

2Q 2022

# ValTrends Data Report

**RERC**<sup>®</sup>  
A SitusAMC Company

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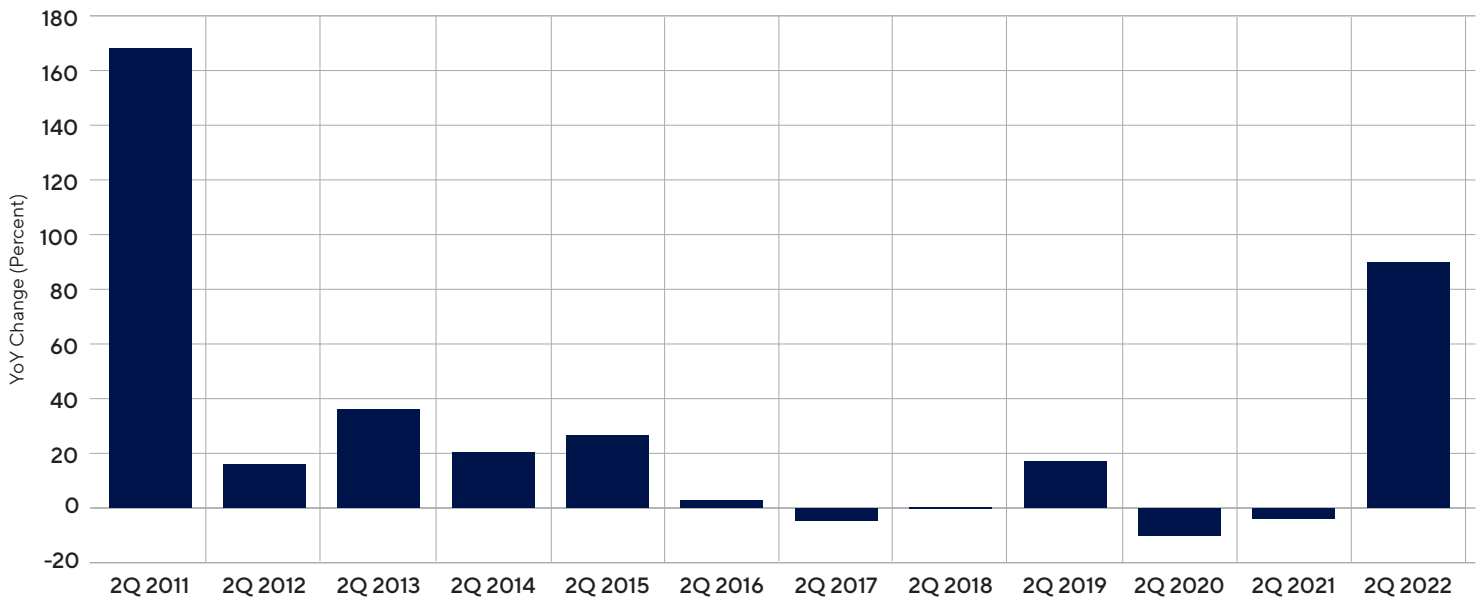
# 01 RERC Overall ValTrends



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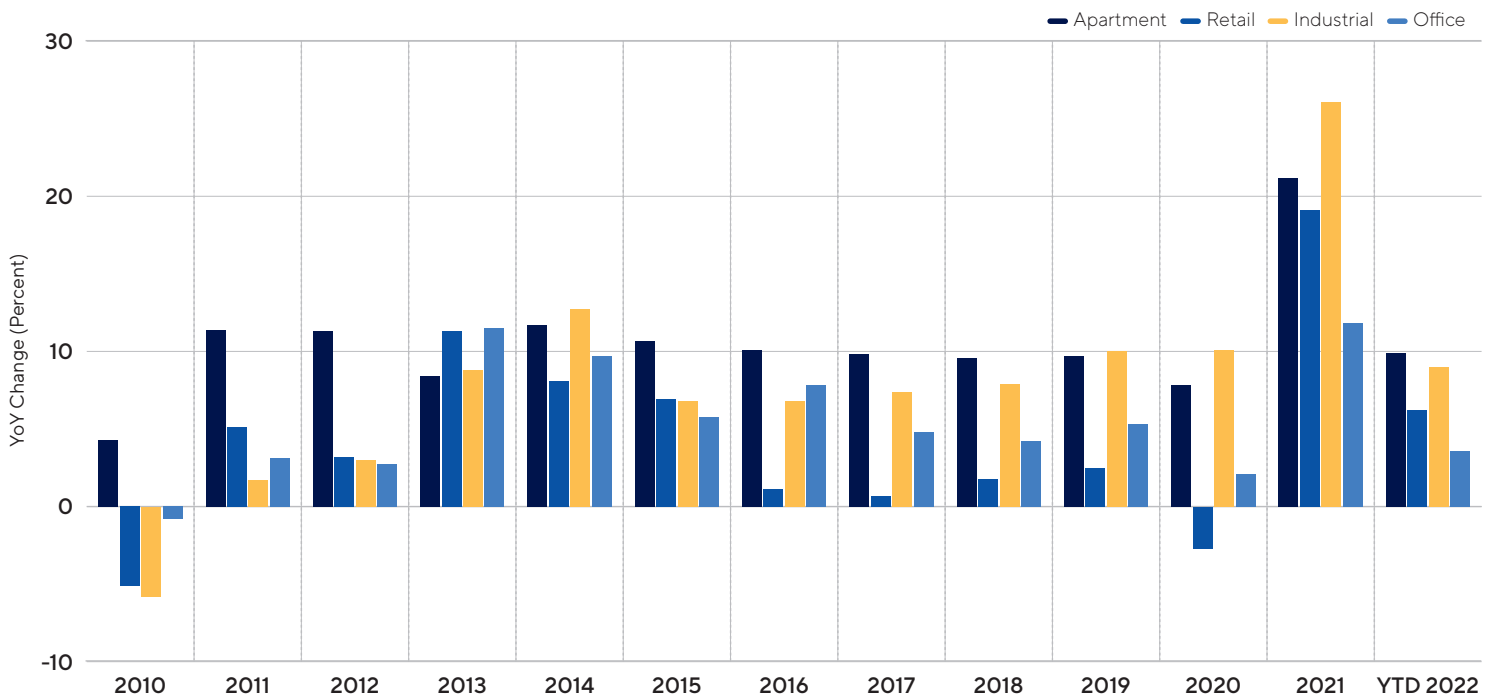
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### RCA Transaction Volume<sup>1</sup> Change



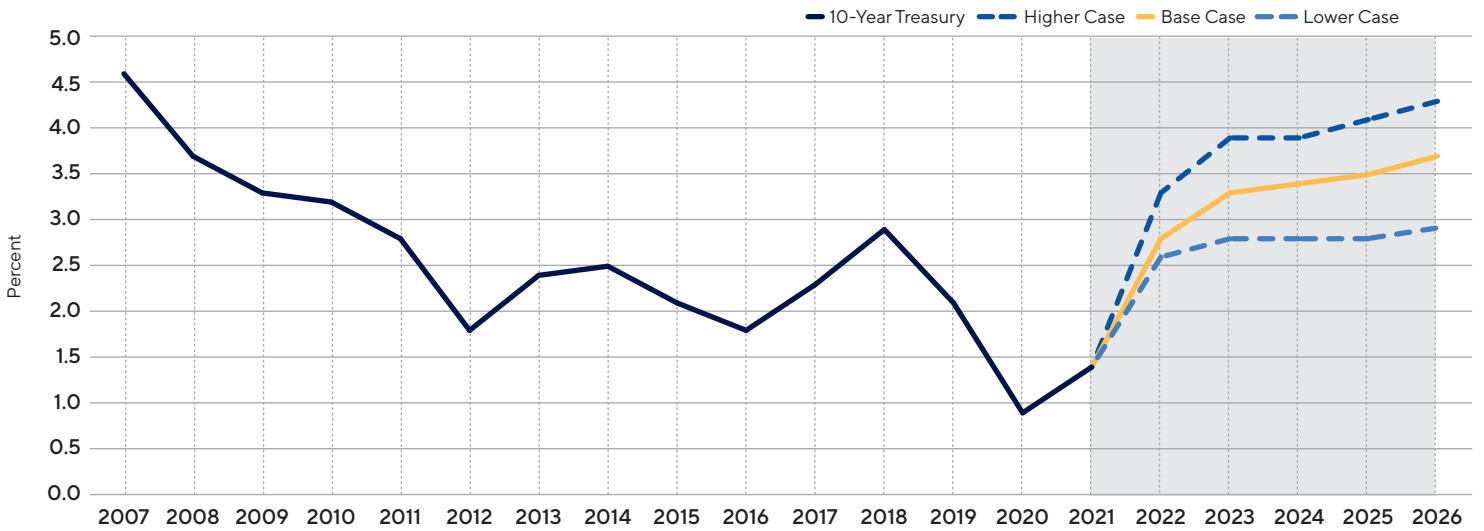
<sup>1</sup>Indicates year-over-year trailing 12 months data provided by RCA.  
**Source** RCA, 2Q 2022.

### RCA CPPI – U.S. By Property Type



The Real Capital Analytics Commercial Property Price Index (CPPI) is based on repeat-sales (RS) transactions that occurred at any time through the month of the current report.  
**Source** RCA, 2Q 2022.

# RERC 10-YEAR TREASURY FORECAST



Data based on annual averages. Shaded area indicates forecast.

Sources RERC, Federal Reserve, 2Q 2022.



# RERC RISK-ADJUSTED RETURN ANALYSIS (RAR)

## Capital Return Performance

	Current Quarter Capital Return	Frequency of Outperformance <sup>1</sup>	1-Year Trailing Capital Return	Frequency of Outperformance <sup>1</sup>
All Property Types	2.3%	88%	16.9%	98%
Apartment	2.9%	93%	20.0%	100%
Hotel	0.2%	63%	5.2%	93%
Industrial - R&D	2.6%	80%	23.0%	95%
Industrial - Flex	5.7%	90%	38.0%	98%
Industrial - Warehouse	5.1%	90%	43.3%	98%
Office - CBD	-1.1%	5%	-1.1%	15%
Office - Suburban	0.2%	18%	4.8%	75%
Retail - Neigh/Comm	0.9%	67%	5.6%	79%
Retail - Power Center	1.1%	80%	4.7%	85%
Retail - Regional Mall	0.1%	43%	-1.5%	40%

<sup>1</sup>Frequency of Outperformance compares the current quarter (i.e., quarterly or 1-year trailing) to 10 years of historical NPI returns and indicates the percentage of periods that the current (or 1-year trailing) return has outperformed historical returns.

Sources RERC, NCREIF, 2Q 2022.



## 1-Year Trailing Return

	1-YR Trailing NCREIF Returns	10-YR NCREIF Standard Deviation	RAR <sup>1</sup> Metric	1-YR Trailing RERC Avg Expected Returns	NCREIF Returns Less RERC Returns
Industrial - R&D	28.2%	5.7%	4.95	10.0%	18.2%
Office - Suburban	9.6%	2.1%	4.50	7.5%	2.1%
Industrial - Warehouse	47.9%	10.8%	4.46	5.8%	42.2%
All Property Types	21.5%	4.9%	4.41	7.4%	14.0%
Apartment	24.4%	5.7%	4.29	6.0%	18.5%
Industrial - Flex	43.8%	10.8%	4.07	7.3%	36.5%
Retail - Neigh/Comm	11.1%	4.7%	2.38	7.1%	4.0%
Retail - Power Center	11.0%	4.8%	2.27	8.0%	3.0%
Hotel	10.4%	9.3%	1.12	10.0%	0.4%
Office - CBD	3.0%	4.0%	0.76	6.9%	-3.9%
Retail - Regional Mall	3.0%	8.1%	0.37	8.0%	-5.0%

<sup>1</sup>RAR = Risk-Adjusted Return. Property types are listed in order of their RAR metric.  
Sources RERC, NCREIF, 2Q 2022.

## 10-Year Trailing Return

	10-YR Trailing NCREIF Returns	10-YR NCREIF Standard Deviation	RAR <sup>1</sup> Metric	10-YR Trailing RERC Avg Expected Returns	NCREIF Returns Less RERC Returns
Office - Suburban	8.2%	2.1%	3.85	8.2%	0.1%
Industrial - R&D	14.2%	5.7%	2.50	9.8%	4.4%
All Property Types	9.7%	4.9%	1.99	7.9%	1.8%
Office - CBD	6.7%	4.0%	1.71	7.3%	-0.6%
Retail - Neigh/Comm	7.8%	4.7%	1.68	7.4%	0.4%
Apartment	9.4%	5.7%	1.64	6.8%	2.5%
Industrial - Warehouse	17.1%	10.8%	1.59	7.0%	10.1%
Retail - Power Center	6.6%	4.8%	1.36	8.1%	-1.6%
Industrial - Flex	14.6%	10.8%	1.36	8.3%	6.3%
Retail - Regional Mall	5.0%	8.1%	0.62	7.8%	-2.8%
Hotel	3.5%	9.3%	0.37	9.8%	-6.4%

<sup>1</sup>RAR = Risk-Adjusted Return. Property types are listed in order of their RAR metric.  
Sources RERC, NCREIF, 2Q 2022.

### NPI Annualized Total Returns by Market (All Property Types)

Metro	1-Year Trailing	3-Year Trailing	5-Year Trailing	10-Year Trailing
Atlanta	26.9%	13.5%	11.2%	11.3%
Boston	10.5%	6.6%	6.7%	7.9%
Chicago	11.8%	5.0%	4.7%	7.4%
Dallas	24.1%	11.3%	9.4%	10.3%
Houston	13.9%	4.8%	4.8%	7.4%
Los Angeles	27.6%	12.9%	11.3%	11.3%
Minneapolis	11.0%	4.3%	3.9%	5.8%
New York	12.1%	5.3%	4.9%	7.3%
San Francisco	6.9%	4.7%	6.4%	10.1%
Seattle	19.1%	10.8%	10.5%	10.6%
Washington, D.C.	8.3%	4.2%	4.3%	5.4%
National	21.5%	10.2%	8.9%	9.7%

Source NCREIF, compiled by RERC, 2Q 2022.

### NAREIT Investment Performance Index<sup>1</sup> (By Property Type)

Property Sector/ Sub-sector	Total Return		Number of REITs	Dividend Yield <sup>2</sup>
	YTD	2021		
All Equity REIT Index	-19.2	41.3	153	3.4
Industrial	-26.6	62.0	13	2.7
Office	-27.5	22.0	20	4.7
Retail	-20.5	51.9	32	5.1
Shopping Centers	-18.8	65.1	17	4.2
Regional Malls	-39.7	92.1	3	7.0
Free Standing	-8.2	19.7	12	4.9
Residential	-20.4	58.3	21	2.9
Apartments	-20.1	63.6	16	3.2
Manufactured Homes	-21.9	42.0	3	2.3
Single-Family Homes	-19.8	52.8	2	2.3
Diversified	-10.6	29.2	13	5.0
Lodging/Resorts	-16.1	18.2	14	1.0
Health Care	-10.2	16.3	16	4.6
Self Storage	-20.1	79.4	5	3.1
Timber	-15.0	28.8	4	2.5
Infrastructure	-14.9	34.4	4	2.5
Data Centers	-22.0	25.5	2	2.6
Specialty	-8.4	41.7	9	5.3

<sup>1</sup>All figures represent percent change except where noted.

<sup>2</sup>Dividend yield is quoted in percent and is for month ending June 30.

Sources FTSE™, Nareit, 2Q 2022.

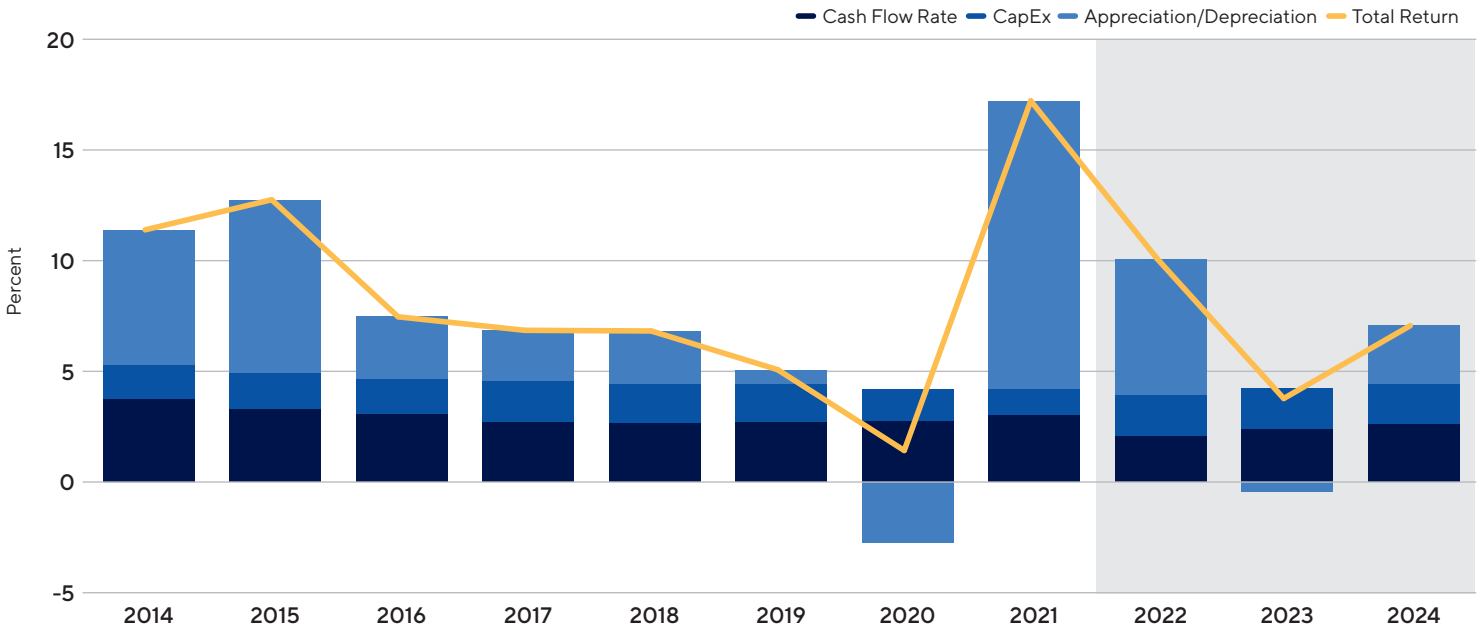
### Annualized NPI Returns

	YTD	2021	2020	2019	2018	2017
Office	2.2%	6.1%	1.6%	6.6%	6.8%	6.0%
Industrial	17.5%	43.3%	11.8%	13.4%	14.3%	13.1%
Retail	4.0%	4.2%	-7.5%	1.9%	2.2%	5.7%
Apartment	9.3%	19.9%	1.8%	5.5%	6.1%	6.2%
Hotel	3.6%	5.5%	-25.6%	3.5%	7.6%	4.9%
East	6.0%	13.4%	1.4%	4.9%	5.0%	5.1%
West	10.6%	21.1%	2.5%	8.3%	8.8%	8.9%
Midwest	5.5%	12.2%	-1.3%	3.1%	4.3%	5.6%
South	10.1%	19.8%	1.3%	6.7%	6.7%	6.9%
National	8.7%	17.7%	1.6%	6.4%	6.7%	7.0%

Source NCREIF, compiled by RERC, 2Q 2022.

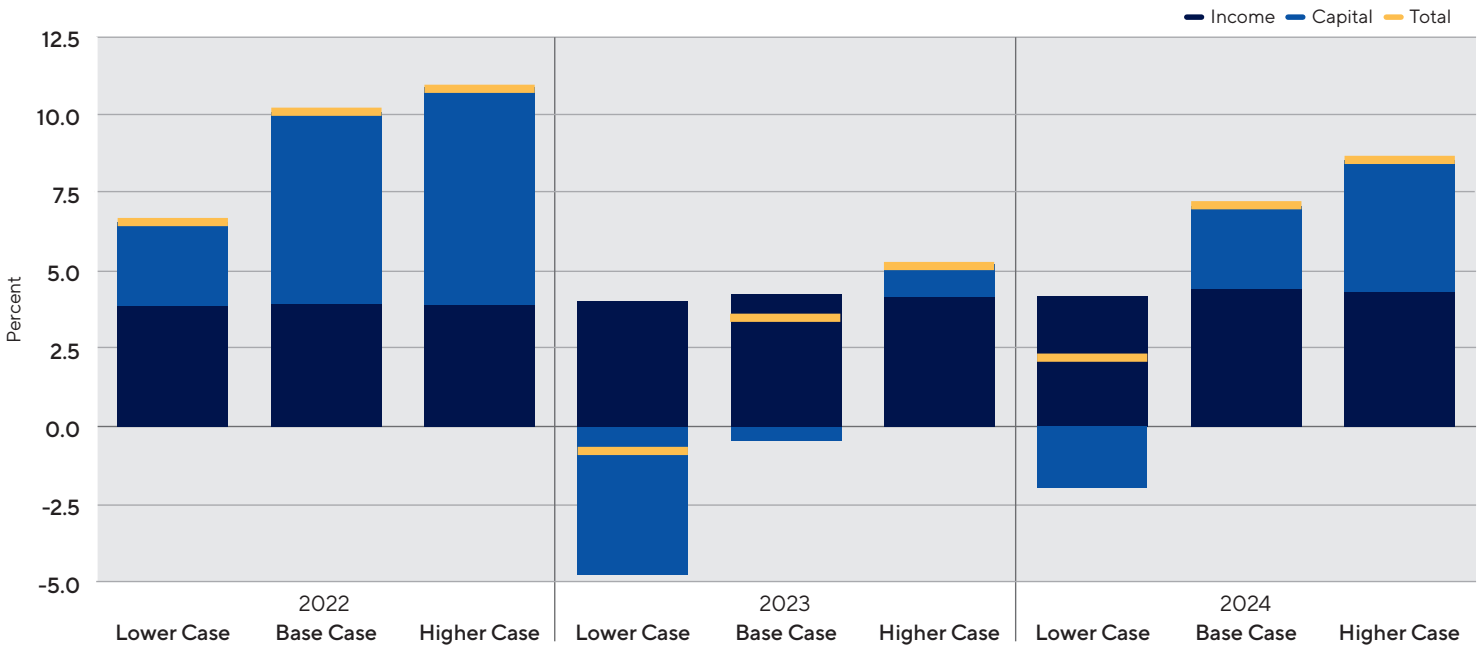


Total Return Forecast (Base Case Scenario)



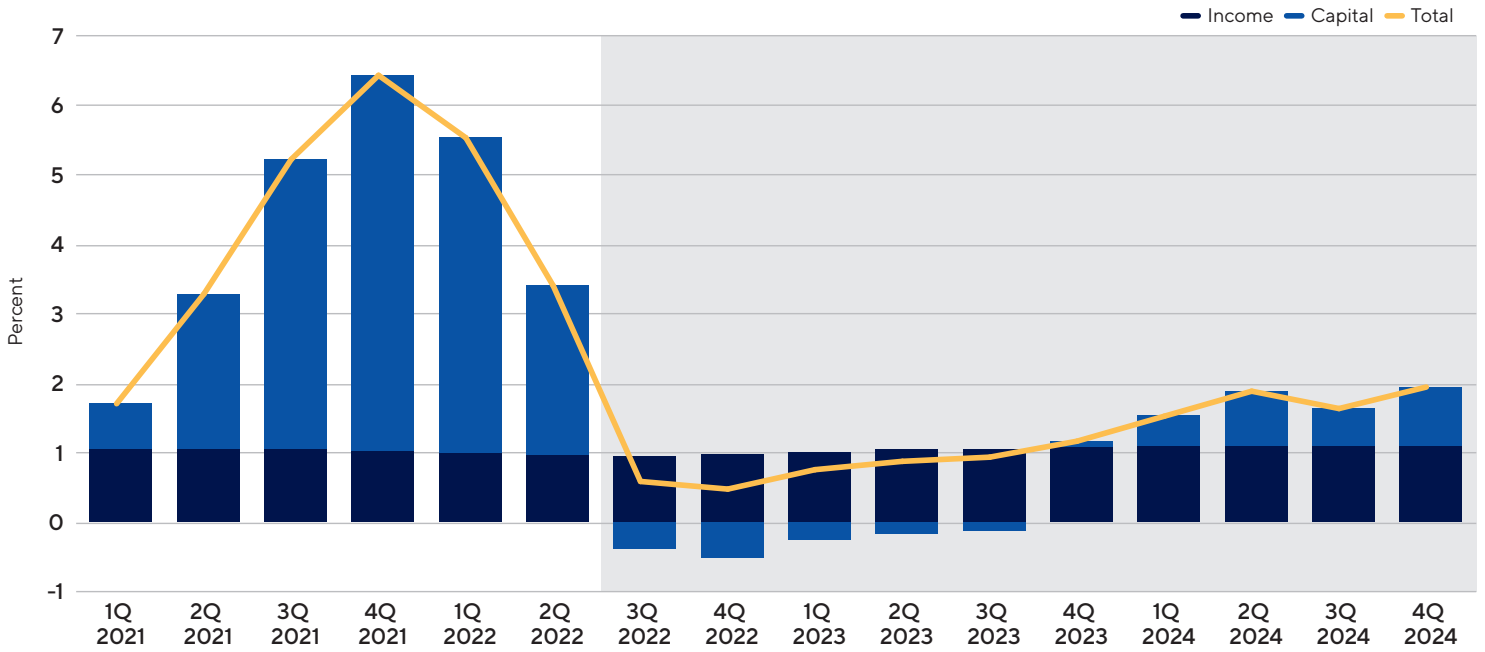
The total return forecast is RERC’s proprietary model based on RERC data and data from NPI-ODCE and is for unleveraged, institutional-grade properties. Total returns are derived from an income component and a capital appreciation/depreciation component. Shaded area reflects RERC’s outlook for the base case scenario for 2022, 2023 and 2024. Sources RERC, NCREIF, 2Q 2022.

Total Return Forecast (Lower Case, Base Case and Higher Case Scenarios)



The total return forecast is RERC’s proprietary model based on RERC data and data from NPI-ODCE and is for unleveraged, institutional-grade properties. Total returns are derived from an income component and a capital appreciation/depreciation component. Shaded area reflects RERC’s outlook for the base case scenario for 2022, 2023 and 2024. Sources RERC, NCREIF, 2Q 2022.

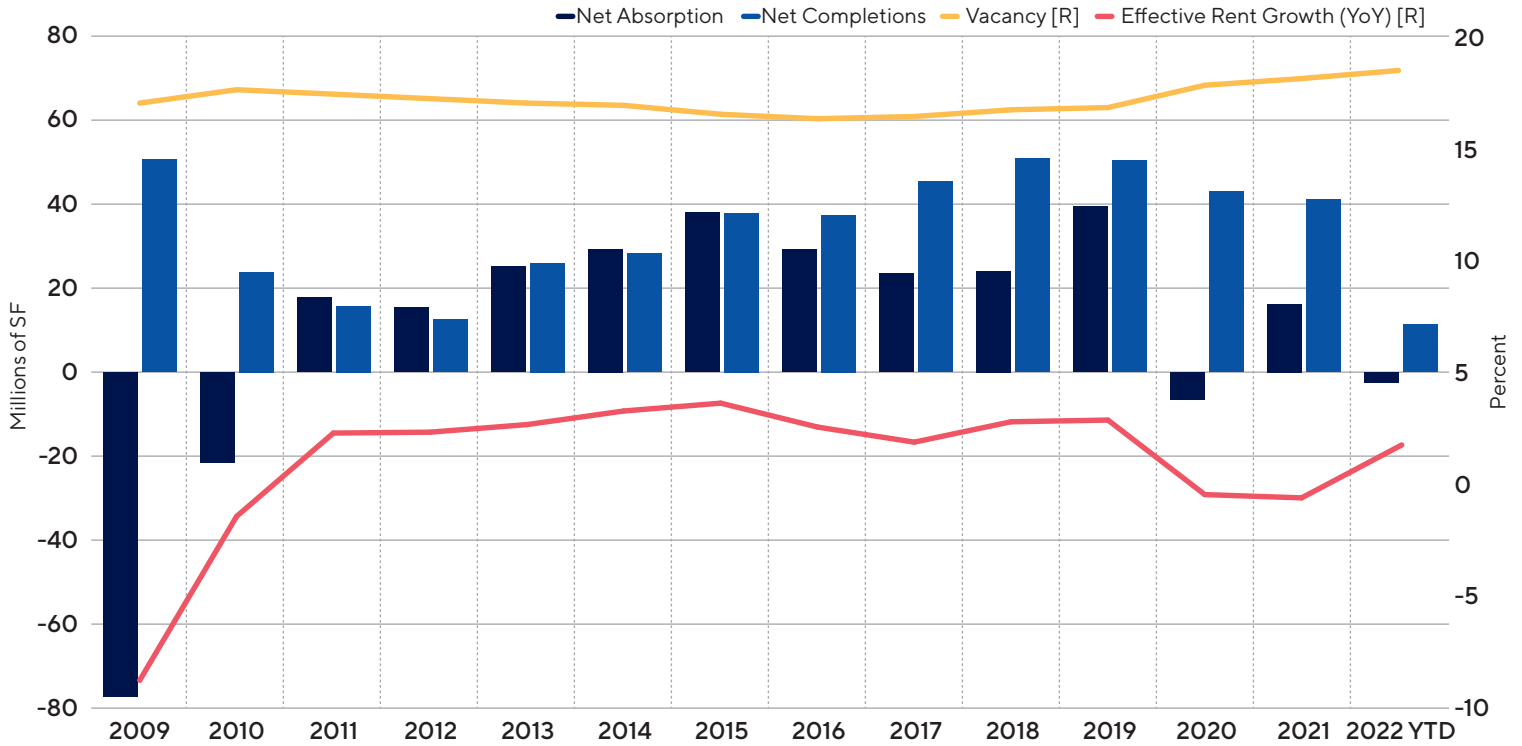
Total Return Forecast (Base Case Scenario) – Quarterly



The total return forecast is RERC’s proprietary model based on RERC data and data from NPI-ODCE and is for unleveraged, institutional-grade properties. Total returns are derived from an income component and a capital appreciation/depreciation component. Shaded area reflects RERC’s outlook for the base case scenario for 2022, 2023 and 2024.  
**Sources** RERC, NCREIF, 2Q 2022.

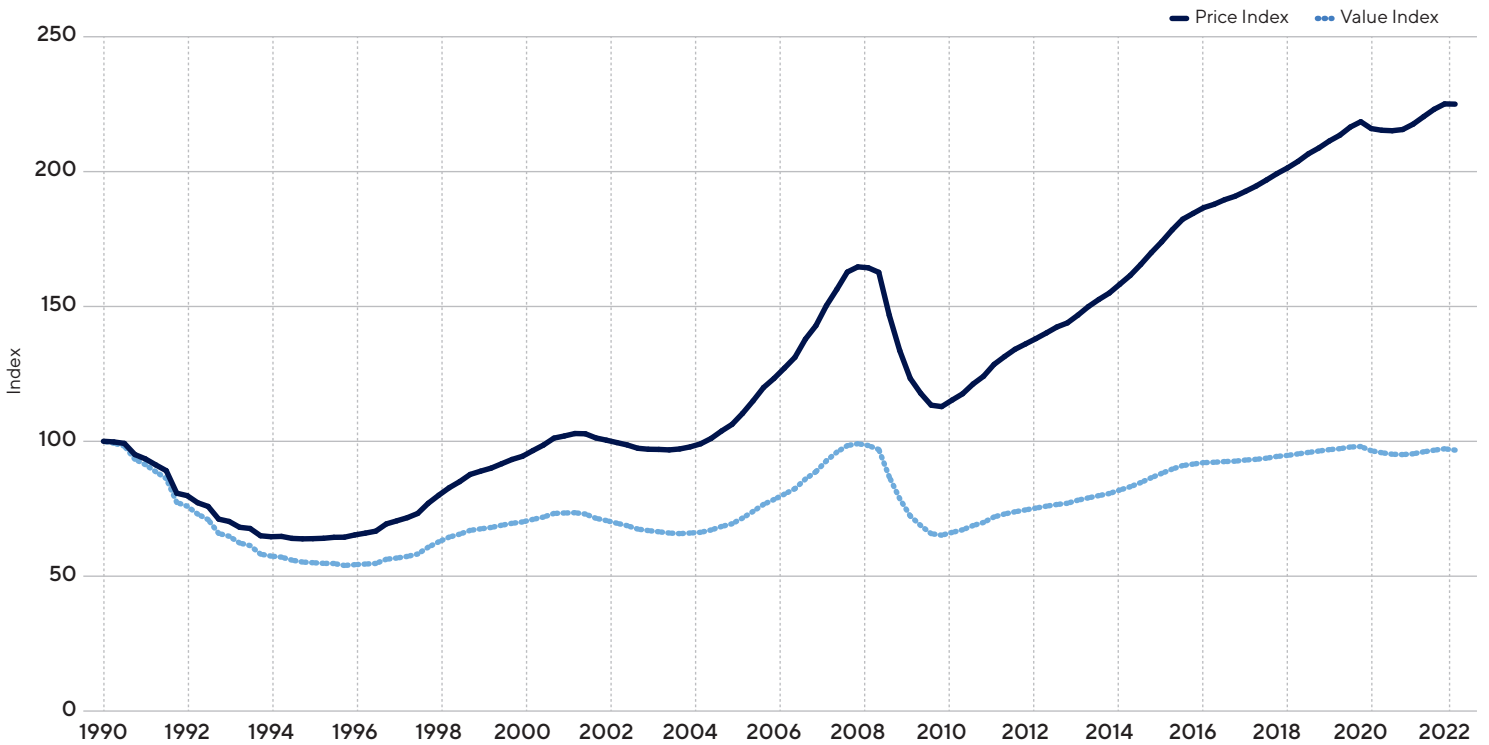


### Office Fundamentals



Source Reis, 2Q 2022.

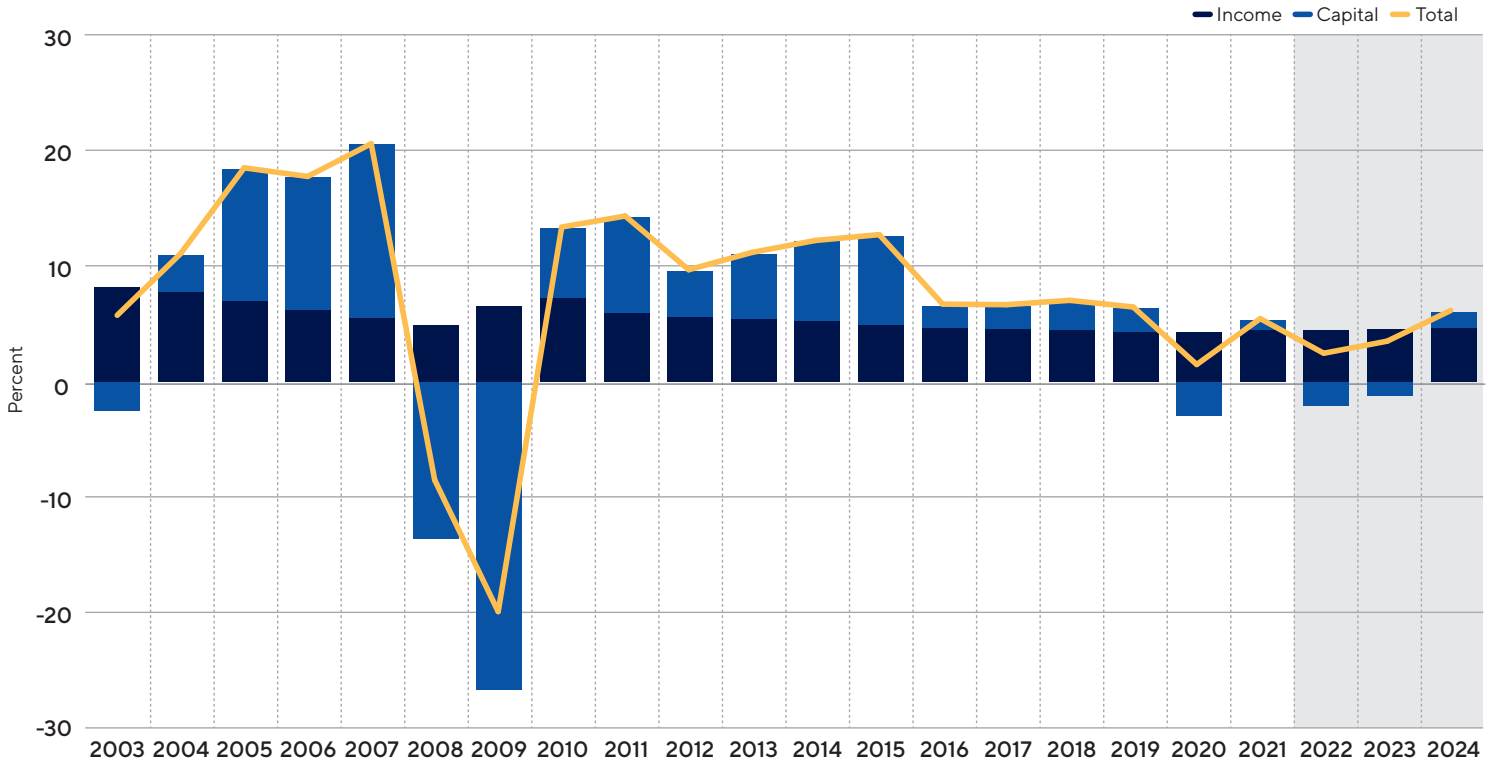
### Office Price and Value Indexes



Price index combines capital expenditures and capital returns. Value index represents capital returns only.

Sources RERC, NCREIF, 2Q 2022.

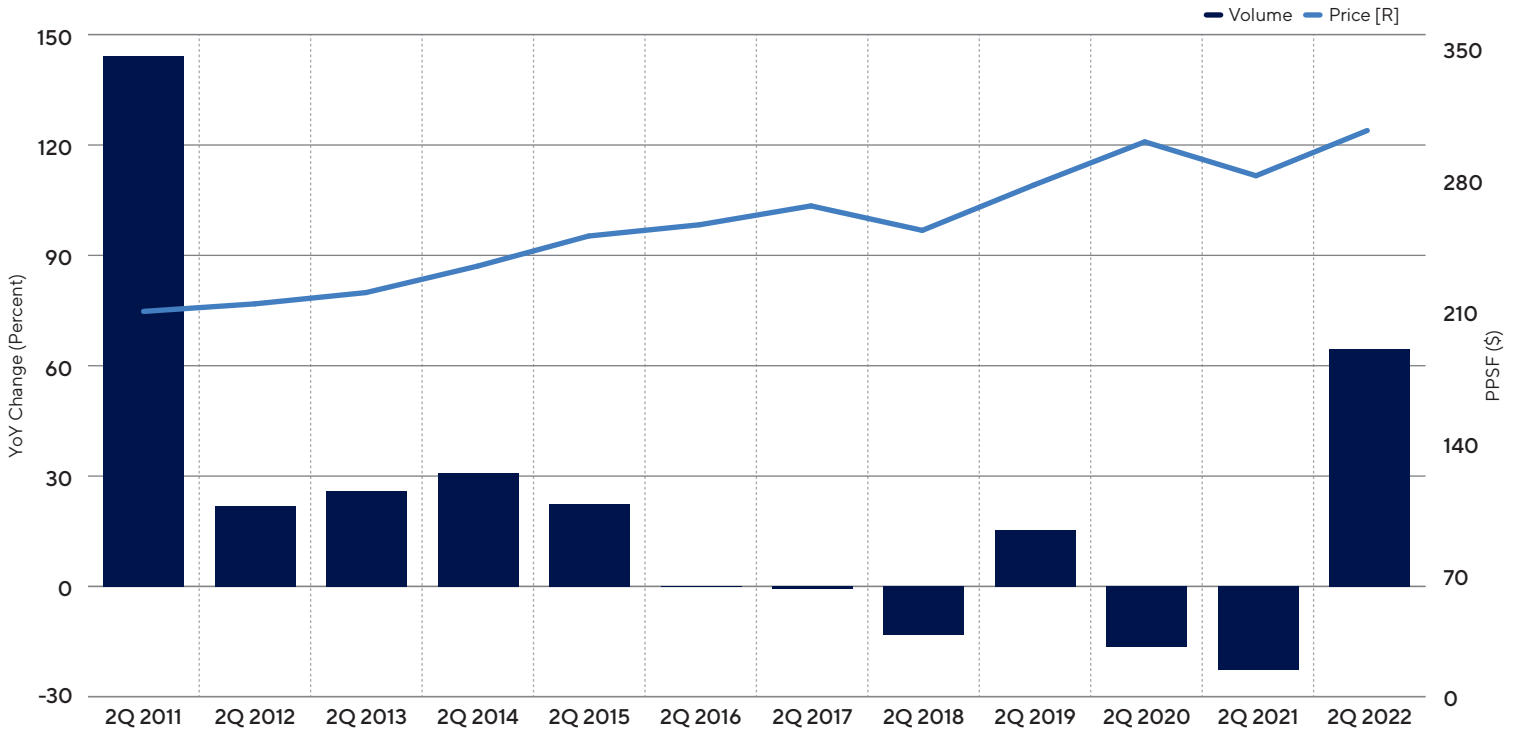
Total Return Forecast – Office (Base Case Scenario)



The total return forecast is RERC’s proprietary model based on RERC data and data from NPI-ODCE and is for unleveraged, institutional-grade properties. Shaded area reflects RERC’s outlook for the base case scenario for 2022, 2023 and 2024.

Sources RERC, NCREIF, 2Q 2022.

RCA Transaction Volume<sup>1</sup> and Price<sup>2</sup> – Office

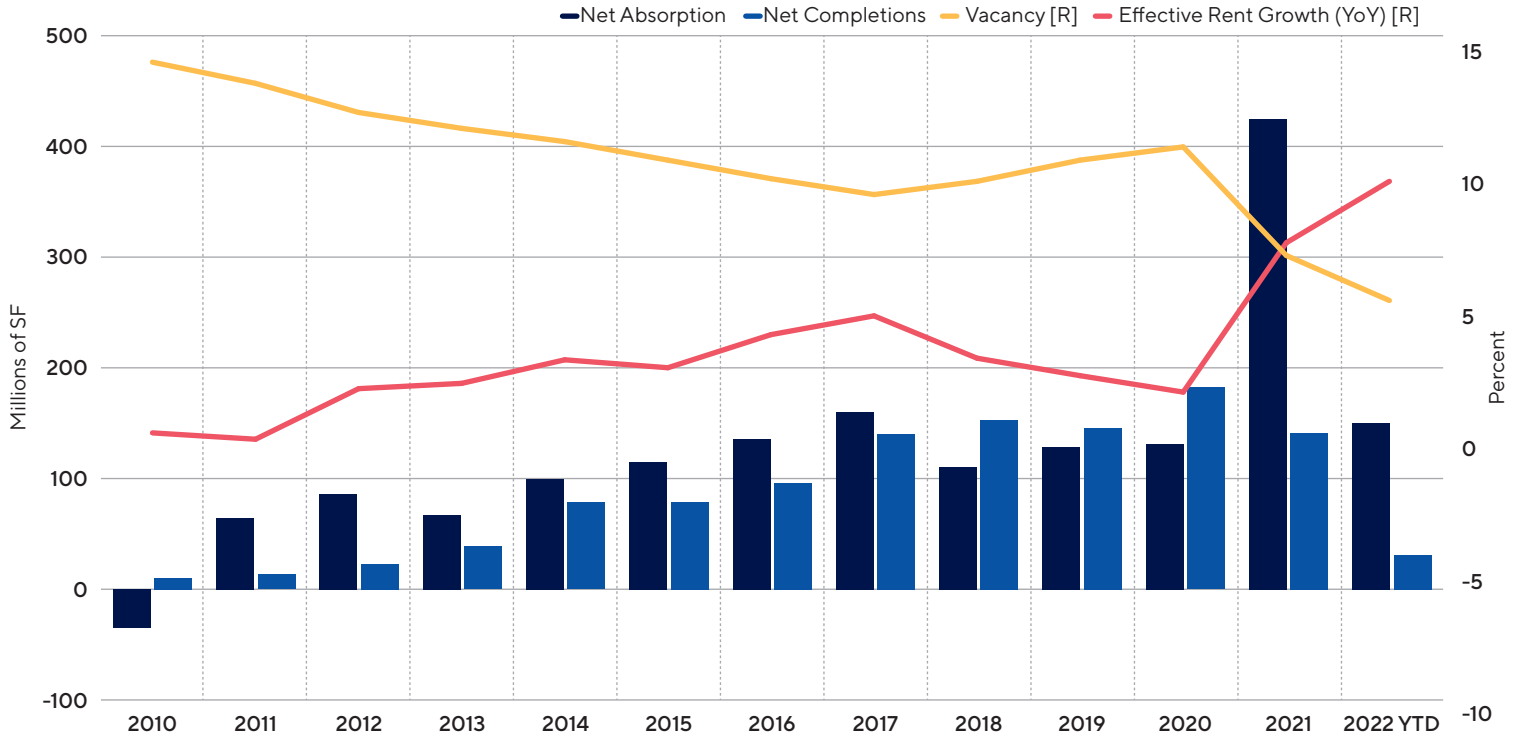


<sup>1</sup>Indicates year-over-year trailing 12 months data provided by RCA.

<sup>2</sup>Indicates average trailing 12 months data provided by RCA.

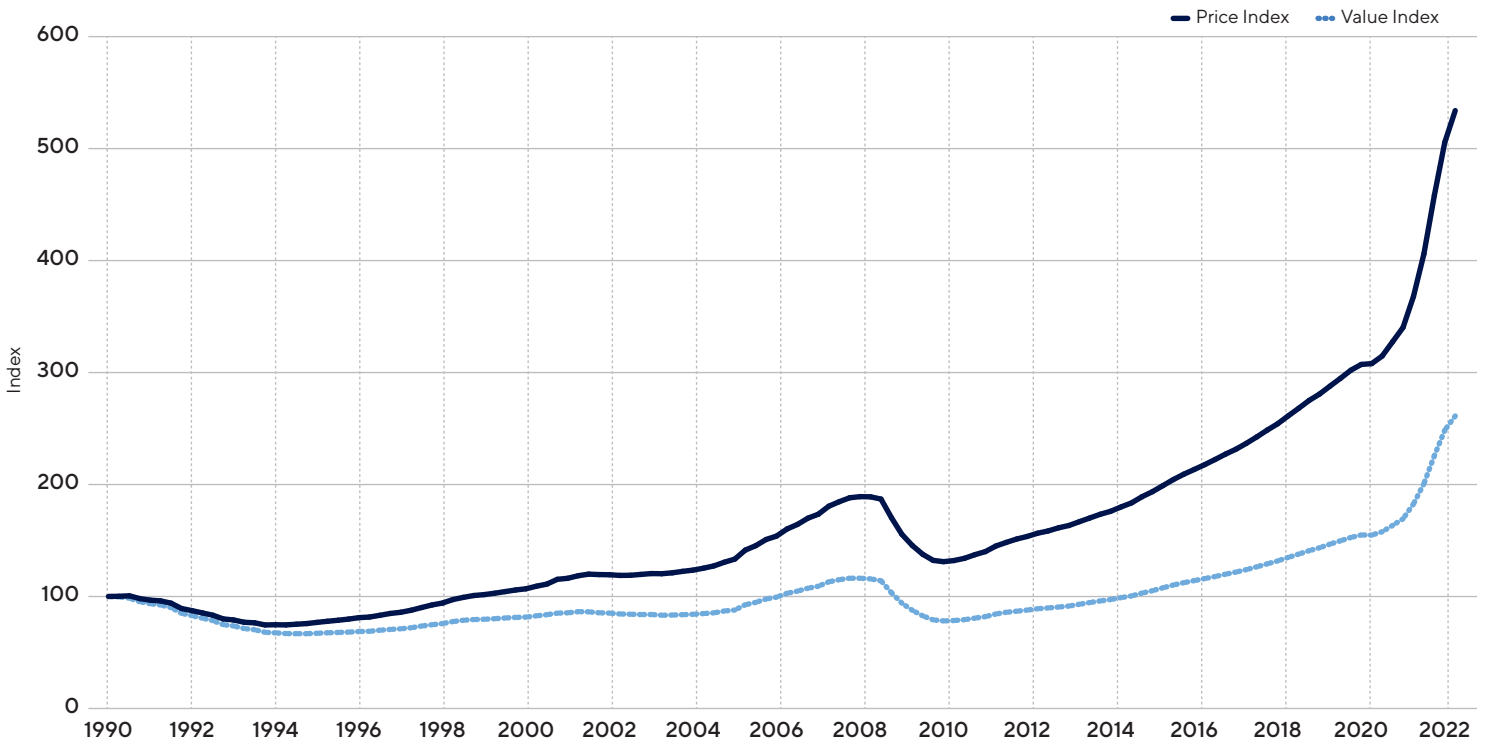
Source RCA, 2Q 2022.

### Industrial Fundamentals



Source Reis, 2Q 2022.

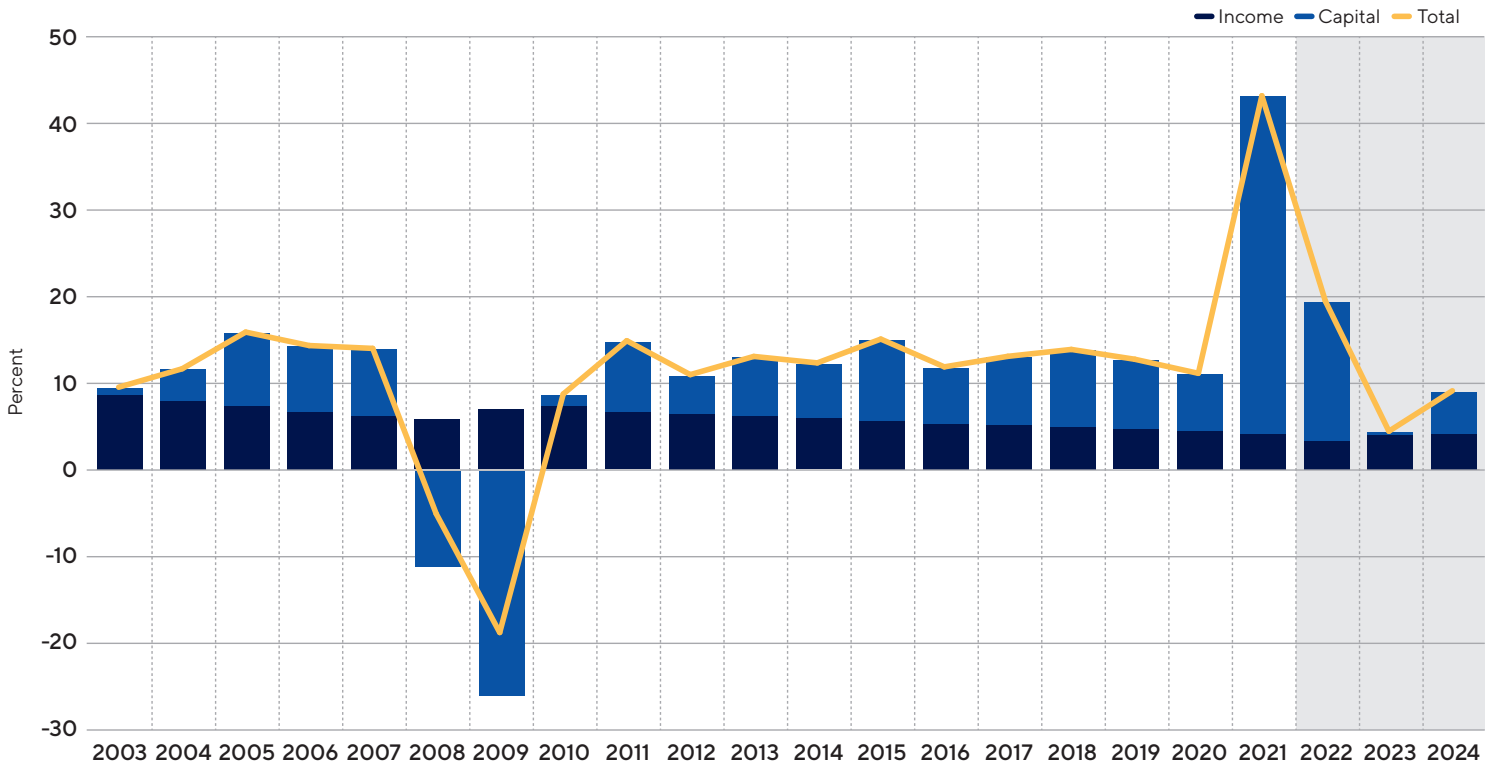
### Industrial Price and Value Indexes



Price index combines capital expenditures and capital returns. Value index represents capital returns only.

Sources RERC, NCREIF, 2Q 2022.

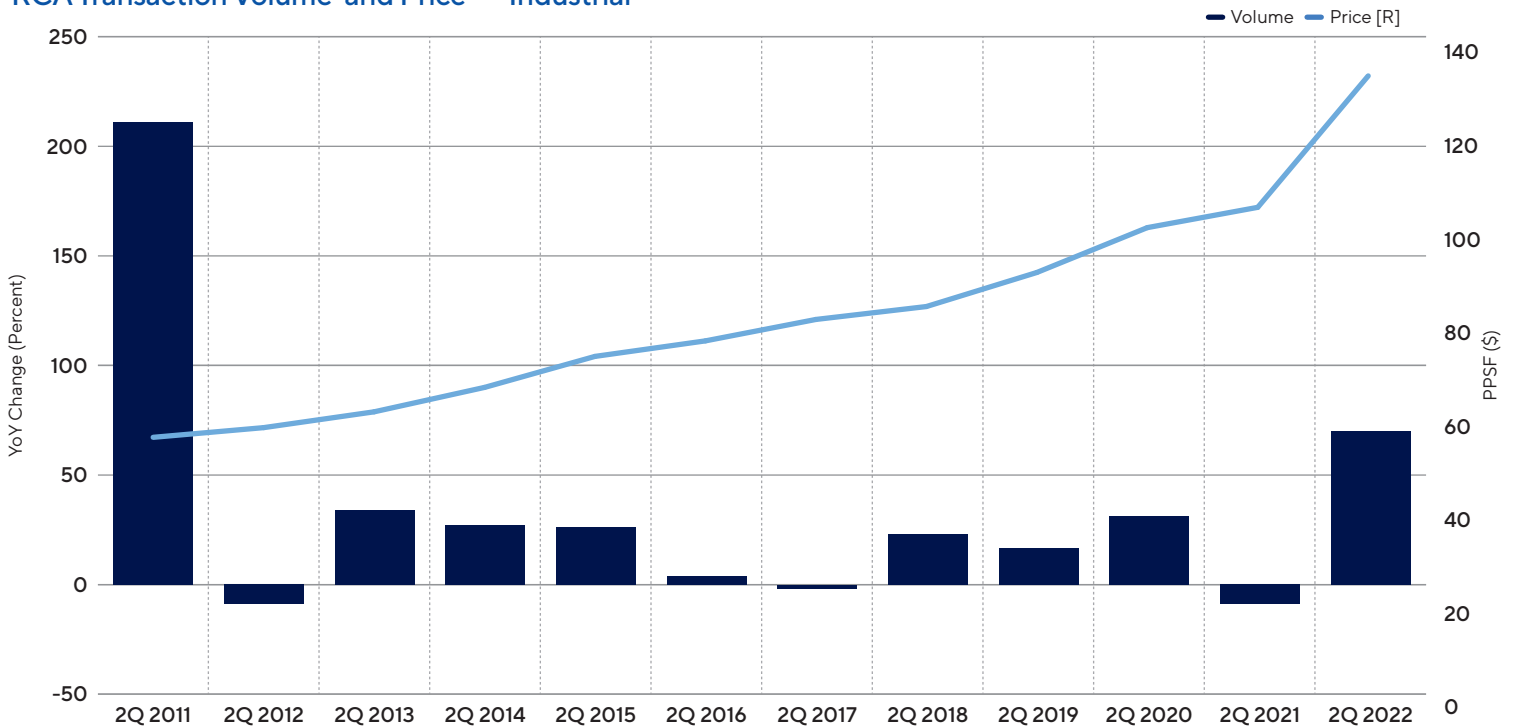
### Total Return Forecast – Industrial (Base Case Scenario)



The total return forecast is RERC’s proprietary model based on RERC data and data from NPI-ODCE and is for unleveraged, institutional-grade properties. Shaded area reflects RERC’s outlook for the base case scenario for 2022, 2023 and 2024.

Sources RERC, NCREIF, 2Q 2022.

### RCA Transaction Volume<sup>1</sup> and Price<sup>2</sup> – Industrial

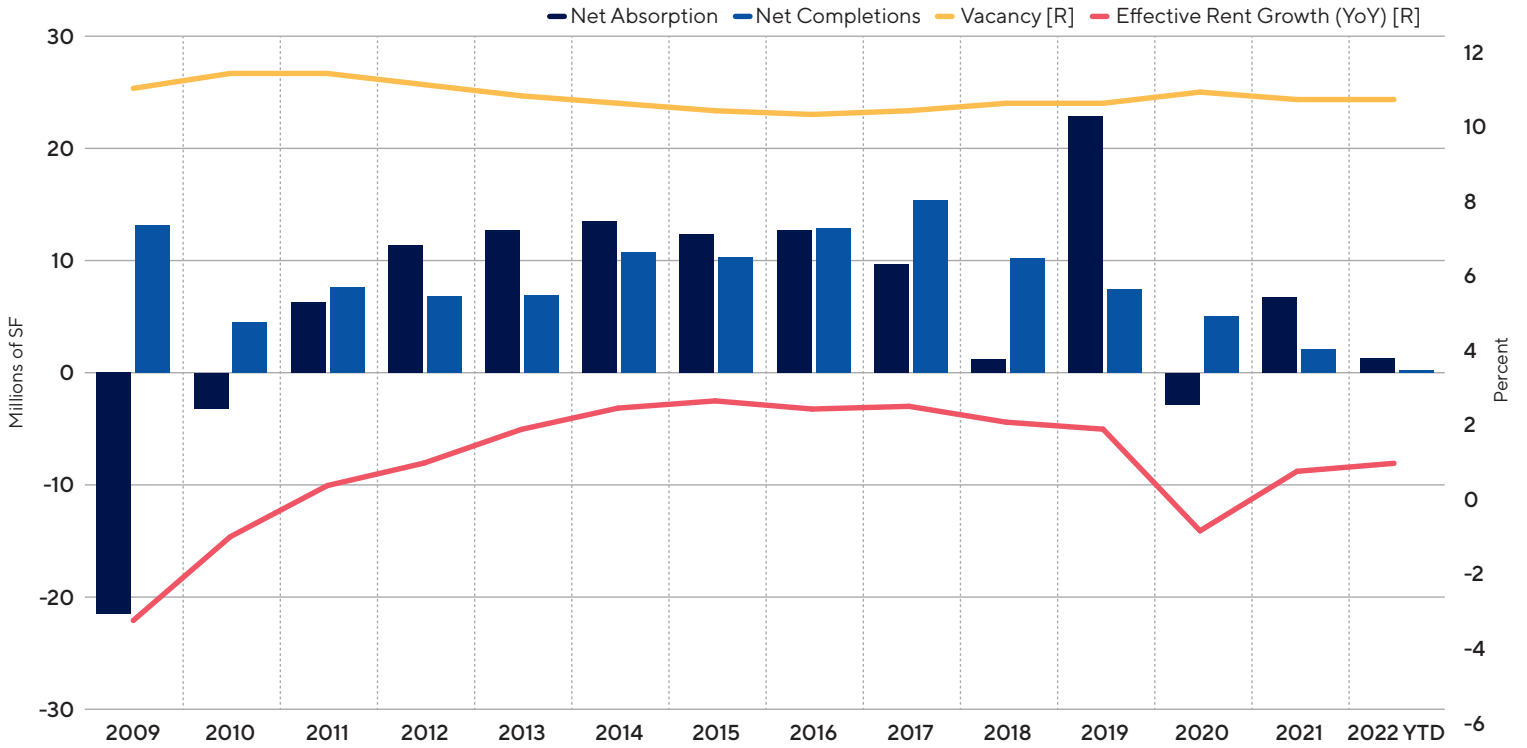


<sup>1</sup>Indicates year-over-year trailing 12 months data provided by RCA.

<sup>2</sup>Indicates average trailing 12 months data provided by RCA.

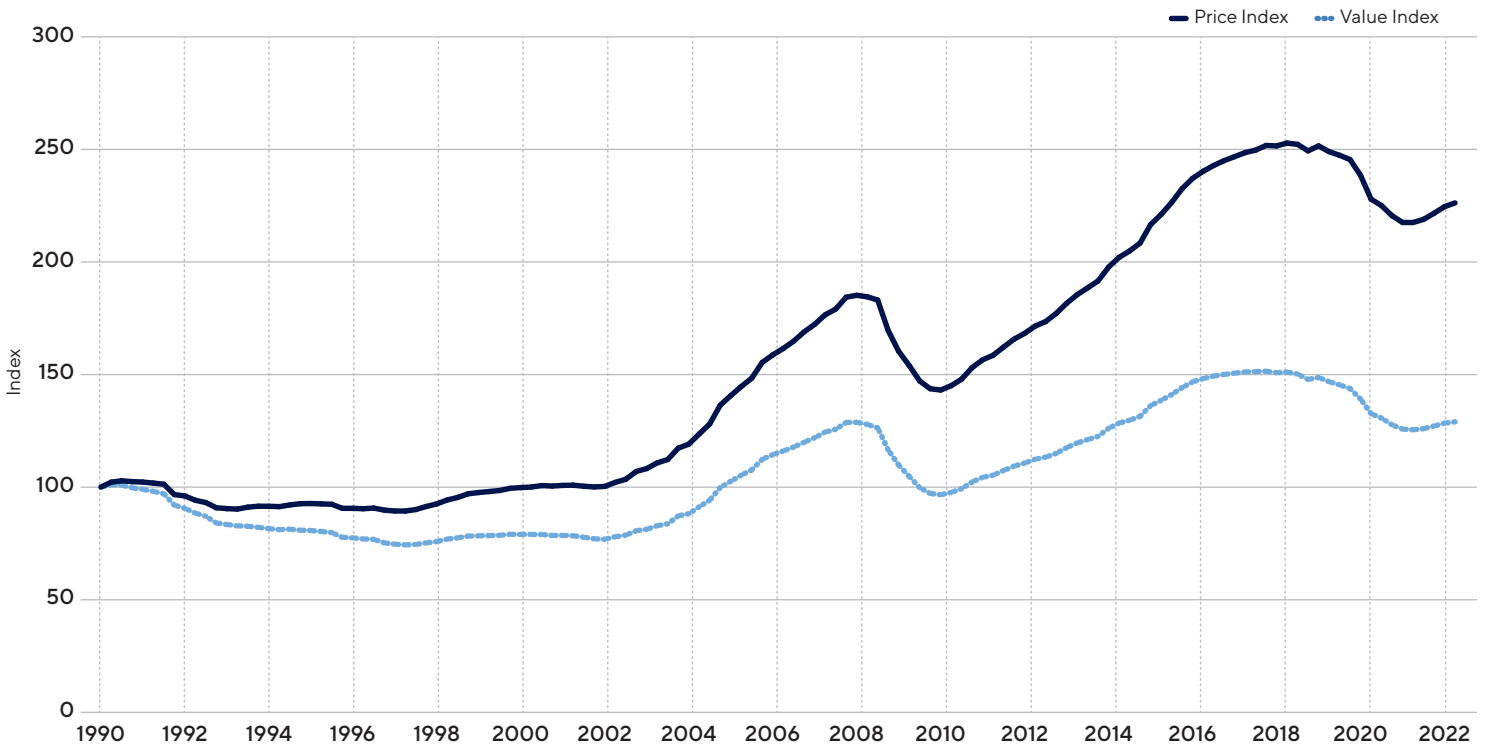
Source RCA, 2Q 2022.

### Retail Fundamentals



Source Reis, 2Q 2022.

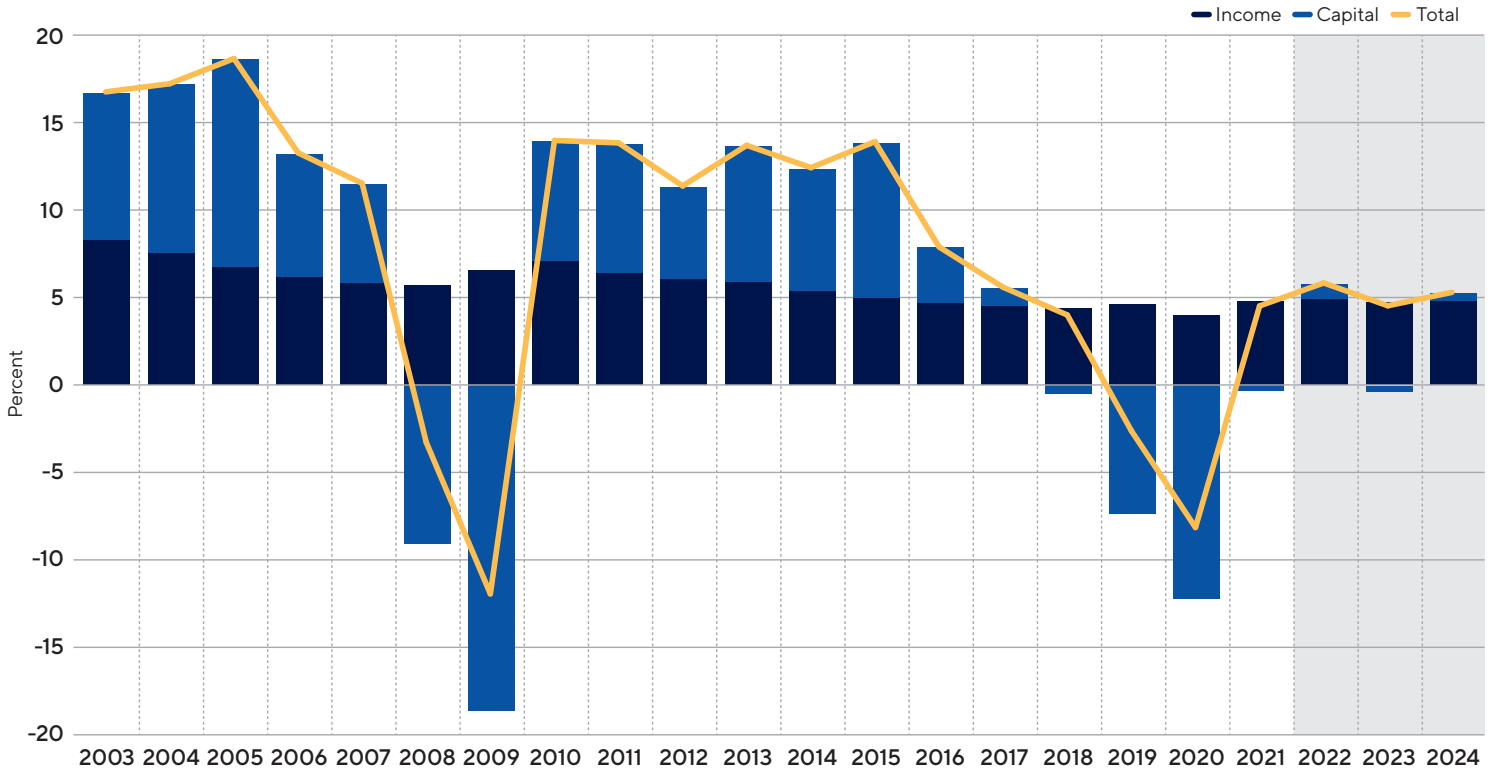
### Retail Price and Value Indexes



Price index combines capital expenditures and capital returns. Value index represents capital returns only.

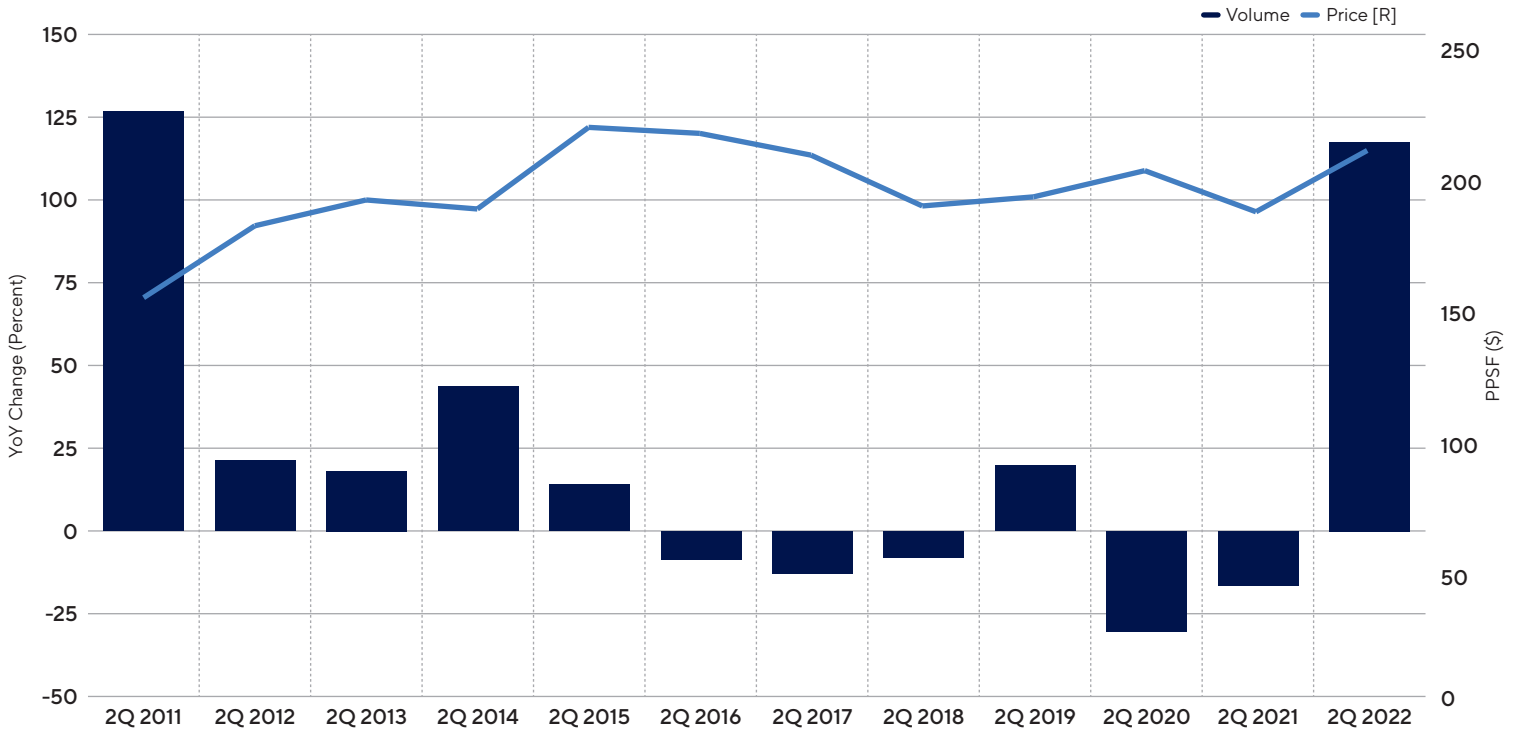
Sources RERC, NCREIF, 2Q 2022.

### Total Return Forecast – Retail (Base Case Scenario)



The total return forecast is RERC’s proprietary model based on RERC data and data from NPI-ODCE and is for unleveraged, institutional-grade properties. Shaded area reflects RERC’s outlook for the base case scenario for 2022, 2023 and 2024.  
**Sources** RERC, NCREIF, 2Q 2022.

### RCA Transaction Volume<sup>1</sup> and Price<sup>2</sup> – Retail



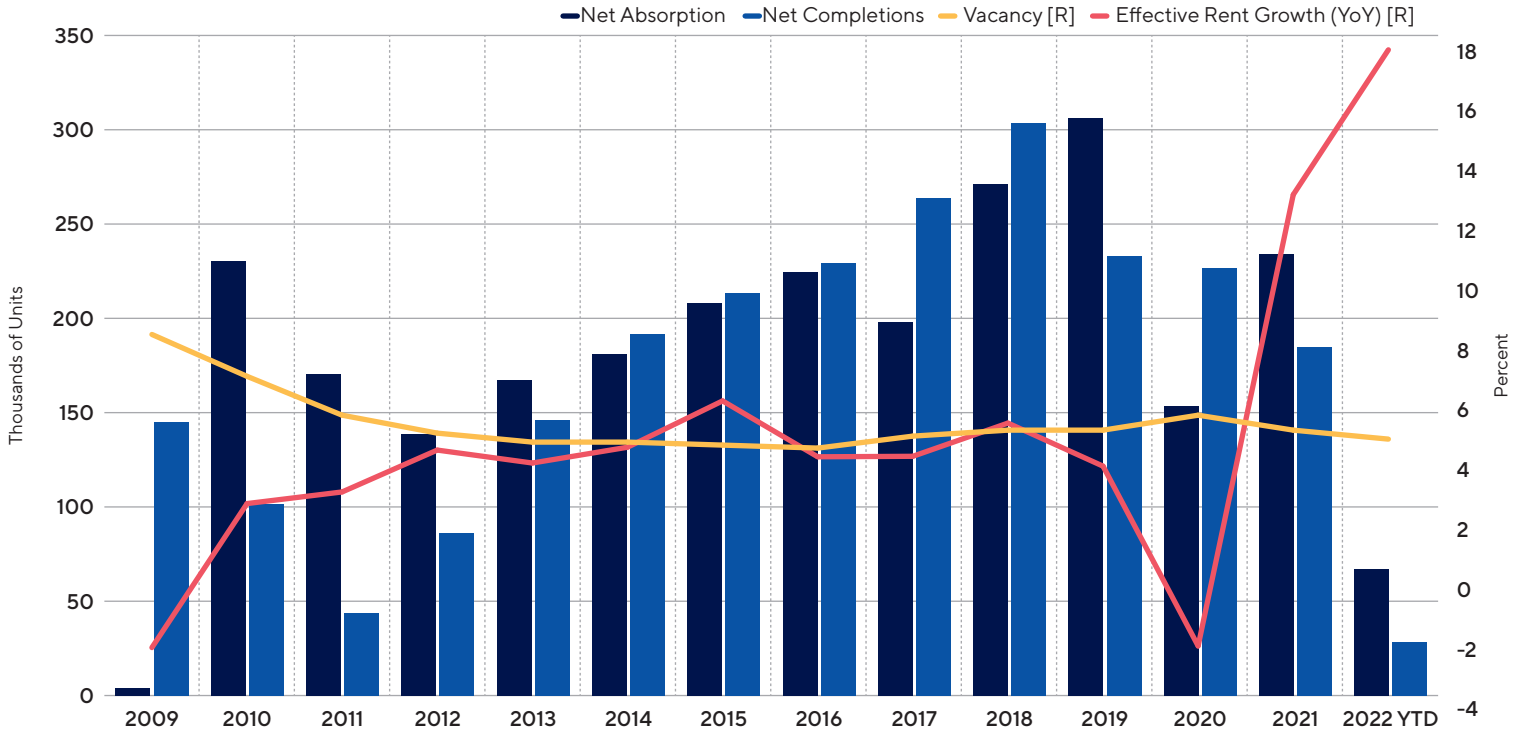
<sup>1</sup>Indicates year-over-year trailing 12 months data provided by RCA.

<sup>2</sup>Indicates average trailing 12 months data provided by RCA.

**Source** RCA, 2Q 2022.

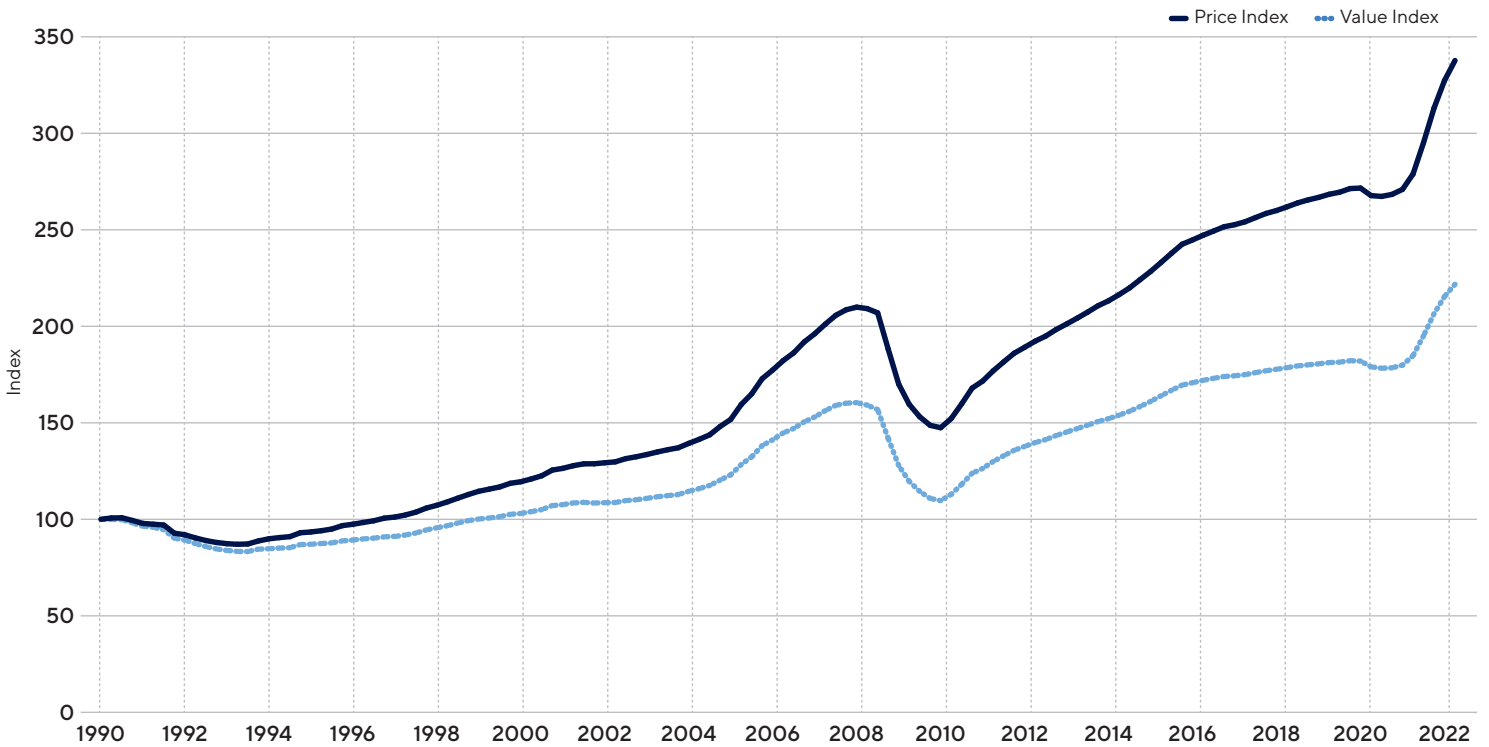


### Apartment Fundamentals



Source Reis, 2Q 2022.

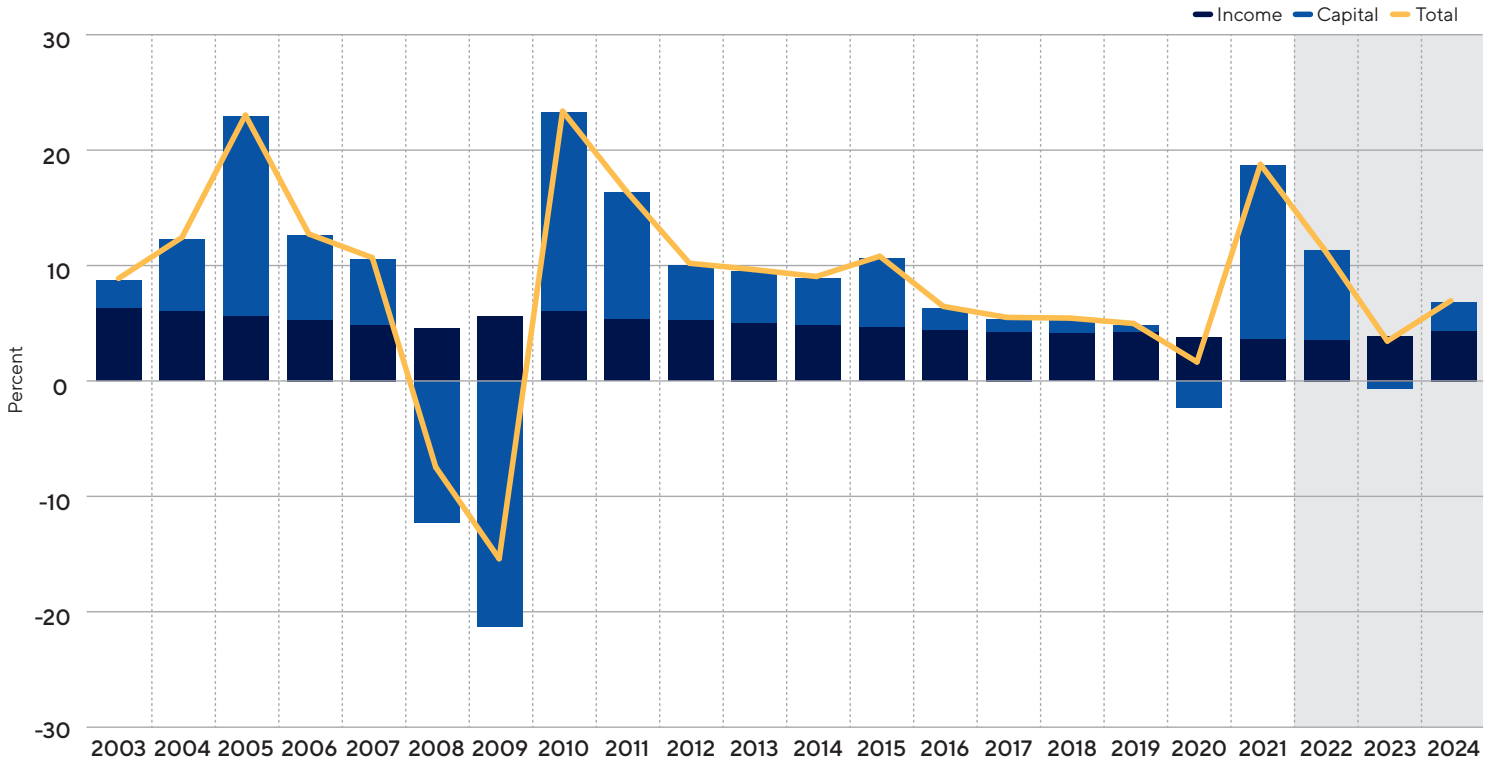
### Apartment Price and Value Indexes



Price index combines capital expenditures and capital returns. Value index represents capital returns only.

Sources RERC, NCREIF, 2Q 2022.

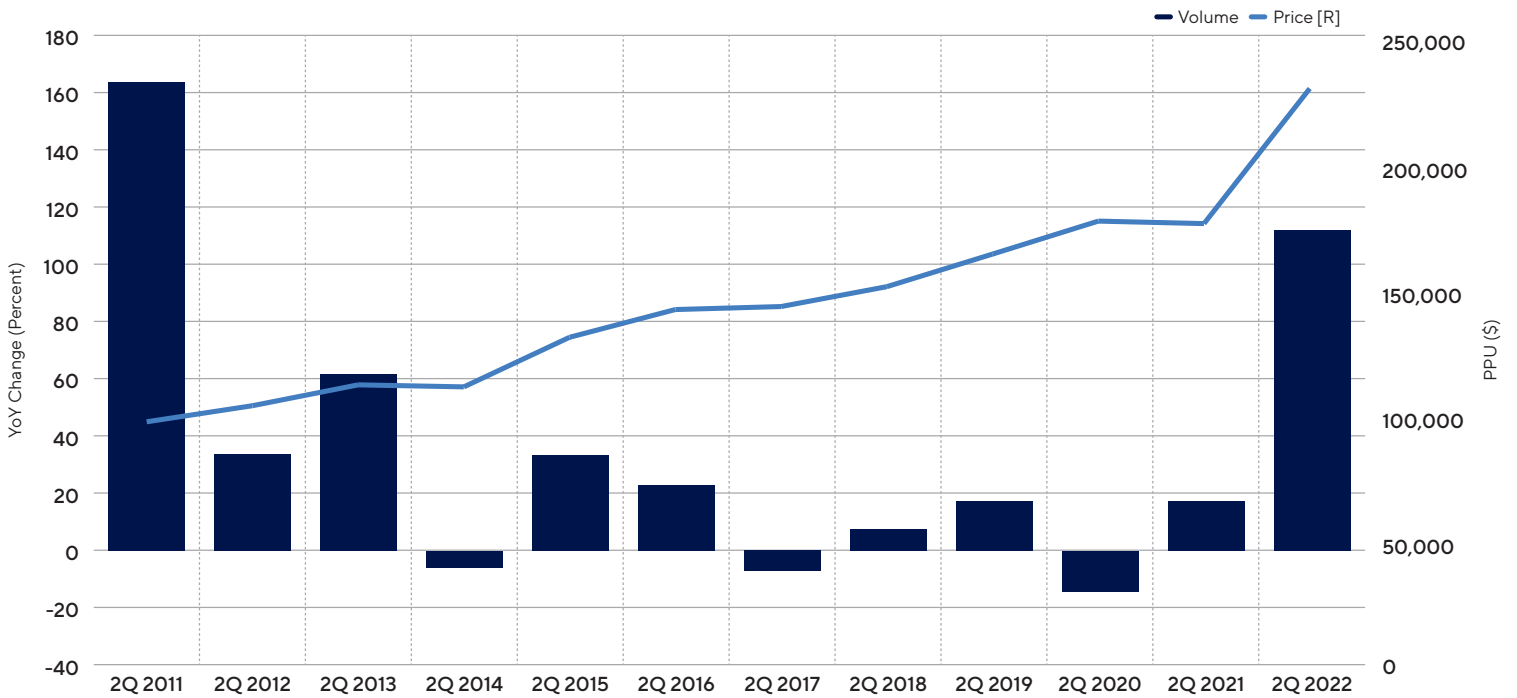
### Total Return Forecast – Apartment (Base Case Scenario)



The total return forecast is RERC’s proprietary model based on RERC data and data from NPI-ODCE and is for unleveraged, institutional-grade properties. Shaded area reflects RERC’s outlook for the base case scenario for 2022, 2023 and 2024.

Sources RERC, NCREIF, 2Q 2022.

### RCA Transaction Volume<sup>1</sup> and Price<sup>2</sup> – Apartment

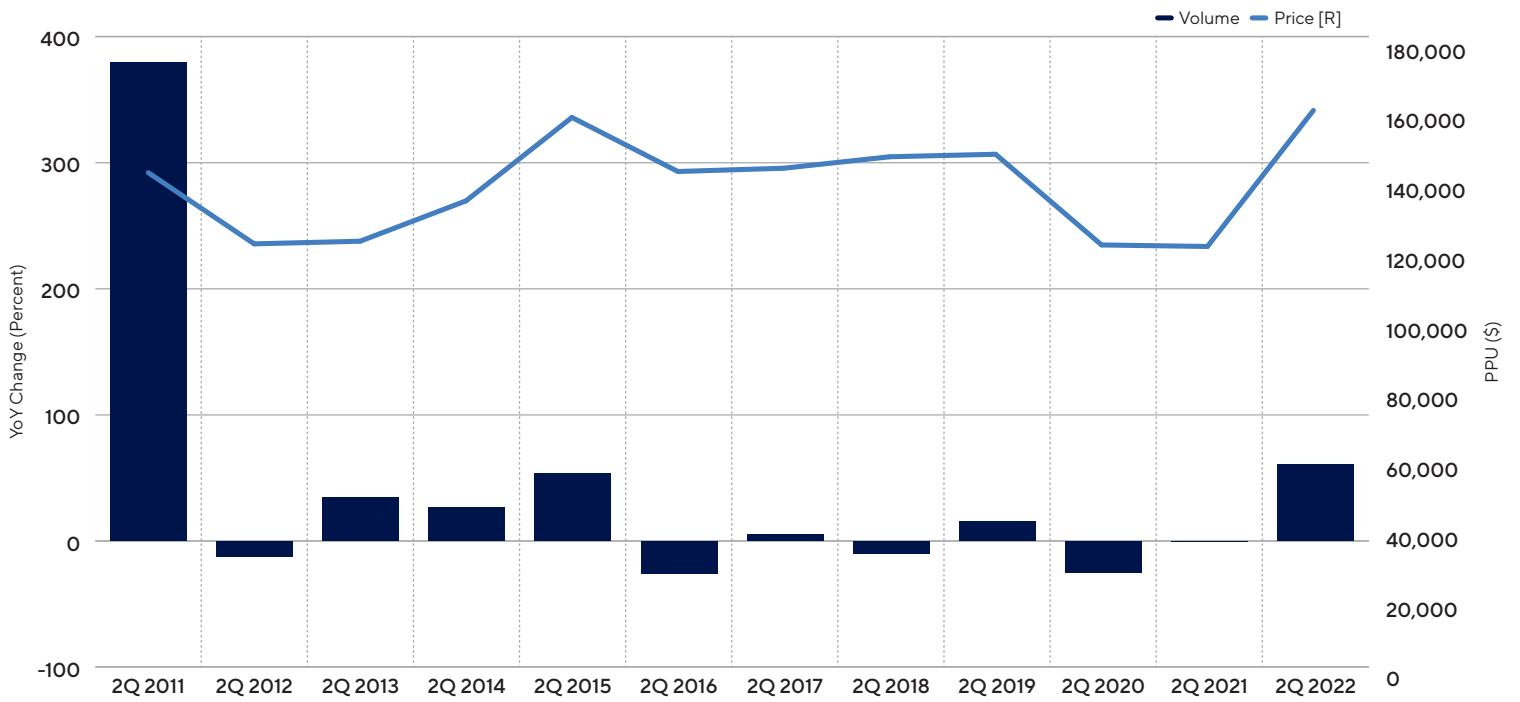


<sup>1</sup>Indicates year-over-year trailing 12 months data provided by RCA.

<sup>2</sup>Indicates average trailing 12 months data provided by RCA.

Source RCA, 2Q 2022.

### RCA Transaction Volume<sup>1</sup> and Price<sup>2</sup> – Hotel



<sup>1</sup>Indicates year-over-year trailing 12 months data provided by RCA.  
<sup>2</sup>Indicates average trailing 12 months data provided by RCA.  
**Source** RCA, 2Q 2022.



# 02 ValTrends by Region



# RERC REGIONAL INVESTMENT MONITOR

## WEST REGION

### Investment Recommendations



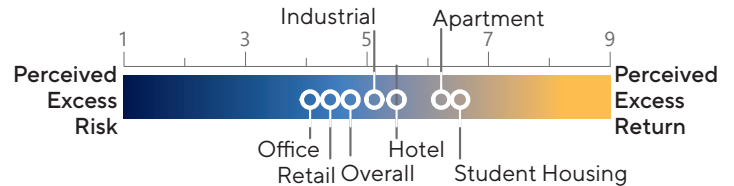
### Availability & Discipline of Equity Capital



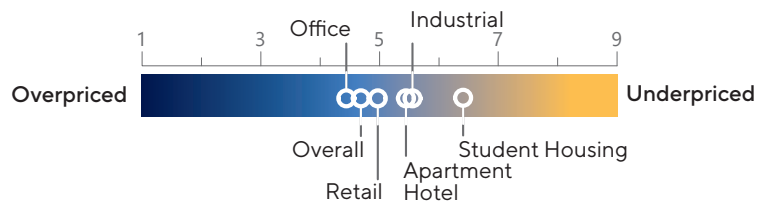
### RERC Investment Criteria – First-Tier Properties

	Pre-Tax Yield (%)	Going-In Cap Rate (%)	Terminal Cap Rate (%)
CBD	8.6	6.8	7.5
Suburban	8.8	7.1	7.7
Warehouse	7.6	5.9	6.9
R&D	8.2	6.7	7.4
Flex	8.2	6.6	7.3
Regional Mall	9.5	7.8	8.4
Power Center	8.4	7.3	8.1
Neigh/Comm	8.4	7.1	7.7
Apartment	7.0	5.1	6.0
Hotel	9.7	7.7	8.6
Average	8.4	6.8	7.6

### Perceived Relative Risk

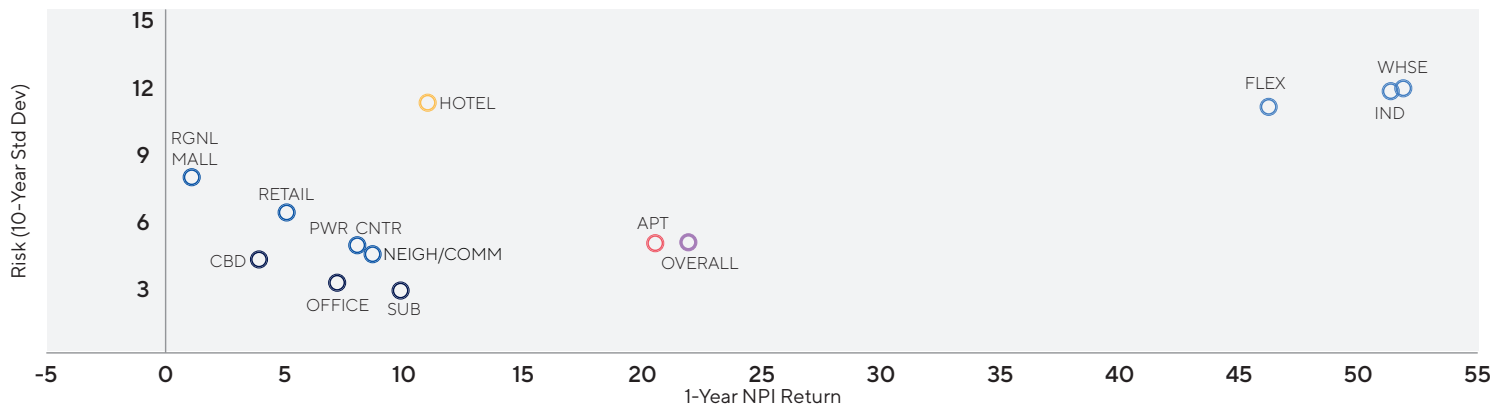


### Relative Value Sentiment



Investment recommendations represent the percentage of total respondents recommending buy, sell or hold. Availability & discipline of equity capital are rated on a scale of 1 to 10, with 10 being excellent. Perceived relative risk is rated on a scale of 1 to 10, with 10 indicating return far exceeds risk. Relative value sentiment is rated on a scale of 1 to 10, with 10 indicating that value far exceeds price. **Source** RERC, 2Q 2022.

### NPI Return and Risk

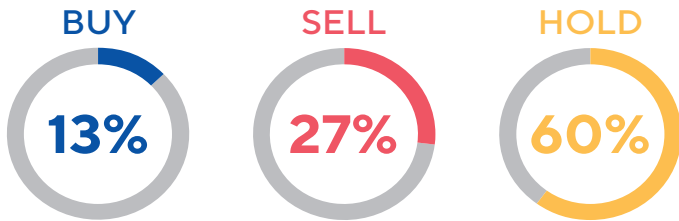


**Source** NCREIF, compiled by RERC, 2Q 2022.

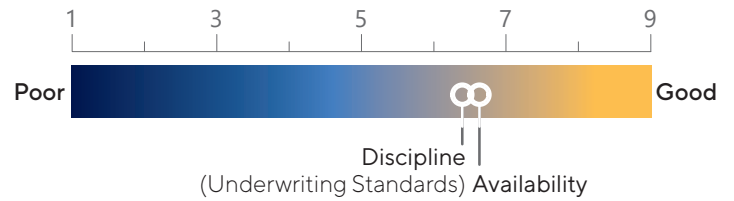
# RERC REGIONAL INVESTMENT MONITOR

## MIDWEST REGION

### Investment Recommendations



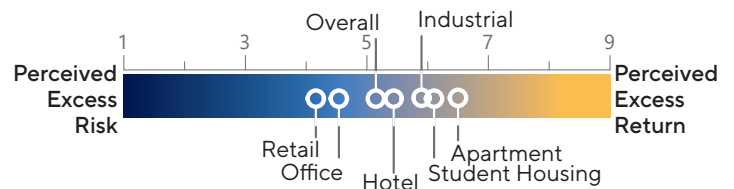
### Availability & Discipline of Equity Capital



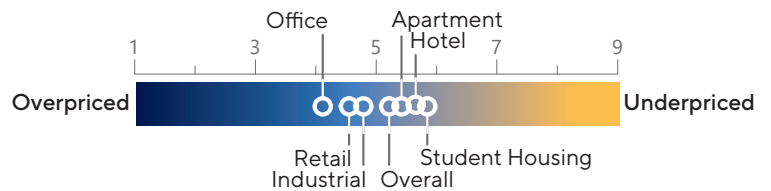
### RERC Investment Criteria – First-Tier Properties

	Pre-Tax Yield (%)	Going-In Cap Rate (%)	Terminal Cap Rate (%)
CBD	8.7	7.5	8.0
Suburban	8.9	7.7	8.1
Warehouse	7.8	6.4	6.8
R&D	8.3	7.0	7.7
Flex	8.6	7.1	7.7
Regional Mall	9.7	8.5	9.1
Power Center	8.8	8.2	8.7
Neigh/Comm	8.8	7.6	8.2
Apartment	7.1	5.6	6.3
Hotel	10.2	8.5	9.2
Average	8.7	7.4	8.0

### Perceived Relative Risk

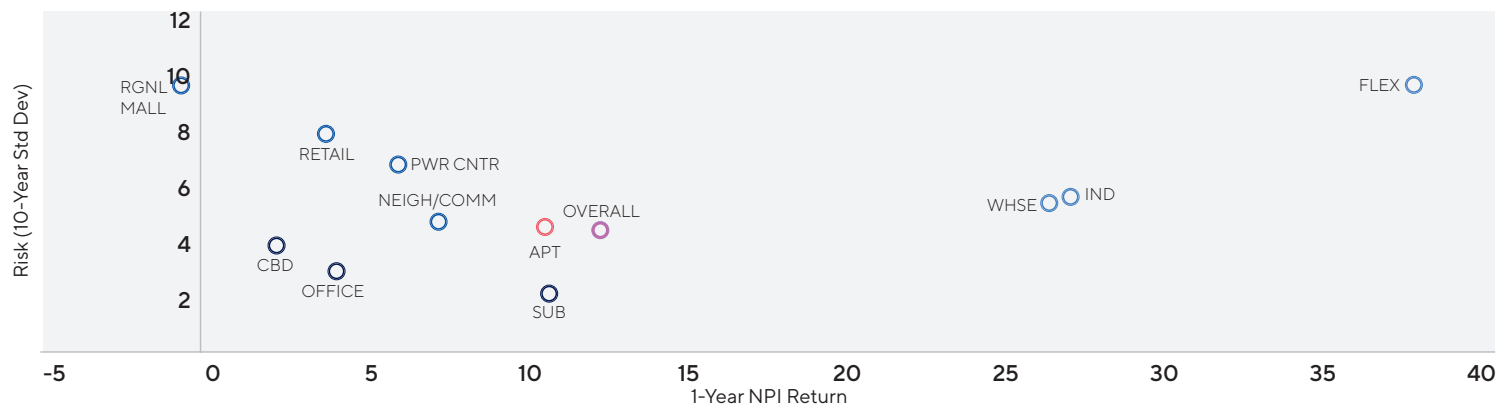


### Relative Value Sentiment



Investment recommendations represent the percentage of total respondents recommending buy, sell or hold. Availability & discipline of equity capital are rated on a scale of 1 to 10, with 10 being excellent. Perceived relative risk is rated on a scale of 1 to 10, with 10 indicating return far exceeds risk. Relative value sentiment is rated on a scale of 1 to 10, with 10 indicating that value far exceeds price. **Source** RERC, 2Q 2022.

### NPI Return and Risk

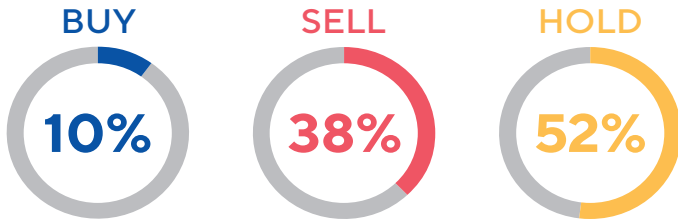


**Source** NCREIF, compiled by RERC, 2Q 2022.

# RERC REGIONAL INVESTMENT MONITOR

## SOUTH REGION

### Investment Recommendations



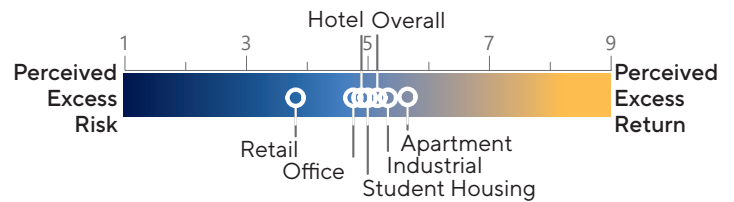
### Availability & Discipline of Equity Capital



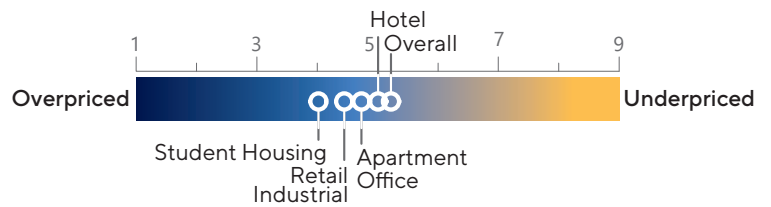
### RERC Investment Criteria – First-Tier Properties

	Pre-Tax Yield (%)	Going-In Cap Rate (%)	Terminal Cap Rate (%)
CBD	8.8	7.0	7.7
Suburban	8.9	7.2	7.8
Warehouse	7.9	6.2	6.8
R&D	8.3	7.1	7.5
Flex	8.5	6.9	7.5
Regional Mall	9.4	8.2	8.5
Power Center	8.7	7.5	7.9
Neigh/Comm	8.5	7.2	7.6
Apartment	6.9	5.4	5.7
Hotel	10.1	8.4	8.9
Average	8.6	7.1	7.6

### Perceived Relative Risk

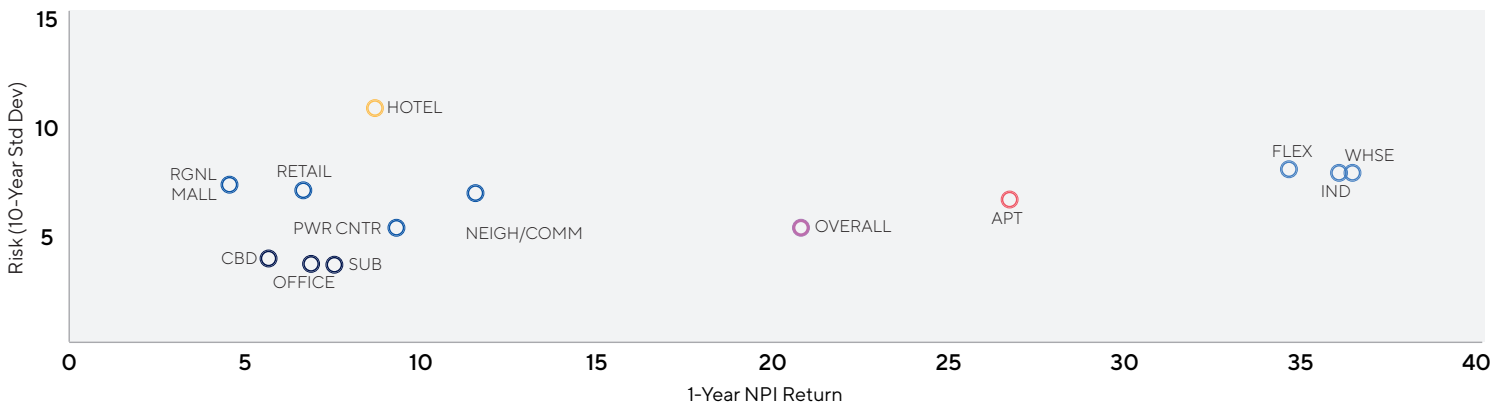


### Relative Value Sentiment



Investment recommendations represent the percentage of total respondents recommending buy, sell or hold. Availability & discipline of equity capital are rated on a scale of 1 to 10, with 10 being excellent. Perceived relative risk is rated on a scale of 1 to 10, with 10 indicating return far exceeds risk. Relative value sentiment is rated on a scale of 1 to 10, with 10 indicating that value far exceeds price. **Source** RERC, 2Q 2022.

### NPI Return and Risk

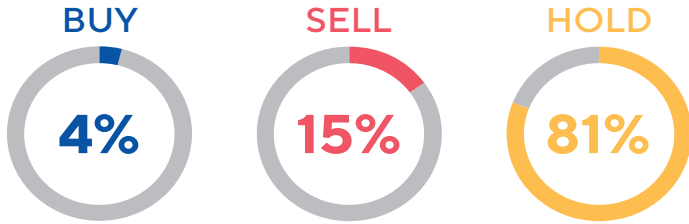


**Source** NCREIF, compiled by RERC, 2Q 2022.

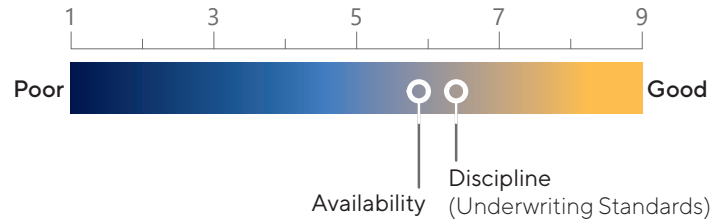
# RERC REGIONAL INVESTMENT MONITOR

## EAST REGION

### Investment Recommendations



### Availability & Discipline of Equity Capital

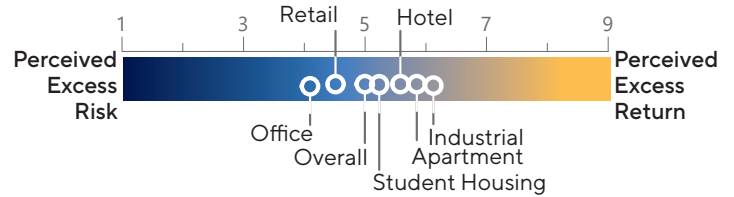


### RERC Investment Criteria – First-Tier Properties

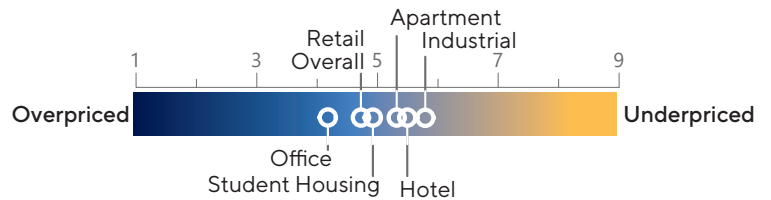
	Pre-Tax Yield (%)	Going-In Cap Rate (%)	Terminal Cap Rate (%)
CBD	8.8	7.3	7.8
Suburban	9.0	7.4	7.9
Warehouse	7.3	5.9	6.7
R&D	8.2	7.0	7.6
Flex	8.4	7.1	7.6
Regional Mall	9.8	8.5	9.1
Power Center	9.0	7.5	8.2
Neigh/Comm	8.8	7.4	7.9
Apartment	6.8	5.2	5.9
Hotel	9.8	8.3	8.9
Average	8.6	7.2	7.8

Source RERC, 2Q 2022.

### Perceived Relative Risk

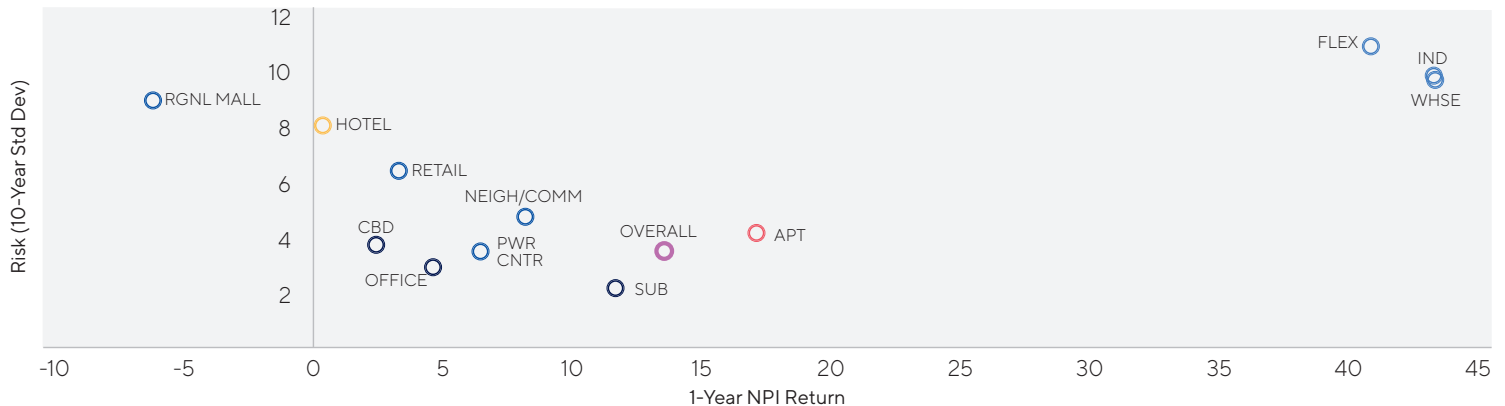


### Relative Value Sentiment



Investment recommendations represent the percentage of total respondents recommending buy, sell or hold. Availability & discipline of equity capital are rated on a scale of 1 to 10, with 10 being excellent. Perceived relative risk is rated on a scale of 1 to 10, with 10 indicating return far exceeds risk. Relative value sentiment is rated on a scale of 1 to 10, with 10 indicating that value far exceeds price. Source RERC, 2Q 2022.

### NPI Return and Risk



Source NCREIF, compiled by RERC, 2Q 2022.



### METRO INVESTMENT OUTLOOK



	Apartment		Industrial		Office		Retail	
	2Q 2022	1Q 2022	2Q 2022	1Q 2022	2Q 2022	1Q 2022	2Q 2022	1Q 2022
Atlanta	1	1	1	1	5	5	5	5
Austin	1	1	2	1	6	4	5	4
Baltimore	2	2	1	1	5	5	5	5
Boston	1	1	1	1	5	5	5	5
Central NJ	1	2	1	1	4	5	5	5
Charlotte	1	1	1	1	4	3	5	5
Chicago	2	2	1	1	5	5	5	5
Cincinnati	2	1	1	1	6	6	5	5
Cleveland	1	2	1	1	5	5	5	5
Columbus	1	1	1	1	6	5	5	5
Dallas	1	1	1	1	4	4	5	4
Denver	2	1	1	1	5	5	5	5
Detroit	3	3	1	1	6	6	5	5
Fort Lauderdale	1	1	1	1	5	4	5	5
Fort Worth	1	1	1	1	5	4	5	5
Houston	1	1	1	1	6	5	5	5
Indianapolis	1	1	1	1	4	5	5	5
Jacksonville	3	1	1	1	5	5	5	5
Kansas City	1	1	1	1	5	5	5	6
Las Vegas	2	1			6	5	5	5
Long Island	2	3	1	1	5	5	5	5
Los Angeles	1	1	1	1	5	5	5	5
Memphis	3	1	1	1	5	5	5	5
Miami	1	1	1	1	5	5	5	5
Milwaukee	2	1			6	6	5	5
Minneapolis	4	2	1	1	5	4	5	5
Nashville	3	1	1	1	5	5	5	5
New York City	1	1			6	6		
Northern NJ	3	3	1	1	5	5	5	5
Northern Virginia	2	2	1	1	6	6	5	5
Oakland-East Bay	3	3	1	1	5	5	5	4
Orange County	1	1	1	1	5	4	5	4
Orlando	1	1	1	1	6	5	5	4
Palm Beach	1	1	1	1	4	4	5	5
Philadelphia	2	1	1	1	6	5	5	5
Phoenix	1	1	2	1	6	5	5	5
Pittsburgh	2	1	1	1	6	6	5	5
Portland	1	1	1	1	6	5	5	4
Raleigh-Durham	1	1	1	1	6	4	5	4
Riverside-San Bernardino	1	1	1	1	4	3	5	5
Sacramento	1	1	1	1	6	5	5	5
Salt Lake City	2	2			6	6	5	5
San Antonio	2	2	2	1	5	5	5	5
San Diego	1	1	1	1	6	5	5	4
San Francisco	1	1	2	2	6	6	5	4
San Jose	1	1	1	1	6	5	5	4
Seattle	1	1	1	1	6	5	5	4
St. Louis	1	1	1	1	6	4	5	5
Suburban Maryland	2	2	1	1	6	5	5	5
Tampa	1	1	1	1	6	5	5	5
Washington, D.C.	2	1			5	5		

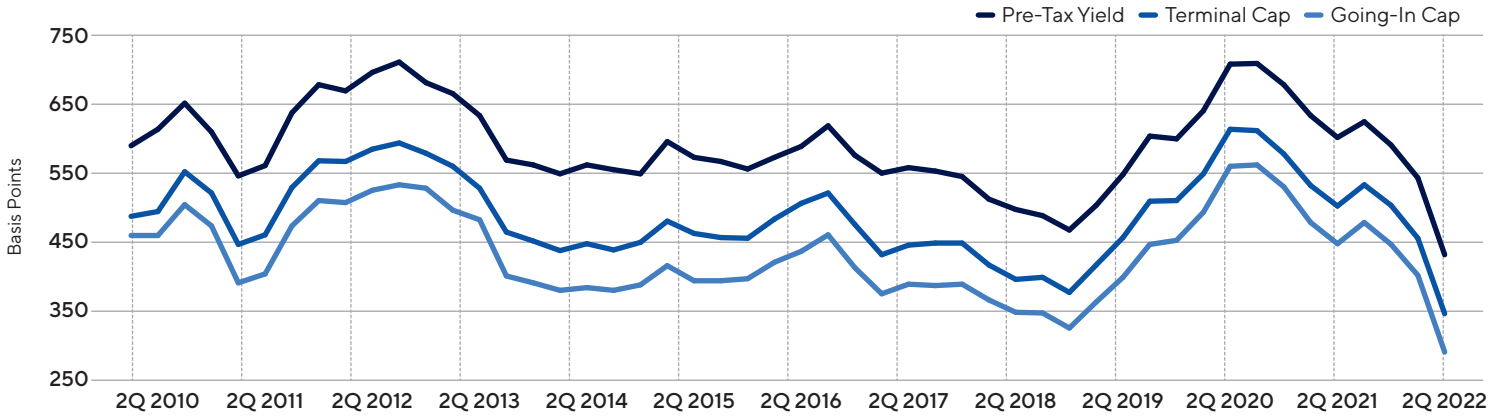
Source RERC, SitusAMC Insights, 2Q 2022.

# 03 RERC Expected Returns



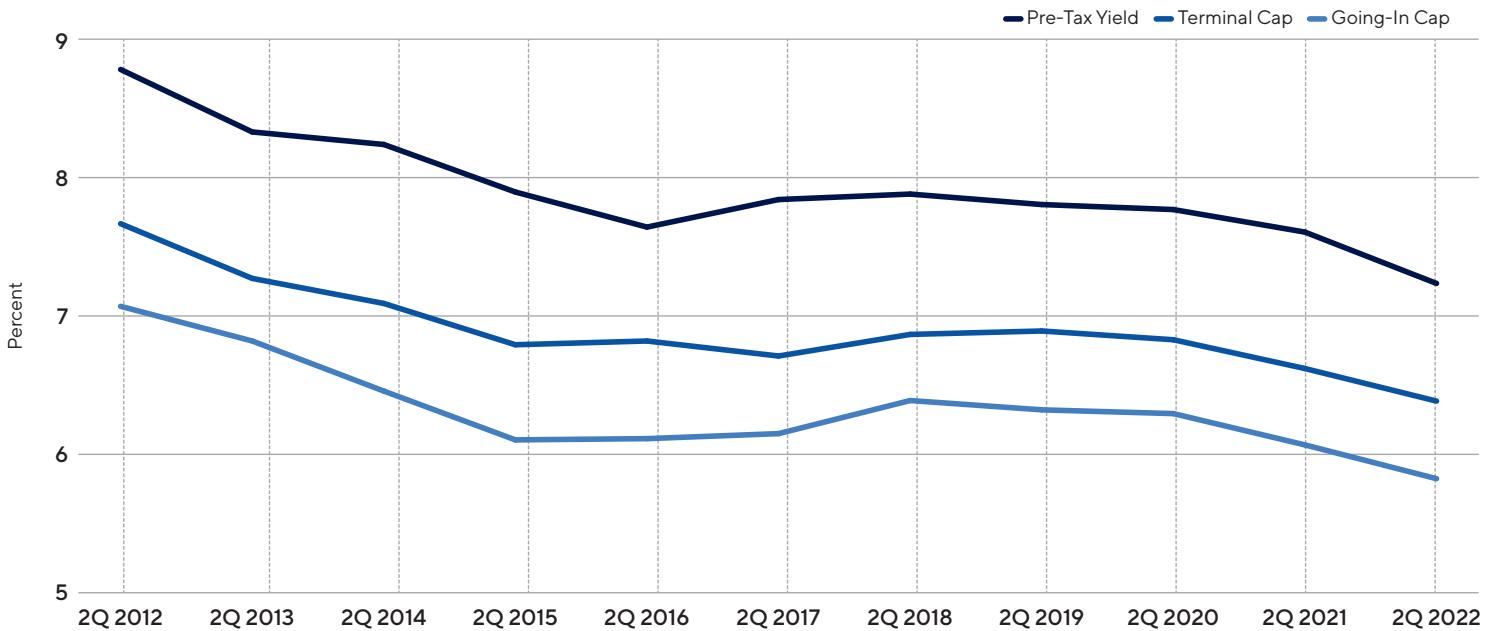
# INSTITUTIONAL INVESTMENT CRITERIA

## Historical Spreads Over 10-Year Treasurys



Source RERC, 2Q 2022.

## Historical Required Pre-Tax Yield Rates (IRR), Going-In Cap Rates and Terminal Cap Rates



Note Rates reflect the all-property-types average.  
Source RERC, 2Q 2022.



RERC Required Return Expectations by Property Type<sup>1</sup>

	Office		Industrial			Retail			Apt	Student Housing	Hotel	Average All Types	RERC Port Index
	CBD	SUB	WHSE	R&D	FLEX	RGNL MALL	PWR CNTR	NEIGH/ COMM					
Pre-Tax Yield Rate (IRR) (%)													
Range <sup>2</sup>	6.0 - 7.5	6.3 - 8.5	4.4 - 6.3	6.0 - 8.7	6.0 - 8.9	6.6 - 9.5	6.5 - 9.3	6.0 - 8.5	5.3 - 7.0	7.3 - 8.1	8.0 - 10.5	4.5 - 10.5	4.4 - 10.5
Average	6.8	7.4	5.6	7.0	7.1	7.7	7.8	6.9					
Weighted Average <sup>3</sup>	7.1		5.6			7.4			5.9	7.7	9.7	7.2	6.3
BPS Change <sup>4</sup>	-10	0	-10	-20	-20	-20	-10	-20	-10	0	-30	-20	-10
	-10		-10			-20							
Going-In Cap Rate (%)													
Range <sup>2</sup>	4.0 - 7.3	5.5 - 7.5	3.5 - 4.5	5.0 - 8.0	4.6 - 8.0	5.1 - 7.8	5.8 - 8.0	5.0 - 7.0	3.4 - 5.5	5.1 - 6.5	5.8 - 8.5	3.4 - 8.5	3.4 - 8.5
Average	5.5	6.4	4.0	6.0	6.0	6.3	6.8	5.6					
Weighted Average <sup>3</sup>	5.9		4.1			6.1			4.1	5.8	7.6	5.8	4.9
BPS Change <sup>4</sup>	-10	10	-10	-10	-20	-10	-10	-20	-10	0	-40	-10	-10
	0		-10			-10							
Terminal Cap Rate (%)													
Range <sup>2</sup>	4.7 - 7.3	5.8 - 8.3	3.8 - 6.3	5.8 - 8.5	5.8 - 8.5	5.3 - 8.6	6.3 - 8.3	5.5 - 7.6	4.1 - 5.8	5.9 - 7.1	6.4 - 9.0	3.8 - 9.0	3.8 - 9.0
Average	6.0	6.9	4.7	6.6	6.6	6.9	7.2	6.1					
Weighted Average <sup>3</sup>	6.4		4.8			6.7			4.7	6.4	8.1	6.4	5.4
BPS Change <sup>4</sup>	-10	10	0	0	-20	0	-20	-30	0	-10	-40	-10	0
	0		0			-10							
Rental Growth (%)													
Range <sup>2</sup>	0.0 - 3.0	0.0 - 3.0	3.0 - 8.0	0.0 - 5.0	1.0 - 3.8	0.0 - 3.0	0.0 - 3.3	1.0 - 3.5	3.0 - 5.0	0.0 - 3.2	0.0 - 6.0	0.0 - 8.0	0.0 - 8.0
Average	2.4	2.4	4.1	3.0	2.9	1.7	1.9	2.5	3.5	2.2	3.3	2.7	3.2
BPS Change <sup>4</sup>	50	10	10	40	20	20	30	10	10	60	90	30	20
Expense Growth (%)													
Range <sup>2</sup>	2.5 - 4.0	2.5 - 4.0	2.0 - 4.0	2.5 - 4.0	2.5 - 4.0	2.5 - 6.0	2.5 - 4.0	2.5 - 4.0	2.5 - 4.0	3.0 - 3.0	3.0 - 4.5	2.0 - 6.0	2.0 - 6.0
Average	3.1	3.1	3.0	3.1	3.1	3.2	3.0	3.0	3.0	3.0	3.9	3.1	3.0
BPS Change <sup>4</sup>	0	0	-10	0	0	0	-10	-10	-10	-20	30	-10	-10

<sup>1</sup>This survey was conducted from April through June 2022 and reflects expected returns for investments over the next 12 months.

<sup>2</sup>Ranges and other data reflect the central tendencies of respondents; unusually high and low responses have been eliminated.

<sup>3</sup>Weighting based upon 2Q 2022 NCREIF Portfolio market values.

<sup>4</sup>Change (+/-) in basis points (BPS) from quarter immediately preceding current rate.

Source RERC, 2Q 2022.

## Current Quarter Investment Conditions & Capitalization Techniques

	Investment Conditions <sup>1</sup>				Income Approach <sup>2</sup>	Cap Rate <sup>3</sup>	
	2Q 2022	1Q 2022	2Q 2021	2Q 2020		Before Reserves	After Reserves
Office - CBD	3.2	4.2	4.1	3.8	DCF Model	87%	13%
Office - Suburban	3.6	4.3	4.5	4.2	DCF Model	87%	13%
Industrial - Warehouse	6.7	6.9	7.3	7.4	DCF Model	87%	13%
Industrial - R&D	5.3	5.4	6.1	5.2	DCF Model	87%	13%
Industrial - Flex	5.1	5.1	5.4	4.9	DCF Model	87%	13%
Retail - Regional Mall	3.5	3.4	2.8	2.2	DCF Model	86%	14%
Retail - Power Center	4.7	4.5	4.1	2.7	DCF Model	81%	19%
Retail - Neigh/Comm	5.5	5.4	5.2	4.5	DCF Model	77%	23%
Apartment	6.2	6.2	6.5	6.2	DCF Model	6%	94%
Hotel	5.3	5.7	3.6	2.2	DCF Model	25%	75%
Student Housing	5.3	5.7	4.7	3.4	DCF Model	33%	67%

<sup>1</sup>Investment Conditions rated on a scale of 1 = poor to 10 = excellent.

<sup>2</sup>Income Approach reflects the most relative method (DCF or Direct Cap), as chosen by survey respondents.

<sup>3</sup>Percentage of respondents who apply the cap rate before or after reserves. See *RERC Scope and Methodology* for more information.

Source RERC, 2Q 2022.

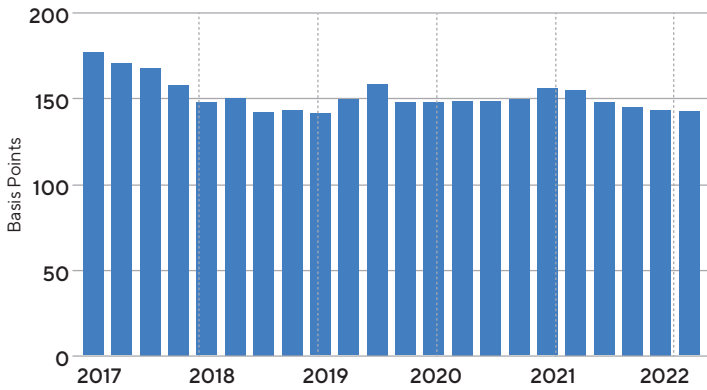
## Expected Leasing Assumptions, Marketing & Holding

	Renewal Probability (%)	Time to Release (months)	Vacancy Loss <sup>1</sup> (%)	Marketing Time (months)	Holding Period (years)
Office - CBD	65	9.5	7.2	8.8	9.8
Office - Suburban	64	9.3	7.6	7.9	9.5
Industrial - Warehouse	74	6.7	3.1	4.3	9.4
Industrial - R&D	69	8.4	5.9	7.0	9.7
Industrial - Flex	68	8.2	6.1	6.7	9.8
Retail - Regional Mall	59	10.5	8.8	10.6	10.5
Retail - Power Center	64	9.8	8.0	8.9	9.8
Retail - Neigh/Comm	68	8.9	6.8	7.4	9.8
Apartment	79	1.8	4.6	4.3	8.9
Student Housing	50	4.0	7.0	6.0	9.3
Hotel	N/A	N/A	N/A	5.5	9.3
All Types	66	7.7	6.5	7.0	9.6

<sup>1</sup>Vacancy loss reflects a typical holding period, not the current level.

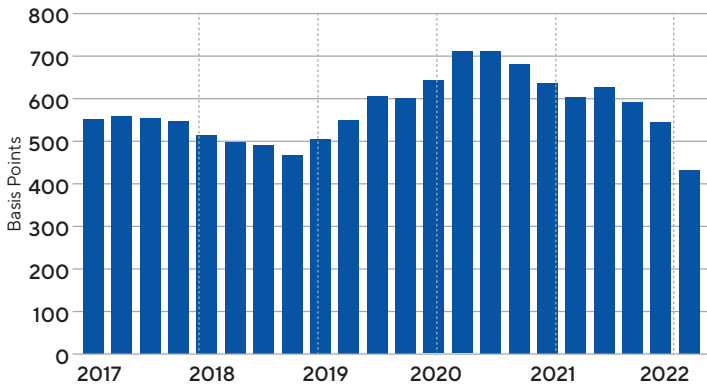
Source RERC, 2Q 2022.

### Historical Spread Between Pre-Tax Yield Rates (IRR) & Going-In Cap Rates



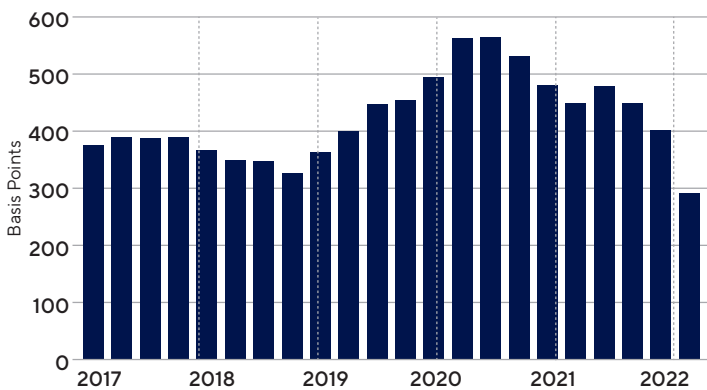
Source RERC, 2Q 2022.

### Historical Spread Between Pre-Tax Yield Rates (IRR) & 10-Year Treasurys

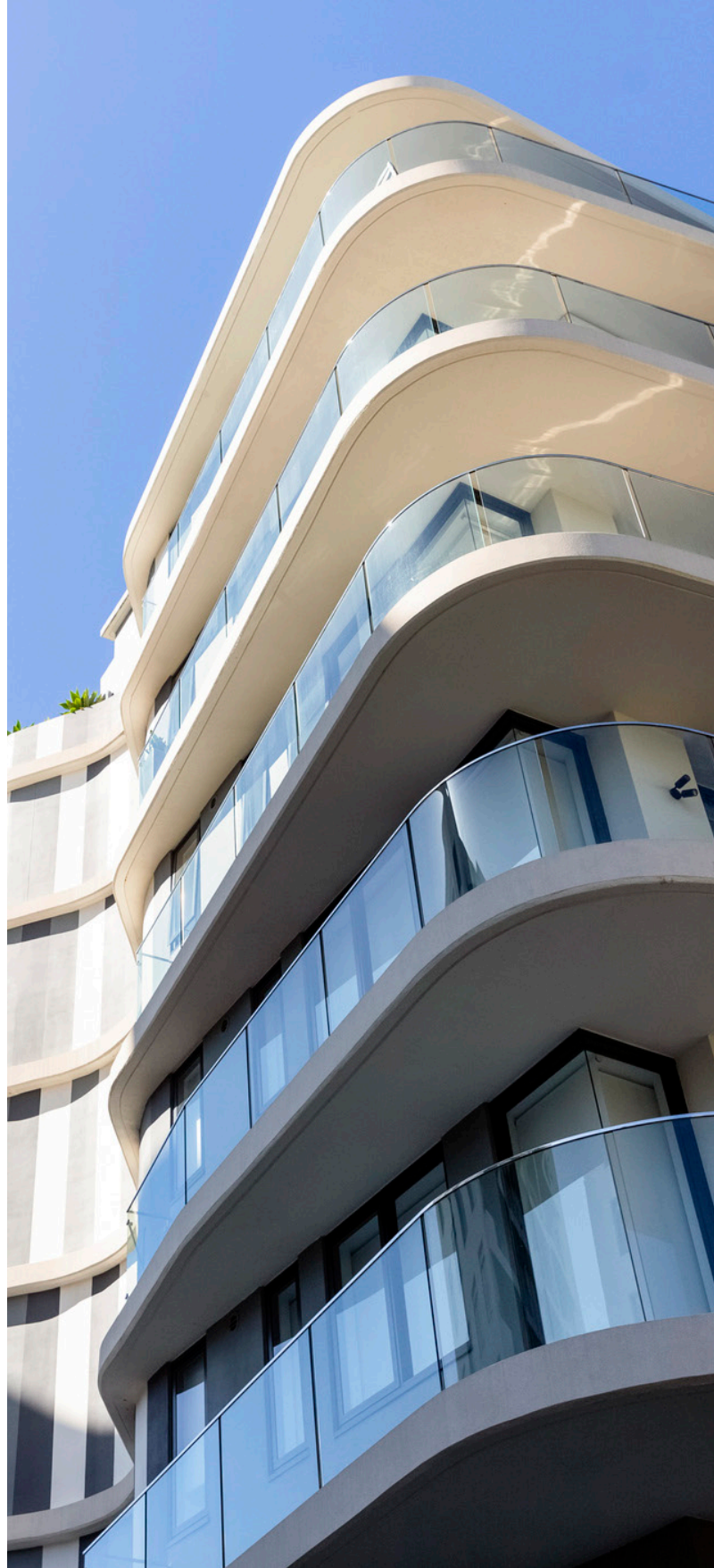


Source RERC, 2Q 2022.

### Historical Spread Between Going-In Cap Rates & 10-Year Treasurys



Source RERC, 2Q 2022.



## Required Real Estate Yields Vis-À-Vis Capital Market Returns

	2Q 2022	1Q 2022	2Q 2021	2Q 2020	2Q 2019	2Q 2018
Real Estate Yield (%)	7.2	7.4	7.6	7.8	7.8	7.9
Moody's Baa Corporate (%)	5.0	3.9	3.6	3.9	4.6	4.8
Moody's Aaa Corporate (%)	4.0	3.2	2.9	2.5	3.6	3.9
10-Year Treasurys (%)	2.9	1.9	1.6	0.7	2.3	2.9
<b>Yield Spread (Percentage Points)</b>						
Moody's Baa Corporate (%)	2.2	3.5	4.0	3.9	3.2	3.1
Moody's Aaa Corporate (%)	3.2	4.2	4.7	5.3	4.2	4.0
10-Year Treasurys (%)	4.3	5.5	6.0	7.1	5.5	5.0

Sources RERC, Federal Reserve, Moody's, 2Q 2022.

## Institutional Pre-Tax Yield (IRR) Analysis

	Office		Industrial			Retail		Apt	Student Housing	Hotel	
	CBD	SUB	WHSE	R&D	FLEX	RGNL MALL	PWR CNTR				NEIGH/ COMM
<b>Institutional Investors</b>											
Range	6.0 - 7.5	6.3 - 8.5	4.4 - 6.3	6.0 - 8.7	6.0 - 8.9	6.6 - 9.5	6.5 - 9.3	6.0 - 8.5	5.3 - 7.0	7.3 - 8.1	8.0 - 10.5
Average	6.8	7.4	5.6	7.0	7.1	7.7	7.8	6.9	5.9	7.7	9.7
<b>National Results from Regional Survey (First-Tier)</b>											
Range	6.5 - 11.0	7.0 - 12.0	5.0 - 10.0	6.5 - 9.5	6.5 - 11.0	7.0 - 12.0	6.0 - 10.5	6.5 - 10.5	5.0 - 9.0	5.5 - 8.8	8.0 - 13.0
Average	8.7	8.9	7.7	8.3	8.4	9.6	8.7	8.6	7.0	7.3	10.0
<b>Realized Total Returns - Ten-Year Averages (NCREIF)<sup>1</sup></b>											
Range	3.2 - 12.9		10.3 - 47.7			-5.6 - 13.6		3.0 - 24.4		-18.1 - 14.0	
Average	7.4		17.3			6.6		9.5		3.9	
<b>Alternative Investments</b>											

The table Required Real Estate vis-a-vis Capital Market Returns shows historical spreads between the average targeted yield for real estate and actual yields for alternative investments. The current capital market returns range from 2.9% to 5%. The current spread range is from 430 basis points on 10-year Treasurys to 220 basis points on Moody's Baa Corporate. The normative spread ranges from 391 to 616 basis points. The gap only serves to underline the relative attractiveness of current returns on real estate as compared to other asset classes. Adding in the normative spread for real estate of 391 basis points for Moody's Baa Corporate indicates a discount rate of 8.9% and using 616 basis points from 10-year Treasurys, for example, the alternative market analysis indicates a discount rate of 9.1%.

### Pre-Tax Yield (IRR) Conclusion

The criteria outlined in this section serve as the basis for selecting an appropriate discount rate for commercial properties. The pre-tax yield/IRR/discount rate is to be applied to the cash flow of the property and must reflect the quality and durability of the income projections as well as the likelihood of real long-term gain in asset value. The yield to the investor must be at a level commensurate with alternative investment vehicles. The most comparable rates for commercial properties, as previously discussed, are listed to the right:

Institutional Investors: 5.6 - 9.7  
Regional Investors: 7.0 - 10.0  
Real Estate Indices: 3.9 - 17.3

<sup>1</sup>The NCREIF Property Index Return Survey presents the total returns for all the properties surveyed. Total returns, also called overall returns, include appreciation (or depreciation), realized capital gain (or loss) and income. It is computed by adding the income and capital appreciation return on a quarterly basis.

Sources RERC, NCREIF, Federal Reserve, 2Q 2022.

## Institutional Going-In Capitalization Rate Analysis

	Office		Industrial			Retail		Apt	Student Housing	Hotel	
	CBD	SUB	WHSE	R&D	FLEX	RGNL MALL	PWR CNTR				NEIGH/ COMM
<b>Institutional Investors</b>											
Range	4.0 - 7.3	5.5 - 7.5	3.5 - 4.5	5.0 - 8.0	4.6 - 8.0	5.1 - 7.8	5.8 - 8.0	5.0 - 7.0	3.4 - 5.5	5.1 - 6.5	5.8 - 8.5
Average	5.5	6.4	4.0	6.0	6.0	6.3	6.8	5.6	4.1	5.8	7.6
<b>National Results from Regional Survey (First-Tier)</b>											
Range	5.0 - 9.3	5.0 - 9.3	4.0 - 8.8	5.0 - 9.0	5.5 - 9.0	5.5 - 10.0	5.0 - 9.0	5.5 - 10.0	3.8 - 8.3	4.0 - 8.5	6.0 - 9.5
Average	7.2	7.4	6.1	7.0	6.9	8.3	7.6	7.3	5.3	6.0	8.2
<b>Realized Income Returns - Ten-Year Averages (NCREIF)<sup>1</sup></b>											
Range	4.4 - 5.5		3.6 - 6.1			4.3 - 6.1		3.7 - 5.3		-3.6 - 8.5	
Average	4.7		5.1			5.0		4.5		6.3	
<b>Alternative Investments</b>											

The table Required Real Estate vis-a-vis Capital Market Returns shows historic spreads between the average targeted cap rates for real estate and actual yields for alternative investments. The current capital market returns range from 2.9% to 5%. The current spread range is from 290 basis points on 10-year Treasuries to 80 basis points on Moody's Baa Corporate. The normative spread ranges from 242 to 467 basis points. The gap only serves to underline the relative attractiveness of current returns on real estate as compared to other asset classes. Adding in the normative spread for real estate of 242 basis points for Moody's Baa Corporate indicates a going-in cap rate of 7.4% and using 467 basis points from 10-year Treasuries, for example, the alternative market analysis indicates a going-in cap rate of 7.6%.

### Going-In Capitalization Rate Conclusion

The criteria outlined in this section serve as the basis for selecting an appropriate going-in cap rate for commercial properties. The cap rate is to be applied to the first year or stabilized cash flow of the property for the determination of value for the direct capitalization approach and must reflect the quality and durability of the income projections, as well as the likelihood of real long-term gain in asset value. The rate to the investor must be at a level commensurate with alternative investment vehicles. The most comparable rates for commercial properties, as previously discussed, are listed to the right:

Institutional Investors: 4.0 - 7.6  
Regional Investors: 5.3 - 8.3  
Real Estate Indices: 4.5 - 6.3

<sup>1</sup>The NCREIF Property Index Return Survey presents the income returns for all the properties surveyed. Income returns include only the income of the property and do not take into account the appreciation and/or depreciation of the property.

Sources RERC, NCREIF, Federal Reserve, 2Q 2022.

## Institutional Terminal Capitalization Rate Analysis

	Office		Industrial			Retail		Apt	Student Housing	Hotel	
	CBD	SUB	WHSE	R&D	FLEX	RGNL MALL	PWR CNTR				NEIGH/ COMM
<b>Institutional Investors</b>											
Range	4.7 - 7.3	5.8 - 8.3	3.8 - 6.3	5.8 - 8.5	5.8 - 8.5	5.3 - 8.6	6.3 - 8.3	5.5 - 7.6	4.1 - 5.8	5.9 - 7.1	6.4 - 9.0
Average	6.0	6.9	4.7	6.6	6.6	6.9	7.2	6.1	4.7	6.4	8.1
Spread Basis Points Average	50	50	70	60	60	60	40	50	60	60	50
<b>National Results from Regional Survey (First-Tier)</b>											
Range	5.0 - 9.5	5.0 - 10.0	4.5 - 11.0	5.5 - 9.0	5.5 - 9.5	5.8 - 11.0	6.0 - 10.0	6.5 - 10.3	4.3 - 8.3	4.5 - 8.5	6.5 - 10.0
Average	7.8	7.9	6.8	7.6	7.5	8.8	8.2	7.9	6.0	6.6	8.9
Spread Basis Points Average	60	50	70	60	60	50	60	60	70	60	70
<b>Terminal Capitalization Rate Conclusion</b>											
The terminal (reversion) cap rate is calculated by adjusting a typical stabilized overall cap rate for the loss in the competitive market standing realized by properties over the holding period due to the nominal aging of the property. Typically, this has ranged between 40 and 100 basis points, with the average around 60 basis points. After adjusting the data for the time horizon and relative earning rates for different properties, the indicated terminal ranges have been deemed appropriate for the different property types.								Institutional Investors: 4.7 - 8.1 Regional Investors: 6.0 - 8.9 Institutional Average Going-In/Terminal Spread: 40 - 70 Regional Average Going-In/Terminal Spread: 50 - 70			

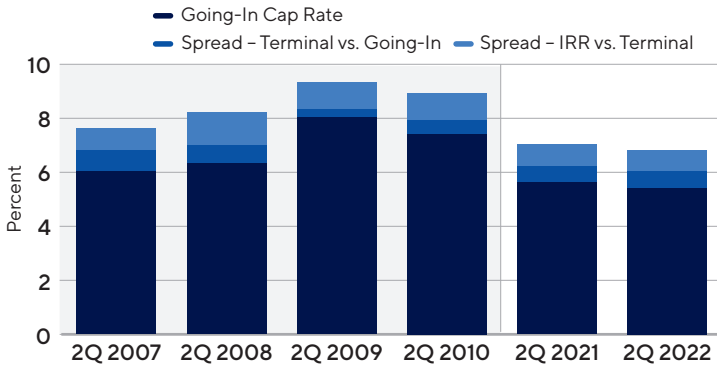
**Note** The spread averages in this chart refer to going-in/terminal spreads.

Sources RERC, Federal Reserve, 2Q 2022.



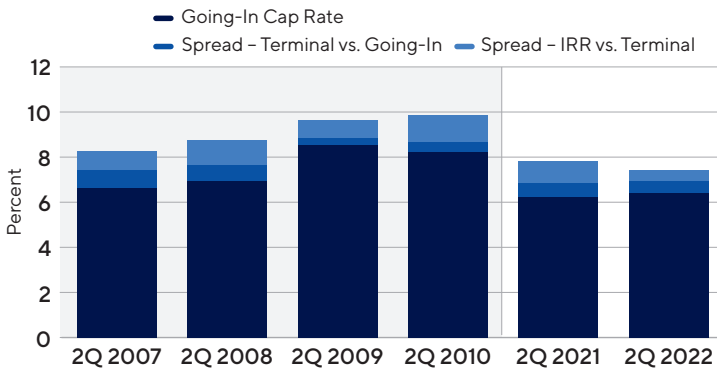
OFFICE

CBD IRR & Cap Rate Composition



The shaded area represents quarterly rates prior to, during and immediately after the Global Financial Crisis.  
 Source RERC, 2Q 2022.

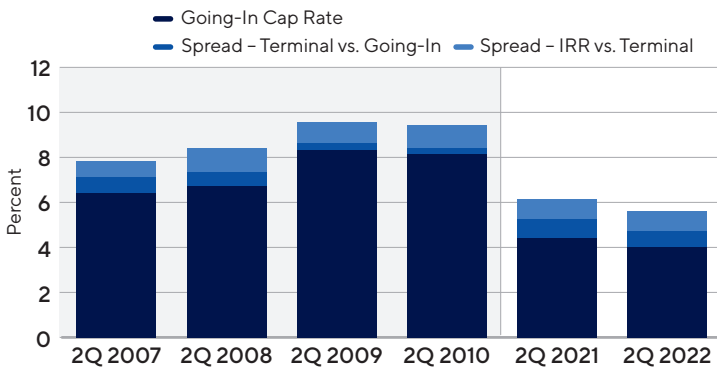
Suburban IRR & Cap Rate Composition



The shaded area represents quarterly rates prior to, during and immediately after the Global Financial Crisis.  
 Source RERC, 2Q 2022.

INDUSTRIAL

Warehouse IRR & Cap Rate Composition

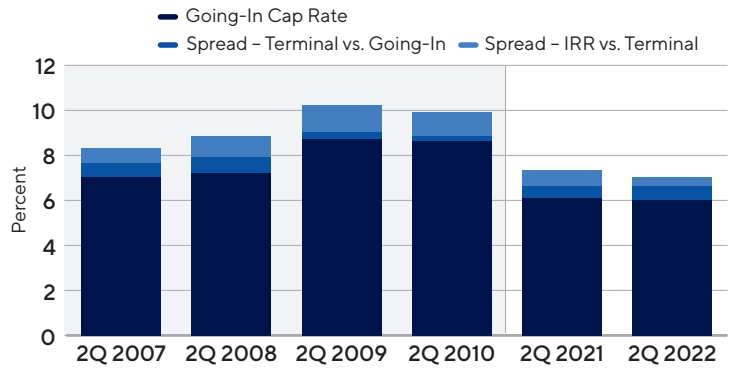


The shaded area represents quarterly rates prior to, during and immediately after the Global Financial Crisis.  
 Source RERC, 2Q 2022.





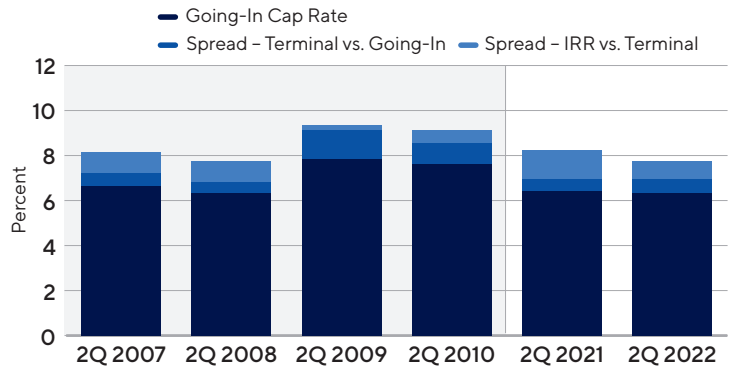
### R&D IRR & Cap Rate Composition



The shaded area represents quarterly rates prior to, during and immediately after the Global Financial Crisis.  
**Source** RERC, 2Q 2022.

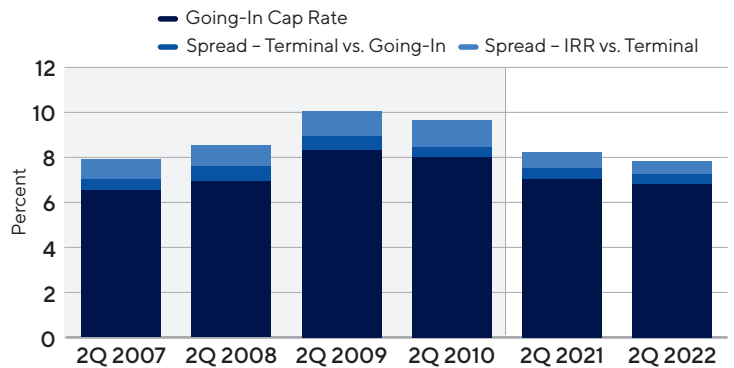
## RETAIL

### Regional Mall IRR & Cap Rate Composition



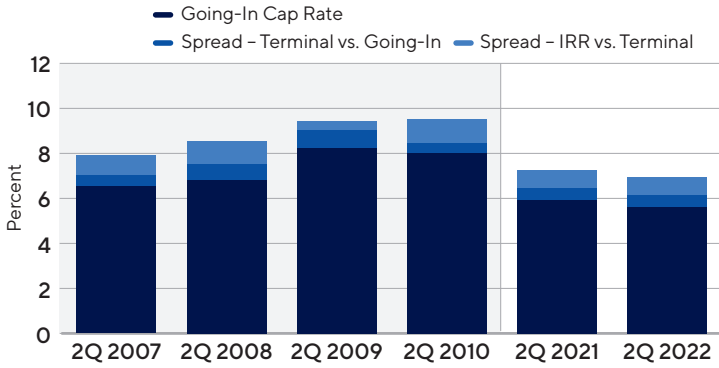
The shaded area represents quarterly rates prior to, during and immediately after the Global Financial Crisis.  
**Source** RERC, 2Q 2022.

### Power Center IRR & Cap Rate Composition



The shaded area represents quarterly rates prior to, during and immediately after the Global Financial Crisis.  
**Source** RERC, 2Q 2022.

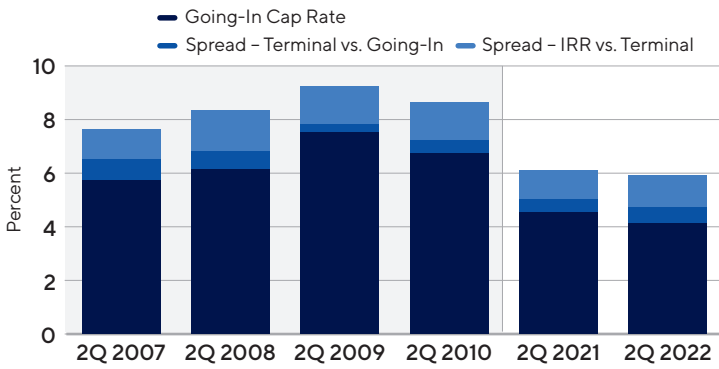
### Neigh/Comm IRR & Cap Rate Composition



The shaded area represents quarterly rates prior to, during and immediately after the Global Financial Crisis.  
**Source** RERC, 2Q 2022.

## APARTMENT

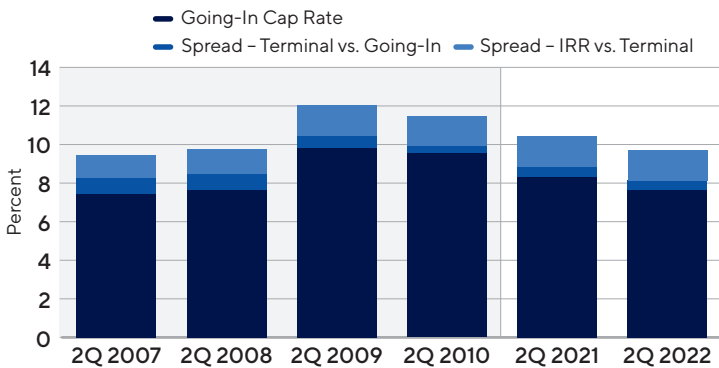
### Apartment IRR & Cap Rate Composition



The shaded area represents quarterly rates prior to, during and immediately after the Global Financial Crisis.  
**Source** RERC, 2Q 2022.

## HOTEL

### Hotel IRR & Cap Rate Composition



The shaded area represents quarterly rates prior to, during and immediately after the Global Financial Crisis.  
**Source** RERC, 2Q 2022.





## INSTITUTIONAL SURVEY RESPONDENTS<sup>1</sup>

Boston Capital Real Estate Partners  
 CalPERS  
 Equus Capital Partners, Ltd.  
 J.P. Morgan Asset Management  
 Mays Business School at Texas A&M  
 MetLife  
 National Valuation Consultants, Inc.  
 New York Life Real Estate Investors  
 NPV Advisors  
 Principal Real Estate Investors  
 Real Property Dynamics  
 SitusAMC  
 State Teachers Retirement System of Ohio  
 US Realty Consultants

<sup>1</sup>This is a partial list of the companies that participated in our institutional survey. The firms listed agreed to be identified and do not represent our entire list of survey respondents.

## REGIONAL INVESTMENT SURVEY RESPONDENTS<sup>2</sup>

Douglas Adams, MAI  
 Adams & Associates  
 Grand Rapids, MI

Ryan Bauer  
 Diversified Real Estate Services, Inc.  
 Minneapolis, MN

Scott J. Belke, MAI  
 Belke Appraisal & Consulting Services, Inc.  
 Kansas City, MO

Bush Benton  
 Stegall, Benton, Melancon & Associates  
 New Orleans, LA

Bob Blincow  
 Principal Real Estate Investors  
 New York, NY

<sup>2</sup>This is a partial list of the professionals who participated in our regional survey. The individuals listed agreed to be identified and do not represent our entire list of survey respondents.

Daniel T. Boris, MAI, CCIM, SRA  
The Appraisal Group  
Minneapolis, MN

Franklin Flato  
Flato Realty Advisors, LLC  
San Antonio, TX

John M. Lansbury, MAI  
Metropolitan Commercial Valuations  
Washington, DC

Paul Borysow  
Borysow Appraisal  
Chicago, IL

C. Gordon Gilbert, Jr., MAI  
Gilbert Advising & Appraising, LLC  
Baltimore, MD

Frank Leatherman, MAI, CCIM  
Leatherman Real Estate Services  
Raleigh, NC

MacKenzie Bottum  
M.S. Bottum & Associates, Inc.  
Dallas-Fort Worth, TX

Linwood Gilbert, MAI  
Urban Realty Solutions  
St. Petersburg, FL

Anne R. Lloyd-Jones  
HVS  
New York, NY

Bradley Braemer  
Real Estate Analysis Corporation  
Chicago, IL

Steven M. Goodpaster, MAI, MRE  
Woodford & Associates  
Knoxville, TN

Bob Martinek  
BDO  
New York, NY

Gary Brown  
NAI Partners  
Houston, TX

Michael Green  
Real Estate Analysts, Ltd.  
St. Louis, MO

Daniel McCown  
Dan McCown and Co, Inc.  
Pittsburgh, PA

Matthew R. Bulthuis  
Bulthuis Realty Consultants  
Chicago, IL

Michael Hanley  
Townebank  
Norfolk, VA

Suzanne Mellen, MAI, CRE, FRICS, ISHC  
HVS  
San Francisco, CA

James Caminis, MAI  
Lipman Frizzell & Mitchell, LLC  
Baltimore, MD

James Hardey  
Hardey/Associates, Inc.  
Sacramento, CA

Charlie Minor  
Roe Minor Realty Consultants  
Fort Lauderdale, FL

Harrison Chavis  
Harrison Chavis & Associates, Inc.  
Richmond, VA.

Paul Hendricks  
Paul Hendricks Appraisal  
Tucson, AZ

Michael Mohn  
Hotel Realty NW  
Seattle, WA

Gary L. Cohen  
Global Lodging Consultants  
Los Angeles, CA

Gerald Hendry, MAI, CCIM  
Maxwell, Hendry & Simmons, LLC  
Fort Myers, FL

Robert Nahigian  
Auburndale Realty Co.  
Boston, MA

William Cole  
Calusa Appraisal, LLC  
Sarasota, FL

Jeff Hicks  
Dohring Group  
Tampa, FL

Doug Nelson  
Nelson Appraisal  
Bettendorf, IA

Joe Corlett  
Valbridge Property Advisors  
Boise, ID

Robert Hornbuckle  
Provident Valuation & Advisory Services, Inc.  
Jacksonville, FL

Alex Newman, MAI  
Bank of Stockton  
Central San Joaquin Valley, CA

Edward de Laurier, CRE, CCIM, FRICS, MAI  
Atlantic Realty Advisors  
Jacksonville, FL

Tom Horner  
Ohio Real Estate Consultants, Inc.  
Columbus, OH

Scott Pettifer, MAI, SRA  
Pettifer & Associates, Inc.  
Santa Ana, CA

Dale Donerkiel  
DMD Appraisals, Inc.  
Los Angeles, CA

Steve Jacquemin  
S.J. Financial Group  
St Louis, MO

Thomas G. Rife MAI, SRA, AMD, AI-GRS  
Rife & Company Appraisers/Consultants  
Bentonville, AR

Vathana Duong  
Colliers International  
San Francisco, CA

William M. James, MAI, CCIM, MBA  
JRES Intelica CRE  
Denver, CO

William F. Schoenhut  
Star Valuation Services, LLC  
Philadelphia, PA

Timothy Sheehan  
T. W. Sheehan & Associates, LLC  
Philadelphia, PA

Mark Shelton  
Hallmark Properties, Inc.  
Lynchburg, VA

John Sherman  
John R. Sherman, LLC  
Cheyenne, WY

Curtis Silva  
Penn Center Advisors  
Philadelphia, PA

Ken E. Simpson, MAI, SRA  
Simpson & Associates, Inc.  
Rapid City, SD

Russell Sloan  
Sloan Appraisal & Realty Services  
Paducah, KY

Jeremie Snowder  
Valuation Consulting Group, LLC  
Salt Lake City, UT

Pete Sockler  
SRSGI  
Hightstown, NJ

Stephen B. Spraberry, MAI  
The Ambrose Group  
Dallas-Fort Worth, TX

Robert Stack  
Robert Lamar Stack, MAI, FRICS  
New York, NY

Kent D. Steele  
National Realty Counselors, Inc.  
Chicago, IL

Erik Stropp  
Stropp Appraisal  
Syracuse, NY

Rocky A. Tarantello  
Tarantello & Associates  
Orange County, CA

John Thistlethwaite  
John M. Thistlethwaite Interests, LLC  
Fort Wayne, IN

Michael Tinker  
Dahlen, Dwyer, Foley & Tinker, Inc.  
Minneapolis, MN

John Trabold  
VMG Health  
Dallas, TX

Michael L. VanBuskirk  
Newmark Grubb Zimmer  
Kansas City, MO

S. Steven Vitale, MAI  
Valbridge Property Advisors  
Milwaukee, WI

Martin Ward  
Bristol Realty Counselors of Colorado, Inc.  
Boulder, CO

Michael Weinberg  
Michael J. Weinberg & Associates  
New York, NY

Gary T. Westholm, MAI  
Westholm And Associates, LLC  
Baltimore, MD

G. Michael Yovino-Young  
Yovino-Young, Inc.  
San Francisco, CA



# RERC SCOPE AND METHODOLOGY



## REPORT METHODOLOGY

The RERC Real Estate Investment Survey summarizes the required rates of return (ex-ante), property selection criteria and investment outlook of a representative sample of large institutional investors and regional respondents throughout the United States. We survey both regional and institutional investors across the nation quarterly, inquiring about investment criteria in their local marketplace and trends across the country. The results are collected, averaged and then included in our quarterly report.

Published quarterly, the data provide timely insight into yields, return criteria and risk adjustments that institutional investors rely on when making acquisitions. The survey data are used by investors, developers, appraisers and financial institutions to monitor changing market conditions and to estimate financial performance.

Findings reflect ex-ante required returns, or expectations, of investors contemplating acquisitions. Thus, the RERC survey acts as a barometer of current market perceptions and confidence among the nation's top professionals.

Readers should also recognize that underwriting assumptions and practices, as well as underlying definitions of key terms, will vary slightly among survey respondents. Therefore, the greatest benefit to an investor who is interpreting survey results over time is a recognition of the trends of various measuring devices and contemplation of the relationship of one measuring device to another. It is equally important to keep in mind that the investment survey reports required returns, not actual or historical performance. Performance data are available from other sources.

## RERC DEFINITIONS

**Basis Point (bp):** A unit of measure describing the percentage point change in rates or values. The basis point spread is the difference

between the yield (as defined) and an alternative investment with a comparable life (e.g., 10-Year Treasurys).

**Down Time:** The average number of months to re-lease a space.

**Going-In (Overall) Capitalization Rate:** The first-year net operating income (NOI) divided by price or value.

*Note: Going-in (overall) capitalization rate is the first-year NOI divided by price or value. To clarify and allow the reader to use our cap rates properly relative to the direct cap method, please refer to the "RERC Investment Conditions and Current Quarter Capitalization Techniques" table that indicates the reserve treatment (NOI before or after reserves) for each property type. To use RERC's data correctly, the user of our information should: (1) view the RERC cap rates within the context reported for reserves; (2) determine if the cap rate will be applied on NOI before or after reserves; (3) evaluate and adjust the cap rate as needed to make it consistent with the extraction and application of the rate for the user's situation.*

**Holding Period:** Average time that a property type is held for investment.

**Institutional Real Estate:** High-quality CRE (minimum value of \$5 million per property) that is generally owned or financed at least in part by tax-exempt investors on behalf of beneficiaries in a fiduciary environment (e.g., public and corporate pension funds, endowments and foundations, life insurance companies, commercial banks, real estate investment trusts, sovereign wealth funds).

**Marketing Time:** The period between the offering of a property for sale and securing a bona fide buyer.

**Metropolitan Investment Criteria:** RERC metro rates are estimated and developed based on proprietary models that include, but are not exclusive to, commercial real estate fundamentals (e.g., population

growth, sales volume, market liquidity) and observed rates in the market for various property classes and regions on a national basis. RERC uses its valuation experience and knowledge to audit and examine the estimated rates developed from our models. Employing objective or quantitative models that are subject to expert knowledge provides well-supported rates for 47 metros and all property types.

**Net Operating Income (NOI):** The current income of a property, net of all operating expenses, but before any reserves, debt service, capital expenditures, tenant improvements and leasing commissions. The NOI is similar to the financial term EBITDA.

**Pre-Tax Yield Rate (IRR, Discount Rate):** The rate of interest that discounts the pre-income-tax cash flows received on an unleveraged investment back to a present value that is exactly equal to the amount of the original equity investment. It is in effect a time-weighted average return on equity and, as used here, is synonymous with the term “yield.”

**Renewal Probability:** The expected probability (as a percentage) that an existing tenant will renew its lease after the expiration date.

**Reserves:** Amount allocated for periodic replacement of long-lived building components during a property’s economic life.

**RERC Estimate vs. Survey Rates:** In addition to the survey responses (i.e., survey rates) that RERC receives and analyzes each quarter, RERC also developed a proprietary model that incorporates unemployment, vacancy rates and other financial and space market data. This modeled information, combined with the data received from the survey responses, is the RERC Estimate.

**RERC Portfolio Index (RPI):** RERC’s required return utilizing a weighted average based on the NCREIF Property Index.

**Sales Cost:** The deduction, as a percentage of the reversion, that is made for the anticipated cost of selling a property at the end of the holding period.

**Terminal (Residual) Capitalization Rate:** The rate used to estimate resale or reversion value at the end of the holding period. Typically, it is the NOI in the year following the last year of the holding period that is capitalized. This rate is similar to the going-in capitalization rate, but is applied at the end of the holding investment period.

**Vacancy Loss:** Percentage of total revenue uncollected due to space that remains vacant over a typical holding period.

## RERC DEFINED REGIONS AND PROPERTY CLASSIFICATIONS

**West:** Alaska, Arizona, California, Colorado, Hawaii, Idaho, Montana, Nevada, New Mexico, Oregon, Utah, Washington, Wyoming.

**Midwest:** Illinois, Indiana, Iowa, Kansas, Michigan, Minnesota, Missouri, Nebraska, North Dakota, Ohio, South Dakota, Wisconsin.

**South:** Alabama, Arkansas, Florida, Georgia, Louisiana, Mississippi, Oklahoma, Tennessee, Texas.

**East:** Connecticut, Delaware, Kentucky, Maine, Maryland, Massachusetts, New Hampshire, New Jersey, New York, North Carolina, Pennsylvania, Rhode Island, South Carolina, Vermont, Virginia, Washington, D.C., West Virginia.

**Tier 1 Properties:** New or newer quality construction in prime to good locations.

**Tier 2 Properties:** Aging, former first-tier properties, in good to average locations.

**Tier 3 Properties:** Older properties with functional inadequacies and/or in marginal locations.

**Institutional Investment-grade Property:** A property is considered to be institutional investment-grade if it attracts the attention of large institutional capital sources, such as pension plans, insurance companies, private equity firms or real estate investment trusts. These properties generally have top amenities, creditworthy tenants, higher rent, low vacancy rates and are well located in the market. Based on the risk and return tolerance level of an institution, Class A, and certain assets in Class B, could all be considered institutional investment-grade assets.

**Regional Investment-grade Property:** A property is considered to be regional investment-grade if it attracts the attention of national and regional capital sources seeking an income-producing property and could consist of large or small buyers. These properties generally have good amenities, creditworthy tenants, an income stream in place and have good locations for that market. Regional investment-grade properties are generally stable over time relative to their income.

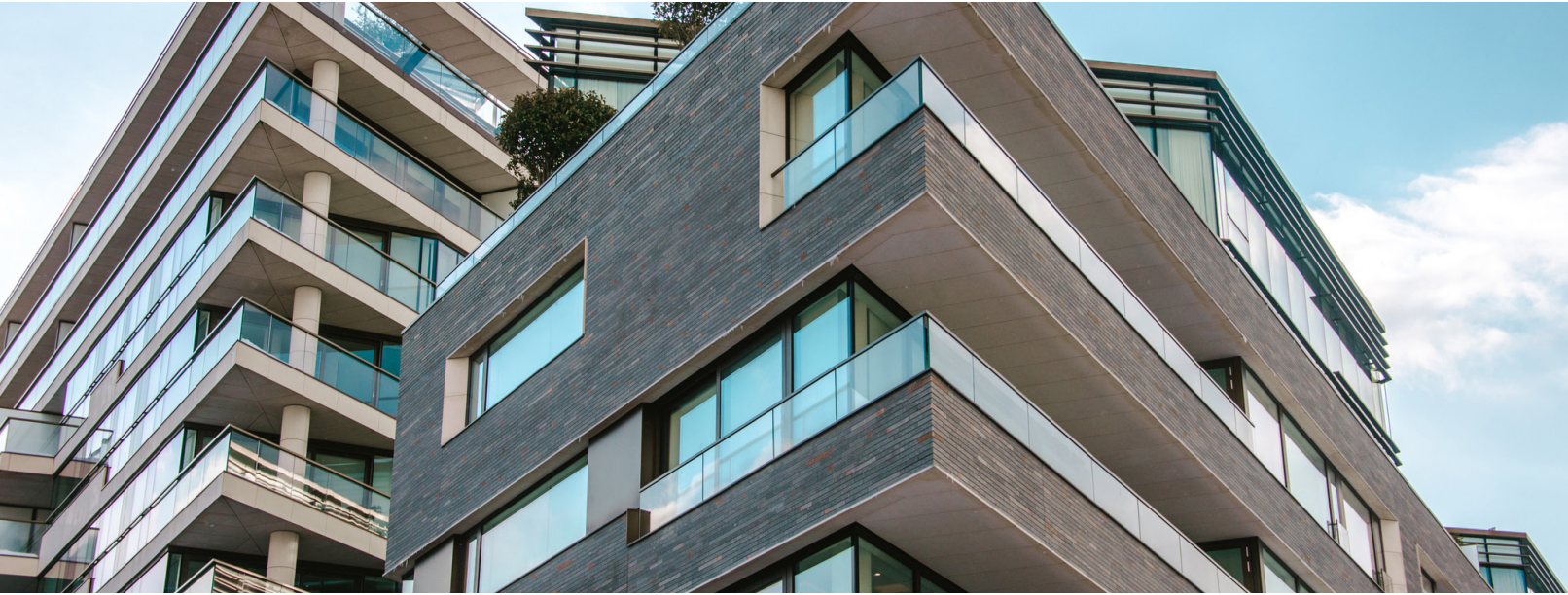
**Note of Caution:** The institutional and regional rates obtained in this report are for investment-grade properties and are not directly applicable to non-investment-grade properties (i.e., a property that does not generate income and is highly speculative and risky in nature). Since the market for real estate changes constantly, the precise threshold for what constitutes an investment-grade or non-investment-grade property is not constant. There are no precise formulas for placing the property into a certain segment, and the criteria for investment-grade is influenced by many factors present in the real estate environment at the time of observation.

It is imperative to exercise caution when interpreting required rates of return. RERC’s institutional and regional return data show a normal range of expected returns from many categories of investment-grade properties. Obviously, properties with greater investment risk will be in the high range of the scale.

We also note that investors generally strive to achieve a diversified portfolio; this motivation partially explains the variation in pre-tax yield requirements. Ranges and other data reflect the central tendencies of respondents; unusually high and low responses have been eliminated.



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