

The Virginia Tech–USDA Forest Service Housing Commentary: Section I September 2023



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

To request the commentary, please email: buehlmann@gmail.com or delton.r.alderman@usda.gov

Opening Remarks

Housing data, year-over-year, were decidedly negative. 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.

The October 10th Atlanta Fed GDPNow™ total residential investment spending forecast is a positive -0.9% for Quarter IV, 2023. Quarterly log change for new private permanent site expenditures were projected at -0.2%; the improvement spending forecast was 0.8%; and the manufactured/mobile home expenditures projection was -0.7% (all: quarterly log change and at a seasonally adjusted annual rate).¹

“... We don’t see any recession ahead in 2024, but neither do we see a scenario for interest rate cuts in the foreseeable future. We look for modest rate cuts in 2025, followed by an equally modest boom in mortgage lending and then a long-term correction in home prices a la the 1990s.” – R. Christopher Whalen, The Institutional Risk Analyst, Whalen Global Advisors LLC.

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 (of note is the Federal Reserve Bank of San Francisco’s projection for future shelter inflation), private firm indicators, and demographic/economic information.

Sources: ¹ www.frbatlanta.org/cqer/research/gdpnow.aspx; 11/15/23

² <https://www.theinstitutionalriskanalyst.com/post/higher-for-longer>; 10/24/23

September 2023 Housing Scorecard

	M/M	Y/Y
Housing Starts	▲ 7.0%	▼ 7.2%
Single-Family (SF) Starts	▲ 3.2%	▲ 8.6%
Multi-Family (MF) Starts*	▲ 17.6%	▼ 31.4%
Housing Permits	▼ 4.5%	▼ 7.4%
SF Permits	▲ 1.6%	▲ 11.3%
MF Permits*	▼ 14.3%	▼ 29.7%
Housing Under Construction	▼ 0.7%	▼ 1.3%
SF Under Construction	▼ 0.7%	▼ 14.8%
Housing Completions	▲ 6.6%	▲ 1.0%
SF Completions	▲ 5.3%	▼ 4.8%
New SF House Sales	▲ 12.3%	▲ 33.9%
Private Residential Construction Spending	▲ 0.6%	▼ 2.2%
SF Construction Spending	▲ 1.3%	▼ 5.9%
Existing House Sales ¹	▼ 2.0%	▼ 15.4%

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

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

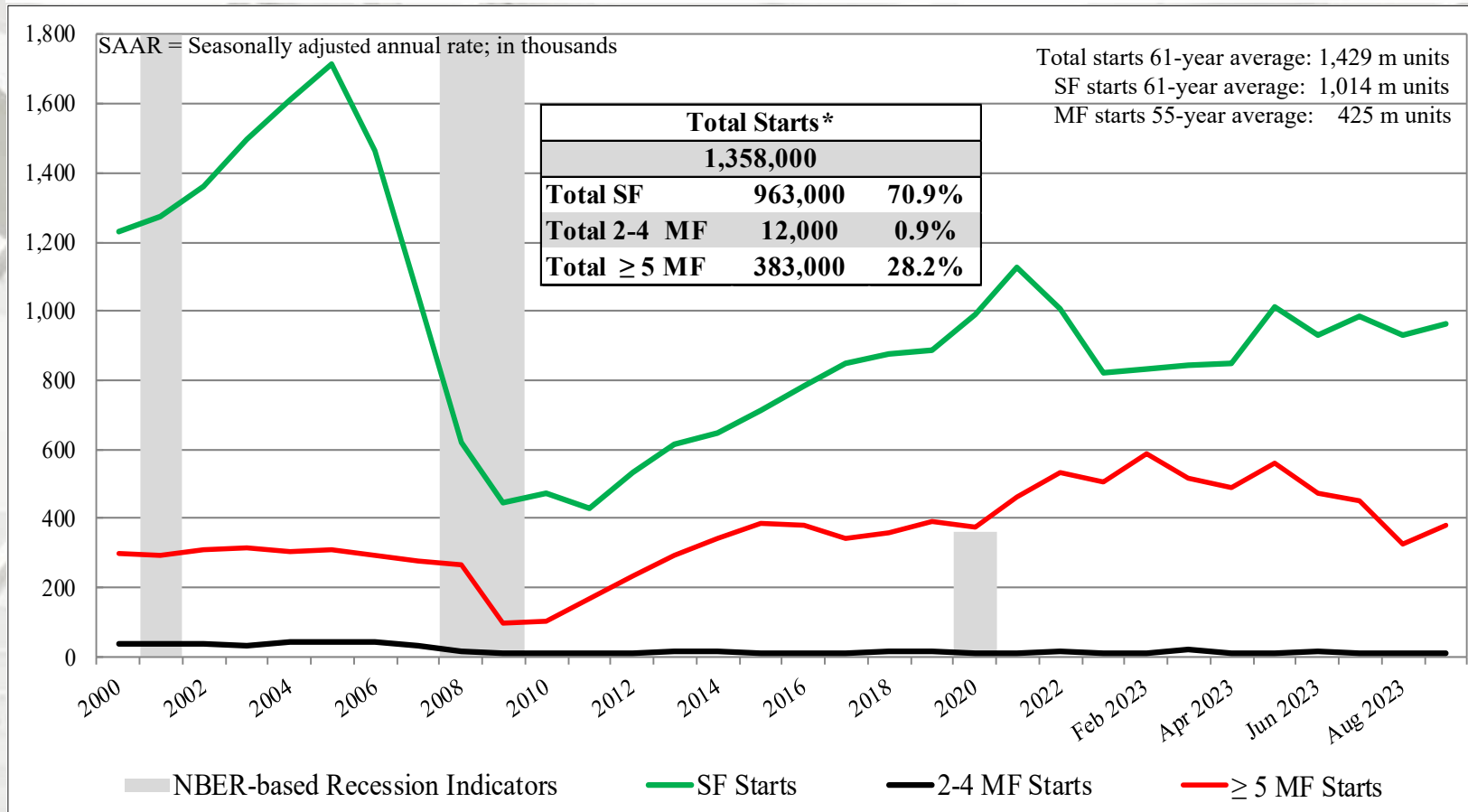
New Housing Starts

	Total Starts*	SF Starts	MF 2-4 Starts**	MF ≥5 Starts
September	1,358,000	963,000	12,000	383,000
August	1,269,000	933,000	9,000	327,000
2022	1,463,000	887,000	17,000	559,000
M/M change	7.0%	3.2%	33.3%	17.1%
Y/Y change	-7.2%	8.6%	-29.4%	-31.5%

* 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

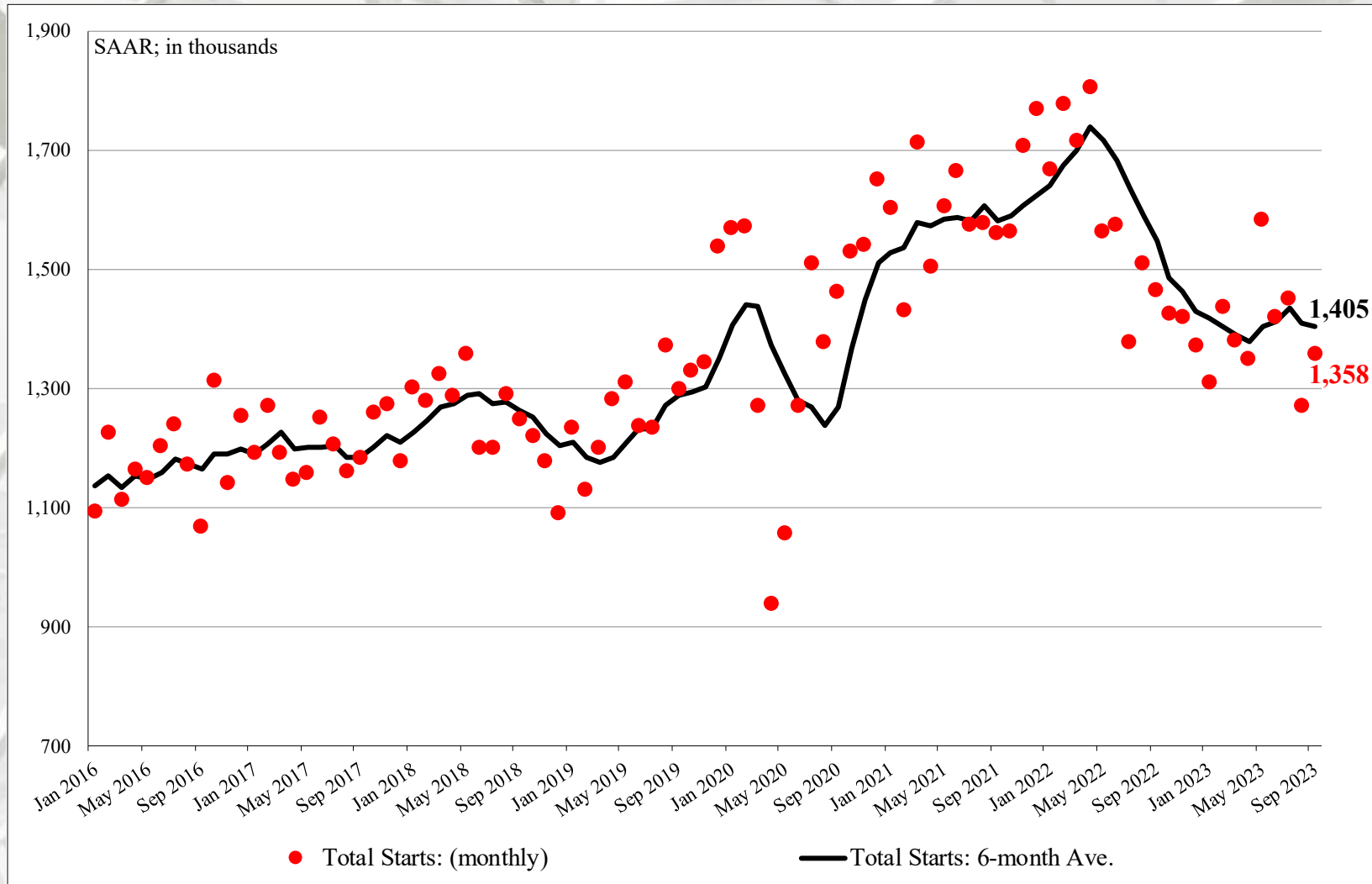


The US DOC does not report 2 to 4 multi-family starts directly; this is an estimation: (Total starts – (SF + 5-unit MF)).

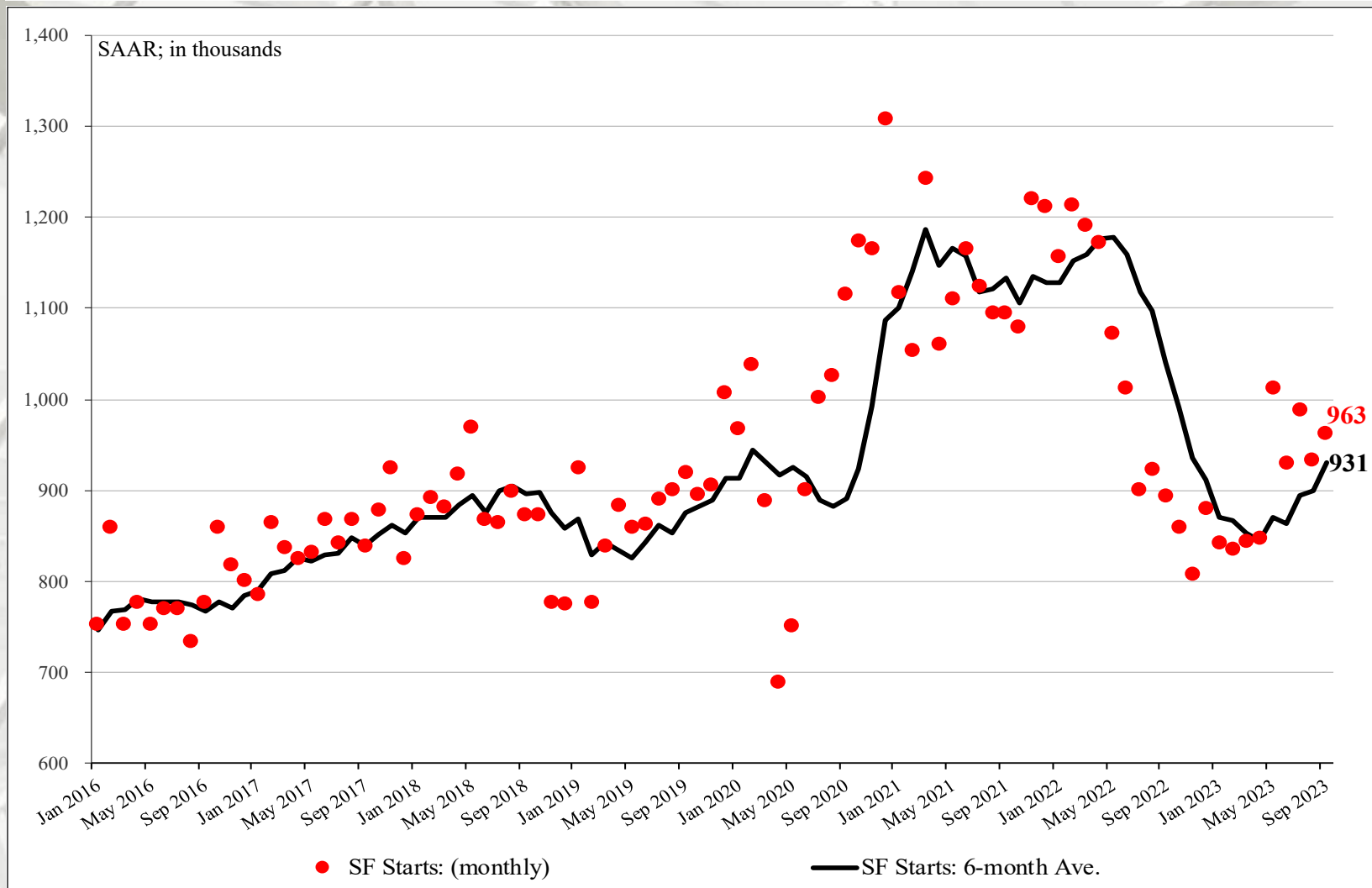
* Percentage of total starts.

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

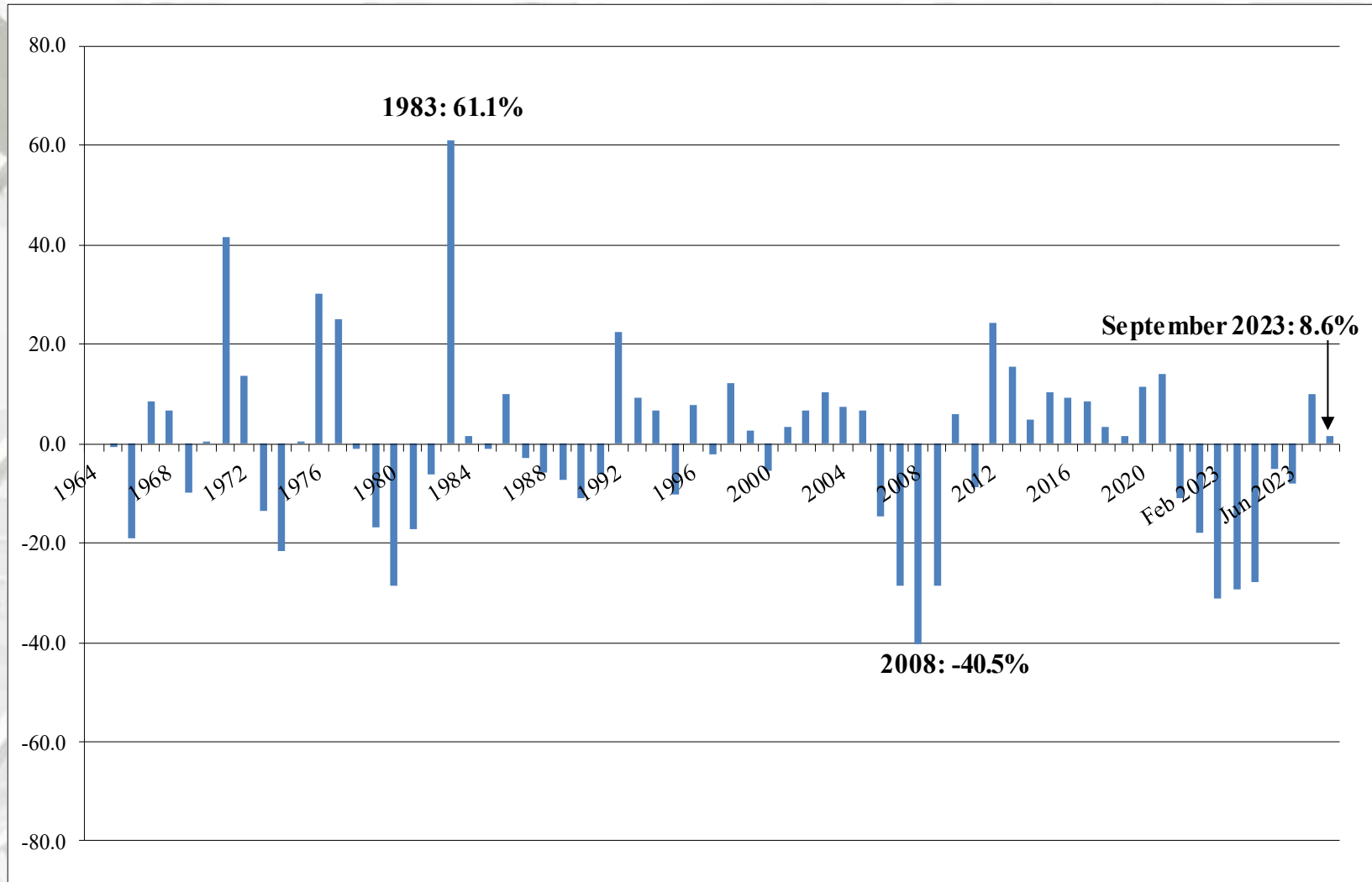
Total Housing Starts: Six-Month Moving Average



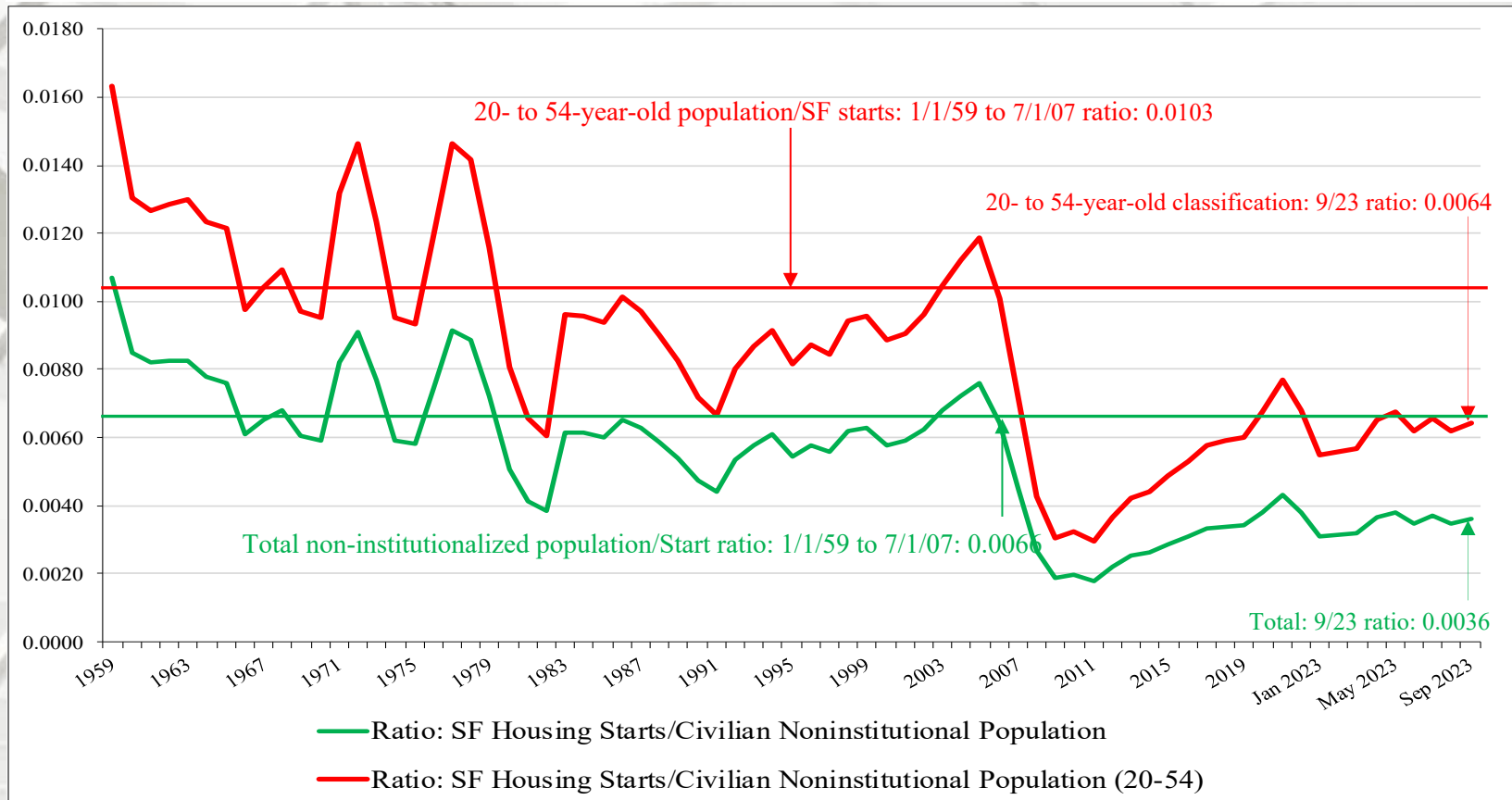
SF Housing Starts: Six-Month Moving Average



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



New SF Starts

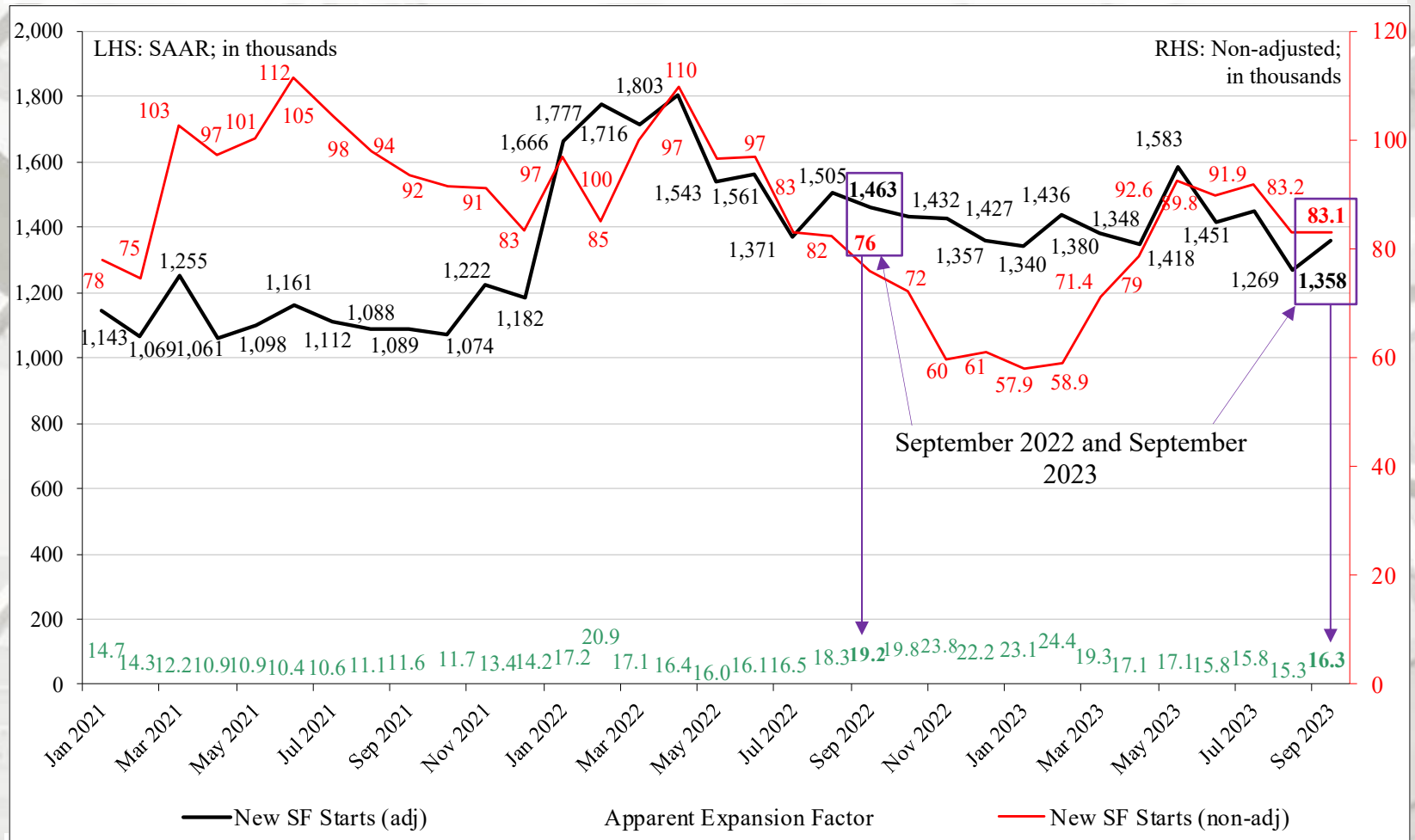


New SF starts adjusted for the US population

From January 1959 to September 2007, the long-term ratio of new SF starts to the total US non-institutionalized population is 0.0066. In September 2023 it was 0.0036 – a slight increase from August (0.0035). The long-term ratio of non-institutionalized population, aged 20 to 54 is 0.0103; in September 2023 it was 0.0064 – also an improvement from August (0.0062). 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**
September	83,000	47,000	36,000
August	110,000	58,000	52,000
2022	148,000	60,000	88,000
M/M change	-24.5%	-19.0%	-30.8%
Y/Y change	-43.9%	-21.7%	-59.1%
	MW Total	MW SF	MW MF
September	203,000	121,000	82,000
August	150,000	106,000	44,000
2022	210,000	123,000	87,000
M/M change	35.3%	14.2%	86.4%
Y/Y change	-3.3%	-1.6%	-5.7%

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

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

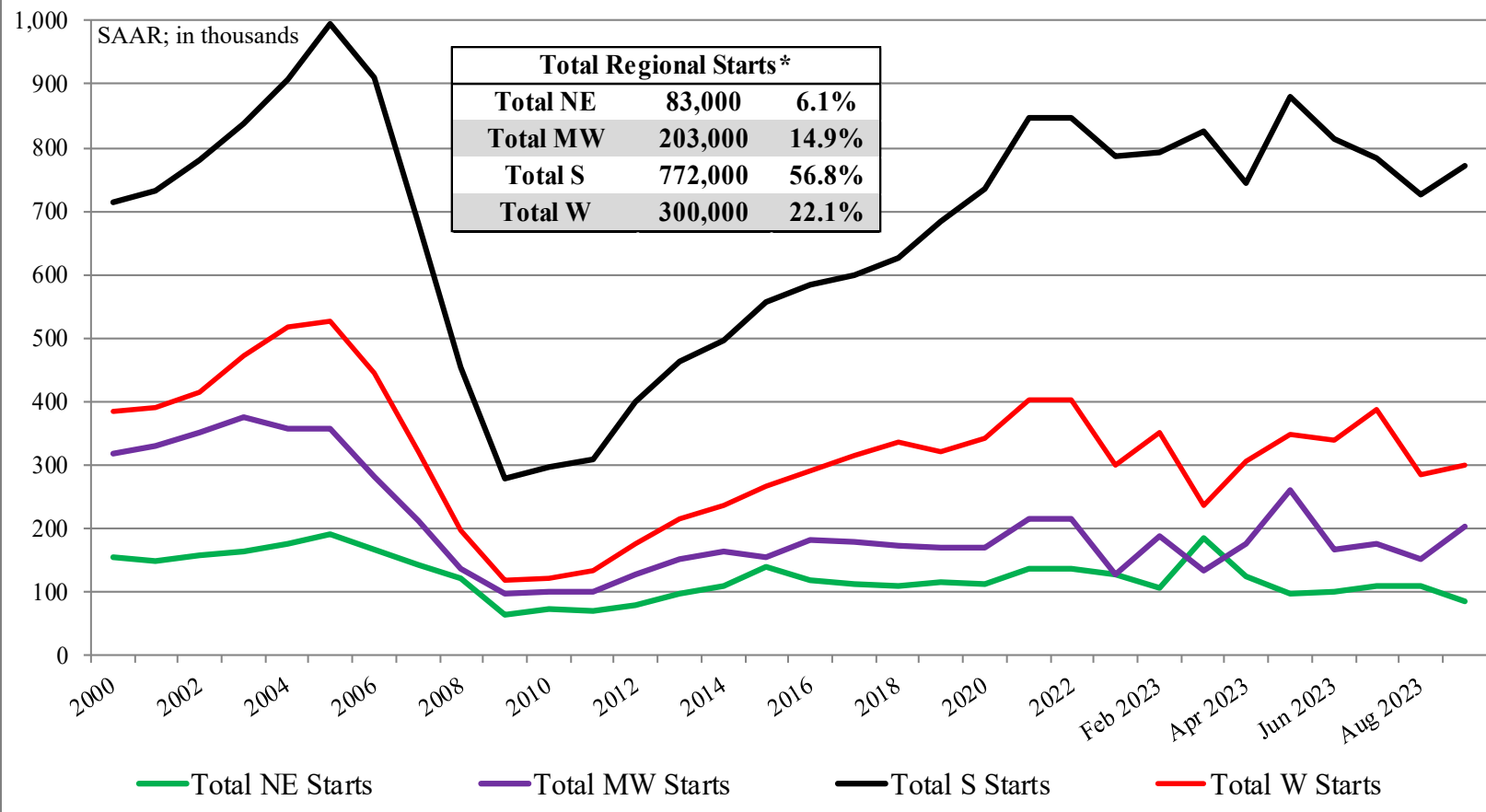
New Housing Starts by Region

	S Total	S SF	S MF**
September	772,000	593,000	179,000
August	725,000	577,000	148,000
2022	738,000	511,000	227,000
M/M change	6.5%	2.8%	20.9%
Y/Y change	4.6%	16.0%	-21.1%
	W Total	W SF	W MF
September	300,000	202,000	98,000
August	284,000	192,000	92,000
2022	367,000	193,000	174,000
M/M change	5.6%	5.2%	6.5%
Y/Y change	-18.3%	4.7%	-43.7%

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

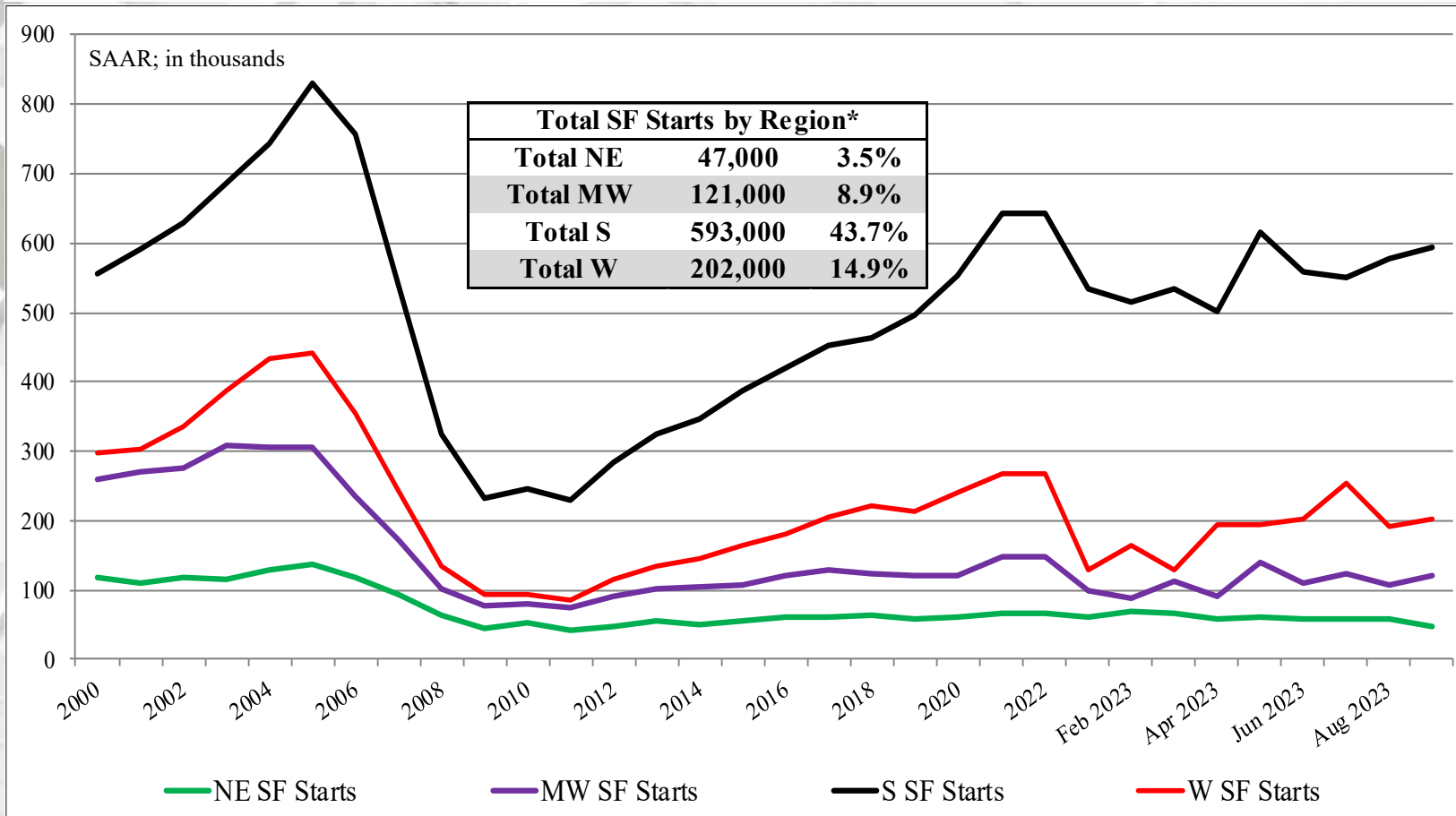


NE = Northeast, MW = Midwest, S = South, W = West

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

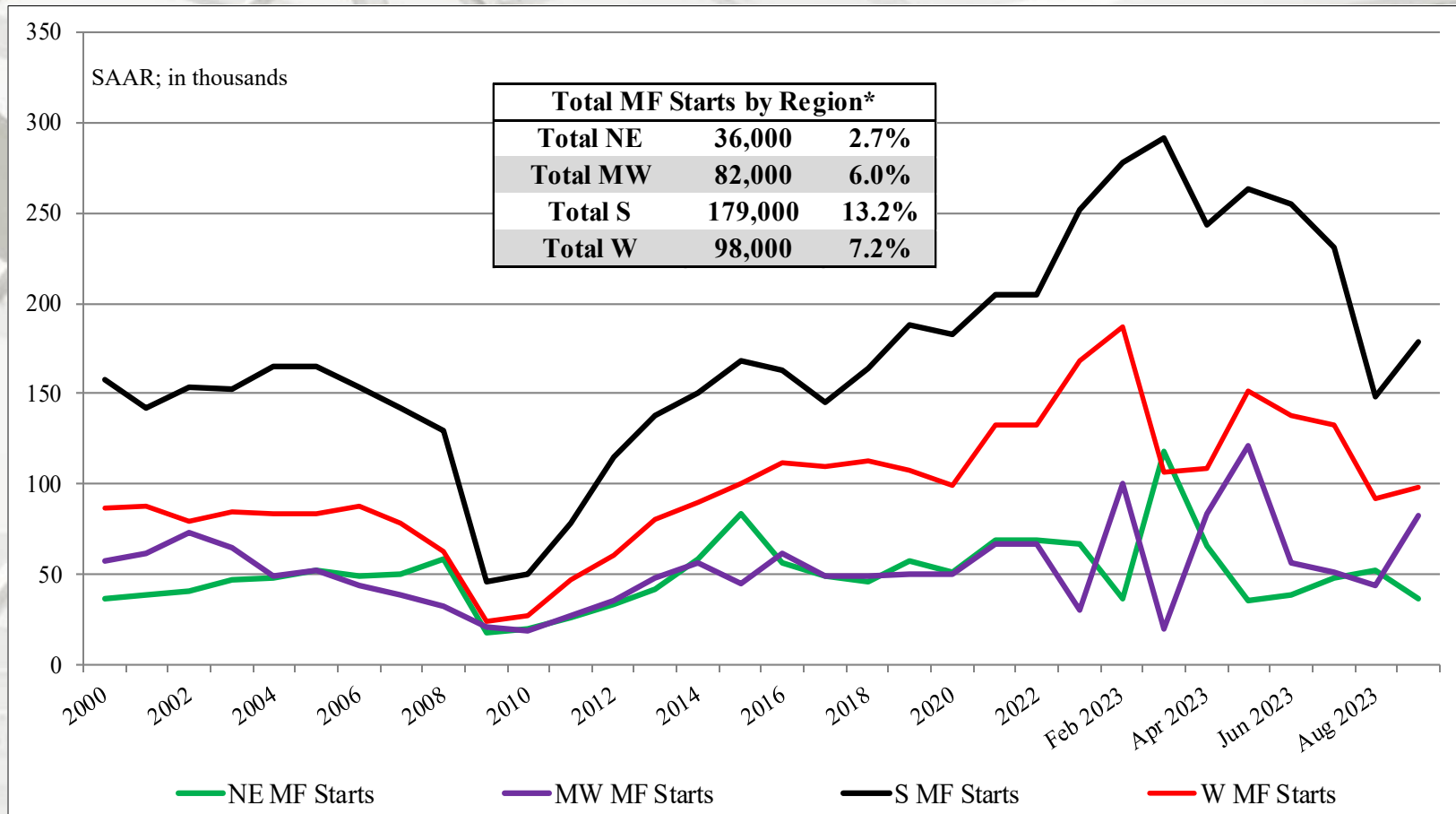


NE = Northeast, MW = Midwest, S = South, W = West

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

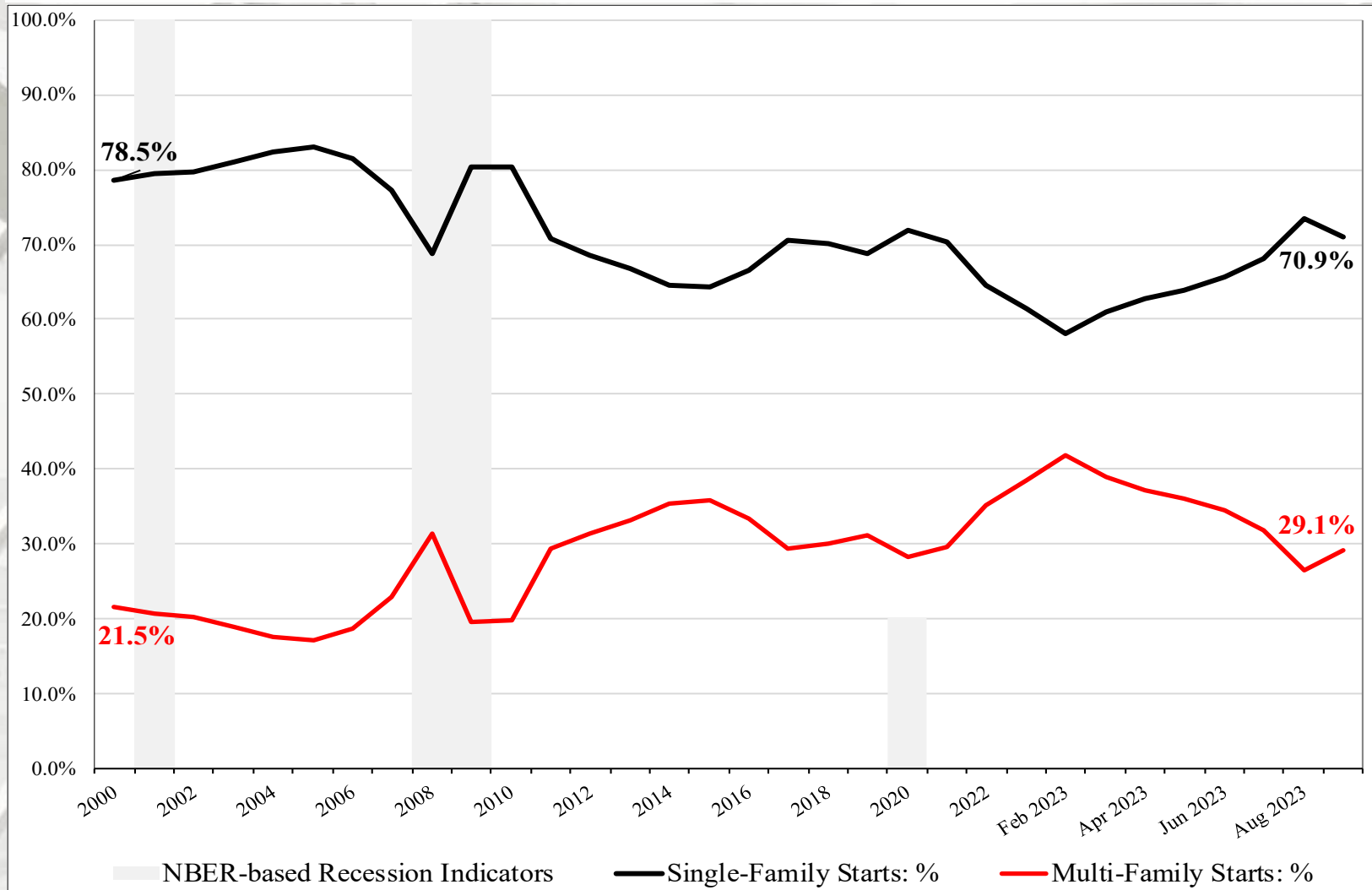


NE = Northeast, MW = Midwest, S = South, W = West

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 (%)



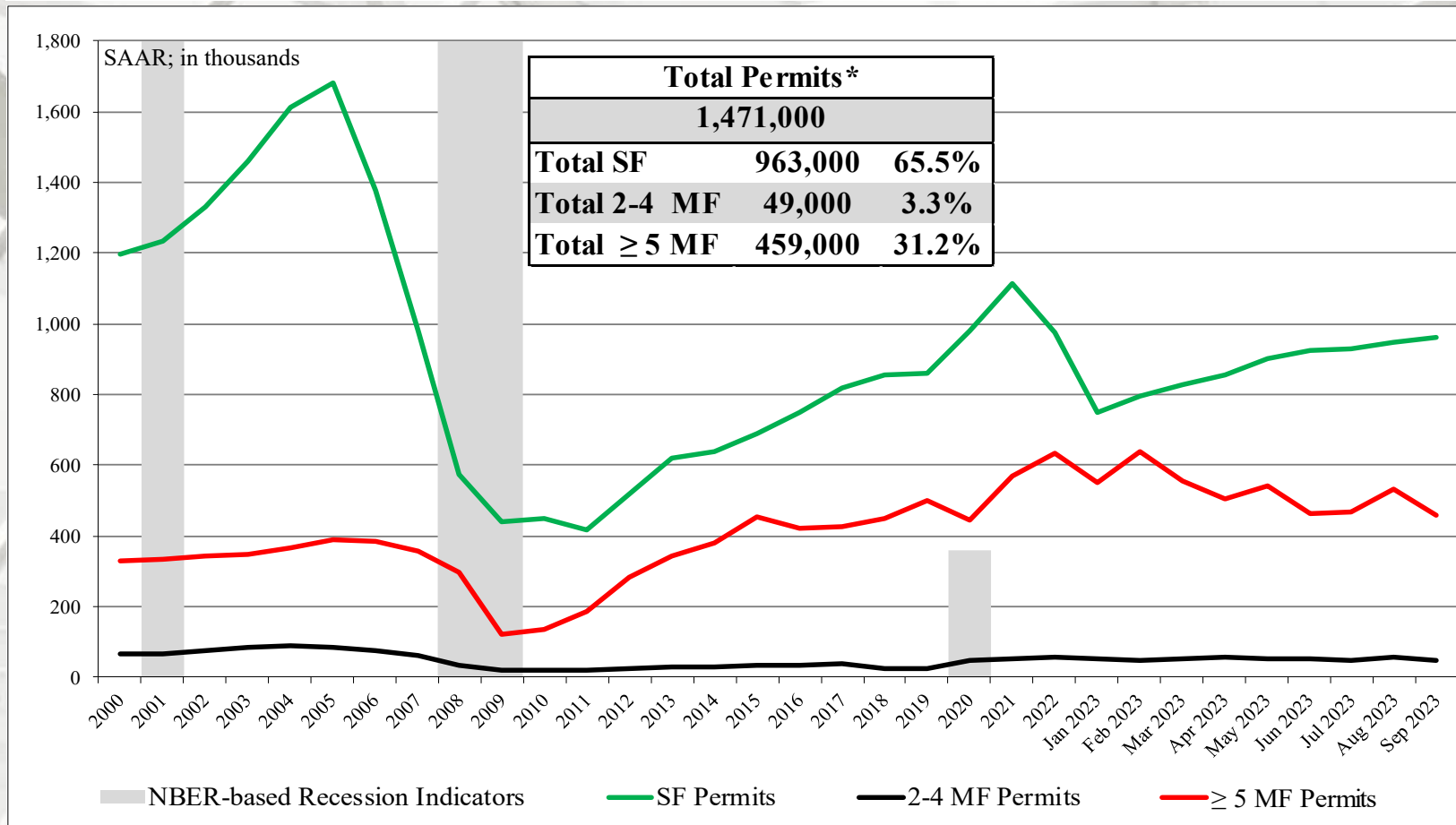
NBER based Recession Indicator Bars for the United States from the Period following the Peak through the Trough (FRED, St. Louis).

New Housing Permits

	Total Permits*	SF Permits	MF 2-4 unit Permits	MF ≥ 5 unit Permits
September	1,471,000	963,000	49,000	459,000
August	1,541,000	948,000	59,000	534,000
2022	1,588,000	865,000	52,000	671,000
M/M change	-4.5%	1.6%	-16.9%	-14.0%
Y/Y change	-7.4%	11.3%	-5.8%	-31.6%

* 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**
September	109,000	54,000	55,000
August	120,000	54,000	66,000
2022	127,000	62,000	65,000
M/M change	-9.2%	0.0%	-16.7%
Y/Y change	-14.2%	-12.9%	-15.4%

	MW Total*	MW SF	MW MF**
September	189,000	117,000	72,000
August	208,000	118,000	90,000
2022	215,000	110,000	105,000
M/M change	-9.1%	-0.8%	-20.0%
Y/Y change	-12.1%	6.4%	-31.4%

NE = Northeast; MW = Midwest

* All data are SAAR

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

New Housing Permits by Region

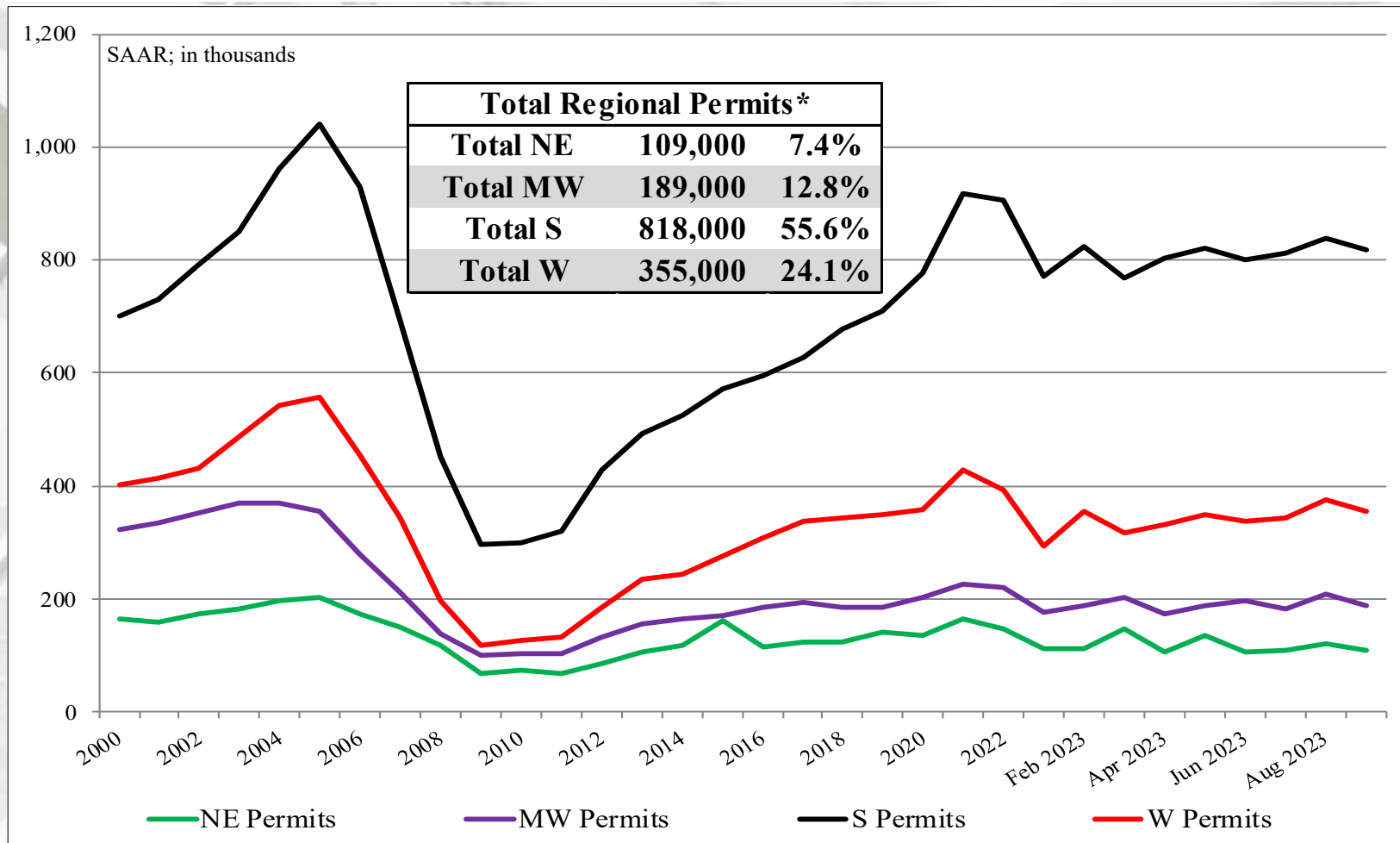
	S Total*	S SF	S MF**
September	818,000	590,000	228,000
August	837,000	574,000	263,000
2022	861,000	516,000	345,000
M/M change	-2.3%	2.8%	-13.3%
Y/Y change	-5.0%	14.3%	-33.9%
	W Total*	W SF	W MF**
September	355,000	202,000	153,000
August	376,000	202,000	174,000
2022	385,000	177,000	208,000
M/M change	-5.6%	0.0%	-12.1%
Y/Y change	-7.8%	14.1%	-26.4%

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).

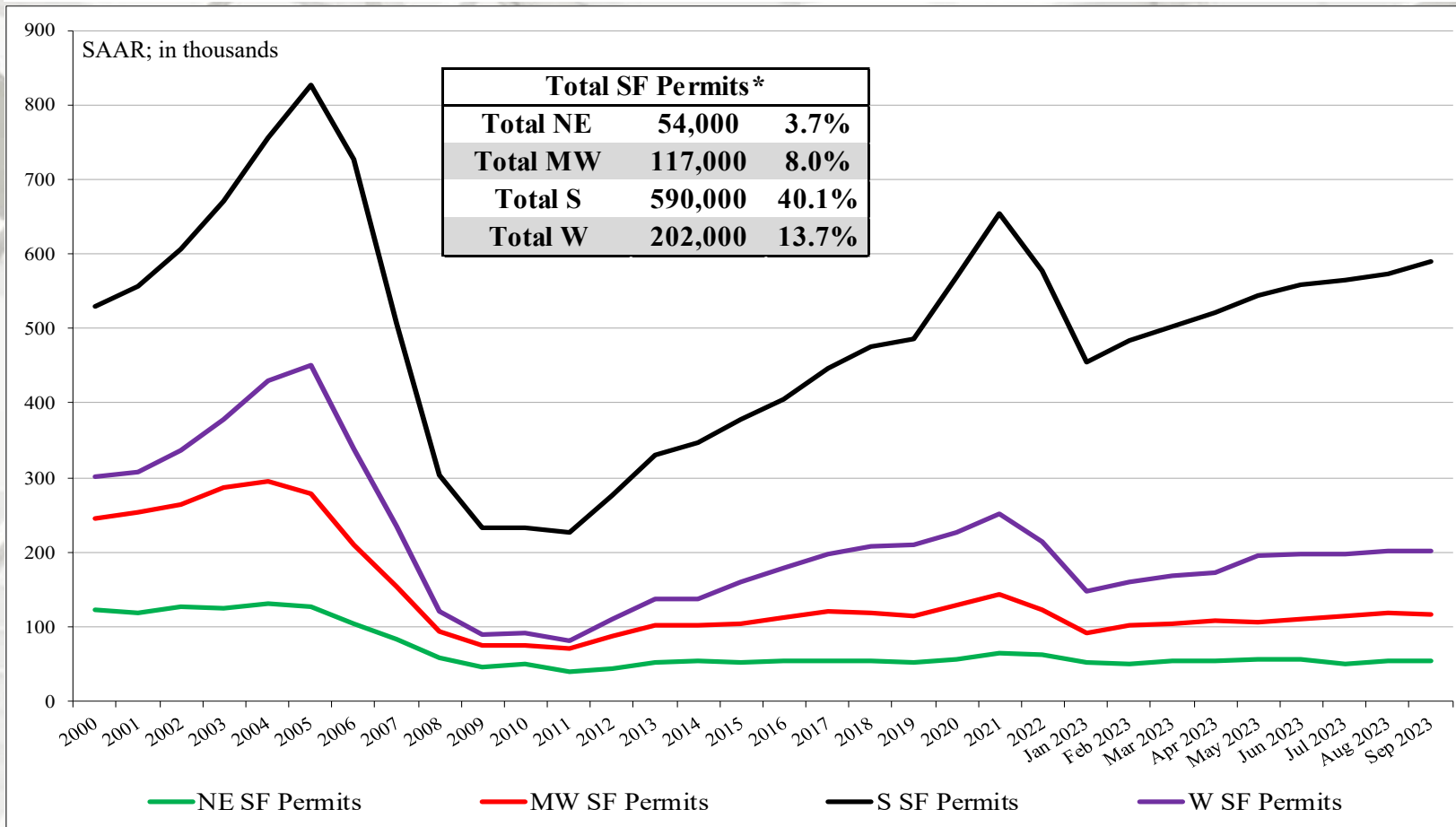
Total Housing Permits by Region



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

* Percentage of total permits.

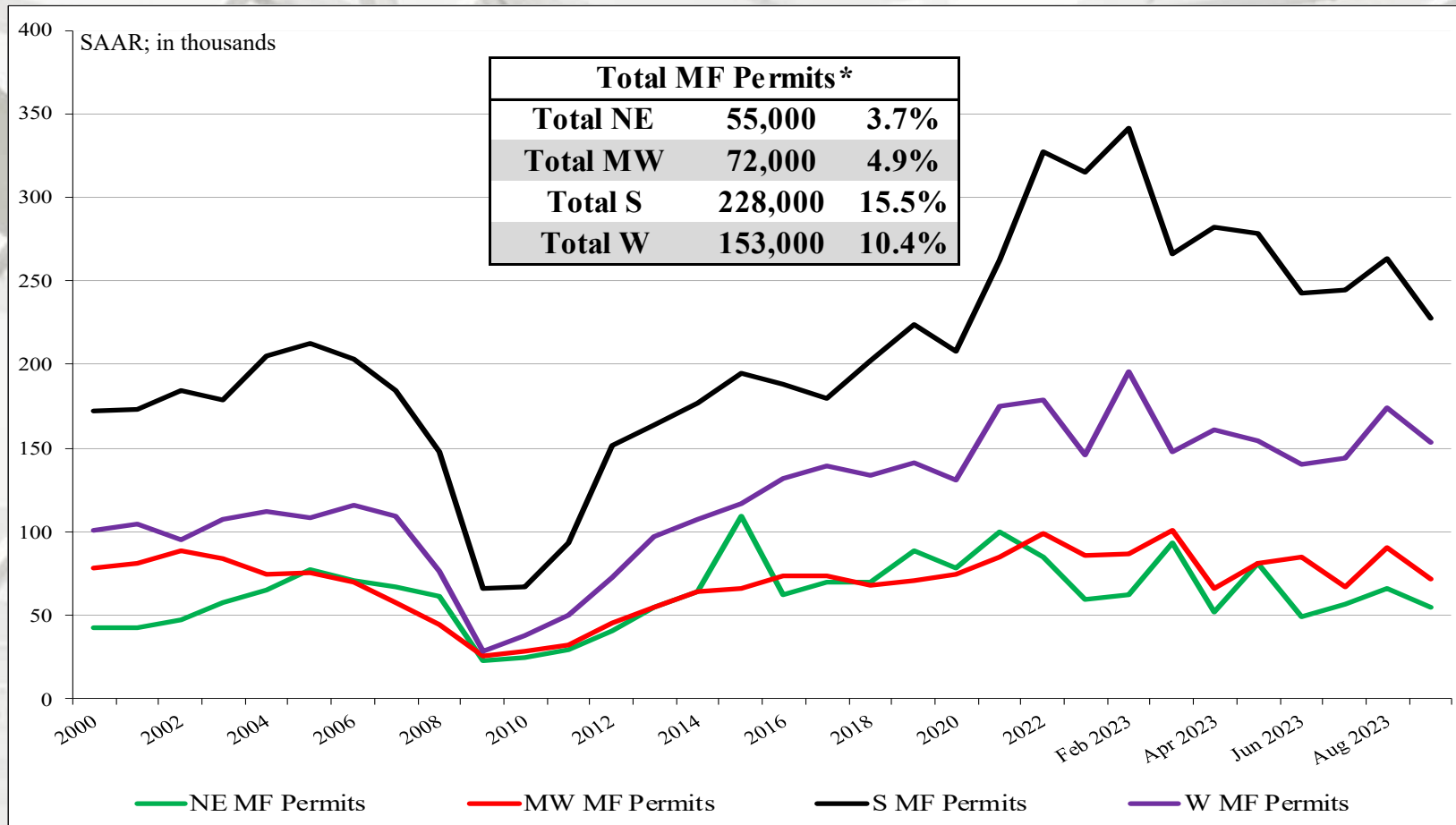
SF Housing Permits by Region



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.

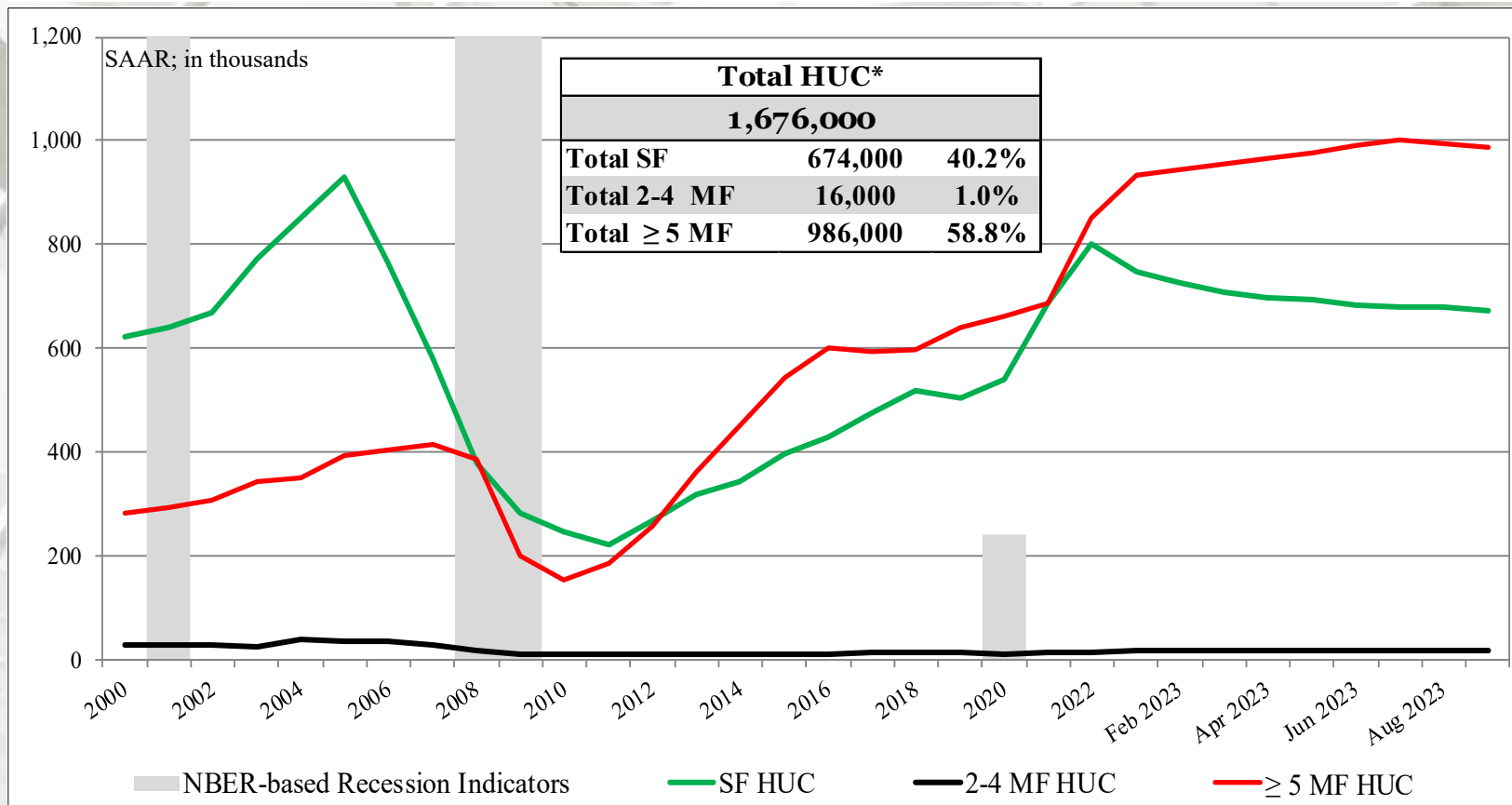
New Housing Under Construction (HUC)

	Total HUC*	SF HUC	MF 2-4 unit** HUC	MF ≥ 5 unit HUC
September	1,676,000	674,000	16,000	986,000
August	1,688,000	679,000	16,000	993,000
2022	1,698,000	791,000	18,000	889,000
M/M change	-0.7%	-0.7%	0.0%	-0.7%
Y/Y change	-1.3%	-14.8%	-11.1%	10.9%

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**
September	214,000	67,000	147,000
August	216,000	67,000	149,000
2022	225,000	61,000	164,000
M/M change	-0.9%	0.0%	-1.3%
Y/Y change	-4.9%	9.8%	-10.4%
	MW Total	MW SF	MW MF
September	206,000	87,000	119,000
August	206,000	88,000	118,000
2022	214,000	106,000	108,000
M/M change	0.0%	-1.1%	0.8%
Y/Y change	-3.7%	-17.9%	10.2%

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

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

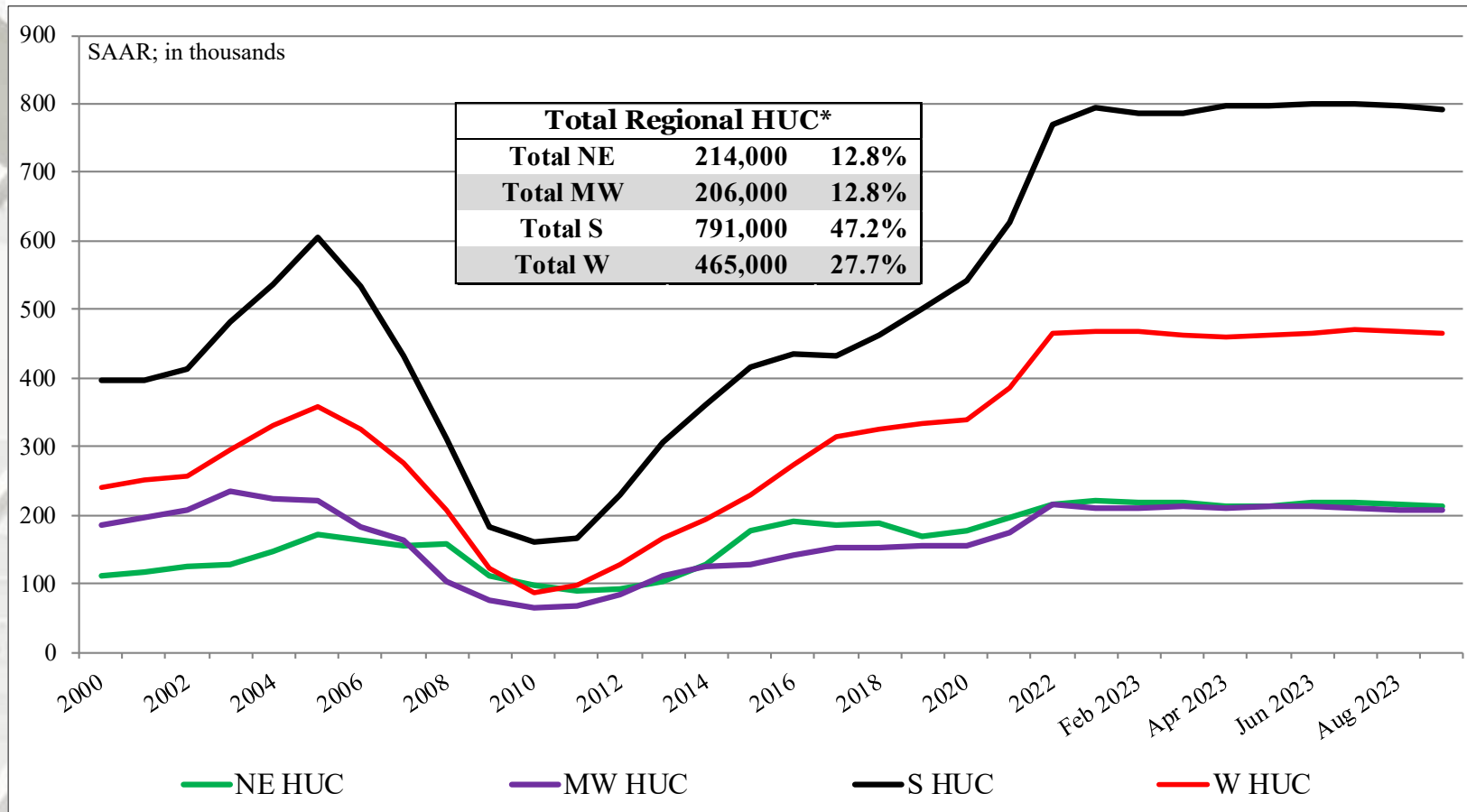
New Housing Under Construction by Region

	S Total	S SF	S MF**
September	791,000	353,000	438,000
August	797,000	357,000	440,000
2022	786,000	423,000	363,000
M/M change	-0.8%	-1.1%	-0.5%
Y/Y change	0.6%	-16.5%	20.7%
	W Total	W SF	W MF
September	465,000	167,000	298,000
August	469,000	167,000	302,000
2022	473,000	201,000	272,000
M/M change	-0.9%	0.0%	-1.3%
Y/Y change	-1.7%	-16.9%	9.6%

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

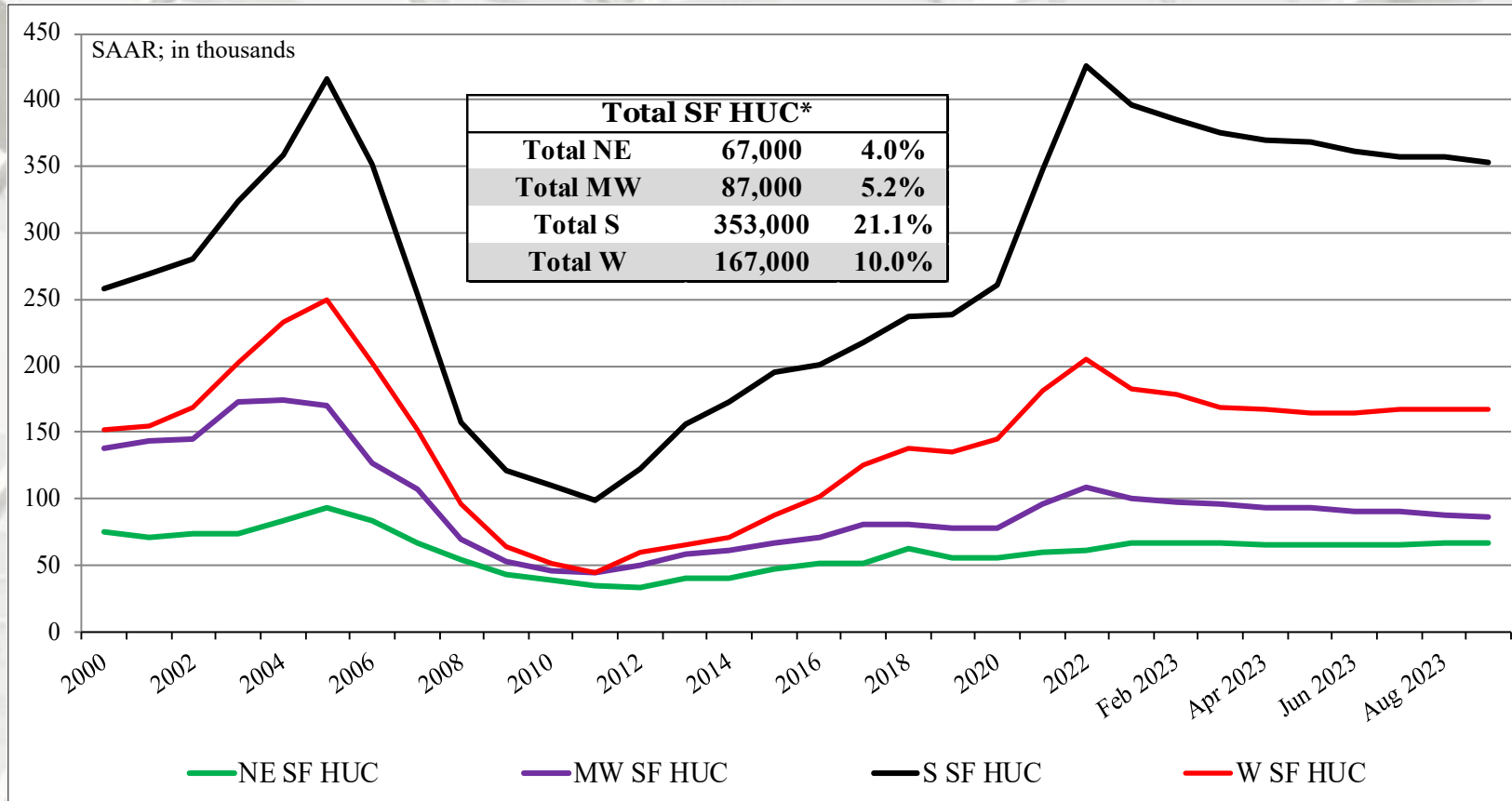


NE = Northeast, MW = Midwest, S = South, W = West

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

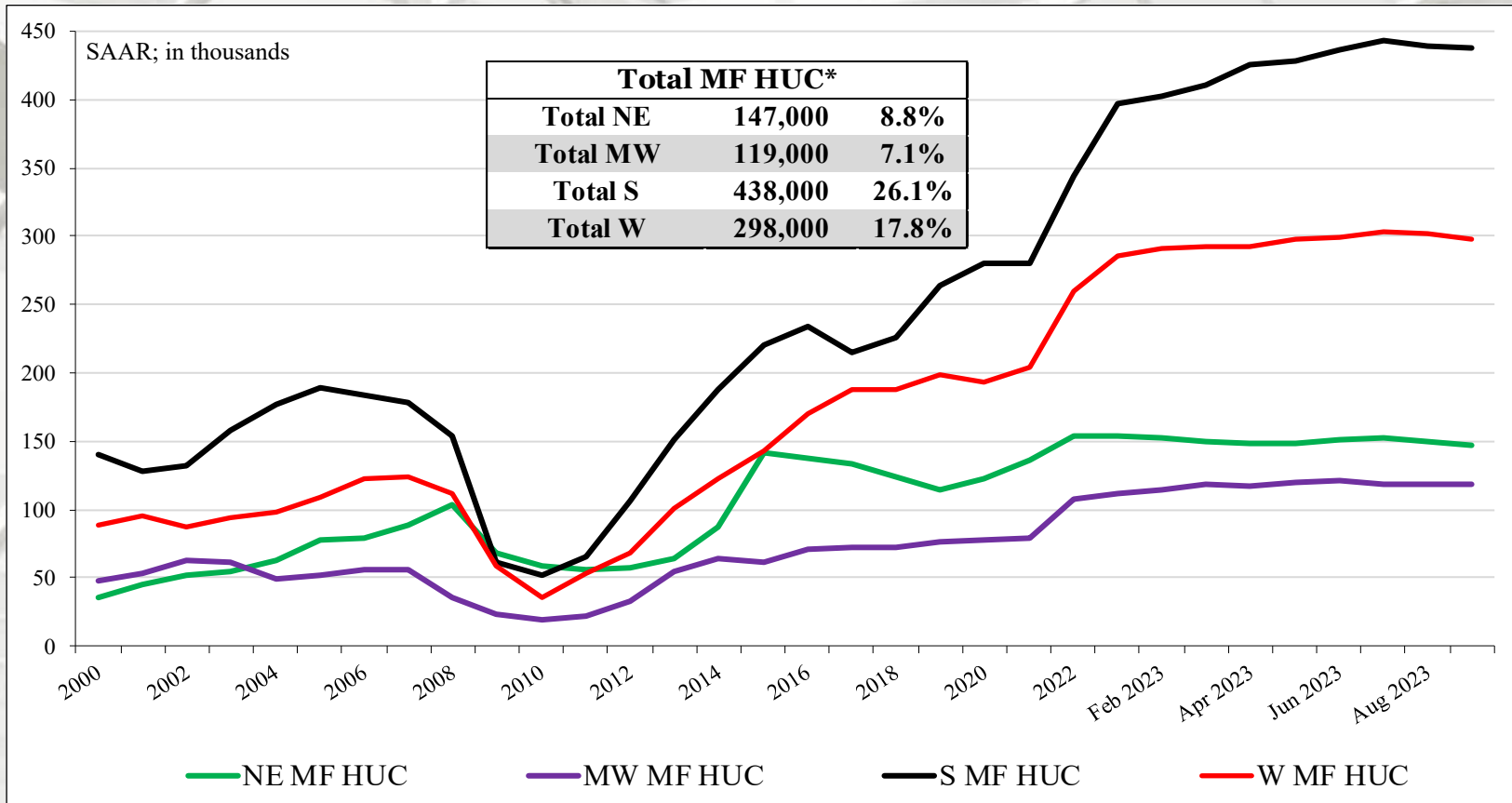


NE = Northeast, MW = Midwest, S = South, W = West.

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.

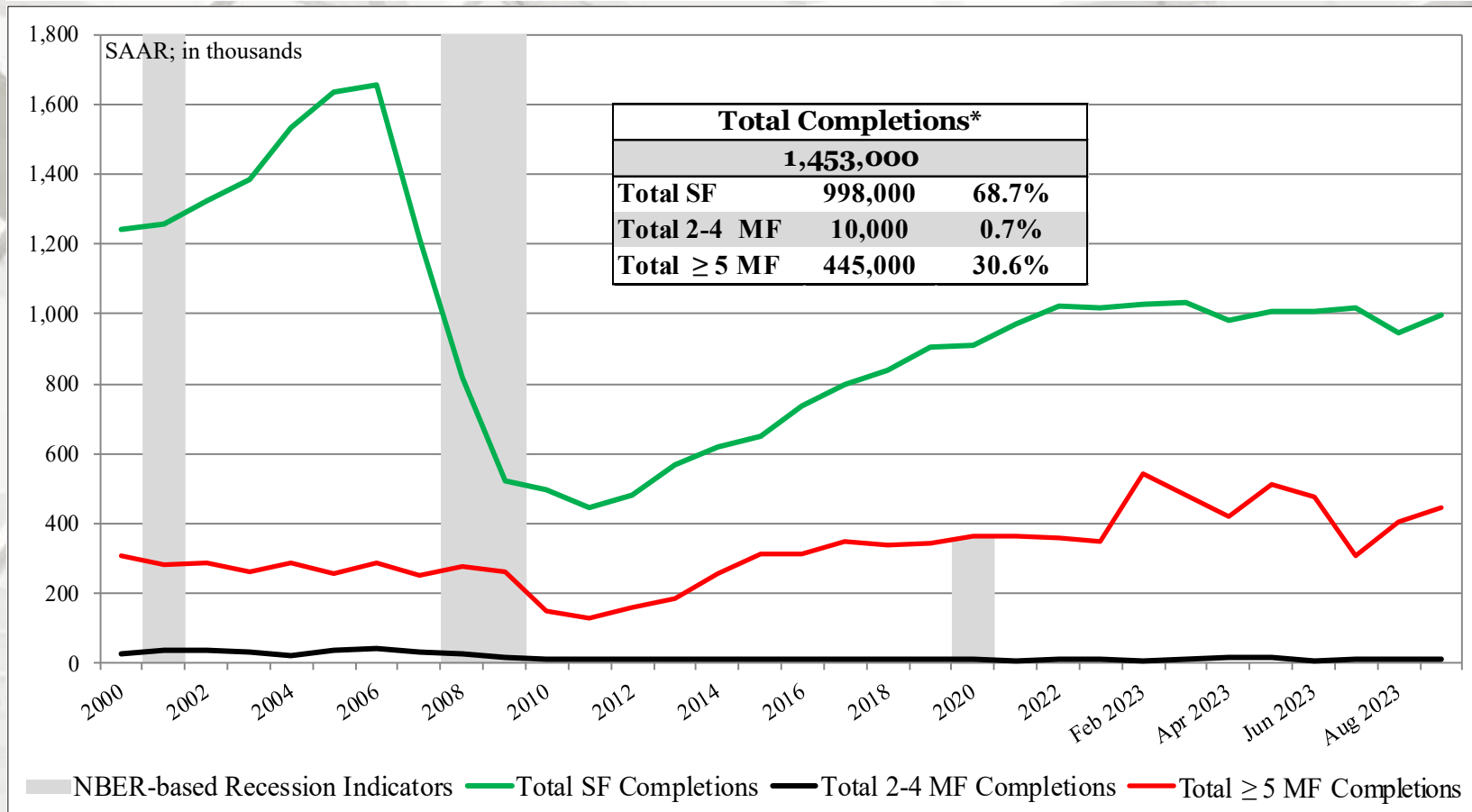
New Housing Completions

	Total Completions*	SF Completions	MF 2-4 unit**	MF ≥ 5 unit Completions
September	1,453,000	998,000	10,000	445,000
August	1,363,000	948,000	11,000	404,000
2022	1,438,000	1,048,000	3,000	387,000
M/M change	6.6%	5.3%	-9.1%	10.1%
Y/Y change	1.0%	-4.8%	233.3%	15.0%

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

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

Total Housing Completions



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

* Percentage of total housing completions

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

New Housing Completions by Region

	NE Total	NE SF	NE MF**
September	91,000	43,000	48,000
August	101,000	37,000	64,000
2022	119,000	40,000	79,000
M/M change	-9.9%	16.2%	-25.0%
Y/Y change	-23.5%	7.5%	-39.2%
	MW Total	MW SF	MW MF
September	181,000	118,000	63,000
August	192,000	136,000	56,000
2022	209,000	151,000	58,000
M/M change	-5.7%	-13.2%	12.5%
Y/Y change	-13.4%	-21.9%	8.6%

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

New Housing Completions by Region

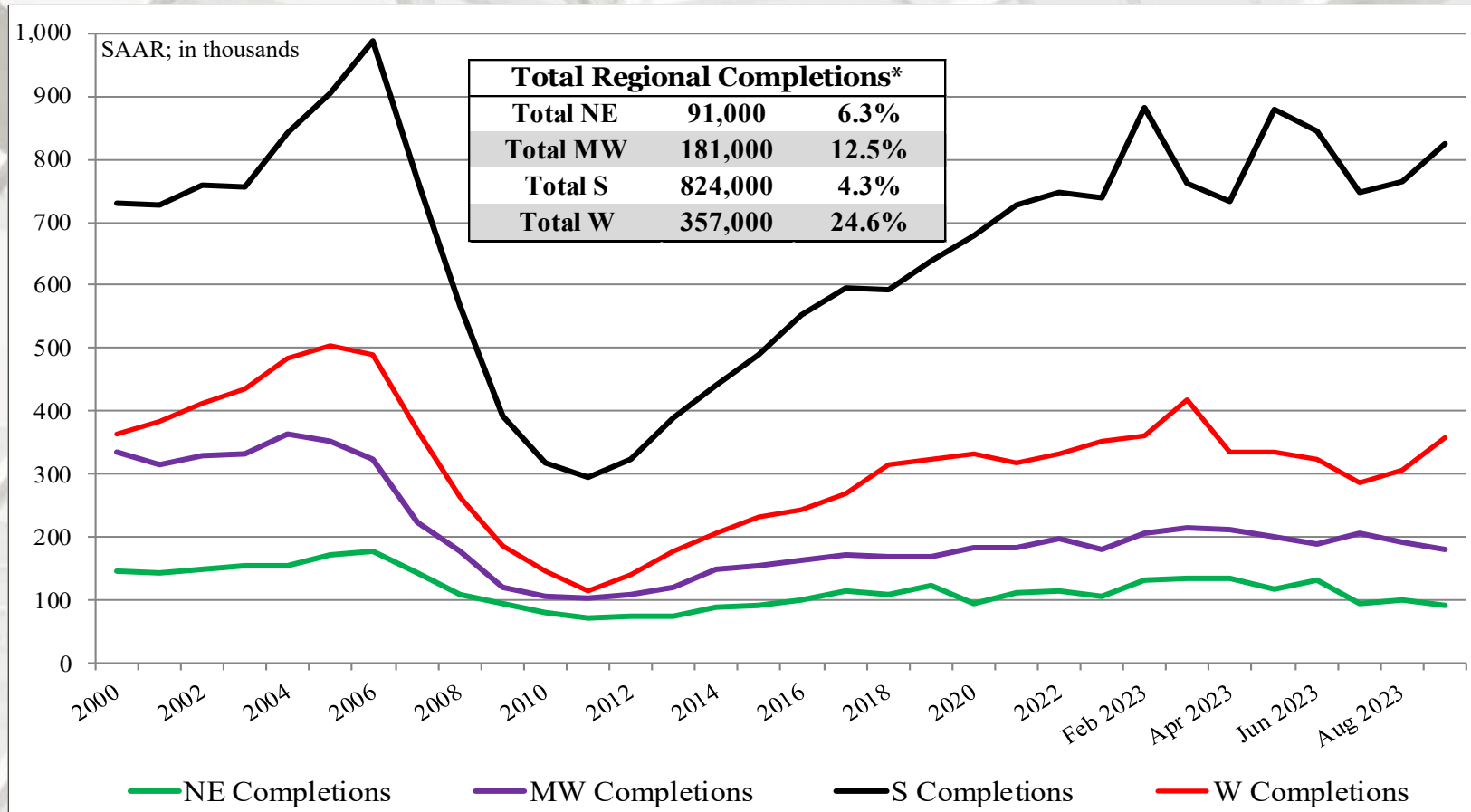
	S Total	S SF	S MF**
September	824,000	633,000	191,000
August	764,000	582,000	182,000
2022	754,000	626,000	128,000
M/M change	7.9%	8.8%	4.9%
Y/Y change	9.3%	1.1%	49.2%
	W Total	W SF	W MF
September	357,000	204,000	153,000
August	306,000	193,000	113,000
2022	356,000	231,000	125,000
M/M change	16.7%	5.7%	35.4%
Y/Y change	0.3%	-11.7%	22.4%

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

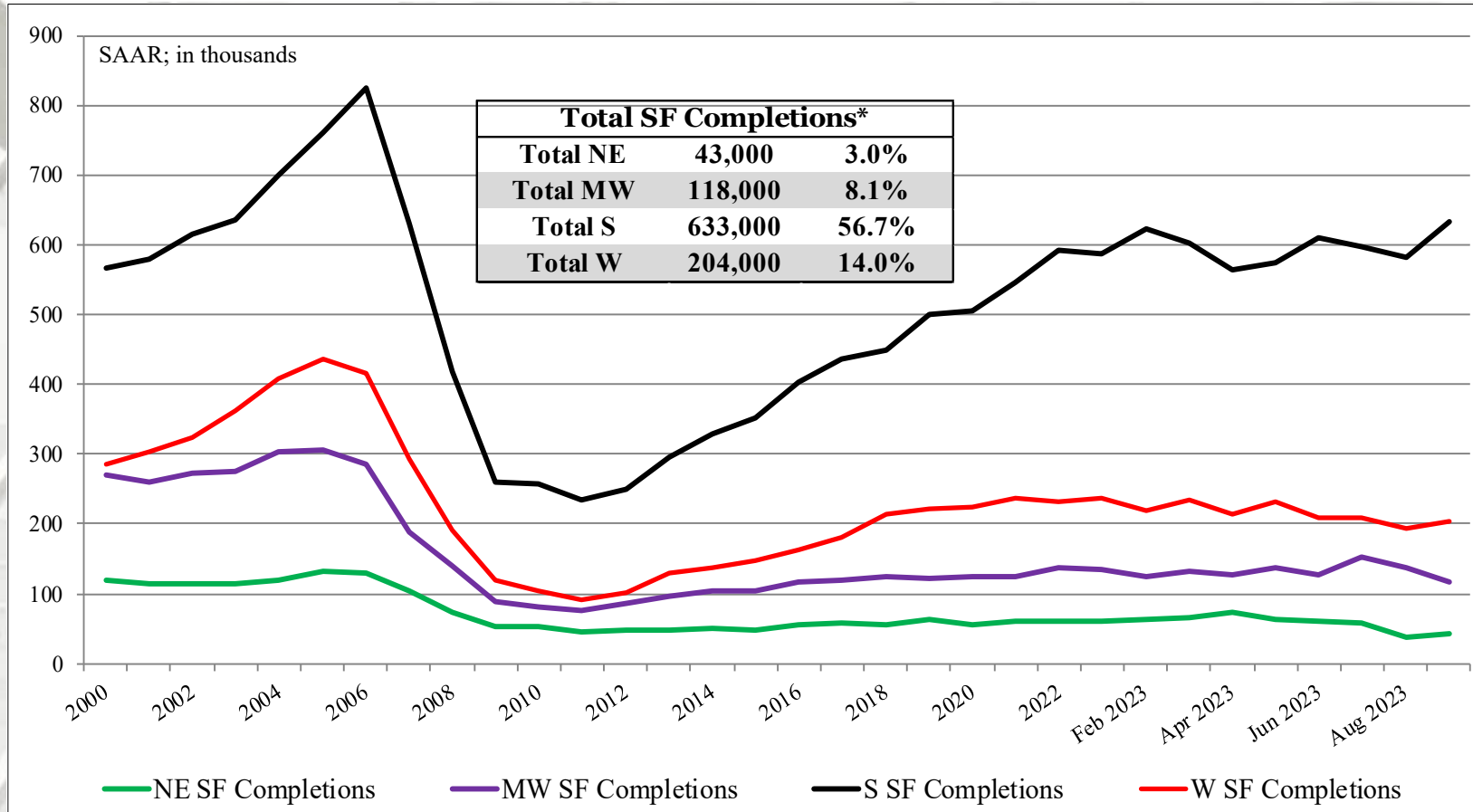
Total Housing Completions by Region



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

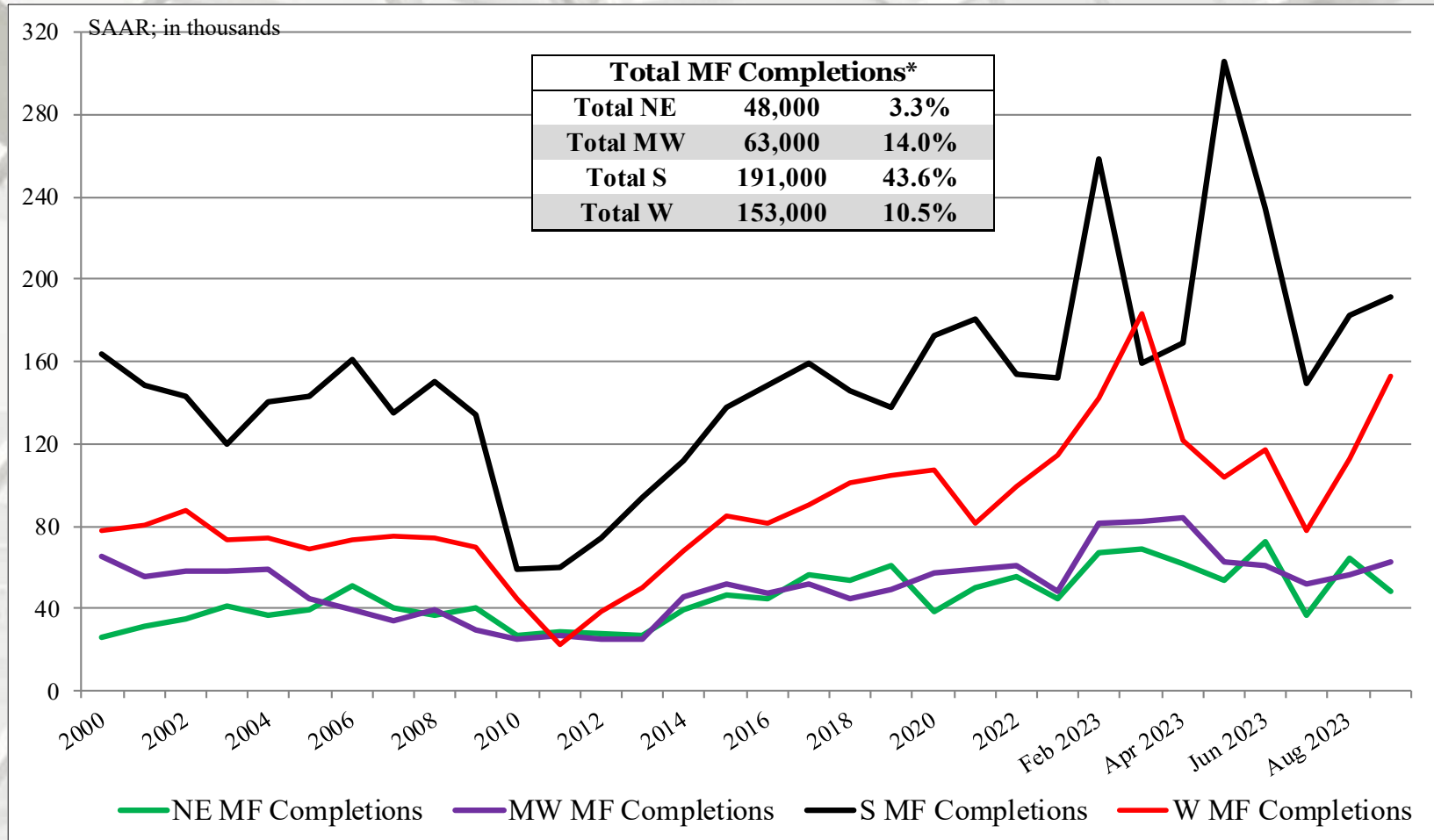


NE = Northeast, MW = Midwest, S = South, W = West

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

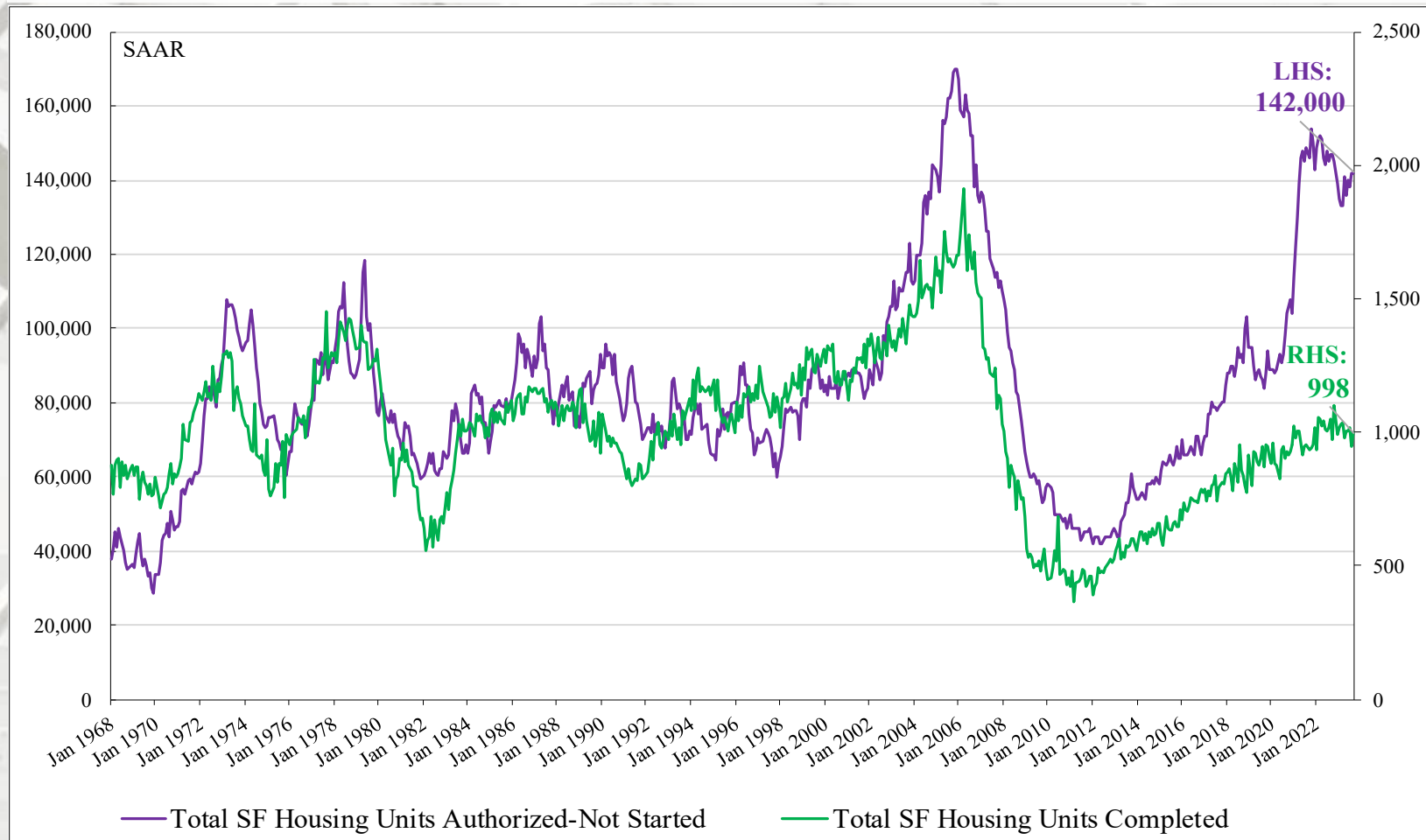


NE = Northeast, MW = Midwest, S = South, W = West

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 September, a slight increase from August, and SF authorized units “not” started were 142,000 units in September, 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.

New Single-Family House Sales

	New SF Sales*	Median Price	Mean Price	Month's Supply
September	759,000	\$418,800	\$503,900	6.9
August	676,000	\$433,100	\$522,700	7.7
2022	567,000	\$477,700	\$530,100	9.7
M/M change	12.3%	-3.3%	-3.6%	-10.4%
Y/Y change	33.9%	-12.3%	-4.9%	-28.9%

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

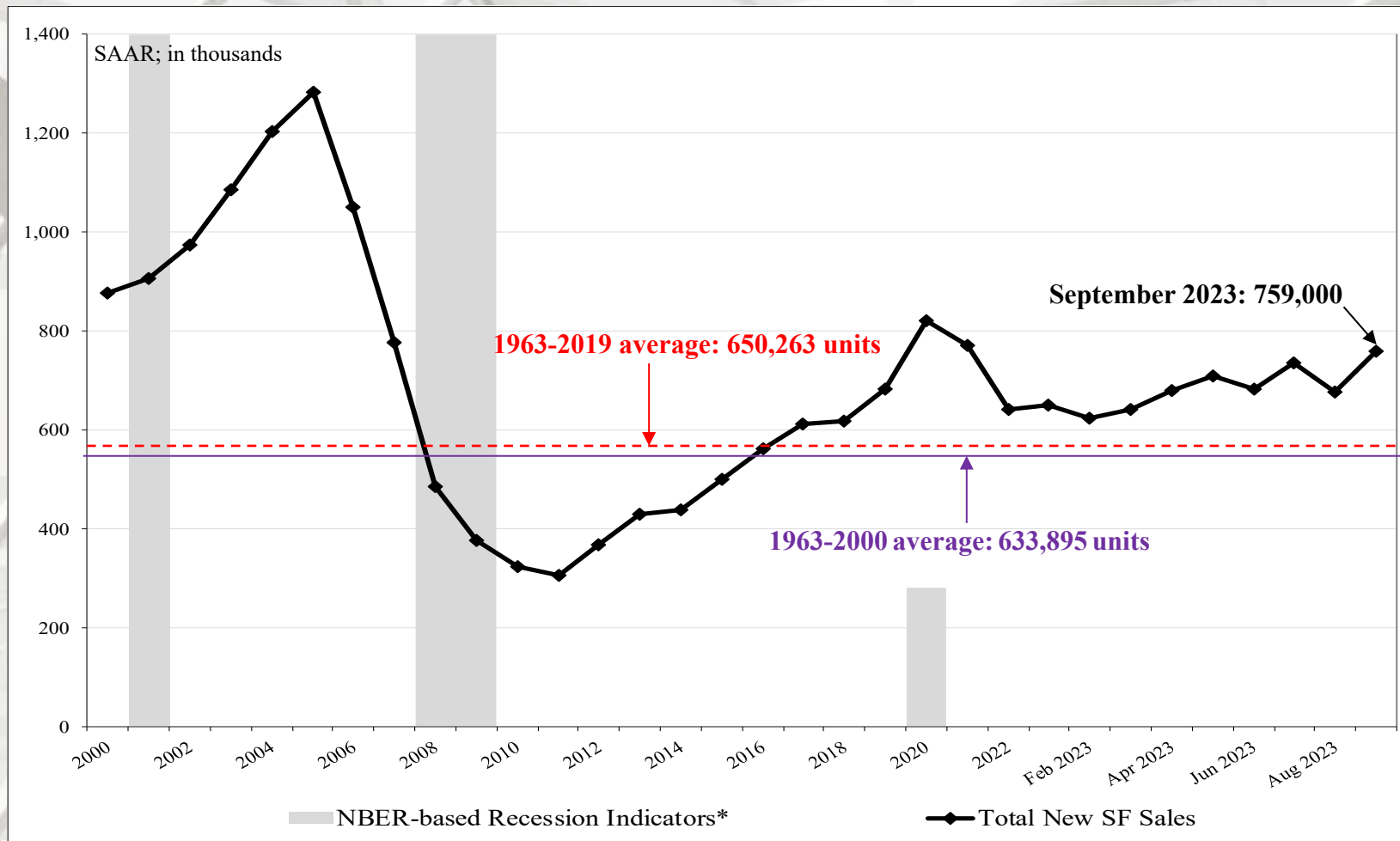
New SF sales were much greater than the consensus forecast³ of 685 m; range 635 m to 701 m. The past three month's new SF sales data also were revised:

June initial: 697 m, revised to 683 m.

July initial: 714 m, revised to 736 m.

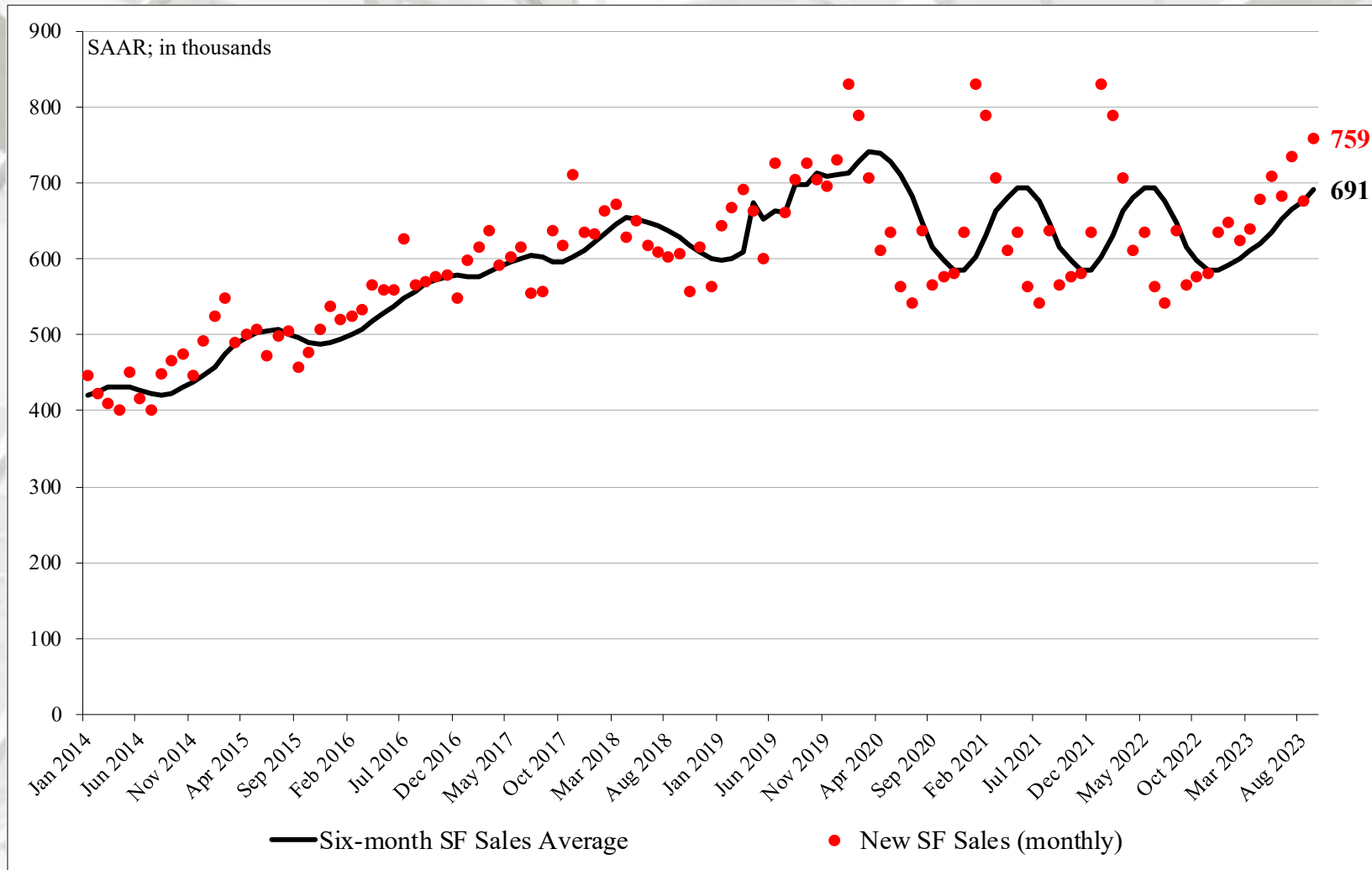
August initial: 675 m, revised to 676 m.

New SF House Sales



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

New SF Housing Sales: Six-month average & monthly



New SF House Sales by Region and Price Category

	NE	MW	S	W			
September	49,000	67,000	456,000	187,000			
August	40,000	64,000	398,000	174,000			
2022	30,000	64,000	351,000	122,000			
M/M change	22.5%	4.7%	14.6%	7.5%			
Y/Y change	63.3%	4.7%	29.9%	53.3%			
	≤ \$150m	\$150 - \$199.9m	\$200 - 299.9m	\$300 - \$399.9m	\$400 - \$499.9m	\$500 - \$749.9m	≥ \$750m
September ^{1,2,3,4}	0	1,000	10,000	17,000	11,000	15,000	7,000
August	0	0	7,000	14,000	11,000	13,000	9,000
2022	500	500	3,000	11,000	10,000	13,000	6,000
M/M change	0.0%	0.0%	42.9%	21.4%	0.0%	15.4%	-22.2%
Y/Y change	0.0%	0.0%	233.3%	54.5%	10.0%	15.4%	16.7%
% of New SF sales	0.8%	0.8%	13.3%	31.7%	20.0%	21.7%	13.3%

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

¹ All data are SAAR

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

³ Detail September not add to total because of rounding.

⁴ Housing prices are adjusted at irregular intervals.

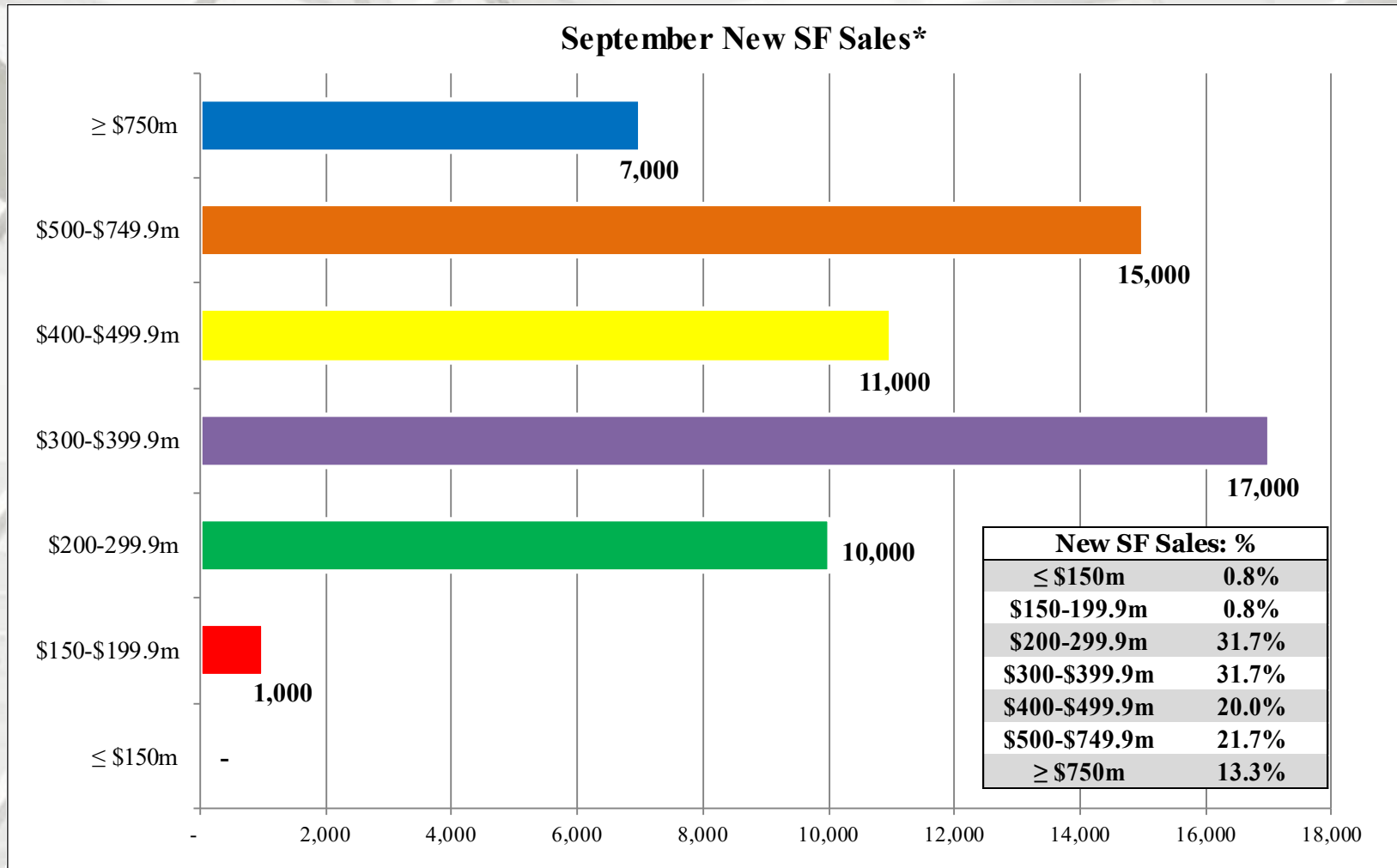
⁵ Z = Less than 500 units or less than 0.5 percent

Sources: ^{1,2,3} <https://www.census.gov/construction/nrs/index.html>; 10/25/23;

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

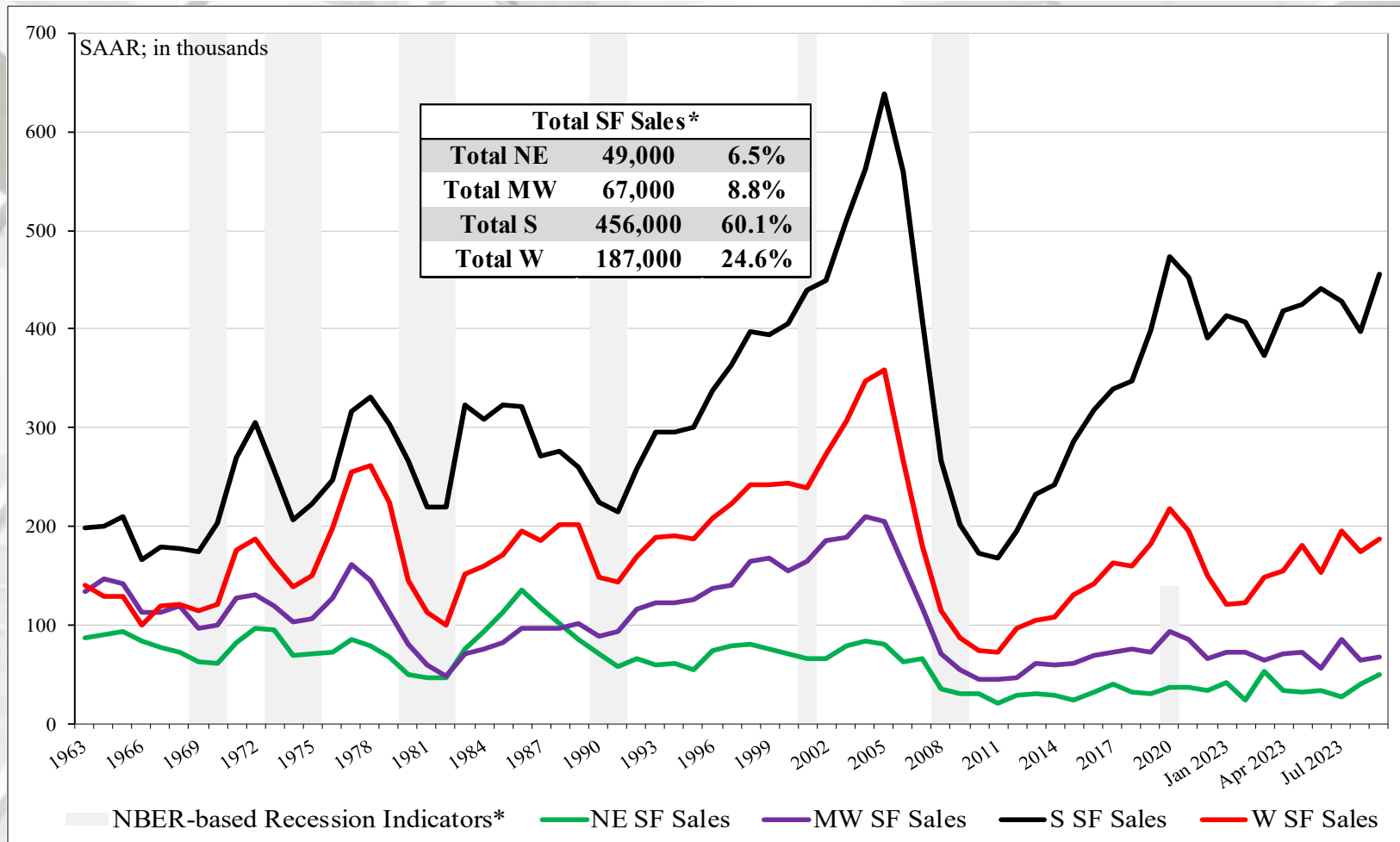
Return TOC

New SF House Sales



* Total new sales by price category and percent.

New SF House Sales by Region

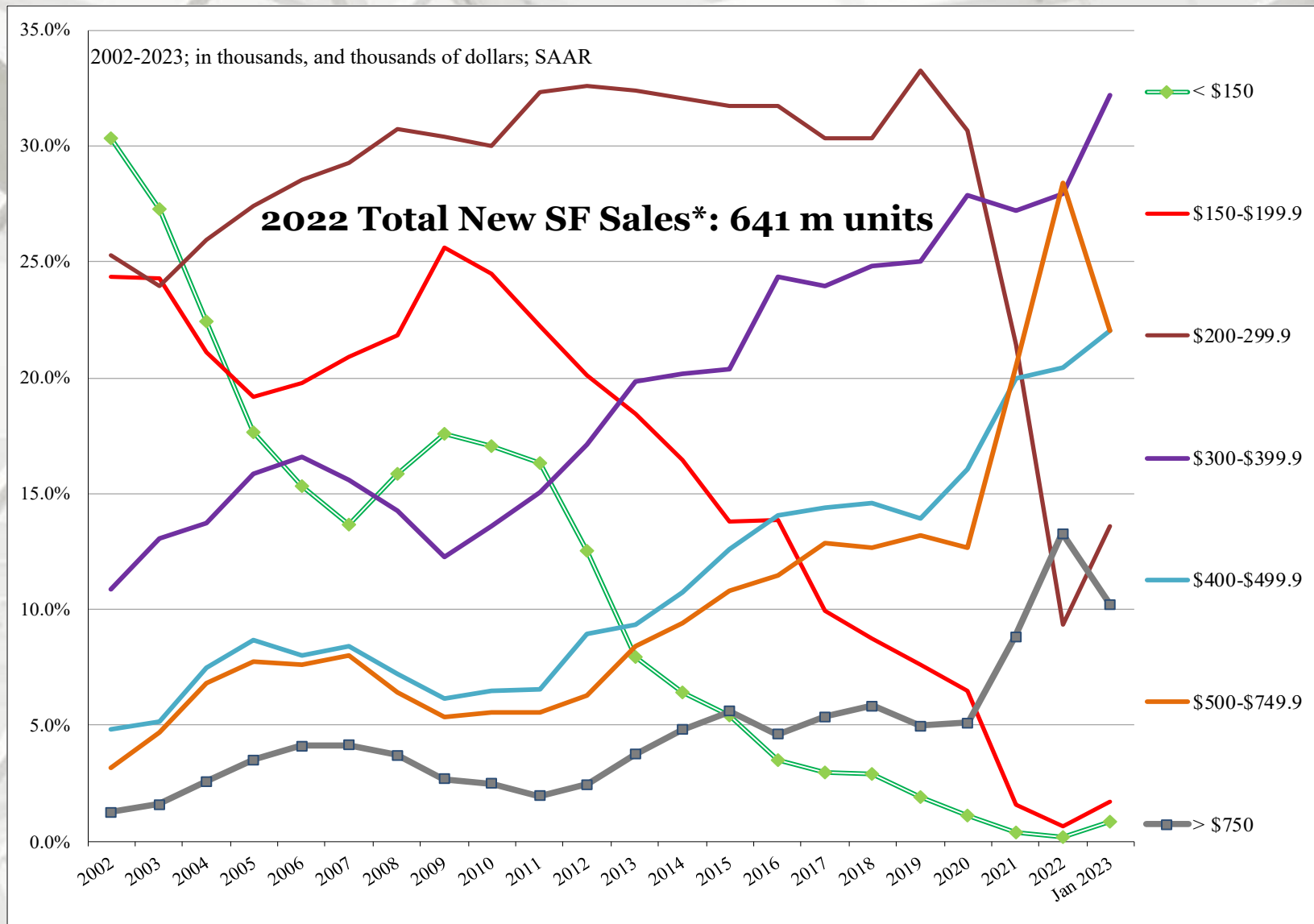


NE = Northeast; MW = Midwest; S = South; W = West

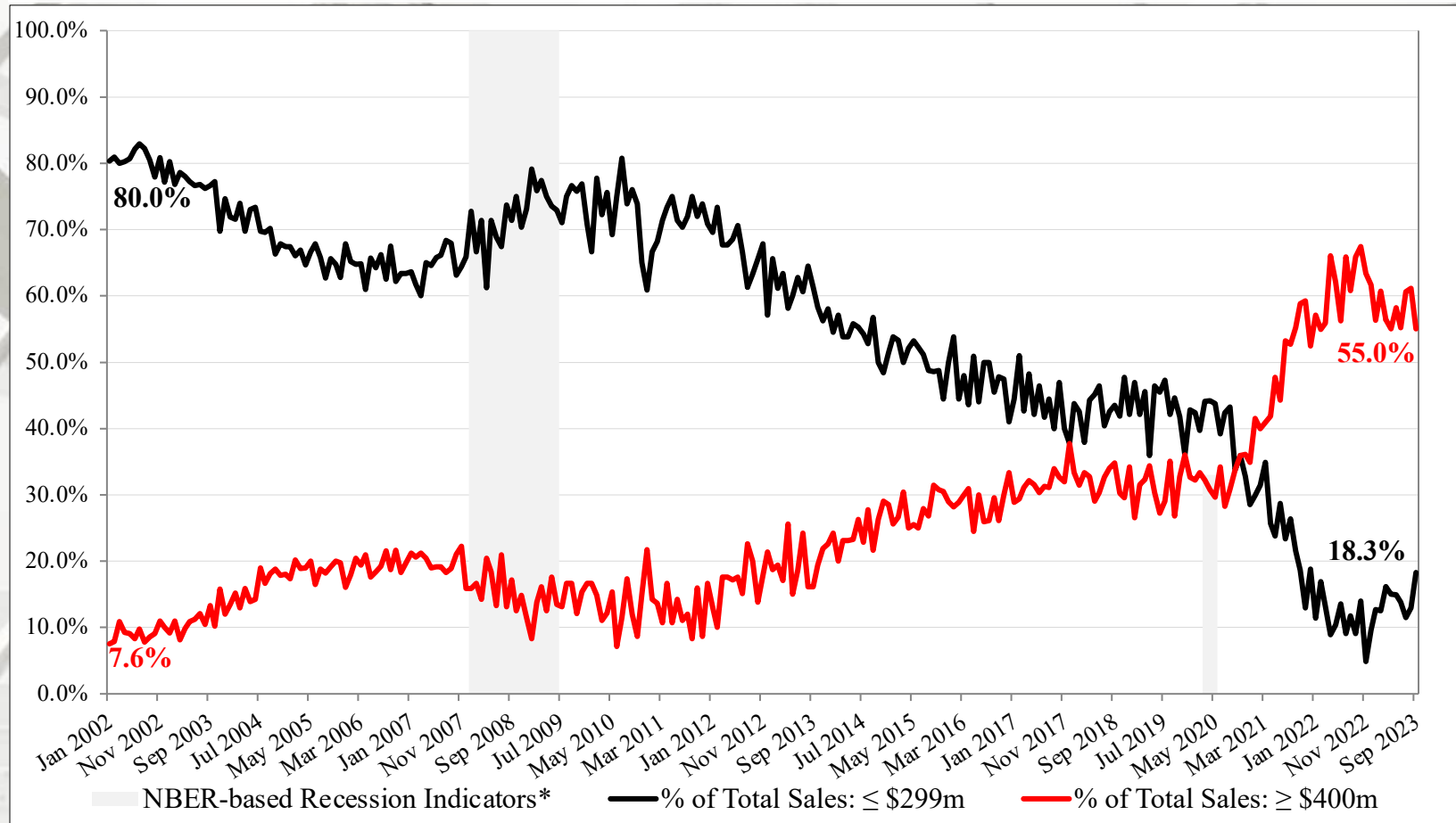
* Percentage of total new sales.

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

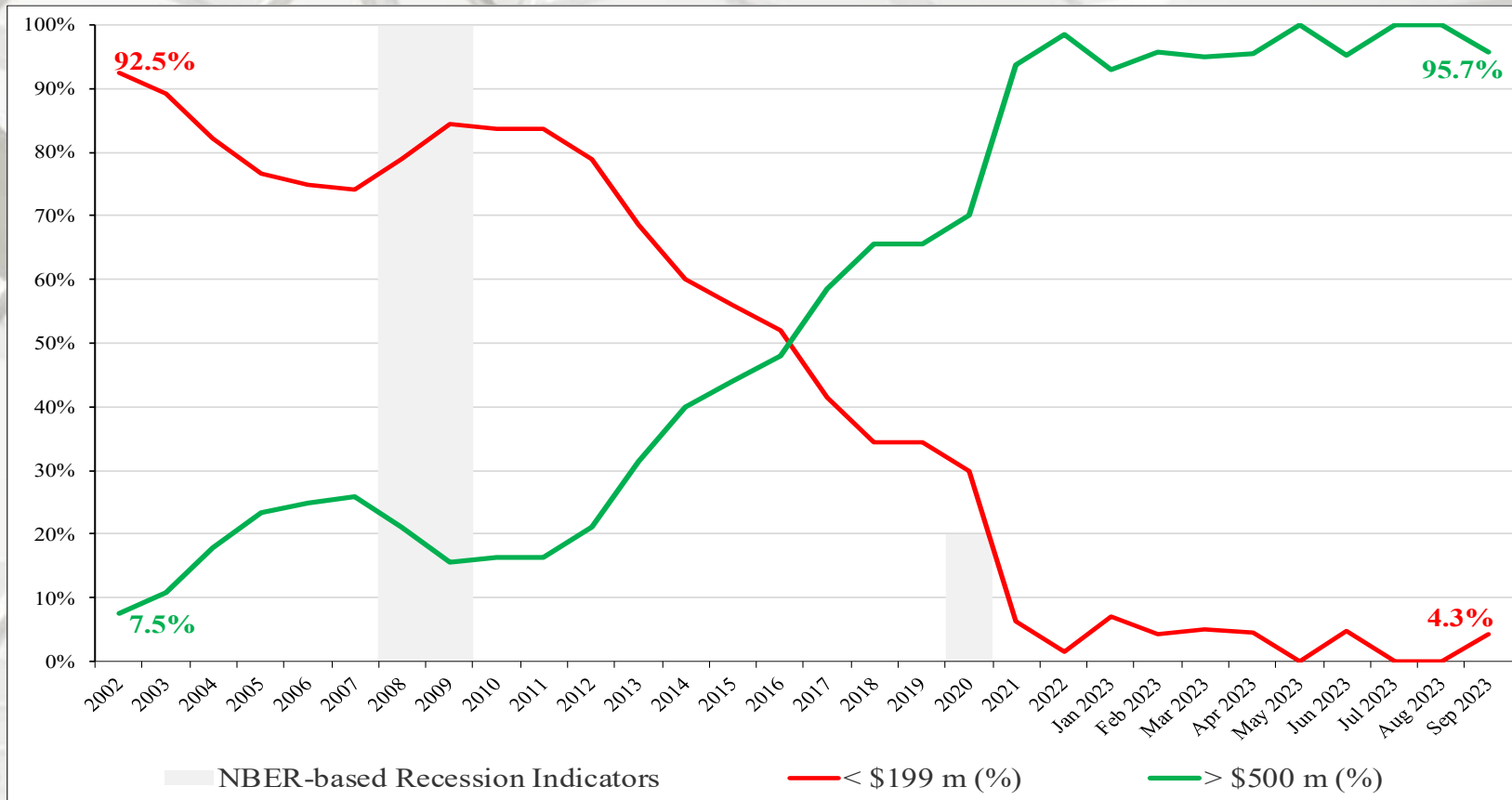


* NBER based Recession Indicator Bars for the United States from the Period following the Peak through the Trough (FRED, St. Louis).

New SF Sales: ≤ \$299m and ≥ \$400m: 2002 – September 2023

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

New SF House Sales

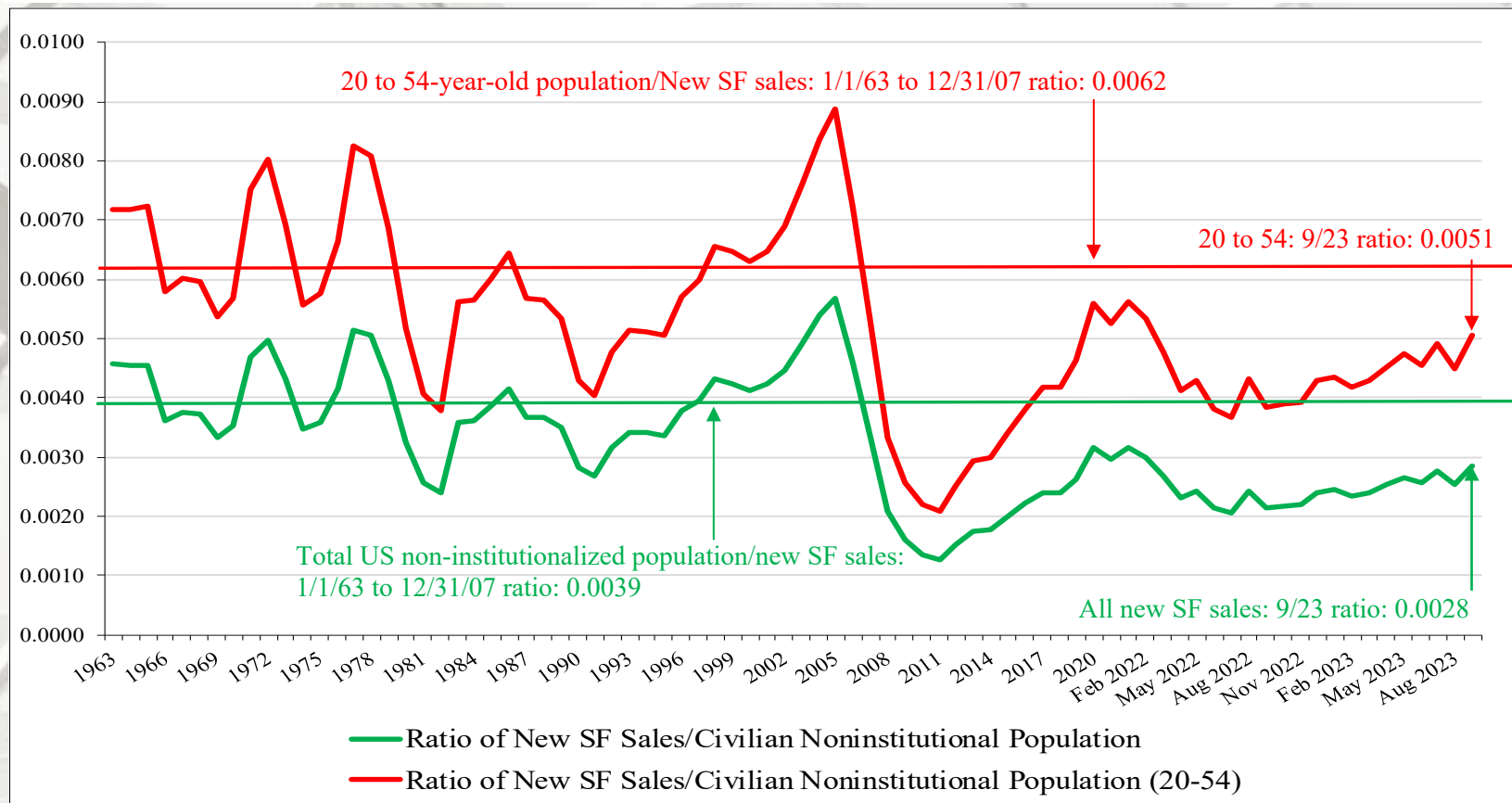


New SF Sales: ≤ \$ 200m and ≥ \$500m: 2002 to September 2022

The number of ≤ \$200 thousand SF houses has declined dramatically since 2002^{1,2}. Subsequently, from 2012 onward, the ≥ \$500 thousand class has soared (on a percentage basis) in contrast to the ≤ \$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

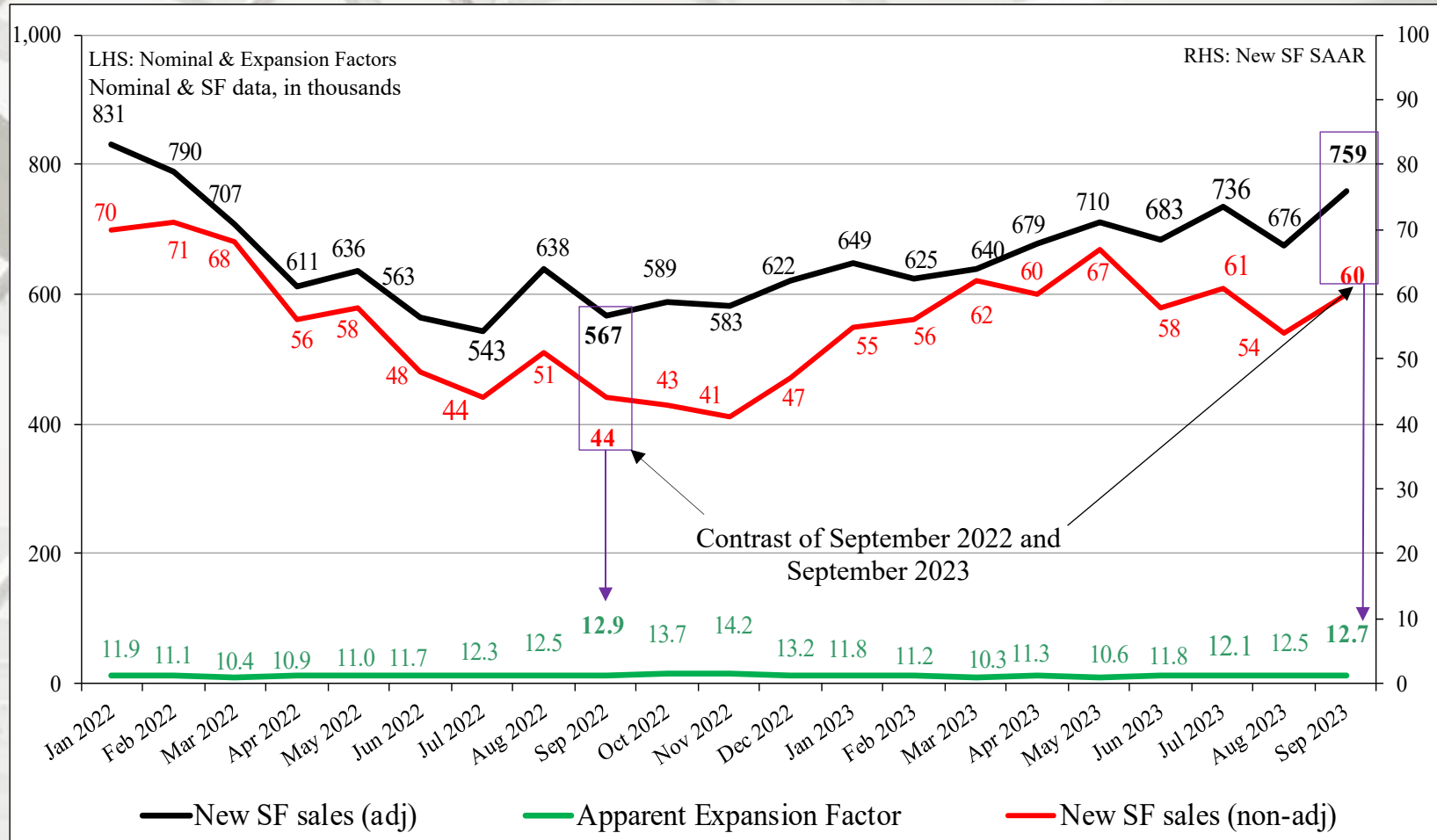


New SF sales adjusted for the US population

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 September 2023 it was 0.0028 – an increase from August (0.0025). The non-institutionalized population, aged 20 to 54 long-term ratio is 0.0062; in September 2023 it was 0.0051 – also an improvement from August (0.0049). 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

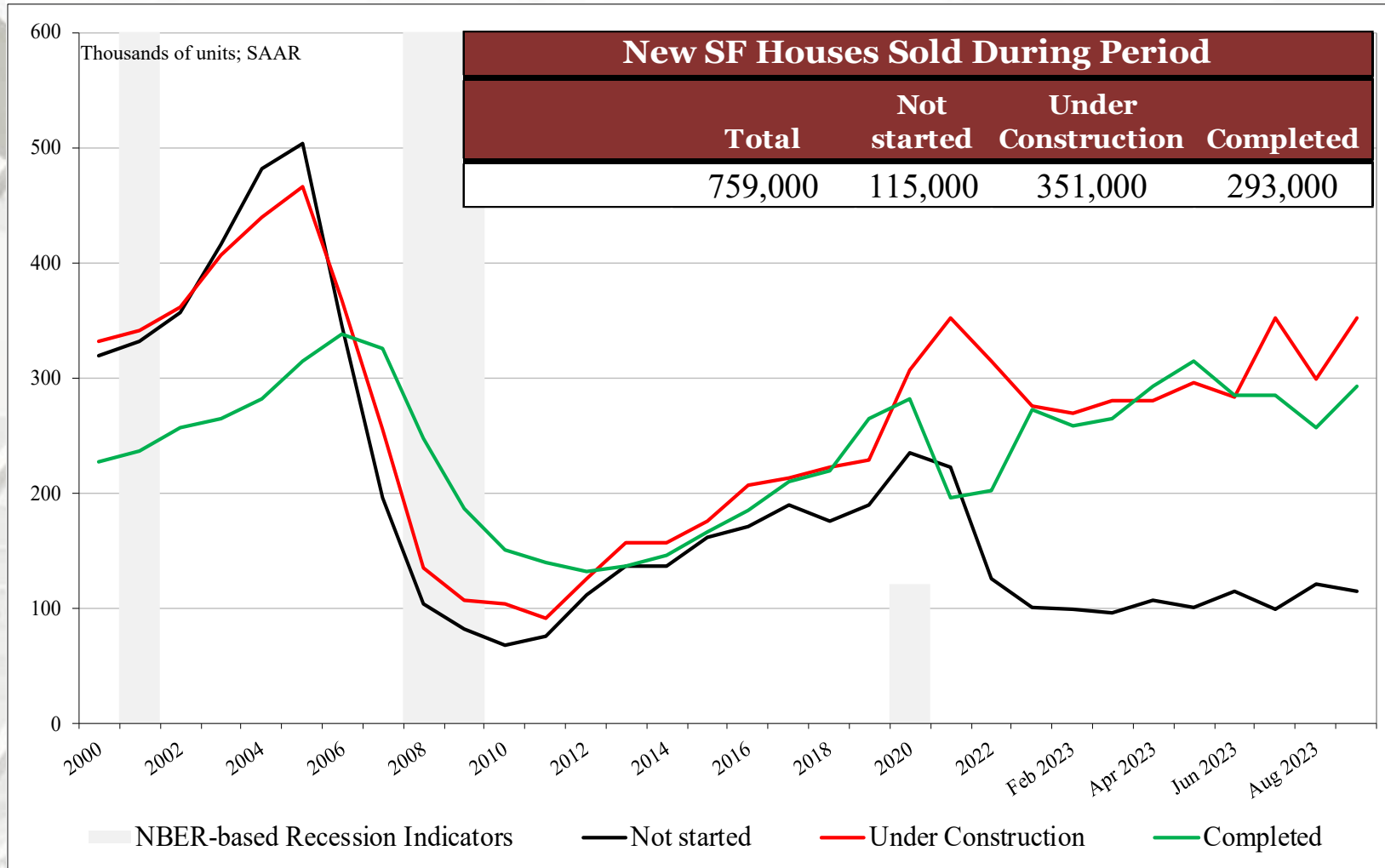
New SF House Sales

New SF Houses Sold During Period

	Total	Not started	Under Construction	Completed
September	759,000	115,000	351,000	293,000
August	676,000	120,000	299,000	257,000
2022	460,000	96,000	310,000	54,000
M/M change	12.3%	-4.2%	17.4%	14.0%
Y/Y change	65.0%	19.8%	13.2%	442.6%
Total percentage		15.2%	46.2%	38.6%

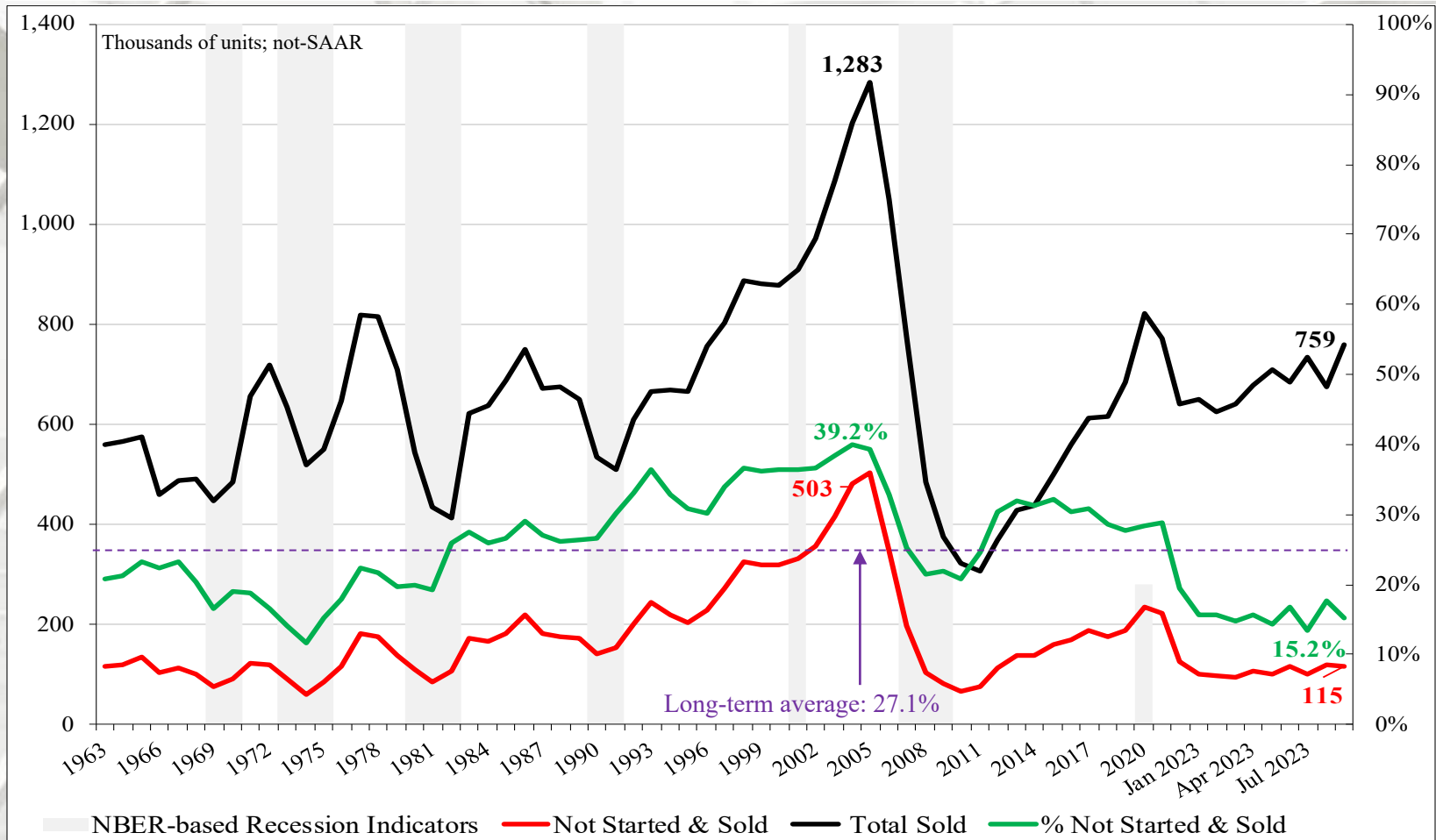
All data is SAAR

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 September (759 m), 15.1% (115 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

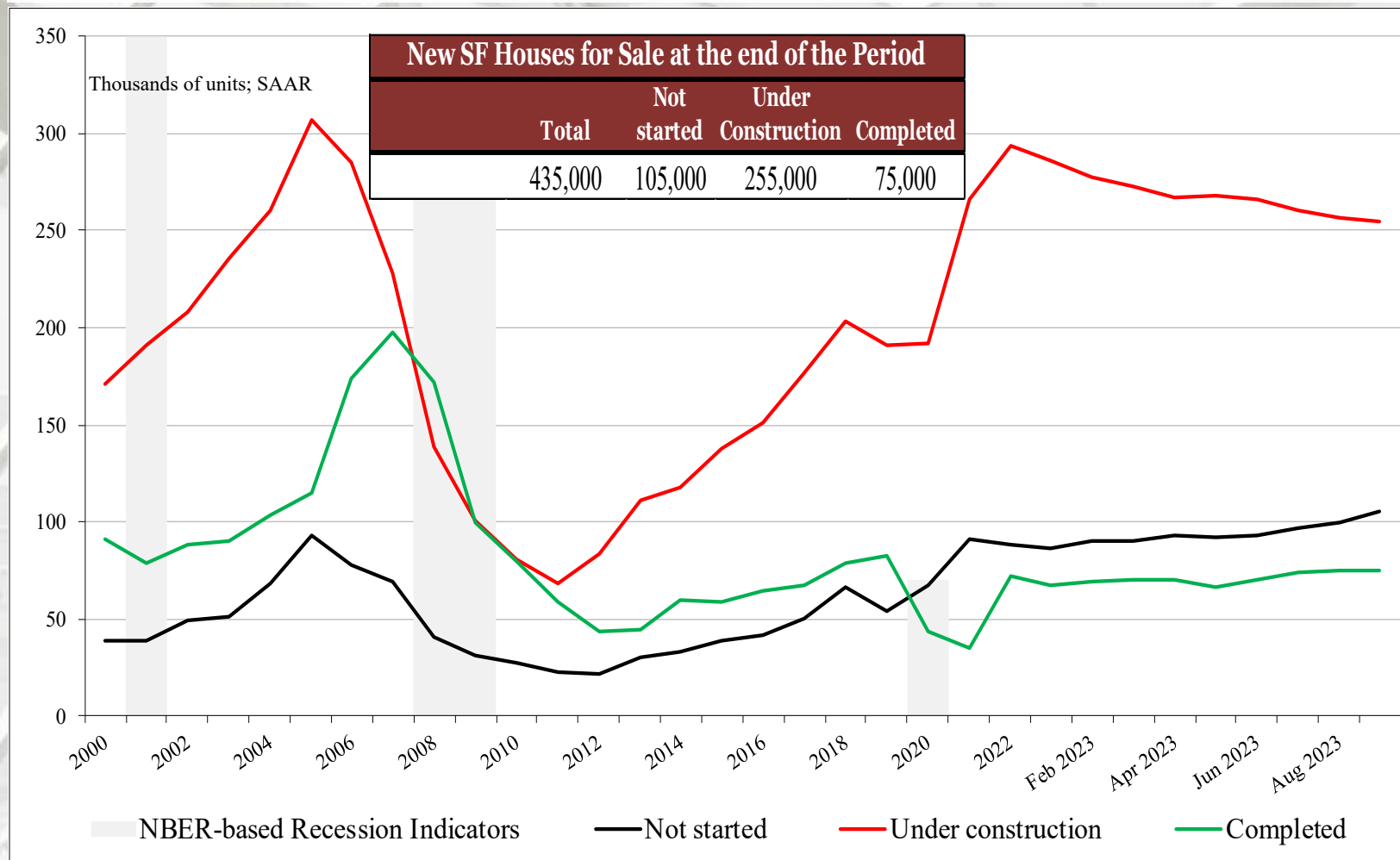
New SF Houses for Sale at the end of the Period

	Total	Not started	Under Construction	Completed
September	435,000	105,000	255,000	75,000
August	432,000	100,000	257,000	75,000
2022	460,000	96,000	310,000	54,000
M/M change	0.7%	5.0%	-0.8%	0.0%
Y/Y change	-5.4%	9.4%	-17.7%	38.9%
Total percentage		24.1%	58.6%	17.2%

Not SAAR

Of houses listed for sale (435 m) in September, 17.2% (75 m) have been built. In the 'ground had not been broken for construction' or 'not started' category, 105 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).

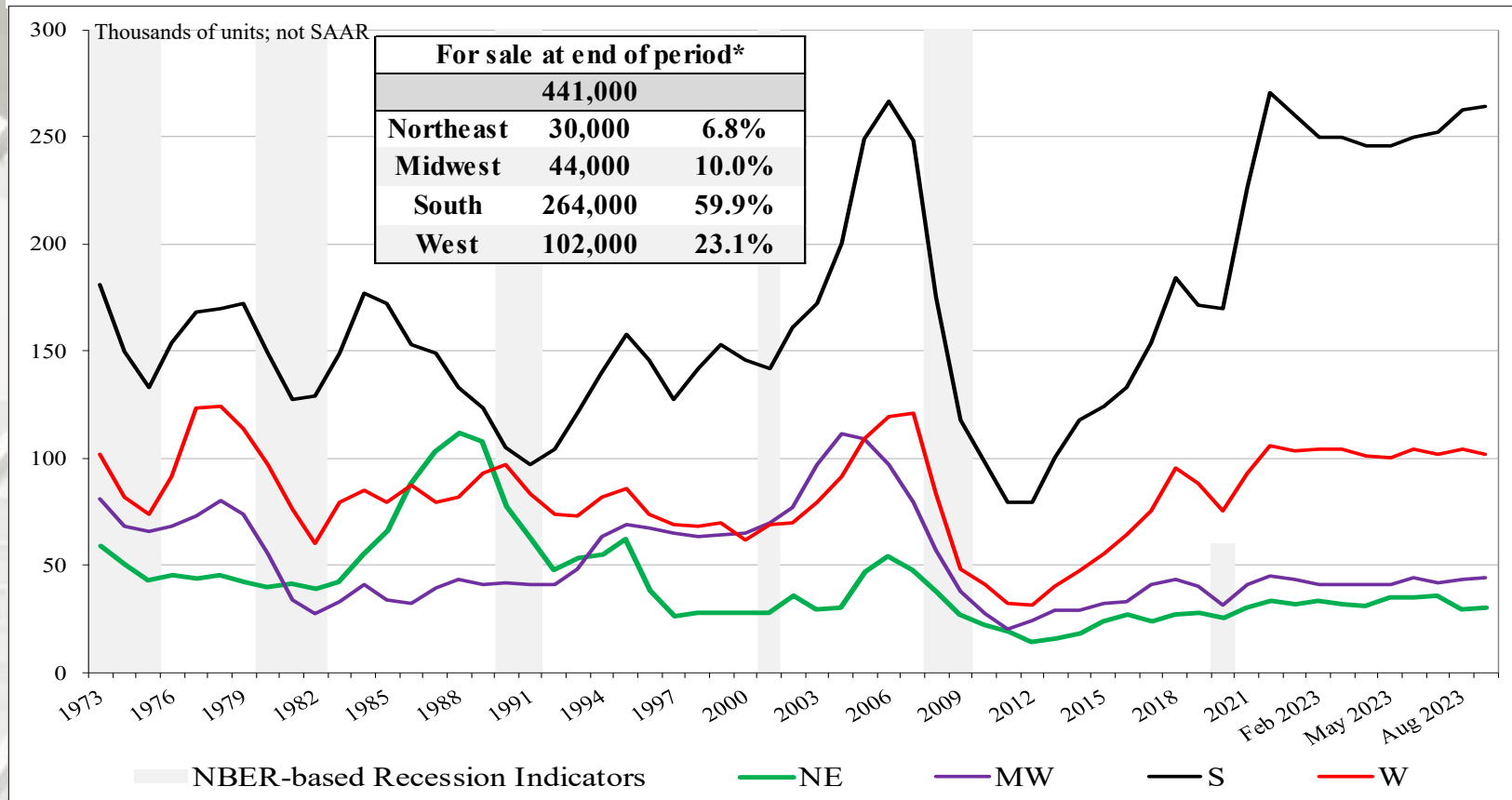
New SF House Sales

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

	Total	NE	MW	S	W
September	441,000	30,000	44,000	264,000	102,000
August	439,000	29,000	43,000	263,000	104,000
2022	471,000	29,000	47,000	282,000	113,000
M/M change	0.5%	3.4%	2.3%	0.4%	-1.9%
Y/Y change	-6.4%	3.4%	-6.4%	-6.4%	-9.7%

* Not SAAR

New SF Houses for Sale at End of Period by Region

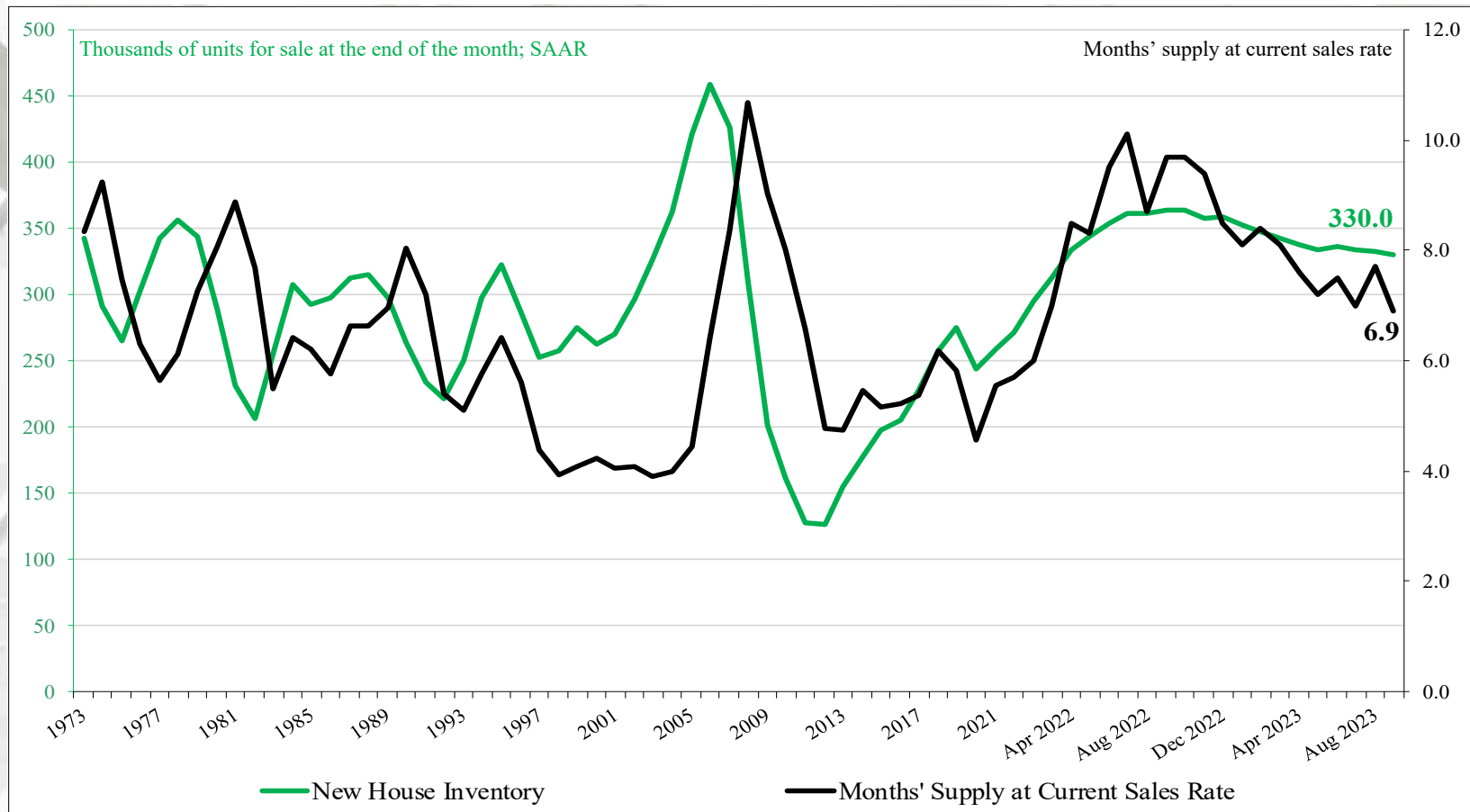


NE = Northeast; MW = Midwest; S = South; W = West

* Percentage of new SF sales.

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

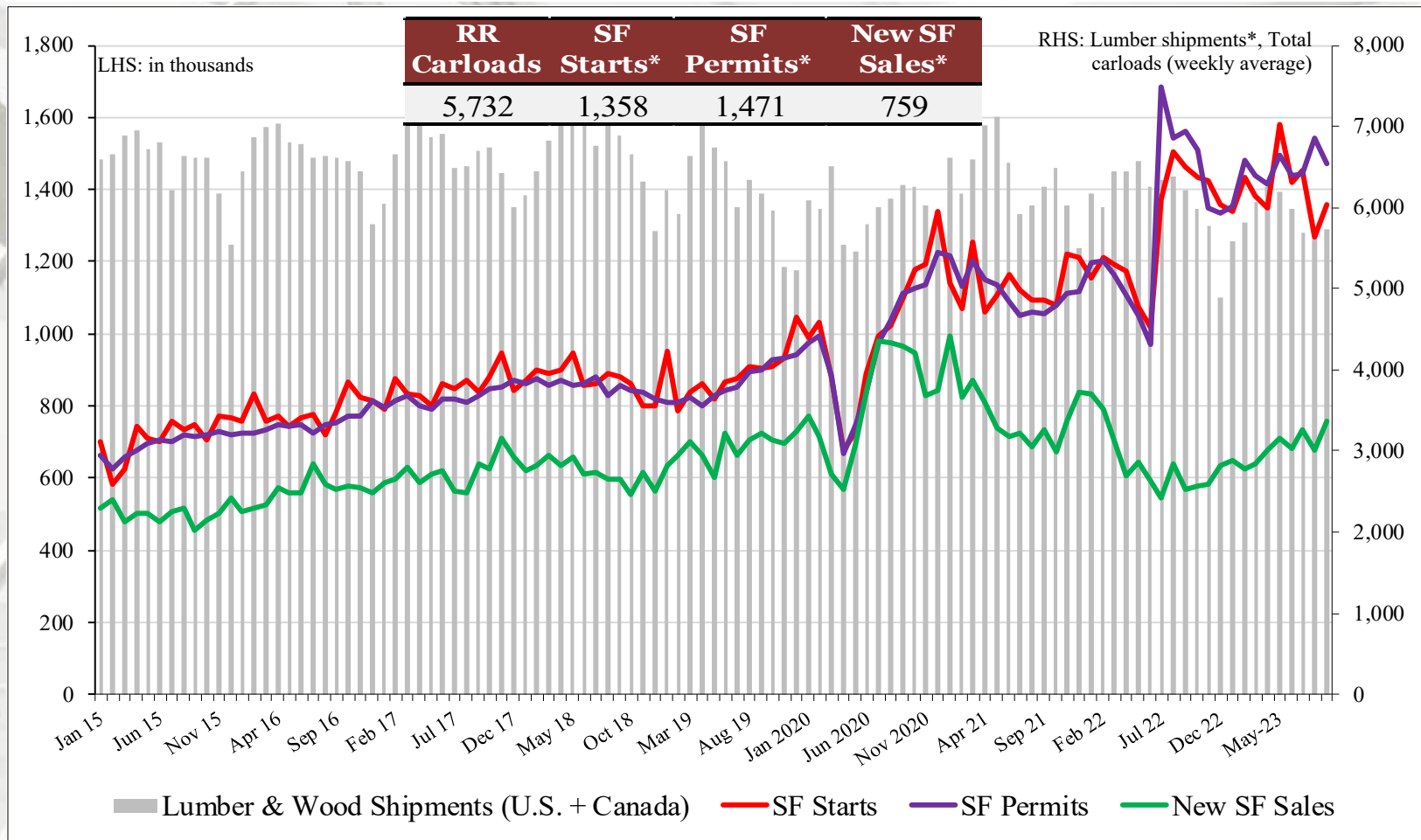
Months' Supply and New House Inventory^a



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

The months' supply of new houses for sale at the end of September was 6.9, greater than the historically preferred number of five- to six-months (SAAR).

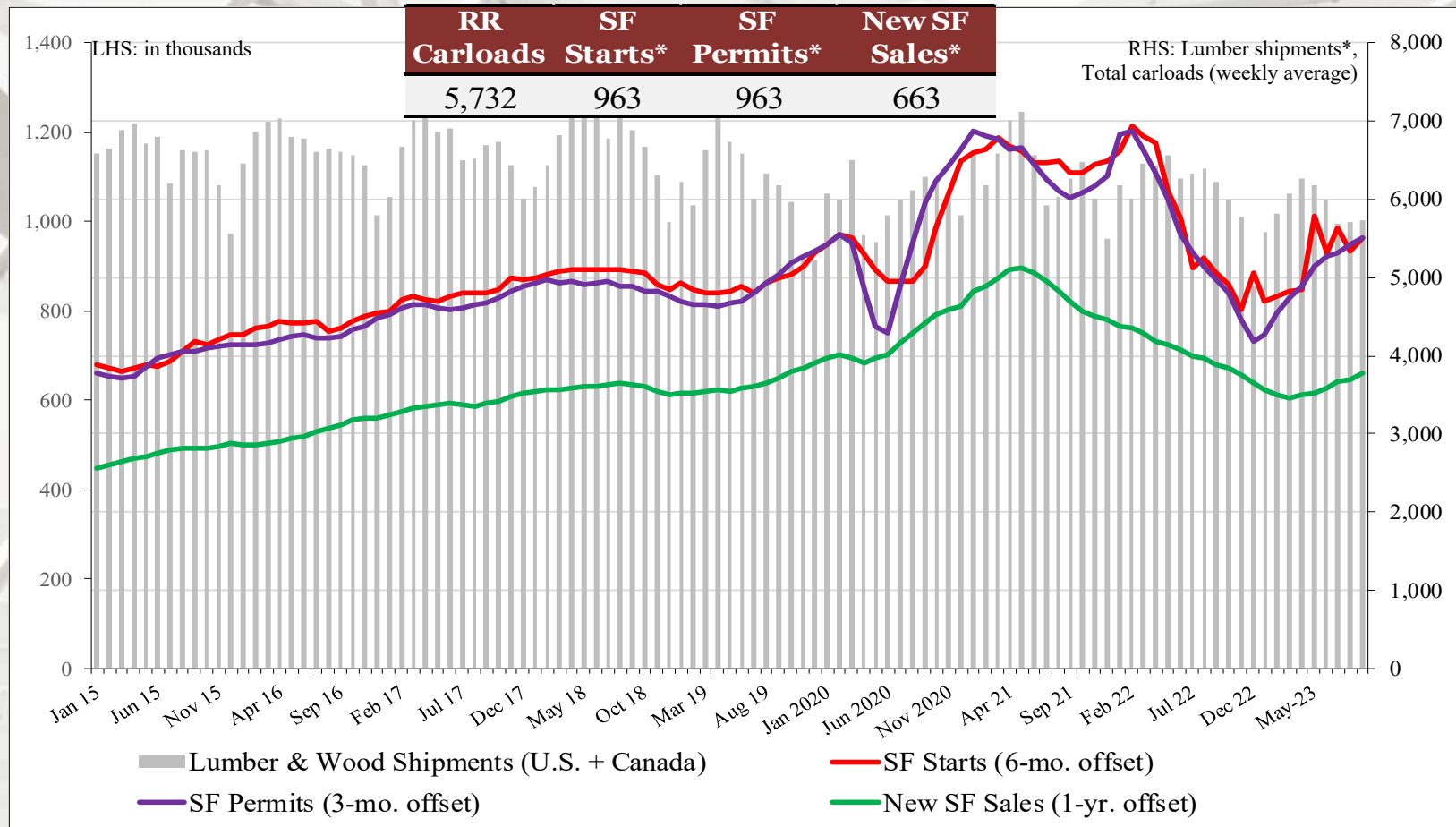
U.S.-Canada Lumber & Wood Shipments vs. SF Starts, Permits, and New Sales



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

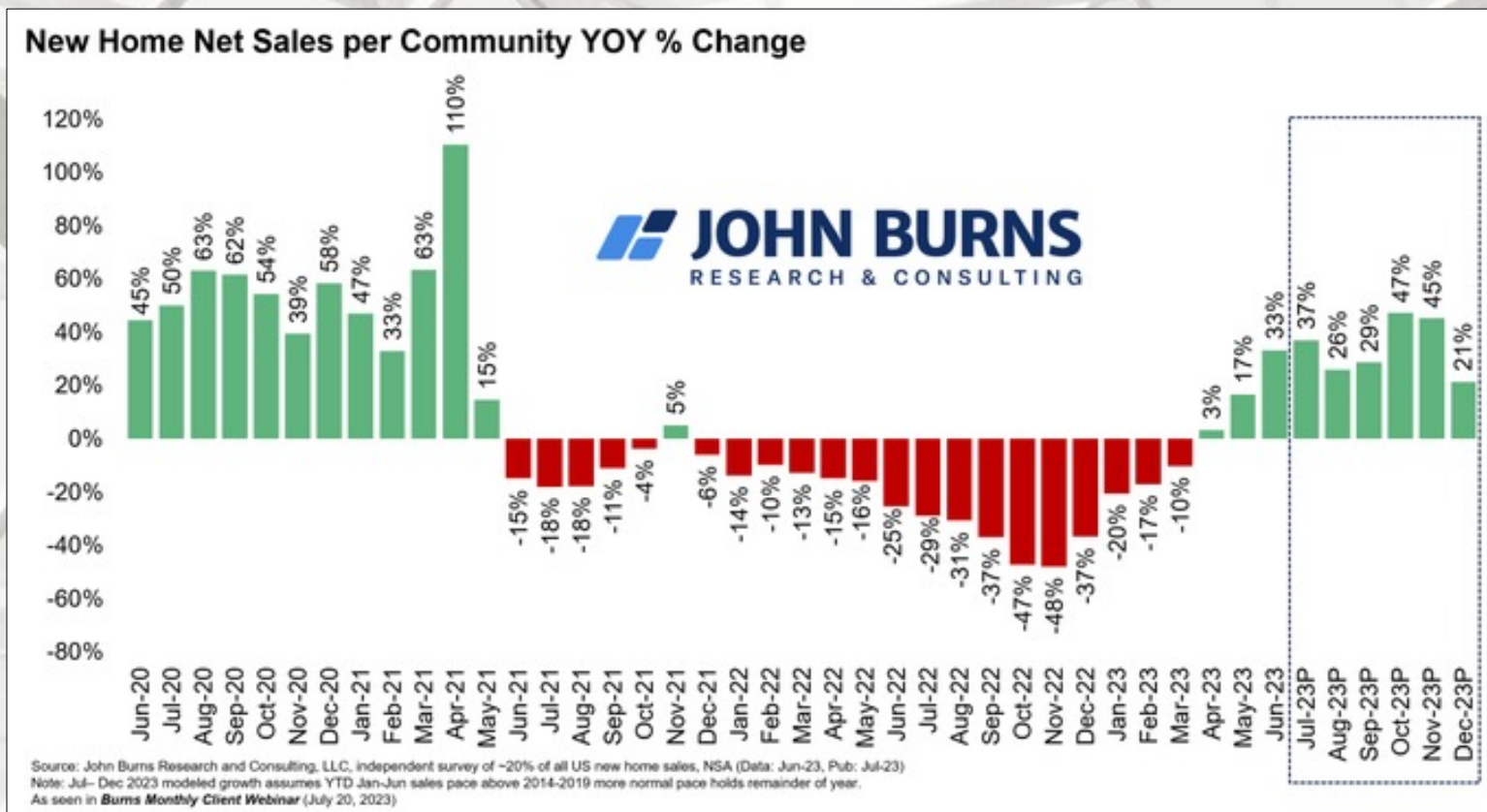
U.S.-Canada Lumber & Wood Shipments vs. SF Starts, Permits, and New Sales



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

“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

September 2023 Construction Spending

	Total Private Residential*	SF	MF	Improvement**
September	\$872,038	\$402,319	\$135,650	\$334,069
August	\$866,550	\$397,249	\$135,847	\$333,454
2022	\$891,657	\$427,625	\$110,911	\$353,121
M/M change	0.6%	1.3%	-0.1%	0.2%
Y/Y change	-2.2%	-5.9%	22.3%	-5.4%

* 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\$.

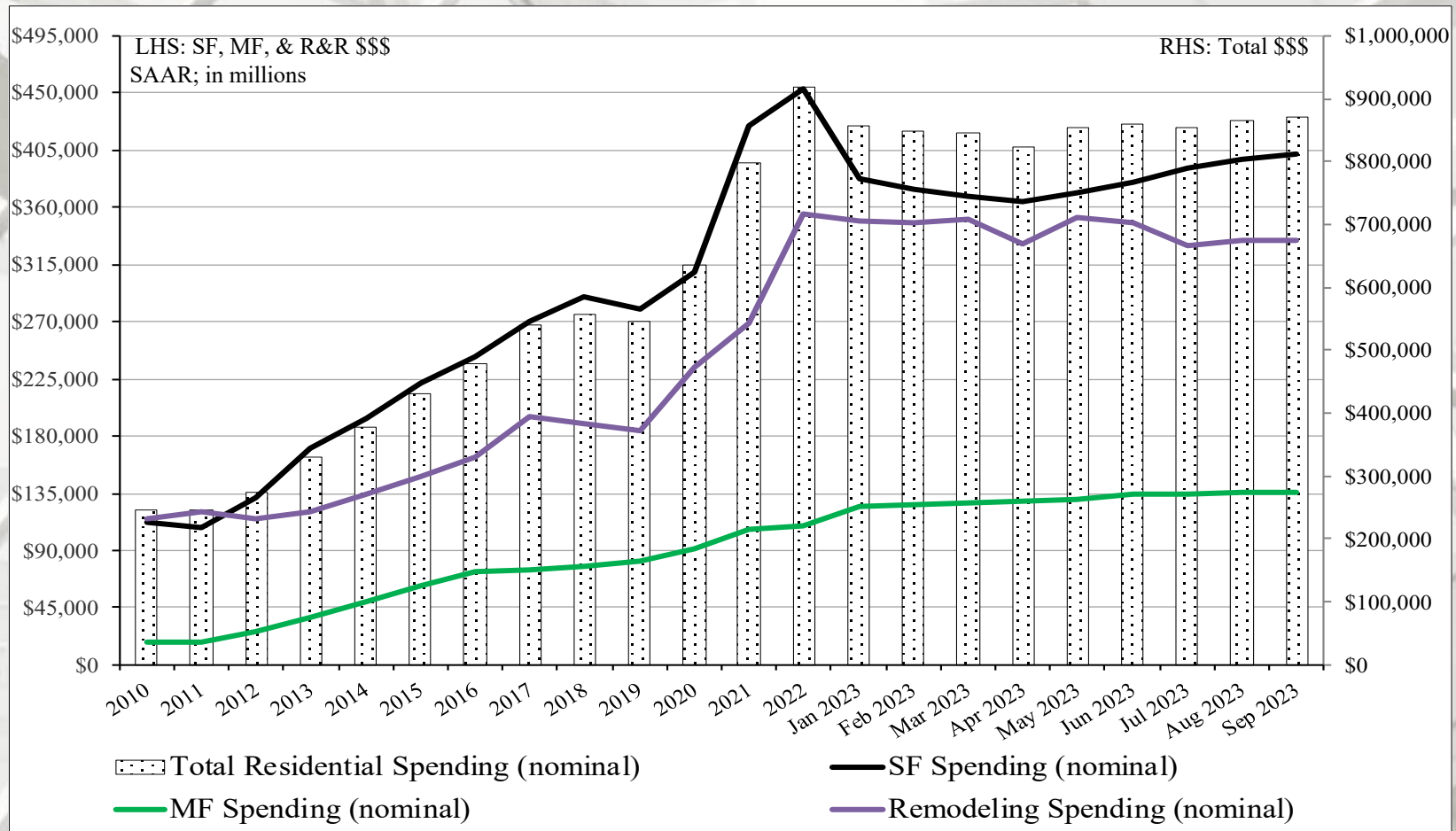
Total private residential construction spending includes new single-family, new multi-family, and improvement (AKA repair and remodeling) expenditures.

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.

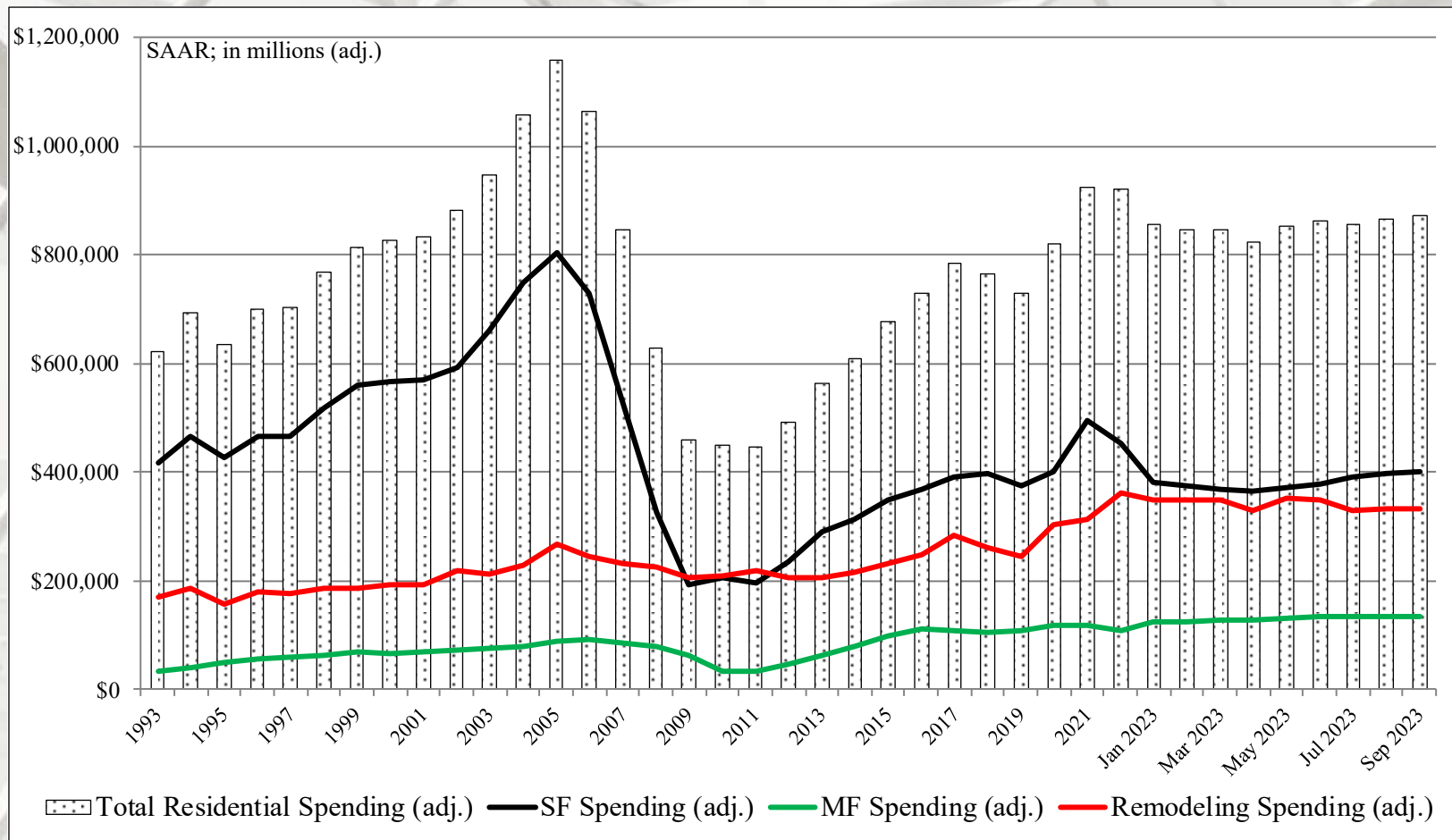
Total Construction Spending (nominal): 2000 – September 2023



Reported in nominal US\$.

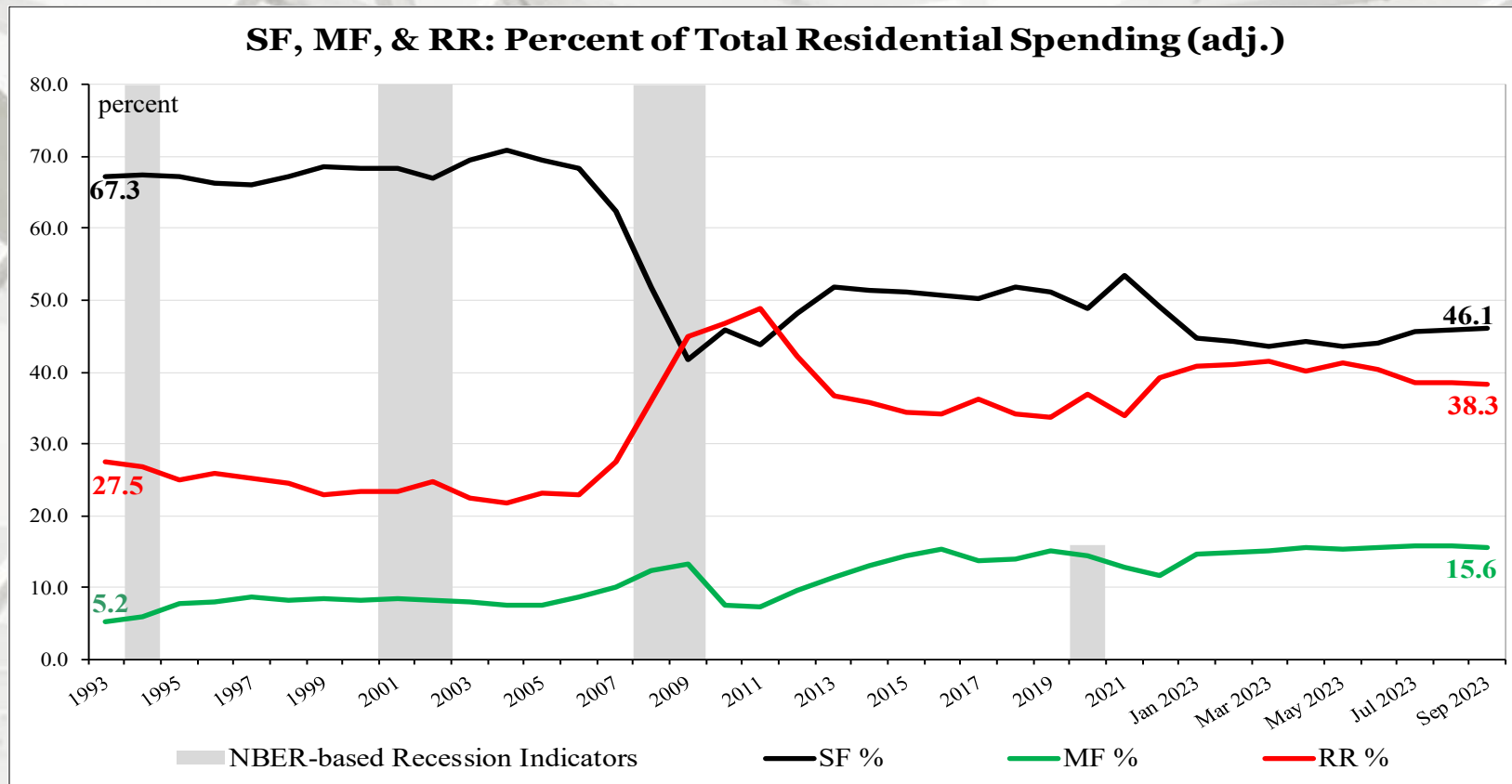
The US DOC does not report improvement spending directly, this is a monthly estimation for 2022.

Total Construction Spending (adjusted): 1993 – September 2023



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

Construction Spending Shares: 1993 – September 2023



Total Residential Spending: 1993 through 2006

SF spending average: 69.2%

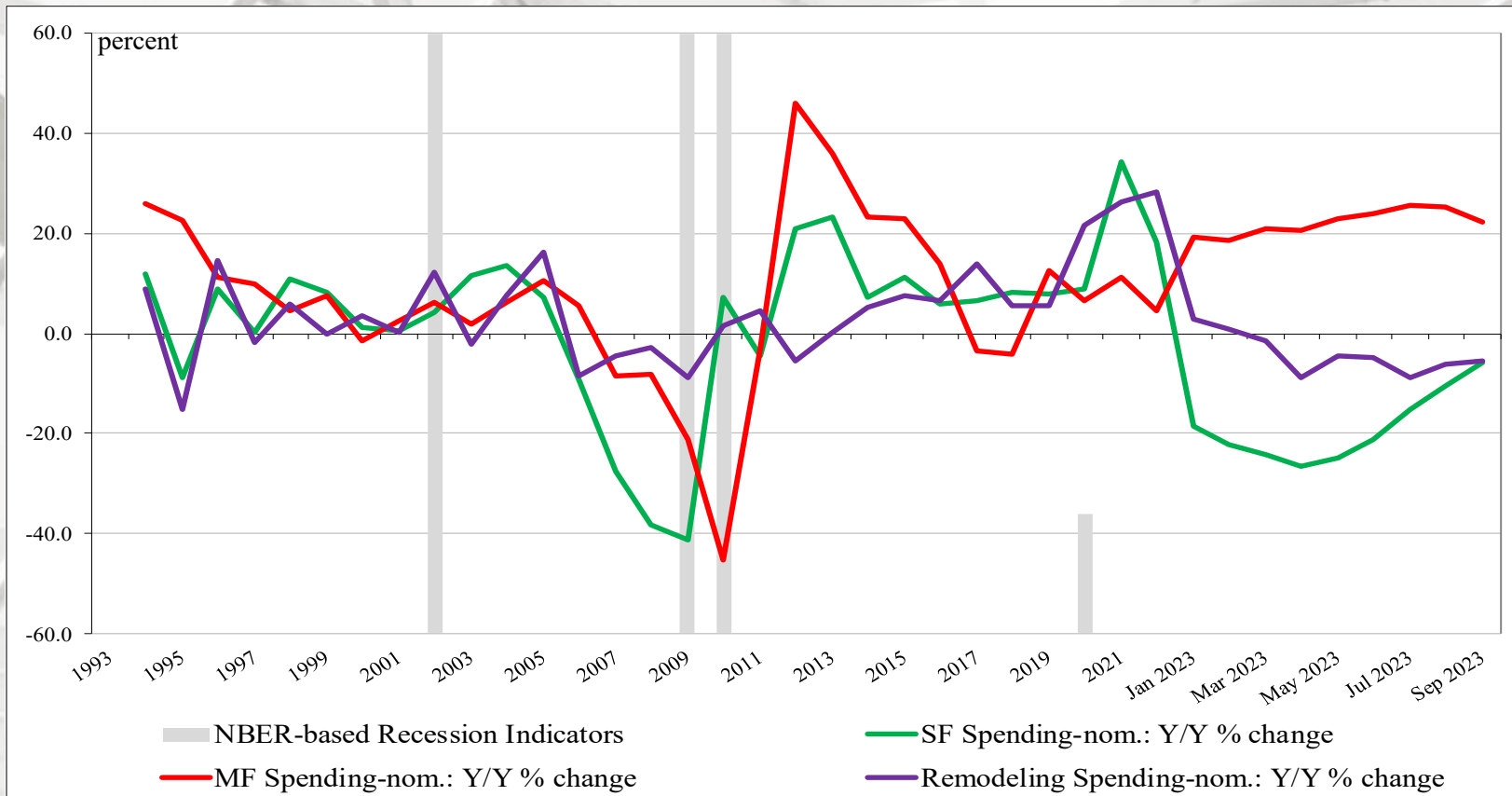
MF spending average: 7.5%

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

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

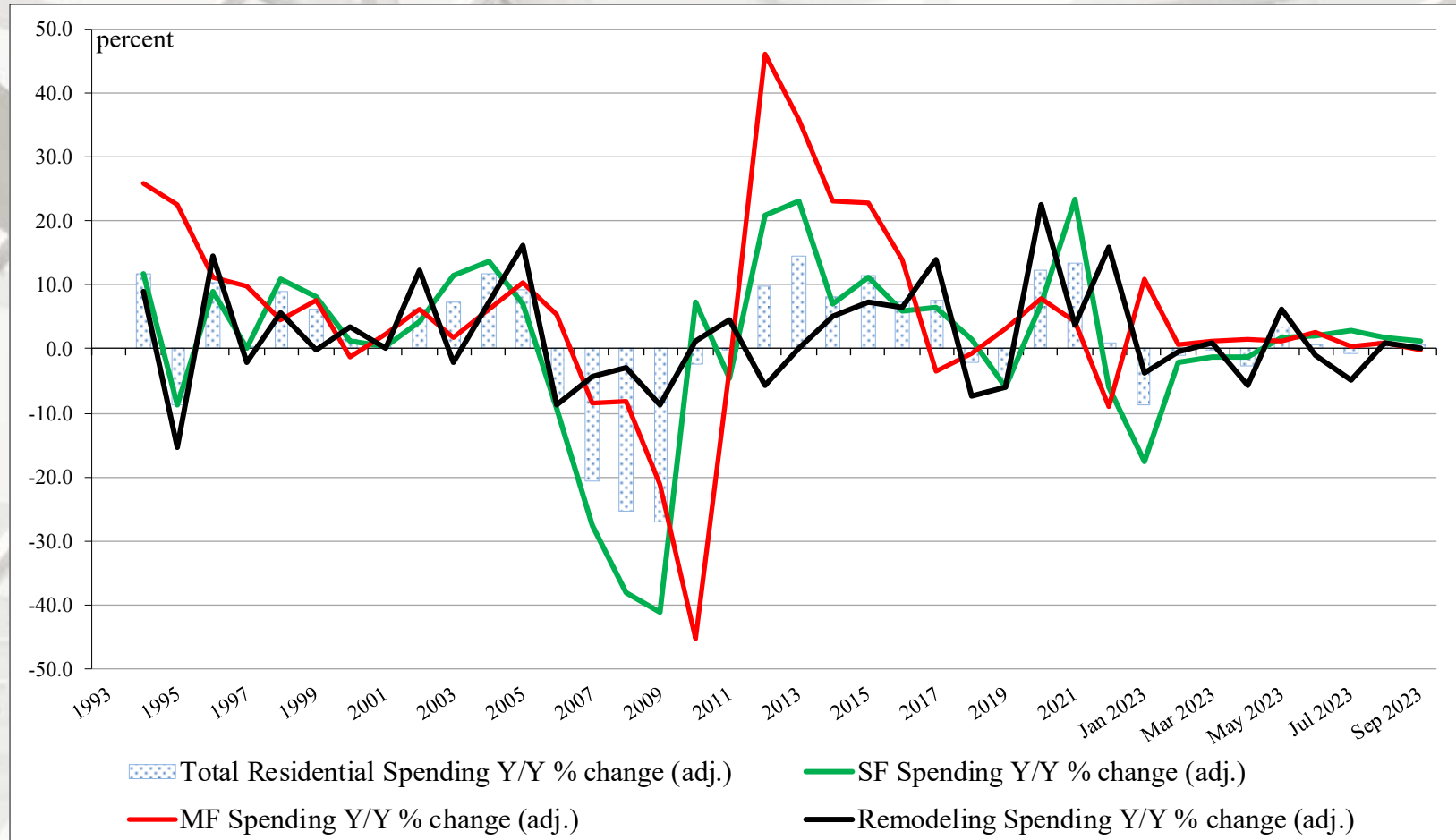


Nominal Residential Construction Spending: Y/Y percentage change, 1993 to September 2023

Presented above is the percentage change of Y/Y construction spending. MF expenditures were positive on a percentage basis, year-over-year (September 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

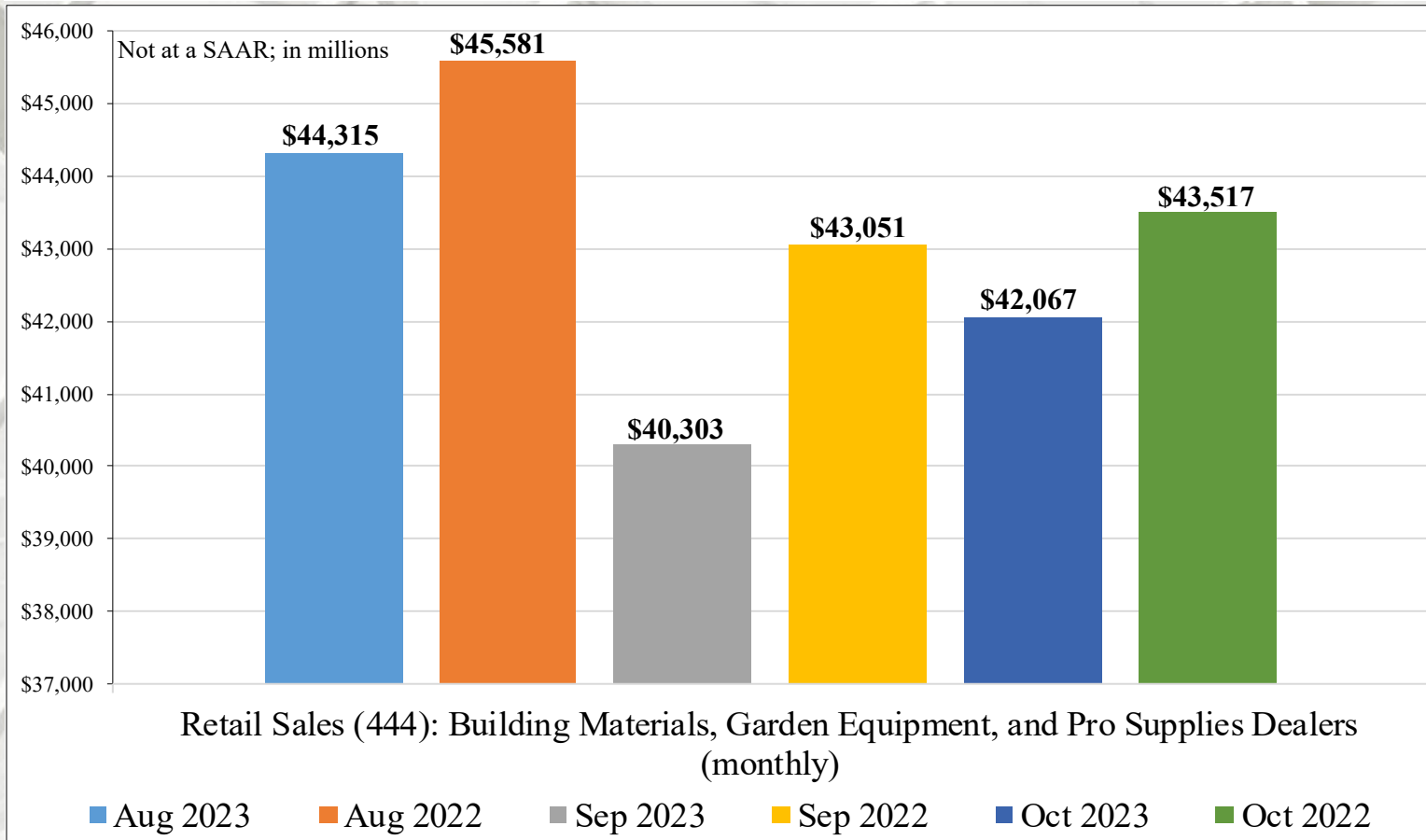


Adjusted Residential Construction Spending: Y/Y percentage change, 1993 to September 2023

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

Remodeling

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



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

NAICS 444 sales decreased 4.4% in October 2023 from September 2023 and decreased 3.3% Y/Y (on a non-adjusted basis).

Remodeling

Retail Sales: Hardware Stores



Hardware Stores: NAICS 44413

NAICS 44413 retail sales decreased 8.9% in September 2023 from August 2023 and improved 2.2% 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.

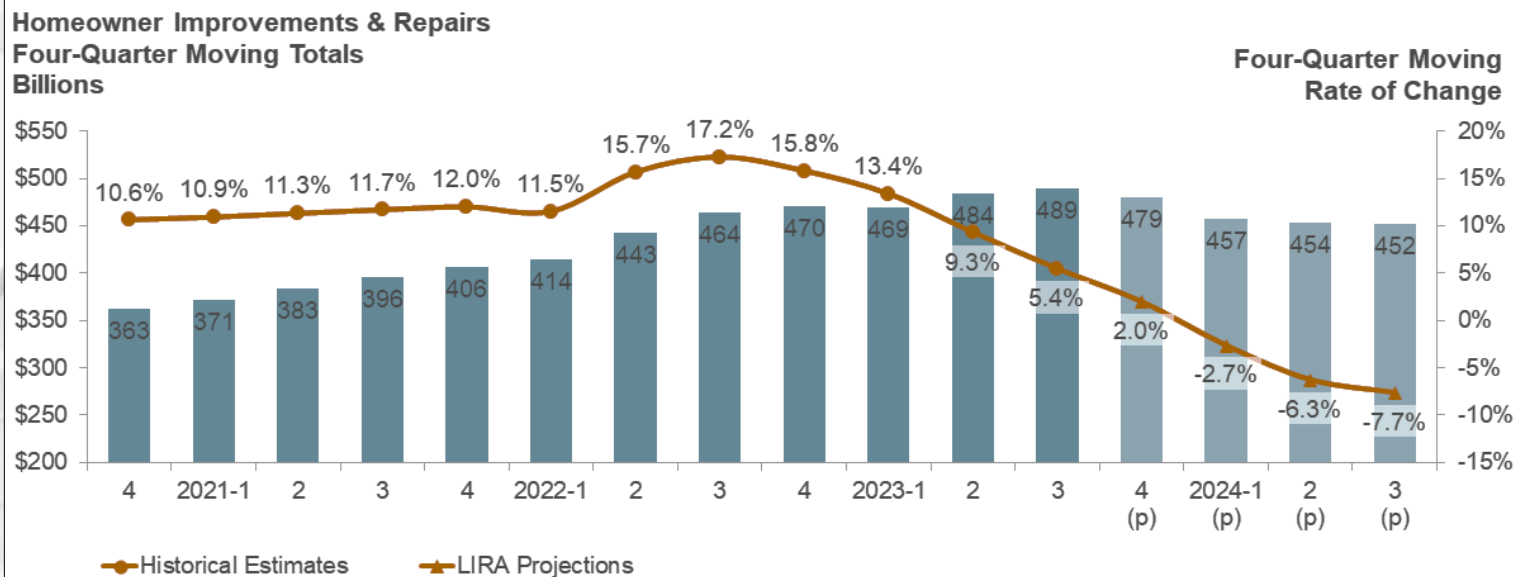
The level of annual spending on improvements and repairs is projected to fall from \$489 billion today to \$452 billion over the coming four quarters. While the rate of market decline should decelerate significantly in the second part of the year, 2024 is shaping up to be a challenging year for home 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

U.S. Remodeler Index

Remodeler Sentiment Cools in Third Quarter

Home improvement, replacement firms less bullish. Full-service and Design-build firms largely hold steady.

“In three years of registering data, remodelers have yet to express a sentiment rating below 50 on a scale of one to 100. That streak continued in the third quarter of 2023 as remodelers gave conditions a 53 rating, which is technically still in growth mode and remains at ‘normal’ levels. The number is, however, the lowest reading since the U.S. Remodeler Index was initiated in the fall of 2020, when the economy was in the throes of the COVID-19 pandemic.

The 53-sentiment rating is down from a 56 reading the previous quarter, and down from a 57 in the fourth quarter of 2022, when many economists were predicting a recession this year. So far, consumers have continued to spend despite higher inflation and much higher mortgage interest rates.

When viewed by remodeling segment, the sharpest pull back in sentiment was among home improvement and replacement firms. Their sentiment was a 51 in the third quarter, down from a 61 reading for the quarter ending in June. Full-service remodeling firms, those that handle all types of jobs big and small, remained unchanged at 52, while design-build firms, those that specialize in large projects, fell to a 55 reading, down from 61 in June.

Analysis from John Burns Research and Consulting, which produces the index in collaboration with *Qualified Remodeler* magazine cited four key takeaways in its third quarter report on the numbers.” – Patrick O’Toole, Editor and Publisher, *Qualified Remodeler*

Remodeling

U.S. Remodeler Index

Remodeler Sentiment Cools in Third Quarter

1. **“The average remodeling customer is pulling back on new projects for now.** Home owners are tightening budgets, saving costs wherever they can, and delaying or deferring needed improvements. A smaller set of wealthy, aging, long-term home owners (many with no mortgage payments) are moving ahead with big-ticket remodeling projects.
2. **Remodeling customers are choosing lower-cost options.** Customers start new projects, reducing project scopes, splitting up large projects over time, and swapping in cheaper products – all to save on up-front costs.
3. **The supply chain is back to normal, but labor is still tight.** Lead times for building products have improved over the past year, with many remodeling saying delays are no longer an issue. Remodelers still find it hard to find enough workers to finish jobs on time.
4. **Remodelers expect a slight rebound in 2024 revenue growth despite the weak volume of new project inquiries.** Remodelers expect slightly higher revenue growth in 2024 than in 2023, which may be overly optimistic. With new project inquiries slowing, remodeling project activity is likely to decline ahead.

Sentiment for future activity during the next three months was varied. Home improvement and replacement firms rated the period ahead with a bearish 44 reading, while design build firms remained relatively bullish delivering a reading of 60 for the near term. Full-service firms held exactly where they are for current conditions with a 52 reading for the near term.” – Patrick O’Toole, Editor and Publisher, Qualified Remodeler

Remodeling

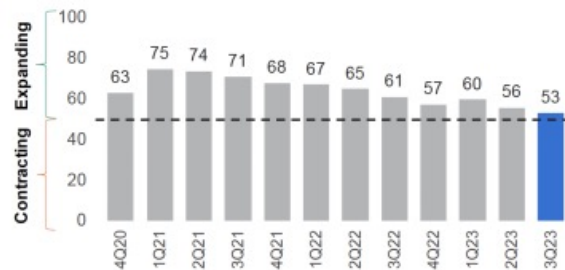
U.S. Remodeler Index

Remodeler Sentiment Cools in Third Quarter

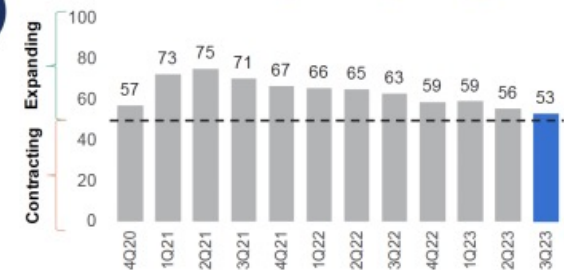
The US Remodeler Index dropped -3 points to 53 in 3Q23. Professional remodelers note that new inquiries and sales are slowing, while project backlogs support current activity.



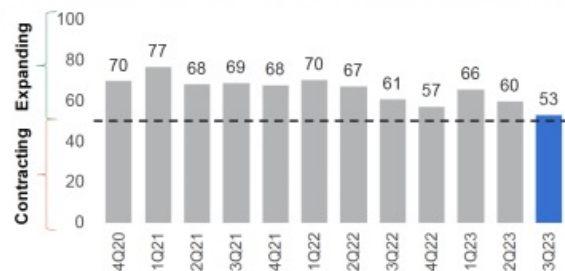
US Remodeler Index



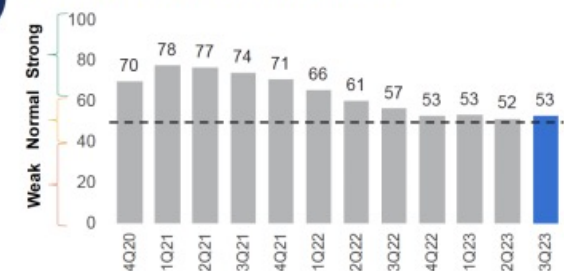
Current Remodeling Activity Gauge



Near-Term Remodeling Activity Gauge (Next 3 Mos.)

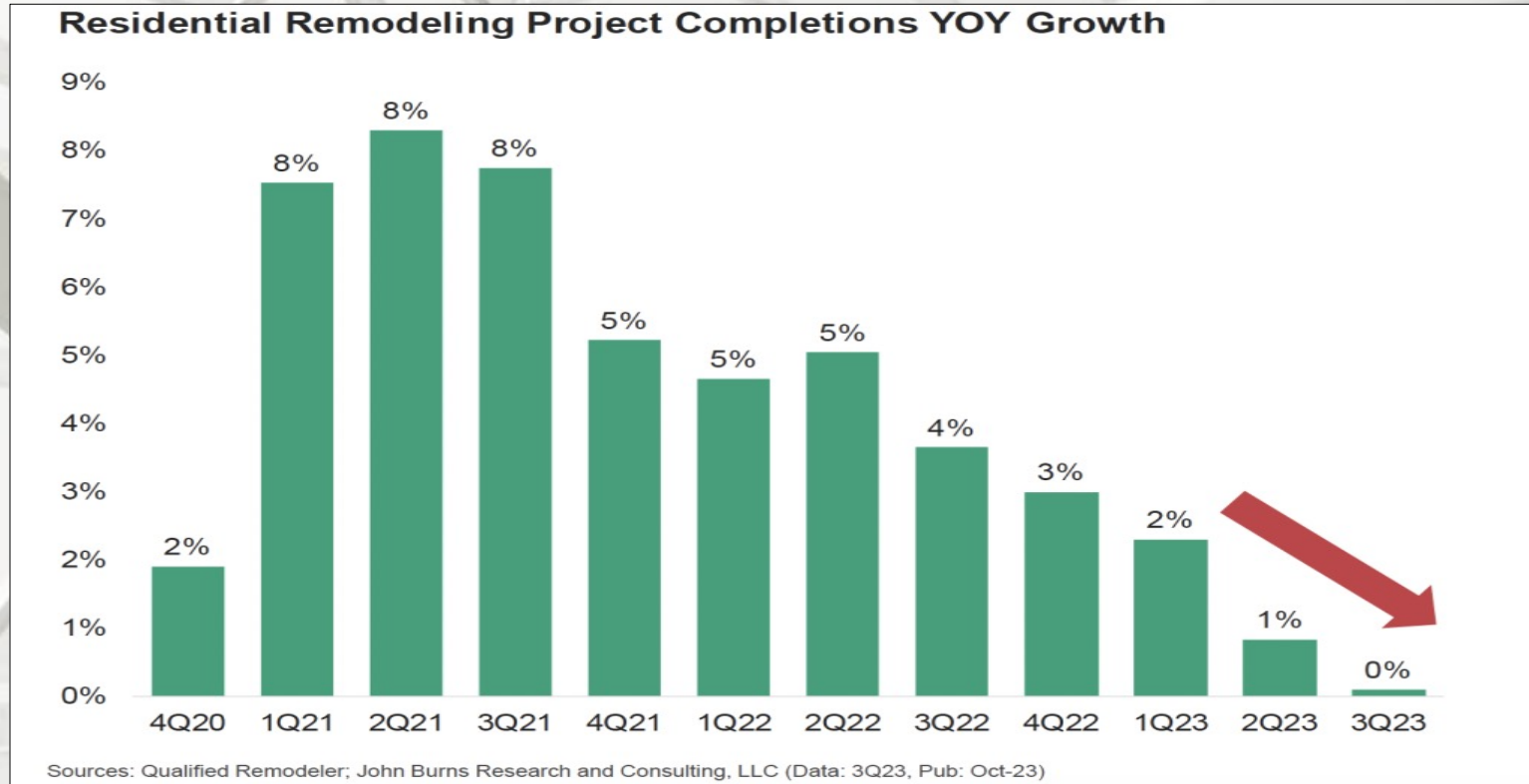


Remodeling Demand Meter



Sources: Qualified Remodeler; John Burns Research and Consulting, LLC (Data: 3Q23, Pub: Oct-23)

Remodeling



U.S. Remodeler Index

Remodeler Sentiment Cools in Third Quarter

“Despite the chillier sentiment among remodelers, all three segments are expected to grow their revenues in 2023, the report said, with bigger gains coming in 2024.

- Full service remodelers expect to grow by 0.05 percent in 2023, 2.4 percent for 2024
- Design build remodelers expect to grow by 2.5 percent in 2023, 4.3 percent for 2024
- Home improvement Pros expect to grow by 1.0 percent in 2023, 2.5 percent for 2024.” – Patrick O’Toole, Editor and Publisher, Qualified Remodeler

Existing House Sales

National Association of Realtors®

	Existing Sales	Median Price	Month's Supply
September	3,960,000	\$394,300	3.4
August	4,040,000	\$404,100	3.3
2022	4,680,000	\$383,500	3.2
M/M change	-2.0%	-2.4%	3.0%
Y/Y change	-15.4%	2.8%	6.3%

All sales data: SAAR

Existing House Sales

	NE	MW	S	W
July	500,000	930,000	1,820,000	710,000
June	480,000	970,000	1,840,000	750,000
2022	600,000	1,140,000	2,060,000	880,000
M/M change	4.2%	-4.1%	-1.1%	-5.3%
Y/Y change	-16.7%	-18.4%	-11.7%	-19.3%

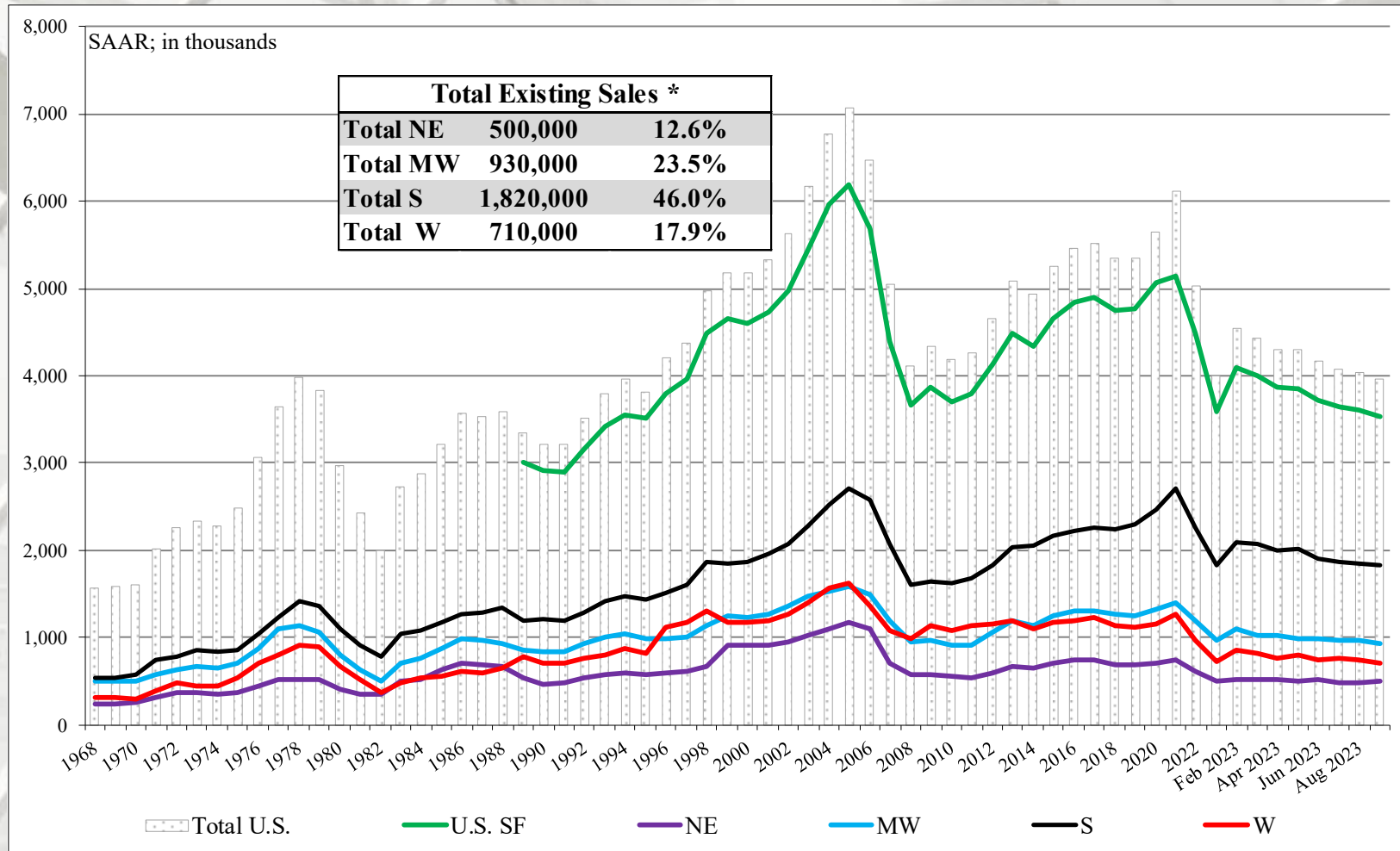
	Existing SF Sales	SF Median Price
September	3,530,000	\$399,200
August	3,600,000	\$410,200
2022	4,190,000	\$389,600
M/M change	-1.9%	-2.4%
Y/Y change	-15.8%	2.5%

All sales data: SAAR.

Source: <https://fred.stlouisfed.org/series/EXHOSLUSM495S>; 9/21/23

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

FHFA House Price Index Up 0.6 Percent in August; Up 5.6 Percent from Last Year

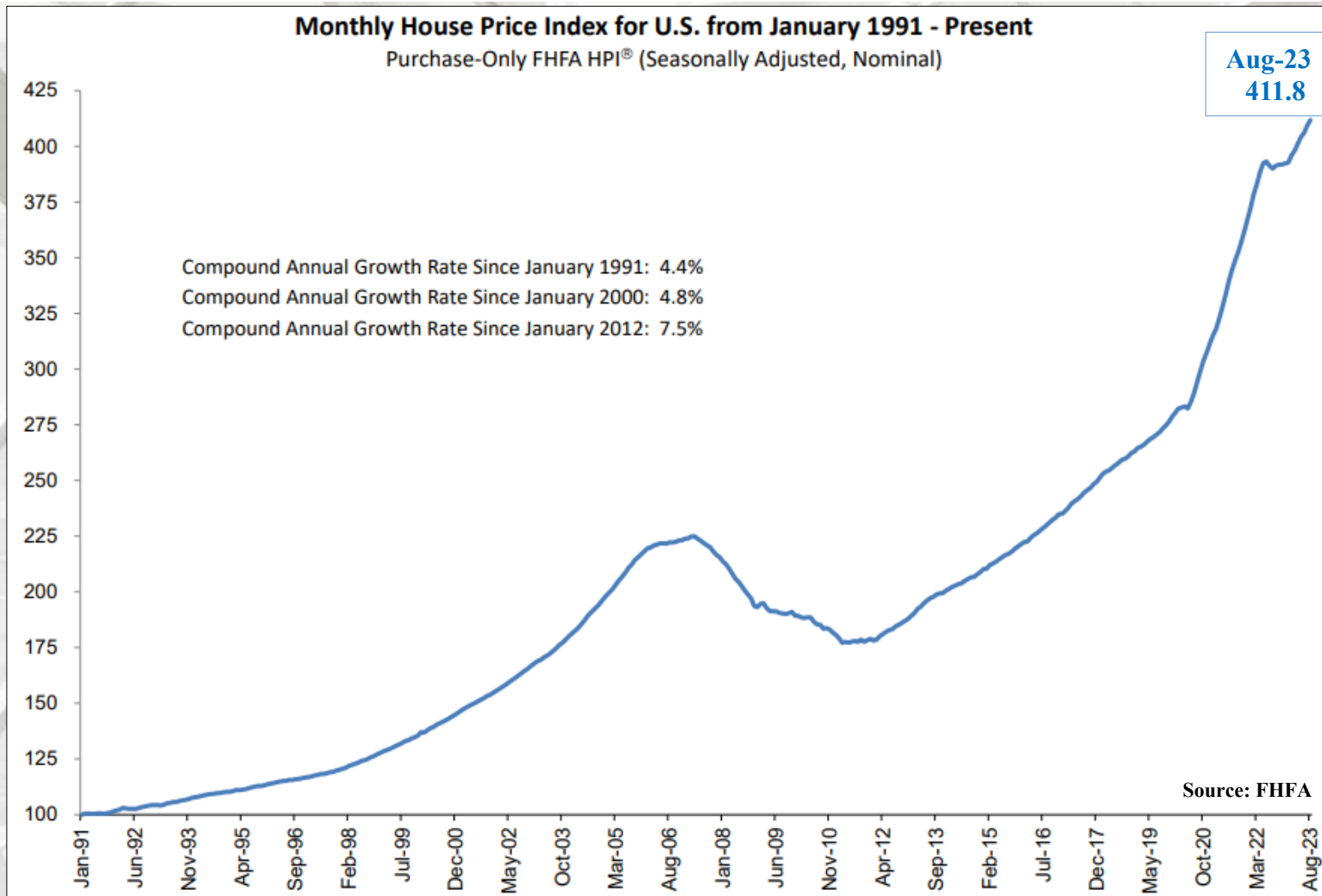
Significant Findings

“U.S. house prices rose in August, up 0.6 percent from July, according to the Federal Housing Finance Agency (FHFA) seasonally adjusted monthly House Price Index (HPI®). House prices rose 5.6 percent from August 2022 to August 2023. The previously reported 0.8 percent price increase in July remained unchanged.

For the nine census divisions, seasonally adjusted monthly price changes from July 2023 to August 2023 ranged from **-0.2 percent** in the South Atlantic division to **+1.1 percent** in the Pacific and East North Central divisions. The 12-month changes ranged from +2.4 percent in the Mountain division to **+8.6 percent** in the Middle Atlantic division.” – Adam Russell, FHFA

“U.S. and regional house price gains remained strong over the last 12 months. The South Atlantic division showed moderate weakness in August, while the remaining census divisions posted positive price appreciation from the previous month.” – Dr. Nataliya Polkovnichenko, Supervisory Economist, Division of Research and Statistics, FHFA

U.S. Housing Prices



U.S. Housing Prices

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

“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 August 2023 show that 13 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.

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 2.6% annual change in August, up from a 1.0% change in the previous month. The 10-City Composite showed an increase of 3.0%, up from a 1.0% increase in the previous month. The 20-City Composite posted a year-over-year increase of 2.2%, a slight increase of 0.2% in the previous month. Chicago led the way for the fourth consecutive month, reporting the highest year-over-year gain among the 20 cities in August. For this month, seven of 20 cities reported lower prices. Twelve of the 20 cities reported higher prices in the year ending August 2023 versus the year ending July 2023. Nineteen of the 20 cities show a positive trend in year-over-year price acceleration compared to the prior month. ...

Month-Over-Month

Before seasonal adjustment, the U.S. National Index, 10-City and 20-City Composites, all posted a 0.4% month-over-month increase in August.

After seasonal adjustment, the U.S. National Index posted a month-over-month increase of 0.9%, while the 10-City and 20-City Composites posted a 1.0% increase each.” – 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

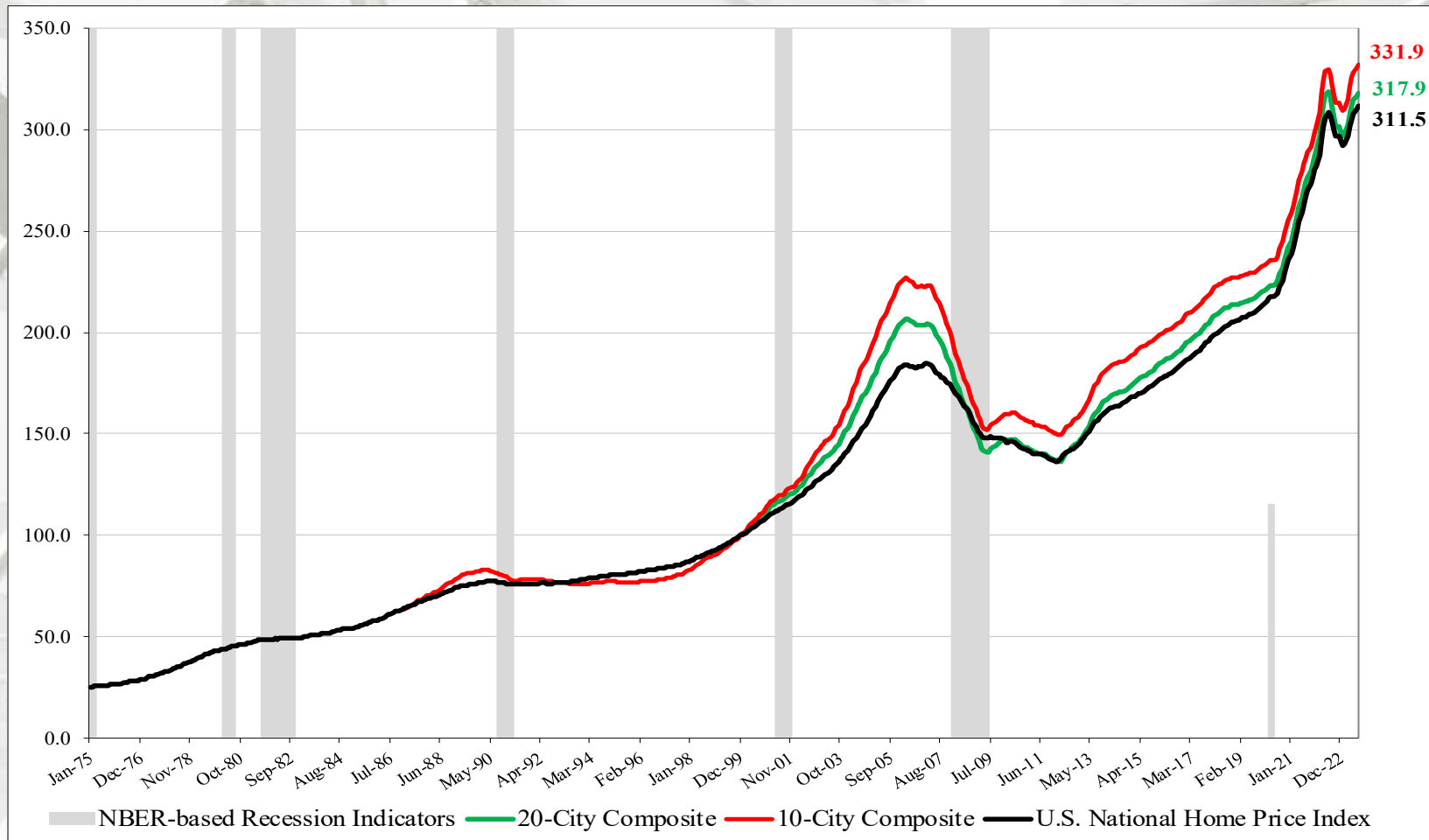
“U.S. home prices continued to rise in August 2023. Our National Composite rose by 0.4% in August, which marks the seventh consecutive monthly gain since prices bottomed in January 2023. The Composite now stands 2.6% above its year-ago level and 6.4% above its January level. Our 10- and 20-City Composites each also rose in August, and likewise currently exceed their year-ago and January levels.

One measure of the strength of the housing market is the relationship of current prices to their historical levels. On that dimension, it’s worth noting that the National Composite, the 10-City Composite, and seven individual cities (Atlanta, Boston, Charlotte, Chicago, Detroit, Miami, and New York) stand at their all-time highs. Observing the breadth of price changes provides insight into another dimension of market health. On a seasonally adjusted basis, prices increased in 19 of 20 cities in August (and Cleveland only missed by a whisker); before seasonal adjustments, prices rose in 13 cities.

Regional differences are substantial. On a year-over-year basis, the three best-performing metropolitan areas in August were Chicago (+5.00%), New York (+4.98%), and Detroit (+4.8%). Chicago has topped the leader board for four consecutive months, and New York moved up this month to the silver medal position. The bottom of the rankings still has a western focus, with the worst performances coming from Las Vegas (-4.9%) and Phoenix (-3.9%). The Midwest (+3.9%) continues as the nation’s strongest region, followed by the Northeast (+3.8%). The West (-0.9%) and Southwest (-0.8%) remain the weakest regions.

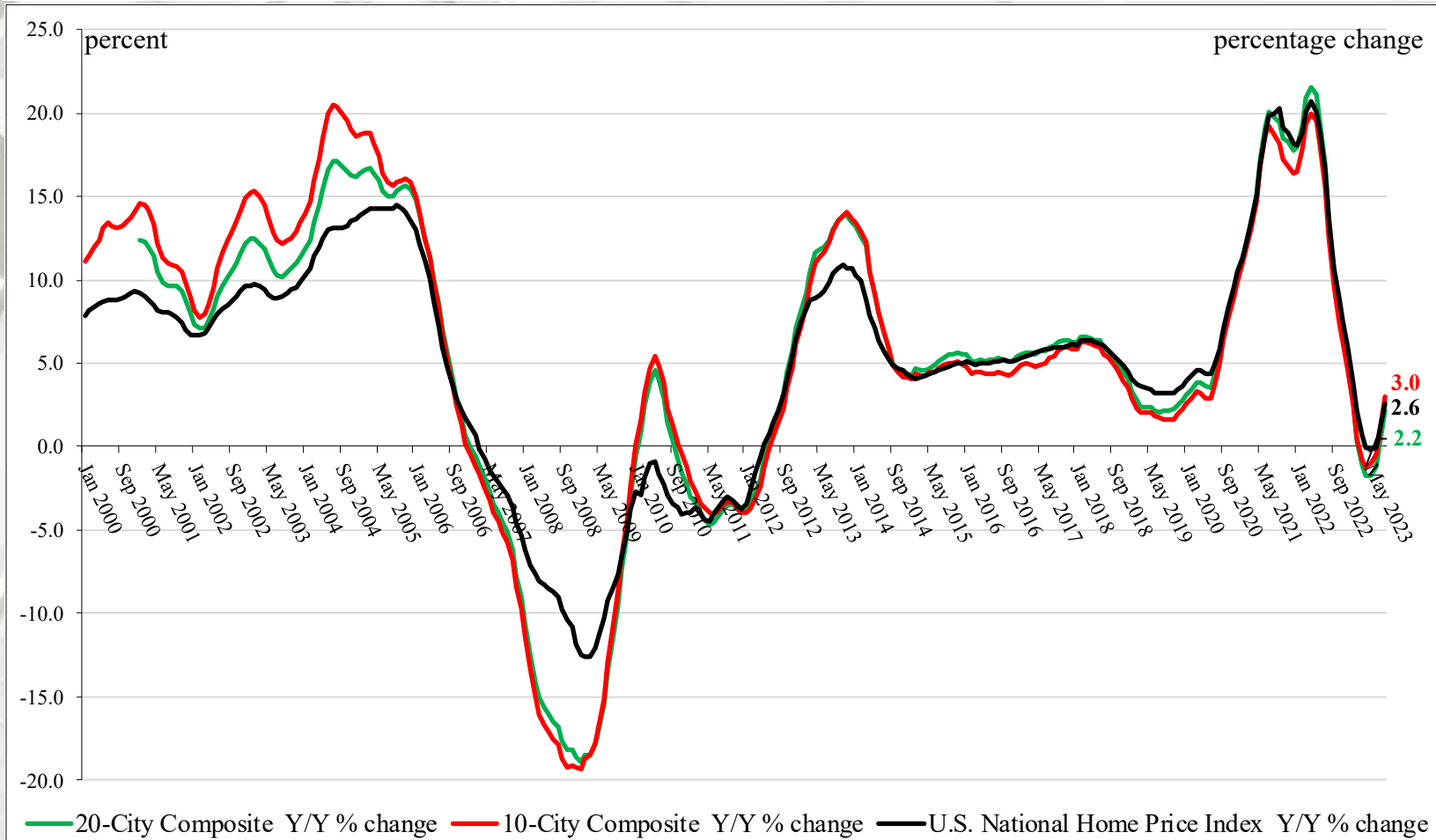
On a year-to-date basis, the National Composite has risen 5.8%, which is well above the median full calendar year increase in more than 35 years of data. The year’s increase in mortgage rates has surely suppressed housing demand, but after years of very low rates, it seems to have suppressed supply even more. Unless higher rates or other 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

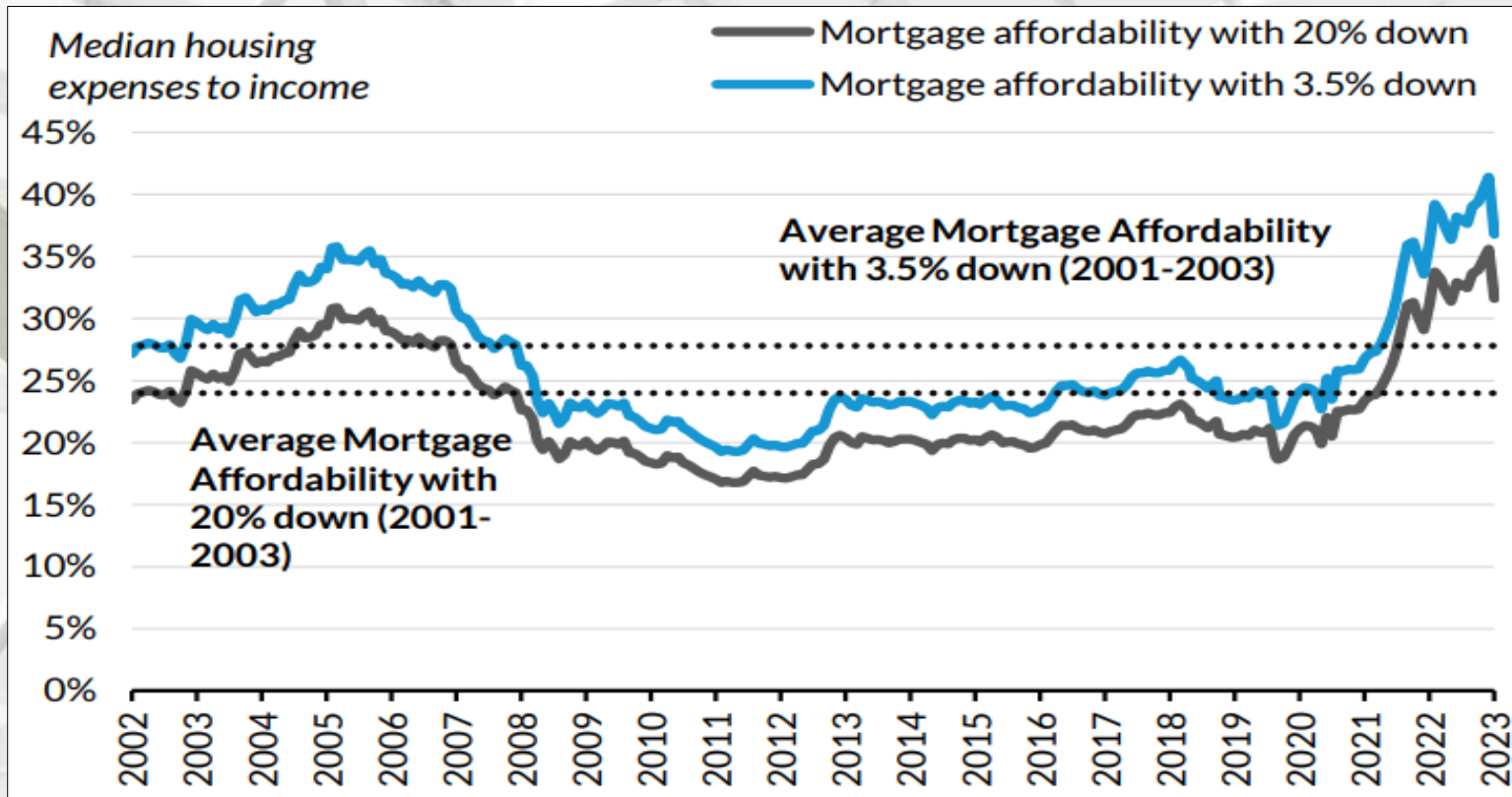


* NBER based Recession Indicator Bars for the United States from the Period following the Peak through the Trough (FRED, St. Louis).

Y/Y Price Change

From August 2022 to August 2023, the National Index indicated a 3.0% increase; the Ten-City improved by 2.6%, and the Twenty-City increased by 2.2%.

U.S. Housing Affordability



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

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

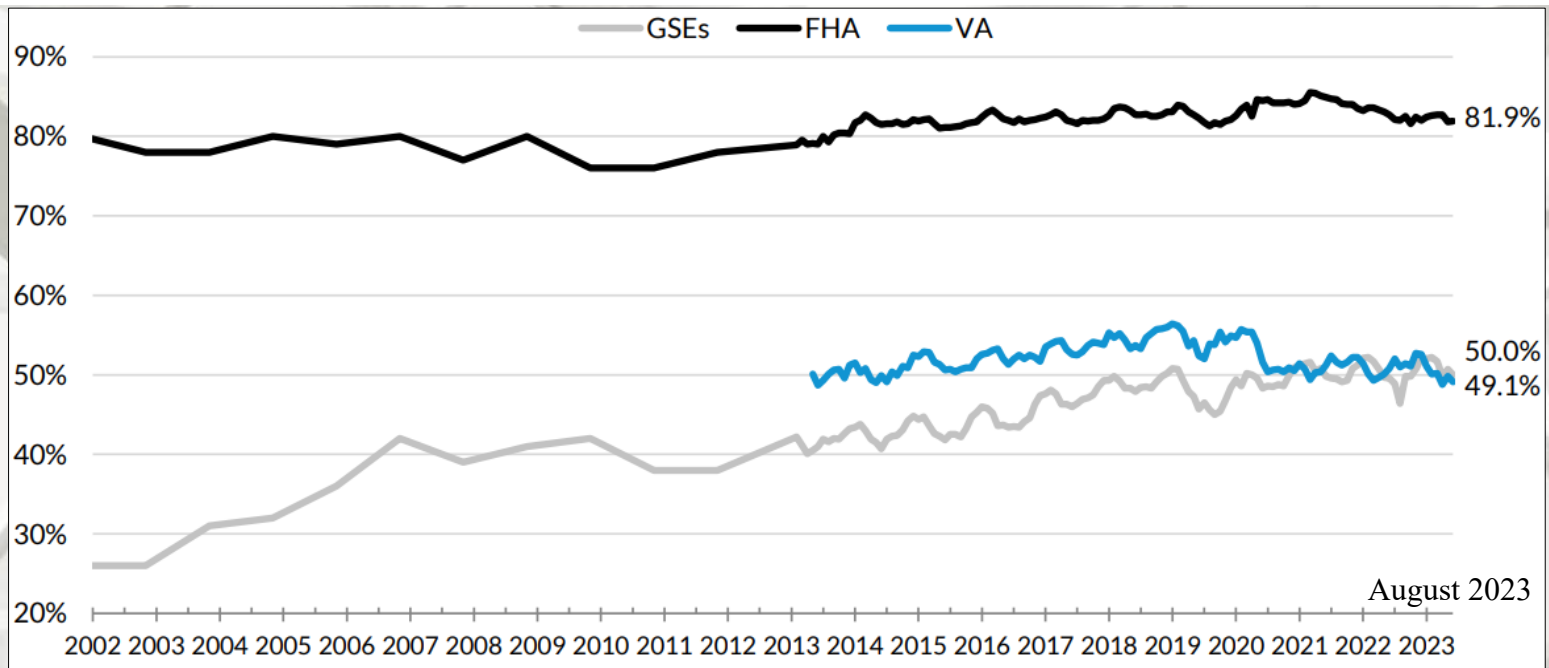
Urban Institute

National Mortgage Affordability Over Time

“Mortgage affordability improved from August to September. August had been the worst month since the series’ inception in 2002. As of September 2023, with a 20 percent down payment, the share of median income needed for the monthly mortgage payment stood at 31.6 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 36.8 percent, also above the 35.8 percent prior peak in November 2005. Given that October rates have shot up, this is a temporary improvement. ...” – Laurie Goodman *et. al*, Vice President, Urban Institute

Source: <https://www.urban.org/research/publication/housing-finance-glance-monthly-chartbook-october-2023>; 10/30/23

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.

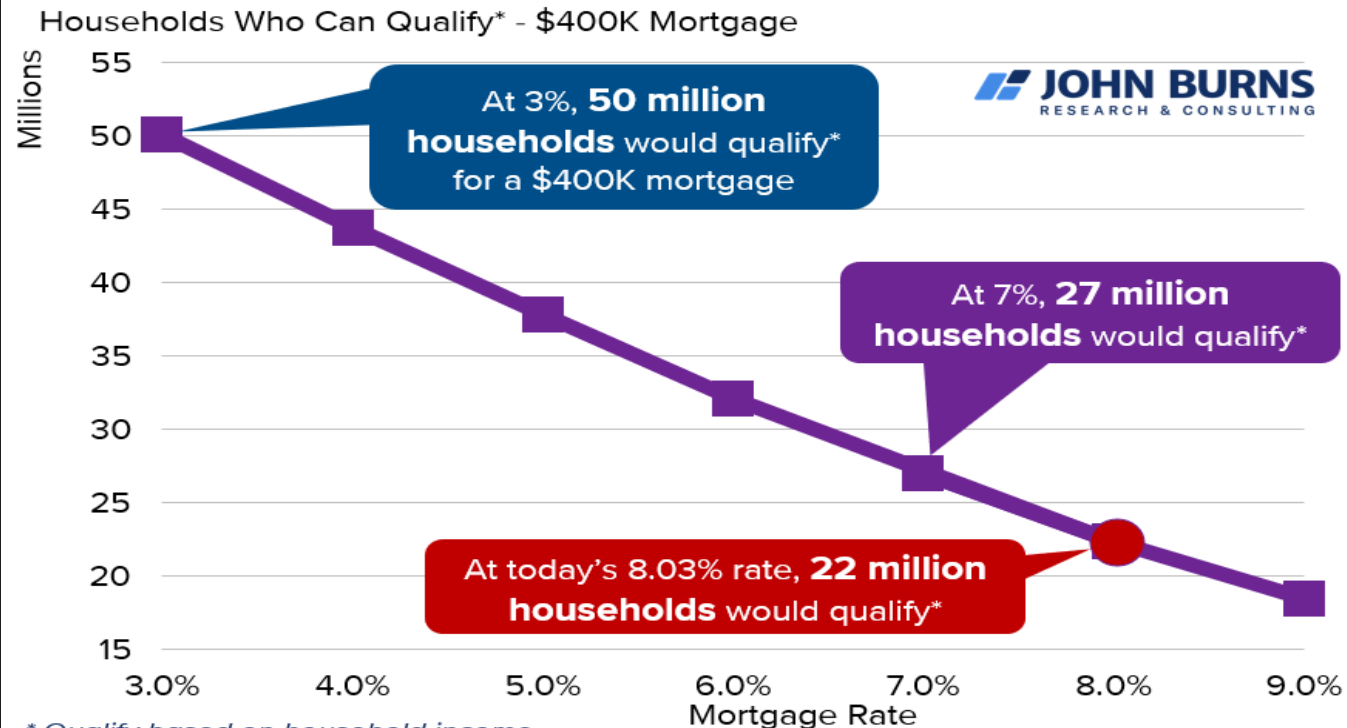
Urban Institute

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 April was 50.0 percent; the VA share was 49.1 percent. ...” – Laurie Goodman *et. al*, Vice President, Urban Institute

U.S. Housing Affordability

Mortgage rates moving from 7% to 8% priced out 5 million more households. 28 million priced out since 2021.



* Qualify based on household income

Sources: Qualified Remodeler, John Burns Research and Consulting, LLC (Data: 10/20/23)

As seen in **Burns US Housing Analysis and Forecast**

John Burns Research and Consulting LLC

“Mortgage rates moving from 7 to 8% since July means around 5-million fewer households would qualify for a \$400K mortgage. The potential borrower pool has now shrunk by -56% since in 2021 when rates were 3%.” – Eric Finnigan, Vice President, Building Products Research & Demographic, John Burns Research and Consulting LLC

U.S. Housing Market

ResiClub

The housing recession is back on, Wells Fargo and Goldman Sachs agree

“Just hours after the U.S. Bureau of Economic Analysis published data on Thursday showing that [*residential fixed investment*](#) growth was positive last quarter, following nine straight quarters of contraction, Wells Fargo released a report titled: “[*Rising borrowing costs stand to tip the housing sector back into recession.*](#)”

The recent run-up in mortgage rates – with the average 30-year fixed mortgage rate sitting at 7.92% on Monday – means that taking into account mortgage rates, incomes, and house prices, October 2023 will go down as the least affordable month for U.S. housing this century. In the eyes of Wells Fargo, that means housing activity will continue to contract.

Wells Fargo analysts wrote: “After perking up at the start of year, nearly every facet of housing activity has shown signs of relapse as the Fed has maintained a restrictive policy stance and mortgage rates have breached 7.0%. In September, existing home sales extended a three-month streak of declines and dropped to a 3.96 million-unit pace, the slowest sales pace since October 2010. Mortgage applications for purchase have retreated in recent weeks and, as of October 20, have fallen to the lowest level since 1995. In September, the Fannie Mae Home Purchase Sentiment Index reported that 84% of consumers were pessimistic about home buying conditions, a new survey high. Single-family construction has not yet turned down, but the NAHB Housing Market Index, which reflects home builder confidence, has declined since July, suggesting new construction may soon begin to slow.”

While Wells Fargo doesn't anticipate a significant correction in U.S. existing home prices, they do believe that up to two-thirds of the national home price gains for 2023 could be eroded by year-end.” – Lance Lambert, CMB; ResiClub

U.S. Housing Market

ResiClub

The housing recession is back on, Wells Fargo and Goldman Sachs agree

“Through July, U.S. home prices as tracked by the Case-Shiller National Home Price Index are up **+5.3%** this year. Wells Fargo expects U.S home prices to end the year up just **+1.8%**. For that to happen, national home prices would need to fall over the final months of 2023. (In the morning, the lagged Case-Shiller index will publish its results for August).

Beyond 2023, Wells Fargo expects U.S. home prices to rise **+2.5%** in 2024 followed by **+4.4%** in 2025. If Wells Fargo is right, U.S. home prices would end 2023 down **-2.8%** from June 2022 (i.e., the peak of home prices last year), end 2024 down **-0.4%** from June 2022, and end 2025 up **+4.0%** above June 2022.

Considering Wells Fargo's expectation of national house prices gradually increasing through the end of 2025, one might wonder why they refer to this as a “housing recession.”

The reason is that the term “recession” typically implies a decline in economic activity rather than necessarily falling prices. In most full-blown recessions, overall consumer prices, (i.e., inflation, continue to rise despite economic contraction and job losses).

From that lens the U.S. housing market is very much in recession in Q4 2023.

Both Goldman Sachs and Wells Fargo anticipate that residential fixed investment (the core of “housing GDP”) will experience a double-digit percentage decrease in 2023, followed by a slight decline in 2024.

Housing recessions are nothing new, of course. These so-called “housing recessions” typically occur when the Fed transitions into quantitative tightening mode in an effort to control the economy and curb inflation.” – Lance Lambert, CMB; ResiClub

U.S. Housing Market

Where Goldman Sachs and Wells Fargo forecast U.S. home prices, as tracked by Case-Shiller, for the end of 2023, 2024, and 2025

Index Jan. 2000=100, not seasonally adjusted

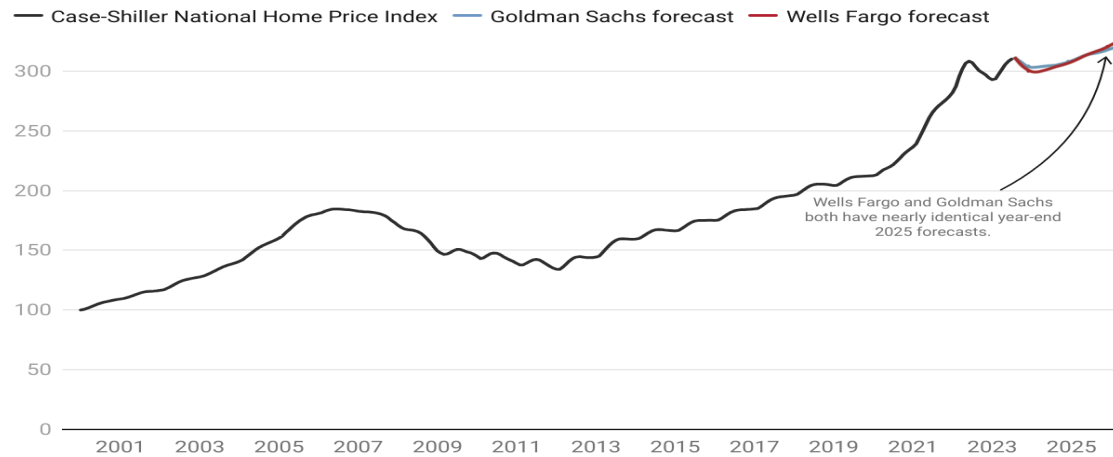


Chart: Lance Lambert • Created with Datawrapper



ResiClub

“Wells Fargo invoked that history in their note: [“The National Association of Realtors recently sent a letter](#) to fiscal and monetary policymakers proposing a list of actions that, in their view, would reduce mortgage rates and bolster housing activity, which generally has turned lower since the start of 2022 when the Federal Reserve first began raising the federal funds target range. It is not uncommon for policymakers to hear directly from industry associations about market conditions. The letter is reminiscent of when, in 1980, home builders sent a piece of lumber to the Federal Reserve asking for “help” in boosting housing demand via lower interest rates. In the late 1970s and early 1980s, high inflation led to tighter monetary policy and sharply higher mortgage rates. According to Freddie Mac, the 30-year mortgage rate peaked at nearly 19% in 1981. The run-up in rates spurred a severe contraction in new single-family construction, which dropped nearly 65% between April 1978 and February 1982. The plea for assistance from housing industry participants, both in the early 1980s and more recently, illustrates the severe impact higher interest rates can have on the residential sector.” – Lance Lambert, CMB; ResiClub

U.S. Housing Market

ResiClub

Updated housing forecasts from Goldman Sachs and Wells Fargo

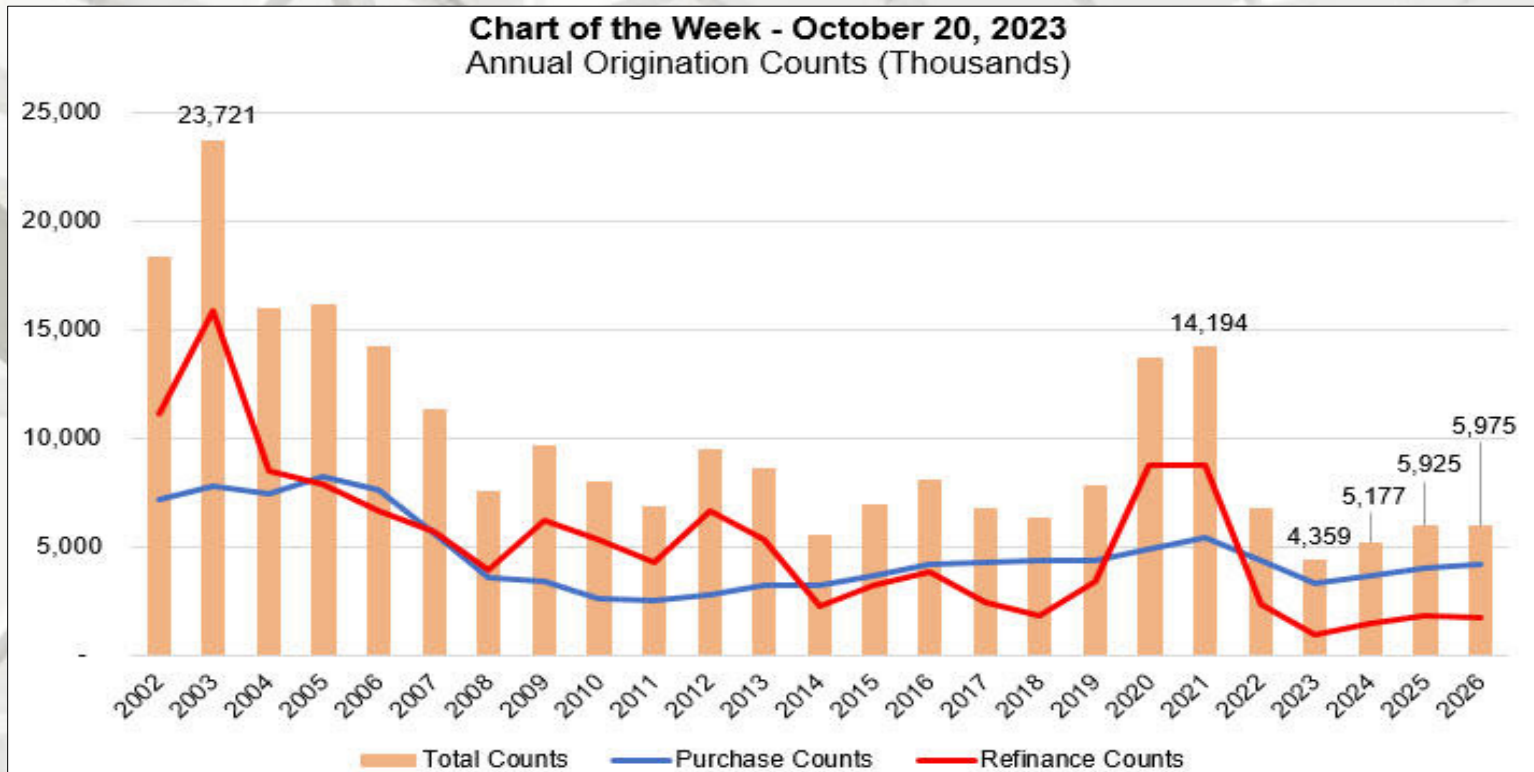
Goldman Sachs' forecast was updated on October 22, 2023. Wells Fargo's forecast was updated on October 26, 2023.

Firm	Metric	2023	2024	2025
Goldman Sachs	Unemployment rate (U3)	3.60%	3.60%	3.60%
Wells Fargo	Unemployment rate (U3)	3.60%	4.20%	4.10%
Goldman Sachs	10-year Treasury yield	4.30%	4.30%	4.25%
Wells Fargo	10-year Treasury yield	4.08%	3.73%	3.38%
Goldman Sachs	30-year fixed mortgage rate	7.10%	6.80%	6.50%
Wells Fargo	30-year fixed mortgage rate	6.94%	6.39%	5.70%
Goldman Sachs	Residential fixed investment	-11.60%	-1.70%	2.60%
Wells Fargo	Residential fixed investment	-10.90%	-0.10%	2.30%
Goldman Sachs	U.S. home prices (Case-Shiller)	3.50%	0.60%	3.80%
Wells Fargo	U.S. home prices (Case-Shiller)	1.80%	2.50%	4.40%
Goldman Sachs	Total existing home sales	4,093,000	3,838,000	4,244,000
Wells Fargo	Total existing home sales	4,215,000	4,415,000	4,745,000
Goldman Sachs	New home sales	680,000	723,000	771,000
Wells Fargo	New home sales	683,000	710,000	725,000
Goldman Sachs	Total housing starts	1,388,000	1,335,000	1,430,000
Wells Fargo	Total housing starts	1,385,000	1,348,000	1,360,000

Table: Lance Lambert • Created with Datawrapper



U.S. Housing Finance



Sources: MBA Forecast

Mortgage Bankers Association (MBA) Chart of the Week: Annual Origination Units

“As the economy slows and inflation moves lower, longer-term rates will decline from current levels, helping to bring mortgage rates lower. The forecast is for mortgage rates to end 2024 at 6.1 percent and reach 5.5 percent at the end of 2025. Demographic fundamentals still support housing demand and lower rates will improve housing affordability and unlock some housing inventory as owners become more willing to give up their current rates and list their homes. These factors combined should support purchase market growth in 2024 and 2025, giving the industry a much-needed boost.” – Joel Kan, Associate Vice President of Economic and Industry Forecasting and Marina Walsh, Vice President of Industry analysis, CMB; MBA

U.S. Housing

Mortgage Bankers Association (MBA)

September New Home Purchase Mortgage Applications Increased 14.9 Percent

“The Mortgage Bankers Association (MBA) Builder Application Survey (BAS) data for September 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 September, 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 September, 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 September 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)

September New Home Purchase Mortgage Applications Increased 14.9 Percent

“The seasonally adjusted estimate for September 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 September 2023, a decrease of 13.6 percent from 59,000 new home sales in August.

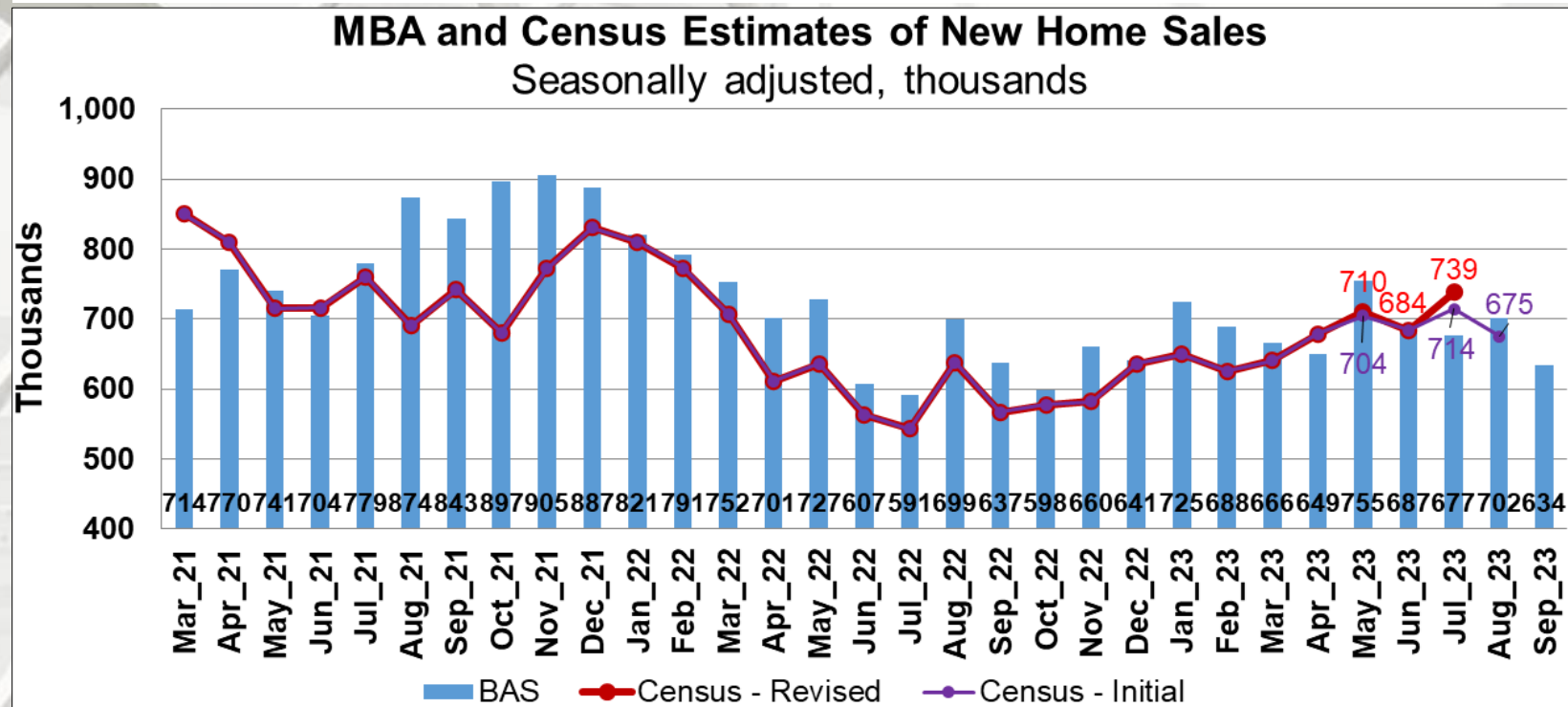
By product type, conventional loans composed 65.1 percent of loan applications, FHA loans composed 25.1 percent, RHS/USDA loans composed 0.3 percent and VA loans composed 9.5 percent. The average loan size for new homes decreased from \$398,092 in August to \$397,550 in September.

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)

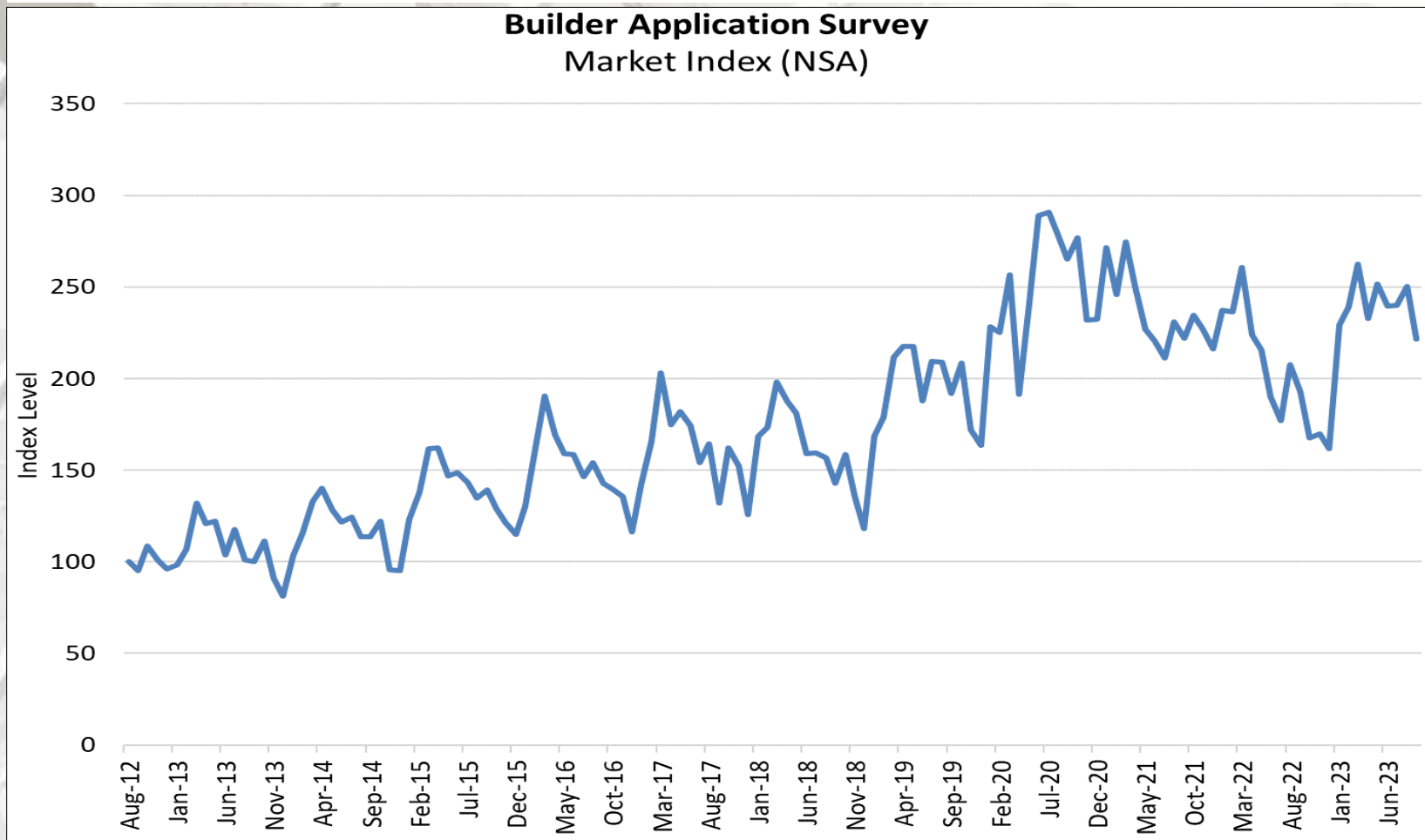
September New Home Purchase Mortgage Applications Increased 14.9 Percent



U.S. Housing Finance

Mortgage Bankers Association (MBA)

September New Home Purchase Mortgage Applications Increased 14.9 Percent



U.S. Housing Finance

Mortgage Bankers Association (MBA)

Mortgage Credit Availability Increased in October

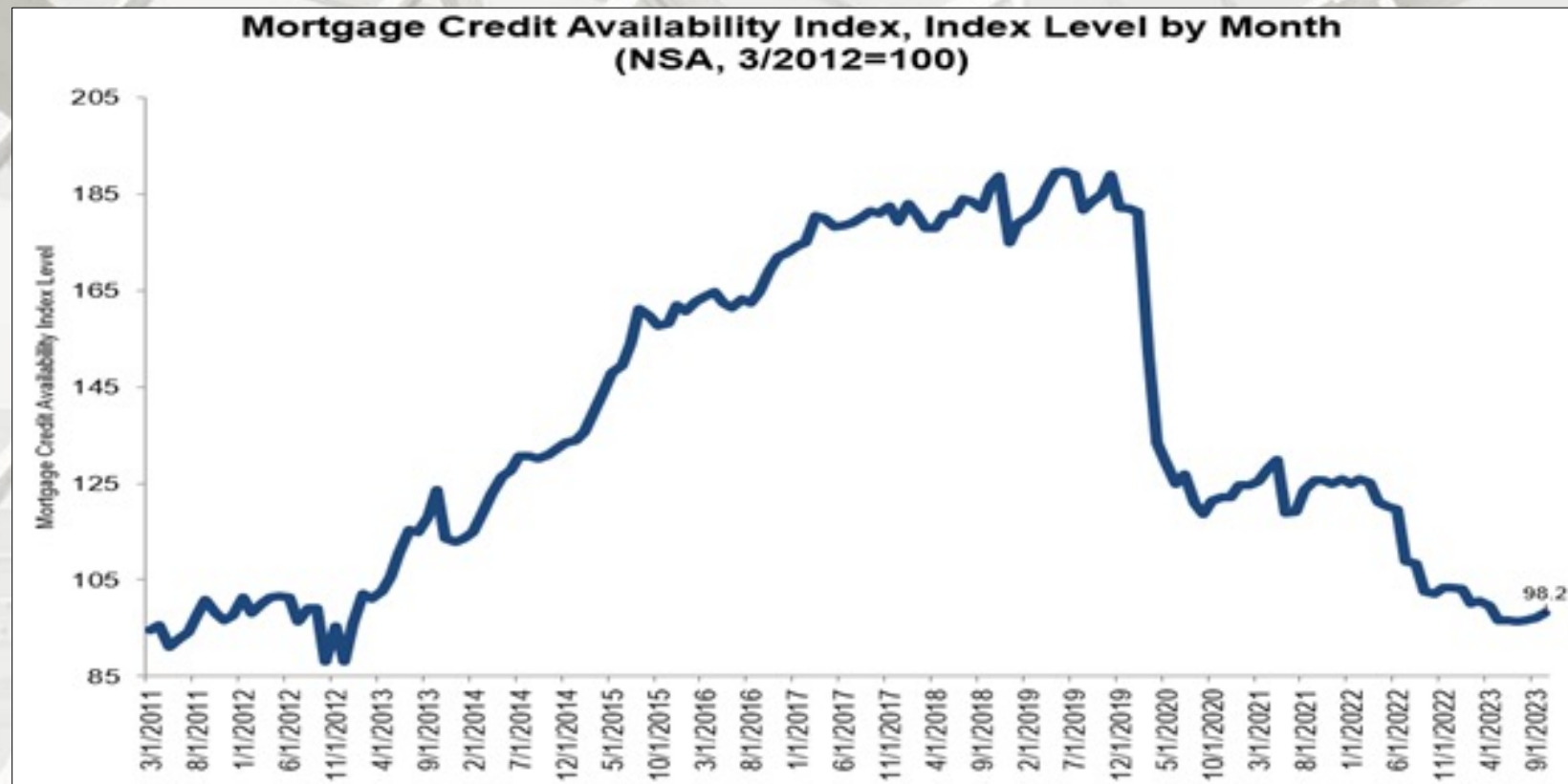
“Mortgage credit availability increased in October according to the Mortgage Credit Availability Index (MCAI), a report from the Mortgage Bankers Association (MBA) that analyzes data from ICE Mortgage Technology.

The MCAI rose by 1.0 percent to 98.2 in October. 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 1.7 percent, while the Government MCAI increased by 0.3 percent. Of the component indices of the Conventional MCAI, the Jumbo MCAI increased by 2.7 percent, and the Conforming MCAI was unchanged from the previous month.

Mortgage credit availability rose in October, but the growth was driven by increased activity in the jumbo market. The jumbo index increased by 2.7 percent to the highest level in 14 months – its third straight monthly increase. However, despite the uptick in credit availability recently, we are still close to the lowest levels since 2013. Loan offerings remain narrower as lenders have reduced capacity to cope with the lower origination volumes. Some lenders responded to the challenging rate environment and offered more ARM products, as mortgage rates increased by over 40 basis points on average in October, reaching almost 8 percent in the second half of the month.” – Joel Kan, Associate Vice President of Economic and Industry Forecasting, MBA

U.S. Housing Finance

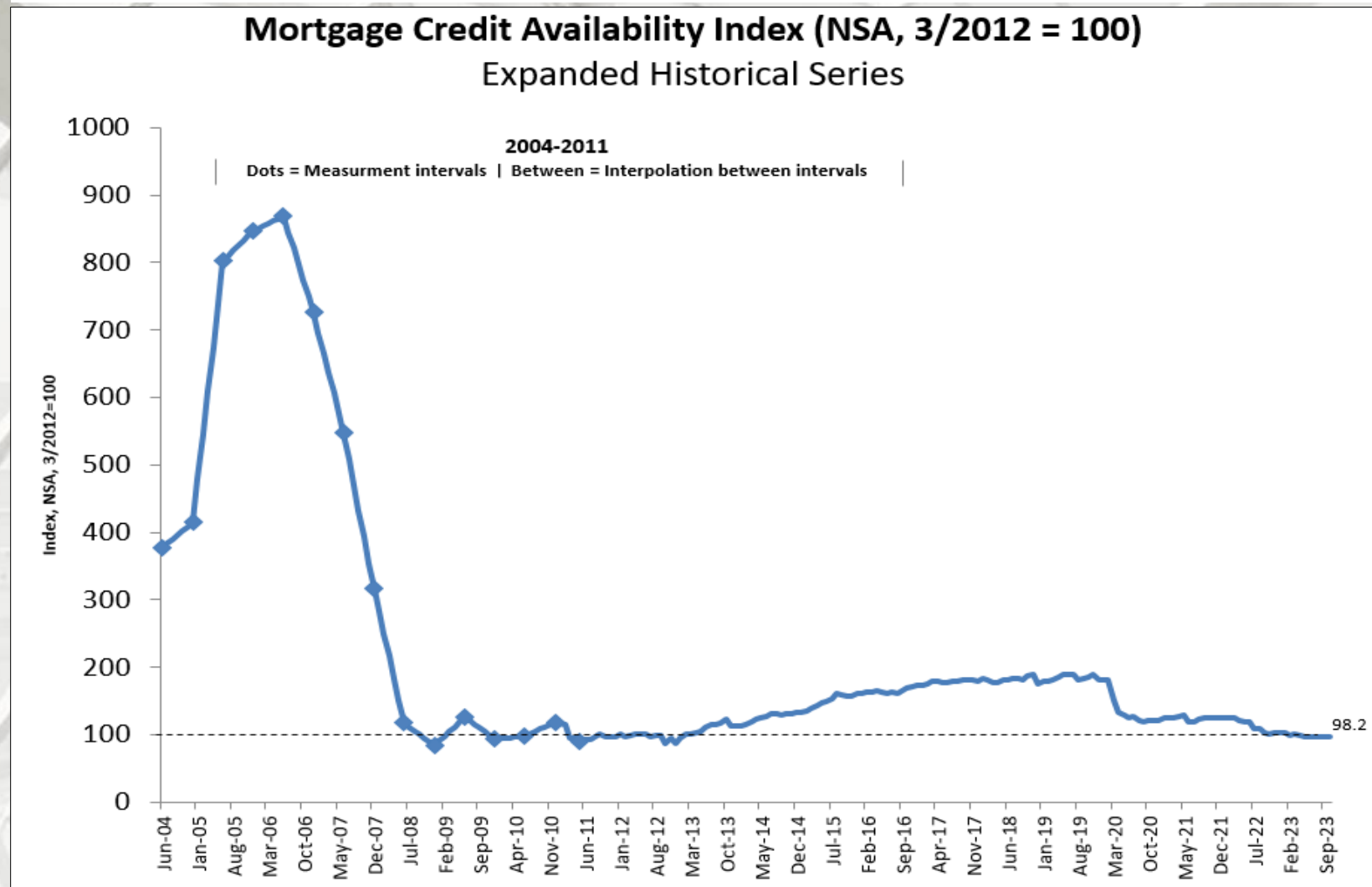
Mortgage Credit Availability (MBA)



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

U.S. Housing Finance

Mortgage Credit Availability (MBA)



MBA Mortgage Finance Forecast

	2023				2024				2025				2022	2023	2024	2025	2026
	Q1	Q2	Q3	Q4	Q1	Q2	Q3	Q4	Q1	Q2	Q3	Q4					
Housing Measures																	
Housing Starts (SAAR, Thous)	1,385	1,450	1,387	1,376	1,351	1,346	1,346	1,380	1,418	1,435	1,462	1,479	1,551	1,399	1,356	1,449	1,424
Single-Family	834	930	965	974	989	1,014	1,032	1,076	1,102	1,123	1,148	1,176	1,004	926	1,028	1,137	1,123
Two or More	552	520	422	402	362	332	314	304	316	312	314	303	547	474	328	311	302
Home Sales (SAAR, Thous)																	
Total Existing Homes	4,327	4,250	4,027	4,093	4,196	4,324	4,501	4,661	4,767	4,836	4,899	4,921	5,099	4,174	4,420	4,856	4,999
New Homes	638	694	709	727	736	747	765	762	780	791	797	811	641	692	752	795	789
FHFA US House Price Index (YOY % Change)																	
Median Price of Total Existing Homes (Thous \$)	366.7	397.5	413.7	396.5	393.4	389.6	387.6	384.4	384.9	383.7	380.8	386.1	384.0	393.6	388.8	386.6	385.2
Median Price of New Homes (Thous \$)	434.8	418.0	435.5	431.2	432.0	430.2	429.8	430.6	432.7	434.6	437.6	440.0	455.8	429.9	430.6	436.2	430.7
Interest Rates																	
30-Year Fixed Rate Mortgage (%)	6.4	6.5	7.0	7.2	6.8	6.6	6.3	6.1	5.9	5.8	5.6	5.5	6.6	7.2	6.1	5.5	5.4
10-Year Treasury Yield (%)	3.6	3.6	4.2	4.2	4.1	4.0	3.8	3.7	3.7	3.7	3.6	3.6	3.8	4.2	3.7	3.6	3.6
Mortgage Originations																	
Total 1- to 4-Family (Bil \$)	333	463	444	399	409	507	525	508	478	601	594	581	2,305	1,639	1,949	2,254	2,382
Purchase	267	371	363	324	314	394	393	371	328	453	434	423	1,619	1,325	1,471	1,639	1,747
Refinance	66	92	81	75	95	113	132	138	150	148	160	158	686	314	478	616	635
Refinance Share (%)	20	20	18	19	23	22	25	27	31	25	27	27	30	19	25	27	27
FHA Originations (Bil \$)													228	197	214	224	219
Total 1- to 4-Family (000s loans)	895	1,239	1,173	1,052	1,086	1,342	1,396	1,353	1,281	1,578	1,555	1,511	6,720	4,359	5,177	5,925	6,065
Purchase	686	948	919	818	791	990	985	927	818	1,123	1,069	1,035	4,382	3,370	3,693	4,044	4,182
Refinance	210	291	254	234	294	353	411	426	463	455	486	477	2,338	989	1,484	1,881	1,882
Refinance Share (%)	23	23	22	22	27	26	29	32	36	29	31	32	35	23	29	32	31
Mortgage Debt Outstanding																	
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	13,610	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 Economic Forecast

MBA Economic Forecast

October 15, 2023

	2023				2024				2025				2022	2023	2024	2025	2026
	Q1	Q2	Q3	Q4	Q1	Q2	Q3	Q4	Q1	Q2	Q3	Q4					
Percent Change, SAAR																	
Real Gross Domestic Product	2.2	2.1	4.8	1.4	-0.3	-0.4	0.6	1.2	1.7	1.7	1.8	1.8	0.7	2.6	0.3	1.7	1.8
Personal Consumption Expenditures	3.8	0.8	3.2	1.4	0.9	0.5	1.2	1.1	1.4	1.4	1.4	1.5	1.2	2.3	0.9	1.4	2.0
Business Fixed Investment	5.7	7.4	0.7	1.2	-0.7	-1.7	-1.4	0.1	1.6	1.7	2.3	2.2	5.6	3.7	-0.9	1.9	2.1
Residential Investment	-5.3	-2.2	5.4	-1.4	-1.4	0.0	0.5	4.9	8.1	6.4	5.1	7.7	-17.4	-1.0	1.0	6.8	0.0
Govt. Consumption & Investment	4.8	3.3	3.2	1.8	0.9	0.8	0.6	0.5	0.5	0.4	0.5	0.5	0.8	3.3	0.7	0.5	0.4
Net Exports (Bil. Chain 2012\$)	-1048.8	-1039.0	-971.0	-959.6	-1011.9	-1046.0	-1053.5	-1052.9	-1065.9	-1074.6	-1075.7	-1081.1	-1158.7	-1004.6	-1041.1	-1074.3	-1091.7
Inventory Investment (Bil. Chain 2012\$)	24.1	13.2	33.7	20.0	14.5	8.6	2.1	8.1	20.9	33.7	43.6	51.3	113.4	22.7	8.3	37.4	60.7
Consumer Prices (YOY)	5.8	4.1	3.5	3.1	2.8	2.6	2.4	2.3	2.1	2.0	2.2	2.1	7.1	3.1	2.3	2.1	2.1
Percent																	
Unemployment Rate	3.5	3.5	3.7	3.9	4.1	4.4	4.8	5.0	4.9	4.8	4.6	4.4	3.6	3.7	4.6	4.7	4.2
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	4.375	5.375	4.625	3.625	2.625
10-Year Treasury Yield	3.6	3.6	4.2	4.2	4.1	4.0	3.8	3.7	3.7	3.7	3.6	3.6	3.8	4.2	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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Summary

In conclusion:

Housing data, year-over-year, were decidedly negative. 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. Year-over-year single-family starts, total housing completions, new house sales were positive. The influence of increasing mortgage rates is evident, as aggregate costs have decreased affordability.

Pros:

- 1) The desire to own a house remains strong, though consumer sentiment September 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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