



WILSHIRE ASSOCIATES

Wilshire Consulting



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 2020



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CAPITAL MARKET OVERVIEW

U.S. Equity Market

The U.S. stock market, represented by the Wilshire 5000 Total Market IndexSM, was up 21.94% for the second quarter of 2020. Since the beginning of January, equities do remain in the red holding a -3.30% return, but have now reclaimed the positive territory for the trailing 1-year period, finishing at 6.78%. All eleven major sectors were in positive territory while the best performing sector was Consumer Discretionary (+37.0%), followed closely by Energy (+32.6%) and Technology (+31.6%). Although parts of the country have begun to loosen Coronavirus-related restrictions, considerable uncertainty about 2020 economic growth prospects remain. In fact, more than a dozen states have paused or reversed their reopening plans. According to a report by the Federal Reserve Bank of Philadelphia, expectations for real GDP growth this year are approximately -5% with an unemployment rate remaining above 10%.

Given the importance of consumer spending to real economic growth, unemployment statistics are worth watching closely as the year continues. A surprising employment report in May speaks well for an eventual recovery. Additionally, unemployment claims are beginning to point towards a bottom and perhaps the beginning of a recovery, albeit off extremely weak levels. Other signals are not as encouraging. The ratio of employed persons to the overall population stands at 52.8%, down nearly 10%-points from the beginning of the year. Taken together, it seems that robust fiscal stimulus programs, targeting both households and businesses, are working well. However, fiscal support has not yet been renewed past this summer and may still prove to be necessary.

Fixed Income Market

The U.S. Treasury yield curve was little changed during the quarter after a dramatic drop in Q1. Although the entire curve is below 1.50% it also is steeper than it has been in two years. The 10-year Treasury yield ended the quarter at 0.66%, down just 4 basis points from March. The Federal Open Market Committee met twice during the quarter, as scheduled, with no change to their overnight rate, which they expect will be near zero until at least 2022. Chair Jerome Powell attempted to temper expectations by stating that, "The path forward for the economy is extraordinarily uncertain." Credit spreads tightened significantly during the quarter, as evidenced by the double-digit return within the high yield market.

Non-U.S. Market

Equity markets outside of the U.S. also enjoyed a strong rebound during the quarter, although they did trail the U.S. market. Economic releases showed that the U.K. suffered its worst contraction in more than 40 years as real GDP shrank -2.2% in the first quarter. Employment data shows that nearly a third of the U.K.'s workforce is on furlough with the government supporting a majority of those employees' wages. Although the 19-nation euro region is expected to shrink more than -8% this year, there are some early signs of a recovery. Survey data shows that economic sentiment is returning, although is depressed versus earlier this year. Inflation statistics in Germany indicate that service providers have been able to successfully raise prices to counter Coronavirus-related restrictions. China's economic recovery continued during the second quarter due, in part, to government support policies and the reopening of some overseas markets. The official Purchasing

Manager's Index for China indicates that manufacturing in the country expanded for the fourth straight month after a dramatic slowdown.

Real Assets & Commodities Markets

Real estate securities were up during the second quarter in both the U.S. and abroad. The rebound was broad-based, including sectors that have struggled such as regional shopping malls and shopping centers. Commodity results were positive for the quarter as crude oil jumped 91.7% to \$39.27 per barrel. Natural gas prices were up 6.8%, ending the quarter at \$1.75 per million BTUs. Midstream Energy was among the best performing market segments, up 32.6% for the quarter. Finally, gold prices were up 13.7%, the seventh straight positive quarter, and finished at approximately \$1,801 per troy ounce.

SUMMARY OF INDEX RETURNS – JUNE 30, 2020

	Quarter	One Year	Three Years	Five Years	Ten Years
Domestic Equity					
Standard & Poor's 500	20.54%	7.50%	10.73%	10.73%	13.99%
Wilshire 5000	21.94	6.78	10.13	10.27	13.74
Wilshire 4500	30.36	0.72	6.19	7.18	12.51
Wilshire Large Cap	21.64	8.22	10.96	10.90	14.03
Wilshire Small Cap	25.63	-7.70	1.91	4.26	11.01
Wilshire Micro Cap	28.97	-12.13	-2.39	0.99	8.54
Domestic Equity					
Wilshire Large Value	15.56%	-1.46%	6.06%	7.88%	11.85%
Wilshire Large Growth	27.30	18.31	15.89	13.74	16.18
Wilshire Mid Value	17.50	-17.81	-1.64	2.85	9.75
Wilshire Mid Growth	31.82	4.65	9.22	7.83	13.30
Wilshire Small Value	21.27	-14.88	-2.67	2.15	9.30
Wilshire Small Growth	29.92	0.00	6.64	6.22	12.63
International Equity					
MSCI All World ex U.S. (USD)	16.12%	-4.80%	1.13%	2.26%	4.97%
MSCI EAFE	14.88	-5.13	0.81	2.05	5.73
MSCI Europe	15.26	-6.78	-0.01	1.46	5.65
MSCI Pacific	14.16	-2.39	2.31	3.23	5.98
MSCI Emerging Markets Index	18.08	-3.39	1.90	2.86	3.27
Domestic Fixed Income					
Barclays Aggregate Bond	2.90%	8.74%	5.32%	4.30%	3.83%
Barclays Credit	0.48	10.45	5.57	4.07	3.41
Barclays Mortgage	0.67	5.67	3.97	3.23	3.06
Barclays Treasury	8.22	9.07	6.14	5.54	5.24
Citigroup High Yield Cash Pay	9.54	-1.18	2.87	4.28	6.28
Barclays US TIPS	4.24	8.28	5.05	3.75	3.52
91-Day Treasury Bill	0.02	1.63	1.77	1.19	0.64
Currency*					
Euro vs. \$	2.36%	-1.37%	-0.51%	0.16%	-0.86%
Yen vs. \$	0.06	-0.13	1.36	2.55	-1.96
Pound vs. \$	-0.35	-2.92	-1.65	-4.71	-1.89
Real Estate					
Wilshire REIT Index	10.56%	-12.30%	0.23%	3.98%	9.22%
Wilshire RESI	10.57	-12.39	0.22	4.20	9.34

SUMMARY REVIEW OF PLANS PERIOD ENDED JUNE 30, 2020

	Asset Value					
	(\$Million)	Quarter	1-Year	3-Year	5-Year	10-Year
CalPERS Total Fund	\$ 389,037.1	9.1%	4.7%	6.6%	6.3%	8.5%
Total Fund Policy Benchmark ¹		8.6%	4.3%	6.7%	6.4%	8.4%
Actuarial Rate		1.8%	7.3%	7.3%	7.4%	7.5%
Affiliate Funds:						
Judges I	\$ 45.6	0.1%	1.6%	1.8%	1.3%	0.7%
91-Day Treasury Bill		0.0%	1.6%	1.8%	1.2%	0.6%
Judges II	\$ 1,867.0	13.0%	4.5%	6.2%	6.0%	8.2%
Weighted Policy Benchmark		12.8%	4.1%	6.0%	5.7%	8.0%
Legislators' Retirement System	\$ 114.3	8.4%	6.4%	6.2%	5.4%	6.7%
Weighted Policy Benchmark		8.2%	6.1%	6.0%	5.2%	6.5%
Long-Term Care ("LTC")	\$ 4,910.4	8.0%	4.7%	5.3%	4.6%	5.8%
Weighted Policy Benchmark		7.4%	5.1%	5.4%	4.6%	5.7%
CERBT Strategy 1	\$ 9,565.5	14.1%	3.5%	5.9%	5.8%	8.2%
CERBT Strategy 1 Policy Benchmark		14.0%	3.2%	5.6%	5.4%	7.9%
CERBT Strategy 2	\$ 1,434.1	11.1%	5.4%	6.2%	5.8%	-.%
CERBT Strategy 2 Policy Benchmark		11.0%	5.2%	6.0%	5.4%	-.%
CERBT Strategy 3	\$ 671.7	8.4%	6.3%	6.1%	5.3%	-.%
CERBT Strategy 3 Policy Benchmark		8.2%	6.1%	5.9%	5.0%	-.%
CEPPT Strategy 1	\$ 8.8	10.4%	-.%	-.%	-.%	-.%
CEPPT Strategy 1 Policy Benchmark		10.3%	-.%	-.%	-.%	-.%
CEPPT Strategy 2	\$ 2.3	5.9%	-.%	-.%	-.%	-.%
CEPPT Strategy 2 Policy Benchmark		5.9%	-.%	-.%	-.%	-.%
Health Care Fund	\$ 520.4	2.9%	8.8%	5.4%	4.3%	4.2%
Barclays U.S. Aggregate		2.9%	8.7%	5.3%	4.3%	3.8%
Supplemental Contribution Plan	\$ 107.2	NM	NM	NM	NM	NM
CalPERS Custom SCP Plan Index		NM	NM	NM	NM	NM
457 Program	\$ 1,723.1	NM	NM	NM	NM	NM
CalPERS Custom 457 Plan Index		NM	NM	NM	NM	NM

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

TOTAL FUND PERIOD ENDED JUNE 30, 2020

TOTAL FUND PERFORMANCE

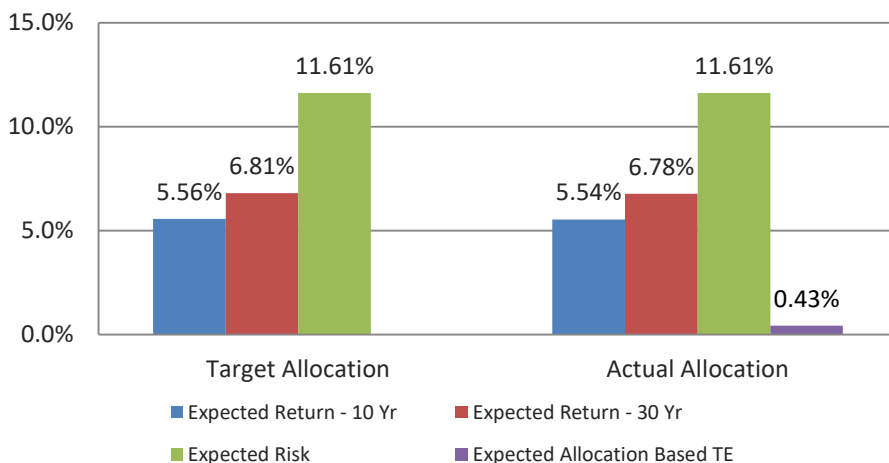
	Asset Value						VaR (\$Billion)	5-Year Ratios	
	(\$Billion)	Quarter	1-Year	3-Year	5-Year	10-Year		Sharpe	Info
TOTAL FUND	\$ 389.0	9.1%	4.7%	6.6%	6.3%	8.5%	\$ 52.7	0.7	-0.1
<i>Total Fund Policy Benchmark</i>		8.6%	4.3%	6.7%	6.4%	8.4%		0.7	0.0
<i>Actuarial Rate</i>		1.8%	7.3%	7.3%	7.4%	7.5%			
PUBLIC EQUITY	\$ 206.2	18.0%	0.6%	6.0%	6.6%	9.7%	\$ 40.7	0.4	0.1
<i>Public Equity Policy Benchmark</i>		17.8%	0.4%	6.1%	6.6%	9.5%		0.4	0.0
Public Equity - Cap Weighted	\$ 148.3	20.4%	1.8%	6.1%	6.6%	9.7%	\$ 32.2	0.4	0.0
<i>FTSE Global All Cap Custom Index Net</i>		20.2%	1.7%	6.2%	6.6%	9.5%		0.4	0.0
Public Equity - Factor Weighted	\$ 57.9	12.0%	-2.6%	-.%	-.%	-.%	\$ 9.2	N/A	N/A
<i>MSCI ACWI Select Factor Weighted Index</i>		11.9%	-2.7%	-.%	-.%	-.%		N/A	N/A
PRIVATE EQUITY	\$ 24.6	-10.2%	-5.1%	5.9%	6.6%	10.4%	\$ 10.0	1.0	0.1
<i>Private Equity Policy Benchmark</i>		-22.1%	-11.0%	3.2%	5.6%	10.2%		0.3	0.0
INCOME	\$ 109.9	4.5%	12.5%	7.4%	6.3%	5.9%	\$ 11.6	1.0	1.1
<i>Income Policy Benchmark</i>		4.2%	12.3%	7.1%	5.9%	5.2%		0.9	0.0
Spread	\$ 64.0	6.1%	8.8%	-.%	-.%	-.%	\$ 6.1	N/A	N/A
<i>BBG Barc Custom Global Long Spread Index</i>		5.9%	7.9%	-.%	-.%	-.%		N/A	N/A
Treasury	\$ 34.5	0.5%	20.0%	-.%	-.%	-.%	\$ 5.3	N/A	N/A
<i>CalPERS Custom Treasury Benchmark</i>		0.5%	20.6%	-.%	-.%	-.%		N/A	N/A
High Yield	\$ 11.3	8.2%	-1.1%	-.%	-.%	-.%	\$ 1.4	N/A	N/A
<i>BBG Barclays US High Yield BB/B Liquid Index</i>		8.8%	-0.9%	-.%	-.%	-.%		N/A	N/A
REAL ASSETS	\$ 44.1	-1.6%	4.6%	5.4%	5.9%	8.8%	\$ 6.3	1.8	-0.5
<i>Real Assets Policy Benchmark</i>		0.8%	3.9%	5.7%	7.0%	9.6%		1.9	0.0
LIQUIDITY	\$ 3.3	0.1%	1.6%	2.0%	1.4%	1.3%	\$ 0.04	0.8	4.4
<i>Liquidity Policy Benchmark</i>		0.0%	1.3%	1.6%	1.1%	1.3%		-0.5	0.0
OPPORTUNISTIC STRATEGIES	\$ 0.1	-.%	-.%	-.%	-.%	-.%		N/A	N/A
<i>Custom Opp. Strategies Benchmark</i>		-.%	-.%	-.%	-.%	-.%		N/A	N/A
TRUST LEVEL PORTFOLIO MGMT *	\$ 0.7	NM	NM	NM	-.%	-.%	\$ 0.1	N/A	N/A
<i>CalPERS Reference Portfolio Benchmark</i>		14.5%	3.7%	6.2%	-.%	-.%		N/A	N/A
OTHER PERF **	\$ 0.2	NM	NM	NM	NM	NM		N/A	N/A
TERMINATED AGENCY POOL	\$ 0.2	3.9%	16.1%	8.3%	6.5%	-.%		N/A	N/A
TOTAL FUND PLUS TAP	\$ 389.2	9.1%	4.7%	6.6%	6.3%	8.5%		N/A	N/A

* More detail of the TLPM return can be found in the program section, page 20.

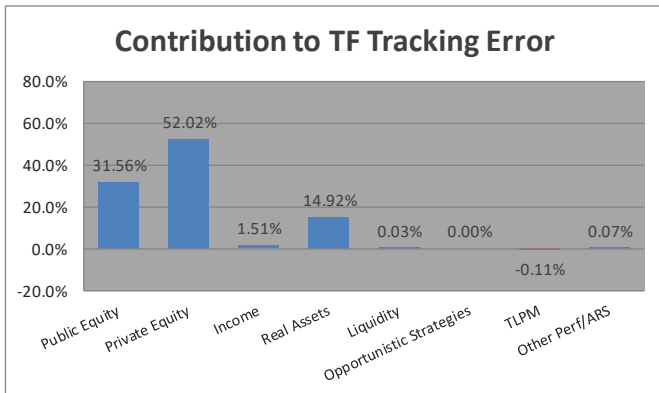
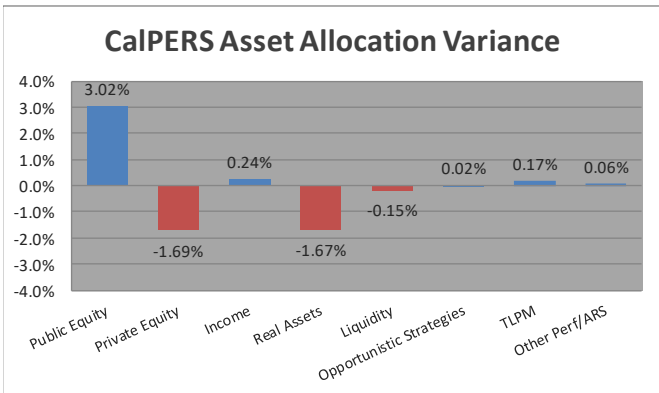
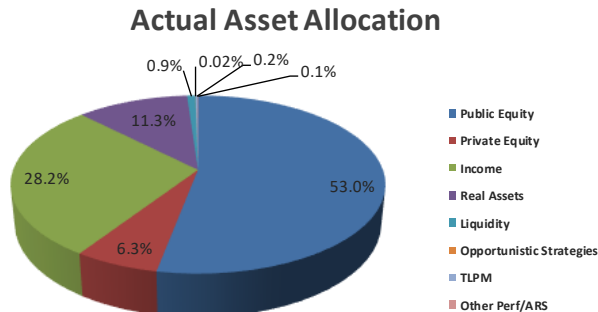
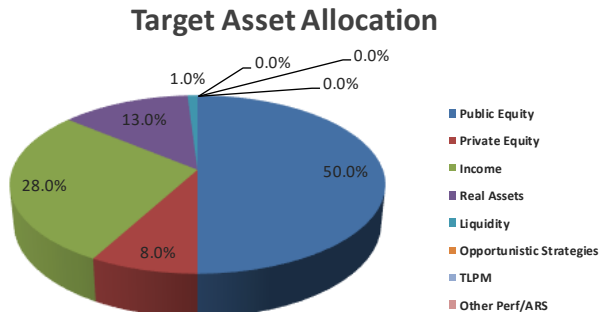
** More detail of the OTHER PERF return can be found in the program section, page 21.

TOTAL FUND PERIOD ENDED JUNE 30, 2020

EXPECTED RETURN AND RISK²



TOTAL FUND ASSET ALLOCATION BASED TRACKING ERROR

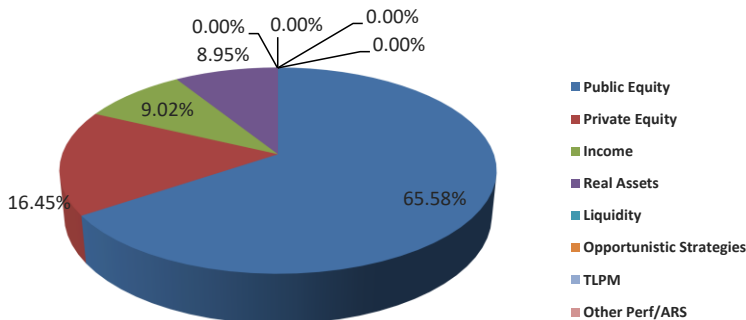


² Return and risk values expressed in this page are derived based on Wilshire Consulting Capital Market Assumptions, which are forward looking in nature.

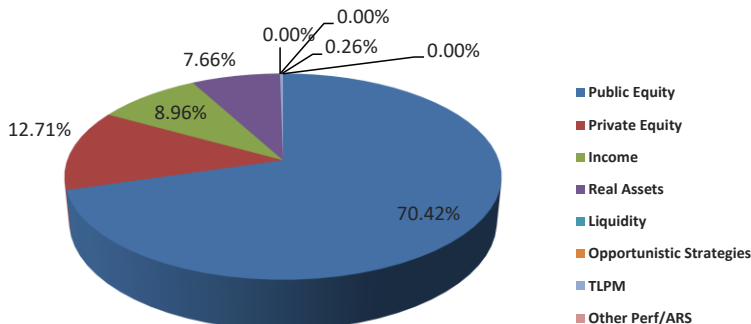
TOTAL FUND PERIOD ENDED JUNE 30, 2020

CONTRIBUTION TO TOTAL RISK³

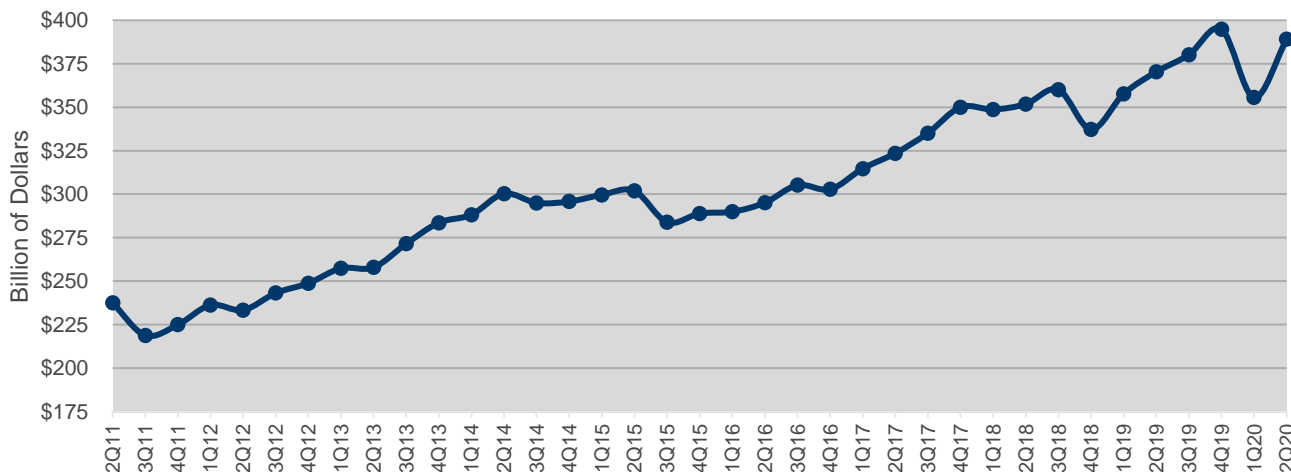
Contribution to Total Risk - Target Allocation



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.

**TOTAL FUND
PERIOD ENDED JUNE 30, 2020**

TOTAL FUND ATTRIBUTION – QUARTER									
Asset Class	Actual (%)		Benchmark (%)		Difference (%)		Total Fund Return Contribution (%)		
	Weight *	Return	Weight *	Return	Weight	Return	Actual Allocation	Active Management	Total
Public Equity	50.91	17.95	52.22	17.75	-1.31	0.19	-0.08	0.09	0.00
Public Equity - Cap Weighted	36.44	20.43	36.99	20.24	-0.56	0.19	-0.05	0.07	0.02
Public Equity - Factor Weighted	14.47	12.02	15.23	11.87	-0.75	0.15	-0.03	0.02	-0.01
Private Equity	7.16	-10.18	7.32	-22.44	-0.15	12.27	0.13	0.75	0.88
Income	28.89	4.49	27.50	4.23	1.39	0.26	-0.01	0.02	0.01
Treasury	9.37	0.52	9.81	0.47	-0.45	0.05	0.04	0.00	0.04
Spread	16.63	6.09	14.70	5.88	1.93	0.21	-0.05	0.04	-0.01
High Yield	2.90	8.23	2.99	8.79	-0.09	-0.55	0.00	-0.02	-0.02
Real Assets	12.02	-1.59	12.01	0.78	0.01	-2.37	0.00	-0.30	-0.30
Inflation	0.00	0.00	0.00	7.25	0.00	-7.25	0.00	0.00	0.00
Liquidity	0.84	0.07	0.96	0.02	-0.11	0.06	0.00	0.00	0.00
Opportunistic Strategies	0.01	0.96	0.00	1.13	0.01	-0.17	0.00	0.00	0.00
TLPM	0.12	NM**	0.00	14.47	0.12	NM**	0.01	-0.02	-0.01
Other PERF/ARS	0.05	NM***	0.00	0.00	0.05	NM***	0.00	0.02	0.01
Monthly Linked Return	100.00	9.16	100.00	8.58		0.58	0.04	0.56	0.60
Residual		-0.03		0.00		-0.02			-0.04
Total		9.13		8.58		0.56			0.56

* Average period weight displayed.

** More detail of the TLPM return can be found in the program section, page 20.

*** More detail of the OTHER PERF return can be found in the program section, page 21.

**TOTAL FUND
PERIOD ENDED JUNE 30, 2020**

TOTAL FUND ATTRIBUTION – CALENDAR YEAR-TO-DATE

Asset Class	Actual (%)		Benchmark (%)		Difference (%)		Total Fund Return Contribution (%)		
	Weight *	Return	Weight *	Return	Weight	Return	Actual Allocation	Active Management	Total
Public Equity	50.79	-6.95	51.67	-7.23	-0.89	0.28	-0.02	0.13	0.10
Public Equity - Cap Weighted	36.16	-6.49	36.66	-6.75	-0.50	0.26	0.01	0.10	0.10
Public Equity - Factor Weighted	14.62	-8.26	15.01	-8.44	-0.39	0.18	-0.03	0.03	0.00
Private Equity	6.93	-6.54	6.99	-15.39	-0.06	8.85	0.13	0.26	0.40
Income	29.39	8.81	28.80	8.83	0.60	-0.02	-0.04	-0.01	-0.05
Treasury	10.49	17.05	10.76	17.77	-0.27	-0.73	0.00	-0.09	-0.09
Spread	15.96	4.75	15.04	4.17	0.92	0.58	-0.05	0.09	0.04
High Yield	2.94	-4.97	2.99	-4.73	-0.05	-0.24	0.00	-0.01	-0.01
Real Assets	11.65	1.16	11.56	2.04	0.09	-0.87	0.03	-0.10	-0.07
Inflation	0.00	0.00	0.00	-6.42	0.00	6.42	0.00	0.00	0.00
Liquidity	0.91	0.44	0.98	0.37	-0.07	0.06	0.00	0.00	0.00
Opportunistic Strategies	0.00	0.96	0.00	1.13	0.00	-0.17	0.00	0.00	0.00
TLPM	0.29	NM**	0.00	-3.22	0.29	NM**	-0.01	-0.01	-0.02
Other PERF/ARS	0.05	NM***	0.00	0.00	0.05	NM***	0.00	0.01	0.01
Monthly Linked Return	100.00	-0.95	100.00	-1.26		0.31	0.09	0.29	0.38
Residual		0.06		0.00		0.07			0.00
Total		-0.88		-1.26		0.38			0.38

* Average period weight displayed.

** More detail of the TLPM return can be found in the program section, page 20.

*** More detail of the OTHER PERF return can be found in the program section, page 21.

**TOTAL FUND
PERIOD ENDED JUNE 30, 2020**

TOTAL FUND ATTRIBUTION – FISCAL YEAR-TO-DATE									
Asset Class	Actual (%)		Benchmark (%)		Difference (%)		Total Fund Return Contribution (%)		
	Weight *	Return	Weight *	Return	Weight	Return	Actual Allocation	Active Management	Total
Public Equity	50.98	0.58	50.84	0.37	0.14	0.21	0.04	0.08	0.11
Public Equity - Cap Weighted	36.26	1.80	35.83	1.66	0.43	0.15	0.07	0.05	0.12
Public Equity - Factor Weighted	14.72	-2.57	15.01	-2.74	-0.29	0.17	-0.03	0.03	-0.01
Private Equity	6.93	-5.07	7.49	-11.65	-0.57	6.58	0.16	0.05	0.20
Income	29.10	12.53	28.40	12.34	0.70	0.19	-0.11	0.06	-0.05
Treasury	10.54	19.97	10.38	20.59	0.16	-0.61	-0.05	-0.08	-0.13
Spread	15.54	8.84	15.02	7.85	0.51	0.99	-0.06	0.15	0.09
High Yield	3.02	-1.10	3.00	-0.87	0.03	-0.23	0.00	-0.01	-0.01
Real Assets	11.37	4.60	12.28	3.87	-0.91	0.73	0.11	0.08	0.19
Inflation	0.00	0.00	0.00	-4.00	0.00	4.00	0.00	0.00	0.00
Liquidity	0.95	1.61	0.99	1.28	-0.04	0.33	0.00	0.00	0.01
Opportunistic Strategies	0.00	0.96	0.00	1.13	0.00	-0.17	0.00	0.00	0.00
TLPM	0.63	NM**	0.00	3.67	0.63	NM**	0.00	-0.07	-0.07
Other PERF/ARS	0.05	NM***	0.00	0.00	0.05	NM***	0.00	0.01	0.01
Monthly Linked Return	100.00	4.65	100.00	4.33			0.19	0.21	0.40
Residual		0.05		0.00		0.05			-0.03
Total		4.70		4.33		0.37			0.37

* Average period weight displayed.

** More detail of the TLPM return can be found in the program section, page 20.

*** More detail of the OTHER PERF return can be found in the program section, page 21.



**TOTAL FUND
PERIOD ENDED JUNE 30, 2020**

TOTAL FUND ATTRIBUTION – WILSHIRE COMMENT

The California Public Employees’ Retirement System (“CalPERS, the System”) generated a total fund return of 9.13% for the quarter ended June 30, 2020. CalPERS’ return can be attributed as follows:

8.58%	Strategic Policy Allocation
0.04%	Actual/Tactical Asset Allocation
0.57%	Active Management
<u>-0.05%</u>	Residual (Trading/Currency Hedging)
9.13%	Total Return

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 active management accounted for the lion’s share of positive contribution to the System’s relative outperformance during the second quarter of 2020, and among the major CalPERS asset classes the top honor belonged to Private Equity. Even though on its own the Private Equity program did not stand out this quarter, having lost -10.2% when most risk assets actually rose, in relative terms this represented a massive benchmark beat as it bettered the Private Equity policy by a +1,195 bps margin, which in turn translated into a +89 bps contribution to Total Fund out-performance. This helped more than offset the drag from Real Assets, which was the only major CalPERS asset class to meaningfully underperform in Q2 (by -237 bps against the Real Assets policy benchmark).

TOTAL FUND PERIOD ENDED JUNE 30, 2020

RELATIVE TO TOTAL FUND POLICY BENCHMARK

Public Equity: After crashing and bottoming out in late March, global equity markets roared back in the second quarter to post strong returns in April and May. Despite broad consensus that world economy has plunged into severe contraction and is facing unprecedented uphill climb with soaring job losses amid widespread trade/finance disruption, market sentiment quickly diverged from the challenging reality and rebounded higher on the back of record supporting stimulus. Although the pace of advance slowed notably in June amid signs of resurging COVID-19 cases in some parts of the world and concerns that economic fundamentals remain murky. Having said that, the 18.0% return by the CalPERS Public Equity asset class in the April-June stretch was still the highest quarterly gain in more than a decade, and helped lift its 1-year return back into the black (at 0.6%). This Q2 return easily topped the Total Fund Policy Benchmark and all other System's major asset classes, while allowing Public Equity's long-term performance history to maintain the lead as well.

Private Equity: Results of the CalPERS Private Equity asset class, which is reported on a lagged basis, was challenging this quarter with a -10.2% loss. Having largely turned out steady rate of gains that's averaged in the near-mid-single digit range over the past decade, the private equity program's double-digit fall in Q2 was the steepest pullback it has experienced since the Global Financial Crisis, and pulled the 1-year return deep into the red as well (at -5.1%). While both figures were well off Total Fund Policy Benchmark's pace and ranked dead last against other major CalPERS asset classes, they did fare much better than the program's own benchmark, which had a -22.1% return for Q2 and -11.0% return for the trailing 1-year period.

Income: Broadly speaking, results of the CalPERS Income asset class were positive during the 2nd Quarter. Following a massive selloff in March, bond prices rebounded sharply in April and rallied through June thanks primarily to the significant amount of liquidity injected by the Fed. Credit spreads recovered/tightened quickly as new bond-buying programs/liquidity-extending facilities helped extend liquidity to main street businesses and restored stability in the credit market. These stimulus measures powered a risk-on wave that drove bonds to a strong Q2 finish: the CalPERS Income asset class concluded on a favorable note by notching gains in all three months to reach a 4.5% total return. While this output did not match the Total Fund Policy Benchmark's 8.6% pace, coupled with Q1's 4.1% gain the Income asset class currently holds a 12.5% trailing 1-year return and has returned 6.3% over the past five years; both figures do show well in absolute and relative terms, and have contributed to the System's overall success.

Real Assets: The Real Assets asset class was a sizable detractor for the System from a relative perspective, for it recorded a negative Q2 finish of -1.6% that came in well behind the Total Fund Policy's 8.6% pace and against its own policy benchmark (0.8%). All of RA's components were in the red for the quarter, but it was the poor showing from the Infrastructure (-6.2%) and Forestland (-3.3%) portfolios that notably weighed down the asset class's relative results. But given Real Assets has been consistently churning out small rate of steady gains since late 2010, its 4.6% 1-yr return and 8.8% 10-yr return do still fare well against Total Fund Policy.

Liquidity: With the Fed slashing interest rates to nearly zero as part of the effort to prop up capital markets, short-term rates also plummeted to record low levels. Amid this backdrop the Liquidity asset class, which is solely comprised of short-term investment funds, also saw its return dip, to 0.1% at the end of Q2. Liquidity's long-term track record does remain intact and still tracks close to its own benchmark measure.

PUBLIC EQUITY PERIOD ENDED JUNE 30, 2020

PUBLIC EQUITY ASSET ALLOCATION: ACTUAL VS. TARGET WEIGHTS

Asset Class	Actual Asset Allocation	Target Asset Allocation	Difference
PUBLIC EQUITY	53.0%	50.0%	3.0%
Public Equity - Cap Weighted	38.1%	35.0%	3.1%
Public Equity - Factor Weighted	14.9%	15.0%	-0.1%

PUBLIC EQUITY SEGMENT PERFORMANCE

	Asset Value						VaR (\$Billion)	5-Year Ratios	
	(\$Billion)	Quarter	1-Year	3-Year	5-Year	10-Year		Sharpe	Info
PUBLIC EQUITY	\$ 206.2	18.0%	0.6%	6.0%	6.6%	9.7%	\$ 40.7	0.4	0.1
<i>Public Equity Policy Benchmark</i>		17.8%	0.4%	6.1%	6.6%	9.5%		0.4	0.0
Public Equity - Cap Weighted	\$ 148.3	20.4%	1.8%	6.1%	6.6%	9.7%	\$ 32.2	0.4	0.0
<i>FTSE Global All Cap Custom Index Net</i>		20.2%	1.7%	6.2%	6.6%	9.5%		0.4	0.0
Public Equity - Factor Weighted	\$ 57.9	12.0%	-2.6%	-.%	-.%	-.%	\$ 9.2	N/A	N/A
<i>MSCI ACWI Select Factor Weighted Index</i>		11.9%	-2.7%	-.%	-.%	-.%		N/A	N/A

PUBLIC EQUITY PORTFOLIOS PERFORMANCE

	Asset Value						VaR (\$Billion)	5-Year Ratios	
	(\$Billion)	Quarter	1-Year	3-Year	5-Year	10-Year		Sharpe	Info
Public Equity - Cap Weighted									
Global Equity Index-Oriented Strategy	\$ 136.8	20.4%	2.1%	6.6%	7.0%	10.1%		0.4	1.0
<i>GE Index-Oriented Strategy Benchmark</i>		20.2%	1.8%	6.5%	6.9%	9.9%		0.4	0.0
Global Equity Alternative Beta	\$ 1.0	17.8%	-0.6%	4.8%	5.6%	8.8%		0.3	-0.5
<i>GE Alternative Beta Custom Index</i>		20.2%	1.6%	6.0%	6.3%	8.9%		0.3	0.0
GE Public Equity - Traditional Active	\$ 5.4	22.0%	5.3%	6.7%	7.1%	9.9%		0.4	0.9
<i>GE Active ex-Alt Beta Custom Index</i>		19.5%	0.4%	5.4%	6.2%	9.0%		0.3	0.0
Other	\$ 5.0	NM	NM	NM	NM	NM		N/A	N/A
Public Equity - Factor Weighted (Min Volatility)									
Internal Factor Weighted Idx Oriented	\$ 57.9	12.0%	-2.6%	-.%	-.%	-.%		N/A	N/A
<i>MSCI ACWI Select Factor Weighted Index</i>		11.9%	-2.7%	-.%	-.%	-.%		N/A	N/A

PUBLIC EQUITY PERIOD ENDED JUNE 30, 2020

PERFORMANCE NOTES – PUBLIC EQUITY

Helped Performance:

Cap Weighted Public Equity – Index-Oriented Strategy: By far the largest component within Public Equity representing 66% of the assets, Index-Oriented Strategy also set the tone for the entire asset class's performance during Q2 of 2020: it rebounded strongly from the huge falls of February and March to go on a 3-month rallying streak, finishing with a market-like overall return of 20.4%. This output was not quite enough to fully claw back prior quarter's -22.3% loss, but did come in well ahead of the Public Equity Policy Benchmark's 17.8% Q2 pace. Having also previously captured the equity market's strong momentum at the end of 2019, this program currently holds a 2.1% 1-year return and has average annualized 10.1% over the past decade; both are solid figures that compare favorably to the asset class benchmark's gains for the same periods while tracking ahead of its own assigned benchmark measure.

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 was a standout for CalPERS during Q2's "risk on" environment where almost every major risk asset types posted solid gains. After suffering a historic -21.0% decline in Q1, this program countered with an almost equally historic rally of 22.0% in the second quarter that was only ever surpassed once in its 30+ year history (a 25.6% gain in Q2 2009), a result that towered over all other CalPERS Growth investments and the Public Equity Policy Benchmark. Q2's impressive rebound also easily powered the external Traditional Active equity program's trailing 1-year return past the asset class policy benchmark, 5.3% to 0.4%, while preserving the favorable longer-term lead as well.

Impeded Performance:

Factor Weighted Public Equity: True to form, this factor weighted portfolio participated in this quarter's risk assets rebound by doing it in a bit more subdued fashion compared to its traditional cap-weighted counterparts. With a 12.0% Q2 return, this portfolio ranked at the bottom of the leaderboard among Public Equity's investment programs and paled in comparison to the Public Equity Policy Benchmark's 17.8% return, though it did trend right in line with its tracking benchmark while serving as a worthy complement to the System's Growth investment lineup. The Factor Weighted Public Equity portfolio's -2.6% trailing 12-month return is cast in a similar light, coming in softer than the cap-weighted portfolios/Public Equity Policy Benchmark have generated for the same period but properly mirrored its own benchmark.

Cap Weighted Public Equity – Alternative Beta: This internally managed program performed admirably in Q2, generated a double-digit return of 17.8%. In relative terms this output was enough to just match the Public Equity Policy Benchmark, but was well short of the Alternative Beta Custom Index (by a -240 bps margin). For the trailing 1-year period the Alternative Beta program's result has been a net detractor to the Public Equity asset class as well, with a -0.6% return that trailed both the asset class benchmark and the program custom index.

PRIVATE EQUITY PERIOD ENDED JUNE 30, 2020

PRIVATE EQUITY ASSET ALLOCATION: ACTUAL VS. TARGET WEIGHTS

Asset Class	Actual Asset Allocation	Target Asset Allocation	Difference
PRIVATE EQUITY	6.6%	8.0%	-1.4%
Private Equity	6.3%	8.0%	-1.7%

PRIVATE EQUITY SEGMENT PERFORMANCE ⁴

	Asset Value						VaR (\$Billion)	5-Year Ratios	
	(\$Billion)	Quarter	1-Year	3-Year	5-Year	10-Year		Sharpe	Info
PRIVATE EQUITY	\$ 24.6	-10.2%	-5.1%	5.9%	6.6%	10.4%	\$ 10.0	1.0	0.1
<i>CalPERS Custom Private Equity Benchmark</i>		-22.1%	-11.0%	3.2%	5.6%	10.2%		0.3	0.0

PRIVATE EQUITY PORTFOLIOS PERFORMANCE

	Asset Value						VaR (\$Billion)	5-Year Ratios	
	(\$Billion)	Quarter	1-Year	3-Year	5-Year	10-Year		Sharpe	Info
Private Equity									
Private Equity Partnership Investments	\$ 24.5	-10.2%	-5.0%	5.9%	6.7%	10.5%		N/A	N/A
Private Equity Distribution Stock	\$ 0.0	-5.7%	-21.6%	13.2%	-5.8%	-10.8%		N/A	N/A

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

INCOME PERIOD ENDED JUNE 30, 2020

INCOME ASSET ALLOCATION: ACTUAL VS. TARGET WEIGHTS

Asset Class	Actual Asset Allocation	Target Asset Allocation	Difference
INCOME	28.2%	28.0%	0.2%
Spread	16.5%	15.0%	1.5%
Treasury	8.9%	10.0%	-1.1%
High Yield	2.9%	3.0%	-0.1%

INCOME SEGMENT PERFORMANCE

	Asset Value						VaR (\$Billion)	5-Year Ratios	
	(\$Billion)	Quarter	1-Year	3-Year	5-Year	10-Year		Sharpe	Info
INCOME	\$ 109.9	4.5%	12.5%	7.4%	6.3%	5.9%	\$ 11.6	1.0	1.1
<i>Income Policy Benchmark</i>		4.2%	12.3%	7.1%	5.9%	5.2%		0.9	0.0
Spread	\$ 64.0	6.1%	8.8%	-.%	-.%	-.%	\$ 6.1	N/A	N/A
<i>BBG Barc Custom Global Long Spread Index</i>		5.9%	7.9%	-.%	-.%	-.%		N/A	N/A
Treasury	\$ 34.5	0.5%	20.0%	-.%	-.%	-.%	\$ 5.3	N/A	N/A
<i>CalPERS Custom Treasury Benchmark</i>		0.5%	20.6%	-.%	-.%	-.%		N/A	N/A
High Yield	\$ 11.3	8.2%	-1.1%	-.%	-.%	-.%	\$ 1.4	N/A	N/A
<i>BBG Barclays US High Yield BB/B Liquid Index</i>		8.8%	-0.9%	-.%	-.%	-.%		N/A	N/A

INCOME PORTFOLIOS PERFORMANCE

	Asset Value						VaR (\$Billion)	5-Year Ratios	
	(\$Billion)	Quarter	1-Year	3-Year	5-Year	10-Year		Sharpe	Info
Spread									
Mortgages	\$ 31.0	1.0%	6.0%	4.5%	3.8%	4.2%		1.3	1.5
<i>CalPERS Custom BBG Barc LPF Mortgage</i>		0.9%	5.7%	4.0%	3.3%	3.2%		1.0	0.0
Investment Grade Corporate Bonds	\$ 26.9	11.9%	13.6%	-.%	-.%	-.%		N/A	N/A
<i>CalPERS Corp x Sov x Tobacco Benchmark</i>		11.5%	11.9%	-.%	-.%	-.%		N/A	N/A
Sovereign Bonds	\$ 3.1	8.4%	9.5%	8.1%	6.8%	6.7%		0.7	0.9
<i>CalPERS Sovereign Benchmark</i>		7.4%	8.5%	7.4%	6.2%	6.2%		0.6	0.0
High Yield (Cash Pay)	\$ 2.9	8.8%	-0.5%	3.2%	5.1%	7.0%		0.5	0.6
<i>CalPERS HY Cash Pay Benchmark</i>		9.8%	-1.6%	2.6%	4.2%	6.2%		0.4	0.0
Non-Core/Opportunistic	\$ 0.1	1.6%	3.7%	-.%	-.%	-.%		N/A	N/A
Treasury									
Internal US Treasury/Agency	\$ 34.5	0.5%	20.0%	9.9%	7.4%	6.2%		0.8	-0.2
<i>CalPERS Custom Treasury Benchmark</i>		0.5%	20.6%	10.1%	7.5%	6.3%		0.8	0.0
High Yield									
BB/B High Yield Fund of Funds	\$ 11.3	8.3%	-1.1%	-.%	-.%	-.%		N/A	N/A
<i>BBG Barclays US High Yield BB/B Liquid Index</i>		8.8%	-0.9%	-.%	-.%	-.%		N/A	N/A

INCOME PERIOD ENDED JUNE 30, 2020

PERFORMANCE NOTES – INCOME

Helped Performance:

Spread: Fixed income returns for the second quarter of 2020 largely reflected a sense of optimism, influenced by stabilizing employment data and powerful fiscal/monetary stimulus measures. With little changes in interest rates for the quarter, bond returns were mostly driven by spread compression and this was a boom to the CalPERS Spread program. For Q2, this overall program generated a record return of 6.1% that handily outpaced the Income Policy Benchmark (by +186 bps) and the program's own benchmark measure (by +21 bps). With a 1.5% overweight relative to allocation target, this exposure was also a net positive to the Income asset class's Q2 performance.

Within the program, all components rose thanks to rebounding risk appetite, although gains were heavily tilted towards the Investment Grade Corporate Credit portfolio (+11.9%) and the Sovereign Bonds portfolio (+8.4%). Unsurprisingly, performance from the Mortgages portfolio, the largest Spread component representing 48% of the assets, was less robust at just 1.0% as this segment confronts with issues such as elevated prepayment speeds and downward pressure on mortgage rates. Having gave up "only" -1.3% during the first quarter, the Spread program currently holds a 8.8% 1-yr return that sits comfortably ahead of its own benchmark (by +99 bps) but is behind the Income Policy Benchmark's 12.3% total return rate.

High Yield: The second quarter of 2020 saw one of the strongest risk rallies on record resulting from aggressive policy support, and high yield securities fully benefited from this risk-on tilt. The positive momentum in this segment was strong from the start of the quarter and mostly extended through early June, besting other major Income investments as the CalPERS High Yield program rallied a total of 8.2%. With a high quality focus, this return did trail the broad high yield market by a modest margin as improved risk appetite on news of re-openings and some less bad than feared corporate results led lower quality high yield spectrums to stronger gains. However, this output was easily atop the Income Policy Benchmark's return of 4.2%. Having previously lost -12.2% when prices collapsed during a massive flight-to-safety shift from Q1, the High Yield program currently holds the softest trailing 12-month return (at -1.1%) when compared to CalPERS Income asset class's Spread and Treasury programs, and is behind both the asset class benchmark (12.3%) and its own policy benchmark (-0.9%) as well.

Treasury: With most Treasury yields anchored to their historical lows following the Fed's pledge to keep the Fed Funds rate effectively at zero after two Q2 meetings, the Treasury program was the least productive member of the CalPERS Income asset class this quarter. It went from Q1's brightest star with a 16.5% pop to a barely-positive 0.5% total return for Q2 as yield-hunting investors relaxed their risk appetite and rotated back out to other areas. This performance was on par with the program's own benchmark measure, but did inevitably fall short of the Income Policy Benchmark's 4.2% rate. As the System was underweight in Treasury, this lower-than-policy exposure was a net plus to the Income asset class's Q2 result. For the trailing 1-year period, though, the Treasury program's output currently paints a complete opposite picture, with it amassing an asset class-leading 20.0% return that largely kept pace with its own benchmark (20.6%) and is well ahead of the Income Policy Benchmark (12.3%).

REAL ASSETS PERIOD ENDED JUNE 30, 2020

REAL ASSETS ASSET ALLOCATION: ACTUAL VS. TARGET WEIGHTS

Asset Class	Actual Asset Allocation	Target Asset Allocation	Difference
REAL ASSETS	11.3%	13.0%	-1.7%
Real Estate	9.6%	--	--
Forestland	0.3%	--	--
Infrastructure	1.4%	--	--

REAL ASSETS SEGMENT & PORTFOLIOS PERFORMANCE ⁵

	Asset Value						VaR (\$Billion)	5-Year Ratios	
	(\$Billion)	Quarter	1-Year	3-Year	5-Year	10-Year		Sharpe	Info
REAL ASSETS	\$ 44.1	-1.6%	4.6%	5.4%	5.9%	8.8%	\$ 6.3	1.8	-0.5
<i>Real Assets Policy Benchmark</i>		0.8%	3.9%	5.7%	7.0%	9.6%		1.9	0.0
Real Estate	\$ 37.4	-0.8%	5.5%	5.2%	6.1%	9.5%	\$ 5.3	1.8	-0.5
<i>CalPERS Custom Real Estate Benchmark</i>		0.8%	3.9%	5.8%	7.5%	10.5%		1.8	0.0
Infrastructure	\$ 5.4	-6.2%	0.2%	10.3%	10.0%	13.8%	\$ 0.8	1.4	0.7
<i>CalPERS Custom Infrastructure Benchmark</i>		0.8%	3.9%	5.6%	5.6%	5.9%		2.8	0.0
Forestland	\$ 1.3	-3.3%	-0.1%	-3.1%	-3.7%	-2.4%	\$ 0.2	-0.7	-1.1
<i>CalPERS Custom Forestland Benchmark</i>		0.8%	3.9%	4.7%	4.1%	5.2%		1.5	0.0

PERFORMANCE NOTES – REAL ASSETS

Impeded Performance:

Real Estate: Currently representing 85% of the Real Assets asset class, the Real Estate program was a performance drag in Q2, producing a negative net return of -0.8% amid the challenging macro backdrop for private real estate (as some of the unique COVID-19 containment policy measures created severe disruptions, adversely impacting RE incomes/valuations). This represented a -161 underperformance relative to the Real Assets Policy Benchmark. Real Estate's 5.5% 1-year return currently remains above par, and its steady long-term track record does continue to represent solid return for the asset class as well.

Infrastructure: The Infrastructure portfolio was the laggard in Real Assets during the second quarter, finishing the period down -6.2% that was among the steepest decline this program has ever incurred, second only to the -10.8% drop it recorded back in Q1 2009. Both this quarterly return and the 0.2% 1-year return trailed the Real Assets Policy Benchmark by a wide margin.

Forestland: Real Assets' smallest component also finished Q2 in the red, losing -3.3% that dragged its trailing 1-year return to just below the flat line; these measures trailed the Real Assets Policy Benchmark. Coupled with drag from the sale of a legacy timber investment that represented a markdown of portfolio value at the beginning of Q3 2018, Forestland's trailing 3- and 5-year returns currently also stand in the red at -3.1% and -3.7% respectively; both figures underperformed the Real Assets Policy Benchmark as well.

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

LIQUIDITY PERIOD ENDED JUNE 30, 2020

LIQUIDITY ASSET ALLOCATION: ACTUAL VS. TARGET WEIGHTS

Asset Class	Actual Asset Allocation	Target Asset Allocation	Difference
LIQUIDITY	0.9%	1.0%	-0.1%
Internal Short Term Cash Portfolio	0.9%	1.0%	-0.1%

LIQUIDITY SEGMENT & PORTFOLIO PERFORMANCE

	Asset Value							VaR (\$Billion)	5-Year Ratios	
	(\$Billion)	Quarter	1-Year	3-Year	5-Year	10-Year	Sharpe		Info	
LIQUIDITY	\$ 3.3	0.1%	1.6%	2.0%	1.4%	1.3%	\$ 0.04	0.8	4.4	
<i>Liquidity Policy Benchmark</i>		0.0%	1.3%	1.6%	1.1%	1.3%		-0.5	0.0	
Internal Short Term Cash Portfolio	\$ 3.3	0.1%	1.6%	2.0%	1.4%	0.8%	\$ 0.04	0.8	4.4	
<i>CalPERS Short Term Benchmark</i>		0.0%	1.3%	1.6%	1.1%	0.6%		-0.5	0.0	

OPPORTUNISTIC STRATEGIES PERIOD ENDED JUNE 30, 2020

OPPORTUNISTIC STRATEGIES ASSET ALLOCATION: ACTUAL VS. TARGET WEIGHTS

Asset Class/Program	Actual Asset Allocation	Target Asset Allocation	Difference
OPPORTUNISTIC STRATEGIES	0.0%	0.0%	0.02%

OPPORTUNISTIC STRATEGIES SEGMENT & PORTFOLIO PERFORMANCE

	Asset Value							VaR (\$Billion)	5-Year Ratios	
	(\$Billion)	Quarter	1-Year	3-Year	5-Year	10-Year	Sharpe		Info	
OPPORTUNISTIC STRATEGIES	\$ 0.1	-.%	-.%	-.%	-.%	-.%	\$ -	N/A	N/A	
<i>Custom Opp. Strategies Benchmark</i>		-.%	-.%	-.%	-.%	-.%		N/A	N/A	

TRUST LEVEL PORTFOLIO MANAGEMENT PERIOD ENDED JUNE 30, 2020

TLPM ASSET ALLOCATION: ACTUAL VS. TARGET WEIGHTS

Asset Class	Actual Asset Allocation	Target Asset Allocation	Difference
TRUST LEVEL PORTFOLIO MANAGEMENT	0.2%	0.0%	0.2%
External Multi-Asset Class	0.1%	--	--
TLPM Overlay	0.1%	--	--
TLPM Transition	0.0%	--	--

TLPM SEGMENT & PORTFOLIOS PERFORMANCE

	Asset Value						VaR	5-Year Ratios	
	(\$Billion)	Quarter	1-Year	3-Year	5-Year	10-Year		(\$Billion)	Sharpe
TRUST LEVEL PORTFOLIO MGMT	\$ 0.7	-1.3%	2.3%	2.3%	--%	--%	\$ 0.1	N/A	N/A
<i>CalPERS Reference Portfolio Benchmark</i>		14.5%	3.7%	6.2%	--%	--%		N/A	N/A
External Multi-Asset Class	\$ 0.4	-2.0%	-19.5%	-4.9%	-1.9%	--%		N/A	N/A
<i>CalPERS Reference Portfolio Benchmark</i>		14.5%	3.7%	6.2%	6.1%	--%		N/A	N/A
TLPM Overlay	\$ 0.3	--%	--%	--%	--%	--%		N/A	N/A
<i>CalPERS Reference Portfolio Benchmark</i>		--%	--%	--%	--%	--%		N/A	N/A
TLPM Transition	\$ 0.0	--%	--%	--%	--%	--%		N/A	N/A



OTHER PERF
PERIOD ENDED JUNE 30, 2020

OTHER PERF ASSET ALLOCATION: ACTUAL VS. TARGET WEIGHTS

Asset Class	Actual Asset Allocation	Target Asset Allocation	Difference
OTHER PERF	0.1%	0.0%	0.1%
Absolute Return Strategies	0.1%	--	--

OTHER PERF SEGMENT & PORTFOLIO PERFORMANCE

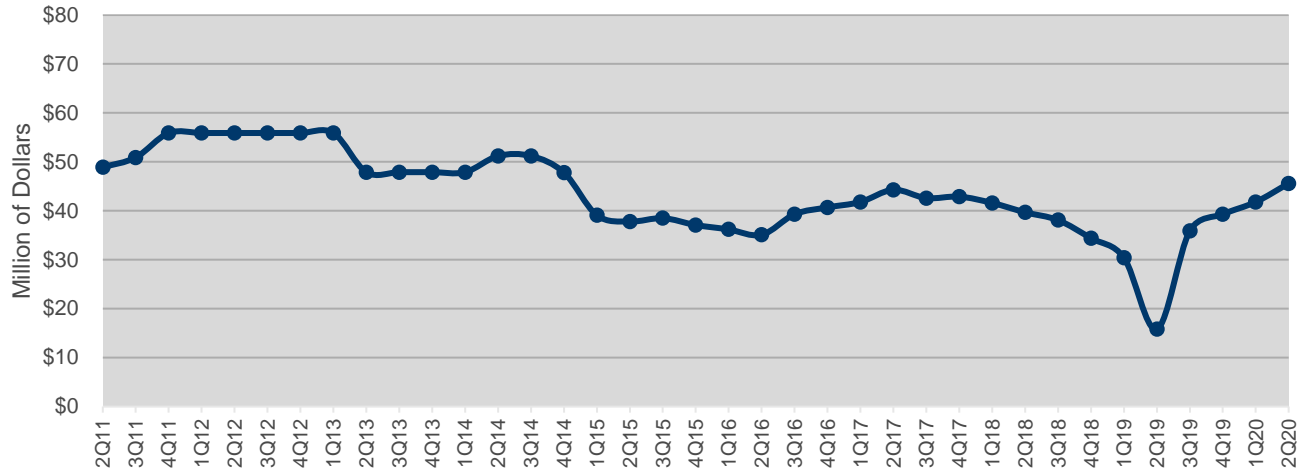
	Asset Value						VaR (\$Billion)	5-Year Ratios	
	(\$Billion)	Quarter	1-Year	3-Year	5-Year	10-Year		Sharpe	Info
OTHER PERF	\$ 0.2	NM	NM	NM	NM	NM	\$ -	N/A	N/A
Absolute Return Strategies	\$ 0.2	48.9%	51.0%	7.9%	3.9%	4.5%		0.1	-0.1
<i>Total ARS Program Blended Benchmark</i>		1.2%	8.0%	7.4%	6.6%	6.0%		8.9	0.0

AFFILIATE FUND INFORMATION

JUDGES RETIREMENT SYSTEM I FUND

JUDGES I PERFORMANCE PERIOD ENDED JUNE 30, 2020

GROWTH IN ASSETS



NET OF FEE PLAN PERFORMANCE RESULTS – JUDGES I ⁶

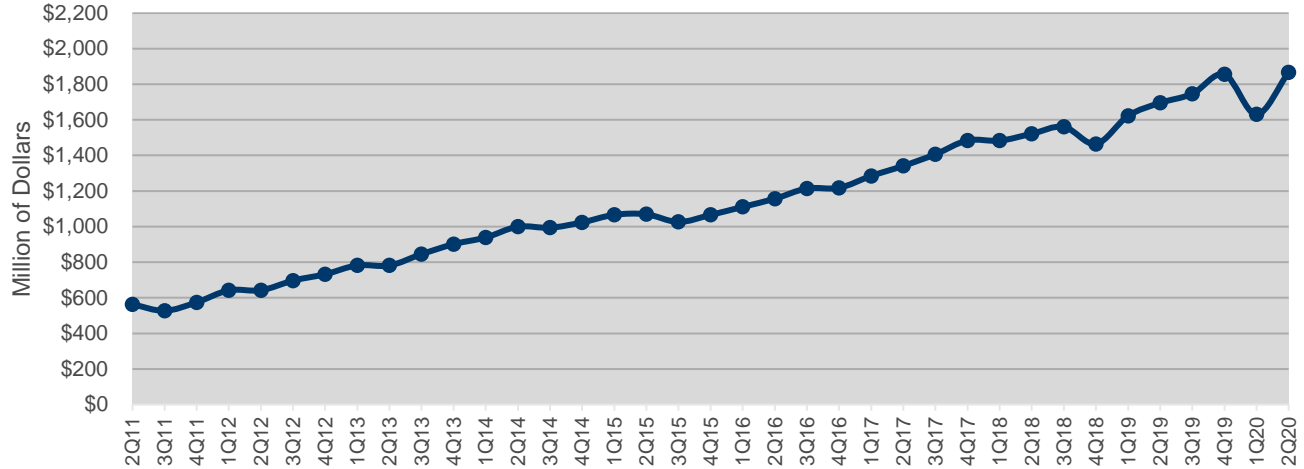
	Asset Value					
	(\$Million)	Quarter	1-Year	3-Year	5-Year	10-Year
Judges Retirement I Fund	\$ 45.6	0.1%	1.6%	1.8%	1.3%	0.7%
<i>91-Day Treasury Bill</i>		<i>0.0%</i>	<i>1.6%</i>	<i>1.8%</i>	<i>1.2%</i>	<i>0.6%</i>
Judges I Programs:						
Judges I Internal Short-Term	\$ 45.6	0.1%	1.6%	1.8%	1.3%	0.7%
<i>91-Day Treasury Bill</i>		<i>0.0%</i>	<i>1.6%</i>	<i>1.8%</i>	<i>1.2%</i>	<i>0.6%</i>

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, 2020

GROWTH IN ASSETS



NET OF FEE PLAN PERFORMANCE RESULTS – JUDGES II ⁷

	Asset Value					
	(\$Million)	Quarter	1-Year	3-Year	5-Year	10-Year
Judges Retirement II Fund	\$ 1,867.0	13.0%	4.5%	6.2%	6.0%	8.2%
<i>Weighted Policy Benchmark</i>		12.8%	4.1%	6.0%	5.7%	8.0%
Judges II Programs:						
JRS II Global Equity	\$ 1,031.1	20.0%	1.6%	6.1%	6.6%	9.7%
<i>Global Equity Benchmark</i>		19.8%	1.2%	5.8%	6.4%	9.6%
JRS II US Fixed Income	\$ 549.0	4.0%	13.2%	7.7%	6.6%	6.3%
<i>Custom Benchmark</i>		3.7%	13.1%	7.5%	6.2%	5.6%
JRS II TIPS	\$ 86.2	4.2%	8.3%	5.1%	3.8%	--%
<i>Bloomberg Barclays U.S. TIPS Index</i>		4.2%	8.3%	5.1%	3.8%	--%
JRS II REITs	\$ 145.7	9.8%	-15.9%	-0.8%	2.2%	7.1%
<i>Custom Benchmark</i>		10.1%	-16.2%	-1.2%	1.9%	7.0%
JRS II Commodities	\$ 54.8	9.2%	-34.7%	-9.0%	-12.5%	--%
<i>GSCI Total Return</i>		10.5%	-33.9%	-8.7%	-12.5%	--%
JRS II Cash/Short-Term	\$ 0.07	NM	NM	NM	NM	NM
<i>91-Day T-Bill</i>		0.0%	1.6%	1.8%	1.2%	0.6%

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 Barclays Long Liability Index. Barclays 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, 2020

JUDGES II ASSET ALLOCATION: ACTUAL VS. TARGET WEIGHTS

Asset Class	Actual Asset Allocation	Target Asset Allocation	Difference
JUDGES II TOTAL FUND	100.0%	100.0%	0.0%
Global Equity	55.2%	52.0%	3.2%
US Fixed Income	29.4%	32.0%	-2.6%
TIPS	4.6%	5.0%	-0.4%
REITs	7.8%	8.0%	-0.2%
Commodities	2.9%	3.0%	-0.1%
Cash/Short-Term	0.0%	0.0%	0.0%

PERFORMANCE NOTES – JUDGES II

Under the backdrop lined by optimistic assumptions that global growth would soon return to positive following economic re-starts and swift government support, Judges II (“JRS II, the Plan”) finished Q2 sharply higher, posting a total return of 13.0% with all of its investment programs registering solid gains. In relative terms this also compared favorably to the Plan’s weighted policy benchmark by +20 bps, mainly thanks to an overweight in the strong-performing domestic equity segment. Q2’s double-digit return capped off an impressive comeback that almost fully reversed prior quarter’s -13.2% loss, bringing the trailing 1-year plan return to 4.5% (vs. 4.1% policy). There are also no concerns with JRS II’s performance over longer-term horizon, as its 6.2% 3-year gain and all other annualized returns shown continue to fare well against the weighted policy benchmark.

At the end of Q2, Judges II’s asset allocation showed an overweight in global equity, with underweight in U.S. fixed income, TIPS, REITs and commodities.

Despite the Great Lockdown delivering a severe blow to global economies, investor sentiment and global equity valuations notably diverged from the economic reality in the second quarter, emerging from the massive late-March selloff to rally through June. Supported by unprecedented level of fiscal and monetary stimulus, as well as the prospect of economies reopening as the world working to get a handle on the infection curve, the global equity fund rebounded sharply from the March bottom to record a 20.0% Q2 return. While the fund remains down for the year 2020 (at -6.8%), its Q2 rally was enough to lift the trailing 12-month return back into the black at 1.6%. Both the quarterly and 1-year fund returns compared favorably to the custom benchmark’s pace of 19.8% and 1.2%, respectively, and allows the global equity fund to maintain its solid longer-term track record, where it continues to perform in line with expectations while pacing ahead of the market.

The U.S. fixed income fund continued to see strong momentum in the second quarter of 2020. After previously advancing 5.5% in Q1, the fund logged another sizable gain with 4.0% total return in the April-June stretch, powered by an across the board credit spread compression that was the result of multiple waves of massive Fed policy support. Together with Q1’s robust gains, the U.S. fixed income fund now carries a 9.7% calendar YTD return and a 13.2% trailing 12-month gain, both figures are ahead of the pack among all Judges II investment programs. They also beat the fund’s custom benchmark, while allowing the fund to maintain its longer-term edge in relative terms.

JUDGES II PERFORMANCE PERIOD ENDED JUNE 30, 2020

PERFORMANCE NOTES – JUDGES II (CONTINUED)

The anticipated state/local re-openings and rebound of economic activities/oil prices from severely depressed levels worked well for TIPS performance in the second quarter, with rising breakeven rate carrying the JRS II TIPS portfolio to a 4.2% return that was its strongest quarterly finish in more than four years. This outcome also easily mirrored the fund custom benchmark the Bloomberg Barclays U.S. TIPS Index. Within a backdrop of falling real yields that has pretty much persisted since early 2019, the TIPS fund was already generating steady rate of gains prior to the strong Q2 finish; it currently holds a welcoming 6.0% calendar YTD return and a 8.3% 1-year total return that closely follow the steps of its benchmark measure.

Compared to the also-publicly traded global equity portfolio (which was up 20%), the JRS II REIT portfolio's Q2 results were much less dramatic in a relative sense, but it was still a sizable quarterly gain coming in at 9.8%. A large part of this performance disparity could be attributed to the myriad of disruptions brought on by the COVID-19 crisis, as market has significantly repriced future real estate return expectations amid hurdles imposed by all the shelter-in-place orders/travel restrictions/shifting consumer spending pattern. Unfortunately, the -28.2% loss experienced by the REIT portfolio during Q1 was a significant drag, therefore this investment's calendar YTD and trailing 12-month returns currently remain in the red at -21.1% and -15.9% respectively; both figures compared better than the REIT custom benchmark by a small margin. Looking past the short-term volatility, this 15-year-old portfolio's longer-term track record does still remain on solid footing, with an annualized 7.1% return over the past decade that tracks just ahead of the custom benchmark.

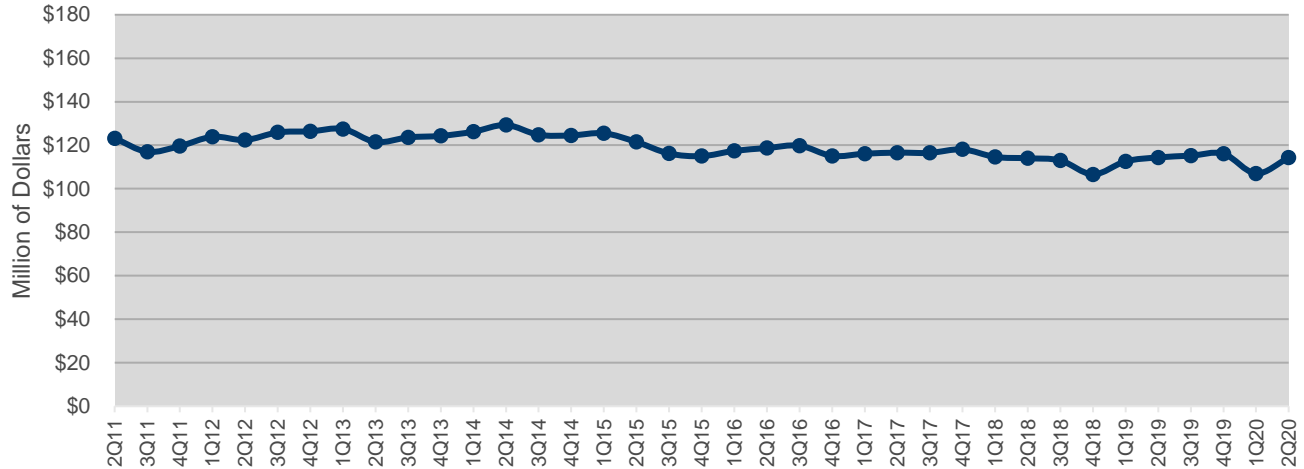
The commodities portfolio posted the third highest rate of gains for JRS II during Q2 2020, advancing 9.2% amid the backdrop of broad risk asset prices rebound (including crude oil and industrial metals) as economic activities resume around the world. Although relatively speaking this positive pace came up modestly short of the GSCI Commodity Total Return Index's 10.5% return for the same period. Despite a nice Q2 uptick, the commodities portfolio previously lost -42.4% during the severe Q1 downdraft, as a result its near- and medium-term portfolio track record have also been negatively impacted, with 1-year return standing at -34.7% and 3-year return at -9.0%, both of which trail the assigned benchmark by a modest margin as well.

LEGISLATORS' RETIREMENT SYSTEM FUND



LEGISLATORS' RETIREMENT SYSTEM PERFORMANCE PERIOD ENDED JUNE 30, 2020

GROWTH IN ASSETS



NET OF FEE PLAN PERFORMANCE RESULTS – LEGISLATORS' ⁸

	Asset Value (\$Million)	Quarter	1-Year	3-Year	5-Year	10-Year
Legislators' Retirement System Fund	\$ 114.3	8.4%	6.4%	6.2%	5.4%	6.7%
<i>Weighted Policy Benchmark</i>		8.2%	6.1%	6.0%	5.2%	6.5%
LRS Programs:						
LRS Global Equity	\$ 27.8	19.8%	1.5%	6.1%	6.6%	9.8%
<i>Global Equity Benchmark</i>		19.8%	1.2%	5.8%	6.4%	9.6%
LRS US Fixed Income	\$ 53.7	4.0%	13.2%	7.7%	6.6%	6.3%
<i>Custom Benchmark</i>		3.7%	13.1%	7.5%	6.2%	5.6%
LRS TIPS	\$ 17.6	4.2%	8.3%	5.1%	3.8%	3.5%
<i>Custom Benchmark</i>		4.2%	8.3%	5.1%	3.8%	3.5%
LRS REITs	\$ 9.3	10.0%	-15.7%	-0.7%	2.2%	-.%
<i>Custom Benchmark</i>		10.1%	-16.2%	-1.2%	1.9%	-.%
LRS Commodities	\$ 5.8	10.2%	-34.0%	-8.3%	-12.1%	-.%
<i>GSCI Total Return</i>		10.5%	-33.9%	-8.7%	-12.5%	-.%
LRS Cash/Short-Term	\$ 0.01	NM	NM	NM	NM	NM
<i>91-Day T-Bill</i>		0.0%	1.6%	1.8%	1.2%	0.6%

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 Barclays Long Liability Index. Barclays 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 Barclays U.S. TIPS Index. Prior of July 2017 it was the Barclays 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, 2020

LEGISLATORS' ASSET ALLOCATION: ACTUAL VS. TARGET WEIGHTS

Asset Class	Actual Asset Allocation	Target Asset Allocation	Difference
LEGISLATORS' RETIREMENT SYSTEM FUND	100.0%	100.0%	0.0%
Global Equity	24.4%	22.0%	2.4%
US Fixed Income	47.0%	49.0%	-2.0%
TIPS	15.4%	16.0%	-0.6%
REITs	8.1%	8.0%	0.1%
Commodities	5.1%	5.0%	0.1%
Cash/Short-Term	0.0%	0.0%	0.0%

PERFORMANCE NOTES – LEGISLATORS'

Under a more conservative profile targeting 35% growth / 65% income asset allocation split, the California Legislators' Retirement System ("LRS, the System") unsurprisingly saw a softer total return than JRS II during the 2nd quarter of 2020. But with a larger-than-policy exposure to the rallying domestic equity segment, the System's 8.4% Q2 return did finish +20 bps ahead of its weighted policy benchmark, and was able to more than offset the -6.3% it lost during Q1's risk-off rotation. Outside of the unusual swings from the first half of 2020 that's commanded much of the attention, the sizable investment grade fixed income exposure has historically afforded the System a less volatile return pattern: LRS's 3-, 5-, and 10-year returns have all averaged at or near the mid-single digit range while mildly outpacing the weighted policy benchmark.

At the end of Q2, the System's asset allocation showed overweight in global equity, REITs and commodities, with underweight in U.S. fixed income and TIPS.

Despite the Great Lockdown delivering a severe blow to global economies, investor sentiment and global equity valuations notably diverged from economic reality in the second quarter, emerging from the massive late-March selloff to rally through June. Supported by unprecedented level of fiscal and monetary stimulus, as well as the prospect of economies reopening as the world working to get a handle on the infection curve, the global equity fund rebounded sharply from the March bottom to record a 19.8% Q2 return. While the fund remains down for the year 2020 (at -7.0%), its Q2 rally was enough to lift the trailing 12-month return back into the black at 1.5%. Both the quarterly and 1-year fund returns compared nicely to the custom benchmark's pace of 19.8% and 1.2%, respectively, and allows the global equity fund to maintain its solid longer-term track record, where it continues to perform in line with expectations while pacing ahead of the market.

The U.S. fixed income fund continued to see strong momentum in the second quarter of 2020. After previously advancing 5.5% in Q1, the fund logged another sizable gain with 4.0% total return in the April-June stretch, powered by an across the board credit spread compression that was the result of multiple waves of massive Fed policy support. Together with Q1's robust gains, the U.S. fixed income fund now carries a 9.6% calendar YTD return and a 13.2% trailing 12-month gain, both figures are ahead of the pack among all LRS investment programs. They also beat the fund's custom benchmark, while allowing the fund to maintain its longer-term edge in relative terms.

LEGISLATORS' RETIREMENT SYSTEM PERFORMANCE PERIOD ENDED JUNE 30, 2020

PERFORMANCE NOTES – LEGISLATORS' (CONTINUED)

The anticipated state/local re-openings and rebound of economic activities/oil prices from severely depressed levels worked well for TIPS performance in the second quarter, with rising breakeven rate carrying the LRS TIPS portfolio to a 4.2% return that was its strongest quarterly finish in more than four years. This outcome also easily mirrored the fund custom benchmark the Bloomberg Barclays U.S. TIPS Index. Within a backdrop of falling real yields that has pretty much persisted since early 2019, the TIPS fund was already generating steady rate of gains prior to the strong Q2 finish; it currently holds a welcoming 6.0% calendar YTD return and a 8.3% 1-year total return that closely follow the steps of its benchmark measure.

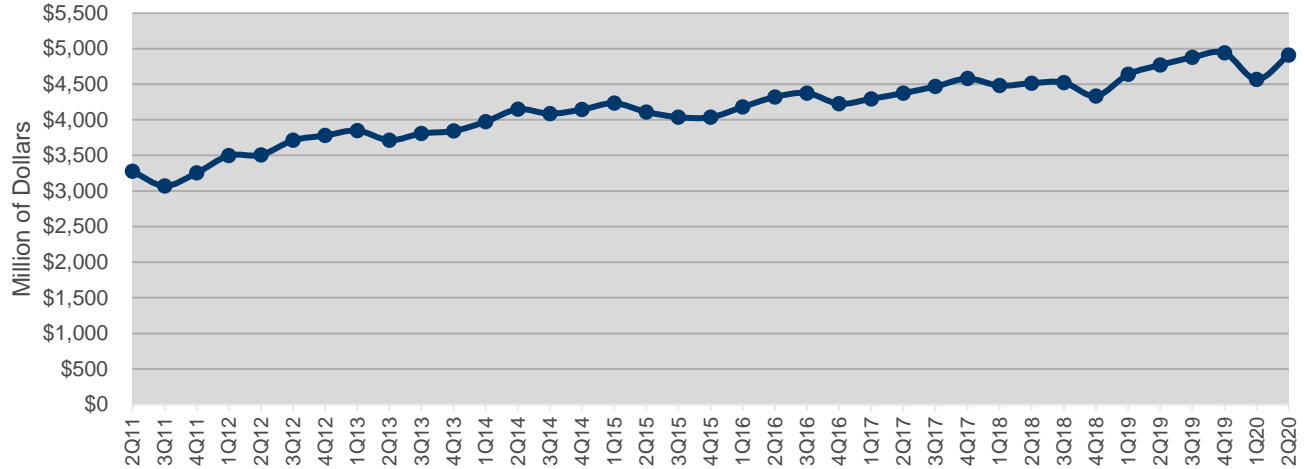
Compared to the also-publicly traded global equity portfolio (which was up 20%), the LRS REIT portfolio's Q2 results were much less dramatic in a relative sense, but it was still a sizable quarterly gain coming in at 10.0%. A large part of this performance disparity could be attributed to the myriad of disruptions brought on by the COVID-19 crisis, as market has significantly repriced future real estate return expectations amid hurdles imposed by all the shelter-in-place orders/travel restrictions/shifting consumer spending pattern. Unfortunately, the -28.2% loss experienced by the REIT portfolio during Q1 was a significant drag, therefore this investment's calendar YTD and trailing 12-month returns currently remain in the red at -21.0% and -15.7% respectively; although both figures fared better than the REIT custom benchmark by a small margin. Looking past the short-term volatility, this 8.5-year-old portfolio's longer-term track record does still remain respectable, with an annualized 2.2% return over the past five years that tracks ahead of the custom benchmark.

The commodities portfolio posted the third highest rate of gains for LRS during Q2 2020, advancing 10.2% amid the backdrop of broad risk asset prices rebound (including crude oil and industrial metals) as economic activities resume around the world. Although relatively speaking this positive pace came up mildly shy of the GSCI Commodity Total Return Index's 10.5% return for the same period. Despite a nice Q2 uptick, the commodities portfolio previously lost -42.4% during the severe Q1 downdraft, as a result its near- and medium-term portfolio track record have also been negatively impacted, with 1-year return standing at -34.0% and 3-year return at -8.3%; both figures are currently tracking the assigned benchmark within a reasonable range.

LONG-TERM CARE FUND

LONG-TERM CARE FUND PERFORMANCE PERIOD ENDED JUNE 30, 2020

GROWTH IN ASSETS



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

	Asset Value					
	(\$Million)	Quarter	1-Year	3-Year	5-Year	10-Year
Long-Term Care Fund	\$ 4,910.4	8.0%	4.7%	5.3%	4.6%	5.8%
<i>Weighted Policy Benchmark</i>		7.4%	5.1%	5.4%	4.6%	5.7%
LTC Programs:						
LTC Global Equity	\$ 769.1	19.9%	1.5%	5.8%	6.4%	9.7%
<i>Custom Benchmark</i>		19.8%	1.2%	5.6%	6.1%	9.5%
LTC US Fixed Income	\$ 2,954.9	4.0%	13.2%	7.6%	6.2%	5.8%
<i>Custom Benchmark</i>		3.7%	13.1%	7.5%	6.2%	5.6%
LTC TIPS	\$ 284.1	4.2%	8.3%	5.0%	3.7%	3.5%
<i>Bloomberg Barc. US TIPS Index</i>		4.2%	8.3%	5.1%	3.8%	3.5%
LTC REITs	\$ 499.4	10.1%	-15.7%	-0.8%	1.8%	6.8%
<i>Custom Benchmark</i>		10.1%	-16.2%	-1.5%	1.0%	6.2%
LTC Commodities	\$ 402.7	10.6%	-33.8%	-8.7%	-12.6%	-.-%
<i>GSCI Total Return</i>		10.5%	-33.9%	-8.7%	-12.5%	-.-%
LTC Cash/Short-Term	\$ 0.2	NM	NM	NM	NM	NM
<i>91-Day T-Bill</i>		0.0%	1.6%	1.8%	1.2%	0.6%

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 Barclays Long Liability Index. Barclays Long Liability ex TIPS ex High Yield was the benchmark between June 2007 and July 2005. Prior of that the benchmark was Barclays 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.

LONG-TERM CARE FUND PERFORMANCE PERIOD ENDED JUNE 30, 2020

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

Asset Class	Actual Asset Allocation	Target Asset Allocation	Difference
LONG-TERM CARE TOTAL FUND	100.0%	100.0%	0.0%
Global Equity	15.7%	15.0%	0.7%
US Fixed Income	60.2%	60.0%	0.2%
TIPS	5.8%	6.0%	-0.2%
REITs	10.2%	11.0%	-0.8%
Commodities	8.2%	8.0%	0.2%
Cash/Short-Term	0.0%	0.0%	0.0%

PERFORMANCE NOTES – LONG-TERM CARE FUND

Among the three major Affiliates programs, the Long-Term Care Fund (“LTC, the Fund”) has the lowest exposure to global equities, currently at 15.7% (with a 15% target). As a result, despite risk assets in general having enjoyed a standout quarter, LTC’s Q1 total return remained the lowest among this group. Relative to LTC’s own weighted policy benchmark, though, this quarter’s 8.0% return did represent a +58 bps out-performance. Over longer time horizon, the LTC has done relatively well as its track record currently sits comfortably near the policy benchmark over time periods 3-year and beyond.

At the end of Q2, the LTC’s asset allocation showed modest overweight in global equity, U.S fixed income and commodities, with mild underweight in TIPS and REITs.

Despite the Great Lockdown delivering a severe blow to global economies, investor sentiment and global equity valuations notably diverged from the economic reality in the second quarter, emerging from the massive late-March selloff to rally through June. Supported by unprecedented level of fiscal and monetary stimulus, as well as the prospect of economies reopening as the world working to get a handle on the infection curve, the global equity fund rebounded sharply from the March bottom to record a 19.9% Q2 return. While the fund remains down for the year 2020 (at -6.9%), its Q2 rally was enough to lift the trailing 12-month return back into the black at 1.5%. Both the quarterly and 1-year fund returns compared favorably to the custom benchmark’s pace of 19.8% and 1.2%, respectively, and allows the global equity fund to maintain its solid longer-term track record, where it continues to perform in line with expectations while pacing ahead of the market.

The U.S. fixed income fund continued to see strong momentum in the second quarter of 2020. After previously advancing 5.5% in Q1, the fund logged another sizable gain with 4.0% total return in the April-June stretch, powered by an across the board credit spread compression that was the result of multiple waves of massive Fed policy support. Together with Q1’s robust gains, the U.S. fixed income fund now carries a 9.7% calendar YTD return and a 13.2% trailing 12-month gain, both figures are ahead of the pack among all LRS investment programs. They also beat the fund’s custom benchmark, while allowing the fund to maintain its longer-term edge in relative terms.

LONG-TERM CARE FUND PERFORMANCE PERIOD ENDED JUNE 30, 2020

PERFORMANCE NOTES – LONG-TERM CARE FUND (CONTINUED)

The anticipated state/local re-openings and rebound of economic activities/oil prices from severely depressed levels worked well for TIPS performance in the second quarter, with rising breakeven rate carrying the LTC TIPS portfolio to a 4.2% return that was its strongest quarterly finish in more than four years. This outcome also easily mirrored the fund custom benchmark the Bloomberg Barclays U.S. TIPS Index. Within a backdrop of falling real yields that has pretty much persisted since early 2019, the TIPS fund was already generating steady rate of gains prior to the strong Q2 finish; it currently holds a welcoming 6.0% calendar YTD return and a 8.3% 1-year total return that closely follow the steps of its benchmark measure.

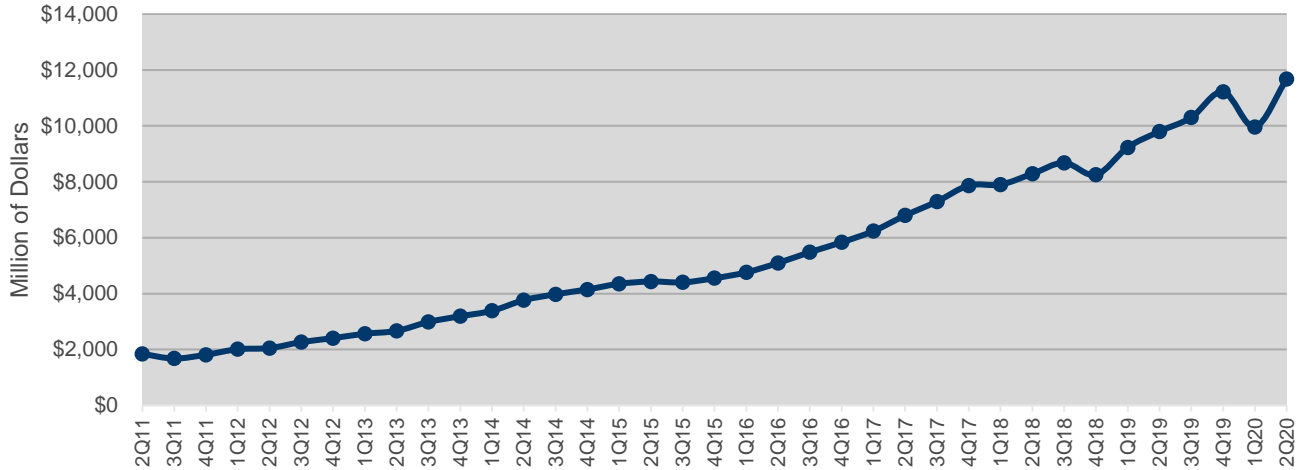
Compared to the also-publicly traded global equity portfolio (which was up 20%), the LTC REIT portfolio's Q2 results were much less dramatic in a relative sense, but it was still a sizable quarterly gain coming in at 10.1%. A large part of this performance disparity could be attributed to the myriad of disruptions brought on by the COVID-19 crisis, as market has significantly repriced future real estate return expectations amid hurdles imposed by all the shelter-in-place orders/travel restrictions/shifting consumer spending pattern. Unfortunately, the -28.2% loss experienced by the REIT portfolio during Q1 was a significant drag, therefore this investment's calendar YTD and trailing 12-month returns currently remain in the red at -20.9% and -15.7% respectively. All three figures fared better than the REIT custom benchmark by a small margin. Looking past the short-term volatility, this 15-year-old portfolio's longer-term track record does still remain respectable, with an annualized 6.8% return over the past decade that tracks ahead of the custom benchmark.

The commodities portfolio posted the third highest rate of gains for LTC during Q2 2020, advancing 10.6% amid the backdrop of broad risk asset prices rebound (including crude oil and industrial metals) as economic activities resume around the world. Relatively speaking this positive pace bested the GSCI Commodity Total Return Index for the same period by +16 bps. Despite a nice Q2 uptick, the commodities portfolio previously lost -42.4% during the severe Q1 downdraft, as a result its near- and medium-term portfolio track record have also been negatively impacted, with 1-year return standing at -33.8% and 3-year return at -8.7%; both figures are currently tracking the assigned benchmark within a reasonable range.

CALIFORNIA EMPLOYERS' RETIREE BENEFIT TRUST

CALIFORNIA EMPLOYERS' RETIREE BENEFIT TRUST AGGREGATE PERIOD ENDED JUNE 30, 2020

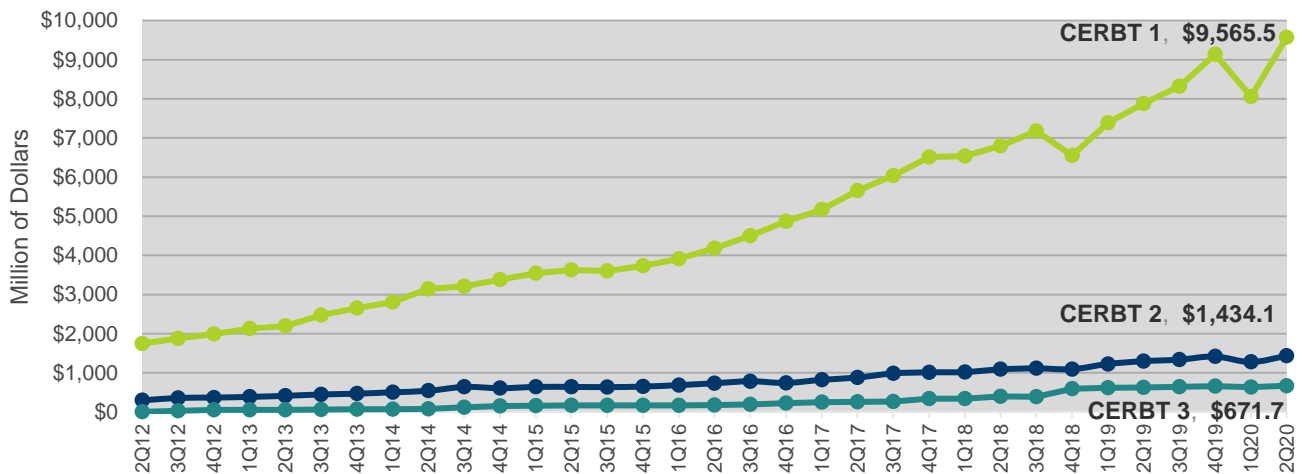
GROWTH IN ASSETS – CERBT AGGREGATE



NET OF FEE PLAN PERFORMANCE RESULTS – CERBT AGGREGATE

	Asset Value					
	(\$Million)	Quarter	1-Year	3-Year	5-Year	10-Year
CERBT Aggregate	\$ 11,671.3	13.4%	3.9%	5.9%	5.8%	8.1%
<i>CERBT Trust Aggregate Benchmark</i>		13.2%	3.6%	5.6%	5.4%	7.8%

GROWTH IN ASSETS – CERBT 1, 2, 3



CALIFORNIA EMPLOYERS' RETIREE BENEFIT TRUST 1 PERIOD ENDED JUNE 30, 2020

CERBT 1 ASSET ALLOCATION: ACTUAL VS. TARGET WEIGHTS

Asset Class	Actual Asset Allocation	Target Asset Allocation	Difference
TOTAL CERBT 1	100.0%	100.0%	0.0%
Global Equity	61.9%	59.0%	2.9%
US Fixed Income	22.7%	25.0%	-2.3%
TIPS	4.6%	5.0%	-0.4%
REITs	7.7%	8.0%	-0.3%
Commodities	2.9%	3.0%	-0.1%
Cash/Short-Term	0.3%	0.0%	0.3%

NET OF FEE PLAN PERFORMANCE RESULTS – CERBT 1 ¹⁰

	Asset Value (\$Million)	Performance				
		Quarter	1-Year	3-Year	5-Year	10-Year
CERBT Strategy 1	\$ 9,565.5	14.1%	3.5%	5.9%	5.8%	8.2%
<i>Total CERBT Strategy 1 Benchmark</i>		14.0%	3.2%	5.6%	5.4%	7.9%
CERBT 1 Programs:						
Global Equity	\$ 5,917.3	19.9%	1.5%	5.9%	6.5%	9.7%
<i>CERBT Global Equity Benchmark</i>		19.8%	1.2%	5.6%	6.1%	9.4%
Domestic Fixed Income	\$ 2,173.4	4.0%	13.2%	7.7%	6.6%	6.3%
<i>CalPERS Custom Long Liability</i>		3.7%	13.1%	7.5%	6.2%	5.6%
TIPS	\$ 436.1	4.2%	8.2%	5.0%	3.7%	-.-%
<i>CalPERS TIPS</i>		4.2%	8.3%	5.1%	3.8%	-.-%
REITs	\$ 736.9	10.1%	-15.7%	-0.8%	1.8%	6.8%
<i>Custom Benchmark</i>		10.1%	-16.2%	-1.5%	1.0%	6.2%
Commodities	\$ 277.2	10.0%	-34.1%	-8.7%	-12.6%	-.-%
<i>GSCI Total Return</i>		10.5%	-33.9%	-8.7%	-12.5%	-.-%
Cash/Short-Term	\$ 24.6	NM	NM	NM	NM	NM
<i>91-Day T-Bill</i>		0.0%	1.6%	1.8%	1.2%	0.6%

¹⁰ CERBT Strategy 1 cash balances are inclusive of employer fund contributions that are in the process of being invested into asset classes. These contributions occur daily, but 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, 2020

CERBT 2 ASSET ALLOCATION: ACTUAL VS. TARGET WEIGHTS

Asset Class	Actual Asset Allocation	Target Asset Allocation	Difference
TOTAL CERBT 2	100.0%	100.0%	0.0%
Global Equity	43.1%	40.0%	3.1%
US Fixed Income	40.1%	43.0%	-2.9%
TIPS	4.7%	5.0%	-0.3%
REITs	7.9%	8.0%	-0.1%
Commodities	4.0%	4.0%	0.0%
Cash/Short-Term	0.3%	0.0%	0.3%

NET OF FEE PLAN PERFORMANCE RESULTS – CERBT 2 ¹¹

	Asset Value (\$Million)	Performance				
		Quarter	1-Year	3-Year	5-Year	10-Year
CERBT Strategy 2	\$ 1,434.1	11.1%	5.4%	6.2%	5.8%	-.%
<i>Total CERBT Strategy 2 Benchmark</i>		11.0%	5.2%	6.0%	5.4%	-.%
CERBT 2 Programs:						
Global Equity	\$ 617.6	19.9%	1.5%	5.9%	6.5%	-.%
<i>CERBT Global Equity Benchmark</i>		19.8%	1.2%	5.6%	6.1%	-.%
Domestic Fixed Income	\$ 574.5	4.0%	13.2%	7.7%	6.5%	-.%
<i>CalPERS Custom Long Liability</i>		3.7%	13.1%	7.5%	6.2%	-.%
TIPS	\$ 67.1	4.2%	8.2%	5.1%	3.8%	-.%
<i>CalPERS TIPS</i>		4.2%	8.3%	5.1%	3.8%	-.%
REITs	\$ 113.5	10.0%	-15.8%	-0.8%	1.8%	-.%
<i>Custom Benchmark</i>		10.1%	-16.2%	-1.5%	1.0%	-.%
Commodities	\$ 56.9	10.3%	-34.0%	-8.5%	-12.5%	-.%
<i>GSCI Total Return</i>		10.5%	-33.9%	-8.7%	-12.5%	-.%
Cash/Short-Term	\$ 4.5	NM	NM	NM	NM	-.%
<i>91-Day T-Bill</i>		0.0%	1.6%	1.8%	1.2%	-.%

¹¹ CERBT Strategy 2 cash balances are inclusive of employer fund contributions that are in the process of being invested into asset classes. These contributions occur daily, but 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 3 PERIOD ENDED JUNE 30, 2020

CERBT 3 ASSET ALLOCATION: ACTUAL VS. TARGET WEIGHTS

Asset Class	Actual Asset Allocation	Target Asset Allocation	Difference
TOTAL CERBT 3	100.0%	100.0%	0.0%
Global Equity	24.3%	22.0%	2.3%
US Fixed Income	46.8%	49.0%	-2.2%
TIPS	15.4%	16.0%	-0.6%
REITs	8.1%	8.0%	0.1%
Commodities	5.1%	5.0%	0.1%
Cash/Short-Term	0.3%	0.0%	0.3%

NET OF FEE PLAN PERFORMANCE RESULTS – CERBT 3 ¹²

	Asset Value (\$Million)	Performance				
		Quarter	1-Year	3-Year	5-Year	10-Year
CERBT Strategy 3	\$ 671.7	8.4%	6.3%	6.1%	5.3%	-.%
<i>Total CERBT Strategy 3 Benchmark</i>		8.2%	6.1%	5.9%	5.0%	-.%
CERBT 3 Programs:						
Global Equity	\$ 163.2	19.8%	1.4%	5.8%	6.4%	-.%
<i>CERBT Global Equity Benchmark</i>		19.8%	1.2%	5.6%	6.1%	-.%
Domestic Fixed Income	\$ 314.5	4.0%	13.2%	7.7%	6.6%	-.%
<i>CalPERS Custom Long Liability</i>		3.7%	13.1%	7.5%	6.2%	-.%
TIPS	\$ 103.2	4.2%	8.2%	5.1%	3.8%	-.%
<i>CalPERS TIPS</i>		4.2%	8.3%	5.1%	3.8%	-.%
REITs	\$ 54.5	10.0%	-15.7%	-0.8%	1.8%	-.%
<i>Custom Benchmark</i>		10.1%	-16.2%	-1.5%	1.0%	-.%
Commodities	\$ 34.2	10.1%	-34.1%	-8.3%	-12.3%	-.%
<i>GSCI Total Return</i>		10.5%	-33.9%	-8.7%	-12.5%	-.%
Cash/Short-Term	\$ 2.1	NM	NM	NM	NM	-.%
<i>91-Day T-Bill</i>		0.0%	1.6%	1.8%	1.2%	-.%

¹² CERBT Strategy 3 cash balances are inclusive of employer fund contributions that are in the process of being invested into asset classes. These contributions occur daily, but 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.

CA EMPLOYERS' PENSION PREFUNDING TRUST

CA PENSION PREFUNDING TRUST PERFORMANCE PERIOD ENDED JUNE 30, 2020

CEPPT STRATEGY 1 ASSET ALLOCATION: ACTUAL VS. TARGET WEIGHTS

Asset Class	Actual Asset Allocation	Target Asset Allocation	Difference
PENSION PREFUNDING TRUST-STRATEGY 1	100.0%	100.0%	0.0%
Global Equity	42.0%	40.0%	2.0%
US Fixed Income	45.7%	47.0%	-1.3%
REITs	7.7%	8.0%	-0.3%
TIPS	4.6%	5.0%	-0.4%
Cash/Short-Term	0.0%	0.0%	0.0%

NET OF FEE PERFORMANCE RESULTS – CEPPT STRATEGY 2 ¹³

	Asset Value					
	(\$Million)	Quarter	1-Year	3-Year	5-Year	10-Year
Pension Prefunding Trust - Strategy 1	\$ 8.8	10.4%	-.%	-.%	-.%	-.%
<i>CEPPT Strategy 1 Policy Benchmark</i>		10.3%	-.%	-.%	-.%	-.%
CEPPT Strategy 1 Programs:						
CEPPT S1 Equity	\$ 3.7	19.9%	-.%	-.%	-.%	-.%
<i>MSCI ACWI IMI Net</i>		19.8%	-.%	-.%	-.%	-.%
CEPPT S1 Fixed Income	\$ 4.0	2.9%	-.%	-.%	-.%	-.%
<i>Bloomberg Barc. US Aggregate Bond Idx</i>		2.9%	-.%	-.%	-.%	-.%
CEPPT S1 REITs	\$ 0.7	10.4%	-.%	-.%	-.%	-.%
<i>Custom Benchmark</i>		10.1%	-.%	-.%	-.%	-.%
CEPPT S1 TIPS	\$ 0.4	4.3%	-.%	-.%	-.%	-.%
<i>CalPERS TIPS</i>		4.2%	-.%	-.%	-.%	-.%
CEPPT S1 Cash	\$ 0.0	NM	-.%	-.%	-.%	-.%
<i>91-Day Treasury Bill</i>		0.0%	-.%	-.%	-.%	-.%

¹³ 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.

CA PENSION PREFUNDING TRUST PERFORMANCE PERIOD ENDED JUNE 30, 2020

CEPPT STRATEGY 2 ASSET ALLOCATION: ACTUAL VS. TARGET WEIGHTS

Asset Class	Actual Asset Allocation	Target Asset Allocation	Difference
PENSION PREFUNDING TRUST-STRATEGY 2	100.0%	100.0%	0.0%
Global Equity	14.1%	14.0%	0.1%
US Fixed Income	73.0%	73.0%	0.0%
REITs	8.0%	8.0%	0.0%
TIPS	5.0%	5.0%	0.0%
Cash/Short-Term	0.0%	0.0%	0.0%

NET OF FEE PERFORMANCE RESULTS – CEPPT STRATEGY 2 ¹⁴

	Asset Value					
	(\$Million)	Quarter	1-Year	3-Year	5-Year	10-Year
Pension Prefunding Trust - Strategy 2	\$ 2.3	5.9%	-.%	-.%	-.%	-.%
<i>CEPPT Strategy 2 Policy Benchmark</i>		5.9%	-.%	-.%	-.%	-.%
CEPPT Strategy 2 Programs:						
CEPPT S2 Equity	\$ 0.3	19.6%	-.%	-.%	-.%	-.%
<i>MSCI ACWI IMI Net</i>		19.8%	-.%	-.%	-.%	-.%
CEPPT S2 Fixed Income	\$ 1.7	2.9%	-.%	-.%	-.%	-.%
<i>Bloomberg Barc. US Aggregate Bond Idx</i>		2.9%	-.%	-.%	-.%	-.%
CEPPT S2 REITs	\$ 0.2	10.1%	-.%	-.%	-.%	-.%
<i>Custom Benchmark</i>		10.1%	-.%	-.%	-.%	-.%
CEPPT S2 TIPS	\$ 0.1	4.2%	-.%	-.%	-.%	-.%
<i>CalPERS TIPS</i>		4.2%	-.%	-.%	-.%	-.%
CEPPT S2 Cash	\$ 0.0	NM	-.%	-.%	-.%	-.%
<i>91-Day Treasury Bill</i>		0.0%	-.%	-.%	-.%	-.%

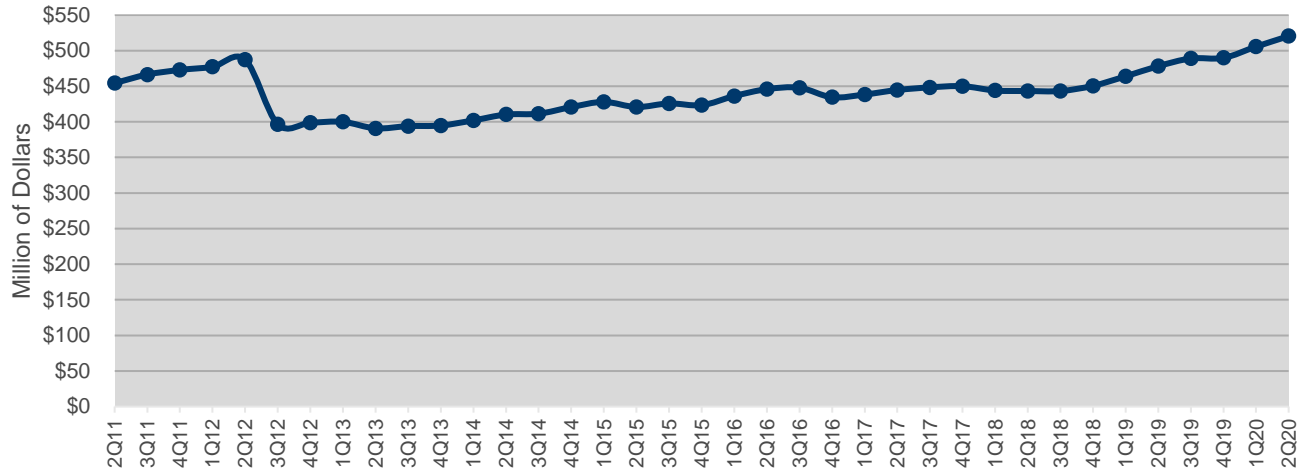
¹⁴ CEPPT Strategy 2 funding occurred during December 2019; official performance reporting began 1/01/2020.

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, 2020

GROWTH IN ASSETS ¹⁵



NET OF FEE PLAN PERFORMANCE RESULTS – HEALTH CARE FUND

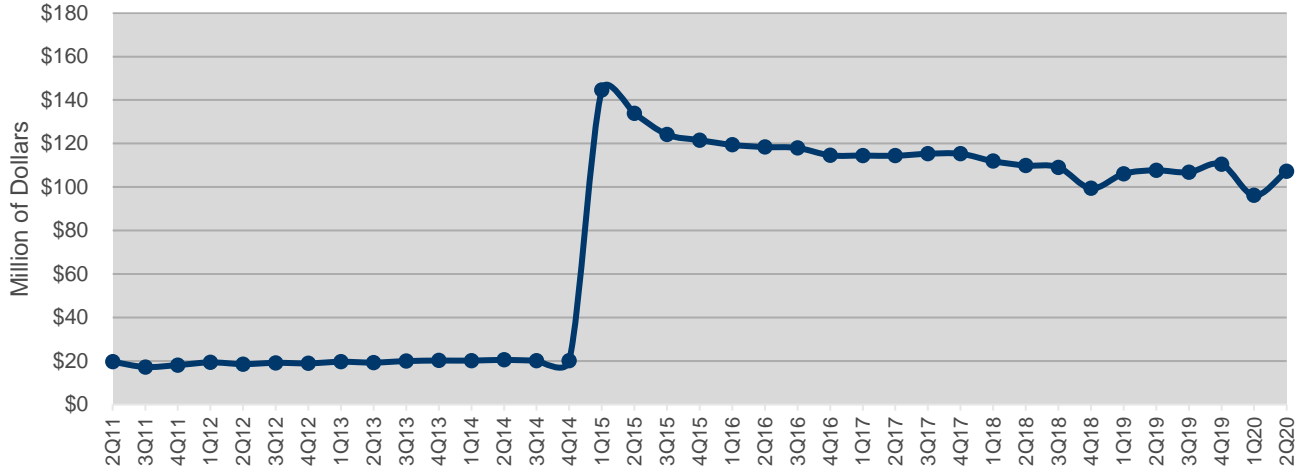
	Asset Value					
	(\$Million)	Quarter	1-Year	3-Year	5-Year	10-Year
CalPERS Health Care Bond Fund	\$ 520.4	2.9%	8.8%	5.4%	4.3%	4.2%
<i>Bloomberg Barc. US Aggregate Bond Idx</i>		2.9%	8.7%	5.3%	4.3%	3.8%

¹⁵ The decline in assets in the 3rd quarter of 2012 was due to a \$100 million withdrawal from the fund.

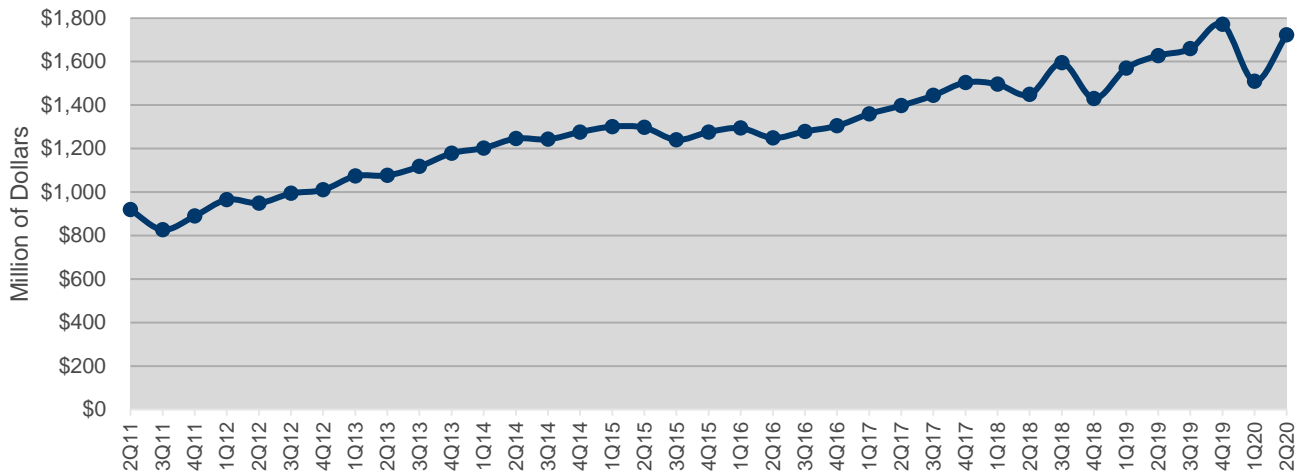
SUPPLEMENTAL INCOME PLANS

SUPPLEMENTAL INCOME PLANS PERIOD ENDED JUNE 30, 2020

GROWTH IN ASSETS – SUPPLEMENTAL CONTRIBUTION PLAN ¹⁶



GROWTH IN ASSETS – 457 PROGRAM



¹⁶ 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, 2020

NET OF FEE PLAN PERFORMANCE RESULTS – SCP

	Asset Value (\$Million)	Quarter	1-Year	3-Year	5-Year	10-Year
CalPERS Target Income Fund	\$ 17.0	8.4%	6.9%	5.2%	4.4%	5.2%
<i>SIP Income Policy</i>		8.2%	6.4%	5.0%	4.2%	5.1%
CalPERS Target 2015 Fund	\$ 15.1	9.2%	6.7%	5.0%	4.3%	6.1%
<i>SIP 2015 Policy</i>		8.9%	6.2%	4.8%	4.1%	6.1%
CalPERS Target 2020 Fund	\$ 21.8	11.4%	6.2%	4.8%	4.2%	6.5%
<i>SIP 2020 Policy</i>		11.0%	5.6%	4.6%	4.0%	6.5%
CalPERS Target 2025 Fund	\$ 19.7	13.5%	5.2%	5.0%	4.6%	-.%
<i>SIP 2025 Policy</i>		13.0%	4.6%	4.7%	4.4%	-.%
CalPERS Target 2030 Fund	\$ 14.5	15.6%	3.9%	4.7%	4.6%	7.7%
<i>SIP 2030 Policy</i>		15.1%	3.6%	4.6%	4.5%	7.7%
CalPERS Target 2035 Fund	\$ 6.9	17.8%	2.8%	4.6%	4.8%	-.%
<i>SIP 2035 Policy</i>		17.2%	2.5%	4.5%	4.7%	-.%
CalPERS Target 2040 Fund	\$ 3.9	19.2%	1.9%	4.7%	5.1%	8.5%
<i>SIP 2040 Policy</i>		18.6%	1.6%	4.6%	4.9%	8.5%
CalPERS Target 2045 Fund	\$ 0.9	19.2%	1.9%	5.2%	5.6%	-.%
<i>SIP 2045 Policy</i>		18.6%	1.6%	5.1%	5.4%	-.%
CalPERS Target 2050 Fund	\$ 0.1	19.2%	1.9%	5.2%	5.6%	-.%
<i>SIP 2050 Policy</i>		18.6%	1.6%	5.1%	5.4%	-.%
CalPERS Target 2055 Fund	\$ 0.1	19.2%	1.9%	5.2%	5.6%	-.%
<i>SIP 2055 Policy</i>		18.6%	1.6%	5.1%	5.4%	-.%
CalPERS Target 2060 Fund	\$ 0.0	19.2%	-.%	-.%	-.%	-.%
<i>SIP 2060 Policy</i>		18.6%	-.%	-.%	-.%	-.%
SSgA Russell All Cap Index SL	\$ 4.2	22.0%	6.4%	10.0%	10.0%	-.%
<i>Russell 3000</i>		22.0%	6.5%	10.0%	10.0%	-.%
SSgA Global All Cap ex-US SL	\$ 0.4	18.3%	-4.2%	1.3%	2.6%	-.%
<i>MSCI ACWI ex-US IMI (N)</i>		17.0%	-4.7%	1.0%	2.3%	-.%
SSgA US Bond Index SL	\$ 0.4	3.0%	8.9%	5.4%	4.4%	-.%
<i>Bloomberg Barc. US Aggregate Bond Idx</i>		2.9%	8.7%	5.3%	4.3%	-.%
SSgA US Short Term Bond	\$ 0.5	1.1%	4.2%	2.8%	2.0%	-.%
<i>Bloomberg Barc. US Gov/Credit</i>		1.2%	4.2%	2.9%	2.1%	-.%
SSgA Real Asset NL	\$ 0.2	10.8%	-8.1%	0.5%	0.6%	-.%
<i>Real Assets Blended Index</i>		10.5%	-8.7%	0.4%	0.5%	-.%
SSgA STIF	\$ 1.5	0.1%	1.7%	1.9%	1.4%	-.%
<i>BofAML 3 Months US T-Bill</i>		0.0%	1.6%	1.8%	1.2%	-.%
SCP AGGREGATE	\$ 107.2					

457 PROGRAM PERFORMANCE

PERIOD ENDED JUNE 30, 2020

NET OF FEE PLAN PERFORMANCE RESULTS – 457

	Asset Value (\$Million)	Quarter	1-Year	3-Year	5-Year	10-Year
CalPERS Target Income Fund	\$ 95.2	8.4%	6.9%	5.2%	4.4%	5.2%
<i>SIP Income Policy</i>		8.2%	6.4%	5.0%	4.2%	5.1%
CalPERS Target 2015 Fund	\$ 77.7	9.2%	6.7%	5.0%	4.3%	6.1%
<i>SIP 2015 Policy</i>		8.9%	6.2%	4.8%	4.1%	6.1%
CalPERS Target 2020 Fund	\$ 149.2	11.4%	6.2%	4.8%	4.2%	6.5%
<i>SIP 2020 Policy</i>		11.0%	5.6%	4.6%	4.0%	6.5%
CalPERS Target 2025 Fund	\$ 159.7	13.5%	5.2%	5.0%	4.6%	7.2%
<i>SIP 2025 Policy</i>		13.0%	4.6%	4.7%	4.4%	7.2%
CalPERS Target 2030 Fund	\$ 145.4	15.6%	3.9%	4.7%	4.6%	7.7%
<i>SIP 2030 Policy</i>		15.1%	3.6%	4.6%	4.5%	7.7%
CalPERS Target 2035 Fund	\$ 88.1	17.8%	2.8%	4.6%	4.8%	8.1%
<i>SIP 2035 Policy</i>		17.2%	2.5%	4.5%	4.7%	8.2%
CalPERS Target 2040 Fund	\$ 81.4	19.2%	1.9%	4.7%	5.1%	8.5%
<i>SIP 2040 Policy</i>		18.6%	1.6%	4.6%	4.9%	8.6%
CalPERS Target 2045 Fund	\$ 45.6	19.2%	1.9%	5.2%	5.6%	8.8%
<i>SIP 2045 Policy</i>		18.6%	1.6%	5.1%	5.4%	8.8%
CalPERS Target 2050 Fund	\$ 25.3	19.2%	1.9%	5.2%	5.6%	8.8%
<i>SIP 2050 Policy</i>		18.6%	1.6%	5.1%	5.4%	8.8%
CalPERS Target 2055 Fund	\$ 9.7	19.2%	1.9%	5.2%	5.6%	--%
<i>SIP 2055 Policy</i>		18.6%	1.6%	5.1%	5.4%	--%
CalPERS Target 2060 Fund	\$ 3.7	19.2%	1.8%	--%	--%	--%
<i>SIP 2060 Policy</i>		18.6%	1.6%	--%	--%	--%
SSgA Russell All Cap Index SL	\$ 542.8	22.0%	6.4%	10.0%	10.0%	--%
<i>Russell 3000</i>		22.0%	6.5%	10.0%	10.0%	--%
SSgA Global All Cap ex-US SL	\$ 61.0	18.3%	-4.3%	1.3%	2.6%	--%
<i>MSCI ACWI ex-US IMI (N)</i>		17.0%	-4.7%	1.0%	2.3%	--%
SSgA US Bond Index SL	\$ 70.0	3.0%	8.9%	5.4%	4.3%	--%
<i>Bloomberg Barc. US Aggregate Bond Idx</i>		2.9%	8.7%	5.3%	4.3%	--%
SSgA US Short Term Bond	\$ 42.0	1.1%	4.2%	2.8%	2.0%	--%
<i>Bloomberg Barc. US Gov/Credit</i>		1.2%	4.2%	2.9%	2.1%	--%
SSgA Real Asset NL	\$ 6.6	10.8%	-8.1%	0.5%	0.6%	--%
<i>Real Assets Blended Index</i>		10.5%	-8.7%	0.4%	0.5%	--%
SSgA STIF	\$ 119.8	0.1%	1.7%	1.9%	1.4%	--%
<i>BofAML 3 Months US T-Bill</i>		0.0%	1.6%	1.8%	1.2%	--%
457 AGGREGATE	\$ 1,723.1					