The Good, the Bad and the Ugly

An Outlook for Real Estate and the Economy





Highest Mortgage rates



Highest Inflation

Presented by



Dr. Ted C. JonesChief Economist
Senior Vice President
Stewart Title Guaranty Company





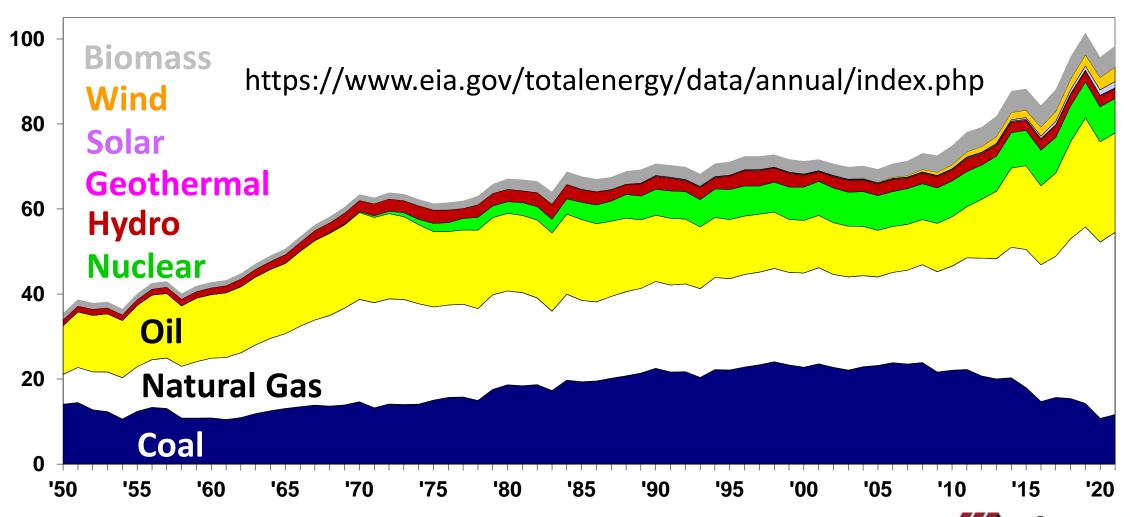
CHANGE

Doing That

ENERGY

US Energy

Quadrillion BTUs Restated by USEI





///stewart

A Level 3 EV Charger Uses as Much Electricity as 55 Homes on Average During the 20 to 40 Minute Charging Cycle

Bosch EV3000 30kW DC Electric Vehicle Fast Charger

SKU: BOEV3000

Manufacturer: Bosch Automotive Equipment

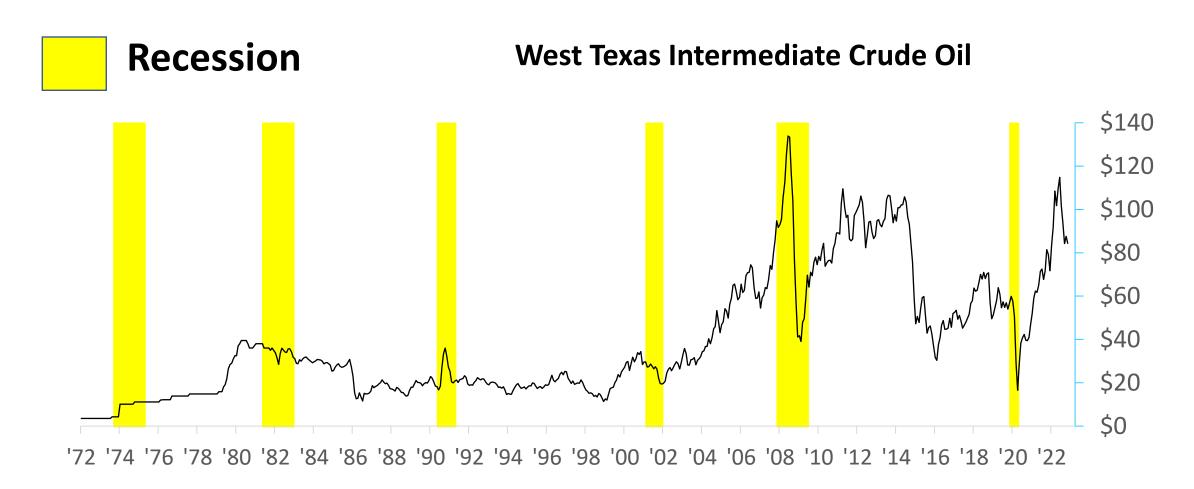
Weight: 187.40 LBS

\$18,429.89



Truth

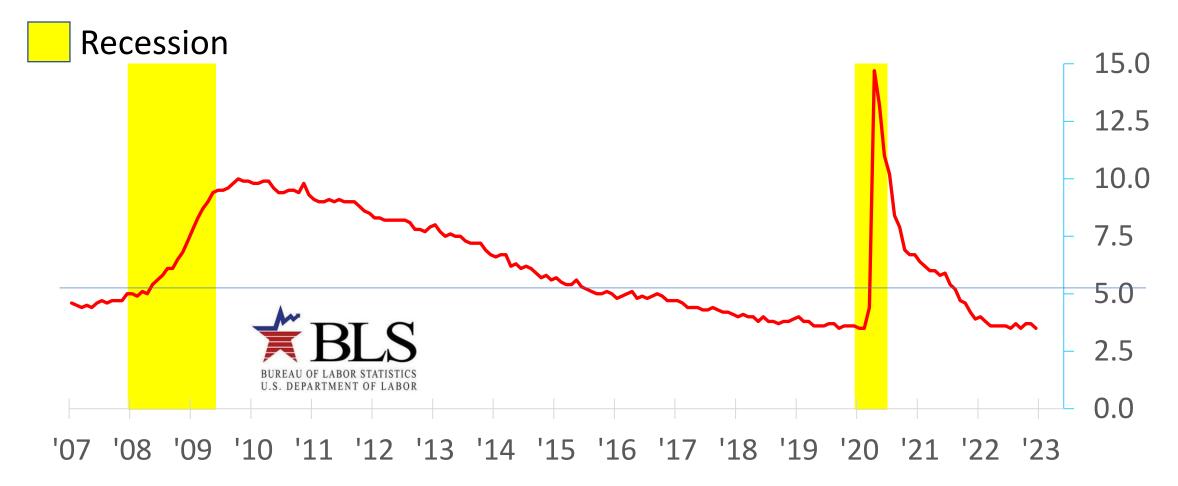
Recessions + Oil Prices





U.S. Unemployment Rate

Percent







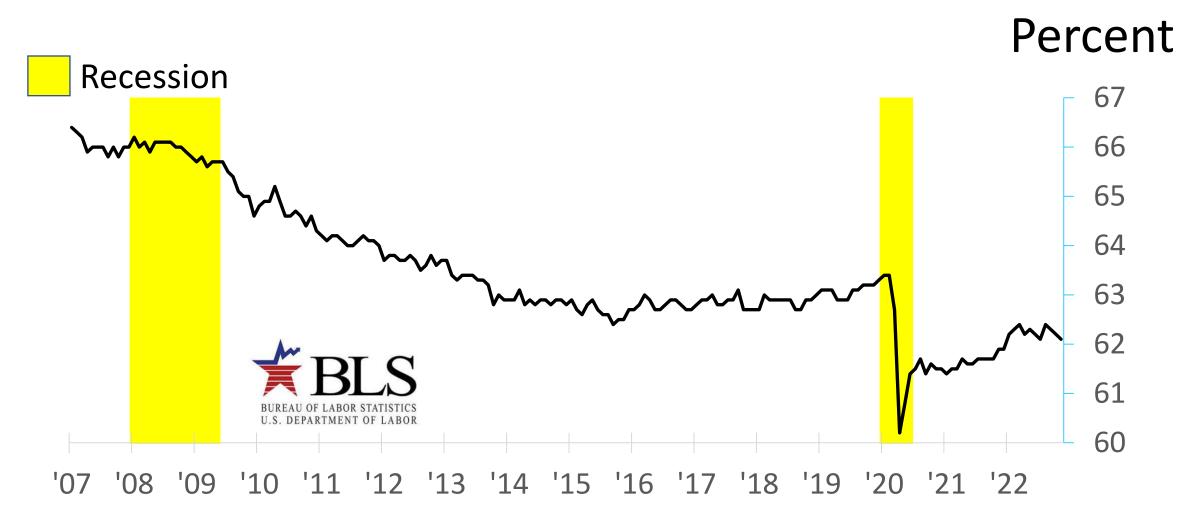
The Federal Reserves meeting minutes from December state their intention to raise the Fed Funds Rate to 5% to 5.5% & to keep it there until year end. Only 2 of the 19 policy makers thought rates would be slightly less

@USATODAYmoney
@federalreserve

6:20 AM · Jan 6, 2023



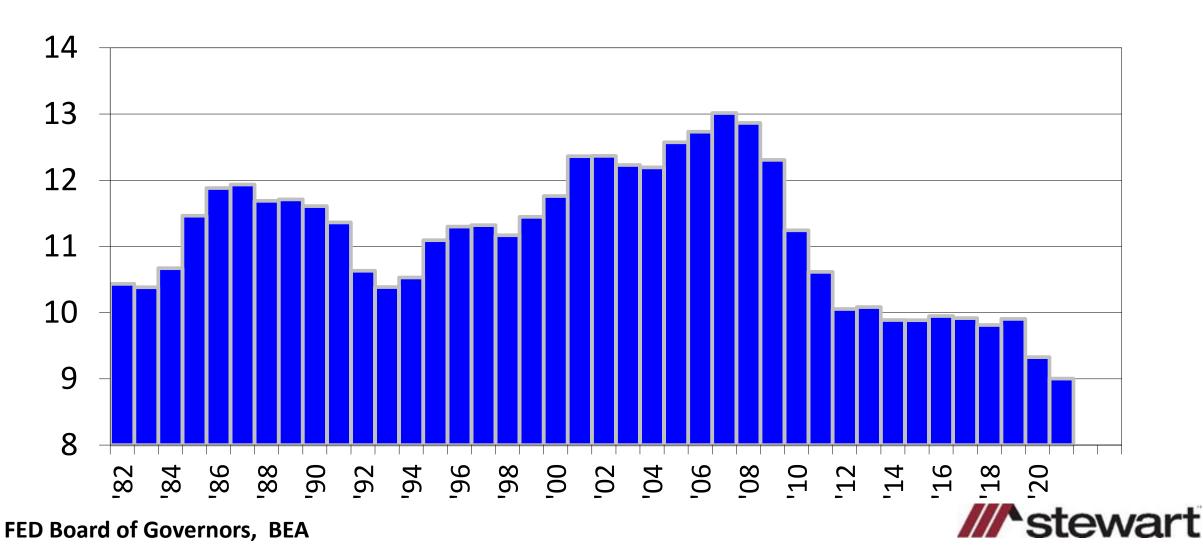
Civilian Labor Force Participation Rate





Household Debt Service as a Percent of Household Disposable Income

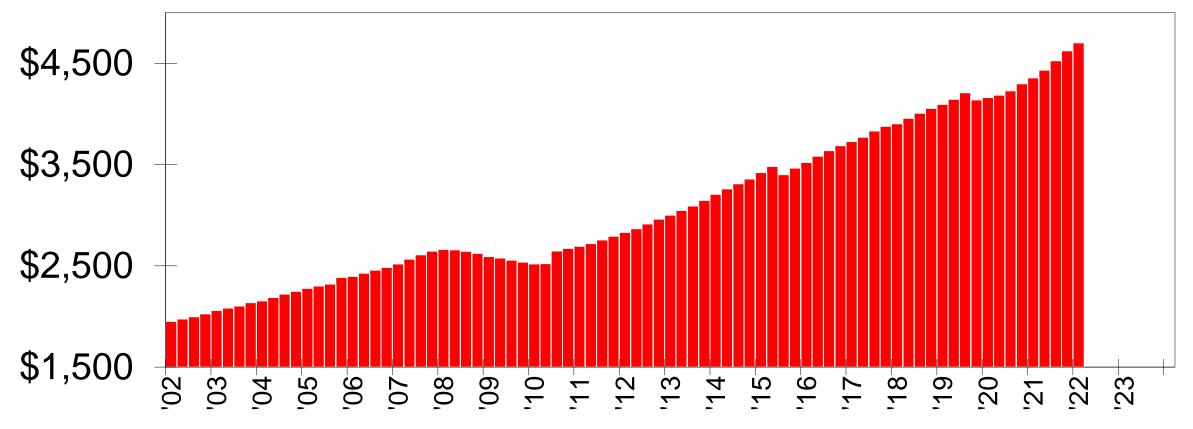
Percent



Household & Nonprofit Consumer Credit

\$ Billions

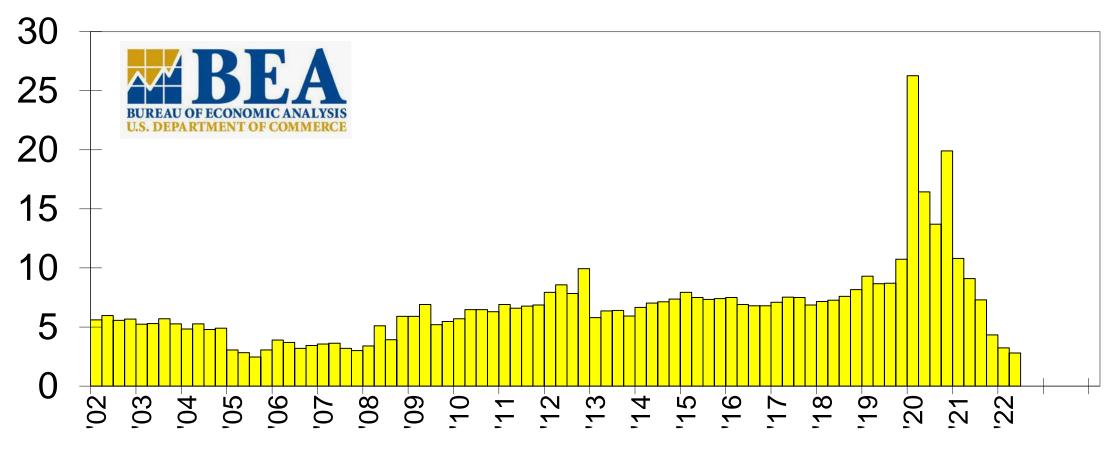






Personal Savings Rate - Seasonally Adjusted

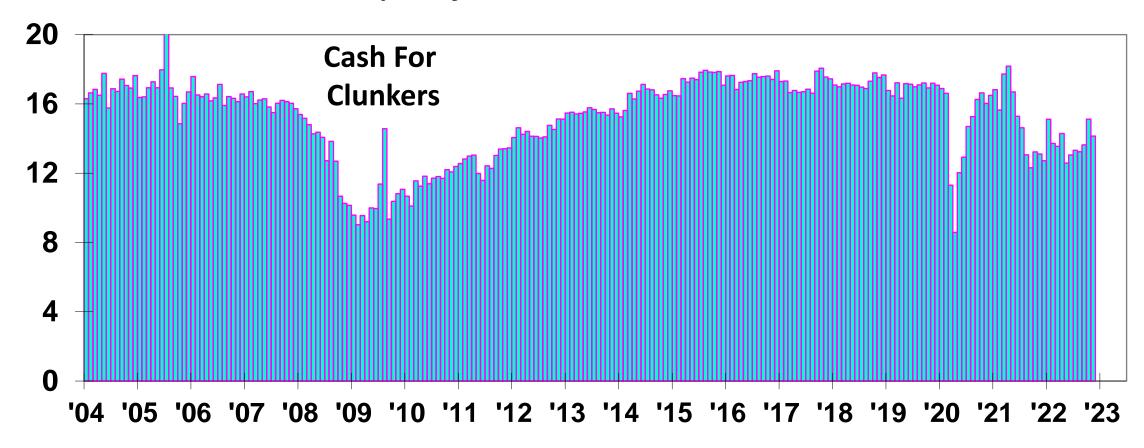
Percent





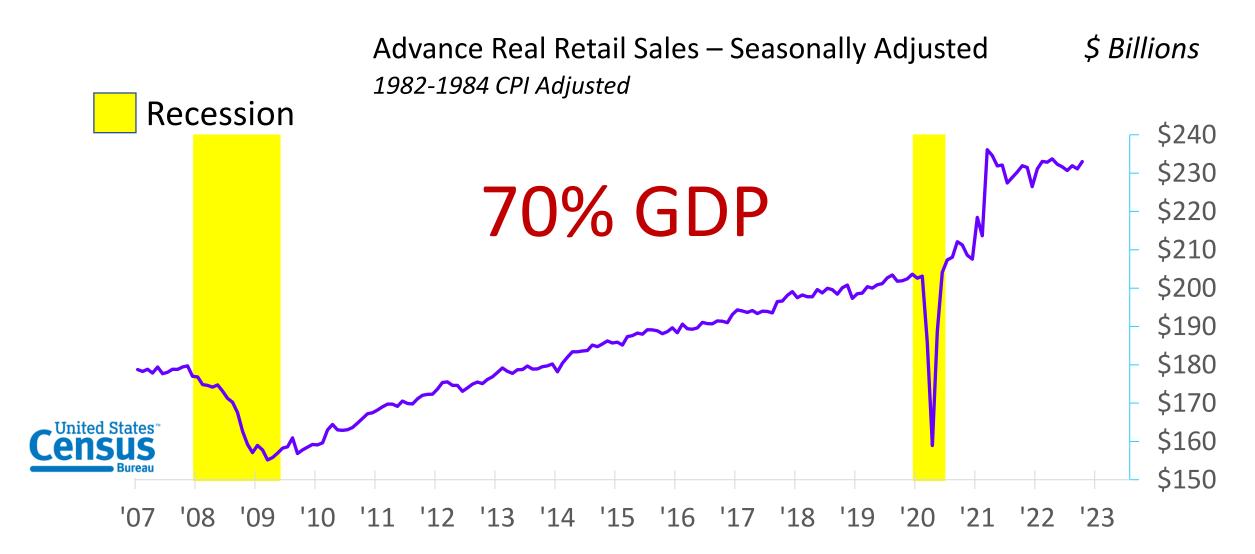
Light Weight Vehicle Sales

Millions — Seasonally Adjusted Annual Rate



Bureau of Economic Analysis

U.S. Real Retail & Food Service Sales





2023

Pause, Look Both Ways & Reflect Economy New Normal - Permanent Changes 66 Days Shrinking Commercial Sales Shrinking House & Apartment Sales Downward Pressure on Rents & Home Values Recession - Almost Guaranteed in 2023 Bloomberg



- Fannie Mae modest recession will commence in Q1 2023
- The Conference Board economic weakness to see a recession to begin around the end of 2022
- Bloomberg probability of a recession is now 100 percent within a year
- JPMorgan mild recession in 2023
- Forbes recession will begin late 2022 or early 2023
- Former Boston Fed President Eric Rosengren U.S. likely headed to mild recession in 2023
- FitchRatings recession to start in Q2 2023
- University of Michigan Economists mild recession ahead in 2023
- The Economist Why a Global Recession is inevitable in 2023
- Bank of America forecasts mild 2023 recession
- **S&P Market Intelligence** 2023 recession more likely than not
- **RBC** recession is not here but it is coming



Wealth Effect



Notion that when households become richer as a result of a rise in asset values, such as corporate stock prices or home values, they spend more and stimulate the broader economy, and vice-versa





Ted C. Jones @DrTCJ

Goldman Sachs note to clients says if the Fed has to hit the economy hard enough to raise the unemployment rate to 5%, the S&P500 index would have to fall another 14%. A 6% unemployment rate would drop the S&P500 27% in worse case scenario

@GoldmanSachs
@MKTWeconomics





Goldman Sachs (NYSE: GS) chief U.S. equity

strategist David Kostin expects a soft landing in 2023, with U.S. GDP growing about 1%.

Speaking to CNBC, he said that there will be no earnings growth next year, given the negative earnings revisions in the past several months and the likely impact from the recent hikes in interest rates.

Given this scenario, Kostin predicted S&P 500 earnings would decline ~11% in 2023. As a result, the S&P 500 will likely trade in a range of 3,750 to 4,000.

December 6, 2022

U.S. Census Bureau Vintage Population Estimates



Greatest Percentage Gain

Overall	United States™	As of J	luly 1	Percent	Net Change
Rank	State Bureau	2021	2022	Change	People
1	Florida	21,828,069	22,244,823	1.9%	416,754
2	Idaho	1,904,314	1,939,033	1.8%	34,719
3	South Carolina	5,193,266	5,282,634	1.7%	89,368
4	Texas	29,558,864	30,029,572	1.6%	470,708
5	South Dakota	896,164	909,824	1.5%	13,660
6	Montana	1,106,227	1,122,867	1.5%	16,640
7	Delaware	1,004,807	1,018,396	1.4%	13,589
8	Arizona	7,264,877	7,359,197	1.3%	94,320
9	North Carolina	10,565,885	10,698,973	1.3%	133,088
10	Utah	3,339,113	3,380,800	1.2%	41,687
11	Tennessee	6,968,351	7,051,339	1.2%	82,988
37	Ohio	11,764,342	11,756,058	-0.1%	-8,284

U.S. Census Bureau Vintage Population Estimates

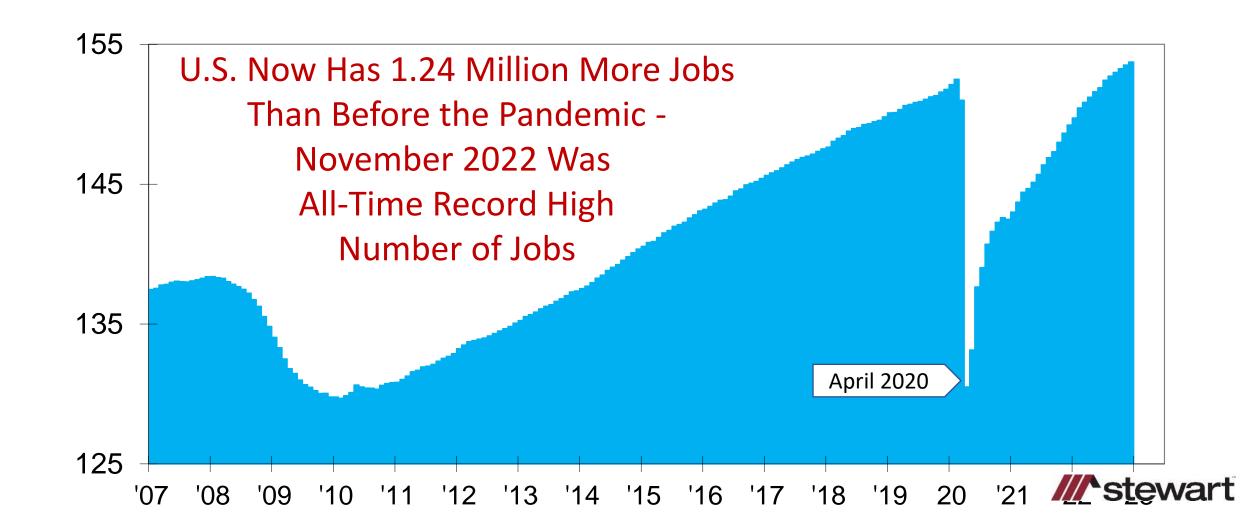


Greatest Percentage Gain

Overall	United States™	As of July 1		Percent	Net Change
Rank	State	2021	2022	Change	People
39	Massachusetts	6,989,690	6,981,974	-0.1%	-7,716
40	New Mexico	2,116,677	2,113,344	-0.2%	-3,333
41	Maryland	6,174,610	6,164,660	-0.2%	-9 <i>,</i> 950
42	California	39,142,991	39,029,342	-0.3%	-113,649
43	Rhode Island	1,096,985	1,093,734	-0.3%	-3,251
44	Pennsylvania	13,012,059	12,972,008	-0.3%	-40,051
45	Mississippi	2,949,586	2,940,057	-0.3%	-9,529
46	Oregon	4,256,301	4,240,137	-0.4%	-16,164
47	Hawaii	1,447,154	1,440,196	-0.5%	-6 <i>,</i> 958
48	West Virginia	1,785,526	1,775,156	-0.6%	-10,370
49	Louisiana	4,627,098	4,590,241	-0.8%	-36 <i>,</i> 857
50	Illinois	12,686,469	12,582,032	-0.8%	-104,437
51	New York	19,857,492	19,677,151	-0.9%	-180,341

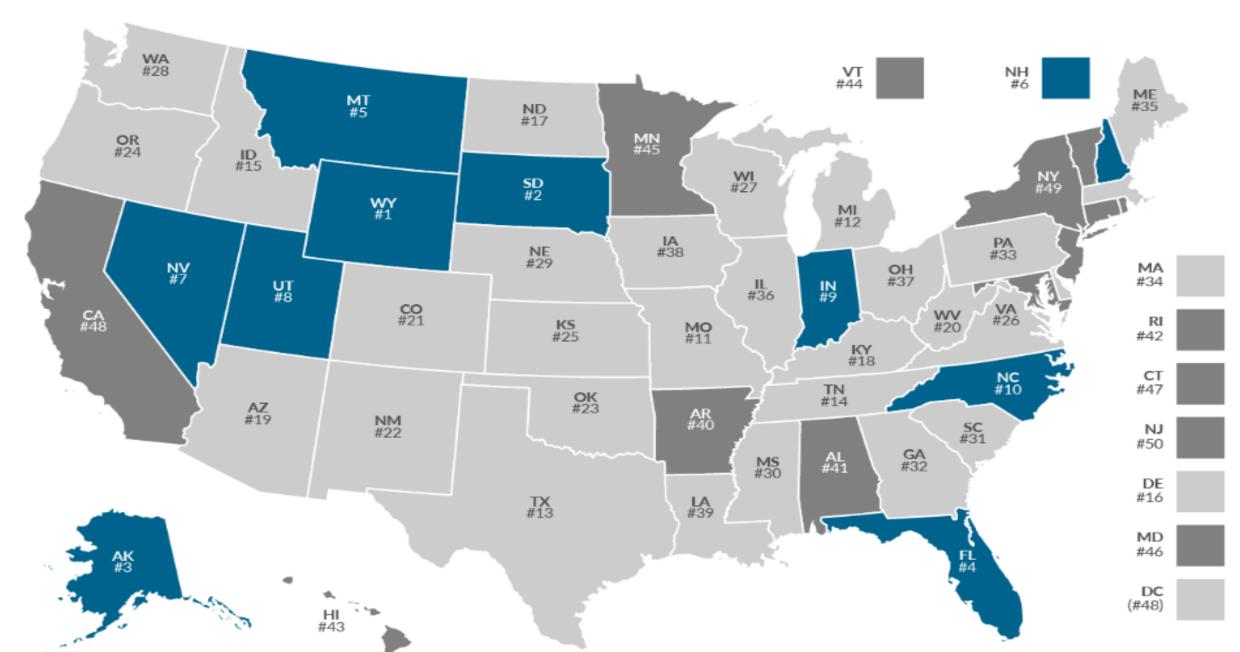
U.S. Jobs Jobs (Millions) Seasonally Adjusted





2023 State Business Tax Climate Index

THE TAX FOUNDATION



Change in Jobs - February 2020 Through November 2022



Idaho	6.9%	Nebraska	0.9%	Kansas	-1.0%
Utah	6.6%	Kentucky	0.8%	Minnesota	-1.2%
Texas	5.5%	Maine	0.8%	Pennsylvania	-1.2%
Florida	5.4%	Alabama	0.7%	Wisconsin	-1.2%
North Carolina	4.7%	New Jersey	0.7%	Delaware	-1.4%
Arizona	3.7%	Missouri	0.5%	Michigan	-1.5%
Tennessee	3.6%	California	0.3%	Connecticut	-1.5%
Georgia	3.6%	Virginia	0.1%	Maryland	-1.7%
Montana	3.6%	New Hampshire	0.0%	Ohio	-1.9%
South Dakota	3.2%	Oklahoma	-0.2%	Rhode Island	-1.9%
Colorado	2.9%	Iowa	-0.3%	Alaska	-1.9%
South Carolina	2.2%	Massachusetts	-0.3%	North Dakota	-2.3%
Arkansas	1.8%	New Mexico	-0.5%	Louisiana	-2.8%
Nevada	1.8%	West Virginia	-0.5%	New York	-2.9%
Indiana	1.3%	Illinois	-0.6%	Dist of Columbia	-4.1%
Washington	1.1%	Mississippi	-0.7%	Vermont	-4.3%
Oregon	1.0%	Wyoming	-1.0%	Hawaii	-6.5%

State Job Growth -- 1-Month October to November 2022

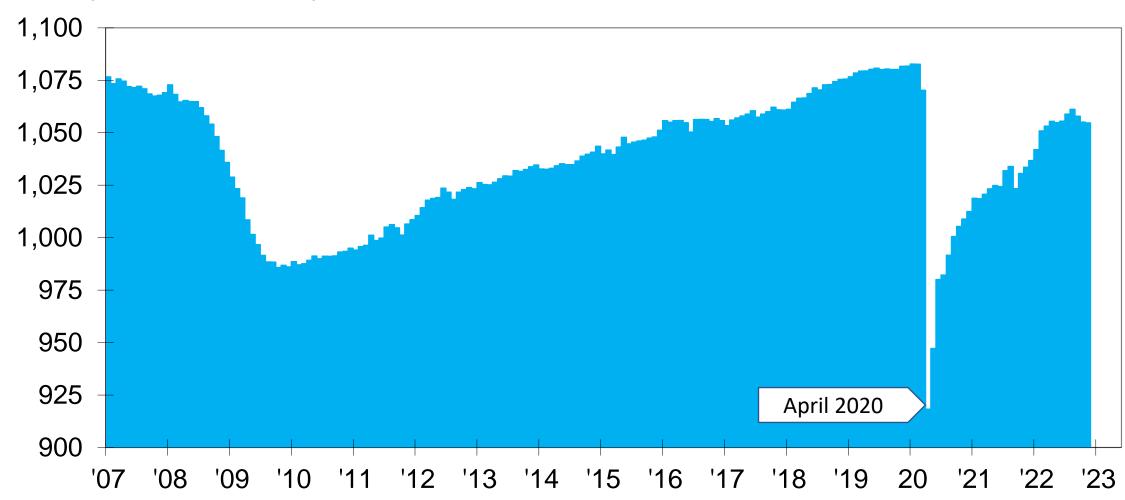


West Virginia	1.0%	Missouri	0.3%	California	0.2%
Wyoming	0.7%	New Jersey	0.3%	Colorado	0.1%
New Hampshire	0.6%	Hawaii	0.3%	North Carolina	0.1%
Alaska	0.6%	Indiana	0.3%	Ohio	0.1%
Oklahoma	0.5%	Texas	0.2%	Idaho	0.1%
Maine	0.5%	New Mexico	0.2%	Maryland	0.1%
Massachusetts	0.5%	Nebraska	0.2%	Iowa	0.0%
Oregon	0.4%	Minnesota	0.2%	Georgia	0.0%
Dist of Columbia	0.4%	New York	0.2%	Utah	0.0%
South Dakota	0.4%	Arizona	0.2%	Kentucky	0.0%
Connecticut	0.4%	Rhode Island	0.2%	Kansas	0.0%
Washington	0.4%	Wisconsin	0.2%	South Carolina	0.0%
Nevada	0.4%	Alabama	0.2%	Virginia	-0.1%
Montana	0.3%	Louisiana	0.2%	North Dakota	-0.2%
Michigan	0.3%	Tennessee	0.2%	Vermont	-0.2%
Florida	0.3%	Mississippi	0.2%	Delaware	-0.2%
Illinois	0.3%	Pennsylvania	0.2%	Arkansas	-0.2%

Cleveland-Elyria MSA

Jobs (Thousands) Seasonally Adjusted





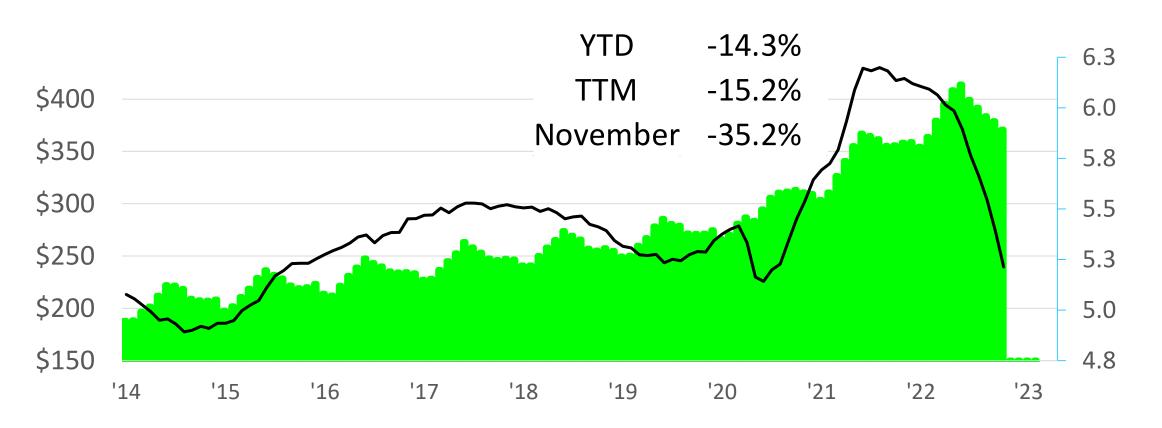


The 1st Indicator of a Softening, Down-Turning Real Estate Market is a Decline in Sales as Prices Rise Strongly

US Existing Home Sales & Median Prices

Median Price - \$ Thousands

Sales – Prior 12 Months *Millions*







		Change in	Median
		Sales Vs	Days
Price Range	Sales	November	On The
Thousands	Distribution	2021	Market
\$0 to \$100	4.8%	-27.4%	23
\$100 - \$250	23.6%	-37.1%	16
\$250 - \$500	43.8%	-33.6%	20
\$500 - \$750	16.5%	-32.0%	22
\$750 - \$1 Million	5.8%	-34.7%	22
Great than \$1 Million	5.5%	-41.2%	25

Based on a Non-Seasonally Adjusted Sample





Existing Home Sales Year-to-Date

October *2022*

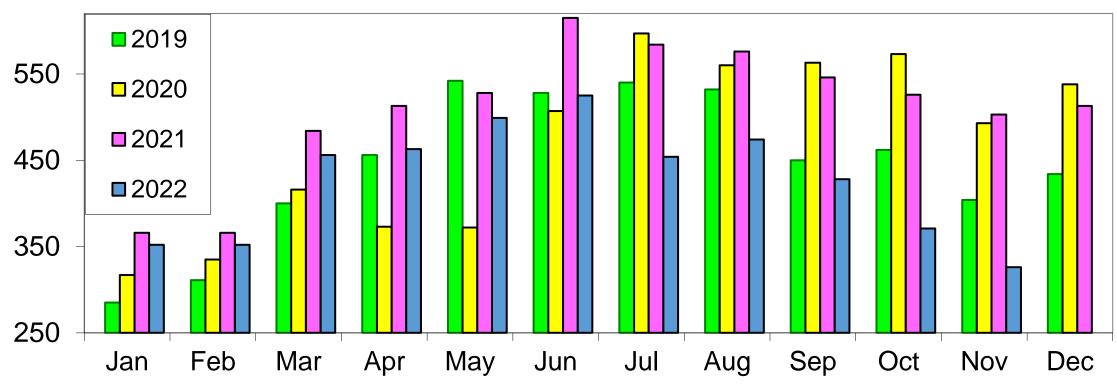
	Single	Townhouse	
Year	Family	Condo	Total
2021	4,506,000	598,000	5,104,000
2022	3,894,000	480,000	4,374,000
Percent			
Change	-13.6%	-19.7%	-14.3%





U.S. Existing Home Sales

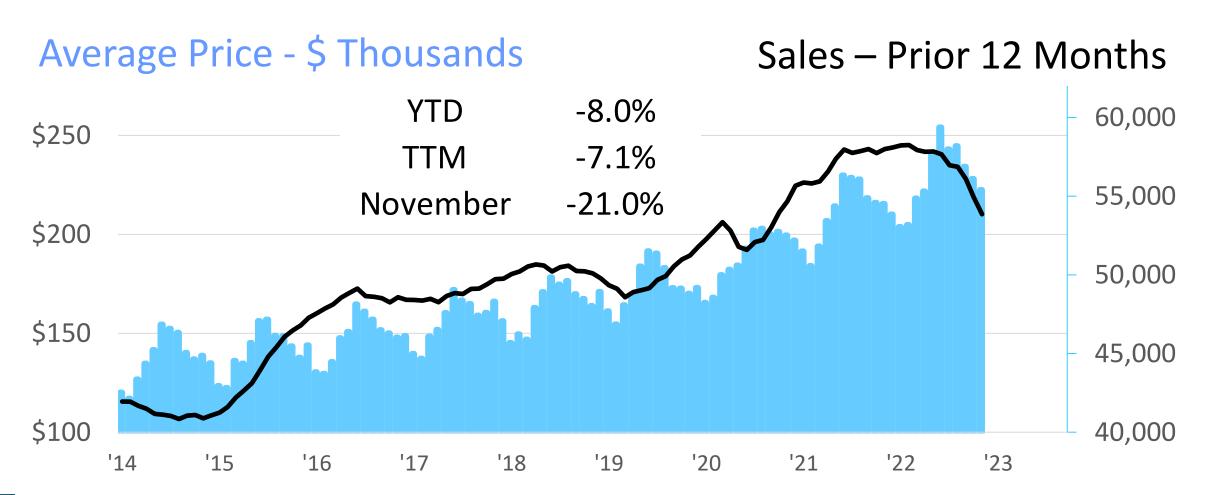
Monthly Sales – Not Seasonally Adjusted - Thousands







Greater Cleveland Home Sales & Median Prices

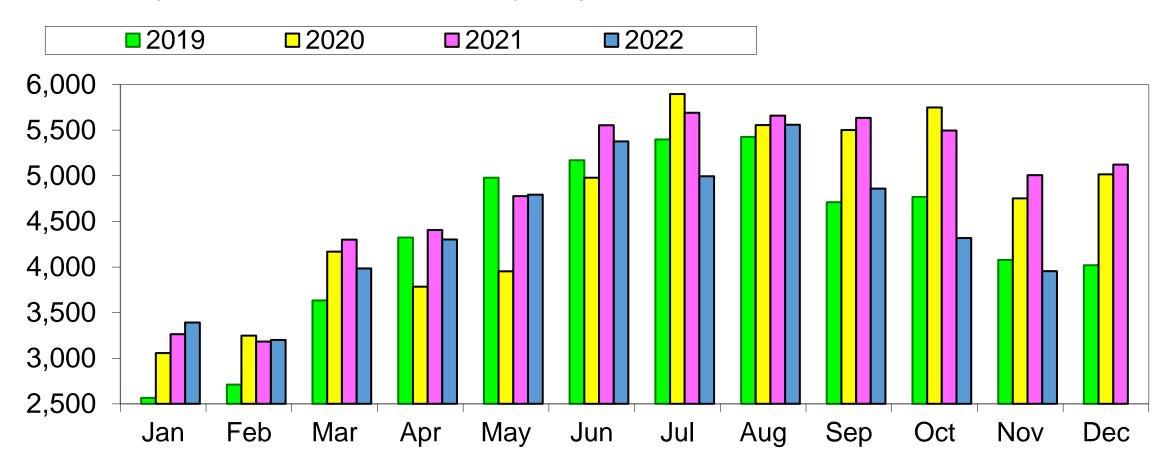






Greater Cleveland Home Sales

Monthly Sales – Not Seasonally Adjusted - Thousands





Cleveland MSA - Building Permits - Jobs

	Total				New
			New	Net	Jobs
	Single	Multi	Dwelling	New	Per
Year	Family	Family	Units	Jobs	Dwelling
2010	1,853	88	1,941	8,900	4.59
2011	1,585	182	1,767	13,600	7.70
2012	1,925	407	2,332	14,700	6.30
2013	2,280	500	2,780	11,400	4.10
2014	2,282	644	2,926	8,900	3.04
2015	2,533	405	2,938	7,600	2.59
2016	2,618	435	3,053	4,600	1.51
2017	2,749	478	3,227	5,000	1.55
2018	2,733	248	2,981	14,800	4.96
2019	2584	448	3,032	6,200	2.04
2020	2814	560	3,374	(69,300)	-20.54
2021	2,949	391	3,340	24,300	7.28
	28,905	4,786	33,691	50,700	1.50

Need 1.25 to 1.50 Net **New Jobs** Per New Dwelling Unit



* *

Where 1st-Time Homebuyers Got Their Down Payment

52% from their paychecks

24% stimulus money

23% saved extra during the pandemic

22% worked a 2nd job

17% inheritance

15% sold stocks

12% cash gift from family

12% sold cryptocurrency

10% retirement account

@Redfin
@MBAMortgage





Ted C. Jones @DrTCJ

The percent of 1st-time homebuyers just fell to a record-low 26% of all transactions, down from 34% a year ago and off the record high 50% tallied in 2010 as interest rates continued upwards and greater year-over-year median prices @NAR_Research

10:32 AM · Nov 7, 2022 · Twitter for iPhone



Existing Home Sales

Existing Home Sales Forecast

December 2022

Sales -- Thousands Annual

_	2021	2022	2023	2024
Fannie Mae	6,120	5,073	4,004	4,627
MBA	6,127	5,161	4,513	5,174
Average	6,124	5,117	4,259	4,901

Percent Change - Year-Over-Year

Fannie Mae -17.1% -21.1% 15.6%

MBA -15.8% -12.6% 14.6%

Average -16.4% -16.8% 15.1%

Existing Home Median Price Forecast

December 2022

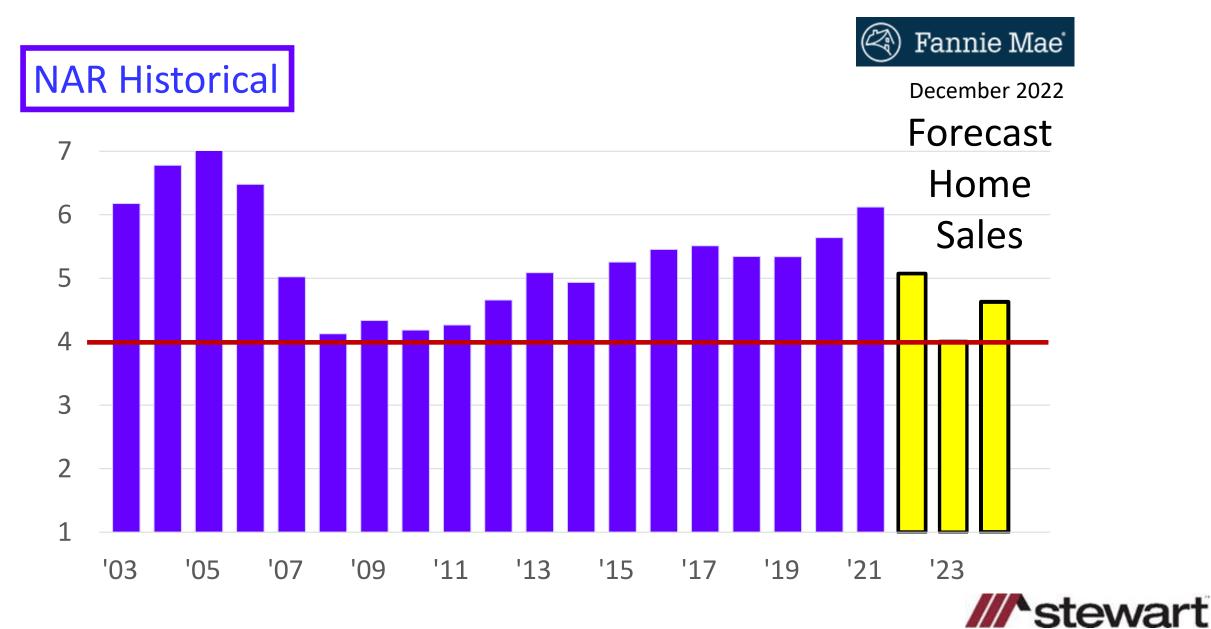
Median Price -- \$ Thousands

	2021	2022	2023		2024	
Fannie Mae	\$347.1	\$ 378.3	\$	372.7	\$	367.4
MBA	\$ 347.9	\$ 384.6	\$	371.4	\$	380.1
Average	\$ 347.5	\$381.5	\$	372.0	\$	373.8

Percent Change - Year-Over-Year

Fannie Mae	9.0%	-1.5%	-1.4%
MBA	10.5%	-3.4%	2.3%
Average	9.8%	-2.5%	0.5%

Existing Home Sales



Residential Lending Forecast

Residential Lending	Forecast						Dec 2022
Purchase Lending ;	\$ Billions						
	2021	2022	2023	2024	2022	2023	2024
Fannie Mae	\$ 1,900.0	\$ 1,660.0	\$ 1,331.0	\$ 1,533.0	-12.6%	-19.8%	15.2%
MBA	\$ 1,863.0	\$ 1,578.0	\$ 1,450.0	\$ 1,644.0	-15.3%	-8.1%	13.4%
Average	\$ 1,881.5	\$ 1,619.0	\$ 1,390.5	\$ 1,588.5	-14.0%	-14.1%	14.2%
Definence Londing	¢ Dillions						
Refinance Lending	\$ Billions						
	2021	2022	2023	2024	2022	2023	2023
Fannie Mae	\$ 2,670.0	\$ 686.0	\$ 366.0	\$ 576.0	-74.3%	-46.6%	57.4%
MBA	\$ 2,574.0	\$ 667.0	\$ 449.0	\$ 635.0	-74.1%	-32.7%	41.4%
Average	\$ 2,622.0	\$ 676.5	\$ 407.5	\$ 605.5	-74.2%	-39.8%	48.6%
Total Landing & Bil	lions						
Total Lending \$ Bill							
	2021	2022	2023	2024	2022	2023	2023
Fannie Mae	\$ 4,570.0	\$ 2,346.0	\$ 1,697.0	\$ 2,109.0	-48.7%	-27.7%	24.3%
MBA	\$ 4,437.0	\$ 2,245.0	\$ 1,899.0	\$ 2,279.0	-49.4%	-15.4%	20.0%
Average	\$ 4,503.5	\$ 2,295.5	\$ 1,798.0	\$ 2,194.0	-49.0%	-21.7%	22.0%
							

HOUSINGWIRE

Daily Update

November 10, 2022

"Last night, my Uber driver was a loan officer."

Mortgage, Real Estate



Declining Home Prices

Joint Congress Economic Committee

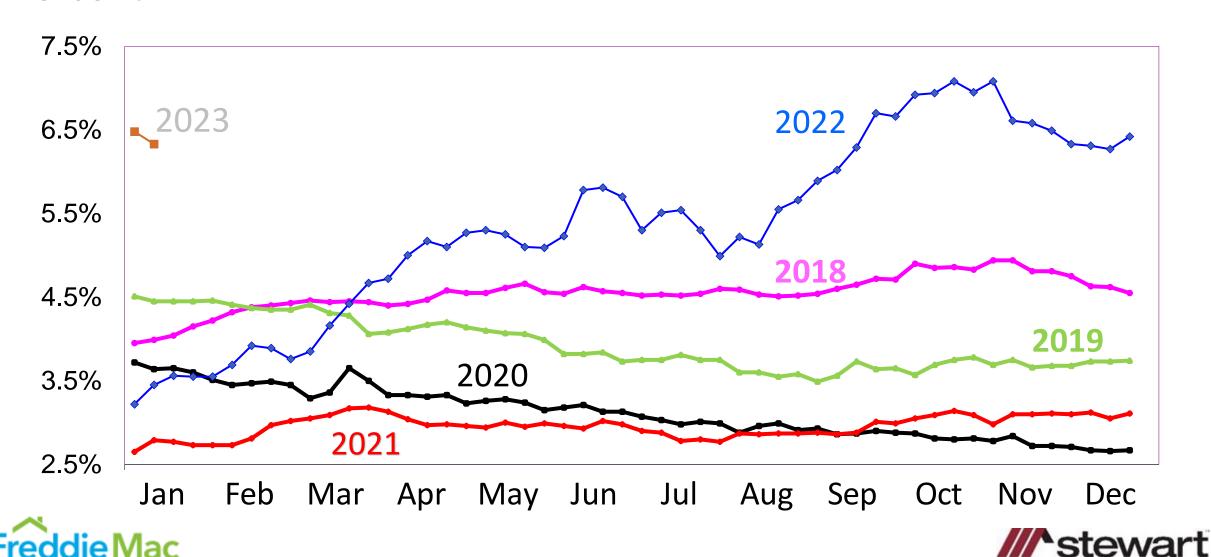
\$747 Per Month More Expensive This Year

Services a 6.42% \$119,173 30-Year Loan



30-Year Conventional Residential Mortgage Rates

Percent



- 1 Texas
- 2 Florida
- 3 South Carolina
- 4 North Carolina
- 5 Virginia
- 6 Tennessee
- 7 Arizona
- 8 Georgia
- 9 Ohio
- 10 Idaho

Top Percentage Inbound States 2022



Top Percentage Inbound MSAs 2022

- 1 Wilmington NC
- 2 Bellingham WA
- 3 Santa Fe NM
- 4 Myrtle Beach SC
- 5 Punta Gorda FL
- 6 Flagstaff AZ
- 7 Sarasota-Bradenton FL
- 8 State College PA
- 9 Eugene-Springfield OR
- 10 Ft Myers-Cape Coral FL

- 11 Burlington VT
- 12 Ft Pierce-St Lucie FL
- 13 Daytona Beach FL
- 14 Dothan AL
- 15 Hickory AL
- 16 Mobil AL
- 17 Portland-Vancouver OR-WA
- 18 Montgomery AL
- 19 West Palm Beach- Boca Raton
- 20 Dover DE



Ted's 2023 Existing Home Sales Forecast

Total Sales Down 10% to 12% Vs 2022

Median Price Gain in 2022 in Lower Single Digits Then Negative 10% to 14% YOY in 2023

30-Year Mortgage Rates in 6%s to Low 7%s



According to the Redfin Homebuyer Index, while home prices are up 3.2% year-over-year in the 4 week period ending November 6, prices have dropped 8.4% since reaching a record high this past June

@DSNewsDaily
@Redfin

6:13 AM · Nov 14, 2022 · Twitter for iPad



Where Home Prices are Dropping the Most Percent Change in Monthly Median Home List Price Since June

- -10.3% Austin
- -9.9% Phoenix
- -8.9% Palm Bay Fl
- -8.6% Charleston
- -8.6% Ogden UT
- -8.0% Denver NC
- -7.9% Las Vegas
- -7.7% Stockton CA
- -7.5% Durham
- -7.4% Spokane WA

@realtordotcom



New Home Glut

There are now an estimated 470,000 unsold new homes under all-states of construction - up 21% year-over-year & the largest inventory seen since March 2008 at the start of the housing bubble implosion

@uscensusbureau
Wolf Street

5:08 AM · Dec 12, 2022

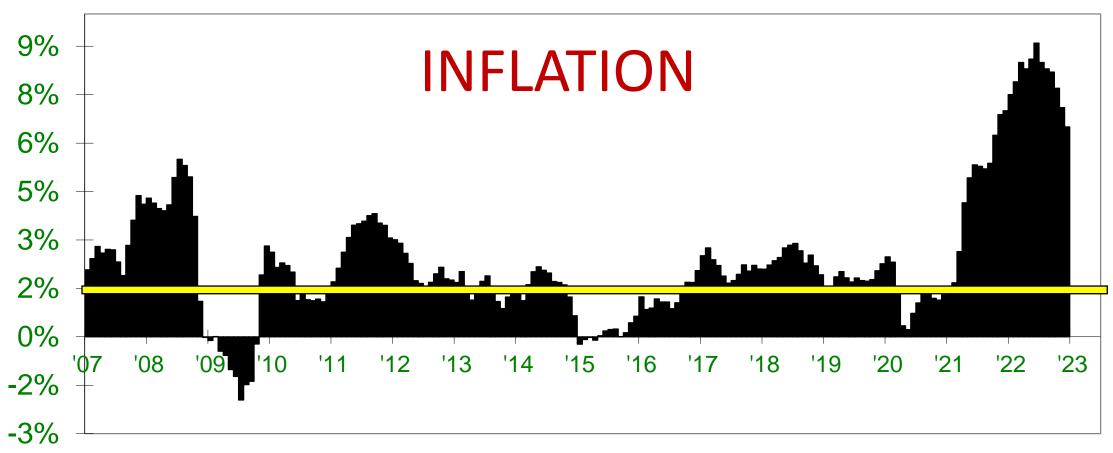
Select Markets Not Every Place



CPI for All Urban Consumers -- U.S. City Average

12-Month Change Seasonally Adjusted

6.5% December 2022



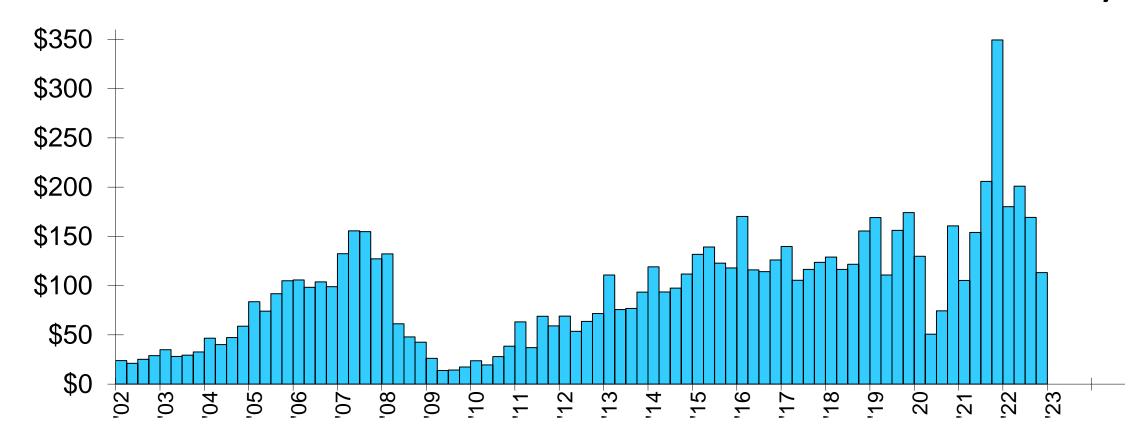




U.S. Commercial Real Estate Sales

\$ Billions – *Quarterly*

Q4 2021 Best Quarter in History

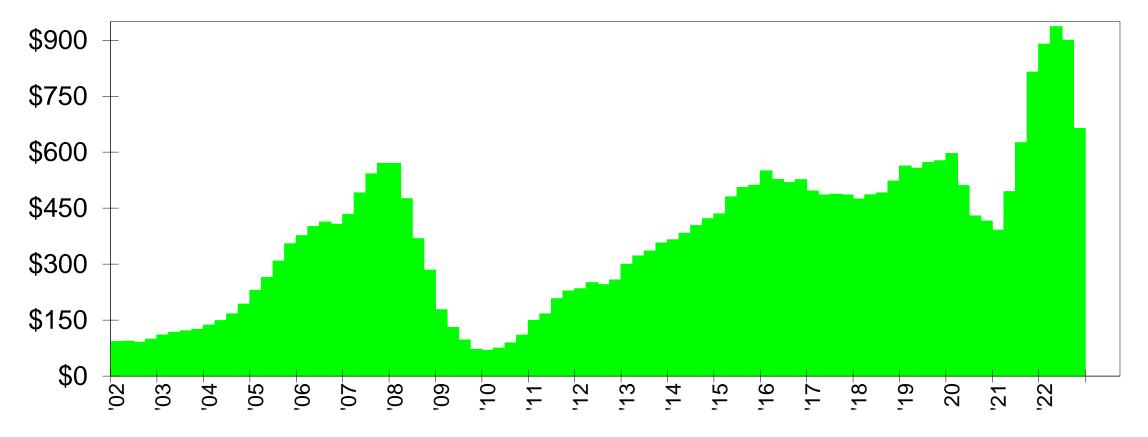






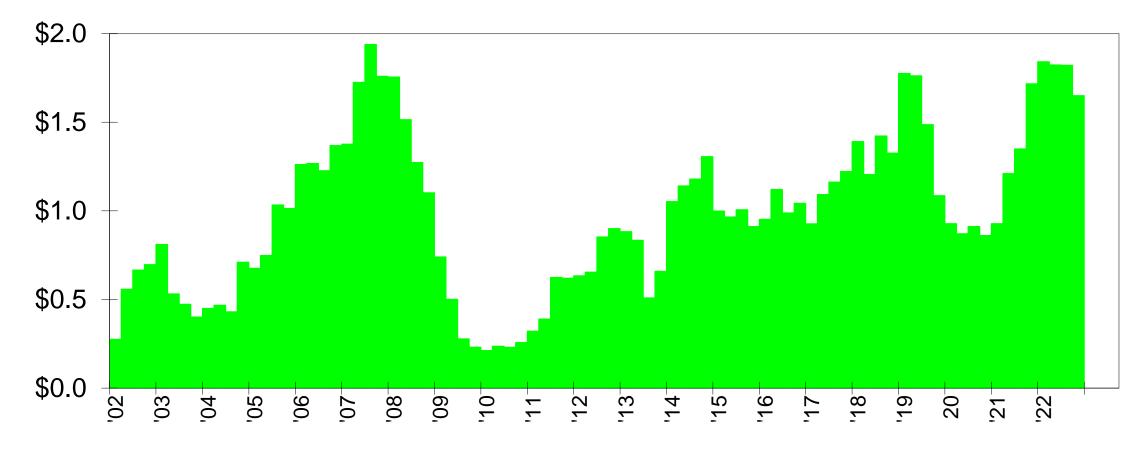
US Commercial Real Estate Sales







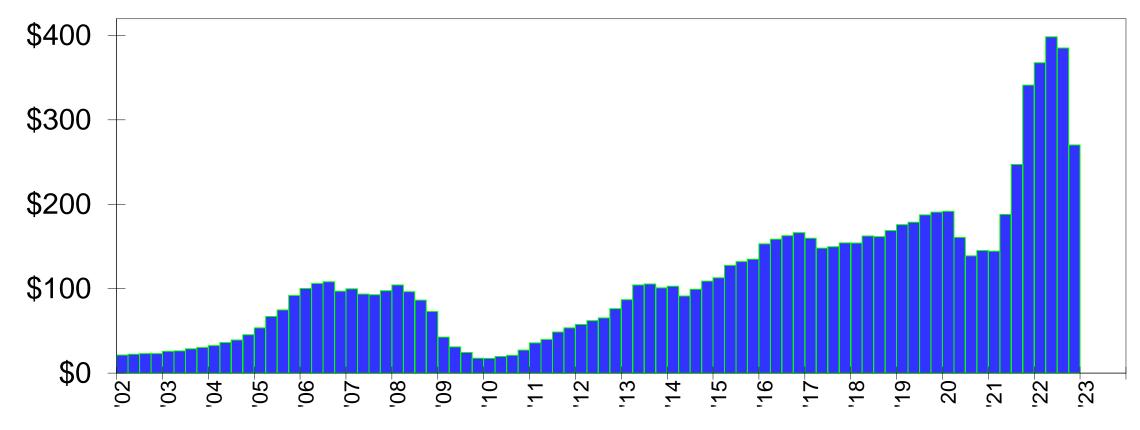
Cleveland Commercial Real Estate Salurstewart





US Apartment Sales

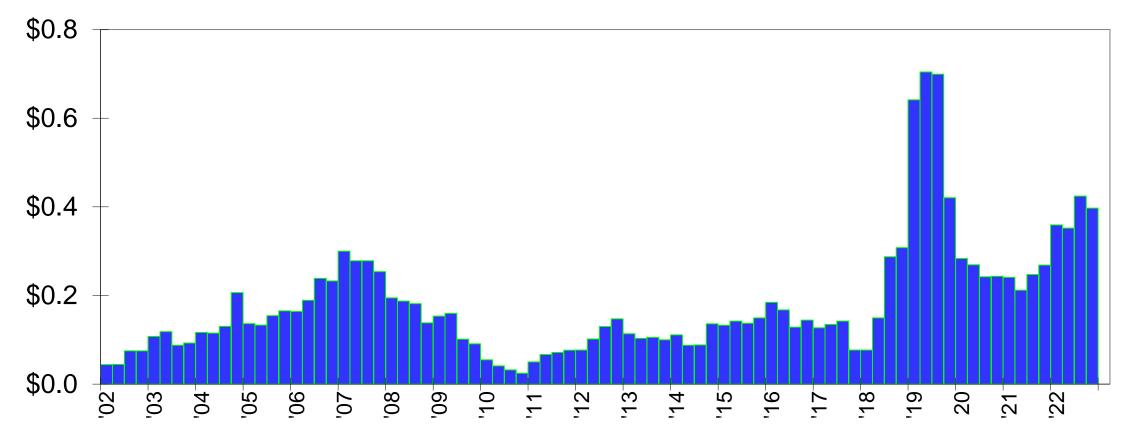






Cleveland Apartment Sales







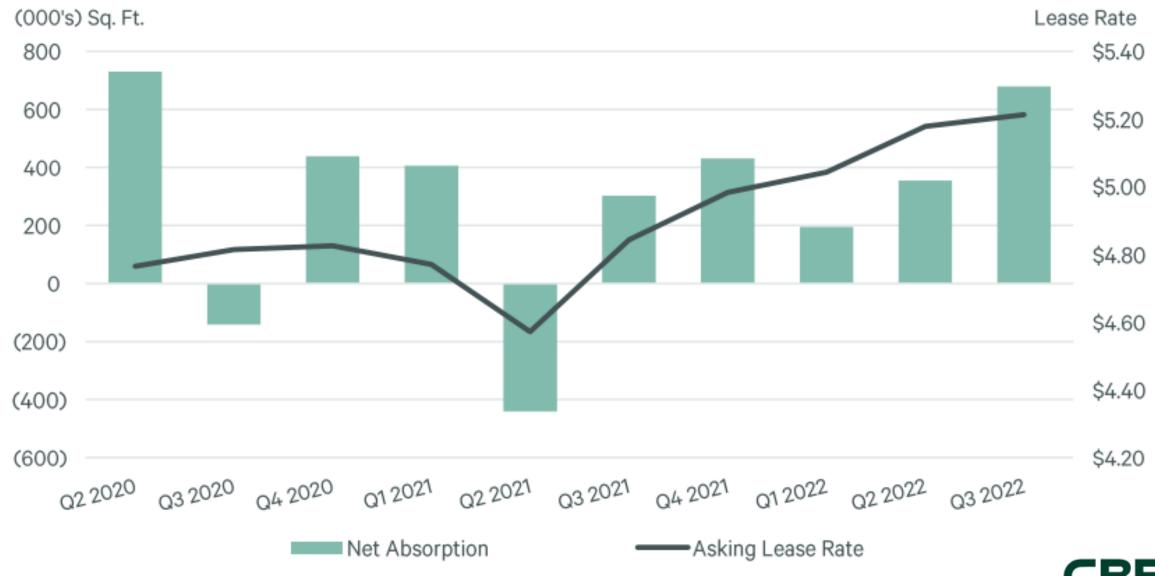
Ohio



Ohio Apartment Market Data | Q3 2022

Metro Area	Inventory (# of Units)	Vacant Units	Annual Demand (Units)	Occupancy Rate (%)	Annual New Supply (Units)	Units Under Construction	Avg Monthly Rent	Avg Rent per SF
Cleveland	170,024	5,985	35	96.5%	1,088	2,107	\$1,187.00	\$1.37
Cincinnati	164,992	5,148	1,013	96.9%	2,130	6,411	\$1,286.00	\$1.35
Columbus	195,960	7,603	1,486	96.1%	3,921	8,768	\$1,267.00	\$1.34
Dayton	56,564	2,002	-200	96.5%	373	907	\$1,071.00	\$1.18
Akron	44,497	1,112	-136	97.5%	357	731	\$1,134.00	\$1.23
Grand Total	632,037	21,851	2,198	96.7%	7,869	18,924	\$1,189.00	\$1.29

Cleveland Industrial

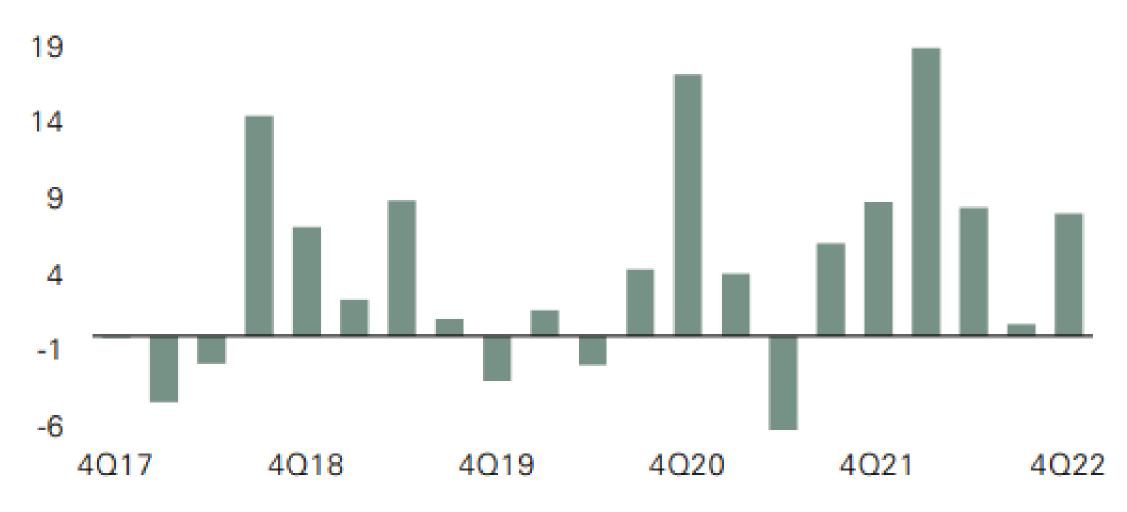




Cleveland Industrial



NET ABSORPTION (SF, Hundred Thousands)





Cleveland

Vacancy reaches a historic low while the average rent increases to its highest level on record

- Construction in 2022 is projected to total 6.1 million s.f. This is the highest annual level of industrial construction in more than 25 years.
- Demand for industrial space in Cleveland has outpaced construction levels for the last four years, pushing vacancy down to 3.3% at the end of Q3 2022.
- The average industrial asking rent in Cleveland increased to \$5.41
 p.s.f. in Q3 2022, a historic high-water mark and an increase of 32% in
 the last two years.

Fundamentals	Forecast
YTD net absorption	6,425,138 s.f. ▶
Under construction	5,589,886 s.f. ▼
Total vacancy	3.3% ▼
Sublease vacancy	845,414 s.f. ▼
Direct asking rent	\$5.42 p.s.f. 🛕
Sublease asking rent	\$5.32 p.s.f. 🛕
Concessions	Decreasing ▼

Cleveland Office

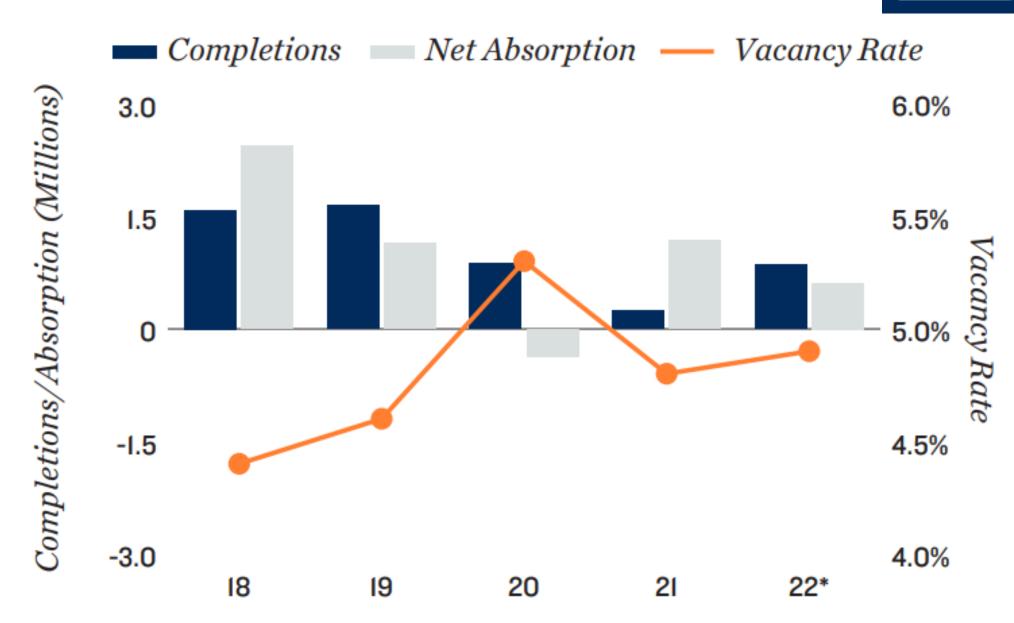
	21Q3	22Q2	22Q3
"Total Inventory (in Millions of SF)"	52.3	52.4	52.4
"New Supply (in Thousands of SF)"	130.0	0.0	0.0
"Net Absorption (in Thousands of SF)"	14.8	56.4	-33.6
Overall Vacancy	13.6%	13.1%	14.3%
"Under Construction (in Thousands of SF)"	533.4	2039.9	2039.9
"Overall Asking Lease Rates (FSG)"	\$18.46	\$18.22	\$18.46



Cleveland Office

OVERALL VACANCY & ASKING RENT





10		_	Columbus	Cincinnati	Cleveland
<u>,8</u>	Transactions	2019	39	56	31
₹ \	Q1-Q3	2021	32	37	21
ANALYTICS		2022	45	20	25
04					
4	Sales Change	Q1-Q3			
4	2019	to 2022	15.4%	-64.3%	-19.4%
HI.	2021	to 2022	40.6%	-45.9%	19.0%
\mathbf{C}					
	Cap Rates - Ave	erage			
_		2019	6.05%	6.32%	6.22%
O		2021	5.34%	5.78%	5.53%
S		2022	5.11%	5.50%	5.50%
MSC		Q4 2022	5.08%	5.54%	5.28%
	Price Per Unit -	- Hedonic			
		2019	\$81,055	\$68,061	\$55 <i>,</i> 360
Ohio		2021	\$99,079	\$103,196	\$70 <i>,</i> 852
OHIO		2022	\$110,947	\$113,329	\$78 <i>,</i> 180
Ohio		Hedonic 2019 2021	\$81,055 \$99,079	\$68,061 \$103,196	\$55, \$70,



Government imposed regulations account for more than 40% of all multifamily development costs according to a study by @NAHBhome & @NMHCInnovation National Multifamily Housing Counsel

87.5% of builders will avoid new construction in markets with rent controls

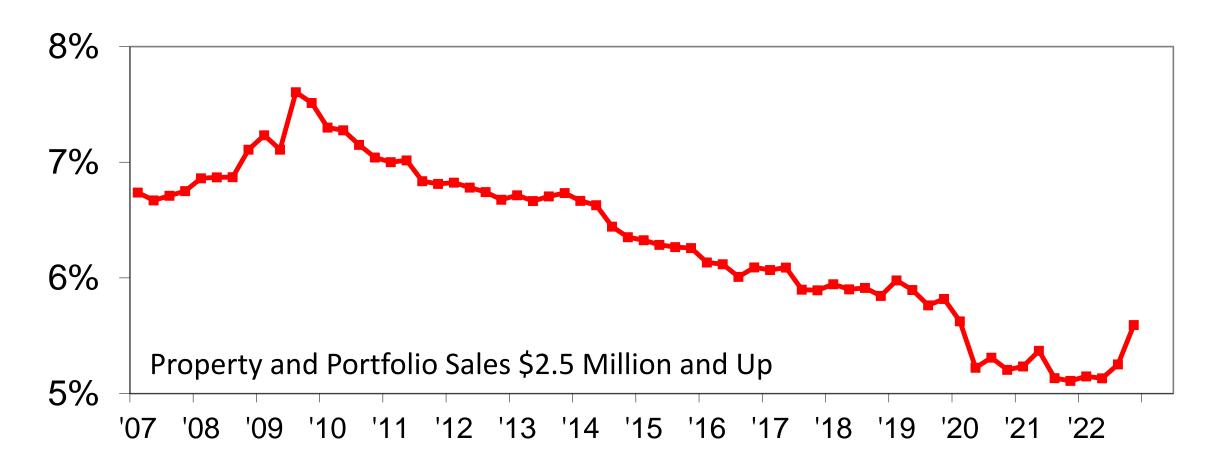
@GlobeStcom



U.S. Cap Rates – All Property Types



Percent





CREATIVITY

The Good, the Bad and the Ugly

An Outlook for Real Estate and the Economy





Highest Mortgage rates



Highest Inflation

Presented by



Dr. Ted C. JonesChief Economist
Senior Vice President
Stewart Title Guaranty Company



