Wilshire

Executive Summary of Performance for

California Public Employees' Retirement System

Judges II

Legislators' Fund

Long-Term Care

California Employers' Retiree Benefit Trusts

California Employers' Pension Prefunding Trust

Health Care Fund

Supplemental Income Plans

Second Quarter 2023

SECOND QUARTER 2023

Quarterly Market Commentary

Market Dashboard

Multi-Asset	MTD (%)	QTD (%)	YTD (%)	1Y (%)
Global 60/40 (ACWI/U.S. Core Bonds)	3.34	3.36	9.11	9.43
Wilshire Risk Parity Index ^{sм} − 12% Volatility	1.80	(0.20)	8.44	2.53
Source: Bloomberg. Indexes are total return.				
Strategic Allocation Themes	MTD (%)	QTD (%)	YTD (%)	1Y (%)
Growth ⁱ	5.81	6.18	13.93	16.53
Defensive Growth ⁱⁱ	3.45	2.99	5.52	7.59
Diversified Credit ^{ili}	2.00	2.14	4.98	8.60
Real Assetsiv	2.16	(1.92)	(1.04)	(5.13)
Defensive ^v	(0.36)	(0.84)	2.09	(0.94)

Source: Bloomberg. Indexes are total return.

Quarterly Insight

Large-cap growth stocks are outperforming value stocks by an astonishing margin this year. While growth tends to lead during bull markets, the current 6-month return difference is the largest in 25 years at +29.4%. This can be dissected further to find that just a few stocks are contributing a vast majority of the overall market return through June. Additionally, most of these names are technology sector stocks – Amazon, Apple, Google and Meta. It is worth noting that these companies are highly dependent on the consumer's ability to spend. U.S. real personal consumption's steady growth during the past 1.5 years will need to continue to support not just economic growth but also current stock prices.

Meaningful Disconnect between Growth and Value Stocks



Source: Bloomberg.

Economic highlights

GDP: Real GDP growth continued to slow during the first quarter but was still positive, expanding an annualized 2.0%. Consumer spending was quite strong, registering its best quarter in nearly two years and contributing 2.8% to growth. However, private spending was down by double-digits. The Atlanta Federal Reserve's (Fed) GDPNow forecast for the second quarter of 2023 currently stands at

Source: Bureau of Economic Analysis.

Interest Rates: The Treasury curve rose across all maturities during the second quarter. The 10-year Treasury closed at 3.84%, up 37 basis points. The 10-year real yield (i.e., net of inflation) rose 47 basis points to 1.62%. The Federal Open Market Committee (FOMC) increased their overnight rate by 0.25%, targeting a range of 5.00% to 5.25%. The committee's current median outlook is for a rate of approximately 5.6% by the end of 2023.

Source: U.S. Treasury.

Inflation: Consumer price changes have moderated as the Consumer Price Index rose 0.5% for the three months ending May. For the one-year period, the CPI was up 4.1%. The 10-year breakeven inflation rate was down slightly at 2.23% in June versus 2.32% in March.

Source: Dept. of Labor (BLS), U.S. Treasury.

Employment: Jobs growth remains solid, with an average of 283,000 jobs/month added during the three months ending in May. The unemployment rate was little changed at 3.7%, up from 3.6% in February. Wage growth has slowed this year, up 0.3% in May, a likely welcome sign for the Federal Reserve.

Source: Dept. of Labor (BLS).

Housing: New data suggests that the housing market has started to rebound from a precipitous decline that started last June. The S&P Case-Shiller 20-City Home Price Index was up 1.3% during the threemonths through April but is still down -1.7% during the trailing 12-months.

Source: Standard & Poor's.

U.S. Economy and Markets

The U.S. stock market, represented by the FT Wilshire 5000 Index^{5M}, was up 8.43% for the second quarter and is up 19.03% for the past 12 months. A majority of sectors were up for the quarter. The best performing were information technology (+17.2%), consumer discretionary (+14.6) and communication services (+13.1%). The worst performing sector was utilities (-2.5%). From a size perspective, large-cap outperformed small-cap by 331 basis points. Growth stocks vastly outperformed value for the second straight quarter and now lead meaningfully for the one-year return.

MTD (%)	QTD (%)	YTD (%)	1Y (%)
6.86	8.43	16.30	19.03
6.61	8.74	16.89	19.59
8.65	5.40	8.96	13.72
4.52	2.65	3.98	7.99
MTD (%)	QTD (%)	YTD (%)	1Y (%)
6.61	8.89	17.47	19.88
6.80	13.91	31.93	27.67
6.39	3.86	4.66	12.34
8.84	5.58	9.83	14.82
8.23	6.17	13.72	17.28
9.43	4.97	6.06	12.40
7.14	3.93	2.49	5.56
MTD (%)	QTD (%)	YTD (%)	1Y (%)
2.58	13.07	36.24	17.28
12.07	14.58	33.06	24.73
3.24	0.45	1.28	6.60
6.65	-0.89	-5.52	18.76
6.69	5.33	-0.53	9.50
4.36	2.95	-1.48	5.37
11.29	6.49	10.19	25.16
6.59	17.20	42.77	40.26
11.05	3.31	7.74	15.12
5.59	1.81	3.79	-4.13
	6.86 6.61 8.65 4.52 MTD (%) 6.61 6.80 6.39 8.84 8.23 9.43 7.14 MTD (%) 2.58 12.07 3.24 6.65 6.69 4.36 11.29 6.59 11.05	6.86 8.43 6.61 8.74 8.65 5.40 4.52 2.65 MTD (%) QTD (%) 6.61 8.89 6.80 13.91 6.39 3.86 8.84 5.58 8.23 6.17 9.43 4.97 7.14 3.93 MTD (%) QTD (%) 2.58 13.07 12.07 14.58 3.24 0.45 6.65 -0.89 6.69 5.33 4.36 2.95 11.29 6.49 6.59 17.20 11.05 3.31	6.86 8.43 16.30 6.61 8.74 16.89 8.65 5.40 8.96 4.52 2.65 3.98 MTD (%) QTD (%) YTD (%) 6.61 8.89 17.47 6.80 13.91 31.93 6.39 3.86 4.66 8.84 5.58 9.83 8.23 6.17 13.72 9.43 4.97 6.06 7.14 3.93 2.49 MTD (%) QTD (%) YTD (%) 2.58 13.07 36.24 12.07 14.58 33.06 3.24 0.45 1.28 6.65 -0.89 -5.52 6.69 5.33 -0.53 4.36 2.95 -1.48 11.29 6.49 10.19 6.59 17.20 42.77 11.05 3.31 7.74

Large-cap growth stocks

greatly outperformed for the second straight

quarter, with a 32% return through June

International Economy and Markets

Performance results within international equity markets were positive for the second quarter, with developed outperforming emerging markets. The MSCI EAFE Index was up 2.95% for the quarter, while the MSCI Emerging Markets Index was up 0.90%. The eurozone fell into a mild recession around the start of the new year as real GDP fell during the fourth and first quarters. Consumer spending has been hampered by high inflation and rising interest rates while government spending fell sharply. Economic growth within the United Kingdom has been positive enough this year to barely escape a technical recession, for now. Inflation has been trending downward within Britain but at a much slower pace versus other regions, with annual changes being twice as high in the United Kingdom as in the United States, as of the end of May. In China, several economic indicators have fallen short of expectations during the past few weeks, including measurements of industrial production, retail sales and trade. Recent policy statements indicate that officials are increasingly concerned about the economy.

Non-U.S. Equity	MTD (%)	QTD (%)	YTD (%)	1Y (%)
MSCI ACWI	5.81	6.18	13.94	16.53
MSCI ACWI ex USA	4.49	2.44	9.47	12.72
MSCI ACWI ex USA Minimum Volatility	2.00	2.67	6.52	6.36
MSCI EAFE	4.55	2.95	11.67	18.77
MSCI Emerging Markets	3.80	0.90	4.89	1.75
MSCI ACWI ex USA Small Cap	3.44	2.05	6.84	10.93
Source: Bloomberg. Indexes are total return.				
Non-U.S. Equity (local currency)	MTD (%)	QTD (%)	YTD (%)	1Y (%)
MSCI ACWI	5.44	6.55	14.03	16.47
MSCI ACWI ex USA	3.57	3.36	9.74	12.58
MSCI ACWI ex USA Minimum Volatility	2.17	4.48	7.96	7.86
MSCI EAFE				47.50
	3.60	4.28	12.10	17.50
MSCI Emerging Markets	3.60	4.28 1.71	5.55	3.28
MSCI Emerging Markets MSCI ACWI ex USA Small Cap				

Inflation in Britain has been trending downward but is still twice as high as in the **United States**

MATE (04) OTE (04) MED (04) 414 (04)

Fixed Income Markets

Source: Bloomberg. Indexes are total return.

The U.S. Treasury yield curve was up across the maturity spectrum during the quarter, and to a greater degree from the short end to 3-years. The 10-year Treasury yield ended the guarter at 3.84%, up 37 basis points from March. Credit spreads were noticeably down during the quarter with investment grade down 15 basis points and high yield bonds down 69 basis points. The FOMC met twice during the quarter, as scheduled, and increased the overnight rate by 0.25% in May, targeting a range of 5.00% to 5.25%, before pausing increases in June. The Fed's "dot plot" is messaging that the current expectation is for another 50 basis point in increases before the end of 2023 while markets are pricing a slightly lower year-end rate, equal to approximately 25 basis points higher than the current rate. In late June, Fed Chair Jerome Powell said that central bank policy "may not be restrictive enough and it has not been restrictive for long enough."

FOMC raised their overnight rate 0.25% in May before pausing increases in June

U.S. Fixed Income	MTD (%)	QTD (%)	YTD (%)	1Y (%)
Bloomberg U.S. Aggregate	(0.36)	(0.84)	2.09	(0.94)
Bloomberg Long Term Treasury	(0.02)	(2.30)	3.72	(6.82)
Bloomberg Long Term Corporate	1.54	(0.54)	4.88	0.98
Bloomberg U.S. TIPS	(0.34)	(1.42)	1.87	(1.40)
Bloomberg U.S. Credit	0.31	(0.31)	3.13	1.39
Bloomberg U.S. Corporate High Yield	1.67	1.75	5.38	9.06
S&P/LSTA Leveraged Loan	2.26	3.15	6.50	10.71
Source: Bloomberg. Indexes are total return.				
Market Rates	June 30	Mar 31	Dec 31	Sept 30
10-Year Treasury	3.84	3.47	3.88	3.83
10-Year Breakeven Inflation	2.23	2.32	2.30	2.15
Source: Bloomberg. Indexes are total return.				
Global Fixed Income	MTD (%)	QTD (%)	YTD (%)	1Y (%)
Bloomberg Global Aggregate	(0.01)	(1.53)	1.43	(1.32)
Bloomberg Global Aggregate (Hdg)	(0.06)	0.06	2.96	0.52
Bloomberg EM LC Gov't Universal	(0.03)	(0.84)	1.95	2.00
Bloomberg EM LC Gov't Universal (Hdg)	0.52	1.91	3.92	6.34

Real Asset Markets

Real estate securities were up during the second quarter in the United States but produced a negative return abroad. Commodity results were negative for the quarter, with crude oil falling by -6.6% to \$70.64 per barrel. Aggressive monetary tightening worldwide has had a detrimental effect on oil prices, which are down -33% during the past year. Natural gas prices moved higher after two quarters of significant declines. Prices were up 26.3% for the second quarter after falling -50.5% through March, closing at \$2.80 per million BTUs. Gold prices were down -2.0% during the second quarter, finishing at approximately \$1,929 per troy ounce, as the Fed slowed rate increases at least momentarily.

MTD (%) QTD (%) YTD (%) 1Y (%) **Real Assets** Wilshire US Real Estate Securities Index^{sм} 5.44 3.29 6.85 (0.13)Wilshire Global Real Estate Securities Index^{sм} 4.11 1.87 4.26 (1.54)FTSE Global Core Infrastructure 50/50 2.93 (0.10)0.64 0.18 6.97 3.71 4.51 12.16 Alerian Midstream Energy **Bloomberg Commodity** 4.04 (2.56)(7.79)(9.61)Gold (2.54)5.23 6.20 (2.21)Bitcoin 12.07 7.03 83.31 62.25

Source: Bloomberg. Indexes are total return.

Oil prices have fallen by one-third during the past 12 months

Alternatives

In the second quarter, the Wilshire Liquid Alternative Index returned 1.38%, bringing year-to-date performance to 2.60%. Equity hedge managers led all sub-strategies for the quarter, benefitting largely from positive equity performance in the month of June. Macro managers had a strong quarter as well, benefitting from long positions in equities as well as short positions in fixed income and the Japanese yen. Event driven managers ended with negative performance in the second quarter, largely driven by a challenging month of May. Merger arbitrage managers particularly suffered following a number blocked deals and the failure of the First Horizon/Toronto Dominion deal. Relative value managers also ended on the wrong side of flat for the quarter, also due to losses in May as bonds tumbled from first quarter highs established amidst banking sector concerns.

Alternatives	MTD (%)	QTD (%)	YTD (%)	1Y (%)
Wilshire Liquid Alternative Index ^{sм}	1.35	1.38	2.60	2.46
Wilshire Liquid Alternative Equity Hedge Index sm	2.94	3.66	6.20	7.60
Wilshire Liquid Alternative Event Driven Index ^{sм}	0.92	(0.22)	0.20	1.39
Wilshire Liquid Alternative Global Macro Index ^{₅м}	1.14	3.22	0.51	(1.18)
Wilshire Liquid Alternative Multi-Strategy Index ^{sм}	2.11	1.45	2.60	2.61
Wilshire Liquid Alternative Relative Value Index ^{sм}	0.20	(0.19)	1.34	0.29

Source: Bloomberg. Indexes are total return.

Macro managers had a strong quarter, benefitting from long positions in equities as well as short positions in fixed income

SUMMARY REVIEW OF PLANS

Period Ended June 30, 2023

	As	set Value					
	(5	Million)	<u>Quarter</u>	<u>1-Year</u>	<u>3-Year</u>	<u>5-Year</u>	<u>10-Year</u>
CalPERS PERF Policy Benchmark ¹	\$ 4	462,818.7	2.4% 2.7%	5.8% 5.5%	6.4% 6.1%	6.1% 5.9%	7.1% 7.0%
Actuarial Rate			1.7%	6.8%	6.9%	7.0%	7.3%
Judges I	\$	47.0	1.3%	4.1%	1.5%	1.7%	1.1%
91-Day Treasury Bill			1.2%	3.6%	1.3%	1.6%	1.0%
Judges II	\$	2,319.1	2.7%	7.1%	4.9%	5.2%	6.2%
Weighted Policy Benchmark			2.7%	6.7%	4.7%	4.9%	6.0%
Legislators' Retirement System	\$	95.7	0.2%	0.8%	0.7%	3.1%	4.1%
Weighted Policy Benchmark			0.2%	0.7%	0.6%	3.0%	3.9%
Long-Term Care ("LTC")	\$	4,843.3	0.0%	-0.6%	0.4%	2.6%	3.3%
Weighted Policy Benchmark			0.0%	-0.7%	0.2%	2.5%	3.2%
CERBT Strategy 1	\$	14,982.6	2.6%	6.4%	5.5%	5.3%	6.3%
CERBT Strategy 1 Policy Benchmark			2.5%	6.3%	5.4%	5.0%	6.0%
CERBT Strategy 2	\$	1,859.5	1.5%	3.6%	2.7%	4.1%	5.1%
CERBT Strategy 2 Policy Benchmark			1.4%	3.5%	2.6%	4.0%	4.9%
CERBT Strategy 3	\$	773.2	0.6%	1.6%	1.0%	3.3%	4.2%
CERBT Strategy 3 Policy Benchmark			0.6%	1.5%	0.9%	3.2%	3.9%
CEPPT Strategy 1	\$	96.7	1.8%	5.2%	2.9%	%	%
CEPPT Strategy 1 Policy Benchmark			1.8%	5.1%	2.7%	%	%
CEPPT Strategy 2	\$	43.5	0.6%	2.3%	-0.6%	%	%
CEPPT Strategy 2 Policy Benchmark			0.6%	2.4%	-0.6%	%	%
Health Care Fund	\$	205.1	-0.9%	-1.0%	-4.0%	0.8%	1.6%
Barclays U.S. Aggregate			-0.8%	-0.9%	-4.0%	0.8%	1.5%
Supplemental Contribution Plan	\$	108.3	NM	NM	NM	NM	NM
CalPERS Custom SCP Plan Index			NM	NM	NM	NM	NM
457 Program	\$	2,124.6	NM	NM	NM	NM	NM
CalPERS Custom 457 Plan Index			NM	NM	NM	NM	NM

¹ CalPERS PERF Policy Benchmark is currently computed by weighting the System's major asset class benchmarks at their respective policy targets, rebalanced periodically.

Period Ended June 30, 2023

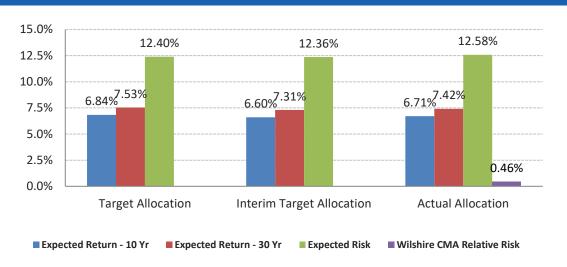
PERF TOTAL FUND PERFORMANCE

	Ass	et Value						VaR	5-Year	Ratios
	<u>(</u> \$	Billion)	<u>Quarter</u>	<u>1-Year</u>	<u>3-Year</u>	<u>5-Year</u>	<u>10-Year</u>	(\$Billion)	<u>Sharpe</u>	<u>Info</u>
CALPERS PERF CalPERS PERF Policy Benchmark Actuarial Rate	\$	462.8	2.4% 2.7% 1.7%	5.8% 5.6% 6.8%	6.4% 6.1% 6.9%	6.1% 5.9% 7.0%	7.1% 7.0% 7.3%	\$ 62.7	0.5 0.5	0.1 0.0
PUBLIC EQUITY* Public Equity Policy Benchmark	\$	208.8	5.2% 5.3%	14.1% 14.1%	10.6% 10.4%	7.6% 7.5%	8.9% 8.8%	\$ 42.2	0.4 0.4	0.4 0.0
PUBLIC EQUITY - CAP WEIGHTED* CalPERS Custom FTSE Global Benchmark	\$	153.3	6.2% 6.2%	16.7% 16.8%	11.7% 11.5%	8.3% 8.2%	9.3% 9.2%	\$ 33.7	0.4 0.4	0.4 0.0
PUBLIC EQUITY - FACTOR WEIGHTED CalPERS Custom FTSE Factor Wtd Bnchmrk	\$	55.4	2.7% 2.7%	7.4% 7.4%	7.1% 7.1%	6.3% 6.3%	% %	\$ 9.1	0.3	0.1 0.0
PRIVATE EQUITY Private Equity Policy Benchmark	\$	59.7	2.8% 7.6%	-2.3% -5.9%	19.5% 18.0%	11.8% 8.7%	11.8% 11.4%	\$ 23.7	1.2 0.4	0.2
INCOME* Income Policy Benchmark	\$	122.2	- 0.2% -0.2%	0.0% 0.0%	- 5.1% -5.3%	1.0% 0.8%	2.4% 2.0%	\$ 7.0	-0.1	0.9 0.0
TREASURY* TOTAL FUND INCOME CalPERS Custom Treasury Benchmark	\$ \$	17.1 6.4	- 2.1% - 2.4% -2.1%	- 5.6% - 5.7% -5.6%	- 10.2% - . -% -10.2%	- 0.8 % % -0.7%	1.2% % 1.2%	\$ 2.4 \$ 0.9		-0.2 N/A 0.0
MORTGAGE-BACKED SECURITIES Bloomberg LMTG	\$	23.5	- 0.6% -0.6%	-1.3% -1.5%	-3.5% -3.6%	0.3% 0.1%	2.0% 1.2%	\$ 0.2	-0.2 -0.3	0.6 0.0
INVESTMENT GRADE CREDIT Bloomberg LCORPXSOV	\$	30.7	-0.5% -0.5%	0.9% 1.3%	- 5.3% -5.2%	2.0% 1.6%	3.7% 3.2%	\$ 3.2	0.0	0.7 0.0
HIGH YIELD BBG US High Yield BB/B Liquid Index	\$	21.0	1.5% 1.4%	9.1% 8.9%	3.0% 2.9%	3.2% 3.1%	% %	\$ 2.1	0.2	0.4
EM SOVEREIGN BBG US High Yield BB/B Liquid Index	\$	23.5	1.2% 1.0%	% %	% %	% %	% %	\$ 1.3	N/A	N/A N/A
REAL ASSETS Real Assets Policy Benchmark	\$	70.4	-1.8% -3.4%	- 3.1% -4.0%	7.2% 7.3%	6.0% 6.5%	7.7% 8.0%	\$ 10.4	0.7	-0.1
PRIVATE DEBT Private Debt Blended Benchmark	\$	10.3	3.3% 3.2%	6.5% 3.7%	% %	% %	% %	\$ 0.8	N/A	N/A N/A
COTHER TRUST LEVEL LIER LIBOR 1 Month Rate	\$ \$	15.7 14.1	2.0% 1.3%	6.5% 4.1%	3.1% 1.5%	2.7% 1.7%	- % %	\$ 0.1	N/A 0.4 -0.4	N/A 0.4 0.0
OPPORTUNISTIC STRATEGIES CalPERS Opportunistic Strategies BM	\$	0.2	3.8% 1.7%	- 1.6% 7.0%	6.4% 7.0%	% %	% %	\$ 0.0		N/A N/A
OTHER	\$	1.4	NM	NM	NM	NM	NM		N/A	N/A
TOTAL FUND FINANCING	\$	(24.3)							N/A	N/A
TERMINATED AGENCY POOL Calpers Perf Plus TAP	\$ \$	0.2 463.0	-1.2% 2.4%	-3.1% 5.8%	-4.8% 6.4%	1.4% 6.1%	2.3% 7.1%		N/A N/A	N/A N/A

^{*}The CalPERS PERF asset values shown include derivative exposure.

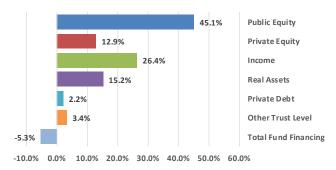
Period Ended June 30, 2023

EXPECTED RETURN AND RISK²

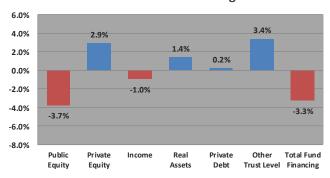


TOTAL FUND ASSET ALLOCATION BASED TRACKING ERROR

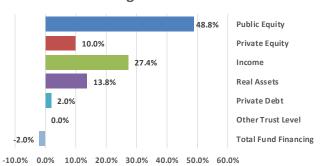
Actual Asset Allocation



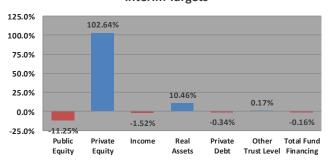
Allocation vs. Interim Targets



Interim Target Asset Allocation



Contribution to Tracking Error vs. Interim Targets

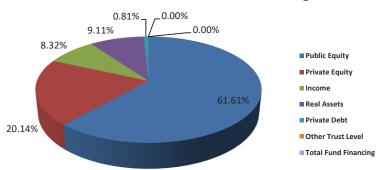


² Return and risk values expressed in this page are derived based on Wilshire Consulting Capital Market Assumptions, which are forward looking in nature.

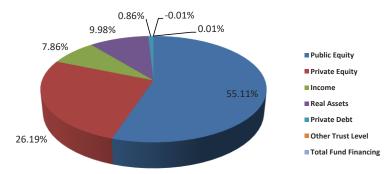
Period Ended June 30, 2023

CONTRIBUTION TO TOTAL RISK³

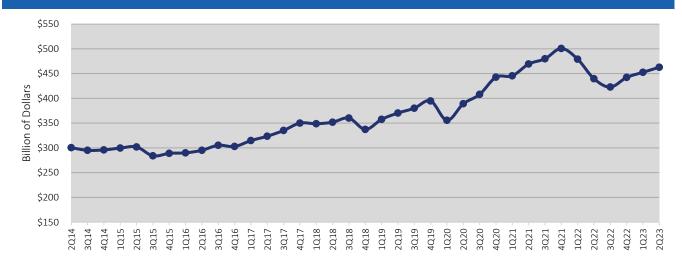
Contribution to Total Risk - Interim Target



Contribution to Total Risk - Actual Allocation



CHANGES IN ASSET VALUE



³ Return and risk values expressed in this page are derived based on Wilshire Consulting Capital Market Assumptions, which are forward looking in nature.

Period Ended June 30, 2023

CALPERS PERF ATTRIBUTION – QUARTER

	Actua	(%)	Benchma	ark (%)	Difference (%)		Total Fund	l Return Contribut	tion (%)
Asset Class	Weight *	Return	Weight *	Return	Weight	Return	Actual Allocation	Active Management	Total
Public Equity	45.39	5.24	45.57	5.27	-0.17	-0.03	-0.02	-0.01	-0.03
Public Equity - Cap Weighted	33.30	6.18	33.50	6.23	-0.20	-0.05	-0.02	-0.02	-0.03
Public Equity - Factor Weighted	12.09	2.68	12.07	2.66	0.02	0.02	0.00	0.00	0.00
Private Equity	12.44	2.77	12.16	7.16	0.28	-4.39	0.03	-0.60	-0.57
Income	26.45	-0.17	26.61	-0.23	-0.17	0.05	0.00	0.01	0.02
Treasury	3.64	-2.13	5.08	-2.13	-1.44	0.00	0.07	0.00	0.07
Mortgage-Backed Securities	5.07	-0.57	5.17	-0.63	-0.10	0.07	0.00	0.00	0.00
Investment Grade Credit	6.61	-0.47	6.64	-0.52	-0.03	0.05	0.00	0.00	0.00
High Yield	4.58	1.51	4.58	1.44	0.00	0.07	0.00	0.00	0.00
EM Sovereign	5.10	1.17	5.13	1.00	-0.03	0.17	0.00	0.01	0.01
Total Fund Income	1.44	-2.40	0.00	-2.13	1.44	-0.26	-0.07	0.00	-0.07
Real Assets	15.64	-1.79	15.73	-3.38	-0.09	1.59	0.01	0.23	0.25
Private Debt	2.13	3.25	2.06	3.25	0.07	0.00	0.00	0.00	0.00
Other Trust Level	3.67	-	0.00	-	3.67	-	-0.07	0.04	-0.03
LLER	3.13	2.03	0.00	1.28	3.13	0.75	-0.04	0.02	-0.02
Opportunistic Strategies	0.05	3.76	0.00	1.70	0.05	2.06	0.00	0.00	0.00
Other PERF	0.04	-	0.00	-	0.04	-	0.00	0.00	0.00
TLPM	0.46	-	0.00	-	0.46	-	-0.01	0.00	-0.01
Total Fund Financing	-5.72	-	-2.13	-	-3.59	-	0.05	-0.07	-0.02
Monthly Linked Return	100.00	2.37	100.00	2.76		-0.39	0.02	-0.41	-0.39
Residual		0.04		-0.01		0.06			0.06
Total PERF		2.42		2.75		-0.33			-0.33

^{*} Average period weight displayed.

Period Ended June 30, 2023

CALPERS PERF ATTRIBUTION — FISCAL YEAR-TO-DATE

	Actual	(%)	Benchma	ark (%)	Differe	nce (%)	Total Fund	l Return Contribut	tion (%)
Asset Class	Weight *	Return	Weight *	Return	Weight	Return	Actual Allocation	Active Management	Total
Public Equity	46.53	14.06	46.61	14.13	-0.09	-0.07	-0.05	-0.03	-0.07
Public Equity - Cap Weighted	33.88	16.66	33.96	16.77	-0.08	-0.11	-0.04	-0.03	-0.07
Public Equity - Factor Weighted	12.65	7.44	12.66	7.44	-0.01	0.00	-0.01	0.00	-0.01
Private Equity	11.64	-2.29	11.58	-7.31	0.06	5.02	0.04	0.21	0.24
Income	25.13	-0.04	25.30	-0.02	-0.17	-0.01	0.07	-0.13	-0.06
Treasury	4.19	-5.59	5.71	-5.59	-1.52	0.00	0.21	0.00	0.21
Mortgage-Backed Securities	5.64	-1.25	5.74	-1.50	-0.09	0.24	0.01	0.01	0.03
Investment Grade Credit	6.11	0.87	6.12	1.28	-0.01	-0.40	0.00	-0.03	-0.02
High Yield	4.50	9.09	4.47	8.93	0.03	0.16	0.01	0.01	0.02
EM Sovereign	3.25	3.10	3.26	5.99	-0.01	-2.90	0.00	-0.13	-0.13
Total Fund Income	1.45	-5.68	0.00	-5.59	1.45	-0.09	-0.17	0.00	-0.17
Real Assets	16.11	-3.08	16.12	-4.05	-0.02	0.97	0.03	0.04	0.06
Private Debt	1.76	6.50	1.87	3.69	-0.10	2.80	0.05	0.03	0.09
Other Trust Level	3.72	-	0.00	-	3.72	-	-0.12	0.09	-0.03
LLER	3.08	6.53	0.00	4.08	3.08	2.45	-0.03	0.07	0.04
Opportunistic Strategies	0.16	-1.62	0.00	5.09	0.16	-6.71	-0.05	-0.01	-0.06
Other PERF	0.04	-	0.00	-	0.04	-	0.00	0.00	0.00
TLPM	0.43	-	0.00	-	0.43	-	-0.01	0.00	-0.01
Total Fund Financing	-4.89	-	-1.48	-	-3.40	-	0.02	-0.15	-0.13
Monthly Linked Return	100.00	5.59	100.00	5.50		0.10	0.06	0.04	0.10
Residual		0.21		0.06		0.15			0.15
Total PERF		5.80		5.56		0.25			0.25

^{*} Average period weight displayed.

Period Ended June 30, 2023

CALPERS PERF ATTRIBUTION — CALENDAR YEAR-TO-DATE

	Actua	(%)	Benchma	Benchmark (%)		Difference (%)		Total Fund Return Contribution (%)	
Asset Class	Weight *	Return	Weight *	Return	Weight	Return	Actual Allocation	Active Management	Total
Public Equity	46.17	11.49	46.27	11.64	-0.10	-0.16	-0.02	-0.07	-0.09
Public Equity - Cap Weighted	34.16	13.61	34.26	13.84	-0.10	-0.22	-0.02	-0.07	-0.09
Public Equity - Factor Weighted	12.01	5.53	12.01	5.51	0.00	0.02	0.00	0.00	0.00
Private Equity	11.96	3.97	11.83	17.71	0.14	-13.74	0.03	-1.72	-1.68
Income	25.68	3.56	25.76	3.50	-0.08	0.06	0.01	0.01	0.02
Treasury	3.50	3.01	4.93	3.01	-1.43	0.00	0.06	0.00	0.06
Mortgage-Backed Securities	5.21	2.03	5.26	1.82	-0.05	0.20	0.00	0.01	0.01
Investment Grade Credit	6.34	4.08	6.35	4.35	-0.01	-0.26	0.00	-0.02	-0.02
High Yield	4.59	5.20	4.60	5.03	0.00	0.17	0.00	0.01	0.01
EM Sovereign	4.61	3.10	4.64	2.92	-0.02	0.17	0.00	0.01	0.01
Total Fund Income	1.42	3.35	0.00	3.01	1.42	0.33	-0.06	0.01	-0.05
Real Assets	15.99	-5.67	16.05	-8.35	-0.05	2.68	0.01	0.42	0.43
Private Debt	2.07	4.61	2.03	7.44	0.03	-2.83	0.00	-0.06	-0.06
Other Trust Level	3.69	-	0.00	-	3.69	-	-0.21	0.08	-0.13
LLER	3.15	4.20	0.00	2.45	3.15	1.75	-0.15	0.06	-0.09
Opportunistic Strategies	0.05	4.60	0.00	3.43	0.05	1.16	0.00	0.00	0.00
Other PERF	0.03	-	0.00	-	0.03	-	0.00	0.00	0.00
TLPM	0.46	-	0.00	-	0.46	-	-0.03	0.00	-0.03
Total Fund Financing	-5.56	-	-1.93	-	-3.63	-	0.17	-0.12	0.05
Monthly Linked Return	100.00	5.62	100.00	7.07		-1.46	0.02	-1.48	-1.46
Residual		0.07		0.05		0.02			0.02
Total PERF		5.69		7.12		-1.44			-1.44

^{*} Average period weight displayed.

Period Ended June 30, 2023

CALPERS PERF ATTRIBUTION - WILSHIRE COMMENT

The California Public Employees' Retirement System ("CalPERS PERF, the System") generated a total fund return of 2.42% for the quarter ended June 30, 2023. CalPERS' return can be attributed as follows:

2.42%	Total Return
0.06%	Residual (Trading/Currency Hedging)
-0.40%	Active Management
0.01%	Actual/Tactical Asset Allocation
2.75%	Strategic Policy Allocation

The total fund attribution table in the previous pages display the return contribution of each asset class to the total fund. These tables allows the Board to see whether tactical allocation and active management within asset classes helped or hurt performance during the measured period.

- Strategic Policy: The contribution to total return from each asset class, calculated as the percentage allocated to each asset class multiplied by the benchmark return for that asset class
- Actual Allocation: The return contribution during the measured period due to differences in the actual allocation
 from the policy allocation (i.e. the actual allocation to total equity was higher than the policy allocation). A
 positive number would indicate an overweight benefited performance and vice versa
- Active Management: The return contribution from active management. The number would be positive if the
 asset class outperformed the designated policy index and vice versa (i.e. the Income segment outperformed its
 custom benchmark during a quarter and contributed positively to active management)
- Actual Return: The actual return of the asset classes if allocations to them were static during the quarter. These
 returns will not match exactly with the actual segment returns since asset class allocations change during the
 quarter due to market movement, cash flows, etc.

Wilshire attribution showed that CalPERS PERF finished behind its policy benchmark by -33 bps in the 2nd Quarter primarily due to drag from the Private Equity asset class, where this program underperformed by sizable margin. This was Private Equity's second straight quarterly miss, and it more than offset better-than-benchmark results reported by the Real Assets and Income asset classes. The good thing is, the Private Equity program had previously done very well in the second half of 2022, its cumulative return for trailing twelve months remains well ahead of its benchmark measure and was considered a net contributor, adding +24 bps total that helped boost CalPERS PERF's fiscal year outperformance.

Period Ended June 30, 2023

CALPERS PERF PROGRAMS NOTES

Public Equity: Primarily supported by a robust U.S. market (where stability was regained following the March regional banking crisis and sentiment on growth turned higher) offsetting softer Europe and Emerging markets, where some of the key economies showed signs of weakness, global equities ended the second quarter of 2023 on a higher note. Among major CalPERS asset classes Public Equity was a clear winner in the second quarter of 2023, with this program posting the largest sized gains, coming in at 5.2%. This was the third straight quarter where Public Equity advanced in excess of 6%, allowing it to string together a cumulative 1-year net gain of 14.1% that was also at the front of the pack while contributing to CalPERS PERF's total return for the year. In relative terms, both the quarterly and 1-year gains were right on par with Public Equity's own policy benchmark.

Private Equity: Dynamics in the private equity market remain challenged six months into 2023, with many of the issues that plagued public equities previously remaining in play, including rising interest rates, tightening credit conditions, surging cost of leverage, subdued deal activity, and lack of exit options. This ongoing tough environment is reflected in the CalPERS Private Equity program's results (the underlying partnerships are reported on a lagged basis), with it recording a 2.8% return in the second quarter that was much softer compared to Public Equity's 5.2% gain over the same period. This return also trailed Private Equity's own policy benchmark by a large margin of -478 bps. For the full fiscal year, the PE program netted a -2.3% return, which was not the strongest among the major CalPERS programs, but it did outperform the -5.9% return of its benchmark and was considered a contributor at the plan level.

Income: The US bond market mostly spent time in the red during the second quarter. Treasury yields rose across the curve (2-Year by +87 bps and 10-Year by +37 bps), driven by the hawkish Fed stance channeling expectations of further rate hikes following better-than-expected employment/wage growth data and still elevated (albeit slowing) inflation. Such yield movement presented notable headwinds to bond prices and weighed on the CalPERS Income asset class, which lost -0.2% for the quarter to close out the fiscal year flat at 0.0%. While these finishes paled against the solid rate of gains generated by Public Equity and Private Debt, relatively speaking they were on par with the Income Policy Benchmark and did not detract from an active management perspective.

Real Assets: This CalPERS program is a blend of privately held real estate, infrastructure, and forestland investments. Real Assets had an underwhelming quarter with its return coming in at -1.8%, as results from all three of its components, particularly real estate, lagged most other major risk asset programs' output due to the higher interest rate headwind. Q2's last-place negative return finish followed Q1's -4.0% drop, which dragged the cumulative 1-year return to -3.1% that also ranked last among all CalPERS asset classes. On the bright side, both the quarterly and 1-year returns fared better than the Real Assets policy benchmark by a good margin (+159 bps and +97 bps, respectively), therefore still contributing to CalPERS PERF in a relative sense.

Private Debt: The Private Debt program turned in a welcoming 3.3% return in Q2 that was ranked near the top of the leaderboard, behind just Public Equity. This figure rounded into a 6.5% return for this fiscal year, which also compared well to other programs and contributed relatively by beating the custom Private Debt Blended Benchmark (3.7%).

PUBLIC EQUITY

Period Ended June 30, 2023

PUBLIC EQUITY ASSET ALLOCATION: ACTUAL VS. TARGET WEIGHTS

	Actual Asset	Target Asset		
Asset Class	Allocation	Allocation	Difference	
PUBLIC EQUITY	45.1%	48.8%	<u>-3.7%</u>	
Public Equity - Cap Weighted	33.1%	36.8%	-3.7%	
Public Equity - Factor Weighted	12.0%	12.0%	0.0%	

PUBLIC EQUITY SEGMENT PERFORMANCE

	Asset Value							١	/aR	5-Year Ratios	
	<u>(\$1</u>	<u> Billion)</u>	<u>Quarter</u>	<u>1-Year</u>	<u>3-Year</u>	<u>5-Year</u>	<u>10-Year</u>	<u>(\$B</u>	illion <u>)</u>	<u>Sharpe</u>	<u>Info</u>
PUBLIC EQUITY*	\$	208.8	5.2%	14.1%	10.6%	7.6%	8.9%	\$	42.2	0.4	0.4
Public Equity Policy Benchmark			5.3%	14.1%	10.4%	7.5%	8.8%			0.4	0.0
Public Equity - Cap Weighted*	\$	153.3	6.2%	16.7%	11.7%	8.3%	9.3%	\$	33.7	0.4	0.4
CalPERS Custom FTSE Global Benchmark			6.2%	16.8%	11.5%	8.2%	9.2%			0.4	0.0
Public Equity - Factor Weighted	\$	55.4	2.7%	7.4%	7.1%	6.3%	%	\$	9.1	0.3	0.1
CalPERS Custom FTSE Factor Weighted BM			2.7%	7.4%	7.1%	6.3%	%			0.3	0.0

^{*} The CalPERS asset values shown include derivative exposure.

PUBLIC EQUITY PORTFOLIOS PERFORMANCE

	Asse	t Value						VaR	5-Year	Ratios
	(\$B	<u>illion)</u>	<u>Quarter</u>	<u>1-Year</u>	<u>3-Year</u>	<u>5-Year</u>	<u> 10-Year</u>	(\$Billion)	<u>Sharpe</u>	<u>Info</u>
PUBLIC EQUITY – CAP WEIGHTED										
Global Equity Index-Oriented Strategy	\$	122.4	6.2%	16.8%	11.8%	8.5%	9.5%		0.4	1.4
GE Index-Oriented Strategy Benchmark			6.3%	16.8%	11.6%	8.3%	9.4%		0.4	0.0
Global Equity Alternative Beta	\$	4.8	5.2%	14.8%	12.4%	8.1%	8.7%		0.4	-0.1
GE Alternative Beta Custom Index			6.2%	16.8%	11.5%	8.2%	8.8%		0.4	0.0
GE Public Equity - Traditional Active	\$	13.3	6.3%	16.8%	12.8%	9.6%	9.1%		0.5	0.8
GE Active ex-Alt Beta Custom Index			5.9%	16.5%	11.0%	7.6%	8.1%		0.3	0.0
Other	\$	12.9	NM	NM	NM	NM	NM		N/A	N/A
		DI	UBLIC EQUIT	V EACTOR	WEIGHTED					
Internal Factor Waighted Index Oriented	\$	55.4	2.7%	7.5%	7.1%	6.3%	%		0.3	0.1
Internal Factor Weighted Index Oriented	۶	55.4								
CalPERS Custom FTSE Factor Weighted Bm			2.7%	7.4%	7.1%	6.3%	%		0.3	0.0

PUBLIC EQUITY

Period Ended June 30, 2023

PERFORMANCE NOTES - PUBLIC EQUITY

Cap Weighted Public Equity – Index-Oriented Strategy: The largest Public Equity component with 59% of the assets at the end of June, Index-Oriented Strategy continues to function as intended by providing accurate beta exposure and closely tracked the global equity markets' 6.3% 2nd Quarter gain as well as the 16.8% 1-year return. The Strategy's longer-term track record also reflects this ability in properly mirroring the broader global equity opportunity set by tracking its own assigned benchmark measure while incrementally adding value.

Cap Weighted Public Equity – Traditional Active: With assets invested either directly by external managers or through models provided by external managers, the Traditional Active Equity program did well during Q2's up market, posting a 6.3% return that led all Public Equity programs and was also +399 bps ahead of its own benchmark. This strong finish helped wrap up the most recent fiscal year on a high note, closing with a cumulative 16.8% return while comparing favorably against its custom benchmark's 16.5%. Overall speaking, Traditional Active Equity's ability to capture broad equity market's forward momentum while adding additional alpha has worked well over time: this program's 12.8% 3-year return and 9.6% 5-year return easily paced other Public Equity components and represent sizable outperformance.

Cap Weighted Public Equity — Alternative Beta: A small member component of Public Equity (accounting for approx. 6% of the asset class assets), Alternative Beta has struggled so far in 2023's narrow market, posting back-to-back quarters of large misses despite earning solid absolute rate of returns. For Q2 it was up 5.2% versus 6.2% return of its custom benchmark, and during Q1 it was 5.2% vs. 7.2% of benchmark. This soft stretch weighed on Alternative Beta's near-term results, causing it to underperform by -196 bps for the 1-year period despite earning 14.8% total. While this component was a detractor in Public Equity this year, things are more steady when factoring in longer-term track record: it had previously performed better in recent years and continues to hold benchmark measure-like annualized returns from the three-year mark and on.

Factor Weighted Public Equity: Amid a mega-cap stocks dominated narrow market advance, there was little surprise the Factor Weighted Public Equity portfolio did not keep pace with its cap weighted counterpart during Q2: this internally managed passive portfolio only generated a modest 2.7% return. Things did look better in relative terms, however, as this output was on par with the custom FTSE Factor Weighted Benchmark. Similar level of performance divergence between cap- and factor-weighted equity was also observed in the first quarter of this year, which in turn led to a larger gap for the full fiscal year with this portfolio totaling 7.5% compared to double-digit rate of gains of the cap weighted portfolios. The sizable near-term return disparity aside, it is important to note that the Factor Weighted portfolio has provided key diversification benefits in volatile periods such as during the drawdown through first three quarters of 2022, while properly mirroring its assigned custom benchmark.

PRIVATE EQUITY

Period Ended June 30, 2023

DDIVATE EO	LIITV ACCET	ALLOCATION:	ACTUAL VO	TARGET	WEIGHTS
PRIVATE EU	UIIT ASSE	ALLUCATION:	ACTUAL VS	. IARGEI	WEIGHIS

	Actual Asset	Target Asset	
Asset Class	Allocation	Allocation	Difference
PRIVATE EQUITY	<u>12.9%</u>	10.0%	2.9%
Private Equity	12.9%	10.0%	2.9%

PRIVATE EQUITY SEGMENT PERFORMANCE 4

	Asse	t Value						١	/aR	5-Year	Ratios
	<u>(\$B</u>	illion)	<u>Quarter</u>	<u>1-Year</u>	<u>3-Year</u>	<u>5-Year</u>	<u>10-Year</u>	<u>(\$</u> B	illion)	<u>Sharpe</u>	<u>Info</u>
PRIVATE EQUITY	\$	59.7	2.8%	-2.3%	19.5%	11.8%	11.8%	\$	23.7	1.2	0.2
Private Equity Policy Benchmark			7.6%	-5.9%	18.0%	8.7%	11.4%			0.4	0.0

PRIVATE EQUITY PORTFOLIOS PERFORMANCE

Asset Value									5-Year	Ratios
	<u>(\$B</u>	illion)	<u>Quarter</u>	<u>1-Year</u>	<u>3-Year</u>	<u>5-Year</u>	<u>10-Year</u>	(\$Billion)	<u>Sharpe</u>	<u>Info</u>
PRIVATE EQUITY										
Private Equity Partnership Investments	\$	59.7	2.8%	-2.2%	19.5%	11.8%	11.9%		N/A	N/A
Private Equity Distribution Stock	\$	0.0	-2.0%	-9.9%	-38.7%	-25.5%	-19.1%		N/A	N/A

⁴ Performance of CalPERS' private equity investments is 1-quarter lagged.

INCOME

Period Ended June 30, 2023

INCOME ASSET ALLOCATION: ACTUAL VS. TARGET WEIGHTS

Asset Class	Actual Asset Allocation	Target Asset Allocation	Difference	
INCOME	26.4%	27.4%	<u>-1.0%</u>	
Treasury	5.1%	5.3%	-0.2%	
Mortgages	5.1%	5.3%	-0.2%	
Investment Grade Corporates	6.6%	6.9%	-0.3%	
High Yield	4.5%	4.7%	-0.1%	
EM Sovereign Bonds	5.1%	5.3%	-0.2%	

INCOME SEGMENT & PORTFOLIO PERFORMANCE

	Asse	et Value						V	'aR	5-Year	Ratios
	<u>(\$</u> E	Billion)	<u>Quarter</u>	<u>1-Year</u>	<u>3-Year</u>	<u>5-Year</u>	<u> 10-Year</u>	<u>(\$Bi</u>	llion)	<u>Sharpe</u>	<u>Info</u>
INCOME*	\$	122.2	-0.2%	0.0%	-5.1%	1.0%	2.4%	\$	7.0	-0.1	0.9
Income Policy Benchmark			-0.2%	0.0%	-5.3%	0.8%	2.0%			-0.1	0.0
Treasury*	\$	17.1	-2.1%	-5.6%	-10.2%	-0.8%	1.2%	\$	2.4	-0.2	-0.2
Total Fund Income	\$	6.4	-2.4%	-5.7%	%	%	%	\$	0.9	N/A	N/A
CalPERS Custom Treasury Benchmark			-2.1%	-5.6%	-10.2%	-0.7%	1.2%			-0.2	0.0
Mortgage-Backed Securities	\$	23.5	-0.6%	-1.3%	-3.5%	0.3%	2.0%	\$	0.2	-0.2	0.6
Bloomberg LMTG			-0.6%	-1.5%	-3.6%	0.1%	1.2%			-0.3	0.0
Investment Grade Credit	\$	30.7	-0.5%	0.9%	-5.3%	2.0%	3.7%	\$	3.2	0.0	0.7
Bloomberg LCORPXSOV			-0.5%	1.3%	-5.2%	1.6%	3.2%			0.0	0.0
High Yield	\$	21.0	1.5%	9.1%	3.0%	3.2%	%	\$	2.1	0.2	0.4
BBG US High Yield BB/B Liquid Index			1.4%	8.9%	2.9%	3.1%	%			0.2	0.0
EM Sovereign	\$	23.5	1.2%	%	%	%	%	\$	1.3	N/A	N/A
JPM EMBIG Diversified Index			1.0%	%	%	%	%			N/A	N/A

^{*} The CalPERS asset values shown include derivative exposure.

INCOME

Period Ended June 30, 2023

PERFORMANCE NOTES – INCOME

Treasury: With UST yields continued climbing and once again nearing highs previously reached last October, the Treasury segment did not enjoy much positive momentum in the second quarter and was the weakest performing fixed income sector. This was reflected in the internally-managed Treasury program's results as it posted a drop of -2.1% for the quarter, trailing all other major CalPERS Income portfolios. Similar outcome is observed over the past 1-year and 3-year periods with returns of -5.6% and -10.2%, respectively, as this program previously suffered heavy losses in 2022 (three straight quarters of decline over -8%) following the start of the Fed's heavy handed rate hike effort that weighed on its track record. The is comfort in relative terms, however, as all of these return figures were in line with Treasury's own custom benchmark.

Mortgage-Backed Securities: MBS performance was in the red for the quarter, but thanks to compressing spreads this Income program fared better than Treasury with a more modest sized -0.6% decline that mirrored the pace of the Bloomberg LMTG Index. For the full fiscal year its return came in at -1.3%, which also compared more favorable to Treasury, and managed to better the -1.5% pace of its own benchmark.

Investment Grade Credit: The IG Credit program behaved in similar pattern as MBS did in Q2, registering a much smaller-than-Treasury's drop of -0.5% on the back of good corporate earnings and spread tightening. Now a year-plus into the Fed's Quantitative Tightening, this CalPERS program has thus far fared better than the other two investment grade Income components, which in turn allowed it to conclude the latest fiscal year above the flatline at 0.9%. This output did represent a small let down in relative terms, as IG Credit's own benchmark was up 1.3% for the same period, but it nonetheless still contributed in lifting Income's overall results by partially offsetting the weaker Treasury and MBS programs.

High Yield: High yield bonds held up well in Q2, with this segment recording spread tightening of over 60 bps on the quarter. Strong performance from lower-rated bonds also provided further support, making high yield one of the highest returning fixed income sectors this quarter. With a lean towards higher quality, the CalPERS High Yield program's Q2 return was more subdued, but still firmly positive at 1.5% that paced all other Income programs while comparing better than the Bloomberg U.S. High Yield BB/B Liquid Index's 1.4% rate. Having now recorded three straight quarterly gains, the High Yield program's full fiscal year return stands at 9.1% and links up to solid longer term track record (3.0% for 3 years and 3.2% for 5 years), all of which pace ahead of the high yield benchmark.

REAL ASSETS

Period Ended June 30, 2023

REAL ASSETS ASSET ALLOCATION: ACTUAL VS. TARGET WEIGHTS

	Actual Asset	Target Asset		
Asset Class	Allocation	Allocation	Difference	
REAL ASSETS	<u>15.2%</u>	<u>13.8%</u>	<u>1.4%</u>	
Real Estate	12.0%	-,-		
Forestland	0.1%	-,-	55	
Infrastructure	3.2%	-,-	55	

REAL ASSETS SEGMENT & PORTFOLIOS PERFORMANCE 5

	Asse	t Value						\	/aR	5-Year Ratios	
	<u>(\$B</u>	<u>illion)</u>	<u>Quarter</u>	<u>1-Year</u>	<u>3-Year</u>	<u>5-Year</u>	<u> 10-Year</u>	<u>(\$B</u>	illion)	<u>Sharpe</u>	<u>Info</u>
REAL ASSETS	\$	70.4	-1.8%	-3.1%	7.2%	6.0%	7.7%	\$	10.4	1.0	-0.1
Real Assets Policy Benchmark			-3.4%	-4.0%	7.3%	6.5%	8.0%			0.7	0.0
Real Estate	\$	55.5	-2.8%	-5.1%	7.0%	5.9%	7.8%	\$	8.2	0.9	-0.1
CalPERS Custom Real Estate Benchmark			-3.4%	-4.0%	7.3%	6.5%	8.4%			0.7	0.0
Infrastructure	\$	14.6	2.3%	4.8%	8.8%	7.5%	11.2%	\$	2.2	1.0	0.1
CalPERS Custom Infrastructure Benchmark			-3.4%	-4.0%	7.3%	6.5%	6.0%			0.7	0.0
Forestland	\$	0.3	-1.0%	13.4%	5.9%	1.2%	0.1%	\$	0.1	-0.1	-0.5
CalPERS Custom Forestland Benchmark			-3.4%	-4.0%	7.3%	6.5%	6.3%			0.7	0.0

PERFORMANCE NOTES – REAL ASSETS

Real Estate: The slowdown of the Real Estate program that started in 2022 gained pace this year, as property valuations continue to see downward pressure amid a unique combination of higher borrowing costs, reduced debt availability, and changing tenant demand. For Q2 of 2023 this program lost -2.8% and is cumulatively down -5.1% for the fiscal year. The full year figure also came in -102 bps below the real estate custom benchmark, therefore was a detractor to the asset class. While the present headwinds are expected to persist, Real Estate is currently holding on to a solid 7.0% annualized gain over the past three years thanks to the robust valuation rebound coming out of the COVID lockdown and has earned 7.8% over the past decade; both figures show a modest amount of lag in relative terms, however.

Infrastructure: The infrastructure portfolio was a contributor in Q2, being the sole Real Assets program to record a gain (and was +571 bps ahead of the custom infrastructure benchmark). For the full fiscal year this program holds a 4.8% total return that also represented sizable outperformance while translating into solid longer-term track record that makes Infrastructure the strongest returning Real Assets component.

Forestland: Real Assets' smallest component was a notable contributor in the latest fiscal year by earning a 13.4% return, far outstripping the custom benchmark's -4.0% for the same period. Although after factoring in drag from the sale of a legacy timber investment that represented a sizable portfolio value markdown in 2018, Forestland's longer-term track record remains soft, currently underperforming against the Real Assets Policy Benchmark.

⁵ Performance of CalPERS' Real Assets investments is reported on a 1-quarter lagged basis.

PRIVATE DEBT

Period Ended June 30, 2023

PRIVATE DEBT LEVELALLOCATION: ACTUAL VS. TARGET WEIGHTS

	Actual Asset	Target Asset	
Asset Class	Allocation	Allocation	Difference
PRIVATE DEBT	2.2%	2.0%	<u>0.2%</u>
Private Debt	2.2%	2.0%	0.2%

PRIVATE DEBT SEGMENT & PORTFOLIO PERFORMANCE

Asset Value									/aR	5-Year Ratios	
	<u>(\$B</u>	illion)	<u>Quarter</u>	<u>1-Year</u>	<u>3-Year</u>	<u>5-Year</u>	<u>10-Year</u>	<u>(\$B</u>	illion)	<u>Sharpe</u>	<u>Info</u>
PRIVATE DEBT	\$	10.3	3.3%	6.5%	%	%	%	\$	0.8	N/A	N/A
Private Debt Blended Benchmark			3.2%	3.7%	%	%	%			N/A	N/A

OTHER TRUST LEVEL

Period Ended June 30, 2023

OTHER TRUST LEVEL ASSET ALLOCATION: ACTUAL VS. TARGET WEIGHTS

	Actual Asset	Target Asset		
Asset Class	Allocation	Allocation	Difference	
OTHER TRUST LEVEL	3.4%	0.0%	<u>3.4%</u>	
LLER	3.0%	-,-	3.0%	
Opportunistic Strategies	0.1%	-,-	0.1%	
TLPM	0.3%	-,-	0.3%	
Other PERF	0.0%	-,-	0.0%	

OTHER TRUST LEVEL SEGMENT & PORTFOLIO PERFORMANCE

	Asse	t Value						ν	aR	5-Year	Ratios
	<u>(\$B</u>	<u>illion)</u>	<u>Quarter</u>	<u>1-Year</u>	<u>3-Year</u>	<u>5-Year</u>	<u> 10-Year</u>	<u>(\$B</u> i	illion)	<u>Sharpe</u>	<u>Info</u>
OTHER TRUST LEVEL	\$	15.7									
LLER	\$	14.1	2.0%	6.5%	3.1%	2.7%	%	\$	0.1	0.4	0.4
LIBOR 1 Month Rate			1.3%	4.1%	1.5%	1.7%	%			-0.4	0.0
Opportunistic Strategies	\$	0.2	3.8%	-1.6%	6.4%	%	%	\$	0.0	N/A	N/A
Custom Opportunistic Strategies Bend	hmark		1.7%	7.0%	7.0%	%	%			N/A	N/A
Trust Level Portfolio Management	\$	1.2	NM	NM	NM	NM	NM			N/A	N/A
Other Perf	\$	0.2	NM	NM	NM	NM	NM			N/A	N/A

TOTAL FUND FINANCING

Period Ended June 30, 2023

TOTAL FUND FINANCING ASSET ALLOCATION: ACTUAL VS. TARGET WEIGHTS

	Actual Asset	Target Asset		
Asset Class	Allocation	Allocation	Difference	
TOTAL FUND FINANCING	<u>-5.3%</u>	<u>-2.0%</u>	<u>-3.3%</u>	
Strategic	-1.9%	-2.0%	0.1%	
Active	-3.4%	0.0%	-3.4%	

TOTAL FUND FINANCING SEGMENT PERFORMANCE

	Asset Value									Ratios
	<u>(\$</u>	Billion)	<u>Quarter</u>	<u>1-Year</u>	<u>3-Year</u>	<u>5-Year</u>	<u>10-Year</u>	(\$Billion)	<u>Sharpe</u>	<u>Info</u>
TOTAL FUND FINANCING	\$	(24.3)	%	%	%	%	%		N/A	N/A
Strategic	\$	(8.6)	%	%	%	%	%		N/A	N/A
Active	\$	(15.7)	%	%	%	%	%		N/A	N/A

SECURITIES LENDING

Period Ended June 30, 2023

SEC LENDING SEGMENT & PORTFOLIOS PERFORMANCE

	Asset Value									Ratios
	<u>(\$Bi</u>	llion <u>)</u>	<u>Quarter</u>	<u>1-Year</u>	<u>3-Year</u>	<u>5-Year</u>	<u>10-Year</u>	(\$Billion)	<u>Sharpe</u>	<u>Info</u>
Sec Lending Composite	\$	3.4	0.9%	3.6%	1.3%	1.6%	1.2%		N/A	N/A
Internal Sec Lending Portfolio	\$	2.7	1.3%	4.1%	1.5%	1.8%	1.2%		N/A	N/A
CalPERS GSTIF			1.3%	4.1%	1.5%	1.7%	1.1%		N/A	N/A

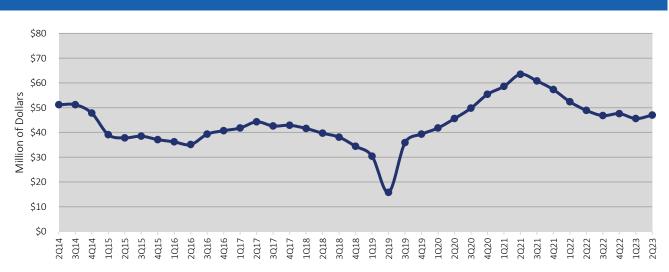
AFFILIATE FUND INFORMATION

JUDGES RETIREMENT SYSTEM I FUND

JUDGES I PERFORMANCE

Period Ended June 30, 2023





NET OF FEE PLAN PERFORMANCE RESULTS – JUDGES I 6

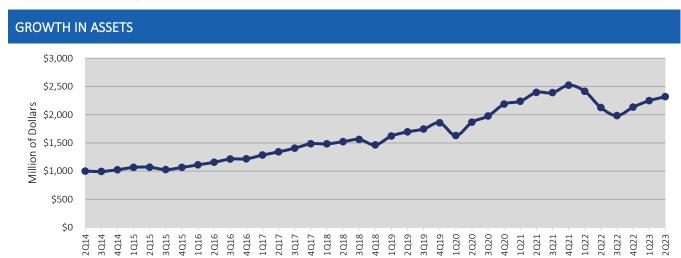
	Asse	t Value					
	<u>(\$N</u>	lillion)	<u>Quarter</u>	<u>1-Year</u>	<u>3-Year</u>	<u>5-Year</u>	<u> 10-Year</u>
Judges Retirement I Fund	\$	47.0	1.3%	4.1%	1.5%	1.7%	1.1%
91-Day Treasury Bill			1.2%	3.6%	1.3%	1.6%	1.0%
Judges I Programs:							
Judges I Internal Short-Term	\$	47.0	1.3%	4.1%	1.5%	1.7%	1.1%
91-Day Treasury Bill			1.2%	3.6%	1.3%	1.6%	1.0%

⁶ JRS I maintains a reserve balance of approximately two months of benefit payments. Prior to 2009-2010 fiscal year, the fund held approximately one month of benefit reserve with the majority of funds held at the State Treasurer's Office.

JUDGES RETIREMENT SYSTEM II FUND

JUDGES II PERFORMANCE

Period Ended June 30, 2023



NET OF FEE PLAN PERFORMANCE RESULTS – JUDGES II 7

	As	set Value					
	<u>(\$</u>	Million)	<u>Quarter</u>	<u>1-Year</u>	<u>3-Year</u>	<u>5-Year</u>	<u> 10-Year</u>
Judges Retirement II Fund Weighted Policy Benchmark	\$	2,319.1	2.7% 2.7%	7.1% 6.7%	4.9% 4.7%	5.2% 4.9%	6.2% 6.0%
Judges II Programs:							
JRS II Global Equity Global Equity Benchmark	\$	1,188.4	6.0% 5.9%	16.6% 16.1%	11.4% 11.0%	8.1% 7.6%	9.2% 8.9%
JRS II US Fixed Income Custom Benchmark	\$	480.2	-1.1% -1.1%	-1.9% -2.0%	-6.4% -6.5%	0.4% <i>0.4%</i>	2.3% 1.9%
JRS II TIPS Bloomberg U.S. TIPS Index	\$	114.7	-1.4% -1.4%	-1.4% -1.4%	-0.1% -0.1%	2.5% 2.5%	2.0% 2.1%
JRS II REITs Custom Benchmark	\$	466.1	0.4% 0.2%	- 3.9% -4.6%	4.1% 3.3%	0.8% 0.0%	3.8% 3.4%
JRS II Commodities GSCI Total Return	\$	69.7	-2.8% -2.7%	-14.5% -14.2%	24.8% 25.1%	2.7% 2.8%	-3.6% <i>-3.5%</i>
JRS II Cash/Short-Term 91-Day T-Bill	\$	0.1	NM 1.2%	NM 3.6%	NM 1.3%	NM 1.6%	NM 1.0%

⁷ JRS II weighted policy benchmark is calculated based on asset class index returns weighted at their respective asset class policy targets.

JRS II Global Equity Benchmark is MSCI ACWI IMI Net starting 6/07/2018. Between 6/06/2018 and 9/08/2011 the custom benchmark was run by FTSE. Prior of that it was calculated as an asset weighted benchmark of its underlying domestic and international funds.

Current US Fixed Income Custom Benchmark is the Bloomberg Long Liability Index. Bloomberg Long Liability ex TIPS was used as the benchmark between June 2005 and May 2007. Prior of that the benchmark was Citigroup LPF.

The REIT Custom Benchmark is the FTSE EPRA/NAREIT Developed (Net) Index starting 3/27/2020. Between 3/26/2020 and 6/07/2018 it was FTSE EPRA/NAREIT Developed Liquid (Net) Index. Between 6/06/2018 and 9/08/2011 the it was FTSE EPRA/NAREIT Developed (TR) Index. Prior of that it was the Wilshire RESI and REIT Indices.

JUDGES II PERFORMANCE

Period Ended June 30, 2023

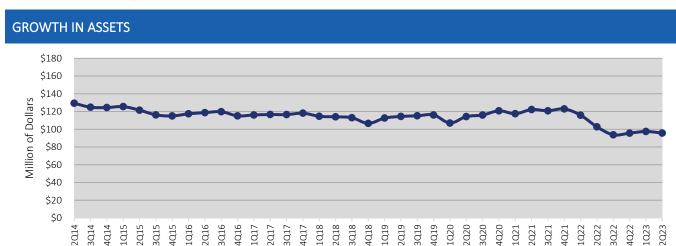
JUDGES II ASSET ALLOCATION: ACTUAL VS. TARGET WEIGHTS

	Actual Asset	Target Asset	
Asset Class	Allocation	Allocation	Difference
JUDGES II TOTAL FUND	100.0%	100.0%	0.0%
Global Equity	51.2%	51.0%	0.2%
US Fixed Income	20.7%	21.0%	-0.3%
TIPS	4.9%	5.0%	-0.1%
REITs	20.1%	20.0%	0.1%
Commodities	3.0%	3.0%	0.0%
Cash/Short-Term	0.0%	0.0%	0.0%

LEGISLATORS' RETIREMENT SYSTEM FUND

LEGISLATORS' RETIREMENT SYSTEM PERFORMANCE

Period Ended June 30, 2023



NET OF FEE PLAN PERFORMANCE RESULTS - LEGISLATORS' 8

	Asse	t Value					
	<u>(\$IV</u>	lillion)	<u>Quarter</u>	<u>1-Year</u>	<u>3-Year</u>	<u>5-Year</u>	<u> 10-Year</u>
Legislators' Retirement System Fund	\$	95.7	0.2%	0.8%	0.7%	3.1%	4.1%
Weighted Policy Benchmark			0.2%	0.7%	0.6%	3.0%	3.9%
LRS Programs:							
LRS Global Equity	\$	17.4	6.0%	16.6%	11.4%	8.1%	9.2%
Global Equity Benchmark			5.9%	16.1%	11.0%	7.6%	8.9%
LRS US Fixed Income	\$	42.7	-1.1%	-2.1%	-6.5%	0.4%	2.3%
Custom Benchmark			-1.1%	-2.0%	-6.5%	0.4%	1.9%
LRS TIPS	\$	19.1	-1.4%	-1.4%	-0.1%	2.5%	2.1%
Custom Benchmark			-1.4%	-1.4%	-0.1%	2.5%	2.1%
LRS REITs	\$	13.6	0.4%	-3.9%	4.1%	0.8%	3.8%
Custom Benchmark			0.2%	-4.6%	3.3%	0.0%	3.4%
LRS Commodities	\$	2.9	-2.8%	-14.5%	24.8%	2.9%	-3.5%
GSCI Total Return			-2.7%	-14.2%	25.1%	2.8%	-3.5%
LRS Cash/Short-Term	\$	0.0	NM	NM	NM	NM	NM
91-Day T-Bill			1.2%	3.6%	1.3%	1.6%	1.0%

⁸ LRS weighted policy benchmark is calculated based on asset class index returns weighted at their respective asset class policy targets.

LRS Global Equity Benchmark is MSCI ACWI IMI Net starting 6/07/2018. Between 6/06/2018 and 9/08/2011 the custom benchmark was run by FTSE. Prior of that it was calculated as an asset weighted benchmark of its underlying domestic and international funds.

Current US Fixed Income Custom Benchmark is the Bloomberg Long Liability Index. Bloomberg Long Liability ex TIPS was used as the benchmark between June 2005 and May 2007. Prior of that the benchmark was Citigroup LPF.

TIPS Benchmark is currently the Bloomberg U.S. TIPS Index. Prior of July 2017 it was the Bloomberg Long Liability TIPS Index.

The REIT Custom Benchmark is the FTSE EPRA/NAREIT Developed (Net) Index starting 3/27/2020. Between 3/26/2020 and 6/07/2018 it was FTSE EPRA/NAREIT Developed Liquid (Net) Index. Between 6/06/2018 and 9/08/2011 the benchmark was FTSE EPRA/NAREIT Developed (TR) Index. Prior of that it was the Wilshire RESI and REIT Indices.

LEGISLATORS' RETIREMENT SYSTEM PERFORMANCE

Period Ended June 30, 2023

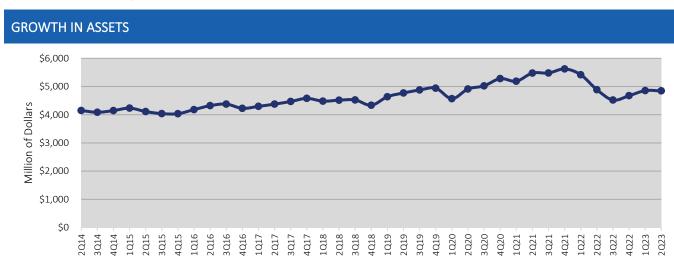
LEGISLATORS' ASSET ALLOCATION: ACTUAL VS. TARGET WEIGHTS

	Actual Asset	Target Asset	
Asset Class	Allocation	Allocation	Difference
LEGISLATORS' RETIREMENT SYSTEM FUND	100.0%	100.0%	0.0%
Global Equity	18.2%	18.0%	0.2%
US Fixed Income	44.7%	45.0%	-0.3%
TIPS	19.9%	20.0%	-0.1%
REITs	14.2%	14.0%	0.2%
Commodities	3.0%	3.0%	0.0%
Cash/Short-Term	0.0%	0.0%	0.0%

LONG-TERM CARE FUND

LONG-TERM CARE FUND PERFORMANCE

Period Ended June 30, 2023



NET OF FEE PLAN PERFORMANCE RESULTS – LONG-TERM CARE FUND 9

	As	set Value					
	<u>(\$</u>	Million)	<u>Quarter</u>	<u>1-Year</u>	<u>3-Year</u>	<u>5-Year</u>	<u> 10-Year</u>
Long-Term Care Fund Weighted Policy Benchmark	\$	4,843.3	0.0% <i>0.0%</i>	- 0.6% -0.7%	0.4% 0.2%	2.6% 2.5%	3.3% <i>3.2%</i>
LTC Programs:							
LTC Global Equity Custom Benchmark	\$	818.4	6.0% 5.9%	16.5% 16.1%	11.3% 11.0%	8.0% 7.6%	8.9% 8.6%
LTC US Fixed Income Custom Benchmark	\$	2,876.2	- 1.1% -1.1%	-2.1% -2.0%	- 6.5% -6.5%	0.4% <i>0.4%</i>	1.9% 1.9%
LTC TIPS Bloomberg US TIPS Index	\$	287.0	- 1.4% -1.4%	-1.4% -1.4%	- 0.1% - <i>0.1%</i>	2.5% 2.5%	2.1% 2.1%
LTC REITs Custom Benchmark	\$	491.8	0.5% 0.2%	-3.8% -4.6%	4.1% 3.3%	0.8% 0.0%	3.5% 2.7%
LTC Commodities GSCI Total Return	\$	369.8	-2.8% -2.7%	- 14.5% -14.2%	24.8% 25.1%	2.7% 2.8%	-3.6% -3.5%
LTC Cash/Short-Term 91-Day T-Bill	\$	0.0	NM 1.2%	NM 3.6%	NM 1.3%	NM 1.6%	NM 1.0%

⁹ LTC weighted policy benchmark is calculated based on asset class index returns weighted at their respective asset class policy targets.
LTC Global Equity Benchmark is MSCI ACWI IMI Net starting 12/12/2012. Prior of that it was calculated as an asset weighted benchmark of its underlying domestic and international funds.

Current US Fixed Income Custom Benchmark is the Bloomberg Long Liability Index. Bloomberg Long Liability ex TIPS ex High Yield was the benchmark between June 2007 and July 2005. Prior of that the benchmark was Bloomberg Aggregate Bond Index.

The REIT Custom Benchmark is the FTSE EPRA/NAREIT Developed (Net) Index starting 3/27/2020. Between 3/26/2020 and 12/12/2012 it was FTSE EPRA/NAREIT Developed Liquid (Net) Index.

LTC ending asset values presented were as of July 3, 2023.

LONG-TERM CARE FUND PERFORMANCE

Period Ended June 30, 2023

LONG-TERM CARE FUND ASSET ALLOCATION: ACTUAL VS. TARGET WEIGHTS 10

	Actual Asset	Target Asset	
Asset Class	Allocation	Allocation	Difference
LONG-TERM CARE TOTAL FUND	100.0%	100.0%	0.0%
Global Equity	16.9%	15.0%	1.9%
US Fixed Income	59.4%	60.0%	-0.6%
TIPS	5.9%	6.0%	-0.1%
REITs	10.2%	11.0%	-0.8%
Commodities	7.6%	8.0%	-0.4%
Cash/Short-Term	0.0%	0.0%	0.0%

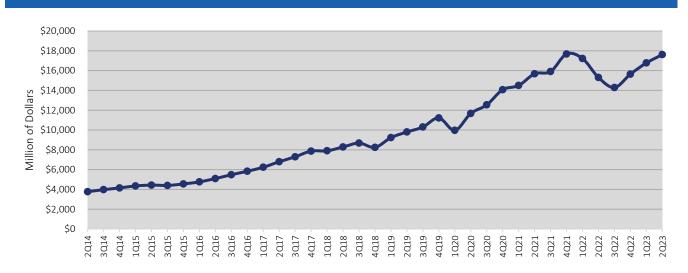
 $^{^{10}\,}$ LTC actual asset allocation weights presented were based on July 3, 2023 ending asset values.

CALIFORNIA EMPLOYERS' RETIREE BENEFIT TRUST

CALIFORNIA EMPLOYERS' RETIREE BENEFIT TRUST AGGREGATE

Period Ended June 30, 2023

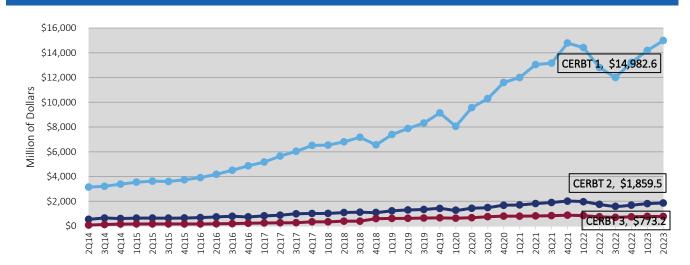
GROWTH IN ASSETS – CERBT AGGREGATE



NET OF FEE PLAN PERFORMANCE RESULTS - CERBT AGGREGATE

	Asset Value					
	<u>(\$Million)</u>	<u>Quarter</u>	<u>1-Year</u>	<u>3-Year</u>	<u>5-Year</u>	<u> 10-Year</u>
CERBT Aggregate	\$ 17,615.3	2.4%	5.9%	4.9%	5.0%	6.1%
CERBT Trust Aggregate Benchmark		2.3%	5.7%	4.8%	4.8%	5.8%

GROWTH IN ASSETS - CERBT 1, 2, 3



CALIFORNIA EMPLOYERS' RETIREE BENEFIT TRUST 1

Period Ended June 30, 2023

CERBT 1 ASSET ALLOCATION: ACTUAL VS. TARGET WEIGHTS

	Actual Asset	Target Asset	
Asset Class	Allocation	Allocation	Difference
TOTAL CERBT 1	100.0%	100.0%	0.0%
Global Equity	49.2%	49.0%	0.2%
US Fixed Income	22.7%	23.0%	-0.3%
TIPS	4.9%	5.0%	-0.1%
REITs	20.1%	20.0%	0.1%
Commodities	3.0%	3.0%	0.0%
Cash/Short-Term	0.1%	0.0%	0.1%

NET OF FEE PLAN PERFORMANCE RESULTS – CERBT 1 11

	Asse	t Value					
	<u>(\$M</u>	<u>lillion)</u>	<u>Quarter</u>	<u>1-Year</u>	<u>3-Year</u>	<u>5-Year</u>	<u> 10-Year</u>
CERBT Strategy 1	\$ 1	4,982.6	2.6%	6.4%	5.5%	5.3%	6.3%
Total CERBT Strategy 1 Benchmark			2.5%	6.3%	5.4%	5.0%	6.0%
CERBT 1 Programs:							
Global Equity	\$	7,371.3	6.0%	16.4%	11.3%	8.0%	9.0%
CERBT Global Equity Benchmark			5.9%	16.1%	11.0%	7.6%	8.6%
Domestic Fixed Income	\$	3,402.3	-1.1%	-2.1%	-6.5%	0.4%	2.3%
CalPERS Custom Long Liability			-1.1%	-2.0%	-6.5%	0.4%	1.9%
TIPS	\$	740.0	-1.4%	-1.4%	-0.1%	2.5%	2.0%
CalPERS TIPS			-1.4%	-1.4%	-0.1%	2.5%	2.1%
REITs	\$	3,008.9	0.4%	-3.8%	4.2%	0.8%	3.5%
Custom Benchmark			0.2%	-4.6%	3.3%	0.0%	2.7%
Commodities	\$	449.8	-2.8%	-14.5%	24.8%	2.7%	-3.7%
GSCI Total Return			-2.7%	-14.2%	25.1%	2.8%	-3.5%
Cash/Short-Term	\$	10.4	NM	NM	NM	NM	NM
91-Day T-Bill			1.2%	3.6%	1.3%	1.6%	1.0%

¹¹ CERBT Strategy 1 cash balances are inclusive of employer fund contributions that are in the process of being invested into asset classes. These contributions may occur daily, and tend to be higher at the end of each quarter.

The REIT Custom Benchmark is the FTSE EPRA/NAREIT Developed (Net) Index starting 3/27/2020. Prior to that it was the FTSE EPRA/NAREIT Developed Liquid (Net) Index.

CALIFORNIA EMPLOYERS' RETIREE BENEFIT TRUST 2

Period Ended June 30, 2023

CERBT 2 ASSET ALLOCATION: ACTUAL VS. TARGET WEIGHTS

	Actual Asset	Target Asset	
Asset Class	Allocation	Allocation	Difference
TOTAL CERBT 2	100.0%	100.0%	0.0%
Global Equity	34.1%	34.0%	0.1%
US Fixed Income	41.0%	41.0%	0.0%
TIPS	4.9%	5.0%	-0.1%
REITs	17.0%	17.0%	0.0%
Commodities	3.0%	3.0%	0.0%
Cash/Short-Term	0.0%	0.0%	0.0%

NET OF FEE PLAN PERFORMANCE RESULTS – CERBT 2 12

	Ass	set Value					
	<u>(\$</u>	Million)	<u>Quarter</u>	<u>1-Year</u>	<u>3-Year</u>	<u>5-Year</u>	<u> 10-Year</u>
CERBT Strategy 2	\$	1,859.5	1.5%	3.6%	2.7%	4.1%	5.1%
Total CERBT Strategy 2 Benchmark			1.4%	3.5%	2.6%	4.0%	4.9%
CERBT 2 Programs:							
Global Equity	\$	633.2	6.0%	16.4%	11.3%	7.9%	8.9%
CERBT Global Equity Benchmark			5.9%	16.1%	11.0%	7.6%	8.6%
Domestic Fixed Income	\$	761.8	-1.1%	-2.1%	-6.5%	0.4%	2.3%
CalPERS Custom Long Liability			-1.1%	-2.0%	-6.5%	0.4%	1.9%
TIPS	\$	91.6	-1.4%	-1.4%	-0.1%	2.5%	2.0%
CalPERS TIPS			-1.4%	-1.4%	-0.1%	2.5%	2.1%
REITs	\$	316.6	0.4%	-3.8%	4.1%	0.8%	3.5%
Custom Benchmark			0.2%	-4.6%	3.3%	0.0%	2.7%
Commodities	\$	55.7	-2.8%	-14.5%	24.8%	2.8%	-3.6%
GSCI Total Return			-2.7%	-14.2%	25.1%	2.8%	-3.5%
Cash/Short-Term	\$	0.5	NM	NM	NM	NM	NM
91-Day T-Bill			1.2%	3.6%	1.3%	1.6%	1.0%

¹² CERBT Strategy 2 cash balances are inclusive of employer fund contributions that are in the process of being invested into asset classes. These contributions may occur daily, and tend to be higher at the end of each quarter.

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CALIFORNIA EMPLOYERS' RETIREE BENEFIT TRUST 3

Period Ended June 30, 2023

CERBT 3 ASSET ALLOCATION: ACTUAL VS. TARGET WEIGHTS

	Actual Asset	Target Asset	
Asset Class	Allocation	Allocation	Difference
TOTAL CERBT 3	100.0%	100.0%	0.0%
Global Equity	23.2%	23.0%	0.2%
US Fixed Income	50.6%	51.0%	-0.4%
TIPS	8.9%	9.0%	-0.1%
REITs	14.1%	14.0%	0.1%
Commodities	3.0%	3.0%	0.0%
Cash/Short-Term	0.1%	0.0%	0.1%

NET OF FEE PLAN PERFORMANCE RESULTS – CERBT 3 13

	Asse	et Value					
	<u>(\$1</u>	Million)	<u>Quarter</u>	<u>1-Year</u>	<u>3-Year</u>	<u>5-Year</u>	<u> 10-Year</u>
CERBT Strategy 3	\$	773.2	0.6%	1.6%	1.0%	3.3%	4.2%
Total CERBT Strategy 3 Benchmark			0.6%	1.5%	0.9%	3.2%	3.9%
CERBT 3 Programs:							
Global Equity	\$	179.4	6.0%	16.4%	11.3%	7.9%	8.9%
CERBT Global Equity Benchmark			5.9%	16.1%	11.0%	7.6%	8.6%
Domestic Fixed Income	\$	391.5	-1.1%	-2.1%	-6.5%	0.4%	2.3%
CalPERS Custom Long Liability			-1.1%	-2.0%	-6.5%	0.4%	1.9%
TIPS	\$	69.1	-1.4%	-1.4%	-0.1%	2.5%	2.1%
CalPERS TIPS			-1.4%	-1.4%	-0.1%	2.5%	2.1%
REITs	\$	109.2	0.4%	-3.8%	4.1%	0.9%	3.5%
Custom Benchmark			0.2%	-4.6%	3.3%	0.0%	2.7%
Commodities	\$	23.3	-2.8%	-14.5%	24.8%	2.9%	-3.5%
GSCI Total Return			-2.7%	-14.2%	25.1%	2.8%	-3.5%
Cash/Short-Term	\$	0.7	NM	NM	NM	NM	NM
91-Day T-Bill			1.2%	3.6%	1.3%	1.6%	1.0%

¹³ CERBT Strategy 3 cash balances are inclusive of employer fund contributions that are in the process of being invested into asset classes. These contributions may occur daily, and tend to be higher at the end of each quarter.

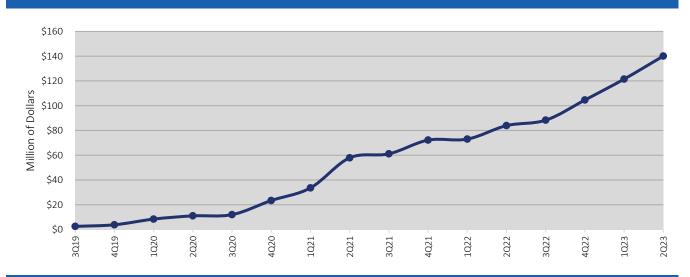
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CA EMPLOYERS' PENSION PREFUNDING TRUST

CALIFORNIA PREFUNDING TRUST AGGREGATE

Period Ended June 30, 2023

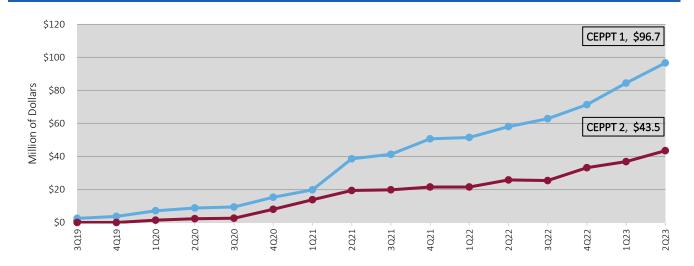
GROWTH IN ASSETS – CEPPT AGGREGATE



NET OF FEE PLAN PERFORMANCE RESULTS - CEPPT AGGREGATE

	Ass	et Value					
	<u>(\$1</u>	Million)	<u>Quarter</u>	<u>1-Year</u>	<u>3-Year</u>	<u>5-Year</u>	<u> 10-Year</u>
CEPPT Aggregate	\$	140.1	1.4%	4.3%	1.9%	%	%
CEPPT Trust Aggregate Benchmark			1.4%	4.2%	1.8%	%	%

GROWTH IN ASSETS - CEPPT 1, 2



CA PENSION PREFUNDING TRUST PERFORMANCE

Period Ended June 30, 2023

CEPPT STRATEGY 1 ASSET ALLOCATION: ACTUAL VS. TARGET WEIGHTS

	Actual Asset	Target Asset	
Asset Class	Allocation	Allocation	Difference
PENSION PREFUNDING TRUST-STRATEGY 1	100.0%	100.0%	0.0%
Global Equity	37.3%	37.0%	0.3%
US Fixed Income	43.6%	44.0%	-0.4%
REITs	14.1%	14.0%	0.1%
TIPS	5.0%	5.0%	0.0%
Cash/Short-Term	0.0%	0.0%	0.0%

NET OF FEE PERFORMANCE RESULTS – CEPPT STRATEGY 1 14

	Asse	et Value					
	<u>(\$N</u>	<u>/lillion)</u>	<u>Quarter</u>	<u>1-Year</u>	<u>3-Year</u>	<u>5-Year</u>	<u> 10-Year</u>
Pension Prefunding Trust - Strategy 1	\$	96.7	1.8%	5.2%	2.9%	%	%
CEPPT Strategy 1 Policy Benchmark			1.8%	5.1%	2.7%	%	%
CEPPT Strategy 1 Programs:							
CEPPT S1 Equity	\$	36.1	6.0%	16.4%	11.2%	%	%
MSCI ACWI IMI Net			5.9%	16.1%	11.0%	%	%
CEPPT S1 Fixed Income	\$	42.1	-0.8%	-0.9%	-4.0%	%	%
Bloomberg US Aggregate Bond Indx			-0.8%	-0.9%	-4.0%	%	%
CEPPT S1 REITs	\$	13.6	0.4%	-3.9%	4.1%	%	%
Custom Benchmark			0.2%	-4.6%	3.3%	%	%
CEPPT S1 TIPS	\$	4.8	-1.4%	-1.4%	-0.2%	%	%
CalPERS TIPS			-1.4%	-1.4%	-0.1%	%	%
CEPPT S1 Cash	\$	0.0	NM	NM	%	%	%
91-Day Treasury Bill			1.2%	3.6%	%	%	%

¹⁴ CEPPT Strategy 1 cash balances are inclusive of employer fund contributions that are in the process of being invested into asset classes. These contributions may occur daily, and tend to be higher at the end of each quarter.

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CA PENSION PREFUNDING TRUST PERFORMANCE

Period Ended June 30, 2023

CEPPT STRATEGY 2 ASSET ALLOCATION: ACTUAL VS. TARGET WEIGHTS

	Actual Asset	Target Asset	
Asset Class	Allocation	Allocation	Difference
PENSION PREFUNDING TRUST-STRATEGY 2	100.0%	100.0%	0.0%
Global Equity	21.3%	21.0%	0.3%
US Fixed Income	60.6%	61.0%	-0.4%
REITs	9.1%	9.0%	0.1%
TIPS	9.0%	9.0%	0.0%
Cash/Short-Term	0.0%	0.0%	0.0%

NET OF FEE PERFORMANCE RESULTS – CEPPT STRATEGY 2 15

	Asse	et Value					
	<u>(\$N</u>	<u>/lillion)</u>	<u>Quarter</u>	<u>1-Year</u>	<u>3-Year</u>	<u>5-Year</u>	<u> 10-Year</u>
Pension Prefunding Trust - Strategy 2	\$	43.5	0.6%	2.3%	-0.6%	%	%
CEPPT Strategy 2 Policy Benchmark			0.6%	2.4%	-0.6%	%	%
CEPPT Strategy 2 Programs:							
CEPPT S2 Equity	\$	9.2	6.0%	16.4%	11.2%	%	%
MSCI ACWI IMI Net			5.9%	16.1%	11.0%	%	%
CEPPT S2 Fixed Income	\$	26.4	-0.8%	-0.9%	-4.0%	%	%
Bloomberg US Aggregate Bond Indx			-0.8%	-0.9%	-4.0%	%	%
CEPPT S2 REITs	\$	4.0	0.4%	-3.9%	4.1%	%	%
Custom Benchmark			0.2%	-4.6%	3.3%	%	%
CEPPT S2 TIPS	\$	3.9	-1.4%	-1.4%	-0.1%	%	%
CalPERS TIPS			-1.4%	-1.4%	-0.1%	%	%
CEPPT S2 Cash	\$	0.0	NM	NM	NM	%	%
91-Day Treasury Bill			1.2%	3.6%	1.3%	%	%

¹⁵ CEPPT Strategy 2 cash balances are inclusive of employer fund contributions that are in the process of being invested into asset classes. These contributions may occur daily, and tend to be higher at the end of each quarter.

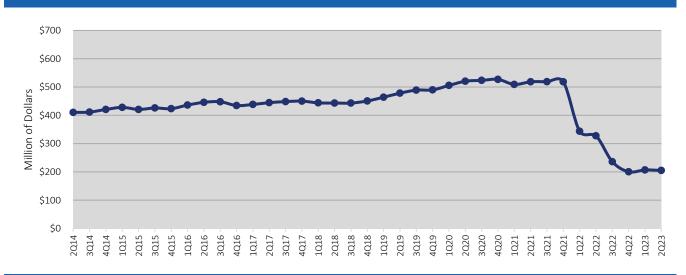
The REIT Custom Benchmark is the FTSE EPRA/NAREIT Developed (Net) Index starting 3/27/2020. Prior to that it was the FTSE EPRA/NAREIT Developed Liquid (Net) Index.

HEALTH CARE FUND

HEALTH CARE FUND PERFORMANCE

Period Ended June 30, 2023





NET OF FEE PLAN PERFORMANCE RESULTS - HEALTH CARE FUND

	Asse	et Value					
	<u>(\$N</u>	/lillion)	<u>Quarter</u>	<u>1-Year</u>	<u>3-Year</u>	<u>5-Year</u>	<u> 10-Year</u>
CalPERS Health Care Bond Fund	\$	205.1	-0.9%	-1.0%	-4.0%	0.8%	1.6%
Bloomberg US Aggregate Bond Indx			-0.8%	-0.9%	-4.0%	0.8%	1.5%

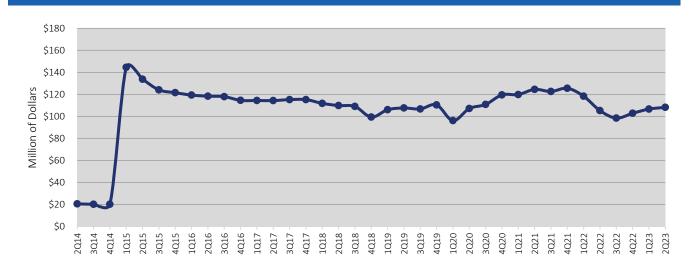
¹⁶ The decline in assets starting in the 4th Quarter of 2021 was due to periodic withdrawals from the fund in the amount of \$240 million through 12/31/2022, with the remaining decline due to investment performance of bonds during calendar year 2022.

SUPPLEMENTAL INCOME PLANS

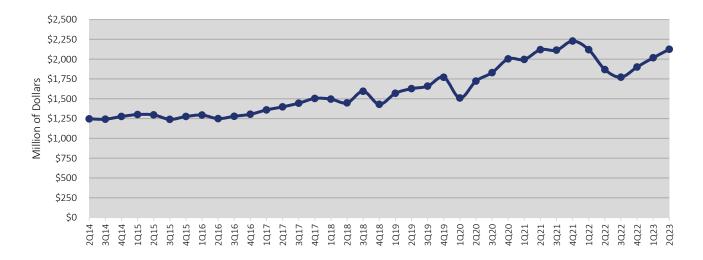
SUPPLEMENTAL INCOME PLANS

Period Ended June 3, 2023

GROWTH IN ASSETS - SUPPLEMENTAL CONTRIBUTION PLAN 17



GROWTH IN ASSETS – 457 PROGRAM



¹⁷ SCP experienced a steep increase in assets during the 1st quarter of 2015. This was due to the termination of the State Peace Officers' and Firefighters' (POFF) Defined Contribution Plan, which took place June 1, 2014. The termination required distributions of participants' money in the POFF DC Plan in accordance with state and federal law, and SCP was designated as the default plan for participants who did not make an affirmative election to take a distribution.

SUPPLEMENTAL CONTRIBUTION PLAN PERFORMANCE

Period Ended June 30, 2023

NET OF FEE PLAN PERFORMANCE RESULTS - SCP

	et Value					
CAREE Town I have a Final	 Million)	Quarter	1-Year	3-Year	5-Year	10-Year
CalPERS Target Income Fund SIP Income Policy	\$ 28.9	1.5% 1.5%	4.8% 4.6%	1.8% 1.8%	3.7% 3.6%	3.6% 3.5%
CalPERS Target 2020 Fund SIP 2020 Policy	\$ 19.3	2.2% 2.2%	6.4% 6.3%	3.8% <i>3.7%</i>	4.6% 4.4%	4.5% 4.3%
CalPERS Target 2025 Fund SIP 2025 Policy	\$ 20.0	3.1% 3.0%	8.6% 8.5%	5.5% 5.4%	5.4% 5.2%	5.4% 5.2%
CalPERS Target 2030 Fund SIP 2030 Policy	\$ 15.9	3.8% <i>3.7%</i>	10.5% 10.3%	7.2% 7.2%	6.0% 5.9%	6.1% 5.9%
CalPERS Target 2035 Fund SIP 2035 Policy	\$ 8.5	4.8% 4.7%	12.9% 12.7%	9.1% 8.9%	6.8% 6.6%	% %
CalPERS Target 2040 Fund SIP 2040 Policy	\$ 4.6	5.5% 5.5%	15.0% 14.8%	10.5% 10.4%	7.4% 7.2%	7.6% 7.4%
CalPERS Target 2045 Fund SIP 2045 Policy	\$ 1.1	5.7% 5.6%	15.4% 15.2%	10.7% 10.5%	7.6% 7.4%	% %
CalPERS Target 2050 Fund SIP 2050 Policy	\$ 0.1	5.7% 5.6%	15.4% 15.2%	10.7% 10.5%	7.6% 7.4%	% %
CalPERS Target 2055 Fund SIP 2055 Policy	\$ 0.1	5.7% 5.6%	15.4% 15.2%	10.7% 10.5%	7.6% 7.4%	% %
CalPERS Target 2060 Fund SIP 2060 Policy	\$ 0.0	5.6% 5.6%	15.4% 15.2%	% %	% %	% %
CalPERS Target 2065 Fund SIP 2065 Policy	\$ 0.0	% %	% %	% %	% %	% %
SSgA Russell All Cap Index SL Russell 3000	\$ 5.6	8.4% 8.4%	18.9% 19.0%	14.0% 13.9%	11.4% 11.4%	% %
SSgA Global All Cap ex-US SL MSCI ACWI ex-US IMI (N)	\$ 1.0	2.6% 2.4%	13.0% 12.5%	7.6% 7.3%	3.7% 3.4%	% %
SSgA US Bond Index SL Bloomberg US Aggregate Bond	\$ 0.4	-0.8% -0.8%	-1.0% -0.9%	-4.0% -4.0%	0.8%	% %
SSgA US Short Term Bond Bloomberg US Gov/Credit	\$ 0.4	-0.4% -0.4%	0.5% <i>0.5%</i>	-0.9% -0.9%	1.1% <i>1.1%</i>	% %
SSgA Real Asset NL Real Assets Blended Index	\$ 0.4	-1.9% -1.9%	-0.7% -0.7%	12.2% 12.3%	5.8% 5.7%	% %
SSgA STIF BofAML 3 Months US T-Bill	\$ 1.9	1.3% <i>1.2%</i>	4.1% 3.6%	1.5% <i>1.3%</i>	1.8% <i>1.6%</i>	% %
SCP AGGREGATE	\$ 108.3					

457 PROGRAM PERFORMANCE

Period Ended June 30, 2023

NET OF FEE PLAN PERFORMANCE RESULTS - 457

		set Value	Ougustan	1 V	2 V	F Voor	10 Year
CalPERS Target Income Fund SIP Income Policy	<u>(S</u> \$	<u>Million)</u> 155.1	Quarter 1.5% 1.5%	1-Year 4.8% 4.6%	3-Year 1.8% 1.8%	5-Year 3.7% 3.6%	10-Year 3.6% 3.5%
CalPERS Target 2020 Fund SIP 2020 Policy	\$	141.9	2.2% 2.2%	6.4% <i>6.3%</i>	3.8% 3.7%	4.6% 4.4%	4.5% 4.3%
CalPERS Target 2025 Fund SIP 2025 Policy	\$	200.4	3.1% 3.0%	8.6% 8.5%	5.5% 5.4%	5.4% 5.2%	5.4% 5.2%
CalPERS Target 2030 Fund SIP 2030 Policy	\$	205.6	3.8% <i>3.7%</i>	10.5% 10.3%	7.2% 7.2%	6.0% 5.9%	6.1% 5.9%
CalPERS Target 2035 Fund SIP 2035 Policy	\$	143.9	4.8% <i>4.7%</i>	12.9% 12.7%	9.1% 8.9%	6.8% 6.6%	6.9% 6.7%
CalPERS Target 2040 Fund SIP 2040 Policy	\$	137.3	5.5% 5.5%	15.0% 14.8%	10.5% 10.4%	7.4% 7.2%	7.6% 7.4%
CalPERS Target 2045 Fund SIP 2045 Policy	\$	84.2	5.6% 5.6%	15.4% 15.2%	10.7% 10.5%	7.6% 7.4%	7.9% <i>7.7%</i>
CalPERS Target 2050 Fund SIP 2050 Policy	\$	52.9	5.6% 5.6%	15.4% 15.2%	10.7% 10.5%	7.6% 7.4%	7.9% <i>7.7%</i>
CalPERS Target 2055 Fund SIP 2055 Policy	\$	20.1	5.6% 5.6%	15.4% 15.2%	10.7% 10.5%	7.6% 7.4%	% %
CalPERS Target 2060 Fund SIP 2060 Policy	\$	9.9	5.6% 5.6%	15.4% 15.2%	10.7% 10.5%	% %	% %
CalPERS Target 2065 Fund SIP 2065 Policy	\$	1.0	5.6% 5.6%	% %	% %	% %	% %
SSgA Russell All Cap Index SL Russell 3000	\$	671.6	8.4% 8.4%	18.9% 19.0%	14.0% 13.9%	11.4% 11.4%	% %
SSgA Global All Cap ex-US SL MSCI ACWI ex-US IMI (N)	\$	70.9	2.6% 2.4%	13.0% 12.5%	7.6% 7.3%	3.7% 3.4%	% %
SSgA US Bond Index SL Bloomberg US Aggregate Bond	\$	52.5	-0.8%	-1.0% -0.9%	-4.0% -4.0%	0.8%	% %
SSgA US Short Term Bond Bloomberg US Gov/Credit	\$	37.0	-0.4% -0.4%	0.5% <i>0.5%</i>	-0.9% -0.9%	1.1% <i>1.1%</i>	% %
SSgA Real Asset NL Real Assets Blended Index	\$	19.5	-1.9% -1.9%	-0.7% -0.7%	12.2% 12.3%	5.8% 5.7%	% %
SSgA STIF BofAML 3 Months US T-Bill	\$	120.7	1.3% 1.2%	4.1% 3.6%	1.5% <i>1.3%</i>	1.8% 1.6%	% %
457 AGGREGATE	\$	2,124.6					

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For more information, please contact us directly:

T +1 **310 451 3051**

Wilshire

1299 Ocean Avenue, Suite 700, Santa Monica, CA 90401

wilshire.com