

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



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Virginia Polytechnic Institute and State University

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Table of Contents

Slide 3: Opening Remarks	Slide 43: Region SF House Sales & Price
Slide 4: Housing Scorecard	Slide 46: New SF House Sales x Category
Slide 5: New Housing Starts	Slide 62: Construction Spending
Slide 12: Regional Housing Starts	Slide 65: Construction Spending Shares
Slide 25: New Housing Permits	Slide 68: Remodeling
Slide 27: Regional New Housing Permits	Slide 77: Existing House Sales
Slide 32: Housing Under Construction	Slide 80: U.S. Housing Prices & Finance
Slide 34: Regional Under Construction	Slide 101: Mortgage Finance & Outlook
Slide 39: Housing Completions	Slide 106: Summary
Slide 41: Regional Housing Completions	Slide 107: Virginia Tech Disclaimer
Slide 40: New Housing Sales	Slide 108: USDA Disclaimer
Slide 47: New Single-Family House Sales	

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

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Opening Remarks

Housing data, month-over-month and year-over-year, were mostly negative. On a month-over-month basis total and multi-family starts, total and multi-family permits and housing completion were positive. Year-over-year, single-family starts, total and single-family completions, and total and single-family construction spending were positive. The influence of increased mortgage rates is evident, as aggregate costs have decreased affordability and the “lock-in” effect have obfuscated sales. New and existing house sales continued their respective declines.

The August 15th Atlanta Fed GDPNow™ total residential investment spending forecast is -1.5% for Q3 2024. Quarterly log change for new private permanent site expenditures were projected at -6.1%; the improvement spending forecast was -1.7%; and the manufactured/mobile home expenditures projection was 5.1% (all: quarterly log change and at a seasonally adjusted annual rate).¹

“North American lumber markets over the near term are expected to remain depressed as the economy continues to adjust to inflationary pressures, elevated interest rates, labour shortages and geo-political uncertainty, and as industry-wide lumber production continues to adjust to match demand.

Interfor expects that over the mid-term, lumber markets will continue to benefit from favourable underlying supply and demand fundamentals. Positive demand factors include the advanced age of the U.S. housing stock, a shortage of available housing and various demographic factors, while growth in lumber supply is expected to be limited by extended capital project completion and ramp-up timelines, labour availability and constrained global fibre availability.” – Richard Pozzebon, Executive Vice President and Chief Financial Officer; Interfor Corporation

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; 8/15/24

² <https://interfor.com/wp-content/uploads/2024/08/Interfor-Reports-Q224-Results.pdf>; 8/8/24

June 2024 Housing Scorecard

	M/M	Y/Y
Housing Starts	▲ 3.0%	▼ 4.4%
Single-Family (SF) Starts	▼ 2.2%	▲ 5.4%
Multi-Family (MF) Starts*	▲ 19.6%	▼ 23.1%
Housing Permits	▲ 3.9%	▼ 2.6%
SF Permits	▼ 1.8%	▼ 0.7%
MF Permits*	▲ 16.3%	▼ 5.9%
Housing Under Construction	▼ 1.5%	▼ 7.7%
SF Under Construction	▼ 1.3%	▼ 2.2%
Housing Completions	▲ 10.1%	▲ 15.5%
SF Completions	▲ 1.8%	▲ 3.2%
New SF House Sales	▼ 0.6%	▼ 7.4%
Private Residential Construction Spending	▼ 0.3%	▲ 7.3%
SF Construction Spending	▼ 1.2%	▲ 9.9%
Existing House Sales ¹	▼ 5.4%	▼ 5.4%

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

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

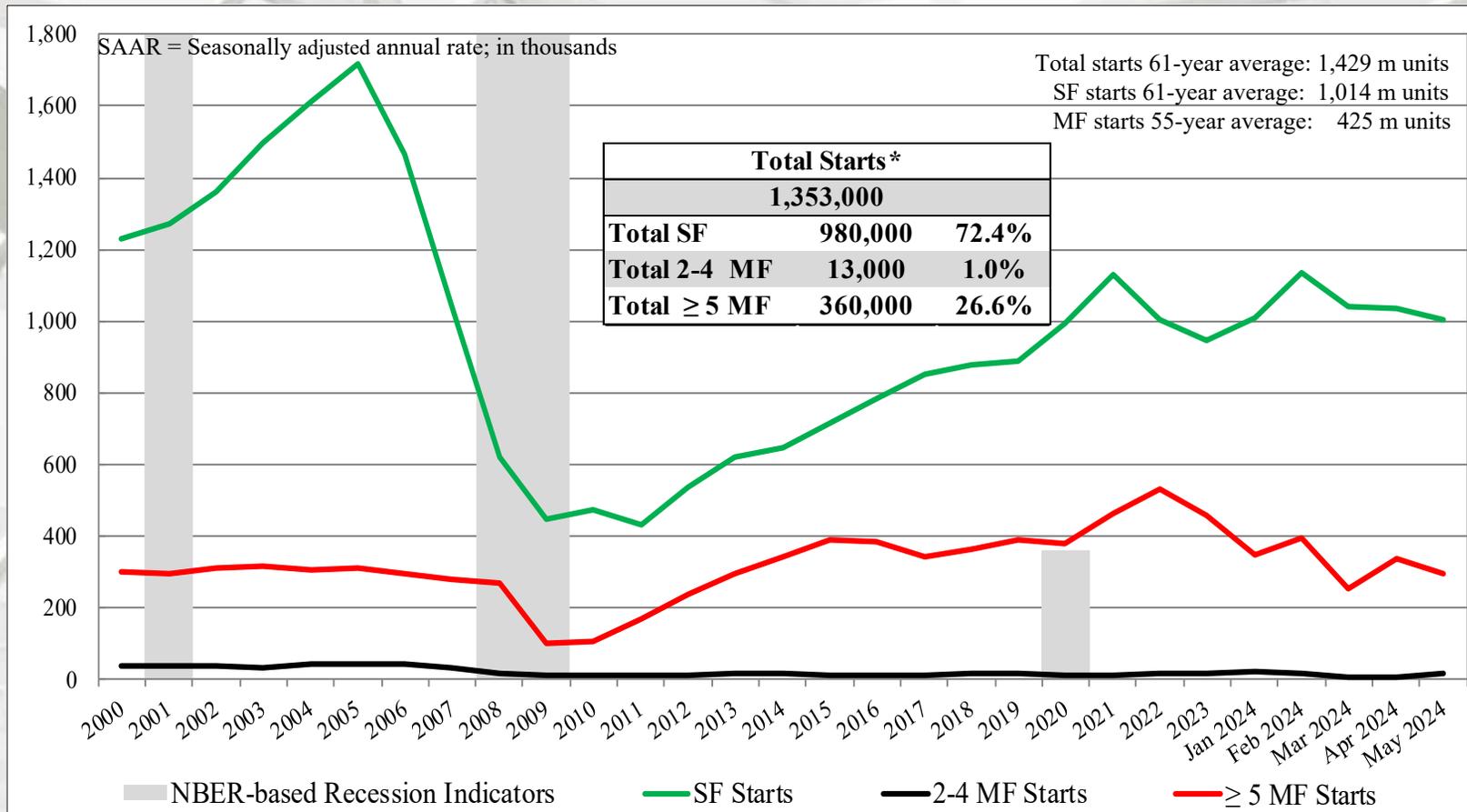
New Housing Starts

	Total Starts*	SF Starts	MF 2-4 Starts**	MF ≥5 Starts
June	1,353,000	980,000	13,000	360,000
May	1,314,000	1,002,000	17,000	295,000
2023	1,415,000	930,000	15,000	470,000
M/M change	3.0%	-2.2%	-23.5%	22.0%
Y/Y change	-4.4%	5.4%	-13.3%	-23.4%

* 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

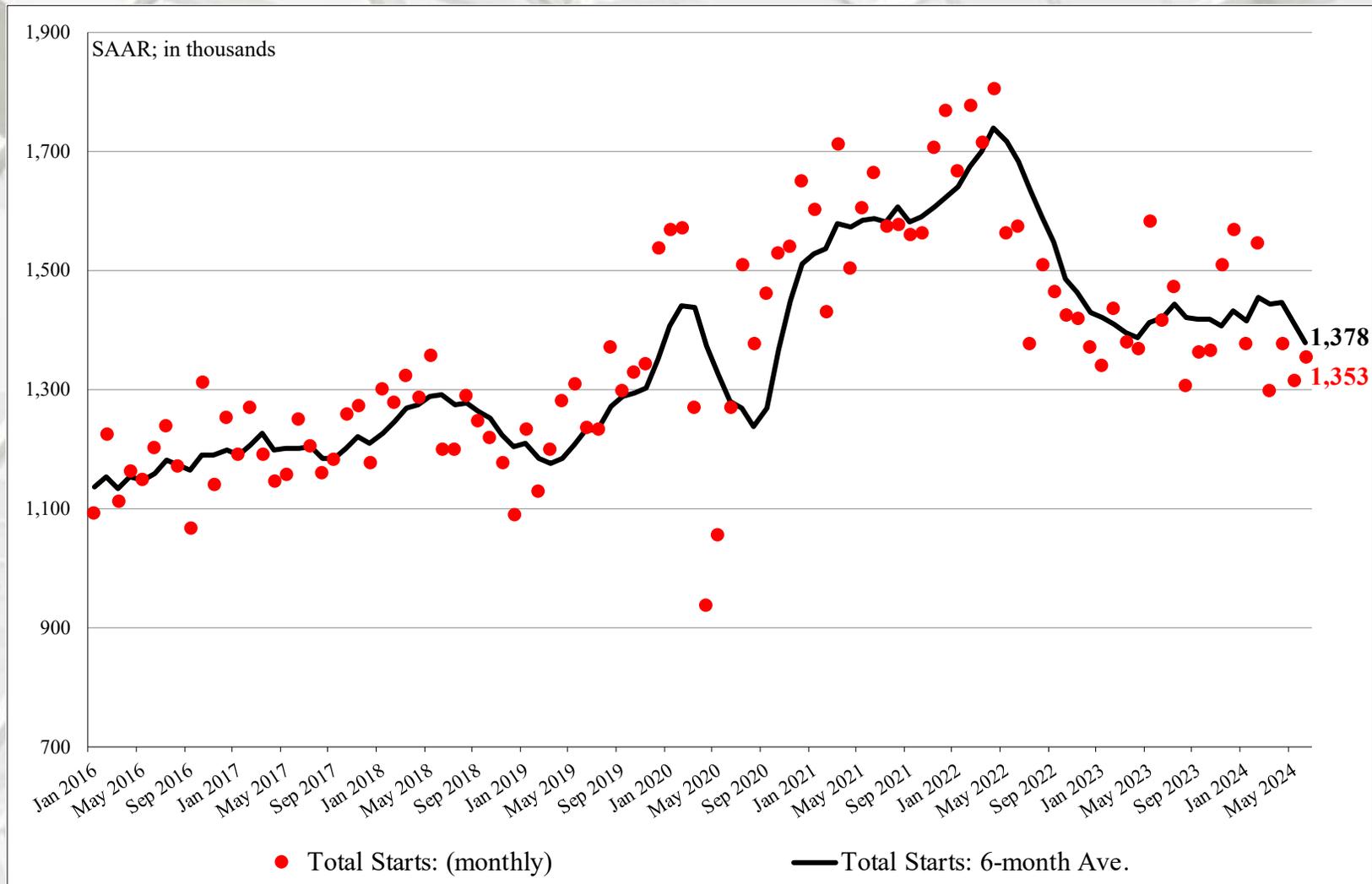


The US DOC does not report 2 to 4 multi-family starts directly; this is an estimation: (Total starts – (SF + 5-unit MF)).

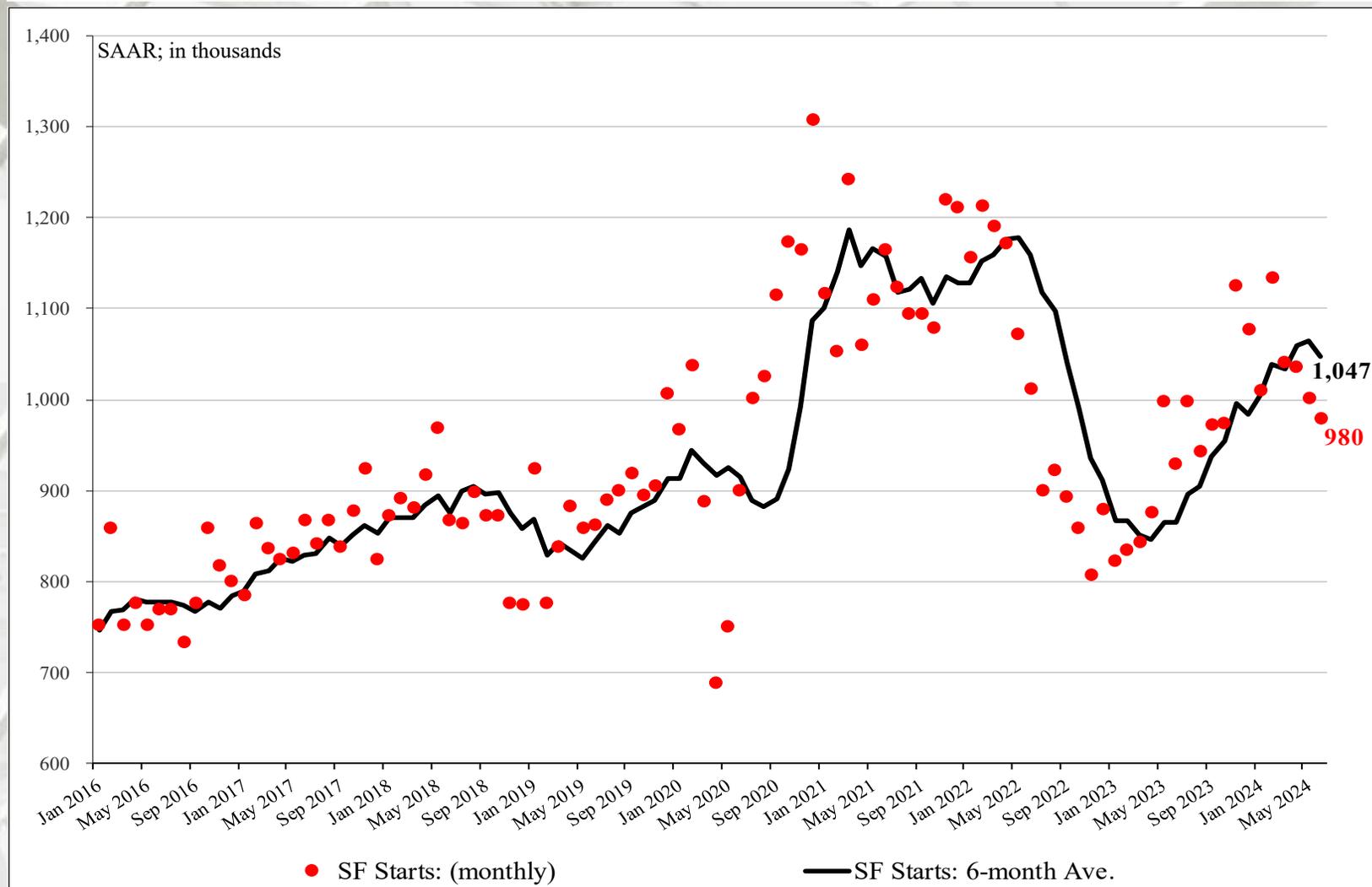
* Percentage of total starts.

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

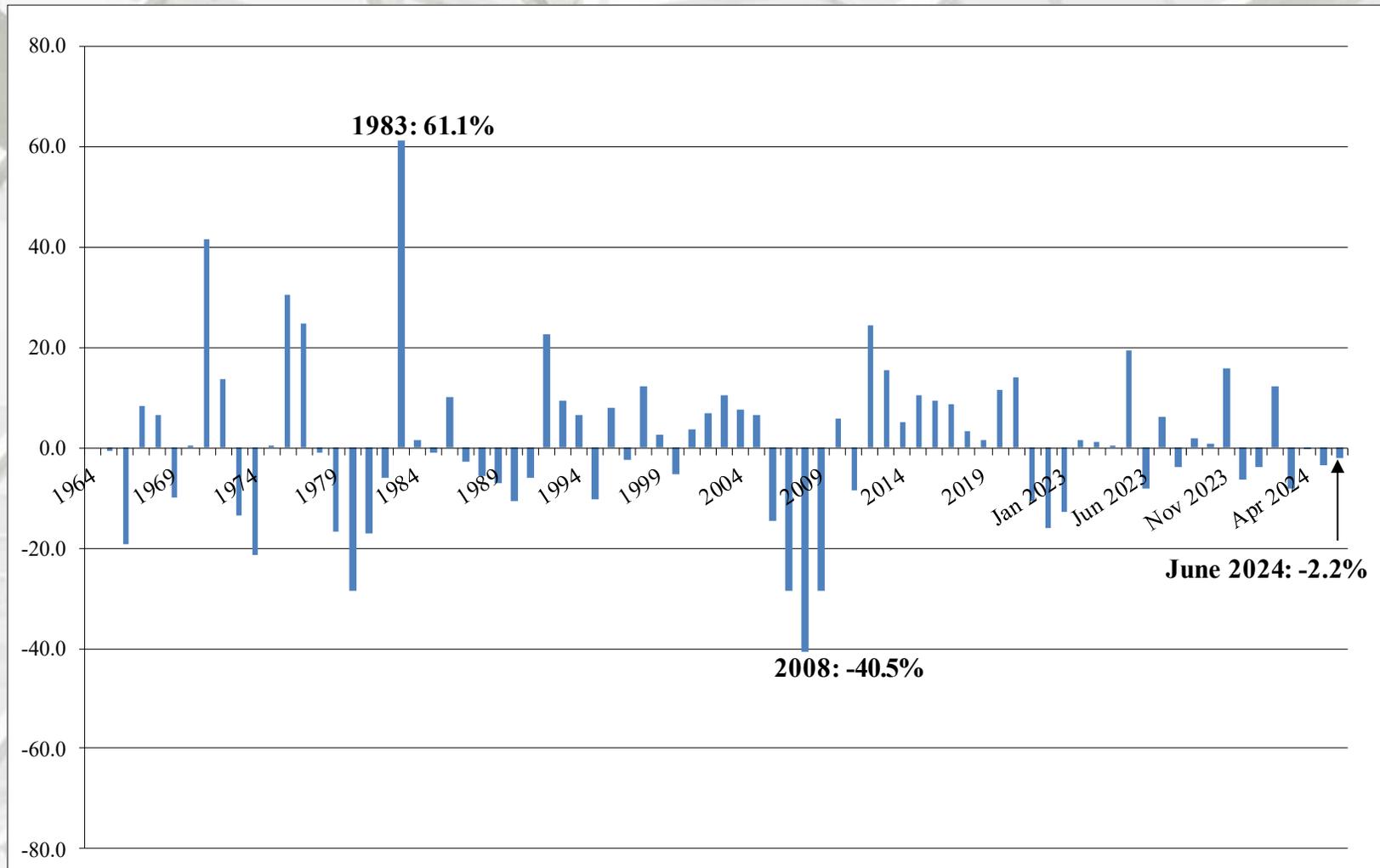
Total Housing Starts: Six-Month Moving Average



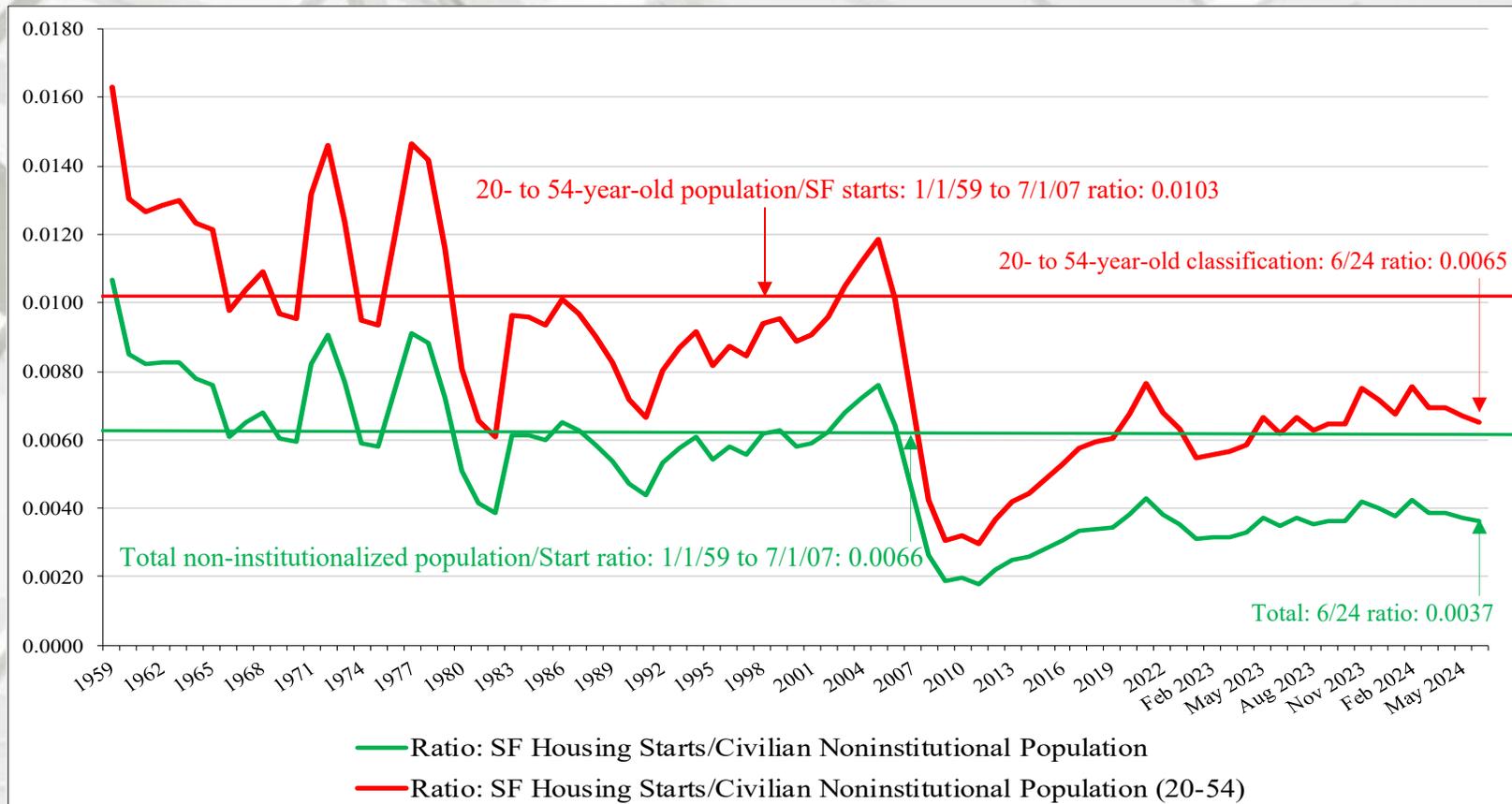
SF Housing Starts: Six-Month Moving Average



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



New SF Starts

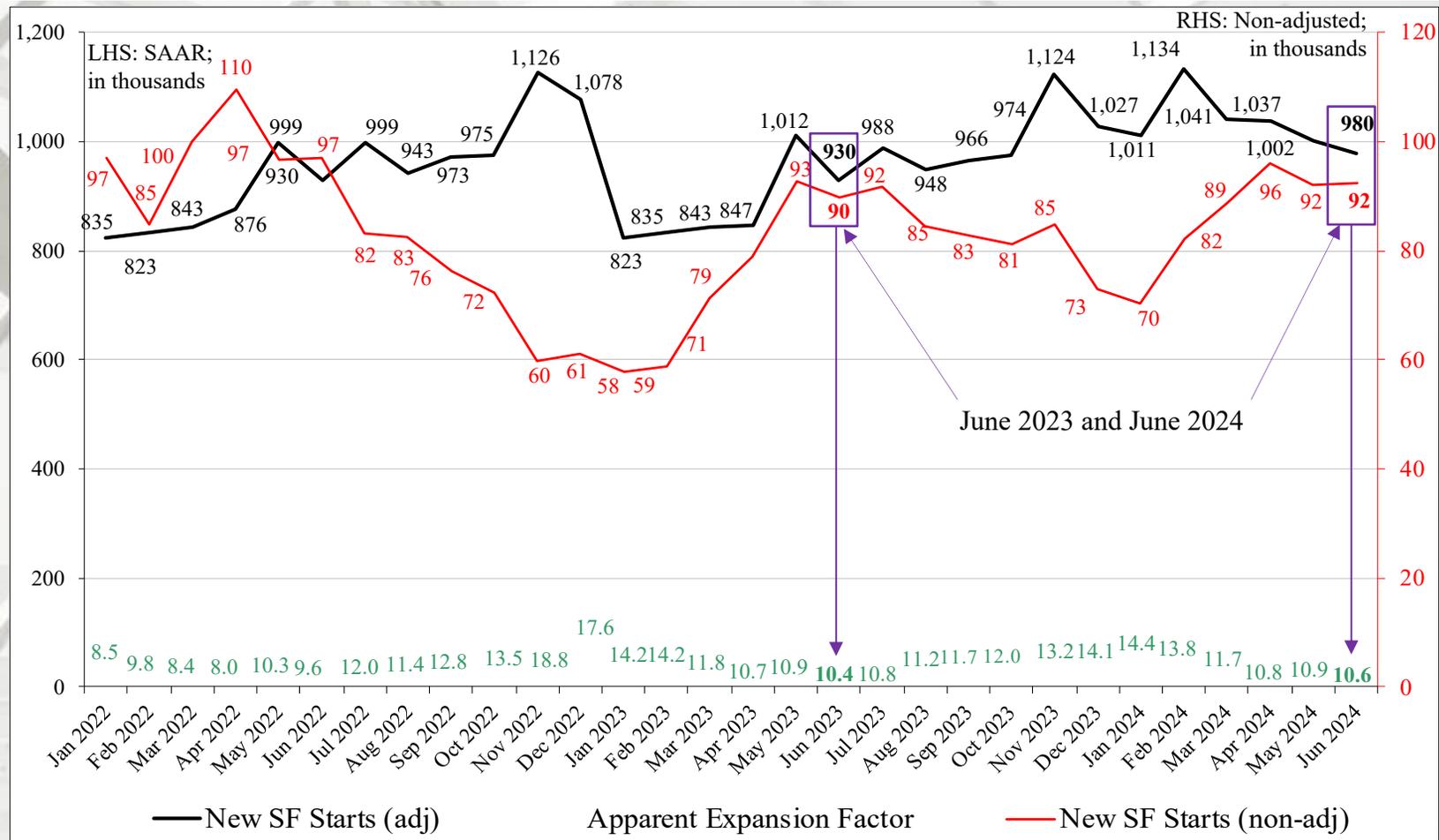


New SF starts adjusted for the US population

From June 1959 to June 2007, the long-term ratio of new SF starts to the total US non-institutionalized population is 0.0066. In June 2024 it was 0.0037 – no change from May. The long-term ratio of non-institutionalized population, aged 20 to 54 is 0.0103; in June 2024 it was 0.0065 – a decline from May (0.0067). 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**
June	121,000	67,000	54,000
May	90,000	69,000	21,000
2023	97,000	58,000	39,000
M/M change	34.4%	-2.9%	157.1%
Y/Y change	24.7%	15.5%	38.5%
	MW Total	MW SF	MW MF
June	194,000	111,000	83,000
May	153,000	110,000	43,000
2023	167,000	111,000	56,000
M/M change	26.8%	0.9%	93.0%
Y/Y change	16.2%	0.0%	48.2%

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).

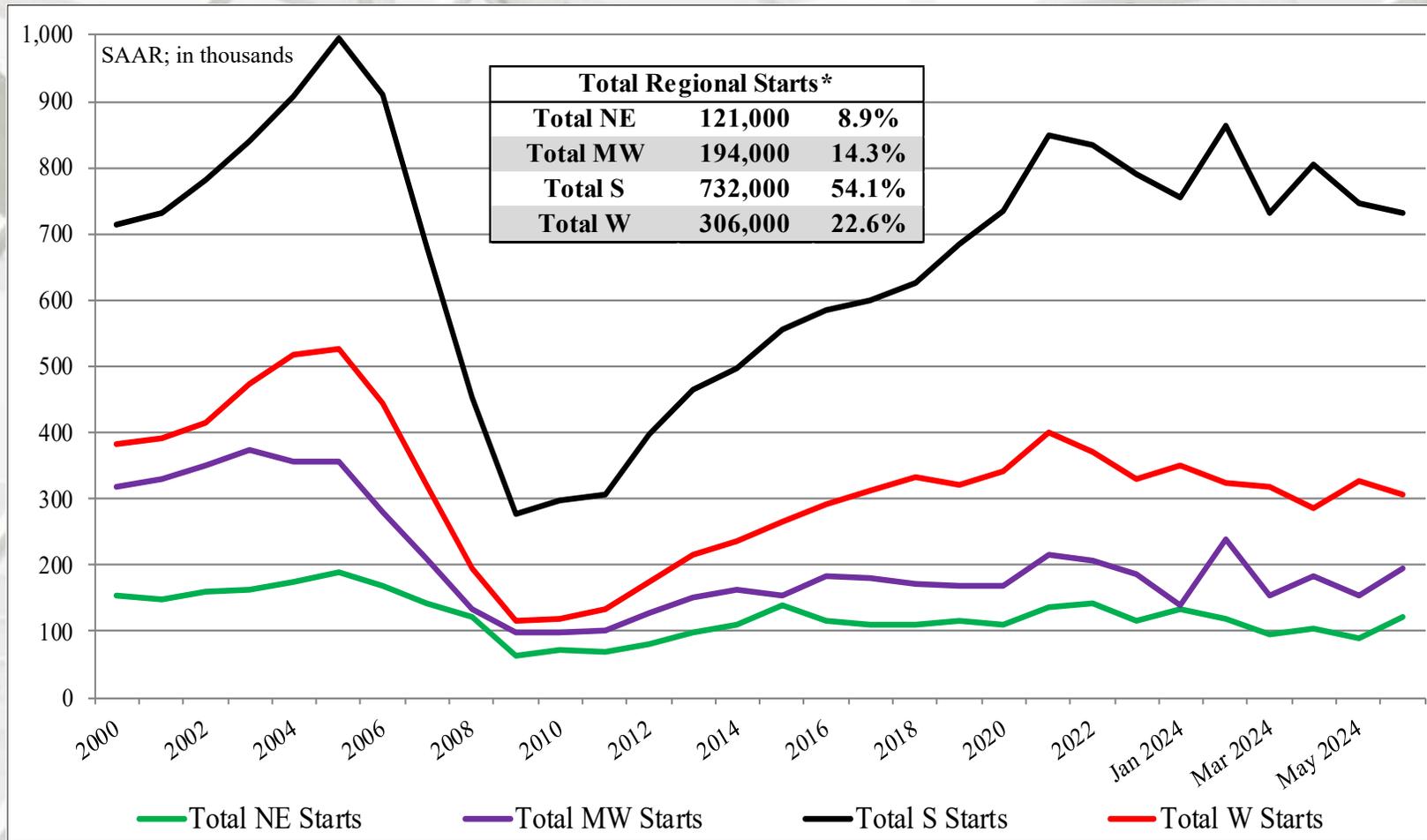
New Housing Starts by Region

	S Total	S SF	S MF**
June	732,000	591,000	141,000
May	745,000	588,000	157,000
2023	813,000	560,000	253,000
M/M change	-1.7%	0.5%	-10.2%
Y/Y change	-10.0%	5.5%	-44.3%
	W Total	W SF	W MF
June	306,000	211,000	95,000
May	326,000	235,000	91,000
2023	338,000	201,000	137,000
M/M change	-6.1%	-10.2%	4.4%
Y/Y change	-9.5%	5.0%	-30.7%

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

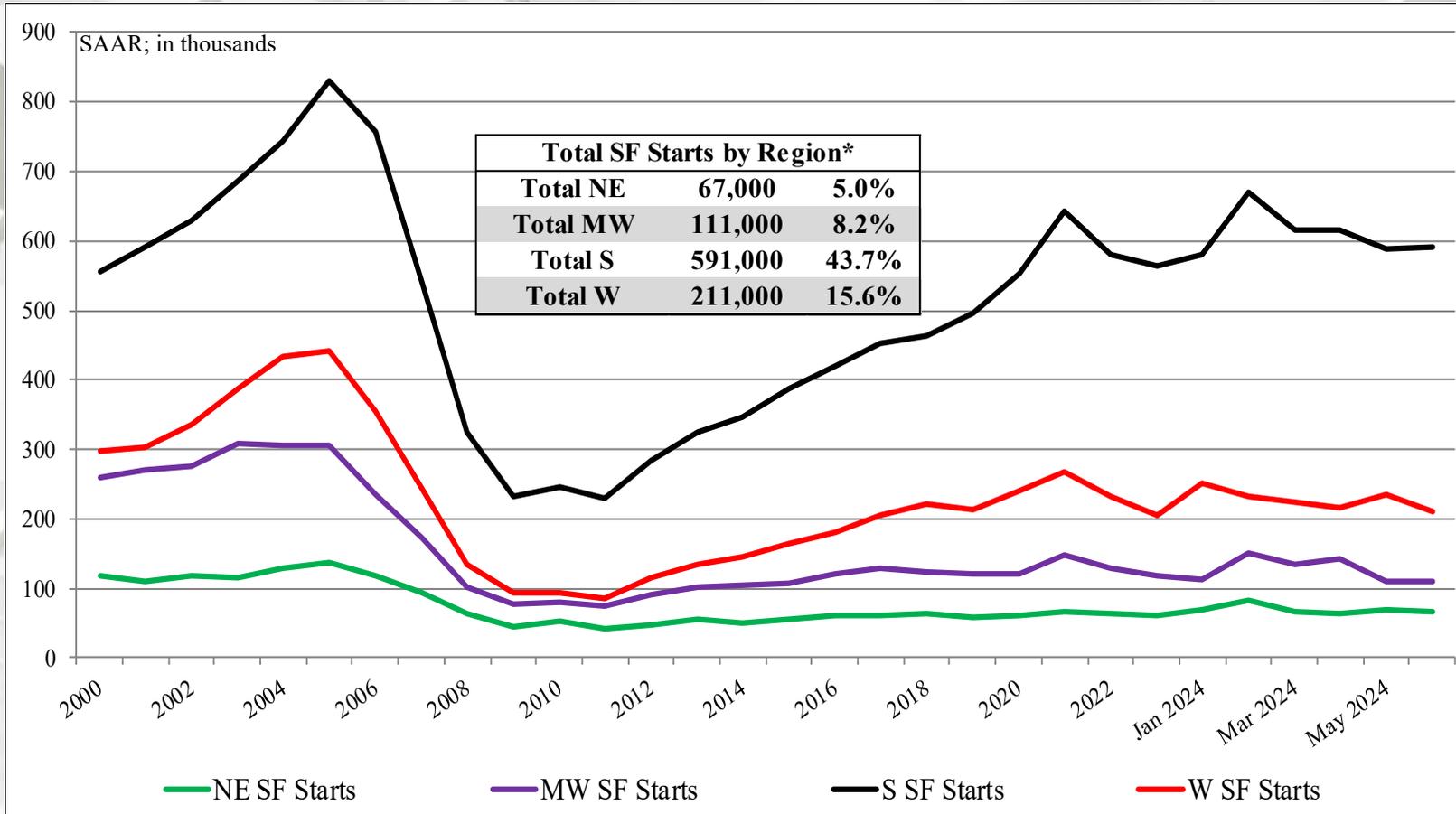


NE = Northeast, MW = Midwest, S = South, W = West

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

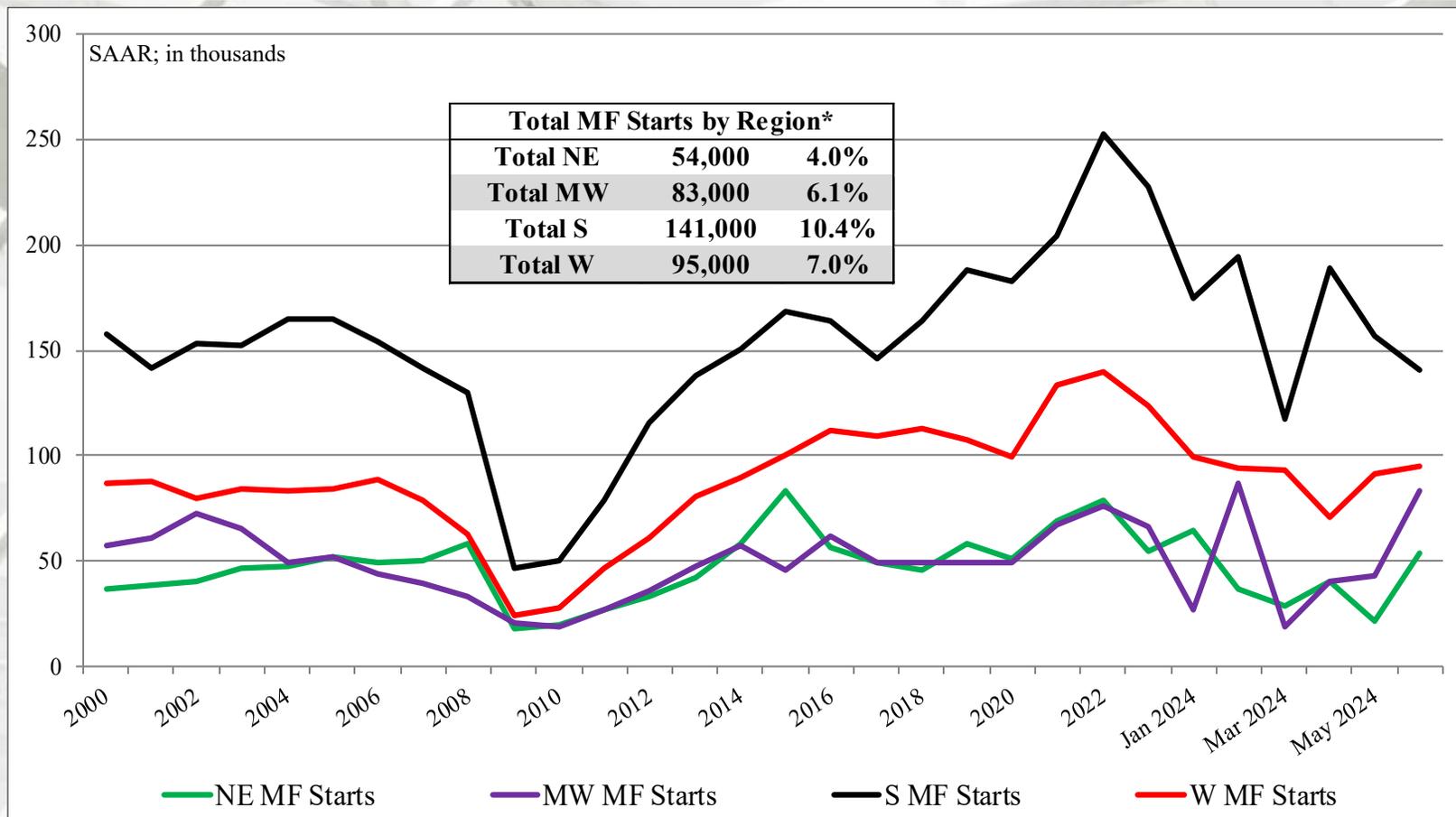


NE = Northeast, MW = Midwest, S = South, W = West

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

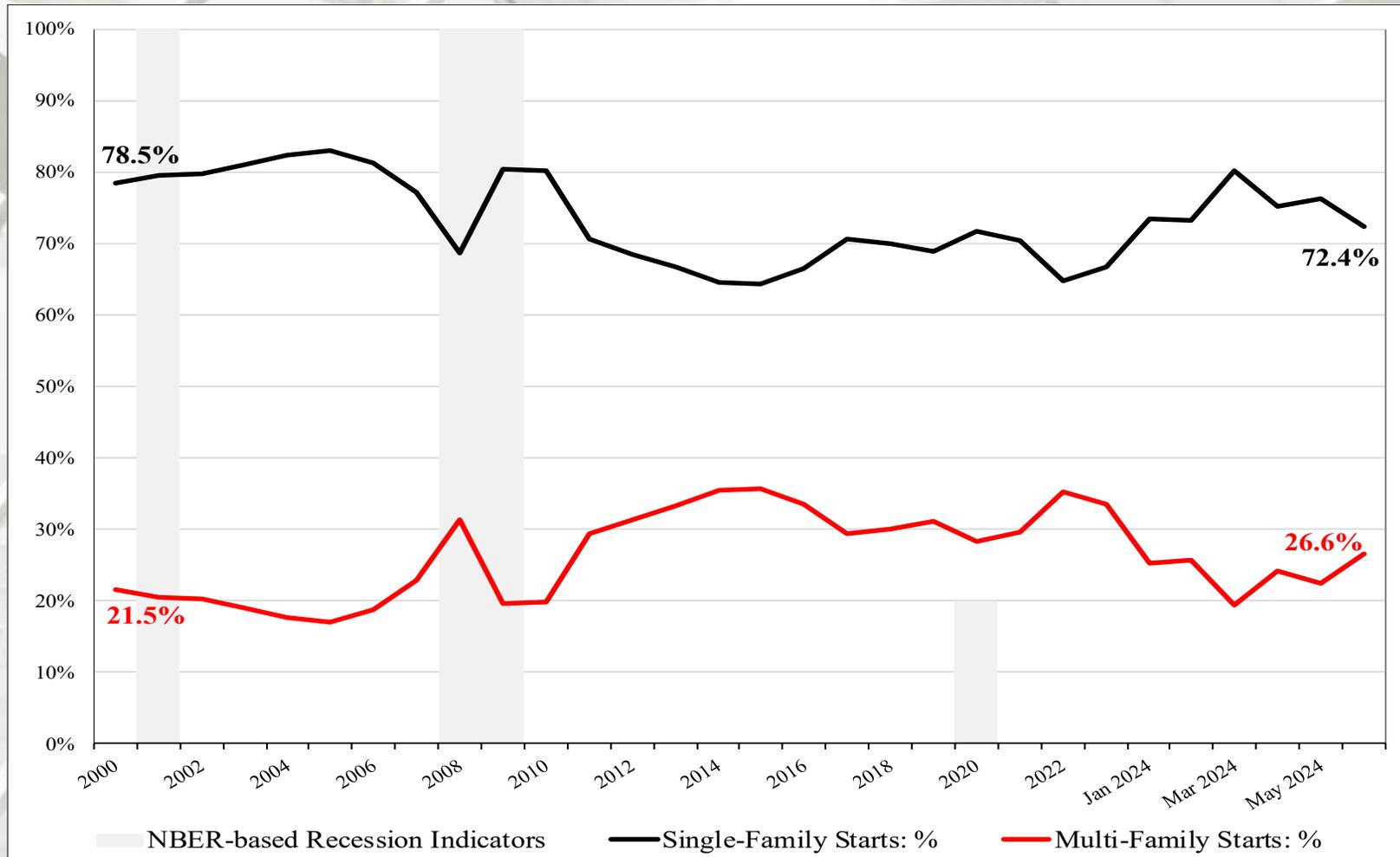


NE = Northeast, MW = Midwest, S = South, W = West

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 (%)



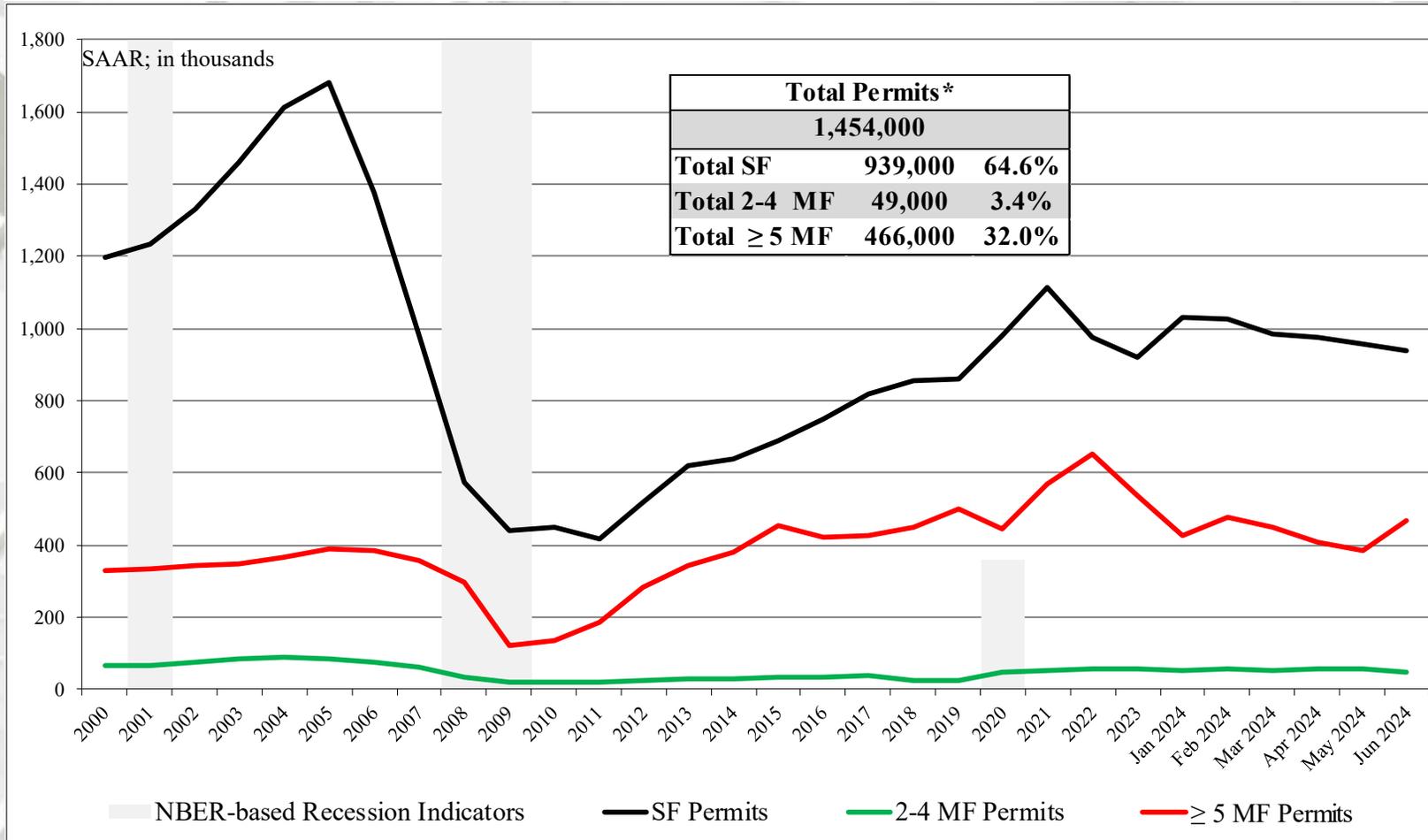
NBER based Recession Indicator Bars for the United States from the Period following the Peak through the Trough (FRED, St. Louis).

New Housing Permits

	Total Permits*	SF Permits	MF 2-4 unit Permits	MF ≥ 5 unit Permits
June	1,454,000	939,000	49,000	466,000
May	1,399,000	956,000	57,000	386,000
2023	1,493,000	946,000	55,000	492,000
M/M change	3.9%	-1.8%	-14.0%	20.7%
Y/Y change	-2.6%	-0.7%	-10.9%	-5.3%

* 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**
June	117,000	61,000	56,000
May	120,000	58,000	62,000
2023	132,000	61,000	71,000
M/M change	-2.5%	5.2%	-9.7%
Y/Y change	-11.4%	0.0%	-21.1%
	MW Total*	MW SF	MW MF**
June	207,000	121,000	86,000
May	180,000	114,000	66,000
2023	204,000	114,000	90,000
M/M change	15.0%	6.1%	30.3%
Y/Y change	1.5%	6.1%	-4.4%

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

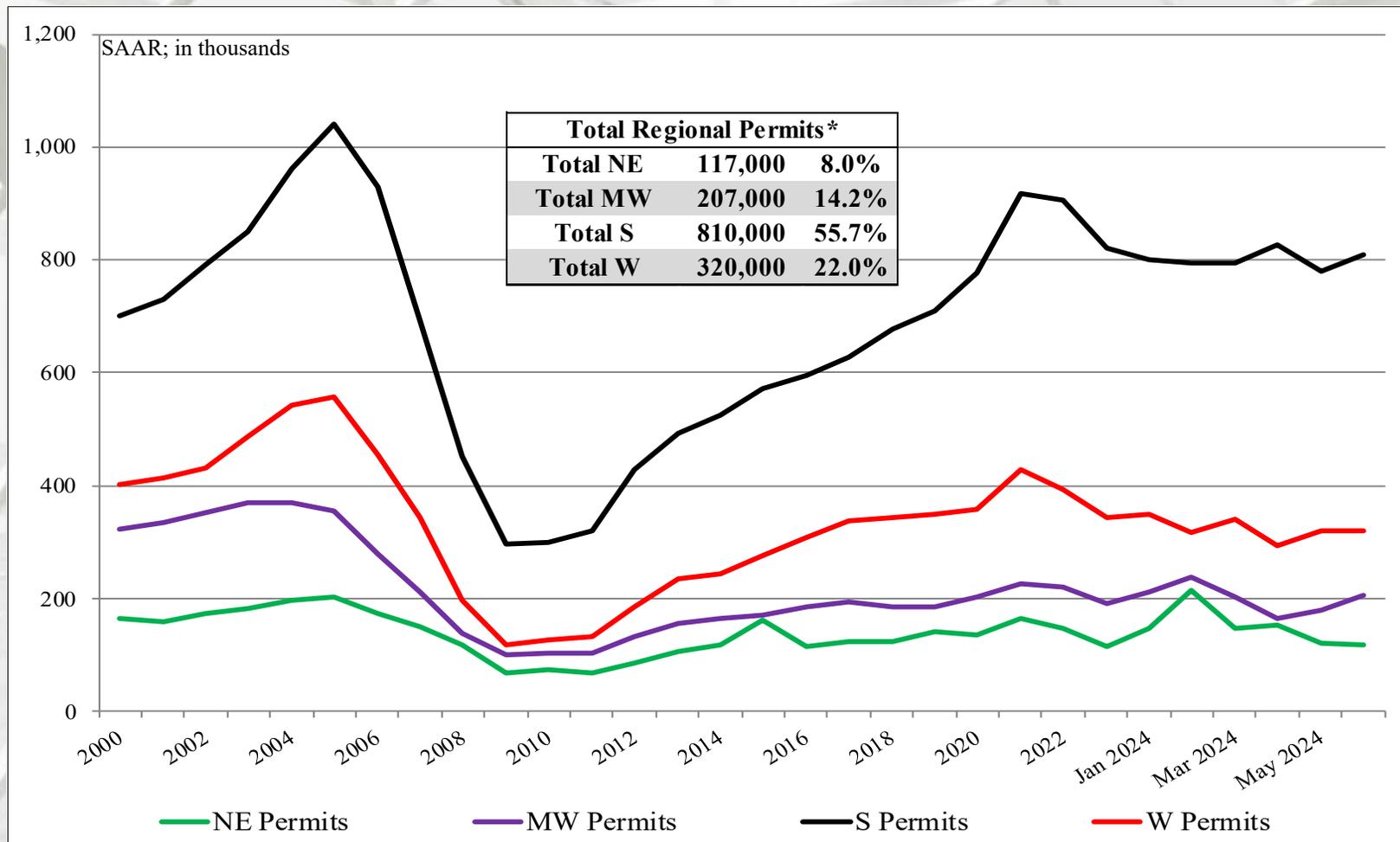
	S Total*	S SF	S MF**
June	810,000	555,000	255,000
May	779,000	577,000	202,000
2023	819,000	570,000	249,000
M/M change	4.0%	-3.8%	26.2%
Y/Y change	-1.1%	-2.6%	2.4%
	W Total*	W SF	W MF**
June	320,000	202,000	118,000
May	320,000	207,000	113,000
2023	338,000	201,000	137,000
M/M change	0.0%	-2.4%	4.4%
Y/Y change	-5.3%	0.5%	-13.9%

S = South; W = West

* All data are SAAR

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

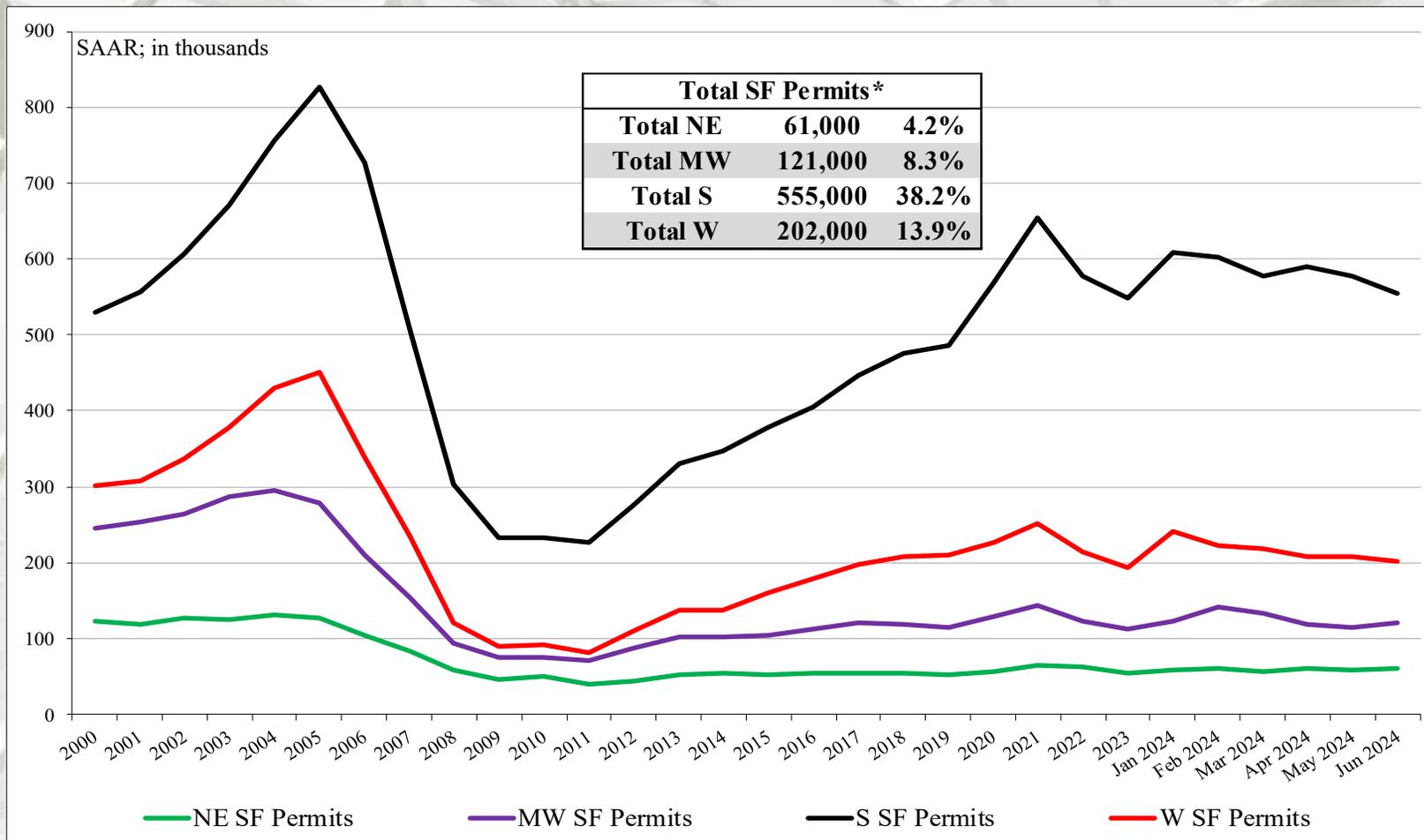
Total Housing Permits by Region



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

* Percentage of total permits.

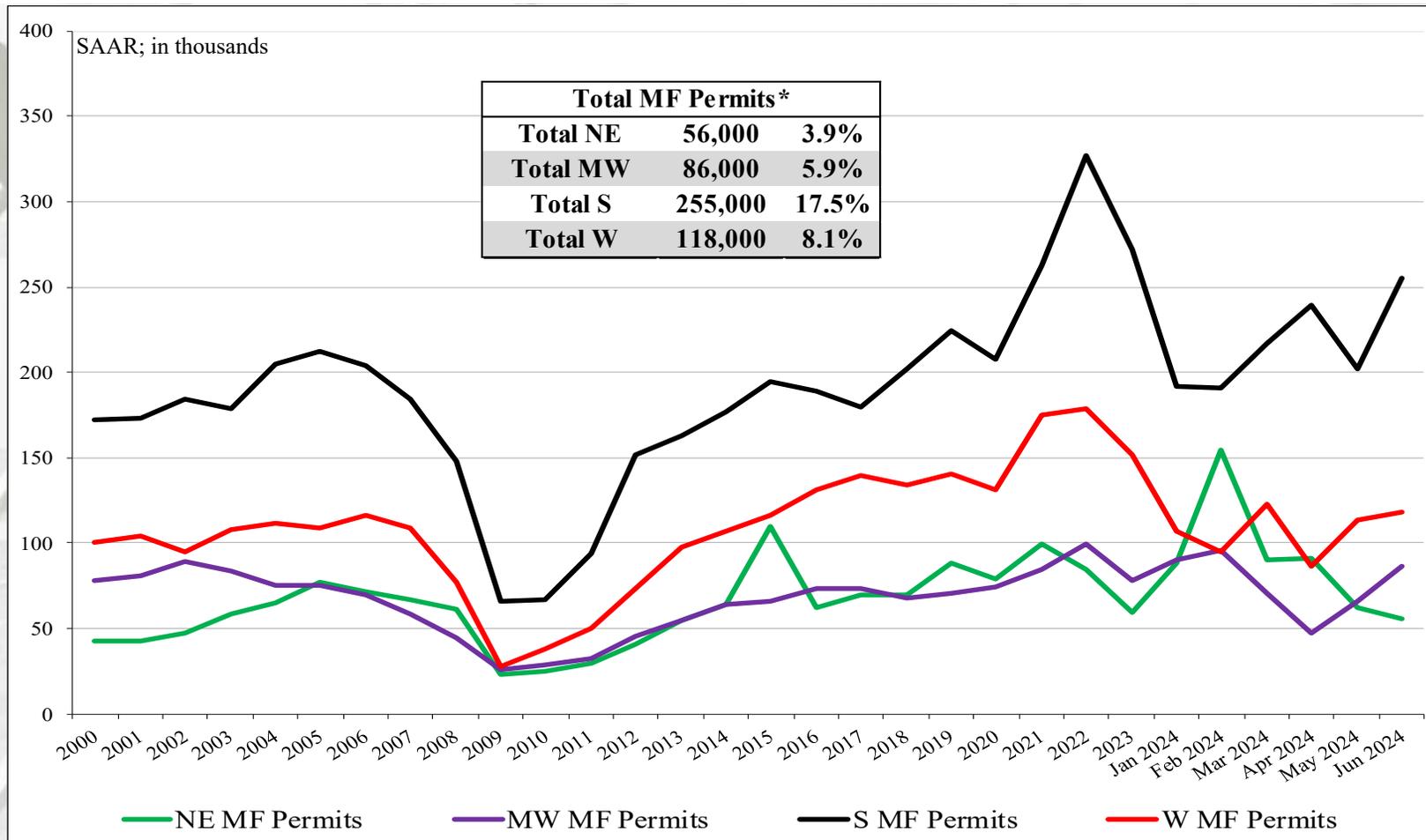
SF Housing Permits by Region



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

* Percentage of total permits.

MF Housing Permits by Region



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

* Percentage of total permits.

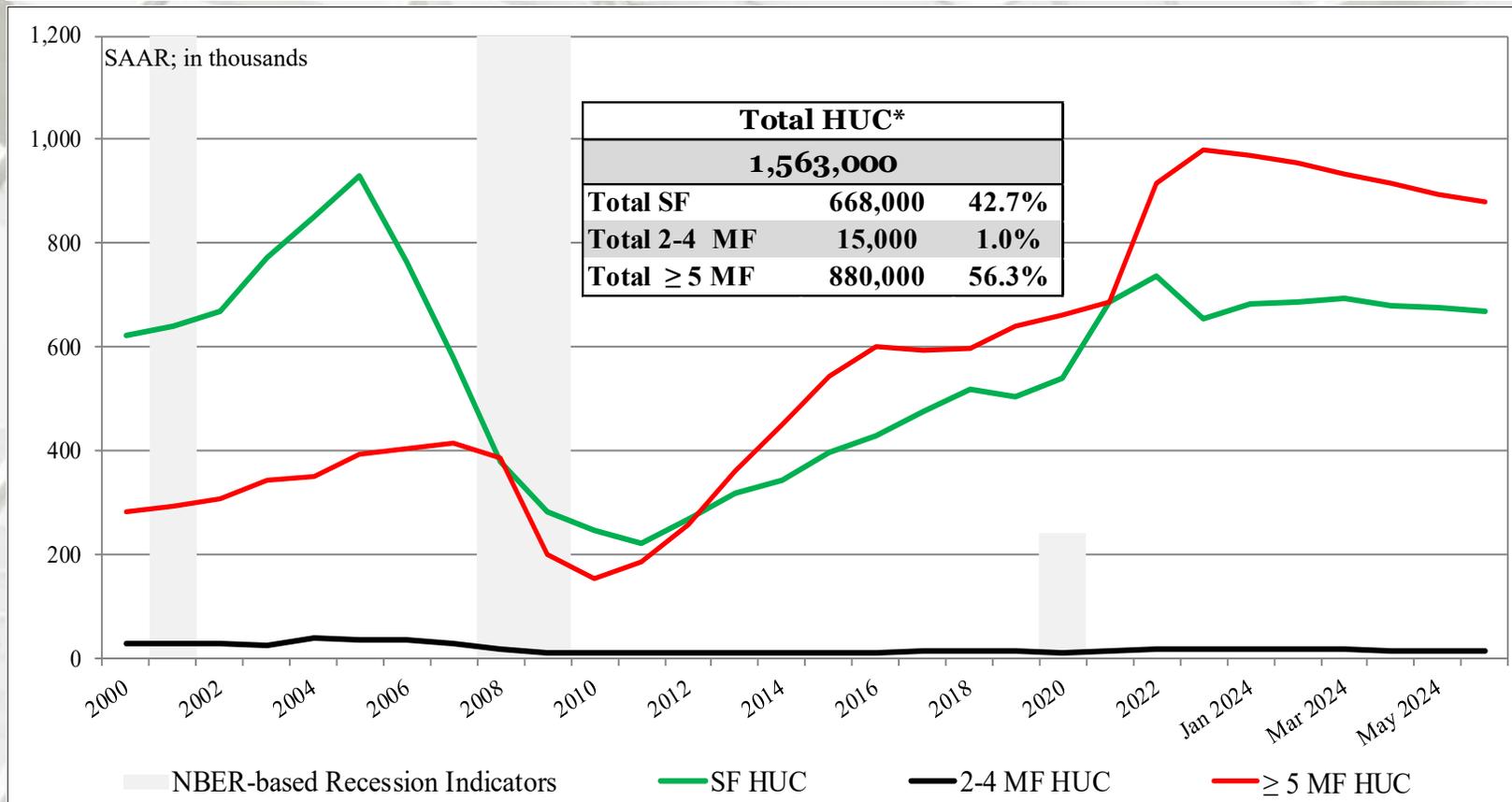
New Housing Under Construction (HUC)

	Total HUC	SF HUC	MF 2-4 unit** HUC	MF ≥ 5 unit HUC
June	1,563,000	668,000	15,000	880,000
May	1,587,000	677,000	15,000	895,000
2023	1,693,000	683,000	17,000	993,000
M/M change	-1.5%	-1.3%	0.0%	-1.7%
Y/Y change	-7.7%	-2.2%	-11.8%	-11.4%

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**
June	208,000	65,000	143,000
May	212,000	66,000	146,000
2023	217,000	66,000	151,000
M/M change	-1.9%	-1.5%	-2.1%
Y/Y change	-4.1%	-1.5%	-5.3%
	MW Total	MW SF	MW MF
June	178,000	86,000	92,000
May	187,000	89,000	98,000
2023	213,000	91,000	122,000
M/M change	-4.8%	-3.4%	-6.1%
Y/Y change	-16.4%	-5.5%	-24.6%

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).

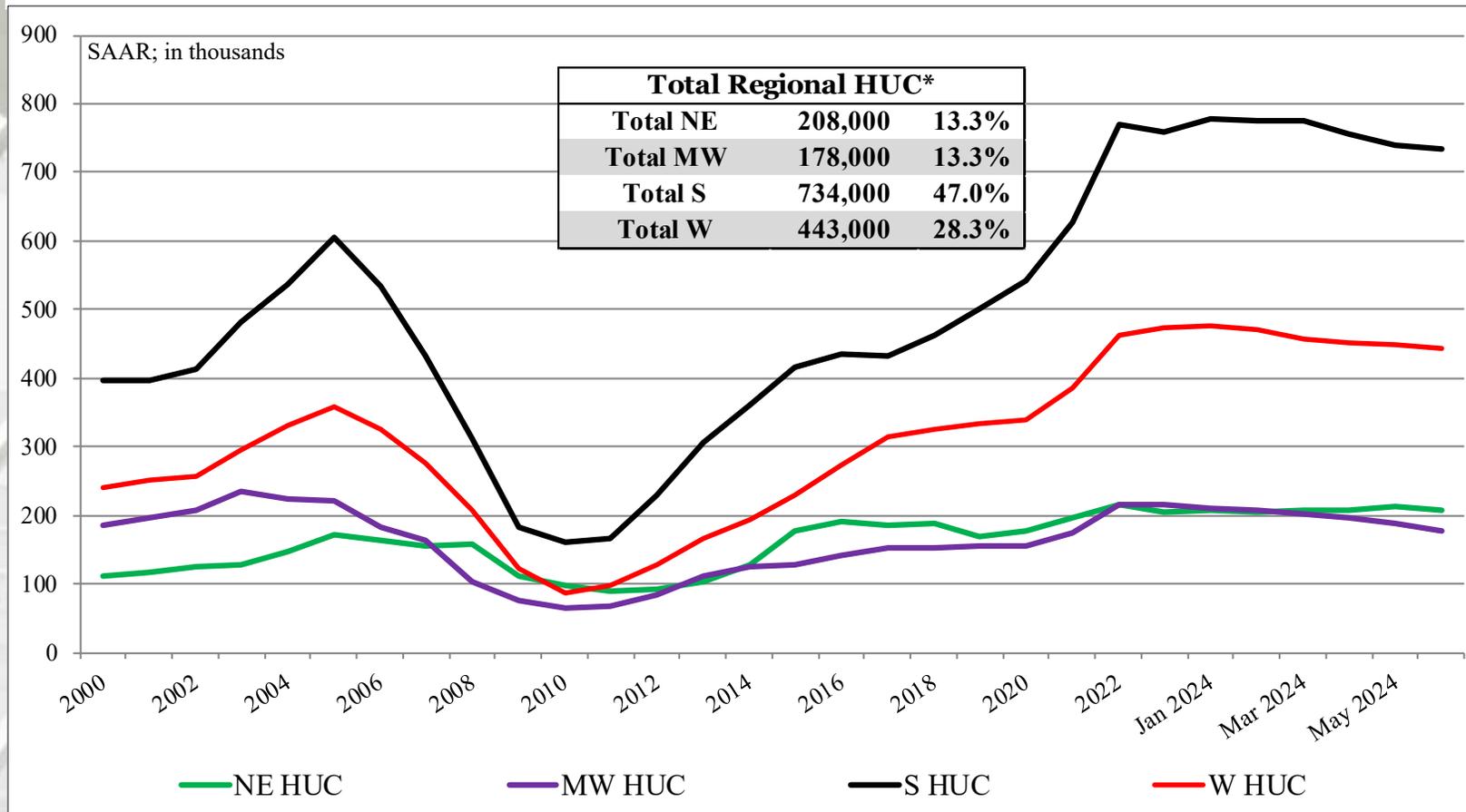
New Housing Under Construction by Region

	S Total	S SF	S MF**
June	734,000	344,000	390,000
May	740,000	348,000	392,000
2023	800,000	362,000	438,000
M/M change	-0.8%	-1.1%	-0.5%
Y/Y change	-8.3%	-5.0%	-11.0%
	W Total	W SF	W MF
June	443,000	173,000	270,000
May	448,000	174,000	274,000
2023	463,000	164,000	299,000
M/M change	-1.1%	-0.6%	-1.5%
Y/Y change	-4.3%	5.5%	-9.7%

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

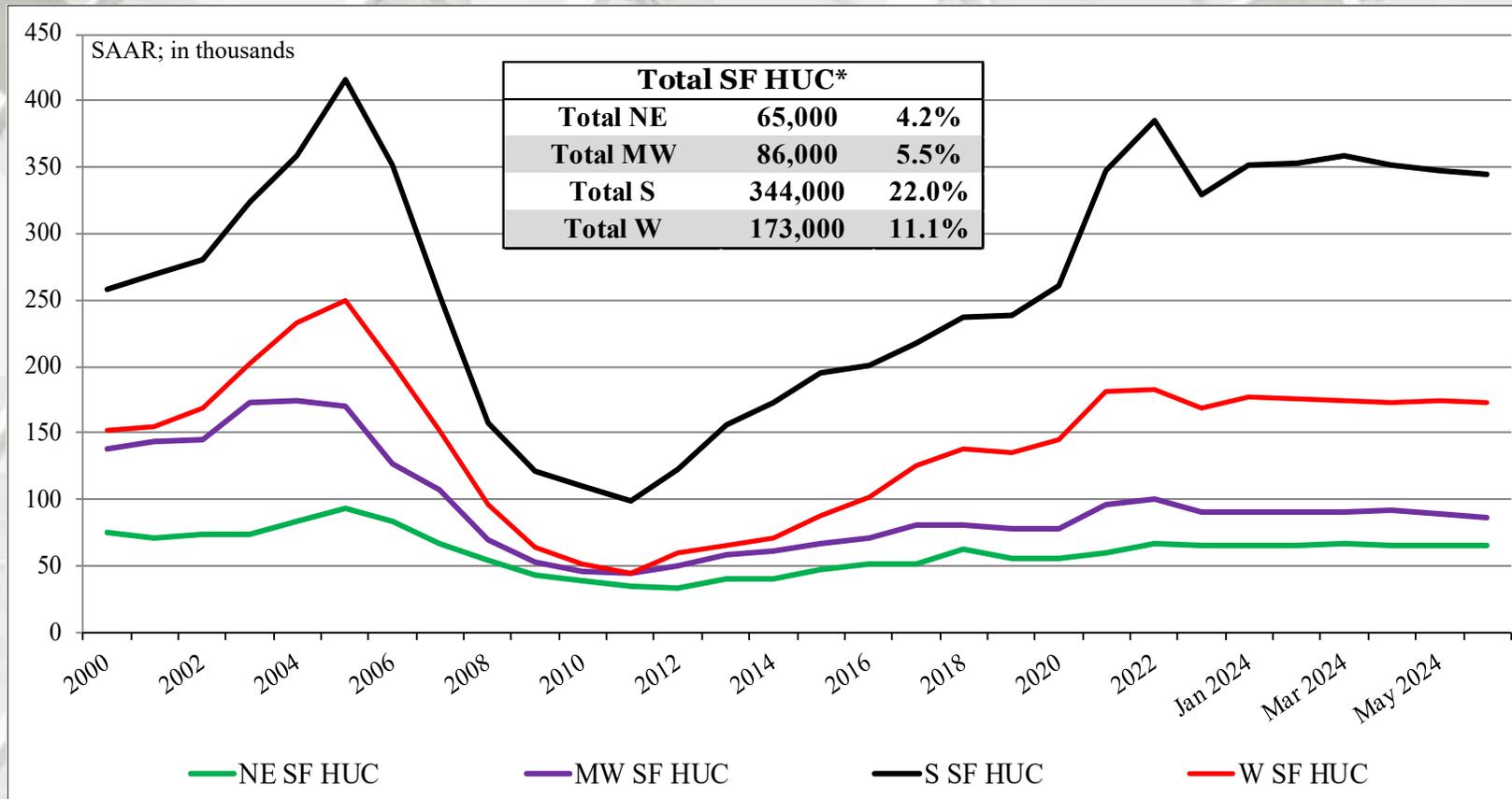


NE = Northeast, MW = Midwest, S = South, W = West

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

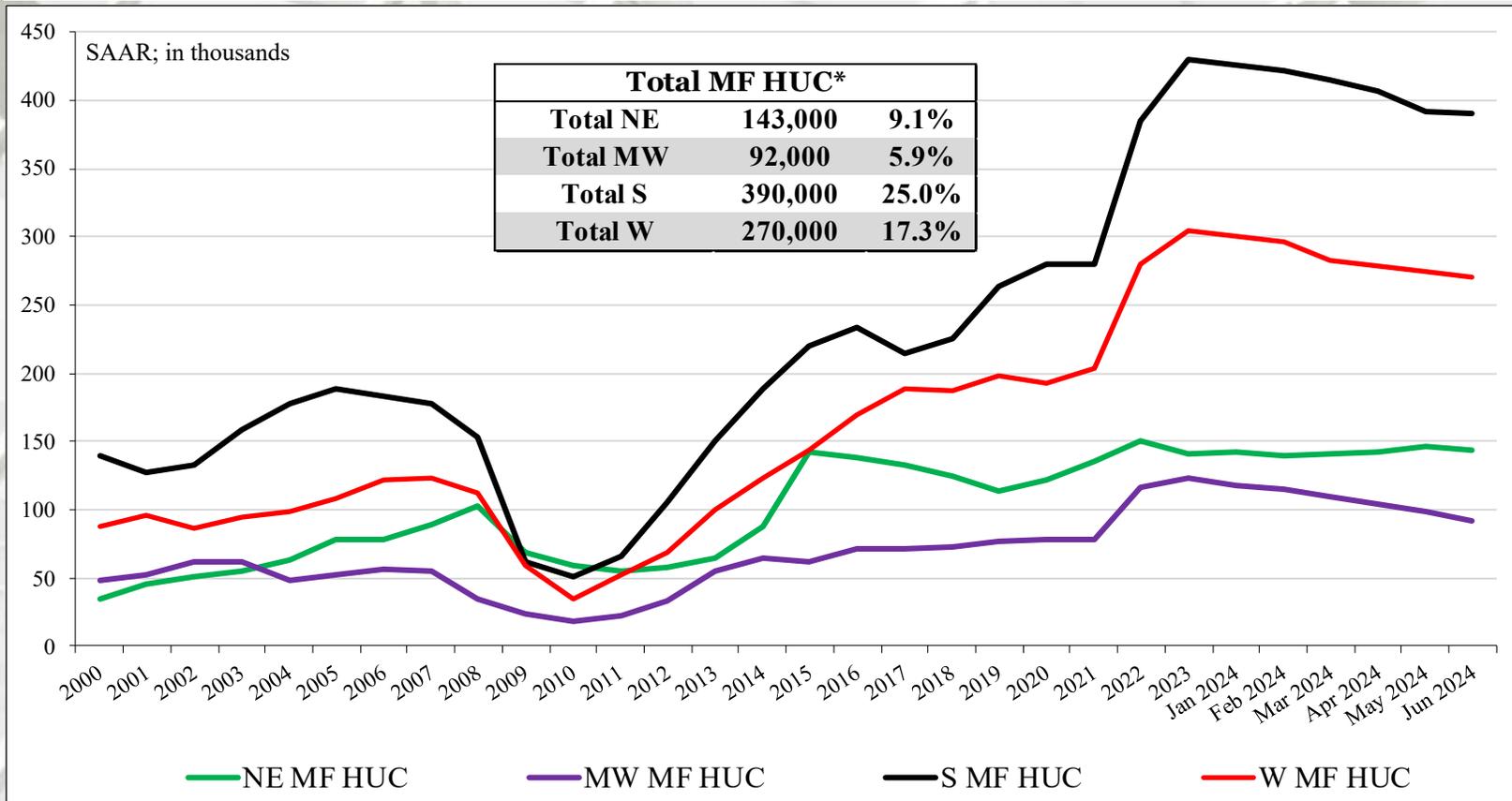


NE = Northeast, MW = Midwest, S = South, W = West.

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.

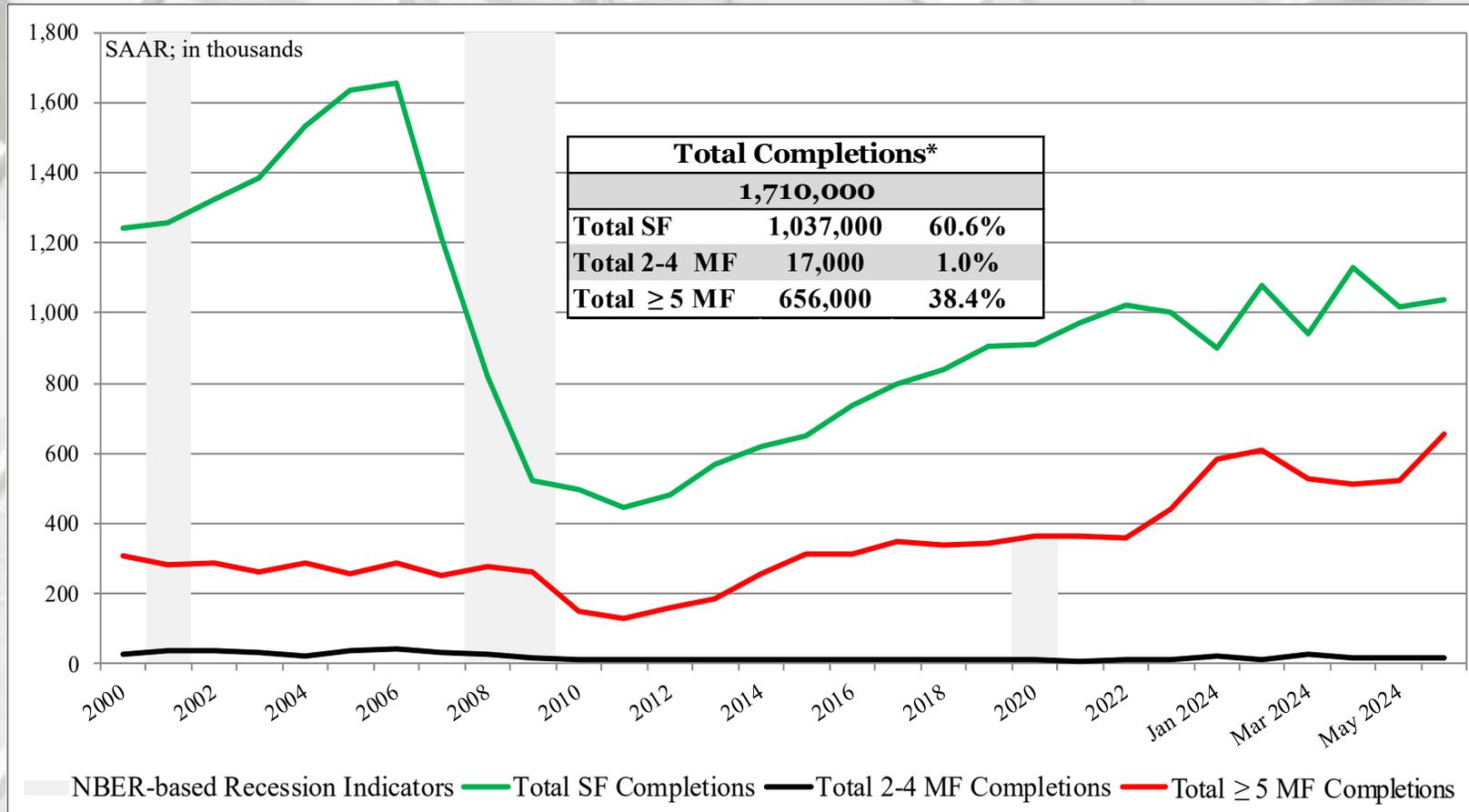
New Housing Completions

	Total Completions*	SF Completions	MF 2-4 unit**	MF ≥ 5 unit Completions
June	1,710,000	1,037,000	17,000	656,000
May	1,553,000	1,019,000	14,000	520,000
2023	1,480,000	1,005,000	7,000	468,000
M/M change	10.1%	1.8%	21.4%	26.2%
Y/Y change	15.5%	3.2%	142.9%	40.2%

* 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**
June	137,000	66,000	71,000
May	91,000	68,000	23,000
2023	133,000	63,000	70,000
M/M change	50.5%	-2.9%	208.7%
Y/Y change	3.0%	4.8%	1.4%
	MW Total	MW SF	MW MF**
June	326,000	147,000	179,000
May	212,000	128,000	84,000
2023	187,000	127,000	60,000
M/M change	53.8%	14.8%	113.1%
Y/Y change	74.3%	15.7%	198.3%

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

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

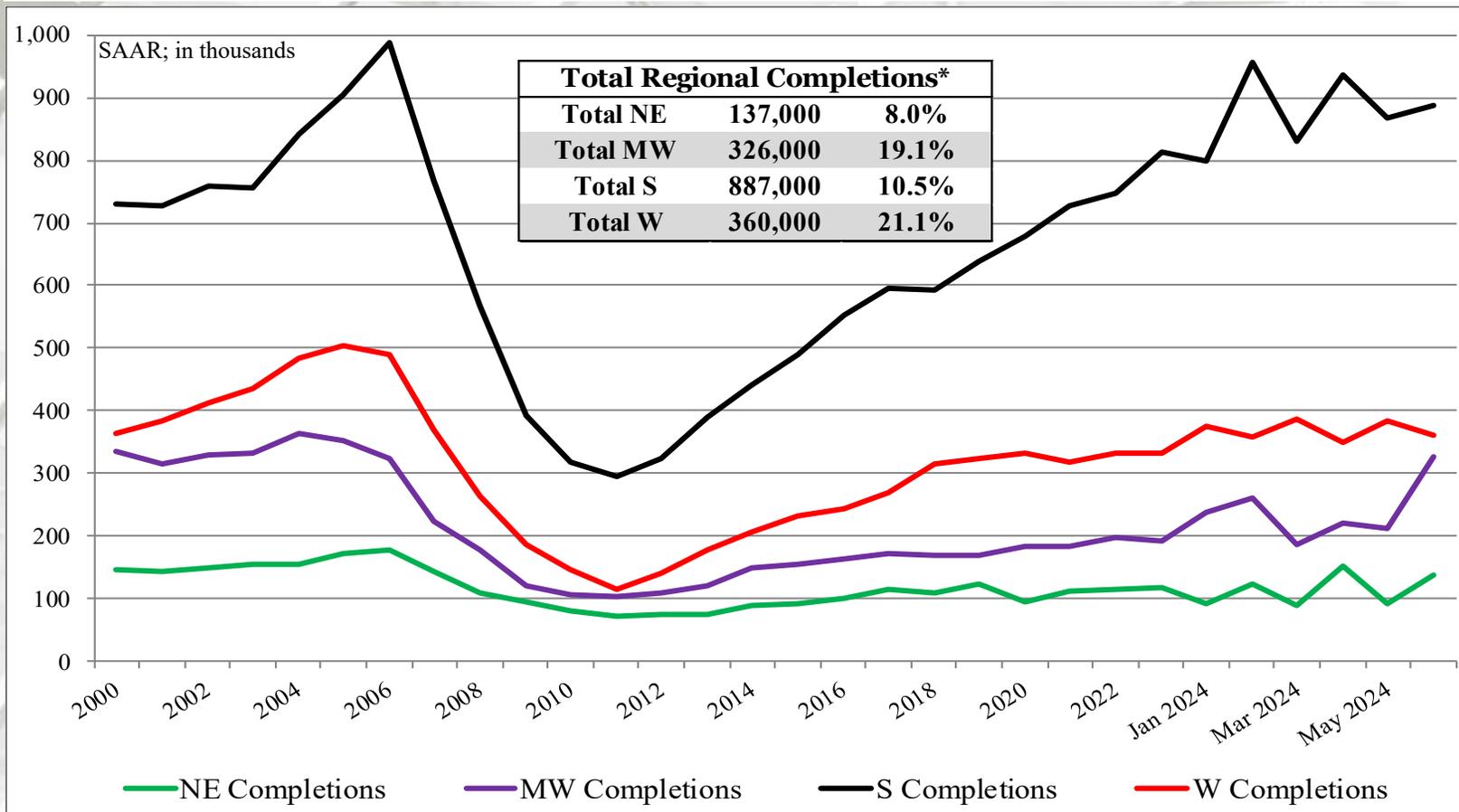
New Housing Completions by Region

	S Total	S SF	S MF**
June	887,000	619,000	268,000
May	867,000	605,000	262,000
2023	839,000	609,000	230,000
M/M change	2.3%	2.3%	2.3%
Y/Y change	5.7%	1.6%	16.5%
	W Total	W SF	W MF**
June	360,000	205,000	155,000
May	383,000	218,000	165,000
2023	321,000	206,000	115,000
M/M change	-6.0%	-6.0%	-6.1%
Y/Y change	12.1%	-0.5%	34.8%

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

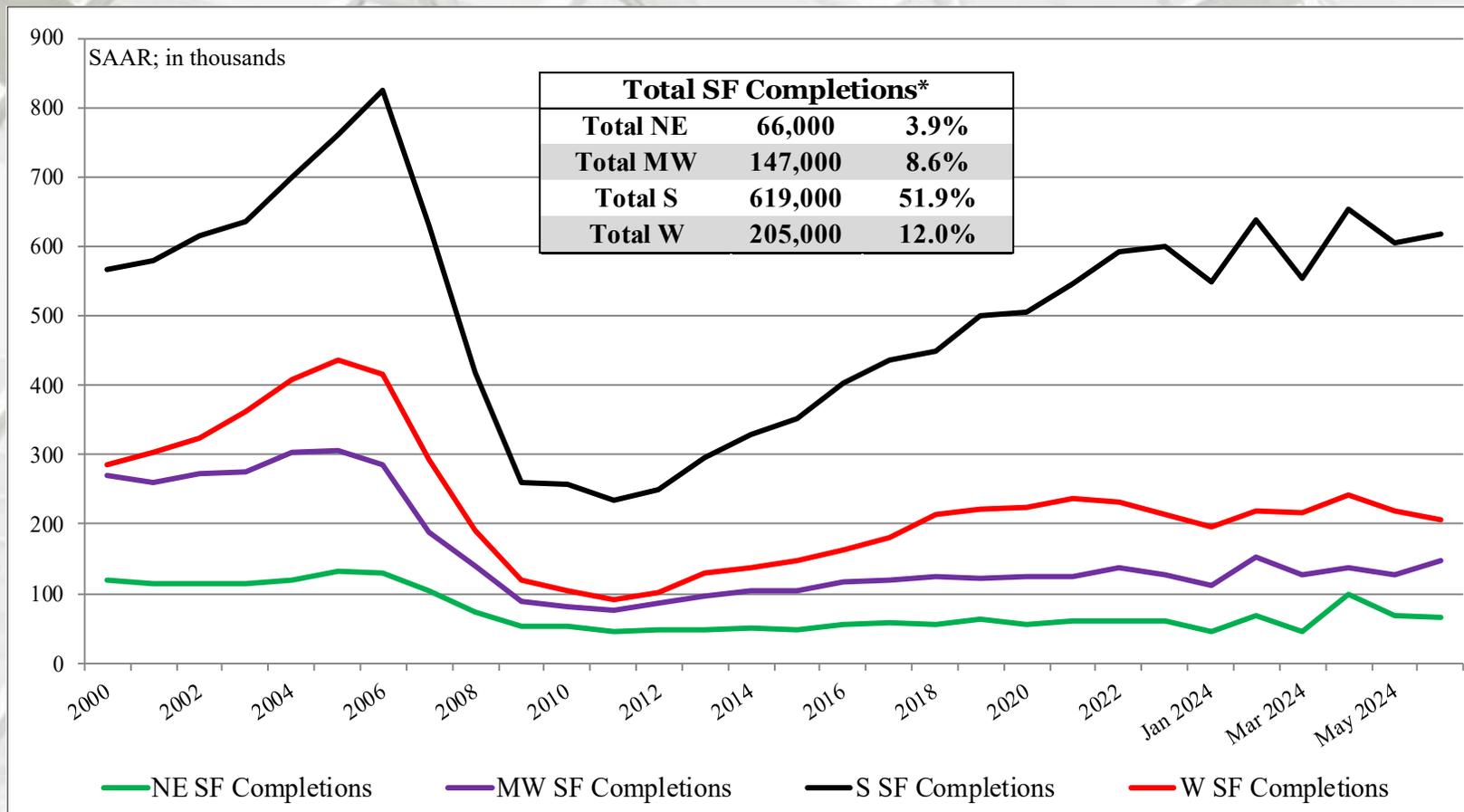
**US DOC does not report 2 to 4 multi-family completions directly; this is an estimation (Total completions – SF completions).

Total Housing Completions by Region



All data are SAAR; NE = Northeast and MW = Midwest; S = South, W = West
 * Percentage of total housing completions.

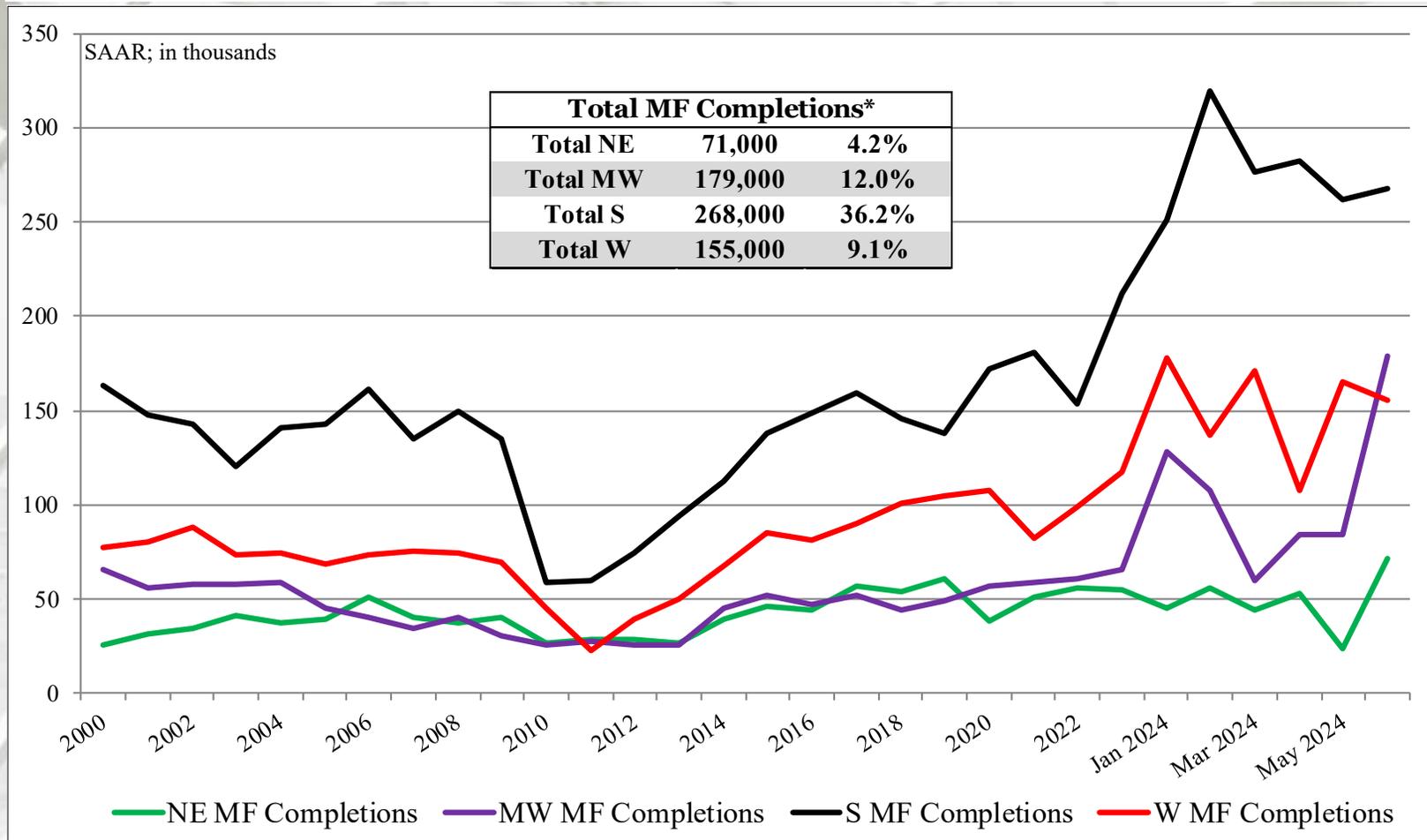
SF Housing Completions by Region



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

* Percentage of total housing completions

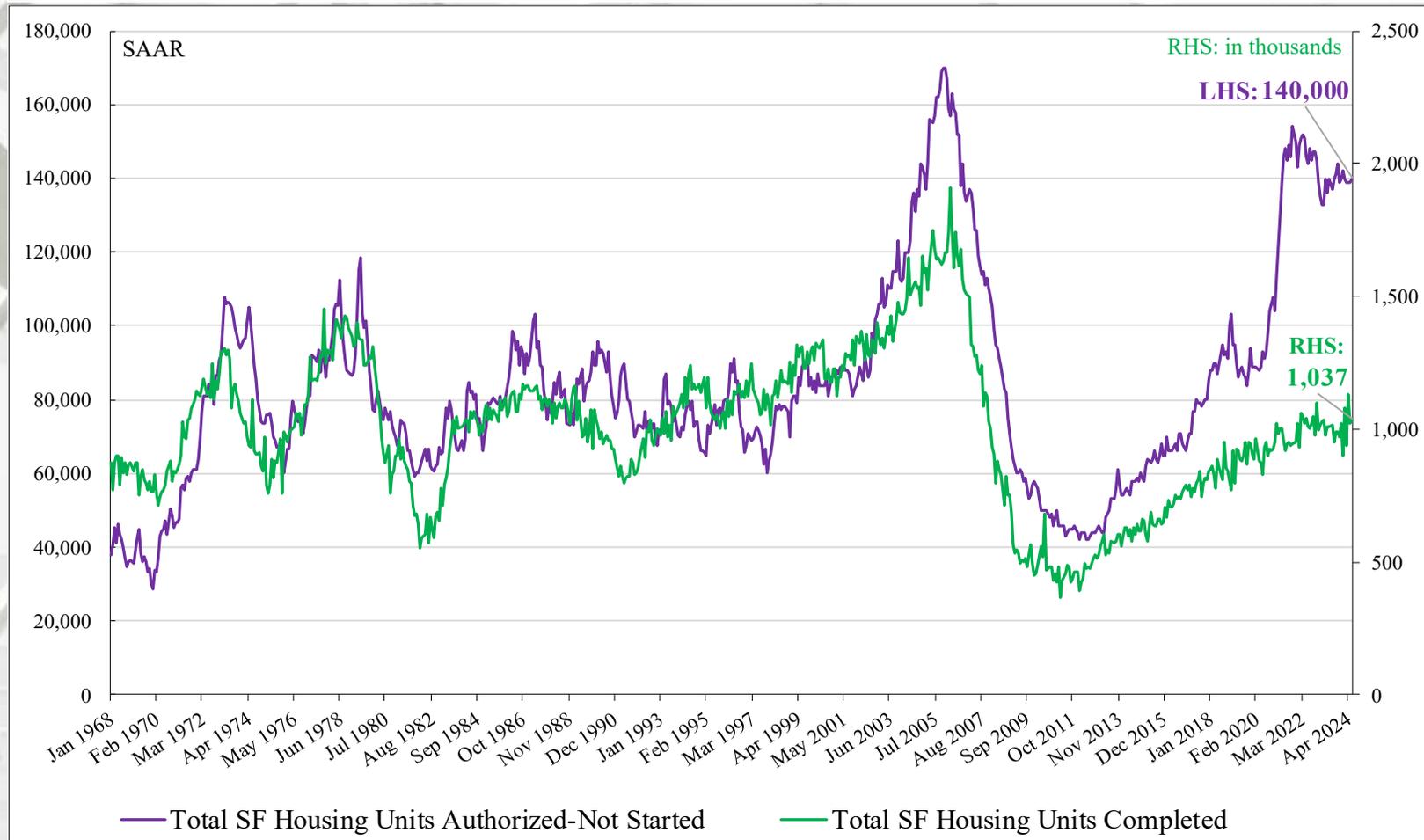
MF Housing Completions by Region



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

* 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 277,000 in June, an increase from May (272,000), and SF authorized units “not” started were 140,000 units in June, an increase from May (139,000). Total completions and SF unit completions decreased 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
June	617,000	\$417,300	\$487,200	9.3
May	621,000	\$407,100	\$504,500	9.1
2023	666,000	\$417,600	\$507,800	7.7
M/M change	-0.6%	2.5%	-3.4%	2.2%
Y/Y change	-7.4%	-0.1%	-4.1%	20.8%

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

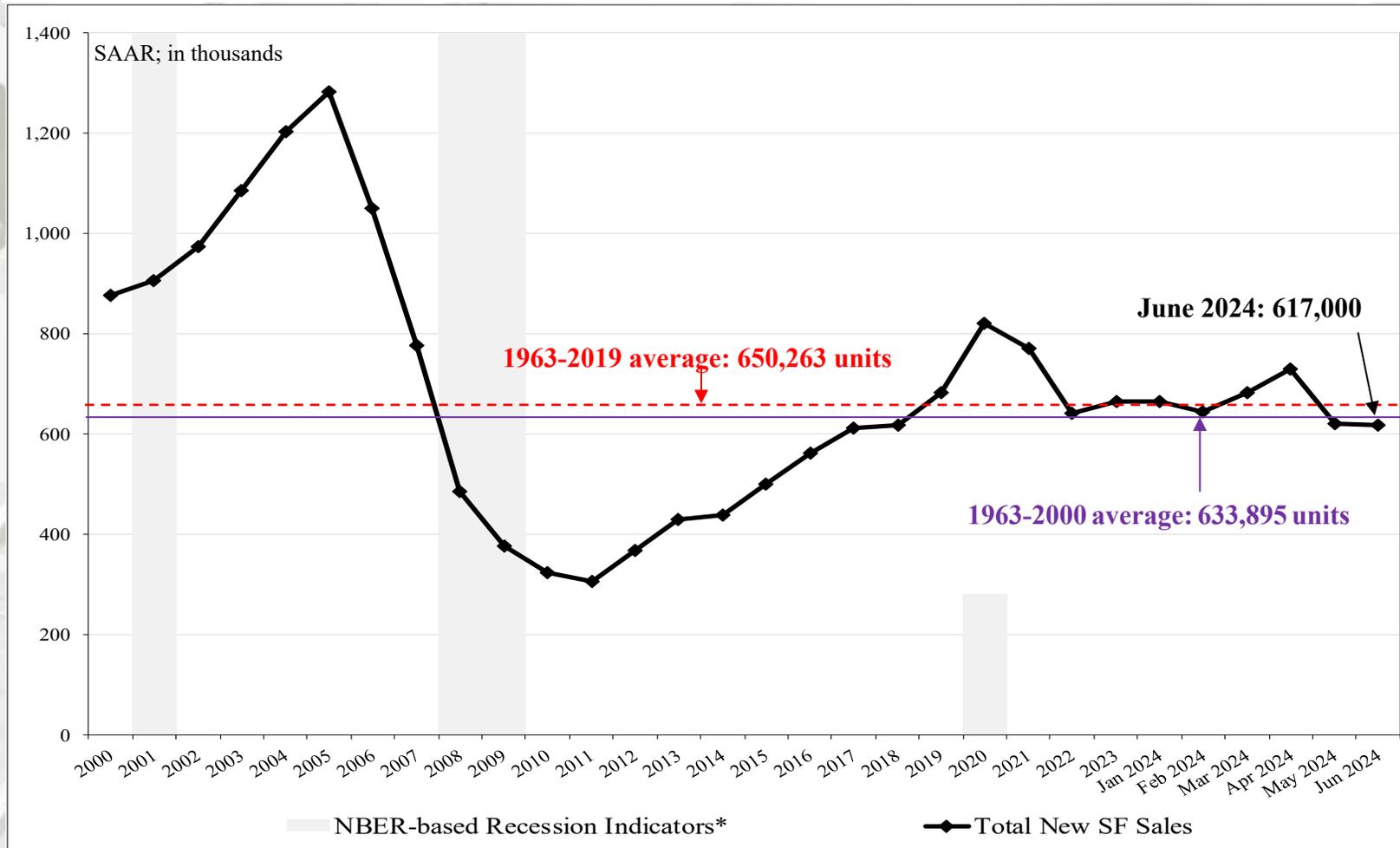
New SF sales were less than the consensus forecast³ of 640 m; range 659 m to 666 m. The past three month's new SF sales data also were revised:

March initial: 693 m, revised to 683 m.

April initial: 634 m, revised to 730 m.

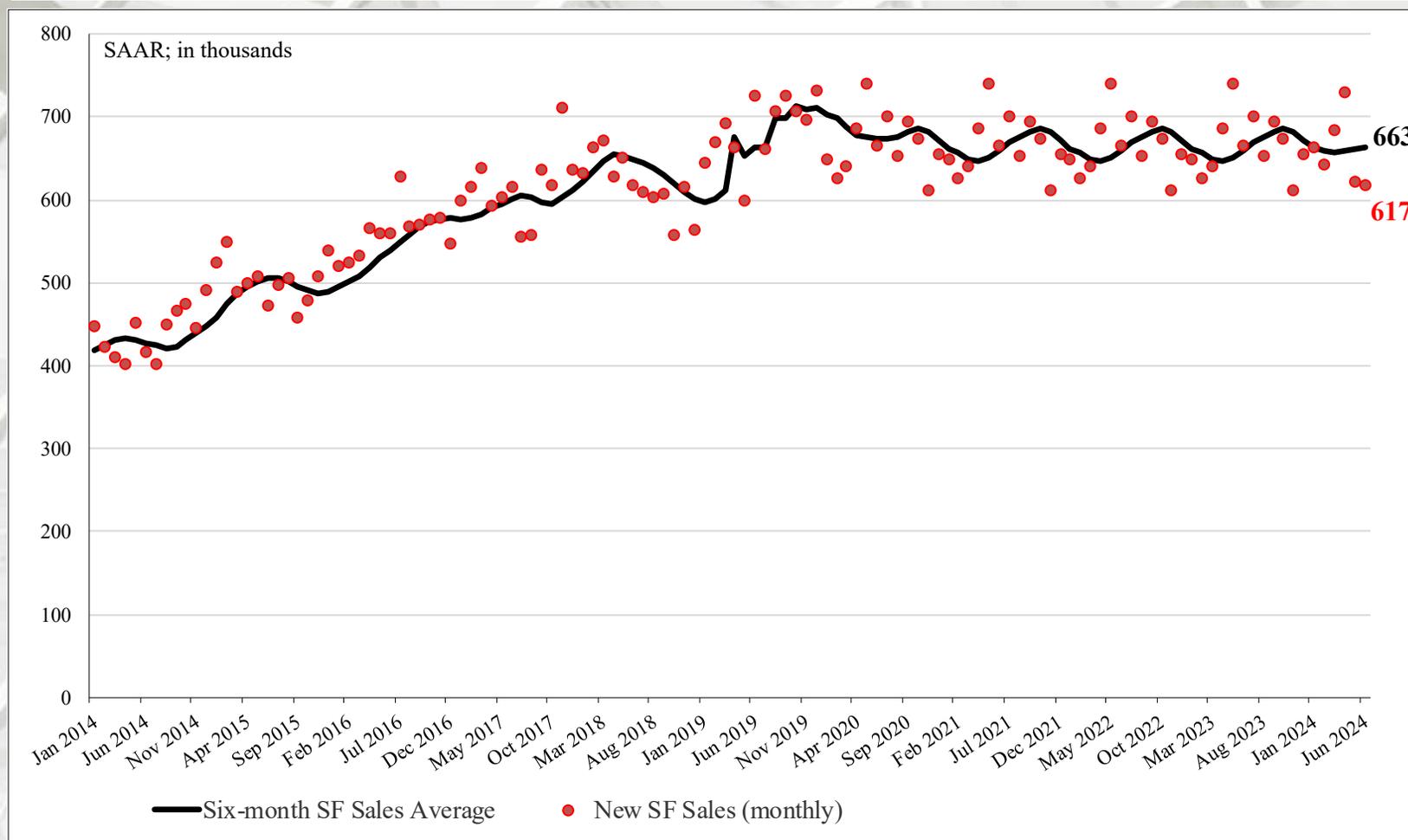
May initial: 619 m, revised to 621 m.

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			
June	12,000	81,000	375,000	149,000			
May	13,000	87,000	374,000	147,000			
2023	33,000	61,000	427,000	145,000			
M/M change	-7.7%	-6.9%	0.3%	1.4%			
Y/Y change	-63.6%	32.8%	-12.2%	2.8%			
	< \$300m	\$300m- \$399m	\$400m- \$499m	\$500m- \$599m	\$600m- \$799m	\$800m- \$999m	≥ \$1mm
June ^{1,2,3,4}	9,000	15,000	12,000	7,000	6,000	2,000	3,000
May	10,000	18,000	9,000	8,000	6,000	2,000	3,000
2023	8,000	18,000	7,000	18,000	12,000	13,000	7,000
M/M change	-10.0%	-16.7%	33.3%	-12.5%	0.0%	0.0%	0.0%
Y/Y change	12.5%	-16.7%	71.4%	-61.1%	-50.0%	-84.6%	-57.1%
% of New SF sales	13.8%	29.3%	22.4%	12.1%	12.1%	5.2%	6.9%

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 June not add to total because of rounding.

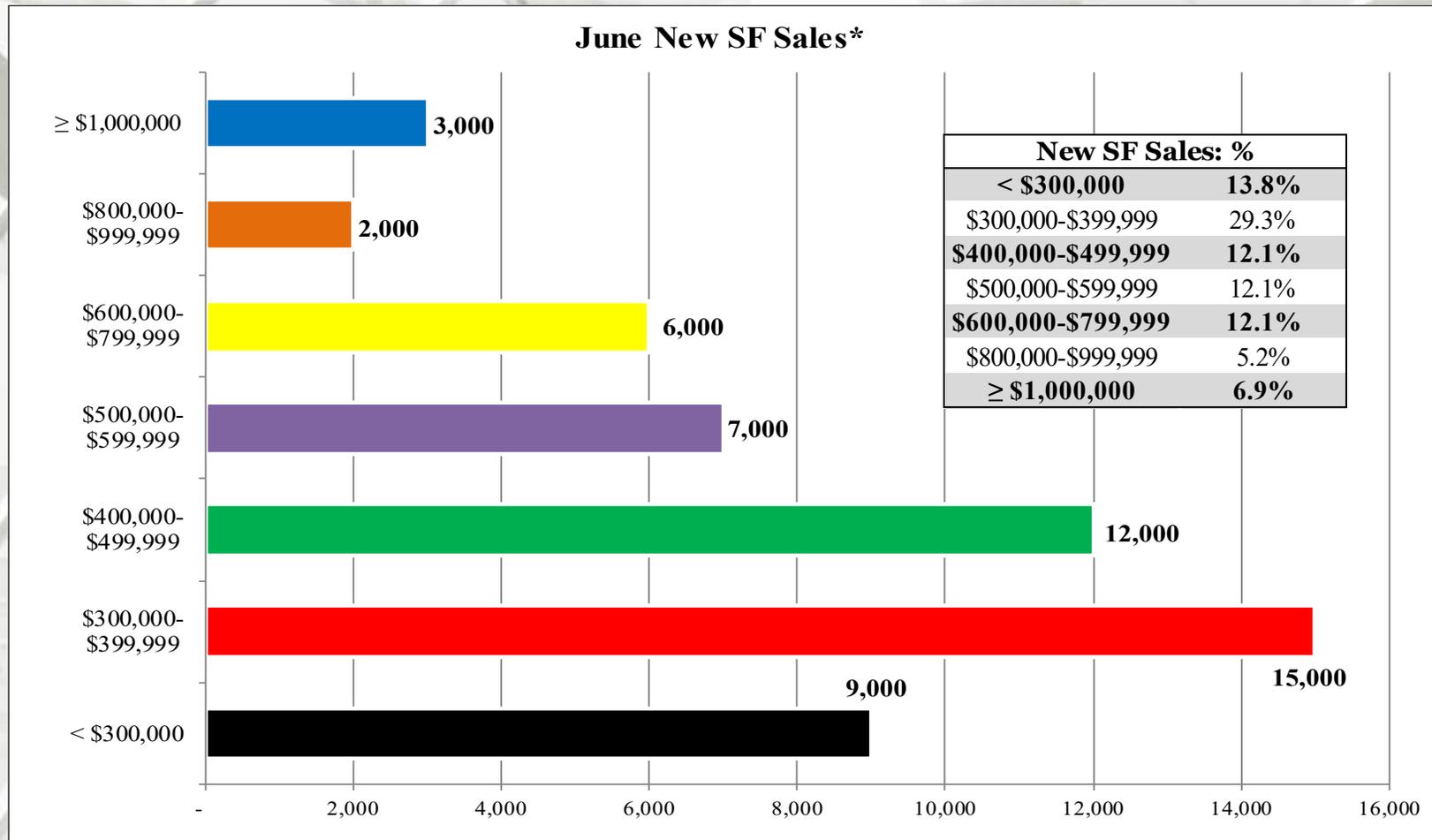
⁴ Housing prices are adjusted at irregular intervals.

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

Sources: ^{1,2,3} <https://www.census.gov/construction/nrs/index.html>; 7/24/24;

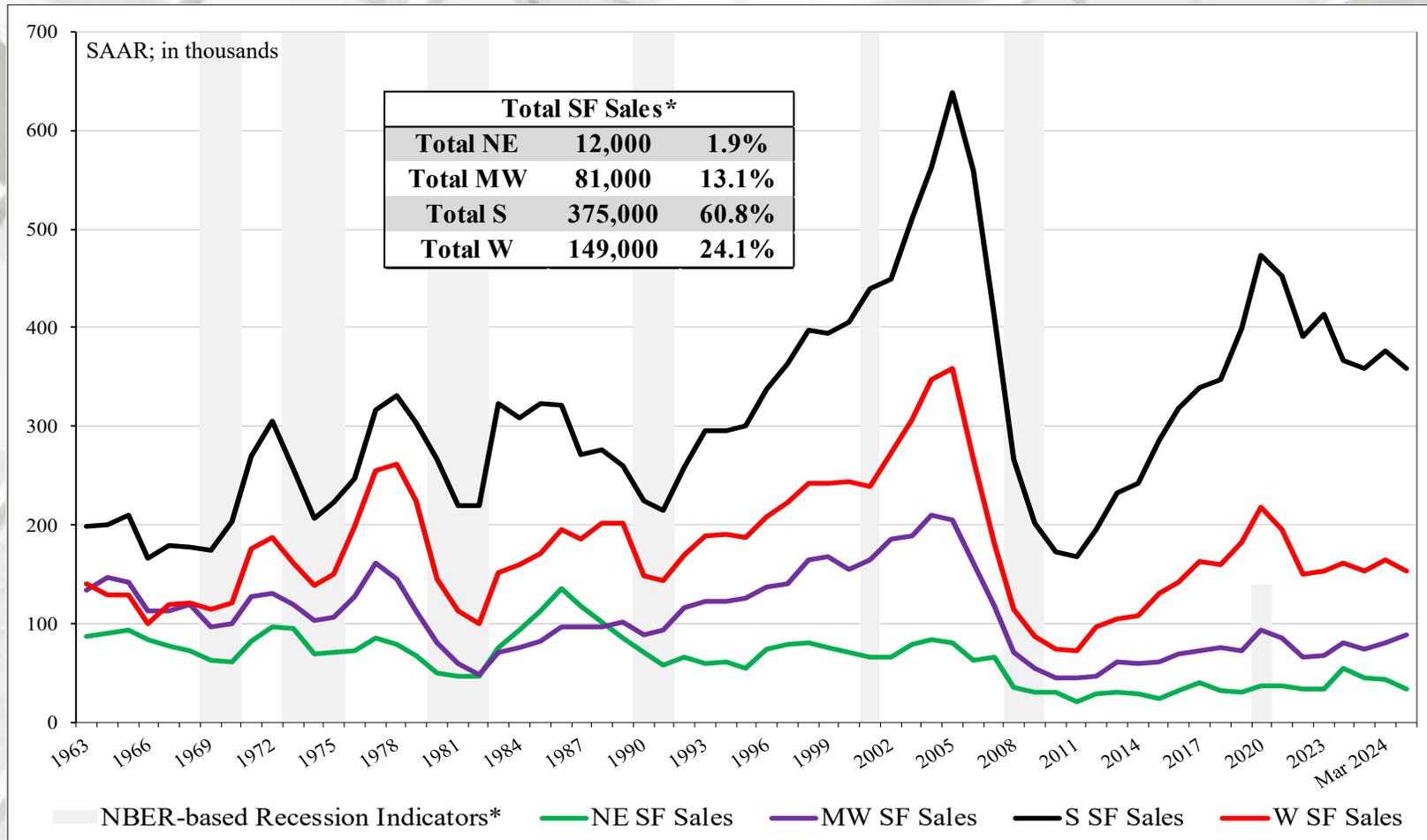
⁴ https://www.census.gov/construction/cpi/pdf/descpi_sold.pdf

New SF House Sales



* Total new sales by price category and percent.

New SF House Sales by Region

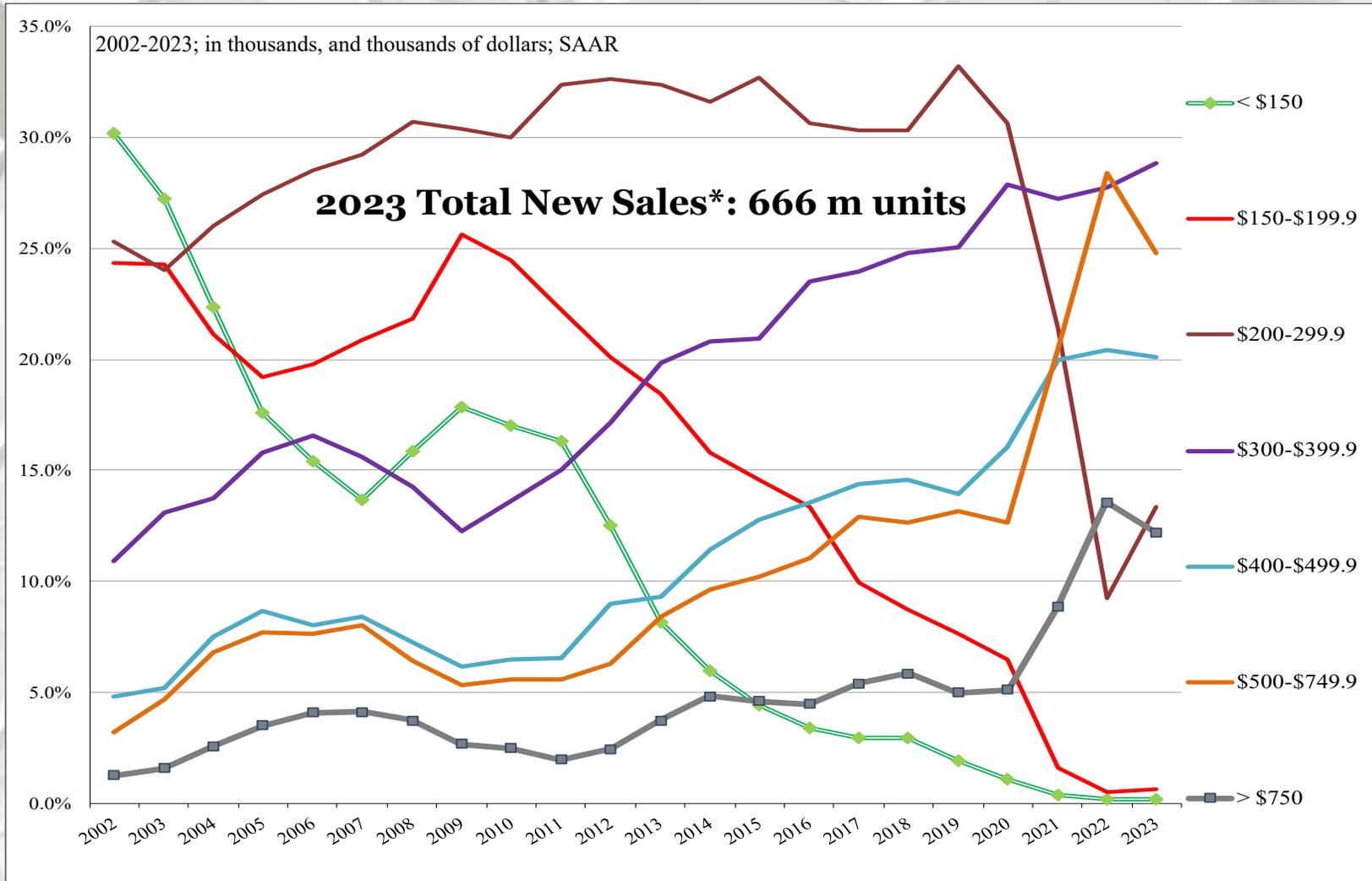


NE = Northeast; MW = Midwest; S = South; W = West

* Percentage of total new sales.

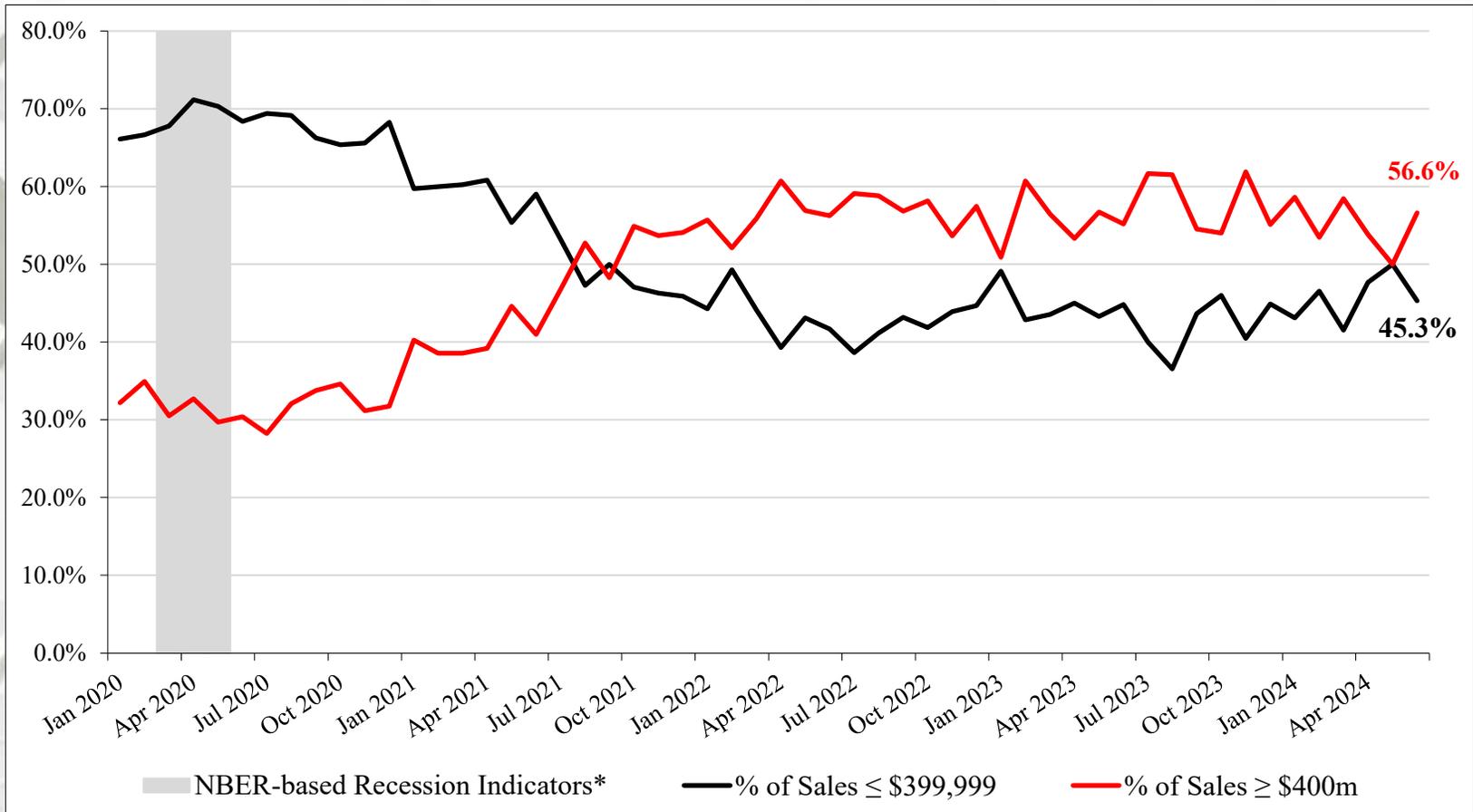
NBER based Recession Indicator Bars for the United States from the Period following the Peak through the Trough (FRED, St. Louis).

New SF House Sales by Price Category



* Sales tallied by price category, nominal dollars.

New SF House Sales



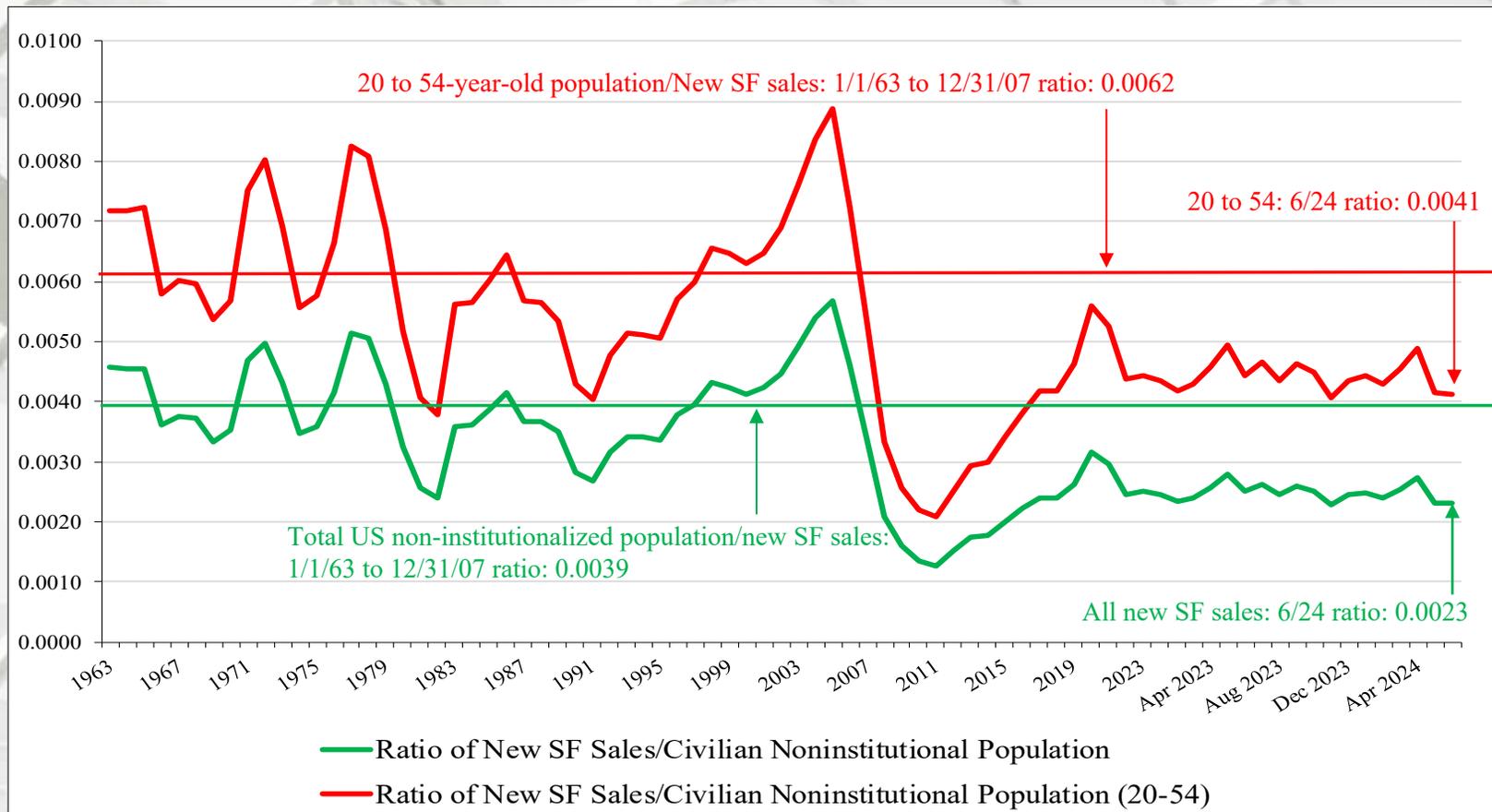
* NBER based Recession Indicator Bars for the United States from the Period following the Peak through the Trough (FRED, St. Louis).

New SF Sales: < \$399.9 m and > \$400 m: 2020 – June 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.

Sources: <https://fred.stlouisfed.org/series/USREC>, 6/1/21; ¹ <https://www.census.gov/construction/nrs/index.html>; ² https://www.census.gov/construction/cpi/pdf/descpi_sold.pdf 7/24/24

New SF House Sales

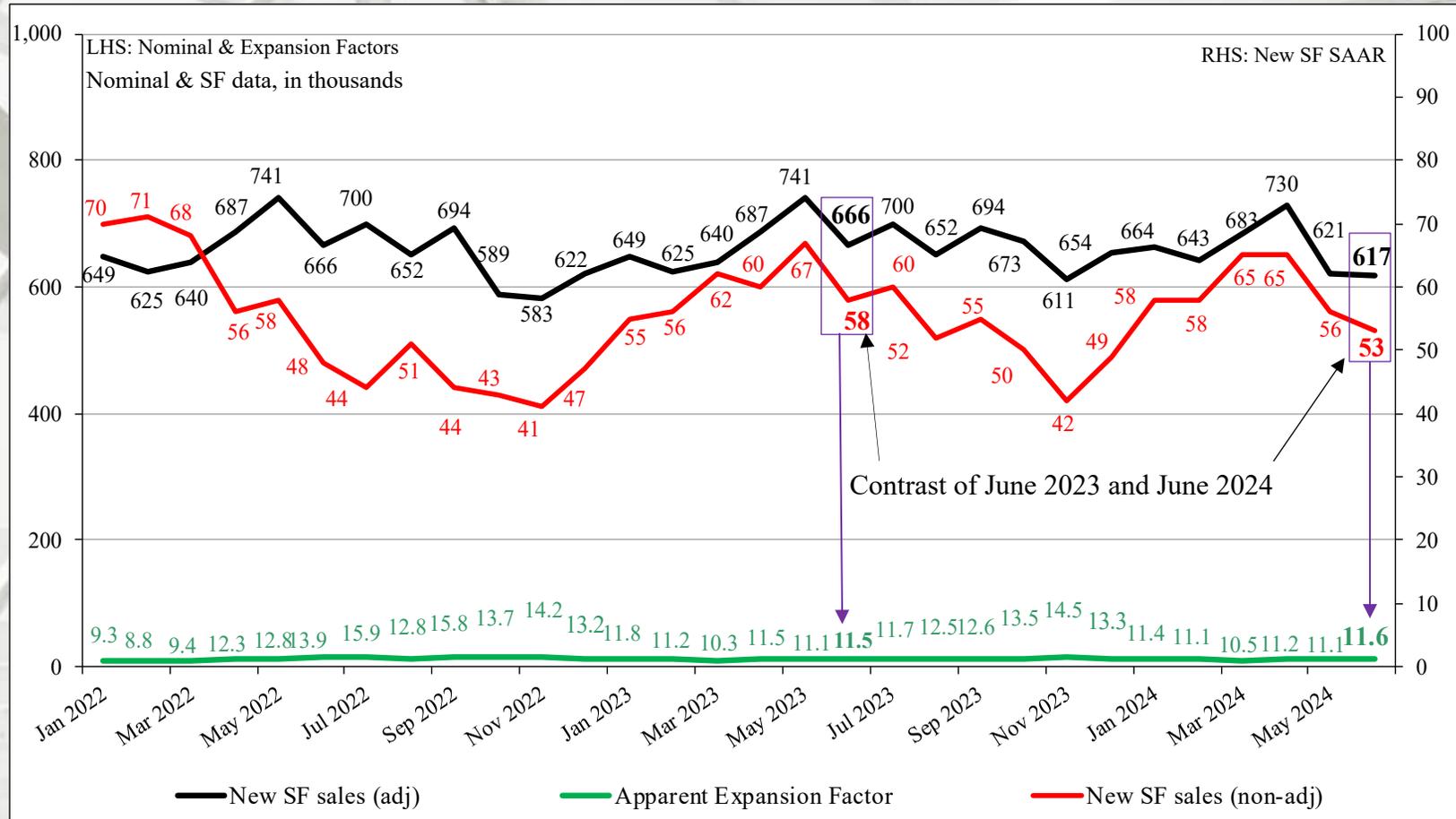


New SF sales adjusted for the US population

From June 1963 to June 2007, the long-term ratio of new house sales to the total US non-institutionalized population was 0.0039; in June 2024 it was 0.0023 – no change from May. The non-institutionalized population, aged 20 to 54 long-term ratio is 0.0062; in June 2024 it was 0.0041 – also no change from May. 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

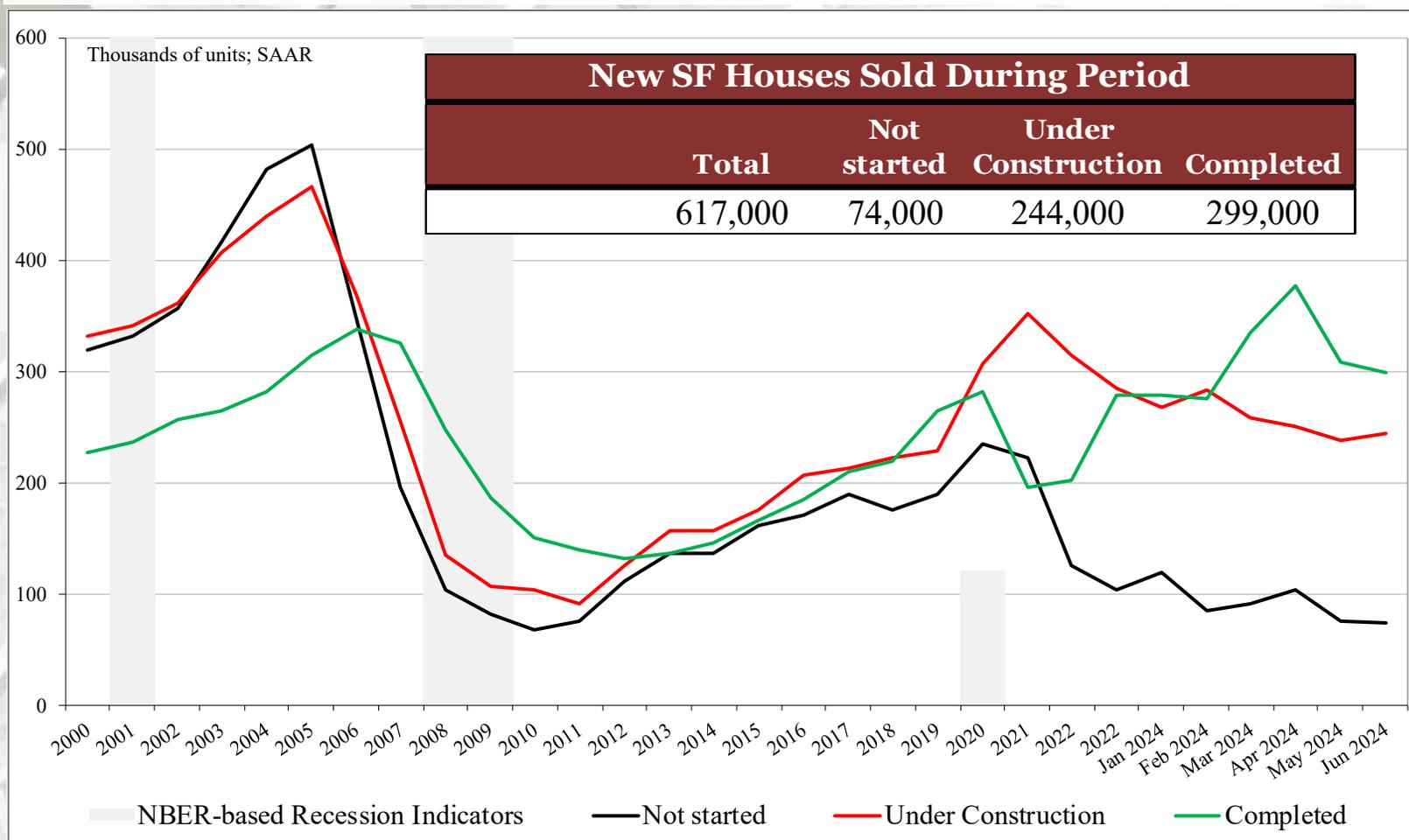
New SF House Sales

New SF Houses Sold During Period

	Total	Not started	Under Construction	Completed
June	617,000	74,000	244,000	299,000
May	621,000	76,000	237,000	308,000
2023	428,000	92,000	268,000	68,000
M/M change	-0.6%	-2.6%	3.0%	-2.9%
Y/Y change	44.2%	-19.6%	-9.0%	339.7%
Total percentage		12.0%	39.5%	48.5%

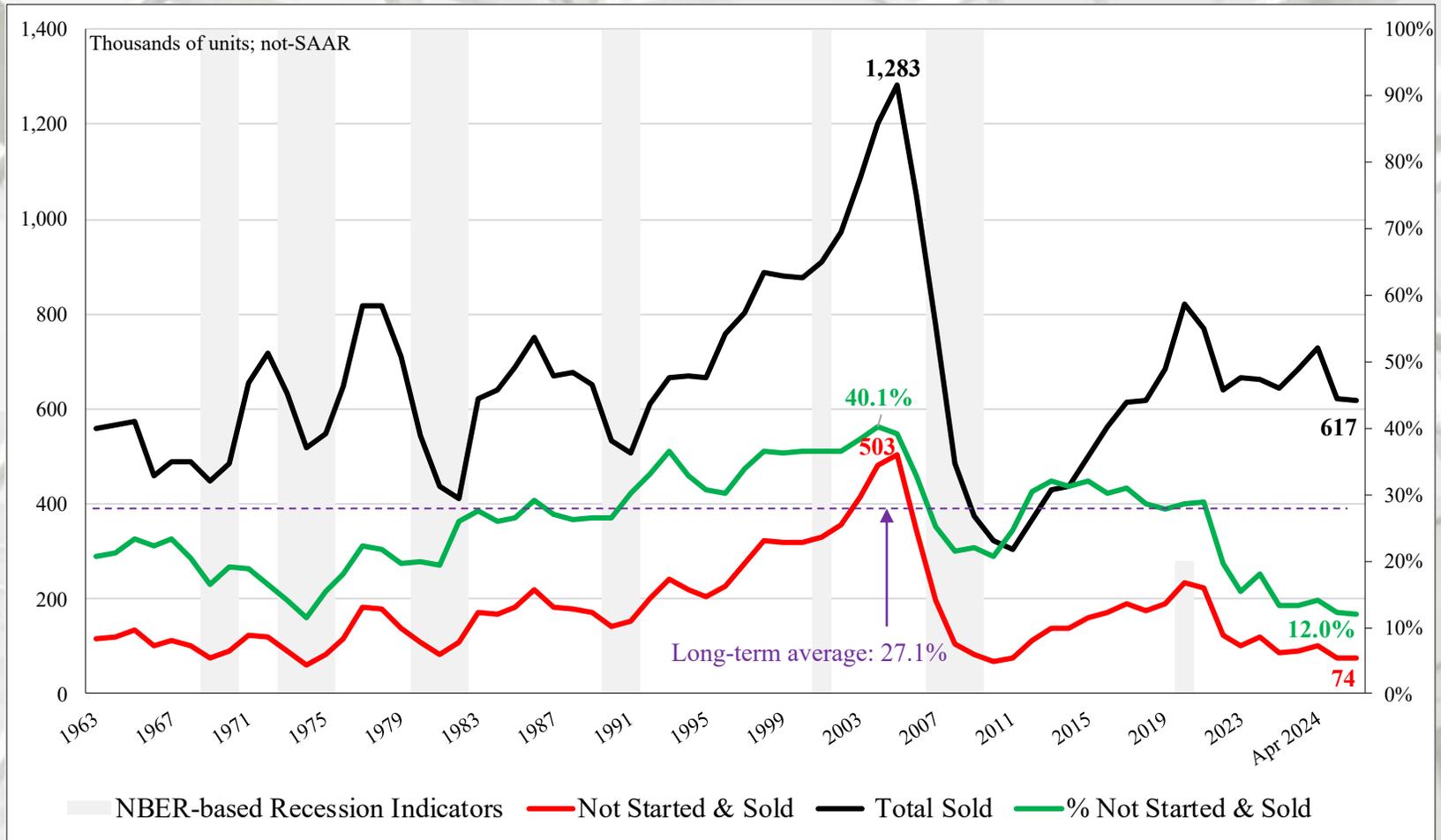
All data is SAAR

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 June (617 m), 12.9% (74 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).

Sources: <https://fred.stlouisfed.org/series/USREC>, 6/1/21; <http://www.census.gov/construction/nrc/pdf/newresconst.pdf>; 7/24/24

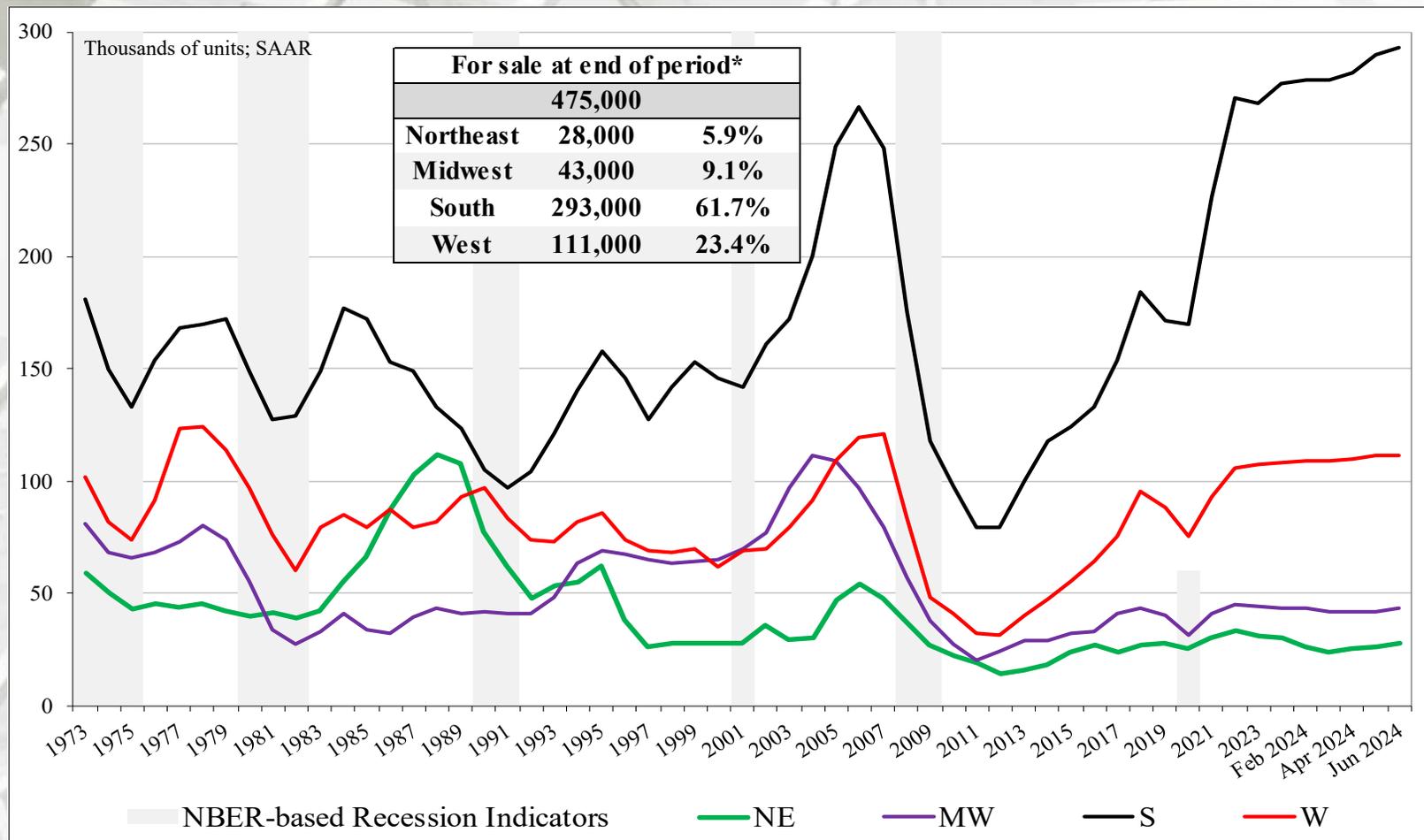
New SF Houses for Sale

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

	Total	NE	MW	S	W
June	475,000	28,000	43,000	293,000	111,000
May	469,000	26,000	42,000	290,000	111,000
2023	433,000	35,000	44,000	250,000	104,000
M/M change	1.3%	7.7%	2.4%	1.0%	0.0%
Y/Y change	9.7%	-20.0%	-2.3%	17.2%	6.7%

* 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.

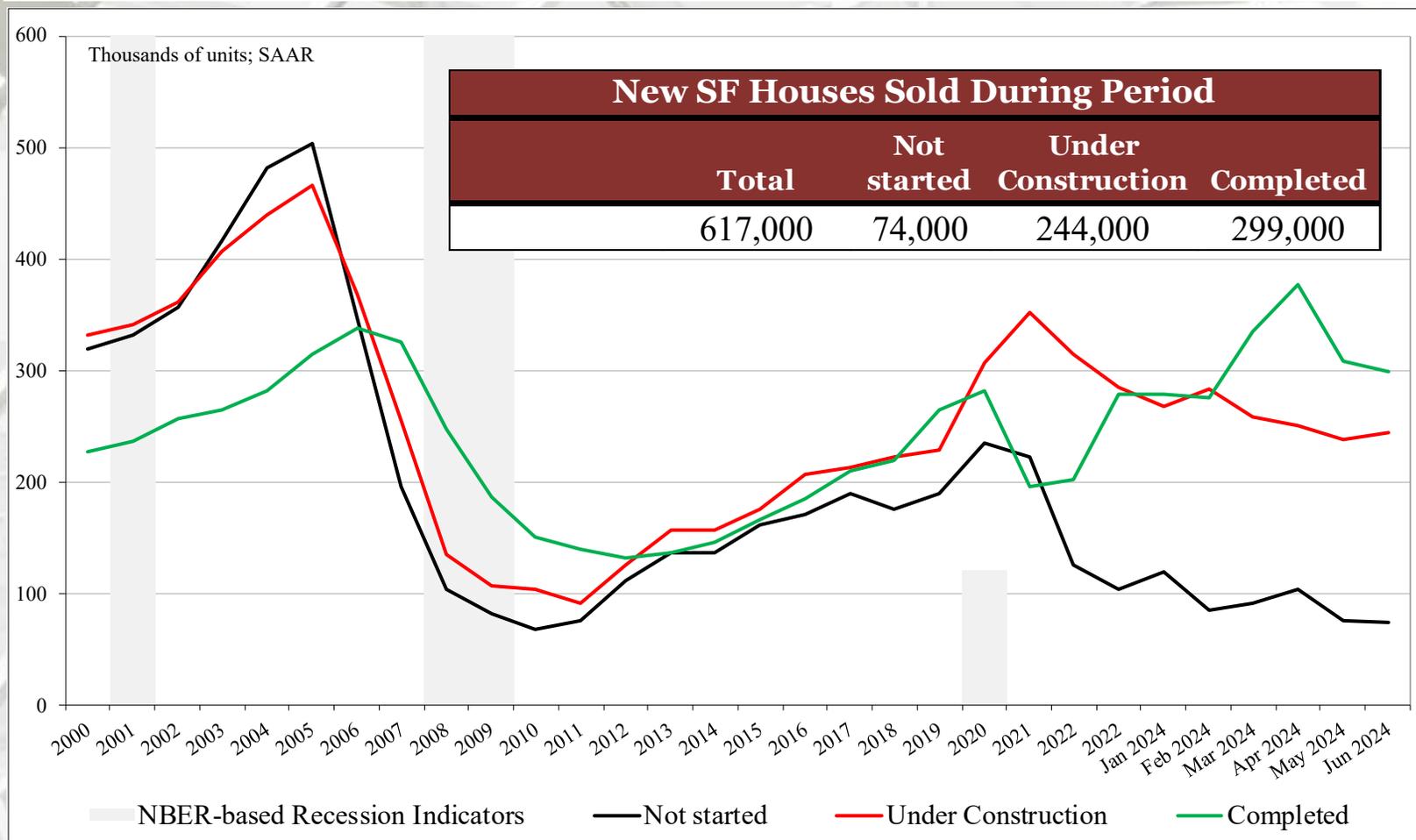
Sources: <https://fred.stlouisfed.org/series/USREC>, 6/1/21; <http://www.census.gov/construction/nrc/pdf/newresconst.pdf>; 7/24/24

New SF House Sales

New SF Houses Sold During Period

	Total	Not started	Under Construction	Completed
June	617,000	74,000	244,000	299,000
May	621,000	76,000	237,000	308,000
2023	428,000	92,000	268,000	68,000
M/M change	-0.6%	-2.6%	3.0%	-2.9%
Y/Y change	44.2%	-19.6%	-9.0%	339.7%
Total percentage		12.0%	39.5%	48.5%

New SF House Sales: For Sale at End of Period



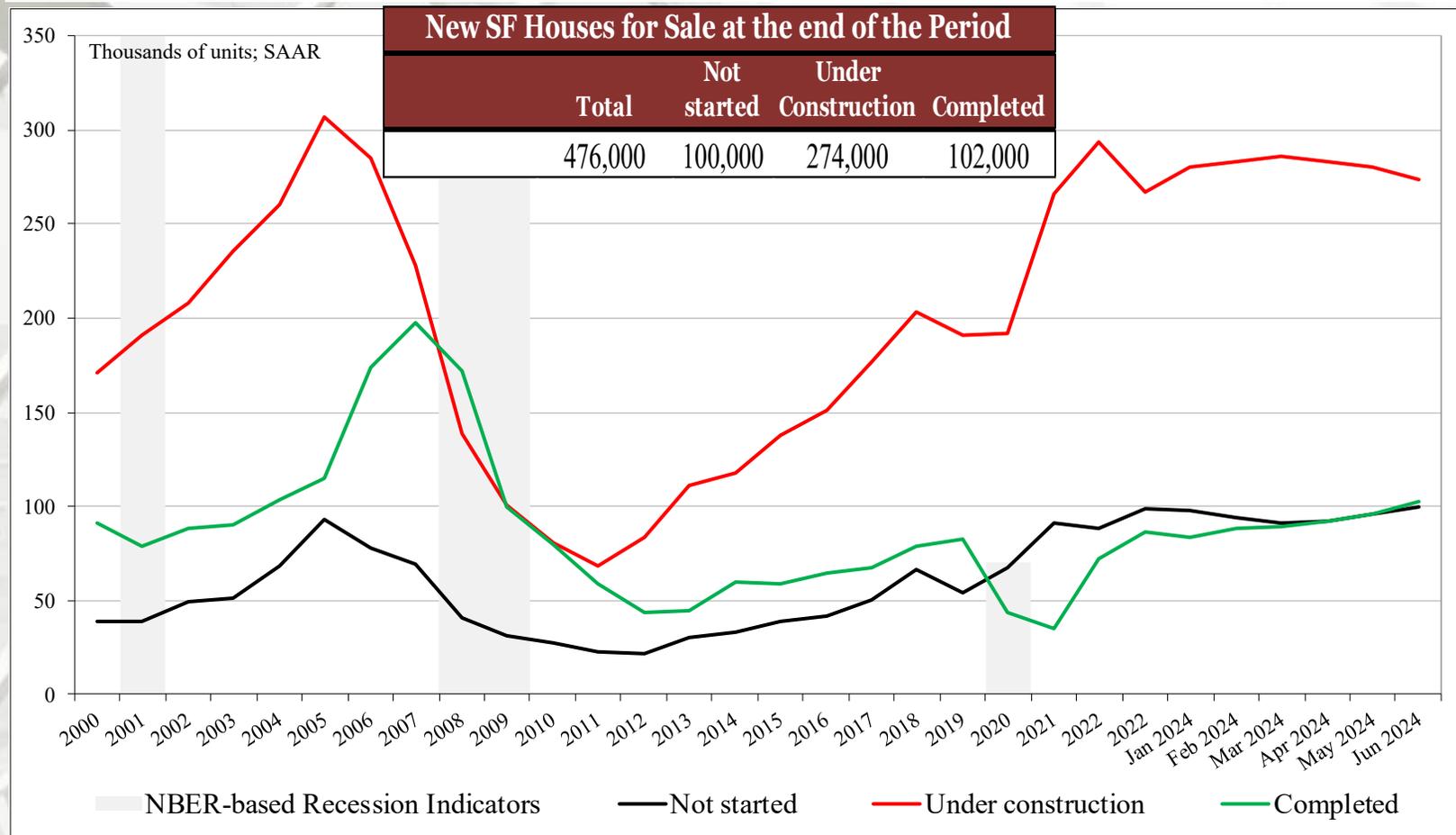
NBER based Recession Indicator Bars for the United States from the Period following the Peak through the Trough (FRED, St. Louis).

New SF House Sales

New SF Houses for Sale at the end of the Period

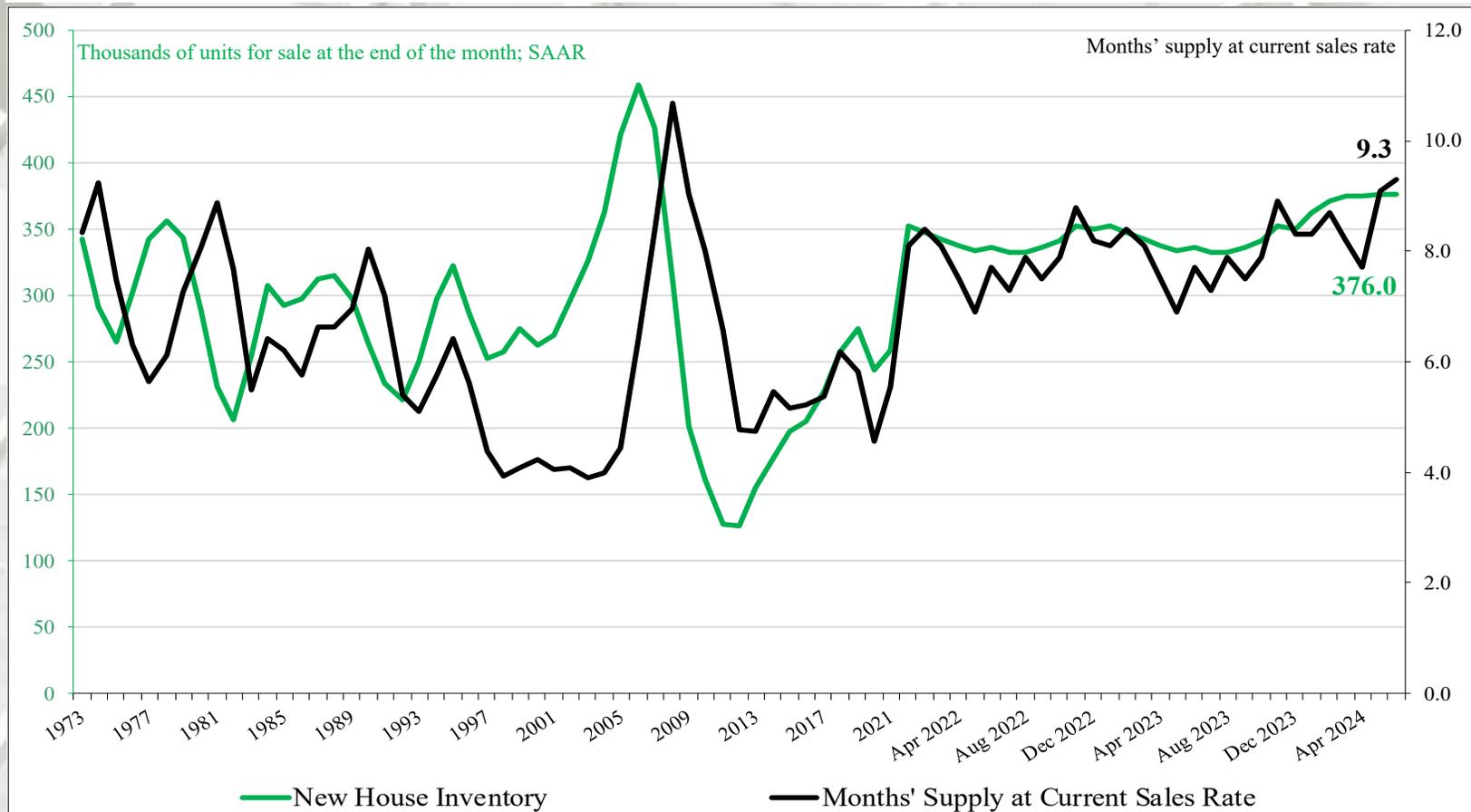
	Total	Not started	Under Construction	Completed
June	476,000	100,000	274,000	102,000
May	472,000	96,000	280,000	96,000
2023	428,000	92,000	268,000	68,000
M/M change	0.8%	4.2%	-2.1%	6.3%
Y/Y change	11.2%	8.7%	2.2%	50.0%
Total percentage		21.0%	57.6%	21.4%

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).

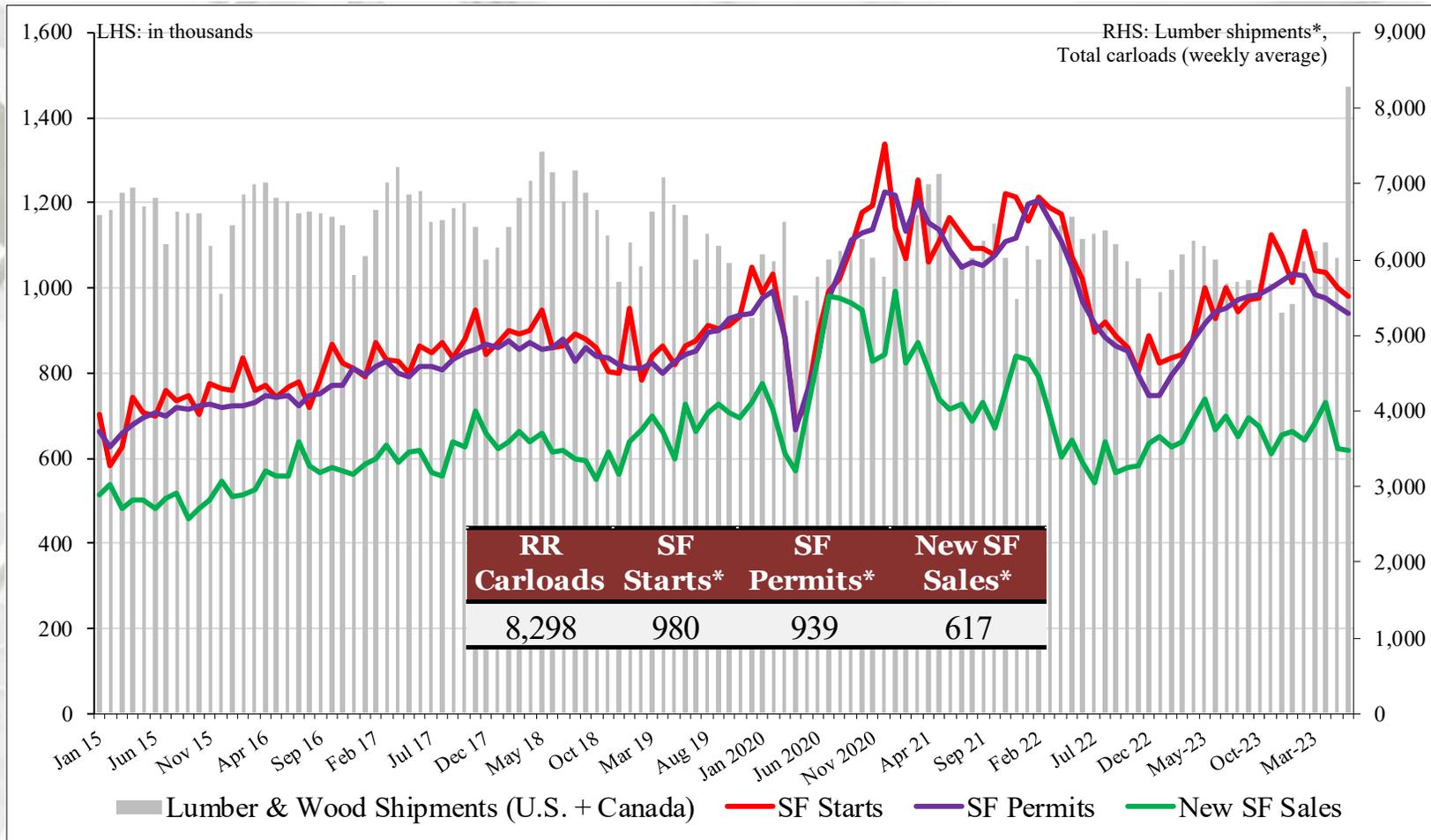
Months' Supply and New House Inventory^a



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

The months' supply of new houses at current sales rate at the end of June was 9.3, greater than the historically preferred number of five- to six-months (SAAR).

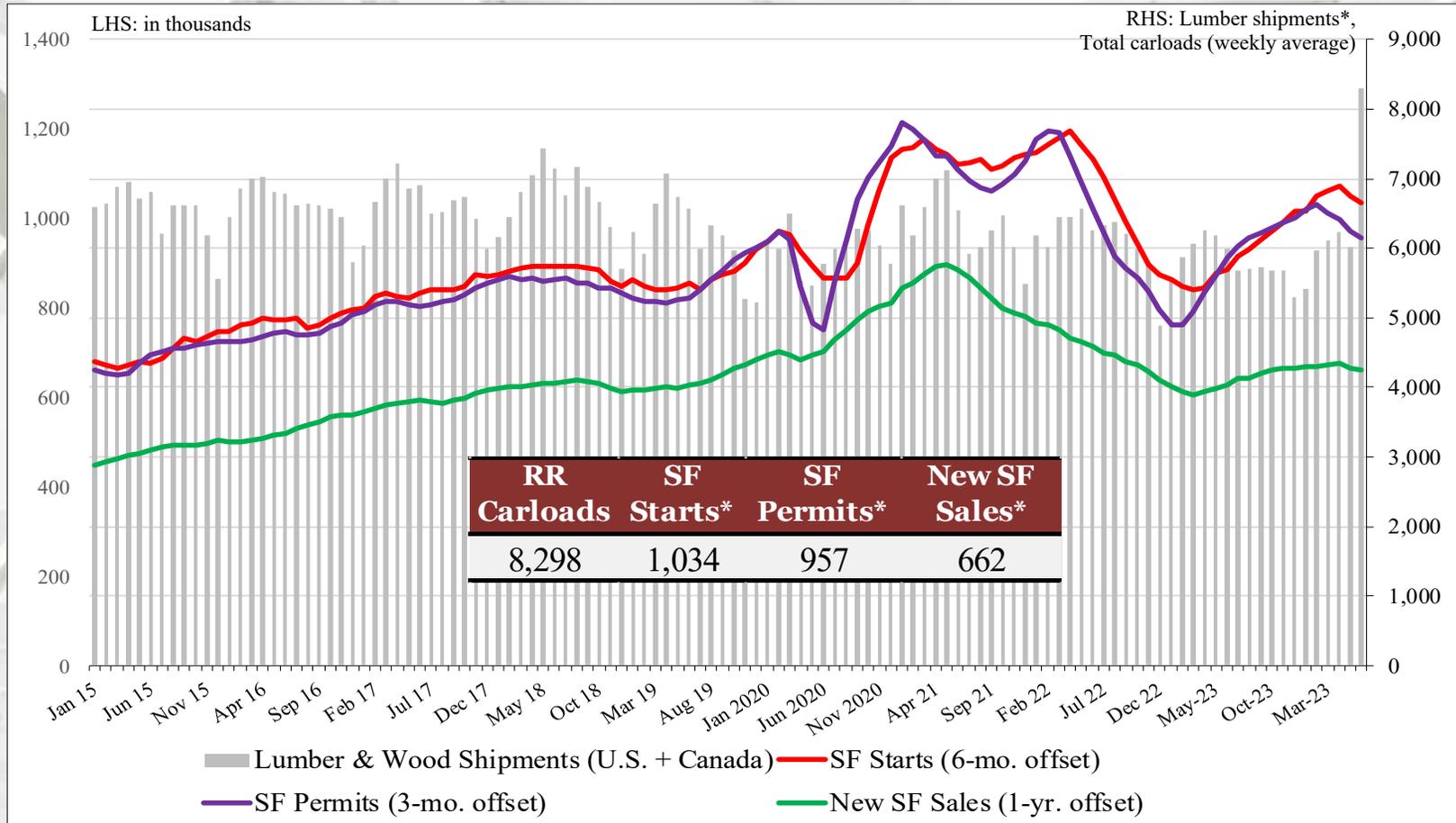
U.S.-Canada Lumber & Wood Shipments vs. SF Starts, Permits, and New Sales



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.

June 2024 Construction Spending

	Total Private Residential*	SF*	MF*	Improvement**
June	\$927,986	\$431,020	\$130,083	\$366,883
May	\$931,097	\$436,449	\$129,902	\$364,746
2023	\$864,826	\$392,079	\$140,455	\$332,292
M/M change	-0.3%	-1.2%	0.1%	0.6%
Y/Y change	7.3%	9.9%	-7.4%	10.4%

* Millions of dollars.

** 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\$.

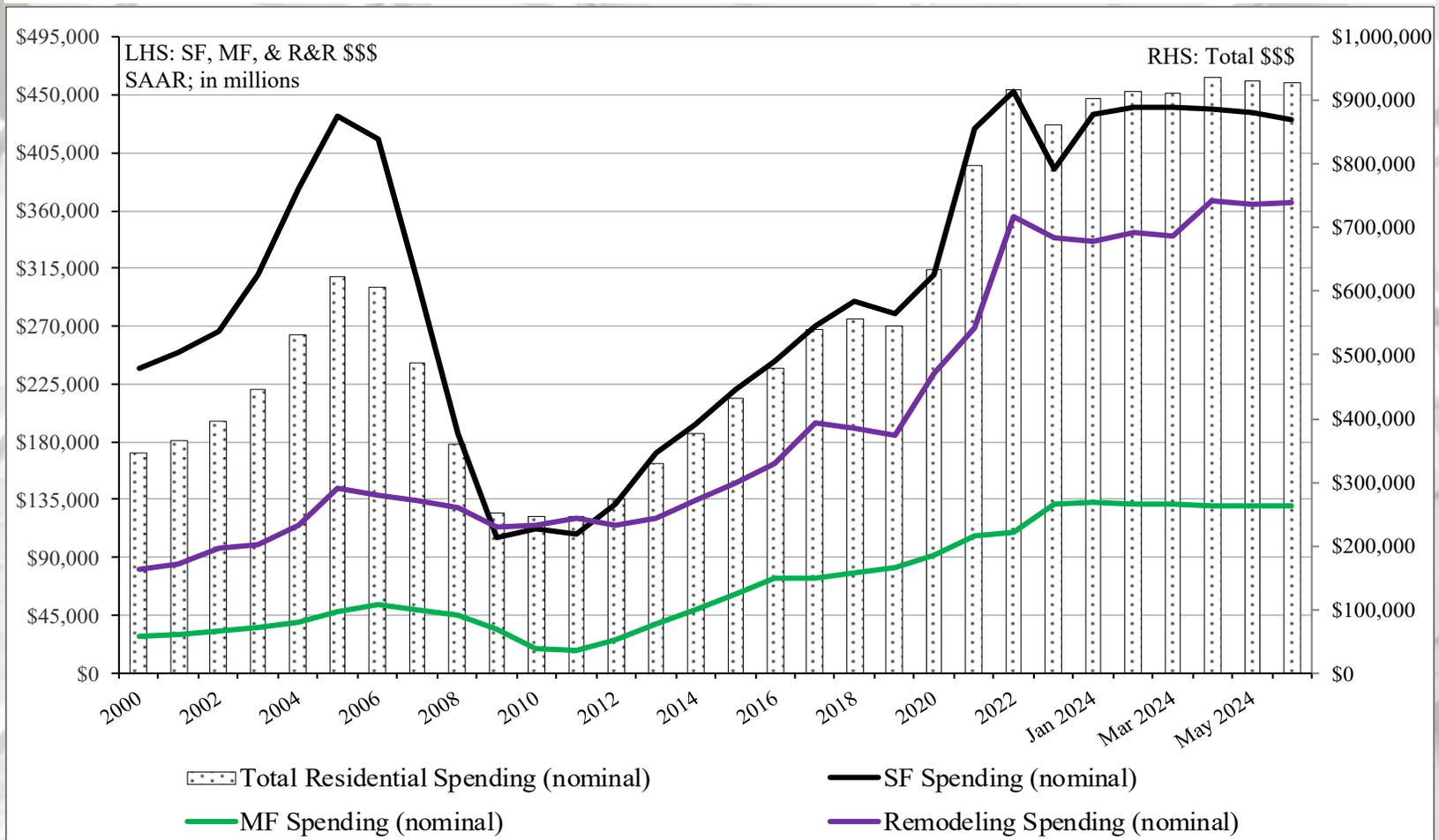
Total private residential construction spending includes new single-family, new multi-family, and improvement (AKA repair and remodeling) expenditures.

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.

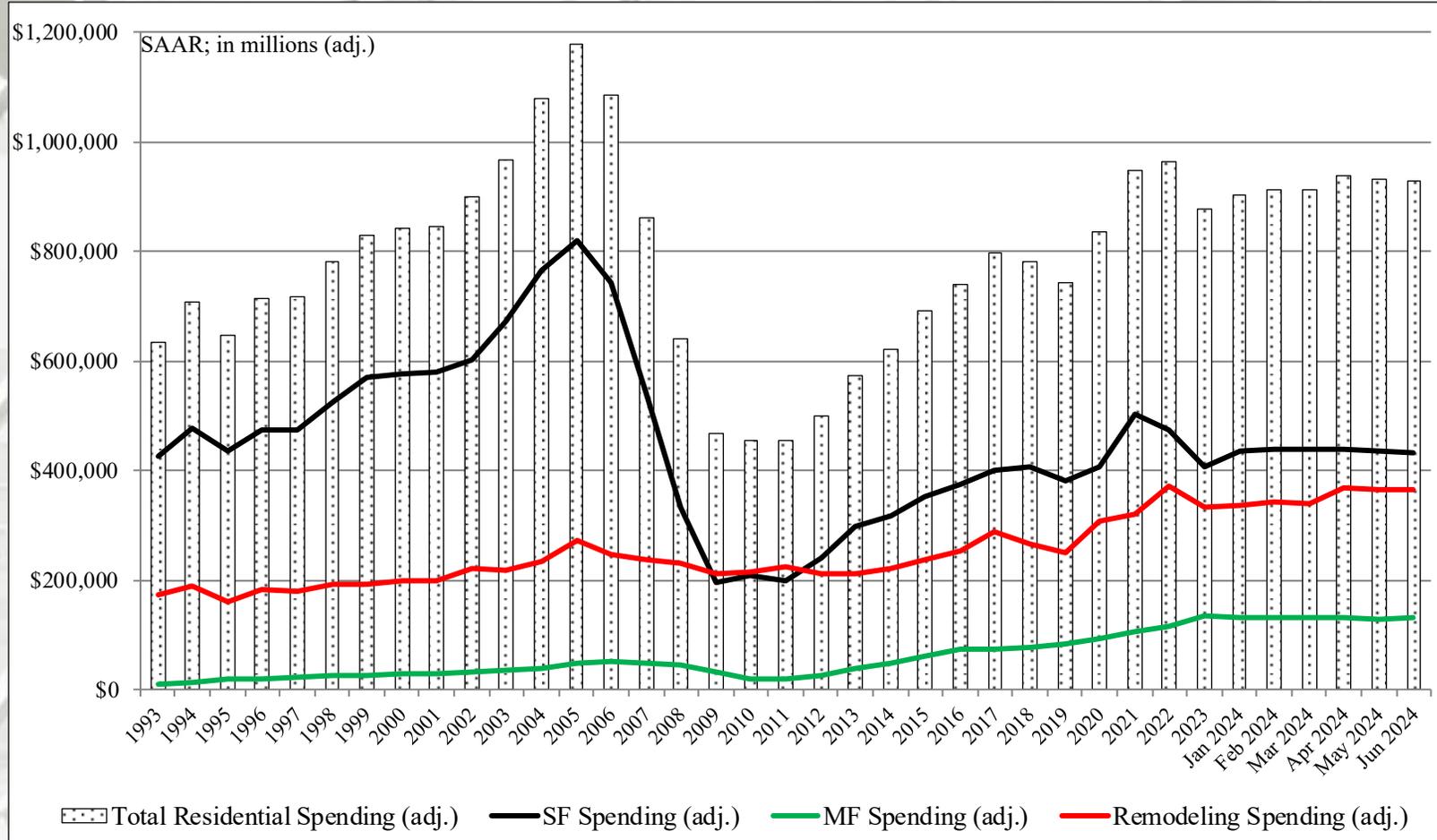
Total Construction Spending (nominal): 2000 – June 2024



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 – June 2024

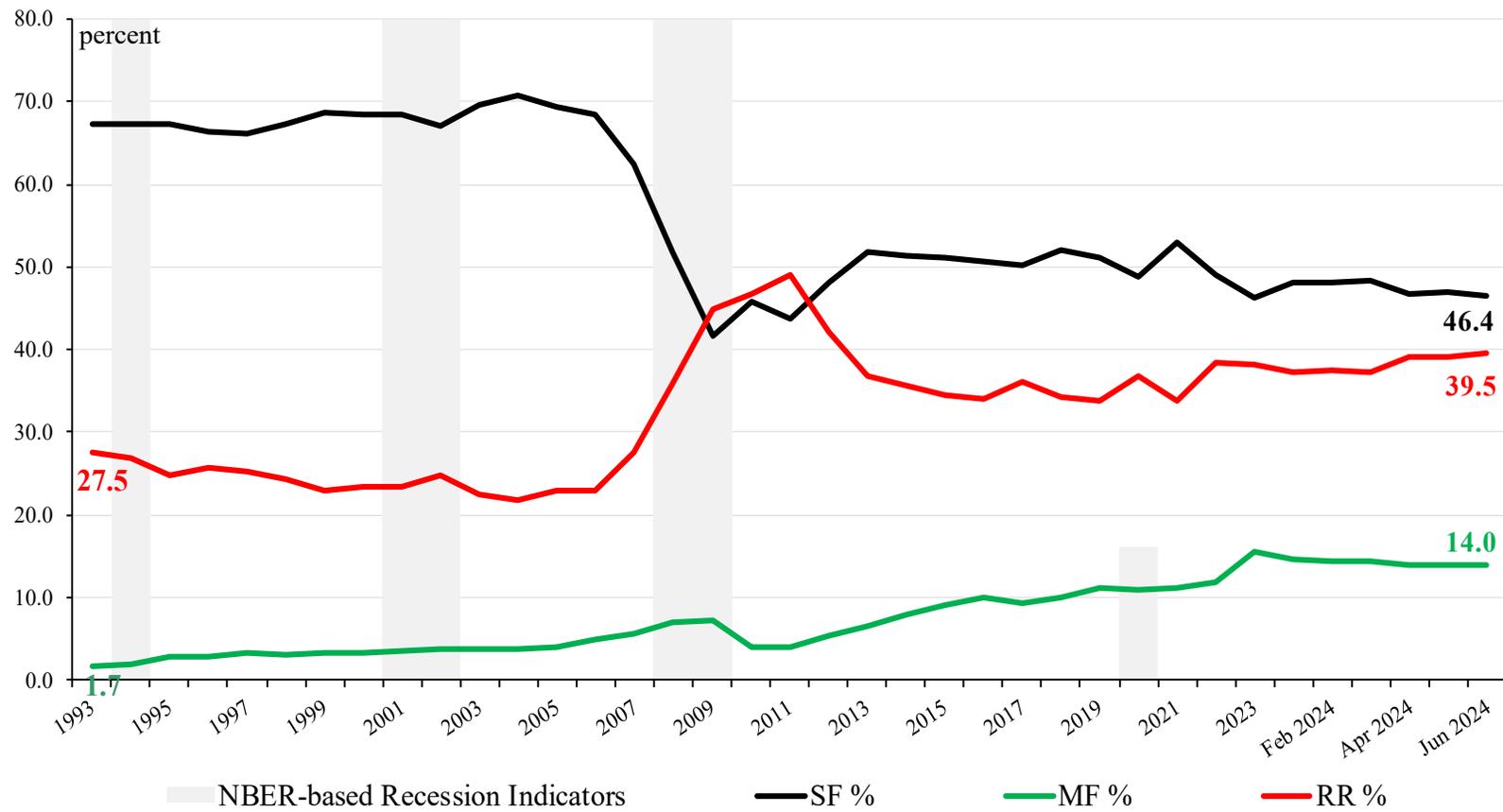


Reported in adjusted \$US: 1993 – 2023 (adjusted for inflation, BEA Table 1.1.9); June 2024 reported in nominal US\$.

Sources: * <http://www.bea.gov/iTable/iTable.cfm>; 8/1/24; <http://www.census.gov/construction/c30/pdf/privsa.pdf>; 8/1/2024

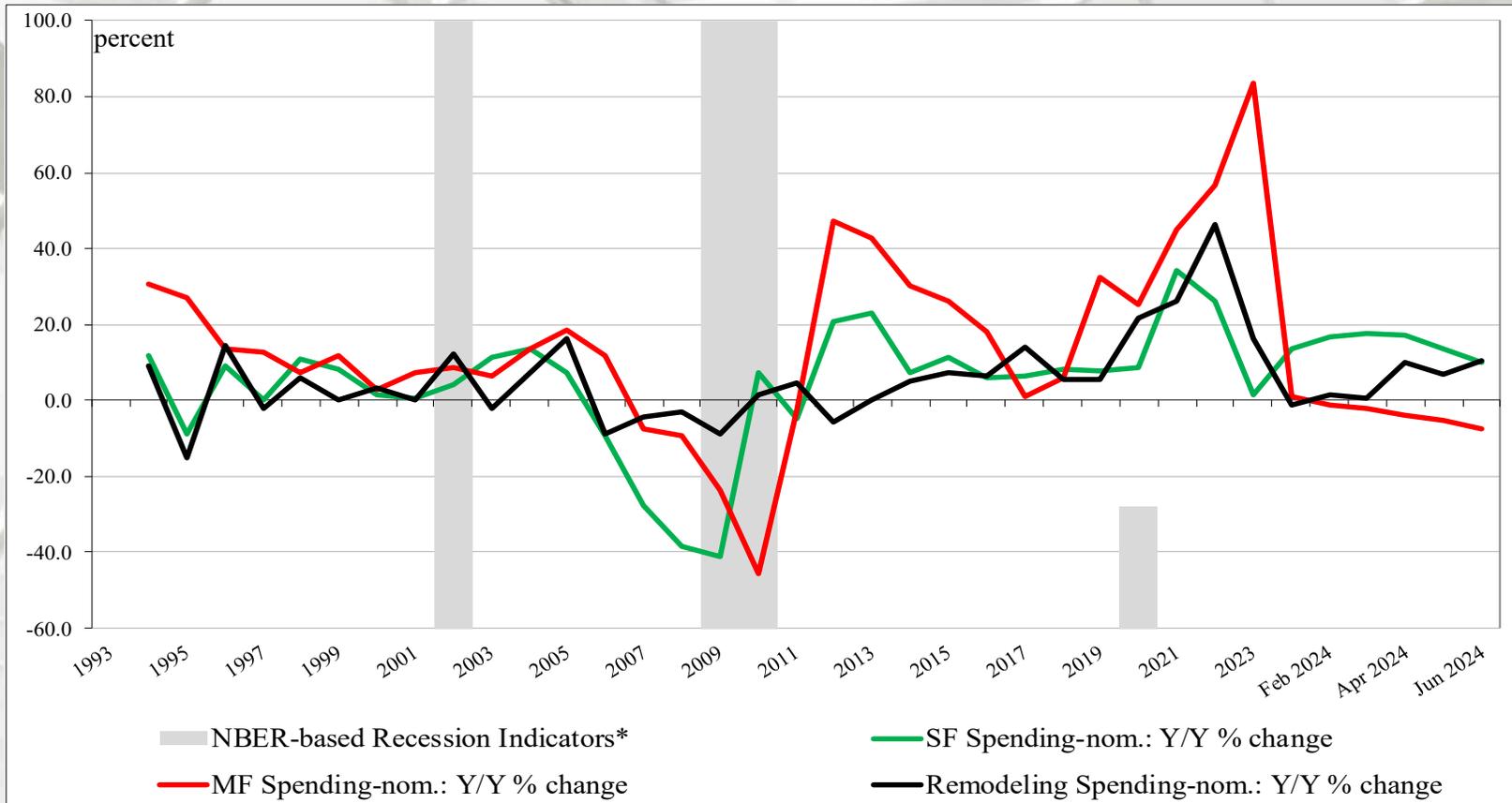
Construction Spending Shares: 1993 – June 2024

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



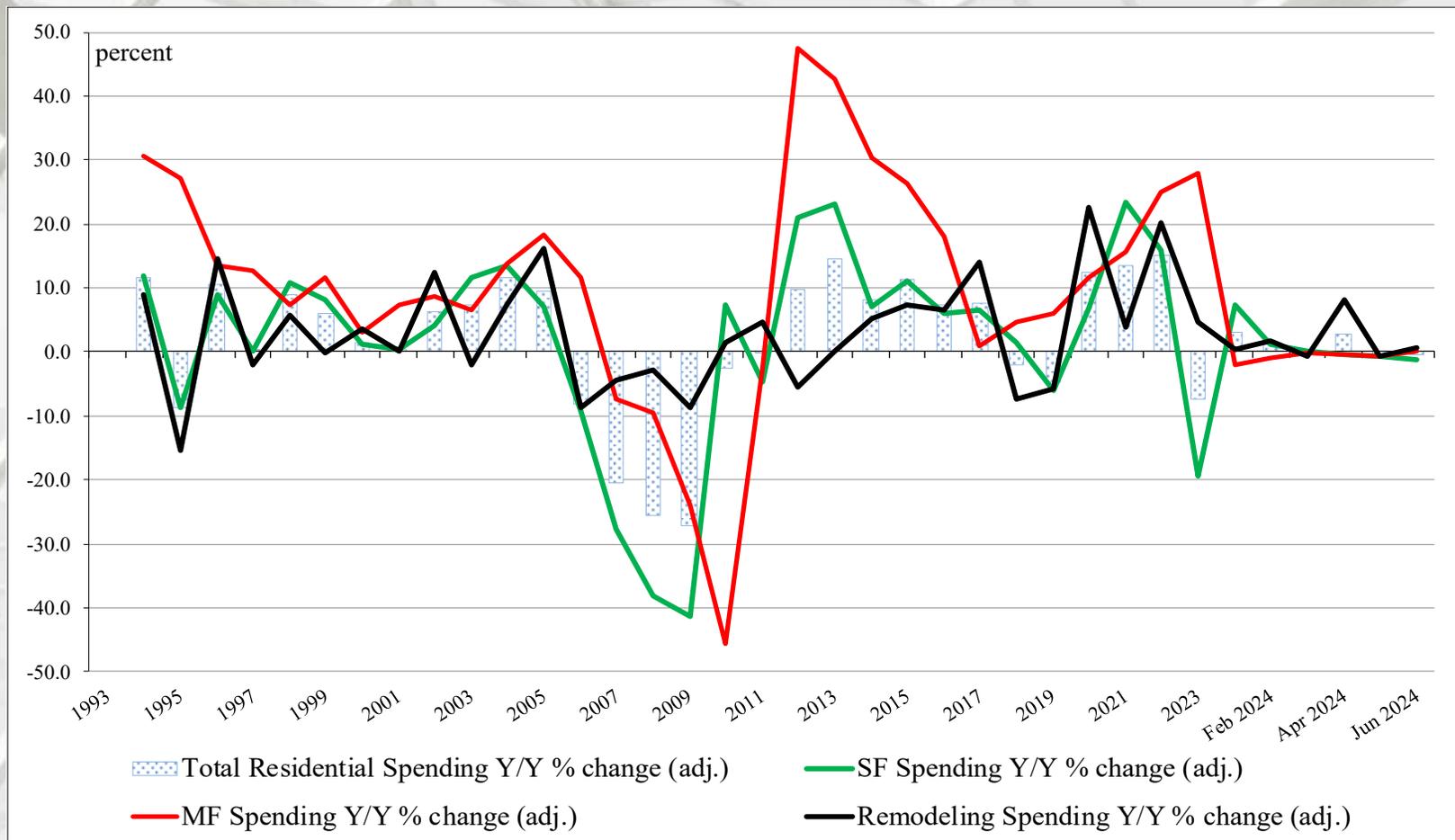
Nominal Residential Construction Spending: Y/Y percentage change, 1993 to June 2024

Presented above is the percentage change of Y/Y construction spending. SF and RR expenditures were positive on a percentage basis, year-over-year (June 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>, 6/21/21; <http://www.census.gov/construction/c30/pdf/privsa.pdf>; 8/1/24 and <http://www.bea.gov/iTable/iTable.cfm>; 8/1/24

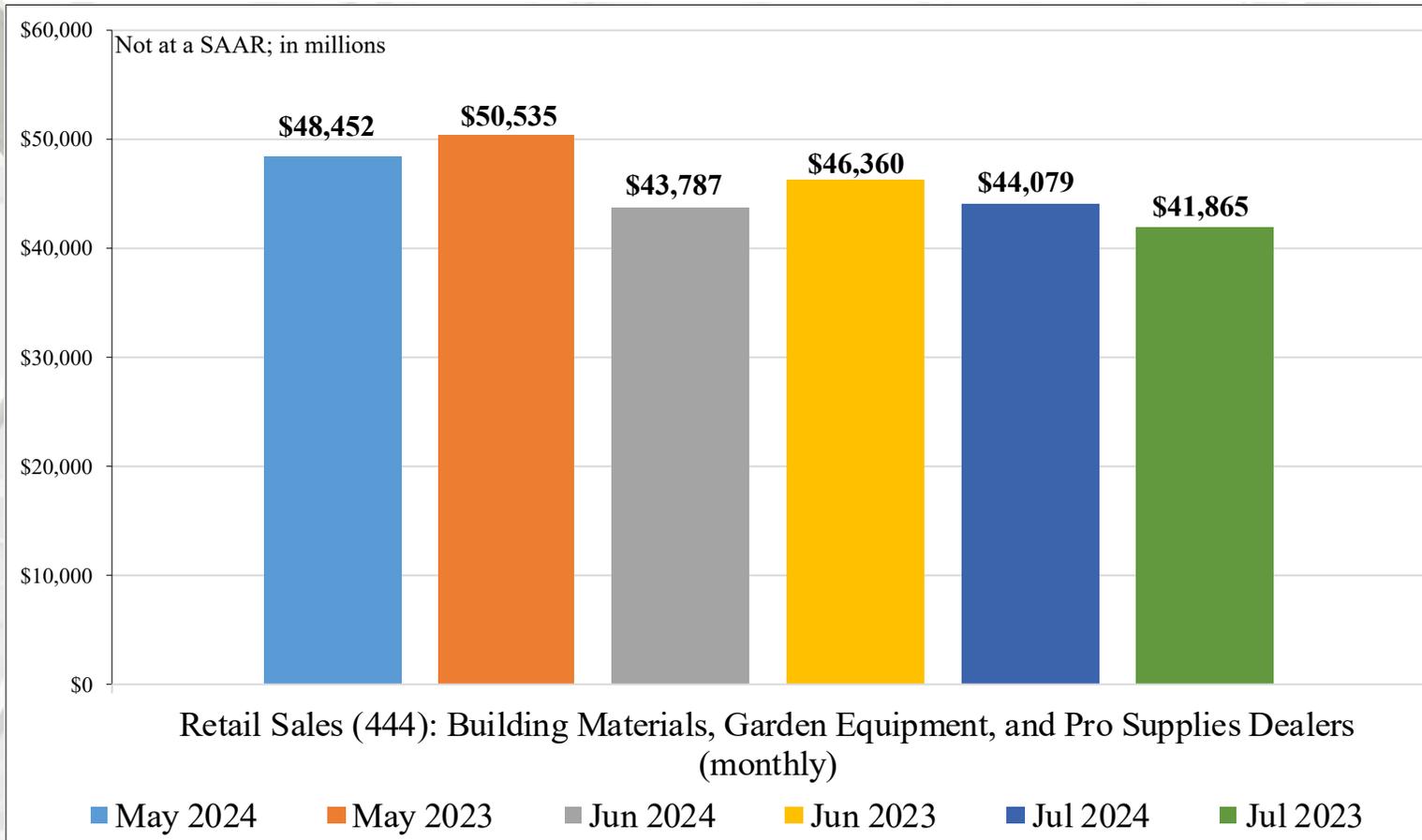
Adjusted Construction Spending: Y/Y Percentage Change



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

Remodeling

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

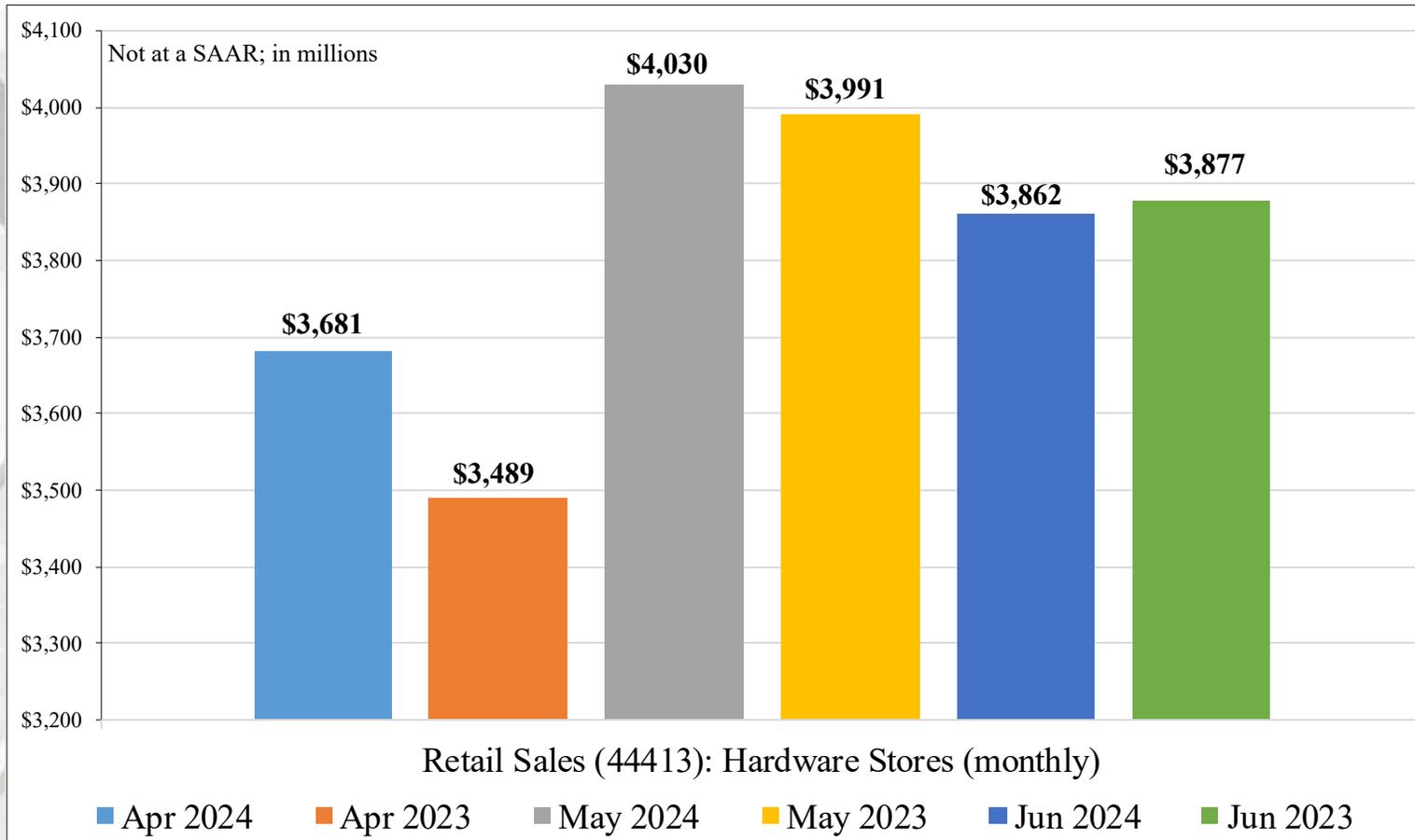


Building materials, Garden Equipment, & PRO Supply Dealers: NAICS 444

NAICS 444 sales increased 0.7% in July 2024 from June 2024 and improved 5.3% Y/Y (nominal basis).

Remodeling

Retail Sales: Hardware Stores



Hardware Stores: NAICS 44413

NAICS 44413 retail sales decreased 4.2% in June 2024 from May 2024 and declined 0.4% Y/Y (nominal basis).

Remodeling

Harvard Joint Center for Housing Studies

Remodeling Spending To Tick Up Through Mid-year 2025

“After a modest downturn, home owner expenditures for improvements and repairs are expected to trend up through the first half of 2025, according to our latest [Leading Indicator of Remodeling Activity \(LIRA\)](#). The LIRA projects that declines in annual spending for renovations and maintenance to owner-occupied homes will ease to just -0.5 percent through the second quarter of 2025.

Economic uncertainty and continued weakness in home sales and the sale of building materials are keeping a lid on residential remodeling, although many drivers of spending are starting to firm up again. After several years of frenzied activity during the pandemic, owners are now making upgrades and repairs to their homes at a steadier and more sustainable pace.

Annual spending on home owner improvements and maintenance is expected to reach \$466 billion through the second quarter of next year, on par with spending over the past four quarters. The home remodeling slowdown should continue to be relatively mild, with activity stabilizing just shy of last year’s peaks.” – Abbe Will, Senior Research Associate & Associate Director, Remodeling Futures; Harvard Joint Center for Housing Studies

Remodeling

Harvard Joint Center for Housing Studies

Leading Indicator of Remodeling Activity – Second Quarter 2024



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

John Burns Real Estate Research & Consulting & Qualified Remodeler

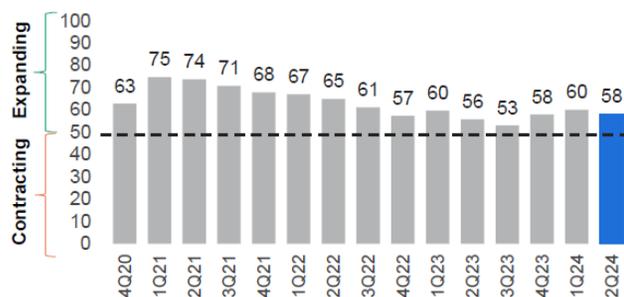
Q2 2024 U.S. Remodeler Index

“The US Remodeler Index rates 58 out of 100, indicating that the professional remodeling industry expanded in 2Q24.” – John Burns Real Estate Research & Consulting and Qualified Remodeler

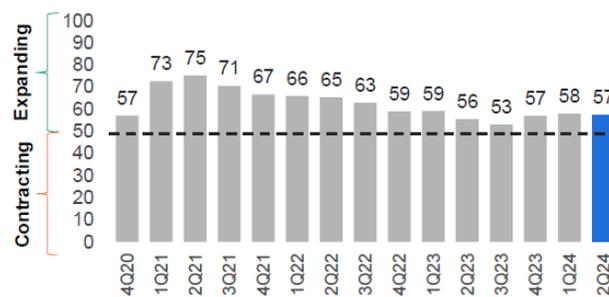
The 2Q24 US Remodeler Index decreased -2 points to 58, compared to 1Q24. High interest rates and cost inflation drove households to reduce project sizes or pause projects.



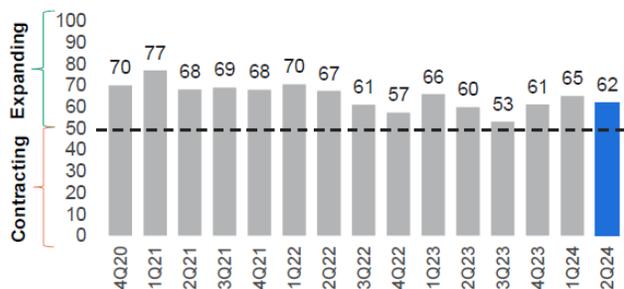
US Remodeler Index



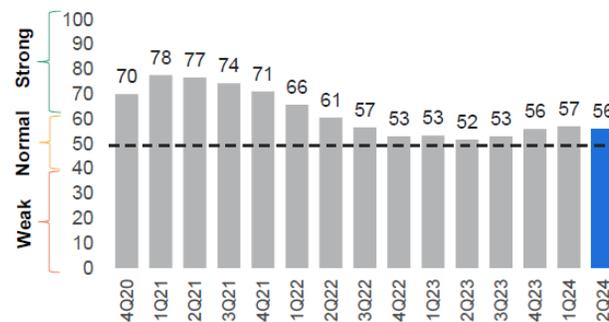
Current Remodeling Activity Gauge



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



Remodeling Demand Meter



Sources: Qualified Remodeler; John Burns Research and Consulting, LLC (Data: 2Q24, Pub: Jul-24)

Remodeling

John Burns Real Estate Research & Consulting & Qualified Remodeler

Key 2Q24 professional remodeling takeaways by industry segment



Full-Service Remodelers

- Higher interest rates and project cost inflation reduced project size and scope.
- **+1% growth year over year (YOY) in 2Q24 project completions** (previously **+1%**)
- **38%** say project backlogs are smaller than a year ago (previously **39%**).
- **We expect +2.5% revenue growth for full-year 2024** (previously **+2.6%**).



Design-Build Firms

- Stable demand with wealthier customers who are less impacted by prices and interest rates.
- **+2% growth YOY in 2Q24 project completions** (previously **+3%**)
- **36%** say project backlogs are smaller than a year ago (previously **34%**).
- **We expect +3.2% revenue growth for full-year 2024** (previously **+5.2%**).



Home Improvement Pros

- Cautious consumers restrain stronger remodeling growth. Needed repairs prioritized over “desired” remodels
- **+2% growth YOY in 2Q24 project completions** (previously **+2%**)
- **37%** say project backlogs are smaller than a year ago (previously **42%**).
- **We expect +4.1% revenue growth for full-year 2024** (previously **+4.1%**).

Note: 'Full-Service Remodelers' offer a broad range of repair, remodeling, and home improvement services, including kitchen and bath remodeling/trades. 'Design-Build Firms' offer design and construction remodeling services, primarily whole-home remodels and additions. 'Home Improvement Professionals' include specialty contractors marketing windows, roofing, siding, decking, bath replacements, etc.

Sources: Qualified Remodeler; John Burns Research and Consulting, LLC (Data: 2Q24, Pub: Jul-24)

Remodeling

John Burns Real Estate Research & Consulting & Qualified Remodeler

4 big professional remodeling takeaways from the latest US Remodeler Index survey

1 Holding pattern for large discretionary remodels

Sticker shock and high interest rates are causing households to pause or reduce the scope of remodeling projects. General uncertainty on the economy has pushed households to prioritize remodeling needs vs. wants.



2 Pockets of growth for older and wealthier households

Wealthier older households, staying in their homes longer, continue to spend on remodeling. These households tend to be less interest rate sensitive, pay for remodels in cash, and therefore continue to spend in an elevated interest rate environment.



3 Skilled contractor labor remains in short supply.

Despite softer market conditions, professional remodelers continue to note an “industry problem” with skilled labor shortages. This is the “canary in the coal mine” for future remodeler labor inflation when growth accelerates.



4 Homeowner demand for professional remodeling will gradually recover.

On average, professional remodelers expect revenue to grow in 2024. At the midpoint of the year, the Near-Term (next 3-month) Remodeling Activity Gauge is higher than the Current Remodeling Activity Gauge, consistent with the expectation of stronger second-half growth.



Sources: Qualified Remodeler; John Burns Research and Consulting, LLC (Data: 2Q24, Pub: Jul-24)

U.S. Construction Expenditures

American Institute of Architects (AIA) & Deltek

Construction spending gains projected this year, expected to stall in 2025

“Spending on nonresidential buildings is projected to increase more than 7% this year, according to The American Institute of Architects mid-year Consensus Construction Forecast. The spending will slow to only 2% in 2025 as market challenges continue to impact the pace of growth.

Construction spending, while continuing to increase, has seen the pace of growth slow so far this year, and this slowdown is expected to continue into 2025. The challenging lending market for construction projects, continued weakness in commercial property values, and ongoing softness in billings at architecture firms contribute to the slowdown.

The Consensus Construction Forecast panelists, a group comprised of the leading construction forecasters from across the country, report sector conditions diverging with performance varying greatly sector by sector:

- Commercial facilities activity effectively will be flat this year and next
- Manufacturing construction will increase almost 14% this year before stabilizing in 2025
- Institutional construction will see a more than 10% gain this year before slowing to 4% in 2025

“The disparity in sector performance highlights the uneven economic conditions and ongoing market uncertainties,” noted AIA Chief Economist Kermit Baker, PhD. “Despite the challenges, specific sectors like manufacturing construction are showing strong ongoing activity from the surge in projects that started during the pandemic, while most institutional sectors are seeing reasonably healthy gains, fueled by the education market.”” – American Institute of Architects (AIA) & Deltek

U.S. Construction Expenditures

American Institute of Architects (AIA) & Deltek

CONSENSUS CONSTRUCTION FORECAST, JULY 2024

Click on each name to see their forecast

Consensus		Actual	Forecast	
		\$	% Change	
		2023	2024	2025
Dodge Construction Network	Nonresidential Total	–	7.4	2.0
S&P Global, Market Intelligence	Commercial Total	–	-0.1	1.3
	Office	–	2.8	1.0
Moody's Analytics	Retail & Other Commercial	–	-1.8	0.3
	Hotel	–	-0.3	6.6
FMI	Industrial Total	–	13.7	0.1
ConstructConnect	Institutional Total	–	10.7	4.1
	Health	–	7.3	4.0
Associated Builders and Contractors	Education	–	10.1	4.4
	Religious	–	12.5	0.8
Wells Fargo Securities	Public Safety	–	30.3	4.2
Markstein Advisors	Amusement & Recreation	–	11.7	3.9
Piedmont Crescent Capital				

Notes:

* FMI's "Retail & Other Commercial" category includes commercial/retail, transportation, and communication.

The AIA Consensus Forecast is computed as an average of the forecasts provided by the panelists that submit forecasts for each of the included building categories.

There are no standard definition of some nonresidential building categories, so panelists may define a given category somewhat differently.

Panelists may forecast only a portion of a category (e.g public buildings but not private buildings); these forecasts are treated like other forecasts in computing the consensus.

All forecasts are presented in current (non-inflation adjusted) dollars.

Existing House Sales

National Association of Realtors®

	Existing Sales	Median Price	Month's Supply
June	3,890,000	\$426,900	4.1
May	4,110,000	\$422,400	3.7
2023	4,110,000	\$410,000	3.1
M/M change	-5.4%	1.1%	10.8%
Y/Y change	-5.4%	4.1%	32.3%

All sales data: SAAR

Existing House Sales

	NE	MW	S	W
June	470,000	920,000	1,760,000	740,000
May	480,000	1,000,000	1,870,000	760,000
2023	500,000	980,000	1,890,000	740,000
M/M change	-2.1%	-8.0%	-5.9%	-2.6%
Y/Y change	-6.0%	-6.1%	-6.9%	0.0%

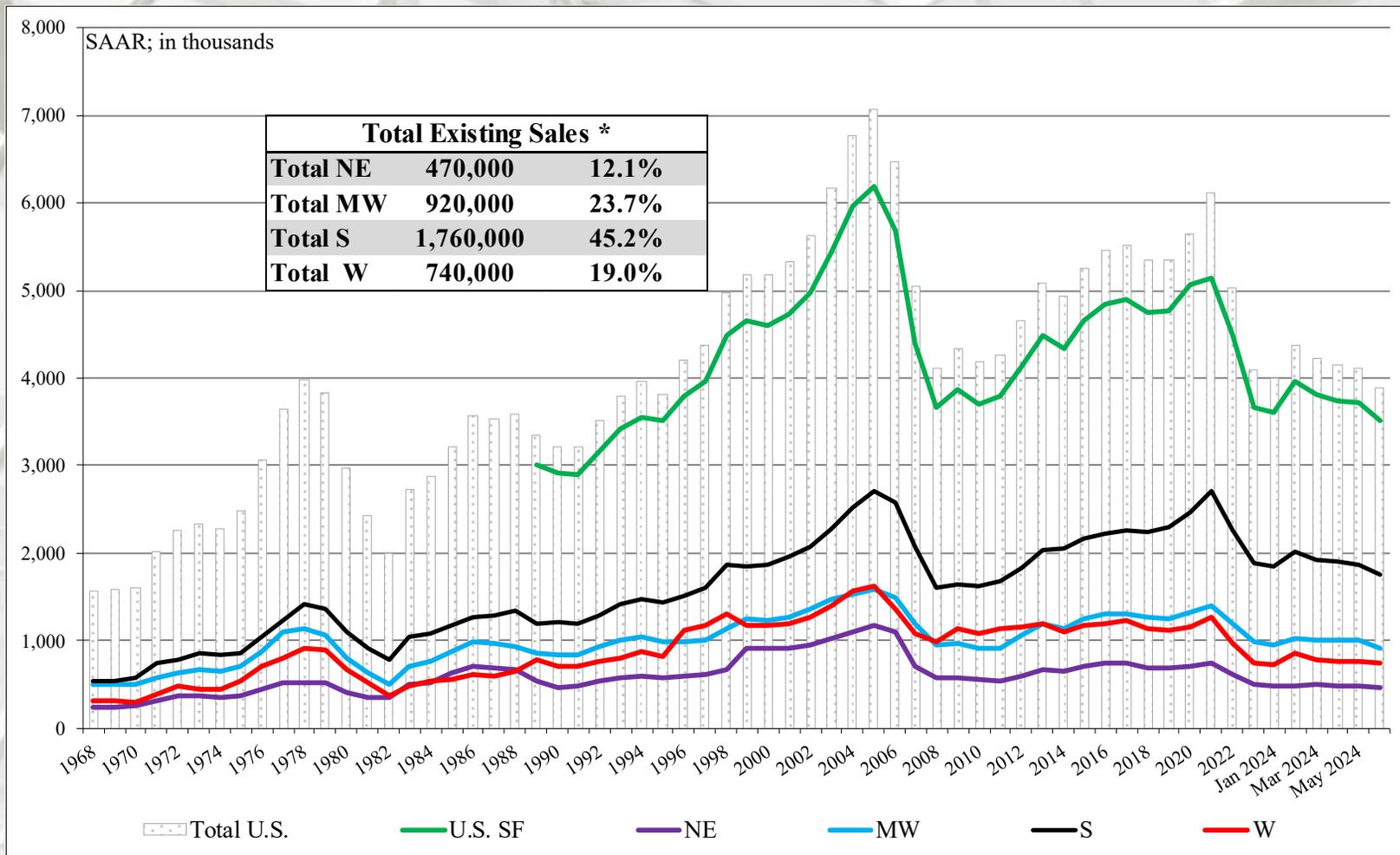
	Existing SF Sales	SF Median Price
June	3,520,000	\$432,700
May	3,710,000	\$424,500
2023	3,680,000	\$415,700
M/M change	-5.1%	1.1%
Y/Y change	-4.3%	4.1%

All sales data: SAAR.

Source: <https://fred.stlouisfed.org/series/EXHOSLUSM495S>; 7/23/24

[Return TOC](#)

Existing House Sales



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

* Percentage of total existing sales.

Source: <https://fred.stlouisfed.org/series/EXHOSLUSM495S>; 7/23/24

U.S. Housing Market

Zillow

New U.S. Homes Are Now Cheaper by the Foot Than Existing Ones

As new construction homes adapt to affordability challenges, they offer a renewed value proposition.

- “New homes sold for \$3.50 less per foot than existing homes in May, the largest discount in at least six years.
- San Diego, Salt Lake City, and Los Angeles offer the biggest discount for new builds.
- Not needing updates or repairs was the top reason for choosing a new home, buyers say.
- Lot sizes and square footage for new homes have fallen significantly over the past six years.

New construction homes commanded a serious premium before the pandemic – from \$15 to \$22 more per foot than existing homes – but they now represent a relative value. Buyers of new homes got a \$3.50 discount per square foot in May compared to those purchasing existing homes. That’s the biggest discount in Zillow median sale price data that stretches back to 2018. ...

While new-build properties are still selling for about \$54,000 more than existing homes, buyers are now seeing savings by the foot nationwide and in 21 major metros – beyond incentives commonly offered by builders. New construction homes in May sold for \$209.70 per square foot nationally, just under the \$213.20 rate for existing homes.

New builds have only been less expensive per square foot than existing homes in five other months since the start of 2018, and this is the biggest savings seen yet. Builders are offering more price cuts than home owners selling their own properties. About [29% of new homes received a price cut in June](#). Meanwhile, [more than half of all builders \(61%\)](#) offer sales incentives other than price cuts, such as mortgage rate buydowns and covering closing costs, which can save buyers thousands of dollars over the first few years of ownership.” – Zillow Research

U.S. Housing Market

Zillow

New U.S. Homes Are Now Cheaper by the Foot Than Existing Ones

As new construction homes adapt to affordability challenges, they offer a renewed value proposition.

Composition considerations

“The new construction homes of today, their lot sizes, and the share that are detached vs. condos have evolved over recent years, all contributing to changing the math when comparing prices against existing homes. Today’s new construction buyers are getting significantly smaller lots than those in prior years, and the lot-size advantage of buying existing homes is growing.

Existing home sale prices are up 52% since before the pandemic, while the sale price of new builds has risen by just 26% over the same period.

Zillow listings data shows new construction lots are shrinking far faster than existing ones. The average lot size for new builds is now 460 feet smaller than in 2018 (about the size of a one-car garage), while lots of existing homes shrank by just 94 square feet.

That’s widened the gap in lot sizes between new homes and existing homes. Buyers of existing homes enjoy lot sizes 1,900 square feet larger, on average, than those purchasing new builds – up from a difference of 1,535 feet in 2018.

Land costs continually rise as buildable land becomes more scarce – making more efficient use of the space is one way for builders to make sure housing is still within reach as costs rise.

In May of 2018, new homes that sold were nearly 500 square feet larger than existing homes that sold. But that size advantage shrank in May of 2024 to just 335 square feet.

Home sizes are falling faster for new builds – those sold in May are 185 square feet smaller than in 2018 – the size of a decent bedroom – compared to just a 24-foot drop over the same period for existing homes that sold.” – Zillow Research

U.S. Housing Market

Zillow

New U.S. Homes Are Now Cheaper by the Foot Than Existing Ones

Composition considerations

“Context is important here. When mortgage rates doubled in 2022, costs skyrocketed for both builders and their buyers, pushing [developers to pivot](#) toward smaller units. This is in response to the massive housing shortage and affordability crisis that has pushed home ownership out of reach for many households.

Another explanation for why the gap in price per square foot shrank and – for now – reversed, is that condos and townhomes represent a far smaller portion of new construction sales than they did in 2018. Condos represent just 3% of all the new construction units sold in May 2024, versus 10% in 2018. Condos are significantly more expensive per square foot of living area than single-family units are, so by making up a smaller portion of the mix, price per square foot should ease accordingly.

The more cyclical nature of the existing-home sales season is another factor affecting prices, and price per square foot by extension. Home price growth of existing homes typically peaks in the spring – growth is already cooling down in June from a May peak. Price growth for new-build homes typically has less seasonal variation.

New construction has taken on added importance by providing [much-needed inventory](#) while home owners are still, in large part, [locked in to their existing low-rate mortgages](#). Home construction took off during the pandemic but so far hasn’t made up for years of underbuilding.

The nationwide housing shortage grew to 4.5 million homes in 2022, according to new [research from Zillow](#). Zillow’s [latest market report](#) shows the number of existing homes for sale on the market is still 33% below pre-pandemic levels nationally, and the deficit is far greater in many markets.” – Zillow Research

U.S. Housing Market

Zillow

New U.S. Homes Are Now Cheaper by the Foot Than Existing Ones

As new construction homes adapt to affordability challenges, they offer a renewed value proposition.

New build buyers want less hassle, within the budget

“About two in five new construction buyers (43%) said the top reason for choosing a new build was that the home was move-in ready, without any need for repairs or updates, according to [Zillow’s New Construction Consumer Housing Trends Report](#).”

Affordability and relief from the heat – two top topics of the times – weigh heavily on the minds of buyers when considering their next home’s most important features. A home within their budget was very or extremely important to 89% of new-build buyers – the same share that said the same thing about air conditioning. That a home is energy efficient was the third most important factor.”
– Zillow Research

U.S. Housing Market

Zonda

New Home Lot Supply Index

“The New Home LSI, backed by data from Zonda, showed lot supply tightened year-over-year across the United States, as well as quarter-over-quarter. The index is a residential real estate indicator based on the number of single-family vacant developed lots and the rate at which those lots are absorbed via housing starts.

- The New Home LSI came in at 56.7 for 2Q24, representing a 9.5% decrease from 2Q23. The 2Q24 data shows a “significantly undersupplied” market nationally. Nationally, the market has been “significantly undersupplied” since 2017.
- On a quarter-over-quarter basis, supply decreased by 1.1% from 1Q24.
- It is important to remember how this index is calculated. We consider the total vacant developed lot supply and adjust it for overall starts activity. The LSI started to rollover in 4Q23 as builders felt more confident increasing starts again and that trend continued into the new year.

“The number one issue reported by home builders today is land and lot supply,” said Ali Wolf, chief economist at Zonda. “Delays in land development, including on the entitlement, zoning, and plan approval side, are driving up development costs and putting a lid on total market activity. The declining LSI for the second quarter underscores this issue, indicating that the pace of new construction continues to outstrip the pace at which vacant developed lots are coming online.”” – Valerie Sheets; Zonda

U.S. Housing Market

2Q24

New Home Lot Supply Index

NATIONAL INDEX

56.7

SFD Lot Supply

Year-over-year

-9.5%

Quarter-over-quarter

-1.1%



The number one issue reported by homebuilders today is land and lot supply. Delays in land development, including on the entitlement, zoning, and plan approval side, are driving up development costs and putting a lid on total market activity. The declining LSI for the second quarter underscores this issue, indicating that the pace of new construction continues to outstrip the pace at vacant developed lots are coming online.



All Wolf
Chief Economist

Most impacted markets

Supply in 9 of 30 select markets loosened year-over-year, led by Orlando, Charlotte, Indianapolis.

Orlando, FL

YOY

+27.9%

Charlotte, NC

YOY

+20.6%

Indianapolis, IN

YOY

+11.4%

U.S. Housing Market

Zonda

New Home Lot Supply Index

Lot supply tightened in most major metropolitan areas in 2Q24, with 21 of 30 decreasing year-over-year, up from 19 last quarter

- “Lot inventory was still categorized as “significantly undersupplied” in most markets in 2Q24. The tightening trend year-over-year reflects the increase in construction activity over the last few quarters.
- The LSI tightened quarter-over-quarter in 14 of Zonda’s select 30 markets, a decrease from 25 in 1Q24.
- Los Angeles/OC tightened the most compared to the same time last year, falling 43% to 16.8. Los Angeles/OC is now the second tightest lot market in the country behind Miami. San Diego rounds out the top three. These markets have severe geographic and topographical limitations on land and lot development.
- The markets where land supply loosened the most on a year-over-year basis were led by Orlando, Charlotte, and Indianapolis. In these markets, starts were up 17%, 14%, and 21%, respectively, compared to the same quarter last year.
- Five markets are considered slightly undersupplied – San Antonio, Dallas, Austin, Atlanta, and Minneapolis. Housing starts increased year-over-year in all of these markets and so did VDLs.” – Valerie Sheets; Zonda

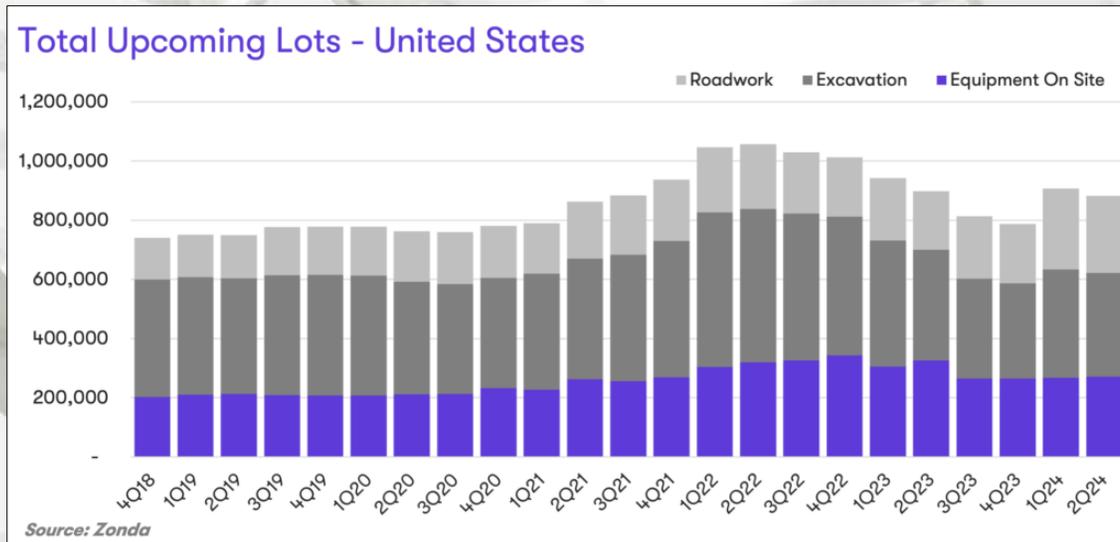
U.S. Housing Market

New Home Lot Supply Index



Source: Zonda

U.S. Housing Market



Zonda

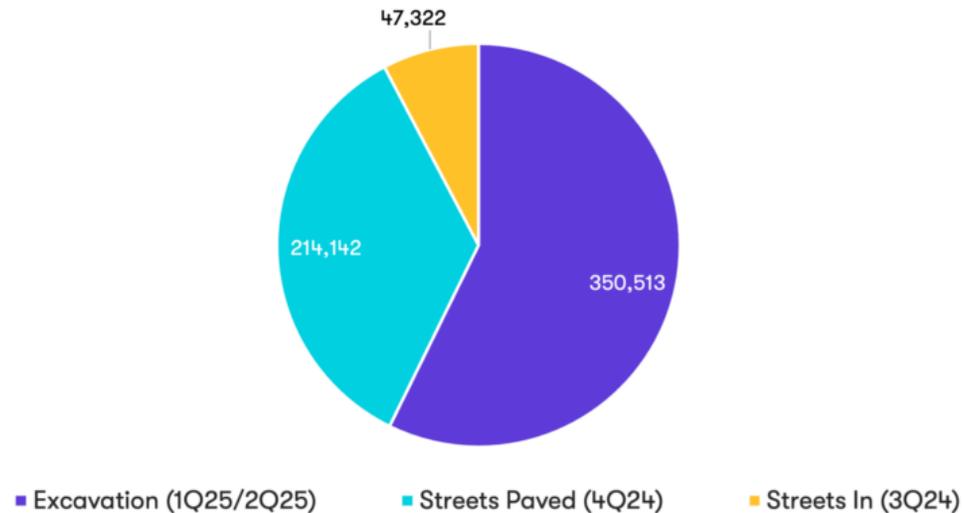
“Zonda also records future lots through the stages of development. The stages range from raw land through streets in, which is the last step before the lot becomes a vacant developed lot. Zonda groups the last few stages into a classification called total upcoming lots, which typically indicates delivery over the next 12-18 months.

Total upcoming lots for 2Q24 decreased 1.7% year-over-year and were down 2.6% from last quarter. Importantly, total upcoming lots are up 12.8% from the recent trough and 17.8% higher than the same quarter in 2019.

Among total upcoming lots, roadwork increased the most, up 32% from the same period last year. Roadwork is comprised of the two smaller stages, streets paved and streets in, and represents the last step in lot development. Lots in the excavation stage slipped 6.0% year-over-year, while those with equipment on site are down 17.0%.” – Valerie Sheets; Zonda

U.S. Housing Market

Expected Vacant Developed Lot Delivery Based on Stage of Construction



Source: Zonda

Zonda

“The largest share of total upcoming lots were in the excavation stage in 2Q24, making up 57% nationally. These lots have an expected delivery between 1Q25 and 2Q25 (the range represents different timeframes from local entitlement processes). Note, not all of the lots in excavation will match Zonda’s estimated timeline.

“Tracking upcoming lots and listening to builder feedback can help guide us on future housing starts,” said Wolf. “Roughly 70% of home builders plan to increase housing production this year and 80% are planning for even more starts in 2025. This confidence is largely driven by two things – the hope of lower interest rates and the anticipation of more lot supply.” – Valerie Sheets; Zonda

U.S. Housing Prices

Federal Housing Finance Agency

U.S. House Price Index

FHFA House Price Index Unchanged in May; Up 5.7 Percent from Last Year

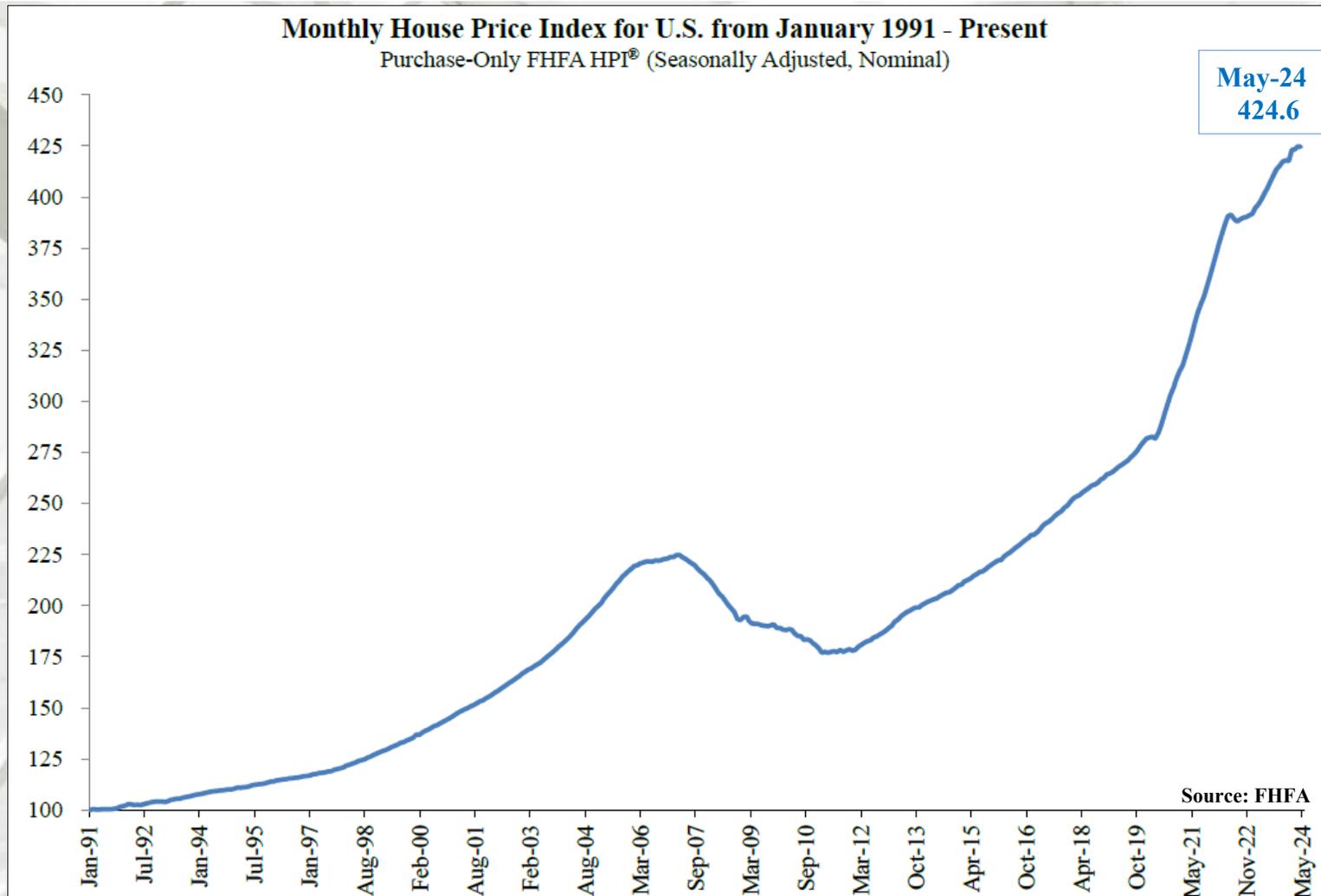
Significant Findings

“U.S. house prices were **unchanged** in May, according to the Federal Housing Finance Agency (FHFA) seasonally adjusted monthly House Price Index (HPI®). House prices rose **5.7 percent** from May 2023 to May 2024. The previously reported 0.2 percent price increase in April was revised upward to 0.3 percent.

For the nine census divisions, seasonally adjusted monthly price changes from April 2024 to May 2024 ranged from **-0.5 percent** in the West North Central division to **+0.3 percent** in the New England division. The 12-month changes were all positive, ranging from **+2.4 percent** in the West South Central division to **+9.2 percent** in the New England division.” – Adam Russell, FHFA

“U.S. house price movement was flat in May. The slowdown in U.S. house price appreciation continued in May amid a slight rise in both mortgage rates and housing inventory.” – 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 Breaks Previous Month's All-Time High in April 2024

“S&P Dow Jones Indices (S&P DJI) released the May 2024 results for the S&P CoreLogic Case-Shiller Indices. The leading measure of U.S. home prices shows that the upward trend continued to decelerate in May 2024. 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 5.9% annual gain for May, down from a 6.4% annual gain in the previous month. The 10-City Composite saw an annual increase of 7.7%, down from an 8.1% annual increase in the previous month. The 20-City Composite posted a year-over-year increase of 6.8%, dropping from a 7.3% increase in the previous month. New York reported the highest annual gain among the 20 cities with a 9.4% increase in May, followed by San Diego and Las Vegas with increases of 9.1% and 8.6%, respectively. Portland once again held the lowest rank for the smallest year-over-year growth, notching a 1.0% annual increase in May.

Month-Over-Month

The U.S. National Index the 20-City Composite, and the 10-City Composite upward trends continued to decelerate from last month, with pre-seasonality adjustment increases of 0.9%, 1.0%, and 1.0%, respectively.

After seasonal adjustment, the U.S. National Index posted the same month-over-month change of 0.3% as last month, while the 20-City and 10-City Composite reported a monthly change of 0.3% and 0.4%, respectively.” – Brian D. Luke, Head of Commodities, Real & Digital Assets, S&P DJI

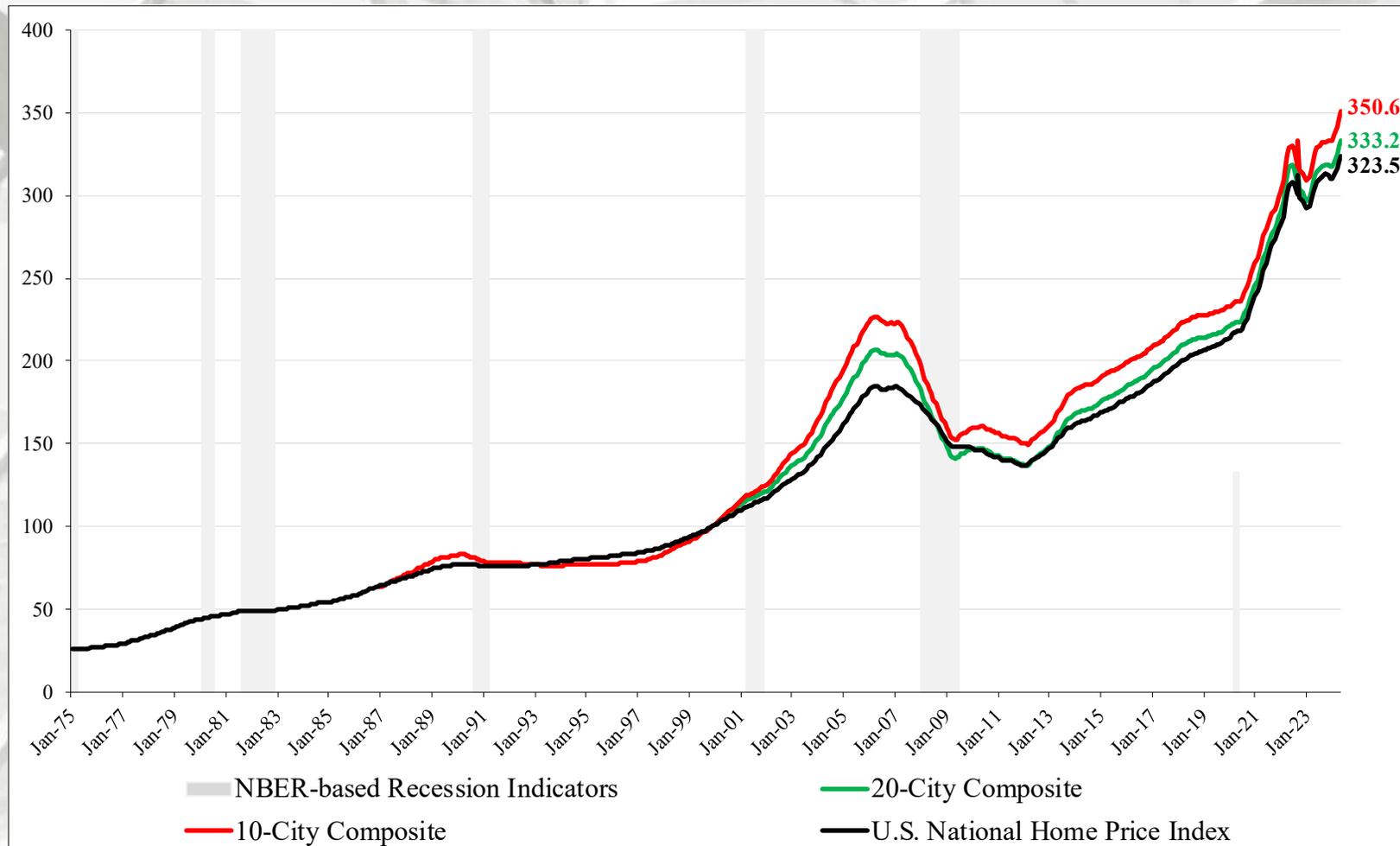
U.S. Housing Prices

S&P CoreLogic Case-Shiller Index Analysis

“While annual gains have decelerated recently, this may have more to do with 2023 than 2024, as recent performance remains encouraging. Our home price index has appreciated 4.1% year-to-date, the fastest start in two years. Covering the six-month period dating to when mortgage rates peaked, our national index has risen the past four months, erasing the stall experienced late last year. Collectively, all 20 markets covered continue to trade in a homogeneous pattern. Coming into the 2024 presidential election, traditional red states are in a dead heat with blue states, both averaging 5.9% gains annually.

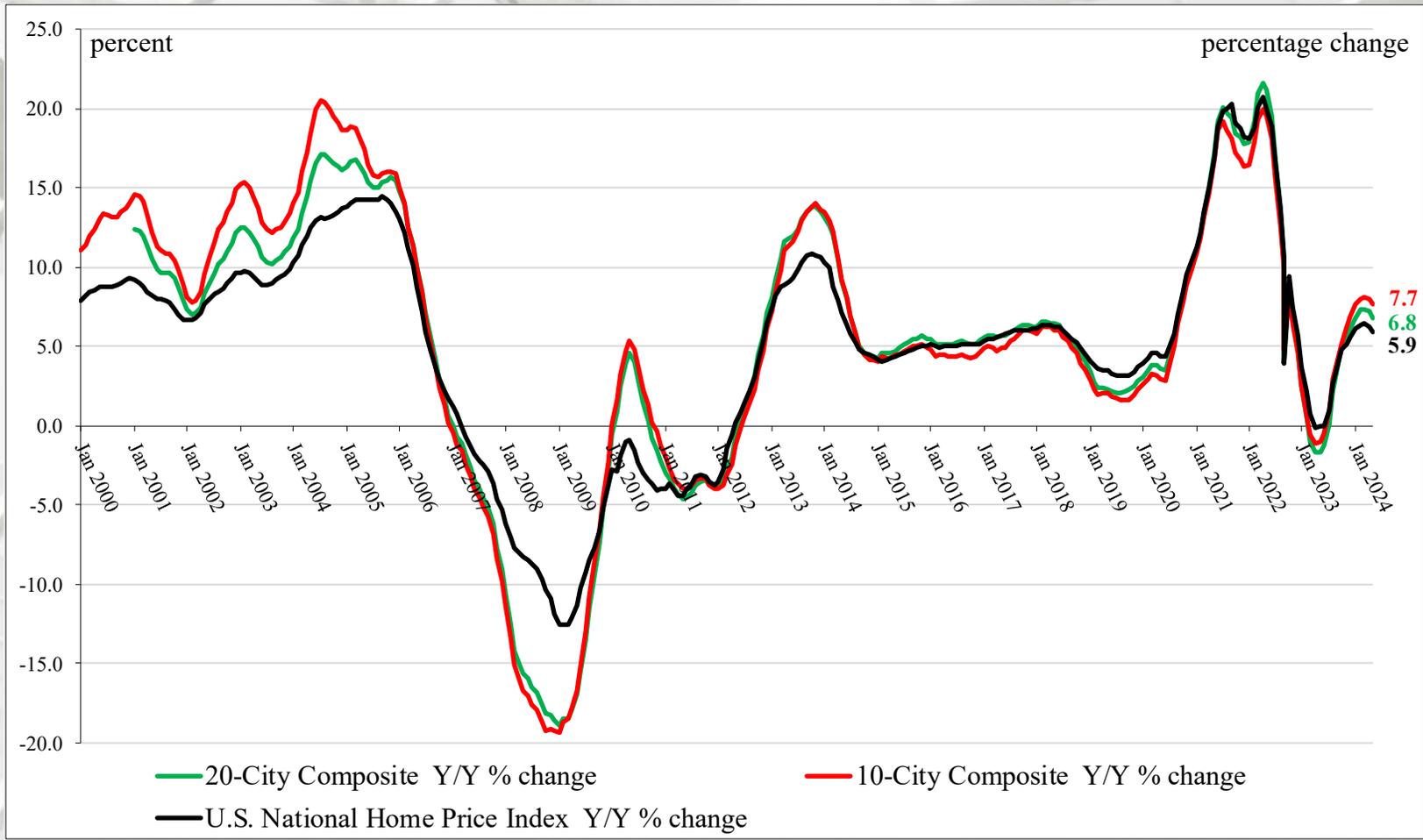
The Big Apple returned to the top of the leader boards, toppling San Diego from its six-month perch. New York’s 9.4% annual return outpaced San Diego and Las Vegas, by 0.3% and 0.7%, respectively. All 20 markets observed annual gains for the last six months. The last time we saw that long a streak was when all markets rose for three years consecutively during the COVID housing boom. This rally pales in comparison in both duration and annual gains, with above trend growth of 6.2%. The waiting game for the possibility of favorable changes in lending rates continues to be costly for potential buyers as home prices march forward.” – 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).

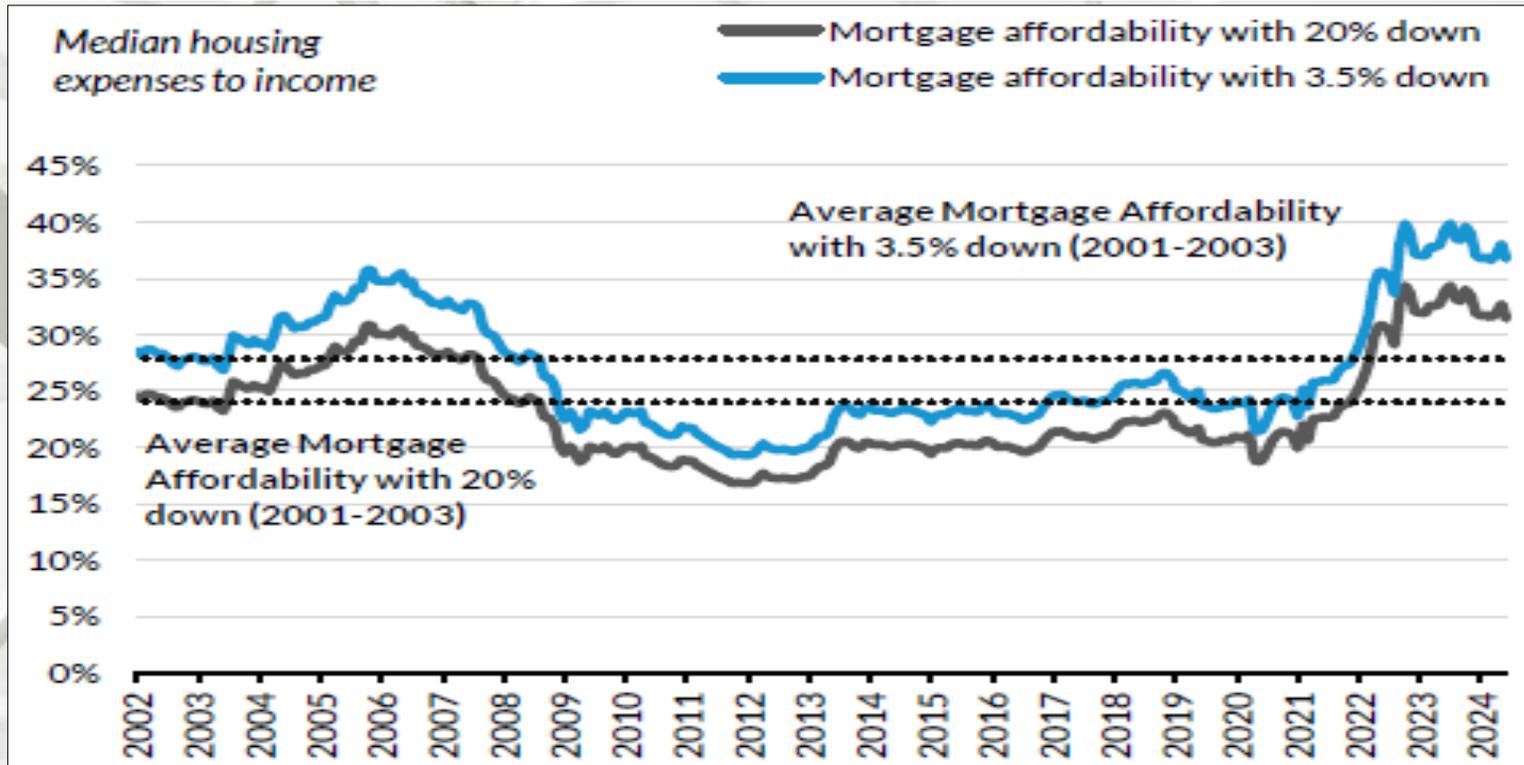
S&P/Case-Shiller Home Price Indices



Y/Y Price Change

From May 2023 to May 2024, the National Index indicated a 5.9% increase; the Ten-City increased by 7.7%, and the Twenty-City escalated by 6.8%.

U.S. Housing Affordability



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

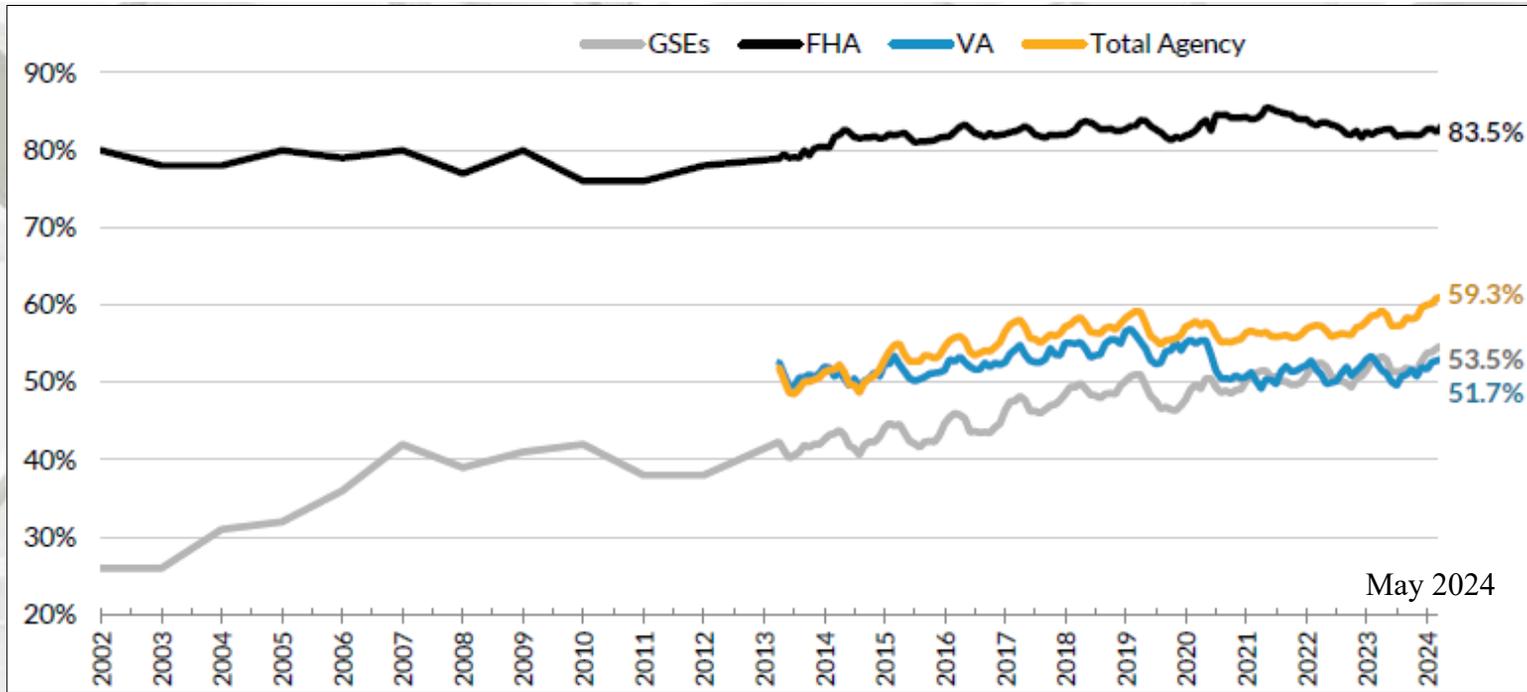
Note: All series measure the first-time home buyer share of purchase loans for principal residences.

Urban Institute

National Mortgage Affordability Over Time

“Mortgage rates remain elevated and in response, mortgage affordability remains close to the worst level since the inception of this series in 2002. As of June 2024, with a 20 percent down payment, the share of median income needed for the monthly mortgage payment stood at 31.4 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.

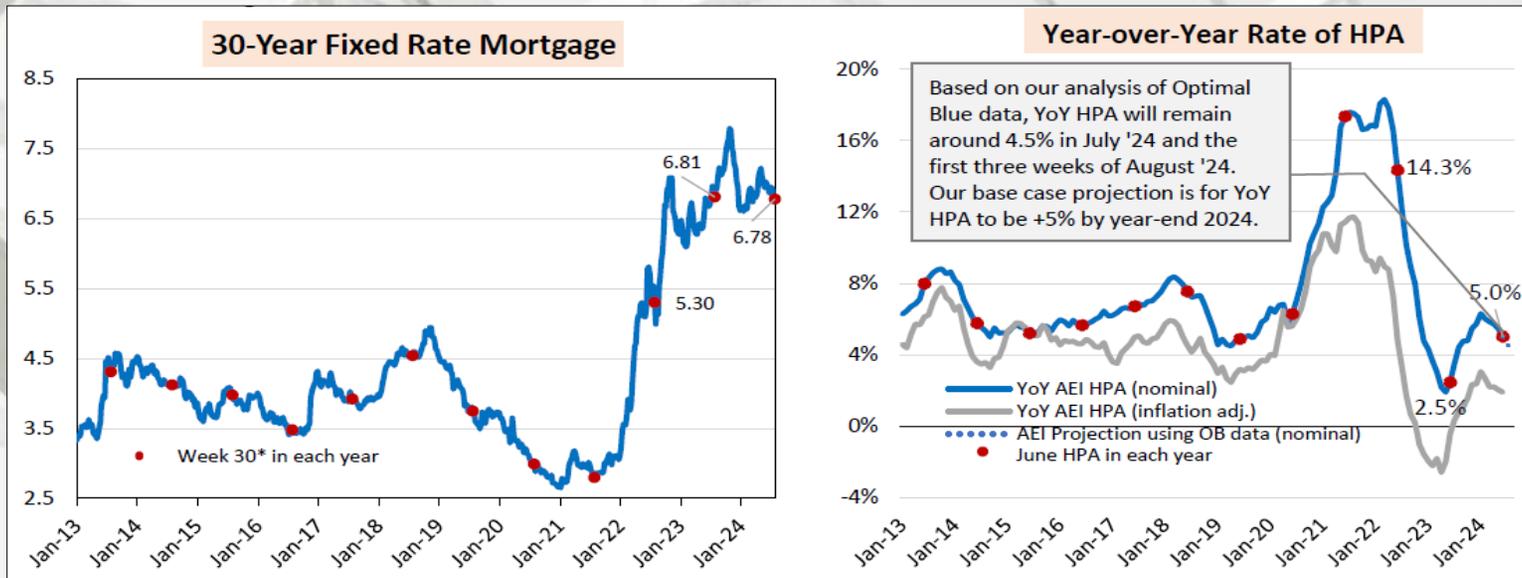
Note: All series measure the first-time home buyer share of purchase loans for principal residences.

Urban Institute

First-time House Buyer Share

“In May 2024, the first-time home buyer (FTHB) share for FHA, which has always been more focused on first time home buyers, was 83.5 percent. The FTHB share of GSE lending in February was 53.5 percent; the VA share was 51.7 percent. ...” – Laurie Goodman *et. al*, Vice President, Urban Institute

U.S. Housing Affordability



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

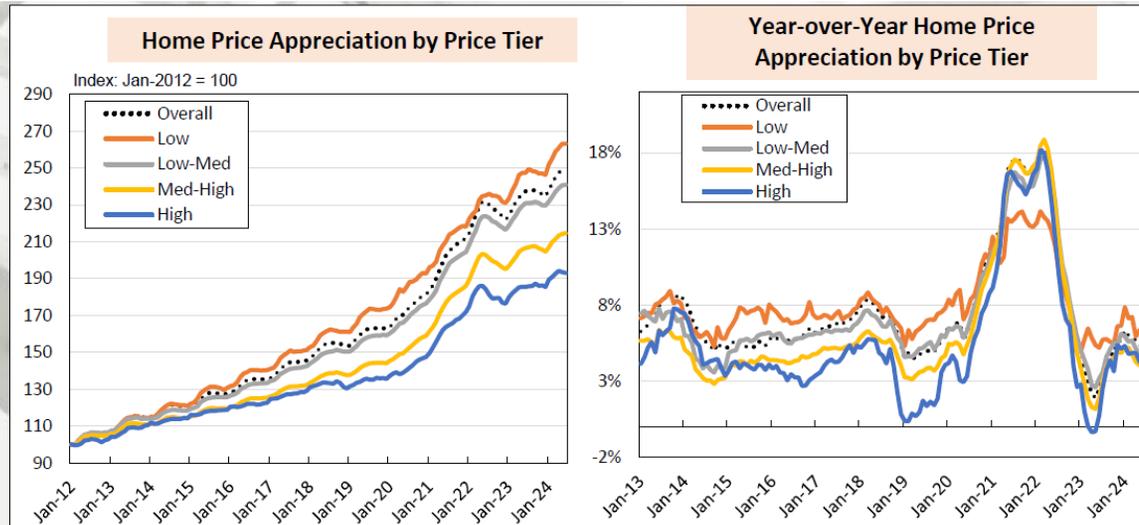
Note: Data are for the entire country. Data for June 2024 are preliminary.
Source: AEI Housing Center, www.AEI.org/housing

AEI Housing Center

**June 2024's preliminary YoY HPA was 5.0%,
down from 5.5% a month ago and 2.5% a year ago.**

- “June 2024’s HPA was 0.1%. As our projection on the following slide indicates, YoY HPA is expected to be around 5% by Dec. 2024.
- Despite subdued purchase activity and relatively high rates, the 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, higher housing debt ratios, work from home, and ongoing home price arbitrage opportunities further support HPA gains that outpace inflation.
- 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

Home Price Appreciation by Price Tier



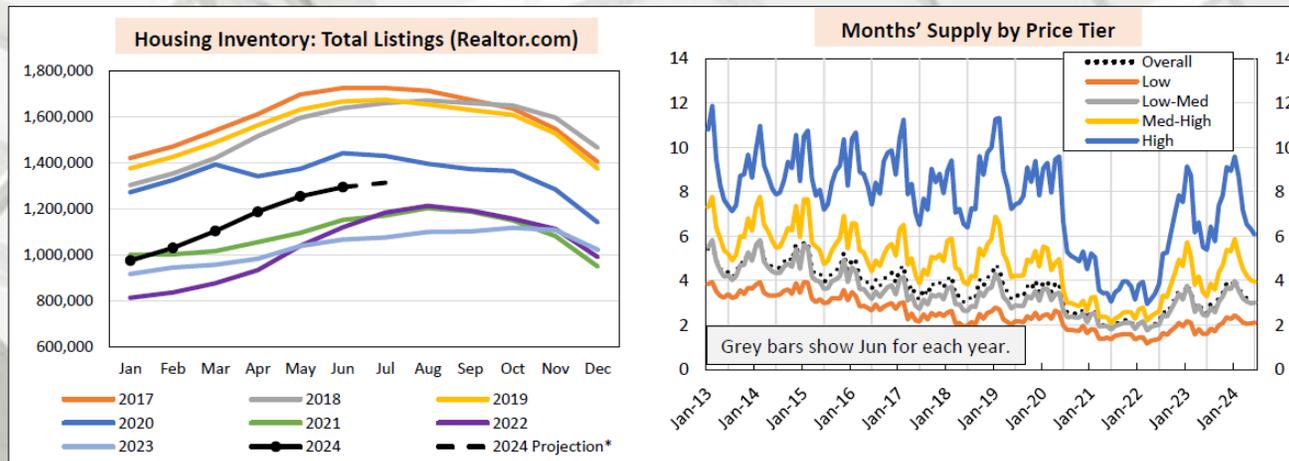
Note: Data are for the entire country. Data for June 2024 are preliminary .
Source: AEI Housing Center, www.AEI.org/housing

AEI Housing Center

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

- Preliminary numbers for June 2024 indicate that the low price tier leads the YoY change in tier home prices at 6.4 % due to low months’ supply (2 .1 months), low unemployment, and increasing demand promoted by agency credit easing (right panel).
- The med high and high price tiers are generally not eligible for federal first-time buyer assistance, leaving them more dependent on the Fed’s monetary punchbowl. As a result, they had the largest slow downs in YoY HPA since March 2022.
- As of June 2024, all price tiers have shown relatively robust YoY HPA from the slowest at 3.9% (med high) to the highest of 6.4% (low).” – Edward Pinto, Senior Fellow and Director and Tobias Peter, Research Fellow and Assistant Director, AEI Housing Center

Housing Inventory and Months' Supply



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

AEI Housing Center

“Months’ remaining supply was 3.2 months (not seasonally-adjusted) in June 2024. Housing was at pre-pandemic levels (the average for June 2017, 2018, and 2019 was 3.2).

- June’s 2024 housing inventory was up 3% and 22% from May 2024 and June 2023, respectively. The inventory today is still 22% below June 2019, the “last normal” month prior to the pandemic, indicating an unhealthy market (left panel).
 - The projection for July indicates total listings increased 1.4% over the prior month.
- Months’ supply remained unchanged at 3.2 months in June 2024 compared to May 2024, however up from 2.5 months a year ago, but below 3.4 months in June 2019, the last comparable pre-pandemic month right panel). YoY HPA was 5.0% in June 2024 compared to 4.9% in June 2019, indicative of a continuing strong seller’s market and helps explain the robust YoY HPA
- Notwithstanding rates around 7%, the supply demand imbalance evidenced by continued tight months’ supply will fuel continued upward price pressures (left panel).
- Based on an analysis of historical data , a 6 8 months’ supply represents a national market that is at a nominal price equilibrium or neutral point and would need to increase 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

Mortgage Credit Availability Increased in July

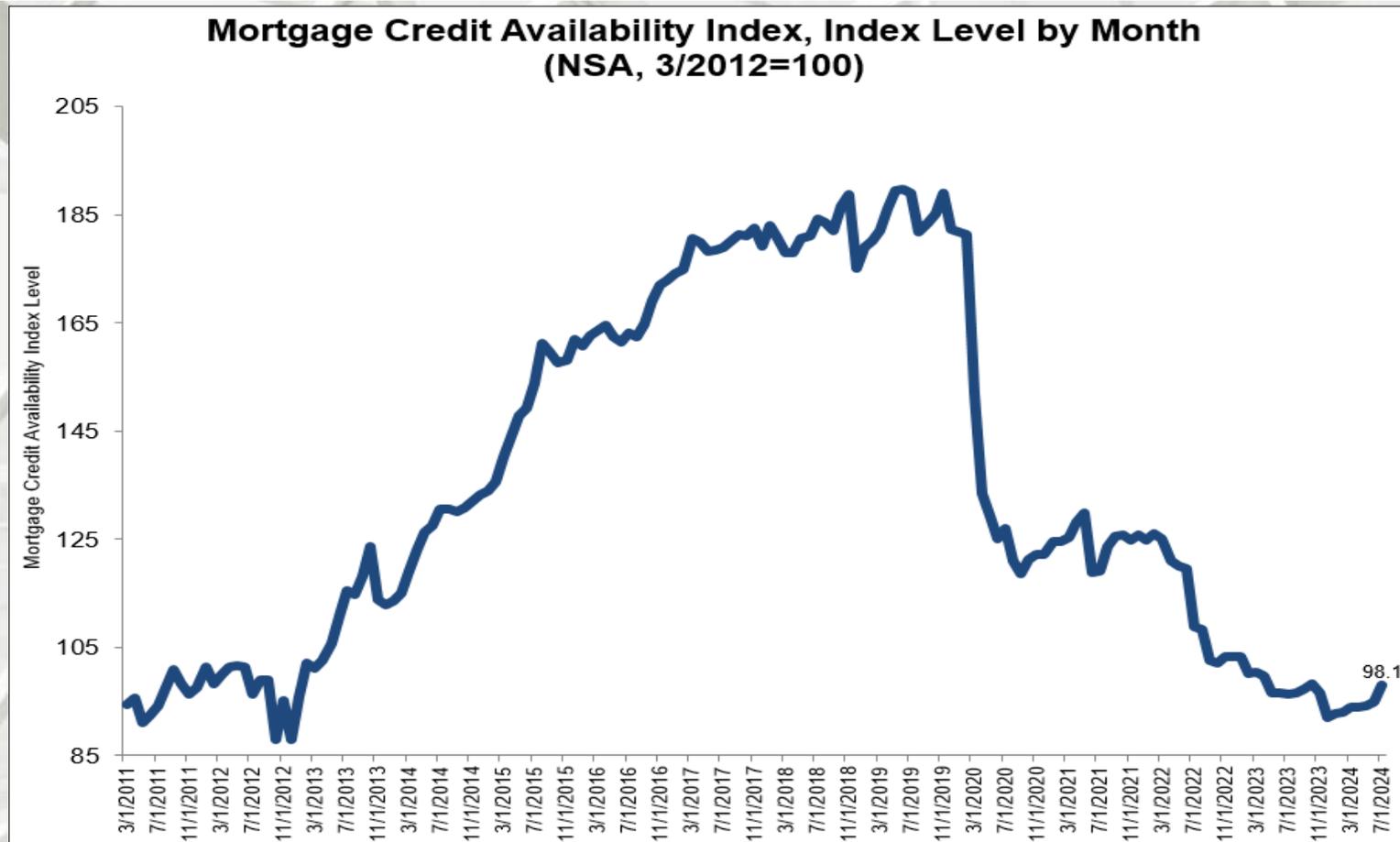
“Mortgage credit availability increased in July according to the Mortgage Credit Availability Index (MCAI), a report from the Mortgage Bankers Association (MBA) that analyzes data from ICE Mortgage Technology.

The MCAI rose by 3.3 percent to 98.1 in July. 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 6.4 percent, while the Government MCAI decreased by 0.1 percent. Of the component indices of the Conventional MCAI, the Jumbo MCAI increased by 9.3 percent, and the Conforming MCAI rose by 0.7 percent.

Overall credit availability grew to its highest level since October 2023, driven by increased conventional loan offerings such as ARMs and cash-out refinance loans. We also saw credit supply expand for jumbo loans, particularly in the non-QM space. Industry capacity has been low for some time, but we have now seen more than six months of credit expansion, which should be supportive for home buyers and refinance borrowers, as rates have declined in recent weeks.” – Joel Kan, Associate Vice President of Economic and Industry Forecasting; MBA

U.S. Housing Finance

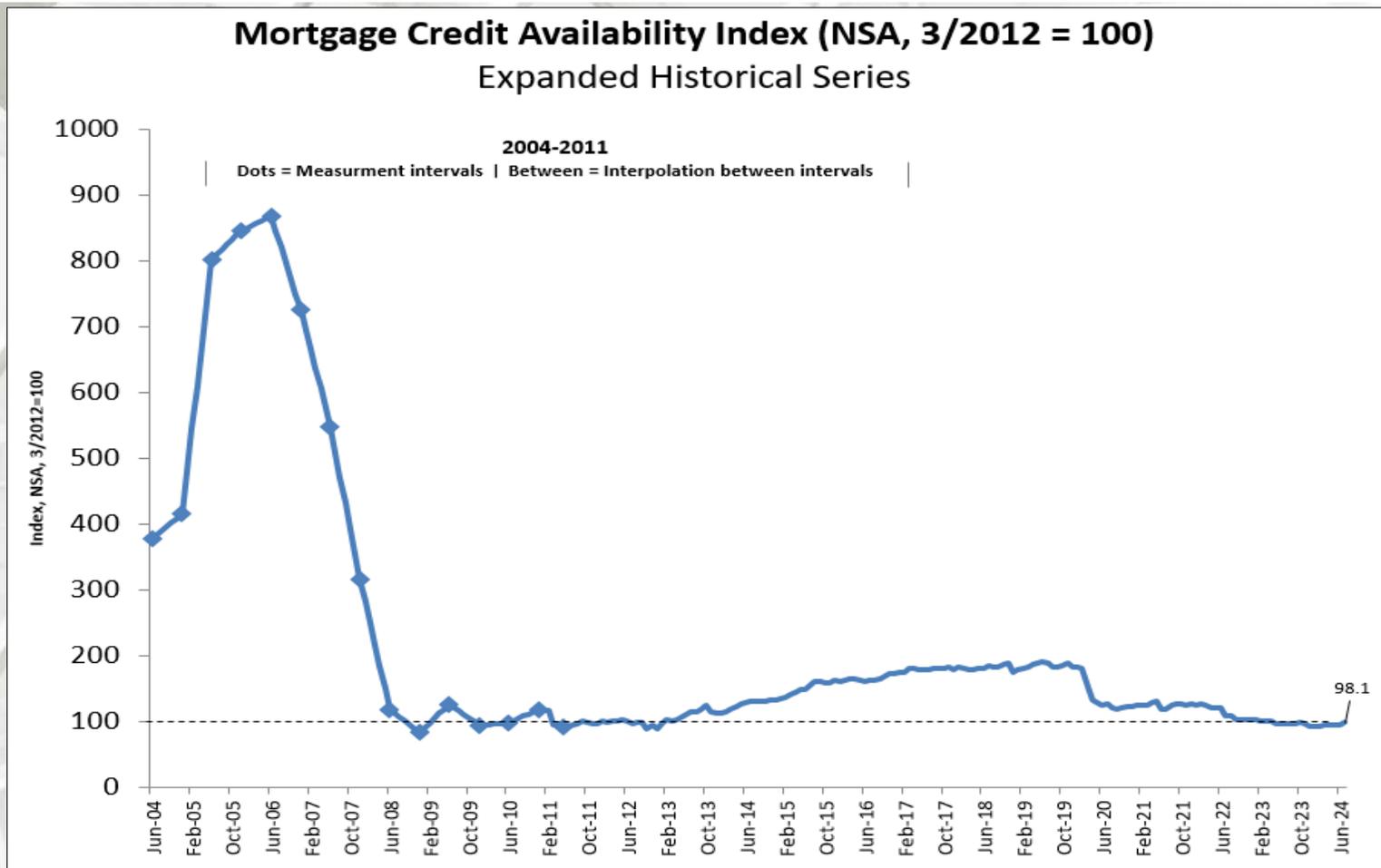
Mortgage Credit Availability (MBA)



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

July 19, 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)	1,369	1,455	1,380	1,481	1,407	1,348	1,351	1,384	1,408	1,413	1,434	1,448	1,421	1,373	1,426	1,427
Single-Family	828	935	972	1,060	1,062	1,006	1,010	1,052	1,084	1,095	1,118	1,138	949	1,033	1,109	1,123
Two or More	541	520	409	421	345	342	341	332	324	318	316	310	473	340	317	304
Home Sales (SAAR, Thous)																
Total Existing Homes	4,327	4,250	4,020	3,797	4,190	4,039	4,280	4,404	4,448	4,442	4,486	4,582	4,099	4,228	4,490	4,747
New Homes	638	691	693	644	667	668	729	763	791	796	799	812	667	707	800	807
FHFA US House Price Index (YOY % Change)	4.6	3.3	5.6	6.4	6.6	6.0	5.3	4.5	3.6	3.4	3.2	3.3	6.4	4.5	3.3	3.5
Median Price of Total Existing Homes (Thous \$)	366.7	397.5	400.9	387.3	385.3	411.2	408.1	407.1	401.4	405.5	408.5	400.2	388.1	402.9	403.9	395.3
Median Price of New Homes (Thous \$)	434.8	418.7	434.3	421.8	429.2	418.4	419.1	423.1	421.2	425.2	428.7	429.8	427.4	422.5	426.2	429.3
Interest Rates																
30-Year Fixed Rate Mortgage (%)	6.4	6.5	7.0	7.3	6.7	7.0	6.8	6.6	6.4	6.3	6.2	6.0	7.3	6.6	6.0	5.8
10-Year Treasury Yield (%)	3.6	3.6	4.2	4.4	4.2	4.4	4.2	4.1	4.0	4.0	3.9	3.8	4.4	4.1	3.8	3.8
Mortgage Originations																
Total 1- to 4-Family (Bil \$)	333	463	444	399	377	429	494	477	460	551	555	540	1,639	1,777	2,106	2,298
Purchase	267	371	363	324	291	336	372	347	322	405	402	386	1,325	1,346	1,515	1,649
Refinance	66	92	81	75	86	93	122	130	138	146	153	154	314	431	591	649
Refinance Share (%)	20	20	18	19	23	22	25	27	30	26	28	29	19	24	28	28
FHA Originations (Bil \$)													198	200	208	201
Total 1- to 4-Family (000s loans)	895	1,239	1,165	1,034	967	1,081	1,238	1,189	1,143	1,348	1,350	1,306	4,333	4,475	5,146	5,435
Purchase	686	948	913	804	708	806	880	812	747	932	918	874	3,350	3,206	3,471	3,655
Refinance	210	291	252	230	259	276	357	377	396	416	432	431	983	1,269	1,676	1,780
Refinance Share (%)	23	23	22	22	27	26	29	32	35	31	32	33	23	28	33	33
Mortgage Debt Outstanding																
1- to 4-Family (Bil \$)	13,680	13,778	13,901	13,994	14,071	14,144	14,236	14,332	14,427	14,533	14,640	14,735	13,994	14,332	14,735	15,118

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

July 19, 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	3.4	1.4	1.8	1.4	1.4	1.4	1.4	1.3	1.5	3.1	1.5	1.4	1.6
Personal Consumption Expenditures	3.8	0.8	3.1	3.3	1.5	1.0	1.9	1.7	1.7	1.4	1.2	1.4	2.7	1.5	1.4	1.6
Business Fixed Investment	5.7	7.4	1.4	3.7	4.4	5.9	1.7	2.1	2.1	1.5	1.0	0.7	4.6	3.5	1.3	1.0
Residential Investment	-5.3	-2.2	6.7	2.8	16.0	-3.0	-8.3	-4.0	4.4	4.7	4.1	6.0	0.4	-0.3	4.8	1.7
Govt. Consumption & Investment	4.8	3.3	5.8	4.6	1.8	0.4	1.2	0.7	0.7	0.4	0.4	0.4	4.6	1.0	0.5	0.3
Net Exports (Bil. Chain 2012\$)	-1048.8	-1039.0	-1043.1	-1032.7	-1074.3	-1125.8	-1104.6	-1097.8	-1109.6	-1116.8	-1117.1	-1112.0	-1040.9	-1100.6	-1113.9	-1075.6
Inventory Investment (Bil. Chain 2012\$)	24.1	13.2	68.9	48.6	25.4	83.1	68.3	61.9	51.6	52.7	56.1	55.1	38.7	59.7	53.9	57.1
Consumer Prices (YOY)	5.7	4.0	3.6	3.2	3.2	3.2	2.9	2.7	2.5	2.4	2.2	2.1	3.2	2.7	2.1	2.1
Percent																
Unemployment Rate	3.5	3.6	3.7	3.8	3.8	4.0	4.2	4.3	4.4	4.5	4.6	4.7	3.6	4.1	4.5	4.6
Federal Funds Rate	4.875	5.125	5.375	5.375	5.375	5.375	5.125	4.875	4.625	4.375	4.125	3.875	5.375	4.875	3.875	3.375
10-Year Treasury Yield	3.6	3.6	4.2	4.4	4.2	4.4	4.2	4.1	4.0	4.0	3.9	3.8	4.4	4.1	3.8	3.8

Notes:

The Fed Funds Rate forecast is shown as the mid point of the Fed Funds range at the end of the period.

All data except interest rates are seasonally adjusted

The 10-Year Treasury Yield is the average for the quarter, while the annual value is the Q4 value

Forecast produced with the assistance of the Macroeconomic Advisers' model

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MBA

MORTGAGE BANKERS ASSOCIATION

Summary

In conclusion:

Housing data, month-over-month and year-over-year, were mostly negative. On a month-over-month basis total and multi-family starts, total and multi-family permits and housing completion were positive. Year-over-year, single-family starts, total and single-family completions, and total and single-family construction spending were positive. The influence of increased mortgage rates is evident, as aggregate costs have decreased affordability and the “lock-in” effect have obfuscated sales. New and existing house sales continued their respective declines.

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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