

Real Estate Portfolio

# **Performance Review**

SECOND QUARTER 2022



### **Portfolio Funding Status**



- The following slides provide a review of key information pertaining to the Los Angeles City Employees' Retirement System ("LACERS") Real Estate Portfolio (the "Portfolio") through June 30, 2022. A detailed performance report is also provided as **Exhibit A.**
- LACERS is below its 7.0% target allocation to Real Estate as of quarter-end on a funded and committed basis. The LACERS Board of Trustees increased the target allocation from 5.0% to 7.0% in April 2018.

	Market Value (\$ millions)*	% LACERS Plan*
LACERS Total Plan Assets	20,600	
Real Estate Target	1,442	7.0%
RE Market Value:		
Core	822	
Non-Core	326	
Timber	19	
Total RE Market Value	1,168	5.7%
Unfunded Commitments	466	2.3%

### **Real Estate Portfolio Composition**



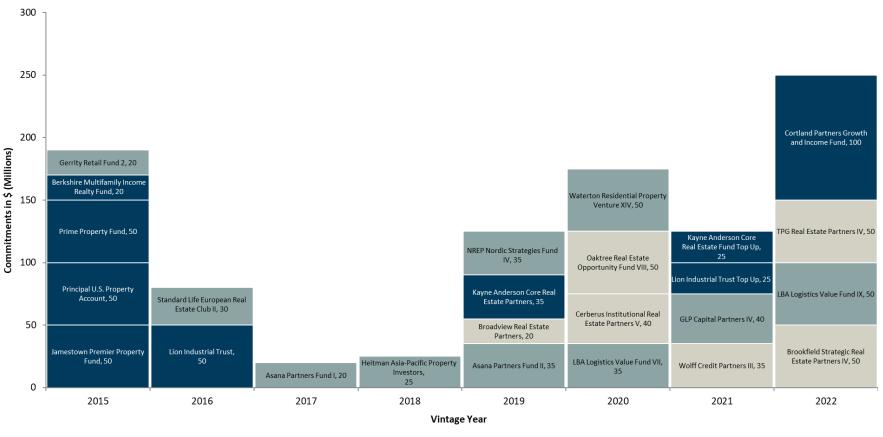
	Strategi	: Targets	Portfolio Compo	osition (6/30/2022)*
	Target Allocation	Tactical Range	Market Value	Market Value & Unfunded Commitments
Core	60%	40% - 80%	70.4%	56.5%
Non-Core	40%	20% - 60%	27.9%	42.3%
Value Add Portfolio	N/A	N/A	17.9%	21.8%
Opportunistic Portfolio	N/A	N/A	10.0%	20.4%
Timber	N/A	N/A	1.7%	1.3%

- In May 2014, the Board approved the strategic targets displayed above in order to reflect a more conservative risk profile going-forward. At the time, the Portfolio had 30% exposure to Core and 70% exposure to Non-Core.
- Since 2015, to transition the Portfolio, the LACERS Board has approved \$405 million in Core commitments.
- The LACERS Board has approved approximately \$585 million in Non-Core investments\*\* since 2015. These investments initially focused on Value Add strategies with pre-specified portfolios, embedded value and/or an element of current income, with recent commitments focused on blind pool Opportunistic funds and strategies with attractive property type exposures.
- LACERS Core and Non-Core allocations are near strategic targets on a funded and committed basis, but below the Non-Core target on a funded basis.
- The Core Portfolio utilizes 25.7% leverage, measured on a loan-to-value (LTV) basis, well below the 40.0% constraint.
- The Non-Core Portfolio utilizes 52.6% leverage, well below the 75.0% constraint.

\*Figures may not add due to rounding. Funded & Committed figures exclude commitments made after 6/30/22.

\*\* Excludes commitments approved after 6/30/2022.

# LACERS Commitment Activity Under Townsend Advisory – Since 2015



Core Commitments Value Add Commitments Opportunitistic Commitments

- LACERS has committed \$990 million since 2015, all of which has been Townsend-initiated activity.
- Four Non-Core commitments since 2015 (Gerrity, Asana I & II, and Broadview) met LACERS' current Emerging Manager guidelines.
- Vintage year classifications are based on LACERS' first capital call (or expected capital call), though commitments may have been approved in prior years.

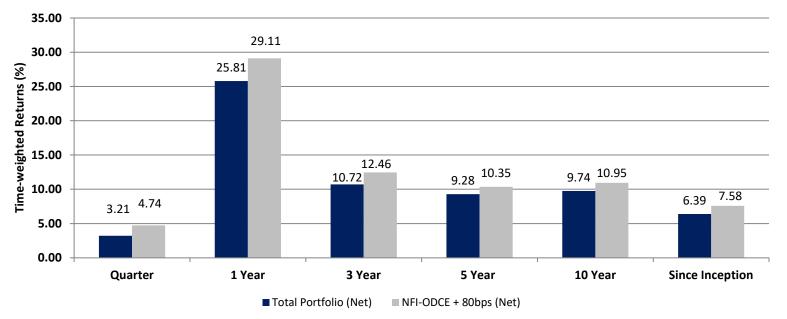
TOWNSEND

GROUP

an Aon company



## **Total Portfolio Performance**

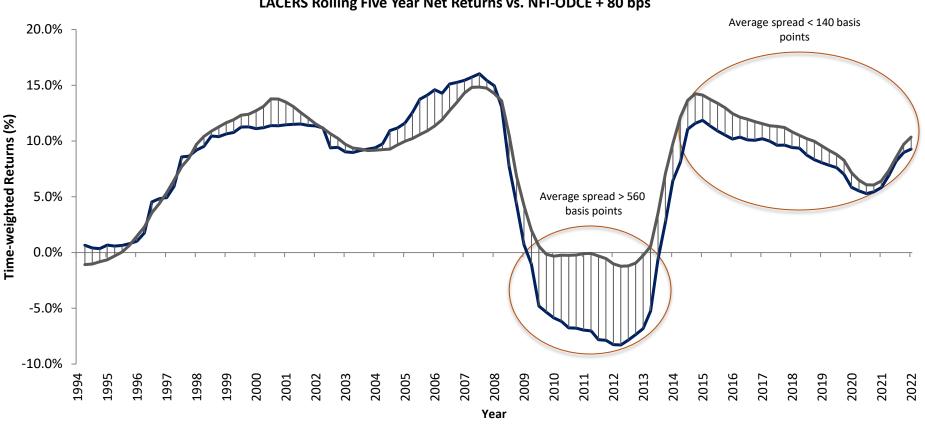


#### LACERS Total Real Estate Portfolio vs. NFI-ODCE + 80 bps

- The benchmark for the LACERS Total Real Estate Portfolio is the NCREIF Fund Index of Open-End Diversified Core Equity funds (NFI-ODCE) + 80 basis points ("bps"), measured over 5-year time periods, net of fees (defined below). LACERS has underperformed over all periods, mostly due to weak performance of Opportunistic funds. However, investments made since 2014 are outperforming the policy benchmark, as detailed on page 7.
- The NFI-ODCE is a Core index that includes Core open-end diversified funds with at least 95% of their investments in US markets. The NFI-ODCE is the first of the NCREIF Fund Database products, created in May 2005, and is an index of investment returns reporting on both a historical (back to 1978) and current basis (26 active vehicles), utilizing approximately 21.5% leverage.
  - The 80 basis point ("bps") premium is a reflection of the incremental return expected from Non-Core exposure in the Portfolio, which is not included in the NFI-ODCE.

### **Improving Relative Total Portfolio Performance**





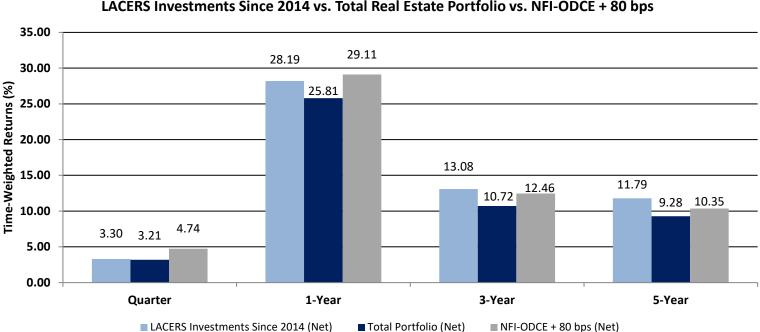
#### LACERS Rolling Five Year Net Returns vs. NFI-ODCE + 80 bps

LACERS net \_\_\_\_NFI-ODCE + 80 bps

The chart above displays rolling 5-year time-weighted returns for the Total LACERS RE Portfolio, net of fees, relative to the benchmark.

While LACERS continues to underperform the benchmark on a rolling 5-year basis, LACERS' average spread to the benchmark is trending downwards. Performance should continue to improve as accretive new investments continue to fund into the Portfolio and legacy investments fully liquidate.

### **Post-GFC Investments Accretive to Performance**



### LACERS Investments Since 2014 vs. Total Real Estate Portfolio vs. NFI-ODCE + 80 bps

Since 2014, Townsend has recommended 26\* investments to LACERS staff and twenty-five (including four emerging managers) ultimately were approved by the Board. As of 6/30/22, these investments make up 60% of the LACERS Real Estate Market Value.

Townsend-advised investments since 2014 outperformed the Total Portfolio over all periods and outperformed the benchmark over longer \_ time periods. These investments are expected to drive performance going forward.

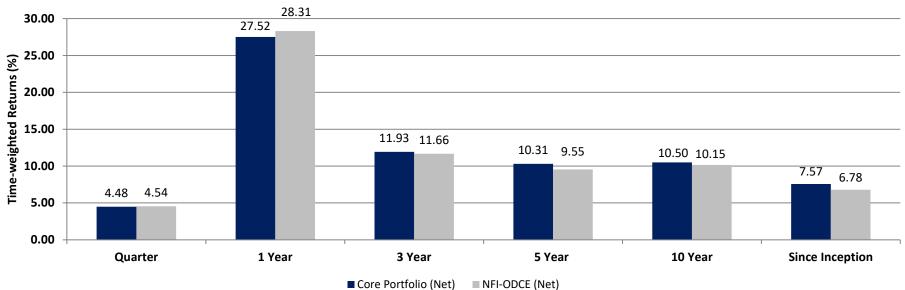
\*Includes top-up commitments. Excludes commitments approved after 6/30/2022.

TOWNSEND GROUP

an Aon company



## **Relative Performance by Strategy: Core**

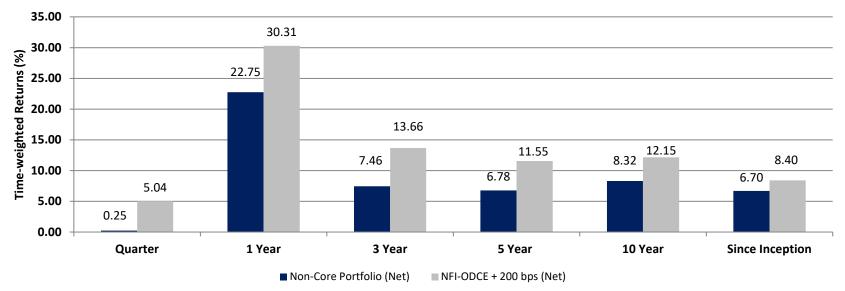


LACERS Core Real Estate Portfolio vs. NFI-ODCE

- The LACERS Core benchmark is the NFI-ODCE, measured over 5-year time periods, net of fees.
- The Core Portfolio has outperformed relative to the benchmark overall, except for the current quarter and the trailing year.
- Berkshire Multifamily Income Realty Fund was the strongest absolute performer, outperforming the NFI-ODCE by 374 bps.
- On a dollar-weighted basis, Lion Industrial Trust was the largest positive contributor to Core performance over the quarter, outperforming the NFI-ODCE by 263 bps.
- CIM VI (Urban REIT) was the weakest performer, underperforming the NFI-ODCE by 476 basis points.
- Over the trailing year, returns were driven primarily by Lion Industrial Trust, which delivered a 47.4% net return.

## **Relative Performance by Strategy: Non-Core**

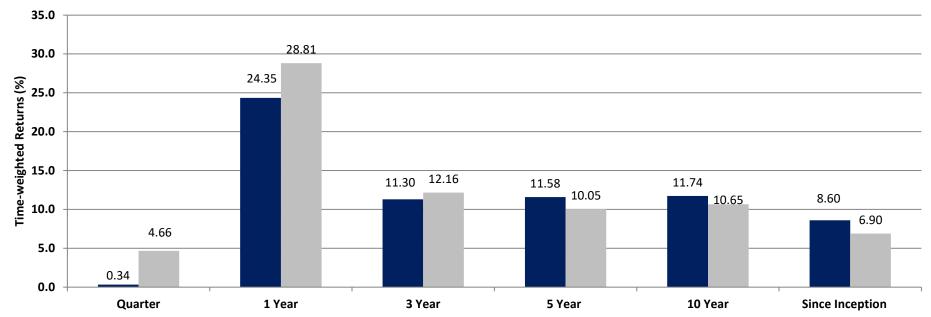




### LACERS Non-Core Real Estate Portfolio vs. NFI-ODCE + 200 bps

- The LACERS Non-Core benchmark is the NFI-ODCE + 200 bps, measured over 5-year time periods, net of fees. The 200 bps premium is a reflection of the incremental return expected from the additional risk inherent in Non-Core strategies.
- The Non-Core Portfolio underperformed relative to the NFI-ODCE + 200 bps benchmark during the quarter and all other periods. Underperformance over longer time periods is mostly due to Non-Core legacy funds that are due to liquidate over the next few years. As these funds liquidate and approved investments are funded, Non-Core portfolio performance is expected to improve.
- The Value Add Portfolio has achieved strong absolute and relative annualized returns over medium and long-term, but slightly underperformed recently. Meanwhile the Opportunistic Portfolio has continued as the main catalyst for Non-Core underperformance. Both are discussed in more detail on the following pages.

### **Relative Performance by Strategy: Non-Core — Value Add**



### LACERS Value Add Real Estate Portfolio vs. NFI-ODCE + 50 basis points

#### ■ Value Add Portfolio (Net) ■ NFI-ODCE + 50 bps (Net)

- The LACERS Value Add benchmark is the NFI-ODCE + 50 bps, measured over 5-year time periods, net of fees. The 50 bps premium is a reflection of the incremental return expected from additional risk inherent in Value Add strategies.
- The Value Add Portfolio underperformed the NFI-ODCE + 50 bps benchmark during the current quarter, trailing 1-year, and 3-year periods. However, the portfolio has outperformed the benchmark over the later periods including the official 5-year benchmarking period.
- During the Quarter, Asana Partners Fund I (4.0% net) and DRA Growth Fund VIII (2.2% net) were the strongest performers.
- Recent underperformance is driven by continuing volatile market conditions and rising interest rates leading to non-core managers writing down assets internally. The NFI-ODCE benchmark is based on external appraisals and therefore slower to react to changes in market environment.

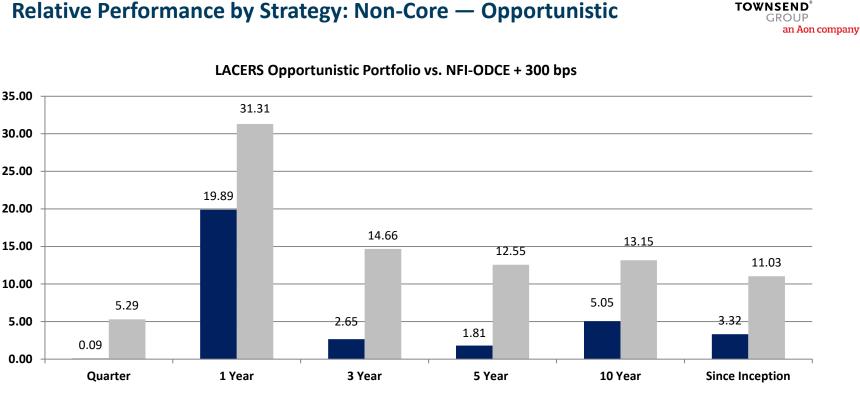
TOWNSEND

GROUP

an Aon company

## **Relative Performance by Strategy: Non-Core — Opportunistic**

Time-weighted Returns (%)



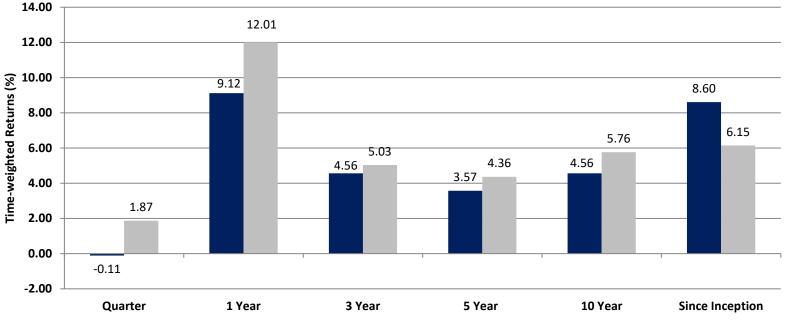
Opportunistic Portfolio (Net) NFI-ODCE + 300 bps (Net)

- The LACERS Opportunistic benchmark is the NFI-ODCE + 300 bps, measured over 5-year time periods, net of fees. The 300 bps premium is a \_ reflection of the incremental return expected from additional risk inherent in Opportunistic strategies.
- The Opportunistic Portfolio has underperformed the NFI-ODCE + 300 bps benchmark over all other time periods. Underperformance over long time periods is mostly due to legacy funds that are due to liquidate over the next few years.
  - Recent performance has improved to strong absolute returns of 19.89% over the trailing year, compared to years of mostly flat or 0 even negative returns in the past. However, overall performance still lagged the benchmark, which saw a record return over the trailing year.



## **Relative Performance by Strategy: Timber**

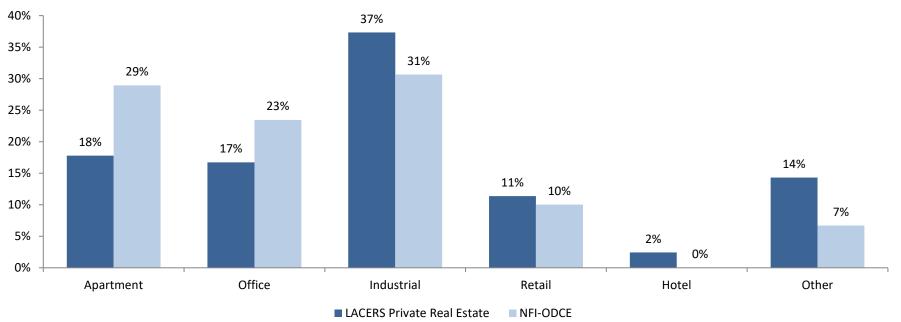




■ Timber Portfolio (Net) ■ NCREIF Timberland Index (Gross)

- The Timber Portfolio, net of fees, underperformed its benchmark, the NCREIF Timberland Index, gross of fees, excluding the sinceinception period.
- Outperformance over the long-term is mostly related to strong performance of Hancock ForesTree V, which was fully liquidated by yearend 2015.
- LACERS' only current timberland investment is Hancock Timberland XI. The Fund's assets are located in the United States (split between the South and the Northwest) and Chile (15%).
- Income returns for timber investments tend to be infrequent and are realized through harvest. To date, there has been no meaningful income from the fund due to limited harvest activity during a period of lower timber prices. This has impacted total returns.
- Further, all assets in Hancock Timberland IX are appraised at year-end, which is why appreciation usually remains relatively flat from the first quarter through the third quarter of each year. The effect of year-end appraisals is demonstrated in the annualized returns.

## **Real Estate Portfolio Diversification**



#### Private Real Estate Portfolio - Property Type Diversification

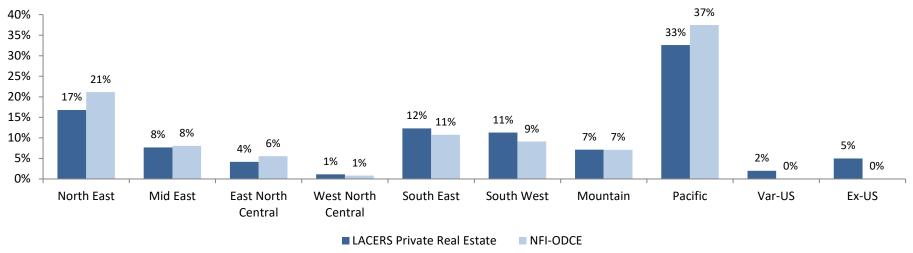
- The diversification of the Private Portfolio is measured against the diversification of the NFI-ODCE ± 10.0%. Currently, the "Other" category includes investments in alternative property types including Self Storage, Student Housing, Senior Housing, For Sale Residential, and Land.
- Among the "Other" property types, LACERS' portfolio has the greatest exposure to Land (1.0%), Self-Storage (2.8%), Senior Housing (1.4%), Health Care (0.4%), and Student Housing (0.8%).

TOWNSEND GROUP

an Aon company



## **Real Estate Portfolio Diversification**

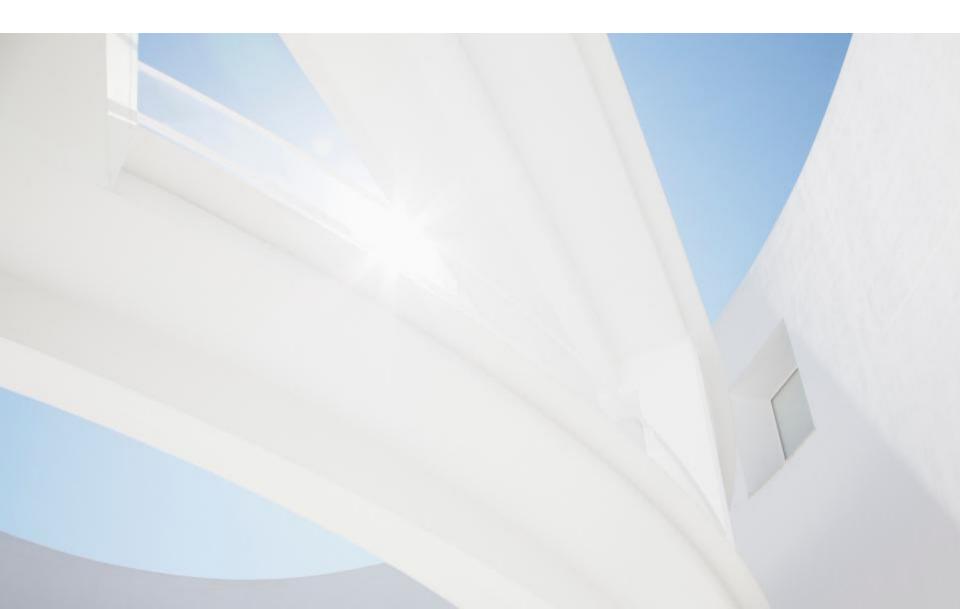


### Private Real Estate Portfolio - Geographic Diversification

- The diversification goal of the Private Portfolio is to be well diversified across the US. The only constraint is a 30.0% maximum allocation to Ex-US investments. NFI-ODCE diversification is provided as a benchmark.
- The Portfolio currently has an aggregate exposure to the Los Angeles metropolitan area of approximately 10% as of 2Q22, with approximately 5% exposure to Los Angeles City. The NFI-ODCE's exposure to the Los Angeles metropolitan area is approximately 11%.
- The 5% Ex-US exposure is composed primarily of two large regional exposures: Europe (3.0%), Asia (1.5%).

\*Var-US includes any investments that are not directly tied to specific regions, such as real estate debt investments through Torchlight or entity-level investments through Almanac.

# Exhibit A: Performance Flash Report





Portfolio Composition (\$)								
Total Plan Assets	Target Allocation		Market	Value	Unfunded Co	nmitments	Remaining Allocation	
\$20,600,086,387	1,442,006,047	7.0%	1,167,868,450	5.7%	465,538,758	2.3%	-191,401,161	-0.9%
Performance Summary	Quarte	er (%)	1 Year	(%)	3 Year	(%)	5 Year (%)	
	TGRS	TNET	TGRS	TNET	TGRS	TNET	TGRS	TNET
LACERS	3.7	3.2	28.6	25.8	12.6	10.7	11.0	9.3
NFI-ODCE + 80 basis points	5.0	4.7	30.3	29.1	13.5	12.5	11.3	10.4

Funding Status (\$)	Investment Vintage Year	Commitment Amount	Funded Amount	Unfunded Commitments	Capital Returned	Market Value	Market Value (%)	Market Value + Unfunded Commitments (%)
Core Portfolio	1989	423,867,553	510,029,109	100,000,000	170,502,391	822,282,999	70.4	56.5
Non-Core Portfolio	1990	993,977,156	663,649,935	364,140,609	487,672,133	326,118,933	27.9	42.3
Value Added Portfolio	1990	413,969,813	270,060,779	147,322,891	175,018,516	209,458,044	17.9	21.8
Opportunistic Portfolio	1996	605,007,343	455,071,681	216,817,718	386,465,280	116,660,890	10.0	20.4
Timber Portfolio	1999	20,000,000	18,601,851	1,398,149	5,732,328	19,466,518	1.7	1.3
Total Current Portfolio								
LACERS	1989	1,437,844,709	1,192,280,895	465,538,758	663,906,852	1,167,868,450	100.0	100.0

#### Los Angeles City Employees' Retirement System



Funding Status (\$)	Investment Vintage Year	Commitment Amount	Funded Amount	Unfunded Commitments	Capital Returned	N ۱
Core						
Berkshire Multifamily Income Realty Fund	2015	20,000,000	20,000,000	0	13,703,349	
Cortland Partners Growth and Income Fund	2022	100,000,000	0	100,000,000	0	
CIM VI (Urban REIT), LLC	2012	25,000,000	25,000,000	0	16,098,534	
INVESCO Core Real Estate	2004	63,867,553	137,113,121	0	78,734,446	
Jamestown Premier Property Fund	2015	50,000,000	51,573,787	0	27,394,989	
JP Morgan Strategic Property Fund	2005	30,000,000	30,421,882	0	2,858,499	
Kayne Anderson Core Real Estate Fund	2019	60,000,000	60,000,000	0	4,569,132	
Lion Industrial Trust - 2007	2016	75,000,000	85,920,320	0	13,042,781	
Prime Property Fund	2015	50,000,000	50,000,000	0	14,100,661	
Principal U.S. Property Account	2015	50,000,000	50,000,000	0	0	
Core	1989	523,867,553	510,029,110	100,000,000	170,502,391	
Timber						
Hancock Timberland XI	2012	20,000,000	18,601,851	1,398,149	5,732,328	
Timber	1999	20,000,000	18,601,851	1,398,149	5,732,328	
Value Added						
Almanac Realty Securities VI	2012	25,000,000	15,475,571	0	17,062,272	
Asana Partners Fund I	2017	20,000,000	18,301,629	2,015,220	6,081,663	
Asana Partners Fund II	2019	35,000,000	18,025,000	16,975,000	0	
DRA Growth and Income Fund VII	2011	25,000,000	26,640,000	0	59,233,914	
DRA Growth and Income Fund VIII	2014	25,000,000	29,576,071	518,518	30,683,275	
Gerrity Retail Fund 2	2015	20,000,000	20,077,854	0	6,492,336	
GLP Capital Partners IV	2021	40,000,000	25,095,222	19,308,747	8,722,633	
Heitman Asia-Pacific Property Investors	2018	25,000,000	22,311,650	3,333,094	5,559,494	
LBA Logistics Value Fund IX	2021	50,000,000	7,051,282	42,948,718	0	
LBA Logistics Value Fund VII	2020	35,000,000	28,699,340	6,300,660	610,273	
NREP Nordic Strategies Fund IV	2019	35,437,928	13,417,732	21,544,403	0	
Standard Life Investments European Real Estate Club II	2015	28,531,885	28,134,410	1,633,551	40,572,657	
Waterton Residential Property Venture XIV, L.P.	2020	50,000,000	17,255,020	32,744,980	0	
Value Added	1990	413,969,813	270,060,781	147,322,891	175,018,517	
Total Current Portfolio						
LACERS	1989	1,537,844,709	1,192,280,896	465,538,758	663,906,852	1

Market Value	Market Value (%)	Market Value + Unfunded Commitments (%)
	4.0	1.0
21,761,307	1.9	1.3
0	0.0	6.1
20,065,606	1.7	1.2
250,337,647	21.4	15.3
34,695,618	3.0	2.1
95,223,473	8.2	5.8
65,731,670	5.6	4.0
170,620,011	14.6	10.4
71,308,181	6.1	4.4
92,539,485	7.9	5.7
822,282,998	70.4	56.5
19,466,518	1.7	1.3
19,466,518	1.7	1.3
3,340,695	0.3	0.2
27,196,026	2.3	1.8
22,573,503	1.9	2.4
2,021,014	0.2	0.1
9,526,017	0.8	0.6
17,302,855	1.5	1.1
26,461,796	2.3	2.8
19,218,479	1.6	1.4
6,558,460	0.6	3.0
38,572,134	3.3	2.7
14,764,005	1.3	2.2
120,071	0.0	0.1
21,802,988	1.9	3.3
209,458,043	17.9	21.8
1,167,868,450	100.0	100.0



Funding Status (\$)	Funding Status (\$) Investment Commitment Funded Vintage Year Amount Amount		Unfunded Commitments	Capital Returned	Market Value	Market Value (%)	Market Value + Unfunded Commitments (%)	
Opportunistic								
Apollo CPI Europe I	2006	25,533,001	22,385,238	1,559,178	11,762,746	203,658	0.0	0.1
Bristol Value II, L.P.	2012	20,000,000	23,703,166	1,788,573	17,469,524	17,966,700	1.5	1.2
Broadview Real Estate Partners Fund, L.P.	2019	20,000,000	6,337,535	13,067,139	393,604	7,019,854	0.6	1.2
Brookfield Strategic Real Estate Partners IV	2021	50,000,000	0	50,000,000	0	0	0.0	3.1
Bryanston Retail Opportunity Fund	2005	10,000,000	4,271,584	5,885,919	11,492,685	8,261,028	0.7	0.9
California Smart Growth Fund IV	2006	30,000,000	31,522,663	33,153	37,313,224	1,024,450	0.1	0.1
Cerberus Institutional Real Estate Partners V	2020	40,000,000	24,409,117	15,590,884	0	28,991,643	2.5	2.7
CIM Real Estate Fund III	2007	15,000,000	16,674,075	0	21,301,769	6,587,989	0.6	0.4
Colony Investors VIII	2007	30,000,000	28,963,224	1,023,167	12,848,965	30,462	0.0	0.1
Latin America Investors III	2008	20,000,000	20,686,689	0	3,886,924	-1,894,613	-0.2	-0.1
Lone Star Fund VII	2011	15,000,000	14,075,468	0	24,661,759	49,723	0.0	0.0
Lone Star Real Estate Fund II	2011	15,000,000	13,291,475	0	20,508,270	28,348	0.0	0.0
Oaktree Real Estate Opportunities Fund VIII L.P.	2021	50,000,000	11,174,118	42,500,000	4,012,272	10,392,673	0.9	3.2
RECP Fund IV, L.P.	2008	40,000,000	53,279,662	750,435	40,654,313	20,893,903	1.8	1.3
Southern California Smart Growth Fund	2004	10,000,000	18,836,734	68,213	18,787,802	35,009	0.0	0.0
Stockbridge Real Estate Fund II	2006	30,000,000	30,000,000	0	13,779,370	353,356	0.0	0.0
Torchlight Debt Opportunity Fund IV	2013	24,474,342	24,483,106	0	31,379,671	3,964,624	0.3	0.2
TPG Real Estate Partners IV	2021	50,000,000	0	50,000,000	0	-414,473	0.0	3.0
Walton Street Real Estate Fund V	2006	25,000,000	25,000,001	0	17,037,214	1,111,837	0.1	0.1
Walton Street Real Estate Fund VI	2009	25,000,000	22,161,966	1,884,390	25,363,504	9,865,212	0.8	0.7
Wolff Credit Partners III, LP	2022	35,000,000	2,333,333	32,666,667	0	2,189,507	0.2	2.1
Opportunistic	1996	580,007,343	393,589,154	216,817,718	312,653,616	116,660,890	10.0	20.4
Private Real Estate Portfolio Only (ex. Timber)	1989	1,517,844,709	1,173,679,045	464,140,609	658,174,524	1,148,401,931	98.3	98.7
Non-Core Portfolio	1990	993,977,156	663,649,935	364,140,609	487,672,133	326,118,933	27.9	42.3
Total Current Portfolio								
LACERS	1989	1,537,844,709	1,192,280,896	465,538,758	663,906,852	1,167,868,450	100.0	100.0

### Los Angeles Clty Employees' Retirement System



	Market Value		Qua	arter			1 Y	'ear		3 Year			
Returns (%)	(\$)	INC <sup>1</sup>	APP <sup>1</sup>	TGRS <sup>1</sup>	TNET <sup>1</sup>	INC	APP	TGRS	TNET	INC	APP	TGRS	TNET
Core													
Berkshire Multifamily Income Realty Fund	21,761,307	0.8	7.7	8.5	8.3	3.4	32.0	36.2	35.4	3.5	11.1	14.9	14.1
CIM VI (Urban REIT), LLC	20,065,606	0.5	-0.4	0.1	-0.2	2.3	-0.2	2.1	0.9	2.4	-2.0	0.4	-0.9
INVESCO Core Real Estate	250,337,647	0.9	4.0	4.9	4.8	3.7	22.9	27.2	26.8	3.6	7.8	11.6	11.2
Jamestown Premier Property Fund	34,695,618	0.5	0.2	0.7	0.5	2.5	4.3	6.9	6.2	2.2	-4.2	-2.1	-2.5
JP Morgan Strategic Property Fund	95,223,473	0.7	4.0	4.7	4.5	3.5	24.5	28.6	27.6	3.6	8.2	12.0	11.0
Kayne Anderson Core Real Estate Fund	65,731,670	1.2	1.8	3.0	2.8	5.0	9.0	14.3	13.5	4.9	4.1	9.2	8.7
Lion Industrial Trust - 2007	170,620,011	0.8	7.6	8.4	7.2	3.6	52.2	57.2	47.4	4.3	25.2	30.3	25.4
Prime Property Fund	71,308,181	0.9	2.6	3.4	3.0	3.7	24.9	29.3	27.9	3.7	9.1	13.0	11.8
Principal U.S. Property Account	92,539,485	0.9	2.3	3.3	3.1	4.0	24.1	28.8	27.8	4.1	8.6	13.0	12.0
Core	822,282,998	0.8	4.0	4.9	4.5	3.7	25.3	29.6	27.5	3.7	9.3	13.2	11.9
Timber													
Hancock Timberland XI	19,466,518	0.1	0.0	0.1	-0.1	0.5	9.5	10.1	9.1	0.8	4.6	5.5	4.6
Timber	19,466,518	0.1	0.0	0.1	-0.1	0.5	9.5	10.1	9.1	0.8	4.6	5.5	4.6
Value Added													
Almanac Realty Securities VI	3,340,695	0.0	-5.4	-5.4	-5.7	0.6	2.6	3.2	2.0	2.9	-10.8	-7.9	-8.9
Asana Partners Fund I	27,196,026	1.0	4.3	5.2	4.0	3.8	27.5	32.1	24.5	3.5	13.7	17.5	13.5
Asana Partners Fund II	22,573,503	0.1	-6.7	-6.6	-5.5	0.7	29.6	30.5	21.7				
DRA Growth and Income Fund VII	2,021,014	1.2	0.1	1.3	0.9	8.6	19.1	29.2	23.1	9.5	41.8	54.4	43.3
DRA Growth and Income Fund VIII	9,526,017	1.6	1.3	2.9	2.2	11.2	9.7	21.4	20.3	7.2	0.0	7.2	5.9
Gerrity Retail Fund 2	17,302,855	1.3	0.0	1.3	1.0	5.7	0.9	6.6	5.2	5.9	-5.4	0.3	-1.0
GLP Capital Partners IV	26,461,796	0.5	1.3	1.8	1.7	35.8	22.6	64.7	63.4				
Heitman Asia-Pacific Property Investors	19,218,479	0.9	-2.1	-1.2	-1.4	3.5	0.9	4.5	3.7	4.0	2.1	6.1	5.3
LBA Logistics Value Fund IX	6,558,460	-0.1	0.0	-0.2	-2.7								
LBA Logistics Value Fund VII	38,572,134	0.9	0.3	1.2	0.8	3.8	25.5	30.0	27.8				
NREP Nordic Strategies Fund IV <sup>3</sup>	14,764,005	-3.3	7.4	4.1	0.4	-15.6	58.0	40.0	23.4				
Standard Life Investments European Real Estate Club II <sup>2</sup>	120,071	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
Waterton Residential Property Venture XIV, L.P.	21,802,988	0.0	2.6	2.6	1.9	-0.1	58.5	58.4	42.6				·
Value Added	209,458,043	0.4	0.5	0.9	0.3	6.3	22.3	29.6	24.4	4.6	10.9	15.9	11.3
Total Portfolio <sup>4</sup>													
LACERS	1,167,868,450	0.7	2.9	3.7	3.2	4.1	23.8	28.6	25.8	3.5	8.8	12.6	10.7
Indices													
NFI-ODCE (Core)		0.9	3.9	4.8	4.5	3.8	25.0	29.5	28.3	3.9	8.5	12.7	11.7
NFI-ODCE + 80 bps (Total Portfolio)			-	5.0	4.7	-	-	30.3	29.1	_	-	13.5	12.5
NFI-ODCE + 200 bps (Non-Core Portfolio)				5.3	5.0			31.5	30.3			14.7	13.7
NFI -ODCE + 50 bps (Value Add)				4.9	4.7			30.0	28.8			13.2	12.2
NFI -ODCE + 300 bps (Opportunistic)				5.5	5.3			32.5	31.3			15.7	14.7
NCREIF Timberland Property Index "NTI"		0.8	1.0	1.9	2.0	3.4	8.4	12.0	01.0	3.0	2.0	5.0	

\* Net IRR and Equity Multiple may be missing due to hard coded data.

<sup>1</sup>INC: Income Return; APP: Appreciation Return; TGRS: Total Gross Return; TNET: Total Net Return. Please refer to Exhibit C for more detailed definitions.

<sup>2</sup> Liquidating investment. Time-weighted returns are excluded as they are no longer meaningful.

<sup>3</sup> Broken time-weighted return since inception.

<sup>4</sup> Excludes Integrated Capital Hospitality Fund, which did not provide data as of 6/30/22.



	Market Value		5 Y	ear			Ince	ption		TWR	Net	Equity
Returns (%)	(\$)	INC	APP	TGRS	TNET	INC	APP	TGRS	TNET	Calculation Inception	IRR*	Multiple*
Core												
Berkshire Multifamily Income Realty Fund	21,761,307	3.8	7.1	11.1	10.4	3.9	6.3	10.5	9.7	1Q16	10.5	1.8
CIM VI (Urban REIT), LLC	20,065,606	2.8	0.0	2.8	1.5	3.3	3.3	6.7	5.4	3Q12	4.9	1.4
INVESCO Core Real Estate	250,337,647	3.6	6.2	10.0	9.6	4.9	3.8	8.8	8.3	4Q04	8.3	2.4
Jamestown Premier Property Fund	34,695,618	2.8	0.7	3.4	2.2	3.3	2.0	5.3	3.9	3Q15	4.5	1.2
JP Morgan Strategic Property Fund	95,223,473	3.7	5.9	9.8	8.8	4.9	3.3	8.3	7.3	4Q05	7.4	3.2
Kayne Anderson Core Real Estate Fund	65,731,670					5.0	4.3	9.5	8.9	1Q19	9.5	1.2
Lion Industrial Trust - 2007	170,620,011	4.6	19.6	25.0	21.1	4.9	17.1	22.6	19.1	1Q16	19.2	2.1
Prime Property Fund	71,308,181	3.8	7.4	11.3	10.2	3.9	7.0	11.1	9.9	1Q16	9.7	1.7
Principal U.S. Property Account	92,539,485	4.3	6.7	11.2	10.2	4.5	6.3	10.9	9.9	4Q15	9.9	1.9
Core	822,282,998	3.8	7.5	11.5	10.3	6.1	2.3	8.5	7.6	1Q89	6.7	1.7
Timber												
Hancock Timberland XI	19,466,518	0.7	3.8	4.5	3.6	0.0	5.3	5.3	4.4	2Q12	4.1	1.4
Timber	19,466,518	0.7	3.8	4.5	3.6	4.2	5.4	9.9	8.6	4Q99	9.3	1.8
Value Added												
Almanac Realty Securities VI	3,340,695	5.0	-10.3	-5.6	-6.5	6.7	-1.2	5.5	4.0	1Q13	9.2	1.3
Asana Partners Fund I	27,196,026	2.5	19.5	22.3	16.5	2.5	18.7	21.6	15.6	2Q17	16.2	1.8
Asana Partners Fund II	22,573,503					-4.1	9.4	4.3	-7.7	4Q19	14.2	1.3
DRA Growth and Income Fund VII	2,021,014	9.1	37.1	48.8	39.1	10.9	22.1	35.0	28.2	1Q12	21.6	2.3
DRA Growth and Income Fund VIII	9,526,017	8.6	0.8	9.4	7.7	10.2	1.0	11.3	9.1	4Q14	9.2	1.4
Gerrity Retail Fund 2	17,302,855	6.4	-2.1	4.2	2.7	7.1	0.0	7.1	5.1	4Q15	3.9	1.2
GLP Capital Partners IV	26,461,796					35.8	22.6	64.7	63.4	3Q21	44.3	1.4
Heitman Asia-Pacific Property Investors	19,218,479					2.5	-0.1	2.4	1.6	3Q18	4.1	1.1
LBA Logistics Value Fund IX	6,558,460					-0.1	0.0	-0.2	-2.7	2Q22	-9.5	0.9
LBA Logistics Value Fund VII	38,572,134					4.1	32.9	37.9	34.4	4Q20	28.2	1.4
NREP Nordic Strategies Fund IV <sup>3</sup>	14,764,005					-23.0	52.5	21.6	N/A	1Q20	9.4	1.1
Standard Life Investments European Real Estate Club II <sup>2</sup>	120,071	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	1Q16	15.5	1.4
Waterton Residential Property Venture XIV, L.P.	21,802,988		·			-0.1	75.3	75.1	53.2	1Q21	33.9	1.3
Value Added	209,458,043	5.6	9.7	15.6	11.6	7.3	3.3	10.8	8.6	4Q90		
Total Portfolio <sup>4</sup>												
LACERS	1,167,868,450	3.7	7.0	11.0	9.3	5.9	2.1	8.1	6.4	1Q89		
Indices												
NFI-ODCE (Core)		4.0	6.3	10.5	9.6	6.5	1.3	7.8	6.8	1Q89		
NFI-ODCE + 80 bps (Total Portfolio)				11.3	10.4			8.6	7.6	1Q89		
NFI-ODCE + 200 bps (Non-Core Portfolio)				12.5	11.6			9.4	8.4	4Q90		
NFI -ODCE + 50 bps (Value Add)				11.0	10.1			7.9	6.9	4Q90		
NFI -ODCE + 300 bps (Opportunistic)				13.5	12.6			12.1	11.0	4Q96		
NCREIF Timberland Property Index "NTI"		3.0	1.3	4.4	-	3.3	2.8	6.1	-	4Q99		

\* Net IRR and Equity Multiple may be missing due to hard coded data.

<sup>1</sup>INC: Income Return; APP: Appreciation Return; TGRS: Total Gross Return; TNET: Total Net Return. Please refer to Exhibit C for more detailed definitions.

<sup>2</sup> Liquidating investment. Time-weighted returns are excluded as they are no longer meaningful.

<sup>3</sup> Broken time-weighted return since inception.

<sup>4</sup> Excludes Integrated Capital Hospitality Fund, which did not provide data as of 6/30/22.



	Market Value		Qua	arter		1 Year				3 Year			
Returns (%)	(\$)	INC	APP	TGRS	TNET	INC	APP	TGRS	TNET	INC	APP	TGRS	TNET
Opportunistic													
Apollo CPI Europe I <sup>1</sup>	203,658	N/A											
Bristol Value II, L.P.	17,966,700	1.3	0.0	1.3	1.1	4.9	18.2	23.8	22.8	3.3	11.2	14.8	13.5
Broadview Real Estate Partners Fund, L.P.	7,019,854	-0.4	2.6	2.2	1.5	-0.6	28.2	27.6	17.8				
Bryanston Retail Opportunity Fund	8,261,028	0.4	-19.7	-19.3	-19.3	2.0	35.2	37.7	37.5	1.3	38.9	40.6	40.3
California Smart Growth Fund IV	1,024,450	-0.2	0.0	-0.2	-0.2	33.6	0.0	33.6	33.6	16.3	5.1	22.2	22.2
Cerberus Institutional Real Estate Partners V	28,991,643	-0.4	7.6	7.2	5.3	-2.2	40.8	37.9	27.2				
CIM Real Estate Fund III <sup>2</sup>	6,587,989	0.6	0.1	0.6	0.3	-0.4	18.1	17.7	15.9	-1.4	-0.2	-1.6	-3.1
Colony Investors VIII <sup>1,2</sup>	30,462	N/A											
Latin America Investors III <sup>1</sup>	-1,894,613	N/A											
Lone Star Fund VII <sup>1</sup>	49,723	, N/A	N/A	N/A	, N/A								
Lone Star Real Estate Fund II <sup>1</sup>	28,348	, N/A											
Oaktree Real Estate Opportunities Fund VIII L.P.	10,392,673	0.8	-2.1	-1.2	-2.3	,,,	,,,	,,,	,,,	,,,	,,,	,,,	,,,
RECP Fund IV, L.P.	20,893,903	0.0	1.7	1.6	1.6	2.0	14.4	16.6	19.4	1.6	-5.0	-3.5	-3.8
Southern California Smart Growth Fund <sup>1</sup>	35,009	N/A											
Stockbridge Real Estate Fund II <sup>1</sup>	353,356	N/A											
Torchlight Debt Opportunity Fund IV	3,964,624	0.4	-3.0	-2.5	-0.7	1.6	4.2	5.9	5.5	2.4	-5.5	-3.2	0.9
TPG Real Estate Partners IV	-414,473	0.1	5.0	2.5	0.7	1.0		5.5	5.5	2.1	5.5	5.2	0.5
Walton Street Real Estate Fund V	1,111,837	-0.1	-1.4	-1.5	-1.5	1.5	-19.7	-18.2	-18.2	-0.8	-13.2	-13.9	-13.9
Walton Street Real Estate Fund VI	9,865,212	2.9	0.4	3.3	3.3	13.1	5.1	18.7	18.3	7.1	-2.3	4.7	3.9
Wolff Credit Partners III, LP	2,189,507	13.7	0.0	13.7	7.2	_							
Opportunistic	116,660,890	0.7	0.1	0.8	0.1	3.7	19.1	23.3	19.9	1.4	3.3	4.7	2.7
Private Real Estate Portfolio Only (ex. Timber) <sup>3</sup>	1,148,401,931	0.7	3.0	3.7	3.3	4.2	24.1	29.0	26.2	3.6	8.9	12.7	10.8
Non-Core Portfolio	326,118,933	0.5	0.3	0.9	0.2	5.4	21.2	27.3	22.7	3.2	7.6	10.9	7.5
Total Portfolio <sup>3</sup>													
LACERS	1,167,868,450	0.7	2.9	3.7	3.2	4.1	23.8	28.6	25.8	3.5	8.8	12.6	10.7
Indices													
NFI-ODCE (Core)		0.9	3.9	4.8	4.5	3.8	25.0	29.5	28.3	3.9	8.5	12.7	11.7
NFI-ODCE + 80 bps (Total Portfolio)				5.0	4.7			30.3	29.1			13.5	12.5
NFI-ODCE + 200 bps (Non-Core Portfolio)				5.3	5.0			31.5	30.3			14.7	13.7
NFI -ODCE + 50 bps (Value Add)				4.9	4.7			30.0	28.8			13.2	12.2
NFI -ODCE + 300 bps (Opportunistic)				5.5	5.3			32.5	31.3			15.7	14.7
NCREIF Timberland Property Index "NTI"		0.8	1.0	1.9		3.4	8.4	12.0		3.0	2.0	5.0	

\* Net IRR and Equity Multiple may be missing due to hard coded data.

<sup>1</sup> Liquidating investment. Time-weighted returns are excluded as they are no longer meaningful.

<sup>2</sup> Broken time-weighted return since inception.

<sup>3</sup> Excludes Integrated Capital Hospitality Fund, which did not provide data as of 6/30/22.



	Market Value		5 ۲	/ear			Ince	ption		TWR	Net	Equity
Returns (%)	(\$)	INC	APP	TGRS	TNET	INC	APP	TGRS	TNET	Calculation Inception	IRR*	Multiple*
Opportunistic												
Apollo CPI Europe I <sup>1</sup>	203,658	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	4Q06	-9.1	0.5
Bristol Value II, L.P.	17,966,700	2.2	10.7	13.1	11.7	2.9	10.7	13.9	12.2	1Q13	10.8	1.5
Broadview Real Estate Partners Fund, L.P.	7,019,854					-6.3	287.1	N/A	N/A	4Q19	14.8	1.2
Bryanston Retail Opportunity Fund	8,261,028	0.8	20.9	21.8	21.4	6.2	25.0	30.9	28.1	2Q05	79.6	4.6
California Smart Growth Fund IV	1,024,450	9.8	4.1	14.3	14.0	4.8	1.0	5.9	4.1	1Q07	3.0	1.2
Cerberus Institutional Real Estate Partners V	28,991,643					-3.6	40.8	36.2	22.7	1Q21	21.5	1.2
CIM Real Estate Fund III <sup>2</sup>	6,587,989	0.3	0.8	1.2	-0.3	-7.4	N/A	N/A	N/A	1Q08	8.8	1.7
Colony Investors VIII <sup>1,2</sup>	30,462	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	4Q07	-11.5	0.4
Latin America Investors III <sup>1</sup>	-1,894,613	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	1Q09	0.0	0.1
Lone Star Fund VII <sup>1</sup>	49,723	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	3Q11	50.2	1.8
Lone Star Real Estate Fund II <sup>1</sup>	28,348	N/A	N/A	N/A	, N/A	, N/A	N/A	, N/A	N/A	3Q11	26.3	1.5
Oaktree Real Estate Opportunities Fund VIII L.P.	10,392,673	,,,		,	,	4.5	8.1	12.9	8.0	4Q21	204.3	1.3
RECP Fund IV, L.P.	20,893,903	2.0	-1.4	0.5	0.1	3.0	-5.8	-3.0	-5.9	4Q08	2.3	1.2
Southern California Smart Growth Fund <sup>1</sup>	35,009	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	1Q05	0.0	1.0
Stockbridge Real Estate Fund II <sup>1</sup>	353,356	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	4Q06	-6.8	0.5
Torchlight Debt Opportunity Fund IV	3,964,624	4.6	-1.8	2.7	4.2	6.9	0.2	7.0	6.8	4Q13	9.5	1.4
TPG Real Estate Partners IV	-414,473									4Q22	0.0	0.0
Walton Street Real Estate Fund V	1,111,837	0.0	-12.1	-12.0	-12.2	1.7	-4.5	-2.9	-4.3	4Q06	-3.5	0.7
Walton Street Real Estate Fund VI	9,865,212	5.8	-0.8	5.0	4.1	-5.5	10.0	2.9	-0.9	3Q09	8.3	1.6
Wolff Credit Partners III, LP	2,189,507					13.7	0.0	13.7	7.2	2Q22	-6.2	0.9
Opportunistic	116,660,890	1.8	1.8	3.6	1.8	3.9	2.8	6.7	3.3	4Q96	2.2	1.1
Private Real Estate Portfolio Only (ex. Timber) <sup>3</sup>	1,148,401,931	3.8	7.1	11.1	9.4	5.9	2.1	8.1	6.4	1Q89		
Non-Core Portfolio	326,118,933	3.7	5.9	9.7	6.8	6.1	3.0	9.3	6.7	4Q90		
Total Portfolio <sup>3</sup>												
LACERS	1,167,868,450	3.7	7.0	11.0	9.3	5.9	2.1	8.1	6.4	1Q89		
Indices												
NFI-ODCE (Core)		4.0	6.3	10.5	9.6	6.5	1.3	7.8	6.8	1Q89		
NFI-ODCE + 80 bps (Total Portfolio)				11.3	10.4			8.6	7.6	1Q89		
NFI-ODCE + 200 bps (Non-Core Portfolio)				12.5	11.6			9.4	8.4	4Q90		
NFI -ODCE + 50 bps (Value Add)				11.0	10.1			7.9	6.9	4Q90		
NFI -ODCE + 300 bps (Opportunistic)				13.5	12.6			12.1	11.0	4Q96		
NCREIF Timberland Property Index "NTI"		3.0	1.3	4.4		3.3	2.8	6.1		4Q99		

\* Net IRR and Equity Multiple may be missing due to hard coded data.

<sup>1</sup> Liquidating investment. Time-weighted returns are excluded as they are no longer meaningful.

<sup>2</sup> Broken time-weighted return since inception.

<sup>3</sup> Excludes Integrated Capital Hospitality Fund, which did not provide data as of 6/30/22.



Detume (0/)	Market Value	202	22	2	021	20	)20	2019		2018	
Returns (%)	(\$)	TGRS	TNET	TGRS	TNET	TGRS	TNET	TGRS	TNET	TGRS	TNET
Core											
Berkshire Multifamily Income Realty Fund	21,761,307	15.0	14.6	25.7	24.9	1.9	1.0	5.0	4.2	6.2	5.6
CIM VI (Urban REIT), LLC	20,065,606	2.5	1.9	-0.7	-2.0	-5.0	-6.3	5.3	3.9	10.4	8.9
INVESCO Core Real Estate	250,337,647	11.7	11.6	21.1	20.7	-1.6	-1.9	6.6	6.2	9.4	9.0
Jamestown Premier Property Fund	34,695,618	3.1	2.7	-0.5	-1.1	-9.3	-9.4	3.0	2.4	9.7	7.7
JP Morgan Strategic Property Fund	95,223,473	11.5	11.1	20.9	19.8	1.4	0.4	4.4	3.4	8.0	7.0
Kayne Anderson Core Real Estate Fund	65,731,670	6.5	6.1	13.2	12.8	4.0	3.5	9.6	9.0		
Lion Industrial Trust - 2007	170,620,011	21.3	18.0	49.7	41.5	13.7	11.6	16.5	13.9	18.7	15.9
Prime Property Fund	71,308,181	11.0	10.3	22.9	21.5	2.1	1.3	7.4	6.2	9.1	8.0
Principal U.S. Property Account	92,539,485	11.0	10.6	23.7	22.6	1.6	0.6	7.0	6.0	9.1	8.1
Core	822,282,998	12.2	11.4	23.0	21.2	1.2	0.4	7.2	6.3	9.8	8.7
Timber											
Hancock Timberland XI	19,466,518	0.5	0.1	10.9	9.9	0.6	-0.3	4.9	3.9	3.9	2.9
Timber	19,466,518	0.5	0.1	10.9	9.9	0.6	-0.3	4.9	3.9	3.9	2.9
Value Added											
Almanac Realty Securities VI	3,340,695	-2.7	-3.2	17.2	15.9	-32.1	-32.9	-2.5	-3.2	2.0	1.3
Asana Partners Fund I	27,196,026		7.0	53.1	35.3	-13.0	-7.1	28.7	21.3	26.4	18.7
Asana Partners Fund II	22,573,503		-2.8	63.7	49.9	-36.4	-45.7	11.1	1.5		
DRA Growth and Income Fund VII	2,021,014	19.6	16.0	49.6	39.6	51.2	40.5	58.0	46.3	45.3	37.5
DRA Growth and Income Fund VIII	9,526,017	4.7	3.6	32.7	31.9	-16.6	-17.1	11.0	8.6	14.1	11.3
Gerrity Retail Fund 2	17,302,855		1.9	7.4	5.9	-11.5	-12.7	6.7	5.3	12.4	10.6
GLP Capital Partners IV	26,461,796		9.6	49.8	49.0			•			
Heitman Asia-Pacific Property Investors	19,218,479		0.2	4.7	4.0	5.2	4.3	4.1	3.3	-4.7	-5.2
LBA Logistics Value Fund IX	6,558,460		-2.7								
LBA Logistics Value Fund VII	38,572,134	2.5	1.8	52.3	48.5	12.4	11.0				
NREP Nordic Strategies Fund IV <sup>3</sup>	14,764,005	2.0	-4.4	30.9	10.3	22.1	-121.4				
Standard Life Investments European Real Estate Club II <sup>1</sup>	120,071		-13.0		4.4	3.9	1.1	54.8	41.9	-2.0	-2.7
Waterton Residential Property Venture XIV, L.P.	21,802,988		16.3		63.1						
Value Added	209,458,043	5.1	3.5		31.3	-4.8	-6.8	18.9	13.9	14.1	11.0
Total Portfolio <sup>2</sup>											
LACERS	1,167,868,450	10.1	9.0	25.3	22.4	-0.8	-1.8	7.6	6.2	8.4	7.0
Indices											
NFI-ODCE (Core)		12.5	12.0	22.2	21.0	1.2	0.3	5.3	4.4	8.3	7.4
NFI-ODCE + 80 bps (Total Portfolio)		13.3	12.8		21.8	2.0	1.1	6.1	5.2	9.1	8.2
NFI-ODCE + 200 bps (Non-Core Portfolio)		14.5	14.0		23.0	4.0	3.1	8.1	7.2	11.1	10.2
NFI-ODCE + 50 bps (Value Add)		13.0	12.5	22.7	23.0	1.7	0.8	5.8	4.9	8.8	7.9
NFI-ODCE + 300 bps (Opportunistic)		15.5	15.0		24.0	4.2	3.3	8.3	7.4	11.3	10.4
NCREIF Timberland Index (Timber)		5.1	10.0	9.2	2 1.0	0.8	0.0	1.3	,	3.4	20.1
		5.1		3.2		0.0		1.5		5.7	

1 Liquidating investment. Time-weighted returns are excluded as they are no longer meaningful.

<sup>2</sup> Excludes Integrated Capital Hospitality Fund, which did not provide data as of 6/30/22.

<sup>3</sup> Broken time-weighted return since inception.

#### Los Angeles Clty Employees' Retirement System

20	17
TGRS	TNET
5.4 5.2 8.4 18.0 7.2	4.7 3.7 8.0 14.2 6.2
1.2	0.2
14.4 9.9 9.1 <b>9.2</b>	12.3 8.8 8.1 <b>8.1</b>
2.1	1.2
2.1	1.2
0.4 18.1	-0.3 10.8
34.3 14.2 9.8	27.5 11.7 7.6
33.8	32.6
18.6	15.9
10.0	8.6
7.6 8.4 10.4 8.1 10.6 3.6	6.7 7.5 9.5 7.2 9.7



	Market Value	20	016	20	)15	20	14	2013		2012	
Returns (%)	(\$)	TGRS	TNET								
Core											
Berkshire Multifamily Income Realty Fund	21,761,307	10.4	9.5								
CIM VI (Urban REIT), LLC	20,065,606	2.6	2.4	13.4	11.0	15.0	13.5	6.8	5.4	13.8	13.1
INVESCO Core Real Estate	250,337,647	9.2	8.9	14.7	14.3	12.4	11.9	14.3	13.8	8.7	8.2
Jamestown Premier Property Fund	34,695,618	6.7	5.4	8.5	7.0						
JP Morgan Strategic Property Fund	95,223,473	8.4	7.3	15.2	14.1	11.1	10.1	15.9	14.8	12.1	11.0
Kayne Anderson Core Real Estate Fund	65,731,670										
Lion Industrial Trust - 2007	170,620,011	14.9	12.8								
Prime Property Fund	71,308,181	10.4	9.2								
Principal U.S. Property Account	92,539,485	10.1	9.0	3.0	2.8						
Core	822,282,998	8.7	7.9	13.4	12.7	11.8	11.3	13.3	12.5	9.6	8.9
Timber											
Hancock Timberland XI	19,466,518	3.5	2.6	5.4	4.6	5.2	4.6	9.9	8.9	8.1	7.6
Timber	19,466,518	3.5	2.6	5.4	4.5	8.1	4.5	20.9	17.8	9.9	8.9
Value Added											
Almanac Realty Securities VI	3,340,695	15.2	14.3	23.5	21.2	15.2	12.8	31.6	26.1		
Asana Partners Fund I	27,196,026										
Asana Partners Fund II	22,573,503										
DRA Growth and Income Fund VII	2,021,014	35.2	28.8	22.9	16.2	20.3	17.7	18.7	15.5	17.6	14.3
DRA Growth and Income Fund VIII	9,526,017	14.7	11.8	16.0	12.9	2.7	2.1				
Gerrity Retail Fund 2	17,302,855	21.4	17.7	1.7	0.6						
GLP Capital Partners IV	26,461,796										
Heitman Asia-Pacific Property Investors	19,218,479										
LBA Logistics Value Fund IX	6,558,460										
LBA Logistics Value Fund VII	38,572,134										
NREP Nordic Strategies Fund IV <sup>3</sup>	14,764,005										
Standard Life Investments European Real Estate Club II <sup>1</sup>	120,071	8.1	7.1								
Waterton Residential Property Venture XIV, L.P.	21,802,988										
Value Added	209,458,043	14.6	12.1	14.5	11.7	12.6	10.9	9.5	7.9	17.1	15.6
Total Portfolio <sup>2</sup>											
LACERS	1,167,868,450	8.1	6.8	11.2	9.5	13.7	11.8	13.5	11.4	12.8	11.0
Indices											
NFI-ODCE (Core)		8.8	7.8	15.0	14.0	12.5	11.5	13.9	12.9	10.9	9.8
NFI-ODCE + 80 bps (Total Portfolio)		9.6	8.6	15.8	14.8	13.3	12.3	14.7	13.7	11.7	10.6
NFI-ODCE + 200 bps (Non-Core Portfolio)		11.6	10.6	17.8	16.8	15.3	14.3	16.7	15.7	13.7	12.6
NFI-ODCE + 50 bps (Value Add)		9.3	8.3	15.5	14.5	13.0	12.0	14.4	13.4	11.4	10.3
NFI-ODCE + 300 bps (Opportunistic)		11.8	10.8	18.0	17.0	15.5	14.5	16.9	15.9	13.9	12.8
NCREIF Timberland Index (Timber)		2.7		5.0		10.5		9.7		7.8	

1 Liquidating investment. Time-weighted returns are excluded as they are no longer meaningful.

<sup>2</sup> Excludes Integrated Capital Hospitality Fund, which did not provide data as of 6/30/22.

<sup>3</sup> Broken time-weighted return since inception.

#### Los Angeles Clty Employees' Retirement System



	Market Value	202	22	20	)21	20	20	20	19	2018		20	)17
Returns (%)	(\$)	TGRS	TNET	TGRS	TNET	TGRS	TNET	TGRS	TNET	TGRS	TNET	TGRS	TNET
Opportunistic			<b>I</b>										
Apollo CPI Europe I <sup>1</sup>	203,658	-8.6	-8.6	-8.3	-8.3	N/A	N/A	1.6	1.6	-23.0	-23.2	10.4	10.4
Bristol Value II, L.P.	17,966,700	7.9	7.5	16.9	15.9	10.1	8.7	8.5	6.9	6.7	5.1	17.1	15.3
Broadview Real Estate Partners Fund, L.P.	7,019,854	9.4	6.4	60.3	40.2	82.4	35.2	-158.5	-158.5				
Bryanston Retail Opportunity Fund	8,261,028	-10.8	-10.9	74.3	74.0	51.2	50.8	18.3	17.9	23.5	22.9	-22.1	-22.4
California Smart Growth Fund IV	1,024,450	13.0	13.0	26.4	26.4	10.1	10.1	28.3	28.3	-6.1	-6.1	14.3	12.8
Cerberus Institutional Real Estate Partners V	28,991,643	13.9	10.1	39.5	23.4								
CIM Real Estate Fund III <sup>1</sup>	6,587,989	5.0	4.3	11.0	9.0	-17.2	-18.5	0.3	-1.1	5.9	4.5	8.0	6.4
Colony Investors VIII <sup>1</sup>	30,462	-10.5	-10.5	-2.3	-2.3	N/A	N/A	-9.8	-9.8	-19.2	-19.2	16.0	14.9
Latin America Investors III <sup>1</sup>	-1,894,613	13.9	19.7	-54.1	-46.9	N/A	, N/A	N/A	N/A	-99.0	-103.0	-21.9	-24.6
Lone Star Fund VII <sup>1</sup>	49,723	-1.9	-1.4	45.6	42.0	N/A	, N/A	N/A	, N/A	-38.2	-29.2	-57.8	-46.7
Lone Star Real Estate Fund II <sup>1</sup>	28,348	0.6	1.0	6.4	-11.4	N/A	N/A	10.1	10.4	-2.9	-1.0	-0.7	5.4
Oaktree Real Estate Opportunities Fund VIII	10,392,673	4.7	2.1	7.8	5.8	,,,,	,,,,	1011	2011	2.5	1.0	017	511
RECP Fund IV, L.P.	20,893,903	4.5	4.5	10.4	12.9	-23.0	-25.1	2.3	2.1	2.1	1.6	14.6	12.4
Southern California Smart Growth Fund <sup>1</sup>	35,009	-4.5	-4.5	-8.9	-8.9	N/A	N/A	N/A	N/A	N/A	N/A	-1.1	-1.1
Stockbridge Real Estate Fund II	353,356	20.0	19.8	16.0	15.3	-6.2	-6.6	-4.6	-5.0	0.6	0.2	21.2	20.6
Torchlight Debt Opportunity Fund IV	3,964,624	-2.3	0.1	10.7	7.9	-12.3	-4.0	-2.2	1.5	14.8	10.7	15.2	11.3
TPG Real Estate Partners IV	-414,473	2.0	0.1						2.0				
Walton Street Real Estate Fund V	1,111,837	-8.4	-8.4	-10.3	-10.3	-8.7	-8.7	-17.9	-18.1	-16.6	-17.1	4.5	3.5
Walton Street Real Estate Fund VI	9,865,212	5.9	5.8	19.8	19.2	-10.0	-11.0	2.0	1.0	4.2	3.1	9.2	7.9
Wolff Credit Partners III, LP	2,189,507	13.7	7.2										
Opportunistic	116,660,890	6.4	4.9	12.4	10.5	-11.2	-12.8	0.1	-0.8	-1.1	-2.5	7.5	5.8
Private Real Estate Portfolio Only (ex. Timber) <sup>2</sup>	1,148,401,931	10.3	9.2	16.0	13.9	-0.8	-1.9	7.7	6.3	8.6	7.1	10.2	8.8
Non-Core Portfolio	326,118,933	5.6	4.0	20.6	16.2	-7.6	-9.3	9.0	6.2	5.8	3.7	12.1	10.0
Total Portfolio <sup>2</sup>													
LACERS	1,167,868,450	10.1	9.0	25.3	22.4	-0.8	-1.8	7.6	6.2	8.4	7.0	10.0	8.6
Indices													
NFI-ODCE (Core)		12.5	12.0	22.2	21.0	1.2	0.3	5.3	4.4	8.3	7.4	7.6	6.7
NFI-ODCE + 80 bps (Total Portfolio)		13.3	12.8	23.0	21.8	2.0	1.1	6.1	5.2	9.1	8.2	8.4	7.5
NFI-ODCE + 200 bps (Non-Core Portfolio)		14.5	14.0	24.2	23.0	4.0	3.1	8.1	7.2	11.1	10.2	10.4	9.5
NFI-ODCE + 50 bps (Value Add)		13.0	12.5	22.7	21.5	1.7	0.8	5.8	4.9	8.8	7.9	8.1	7.2
NFI-ODCE + 300 bps (Opportunistic)		15.5	15.0		24.0	4.2	3.3	8.3	7.4	11.3	10.4	10.6	9.7
NCREIF Timberland Index (Timber)		5.1		9.2		0.8		1.3		3.4		3.6	

<sup>1</sup> Liquidating investment. Time-weighted returns are excluded as they are no longer meaningful.

<sup>2</sup> Excludes Integrated Capital Hospitality Fund, which did not provide data as of 6/30/22.



	Market Value	2(	016	20	)15	20	)14	20	13	20	12
Returns (%)	(\$)	TGRS	TNET	TGRS	TNET	TGRS	TNET	TGRS	TNET	TGRS	TNET
Opportunistic											
Apollo CPI Europe I <sup>1</sup>	203,658	-0.3	-0.4	-16.0	-16.4	-0.8	-1.5	0.7	0.1	20.3	19.5
Bristol Value II, L.P.	17,966,700	11.0	9.1	8.2	6.1	12.4	10.6	35.0	33.0		
Broadview Real Estate Partners Fund, L.P.	7,019,854										
Bryanston Retail Opportunity Fund	8,261,028	-2.5	-2.8	144.0	142.1	7.3	5.8	50.5	47.5	40.1	37.2
California Smart Growth Fund IV	1,024,450	5.9	5.4	20.3	19.2	17.9	16.2	13.1	11.6	19.9	18.3
Cerberus Institutional Real Estate Partners V	28,991,643										
CIM Real Estate Fund III <sup>1</sup>	6,587,989	5.4	4.0	8.3	7.1	11.0	9.8	11.1	9.9	20.8	19.4
Colony Investors VIII <sup>1</sup>	30,462	-13.9	-15.0	-3.3	-6.0	-8.7	-10.9	45.6	42.0	14.4	10.9
Latin America Investors III <sup>1</sup>	-1,894,613	-4.9	-6.9	-30.3	-32.8	0.4	-4.6	-17.9	-22.4	-60.0	-62.6
Lone Star Fund VII <sup>1</sup>	49,723	-27.3	-21.1	-0.1	0.0	42.8	33.5	100.6	75.7	59.7	43.7
Lone Star Real Estate Fund II <sup>1</sup>	28,348	16.4	13.8	42.5	32.9	58.3	44.7	30.5	22.3	40.2	30.6
Oaktree Real Estate Opportunities Fund VIII	10,392,673		20.0		01.0						
RECP Fund IV, L.P.	20,893,903	6.9	5.3	8.3	6.2	6.4	4.6	8.5	6.7	23.4	21.1
Southern California Smart Growth Fund <sup>1</sup>	35,009	44.3	43.3	21.0	19.2	21.8	19.3	14.9	11.4	-33.5	-33.6
Stockbridge Real Estate Fund II	353,356	-4.7	-5.5	3.9	2.6	24.4	22.8	46.5	43.7	3.2	0.7
Torchlight Debt Opportunity Fund IV	3,964,624	11.8	9.8	12.0	9.8	13.9	10.4	3.6	3.0		•
TPG Real Estate Partners IV	-414,473	-		-			-				
Walton Street Real Estate Fund V	1,111,837	2.1	0.7	11.9	10.4	13.2	11.7	12.9	11.2	9.5	7.8
Walton Street Real Estate Fund VI	9,865,212	-5.4	-6.6	13.5	12.2	14.8	13.4	16.0	14.3	12.1	10.4
Wolff Credit Partners III, LP	2,189,507										
Opportunistic	116,660,890	2.8	1.3	7.2	5.3	15.7	12.9	15.3	12.2	12.5	10.1
Private Real Estate Portfolio Only (ex. Timber) <sup>2</sup>	1,148,401,931	8.2	6.9	11.3	9.6	13.8	12.0	13.4	11.3	12.8	11.1
Non-Core Portfolio	326,118,933	7.5	5.6	9.8	7.6	14.7	12.2	13.6	10.9	14.0	11.9
Total Portfolio <sup>2</sup>											
LACERS	1,167,868,450	8.1	6.8	11.2	9.5	13.7	11.8	13.5	11.4	12.8	11.0
Indices											
NFI-ODCE (Core)		8.8	7.8	15.0	14.0	12.5	11.5	13.9	12.9	10.9	9.8
NFI-ODCE + 80 bps (Total Portfolio)		9.6	8.6	15.8	14.8	13.3	12.3	14.7	13.7	11.7	10.6
NFI-ODCE + 200 bps (Non-Core Portfolio)		11.6	10.6	17.8	16.8	15.3	14.3	16.7	15.7	13.7	12.6
NFI-ODCE + 50 bps (Value Add)		9.3	8.3	15.5	14.5	13.0	12.0	14.4	13.4	11.4	10.3
NFI-ODCE + 300 bps (Opportunistic)		11.8	10.8	18.0	17.0	15.5	14.5	16.9	15.9	13.9	12.8
NCREIF Timberland Index (Timber)		2.7		5.0		10.5		9.7		7.8	

<sup>1</sup> Liquidating investment. Time-weighted returns are excluded as they are no longer meaningful.

<sup>2</sup> Excludes Integrated Capital Hospitality Fund, which did not provide data as of 6/30/22.



Quarterly Cash Flow Activity (\$)	Beginning Market Value	Contributions	Distributions	Withdrawals	Gross Income	Manager Fees	Appreciation	Ending Market Value	LTV (%)
Core									
Berkshire Multifamily Income Realty Fund	22,866,768	0	92,837	2,686,294	151,934	35,419	1,557,155	21,761,307	38.8
CIM VI (Urban REIT), LLC	23,575,992	0	3,461,293	0	104,699	65,544	-88,248	20,065,606	15.4
INVESCO Core Real Estate	238,861,079	1,850,649	1,878,657	0	2,078,111	192,501	9,618,966	250,337,647	23.8
Jamestown Premier Property Fund	34,583,541	51,875	108,641	0	157,696	61,362	72,509	34,695,618	42.6
JP Morgan Strategic Property Fund	91,130,880	0	0	0	680,945	192,395	3,604,043	95,223,473	24.9
Kayne Anderson Core Real Estate Fund	60,053,765	4,556,203	665,066	0	753,460	113,757	1,147,065	65,731,670	33.5
Lion Industrial Trust - 2007	133,382,105	26,555,370	667,987	0	1,271,783	1,987,406	12,066,146	170,620,011	24.5
Prime Property Fund	69,870,649	0	688,577	0	595,685	271,717	1,802,141	71,308,181	18.0
Principal U.S. Property Account	89,798,283	0	0	0	816,646	182,331	2,106,887	92,539,485	22.4
Core	764,123,062	33,014,097	7,563,058	2,686,294	6,610,959	3,102,432	31,886,665	822,282,998	25.7
Timber									
Hancock Timberland XI	19,571,170	0	82,584	0	23,406	45,474	0	19,466,518	0.0
Timber	19,571,170	0	82,584	0	23,406	45,474	0	19,466,518	0.0
Value Added									
Almanac Realty Securities VI	3,541,178	0	0	0	-825	9,284	-190,374	3,340,695	0.0
Asana Partners Fund I	26,736,351	0	600,000	0	252,492	317,798	1,124,980	27,196,026	37.8
Asana Partners Fund II	23,884,877	0	0	0	16,257	-271,917	-1,599,549	22,573,503	55.4
DRA Growth and Income Fund VII	2,002,847	0	0	0	24,136	8,450	2,481	2,021,014	61.5
DRA Growth and Income Fund VIII	9,637,265	0	114,278	206,450	148,180	63,361	124,661	9,526,017	68.1
Gerrity Retail Fund 2	17,716,748	0	586,577	0	231,585	58,900	0	17,302,855	52.7
GLP Capital Partners IV	26,393,831	0	379,014	0	141,205	33,853	339,627	26,461,796	53.5
Heitman Asia-Pacific Property Investors	19,610,027	85,508	205,362	0	180,764	36,243	-416,214	19,218,479	47.0
LBA Logistics Value Fund IX	2,865,928	3,846,154	0	0	-8,214	143,750	-1,658	6,558,460	67.8
LBA Logistics Value Fund VII	34,229,799	4,288,407	230,914	0	311,042	119,956	93,757	38,572,134	38.7
NREP Nordic Strategies Fund IV	12,814,062	1,894,150	0	0	-447,990	490,042	993,825	14,764,005	43.0
Standard Life Investments European Real Estate Club II	132,524	0	0	0	-6,355	-742	-6,840	120,071	0.0
Waterton Residential Property Venture XIV, L.P.	16,042,501	5,375,442	0	0	-69	141,174	526,288	21,802,988	67.8
Value Added	195,607,938	15,489,661	2,116,145	206,450	842,207	1,150,151	990,984	209,458,043	52.4
Total Portfolio									
LACERS	1,095,795,224	52,364,608	12,685,193	3,346,975	8,178,524	5,412,093	32,974,358	1,167,868,449	35.6



Quarterly Cash Flow Activity (\$)	Beginning Market Value	Contributions	Distributions	Withdrawals	Gross Income	Manager Fees	Appreciation	Ending Market Value	LTV (%)
Opportunistic									
Apollo CPI Europe I	495,729	0	268,817	0	-1,431	0	-21,823	203,658	0.0
Bristol Value II, L.P.	17,886,464	92,444	211,682	0	234,736	31,315	-3,947	17,966,700	33.6
Broadview Real Estate Partners Fund, L.P.	6,918,007	0	0	0	-25,719	50,304	177,871	7,019,854	0.0
Bryanston Retail Opportunity Fund	10,282,567	0	0	37,038	44,851	2,901	-2,026,451	8,261,028	36.6
California Smart Growth Fund IV	1,026,301	0	0	0	-1,851	0	0	1,024,450	0.0
Cerberus Institutional Real Estate Partners V	27,521,537	0	0	0	-104,821	507,921	2,082,848	28,991,643	68.9
CIM Real Estate Fund III	7,052,834	0	67,593	415,212	39,012	25,567	4,515	6,587,989	31.5
Colony Investors VIII	33,536	0	0	0	-3,074	0	0	30,462	0.0
Latin America Investors III	-1,596,295	0	0	0	-59,178	41,574	-197,566	-1,894,613	38.2
Lone Star Fund VII	50,369	0	0	0	-646	0	0	49,723	0.0
Lone Star Real Estate Fund II	55,711	0	25,806	1,981	427	2	0	28,348	100.0
Oaktree Real Estate Opportunities Fund VIII L.P.	8,077,384	2,500,000	0	0	68,218	83,507	-169,422	10,392,673	0.0
RECP Fund IV, L.P.	21,472,606	1,268,406	2,192,916	0	-3,919	0	349,726	20,893,903	51.2
Southern California Smart Growth Fund	35,616	0	0	0	-607	0	0	35,009	0.0
Stockbridge Real Estate Fund II	306,686	0	0	0	46,670	0	0	353,356	0.0
Torchlight Debt Opportunity Fund IV	3,990,647	0	0	0	17,575	-75,271	-118,869	3,964,624	22.6
TPG Real Estate Partners IV	0	0	0	0	-106,774	307,699	0	-414,473	102.8
Walton Street Real Estate Fund V	1,287,416	0	156,592	0	-1,491	0	-17,496	1,111,837	35.7
Walton Street Real Estate Fund VI	9,554,219	0	0	0	280,937	7,267	37,323	9,865,212	39.2
Wolff Credit Partners III, LP	2,041,720	0	0	0	279,037	131,250	0	2,189,507	77.2
Opportunistic	116,493,054	3,860,850	2,923,406	454,231	701,952	1,114,036	96,709	116,660,890	53.1
Private Real Estate Portfolio Only (ex. Timber)	1,076,224,054	52,364,608	12,602,609	3,346,975	8,155,118	5,366,619	32,974,358	1,148,401,931	36.0
Non-Core Portfolio	312,100,992	19,350,511	5,039,551	660,681	1,544,159	2,264,187	1,087,693	326,118,933	52.6
Total Portfolio									
LACERS	1,095,795,224	52,364,608	12,685,193	3,346,975	8,178,524	5,412,093	32,974,358	1,167,868,449	35.6



Property Type Diversification (%)	Apartment	Office	Industrial	Retail	Hotel	Other
Core						
Berkshire Multifamily Income Realty Fund	100.0	-	-	-	-	-
CIM VI (Urban REIT), LLC	48.6	43.9	-	7.5	-	-
NVESCO Core Real Estate	26.3	24.0	28.3	11.4	-	10.0
lamestown Premier Property Fund	-	69.5	-	22.2	-	8.2
IP Morgan Strategic Property Fund	22.7	23.7	34.0	15.5	-	4.2
Kayne Anderson Core Real Estate Fund	-	-	-	-	-	100.0
Lion Industrial Trust - 2007	-	-	100.0	-	-	-
Prime Property Fund	26.2	21.0	31.7	6.8	-	14.3
Principal U.S. Property Account	24.6	23.1	34.7	9.9	-	7.8
Core	19.2	17.7	42.2	7.8	-	13.1
Timber						
Hancock Timberland XI	-	-	-	-	-	100.0
limber	-	-	-	-	-	100.0
Value Added						
Almanac Realty Securities VI	27.3	-	-	-	70.0	2.8
Asana Partners Fund I	0.9	25.1	-	74.0	-	-
Asana Partners Fund II	0.7	47.6	-	51.7	-	-
DRA Growth and Income Fund VII	20.2	8.6	-	71.1	-	-
DRA Growth and Income Fund VIII	5.9	45.6	-	48.5	-	-
Gerrity Retail Fund 2	-	-	-	100.0	-	-
GLP Capital Partners IV	-	-	100.0	-	-	-
Heitman Asia-Pacific Property Investors	-	48.7	-	18.8	-	32.5
LBA Logistics Value Fund IX	-	-	85.3	-	-	14.7
BA Logistics Value Fund VII	-	-	85.2	-	-	14.8
NREP Nordic Strategies Fund IV	28.0	3.5	30.7	4.3	7.6	25.8
Standard Life Investments European Real Estate Club II	-	-	-	-	-	-
Waterton Residential Property Venture XIV, L.P.	100.0	-	-	-	-	-
Value Added	14.0	15.8	31.5	28.5	1.9	8.4
Total Portfolio						
Los Angeles City Employees' Retirement System	17.5	16.5	36.8	11.2	2.4	15.6
ndices						
NFI-ODCE*	29.0	23.5	30.7	10.0	0.2	6.7

#### Los Angeles City Employees' Retirement System



Property Type Diversification (%)	Apartment	Office	Industrial	Retail
Opportunistic				
Apollo CPI Europe I	-	-	-	-
Bristol Value II, L.P.	-	56.2	-	-
Broadview Real Estate Partners Fund, L.P.	-	-	33.2	-
Bryanston Retail Opportunity Fund	-	-	-	100.0
California Smart Growth Fund IV	-	-	46.3	-
Cerberus Institutional Real Estate Partners V	-	0.7	38.8	0.0
CIM Real Estate Fund III	0.0	32.8	-	12.0
Colony Investors VIII	-	-	-	-
Latin America Investors III	-	39.5	-	-
Lone Star Fund VII	-	-	-	-
Lone Star Real Estate Fund II	-	-	-	-
Oaktree Real Estate Opportunities Fund VIII L.P.	42.1	13.3	24.3	-
RECP Fund IV, L.P.	7.7	3.8	2.3	-
Southern California Smart Growth Fund	-	-	100.0	-
Stockbridge Real Estate Fund II	-	-	-	-
Torchlight Debt Opportunity Fund IV	-	-	-	18.1
TPG Real Estate Partners IV	-	-	46.6	-
Walton Street Real Estate Fund V	-	-	-	4.3
Walton Street Real Estate Fund VI	3.0	-3.5	-	4.0
Wolff Credit Partners III, LP	100.0	-	-	-
Opportunistic	14.8	12.0	16.0	6.9
Private Real Estate Portfolio Only (ex. Timber)	17.8	16.7	37.3	11.4
Non-Core Portfolio	14.3	14.3	25.5	20.2
Total Portfolio				
Los Angeles City Employees' Retirement System	17.5	16.5	36.8	11.2
Indices				
NFI-ODCE*	29.0	23.5	30.7	10.0

#### Los Angeles Clty Employees' Retirement System

Hotel	Other
-	-
-	43.8
-	66.8
-	- 53.7
31.3	29.2
31.8	23.4
-	-
-	60.5
-	100.0
-	100.0
18.6	1.7
41.5	44.8
-	-
-	-
47.4	34.5
-	53.4
45.7	50.0
-	96.6
-	-
18.8	31.5
2.4	14.3
8.4	17.3
014	27.0
2.4	15.6
0.2	6.7



Geographic Diversification (%)	North East	Mid East	East North Central	West North Central	South East	South West	Mountain	Pacific	Var-US	Ex-US
Core										
Berkshire Multifamily Income Realty Fund	5.1	3.9	7.8	3.6	21.6	25.1	7.8	25.0	-	-
CIM VI (Urban REIT), LLC	31.8	23.9	-	-	-	24.7	-	19.6	-	-
INVESCO Core Real Estate	16.8	7.4	1.4	0.3	3.5	13.8	9.2	47.5	-	-
Jamestown Premier Property Fund	28.1	30.5	-	-	4.3	-	-	37.1	-	-
JP Morgan Strategic Property Fund	15.3	6.2	4.4	0.2	4.8	13.3	4.8	51.0	-	-
Kayne Anderson Core Real Estate Fund	7.4	9.6	13.7	5.6	34.3	16.2	9.0	4.2	-	-
Lion Industrial Trust - 2007	18.6	3.2	5.3	0.9	13.6	14.3	7.8	36.3	-	-
Prime Property Fund	28.4	5.1	8.0	0.7	13.8	8.4	6.1	29.4	-	-
Principal U.S. Property Account	11.6	8.6	2.1	1.5	9.9	15.3	13.3	37.7	-	-
Core	17.3	7.5	4.3	1.1	10.3	13.8	8.0	37.9	-	-
Timber										
Hancock Timberland XI	-	-	-	-	-	-	-	23.9	61.6	14.5
Timber	-	-	-	-	-	-	-	23.9	61.6	14.5
Value Added										
Almanac Realty Securities VI	-	-	-	-	-	-	-	-	100.0	-
Asana Partners Fund I	6.2	35.3	-	-	32.8	21.6	-	4.1	-	-
Asana Partners Fund II	19.3	19.7	-	10.0	17.3	6.4	21.1	6.2	-	-
DRA Growth and Income Fund VII	-	20.2	-	-	2.7	-	36.3	40.8	-	-
DRA Growth and Income Fund VIII	14.3	5.2	33.7	11.1	15.8	9.5	-	10.2	-	-
Gerrity Retail Fund 2	-	-	-	-	-	-	-	100.0	-	-
GLP Capital Partners IV	31.3	5.3	4.6	-	6.4	7.2	-	45.1	-	-
Heitman Asia-Pacific Property Investors	-	-	-	-	-	-	-	-	-	100.0
LBA Logistics Value Fund IX	10.1	-	7.9	-	22.4	-	-	59.6	-	-
LBA Logistics Value Fund VII	9.5	13.6	9.7	1.3	20.8	9.6	9.0	26.5	-	-
NREP Nordic Strategies Fund IV	-	-	-	-	-	-	-	-	-	100.0
Standard Life Investments European Real Estate Club II	-	-	-	-	-	-	-	-	-	100.0
Waterton Residential Property Venture XIV, L.P.	3.8	-	10.6	-	31.4	6.2	7.5	40.5	-	-
Value Added	9.7	10.9	4.7	2.0	15.6	7.3	5.5	24.1	1.5	18.6
Total Portfolio										
LACERS	16.6	7.6	4.1	1.1	12.1	11.1	7.0	32.5	2.9	5.1
Indices										
NFI-ODCE*	21.2	8.1	5.5	0.8	10.8	9.1	7.1	37.5	-	-

### Los Angeles City Employees' Retirement System



Geographic Diversification (%)	North East	Mid East	East North Central	West North Central	South East	South West	Mountain	Pacific	Var-US	Ex-US
Dpportunistic										
Apollo CPI Europe I	-	-	-	-	-	-	-	-	100.0	-
Bristol Value II, L.P.	51.6	-	-	-	38.0	-	10.5	-	-	-
roadview Real Estate Partners Fund, L.P.	-	-	13.6	-	86.4	-	-	-	-	-
ryanston Retail Opportunity Fund	16.9	0.0	9.8	0.2	1.5	11.8	13.6	46.1	-	-
California Smart Growth Fund IV	-	-	-	-	-	-	-	100.0	-	-
Cerberus Institutional Real Estate Partners V	1.0	-	-	-	1.2	-	5.0	1.5	54.5	36.9
IM Real Estate Fund III	16.9	-	9.6	-	21.5	16.7	-	35.3	-	-
olony Investors VIII	-	-	-	-	-	-	-	-	100.0	-
atin America Investors III	-	-	-	-	-	-	-	-	-	100.0
one Star Fund VII	-	-	100.0	-	-	-	-	-	-	-
one Star Real Estate Fund II	-	-	-	-	-	-	-	-	100.0	-
aktree Real Estate Opportunities Fund VIII L.P.	25.3	7.8	1.8	0.4	20.6	-	-	21.2	-	22.9
ECP Fund IV, L.P.	32.5	16.4	-	-	-	2.3	-	23.2	-	25.7
outhern California Smart Growth Fund	-	-	-	-	-	-	-	100.0	-	-
tockbridge Real Estate Fund II	-	-	-	-	-	-	-	-	100.0	-
orchlight Debt Opportunity Fund IV	-	-	-	-	-	-	-	-	100.0	-
PG Real Estate Partners IV	29.2	-	-	-	70.8	-	-	-	-	-
Valton Street Real Estate Fund V	-	-	-	-	-	-	-	-	-	100.0
Valton Street Real Estate Fund VI	98.3	3.0	-	1.9	-	-	-	-3.5	-	0.4
Volff Credit Partners III, LP	20.5	-	4.2	-	47.8	-	8.3	19.2	-	-
pportunistic	25.2	3.6	2.4	0.2	20.0	1.7	4.2	12.6	15.3	14.9
Private Real Estate Portfolio Only (ex. Timber)	16.8	7.7	4.2	1.1	12.3	11.3	7.1	32.6	2.0	5.0
Non-Core Portfolio	15.7	8.1	3.8	1.3	17.3	5.2	5.0	19.6	6.8	17.2
otal Portfolio										
ACERS	16.6	7.6	4.1	1.1	12.1	11.1	7.0	32.5	2.9	5.1
ndices										
IFI-ODCE*	21.2	8.1	5.5	0.8	10.8	9.1	7.1	37.5	-	-



#### **Advisory Disclosures and Definitions**

**Disclosure** Trade Secret and Confidential.

Past performance is not indicative of future results.

Investing involves risk, including the possible loss of principal.

Returns are presented on a time weighted basis and shown both gross and net of underlying third party fees and expenses and may include income, appreciation and/or other earnings. In addition, investment level Net IRR's and equity multiples are reported.

The Townsend Group, on behalf of its client base, collects quarterly limited partner/client level performance data based upon inputs from the underlying investment managers. Data collection is for purposes of calculating investment level performance as well as aggregating and reporting client level total portfolio performance. Quarterly limited partner/client level performance data is collected directly<sup>1</sup> from the investment managers via a secure data collection site.

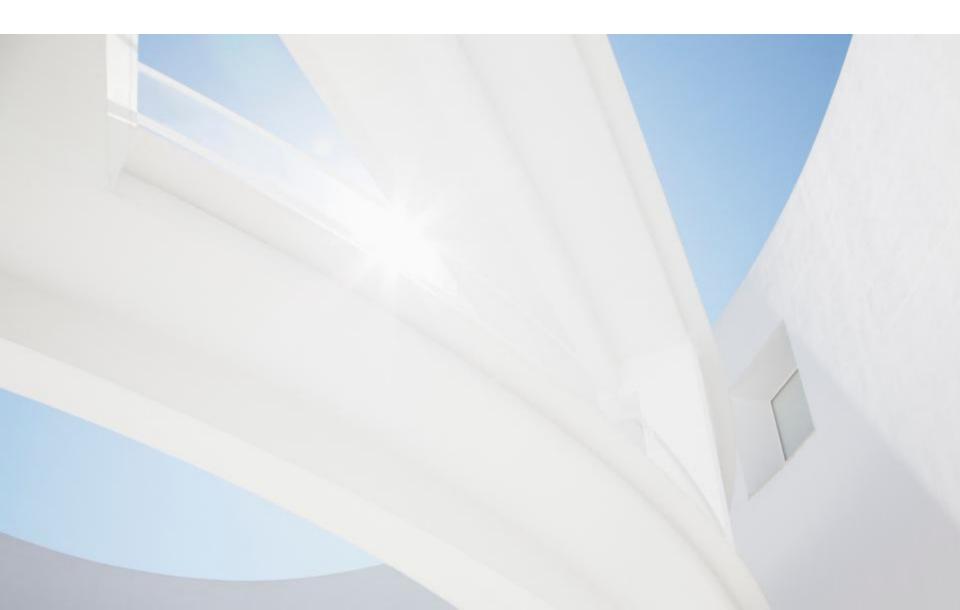
<sup>1</sup>In select instances where underlying investment managers have ceased reporting limited partner/client level performance data directly to The Townsend Group via a secure data collection site, The Townsend Group may choose to input performance data on behalf of its client based upon the investment managers quarterly capital account statements which are supplied to The Townsend Group and the client alike.

#### Benchmarks

The potential universe of available real asset benchmarks are infinite. Any one benchmark, or combination thereof, may be utilized on a gross or net of fees basis with or without basis point premiums attached. These benchmarks may also utilize a blended composition with varying weighting methodologies, including market weighted and static weighted approaches.

#### Los Angeles City Employees' Retirement System

# Exhibit B: Real Estate Market Update



### United States Real Estate Market Update (2Q22)

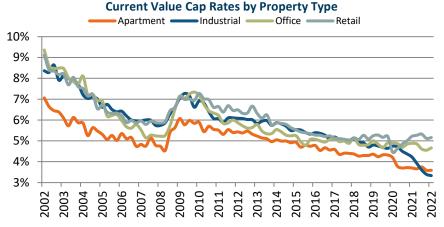


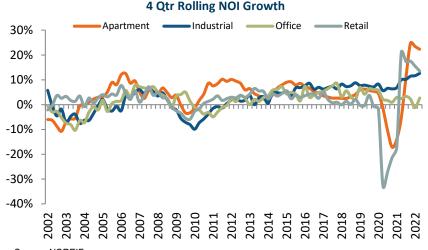
#### General

- Townsend witnessed a robust recovery across the U.S. economy and U.S. real estate markets in 2021 but begun to moderate in 2022. The post-pandemic economic recovery has remained generally on track; however, an array of headwinds have emerged including rising interest rates, persistent inflation, various geopolitical events, and widespread global supply chain struggles. In first half 2022, tightening federal reserve policy and market volatility sent public markets plummeting. The S&P 500 produced a gross total return of -20.6% during the first six months of the year. The MSCI US REIT index also continued its cool off following a strong 2021, posting a gross second quarter return of -17.0%.
- The U.S. entered into a recession during second quarter 2022, as GDP decreased for a second straight quarter, at an annualized rate of 0.9%. Slowing economic growth is attributable to decreased federal, state and government spending, and decreased exports. As a result of the atrocities of the Russian-Ukraine war, prolonged lockdowns in Shanghai, and a rise in protectionist measures, commodity pricing has skyrocketed, in lockstep with inflation. Federal reserve officials remain committed to taming inflation and reducing the central bank's balance sheet, approving a 75-bps hike during its June session.

#### **Commercial Real Estate**

- Through the second quarter of 2022, total CRE transaction activity for the quarter was up 17% YoY, with annual transaction activity up 86% YoY. In 2Q22, U.S. private real estate deal volumes across all sectors remained strong but moderated from a historic high witnessed in fourth quarter 2021. Transaction volume has been the strongest in the apartment and industrial sectors.
- Transaction cap rates (4.6%) compressed during the quarter, to the tune of 35 bps. This decrease comes after a +74 bps quarter-over-quarter increase in 1Q22. Current valuation cap rates increased for retail (+21 bps) and office (+5 bps), while the industrial (-15 bps) and apartment (-2 bps) property sectors experienced slight cap rate compression.
- NOI growth has substantially diverged between property sectors due to the impacts of COVID-19. Retail NOI has expanded substantially (+14%) YoY as the sector continues to recover from decreased rent collections and retailer shutdowns. Apartment sector fundamentals remain strong, as many millennials seek out a more opportune time to purchase their first home. Apartment NOI expanded (+22%) YoY.
- 10-year treasury bond yields soared to nearly 3.5% intra-quarter; however, closed the quarter at 3.0% an increase of 70 basis points quarter-over-quarter. Economists expect rates to move modestly higher throughout 2022.





Source: NCREIF

Source: NCRFIF

### **United States Property Matrix (2Q22)**

TOWNSEND<sup>°</sup> GROUP an Aon company

#### INDUSTRIAL

- In 2Q22, industrial properties were the highest returning sector at 5.9% and outperformed the NPI by 263 bps.
- Transaction volumes decreased to \$35 billion in the second quarter of the year, resulting in a 8% increase year-over-year. Individual asset sales increased 4% year-over-year, while portfolio purchases turned in a year-over-year volume increase of 25%. At \$35 billion, the industrial sector decreased by \$4 billion quarter-over-quarter.
- The industrial sector turned in NOI growth of 12.6% over the past year. NOI continues to reach all time highs for the sector.
- Vacancy decreased by 144 bps year-over-year to 1.7%. Vacancy in the sector decreased 14 bps from last quarter, reaching all-time historic lows. E-commerce continues to drive demand across the sector.
- Industrial cap rates compressed approximately 89 bps from a year ago, to 3.3%. Industrial overall fundamentals still top all property sectors.

The apartment sector delivered a 3.9% return during the quarter, underperforming the NPI by 63 bps.

MULTIFAMILY

- Transaction volume in the second quarter of 2022 increased to \$86 billion, resulting in an increase of 42% year-over-year. Transaction volume for the sector is near historical levels. This volume continues to make multifamily the most actively traded sector for the eighteenth straight quarter.
- Cap rates remained steady at 3.6% quarter-over-quarter, decreasing 11 bps year-over-year. Multifamily cap rates remain at the lowest level observed in years, driven by continued increases in valuation.
- The multifamily sector saw increasing vacancy rates throughout the entirety of 2020 due to the global pandemic. Through 2021, the sector appeared to have shaken that trend although vacancy rates remained steady during the last 3 quarters. Vacancy rates slightly decreased by 22 bps quarter-over-quarter and are back to slightly below pre-pandemic levels. The aging millennials have begun shifting their desires to suburban living, but continued home price appreciation has deterred the full effect of this migratory trend.

#### OFFICE

- The office sector returned 0.6% in 2Q22, 266 bps below the NPI return over the period.
- Transaction volumes decreased by 9% year-over-year in the second quarter. Transaction volume equated to \$25 billion for the quarter, a decrease of \$6 billion quarter-over-quarter. Office transaction levels have regressed from 1Q22 but not quite to levels seen during the COVID-19 pandemic.
- Office sector vacancy rates have expanded since the beginning of the pandemic due to work from home orders and uncertainty revolving around the future of office space. Office continues to be the highest vacancy property type at 12.9%, increasing 6 bps from last quarter.
- NOI growth in the office sector expanded quarter-over-quarter by 148 bps and appears to be in the midst of its recovery to pre-pandemic levels.
- Office cap rates compressed from a year ago, sitting at approximately 4.6%. Office-using job growth was stunted significantly through out 2020 due to work from home orders. Though we are observing a slow but steady flow back to in-office work, there is still uncertainty in the sector as many companies remain hesitant.

#### RETAIL

- As of 2Q22, the retail sector delivered a quarterly return of 1.7%, underperforming 155 bps below the NPI.
- Transaction volumes totaled \$23 billion in the second quarter, increasing 46% year-over-year. Single asset transactions accounted for just over 81% of all sales volume for the quarter.
- Cap rates have compressed approximately 6 bps within the sector over the last year, to 5.2%. Current valuation cap rates compressed quarter-over-quarter by 4 bps due to valuation adjustments made across the sector in general.
- NOI growth slightly decreased, 2.0% over the last year. Retail has begun its slow recovery as vaccine rollouts have allowed a large portion of store nationally to open and operate safely.
- Retail vacancy rates decreased over the quarter by 35 bps, and down 102 bps over the past year to 8.7%. Many big box stores have closed as the need for retail space shrinks, translating to a negative outlook for rent growth. Paired with the global economic crisis, which has had a significant negative impact on this sector



### Global Real Estate Market Update (2Q22)

- Significant headwinds have materialized in rising inflation, energy costs, and interest rates significantly impacting the global investment landscape in the first half of 2022. Rising debt costs have seen the number of traded properties recede, impacting pricing and bidding dynamics around the global market. This has culminated in the impending threat of a recession in some of the world's largest economies.
- Tangible effects of these challenges can be witnessed in the EMEA region, with deal volume falling 26% YOY. European markets, specifically Germany, have experienced liquidity issues with their economy being vulnerable due to its dependence on Russian energy supplies and global export markets. The UK market has remained steadfast, with demand remaining strong in the multifamily and industrial sector sustaining deal flow.
- That withstanding, the U.S. was at the forefront of this growth in deal volume improving 27% YOY reaching \$180.5B. This was the third best recorded quarter based on transactions \$10M or more. This was led by its multifamily sector, with rising demand in the Sun Belt Region resulting in record deal volumes and doubledigit price growth.
- Inversely, the Asia Pacific market had an 8% decline YOY. A major proponent was China's continued widespread lockdowns in major cities to quell the spread of Covid-19 which has hampered deal activity (just \$1B in spent on income producing properties in April 2022, lowest since 2018).
- The hotel sector continued its strong recovery in Q2, despite global economic turbulence and labor shortages across travel/tourism industries. With consumers shifting their priories towards experiences rather than material goods this favors leisure and resort destinations. Performance in luxury hotels across major European markets (Paris, Barcelona, London, Milan) is aiding in expediting the regions recovery. Asian markets with very little border or quarantine restrictions such as Bali and the Maldives have become more in favor.
- In Q2 demand for logistics and industrial space slowed year-over-year across all three regions. However, transaction activity was hampered by a lack of available supply in many markets and Q2 2021 leasing volumes were very high. Demand this year has become more broad-based with supply chain restructuring increasing demand from Logistics & Distribution and 3PL operators.
- Vacancy rates have remained broadly stable across the regions, and in the case of both the U.S. and Europe is
  at all-time lows. In the short term, high inflation should subdue consumer spending through the end of the
  year which may delay expansion plans for online retailers, with grocery delivery likely to be the only online
  sector that will continue to expand in the immediate future.

#### Global Total Commercial Real Estate Volume - 2021 - 2022

			% Change			% Change
\$ US Billions	Q2 2022	Q2 2021	Q2 22 - Q2 21	H1 2022	H1 2021	H1 22 - H2 21
Americas	181	142	27%	355	238	49%
EMEA	65	89	-27%	154	167	-8%
Asia Pacific	212	231	-8%	347	377	-8%
Total	458	462	-1%	856	783	9%

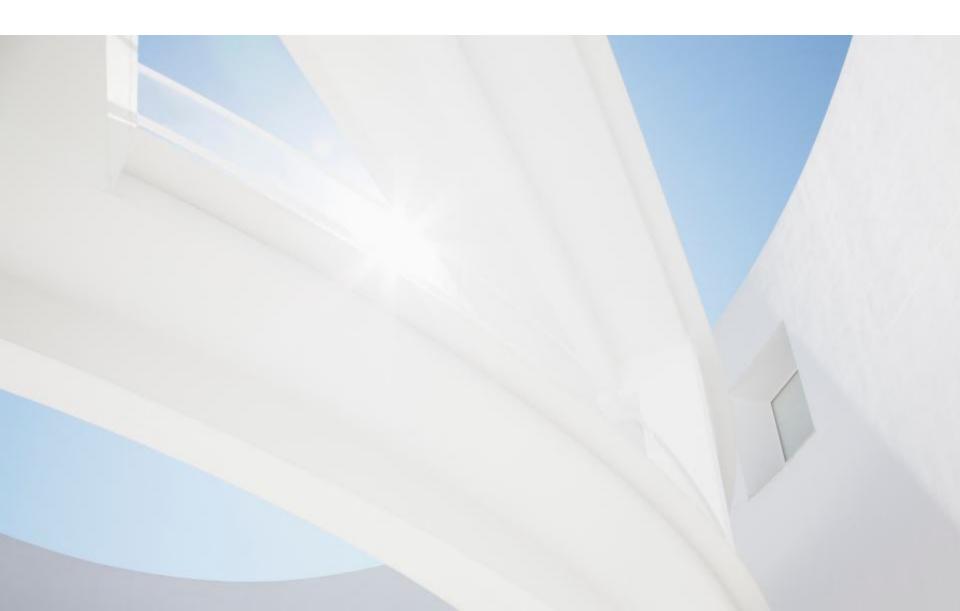
Source: Real Capital Analytics, Inc., Q2' 22

#### Global Outlook - GDP (Real) Growth % pa, 2022-2024

	2022	2023	2024
Global	5.9	4.3	3.6
Asia Pacific	4.4	4.6	4.4
Australia	4.1	2.8	2.5
China	4.5	5.2	5.1
India	8.7	7.3	6.5
Japan	1.8	1.8	1.1
North America	2.7	2.0	1.9
US	2.6	2.0	1.9
Middle East	4.1	4.4	4.5
European Union	3.0	2.1	2.0
France	2.7	1.8	1.7
Germany	1.8	2.3	2.0
UK	3.7	1.2	1.7

Source: Bloomberg

# Exhibit C: Glossary





# **Cash Flow Statement**

Beginning Market Value:	Value of real estate, cash and other holdings from prior period end.
Contributions:	Cash funded to the investment for acquisition and capital items (i.e., initial investment cost or significant capital improvements).
Distributions:	Actual cash returned from the investment, representing distributions of income from operations.
Withdrawals:	Cash returned from the investment, representing returns of capital or net sales proceeds.
Ending Market Value:	The value of an investment as determined by actual sales dollars invested and withdrawn plus the effects of appreciation and reinvestment; market value is equal to the ending cumulative balance of the cash flow statement (NAV).
Unfunded Commitments:	Capital allocated to managers which remains to be called for investment. Amounts are as reported by managers.
Remaining Allocation	The difference between the ending market value + the unfunded commitments and the target allocation. This figure represents dollars available for allocation.

## **Style Groups**



The Style Groups consist of returns from commingled funds with similar risk/return investment strategies. Investor portfolios/investments are compared to comparable style groupings.

Core:	Direct investments in operating, fully leased, office, retail, industrial, or multifamily properties using little or no leverage (normally less than 30%).
Value-Added:	Core returning investments that take on moderate additional risk from one or more of the following sources: leasing, re-development, exposure to non-traditional property types, the use of leverage (typically between 40% and 65%).
Opportunistic:	Investments that take on additional risk in order to achieve a higher return. Typical sources of risks are: development, land investing, operating company investing, international exposure, high leverage (typically between 50% and 65% or higher), distressed properties.

## Indices



Stylized Index:	Weights the various style group participants so as to be comparable to the investor portfolio holdings for each period.
Open-End Diversified Core Equity Index ("ODCE"):	A core index that includes only open-end diversified core strategy funds with at least 95% of their investments in U.S. markets. The ODCE is the first of the NCREIF Fund Database products, created in May 2005, and is an index of investment returns reporting on both a historical and current basis (25 active vehicles). The ODCE Index is capitalization-weighted and is reported gross and net of fees. Measurement is time-weighted and includes leverage.
NCREIF Timberland Index ("NTI"):	National Index comprised of a large pool of individual timber properties owned by institutions for investment purposes.
NCREIF Property Index ("NPI"):	National Property Index comprised of core equity real estate assets owned by institutions.

## Performance



Income Return ("INC"):	Net operating income net of debt service before deduction of capital items (e.g., roof replacement, renovations, etc.)
Appreciation Return ("APP"):	Increase or decrease in investment's value based on internal or third party appraisal, recognition of capital expenditures which did not add value or uncollectible accrued income, or realized gain or loss from sales.
Total Gross Return ("TGRS"):	The sum of the income return and appreciation return before adjusting for fees paid to and/or accrued by the manager.
Total Net Return ("TNET"):	Total gross return less Advisor fees reported. All fees are requested (asset management, accrued incentives, paid incentives). No fee data is verified. May not include any fees paid directly by the investor as opposed to those paid from cash flows.
Inception Returns <sup>1</sup> :	The total net return for an investment or portfolio over the period of time the client has funds invested. Total portfolio Inception Returns may include returns from investments no longer held in the current portfolio.
Net IRR:	IRR after advisory fees, incentive and promote. This includes actual cash flows and a reversion representing the LP Net Assets at market value as of the period end reporting date.
Equity Multiple:	The ratio of Total Value to Paid-in-Capital (TVPIC). It represents the Total Return of the investment to the original investment not taking into consideration the time invested. Total Value is computed by adding the Residual Value and Distributions. It is calculated net of all investment advisory and incentive fees and promote.

<sup>1</sup> Portfolio level returns include historical returns of managers no longer with assets under management.

All returns are calculated on a time-weighted basis.



