

San Bernardino County Employees' Retirement Association

Board Report

June 30, 2022

Table of Contents

Section 1

Total Plan Summary	1
Plan Attrib - 1 Year	2
Plan Attrib - 3 Year	3
Total Plan Performance History	4
Total Asset Allocation	5
Performance by Strategy	6-9
Performance by Manager	10-22
Disclaimer Page	23

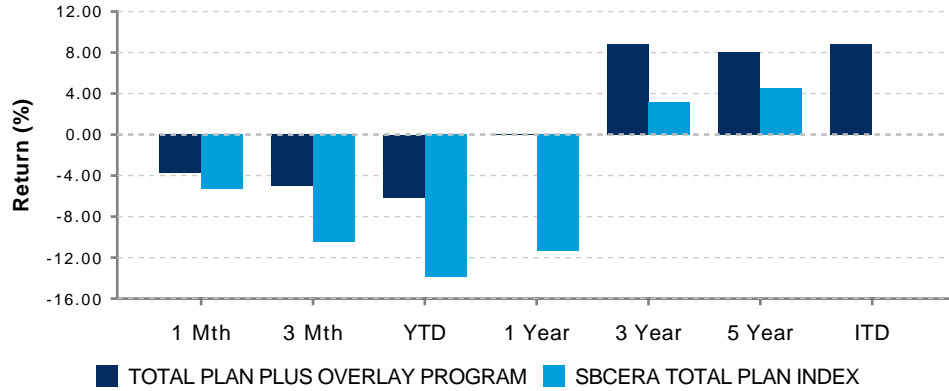
San Bernardino County Retirement

June 30, 2022

Net Mgr



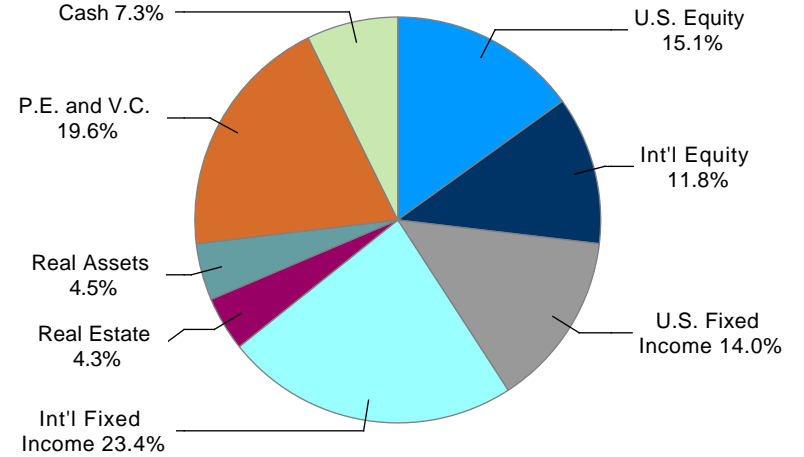
Performance



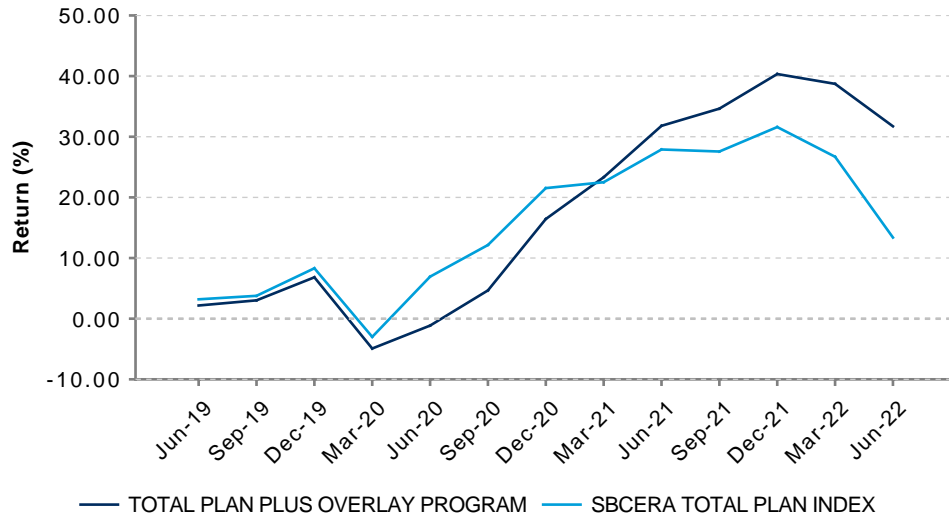
	1 Mth	3 Mth	YTD	FYTD	1 Year	3 Year	5 Year	ITD	Incept Date
TOTAL PLAN +OVERLAY PROGRAM	-3.75	-5.04	-6.14	-0.06	-0.06	8.84	8.00	8.86	07/82
SBCERA TOTAL PLAN INDEX	-5.31	-10.51	-13.85	-11.35	-11.35	3.19	4.53	-	07/82
Excess	1.56	5.47	7.71	11.30	11.30	5.65	3.47	-	-

Asset Allocation

	Ending Market Value
TOTAL PLAN PLUS OVERLAY PROGRAM	13,376,948,017

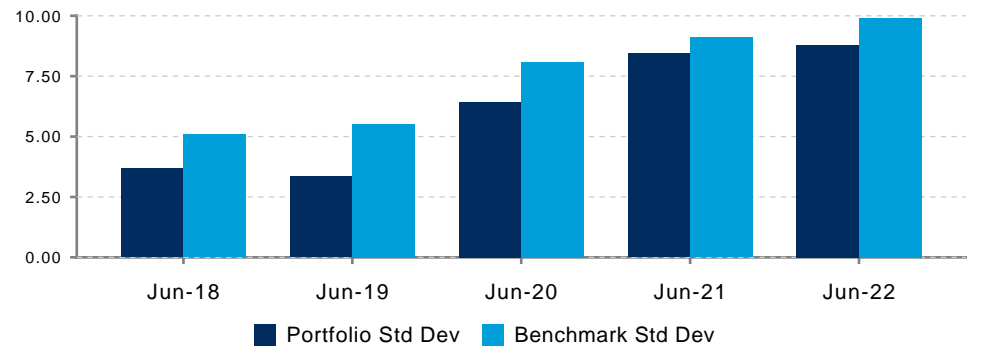


Cumulative Return (%)



3 Year Risk Statistics

	Return	Portfolio Std Dev	Benchmark Std Dev	Sharpe Ratio	Beta	Tracking Error
TOTAL PLAN PLUS OVERLAY PROGRAM	8.84	8.78	9.90	0.94	0.77	5.11



San Bernardino County Retirement

June 30, 2022

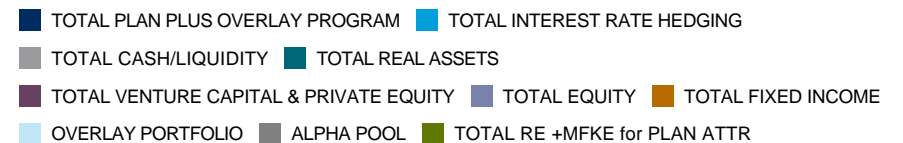
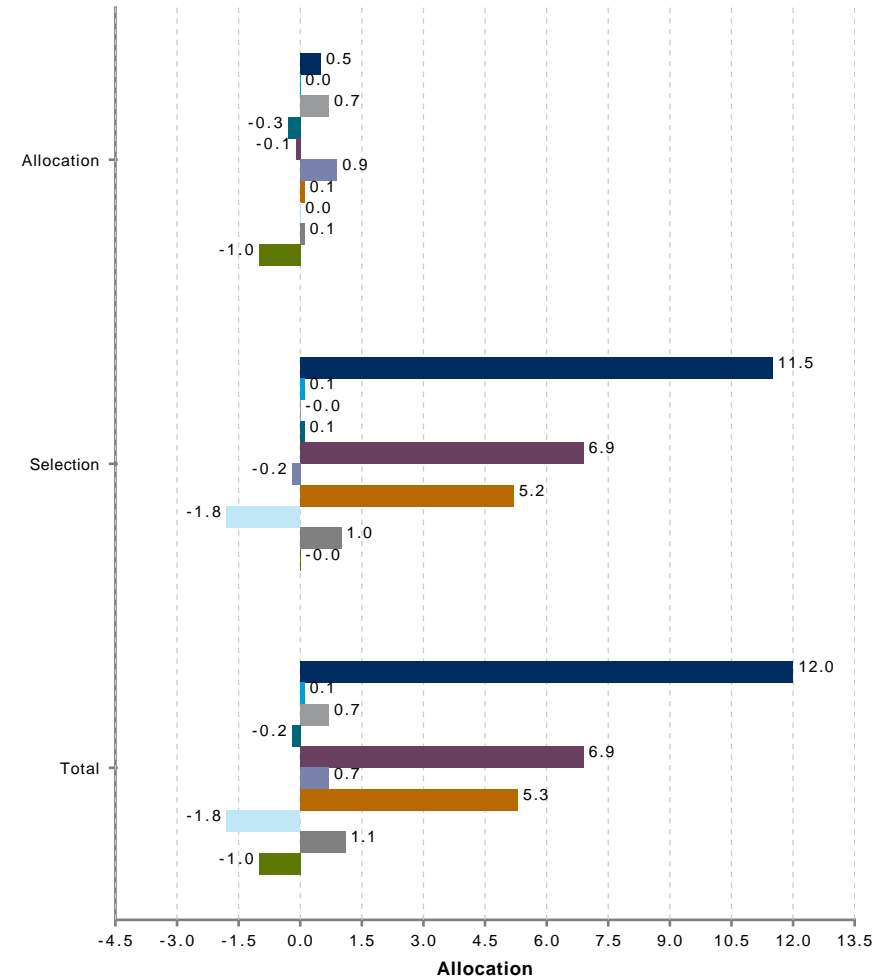
1 Year Plan Attribution



Plan Attribution - 1 Year, Asset Class Level

	Weighting		Returns		Value Added			Total
	Fund	Relative	Fund	Relative	Allocation	Selection	Bench Imp	
TOTAL PLAN PLUS OVERLAY PROGRAM	100.0	0.0	-0.2	12.7	0.5	11.5	0.5	12.0
TOTAL INTEREST RATE HEDGING	0.1	0.1	114.3	114.0	0.0	0.1	-	0.1
TOTAL CASH/LIQUIDITY	5.3	3.3	0.2	0.0	0.7	-0.0	-	0.7
TOTAL REAL ASSETS	3.9	-1.1	17.7	3.0	-0.3	0.1	-	-0.2
TOTAL VENTURE CAPITAL & PRIVATE EQUITY	18.1	2.1	25.0	45.2	-0.1	6.9	-	6.9
TOTAL EQUITY	16.2	-11.8	-16.5	0.4	0.9	-0.2	-	0.7
TOTAL FIXED INCOME	31.0	-4.0	0.5	18.2	0.1	5.2	-	5.3
OVERLAY PORTFOLIO	8.6	8.6	-27.7	-18.3	0.0	-1.8	-	-1.8
ALPHA POOL	13.2	6.2	-2.8	8.3	0.1	1.0	-	1.1
TOTAL RE +MFKE for PLAN ATTR	3.7	-3.3	23.6	1.4	-1.0	-0.0	-	-1.0

Value Added Effects



San Bernardino County Retirement

June 30, 2022

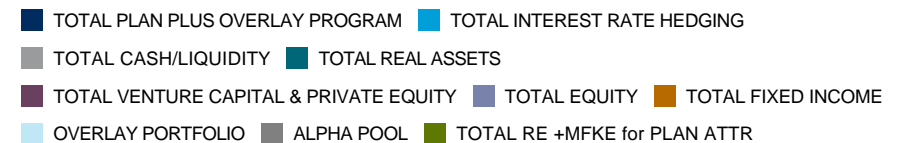
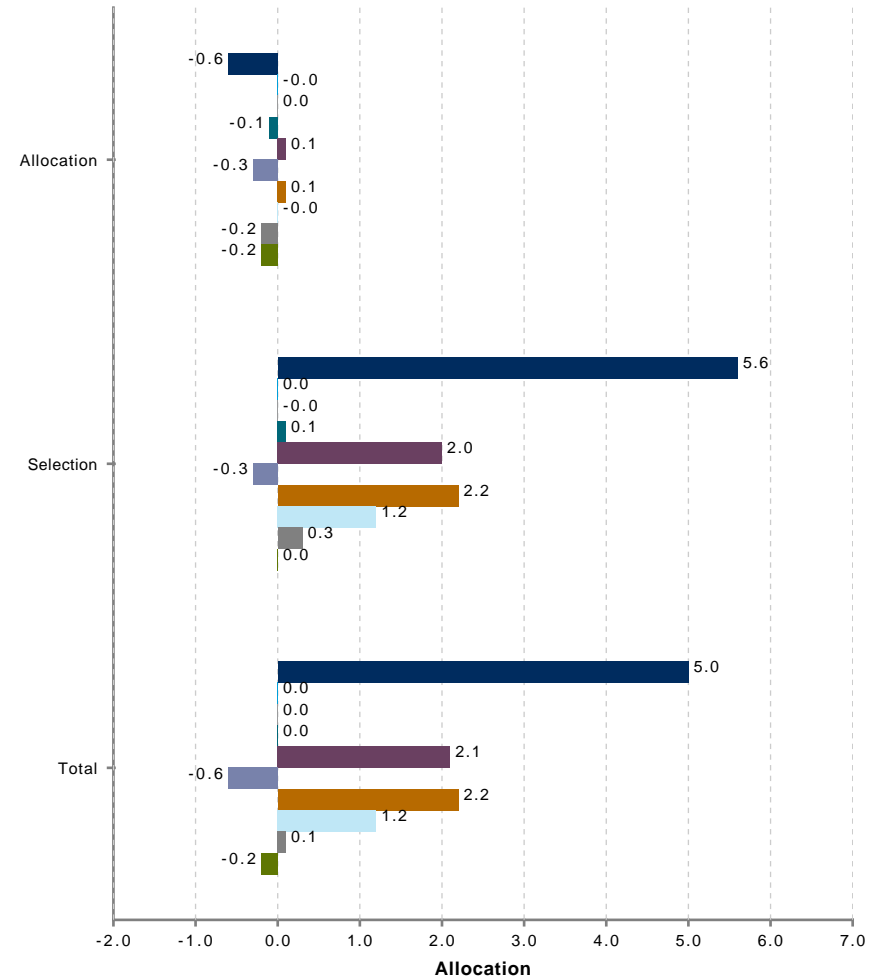
3 Year Plan Attribution



Plan Attribution - 3 Year, Asset Class Level

	Weighting		Returns		Value Added			Total
	Fund	Relative	Fund	Relative	Allocation	Selection	Bench Imp	
TOTAL PLAN PLUS OVERLAY PROGRAM	100.0	0.0	8.8	5.5	-0.6	5.6	0.3	5.0
TOTAL INTEREST RATE HEDGING	0.1	0.1	11.1	10.4	-0.0	0.0	-	0.0
TOTAL CASH/LIQUIDITY	3.9	1.9	0.4	-0.2	0.0	-0.0	-	0.0
TOTAL REAL ASSETS	4.6	-0.4	13.8	2.6	-0.1	0.1	-	0.0
TOTAL VENTURE CAPITAL & PRIVATE EQUITY	16.1	0.1	23.8	12.8	0.1	2.0	-	2.1
TOTAL EQUITY	15.9	-12.1	5.0	-1.1	-0.3	-0.3	-	-0.6
TOTAL FIXED INCOME	36.1	1.1	4.1	6.7	0.1	2.2	-	2.2
OVERLAY PORTFOLIO	3.7	3.7	17.4	13.9	-0.0	1.2	-	1.2
ALPHA POOL	15.5	8.5	2.0	2.9	-0.2	0.3	-	0.1
TOTAL RE +MFKE for PLAN ATTR	4.1	-2.9	11.3	1.5	-0.2	0.0	-	-0.2

Value Added Effects



Total Plan Performance History

TOTAL PLAN PERFORMANCE HISTORY
JUN-2022

Net Mgr Returns

Total Plan Returns (by Fiscal Quarter)							
	Q1	Q2	Q3	Q4	FYTD	Fiscal Year	5 Year Annualized Return
2022	2.15%	4.25%	-1.16%	-5.04%	-0.06%	-0.06%	8.00%
2021	5.87%	11.25%	5.91%	6.88%		33.32%	
2020	0.83%	3.69%	-10.99%	3.98%		-3.24%	
2019	1.96%	-3.95%	4.75%	2.17%		4.81%	
2018	3.24%	2.51%	0.94%	1.80%		8.76%	

Policy Benchmark Returns (by Fiscal Quarter)							
	Q1	Q2	Q3	Q4	FYTD	Fiscal Year	5 Year Annualized Return
2022	-0.26%	3.17%	-3.73%	-10.51%	-11.35%	-11.35%	4.53%
2021	4.88%	8.37%	0.80%	4.40%		19.61%	
2020	0.56%	4.38%	-10.44%	10.24%		3.63%	
2019	2.07%	-5.42%	6.81%	3.19%		6.40%	
2018	3.04%	3.22%	0.14%	0.24%		6.77%	

Excess Returns (by Fiscal Quarter)							
	Q1	Q2	Q3	Q4	FYTD	Fiscal Year	5 Year Annualized Return
2022	2.41%	1.08%	2.57%	5.47%	11.30%	11.30%	3.47%
2021	0.99%	2.88%	5.11%	2.47%		13.71%	
2020	0.27%	-0.69%	-0.55%	-6.26%		-6.87%	
2019	-0.11%	1.47%	-2.06%	-1.02%		-1.59%	
2018	0.20%	-0.70%	0.79%	1.56%		1.98%	

* 5 Year Annualized Returns Effective JUN

Information Classification: General

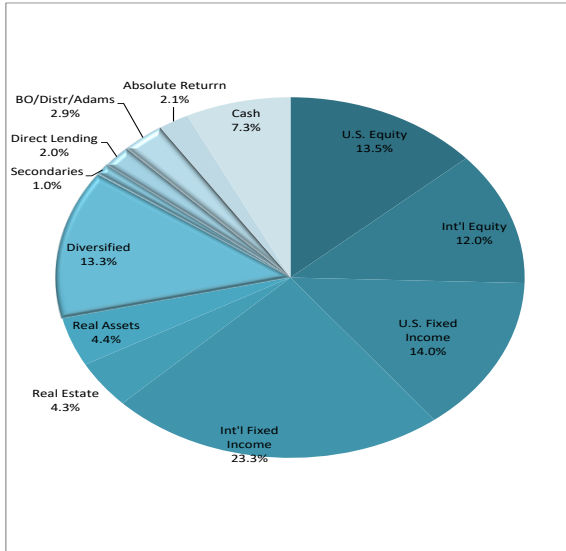
San Bernardino County Retirement

June 30, 2022

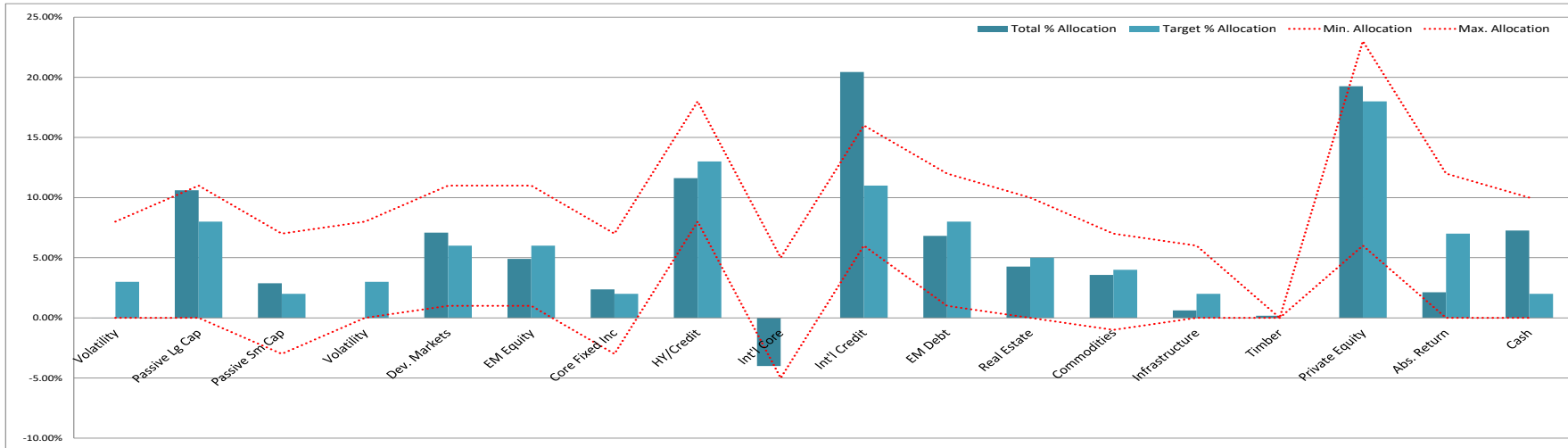
Net Mgr



Total Plan Allocation



Asset Class	Sub-Asset Class	Actual \$ Allocation			Total Alloc	Target Alloc	Target Range	
		Physical	Synthetic	Total			Min	Max
U.S. Equity	Volatility	1,189,967	0	1,189,967	0.01%	3.00%	0%	8%
	Passive Large Cap	1,506,358,213	-28,600,000	1,477,758,213	10.61%	8.00%	0%	11%
	Passive Small Cap	0	400,200,000	400,200,000	2.87%	2.00%	-3%	7%
SUB-TOTAL		1,507,548,180	371,600,000	1,879,148,180	13.50%	13.00%	8%	18%
Int'l Equity	Volatility	0	0	0	0.00%	3.00%	0%	8%
	Developed Markets	172,729,277	814,100,000	986,829,277	7.09%	6.00%	1%	11%
	Emerging Markets	453,412,301	229,200,000	682,612,301	4.90%	6.00%	1%	11%
SUB-TOTAL		626,141,578	1,043,300,000	1,669,441,578	11.99%	15.00%	10%	20%
U.S. Fixed Income	US Core	329,600,000	329,600,000	329,600,000	2.37%	2.00%	-3%	7%
	High Yield/Credit	1,617,958,799	0	1,617,958,799	11.62%	13.00%	8%	18%
	SUB-TOTAL		1,617,958,799	329,600,000	1,947,558,799	13.99%	15.00%	10%
Int'l Fixed Income	International Core	0	-556,978,769	-556,978,769	-4.00%	0.00%	-5%	5%
	International Credit	1,397,423,989	1,448,378,769	2,845,802,758	20.44%	11.00%	6%	16%
	Em. Market Debt	948,725,678	0	948,725,678	6.81%	8.00%	1%	12%
	SUB-TOTAL		2,346,149,667	891,400,000	3,237,549,667	23.25%	19.00%	13%
Real Estate	Real Estate	593,336,581	0	593,336,581	4.26%	5.00%	0%	10%
Real Assets	Commodities	497,333,547	0	497,333,547	3.57%	4.00%	-1%	7%
	Infrastructure	86,567,993	0	86,567,993	0.62%	2.00%	0%	6%
	Timber	24,932,580	0	24,932,580	0.18%	0.00%	0%	0%
	SUB-TOTAL		608,834,120	0	608,834,120	4.37%	6.00%	0%
P.E and V.C	Private Equity	2,681,749,729	0	2,681,749,729	19.26%	18.00%	6%	23%
Absolute Return	Absolute Return	2,931,888,415	-2,636,000,000	295,888,415	2.12%	7.00%	0%	12%
	Cash	1,010,962,148	0	1,010,962,148	7.26%	2.00%	0%	10%
Total	Total	13,924,569,217	-100,000	13,924,469,217	100.00%	100.00%		



San Bernardino County Retirement

June 30, 2022

Net Mgr



Performance by Asset Class/Strategy

	Market Value	1 Mth	3 Mth	YTD	FYTD	1 Year	3 Year	5 Year	10 Year	ITD	Inception Date
TOTAL PUBIC EQUITY	1,983,417,531	-7.05	-13.37	-17.89	-16.48	-16.48	5.04	5.57	5.48	8.06	Jun-01-83
TOTAL EQUITY BENCHMARK		-8.23	-15.12	-19.75	-16.78	-16.78	6.25	7.28	9.25		Jun-01-83
Excess		1.18	1.75	1.87	0.30	0.30	-1.21	-1.71	-3.77		
U.S. EQUITY	1,393,444,637	-7.57	-14.11	-18.25	-12.19	-12.19	8.60	7.76	5.22	7.57	Jun-01-83
Russell 3000 TR		-8.37	-16.70	-21.10	-13.87	-13.87	9.77	10.60	12.57	10.71	Jun-01-83
Excess		0.80	2.59	2.85	1.68	1.68	-1.18	-2.83	-7.36	-3.13	
U.S. PASSIVE EQUITY	1,392,253,544	-7.58	-14.12	-18.26	-12.20	-12.20	8.97	8.31	8.19		Jan-01-97
Russell 3000 TR		-8.37	-16.70	-21.10	-13.87	-13.87	9.77	10.60	12.57		Jan-01-97
Excess		0.79	2.58	2.83	1.67	1.67	-0.80	-2.29	-4.39		
INT'L EQUITY	589,972,894	-5.81	-11.56	-17.01	-24.21	-24.21	-1.80	0.52	4.46	6.01	Apr-01-86
MSCI AC WORLD ex US (NET)		-8.60	-13.73	-18.42	-19.42	-19.42	1.35	2.50	4.83		Apr-01-86
Excess		2.79	2.17	1.41	-4.79	-4.79	-3.15	-1.98	-0.37		
DEVELOPED MKT INT'L EQUITY	162,764,026	-5.77	-11.59	-16.32	-21.03	-21.03	-2.65	-1.61	7.79	2.94	Jan-01-07
TOTAL DEV INTL EQUITY BM		-8.60	-13.73	-18.42	-19.42	-19.42	1.35	2.41	5.51	2.11	Jan-01-07
Excess		2.83	2.14	2.10	-1.61	-1.61	-4.00	-4.03	2.29	0.83	
EMERGING MKTS EQUITY	427,208,868	-5.83	-11.55	-17.27	-25.36	-25.36	-1.96	0.66	1.22	6.40	Jul-01-04
MSCI EMERGING MARKETS		-6.64	-11.45	-17.63	-25.28	-25.28	0.57	2.18	3.06	7.30	Jul-01-04
Excess		0.81	-0.10	0.36	-0.07	-0.07	-2.53	-1.51	-1.84	-0.90	
TOTAL FIXED INCOME	3,832,164,645	-3.38	-4.59	-4.09	0.70	0.70	4.22	4.60	6.36	8.52	Sep-01-82
TOTAL FIXED INCOME BENCHMARK		-4.57	-8.98	-14.59	-14.99	-14.99	-2.38	0.22	1.77		Sep-01-82
Excess		1.18	4.39	10.50	15.69	15.69	6.60	4.38	4.59		
U.S. FIXED INCOME	1,556,572,156	-3.70	-4.80	-5.08	-0.89	-0.89	7.53	7.29	8.07	9.20	Jul-01-82
Bloomberg U.S. Aggregate		-1.57	-4.69	-10.35	-10.29	-10.29	-0.93	0.88	1.54	6.95	Jul-01-82
Excess		-2.13	-0.10	5.27	9.40	9.40	8.47	6.42	6.53	2.24	
HIGH YIELD U.S. FIXED INCOME	1,556,572,156	-3.70	-4.80	-5.08	-0.89	-0.89	7.53	7.29	8.07	8.58	Jan-01-07
Bloomberg U.S. Aggregate		-1.57	-4.69	-10.35	-10.29	-10.29	-0.93	0.88	1.54	3.22	Jan-01-07
Excess		-2.13	-0.10	5.27	9.40	9.40	8.47	6.42	6.53	5.36	
INT'L FIXED INCOME	2,275,592,489	-3.17	-4.42	-3.38	1.82	1.82	2.15	3.03	5.31	5.42	Apr-01-92

San Bernardino County Retirement

June 30, 2022

Net Mgr



Performance by Asset Class/Strategy

	Market Value	1 Mth	3 Mth	YTD	FYTD	1 Year	3 Year	5 Year	10 Year	ITD	Inception Date
INTERNATIONAL FIXED INCOME BENCHMARK		-4.50	-11.01	-16.49	-18.78	-18.78	-5.07	-1.52	0.06		Apr-01-92
Excess		1.33	6.59	13.10	20.61	20.61	7.22	4.55	5.25		
TOTAL EMERGING MKTS FIXED INCOME	915,497,511	-3.80	-4.24	-5.42	-7.08	-7.08	-2.43	-1.17	1.69	4.20	May-01-04
TOTAL EM FIXED INC BM		-6.91	-12.46	-26.65	-27.71	-27.71	-8.75	-4.08	0.35	4.76	May-01-04
Excess		3.12	8.22	21.23	20.62	20.62	6.31	2.90	1.34	-0.56	
TOTAL DEVELOPED MKT INTL FIXED INCOME	1,360,094,978	-2.74	-4.56	-2.03	8.76	8.76	5.64	5.96	7.42	6.81	Jan-01-07
SBCERA CUSTOM BC GLOBAL AGGREGATE INDEX		-4.50	-11.01	-16.49	-18.78	-18.78	-5.07	-1.75	-1.06	1.45	Jan-01-07
Excess		1.76	6.46	14.46	27.55	27.55	10.71	7.71	8.48	5.36	
INTERNATIONAL CREDIT	1,360,094,978	-2.74	-4.56	-2.03	8.76	8.76	5.64	5.96	8.02	8.18	Aug-01-09
TOTAL INT'L CREDIT BM		-4.50	-11.01	-16.49	-18.78	-18.78	-5.07	-1.87	2.15	3.80	Aug-01-09
Excess		1.76	6.46	14.46	27.55	27.55	10.71	7.83	5.87	4.38	
REAL ESTATE	590,979,845	-0.11	5.91	11.30	23.01	23.01	11.10	9.67	9.43	4.26	Mar-01-85
NCREIF PROPERTY INDEX 1 QTR LAG		5.33	5.33	11.80	21.87	21.87	9.60	8.54	9.61	8.17	Mar-01-85
Excess		-5.43	0.58	-0.50	1.13	1.13	1.49	1.12	-0.18	-3.91	
SECONDARIES R.E.	100,191,072	0.00	1.60	8.41	17.05	17.05	6.05	7.49		13.83	Nov-01-14
NCREIF PROPERTY INDEX 1 QTR LAG		5.33	5.33	11.80	21.87	21.87	9.60	8.54		9.32	Nov-01-14
Excess		-5.33	-3.72	-3.40	-4.82	-4.82	-3.55	-1.05		4.51	
CORE R.E.	77,858,244	0.13	2.61	4.50	4.87	4.87	7.48	6.86	7.21	8.92	Jun-01-97
NCREIF PROPERTY INDEX 1 QTR LAG		5.33	5.33	11.80	21.87	21.87	9.60	8.54	9.61	9.57	Jun-01-97
Excess		-5.19	-2.71	-7.31	-17.00	-17.00	-2.13	-1.68	-2.41	-0.65	
ENHANCED RETURN R.E.	281,649,473	-0.00	6.84	13.83	28.62	28.62	12.24	10.50	11.71	9.38	Jun-01-03
NCREIF PROPERTY INDEX 1 QTR LAG		5.33	5.33	11.80	21.87	21.87	9.60	8.54	9.61	9.05	Jun-01-03
Excess		-5.33	1.51	2.03	6.75	6.75	2.63	1.96	2.10	0.33	
HIGH RETURN - U.S. R.E.	98,364,749	-0.01	13.80	16.43	40.26	40.26	22.25	13.13	10.95	6.54	Jan-01-03
NCREIF PROPERTY INDEX 1 QTR LAG		5.33	5.33	11.80	21.87	21.87	9.60	8.54	9.61	8.94	Jan-01-03
Excess		-5.34	8.48	4.63	18.39	18.39	12.65	4.59	1.34	-2.41	
HIGH RETURN - GLOBAL R.E.	32,381,944	-2.39	-3.94	-0.97	0.90	0.90	1.88	5.52	6.62	5.01	Jul-01-03
NCREIF PROPERTY INDEX 1 QTR LAG		5.33	5.33	11.80	21.87	21.87	9.60	8.54	9.61	8.99	Jul-01-03

San Bernardino County Retirement

June 30, 2022

Net Mgr



Performance by Asset Class/Strategy											
	Market Value	1 Mth	3 Mth	YTD	FYTD	1 Year	3 Year	5 Year	10 Year	ITD	Inception Date
Excess		-7.71	-9.26	-12.77	-20.97	-20.97	-7.73	-3.02	-2.99	-3.97	
STRUCTURED R.E.	534,362	0.00	2.46	19.56	33.29	33.29	6.04	3.47	5.41	1.53	Apr-01-05
NCREIF PROPERTY INDEX 1 QTR LAG		5.33	5.33	11.80	21.87	21.87	9.60	8.54	9.61	8.66	Apr-01-05
Excess		-5.33	-2.87	7.75	11.41	11.41	-3.56	-5.07	-4.20	-7.13	
TOTAL P.E and V.C	2,655,331,511	-0.89	2.97	5.33	25.04	25.04	23.85	20.00	16.41	11.73	Sep-01-87
TOTAL VC & PVT EQUITY BM		-8.37	-16.70	-21.10	-13.87	-13.87	9.77	10.81	10.68	12.08	Sep-01-87
Excess		7.47	19.67	26.43	38.91	38.91	14.07	9.19	5.72	-0.34	
DIVERSIFIED	1,849,013,149	-0.80	3.46	5.21	27.31	27.31	26.81	22.97	18.00	10.68	Jul-01-04
Russell 3000 TR		-8.37	-16.70	-21.10	-13.87	-13.87	9.77	10.60	12.57	9.03	Jul-01-04
Excess		7.57	20.16	26.31	41.17	41.17	17.03	12.37	5.43	1.66	
BUYOUT	161,330,169	0.03	10.05	22.23	44.79	44.79	26.68	21.16	22.27	17.74	Sep-01-05
STATE STREET PE 1 QTR LAG		-0.64	-0.64	5.06	24.00	24.00	23.02	19.06	14.73	13.42	Sep-01-05
Excess		0.67	10.69	17.16	20.79	20.79	3.66	2.11	7.54	4.33	
SECONDARIES	137,534,755	-5.21	-2.06	-0.79	29.03	29.03	27.67	22.08	17.15	13.61	Jun-01-05
STATE STREET PE 1 QTR LAG		-0.64	-0.64	5.06	24.00	24.00	23.02	19.06	14.73	13.07	Jun-01-05
Excess		-4.57	-1.42	-5.85	5.04	5.04	4.65	3.02	2.42	0.54	
DIRECT LENDING	273,006,943	-0.75	-0.37	1.10	5.85	5.85	11.38	9.36	9.40	7.53	May-01-05
STATE STREET PE 1 QTR LAG		-0.64	-0.64	5.06	24.00	24.00	23.02	19.06	14.73	13.00	May-01-05
Excess		-0.11	0.27	-3.96	-18.15	-18.15	-11.64	-9.70	-5.33	-5.47	
OPPORTUNISTIC DEBT	234,446,494	0.19	1.66	4.42	18.04	18.04	18.89	14.54	14.27	12.18	Jan-01-06
STATE STREET PE 1 QTR LAG		-0.64	-0.64	5.06	24.00	24.00	23.02	19.06	14.73	12.89	Jan-01-06
Excess		0.83	2.30	-0.65	-5.96	-5.96	-4.13	-4.52	-0.46	-0.70	
REAL ASSETS	619,490,943	-1.92	2.21	7.51	17.72	17.72	13.77	9.34	5.53		Dec-01-05
TOTAL REAL ASSETS BENCHMARK		-8.26	-5.69	9.02	14.26	14.26	10.90	7.48	4.66		Dec-01-05
Excess		6.34	7.90	-1.51	3.46	3.46	2.87	1.86	0.87		
TOTAL COMMODITIES	520,830,671	-0.26	3.52	6.55	20.48	20.48	16.15	13.18	6.60	5.26	Apr-01-08
TOTAL REAL ASSETS BENCHMARK		-8.26	-5.69	9.02	14.26	14.26	10.90	7.48	4.66	2.74	Apr-01-08
Excess		8.01	9.20	-2.47	6.22	6.22	5.25	5.69	1.93	2.52	

San Bernardino County Retirement

June 30, 2022

Net Mgr



Performance by Asset Class/Strategy

	Market Value	1 Mth	3 Mth	YTD	FYTD	1 Year	3 Year	5 Year	10 Year	ITD	Inception Date
TIMBER	24,932,630	0.00	29.94	28.45	25.86	25.86	6.36	2.40	3.29	1.85	Jul-01-05
TOTAL REAL ASSETS BENCHMARK		-8.26	-5.69	9.02	14.26	14.26	10.90	7.48	4.66		Jul-01-05
Excess		8.26	35.62	19.43	11.60	11.60	-4.54	-5.08	-1.37		
INFRASTRUCTURE	73,727,643	-12.47	-11.68	7.49	4.13	4.13	12.85	8.84	4.36	5.83	Oct-01-07
TOTAL REAL ASSETS BENCHMARK		-8.26	-5.69	9.02	14.26	14.26	10.90	7.48	4.66	3.24	Oct-01-07
Excess		-4.21	-6.00	-1.54	-10.13	-10.13	1.94	1.36	-0.30	2.58	
ALPHA POOL	1,747,909,705	-2.99	-5.52	-5.81	-2.38	-2.38	2.10	3.65	4.65	4.14	Jan-01-08
BBG BARC Agg Bd		-1.57	-4.69	-10.35	-10.29	-10.29	-0.93	0.88			Jan-01-08
Excess		-1.43	-0.83	4.54	7.91	7.91	3.04	2.77			
ALPHA POOL CREDIT COMPOSITE	1,541,253,790	-3.37	-6.22	-6.52	-2.66	-2.66	2.35	3.96	5.10	4.33	Jun-01-06
BBG BARC Agg Bd		-1.57	-4.69	-10.35	-10.29	-10.29	-0.93	0.88			Jun-01-06
Excess		-1.80	-1.52	3.83	7.64	7.64	3.28	3.08			
OVERLAY PORTFOLIO	946,094,699	-13.71	-20.68	-30.84	-27.67	-27.67	17.45	13.48		9.44	May-01-15
SBCERA - TOTAL PLAN INDEX		-5.31	-10.51	-13.85	-11.35	-11.35	3.19	4.53			May-01-15
Excess		-8.40	-10.17	-16.99	-16.32	-16.32	14.26	8.94			
CASH	18,119,157	0.00	0.00	0.00	0.00	0.00	0.59	0.35		-0.76	Mar-01-13
ICE BofA US 3-Month Treasury Bill		0.02	0.10	0.14	0.17	0.17	0.63	1.11		0.68	Mar-01-13
Excess		-0.02	-0.10	-0.14	-0.17	-0.17	-0.04	-0.76		-1.43	

San Bernardino County Retirement

June 30, 2022

Net Mgr



Performance by Manager

	Ending Market Value	1 Mth	3 Mth	YTD	FYTD	1 Year	3 Year	5 Year	7 Year	10 Year	ITD
TOTAL DOMESTIC EQUITY	1,393,444,637.48	-7.57	-14.11	-18.25	-12.19	-12.19	8.60	7.76	6.15	5.22	7.57
Russell 3000 TR		-8.37	-16.70	-21.10	-13.87	-13.87	9.77	10.60	10.43	12.57	10.71
RUSSELL - US SC VOL	249,153.25	0.09	0.19	0.21	0.22	0.22	0.62	1.42	10.56	-17.37	-10.44
<i>Russell 2000 Index</i>		-8.22	-17.20	-23.43	-25.20	-25.20	4.21	5.17	5.91	9.35	10.69
RUSSELL - US LC VOL	941,939.84	0.09	0.19	0.21	0.22	0.22	-55.83	-54.21	-54.26	-51.94	-44.61
<i>Russell 3000 TR</i>		-8.37	-16.70	-21.10	-13.87	-13.87	9.77	10.60	10.43	12.57	13.36
SSGA - S&P CALL WRITE	1,001,164,544.39	-8.26	-16.10	-19.96	-10.95	-10.95	9.61	9.20	8.32	8.63	5.59
<i>Russell 3000 TR</i>		-8.37	-16.70	-21.10	-13.87	-13.87	9.77	10.60	10.43	12.57	8.60
TOBAM - AB US EQUITY	391,089,000.00	-5.78	-8.61	-13.57	-14.01	-14.01	8.02				6.97
<i>Russell 3000 TR</i>		-8.37	-16.70	-21.10	-13.87	-13.87	9.77				9.97
TOTAL INTERNATIONAL EQUITY	589,972,893.59	-5.81	-11.56	-17.01	-24.21	-24.21	-1.80	0.52	0.79	4.46	6.01
MSCI AC WORLD ex US (NET)		-8.60	-13.73	-18.42	-19.42	-19.42	1.35	2.50	2.92	4.83	
RUSSELL - INTER VOL	16,487.36	0.09	0.19	0.21	0.22	0.22					
<i>OVERLAY BLENDED BM</i>		-8.60	-13.73	-18.42	-19.42	-19.42					
TOBAM - AB EM FUND	279,212,825.31	-5.77	-12.54	-18.62	-26.14	-26.14	-3.05	0.59			1.30
<i>MSCI EMERGING MARKETS</i>		-6.64	-11.45	-17.63	-25.28	-25.28	0.57	2.18			5.38
TOBAM - AB WORLD EX-US	162,747,538.35	-5.77	-11.59	-16.32	-21.03	-21.03	-3.23				-3.54
<i>MSCI AC WORLD ex US (NET)</i>		-8.60	-13.73	-18.42	-19.42	-19.42	1.35				0.84
MONDRIAN - EM EQUITY	147,996,042.56	-5.95	-9.62	-14.58	-23.82	-23.82	0.27	1.06	1.39	1.79	6.62
<i>MSCI EMERGING MARKETS</i>		-6.64	-11.45	-17.63	-25.28	-25.28	0.57	2.18	2.79	3.06	6.93
TOTAL DOMESTIC FIXED INCOME	1,556,572,155.83	-3.70	-4.80	-5.08	-0.89	-0.89	7.53	7.29	6.82	8.07	9.20
Bloomberg U.S. Aggregate		-1.57	-4.69	-10.35	-10.29	-10.29	-0.93	0.88	1.42	1.54	6.95
BEACH POINT - SELECT	234,366,533.46	-5.52	-5.52	-5.28	1.29	1.29	8.73	7.53	7.65	9.08	9.78
<i>ICE BofA US High Yield Index</i>		-6.81	-9.97	-14.04	-12.66	-12.66	-0.04	1.95	3.40	4.41	8.57
APOLLO - CREDIT STRAT	130,531,941.54	-0.68	-1.15	-0.64	3.47	3.47	11.33	10.05	8.90	8.23	8.77
<i>ICE BofA US High Yield Index</i>		-6.81	-9.97	-14.04	-12.66	-12.66	-0.04	1.95	3.40	4.41	5.08

San Bernardino County Retirement

June 30, 2022

Net Mgr



Performance by Manager

	Ending Market Value	1 Mth	3 Mth	YTD	FYTD	1 Year	3 Year	5 Year	7 Year	10 Year	ITD
MANULIFE DEC - SMA	94,781,030.05	-1.10	-3.36	-5.71	-5.39	-5.39	1.92	3.31	3.65	4.84	5.99
<i>ICE BofA US High Yield Index</i>		-6.81	-9.97	-14.04	-12.66	-12.66	-0.04	1.95	3.40	4.41	4.99
WATERFALL - SMA	33,084,860.25	-13.11	-15.80	-16.26	-10.46	-10.46	6.48	8.90			12.52
<i>ICE BofA US High Yield Index</i>		-6.81	-9.97	-14.04	-12.66	-12.66	-0.04	1.95			3.53
WATERFALL - READY CAP	21,770,866.97	-15.94	-15.71	-18.73	-15.35	-15.35	7.21	4.83	5.72	6.96	7.65
<i>ICE BofA US High Yield Index</i>		-6.81	-9.97	-14.04	-12.66	-12.66	-0.04	1.95	3.40	4.41	6.40
WATERFALL - VICTORIA	81,523,277.00	-0.03	0.56	1.94	6.42	6.42	6.60	7.64	8.17		8.28
<i>ICE BofA US High Yield Index</i>		-6.81	-9.97	-14.04	-12.66	-12.66	-0.04	1.95	3.40		3.45
GOLDENTREE - SMA-PB	28,937,935.44	-10.97	-4.56	3.50	18.90	18.90	20.33	16.76	12.64	27.91	27.49
<i>ICE BofA US High Yield Index</i>		-6.81	-9.97	-14.04	-12.66	-12.66	-0.04	1.95	3.40	4.41	4.87
MACKAY SHIELDS - SMA	45,336,913.99	-6.58	-10.10	-14.27	-13.18	-13.18	0.92	1.76	2.65	4.58	6.09
<i>ICE BofA US High Yield Index</i>		-6.81	-9.97	-14.04	-12.66	-12.66	-0.04	1.95	3.40	4.41	6.12
GOLDENTREE - SMA	540,264,824.08	-3.63	-6.13	-8.30	-5.28	-5.28	8.25	8.41	8.12		
<i>ICE BofA US High Yield Index</i>		-6.81	-9.97	-14.04	-12.66	-12.66	-0.04	1.95	3.40		
AG - CAP RECOVERY PRT VI	0.01	0.00	0.00	100.00	91.00	91.00					
<i>ICE BofA US High Yield Index</i>		-6.81	-9.97	-14.04	-12.66	-12.66					
APOLLO - OFFSHR CREDIT	289,253,047.19	-2.66	-3.74	-4.03	0.87	0.87	5.05	4.58	4.80	6.00	9.79
<i>ICE BofA US High Yield Index</i>		-6.81	-9.97	-14.04	-12.66	-12.66	-0.04	1.95	3.40	4.41	8.78
KING STREET CAPITAL LTD	0.01										
<i>ICE BofA US High Yield Index</i>		-6.81									
GOLDENTREE - DIST FUND	7,830,736.79	0.00	13.67	20.60	47.74	47.74	10.29	7.15	5.52	10.36	9.19
<i>ICE BofA US High Yield Index</i>		-6.81	-9.97	-14.04	-12.66	-12.66	-0.04	1.95	3.40	4.41	5.46
KA - BDC	48,890,189.05	0.00	1.51	16.15	22.39	22.39					
<i>ICE BofA US High Yield Index</i>		-6.81	-9.97	-14.04	-12.66	-12.66					
TOTAL INTERNATIONAL FIXED INCOME	2,275,592,489.18	-3.17	-4.42	-3.38	1.82	1.82	2.15	3.03	4.63	5.31	5.42
INTERNATIONAL FIXED INCOME BENCHMARK		-4.50	-11.01	-16.49	-18.78	-18.78	-5.07	-1.52	0.29	0.06	
ALCENTRA SCF	17,841,656.77	-2.41	-4.54	13.02	10.73	10.73	-3.88	-0.76			-0.73

San Bernardino County Retirement

June 30, 2022

Net Mgr



Performance by Manager

	Ending Market Value	1 Mth	3 Mth	YTD	FYTD	1 Year	3 Year	5 Year	7 Year	10 Year	ITD
<i>Bloomberg Global Aggregate ex-USD</i>		-4.50	-11.01	-16.49	-18.78	-18.78	-5.07	-1.75			-1.30
ALCENTRA - VIADUCT	72,742,949.51	0.00	-0.00	4.13	7.29	7.29	9.25				8.06
<i>Bloomberg Global Aggregate ex-USD</i>		-4.50	-11.01	-16.49	-18.78	-18.78	-5.07				-3.62
OCM INTL CONVERTIBLES SMA	0.02										
<i>SBCERA CUSTOM BC GLOBAL AGGREGATE INDEX</i>		-4.50									
ALCENTRA DLF	920,210.73	0.00	4.63	7.80							
<i>Bloomberg Global Aggregate ex-USD</i>		-4.50	-11.01	-16.49							
GRAMERCY FUNDS MANAGEMENT LLC	682,834,994.05	-3.44	-3.14	-0.78	0.15	0.15	-1.02	-1.45	2.01		4.04
<i>JPMorgan EMBI Global Diversified Index</i>		-6.21	-11.43	-20.31	-21.22	-21.22	-5.22	-1.19	1.33		1.50
CAIRN - SMA	202,913,835.01	0.21	1.68	4.49	8.47	8.47	6.05	5.16	6.37		6.37
<i>Bloomberg Global Aggregate ex-USD</i>		-4.50	-11.01	-16.49	-18.78	-18.78	-5.07	-1.75	-0.29		-0.29
CAIRN - CLI HOLDINGS	85,390,139.00	-1.90	-5.76	-7.87	-5.95	-5.95					10.18
<i>Bloomberg Global Aggregate ex-USD</i>		-4.50	-11.01	-16.49	-18.78	-18.78					-4.98
ASHMORE - EM FIXED	126,959,637.18	-8.49	-13.32	-22.11	-27.04	-27.04	-10.07	-4.34	-1.41	-1.14	1.28
<i>JPMorgan EMBI Global Diversified Index</i>		-6.21	-11.43	-20.31	-21.22	-21.22	-5.22	-1.19	1.33	2.21	4.55
BARDIN HILL - MCA	238,516,287.78	-1.96	-0.37	0.85	32.62	32.62	7.04	5.19			6.89
<i>HALCYON BLENDED BM</i>		-6.81	-9.97	-14.04	-12.66	-12.66	0.22	2.12			3.65
MARATHON - SMA	260,465,028.70	0.16	0.64	4.55	13.67	13.67	10.05	10.57	9.05	9.86	7.10
<i>Bloomberg Global Aggregate ex-USD</i>		-4.50	-11.01	-16.49	-18.78	-18.78	-5.07	-1.75	-0.29	-1.06	-0.03
ALCENTRA - CSCOF III	37,647,061.50	0.00	-3.61	0.10	9.94	9.94	13.61	7.58			7.96
<i>Bloomberg Global Aggregate ex-USD</i>		-4.50	-11.01	-16.49	-18.78	-18.78	-5.07	-1.75			-2.16
PGIM EM - DEBT OPP FUND	105,702,880.00	0.00	1.15	-8.06	-13.97	-13.97	1.66	1.91	4.05		2.88
<i>JPMorgan EMBI Global Diversified Index</i>		-6.21	-11.43	-20.31	-21.22	-21.22	-5.22	-1.19	1.33		1.22
ALCENTRA - SMA	443,657,808.92	-6.78	-12.28	-9.91	0.59	0.59	2.70	5.53	7.90		7.90
<i>Bloomberg Global Aggregate ex-USD</i>		-4.50	-11.01	-16.49	-18.78	-18.78	-5.07	-1.75	-0.29		-0.29
TOTAL REAL ESTATE	590,979,844.55	-0.11	5.91	11.30	23.01	23.01	11.10	9.67	9.58	9.43	4.26
NCREIF PROPERTY INDEX 1 QTR LAG		5.33	5.33	11.80	21.87	21.87	9.60	8.54	8.82	9.61	8.17

San Bernardino County Retirement

June 30, 2022

Net Mgr



Performance by Manager

	Ending Market Value	1 Mth	3 Mth	YTD	FYTD	1 Year	3 Year	5 Year	7 Year	10 Year	ITD
KA - RED IV	9,695,940.60	0.00	2.11	2.79	4.51	4.51					3.49
<i>NCREIF PROPERTY INDEX 1 QTR LAG</i>		5.33	5.33	11.80	21.87	21.87					17.39
PGIM RE - PRECap VII	12,595,277.30	-3.71	-6.68	-1.90	2.72	2.72					0.59
<i>NCREIF PROPERTY INDEX 1 QTR LAG</i>		5.33	5.33	11.80	21.87	21.87					17.39
INVESCO REAL ESTATE US FUND VI	0.01	0.00	0.00	0.00							0.00
<i>NCREIF PROPERTY INDEX 1 QTR LAG</i>		5.33	5.33	11.80							17.65
APOLLO - RE FUND II	16,097,823.57	-0.00	10.98	14.35	27.85	27.85	6.82	8.64			12.47
<i>NCREIF PROPERTY INDEX 1 QTR LAG</i>		5.33	5.33	11.80	21.87	21.87	9.60	8.54			8.33
BRYANSTON - RETAIL OPP	20,491,059.61	0.00	10.54	7.55	77.16	77.16	55.74	29.24	35.32	33.69	
<i>NCREIF PROPERTY INDEX 1 QTR LAG</i>		5.33	5.33	11.80	21.87	21.87	9.60	8.54	8.82	9.61	
KA - RED III	7,711,535.58	-0.18	8.17	10.28	25.78	25.78	14.49				12.46
<i>NCREIF PROPERTY INDEX 1 QTR LAG</i>		5.33	5.33	11.80	21.87	21.87	9.60				9.06
MORGAN STANLEY - RE	1,113,545.22	0.00	-0.34	12.56	10.70	10.70	2.43	-0.95	3.07	6.42	3.27
<i>NCREIF PROPERTY INDEX 1 QTR LAG</i>		5.33	5.33	11.80	21.87	21.87	9.60	8.54	8.82	9.61	8.37
PGIM RE - PRISA III	72,550,183.30	0.00	5.05	11.90	27.68	27.68	15.51	12.62	13.26	14.18	13.93
<i>NCREIF PROPERTY INDEX 1 QTR LAG</i>		5.33	5.33	11.80	21.87	21.87	9.60	8.54	8.82	9.61	9.05
PGIM RE - PRECap VI	9,484,479.72	-3.64	-5.97	-0.71	-0.98	-0.98	4.51	7.14			8.58
<i>NCREIF PROPERTY INDEX 1 QTR LAG</i>		5.33	5.33	11.80	21.87	21.87	9.60	8.54			8.59
STARWOOD - CAP FUND I-2	2,546,402.56	0.00	1.85	1.62	2.39	2.39	0.75	2.95	-0.87	-1.01	0.95
<i>NCREIF PROPERTY INDEX 1 QTR LAG</i>		5.33	5.33	11.80	21.87	21.87	9.60	8.54	8.82	9.61	8.21
WALTON ST RE FUND V	1,809,316.03	-0.00	-7.05	-18.33	-18.01	-18.01	-15.84	-12.99	-8.57	-2.88	-5.32
<i>NCREIF PROPERTY INDEX 1 QTR LAG</i>		5.33	5.33	11.80	21.87	21.87	9.60	8.54	8.82	9.61	7.92
INVESCO - ASIA CORE RE	70,803,724.05	0.00	2.18	4.19	4.64	4.64	7.39	6.69	8.34		6.81
<i>NCREIF PROPERTY INDEX 1 QTR LAG</i>		5.33	5.33	11.80	21.87	21.87	9.60	8.54	8.82		9.30
SQUARE MILE - PRT III	114,960.00	0.00	2.64	107.35	121.80	121.80	-5.05	-8.60	-4.42	0.31	0.72
<i>NCREIF PROPERTY INDEX 1 QTR LAG</i>		5.33	5.33	11.80	21.87	21.87	9.60	8.54	8.82	9.61	7.21
KA - RE FUND V	17,606,379.55	0.00	24.30	32.64	51.96	51.96	28.87				15.27
<i>NCREIF PROPERTY INDEX 1 QTR LAG</i>		5.33	5.33	11.80	21.87	21.87	9.60				8.78

San Bernardino County Retirement

June 30, 2022

Net Mgr



Performance by Manager

	Ending Market Value	1 Mth	3 Mth	YTD	FYTD	1 Year	3 Year	5 Year	7 Year	10 Year	ITD
PTNRS GRP - RE SEC 2017	62,639,450.33	0.00	2.74	10.07	20.17	20.17	11.39				10.36
<i>NCREIF PROPERTY INDEX 1 QTR LAG</i>		5.33	5.33	11.80	21.87	21.87	9.60				8.70
APOLLO US REAL ESTATE III, L.P.	22,560,650.36	-0.00	22.78	29.38							
<i>NCREIF PROPERTY INDEX 1 QTR LAG</i>		5.33	5.33	11.80							
KA - REP VI	4,201,359.78	0.00	11.83	11.83	21.92	21.92					
<i>NCREIF PROPERTY INDEX 1 QTR LAG</i>		5.33	5.33	11.80	21.87	21.87					
PTNRS GRP - RE SEC 2013	37,551,621.28	0.00	-0.24	5.83	12.70	12.70	1.05	4.28	10.93		11.60
<i>NCREIF PROPERTY INDEX 1 QTR LAG</i>		5.33	5.33	11.80	21.87	21.87	9.60	8.54	8.82		9.32
PGIM RE - PRISA II	209,099,289.93	-0.00	7.46	14.50	28.92	28.92	11.14	9.80	10.24	11.12	7.06
<i>NCREIF PROPERTY INDEX 1 QTR LAG</i>		5.33	5.33	11.80	21.87	21.87	9.60	8.54	8.82	9.61	8.89
OAKTREE - RE OPP V	607,105.00	0.00	-0.48	9.97	13.99	13.99	5.05	3.07	3.75	7.36	7.30
<i>NCREIF PROPERTY INDEX 1 QTR LAG</i>		5.33	5.33	11.80	21.87	21.87	9.60	8.54	8.82	9.61	9.81
FORTRESS - JP OPP II	3,564,111.99	-0.00	3.03	5.68	12.78	12.78	11.90	26.59	28.06	25.22	24.99
<i>NCREIF PROPERTY INDEX 1 QTR LAG</i>		5.33	5.33	11.80	21.87	21.87	9.60	8.54	8.82	9.61	9.81
348 WEST HOSPITALITY	7,054,520.07	1.50	7.17	7.67	7.16	7.16	8.22	7.29	7.96	7.33	3.96
<i>NCREIF PROPERTY INDEX 1 QTR LAG</i>		5.33	5.33	11.80	21.87	21.87	9.60	8.54	8.82	9.61	8.91
STARWOOD - GI OPP VII-A	599,673.43	0.00	-2.09	-5.53	-3.04	-3.04	1.70	1.69	-0.10	1.49	-0.84
<i>NCREIF PROPERTY INDEX 1 QTR LAG</i>		5.33	5.33	11.80	21.87	21.87	9.60	8.54	8.82	9.61	8.21
WALTON ST RE FUND IV	62,033.00	0.00	-6.43	-5.87	-6.37	-6.37	-7.48	-13.01	-8.76	-3.27	1.43
<i>NCREIF PROPERTY INDEX 1 QTR LAG</i>		5.33	5.33	11.80	21.87	21.87	9.60	8.54	8.82	9.61	8.99
TRI-CON CAPITAL VII	419,402.28	0.00	2.41	7.12	20.24	20.24	2.84	10.87	6.47	1.63	-9.04
<i>NCREIF PROPERTY INDEX 1 QTR LAG</i>		5.33	5.33	11.80	21.87	21.87	9.60	8.54	8.82	9.61	8.66
TOTAL VENTURE CAPITAL & PRIVATE EQUITY	2,655,331,510.54	-0.89	2.97	5.33	25.04	25.04	23.85	20.00	17.31	16.41	11.73
TOTAL VC & PVT EQUITY BM		-8.37	-16.70	-21.10	-13.87	-13.87	9.77	10.81	10.30	10.68	12.08
IND VENT - FUND V	316,454.57	-4.20	9.32	9.32	25.94	25.94	9.70	8.61	7.45	20.60	21.82
<i>STATE STREET PE 1 QTR LAG</i>		-0.64	-0.64	5.06	24.00	24.00	23.02	19.06	16.10	14.73	11.34
LEXINGTON - PRT VII	4,124,075.02	-0.48	2.34	5.03	25.67	25.67	19.01	14.34	11.75	13.15	14.60

San Bernardino County Retirement

June 30, 2022

Net Mgr



Performance by Manager

	Ending Market Value	1 Mth	3 Mth	YTD	FYTD	1 Year	3 Year	5 Year	7 Year	10 Year	ITD
STATE STREET PE 1 QTR LAG		-0.64	-0.64	5.06	24.00	24.00	23.02	19.06	16.10	14.73	14.03
LEXINGTON - PRT VI	241,790.21	-3.90	-6.77	-45.20	-37.16	-37.16	-8.45	-1.18	0.16	3.55	4.29
STATE STREET PE 1 QTR LAG		-0.64	-0.64	5.06	24.00	24.00	23.02	19.06	16.10	14.73	12.73
PARTNERS GRP - MCA	526,813,206.53	-1.58	-1.16	2.90	23.56	23.56	18.57	16.07	21.08		16.19
STATE STREET PE 1 QTR LAG		-0.64	-0.64	5.06	24.00	24.00	23.02	19.06	16.10		15.56
BLKRK TCP - ENERGY OPP	7,320,641.90	16.23	22.66	55.84	57.51	57.51	9.49	10.52	12.20		11.90
STATE STREET PE 1 QTR LAG		-0.64	-0.64	5.06	24.00	24.00	23.02	19.06	16.10		16.02
PTNRS GRP - SEC 2004	970,835.55	-2.41	20.67	27.01	39.54	39.54	18.88	11.02	10.00	8.17	6.47
STATE STREET PE 1 QTR LAG		-0.64	-0.64	5.06	24.00	24.00	23.02	19.06	16.10	14.73	13.62
KA - PARTNERS FUND IV	17,198,351.47	0.00	6.11	14.06	46.79	46.79	30.29				23.79
STATE STREET PE 1 QTR LAG		-0.64	-0.64	5.06	24.00	24.00	23.02				19.19
KA - SOLUTIONS FUND	10,363,667.89	-0.00	1.13	5.42	8.50	8.50	35.26				28.74
STATE STREET PE 1 QTR LAG		-0.64	-0.64	5.06	24.00	24.00	23.02				20.14
IND VENT - PRT HOLD VI	9,728,420.03	-4.87	-14.41	-14.41	60.68	60.68					
STATE STREET PE 1 QTR LAG		-0.64	-0.64	5.06	24.00	24.00					
KA - CAP ADVISORS II	11,287,837.74	0.00	2.13	6.55	11.26	11.26					
STATE STREET PE 1 QTR LAG		-0.64	-0.64	5.06	24.00	24.00					
LEXINGTON - MID MRKT I	308,712.37	3.68	-29.01	-62.30	-51.03	-51.03	-21.23	-6.94	-1.33	2.91	6.71
STATE STREET PE 1 QTR LAG		-0.64	-0.64	5.06	24.00	24.00	23.02	19.06	16.10	14.73	13.07
APOLLO - FUND VII	155,982.03	0.00	8.57	8.54	195.23	195.23	63.93	30.80	22.62	24.92	22.65
STATE STREET PE 1 QTR LAG		-0.64	-0.64	5.06	24.00	24.00	23.02	19.06	16.10	14.73	11.05
ARES - SPECIAL SITS I	36,856,334.06	2.39	2.39	5.58	42.95	42.95	24.70	14.57	3.42		3.42
STATE STREET PE 1 QTR LAG		-0.64	-0.64	5.06	24.00	24.00	23.02	19.06	16.10		16.10
BLKRK TCP - DIR LEND 8	26,421,385.80	0.92	0.90	1.67	7.14	7.14	7.96	6.06			5.66
STATE STREET PE 1 QTR LAG		-0.64	-0.64	5.06	24.00	24.00	23.02	19.06			18.46
IND VENT - PRT HOLD III	49,486,793.64	-3.86	-1.91	-1.91	24.29	24.29	50.16	39.17	29.73		29.73
STATE STREET PE 1 QTR LAG		-0.64	-0.64	5.06	24.00	24.00	23.02	19.06	16.10		16.10
ARES - PCS	29,187,758.38	0.00	2.06	4.92	10.86	10.86	10.03	9.03			9.03

San Bernardino County Retirement

June 30, 2022

Net Mgr



Performance by Manager

	Ending Market Value	1 Mth	3 Mth	YTD	FYTD	1 Year	3 Year	5 Year	7 Year	10 Year	ITD
STATE STREET PE 1 QTR LAG		-0.64	-0.64	5.06	24.00	24.00	23.02	19.06			19.06
KA - FRG	0.01	0.00	0.00	0.00	0.00	0.00					
STATE STREET PE 1 QTR LAG		-0.64	-0.64	5.06	24.00	24.00					
CRESTLINE - PRT FIN	28,990,908.08	0.00	0.76	1.95	4.33	4.33	10.69				10.25
STATE STREET PE 1 QTR LAG		-0.64	-0.64	5.06	24.00	24.00	23.02				19.69
BLKRK TCP - CO-INV 2017	0.00										
STATE STREET PE 1 QTR LAG		-0.64									
ASL - SOF IV	16,504,060.48	6.23	24.50	65.03	52.48	52.48					48.65
STATE STREET PE 1 QTR LAG		-0.64	-0.64	5.06	24.00	24.00					26.09
KA - KCLOP II	40,542,651.01	0.00	2.09	13.08	29.11	29.11					31.62
STATE STREET PE 1 QTR LAG		-0.64	-0.64	5.06	24.00	24.00					28.06
ADAMS STREET - MCA	88,809,989.33	2.41	2.41	7.35	17.60	17.60					41.47
STATE STREET PE 1 QTR LAG		-0.64	-0.64	5.06	24.00	24.00					36.98
KA - PARTNERS FUND V	19,592,223.57	0.00	0.59	2.13							
STATE STREET PE 1 QTR LAG		-0.64	-0.64	5.06							
BLKRK TCP - OPP FUND V	507,141.65	-0.03	19.07	-4.84	8.24	8.24	8.42	4.09	8.43	7.87	4.93
STATE STREET PE 1 QTR LAG		-0.64	-0.64	5.06	24.00	24.00	23.02	19.06	16.10	14.73	11.42
LEXINGTON - MID MRKT II	2,496,778.63	0.02	6.72	13.43	43.01	43.01	32.36	26.47	23.10	19.97	17.53
STATE STREET PE 1 QTR LAG		-0.64	-0.64	5.06	24.00	24.00	23.02	19.06	16.10	14.73	11.53
PATHWAY - PPEF VII	251,773,476.80	0.02	-3.75	-3.87	12.57	12.57	21.66	20.00	17.91	18.10	7.36
STATE STREET PE 1 QTR LAG		-0.64	-0.64	5.06	24.00	24.00	23.02	19.06	16.10	14.73	13.48
PTNRS GRP - SEC 2006	15,616.58	-2.41	-13.37	-35.45							
STATE STREET PE 1 QTR LAG		-0.64	-0.64	5.06							
IND VENT - SECONDARY VIII	32,747,188.73	-16.68	-16.93	-16.93	-8.44	-8.44	32.75	42.34			41.71
STATE STREET PE 1 QTR LAG		-0.64	-0.64	5.06	24.00	24.00	23.02	19.06			18.95
KA - PEIF 2 CO-INV	10,617,210.06	-0.00	13.24	16.05	24.49	24.49	51.87				42.56
STATE STREET PE 1 QTR LAG		-0.64	-0.64	5.06	24.00	24.00	23.02				21.11
TCW CRES - MEZZ PRTNR V	124,843.70	0.00	-0.80	-6.56	6.42	6.42	52.64	25.37	19.06	16.49	13.78

San Bernardino County Retirement

June 30, 2022

Net Mgr



Performance by Manager

	Ending Market Value	1 Mth	3 Mth	YTD	FYTD	1 Year	3 Year	5 Year	7 Year	10 Year	ITD
STATE STREET PE 1 QTR LAG		-0.64	-0.64	5.06	24.00	24.00	23.02	19.06	16.10	14.73	11.09
BLKRK TCP - WATERMAN	65,414,021.05	-1.68	-1.16	0.38	4.27	4.27	10.90	10.91	10.85		10.92
STATE STREET PE 1 QTR LAG		-0.64	-0.64	5.06	24.00	24.00	23.02	19.06	16.10		15.50
PATHWAY - MCA	547,381,325.88	-0.08	5.24	6.21	32.68	32.68	34.53	30.23	22.81		16.95
STATE STREET PE 1 QTR LAG		-0.64	-0.64	5.06	24.00	24.00	23.02	19.06	16.10		15.01
SIG GUFF - DIST OPP III	1,690,739.67	0.00	5.52	5.70	7.41	7.41	14.13	12.30	10.07	10.28	9.72
STATE STREET PE 1 QTR LAG		-0.64	-0.64	5.06	24.00	24.00	23.02	19.06	16.10	14.73	11.26
PTNRS GRP - EU MEZ 2005	0.01										
STATE STREET PE 1 QTR LAG		-0.64									
BLKRK TCP - CO-INV 2019	25,388,158.59	0.09	0.19	0.21	6.51	6.51	10.50				10.78
STATE STREET PE 1 QTR LAG		-0.64	-0.64	5.06	24.00	24.00	23.02				24.10
WATERFALL - SENTINEL I	31,160,767.37	0.00	6.01	18.53	40.71	40.71	20.28				18.07
STATE STREET PE 1 QTR LAG		-0.64	-0.64	5.06	24.00	24.00	23.02				21.74
KA - RENEWABLE OPP PRT	20,544,945.59	0.00	19.05	29.88	48.66	48.66					49.89
STATE STREET PE 1 QTR LAG		-0.64	-0.64	5.06	24.00	24.00					26.09
BLKRK TCP - DIR LEND 9	19,678,646.48	-0.25	-0.29	0.57	4.11	4.11					6.14
STATE STREET PE 1 QTR LAG		-0.64	-0.64	5.06	24.00	24.00					27.13
ASL - EU STRAT PTNR '04	691,252.03	-2.41	-14.01	-15.86	-28.09	-28.09	-12.80	-3.33	1.03	2.89	1.66
STATE STREET PE 1 QTR LAG		-0.64	-0.64	5.06	24.00	24.00	23.02	19.06	16.10	14.73	13.71
KA - PEIF 2	8,219,924.26	0.59	31.31	29.85	44.42	44.42	60.40				50.69
STATE STREET PE 1 QTR LAG		-0.64	-0.64	5.06	24.00	24.00	23.02				21.11
IND VENT - PRT HOLD V	47,933,270.79	3.53	33.64	33.64	74.05	74.05	39.33				44.98
STATE STREET PE 1 QTR LAG		-0.64	-0.64	5.06	24.00	24.00	23.02				21.74
WATERFALL - PE CO-INV	64,716,032.03	0.00	11.37	30.22	58.05	58.05	19.39				17.29
STATE STREET PE 1 QTR LAG		-0.64	-0.64	5.06	24.00	24.00	23.02				21.74
IND VENT - SECONDARY IX	32,361,866.96	-1.53	-3.35	-3.35	57.02	57.02					
STATE STREET PE 1 QTR LAG		-0.64	-0.64	5.06	24.00	24.00					
CRESTLINE - PRT FIN II	16,788,435.46	0.00	2.12	4.54	12.93	12.93					9.97

San Bernardino County Retirement

June 30, 2022

Net Mgr



Performance by Manager

	Ending Market Value	1 Mth	3 Mth	YTD	FYTD	1 Year	3 Year	5 Year	7 Year	10 Year	ITD
STATE STREET PE 1 QTR LAG		-0.64	-0.64	5.06	24.00	24.00					35.06
BLKRK TCP - OPP FUND VI	1,571,079.94	-3.47	-1.62	-21.33	-7.19	-7.19	13.05	4.51	6.96	7.43	7.53
STATE STREET PE 1 QTR LAG		-0.64	-0.64	5.06	24.00	24.00	23.02	19.06	16.10	14.73	14.25
INDUSTRY VENTURES - MCA	88.58										
STATE STREET PE 1 QTR LAG		-0.64									
ASL - SOF I	4,824,095.13	-6.64	-8.48	-8.48	7.35	7.35	11.14	11.40	11.76		10.70
STATE STREET PE 1 QTR LAG		-0.64	-0.64	5.06	24.00	24.00	23.02	19.06	16.10		15.13
KA - ENERGY VII	6,133,136.87	0.00	48.02	82.78	99.64	99.64	-17.81	-6.18			-0.96
STATE STREET PE 1 QTR LAG		-0.64	-0.64	5.06	24.00	24.00	23.02	19.06			18.95
IND VENT - DIRECT II	74,179,428.87	0.00	48.18	47.38	60.46	60.46					29.75
STATE STREET PE 1 QTR LAG		-0.64	-0.64	5.06	24.00	24.00					26.09
IND VENT - PARTNERSHIP	53,759,199.26	-0.02	13.15	13.15	62.95	62.95	41.49	30.05			23.34
STATE STREET PE 1 QTR LAG		-0.64	-0.64	5.06	24.00	24.00	23.02	19.06			18.14
APOLLO - EU PRINCIPAL	84,011.60	-7.74	281.87	273.62	270.79	270.79	95.95	43.68	38.90	34.85	27.59
STATE STREET PE 1 QTR LAG		-0.64	-0.64	5.06	24.00	24.00	23.02	19.06	16.10	14.73	15.09
ARES - EU LOAN FUNDING	11,212,110.11	-2.41	-3.00	-5.09	-8.95	-8.95	8.62	7.47			6.84
STATE STREET PE 1 QTR LAG		-0.64	-0.64	5.06	24.00	24.00	23.02	19.06			18.43
ARES - ICOF III	41,695,712.61	0.00	1.92	4.24	14.09	14.09	8.35	7.65			6.85
STATE STREET PE 1 QTR LAG		-0.64	-0.64	5.06	24.00	24.00	23.02	19.06			18.14
BLKRK TCP SS FUND IX	29,180,002.00	-3.84	-13.67	-15.52	-15.46	-15.46	8.32	8.23			6.20
STATE STREET PE 1 QTR LAG		-0.64	-0.64	5.06	24.00	24.00	23.02	19.06			16.32
PTNRS GRP - SEC 2008	1,737,144.75	-2.41	-8.02	-4.78	3.95	3.95	10.68	7.86	6.03	7.44	7.44
STATE STREET PE 1 QTR LAG		-0.64	-0.64	5.06	24.00	24.00	23.02	19.06	16.10	14.73	15.25
IND VENT - SPECIAL OPP	4,210,709.54	-14.82	15.91	15.91	23.11	23.11	56.65	48.24			50.86
STATE STREET PE 1 QTR LAG		-0.64	-0.64	5.06	24.00	24.00	23.02	19.06			18.46
ASL - SOF III	26,207,461.55	4.00	8.42	8.42	30.59	30.59	20.75				25.01
STATE STREET PE 1 QTR LAG		-0.64	-0.64	5.06	24.00	24.00	23.02				19.19
BNY MELLON ALCENTRA MEZZ III	0.00	0.00	0.00	0.00	0.02	0.02	18.28	5.81	8.36		9.86

San Bernardino County Retirement

June 30, 2022

Net Mgr



Performance by Manager

	Ending Market Value	1 Mth	3 Mth	YTD	FYTD	1 Year	3 Year	5 Year	7 Year	10 Year	ITD
STATE STREET PE 1 QTR LAG		-0.64	-0.64	5.06	24.00	24.00	23.02	19.06	16.10		14.86
IND VENT - PRT HLDNG II	71,967,728.85	-10.39	-3.29	-3.29	42.37	42.37	38.17	31.29	24.22	26.22	26.89
STATE STREET PE 1 QTR LAG		-0.64	-0.64	5.06	24.00	24.00	23.02	19.06	16.10	14.73	15.21
IND VENT - FUND VI	306,319.05	-34.80	-54.38	-54.38	-42.93	-42.93	5.44	2.45	2.54	4.54	5.05
STATE STREET PE 1 QTR LAG		-0.64	-0.64	5.06	24.00	24.00	23.02	19.06	16.10	14.73	14.48
CATALYST - FUND LP II	33,960,556.94	-0.08	0.66	0.54	-0.08	-0.08	25.03	13.28	9.20	13.06	12.00
STATE STREET PE 1 QTR LAG		-0.64	-0.64	5.06	24.00	24.00	23.02	19.06	16.10	14.73	11.42
AURORA - EQ PARTNERS IV	3,692,523.57	0.00	0.24	1.88	-11.57	-11.57	13.83	15.86	18.90		16.68
STATE STREET PE 1 QTR LAG		-0.64	-0.64	5.06	24.00	24.00	23.02	19.06	16.10		14.86
IND VENT - DIRECT	51,081,861.94	0.00	13.69	13.69	44.72	44.72	40.46	27.61			24.07
STATE STREET PE 1 QTR LAG		-0.64	-0.64	5.06	24.00	24.00	23.02	19.06			18.46
ASL - SOF II	199,105.28	0.00	-10.88	-10.88	-0.31	-0.31	-16.05	-2.61	3.00		3.00
STATE STREET PE 1 QTR LAG		-0.64	-0.64	5.06	24.00	24.00	23.02	19.06	16.10		16.10
IND VENT - PRT HOLD 3-A	6,516,712.98	2.27	7.85	6.65	11.42	11.42	19.25	4.09	2.61		2.61
STATE STREET PE 1 QTR LAG		-0.64	-0.64	5.06	24.00	24.00	23.02	19.06	16.10		16.10
ARES - MCA	1,110,370.81	1.53	5.44	22.06	22.09	22.09					
STATE STREET PE 1 QTR LAG		-0.64	-0.64	5.06	24.00	24.00					
IND VENT - SEC VII	11,556,150.07	-10.35	-1.64	-1.64	13.33	13.33	32.29	27.88	21.84		21.84
STATE STREET PE 1 QTR LAG		-0.64	-0.64	5.06	24.00	24.00	23.02	19.06	16.10		16.10
ASL - EU STRAT PTNR '08	4,257,637.44	-3.33	1.81	-0.54	5.28	5.28	4.85	9.57	11.32	10.82	8.45
STATE STREET PE 1 QTR LAG		-0.64	-0.64	5.06	24.00	24.00	23.02	19.06	16.10	14.73	14.67
ARES - ICOF II	25,820,566.84	0.00	3.23	6.66	33.20	33.20	13.65	13.41			13.41
STATE STREET PE 1 QTR LAG		-0.64	-0.64	5.06	24.00	24.00	23.02	19.06			19.06
IND VENT - TECH BUYOUT	45,624,624.80	1.24	6.41	6.41	21.76	21.76	15.29				9.17
STATE STREET PE 1 QTR LAG		-0.64	-0.64	5.06	24.00	24.00	23.02				21.11
ARES - PCS II	28,875,569.18	0.00	1.26	3.68							
STATE STREET PE 1 QTR LAG		-0.64	-0.64	5.06							
KAYNE ANDERSON CO-INVESTMENTS	10,093,880.00	0.00	0.94								

San Bernardino County Retirement

June 30, 2022

Net Mgr



Performance by Manager

	Ending Market Value	1 Mth	3 Mth	YTD	FYTD	1 Year	3 Year	5 Year	7 Year	10 Year	ITD
STATE STREET PE 1 QTR LAG		-0.64	-0.64								
TOTAL REAL ASSETS	619,490,943.48	-1.92	2.21	7.51	17.72	17.72	13.77	9.34	6.00	5.53	
TOTAL REAL ASSETS BENCHMARK		-8.26	-5.69	9.02	14.26	14.26	10.90	7.48	5.08	4.66	
STARWOOD - ENERGY INFRA	55,009.97	0.00	7.55	6.79	7.05	7.05	8.60	14.11	12.65	11.51	9.19
TOTAL REAL ASSETS BENCHMARK		-8.26	-5.69	9.02	14.26	14.26	10.90	7.48	5.08	4.66	4.80
ENERGY SPEC - PTNR VI	877,186.08	0.00	-8.33	19.53	19.23	19.23	0.85	16.85	15.24	13.32	-0.73
TOTAL REAL ASSETS BENCHMARK		-8.26	-5.69	9.02	14.26	14.26	10.90	7.48	5.08	4.66	4.14
PINNACLE - PHYS FIN II	313,292,191.65	-1.79	-1.37	0.90	10.88	10.88	14.78	12.41	8.88	7.11	6.30
TOTAL REAL ASSETS BENCHMARK		-8.26	-5.69	9.02	14.26	14.26	10.90	7.48	5.08	4.66	4.34
PINNACLE - NAT RESOURCE	206,606,283.03	2.16	11.51	15.65	39.03	39.03	20.07	14.64	8.71	6.67	7.26
TOTAL REAL ASSETS BENCHMARK		-8.26	-5.69	9.02	14.26	14.26	10.90	7.48	5.08	4.66	2.74
KA - MLP	69,093,152.83	-13.02	-11.36	10.40	8.44	8.44	3.92				2.36
TOTAL REAL ASSETS BENCHMARK		-8.26	-5.69	9.02	14.26	14.26	10.90				7.04
HIGHSTAR - FUND III	692.79	0.14	-3.02	-3.86	-5.40	-5.40					
TOTAL REAL ASSETS BENCHMARK		-8.26	-5.69	9.02	14.26	14.26					
TIMBERVEST- CROSSOVER 2	6,151,507.25	0.00	-0.20	-4.19	-4.20	-4.20	-5.58	-5.22	-5.57	-3.45	-1.99
TOTAL REAL ASSETS BENCHMARK		-8.26	-5.69	9.02	14.26	14.26	10.90	7.48	5.08	4.66	2.59
FORTRESS - FTAI	0.02										
TOTAL REAL ASSETS BENCHMARK		-8.26									
TIMBERVEST - PRTNRS II	0.01										
TOTAL REAL ASSETS BENCHMARK		-8.26									
HANCOCK TIMBERLAND VIII	18,781,122.53	0.00	44.33	44.33	43.79	43.79	17.73	9.26	6.96	7.77	2.39
TOTAL REAL ASSETS BENCHMARK		-8.26	-5.69	9.02	14.26	14.26	10.90	7.48	5.08	4.66	3.81
KA - ACQUISITION	4,633,797.32	-3.34	-15.19	-20.81	-31.84	-31.84					
TOTAL REAL ASSETS BENCHMARK		-8.26	-5.69	9.02	14.26	14.26					
ALPHA POOL	1,747,909,705.22	-2.99	-5.52	-5.81	-2.38	-2.38	2.10	3.65	3.73	4.65	4.14

San Bernardino County Retirement

June 30, 2022

Net Mgr



Performance by Manager

	Ending Market Value	1 Mth	3 Mth	YTD	FYTD	1 Year	3 Year	5 Year	7 Year	10 Year	ITD
BBG BARC Agg Bd		-1.57	-4.69	-10.35	-10.29	-10.29	-0.93	0.88			
SSGA - TREASURY POOL	206,655,914.84	-0.10	0.03	-0.07	-0.02	-0.02	0.48	1.06	0.90	0.71	0.75
ICE BofA US 3-Month Treasury Bill		0.02	0.10	0.14	0.17	0.17	0.63	1.11	0.89	0.64	0.52
ZAIS - OPPORTUNITY FUND	130,984,878.00	-2.97	-7.37	-8.77	-5.77	-5.77	-1.76	0.25	1.26	4.52	6.70
ICE BofA US High Yield Index		-6.81	-9.97	-14.04	-12.66	-12.66	-0.04	1.95	3.40	4.41	5.90
ZAIS - ZEPHYR 7	0.06										
ICE BofA US High Yield Index		-6.81									
ZAIS - Zephyr 8	55,125,162.74	-3.24	-3.41	-3.47	2.55	2.55	8.36				8.36
ICE BofA US High Yield Index		-6.81	-9.97	-14.04	-12.66	-12.66	-0.04				-0.04
ZAIS - SMA	345,774,489.63	-2.98	-7.31	-8.32	-3.32	-3.32	3.34	4.92	6.10	7.13	6.96
ICE BofA US High Yield Index		-6.81	-9.97	-14.04	-12.66	-12.66	-0.04	1.95	3.40	4.41	4.48
APOLLO CRAFT MID CAP TRADE	0.01										
ICE BofA US High Yield Index		-6.81									
ZAIS ZEPHYR A 6 LP	0.01										
ICE BofA US High Yield Index		-6.81									
CORRUM - GLBL CR OPP	205,526,631.26	-2.43	-2.18	-2.18	2.20	2.20	-5.32	-0.26	1.59	2.61	1.50
ICE BofA US High Yield Index		-6.81	-9.97	-14.04	-12.66	-12.66	-0.04	1.95	3.40	4.41	5.55
ARES - ECO MSTR FUND II	529,247,799.89	-4.58	-8.11	-8.46	-6.10	-6.10	2.87	3.32			4.42
ICE BofA US High Yield Index		-6.81	-9.97	-14.04	-12.66	-12.66	-0.04	1.95			3.30
APOLLO - MCA	2,188,707.82	-11.28	-29.55	-18.58	19.19	19.19	14.54	14.89	16.39		16.19
ICE BofA US High Yield Index		-6.81	-9.97	-14.04	-12.66	-12.66	-0.04	1.95	3.40		3.13
BIRCH GROVE - CRED STRT	160,819,157.02	-2.99	-5.89	-5.53	-2.54	-2.54	5.97	6.68	5.50		5.79
ICE BofA US High Yield Index		-6.81	-9.97	-14.04	-12.66	-12.66	-0.04	1.95	3.40		3.78
APOLLO ACCORD+	89,043,635.68	-0.00	0.43								
ICE BofA US High Yield Index		-6.81	-9.97								
ZAIS ZEPHYR 9	22,543,328.26	-6.80	-6.07								-6.07
ICE BofA US High Yield Index		-6.81	-9.97								-10.80

San Bernardino County Retirement

June 30, 2022

Net Mgr



Performance by Manager

	Ending Market Value	1 Mth	3 Mth	YTD	FYTD	1 Year	3 Year	5 Year	7 Year	10 Year	ITD
OVERLAY PORTFOLIO	946,094,698.69	-13.71	-20.68	-30.84	-27.67	-27.67	17.45	13.48	10.52		9.44
SBCERA - TOTAL PLAN INDEX		-5.31	-10.51	-13.85	-11.35	-11.35	3.19	4.53			
RUSSELL - CC LARGE	1,246,549.36	0.09	0.19	0.21	0.22	0.22					
<i>Russell 3000 TR</i>		-8.37	-16.70	-21.10	-13.87	-13.87					
RUSSELL - CRNCY OVERLAY	31,287,736.65										
<i>91 Day Treasury Bill</i>		0.02									
RUSSELL - BETA OVERLAY	912,333,062.92	-12.46	-17.86	-28.10	-24.34	-24.34	19.64	14.64	10.80	23.92	23.91
SBCERA - TOTAL PLAN INDEX		-5.31	-10.51	-13.85	-11.35	-11.35	3.19	4.53			
RUSSELL - CC INTER	546,213.76	0.09	0.19	0.21	0.22	0.22					
<i>RUSSELL COVERED BLENDED BM</i>		-8.60	-13.73	-18.42	-19.42	-19.42					
RUSSELL - CC SMALL	681,136.01	0.09	0.19	0.21	0.22	0.22					
<i>Russell 3000 TR</i>		-8.37	-16.70	-21.10	-13.87	-13.87					
RUSSELL - IR HEDGING	14,629,282.49	5.26	47.06	170.31	114.32	114.32	11.06	-10.60	-14.30	-15.75	-16.38
<i>BBG BARC Agg Bd</i>		-1.57	-4.69	-10.35	-10.29	-10.29	-0.93	0.88			
CASH WITH TREASURY	18,119,156.68	0.00	0.00	0.00	0.00	0.00	0.59	0.35	0.25		-0.76
ICE BofA US 3-Month Treasury Bill		0.02	0.10	0.14	0.17	0.17	0.63	1.11	0.89		0.68
CASH W/CBB & WF	18,119,156.68	0.00	0.00	0.00	0.00	0.00	0.59	0.35	0.25		
<i>ICE BofA US 3-Month Treasury Bill</i>		0.02	0.10	0.14	0.17	0.17	0.63	1.11	0.89		
CASH ACCOUNT	966,145,520.62	0.26	-0.02	-0.08	0.12	0.12	0.35	0.86	0.38	-2.03	3.40
<i>ICE BofA US 3-Month Treasury Bill</i>		0.02	0.10	0.14	0.17	0.17	0.63	1.11	0.89	0.64	
SBCERA Transition	2,665,178.50	0.06	-0.38	-0.81	-0.88	-0.88	0.30	2.78	2.94	1.79	3.76
<i>ICE BofA US 3-Month Treasury Bill</i>		0.02	0.10	0.14	0.17	0.17	0.63	1.11	0.89	0.64	0.51

This report was prepared for you by State Street Bank and Trust Company (or its affiliates, "State Street") utilizing scenarios, assumptions and reporting formats as mutually agreed between you and State Street and information or data provided by State Street's third party data sources ("Suppliers"). While reasonable efforts have been made to ensure the accuracy of the information contained in this report, there is no guarantee, representation or warranty, express or implied, as to its accuracy or completeness. This information is provided "as is" and State Street and its Suppliers disclaim any and all liability and makes no guarantee, representation, or warranty with respect to your use of or reliance upon this information in making any decisions or taking (or not taking) any actions. Neither State Street nor its Suppliers verify the accuracy or completeness of any data, including data provided by State Street for other purposes, or data provided by you or third parties. You should independently review the report (including, without limitation, the assumptions, market data, securities prices, securities valuations, tests and calculations used in the report), and determine that the report is suitable for your purposes.

State Street provides products and services to professional and institutional clients, which are not directed at retail clients. This report is for informational purposes only and it does not constitute investment research or investment, legal or tax advice, and it is not an offer or solicitation to buy or sell any product, service, or securities or any financial instrument, and it does not transfer rights of any kind (except the limited use and redistribution rights described below) or constitute any binding contractual arrangement or commitment of any kind. You may use this report for your internal business purposes and, if such report contains any data provided by Suppliers, including, but not limited to, market or index data, you may not redistribute this report, or an excerpted portion thereof, to any third party, including, without limitation, your investment managers, investment advisers, agents, clients, investors or participants, whether or not they have a relationship with you or have a reasonable interest in the report, without the prior written consent of each such third party data source. You are solely responsible and liable for any and all use of this report.