

ULI Real Estate Economic Forecast

A SURVEY OF LEADING REAL ESTATE ECONOMISTS/ANALYSTS

OCTOBER 2022

ULI Center For Real Estate Economics And Capital Markets

ULI Real Estate Economic Forecast

- Three-year forecast ('22 -'24) for 27 economic and real estate indicators.
- A consensus forecast based on the median of the forecasts from 43 economists/analysts at 37 leading real estate organizations.
- Respondents represent major real estate investment, advisory, and research firms and organizations.
- This is the 22nd survey; completed September 28 – October 12, 2022.
- A semi-annual survey; next release planned for May 2023.
- Forecasts for:
 - Broad economic indicators
 - Real estate capital markets
 - Property investment returns for four property types
 - Vacancy rates and rents for five property types
 - Housing starts and prices

Forecasts vs. Long-Term Averages

2022 Forecast

Better than long-term averages	Worse than long-term averages
Employment Growth Unemployment Rate	GDP Growth
Transaction Volume	CPPI Growth
NCREIF Returns: Apartment, Industrial	CMBS Issuance
Vacancy/Availability rates: Industrial, Apartment, Retail	Equity REIT returns
Rental Rate Change: Retail, Industrial, Apartment	NCREIF Returns: Office, Retail
Hotel Occupancy Rates	Vacancy Rate: Office
Hotel RevPAR Change	Rental Rate Change: Office
Single Family Starts Home Price Change	

2024 Forecast

Better than long-term averages	Worse than long-term averages
GDP Growth	CPPI Growth
Employment Growth Unemployment Rate	Equity REIT returns
Transaction Volume CMBS Issuance	NCREIF Returns: Office, Retail, Apartment, Industrial
Vacancy/Availability rates: Industrial, Apartment, Retail	Vacancy Rate: Office
Rental Rate Change: Retail, Industrial, Apartment	Rental Rate Change: Office
Hotel Occupancy Rates	Single Family Starts Home Price Change
Hotel RevPAR Change	

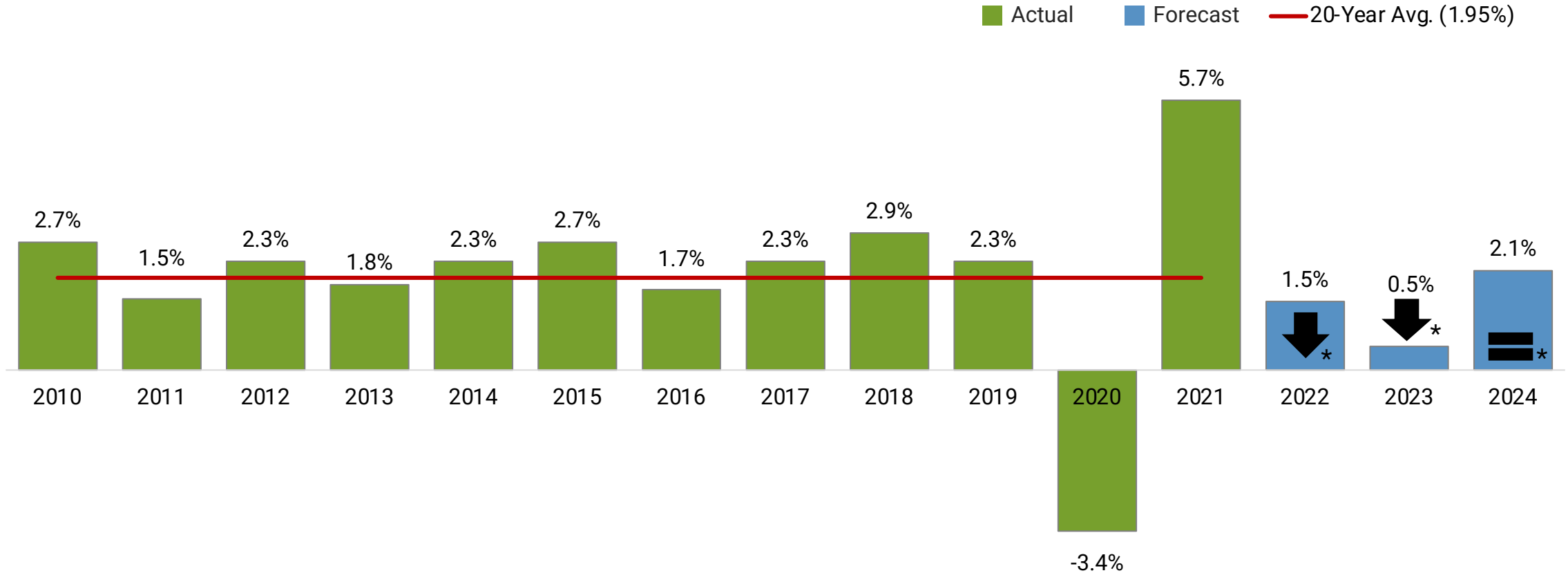
Key Findings

- Commercial real estate transaction volume reached an all-time high of \$855 billion in 2021, rebounding from a 7-year low of \$432 billion in the pandemic year of '20. Levels are expected to moderate to \$600 billion in '22 and remain at that level in '23, a volume closer to the two pre-pandemic years. Transaction volume is expected to strengthen in '24, to \$750 billion; this would exceed annual volumes in all pre-pandemic years.
- Overall, prices increased by 19.2% in '21, about triple the price growth of each of the five previous years; growth in those years was already above the long-term average. Price growth in '22 is expected to moderate substantially to 5.5% although remain above the long-term average, dip below the long-term average in '23 to 3.0%, and then return to 5.0% in '24.
- Total returns for institutional-quality direct real estate investments, as measured by the NCREIF Property Index (NPI), were a strong 17.7% in '21, following four years of returns below the long-term average and then a pandemic low of 1.6% in '20. Total returns are expected to moderate to the long-term average of 9% in '22, fall in '23 to 3.8%, and strengthen in '24 to 7.0% in '24 while remaining below the long-term average. By property type, '22 returns are forecast to range from industrial's 18.9% to office's 2%. In '24, returns are forecast to range from industrial's 9.6% to office's 4.1%.
- Changes in vacancy and availability rates are expected to be minimal to moderate. Industrial availability and apartment vacancy will remain tight by historic standards over the forecast period, even with some moderate increase in apartment vacancies. Office vacancy rates are expected to stay elevated and rise moderately. Availability rates for neighborhood and community shopping centers are expected to tighten just a bit, reaching their lowest post-GFC rate, and remaining there throughout the forecast period.
- Commercial property rent growth differs by property type. Industrial and apartment rent growth are both expected to be strongest in '22 and then stay strong but moderate in the subsequent two years, with annual growth averaging 5.9% and 4.5%, respectively. Average annual retail rent growth is forecast at 1.7%, with a dip in '23, and office rent growth is forecast at an annual average of 0.3%, with most growth occurring in '24.
- Housing starts are expected to reverse direction in '22 after a decade of growth and by '23 be down by almost 30% from starts in '21. Housing starts will begin to recover in '24, approaching but not yet back to the 20-year average.

» Economy

- The economists/analysts who participated in this survey expect a slowing economy with relatively minimal growth in '22 and '23, and a return to stronger growth in '24. Employment growth, expected to be strong in '22, will be positive but at much lower levels in '23 and '24; the unemployment rate reflects a tight labor market in '22 with some loosening in '23 and '24.
- GDP growth bounced back quickly in '21 from the pandemic-induced economic contraction in '20, rising 5.7% or almost three times higher than the long-term average of 1.95%. Growth is expected to slow to below the long-term average in '22 and further decline in '23, with annual growth rates of 1.5% and 0.5%, respectively. Growth is expected to reverse direction in '24 to 2.1%, just above the long-term average.
- Employment growth staged a significant, but not complete, recovery in '21 with 6.74 million jobs from the loss of 9.29 million jobs in '20. Full recovery and growth is expected in '22 with an additional 4.3 million jobs. Growth is expected to continue but at much lower levels, with 0.6 million jobs in '23, below the long-term average, and 1.5 million jobs in '24, back to above the long-term average of 0.91 million jobs.
- The unemployment rate is expected to be 3.7% at the end of '22, among the lowest rates in the last two decades, and then notch up to over 4% in '23 and '24, at 4.5% and 4.3%, respectively. All three forecast years remain below the long-term average of 5.9%.

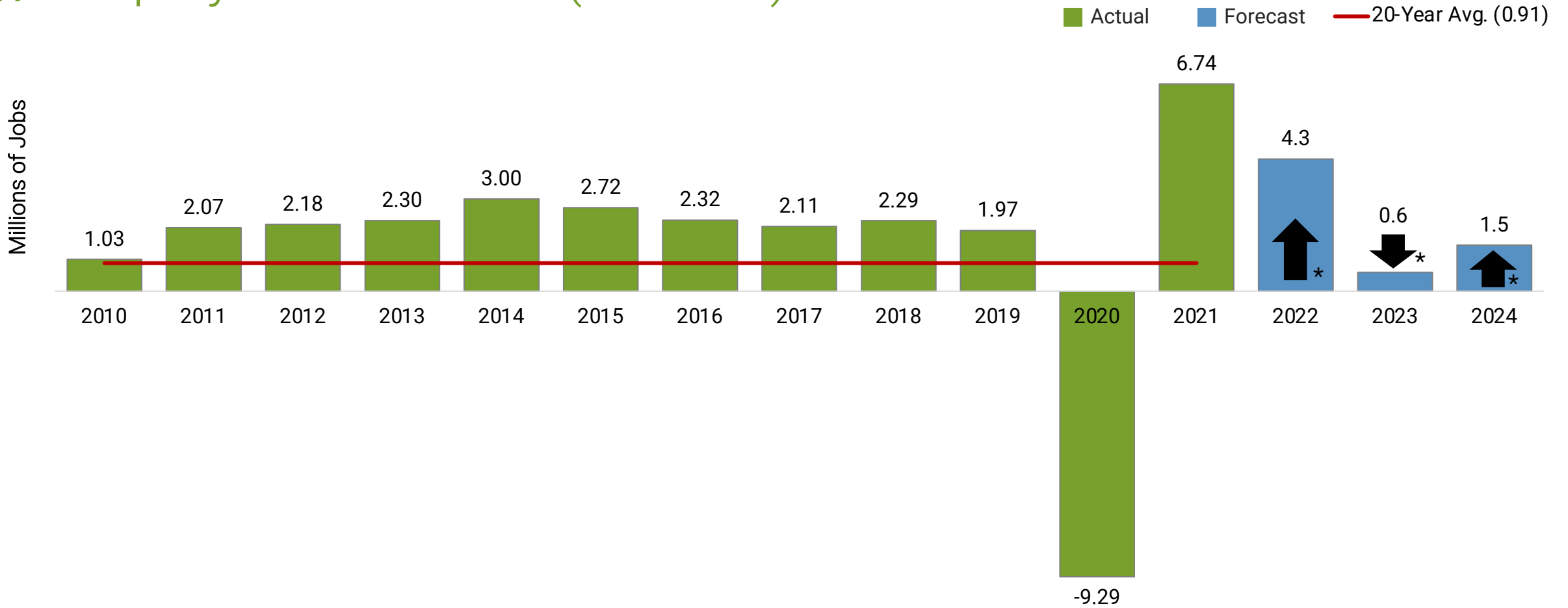
» Real GDP Growth



Sources: 2002-2021, Bureau of Economic Analysis; 2022-2024, ULI Real Estate Economic Forecast.

*Indicated directions (↑ ↓ =) refer to the current forecast relative to the previous ULI Real Estate Economic Forecast. The previous ULI Real Estate Economic Forecast (released in April, 2022) projected 3.2% for 2022, 2.3% for 2023, and 2.1% for 2024.

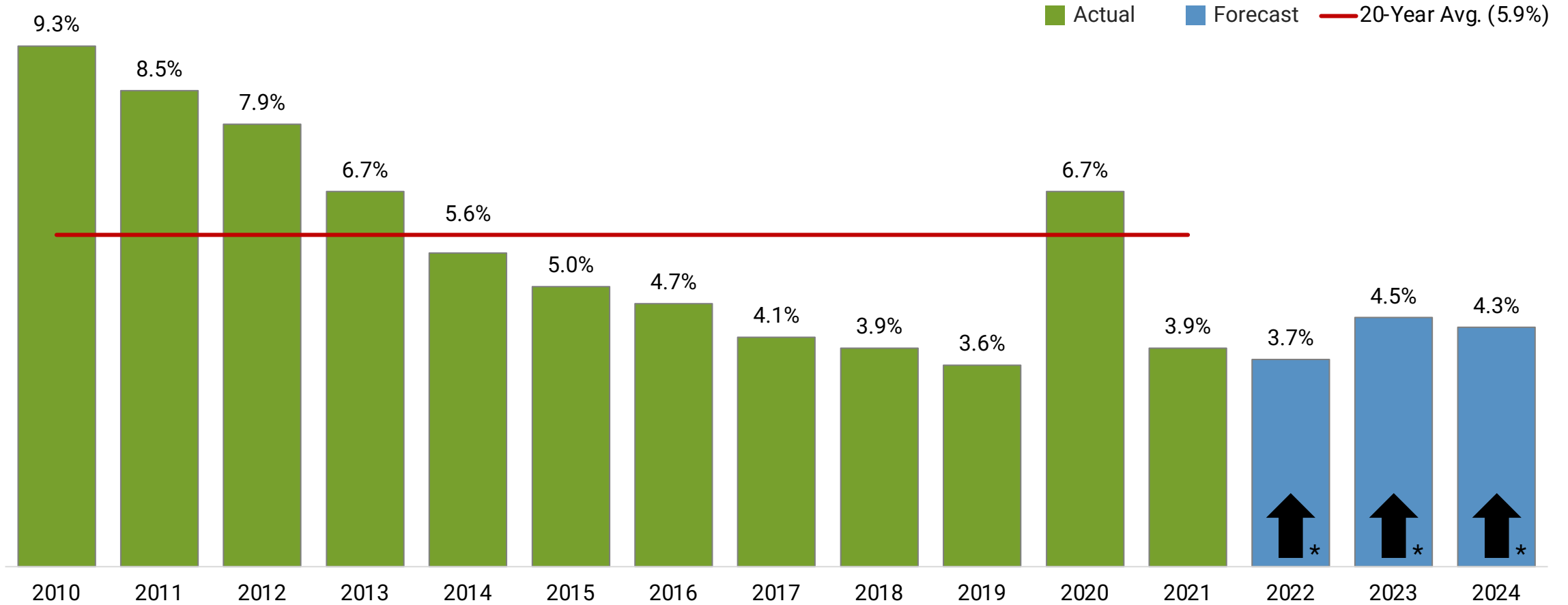
» Employment Growth (Millions)



Sources: 2002-2021, Bureau of Labor Statistics; 2022-2024, ULI Real Estate Economic Forecast.

*Indicated directions (↑ ↓ =) refer to the current forecast relative to the previous ULI Real Estate Economic Forecast. The previous ULI Real Estate Economic Forecast (released in April, 2022) projected 4.1M for 2022, 1.9M for 2023, and 1.2M for 2024.

» Unemployment Rate



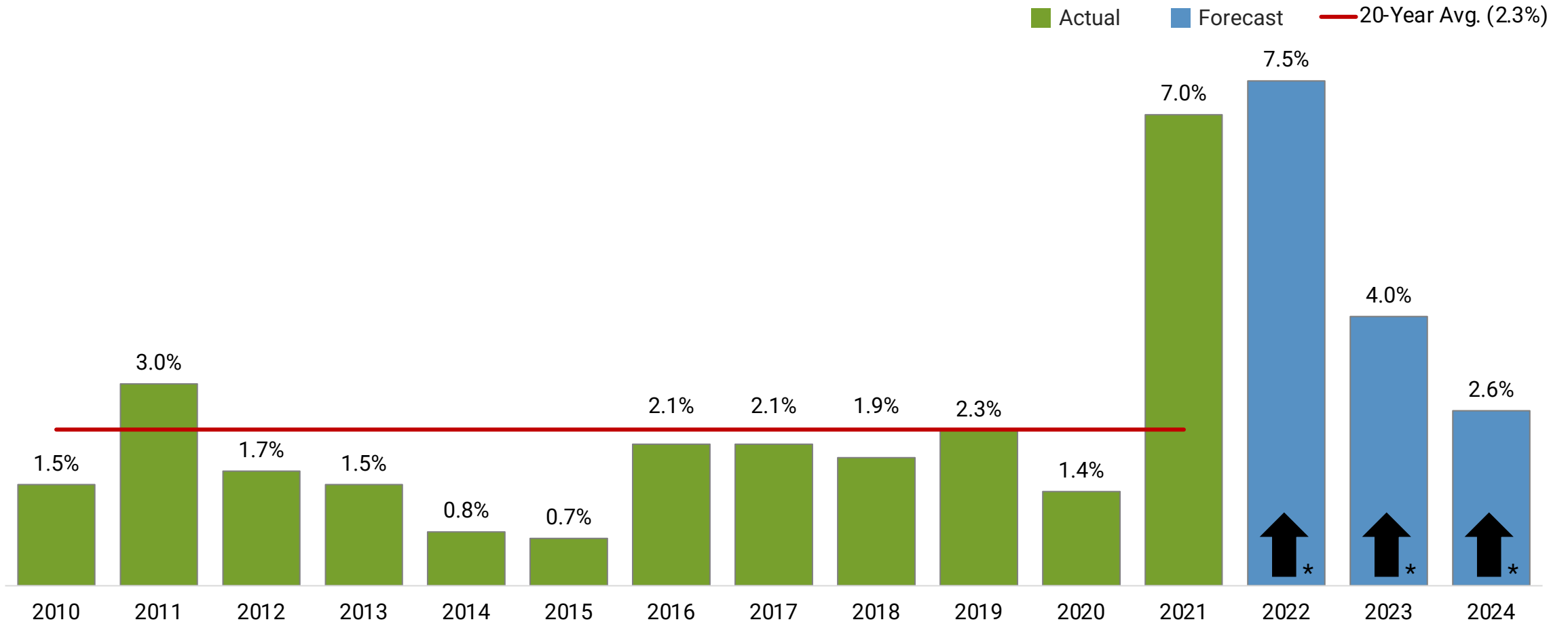
Sources: 2002-2021, (seasonally adjusted, as of December), Bureau of Labor Statistics; 2022-2024 (YE), ULI Real Estate Economic Forecast.

*Indicated directions (↑ ↓ =) refer to the current forecast relative to the previous ULI Real Estate Economic Forecast. The previous ULI Real Estate Economic Forecast (released in April, 2022) projected 3.5% for 2022, 3.5% for 2023, and 3.6% for 2024.

» Inflation, Interest Rates, and Cap Rates

- The CPI inflation rate in 2021 was 7.0%, more than three times higher than the 20-year average of 2.3%. The inflation rate is forecast to notch up further in '22 to 7.5%. Inflation is expected to begin moderating in '23, with a decline to 4.0%, and further decline to 2.6% in '24, ending the forecast period just above the long-term average.
- The ten-year treasury rate averaged 2.1% per year-end from '11 to-'21, below the long-term average of 2.9%, with particularly low rates in '20 and '21. The rate is expected to rise by 236 basis points by the end of '22 from 1.52% in '21 to 3.88% and remain above the long-term average, but moderate, over the two subsequent years, to 3.23% by the end of in '24.
- Capitalization rates for institutional-quality investments (NCREIF cap rates) have steadily declined for 12 years, including the two pandemic years, and were at 4.0% in '21. Cap rates are expected to remain at 4.0% in '22, move up to 4.5% in '23 and plateau at that rate in '24.

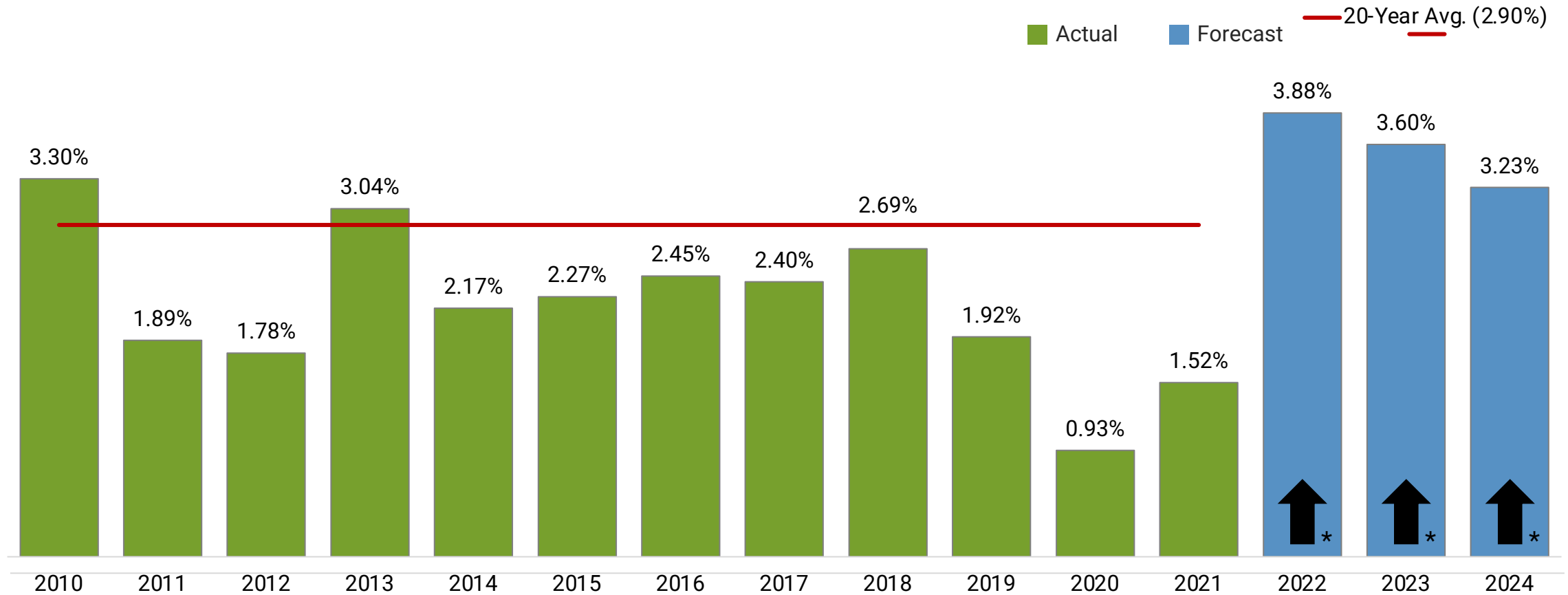
» Consumer Price Index Inflation Rate



Sources: 2002-2021, (12-month change, as of December), Bureau of Labor Statistics; 2022-2024 (YE), ULI Real Estate Economic Forecast.

*Indicated directions (↑ ↓ =) refer to the current forecast relative to the previous ULI Real Estate Economic Forecast. The previous ULI Real Estate Economic Forecast (released in April, 2022) projected 6.0% for 2022, 3.0% for 2023, and 2.5% for 2024.

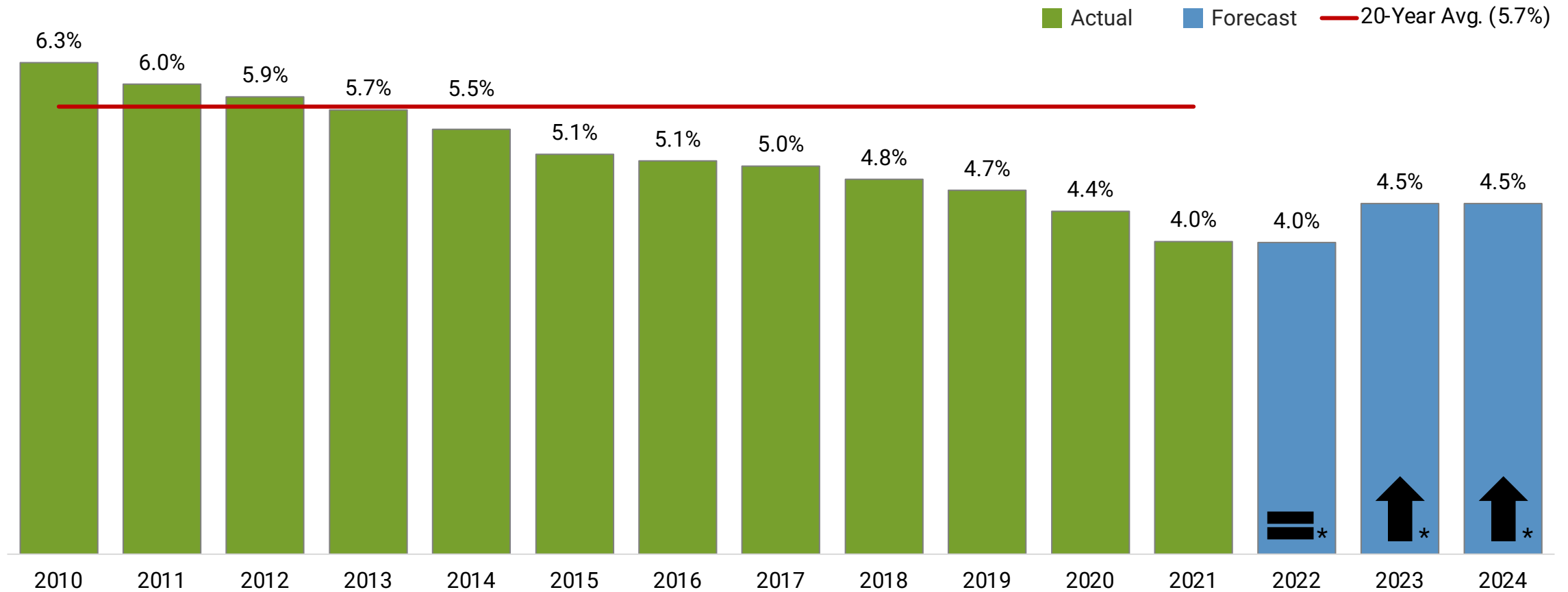
» Ten-Year Treasury Rate



Sources: 2002-2021 (YE), U.S. Federal Reserve; 2022-2024 (YE), ULI Real Estate Economic Forecast.

*Indicated directions (↑ ↓ =) refer to the current forecast relative to the previous ULI Real Estate Economic Forecast. The previous ULI Real Estate Economic Forecast (released in April, 2022) projected 2.70% for 2022, 3.00% for 2023, and 3.00% for 2024.

» NCREIF Capitalization Rate



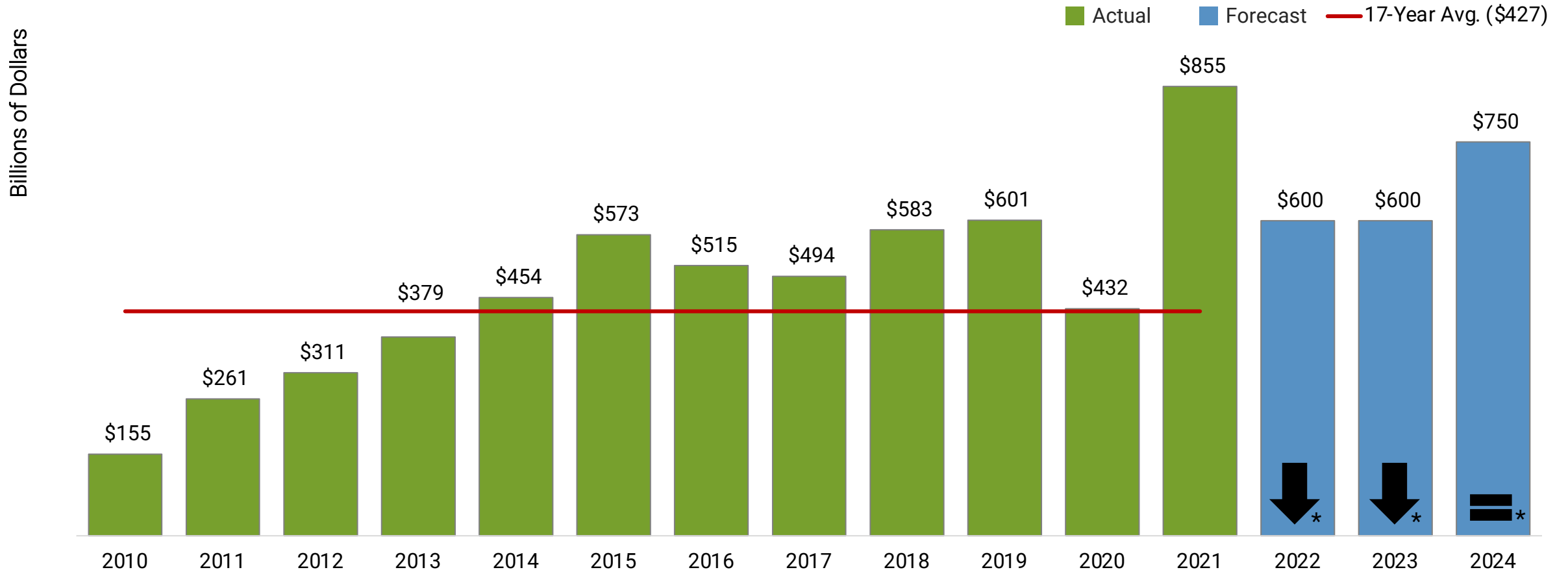
Sources: 2002-2021, Q4, National Council of Real Estate Investment Fiduciaries (NCREIF); 2022-2024 (YE), ULI Real Estate Economic Forecast.

*Indicated directions (↑ ↓ =) refer to the current forecast relative to the previous ULI Real Estate Economic Forecast. The previous ULI Real Estate Economic Forecast (released in April, 2022) projected 4.0% for 2022, 4.3% for 2023, and 4.3% for 2024.

» Real Estate Capital Markets

- Commercial real estate transaction volume reached an all-time high of \$855 billion in 2021, rebounding from a 7-year low of \$432 billion in the pandemic year of '20. Levels are expected to moderate to \$600 billion in '22 and remain at that level in '23, a volume closer to the two pre-pandemic years. Transaction volume is expected to strengthen in '24, to \$750 billion; this would exceed annual volumes in pre-pandemic years.
- Issuance of commercial mortgage-backed securities (CMBS), a source of financing for commercial real estate, reached a post-GFC high in 2021 of \$111 billion, more than double the pandemic low of \$54 billion in '20. Levels are expected to moderate in '22 to \$80 billion, and then increase over the subsequent two years, reaching \$100 billion in '24.

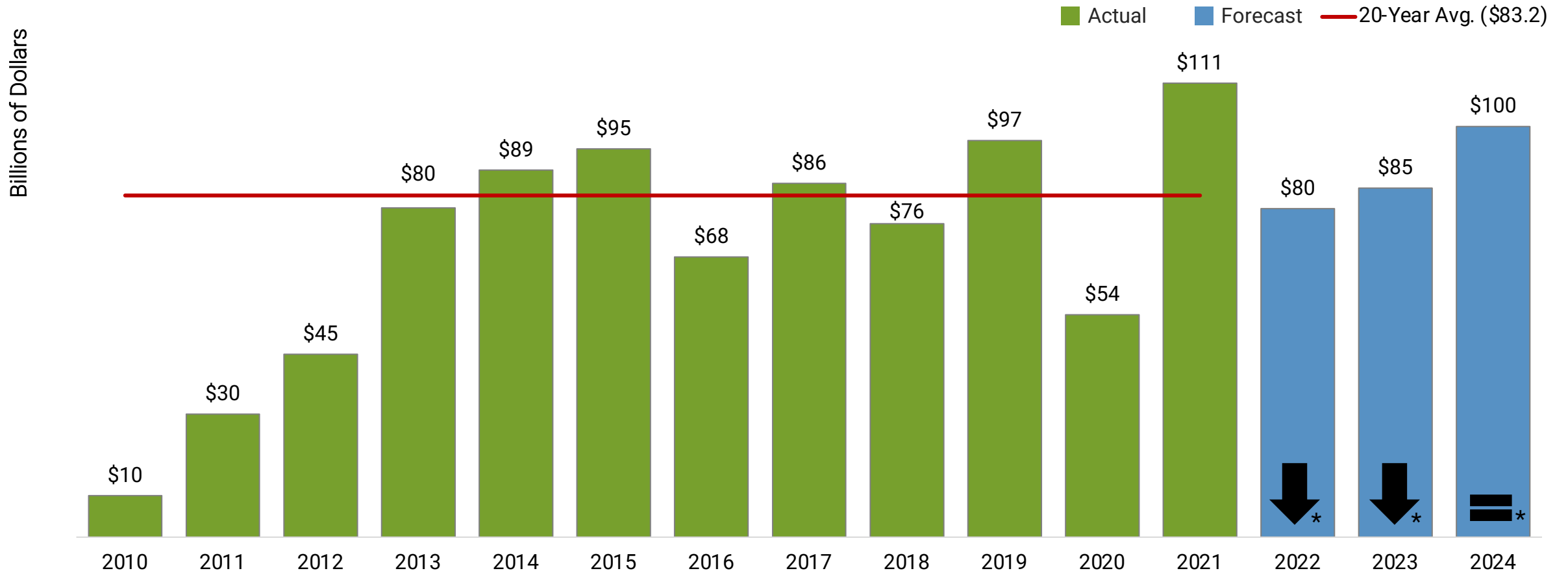
» Commercial Real Estate Transaction Volume



Sources: 2005-2021, MSCI Real Assets; 2022-2024, ULI Real Estate Economic Forecast.

*Indicated directions (↑ ↓ =) refer to the current forecast relative to the previous ULI Real Estate Economic Forecast. The previous ULI Real Estate Economic Forecast (released in April, 2022) projected \$800B for 2022, \$725B for 2023, and \$750B for 2024.

» Commercial Mortgage-Backed Securities (CMBS) Issuance



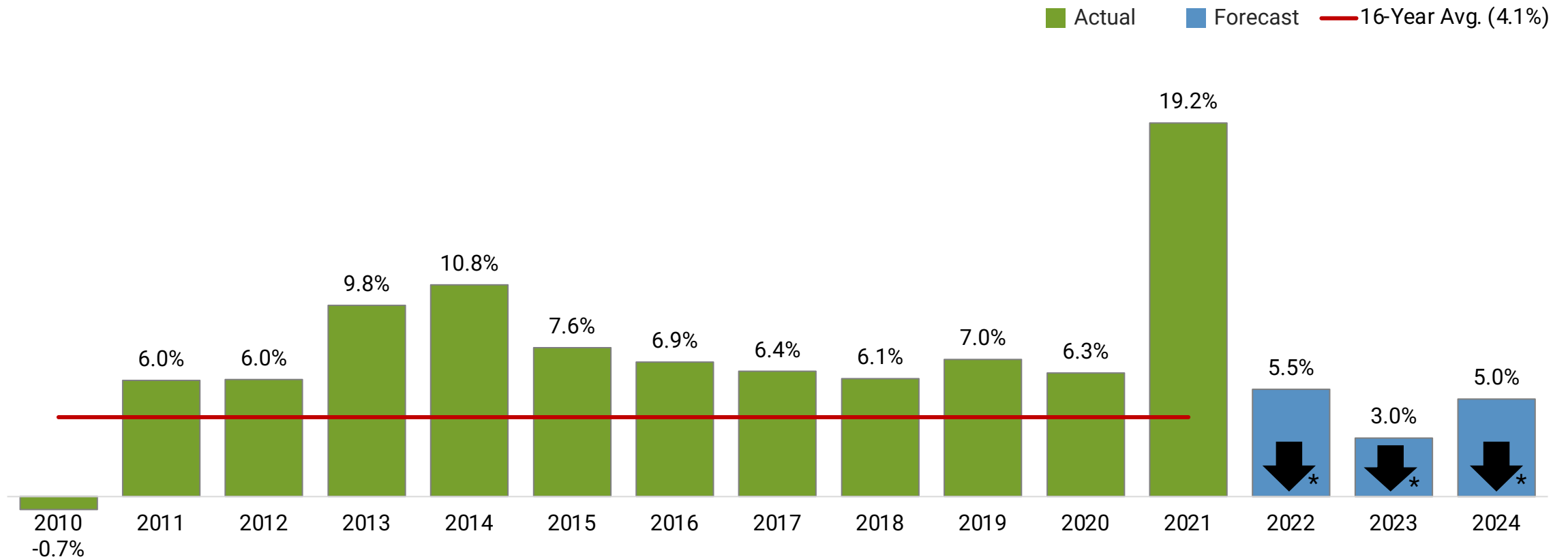
Sources: 2002-2021, Green Street, Commercial Mortgage Alert; 2022-2024, ULI Real Estate Economic Forecast.

*Indicated directions (↑ ↓ =) refer to the current forecast relative to the previous ULI Real Estate Economic Forecast. The previous ULI Real Estate Economic Forecast (released in April, 2022) projected \$100B for 2022, \$90B for 2023, and \$100B for 2024.

» Real Estate Returns and Prices

- The RCA Commercial Property Price Index increased by 19.2% in '21, about triple the price growth of each of the five previous years; growth in those years was already above the long-term average. Price growth is expected to remain above the long-term average in '22 but moderate substantially, at 5.5%, dip below the long-term average in '23 to 3.0%, and then return to 5.0% in '24.
- Equity REIT total annual returns in 2021, according to NAREIT, were a strong 43.2%. Returns are expected to be -20.5% in '23. Returns in '23 and '24 are expected to be positive but below the long-term average of 12.7%, at 10% in both '23 and '24.
- Total returns for institutional-quality direct real estate investments, as measured by the NCREIF Property Index (NPI), were a strong 17.7% in '21, following four years of returns below the long-term average and then a pandemic low of 1.6% in '20. Total returns are expected to moderate to the long-term average of 9% in '22, fall in '23 to 3.8%, and strengthen in '24 to 7.0% in '24 while remaining below the long-term average.

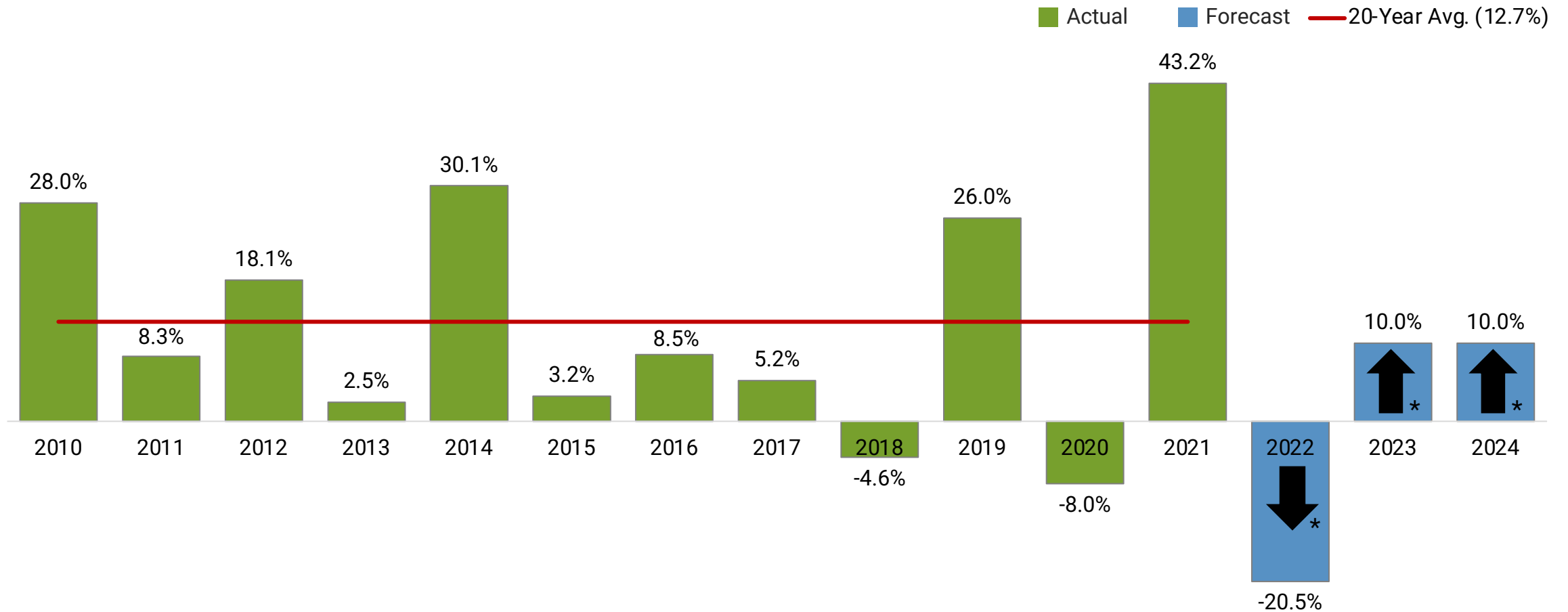
» RCA Commercial Property Price Index (annual change)



Sources: 2005-2021, MSCI Real Assets; 2022-2024, ULI Real Estate Economic Forecast.

*Indicated directions (↑ ↓ =) refer to the current forecast relative to the previous ULI Real Estate Economic Forecast. The previous ULI Real Estate Economic Forecast (released in April, 2022) projected 10.0% for 2022, 6.0% for 2023, and 5.9% for 2024.

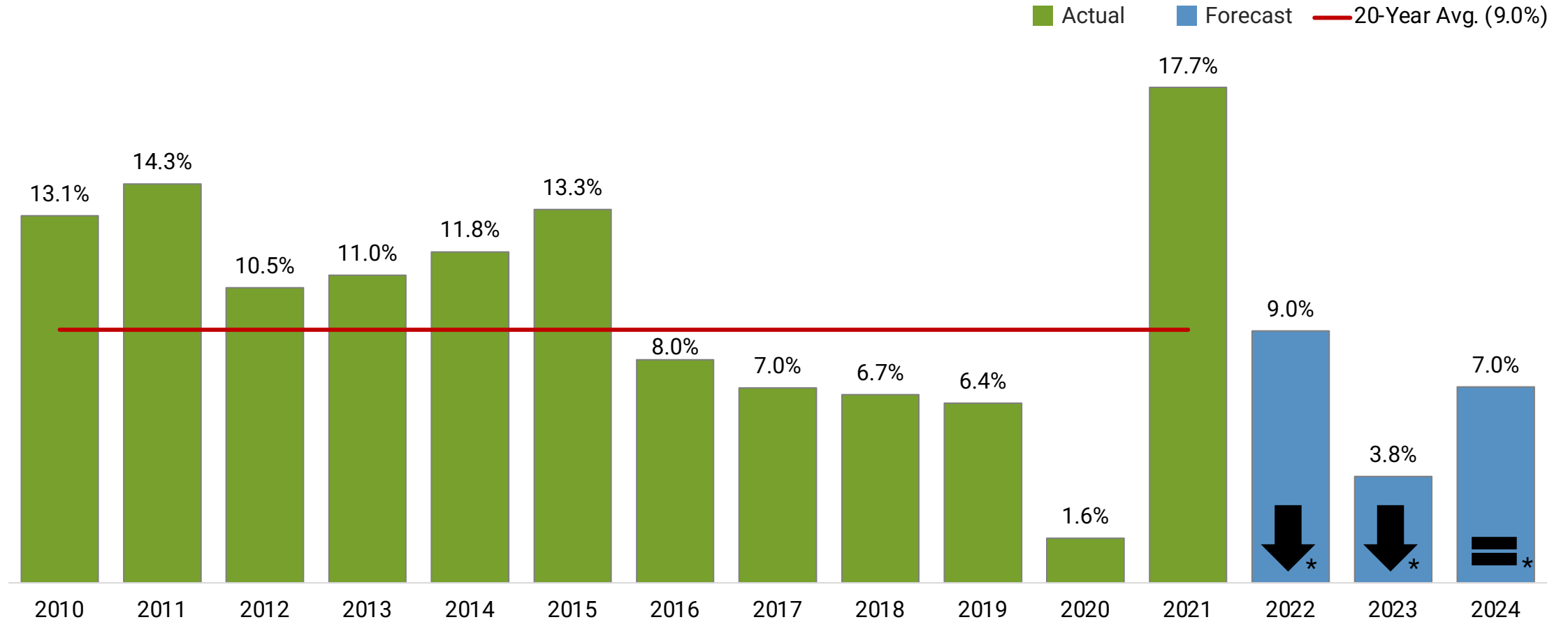
» Equity REIT Total Annual Returns



Sources: 2002-2021, National Association of Real Estate Investment Trusts; 2022-2024, ULI Real Estate Economic Forecast.

*Indicated directions (↑ ↓ =) refer to the current forecast relative to the previous ULI Real Estate Economic Forecast. The previous ULI Real Estate Economic Forecast (released in April, 2022) projected 8.0% for 2022, 8.3% for 2023, and 9.5% for 2024.

» NCREIF Total Annual Returns



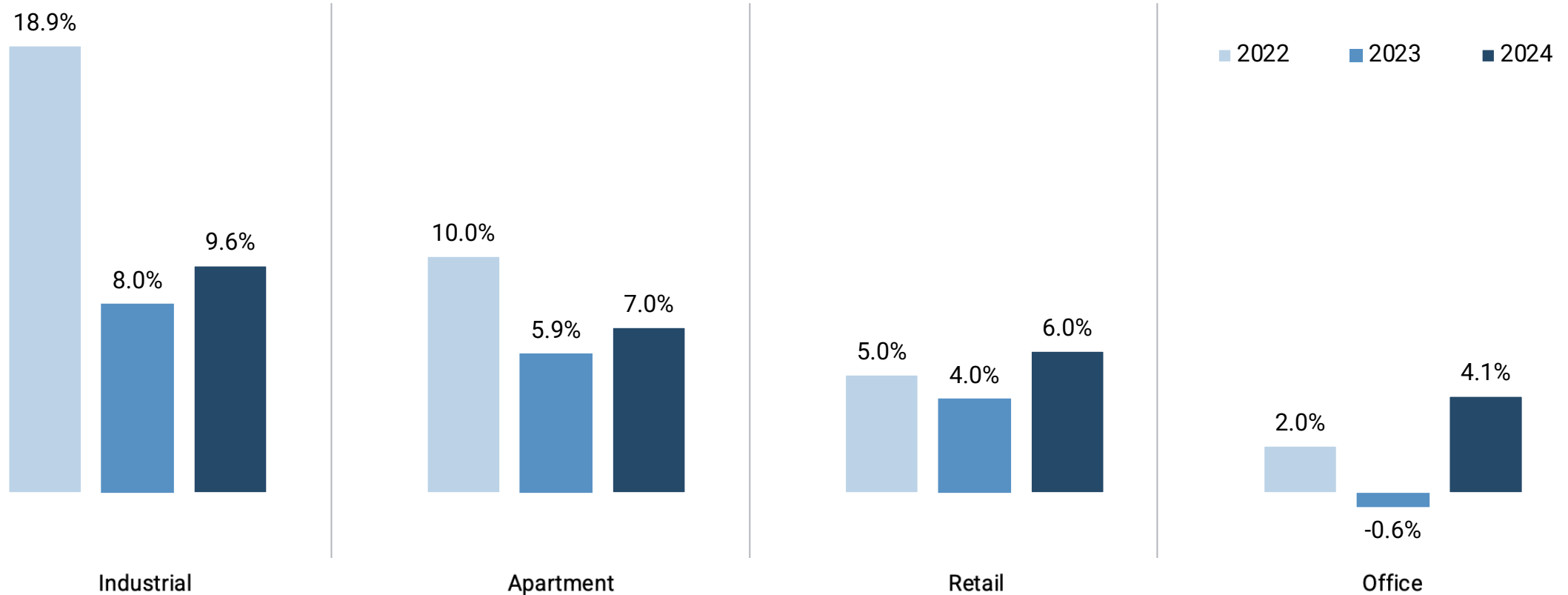
Sources: 2002-2021, National Council of Real Estate Investment Fiduciaries (NCREIF); 2022-2024, ULI Real Estate Economic Forecast.

*Indicated directions (↑ ↓ =) refer to the current forecast relative to the previous ULI Real Estate Economic Forecast. The previous ULI Real Estate Economic Forecast (released in April, 2022) projected 10.0% for 2022, 8.0% for 2023, and 7.0% for 2024.

» NCREIF Returns by Property Type

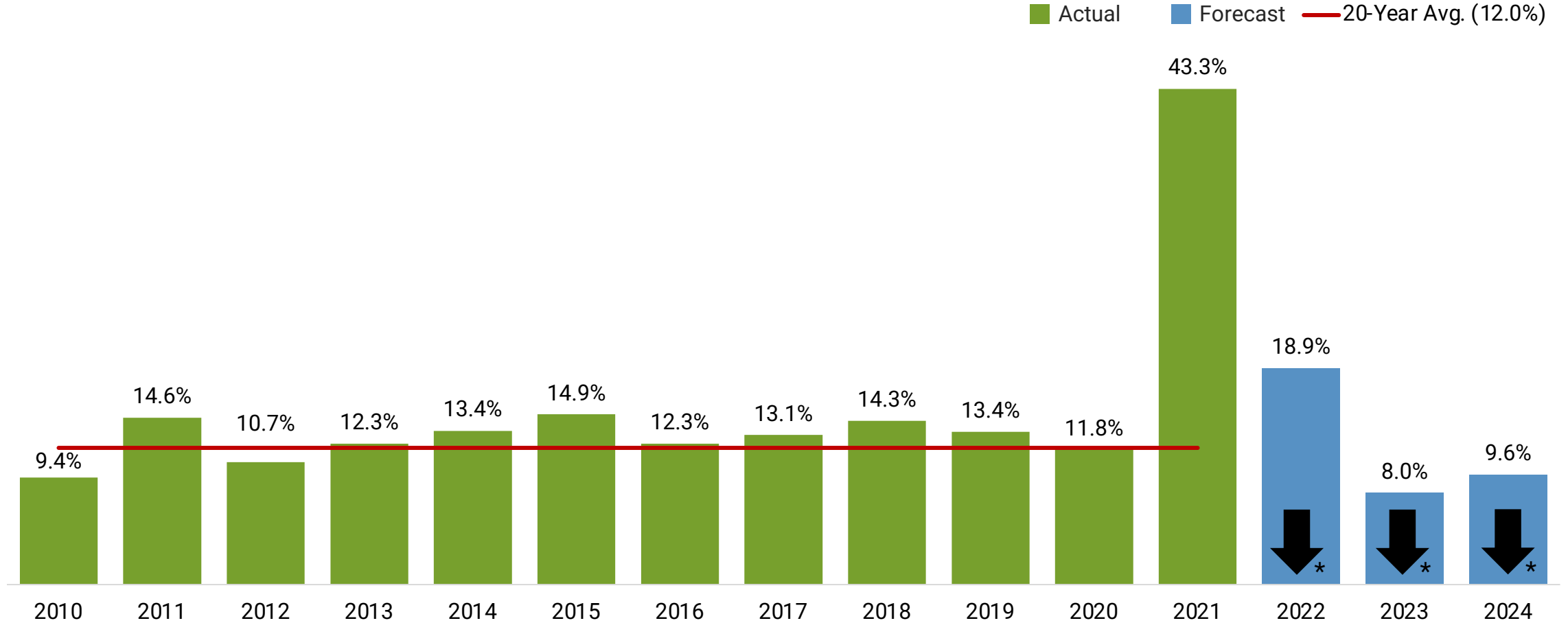
- NCREIF returns for both the industrial and apartment sectors are expected to be strong in 2022, although both sectors will be down from even stronger returns in '21. Industrial returns are forecast to be 18.9% in '22, still significantly above its long-term average, while apartment returns are forecast to be 10% in '22, slightly above its long-term average. In contrast to the other sectors, NCREIF retail returns are expected to strengthen in 2022 to 5.0%, although returns will remain below the long-term average. Office returns are expected to decline significantly in '22 to 2.0%.
- In '23, returns in all four sectors are expected to decline, with industrial and apartment returns down significantly to 8.0% and 5.9%, respectively, and both below their long-term averages. Retail returns are expected to decline to 4%, while office returns are forecasted to be -0.6%.
- In '24, returns for all four sectors are expected to show improvement, but to remain below their long-term averages, with returns in the industrial, apartment, retail and office sectors of 9.6%, 7.0%, 6.0% and 4.1%, respectively.

>> NCREIF Property Types Total Returns



Source: 2022-2024, ULI Real Estate Economic Forecast.

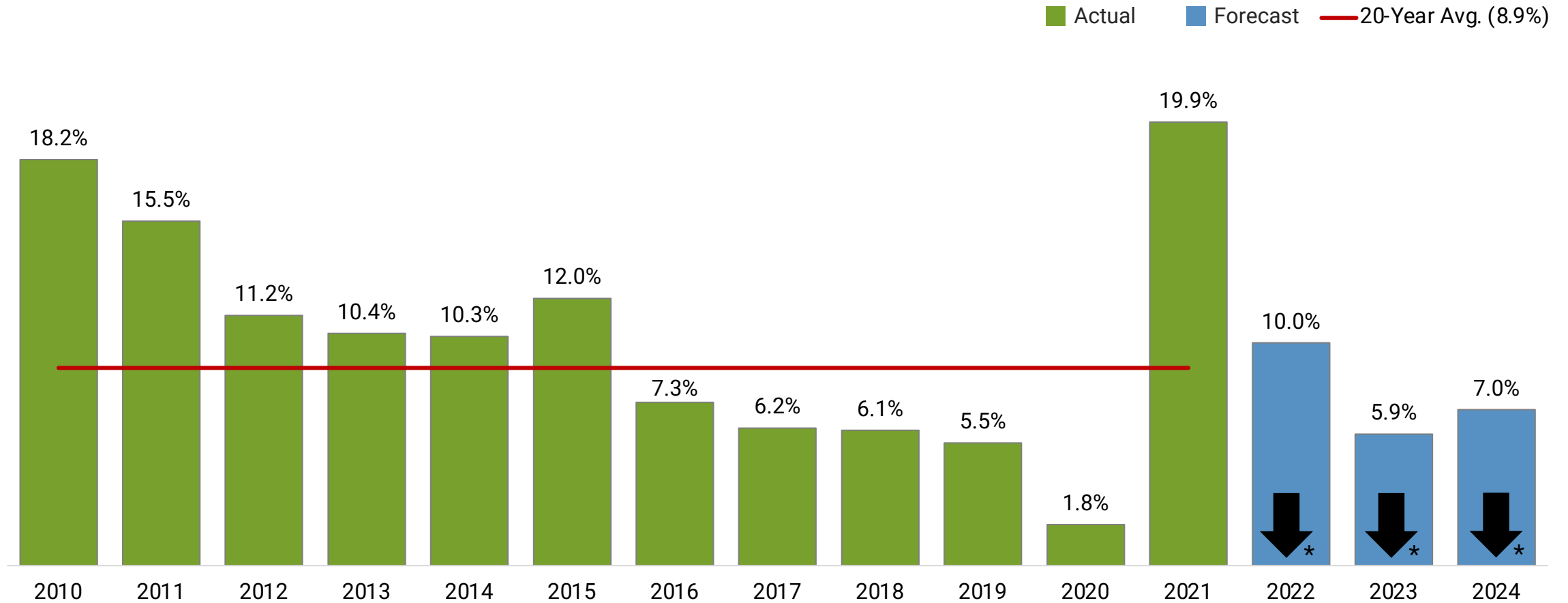
>> NCREIF Industrial Total Annual Returns



Sources: 2002-2021, National Council of Real Estate Investment Fiduciaries (NCREIF); 2022-2024, ULI Real Estate Economic Forecast.

*Indicated directions (↑ ↓ =) refer to the current forecast relative to the previous ULI Real Estate Economic Forecast. The previous ULI Real Estate Economic Forecast (released in April, 2022) projected 20.0% in 2022, 12.0% for 2023, and 9.8% for 2024.

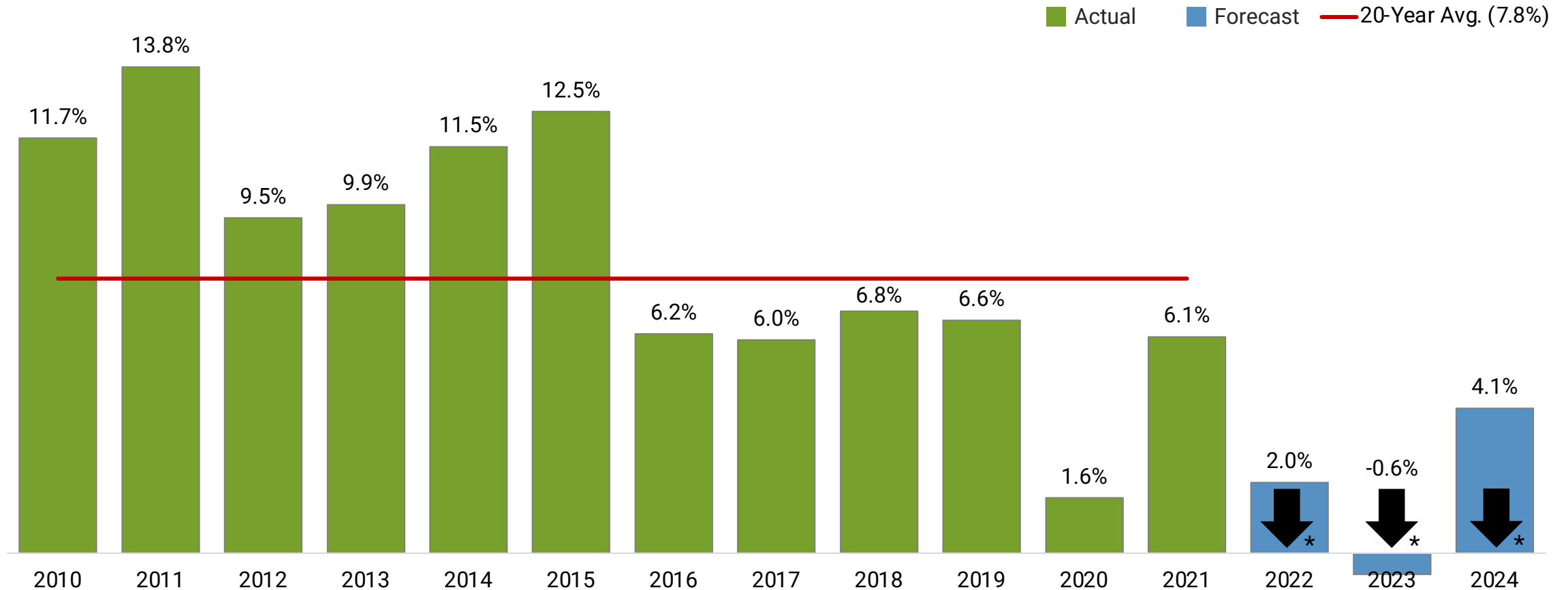
» NCREIF Apartment Total Annual Returns



Sources: 2002-2021, National Council of Real Estate Investment Fiduciaries (NCREIF); 2022-2024, ULI Real Estate Economic Forecast.

*Indicated directions (↑ ↓ =) refer to the current forecast relative to the previous ULI Real Estate Economic Forecast. The previous ULI Real Estate Economic Forecast (released in April, 2022) projected 14.0% for 2022, 9.0% for 2023, and 7.8% for 2024.

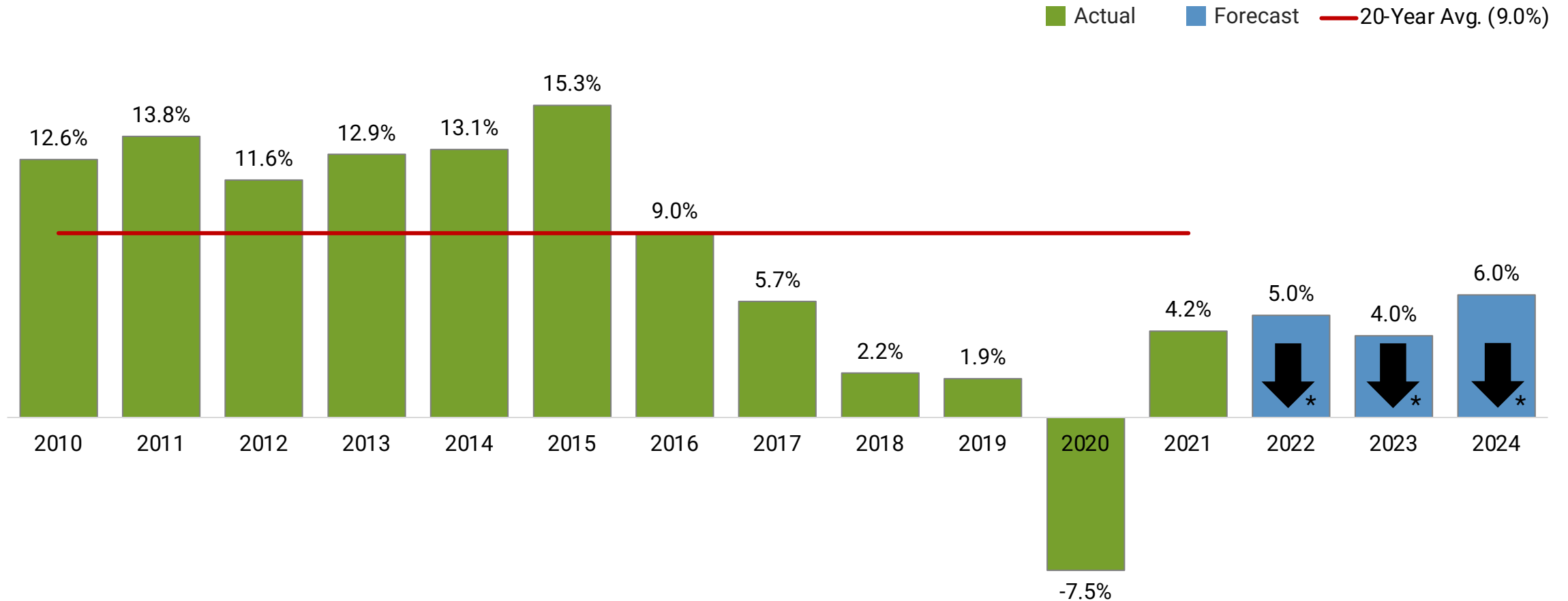
» NCREIF Office Total Annual Returns



Sources: 2002-2021, National Council of Real Estate Investment Fiduciaries (NCREIF); 2022-2024, ULI Real Estate Economic Forecast.

*Indicated directions (↑ ↓ =) refer to the current forecast relative to the previous ULI Real Estate Economic Forecast. The previous ULI Real Estate Forecast (released in April, 2022) projected 5.7% for 2022, 5.2% for 2023, and 5.3% for 2024.

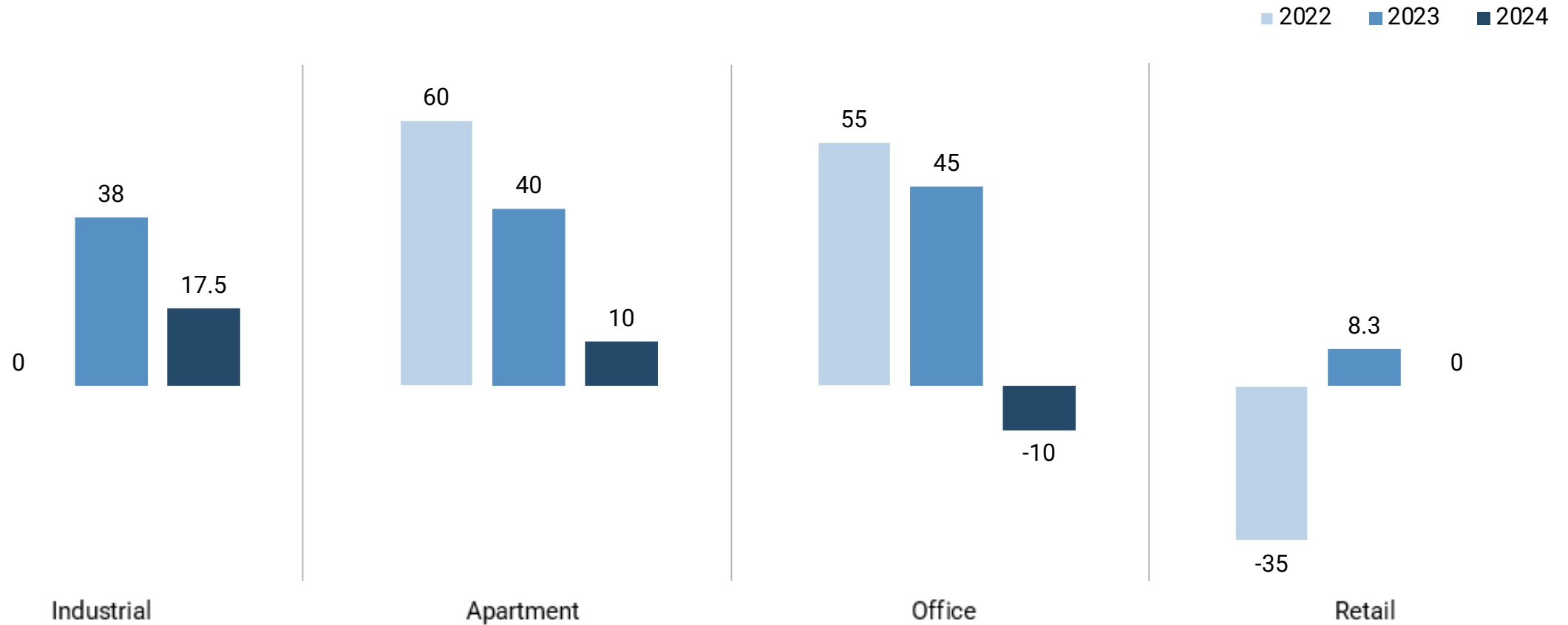
» NCREIF Retail Total Annual Returns



Sources: 2002-2021, National Council of Real Estate Investment Fiduciaries (NCREIF); 2022-2024, ULI Real Estate Economic Forecast.

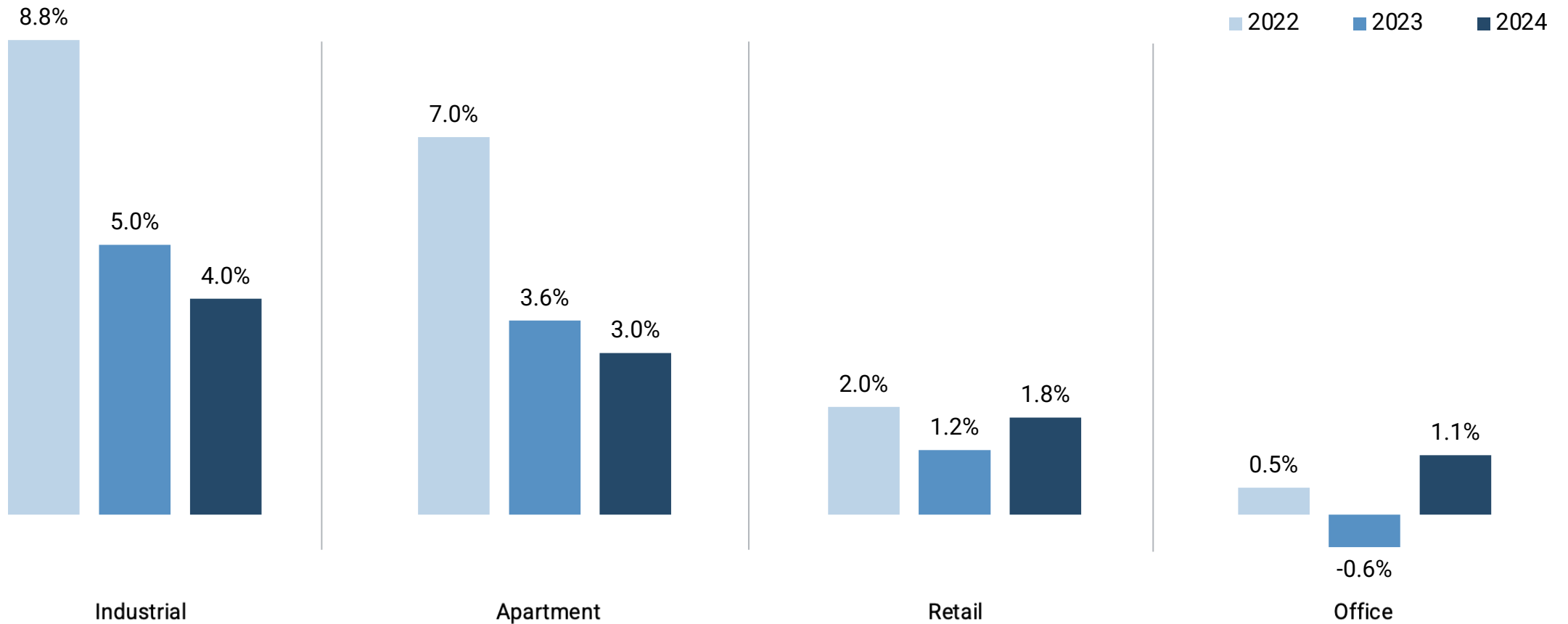
*Indicated directions (↑ ↓ =) refer to the current forecast relative to the previous ULI Real Estate Economic Forecast. The previous ULI Real Estate Economic Forecast (released in April, 2022) projected 5.4% for 2022, 6.0% for 2023 and 6.4% for 2024.

» Vacancy Rate Change (bps)



Source: 2022-2024, ULI Real Estate Economic Forecast.

» Rental Rate Growth

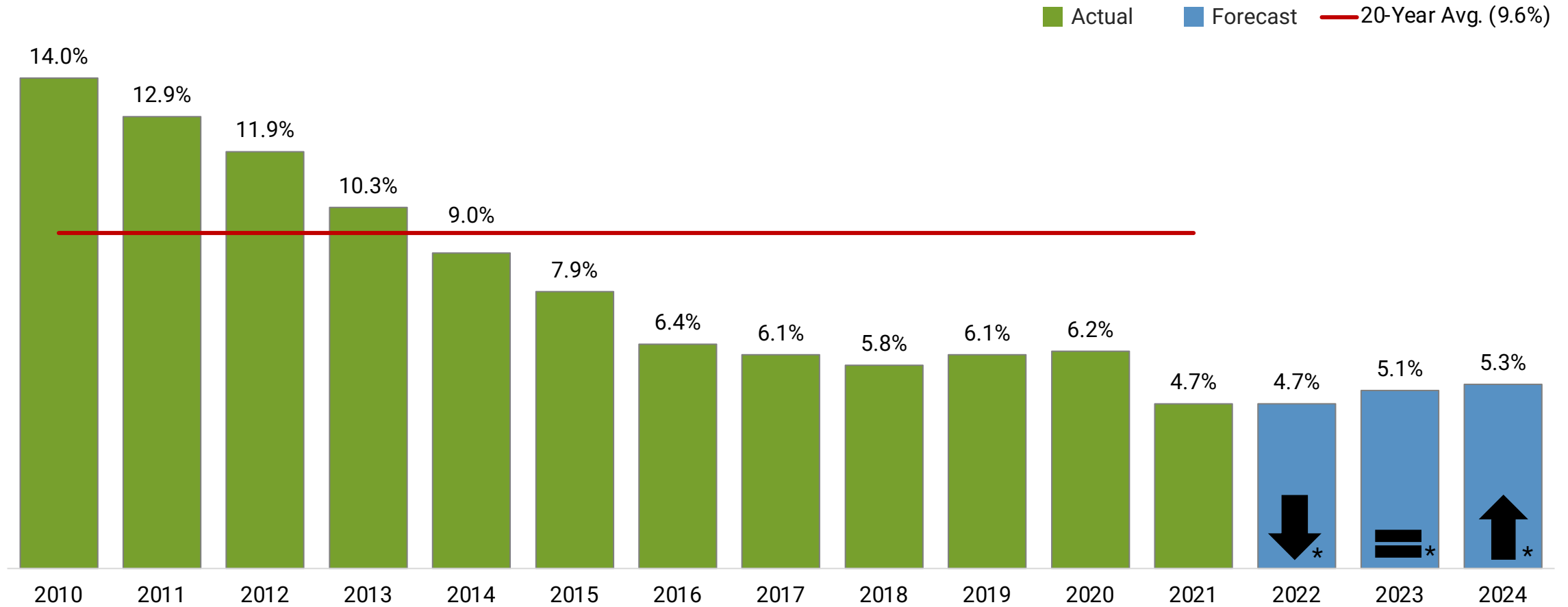


Source: 2022-2024, ULI Real Estate Economic Forecast.

» Industrial/Warehouse Sector Fundamentals

- An eleven-year slide in the availability rate for the industrial/warehouse sector reached 4.7% in 2021, less than half of the long-term average. Availability rates are expected to remain tight during the forecast period, plateauing at 4.7% in '22, and then inching up to 5.1% in '23 and 5.3% in '24.
- Industrial/warehouse rental rate growth in the last nine years has been substantially above the long-term average of 1.8% and reached a two-decade annual high of 6.8% in '21. Rent growth is expected to notch up further in '22 to 8.8% and continue at elevated, but moderating, rates in '23 and '24, at 5.0% and 4.0%, respectively.

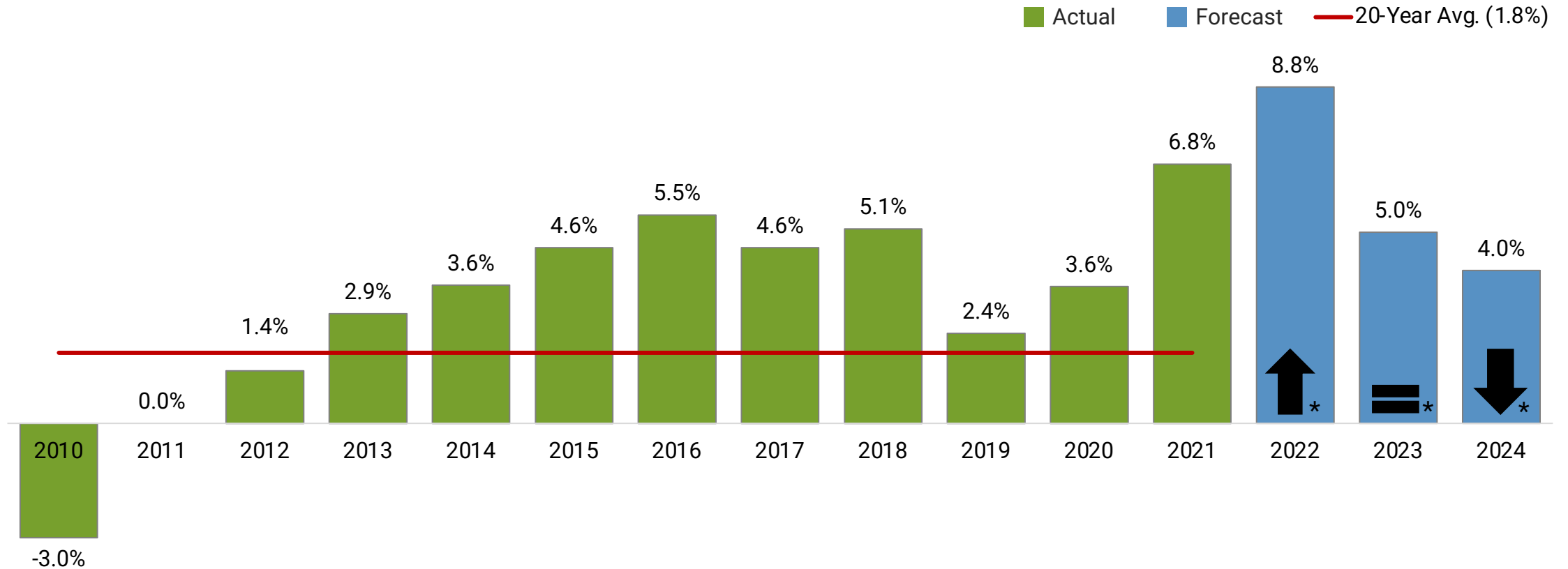
» Industrial/Warehouse Availability Rates



Sources: 2002-2021 (Q4), CBRE; 2022-2024 (YE), ULI Real Estate Economic Forecast.

*Indicated directions (↑ ↓ =) refer to the current forecast relative to the previous ULI Real Estate Economic Forecast. The previous ULI Real Estate Economic Forecast (released in April, 2022) projected 5.1% for 2022, 5.1% for 2023, and 5.2% for 2024.

>> Industrial/Warehouse Rental Rate Change

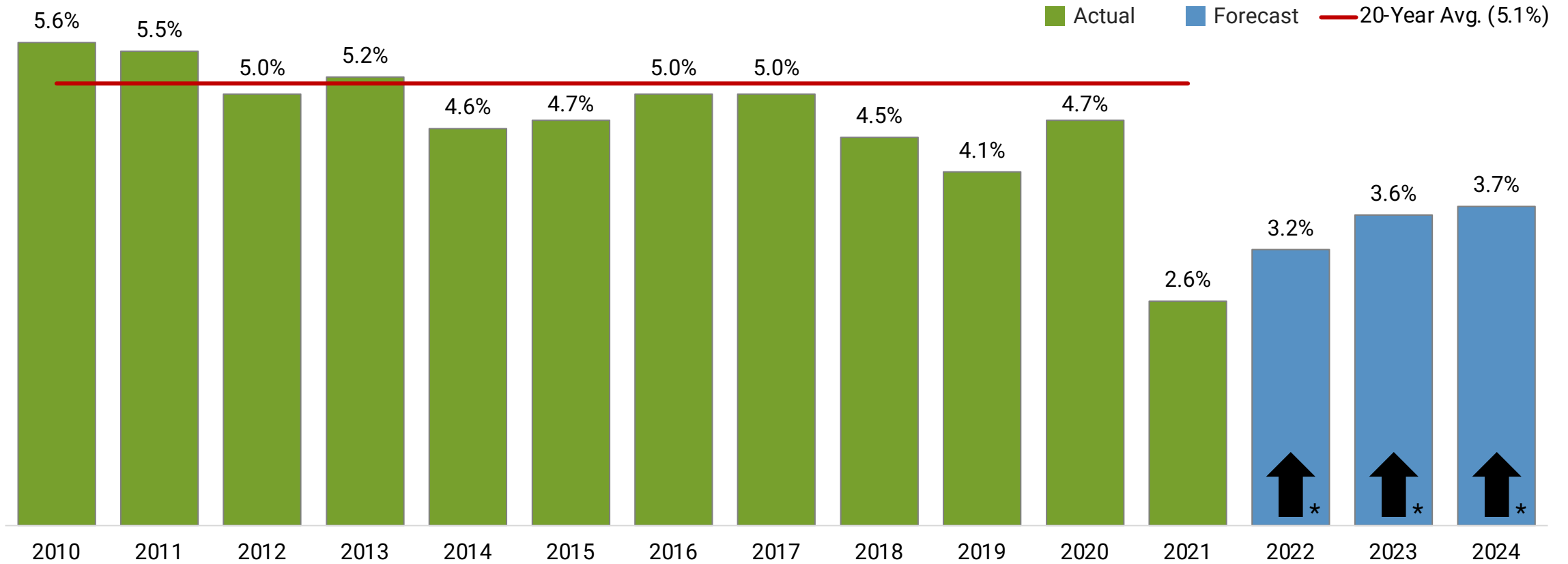


Sources: 2002-2021, CBRE; 2022-2024, ULI Real Estate Economic Forecast. Please note that the industrial historic forecast rent series has changed from TW Rents to EA Asking Rents
 *Indicated directions (↑ ↓ =) refer to the current forecast relative to the previous ULI Real Estate Economic Forecast. The previous ULI Real Estate Economic Forecast (released in April, 2022) projected 7.0% for 2022, 5.0% for 2023, and 4.5% for 2024.

» Apartment Sector Fundamentals

- Even with strong construction activity over the pre-pandemic decade, the apartment sector continued to perform very well—vacancy rates decreased fairly steadily from 7.0% in 2009 to 4.1% in 2019. Vacancy rates increased only slightly during the pandemic year of 2020 to 4.7%. Then, in '21, rates not only reversed direction but dropped substantially to 2.6%. Vacancy rates are expected to remain tight by historic standards but increase over the forecast period, to 3.2% in '22, 3.6% in '23, and 3.7% in '24.
- Rental rate growth was strong in the pre-pandemic decade, with some annual growth rates exceeding 4% and growth in the last two pre-pandemic years averaging 2.8%, all above the 20-year average. Rental rate growth was -4.5% in 2020 before an astounding rebound of 13.4% in '21. Rental rate growth is expected to moderate but remain elevated at 7.0% in '22, and then moderate down to 3.6% and 3.0% in '23 and '24, respectively, but remaining above the long-term average.

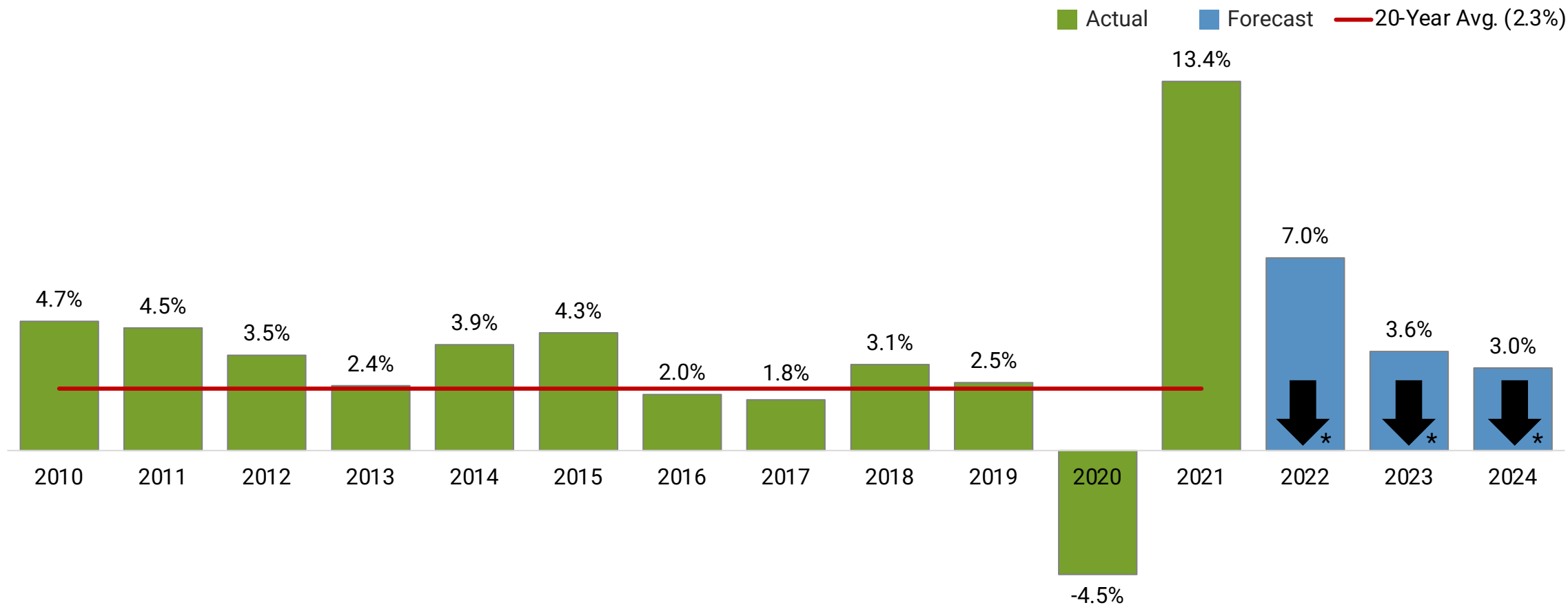
» Apartment Vacancy Rates



Sources: 2002-2021 (Q4), CBRE; 2022-2024 (YE), ULI Real Estate Economic Forecast.

*Indicated directions (↑ ↓ =) refer to the current forecast relative to the previous ULI Real Estate Economic Forecast. The previous ULI Real Estate Economic Forecast (released in April, 2022) projected 2.5% for 2022, 2.7% for 2023, and 2.9% for 2024.

>> Apartment Rental Rate Change



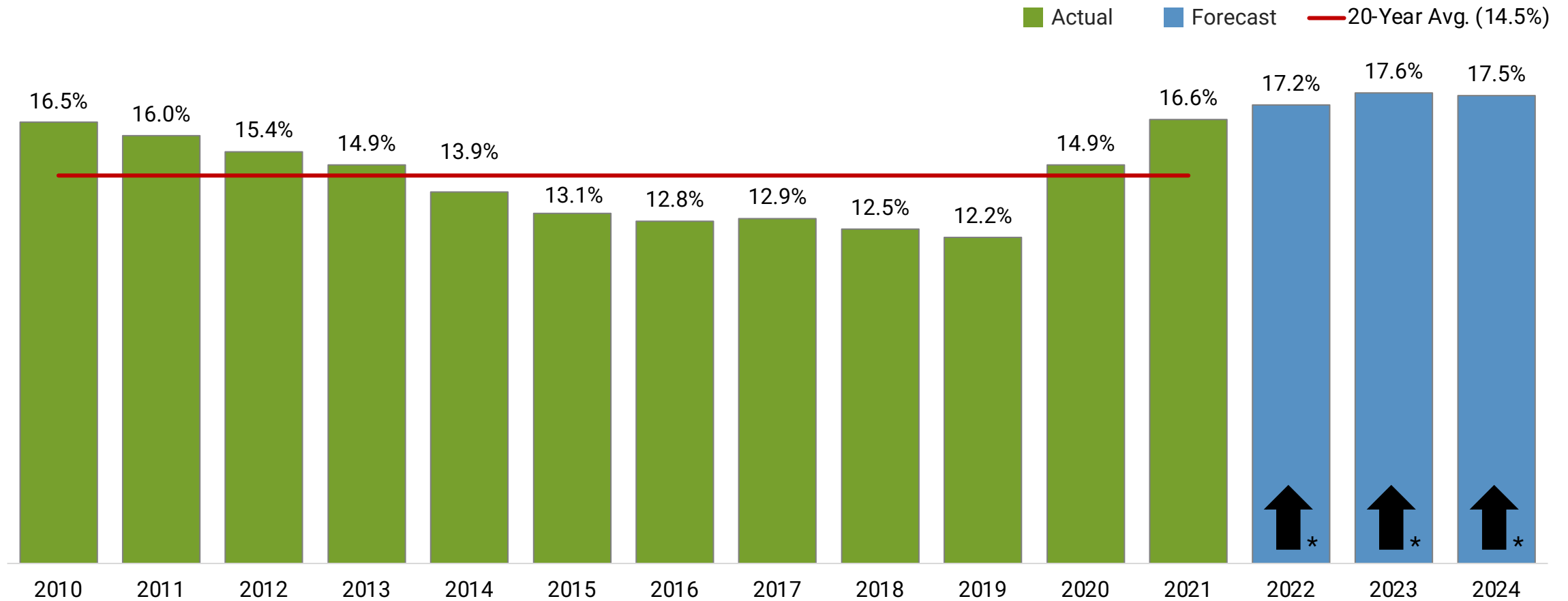
Sources: 2002-2021, CBRE; 2022-2024, ULI Real Estate Economic Forecast.

*Indicated directions (↑ ↓ =) refer to the current forecast relative to the previous ULI Real Estate Economic Forecast. The previous ULI Real Estate Economic Forecast (released in April, 2022) projected 7.5% for 2022, 5.0% for 2023, and 3.4% for 2024.

» Office Sector Fundamentals

- Office vacancy rates reached a post-GFC low of 12.2% in 2019, below the 20-year average of 14.5%. Then in the first two pandemic years of '20 and '21, vacancy rates reversed direction and rose a total of 440 basis points. Rates are expected to stay elevated during the forecast period, rising more moderately to 17.2% in '22, 17.6% in '23, and essentially remaining at that level in '24.
- Growth in office rental rates had averaged 2.3% in the four years prior to the pandemic, above the long-term average of 1.3%. The very minimal changes in rental rates in the first two pandemic years averaged -0.3%. Growth over the three forecast years is expected to average a positive 0.3%, with minimal change in '22 and '23, shifting between slightly positive and slightly negative growth, and some strengthening in '24 with a growth rate of 1.1%.

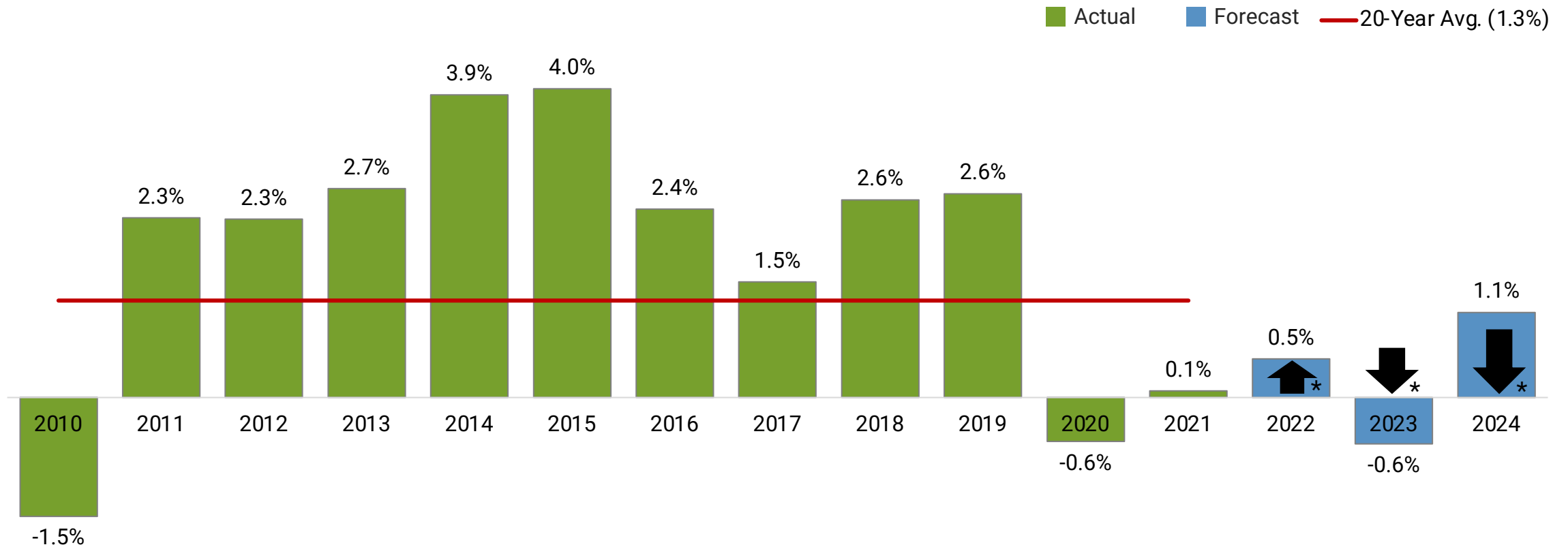
» Office Vacancy Rates



Sources: 2002-2021 (Q4), CBRE; 2022-2024 (YE), ULI Real Estate Economic Forecast.

*Indicated directions (↑ ↓ =) refer to the current forecast relative to the previous ULI Real Estate Economic Forecast. The previous ULI Real Estate Economic Forecast (released in April, 2022) projected 17.0% for 2022, 17.0% for 2023, and 16.9% for 2024.

>> Office Rental Rate Change

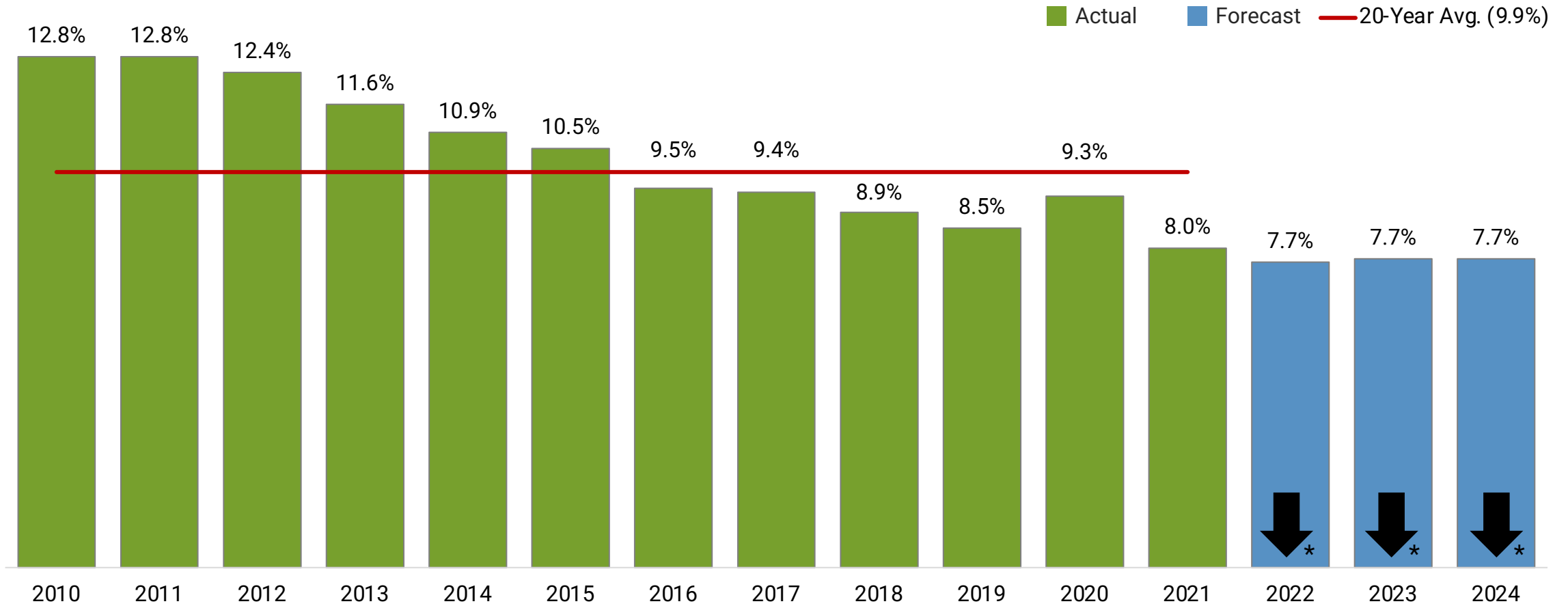


Sources: 2002-2021, CBRE; 2022-2024, ULI Real Estate Economic Forecast. Please note that the office historic forecast rent series has changed from TW Rents to EA Asking Rents.
 *Indicated directions (↑ ↓ =) refer to the current forecast relative to the previous ULI Real Estate Economic Forecast. The previous ULI Real Estate Economic Forecast (released in April, 2022) projected 0.1% for 2022, 2.0% for 2023, and 2.3% for 2024.

» Retail Sector Fundamentals

- Availability rates for neighborhood and community shopping centers increased a relatively modest 80 basis points to 9.3% during the 2020 pandemic restrictions and then tightened to 8.0% in '21, the lowest post-GFC rate. Availability rates are expected to further tighten to 7.7% in '22 and remain at that level in '23 and '24.
- Rental rate growth had moderated to 1.2% in '19 after a few strong years of growth when rates ranged from 1.5% to 3.4%. Rental rate growth subsequently strengthened again in the following two years, reaching 1.9% in '21. The forecast is for further improvement in '22 to 2.0%, a retreat in '23 to 1.2%, and a return to strong growth of 1.8% in '24.

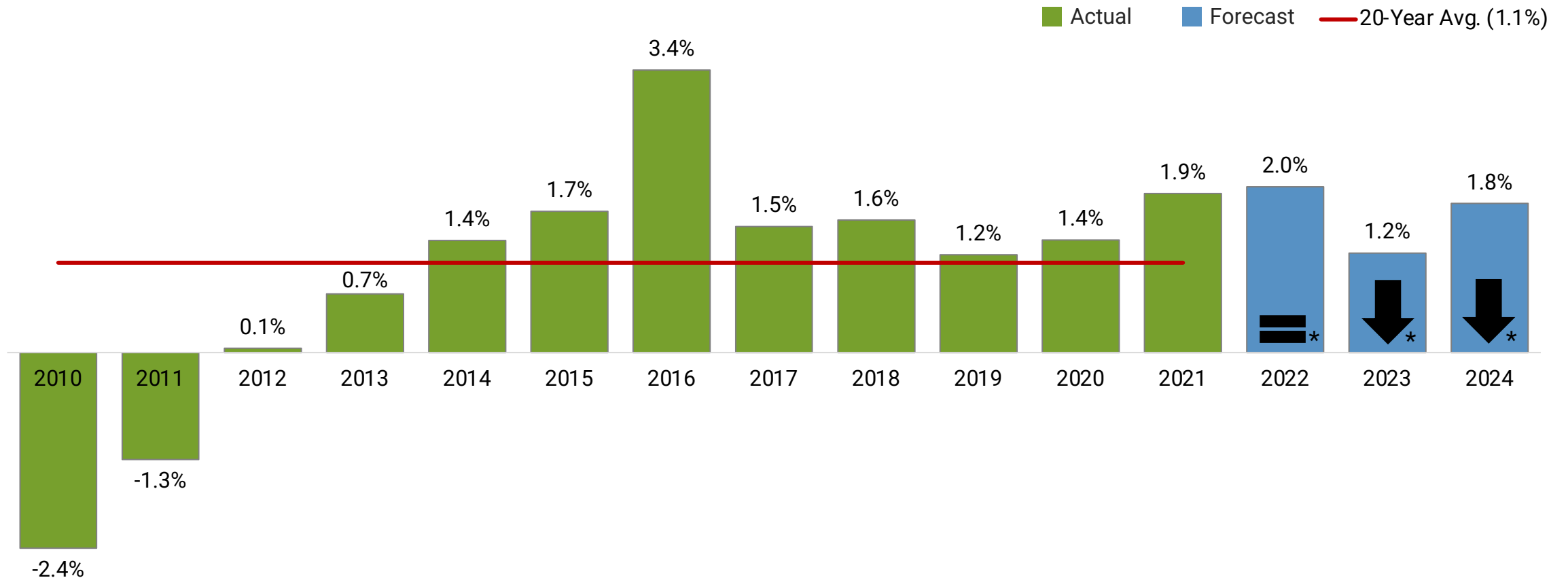
» Retail Availability Rates



Sources: 2002-2021 (Q4), CBRE; 2022-2024 (YE), ULI Real Estate Economic Forecast.

*Indicated directions (↑ ↓ =) refer to the current forecast relative to the previous ULI Real Estate Economic Forecast. The previous ULI Real Estate Economic Forecast (released in April, 2022) projected 7.9% for 2022, 7.9% for 2023, and 7.9% for 2024.

» Retail Rental Rate Change



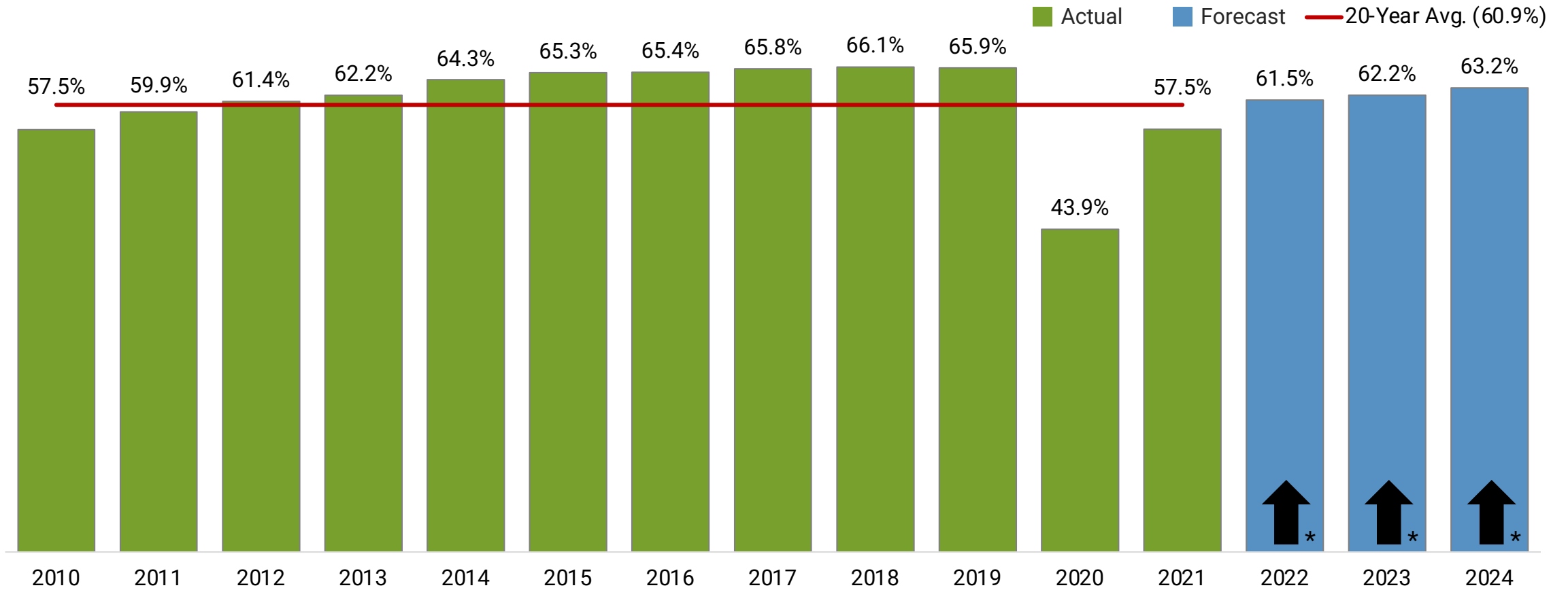
Sources: 2002-2021 (Q4), CBRE; 2022-2024, ULI Real Estate Economic Forecast.

*Indicated directions (↑ ↓ =) refer to the current forecast relative to the previous ULI Real Estate Economic Forecast. The previous ULI Real Estate Economic Forecast (released in April, 2022) projected 2.0% for 2022, 2.0% for 2023, and 2.0% for 2024.

»» Hotel Sector Fundamentals

- According to STR, hotel occupancy rates improved steadily for a decade, reaching 65.9% in 2019, before falling to 43.9% in the pandemic year of 2020. Occupancy rates began recovery, rising to 57.6% in '21. Continued improvement, although still not yet to pre-pandemic highs, is expected during the forecast period, with occupancy rates of 61.5%, 62.2%, and 63.2%, respectively in '22, '23, and '24.
- Following four years of low and slowing revenue per available room (RevPAR) growth, RevPAR dropped substantially in '20 with a growth rate of -47.4%. RevPar quickly began recovery in '21 with an historically high positive growth rate of 58.2%. An almost equally strong growth of 40% is expected in '22, essentially bringing RevPAR to above pre-pandemic levels. RevPAR growth is expected to continue growth but at far more moderate rates of 3.7% and 5.0%, respectively, in '23 and '24.

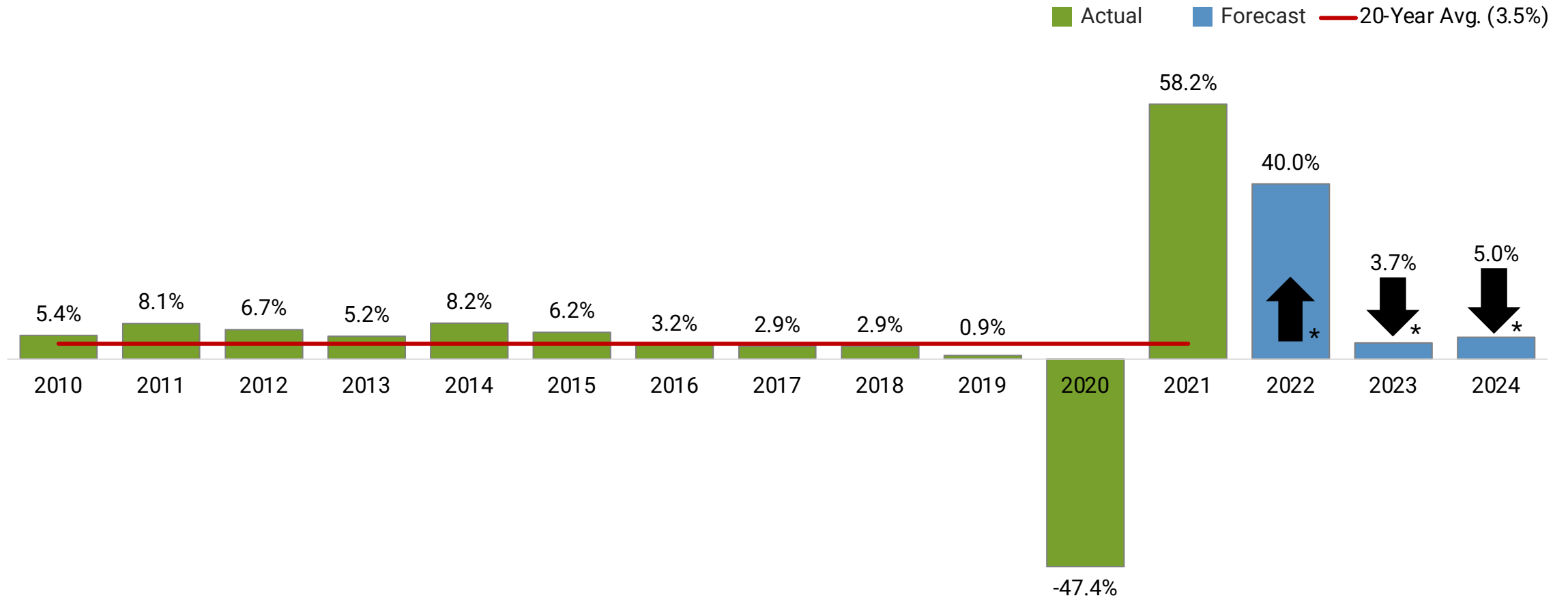
» Hotel Occupancy Rates



Sources: 2002-2021 (December, 12 month rolling average), STR; 2022-2024, ULI Real Estate Economic Forecast.

*Indicated directions (↑ ↓ =) refer to the current forecast relative to the previous ULI Real Estate Economic Forecast. The previous ULI Real Estate Economic Forecast (released in April, 2022) projected 60.0% for 2022, 62.0% for 2023, and 62.6% for 2024.

» Hotel Revenue per Available Room (RevPAR) Change



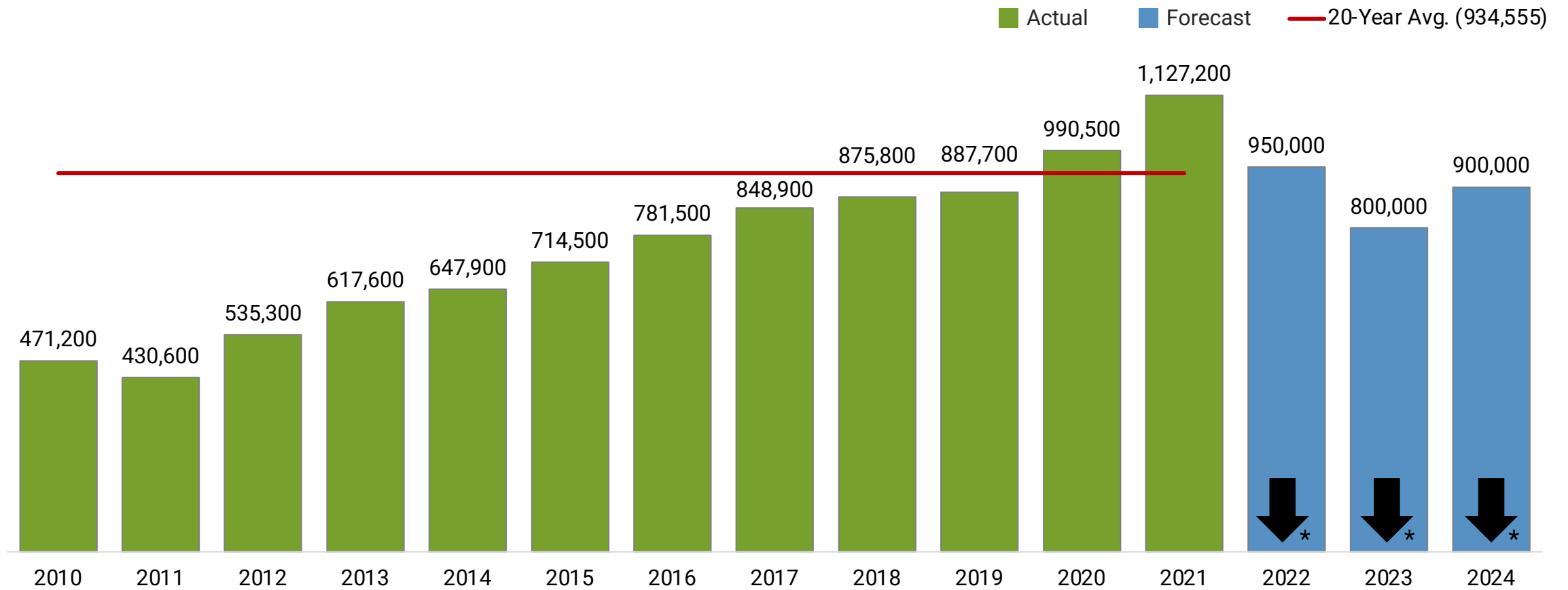
Sources: 2002-2021 (December, 12-month rolling average) STR; 2022-2024, ULI Real Estate Economic Forecast.

*Indicated directions (↑ ↓ =) refer to the current forecast relative to the previous ULI Real Estate Economic Forecast. The previous ULI Real Estate Economic Forecast (released in April, 2022) projected 19.4% for 2022, 10.0% for 2023, and 5.0% for 2024.

»» Housing Sector

- Over the last decade, single-family housing starts experienced consistent annual growth, almost doubling the number of starts in 2012 by 2021. Housing starts are expected to reverse direction in '22 and be down by almost 30% from that peak by '23. Housing starts will begin to recover in '24, approaching but not yet back to the long-term average.
- According to the FHFA, existing home prices increased an average of 11.7% in 2020, roughly double the strong growth rates of the eight years prior, and continued at historically-elevated levels in '21, moving up by 17.9%. Price growth in '22 is expected to slow relative to these last two year but remain strong at 7.3% while growth is expected to become negative in '23. Home price growth will begin to recover in '24, approaching but not yet back to the long-term average.

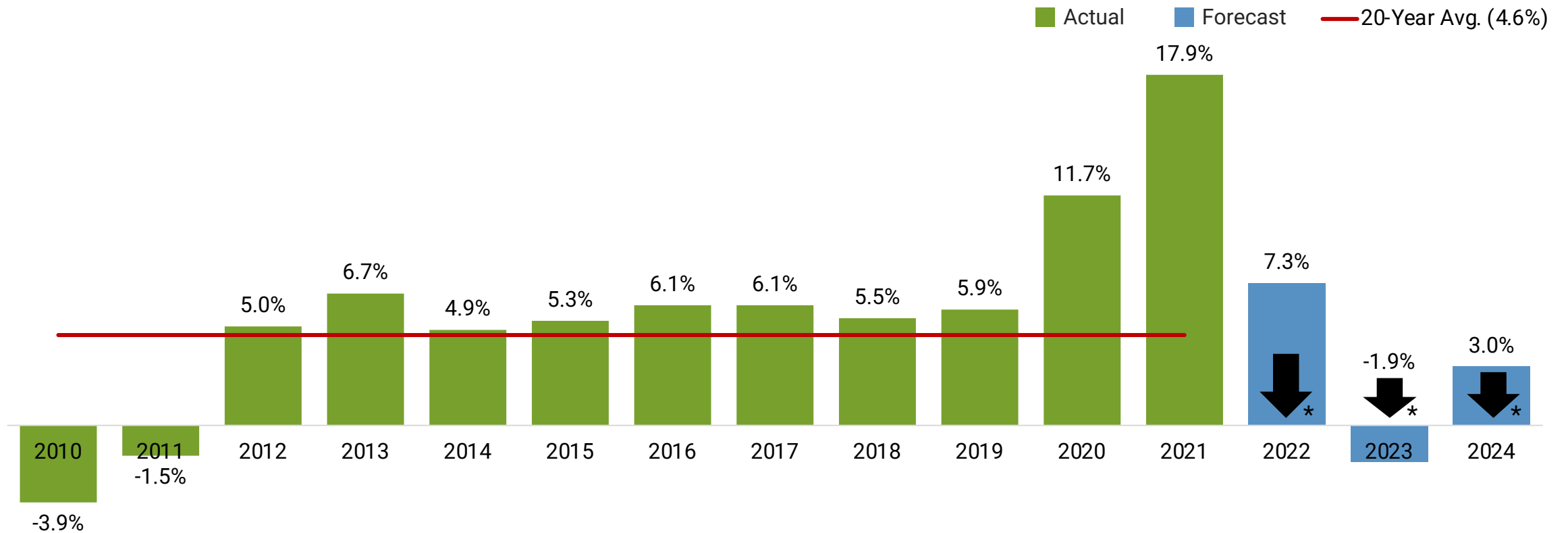
» Single-Family Housing Starts



Sources: 2002-2021, (structures with 1 unit, as of December), U.S. Census; 2022-2024, ULI Real Estate Economic Forecast.

*Indicated directions (↑ ↓ =) refer to the current forecast relative to the previous ULI Real Estate Economic Forecast. The previous ULI Real Estate Economic Forecast (released in April, 2022) projected 1,200,000 for 2022, 1,250,000 for 2023, and 1,100,000 for 2024.

» Average Home Price Change



Sources: 2002-2021, (seasonally adjusted, as of December), Federal Housing Finance Agency; 2022-2024, ULI Real Estate Economic Forecast.

*Indicated directions (↑ ↓ =) refer to the current forecast relative to the previous ULI Real Estate Economic Forecast. The previous ULI Real Estate Economic Forecast (released in April, 2022) projected 10.0% for 2022, 5.0% for 2023, and 4.4% for 2024.

Firms That Participated in the ULI Real Estate Economic Forecast

Organization	Economist/Analyst	Title
AEW Capital Management	Michael Acton	Managing Director
American Realty Advisors	Sabrina Unger	Managing Director, Head of Research & Strategy
	Britteni Lupe	Associate, Research & Strategy
AvalonBay Communities	Craig Thomas	Senior Vice President
Avison Young	Mark Franceski	Executive Director, Residential and Capital Markets
Bell Partners Inc.	TJ Parker	Senior Vice President – Research & Analytics
Berkshire Residential Investments	Gleb Nechayev	Head of Research, Chief Economist
Capital Economics	Kiran Raichura	Senior Property Economist
CBRE	Matthew Mowell	Senior Economist
	Neil Blake	Global Head of Forecasting & Analytics
CCIM Institute	Kiernan C Conway	Chief Economist
Clarion Partners	Tim Wang	Managing Director and Head of Investment Research
Colliers	Steig Seaward	National Director of Research
Cushman & Wakefield	Kevin Thorpe	Chief Economist
	James Bohnaker	Senior Economist

continued.....

Firms That Participated in the ULI Real Estate Economic Forecast

Organization	Economist/Analyst	Title
DWS	Kevin White	Head of Americas Real Estate Research
Eigen10 Advisors, LLC	Paige Mueller	Managing Principal
GID	Suzanne Mulvee	Chief Strategy Officer
Green Street	Jared Giles	Senior Associate
Grosvenor	Brian Biggs	Vice President
Harrison Street Real Estate Capital	Thomas Errath	Managing Director
Heitman	Jeffrey Bingham	Director of Investment Strategy
JLL	Ryan Severino	Chief Economist
Laposa Realty Advisors, LLC	Steven P. Laposa	Principal
LaSalle Investment Management	Richard Kleinman	Head of Americas Research & Strategy
MetLife Investment Management	William Pattison	Head of Real Estate Research & Strategy
Moody's Analytics	Victor Calanog	Head of Commercial Real Estate Economics
	Adam Kamins	Director, Economic Research
National Association of Realtors	Lawrence Yun	Chief Economist
Oxford Economics	Aran Ryan	Tourism Economics, Director of Industry Studies
Principal Real Estate	Indraneel Karlekar	Global Head of Research and Portfolio Strategies

continued.....

Firms That Participated in the ULI Real Estate Economic Forecast

Organization	Economist/Analyst	Title
Prologis	Melinda McLaughlin	Senior Vice President, Global Head of Research
PwC, LLP	Andrew Warren	Director, Real Estate Research
RCLCO Financial Advisors	William Maher	Director, Strategy & Research
	Scot Bommarito	Senior Research Associate
Rosen Consulting Group	Ken Rosen	Chairman
	Randall Sakamoto	President
SitusAMC	Jodi Airhart	Senior Vice President
StepStone Group	Sara Rutledge	Managing Director, Real Estate
Transwestern Investments	Doug Prickett	Senior Managing Director
Trepp, LLC	Matthew Anderson	Managing Director
Unity Medical Properties, LLC	Dr. David James Lynn	CEO
Waterton	Lee Everett	Director of Research and Strategy

Urban Land Institute

About the Urban Land Institute

The Urban Land Institute is a global, member-driven organization comprising more than 45,000 real estate and urban development professionals dedicated to advancing the Institute's mission of shaping the future of the built environment for transformative impact in communities worldwide. For more information, please visit www.uli.org.

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ULI Real Estate Economic Forecast

A SURVEY OF LEADING REAL ESTATE ECONOMISTS/ANALYSTS

OCTOBER 2022

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