

ULI Real Estate Economic Forecast

A SURVEY OF LEADING REAL ESTATE ECONOMISTS/ANALYSTS

NOVEMBER 2023

ULI Center For Real Estate Economics and Capital Markets

ULI Real Estate Economic Forecast

- Three-year forecast ('23 -'25) for 27 economic and real estate indicators.
- A consensus forecast based on the median of the forecasts from 39 economists/analysts at 35 leading real estate organizations.
- Respondents represent major real estate investment, advisory, and research firms and organizations.
- This is the 24th survey; completed October 6– October 23, 2023
- A semi-annual survey; next release planned for April 2024.
- 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

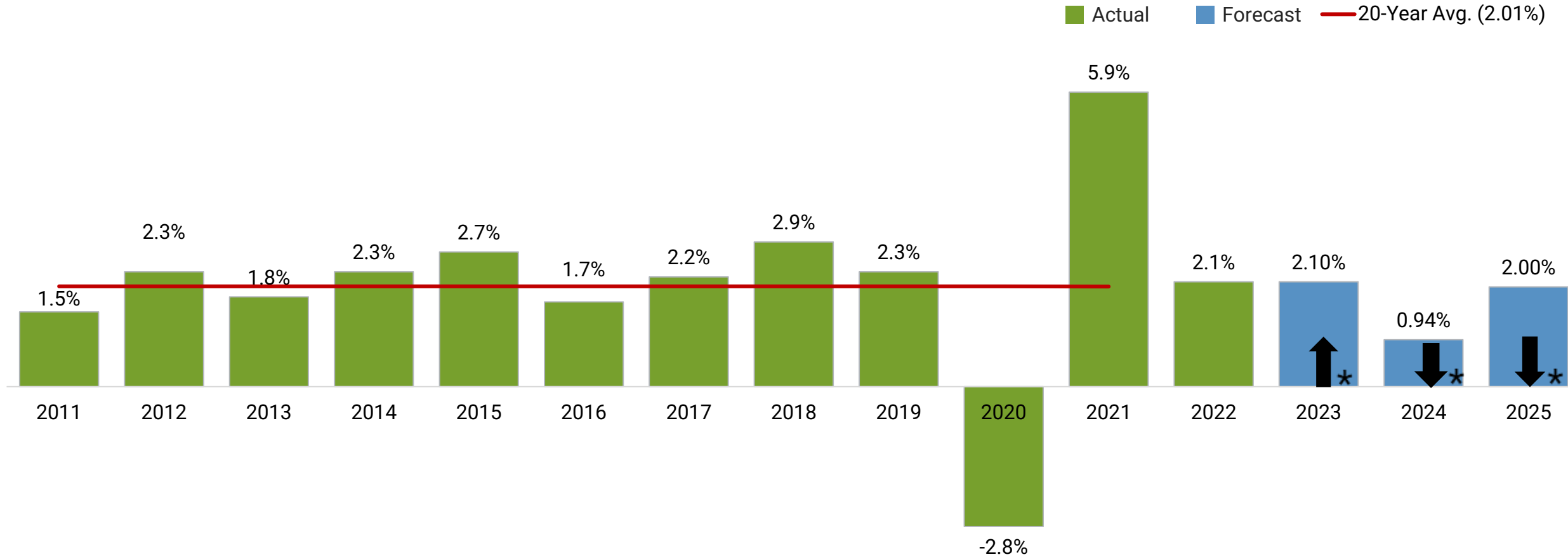
2023 Forecast

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

2025 Forecast

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

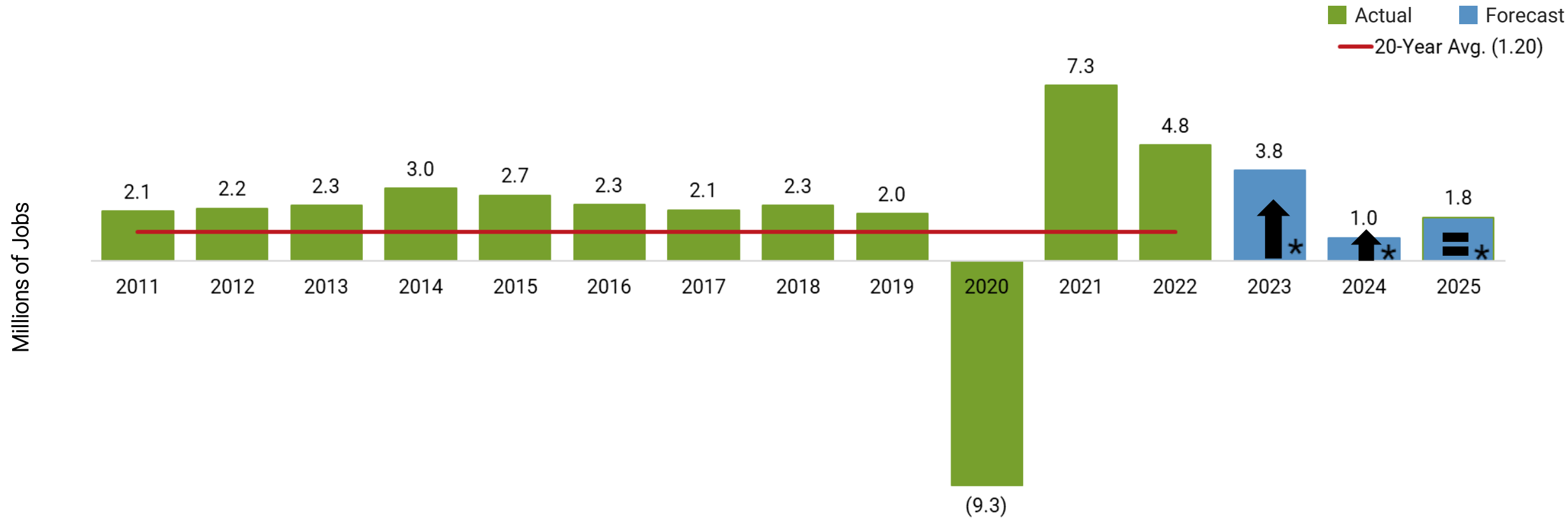
>> Real GDP Growth



Sources: 2003-2022, Bureau of Economic Analysis; 2023-2025, 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 May, 2023) projected 0.9% for 2023, 1.5% for 2024, and 2.5% for 2025.

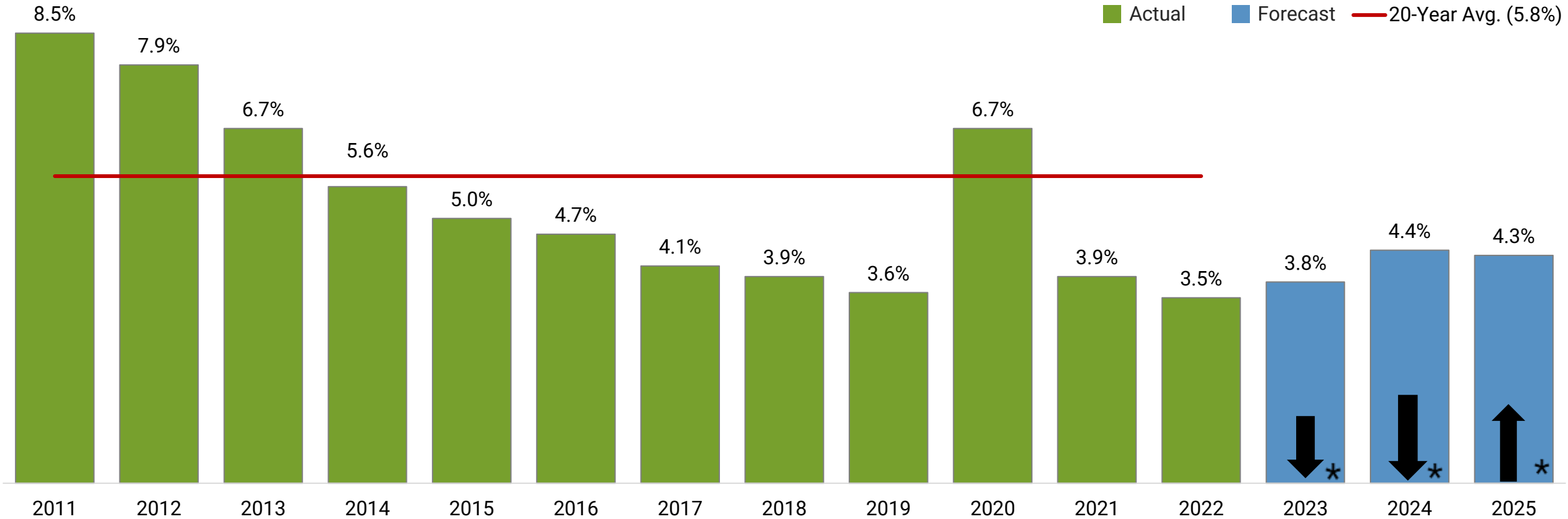
>> Employment Growth (Millions)



Sources: 2003-2022, Bureau of Labor Statistics; 2023-2025, 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 May, 2023) projected 1.50 for 2023, 0.78 for 2024, and 1.75 for 2025.

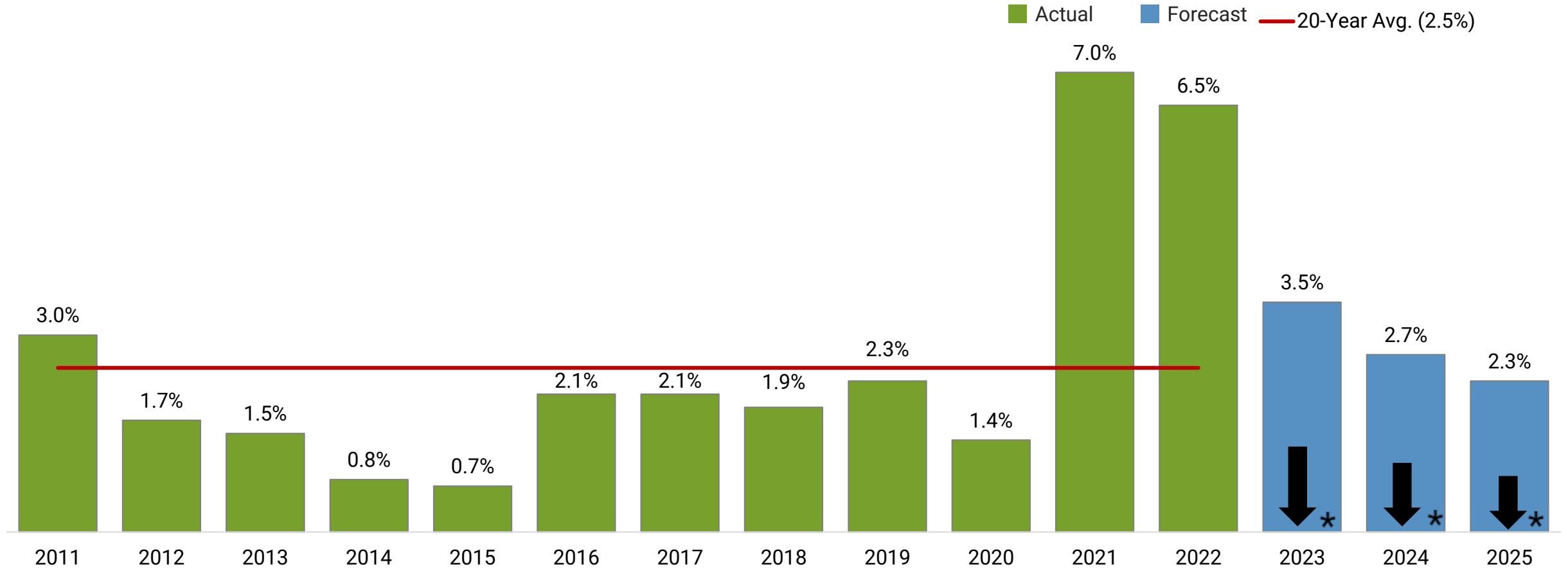
>> Unemployment Rate



Sources: 2003-2022, (seasonally adjusted, as of December), Bureau of Labor Statistics; 2023-2025 (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 May, 2023) projected 4.0% for 2023, 4.6% for 2024, and 4.2% for 2025.

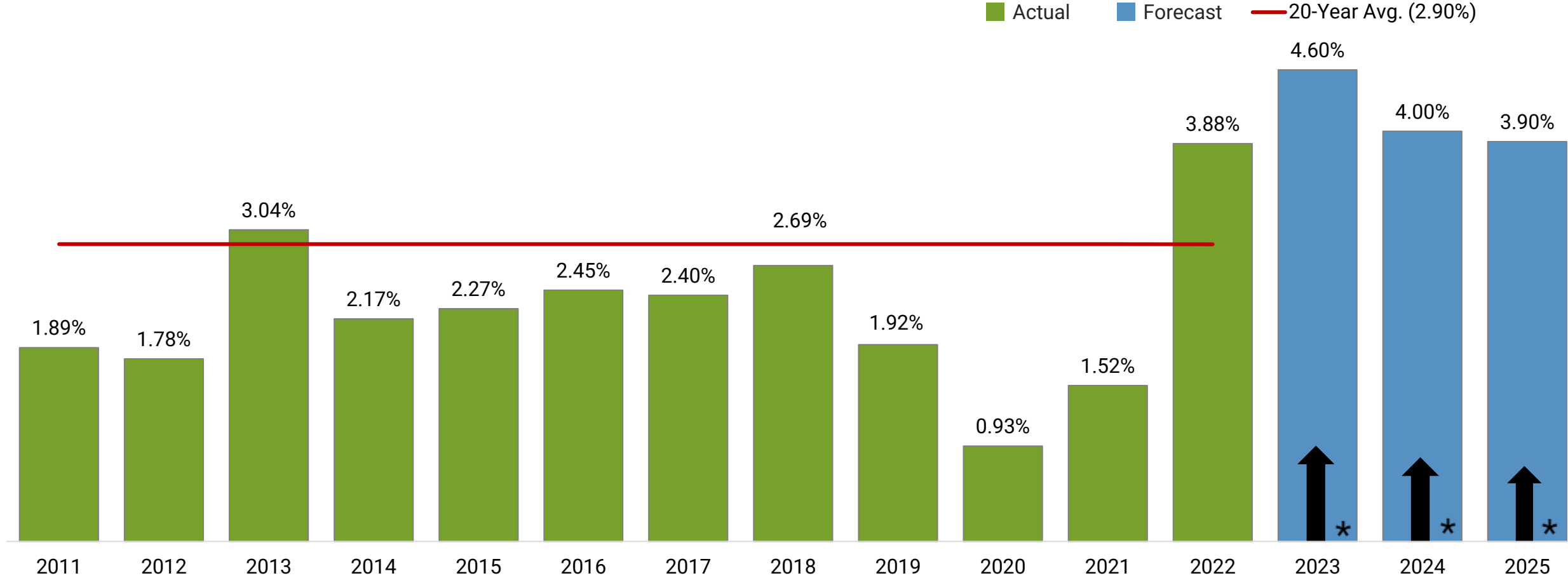
>> Consumer Price Index Inflation Rate



Sources: 2003-2022, (12-month change, as of December), Bureau of Labor Statistics; 2023-2025 (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 May, 2023) projected 4.1% for 2023, 2.8% for 2024, and 2.5% for 2025.

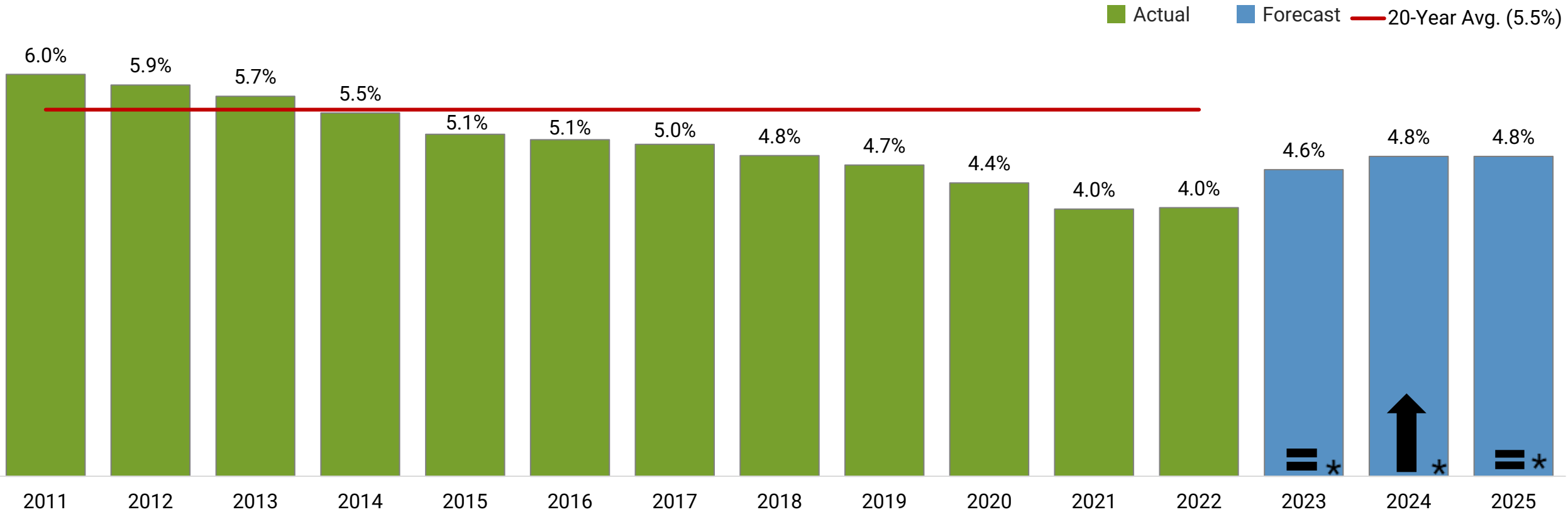
>> Ten-Year Treasury Rate



Sources: 2003-2022 (YE), U.S. Federal Reserve; 2023-2025 (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 May, 2023) projected 3.50% for 2023, 3.30% for 2024, and 3.15% for 2025.

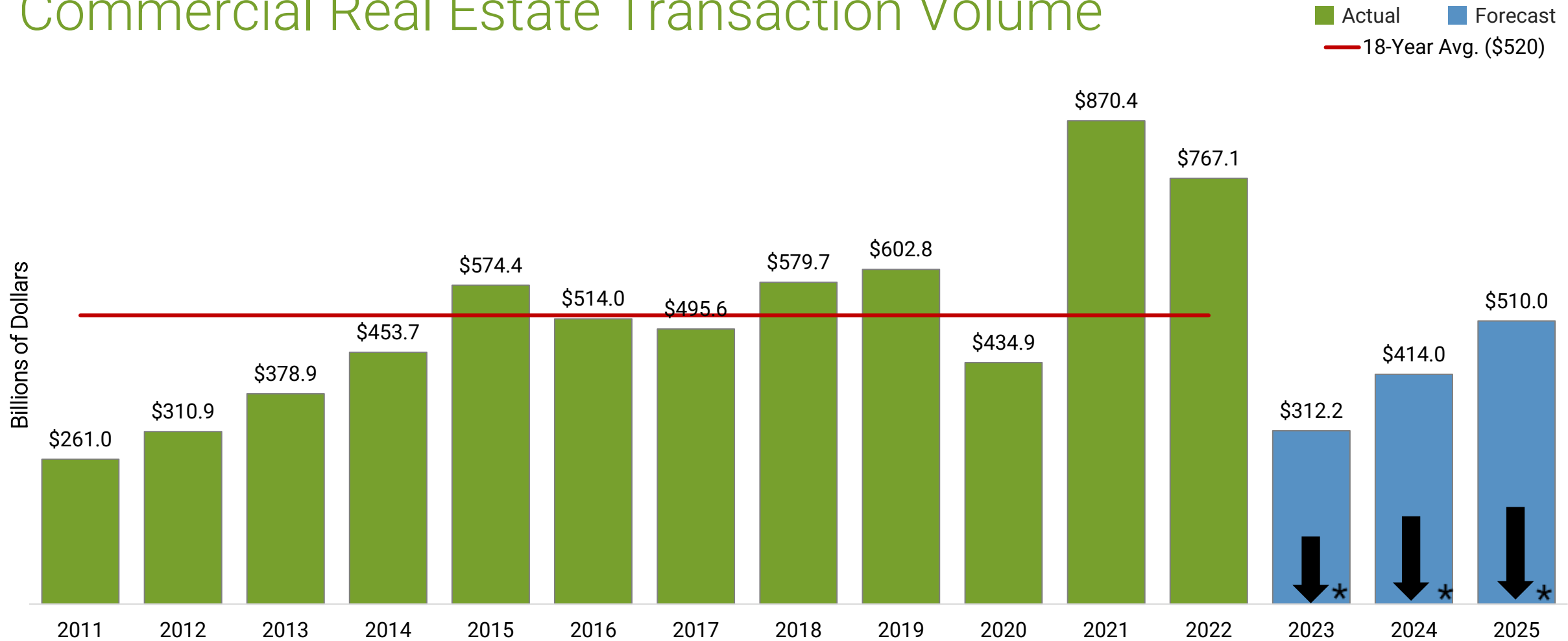
>> NCREIF Capitalization Rate



Sources: 2003-2022, Q4, National Council of Real Estate Investment Fiduciaries (NCREIF); 2023-2025 (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 May, 2023) projected 4.6% for 2023, 4.7% for 2024, and 4.8% for 2025.

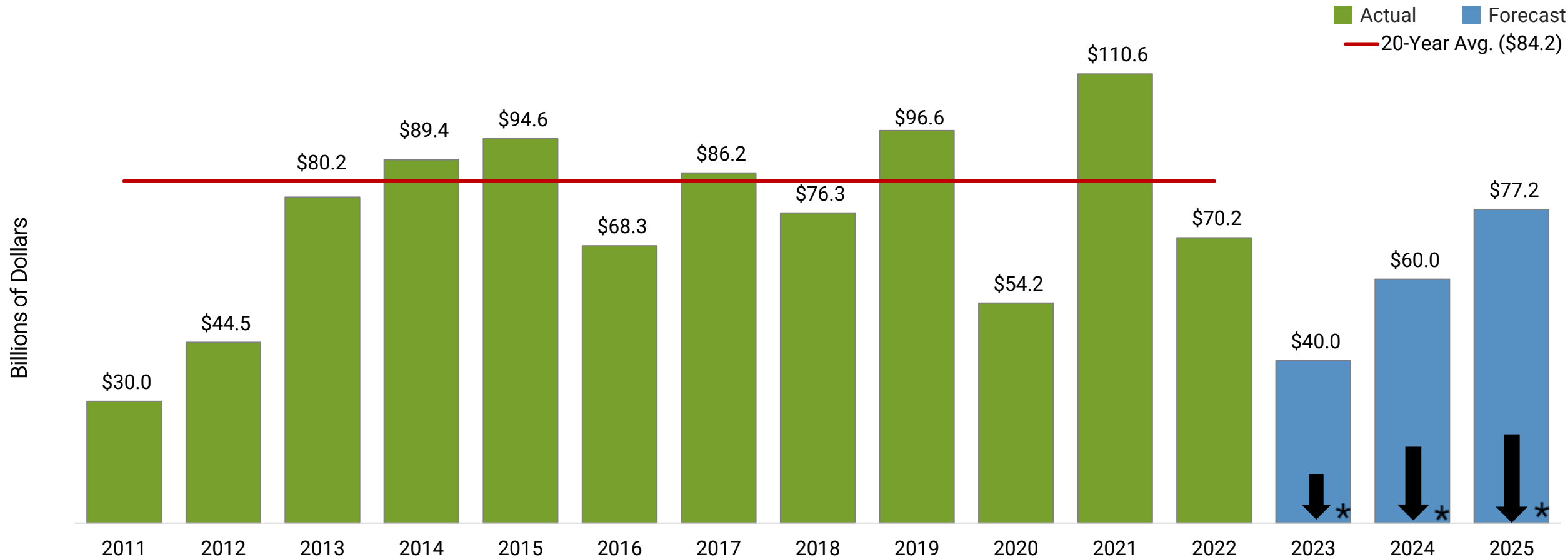
>> Commercial Real Estate Transaction Volume



Sources: 2006-2022, MSCI Real Assets; 2023-2025, 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 May, 2023) projected \$425B for 2023, \$525B for 2024, and \$695B for 2025.

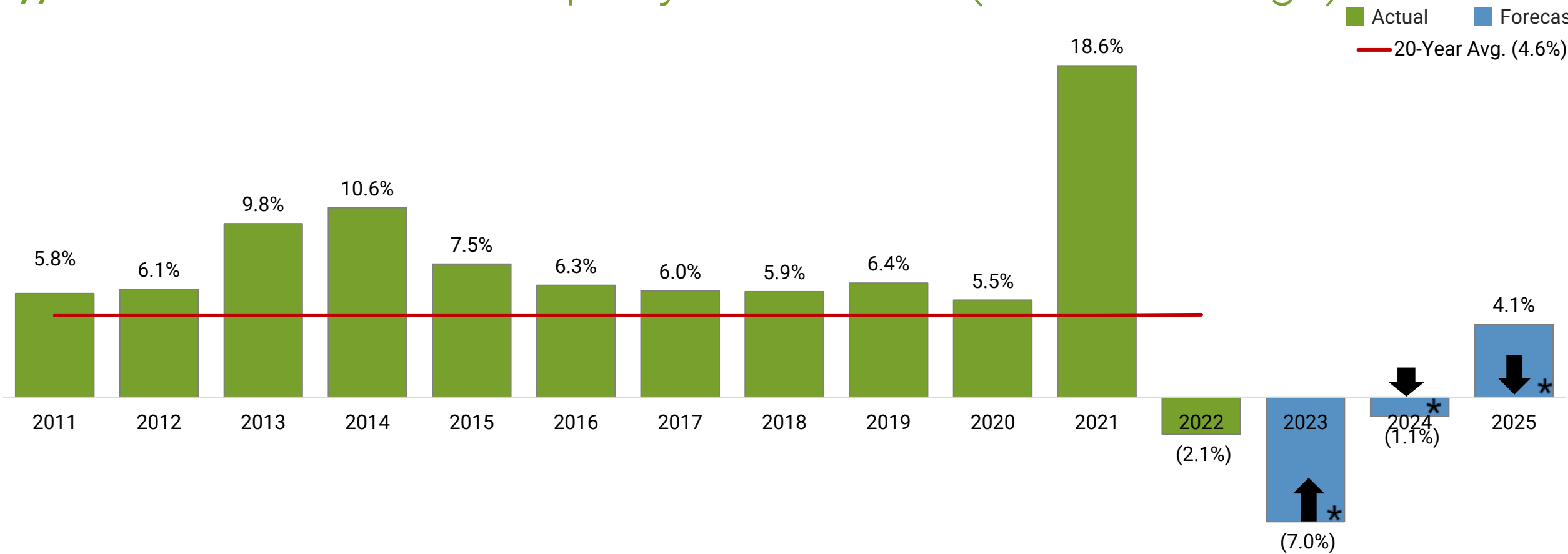
>> Commercial Mortgage-Backed Securities (CMBS) Issuance



Sources: 2003-2022, Green Street, Commercial Mortgage Alert; 2023-2025, ULI Real Estate Economic Forecast.

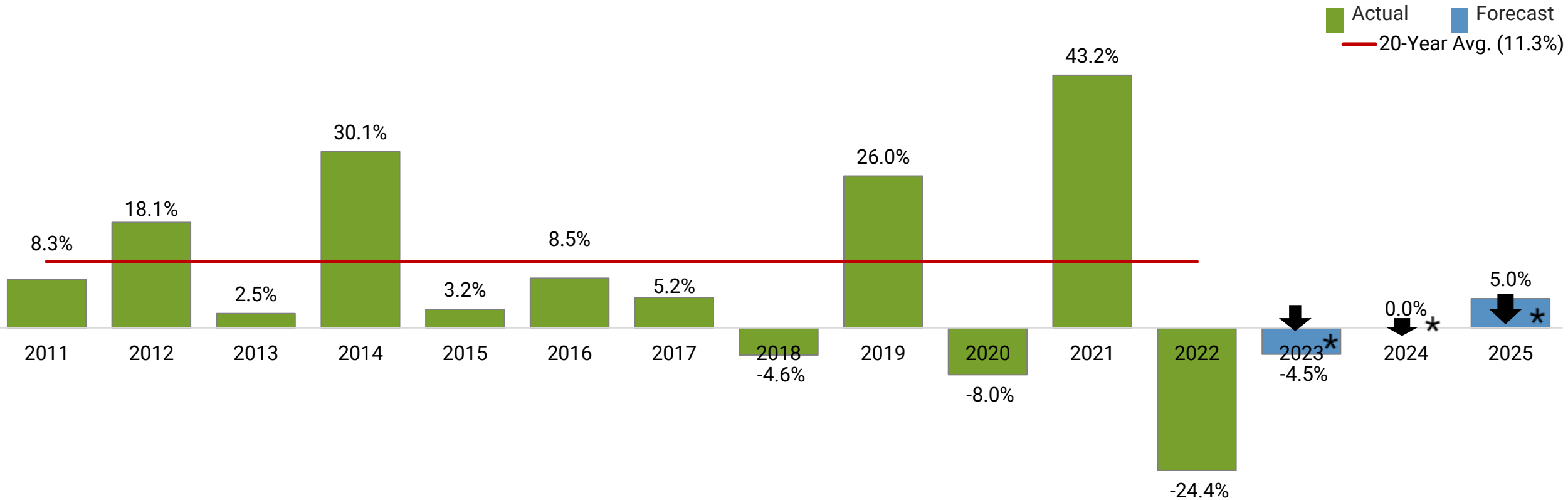
*Indicated directions (↑ ↓ =) refer to the current forecast relative to the previous ULI Real Estate Economic Forecast. The previous ULI Real Estate Economic Forecast (released in May, 2023) projected \$50B for 2023, \$64B for 2024, and \$83B for 2025.

>> RCA Commercial Property Price Index (annual change)



Sources: 2006-2022, MSCI Real Assets; 2023-2025, 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 May, 2023) projected -8.0% for 2023, 2.6% for 2024, and 5.0% for 2025.

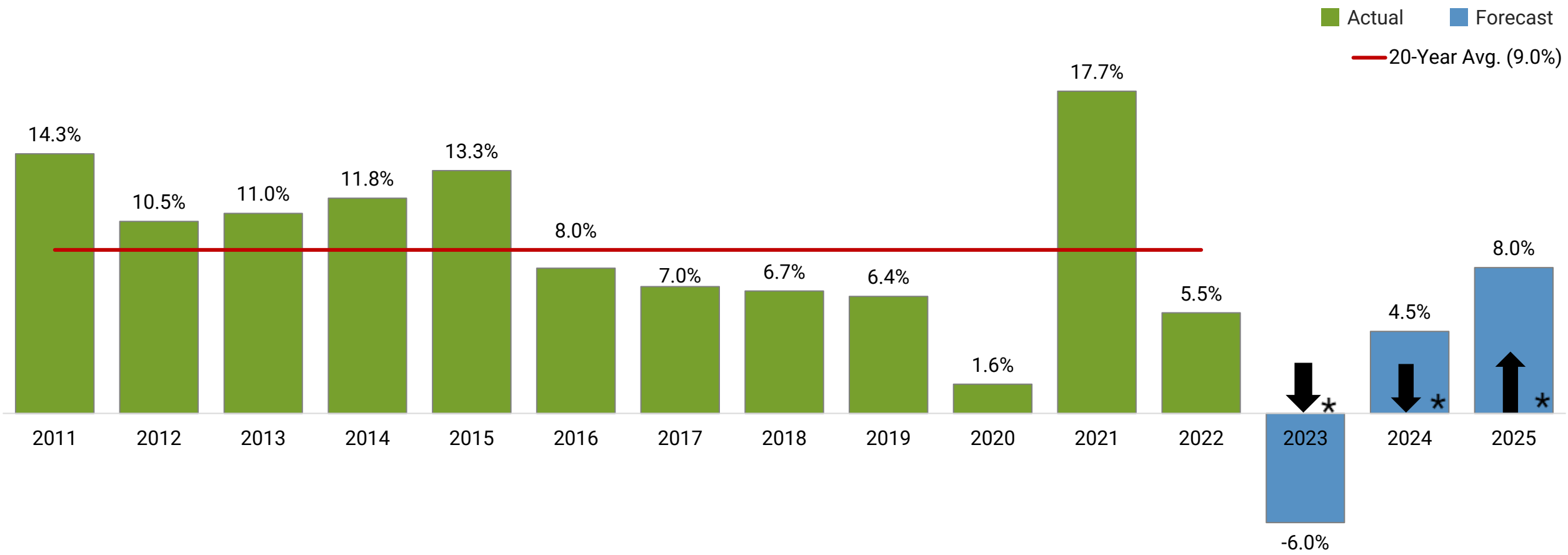
>> Equity REIT Total Annual Returns



Sources: 2003-2022, National Association of Real Estate Investment Trusts; 2023-2025, 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 May, 2023) projected 4.0% for 2023, 10.0% for 2024, and 10.0% for 2025.

>> NCREIF Total Annual Returns



Sources: 2003-2022, National Council of Real Estate Investment Fiduciaries (NCREIF); 2023-2025, 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 May, 2023) projected -3.8% for 2023, 4.6% for 2024, and 7.0% for 2025.

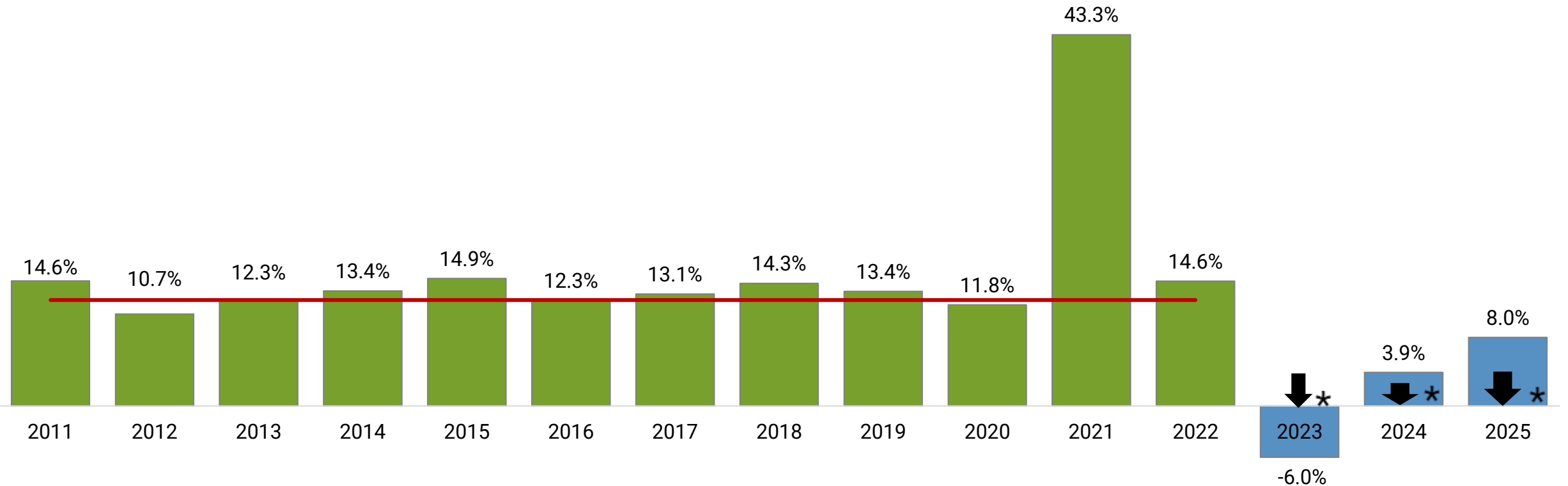
>> NCREIF Property Types Total Returns



Source: ULI Real Estate Economic Forecast, Fall 2023

>> NCREIF Industrial Total Annual Returns

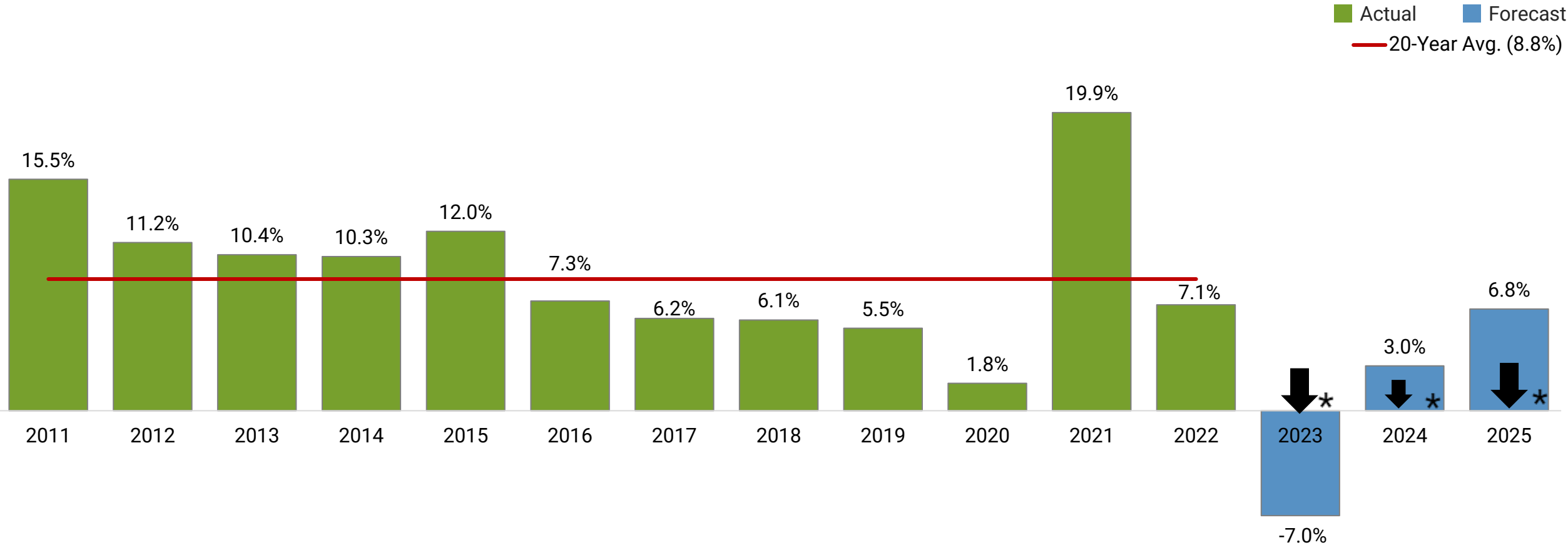
■ Actual ■ Forecast
— 20-Year Avg. (12.3%)



Sources: 2003-2022, National Council of Real Estate Investment Fiduciaries (NCREIF); 2023-2025, 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 May, 2023) projected -1.7% for 2023, 5.0% for 2024, and 8.8% for 2025.

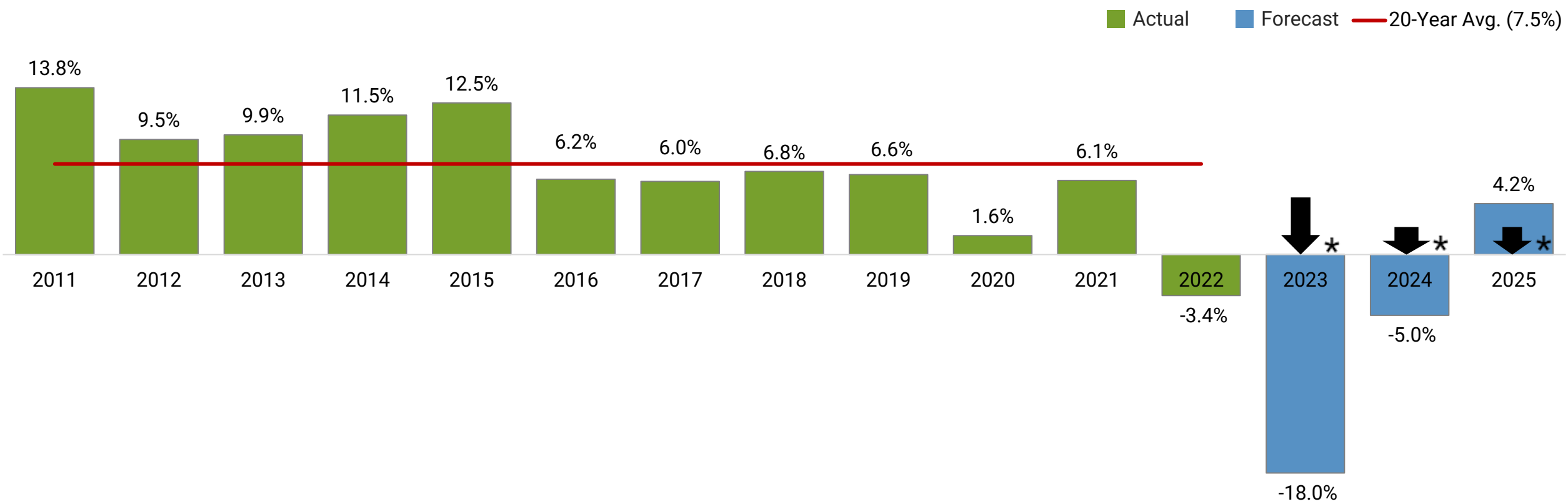
>> NCREIF Apartment Total Annual Returns



Sources: 2003-2022, National Council of Real Estate Investment Fiduciaries (NCREIF); 2023-2025, ULI Real Estate Economic Forecast.

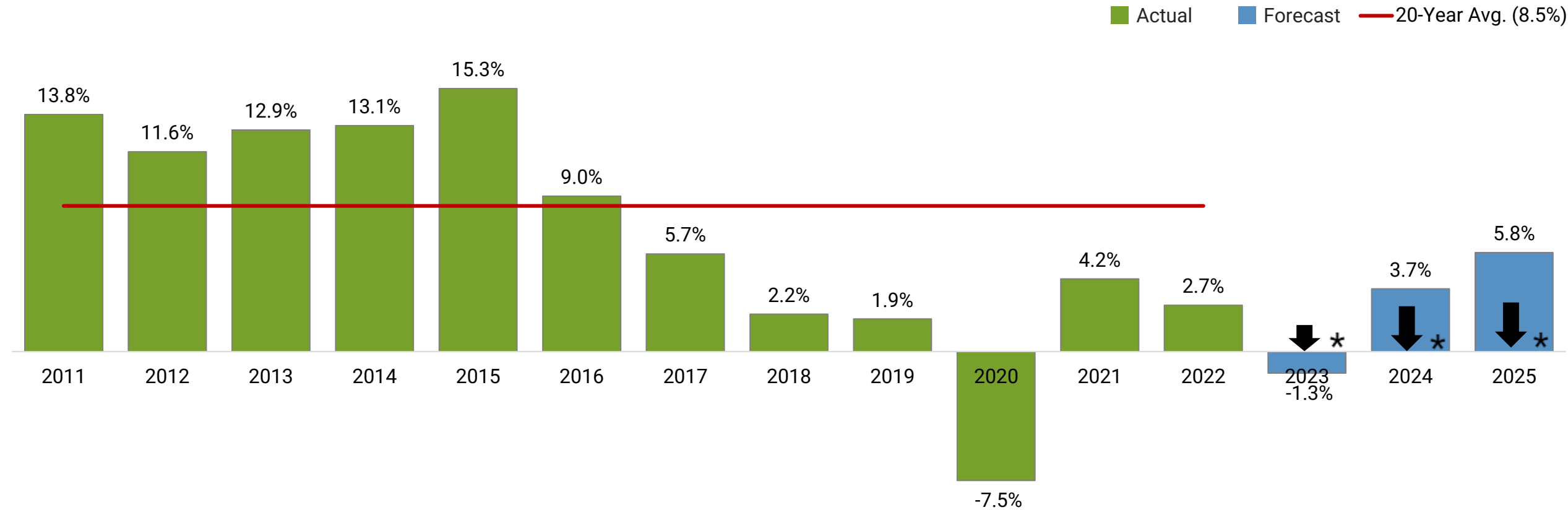
*Indicated directions (↑ ↓ =) refer to the current forecast relative to the previous ULI Real Estate Economic Forecast. The previous ULI Real Estate Economic Forecast (released in May, 2023) projected -0.1% for 2023, 5.3% for 2024, and 7.0% for 2025.

>> NCREIF Office Total Annual Returns



Sources: 2003-2022, National Council of Real Estate Investment Fiduciaries (NCREIF); 2023-2025, 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 May, 2023) projected -10.0% for 2023, -0.9% for 2024, and 4.3% for 2025.

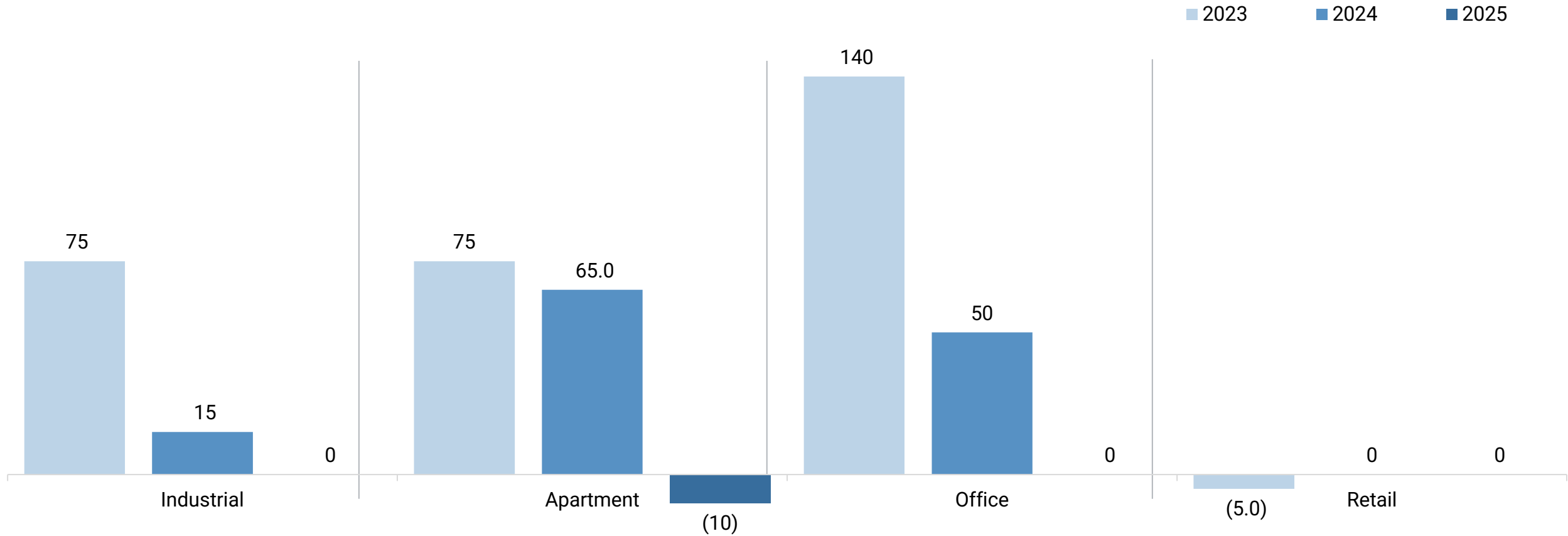
>> NCREIF Retail Total Annual Returns



Sources: 2003-2022, National Council of Real Estate Investment Fiduciaries (NCREIF); 2023-2025, ULI Real Estate Economic Forecast.

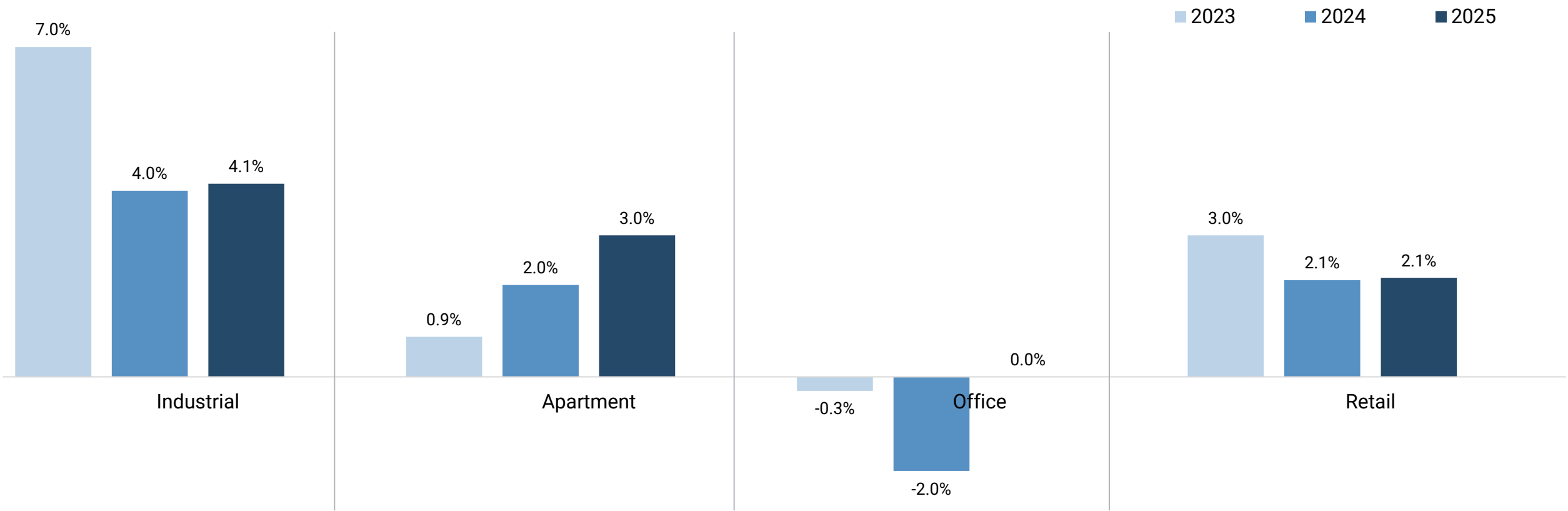
*Indicated directions (↑ ↓ =) refer to the current forecast relative to the previous ULI Real Estate Economic Forecast. The previous ULI Real Estate Economic Forecast (released in May, 2023) projected 1.4% for 2023, 5.0% for 2024, and 6.3% for 2025.

>> Vacancy Rate Change (bps)



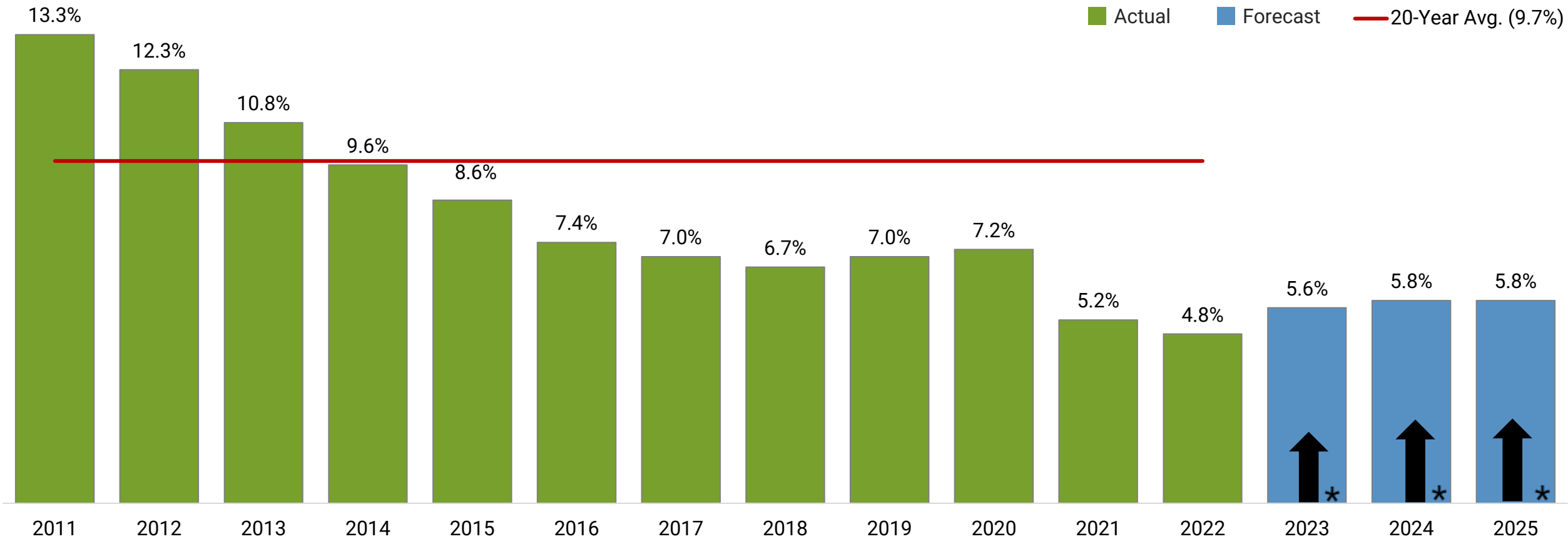
Source: ULI Real Estate Economic Forecast., Fall 2023

>> Rental Rate Growth



Source: ULI Real Estate Economic Forecast, Fall 2023

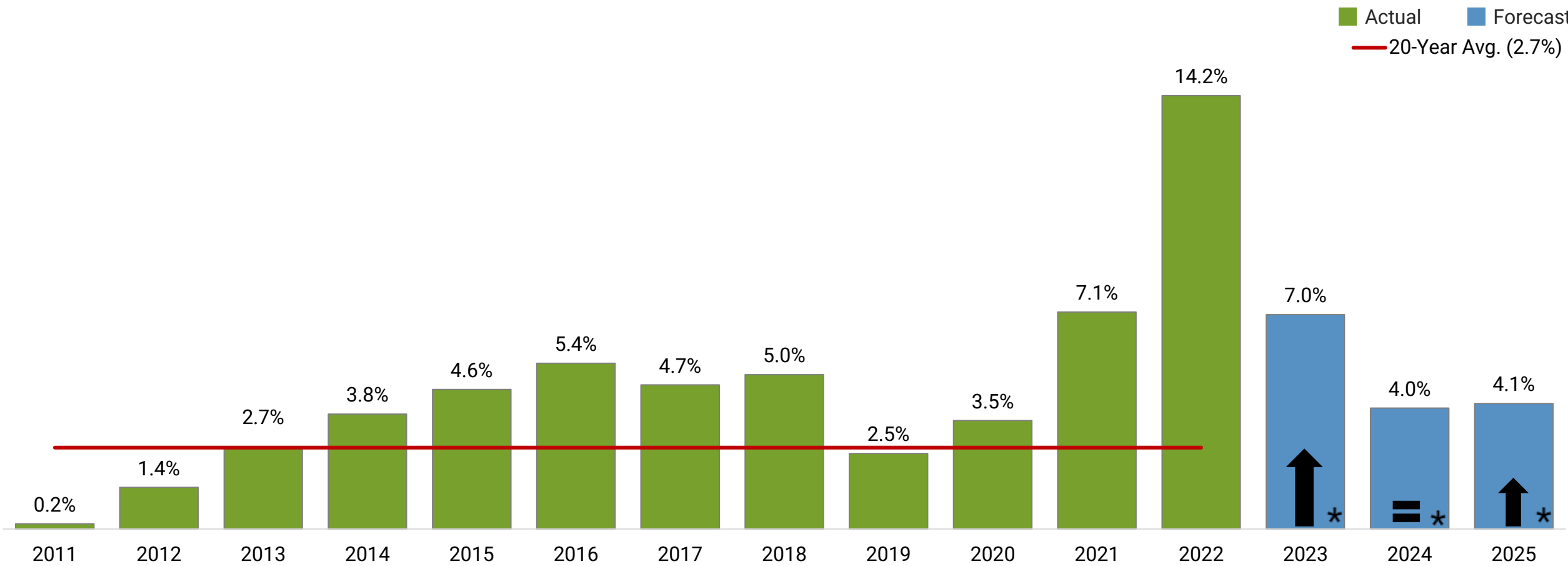
>> Industrial/Warehouse Availability Rates



Sources: 2003-2022 (Q4), CBRE; 2023-2025 (YE), ULI Real Estate Economic Forecast.

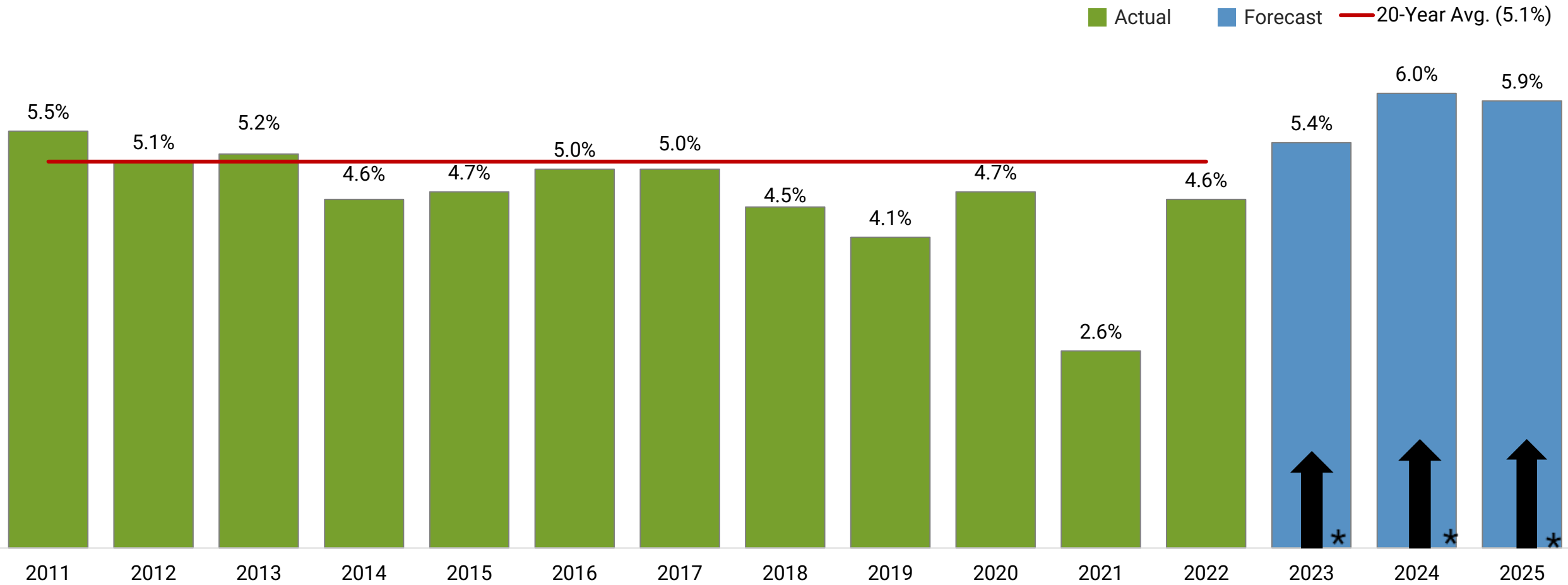
*Indicated directions (↑ ↓ =) refer to the current forecast relative to the previous ULI Real Estate Economic Forecast. The previous ULI Real Estate Economic Forecast (released in May, 2023) projected 5.4% for 2023, 5.6% for 2024, and 5.6% for 2025.

>> Industrial/Warehouse Rental Rate Change



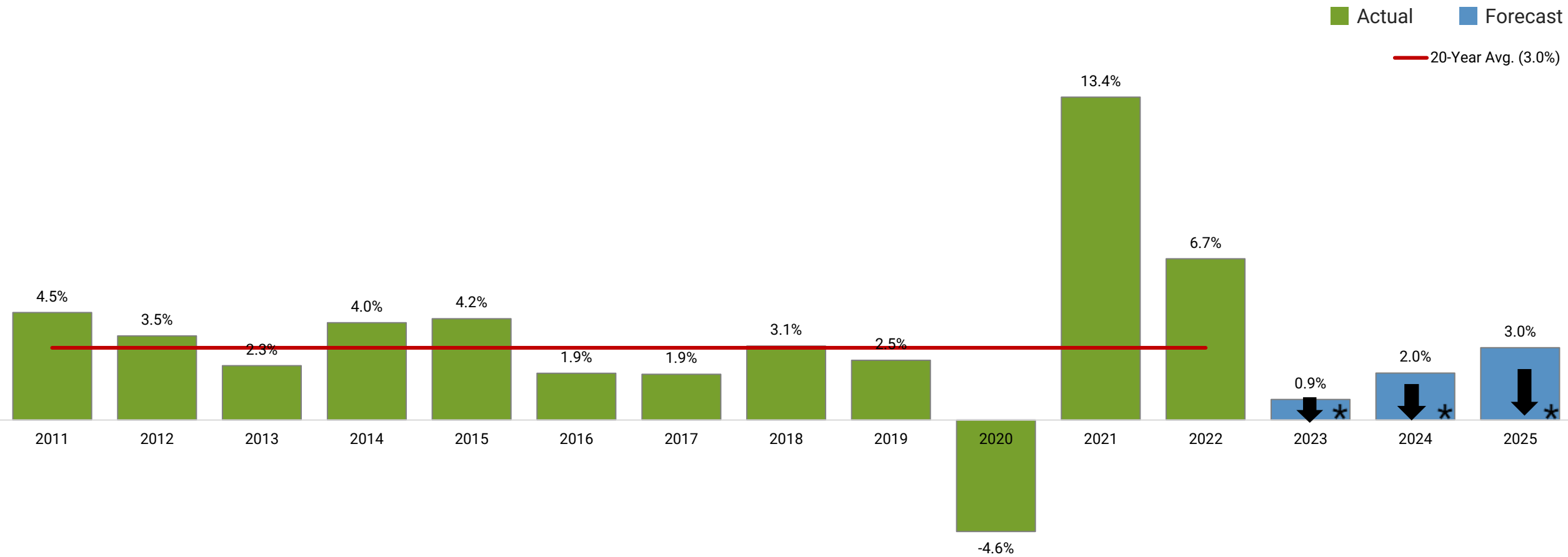
Sources: 2003-2022, CBRE; 2023-2025, ULI Real Estate Economic Forecast. Please note that the industrial historic forecast rent series has changed from TW Rents to EA Asking Rents
*Indicated directions (↑ ↓ =) refer to the current forecast relative to the previous ULI Real Estate Economic Forecast. The previous ULI Real Estate Economic Forecast (released in May, 2023) projected 6.2% for 2023, 4.0% for 2024, and 4.0% for 2025.

>> Apartment Vacancy Rates



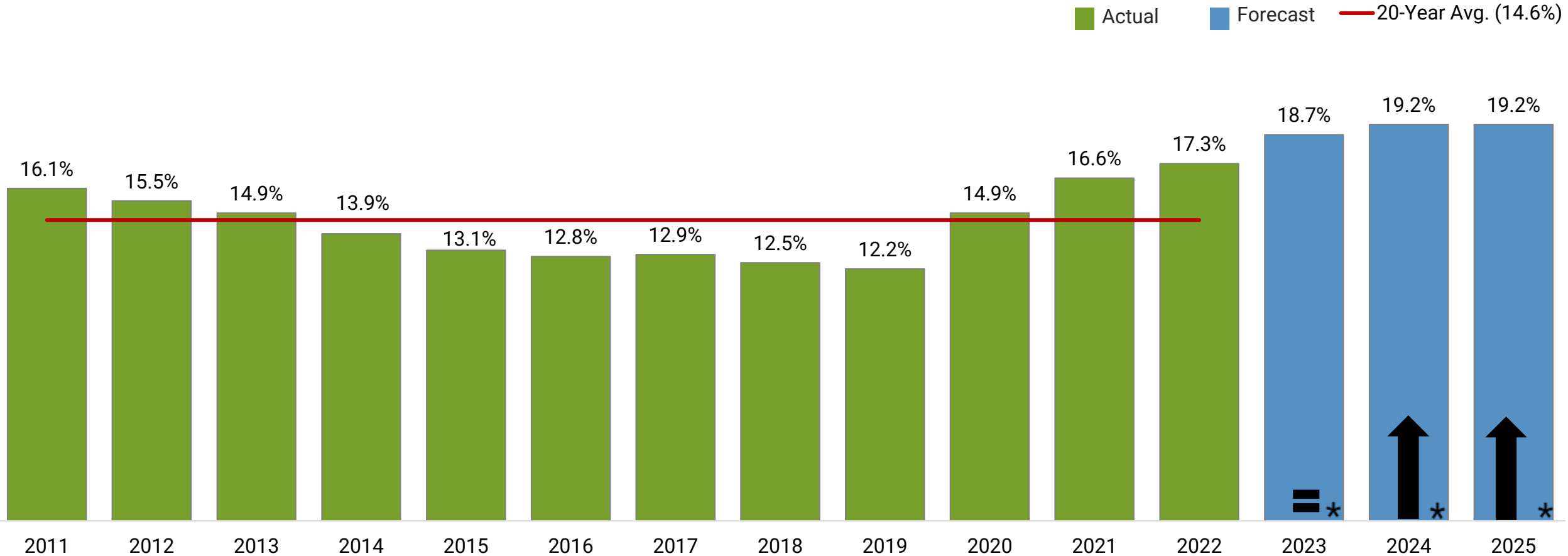
Sources: 2002-2021 (Q4), CBRE; 2022-2024 (YE), ULI Real Estate Economic Forecast.
*Indicated directions (↑ ↓ =) refer to the current forecast relative to the previous ULI Real Estate Economic Forecast. The previous ULI Real Estate Economic Forecast (released in May, 2023) projected 5.2% for 2023, 5.3% for 2024, and 5.1% for 2025.

>> Apartment Rental Rate Change



Sources: 2003-2022, CBRE; 2023-2025, 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 May, 2023) projected 3.0% for 2023, 2.3% for 2024, and 3.2% for 2025.

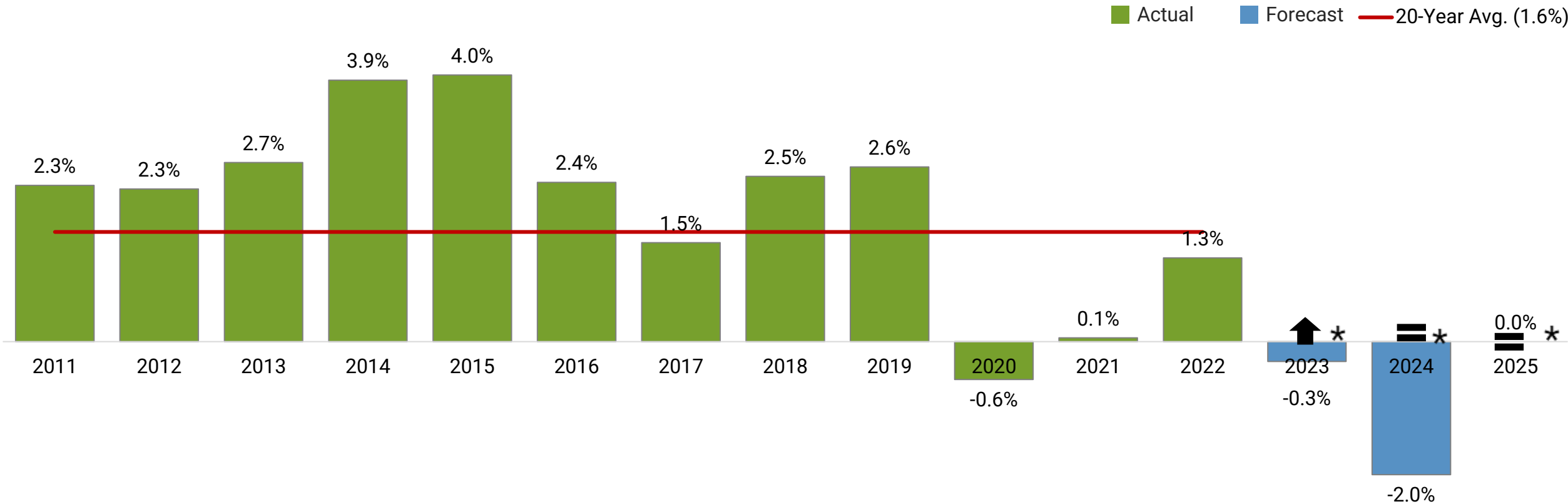
>> Office Vacancy Rates



Sources: 2003-2022 (Q4), CBRE; 2023-2025 (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 May, 2023) projected 18.7% for 2023, 19.0% for 2024, and 19.0% for 2025.

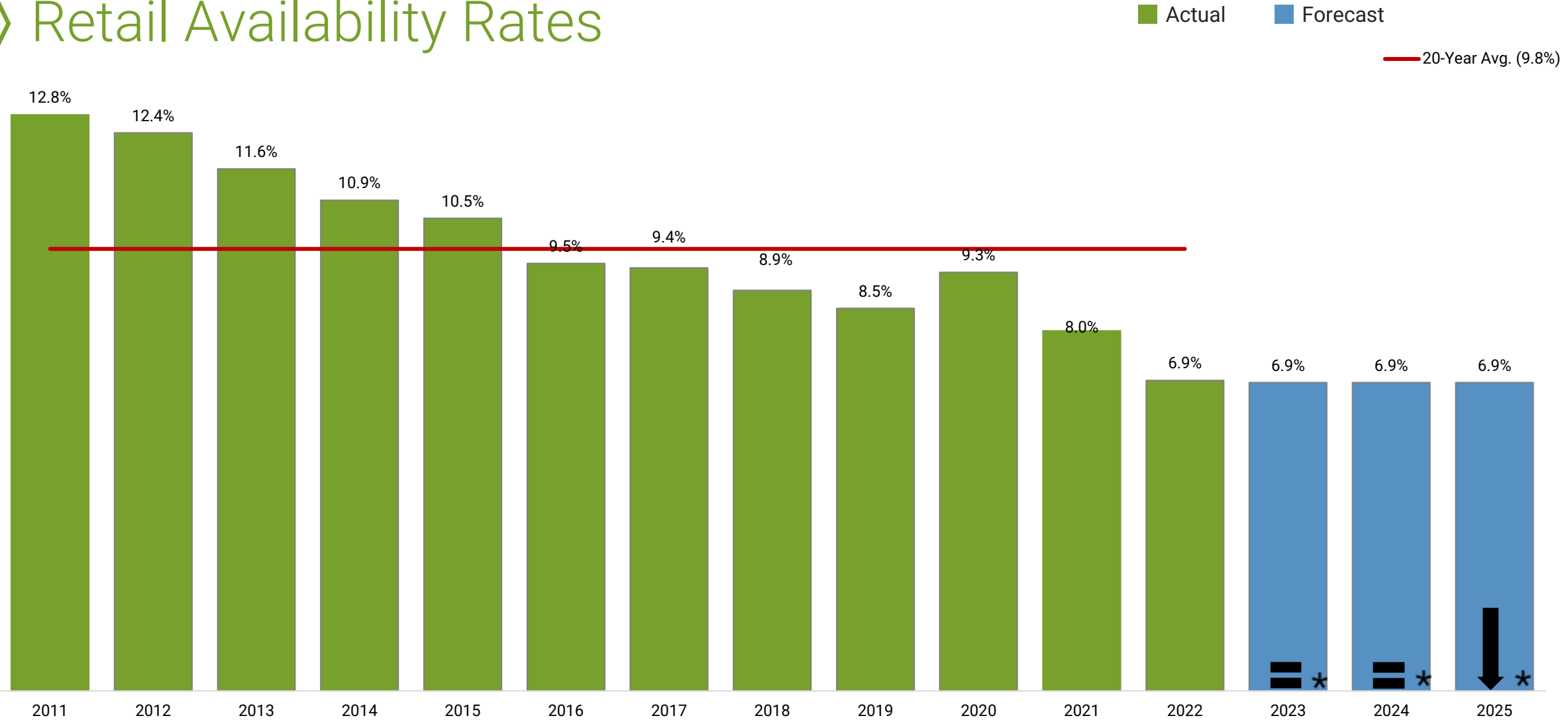
» Office Rental Rate Change



Sources: 2003-2022, CBRE; 2023-2025, ULI Real Estate Economic Forecast. Please note that the office historic forecast rent series has changed from TW Rents to EA Asking Rents.

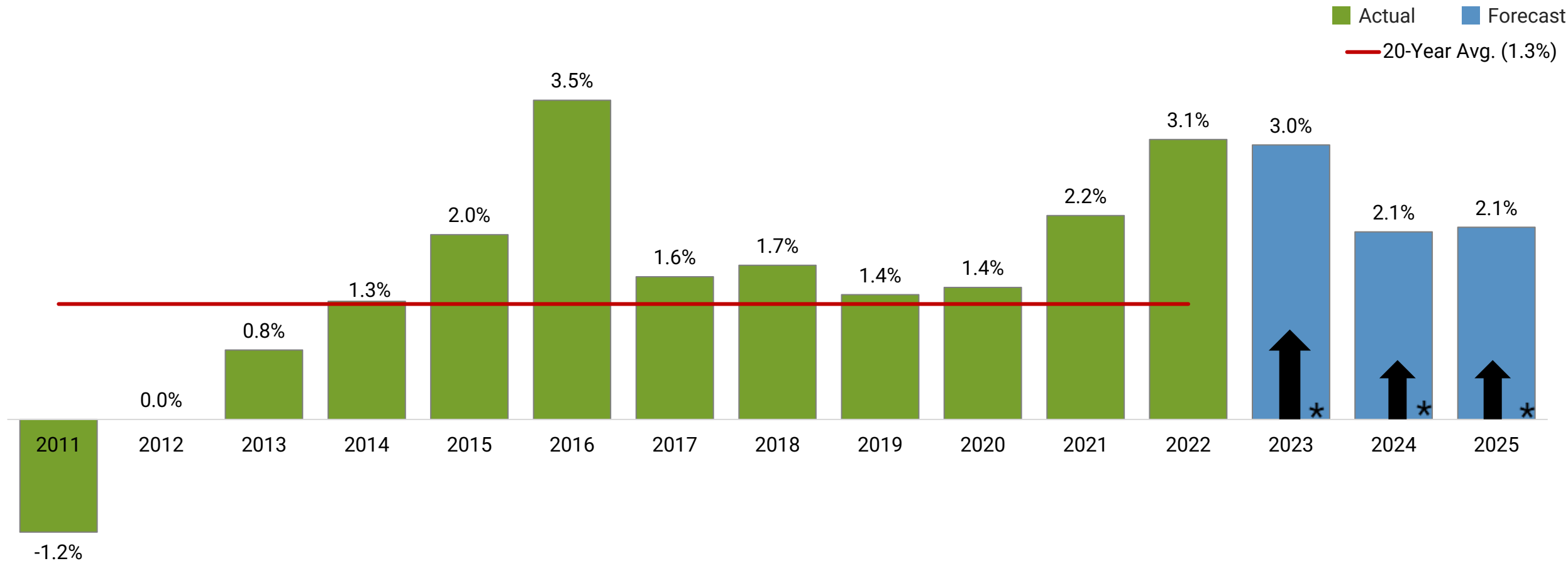
*Indicated directions (↑ ↓ =) refer to the current forecast relative to the previous ULI Real Estate Economic Forecast. The previous ULI Real Estate Economic Forecast (released in May, 2023) projected -2.8% for 2023, -2.0% for 2024, and 0.0% for 2025.

>> Retail Availability Rates



Sources: 2003-2022 (Q4), CBRE; 2023-2025 (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 May, 2023) projected 6.9% for 2023, 6.9% for 2024, and 6.8% for 2025.

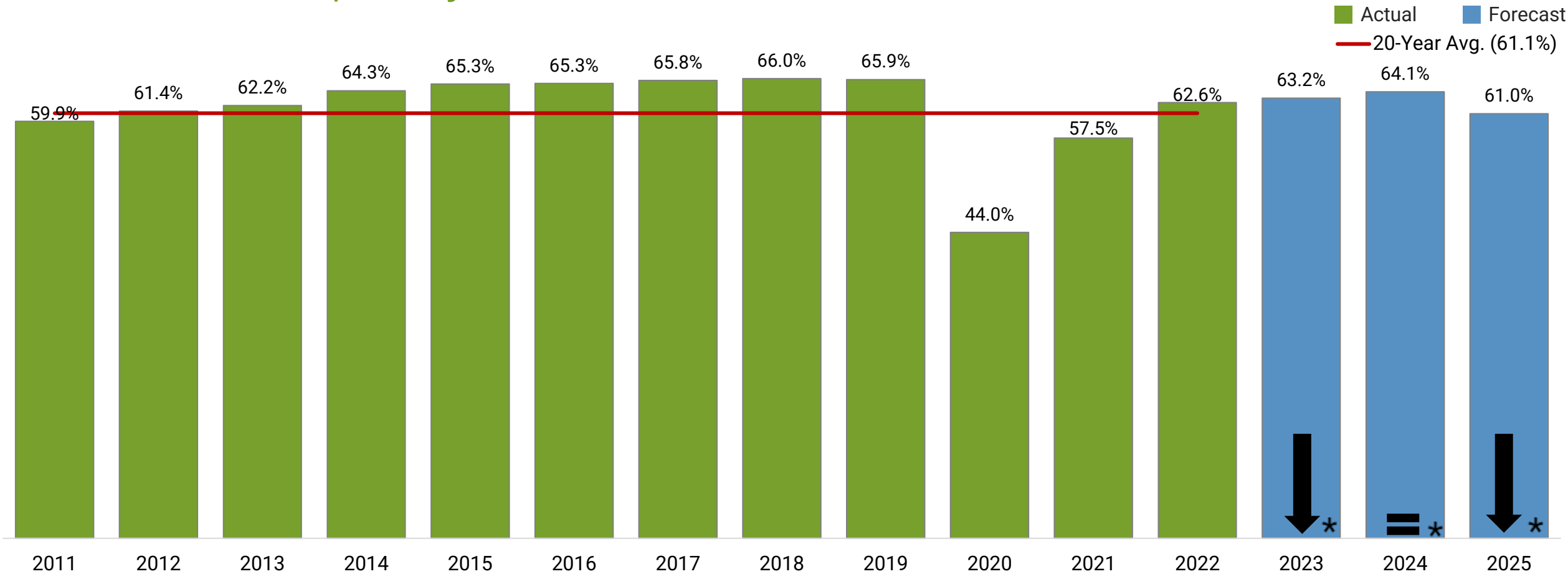
>> Retail Rental Rate Change



Sources: 2003-2022 (Q4), CBRE; 2023-2025, 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 May, 2023) projected 2.4% for 2023, 2.0% for 2024, and 2.0% for 2025.

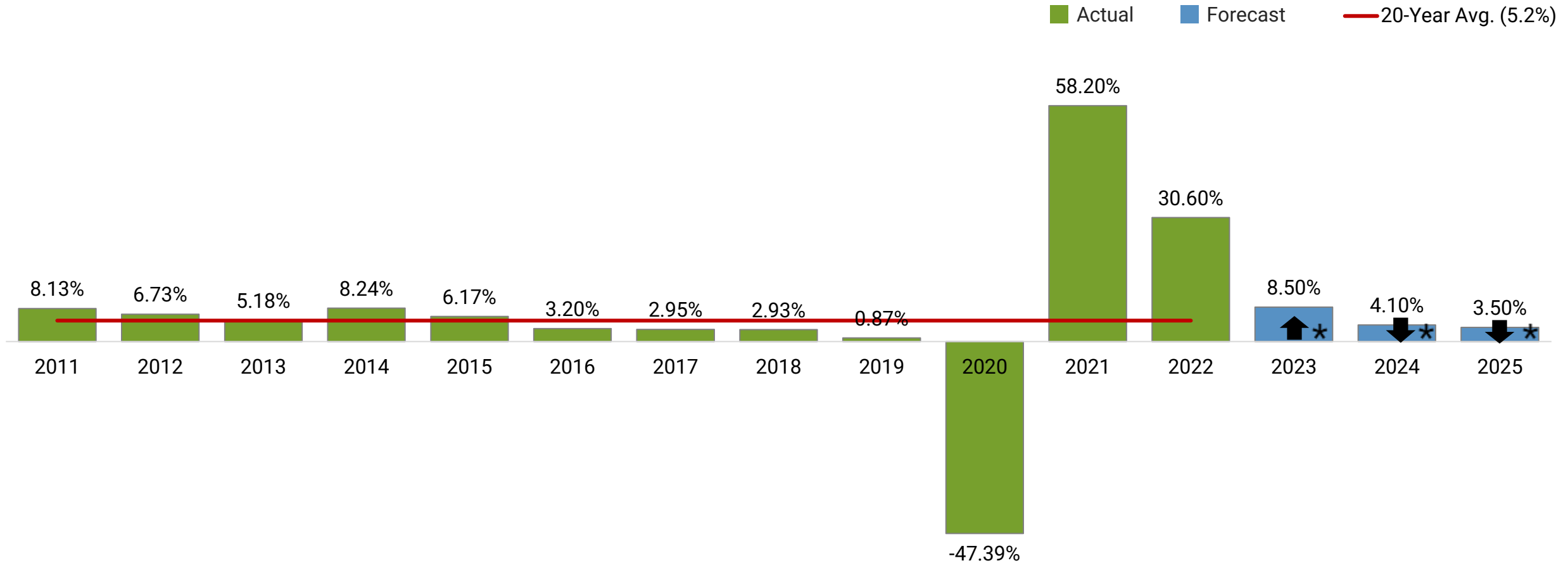
>> Hotel Occupancy Rates



Sources: 2003-2022 (December, 12 month rolling average), STR; 2023-2025, 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 May, 2023) projected 63.5% for 2023, 64.1% for 2024, and 64.8% for 2025.

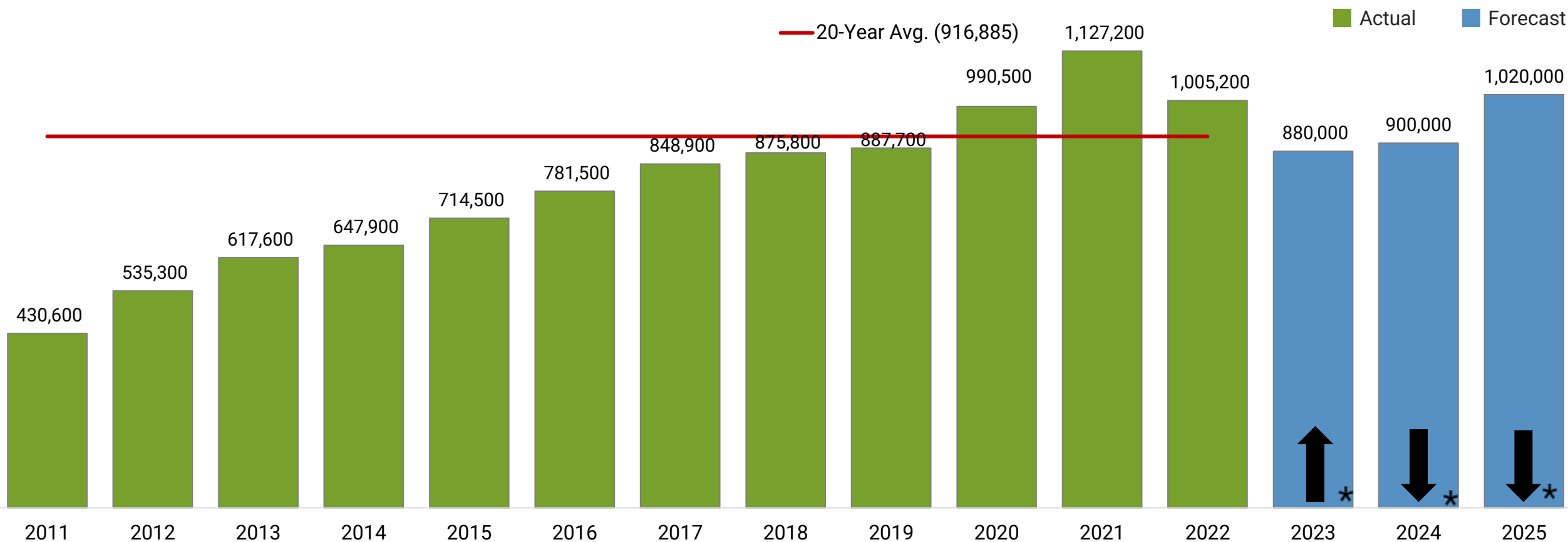
>> Hotel Revenue per Available Room (RevPAR) Change



Sources: 2003-2022 (December, 12-month rolling average) STR; 2023-2025, 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 May, 2023) projected 7.0% for 2023, 6.2% for 2024, and 5.0% for 2025.

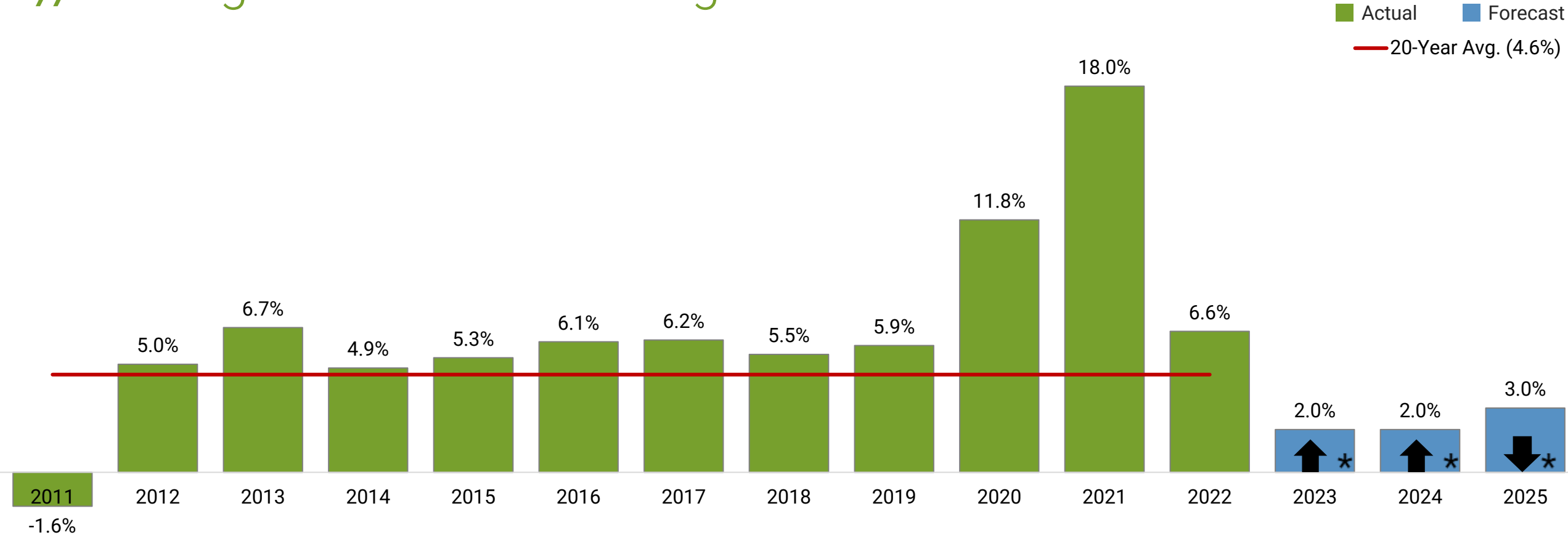
>> Single-Family Housing Starts



Sources: 2003-2022, (structures with 1 unit, as of December), U.S. Census; 2023-2025, 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 May, 2023) projected 850,000 for 2023, 950,000 for 2024, and 1,100,000 for 2025.

>> Average Home Price Change



Sources: 2003-2022, (seasonally adjusted, as of December), Federal Housing Finance Agency; 2023-2025, 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 May, 2023) projected -4.6% for 2023, 1.6% for 2024, and 3.5% for 2025.

Firms That Participated in the ULI Real Estate Economic Forecast

Organization	Economist/Analyst	Title
Altus Group	Alexander Jaffe	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
Barings	Dags Chen	Executive Director, Residential and Capital Markets
	Kathryn Asher	Economist
Berkshire Residential Investments	Gleb Nechayev	Head of Research, Chief Economist
Capital Economics	Kiran Raichura	Senior Property Economist
CBRE	Matthew Mowell	Senior Economist
Clarion Partners	Tim Wang	Managing Director and Head of Investment Research
Cushman & Wakefield	Rebecca Rockey	Duty Chief Economist

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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
Grosvenor	Brian Biggs	Vice President
Harrison Street Real Estate Capital	Thomas Errath	Managing Director
Heitman	Jeffrey Bingham	Director of Investment Strategy
	James Breen	Senior Associate Investment Research
Laposa Realty Advisors, LLC	Steven P. Laposa	Principal
LaSalle Investment Management	Richard Kleinman	Head of Americas Research & Strategy
Linneman Associates	Peter Linneman	CEO
Marcus & Millichap	John Chang	Senior Vice President, National Director of Research Services
MetLife Investment Management	William Pattison	Director, of Real Estate Research & Strategy
National Association of Realtors	Lawrence Yun	Chief Economist
Oxford Economics	Aran Ryan	Tourism Economics, Director of Industry Studies
PGIM Real Estate	Lee Meniffee	Head of America Investment Research
Principal Real Estate	Indraneel Karlekar	Global Head of Research and Portfolio Strategies

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Firms That Participated in the ULI Real Estate Economic Forecast

Organization	Economist/Analyst	Title
Prologis	Melinda McLaughlin	Senior Vice President, Global Head of Research
RCLCO Financial Advisors	William Maher	Director, Strategy & Research
RedShoe Economics	KC Conway	Chief Economist
Rosen Consulting Group	Ken Rosen	Chairman
	Randall Sakamoto	President
SitusAMC	Jodi Airhart	Senior Vice President
StepStone Group	Sara Rutledge	Managing Director, Real Estate
Stockbridge Associates, LLC	George Casey	CEO
Transwestern	Doug Pritchett	Senior Managing Director, Research & Investment Analytics
Trepp, LLC	Matthew Anderson	Managing Director
		CEO
Unity Medical Properties, LLC	Dr. David James Lynn	
University of Denver	Glenn R Mueller	Professor
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 48,000 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

NOVEMBER 2023

ULI Center For Real Estate Economics And Capital Markets

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