

The Virginia Tech–USDA Forest Service Housing Commentary: Section I February 2024



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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, month-over-month and year-over-year, exhibited several categories of positivity. Total housing and single-family starts, and total and single-family construction spending were positive month-over-month and year-over-year. The influence of increased mortgage rates is evident, as aggregate costs have decreased affordability and influenced the “lock-in” effect.

The April 15th Atlanta Fed GDPNow™ total residential investment spending forecast is 12.2% for Q1 2024. Quarterly log change for new private permanent site expenditures were projected at 12.3%; the improvement spending forecast was -2.7%; and the manufactured/mobile home expenditures projection was 16.8% (all: quarterly log change and at a seasonally adjusted annual rate).¹

“People can be ‘locked-in’ or constrained in their ability to make appropriate financial changes In the United States, nearly all 50 million active mortgages have fixed rates, and most have interest rates far below prevailing market rates, creating a disincentive to sell. This paper finds that for every percentage point that market mortgage rates exceed the origination interest rate, the probability of sale is decreased by 18.1%. This mortgage rate lock-in led to a 57% reduction in home sales with fixed-rate mortgages in 2023Q4 and prevented 1.33 million sales between 2022Q2 and 2023Q4. The supply reduction increased home prices by 5.7%, outweighing the direct impact of elevated rates, which decreased prices by 3.3%.” – Ross Batzer, Jonah Coste, William Doerner, and Michael Seiler; FHFA

This month’s commentary contains 2024 housing forecasts, 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: ¹ www.frbatlanta.org/cqer/research/gdpnow.aspx; 4/15/24

² <https://www.fhfa.gov/PolicyProgramsResearch/Research/Pages/wp2403.aspx>; 3/18/24

February 2024 Housing Scorecard

	M/M	Y/Y
Housing Starts	▲ 10.7%	▲ 5.9%
Single-Family (SF) Starts	▲ 11.6%	▲ 35.2%
Multi-Family (MF) Starts*	▲ 8.3%	▼ 34.8%
Housing Permits	▲ 2.4%	▲ 2.8%
SF Permits	▲ 1.1%	▲ 29.6%
MF Permits*	▲ 5.1%	▼ 28.3%
Housing Under Construction	▼ 0.5%	▼ 1.2%
SF Under Construction	▲ 0.3%	▼ 6.1%
Housing Completions	▲ 19.7%	▲ 9.6%
SF Completions	▲ 20.2%	▲ 4.2%
New SF House Sales	▼ 0.3%	▲ 5.9%
Private Residential Construction Spending	▲ 0.7%	▲ 6.3%
SF Construction Spending	▲ 1.4%	▲ 17.2%
Existing House Sales ¹	▲ 9.5%	▼ 3.3%

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

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

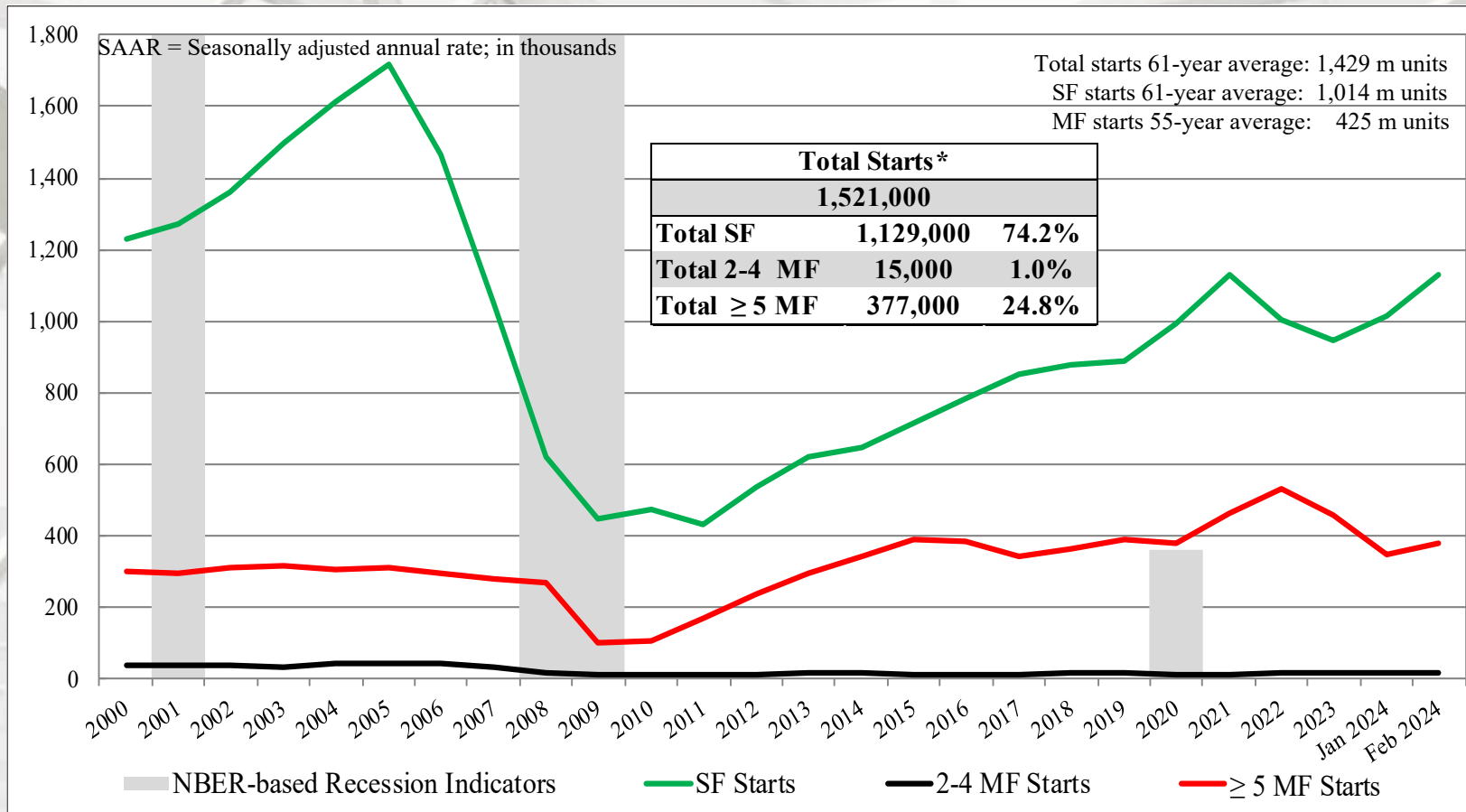
New Housing Starts

	Total Starts*	SF Starts	MF 2-4 Starts**	MF ≥5 Starts
February	1,521,000	1,129,000	15,000	377,000
January	1,374,000	1,012,000	15,000	347,000
2023	1,436,000	835,000	13,000	588,000
M/M change	10.7%	11.6%	0.0%	8.6%
Y/Y change	5.9%	35.2%	15.4%	-35.9%

* 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

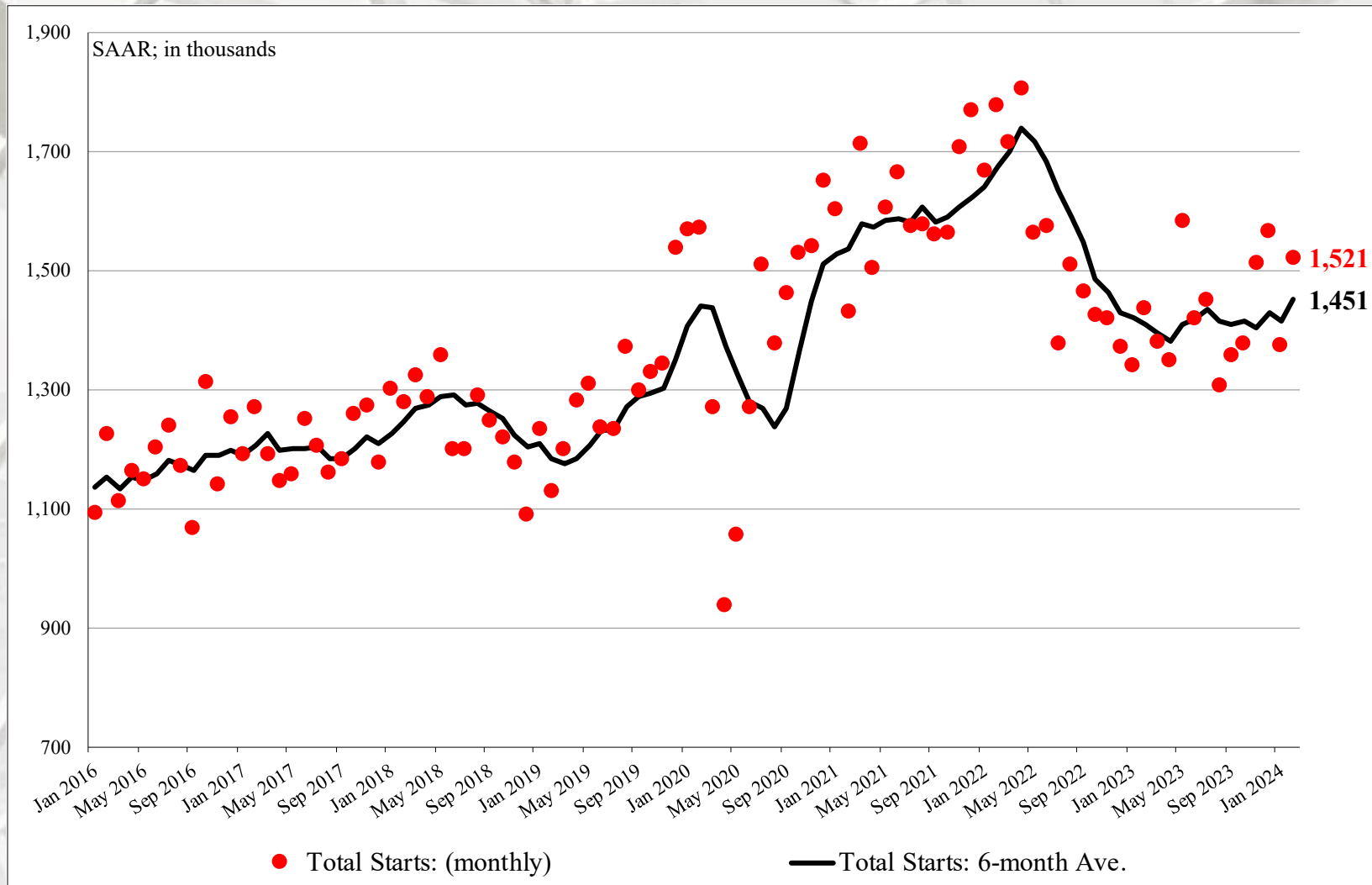


The US DOC does not report 2 to 4 multi-family starts directly; this is an estimation: (Total starts – (SF + 5-unit MF)).

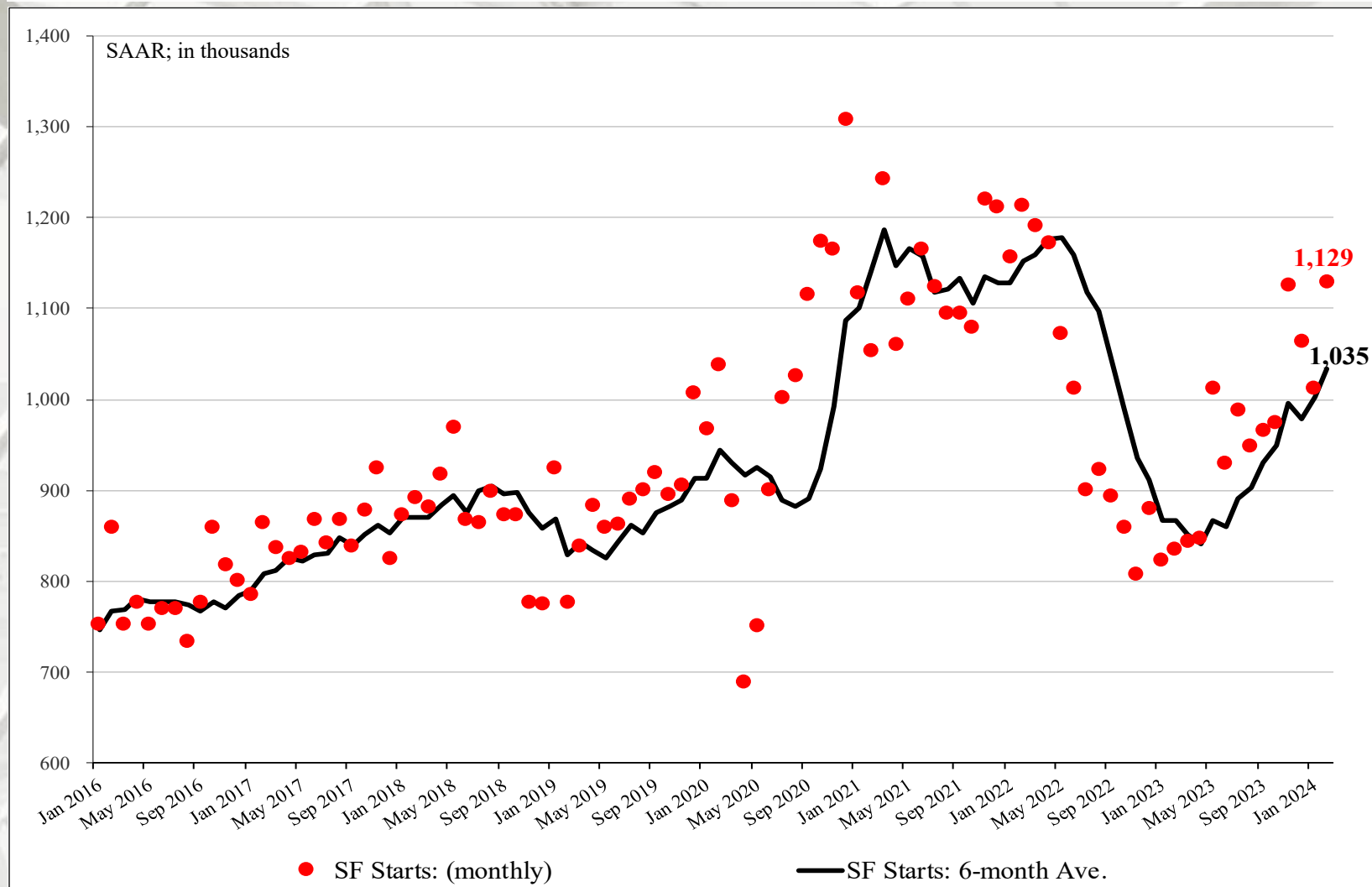
* Percentage of total starts.

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

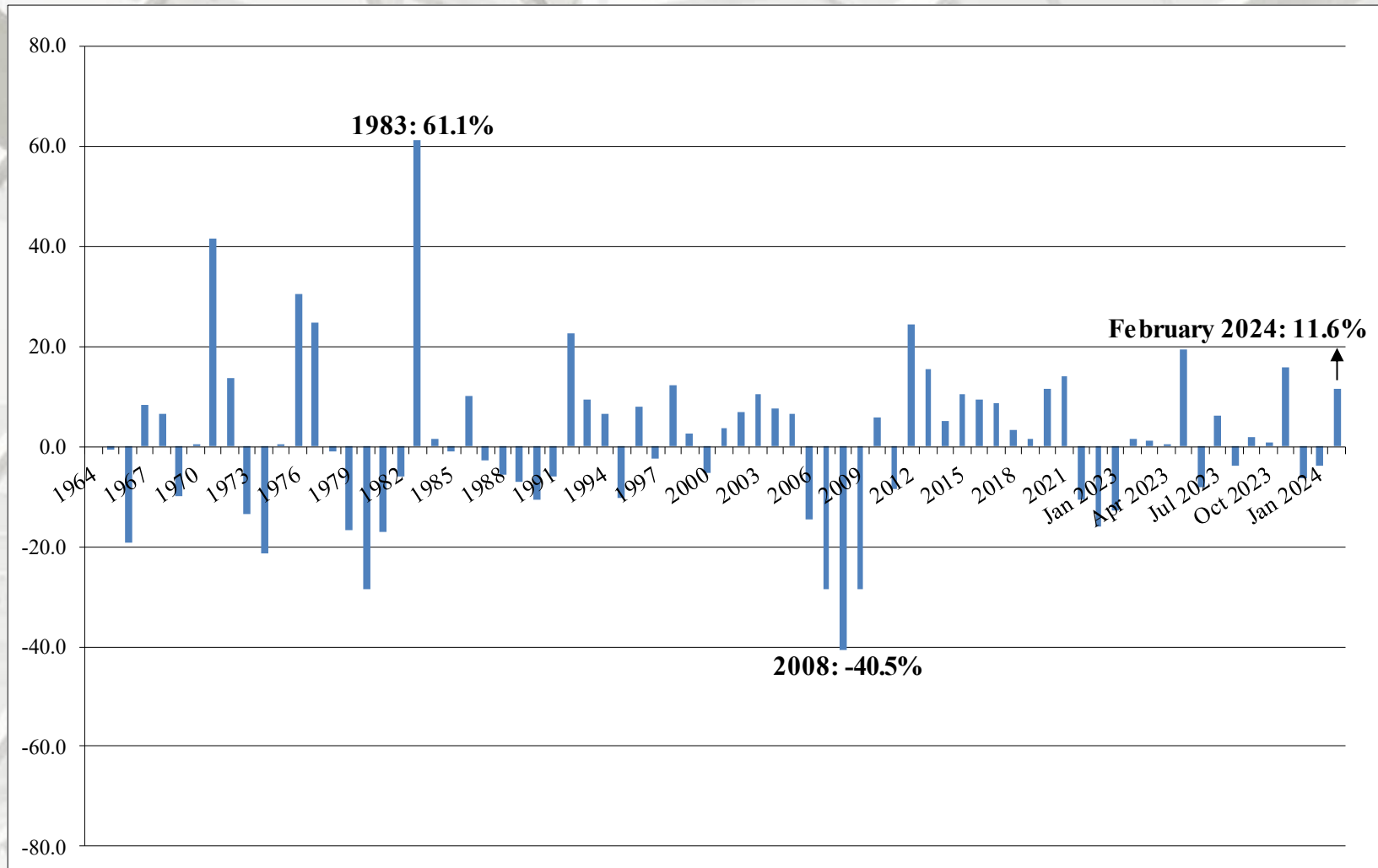
Total Housing Starts: Six-Month Moving Average



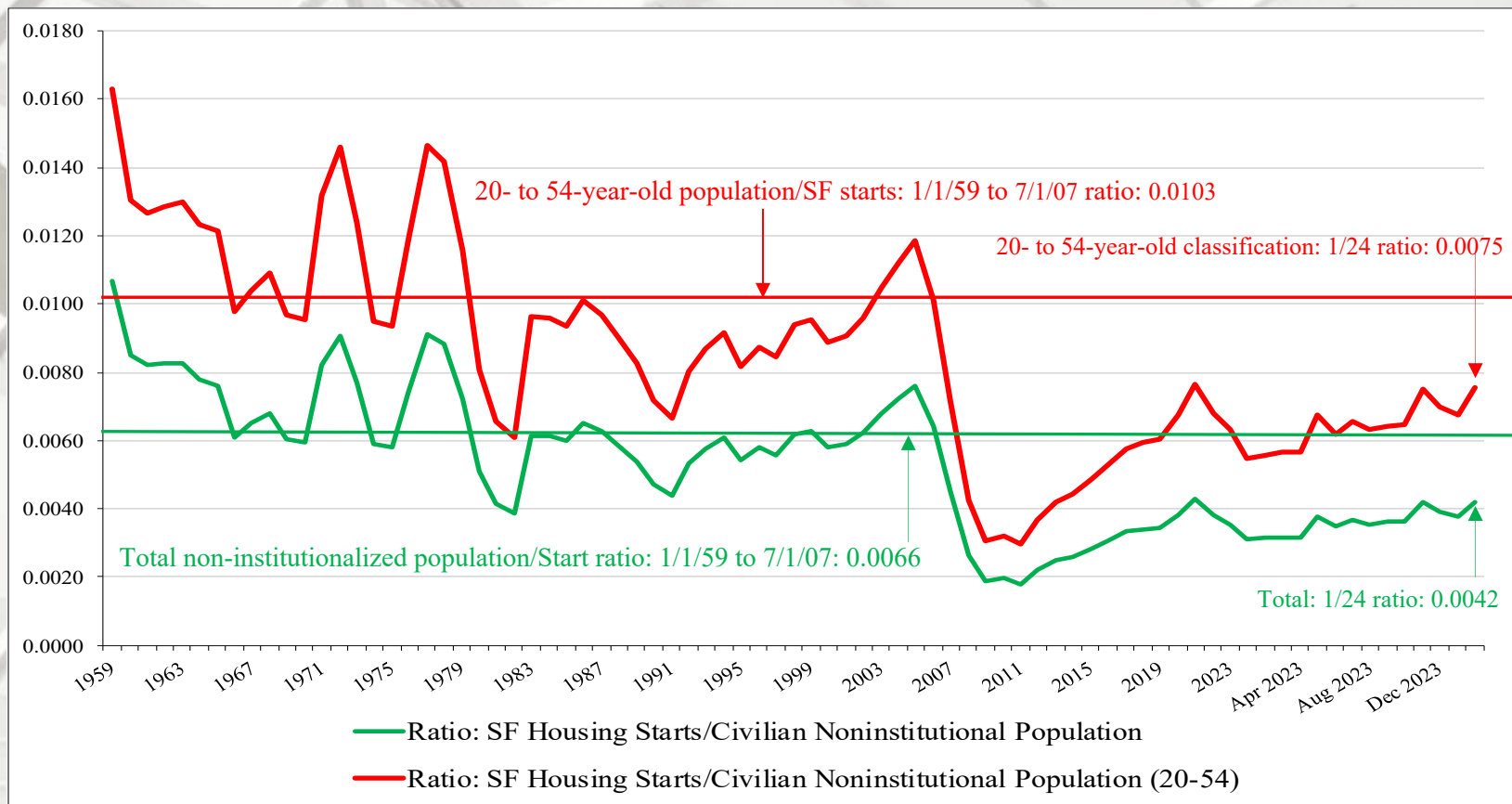
SF Housing Starts: Six-Month Moving Average



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



New SF Starts

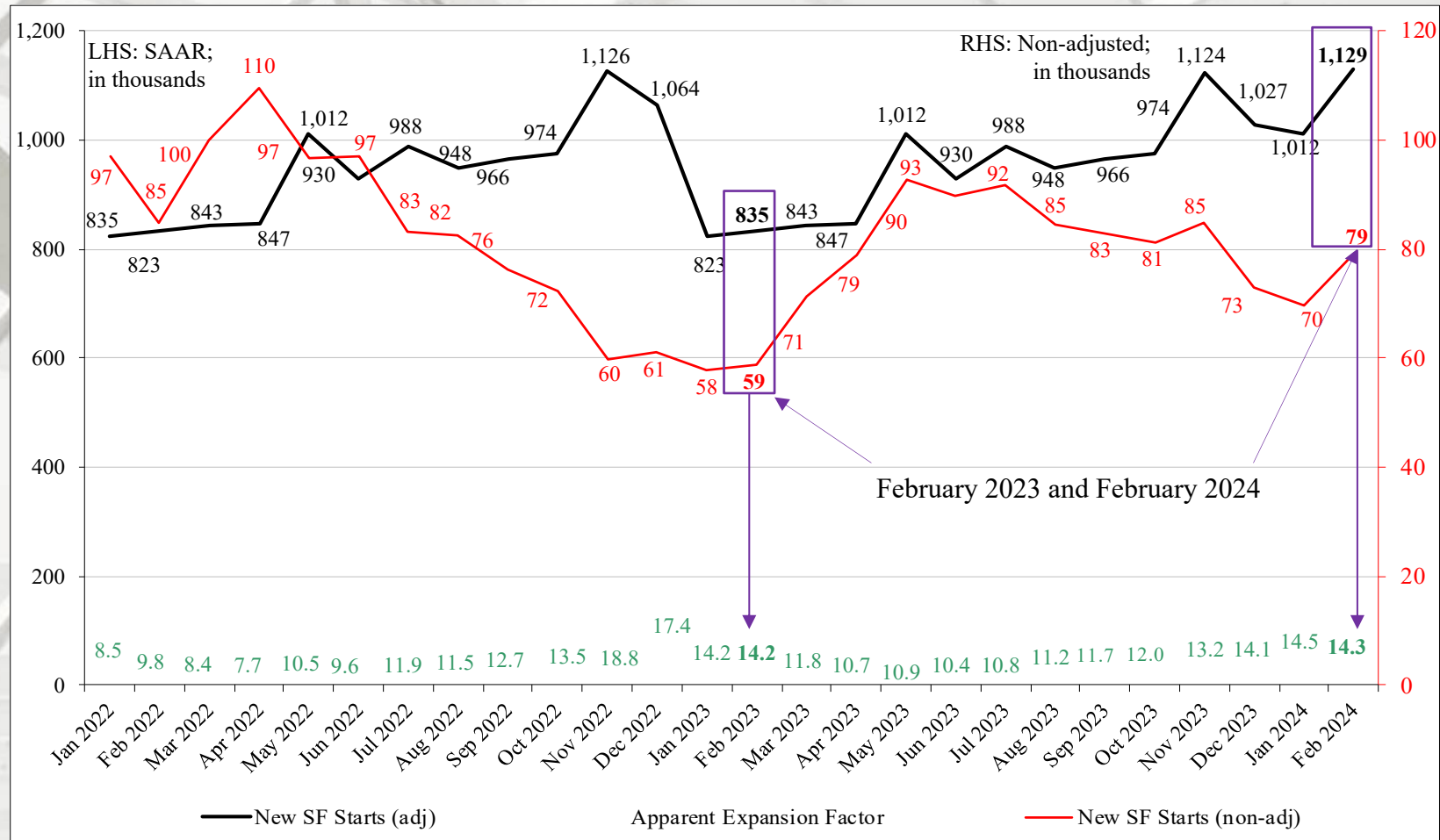


New SF starts adjusted for the US population

From February 1959 to February 2007, the long-term ratio of new SF starts to the total US non-institutionalized population is 0.0066. In February 2024 it was 0.0042 – increasing from January (0.0038). The long-term ratio of non-institutionalized population, aged 20 to 54 is 0.0103; in February 2024 it was 0.0075 – also an improvement from January (0.0068). 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**
February	122,000	85,000	37,000
January	136,000	73,000	63,000
2023	105,000	69,000	36,000
M/M change	-10.3%	16.4%	-41.3%
Y/Y change	16.2%	23.2%	2.8%
	MW Total	MW SF	MW MF
February	202,000	157,000	45,000
January	134,000	112,000	22,000
2023	187,000	87,000	100,000
M/M change	50.7%	40.2%	104.5%
Y/Y change	8.0%	80.5%	-55.0%

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

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

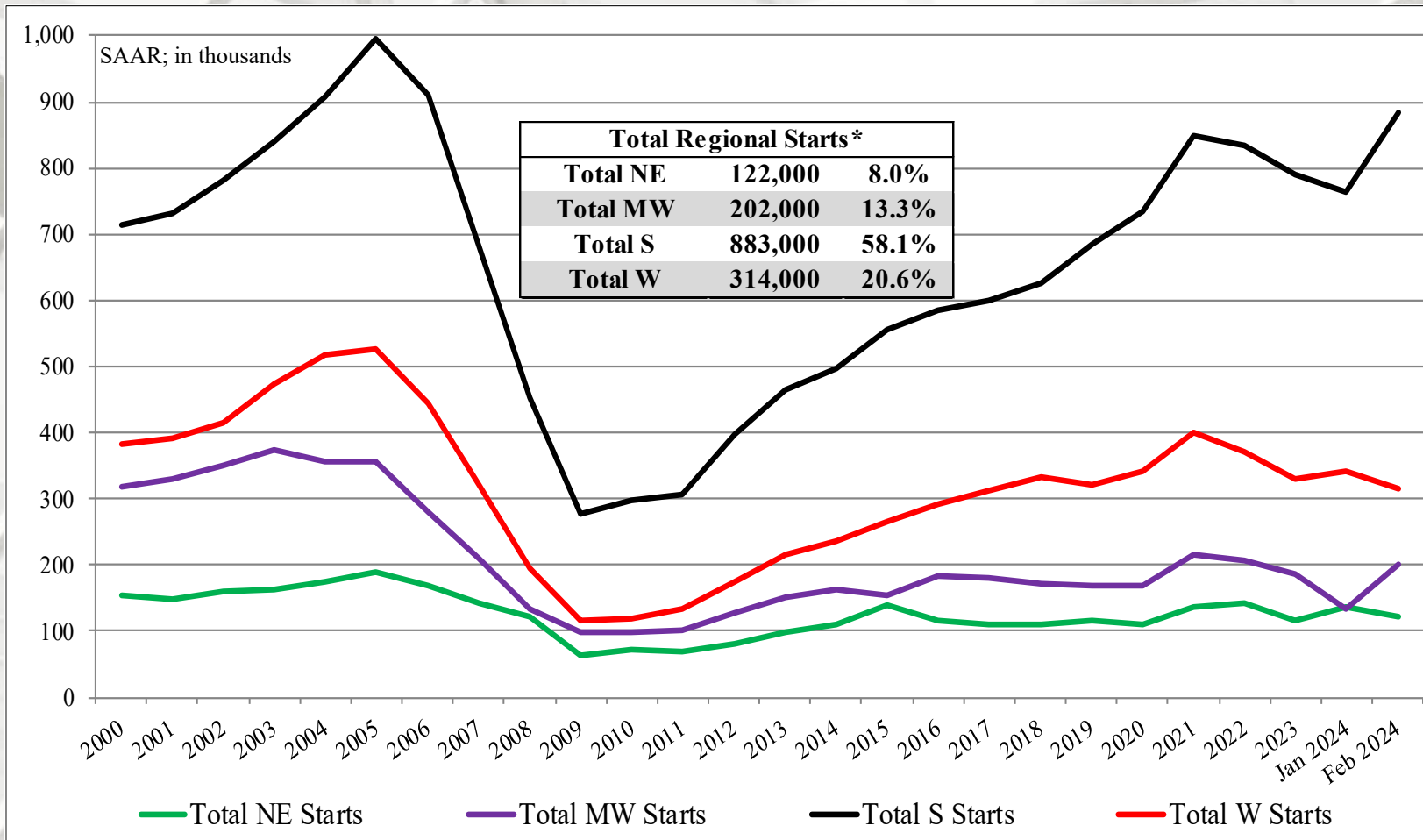
New Housing Starts by Region

	S Total	S SF	S MF**
February	883,000	683,000	200,000
January	763,000	586,000	177,000
2023	792,000	514,000	278,000
M/M change	15.7%	16.6%	13.0%
Y/Y change	11.5%	32.9%	-28.1%
	W Total	W SF	W MF
February	314,000	204,000	110,000
January	341,000	241,000	100,000
2023	352,000	165,000	187,000
M/M change	-7.9%	-15.4%	10.0%
Y/Y change	-10.8%	23.6%	-41.2%

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

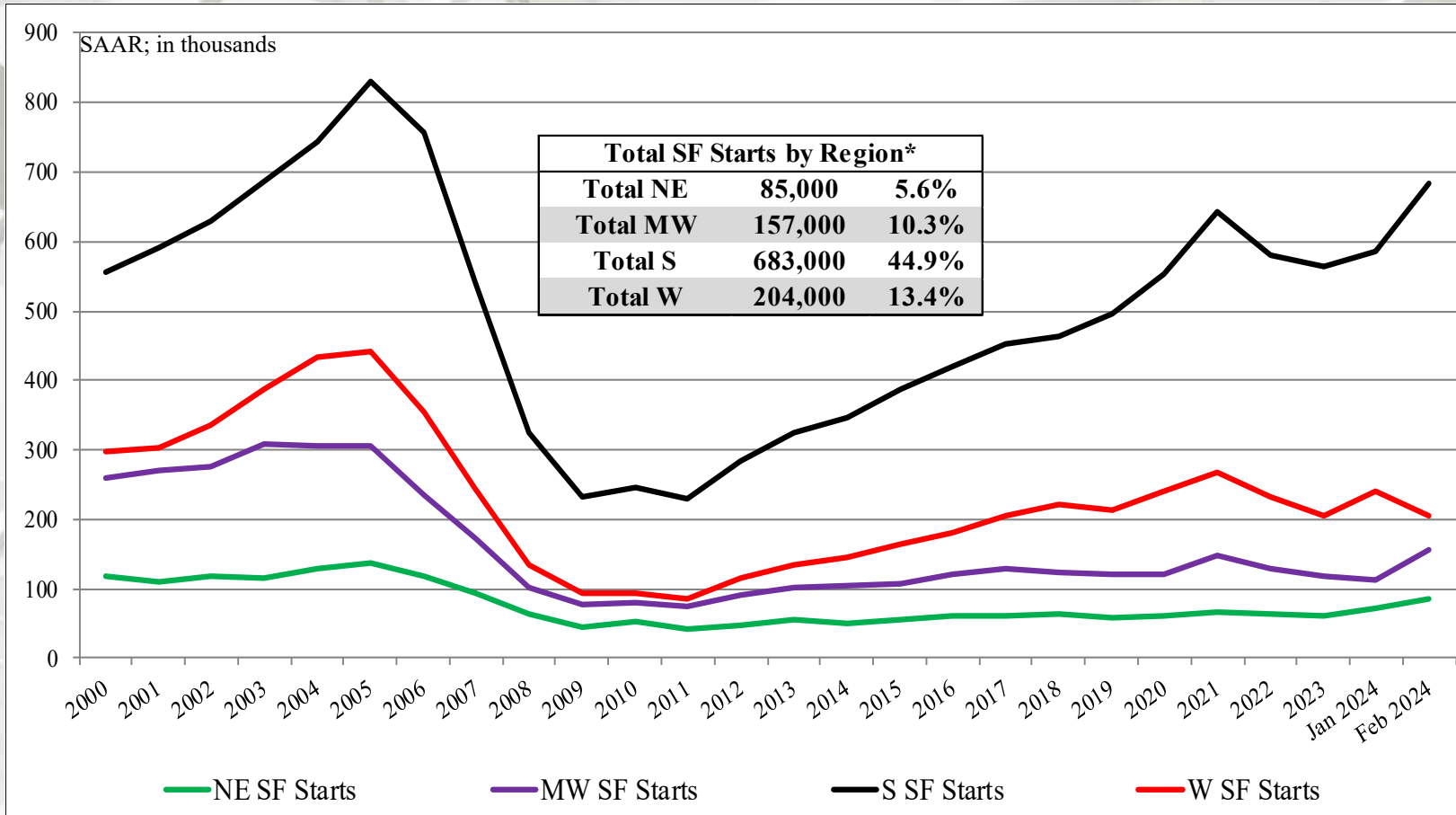


NE = Northeast, MW = Midwest, S = South, W = West

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

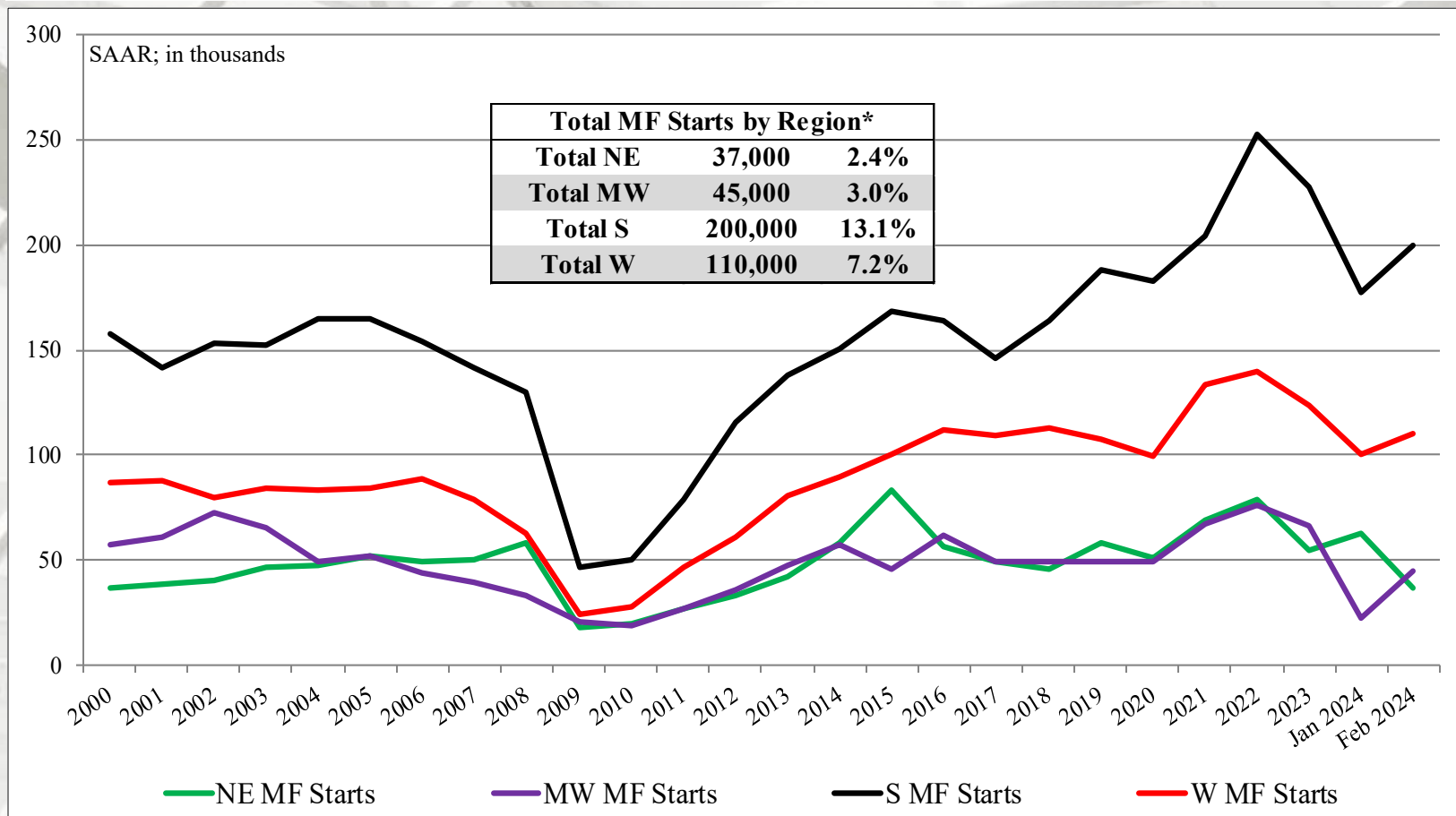


NE = Northeast, MW = Midwest, S = South, W = West

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

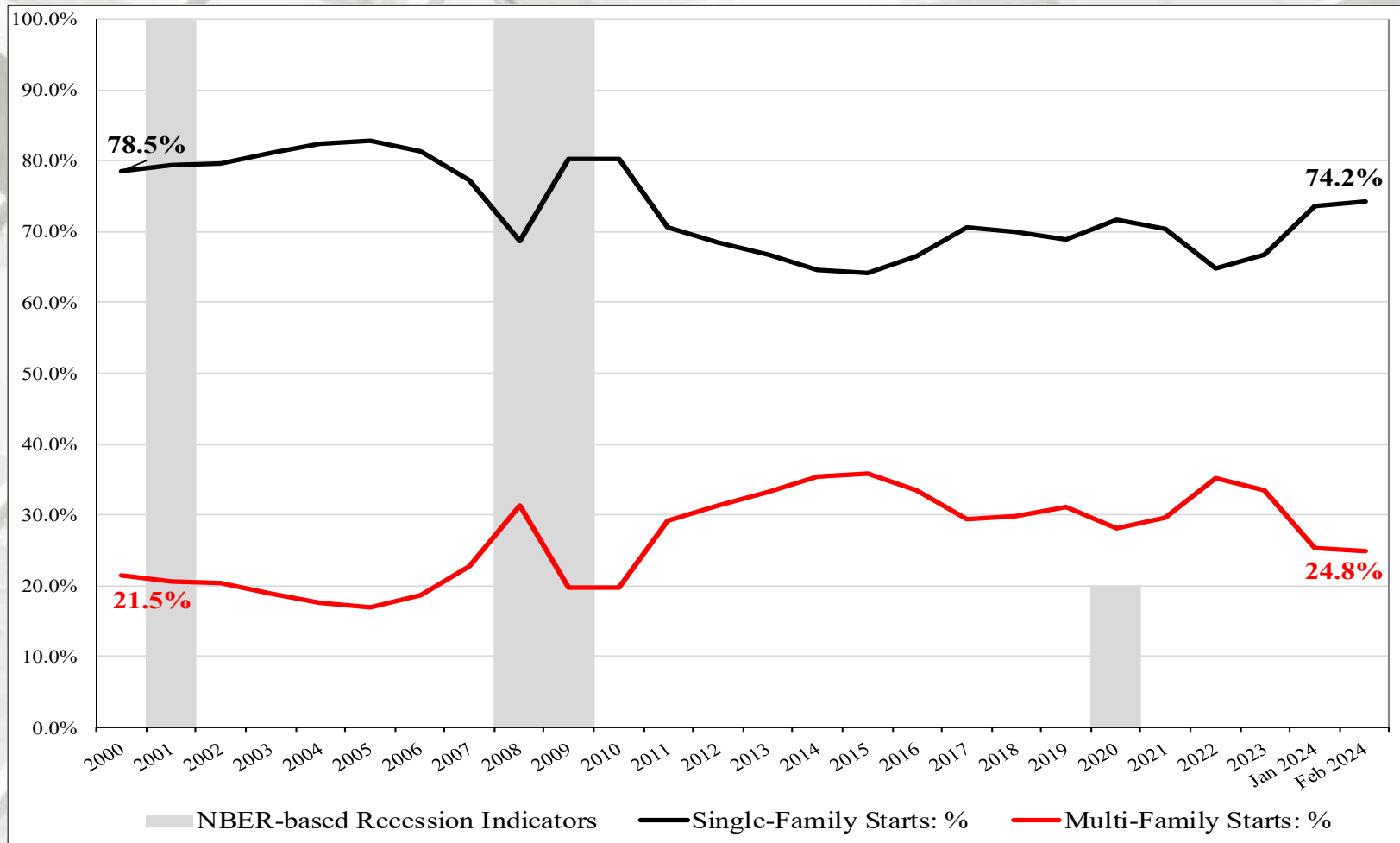


NE = Northeast, MW = Midwest, S = South, W = West

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 (%)



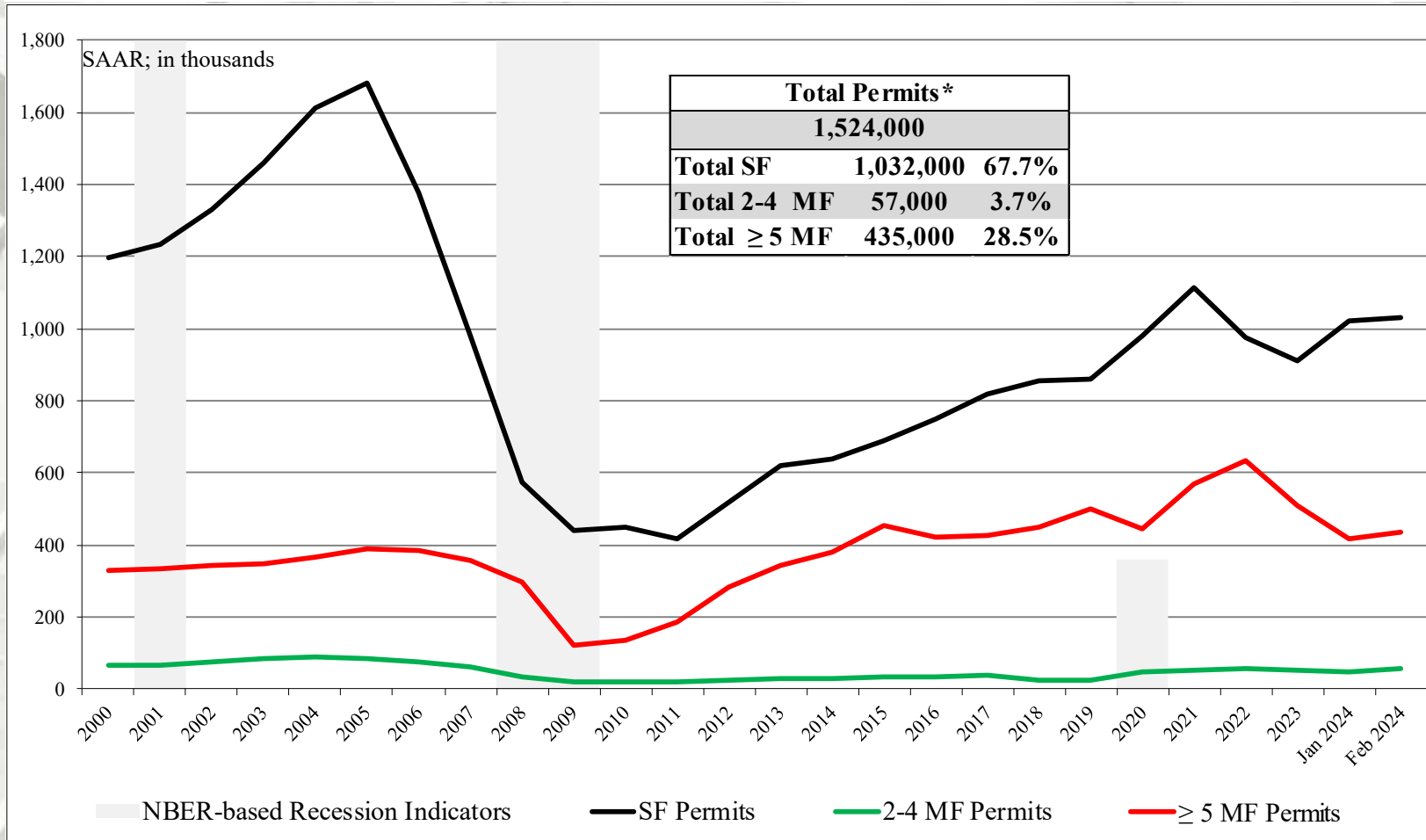
NBER based Recession Indicator Bars for the United States from the Period following the Peak through the Trough (FRED, St. Louis).

New Housing Permits

	Total Permits*	SF Permits	MF 2-4 unit Permits	MF ≥ 5 unit Permits
February	1,524,000	1,032,000	57,000	435,000
January	1,489,000	1,021,000	49,000	419,000
2023	1,482,000	796,000	48,000	638,000
M/M change	2.4%	1.1%	16.3%	3.8%
Y/Y change	2.8%	29.6%	18.8%	-31.8%

* 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**
February	201,000	61,000	140,000
January	149,000	59,000	90,000
2023	113,000	51,000	62,000
M/M change	34.9%	3.4%	55.6%
Y/Y change	77.9%	19.6%	125.8%
	MW Total*	MW SF	MW MF**
February	231,000	142,000	89,000
January	208,000	120,000	88,000
2023	188,000	101,000	87,000
M/M change	11.1%	18.3%	1.1%
Y/Y change	22.9%	40.6%	2.3%

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**
February	777,000	605,000	172,000
January	793,000	605,000	188,000
2023	825,000	484,000	341,000
M/M change	-2.0%	0.0%	-8.5%
Y/Y change	-5.8%	25.0%	-49.6%

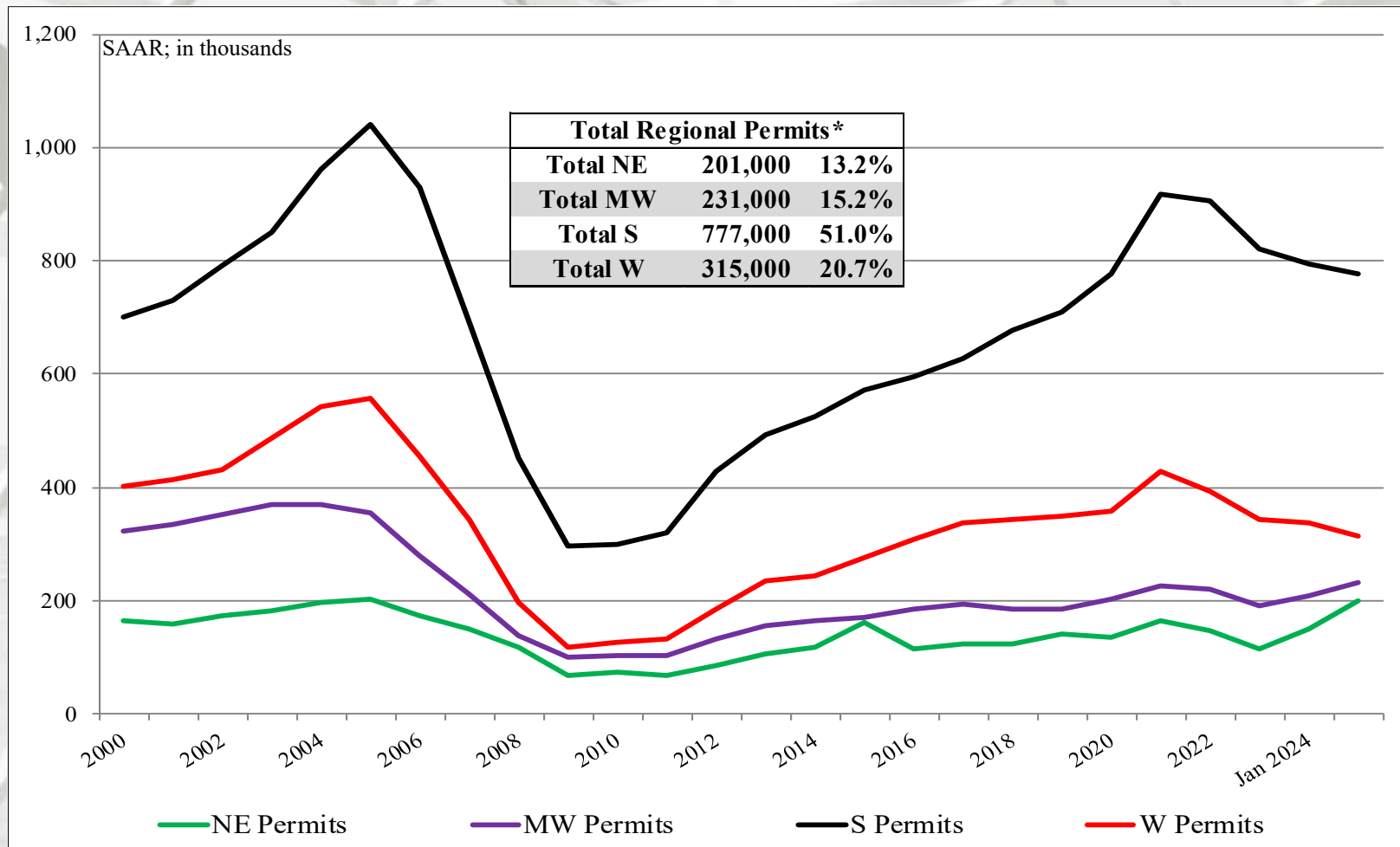
	W Total*	W SF	W MF**
February	315,000	224,000	91,000
January	339,000	237,000	102,000
2023	356,000	160,000	196,000
M/M change	-7.1%	-5.5%	-10.8%
Y/Y change	-11.5%	40.0%	-53.6%

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).

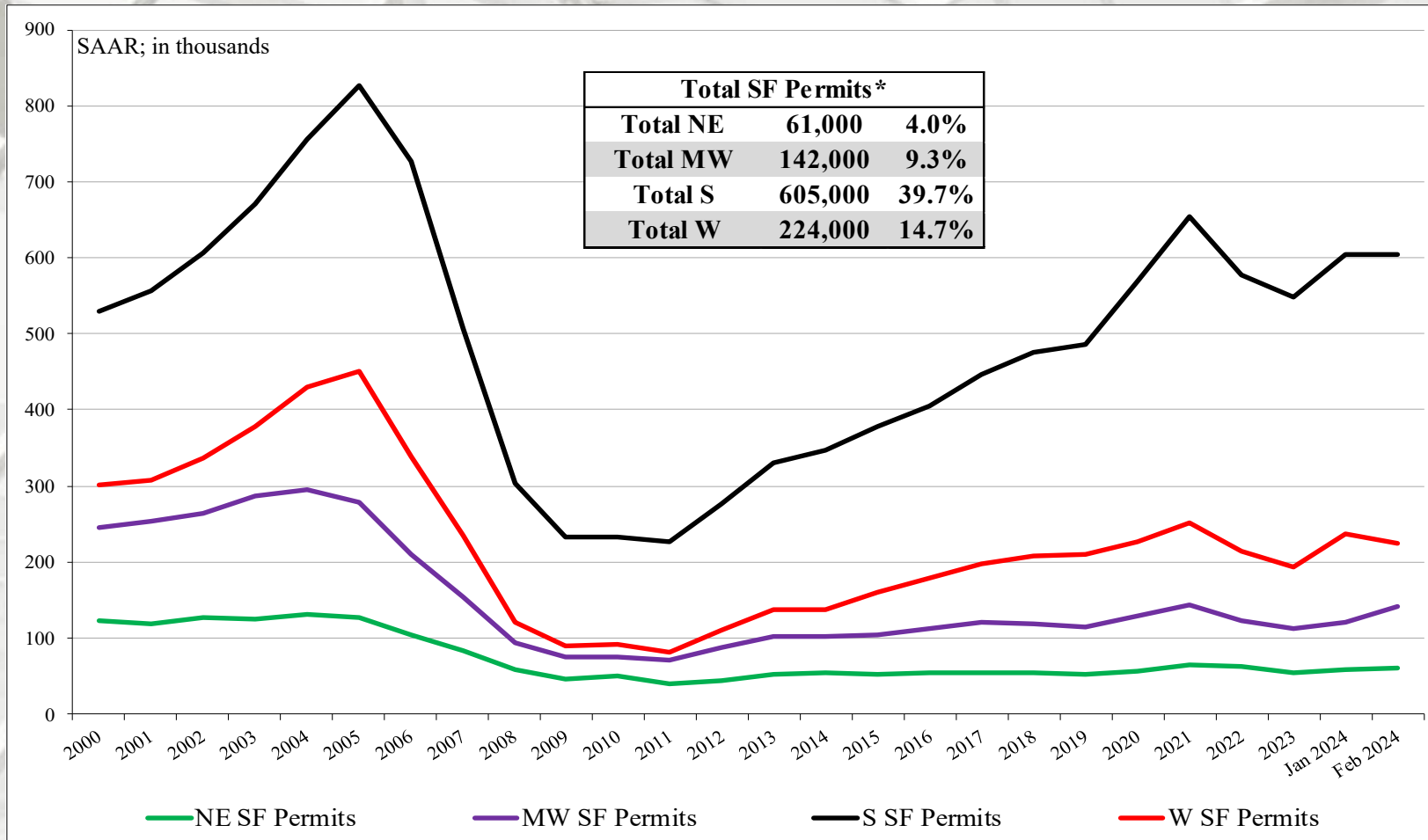
Total Housing Permits by Region



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

* Percentage of total permits.

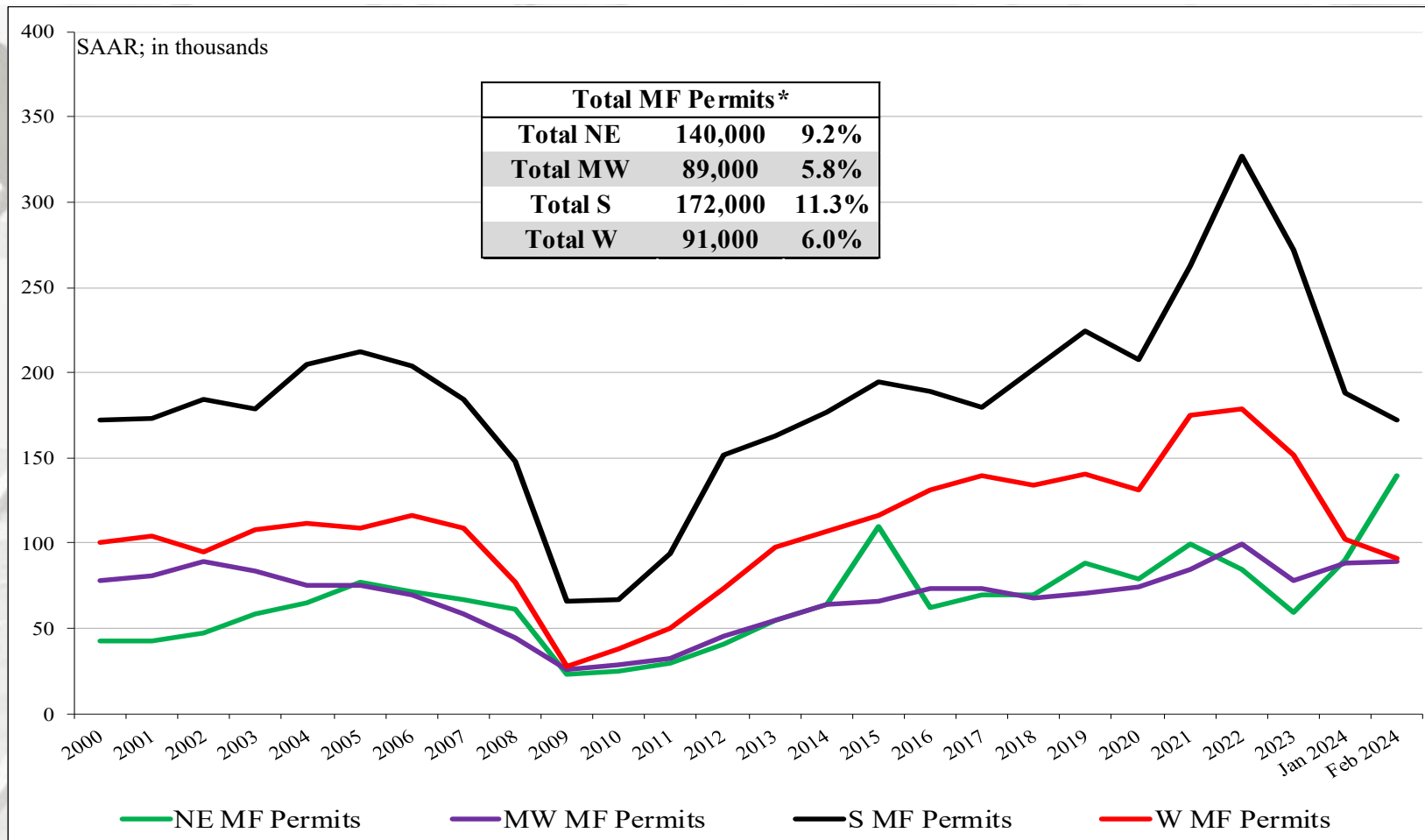
SF Housing Permits by Region



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.

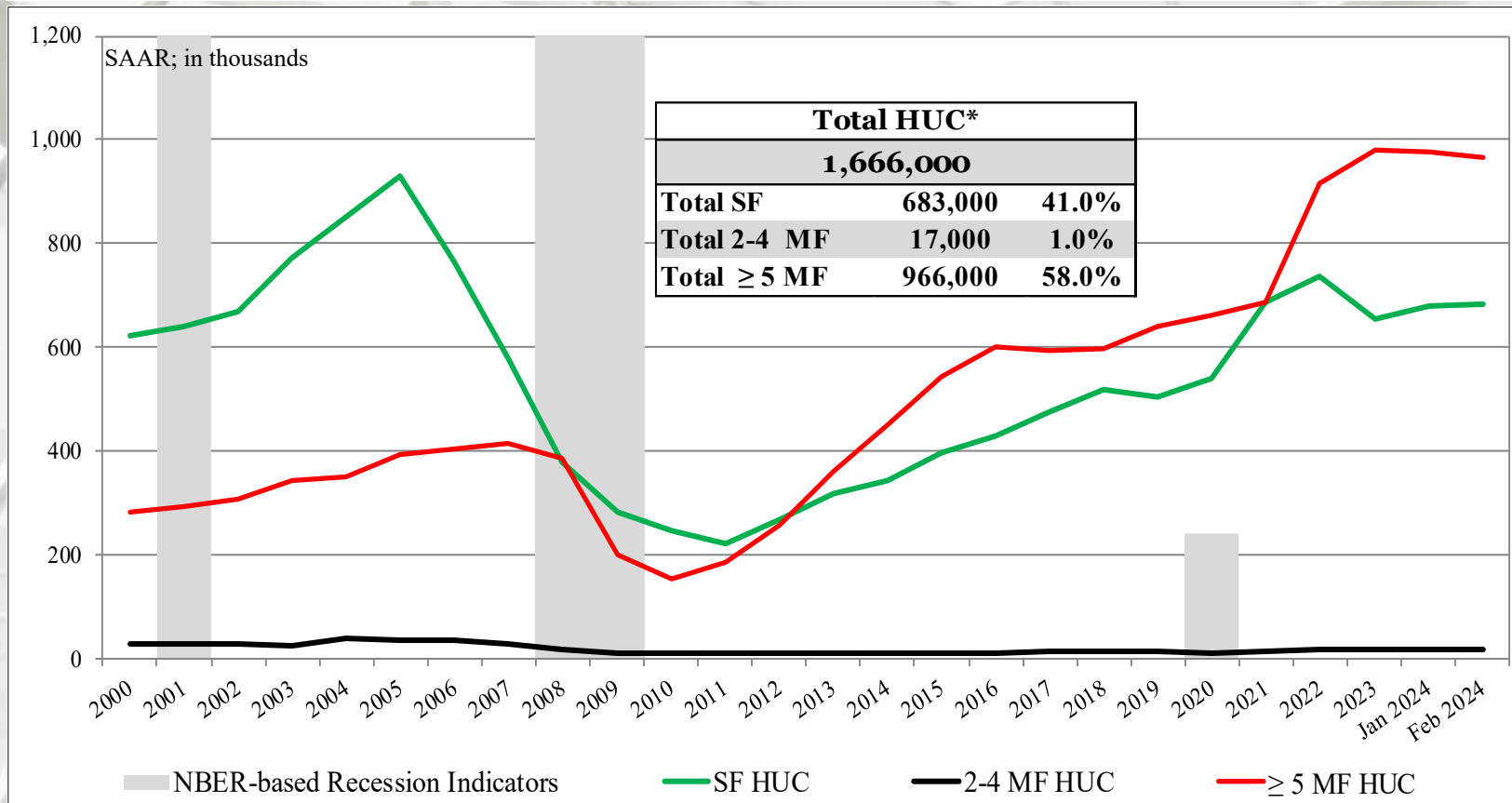
New Housing Under Construction (HUC)

	Total HUC	SF HUC	MF 2-4 unit** HUC	MF ≥ 5 unit HUC
February	1,666,000	683,000	17,000	966,000
January	1,674,000	681,000	17,000	976,000
2023	1,686,000	727,000	16,000	943,000
M/M change	-0.5%	0.3%	0.0%	-1.0%
Y/Y change	-1.2%	-6.1%	6.3%	2.4%

All housing under construction (HUC) 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**
February	204,000	66,000	138,000
January	206,000	65,000	141,000
2023	219,000	67,000	152,000
M/M change	-1.0%	1.5%	-2.1%
Y/Y change	-6.8%	-1.5%	-9.2%
	MW Total	MW SF	MW MF
February	208,000	91,000	117,000
January	213,000	91,000	122,000
2023	211,000	97,000	114,000
M/M change	-2.3%	0.0%	-4.1%
Y/Y change	-1.4%	-6.2%	2.6%

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

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

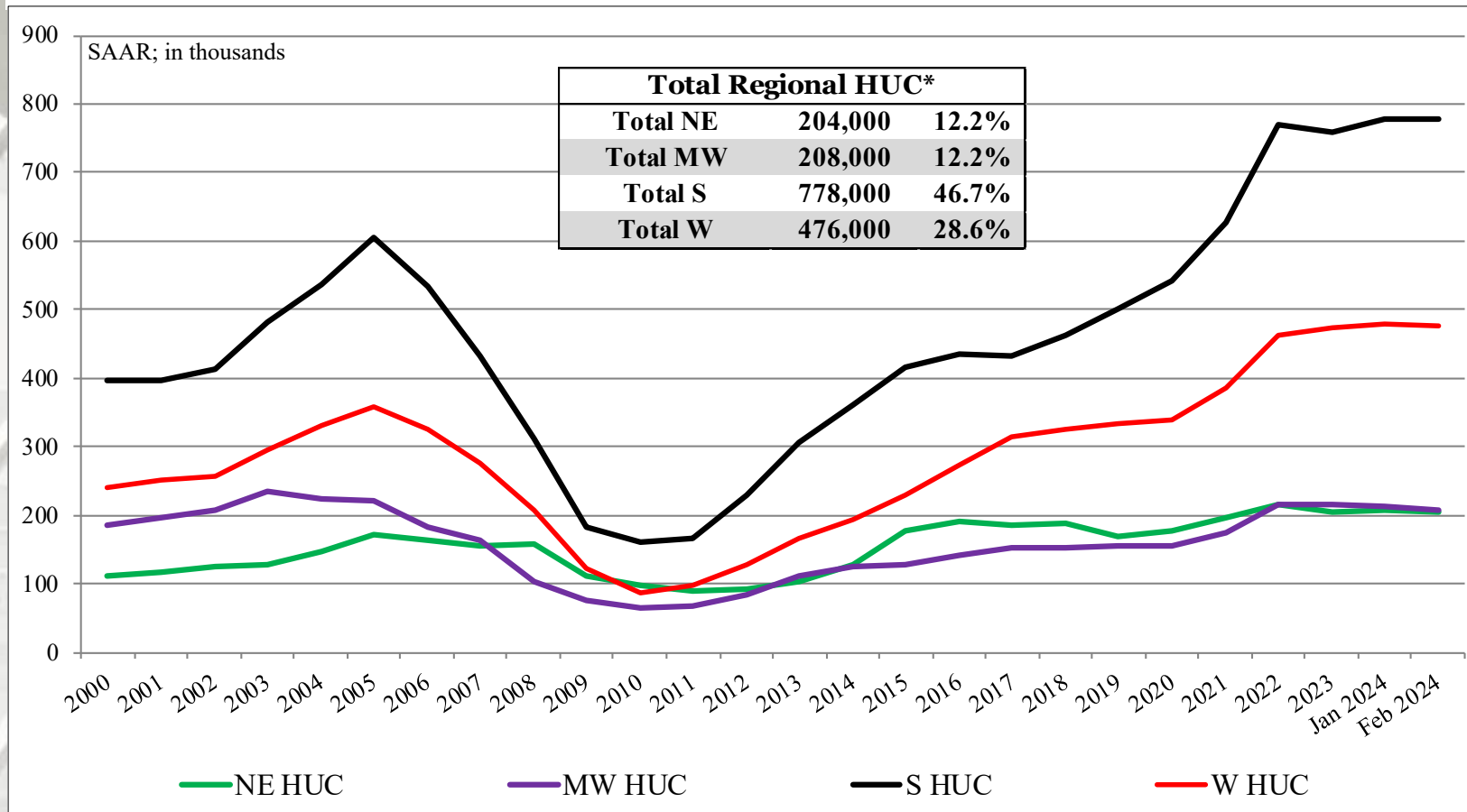
New Housing Under Construction by Region

	S Total	S SF	S MF**
February	778,000	351,000	427,000
January	777,000	349,000	428,000
2023	787,000	385,000	402,000
M/M change	0.1%	0.6%	-0.2%
Y/Y change	-1.1%	-8.8%	6.2%
	W Total	W SF	W MF
February	476,000	175,000	301,000
January	478,000	176,000	302,000
2023	469,000	178,000	291,000
M/M change	-0.4%	-0.6%	-0.3%
Y/Y change	1.5%	-1.7%	3.4%

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

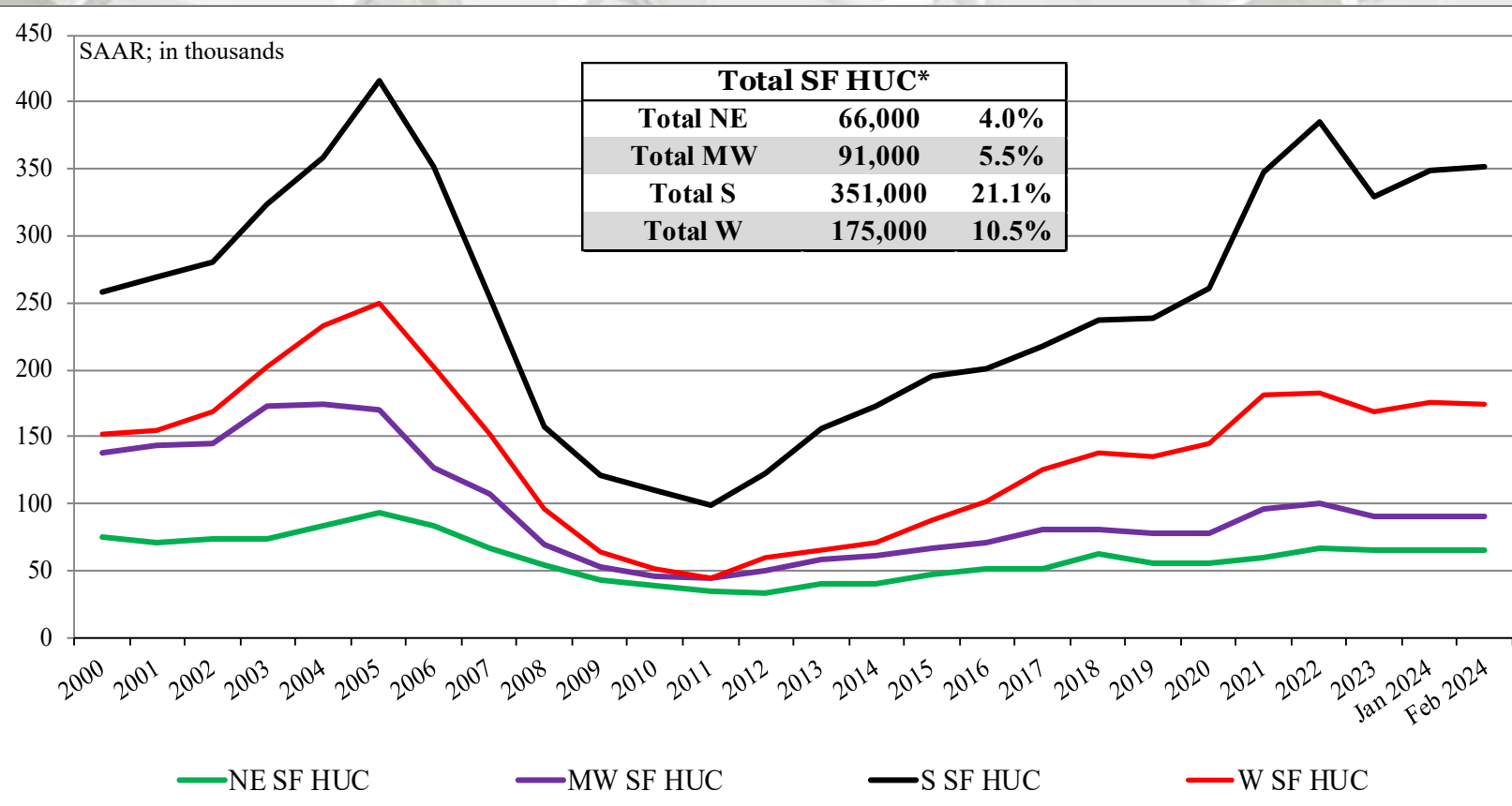


NE = Northeast, MW = Midwest, S = South, W = West

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

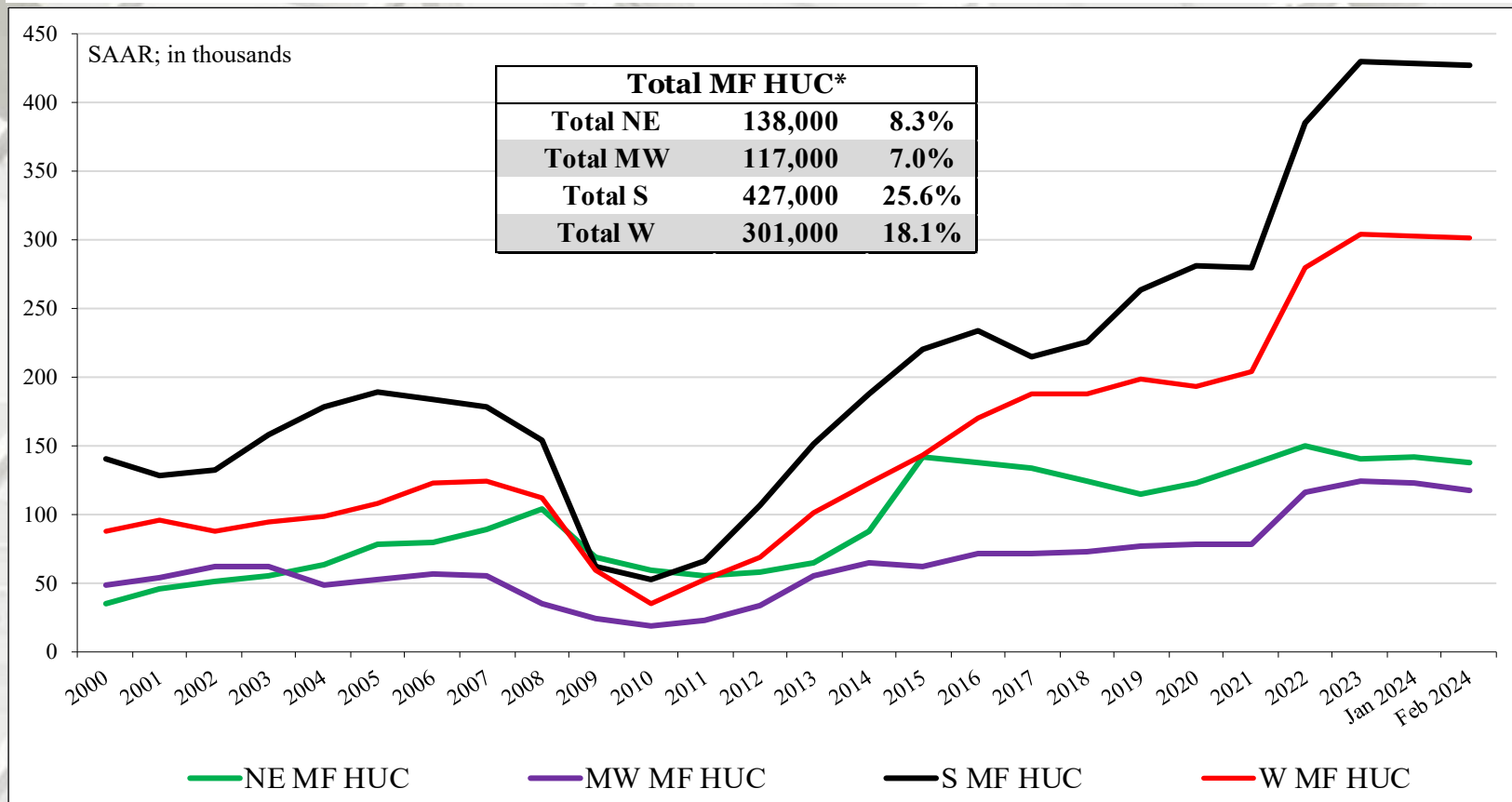


NE = Northeast, MW = Midwest, S = South, W = West.

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.

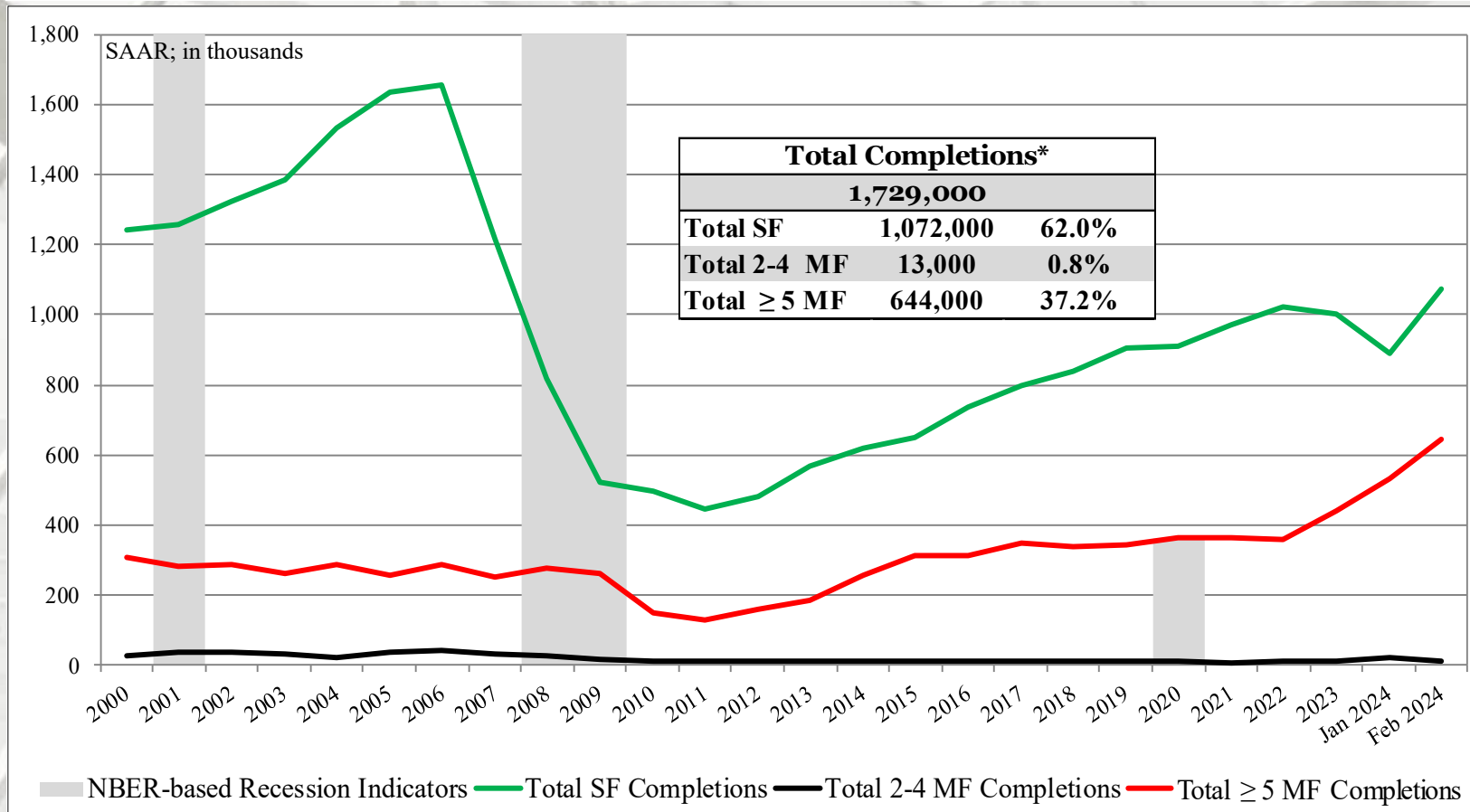
New Housing Completions

	Total Completions*	SF Completions	MF 2-4 unit**	MF ≥ 5 unit Completions
February	1,729,000	1,072,000	13,000	644,000
January	1,445,000	892,000	20,000	533,000
2023	1,577,000	1,029,000	6,000	542,000
M/M change	19.7%	20.2%	-35.0%	20.8%
Y/Y change	9.6%	4.2%	116.7%	18.8%

* 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**
February	132,000	67,000	65,000
January	96,000	46,000	50,000
2023	131,000	64,000	67,000
M/M change	37.5%	45.7%	30.0%
Y/Y change	0.8%	4.7%	-3.0%
	MW Total	MW SF	MW MF**
February	289,000	162,000	127,000
January	181,000	112,000	69,000
2023	205,000	124,000	81,000
M/M change	59.7%	44.6%	84.1%
Y/Y change	41.0%	30.6%	56.8%

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).

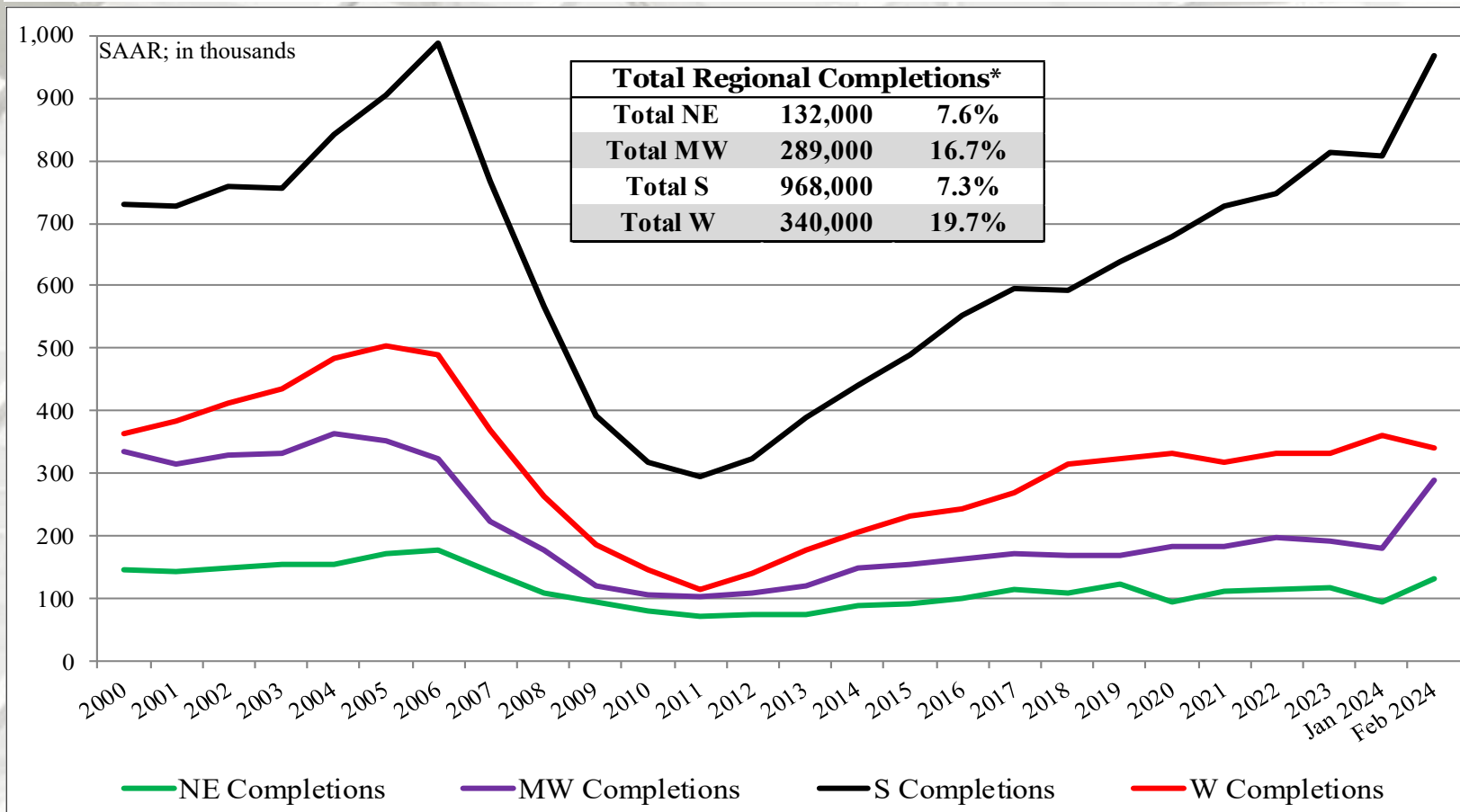
New Housing Completions by Region

	S Total	S SF	S MF**
February	968,000	634,000	334,000
January	806,000	544,000	262,000
2023	881,000	623,000	258,000
M/M change	20.1%	16.5%	27.5%
Y/Y change	9.9%	1.8%	29.5%
	W Total	W SF	W MF**
February	340,000	209,000	131,000
January	362,000	190,000	172,000
2023	360,000	218,000	142,000
M/M change	-6.1%	10.0%	-23.8%
Y/Y change	-5.6%	-4.1%	-7.7%

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).

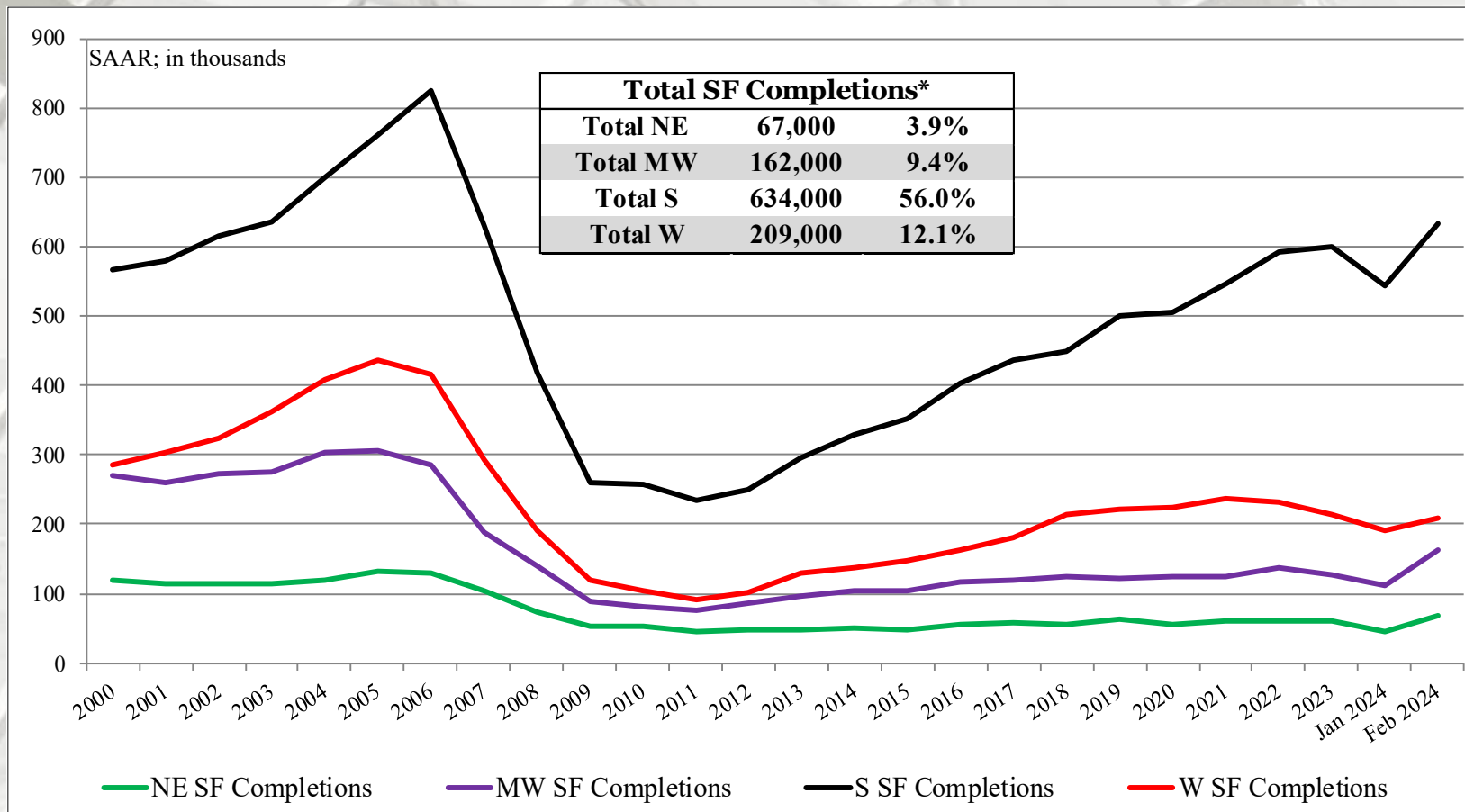
Total Housing Completions by Region



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

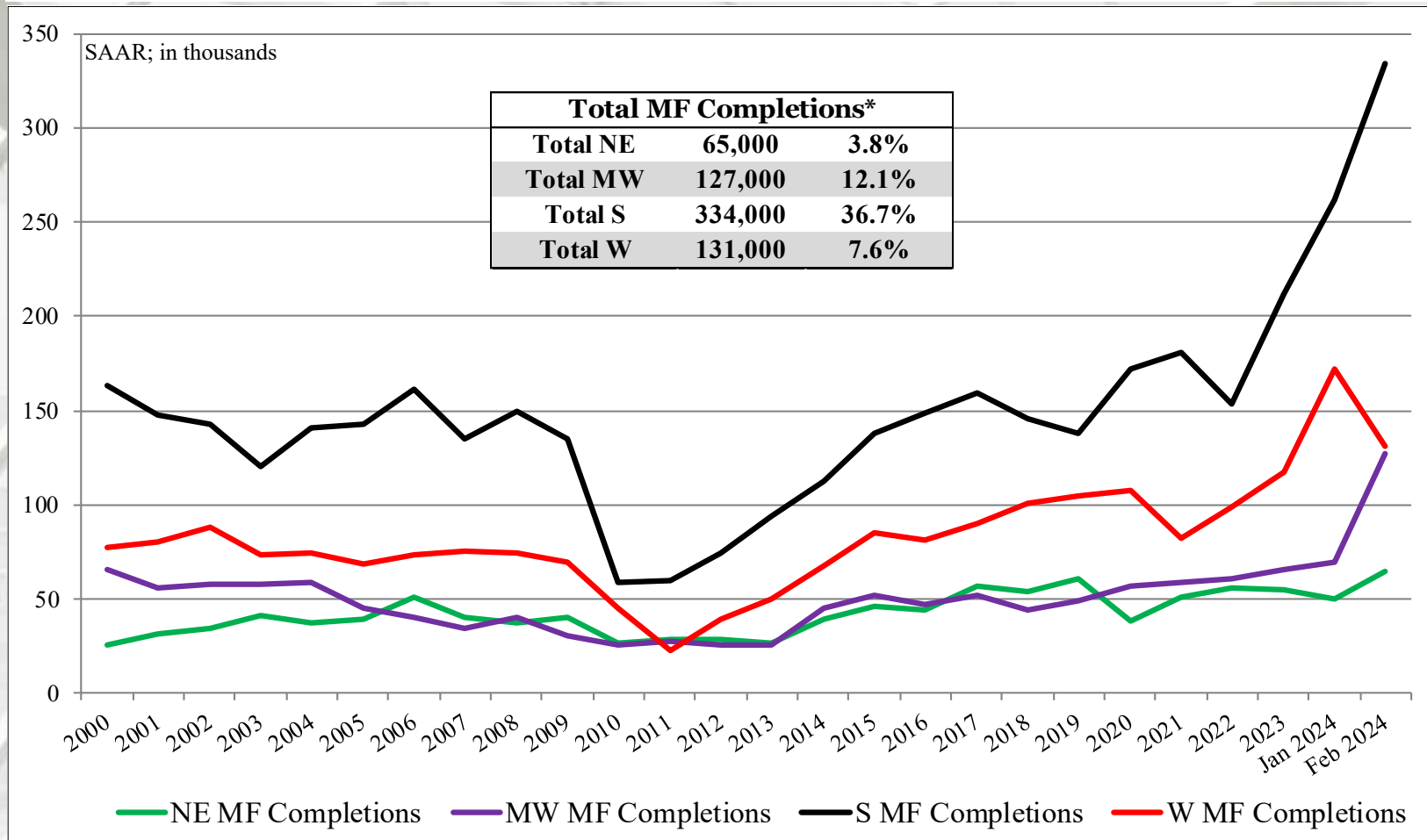


NE = Northeast, MW = Midwest, S = South, W = West

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



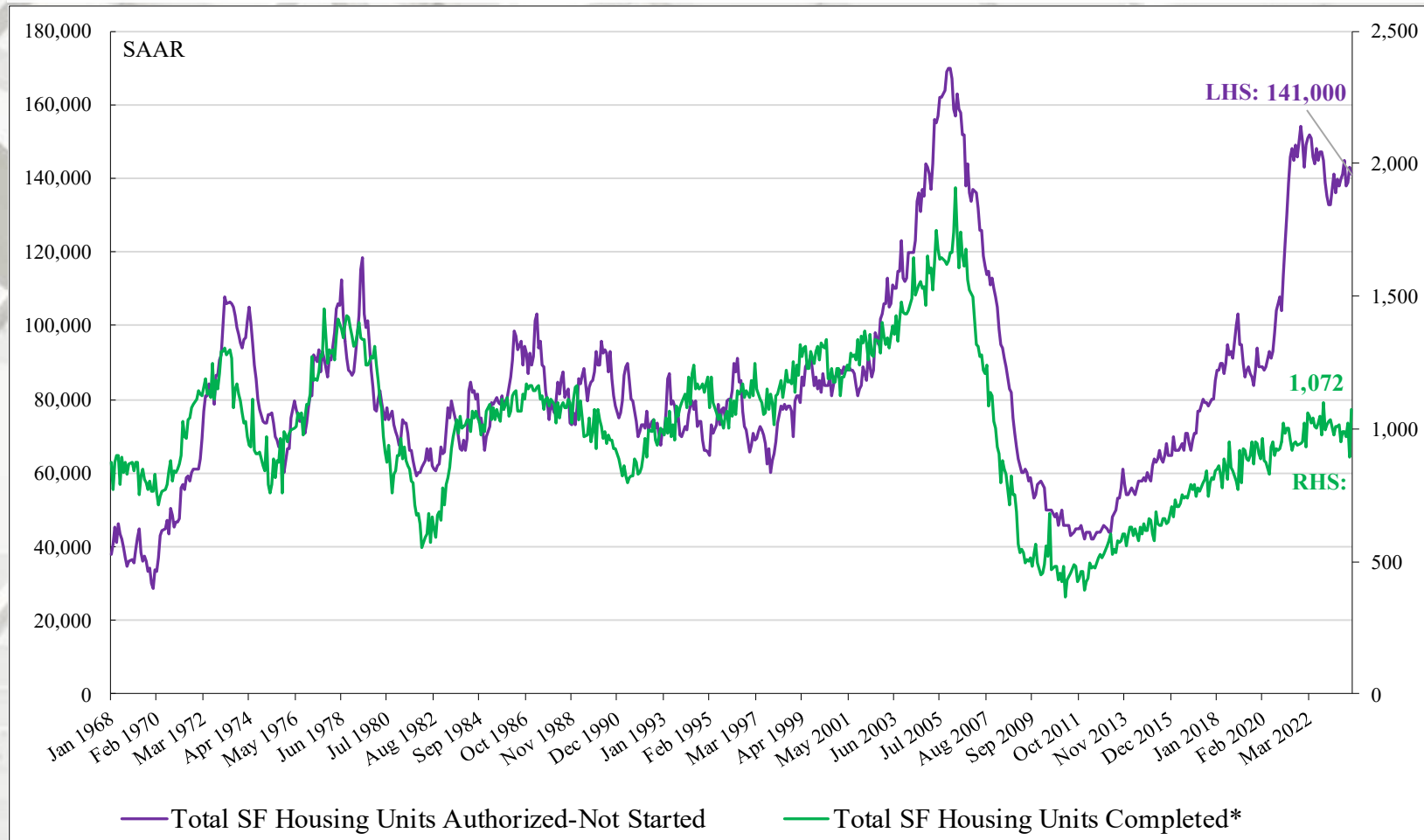
NE = Northeast, MW = Midwest, S = South, W = West

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

Source: <http://www.census.gov/construction/nrc/pdf/newresconst.pdf>; 3/19/24

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



Authorized, Not Started vs. Housing Completions

Total authorized units “not” started was 270,000 in February, an increase from January (269,000), and SF authorized units “not” started were 141,000 units in February, a decrease from January (143,000). Total completions and SF unit completions increased M/M.

The primary reason currently is reduced demand, and in combination with lingering 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
February	662,000	\$400,500	\$485,000	8.4
January	664,000	\$414,900	\$523,400	8.3
2023	625,000	\$433,300	\$499,100	8.4
M/M change	-0.3%	-3.5%	-7.3%	1.2%
Y/Y change	5.9%	-7.6%	-2.8%	0.0%

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

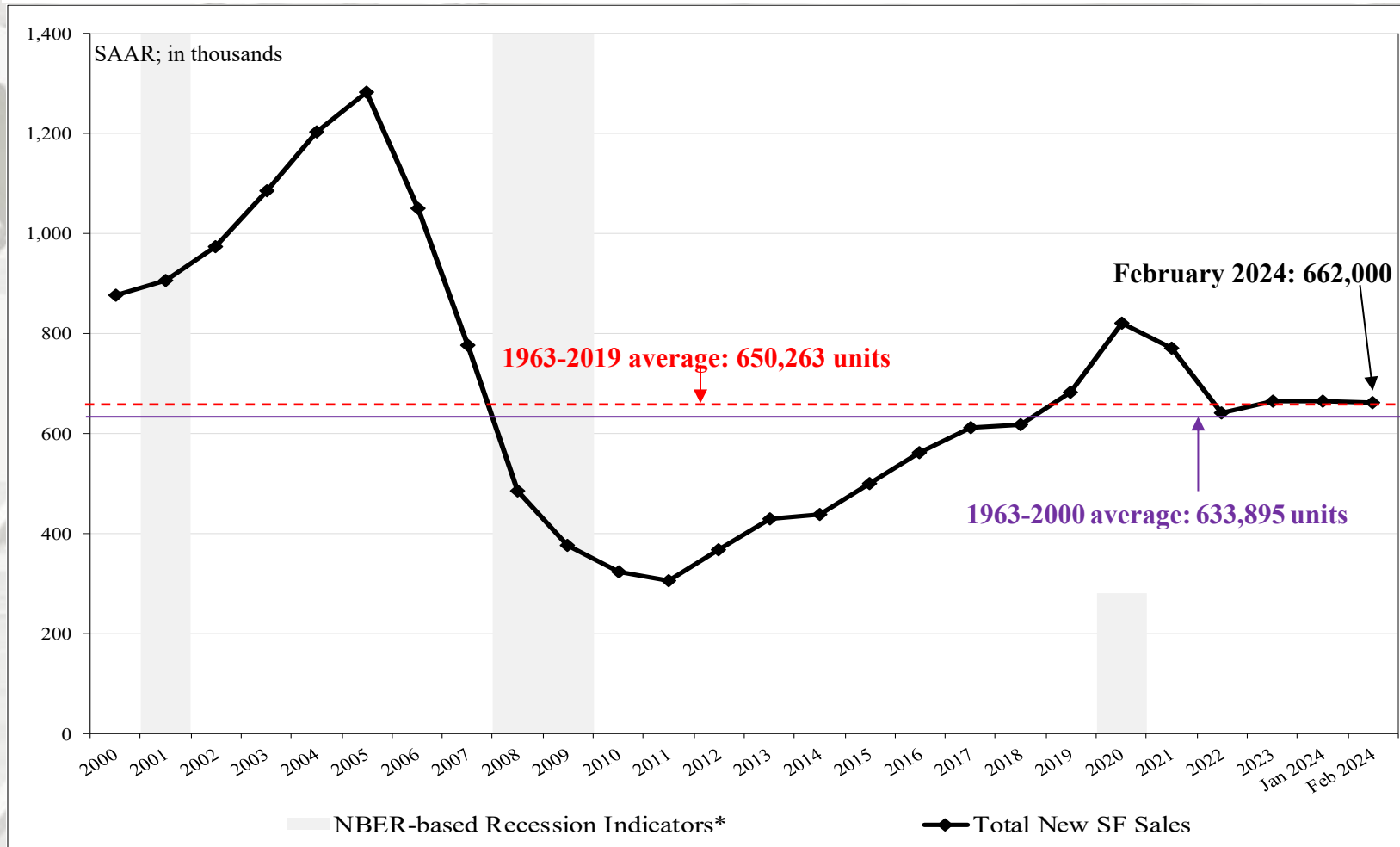
New SF sales were less than the consensus forecast³ of 675 m; range 664 m to 700 m. The past three month's new SF sales data also were revised:

November initial: 590 m, revised to 609 m.

December initial: 664 m, revised to 653 m.

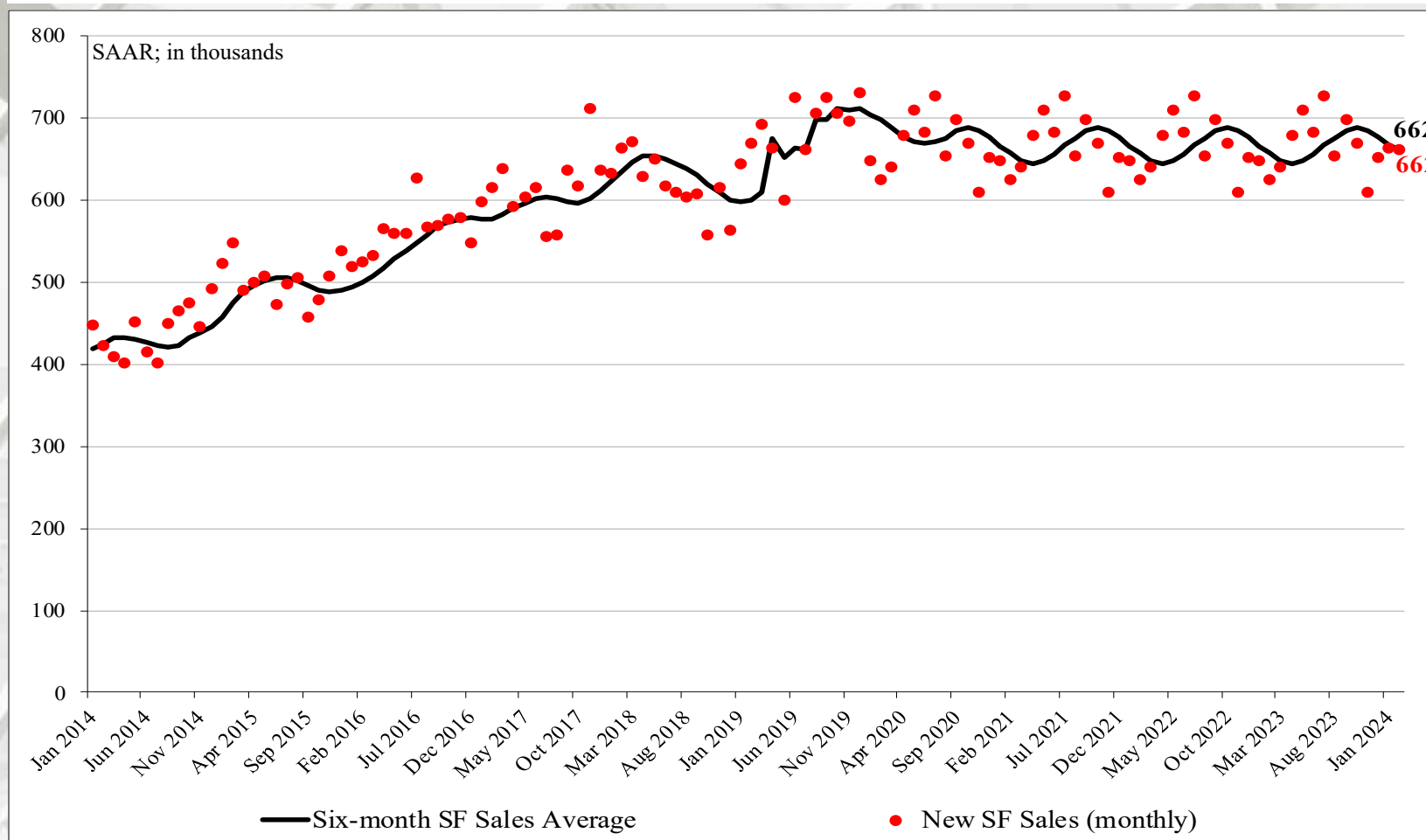
January initial: 661 m, revised to 664 m.

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			
February	37,000	83,000	367,000	175,000			
January	54,000	85,000	354,000	171,000			
2023	23,000	72,000	408,000	122,000			
M/M change	-31.5%	-2.4%	3.7%	2.3%			
Y/Y change	60.9%	15.3%	-10.0%	43.4%			
	\$150 - ≤ \$150m	\$200 - \$199.9m	\$300 - 299.9m	\$400 - \$399.9m	\$500 - \$499.9m	\$750m - \$749.9m	≥ \$750m
February ^{1,2,3,4}	0	0	10,000	20,000	10,000	13,000	7,000
January	0	1,000	8,000	17,000	12,000	12,000	8,000
2023	0	0	6,000	17,000	11,000	17,000	6,000
M/M change	#N/A	#N/A	25.0%	17.6%	-16.7%	8.3%	-12.5%
Y/Y change	#N/A	#N/A	66.7%	17.6%	-9.1%	-23.5%	16.7%
% of New SF sales	0.0%	1.8%	14.0%	29.8%	21.1%	21.1%	14.0%

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 February not add to total because of rounding.

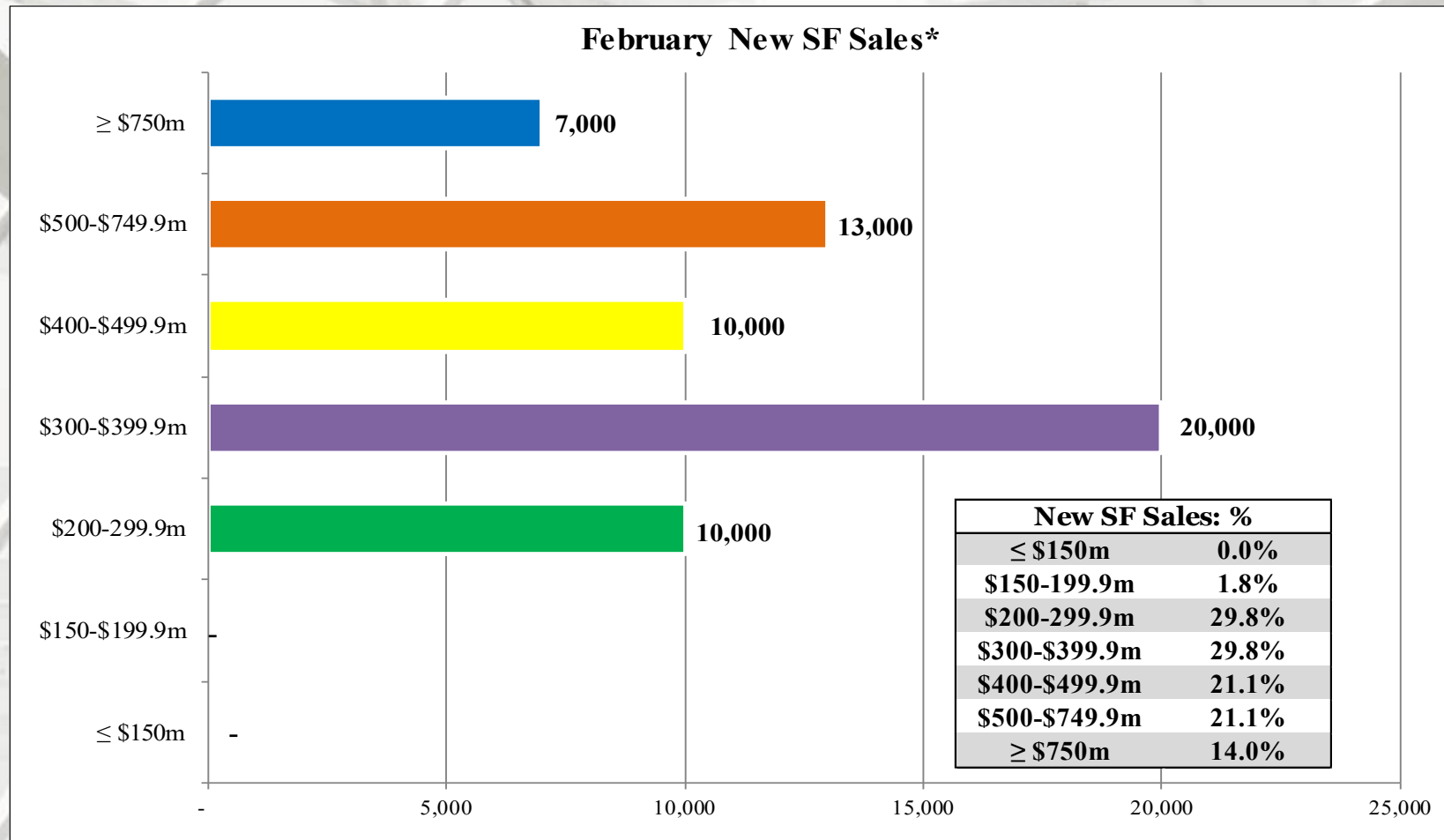
⁴ Housing prices are adjusted at irregular intervals.

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

Sources: ^{1,2,3} <https://www.census.gov/construction/nrs/index.html>; 3/25/24;

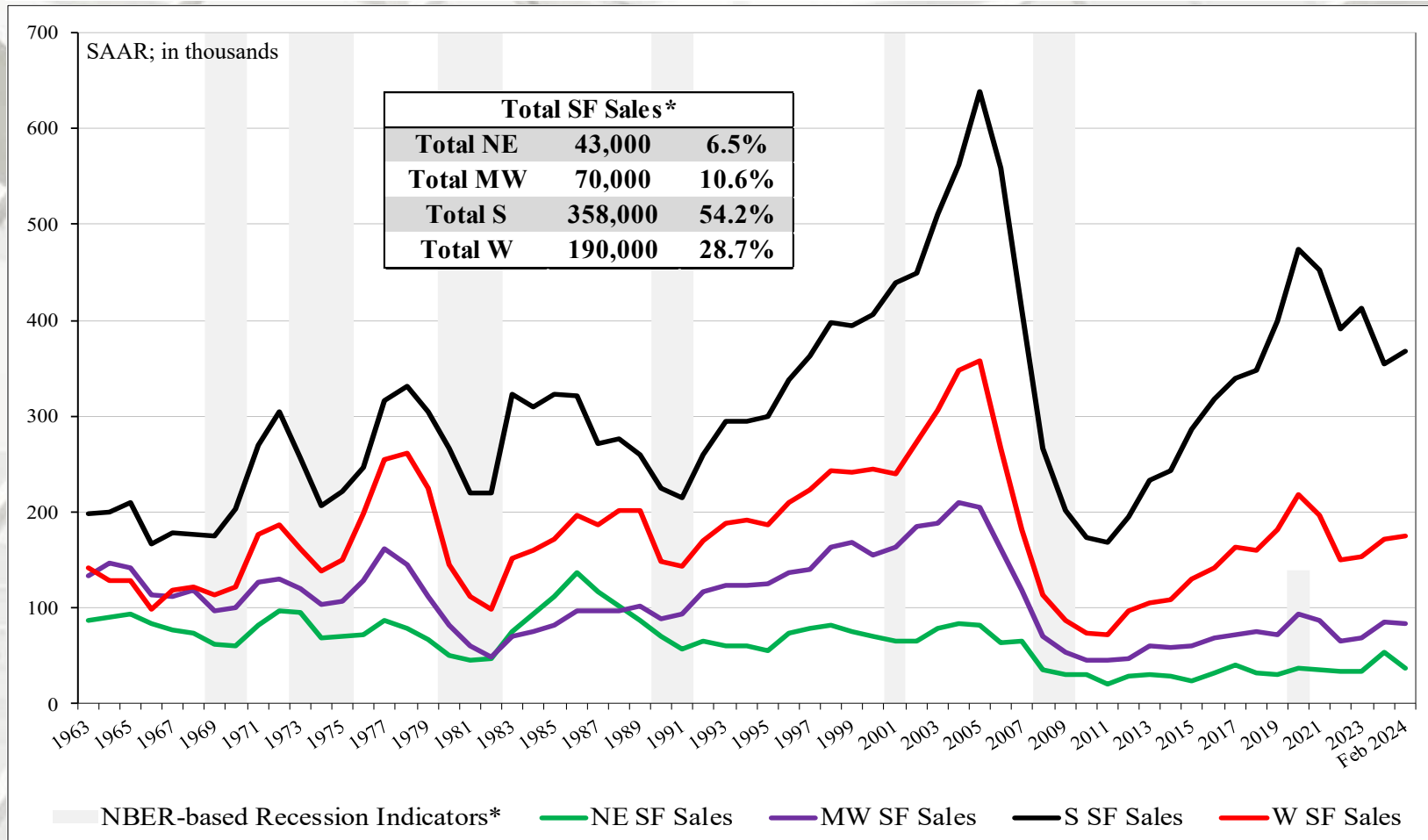
⁴ https://www.census.gov/construction/cpi/pdf/descpi_sold.pdf

New SF House Sales



* Total new sales by price category and percent.

New SF House Sales by Region

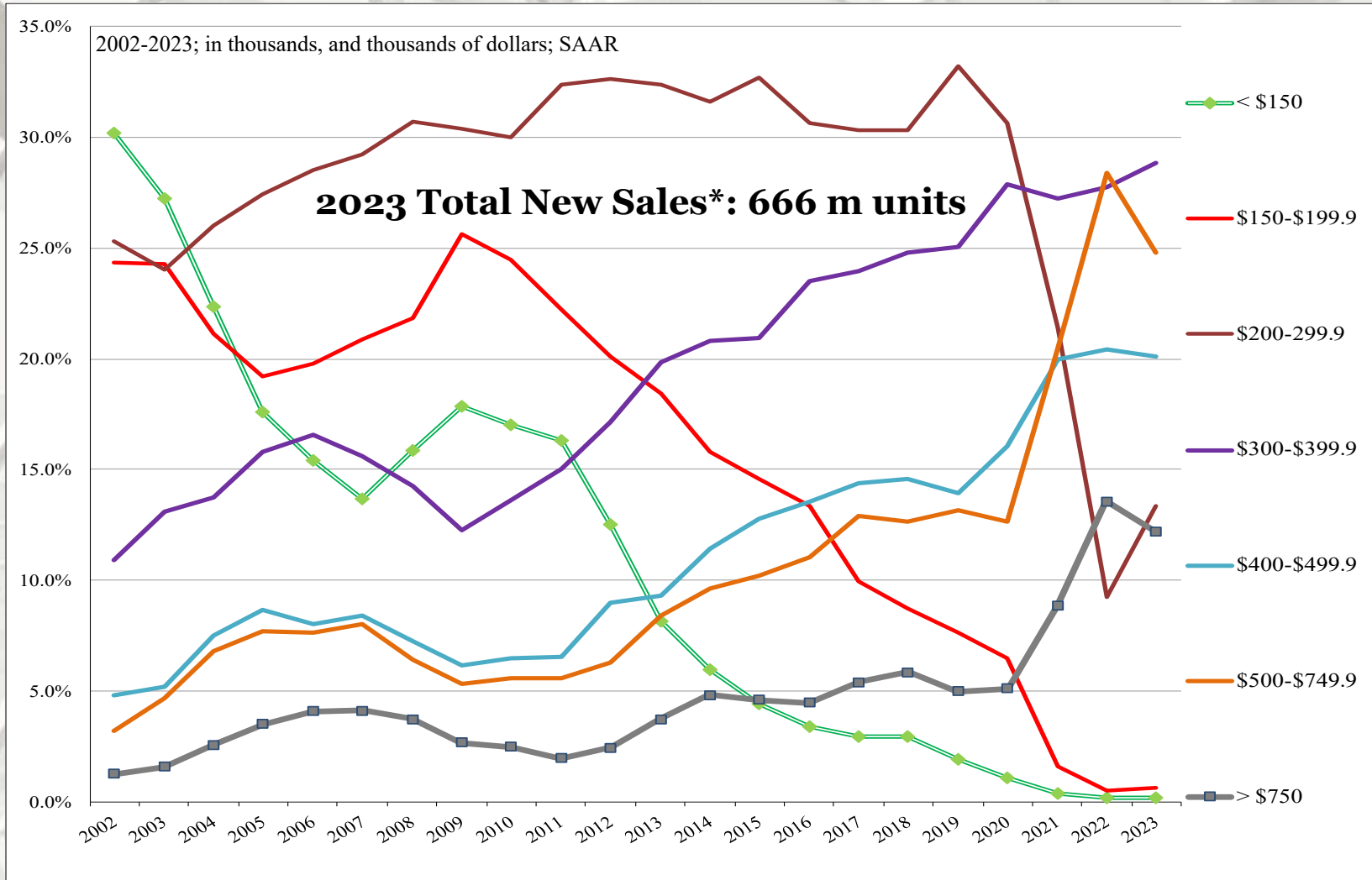


NE = Northeast; MW = Midwest; S = South; W = West

* Percentage of total new sales.

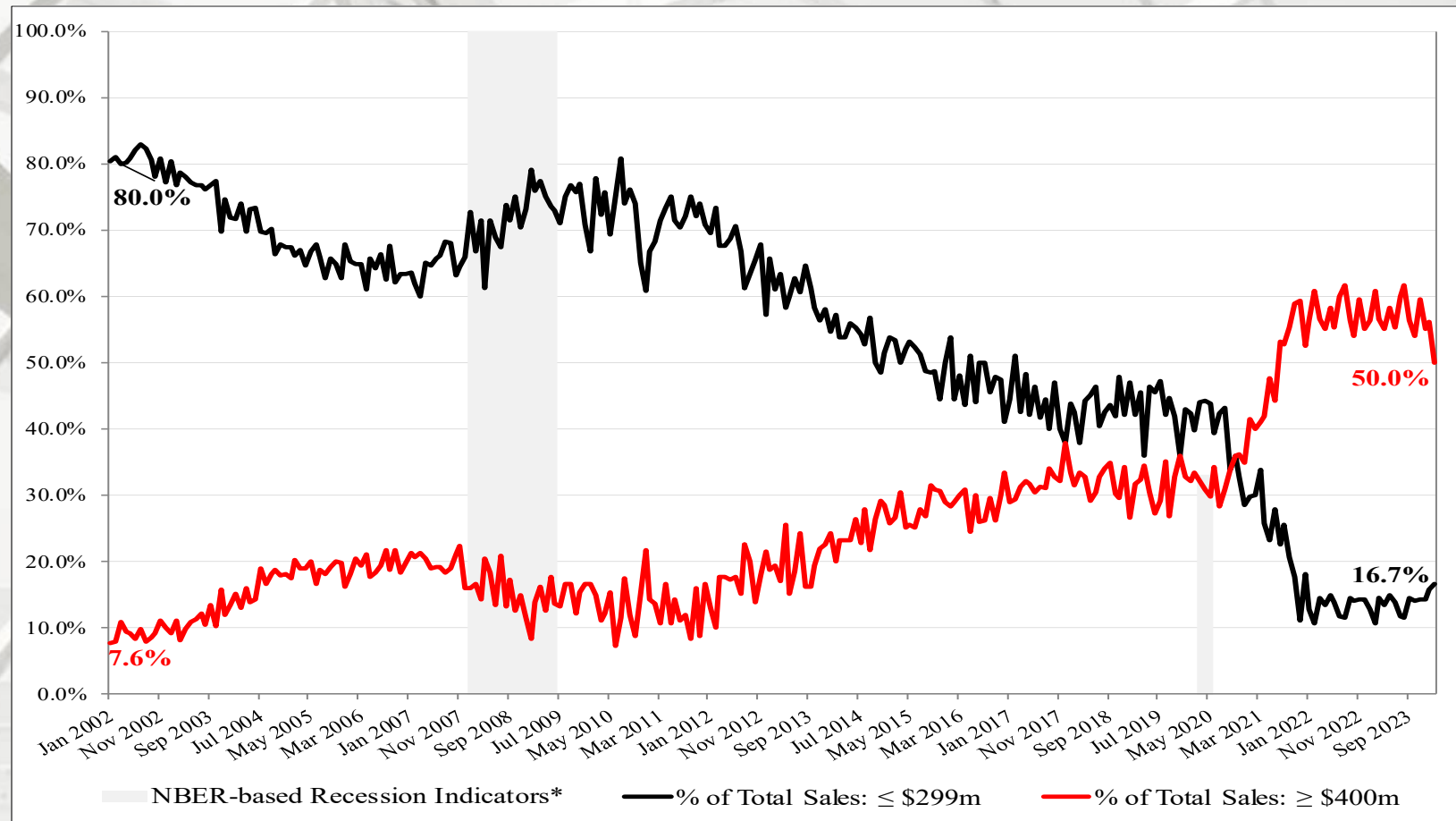
NBER based Recession Indicator Bars for the United States from the Period following the Peak through the Trough (FRED, St. Louis).

New SF House Sales by Price Category



* Sales tallied by price category, nominal dollars.

New SF House Sales



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

New SF Sales: ≤ \$299m and ≥ \$400m: 2002 – February 2024

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

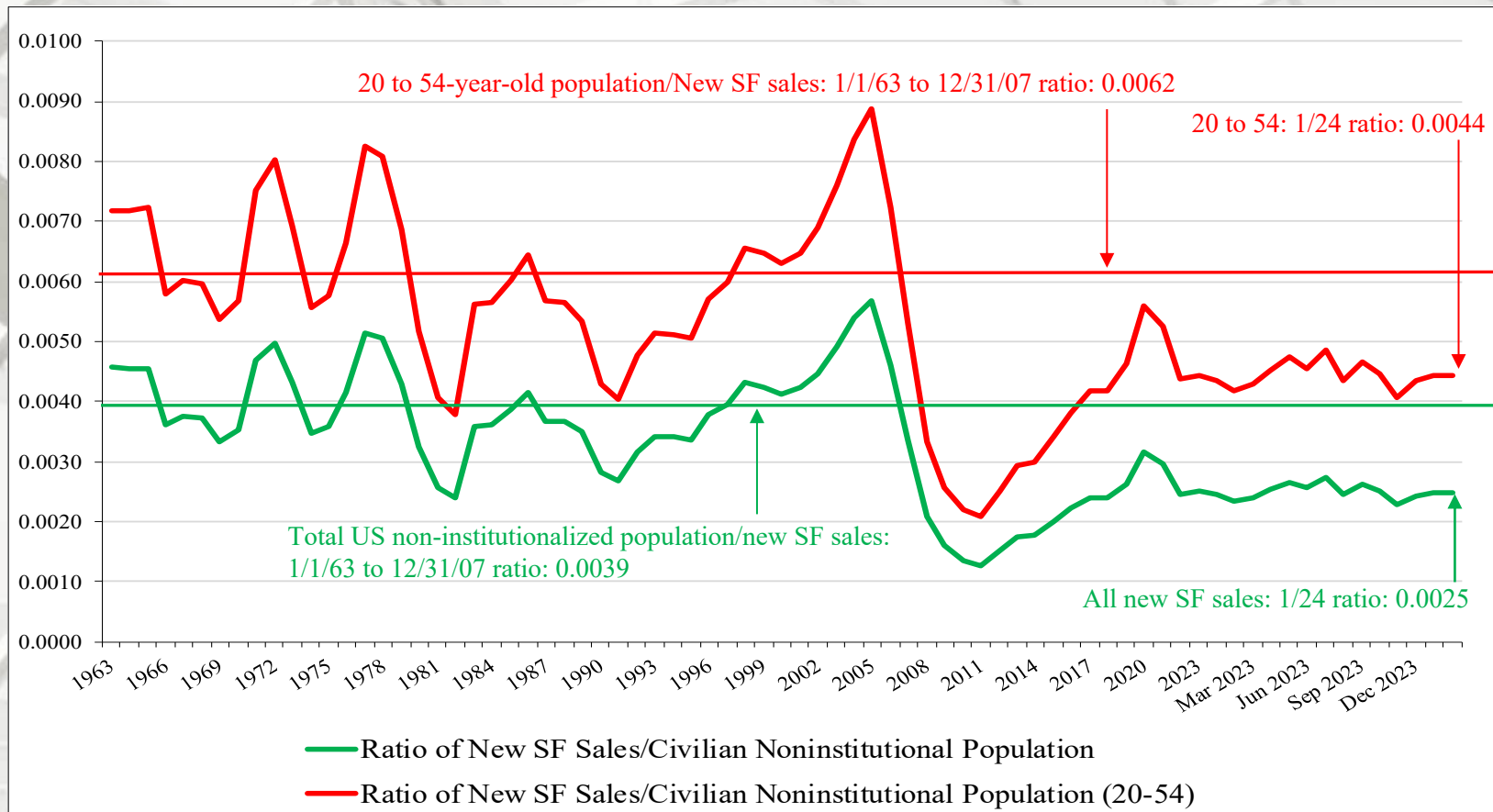


New SF Sales: ≤ \$ 200m and ≥ \$500m: 199 to February 2024

The number of ≤ \$200 thousand SF houses has declined dramatically since 1999^{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

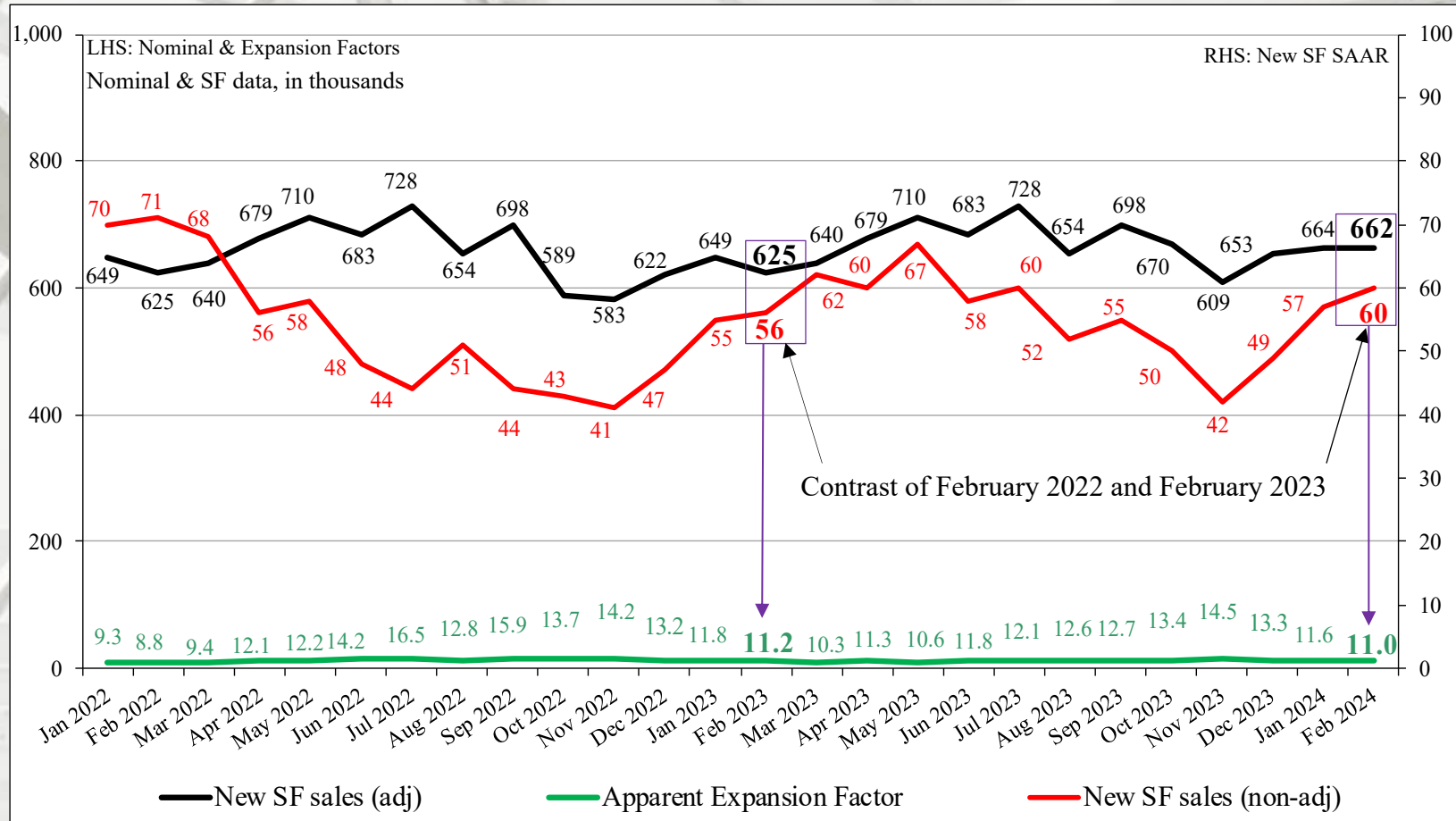


New SF sales adjusted for the US population

From February 1963 to February 2007, the long-term ratio of new house sales to the total US non-institutionalized population was 0.0039; in February 2024 it was 0.0025 – no change from January. The non-institutionalized population, aged 20 to 54 long-term ratio is 0.0062; in February 2024 it was 0.0044 – also no change from January. 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

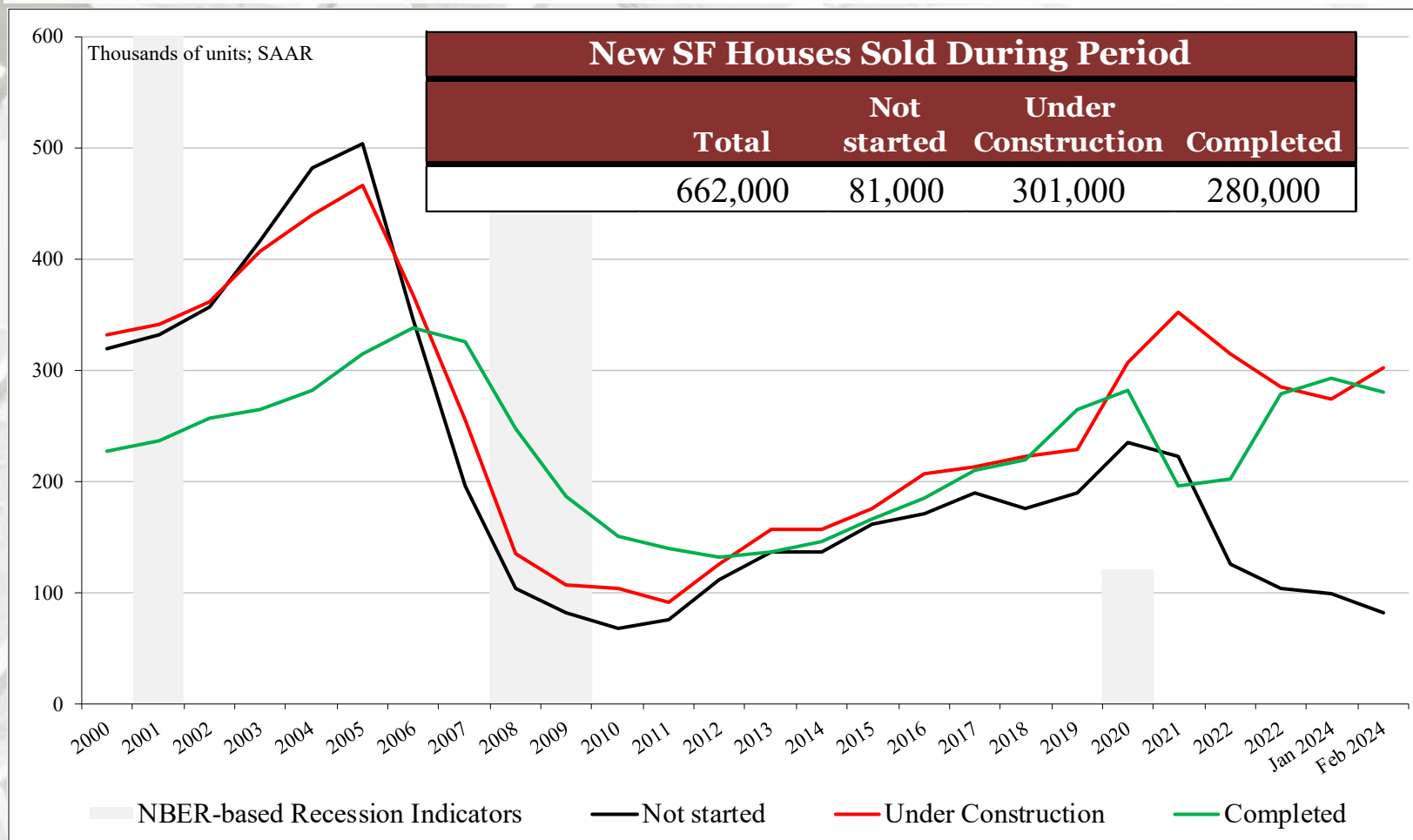
New SF House Sales

New SF Houses Sold During Period

	Total	Not started	Under Construction	Completed
February	662,000	81,000	301,000	280,000
January	664,000	98,000	274,000	292,000
2023	437,000	90,000	278,000	69,000
M/M change	-0.3%	-17.3%	9.9%	-4.1%
Y/Y change	51.5%	-10.0%	8.3%	305.8%
Total percentage		12.2%	45.5%	42.3%

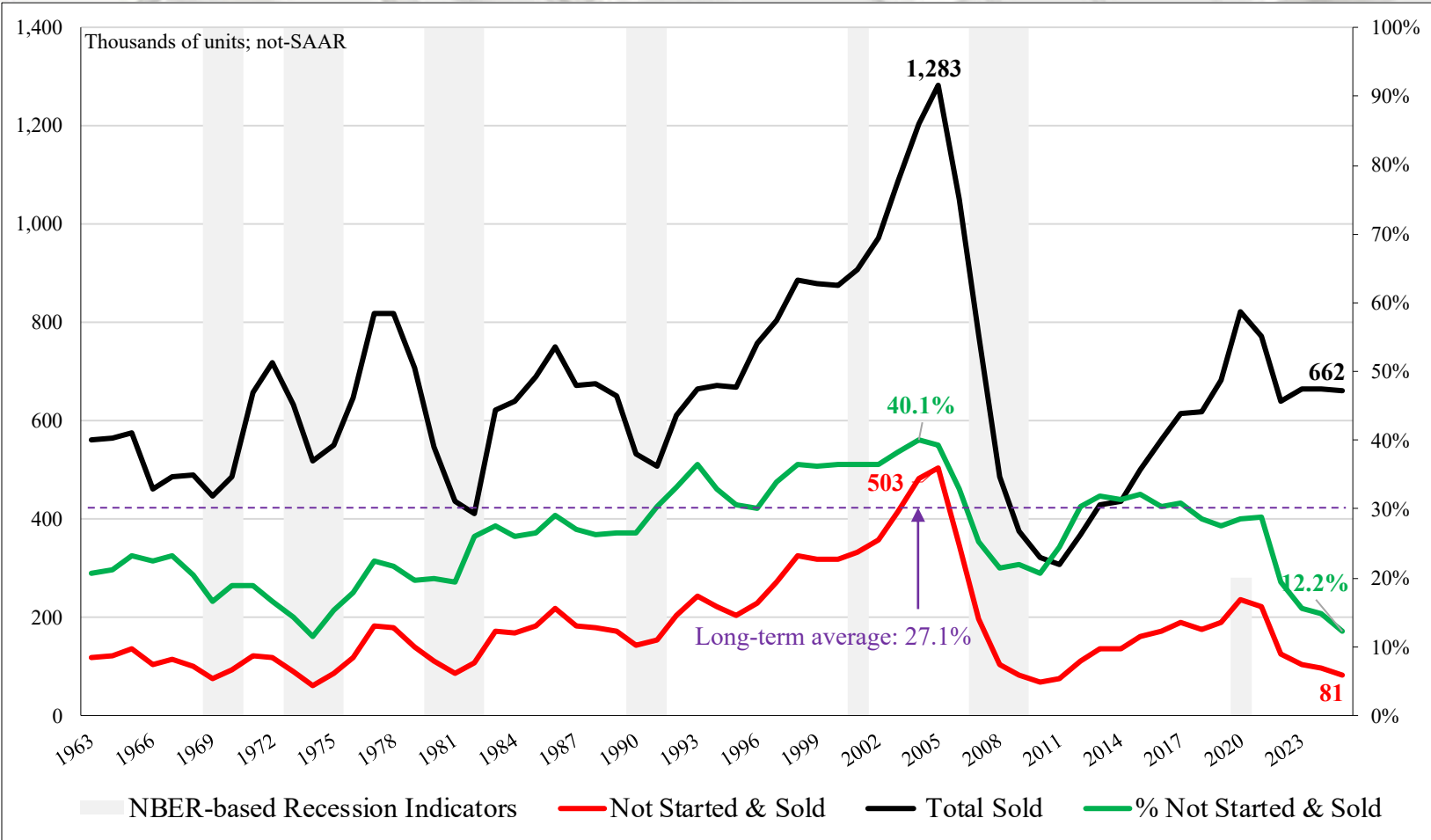
All data is SAAR

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 February (662 m), 12.2% (81 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).

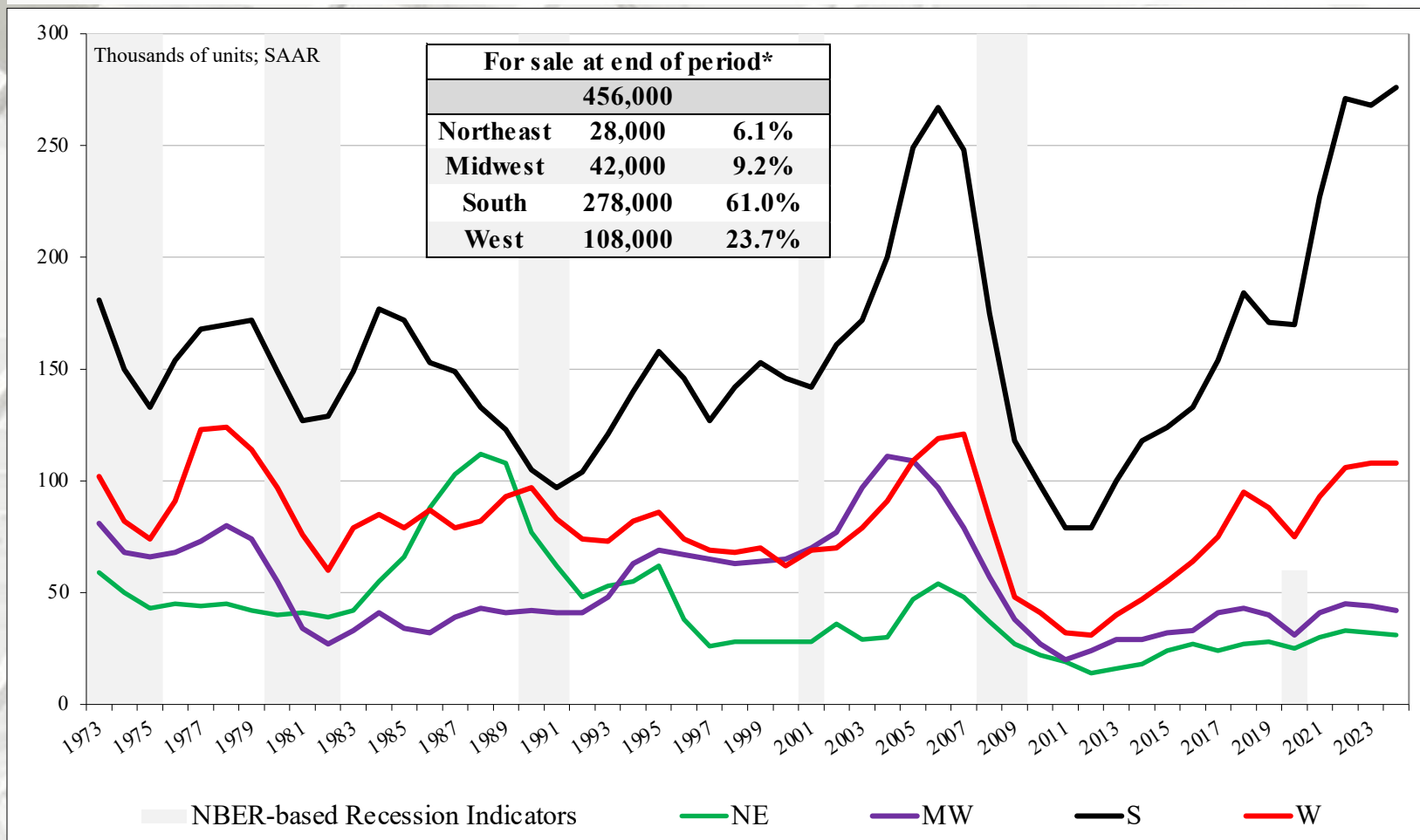
New SF Houses for Sale

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

	Total	NE	MW	S	W
February	456,000	28,000	42,000	278,000	108,000
January	457,000	31,000	42,000	276,000	108,000
2023	428,000	33,000	41,000	250,000	104,000
M/M change	-0.2%	-9.7%	0.0%	0.7%	0.0%
Y/Y change	6.5%	-15.2%	2.4%	11.2%	3.8%

* Not SAAR

New SF House Sales: For sale at end of period by Region



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

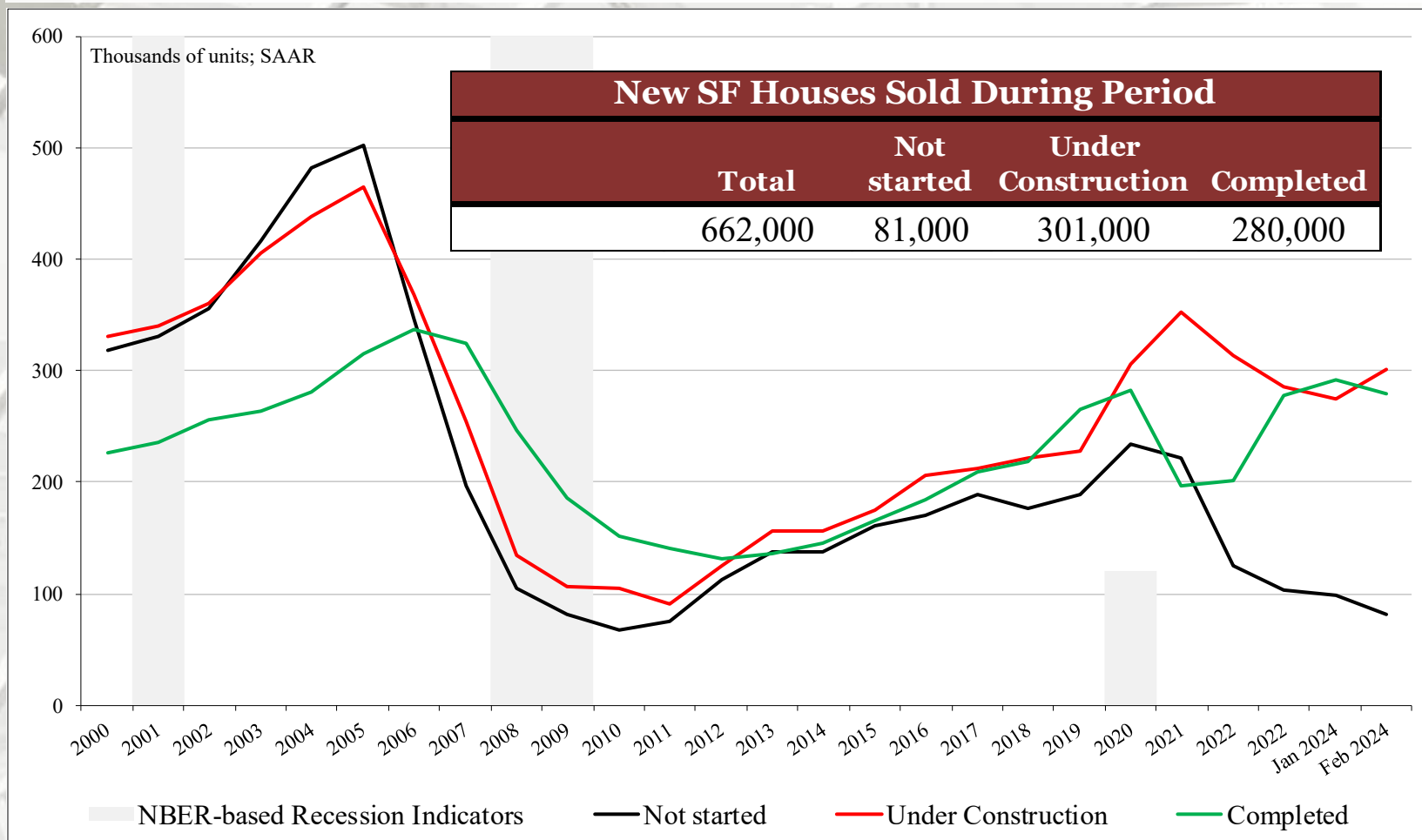
* Percentage of total for sale at end of period.

New SF House Sales

New SF Houses Sold During Period

	Total	Not started	Under Construction	Completed
February	662,000	81,000	301,000	280,000
January	664,000	98,000	274,000	292,000
2023	437,000	90,000	278,000	69,000
M/M change	-0.3%	-17.3%	9.9%	-4.1%
Y/Y change	51.5%	-10.0%	8.3%	305.8%
Total percentage		12.2%	45.5%	42.3%

New SF House Sales: For Sale at End of Period



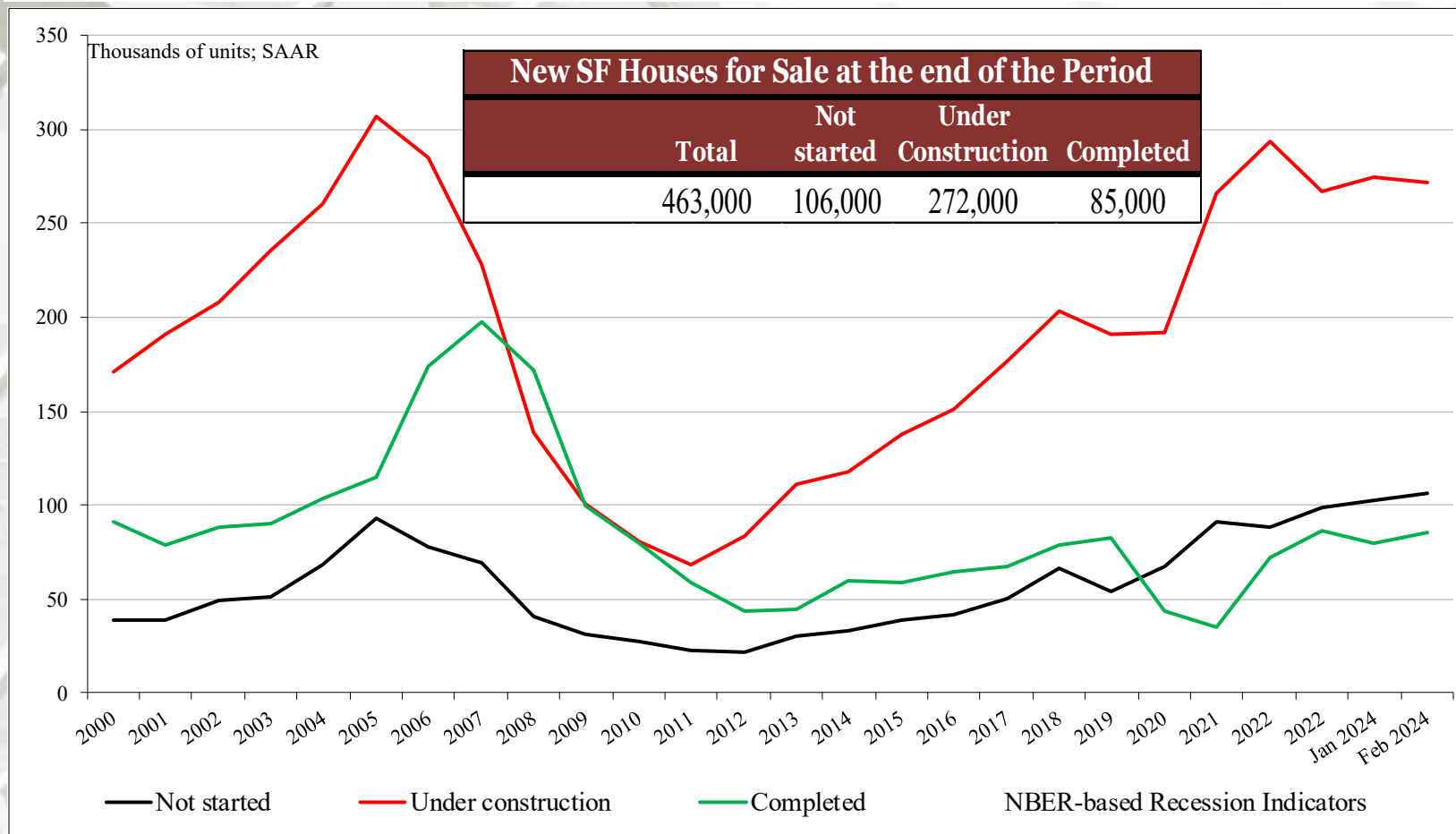
NBER based Recession Indicator Bars for the United States from the Period following the Peak through the Trough (FRED, St. Louis).

New SF House Sales

New SF Houses for Sale at the end of the Period

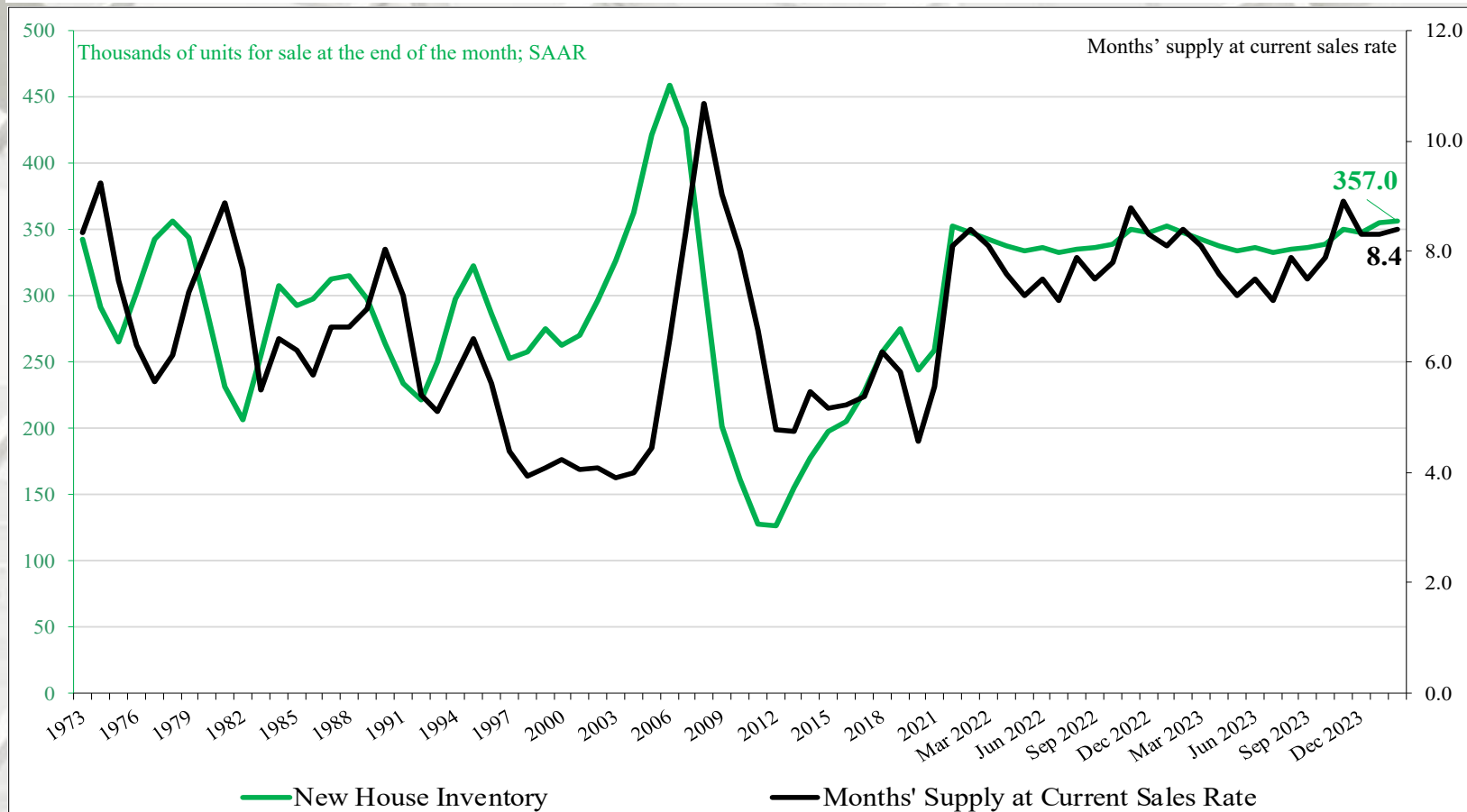
	Total	Not started	Under Construction	Completed
January	463,000	106,000	272,000	85,000
February	457,000	102,000	275,000	80,000
2023	437,000	90,000	278,000	69,000
M/M change	1.3%	3.9%	-1.1%	6.3%
Y/Y change	5.9%	17.8%	-2.2%	23.2%
Total percentage		22.9%	58.7%	18.4%

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).

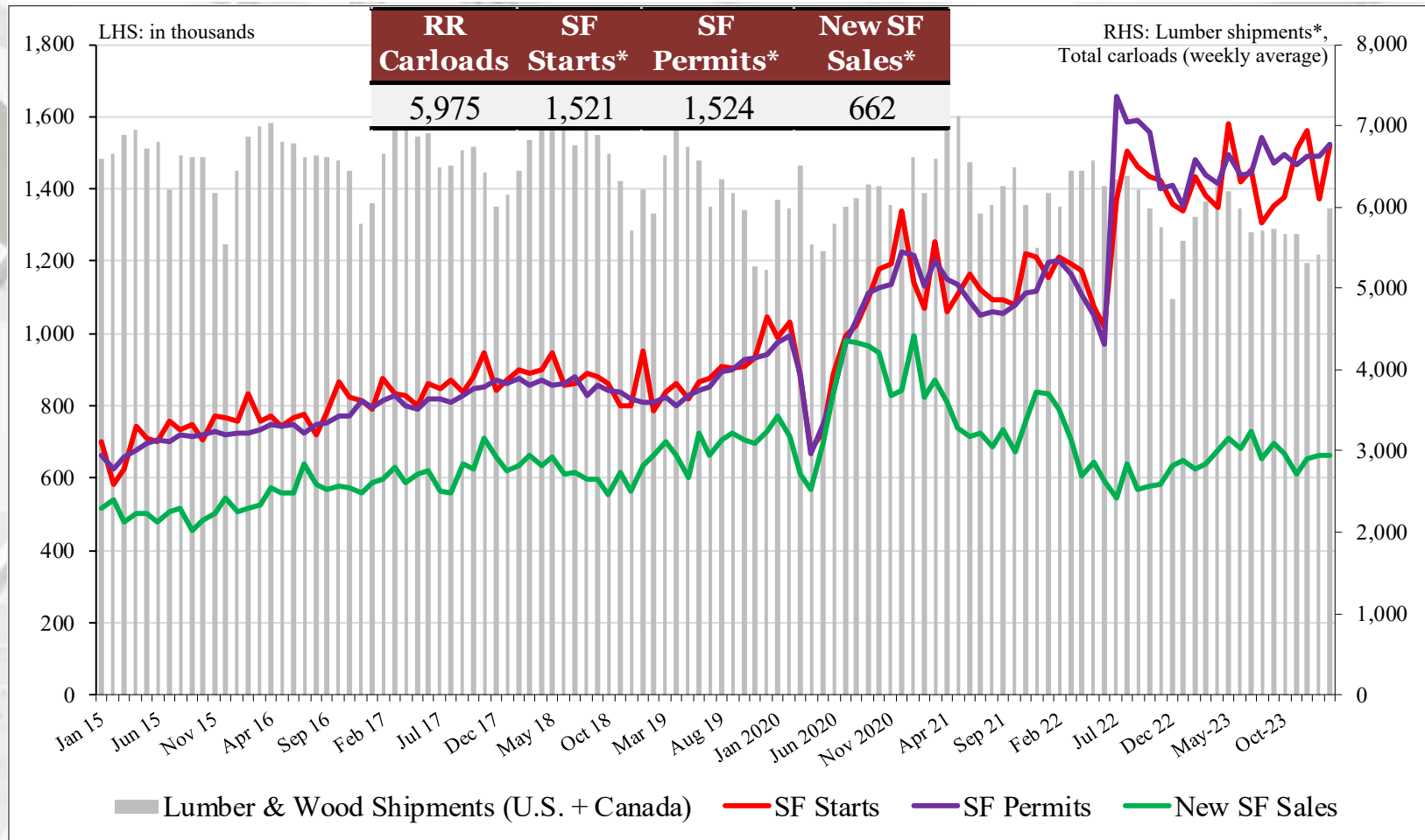
Months' Supply and New House Inventory^a



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

The months' supply of new houses at current sales rate at the end of February was 8.4, greater than the historically preferred number of five- to six-months (SAAR).

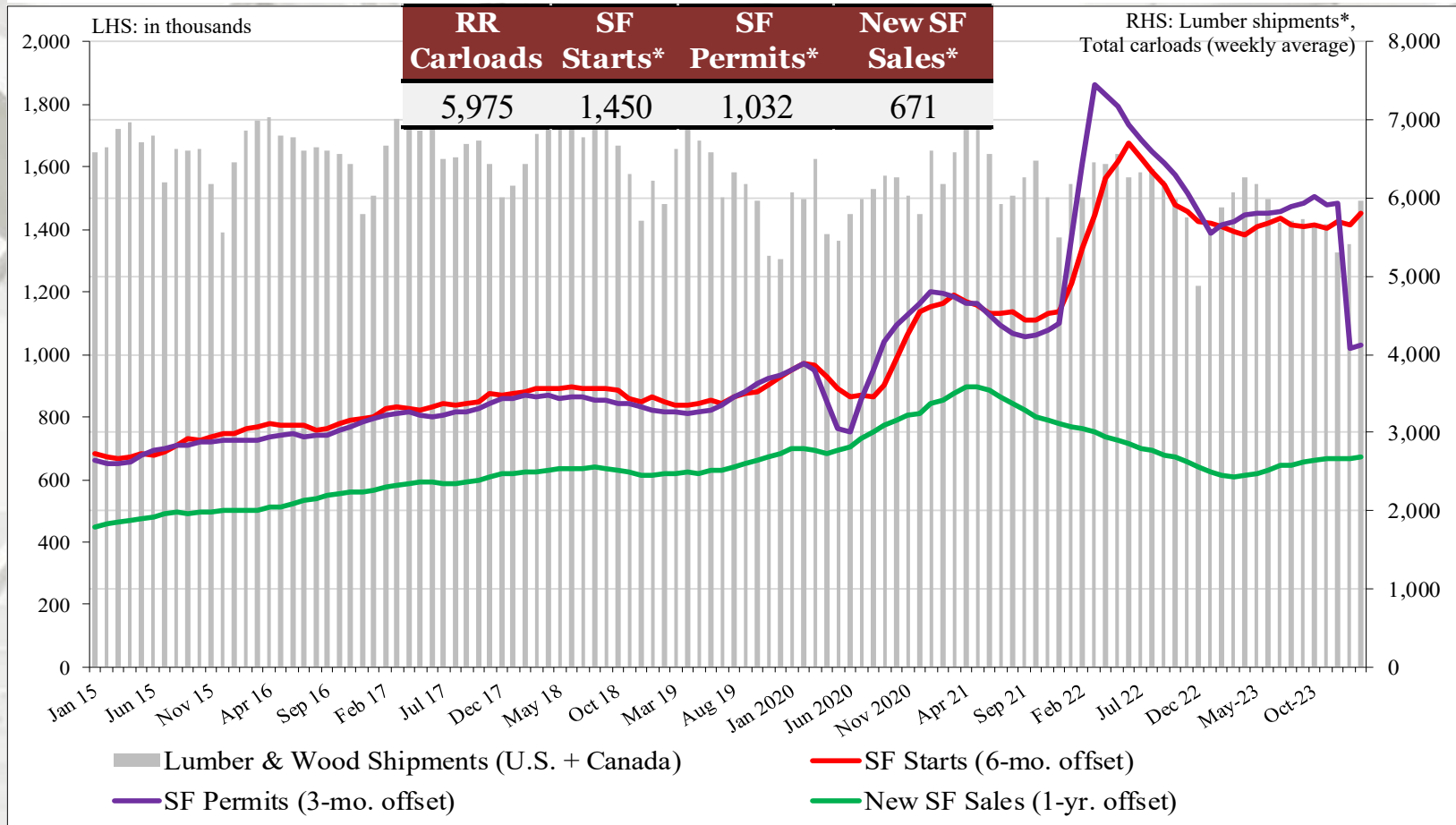
U.S.-Canada Lumber & Wood Shipments vs. SF Starts, Permits, and New Sales



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.

February 2024 Construction Spending

	Total Private Residential*	SF*	MF*	Improvement**
February	\$901,086	\$438,786	\$133,219	\$329,081
January	\$894,517	\$432,715	\$133,435	\$328,367
2023	\$847,507	\$374,548	\$125,529	\$347,430
M/M change	0.7%	1.4%	-0.2%	0.2%
Y/Y change	6.3%	17.2%	6.1%	-5.3%

* 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\$.

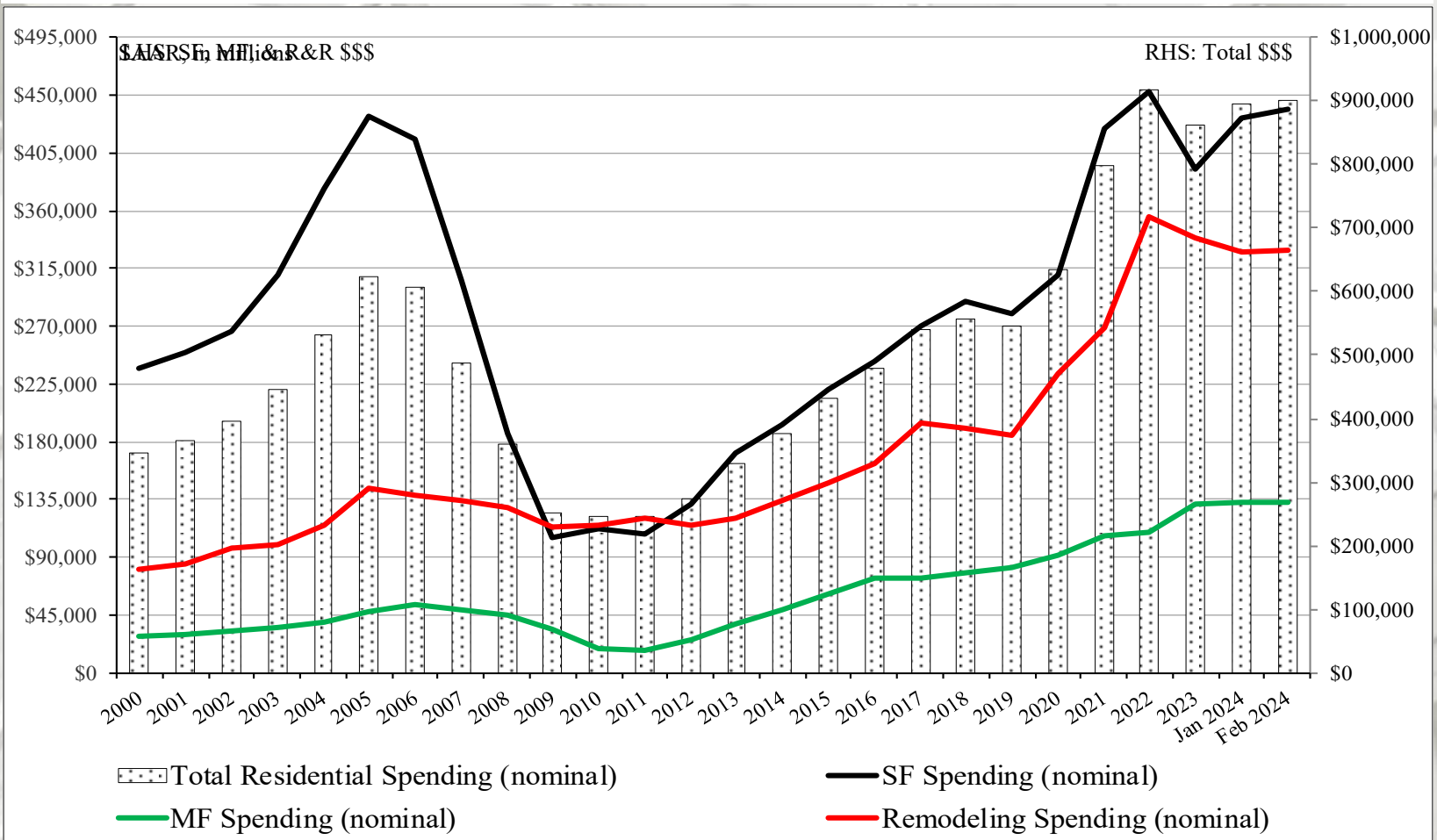
Total private residential construction spending includes new single-family, new multi-family, and improvement (AKA repair and remodeling) expenditures.

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.

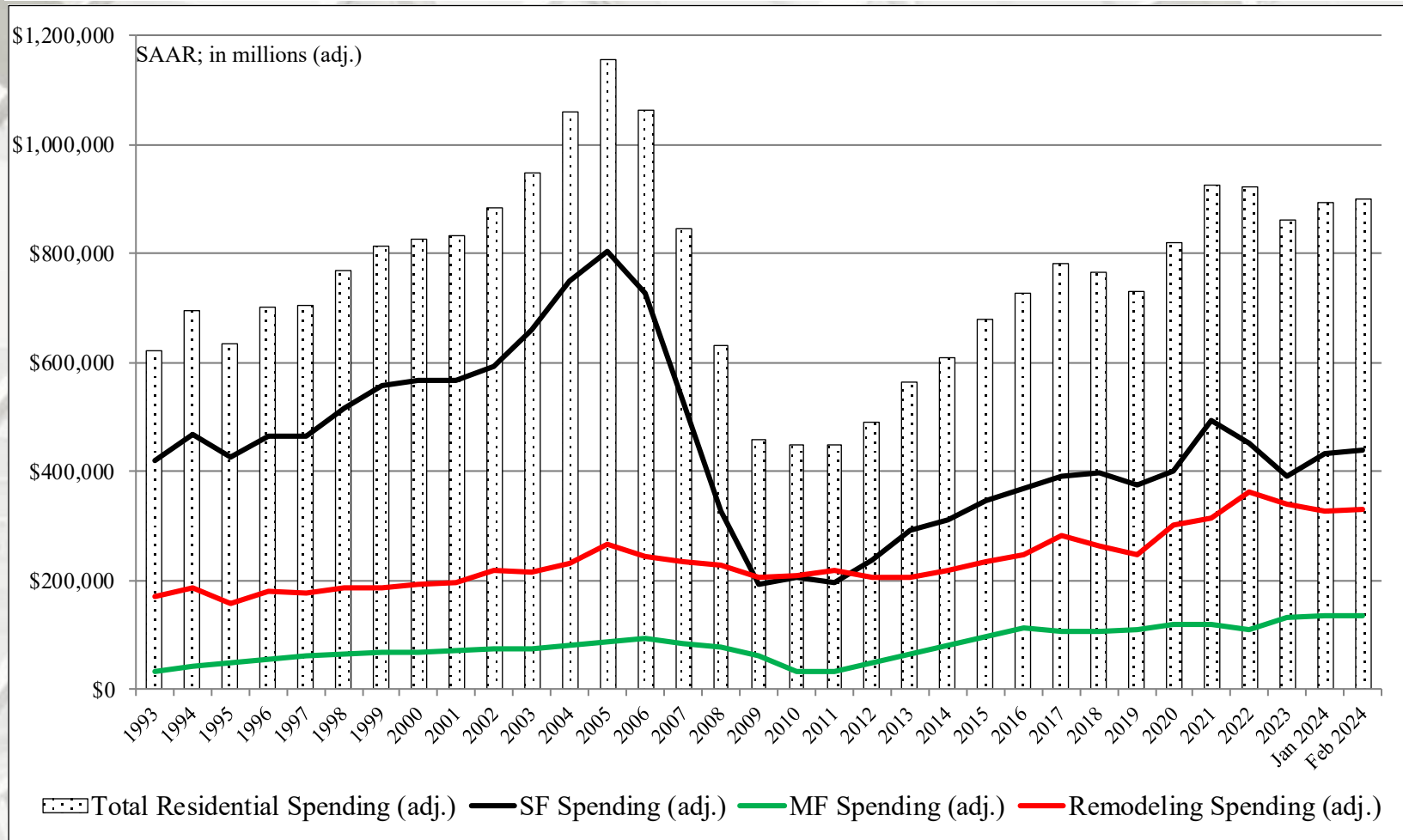
Total Construction Spending (nominal): 2000 – February 2024



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 – February 2024

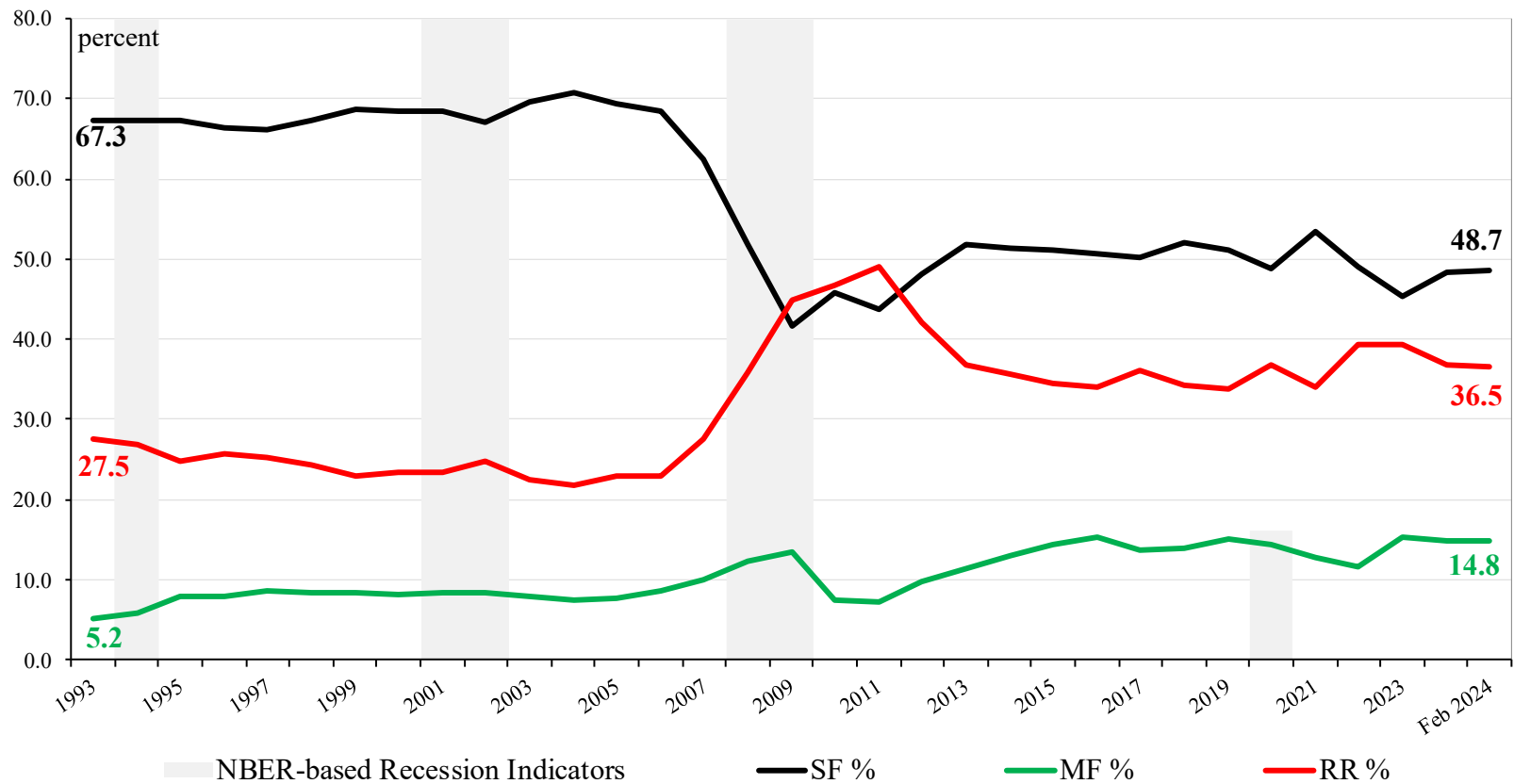


Reported in adjusted \$US: 1993 – 2021 (adjusted for inflation, BEA Table 1.1.9); February 2024 reported in nominal US\$.

Sources: * <http://www.bea.gov/iTable/iTable.cfm; 6/29/23>; <http://www.census.gov/construction/c30/pdf/privsa.pdf; 4/1/2024>

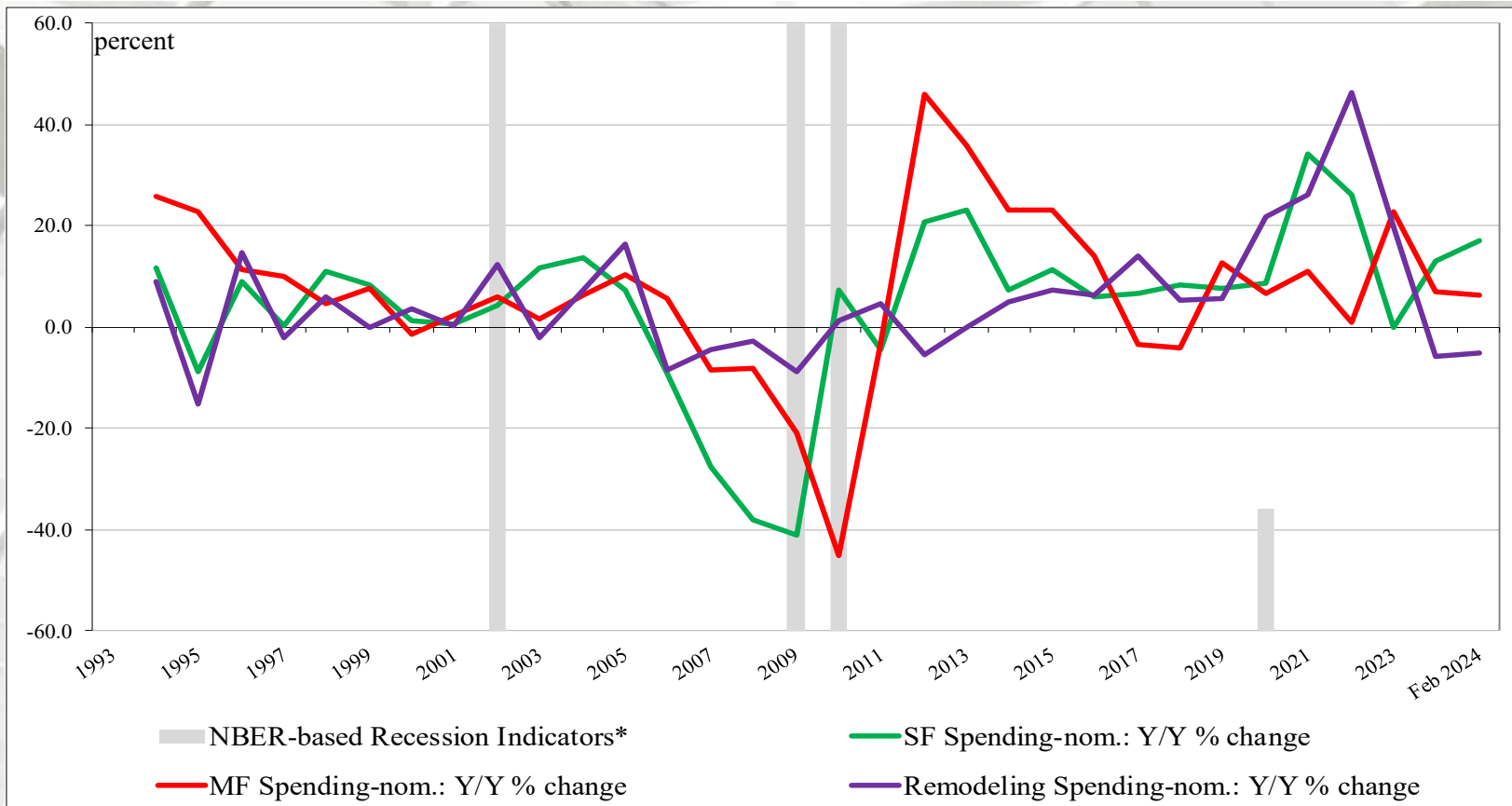
Construction Spending Shares: 1993 – February 2024

SF, MF, & RR: Percent of Total Residential Spending (adj.)



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

Construction Spending: Y/Y Percentage Change



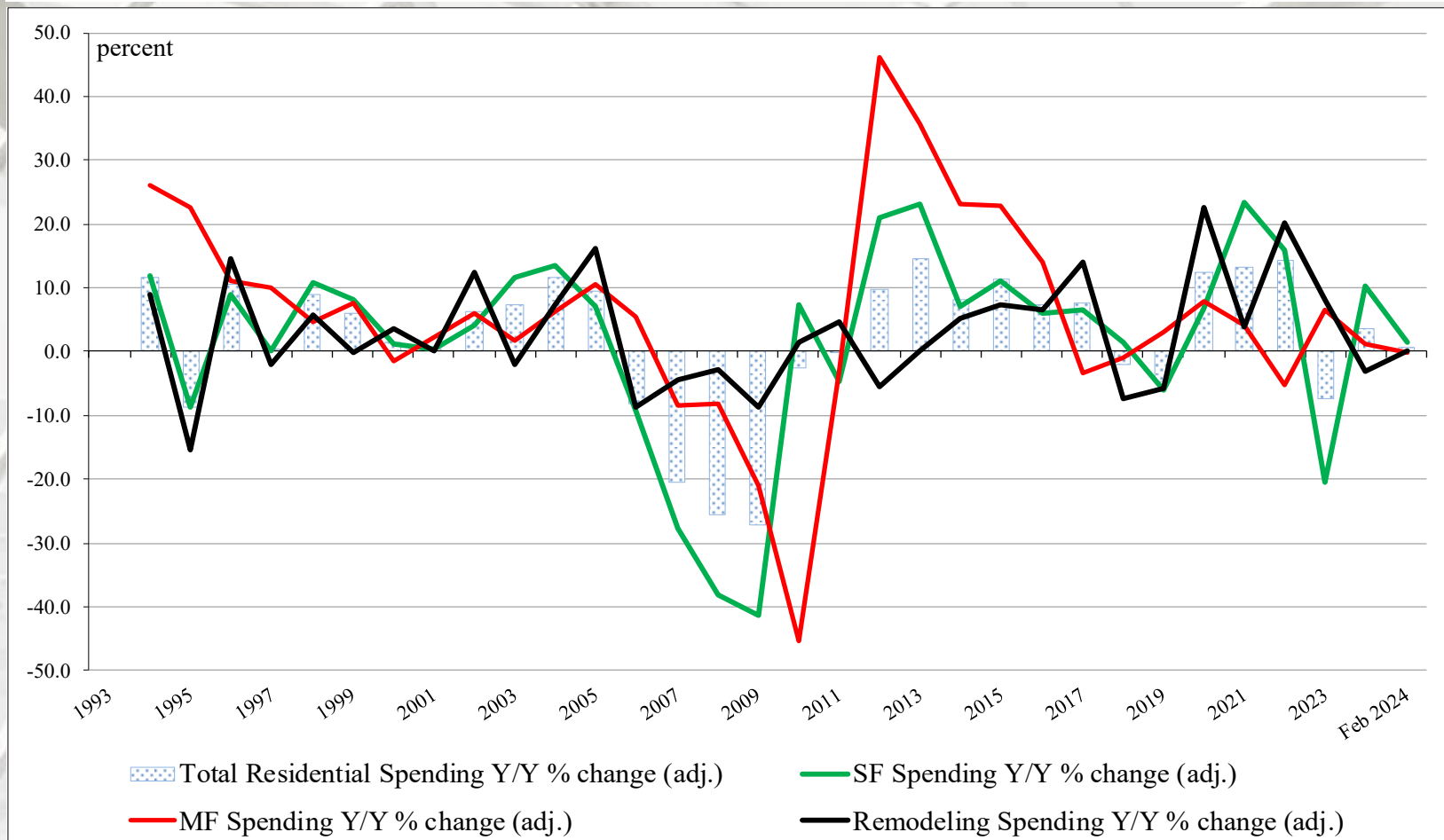
Nominal Residential Construction Spending: Y/Y percentage change, 1993 to February 2024

Presented above is the percentage change of Y/Y construction spending. MF expenditures were positive on a percentage basis, year-over-year (February 2024 data reported in nominal dollars).

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

Sources: *<https://fred.stlouisfed.org/series/USREC>, 6/24/21; <http://www.census.gov/construction/c30/pdf/privsa.pdf>; 4/1/24 and <http://www.bea.gov/iTable/iTable.cfm>; 6/29/23

Adjusted Construction Spending: Y/Y Percentage Change



Adjusted Residential Construction Spending: Y/Y percentage change, 1993 to February 2024

Remodeling

Woodworking Network

More spent on home renovations despite activity dip: Houzz survey

“Renovation spend has surged in the last three years, as median spend increased 60% from \$15,000 in 2020 to \$24,000 in 2023, according to Houzz, a leading platform for home remodeling and design, including project management software for industry professionals.

The [2024 U.S. Houzz & Home Study](#) of more than 30,000 U.S. respondents found the top 90th percentile of spend also rose 77% to \$150,000, from \$85,000 in 2020. In addition, more than half of renovating home owners (51%) spent \$25,000 or more on renovations in 2023, up from 37% in 2020. While renovation activity remains strong with 56% of home owners having taken on a renovation project in 2023, this is down two percentage points from last year, Houzz stated.

The survey found Gen Xers spent the most on renovation projects for the second consecutive year, with their median spend at \$25,000, compared with Baby Boomers at \$24,000. The top 10% of spenders in these groups allocated substantial budgets, with Gen Xers at \$180,000 and Baby Boomers at \$131,000. While Gen X leads in spend, Houzz reported, Baby Boomers continue to drive renovation activity (56%). Gen Xers follow at 32%, up 5 percentage points from last year. While activity among renovating Millennials is far below Gen Xers’ (9%), their median spend is just \$5,000 less (\$20,000).

“Despite prevailing economic headwinds, such as high interest rates and persistent inflation, investment in home renovations continued in 2023. The increase in spend and shift to larger-budget projects is likely driven by rising product and labor costs. Generation X stands out in particular, leading in renovation expenditures for the second consecutive year,” said Marine Sargsyan, Houzz staff economist.” – Karen Koenig, Editor, Wood Working Network

Remodeling

Woodworking Network

More spent on home renovations despite activity dip: Houzz survey

“Looking ahead, with over half of home owners planning renovations, it’s evident that the need to update limited and aging housing stock continues to fuel strong demand for home improvements.”

Along with this substantial investment, Houzz reported, nearly all renovating home owners enlisted the help of a home professional in 2023 (91%), with specialty service providers such as electricians, plumbers and painters, hired most frequently (47%). Home owners are also taking the time to both plan and save for their projects, Houzz found. Renovation planning is typically double the time the actual construction takes. Plus, “finally having the financial means” is the project catalyst for more than a third of renovating home owners.

Considering that motivation, Houzz noted, it’s no surprise that cash from savings continues to be the most common form of funding for renovation projects (83%). Credit card usage followed at a distance (37%), but jumped 9 percentage points in 2023 (28% in 2022). For larger projects with spend between \$50,000 and \$200,000, for which home owners gravitate toward diversified funding sources, secured home loans and cash from home sales (23% and 21%, respectively) were nearly as commonly used as credit cards (32%).” – Karen Koenig, Editor, Wood Working Network

Remodeling

Woodworking Network

More spent on home renovations despite activity dip: Houzz survey

“Other highlights from the report include:

Multi-room remodels

Home owners consistently undertake multiple renovation projects simultaneously. Home owners on average target nearly three interior room upgrades and two or more outdoor projects during their renovations.

Budgets set, yet exceeded

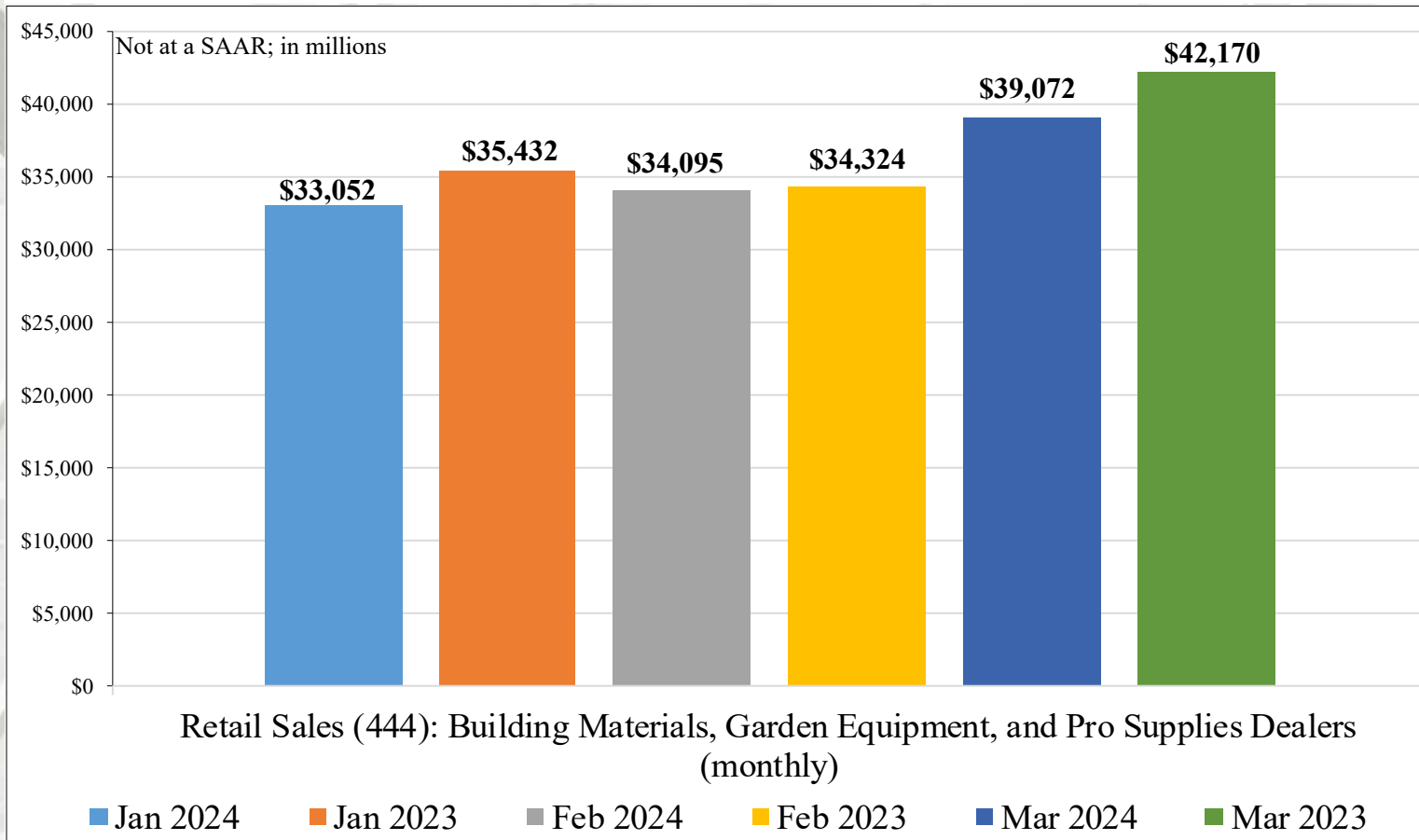
Home owners are increasingly setting renovation budgets prior to beginning work on their home (76%, compared with 73% in 2021). However, while a third of home owners stayed within their budget (34%), nearly 2 in 5 exceeded their budget in 2023 (39%). The main reasons for going over budget included unforeseen costs for products and services, increased project complexity, and choosing more expensive products and materials.

Outdoor projects back in the spotlight

Following a brief drop, outdoor project activity rose two percentage points in 2023 (53%, compared with 51% in 2022). Outdoor lighting is the most commonly updated outdoor system (22%). Security systems follow (18%, up two percentage points from last year), as home owners install cameras and sensors around their properties.” – Karen Koenig, Editor, Wood Working Network

Remodeling

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

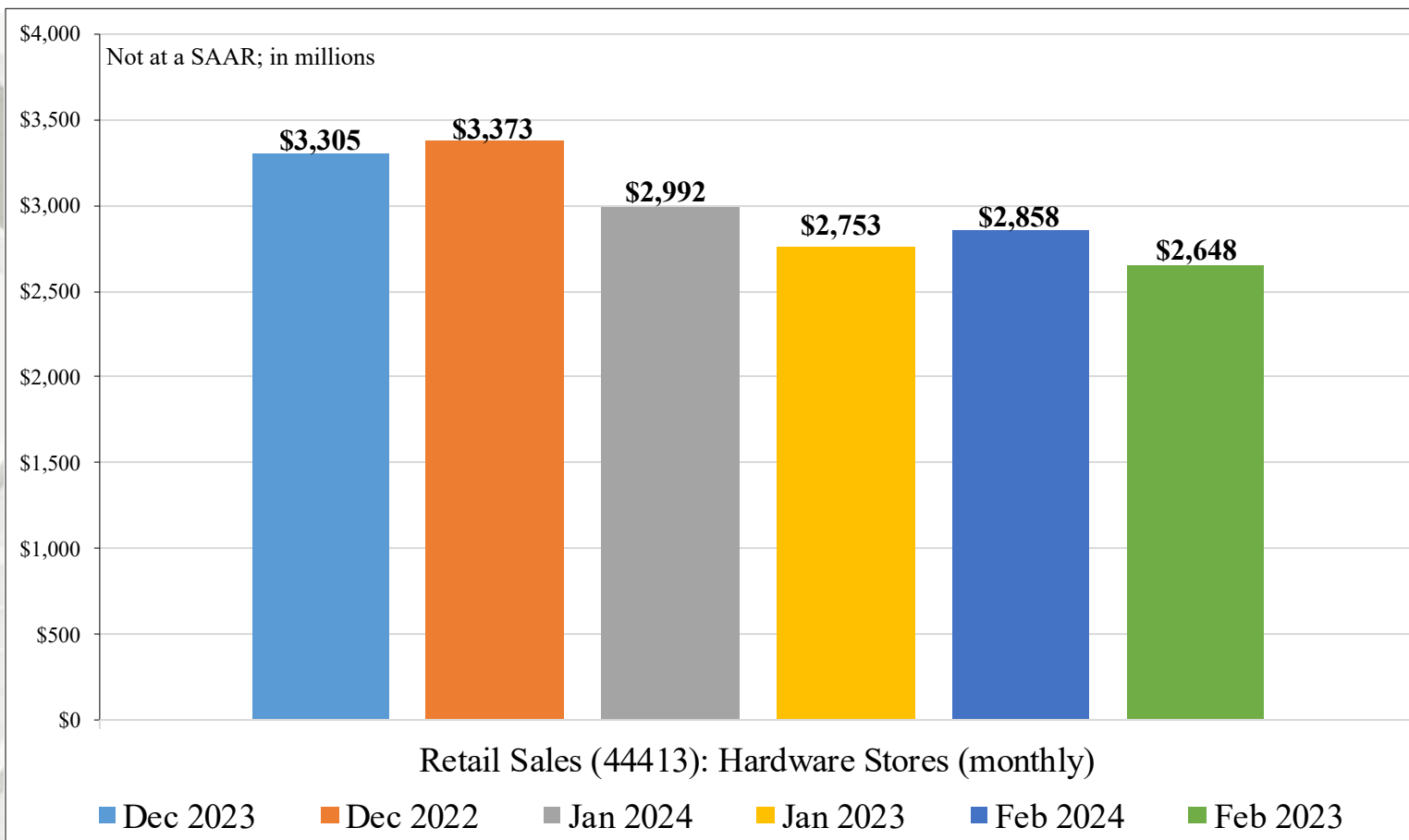


Building materials, Garden Equipment, & PRO Supply Dealers: NAICS 444

NAICS 444 sales increased 14.6% in March 2024 from March 2023 and declined 7.3% Y/Y (nominal basis).

Remodeling

Retail Sales: Hardware Stores



Hardware Stores: NAICS 44413

NAICS 44413 retail sales decreased 4.5% in February 2024 from January 2024 and improved 7.9% Y/Y (nominal basis).

Existing House Sales

National Association of Realtors®

	Existing Sales	Median Price	Month's Supply
February	4,380,000	\$384,500	2.9
January	4,000,000	\$378,600	3.0
2023	4,530,000	\$363,600	2.6
M/M change	9.5%	1.6%	-3.3%
Y/Y change	-3.3%	5.7%	11.5%

All sales data: SAAR

Existing House Sales

	NE	MW	S	W
February	480,000	1,030,000	2,020,000	850,000
January	480,000	950,000	1,840,000	730,000
2023	520,000	1,070,000	2,080,000	860,000
M/M change	0.0%	8.4%	9.8%	16.4%
Y/Y change	-7.7%	-3.7%	-2.9%	-1.2%

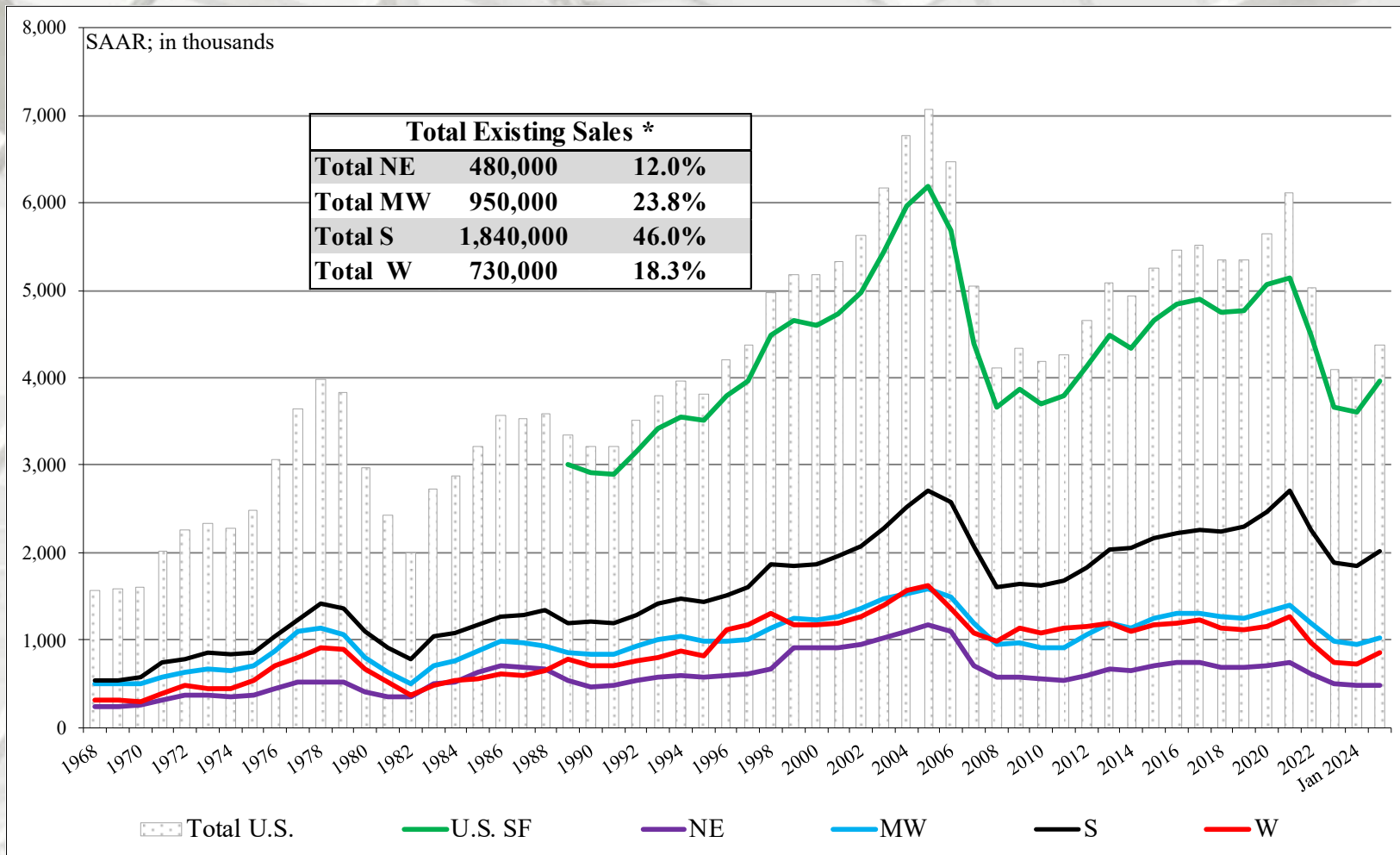
	Existing SF Sales	SF Median Price
February	3,970,000	\$388,700
January	3,600,000	\$382,900
2023	4,080,000	\$368,100
M/M change	10.3%	1.6%
Y/Y change	-2.7%	5.6%

All sales data: SAAR.

Source: <https://fred.stlouisfed.org/series/EXHOSLUSM495S>; 3/21/24

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

UFHFA House Price Index Down 0.1 Percent in January; Up 6.3 Percent from Last Year

Significant Findings

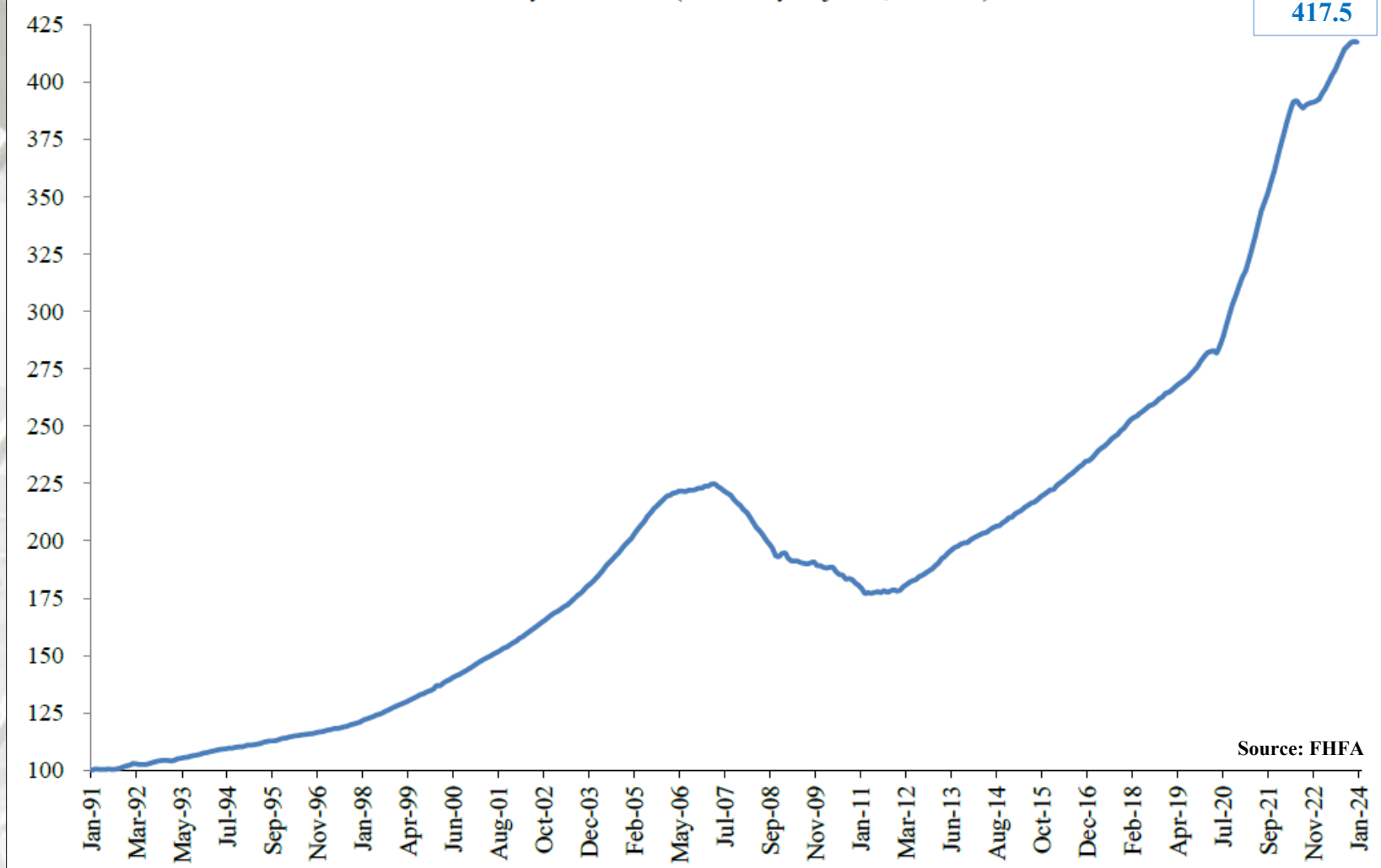
“U.S. house prices fell in January, down **0.1 percent** from December, according to the Federal Housing Finance Agency (FHFA) seasonally adjusted monthly House Price Index (HPI®). House prices rose **6.3 percent** from January 2023 to January 2024. The previously reported 0.1 percent price increase in December remained unchanged.

For the nine census divisions, seasonally adjusted monthly price changes from December 2023 to January 2024 ranged from **-0.6 percent** in the South Atlantic division to **+1.5 percent** in the West North Central division. The 12-month changes were all positive, ranging from **+3.8 percent** in the West South Central division to **+8.7 percent** in the East North Central division.” – Adam Russell, FHFA

“U.S. house prices declined slightly in January, marking the first decrease since August 2022. However, the year-over-year house price growth remained near the historical average.” – 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)



Source: FHFA

U.S. Housing Prices

S&P CoreLogic Case-Shiller Index Continues to Trend Upward in January 2024

“S&P Dow Jones Indices (S&P DJI) released the January 2024 results for the S&P CoreLogic Case-Shiller Indices. The leading measure of U.S. home prices shows that three out 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 6.0% annual gain in January, up from a 5.6% rise in the previous month. The 10-City Composite showed an increase of 7.4%, up from a 7.0% increase in the previous month. The 20-City Composite posted a year-over-year increase of 6.6%, up from a 6.2% increase in the previous month. San Diego again reported the highest year-over-year gain among the 20 cities with an 11.2% increase in January, followed by Los Angeles, with an increase of 8.6%. Portland, though holding the lowest rank after reporting the smallest year-over-year growth, retained an upward trend with a 0.9% increase this month.

Month-Over-Month

The U.S. National Index showed a continued decrease of 0.1%, and 10-City Composite remained unchanged in January. After seasonal adjustment, the U.S. National Index, the 20-City Composite, and the 10-City Composite all posted month-over-month increases of 0.4%, 0.1%, and 0.2% respectively.” – Brian D. Luke, Head of Commodities, Real & Digital Assets, S&P DJI

U.S. Housing Prices

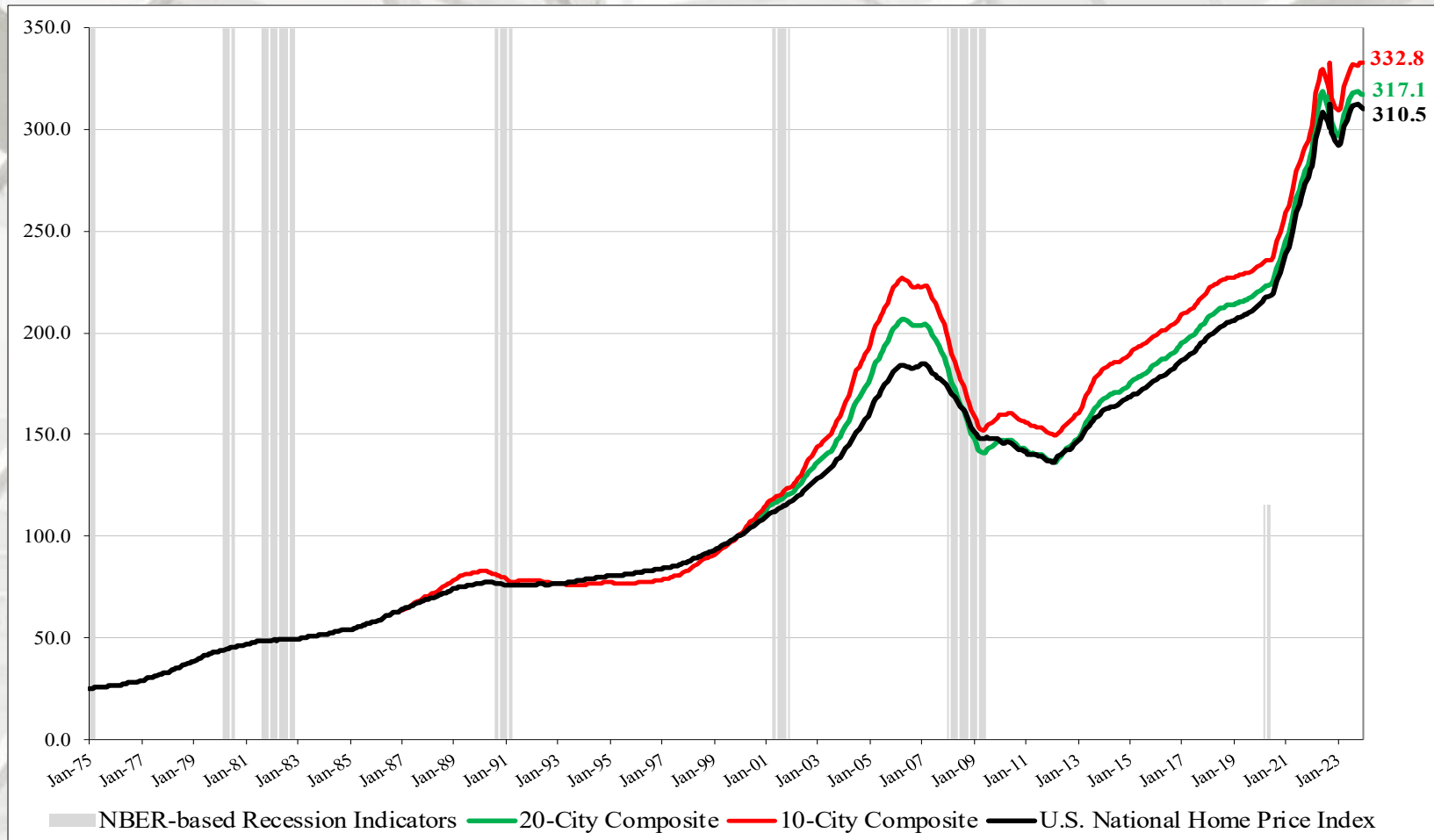
S&P CoreLogic Case-Shiller Index Analysis

“U.S. home prices continued their drive higher. Our National Composite rose by 6% in January, the fastest annual rate since 2022. Stronger gains came from our 10- and 20-City Composite indices, rising 7.4% and 6.6%, respectively. For the second consecutive month, all cities reported increases in annual prices, with San Diego surging 11.2%. On a seasonal adjusted basis, home prices have continued to break through previous all-time highs set last year.”

“We've commented on how consistent each market performed during 2023 and that continues to be the case. While there is a large disparity between leaders such as San Diego versus laggards such as with Portland, the broad market performance is tightly bunched up. This is also true of high and low tiers. The average annual gains between high and low tiers across cities tracked by the indices is just 1.1%. Low price tiered indices have outperformed high priced indices for 17 months. Home owners most likely saw healthy gains in the last year, no matter what city you were in, or if it was in an expensive or inexpensive neighborhood. No matter which way you slice it, the index performance closely resembled the broad market.”

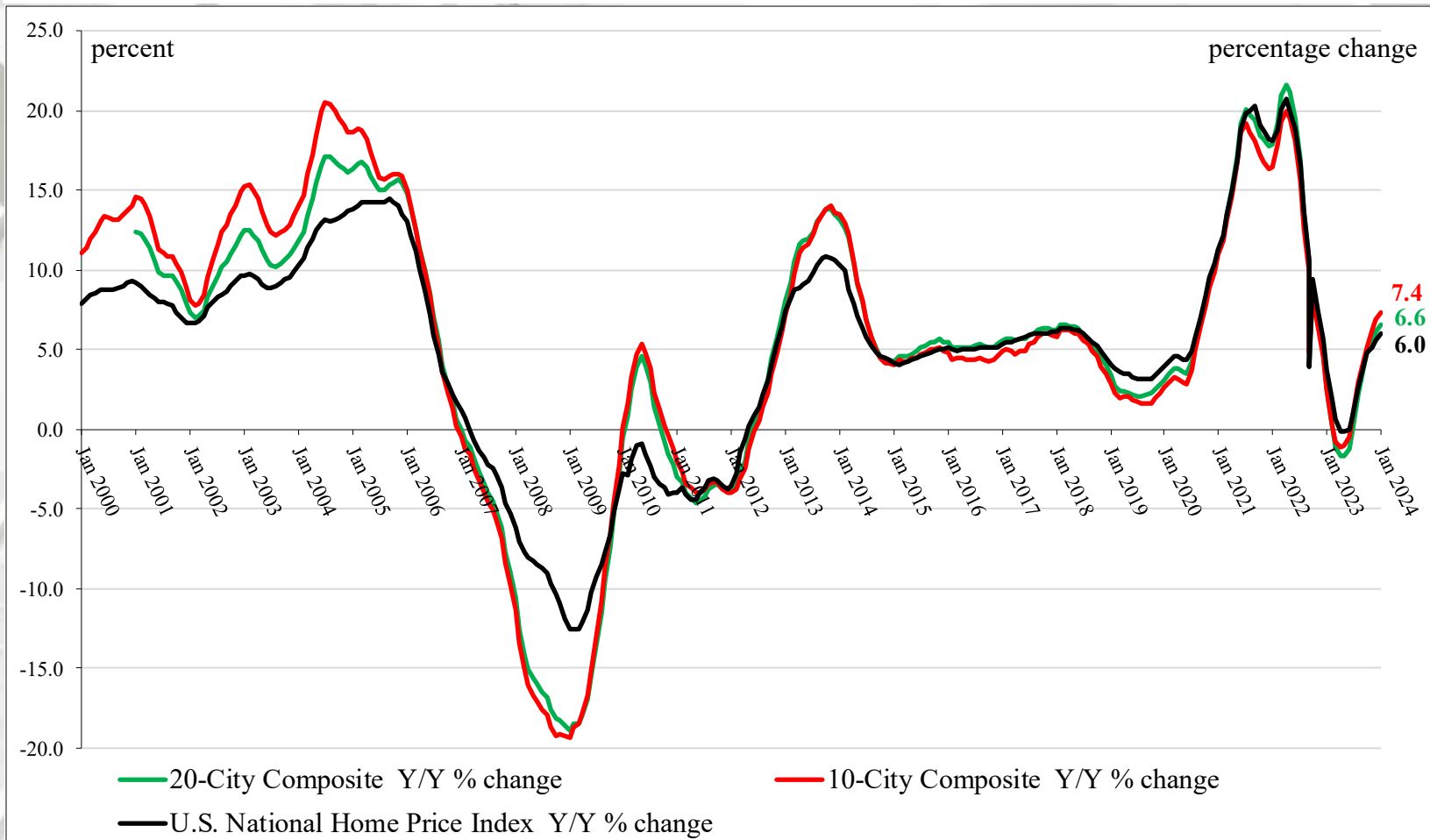
“On a monthly basis, home prices continue to struggle in the face of elevated borrowing costs. Seventeen markets dropped over the last month, while Minneapolis has posted a 2.4% decline over the prior three months. Only Southern California and Washington D.C. have stood up the rising wave of interest rates and deliver positive returns to start the year. San Diego rose 1.8% in January, followed by DC with 0.5% and Los Angeles at 0.1%.” – Brian D. Luke, Head of Commodities, Real & Digital Assets, S&P DJI

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



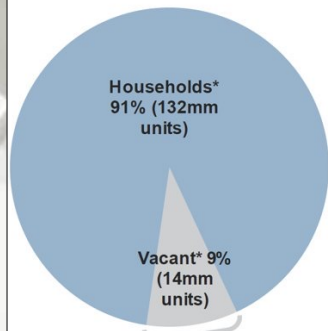
Y/Y Price Change

From January 2023 to January 2024, the National Index indicated a 6.0% increase; the Ten-City improved by 7.4%, and the Twenty-City increased by 6.6%.

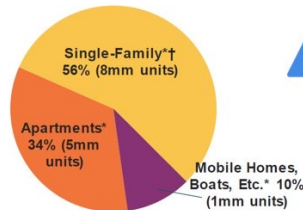
U.S. Housing

US Housing Supply Summary

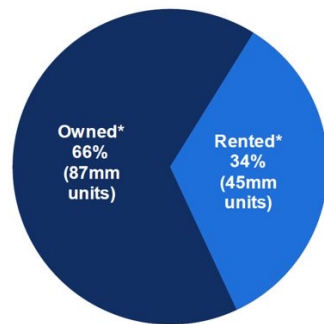
146 Million Housing Units*



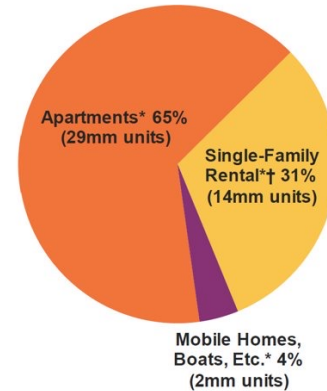
14 Million Total Vacant Units*



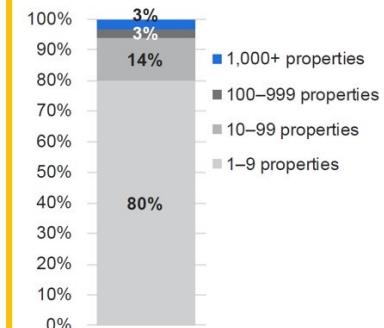
132 Million Households*



45 Million Total Rented Units*



14 Million Single-Family Rental Units*† by Investor Type



JOHN BURNS
RESEARCH & CONSULTING

*JBREC estimates using 2010 Census figures and trending data from ACS / HVS

†Single-family consists of attached and detached units.

Sources: Census Bureau; JBREC aggregation of public records data; John Burns Research and Consulting, LLC (Data: 3Q23, updated quarterly; Pub: Dec-23)

John Burns Research & Consulting LLC

U.S. Housing Supply

“Quick primer on US housing, with a focus on single-family rental ownership nationally and locally. To start, there are 146 million housing units in the US. Follow the charts left to right and you eventually get to 45 million rentals, 14 million of which are single-family.” – Rick Palacios Jr., Director of Research, John Burns Research & Consulting LLC

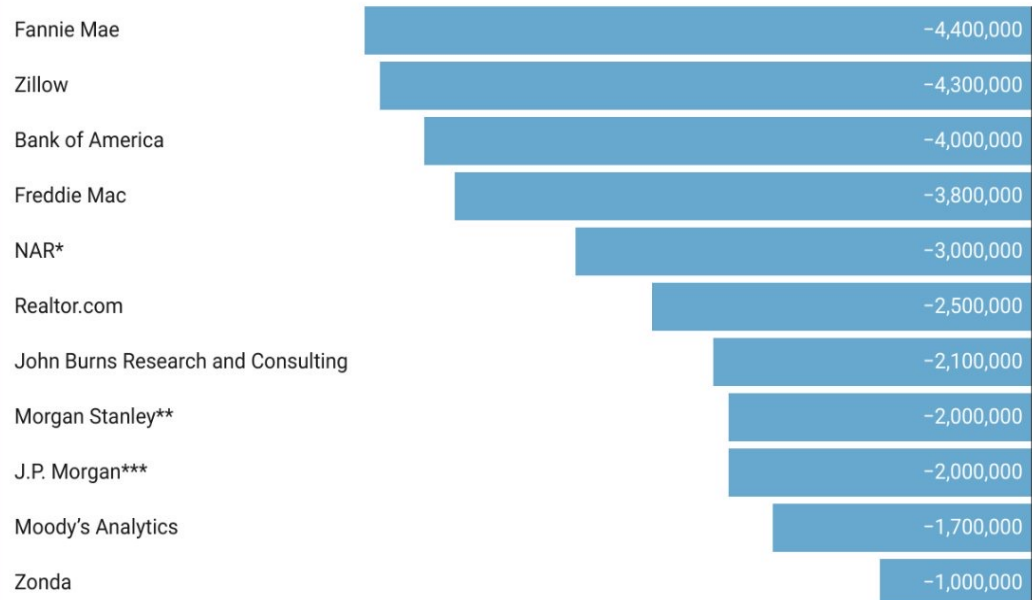
U.S. Housing

11 studies, 1 conclusion: U.S. housing market is underbuilt

ResiClub tracked down studies from 11 different research firms. Among the 11 studies we collected, the average firm estimates that the U.S. housing market is underbuilt by roughly 2.8 million units/homes

The housing shortage, as told by 11 major research firms

Each firm's estimate of the number of housing units/homes the U.S. housing market is "underbuilt" by



NAR estimates that the U.S. is underbuilt by 3 million to 4 million units. **Morgan Stanley's "conservative" estimate suggests a shortage of 2 million units, while its "aggressive" model estimates a shortage of 6 million units. *J.P. Morgan analysts find that the U.S. is short 2 million to 2.5 million units.*

Chart: Lance Lambert • Source: Updated on March 10, 2024 • Created with Datawrapper



ResiClub

U.S. Housing Supply

“Among the 11 studies collected by ResiClub, the average firm estimates that the U.S. housing market is underbuilt by around 2.7 million units.” – Lance Lambert, Co-Founder, Editor-in-Chief, ResidentialClub

U.S. Housing

World Property Journal

Shrinkflation Hitting U.S. Home Builder Industry as Affordability Challenges Remain

Newly Built Homes Reach Their Smallest Median Size In 13 Years In 2024

“As April heralds New Homes Month, the housing industry witnesses a trend towards smaller dwellings, aligning with buyer preferences and striving to make home ownership more accessible to families aspiring to buy a home this year. An analysis by the National Association of Home Builders (NAHB) reveals that in 2023, new homes reached their smallest median size in 13 years.

Carl Harris, NAHB Chairman and a custom home builder from Wichita, Kan., emphasized, “Home ownership remains a goal for families who are eager to put down roots and have a place to call their own. Our nation's builders are meeting the moment by finding solutions in home construction to allow for more individuals to purchase a home.”

According to NAHB, over a third (38%) of builders reduced home sizes in 2023, with over a quarter (26%) planning further reductions this year. NAHB's latest *What Home Buyers Really Want* study reflects a shift in buyer preferences over the past two decades. In 2003, the typical buyer desired 2,260 square feet; today, that figure stands at 2,067 square feet.

Data from the U.S. Census Bureau corroborate the trend of shrinking new homes, persisting for nearly a decade. The median size of new homes constructed in 2023 fell to 2,179 square feet, the lowest since 2010. This downward trajectory began in 2015, with the exception of 2021, when home sizes increased due to pandemic-induced demands for extra space and favorable interest rates.” – Michael Gerrity, Co-Founder, Editor-in-Chief, World Property Journal

U.S. Housing

World Property Journal

Shrinkflation Hitting U.S. Home Builder Industry as Affordability Challenges Remain

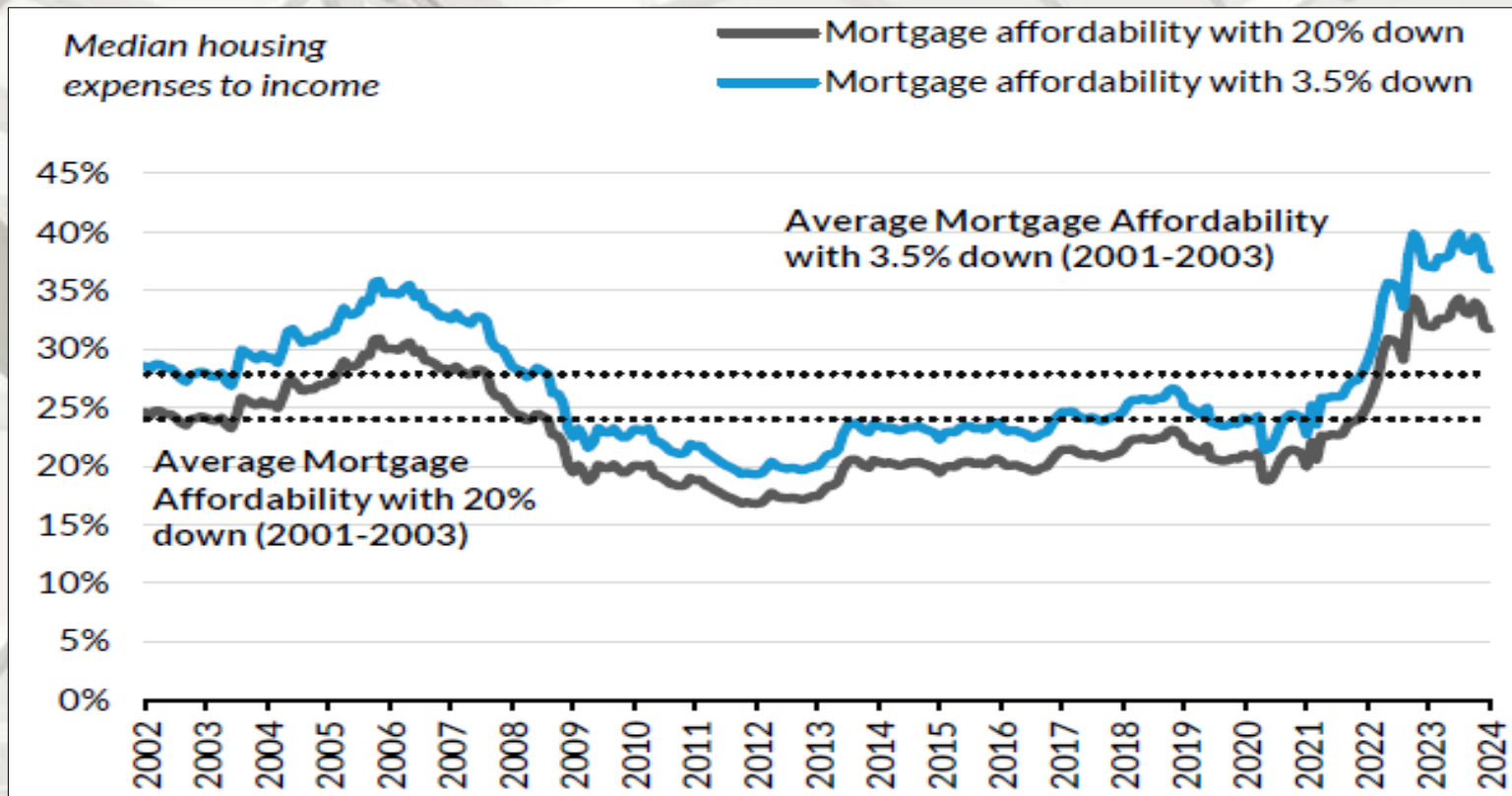
Newly Built Homes Reach Their Smallest Median Size In 13 Years In 2024

“Over a third of builders slashed home prices in 2023. NAHB foresees builders continuing to offer smaller and more affordable designs to tackle housing affordability challenges. However, builders encounter supply-side obstacles that inflate construction costs, including scarce buildable lots, a dearth of skilled labor, and restrictive regulations. The median price of new homes in 2023 stood at \$428,200, marking a 6% decrease from 2022.

Harris stressed, “Boosting the nation's housing supply is key to improving housing affordability. The residential construction industry is committed to keeping the cost of housing at the forefront of the national agenda and is working with all levels of government and both sides of the aisle so more Americans can achieve the dream of home ownership.”

NAHB members nationwide will engage in discussions regarding housing priorities and affordability solutions with their representatives during NAHB's Legislative Conference on June 12 in Washington, D.C.” – Michael Gerrity, Co-Founder, Editor-in-Chief, World Property Journal

U.S. Housing Affordability



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

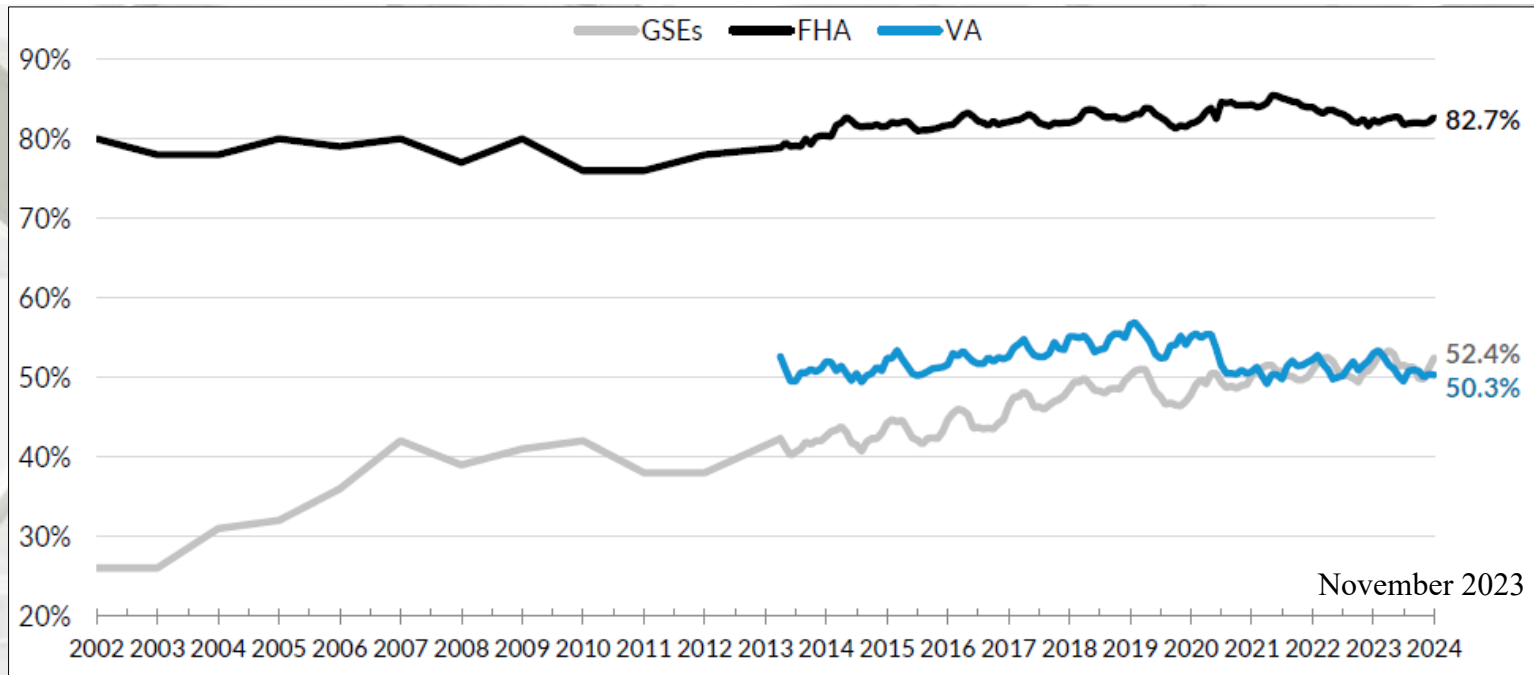
Note: All series measure the first-time home buyer share of purchase loans for principal residences.

Urban Institute

National Mortgage Affordability Over Time

“Mortgage affordability, while marginally better than the record high in October, remains close to the worst level since the inception of this series in 2002. As of January 2024, 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 36.7 percent, also above the 35.8 percent prior peak in November 2005. ...” – Laurie Goodman *et. al*, Vice President, Urban Institute

U.S. First-Time House Buyers



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

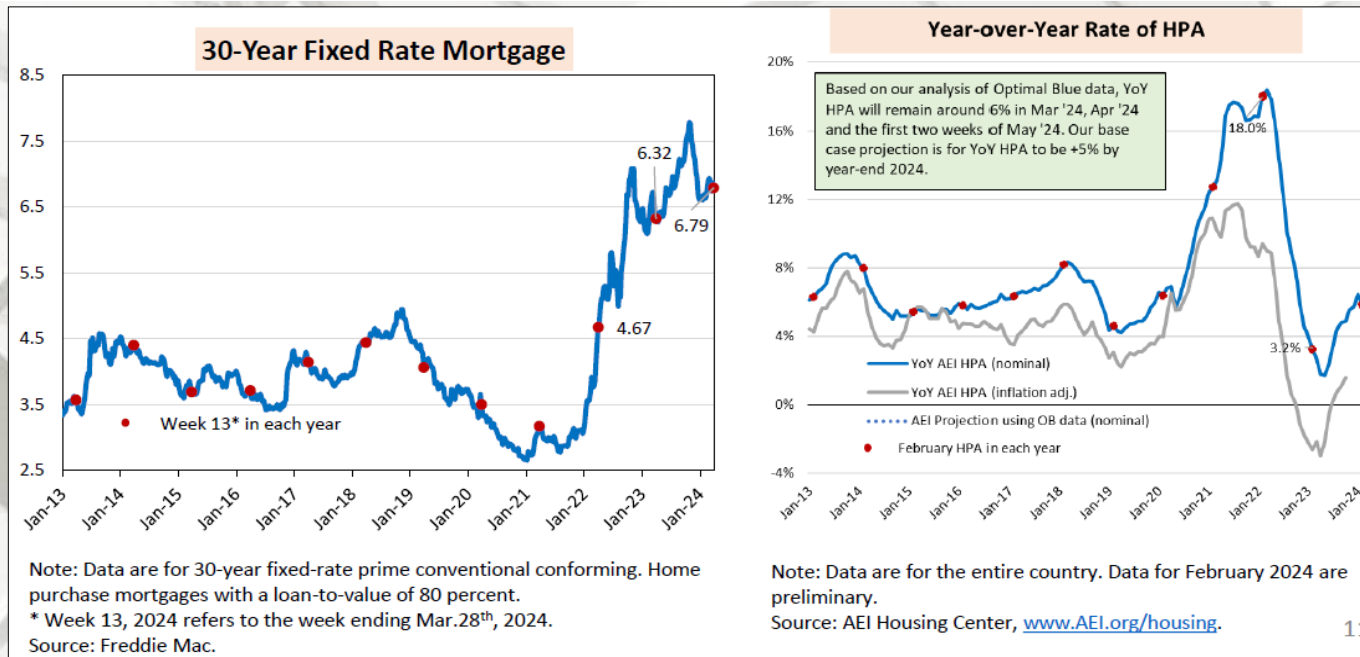
Note: All series measure the first-time homebuyer share of purchase loans for principal residences.

Urban Institute

First-time House Buyer Share

“In January 2024, the FTHB share for FHA, which has always been more focused on first time home buyers, was 82.7 percent. The FTHB share of GSE lending in January was 52.4 percent; the VA share was 50.3 percent. ...” – Laurie Goodman *et. al*, Vice President, Urban Institute

U.S. Housing Affordability



AEI Housing Center

Preliminary Year-over-Year HPA in February 2024 Remains Strong at 5.9%

“February 2024’s preliminary year-over-year (YoY) HPA was February 2024’s preliminary YoY HPA was 5.9%, down from 6.4% a month ago while up from 3.2% a year ago.

- As our projection on the following slide indicates, HPA is expected to be around 5% by Dec. 2024.
- Despite subdued purchase activity and relatively high rates, YoY HPA remains strong, largely due to buyers being well qualified and continued competition due to a strong sellers’ market.
- Continued low unemployment rates, low levels of foreclosures in most areas, work from home, and ongoing home price arbitrage opportunities further support HPA gains that outpace inflation.
- February 2024’s preliminary MoM HPA was 1.1%, reversing the downward trend since October 2023.
- 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

Visual Capitalist

Visualizing America's Shortage of Affordable Homes

“A large share of affordable homes vanished over the pandemic, leading the supply to hit its lowest level on record in 2023. Many buyers have become priced out of the market due to soaring home prices and high interest rates. Last year alone, the number of affordable homes shrank by almost 41%, equal to over 243,000 properties.

This graphic [next slide] shows the dwindling supply of affordable U.S. homes, based on data from [Redfin](#).

In 2023, only 16% of homes were affordable in America, falling from 21% in the year before. An affordable listing was defined as one with a monthly mortgage payment no more than 30% of the median monthly income of that county. ...

... housing affordability has grown increasingly out of reach as mortgage rates have more than doubled in just two years.

While affordable homes made up 39% of the market in 2021, the share dropped precipitously as interest rates climbed higher. In 2023, the average annual 30-year fixed mortgage rates reached 6.81% – hitting its highest level in 20 years.

Although mortgage rates may decline over the year if the Federal Reserve cuts interest rates, it may not be enough to boost the supply of affordable housing.

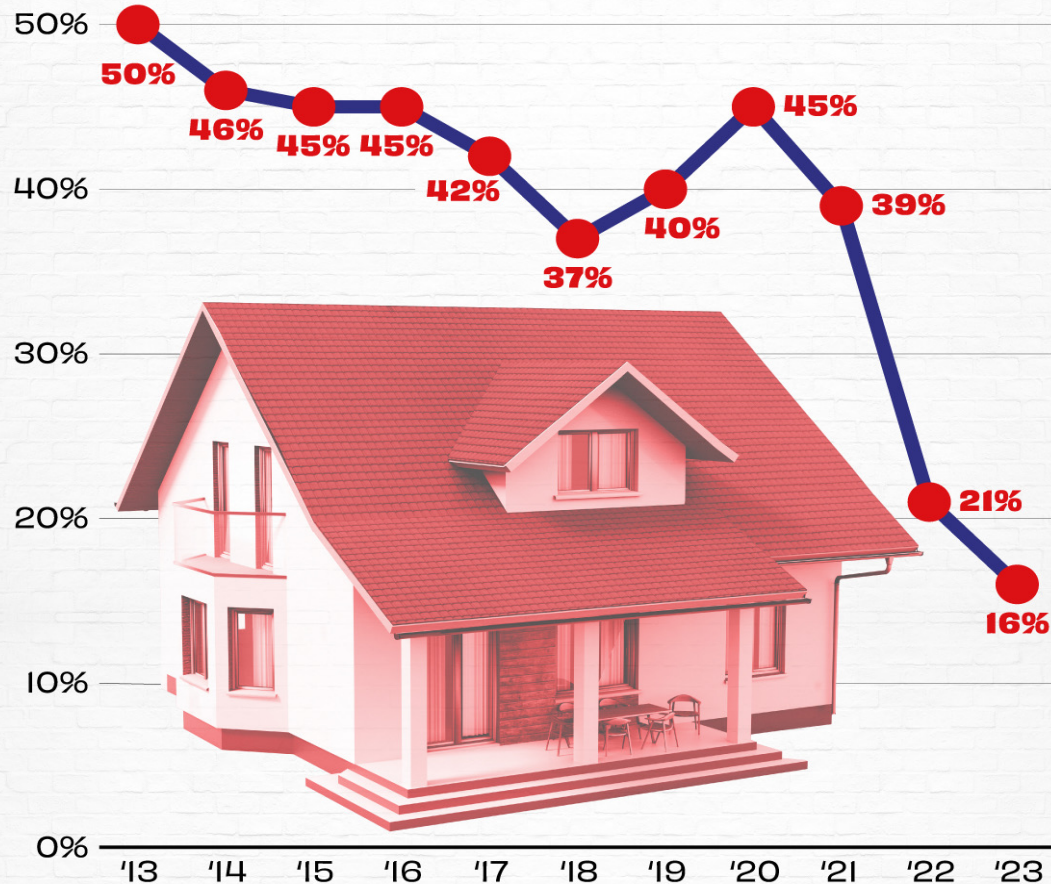
That's because rates may not fall sharply enough to undo the “golden hand-cuff” effect, where home owners are reluctant to sell in order to hold on to their low mortgage rates. Adding to this, home construction has fallen significantly since the global financial crisis. During this time, home builders and lenders became increasingly cautious, leading home construction to drop 55% between 2006 and 2021. ...” – Dorothy Neufeld, Financial Writer, Visual Capitalist

U.S. Housing Affordability

U.S. Home Affordability in Decline

An affordable listing has a monthly mortgage payment **no more than 30%** of the median monthly income of that county.

Share of Home Listings Affordable on Median Income



Source: Redfin

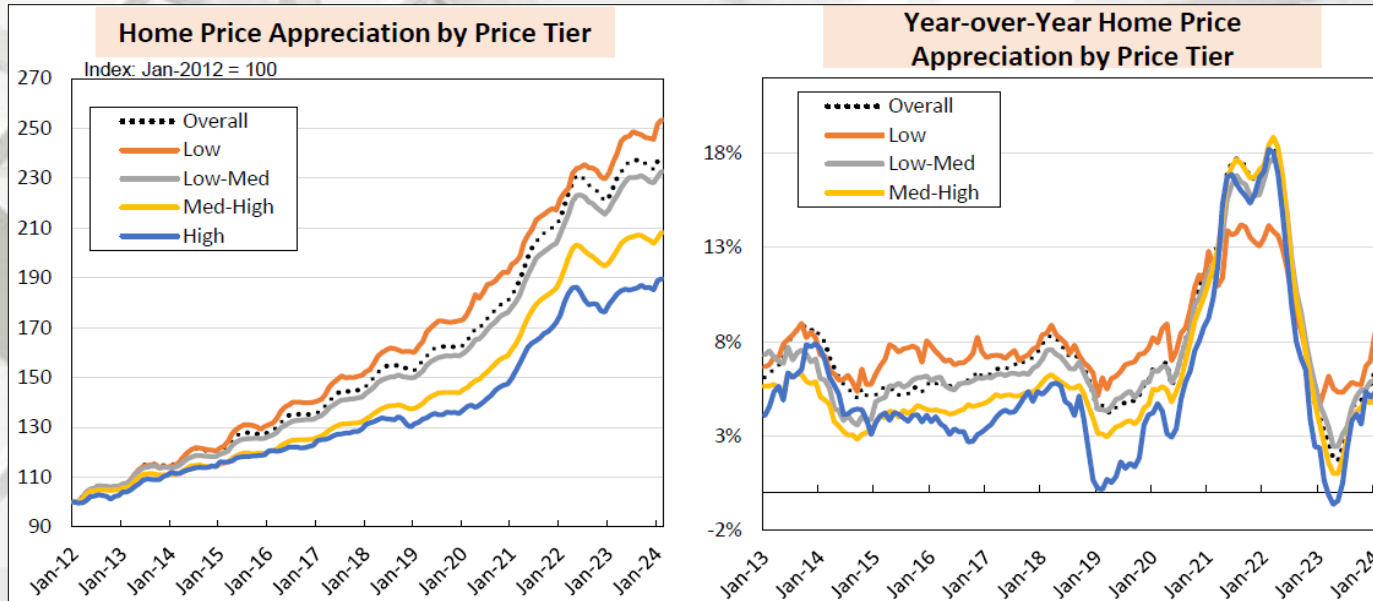
COLLABORATORS RESEARCH + WRITING Niccolo Conte, Dorothy Neufeld | ART DIRECTION + DESIGN Sabrina Lam



Where Data Tells the Story



Home Price Appreciation by Price Tier

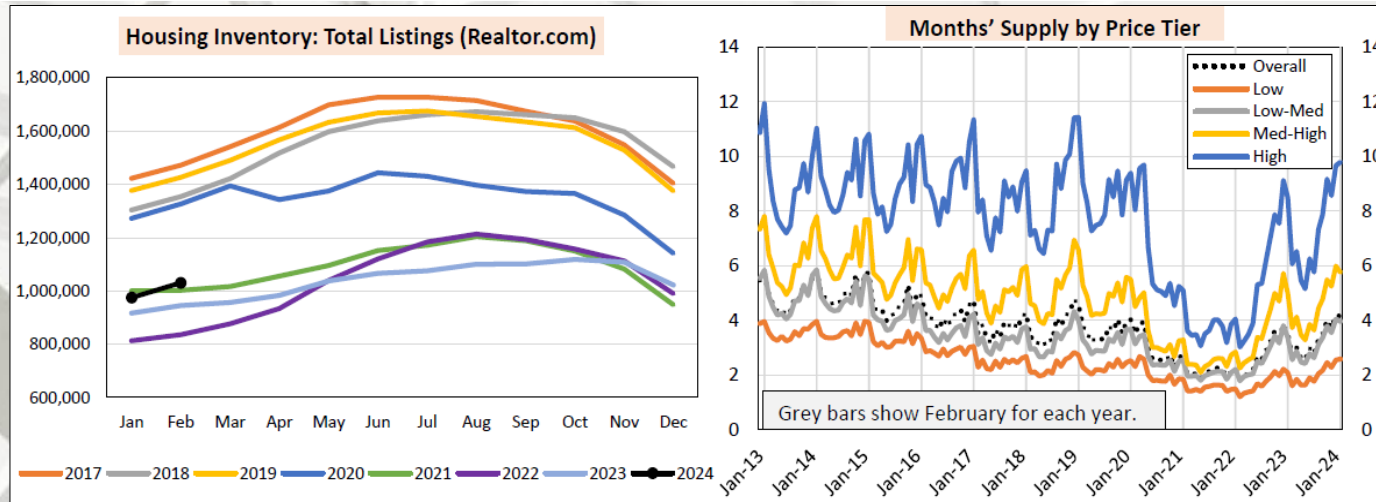


AEI Housing Center

“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 February 2024 indicate that the low price tier leads the YoY change in tier home prices at 7.2 % due to low months’ supply 2.6 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 February 2024, all price tiers have shown relatively robust YoY HPA from the slowest at 4.5% (high) to the highest of 7.2% (low)”– Edward Pinto, Senior Fellow and Director and Tobias Peter, Research Fellow and Assistant Director, AEI Housing Center

Housing Inventory and Months' Supply



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

AEI Housing Center

“Months’ remaining supply was 4.1 months (not seasonally-adjusted) in February 2024. Housing inventory continued to run below pre-pandemic levels, which helps explain the robust YoY HPA.

- February 2024 housing inventory was up 6% and 9% from January 2024 and February 2023, respectively. This marks the first time since the pandemic that the increase from January to February follows the pre-pandemic seasonal pattern. (left panel).
- Inventory today is at about 70% of 2017-2019 levels, indicating an unhealthy market (left panel).
- Months’ supply stood at 4.1 months in February 2024, down from 4.2 months in January 2024, while up from 3.5 months in February 2023, and 4.0 months in February 2020, the last comparable pre-pandemic month (right panel).
- Notwithstanding rates around 7%, the supply-demand imbalance evidenced by continued tight months’ supply will fuel continued upward price pressures (left panel).
- Given historical data, months’ supply would need to increase to > 7 months to enter a buyer’s market and to 8-9 months to trigger a national YoY decline in home price appreciation.” – Edward Pinto, Senior Fellow and Director and Tobias Peter, Research Fellow and Assistant Director, AEI Housing

U.S. Housing Finance

Mortgage Bankers Association (MBA)

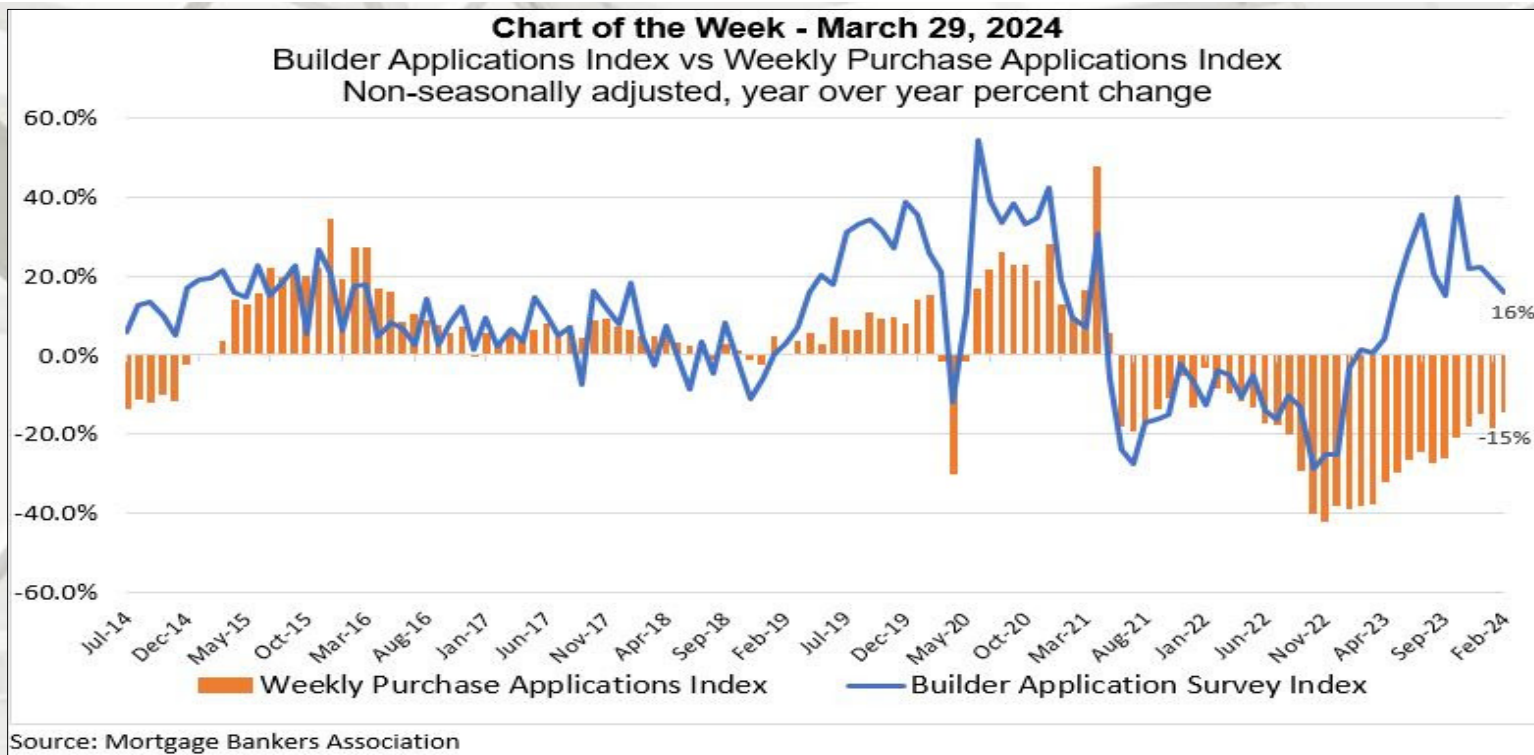
Chart of the Week: Builder Applications vs. Weekly Applications

“As we enter the spring home-buying season, existing-home sales activity remains suppressed by low levels of for-sale inventory. Available supply sits at just over one million units – a 2.9-month supply – and about half the historical average, based on data from the [National Association of Realtors](#). Many homeowners are holding onto mortgage rates significantly lower than currently available rates, which is discouraging them from listing their homes for sale. This is adding to the drag on overall purchase activity, even with buyers willing to purchase in the current rate environment.

Sales of newly built homes on the other hand continue to be strong. [U.S. Census Bureau](#) data show that the inventory of new homes for sale at 463,000 units as of February 2024 – an 8.4-month supply – now represents over 30 percent of all single-family units for sale. Home buyers have turned to new homes as an option if previously owned homes are not available or in their price range, not only because of the relative availability of new homes but also because of the prospect of a newer, higher quality home. This is especially the case given the tradeoff of a higher mortgage rate.

This week’s [Chart of the Week](#) compares data from our [Builder Applications Survey \(BAS\)](#), which captures home purchase applications on newly constructed homes taken by mortgage companies affiliated with home builders, and the [Weekly Applications Survey \(WAS\)](#), which covers a broader sample of lenders who originate loans in the retail and consumer direct channels. The purchase applications from the WAS are predominantly for existing homes. The contrast in results since the start of 2023 is stark – the BAS, as of February 2024, shows a 16 percent annual increase in purchase applications, the 13th consecutive month of annual growth, while the WAS purchase index continues to show annual declines, with the February level of applications down almost 15 percent relative to a year ago.” – Joel Kan, Associate Vice President of Economic and Industry Forecasting and Eddie Seiler, Associate Vice President for Housing Economics; MBA

U.S. Housing Finance



Mortgage Bankers Association (MBA)

Chart of the Week: Builder Applications vs. Weekly Applications

“MBA is forecasting that as interest rates decline to just north of six percent in the fourth quarter of 2024, new-home sales will continue to increase from an annualized rate of 712,000 in the first quarter of 2024 to 792,000 in the fourth quarter. Furthermore, existing-home sales will increase from 4.2 million to 4.5 million. This is welcome news and will help drive purchase originations to approximately \$1.54 trillion in 2024, an increase of 16 percent over 2023.” – Joel Kan, Associate Vice President of Economic and Industry Forecasting and Eddie Seiler, Associate Vice President for Housing Economics; MBA

U.S. Housing Finance

Mortgage Bankers Association

Mortgage Credit Availability Increased in March

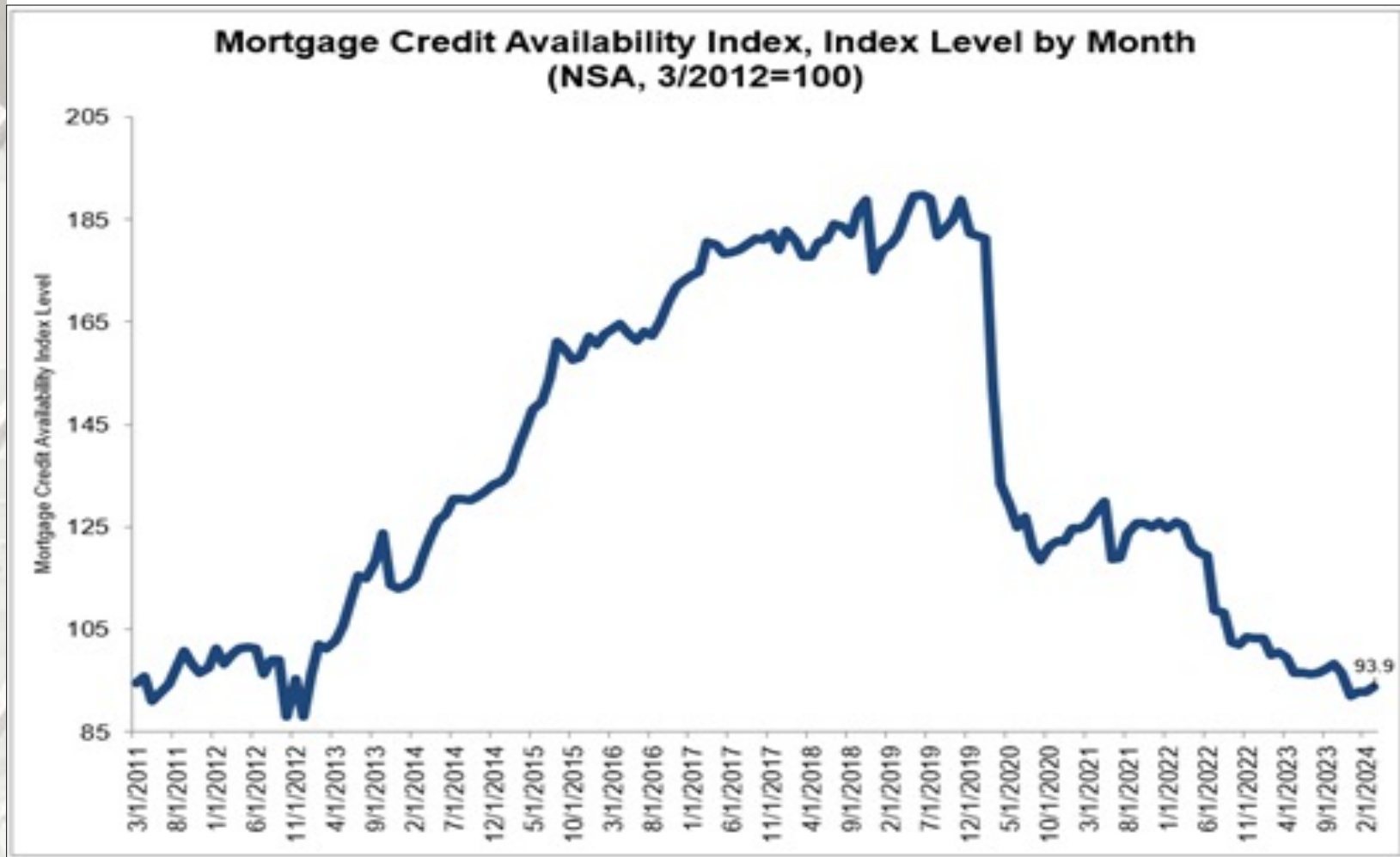
“Mortgage credit availability increased in March according to the Mortgage Credit Availability Index (MCAI), a report from the Mortgage Bankers Association (MBA) that analyzes data from ICE Mortgage Technology.

The MCAI rose by 1.1 percent to 93.9 in March. 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 2.1 percent, while the Government MCAI decreased by 0.1 percent. Of the component indices of the Conventional MCAI, the Jumbo MCAI increased by 2.6 percent, and the Conforming MCAI rose by 1.2 percent.

“Credit availability increased in March, driven by growth in conventional credit. There were increased offerings of cash-out refinance loan programs across fixed rate and ARM loans, as well as for all occupancy types. Although credit supply increased for the third consecutive month, it remains low at nearly 7 percent below a year ago and still close to 2012 lows. The jumbo index grew 2.6 percent last month and was the only component seeing credit supply higher than a year ago. Growth in jumbo credit availability was driven by both non-QM and super conforming loan programs.” – Joel Kan, Associate Vice President of Economic and Industry Forecasting; MBA

U.S. Housing Finance

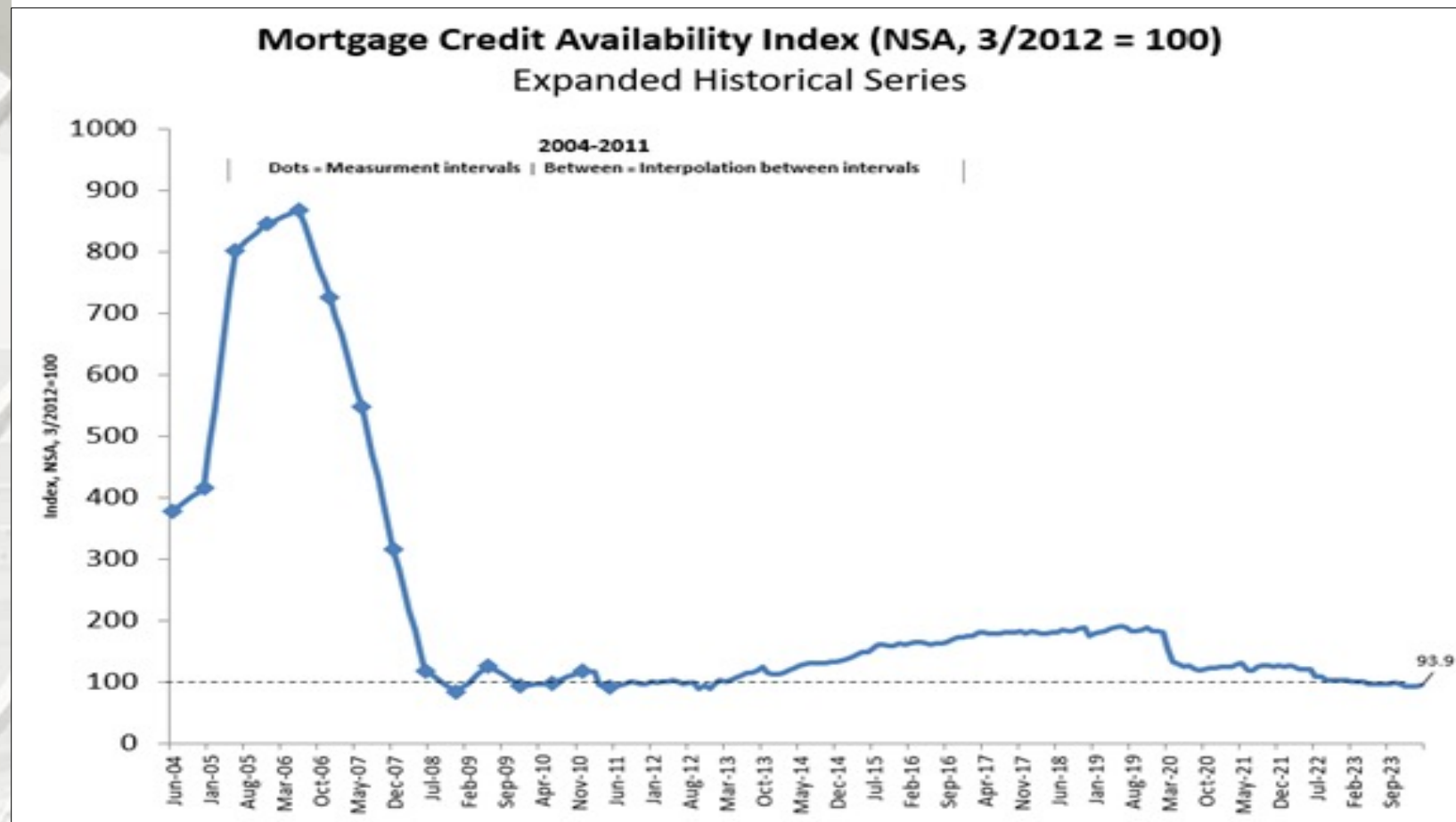
Mortgage Credit Availability (MBA)



Source: Mortgage Bankers Association; Powered by ICE Mortgage Technology

U.S. Housing Finance

Mortgage Credit Availability (MBA)



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

MBA Mortgage Finance Forecast

MBA Mortgage Finance Forecast

March 21, 2024

	2023				2024				2025				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	1,371	1,483	1,482	1,517	1,525	1,513	1,491	1,500	1,484	1,468	1,422	1,509	1,486	1,480
Single-Family	834	930	967	1,051	1,092	1,143	1,161	1,172	1,170	1,186	1,173	1,162	946	1,142	1,173	1,177
Two or More	552	520	403	432	390	374	364	341	321	314	311	306	477	367	313	304
Home Sales (SAAR, Thous)																
Total Existing Homes	4,327	4,250	4,020	3,797	4,229	4,298	4,406	4,519	4,623	4,743	4,836	4,914	4,099	4,363	4,779	4,983
New Homes	638	691	703	652	712	765	788	792	821	827	812	792	671	764	813	810
FHFA US House Price Index (YOY % Change)	4.6	3.3	5.6	6.4	5.7	5.3	4.7	4.1	3.6	3.4	3.2	3.3	6.4	4.1	3.3	3.9
Median Price of Total Existing Homes (Thous \$)	366.7	397.5	400.9	387.3	384.3	394.1	393.4	390.1	389.6	395.0	396.6	393.0	388.1	390.5	393.5	395.6
Median Price of New Homes (Thous \$)	434.8	418.7	434.3	417.9	427.4	428.8	433.8	431.2	432.1	437.0	438.1	432.0	426.4	430.3	434.8	430.4
Interest Rates																
30-Year Fixed Rate Mortgage (%)	6.4	6.5	7.0	7.3	6.8	6.6	6.3	6.1	5.9	5.8	5.6	5.6	7.3	6.1	5.6	5.4
10-Year Treasury Yield (%)	3.6	3.6	4.2	4.4	4.2	4.1	3.9	3.8	3.8	3.8	3.7	3.7	4.4	3.8	3.7	3.6
Mortgage Originations																
Total 1- to 4-Family (Bil \$)	333	463	444	399	377	518	566	549	501	619	620	598	1,639	2,010	2,339	2,436
Purchase	267	371	363	324	291	408	431	409	346	461	456	436	1,325	1,539	1,699	1,782
Refinance	66	92	81	75	86	110	135	140	155	158	164	162	314	471	639	654
Refinance Share (%)	20	20	18	19	23	21	24	26	31	26	27	27	19	23	27	27
FHA Originations (Bil \$)													198	214	213	204
Total 1- to 4-Family (000s loans)	895	1,239	1,165	1,034	971	1,313	1,426	1,376	1,258	1,524	1,517	1,455	4,333	5,086	5,754	5,790
Purchase	686	948	913	804	711	984	1,028	966	810	1,070	1,049	996	3,350	3,689	3,926	3,981
Refinance	210	291	252	230	260	328	398	410	448	454	468	459	983	1,397	1,829	1,809
Refinance Share (%)	23	23	22	22	27	25	28	30	36	30	31	32	23	27	32	31
Mortgage Debt Outstanding																
1- to 4-Family (Bil \$)	13,676	13,774	13,864	13,955	14,027	14,103	14,207	14,314	14,410	14,521	14,628	14,729	13,955	14,314	14,729	15,127

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. Copyright 2024 Mortgage Bankers Association. All rights reserved. THE HISTORICAL DATA AND PROJECTIONS ARE PROVIDED "AS IS" WITH NO WARRANTIES OF ANY KIND.



MBA Economic Forecast

MBA Economic Forecast

March 21, 2024

	2023				2024				2025				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	4.9	3.2	0.9	0.8	0.9	1.4	1.5	1.4	1.4	1.5	3.1	1.0	1.4	1.7
Personal Consumption Expenditures	3.8	0.8	3.1	3.0	1.1	1.4	1.2	1.7	1.7	1.4	1.2	1.5	2.7	1.3	1.5	1.8
Business Fixed Investment	5.7	7.4	1.4	2.4	-1.1	0.1	0.9	1.5	2.0	2.1	1.4	1.2	4.2	0.3	1.7	1.9
Residential Investment	-5.3	-2.2	6.7	2.9	10.4	7.7	1.8	2.4	1.9	1.9	1.1	2.0	0.4	5.5	1.7	1.1
Govt. Consumption & Investment	4.8	3.3	5.8	4.2	1.4	1.0	0.5	0.3	0.3	0.3	0.3	0.3	4.5	0.8	0.3	0.3
Net Exports (Bil. Chain 2012\$)	-1048.8	-1039.0	-1043.1	-1029.5	-1065.1	-1097.9	-1108.9	-1108.0	-1118.1	-1122.6	-1114.9	-1108.4	-1040.1	-1095.0	-1116.0	-1096.0
Inventory Investment (Bil. Chain 2012\$)	24.1	13.2	68.9	58.7	65.4	56.4	51.6	44.8	47.1	48.3	51.4	52.0	41.2	54.5	49.7	55.1
Consumer Prices (YOY)	5.7	4.0	3.6	3.2	3.1	3.0	2.9	2.6	2.3	2.3	2.1	2.2	3.2	2.6	2.2	2.1
Percent																
Unemployment Rate	3.5	3.6	3.7	3.8	3.9	4.0	4.3	4.5	4.6	4.6	4.7	4.8	3.6	4.2	4.7	4.6
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	4.4	4.2	4.1	3.9	3.8	3.8	3.8	3.7	3.7	4.4	3.8	3.7	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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MORTGAGE BANKERS ASSOCIATION

Summary

In conclusion:

Housing data, month-over-month and year-over-year, exhibited several categories of positivity. Total housing and single-family starts, and total and single-family construction spending were positive month-over-month and year-over-year. The influence of increased mortgage rates is evident, as aggregate costs have decreased affordability and influenced the “lock-in” effect.

Pros:

- 1) The desire to own a house remains positive.

Cons:

- 1) Mortgage interest rates and affordability;
- 2) US bank failures;
- 3) Inflation;
- 4) The war in Ukraine and the 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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