

# The Virginia Tech – U.S. Forest Service

## January 2021

### Housing Commentary: Section I



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# Opening Remarks

January housing data denoted the second consecutive month of total starts greater than 1.5-million units. Month-over-month and year-over-year United States housing market data were mostly positive. Aggregate multi-family starts decreased month-over-month and year-over-year. New and existing house sales were positive month-over-month and year-over-year. The New York Federal Reserve Bank's reported new mortgages, in the fourth quarter of 2020, totaled \$1.2 trillion, a record. Residential construction spending was positive month-over-month. On a year-over-year basis, total and single-family expenditures improved 21% and 24%, respectively.

The March 8th Atlanta Fed GDPNow™ model forecast was an aggregate 16.3% increase for total residential investment spending for March 2021. New private permanent site expenditures were projected at 33.4%; the improvement spending forecast was 8.0%; and the manufactured/mobile expenditures projection was 11.9% (all: quarterly log change and at a seasonally adjusted annual rate).<sup>1</sup>

“Despite a hot market marked by rampant demand from eager buyers, home owners with the potential to sell have stayed on the sidelines more so than Americans looking to buy – with pandemic fears given as [one of the main reasons for staying put](#). But if and when that anxiety fades, many sellers may decide to enter the market and list their homes, helping to ease an [ongoing inventory crunch](#) and also contributing to keeping home buying demand high as they list and look for new homes themselves.”<sup>2</sup> – Manny Garcia, Population Scientist, Zillow.

This month's commentary contains applicable housing data. Section I contains relevant data, remodeling, and housing finance commentary. Section II includes regional Federal Reserve analysis, private firm indicators, and demographic and economic information.

# January 2020 Housing Scorecard

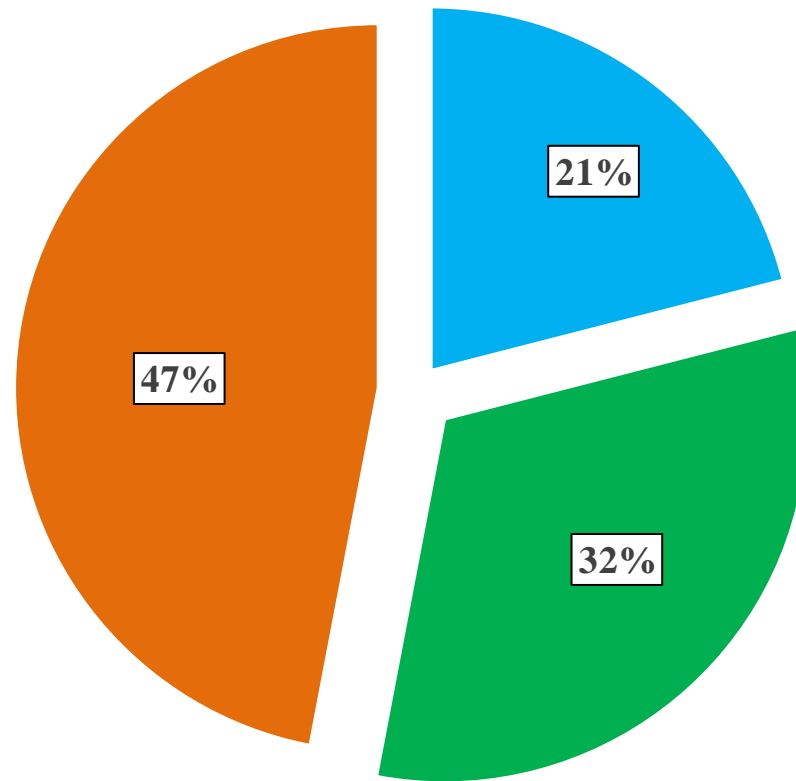
	M/M	Y/Y
Housing Starts	▲ 5.8%	▲ 5.2%
Single-Family (SF) Starts	▲ 12.0%	▲ 27.8%
Multi-Family (MF) Starts*	▼ 13.6%	▼ 38.7%
Housing Permits	▲ 4.2%	▲ 17.0%
SF Permits	▲ 7.6%	▲ 30.1%
MF Permits*	▼ 3.4%	▼ 7.0%
Housing Under Construction	▲ 0.6%	▲ 6.4%
SF Under Construction	▲ 1.1%	▲ 16.1%
Housing Completions	▼ 2.3%	▲ 2.4%
SF Completions	▲ 10.0%	▲ 14.3%
New SF House Sales	▲ 4.3%	▲ 19.3%
Private Residential Construction Spending	▲ 2.5%	▲ 21.0%
SF Construction Spending	▲ 3.0%	▲ 24.2%
Existing House Sales <sup>1</sup>	▲ 0.6%	▲ 23.7%

\* 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

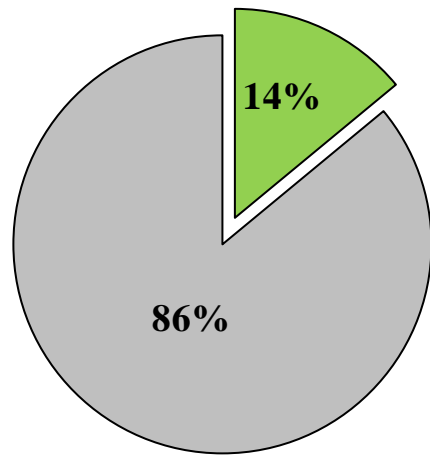


■ Non-structural panels

■ Total Sawnwood

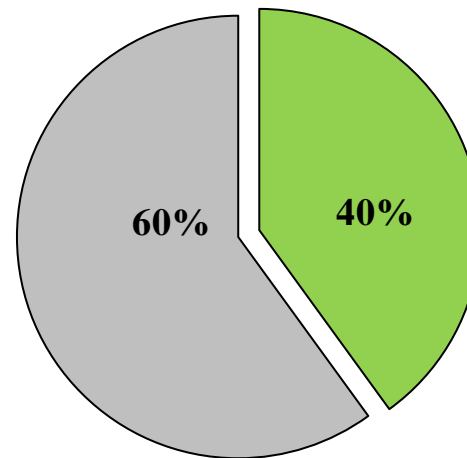
■ Structural panels

# New SF Construction Percentage of Wood Products Consumption



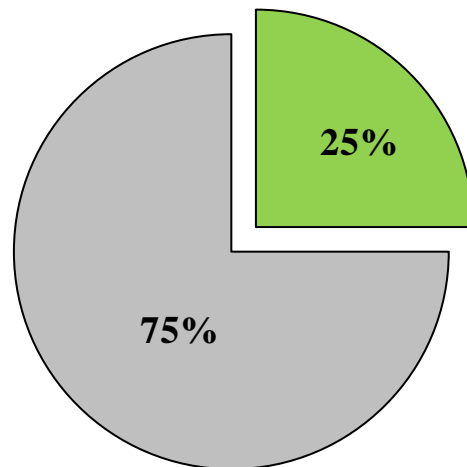
■ Non-structural panels:  
New Housing

■ Other markets



■ Structural panels:  
New housing

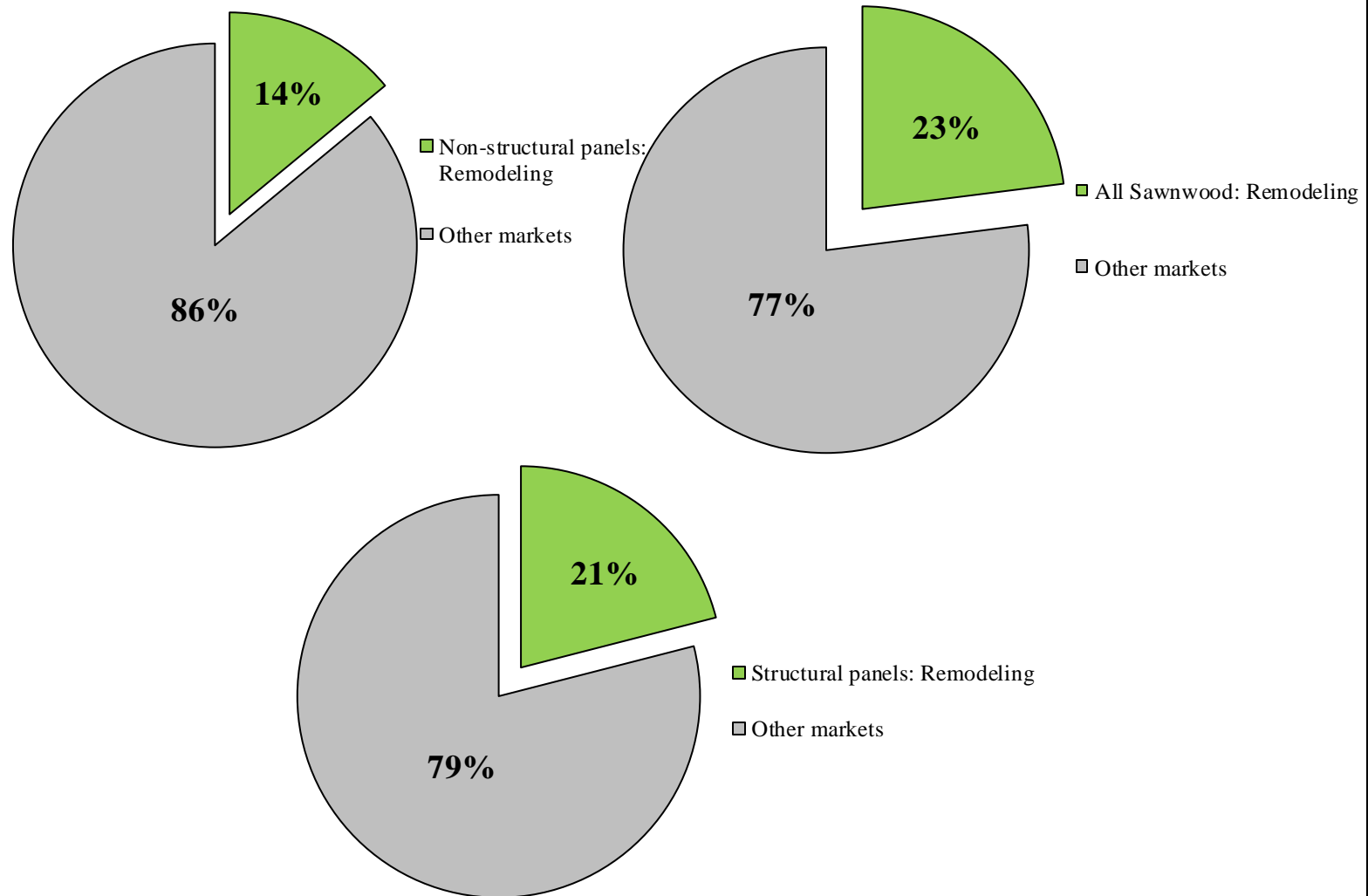
■ Other markets



■ All Sawnwood: New housing

■ Other markets

# Repair and Remodeling's Percentage of Wood Products Consumption



# New Housing Starts

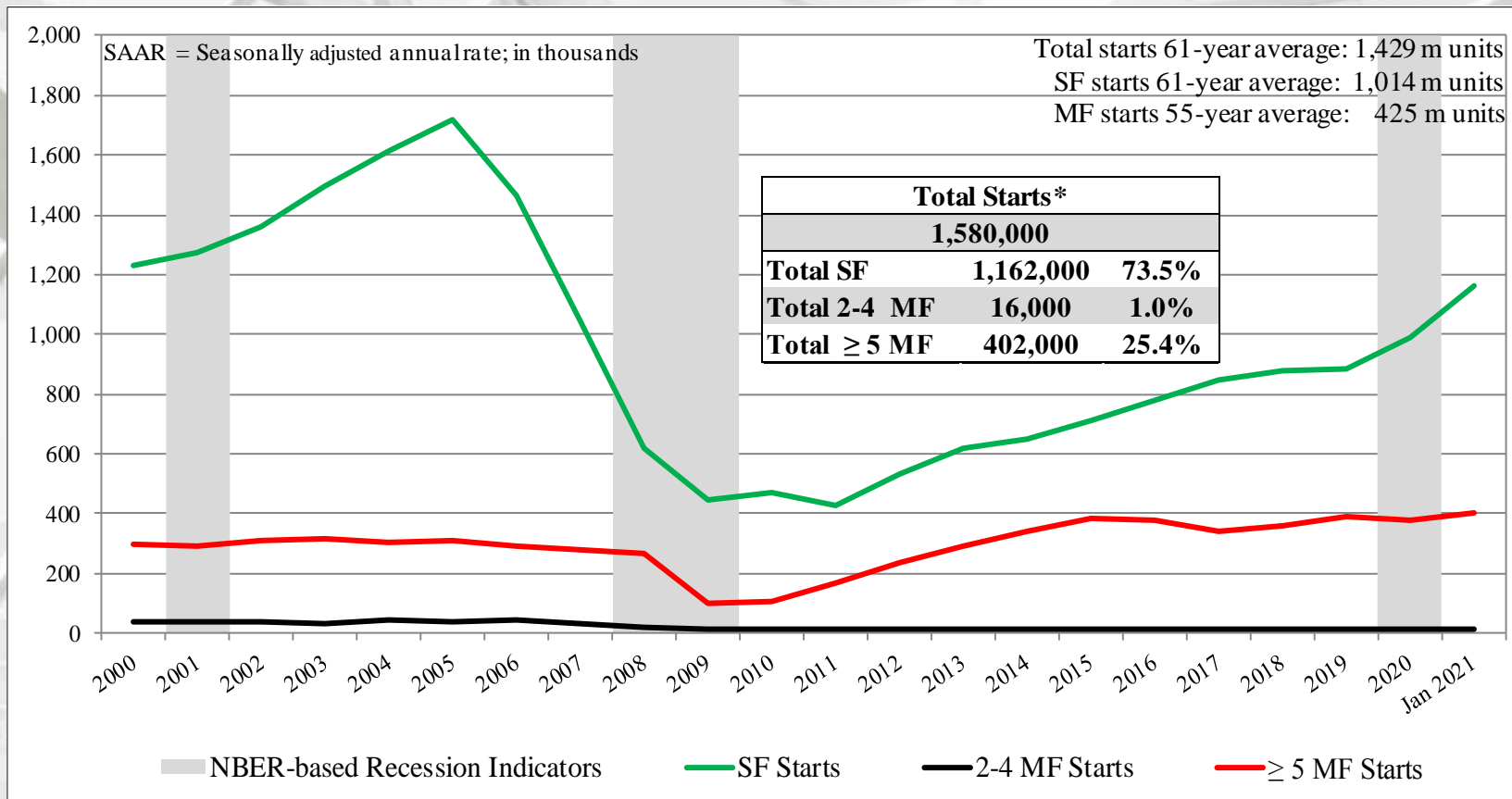
	Total Starts*	SF Starts	MF 2-4 Starts**	MF ≥5 Starts
January	1,580,000	1,162,000	16,000	402,000
December	1,680,000	1,323,000	11,000	346,000
2020	1,617,000	989,000	9,000	619,000
M/M change	-6.0%	-12.2%	45.5%	16.2%
Y/Y change	-2.3%	17.5%	77.8%	-35.1%

\* 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

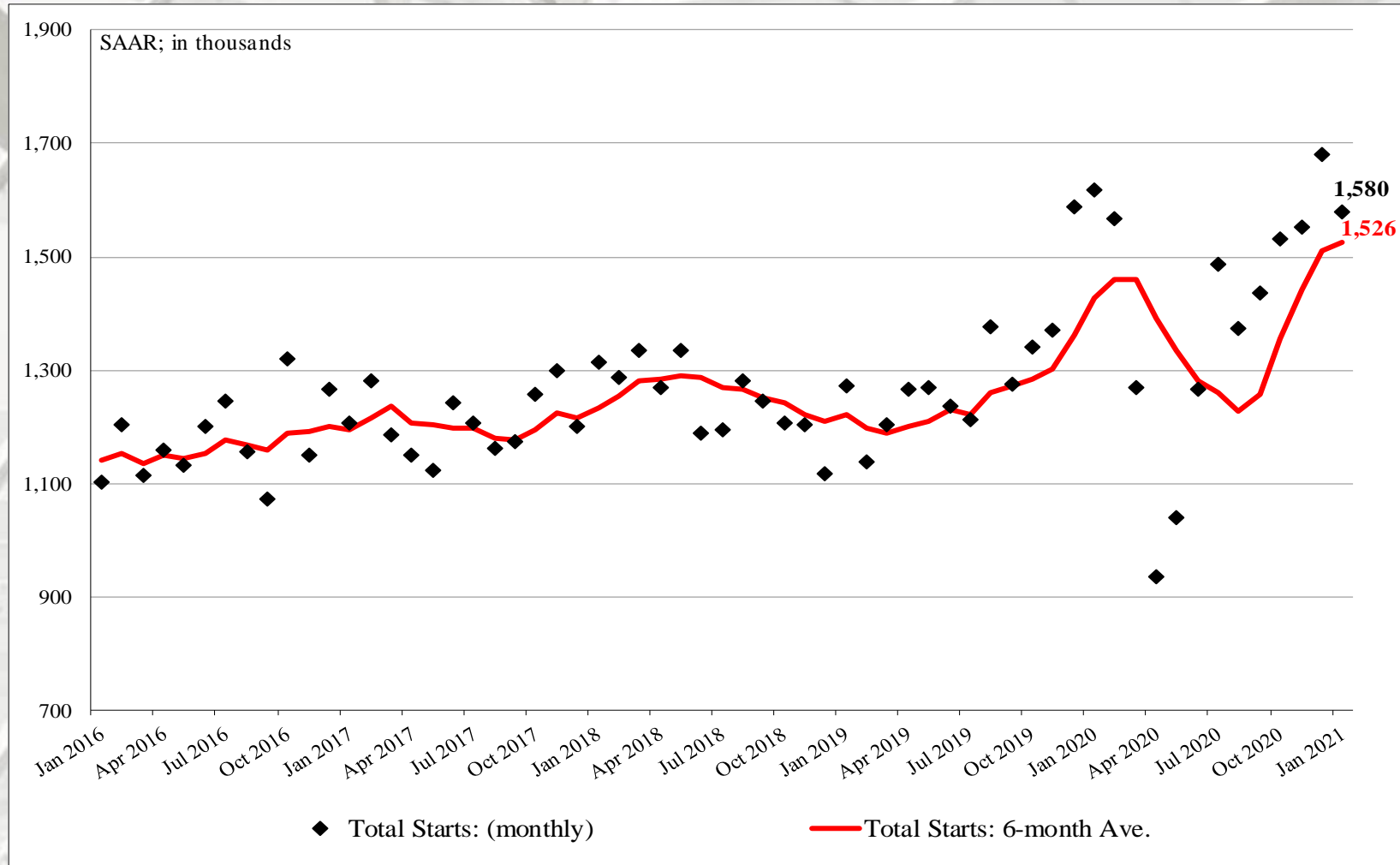


US DOC does not report 2 to 4 multi-family starts directly; this is an estimation: ((Total starts – (SF + ≥ MF)).

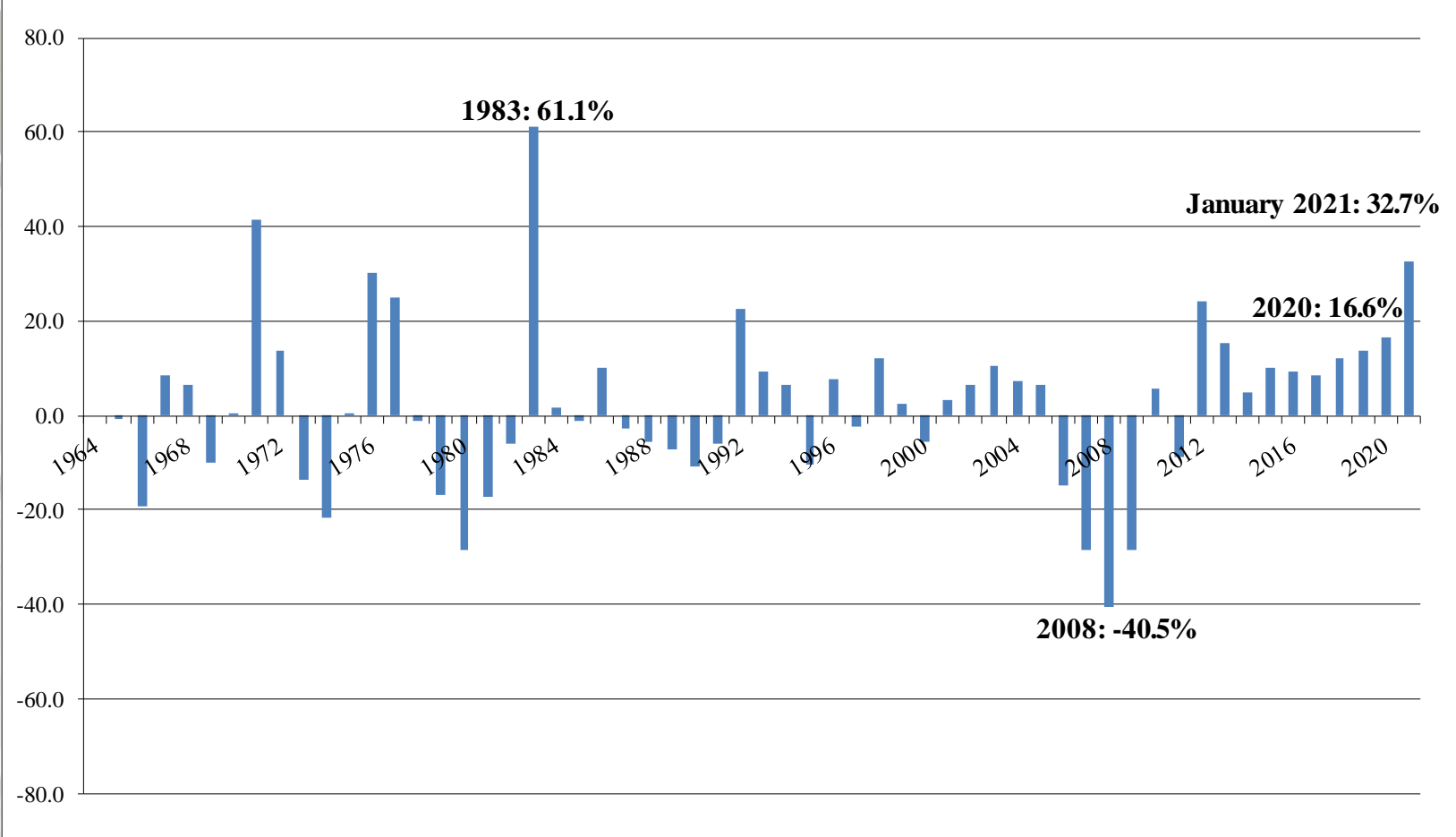
\* Percentage of total starts.

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

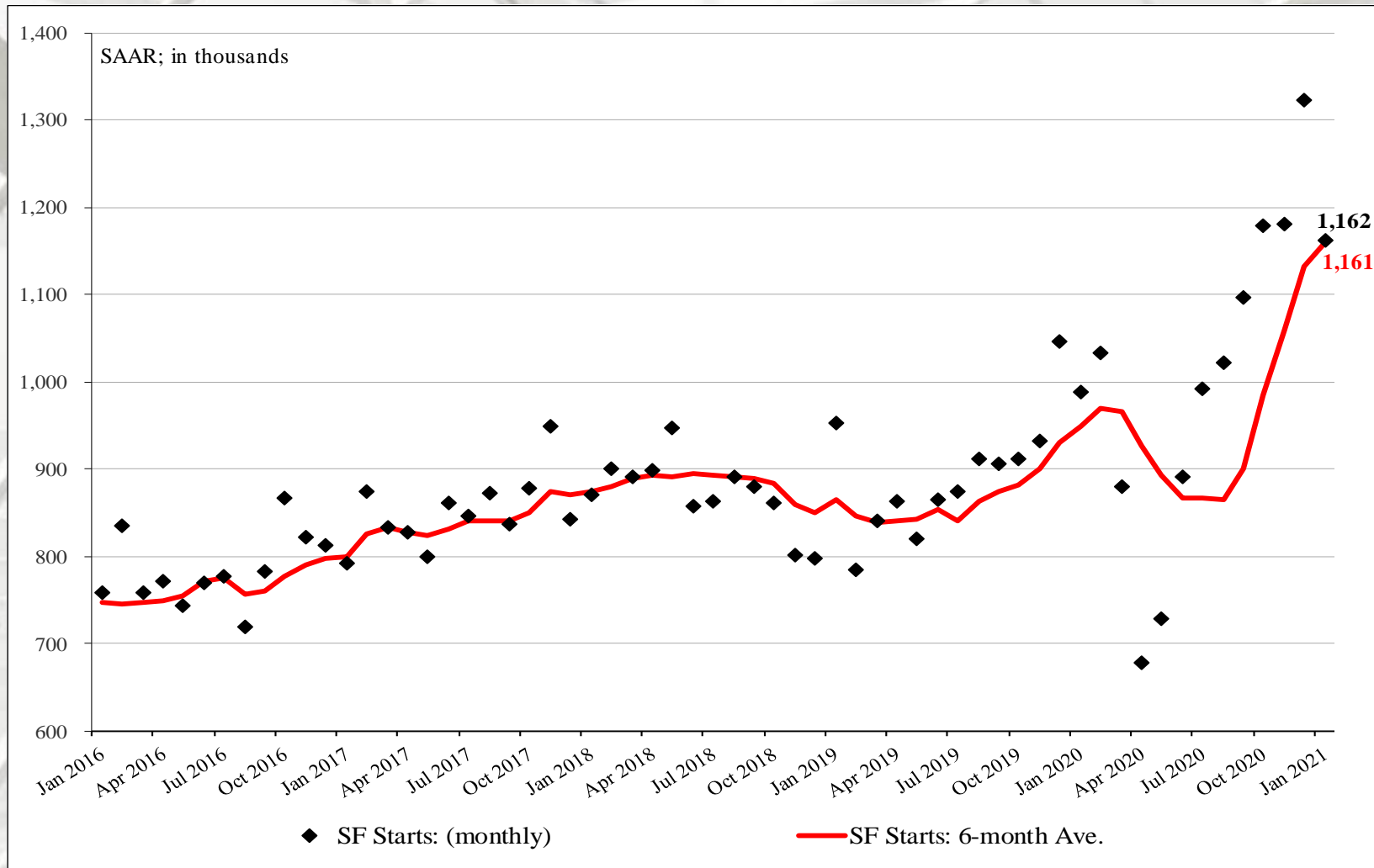
# Total Housing Starts: Six-Month Average



# SF Housing Starts: Year-over-Year Change

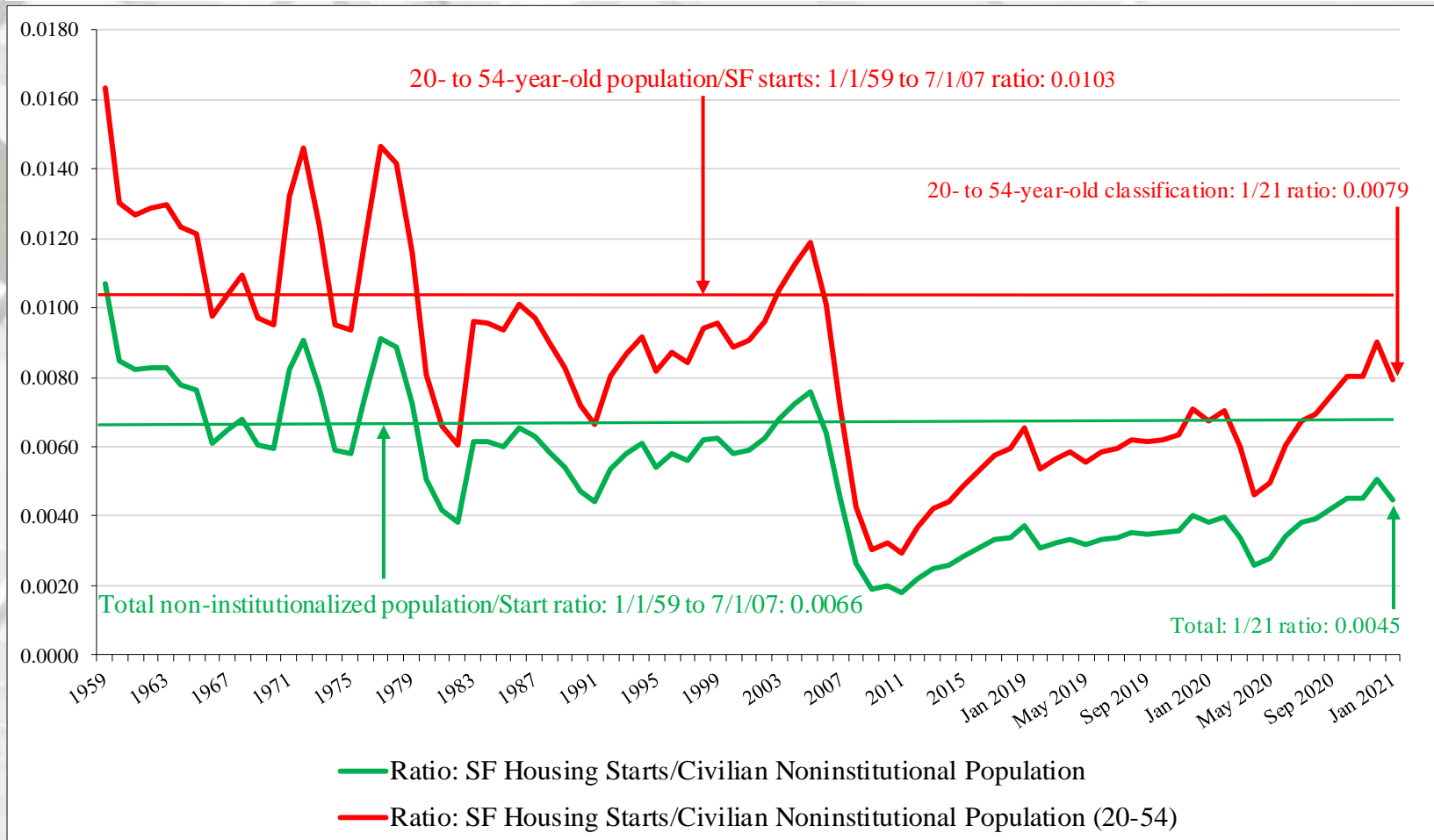


# SF Housing Starts: Six-Month Average





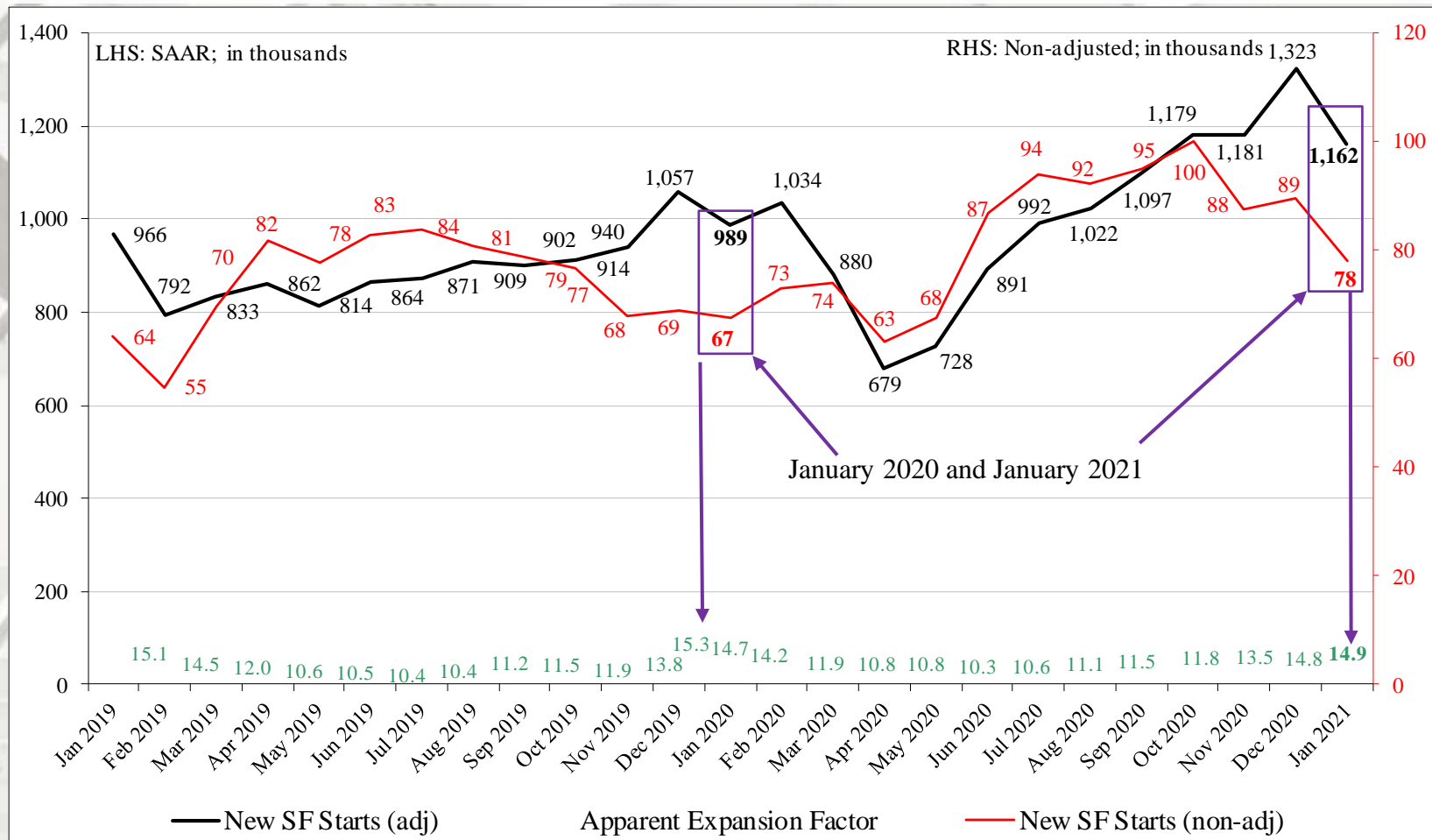
# New SF Starts



## New SF starts adjusted for the US population

From January 1959 to July 2007, the long-term ratio of the total US non-institutionalized population to new SF starts is 0.0066; in January 2021 it was 0.0045 – a decrease from December (0.0051). The long-term ratio of non-institutionalized population, aged 20 to 54 is 0.0103; in January 2021 was 0.0079 – also a decrease from December (0.0090). 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

	<b>NE Total</b>	<b>NE SF</b>	<b>NE MF**</b>
January	134,000	81,000	53,000
December	131,000	79,000	52,000
2020	217,000	65,000	152,000
M/M change	2.3%	2.5%	1.9%
Y/Y change	-38.2%	24.6%	-65.1%
	<b>MW Total</b>	<b>MW SF</b>	<b>MW MF</b>
January	221,000	164,000	57,000
December	252,000	217,000	35,000
2020	172,000	139,000	33,000
M/M change	-12.3%	-24.4%	62.9%
Y/Y change	28.5%	18.0%	72.7%

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

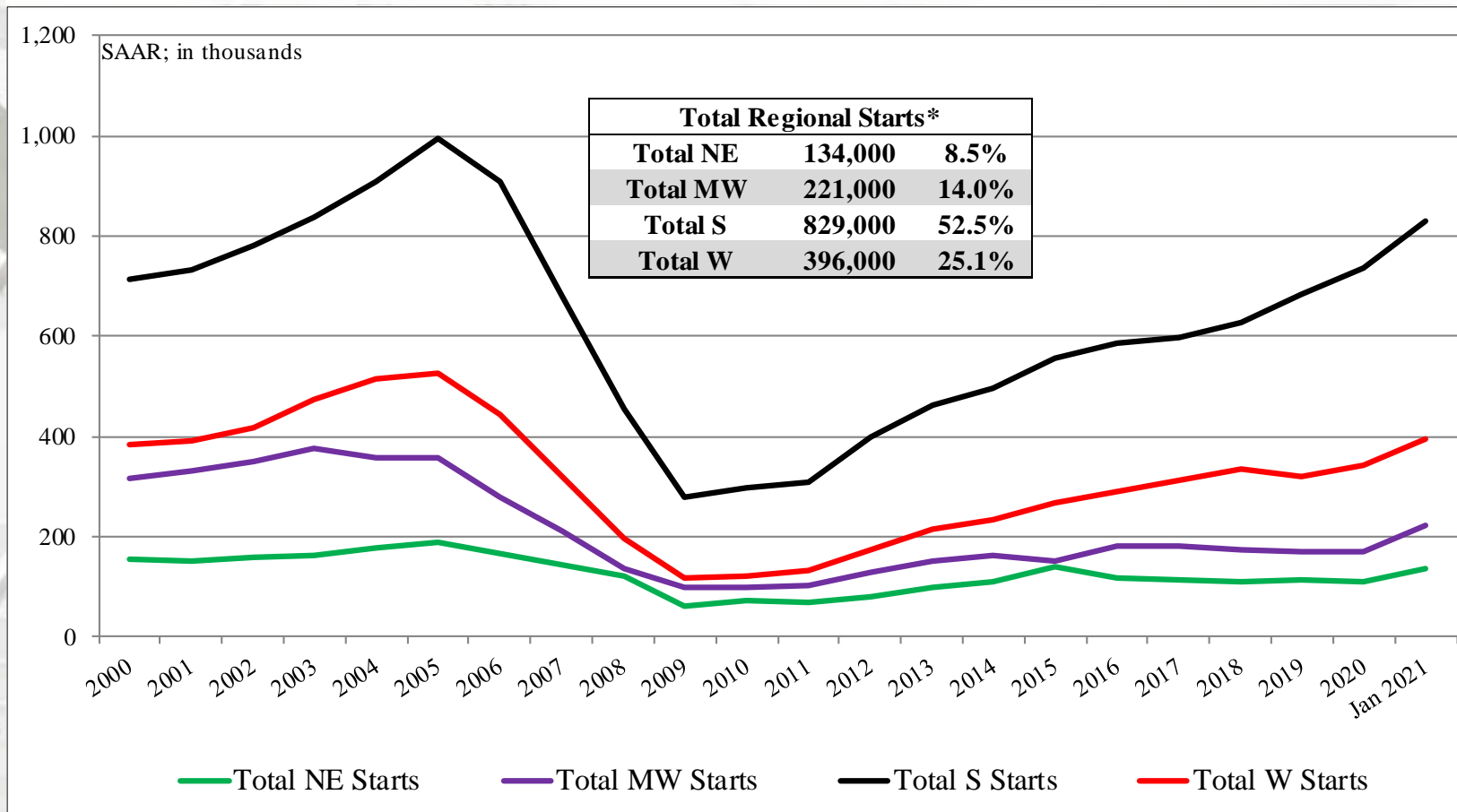
	<b>S Total</b>	<b>S SF</b>	<b>S MF**</b>
January	829,000	642,000	187,000
December	850,000	704,000	146,000
2020	792,000	517,000	275,000
M/M change	-2.5%	-8.8%	28.1%
Y/Y change	4.7%	24.2%	-32.0%
	<b>W Total</b>	<b>W SF</b>	<b>W MF</b>
January	396,000	275,000	121,000
December	447,000	323,000	124,000
2020	436,000	268,000	168,000
M/M change	-11.4%	-14.9%	-2.4%
Y/Y change	-9.2%	2.6%	-28.0%

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

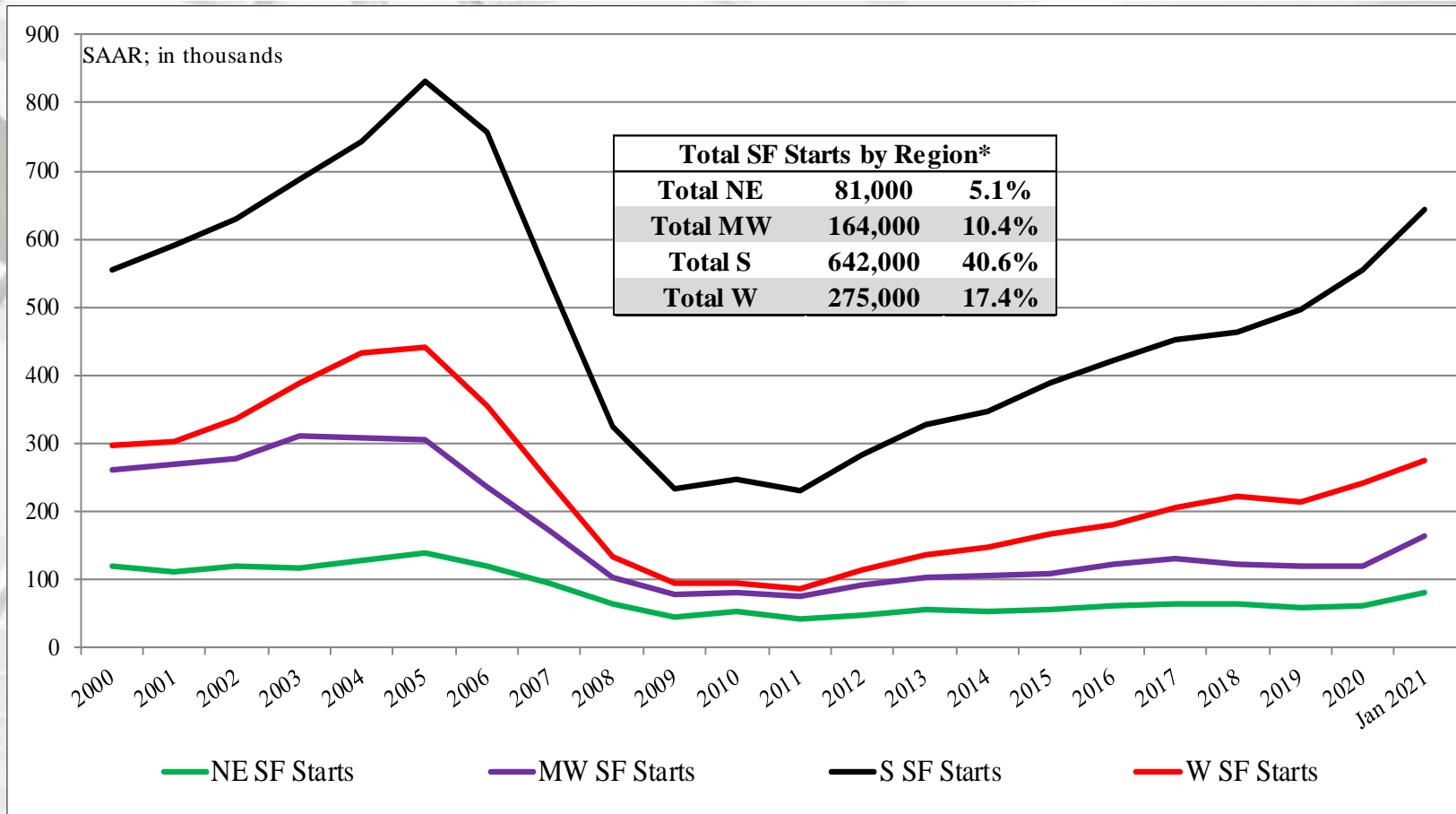


NE = Northeast, MW = Midwest, S = South, W = West

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

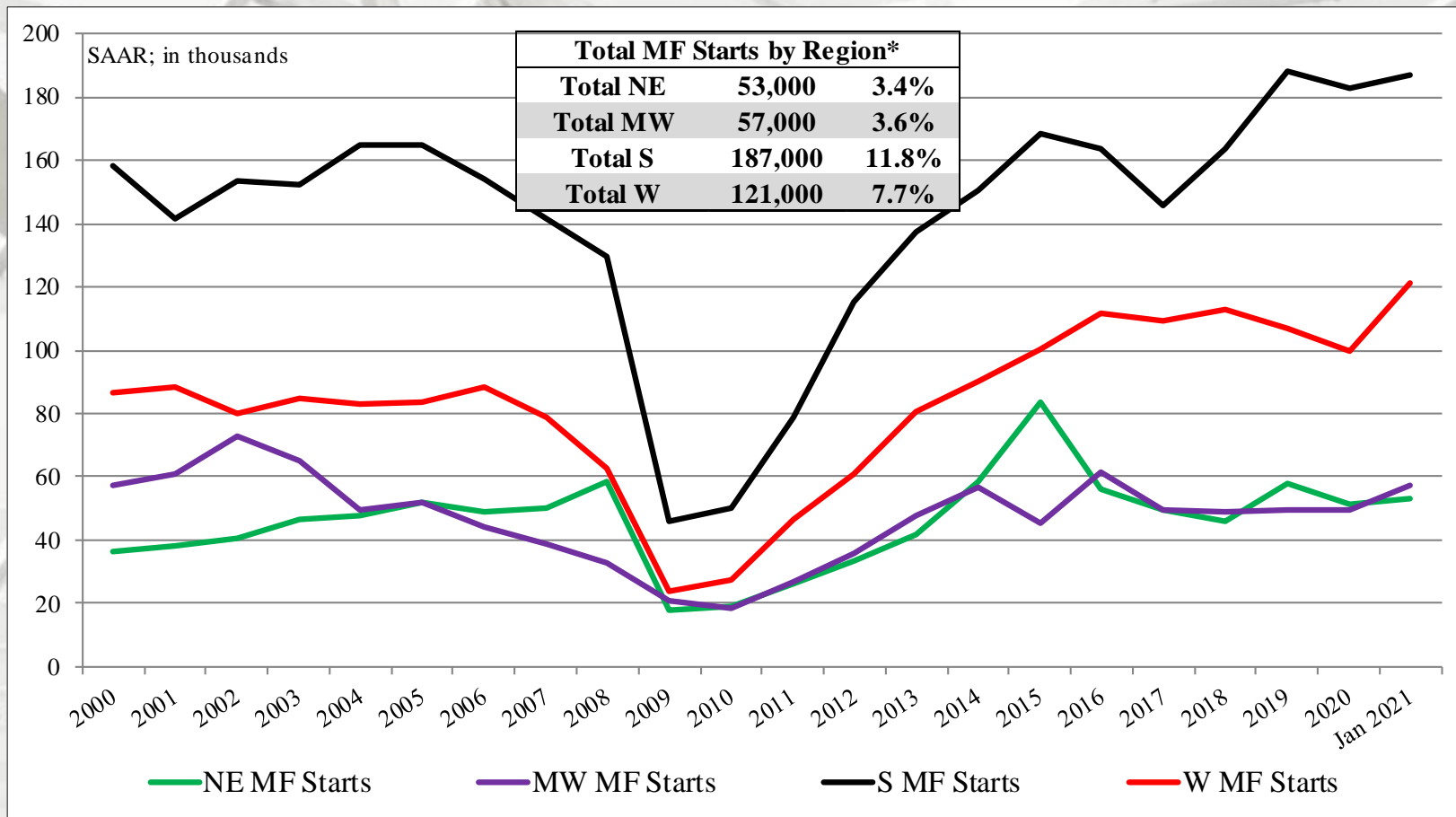


NE = Northeast, MW = Midwest, S = South, W = West

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

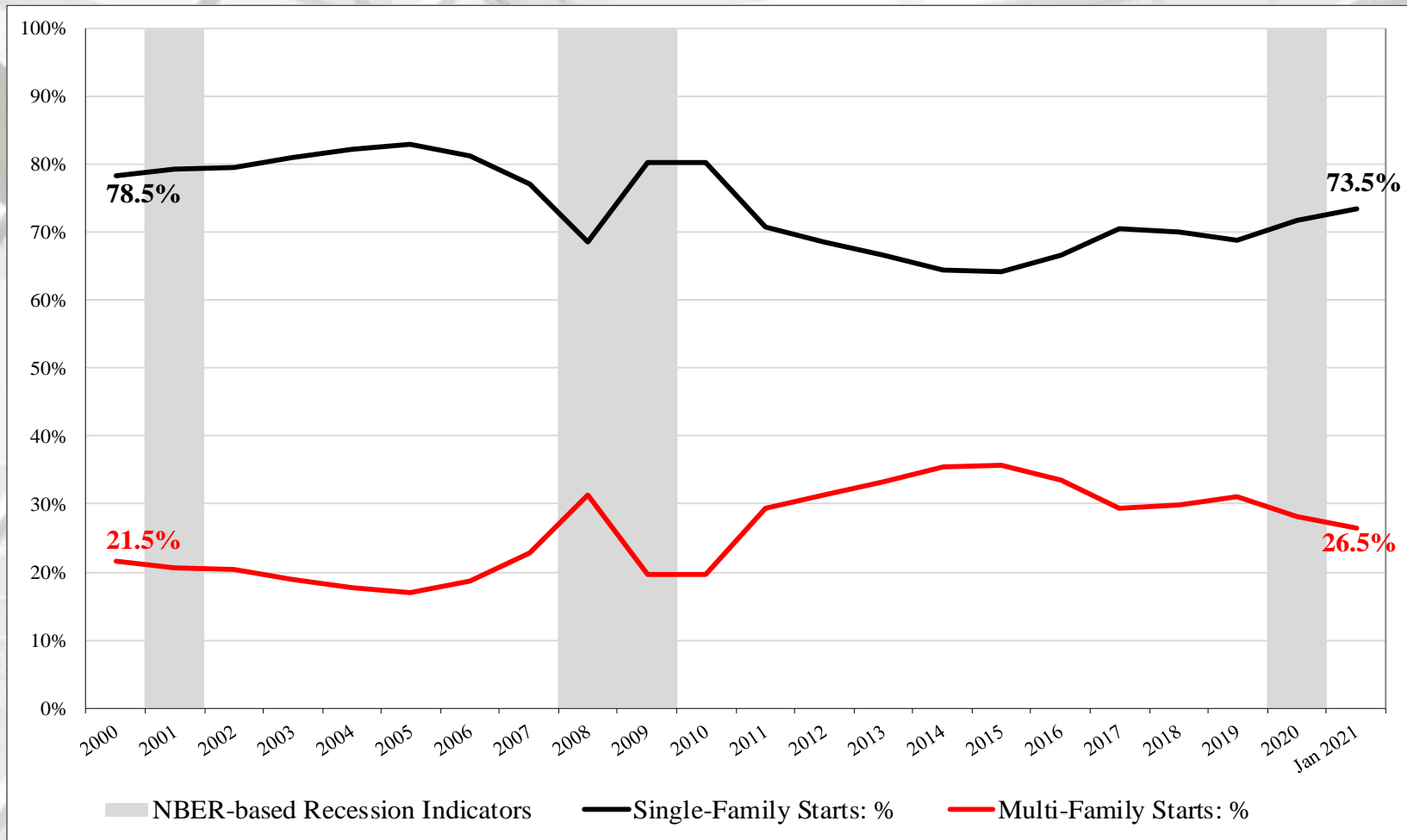


NE = Northeast, MW = Midwest, S = South, W = West

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).

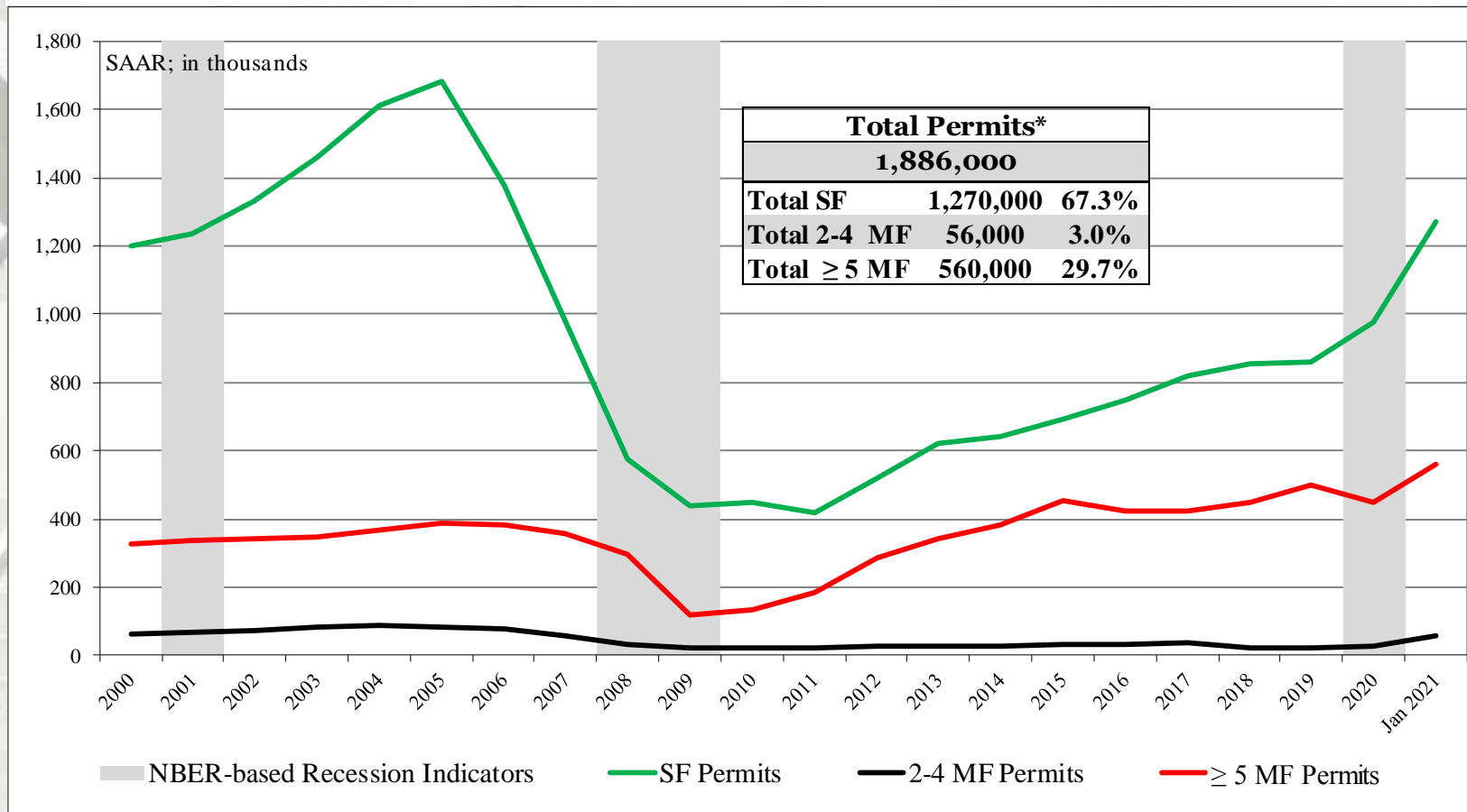


# New Housing Permits

	<b>Total Permits*</b>	<b>SF Permits</b>	<b>MF 2-4 unit Permits</b>	<b>MF ≥ 5 unit Permits</b>
January	1,886,000	1,270,000	56,000	560,000
December	1,704,000	1,223,000	46,000	435,000
2020	1,536,000	977,000	43,000	516,000
M/M change	10.7%	3.8%	21.7%	28.7%
Y/Y change	22.8%	30.0%	30.2%	8.5%

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

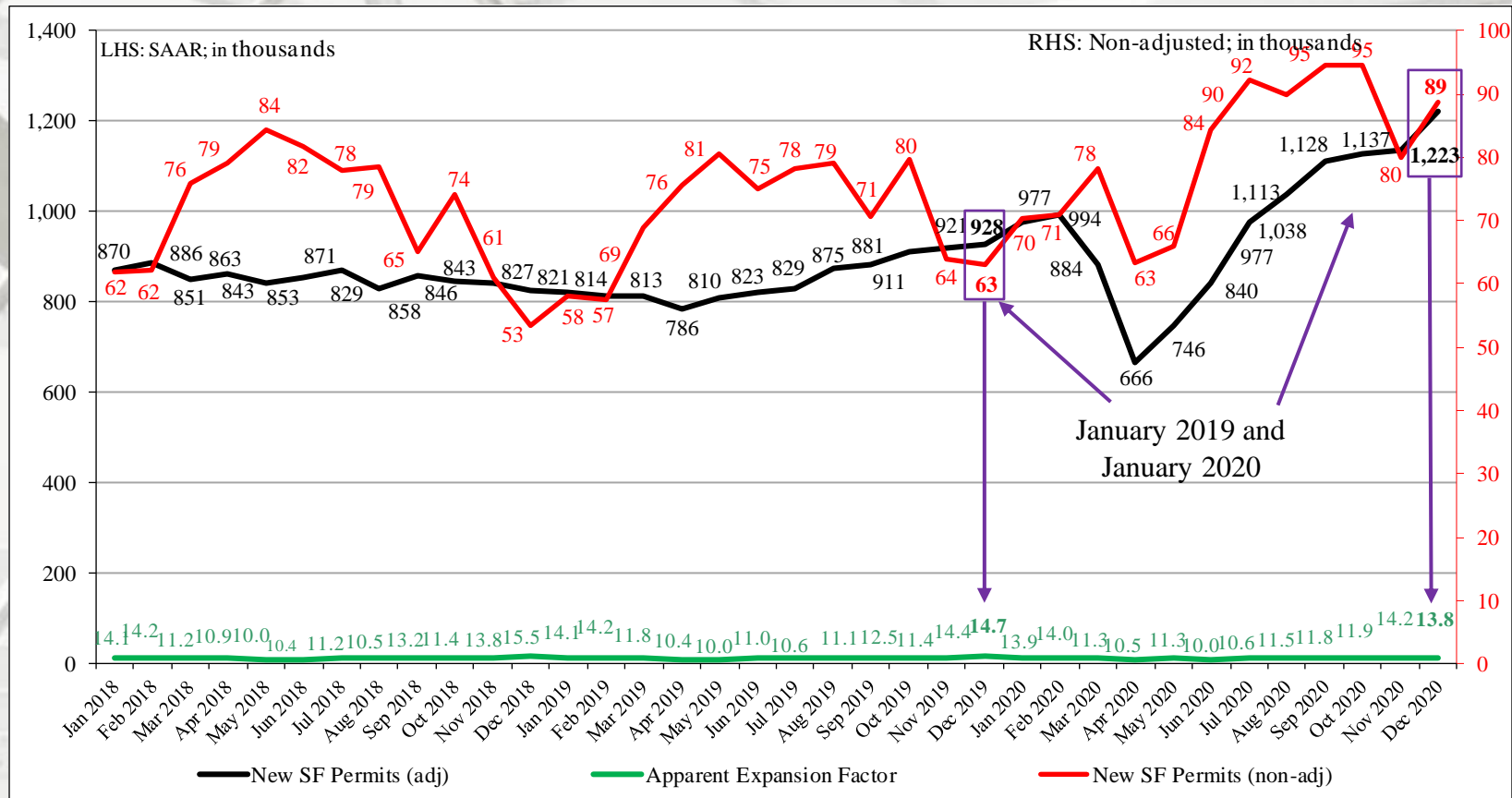
# Total New Housing Permits



\* 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

	<b>NE Total*</b>	<b>NE SF</b>	<b>NE MF**</b>
January	193,000	80,000	113,000
December	140,000	72,000	68,000
2020	179,000	67,000	112,000
M/M change	37.9%	11.1%	66.2%
Y/Y change	7.8%	19.4%	0.9%
	<b>MW Total*</b>	<b>MW SF</b>	<b>MW MF**</b>
January	246,000	178,000	68,000
December	248,000	171,000	77,000
2020	217,000	135,000	82,000
M/M change	-0.8%	4.1%	-11.7%
Y/Y change	13.4%	31.9%	-17.1%

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

	<b>S Total*</b>	<b>S SF</b>	<b>S MF**</b>
January	967,000	717,000	250,000
December	881,000	701,000	180,000
2020	754,000	540,000	214,000
M/M change	9.8%	2.3%	38.9%
Y/Y change	28.2%	32.8%	16.8%
	<b>W Total*</b>	<b>W SF</b>	<b>W MF**</b>
January	480,000	295,000	185,000
December	435,000	279,000	156,000
2020	386,000	235,000	151,000
M/M change	10.3%	5.7%	18.6%
Y/Y change	24.4%	25.5%	22.5%

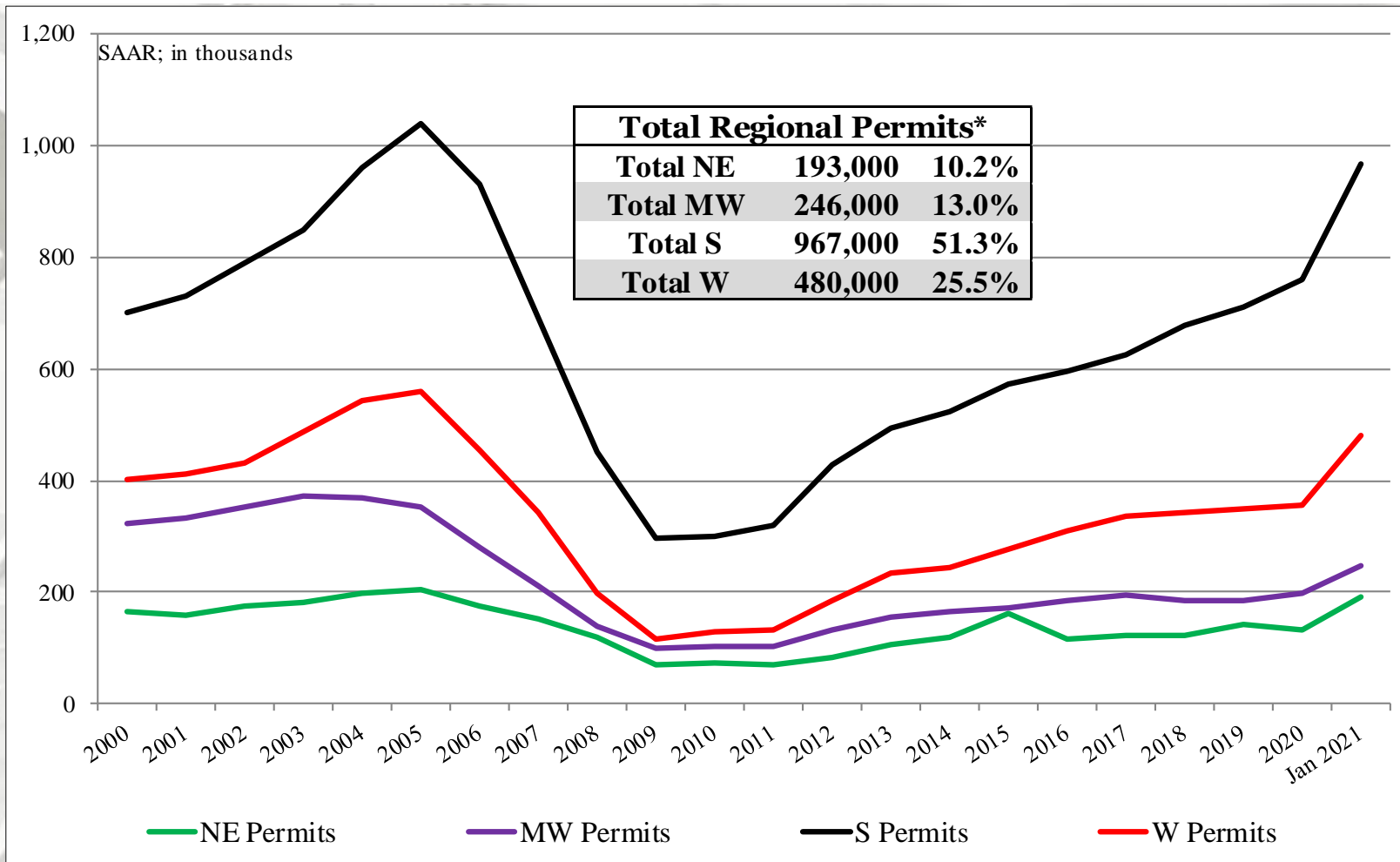
S = South; W = West

\* All data are SAAR

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



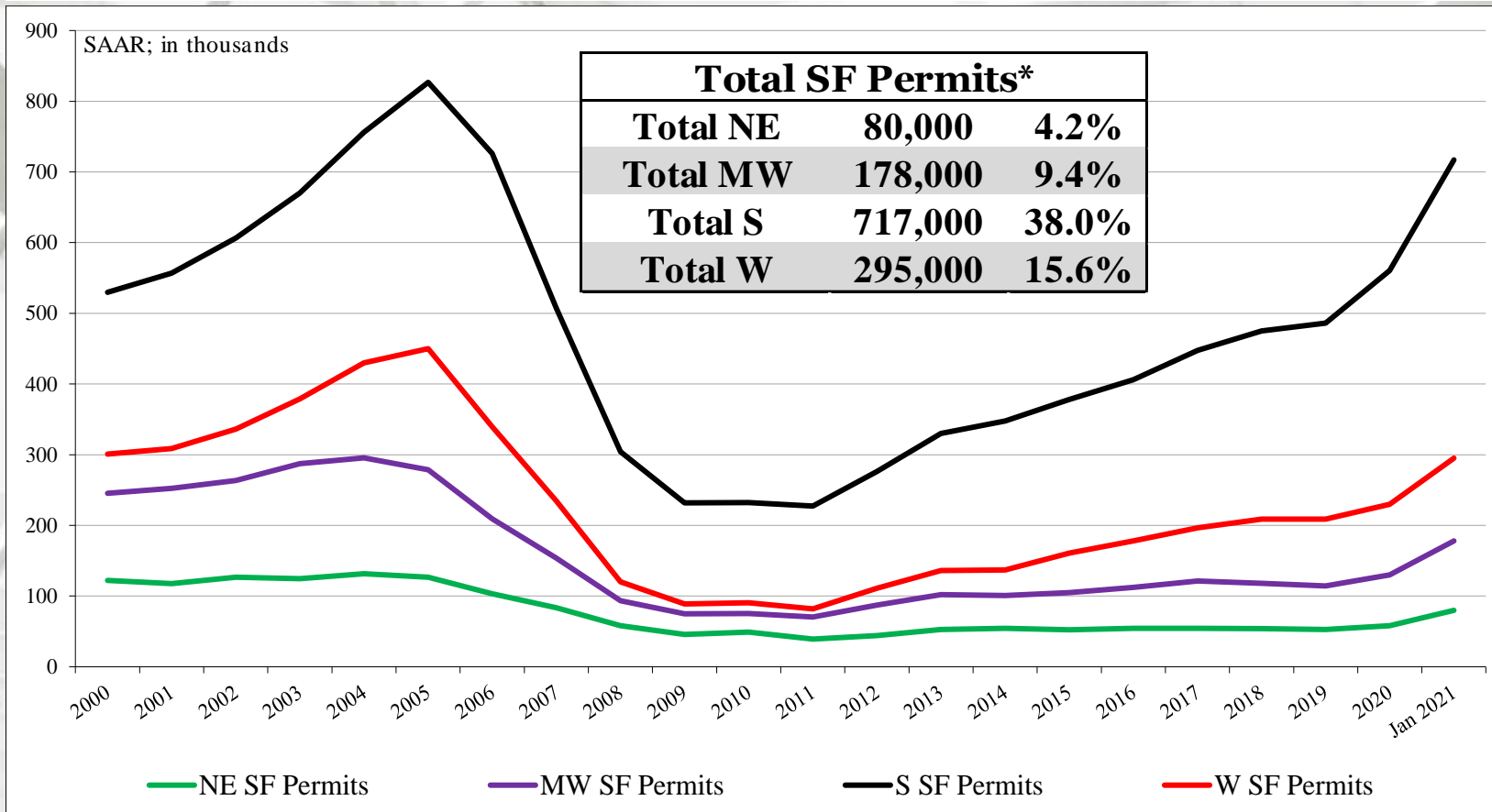
# Total Housing Permits by Region



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

\* Percentage of total permits.

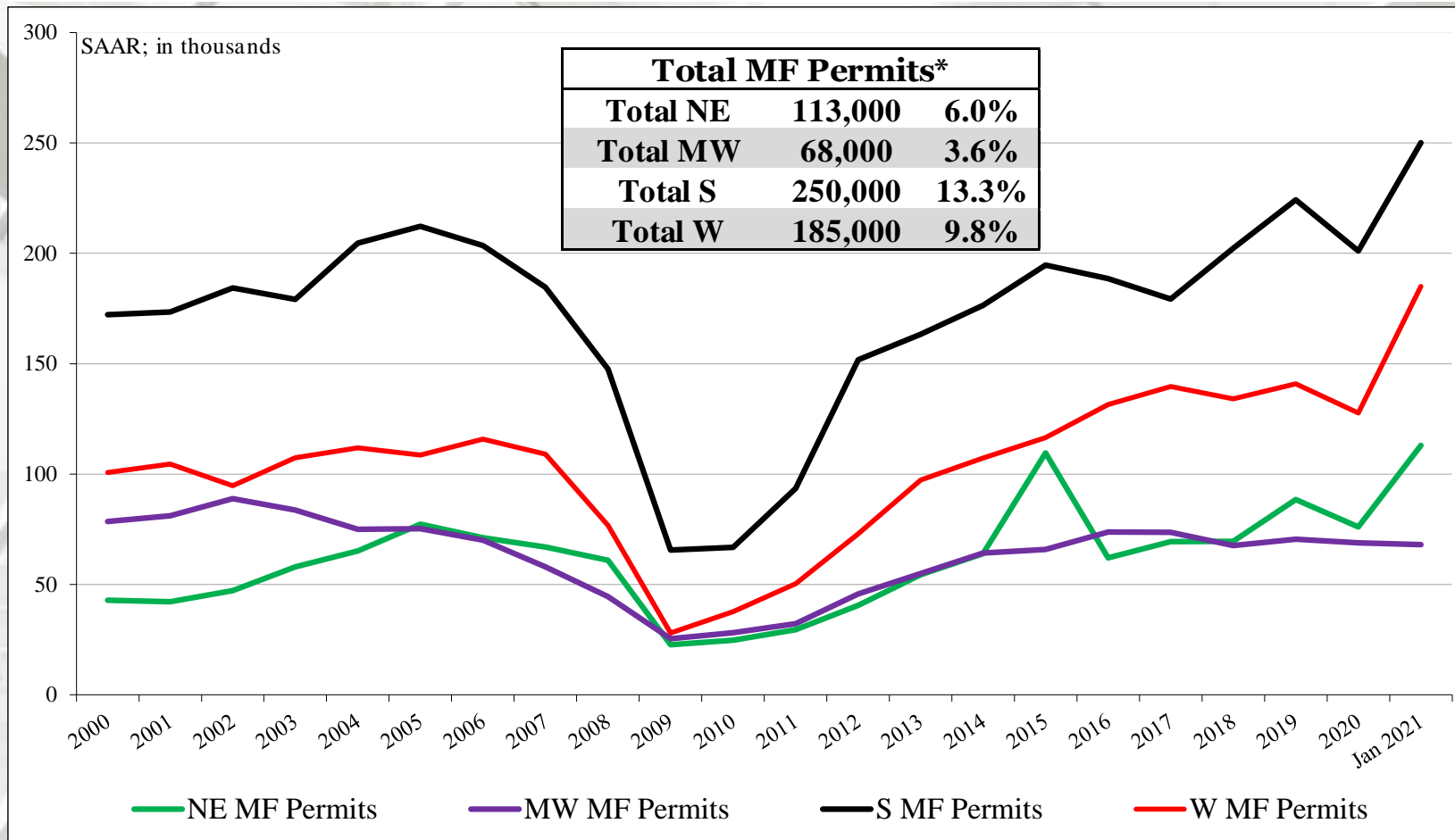
# SF Housing Permits by Region



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.

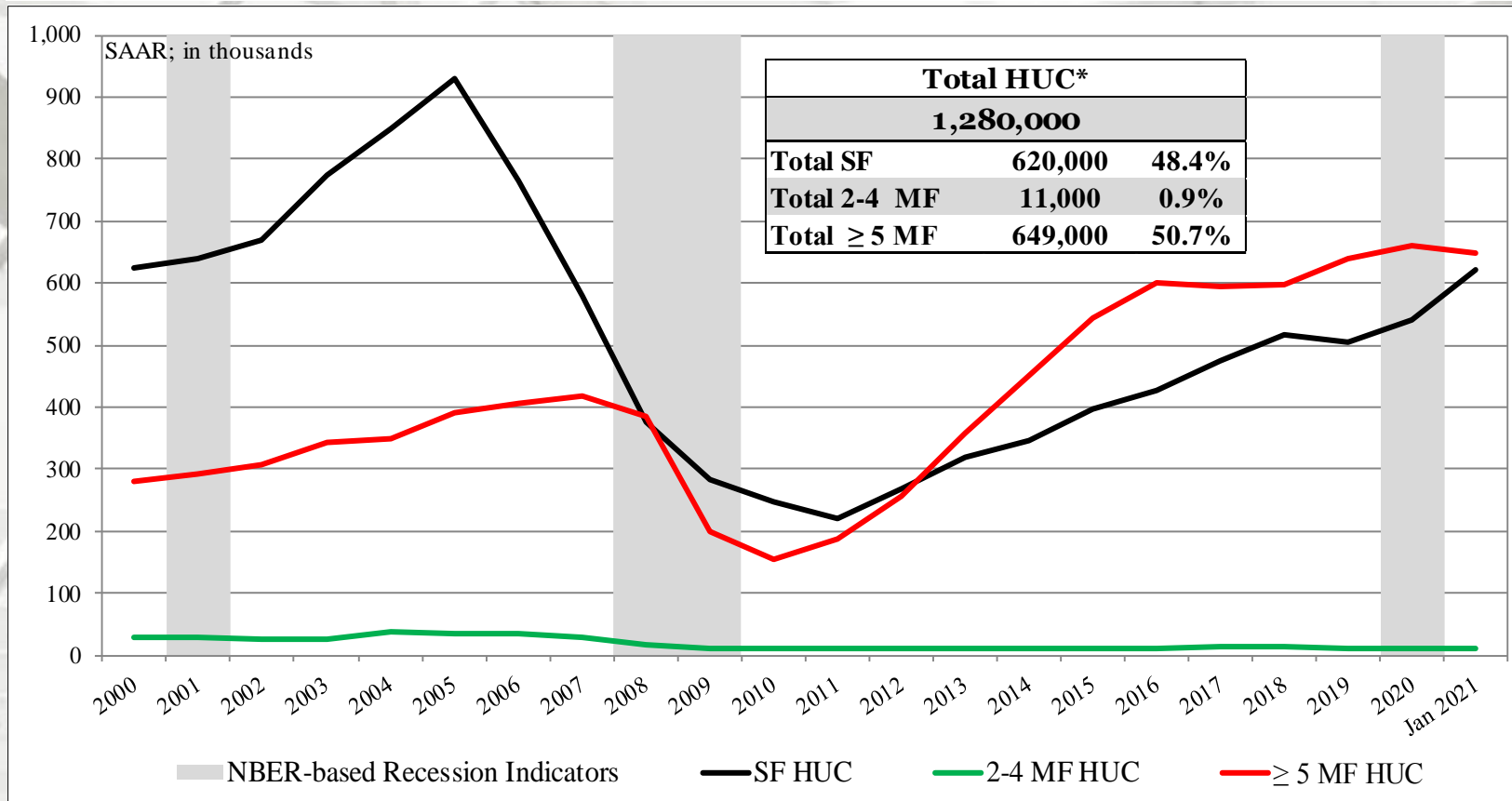
# New Housing Under Construction (HUC)

	Total Under Construction*	SF Under Construction	MF 2-4 unit** Under Construction	MF ≥ 5 unit Under Construction
January	1,280,000	620,000	11,000	649,000
December	1,272,000	613,000	10,000	649,000
2020	1,203,000	534,000	12,000	657,000
M/M change	0.6%	1.1%	10.0%	0.0%
Y/Y change	6.4%	16.1%	-8.3%	-1.2%

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 +  $\geq 5$  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

	<b>NE Total</b>	<b>NE SF</b>	<b>NE MF**</b>
January	178,000	58,000	120,000
December	178,000	57,000	122,000
2020	178,000	55,000	123,000
M/M change	0.0%	1.8%	-1.6%
Y/Y change	0.0%	5.5%	-2.4%
	<b>MW Total</b>	<b>MW SF</b>	<b>MW MF</b>
January	165,000	87,000	78,000
December	164,000	86,000	78,000
2020	156,000	80,000	76,000
M/M change	0.6%	1.2%	0.0%
Y/Y change	5.8%	8.7%	2.6%

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).

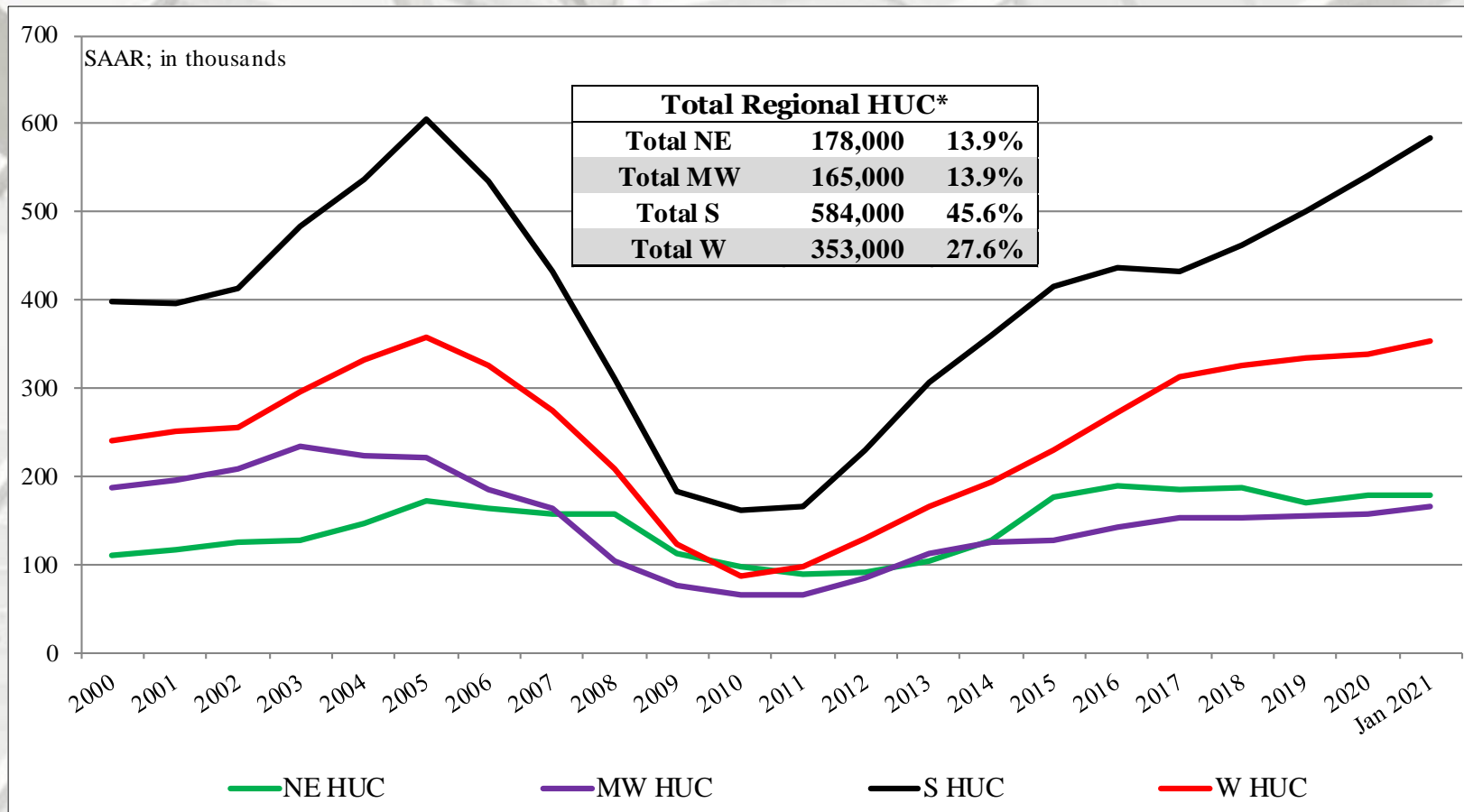
# New Housing Under Construction by Region

	<b>S Total</b>	<b>S SF</b>	<b>S MF**</b>
January	584,000	306,000	278,000
December	580,000	304,000	276,000
2020	526,000	255,000	271,000
M/M change	0.7%	0.7%	0.7%
Y/Y change	11.0%	20.0%	2.6%
	<b>W Total</b>	<b>W SF</b>	<b>W MF</b>
January	353,000	169,000	184,000
December	350,000	166,000	184,000
2020	343,000	144,000	199,000
M/M change	0.9%	1.8%	0.0%
Y/Y change	2.9%	17.4%	-7.5%

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

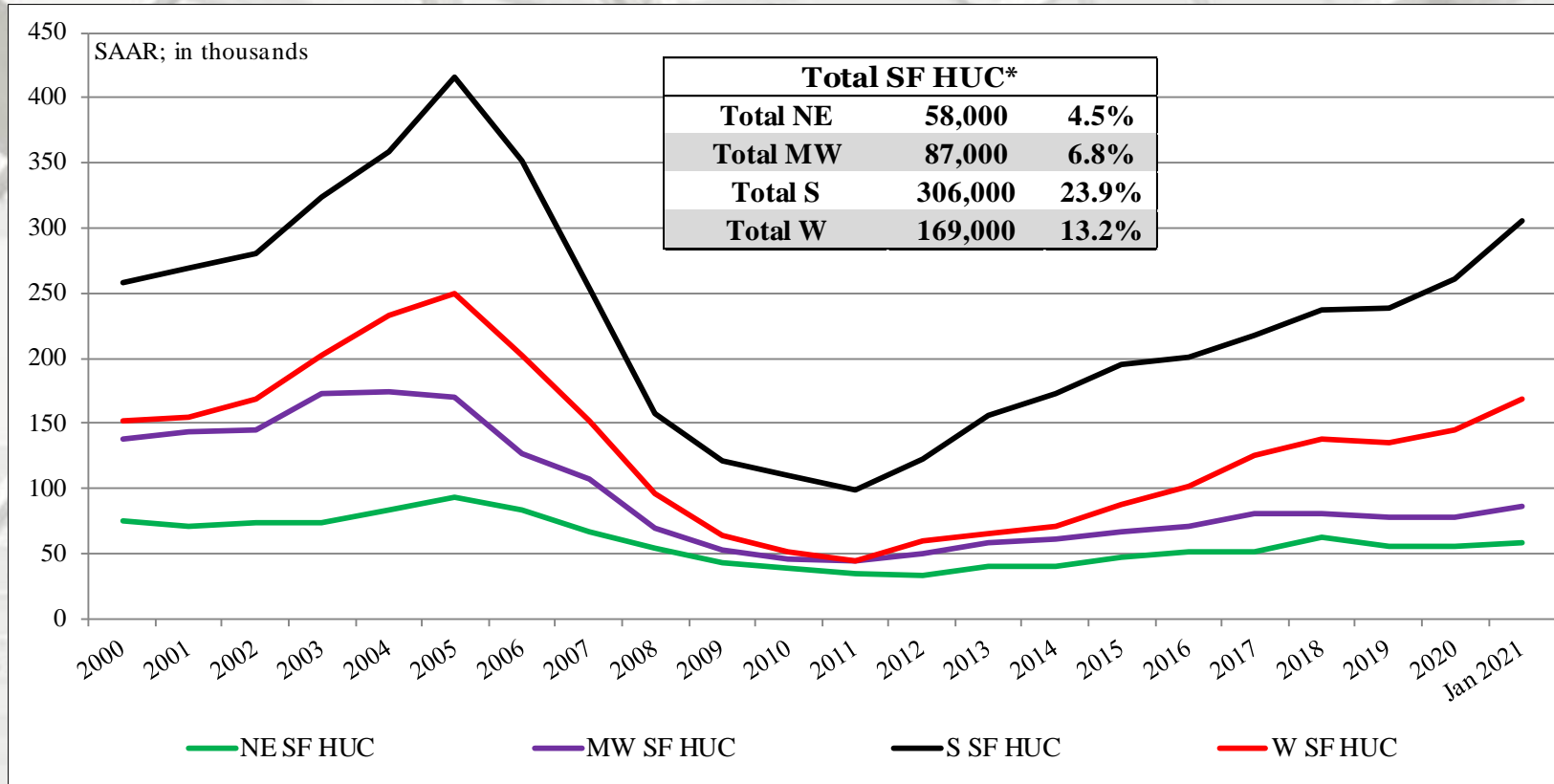


NE = Northeast, MW = Midwest, S = South, W = West

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

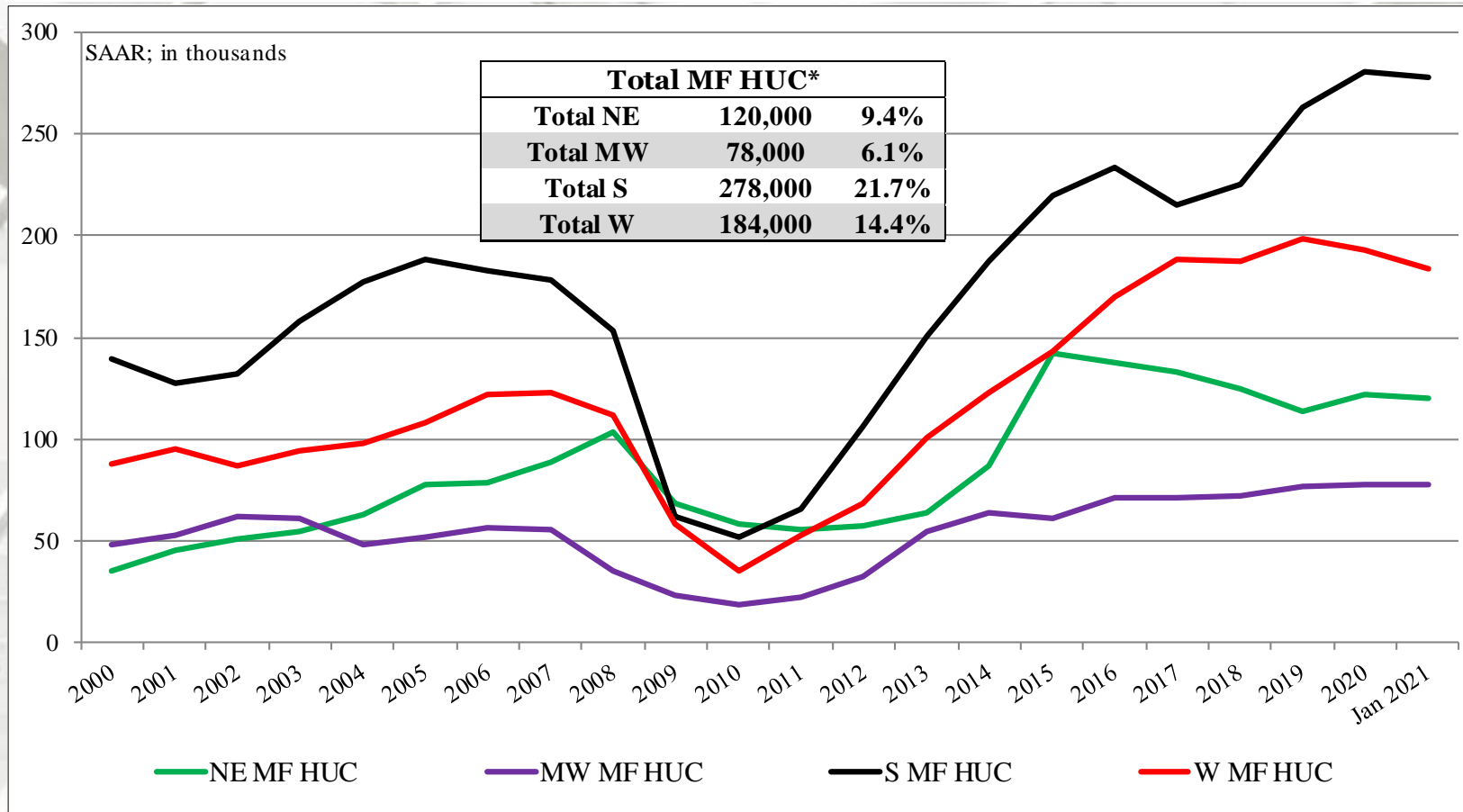


NE = Northeast, MW = Midwest, S = South, W = West.

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.



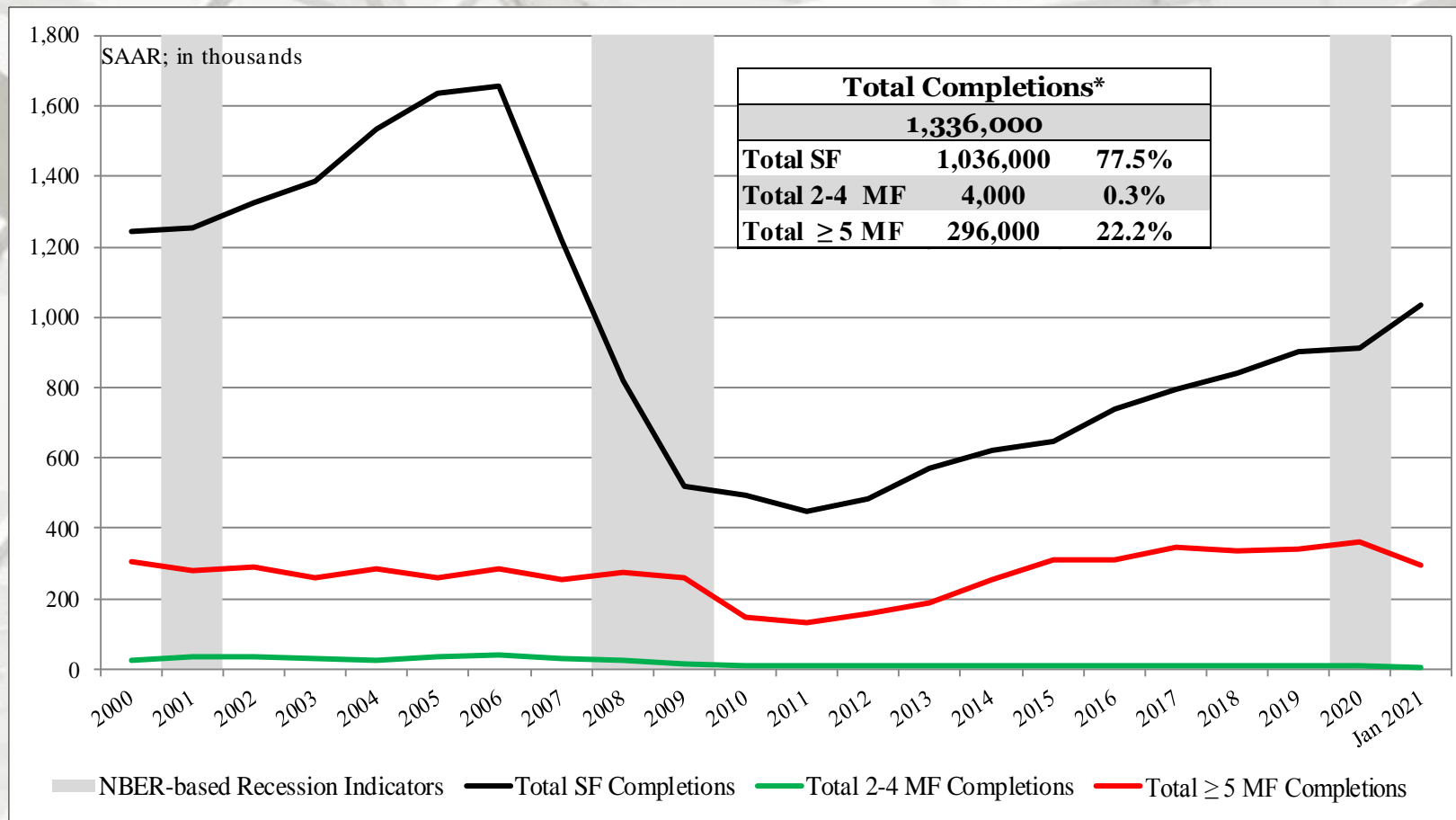
# New Housing Completions

	Total Completions*	SF Completions	MF 2-4 unit**	MF ≥ 5 unit Completions
January	1,336,000	1,036,000	4,000	296,000
December	1,368,000	942,000	13,000	413,000
2020	1,305,000	906,000	10,000	389,000
M/M change	-2.3%	10.0%	-69.2%	-28.3%
Y/Y change	2.4%	14.3%	-60.0%	-23.9%

\* 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**
January	101,000	65,000	36,000
December	118,000	58,000	60,000
2020	104,000	78,000	26,000
M/M change	-14.4%	12.1%	-40.0%
Y/Y change	-2.9%	-16.7%	38.5%
	MW Total	MW SF	MW MF
January	175,000	150,000	25,000
December	190,000	138,000	52,000
2020	184,000	126,000	58,000
M/M change	-7.9%	8.7%	-51.9%
Y/Y change	-4.9%	19.0%	-56.9%

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

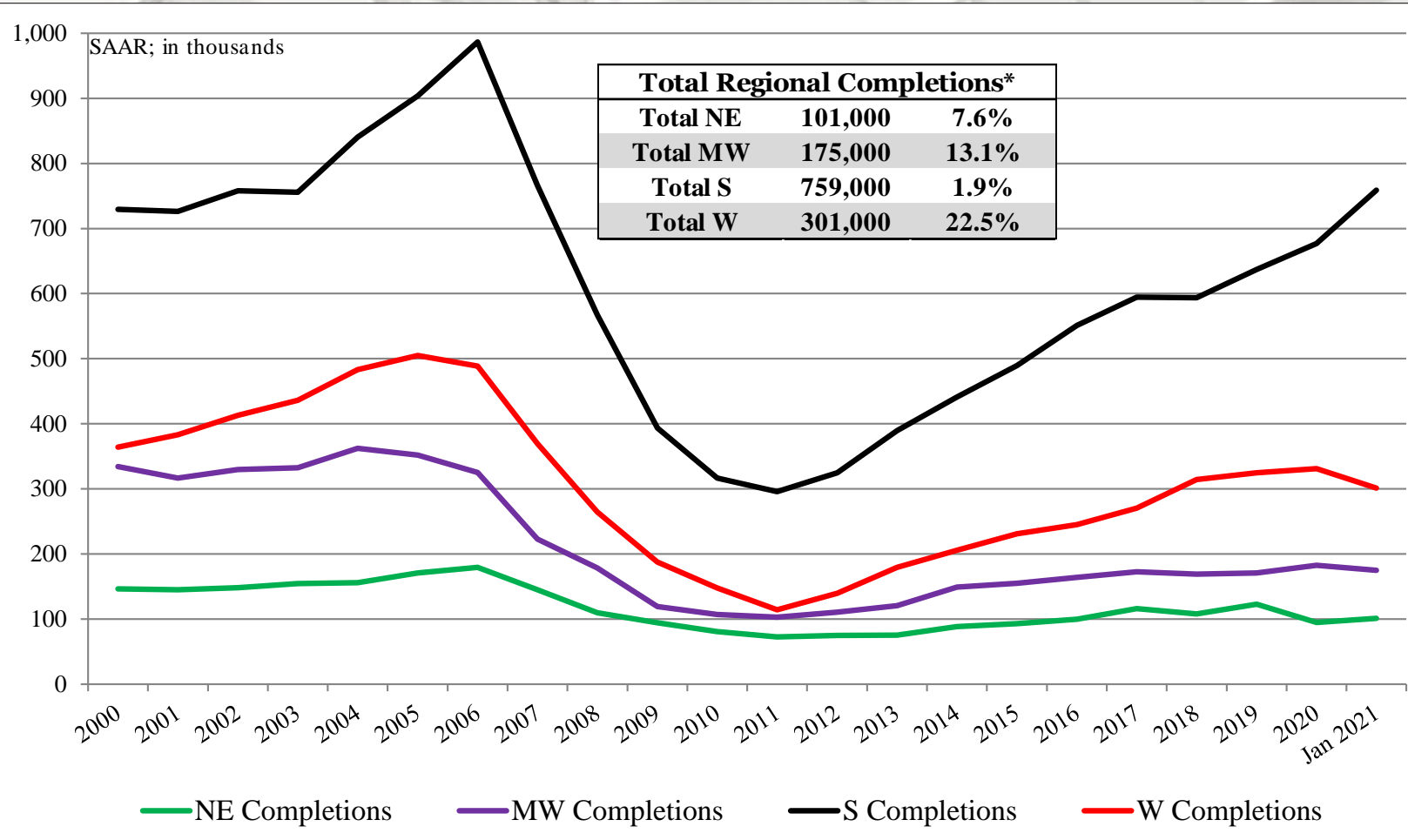
	<b>S Total</b>	<b>S SF</b>	<b>S MF**</b>
January	759,000	594,000	165,000
December	720,000	534,000	186,000
2020	634,000	467,000	167,000
M/M change	5.4%	11.2%	-11.3%
Y/Y change	19.7%	27.2%	-1.2%
	<b>W Total</b>	<b>W SF</b>	<b>W MF</b>
January	301,000	227,000	74,000
December	340,000	212,000	128,000
2020	383,000	235,000	148,000
M/M change	-11.5%	7.1%	-42.2%
Y/Y change	-21.4%	-3.4%	-50.0%

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

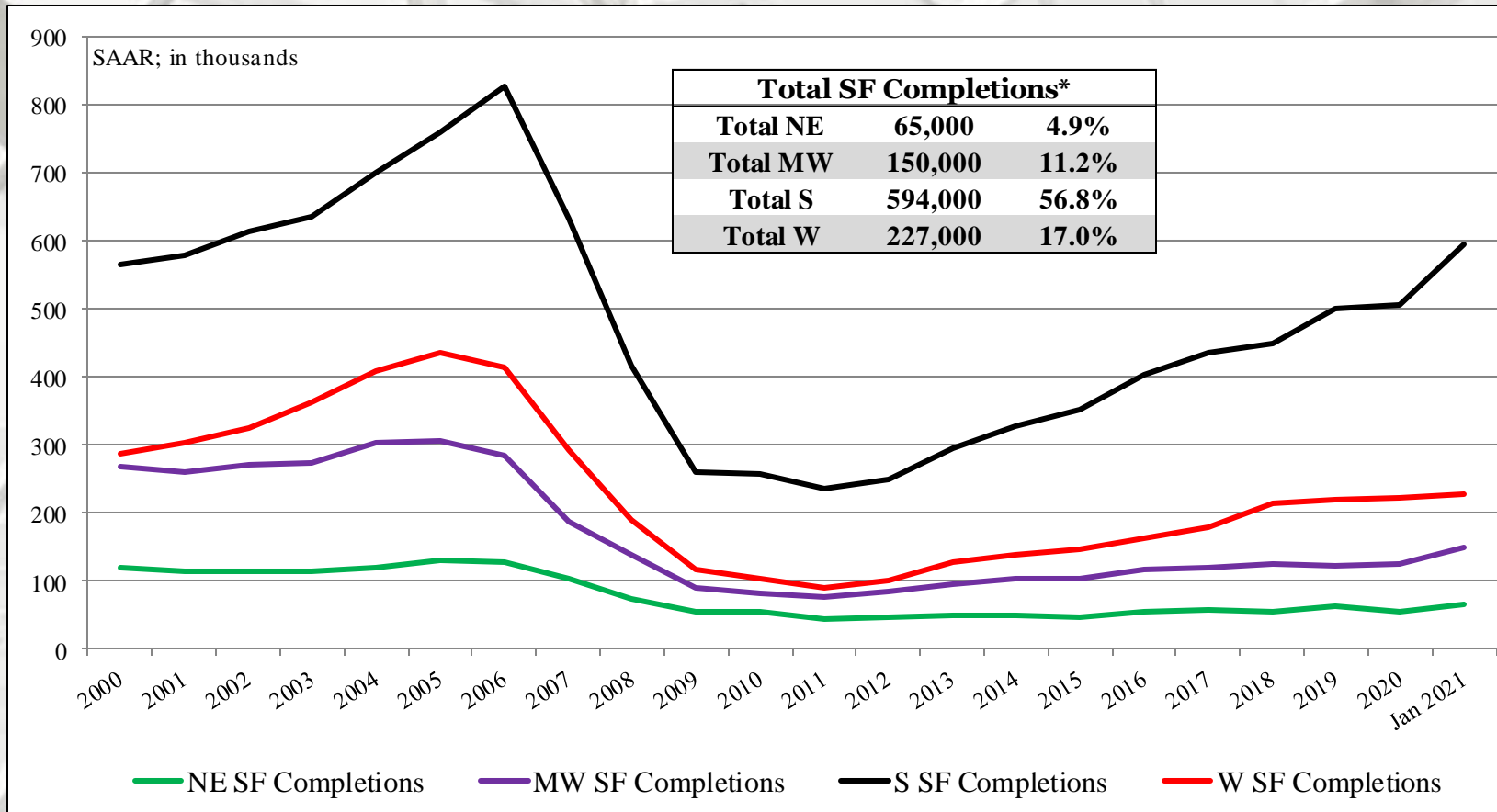


All data are SAAR; NE = Northeast and MW = Midwest.

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



# SF Housing Completions by Region

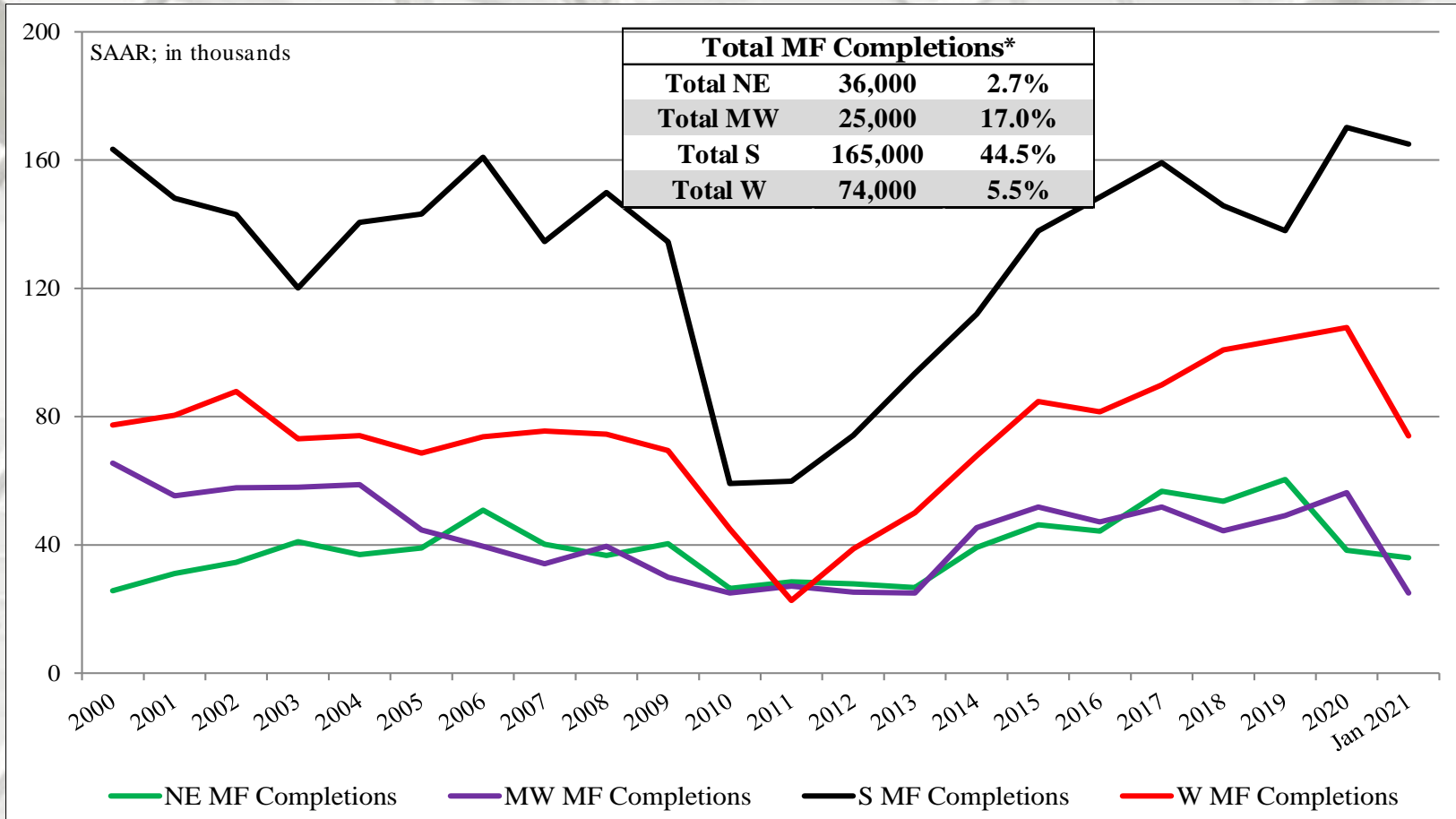


NE = Northeast, MW = Midwest, S = South, W = West

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

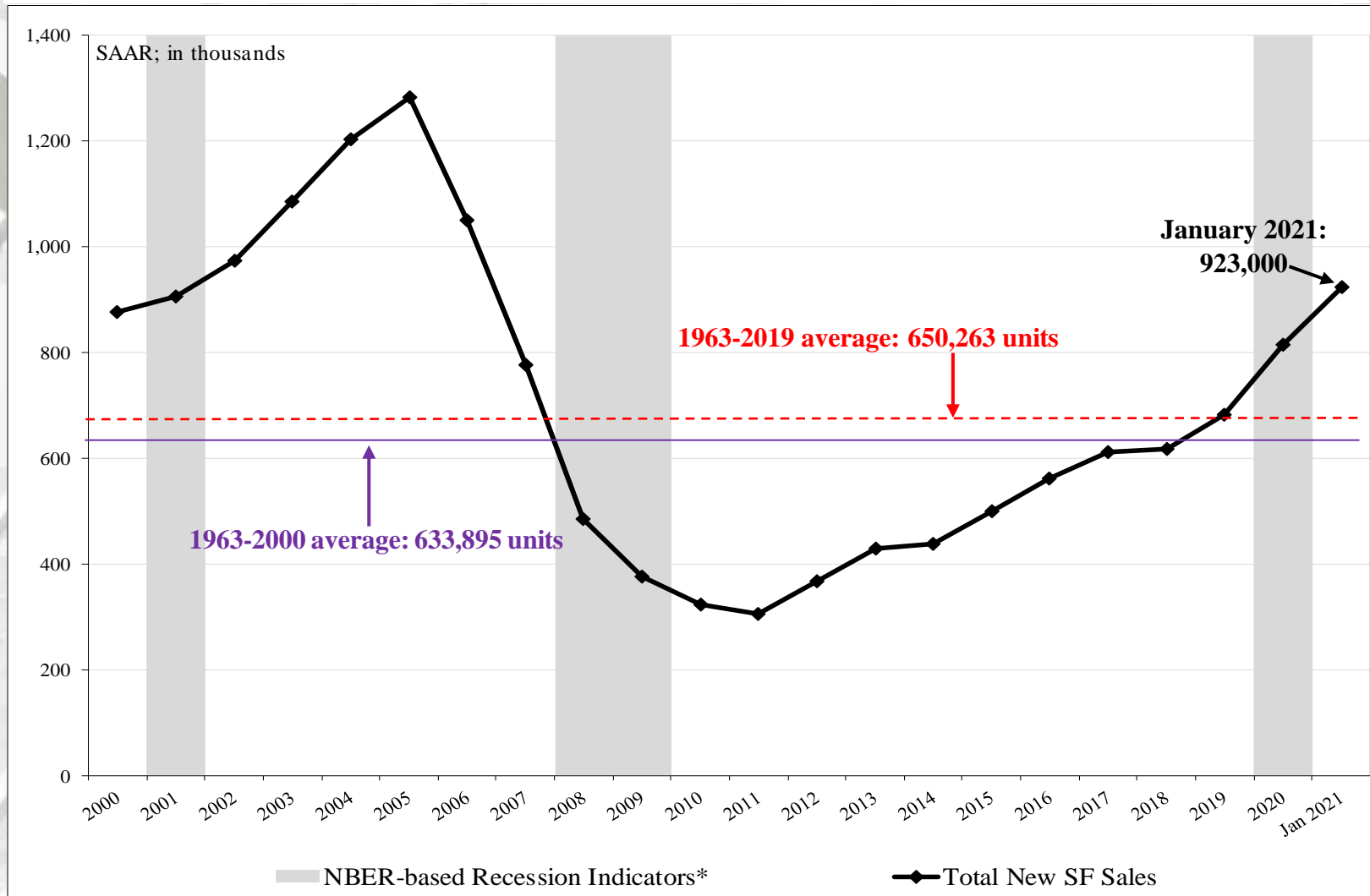
	New SF Sales*	Median Price	Mean Price	Month's Supply
January	923,000	\$346,400	\$408,800	4.0
December	885,000	\$353,100	\$394,700	4.1
2020	774,000	\$328,900	\$384,000	5.0
M/M change	4.3%	-1.9%	3.6%	-2.4%
Y/Y change	19.3%	5.3%	6.5%	-20.0%

\* All new sales data are presented at a seasonally adjusted annual rate (SAAR)<sup>1</sup> and housing prices are adjusted at irregular intervals<sup>2</sup>.

New SF sales were more than the consensus forecast<sup>3</sup> of 855 m (range: 809 m to 905 m). The past three month's new SF sales data also were revised:

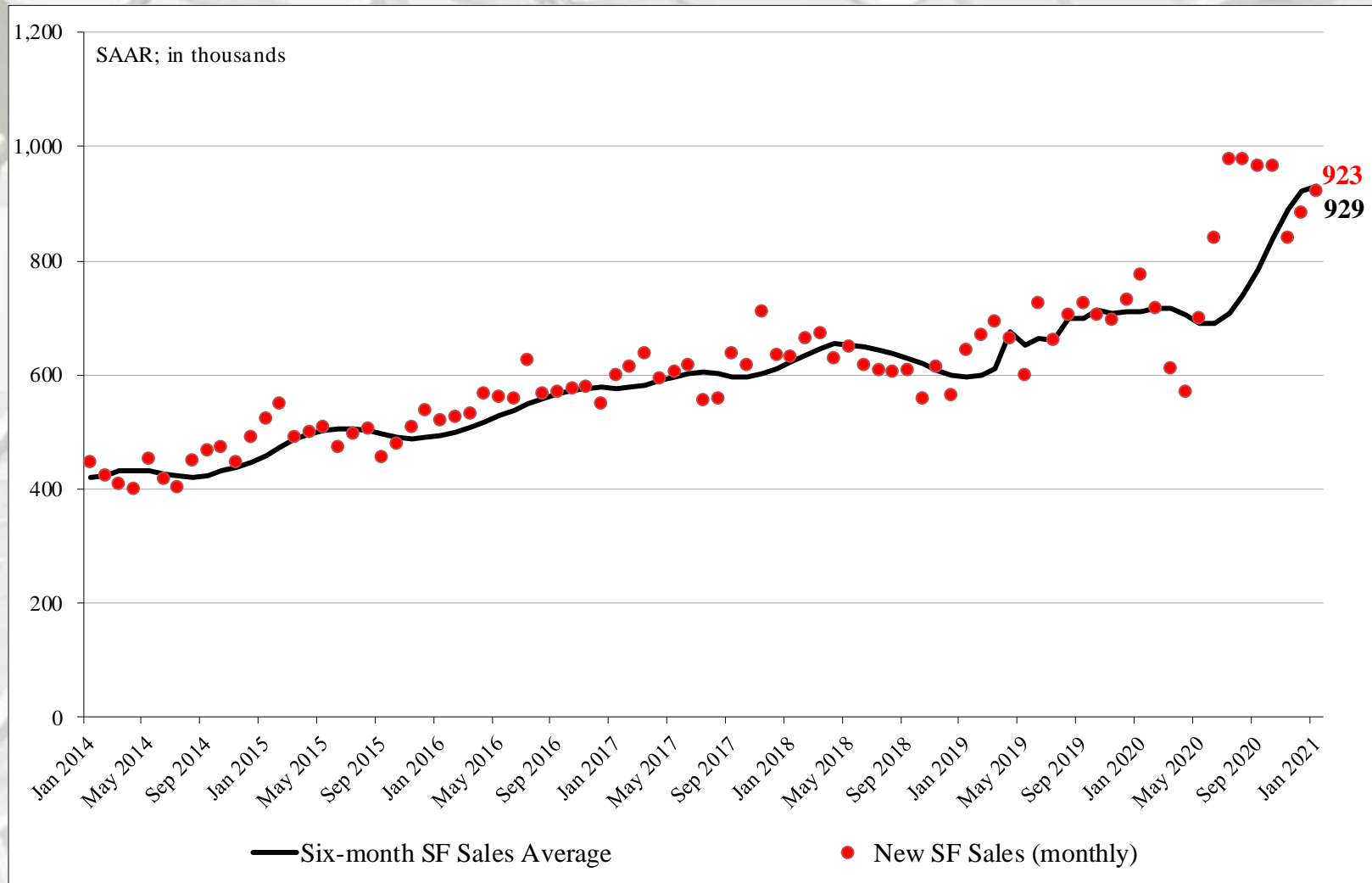
October initial:	999 m, revised to 965 m;
November initial:	841 m, revised to 839 m.
December initial:	842 m, revised to 885 m.

# 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			
January	31,000	107,000	549,000	236,000			
December	36,000	95,000	533,000	221,000			
2020	34,000	97,000	391,000	252,000			
M/M change	-13.9%	12.6%	3.0%	6.8%			
Y/Y change	-8.8%	10.3%	40.4%	-6.3%			
	\$150 - ≤ \$150m	\$200 - \$199.9m 299.9m	\$300 - \$399.9m	\$400 - \$499.9m	\$500 - \$749.9m	≥ \$750m	
January <sup>1,2,3,4</sup>	1,000	3,000	22,000	19,000	10,000	11,000	4,000
December	1,000	2,000	18,000	17,000	11,000	7,000	2,000
2020	1,000	3,000	21,000	14,000	9,000	7,000	3,000
M/M change	0.0%	50.0%	22.2%	11.8%	-9.1%	57.1%	100.0%
Y/Y change	0.0%	0.0%	4.8%	35.7%	11.1%	57.1%	33.3%
New SF sales: %	1.4%	4.3%	31.4%	27.1%	14.3%	15.7%	5.7%

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

<sup>1</sup> All data are SAAR

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

<sup>3</sup> Detail January not add to total because of rounding.

<sup>4</sup> Housing prices are adjusted at irregular intervals.

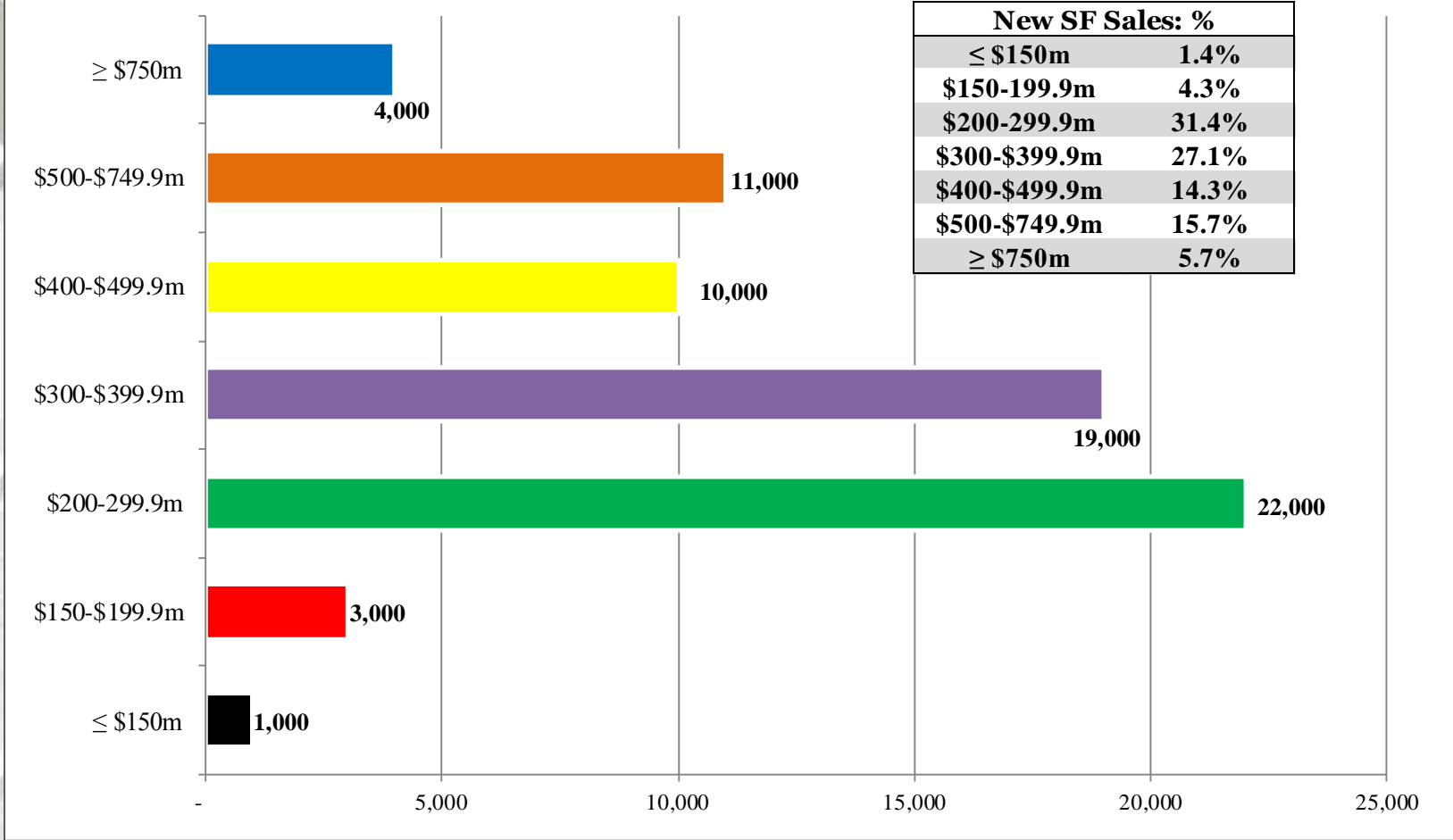
<sup>5</sup> Z = Less than 500 units or less than 0.5 percent

Sources: <sup>1,2,3</sup> <https://www.census.gov/construction/nrs/index.html>; 2/24/21;

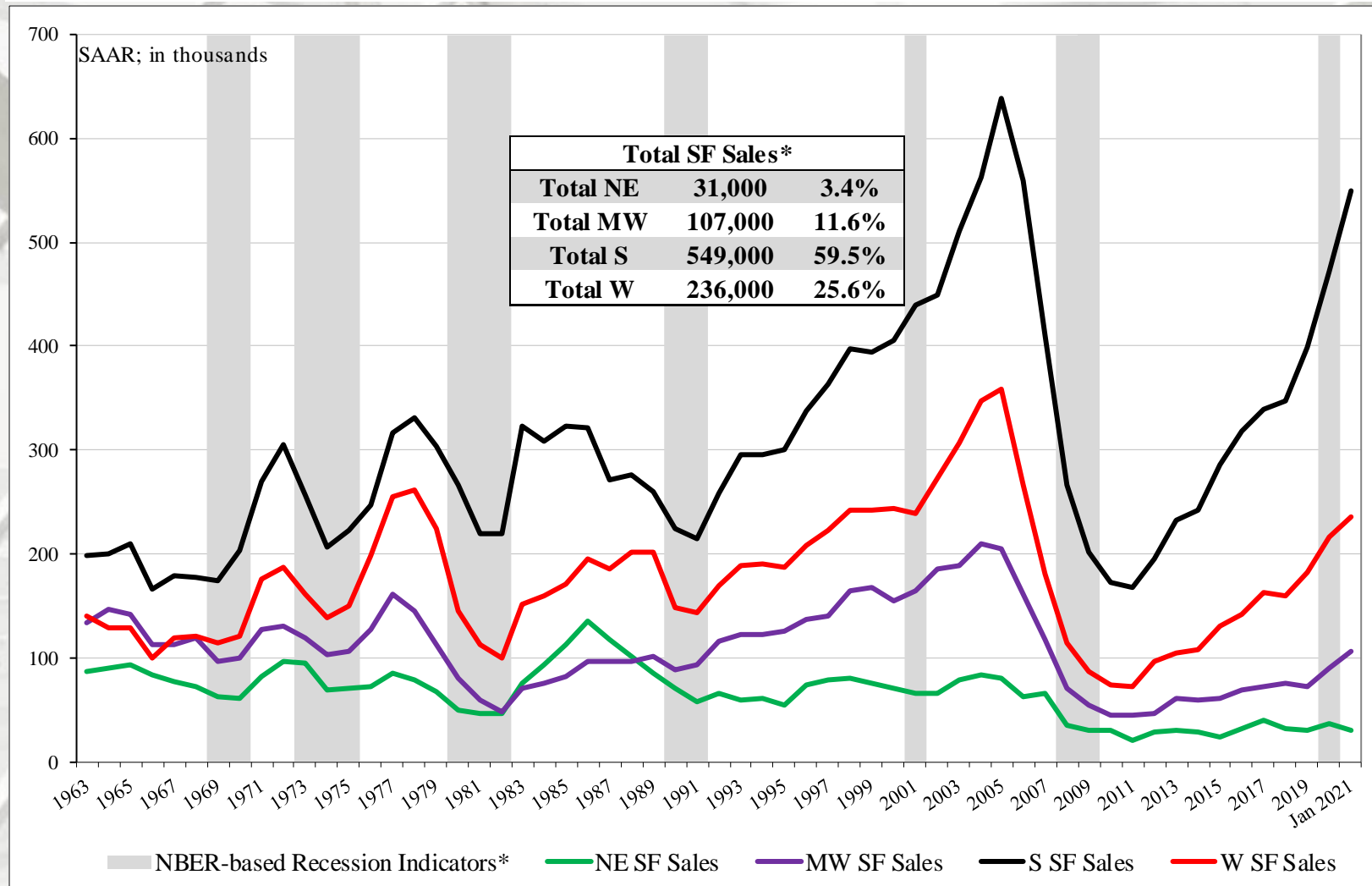
<sup>4</sup> [https://www.census.gov/construction/cpi/pdf/descpi\\_sold.pdf](https://www.census.gov/construction/cpi/pdf/descpi_sold.pdf)

# New SF House Sales

January New SF Sales\*



# New SF House Sales by Region

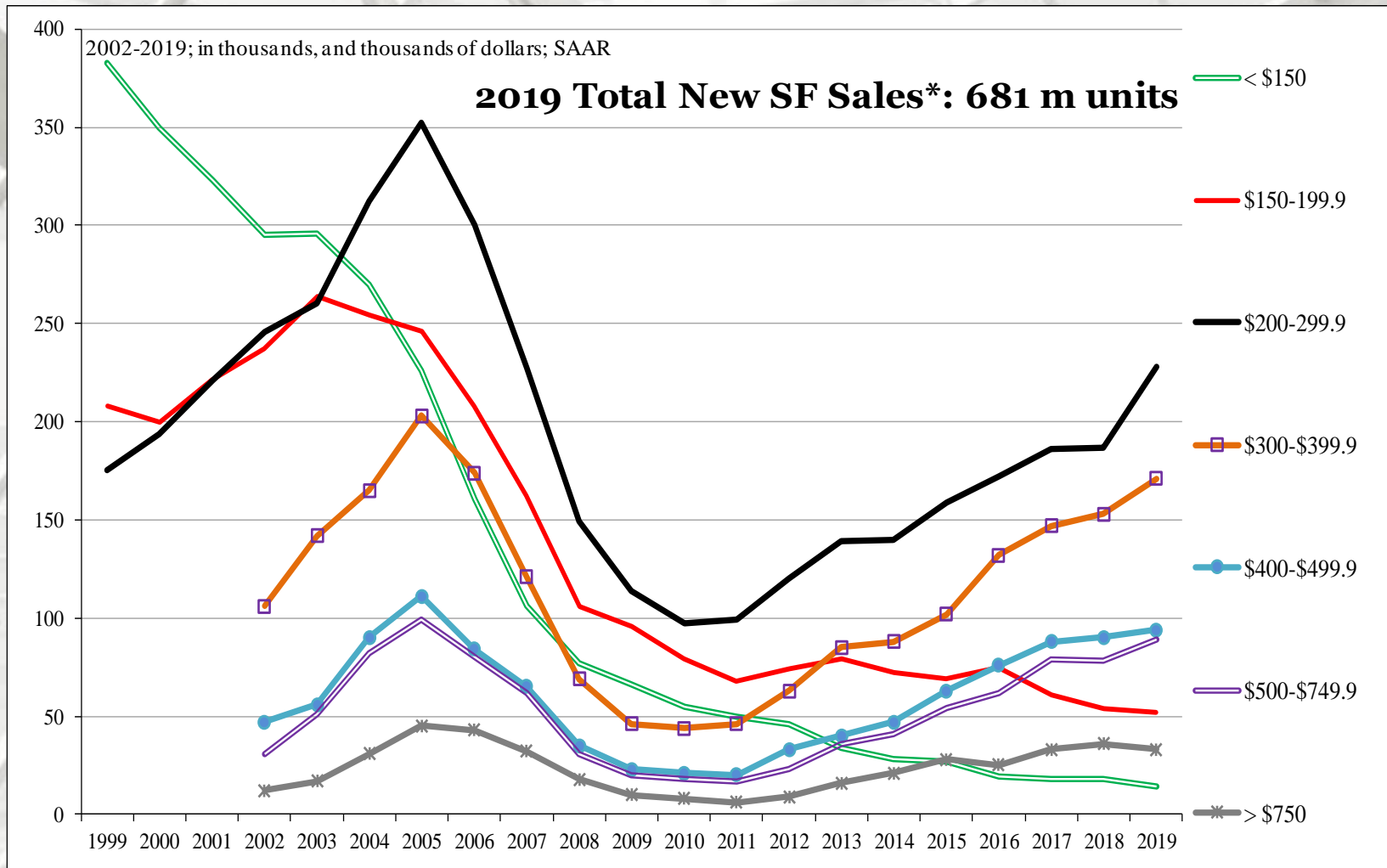


NE = Northeast; MW = Midwest; S = South; W = West

\* Percentage of total new sales.

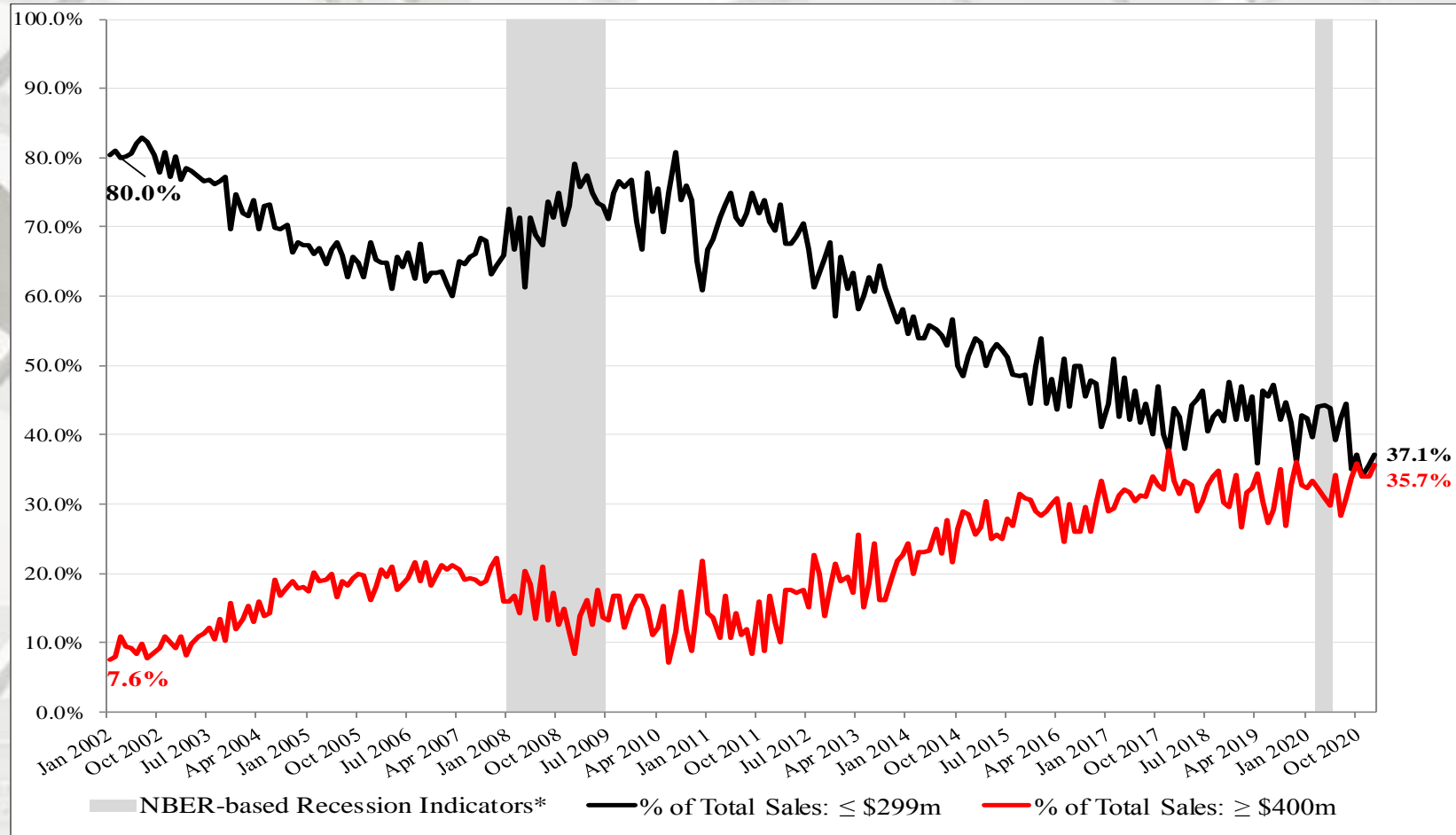
\* NBER based Recession Indicator Bars for the United States from the Period following the Peak through the Trough (FRED, St. Louis).

# New SF House Sales by Price Category



\* Sales tallied by price category.

# New SF House Sales



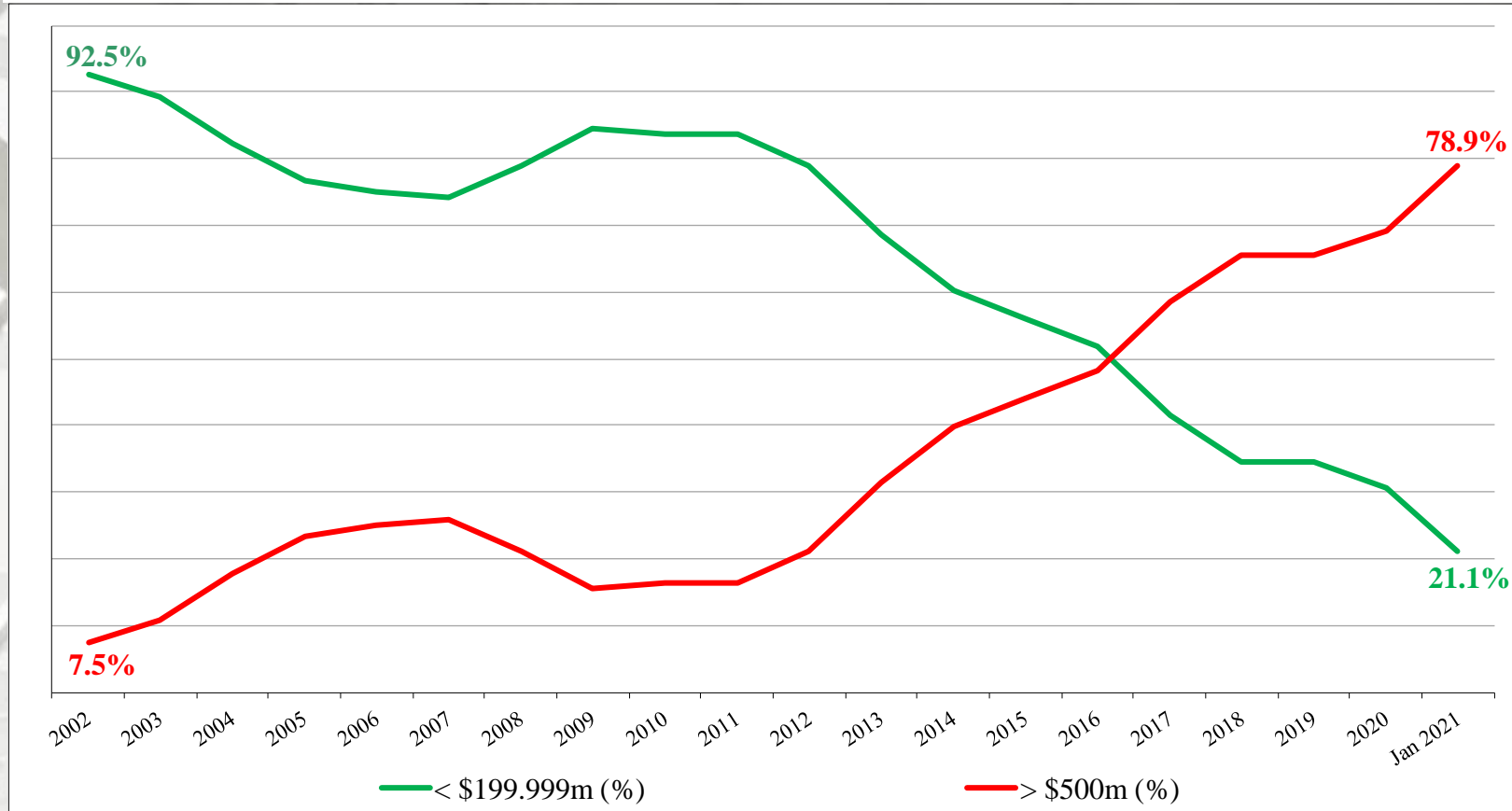
\* NBER based Recession Indicator Bars for the United States from the Period following the Peak through the Trough (FRED, St. Louis).

## New SF Sales: ≤ \$299m and ≥ \$400m: 2002 – January 2021

The sales share of \$400 thousand plus SF houses is presented above<sup>1,2</sup>. 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



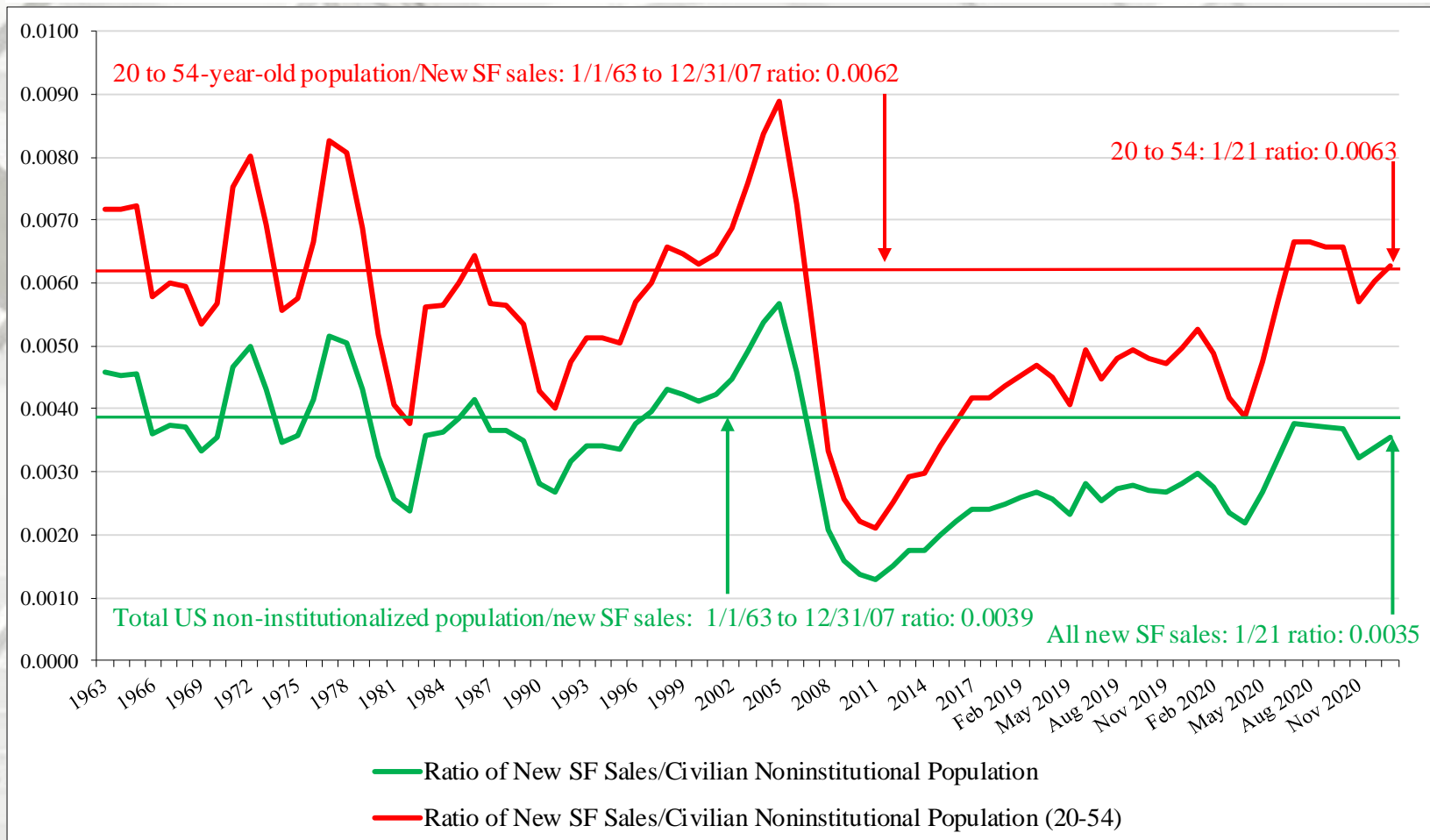
## New SF Sales: $\leq \$ 200m$ and $\geq \$500m$ : 2002 to January 2021

The number of  $\leq \$200$  thousand SF houses has declined dramatically since 2002<sup>1,2</sup>. 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).

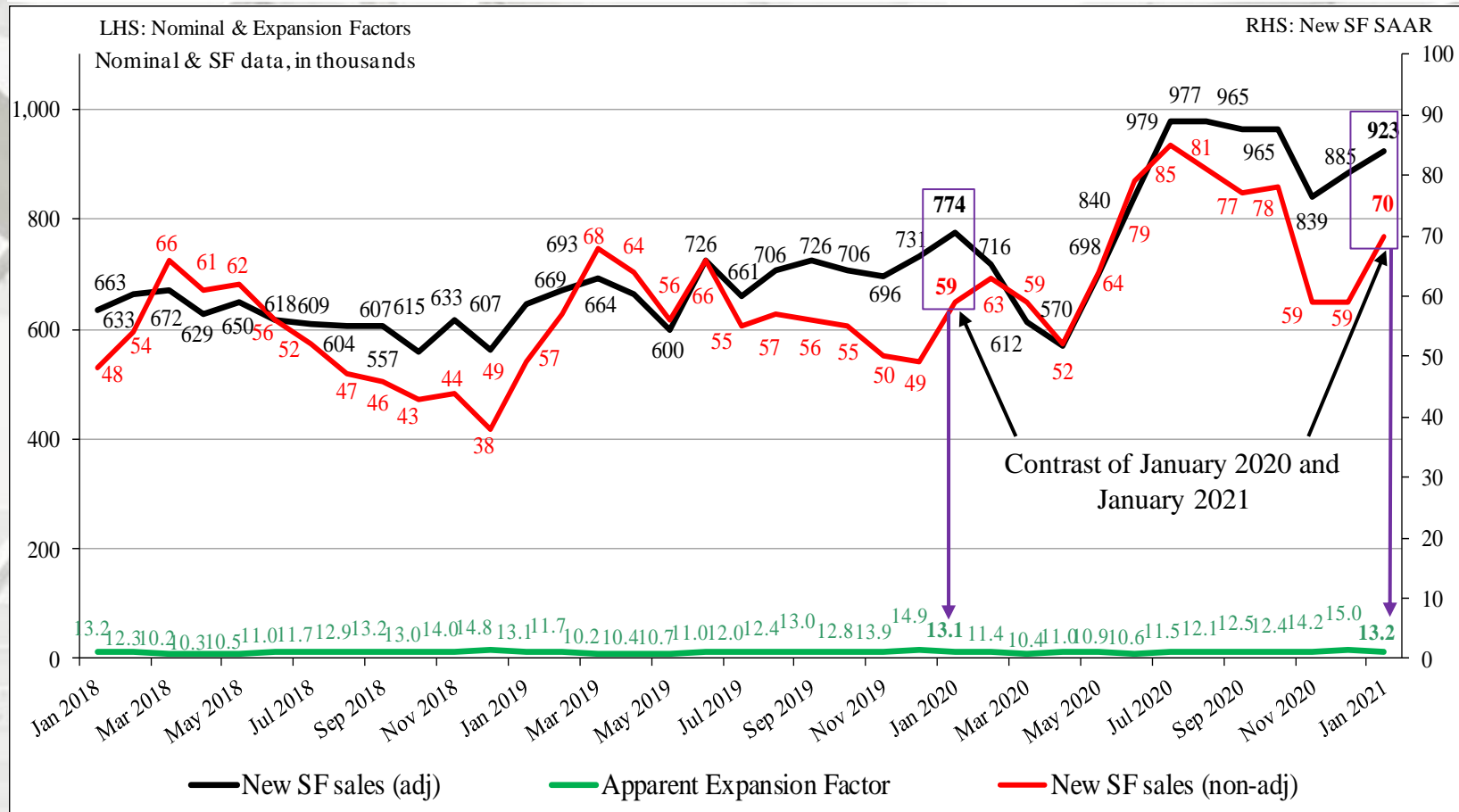
# New SF House Sales



## 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 January 2021 it was 0.0035 – an increase from December. The non-institutionalized population, aged 20 to 54 long-term ratio is 0.0062; in January 2021 it was 0.00636 – a slight increase from December (0.0060). All are non-adjusted data. New house sales for the 20 to 54 class exceeded population growth for the second time in more than a decade. From a total population world view, new sales remain less than 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

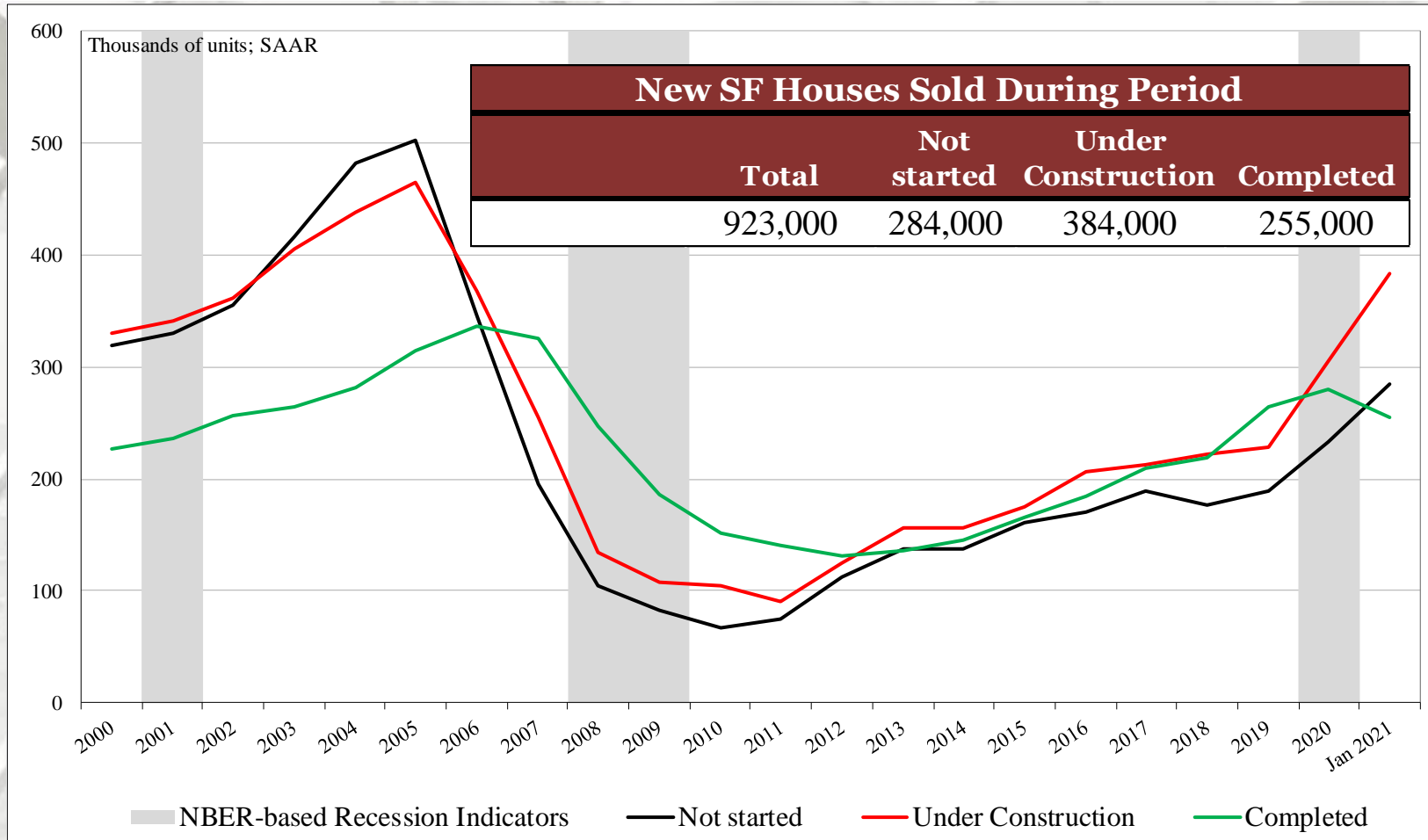
# New SF House Sales

## New SF Houses Sold During Period

	Total	Not started	Under Construction	Completed
January	923,000	284,000	384,000	255,000
December	885,000	233,000	378,000	274,000
2020	774,000	233,000	378,000	274,000
M/M change	4.3%	21.9%	1.6%	-6.9%
Y/Y change	19.3%	21.9%	1.6%	-6.9%
Total percentage		30.8%	41.6%	27.6%

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).



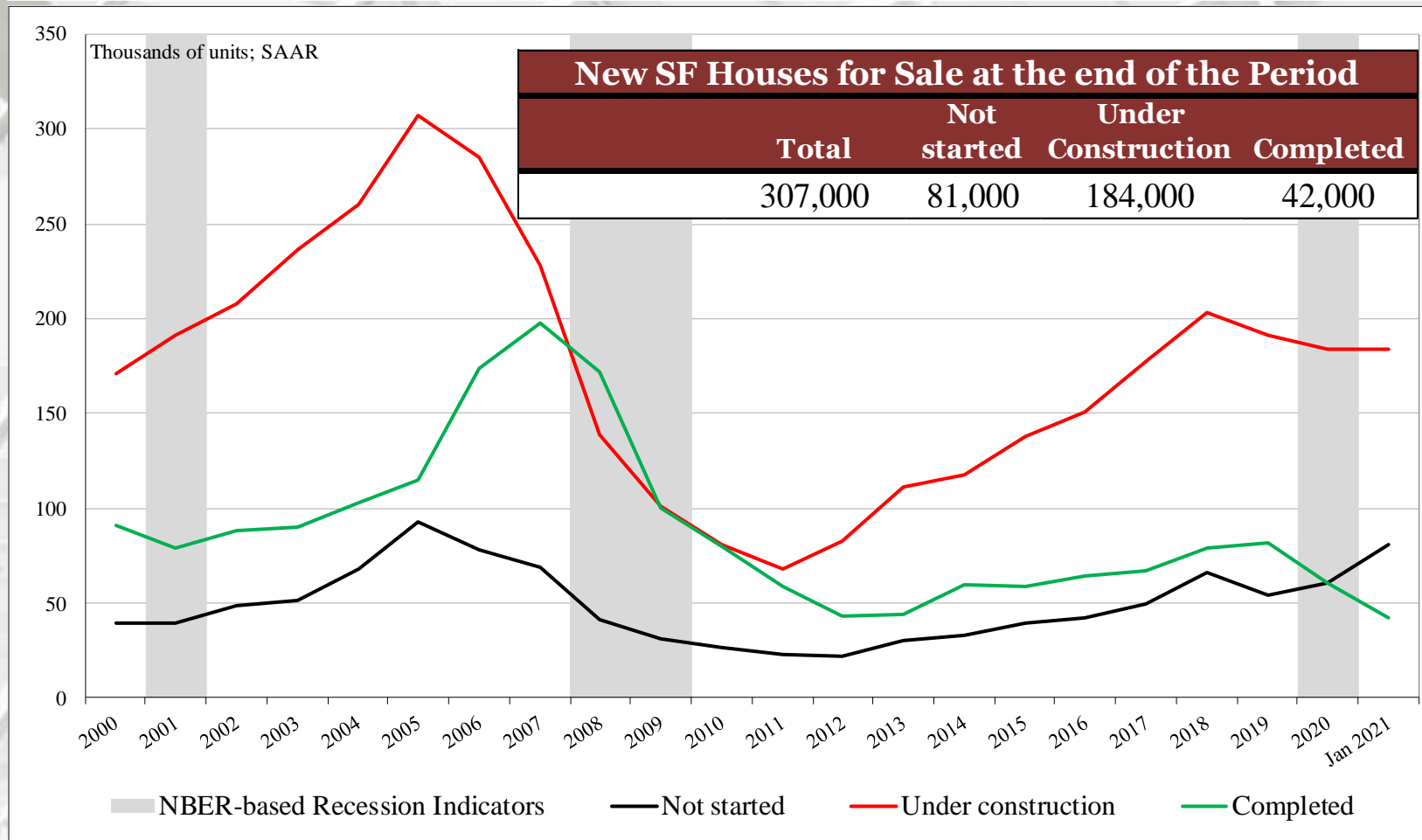
# New SF Houses for Sale at End of Period

## New SF Houses for Sale at the end of the Period

	Total	Not started	Under Construction	Completed
January	307,000	81,000	184,000	42,000
December	299,000	69,000	189,000	41,000
2020	299,000	69,000	189,000	41,000
M/M change	2.7%	17.4%	-2.6%	2.4%
Y/Y change	2.7%	17.4%	-2.6%	2.4%
Total percentage		26.4%	59.9%	13.7%

About 14% (42m) of those houses listed for sale (307m) in January have been built. Census data indicates this is the least quantity recorded. Lastly, 81m (26%) were offerings in which the ground has not been broken for construction.

# 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).

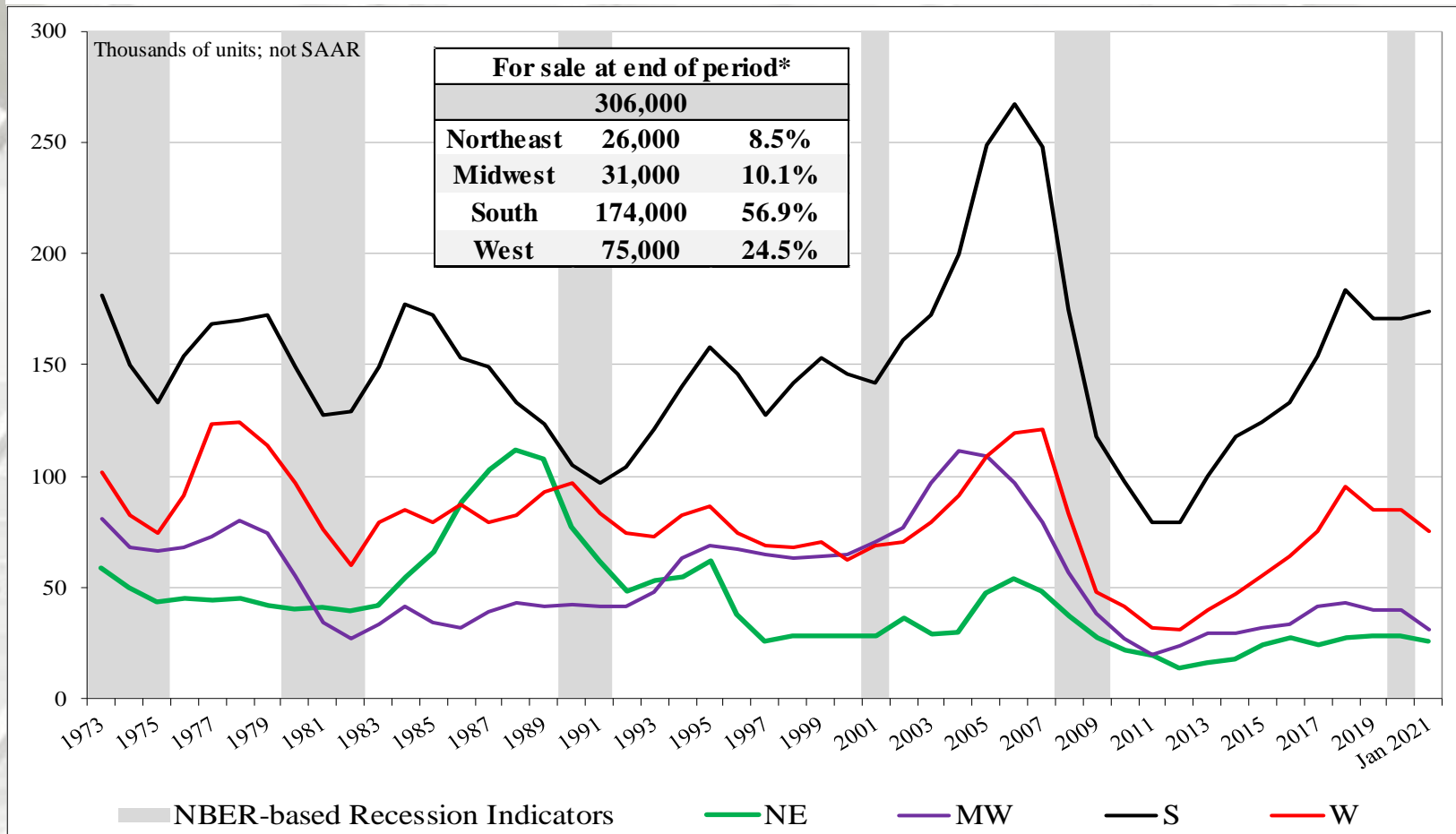
# New SF House Sales

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

	Total	NE	MW	S	W
January	306,000	26,000	31,000	174,000	75,000
December	302,000	25,000	32,000	171,000	74,000
2020	329,000	27,000	39,000	178,000	85,000
M/M change	1.3%	4.0%	-3.1%	1.8%	1.4%
Y/Y change	-7.0%	-3.7%	-20.5%	-2.2%	-11.8%

\* Not SAAR

# New SF Houses for Sale at End of Period by Region

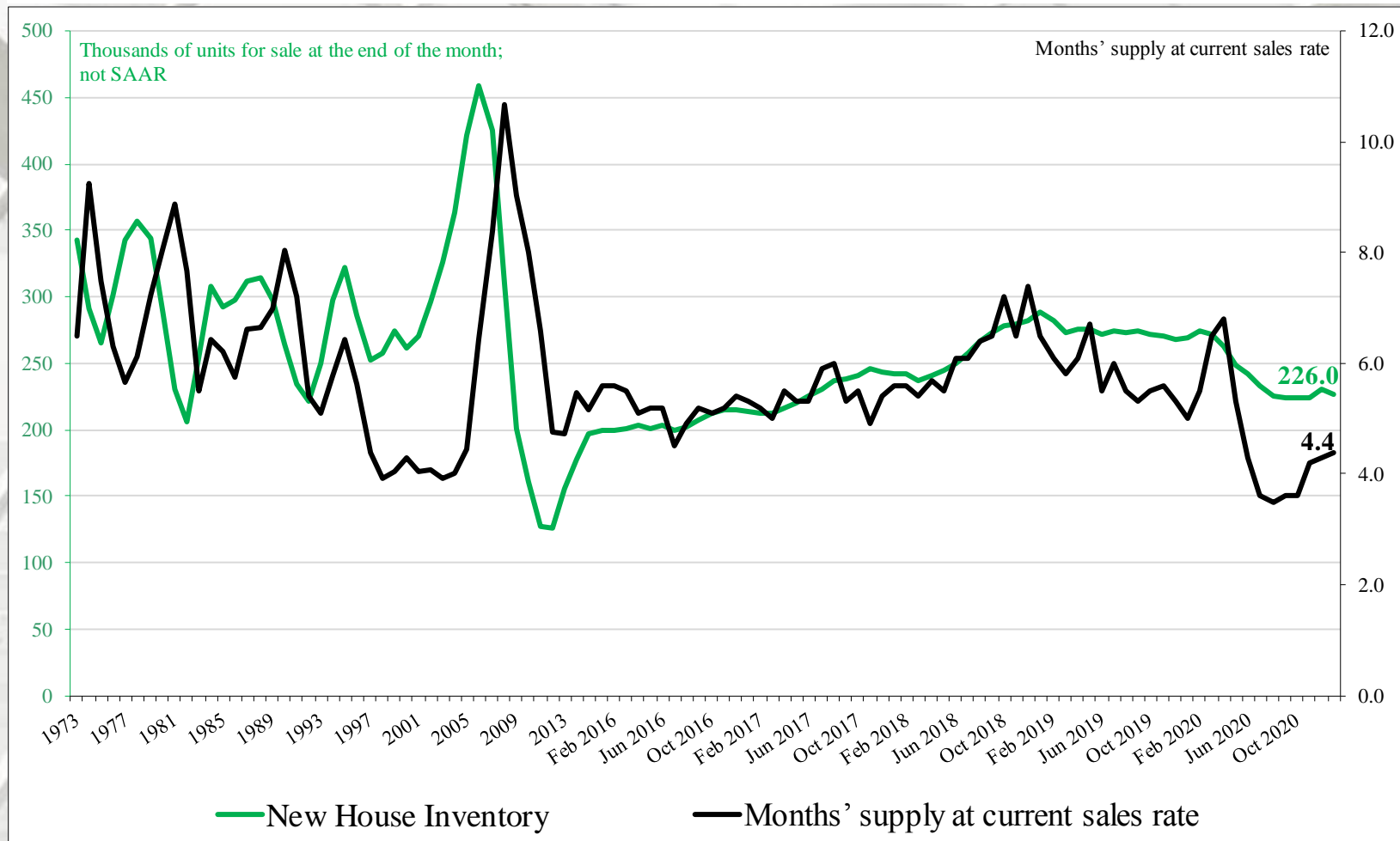


NE = Northeast; MW = Midwest; S = South; W = West

\* 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).

# Months' Supply and New House Inventory<sup>a</sup>

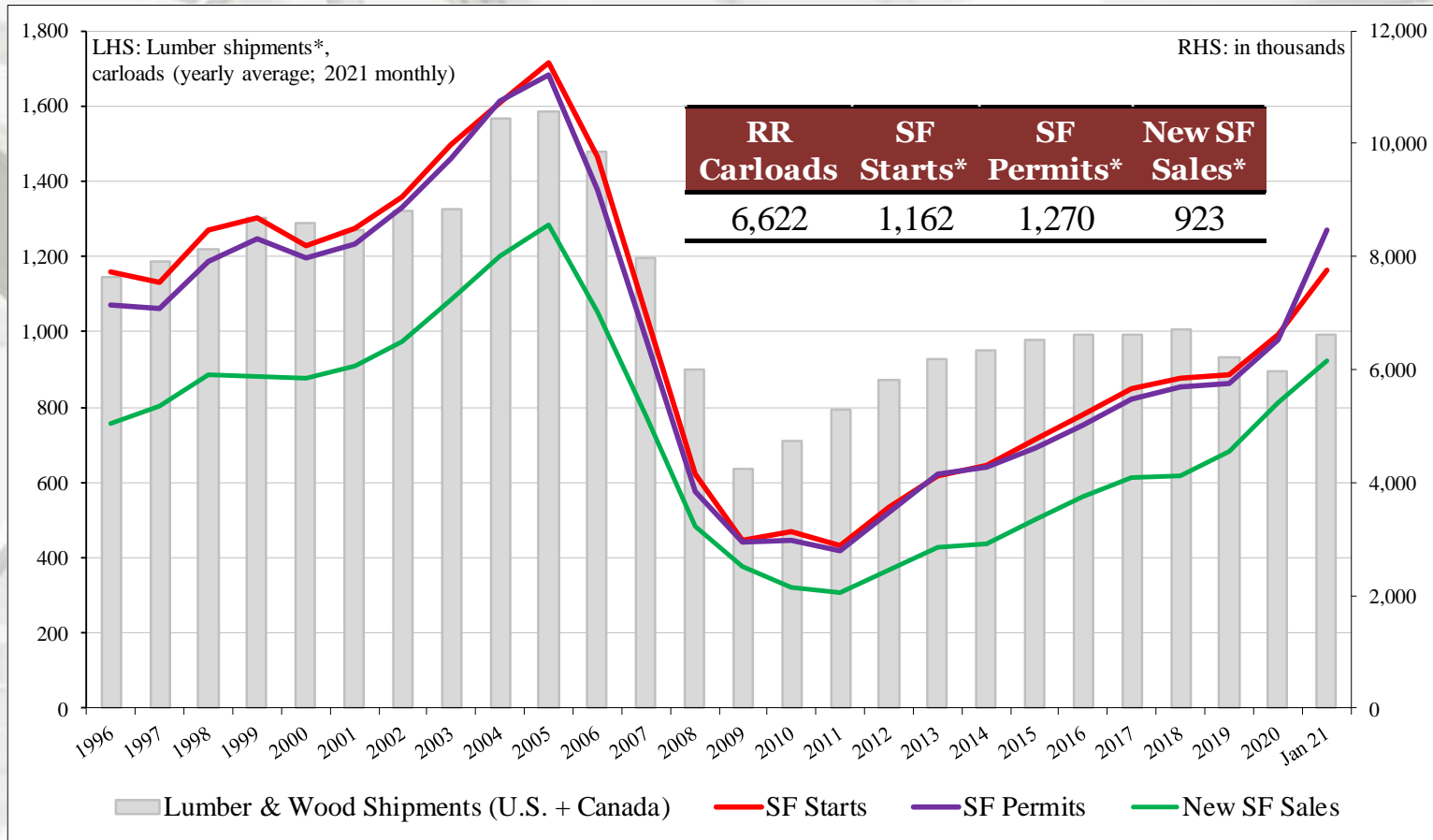


<sup>a</sup> New HUC + New House Completions (sales data only)

The months supply of new houses for sale was 4.4 months in January.



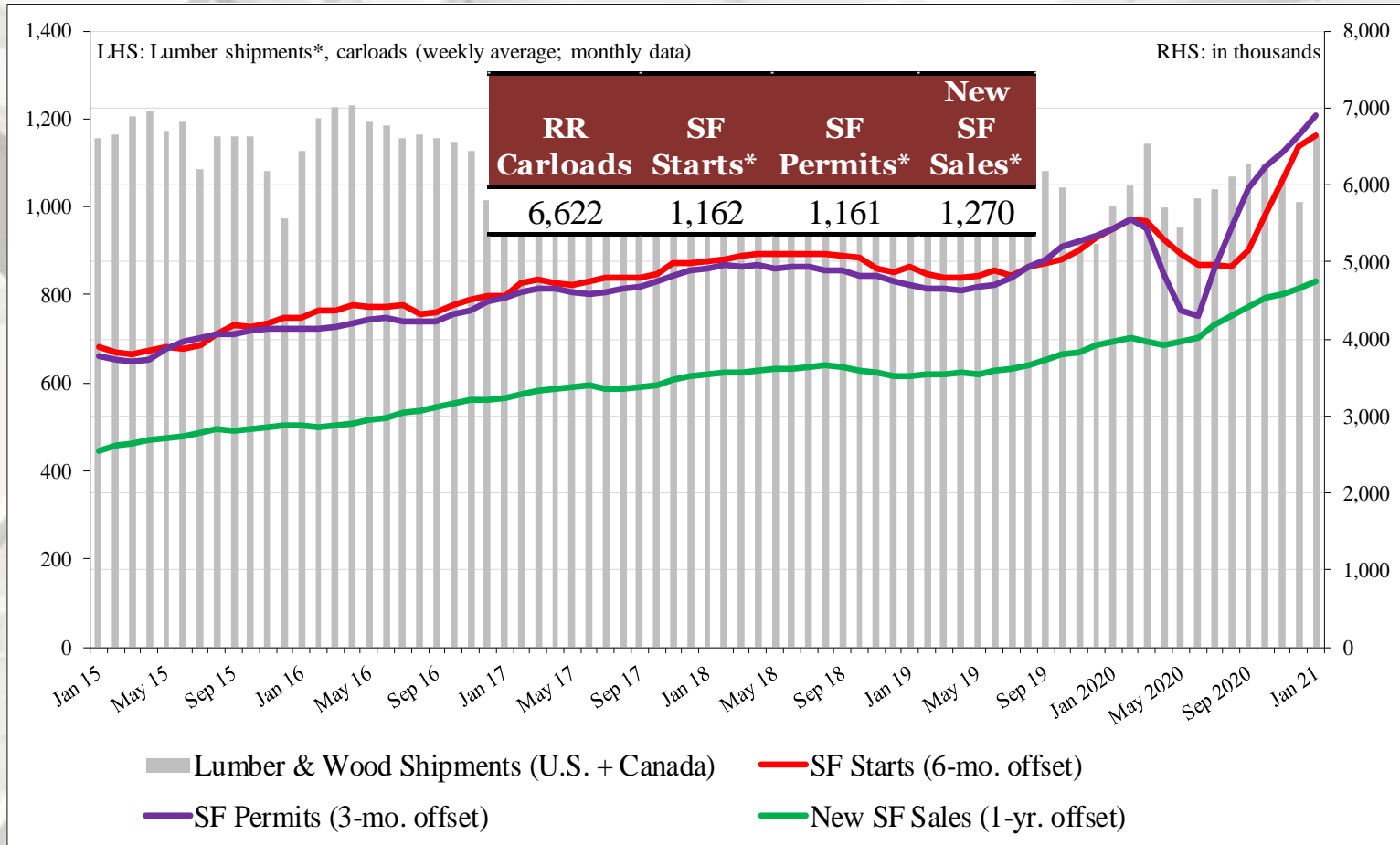
# U.S.-Canada Lumber & Wood Shipments vs. SF Starts, Permits, and New Sales



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 2021 data is on a monthly basis.

\* In thousands

# 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 discern 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.

\* In thousands

# January 2019 Construction Spending

	Total Private Residential*	SF	MF	Improvement**
January	\$712,951	\$376,178	\$92,699	\$244,074
December	\$695,675	\$365,117	\$92,070	\$238,488
2020	\$589,103	\$302,789	\$79,277	\$207,037
M/M change	2.5%	3.0%	0.7%	2.3%
Y/Y change	21.0%	24.2%	16.9%	17.9%

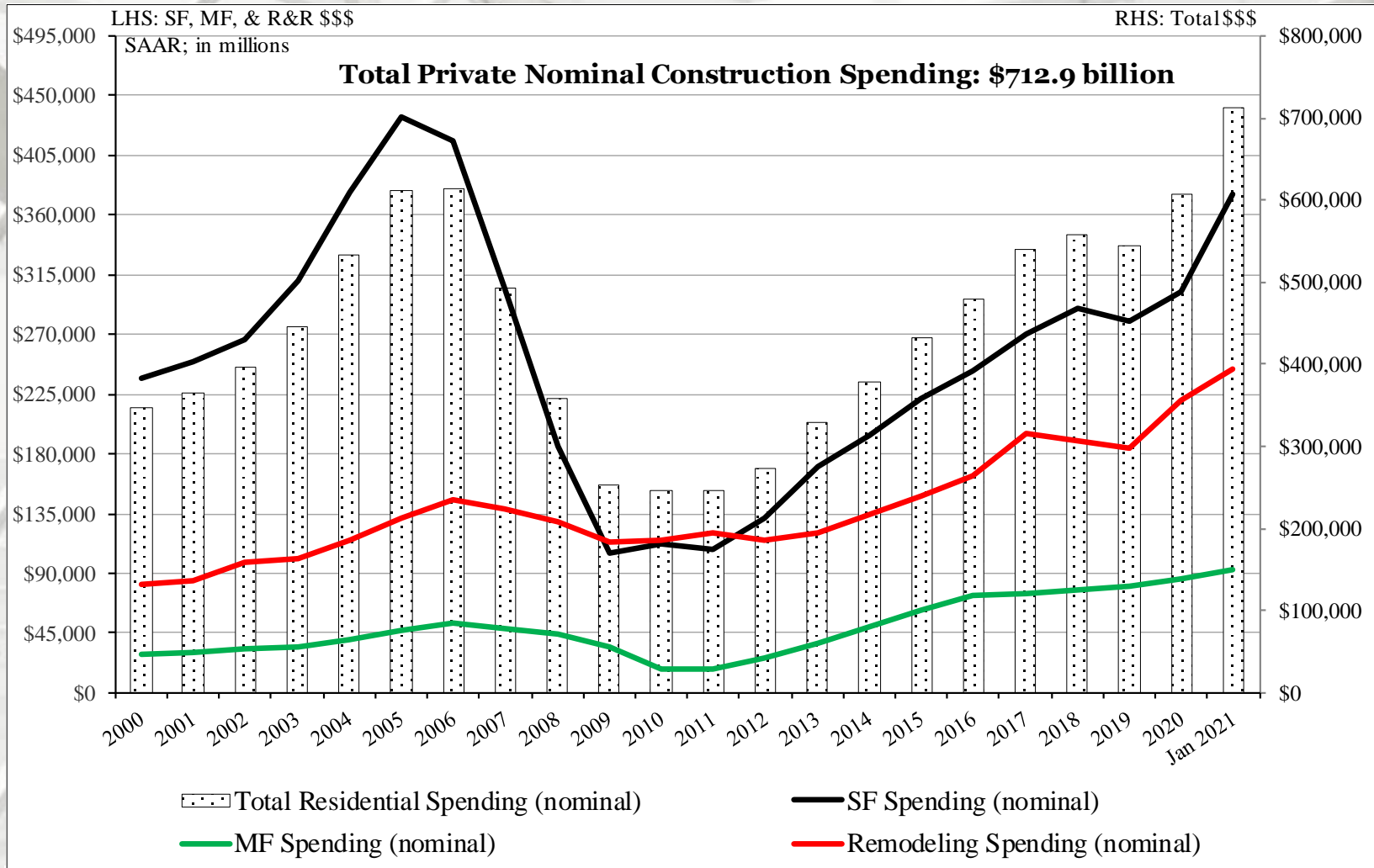
\* billion.

\*\* 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\$.

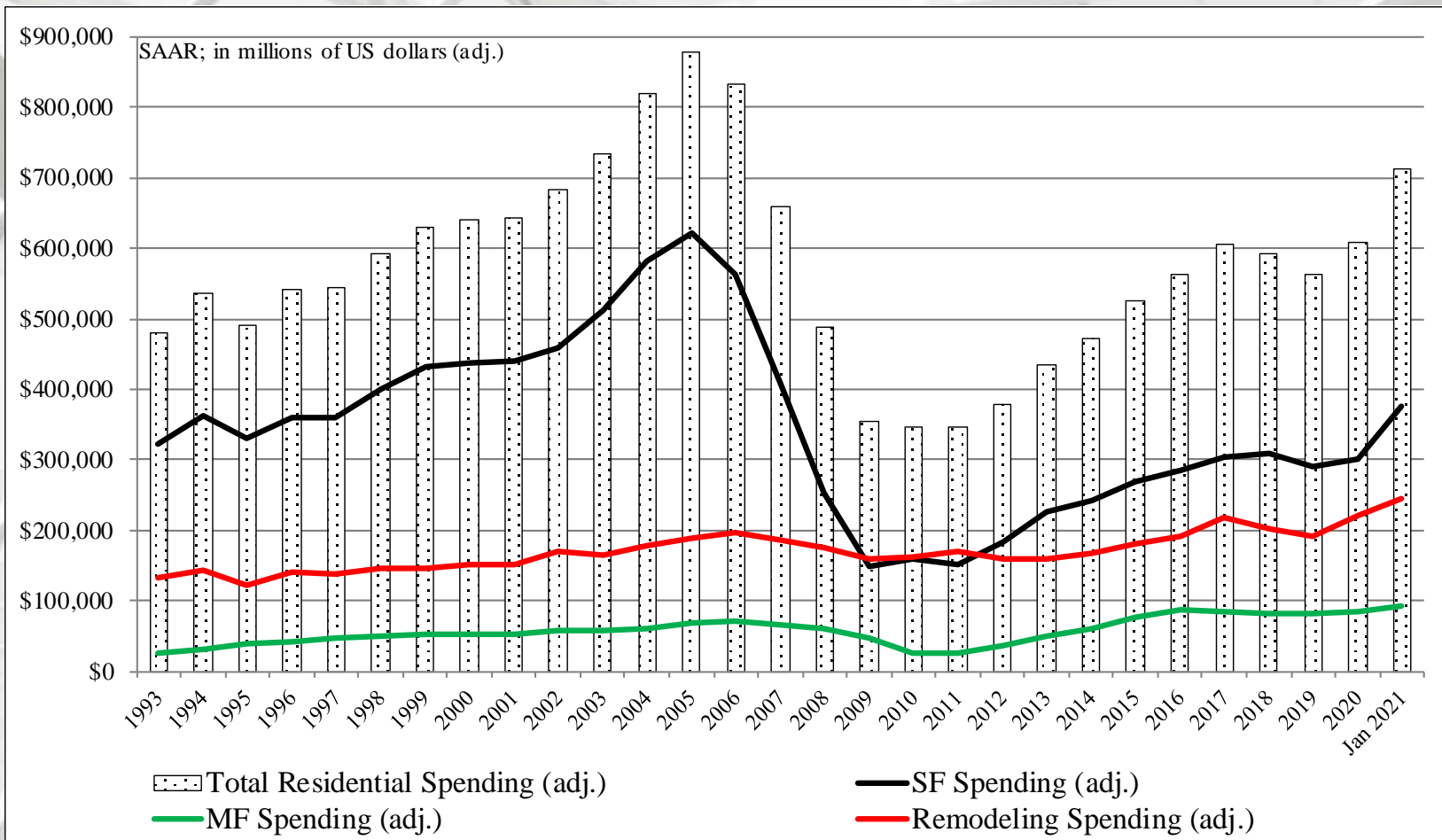
# Total Construction Spending (nominal): 2000 – January 2021



Reported in nominal US\$.

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

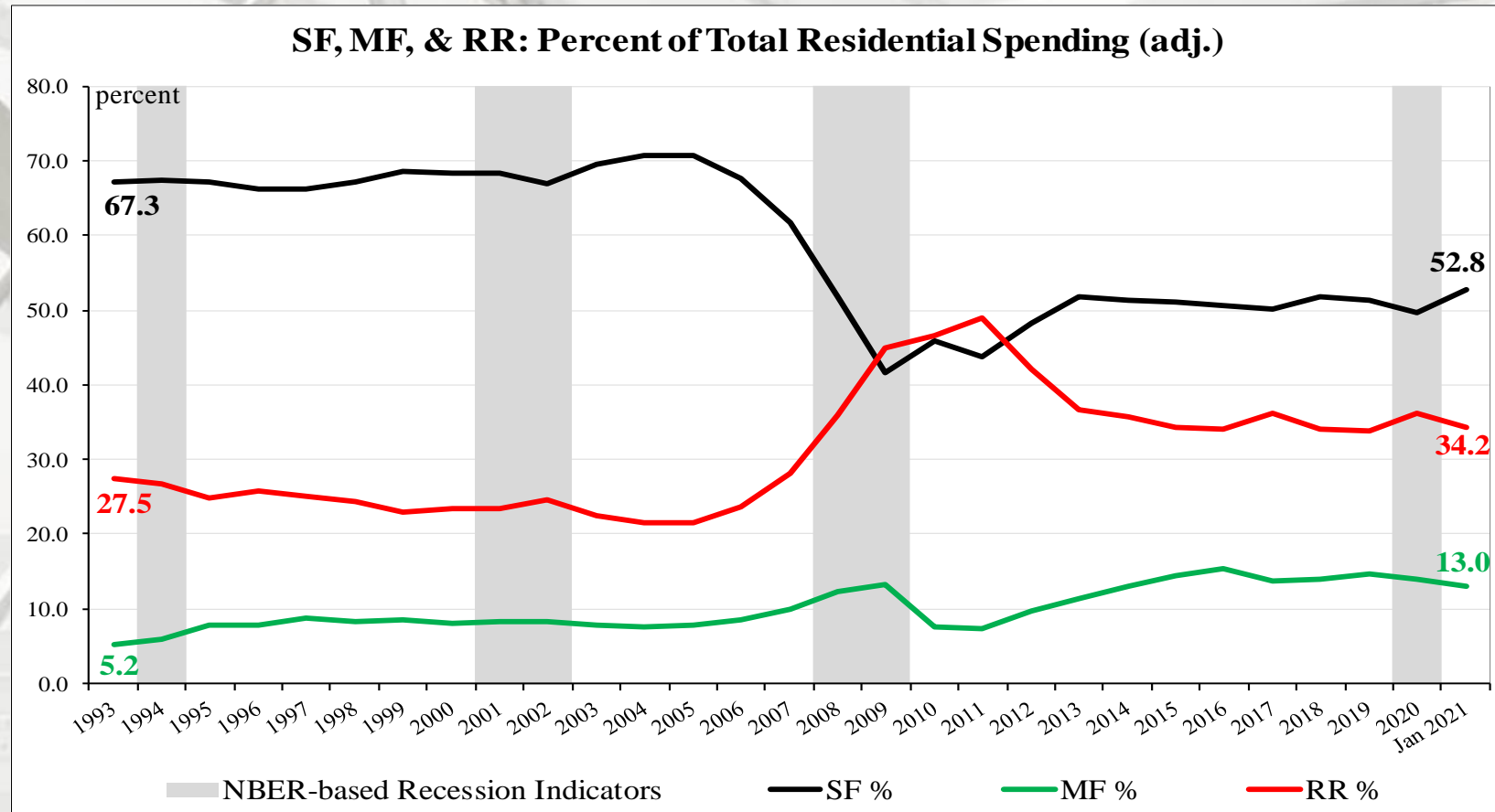
# Total Construction Spending (adjusted): 1993-January 2021



Reported in adjusted US\$: 1993 – 2020 (adjusted for inflation, BEA Table 1.1.9); January 2021 reported in nominal US\$.



# Construction Spending Shares: 1993 to January 2021



## Total Residential Spending: 1993 through 2006

SF spending average: 69.2%

MF spending average: 7.5%

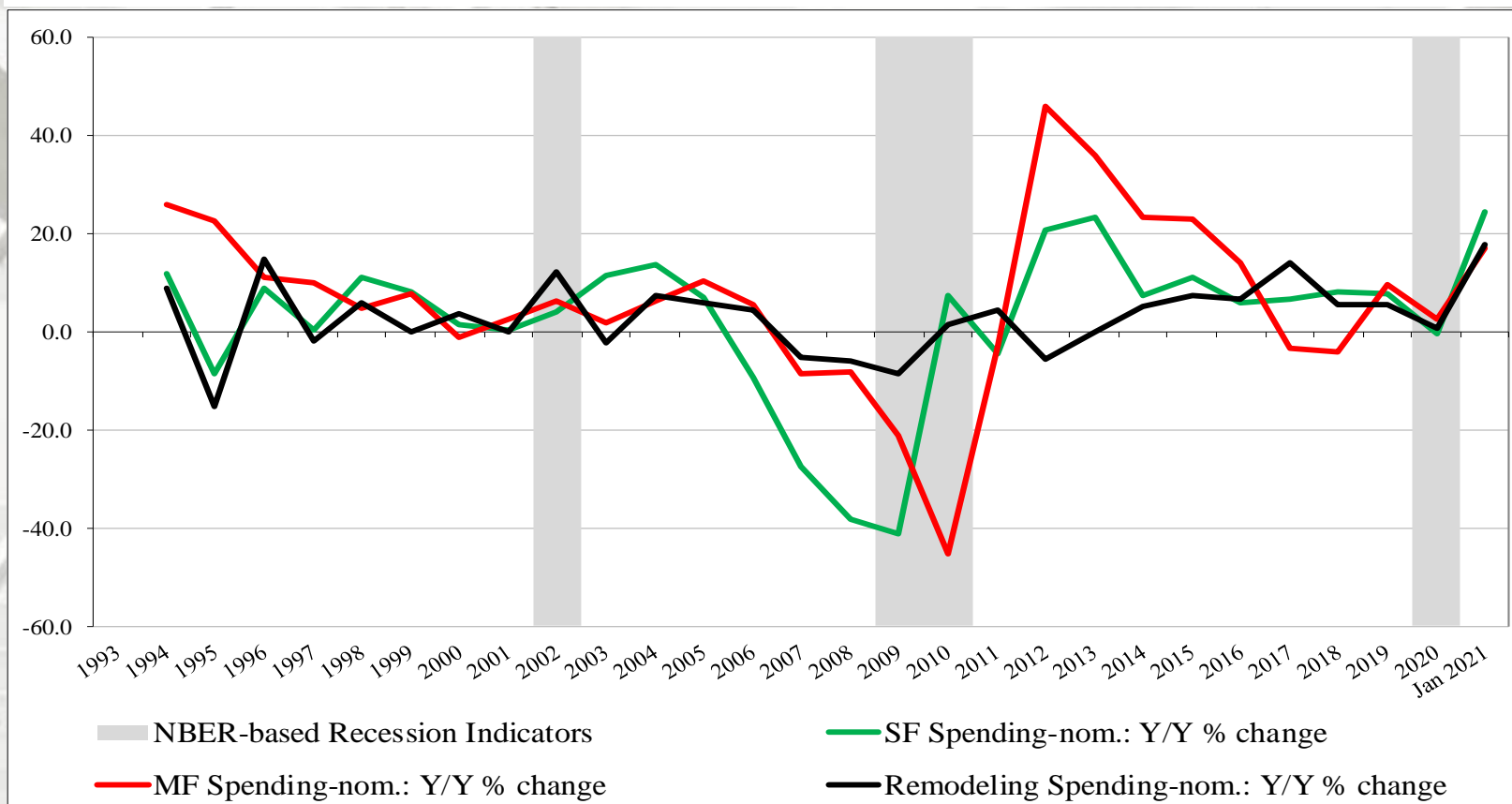
Residential remodeling (RR) spending average: 23.3% (SAAR).

Note: 1993 to 2020 (adjusted for inflation, BEA Table 1.1.9); January 2021 reported in nominal US\$.

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

Sources: \* <https://fred.stlouisfed.org/series/USREC>, 2/18/20; <http://www.census.gov/construction/c30/pdf/privsa.pdf>; 3/1/21 and <http://www.bea.gov/iTable/iTable.cfm>; 3/1/21

# Adjusted Construction Spending: Y/Y Percentage Change, 1993 to January 2021

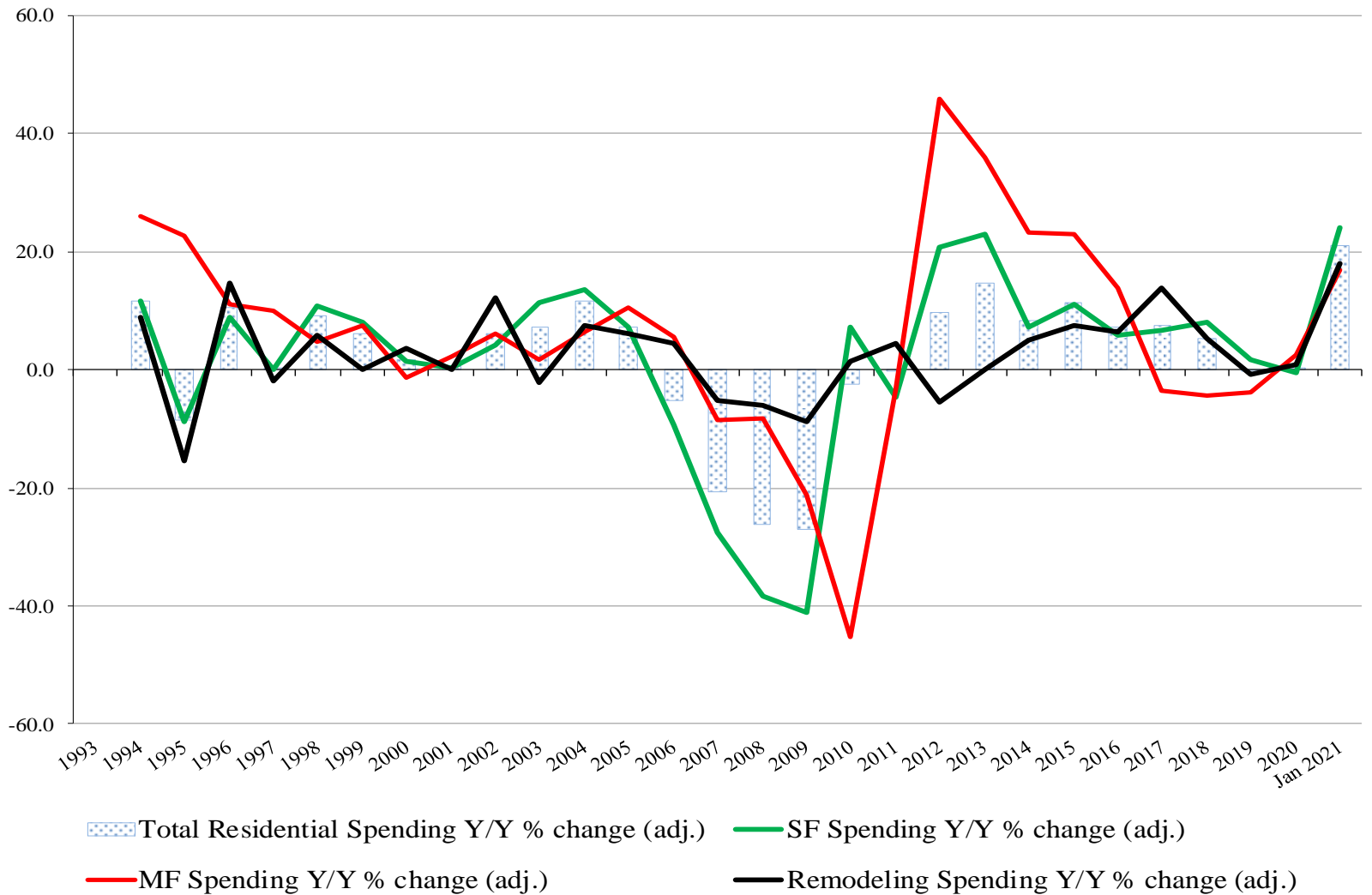


## Nominal Residential Construction Spending: Y/Y percentage change, 1993 to January 2021

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 and month-over-month (January 2021 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).

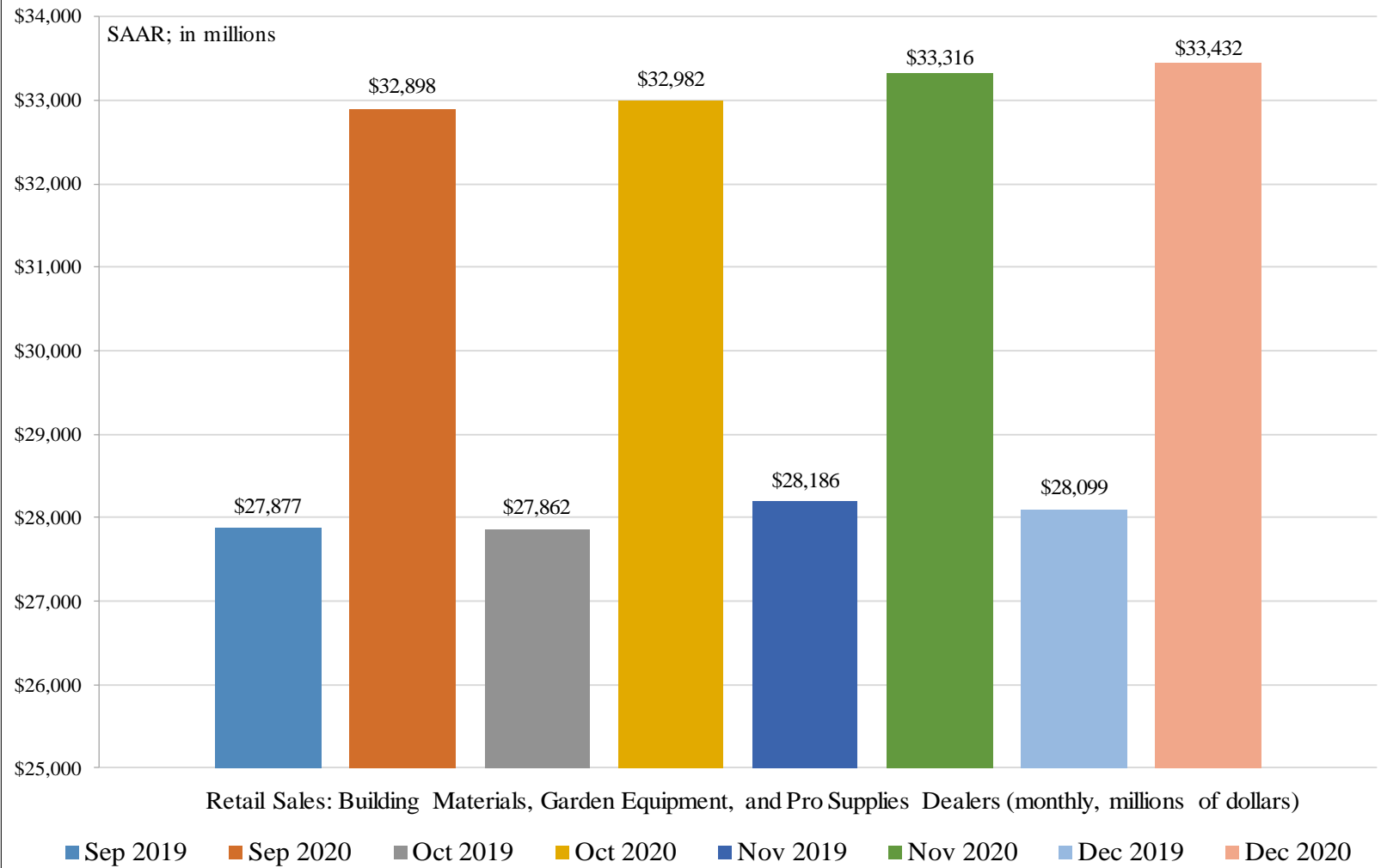
# Adjusted Construction Spending: Y/Y Percentage Change, 1993 to January 2021



Sources: <http://www.census.gov/construction/c30/pdf/privsa.pdf>; 3/1/21 and <http://www.bea.gov/iTable/iTable.cfm>; 3/1/21

# Remodeling

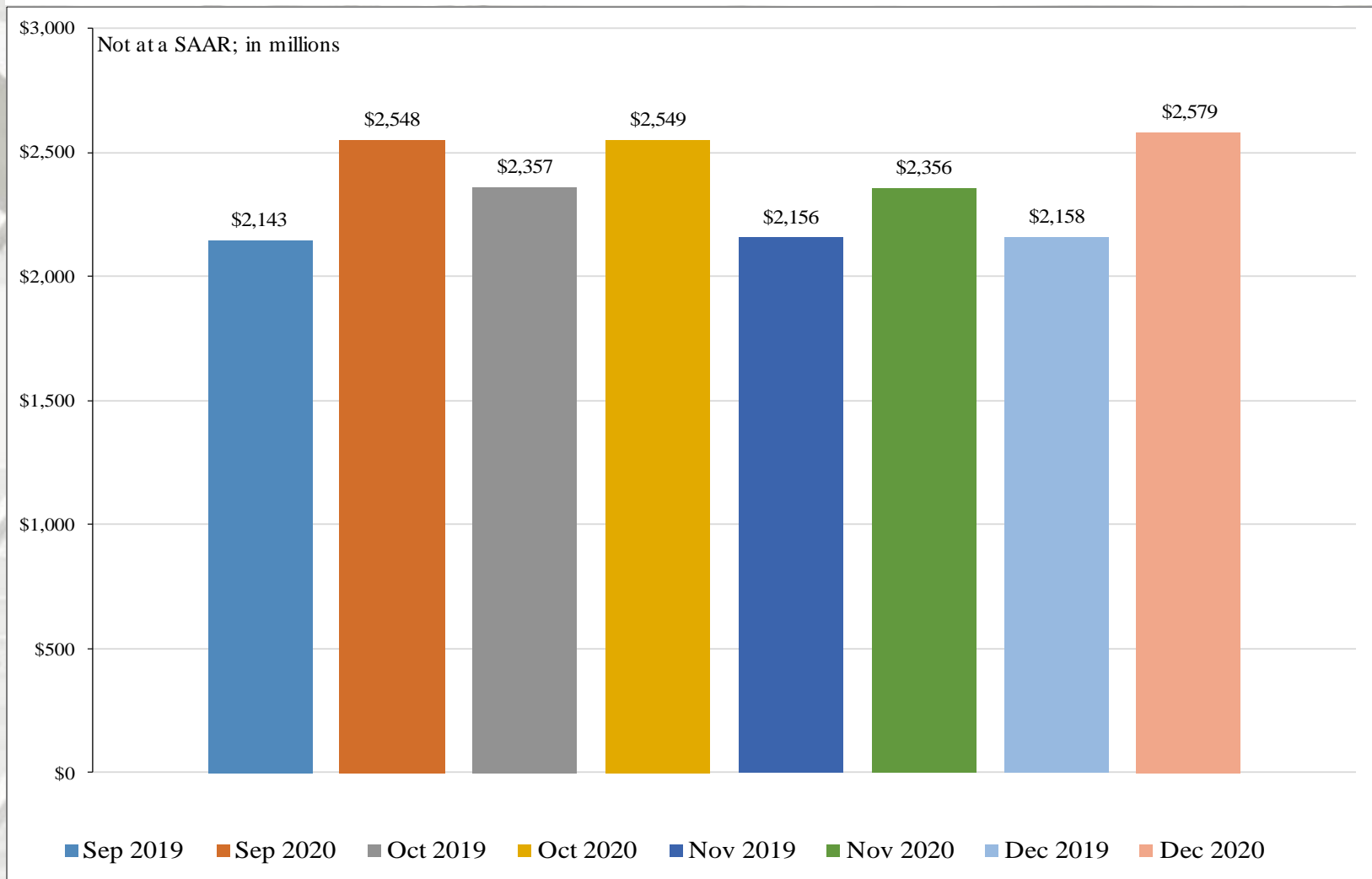
## Retail Sales: Building materials, Garden Equipment, & PRO Supply Dealers



NAICS 4441 sales decreased 0.2% from November to December and improved 16.2% from December 2019 (on a non-adjusted basis).

# Remodeling

## Retail Sales: Hardware Stores

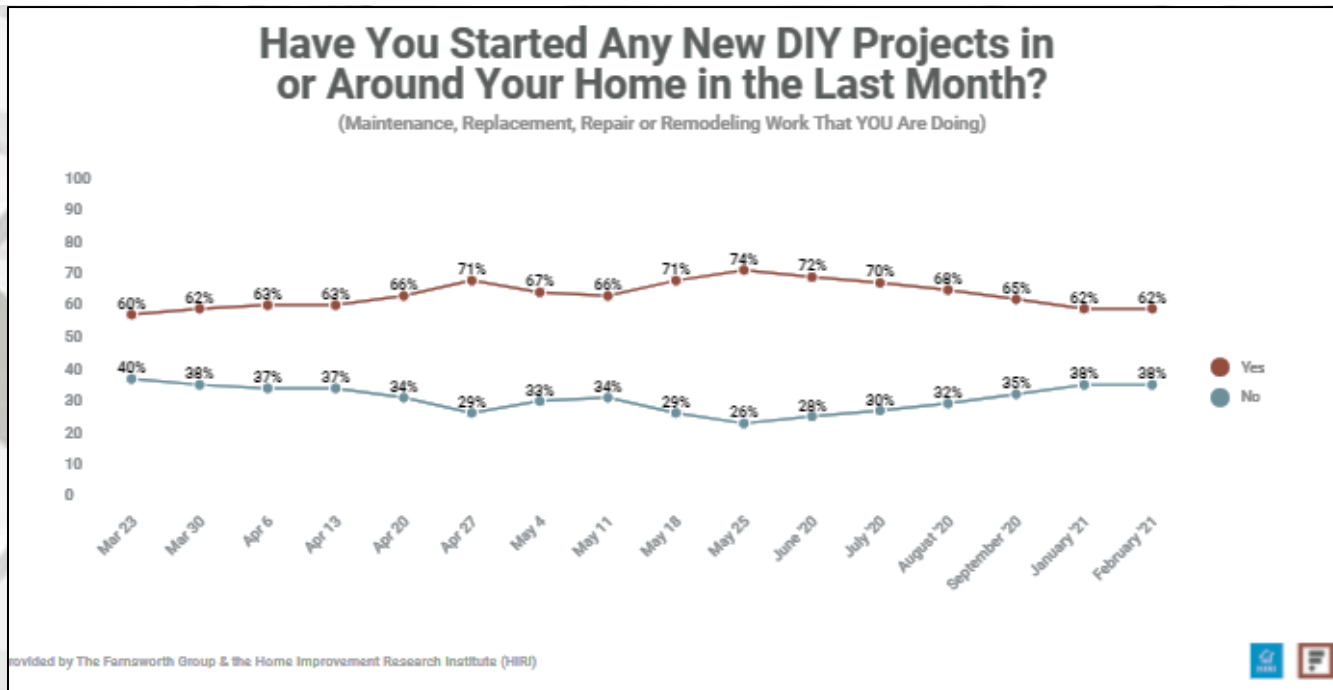


### Hardware Stores: NAICS 44413

NAICS 44413 retail sales decreased 9.5% from November to December and improved 19.5% from December 2019 (on a non-adjusted basis).



# Remodeling



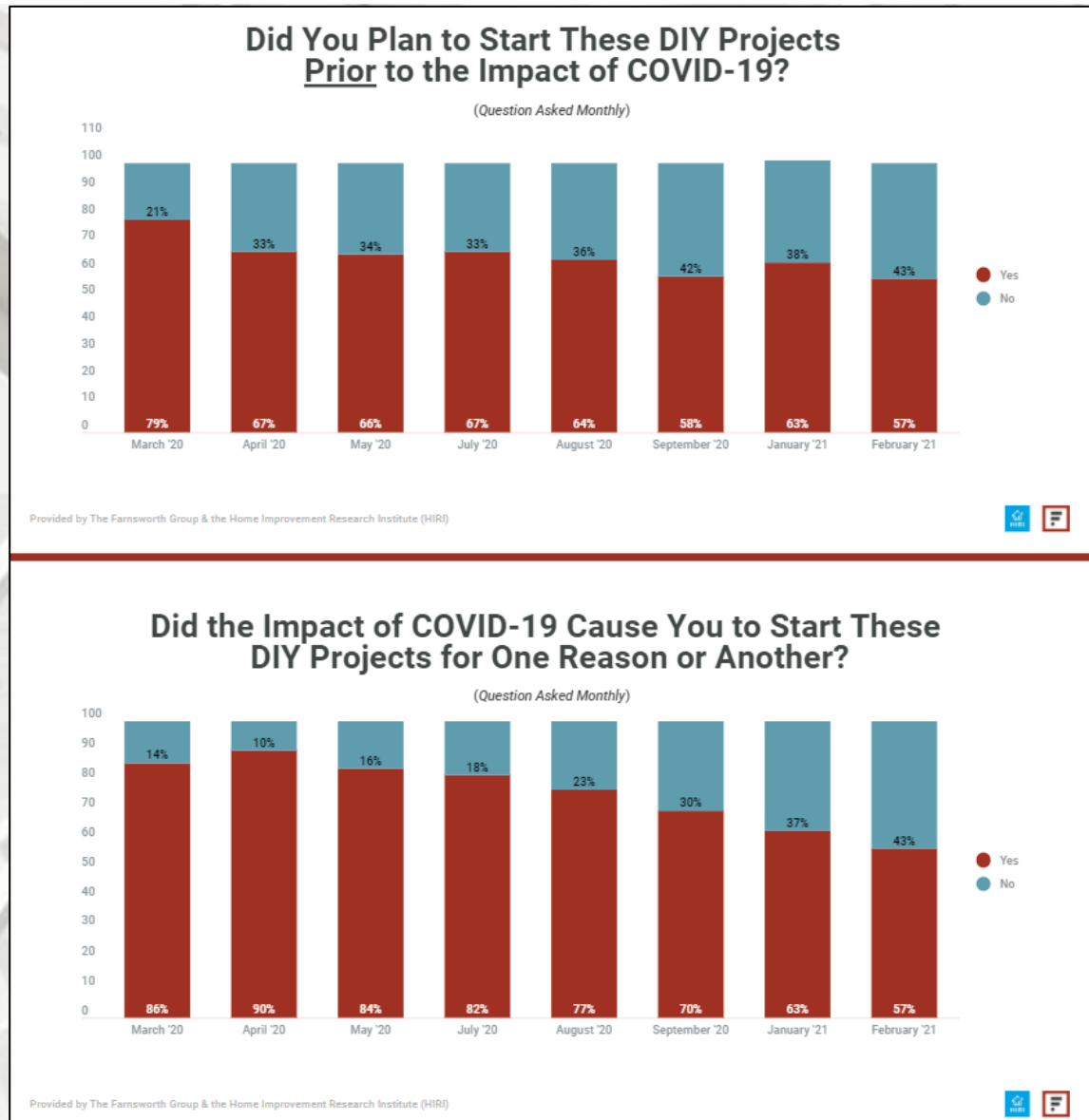
## The Farnsworth Group & the Home Improvement Research Institute (HIRI) COVID-19 DIY Research Insights

“It’s Feb and DIY activity has remained flat during the coldest months of the year. However, we are still in-line with the beginning of the pandemic from last March. These next few months are always critical for DIY activity and sales.

The trend continues of fewer DIYers starting projects as a result of COVID. This is important because COVID was a major factor for increased projects, which otherwise may not have been done and therefore resulted in more product sales. As COVID becomes less of a catalyst for project activity we may start seeing those added DIY sales come to an end.” – The Farnsworth Group & HIRI

# Remodeling

## The Farnsworth Group & the Home Improvement Research Institute (HIRI)

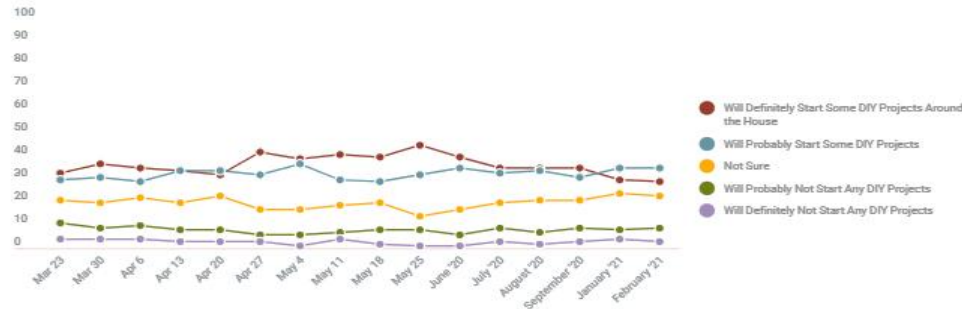


# Remodeling

## The Farnsworth Group & the Home Improvement Research Institute (HIRI)

### Are You Planning to Start Any DIY Projects Within the Next Few Weeks?

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



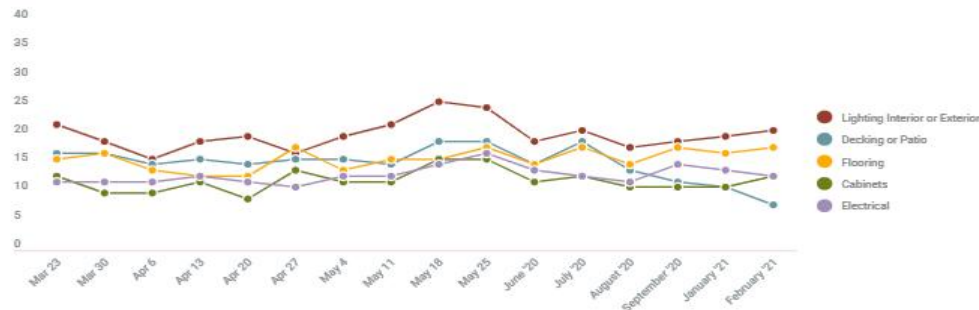
Provided by The Farnsworth Group & the Home Improvement Research Institute (HIRI)



Nearly 75% of DIYers are planning to start a new project in the next few weeks. This metric has been consistent throughout COVID, and it's a good predictor of realized project activity.

While cold months severely reduce lawn and garden projects, January and February have seen slight increases in DIYers doing interior projects like plumbing, HVAC and lighting.

### Which of These DIY Projects Are You Planning to Start in the Next Few Weeks?

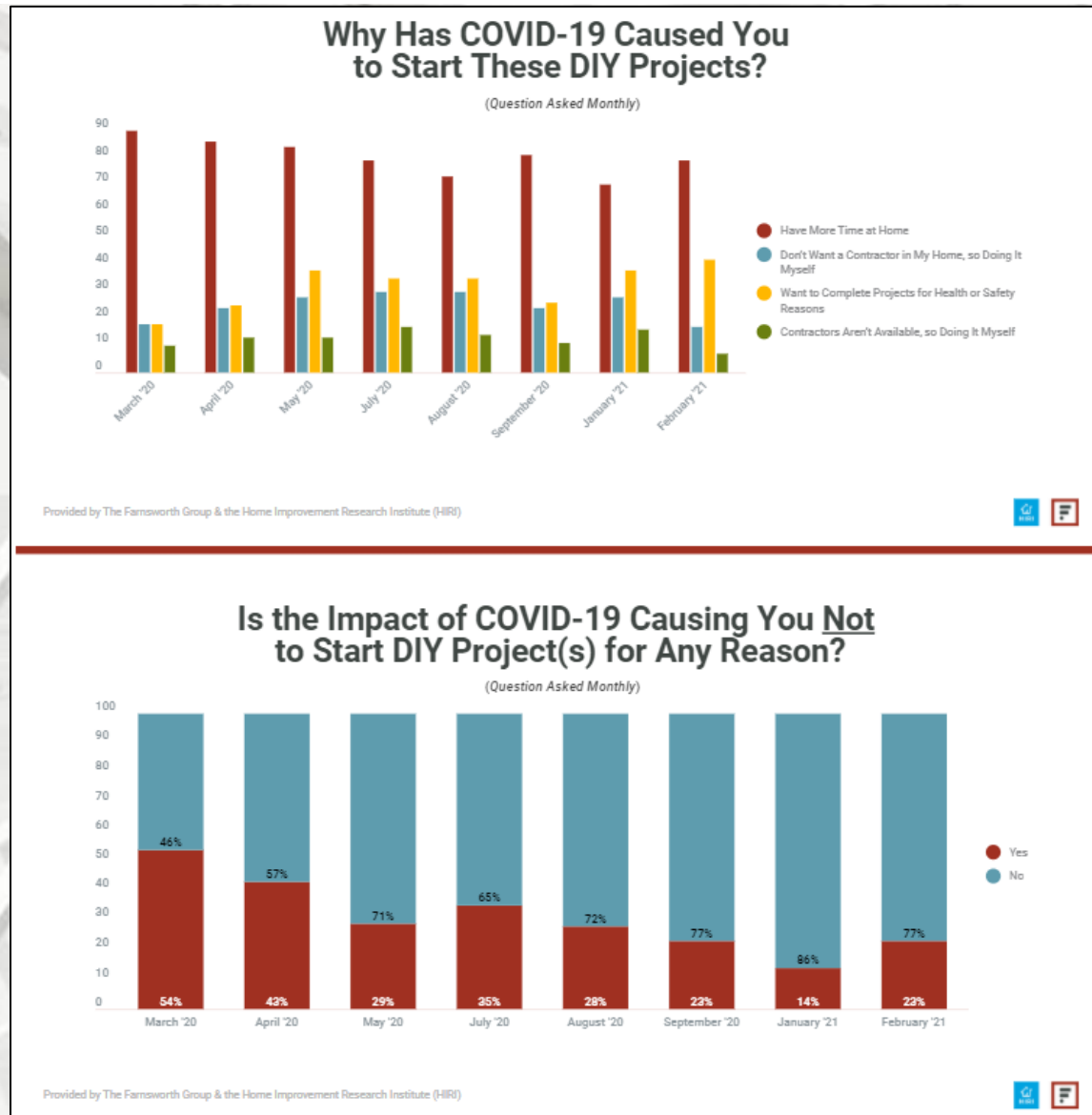


Provided by The Farnsworth Group & the Home Improvement Research Institute (HIRI)



# Remodeling

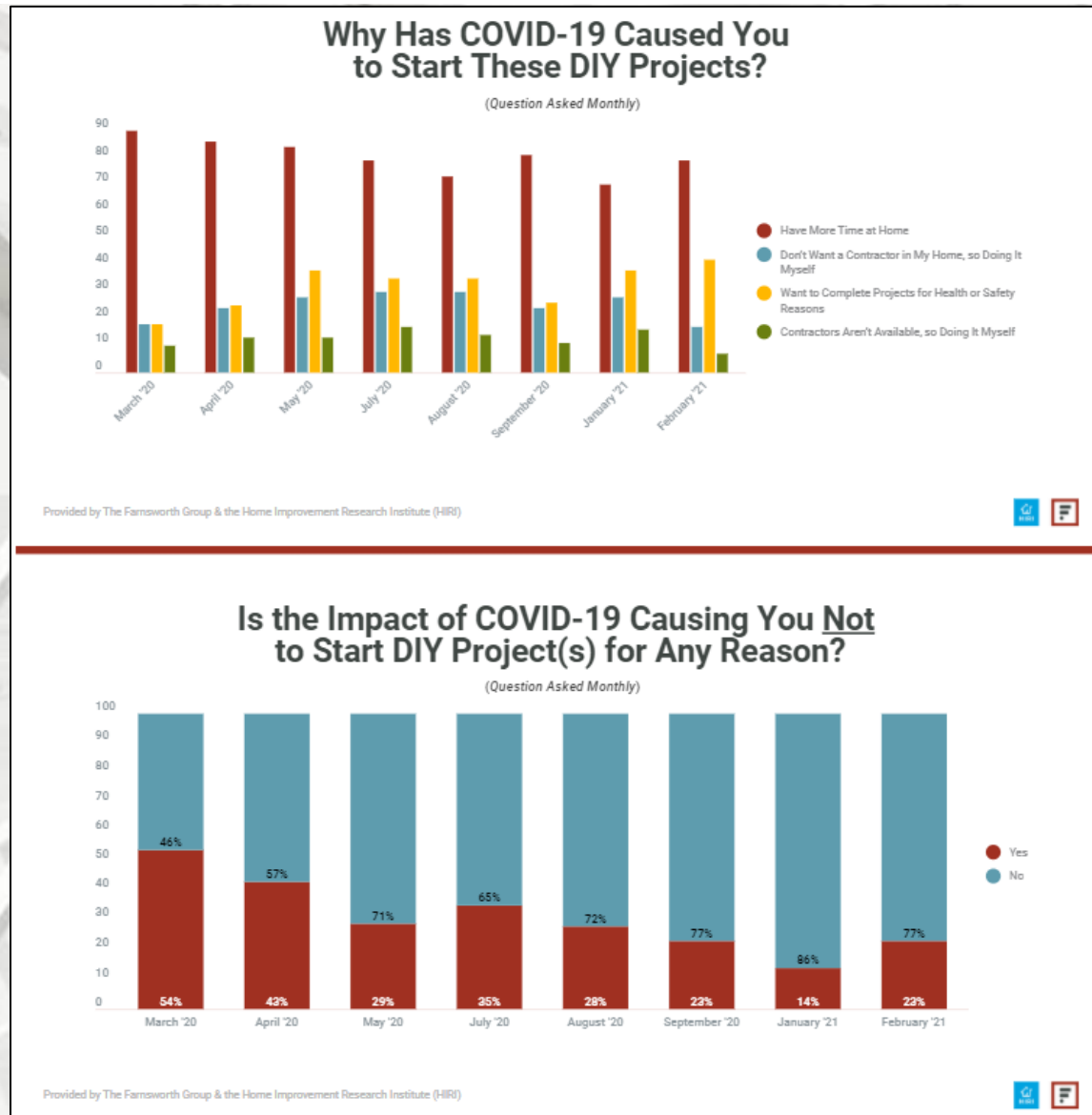
## The Farnsworth Group & the Home Improvement Research Institute (HIRI)





# Remodeling

## The Farnsworth Group & the Home Improvement Research Institute (HIRI)





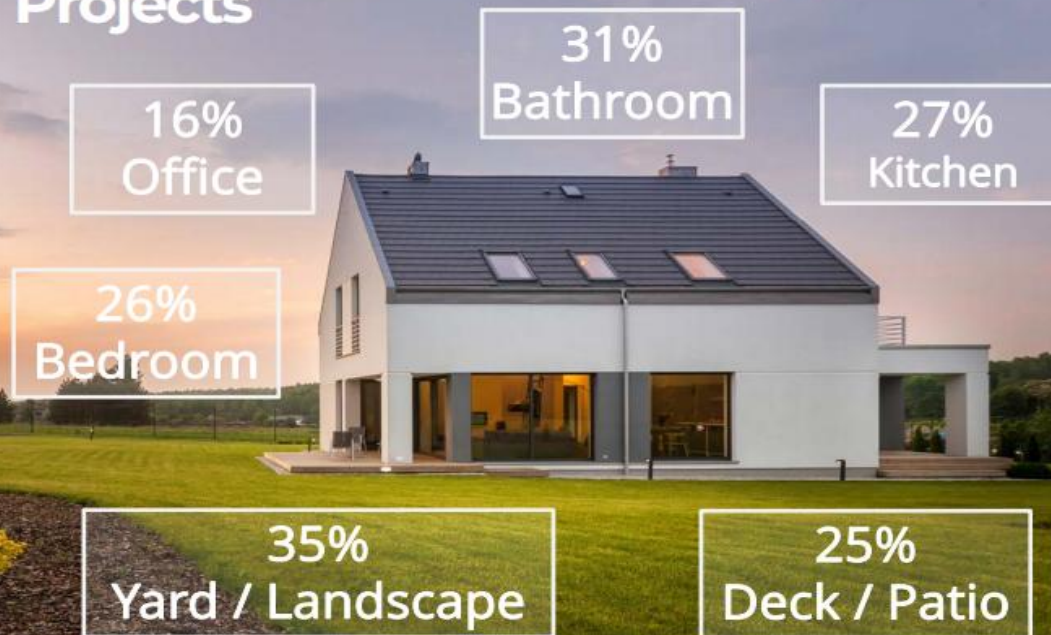
# Remodeling

Axiom

2021 Axiom Homefront Insights Survey

## 2021 Planned Improvements

2021 Planned Home Improvement Projects



# Existing House Sales

**National Association of Realtors**

**January 2021 sales: 6.690 thousand**

	<b>Existing Sales</b>	<b>Median Price</b>	<b>Mean Price</b>	<b>Month's Supply</b>
January	6,690,000	\$303,900	\$337,700	1.9
December	6,650,000	\$309,200	\$342,000	1.9
2020	5,410,000	\$266,300	\$302,900	3.1
M/M change	0.6%	-1.7%	-1.3%	0.0%
Y/Y change	23.7%	14.1%	11.5%	-38.7%

All sales data: SAAR

# Existing House Sales

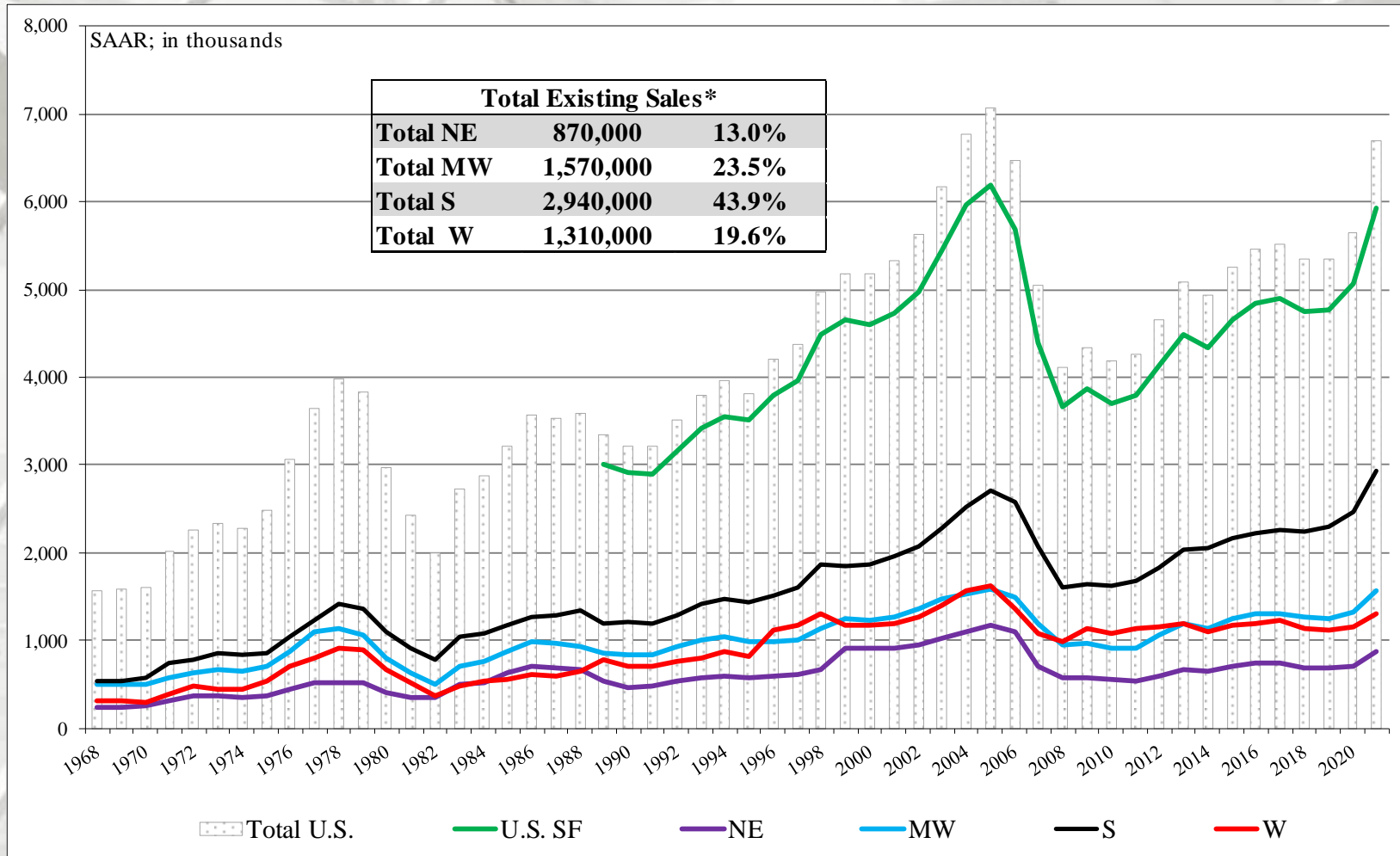
	Existing SF Sales	SF Median Price	SF Mean Price
January	5,930,000	\$308,300	\$341,200
December	5,920,000	\$313,700	\$345,400
2020	4,820,000	\$268,500	\$303,900
M/M change	0.2%	-1.7%	-1.2%
Y/Y change	23.0%	14.8%	12.3%

	NE	MW	S	W
January	870,000	1,570,000	2,940,000	1,310,000
December	890,000	1,540,000	2,850,000	1,370,000
2020	700,000	1,280,000	2,350,000	1,080,000
M/M change	-2.2%	1.9%	3.2%	-4.4%
Y/Y change	24.3%	22.7%	25.1%	21.3%

All sales data: SAAR.

# Existing House Sales



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

\* Percentage of total existing sales.



# U.S. Housing Prices

## Federal Housing Finance Agency

### U.S. House Prices Rise 10.8 Percent over the Last Year; Up 3.8 Percent in the Fourth Quarter

House prices have risen for 38 consecutive quarters,  
or since September 2011

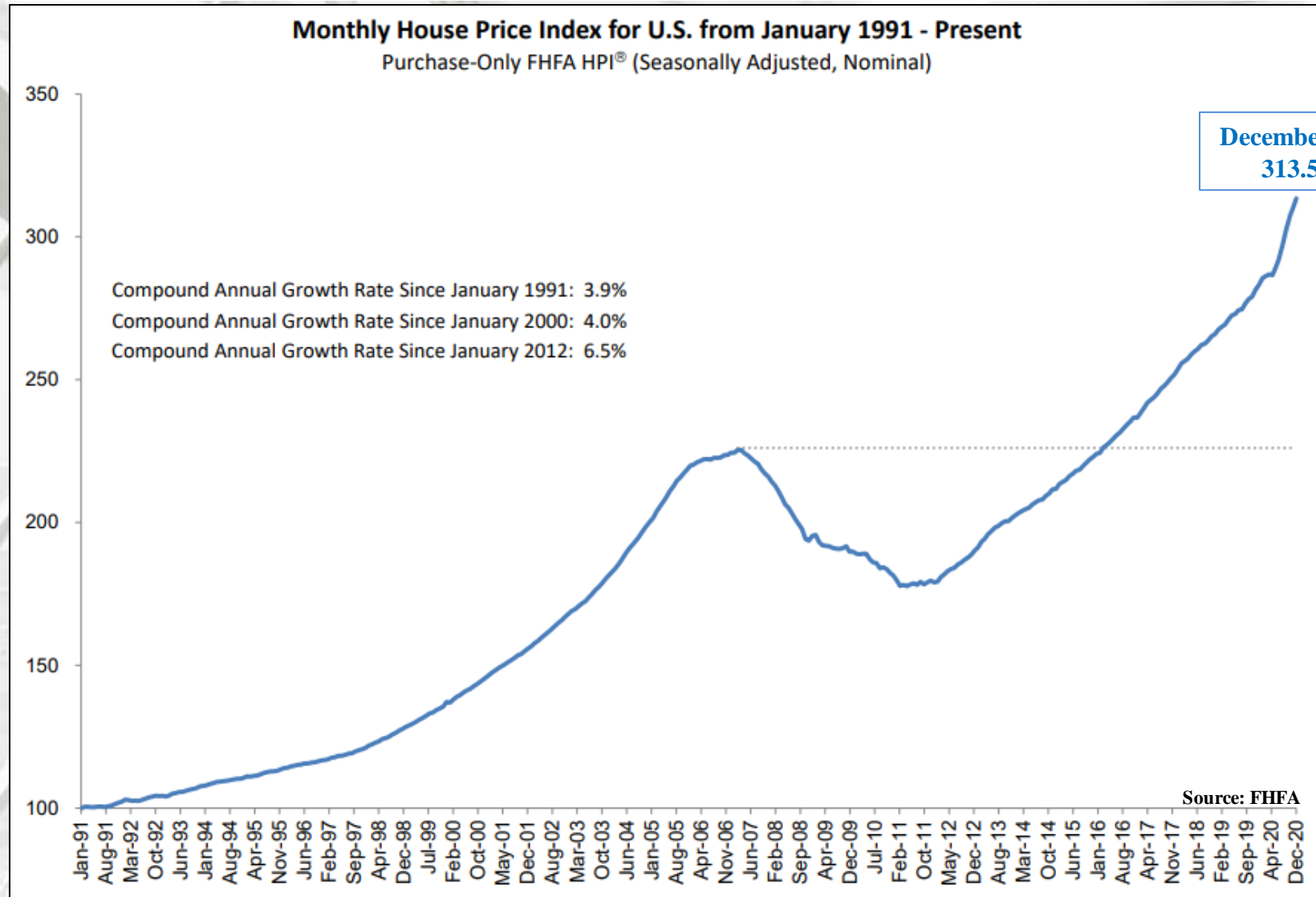
#### Significant Findings

“ U.S. house prices rose **10.8 percent** from the fourth quarter of 2019 to the fourth quarter of 2020 according to the Federal Housing Finance Agency House Price Index (FHFA HPI®). House prices were up **3.8 percent** compared to the third quarter of 2020. FHFA's seasonally adjusted monthly index for December was up **1.1 percent** from November.” – Raffi Williams and Adam Russell, FHFA

“House prices nationwide recorded the largest annual and quarterly increase in the history of the FHFA HPI. Low mortgage rates, pent up demand from homebuyers, and a limited housing supply propelled every region of the country to experience faster growth in 2020 compared to a year ago despite the pandemic. In particular, house prices in western states and cities saw the highest rates of growth, where annual gains often rose above 10 percent.” – 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 10.4% Annual Home Price Gain To End 2020

“Data for December 2020 show that home prices continue to increase 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](http://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 10.4% annual gain in December, up from 9.5% in the previous month. The 10-City Composite annual increase came in at 9.8%, up from 8.9% in the previous month. The 20-City Composite posted a 10.1% year-over-year gain, up from 9.2% in the previous month.

Phoenix, Seattle, and San Diego continued to report the highest year-over-year gains among the 19 cities (excluding Detroit) in December. Phoenix led the way with a 14.4% year-over-year price increase, followed by Seattle with a 13.6% increase and San Diego with a 13.0% increase. Eighteen of the 19 cities reported higher price increases in the year ending December 2020 versus the year ending November 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

“Before seasonal adjustment, the U.S. National Index posted a 0.9% month-over-month increase, while the 10-City and 20-City Composites both posted increases of 0.9% and 0.8% respectively in December. After seasonal adjustment, the U.S. National Index posted a month-over-month increase of 1.3%, while the 10-City and 20-City Composites both posted increases of 1.2% and 1.3% respectively. In December, 18 cities (excluding Detroit) reported increases before seasonal adjustment, while all 19 cities reported increases after seasonal adjustment.

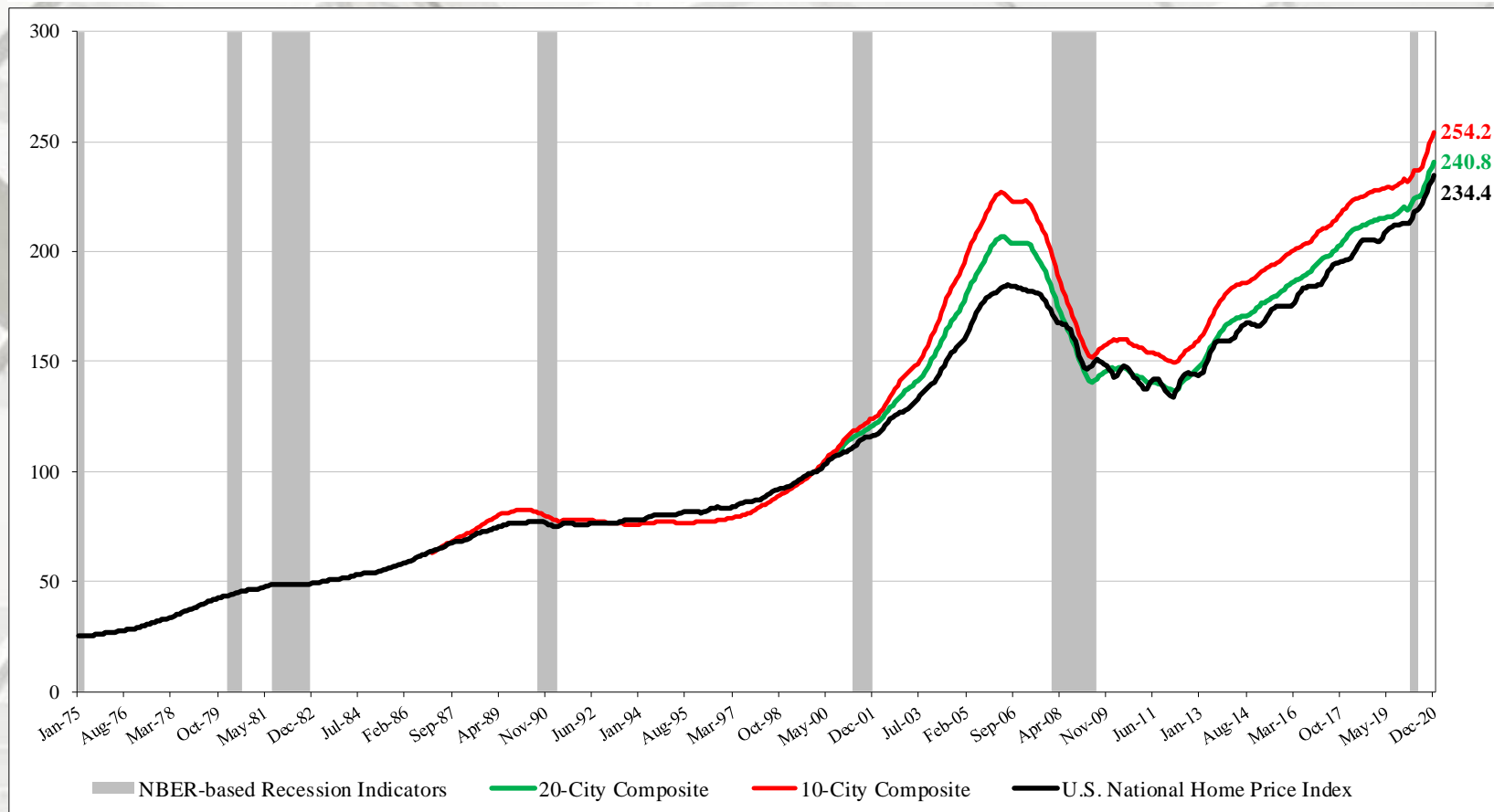
### Analysis

“Home prices finished 2020 with double-digit gains, as the National Composite Index rose by 10.4% compared to year-ago levels. The trend of accelerating prices that began in June 2020 has now reached its seventh month and is also reflected in the 10- and 20-City Composites (up 9.8% and 10.1%, respectively). The market’s strength continues to be broadly-based: 18 of the 19 cities for which we have December data rose, and 18 cities gained more in the 12 months ended in December than they had gained in the 12 months ended in November.

Phoenix’s 14.4% increase led all cities for the 19th consecutive month, with Seattle (+13.6%) and San Diego (+13.0%) close behind. Prices were strongest in the West (+10.8%) and Southwest (+10.5%), but gains were impressive in every region.

As COVID-related restrictions began to grip the economy in early 2020, their effect on housing prices was unclear. Price growth decelerated in May and June, and then began a steady climb upward, and December’s report continues that acceleration in an emphatic manner. 2020’s 10.4% gain marks the best performance of housing prices in a calendar year since 2013. From the perspective of more than 30 years of S&P CoreLogic Case-Shiller data, December’s year-over-year change ranks within the top decile of all reports.” – Craig Lazzara, Managing Director and Global Head of Index Investment Strategy, S&P Dow Jones Indices

# S&P/Case-Shiller Home Price Indices

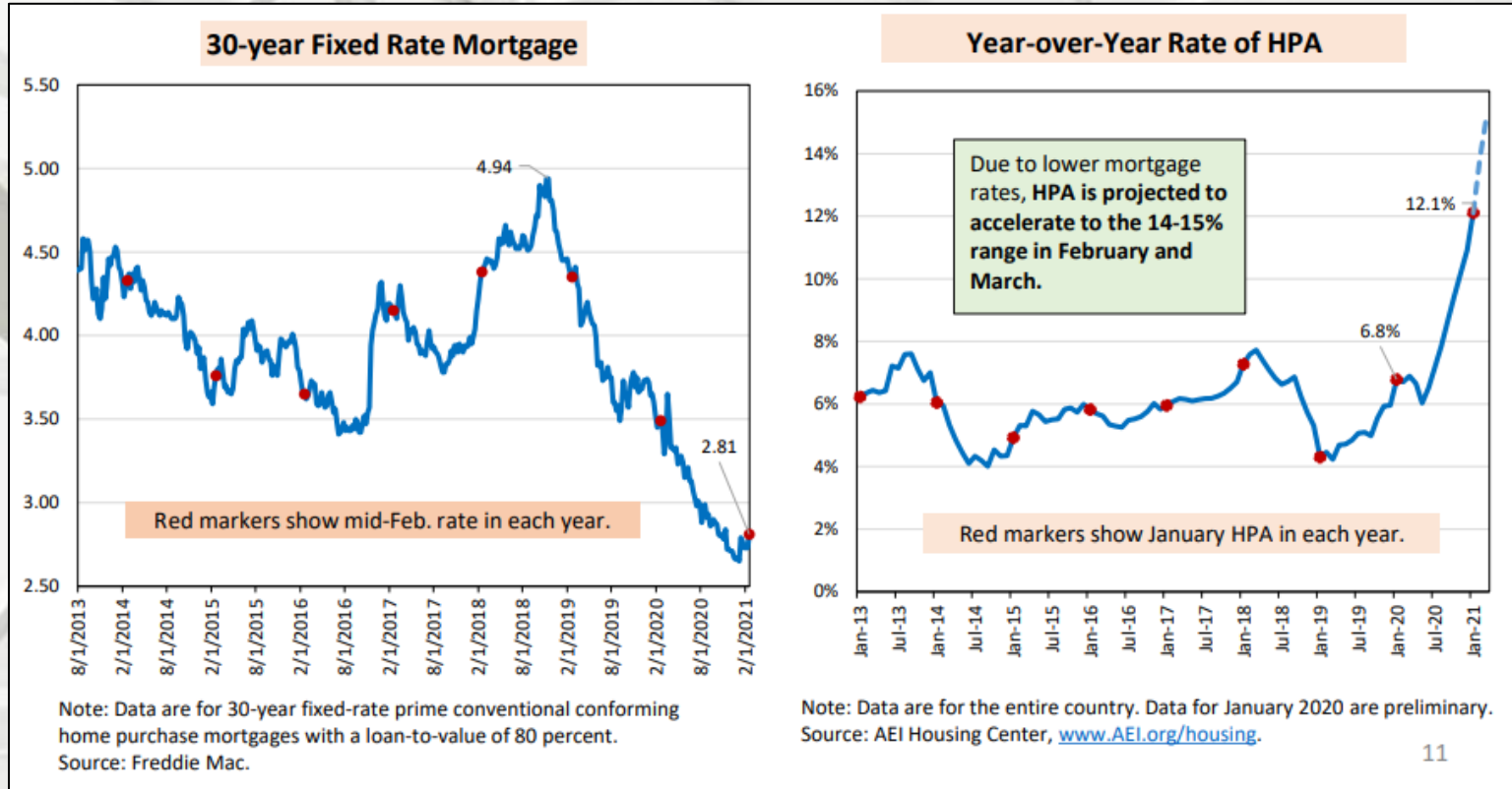


\* NBER based Recession Indicator Bars for the United States from the Period following the Peak through the Trough (FRED, St. Louis).

“These data are consistent with the view that COVID has encouraged potential buyers to move from urban apartments to suburban homes. This may indicate a secular shift in housing demand, or may simply represent an acceleration of moves that would have taken place over the next several years anyway. Future data will be required to address that question.” – Craig Lazzara, Managing Director and Global Head of Index Investment Strategy, S&P Dow Jones Indices



# U.S. Housing Prices

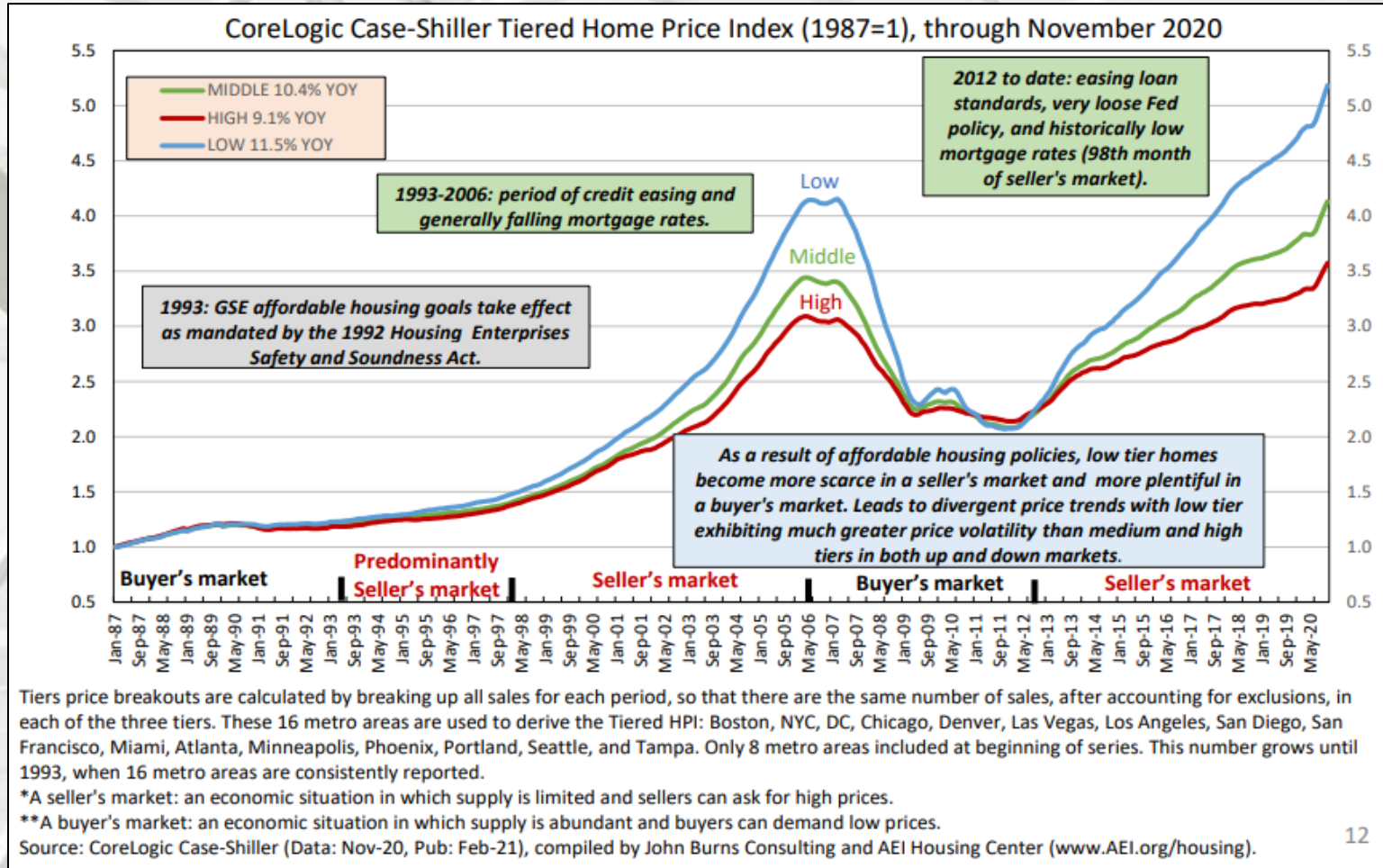


## AEI Housing Center

“Attendees at our July 29, 2020 briefing were the first to learn that HPA was quickly accelerating and heading to the low double digits late in 2020. Preliminary national rate of HPA for January 2021 was 12.1%, up from 6.8% a year ago and the fourth month near or at the low double digits. 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 213 basis points. Optimal Blue data indicate that the rate of HPA will further accelerate to 14-15% by April/May reporting time.” – Edward Pinto, Resident Fellow; Director and Tobias Peter, Research Fellow and Director of Research, AEI Housing Center



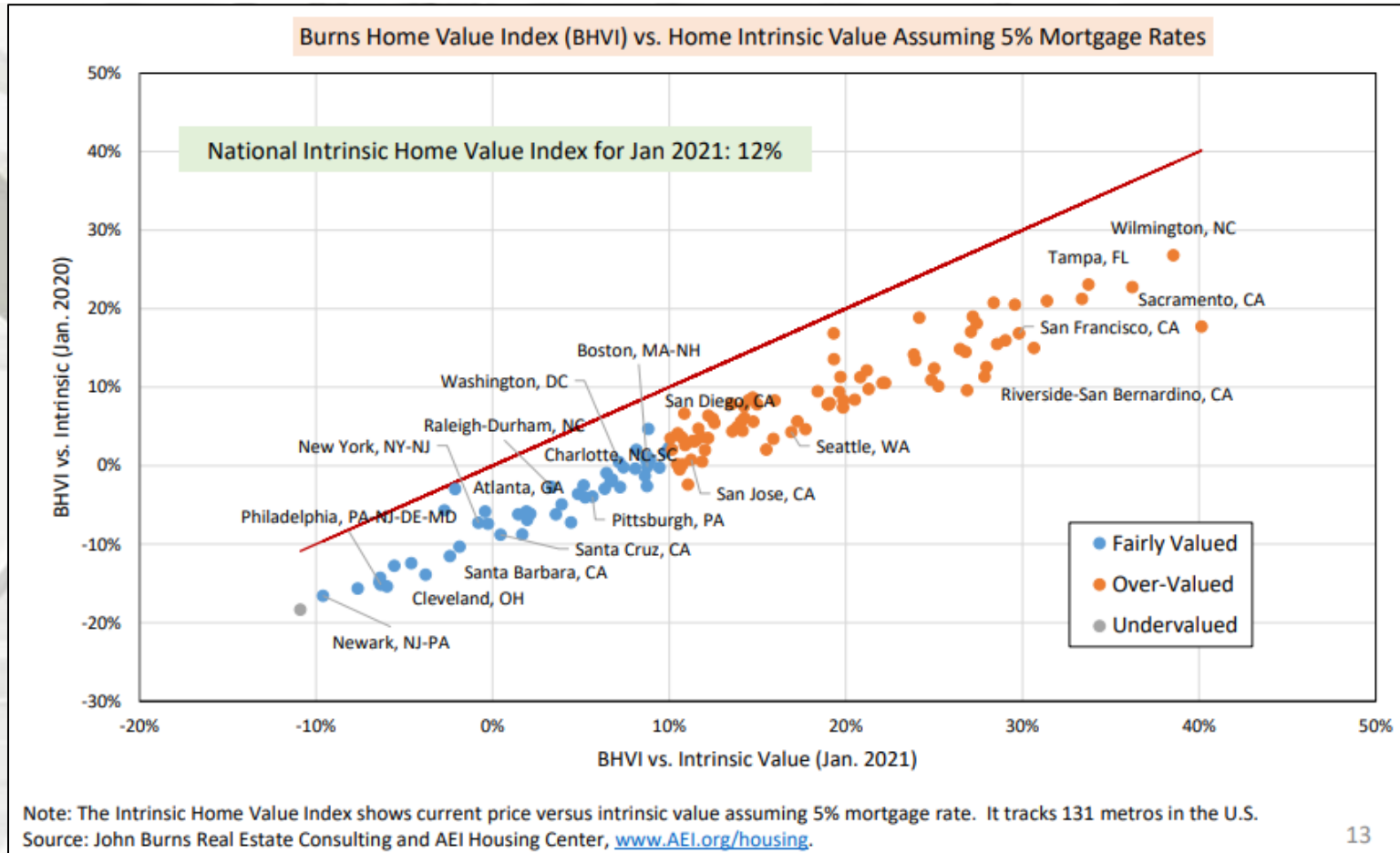
# U.S. Housing Prices



## AEI Housing Center CoreLogic Case-Shiller Tiered Home Price Index

“Since 1990 home prices in the low tier have risen 44% faster than in the high tier with much greater volatility. This has detrimental impact on many first-time home buyers who either need to take on more leverage to afford home ownership or are priced out of the market.” – Edward Pinto, Resident Fellow; Director and Tobias Peter, Research Fellow and Director of Research, AEI Housing Center

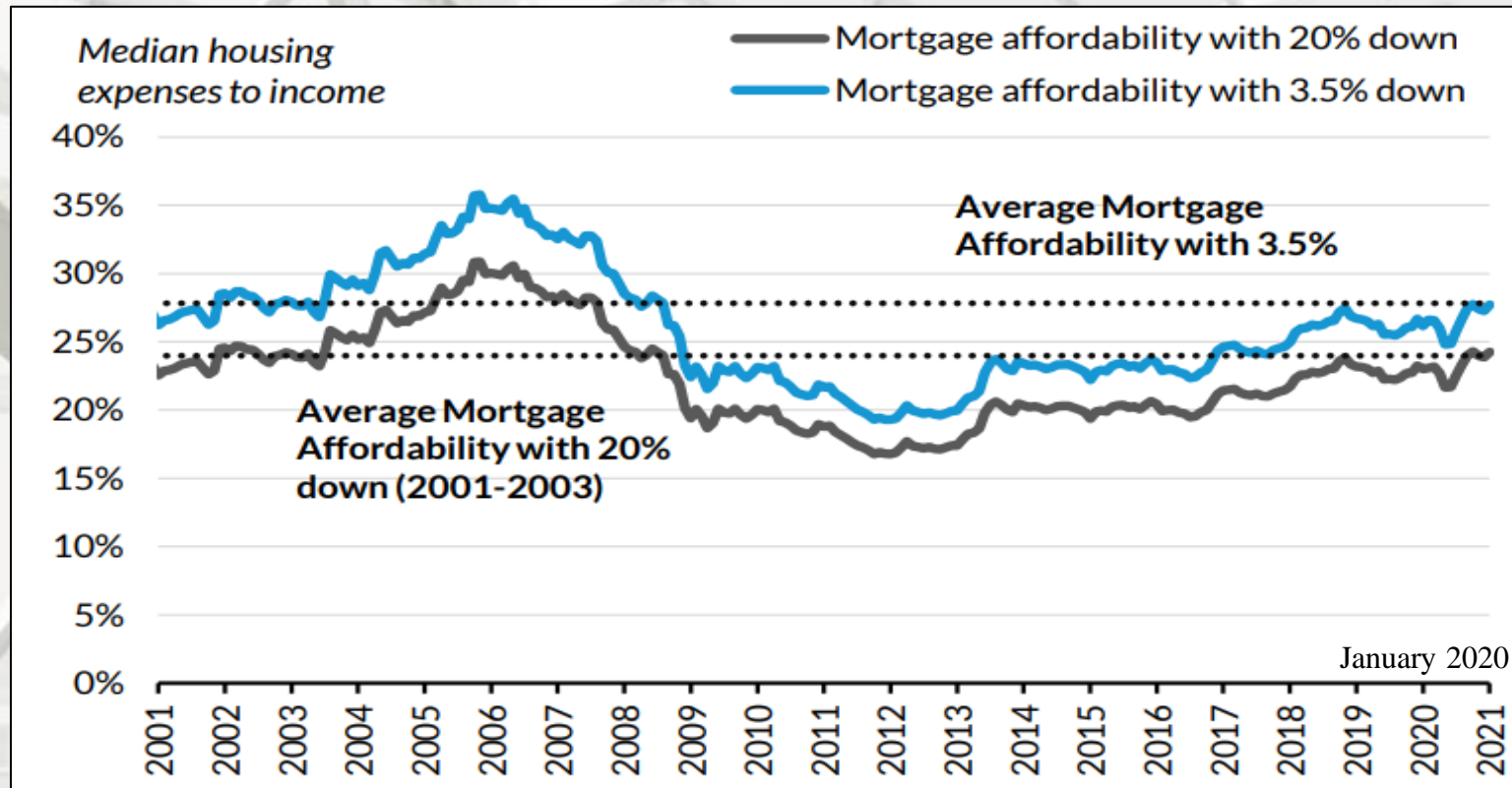
# U.S. Housing Prices



## AEI Housing Center John Burns Intrinsic Home Value Index

“According to the John Burns Intrinsic Home Value Index, which assumes a mortgage rate of 5%, about 61% of the largest metros are overvalued and only one (Trenton, NJ) is undervalued. The metro with the highest overvaluation is Sacramento, CA. Compared to a year ago, the Intrinsic Home Value Index has worsened across all metros tracked.” – Edward Pinto, Resident Fellow; Director and Tobias Peter, Research Fellow and Director of Research, AEI Housing Center

# Housing Affordability



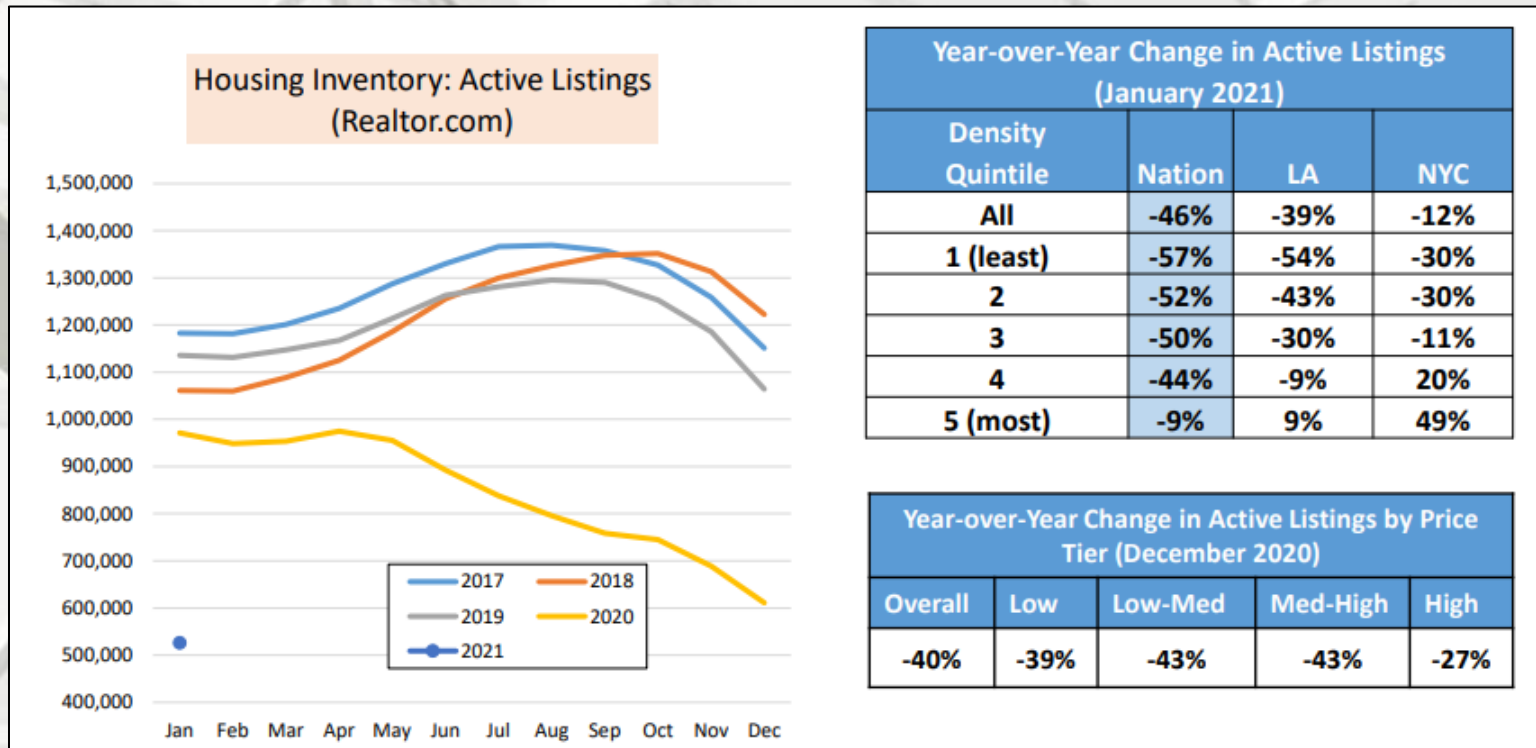
## Urban Institute

### National Mortgage Affordability Over Time

“Despite price increases over the last 8 years, home prices remain affordable by historic standards, as interest rates are now near generational lows. As of January 2021, with a 20 percent down payment, the share of median income needed for the monthly mortgage payment stood at 24.3 percent; with 3.5 down, it is 27.7 percent. These numbers are very close to the 2001-2003 median, and represent a sharp decrease in affordability in recent months. The last time we were at this affordability level was in February of 2019, and before that, in 2008. ...” – Laurie Goodman, Center Vice President, Urban Institute



# U.S. Housing Supply

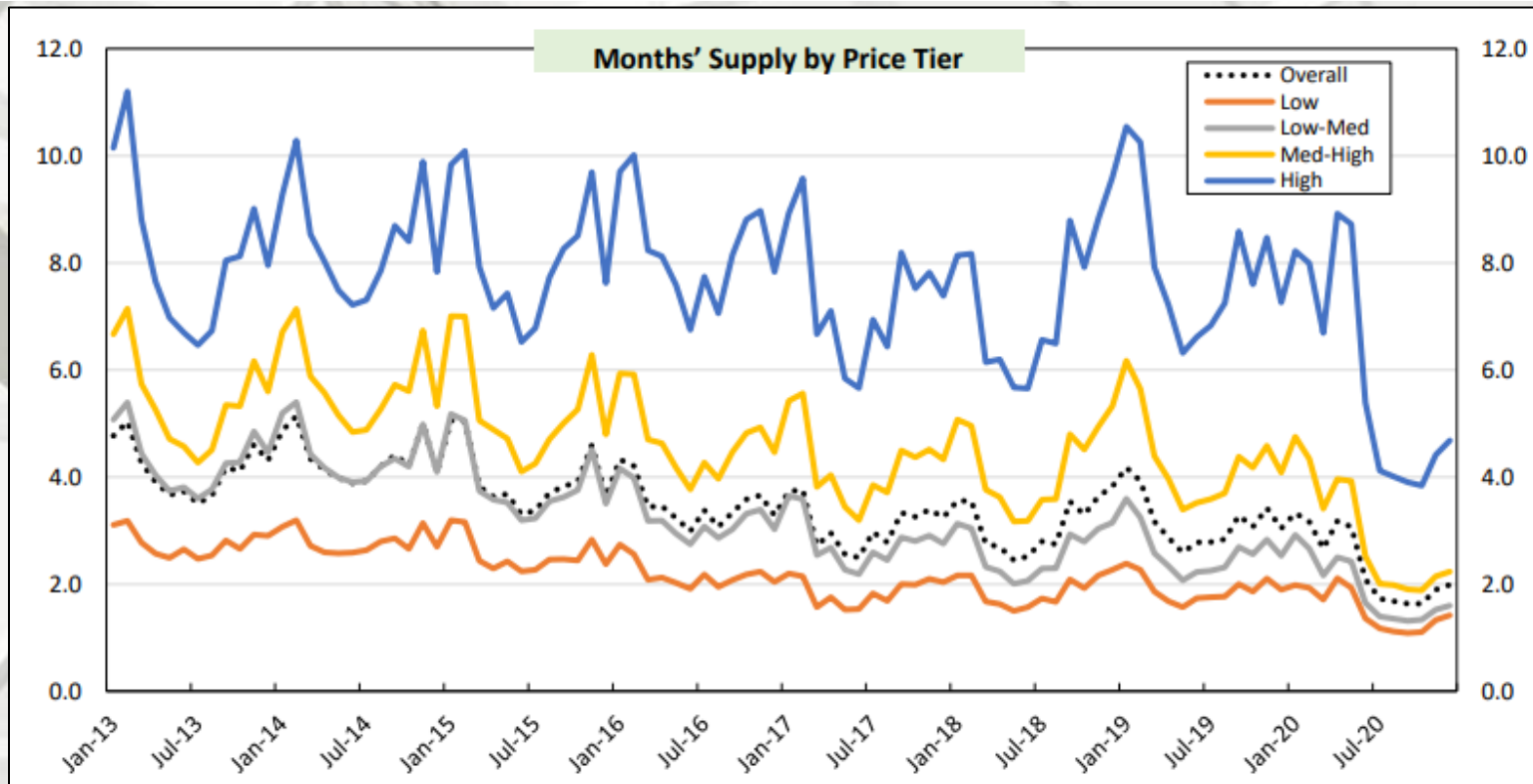


Sources: Realtor.com, Census Bureau, and AEI Housing Center, [www.AEI.org/housing](http://www.AEI.org/housing).

## 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 much of the West, & (iv) new construction supply has fallen from 6.6 months in December 2019 to 4.3 months in December 2020.” – Edward Pinto, Resident Fellow; Director and Tobias Peter, Research Fellow and Director of Research, AEI Housing Center

# Housing Supply



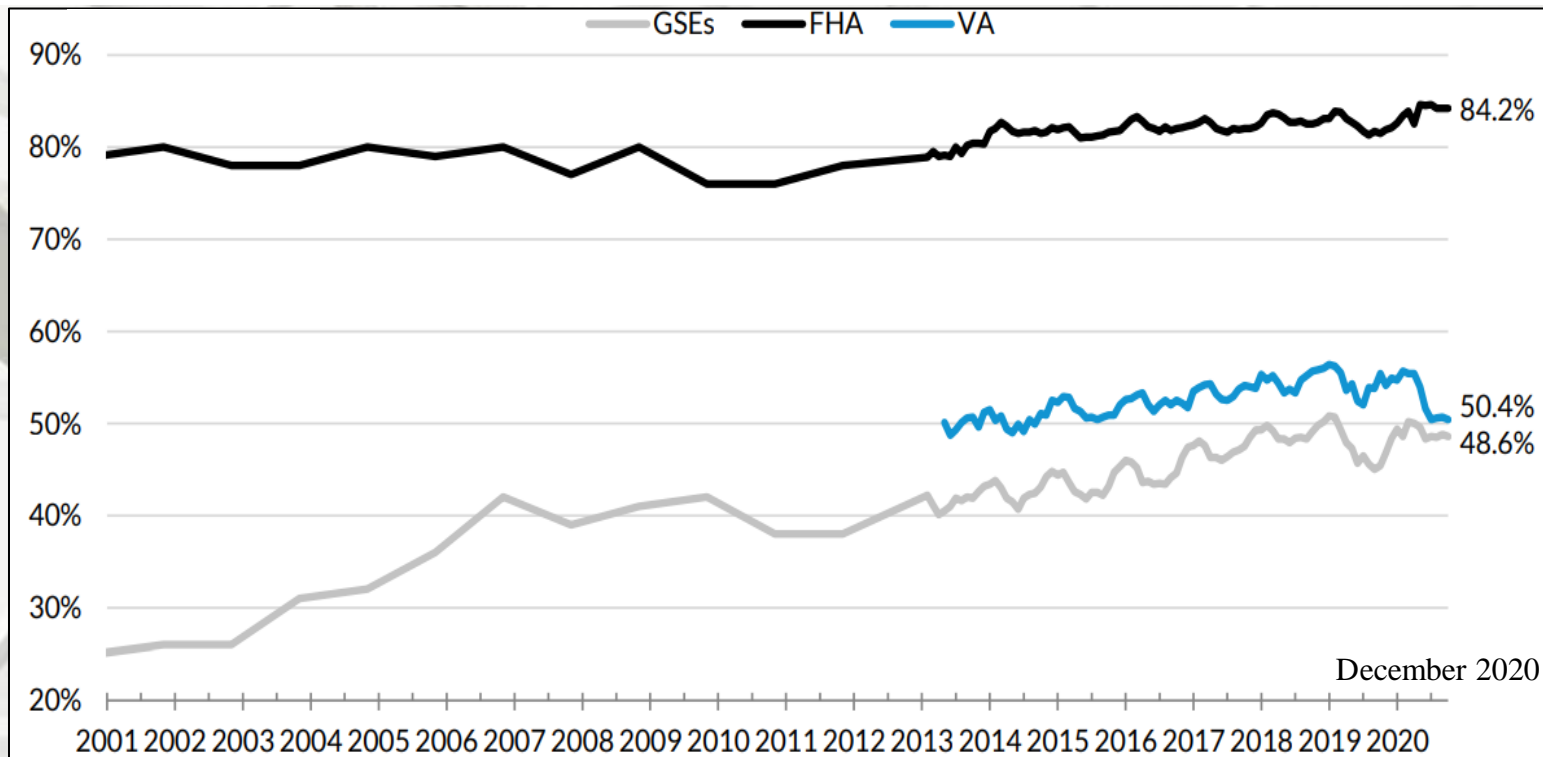
Note: Months' supply measures how long it would take for the existing level of inventory to be sold off at the current sale'space. While the listings data come from the MLS, the sales numbers come from the public records  
Sources: Realtor.com, Census Bureau, and AEI Housing Center, [www.AEI.org/housing](http://www.AEI.org/housing).

## AEI Housing Center Months' Supply Price Tiers

“Starting with June 2020, months' supply levels started to drop precipitously across all price tiers. While supply remains lowest in the low and low-med tiers, the drop in the med-high and high price tiers are especially noteworthy. The high tier has fallen from 7.3 months in December 2019 to 4.7 months in December 2020 and med-high tier has fallen from 4.1 to 2.2. In January 2021 (not shown), overall months' supply stood at 2.0 months.” – Edward Pinto, Resident Fellow; Director and Tobias Peter, Research Fellow and Director of Research, AEI Housing Center



# 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 First-Time Homebuyer Share

“In December 2020, the FTHB share for FHA, which has always been more focused on first time homebuyers, was 84.2 percent. The FTHB share of VA lending in December was 50.4 percent. The GSE FTHB share in December was down slightly relative to November, at 48.6 percent. The bottom table shows that based on mortgages originated in December 2020, the average FTHB was more likely than an average repeat buyer to take out a smaller loan, have a lower credit score, and have a higher LTV, thus paying a higher interest rate.” – Bing Lai, Research Associate, Housing Finance Policy Center

Source: <https://www.urban.org/sites/default/files/publication/103539/housing-finance-at-a-glance-a-monthly-chartbook-february-2021.pdf>; 2/25/21

Return TOC

# U.S. Housing Finance

## Mortgage Bankers Association (MBA)

### Mortgage Credit Availability Unchanged in February

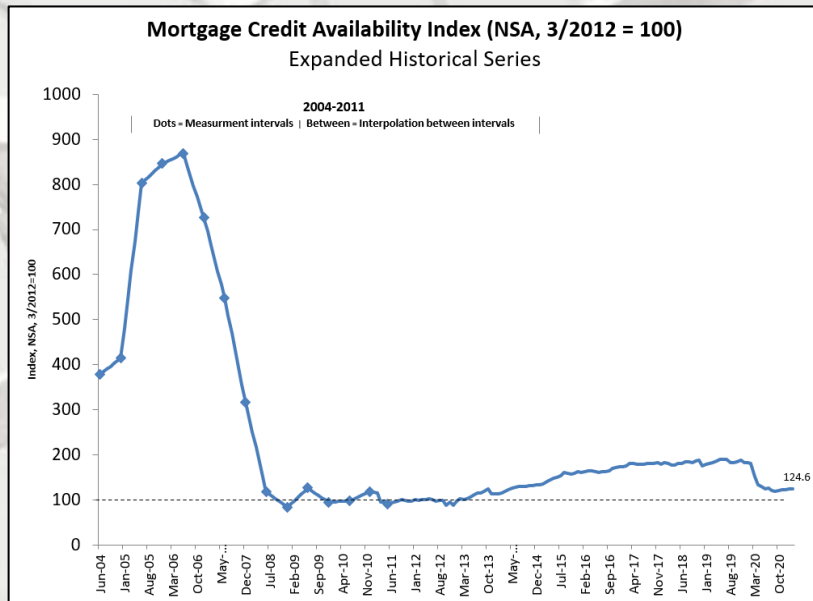
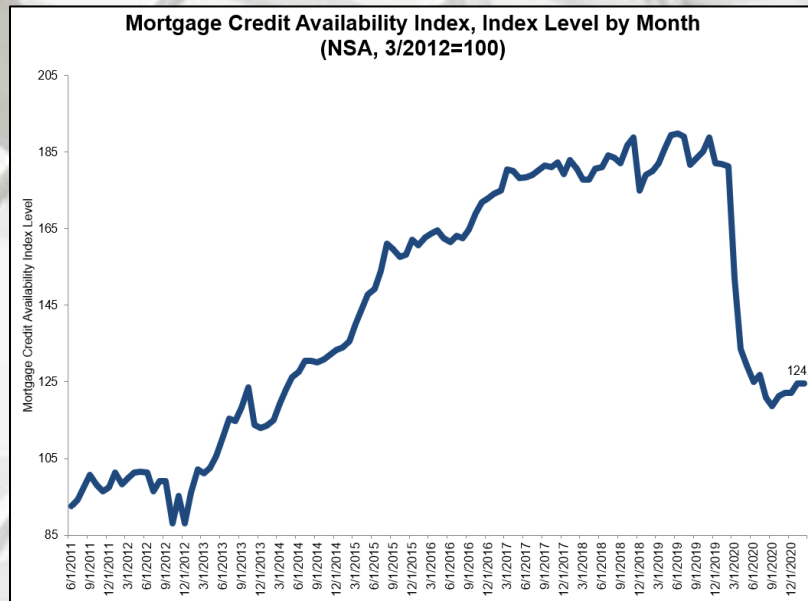
“Mortgage credit availability increased in January according to the Mortgage Credit Availability Index (MCAI), a report from the Mortgage Bankers Association (MBA) that analyzes data from Ellie Mae's AllRegs® Market Clarity® business information tool.

The MCAI remained unchanged at 124.6 in February. 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 0.3 percent, while the Government MCAI increased by 0.3 percent. Of the component indices of the Conventional MCAI, the Jumbo MCAI increased by 0.2 percent, and the Conforming MCAI fell by 0.7 percent.

Credit availability in February was unchanged from January, remaining close to its lowest level since 2014. The housing market is in strong shape heading into the spring, with robust growth in purchase applications, home sales, and new residential construction. Government credit supply has increased in five of the past six months, albeit in small increments, but remains tight by historical standards. This adds another obstacle for many aspiring first-time buyers who are already navigating supply and affordability constraints. Expected home sales growth this year is still likely to be driven by first-time buyers, spurred by millennials reaching peak first-time homebuyer age. Many of these potential buyers will likely utilize FHA and other low down payment loans to purchase a home.” – Joel Kan, Associate Vice President of Economic and Industry Forecasting, MBA

# U.S. Housing Finance

## Mortgage Credit Availability (MBA)



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

# U.S. Housing Finance

## The Federal Reserve Bank of New York

### Mortgage Rates Decline and (Prime) Households Take Advantage

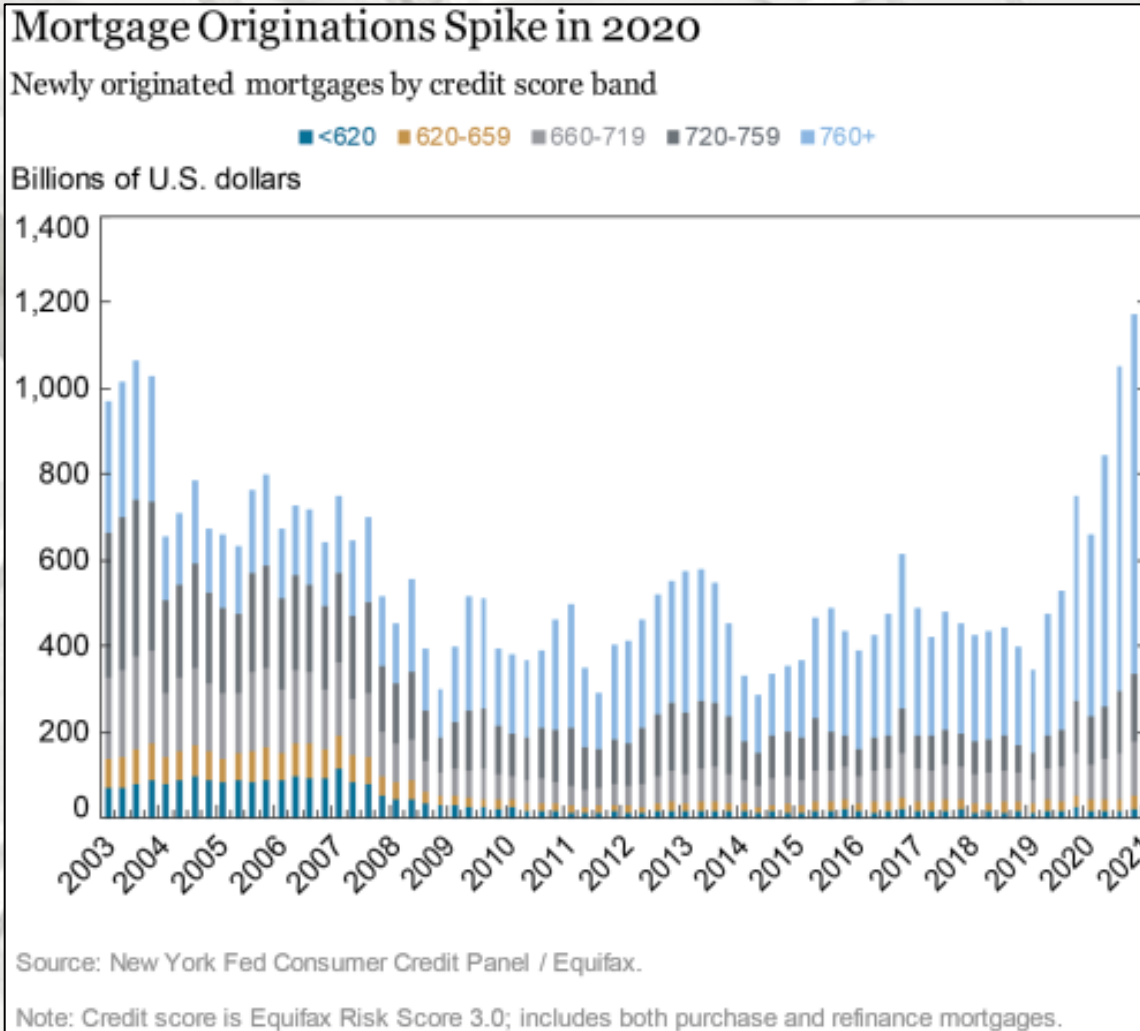
“... One shift in 2020 was a larger bump up in mortgage balances. Mortgage balances grew by \$182 billion, the biggest quarterly uptick since 2007, boosted by historically high volumes of originations. Here, we take a close look at the composition of mortgage originations, which neared \$1.2 trillion in the fourth quarter of 2020, the highest single-quarter volume seen since our series begins in 2000. The [Quarterly Report on Household Debt and Credit](#) and this analysis are based on the New York Fed’s Consumer Credit Panel, which is itself based on anonymized Equifax credit data.

... Here, the boom in originations is starkly visible – originations to the highest credit score borrowers rose sharply during 2020. (We use the Equifax Risk Score 3.0). The origination volume in the fourth quarter of 2020 just surpassed the previous high, from 2003, when a dip in mortgage interest rates prompted a [boom in mortgage refinancing](#). Although these two bumps in mortgage originations are similar in magnitude, the composition is quite different; 71 percent of originations in the fourth quarter of 2020 went to borrowers with credit scores over 760, while in the third quarter of 2003, only 31 percent of those new mortgages went to the most creditworthy borrowers. Researchers have concluded that the 2003 refi boom had long-running consequences, [contributing to over-leveraged](#) balance sheets as home prices fell.” – Andrew F. Haughwout, Donghoon Lee, Joelle Scally, and Wilbert van der Klaauw; Federal Reserve Bank of New York



# U.S. Housing Finance

## The Federal Reserve Bank of New York





# MBA Mortgage Finance Forecast

## MBA Mortgage Finance Forecast

February 19, 2021

	2020				2021				2022				2020	2021	2022	2023
	Q1	Q2	Q3	Q4	Q1	Q2	Q3	Q4	Q1	Q2	Q3	Q4				
<b>Housing Measures</b>																
Housing Starts (SAAR, Thous)	1,484	1,079	1,432	1,592	1,582	1,606	1,622	1,612	1,622	1,642	1,637	1,614	1,397	1,606	1,629	1,615
Single-Family	968	766	1,037	1,237	1,242	1,255	1,267	1,270	1,292	1,315	1,312	1,295	1,002	1,259	1,304	1,318
Two or More	517	313	395	355	340	351	355	342	330	327	325	319	395	347	325	298
Home Sales (SAAR, Thous)																
Total Existing Homes	5,483	4,313	6,137	6,777	6,327	6,327	6,360	6,364	6,382	6,427	6,429	6,384	5,678	6,344	6,406	6,475
New Homes	701	703	973	873	905	946	965	979	1,000	1,025	1,034	1,035	813	949	1,023	1,046
FHFA US House Price Index (YOY % Change)																
Median Price of Total Existing Homes (Thous \$)	272.4	288.3	309.2	311.7	314.8	310.0	304.4	303.4	303.8	304.2	304.7	305.7	295.4	306.0	311.4	310.2
Median Price of New Homes (Thous \$)	329.6	322.8	331.9	335.6	340.0	337.2	339.9	343.1	344.7	346.3	347.7	348.7	330.0	332.6	336.2	338.2
<b>Interest Rates</b>																
30-Year Fixed Rate Mortgage (%)	3.5	3.2	3.0	2.8	2.8	3.1	3.3	3.4	3.6	3.7	3.8	3.9	2.8	3.4	3.9	4.4
10-Year Treasury Yield (%)	1.4	0.7	0.6	0.9	1.2	1.4	1.5	1.6	1.8	1.9	2.0	2.2	0.9	1.6	2.2	2.6
<b>Mortgage Originations</b>																
Total 1- to 4-Family (Bil \$)																
Purchase	257	348	418	401	320	378	443	433	362	395	459	412	1,424	1,574	1,628	1,653
Refinance	306	580	658	724	740	305	195	145	150	141	142	140	2,268	1,385	573	520
Refinance Share (%)	54	63	61	64	70	45	31	25	29	26	24	25	61	47	26	24
FHA Originations (Bil \$)																
Purchase													338	265	199	189
Total 1- to 4-Family (000s loans)																
Purchase	891	1,203	1,427	1,343	1,041	1,227	1,396	1,380	1,123	1,225	1,385	1,260	4,864	5,043	4,992	4,884
Refinance	978	1,848	2,070	2,235	2,219	912	566	426	429	403	395	395	7,132	4,124	1,621	1,417
Refinance Share (%)	52	61	59	62	68	43	29	24	28	25	22	24	59	45	25	22
<b>Mortgage Debt Outstanding</b>																
1- to 4-Family (Bil \$)																
	10,775	10,875	10,984	11,135	11,297	11,442	11,596	11,755	11,916	12,081	12,254	12,424	11,135	11,755	12,424	13,100

**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 transactions.

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 loans.

The FHFA US House Price Index is the forecasted year over year percent change of the FHFA Purchase-Only House Price Index.

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

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**MBA**

MORTGAGE BANKERS ASSOCIATION

# MBA Economic Forecast

## MBA Economic Forecast

February 19, 2021

	2020				2021				2022				2020	2021	2022	2023
	Q1	Q2	Q3	Q4	Q1	Q2	Q3	Q4	Q1	Q2	Q3	Q4				
<b>Percent Change, SAAR</b>																
Real Gross Domestic Product	-5.0	-31.4	33.4	4.0	4.8	5.1	7.2	6.4	4.0	2.9	2.3	2.2	-2.5	5.9	2.8	1.9
Personal Consumption Expenditures	-6.9	-33.2	41.0	2.5	7.3	2.8	5.9	6.1	4.1	3.3	2.5	2.5	-2.6	5.5	3.1	2.3
Business Fixed Investment	-6.7	-27.2	22.9	13.8	9.3	2.3	8.8	9.2	6.4	5.2	4.5	4.1	-1.3	7.4	5.0	3.7
Residential Investment	19.0	-35.6	63.0	33.5	17.1	2.0	1.2	1.1	1.2	2.1	1.4	1.2	13.7	5.1	1.5	1.4
Govt. Consumption & Investment	1.3	2.5	-4.8	-1.2	2.5	13.1	6.7	1.0	-4.1	-5.0	-3.3	-1.5	-0.6	5.7	-3.5	-0.8
Net Exports (Bil. Chain 2012\$)	-650.7	-649.0	-859.6	-947.6	-1029.1	-1092.6	-1108.9	-1096.6	-1080.6	-1032.7	-975.2	-947.8	-776.7	-1081.8	-1009.1	-929.8
Inventory Investment (Bil. Chain 2012\$)	-68.8	-244.0	-3.2	37.9	-10.4	60.9	104.0	130.6	161.7	157.3	129.1	109.2	-69.5	71.3	139.3	90.8
Consumer Prices (YOY)	2.1	0.4	1.3	1.2	1.6	2.9	2.2	2.4	2.2	2.5	2.3	2.1	1.2	2.4	2.1	2.3
<b>Percent</b>																
Unemployment Rate	3.8	13.0	8.8	6.7	5.9	5.5	5.2	4.7	4.6	4.5	4.4	4.4	8.1	5.3	4.5	4.3
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	0.125	0.125	0.125	0.625
10-Year Treasury Yield	1.4	0.7	0.6	0.9	1.2	1.4	1.5	1.6	1.8	1.9	2.0	2.2	0.9	1.6	2.2	2.6

**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



# U.S. Housing Market



## The first 3D-Printed Home for Sale

“\$299,999 3 bd-2 ba-1,407 sq ft; 34 Millbrook Ln, Riverhead, NY 11901; New construction Zestimate®: \$301,458; Est. payment: \$1,812/mo ([https://www.zillow.com/homes/34-Millbrook-Ln-Riverhead,-NY,-11901\\_rb/2075583035\\_zpid/](https://www.zillow.com/homes/34-Millbrook-Ln-Riverhead,-NY,-11901_rb/2075583035_zpid/))

“[A few years ago we shared a story](#) about a prototype house that was being built by a mobile 3D printer, now fast forward to [a new report from CNBC’s Diana Olick](#) about the first ever 3D-printed homes for sale here in the U.S. Olick says with builders up against skyrocketing lumber costs as well as a labor shortage, these homes could help alleviate the ongoing housing shortage. Indeed... by the way, [this Long Island, NY property has been listed on Zillow for \\$299k.](#)” – Brad Beckett, Real Estate Investing Today

# Summary

## **In conclusion:**

January housing data denoted the second consecutive month of total starts greater than 1.5-million units. Month-over-month and year-over-year United States housing market data were mostly positive. Aggregate multi-family starts decreased month-over-month and year-over-year. New and existing house sales were positive month-over-month and year-over-year. The New York Federal Reserve Bank's reported new mortgages, in the fourth quarter of 2020, totaled \$1.2 trillion, a record. Residential construction spending was positive month-over-month. On a year-over-year basis, total and single-family expenditures improved 21% and 24%, respectively.

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 remain in place;
- 2) Select builders are beginning to focus on entry-level houses;
- 3) Housing affordability indicates improvement;

## **Cons:**

- 1) COVID19;
- 2) Construction material constraints;
- 3) Lot availability and building regulations (according to several sources);
- 4) Laborer shortages;
- 5) Household formations still lag historical averages;
- 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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