

# The Virginia Tech–USDA Forest Service Housing Commentary: Section I May 2022



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

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# Opening Remarks

May 2022 data softness was concentrated in housing starts and permits, on a month-over-month basis. Year-over-year data indicated an improvement; however, single-family permits were negative again. This marks the third consecutive month, in 2022, of single-family starts and permits declining. This suggests further moderation in single-family activity in the upcoming months. Increased borrowing costs, combined with rising house prices, have resulted in a major setback for new house sales. The number of potential buyers is dwindling quickly, and first-time buyers also are being constrained due to increasing interest rates.

The July 15th Atlanta Fed GDPNow™ model forecast was a negative 9.2% for total residential investment spending for June 2022. New private permanent site expenditures were projected at -5.4%; the improvement spending forecast was -3.5%; and the manufactured/mobile expenditures projection was 26.8% (all: quarterly log change and at a seasonally adjusted annual rate).<sup>1</sup>

“As summer kicks off, everything is heating up. Everything, it seems, except the housing market. Following a blistering two-year tear, real estate firm Redfin is reporting big drops in demand and price cuts becoming the norm in many of the hottest corners of the market. According to a report on June 23 by Redfin, its Homebuyer Demand Index posted a year-over-year decline of 16% – the largest decrease in over two years – as 30-year mortgage rates neared 6%. “The market was still quite hot with lots of bidding wars, and it was still very common for homes to go above asking price,” Redfin’s chief economist Daryl Fairweather told Fortune in an interview. “But that has slowed down a lot since the Fed raised interest rates and continues to raise interest rates. It’s now almost 30% more expensive to buy a home that was just a year ago, so that’s certainly slowing down demand. Also, home sellers don’t need to participate in this market. They got record equity last year because of the increase in home values.””<sup>2</sup> – Ali Fazal, Chief Economist, Redfin, for Fortune

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

Sources: <sup>1</sup> [www.frbatlanta.org/cqer/research/gdpnow.aspx](http://www.frbatlanta.org/cqer/research/gdpnow.aspx); 7/15/22;

<sup>2</sup> <https://fortune.com/2022/07/04/housing-market-2023-predictions-home-prices-2023-forecast/>; 7/4/22

# May 2022

## Housing Scorecard

		M/M	Y/Y
Housing Starts	▼	14.4%	▼ 3.5%
Single-Family (SF) Starts	▼	9.2%	▼ 5.3%
Multi-Family (MF) Starts*	▼	23.7%	▲ 0.6%
Housing Permits	▼	7.0%	▲ 0.2%
SF Permits	▼	5.2%	▼ 7.6%
MF Permits*	▼	9.8%	▲ 16.5%
Housing Under Construction	▲	0.4%	▲ 24.3%
SF Under Construction	NC	0.0%	▲ 24.5%
Housing Completions	▲	9.1%	▲ 9.3%
SF Completions	▲	2.8%	▲ 8.5%
New SF House Sales	▲	10.7%	▼ 5.9%
Private Residential Construction Spending	▲	0.2%	▲ 19.0%
SF Construction Spending	NC	0.0%	▲ 15.1%
Existing House Sales <sup>1</sup>	▼	3.4%	▼ 8.6%

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

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

# USDA Forest Service Housing Story Map

**USDA FOREST SERVICE HOUSING MARKET REVIEW**

Forest Products Laboratory, Economics, Statistics and Life Cycle Analysis Research

WELCOME MONTHLY HOUSING BRIEFS AND COMMENTARIES CONSTRUCTION DATA HOUSING METRICS AND THE WOOD RESOURCE RESOURCES AND REFERENCES

## USDA Forest Service Housing Market Review

### Housing's Importance

The total value of all homes in the U.S. in 2017 was estimated at \$31.8 trillion.<sup>1</sup>

The value of wood building materials consumed in new residential and remodeling construction was estimated at \$37.4 billion in 2018.<sup>2</sup>

Historic as well as current housing trends show that new, single-family construction is the greatest value-added wood products consuming sector and is a leading coincident economic indicator of the U.S. economy. The forest products sector helps sustain the social, economic, and ecological benefits of forest based industry in the United States. Product revenues sustain economic benefits that include jobs and income. Ecological and social benefits can be supported by timber revenue to landowners that help keep land in forests, and by forest treatments that can help maintain ecological functions. The degree to which the forest products sector helps sustain benefits is influenced by levels of demand and consumption of forest products and how technology, markets, and demand for timber translates into harvest of different species and sizes of trees in different regions.

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## USDA Forest Service Housing Market Review

Each story map's tab contains a compilation of housing information. The 'Construction Data' tab is interactive and allows one to gather and view US Census-Construction data at the national or metropolitan statistical area (MSA) level.

The story map is available at the following link:

<https://www.arcgis.com/apps/MapSeries/index.html?appid=9553db0ea36140d28076399e898dc693>

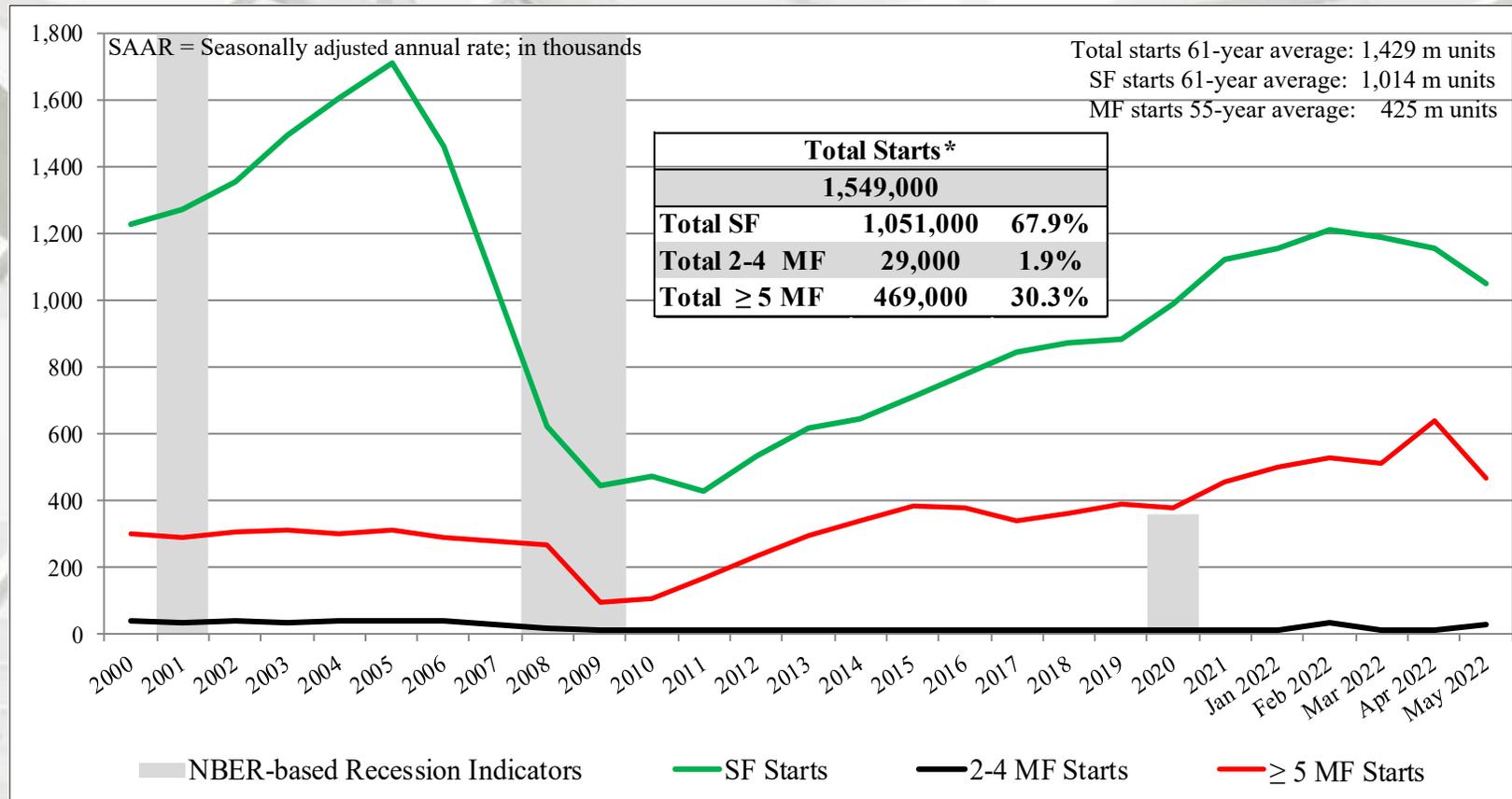
# New Housing Starts

	Total Starts*	SF Starts	MF 2-4 Starts**	MF ≥5 Starts
May	1,549,000	1,051,000	29,000	469,000
April	1,810,000	1,157,000	12,000	641,000
2021	1,605,000	1,110,000	10,000	485,000
M/M change	-14.4%	-9.2%	141.7%	-26.8%
Y/Y change	-3.5%	-5.3%	190.0%	-3.3%

\* 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

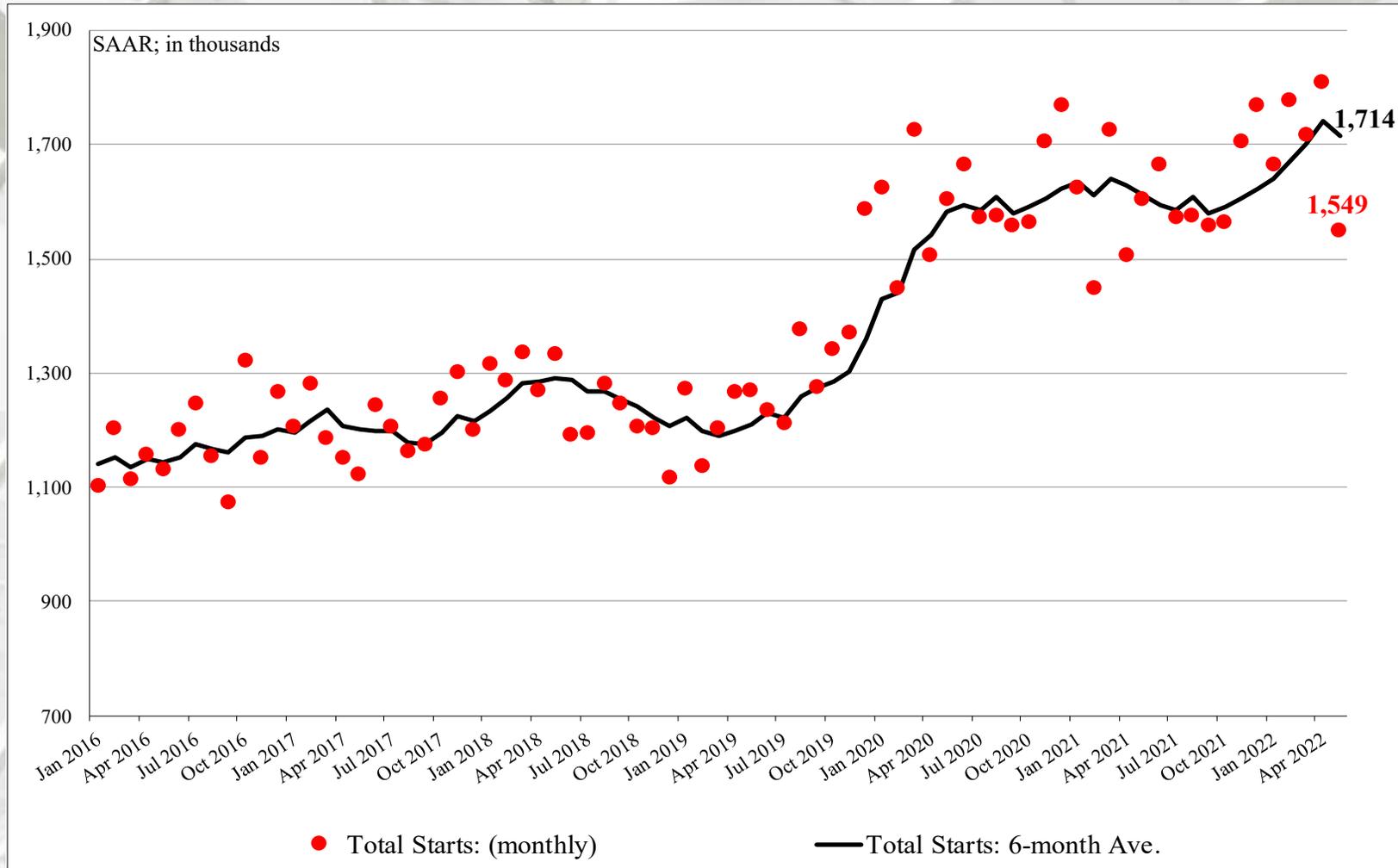


US DOC does not report 2 to 4 multi-family starts directly; this is an estimation: ((Total starts – (SF + ≥ MF)).

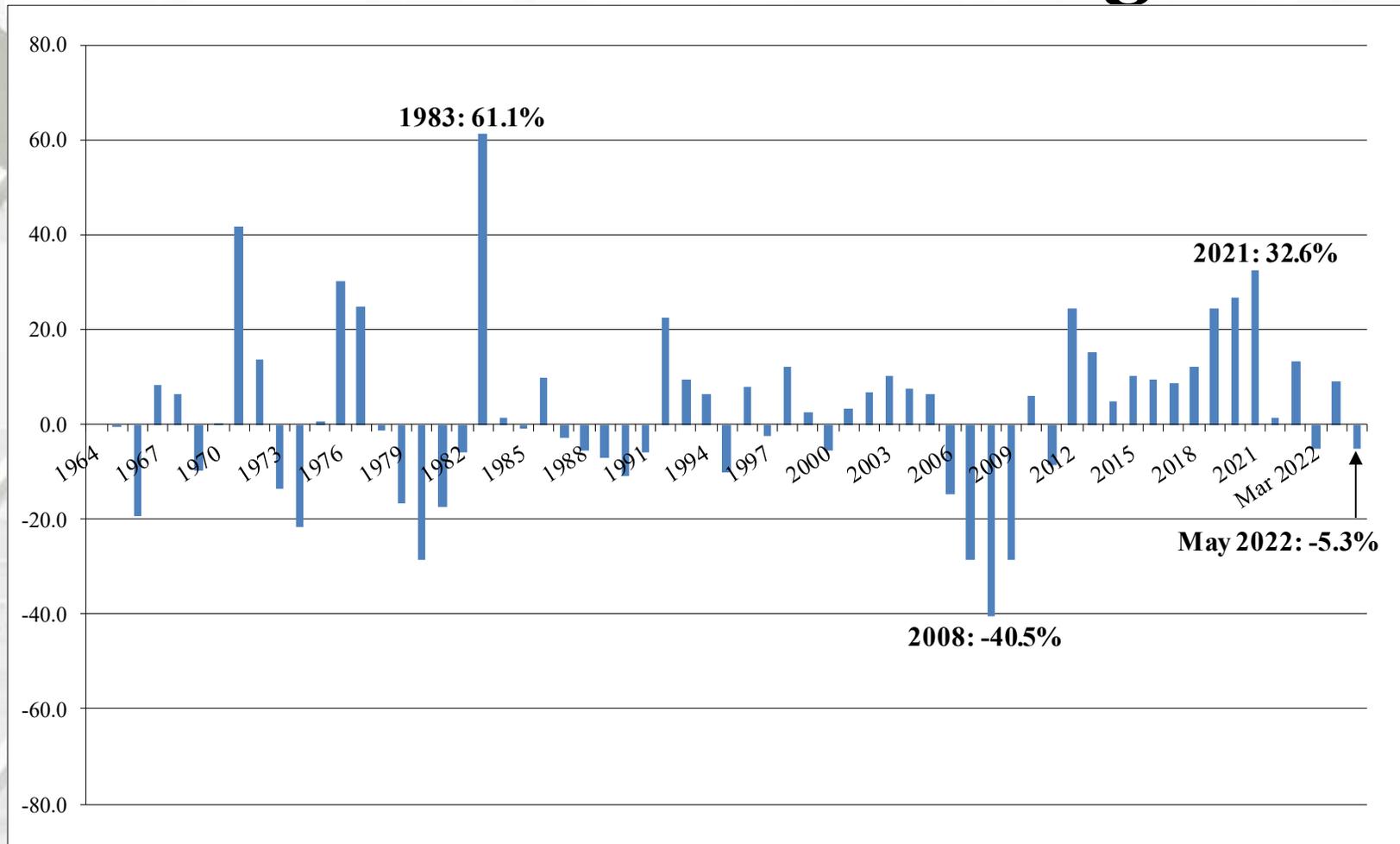
\* Percentage of total starts.

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

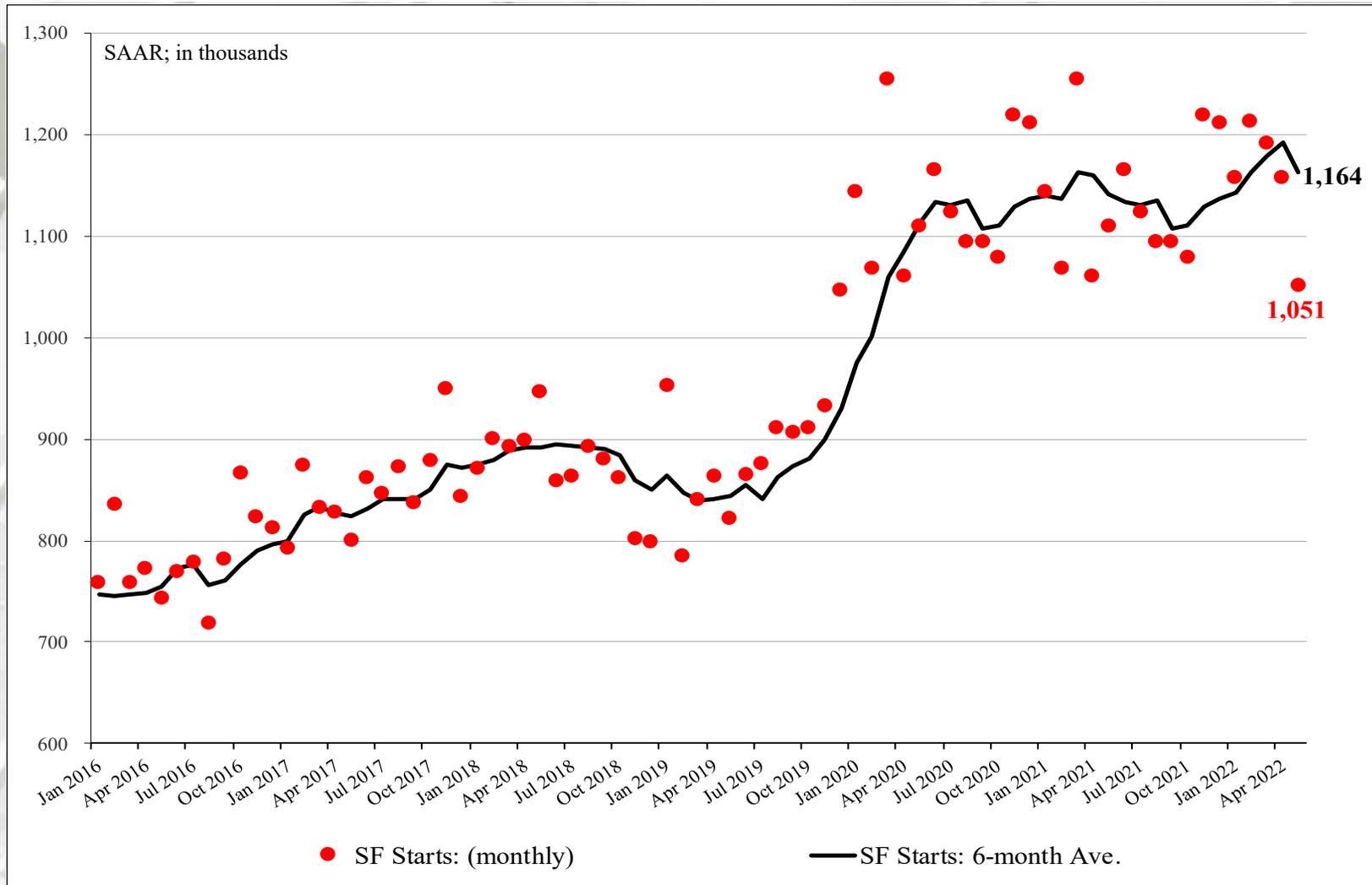
# Total Housing Starts: Six-Month Average



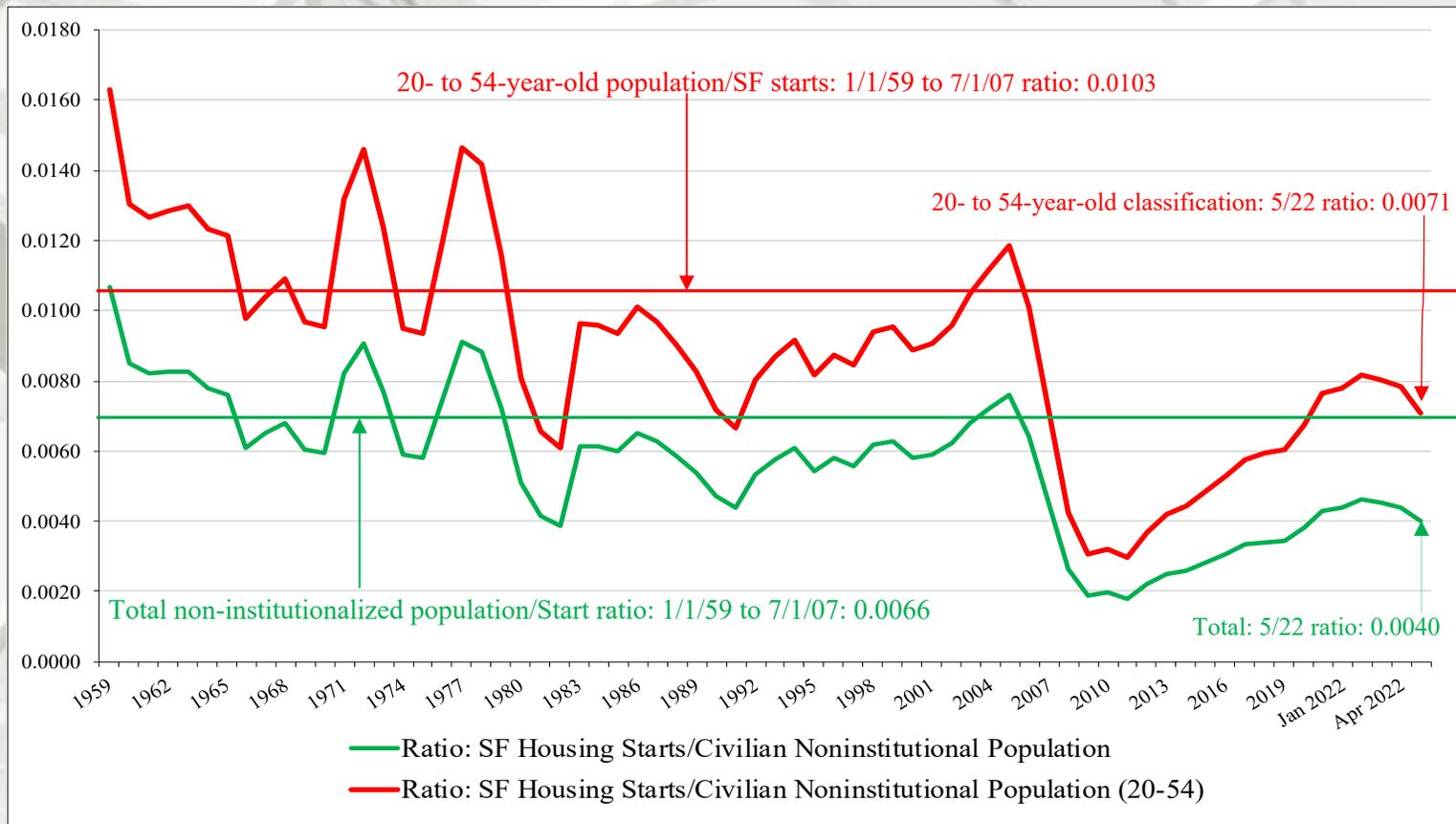
# SF Housing Starts: Year-over-Year Change



# SF Housing Starts: Six-Month Average



# New SF Starts

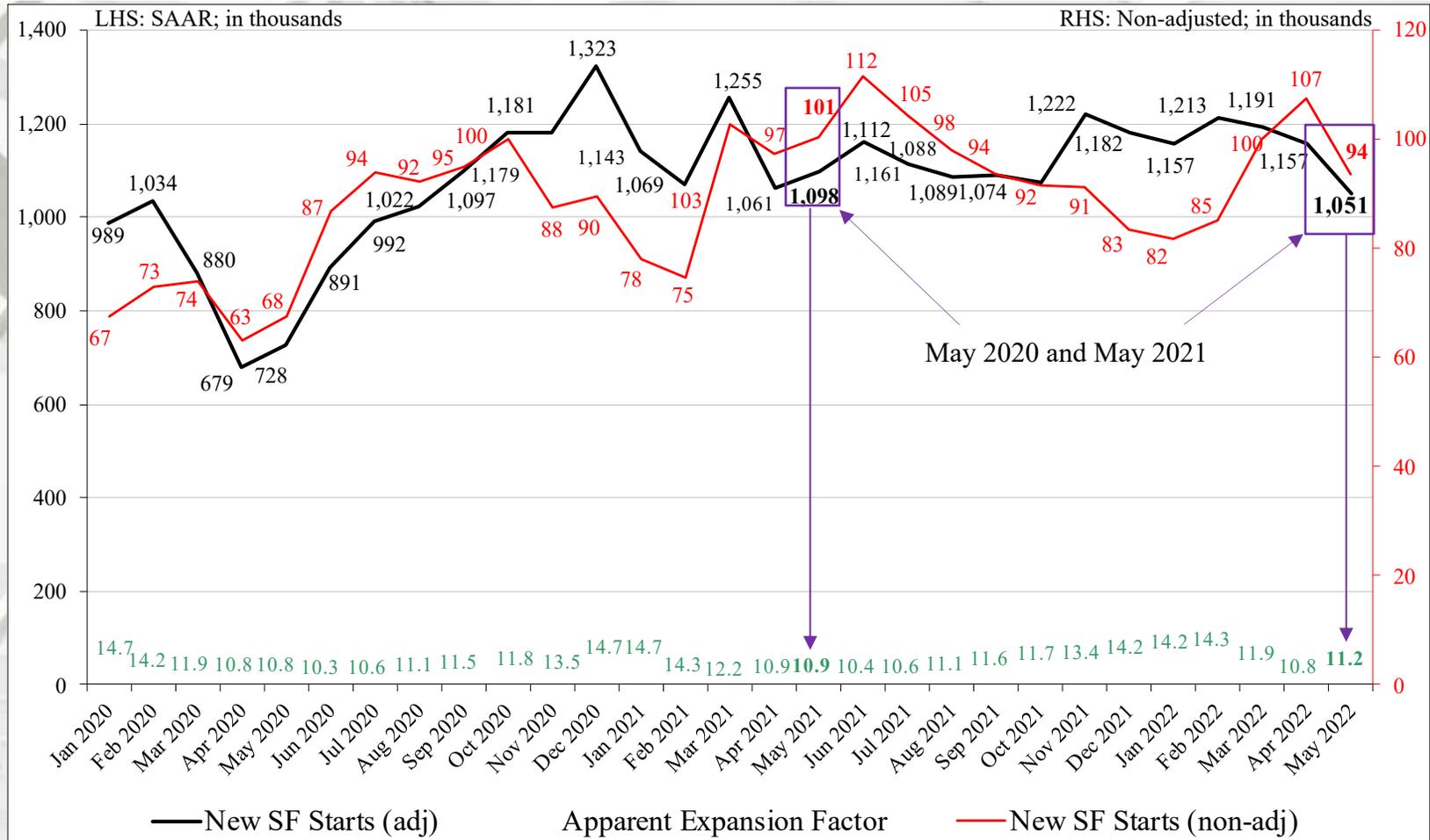


## New SF starts adjusted for the US population

From May 1959 to July 2007, the long-term ratio of new SF starts to the total US non-institutionalized population is 0.0066. In May 2022 it was 0.0040 – a decrease from April (0.0044). The long-term ratio of non-institutionalized population, aged 20 to 54 is 0.0103; in May 2021 it was 0.0071 – also a decrease from May (0.0078). New SF construction in both age categories is less than what is necessary for changes in the population (i.e., under-building).

However, on a long-term basis, some studies report normalized long-term demand at 900,000 to 1,000,000 new SF house sales per year beginning in 2025 through 2050.

# 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>
May	173,000	58,000	115,000
April	151,000	55,000	96,000
2021	137,000	61,000	76,000
M/M change	14.6%	5.5%	19.8%
Y/Y change	26.3%	-4.9%	51.3%
	<b>MW Total</b>	<b>MW SF</b>	<b>MW MF</b>
May	217,000	143,000	74,000
April	213,000	152,000	61,000
2021	263,000	164,000	99,000
M/M change	1.9%	-5.9%	21.3%
Y/Y change	-17.5%	-12.8%	-25.3%

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).

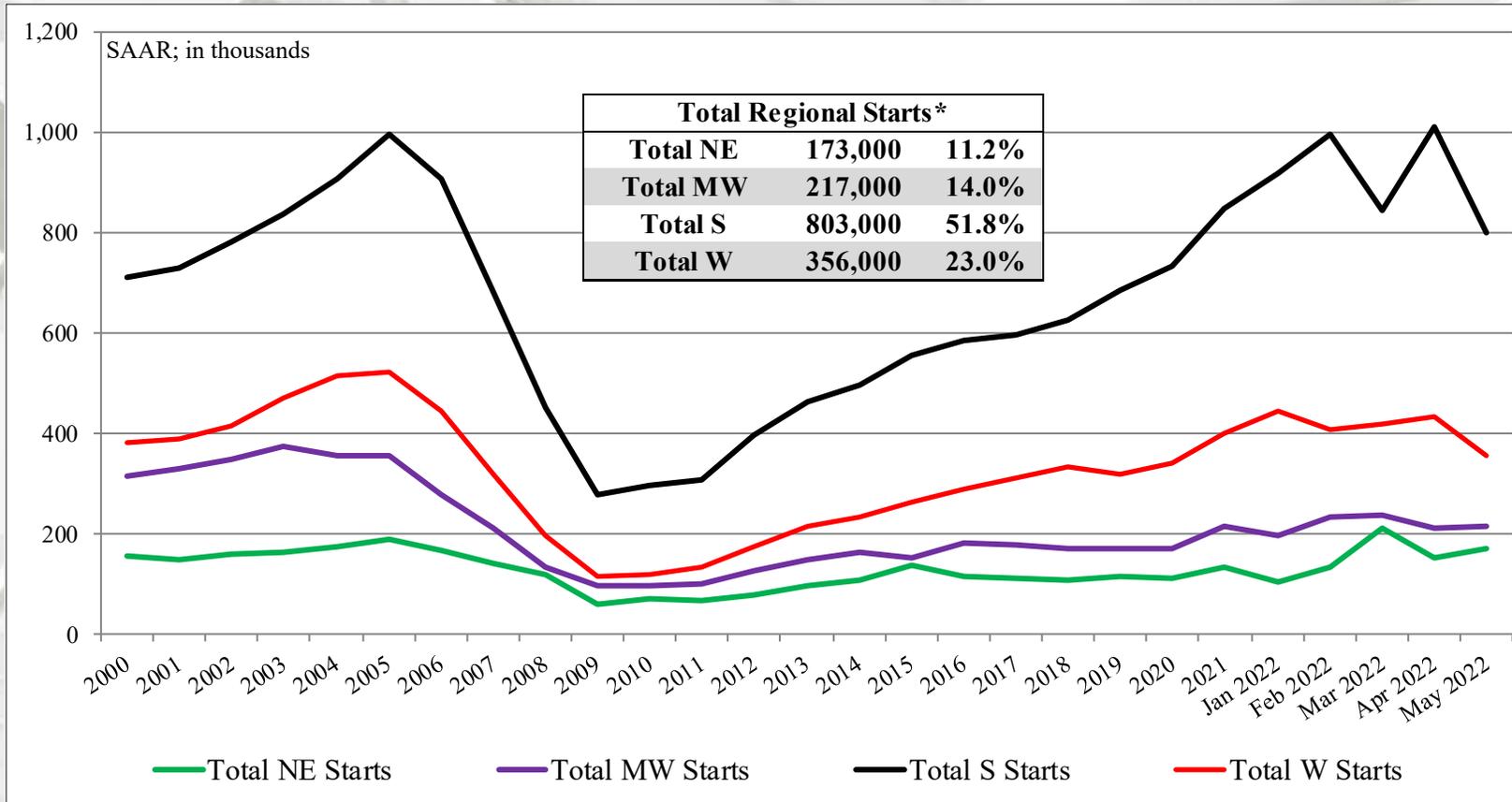
# New Housing Starts by Region

	<b>S Total</b>	<b>S SF</b>	<b>S MF**</b>
May	803,000	596,000	207,000
April	1,013,000	662,000	351,000
2021	809,000	596,000	213,000
M/M change	-20.7%	-10.0%	-41.0%
Y/Y change	-0.7%	0.0%	-2.8%
	<b>W Total</b>	<b>W SF</b>	<b>W MF</b>
May	356,000	254,000	102,000
April	433,000	288,000	145,000
2021	396,000	289,000	107,000
M/M change	-17.8%	-11.8%	-29.7%
Y/Y change	-10.1%	-12.1%	-4.7%

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

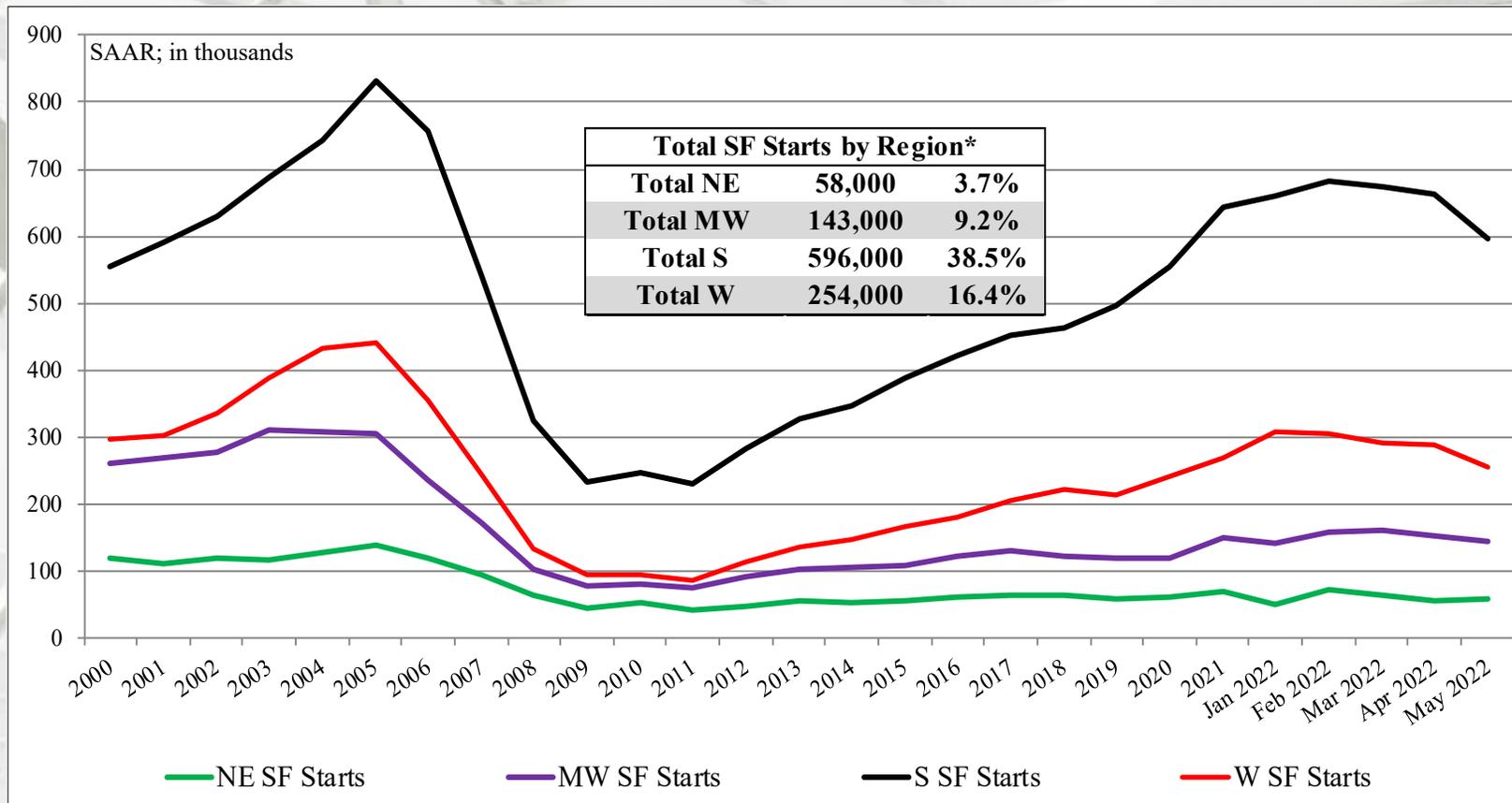


NE = Northeast, MW = Midwest, S = South, W = West

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

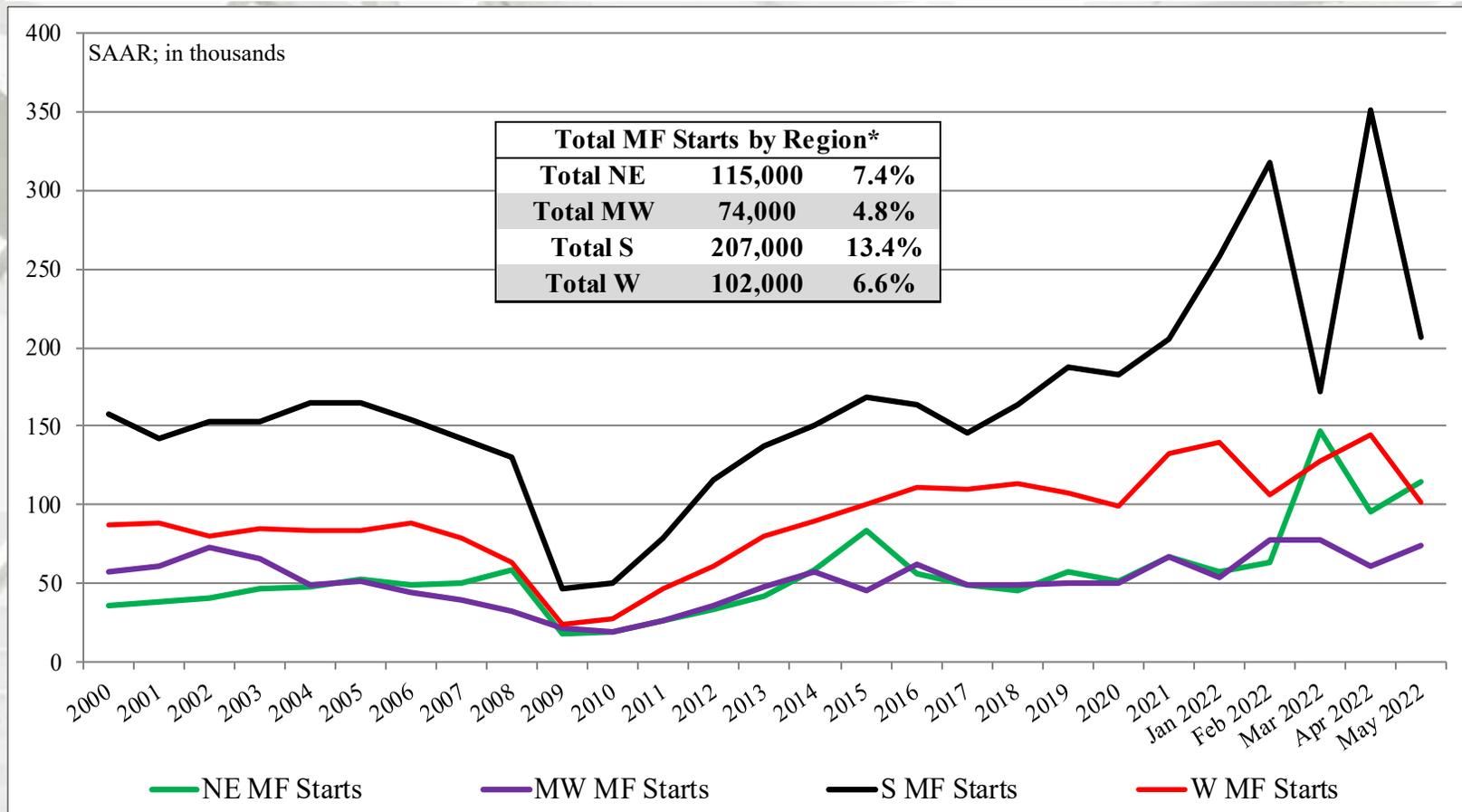


NE = Northeast, MW = Midwest, S = South, W = West

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

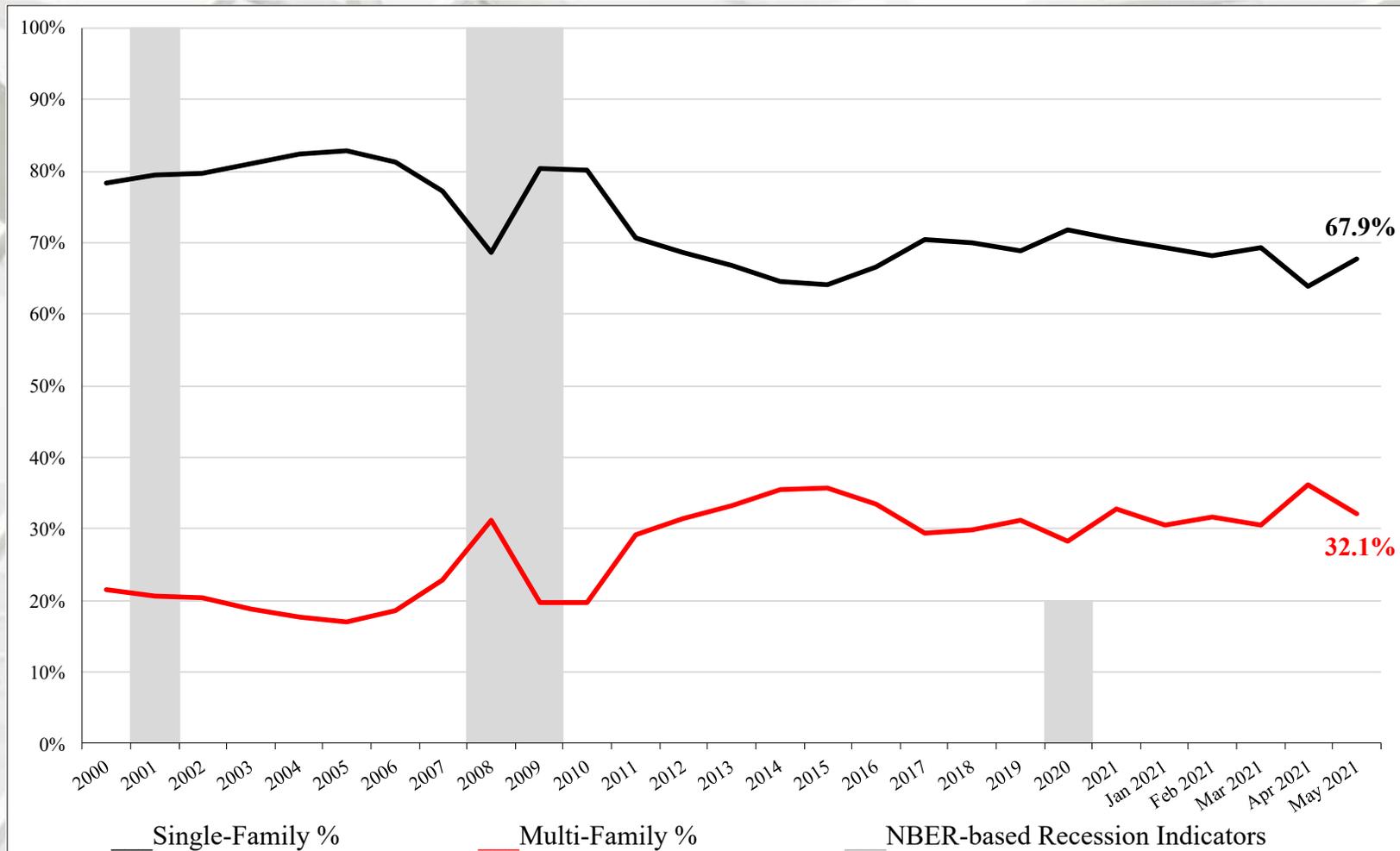


NE = Northeast, MW = Midwest, S = South, W = West

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 (%)

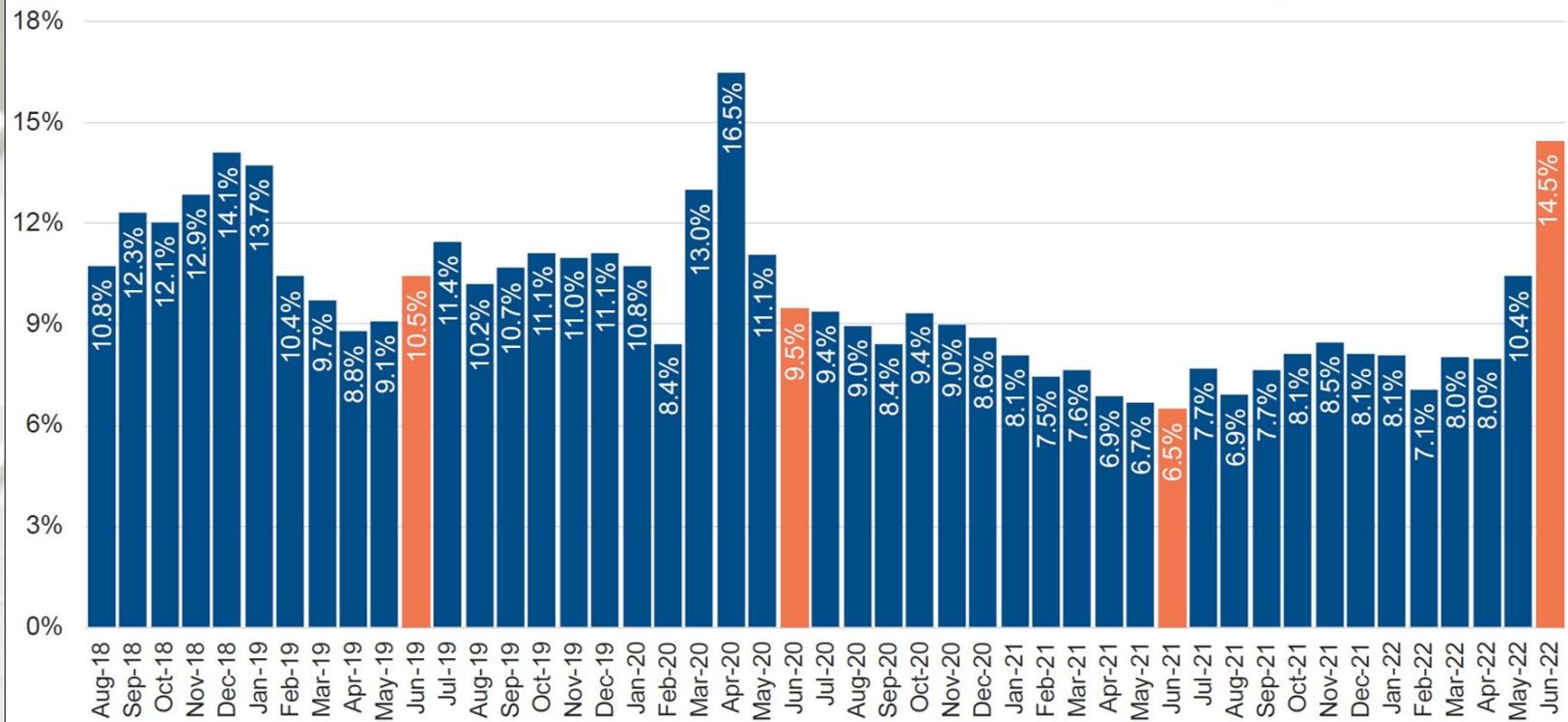


NBER based Recession Indicator Bars for the United States from the Period following the Peak through the Trough (FRED, St. Louis).

# Housing Cancellation Rate

## Home Builder Cancellation Rate: National

Matched builder responses YOY, weighted averages



Source: John Burns Real Estate Consulting, LLC (Data: Jun-22, Pub: Jul-22)

**Burns Home Builder Survey (21% sample size of all US new home sales)**

### John Burns Real Estate Consulting, LLC

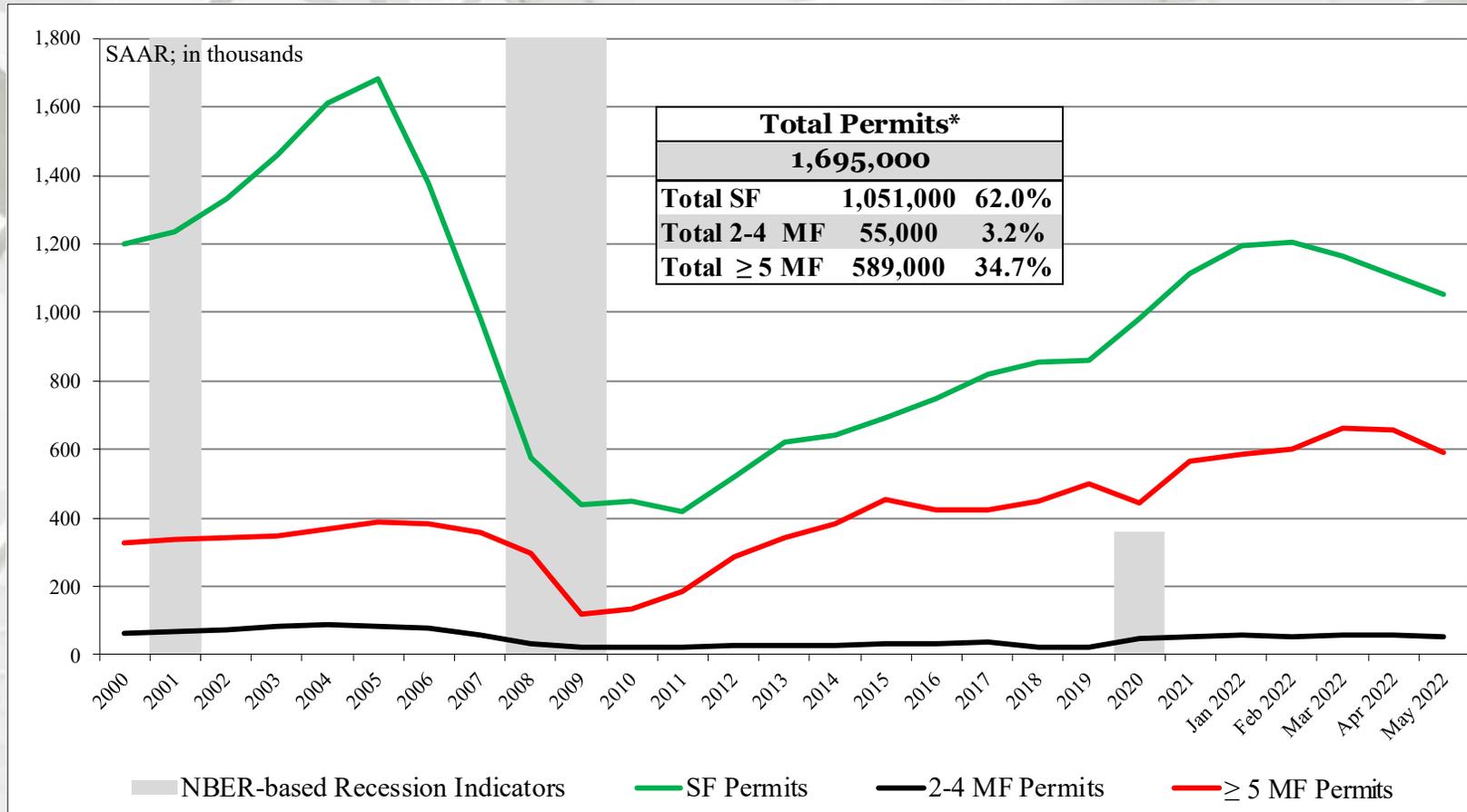
“Home builder cancellation rates jumped in June. Already above end of 2018 levels when rates touched 5% and approaching 2020 COVID panic peak.” – Rick Palacios, Director of Research, John Burns Real Estate Consulting, LLC

# New Housing Permits

	Total Permits*	SF Permits	MF 2-4 unit Permits	MF ≥ 5 unit Permits
May	1,695,000	1,051,000	55,000	589,000
April	1,823,000	1,109,000	56,000	658,000
2021	1,691,000	1,138,000	59,000	494,000
M/M change	-7.0%	-5.2%	-1.8%	-10.5%
Y/Y change	0.2%	-7.6%	-6.8%	19.2%

\* 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).

# New Housing Permits by Region

	<b>NE Total*</b>	<b>NE SF</b>	<b>NE MF**</b>
May	128,000	61,000	67,000
April	163,000	62,000	101,000
2021	158,000	63,000	95,000
M/M change	-21.5%	-1.6%	-33.7%
Y/Y change	-19.0%	-3.2%	-29.5%
	<b>MW Total*</b>	<b>MW SF</b>	<b>MW MF**</b>
May	230,000	132,000	98,000
April	250,000	133,000	117,000
2021	217,000	138,000	79,000
M/M change	-8.0%	-0.8%	-16.2%
Y/Y change	6.0%	-4.3%	24.1%

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

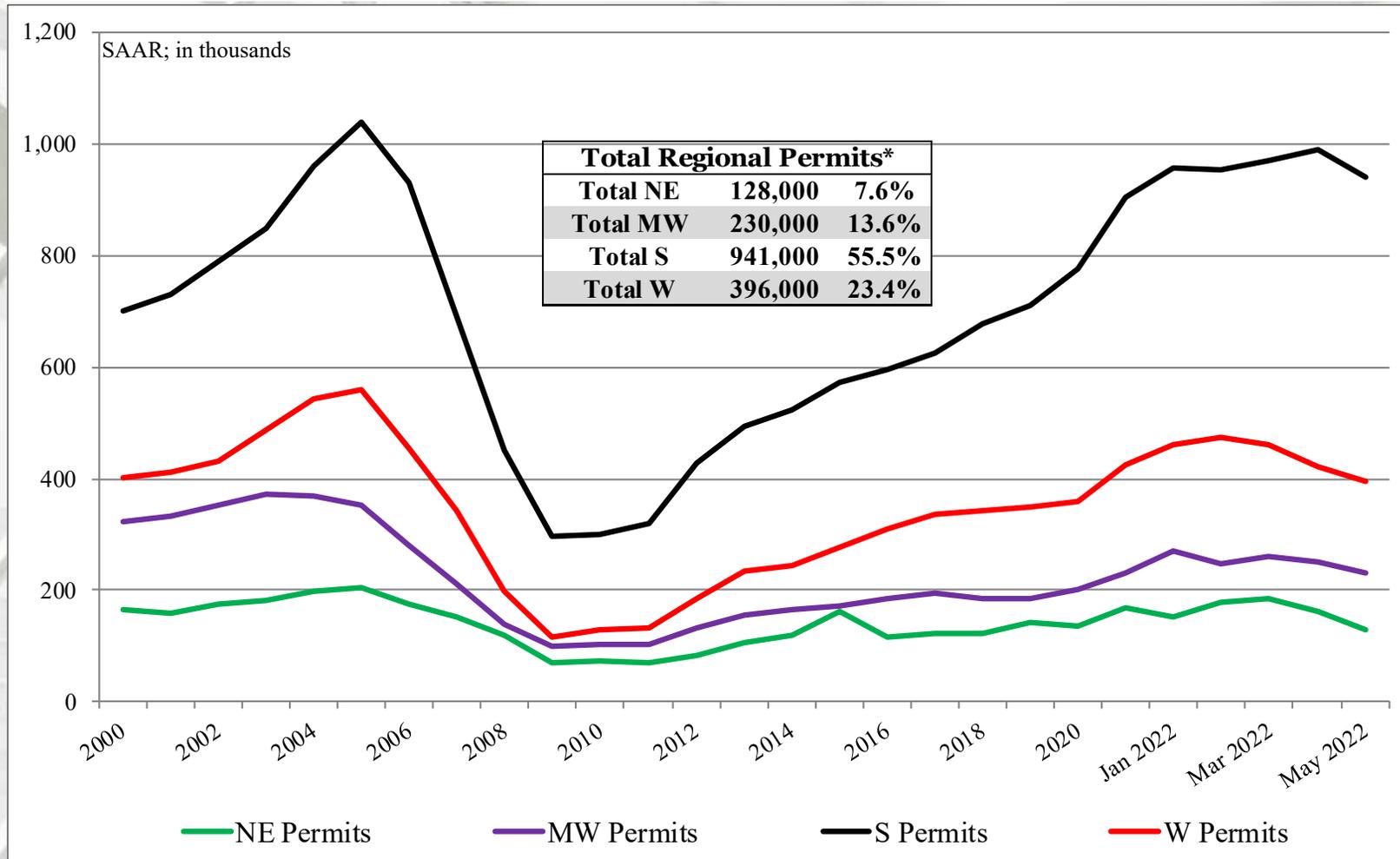
	<b>S Total*</b>	<b>S SF</b>	<b>S MF**</b>
May	941,000	624,000	317,000
April	989,000	671,000	318,000
2021	914,000	690,000	224,000
M/M change	-4.9%	-7.0%	-0.3%
Y/Y change	3.0%	-9.6%	41.5%
	<b>W Total*</b>	<b>W SF</b>	<b>W MF**</b>
May	396,000	234,000	162,000
April	421,000	243,000	178,000
2021	402,000	247,000	155,000
M/M change	-5.9%	-3.7%	-9.0%
Y/Y change	-1.5%	-5.3%	4.5%

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).

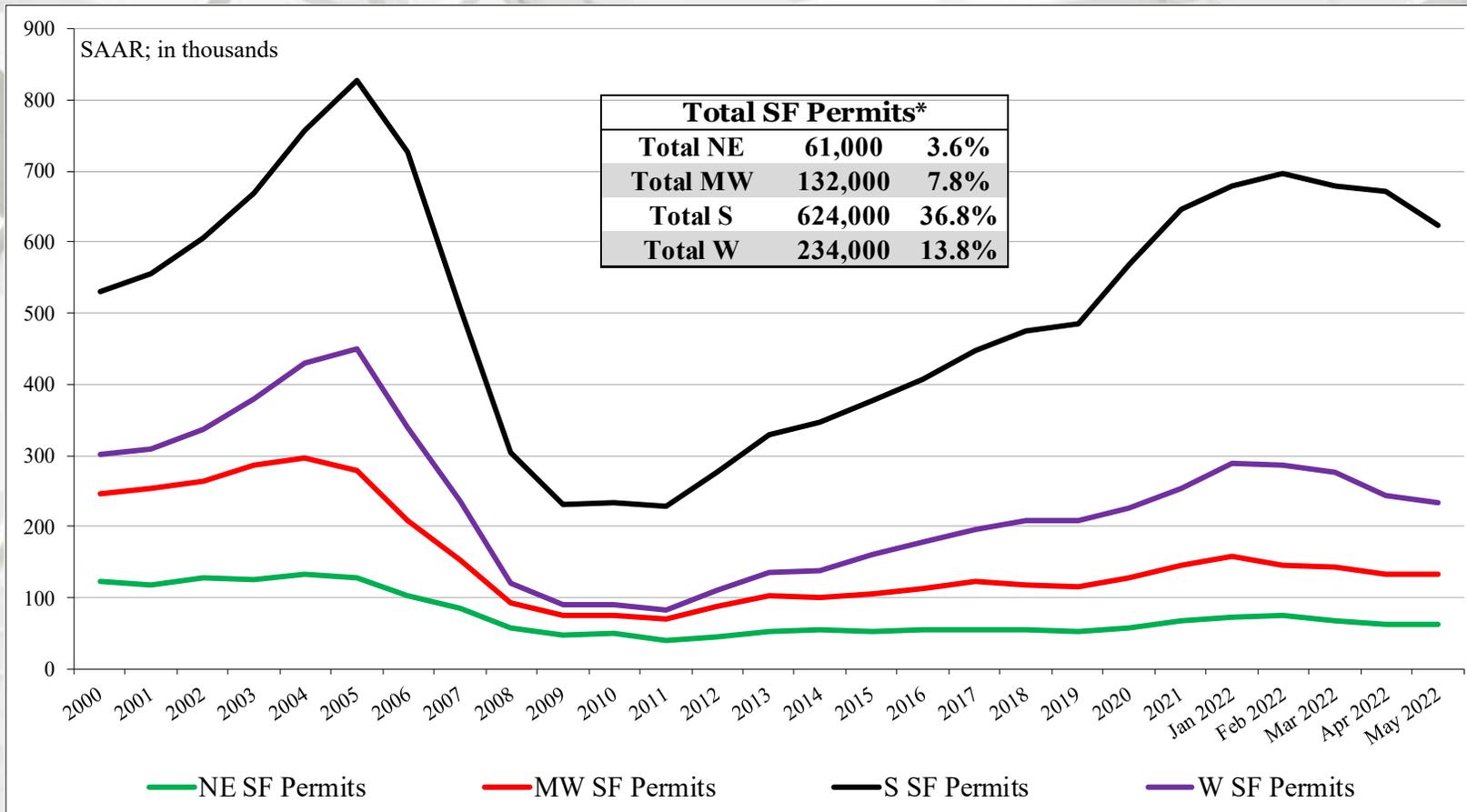
# Total Housing Permits by Region



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

\* Percentage of total permits.

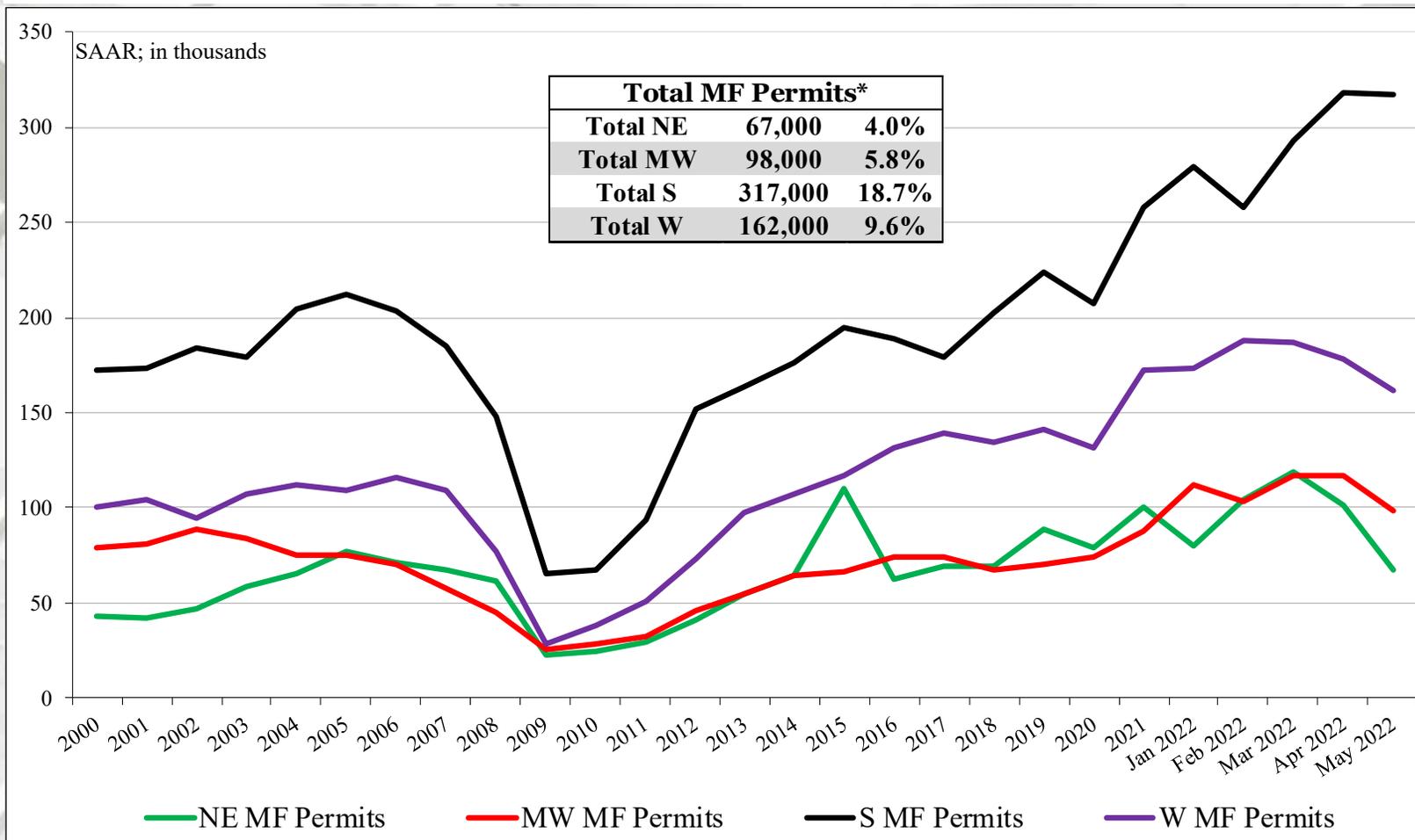
# SF Housing Permits by Region



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.

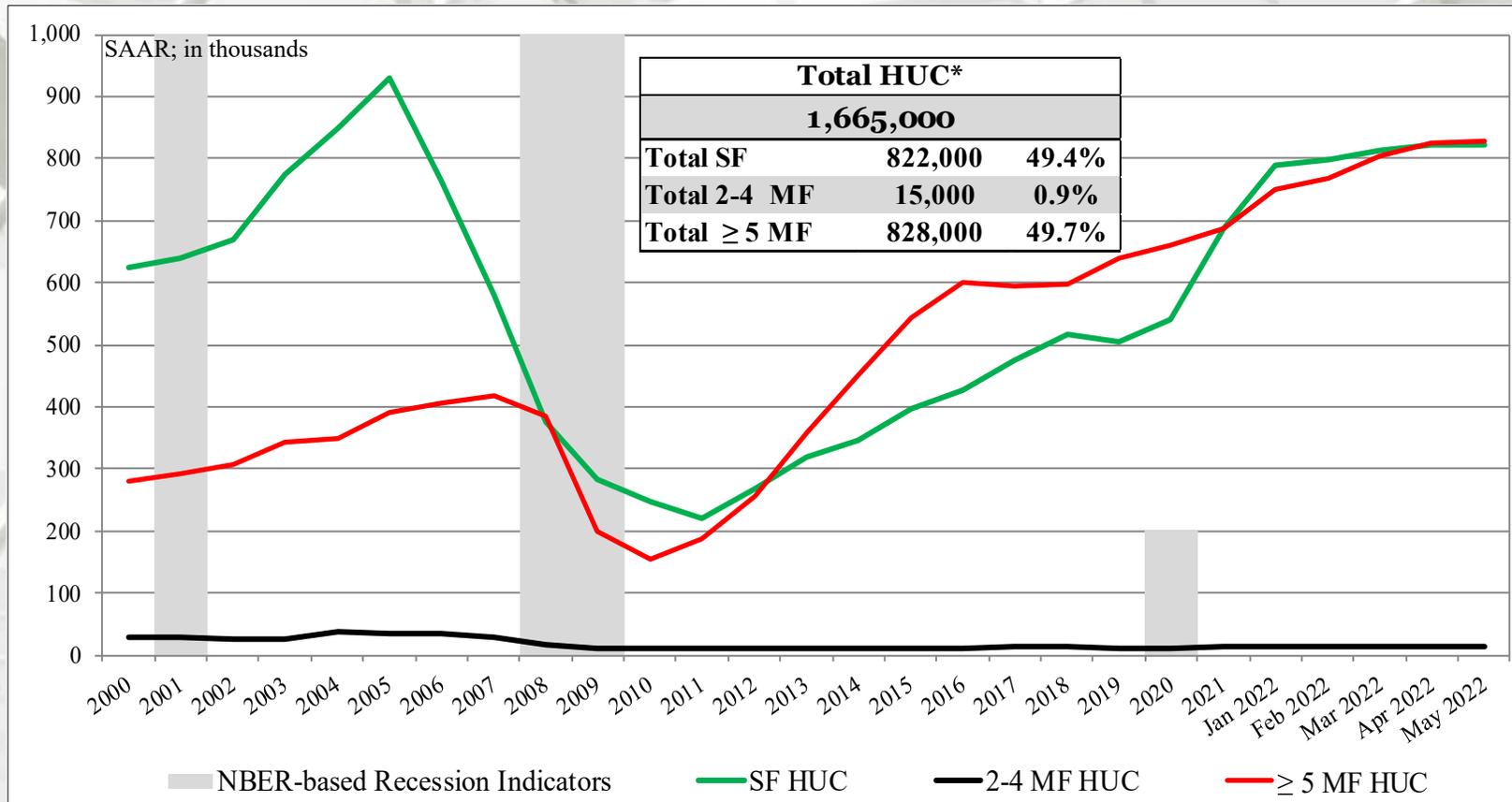
# New Housing Under Construction (HUC)

	Total HUC*	SF HUC	MF 2-4 unit** HUC	MF ≥ 5 unit HUC
May	1,665,000	822,000	15,000	828,000
April	1,659,000	822,000	13,000	824,000
2021	1,339,000	660,000	13,000	666,000
M/M change	0.4%	0.0%	15.4%	0.5%
Y/Y change	24.3%	24.5%	15.4%	24.3%

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

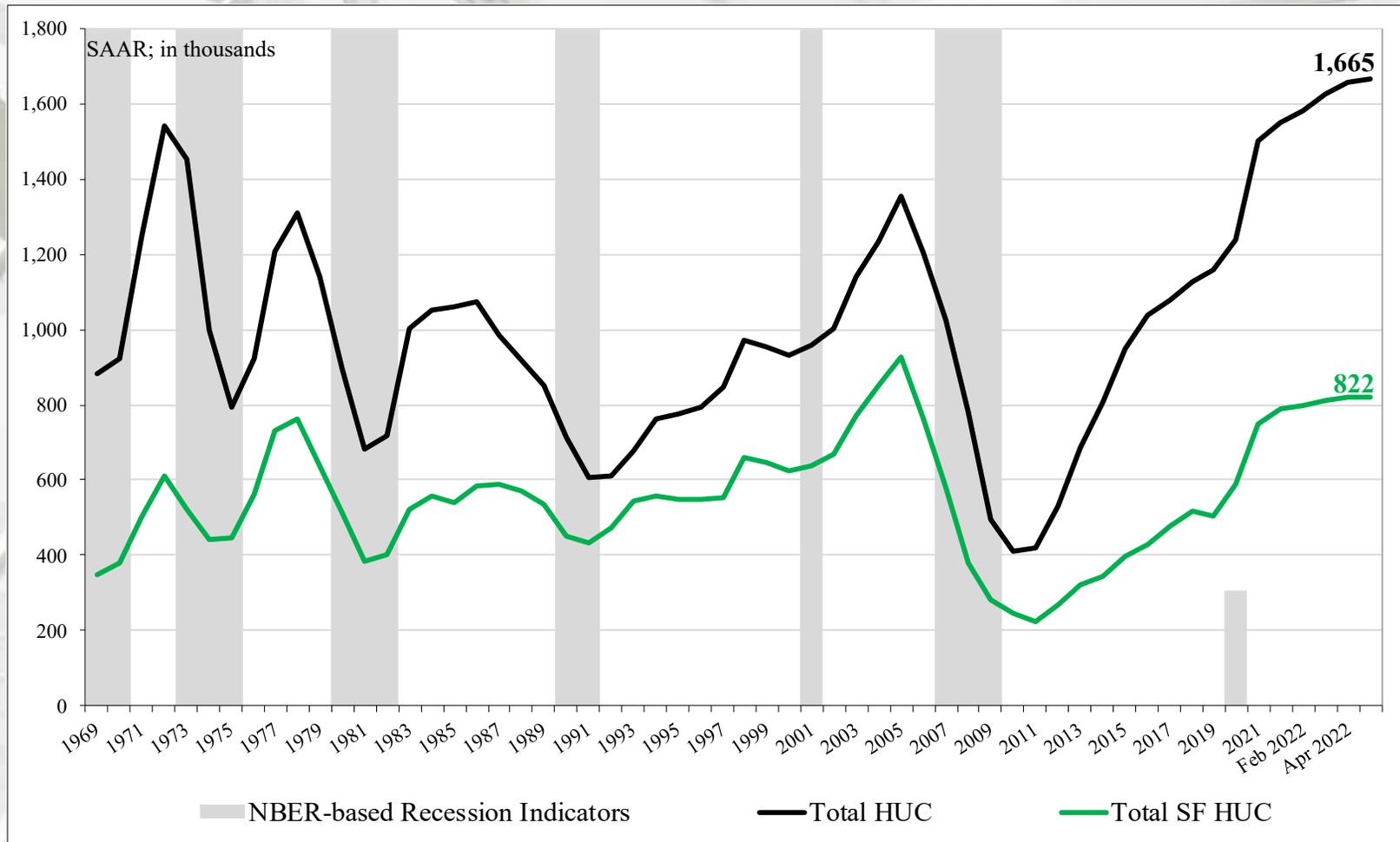


US DOC does not report 2 to 4 multi-family under construction directly, this is an estimation (Total under constructions – (SF +  $\geq 5$  MF HUC)).

\* 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).

# Total Housing Under Construction



In May total housing units under construction (HUC) were 1,665,000 units, the most since May 1973: 1,628,000 units. May's SF HUC reading, 822,000 units, was substantially less than reported for May 2006 (929,000 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>
May	215,000	60,000	155,000
April	212,000	61,000	151,000
2021	197,000	60,000	128,000
M/M change	1.4%	-1.6%	2.6%
Y/Y change	9.1%	0.0%	21.1%
	<b>MW Total</b>	<b>MW SF</b>	<b>MW MF</b>
May	222,000	115,000	107,000
April	217,000	115,000	102,000
2021	172,000	97,000	75,000
M/M change	2.3%	0.0%	4.9%
Y/Y change	29.1%	18.6%	42.7%

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).

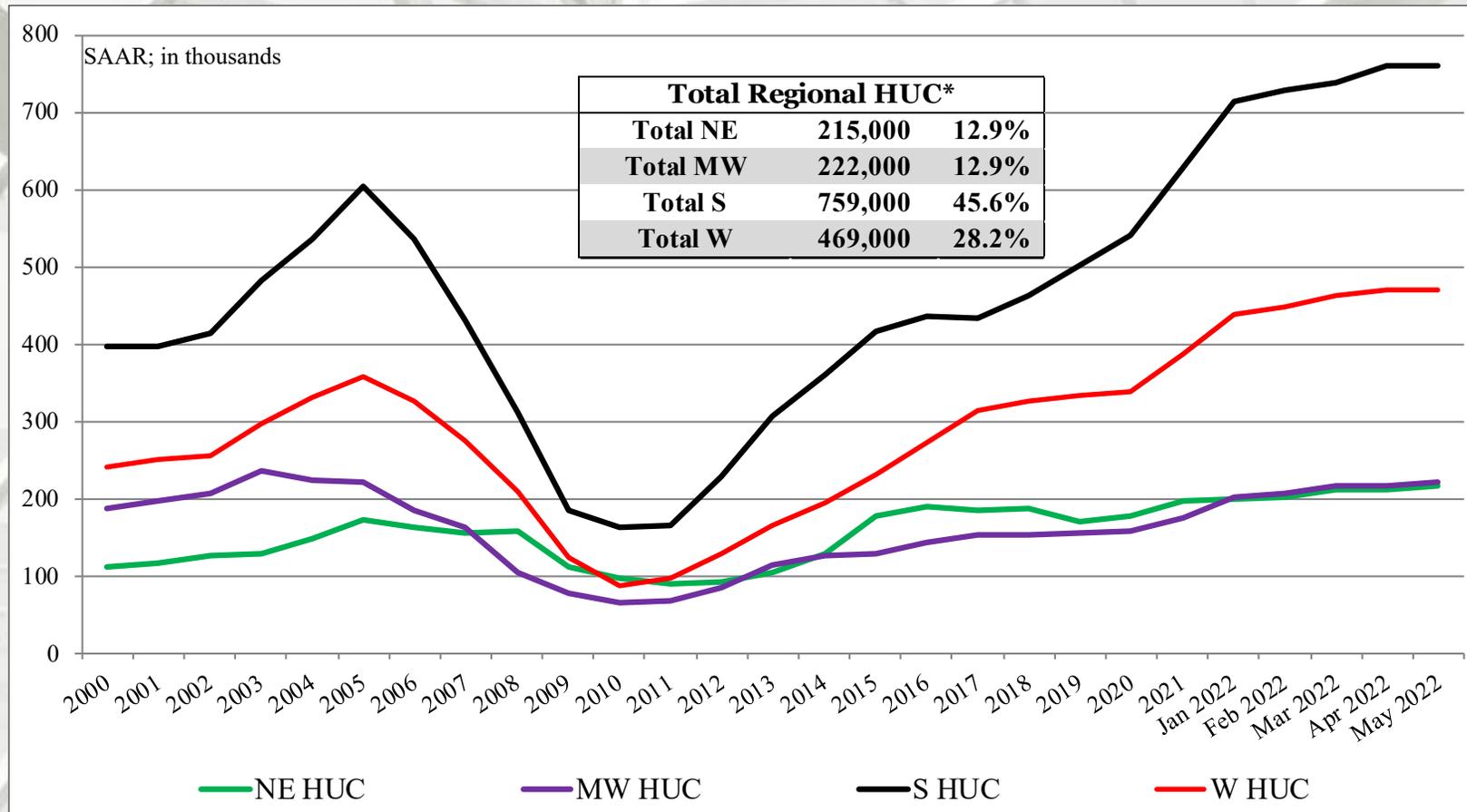
# New Housing Under Construction by Region

	<b>S Total</b>	<b>S SF</b>	<b>S MF**</b>
May	759,000	433,000	326,000
April	761,000	432,000	329,000
2021	596,000	324,000	272,000
M/M change	-0.3%	0.2%	-0.9%
Y/Y change	27.3%	33.6%	19.9%
	<b>W Total</b>	<b>W SF</b>	<b>W MF</b>
May	469,000	214,000	255,000
April	469,000	214,000	255,000
2021	374,000	179,000	195,000
M/M change	0.0%	0.0%	0.0%
Y/Y change	25.4%	19.6%	30.8%

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

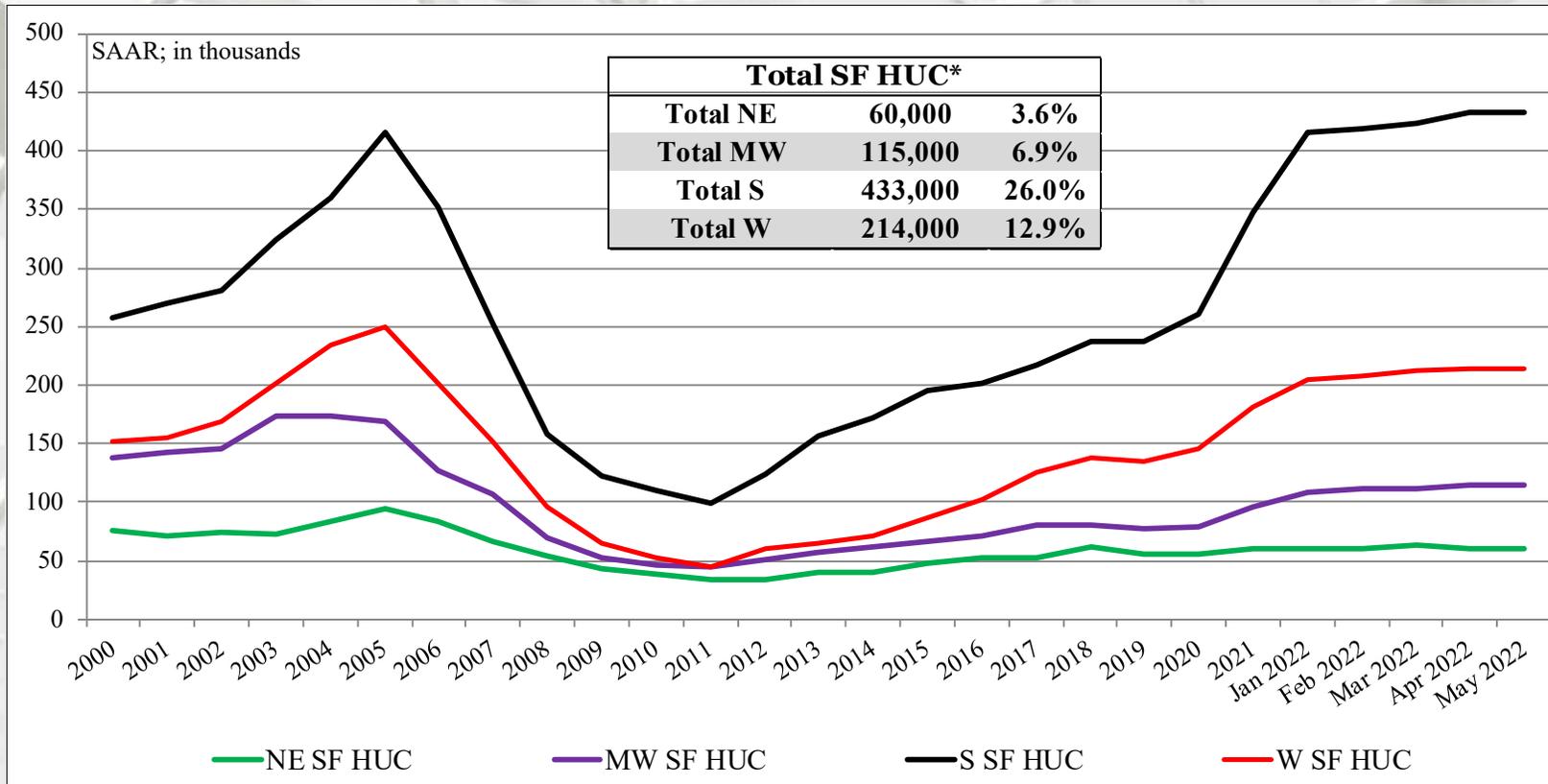


NE = Northeast, MW = Midwest, S = South, W = West

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

\* Percentage of total housing under construction units.

# SF Housing Under Construction by Region

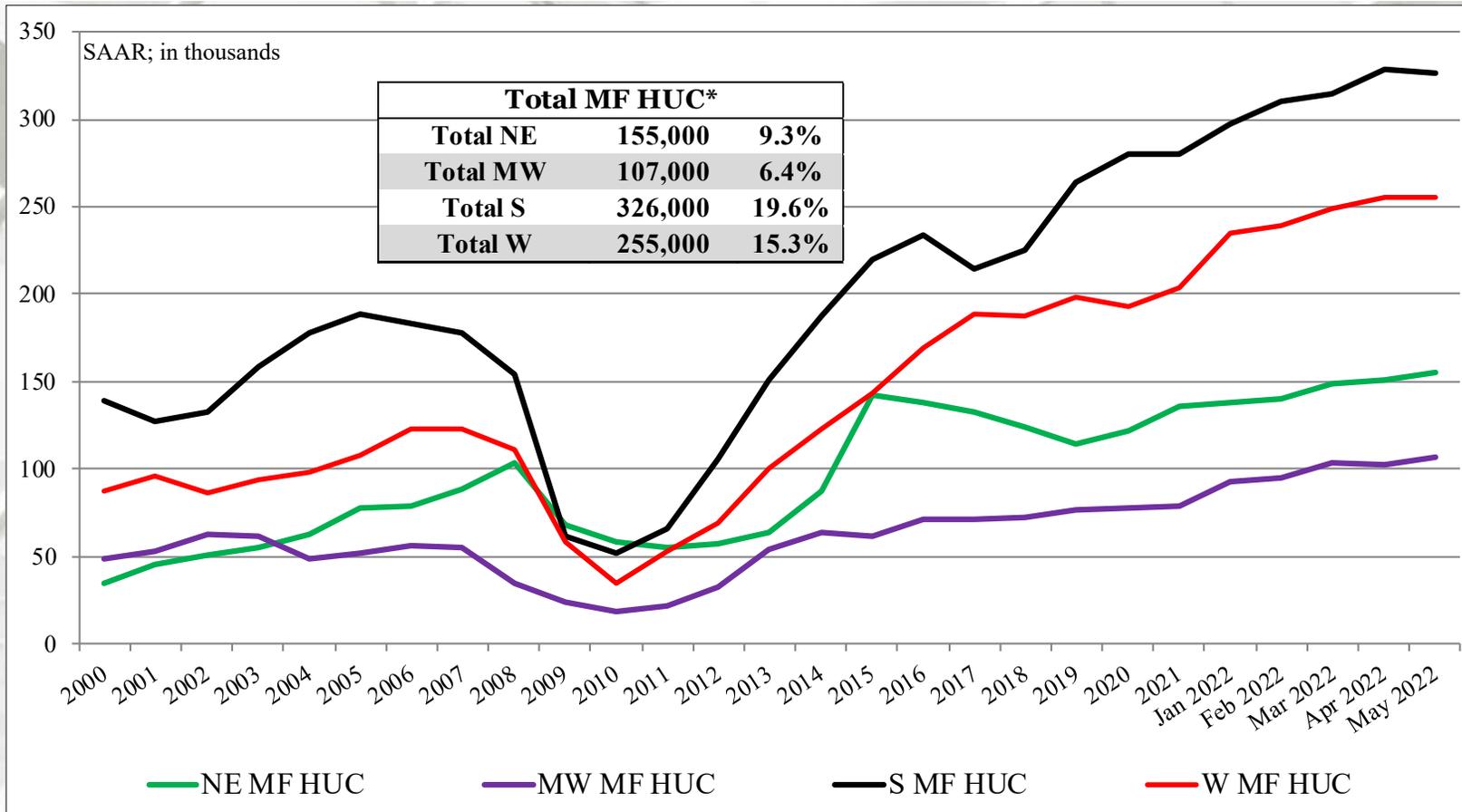


NE = Northeast, MW = Midwest, S = South, W = West.

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

\* Percentage of total housing under construction units.

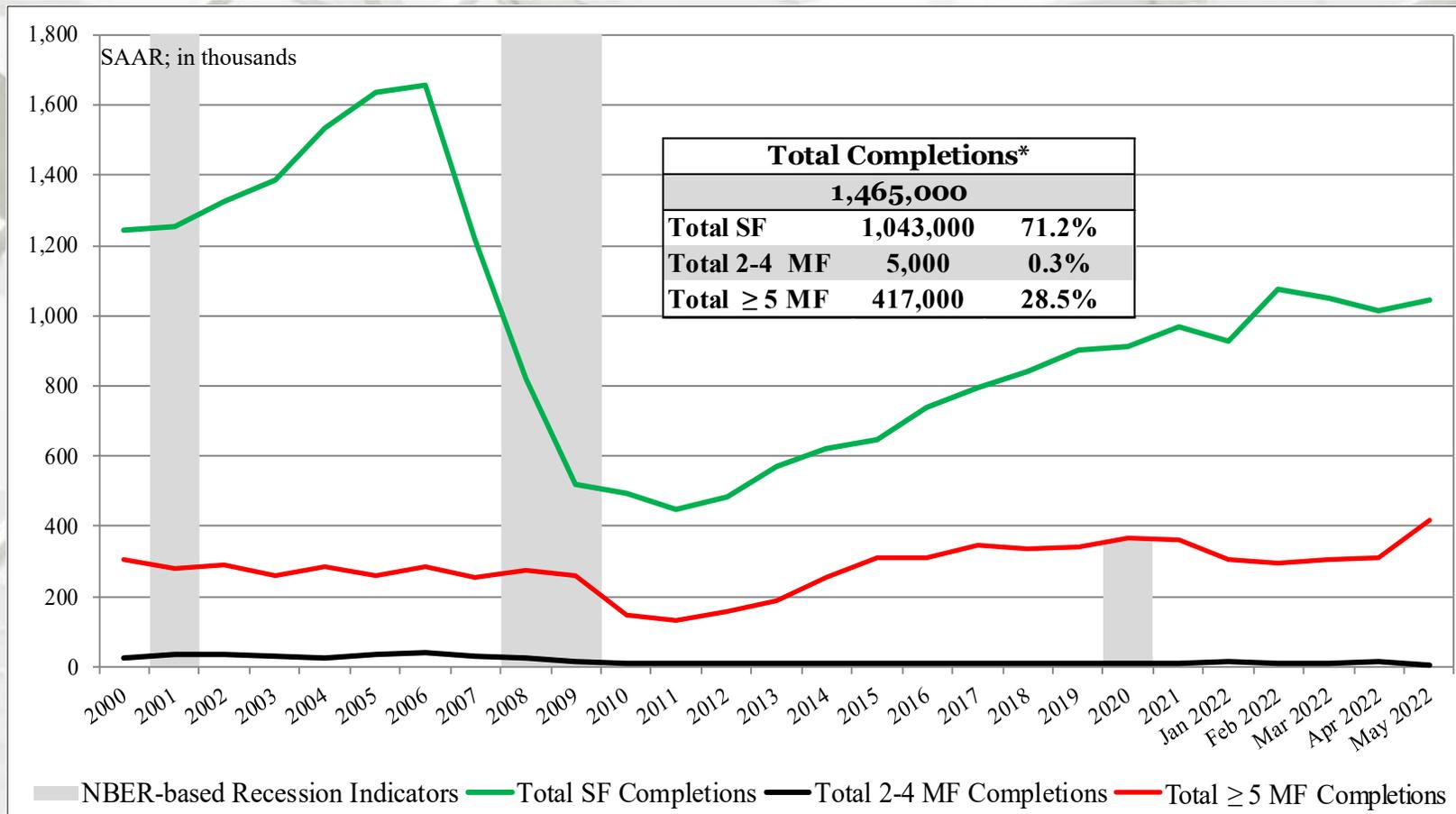
# New Housing Completions

	Total Completions*	SF Completions	MF 2-4 unit**	MF ≥ 5 unit Completions
May	1,465,000	1,043,000	5,000	417,000
April	1,343,000	1,015,000	15,000	313,000
2021	1,340,000	961,000	5,000	374,000
M/M change	9.1%	2.8%	-66.7%	33.2%
Y/Y change	9.3%	8.5%	0.0%	11.5%

\* 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**
May	105,000	68,000	37,000
April	97,000	60,000	37,000
2021	72,000	52,000	20,000
M/M change	8.2%	13.3%	0.0%
Y/Y change	45.8%	30.8%	85.0%
	MW Total	MW SF	MW MF
May	162,000	136,000	26,000
April	170,000	117,000	53,000
2021	188,000	119,000	69,000
M/M change	-4.7%	16.2%	-50.9%
Y/Y change	-13.8%	14.3%	-62.3%

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

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

\* Percentage of total housing completions

# New Housing Completions by Region

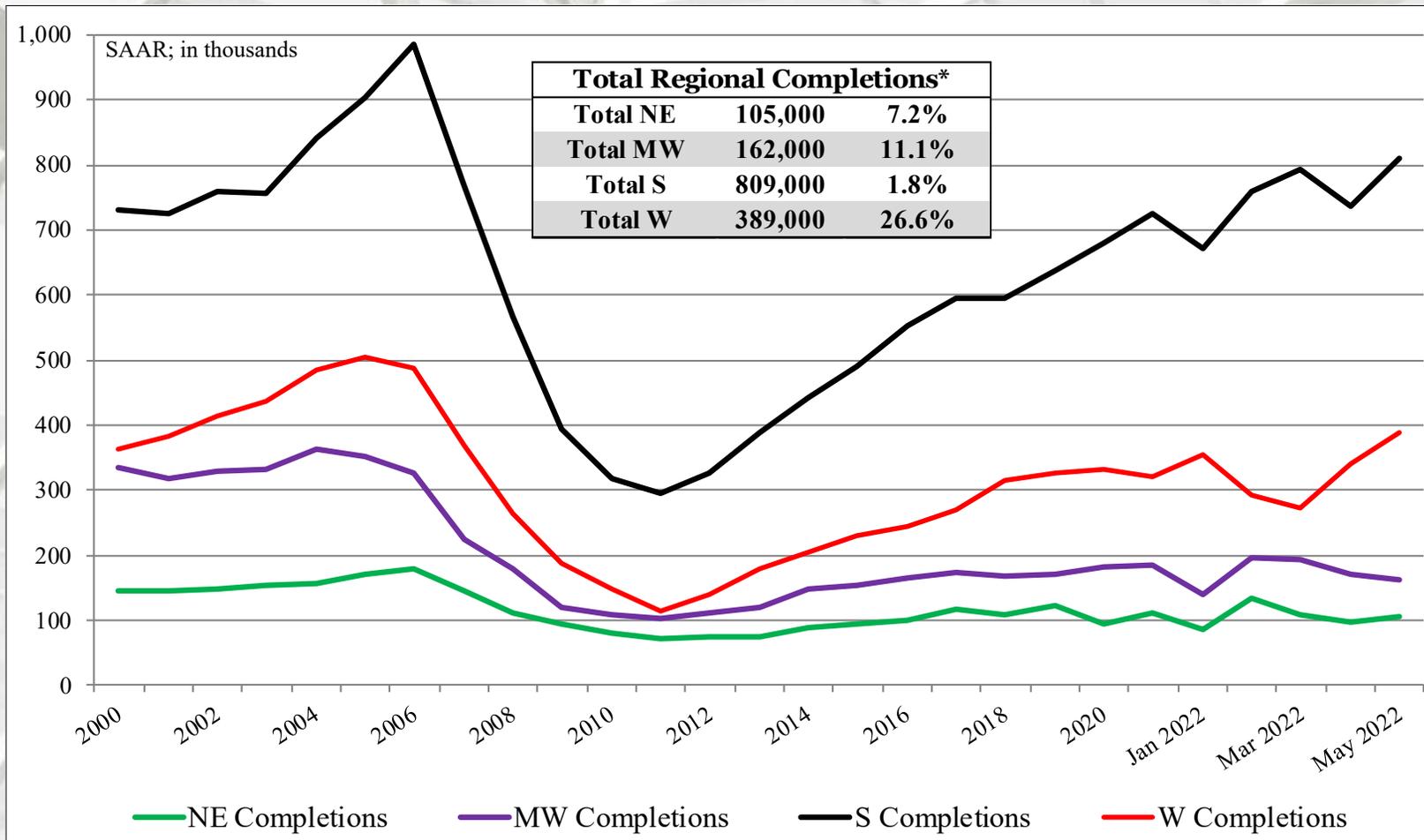
	<b>S Total</b>	<b>S SF</b>	<b>S MF**</b>
May	809,000	587,000	222,000
April	737,000	570,000	167,000
2021	775,000	563,000	212,000
M/M change	9.8%	3.0%	32.9%
Y/Y change	4.4%	4.3%	4.7%
	<b>W Total</b>	<b>W SF</b>	<b>W MF</b>
May	389,000	252,000	137,000
April	339,000	268,000	71,000
2021	305,000	227,000	78,000
M/M change	14.7%	-6.0%	93.0%
Y/Y change	27.5%	11.0%	75.6%

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

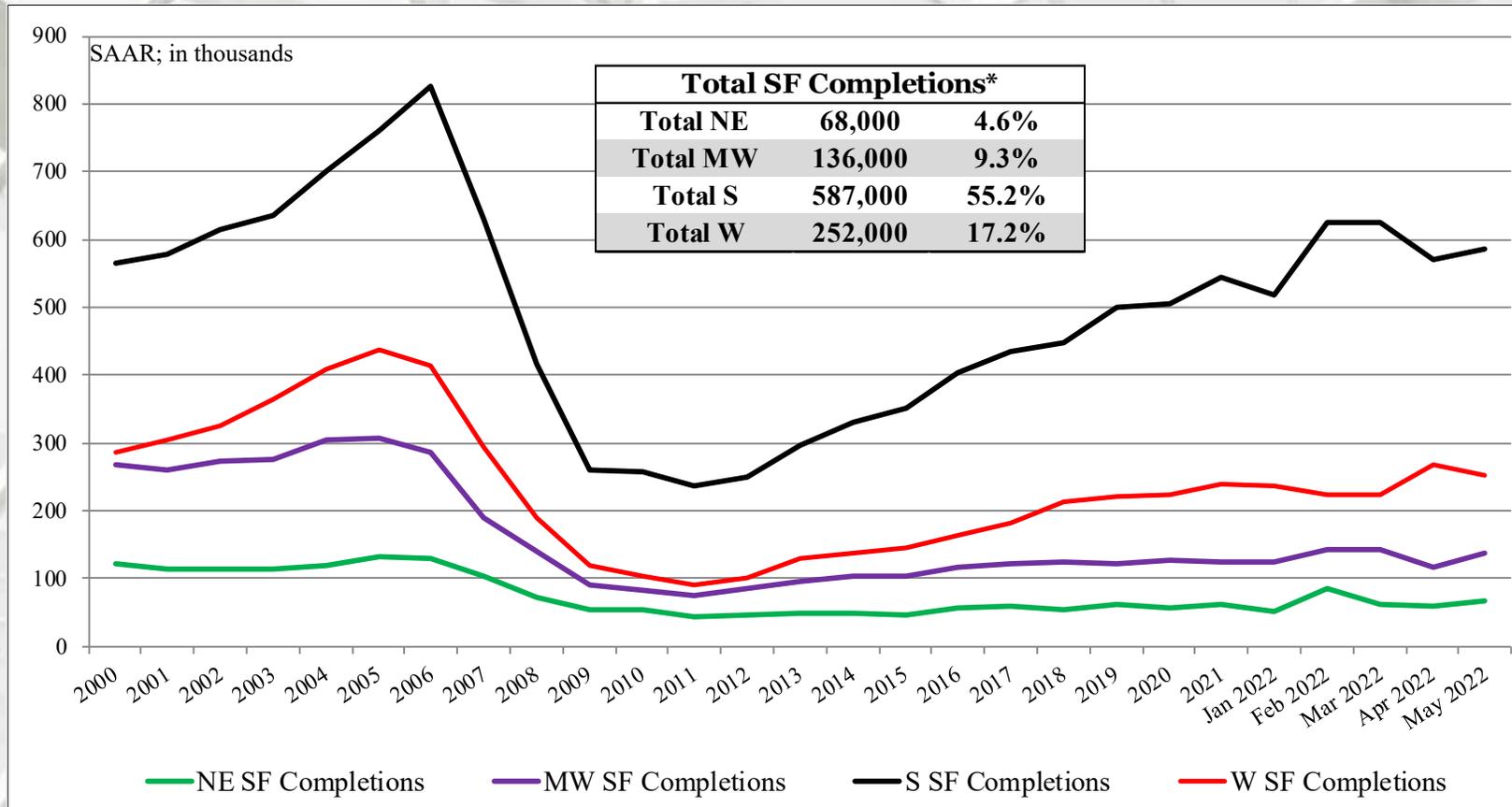
# Total Housing Completions by Region



All data are SAAR; NE = Northeast and MW = Midwest; S = South, W = West

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

# SF Housing Completions by Region

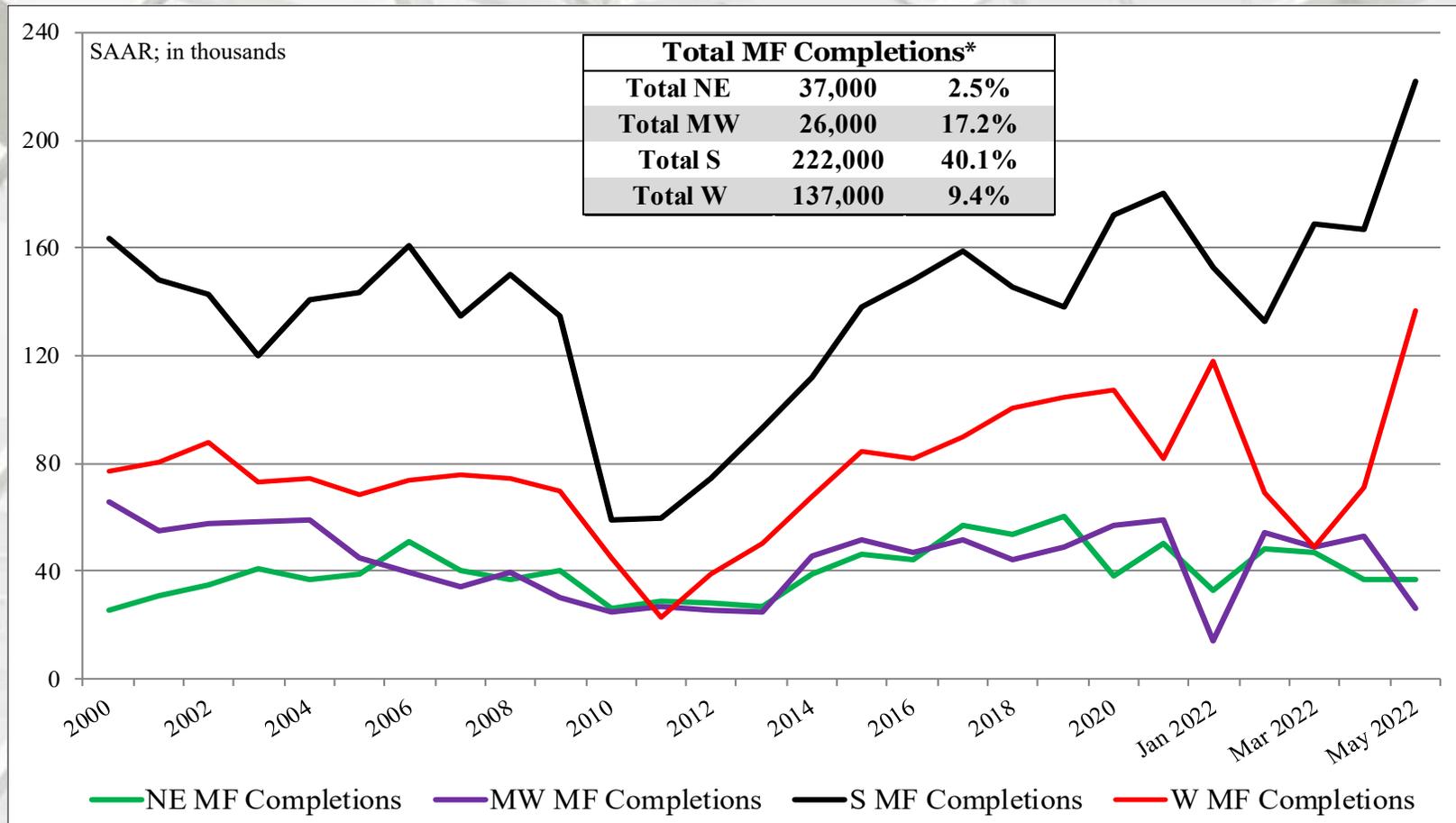


NE = Northeast, MW = Midwest, S = South, W = West

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

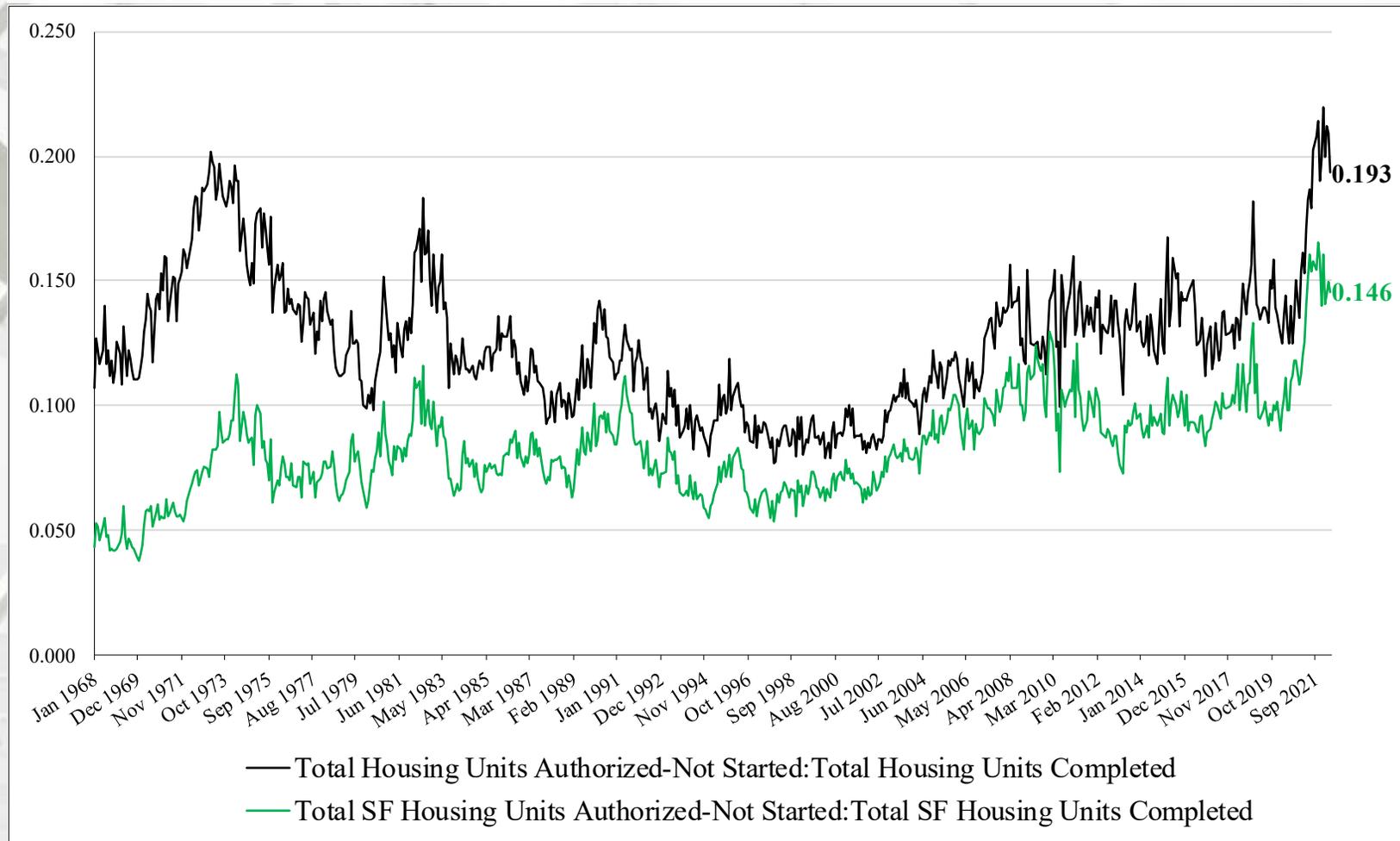


NE = Northeast, MW = Midwest, S = South, W = West

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

# Ratio of Housing Units Authorized & Not Started to Housing Units Completed: M/M



## Authorized, Not Started vs. Housing Completions

The ratio of SF houses authorized-not started to SF completed was less than the greatest in the history of this data series (0.165 – October 2021). Authorized units not started increased to 283,000 in May.

The primary reason is manufacturing supply chain disruptions – ranging from appliances to windows; labor, logistics, and local building regulations.

# New Single-Family House Sales

	New SF Sales*	Median Price	Mean Price	Month's Supply
May	696,000	\$449,000	\$511,400	7.7
April	629,000	\$454,700	\$569,500	8.3
2021	740,000	\$390,400	\$445,300	5.4
M/M change	10.7%	-1.3%	-10.2%	-7.2%
Y/Y change	-5.9%	15.0%	14.8%	42.6%

\* 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>.

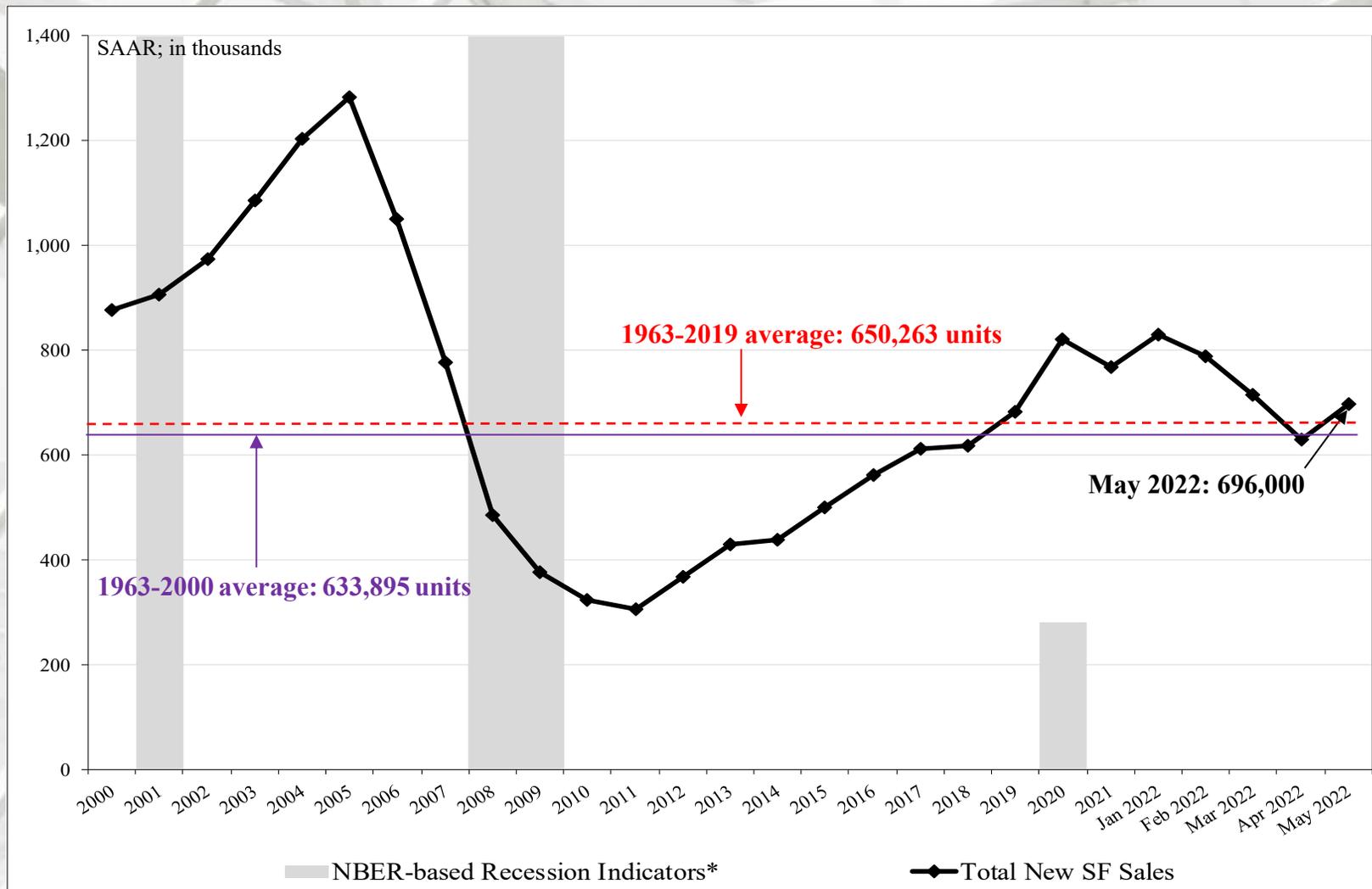
New SF sales were substantially greater than the consensus forecast<sup>3</sup> of 588 m. The past three month's new SF sales data also were revised:

February initial: 772 m, revised to 790 m.

March initial: 763 m, revised to 715 m.

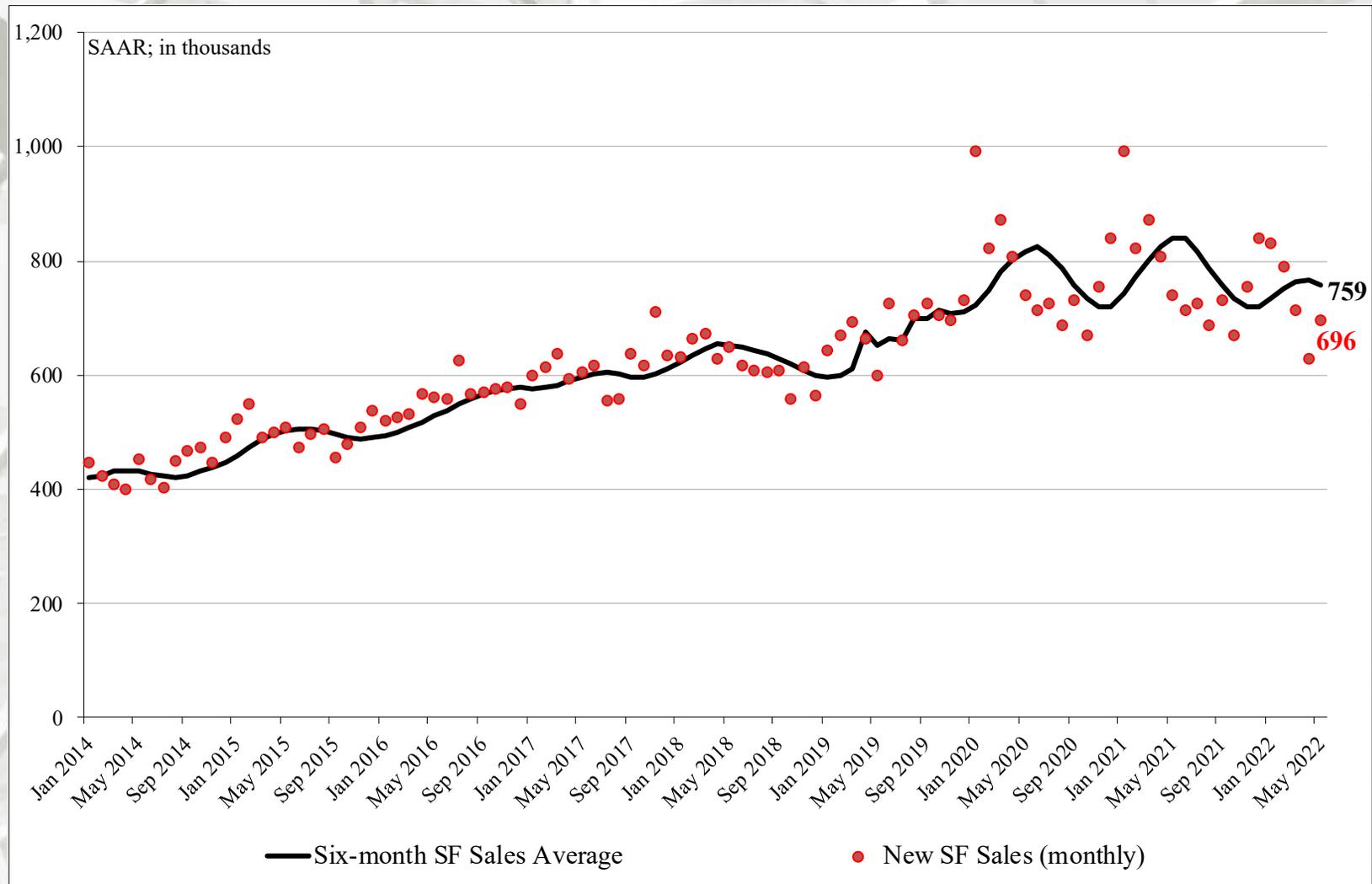
April initial: 591 m, revised to 629 m.

# 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			
May	23,000	58,000	413,000	202,000			
April	47,000	71,000	366,000	145,000			
2021	40,000	92,000	407,000	201,000			
M/M change	-51.1%	-18.3%	12.8%	39.3%			
Y/Y change	-42.5%	-37.0%	1.5%	0.5%			
	\$150 - ≤ \$150m	\$200 - \$199.9m 299.9m	\$300 - \$399.9m	\$400 - \$499.9m	\$500 - \$749.9m	≥ \$750m	
May <sup>1,2,3,4</sup>	500	500	6,000	18,000	16,000	14,000	9,000
April	500	500	5,000	14,000	14,000	15,000	8,000
2021	500	1,000	14,000	19,000	14,000	11,000	6,000
M/M change	0.0%	0.0%	-37.5%	-36.4%	16.7%	-16.7%	0.0%
Y/Y change	-50.0%	-50.0%	-70.6%	-41.7%	27.3%	0.0%	60.0%
New SF sales: %	0.8%	0.8%	9.5%	28.6%	25.4%	22.2%	14.3%

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 May not add to total because of rounding.

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

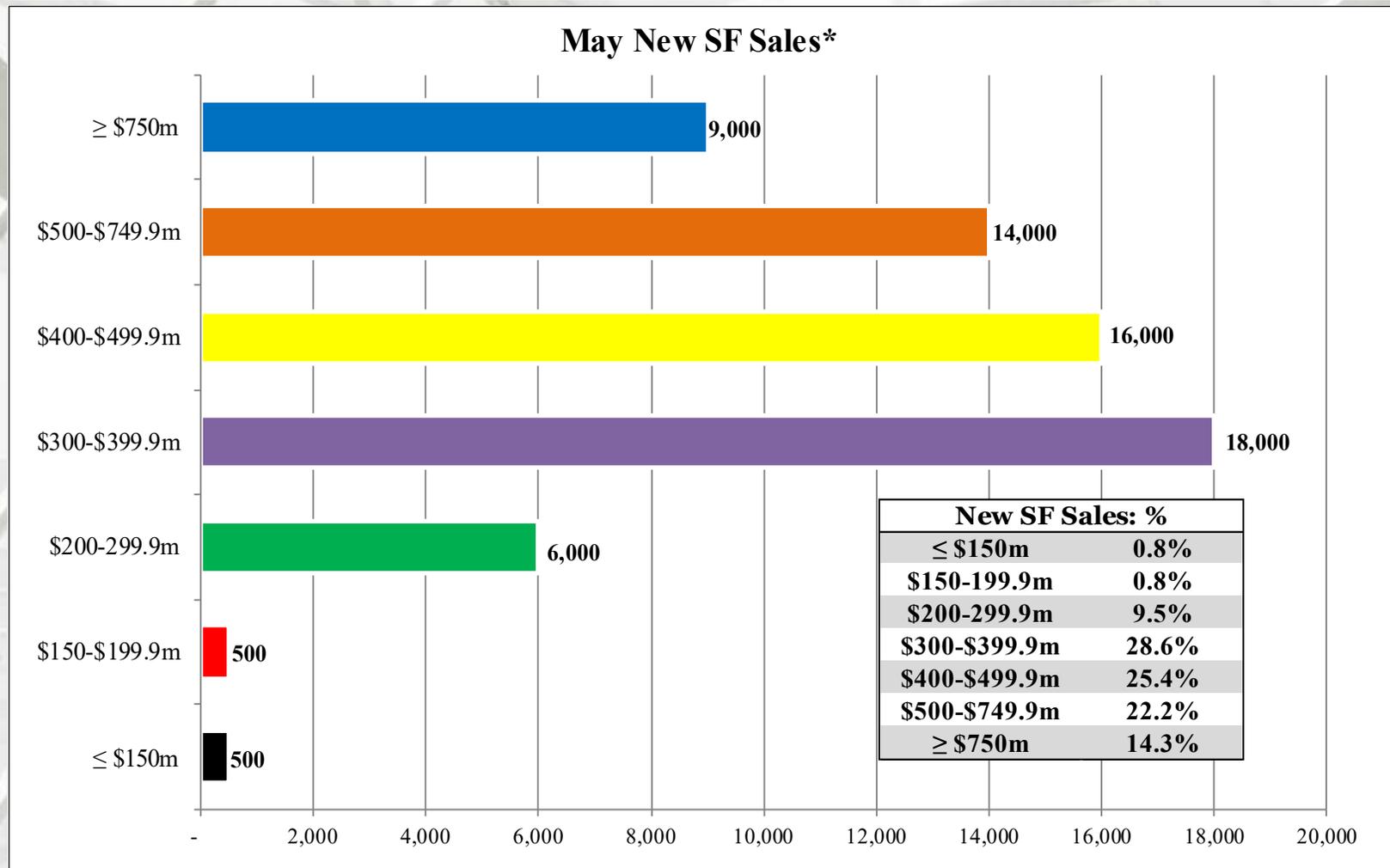
<sup>5</sup> Z = Less than 500 units or less than 0.5 percent

Sources: <sup>1,2,3</sup> <https://www.census.gov/construction/nrs/index.html>; 6/24/22;

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

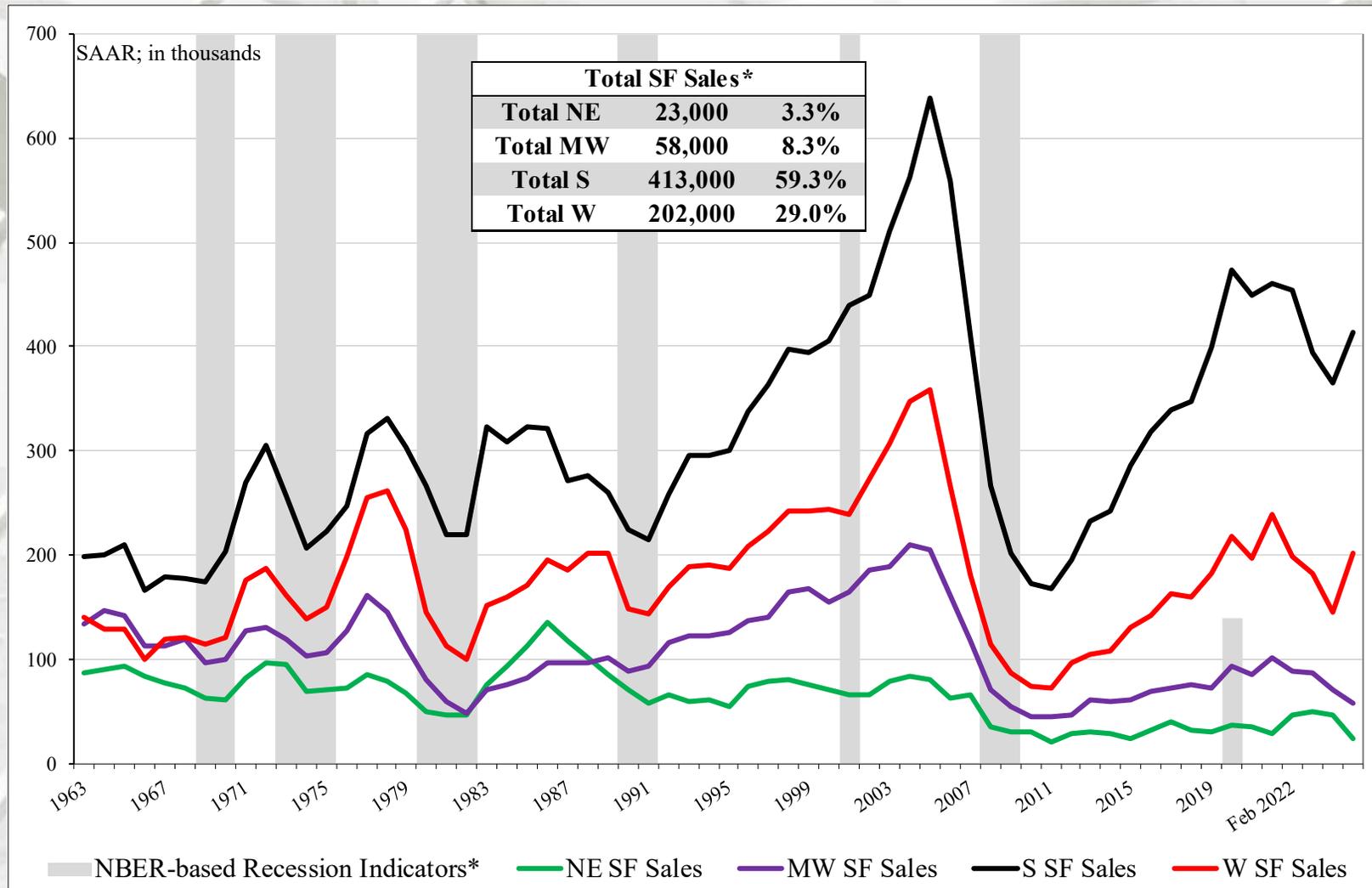
[Return TOC](#)

# New SF House Sales



\* Total new sales by price category and percent.

# New SF House Sales by Region

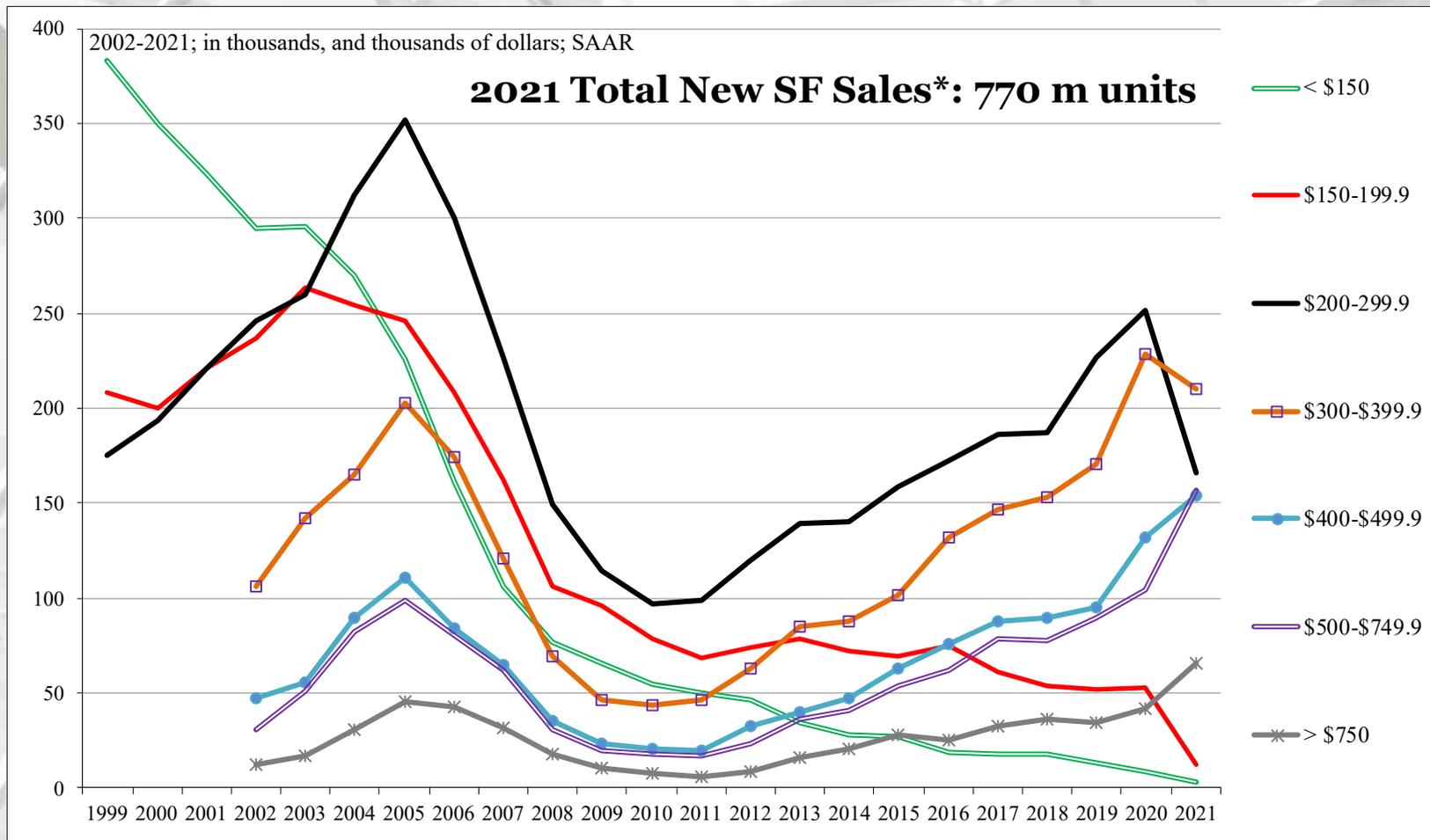


NE = Northeast; MW = Midwest; S = South; W = West

\* Percentage of total new sales.

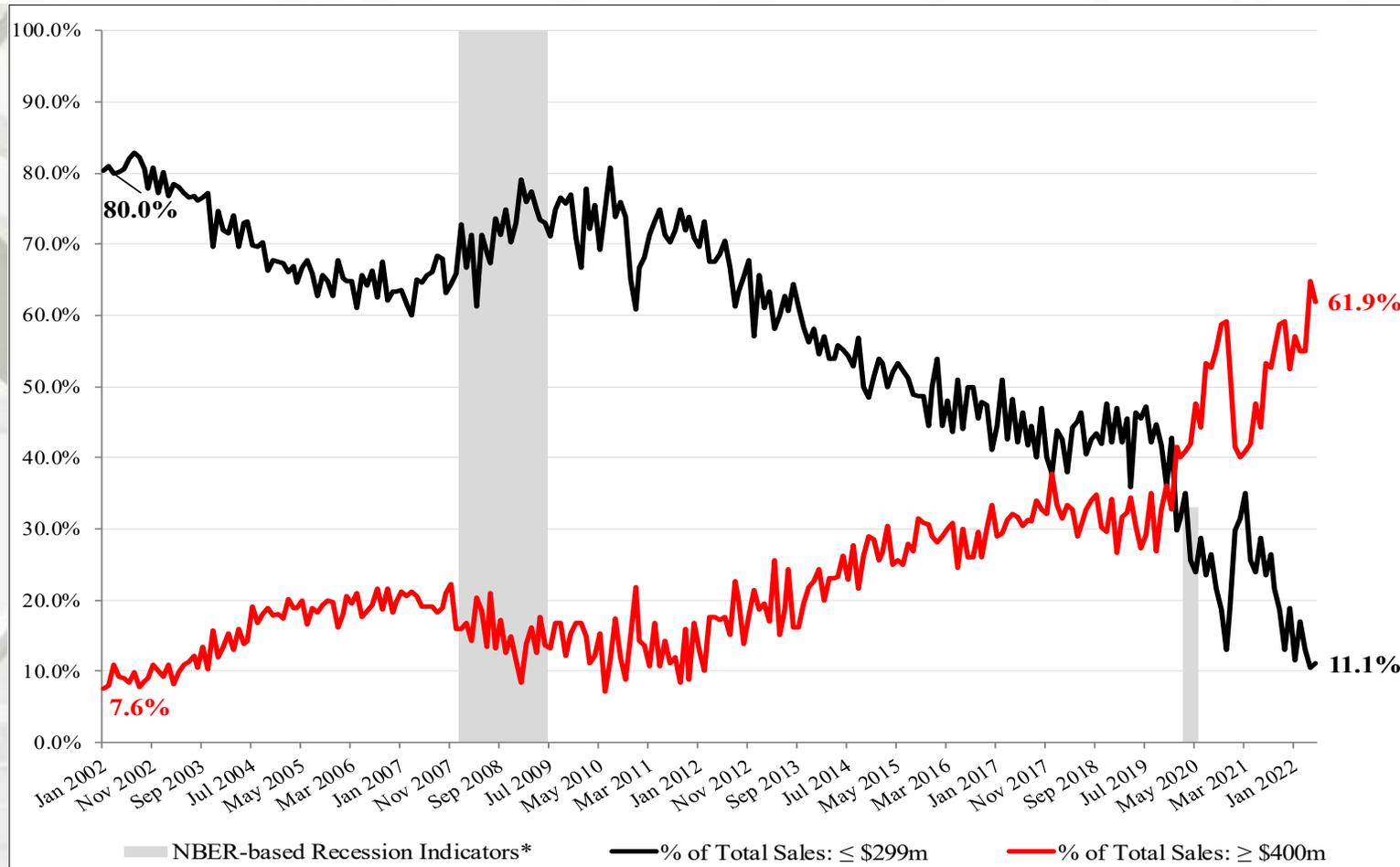
\* NBER based Recession Indicator Bars for the United States from the Period following the Peak through the Trough (FRED, St. Louis).

# New SF House Sales by Price Category



\* Sales tallied by price category, nominal dollars.

# New SF House Sales

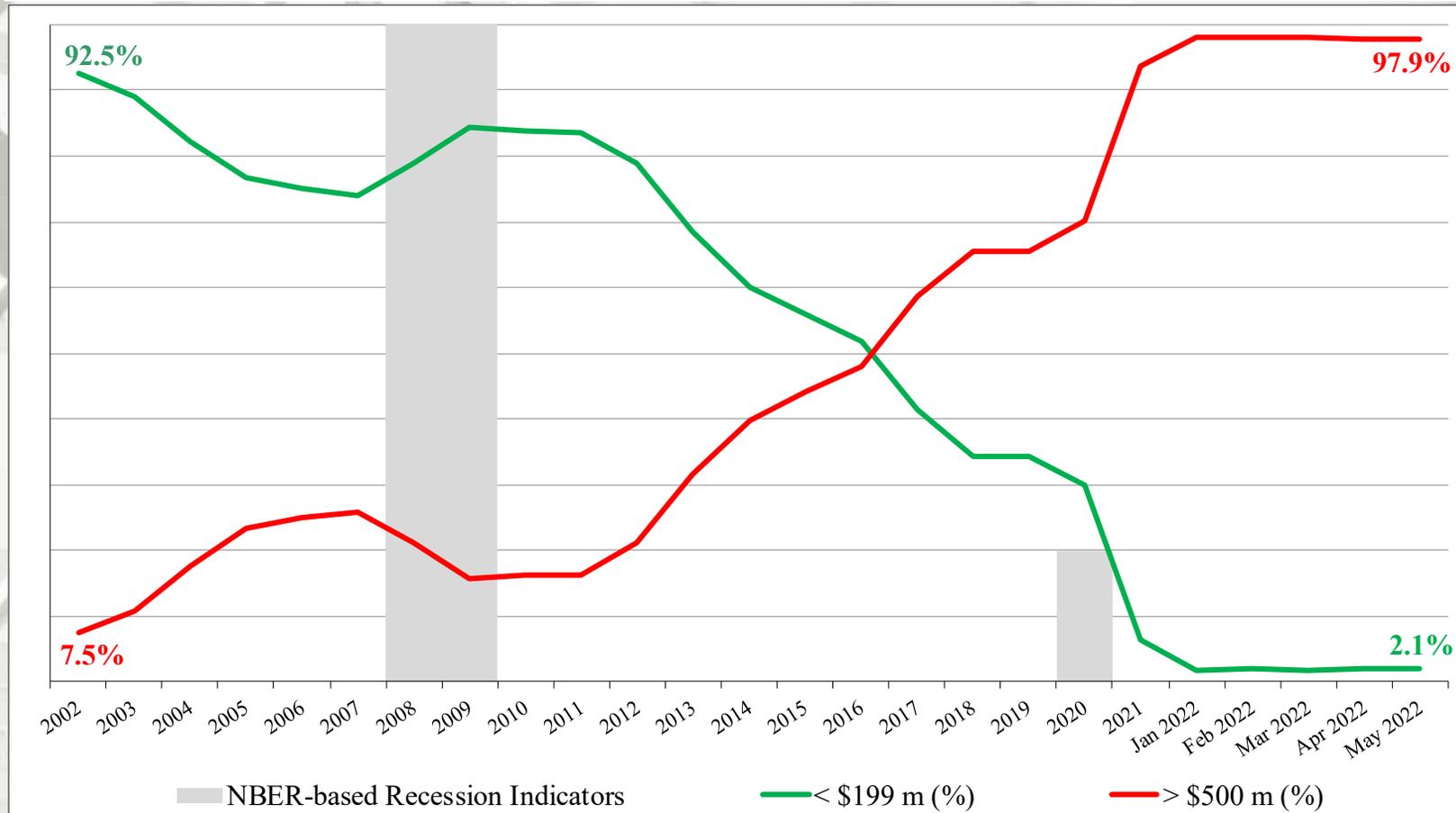


\* NBER based Recession Indicator Bars for the United States from the Period following the Peak through the Trough (FRED, St. Louis).

## New SF Sales: ≤ \$299m and ≥ \$400m: 2002 – May 2022

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

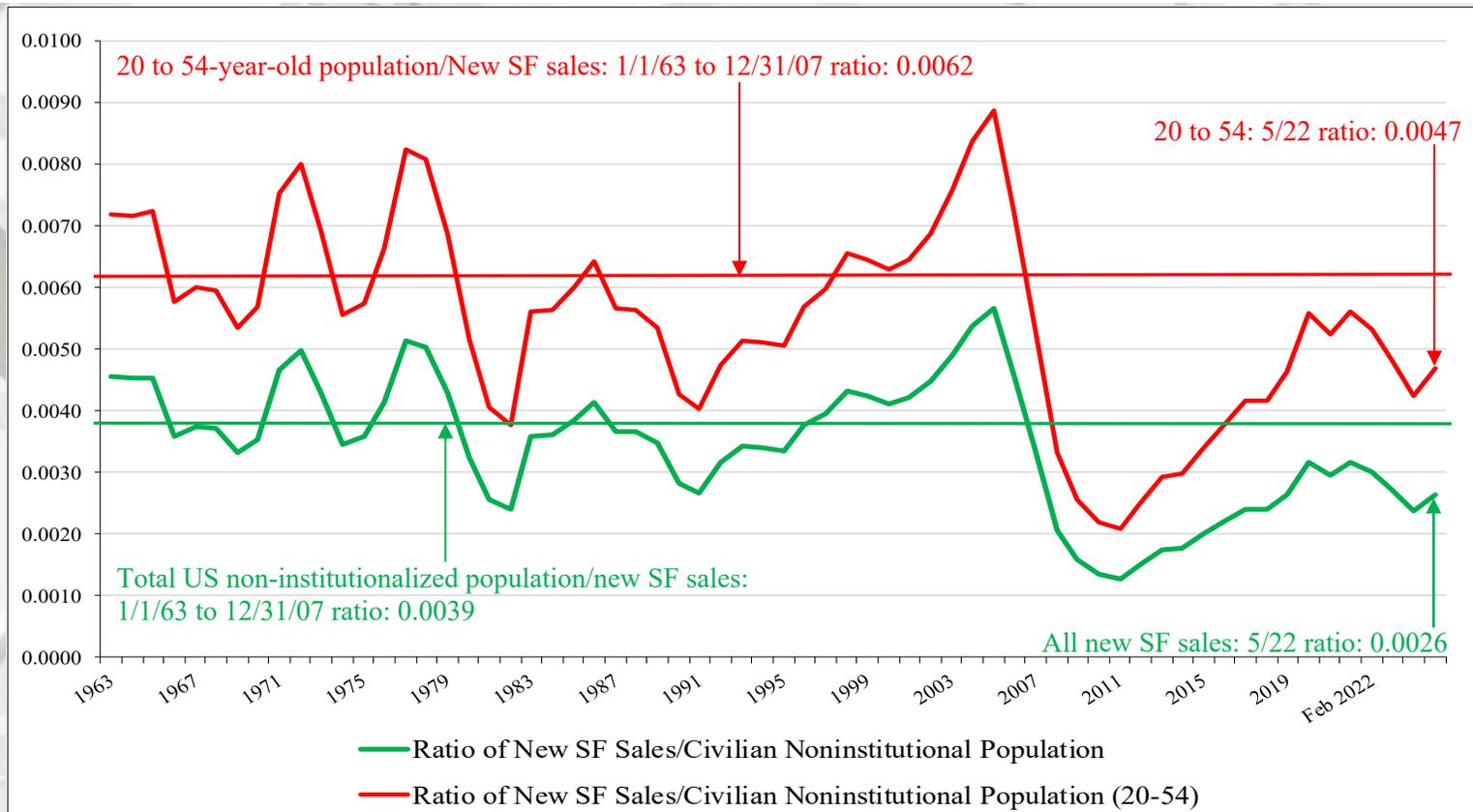


## New SF Sales: ≤ \$ 200m and ≥ \$500m: 2002 to May 2022

The number of ≤ \$200 thousand SF houses has declined dramatically since 2002<sup>1, 2</sup>. Subsequently, from 2012 onward, the ≥ \$500 thousand class has soared (on a percentage basis) in contrast to the ≤ \$200 thousand class. Oft mentioned reasons for this occurrence is builder net margins, affordability, and purchase of new houses for rent – single-family rentals.

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

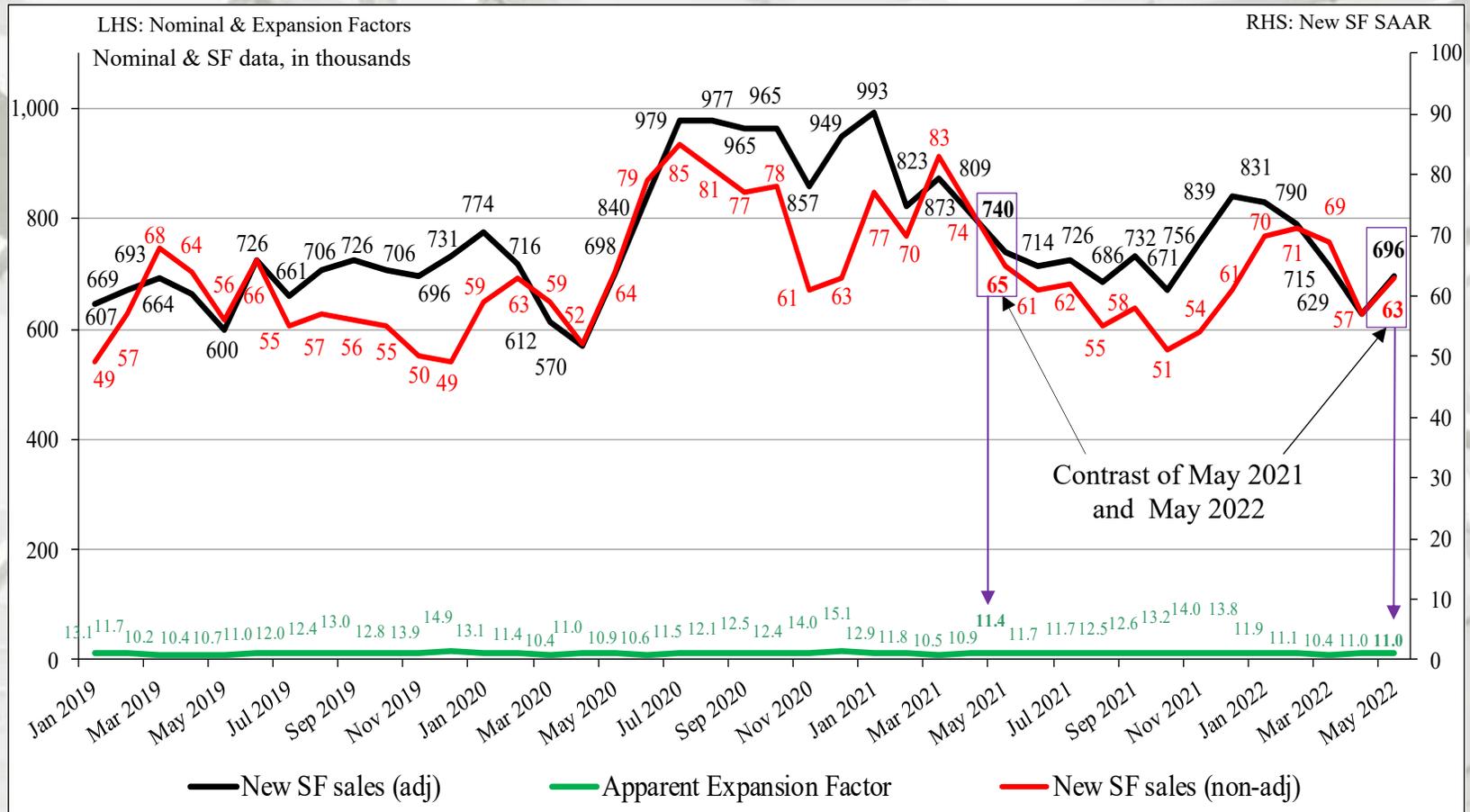


## New SF sales adjusted for the US population

From May 1963 to July 2007, the long-term ratio of new house sales to the total US non-institutionalized population was 0.0039; in May 2022 it was 0.0026 – an increase from April (0.0024). The non-institutionalized population, aged 20 to 54 long-term ratio is 0.0048; in May 2022 it was 0.0047 – also an increase from April (0.0042). All are non-adjusted data. From a non-institutionalized population world view, new sales remain less than the long-term average.

However, on a long-term basis, some studies peg normalized long-term demand at 900,000 to 1,000,000 new SF house sales per year beginning in 2025 through 2050.

# 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

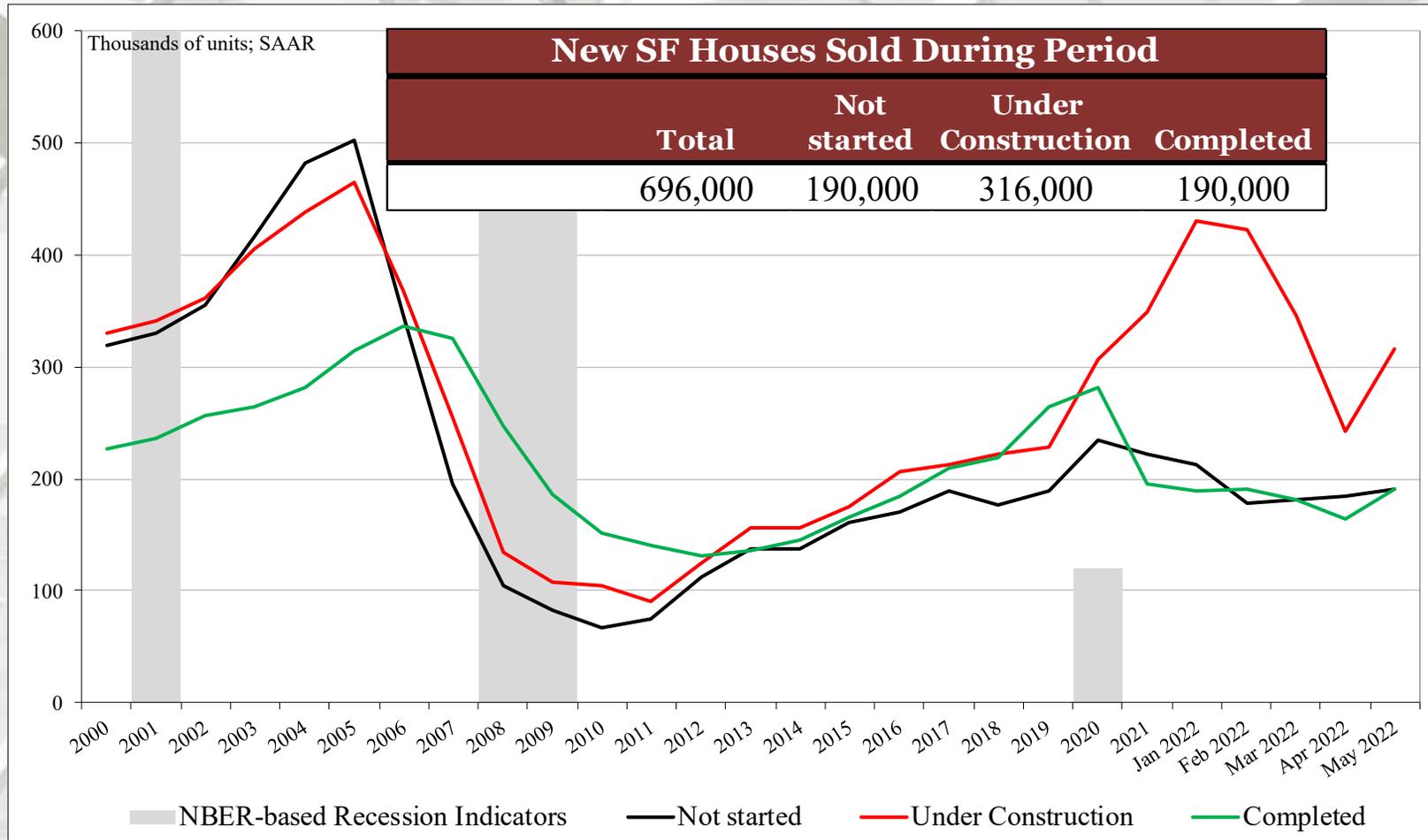
# New SF House Sales

## New SF Houses Sold During Period

	Total	Not started	Under Construction	Completed
May	696,000	190,000	316,000	190,000
April	591,000	185,000	242,000	164,000
2021	740,000	232,000	329,000	179,000
M/M change	17.8%	2.7%	30.6%	15.9%
Y/Y change	-5.9%	-18.1%	-4.0%	6.1%
Total percentage		27.3%	45.4%	27.3%

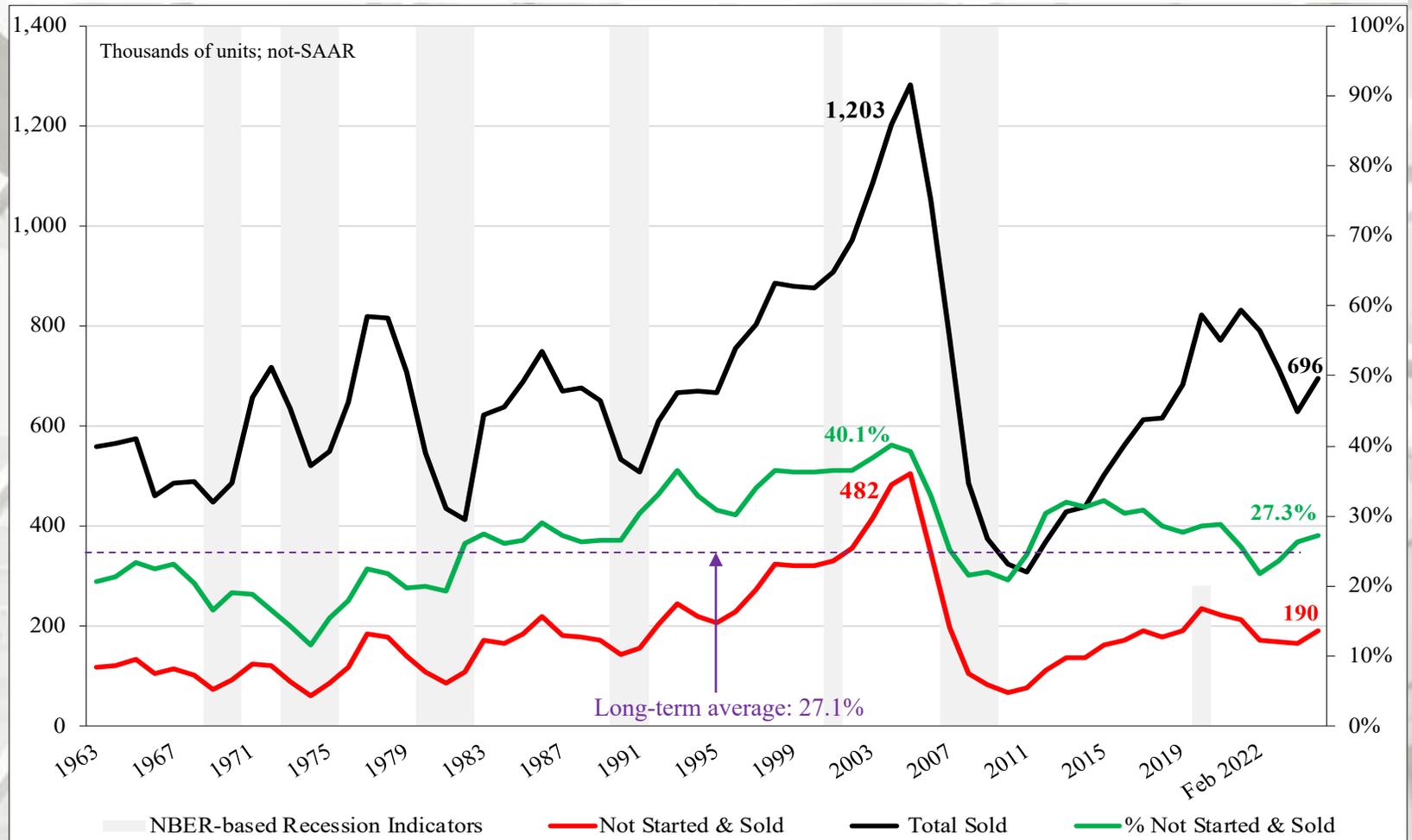
SAAR

# 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 House Sales: Percentage Not Started & Sold During Period



Of the new houses sold in May (591 m), 31.3% (185 m) had not been started. The long-term average is 27.1%.

\* 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

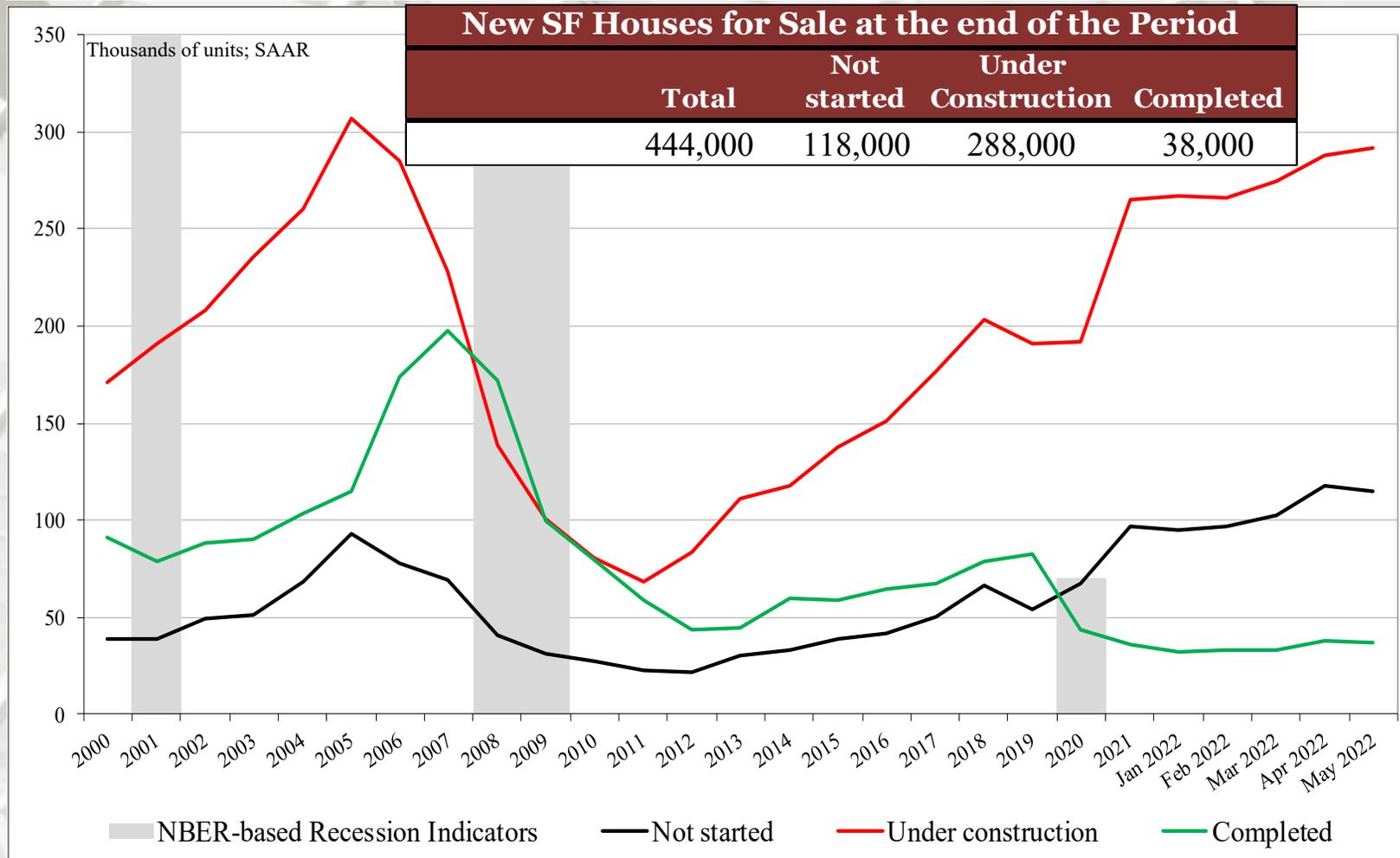
## New SF Houses for Sale at the end of the Period

	Total	Not started	Under Construction	Completed
May	444,000	115,000	292,000	37,000
April	444,000	118,000	288,000	38,000
2021	330,000	90,000	208,000	32,000
M/M change	0.0%	-2.5%	1.4%	-2.6%
Y/Y change	34.5%	27.8%	40.4%	15.6%
<b>Total percentage</b>		<b>25.9%</b>	<b>65.8%</b>	<b>8.3%</b>

Not SAAR

Of houses listed for sale (444 m) in May, 8.3% (37 m) have been built. In the 'ground had not been broken for construction' or 'not started' category, 118 m (25.6%) were sold.

# 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).

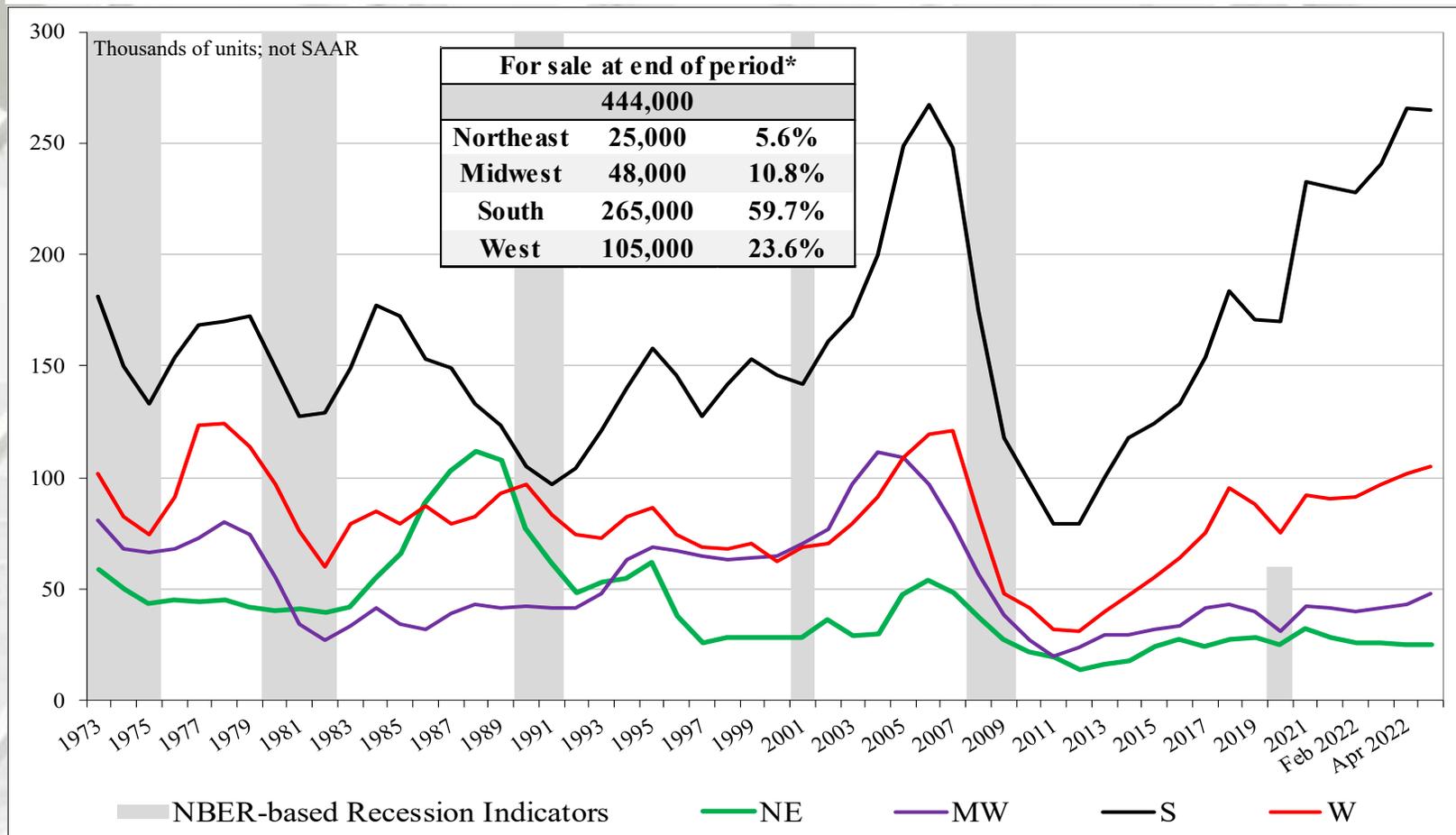
# New SF House Sales

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

	Total	NE	MW	S	W
May	444,000	25,000	48,000	265,000	105,000
April	437,000	25,000	43,000	266,000	102,000
2021	327,000	25,000	30,000	186,000	85,000
M/M change	1.6%	0.0%	11.6%	-0.4%	2.9%
Y/Y change	35.8%	0.0%	60.0%	42.5%	23.5%

\* Not SAAR

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

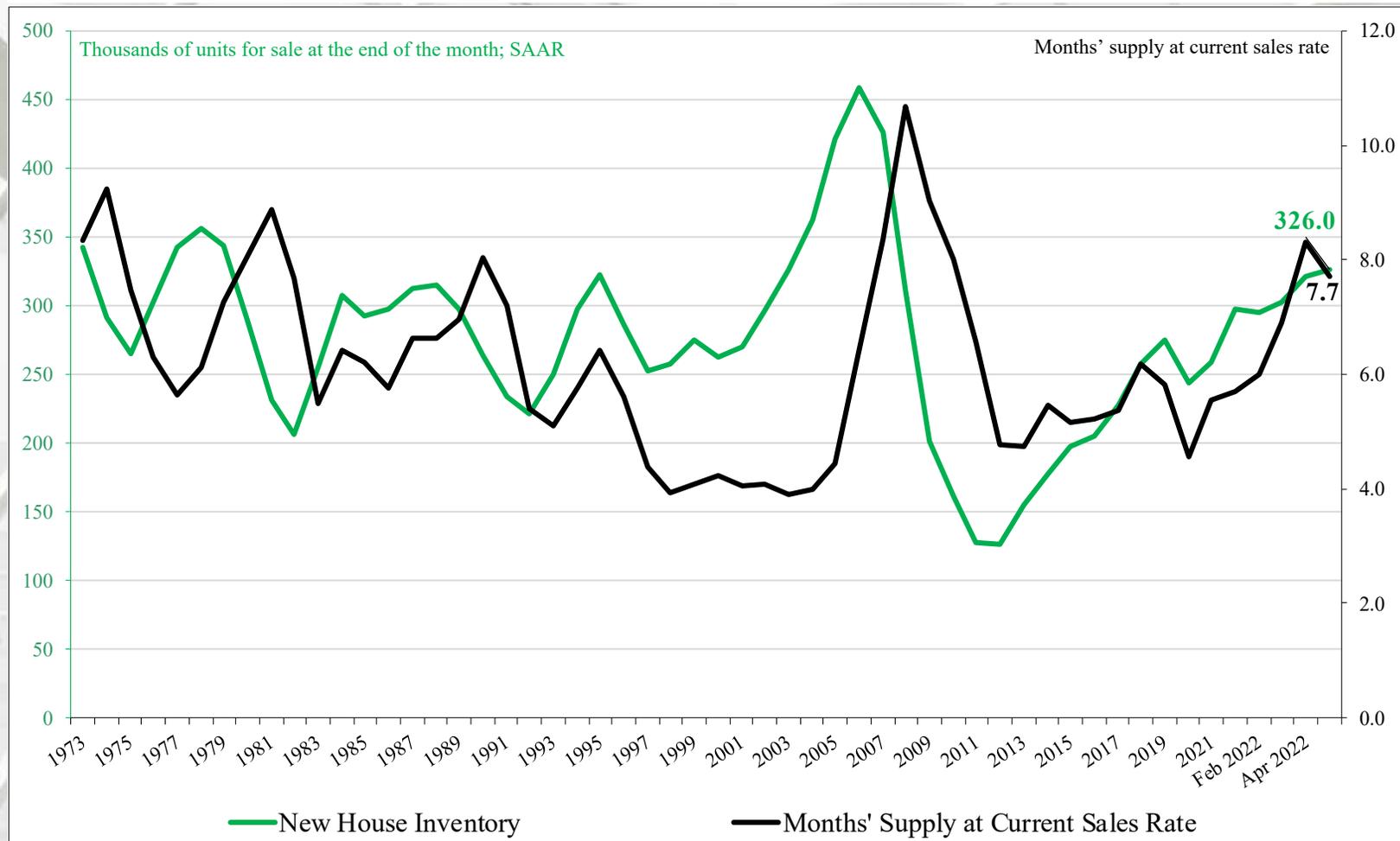


NE = Northeast; MW = Midwest; S = South; W = West

\* 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 7.7 at the end of May 2022 (SAAR).

# May 2022

## Construction Spending

	Total Private Residential*	SF	MF	Improvement**
May	\$938,198	\$483,063	\$100,255	\$354,880
April	\$935,913	\$482,940	\$100,283	\$352,690
2021	\$788,401	\$419,846	\$104,040	\$264,515
M/M change	0.2%	0.0%	0.0%	0.6%
Y/Y change	19.0%	15.1%	-3.6%	34.2%

\* millions.

\*\* 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\$.

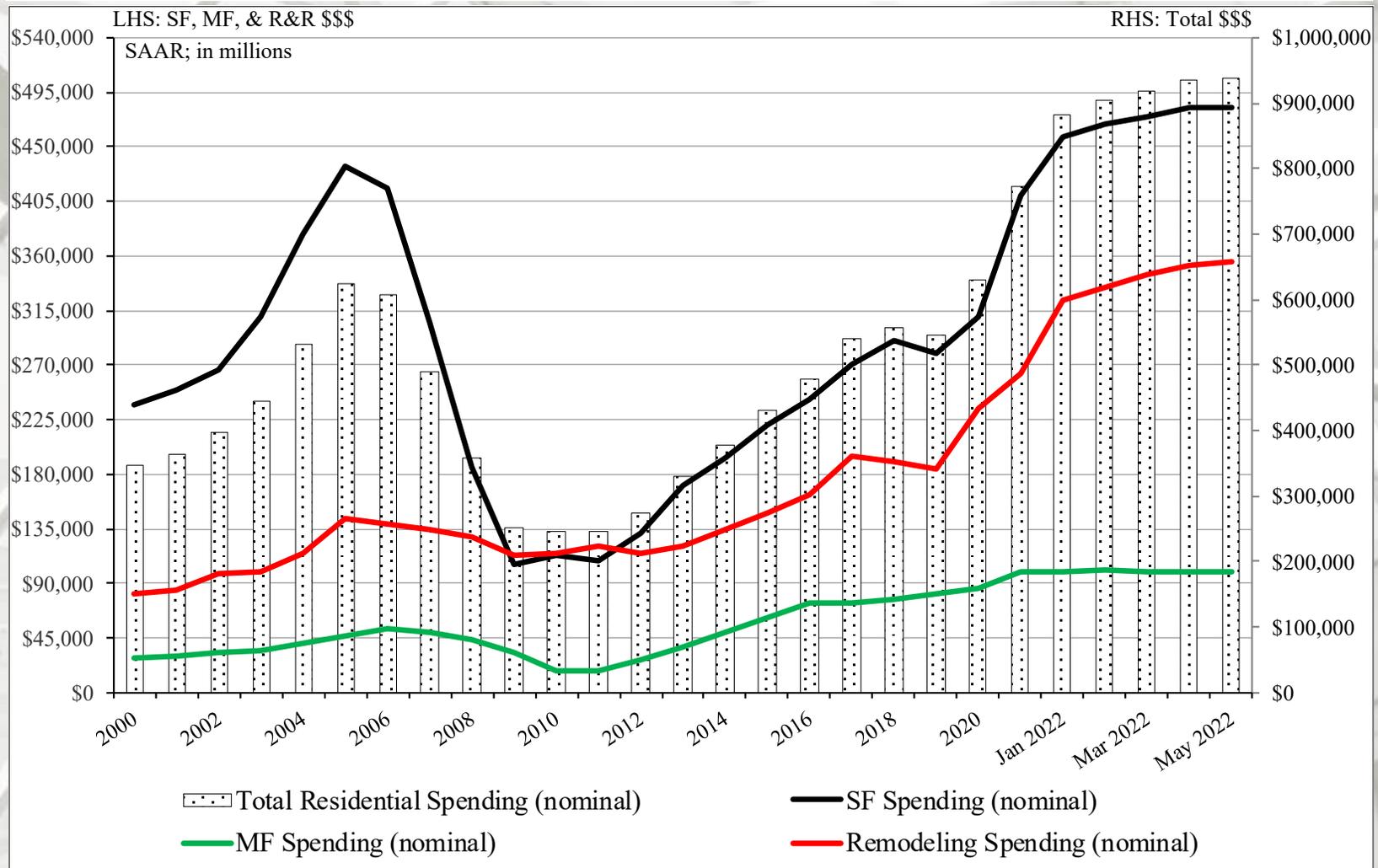
Total private residential construction spending includes new single-family, new multi-family, and improvement (AKA repair and remodeling) expenditures.

New single-family: new houses and town houses built to be sold or rented and units built by the owner or for the owner on contract. The classification excludes residential units in buildings that are primarily nonresidential. It also excludes manufactured housing and houseboats.

New multi-family includes new apartments and condominiums. The classification excludes residential units in buildings that are primarily nonresidential.

Improvements: Includes remodeling, additions, and major replacements to owner occupied properties subsequent to completion of original building. It includes construction of additional housing units in existing residential structures, finishing of basements and attics, modernization of kitchens, bathrooms, etc. Also included are improvements outside of residential structures, such as the addition of swimming pools and garages, and replacement of major equipment items such as water heaters, furnaces and central air-conditioners. Maintenance and repair work is not included.

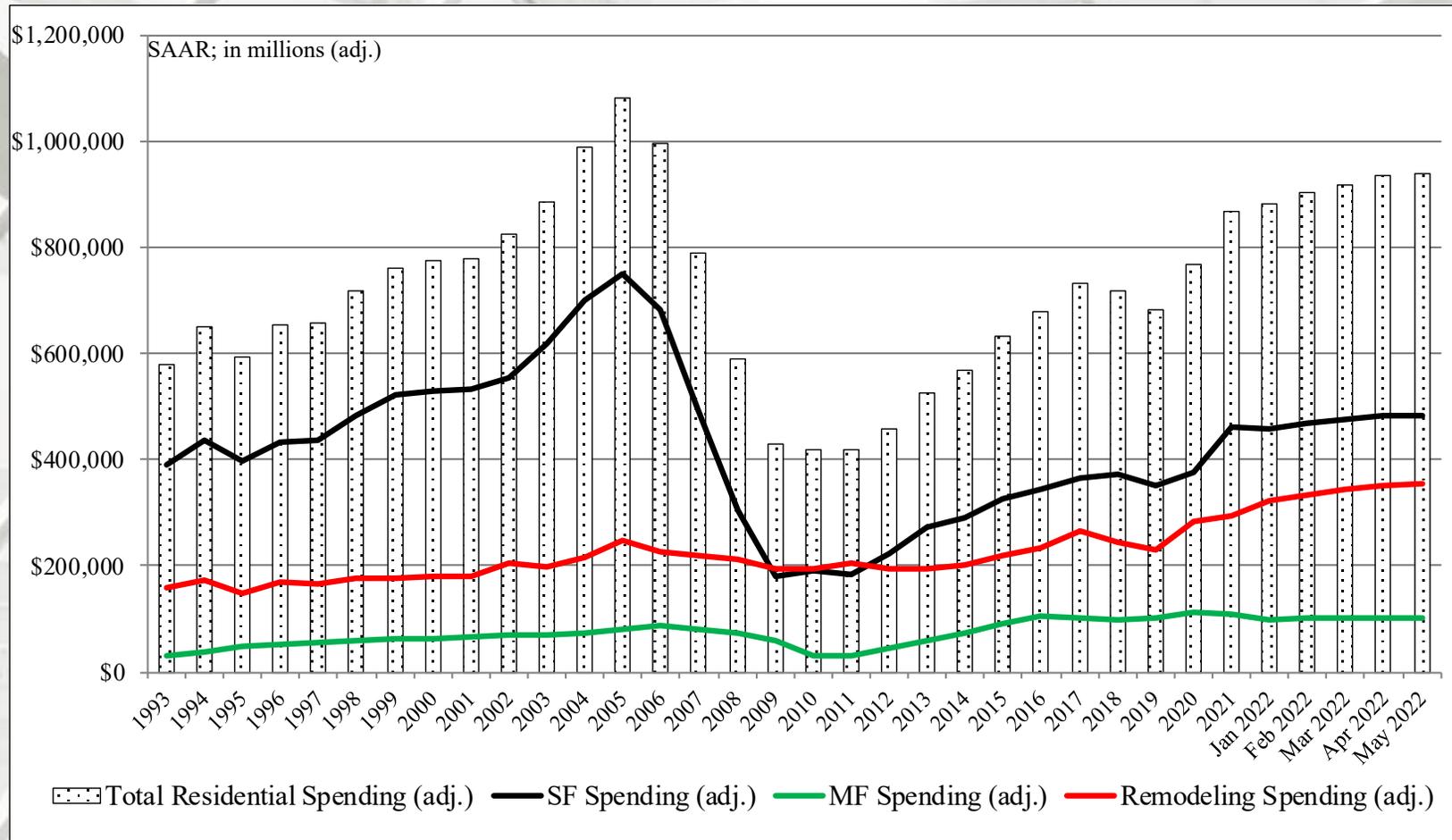
# Total Construction Spending (nominal): 2000 – May 2022



Reported in nominal US\$.

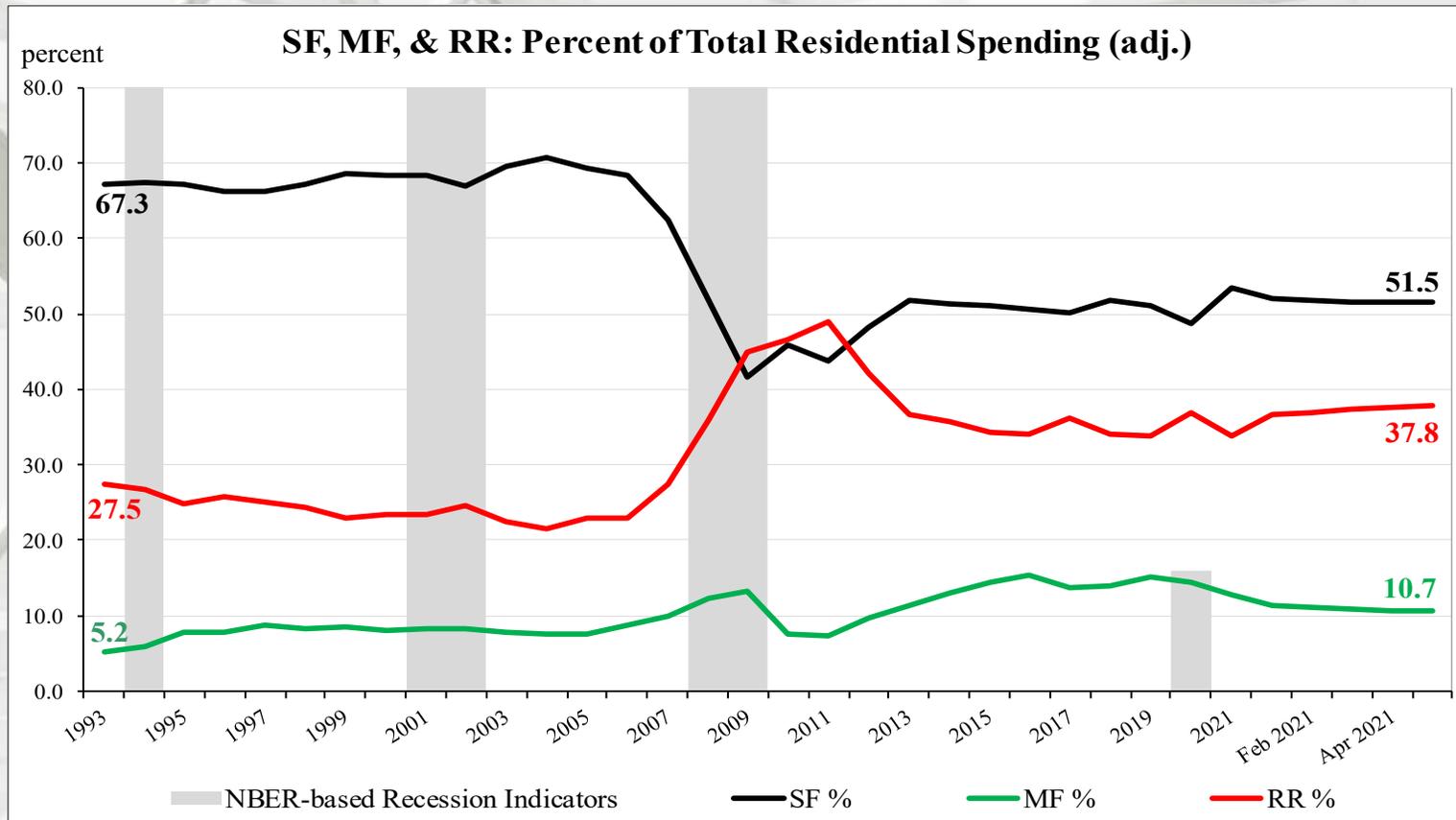
The US DOC does not report improvement spending directly, this is a monthly estimation for 2022.

# Total Construction Spending (adjusted): 1993 – May 2022



Reported in adjusted \$US: 1993 – 2021 (adjusted for inflation, BEA Table 1.1.9); May 2022 reported in nominal US\$.

# Construction Spending Shares: 1993 – May 2022



## Total Residential Spending: 1993 through 2006

SF spending average: 69.2%

MF spending average: 7.5%

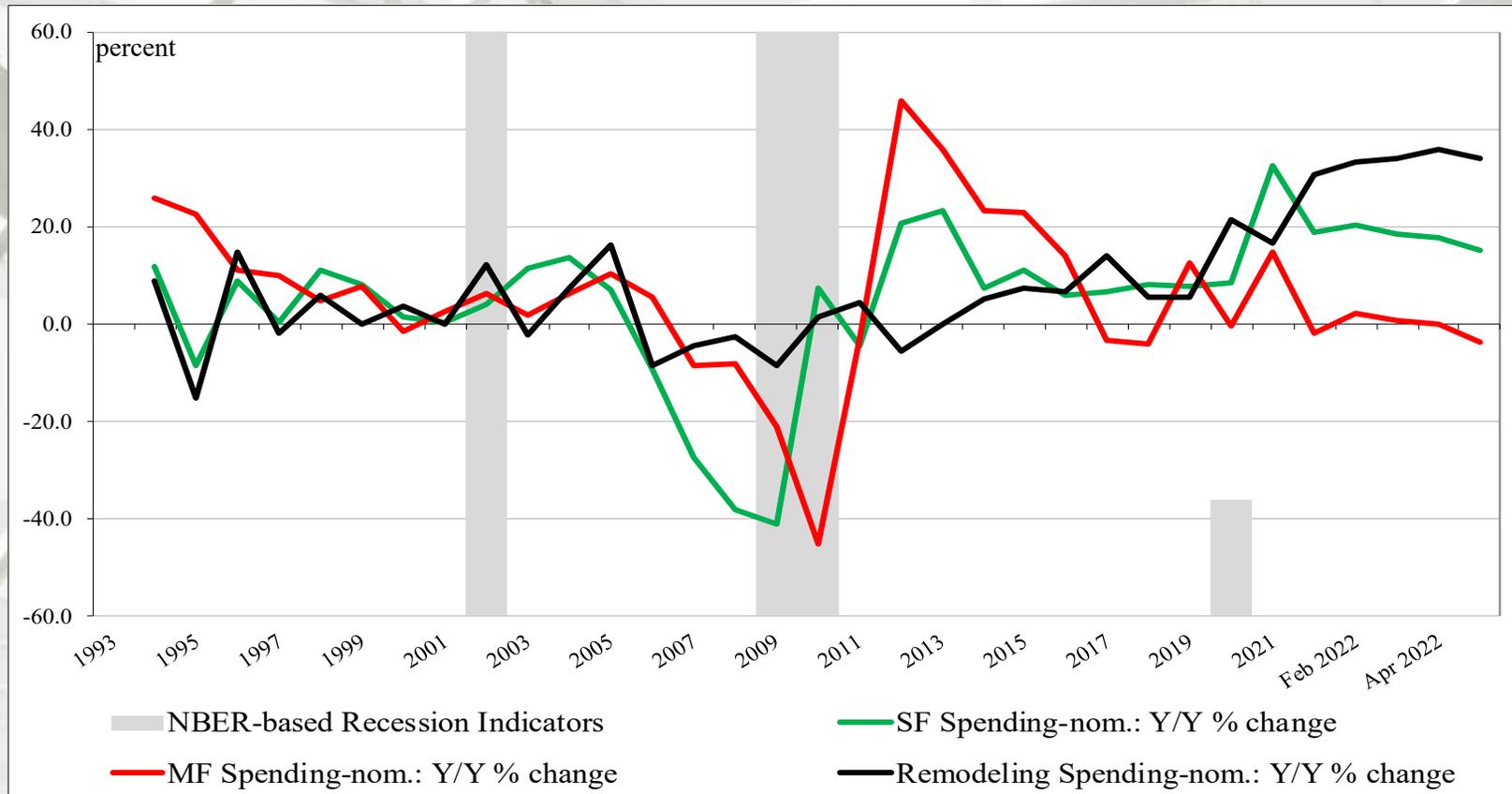
Residential remodeling (RR) spending average: 23.3% (SAAR).

Note: 1993 to 2021 (adjusted for inflation, BEA Table 1.1.9); May 2022 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>, 7/24/21; <http://www.census.gov/construction/c30/pdf/privsa.pdf>; 7/1/22 and <http://www.bea.gov/iTable/iTable.cfm>; 3/30/22

# Adjusted Construction Spending: Y/Y Percentage Change, 1993 – May 2022



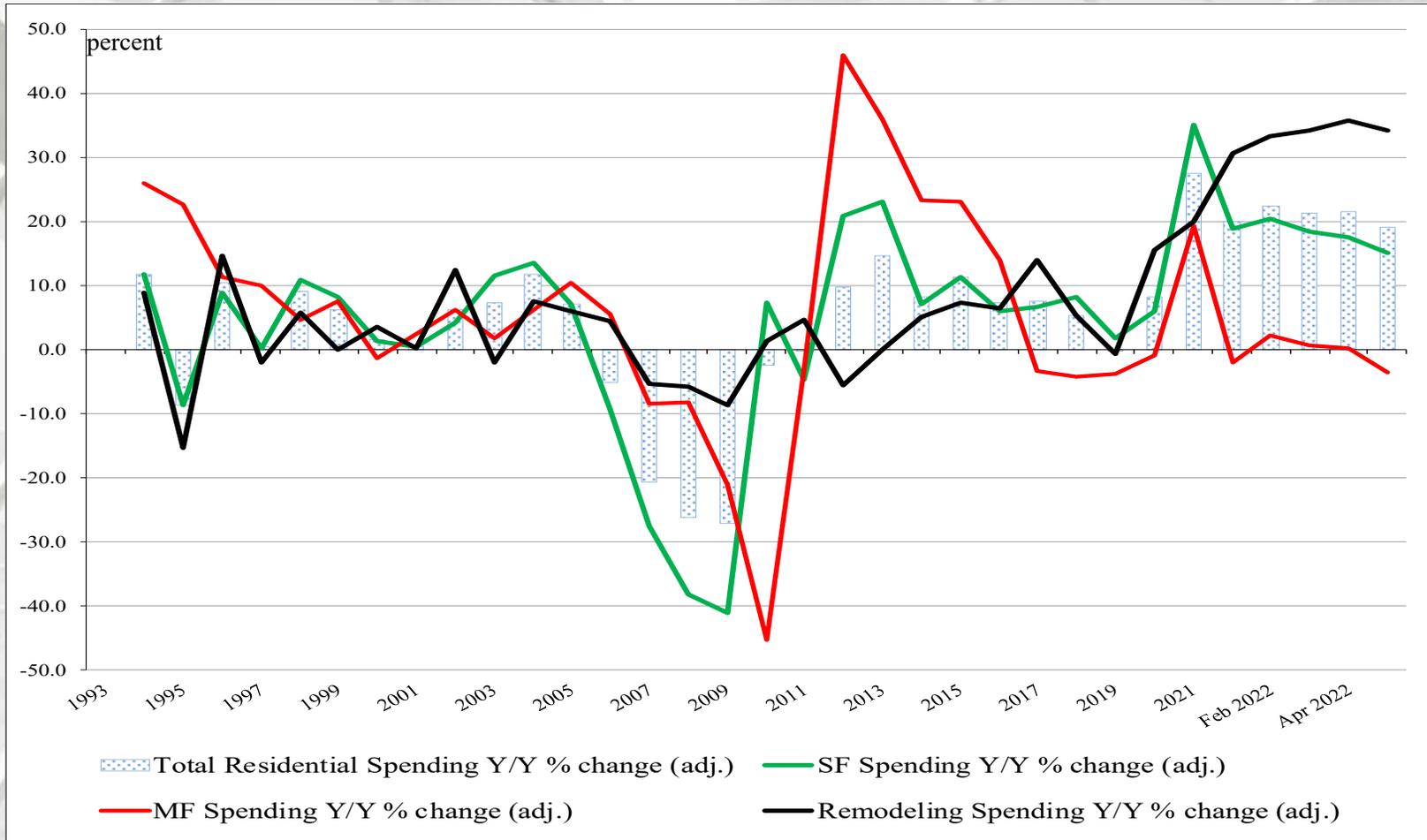
## Nominal Residential Construction Spending: Y/Y percentage change, 1993 to May 2021

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 (May 2022 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).

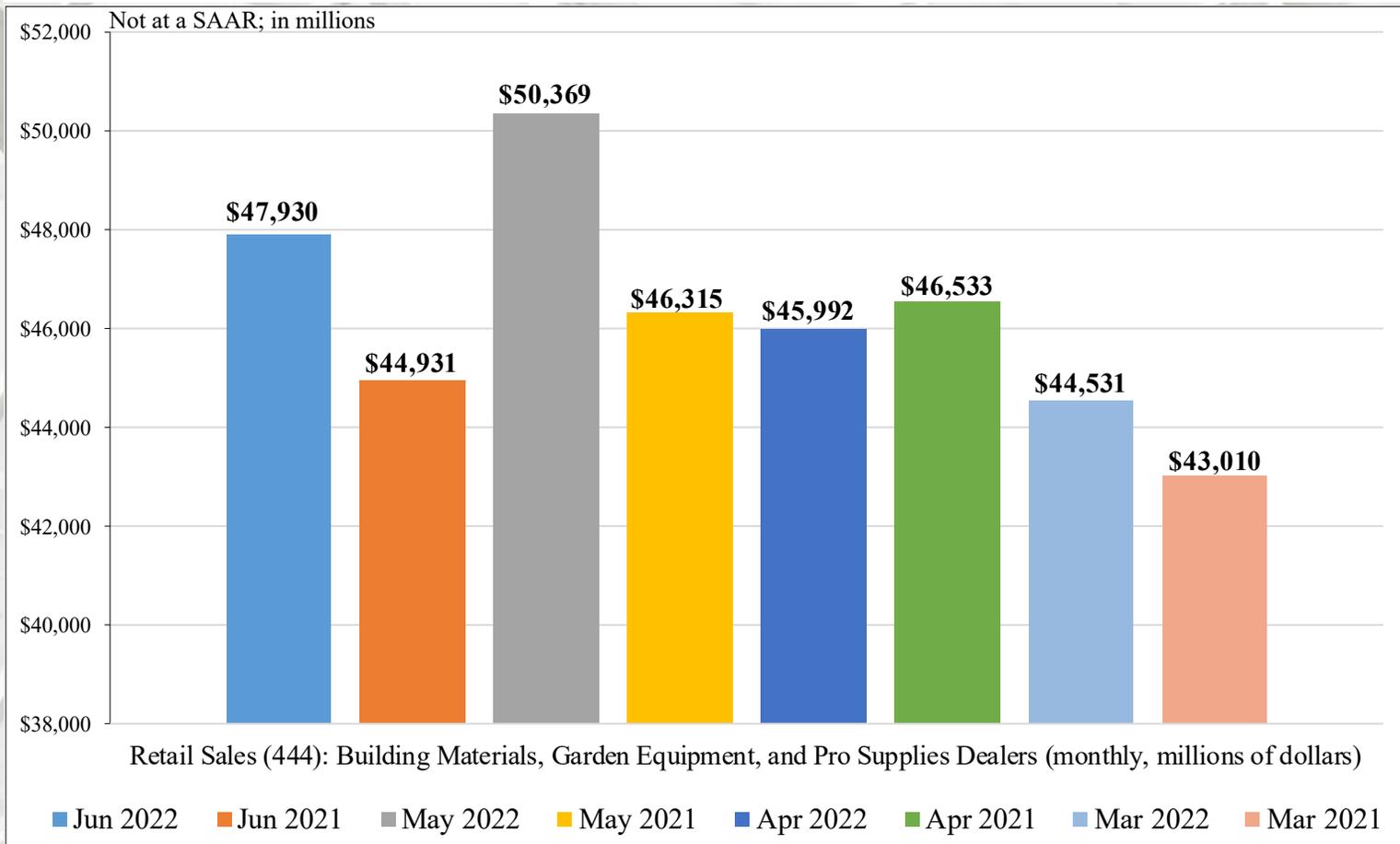
Sources: \* <https://fred.stlouisfed.org/series/USREC>, 6/24/21; <http://www.census.gov/construction/c30/pdf/privsa.pdf>; 7/1/22 and <http://www.bea.gov/iTable/iTable.cfm>; 3/30/22

# Adjusted Construction Spending: Y/Y Percentage Change, 1993 – May 2022



# Remodeling

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

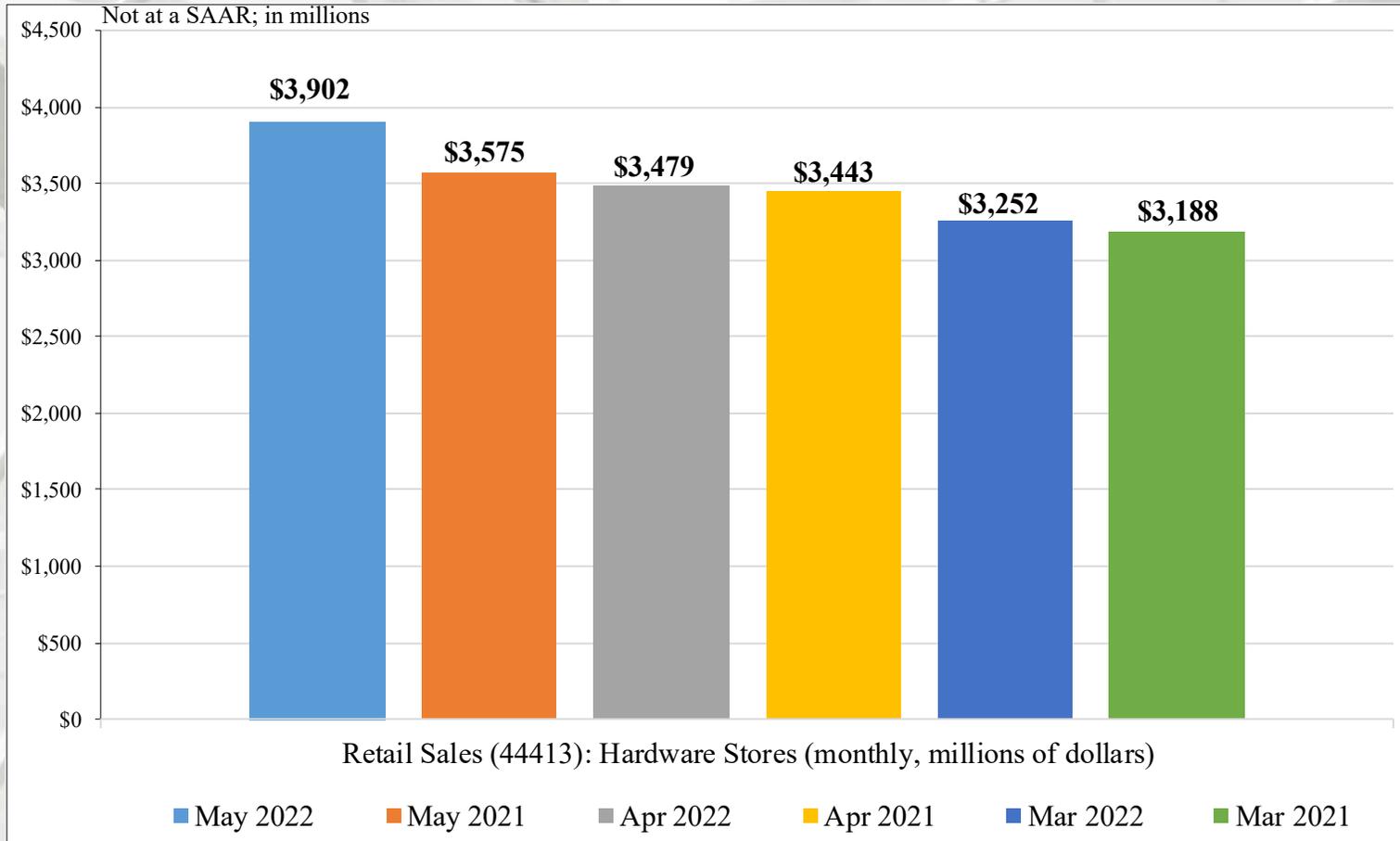


### Building materials, Garden Equipment, & PRO Supply Dealers: NAICS 444

NAICS 444 sales decreased 4.2% in June 2022 from May 2022 and improved 6.7% Y/Y (on a non-adjusted basis).

# Remodeling

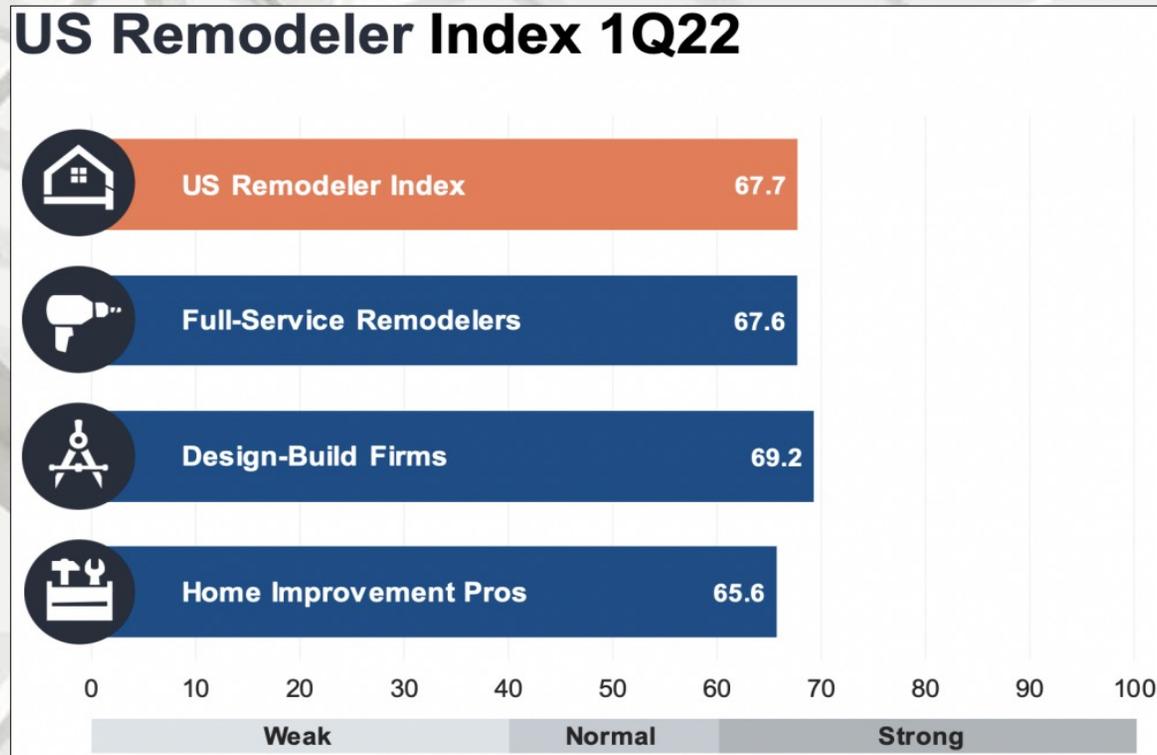
## Retail Sales: Hardware Stores



### Hardware Stores: NAICS 44413

NAICS 44413 retail sales increased 12.2% in April 2022 from May 2022 and increased 9.1% in May 2022 from May 2021 (on a non-adjusted basis).

# Remodeling



## Qualified Remodeler and John Burns Real Estate Consulting U.S. Remodeler Index

“Remodelers and home improvement professionals nationwide remain bullish about residential construction activity according to the latest U.S. Remodeler Index, a gauge of sentiment and remodeling activity conducted quarterly by Qualified Remodeler and John Burns Real Estate Consulting.

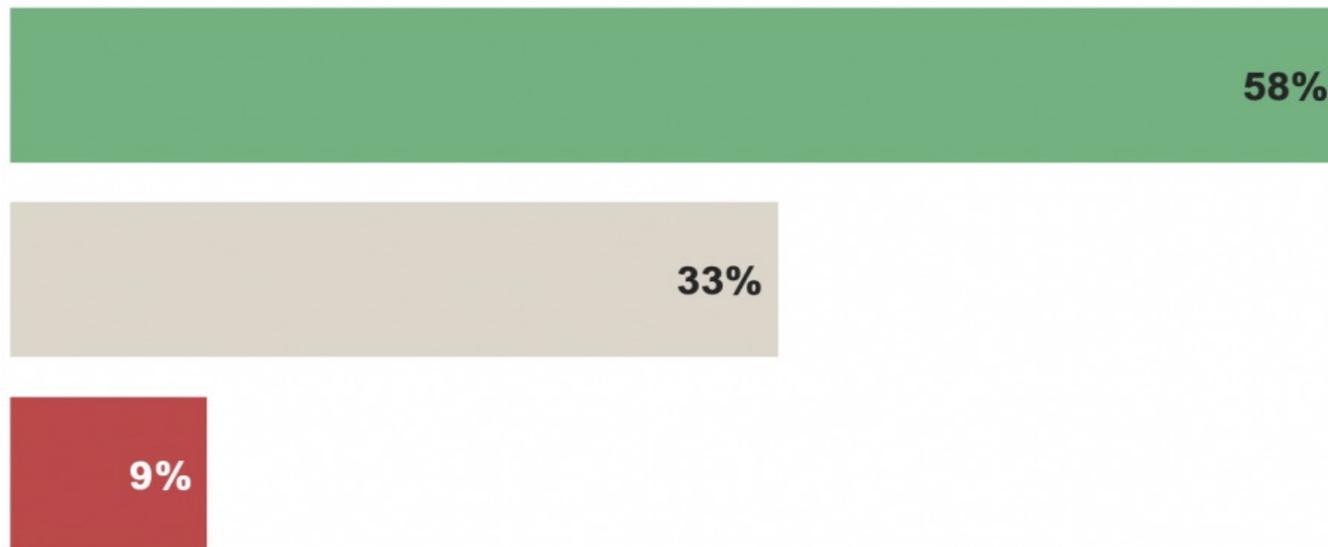
The most recent USRI release asked residential remodelers about the strength of their businesses today and into the future. For the first quarter of 2022, the aggregate reading was 67.7 on a scale where any reading over 50 is positive. Readings at 70 or above are considered strongly positive.” – Qualified Remodeler Staff

# Remodeling

## How are typical remodeling projects changing in size, scope, and budget? (1Q22)

As a percentage of total responses

■ Increasing   ■ About the same   ■ Decreasing



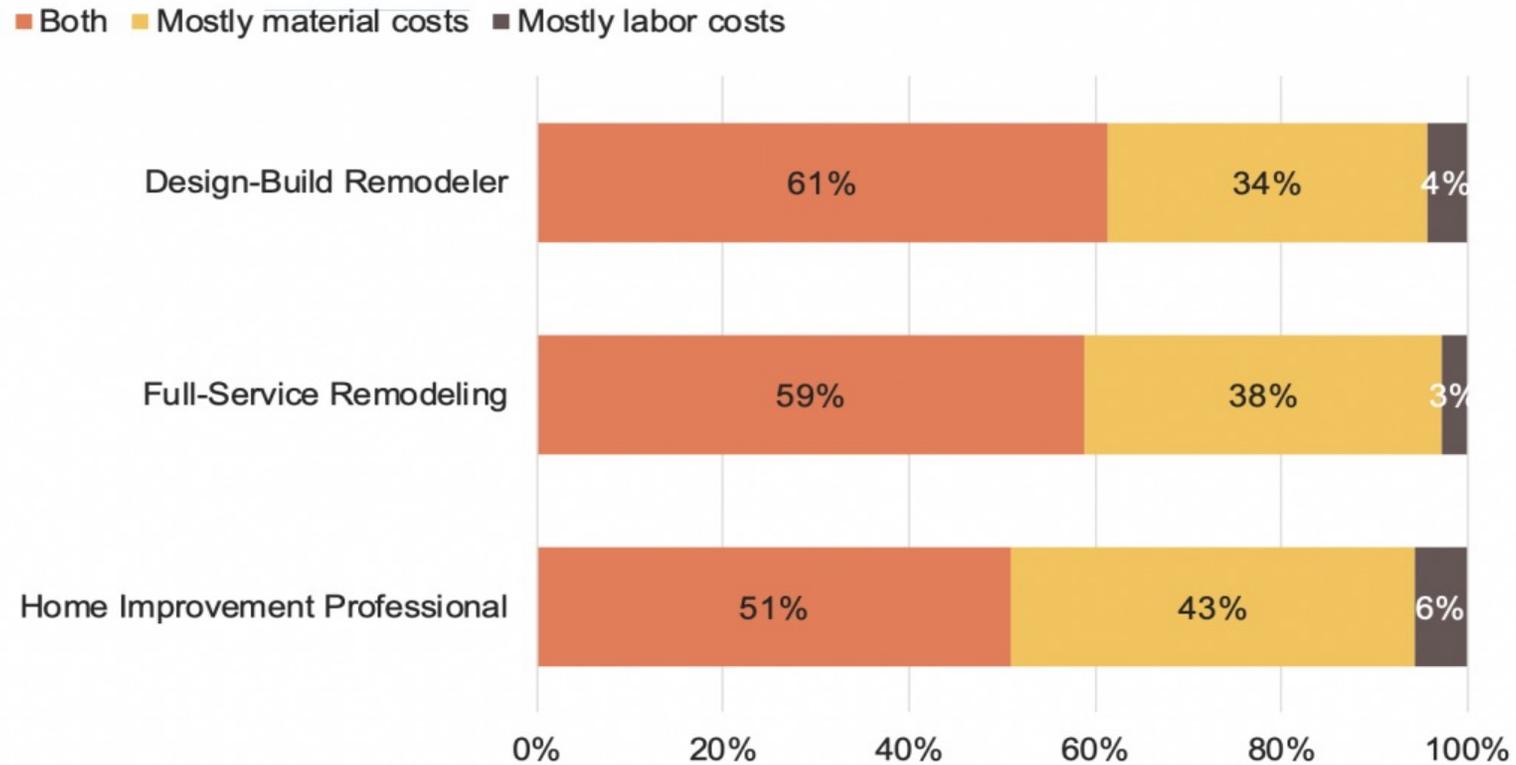
## Qualified Remodeler and John Burns Real Estate Consulting U.S. Remodeler Index

“A full-report from the John Burns team found four key takeaways.

Big project remodeling demand expands, driving Pro activity. 58% of remodelers say project sizes increased in 1Q22. Large-scale projects are driving the professional remodeling market, and projects continue getting bigger despite rapidly rising costs. Remodelers are focusing on these larger projects, where clients are less budget conscious and willing to accept higher prices to get their project underway as soon as possible.” – Qualified Remodeler Staff

# Remodeling

## Where are remodelers seeing the most inflation pressure? (1Q22)

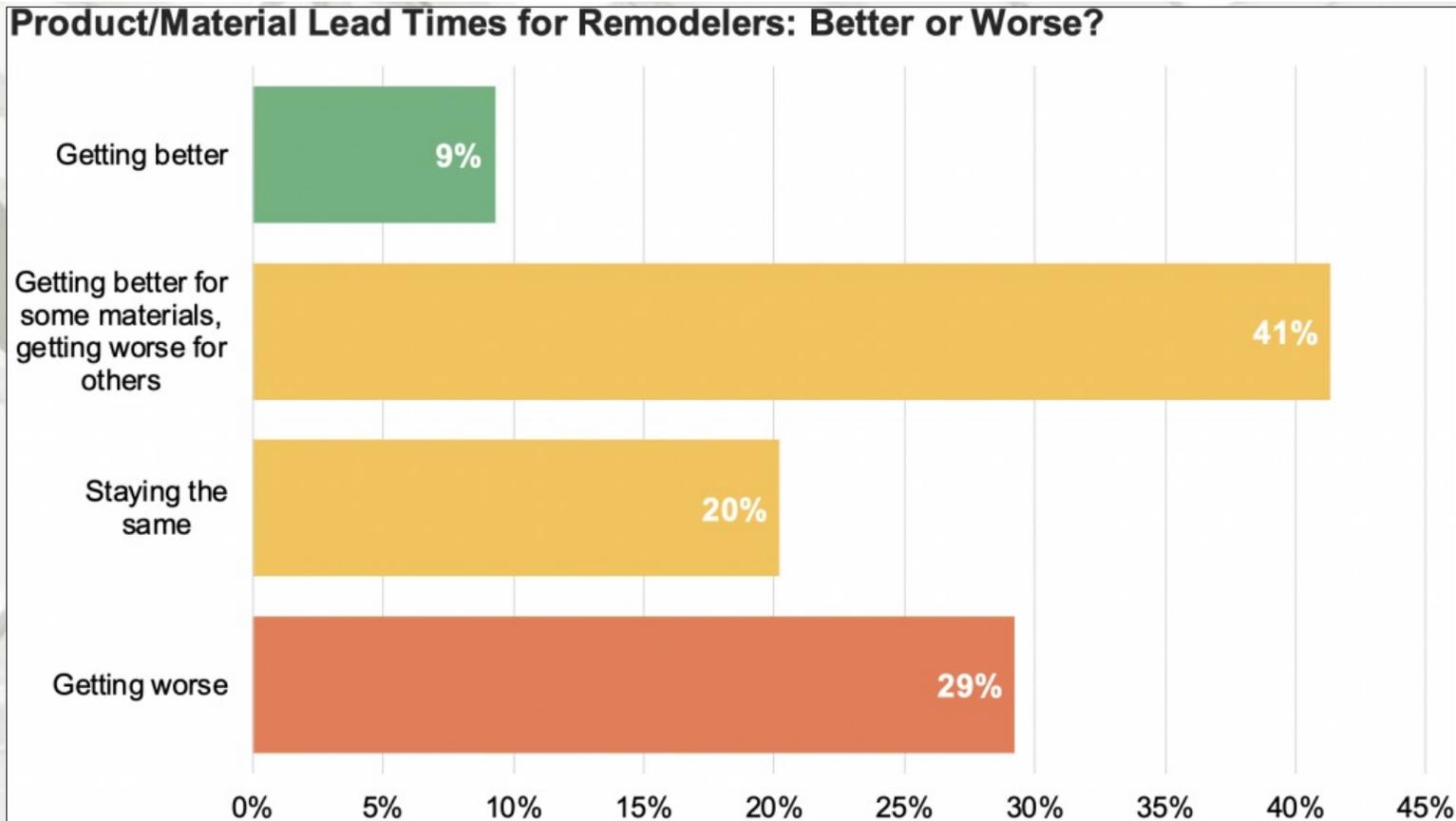


## Qualified Remodeler and John Burns Real Estate Consulting U.S. Remodeler Index

**“Material costs drive inflation remodelers; labor costs not far behind.**

Remodelers report double-digit inflation in every product category, ranging from 12% to 18%. Remodelers have been successful at raising prices to offset inflation, and many have shifted product and material price uncertainty onto clients, for instance through escalation clauses. Labor inflation is also widespread. Clients have reportedly taken the price increases in stride, although some remodelers have noted an uptick in postponements or pushback on price increases just recently.” – Qualified Remodeler Staff

# Remodeling



## Qualified Remodeler and John Burns Real Estate Consulting U.S. Remodeler Index

**“On product/material lead times: “green shoots” starting to emerge, although pessimism is still widespread.**

Remodelers (and their clients) have come to accept extremely long lead times for products. Now, there are early signs of improvement: remodelers are getting much better at project planning and substituting products and vendors based on availability; project timelines are starting to stabilize; and some product lead times have compressed.” – Qualified Remodeler Staff

# Remodeling

## 2022 Remodeler Revenue Growth Outlook

■ Higher than 2021   ■ About the same   ■ Lower than 2021

### Home Improvement Pros



### Design-Build Firms



### Full-Service Remodelers



## Qualified Remodeler and John Burns Real Estate Consulting

### U.S. Remodeler Index

**“7-8% remodeling revenue growth expected in 2022, as economic and supply uncertainty tempers robust backlogs.**

Remodelers’ full-year revenue expectations are slightly lower than last year at this time, a result of elevated demand mixed with difficult comps and project delays. However, remodelers are generally optimistic given the robust backlog of demand. With constraints on both materials and labor, however, more of the 7-8% growth expected this year is likely to come from pricing and product mix than volume. Recent economic uncertainty has also tempered the outlook.” – Qualified Remodeler Staff

# Remodeling

## HBSEdealer

### Momentum builds for ‘Do It For Me’

#### **Consumers are opening their homes and their wallets to pro remodelers.**

“The pros are busy. Very busy. Weekend work is common now. There’s a backlog of home fix-up jobs. And that says a lot about 2022.

‘If the onset of the pandemic is credited with heightening the do-it-yourself, or DIY, movement, consumers’ growing adjustment to our new normal and a strong housing market indicate that 2022 will be the year of “Do It For Me,” or DIFM movement,” said Vinny O’Sullivan, senior general manager of U.S. stores and [The Home Depot](#) for [PPG](#)’s architectural coatings business in the U.S. and Canada.

O’Sullivan has held his position since August 2019, almost three years. Before stepping into the current role, he managed PPG’s architectural coatings business in the U.K. and Ireland. In total, he has spent more than 20 years of his career in the paint and coatings industry.

“When it comes to home improvement, consumers are opening their homes – and their wallets – to pros,” he said, “with nearly 50% of homeowners indicating it is a good time to start a home improvement project, according to the [Home Improvement Research Institute](#).”

As a result of the current housing market, he said, homes have never been more valuable, homeowners’ balance sheets have never been healthier, and there are deep backlogs for the services pros offer.

Additionally, O’Sullivan said, “per the [Cleveland Research Company](#), around-the-home purchases are seen as the number one priority for incremental spending by U.S. home and property owners who view home improvement as a smart investment given the rise of property values over the last two years.”

And many customers are saying “homes are too expensive, so I have to buy what I can afford,” he said, which leads to more remodeling.” – Tim Burke, HBSEdealer.com

# Remodeling

## HBSEdealer

### Momentum builds for ‘Do It For Me’

#### **Consumers are opening their homes and their wallets to pro remodelers.**

“From this we can anticipate a higher demand in pro painters, remodelers and other skilled tradesmen, he added, “to assist with DIFM projects this year.”

Research company for hardware and building supply The Farnsworth Group’s president Grant Farnsworth said, “Two years ago pro work stopped for COVID safety concerns. Now it’s coming back. DIY has morphed into DIFM.”

Farnsworth said the feeling from homeowners today goes something like this: “I’ve got more equity – I’ll hire a pro. That’s the sentiment.” He provided some graphs from his company to demonstrate this trend. See below.

#### **DIFM – now and future**

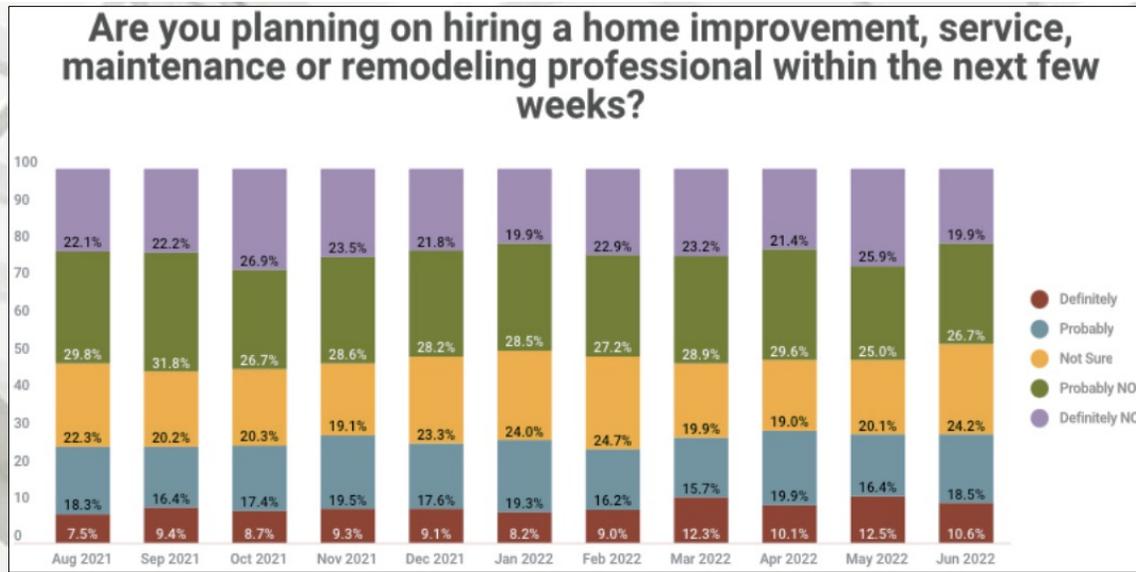
As people are hiring more pros for home improvement, there are certainly specific areas in higher demand.

O’Sullivan said that, “according to research conducted by HIRI, homeowners typically take on more than one home project a year. In fact, in 2021, the average number of home improvement projects planned per household was three. Interior painting projects, kitchen remodels, gardening and landscaping, and bathroom remodels are among the most common home projects.”

It seems people have more money to fix up their homes, and that might be a big factor driving this trend.

As house prices have risen consistently over the last few years, he said, “making purchasing a new home too expensive for many, most homeowners have turned their attention to improving their current homes, and as such, home improvement spending continues to be healthy.”” – Tim Burke, HBSEdealer.com

# Remodeling



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

## HBSDealer

### Momentum builds for ‘Do It For Me’

“The DIFM trend could be an after-effect of coming out of the pandemic.

The pandemic has presented numerous challenges to homeowners and the home improvement industry by causing temporary delays to some projects and cancelling others altogether.

In the long run, however, the pandemic may have turned homeowners’ focus more inward toward their own residences, he said, driving them to nest and to make their houses more comfortable and safer.

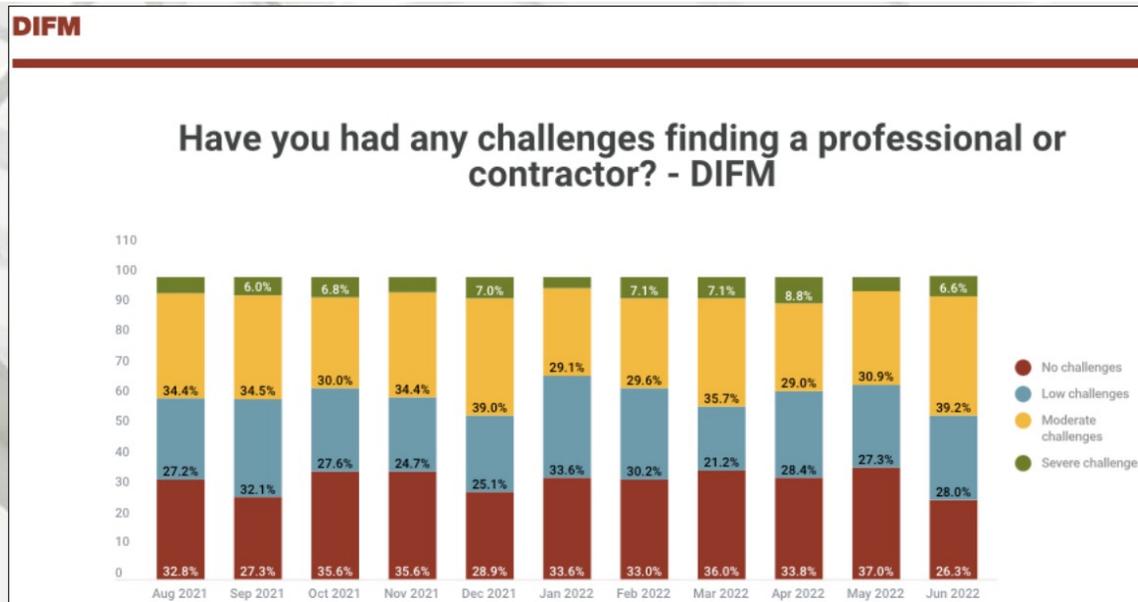
Projects that had been off radar prior to the pandemic have been brought to the forefront for many.

Additionally, said O’Sullivan, “the paint industry, like many others, has reached a pivotal moment amidst the COVID pandemic where customers are becoming increasingly comfortable with – and are beginning to expect – sophisticated digital tools, including easy-to-navigate e-commerce experiences and seamless pick-up and delivery options.”

Is this trend likely to continue throughout this year and into next year?” – Tim Burke, HBSDealer.com

Source: <https://www.hbsdealer.com/momentum-builds-do-it-me/>; 6/27/22

# Remodeling



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

## HBSDealer

### Momentum builds for ‘Do It For Me’

“The senior general manager indicated that there are two main reasons why PPG sees this trend extending beyond 2022.

“First, we expect home improvement industry supply constraints will begin to improve, which will make it easier for pros to access the materials needed. The housing market is expected to remain strong with prices climbing, which will fuel the demand for home improvement projects for many who cannot afford to purchase a new home.”

Second, he said, “the pandemic caused a reverse urbanization across the country, as countless millennials and younger generations entered the hot home buying market earlier than expected. Making up nearly one-third of home purchases, millennials are cashing out of renting in hopes of securing more legroom by buying.”” – Tim Burke, HBSDealer.com

# Remodeling

## HBSEaler

### Momentum builds for ‘Do It For Me’

#### **Consumers are opening their homes and their wallets to pro remodelers.**

“That’s good news for pros and the DIFM trend, as across the generations, millennials are the most active in taking on home improvement and maintenance projects and hiring them out, he said.

“This generation is poised to take on many projects, resulting in greater overall home improvement spending. The generation also happens to account for a large balance of high-cost projects, which drives up their average per-project expenditures,” said O’Sullivan.

There are some tips he passed along to hardware store owners gearing up to supply pros during this increase in home improvement jobs.

“As DIFM opportunity grows,” said O’Sullivan, “pros will turn to retailers they trust for products and services. Our dealer-partners are known for their paint expertise and quality service, which makes them a great fit, and they can lean on PPG as their trusted partner.”” – Tim Burke, HBSEaler.com

# Remodeling

## Harvard Joint Center for Housing Studies

### Home Repairs and Updates Pose Considerable Burdens for Lower-Income Home Owners

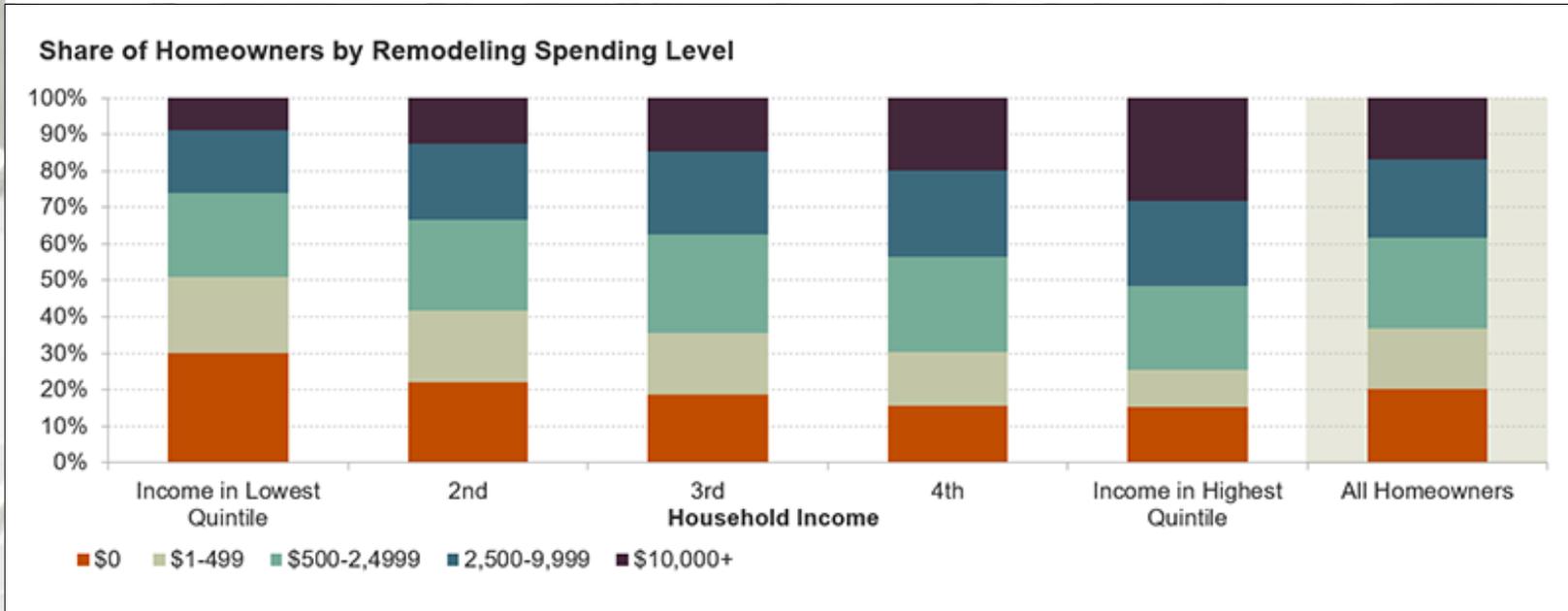
“Lower-income homeowners spend large shares of their incomes on home improvements and maintenance, but spend significantly less per household compared to higher-income home owners, according to a new analysis by the Center’s [Remodeling Futures Program](#) of HUD’s latest [American Housing Survey](#) from 2019. Households with lower incomes also tend to focus their remodeling and repair dollars on different types of projects, with a larger proportion of their budgets going toward maintenance, replacements, and disaster repairs.

As noted in our most recent [Improving America’s Housing report](#), limited financial resources make it difficult for home owners with lower incomes to invest in basic maintenance, replace critical systems and equipment, repair damage from natural disasters, or make any improvements to their homes. According to analysis of the American Housing Survey, fully 30 percent of lowest-income home owners (defined as those with incomes of less than \$32,000 annually and representing 4.8 million households) spent nothing on home maintenance or improvement in 2019 (**Figure 1**).

Additionally, for lower-income home owners, remodeling and repair projects typically consume a significant share of household income (**Figure 2**). While home owners overall spent an average of 9.6 percent of their incomes on home improvements and maintenance in 2019, lowest-income home owners spent nearly twice that share, with an average of 18.3 percent of their incomes going toward home improvements and maintenance. The average share for the highest-income home owners was just 5.8 percent.” – Sophia Wedeen, Research Analyst, Joint Center for Housing Studies

# Remodeling

Figure 1: Large Shares of Home Owners with Lower Incomes Spend Little or Nothing on Home Maintenance and Improvements

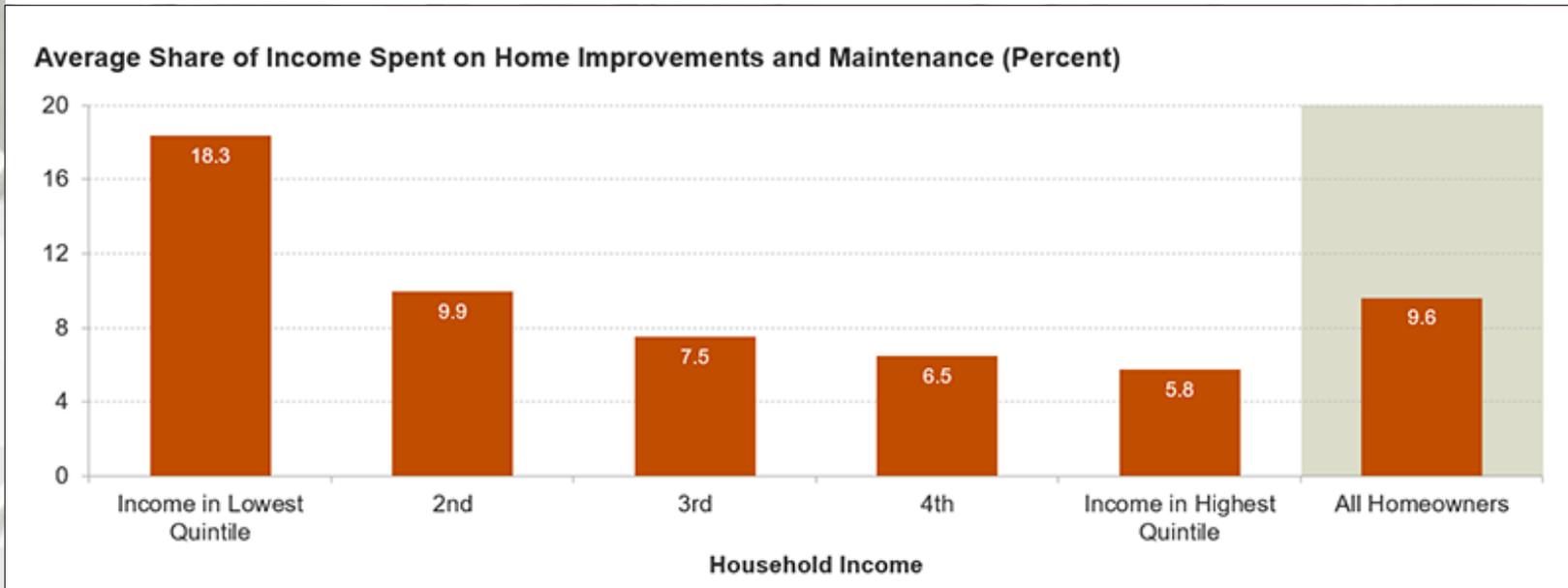


Notes: The lowest income quintile includes home owners with incomes of less than \$32,000. The highest income quintile includes home owners with incomes of more than \$144,000. Remodeling spending includes improvements and maintenance spending.

Sources: JCHS tabulations of HUD, 2019 American Housing Survey.

# Remodeling

Figure 2: Lower-income Home Owners Spend Three Times as Much of Their Incomes on Home Improvement and Maintenance Projects as Higher-income Home Owners



Notes: The lowest income quintile includes home owners with incomes of less than \$32,000. The highest income quintile includes homeowners with incomes of more than \$144,000. Home owners with zero or negative income are assumed to spend 0% of income for improvements and repairs, while those spending over 100% are top-coded at 100%. Average share of income spent on home improvements and maintenance includes households with no spending.

Sources: JCHS tabulations of HUD, 2019 American Housing Survey.

# Remodeling

## Harvard Joint Center for Housing Studies

### Home Repairs and Updates Pose Considerable Burdens for Lower-Income Home Owners

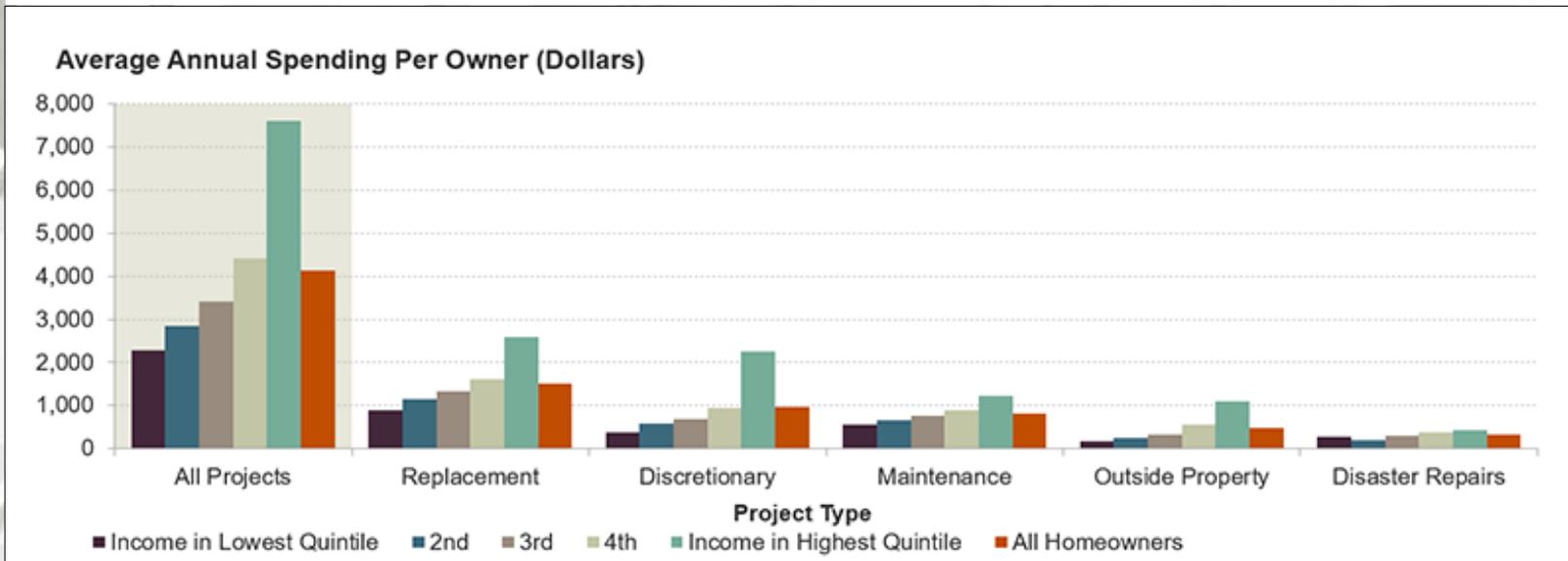
“Per household, lower-income home owners spend less on average on all types of home remodeling and repair projects, including replacement projects, discretionary projects, home maintenance, outside property improvements, and disaster repairs (Figure 3). In total, home owners with incomes in the lowest quintile spent \$2,290 per household on improving and maintaining their homes in 2019, around half of the \$4,120 average for all home owners. Home owners in the highest income quintile spent more than triple that amount on average, at \$7,610 per household.

The limited financial resources of lower-income homeowners also shape the composition of their remodeling spending (Figure 4). A quarter of the remodeling and repair budgets of lower-income homeowners went towards basic home maintenance – well above the 16 percent share for home owners in the highest quintile. Lower-income households also spent a higher share of their budgets on critical replacements such as roofing, windows and doors, and HVAC systems – updates that are more often “need to do” (at 39 percent vs. 34 percent) and double the share on disaster repairs (at 12 percent vs. 6 percent). In total, lower-income households spent roughly three quarters of their remodeling budgets on replacement projects, disaster repairs, and maintenance, which tend to be unavoidable costs for basic habitability.

In contrast, higher income home owners devoted 30 percent of their spending to discretionary projects including kitchen and bath remodels and room additions, nearly double the 17 percent share for lower-income home owners. They also spent more of their budgets on outside property improvements such as landscaping, fencing, driveways and walkways, and recreational structures.” – Sophia Wedeen, Research Analyst, Joint Center for Housing Studies

# Remodeling

Figure 3: Lower-Income Home Owners Spend Significantly Less Per Household on All Types of Home Improvement and Maintenance Projects

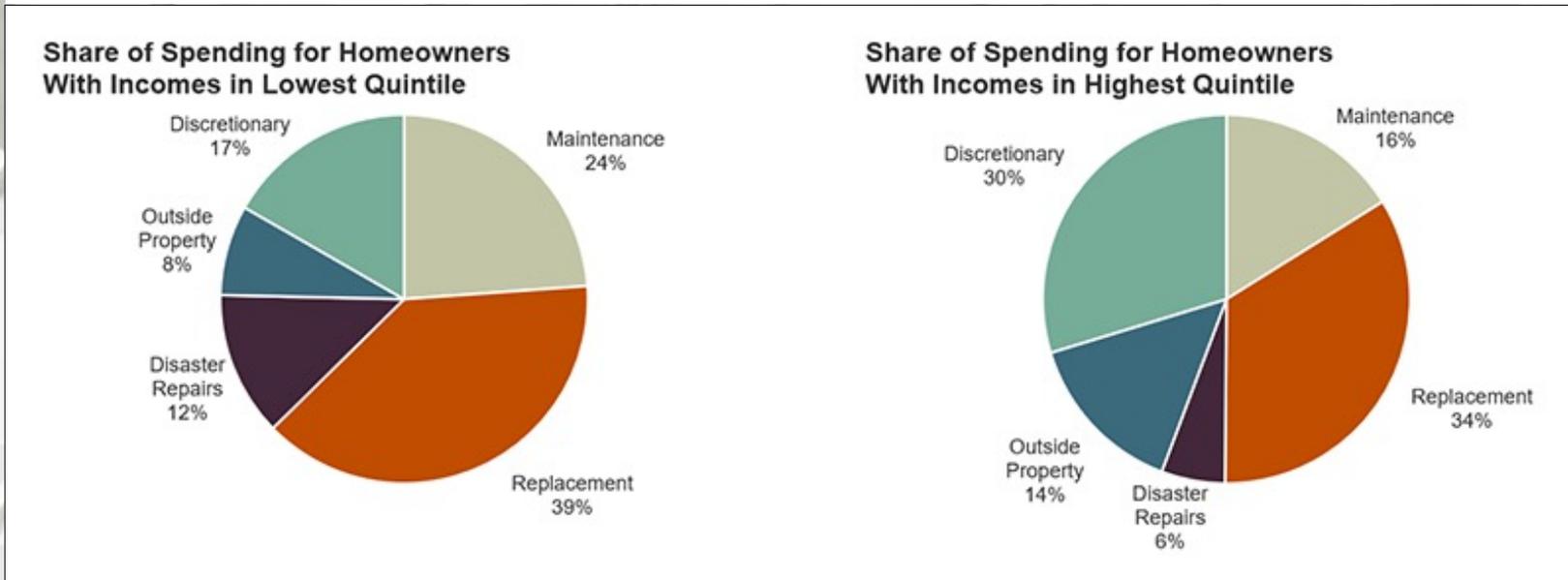


Notes: The lowest income quintile includes home owners with incomes of less than \$32,000. The highest income quintile includes home owners with incomes of more than \$144,000. Replacement projects include exterior, systems and equipment, and interior projects. Discretionary projects include kitchen and bath remodels, room additions, and outside attachments. Outside property includes such projects as driveways and walkways, fencing, sheds, landscaping, and recreational structures. Average spending per owner includes households with no projects. “All Projects” is the sum of replacement, discretionary, maintenance, outside property, and disaster repair spending.

Sources: JCHS tabulations of HUD, 2019 American Housing Survey.

# Remodeling

Figure 4: A Higher Proportion of Lower-Income Home Owners' Remodeling Budgets Goes Towards Maintenance, Replacements, and Disaster Repairs



Notes: The lowest income quintile includes home owners with incomes of less than \$32,000. The highest income quintile includes home owners with incomes of more than \$144,000. Replacement projects include exterior, systems and equipment, and interior projects. Discretionary projects include kitchen and bath remodels, room additions, and outside attachments. Outside property includes such projects as driveways and walkways, fencing, sheds, landscaping, and recreational structures.

Sources: JCHS tabulations of HUD, 2019 American Housing Survey.

# Remodeling

## Harvard Joint Center for Housing Studies

“The high cost of home maintenance and improvements puts a strain on lower-income household finances and may limit their opportunities to build wealth. A study of low-income recent home buyers found that around a third of these households [faced repair costs they could not afford](#), threatening the financial stability of new home owners. Due to longstanding discrimination in education and the labor market, home owners of color have lower median incomes than white home owners. As a result, home owners of color were disproportionately likely to report very little or no spending on home improvement projects in 2019, limiting households’ opportunities to build wealth by undertaking remodeling activities that increase the value of their homes.

When home owners are unable to cover costs for routine home maintenance, let alone critical replacements, they may risk living in unsafe or unsuitable housing conditions. In 2019, 6.3 percent of lower-income home owners, or 997,000 households, were living in homes classified as [structurally inadequate by HUD](#) due to severe structural deficiencies or the absence of basic features such as plumbing, electricity, or heat. A [2019 analysis](#) by the Federal Reserve Bank of Philadelphia and PolicyMap estimated that a third of owner-occupied homes had unmet repair needs resulting from structural deficiencies; damage from leaks and mold; broken electrical, heating, or plumbing; or pests, with an average cost to repair of \$3,142 per unit.

Meeting the repair needs of lower-income home owners will require investment by public and nonprofit programs that subsidize home repairs for households with limited resources. HUD’s [Community Development Block Grant Program \(CDBG\)](#) and [HOME Investments Partnership Program](#) both provide grant funding to state and municipal governments for critical repairs and replacements to homes occupied by low-income households. The [2021 Infrastructure Investment and Jobs Act](#) added an additional \$3.5 billion investment in the Department of Energy’s [Weatherization Assistance Program](#), which funds weatherization and energy efficiency retrofits for lower-income households. Public and nonprofit investments in home repairs and essential upgrades are critical for closing the gap between the housing conditions of highest- and lowest-income home owners, as well as preserving the nation’s affordable housing supply.” – Sophia Wedeen, Research Analyst, Joint Center for Housing Studies

# Existing House Sales

## National Association of Realtors®

	Existing Sales	Median Price	Month's Supply
May	5,410,000	\$407,600	2.6
April	5,600,000	\$395,500	2.2
2021	5,920,000	\$355,000	2.5
M/M change	-3.4%	3.1%	18.2%
Y/Y change	-8.6%	14.8%	4.0%

All sales data: SAAR

# Existing House Sales

	NE	MW	S	W
April	670,000	1,310,000	2,490,000	1,140,000
March	660,000	1,270,000	2,610,000	1,210,000
2021	750,000	1,330,000	2,640,000	1,240,000
M/M change	1.5%	3.1%	-4.6%	-5.8%
Y/Y change	-10.7%	-1.5%	-5.7%	-8.1%

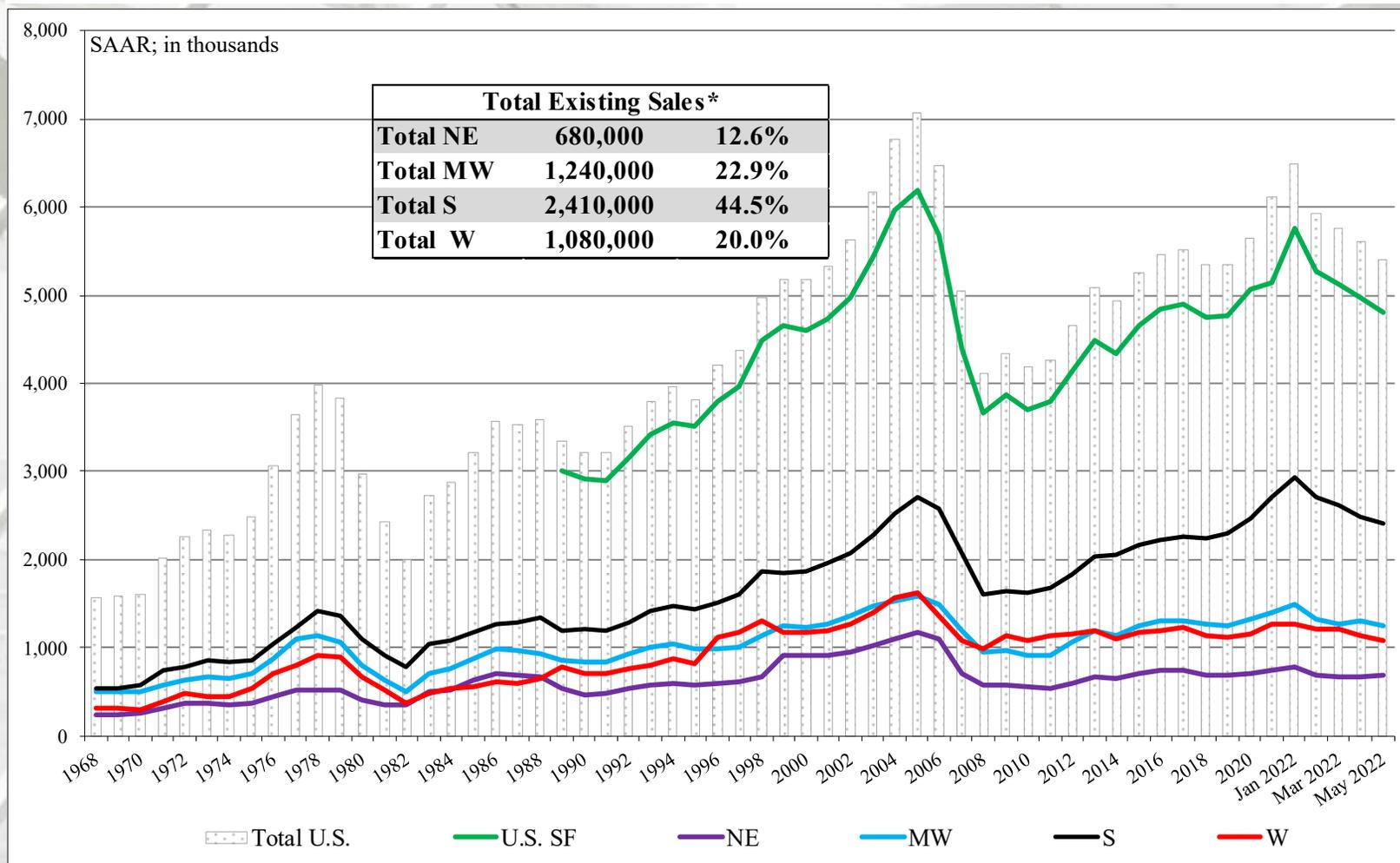
	Existing SF Sales	SF Median Price
May	4,800,000	\$370,000
April	4,980,000	\$360,700
2021	5,200,000	\$315,100
M/M change	-3.6%	3.1%
Y/Y change	-7.7%	14.6%

All sales data: SAAR.

Source: <https://fred.stlouisfed.org/series/EXHOSLUSM495S>; 6/21/22

Return TOC

# 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 Price Index – June 2022

**FHFA House Price Index Up 1.6 Percent in April;  
Up 18.8 Percent from Last Year**

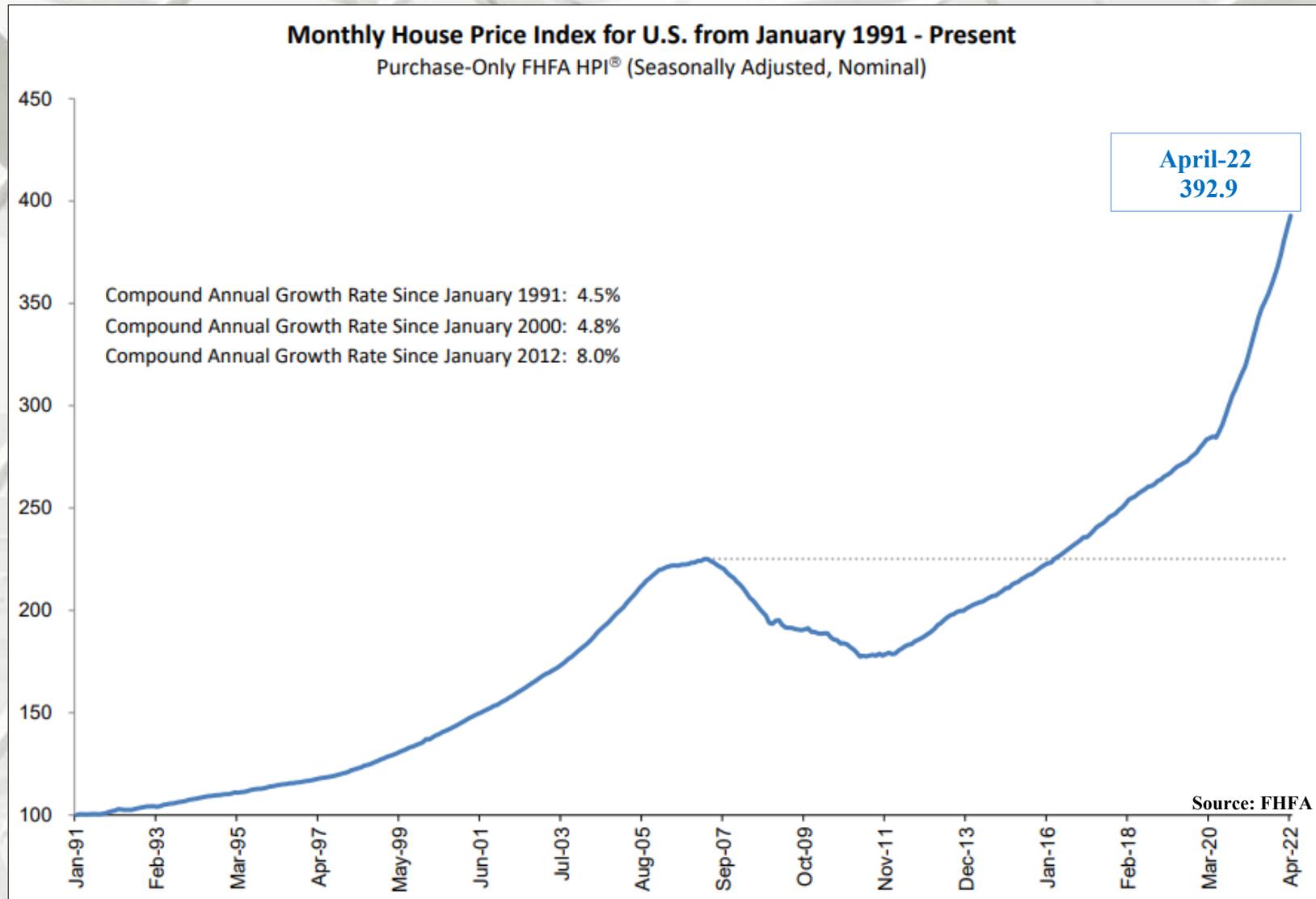
## Significant Findings

“House prices rose nationwide in April, up 1.6 percent from the previous month, according to the latest Federal Housing Finance Agency House Price Index (FHFA HPI®). House prices rose **18.8 percent** from April 2021 to April 2022. The previously reported 1.5 percent price change for March 2022 was revised upward to 1.6 percent.

For the nine census divisions, seasonally adjusted monthly house price changes from March 2022 to April 2022 ranged from **+0.3 percent** in the East South Central division to **+2.5 percent** in the West South Central division. The 12-month changes were all positive, ranging from **+14.1 percent** in the Middle Atlantic division to **+23.5 percent** in the South Atlantic division.” – Raffi Williams and Adam Russell, FHFA

“House price appreciation continues to remain elevated in April. The inventory of homes on the market remains low, which has continued to keep upward pressure on sales prices. Increasing mortgage rates have yet to offset demand enough to deter the strong price gains happening across the country.” – William Doerner, Ph.D., Supervisory Economist, Division of Research and Statistics, FHFA

# U.S. Housing Prices



# U.S. Housing Prices

## S&P CoreLogic Case-Shiller Index Reports Annual Home Price Gain of 20.4%

“... Data for April 2022 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 20.4% annual gain in April, down from 20.6% in the previous month. The 10-City Composite annual increase came in at 19.7%, up from 19.5% in the previous month. The 20-City Composite posted a 21.2% year-over-year gain, up from 21.1% in the previous month. Tampa, Miami, and Phoenix reported the highest year-over-year gains among the 20 cities in April. Tampa led the way with a 35.8% year-over-year price increase, followed by Miami with a 33.3% increase, and Phoenix with a 31.3% increase. Nine of the 20 cities reported higher price increases in the year ending April 2022 versus the year ending March 2022.

### Month-Over-Month

Before seasonal adjustment, the U.S. National Index posted a 2.1% month-over-month increase in April, while the 10-City and 20-City Composites posted increases of 2.2% and 2.3%, respectively. After seasonal adjustment, the U.S. National Index posted a month-over-month increase of 1.5%, and the 10-City and 20-City Composites both posted increases of 1.8%.

In April, all 20 cities reported increases before and after seasonal adjustments.” – 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

### Analysis

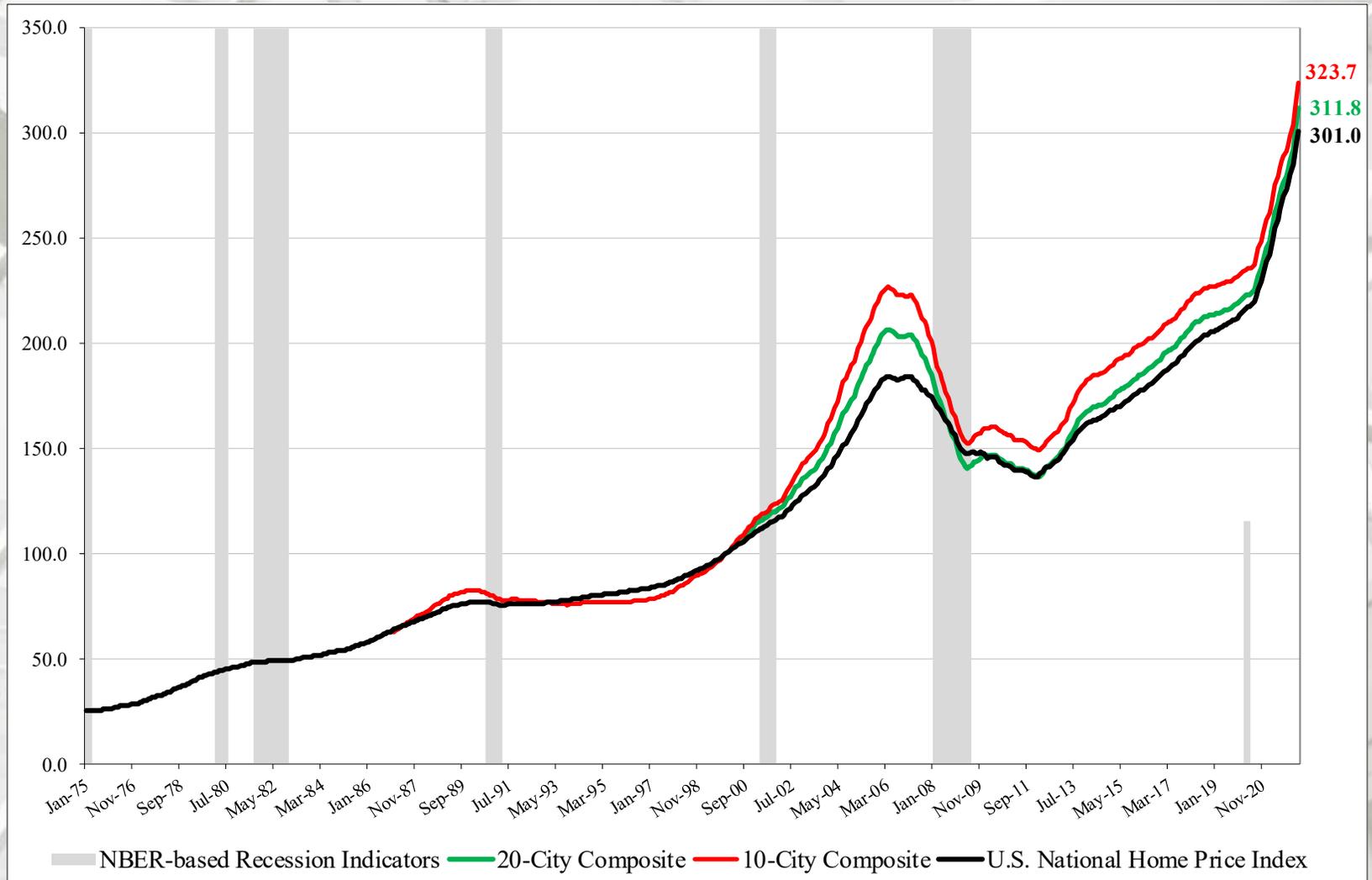
“April 2022 showed initial (although inconsistent) signs of a deceleration in the growth rate of U.S. home prices. The National Composite Index rose by 20.4% for the 12 months ended April 2022; this represents a slight deceleration from March’s 20.6% reading. The 10- and 20-City Composites were up 19.7% and 21.2%, respectively, modestly ahead of their gains in March. Despite the deceleration of the National Composite and the modest acceleration for the 10- and 20-City Composites, these growth rates are extremely strong by historical standards – at or above the 99th percentile in all three cases.

We continue to observe very broad strength in the housing market, as all 20 cities notched double-digit price increases for the 12 months ended in April. April’s price increase ranked in the top quintile of historical experience for every city, and in the top decile for 19 of them. In contrast with the past five months, when prices in most cities accelerated, in April only nine cities saw prices rise faster than they had done in March. There’s a regional pattern among the nine, as all five cities in our South composite (Atlanta, Charlotte, Dallas, Miami, and Tampa) are represented there.

Tampa (+35.8%) was the fastest growing city for the second consecutive month, with Miami (+33.3%) and long-time leader Phoenix (+31.3%) in second and third positions. Prices were strongest in the South (+30.6%) and Southeast (+30.5%). Even the comparatively weak Midwest (+13.8%) and Northeast (+14.0%) showed double-digit gains.

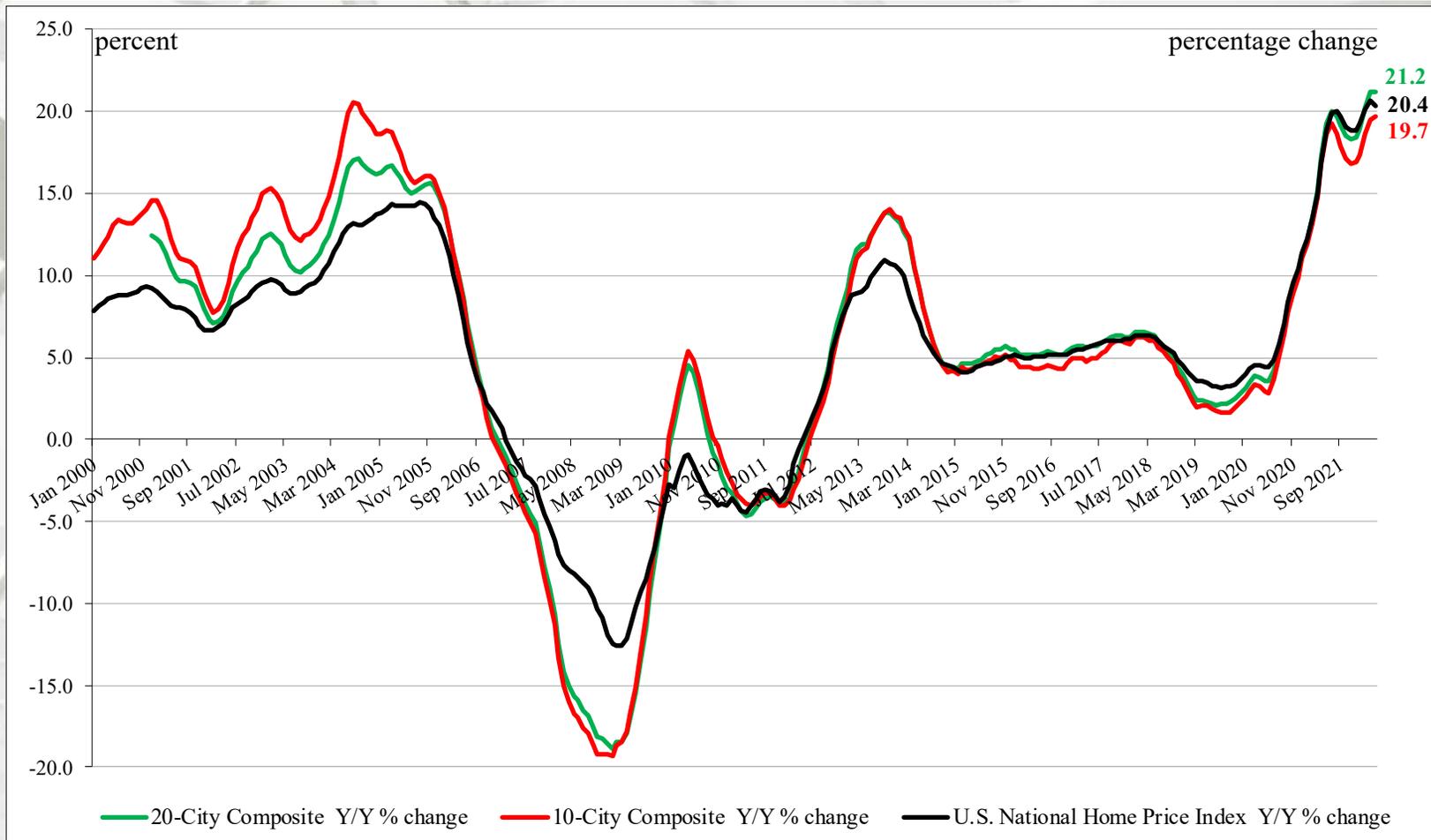
We noted last month that mortgage financing has become more expensive as the Federal Reserve ratchets up interest rates, a process that had only just begun when April data were gathered. A more challenging macroeconomic environment may not support extraordinary home price growth for much longer.” – Craig 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).

# 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).

## Y/Y Price Change

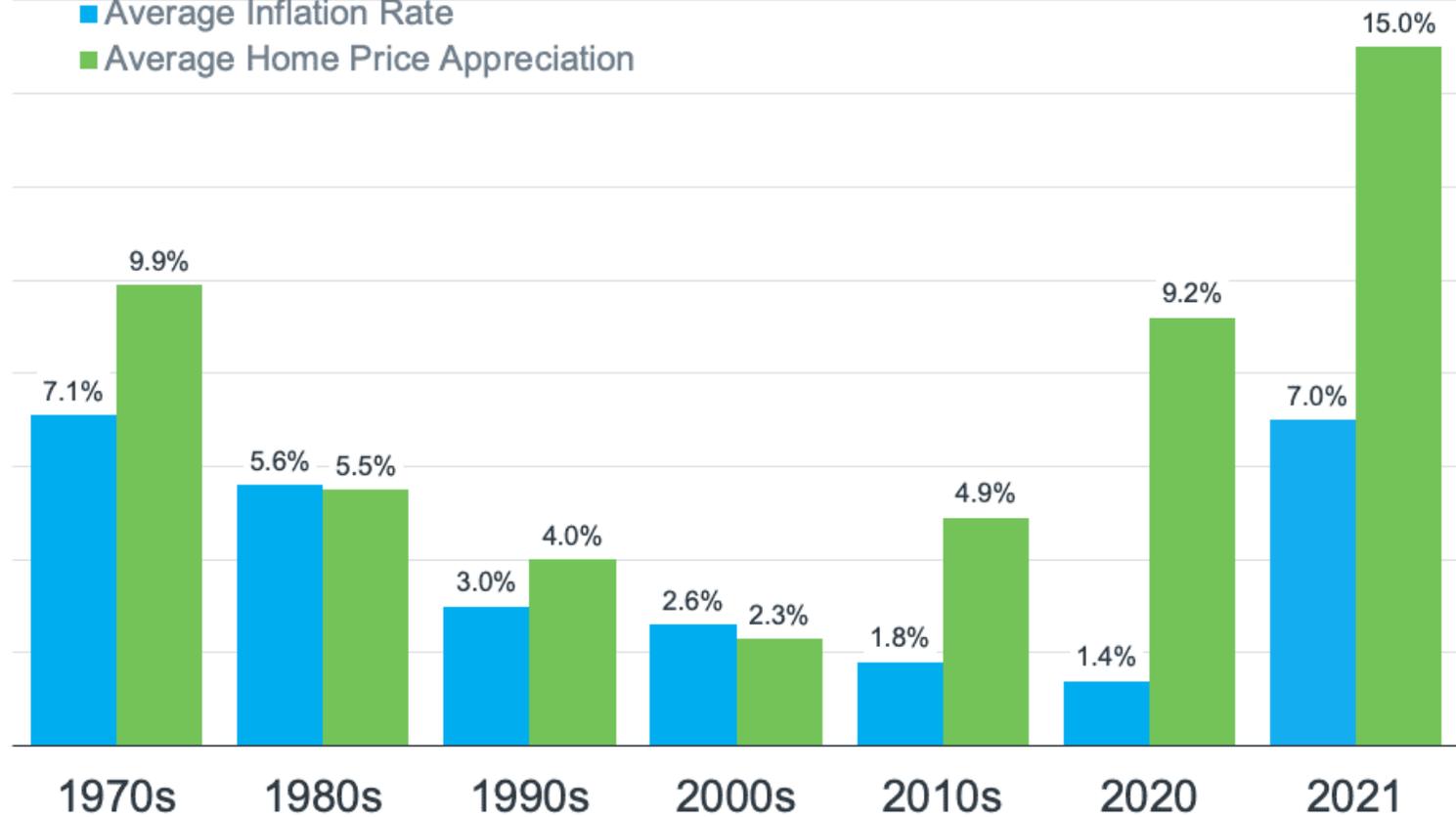
From April 2021 to April 2022, the National Index increased 20.4%; the Ten-City by 19.7%, and the Twenty-City by 21.2%.

# Keeping Current Matters

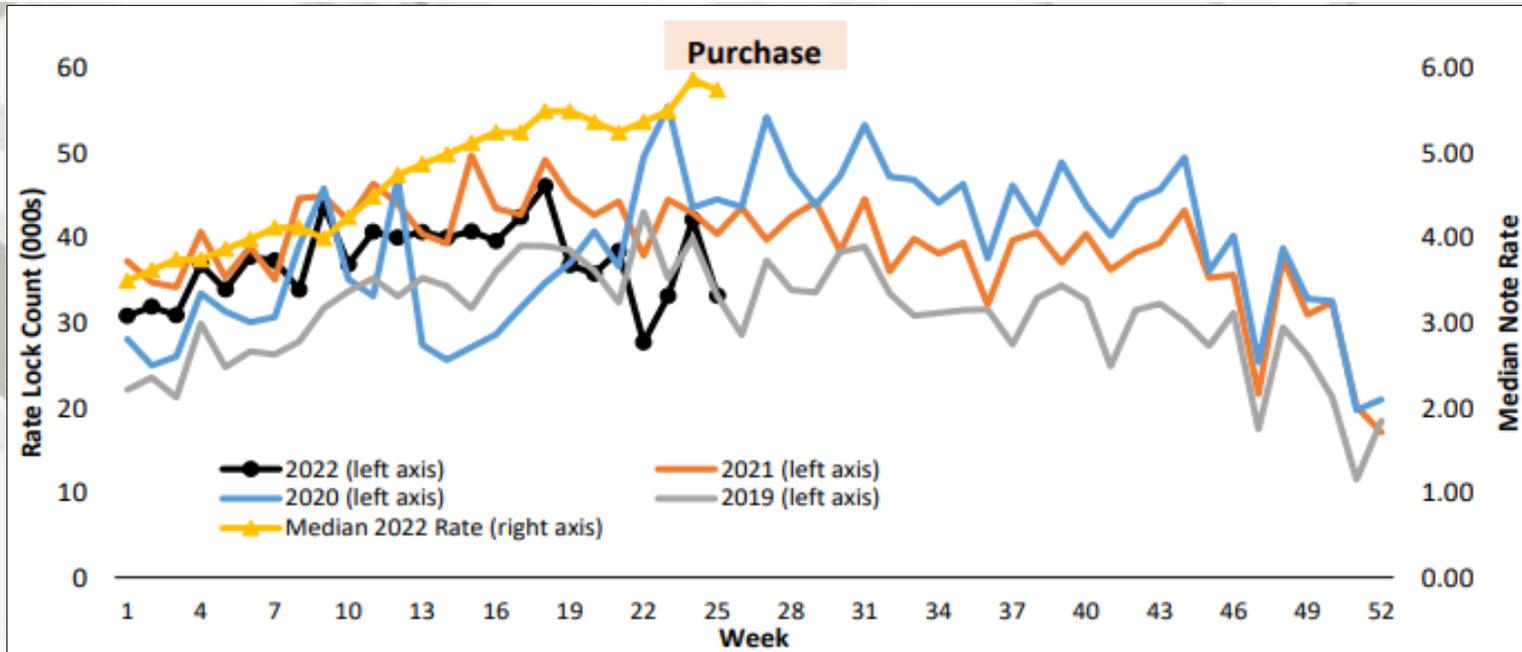
## Home Price Appreciation vs. Inflation Rate

Since the 1970s

- Average Inflation Rate
- Average Home Price Appreciation



# U.S. Housing Affordability & Prices



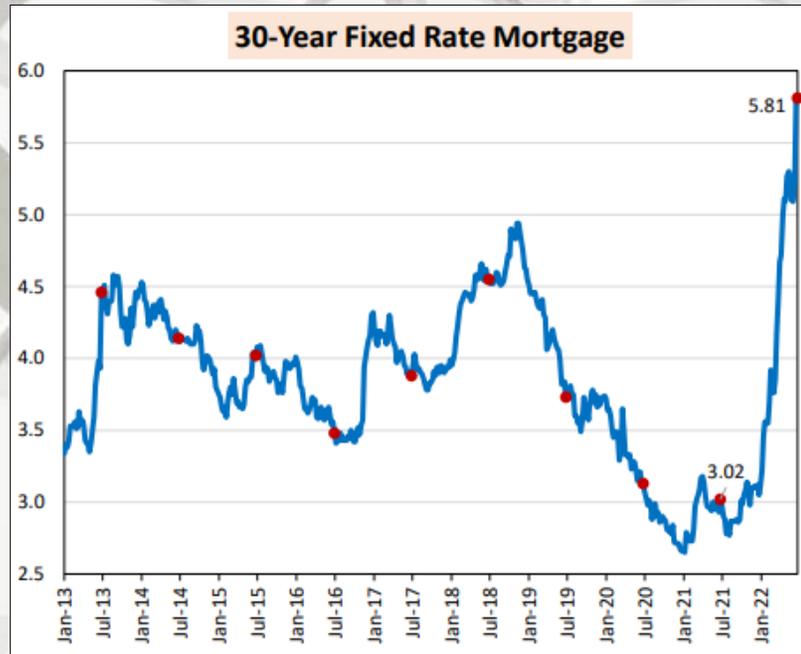
Note: Rate locks are limited to lenders who joined Optimal Blue Dec. 2017 or earlier.  
 Source: Optimal Blue and AEI Housing Center, [www.AEI.org/housing](http://www.AEI.org/housing).

## AEI Housing Center Purchase Activity Outlook Given Headwinds

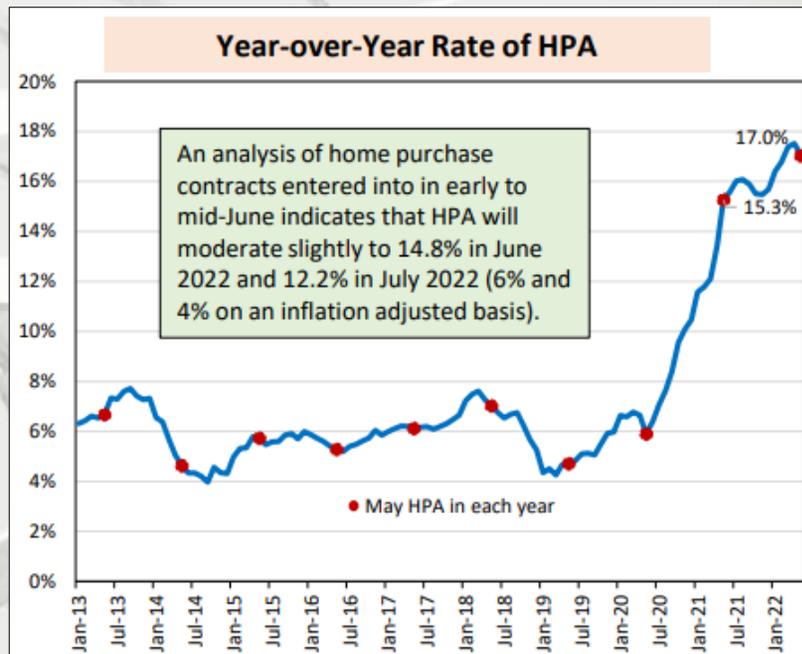
“Purchase rate lock volume and home price appreciation (HPA) both continue to decelerate and confirm a strong trend reversal from the last two years. With rates 225 basis points above 2022 week 1, volume for 2022 week 25 equaled 2019 week 25’s level, but is down 18% from 2021. Additionally, HPA for July and early-August 2022 is projected at 12.2% and 10.2%, respectively, down from 17.0% in May and June’s estimated 14.8%. While we still have a long way to get to a more balanced market (including seeing a significant increase in supply), rate lock volume appears to be normalizing around 2019’s healthy, pre-pandemic levels. *Mortgage News Daily* reported a 30-year mortgage rate of 5.88% for June 27, 2022. The Fed will need to hold the course on rates and quantitative tightening, as rates at the 6% level are needed to slow year-over-year HPA to 4-6% by the end of 2023. Note that week 25 refers to June 18 – 24, 2022.” – Edward Pinto, Resident Fellow; Director and Tobias Peter, Research Fellow and Director of Research, AEI Housing Center

Source: <https://www.aei.org/housing/housing-market-indicators/>; 6/28/22

# U.S. Housing Affordability & Prices



Note: Data are for 30-year fixed-rate prime conventional conforming home purchase mortgages with a loan-to-value of 80 percent  
Source: Freddie Mac.



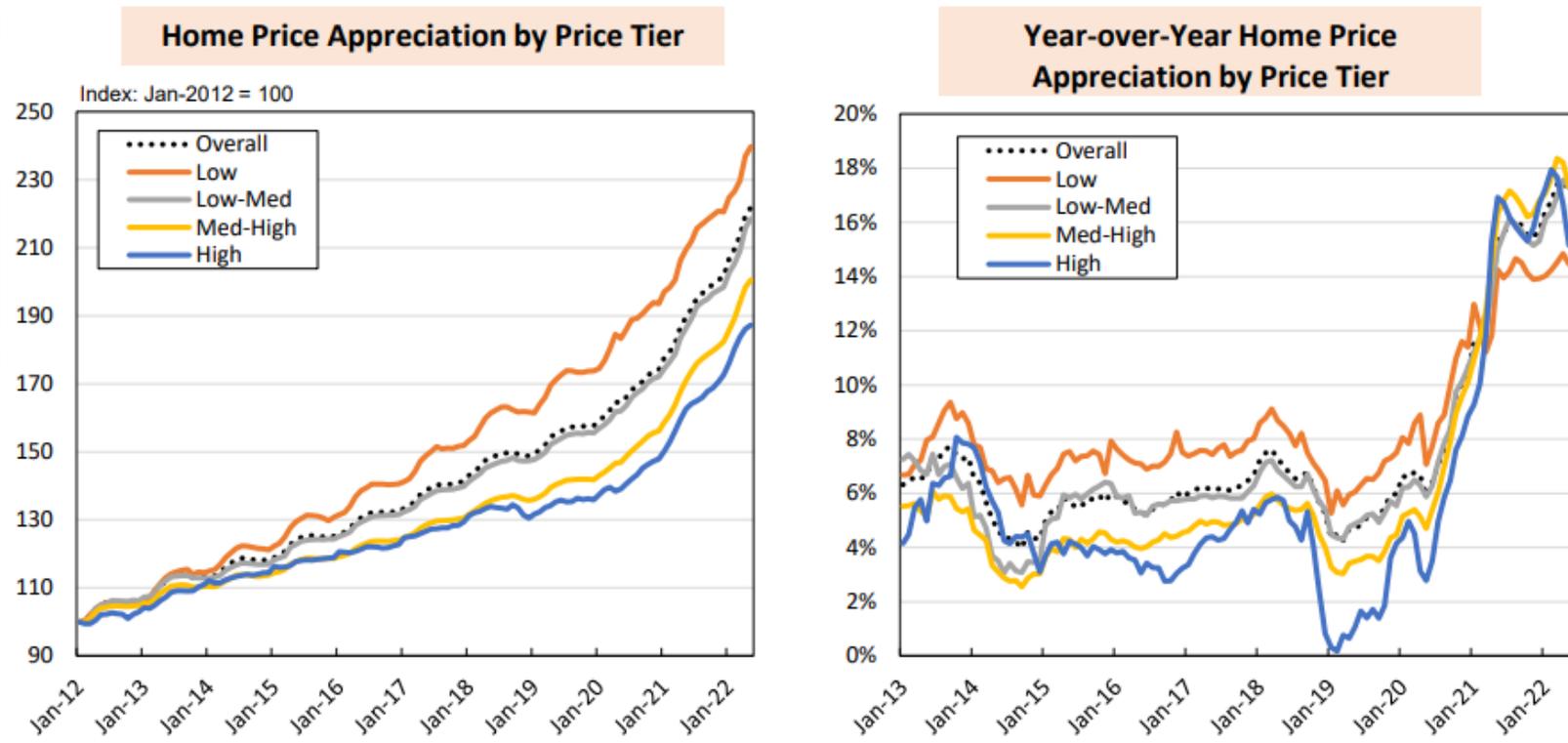
Note: Data are for the entire country. Data for May 2022 are preliminary.  
Source: AEI Housing Center, [www.AEI.org/housing](http://www.AEI.org/housing).

## AEI Housing Center

### Home Price Appreciation Accelerates Despite the Rate Hikes

“HPA for May 2022 came in at 17.0% year-over-year – down from 17.5% a month ago but up from 15.3% a year ago. Since the beginning of 2020, home prices have risen 39%. This rapid pace of HPA is driven by supply constraints (see next slides), relatively low mortgage rates, and an arbitrage opportunity enhanced by the work from home economy. Based on Optimal Blue data, HPA is projected to moderate slightly to 14.8% in June 2022 and 12.2% in July 2022 due to the increasing rates. If mortgage rates remain around 6%, HPA (y-o-y) is expected to further slow to 6% and 4%-6%, respectively, for December 2022 and 2023 (y-o-y) (note: a forecast change).” – Edward Pinto, Resident Fellow; Director and Tobias Peter, Research Fellow and Director of Research, AEI Housing Center

# U.S. Housing Affordability & Prices



Note: Data are for the entire country. Data for April 2021 are preliminary.  
Source: AEI Housing Center, [www.AEI.org/housing](http://www.AEI.org/housing).

## AEI Housing Center

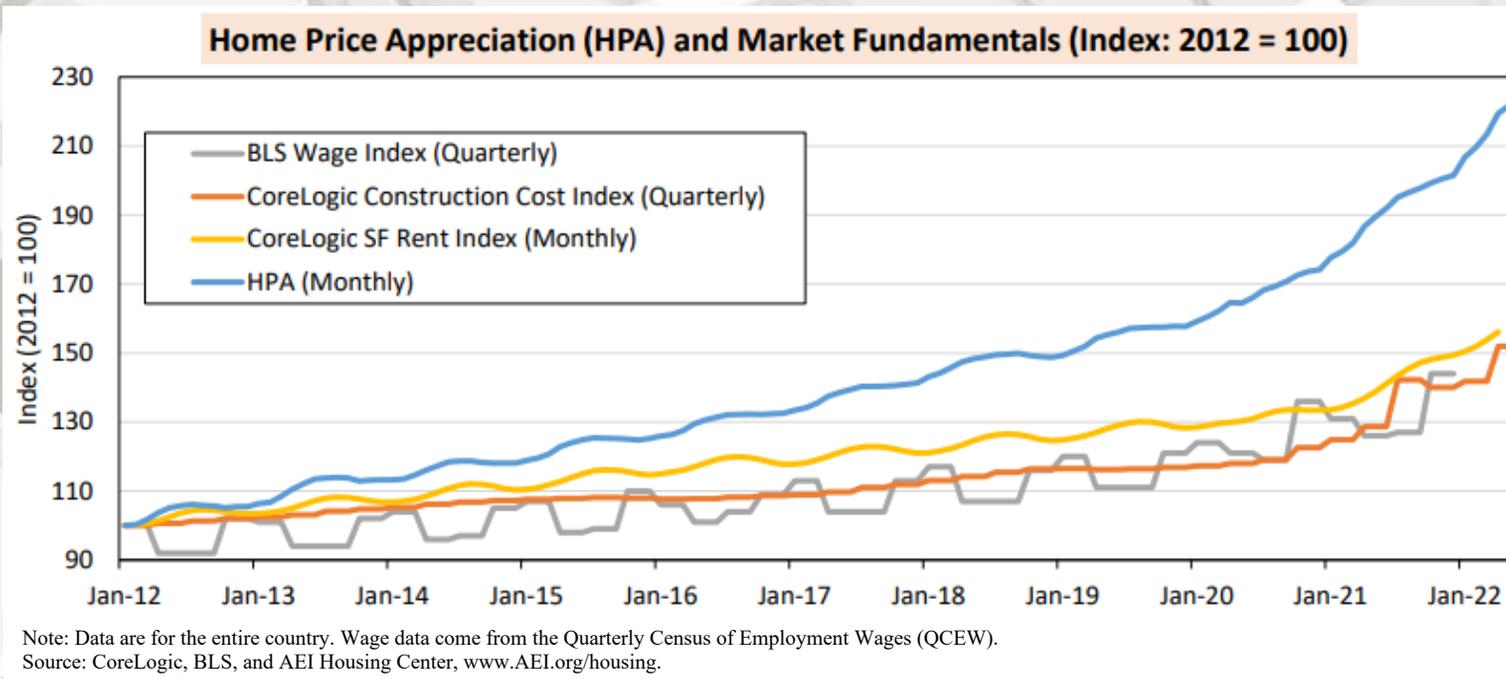
### Home Price Appreciation by Price Tier

“Since 2012 a large gap in HPA has developed between the lower and upper end of the market (left panel). Preliminary numbers for May 2022 indicate that the low price tier continues to have strong HPA. The med-high and high price tiers, which are more dependent on the Fed’s monetary punch bowl for increased buying power from low rates, are showing the strongest HPA. But the impact from higher rates is slowly emerging, especially for the high price tier (right panel). Optimal Blue rate lock data indicates that a strong HPA trend reversal is underway.” – Edward Pinto, Resident Fellow; Director and Tobias Peter, Research Fellow and Director of Research, AEI Housing Center

Source: <https://www.aei.org/housing/housing-market-indicators/>; 6/28/22

Return TOC

# U.S. Housing Affordability & Prices



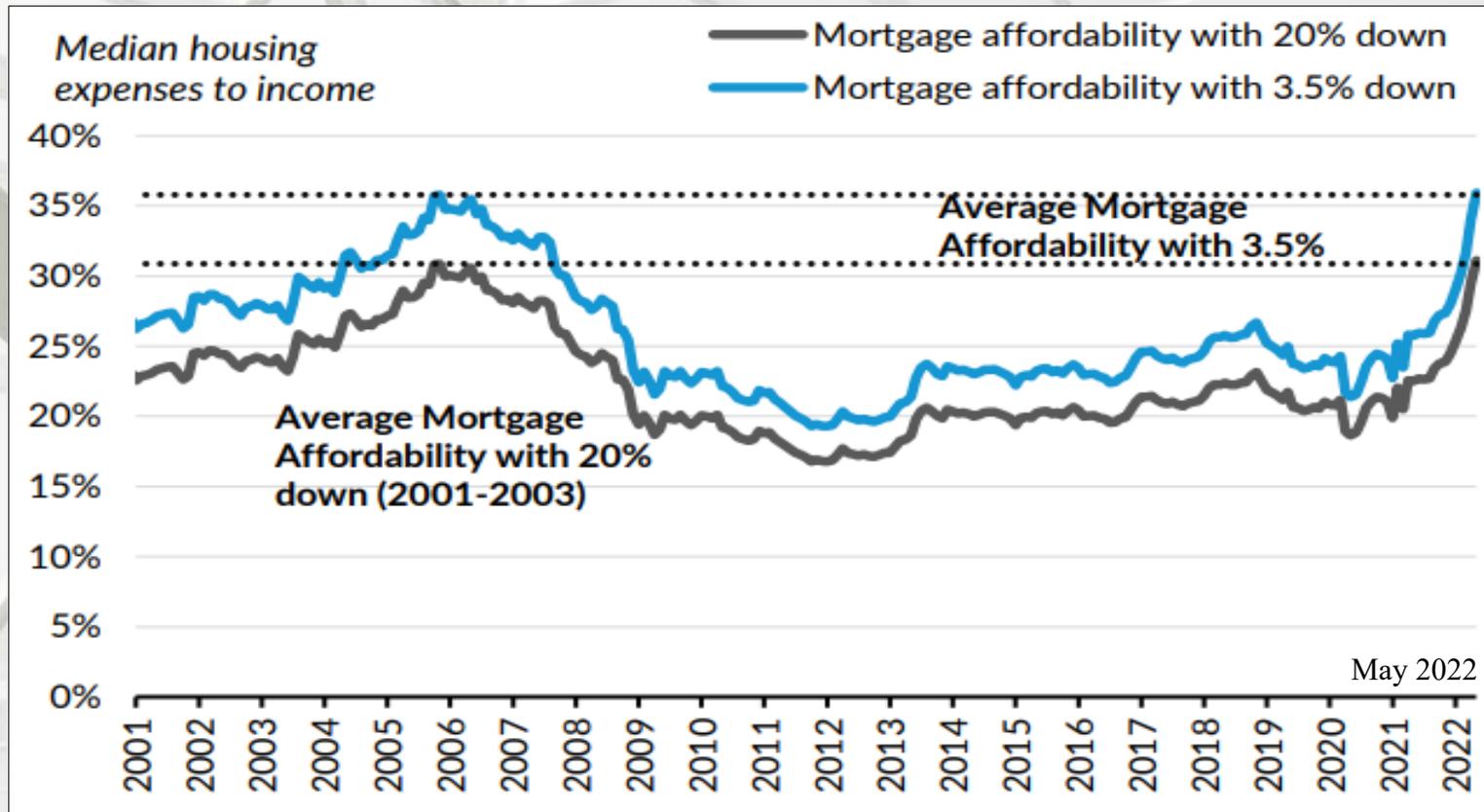
## AEI Housing Center

### Market Fundamentals and Home Price Appreciation

“Since 2012, home price appreciation (HPA) has increased 2-3 times the rate of market fundamentals. While this is usually unsustainable over the long run, the current boom may be different:

- Total housing inventory is near historically low levels and the supply-demand imbalance is underpinning prices.
- Mortgage risk is much lower today than during the 2000s with the exception of FHA.
- Home prices may seem exuberant, but today inflation in the consumer prices index accounts for about half the current growth rate.
- Home price increases are now in line with rent increases, another difference from the early 2000s.
- Strong demographics from Millennials provide demand tailwinds.
- Finally, higher income workers, who have greater opportunities to work from home, are more able to profit from arbitrage opportunities offered by vastly different home prices across metros and regions.” – Edward Pinto, Resident Fellow; Director and Tobias Peter, Research Fellow and Director of Research, AEI Housing Center

# U.S. Housing Affordability

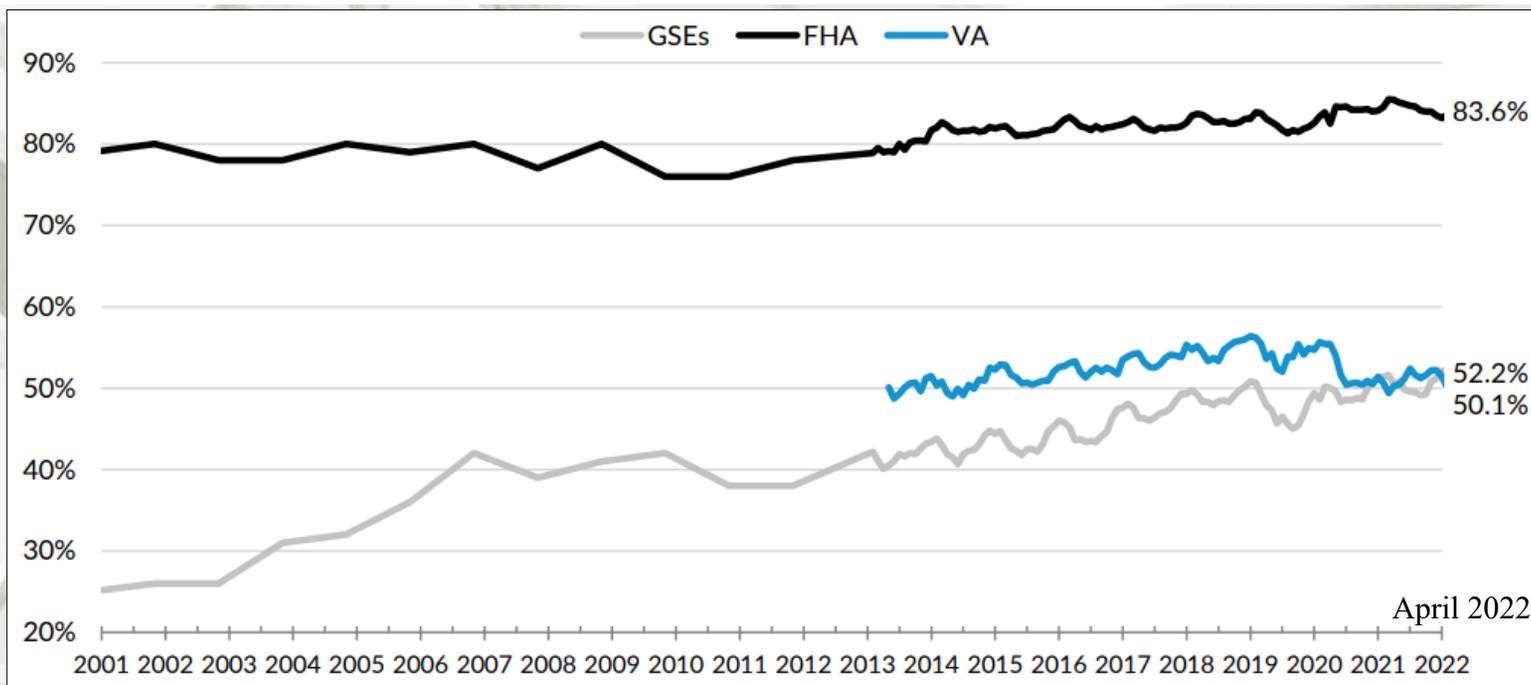


## Urban Institute

### National Mortgage Affordability Over Time

“With the rise in interest rates, and rapid increases in home prices, affordability continues to worsen. As of May 2022, with a 20 percent down payment, the share of median income needed for the monthly mortgage payment stood at 31.1 percent, higher than the 30.9 percent at the peak of the housing bubble in November 2005; with 3.5 percent down it is 35.9 percent, slightly above the 35.8 percent prior peak in November 2005. These numbers represent a sharp worsening in affordability over the past year. ...” – Laurie Goodman *et. al*, Vice President, Urban Institute

# U.S. Housing Affordability



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 Home Buyers

“In April 2022, the FTHB share for FHA, which has always been more focused on first time homebuyers, was 83.6 percent. The FTHB share of VA lending in April was 52.2 percent; the GSE share was a very similar 50.1 percent. ... based on mortgages originated in April 2022, 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.” – Laurie Goodman *et. al*, Vice President, Urban Institute

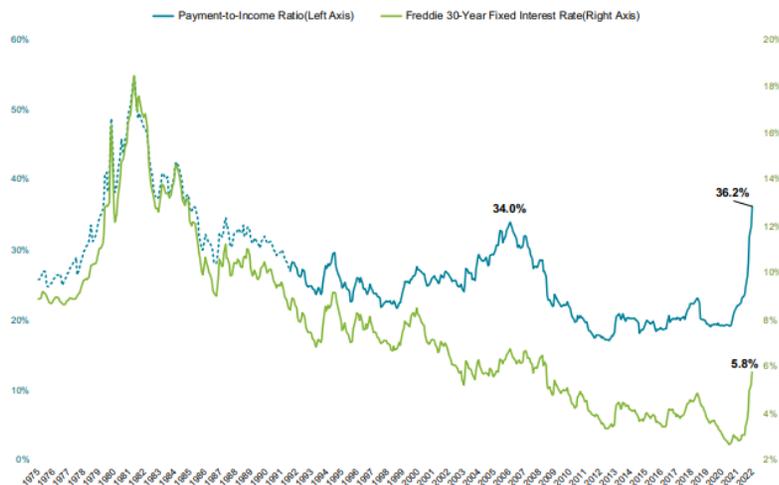
# U.S. Housing Affordability

## Black Knight

### MORTGAGE MONITOR

MAY 2022 HOUSING MARKET, AFFORDABILITY AND INVENTORY

#### NATIONAL PAYMENT-TO-INCOME RATIO\*



Source: Black Knight HPI, Census Bureau, FHLMC PMMS, Moody's  
\*The National Payment to Income Ratio is the share of median income needed to make the monthly principal and interest payment on the purchase of the average-priced home using a 20% down 30-year fixed rate mortgage at the prevailing interest rate  
2022: Data as of June 16th, 2022

Today's 36.2% ratio is a result of both rising interest rates and soaring home values largely driven by historically low inventory levels

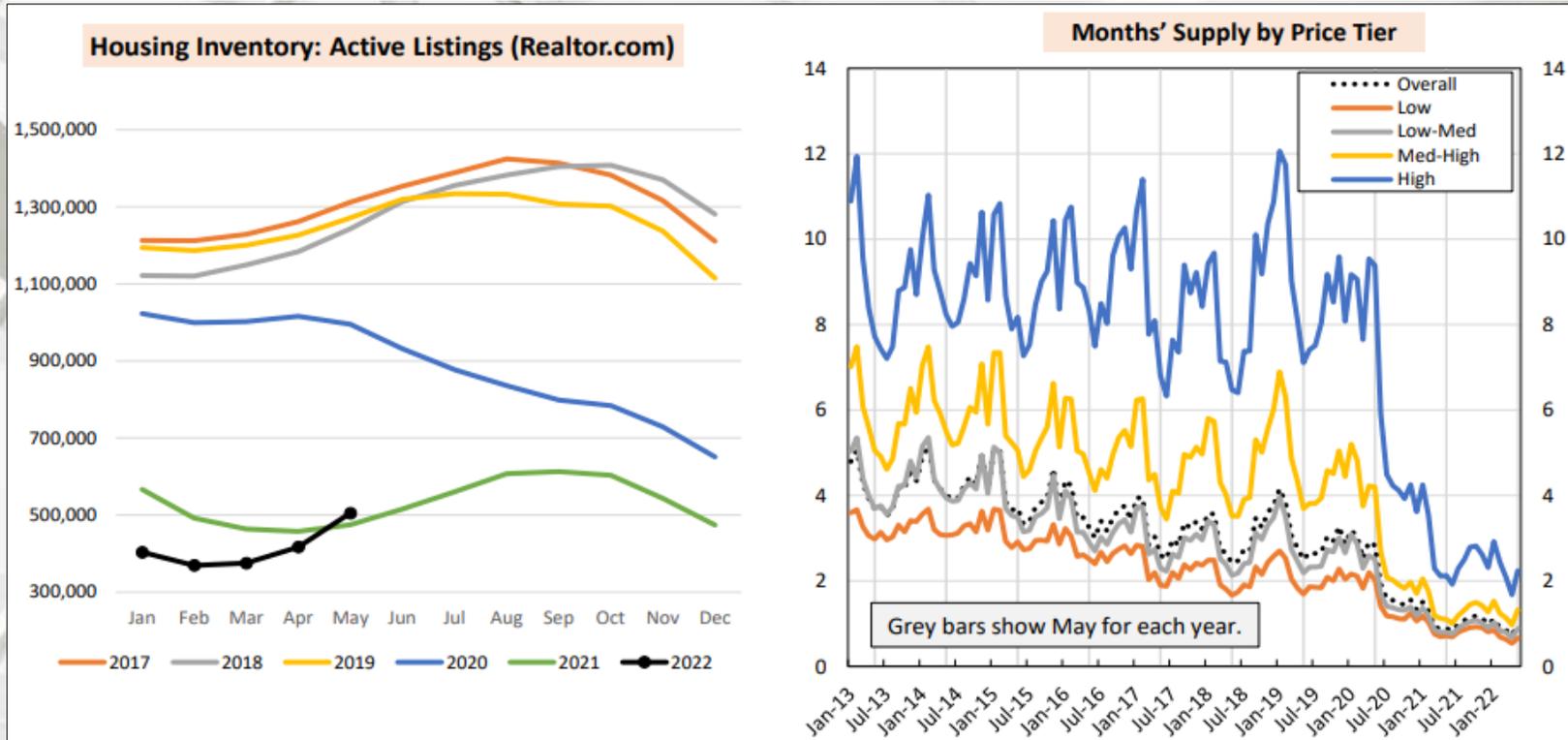
- » With 30-year rates hovering close to 6% and home prices up nearly 11% since the start of 2022, affordability is at its worst point since the mid-1980s – when sharp Fed hikes led to high double-digit mortgage rates that resulted in a greater than 50% payment-to-income ratio
- » The affordability challenge back then was almost entirely driven by the interest rate environment, while incomes largely kept up with home price growth
- » As of mid-June 2022, it takes 36.2% of the median household income to make the mortgage payment on the average priced home purchase, well above the 34.1% post-1980s peak in July 2006
- » The monthly principal and interest (P&I) payment for the average-priced home purchased with 20% down is now over \$2,100 for the first time on record, up nearly \$750 (55%) so far this year and nearly 2X the \$1,089 required at the beginning of the pandemic



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# U.S. Housing Supply



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

## AEI Housing Center

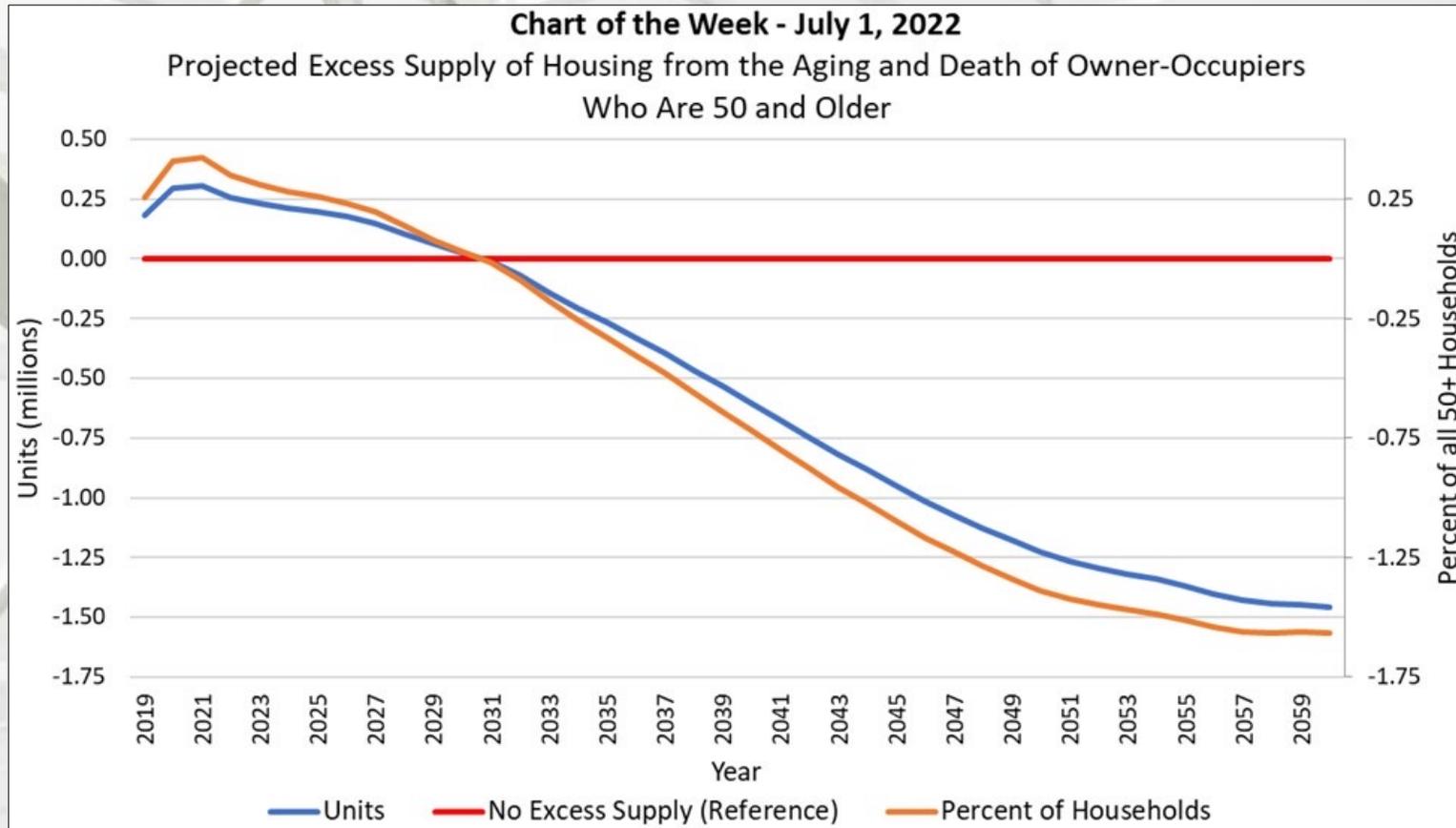
### Supply Remains Depleted, Likely Fueling Continued Rapid HPA

“While active listings increased in May 2022 – largely mimicking pre-pandemic seasonal trends experienced in 2017-2019 – inventory was still only 40% of the 2017-2019 (left). Months’ supply, currently at 1 month, is near the lowest level seen in our series (right). It would need to increase to >6 months to indicate a buyer’s market and to 7-9 months to trigger a decline in national y-o-y home price appreciation.” – Edward Pinto, Resident Fellow; Director and Tobias Peter, Research Fellow and Director of Research, AEI Housing Center

Source: <https://www.aei.org/housing/housing-market-indicators/>; 6/28/22

Return TOC

# U.S. Housing Supply



## Mortgage Bankers Association (MBA)

### MBA Chart of the Week

“This week the Research Institute for Housing America (RIHA), MBA’s think tank, released a special report, [\*Who Will Buy the Baby Boomers’ Homes When They Leave Them?\*](#), authored by Gary Engelhardt of Syracuse University. The report examines population aging, mortality, and the future of the housing market.” – Eddie Seiler, Housing Economist and Executive Director, MBA

# U.S. Housing Supply

## Mortgage Bankers Association (MBA)

### Who Will Buy the Baby Boomers' Homes When They Leave Them?

“In 2019, there were 32 million Boomer home owners (i.e., 41% of all home owners). Many analysts have suggested that their aging and eventual death may have an important impact on the future housing market, with the possibility that the residential market will “flood” with inventory, leading to substantially depressed house price growth and new construction – a phenomenon termed as the “Silver Tsunami.” In contrast to a tsunami, Engelhardt shows, using careful empirical analysis, that aging and mortality in the U.S. is slow-moving and largely predictable – perhaps more of a “Silver Glacier.”

This week’s MBA Chart of the Week replicates Figure 23 from the RIHA report. The blue line plots the projected excess supply of housing from the aging and death of older home owners, defined as the difference between the projected supply of homes to the market for home owners aged 50 and older for 2019-2060, and the projected total demand for homes supplied to the market by home owners aged 50 and older (that transition to occupants of all ages). Similarly, the orange line measures the excess supply as a share of the total number of households with heads 50 and older.

Based on changing demographics, over the next decade there is projected to be a modest amount of excess supply of homes for sale – around quarter-million units annually. While this excess supply will be a very small share (less than one-half of a percent), it constitutes a non-trivial share of current new housing starts and completions, which suggests that most of the adjustment will be through a reduction in the growth of new housing, with some softness in the rental market. Beyond 2032, demographic change is more favorable to demand. This occurs because of compositional changes of the population toward the Millennials and general population growth, as well as the conversion of previously owner-occupied units to rental housing.

Engelhardt’s report provides important predictions for the nation but does not drill down to cities and states with large retiree populations (that could be disproportionately hit by the Silver Tsunami).

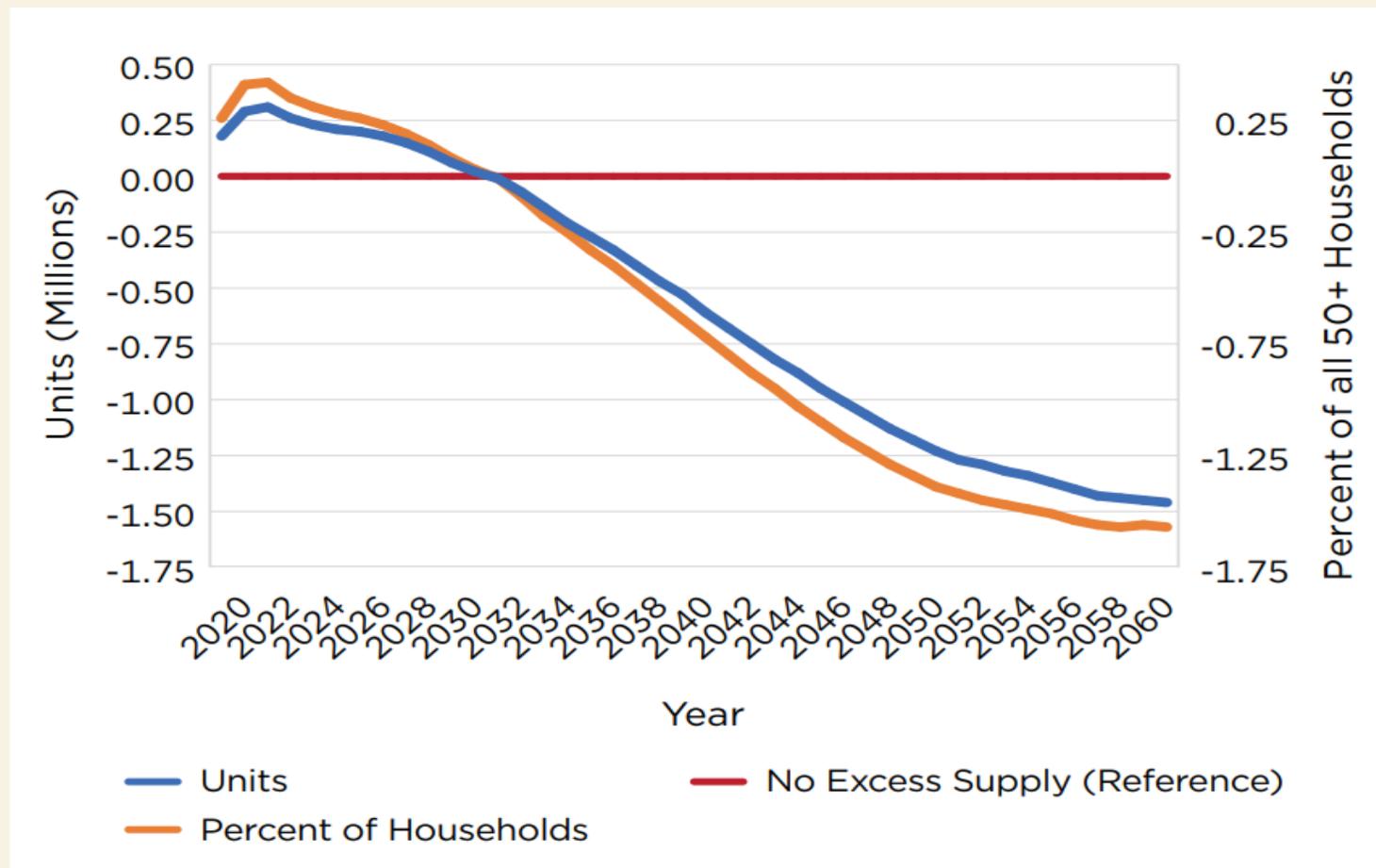
Engelhardt concludes his report by noting that “Incorporating geographic variation into projections of future housing demand and supply from population aging is an important avenue for future research” – a topic that MBA Research will continue to follow.” – Eddie Seiler, Housing Economist and Executive Director, MBA

# U.S. Housing Supply

Mortgage Bankers Association (MBA)

Who Will Buy the Baby Boomers' Homes When They Leave Them?

**Figure 23. Projected Excess Supply of Housing from the Aging and Death of Owner-Occupiers Who Are 50 and Older**



**Source:** Author's calculation based on the projections in Figures 17 and 20

# U.S. Housing Market

## Fannie Mae

### Consumers Appear Increasingly Frustrated by Housing Market, Larger Economy

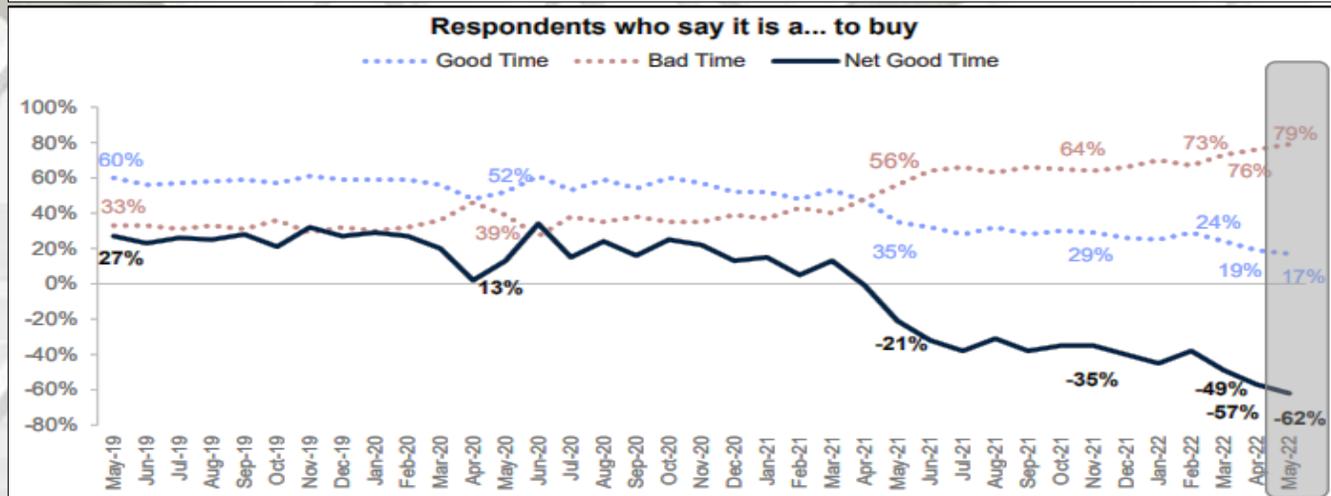
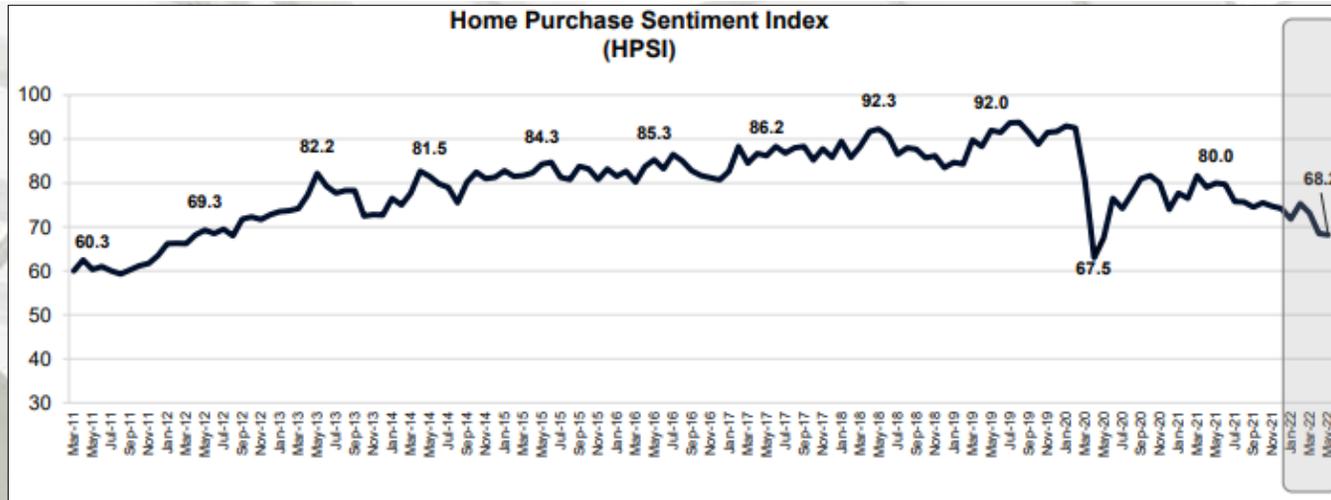
#### Home Purchase Sentiment Index® (HPSI)

“The Fannie Mae (FNMA/OTCQB) [Home Purchase Sentiment Index® \(HPSI\)](#) decreased 3.4 points in June to 64.8, its second-lowest reading in a decade. Surveyed consumers continue to express pessimism about home buying conditions, with only 20% of respondents reporting it’s a good time to buy a home, while the percentage of consumers who believe it’s a “Good Time to Sell” fell from 76% to 68% this month. Overall, four of the index’s six components decreased month over month, including the components associated with perceived job stability and household income. Notably, a survey-high 81% of consumers believe the economy is on the “wrong track” and, for the first time in nearly seven years, a plurality of respondents said it would be difficult to get a mortgage, potentially a function of elevated home prices and higher mortgage rates. Year over year, the full index is [down 14.9 points](#).

“In June, a survey-record 81% of consumers reported that the economy is on the wrong track, suggesting to us – and corroborated by other recently released consumer confidence measures – that people appear to be growing increasingly frustrated with inflation and the slowing economy,” said Doug Duncan, Fannie Mae Senior Vice President and Chief Economist. “Moreover, 21% of respondents expressed job stability concerns, the highest percentage in 18 months. This month’s HPSI reading reflects these macroeconomic and personal financial concerns, with housing sentiment additionally diminished by the recent rapid increases in mortgage rates.”

Duncan continued: “Interestingly, consumers’ perceptions of home-selling conditions declined meaningfully in June, returning to pre-pandemic levels. This was particularly true for home owner respondents. At the same time, consumers, especially those in prime home buying groups, appear to be feeling the affordability pinch of higher mortgage rates: Approximately half of all respondents indicated that it would be ‘difficult’ to get a mortgage, the highest such percentage since 2014. As a whole, this month’s HPSI results are consistent with our [forecast](#) of a slowing housing market through the rest of this year and next.” – Fannie Mae

# U.S. Housing Market



## Fannie Mae

### Home Purchase Sentiment Index® (HPSI)

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Source: <https://www.fanniemae.com/newsroom/fannie-mae-news/consumers-appear-increasingly-frustrated-housing-market-larger-economy>; 7/7/22

# U.S. Housing Finance

## Mortgage Bankers Association (MBA)

### Mortgage Credit Availability Decreased in June

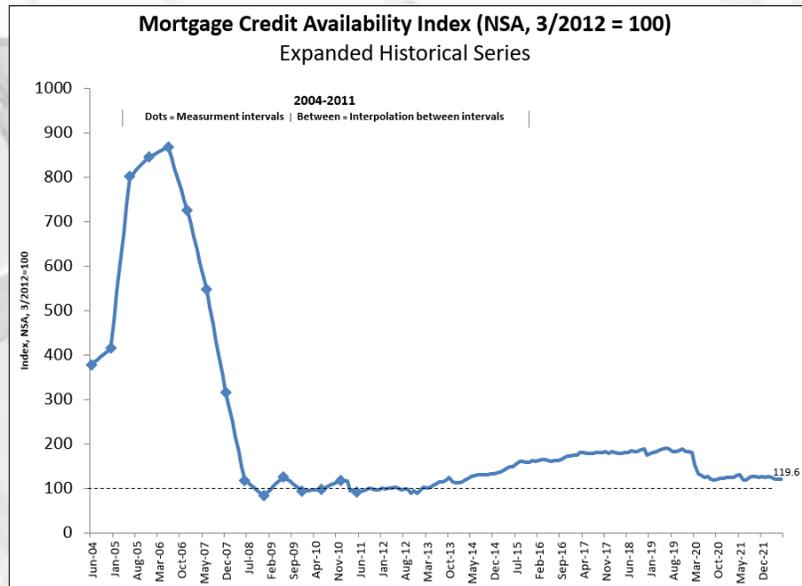
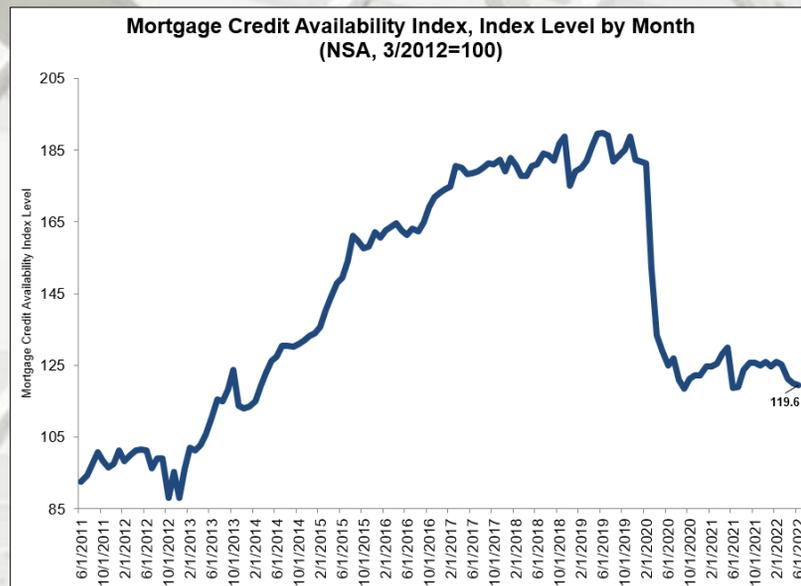
“Mortgage credit availability decreased in June according to the Mortgage Credit Availability Index (MCAI), a report from the Mortgage Bankers Association (MBA) that analyzes data from ICE Mortgage Technology.

The MCAI fell by 0.3 percent to 119.6 in June. 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 increased 1.2 percent, while the Government MCAI decreased by 1.7 percent. Of the component indices of the Conventional MCAI, the Jumbo MCAI increased by 1.4 percent, and the Conforming MCAI rose by 0.6 percent.

Mortgage credit availability decreased slightly in June, as significantly higher mortgage rates compared to a year ago slowed refinance and purchase activity and impacted the overall mortgage credit landscape. Credit availability was mixed by loan type, with the conventional index up 1.2 percent and the government index down 1.7 percent. Although there was reduced supply of lower credit score, high LTV rate-term refinance programs, the decline was offset by increased offerings for conventional ARM and high balance loans. With higher rates and elevated home prices, more prospective buyers are applying for ARMs, but activity remains below historical averages. The decline in the government index was driven by the reduction in offerings for streamline refinance products from FHA and VA, which is the continuation of an ongoing trend reported in prior months.” – 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®

# MBA Mortgage Finance Forecast

## MBA Mortgage Finance Forecast

June 10, 2022

	2021				2022				2023				2021	2022	2023	2024
	Q1	Q2	Q3	Q4	Q1	Q2	Q3	Q4	Q1	Q2	Q3	Q4				
<b>Housing Measures</b>																
Housing Starts (SAAR, Thous)	1,581	1,591	1,569	1,679	1,724	1,701	1,675	1,682	1,710	1,734	1,720	1,746	1,605	1,695	1,728	1,715
Single-Family	1,138	1,112	1,104	1,170	1,186	1,137	1,186	1,216	1,236	1,267	1,264	1,292	1,131	1,181	1,265	1,273
Two or More	443	479	465	509	538	564	489	466	474	467	456	454	474	514	463	443
<b>Home Sales (SAAR, Thous)</b>																
Total Existing Homes	6,287	5,950	6,067	6,203	6,063	5,630	5,645	5,710	5,719	5,838	5,879	6,039	6,127	5,762	5,869	6,076
New Homes	896	737	699	752	814	693	774	794	803	832	815	816	771	769	816	827
FHFA US House Price Index (YOY % Change)	13.1	17.7	18.6	17.6	18.8	16.6	5.6	2.7	2.4	2.3	2.5	2.4	17.6	2.7	2.4	2.5
Median Price of Total Existing Homes (Thous \$)	313.5	351.7	356.1	353.8	361.4	396.5	391.9	385.7	387.5	396.1	398.3	401.1	343.8	383.9	395.8	411.3
Median Price of New Homes (Thous \$)	364.9	380.6	407.8	422.5	430.9	452.6	442.8	437.1	440.3	442.0	443.6	444.1	394.0	440.8	442.5	447.7
<b>Interest Rates</b>																
30-Year Fixed Rate Mortgage (%)	2.9	3.0	2.9	3.1	3.8	5.1	5.1	5.0	5.0	5.0	4.8	4.8	3.1	5.0	4.8	4.4
10-Year Treasury Yield (%)	1.3	1.6	1.3	1.5	1.9	2.9	2.9	2.9	2.9	2.9	2.8	2.8	1.5	2.9	2.8	2.6
<b>Mortgage Originations</b>																
Total 1- to 4-Family (Bil \$)	1,094	1,050	954	893	689	678	527	517	481	621	582	581	3,991	2,411	2,266	2,501
Purchase	320	460	442	424	381	477	417	406	349	484	449	437	1,646	1,681	1,720	1,806
Refinance	774	590	512	469	308	201	110	111	132	137	133	144	2,345	730	546	695
Refinance Share (%)	71	56	54	53	45	30	21	21	27	22	23	25	59	30	24	28
FHA Originations (Bil \$)													293	169	170	180
Total 1- to 4-Family (000s loans)	3,146	2,926	2,714	2,497	1,830	1,846	1,561	1,446	1,313	1,670	1,571	1,502	11,283	6,683	6,057	6,296
Purchase	974	1,341	1,302	1,259	1,025	1,282	1,113	1,059	912	1,252	1,153	1,090	4,876	4,479	4,408	4,494
Refinance	2,172	1,585	1,412	1,238	805	564	448	387	401	418	418	412	6,407	2,204	1,649	1,802
Refinance Share (%)	69	54	52	50	44	31	29	27	31	25	27	27	57	33	27	29
<b>Mortgage Debt Outstanding</b>																
1- to 4-Family (Bil \$)	11,783	12,022	12,274	12,536	12,777	12,993	13,211	13,389	13,590	13,800	14,000	14,188	12,536	13,389	14,188	14,814

**Notes:**

Total 1-to-4-family originations and refinance share are MBA estimates. These exclude second mortgages and home equity loans. 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. The FHFA US House Price Index is the forecasted year over year percent change of the FHFA Purchase-Only House Price Index. Copyright 2022 Mortgage Bankers Association. All rights reserved. THE HISTORICAL DATA AND PROJECTIONS ARE PROVIDED "AS IS" WITH NO WARRANTIES OF ANY KIND.

**MBA**

MORTGAGE BANKERS ASSOCIATION

# MBA Economic Forecast

## MBA Economic Forecast

June 10, 2022

	2021				2022				2023				2021	2022	2023	2024
	Q1	Q2	Q3	Q4	Q1	Q2	Q3	Q4	Q1	Q2	Q3	Q4				
<b>Percent Change, SAAR</b>																
Real Gross Domestic Product	6.3	6.7	2.3	6.9	-1.5	2.3	2.6	2.9	2.1	2.0	2.0	1.7	5.5	1.6	1.9	1.5
Personal Consumption Expenditures	11.4	12.0	2.0	2.5	3.1	4.2	3.1	2.2	2.0	2.1	1.9	2.1	6.9	3.1	2.0	2.2
Business Fixed Investment	12.9	9.2	1.7	2.9	9.2	1.3	8.6	3.1	2.3	1.5	1.6	0.8	6.6	5.5	1.6	0.5
Residential Investment	13.3	-11.7	-7.7	2.2	0.4	-11.5	-0.8	6.7	6.4	6.3	4.3	6.6	-1.5	-1.5	5.9	2.5
Govt. Consumption & Investment	4.2	-2.0	0.9	-2.6	-2.7	0.7	0.8	0.5	0.8	0.8	0.9	1.0	0.1	-0.2	0.9	1.0
Net Exports (Bil. Chain 2012\$)	-1033.0	-1048.4	-1112.3	-1139.5	-1310.0	-1268.5	-1280.8	-1292.0	-1295.9	-1301.8	-1298.6	-1320.3	-1083.3	-1287.8	-1304.2	-1372.6
Inventory Investment (Bil. Chain 2012\$)	-75.1	-143.3	-56.8	164.3	127.2	76.4	53.7	82.5	79.8	76.9	75.4	74.4	-27.7	84.9	76.6	62.7
Consumer Prices (YOY)	1.9	4.8	5.3	6.7	8.0	8.1	6.8	5.4	3.8	2.4	2.6	2.7	6.7	5.4	2.7	2.3
<b>Percent</b>																
Unemployment Rate	6.2	5.9	5.1	4.2	3.8	3.6	3.5	3.4	3.4	3.6	3.7	4.1	5.4	3.6	3.7	4.3
Federal Funds Rate	0.125	0.125	0.125	0.125	0.375	1.375	1.875	2.625	2.875	3.375	3.375	3.375	0.125	2.625	3.375	2.625
10-Year Treasury Yield	1.3	1.6	1.3	1.5	1.9	2.9	2.9	2.9	2.9	2.9	2.8	2.8	1.5	2.9	2.8	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

# Summary

## **In conclusion:**

May 2022 data softness was concentrated in housing starts and permits, on a month-over-month basis. Year-over-year data indicated an improvement; however, single-family permits were negative again. This marks the third consecutive month, in 2022, of single-family starts and permits declining. This suggests further moderation in single-family activity in the upcoming months. Increased borrowing costs, combined with rising house prices, have resulted in a major setback for new house sales. The number of potential buyers is dwindling quickly, and first-time buyers also are being constrained due to increasing interest rates.

The disparity between the number of houses started versus houses completed are at the greatest level since 1984. This spread is evident for both single- and multi-family starts as builders await building materials and products necessary to complete started houses. New and existing house sales were negative, due to a lack of available inventory for sale and increasing mortgage interest rates. Increasing mortgage rates, in combination with record house prices, may reduce affordability for potential house buyers.

## **Pros:**

- 1) Demand still remains strong.

## **Cons:**

- 1) Increasing mortgage interest rates;
- 2) Inflation;
- 3) The war in Ukraine;
- 4) COVID-19;
- 5) Construction material and appliance constraints;
- 6) Logistics/Supply chains;
- 7) Lot availability and building regulations (according to several sources);
- 8) Laborer shortages in many sectors;
- 9) Household formations still lag historical averages;
- 10) Job creation is improving and consistent, but some economists question the quantity and types of jobs being created;
- 11) Debt: Corporate, personal, government – United States and globally;
- 12) Other global uncertainties.

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