

# **The Virginia Tech–USDA Forest Service Housing Commentary: Section I October 2023**



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# Opening Remarks

Housing data, year-over-year, were mixed. Month-over-month data, in aggregate, were positive. Total, single- and multi-family starts, single-family permits, total and single-family housing completions, new house sales, and total private residential and single-family construction spending also indicated improvement. The influence of increasing mortgage rates is evident, as aggregate costs have decreased affordability; thus, a reduction in new and existing house sales.

The December 14th Atlanta Fed GDPNow™ total residential investment spending forecast is a negative -0.6% for December 2023. Quarterly log change for new private permanent site expenditures were projected at 4.8%; the improvement spending forecast was 1.1%; and the manufactured/mobile home expenditures projection was 2.9% (all: quarterly log change and at a seasonally adjusted annual rate).<sup>1</sup>

“Fitch expects a weaker, but fairly stable, operating environment for North American building products and materials companies in 2024 as private construction markets are projected to underperform public markets. Repair and remodeling expenditure are projected to decrease 4% to 5% in 2024, following a projected decline of 3% in 2023. Professional projects likely will remain skewed toward modest, nondiscretionary jobs over larger, discretionary projects. Median building products sector organic revenue are forecast to be flat in 2024 after a marginal decline of 0.3% in 2023. Fitch anticipates that companies with greater exposure and volume from public construction will outperform companies primarily serving the private market.” – Ryan O’Loughlin, Director, Fitch Ratings U.S. Corporates Group.

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); 12/14/23

<sup>2</sup> [https://www.builderonline.com/data-analysis/low-housing-starts-to-contribute-to-weaker-building-product-demand-in-2024\\_o](https://www.builderonline.com/data-analysis/low-housing-starts-to-contribute-to-weaker-building-product-demand-in-2024_o); 12/6/23

# October 2023

## Housing Scorecard

	M/M	Y/Y
Housing Starts	▲ 1.9%	▼ 4.2%
Single-Family (SF) Starts	▲ 0.2%	▲ 13.1%
Multi-Family (MF) Starts*	▲ 6.3%	▼ 30.0%
Housing Permits	▲ 1.8%	▼ 3.7%
SF Permits	▲ 0.6%	▲ 14.0%
MF Permits*	▲ 4.1%	▼ 25.0%
Housing Under Construction	▼ 0.1%	▼ 2.1%
SF Under Construction	▼ 0.6%	▼ 14.5%
Housing Completions	▼ 4.6%	▲ 4.6%
SF Completions	▼ 0.9%	▼ 2.0%
New SF House Sales	▲ 5.6%	▲ 17.7%
Private Residential Construction Spending	▲ 1.2%	▲ 0.7%
SF Construction Spending	▲ 1.1%	▼ 1.4%
Existing House Sales <sup>1</sup>	▼ 4.1%	▼ 14.6%

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

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



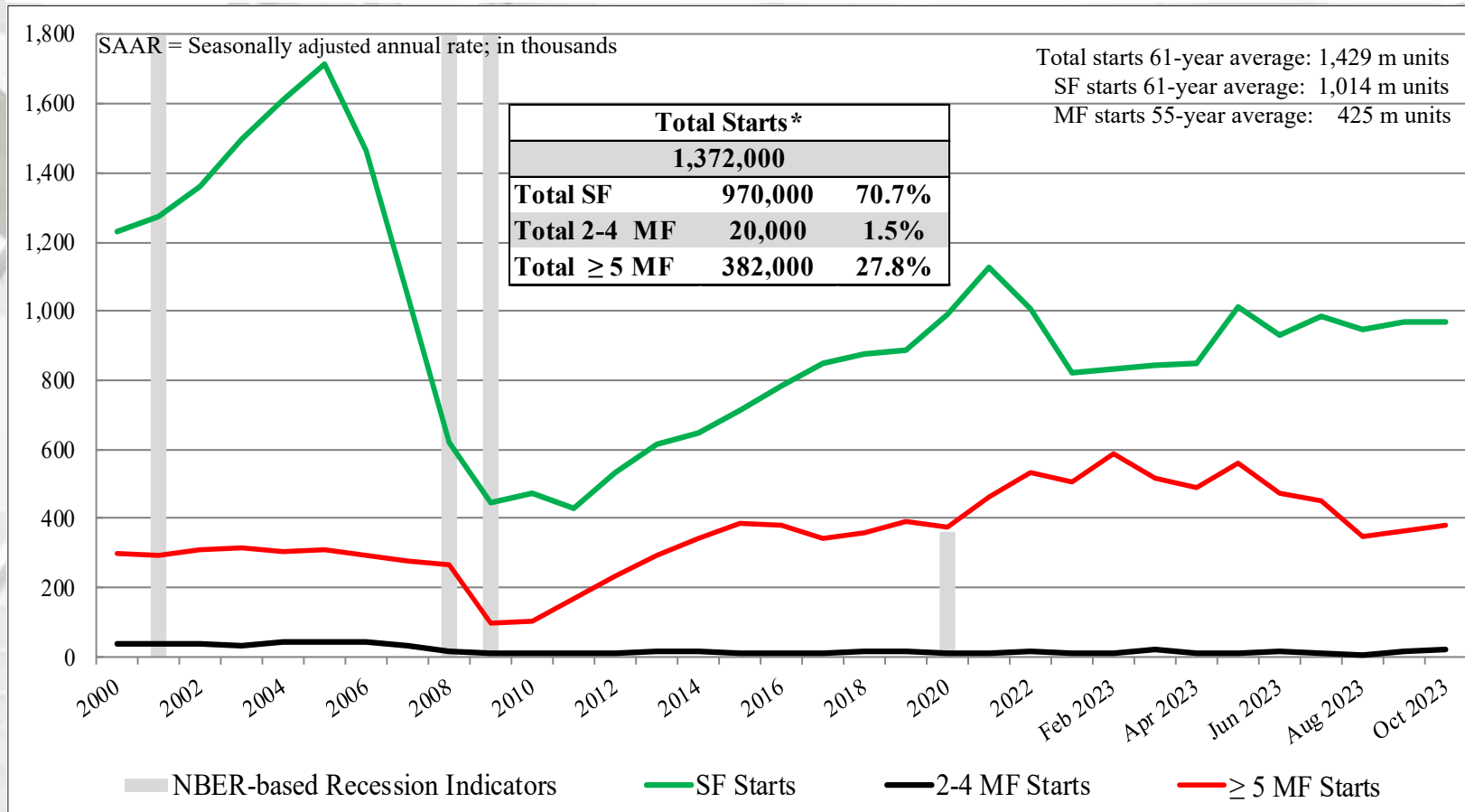
# New Housing Starts

	Total Starts*	SF Starts	MF 2-4 Starts**	MF ≥5 Starts
October	1,372,000	970,000	20,000	382,000
September	1,346,000	968,000	14,000	364,000
2022	1,432,000	858,000	14,000	560,000
M/M change	1.9%	0.2%	42.9%	4.9%
Y/Y change	-4.2%	13.1%	42.9%	-31.8%

\* 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

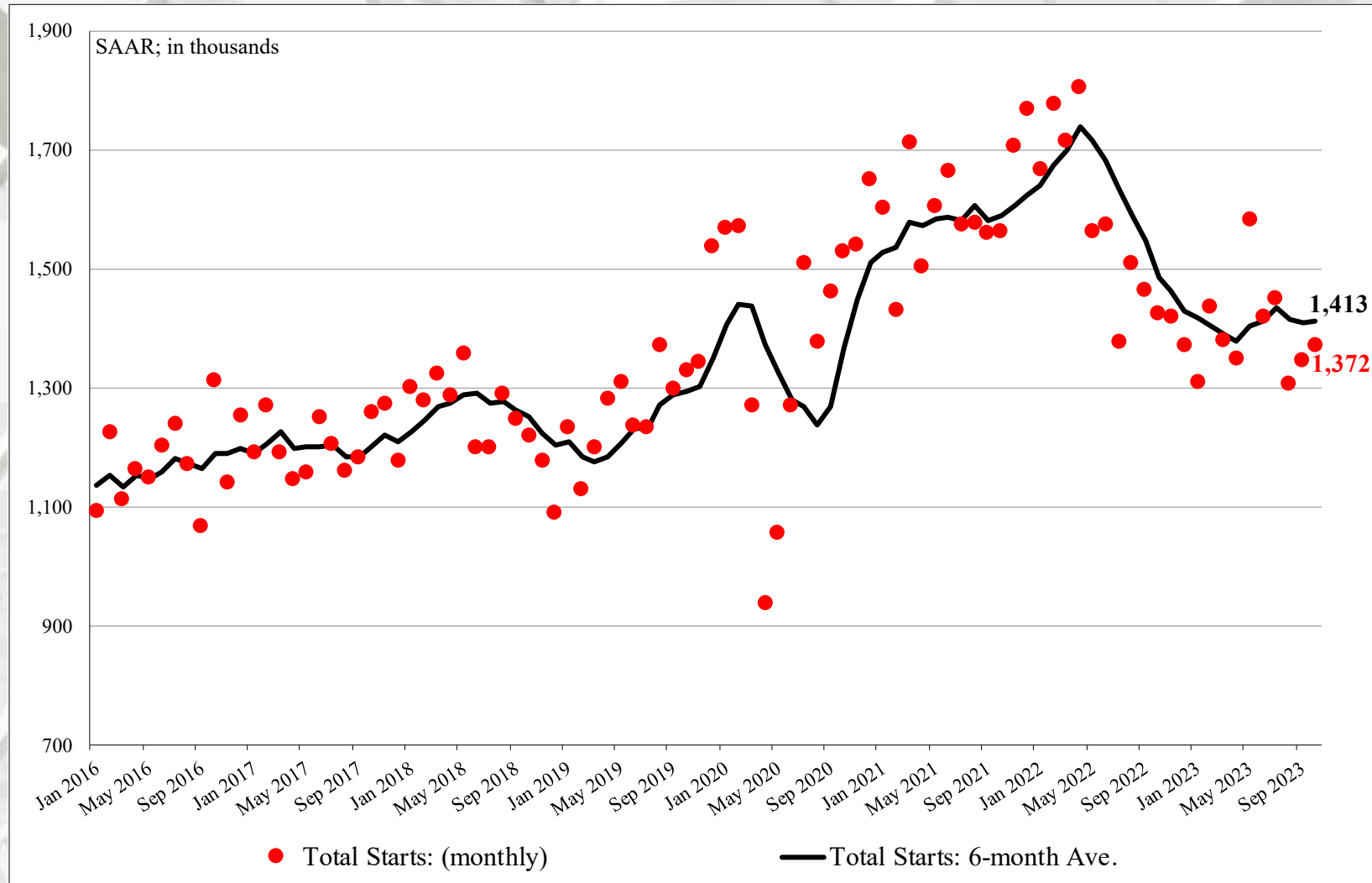


The US DOC does not report 2 to 4 multi-family starts directly; this is an estimation: (Total starts – (SF + 5-unit MF)).

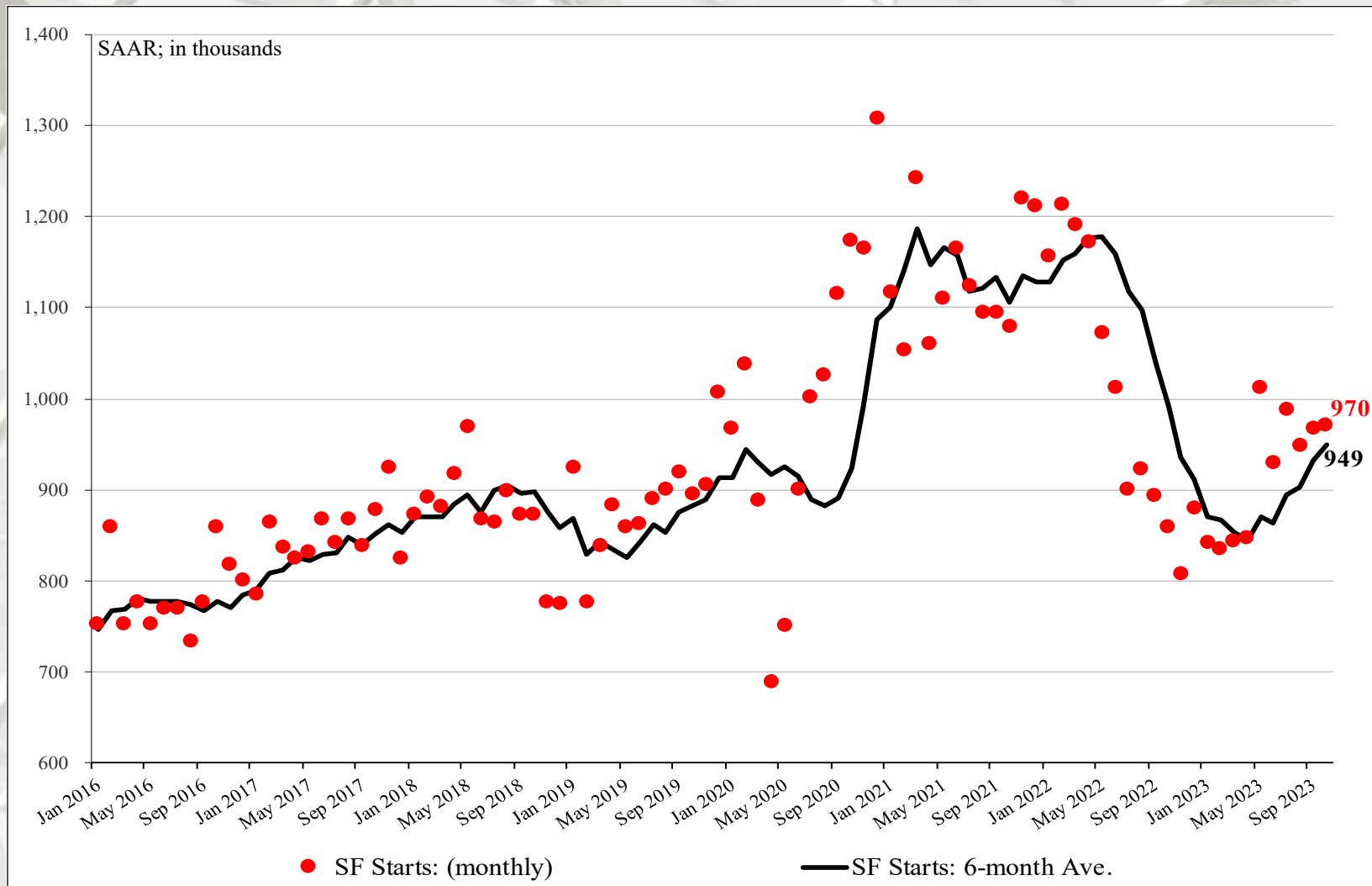
\* Percentage of total starts.

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 Moving Average

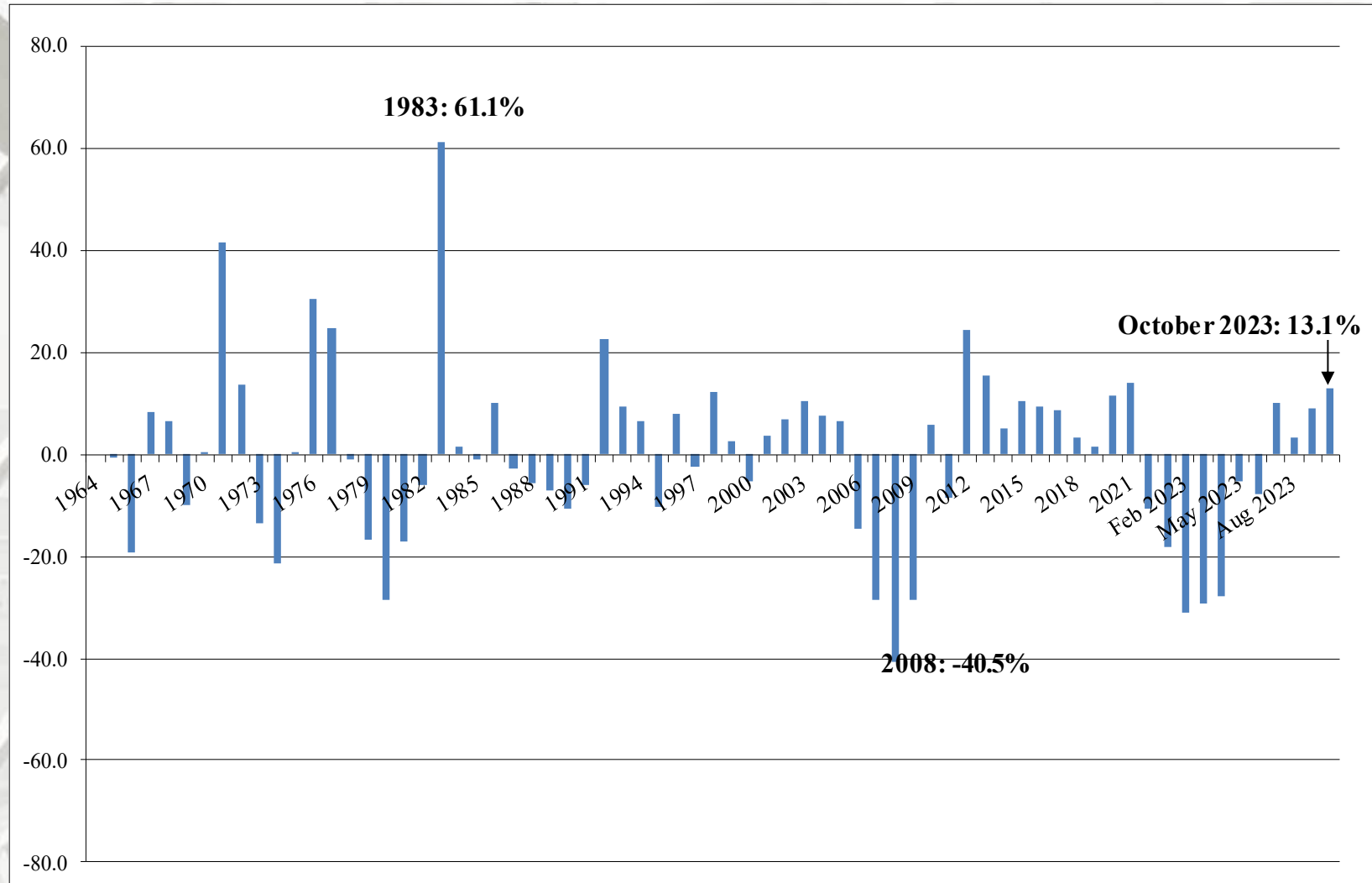


# SF Housing Starts: Six-Month Moving Average

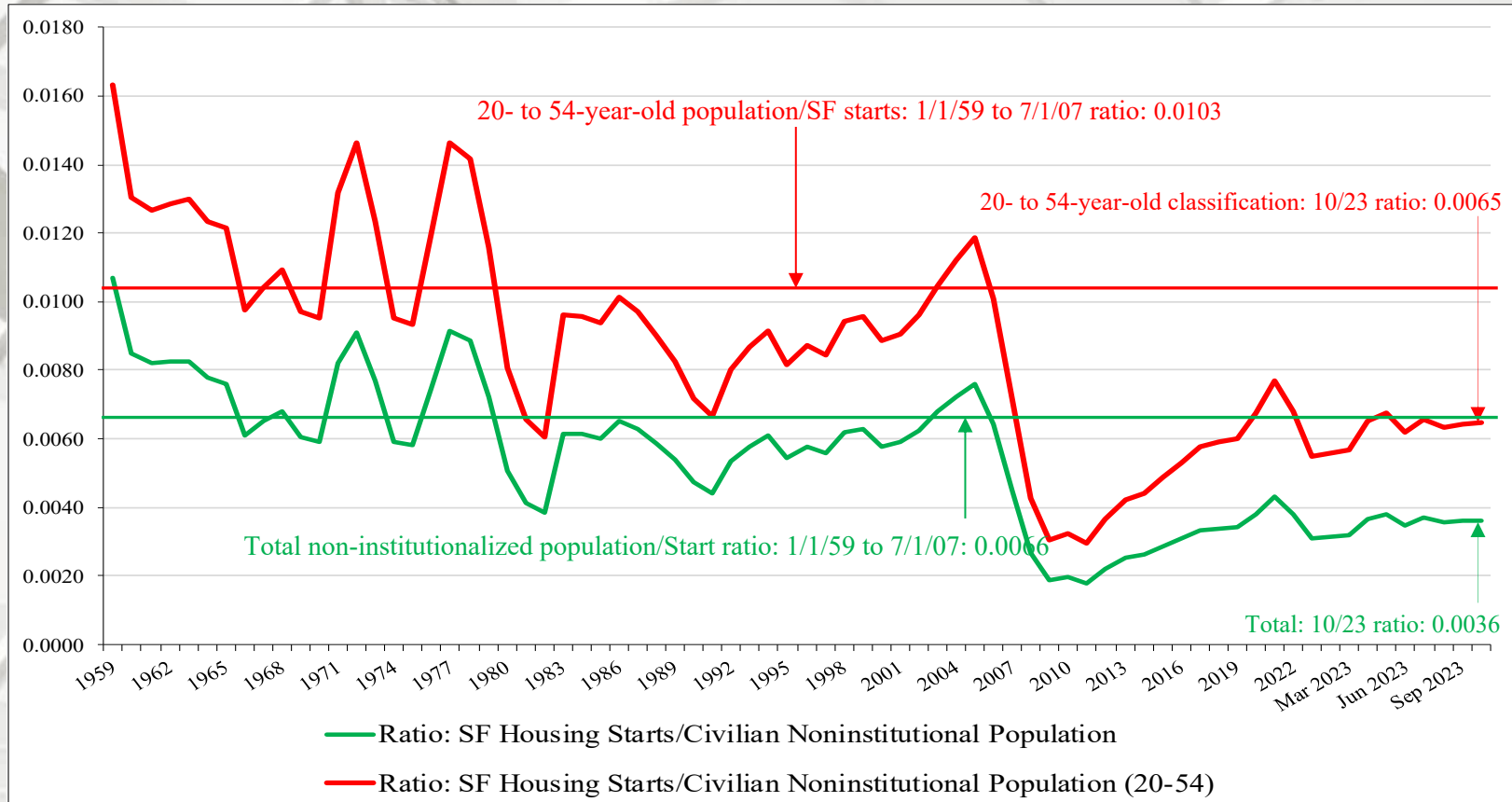




# SF Housing Starts: Year-over-Year Change (%)



# New SF Starts

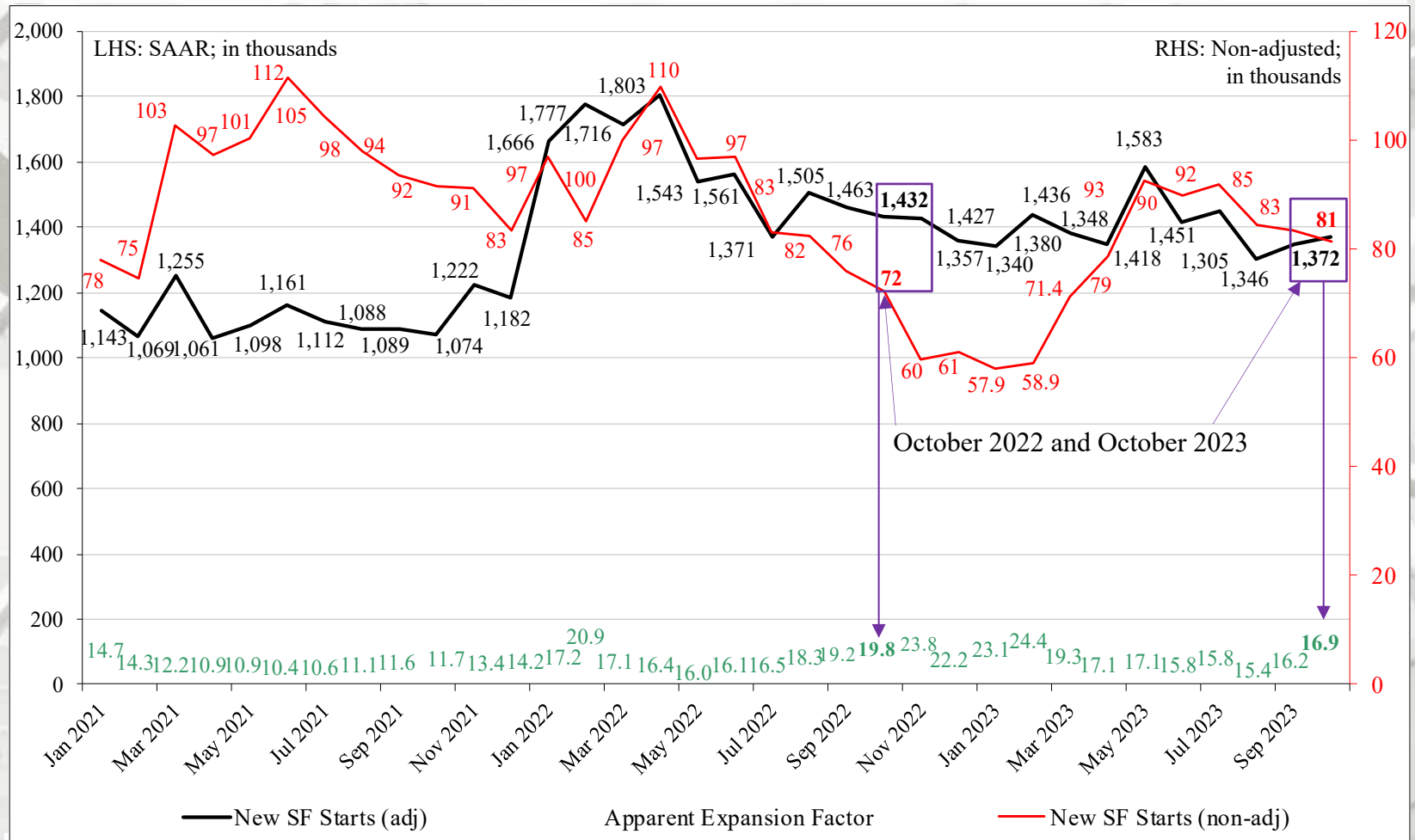


## New SF starts adjusted for the US population

From January 1959 to October 2007, the long-term ratio of new SF starts to the total US non-institutionalized population is 0.0066. In October 2023 it was 0.0036 – no change from September. The long-term ratio of non-institutionalized population, aged 20 to 54 is 0.0103; in October 2023 it was 0.0065 –an improvement from September (0.0064). New SF construction in both age categories is less than what is necessary for changes in the population (i.e., under-building).

Note some studies report normalized long-term demand at 900,000 to 1,000,000 new SF house starts 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

	NE Total	NE SF	NE MF**
October	71,000	56,000	15,000
September	83,000	50,000	33,000
2022	94,000	51,000	43,000
M/M change	-14.5%	12.0%	-54.5%
Y/Y change	-24.5%	9.8%	-65.1%
	MW Total	MW SF	MW MF
October	244,000	115,000	129,000
September	190,000	116,000	74,000
2022	232,000	130,000	102,000
M/M change	28.4%	-0.9%	74.3%
Y/Y change	5.2%	-11.5%	26.5%

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).



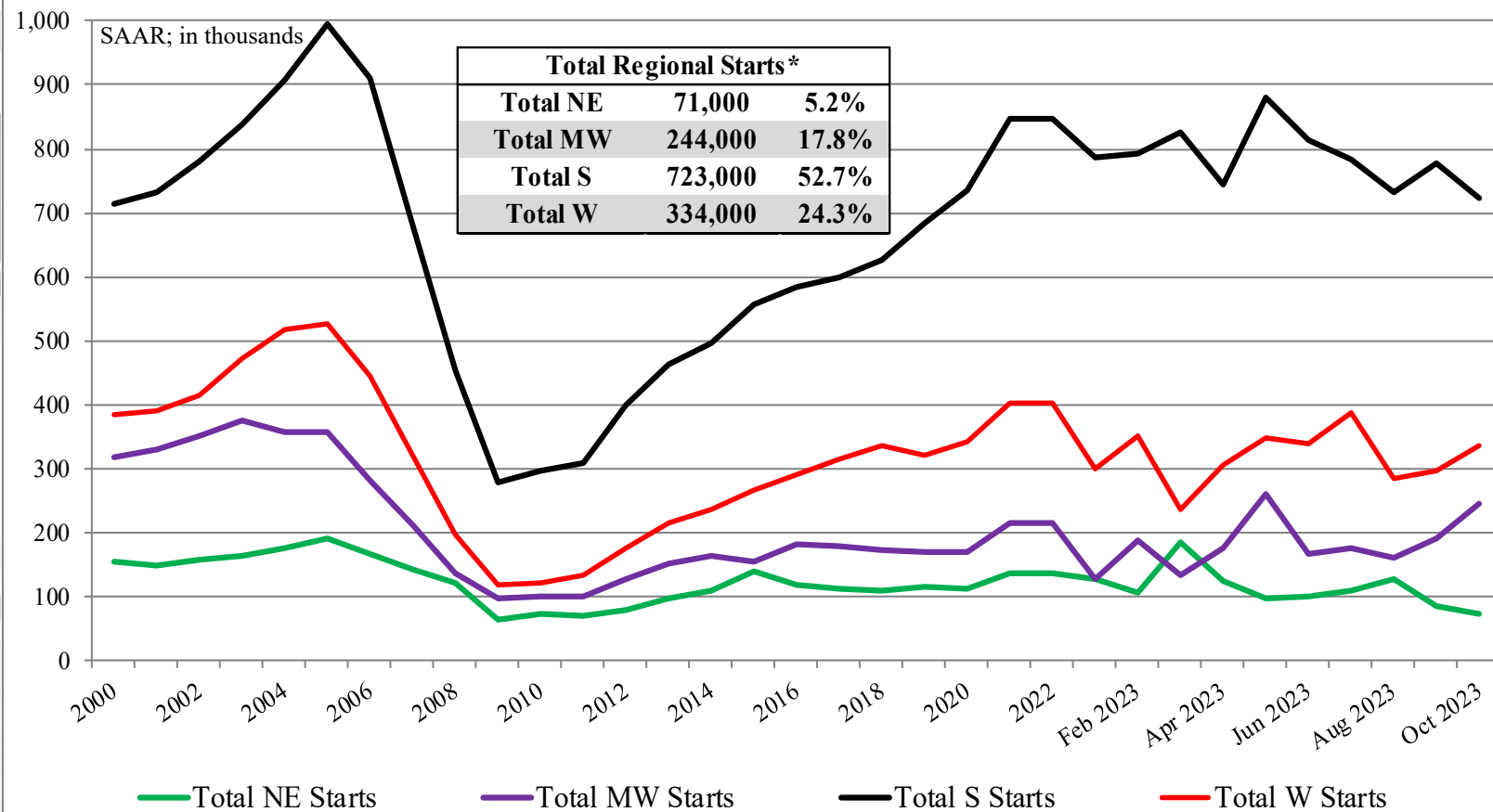
# New Housing Starts by Region

	<b>S Total</b>	<b>S SF</b>	<b>S MF**</b>
October	723,000	561,000	162,000
September	776,000	590,000	186,000
2022	787,000	514,000	273,000
M/M change	-6.8%	-4.9%	-12.9%
Y/Y change	-8.1%	9.1%	-40.7%
	<b>W Total</b>	<b>W SF</b>	<b>W MF</b>
October	334,000	238,000	96,000
September	297,000	212,000	85,000
2022	319,000	163,000	156,000
M/M change	12.5%	12.3%	12.9%
Y/Y change	4.7%	46.0%	-38.5%

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

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

# New Housing Starts by Region

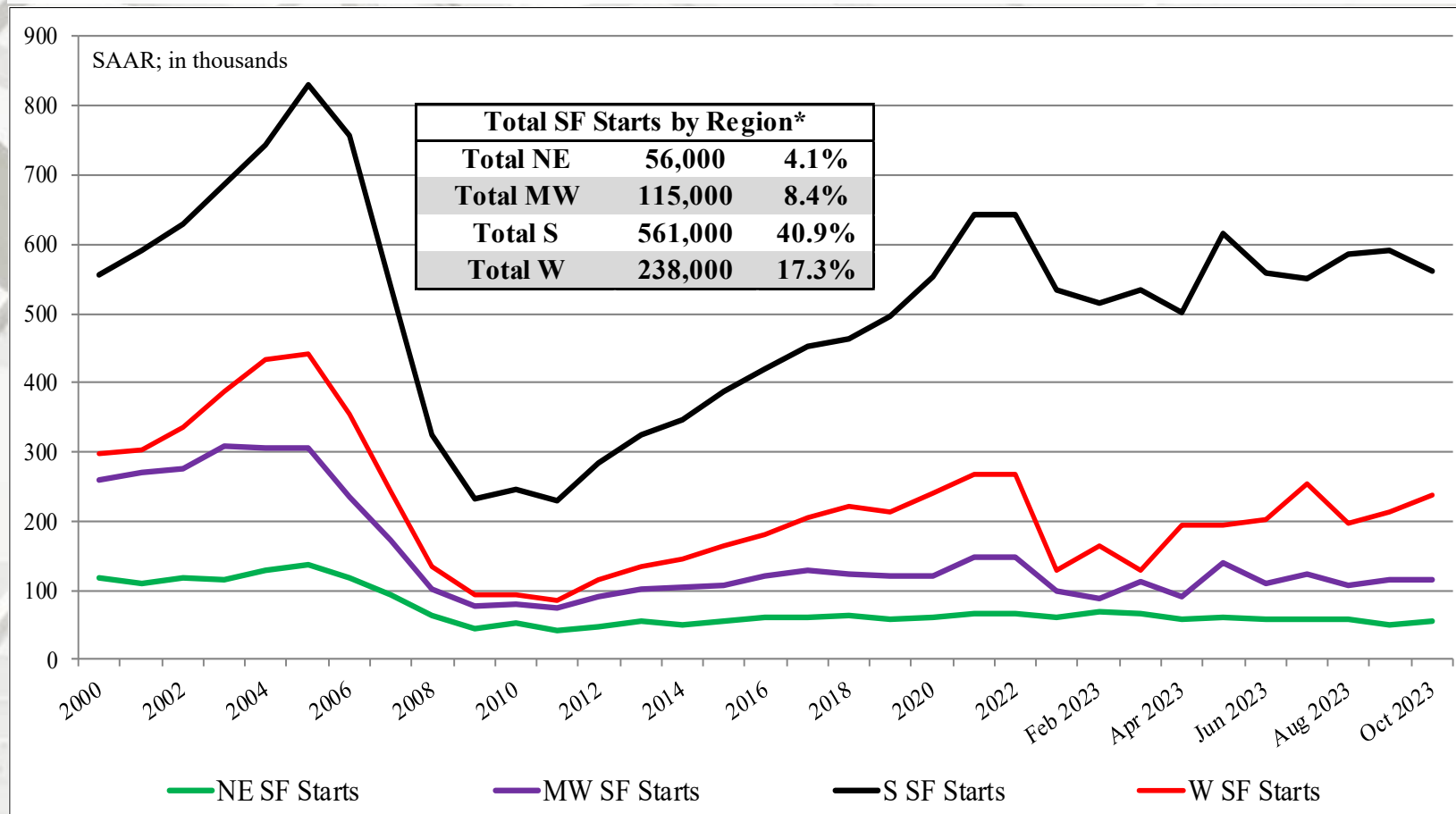


NE = Northeast, MW = Midwest, S = South, W = West

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

\* Percentage of total starts.

# Total SF Housing Starts by Region

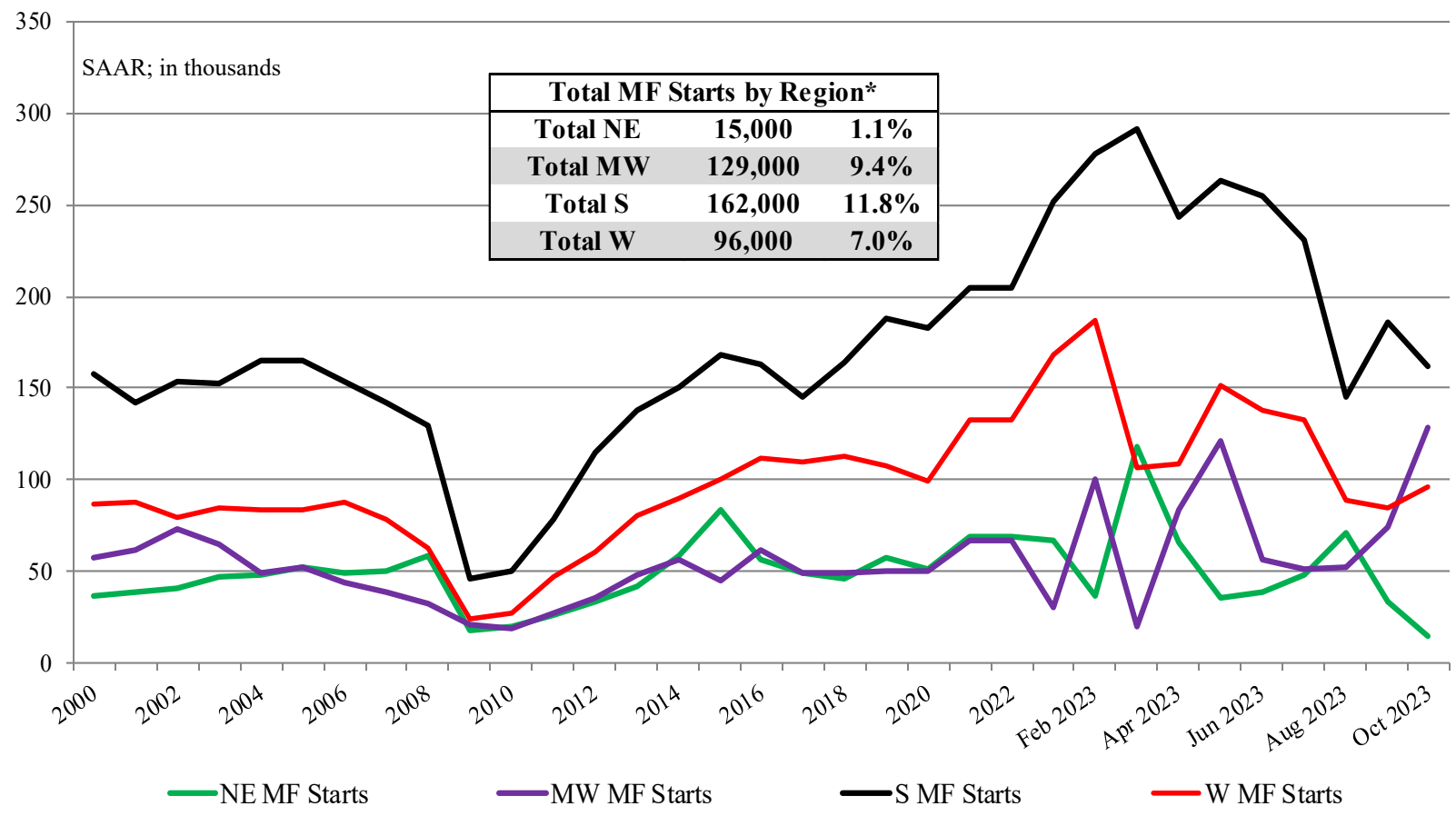


NE = Northeast, MW = Midwest, S = South, W = West

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

\* Percentage of total starts.

# MF Housing Starts by Region



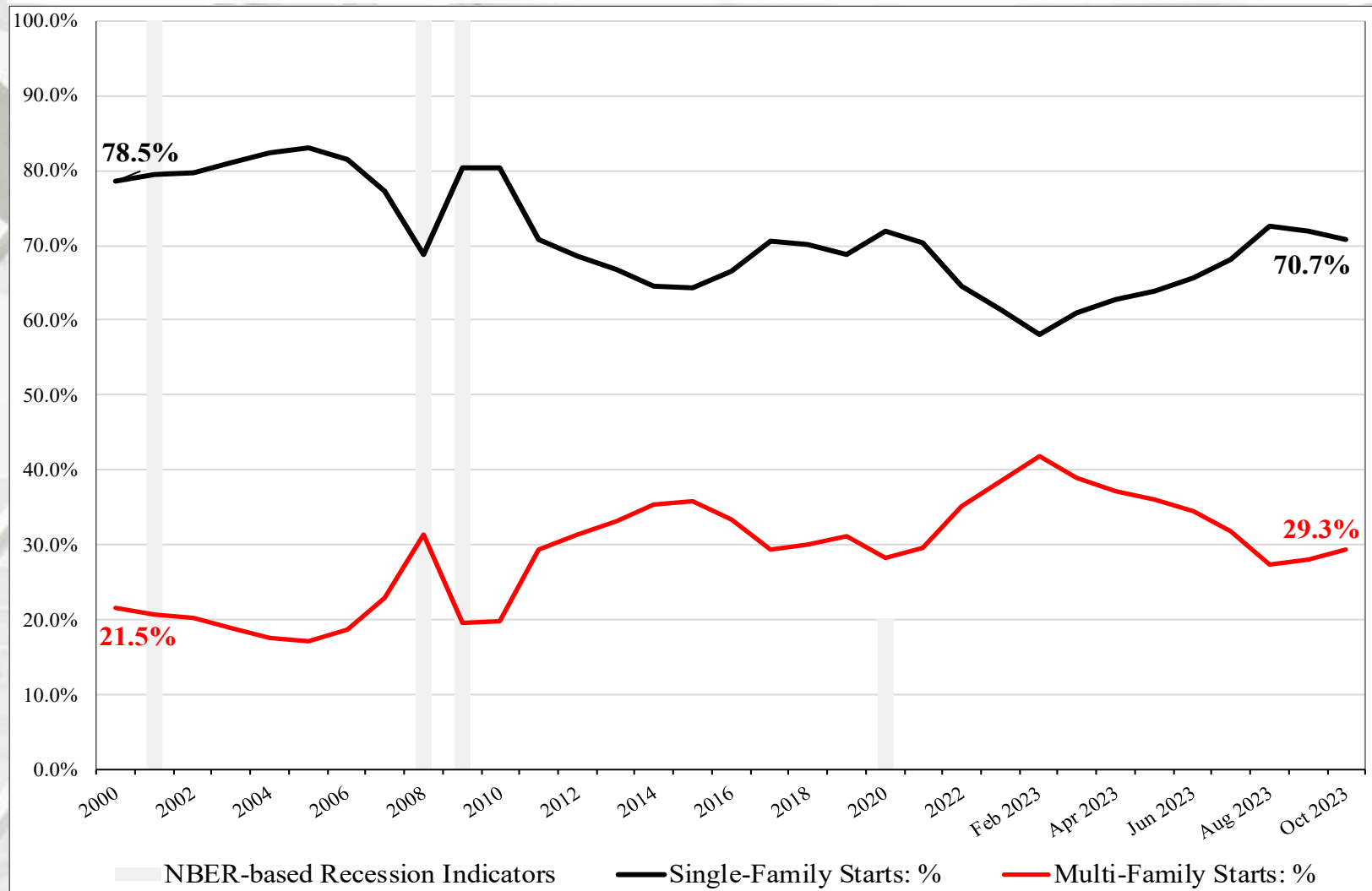
NE = Northeast, MW = Midwest, S = South, W = West

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

\* Percentage of total starts.



# SF vs. MF Housing Starts (%)



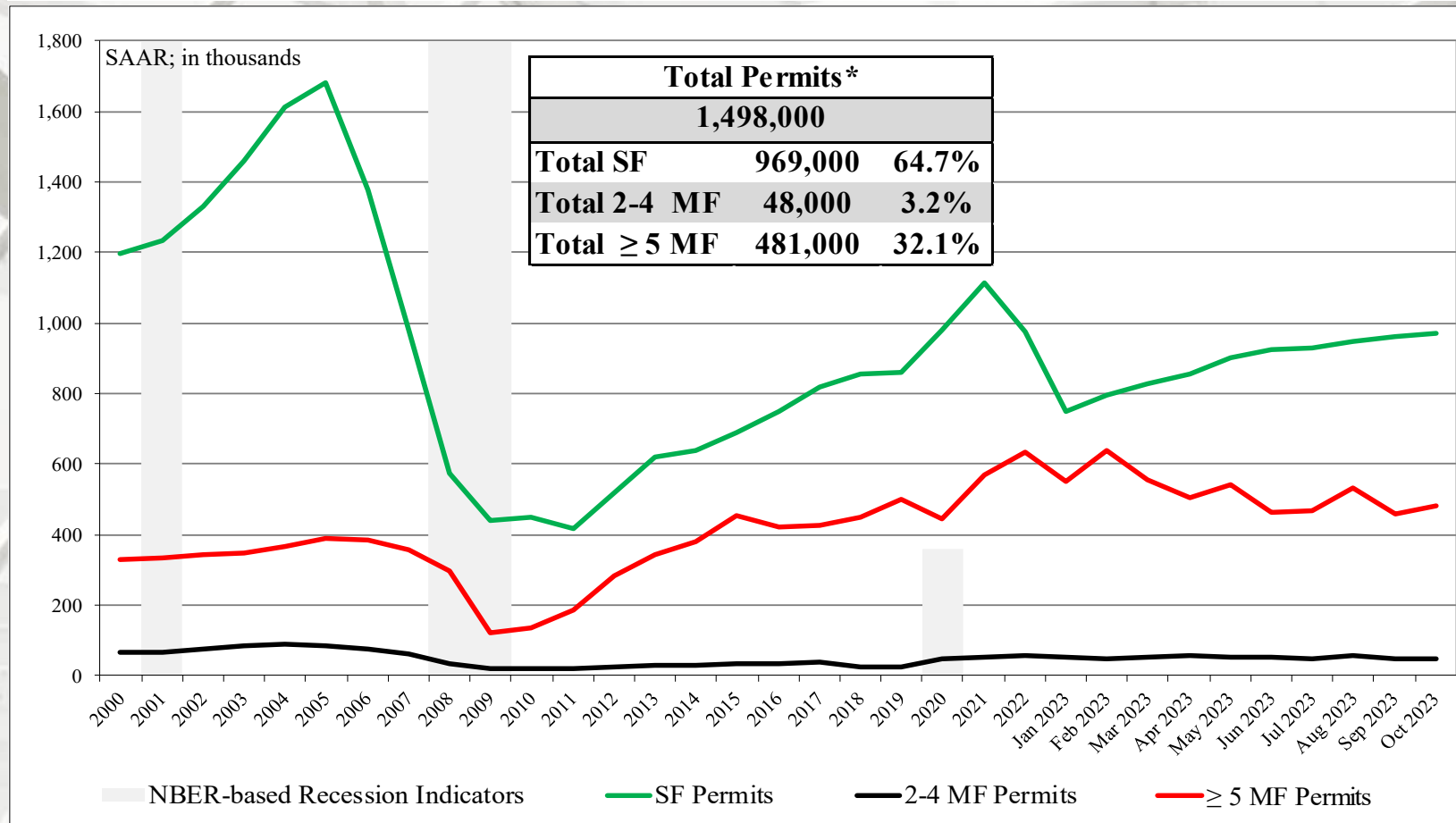
NBER based Recession Indicator Bars for the United States from the Period following the Peak through the Trough (FRED, St. Louis).

# New Housing Permits

	Total Permits*	SF Permits	MF 2-4 unit Permits	MF ≥ 5 unit Permits
October	1,498,000	969,000	48,000	481,000
September	1,471,000	963,000	49,000	459,000
2022	1,555,000	850,000	55,000	650,000
M/M change	1.8%	0.6%	-2.0%	4.8%
Y/Y change	-3.7%	14.0%	-12.7%	-26.0%

\* 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

	NE Total*	NE SF	NE MF**
October	128,000	58,000	70,000
September	109,000	54,000	55,000
2022	112,000	55,000	57,000
M/M change	17.4%	7.4%	27.3%
Y/Y change	14.3%	5.5%	22.8%
	MW Total*	MW SF	MW MF**
October	170,000	114,000	56,000
September	189,000	117,000	72,000
2022	216,000	110,000	106,000
M/M change	-10.1%	-2.6%	-22.2%
Y/Y change	-21.3%	3.6%	-47.2%

NE = Northeast; MW = Midwest

\* All data are SAAR

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



# New Housing Permits by Region

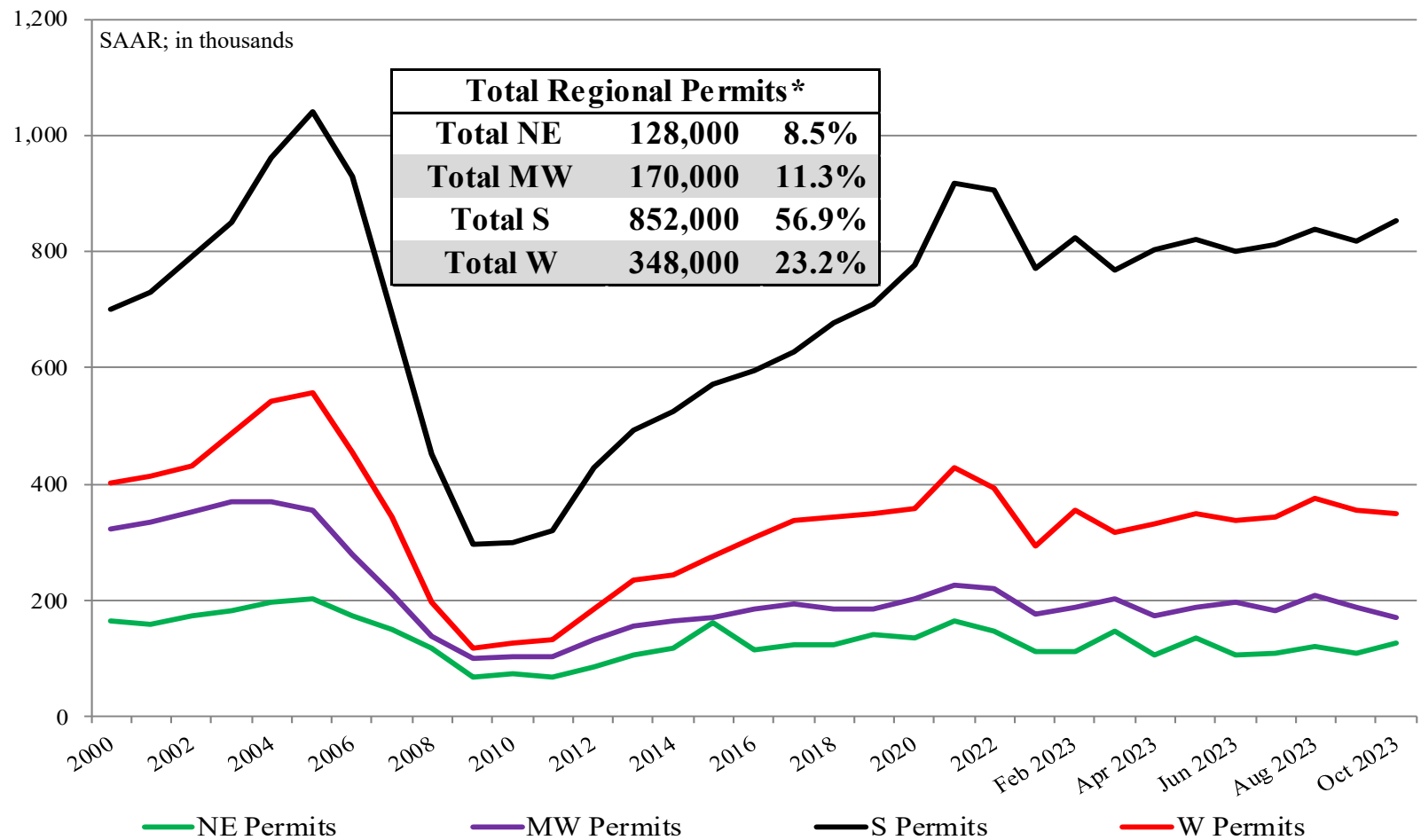
	<b>S Total*</b>	<b>S SF</b>	<b>S MF**</b>
October	852,000	592,000	260,000
September	818,000	590,000	228,000
2022	890,000	516,000	374,000
M/M change	4.2%	0.3%	14.0%
Y/Y change	-4.3%	14.7%	-30.5%
	<b>W Total*</b>	<b>W SF</b>	<b>W MF**</b>
October	348,000	205,000	143,000
September	355,000	202,000	153,000
2022	337,000	169,000	168,000
M/M change	-2.0%	1.5%	-6.5%
Y/Y change	3.3%	21.3%	-14.9%

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).

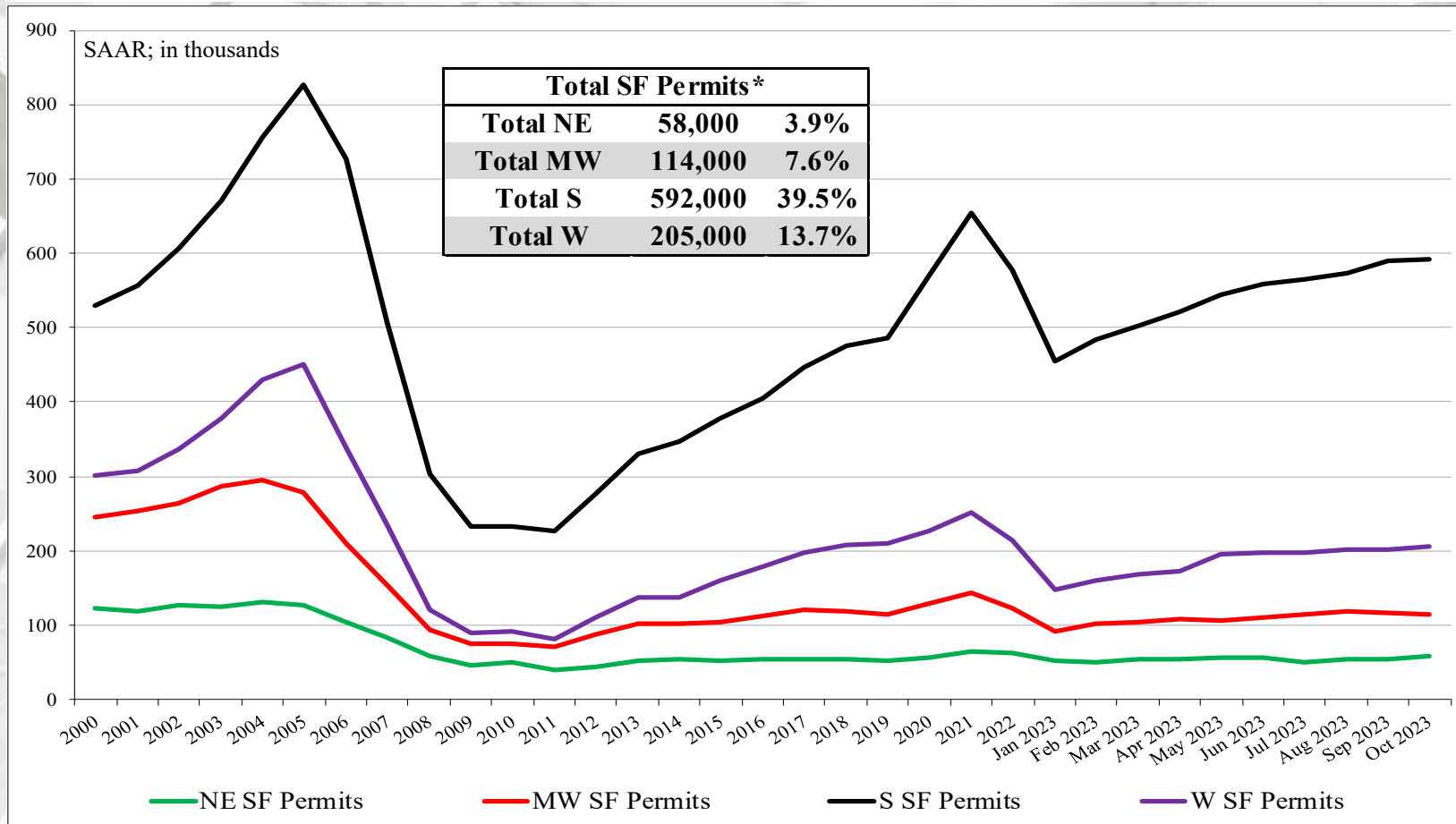
# Total Housing Permits by Region



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

\* Percentage of total permits.

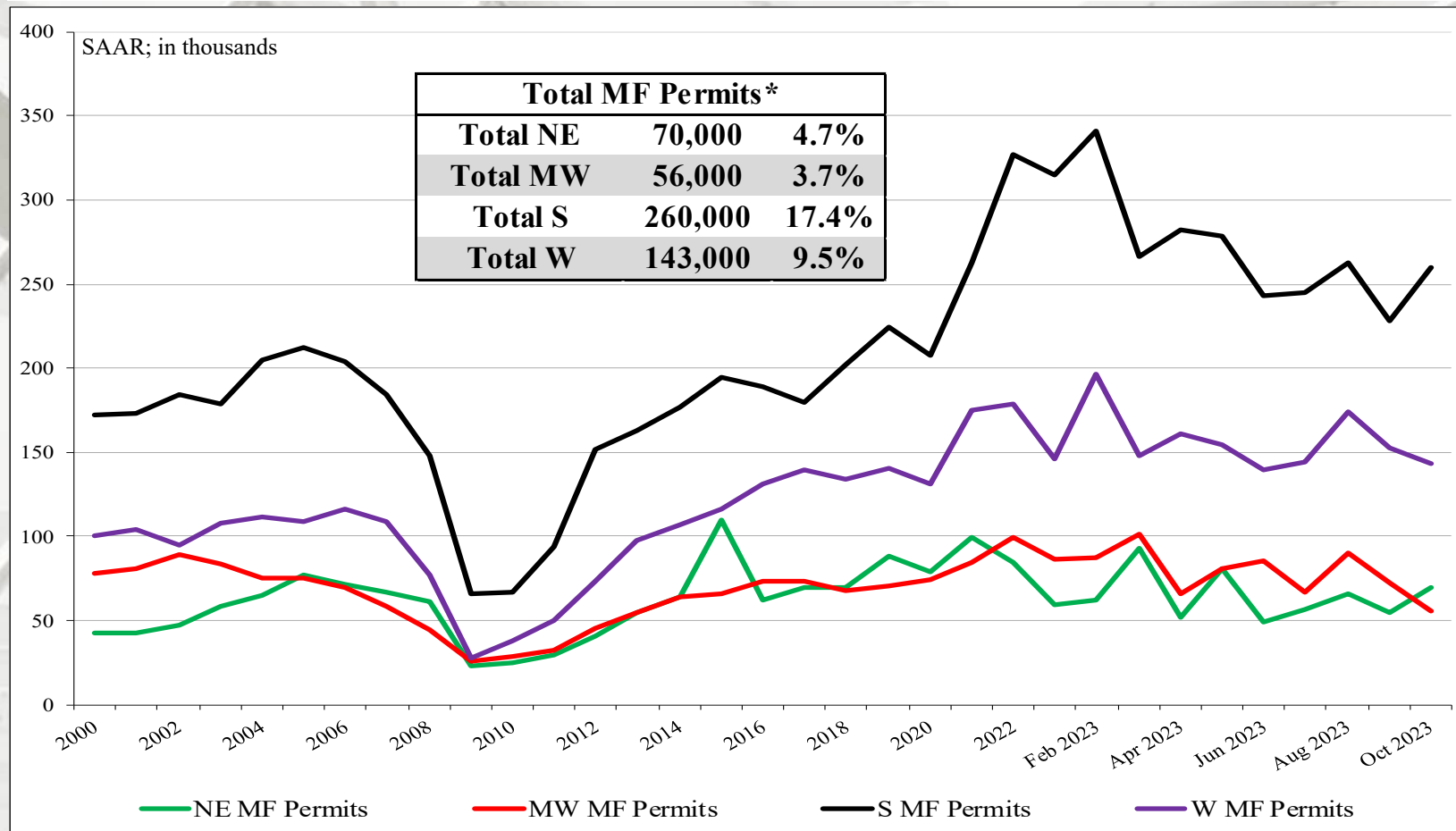
# SF Housing Permits by Region



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.



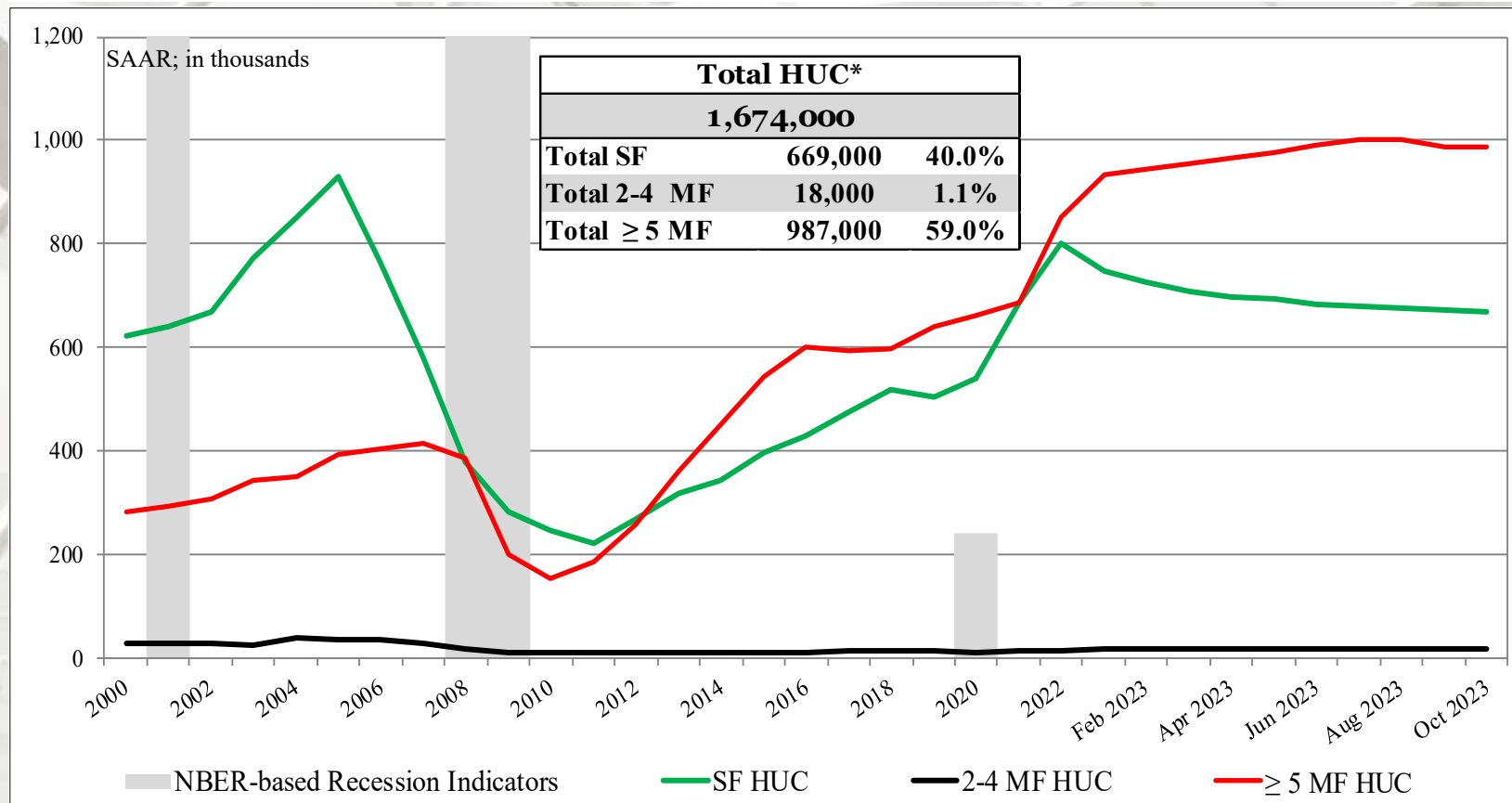
# New Housing Under Construction (HUC)

	Total HUC*	SF HUC	MF 2-4 unit** HUC	MF ≥ 5 unit HUC
October	1,674,000	669,000	18,000	987,000
September	1,676,000	673,000	17,000	986,000
2022	1,710,000	782,000	17,000	911,000
M/M change	-0.1%	-0.6%	5.9%	0.1%
Y/Y change	-2.1%	-14.5%	5.9%	8.3%

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 + 5-unit 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).

# New Housing Under Construction by Region

	NE Total	NE SF	NE MF**
October	211,000	65,000	146,000
September	214,000	66,000	148,000
2022	224,000	62,000	162,000
M/M change	-1.4%	-1.5%	-1.4%
Y/Y change	-5.8%	4.8%	-9.9%
	MW Total	MW SF	MW MF
October	211,000	88,000	123,000
September	208,000	87,000	121,000
2022	221,000	105,000	116,000
M/M change	1.4%	1.1%	1.7%
Y/Y change	-4.5%	-16.2%	6.0%

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

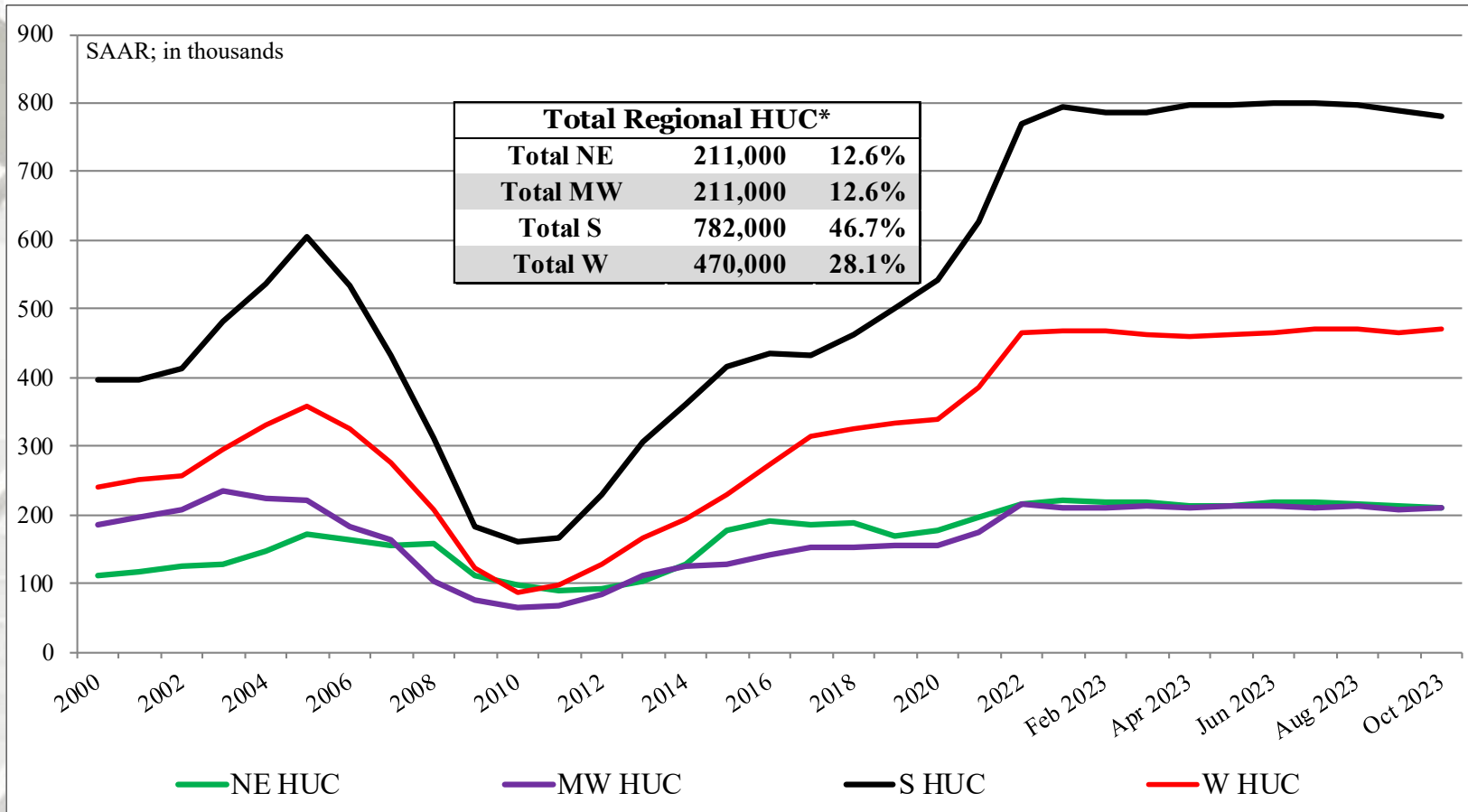
	<b>S Total</b>	<b>S SF</b>	<b>S MF**</b>
October	782,000	347,000	435,000
September	789,000	352,000	437,000
2022	798,000	419,000	379,000
M/M change	-0.9%	-1.4%	-0.5%
Y/Y change	-2.0%	-17.2%	14.8%
	<b>W Total</b>	<b>W SF</b>	<b>W MF</b>
October	470,000	169,000	301,000
September	465,000	168,000	297,000
2022	467,000	196,000	271,000
M/M change	1.1%	0.6%	1.3%
Y/Y change	0.6%	-13.8%	11.1%

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

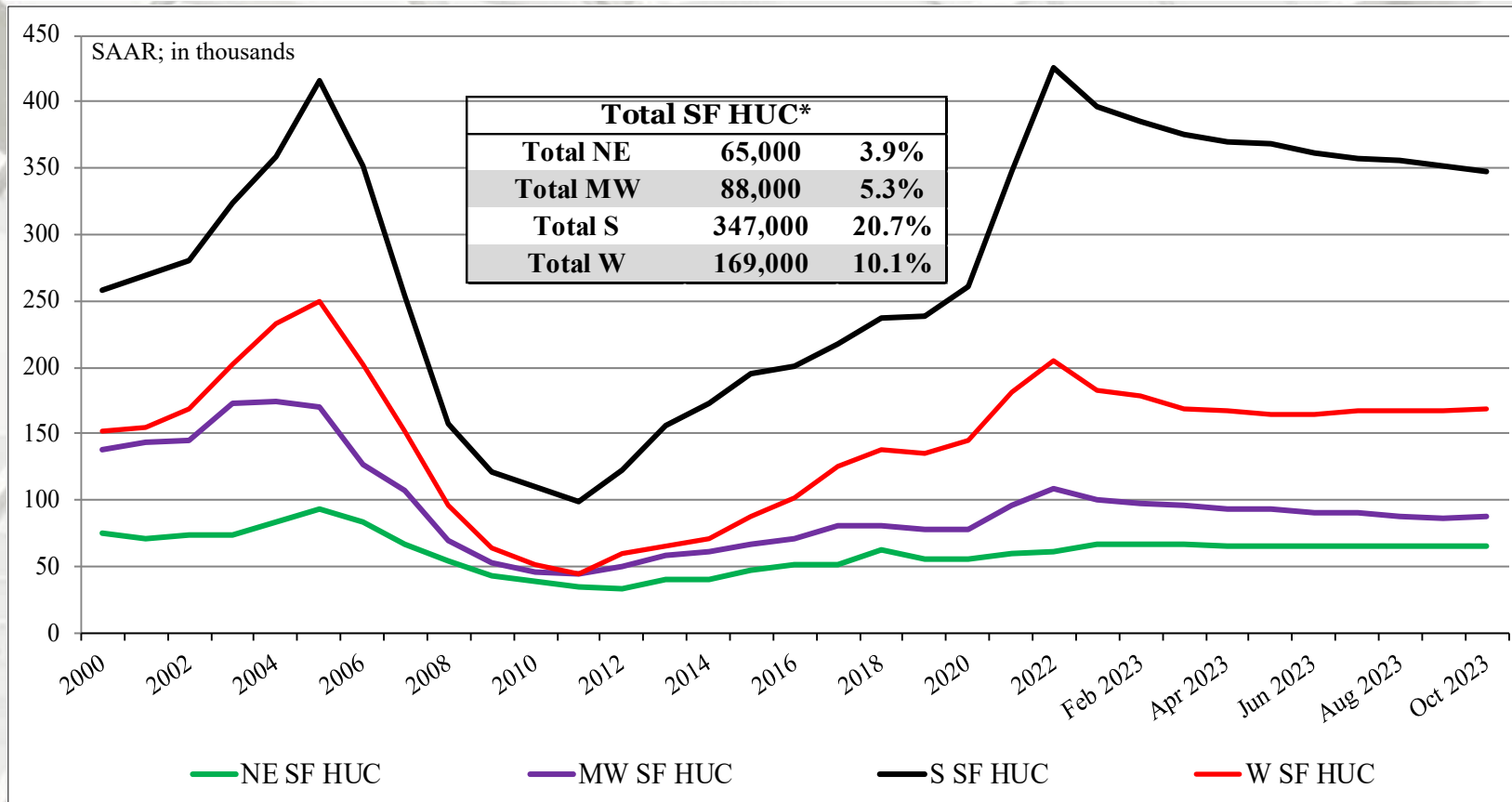


NE = Northeast, MW = Midwest, S = South, W = West

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

\* Percentage of total housing under construction units.

# SF Housing Under Construction by Region

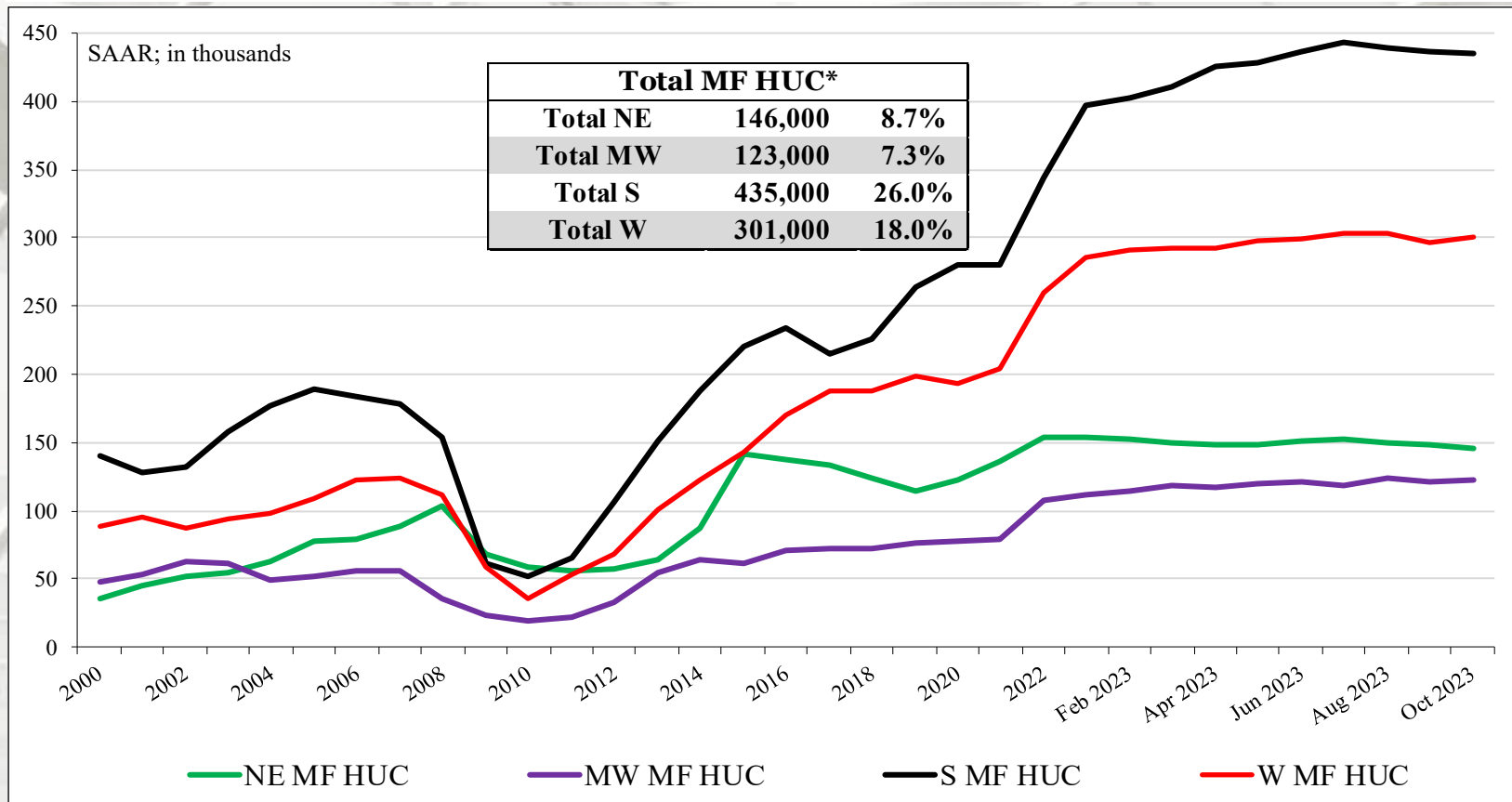


NE = Northeast, MW = Midwest, S = South, W = West.

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

\* Percentage of total housing under construction units.

# New Housing Completions

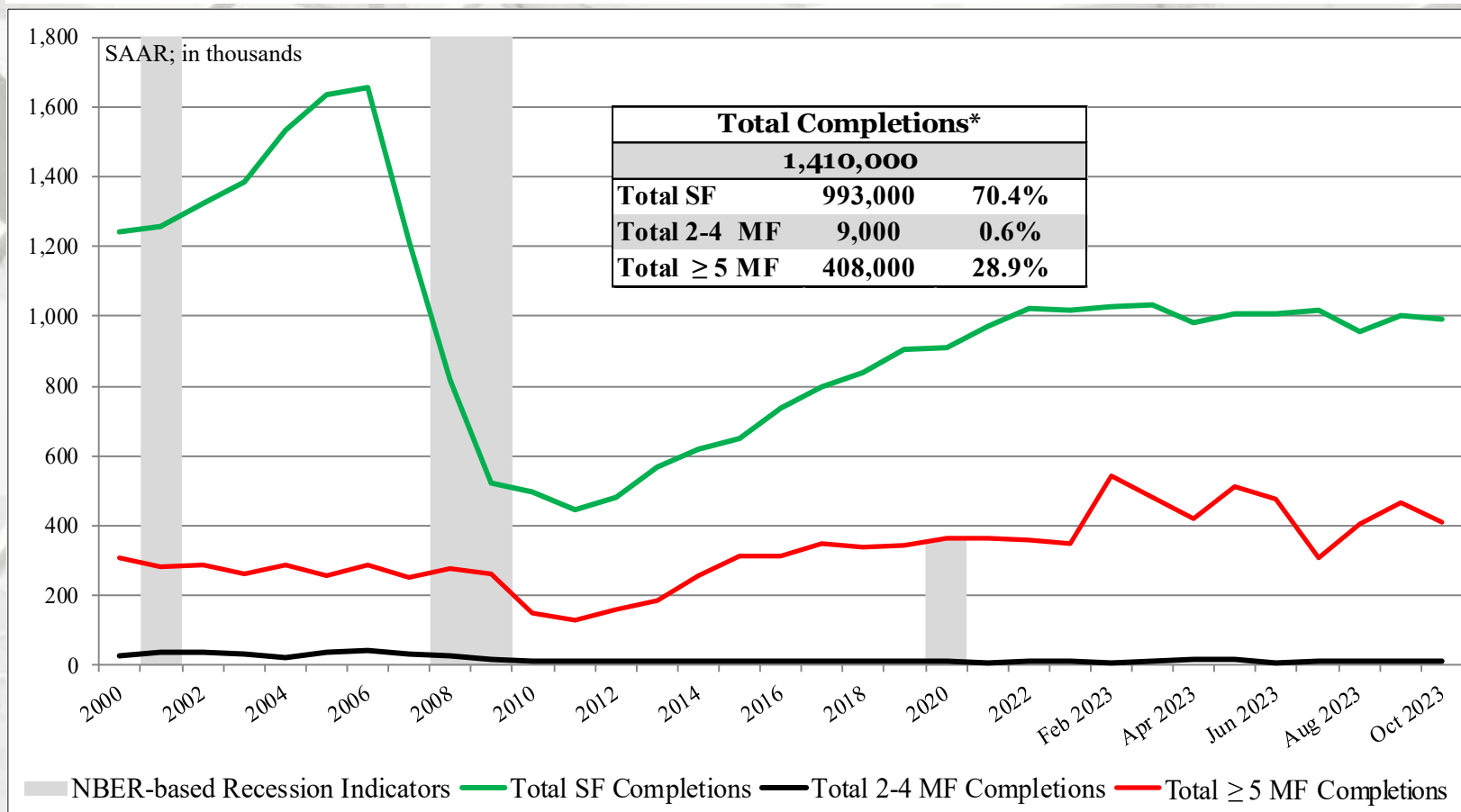
	Total Completions*	SF Completions	MF 2-4 unit** Completions	MF ≥ 5 unit Completions
October	1,410,000	993,000	9,000	408,000
September	1,478,000	1,002,000	9,000	467,000
2022	1,348,000	974,000	17,000	357,000
M/M change	-4.6%	-0.9%	0.0%	-12.6%
Y/Y change	4.6%	2.0%	-47.1%	14.3%

\* 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**
October	99,000	70,000	29,000
September	100,000	48,000	52,000
2022	98,000	60,000	38,000
M/M change	-1.0%	45.8%	-44.2%
Y/Y change	1.0%	16.7%	-23.7%
	MW Total	MW SF	MW MF
October	171,000	93,000	78,000
September	188,000	119,000	69,000
2022	184,000	131,000	53,000
M/M change	-9.0%	-21.8%	13.0%
Y/Y change	-7.1%	-29.0%	47.2%

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

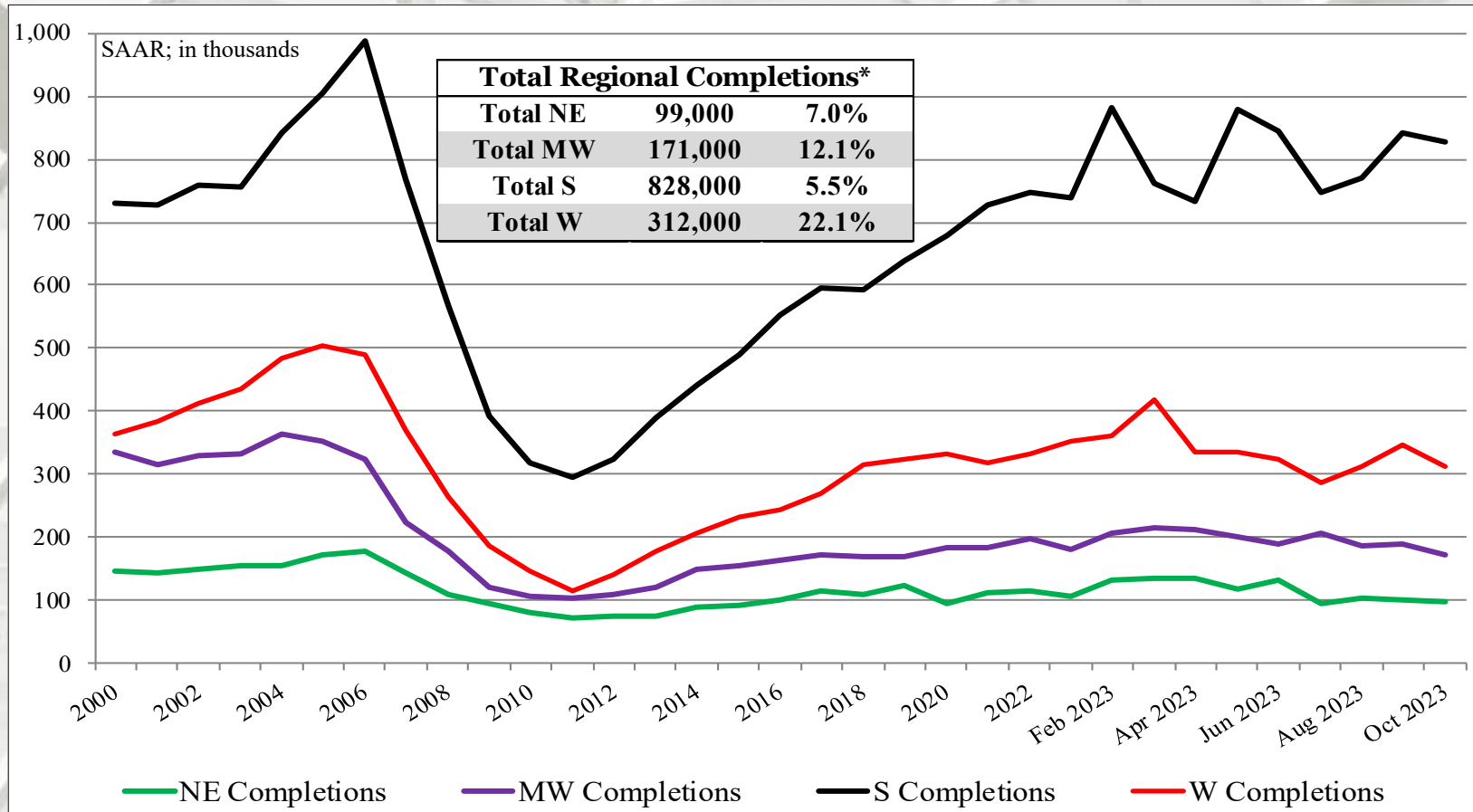
	<b>S Total</b>	<b>S SF</b>	<b>S MF**</b>
October	828,000	626,000	202,000
September	842,000	632,000	210,000
2022	692,000	575,000	117,000
M/M change	-1.7%	-0.9%	-3.8%
Y/Y change	19.7%	8.9%	72.6%
	<b>W Total</b>	<b>W SF</b>	<b>W MF</b>
October	312,000	204,000	108,000
September	348,000	203,000	145,000
2022	374,000	208,000	166,000
M/M change	-10.3%	0.5%	-25.5%
Y/Y change	-16.6%	-1.9%	-34.9%

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

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

\* Percentage of total housing completions

# Total Housing Completions by Region

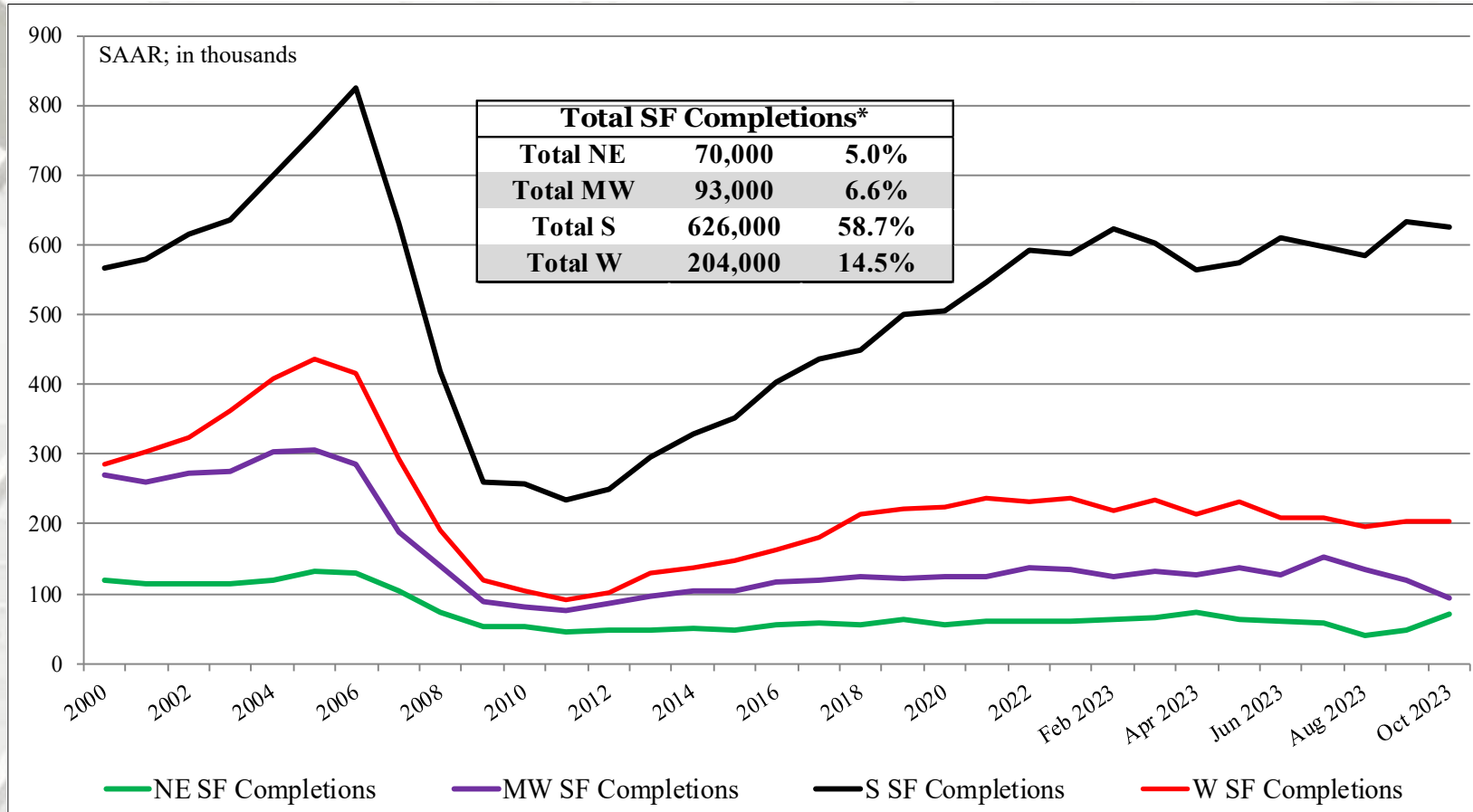


All data are SAAR; NE = Northeast and MW = Midwest; S = South, W = West

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



# SF Housing Completions by Region

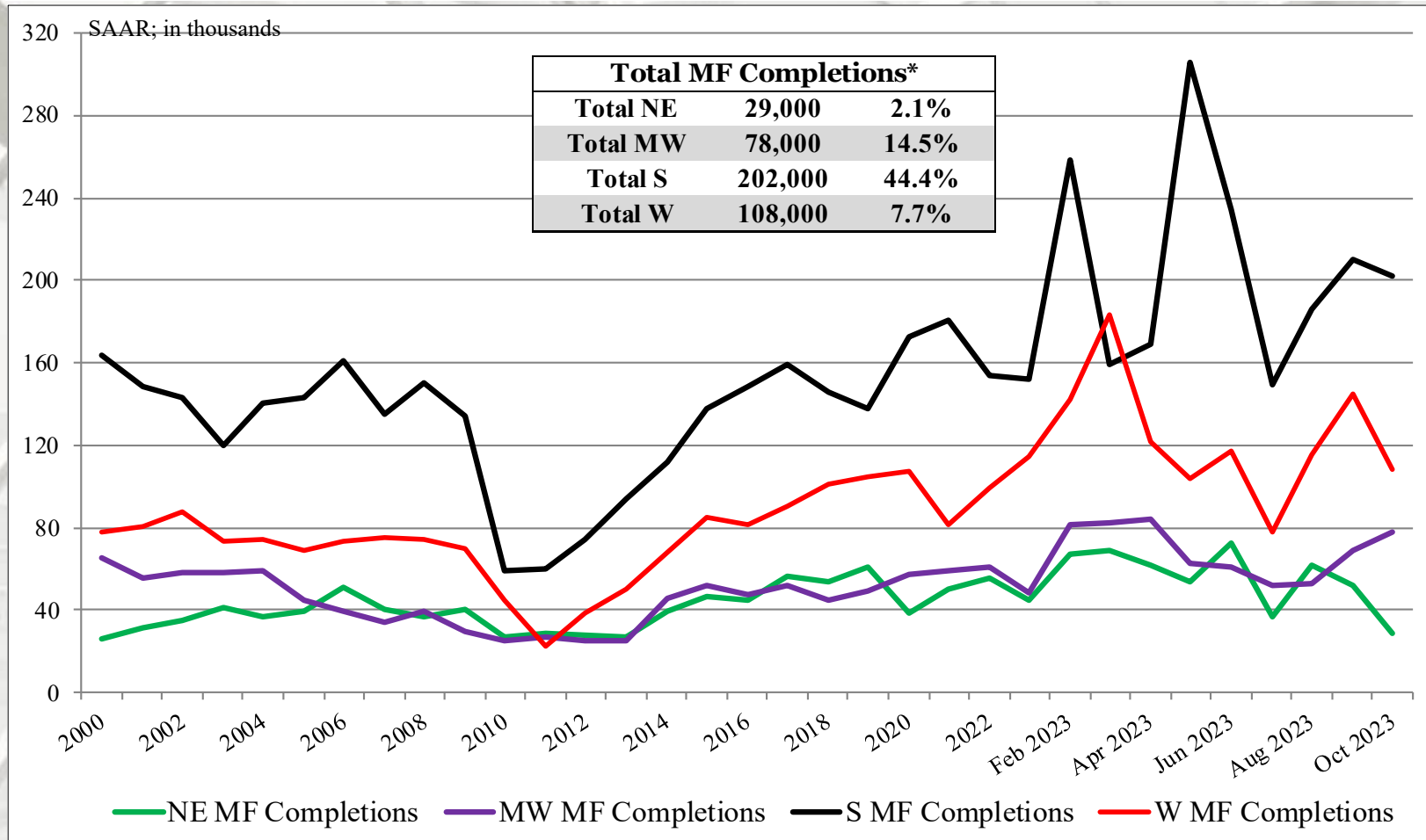


NE = Northeast, MW = Midwest, S = South, W = West

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

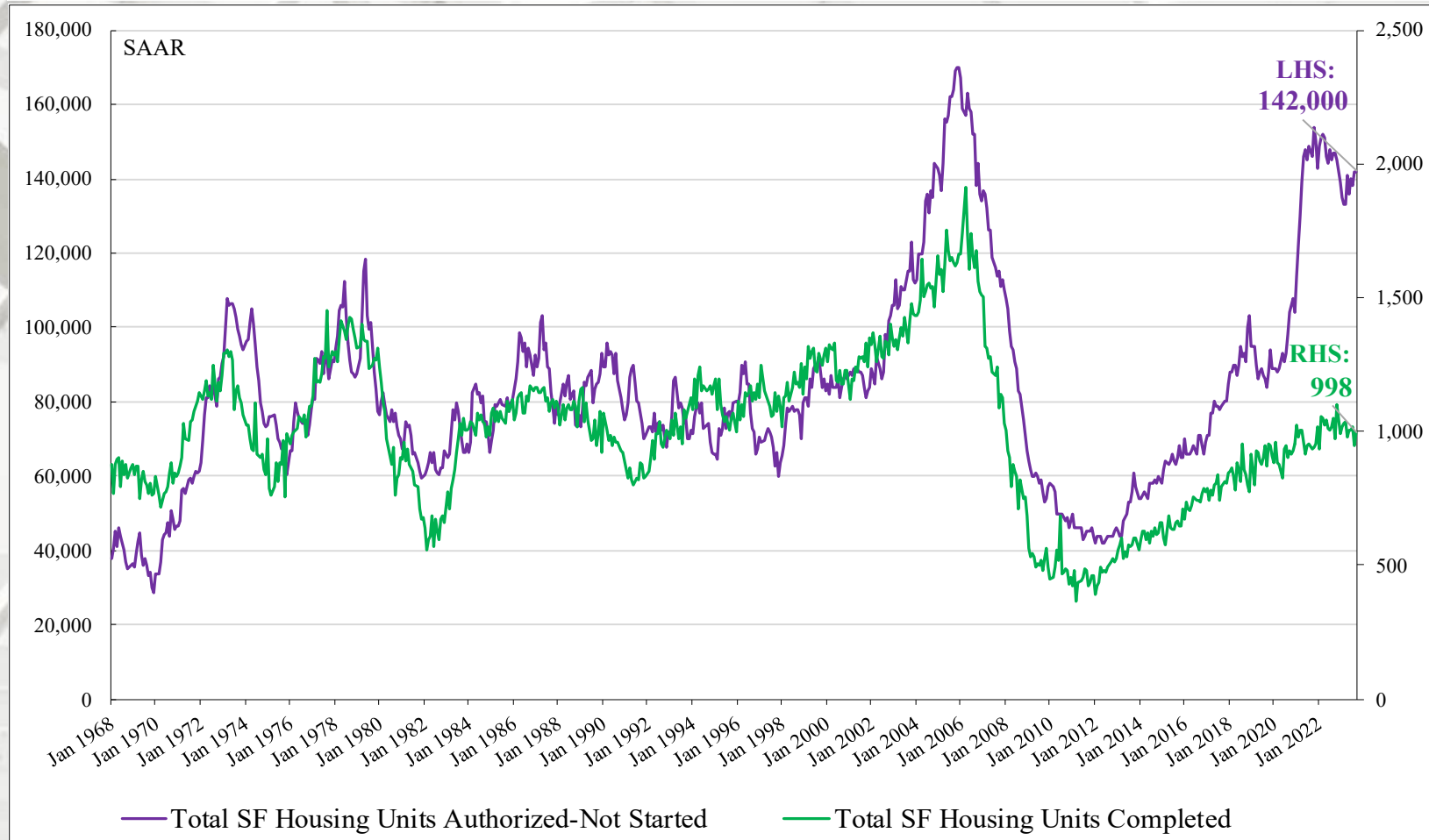


NE = Northeast, MW = Midwest, S = South, W = West

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

# Comparison of SF Units Authorized & Not Started to SF Housing Units Completed

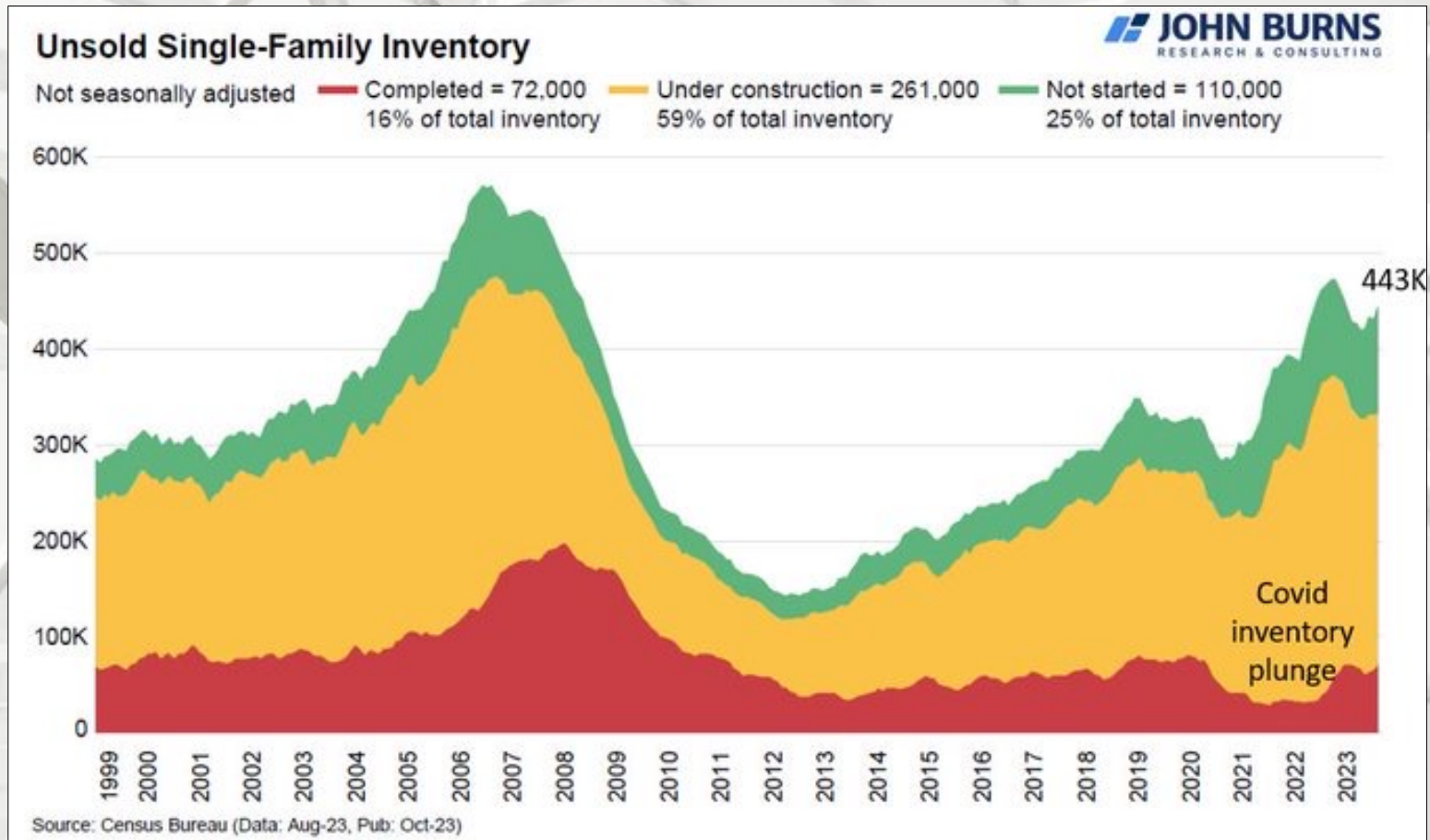


## Authorized, Not Started vs. Housing Completions

Total authorized units “not” started was 281,000 in October, a slight increase from August, and SF authorized units “not” started were 142,000 units in October, no change from August. Total completions and SF unit completions increased M/M.

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

# U.S. New Housing Supply



## John Burns RE Consulting LLC

### New Home Supply

“We would have a new home supply glut except for low resale listings. Completed, unsold homes (red) have returned to normal, with 72K homes available. Many more are on the way, with the highest levels of under construction (261K) and not yet started new homes (110K) since 2008.” – John Burns, CEO, John Burns Real Estate Consulting LLC



# New Single-Family House Sales

	New SF Sales*	Median Price	Mean Price	Month's Supply
October	679,000	\$409,300	\$487,000	7.8
September	719,000	\$422,300	\$515,400	7.2
2022	577,000	\$496,800	\$543,300	9.7
M/M change	-5.6%	-3.1%	-5.5%	8.3%
Y/Y change	17.7%	-17.6%	-10.4%	-19.6%

\* 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 less than the consensus forecast<sup>3</sup> of 725 m; range 650 m to 750 m. The past three month's new SF sales data also were revised:

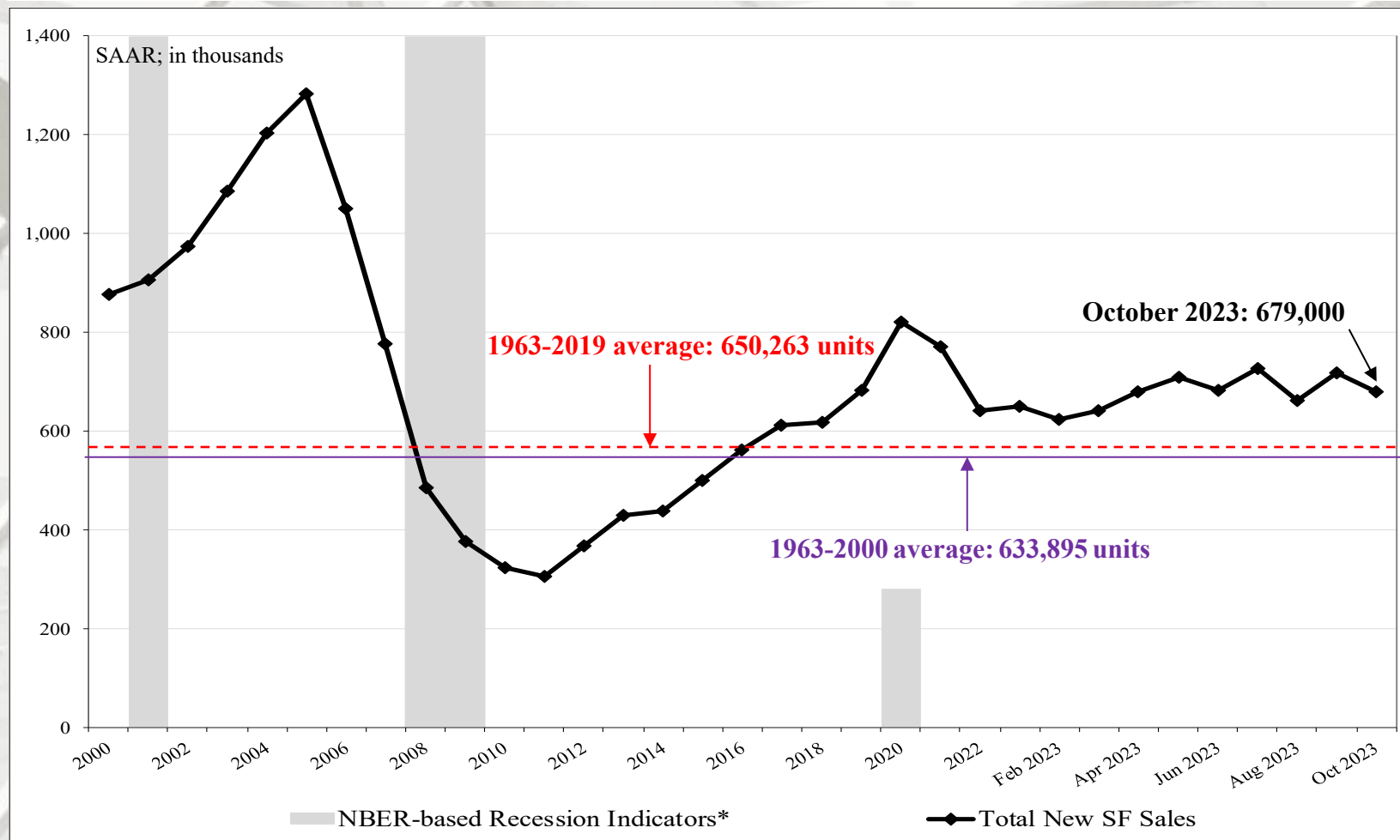
July initial: 714 m, revised to 728 m.

August initial: 675 m, revised to 662 m.

September initial: 759 m, revised to 719 m.

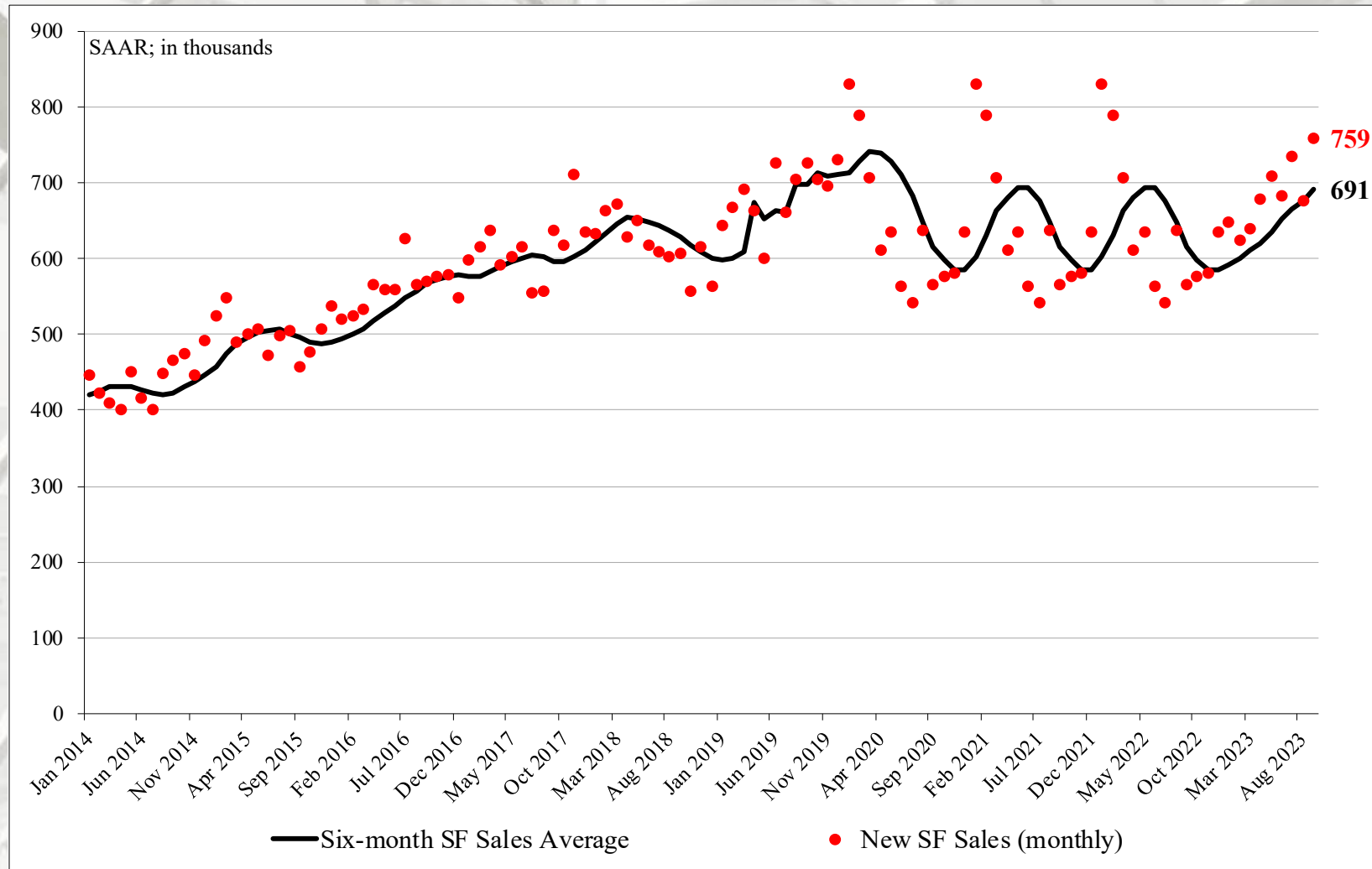


# New SF House Sales



\* 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			
October	43,000	51,000	440,000	145,000			
September	38,000	61,000	431,000	189,000			
2022	39,000	47,000	369,000	122,000			
M/M change	13.2%	-16.4%	2.1%	-23.3%			
Y/Y change	10.3%	8.5%	19.2%	18.9%			
	≤ \$150m	\$150 - \$199.9m	\$200 - 299.9m	\$300 - \$399.9m	\$400 - \$499.9m	\$500 - \$749.9m	≥ \$750m
October <sup>1,2,3,4</sup>	0	0	7,000	17,000	10,000	11,000	5,000
September	0	0	8,000	16,000	10,000	15,000	7,000
2022	500	500	5,000	9,000	8,000	15,000	6,000
M/M change	0.0%	0.0%	-12.5%	6.3%	0.0%	-26.7%	-28.6%
Y/Y change	0.0%	0.0%	40.0%	88.9%	25.0%	-26.7%	-16.7%
% of New SF sales	0.0%	0.0%	13.3%	31.7%	20.0%	21.7%	13.3%

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 October not add to total because of rounding.

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

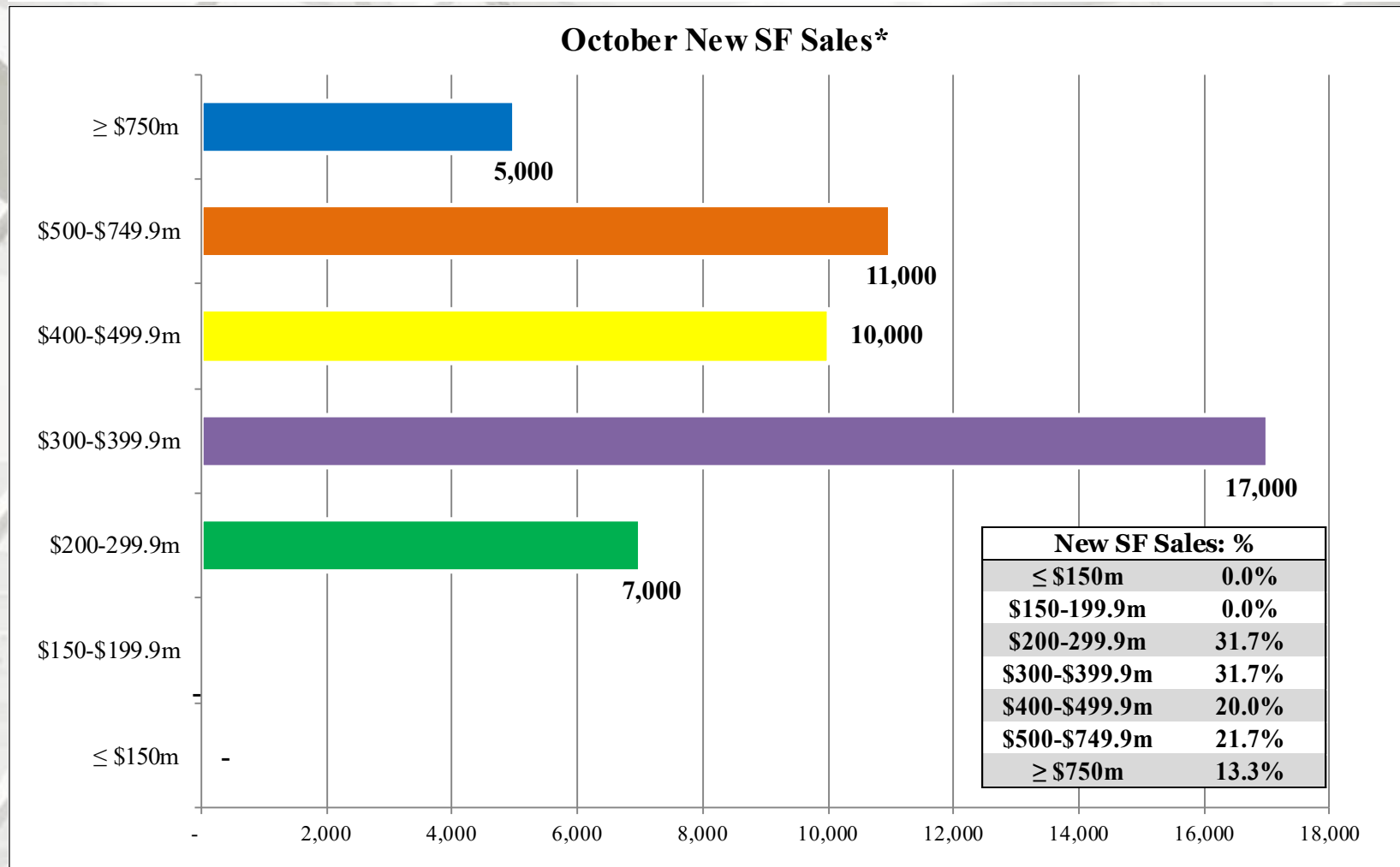
<sup>5</sup> Z = Less than 500 units or less than 0.5 percent

Sources: <sup>1,2,3</sup> <https://www.census.gov/construction/nrs/index.html>; 11/27/23;

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

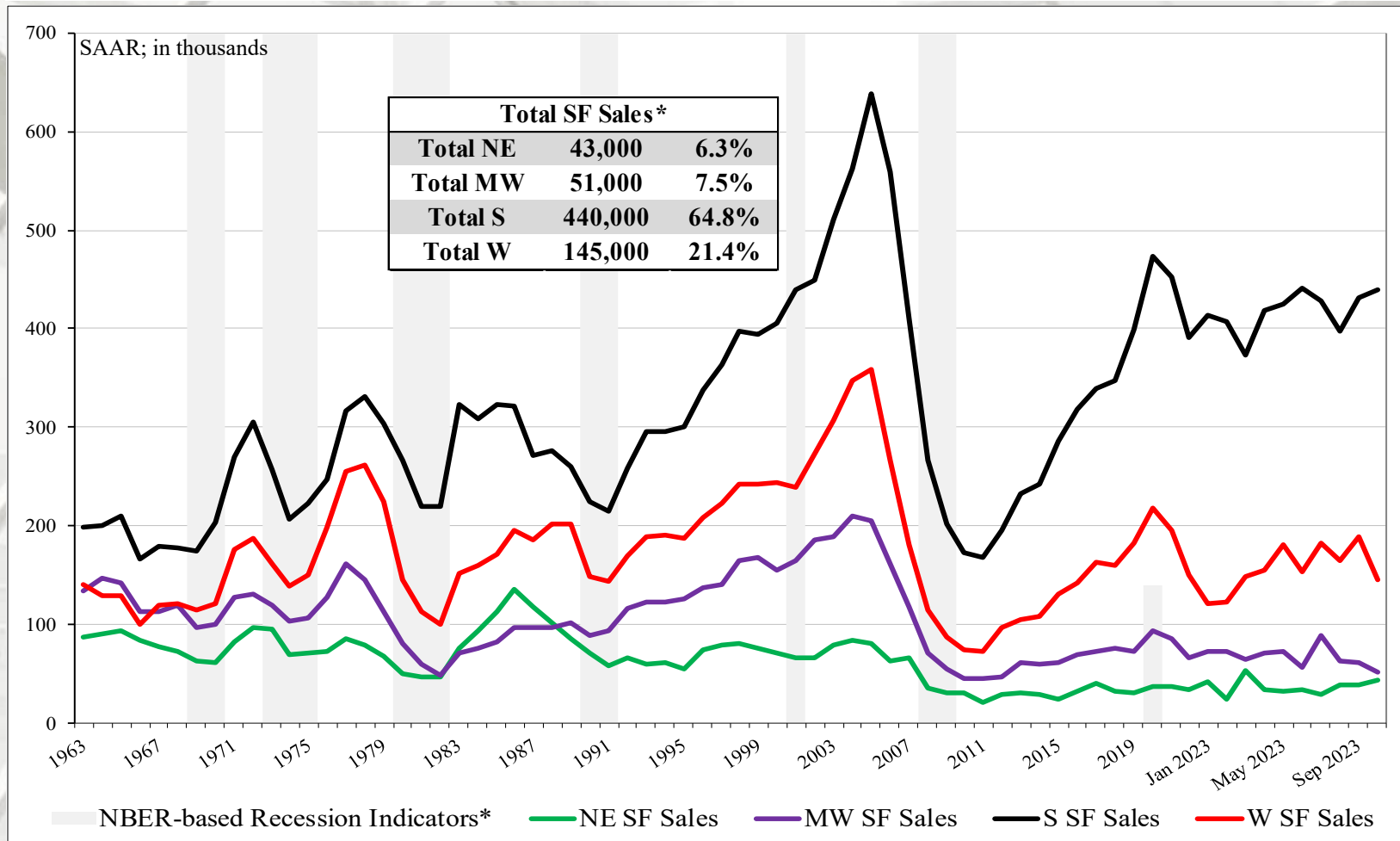
[Return TOC](#)

# New SF House Sales



\* Total new sales by price category and percent.

# New SF House Sales by Region



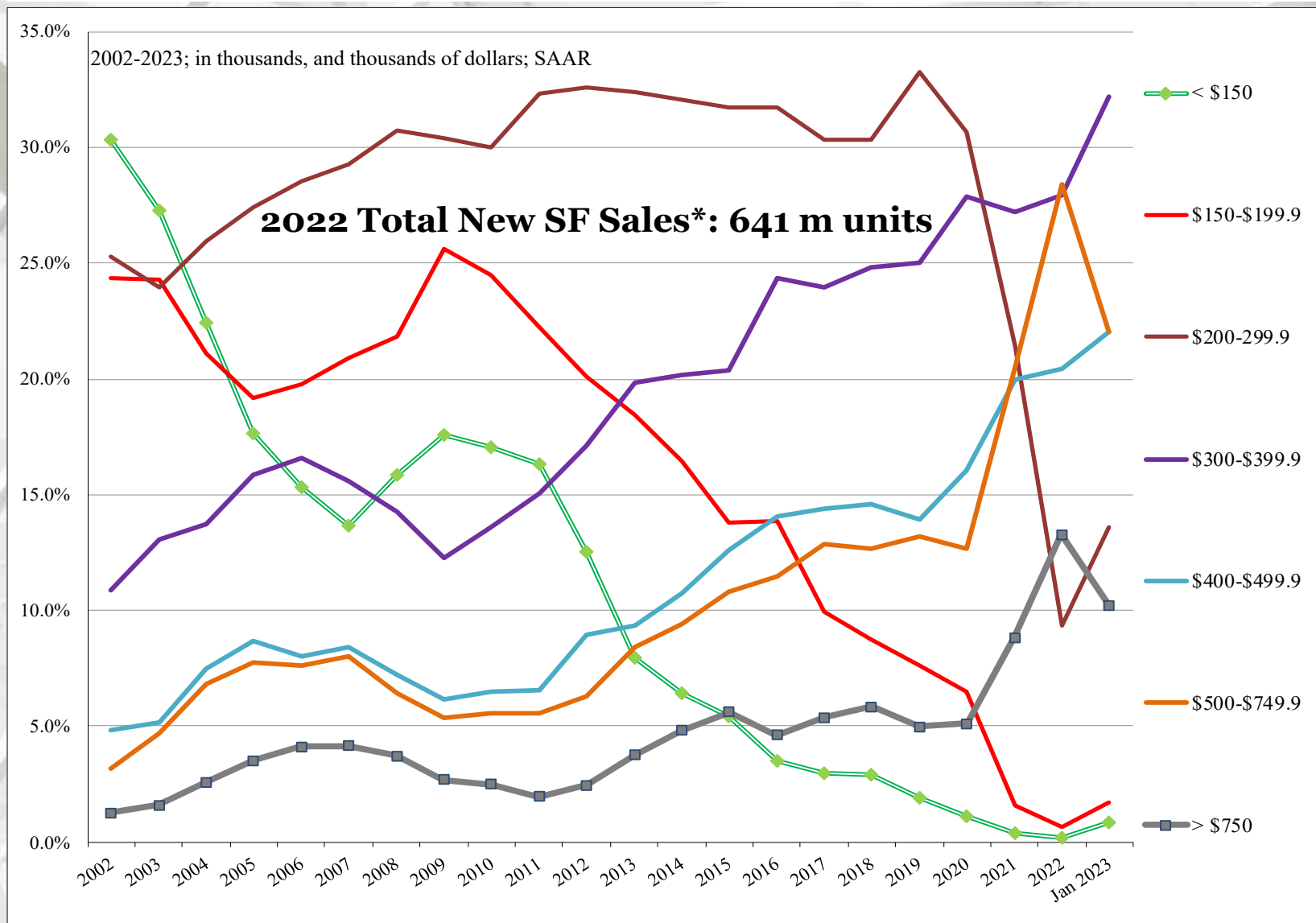
NE = Northeast; MW = Midwest; S = South; W = West

\* Percentage of total new sales.

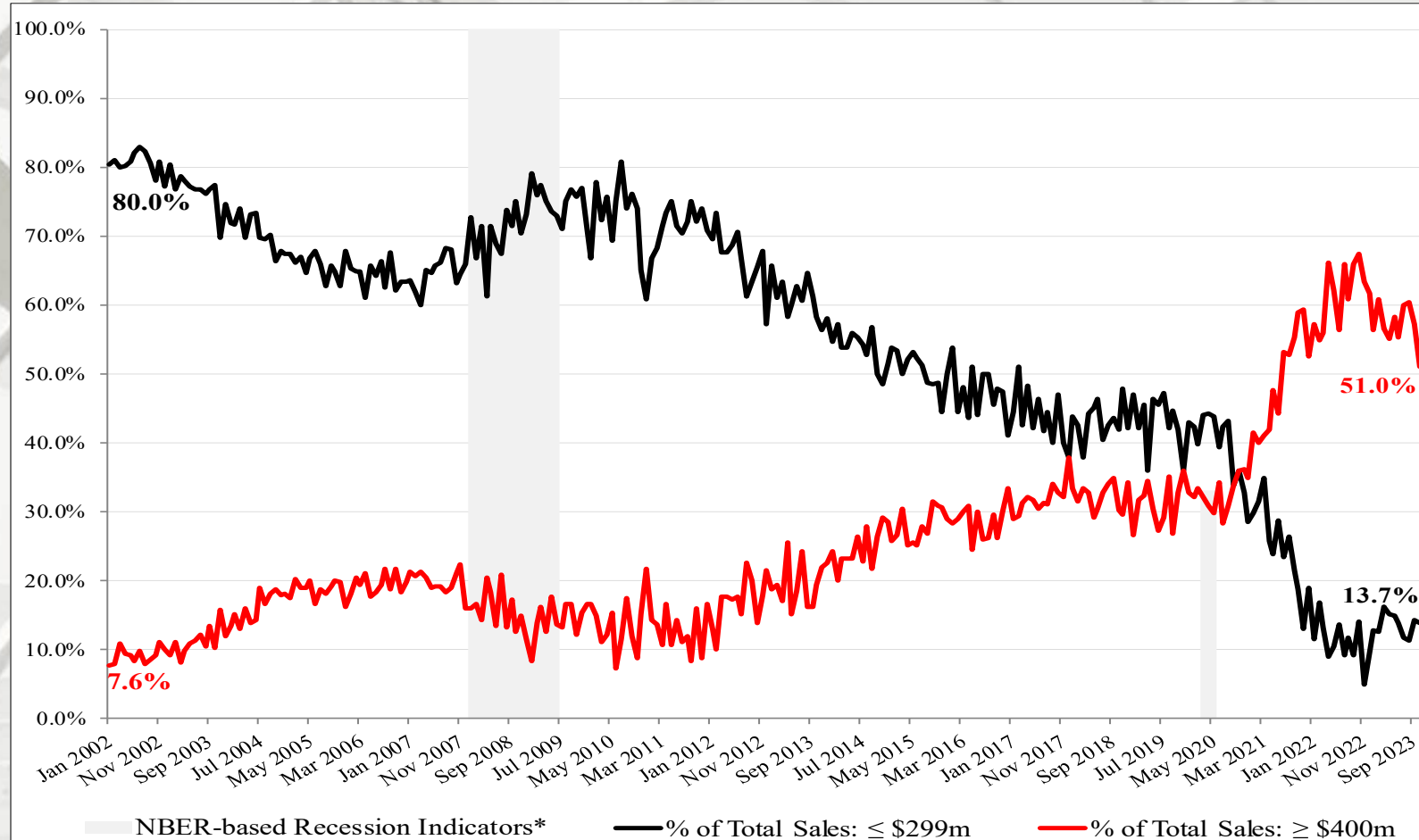
NBER based Recession Indicator Bars for the United States from the Period following the Peak through the Trough (FRED, St. Louis).



# New SF House Sales by Price Category



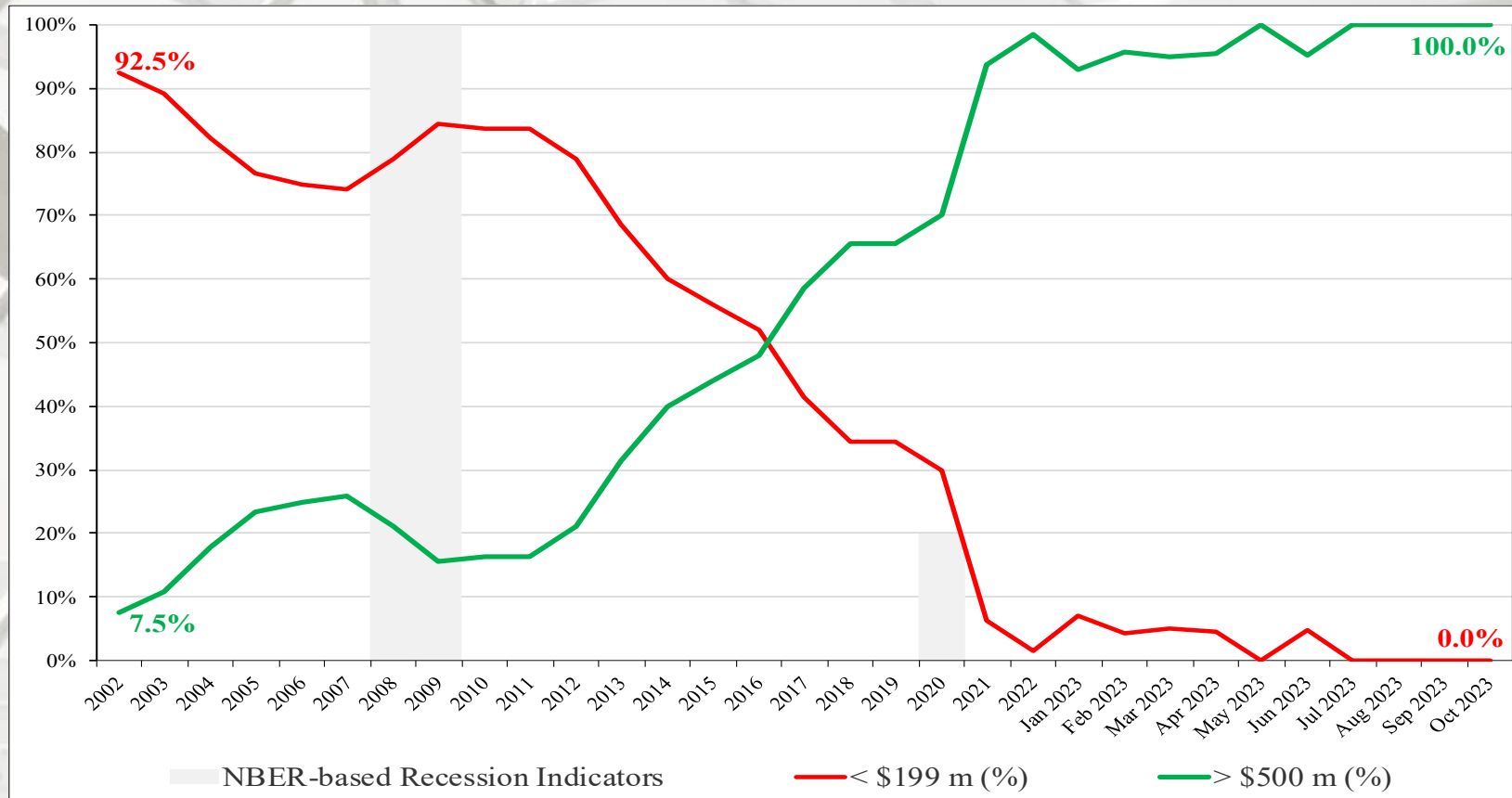
# New SF House Sales



## New SF Sales: $\leq$ \$299m and $\geq$ \$400m: 2002 – October 2023

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

# New SF House Sales

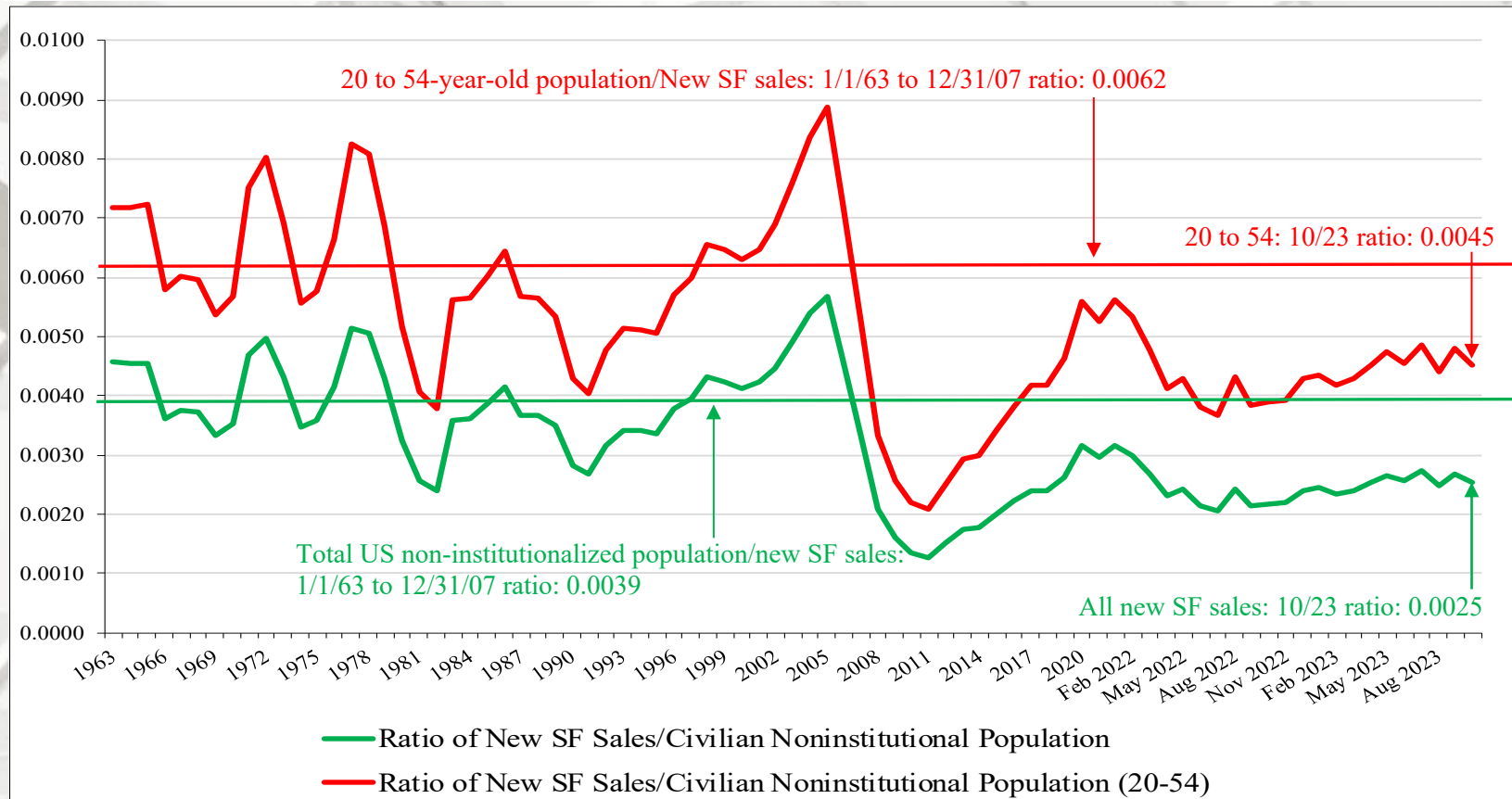


## New SF Sales: $\leq \$200\text{m}$ and $\geq \$500\text{m}$ : 2002 to October 2022

The number of  $\leq \$200$  thousand SF houses has declined dramatically since 2002<sup>1, 2</sup>. Subsequently, from 2012 onward, the  $\geq \$500$  thousand class has soared (on a percentage basis) in contrast to the  $\leq \$200$  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

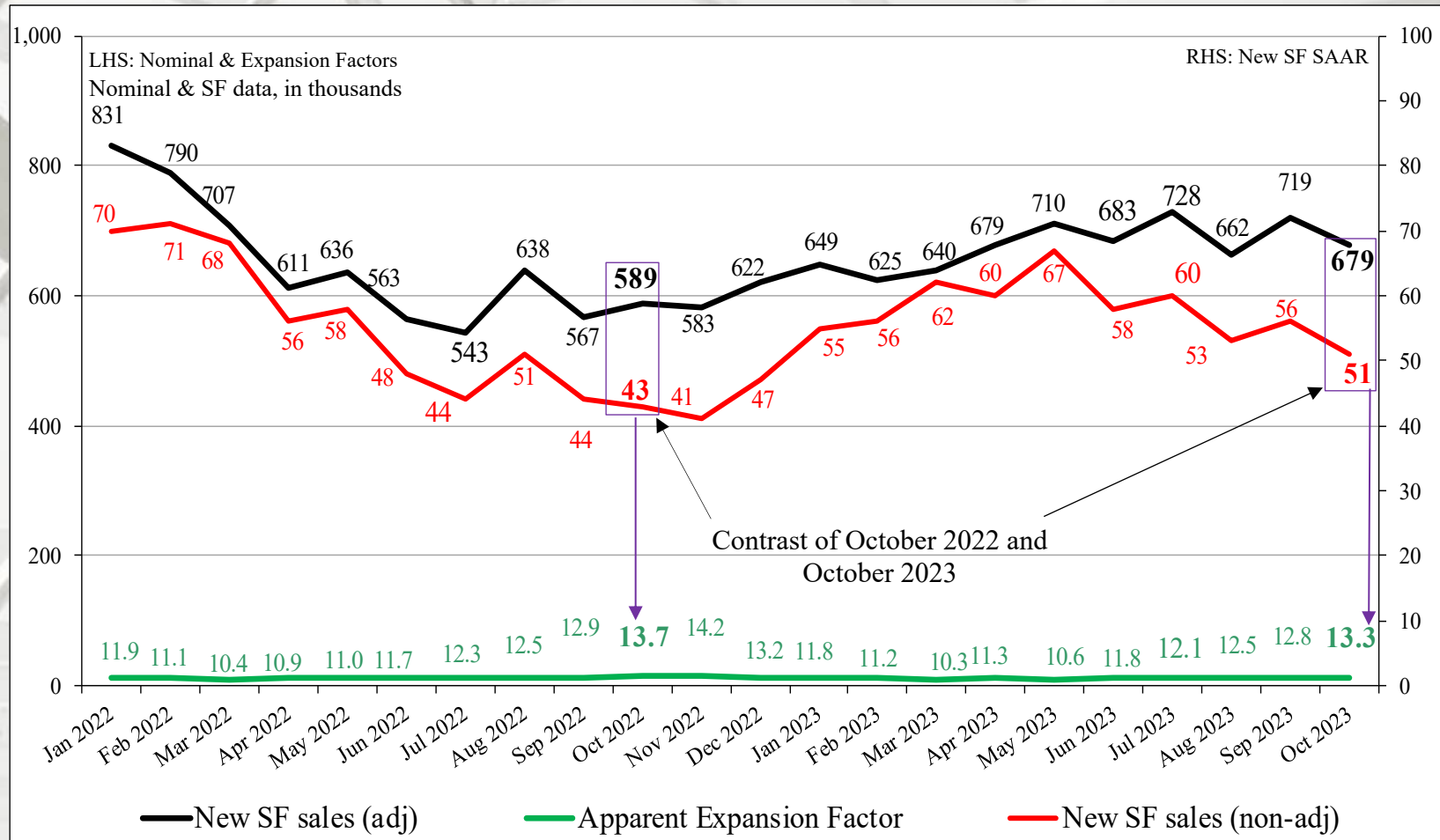


## New SF sales adjusted for the US population

From January 1963 to December 2007, the long-term ratio of new house sales to the total US non-institutionalized population was 0.0039; in October 2023 it was 0.0025 – a decrease from September (0.0027). The non-institutionalized population, aged 20 to 54 long-term ratio is 0.0062; in October 2023 it was 0.0045 – also a decline from September (0.0045). All are non-adjusted data. From a non-institutionalized population world view, new sales remain less than the long-term average.

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



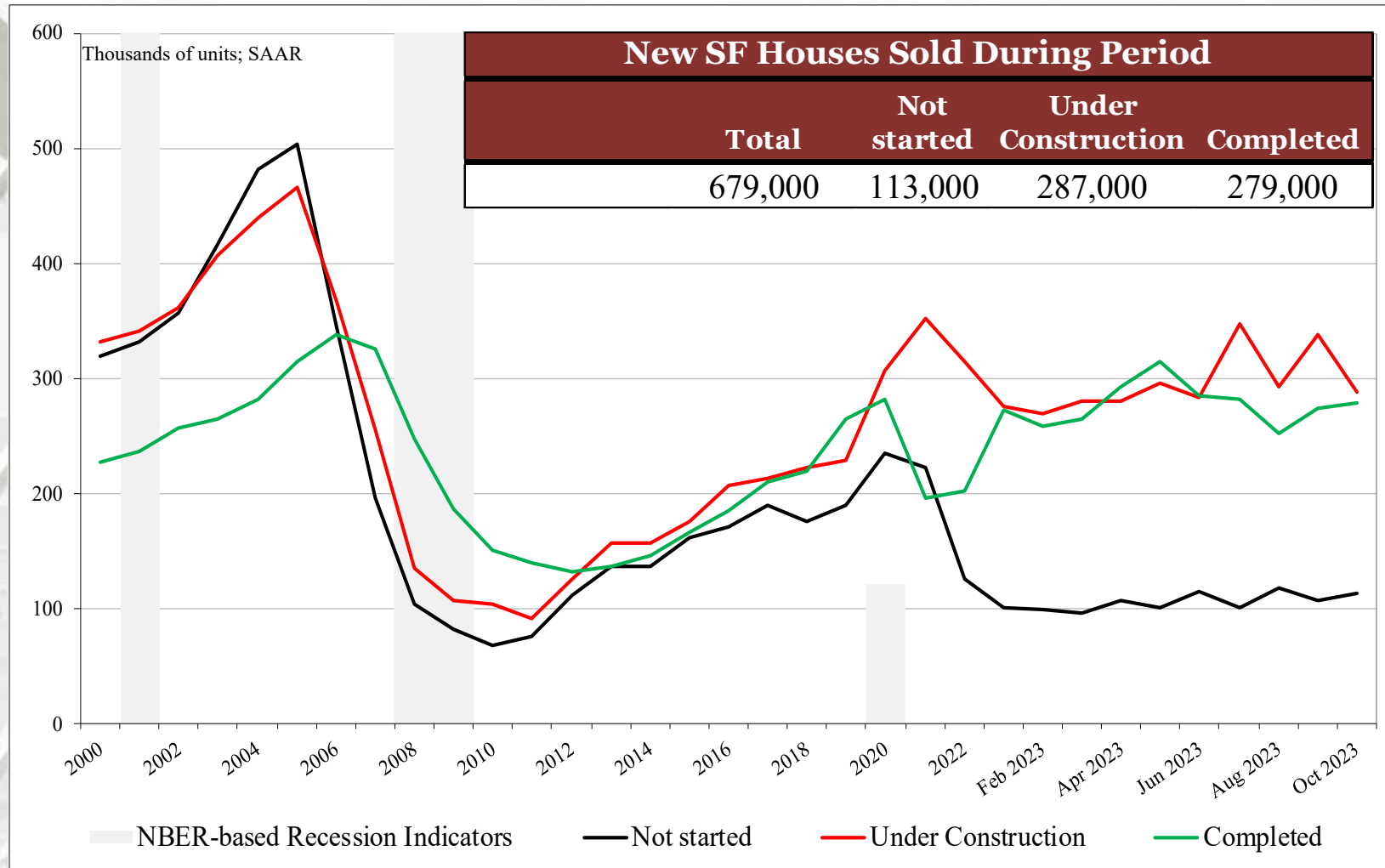
# New SF House Sales

## New SF Houses Sold During Period

	Total	Not started	Under Construction	Completed
October	679,000	113,000	287,000	279,000
September	719,000	107,000	338,000	274,000
2022	466,000	102,000	306,000	58,000
M/M change	-5.6%	5.6%	-15.1%	1.8%
Y/Y change	45.7%	10.8%	-6.2%	381.0%
Total percentage		16.6%	42.3%	41.1%

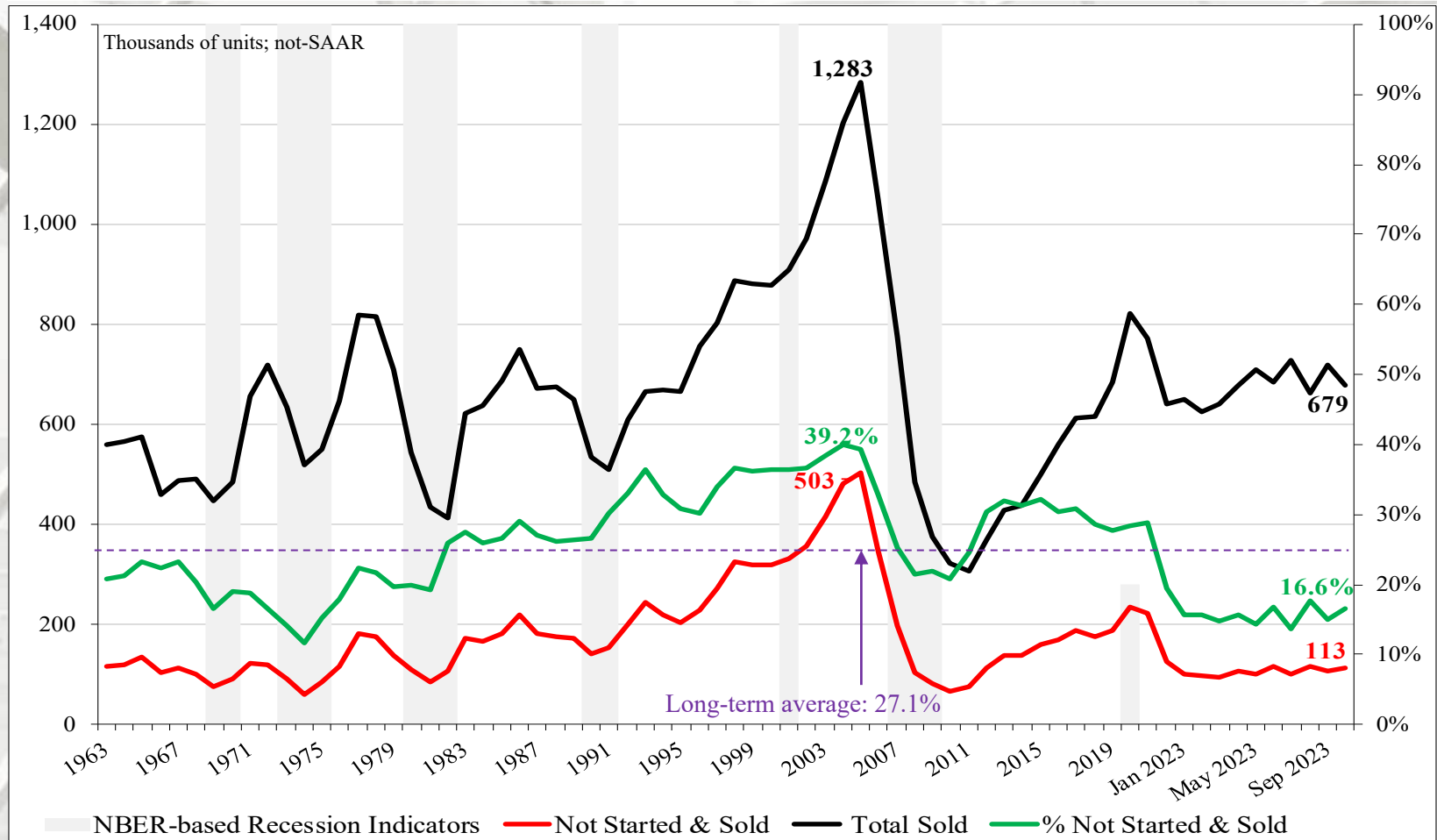
All data is SAAR

# 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 October (679 m), 16.6% (113 m) had not been started and sold. 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

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

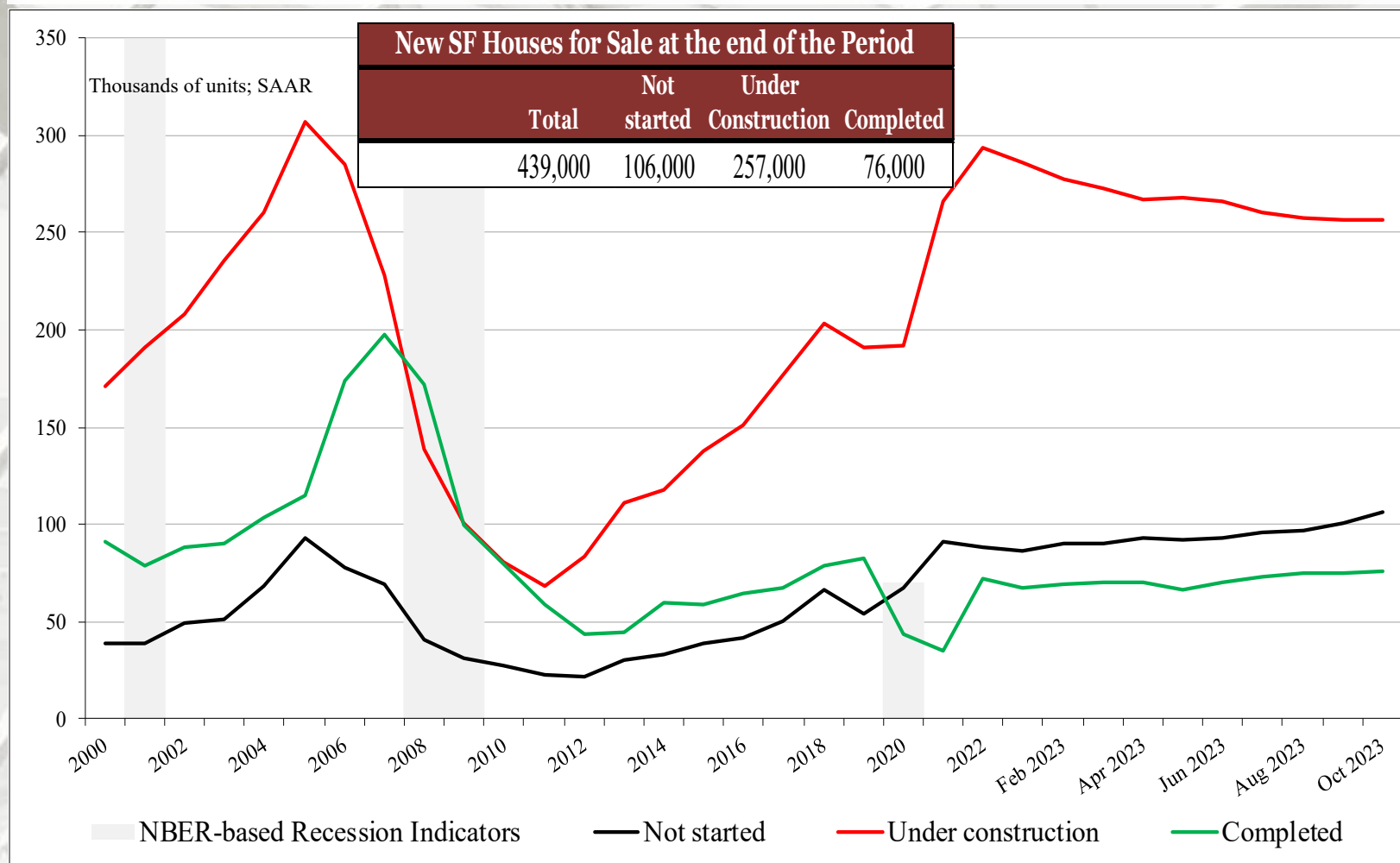
	Total	Not started	Under Construction	Completed
October	439,000	106,000	257,000	76,000
September	433,000	101,000	257,000	75,000
2022	466,000	102,000	306,000	58,000
M/M change	1.4%	5.0%	0.0%	1.3%
Y/Y change	-5.8%	3.9%	-16.0%	31.0%
Total percentage		24.1%	58.5%	17.3%

Not SAAR

Of houses listed for sale (439 m) in October, 17.3% (76 m) have been built. In the 'ground had not been broken for construction' or 'not started' category, 106 m (24.1%) 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
October	449,000	30,000	46,000	267,000	106,000
September	437,000	30,000	44,000	261,000	102,000
2022	472,000	29,000	48,000	282,000	113,000
M/M change	2.7%	0.0%	4.5%	2.3%	3.9%
Y/Y change	-4.9%	3.4%	-4.2%	-5.3%	-6.2%

\* Not SAAR

Thousands of units; not SAAR

For sale at end of period*		
	<b>449,000</b>	
<b>Northeast</b>	<b>30,000</b>	<b>6.7%</b>
<b>Midwest</b>	<b>46,000</b>	<b>10.2%</b>
<b>South</b>	<b>267,000</b>	<b>59.5%</b>
<b>West</b>	<b>106,000</b>	<b>23.6%</b>

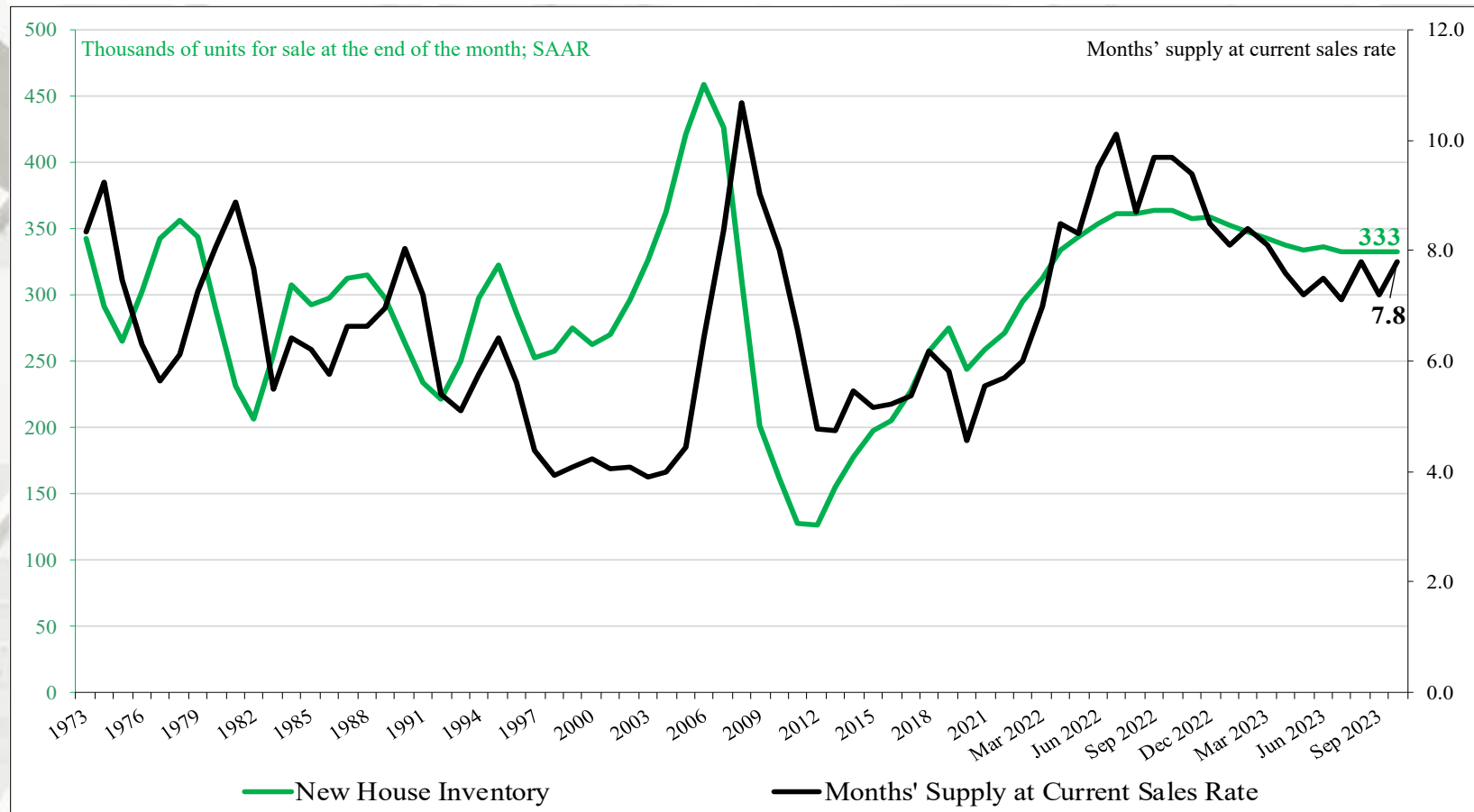
1973 1976 1979 1982 1985 1988 1991 1994 1997 2000 2003 2006 2009 2012 2015 2018 2021 Feb 2023 May 2023 Aug 2023

NE MW S W

NBER-based Recession Indicators

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

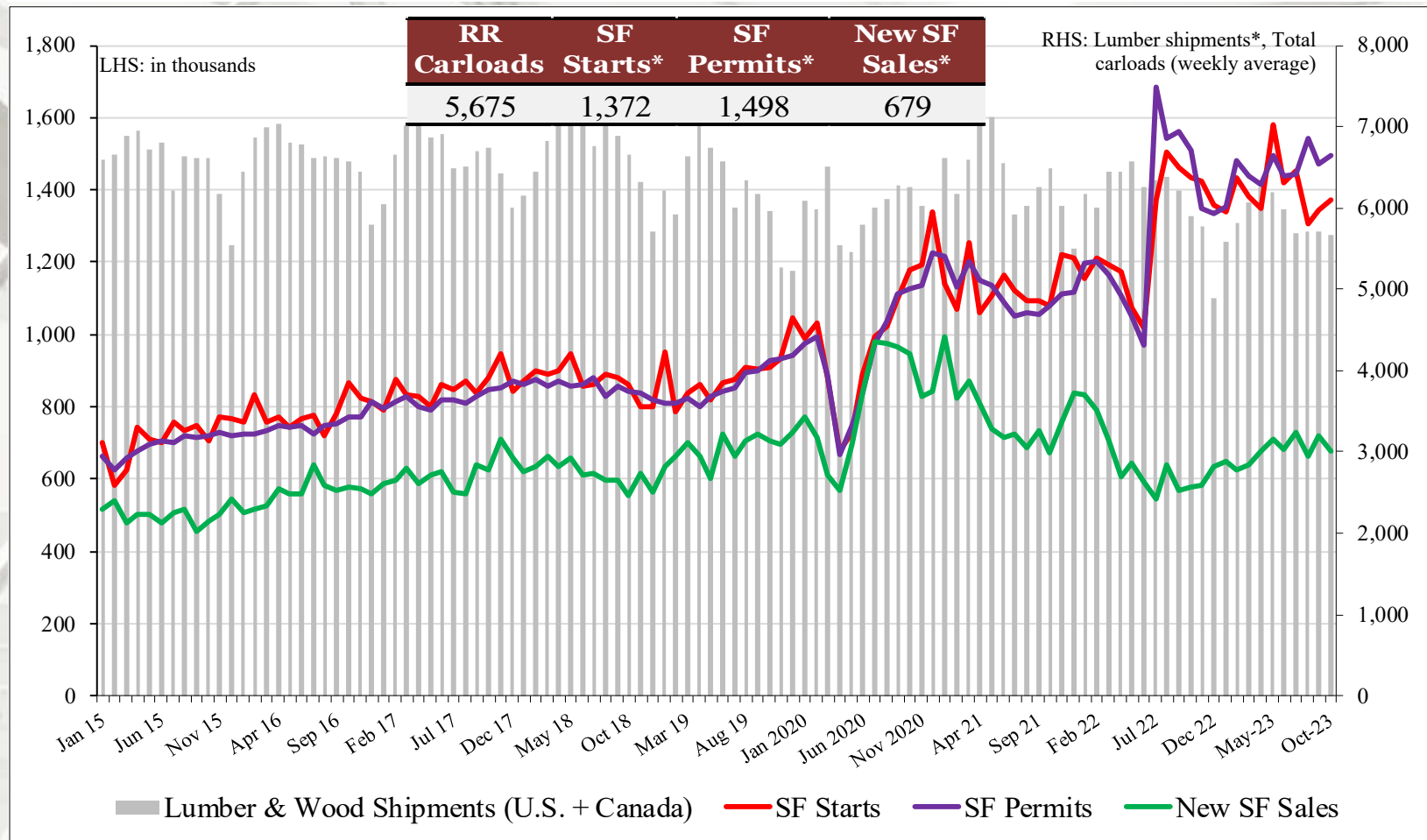
# Months' Supply and New House Inventory<sup>a</sup>



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

The months' supply of new houses for sale at the end of October was 7.8, greater than the historically preferred number of five- to six-months (SAAR).

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



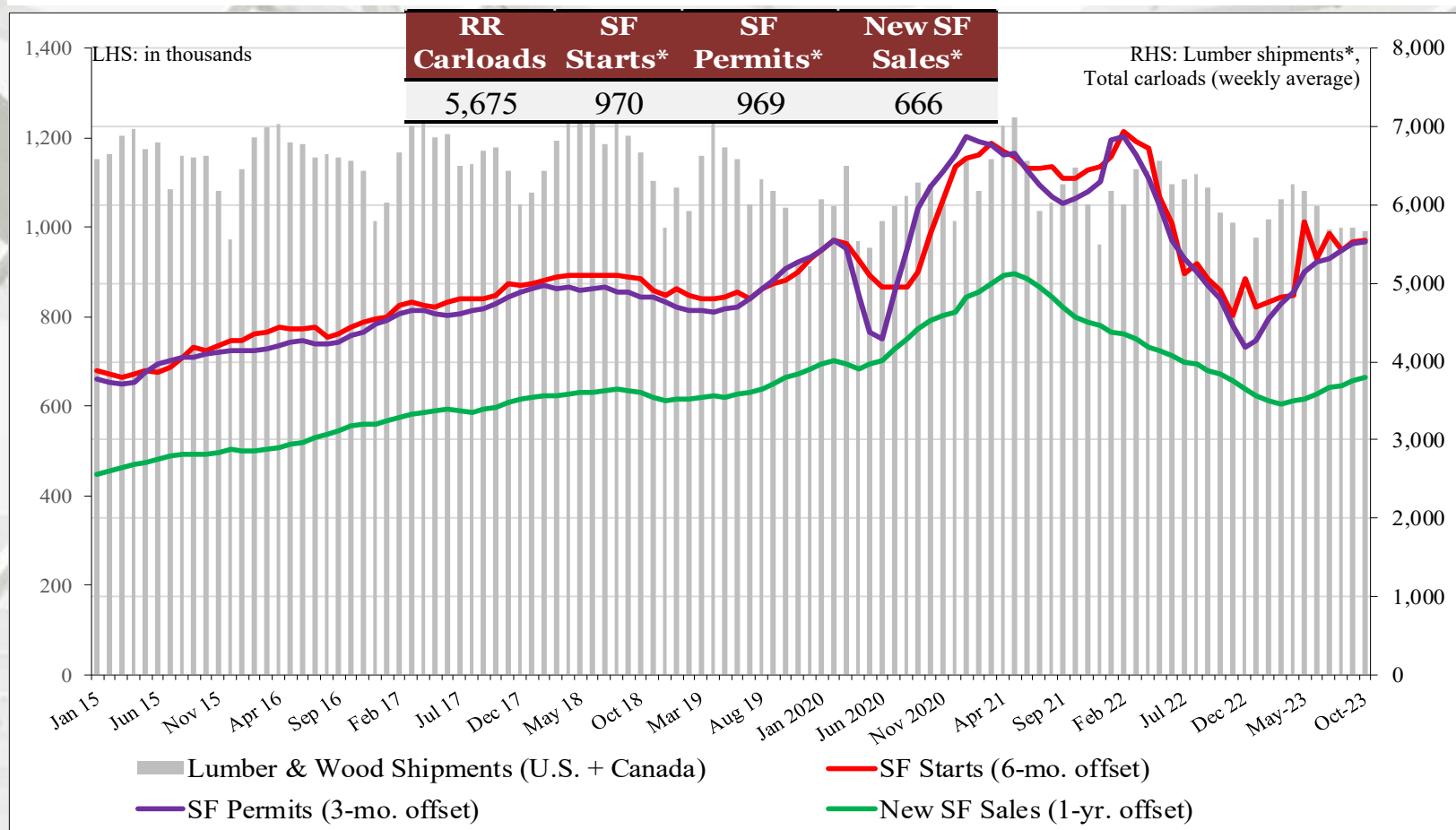
Carloads of Canadian + U.S. lumber and wood shipments to the U.S. are contrasted above to U.S. housing metrics. Annual SF starts, SF Permits, and New sales are compared to total carload lumber and wood shipments. The intent is to discern if lumber shipments relate to future SF starts, SF permits, and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

\* In thousands

Sources: \*Association of American Railroads, *Rail Time Indicators* report-October 2022; <http://www.census.gov/construction/>; 11/17/23 & 11/27/23

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

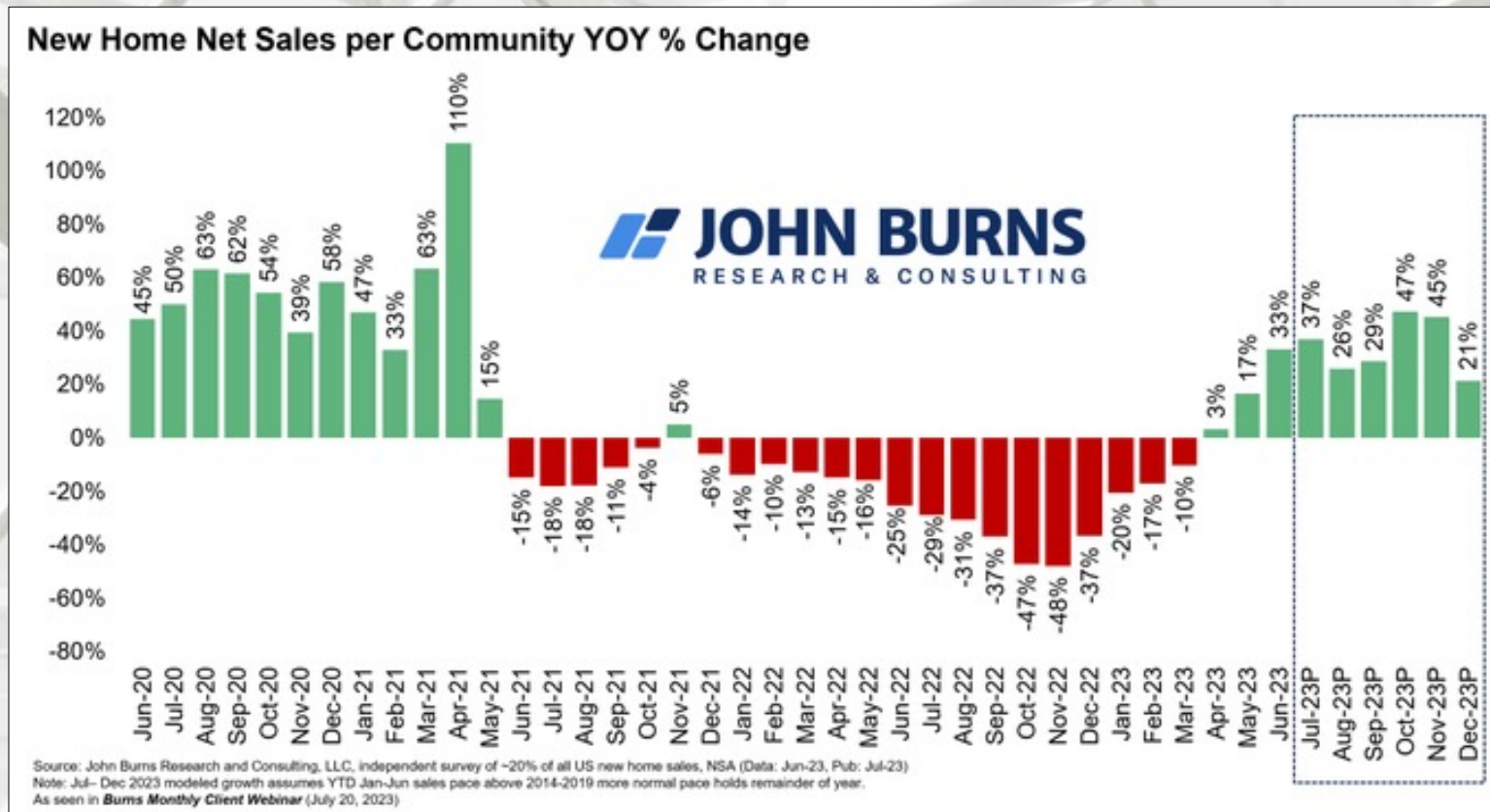


Carloads of Canadian + US lumber and wood shipments to the US are contrasted above to U.S. housing metrics. SF starts are off-set 6-months (a typical time-frame from permit issuance to actual start); Permits are off-set 3-months; and New sales are off-set 1-year. The intent is to discern if lumber shipments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

\* In thousands.



# US house Builders: New Sales



## John Burns Research & Consulting LLC

“For home builder sales, here’s how the second half of 2023 could look using some realistic assumptions from our survey's 10+ years of history along with YTD trends. It’ll be interesting to hear how builders are thinking about the rest of 2023 as many start reporting in coming weeks.” – Rick Palacios Jr., Director of Research, John Burns Research and Consulting

# US house Builders: New Sales



## **John Burns Research & Consulting LLC** **Get ready for more expensive new homes**

“The “coming soon” homes on builder websites indicate a price of \$217 per square foot – up 9% from one year ago. This is at least in part due to more expensive land prices.” – John Burns, CEO, John Burns Real Estate Consulting LLC

# US house Builders: New Sales

## John Burns Research & Consulting LLC

### The Shiny Appeal of Newly Built Homes: John Burns on MarketWatch

“Very low demand and even lower supply.” That’s how CEO John Burns described the housing market in his recent interview with Aarthi Swaminathan on [Barron’s MarketWatch podcast](#). Key insights from their discussion include:

- The forces driving the market
- Trends we have our eyes on
- Predictions for what comes next

#### The forces driving the market: supply shortages and builder strategies

- **The resale market is starved of supply.** Due to elevated mortgage rates, existing home sales are on track for their worst year *since 2008*.
- **Home builders are taking market share.** With the dearth of resale supply, home builders are increasingly becoming the only game in town, keeping the new home market roaring in 2023.
- **Builders are generating sales with heavy incentives.** Thanks to historically high builder margins and new home prices, builders are using [mortgage rate buydowns](#) and other incentives to generate sales. According to our latest home builder survey, about 33% of builders reduced their prices (including increased incentive use) in October, *keeping their sales above seasonal expectations.*” – Dillan Krieg, Research Analyst I, Surveys and Cara Lavender, Research Manager, Surveys; John Burns Research and Consulting LLC

*“But the home builders usually get about 12% to 15% of the sales, and they’re usually about 12% to 15% of the homes you and I could purchase. Right now, they’re 30% to 35% of the homes available to sell, because there’s so little on the resale market.”* – John Burns, CEO

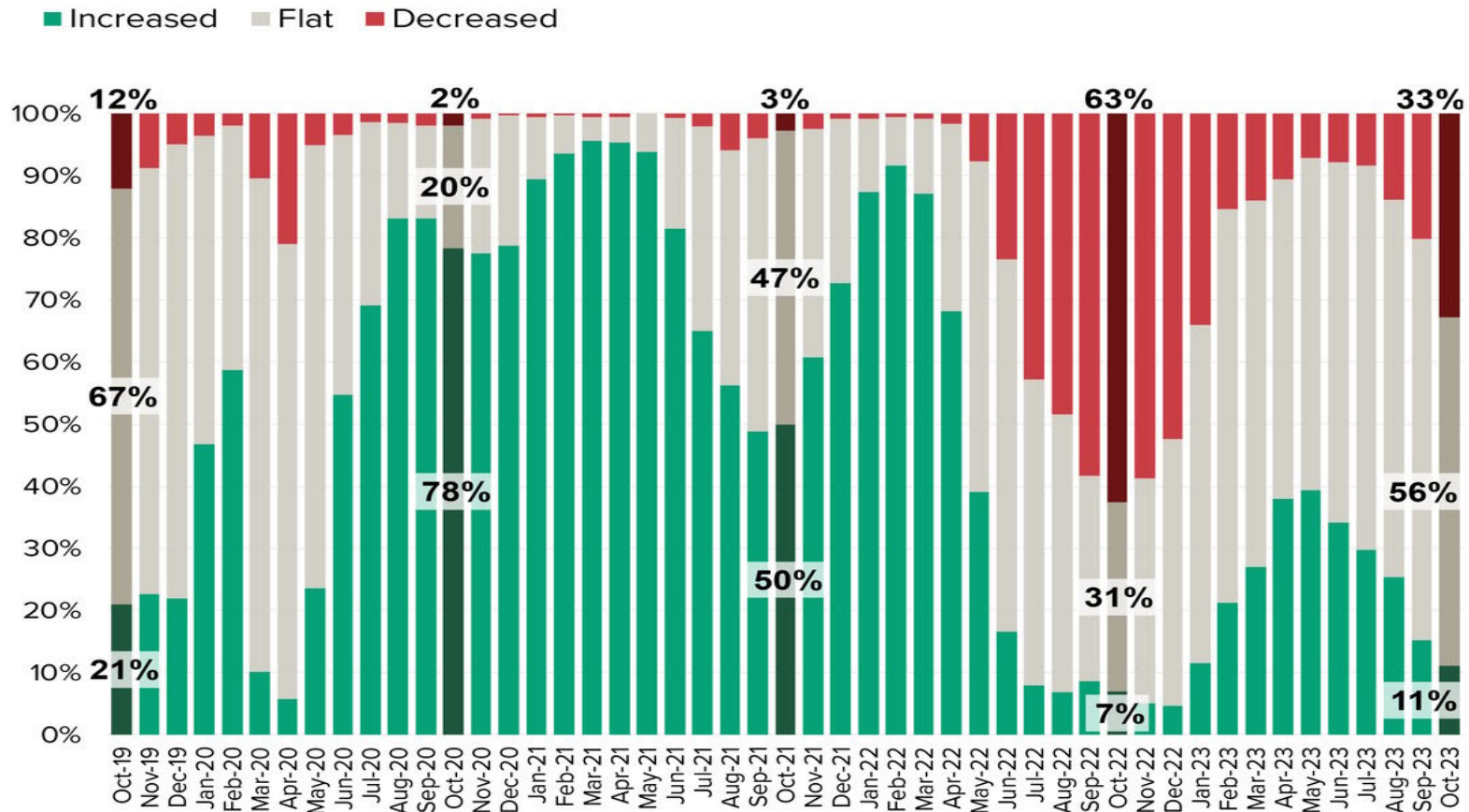


# US house Builders: New Sales

John Burns Research & Consulting LLC



National: Direction of New Home Prices (Net of Incentives)  
All responses



Source: John Burns Research and Consulting, LLC, independent survey of ~20% of all US new home sales, NSA (Data: Oct-23, Pub: Nov-23)

# US house Builders: New Sales

John Burns Research & Consulting LLC

## The Shiny Appeal of Newly Built Homes: John Burns on MarketWatch

### Key trends: land development, regulatory changes, and shifts in home sizes

- **“Land development is costlier than ever.** Low investment in land development has kept the supply of developed land sparse. That means many builders have had to start developing land, which is costly and risky.
- **Change is on the horizon.** Government initiatives promoting office-to-residential conversions, the recent NAR commission collusion ruling, and diverse state and local regulations may shape future industry dynamics.
- **Builders are building smaller and denser homes to solve the affordability crisis.** These smaller homes are becoming more popular among younger buyers.

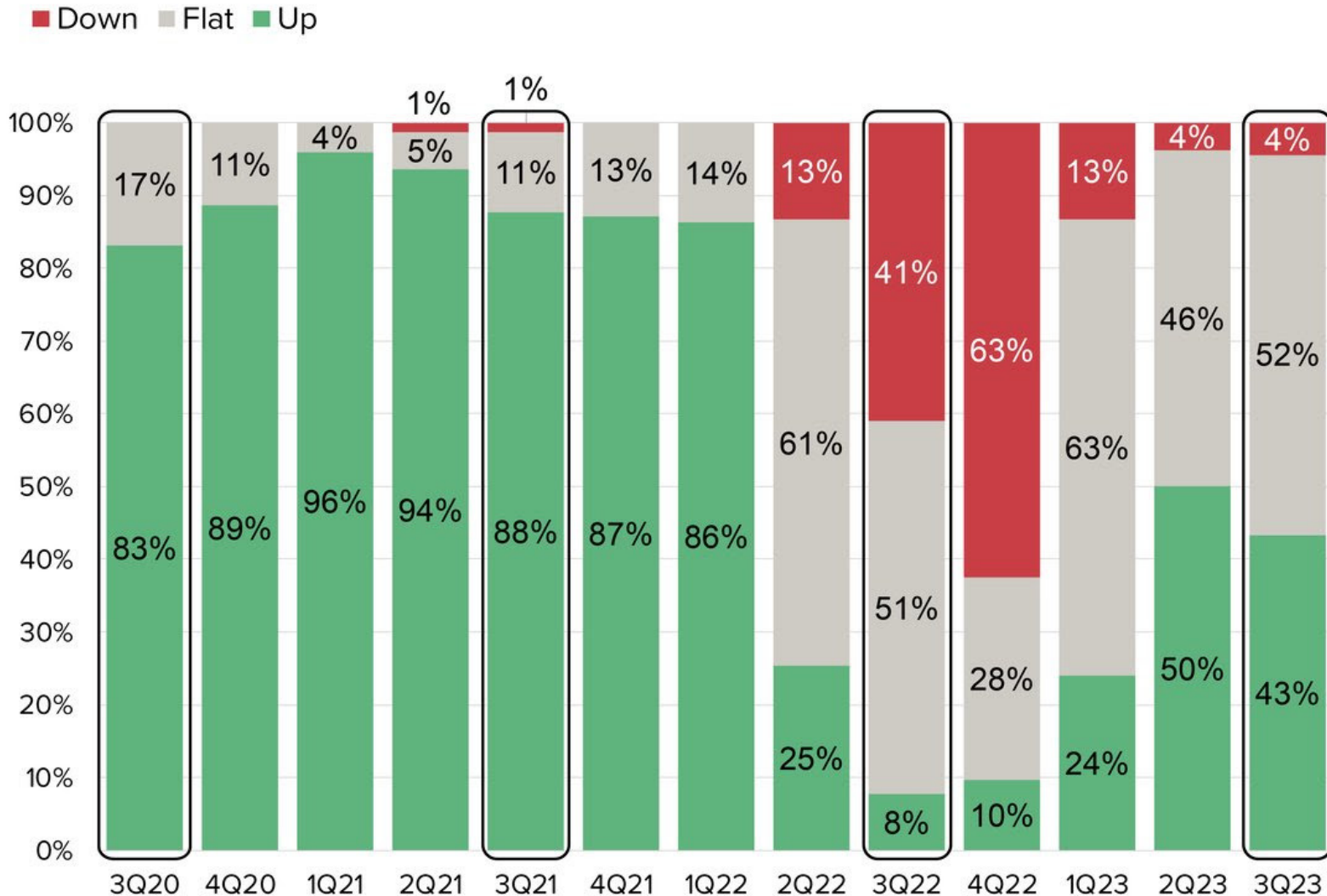
### Predictions: builder dynamics and economic watchfulness

- **Low community counts hinder builders’ growth.** Low community count growth will limit new home sales next year. However, builders still have growth intentions for 2024, and many under-construction homes will help fuel sales.
- **Builders are more concerned about the economy than mortgage rates.** Rising rates in a strong economy are manageable for builders, but a serious recession would shut down the housing market.
- **Large builders shine; smaller builders fall behind.** Large builders, particularly public ones with immense capital backing, have captured much of the labor supply and volume in the market at a very low cost. Smaller builders are unable to compete, especially as financing costs rise. Public builders now account for about 41% of all new home sales, one of the highest percentages in recent memory.”  
– Dillan Krieg, Research Analyst I, Surveys and Cara Lavender, Research Manager, Surveys; John Burns Research and Consulting LLC



## Direction of Finished Lot Prices

Quarterly comparison, not weighted

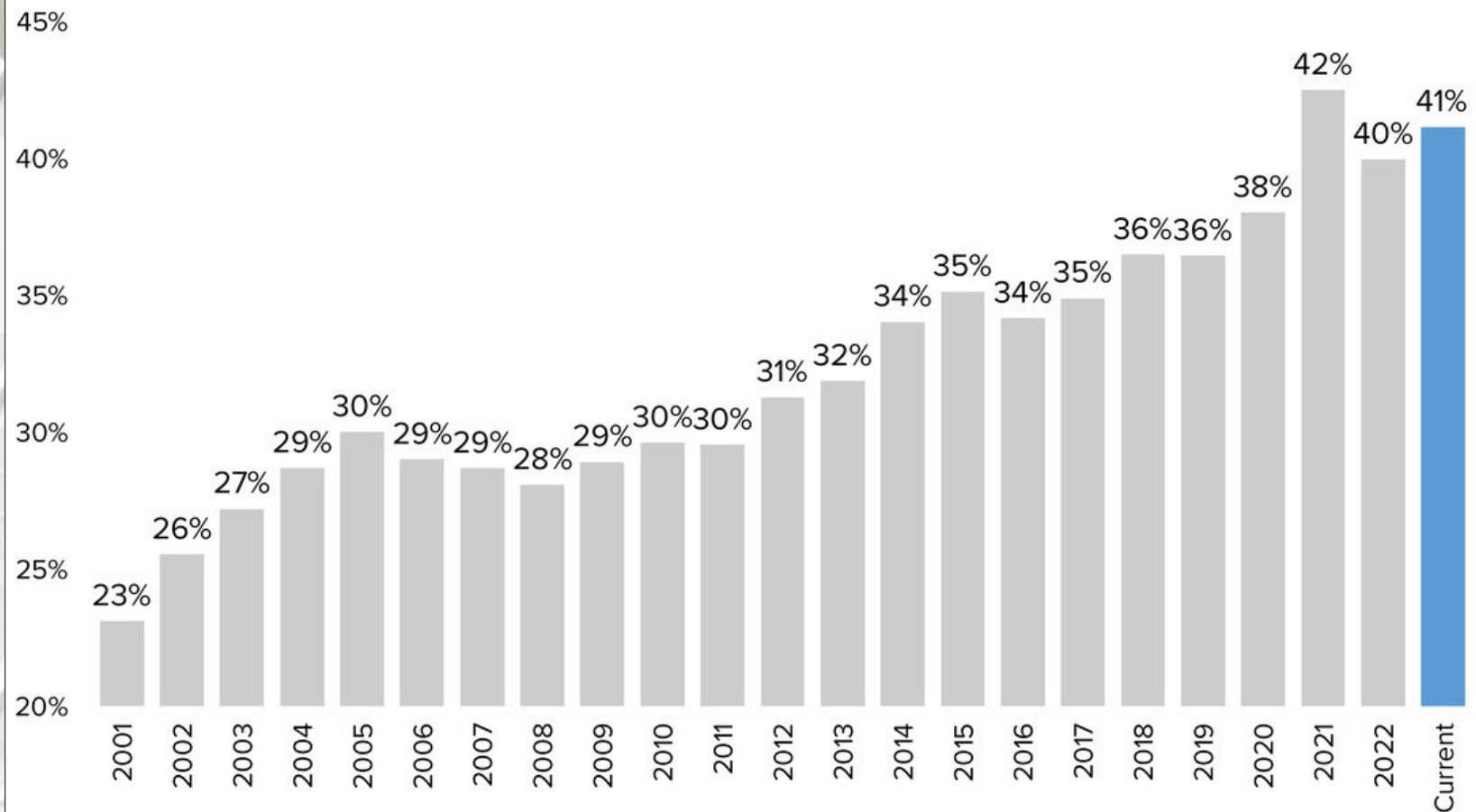


Source: John Burns Research and Consulting, LLC, independent survey, NSA (Data: Oct-23, Pub: Oct-23)

# US house Builders: New Sales



## Public Builder Market Share Home orders as a % of annual new home sales



Notes: 1. Annual new home sales per U.S. Census Bureau. 2. Builder orders per Bloomberg, SEC filings, and company annual reports. 3. Builder data excludes closings from unconsolidated joint ventures. Current value is a trailing four-quarter total.

Source: John Burns Research and Consulting, LLC (Data: 2Q23, Pub: Aug-23)

# October 2023 Construction Spending

	Total Private Residential*	SF	MF	Improvement**
October	\$884,422	\$408,745	\$135,602	\$340,075
September	\$873,641	\$404,357	\$135,837	\$333,447
2022	\$877,990	\$414,703	\$116,228	\$347,059
M/M change	1.2%	1.1%	-0.2%	2.0%
Y/Y change	0.7%	-1.4%	16.7%	-2.0%

\* 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\$.

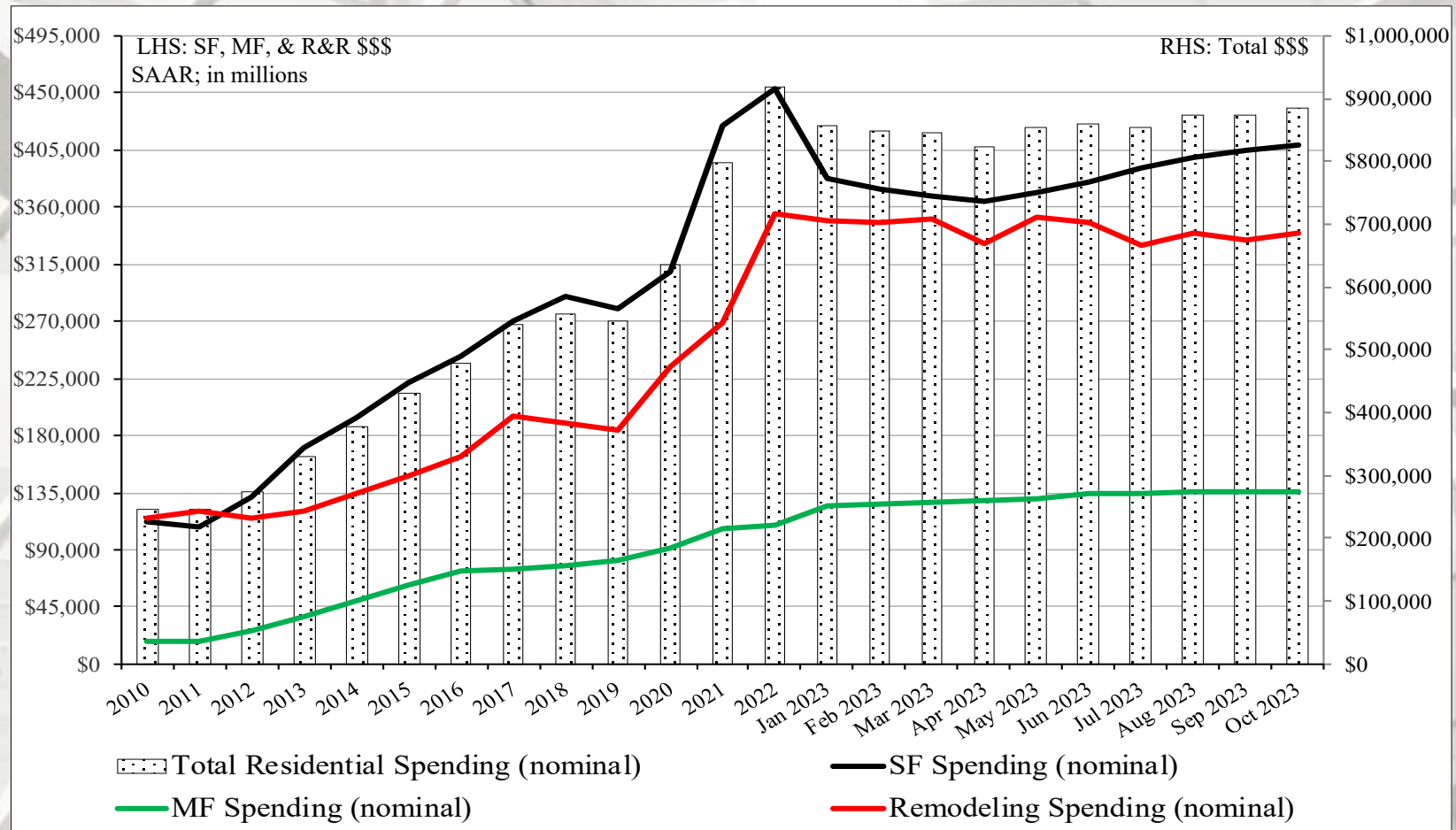
Total private residential construction spending includes new single-family, new multi-family, and improvement (AKA repair and remodeling) expenditures.

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 – October 2023

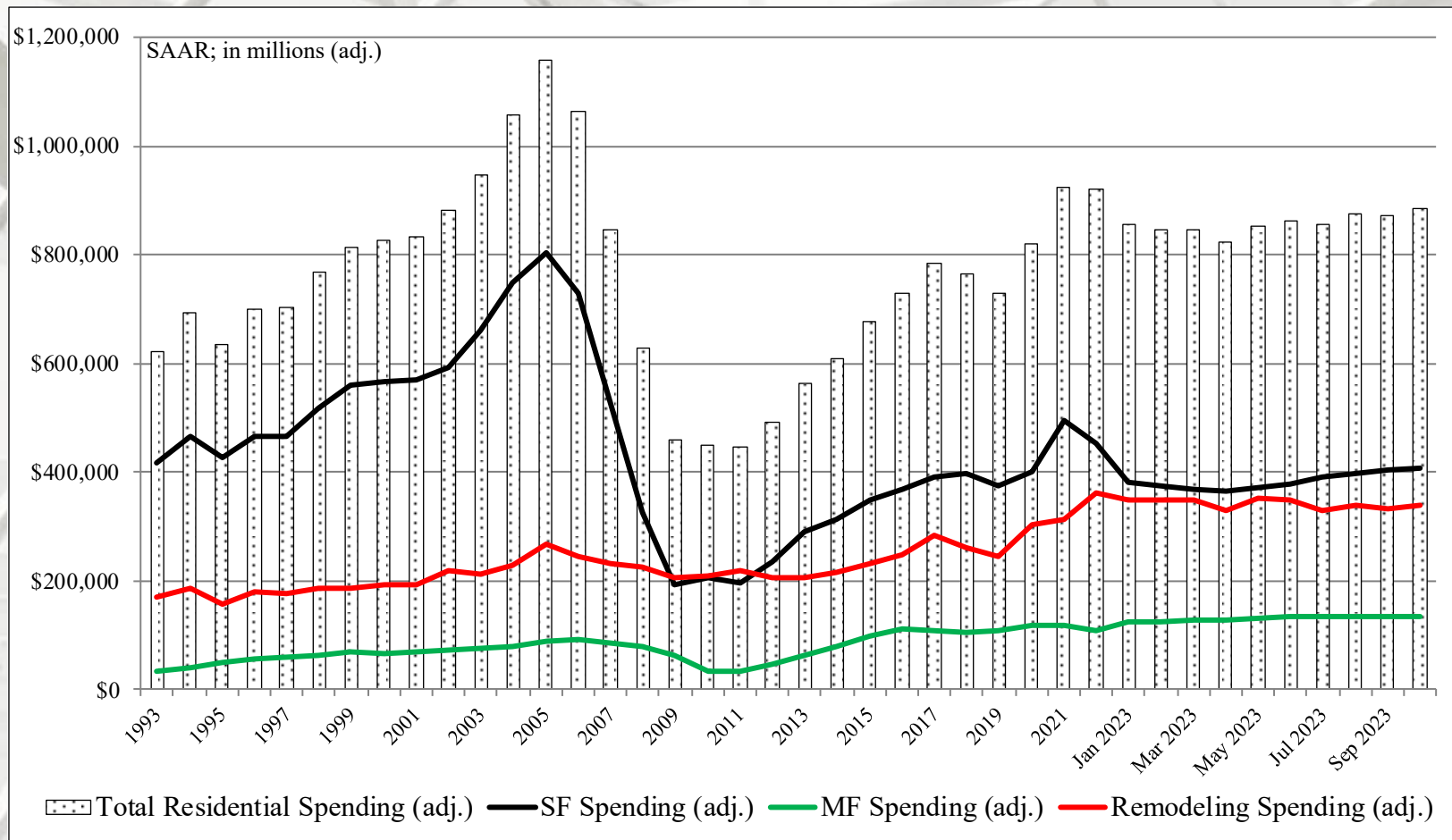


Reported in nominal US\$.

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



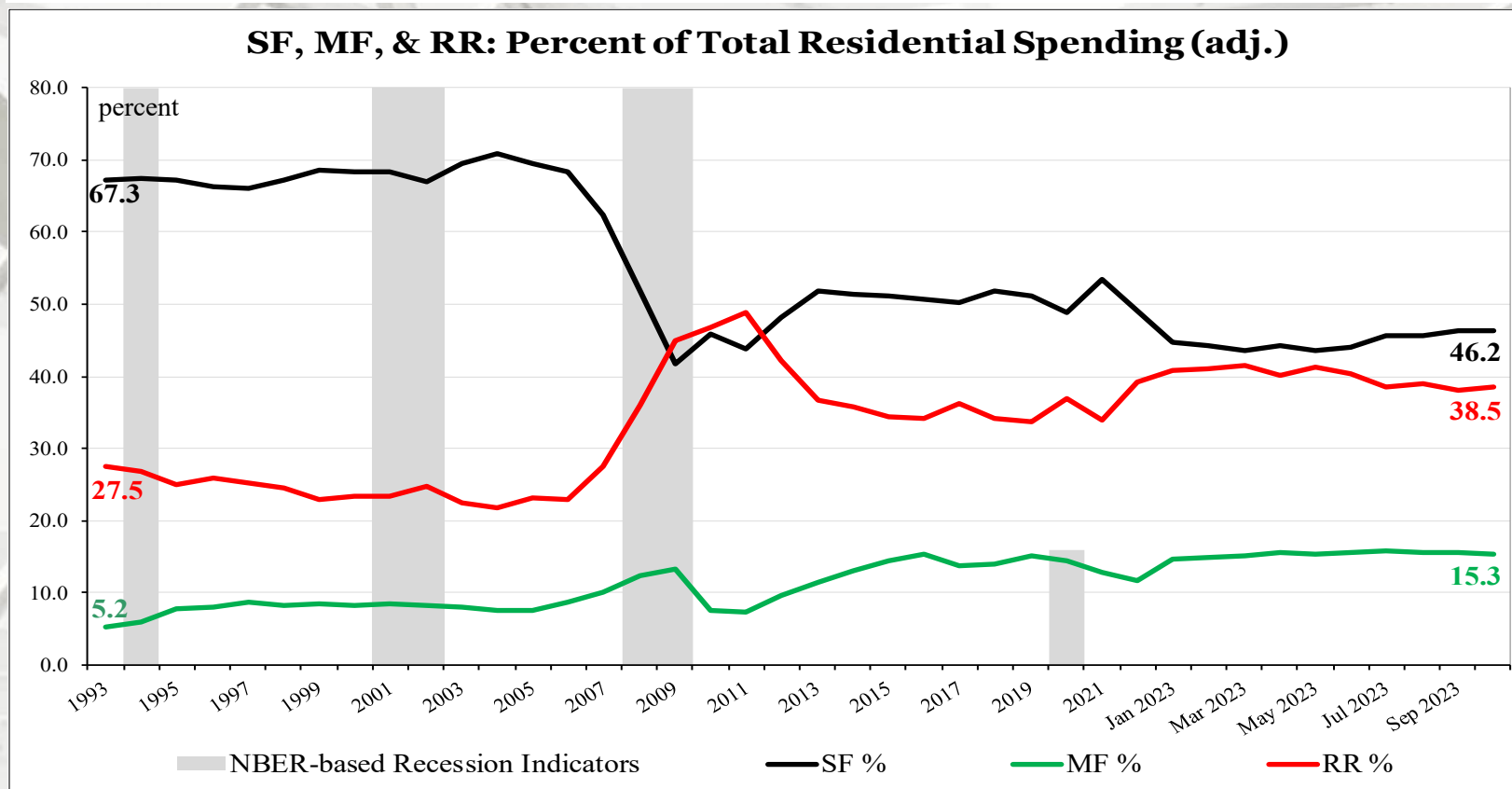
# Total Construction Spending (adjusted): 1993 – October 2023



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



# Construction Spending Shares: 1993 – October 2023



## Total Residential Spending: 1993 through 2006

SF spending average: 69.2%

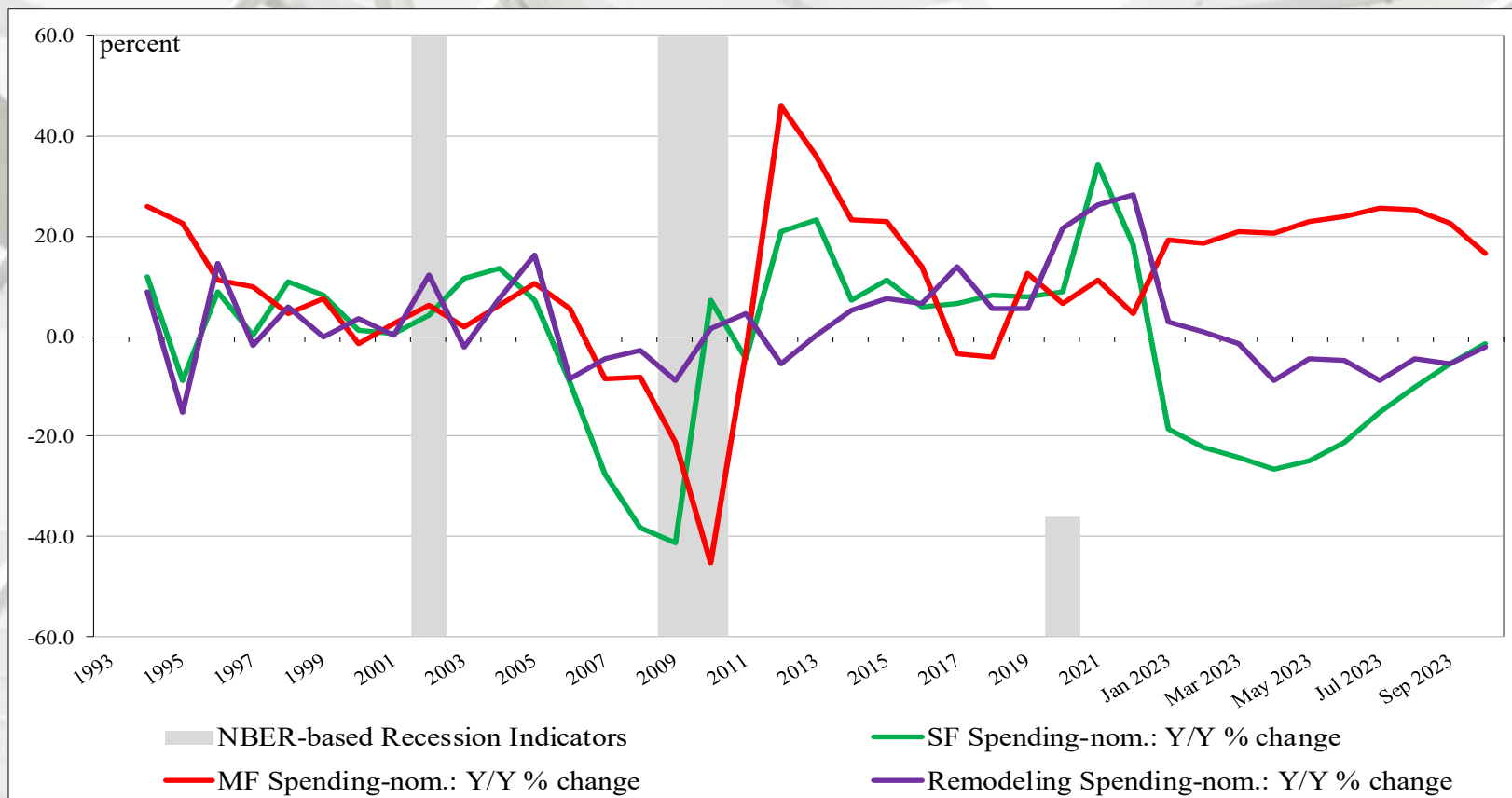
MF spending average: 7.5%

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

Note: 1993 to 2021 (adjusted for inflation, BEA Table 1.1.9); October 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).

# Construction Spending: Y/Y Percentage Change

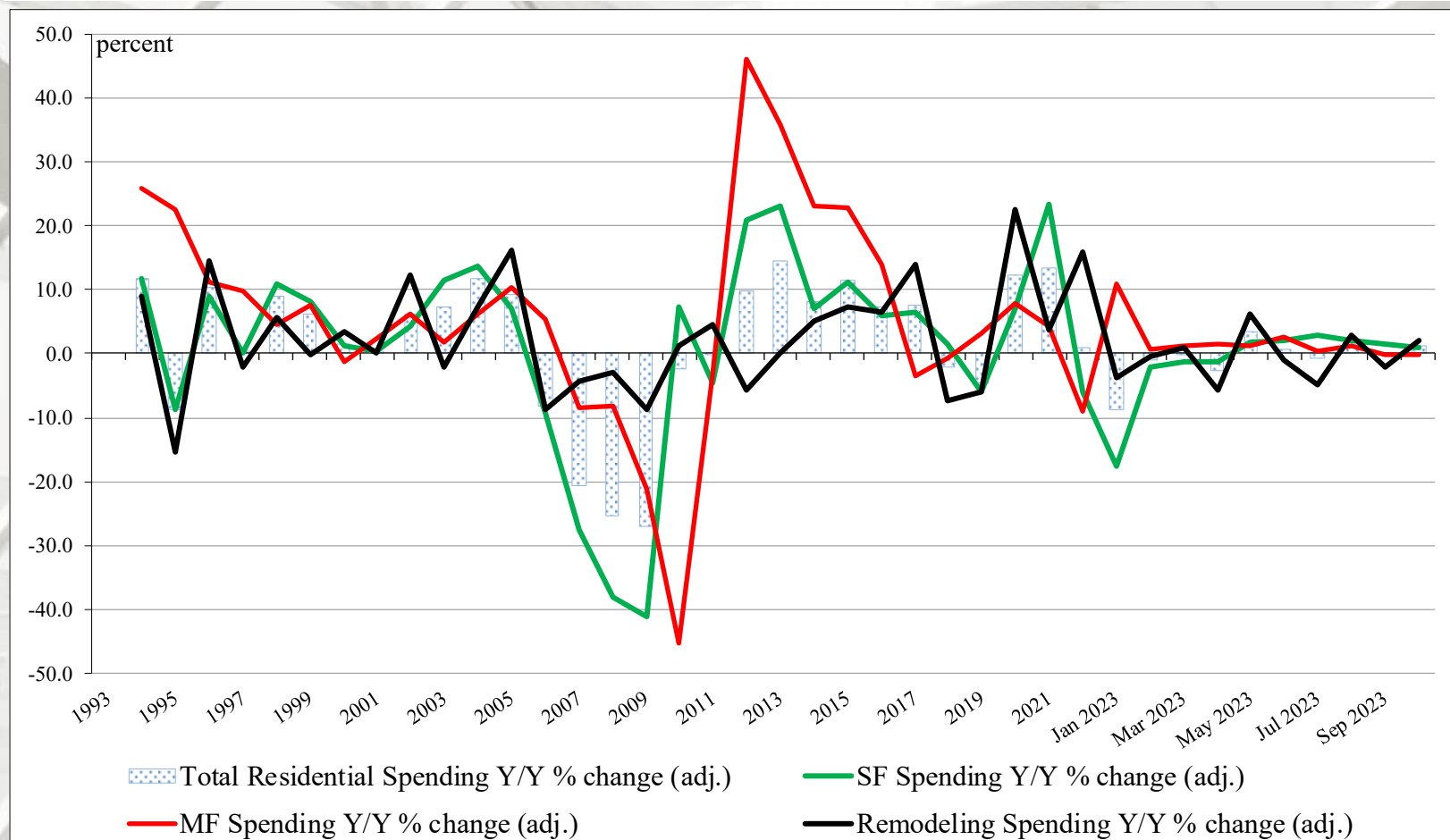


## Nominal Residential Construction Spending: Y/Y percentage change, 1993 to October 2023

Presented above is the percentage change of Y/Y construction spending. MF expenditures were positive on a percentage basis, year-over-year (October 2023 data reported in nominal dollars).

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

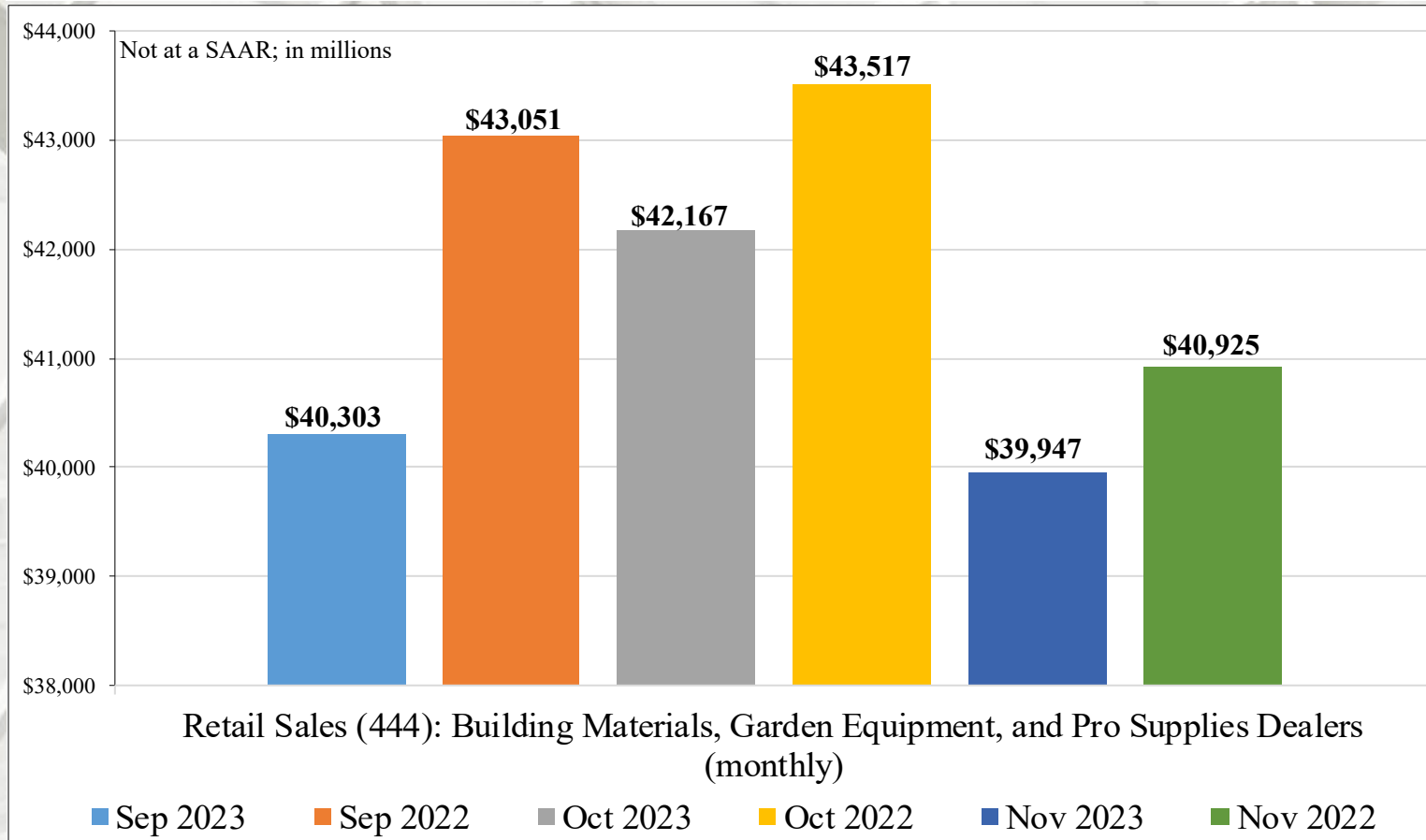
# Adjusted Construction Spending: Y/Y Percentage Change



## Adjusted Residential Construction Spending: Y/Y percentage change, 1993 to October 2023

# Remodeling

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



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

NAICS 444 sales decreased 5.3% in November 2023 from October 2023 and decreased 2.4% Y/Y (on a non-adjusted basis).

# Remodeling

## Retail Sales: Hardware Stores



### Hardware Stores: NAICS 44413

NAICS 44413 retail sales increased 5.0% in October 2023 from August 2023 and improved 4.0% Y/Y (on a non-adjusted basis).



# Remodeling

## Harvard Joint Center for Housing Studies

### **Weakening of residential remodeling activity anticipated for 2024**

“Annual spending for improvements and repairs to owner-occupied homes is expected to decrease at a moderate rate over the coming year, according to our latest [Leading Indicator of Remodeling Activity \(LIRA\)](#). The LIRA projects annual owner expenditures for home updates and maintenance to decline by 7.7 percent through the third quarter of 2024.

The ongoing weakness in the housing market caused by high interest rates and low supply of existing homes is expected to weigh on remodeling activity next year. Homeowner concerns about the health and direction of the broader economy may also dampen plans for remodeling projects.

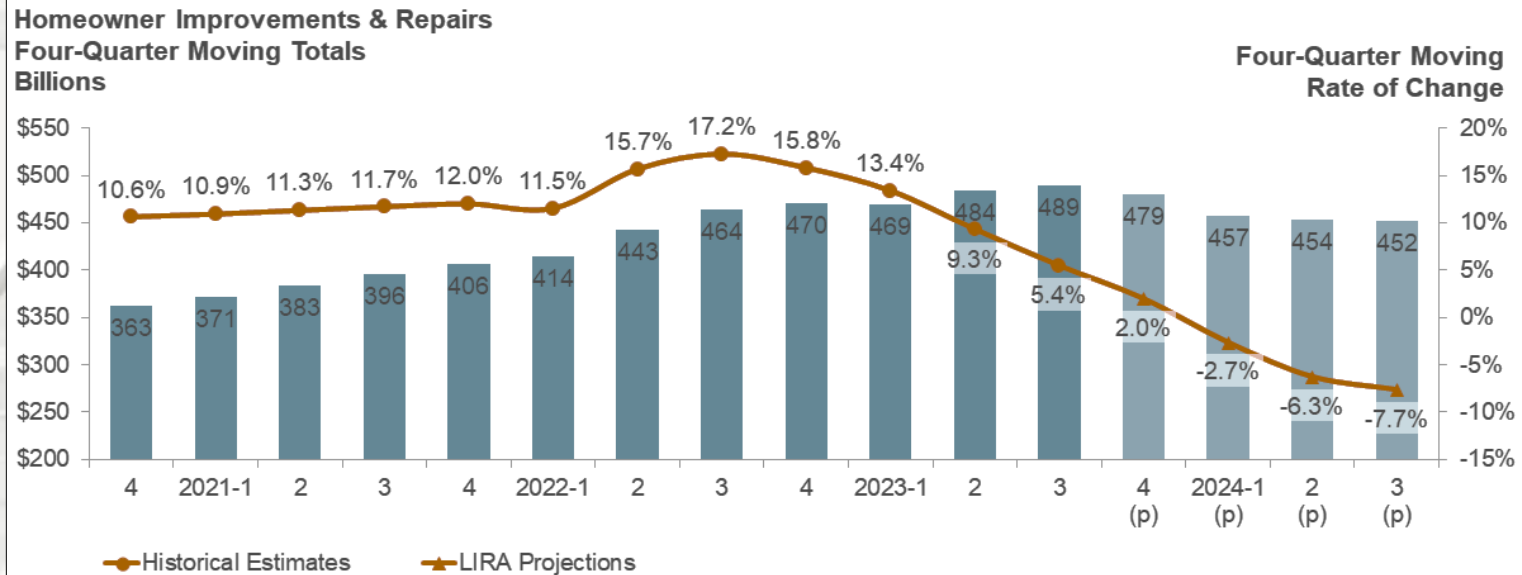
The level of annual spending on improvements and repairs is projected to fall from \$489 billion today to \$452 billion over the coming four quarters. While the rate of market decline should decelerate significantly in the second part of the year, 2024 is shaping up to be a challenging year for home remodeling.” – Abbe Will, Senior Research Associate & Associate Project Director, Remodeling Futures, Harvard Joint Center for Housing Studies

# Remodeling

## Harvard Joint Center for Housing Studies

**Weakening of residential remodeling activity anticipated for 2024**

**Leading Indicator of Remodeling Activity – Third Quarter 2023**



Notes: Improvements include remodels, replacements, additions, and structural alterations that increase the value of homes. Routine maintenance and repairs preserve the current quality of homes. Historical estimates since 2021 are produced using the LIRA model until American Housing Survey benchmark data become available.

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Joint Center for Housing Studies of Harvard University JCHS

# Remodeling

## Zonda

### **Despite Stronger Than Projected End to the Year, Remodeling Downturn Still Expected for 2024**

**A weaker housing market is driving projections for the first annual decrease in the Residential Remodeling Index since 2011.**

“While remodeling activity will close 2023 on a stronger note than expected, a moderate downturn is still expected for the sector in 2024 and 2025, according to Zonda.

Zonda’s Residential Remodeling Index (RRI) – a measure of overall pro-worthy remodeling and replacement levels – increased 2.4% year-over-year and 0.2% sequentially to 169.8 in the third quarter of 2023. The reading is a 19-year high for the RRI and means remodeling activity is 69.8% higher than in 2007, the baseline year of the series. The third quarter reading beat Zonda’s August forecast by three points.

When averaged on an annual basis, the RRI will increase 3.3% for 2023 before decreasing 0.5% in 2024 and 1.8% in 2025. Zonda projects annual growth will return to the sector in 2026, when activity is forecast to increase by 0.5%.

Zonda says the third quarter RRI’s strong estimates for 2023 and milder rates of pullback projected for the next two years reflect “an economy that has proved surprisingly resilient and has a more optimistic outlook.” Moody’s Analytics, the economic research company that forecasts the variables Zonda inputs into the RRI model, believes the Federal Reserve is done hiking interest rates and will achieve a soft landing for the economy with no recession. Moody’s says that while the economy will still see the effects of the rate hikes, the effects will be “modest and efficient enough” to tame inflation.” – Vincent Salandro, Associate Editor, *Builder & Remodeling*

# Remodeling

## Zonda

### **Despite Stronger Than Projected End to the Year, Remodeling Downturn Still Expected for 2024**

“Zonda says a weaker housing market will be the main reason that the RRI will experience its first annual decreases in over a decade in both 2024 and 2025. Existing home sales are running at their lowest level since 2010 and a large portion of remodeling activity is driven by activity that occurs either before or after an existing home sells. Moody’s says the housing market is “in a deep freeze” that will “thaw out painfully slow.” The research group projects home prices will need to decline about 10% from peak to trough to restore health to the market and anticipates this decline will take years to play out. As a result of the correlation between remodeling activity and home equity, the projected decline in home values are the biggest drag on the RRI outlook.

The projected downturn in remodeling follows several years of strong growth to record levels. Remodeling activity will not vanish, though projects may be deferred to when interest rates and costs settle. The lock-in effect with mortgage rates is still driving remodeling activity for home owners who are looking to upgrade rather than move and give up their low interest rates. However, the projects being undertaken are smaller, less expensive projects; more expensive projects are being put on the back burner until costs for materials, labor, and financing come down, according to Zonda.

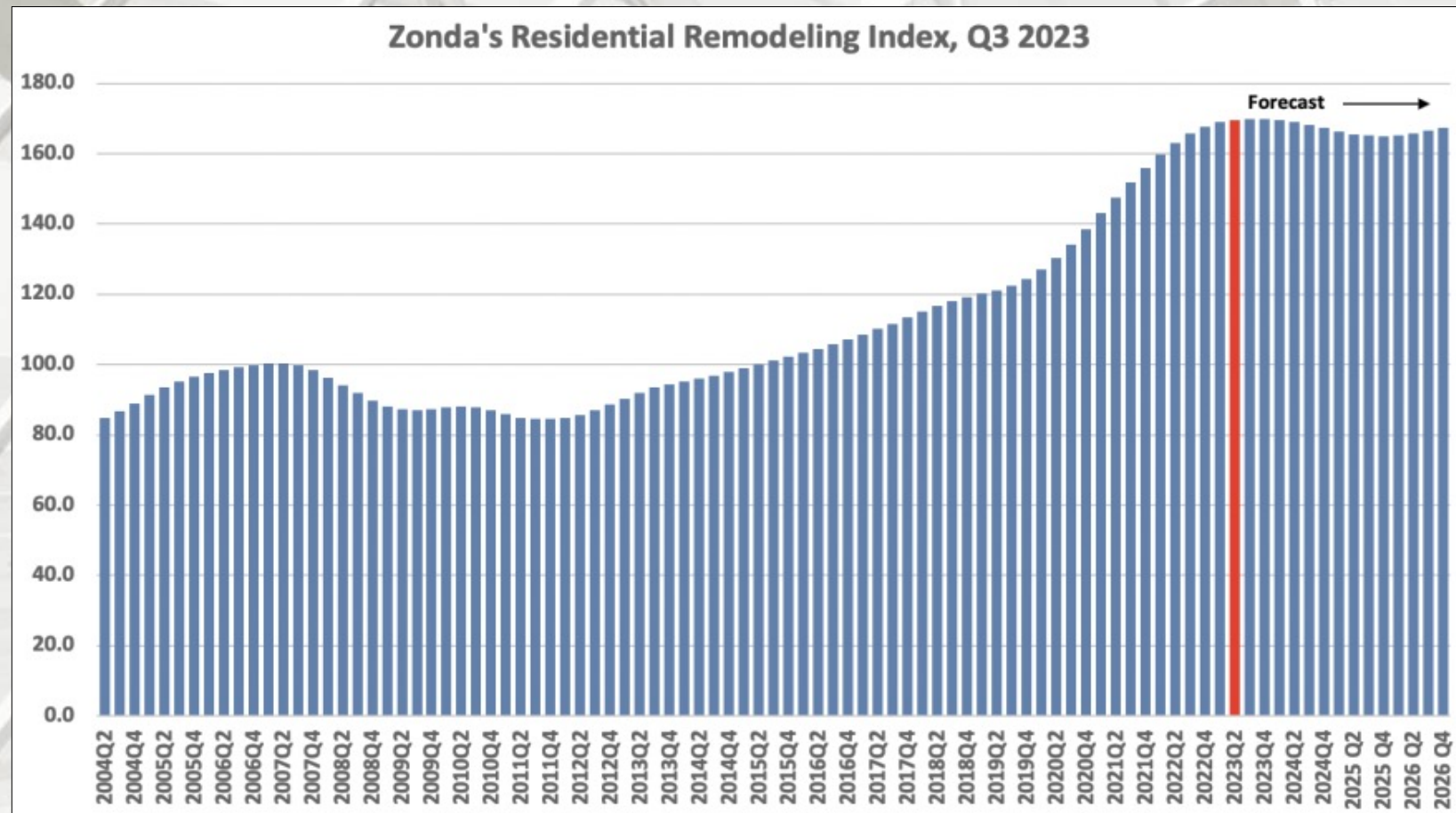
On a local market level, the RRI indicates that 150 of 384 analyzed metropolitan statistical areas are expected to see growth in remodeling project volume in 2024. Among these markets, the average growth rate is projected to be 1.5%.” – Vincent Salandro, Associate Editor, *Builder & Remodeling*



# Remodeling

## Zonda

**Despite Stronger Than Projected End to the Year,  
Remodeling Downturn Still Expected for 2024**



# Remodeling

## John Burns Research and Consulting LLC

### What's Next for Building Products and Home Remodeling?

“The pandemic taught many lessons. In housing, one was that disruptions in the things we build homes with can, unsurprisingly, bring the industry to its knees. As 2023 draws to a close, we ask: Are we finally past all of that – the rising prices, broken supply chains, and interminable waits for everything from a garage door to window latches that forced builders to wait weeks to sell a home that was otherwise ready to go? Can we finally stop using the phrase “post-pandemic” and just move on?

#### The road to where we are now

**First, there was the boom, ignited by low mortgage rates and cash-out refinancing put toward large remodeling projects.** And all those folks who shifted to remote work bought a bigger home further out and had to get it ready for the ball.

**Then came the upsurge in interest rates.** Home builders have prospered by [solving for affordability and buying down rates](#), feasting on the carcass of the resale market (slight exaggeration). The knock-on effect for building products is the redistribution of builder incentives from upgrades to flooring, countertops, and cabinets is reducing building product spending per housing start.

**Households are staying in their homes longer** and, because of this, can wait for the cost of accessing home equity (interest rates) to come down. These deferrals in large discretionary projects are leading to the current contraction in remodeling spending while setting the stage for strong demand on the horizon.

To answer the question at the top, though, **we are back to a building products world that is primarily acting normally**, waxing and waning in response to the factors that have long been key.” – Dean Wehrli, Principal and Matt Saunders, Senior Vice President of Building Products; John Burns Research and Consulting LLC

# Remodeling

## John Burns Research and Consulting LLC

### “The road to where we go next

**Many building product manufacturers have to look years in advance** to calibrate supply and demand for a future that demands decisions now. So, the analytics to understand the future are critical.

[The building products demand meter](#), created by JBREC in partnership with [Home Innovation Research Labs](#), provides historical estimates of market demand and an outlook for future demand.

**Right now, we are showing that building product demand is muted due to cautious household spending** (particularly on big-ticket discretionary items) and the high cost of borrowing.

### Caution is also the word in remodeling

- **Since much remodeling is discretionary, tighter-fisted spending has led to a pullback.** Roofing companies can weather this storm better than others, but the rest of the sector feels it.
- Though most households are cautious, **there is a bifurcation in the market** where more affluent customers versus trade-down customers are still spending more robustly.
- **Mobility plays a role here, too** – the nation continues to age, and older homeowners are less transient. The increased share of non-movers in the household population has shifted the balance of importance in remodeling spending to those that stay put, even though recent movers spend more on average.
- **As rates ease, Matt sees some positivity ahead**, especially for some discretionary categories such as cabinets and countertops. This trend will be further fueled by the pent-up demand brought on by this year’s spending caution and high interest rates.

Everyone wants to know what the next big thing is. For building products, Matt believes innovation may come from adopting technological advancements used by other industries that are disrupting the building products sector. At least for now, incremental change has been the most common response to industry challenges. But never rule out disruptive change in any industry.” – Dean Wehrli, Principal and Matt Saunders, Senior Vice President of Building Products; John Burns Research and Consulting LLC

# Existing House Sales

## National Association of Realtors®

	Existing Sales	Median Price	Month's Supply
October	3,790,000	\$391,800	3.6
September	3,950,000	\$392,800	3.4
2022	4,440,000	\$378,800	3.3
M/M change	-4.1%	-0.3%	5.9%
Y/Y change	-14.6%	3.4%	9.1%

All sales data: SAAR



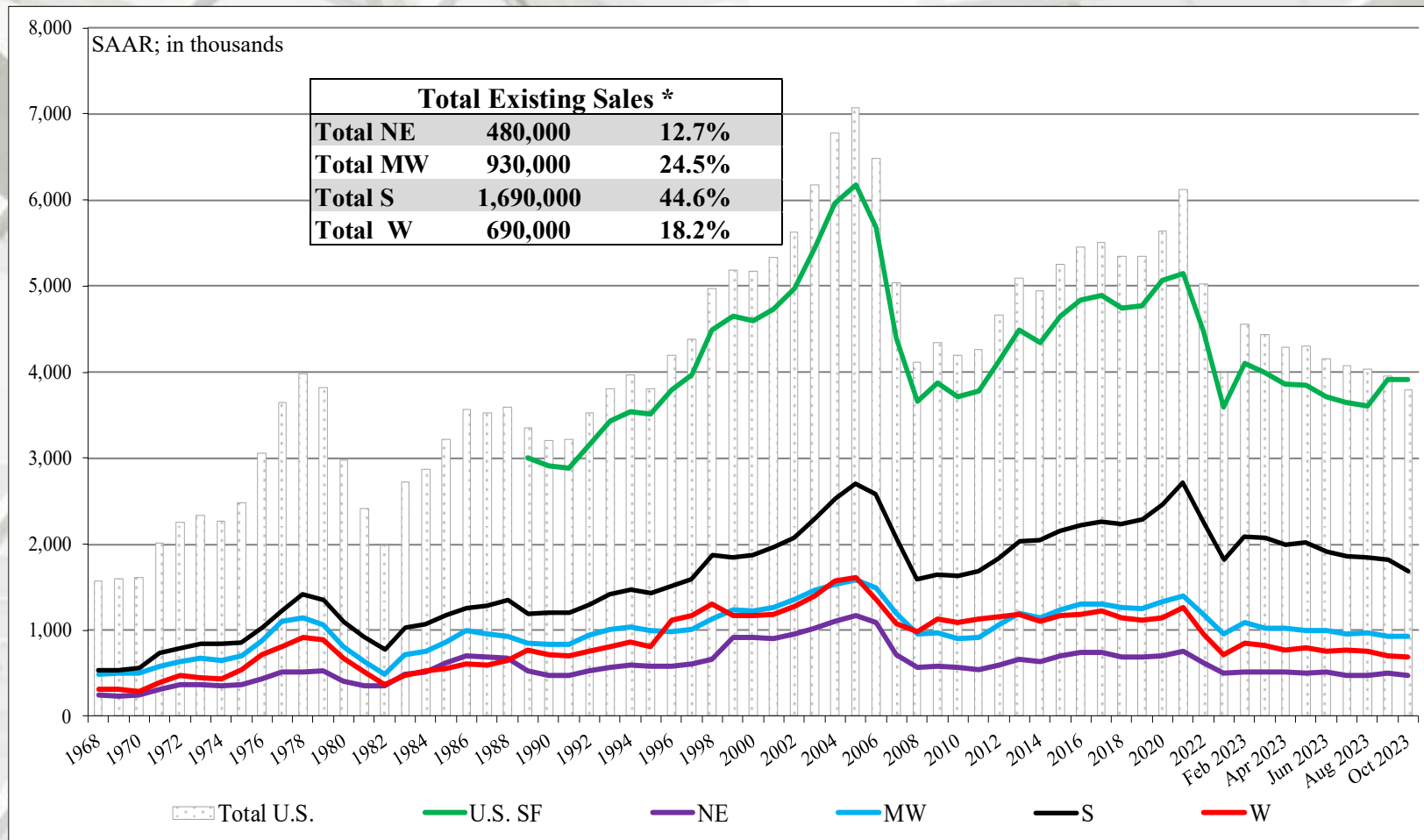
# Existing House Sales

	NE	MW	S	W
October	480,000	930,000	1,690,000	690,000
September	500,000	930,000	1,820,000	700,000
2022	570,000	1,080,000	1,980,000	810,000
M/M change	-4.0%	0.0%	-7.1%	-1.4%
Y/Y change	-15.8%	-13.9%	-14.6%	-14.8%

	Existing SF Sales	SF Median Price
October	3,918,000	\$396,100
September	3,920,000	\$397,400
2022	3,960,000	\$384,600
M/M change	-0.1%	-0.3%
Y/Y change	-1.1%	3.0%

All sales data: SAAR.

# Existing House Sales



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

\* Percentage of total existing sales.

# U.S. Housing Prices

## Federal Housing Finance Agency

### U.S. House Price Index

#### U.S. House Prices Rise 5.5 Percent over the Last Year; Up 2.1 Percent from the Second Quarter

#### Significant Findings

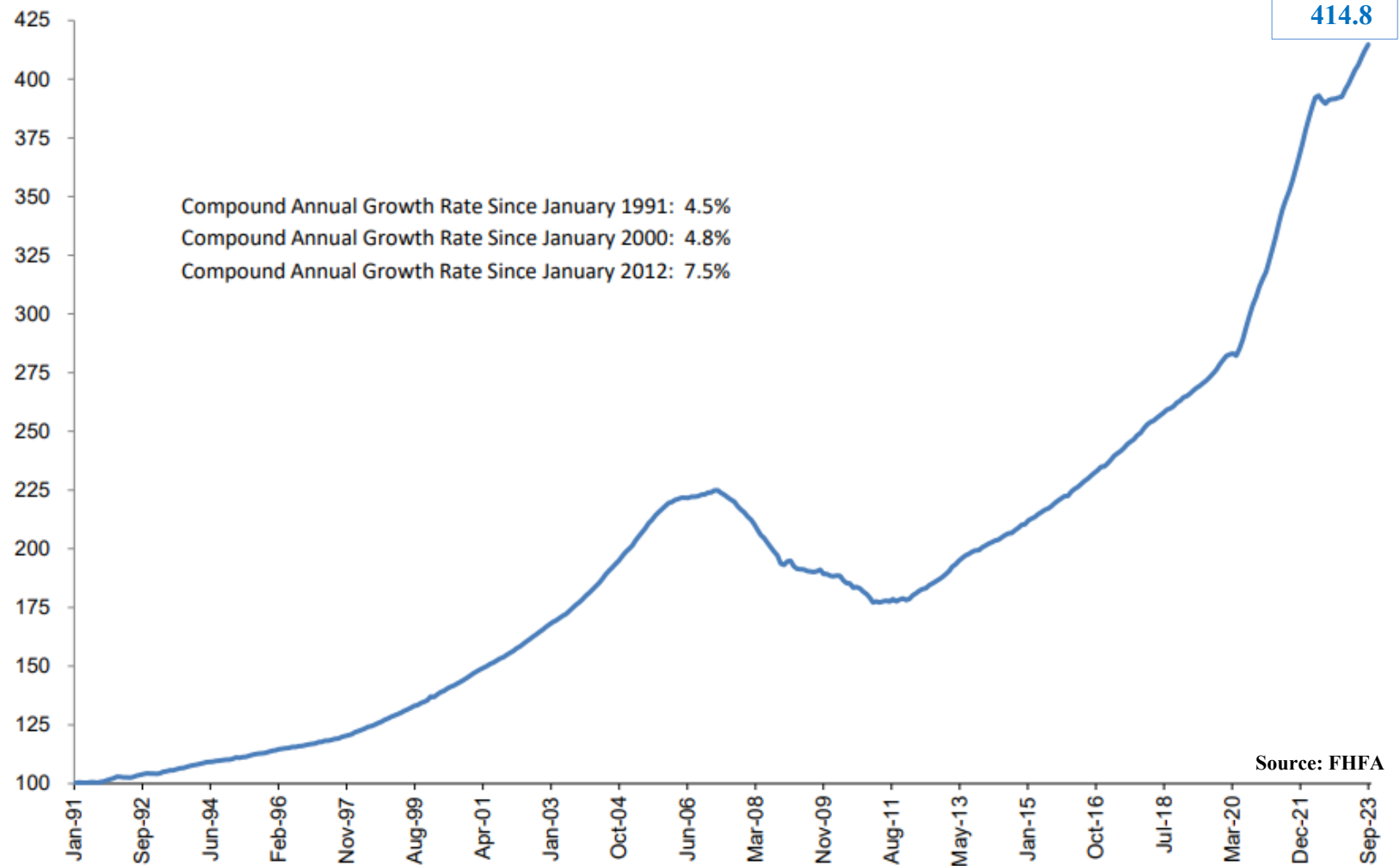
“U.S. house prices rose 5.5 percent between the third quarter of 2022 and the third quarter of 2023, according to the Federal Housing Finance Agency (FHFA) House Price Index (FHFA HPI®). House prices were up 2.1 percent compared to the second quarter of 2023. FHFA’s seasonally adjusted monthly index for September was up 0.6 percent from August.

Nationally, the U.S. housing market has experienced positive annual appreciation each quarter since the start of 2012. ... All nine census divisions had positive house price changes year-over-year. The **New England** division recorded the strongest appreciation, posting a 9.2 percent increase from the third quarter of 2022 to the third quarter of 2023. The **Pacific** division recorded the smallest four-quarter appreciation, at 2.0 percent” – Adam Russell, FHFA

“U.S. house price growth continued to accelerate in the third quarter, appreciating more than in each of the previous four quarters. House prices rose in the third quarter in all census divisions and are higher than one year ago, driven primarily by a low supply of homes for sale.” – Dr. Nataliya Polkovnichenko, Supervisory Economist, Division of Research and Statistics, FHFA

# U.S. Housing Prices

**Monthly House Price Index for U.S. from January 1991 - Present**  
Purchase-Only FHFA HPI® (Seasonally Adjusted, Nominal)





# U.S. Housing Prices

## S&P CoreLogic Case-Shiller Index Continues to Trend Upward in September

“S&P Dow Jones Indices (S&P DJI) released the latest results for the S&P CoreLogic Case-Shiller Indices, the leading measure of U.S. home prices. Data released for September 2023 show that 15 of the 20 major metro markets reported month-over-month price increases. More than 27 years of history are available for the data series and can be accessed in full by going to [www.spglobal.com/spdji/en/index-family/indicators/sp-corelogic-case-shiller](https://www.spglobal.com/spdji/en/index-family/indicators/sp-corelogic-case-shiller).

### 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 3.9% annual change in September, up from a 2.5% change in the previous month. The 10-City Composite showed an increase of 4.8%, up from a 3.0% increase in the previous month. The 20-City Composite posted a year-over-year increase of 3.9%, up from a 2.1% increase in the previous month. Detroit surpassed Chicago, reporting the highest year-over-year gain among the 20 cities with an 6.7% increase in September, followed by San Diego with a 6.5% increase. Three of the 20 cities reported lower prices in September versus a year ago. ...

### Month-Over-Month

Before seasonal adjustment, the U.S. National Index, 10-City and 20-City Composites, all posted 0.3% month-over-month increases in September, while the 10-City and 20-City composites posted 0.3% and 0.2% increases, respectively.

After seasonal adjustment, the U.S. National Index, the 10-City and 20-City Composites each posted month-over-month increases of 0.7%.” – 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

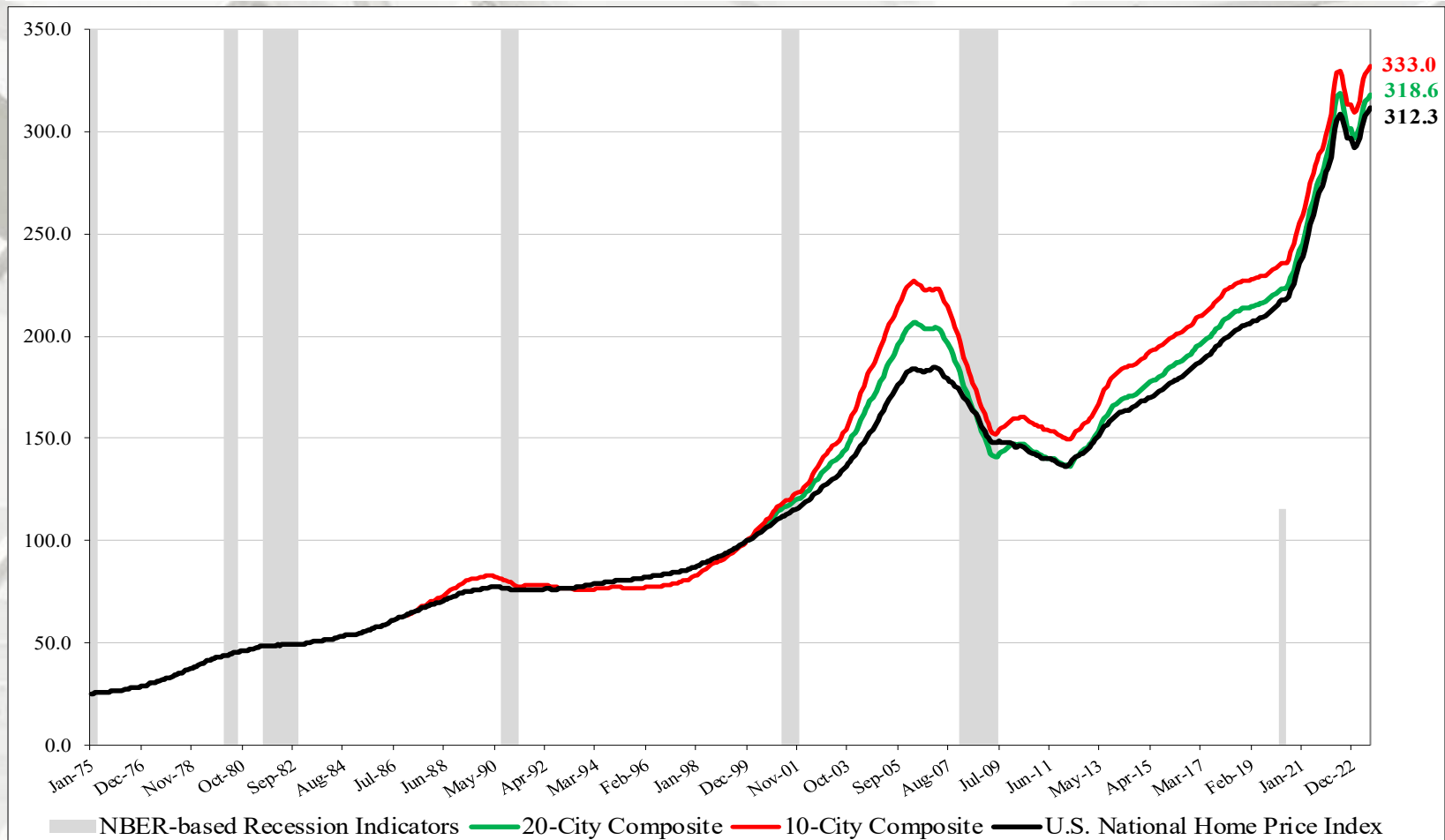
“U.S. home prices continued their rally in September 2023. Our National Composite rose by 0.3% in September, marking eight consecutive monthly gains since prices bottomed in January 2023. The Composite now stands 3.9% above its year-ago level and 6.6% above its January level. Our 10- and 20-City Composites both rose in September, and likewise currently exceed their year-ago and January levels.

We've commented before on the breadth of the housing market's strength, which continued to be impressive. On a seasonally adjusted basis, all 20 cities showed price increases in September; before seasonal adjustments, 15 rose. Prices in 17 of the cities are higher than they were in September 2022. Notably, the National Composite, the 10-City Composite, and 10 individual cities (Atlanta, Boston, Charlotte, Chicago, Cleveland, Detroit, Miami, New York, Tampa, and Washington) stand at their all-time highs.

On a year-over-year basis, the three best-performing metropolitan areas in September were Detroit (+6.7%), San Diego (+6.5%), and New York (+6.3%). San Diego's presence breaks the Rust Belt's recent grip on the top three positions, but the bottom three continue to have a western flavor. Year-over-year, September's worst performers were Las Vegas (-1.9%), Phoenix (-1.2%), and Portland (-0.7%). The Northeast (+5.3%) and Midwest (+5.0%) continue as the nation's strongest regions, while the West (-1.3%) remains the weakest.

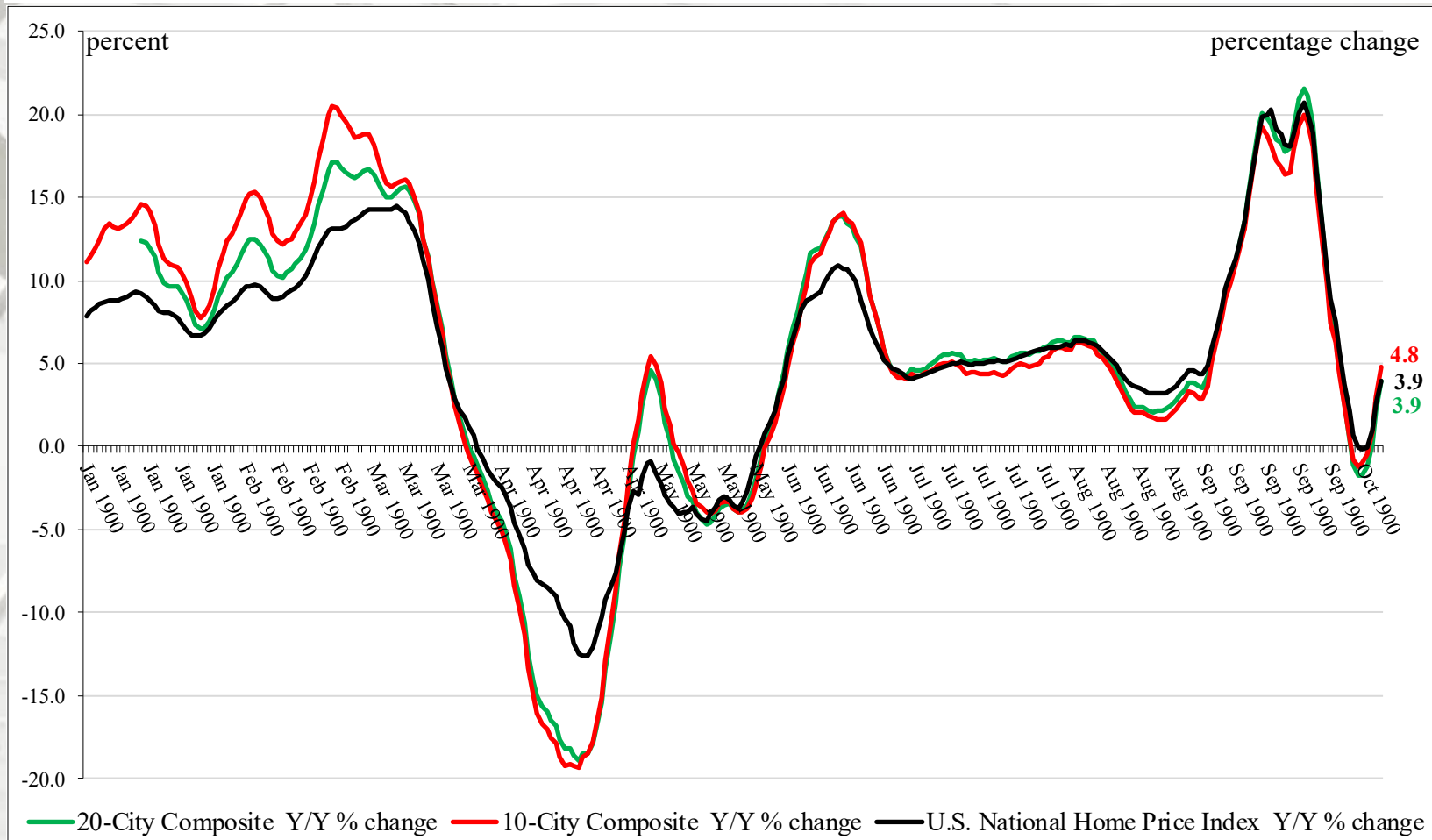
On a year-to-date basis, the National Composite has risen 6.1%, which is well above the median full calendar year increase in more than 35 years of data. Although this year's increase in mortgage rates has surely suppressed the quantity of homes sold, the relative shortage of inventory for sale has been a solid support for prices. Unless higher rates or exogenous events lead to general economic weakness, the breadth and strength of this month's report are consistent with an optimistic view of future results.” – 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

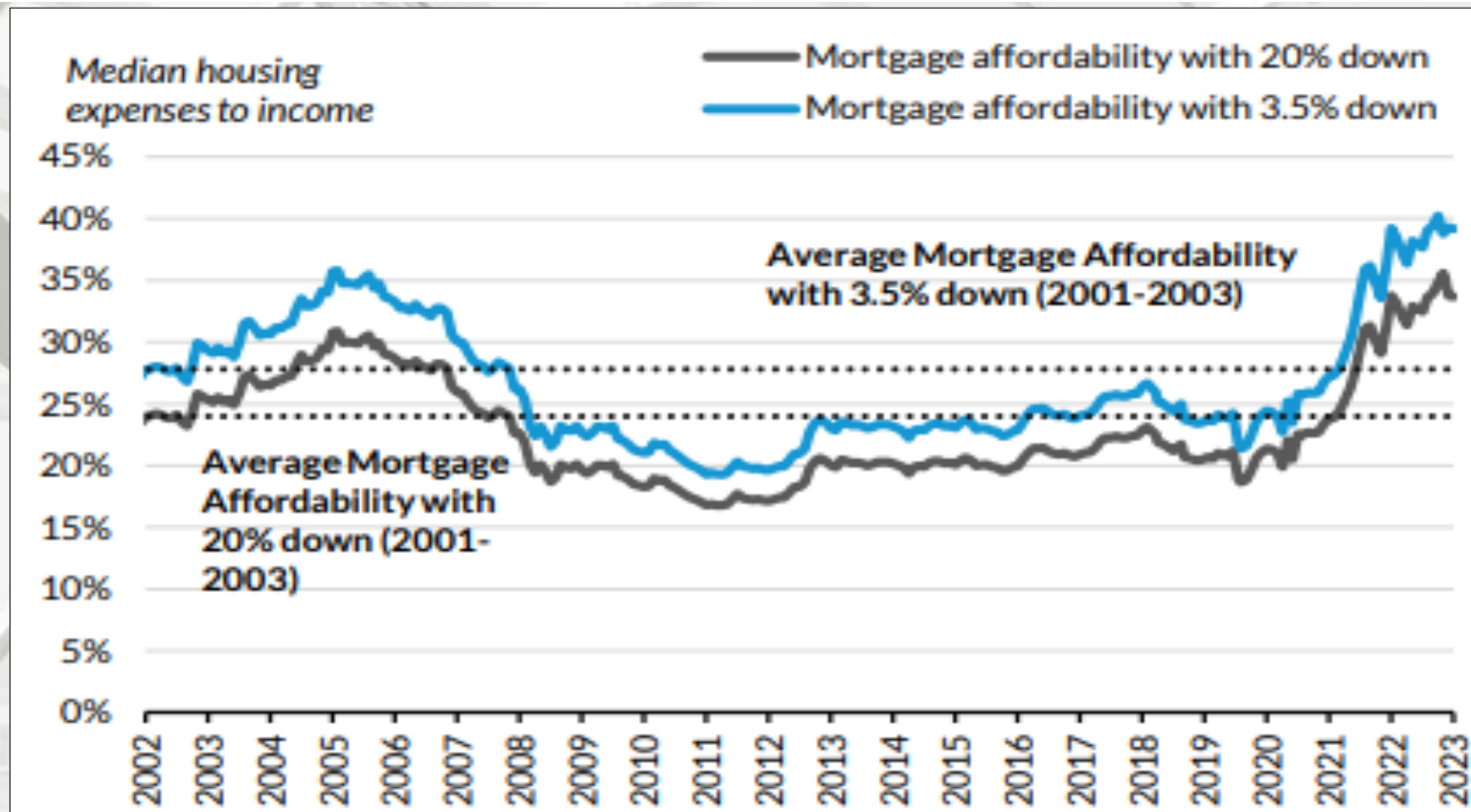


## Y/Y Price Change

From September 2022 to September 2023, the National Index indicated a 3.9% increase; the Ten-City improved by 4.8%, and the Twenty-City increased by 3.9%.



# U.S. Housing Affordability



Urban Institute

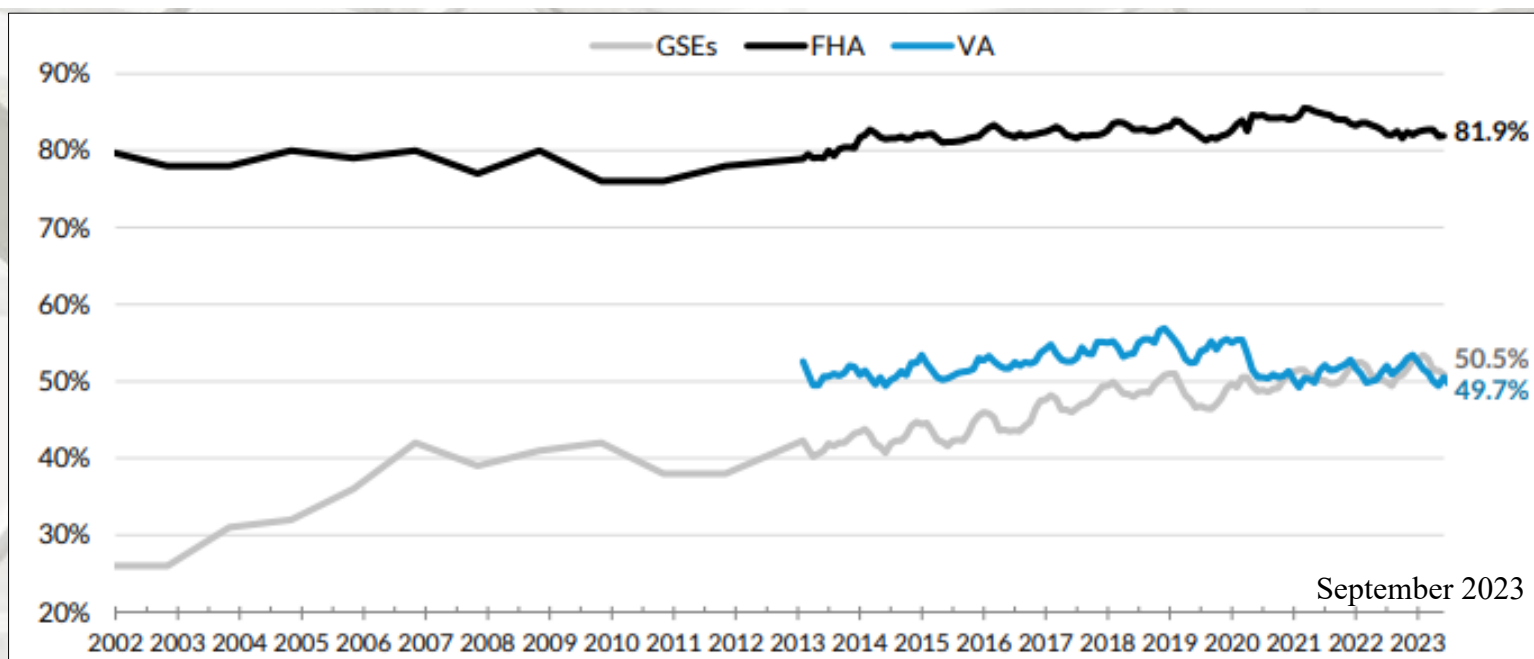
## National Mortgage Affordability Over Time

“National Mortgage Affordability Over Time Mortgage affordability improved again marginally in October after hitting peak marks over the summer. As of October 2023, with a 20 percent down payment, the share of median income needed for the monthly mortgage payment stood at 33.7 percent, higher than the 30.9 percent at the peak of the housing bubble in November 2005; and with 3.5 percent down the housing cost burden is 39.2 percent, also above the 35.8 percent prior peak in November 2005. While affordability looked to have had improved in September, the changes were not long-lasting, as rates shot up again in October. ...” – Laurie Goodman *et. al*, Vice President, Urban Institute

Source: <https://www.urban.org/research/publication/housing-finance-glance-monthly-chartbook-november-2023>; 11/30/23

Return TOC

# U.S. First-Time House Buyers



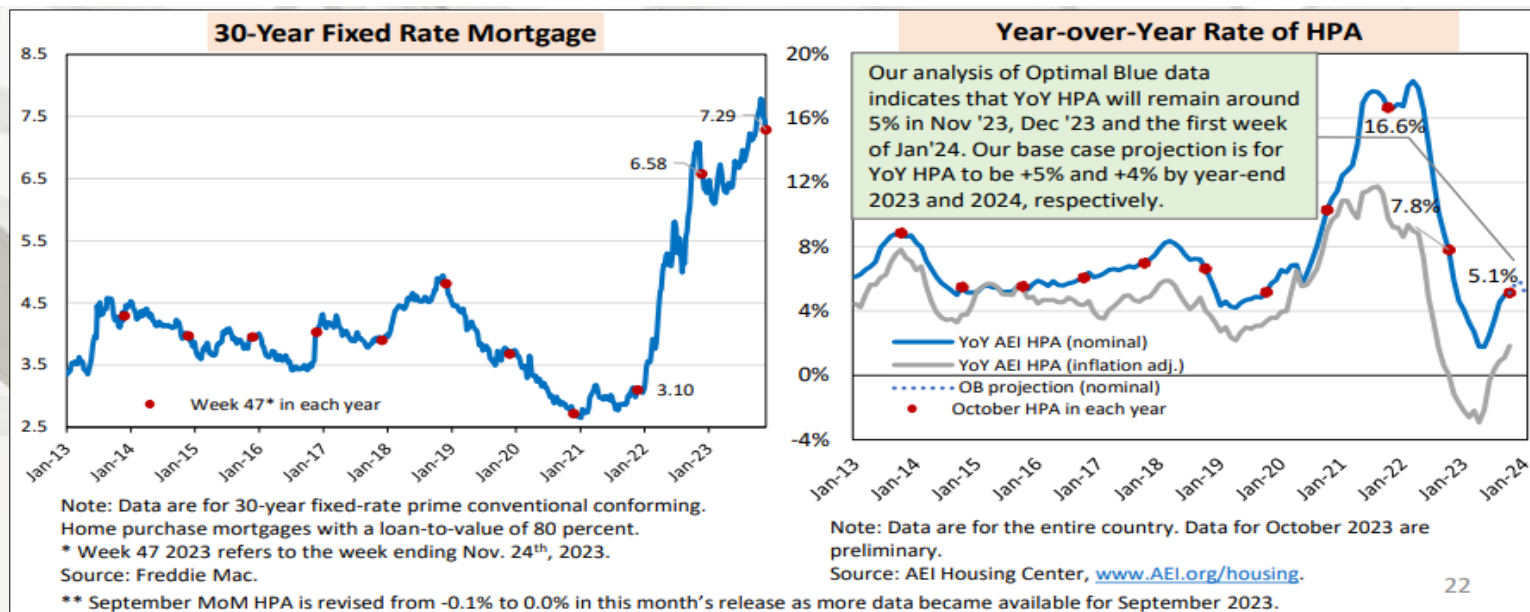
Sources: eMBS, Federal Housing Administration (FHA), and Urban Institute.

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

## Urban Institute First-time House Buyer Share

“In August 2023, the FTHB share for FHA, which has always been more focused on first time home buyers, was 81.9 percent. The FTHB share of GSE lending in September was 50.5 percent; the VA share was 49.7 percent. ...” – Laurie Goodman *et. al*, Vice President, Urban Institute

# U.S. Housing Affordability



## AEI Housing Center

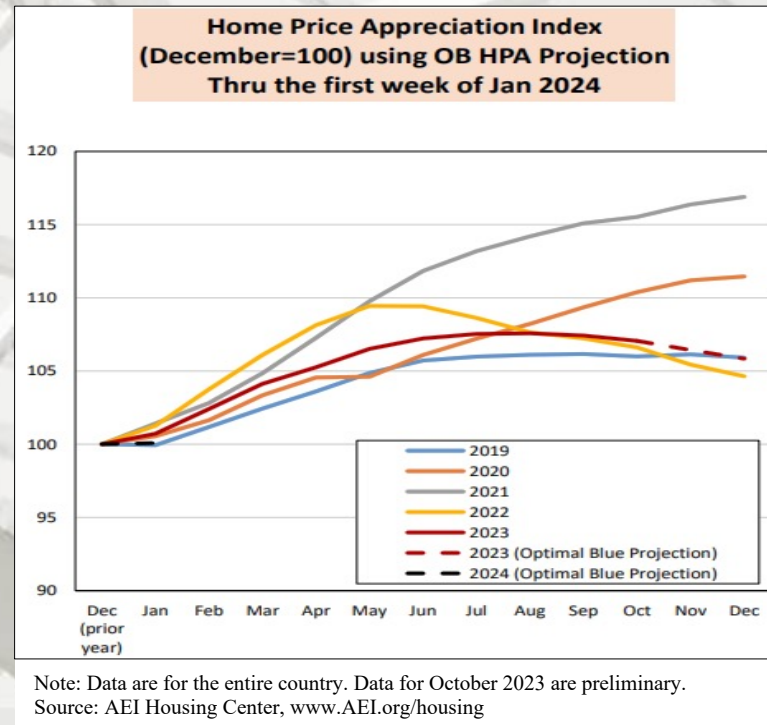
### Year-over-Year (YoY) Home Price Appreciation (HPA) Has Begun to Accelerate

“October 2023’s YoY HPA was 5.1%, up from 5.0% a month ago but down from 7.8% a year ago.

- YoY HPA bottomed out in April 2023 and is expected to continue rising through December 2023 and beyond based on Optimal Blue data. As our projection on the following slide indicates, HPA is expected to be positive through Dec. 2024.
- This is largely because buyers are well-qualified and highly motivated by a historically tight supply. Increasing, yet still low unemployment rates, low levels of foreclosures in most areas, work from home, and continued home price arbitrage opportunities provide further support for robust HPA.
- October 2023’s MoM HPA was -0.5%, the first negative figure since January 2023 as we have now passed the spring and summer home buying season.
- Constant-quality HPA controls for mix shifts in home quality, which otherwise may skew MoM or YoY changes.” – Edward Pinto, Senior Fellow and Director and Tobias Peter, Research Fellow and Assistant Director, AEI Housing Center



# U.S. Housing Affordability



## AEI Housing Center

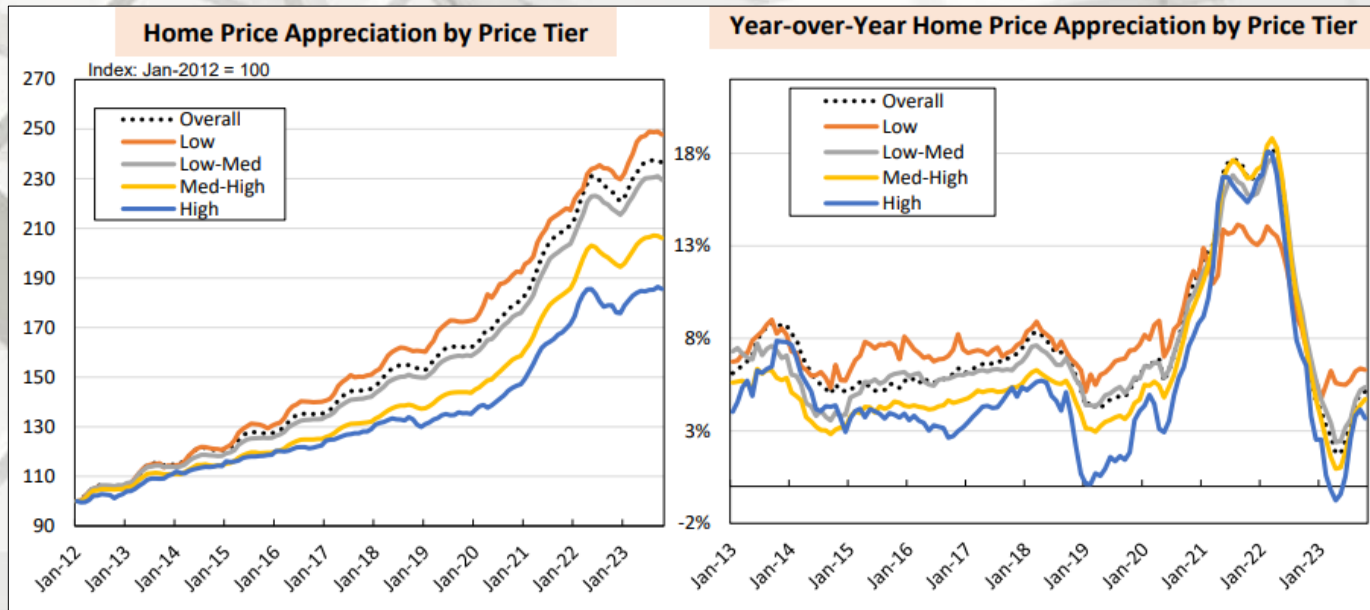
### Home Price Appreciation: December 2023 and 2024 YoY HPA for Projections

“**Base Case HPA Projection** for Dec. 2023 and Dec. 2024 of +5 and +4%, respectively

- Assumes mortgage rate at 6.00%-7.5%, unemployment rate  $\leq 5.5\%$ , and months' supply  $< 4.5$  months.
- **Bullish Case Projection** for Dec. 2024 of +8%
  - Assumes mortgage rate at 4.50%-6.00%, unemployment rate  $\leq 5.5\%$ , and months' supply  $< 4.5$  months.
- **Bearish Case Projection** for Dec. 2024 of -7%
  - Assumes mortgage rate at 7.50%-9.00%, unemployment rate  $> 5.5\%$  and  $\leq 7.5\%$ , and months' supply  $> 6$  months.
- Note: These things might occur at different times over the projection period” – Edward Pinto, Senior Fellow and Director and Tobias Peter, Research Fellow and Assistant Director, AEI Housing Center



# Home Price Appreciation by Price Tier



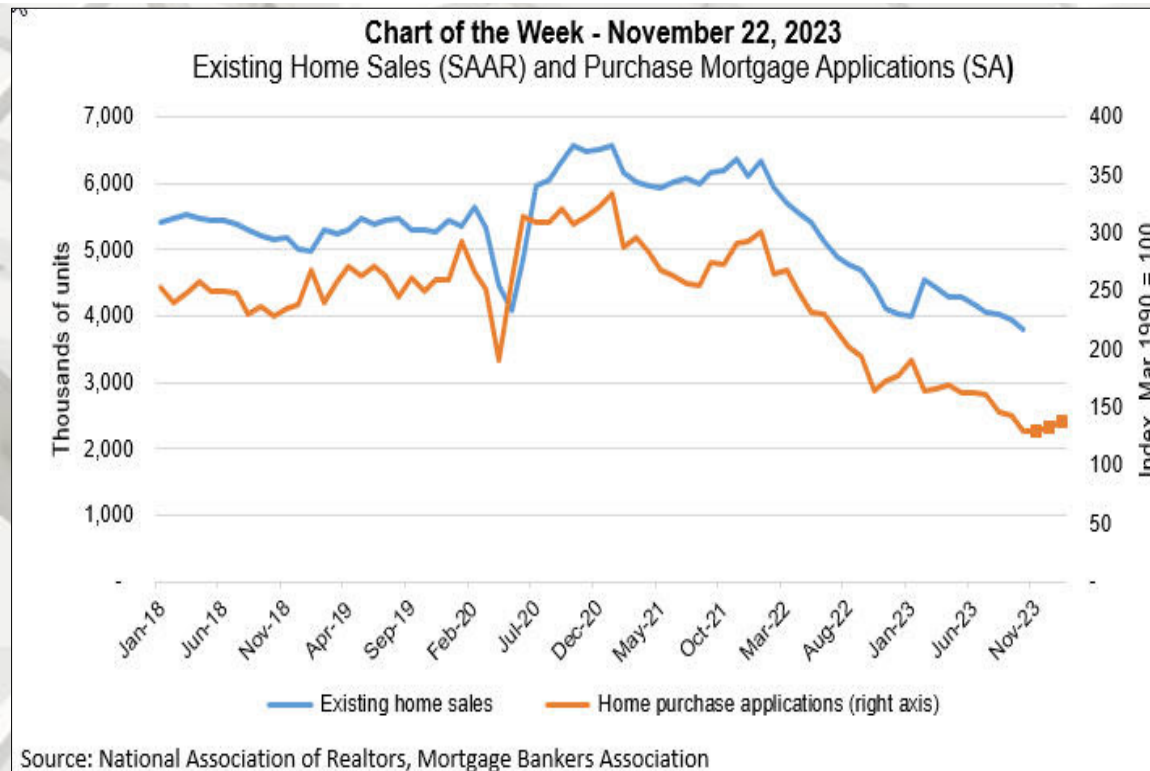
Note: Data are for the entire country. Data for October 2023 are preliminary .  
Source: AEI Housing Center, [www.AEI.org/housing](http://www.AEI.org/housing)

## AEI Housing Center

“**Since 2012**, a large and widening gap in HPA has developed between the lower and upper end of the market (left panel).

- Preliminary numbers for October 2023 indicate that the low price tier leads the YoY change in tier home prices at 6.3% due to low months’ supply (2.5 months), low unemployment, and increasing demand promoted by agency credit easing (right panel).
- Being more dependent on the Fed’s monetary punchbowl, the med-high and high price tiers have had the largest slowdowns in YoY HPA. However, this deceleration has ended as of May 2023.
- As of October 2023, all price tiers have shown relatively robust YoY HPA from 3.7% to 6.3%.” – Edward Pinto, Senior Fellow and Director and Tobias Peter, Research Fellow and Assistant Director, AEI Housing Center

# U.S. Housing Finance



## Mortgage Bankers Association (MBA)

### Chart of the Week: Existing Home Sales and Purchase Applications

“This week’s [Chart of the Week](#) highlights the paths of existing home sales and [purchase applications](#) over the past five years. The October average for the MBA’s purchase applications index was the weakest month since January 1995. However, since the last week of October, purchase applications have ticked up for three consecutive weeks, indicated by the portion of the orange line with the square markers, as mortgage rates edged lower from multiyear highs. According to this week’s [report from the National Association of Realtors](#), existing home sales in October declined 4.1% to an annualized sales pace of 3.79 million units, the lowest level since 2010.” – Joel Kan, Associate Vice President of Economic and Industry Forecasting; MBA

# U.S. Housing Finance

## Mortgage Bankers Association (MBA)

### Chart of the Week: Existing Home Sales and Purchase Applications

“Purchase applications are often seen as a leading indicator of home sales, and if this recent recovery persists, it is likely that existing home sales too might turn a corner. However, we are still at very low levels of both existing home sales and purchase application activity compared to historical standards, with applications still running at a pace that is 20 percent below the same time last year. Low levels of for-sale inventory for existing homes and affordability challenges continue to put a damper on home buying activity. However, a portion of buyers have shifted their preference to newly constructed homes.

Mortgage rates have been one contributor to the erosion in affordability. The 30-year fixed rate stood at 7.41 percent last week, almost two percentage points higher than the 5.55 average for 2022 and more than double the average rates in 2020 and 2021. However, rates down 20 basis points over the week and almost 50 basis points lower than a month ago may have supported this small rebound in purchase activity.

We forecast that mortgage rates will continue to move down gradually in 2024, which will support moderate growth in home sales and purchase originations, in addition to demographic factors such as a growing share of the population approaching prime home buying ages. Lower rates will also help to free up additional existing inventory as the lock-in effect fades.” – Joel Kan, Associate Vice President of Economic and Industry Forecasting; MBA

# U.S. Housing

## Mortgage Bankers Association (MBA)

### October New Home Purchase Mortgage Applications Increased 14.9 Percent

“The Mortgage Bankers Association (MBA) Builder Application Survey (BAS) data for October 2023 shows mortgage applications for new home purchases increased 14.9 percent compared from a year ago. Compared to August 2023, applications decreased by 12 percent. This change does not include any adjustment for typical seasonal patterns.

“New home purchase activity weakened in October, as the recent spike in mortgage rates pushed more home buyers out of the market,” said Joel Kan, MBA’s Vice President and Deputy Chief Economist. “Applications for new home purchases decreased over the month but were 15 percent higher than a year ago, which is the eighth consecutive month of annual gains. Demand for newly constructed homes remains relatively strong due to the persistent shortage of resale inventory, but increasing mortgage rates are impacting would-be buyers. MBA’s estimate of new home sales dropped to a 634,000-unit pace, the weakest sales pace since October 2022.”

Added Kan, “The FHA share of applications reached 25 percent in October, the highest share in the survey dating back to 2013. This is an indication that demand from first-time home buyers is still somewhat strong.”

MBA estimates new single-family home sales, which has consistently been a leading indicator of the U.S. Census Bureau’s New Residential Sales report, is that new single-family home sales were running at a seasonally adjusted annual rate of 634,000 units in October 2023. The new home sales estimate is derived using mortgage application information from the BAS, as well as assumptions regarding market coverage and other factors.” – Falen Taylor, Director of Public Affairs, MBA



# U.S. Housing

## Mortgage Bankers Association (MBA)

### October New Home Purchase Mortgage Applications Increased 14.9 Percent

“The seasonally adjusted estimate for October is a decrease of 9.7 percent from the August pace of 702,000 units. On an unadjusted basis, MBA estimates that there were 51,000 new home sales in October 2023, a decrease of 13.6 percent from 59,000 new home sales in August.

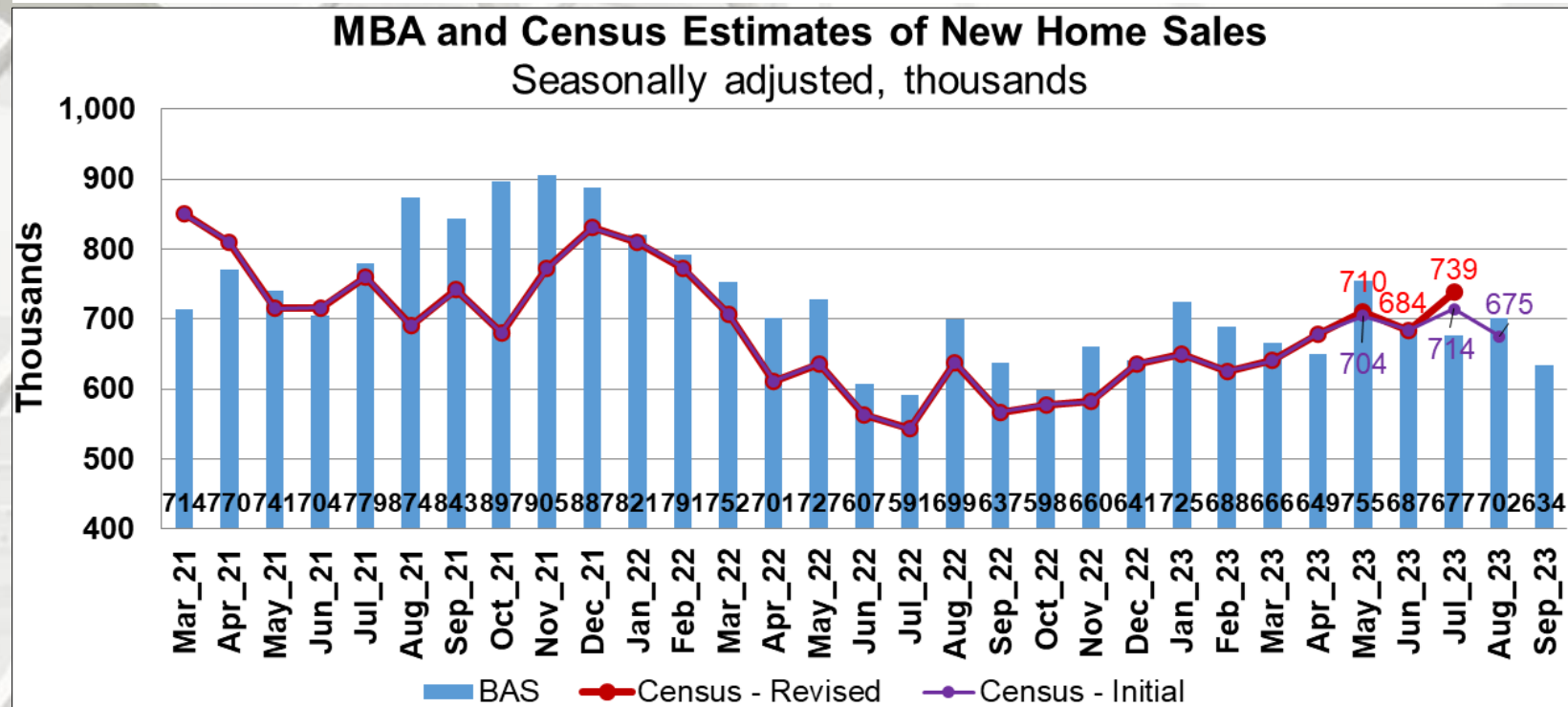
By product type, conventional loans composed 65.1 percent of loan applications, FHA loans composed 25.1 percent, RHS/USDA loans composed 0.3 percent and VA loans composed 9.5 percent. The average loan size for new homes decreased from \$398,092 in August to \$397,550 in October.

MBA’s Builder Application Survey tracks application volume from mortgage subsidiaries of home builders across the country. Utilizing this data, as well as data from other sources, MBA is able to provide an early estimate of new home sales volumes at the national, state, and metro levels. This data also provides information regarding the types of loans used by new home buyers. Official new home sales estimates are conducted by the Census Bureau on a monthly basis. In that data, new home sales are recorded at contract signing, which is typically coincident with the mortgage application.” – Falen Taylor, Director of Public Affairs, MBA

# U.S. Housing

## Mortgage Bankers Association (MBA)

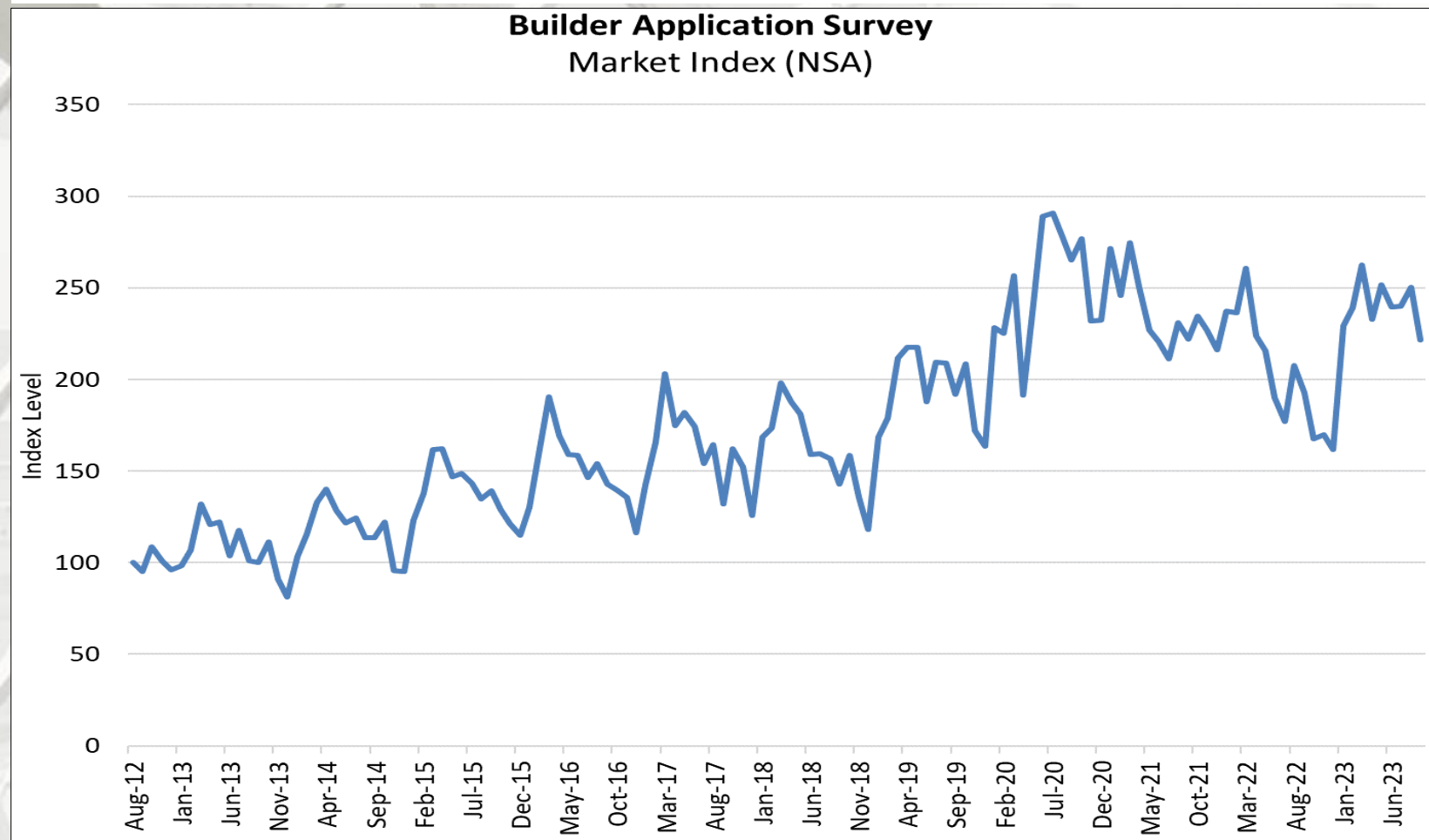
### October New Home Purchase Mortgage Applications Increased 14.9 Percent



# U.S. Housing Finance

## Mortgage Bankers Association (MBA)

### October New Home Purchase Mortgage Applications Increased 14.9 Percent



# **U.S. Housing Finance**

## **Mortgage Bankers Association (MBA)**

### **Mortgage Credit Availability Increased in October**

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

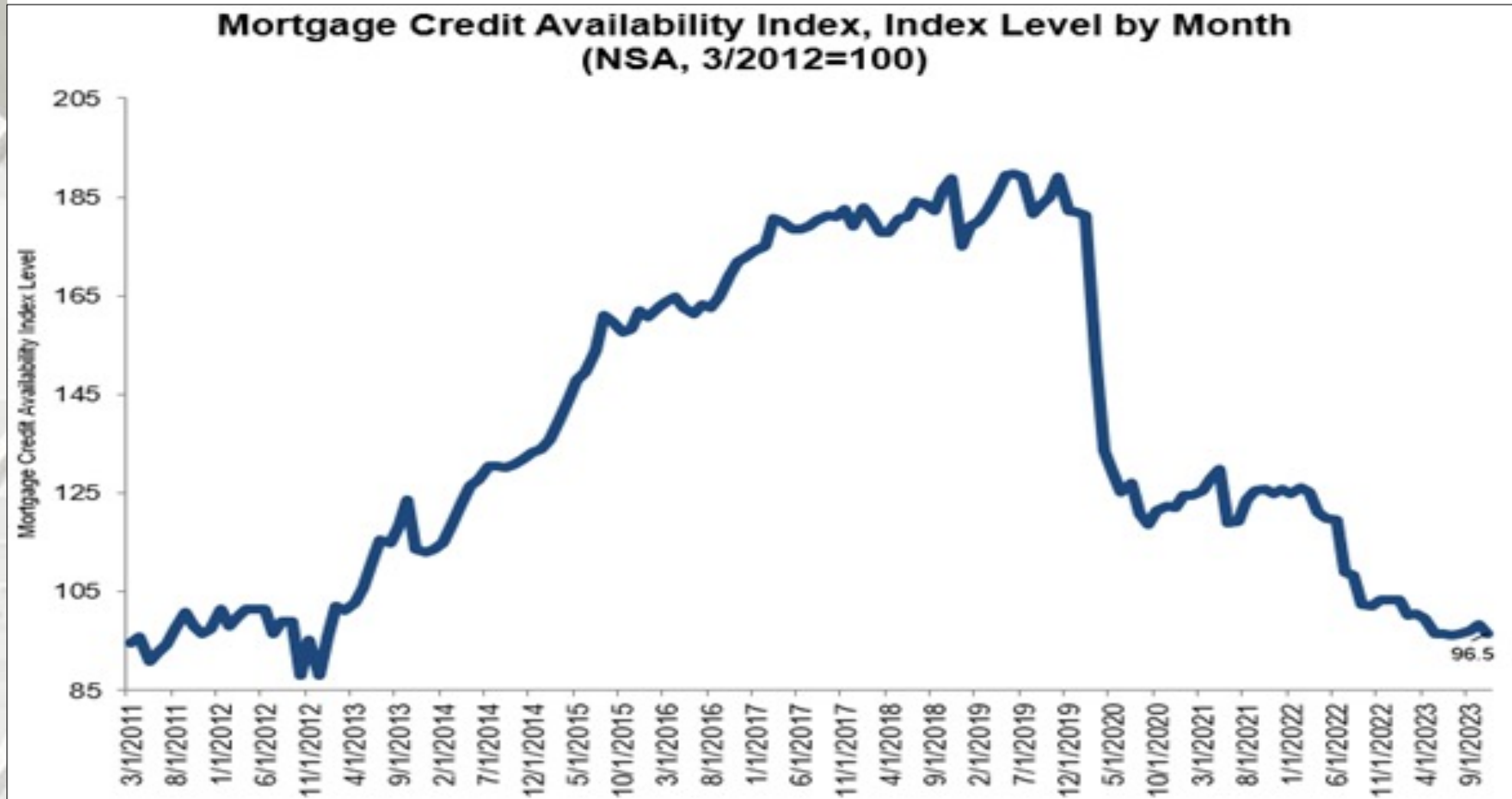
The MCAI fell by 1.7 percent to 96.5 in November. A decline in the MCAI indicates that lending standards are tightening, while increases in the index are indicative of loosening credit. The index was benchmarked to 100 in March 2012. The Conventional MCAI decreased 3.6 percent, while the Government MCAI remained unchanged. Of the component indices of the Conventional MCAI, the Jumbo MCAI decreased by 5.4 percent, and the Conforming MCAI remained unchanged.

Credit availability in November declined to its lowest level in four months, driven by reduced offerings of non-QM and jumbo loan programs. The conforming and government indices were unchanged over the month but remained close to multi-year lows. Overall credit availability was seven percent below last year’s level, as the industry has reduced capacity in response to declining origination volume and lenders continuing to simplify their loan offerings.” – Joel Kan, Associate Vice President of Economic and Industry Forecasting, MBA



# U.S. Housing Finance

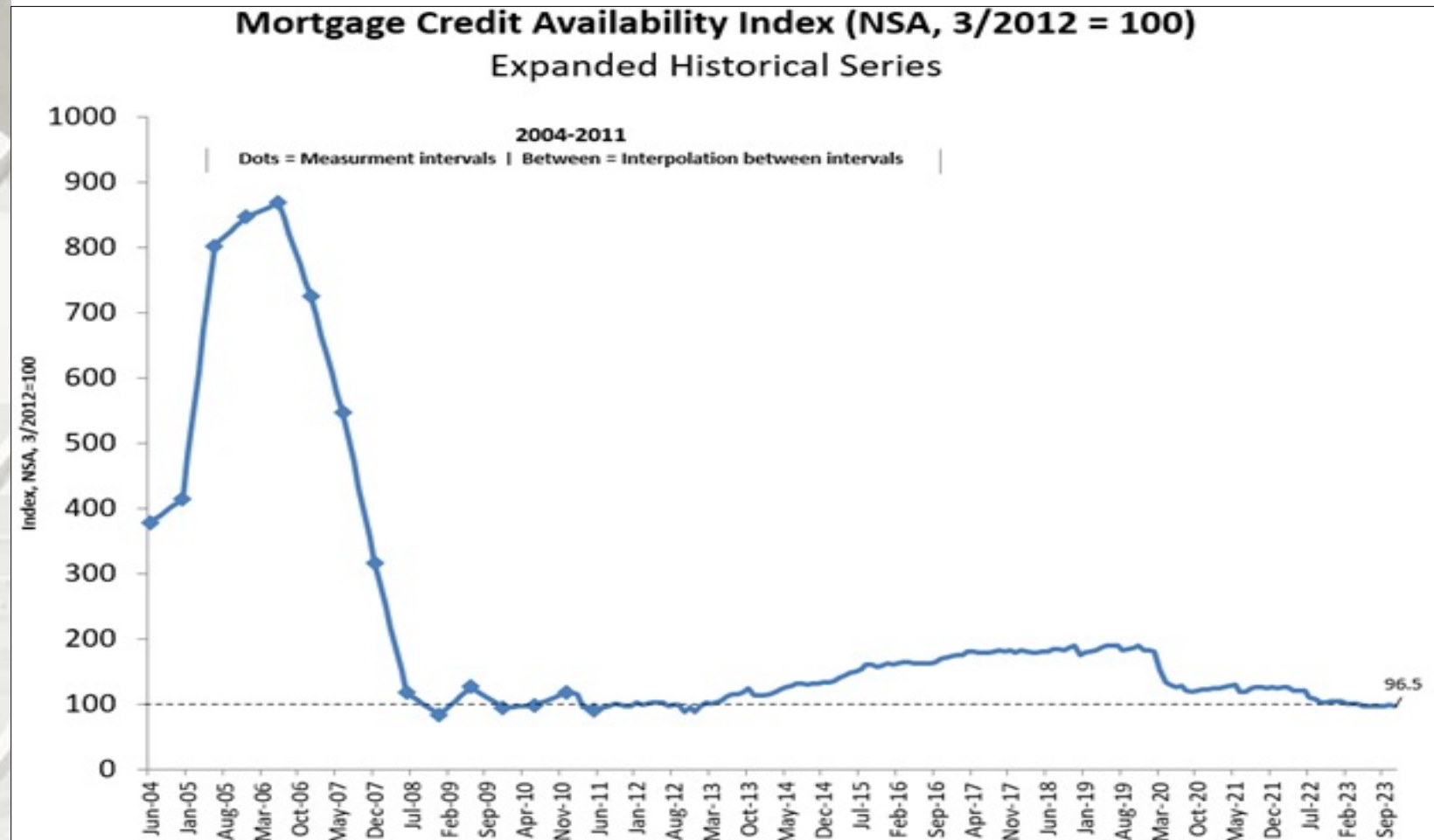
## Mortgage Credit Availability (MBA)



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

# U.S. Housing Finance

## Mortgage Credit Availability (MBA)



**Source:** Mortgage Bankers Association; Powered by ICE Mortgage Technology

# MBA Mortgage Finance Forecast

## MBA Mortgage Finance Forecast

December 12, 2023

	2023				2024				2025				2023	2024	2025	2026
	Q1	Q2	Q3	Q4	Q1	Q2	Q3	Q4	Q1	Q2	Q3	Q4				
<b>Housing Measures</b>																
Housing Starts (SAAR, Thous)	1,385	1,450	1,367	1,383	1,378	1,372	1,366	1,388	1,413	1,442	1,464	1,476	1,396	1,376	1,449	1,444
Single-Family	834	930	968	987	996	1,016	1,035	1,072	1,111	1,128	1,152	1,170	930	1,030	1,140	1,134
Two or More	552	520	399	396	382	356	331	316	302	314	312	306	467	346	309	310
Home Sales (SAAR, Thous)																
Total Existing Homes	4,327	4,250	4,020	3,921	4,097	4,283	4,471	4,646	4,788	4,793	4,886	4,872	4,129	4,374	4,835	4,920
New Homes	638	691	703	716	740	751	766	765	786	794	799	808	687	756	797	796
FHFA US House Price Index (YOY % Change)	4.6	3.3	5.5	5.7	5.7	5.3	4.7	4.1	3.6	3.4	3.2	3.3	5.7	4.1	3.3	3.9
Median Price of Total Existing Homes (Thous \$)	366.7	397.5	400.9	389.0	395.7	397.1	393.1	392.9	393.4	394.1	394.5	395.1	388.5	394.7	394.1	393.4
Median Price of New Homes (Thous \$)	434.8	418.7	428.9	415.4	426.2	431.7	431.2	431.6	433.7	435.7	438.2	440.5	424.4	430.2	437.0	430.4
<b>Interest Rates</b>																
30-Year Fixed Rate Mortgage (%)	6.4	6.5	7.0	7.4	7.0	6.6	6.3	6.1	5.9	5.8	5.6	5.5	7.4	6.1	5.5	5.4
10-Year Treasury Yield (%)	3.6	3.6	4.2	4.5	4.2	4.0	3.8	3.7	3.7	3.7	3.6	3.6	4.5	3.7	3.6	3.6
<b>Mortgage Originations</b>																
Total 1- to 4-Family (Bil \$)	333	463	444	399	422	517	543	519	501	619	620	598	1,639	2,001	2,339	2,436
Purchase	267	371	363	324	323	401	408	379	346	461	456	436	1,325	1,511	1,699	1,782
Refinance	66	92	81	75	99	116	135	140	155	158	164	162	314	490	639	654
Refinance Share (%)	20	20	18	19	23	22	25	27	31	26	27	27	19	24	27	27
FHA Originations (Bil \$)													197	219	233	224
Total 1- to 4-Family (000s loans)	895	1,239	1,165	1,034	1,090	1,314	1,371	1,304	1,258	1,524	1,517	1,455	4,333	5,079	5,754	5,790
Purchase	686	948	913	804	790	968	973	894	810	1,070	1,049	996	3,350	3,625	3,926	3,981
Refinance	210	291	252	230	299	345	398	410	448	454	468	459	983	1,453	1,829	1,809
Refinance Share (%)	23	23	22	22	27	26	29	31	36	30	31	32	23	29	32	31
<b>Mortgage Debt Outstanding</b>																
1- to 4-Family (Bil \$)	13,671	13,767	13,822	13,879	13,931	13,988	14,050	14,117	14,190	14,264	14,343	14,425	13,879	14,117	14,690	14,783

### Notes:

As of the August 2023 forecast, 2022 origination volume was revised based on the 2022 Home Mortgage Disclosure Act data.  
 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.  
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# MBA

MORTGAGE BANKERS ASSOCIATION



# MBA Economic Forecast

## MBA Economic Forecast

December 12, 2023

	2023				2024				2025				2023	2024	2025	2026
	Q1	Q2	Q3	Q4	Q1	Q2	Q3	Q4	Q1	Q2	Q3	Q4				
<b>Percent Change, SAAR</b>																
Real Gross Domestic Product	2.2	2.1	5.2	0.8	-0.3	-0.5	0.7	1.5	1.7	1.6	1.5	1.7	2.6	0.4	1.6	1.7
Personal Consumption Expenditures	3.8	0.8	3.6	2.3	-0.5	0.1	1.0	1.2	1.4	1.4	1.3	1.4	2.6	0.5	1.4	1.6
Business Fixed Investment	5.7	7.4	1.3	3.1	-1.1	-1.0	0.0	1.1	1.7	1.5	1.9	2.0	4.4	-0.3	1.8	1.9
Residential Investment	-5.3	-2.2	6.2	-2.9	-2.8	1.4	2.0	4.7	6.4	6.2	5.0	7.0	-1.2	1.3	6.2	0.5
Govt. Consumption & Investment	4.8	3.3	5.5	0.3	1.0	0.6	0.5	0.4	0.3	0.3	0.4	0.4	3.5	0.6	0.3	0.3
Net Exports (Bil. Chain 2012\$)	-1048.8	-1039.0	-1047.9	-1061.9	-1091.1	-1088.5	-1068.3	-1070.0	-1081.7	-1088.7	-1090.9	-1093.6	-1049.4	-1079.5	-1088.7	-1069.2
Inventory Investment (Bil. Chain 2012\$)	24.1	13.2	74.3	30.5	54.6	23.6	-0.6	12.9	28.3	37.7	44.3	49.1	35.5	22.6	39.9	56.4
Consumer Prices (YOY)	5.8	4.1	3.6	3.1	2.7	2.7	2.5	2.3	2.1	2.0	2.0	2.1	3.1	2.3	2.1	2.2
<b>Percent</b>																
Unemployment Rate	3.5	3.5	3.7	3.9	4.1	4.4	4.8	5.0	4.9	4.8	4.6	4.5	3.6	4.5	4.7	4.4
Federal Funds Rate	4.875	5.125	5.375	5.375	5.375	5.125	4.875	4.625	4.375	4.125	3.875	3.625	5.375	4.625	3.625	2.625
10-Year Treasury Yield	3.6	3.6	4.2	4.5	4.2	4.0	3.8	3.7	3.7	3.7	3.6	3.6	4.5	3.7	3.6	3.6

### 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:**

Housing data, year-over-year, were mixed. Month-over-month data, in aggregate, were positive. Total, single- and multi-family starts, single-family permits, total and single-family housing completions, new house sales, and total private residential and single-family construction spending also indicated improvement. The influence of increasing mortgage rates is evident, as aggregate costs have decreased affordability; thus, a reduction in new and existing house sales.

## **Pros:**

- 1) The desire to own a house remains strong, though consumer sentiment October be waning

## **Cons:**

- 1) Mortgage interest rates and affordability;
- 2) US bank failures;
- 3) Inflation;
- 4) The war in Ukraine and Israel-Palestinian conflict, and other international concerns;
- 5) Construction material, appliance constraints, and logistics/supply chains remain;
- 6) Lot availability and building regulations (according to several sources);
- 7) Labor shortages in many sectors;
- 8) Household formations still lag historical averages;
- 9) Job creation is improving and consistent, but some economists question the quantity and types of jobs being created;
- 10) Debt: Corporate, personal, government – United States and globally;
- 11) Other global uncertainties.

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