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

# VIRGINIA TECH

#### **Delton Alderman**

Acting Program Manager Forest Products Business Unit Forest Products Laboratory



USDA Forest Service Madison, WI 608.259.6076



#### delton.r.alderman@usda.gov

#### Virginia Cooperative Extension

Virginia Tech • Virginia State University

#### **Urs Buehlmann**

Department of Sustainable Biomaterials College of Natural Resources & Environment Virginia Tech Blacksburg, VA 540.231.9759 buehlmann@gmail.com

2023 Virginia Polytechnic Institute and State University

VCE-ANR

Virginia Cooperative Extension programs and employment are open to all, regardless of age, color, disability, gender, gender identity, gender expression, national origin, political affiliation, race, religion, sexual orientation, genetic information, veteran status, or any other basis protected by law. An equal opportunity/affirmative action employer. Issued in furtherance of Cooperative Extension work, Virginia Polytechnic Institute and State University, Virginia State University, and the U.S. Department of Agriculture cooperating. Edwin J. Jones, Director, Virginia Cooperative Extension, Virginia Tech, Blacksburg; Jewel E. Hairston, Administrator, 1890 Extension Program, Virginia State, Petersburg.

# **Table of Contents**

- Slide 3: Opening Remarks
- Slide 4: Housing Scorecard
- Slide 5: New Housing Starts
- Slide 12: <u>Regional Housing Starts</u>
- Slide 18: <u>New Housing Permits</u>
- Slide 20: <u>Regional New Housing Permits</u>
- Slide 25: Housing Under Construction
- Slide 27: Regional Under Construction
- Slide 32: Housing Completions
- Slide 34: <u>Regional Housing Completions</u>
- Slide 40: <u>New Housing Sales</u>

Slide 41: <u>New Single-Family House Sales</u>

Slide45: <u>Region SF House Sales &amp; Price</u>
Slide 46: <u>New SF House Sales x Category</u>
Slide 64: Construction Spending
Slide 67: <u>Construction Spending Shares</u>
Slide 71: <u>Remodeling</u>
Slide 77: Existing House Sales
Slide 80: <u>U.S. Housing Prices &amp; Finance</u>
Slide 95: Mortgage Finance & Outlook
Slide 102: <u>Summary</u>
Slide 103: Virginia Tech Disclaimer
Slide104: USDA Disclaimer

This report is a free monthly service of Virginia Tech. Past issues are available at: <u>http://woodproducts.sbio.vt.edu/housing-report.</u>

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

# **Opening Remarks**

Housing data, month-over-month and year-over-year, exhibited several categories of negativity. Single-family starts and single-family permits, new house sales, and construction spending were positive year-over-year. On a monthly basis single-family permits and under construction, new and existing sales, and spending were also positive. The influence of increased mortgage rates is evident, as aggregate costs have decreased affordability; thus, a reduction in several data categories.

The March 14th Atlanta Fed GDPNow<sup>™</sup> total residential investment spending forecast is 5.8% for Q1 2024. Quarterly log change for new private permanent site expenditures were projected at 6.6%; the improvement spending forecast was -2.6%; and the manufactured/mobile home expenditures projection was -18.7% (all: quarterly log change and at a seasonally adjusted annual rate).<sup>1</sup>

"Due to a continued lack of inventory, home sales are likely to grow only modestly. The demand for housing will remain high based on a large share of Millennial first-time home buyers looking to purchase homes. The lack of supply combined with strong demand will push home prices up. We forecast home prices to increase 2.8% in 2024 and 2.0% in 2025 nationally. However, higher monthly costs and down payments required from the increasing property values are pricing many prospective first-time home buyers out of the market, despite their desire to own a home." – Len Kiefer, Deputy Chief Economist and Senior Director, Economic Housing & Research and Sara Hoffmann, Senior Director, Multifamily Research; Freddie Mac

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.

### January 2024 Housing Scorecard

	M/M	$\mathbf{Y}/\mathbf{Y}$
Housing Starts	<b>▼</b> 14.8%	▼ 0 <b>.</b> 7%
Single-Family (SF) Starts	▼ 4.7%	<b>22.0%</b>
Multi-Family (MF) Starts*	▼ 35.6%	▼ 36.8%
Housing Permits	▼ 0.3%	<b>10.0%</b>
SF Permits	<b>▲</b> 2.2%	<b>▲</b> 36.5%
MF Permits*	▼ 5.3%	▼ 22.8%
Housing Under Construction	▼ 0.2%	▼ 1.1%
SF Under Construction	<b>▲</b> 0.7%	▼ 9.0%
Housing Completions	▼ 8.1%	<b>▲</b> 2.8%
SF Completions	▼ 16.3%	▼ 15.8%
New SF House Sales	<b>▲</b> 1.5%	<b>▲</b> 1.8%
Private Residential Construction Spending	<b>0.2%</b>	<b>▲</b> 5.2%
SF Construction Spending	▲ 0.6%	<b>▲</b> 12.5%
Existing House Sales <sup>1</sup>	<b>▲</b> 3.1%	▼ 1 <b>.</b> 7%

\* All multi-family (2 to  $4 + \ge 5$ -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
January	1,331,000	1,004,000	13,000	314,000
December	1,562,000	1,054,000	19,000	489,000
2023	1,340,000	823,000	11,000	506,000
M/M change	-14.8%	-4.7%	-31.6%	-35.8%
Y/Y change	-0.7%	22.0%	18.2%	-37.9%

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

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

## **Total Housing Starts**



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

\* Percentage of total starts.

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

Sources: https://fred.stlouisfed.org/series/USREC, 6/1/21; http://www.census.gov/construction/nrc/pdf/newresconst.pdf; 2/16/24

## **Total Housing Starts: Six-Month Moving Average**



## SF Housing Starts: Six-Month Moving Average



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



## **New SF Starts**



#### New SF starts adjusted for the US population

From January 1959 to January 2007, the long-term ratio of new SF starts to the total US non-institutionalized population is 0.0066. In January 2024 it was 0.0038 – decreasing from December (0.0039). The long-term ratio of non-institutionalized population, aged 20 to 54 is 0.0103; in January 2024 it was 0.0067 –also a decline from December (0.0070). 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**
January	104,000	76,000	28,000
December	131,000	60,000	71,000
2023	128,000	61,000	67,000
M/M change	-20.6%	26.7%	-60.6%
Y/Y change	-18.8%	24.6%	-58.2%
	MW Total	MW SF	MW MF
January	<b>MW Total</b> 142,000	<b>MW SF</b> 115,000	<b>MW MF</b> 27,000
January December	<b>MW Total</b> 142,000 203,000	<b>MW SF</b> 115,000 123,000	<b>MW MF</b> 27,000 80,000
January December 2023	MW Total142,000203,000128,000	<b>MW SF</b> 115,000 123,000 98,000	<b>MW MF</b> 27,000 80,000 30,000
January December 2023 M/M change	MW Total         142,000         203,000         128,000         -30.0%	MW SF         115,000         123,000         98,000         -6.5%	MW MIF           27,000           80,000           30,000           -66.3%

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	<b>S MF</b> **
January	753,000	579,000	174,000
December	834,000	605,000	229,000
2023	786,000	534,000	252,000
M/M change	-9.7%	-4.3%	-24.0%
Y/Y change	-4.2%	8.4%	-31.0%
	W Total	W SF	W MF
January	<b>W Total</b> 332,000	<b>W SF</b> 234,000	W MF 98,000
January December	W Total 332,000 394,000	W SF 234,000 266,000	W MIF 98,000 128,000
January December 2023	W Total 332,000 394,000 298,000	W SF 234,000 266,000 130,000	W MIF 98,000 128,000 168,000
January December 2023 M/M change	W Total 332,000 394,000 298,000 -15.7%	WSF 234,000 266,000 130,000 -12.0%	W MIF 98,000 128,000 168,000 -23.4%

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  $+ \ge 5$  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  $+ \ge 5$  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 (%)



Return TOC

# **New Housing Permits**

	Total	SF	MF 2-4 unit	$MF \ge 5$ unit
	<b>Permits*</b>	Permits	Permits	Permits
January	1,489,000	1,021,000	49,000	419,000
December	1,493,000	999,000	49,000	445,000
2023	1,354,000	748,000	54,000	552,000
M/M change	-0.3%	2.2%	0.0%	-5.8%
Y/Y change	10.0%	36.5%	-9.3%	-24.1%

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

## **Total New Housing Permits**



<sup>\*</sup> 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).

Sources: https://fred.stlouisfed.org/series/USREC, 6/1/21; https://www.census.gov/construction/bps/; 2/26/24

## **New Housing Permits by Region**

	NE Total*	NE SF	NE MF**
January	149,000	59,000	90,000
December	98,000	51,000	47,000
2023	112,000	53,000	59,000
M/M change	52.0%	15.7%	91.5%
Y/Y change	33.0%	11.3%	52.5%
	MW Total*	MW SF	MW MF**
January	<b>MW Total*</b> 208,000	<b>MW SF</b> 120,000	<b>MW MF**</b> 88,000
January December	<b>MW Total*</b> 208,000 197,000	<b>MW SF</b> 120,000 122,000	<b>MW MF**</b> 88,000 75,000
January December 2023	<b>MW Total*</b> 208,000 197,000 178,000	MW SF 120,000 122,000 92,000	<b>MW MF**</b> 88,000 75,000 86,000
January December 2023 M/M change	MW Total*         208,000         197,000         178,000         5.6%	MW SF         120,000         122,000         92,000         -1.6%	<b>MW MF**</b> 88,000 75,000 86,000 17.3%

NE = Northeast; MW = Midwest

\* All data are SAAR

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

## **New Housing Permits by Region**

	S Total*	S SF	<b>S MF</b> **
January	793,000	605,000	188,000
December	860,000	598,000	262,000
2023	770,000	455,000	315,000
M/M change	-7.8%	1.2%	-28.2%
Y/Y change	3.0%	33.0%	-40.3%
	W Total*	W SF	<b>W MF**</b>
January	<b>W Total*</b> 339,000	<b>W SF</b> 237,000	W MF** 102,000
January December	W Total* 339,000 338,000	WSF 237,000 228,000	WMF** 102,000 110,000
January December 2023	W Total* 339,000 338,000 294,000	WSF 237,000 228,000 148,000	WMF** 102,000 110,000 146,000
January December 2023 M/M change	W Total* 339,000 338,000 294,000 0.3%	WSF 237,000 228,000 148,000 3.9%	WMF** 102,000 110,000 146,000 -7.3%

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**



\* Percentage of total permits.

### New Housing Under Construction (HUC)

	Total HUC	SF HUC	MF 2-4 unit** HUC	MF ≥ 5 unit HUC
January	1,676,000	680,000	17,000	979,000
December	1,680,000	675,000	17,000	988,000
2023	1,695,000	747,000	16,000	932,000
M/M change	-0.2%	0.7%	0.0%	-0.9%
Y/Y change	-1.1%	-9.0%	6.3%	5.0%

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**



\* 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**
January	205,000	66,000	139,000
December	207,000	65,000	142,000
2023	221,000	67,000	154,000
M/M change	-1.0%	1.5%	-2.1%
Y/Y change	-7.2%	-1.5%	-9.7%
	-		
	MW Total	MW SF	MW MF
January	<b>MW Total</b> 217,000	<b>MW SF</b> 93,000	<b>MW MF</b> 124,000
January December	<b>MW Total</b> 217,000 214,000	<b>MW SF</b> 93,000 91,000	MW MF 124,000 123,000
January December 2023	MW Total217,000214,000211,000	MW SF       93,000         91,000       91,000         100,000       900	MW MF 124,000 123,000 111,000
January December 2023 M/M change	MW Total         217,000         214,000         211,000         1.4%	MW SF93,00091,000100,0002.2%	<b>MW MF</b> 124,000 123,000 111,000 0.8%

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	<b>S MF</b> **
January	776,000	345,000	431,000
December	780,000	345,000	435,000
2023	794,000	397,000	397,000
M/M change	-0.5%	0.0%	-0.9%
Y/Y change	-2.3%	-13.1%	8.6%
	W Total	W SF	W MF
January	478,000	176,000	302,000
December	479,000	174,000	305,000
2023	469,000	183,000	286,000
M/M change	-0.2%	1.1%	-1.0%
Y/Y change	1.9%	-3.8%	5.6%

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

\*\* US DOC does not report multi-family units under construction directly; this is an estimation

(Total under construction - SF under construction).

#### Total Housing Under Construction by Region



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

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

\* Percentage of total housing under construction units.

## SF Housing Under Construction by Region



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

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

\* Percentage of total housing under construction units.

#### MF Housing Under Construction by Region



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

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

\* Percentage of total housing under construction units.

# **New Housing Completions**

	Total Completions*	SF Completions	MF 2-4 unit** Completions	MF ≥ 5 unit Completions
January	1,416,000	857,000	21,000	538,000
December	1,541,000	1,024,000	11,000	506,000
2023	1,377,000	1,018,000	9,000	350,000
M/M change	-8.1%	-16.3%	90.9%	6.3%
Y/Y change	2.8%	-15.8%	133.3%	53.7%

\* 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  $+ \ge 5$ -unit MF)).

## **Total Housing Completions**



Sources: https://fred.stlouisfed.org/series/USREC, 6/1/21; http://www.census.gov/construction/nrc/pdf/newresconst.pdf; 2/16/24

#### New Housing Completions by Region

	NE Total	NE SF	NE MF**
January	102,000	43,000	59,000
December	139,000	70,000	69,000
2023	105,000	60,000	45,000
M/M change	-26.6%	-38.6%	-14.5%
Y/Y change	-2.9%	-28.3%	31.1%
	MW Total	MW SF	MW MF
January	<b>MW Total</b> 172,000	<b>MW SF</b> 101,000	<b>MW MF</b> 71,000
January December	<b>MW Total</b> 172,000 202,000	<b>MW SF</b> 101,000 123,000	<b>MW MF</b> 71,000 79,000
January December 2023	MW Total 172,000 202,000 182,000	MW SF 101,000 123,000 134,000	<b>MW MF</b> 71,000 79,000 48,000
January December 2023 M/M change	MW Total 172,000 202,000 182,000 -14.9%	MW SF 101,000 123,000 134,000 -17.9%	<b>MW MF</b> 71,000 79,000 48,000 -10.1%

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

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

\* Percentage of total housing completions

#### New Housing Completions by Region

	S Total	S SF	<b>S MF**</b>
January	803,000	535,000	268,000
December	875,000	623,000	252,000
2023	738,000	586,000	152,000
M/M change	-8.2%	-14.1%	6.3%
Y/Y change	8.8%	-8.7%	76.3%
	W Total	W SF	W MF
January	<b>W Total</b> 339,000	<b>W SF</b> 178,000	<b>W MF</b> 161,000
January December	<b>W Total</b> 339,000 325,000	W SF 178,000 208,000	<b>W MF</b> 161,000 117,000
January December 2023	W Total 339,000 325,000 352,000	W SF 178,000 208,000 238,000	W MIF 161,000 117,000 114,000
January December 2023 M/M change	W Total 339,000 325,000 352,000 4.3%	W SF 178,000 208,000 238,000 -14.4%	W MIF 161,000 117,000 114,000 37.6%

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

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

\* Percentage of total housing completions

### Total Housing Completions by Region



\*\* US DOC does not report multi-family unit completions directly; this is an estimation (Total completions - SF completions).
## SF Housing Completions by Region



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

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

\* Percentage of total housing completions

# MF Housing Completions by Region



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

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

\* Percentage of total housing completions

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



#### Authorized, Not Started vs. Housing Completions

Total authorized units "not" started was 267,000 in January, an increase from December (262,000), and SF authorized units "not" started were 142,000 units in January, also an increase from December (140,000). Total completions increased 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.

Sources: http://www.census.gov/construction/nrc/pdf/newresconst.pdf; 2/16/24

# New Single-Family House Sales

	New SF Sales*	Median Price	Mean Price	Month's Supply
January	661,000	\$420,700	\$534,300	8.3
December	651,000	\$413,100	\$493,400	8.3
2023	649,000	\$432,100	\$495,600	8.1
M/M change	1.5%	1.8%	8.3%	0.0%
Y/Y change	1.8%	-2.6%	7.8%	2.5%

\* All new sales data are presented at a seasonally adjusted annual rate (SAAR)<sup>1</sup> and housing prices are adjusted at irregular intervals<sup>2</sup>.

New SF sales were less than the consensus forecast<sup>3</sup> of 685 m; range 657 m to 715 m. The past three month's new SF sales data also were revised:

October initial: 679 m, revised to 670 m. November initial: 590 m, revised to 607 m. December initial: 664 m, revised to 651 m.

Sources: <sup>1</sup> https://www.census.gov/construction/nrs/index.html; 6/24/21; <sup>2</sup> https://www.census.gov/construction/nrs/pdf/newressales.pdf; 2/26/24 <sup>3</sup> http://us.econoday.com; 2/26/24



\* 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
January	43,000	)	70,00	0	358,000	) 19	0,000
December	25,000	)	65,00	0	424,000	) 13	7,000
2023	41,000	)	73,00	0	414,000	) 12	1,000
M/M change	72.0%	)	7.7%	, D	-15.6%	38	8.7%
Y/Y change	4.9%		-4.1%	0	-13.5%	57	7.0%
	≤ \$150m	\$150 - \$199.9m	\$200 - 299.9m	\$300 - \$399.9m	\$400 - \$499.9m	\$500 - \$749.9m	≥\$750m
January <sup>1,2,3,4</sup>	0	1,000	8,000	17,000	11,000	12,000	8,000
December	0	0	7,000	15,000	9,000	14,000	4,000
2023	0	1,000	6,000	19,000	11,000	13,000	7,000
M/M change	#N/A	#N/A	14.3%	13.3%	22.2%	-14.3%	100.0%
Y/Y change	#N/A	0.0%	33.3%	-10.5%	0.0%	-7.7%	14.3%
% of New SF sales	0.0%	1.8%	14 0%	29.8%	19 3%	21 1%	14 0%

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

<sup>1</sup> All data are SAAR

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

<sup>3</sup> Detail January not add to total because of rounding.

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

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

Sources: <sup>1,2,3</sup> https://www.census.gov/construction/nrs/index.html; 2/26/24; <sup>4</sup> https://www.census.gov/construction/cpi/pdf/descpi\_sold.pdf



\* Total new sales by price category and percent.

Source: http://www.census.gov/construction/nrc/pdf/newresconst.pdf; 2/26/24

# 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.



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

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

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

Source: 1 https://www.census.gov/construction/nrs/index.html; 2 https://www.census.gov/construction/cpi/pdf/descpi\_sold.pdf 2/26/24



#### **New SF Sales:** ≤ **\$ 200m and** ≥ **\$500m: 2002 to January 2022**

The number of  $\leq$  \$200 thousand SF houses has declined dramatically since 2002<sup>1, 2</sup>. Subsequently, from 2012 onward, the  $\geq$  \$500 thousand class has soared (on a percentage basis) in contrast to the  $\leq$  \$200 thousand class. Oft mentioned reasons for this occurrence is builder net margins, affordability, and purchase of new houses for rent – single-family rentals.

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

Source: <sup>1</sup> https://www.census.gov/construction/nrs/index.html; <sup>2</sup> https://www.census.gov/construction/cpi/pdf/descpi\_sold.pdf 2/26/24



#### New SF sales adjusted for the US population

From January 1963 to January 2007, the long-term ratio of new house sales to the total US noninstitutionalized population was 0.0039; in January 2023 it was 0.0025 - an increase from December (0.0024). The non-institutionalized population, aged 20 to 54 long-term ratio is 0.0062; in January 2023 it was 0.0044 – also an improvement from December (0.0043). 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 Houses Sold During Period**

	Total	Not started	Under Construction	Completed
January	661,000	85,000	294,000	282,000
December	452,000	105,000	268,000	79,000
2023	439,000	86,000	286,000	67,000
M/M change	46.2%	-19.0%	9.7%	257.0%
Y/Y change	50.6%	-1.2%	2.8%	320.9%
Total percentage		12.9%	44.5%	42.7%

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



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

# **New SF Houses for Sale**

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

	Total	NE	MW	S	W
January	456,000	33,000	43,000	274,000	107,000
December	452,000	32,000	44,000	268,000	108,000
2023	438,000	32,000	43,000	260,000	103,000
M/M change	0.9%	3.1%	-2.3%	2.2%	-0.9%
Y/Y change	4.1%	3.1%	0.0%	5.4%	3.9%

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).

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

	Total	Not started	Under Construction	Completed
January	456,000	106,000	270,000	80,000
December	452,000	105,000	268,000	79,000
2023	439,000	86,000	286,000	67,000
M/M change	0.9%	1.0%	0.7%	1.3%
Y/Y change	3.9%	23.3%	-5.6%	19.4%
Total percentage		23.2%	59.2%	17.5%

\* Not SAAR

# 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<sup>a</sup>



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

The months' supply of new houses for sale at the end of January was 8.3, greater than the historically preferred number of five- to six-months (SAAR).

## **Residential Electricity Customers, Total and Occupied Housing**



## **Residential Electricity Customers and Occupied Housing**



The number of housing units with electricity exceeds total occupied housing units by a wide margin.

## **Residential Electricity Customers and Occupied Housing**



Return TOC

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



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

\* In thousands

Sources: \*Association of American Railroads, Rail Time Indicators report-January 2022; http://www.census.gov/construction/; 2/16/24 & 2/26/24

## 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.

Sources: \*Association of American Railroads, Rail Time Indicators report-January 2022; http://www.census.gov/construction/; 2/16/24; & 2/26/24

## January 2024 Construction Spending

	Total Private Residential*	SF	MF	Improvement**
January	\$900,846	\$430,129	\$134,477	\$336,240
December	\$899,079	\$427,532	\$135,006	\$336,541
2023	\$856,046	\$382,298	\$124,644	\$349,104
M/M change	0.2%	0.6%	-0.4%	-0.1%
Y/Y change	5.2%	12.5%	7.9%	-3.7%

\* millions.

\* The US DOC does not report improvement spending directly, this is a monthly estimation: ((Total Private Spending – (SF spending + MF spending)). All data are SAARs and reported in nominal US\$.

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

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

New multi-family includes new apartments and condominiums. The classification excludes residential units in buildings that are primarily nonresidential.

Improvements: Includes remodeling, additions, and major replacements to owner occupied properties subsequent to completion of original building. It includes construction of additional housing units in existing residential structures, finishing of basements and attics, modernization of kitchens, bathrooms, etc. Also included are improvements outside of residential structures, such as the addition of swimming pools and garages, and replacement of major equipment items such as water heaters, furnaces and central air-conditioners. Maintenance and repair work is not included.

Source: http://www.census.gov/construction/c30/pdf/privsa.pdf; 3/1/24

### Total Construction Spending (nominal): 2000 – January 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 – January 2024



Sources: \* http://www.bea.gov/iTable/iTable.cfm; 6/29/23; http://www.census.gov/construction/c30/pdf/privsa.pdf; 3/1/2024

## **Construction Spending Shares:** 1993 – January 2024



#### Total Residential Spending: 1993 through 2006

SF spending average: 69.2%

MF spending average: 7.5%

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

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

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

Sources: \*https://fred.stlouisfed.org/series/USREC, 7/24/21; http://www.census.gov/construction/c30/pdf/privsa.pdf; 3/1/24 and http://www.bea.gov/iTable/iTable.cfm; 6/29/23

### **Construction Spending: Y/Y Percentage Change**



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

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

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

Sources: \*https://fred.stlouisfed.org/series/USREC, 6/24/21; http://www.census.gov/construction/c30/pdf/privsa.pdf; 3/1/24 and http://www.bea.gov/iTable/iTable.cfm; 6/29/23

### Adjusted Construction Spending: Y/Y Percentage Change



### Y/Y percentage change, 1993 to January 2024

Sources: http://www.census.gov/construction/c30/pdf/privsa.pdf; 3/1/24 and http://www.bea.gov/iTable/iTable.cfm; 6/29/23

Return TOC

# Remodeling

### Average 2024 Full-Year Professional Remodeler Revenue Growth Outlook

■ 4Q23 = 3Q23

#### Home improvement pros



### John Burns Research & Consulting LLC

"Here is a great sign for the economy and housing market in 2024. Remodelers have grown far more optimistic about their revenue growth potential in 2024, compared to just one quarter ago. Sample size = 683 large remodelers." – John Burns, Chief Executive Officer, John Burns Research & Consulting LLC

Source: https://twitter.com/johnburnsjbrec/status/1749424172961235040; 1/22/24

# Remodeling

### John Burns Research and Consulting, LLC

### Building Products Demand Forecast: A tale of two end markets

"Building material spending will grow in 2024. However, demand from new construction end markets will not be the same. For those exposed to single-family construction, a building material boom is coming. For those largely exposed to multifamily, expect a material bust.

#### The best of times: single-family new construction

This year, strength in the single-family new-construction end market will drive stronger demand for building products. Rate buydowns, a frozen resale market, and quick-move-in homes boosted single-family new home sales in 2023. This created a push to replenish communities that were sold out faster than expected. Our <u>Home Builder Survey</u>, which represents 21% of US new home sales, indicates that single-family starts per community were up +36% year over year (YOY) in January 2024 and above seasonal norms. This increased supply (combined with solid market fundamentals) will prime production builders, especially large builders who can quickly scale up, for growth in 2024.

### **Implications for building products**

Stronger single-family starts, which should continue through the first half of 2024, will drive steady demand for building products. The cadence of this demand is predictable and driven by build schedules. It will start with strong growth for products installed earlier in the build process, followed by growth for those products installed closer to the completion of a single-family home." – Jeremy Albright, Data Scientist and Matt Saunders, Senior Vice President of Building Products Research; John Burns Research and Consulting, LLC

# Remodeling

### John Burns Research and Consulting, LLC

### "The worst of times: multi-family new construction

The end of the apartment construction boom means that multifamily building products demand will decline over the second half of 2024. From 2021 to 2023, multifamily new construction has been a strong end market for building products manufacturers, who have benefited from elevated construction levels and extended cycle times. Now, a deluge of completed units – which will outpace demand – and elevated costs of capital have forced developers to press pause. We expect multifamily new construction starts to plunge in 2024.

### **Implications for building products**

Our <u>Building Products Dealer Survey</u> shows an early read of the shift away from multifamily: dealers rating multifamily demand as Strong dropped -40 percentage points YOY in the February survey.

Building products companies should expect increased demand during the first half of the year from projects with extended cycle times and units nearing completion. As this tapers off in the second half of 2024, multifamily demand for building products will pull back.

For building product companies, **now is the time to evaluate your exposure to single-family and multifamily construction**. For those largely concentrated in the single-family end market, plan to accelerate production to meet growing demand. If highly exposed to multifamily, plan for a decline in demand for your products over the second half of 2024.

As the tale of these two end markets unfolds, we can help you optimize your risk and return. Our <u>Building Products Demand Meter</u> forecasts end-market demand across 18 building product categories. We have partnered with <u>Home Innovation Research Labs</u> to provide our clients with these timely insights. Please <u>reach out</u> to discuss how we can help your company." – Jeremy Albright, Data Scientist and Matt Saunders, Senior Vice President of Building Products Research; John Burns Research and Consulting, LLC
### JOHN BURNS

2024 Forecasted Growth (YOY) in Product/Material Volume for Single-Family Detached New Construction

Installation Timing Relative to Housing Start	Building Product Grouping	Building Product Category	1st half of 2024	2nd half of 2024	2024, Full Year
Start	Foundations and framing	Concrete Dimensional lumber Sheathing	17.6% 21.5% 23.8%	-11.0% -5.4% <u>-3.6</u> %	2.2% 6.5% 8.5%
	Mechanical	HVAC	25.0%	-0.7%	10.6%
	Interior Rough	Rough Plumbing Insulation Drywall/wallboard Flooring	-1.7% 18.8% 17.8% 2.1%	7.7% 5.4% 4.5% 11.8%	2.9% 11.4% 10.5% 6.9%
Completion	Exterior Finish	Roofing Windows Doors Siding Decks and porches	3.9% 2.1% 0.5% 5.6% 8.0%	7.4% 5.5% 8.5% 9.1% 11.7%	5.7% 3.9% 4.4% 7.4% 9.9%
	Interior Finish	Cabinets Countertops Appliances Faucets Interior paint	1.0% -0.6% 0.7% -1.1% 0.8%	10.7% 8.8% 10.3% 8.4% 10.4%	5.8% 4.0% 5.5% 3.6% 5.6%
	18-category aver	8.1%	5.5%	6.4%	

Source: John Burns Research and Consulting, LLC (Pub: Jan-24)

Source: https://jbrec.com/insights/building-products-demand-forecast-a-tale-of-two-end-markets; 2/23/24

### JOHN BURNS

2024 Forecasted New Construction Growth (YOY) in Product/Material Volume for Multifamily New Construction

Building Product Grouping	Building Product Category	1st half of 2024	2nd half of 2024	2024, Full Year				
Eoundations and	Concrete	-9.9%	-13.9%	-12.0%				
framing	Dimensional lumber	-11.9%	-15.2%	-13.5%				
	Sheathing	-9.7%	-13.0%	-11.3%				
Mechanical	HVAC	-12.9%	2.0%	-6.3%				
Interior Rough	Rough Plumbing	10.2%	-18.0%	-6.4%				
	Insulation	-8.4%	9.5%	-0.6%				
	Drywall/wallboard	-12.8%	4.3%	-5.3%				
	Flooring	10.8%	-17.6%	-5.9%				
	Roofing	0.6%	-11.6%	-6.6%				
	Windows	2.5%	-9.9%	-4.7%				
Exterior Finish	Doors	13.5%	-14.6%	-3.0%				
	Siding	-25.5%	-34.5%	-30.8%				
	Decks and porches	6.4%	-6.4%	-1.1%				
	Cabinets	17.3%	-12.7%	-0.4%				
	Countertops	16.3%	-13.5%	-1.2%				
Interior Finish	Appliances	17.7%	-12.5%	0.0%				
	Faucets	10.6%	-17.7%	-6.0%				
	Interior paint	11.7%	-16.9%	-5.1%				
18-Category Averag	ge:	1.5%	-11.8%	-6.7%				

Source: John Burns Research and Consulting, LLC (Pub: Jan-24)

Source: https://jbrec.com/insights/building-products-demand-forecast-a-tale-of-two-end-markets; 2/23/24

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



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

NAICS 444 sales decreased 2.8% in February 2024 from February 2023 and declined 1.3% Y/Y (nominal basis).

### **Retail Sales: Hardware Stores**



#### Hardware Stores: NAICS 44413

NAICS 44413 retail sales decreased 9.2% in January 2024 from December 2023 and improved 9.0% Y/Y (nominal basis).

# **Existing House Sales**

### National Association of Realtors ${}^{\mathbb{R}}$

	Existing Sales	Median Price	Month's Supply
January	4,000,000	\$379,100	3.0
December	3,880,000	\$381,400	3.1
2023	4,070,000	\$361,200	2.9
M/M change	3.1%	-0.6%	-3.2%
Y/Y change	-1.7%	5.0%	3.4%

All sales data: SAAR

Source: https://fred.stlouisfed.org/series/EXHOSLUSM495S; 2/22/23

# **Existing House Sales**

	NE	MW	S	W
January	480,000	950,000	1,840,000	730,000
Decembe	er 480,000	930,000	1,770,000	700,000
2023	510,000	980,000	1,870,000	710,000
M/M chan	ge 0.0%	2.2%	4.0%	4.3%
Y/Y chang	ge -5.9%	-3.1%	-1.6%	2.8%
		Existing	SF Median	
		SF Sales	Price	
	January	3,600,000	\$383,500	1.
	December	3,480,000	\$385,800	
1 2	2023	3,650,000	\$365,400	-
	M/M change	3.4%	-0.6%	
	Y/Y change	-1.4%	5.0%	Time

All sales data: SAAR.

Source: https://fred.stlouisfed.org/series/EXHOSLUSM495S; 2/22/23

# **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** 

U.S. House Prices Rise 6.5 Percent over the Last Year; Up 1.5 Percent from the Third Quarter

### **Significant Findings**

"U.S. house prices rose **6.5 percent** between the fourth quarter of 2022 and the fourth quarter of 2023, according to the Federal Housing Finance Agency (FHFA) House Price Index (FHFA HPI<sup>®</sup>). House prices were up **1.5 percent** compared to the third quarter of 2023. FHFA's seasonally adjusted monthly index for December was up **0.1 percent** from November.

All nine census divisions had positive house price changes year-over-year. The New England division recorded the strongest appreciation, posting a **10.3 percent** increase from the fourth quarter of 2022 to the fourth quarter of 2023. The West South Central division recorded the smallest four-quarter appreciation, at **3.2 percent**." – Adam Russell, FHFA

"U.S. house prices increased modestly over the course of 2023. However, the market showed signs of softening as house price appreciation was lower in the fourth quarter of the year than in the previous quarter." – Dr. Nataliya Polkovnichenko, Supervisory Economist, Division of Research and Statistics, FHFA



### S&P CoreLogic Case-Shiller Index Reports 5.5% Annual Home Price Gain For Calendar 2023

"S&P Dow Jones Indices (S&P DJI) released the latest results for the S&P CoreLogic Case-Shiller Indices, the leading measure of U.S. home prices. Data released December 2023 show that 17 out of the 20 major metro markets reported month-over-month price decreases. More than 27 years of history are available for the data series and can be accessed in full by going to <u>www.spglobal.com/spdji/en/index-family/indicators/sp-corelogic-case-shiller</u>.

#### 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 5.5% annual gain in December, up from a 5.0% rise in the previous month. The 10-City Composite showed an increase of 7.0%, up from a 6.3% increase in the previous month. The 20-City Composite posted a year-over-year increase of 6.1%, up from a 5.4% increase in the previous month. San Diego reported the highest year-over-year gain among the 20 cities with an 8.8% increase in December, followed by Los Angeles and Detroit, each with an 8.3% increase. Portland showed a 0.3% increase this month, holding the lowest rank after reporting the smallest year-over-year growth. ...

#### **Month-Over-Month**

The U.S. National Index showed a continued decrease of 0.4%, while the 20-City Composite and 10-City Composite posted 0.3% and 0.2% month-over-month decreases respectively in December. After seasonal adjustment, the U.S. National Index, the 20-City Composite, and the 10-City Composite all posted month-over-month increases of 0.2%." – Brian D. Luke, Head of Commodities, Real & Digital Assets, S&P DJI

### S&P CoreLogic Case-Shiller Index

### Analysis

"U.S. home prices faced significant headwinds in the fourth quarter of 2023. However, on a seasonally adjusted basis, the S&P Case-Shiller Home Price Indices continued its streak of seven consecutive record highs in 2023. Ten of 20 markets beat prior records, with San Diego registering an 8.9% gain and Las Vegas the fastest rising market in December, after accounting for seasonal impacts.

2023 U.S. housing gains haven't followed such a synchronous pattern since the COVID housing boom. The term 'a rising tide lifts all boats' seems appropriate given broad-based performance in the U.S. housing sector. All 20 markets reported yearly gains for the first time this year, with four markets rising over 8%. Portland eked out a positive annual gain after 11 months of declines. Regionally, the Midwest and Northeast both experienced the greatest annual appreciation with 6.7%.

Looking back at the year, 2023 appears to have exceeded average annual home price gains over the past 35 years. With trend growth at the national level of 4.7%, a 5.5% return demonstrates solid, steady growth. While we are not experiencing the double-digit gains seen in the previous two years, above-trend growth should be well received considering the rising costs of financing home mortgages. We previously suggested that the surge in home prices during the COVID pandemic could have accelerated home ownership temporarily. The past two years reflect consistent growth slightly above trend, suggesting a more secular shift in home ownership post pandemic. In the short term, meanwhile, we should be able to measure the impact of higher mortgage rates on home prices. Increased financing costs appeared to precipitate home price declines in the fourth quarter, as 15 markets saw lower values compared to September." – 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).

**Return to TOC** 

### **S&P/Case-Shiller Home Price Indices**



#### Y/Y Price Change

From December 2022 to December 2023, the National Index indicated a 5.5% increase; the Ten-City improved by 7.0%, and the Twenty-City increased by 6.1%.

## **U.S. Housing Affordability**



Sources: eMBS, Federal Housing Administration (FHA), and Urban Institute. Note: All series measure the first-time home buyer share of purchase loans for principal residences.

### **Urban Institute**

### National Mortgage Affordability Over Time

"Mortgage affordability, while marginally better than the record high in October, remains close to the worst level since the inception of this series in 2002. As of January 2024, with a 20 percent down payment, the share of median income needed for the monthly mortgage payment stood at 31.6 percent, higher than the 30.9 percent at the peak of the housing bubble in November 2005; and with 3.5 percent down the housing cost burden is 36.7 percent, also above the 35.8 percent prior peak in November 2005. ..." – Laurie Goodman *et. al*, Vice President, Urban Institute

Source: https://www.urban.org/research/publication/housing-finance-glance-monthly-chartbook-february-2024; 2/27/24

### **U.S. First-Time House Buyers**



Sources: eMBS, Federal Housing Administration (FHA), and Urban Institute. Note: All series measure the first-time homebuyer share of purchase loans for principal residences.

### Urban Institute

#### **First-time House Buyer Share**

"In November 2023, the FTHB share for FHA, which has always been more focused on first-time home buyers, was 81.9 percent. The FTHB share of GSE lending in December was 51.2 percent; the VA share was 50.4 percent. ..." – Laurie Goodman *et. al*, Vice President, Urban Institute

## **U.S. Housing Affordability**



### **AEI Housing Center**

#### Preliminary Year-over-Year (YoY) HPA in January 2024 Remains Strong at 6.4% Due to Falling Interest Rates in December 2023

"January 2024's preliminary YoY HPA was 6.4%, up from 5.8% a month ago and 4.0% a year ago.
As our projection on the following slide indicates, HPA is expected to be around 5% by Dec. 2024.
The boost from 5.8% to 6.4% is largely due to the substantial rate decline in Dec. 2023 (when Jan. 2024 purchases locked in rates), along with buyers being well-qualified and highly motivated by a

historically tight supply.

• Continued low unemployment rates, low levels of foreclosures in most areas, work from home, and ongoing home price arbitrage opportunities further support HPA gains that outpace inflation.

• January 2024's preliminary MoM HPA was 1.3%, reversing the downward trend since October 2023.

• Constant-quality HPA controls for mix shifts in home quality, which otherwise may skew MoM or YoY changes." – Edward Pinto, Senior Fellow and Director and Tobias Peter, Research Fellow and Assistant Director, AEI Housing Center

Source: https://www.aei.org/research-products/report/aei-housing-market-indicators-february-2024/; 2/5/24

## Home Price Appreciation by Price Tier



Note: Data are for the entire country. Data for January 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 January 2024 indicate that the low price tier leads the YoY change in tier home prices at 8.7% due to low months' supply (2.6 months), low unemployment, and increasing demand promoted by agency credit easing (right panel).
- Being more dependent on the Fed's monetary punchbowl, the med-high and high price tiers have had the largest slowdowns in YoY HPA. However, this deceleration has ended as of May 2023.
- As of January 2024, all price tiers have shown relatively robust YoY HPA from the slowest at 5.1% (med-high) to the highest of 8.7% (low)."– Edward Pinto, Senior Fellow and Director and Tobias Peter, Research Fellow and Assistant Director, AEI Housing Center

Source: https://www.aei.org/research-products/report/aei-housing-market-indicators-february-2024/; 2/5/24

## Housing Inventory and Months' Supply



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

### **AEI Housing Center**

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

- January 2024 housing inventory was down 5% from December 2023 while up 6% from January 2023. Despite the unusual increase in total listings throughout the fall of 2023, it is still near a series low, signaling low inventory levels heading into the spring buying season. Notwithstanding rates around 7%, the supply-demand imbalance evidenced by continued tight months' supply will fuel continued upward price pressures (left panel).
- Inventory today is at about 70% of 2017-2019 levels, indicating an unhealthy market (left panel).
- Months' supply stood at 4.1 months in January 2024, up from 3.8 months in December 2023, 3.8 months in January 2023, and 3.9 months in January 2020, the last comparable pre-pandemic month (right panel).
- Given historical data, months' supply would need to increase to > 7 months to enter a buyer's market and to 8-9 months to trigger a national YoY decline in home price appreciation." Edward Pinto, Senior Fellow and Director and Tobias Peter, Research Fellow and Assistant Director, AEI Housing

Source: https://www.aei.org/research-products/report/aei-housing-market-indicators-february-2024/; 2/5/24

### **U.S.** Housing



### John Burns Research & Consulting LLC

### **U.S. Housing Supply**

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

# U.S. Housing: Mean & Median Square Footage



Since 2015, the mean square footage has declined by 11.5% and the median by 13.2%. Note that 2023 data is a preliminary estimate by the U.S. Census-Construction division.

Source: https://www.census.gov/construction/nrc/pdf/quarterly starts completions.pdf; 2/21/24

## **U.S.** Housing

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

January New Home Purchase Mortgage Applications Increased 14.9 Percent

MBA and Census Estimates of New Home Sales Seasonally adjusted, thousands



## **U.S. Housing Finance**

### Mortgage Bankers Association (MBA) Chart of the Week: 30-Year Fixed Rate (%)

"As we summarize the state of the mortgage market in 2023, there is one series in particular that encapsulates the situation, mortgage interest rates. After falling to record lows in late 2020 and remaining in the 3% range in 2021, rates climbed to over 7% in October 2022 and started 2023 at around 6.5%. 2023 has been rocky, with the MBA Weekly Applications Survey (WAS) 30-year fixed contract interest rate reaching 7.9% in October before retreating to the most recent reading of 6.83%.

Economic prices convey a lot of information, and mortgage rates summarize, among other factors, the Federal Reserve's actions to fight inflation, inherent uncertainty about future Treasury rates (e.g., Quantitative Tightening and large fiscal deficits), and the high value of mortgage prepayment options due to increased underlying interest rate volatility (leading to almost 300 basis point mortgage to Treasury spreads).

The effect of the 2023 rate environment has been to reduce the WAS Refinance Index by 89% compared to 2020-21 averages and shrink WAS purchase applications by 30% year to date. This year has been challenging, and MBA estimates that this year's total originations will be \$1.64 trillion. Moreover, with house price appreciation remaining positive, MBA's <u>Purchase Applications Payment Index (PAPI)</u> shows that conditions remain tough for prospective homebuyers.

With 2023 almost behind us, what can we expect for 2024 and 2025? The Federal Open Market Committee's Summary of Economic Projections moved from September's higher-for-longer fed funds rate projection to a higher-for-not-so-much-longer projection in last week's release. This is welcome news for the mortgage market. <u>MBA's forecast</u> (blue diamonds in the chart) shows a steady decline to 6.1% and 5.5% in 2024 Q4 and 2025 Q4, with originations increasing to \$2 trillion (22%) and \$2.34 trillion (17%) in 2024 and 2025, respectively." – Eddie Seiler, Associate Vice President for Housing Economics; MBA

## **U.S. Housing Finance**

**Mortgage Bankers Association (MBA)** 

January New Home Purchase Mortgage Applications Increased 14.9 Percent



Source: https://www.mba.org/news-and-research/newsroom/news/2023/10/19/January-new-home-purchase-mortgage-applications-increased-14.9-percent; 2/16/24

### **U.S.** Housing

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

#### Chart of the Week: Chart of the Week: 30-Year Fixed Rate (%)



## **U.S. Housing Finance**

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

### Mortgage Credit Availability Increased in February

"Mortgage credit availability increased in February 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 0.2 percent to 92.9 in February. 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 0.5 percent, while the Government MCAI was essentially unchanged. Of the component indices of the Conventional MCAI, the Jumbo MCAI increased by 0.1 percent, and the Conforming MCAI rose by 1.6 percent.

Mortgage credit availability remains quite tight – near the lowest levels in MBA's survey – even as application volume lags last year's pace and as the industry continues to reduce capacity. Despite these factors, credit criteria remain conservative. There was a slight increase in credit availability for refinance loan programs last month. The purchase market, however, continues to be impacted by supply and affordability constraints, due to higher mortgage rates."" – Joel Kan, Associate Vice President of Economic and Industry Forecasting, MBA

## U.S. Housing Finance Mortgage Credit Availability (MBA)



Source: https://www.mba.org/news-and-research/newsroom/news/2024/03/07/mortgage-credit-availability-increased-in-february; 3/8/23

# **U.S. Housing Finance Mortgage Credit Availability (MBA)**



Source: Mortgage Bankers Association; Powered by ICE Mortgage Technology

Source: https://www.mba.org/news-and-research/newsroom/news/2024/03/07/mortgage-credit-availability-increased-in-february; 3/8/23

### **MBA Mortgage Finance Forecast**

#### **MBA Mortgage Finance Forecast**

February 20, 2024

	2023					2024					2025					
	Q1	Q2	Q3	Q4	Q1	Q2	Q3	Q4	Q1	Q2	Q3	Q4	2023	2024	2025	2026
Housing Measures																
Housing Starts (SAAR, Thous)	1,385	1,450	1,371	1,454	1,433	1,418	1,418	1,425	1,427	1,458	1,479	1,505	1,415	1,424	1,467	1,472
Single-Family	834	930	967	1,042	1,025	1,042	1,056	1,079	1,103	1,136	1,162	1,190	943	1,051	1,148	1,162
Two or More	552	520	403	412	408	376	362	346	324	322	317	315	472	373	320	310
Home Sales (SAAR, Thous)																
Total Existing Homes	4,327	4,250	4,020	3,797	3,974	4,237	4,424	4,609	4,714	4,860	4,900	4,907	4,099	4,311	4,845	4,993
New Homes	638	691	703	652	721	760	768	774	782	799	804	812	671	755	799	801
FHFA US House Price Index (YOY % Change)	4.6	3.3	5.5	5.7	5.7	5.3	4.7	4.1	3.6	3.4	3.2	3.3	5.7	4.1	3.3	3.9
Median Price of Total Existing Homes (Thous \$)	366.7	397.5	400.9	387.3	383.5	396.6	392.6	389.1	388.4	398.2	395.6	391.7	388.1	390.5	393.5	393.6
Median Price of New Homes (Thous \$)	434.8	418.7	434.3	417.9	427.4	438.0	433.5	430.9	432.1	441.2	437.5	431.5	426.4	432.5	435.6	430.7
Interest Rates																
30-Year Fixed Rate Mortgage (%)	6.4	6.5	7.0	7.3	6.9	6.6	6.3	6.1	5.9	5.8	5.7	5.5	7.3	6.1	5.5	5.4
10-Year Treasury Yield (%)	3.6	3.6	4.2	4.4	4.2	4.1	3.9	3.8	3.8	3.8	3.7	3.7	4.4	3.8	3.7	3.6
Mortgage Originations																
Total 1- to 4-Family (Bil \$)	333	463	444	399	390	494	563	554	501	619	620	598	1,639	2,001	2,339	2,436
Purchase	267	371	363	324	304	384	428	414	346	461	456	436	1,325	1,530	1,699	1,782
Refinance	66	92	81	75	86	110	135	140	155	158	164	162	314	471	639	654
Refinance Share (%)	20	20	18	19	22	22	24	25	31	26	27	27	19	24	27	27
FHA Originations (Bil \$)													198	213	213	204
Total 1- to 4-Family (000s loans)	895	1,239	1,165	1,034	1,003	1,255	1,419	1,388	1,258	1,524	1,517	1,455	4,333	5,064	5,754	5,790
Purchase	686	948	913	804	743	926	1,021	977	810	1,070	1,049	996	3,350	3,667	3,926	3,981
Refinance	210	291	252	230	260	328	398	410	448	454	468	459	983	1,397	1,829	1,809
Refinance Share (%)	23	23	22	22	26	26	28	30	36	30	31	32	23	28	32	31
Mortgage Debt Outstanding																
1- to 4-Family (Bil \$)	13,676	13,774	13,864	13,955	14,027	14,103	14,207	14,314	14,410	14,521	14,628	14,729	13,955	14,314	14,729	15,127

#### Notes:

As of the August 2023 forecast, 2022 origination volume was revised based on the 2022 Home Mortgage Disclosure Act data. Total 1-to-4-family originations and refinance share are MBA estimates. These exclude second mortgages and home equity loans. Mortgage rate forecast is based on Freddie Mac's 30-Yr fixed rate which is based on predominantly home purchase transactions. The 10-Year Treasury Yield and 30-Yr mortgage rate are the average for the quarter, but annual columns show Q4 values. The FHFA US House Price Index is the forecasted year over year percent change of the FHFA Purchase-Only House Price Index. Copyright 2024 Mortgage Bankers Association. All rights reserved.

THE HISTORICAL DATA AND PROJECTIONS ARE PROVIDED "AS IS" WITH NO WARRANTIES OF ANY KIND.



MORTGAGE BANKERS ASSOCIATION

### **MBA Economic Forecast**

#### **MBA Economic Forecast**

February 20, 2024

	2023				2024				2025							
	Q1	Q2	Q3	Q4	Q1	Q2	Q3	Q4	Q1	Q2	Q3	Q4	2023	2024	2025	2026
Percent Change, SAAR																
Real Gross Domestic Product	2.2	2.1	4.9	3.3	0.9	0.3	0.5	1.3	1.5	1.6	1.5	1.6	3.1	0.8	1.6	1.8
Personal Consumption Expenditures	3.8	0.8	3.1	2.8	1.9	0.8	1.0	1.5	1.6	1.5	1.4	1.8	2.6	1.3	1.6	1.9
Business Fixed Investment	5.7	7.4	1.4	1.9	-1.5	0.1	0.2	1.0	1.8	1.9	1.6	1.4	4.1	-0.1	1.7	2.2
Residential Investment	-5.3	-2.2	6.7	1.1	8.1	0.3	0.2	2.8	4.0	4.9	5.1	6.7	0.0	2.8	5.2	0.9
Govt. Consumption & Investment	4.8	3.3	5.8	3.3	0.8	0.5	0.4	0.3	0.3	0.3	0.3	0.3	4.3	0.5	0.3	0.3
Net Exports (Bil. Chain 2012\$)	-1048.8	-1039.0	-1043.1	-1022.9	-1055.5	-1060.5	-1058.9	-1062.0	-1072.9	-1077.9	-1085.6	-1101.2	-1038.4	-1059.2	-1084.4	-1089.0
Inventory Investment (Bil. Chain 2012\$)	24.1	13.2	68.9	73.2	69.3	53.9	37.4	35.9	41.5	47.9	52.3	54.9	44.8	49.1	49.1	57.7
Consumer Prices (YOY)	5.8	4.1	3.6	3.2	3.0	2.9	2.7	2.6	2.4	2.2	2.2	2.1	3.2	2.6	2.1	2.0
Percent																
Unemployment Rate	3.5	3.6	3.7	3.8	3.8	4.0	4.2	4.4	4.5	4.6	4.6	4.7	3.6	4.1	4.6	4.4
Federal Funds Rate	4.9	5.1	5.4	5.4	5.4	5.1	4.9	4.6	4.4	4.1	3.9	3.6	4.375	5.375	4.625	3.625
10-Year Treasury Yield	3.6	3.6	4.2	4.4	4.2	4.1	3.9	3.8	3.8	3.8	3.7	3.7	3.8	4.4	3.8	3.7

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

Copyright 2024 Mortgage Bankers Association. All rights reserved.

THE HISTORICAL DATA AND PROJECTIONS ARE PROVIDED "AS IS" WITH NO WARRANTIES OF ANY KIND.



MORTGAGE BANKERS ASSOCIATION

## **Summary**

### In conclusion:

Housing data, month-over-month and year-over-year, exhibited several categories of negativity. Single-family starts and single-family permits, new house sales, and construction spending were positive year-over-year. On a monthly basis single-family permits and under construction, new and existing sales, and spending were also positive. The influence of increased mortgage rates is evident, as aggregate costs have decreased affordability; thus, a reduction in several data categories.

#### **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.

### Virginia Tech Disclaimer

#### **Disclaimer of Non-endorsement**

Reference herein to any specific commercial products, process, or service by trade name, trademark, manufacturer, or otherwise, does not constitute or imply its endorsement, recommendation, or favoring by Virginia Tech. The views and opinions of authors expressed herein do not necessarily state or reflect those of Virginia Tech, and shall not be used for advertising or product endorsement purposes.

#### **Disclaimer of Liability**

With respect to documents sent out or made available from this server, neither Virginia Tech nor any of its employees, makes any warranty, expressed or implied, including the warranties of merchantability and fitness for a particular purpose, or assumes any legal liability or responsibility for the accuracy, completeness, or usefulness of any information, apparatus, product, or process disclosed, or represents that its use would not infringe privately owned rights.

#### **Disclaimer for External Links**

The appearance of external hyperlinks does not constitute endorsement by Virginia Tech of the linked web sites, or the information, products or services contained therein. Unless otherwise specified, Virginia Tech does not exercise any editorial control over the information you January find at these locations. All links are provided with the intent of meeting the mission of Virginia Tech's web site. Please let us know about existing external links you believe are inappropriate and about specific additional external links you believe ought to be included.

#### **Nondiscrimination Notice**

Virginia Tech prohibits discrimination in all its programs and activities on the basis of race, color, national origin, age, disability, and where applicable, sex, marital status, familial status, parental status, religion, sexual orientation, genetic information, political beliefs, reprisal, or because all or a part of an individual's income is derived from any public assistance program. Persons with disabilities who require alternative means for communication of program information (Braille, large print, audiotape, etc.) should contact the author. Virginia Tech is an equal opportunity provider and employer.

### **U.S. Department of Agriculture Disclaimer**

#### **Disclaimer of Non-endorsement**

Reference herein to any specific commercial products, process, or service by trade name, trademark, manufacturer, or otherwise, does not necessarily constitute or imply its endorsement, recommendation, or favoring by the United States Government. The views and opinions of authors expressed herein do not necessarily state or reflect those of the United States Government, and shall not be used for advertising or product endorsement purposes.

#### **Disclaimer of Liability**

With respect to documents available from this server, neither the United States Government nor any of its employees, makes any warranty, express or implied, including the warranties of merchantability and fitness for a particular purpose, or assumes any legal liability or responsibility for the accuracy, completeness, or usefulness of any information, apparatus, product, or process disclosed, or represents that its use would not infringe privately owned rights.

### **Disclaimer for External Links**

The appearance of external hyperlinks does not constitute endorsement by the U.S. Department of Agriculture of the linked web sites, or the information, products or services contained therein. Unless otherwise specified, the Department does not exercise any editorial control over the information you January find at these locations. All links are provided with the intent of meeting the mission of the Department and the Forest Service web site. Please let us know about existing external links you believe are inappropriate and about specific additional external links you believe ought to be included.

#### Nondiscrimination Notice

The U.S. Department of Agriculture (USDA) prohibits discrimination in all its programs and activities on the basis of race, color, national origin, age, disability, and where applicable, sex, marital status, familial status, parental status, religion, sexual orientation, genetic information, political beliefs, reprisal, or because all or a part of an individual's income is derived from any public assistance program. (Not all prohibited bases apply to all programs.) Persons with disabilities who require alternative means for communication of program information (Braille, large print, audiotape, etc.) should contact USDA's TARGET Center at 202.720.2600 (voice and TDD). To file a complaint of discrimination write to USDA, Director, Office of Civil Rights, 1400 Independence Avenue, S.W., Washington, D.C. 20250-9410 or call 800.795.3272 (voice) or 202.720.6382 (TDD). The USDA is an equal opportunity provider and employer.