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





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Opening Remarks

Housing data, in aggregate, month-over-month and year-over-year were mixed. On a month-over-month basis single-family starts and permits, total and multi-family permits, single-family completions, spending, and existing and new house sales were positive. Year-over-year, multi-family permits; completions, construction spending, and existing and new house sales were positive. The influence of mortgage rates is evident, as aggregate costs have decreased affordability, and the "lock-in" effect have obfuscated sales.

The January 16th Atlanta Fed GDPNow[™] total residential investment spending forecast is 3.3% for Q4 2024. Quarterly log change for new private permanent site expenditures were projected at -13.2%; the improvement spending forecast was 12.5.0%; and the manufactured/mobile home expenditures projection was 0.1% (all: quarterly log change and at a seasonally adjusted annual rate). ¹

"The home building sector seems strangely slow given our population growth and the ongoing need to scrap older homes due to disasters or for knockdowns. We think government rules and regulations are likely the major hurdle for builders in much of the country, but home construction might also be facing headwinds from a low unemployment rate (which makes it hard to find workers) as well as relatively high mortgage rates. Notably, while mortgage rates were trending lower leading up to the first rate cut announcement from the Federal Reserve in September, these rates are up roughly 50bps since then. That said, there are some tailwinds for housing construction, as well. Many owners of existing homes are hesitant to sell and give up their fixed sub-3% mortgage rates, so prospective buyers will often need new builds. In addition, Millennials are now the largest living generation in the US and have begun to enter the housing market in force, which represents a demographic tailwind for activity. Putting it together, we don't see housing as a major driver of economic growth in the near term, but we're not expecting a housing bust like the 2000s on the way, either." – Brian Wesbury, Chief Economist and Robert Stein, Deputy Chief Economist; First Trust Advisors L. P.

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,

November 2024 Housing Scorecard

		M/M	-	Y/Y
Housing Starts		1.8%	•	14.6%
Single-Family (SF) Starts		6.4%	•	10.2%
Multi-Family (MF) Starts*		23.2%	•	27.6%
Housing Permits		5.2%	•	1.0%
SF Permits		0.5%	•	2.3%
MF Permits*		15.4%		1.6%
Housing Under Construction	•	1.8%	•	14.8%
SF Under Construction	•	0.8%	•	6.3%
Housing Completions		1.9%		9.2%
SF Completions		3.3%		7.0%
New SF House Sales		5.9%		8.7%
Private Residential Construction Spending		0.1%		3.1%
SF Construction Spending		0.3%	V	0.7%
Existing House Sales ¹		4.8%		6.1%
* All 11' C 'l (al 'l)	.1	11 37/3	7	

^{*} All multi-family (2 to 4 + \geq 5-units)

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

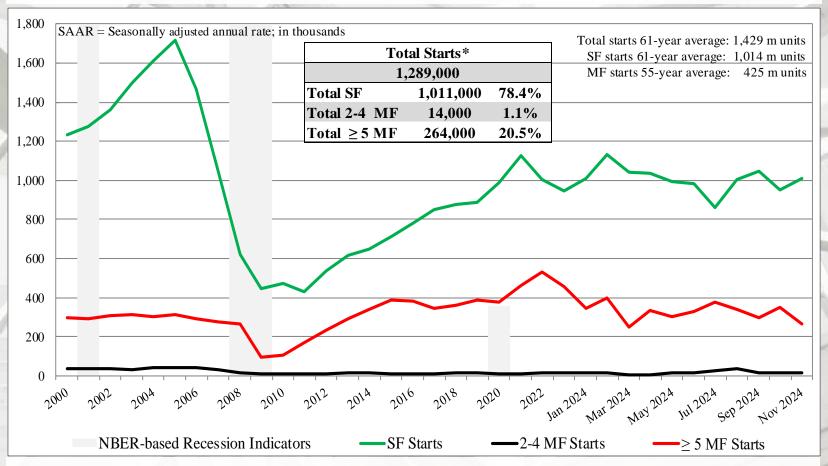
New Housing Starts

	Total Starts*	SF Starts	MF 2-4 Starts**	MF ≥5 Starts
November	1,289,000	1,011,000	14,000	264,000
October	1,312,000	950,000	14,000	348,000
2023	1,510,000	1,126,000	13,000	371,000
M/M change	-1.8%	6.4%	0.0%	-24.1%
Y/Y change	-14.6%	-10.2%	7.7%	-28.8%

^{*} All start data are presented at a seasonally adjusted annual rate (SAAR).

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

Total Housing Starts

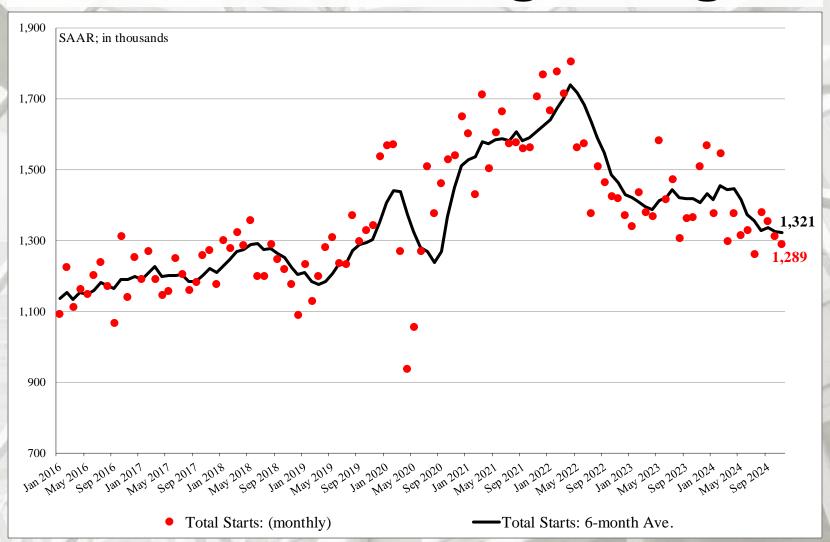


The US DOC does not report 2 to 4 multi-family starts directly; this is an estimation: (Total starts - (SF + 5-unit MF).

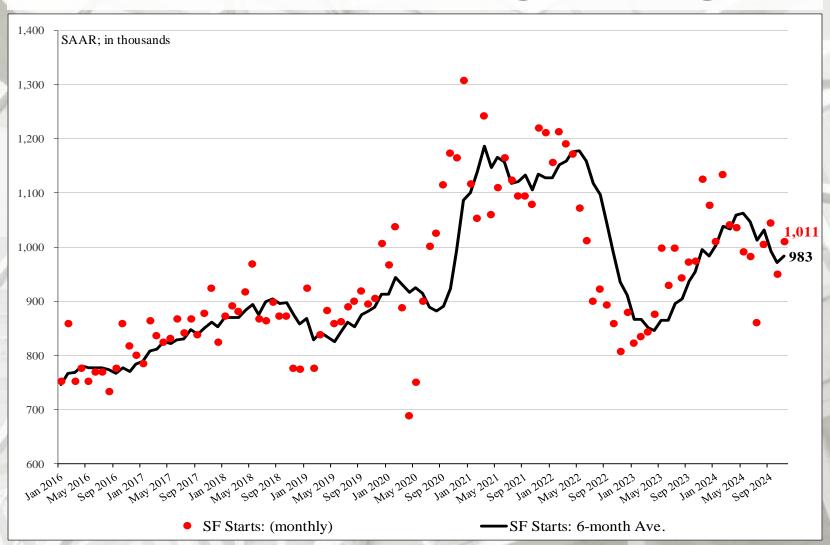
NBER based Recession Indicator Bars for the United States from the Period following the Peak through the Trough (FRED, St. Louis).

^{*} Percentage of total starts.

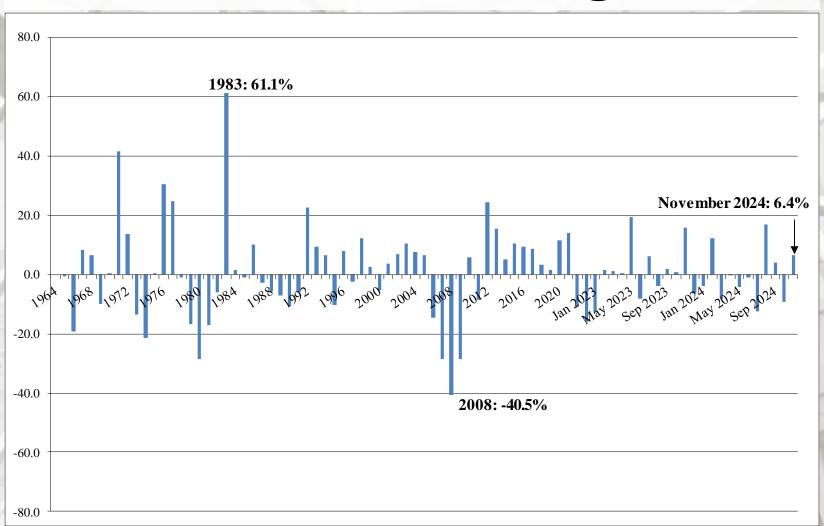
Total Housing Starts: Six-Month Moving Average



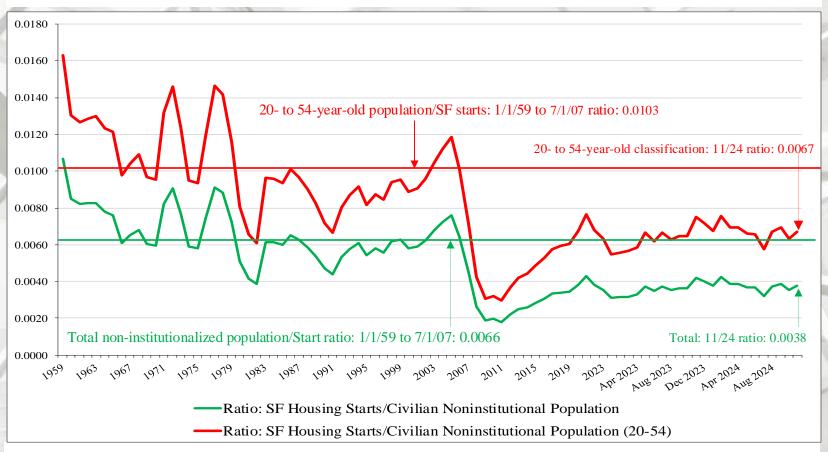
SF Housing Starts: Six-Month Moving Average



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



New SF Starts

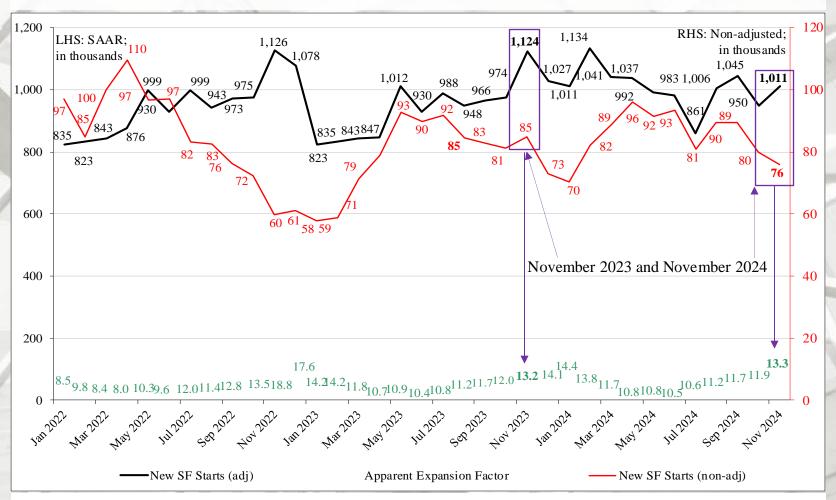


New SF starts adjusted for the US population

From November 1959 to November 2007, the long-term ratio of new SF starts to the total US non-institutionalized population is 0.0066. In November 2024 it was 0.0038 – an increase from October (0.0035). The long-term ratio of non-institutionalized population, aged 20 to 54 is 0.0103; in November 2024 it was 0.0067 – also an improvement from October (0.0063). 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**
November	115,000	46,000	69,000
October	104,000	60,000	44,000
2023	129,000	72,000	57,000
M/M change	10.6%	-23.3%	56.8%
Y/Y change	-10.9%	-36.1%	21.1%
	MW Total	MW SF	MW MF
November	MW Total 158,000	MW SF 132,000	MW MF 26,000
November October			
	158,000	132,000	26,000
October	158,000 220,000	132,000 137,000	26,000 83,000

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).

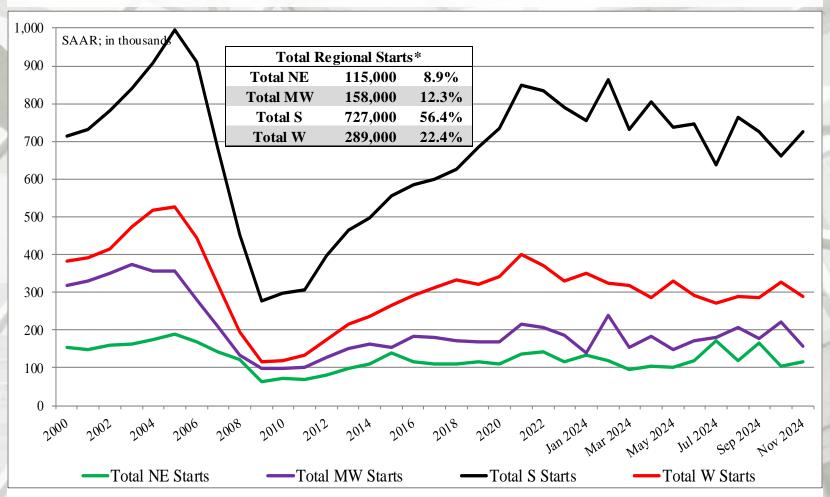
New Housing Starts by Region

	S Total	S SF	S MF**
November	727,000	621,000	106,000
October	660,000	525,000	135,000
2023	818,000	631,000	187,000
M/M change	10.2%	18.3%	-21.5%
Y/Y change	-11.1%	-1.6%	-43.3%
	W Total	W SF	W MF
November	W Total 289,000	W SF 212,000	W MF 77,000
November October			
	289,000	212,000	77,000
October	289,000 328,000	212,000 228,000	77,000 100,000

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

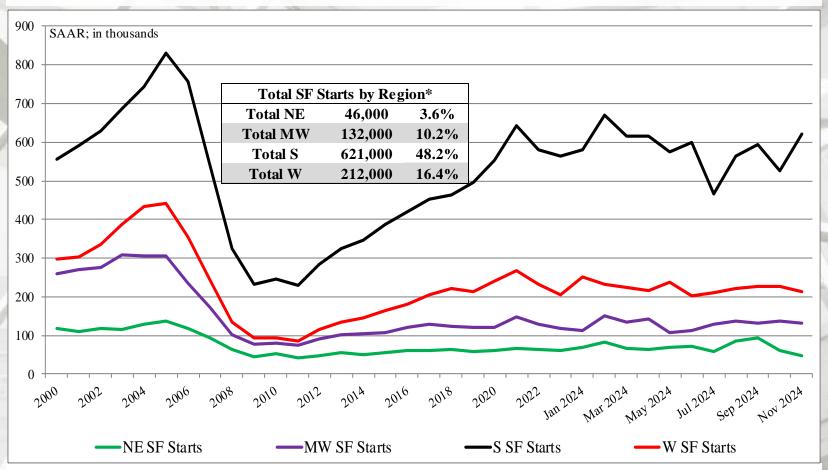


NE = Northeast, MW = Midwest, S = South, W = West

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

^{*} Percentage of total starts.

Total SF Housing Starts by Region

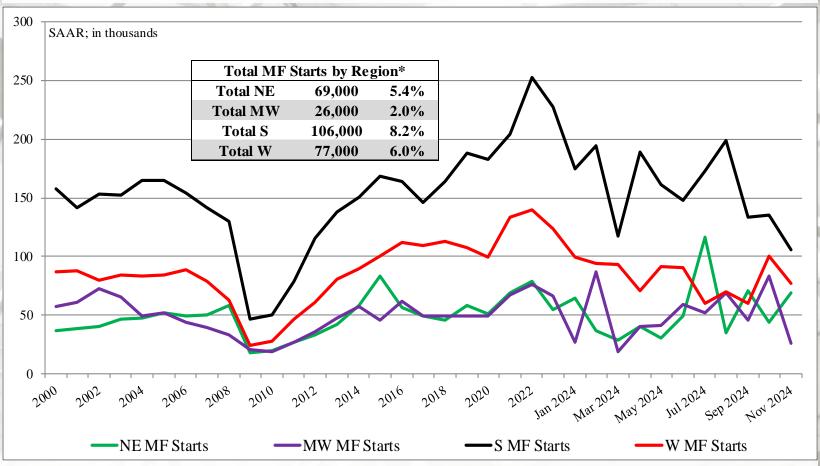


NE = Northeast, MW = Midwest, S = South, W = West

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

^{*} Percentage of total starts.

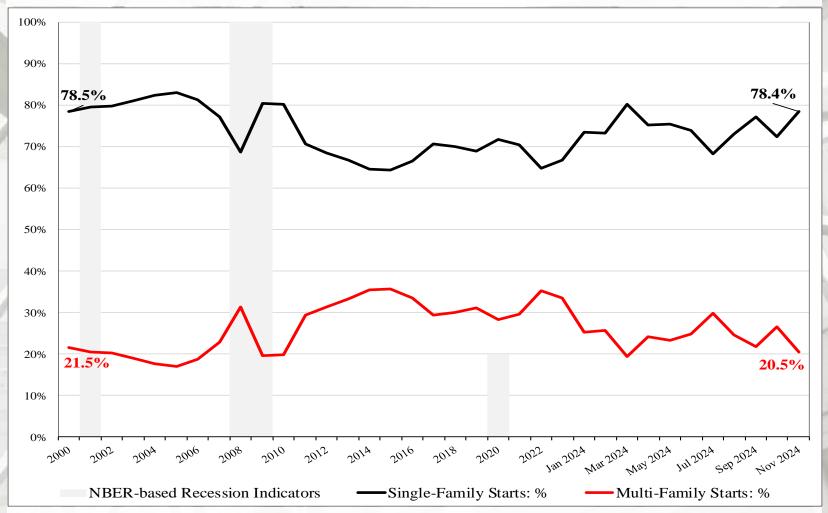
MF Housing Starts by Region



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 $+ \ge 5$ MF starts).

^{*} Percentage of total starts.

SF vs. MF Housing Starts (%)



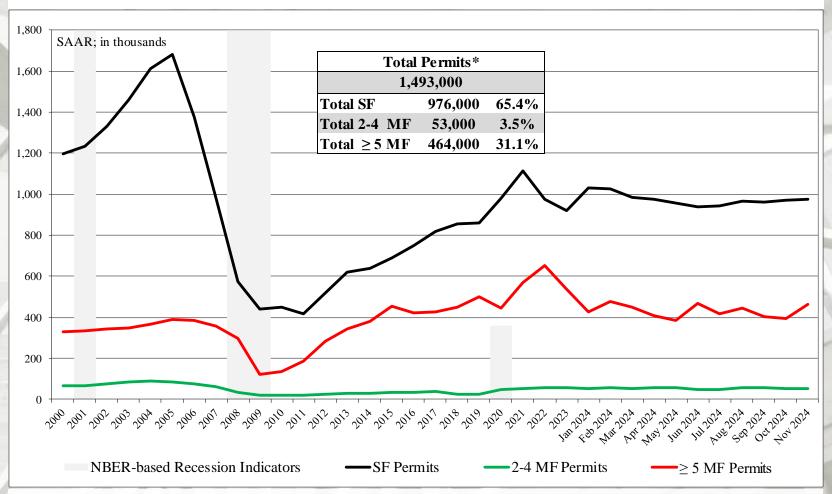
NBER based Recession Indicator Bars for the United States from the Period following the Peak through the Trough (FRED, St. Louis).

New Housing Permits

	Total	SF	MF 2-4 unit	MF ≥ 5 unit
	Permits*	Permits	Permits	Permits
November	1,493,000	976,000	53,000	464,000
October	1,419,000	971,000	54,000	394,000
2023	1,508,000	999,000	50,000	459,000
M/M change	5.2%	0.5%	-1.9%	17.8%
Y/Y change	-1.0%	-2.3%	6.0%	1.1%

^{*} 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**
November	140,000	59,000	81,000
October	142,000	65,000	77,000
2023	116,000	58,000	58,000
M/M change	-1.4%	-9.2%	5.2%
Y/Y change	20.7%	1.7%	39.7%

	MW Total*	MW SF	MW MF**
November	218,000	128,000	90,000
October	196,000	128,000	68,000
2023	197,000	123,000	74,000
M/M change	11.2%	0.0%	32.4%
Y/Y change	10.7%	4.1%	21.6%

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

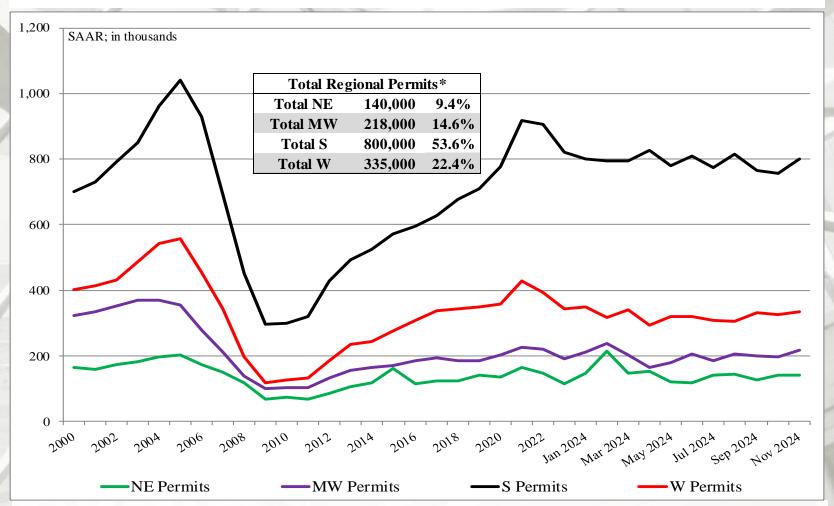
	S Total*	S SF	S MF**
November	800,000	576,000	224,000
October	755,000	563,000	192,000
2023	803,000	596,000	207,000
M/M change	6.0%	2.3%	16.7%
Y/Y change	-0.4%	-3.4%	8.2%
	W Total*	WSF	W MF**
November	W Total* 335,000	W SF 213,000	W MF** 122,000
November October			
	335,000	213,000	122,000
October	335,000 326,000	213,000 215,000	122,000 111,000

S = South; W = West

^{*} All data are SAAR

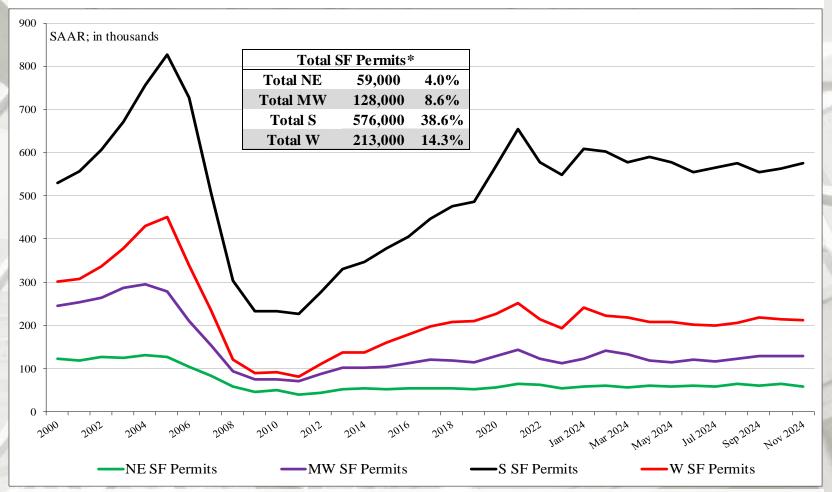
^{**} US DOC does not report multi-family permits directly; this is an estimation (Total permits – SF permits).

Total Housing Permits by Region



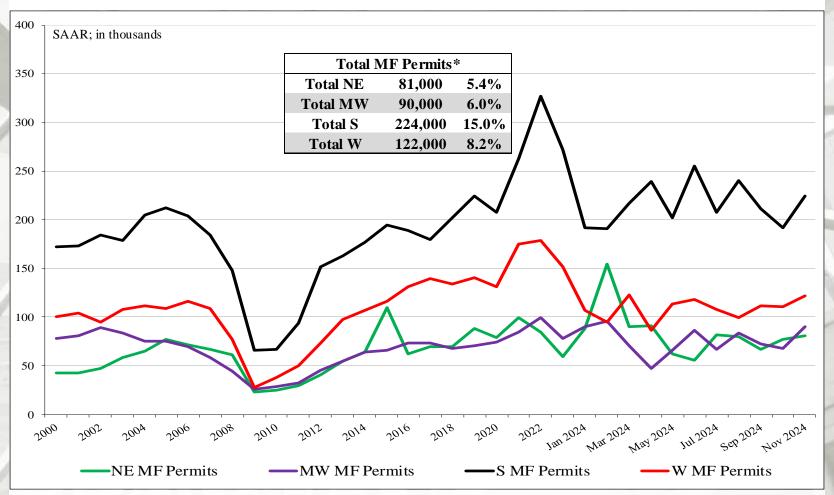
^{*} Percentage of total permits.

SF Housing Permits by Region



^{*} Percentage of total permits.

MF Housing Permits by Region



^{*} Percentage of total permits.

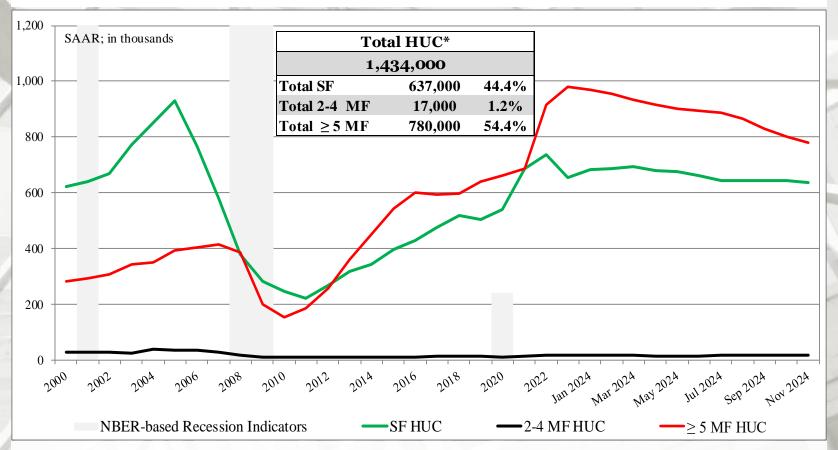
New Housing Under Construction (HUC)

	Total HUC	SF HUC	MF 2-4 unit** HUC	MF ≥ 5 unit HUC
November	1,434,000	637,000	17,000	780,000
October	1,461,000	642,000	17,000	802,000
2023	1,683,000	680,000	17,000	986,000
M/M change	-1.8%	-0.8%	0.0%	-2.7%
Y/Y change	-14.8%	-6.3%	0.0%	-20.9%

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



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

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

^{*} Percentage of total housing under construction units.

New Housing Under Construction by Region

	NE Total	NE SF	NE MF**
November	220,000	65,000	155,000
October	228,000	66,000	162,000
2023	210,000	67,000	143,000
M/M change	-3.5%	-1.5%	-4.3%
Y/Y change	4.8%	-3.0%	8.4%
	MW Total	MW SF	MW MF
November	MW Total 174,000	MW SF 85,000	MW MF 89,000
November October			
	174,000	85,000	89,000
October	174,000 178,000	85,000 86,000	89,000 92,000

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).

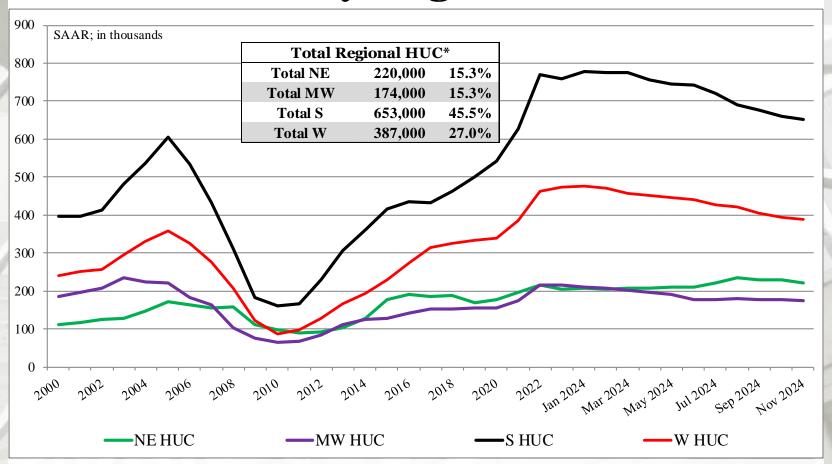
New Housing Under Construction by Region

	S Total	S SF	S MF**
November	653,000	327,000	326,000
October	660,000	325,000	335,000
2023	784,000	351,000	433,000
M/M change	-1.1%	0.6%	-2.7%
Y/Y change	-16.7%	-6.8%	-24.7%
	W Total	W SF	W MF
November	W Total 387,000	W SF 160,000	W MF 227,000
November October			
	387,000	160,000	227,000
October	387,000 395,000	160,000 165,000	227,000 230,000

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

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

Total Housing Under Construction by Region

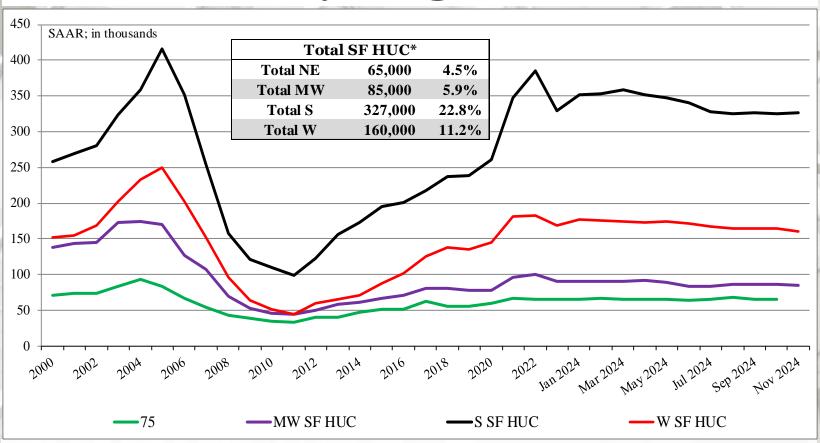


NE = Northeast, MW = Midwest, S = South, W = West

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

^{*} Percentage of total housing under construction units.

SF Housing Under Construction by Region

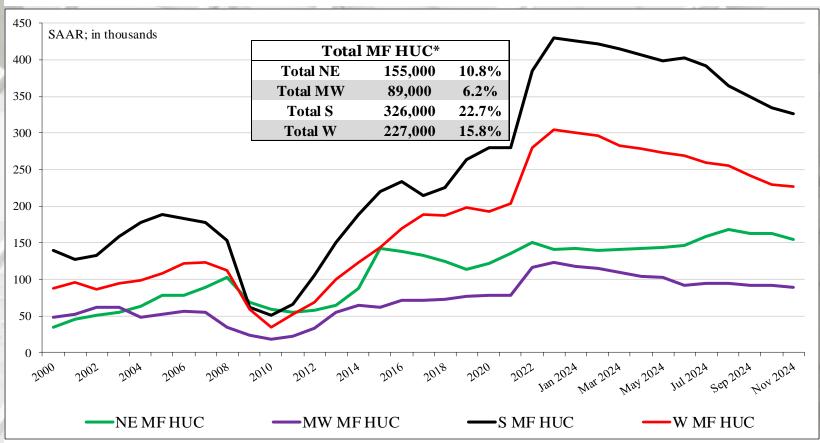


NE = Northeast, MW = Midwest, S = South, W = West.

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

^{*} Percentage of total housing under construction units.

MF Housing Under Construction by Region



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

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

^{*} Percentage of total housing under construction units.

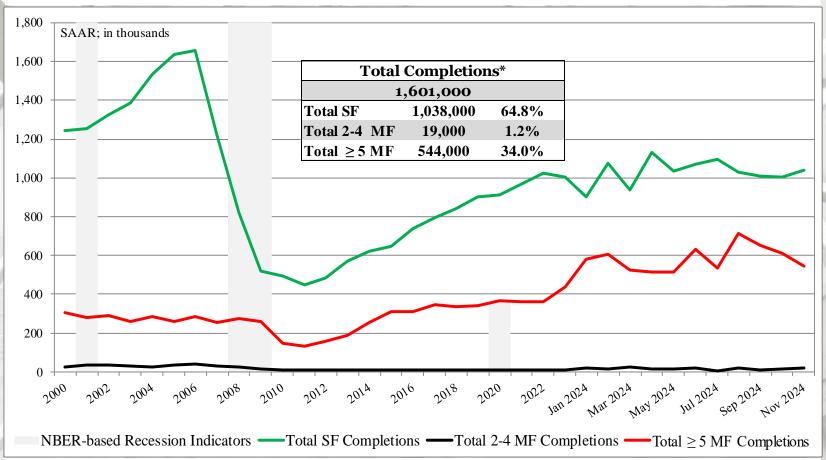
New Housing Completions

	Total Completions*	SF Completions	MF 2-4 unit** Completions	MF ≥ 5 unit Completions
November	1,601,000	1,038,000	19,000	544,000
October	1,632,000	1,005,000	15,000	612,000
2023	1,466,000	970,000	17,000	479,000
M/M change	-1.9%	3.3%	26.7%	-11.1%
Y/Y change	9.2%	7.0%	11.8%	13.6%

^{*} 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 $\pm \geq 5$ -unit MF)).

Total Housing Completions



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

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

^{*} Percentage of total housing completions

New Housing Completions by Region

	NE Total	NE SF	NE MF**
November	195,000	51,000	144,000
September	158,000	78,000	80,000
2023	102,000	55,000	47,000
M/M change	23.4%	-34.6%	80.0%
Y/Y change	91.2%	-7.3%	206.4%
	MW Total	MW SF	MW MF**
November	MW Total 180,000	MW SF 141,000	MW MF** 39,000
November October			
	180,000	141,000	39,000
October	180,000 211,000	141,000 130,000	39,000 81,000

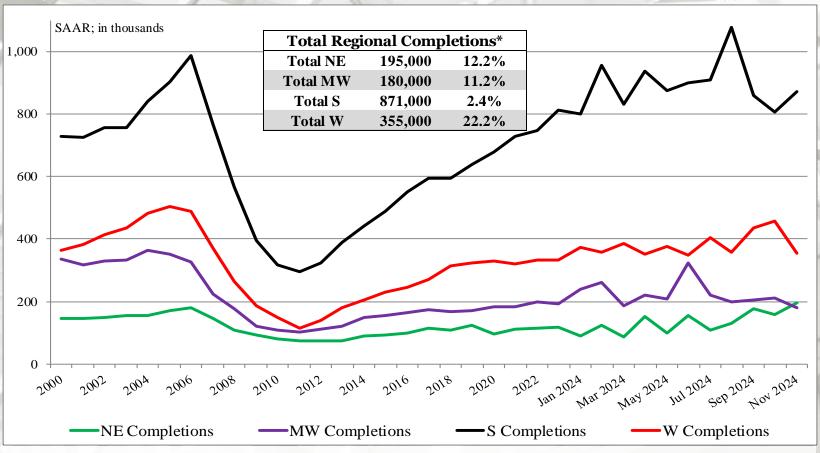
^{**}US DOC does not report 2 to 4 multi-family completions directly; this is an estimation (Total completions – SF completions).

New Housing Completions by Region

	S Total	S SF	S MF**
November	871,000	595,000	276,000
October	807,000	568,000	239,000
2023	879,000	591,000	288,000
M/M change	7.9%	4.8%	15.5%
Y/Y change	-0.9%	0.7%	-4.2%
	W Total	W SF	WMF**
November	W Total 355,000	W SF 251,000	W MF** 104,000
November October			
	355,000	251,000	104,000
October	355,000 456,000	251,000 229,000	104,000 227,000

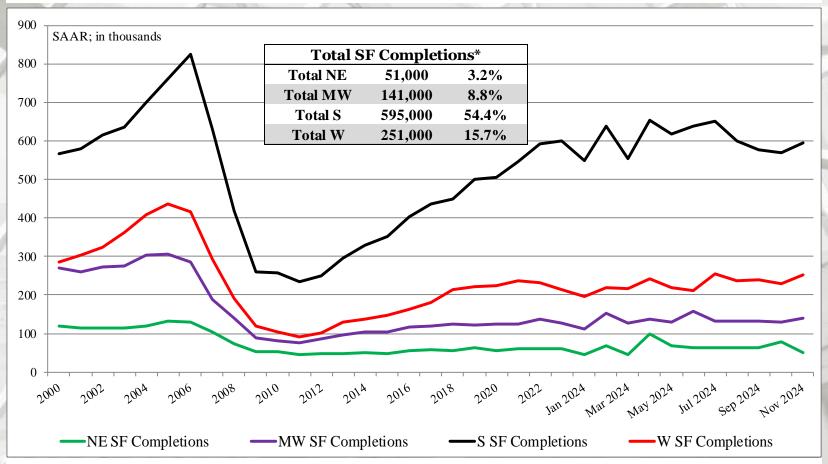
^{**}US DOC does not report 2 to 4 multi-family completions directly; this is an estimation (Total completions – SF completions).

Total Housing Completions by Region



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

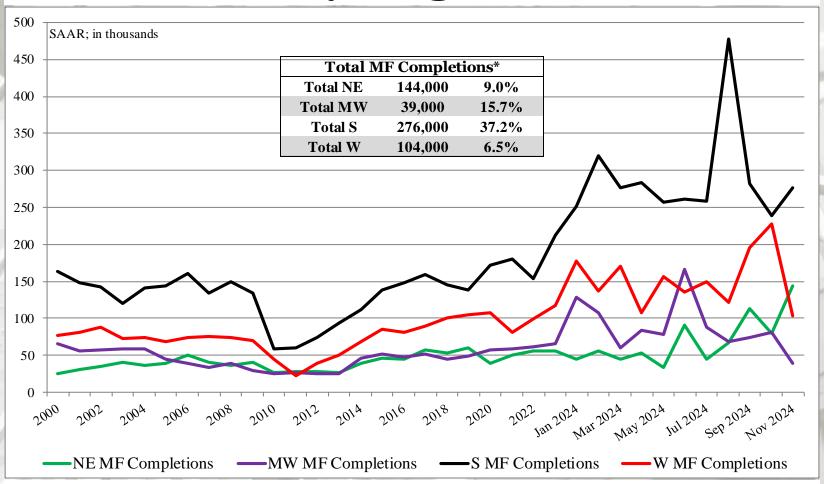
SF Housing Completions by Region



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

^{*} Percentage of total housing completions

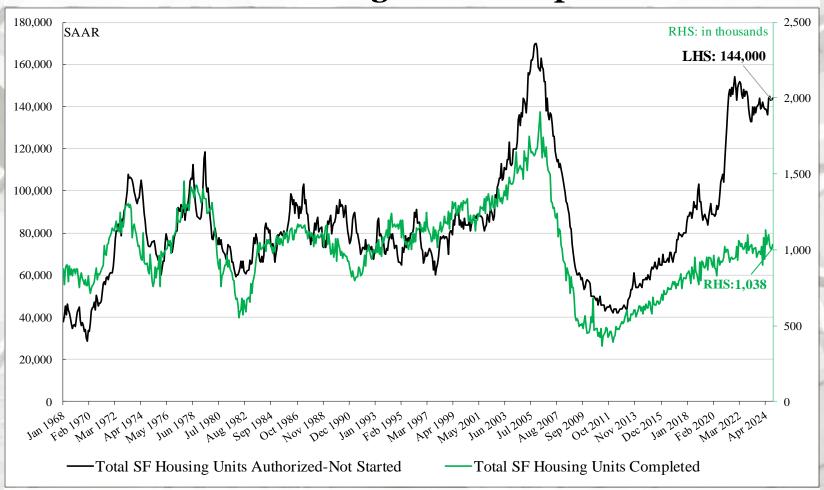
MF Housing Completions by Region



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 295,000 in November, an increase from October (278,000), and SF authorized units "not" started were 144,000 units in November, an increase from October (143,000). 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
November	664,000	\$402,600	\$484,800	8.9
October	627,000	\$425,600	\$525,400	9.2
2023	611,000	\$429,600	\$489,000	8.8
M/M change	5.9%	-5.4%	-7.7%	-3.3%
Y/Y change	8.7%	-6.3%	-0.9%	1.1%

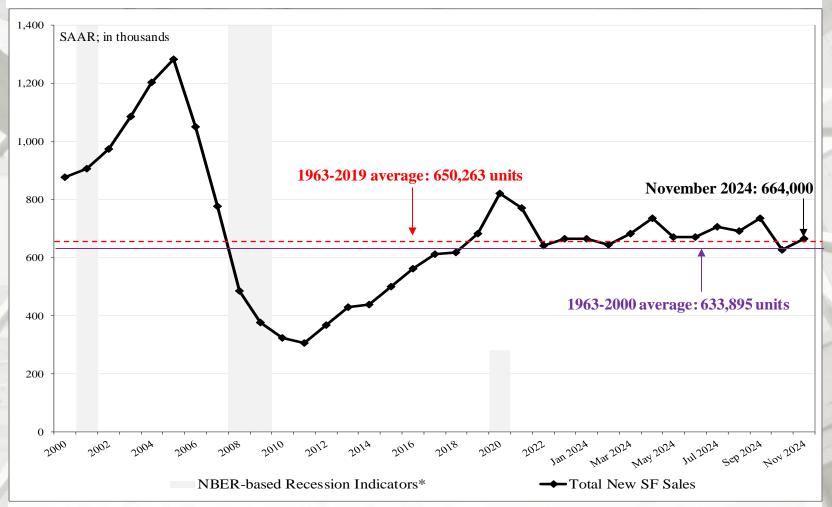
^{*} All new sales data are presented at a seasonally adjusted annual rate (SAAR)¹ and housing prices are adjusted at irregular intervals².

New SF sales were greater than the consensus forecast³ of 664 m; range 613 m to 740 m. The past three month's new SF sales data also were revised:

August initial: 716 m, revised to 691 m. September initial: 738 m, revised to 627 m. October initial: 610 m, revised to 707 m.

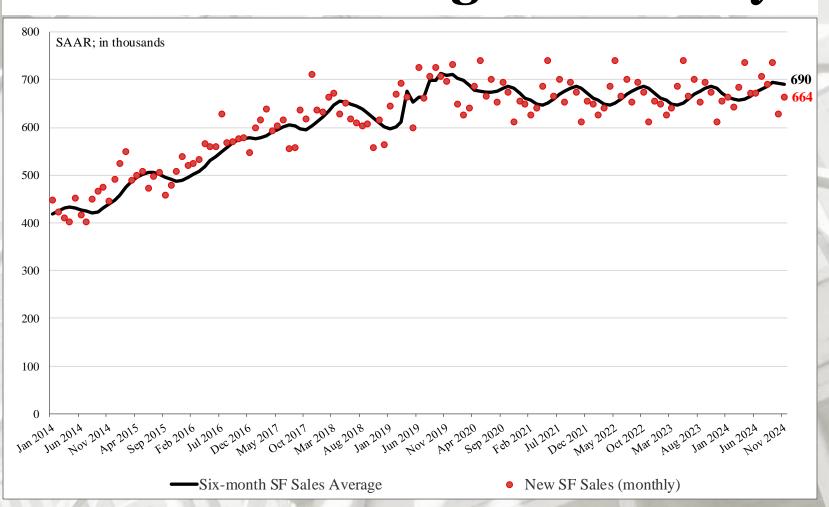
Sources: ¹https://www.census.gov/construction/nrs/index.html; 6/24/21;² https://www.census.gov/construction/nrs/pdf/newressales.pdf; 12/23/24 ³ http://us.econoday.com; 12/23/24

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
November	23,000		88,000	4	417,000	130	5,000
October	39,000		75,000		366,000	147	7,000
2023	26,000		80,000		367,000	138	8,000
M/M change	-41.0%		17.3%		13.9%	-7	.5%
Y/Y change	-11.5%		10.0%		13.6%	-1	.4%
	<\$300m	\$300m- \$399m	\$400m- \$499m	\$500m- \$599m	\$600m- \$799m	\$800m- \$999m	≥ \$1mm
November ^{1,2,3,4}	11,000	12,000	8,000	5,000	5,000	1,000	2,000
October ^{1,2,3,4}	6,000	14,000	10,000	6,000	6,000	2,000	2,000
2023	7,000	10,000	7,000	10,000	10,000	11,000	4,000
M/M change	83.3%	-14.3%	-20.0%	-16.7%	-16.7%	-50.0%	0.0%
Y/Y change	57.1%	20.0%	14.3%	-50.0%	-50.0%	-90.9%	-50.0%
% 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

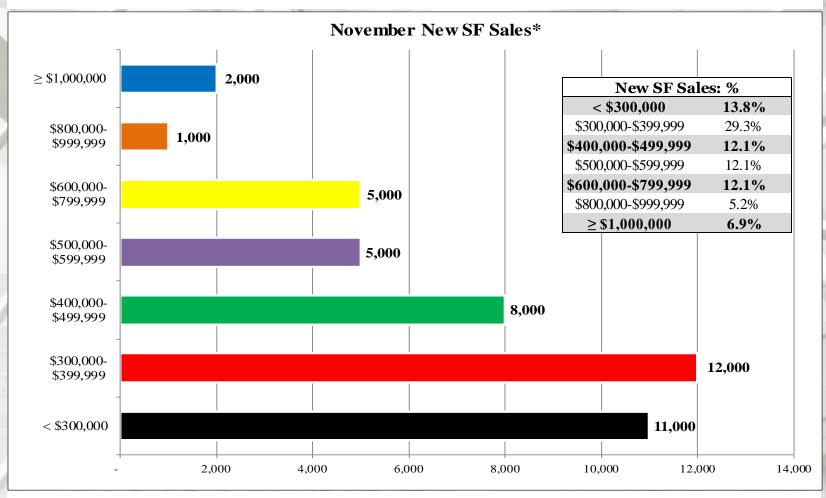
² Houses for which sales price were not reported have been distributed proportionally to those for which sales price was reported;

³ Detail November not add to total because of rounding.

⁴ Housing prices are adjusted at irregular intervals.

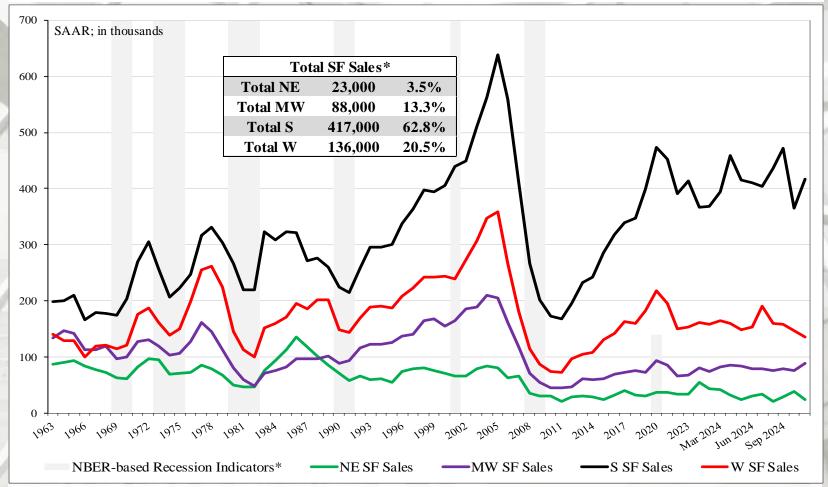
 $^{^{5}}$ Z = Less than 500 units or less than 0.5 percent

New SF House Sales



^{*} Total new sales by price category and percent.

New SF House Sales by Region

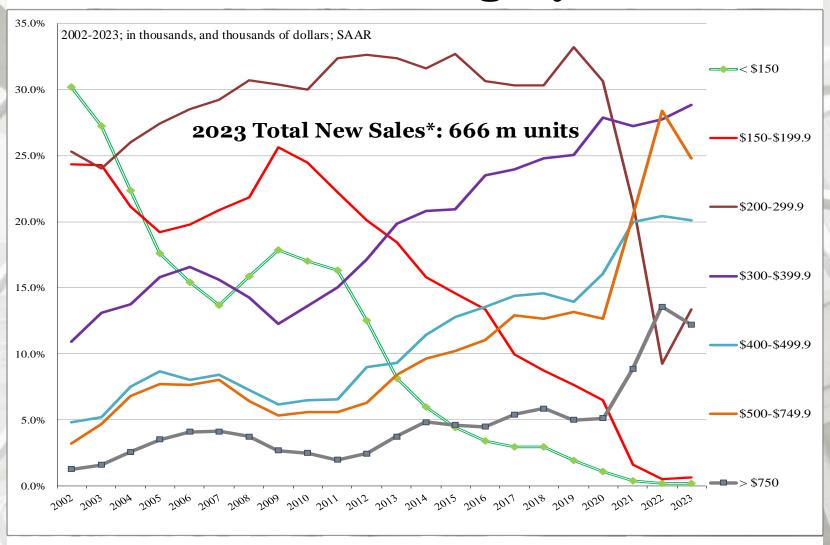


NE = Northeast; MW = Midwest; S = South; W = West

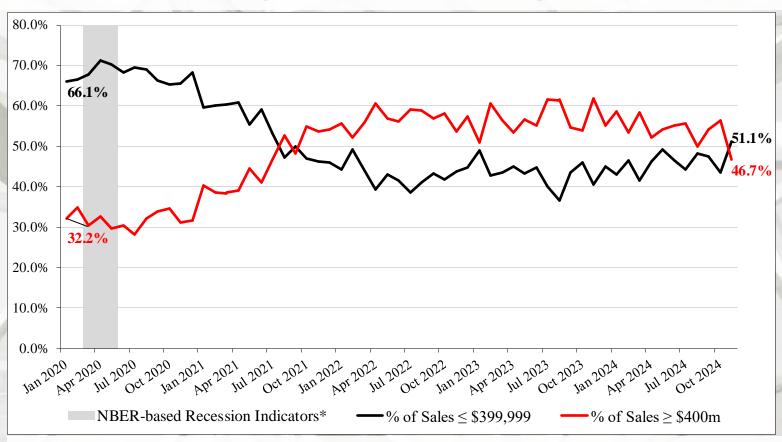
NBER based Recession Indicator Bars for the United States from the Period following the Peak through the Trough (FRED, St. Louis).

^{*} Percentage of total new sales.

New SF House Sales by Price Category



New SF House Sales

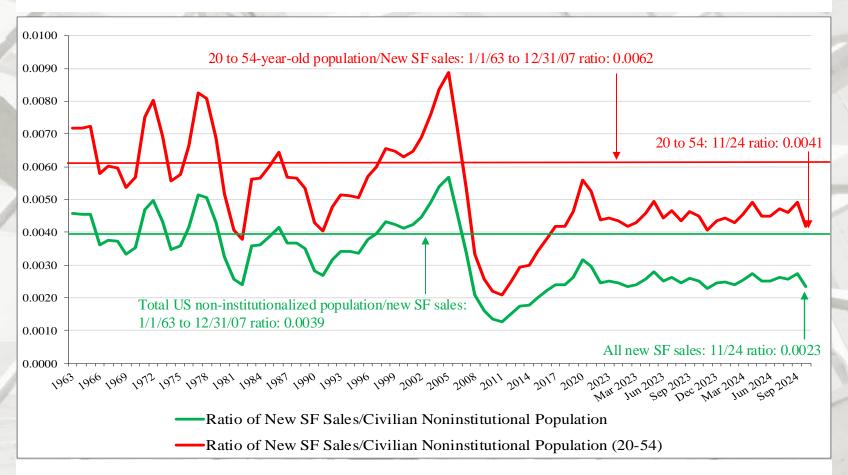


^{*} NBER based Recession Indicator Bars for the United States from the Period following the Peak through the Trough (FRED, St. Louis).

New SF Sales: < \$399.9 m and > \$400 m: 2020 - November 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

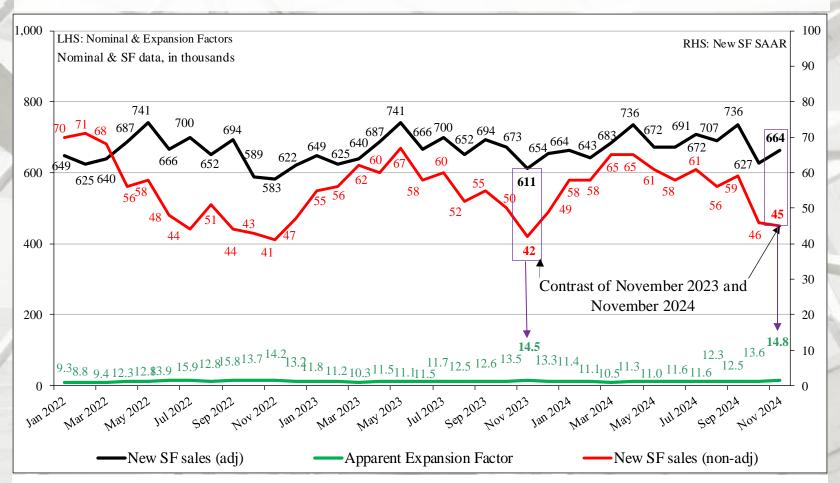


New SF sales adjusted for the US population

From November 1963 to November 2007, the long-term ratio of new house sales to the total US non-institutionalized population was 0.0039; in November 2024 it was 0.0025 – increasing from October (0.0023). The non-institutionalized population, aged 20 to 54 long-term ratio is 0.0062; in November 2024 it was 0.0044 – also an increase from October (0.0042). 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

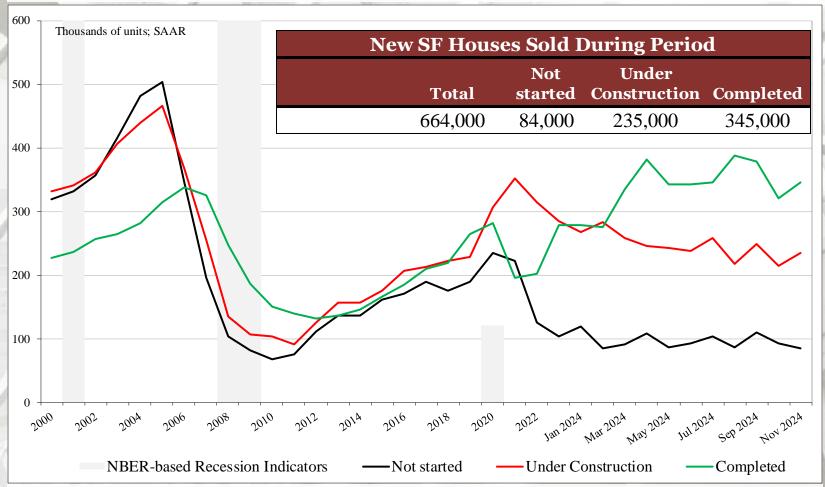
New SF House Sales

New SF Houses Sold During Period

	Total	Not started	Under Construction	Completed
November	664,000	84,000	235,000	345,000
October	627,000	92,000	215,000	320,000
2023	450,000	98,000	276,000	76,000
M/M change	5.9%	-8.7%	9.3%	7.8%
Y/Y change	47.6%	-14.3%	-14.9%	353.9%
Total percentage		12.7%	35.4%	52.0%

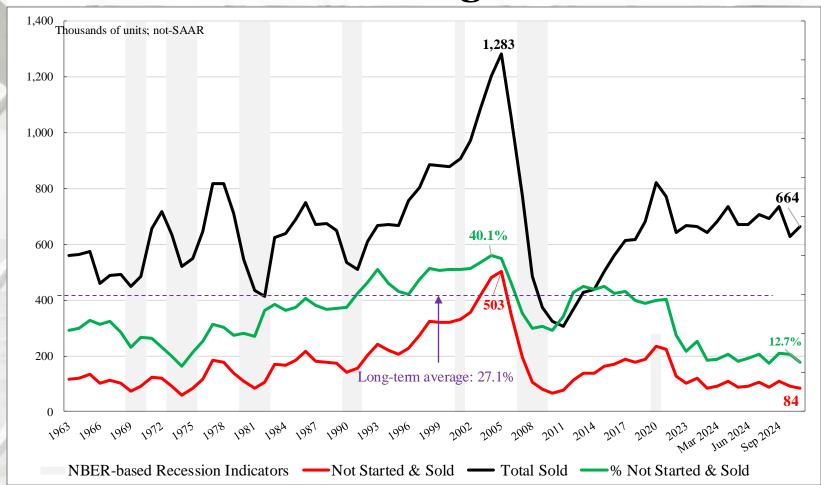
All data is SAAR

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 November (664 m), 12.7% (84 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).

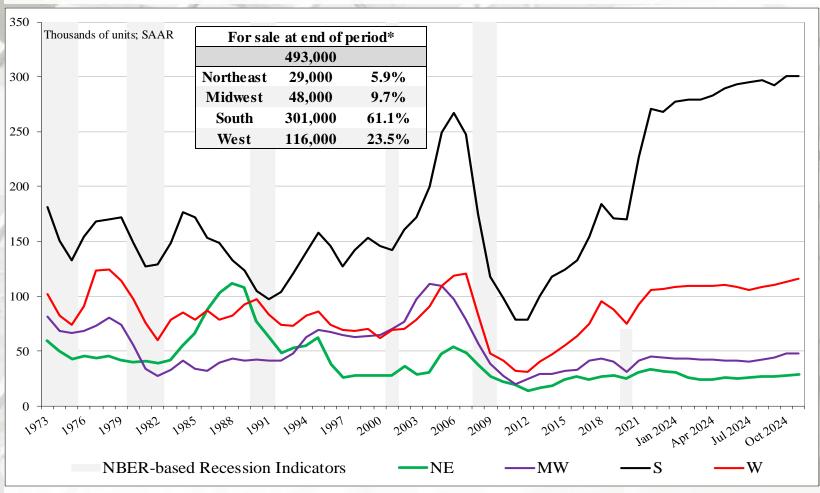
New SF Houses for Sale

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

	Total	NE	MW	S	\mathbf{W}
November	493,000	29,000	48,000	301,000	116,000
October	490,000	28,000	48,000	301,000	113,000
2023	456,000	32,000	45,000	274,000	104,000
M/M change	0.6%	3.6%	0.0%	0.0%	2.7%
Y/Y change	8.1%	-9.4%	6.7%	9.9%	11.5%

^{*} 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).

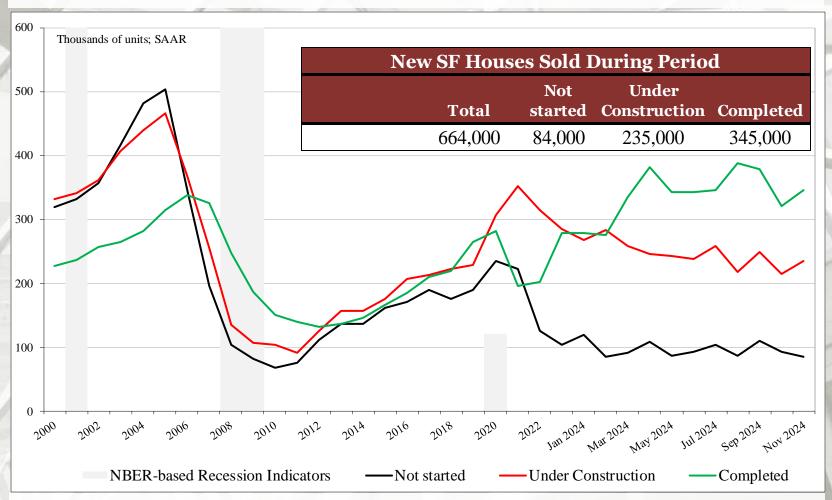
* Percentage of total for sale at end of period.

New SF House Sales

New SF Houses Sold During Period

	Total	Not started	Under Construction	Completed
November	664,000	84,000	235,000	345,000
October	627,000	92,000	215,000	320,000
2023	450,000	98,000	276,000	76,000
M/M change	5.9%	-8.7%	9.3%	7.8%
Y/Y change	47.6%	-14.3%	-14.9%	353.9%
Total percentage		12.7%	35.4%	52.0%

New SF House Sales: For Sale at End of Period



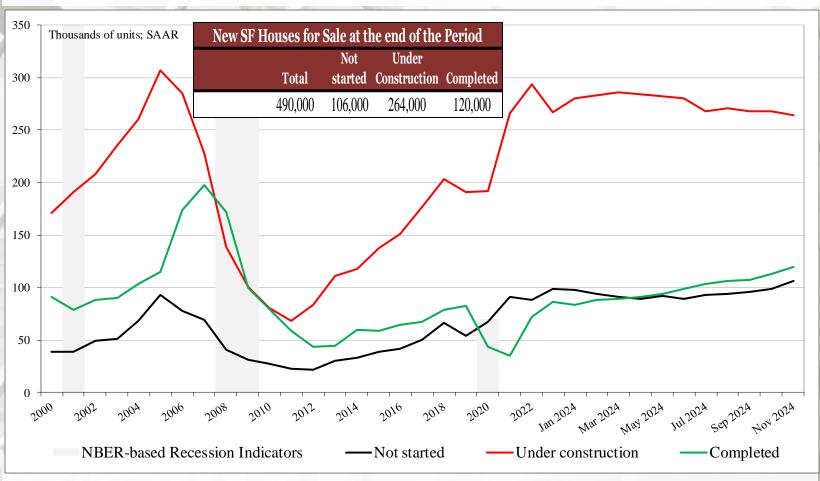
NBER based Recession Indicator Bars for the United States from the Period following the Peak through the Trough (FRED, St. Louis).

New SF House Sales

New SF Houses for Sale at the end of the Period

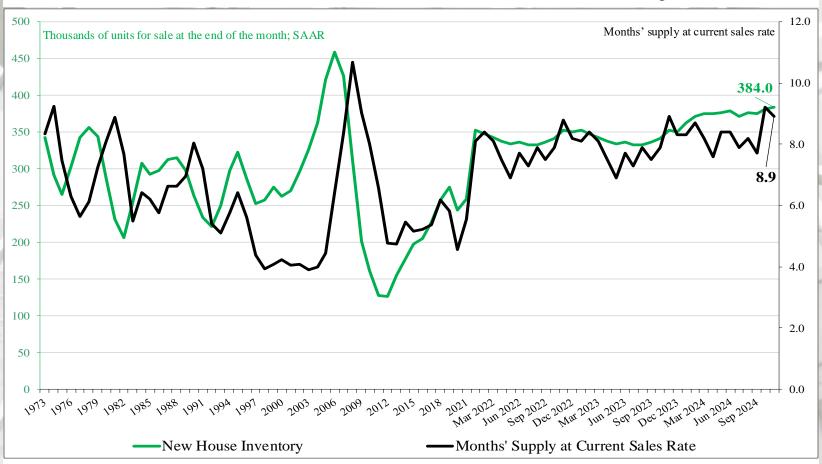
	Total	Not started	Under Construction	Completed
November	490,000	106,000	264,000	120,000
October	480,000	99,000	268,000	113,000
2023	450,000	98,000	276,000	76,000
M/M change	2.1%	7.1%	-1.5%	6.2%
Y/Y change	8.9%	8.2%	-4.3%	57.9%
Total percentage		21.6%	53.9%	24.5%

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).

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 November was 8.9, greater than the historically preferred number of five- to six-months (SAAR).

November 2024 Construction Spending

	Total Private Residential*	SF*	MF*	Improvement**
November	\$906,201	\$422,828	\$121,975	\$361,398
October	\$905,149	\$421,517	\$123,631	\$360,001
2023	\$879,069	\$425,718	\$134,728	\$318,623
M/M change	0.1%	0.3%	-1.3%	0.4%
Y/Y change	3.1%	-0.7%	-9.5%	13.4%

^{*} Millions of dollars.

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

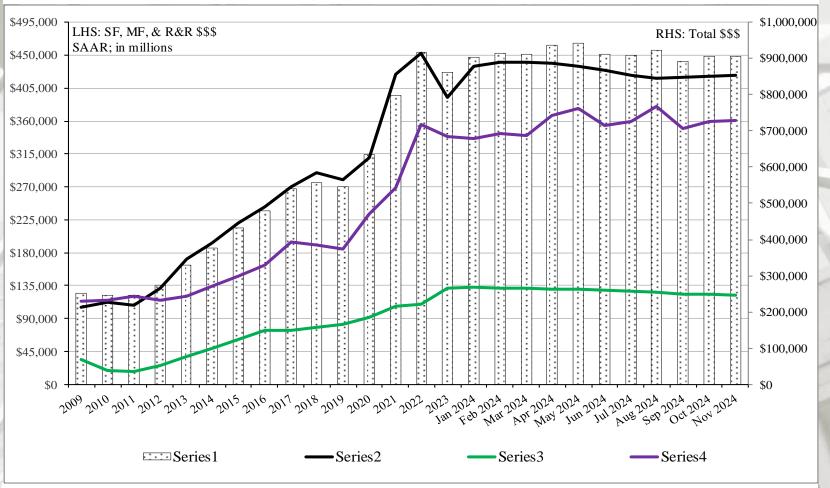
New single-family: new houses and town houses built to be sold or rented and units built by the owner or for the owner on contract. The classification excludes residential units in buildings that are primarily nonresidential. It also excludes manufactured housing and houseboats.

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.

^{**} 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\$.

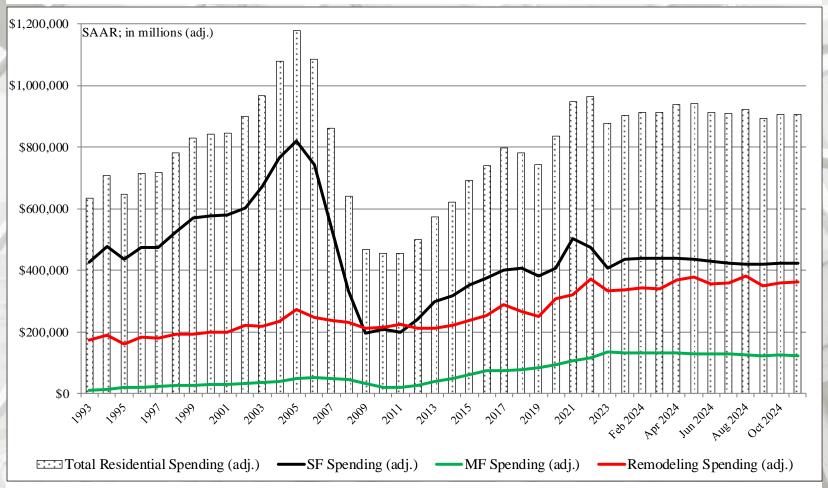
Total Construction Spending (nominal): 2000 – November 2024



Reported in nominal US\$.

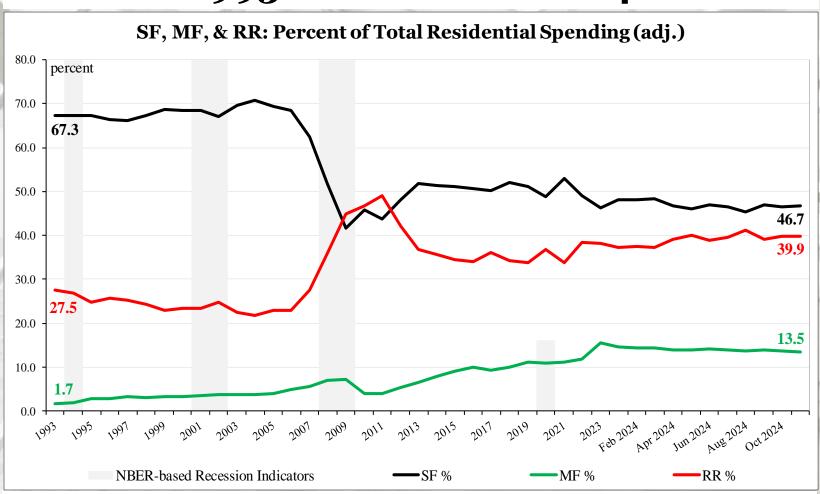
The US DOC does not report improvement spending directly, this is a monthly estimation for 2024.

Total Construction Spending (adjusted): 1993 – November 2024



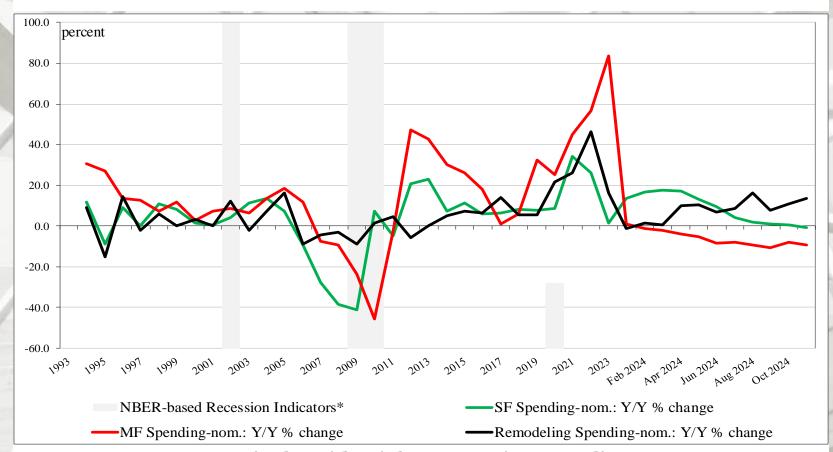
Reported in adjusted \$US: 1993 – 2023 (adjusted for inflation, BEA Table 1.1.9); November 2024 reported in nominal US\$.

Construction Spending Shares: 1993 – November 2024



^{*} 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



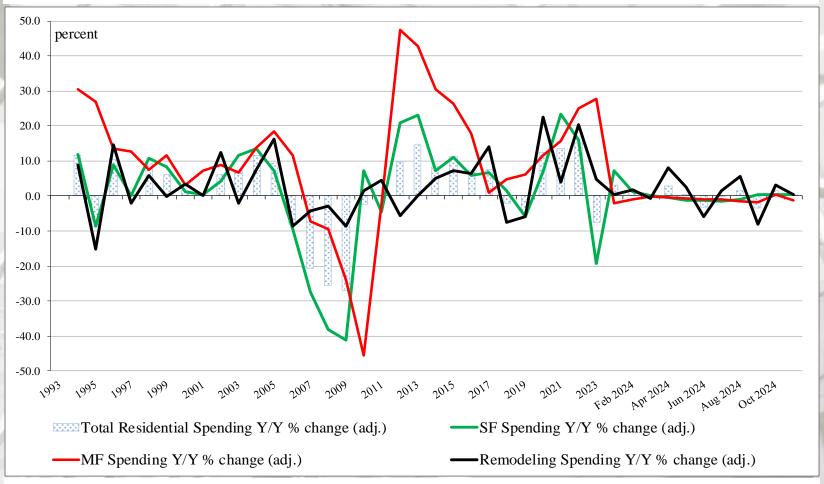
Nominal Residential Construction Spending: Y/Y percentage change, 1993 to November 2024

Y/Y percentage change, 1993 to November 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 (November 2024 data reported in nominal dollars).

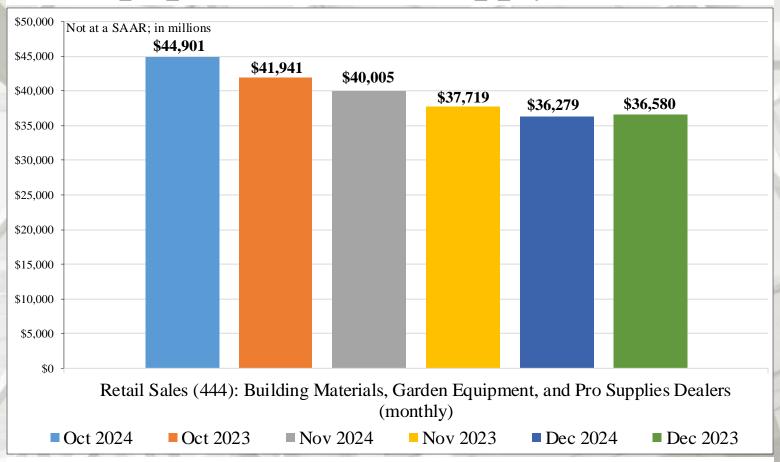
* NBER based Recession Bars for the United States from the Period following the Peak through the Trough (FRED, St. Louis).

Adjusted Construction Spending, Y/Y Percentage Change: 1993 to November 2024



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

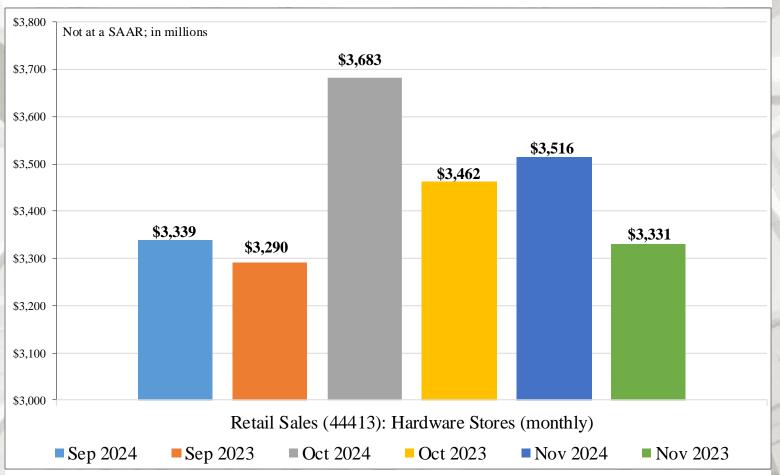
Retail Sales: Building materials, Garden Equipment, & PRO Supply Dealers



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

NAICS 444 sales decreased 9.3% in December 2024 from November 2024 and declined 0.8% Y/Y (nominal basis).

Retail Sales: Hardware Stores



Hardware Stores: NAICS 44413

NAICS 44413 retail sales decreased 4.5% in November 2024 from October 2024 and improved 5.6% Y/Y (nominal basis).

Harvard Joint Center for Housing Studies Modest Gains in 2025 Outlook for Home Remodeling

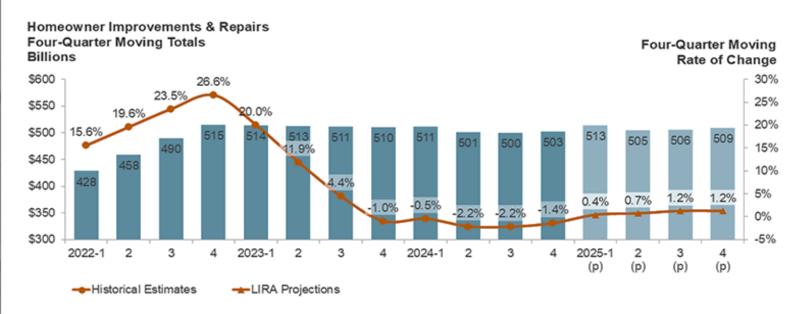
"After two years of decline, annual expenditures for improvements and maintenance to owner-occupied homes are expected to grow at a mild pace throughout 2025, according to our latest <u>Leading Indicator of Remodeling Activity (LIRA)</u>. The LIRA projects that year-over-year spending for home renovation and repair will increase by 1.2 percent in 2025.

A solid labor market, rising home values, and continued improvement in existing home sales are supporting greater activity in home remodeling and repair. Upward trending retail sales of building materials and steady permitting for remodeling indicate that homeowners are slowly but surely expanding the pace and scope of projects compared to the last couple years.

This LIRA release <u>incorporates new benchmark data from the American Housing Survey</u> that revises up the overall market size. In the wake of the pandemic, strong gains in homeownership, record high home values and equity, and a healthy economy combined to lift improvement and repair spending to unprecedented heights in 2022 and 2023, growing 25.3 percent over these two years. The growth in actual spending was 7.5 percentage points higher than the gains originally estimated by the LIRA models over this period. While expenditures are expected to grow only modestly this year, we've increased our projection for the remodeling market size in 2025 by \$30 billion, or 6.4 percent, to \$509 billion." – Abbe Will, Senior Research Associate & Associate Director, Remodeling Futures, Harvard Joint Center for Housing Studies

Harvard Joint Center for Housing Studies Modest Gains in 2025 Outlook for Home Remodeling

Leading Indicator of Remodeling Activity – Fourth 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 2023 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



Existing House Sales

National Association of Realtors®

	Existing Sales	Median Price	Month's Supply
November	4,150,000	\$406,100	3.8
October	3,960,000	\$406,800	4.2
2023	3,910,000	\$387,700	3.5
M/M change	4.8%	-0.2%	-9.5%
Y/Y change	6.1%	4.7%	8.6%

All sales data: SAAR

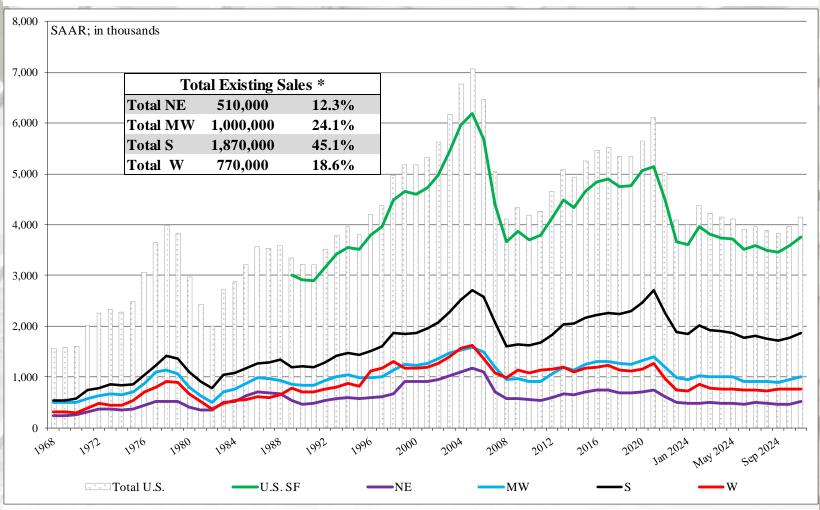
Existing House Sales

	NE	MW	S	W
November	510,000	1,000,000	1,870,000	770,000
October	470,000	950,000	1,770,000	770,000
2023	480,000	950,000	1,810,000	670,000
M/M change	8.5%	5.3%	5.6%	0.0%
Y/Y change	6.3%	5.3%	3.3%	14.9%

	Existing	SF Median
	SF Sales	Price
November	3,760,000	\$410,900
October	3,580,000	\$411,700
2023	3,500,000	\$392,200
M/M change	5.0%	-0.2%
Y/Y change	7.4%	4.8%

All sales data: SAAR.

Existing House Sales



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

^{*} Percentage of total existing sales.

Federal Housing Finance Agency

U.S. House Price Index

FHFA House Prices Rise 0.4 Percent in October; Up 4.5 Percent from a Year Earlier

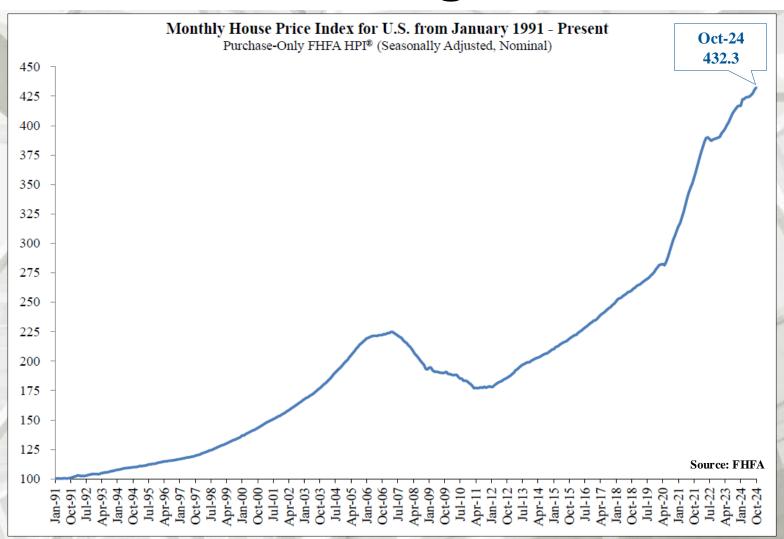
Even though price growth has slowed recently, FHFA's monthly House Price Index showed that home values rose during the 12 months ending in October in every Census division

Significant Findings

"U.S. house prices rose **0.4 percent** in October, according to the Federal Housing Finance Agency's (FHFA) seasonally adjusted monthly House Price Index (HPI®). House prices rose **4.5 percent** from October 2023 to October 2024. The previously reported **0.7 percent** price growth in September remained unchanged.

Among nine geographic divisions defined by the U.S. Census, the change in seasonally adjusted monthly home prices between September and October 2024 ranged from **-0.4 percent** in the Pacific division to 1.0 percent in the West South Central division. The 12-month changes were positive in every division, ranging from **2.3 percent** in the Pacific division to **7.0 percent** in the Middle Atlantic division. Still, growth in U.S. home prices has shown signs of slowing; the 12-month price change was 2 percentage points lower than it was between October 2022 and October 2023." – Adam Russell, FHFA

"Annual house price gains have been trending down since February, stabilizing around 4.5 percent during the last three months. Even with elevated house prices and mortgage rates putting continued pressure on affordability, house prices continued to grow at a steady rate, likely due to a historically low inventory of homes for sale." – Dr. Anju Vajja, Deputy Director Division of Research and Statistics, FHFA



S&P CoreLogic Case-Shiller Index Records 3.6% Annual Gain in October 2024

"S&P Dow Jones Indices (S&P DJI) released the October 2024 results for the S&P CoreLogic Case-Shiller Indices. The leading measure of U.S. home prices recorded a 3.6% annual gain in October 2024, a slight deceleration from the previous annual gains in 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 3.6% annual return for October, down from a 3.9% annual gain in the previous month. The 10-City Composite saw an annual increase of 4.8%, down from a 5.2% annual increase in the previous month. The 20-City Composite posted a year-over-year increase of 4.2%, dropping from a 4.6% increase in the previous month. New York again reported the highest annual gain among the 20 cities with a 7.3% increase in October, followed by Chicago and Las Vegas with annual increases of 6.2% and 5.9%, respectively. Tampa posted the smallest year-over-year growth with 0.4%.

Month-Over-Month

The pre-seasonally adjusted U.S. National Index, 20-City Composite, and 10-City Composite upward trends continued to reverse in October, with a -0.2% drop for the national index, and the 20-City and 10 City Composites saw -0.2% and -0.1% returns for this month, respectively. After seasonal adjustment, the U.S. National Index posted a month-over-month increase of 0.3%, while both the 20-City and 10-City Composite reported monthly rises of 0.3%." – Brian D. Luke, Head of Commodities, Real & Digital Assets, S&P DJI

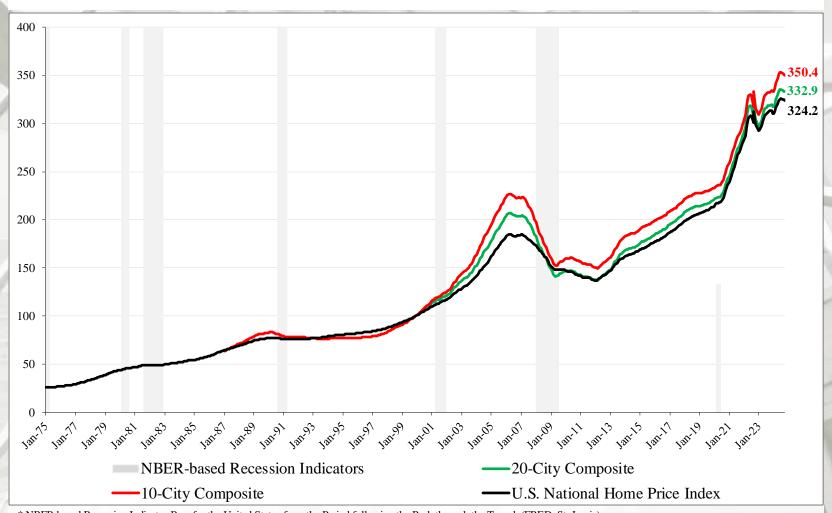
S&P CoreLogic Case-Shiller Index Analysis

"New York once again reigns supreme as the fastest-growing housing market with annual returns over double the national average. Two markets have dominated the top ranks with New York leading all markets the past six months and San Diego the six months prior. New York is the only market sitting at all-time highs and one of just three markets with gains on the month. Accounting for seasonal adjustments shows a broader rally across the country.

Our National Index hit its 17th consecutive all-time high, and only two markets – Tampa and Cleveland – fell during the past month. The annual returns continue to post positive inflationadjusted returns but are falling well short of the annualized gains experienced this decade. Markets in Florida and Arizona are rising, but not keeping up with inflation, and are well off the over 10% gains annually from 2020 to present. This has allowed other markets to catch up.

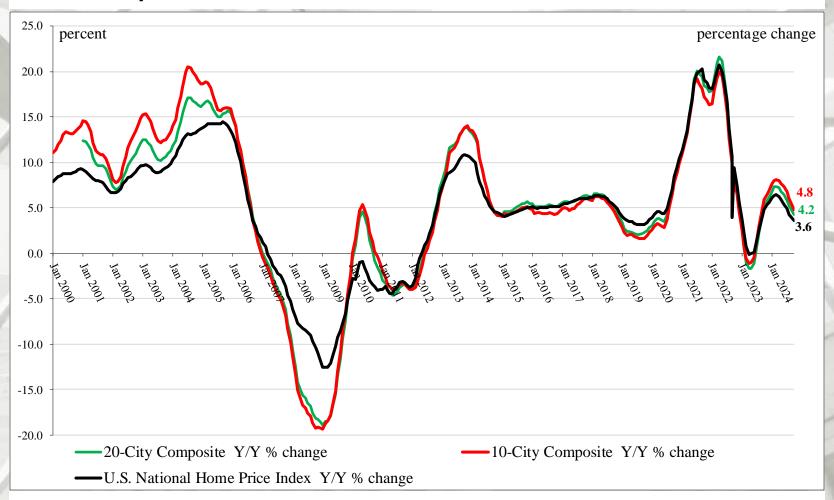
With the latest data covering the period prior to the election, our national index has shown continued improvement. Removing the political uncertainly risk has led to an equity market rally; it will be telling should the similar sentiment occur among homeowners." – Brian D. Luke, Head of Commodities, 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).

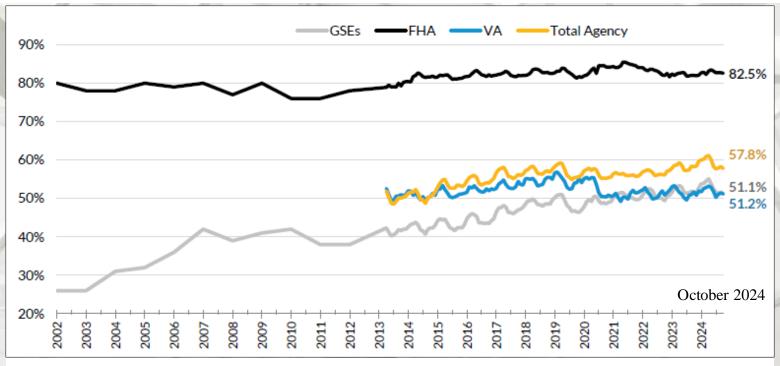
S&P/Case-Shiller Home Price Indices



Y/Y Price Change

From October 2023 to October 2024, the National Index indicated a 3.6% increase; the Ten-City increased by 4.8%, and the Twenty-City rose by 4.2%.

U.S. First-Time House Buyers



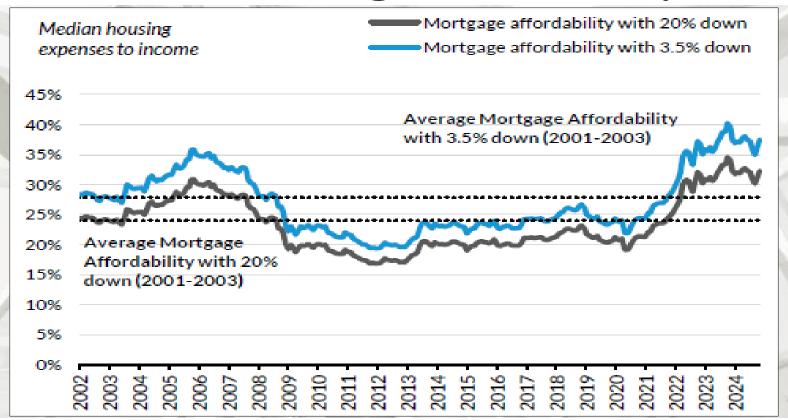
Sources: eMBS, Federal Housing Administration (FHA), and Urban Institute.

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

Urban Institute First-time House Buyer Share

"In October 2024, the first-time homebuyer (FTHB) share for FHA, which has always been more focused on first time homebuyers, was 82.5 percent. The FTHB share of GSE lending in October was 51.1 percent, similar to the VA share of 51.2 percent. ..." – Laurie Goodman *et. al*, Vice President, Urban Institute

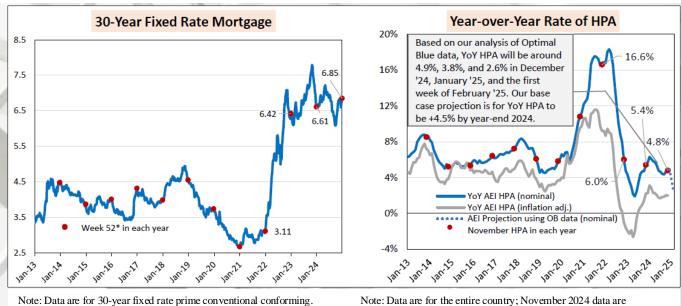
U.S. Housing Affordability



Urban Institute National Mortgage Affordability Over Time

"Mortgage affordability has improved as rates moderated but remains close to the worst level since the inception of this series in 2002. As of November 2024, with a 20 percent down payment, the share of median income needed for the median monthly mortgage payment stood at 32.3 percent, above 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 37.5 percent, also above the 35.8 percent prior peak in November 2005. ..." – 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.

* Week 52, 2024 refers to the week ending December 26th.

Note: Data are for the entire country; November 2024 data are preliminary.

Source: AEI Housing Center, www.AEI.org/housing.

AEI Housing Center

Year over Year (YoY) HPA in November 2024 Remains Robust at 4.8%, but down from 5.4% a year ago.

- "November 2024's MoM HPA -0.3%" As our projection on the following slides indicates, YoY HPA is expected to be about 4.9% in Dec. 2024.
- YoY HPA has remained robust, especially for low price tier homes, but has tapered down slightly due to relatively high rates.
- A strong sellers' market continues, with well qualified buyers competing for a limited supply of homes.
- YoY HPA is projected to increase slightly to 4.9% in December 2024 before declining to 3.8% and 2.6% in January 2025 and the first week of February. ..." Edward Pinto, Senior Fellow and Director and Tobias Peter, Research Fellow and Assistant Director, AEI Housing Center

Home Price Appreciation: December 2024 YoY HPA Projection

AEI Housing Center

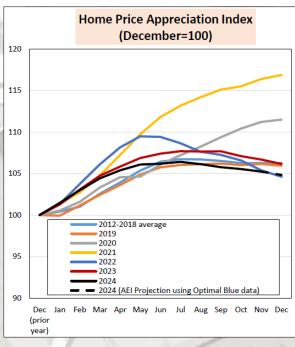
- "Before the pandemic, home price growth followed a predictable seasonal trend:
 - Increases throughout the spring buying season, peaking around June, and leveling off towards the end of the year.
- After the end of the ultra low-interest rate period from mid 2020 to early 2022, HPA is now tracking closer to its pre-pandemic average, where a 5 7% YoY growth by year end was the norm.
 - HPA index slowed down in November and is projected to be 4.9%, 3.8% and 2.6% in December 2024, January 2025, and first week in February 2025, respectively, based on our analysis of Optimal Blue data.

Our projection for YoY HPA Dec. 2024:

Base Case: 4.9% an upward revision of 0.2%.

Our projection for YoY HPA Dec. 2025:

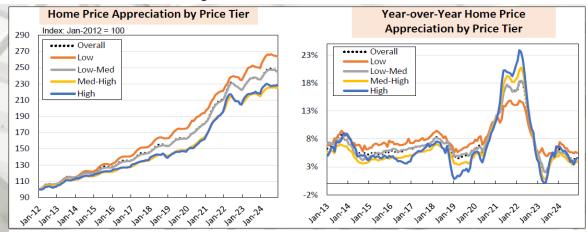
- Base Case: +4.5% a downward revision of 0.5%.*
- Bullish Case: +7.0%.**
- Bearish Case: 2.0 3.5% a downward revision of 0.5%.***." Edward Pinto, Senior Fellow and Director and Tobias Peter, Research Fellow and Assistant Director, AEI Housing Center



- * Base case assumptions: mortgage rate at 5.50% 7.00%, unemployment rate <=5.5%, and months' supply <5 months.
- ** Bullish case assumptions: mortgage rate at 4.00% 5.50%, unemployment rate <=5.5%, and months' supply <5 months or if broad Down Payment Assistance Passes).
- *** Bearish case assumptions: mortgage rate >7.00% or unemployment rate >5.5%, and months' supply >7 months (may occur at different times).

Source: AEI Housing Center, www.AEI.org/housing

Home Price Appreciation by Price Tier



Note: Data are for the entire country. Data for November 2024 are preliminary. This month's update uses a new HPA methodology to better align with the FHFA home price index. This revised approach provides a more accurate representation of home price trends. While this adjustment does not alter the overall results, it does impact price tier breakdowns, particularly the medium high and high price tiers, which now reflect higher rates of appreciation.

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 November 2024 indicate that the low-price tier leads the YoY change in tier home prices at 5.5% due to low months' supply (2.8 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 slowdowns in YoY HPA since March 2022.
- As of November 2024, all price tiers have shown relatively robust YoY HPA from the slowest at 3.9% and 4.1% for low med and med high, respectively) to the fastest of 5.5% (low)." Edward Pinto, Senior Fellow and Director and Tobias Peter, Research Fellow and Assistant Director, AEI Housing Center

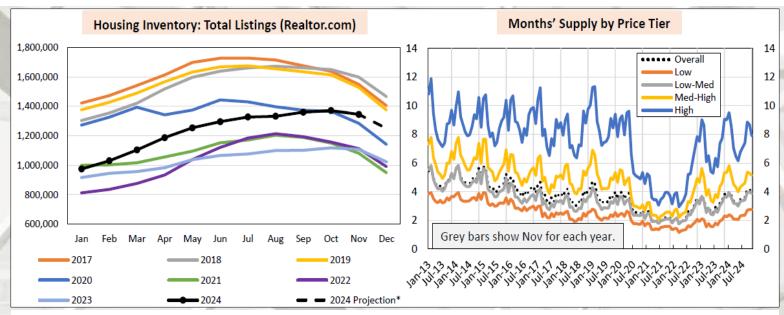
Housing Inventory and Months' Supply

AEI Housing Center

"The strong seller's market continued in November 2024, despite months' remaining supply weakening by 0.2 months from November 2023 to 4.0 months (not seasonally adjusted). Housing inventory remains near pre-pandemic levels (the average for November 2017, 2018, and 2019 was 3.7 months).

- Compared to October 2024, months' remaining supply dropped in November 2024 for the first time since June (albeit by only 0.1 months). Although inventory was up 21% from November 2023, it is still 12% below November 2019, the "last normal" pre pandemic November reading (left panel).
- The projection for December suggests that inventory is expected to decrease by 7.1% over the prior month, signaling the continuation of a delayed traditional seasonal trend.*
- Months' supply stood at 4.0 months in Nov. 2024, down from 4.1 months in Oct. 2024, and up from 3.8 months a year ago (right panel). YoY HPA was 4.8% in Nov. 2024, compared to 5.8% in Nov. 2019, which is indicative of a continuing strong seller's market. Relatively tight inventory helps explain the robust YoY HPA.
- 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 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

Housing Inventory and Months' Supply



^{*}Projected total listings are based on average Altos weekly listings through the week ending December 28th , 2024. Source: Realtor.com, Zillow, and AEI Housing Center, www.AEI.org/housing

U.S. Housing Finance

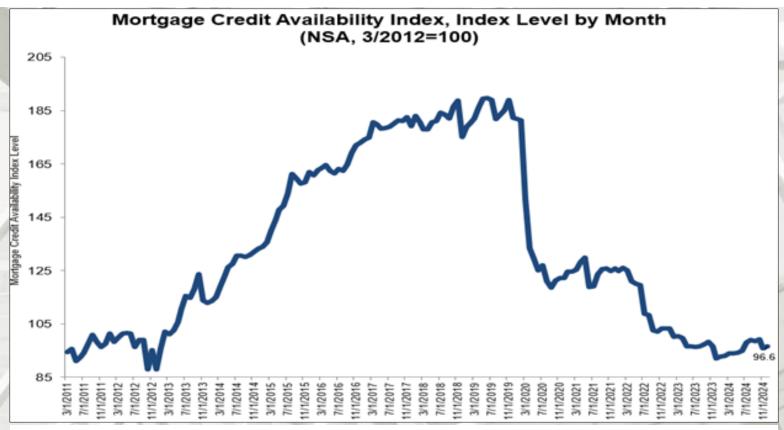
Mortgage Bankers Association Mortgage Credit Availability Increased in December

"Mortgage credit availability decreased in December 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 0.7 percent to 96.6 in December. A decline in the MCAI indicates that lending standards are tightening, while increases in the index are indicative of loosening credit. The index was benchmarked to 100 in March 2012. The Conventional MCAI increased 1.3 percent, while the Government MCAI remained unchanged. Of the component indices of the Conventional MCAI, the Jumbo MCAI increased by 2.3 percent, and the Conforming MCAI fell by 0.7 percent.

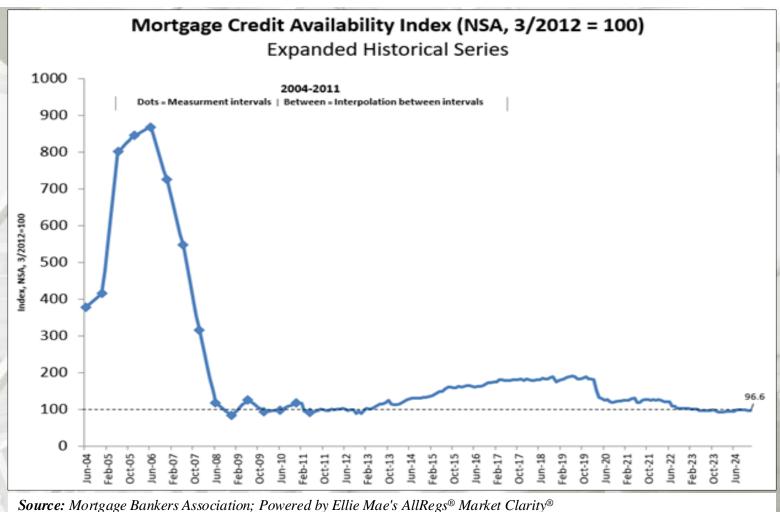
"Credit availability increased slightly in December, driven by more offerings for ARMs and cash out refinances that are primarily for borrowers with better credit. These factors led to a slight rebound in conventional credit compared to the previous month. Additionally, the jumbo index rose to its highest level since August 2024." – 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)



MBA Mortgage Finance Forecast

MBA Mortgage Finance Forecast

December 20, 2024

Housing <i>l</i>	Meas	ures
Housing	Starts	(SAAR, T

Single-Family

Home Sales (SAAR, Thous)

Total Existing Homes

New Home

FHFA US House Price Index (YOY % Change)
Median Price of Total Existing Homes (Thous \$)

Median Price of New Homes (Thous \$)

Interest Rates

30-Year Fixed Rate Mortgage (%) 10-Year Treasury Yield (%)

Mortgage Originations

Total 1- to 4-Family (Bil \$)
Purchase

Pefinanc

Refinance Share (%)

FHA Originations (Bil \$)

Total 1- to 4-Family (000s loans)

Purchase

finance

Refinance Share (%)

Mortgage Debt Outstanding

1- to 4-Family (Bil \$)

	202	24			202	25			202	26					
Q1	Q2	Q3	Q4	Q1	Q2	Q3	Q4	Q1	Q2	Q3	Q4	2024	2025	2026	2027
1,407	1,340	1,332	1,336	1,366	1,383	1,420	1,432	1,448	1,445	1,422	1,430	1,354	1,400	1,436	1,449
1,062	1,004	971	998	1,032	1,054	1,094	1,118	1,141	1,144	1,120	1,123	1,009	1,075	1,132	1,138
345	336	361	338	334	329	326	314	307	301	302	307	345	326	304	311
4,200	4,050	3,890	4,044	4,053	4,115	4,317	4,495	4,516	4,535	4,552	4,582	4,046	4,245	4,546	4,687
663	693	712	723	759	770	785	790	804	799	786	797	698	776	797	816
6.9	5.9	4.4	3.8	2.9	2.1	1.5	1.3	1.2	1.1	1.2	1.3	3.8	1.3	1.3	2.0
385.1	416.9	414.1	407.9	407.2	414.5	416.2	405.2	412.7	417.6	416.9	413.1	406	411	415	416
429.2	414.5	420.5	427.6	433.2	426.3	427.4	418.4	425.7	431.7	426.3	428.1	423	426	428	431
6.7	7.0	6.5	6.6	6.6	6.5	6.4	6.4	6.3	6.3	6.3	6.3	6.6	6.4	6.3	6.3
4.2	4.4	3.9	4.3	4.4	4.3	4.3	4.3	4.3	4.3	4.3	4.3	4.3	4.3	4.3	4.3
377	429	479	494	416	526	570	556	550	630	616	573	1,779	2,068	2,369	2,455
291	336	357	304	282	360	385	369	358	436	428	390	1,288	1,396	1,612	1,681
86	93	122	190	134	166	185	187	192	194	188	183	491	672	757	774
23	22	25	38	32	32	33	34	35	31	31	32	28	33	32	32
												204	211	242	227
1,076	1,203	1,343	1,426	1,171	1,470	1,591	1,551	1,535	1,731	1,685	1,569	5,049	5,784	6,521	6,637
773	880	924	779	718	912	971	927	896	1,088	1,064	967	3,356	3,527	4,015	4,118
303	323	419	647	453	558	621	624	639	643	622	602	1,693	2,256	2,506	2,519
28	27	31	45	39	38	39	40	42	37	37	38	34	39	38	38
13,990	14,094	14,178	14,268	14,363	14,468	14,571	14,665	14,753	14,853	14,949	15,035	14,268	14,665	15,035	15,418
13,990	14,094	14,178	14,268	14,363	14,468	14,571	14,665	14,753	14,853	14,949	15,035	14,268	14,665	15,035	15

Notes:

As of the August 2024 forecast, 2023 origination volume was revised based on the 2023 Home Mortgage Disclosure Act data.

Total 1-to-4-family originations and refinance share are MBA estimates. These exclude second mortgages and home equity loans.

Mortgage rate forecast is based on Freddie Mac's 30-Yr fixed rate which is based on predominantly home purchase transactions.

The 10-Year Treasury Yield and 30-Yr mortgage rate are the average for the quarter, but annual columns show Q4 values.

The FHFA US House Price Index is the forecasted year over year percent change of the FHFA Purchase-Only House Price Index.

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MORTGAGE BANKERS ASSOCIATION

MBA Economic Forecast

MBA Economic Forecast

December 20, 2024

	2024					2025			2026							
	Q1	Q2	Q3	Q4	Q1	Q2	Q3	Q4	Q1	Q2	Q3	Q4	2024	2025	2026	2027
Percent Change, SAAR																
Real Gross Domestic Product	1.6	3.0	2.8	1.9	2.1	1.9	1.9	1.7	1.7	1.6	1.5	1.6	2.3	1.9	1.6	1.5
Personal Consumption Expenditures	1.9	2.8	3.5	3.0	2.9	2.0	1.7	1.4	1.9	2.1	2.2	2.1	2.8	2.0	2.1	2.2
Business Fixed Investment	4.5	3.9	3.8	-1.6	2.9	2.9	2.4	1.9	1.5	1.1	0.9	1.0	2.6	2.5	1.1	8.0
Residential Investment	13.7	-2.8	-5.0	7.4	-1.5	-0.7	2.8	6.5	4.1	2.6	0.2	0.6	3.3	1.8	1.9	2.7
Govt. Consumption & Investment	1.8	3.1	5.0	0.9	0.7	-0.2	0.1	0.1	0.0	0.0	-0.1	-0.2	2.7	0.2	-0.1	-0.3
Net Exports (Bil. Chain 2012\$)	-977.0	-1035.7	-1077.6	-1074.4	-1105.4	-1116.8	-1120.9	-1116.2	-1122.1	-1124.5	-1129.9	-1130.4	-1041.1	-1114.8	-1126.7	-1164.4
Inventory Investment (Bil. Chain 2012\$)	17.7	71.7	64.1	44.2	49.9	70.2	89.4	97.8	102.5	100.8	99.0	95.7	49.4	76.8	99.5	87.7
Consumer Prices (YOY)	3.2	3.2	2.6	2.7	2.3	2.5	2.5	2.3	2.4	2.2	2.3	2.2	2.7	2.3	2.2	2.3
Percent																
Unemployment Rate	3.8	4.0	4.2	4.2	4.3	4.4	4.4	4.5	4.6	4.7	4.8	4.8	4.0	4.4	4.7	4.6
Federal Funds Rate	5.375	5.375	4.875	4.375	4.125	3.875	3.875	3.875	3.875	3.875	3.875	3.875	4.375	3.875	3.875	3.875
10-Year Treasury Yield	4.2	4.4	3.9	4.3	4.4	4.3	4.3	4.3	4.3	4.3	4.3	4.3	4.3	4.3	4.3	4.3

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 S&P ECONOSIM model

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MORTGAGE BANKERS ASSOCIATION

Summary

In conclusion:

Housing data, in aggregate, month-over-month and year-over-year were mixed. On a month-over-month basis single-family starts and permits, total and multi-family permits, single-family completions, spending, and existing and new house sales were positive. Year-over-year, multi-family permits; completions, construction spending, and existing and new house sales were positive. The influence of mortgage rates is evident, as aggregate costs have decreased affordability, and the "lock-in" effect have obfuscated sales. The influence of mortgage rates is evident, as aggregate costs have decreased affordability, and the "lock-in" effect have obfuscated sales.

Pros:

1) The desire to own a house remains positive.

Cons:

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

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