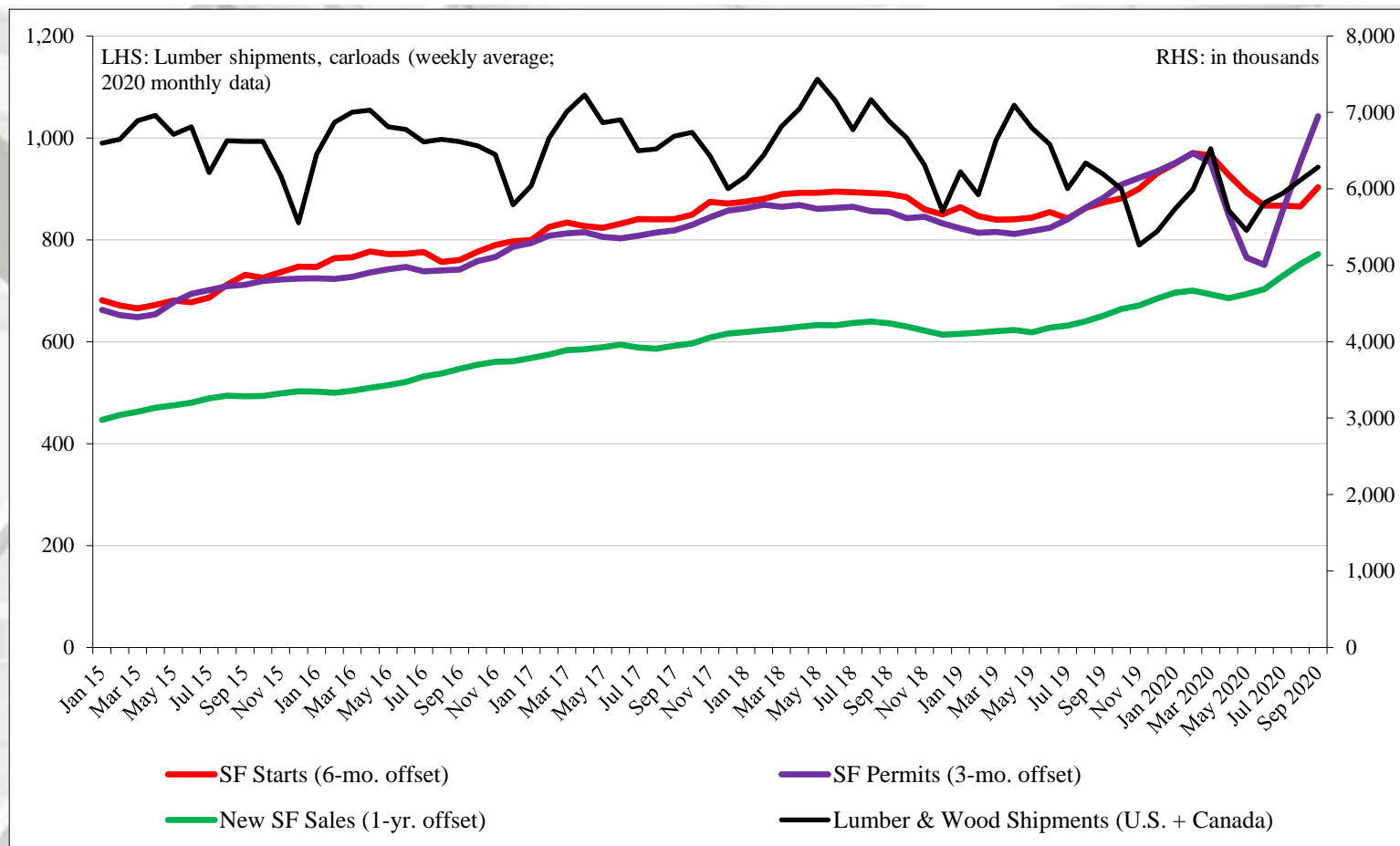
The months supply of new houses for sale was 3.6 months in September. Historic lows of 3.5 months were reported in June and August of 2003.

U.S.-Canada Lumber & Wood Shipments vs. SF Starts, Permits, and New Sales



Carloads of Canadian + US lumber and wood shipments to the US are contrasted above to U.S. housing metrics. Annual SF starts, SF Permits, and New sales are compared to carload lumber and wood shipments. The intent is to learn if lumber shipments relate to future SF starts, SF permits, and New sales. It is realized that lumber and wood products are trucked; however, to our knowledge comprehensive and timely trucking data is not available. Note that 2020 data is on a monthly basis.

U.S.-Canada Lumber & Wood Shipments vs. SF Starts, Permits, and New Sales



Carloads of Canadian + US lumber and wood shipments to the US are contrasted above to U.S. housing metrics. SF starts are off-set 6-months (a typical time-frame from permit issuance to actual start); Permits are off-set 3-months; and New sales are off-set 1-year. The intent is to learn if lumber shipments relate to future SF starts, SF permits, and New sales. It is realized that lumber and wood products are trucked; however, to our knowledge comprehensive and timely trucking data is not available.

September 2019 Construction Spending

	Total Private Residential*	SF	MF	Improvement**
September	\$610,871	\$305,843	\$88,134	\$216,894
August	\$594,264	\$289,302	\$87,095	\$217,867
2019	\$555,879	\$282,651	\$77,931	\$195,297
M/M change	2.8%	5.7%	1.2%	-0.4%
Y/Y change	9.9%	8.2%	13.1%	11.1%

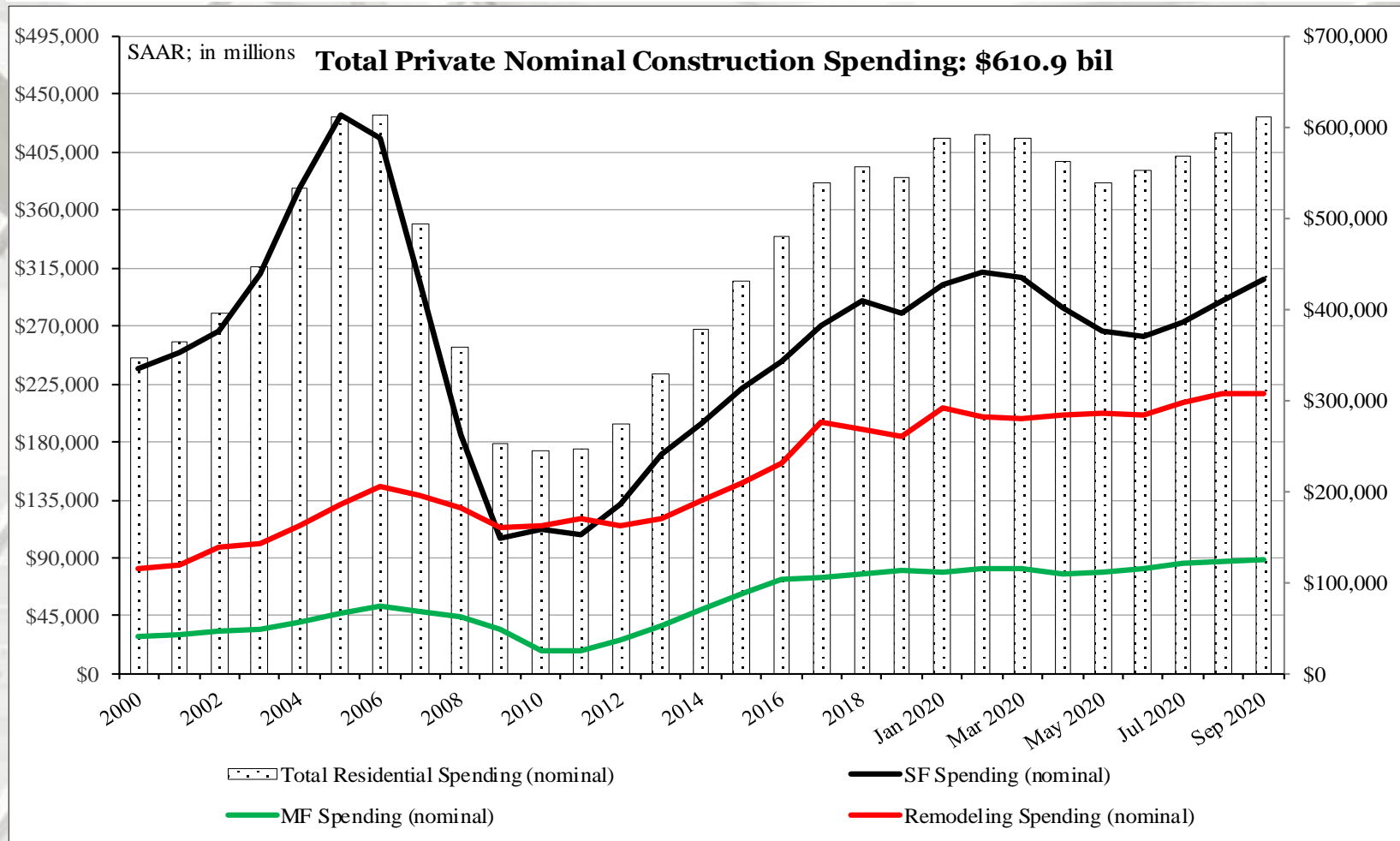
* billion.

** 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\$.

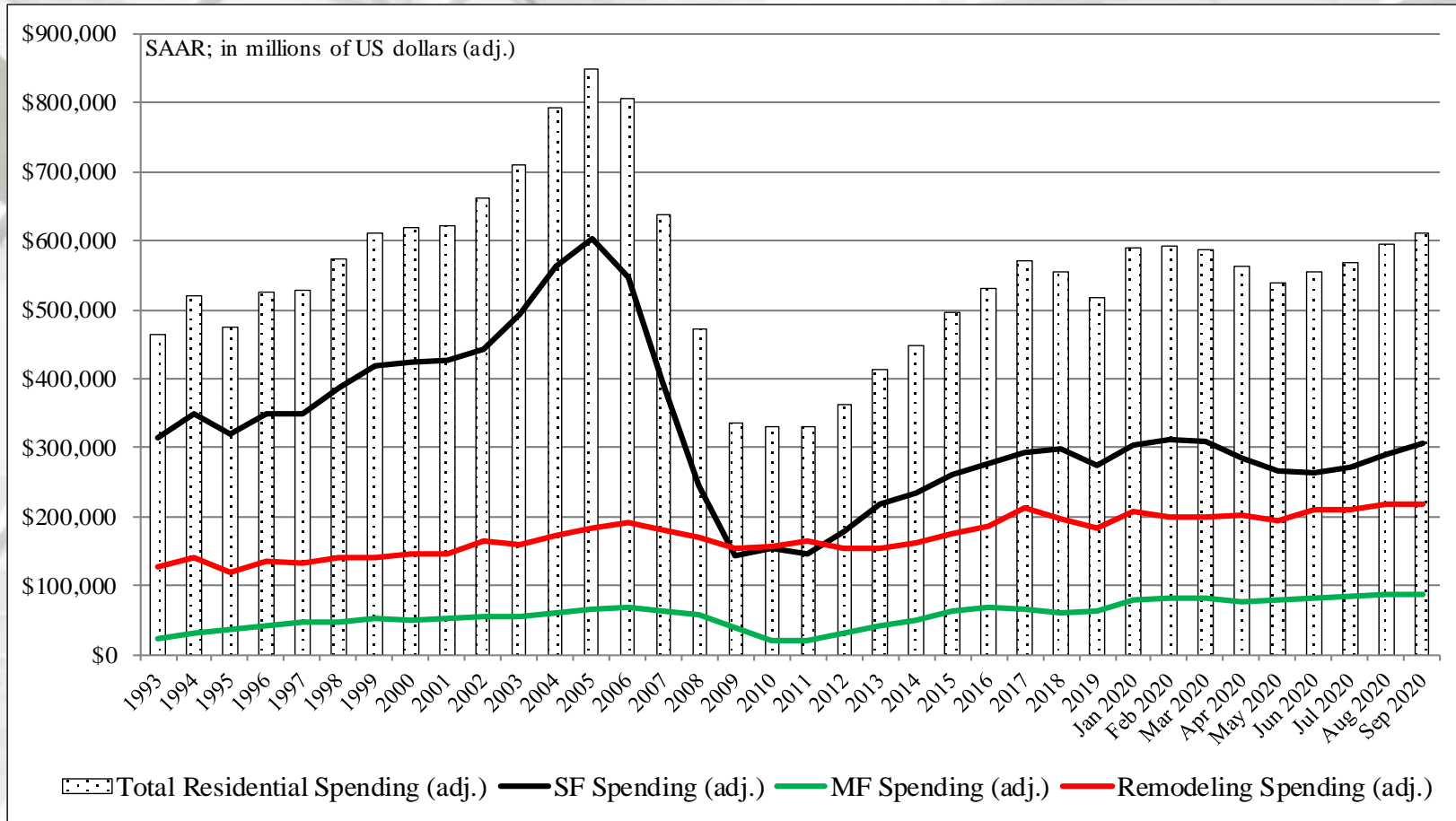
Total Construction Spending (nominal): 2000 – September 2020



Reported in nominal US\$.

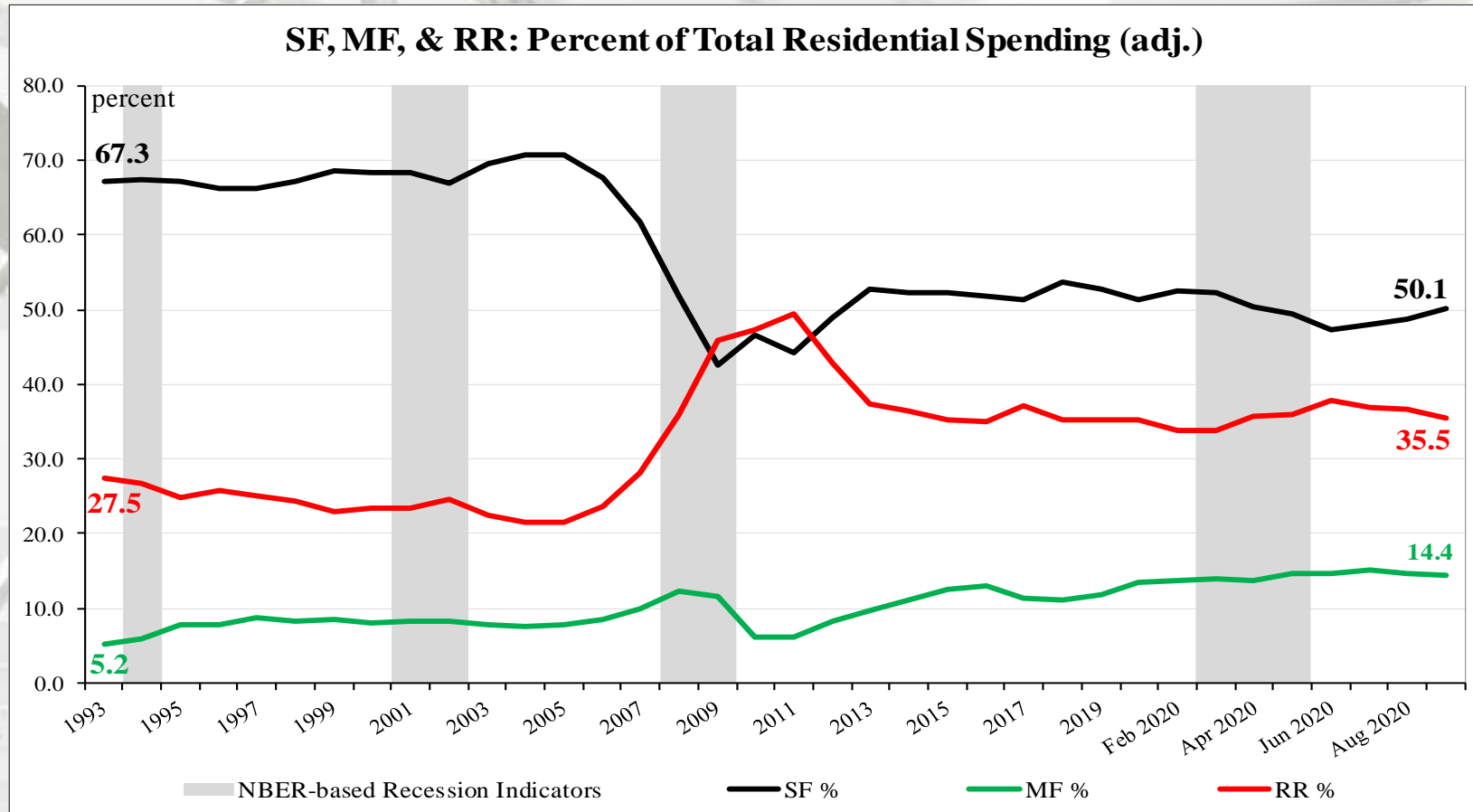
The US DOC does not report improvement spending directly, this is a monthly estimation for 2020.

Total Construction Spending (adjusted): 1993-September 2020



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

Construction Spending Shares: 1993 to September 2020



Total Residential Spending: 1993 through 2006

SF spending average: 69.2%

MF spending average: 7.5 %

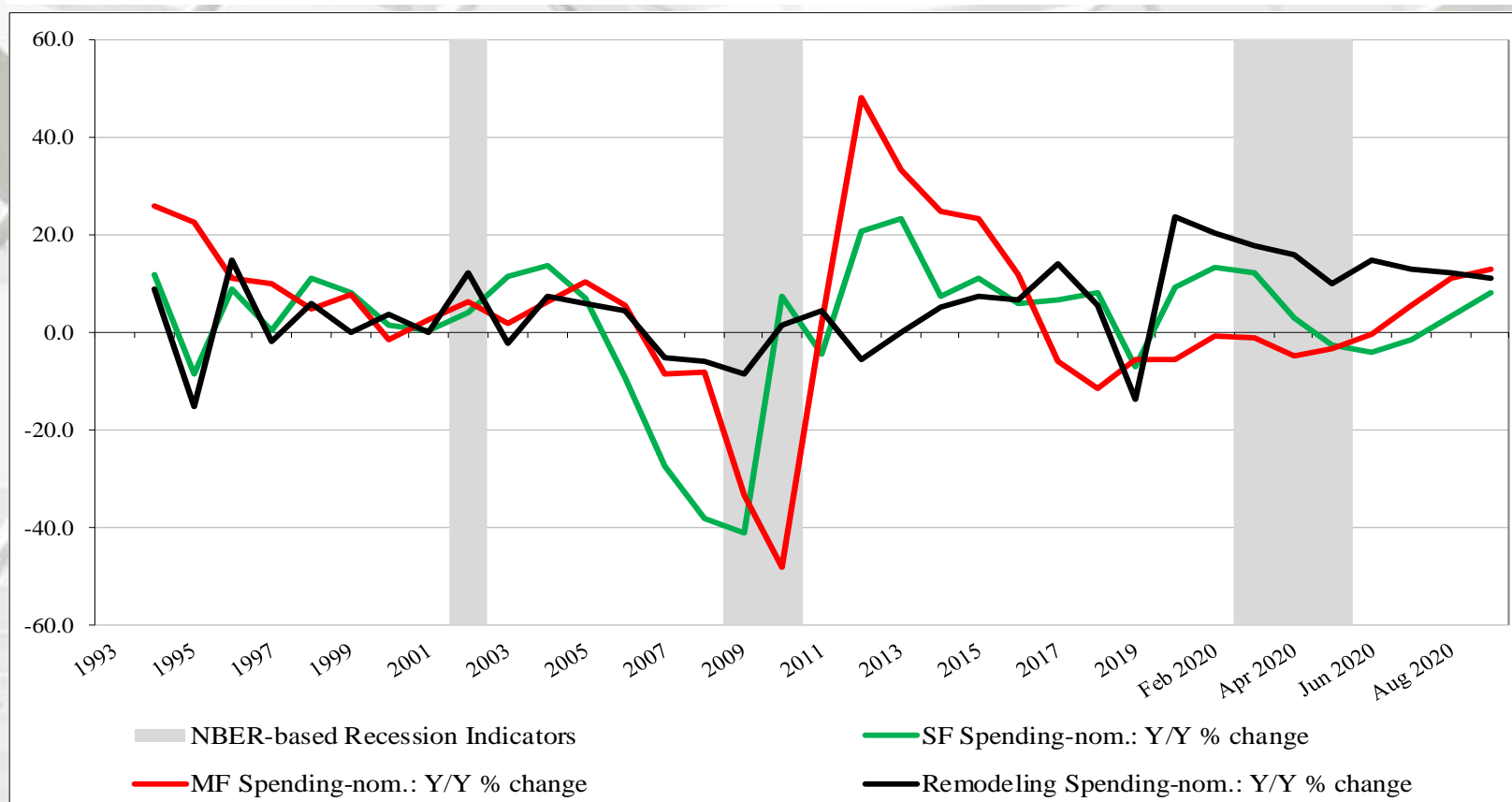
Residential remodeling (RR) spending average: 23.3 % (SAAR).

Note: 1993 to 2019 (adjusted for inflation, BEA Table 1.1.9); January-September 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>; 11/2/20 and <http://www.bea.gov/iTable/iTable.cfm>; 3/2/20

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

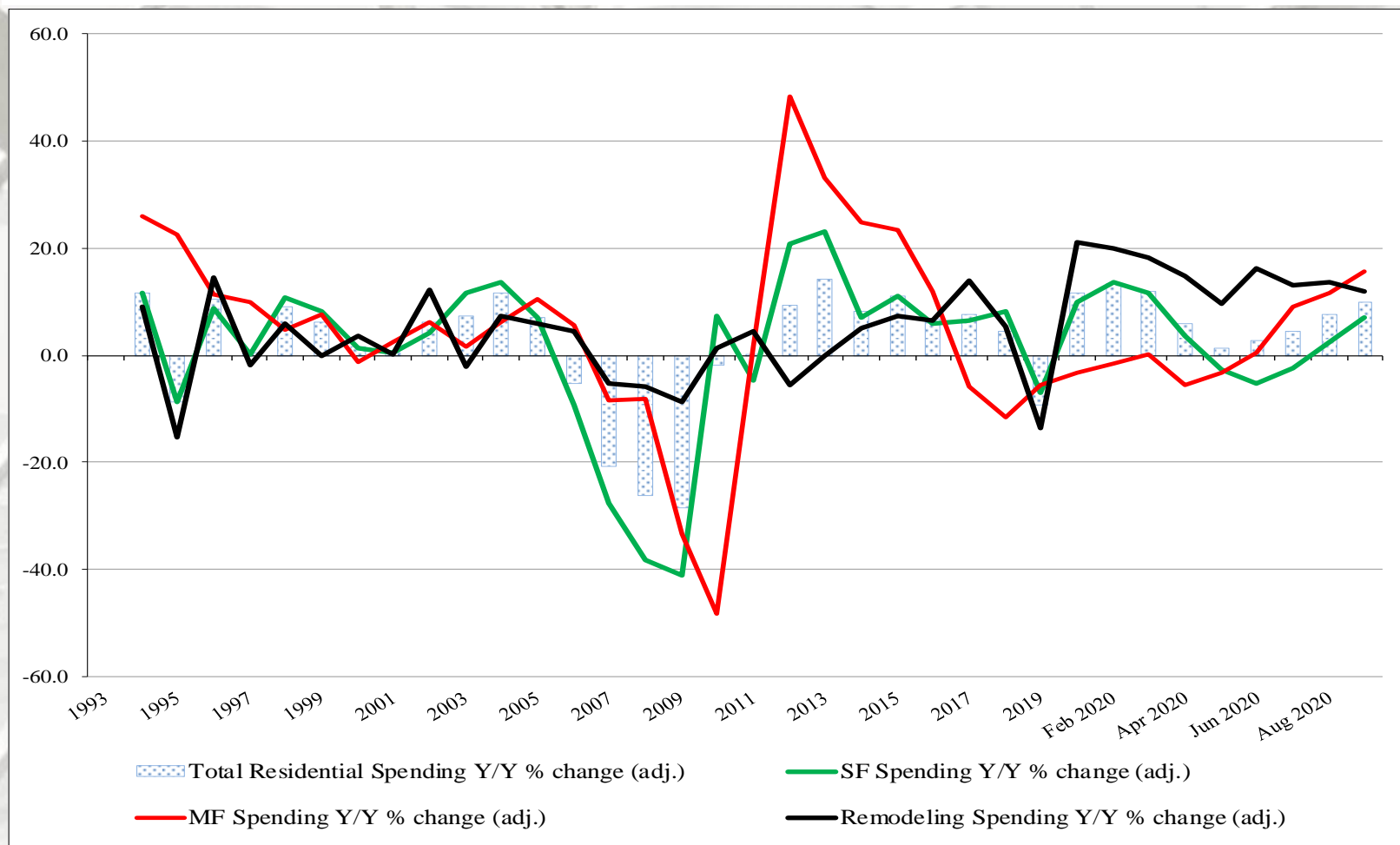


Nominal Residential Construction Spending: Y/Y percentage change, 1993 to September 2020

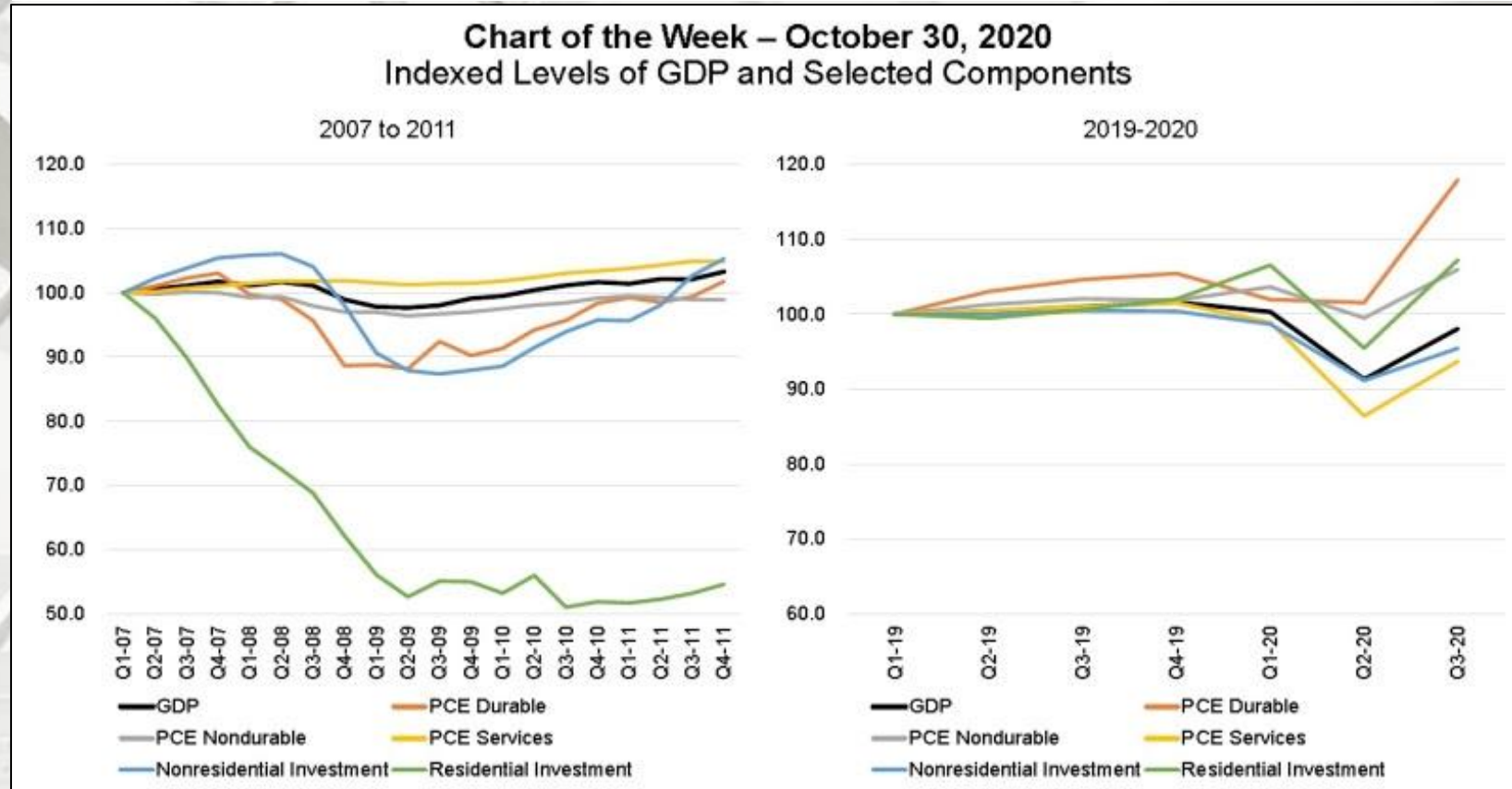
Presented above is the percentage change of inflation adjusted Y/Y construction spending. SF, MF, and RR expenditures were positive on a percentage basis, year-over-year (2020 data reported in nominal dollars).

* 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 September 2020



Mortgage Bankers Association (MBA): GDP & Construction Spending



Source: U.S. Bureau of Economic Analysis

“Economic growth rebounded 33.1 percent in the third quarter of 2020, with multiple segments of the economy – after a sharp 31.4% plunge in the second quarter – showing strong growth. Expressed as an annual rate, consumer spending on durable goods was up more than 80%, business spending on equipment increased more than 70%, residential investment increased almost 60%, and both exports and imports of goods were up over 100%. The data show a picture of an economy re-opening and restocking over the summer.” – Mike Fratantoni, Chief Economist, Senior Vice President, Research and Industry Technology and Joel Kahn, Associate Vice President, Economic & Industry Forecasting, MBA

MBA: GDP & Construction Spending

“This week’s chart compares the 2008-2010 Great Recession (left), to the recent pandemic-driven recession (right), to illustrate the differences in consumer spending and in both nonresidential and residential investment. Even with a 33% increase in GDP in this year’s third quarter, the level of GDP has not returned to where it was in the first quarter. Nonresidential investment was still around 3% lower in the third quarter, while consumer spending on services was 5% lower. This points to the significant negative hit to sectors that rely heavily on in-person activity such as leisure and hospitality. During the Great Recession, spending on services remained strong.

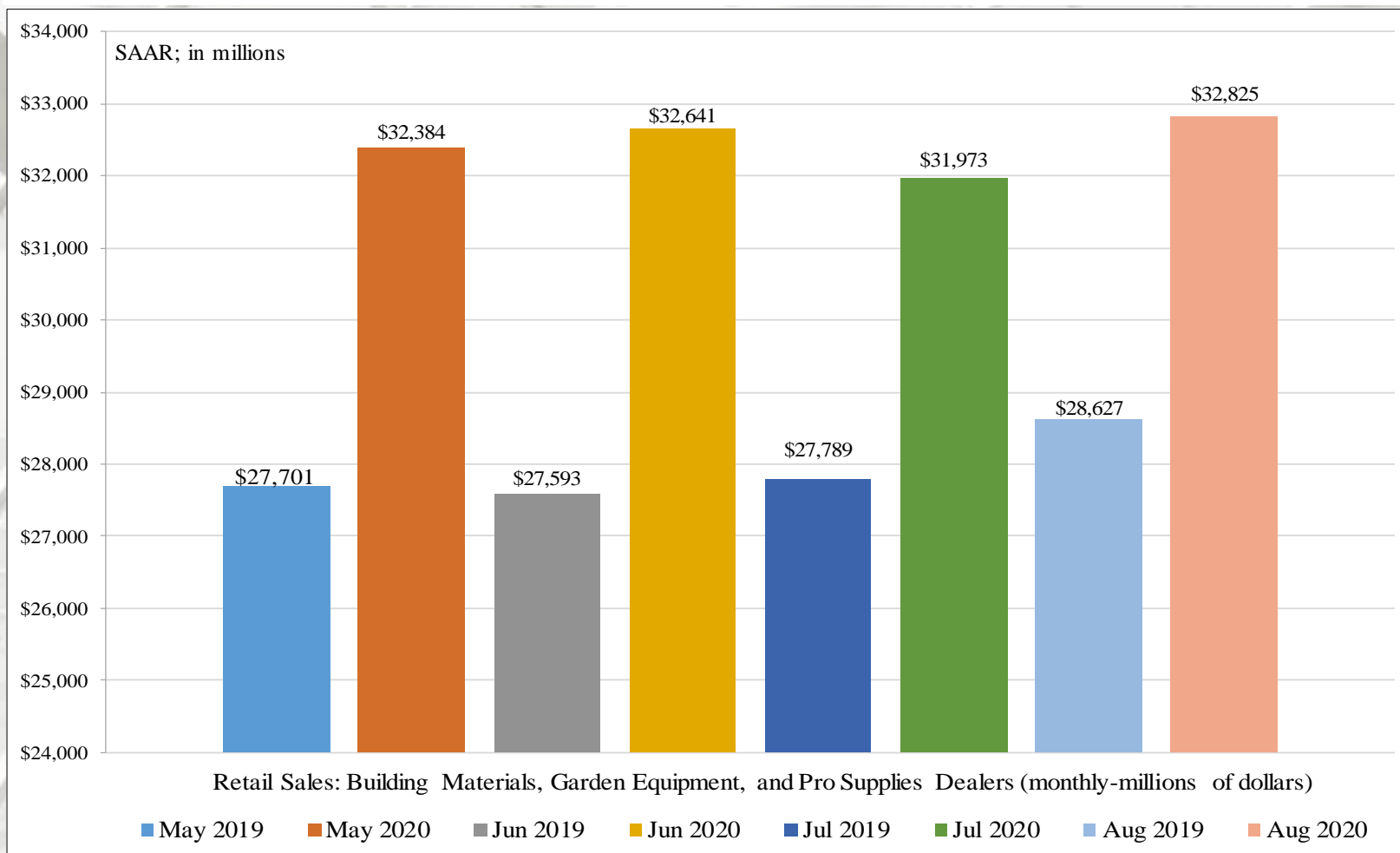
On the other end of the spectrum are consumer spending on durable and nondurable goods, which were both higher in the third quarter compared to the first quarter. Many households are spending more time at home and have spent on goods in connection with this change in lifestyle. Think: appliances, home office supplies, and groceries.

Finally, as shown in the chart on the left, the residential investment component of GDP did not return to pre-recession levels in the last episode, but after a brief downturn in this year’s second quarter, it has bounced back – in line with the jump in housing demand, driven by delayed activity from the spring and demographic factors. Furthermore, many households are seeking to move to less dense areas, or into homes with layouts to accommodate remote-work and distance-learning arrangements.

The third quarter 2020 rebound in growth is consistent with the gains we have seen in the job market. MBA expects that the pace of economic growth will slow in the fourth quarter and into next year, but expansion should nonetheless continue, provided the current spike in virus cases does not lead to another complete lockdown.” – Mike Fratantoni, Chief Economist, Senior Vice President, Research and Industry Technology and Joel Kahn, Associate Vice President, Economic & Industry Forecasting, MBA

Remodeling

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

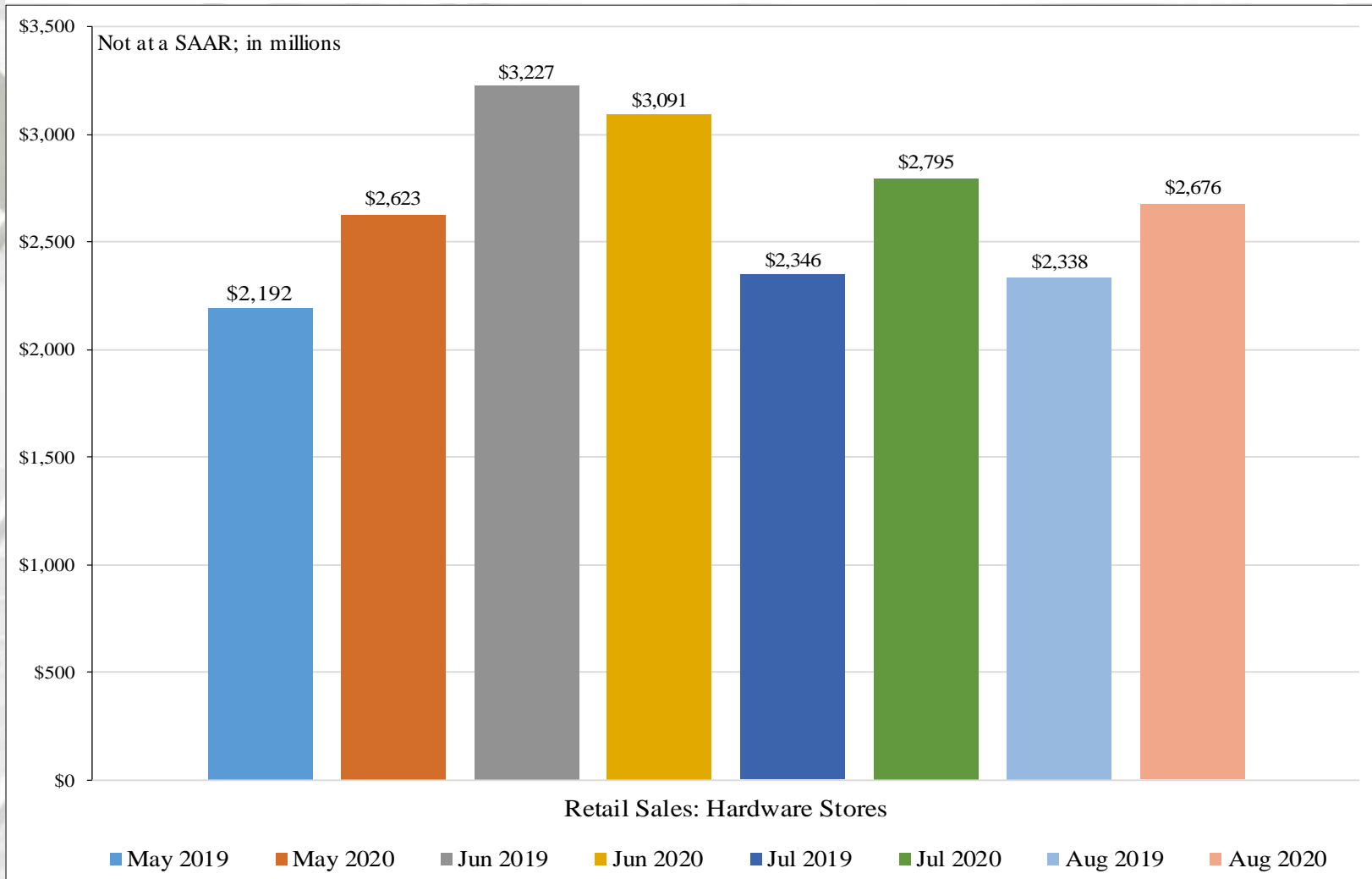


Building materials, Garden Equipment, & PRO Supply Dealers: NAICS 4441

NAICS 4441 sales increased 2.7% from July to August and improved 14.1% from August 2019 (on a non-adjusted basis).

Remodeling

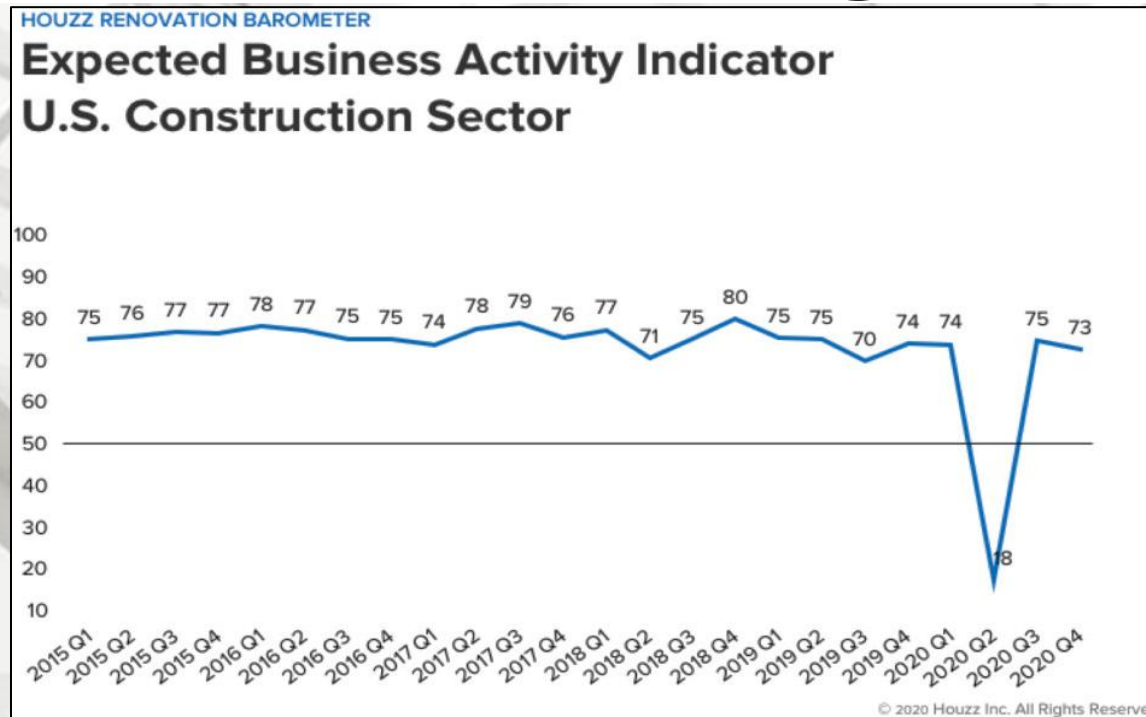
Retail Sales: Hardware Stores



Hardware Stores: NAICS 44413

NAICS 44413 retail sales increased 14.5% from July to August and improved 14.5% from August 2019 (on a non-adjusted basis).

Remodeling

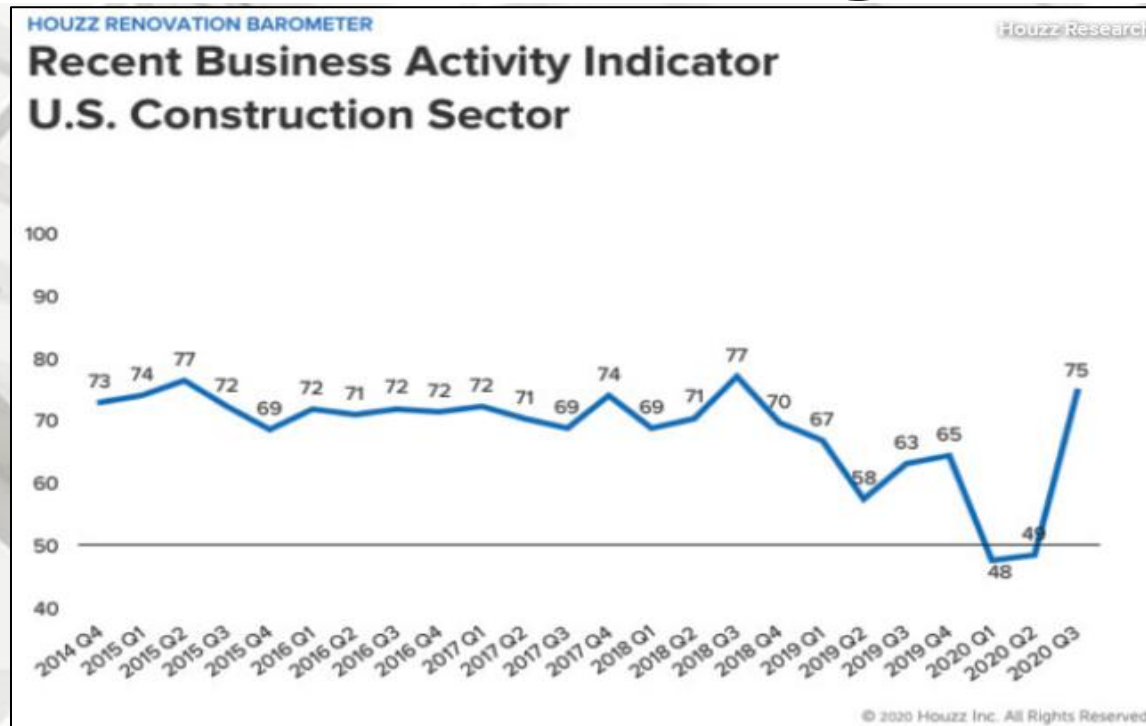


Houzz

Q4 2020 Houzz Renovation Barometer

“The Expected Business Activity Indicator related to project inquiries and new committed projects decreased to 73 in Q4 (compared to 75 in Q3): The expectations for project inquiries decreased from 79 to 71 in Q4, while expectations for new committed projects increased from 71 to 75 in Q4 (up four points). Among the two reporting business groups, expectations were slightly tempered for both build-only and design and build remodelers compared to expectations in the last quarter. Expectations of build-only remodelers decreased to 75 (down one point, compared to Q3) and to 71 among design and build firms (down two points, compared to Q3). Expectations among firms in the construction sector are still below the levels in the same quarter a year ago in five out of nine Census divisions. [See additional subsector and regional data \(PDF\).](#)” – Houzz Research

Remodeling

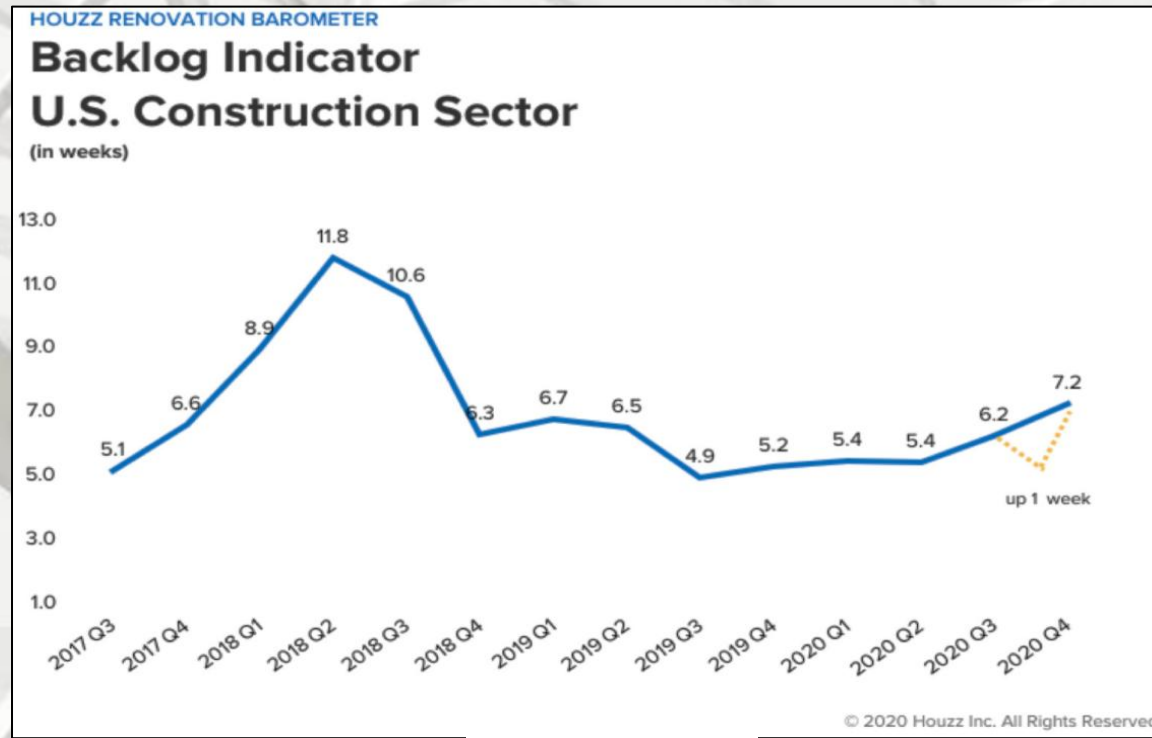


Houzz

Q4 2020 Houzz Renovation Barometer

“The Recent Business Activity Indicator related to project inquiries and new committed projects increased significantly to 75 in Q3 (compared to 49 in Q2): This follows increases in project inquiry activity, which grew to 75 in Q3 (compared to 51 in Q2) and new committed projects to 75 (up 19 points relative to Q2). The overall recent activity indicator for the construction services sector was driven by growth reported by the two business groups. Build-only remodelers reported an increase in the recent business activity to 71 (compared to 48 in Q2), which is the highest activity reported since 2018 Q4. Design and build remodelers also reported a significant increase in recent activity to 78 in Q3 (up 28 points relative to Q2).” – Houzz Research

Remodeling



Houzz

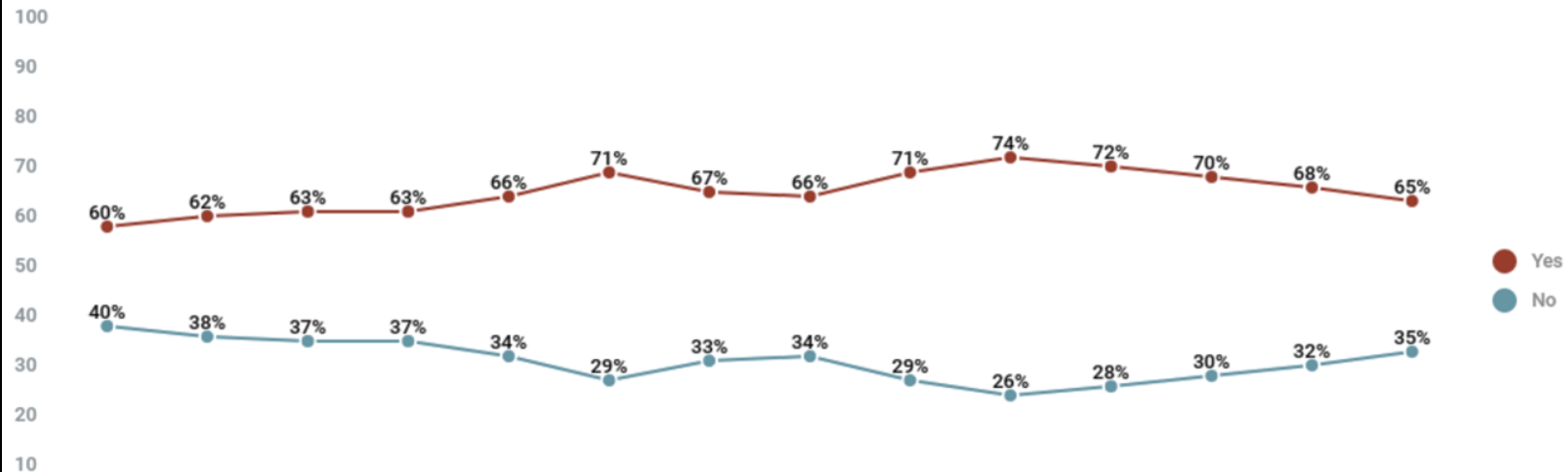
Q4 2020 Houzz Renovation Barometer

“The Q4 2020 Barometer was fielded from September 24 through October 7 and garnered responses from 261 build-only remodelers and 601 design and build remodelers (n = 862 in the construction sector.” – Houzz Research

Remodeling

Have You Started Any New DIY Projects in or Around Your Home in the Last Month?

(Maintenance, Replacement, Repair or Remodeling Work That YOU Are Doing)



The Farnsworth Group

6 Months of Tracking COVID Among DIYers – Where We Are Now

“The percent of DIYers starting a project steadily increased through the early summer weeks, rising from 60% in mid-March to 74% by the end of May. Since then, DIY activity has come down to 65% at the end of September. This is being impacted by seasonality as we’ve seen the biggest decrease in lawn & garden projects.” – Adam Mowrey, Senior Client Manager, The Farnsworth Group

Remodeling

The Farnsworth Group

Financial Concerns Remain For Some, Others Have More To Spend: Don't Get Caught In The Middle

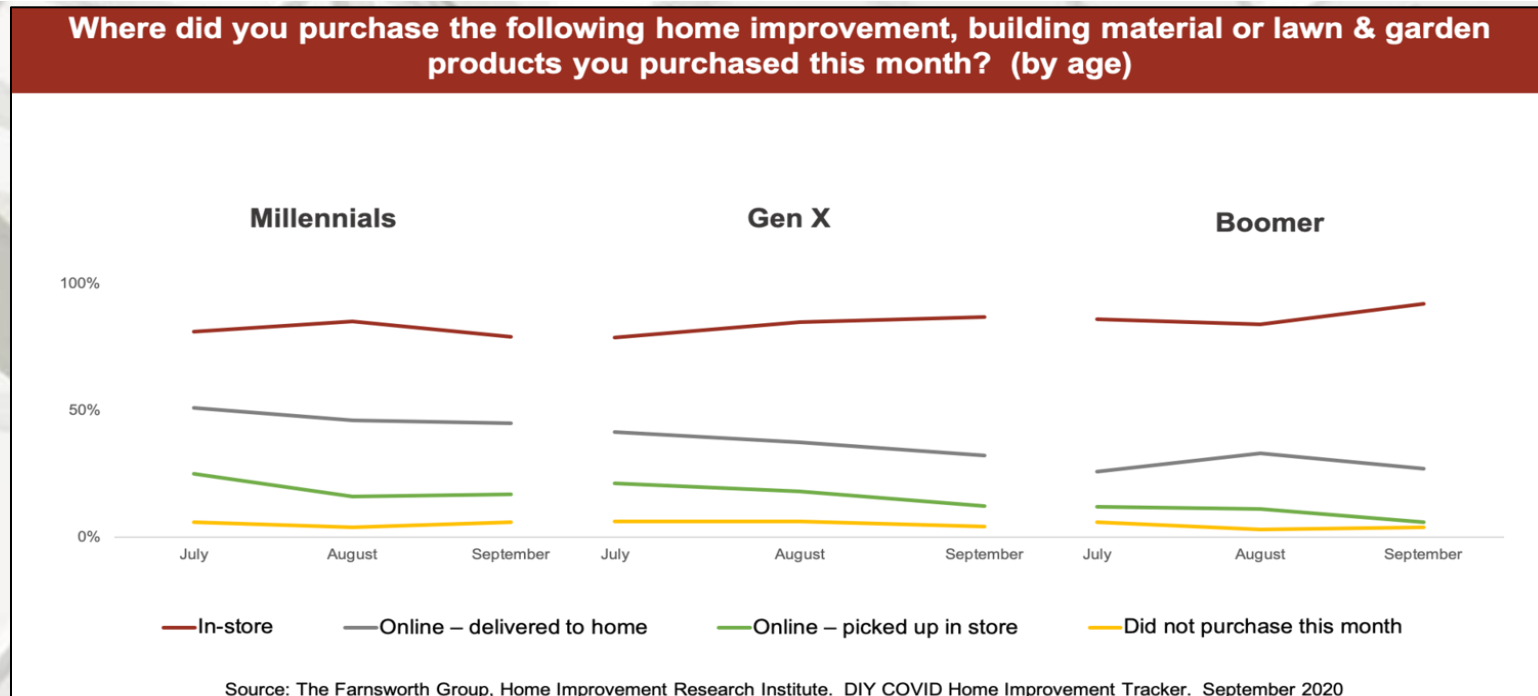
“September had the lowest percentage of DIYers that have canceled or decided not to do a project due to COVID. March had over half saying they’ve put some projects on hold or canceled due to COVID, while September was down to 23%. The reason for not doing projects because of COVID was clearly related to DIYer’s financial concerns.

Budget and financial concerns have remained and even grown for a subset of DIYers. Manufacturers and suppliers must monitor this consumer group because it is/will impact on their decisions. It’s important to offer ‘Good’ products for price sensitive DIYers, while also offering ‘Best’ products for DIYers who aren’t concerned and likely have more disposable income to spend on their home. Be careful not to get caught in the middle!

Project Intent Remains Strong Going Into Autumn

66% of DIYers are planning to start a project in the coming weeks. While this is down from its peak of 77%, this is an encouraging sign as we typically see much DIY activity slow going into the fall and winter. This would suggest strong DIY retail sales through October.” – Adam Mowrey, Senior Client Manager, The Farnsworth Group

Remodeling



The Farnsworth Group

Online Is Real, But Varies By Generation

Purchases have returned to in-store, but much of the online purchase activity that peaked in May has also remained. Online becomes much more important the younger the DIYer. Over 60% of Gen Y reported buying home improvement products online in the month of September compared to roughly 30% of Boomers. Overall, 25% of DIYers going online do so because products are not available in-store.

Be sure your organization is doing analysis into your customers' behaviors to understand who is buying where, what they expect and how it varies by demographic. This will inform your product and marketing teams on what YOU must do to meet the needs of various groups." – Adam Mowrey, Senior Client Manager, The Farnsworth Group

Remodeling

The Farnsworth Group

Concerns Remain, But Not As Strong

Health and safety remain big concerns of DIYers regarding spikes in COVID in recent months. However, the severity of their concerns is slowly coming down month after month. Their top concern: finances/money. This is followed by concerns about reclosure of business and resuming sheltering in place.

It's important to understand that continued concerns related to COVID are shaping what projects DIYers tackle, what products they purchase and where they are engaging with products or brands.

Summary

In six months, we've seen the DIY market remain strong. There are many indications that DIY activity has been added sales rather than pull forward sales due to increased spend on DIY projects as a result of a shift in disposable income, time at home and new DIY projects stimulated because of COVID. We must continue to monitor health and financial concerns as they will continue to play a role in DIY behaviors.

Thus far, spikes in COVID have not had a negative impact on DIY activity, but seasonality is impacting popular projects. DIYers continue to go online even though they are returning to stores, and this is expected to continue.

Manufacturers and suppliers must determine how consumer behaviors have changed for their category, their market and their projects. The importance of availability, impact of price or other factors may have a greater influence today than we've seen over the last few years.” – Adam Mowrey, Senior Client Manager, The Farnsworth Group

Existing House Sales

National Association of Realtors
September 2020 sales: 6.540 thousand

	Existing Sales	Median Price	Mean Price	Month's Supply
September	6,540,000	\$311,800	\$343,300	2.7
August	5,980,000	\$310,400	\$342,300	3.0
2019	5,410,000	\$271,500	\$307,500	4.0
M/M change	9.4%	0.5%	0.3%	-10.0%
Y/Y change	20.9%	14.8%	11.6%	-32.5%

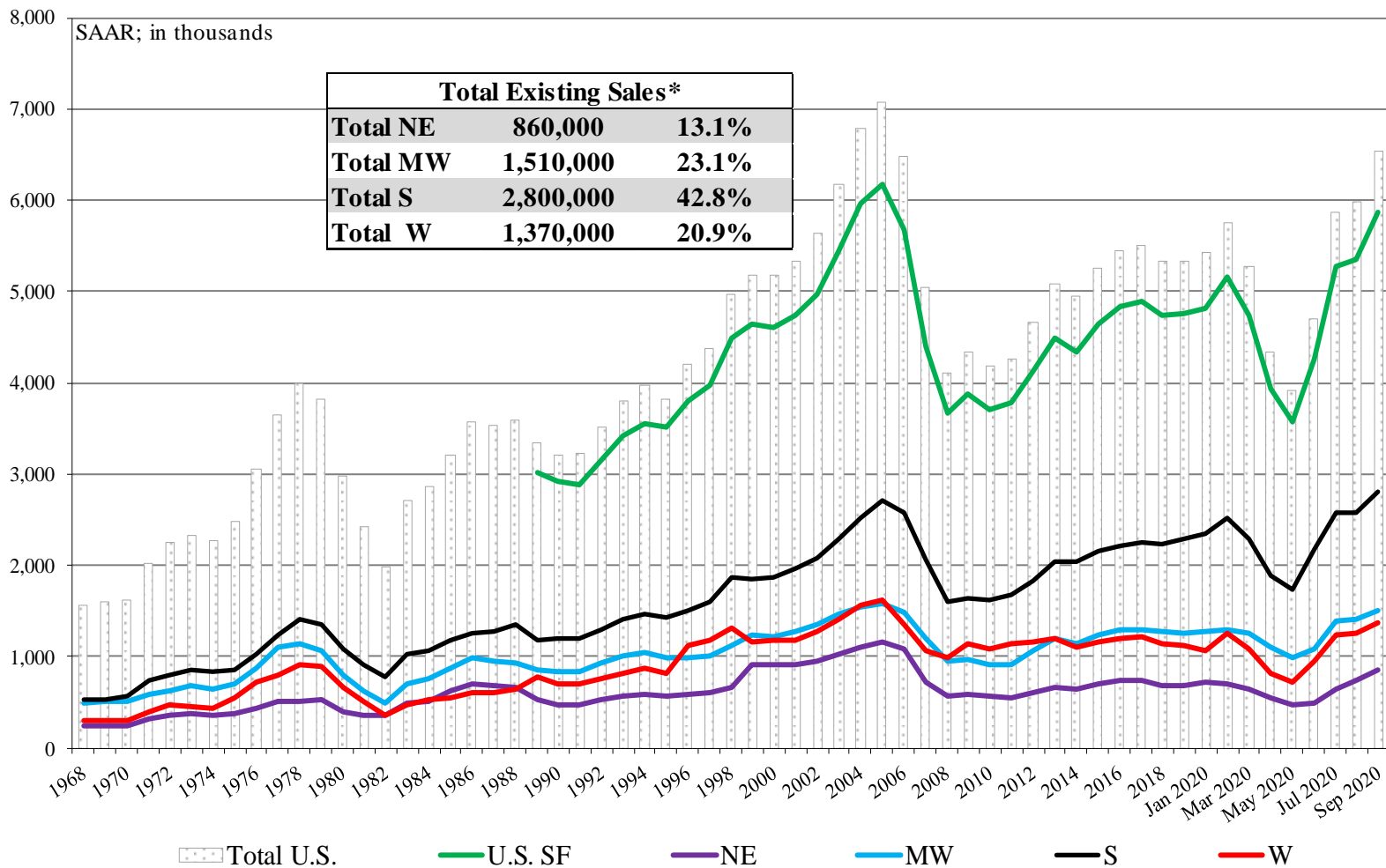
All sales data: SAAR

Existing House Sales

	Existing SF Sales	SF Median Price	SF Mean Price	
September	5,870,000	\$316,200	\$346,600	
August	5,350,000	\$314,800	\$345,500	
2019	4,820,000	\$274,400	\$309,400	
M/M change	9.7%	0.5%	0.3%	
Y/Y change	21.8%	15.2%	12.0%	
	NE	MW	S	W
September	860,000	1,510,000	2,800,000	1,370,000
August	740,000	1,410,000	2,580,000	1,250,000
2019	700,000	1,260,000	2,290,000	1,160,000
M/M change	16.2%	7.1%	8.5%	9.6%
Y/Y change	22.9%	19.8%	22.3%	18.1%

All sales data: SAAR.

Existing House Sales



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

* Percentage of existing sales.

U.S. Housing Prices

Federal Housing Finance Agency

FHFA House Price Index Up 1.5 Percent in August; Up 8.0 Percent from Last Year

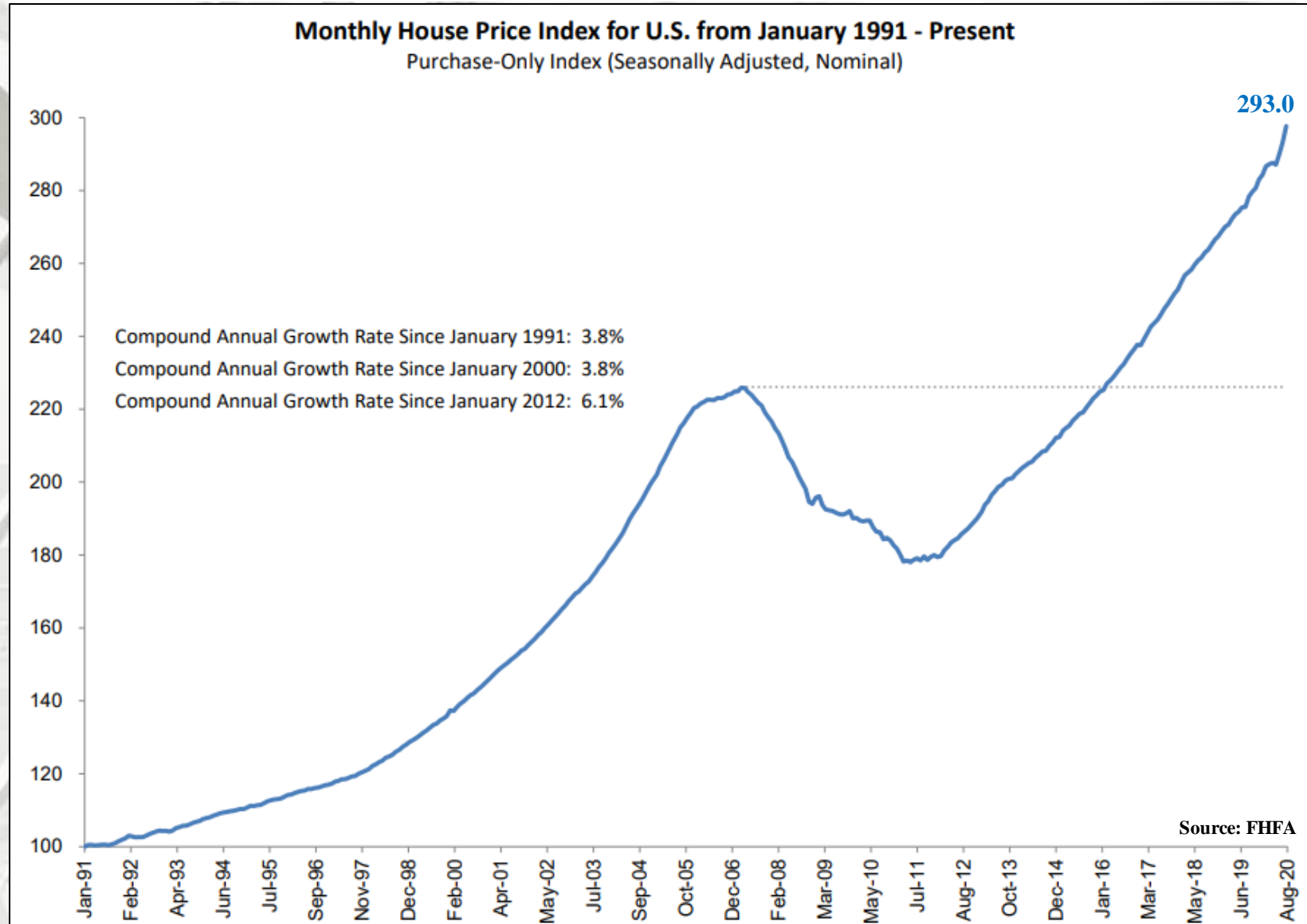
Significant Findings

“House prices rose nationwide in August, up **1.5 percent** from the previous month, according to the latest Federal Housing Finance Agency House Price Index (FHFA HPI®). House prices rose **8.0 percent** from August 2019 to August 2020. FHFA also revised its previously reported 1.0 percent price change for July 2020 to 1.1 percent.

For the nine census divisions, seasonally adjusted monthly house price changes from July 2020 to August 2020 ranged from **+0.9 percent** in the East South Central division to **+1.9 percent** in the West South Central division. The 12-month changes ranged from **+7.2 percent** in the West North Central division to **+9.7 percent** in the Mountain division.” – Raffi Williams and Adam Russell, FHFA

“U.S. house prices posted a strong increase in August. Between July and August 2020, national prices increased by 1.5 percent, which represents the largest one-month price increase observed since the start of the index in 1991. This large month-over-month gain contributes to an already strong increase in prices over the summer. These price gains can be attributed to the historically low interest rate environment, rebounding housing demand, and continued supply constraints.” – 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 Shows Annual Home Price Gains Increased to 5.7% in August

“Data for August 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 5.7% annual gain in August, up from 4.8% in the previous month. The 10-City Composite annual increase came in at 4.7%, up from 3.5% in the previous month. The 20-City Composite posted a 5.2% year-over-year gain, up from 4.1% in the previous month.

Phoenix, Seattle and San Diego reported the highest year-over-year gains among the 19 cities (excluding Detroit) in August. Phoenix led the way with a 9.9% year-over-year price increase, followed by Seattle with an 8.5% increase and San Diego with a 7.6% increase. All 19 cities reported higher price increases in the year ending August 2020 versus the year ending July 2020.” – Craig J. Lazzara, Managing Director and Global Head of Index Investment Strategy, S&P Dow Jones Indices

U.S. Housing Prices

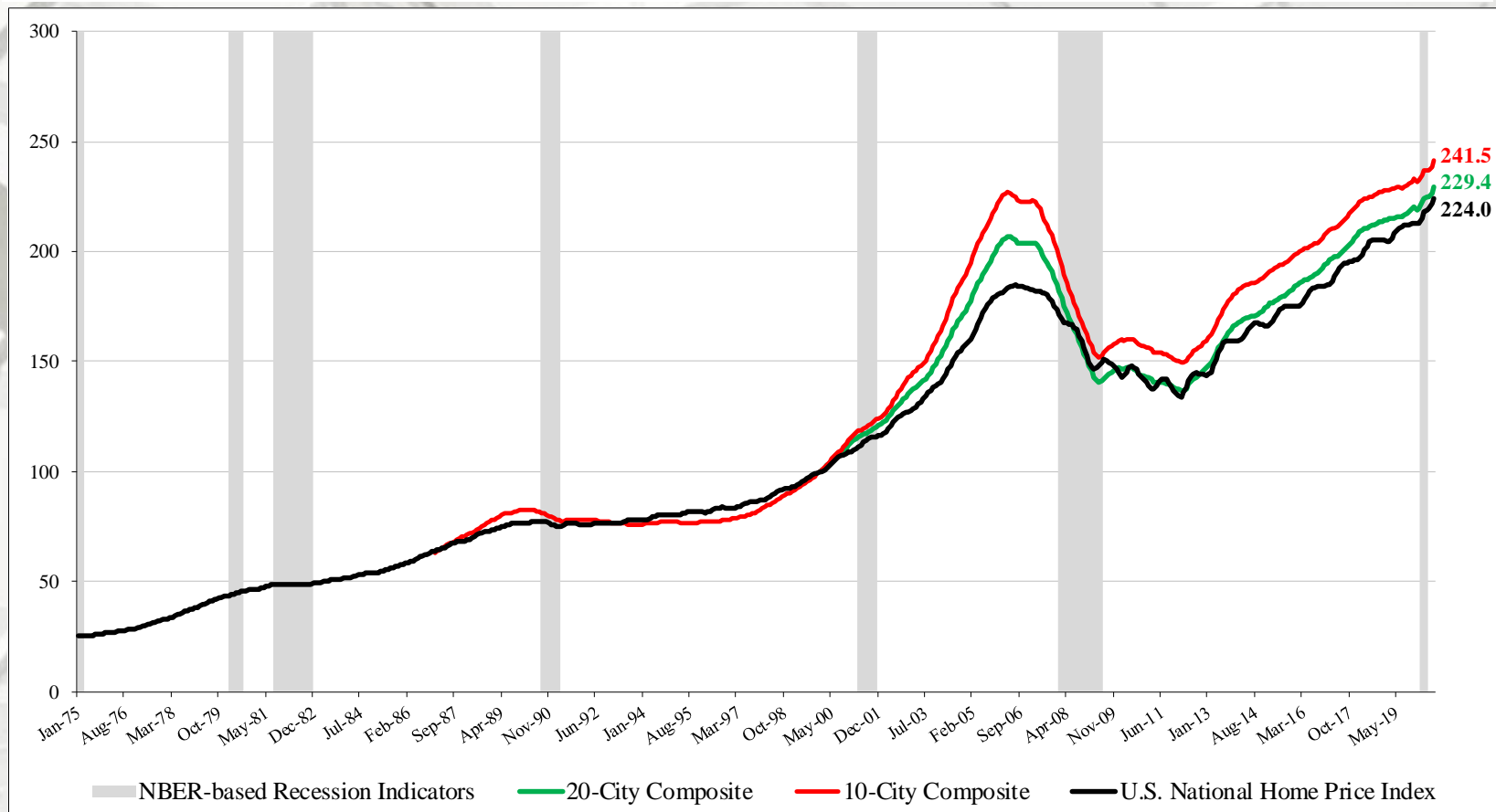
S&P CoreLogic Case-Shiller Index Month-Over-Month

“The National Index posted a 1.1% month-over-month increase, while the 10-City and 20-City Composites both posted increases of 1.1% before seasonal adjustment in August. After seasonal adjustment, the National Index posted a month-over-month increase of 1.0%, while the 10-City and 20-City Composites both posted increases of 0.5%. In August, all 19 cities (excluding Detroit) reported increases before seasonal adjustment, while 17 of the 19 cities reported increases after seasonal adjustment

Analysis

Housing prices were strong in August. The National Composite Index gained 5.7% relative to its level a year ago, well ahead of July’s 4.8% increase. The 10- and 20-City Composites (up 4.7% and 5.2%, respectively) also rose at an accelerating pace in August. The strength of the housing market was consistent nationally – all 19 cities for which we have August data rose, and all 19 gained more in the 12 months ended in August than they had done in the 12 months ended in July. A trend of accelerating increases in the National Composite Index began in August 2019 but was interrupted in May and June, as COVID-related restrictions produced modestly-decelerating price gains. We speculated last month that the accelerating trend might have resumed, and August’s results easily bear that interpretation. The last time that the National Composite matched August’s 5.7% growth rate was 25 months ago, in July 2018. If future reports continue in this vein, we may soon be able to conclude that the COVID-related deceleration is behind us.” – Craig J. Lazzara, Managing Director and Global Head of Index Investment Strategy, S&P Dow Jones Indices

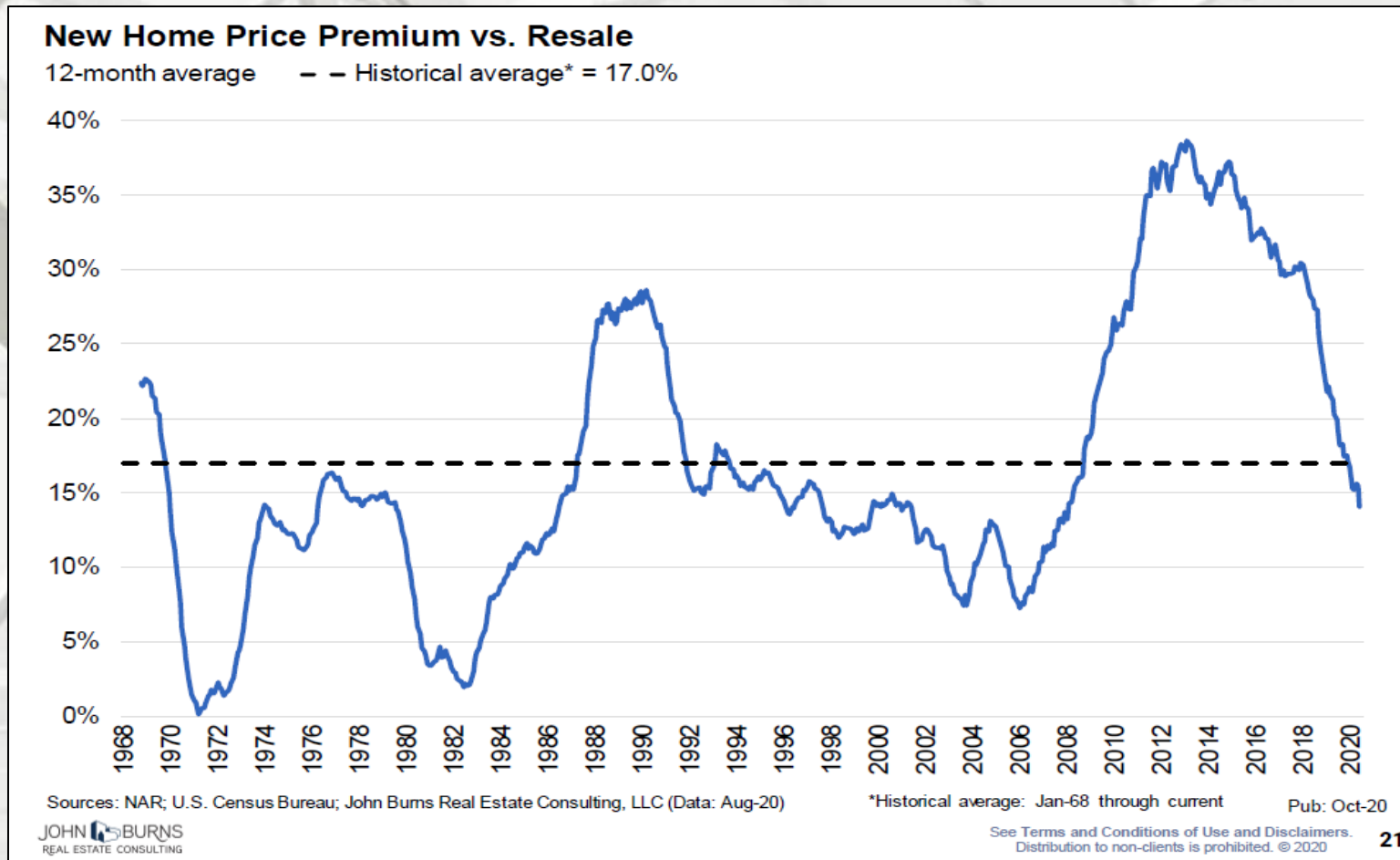
S&P/Case-Shiller Home Price Indices



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

“Phoenix’s 9.9% increase topped the league table for August; this is the 15th consecutive month in which Phoenix home prices rose more than those of any other city. Seattle (8.5%) once again took the silver medal, with San Diego (7.6%) in third place. It’s a measure of housing’s strength that even the worst-performing cities, Chicago (1.2%) and New York (2.8%), did better in August than in July. Prices were strongest in the West and Southeast 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

U.S. Housing Prices



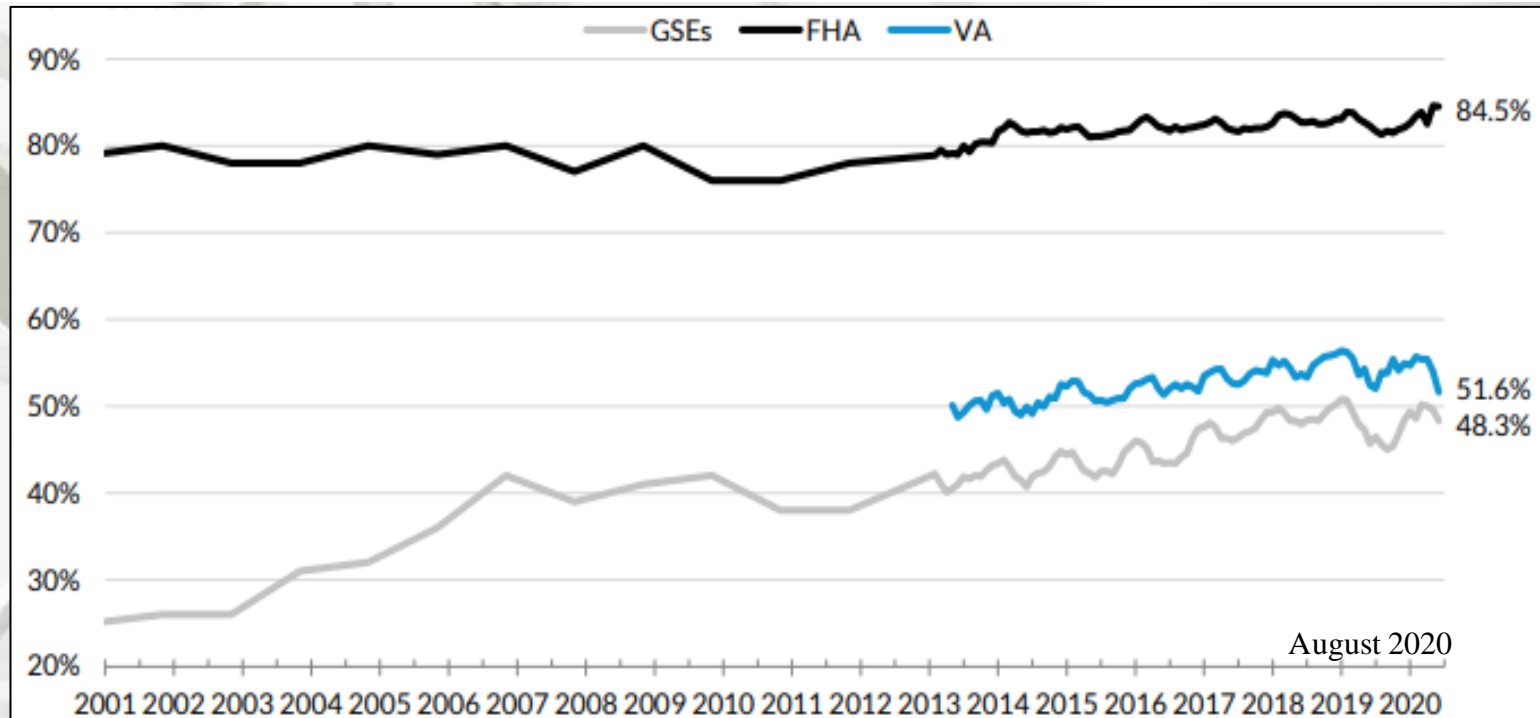
John Burns Real Estate Consulting, LLC New House Sales

“In the last 5 years, new homes have shifted from a historic premium over resales to a below normal premium. First, builders shifted down in size and specification level. Now, they are pushing to the distant suburbs where homes are less expensive.” – John Burns, Chief Executive Officer, John Burns Real Estate Consulting, LLC

Source: <https://twitter.com/johnburnsjbrec/status/1321060382581133314/photo/1>; 10/27/20

[Return to TOC](#)

First-Time House Buyers



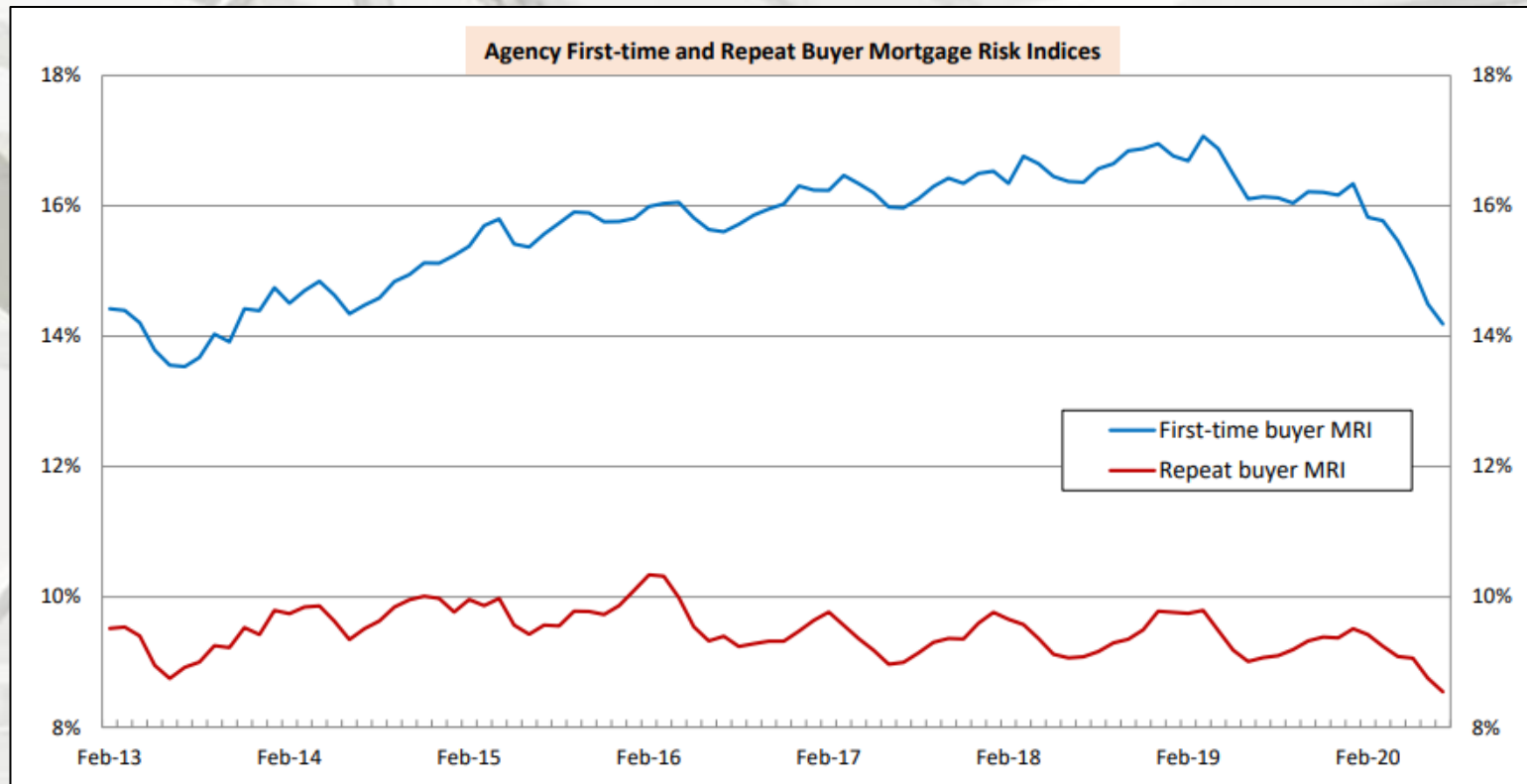
Sources: eMBS, Federal Housing Administration (FHA) and Urban Institute.

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

Urban Institute

“In August 2020, the FTHB share for FHA, which has always been more focused on first time homebuyers, was 84.5 percent. The FTHB share of VA lending declined in August to 51.6 percent. The GSE FTHB share in August was slightly down from July to 48.3 percent. ...” – Bing Lai, Research Associate, Housing Finance Policy Center

First-Time House Buyers



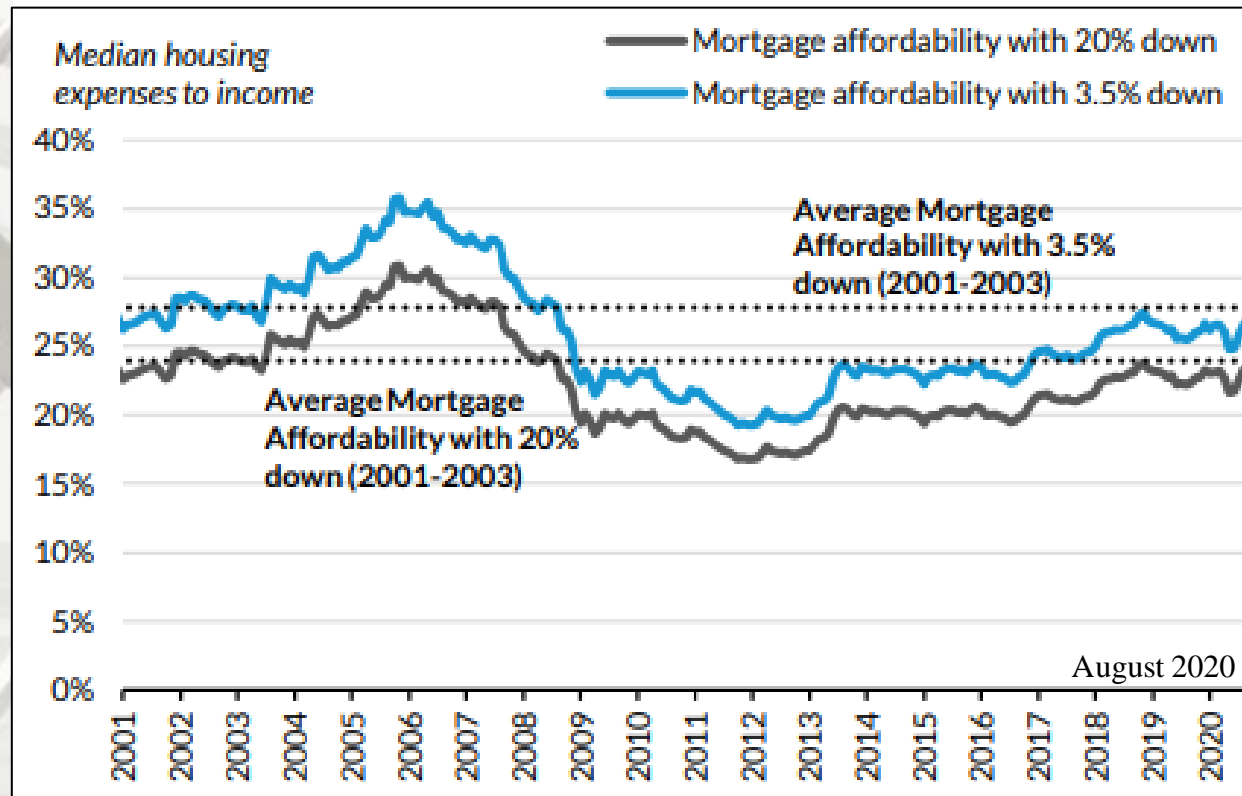
Source: AEI Housing Center, www.AEI.org/housing.

AEI Housing Center

“The first-time buyer (FTB) MRI is back to its 2013 level. The FTB leverage punch bowl is less spiked due to a lower FHA share, less competition between GSEs and FHA, higher credit scores, and lower DTIs. However, the unprecedented spiking of the monetary punch bowl is driving home price appreciation.” – Edward Pinto, Resident Fellow; Director and Tobias Peter, Research Fellow and Director of Research, AEI Housing Center

Housing Affordability

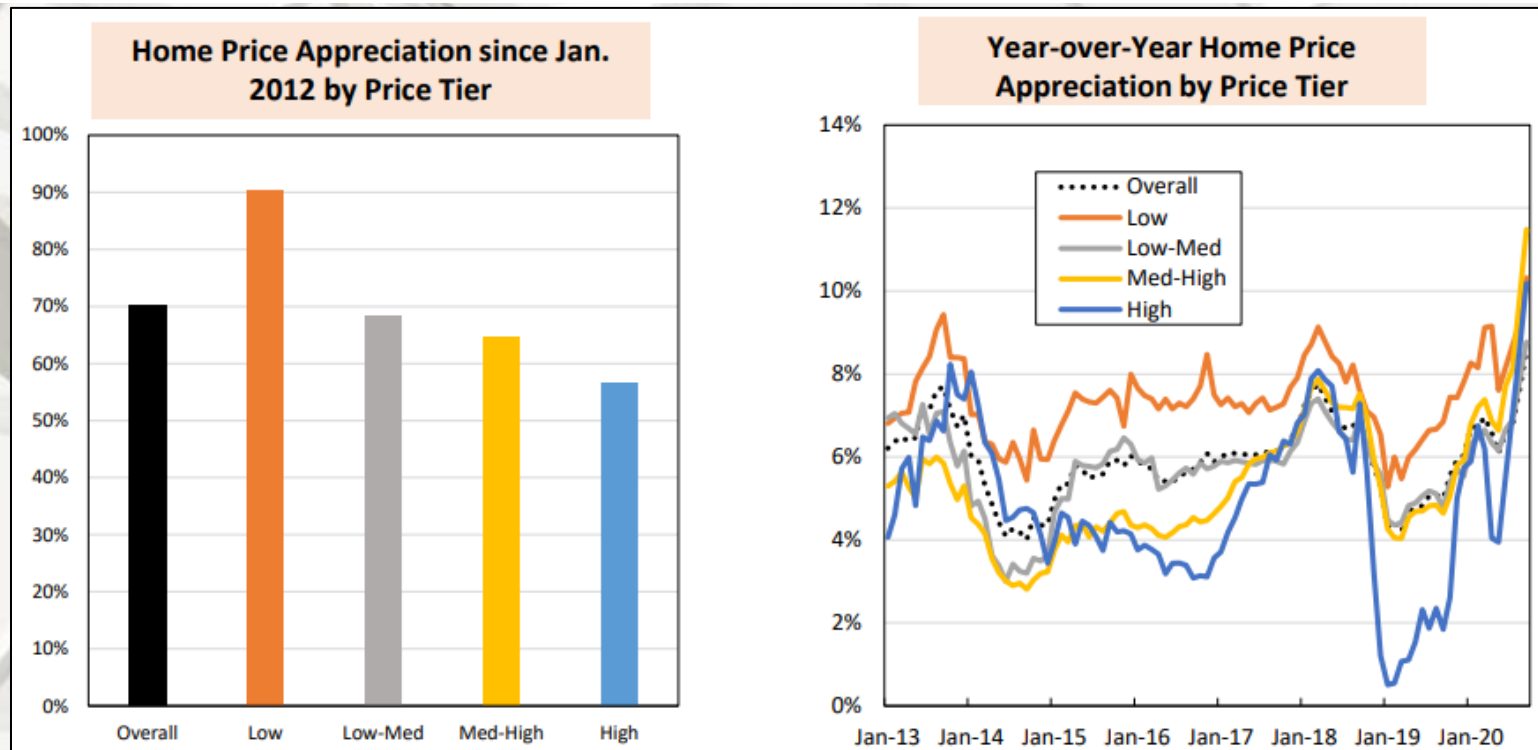
National Housing Affordability Over Time



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 August 2020, with a 20 percent down payment, the share of median income needed for the monthly mortgage payment stood at 22.3 percent; with 3.5 down, it is 26.7 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



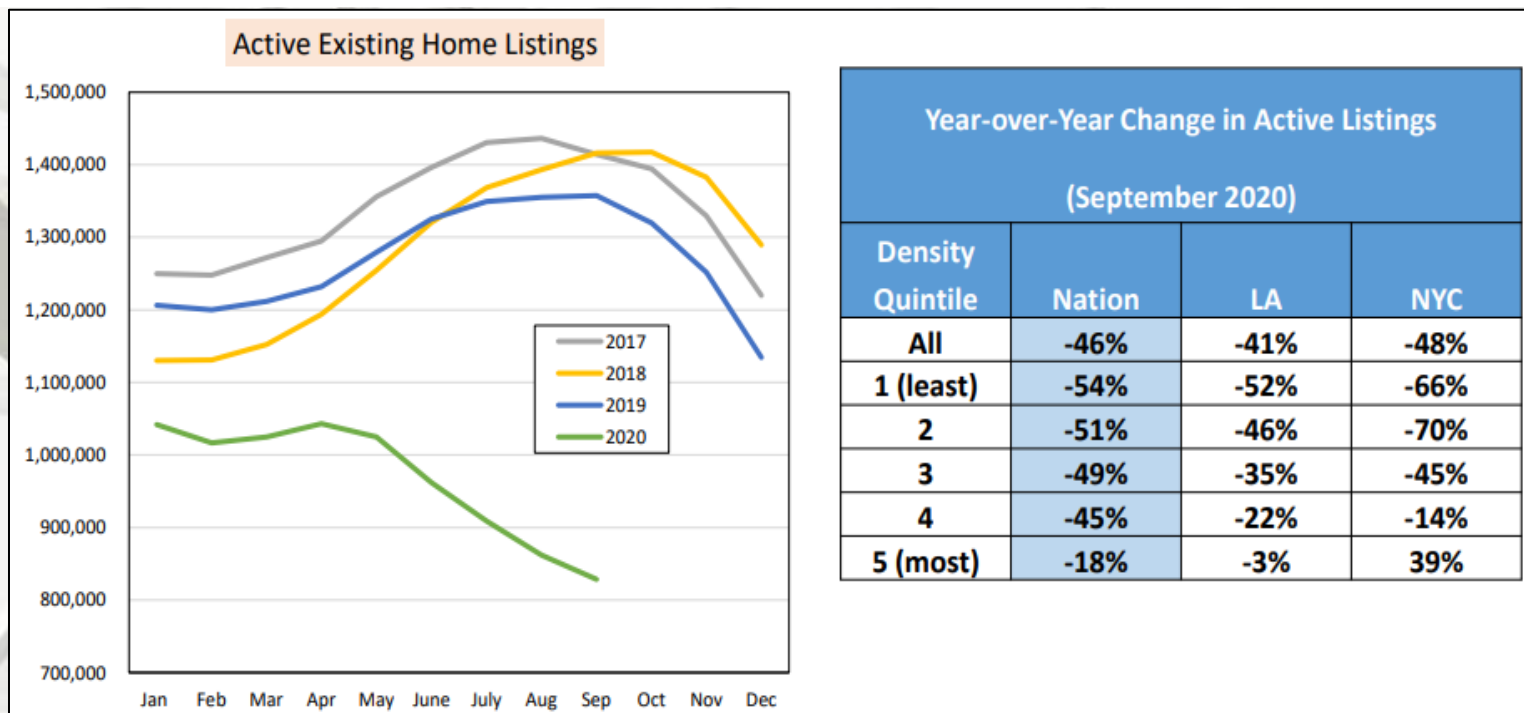
Note: Data for September 2020 are preliminary. Price tiers are set at the metro level and are defined as follows: Low: all sales at or below the 40th percentile of FHA sales prices; Low-Medium: all sales at or below the 80th percentile of FHA sales prices; Medium-High: all sales at or below the 125% of the GSE loan limit; and High: all other sales. HPAs are smoothed around the times of FHFA loan limit changes

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

AEI Housing Center 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 September 2020 indicate that overheating of the low price tier continued (right panel). HPA in the low price tier was 10.3% 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

Housing Supply

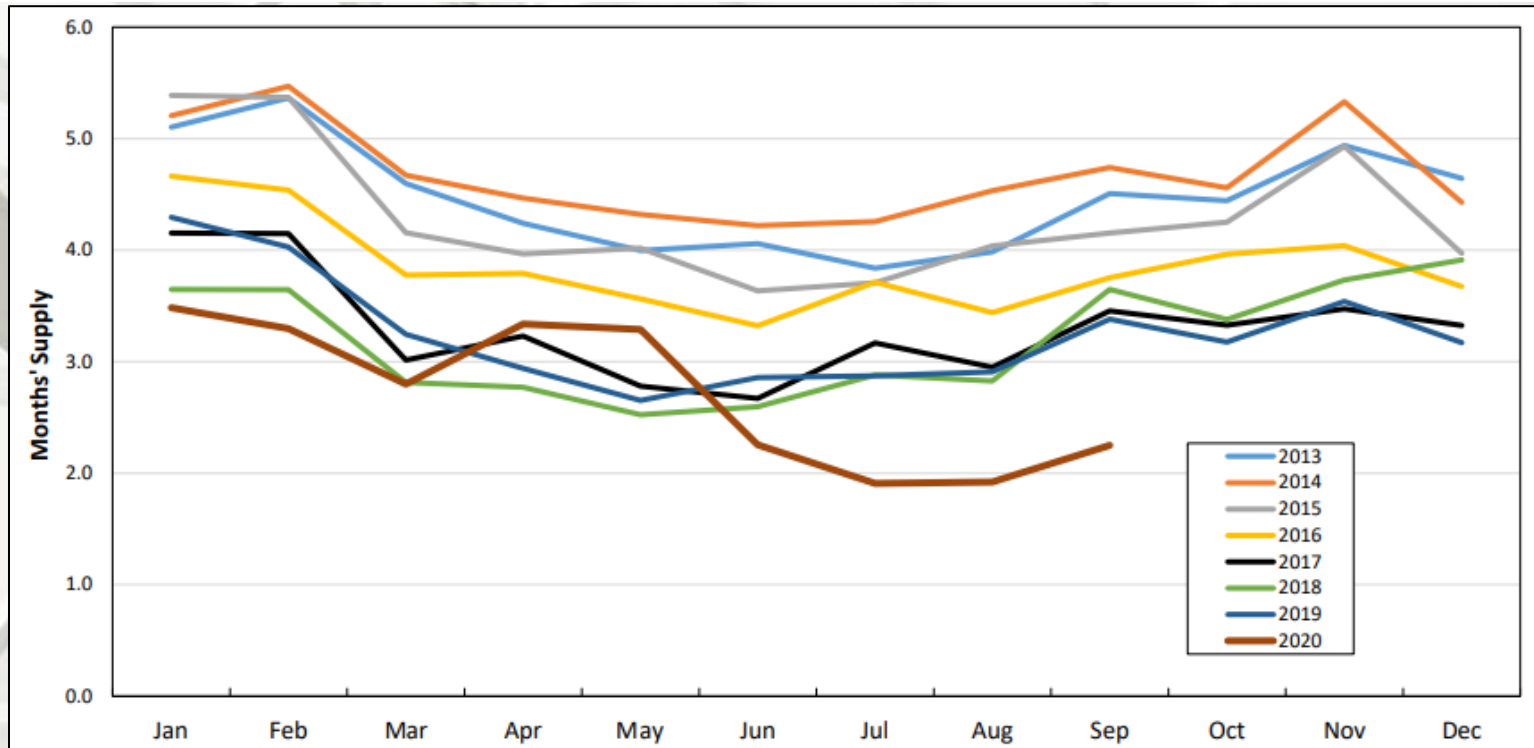


Sources: Realtor.com, Census Bureau, and AEI Housing Center, www.AEI.org/housing.

AEI Housing Center Supply Is Being Depleted

“Supply has fallen dramatically in 2020 and is most depleted in less dense areas. For the foreseeable future, it will be difficult to replenish or add to supply: (i) baby boomers are tending to stay put more, (ii) it takes time to acquire land, entitle, and build new construction even in places like North Carolina and Texas, (iii) adding supply will face the usual difficulties in the Northeast and West, & (iv) new construction supply has fallen from 5.7 months in August 2019 to 3.4 months in August 2020.” – Edward Pinto, Resident Fellow; Director and Tobias Peter, Research Fellow and Director of Research, AEI Housing Center

Housing Supply

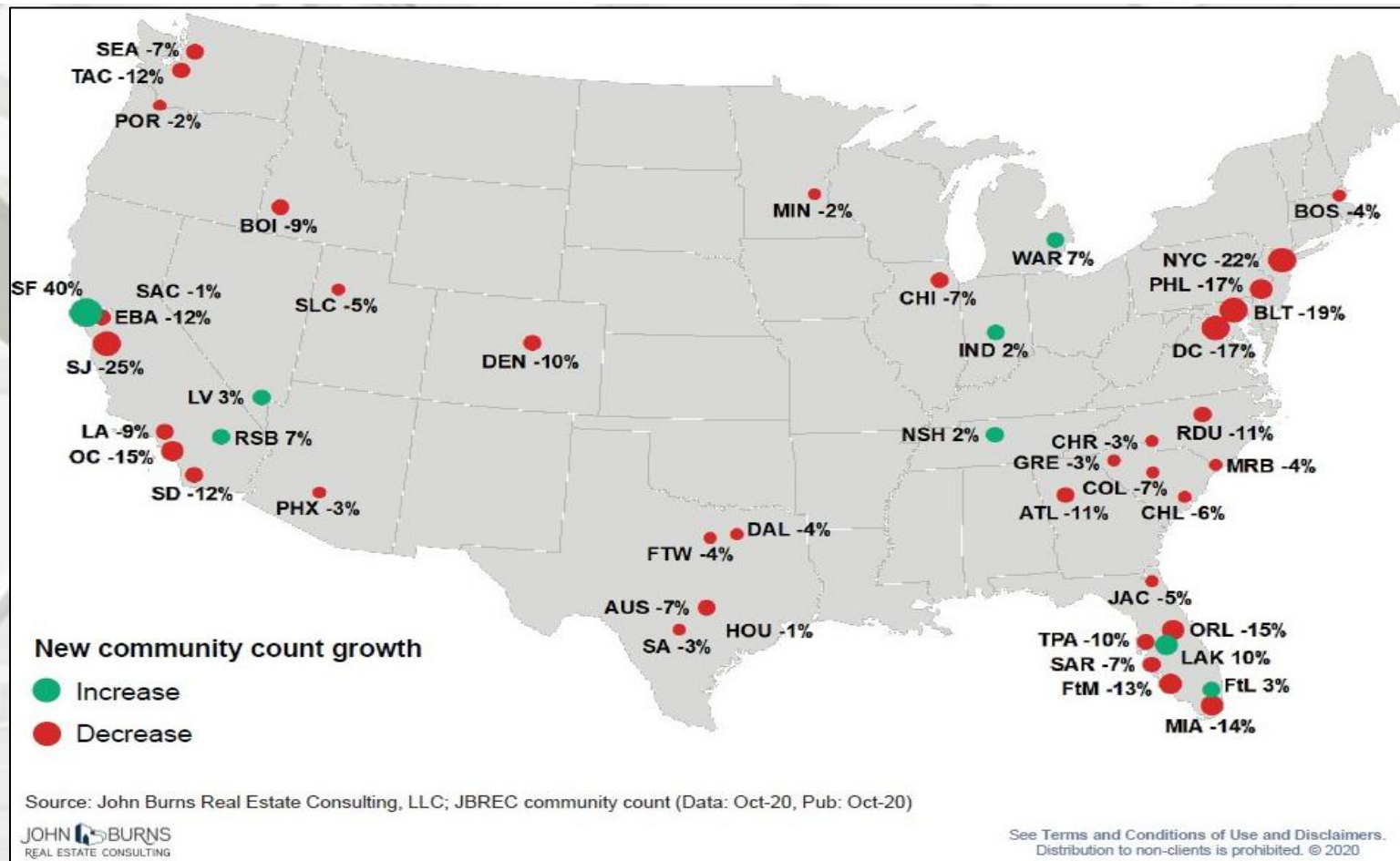


Note: Months' supply measures how long it would take for the existing level of inventory to be sold off at the current sale's pace. While the listings data come from the MLS, the sales numbers come from the public records
Sources: Realtor.com, Census Bureau, and AEI Housing Center, www.AEI.org/housing.

AEI Housing Center Months' Supply

“With the start of the lockdown, inventory levels first increased due to reduced demand. However, levels have noticeably tightened during the housing market recovery, which started in mid-May. Low mortgage rates combined with about 2 months inventory mean that HPA will remain strong over the coming months.” – Edward Pinto, Resident Fellow; Director and Tobias Peter, Research Fellow and Director of Research, AEI Housing Center

U.S. Housing Sales & Supply



John Burns Real Estate Consulting, LLC New Home Communities

“With 6% fewer new home communities than 1-year ago, expect new homes to be undersupplied for a while. Faster than expected sales + difficulty entitling land have been the culprits. This is changing now as our land feasibility study business is booming.” – John Burns, Chief Executive Officer, John Burns Real Estate Consulting, LLC

MBA Mortgage Finance Forecast

	2020				2021				2022				2019	2020	2021	2022	2023
	Q1	Q2	Q3	Q4	Q1	Q2	Q3	Q4	Q1	Q2	Q3	Q4					
Housing Measures																	
Housing Starts (\$AAR, Thous)	1,484	1,079	1,430	1,392	1,390	1,410	1,420	1,423	1,395	1,405	1,410	1,410	1,295	1,346	1,411	1,405	1,428
Single-Family	968	766	1,040	1,012	1,025	1,040	1,040	1,078	1,065	1,075	1,090	1,090	893	946	1,051	1,080	1,118
Two or More	517	313	390	380	365	370	360	345	330	330	320	320	403	400	360	325	310
Home Sales (\$AAR, Thous)																	
Total Existing Homes	5,483	4,474	6,079	6,051	6,031	6,068	6,098	6,100	6,106	6,128	6,134	6,120	5,331	5,522	6,074	6,122	6,196
New Homes	701	676	1,017	972	932	941	950	950	953	959	953	955	685	841	943	955	969
FHFA US House Price Index (YOY % Change)	5.0	4.0	3.4	3.1	2.7	2.4	2.2	2.1	1.9	1.8	1.8	1.7	5.1	3.1	2.1	1.7	1.6
Median Price of Total Existing Homes (Thous \$)	272.4	288.3	304.2	290.5	289.1	289.5	289.0	287.7	286.9	286.4	286.4	286.5	269.7	288.9	293.0	293.3	289.5
Median Price of New Homes (Thous \$)	330.8	315.5	321.3	326.5	333.7	330.4	332.5	335.6	338.4	340.6	342.4	344.1	319.3	323.5	324.3	328.0	330.8
Interest Rates																	
30-Year Fixed Rate Mortgage (%)	3.5	3.2	3.0	3.0	3.1	3.1	3.2	3.3	3.4	3.5	3.6	3.6	3.7	3.0	3.3	3.6	3.9
10-Year Treasury Yield (%)	1.4	0.7	0.6	0.8	0.9	1.0	1.1	1.3	1.4	1.6	1.7	1.8	1.8	0.8	1.3	1.8	2.4
Mortgage Originations																	
Total 1- to 4-Family (Bil \$)	563	928	860	824	660	638	626	564	498	523	570	555	2,253	3,175	2,488	2,146	2,131
Purchase	257	348	410	403	340	370	422	410	348	382	428	415	1,225	1,418	1,542	1,573	1,611
Refinance	306	580	450	421	320	268	204	154	150	141	142	140	1,028	1,757	946	573	520
Refinance Share (%)	54	63	52	51	48	42	33	27	30	27	25	25	46	55	38	27	24
FHA Originations (Bil \$)													255	309	242	210	193
Total 1- to 4-Family (000s loans)	1,869	3,034	2,826	2,698	2,125	2,053	2,027	1,831	1,587	1,644	1,819	1,769	7,779	10,427	8,037	6,839	6,674
Purchase	891	1,196	1,405	1,374	1,138	1,231	1,402	1,360	1,136	1,242	1,393	1,350	4,392	4,866	5,131	5,119	5,143
Refinance	978	1,838	1,421	1,324	987	822	625	471	451	422	426	420	3,387	5,561	2,905	1,719	1,531
Refinance Share (%)	52	61	50	49	46	40	31	26	28	25	23	24	44	53	36	25	23
Mortgage Debt Outstanding																	
1- to 4-Family (Bil \$)	10,775	10,875	10,984	11,106	11,257	11,399	11,535	11,667	11,793	11,920	12,049	12,177	10,677	11,106	11,667	12,177	12,681

Notes:

Housing starts and home sales are seasonally adjusted at annual rate.

Total existing home sales include condos and co-ops.

Mortgage rate forecast is based on Freddie Mac's 30-Yr fixed rate which is based on predominantly home purchase transaction.

The 10-Year Treasury Yield and 30-Yr mortgage rate are the average for the quarter, but annual columns show Q4 values.

Total 1-to-4-family originations and refinance share are MBA estimates. These exclude second mortgages and home equity loan.

The FHFA US House Price Index is the forecasted year over year percent change of the FHFA All Transactions House Price Index.

The mortgage debt outstanding forecast is for 1-4 unit mortgage debt and excludes home equity loans. Annual MDO numbers

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MBA

MORTGAGE BANKERS ASSOCIATION

MBA Economic Forecast

	2020				2021				2022								
	Q1	Q2	Q3	Q4	Q1	Q2	Q3	Q4	Q1	Q2	Q3	Q4	2019	2020	2021	2022	2023
Percent Change, SAAR																	
Real Gross Domestic Product	-5.0	-31.4	30.9	3.4	3.1	3.1	3.0	3.1	2.5	2.2	2.2	2.1	2.3	-3.1	3.1	2.3	2.0
Personal Consumption Expenditures	-6.9	-33.2	35.6	3.8	2.3	4.1	2.5	2.8	2.1	2.1	2.2	2.1	2.5	-3.3	2.9	2.1	1.7
Business Fixed Investment	-6.7	-27.2	20.8	-1.0	0.6	1.9	2.6	4.3	3.4	3.1	3.4	3.6	1.4	-5.0	2.3	3.4	3.7
Residential Investment	19.0	-35.6	59.3	14.6	3.5	1.7	2.3	1.9	-0.1	-0.6	0.9	0.8	1.6	8.8	2.3	0.2	1.4
Govt. Consumption & Investment	1.3	2.5	-1.5	-3.3	0.1	0.3	0.6	0.1	0.3	0.3	0.5	0.0	3.0	-0.3	0.3	0.3	0.4
Net Exports (Bil. Chain 2012\$)	-650.7	-649.0	-806.9	-809.3	-759.7	-784.8	-764.8	-745.2	-717.6	-699.4	-684.8	-670.2	-763.9	-729.0	-763.6	-693.0	-625.2
Inventory Investment (Bil. Chain 2012\$)	-68.8	-244.0	-21.1	21.2	35.6	55.5	72.6	76.8	81.5	82.4	77.4	72.8	41.3	-78.2	60.1	78.5	66.0
Consumer Prices (YOY)	2.1	0.4	1.3	1.3	1.7	3.3	2.7	2.7	2.6	2.5	2.4	2.4	1.8	1.3	2.7	2.4	2.5
Percent																	
Unemployment Rate	3.8	13.0	8.9	7.7	7.3	7.1	6.7	6.2	5.8	5.4	5.2	5.0	3.7	8.4	6.8	5.4	4.8
Federal Funds Rate	0.125	0.125	0.125	0.125	0.125	0.125	0.125	0.125	0.125	0.125	0.125	0.125	1.625	0.125	0.125	0.125	0.625
10-Year Treasury Yield	1.4	0.7	0.6	0.8	0.9	1.0	1.1	1.3	1.4	1.6	1.7	1.8	1.8	0.8	1.3	1.8	2.4

Notes:

The Fed Funds Rate forecast is shown as the mid point of the Fed Funds range at the end of the period.

All data except interest rates are seasonally adjusted

The 10-Year Treasury Yield is the average for the quarter, while the annual value is the Q4 value

Forecast produced with the assistance of the Macroeconomic Advisers' model

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MBA
MORTGAGE BANKERS ASSOCIATION

Mortgage Credit Availability

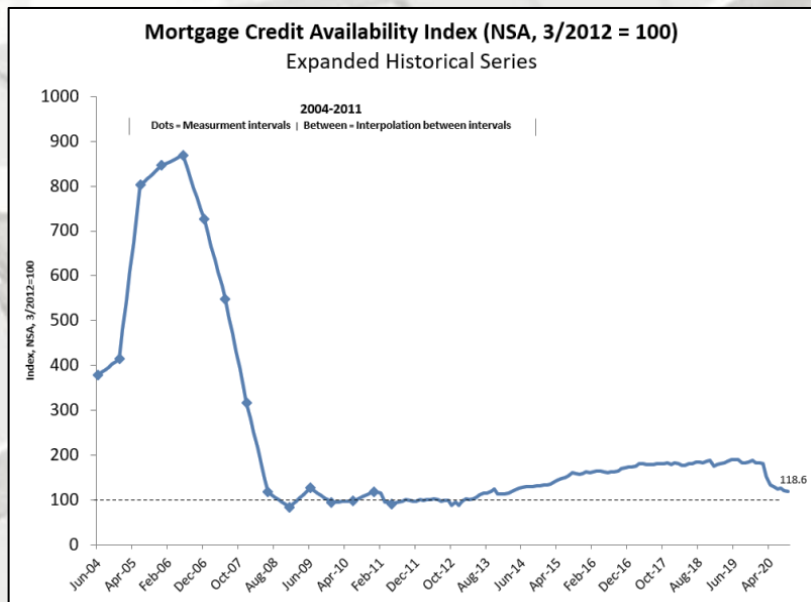
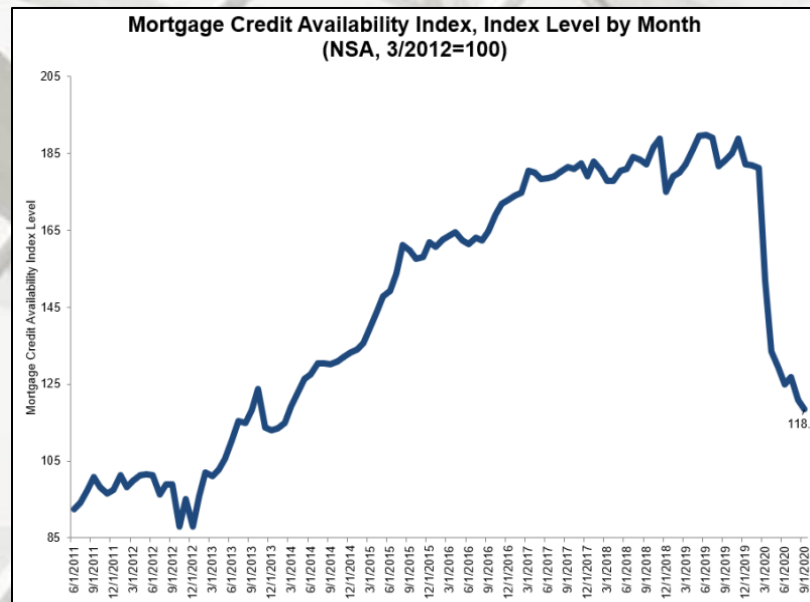
Mortgage Credit Availability Decreased in September

“Mortgage credit availability decreased in September according to the Mortgage Credit Availability Index (MCAI), a report from the Mortgage Bankers Association (MBA) that analyzes data from Ellie Mae's AllRegs® Market Clarity® business information tool.

The MCAI fell by 1.9 percent to 118.6 in September. A decline in the MCAI indicates that lending standards are tightening, while increases in the index are indicative of loosening credit. The index was benchmarked to 100 in March 2012. The Conventional MCAI decreased 6.1 percent, while the Government MCAI increased by 1.4 percent. Of the component indices of the Conventional MCAI, the Jumbo MCAI decreased by 2.1 percent, and the Conforming MCAI fell by 9.5 percent.

Mortgage credit supply decreased in September to its lowest level since February 2014, driven in part by a 9.5 percent 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

Mortgage Credit Availability



Source: Mortgage Bankers Association; Powered by Ellie Mae's AllRegs® Market Clarity®

Mortgage Credit Availability

Board of Governors *of the* Federal Reserve System

Senior Loan Officer Opinion Survey on Bank Lending Practices

The October 2020 Senior Loan Officer Opinion Survey on Bank Lending Practices

“Regarding loans to businesses, respondents to the October survey indicated that, on balance, they tightened their standards and terms on commercial and industrial (C&I) loans to firms of all sizes. Banks reported weaker demand for C&I loans from firms of all sizes. Meanwhile, banks tightened standards and reported weaker demand across all three major commercial real estate (CRE) loan categories – construction and land development loans, nonfarm nonresidential loans, and multifamily loans – over the third quarter of 2020.

For loans to households, banks tightened standards across all categories of residential real estate (RRE) loans and across all three consumer loan categories – credit card loans, auto loans, and other consumer loans – over the third quarter of 2020 on net. Banks reported stronger demand for credit card loans, auto loans, and most categories of RRE loans. ...

Questions on residential real estate lending. Over the third quarter, moderate net shares of banks tightened lending standards for most mortgage loan categories, including for government-sponsored enterprise (GSE)-eligible mortgages, which make up the majority of bank mortgage originations. In addition, significant net shares of banks tightened standards for qualified mortgage (QM) jumbo mortgages and revolving home equity lines of credit (HELOCs). A greater share of other banks reported tightening standards on GSE-eligible and QM jumbo mortgages compared with large banks, while most other mortgage loan categories showed little difference between respondent size groups. ...” – Board of Governors of the Federal Reserve System

Summary

In conclusion:

In September, most housing indicators were positive. While multi-family housing starts and permits were negative on a month-over-month and a year-over-year basis. Multi-family housing under construction and new house sales were negative on a month-over-month basis. Housing remains a bright spot for the United States economy.

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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