



Executive Summary of Performance
Prepared For

California Public Employees' Retirement System
Judges II
Long-Term Care
Legislators' Fund
California Employers' Retiree Benefit Trust
Supplemental Income Plans

Second Quarter 2016

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Capital Market Overview

The dominant theme in global asset markets during the second quarter of 2016 was “Uncertainty”, primarily due to nervousness regarding the so-called Brexit referendum held in the UK on June 23. This closely-watched vote, asking UK citizens to decide whether their country would remain in the European Union or leave, was a true nail-biter. The final result, which found Brits narrowly deciding to leave the EU, sent global equities into a two-day sharp sell-off, with investors running for the safety of U.S. Treasuries and local-market sovereigns. As a result, yields plummeted for these safe-haven bonds; the yield on Germany’s bellwether 10-year Bund, already trading at rock-bottom levels thanks to European Central Bank intervention, dipped below 0% in mid-June and has stayed negative since June 24. The political drama swirling around the upcoming U.S. elections in November and further signs of a global economic slowdown added to overall market jitters. Real GDP growth continued to slow during the first quarter of 2016, expanding 1.1% annualized. Weak business spending continues to act as a drag on growth as private investment shrank for the third quarter in a row. The U.S. actually exported more goods and services despite the strong dollar, which added to growth. Consumer spending continues to be the main point of strength in the economy, although government spending grew for the fourth straight quarter.

The Federal Open Market Committee, in their June meeting, specifically pointed to weaker global economic growth indicators, lackluster U.S. payroll growth and declining productivity as signals against raising interest rates. Despite solid performance in the retail sales and housing sectors, the FOMC cut their forecast for U.S. economic growth and maintained current Fed Funds rate targets. Committee members have also signaled a willingness to postpone proposed interest rate hikes in the second half of this year if economic indicators continue to deteriorate.

Consumer inflation in the U.S. picked up pace in the second quarter of 2016. The Consumer Price Index was up 1.22% for the three months ending June 30 but up just 1.01% for the past 12 months. Core CPI, excluding the volatile food and energy components, increased 0.59% in the second quarter, but leapt 2.26% over the trailing twelve months ending June 30. The 10-year breakeven inflation rate closed the second quarter at 1.40%, down from 1.62% last quarter, and has been below 2% since September 2014.

Commodities in general experienced striking gains for the quarter, with crude oil extending its win streak with a 16.9% price increase, ending the quarter at \$48.33 per barrel. Natural gas prices leapt 32.2% over the second quarter, ending at \$2.924 per million BTUs. MLP performance benefited from the excellent performance of oil and gas (Alerian MLP Index, 19.70%). Gold rallied as well, partly due to Brexit jitters; the precious metal ended the quarter at \$1,320.60 per troy ounce, a 6.8% increase.

U.S. Equity Market

The U.S. stock market, represented by the Wilshire 5000 Total Market IndexSM, was up for the second quarter of 2016 by 2.78%. Price swings during the quarter were not nearly as extreme as what investors experienced during the first quarter, except for the last week of trading. The market was up in both April and May despite modest to weak news within economic releases. The market rebounded from the U.K.-driven sell-off to post three strong days to end the quarter. Large capitalization stocks underperformed smaller shares with the Wilshire Large-Cap IndexSM up 2.65% versus a gain of 4.09% for the Wilshire US Small-Cap IndexSM. Larger shares were up for the past 12 months as well (3.83%), while the small cap index was down for the same period (-3.99%). The Wilshire US Micro-Cap IndexSM was up 2.79% for the quarter but down -12.01% for the past year. Growth stocks trailed value



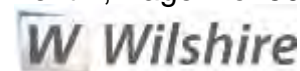
during the second quarter in both large- and small-cap spaces (Wilshire US Large Growth, 0.41%; Wilshire Large Value, 4.80%; Wilshire US Small Growth, 2.21%; Wilshire US Small Value, 6.02%) as well as for the past year. Wilshire 5000 sector performance in the second quarter was mostly positive except for the Information Technology and Consumer Discretionary sectors, which saw pullbacks of -2.16% and -0.95%, respectively. The three best performing sectors were Energy, Telecom Services and Utilities, up 11.65%, 7.66% and 7.36%, respectively. Real estate securities continued their strong 2016 overall performance into the second quarter, although non-U.S. shares saw gains tempered by the strong U.S. dollar (Wilshire US Real Estate Securities IndexSM, 5.99%; Wilshire Global Ex-US RESISM, 1.32%).

Fixed Income Market

U.S. Treasury securities extended their rally in the second quarter (Barclays U.S. Treasury, 2.10%) thanks to broad investor uncertainty, initially over the outcome of the Brexit vote, then over the details and timetable of the withdrawal of the U.K. from the European Union. Most of the rally unsurprisingly occurred as the Brexit referendum results were followed by broad flight-to-safety purchases in the two trading days after the vote. The bellwether 10-year U.S. Treasury yield fell from 1.78% as of March 31 to 1.49% as of June 30. The U.S. Treasury yield curve flattened somewhat over the quarter; two-year yields dropped 15 basis points to 0.58%, while thirty-year yields rode safe-haven purchases down 31 bps to a quarter-ending yield of 2.30%. Unsurprisingly, long-dated Treasuries enjoyed a stronger quarter than shorter bonds (Barclays U.S. Treasury Long, 6.44%; Barclays U.S. Treasury 1-3 Year, 0.53%). Credit yields tightened somewhat over the quarter as well, as investors continued to seek incremental yield wherever they could find it (Barclays U.S. Government-Related, 2.48%; Barclays U.S. Corporate Investment Grade, 3.57%). This especially benefited high yield bonds in relation to investment-grade issuance (Barclays U.S. Aggregate, 2.21%; Barclays U.S. High Yield, 5.52%).

Non-U.S. Markets

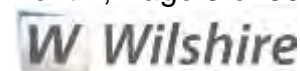
As noted above, the global financial news cycle in the second quarter was dominated by the Brexit vote, overshadowing striking downturns in Asia/Pacific regional markets (MSCI All Country World Index Ex-US, net dividends: -0.10% local currency, 0.99% US dollar terms). The economic slowdown in China, combined with a generally weaker forecast of corporate earnings throughout the region, put investors in a selling mood overall (MSCI Pacific, net: -4.29% local). Despite the Brexit turmoil, however, European stocks overall managed modest gains (MSCI Europe, net, local: 1.23%). Interestingly, the Japanese yen has rallied strongly this year, boosting overall regional performance for U.S. dollar-based investors (MSCI Pacific, net, USD: 0.88%), while the British pound and euro unsurprisingly weakened in the second quarter relative to the U.S. dollar (MSCI Europe, net, USD: -2.69%). Emerging market stocks presented a mixed picture with Asian shares underperforming other world region equities (MSCI Emerging Markets, net: 0.70% local, 0.66% USD). In global bond markets, developed market sovereigns benefited from overall market uneasiness, boosting returns relative to emerging market paper (Barclays Global Aggregate Ex-US: 2.72% hedged, 3.40% USD; Barclays Emerging Markets Local Currency Government Universal: 0.87% hedged, 0.18% USD).



Summary of Index Returns For Periods Ended June 30, 2016

	<u>Quarter</u>	<u>One Year</u>	<u>Three Years</u>	<u>Five Years</u>	<u>Ten Years</u>
Domestic Equity					
Standard & Poor's 500	2.46%	3.99%	11.66%	12.10%	7.43%
Wilshire 5000	2.78	2.96	11.26	11.64	7.46
Wilshire 4500	4.13	-3.29	9.42	9.84	7.77
Wilshire Large Cap	2.65	3.83	11.61	11.89	7.47
Wilshire Small Cap	4.09	-3.99	8.44	9.66	7.91
Wilshire Micro Cap	2.79	-12.01	5.28	8.00	4.48
Domestic Equity					
Wilshire Large Value	4.80%	9.36%	11.03%	12.10%	6.71%
Wilshire Large Growth	0.41	-2.22	12.26	11.61	8.13
Wilshire Mid Value	6.36	9.80	12.57	12.47	8.45
Wilshire Mid Growth	2.75	-8.86	8.17	8.05	8.40
Wilshire Small Value	6.02	4.05	10.47	11.11	7.97
Wilshire Small Growth	2.21	-11.92	6.27	8.07	7.74
International Equity					
MSCI All World ex U.S. (USD)	-0.64%	-10.24%	1.17%	0.10%	1.87%
MSCI All World ex U.S. (local currency)	0.38	-8.15	6.15	5.83	3.23
MSCI EAFE	-1.46	-10.16	2.07	1.68	1.58
MSCI Europe	-2.69	-11.22	1.96	1.02	1.52
MSCI Pacific	0.88	-8.19	2.16	2.98	1.71
MSCI Emerging Markets Index	0.66	-12.05	-1.56	-3.78	3.54
Domestic Fixed Income					
Barclays Aggregate Bond	2.21%	6.00%	4.06%	3.76%	5.13%
Barclays Credit	3.48	7.55	5.26	5.20	6.11
Barclays Mortgage	1.11	4.34	3.76	3.01	4.96
Barclays Treasury	2.10	6.22	3.51	3.53	4.86
Citigroup High Yield Cash Pay	5.96	0.96	3.64	5.51	7.19
Barclays US TIPS	1.71	4.35	2.31	2.63	4.75
91-Day Treasury Bill	0.07	0.19	0.09	0.09	1.04
International Fixed Income					
Citigroup Non-U.S. Gov. Bond	4.04%	13.85%	2.36%	0.31%	3.97%
Citigroup World Gov. Bond	3.41	11.26	2.65	1.18	4.22
Citigroup Hedged Non-U.S. Gov.	3.11	10.19	6.69	5.84	5.12
Currency*					
Euro vs. \$	-2.51%	-0.29%	-5.10%	-5.19%	-1.40%
Yen vs. \$	9.56	19.28	-1.07	-4.67	1.09
Pound vs. \$	-6.99	-15.00	-4.12	-3.60	-3.19
Real Estate					
Wilshire REIT Index	5.60%	22.82%	13.63%	12.48%	6.99%
Wilshire RESI	5.99	23.55	14.07	12.61	7.01

*Positive values indicate dollar depreciation.



Summary Review of Plans Periods Ended 6/30/2016

	<u>Market Value</u>	<u>Qtr</u>	<u>1-Year</u>	<u>3-Year</u>	<u>5-Year</u>	<u>10-Year</u>
TOTAL FUND for PERF	\$295.1 bil	2.0%	0.6%	6.9%	6.8%	5.1%
<i>Total Fund Policy Benchmark ¹</i>		2.0%	1.0%	6.9%	6.6%	6.2%
<i>Actuarial Rate</i>		1.8%	7.5%	7.5%	7.6%	7.7%
Affiliate Funds						
JudgesI	\$35.1 mil	0.1%	0.3%	0.2%	0.1%	1.2%
<i>91-Day Treasury Bill</i>		0.1%	0.2%	0.1%	0.1%	1.0%
JudgesII	\$1,156.6 mil	2.7%	1.6%	6.4%	6.6%	5.6%
<i>Weighted Policy Benchmark</i>		2.7%	1.7%	6.2%	6.6%	5.7%
Legislators' Retirement System	\$118.7 mil	3.0%	4.0%	5.6%	5.8%	6.1%
<i>Weighted Policy Benchmark</i>		2.9%	4.2%	5.3%	5.7%	5.9%
Long-Term Care ("LTC")	\$4,320.7 mil	3.6%	5.5%	4.9%	4.3%	5.0%
<i>Weighted Policy Benchmark</i>		3.7%	5.2%	4.6%	4.2%	4.8%
CERBT Strategy 1	\$4,180.4 mil	2.5%	1.0%	6.1%	6.0%	--%
<i>CERBT Strategy 1 Policy Benchmark</i>		2.4%	0.7%	5.8%	5.8%	--%
CERBT Strategy 2	\$735.1 mil	2.9%	2.9%	5.8%	--%	--%
<i>CERBT Strategy 2 Policy Benchmark</i>		2.7%	2.8%	5.5%	--%	--%
CERBT Strategy 3	\$180.1 mil	3.0%	4.1%	5.5%	--%	--%
<i>CERBT Strategy 3 Policy Benchmark</i>		2.8%	4.1%	5.1%	--%	--%
Health Care Fund	\$445.9 mil	2.2%	6.0%	4.5%	4.3%	5.1%
<i>Barclays U.S. Aggregate</i>		2.2%	6.0%	4.1%	3.8%	5.1%
Supplemental Contribution Plan	\$118.4 mil	1.4%	0.6%	3.9%	4.4%	--%
<i>CalPERS Custom SCP Plan Index</i>		1.4%	0.9%	4.2%	5.0%	--%
457 Program	\$1,249.0 mil	1.7%	0.7%	5.5%	5.5%	4.5%
<i>CalPERS Custom 457 Plan Index</i>		1.7%	0.9%	5.8%	6.0%	5.0%

¹ The Total Fund Policy Benchmark return equals the return for each asset class benchmark weighted at the current target asset allocation.



Total Fund Review PERF
 Periods Ended 6/30/2016

	Market Value	5-Year Ratios							
		Qtr	1-Year	3-Year	5-Year	10-Year	VaR ¹²	Sharpe ¹³	Info ¹⁴
TOTAL FUND	\$295.1 bil	2.0%	0.6%	6.9%	6.8%	5.1%	\$40.6 bil	1.0	0.1
Total Fund Policy Benchmark ²		2.0%	1.0%	6.9%	6.6%	6.2%		0.9	0.0
Actuarial Rate		1.8%	7.5%	7.5%	7.6%	7.7%			
GROWTH	179.5	1.2%	-2.6%	7.3%	6.8%	5.4%	\$37.5 bil	0.6	-0.1
Growth Policy Benchmark ³		1.3%	-3.1%	7.4%	7.0%	6.4%		0.6	0.0
PUBLIC EQUITY	153.1	1.3%	-3.4%	6.8%	6.1%	4.7%	\$31.1 bil	0.4	0.7
Public Equity Policy Benchmark ⁴		1.2%	-4.0%	6.5%	5.9%	5.0%		0.4	0.0
PRIVATE EQUITY	26.4	0.4%	1.7%	10.0%	9.7%	10.2%	\$8.7 bil	2.3	-0.1
Private Equity Policy Benchmark ⁵		1.1%	-0.8%	10.8%	10.6%	12.7%		0.8	0.0
INCOME	59.9	3.9%	9.3%	6.2%	5.9%	7.1%	\$7.6 bil	1.2	0.7
Income Policy Benchmark ⁶		3.6%	9.3%	5.5%	5.3%	6.5%		1.0	0.0
REAL ASSETS⁷	31.8	1.9%	6.0%	10.6%	11.1%	-0.1%	\$4.4 bil	1.6	0.0
Real Assets Policy Benchmark ⁸		1.7%	11.1%	11.5%	11.0%	7.8%		2.6	0.0
INFLATION	17.8	4.6%	-3.6%	-2.6%	-1.5%	-.%	\$1.3 bil	-0.2	0.3
Inflation Policy Benchmark ⁹		4.4%	-5.0%	-3.6%	-2.0%	-.%		-0.3	0.0
LIQUIDITY	4.5	0.1%	0.4%	0.6%	1.1%	1.9%	\$0.0 bil	0.7	-0.7
Liquidity Policy Benchmark ¹⁰		0.1%	0.2%	1.1%	1.5%	3.3%		0.8	0.0
ABSOLUTE RETURN STRATEGIES¹¹	0.4	-0.7%	-1.7%	4.1%	3.4%	3.3%		1.0	-0.5
Absolute Return Strategies Policy Benchmark ¹¹		1.5%	5.6%	5.4%	5.4%	6.8%		25.2	0.0
MULTI-ASSET CLASS COMPOSITE	1.2	0.3%	-1.2%	5.3%	-.%	-.%		N/A	N/A
Absolute 7.5%		1.8%	7.5%	7.5%	-.%	-.%		N/A	N/A
CURRENCY + ASSET ALLOCATION TRANSITION	0.0	-.%	-.%	-.%	-.%	-.%		N/A	N/A
TERMINATED AGENCY POOL	0.1	3.4%	9.9%	5.4%	-.%	-.%		N/A	N/A
TOTAL FUND PLUSTAP	295.2	2.0%	0.6%	6.9%	6.8%	5.1%		N/A	N/A

² The Total Fund Policy Benchmark return equals the return for each asset class benchmark weighted at the current target asset allocations.

³ Growth Policy Benchmark equals the benchmark returns of public equity and private equity weighted at policy allocation target percentages.

⁴ The Public Equity Policy Benchmark is a custom global benchmark maintained by FTSE.

⁵ The Private Equity Policy Benchmark is currently 1-quarter lagged (67% FTSE US TMI + 33% FTSE AW x-US TMI) with a hurdle of + 3%.

⁶ The Income Policy Benchmark equals the benchmark returns of domestic and international fixed income components weighted at policy allocation target percentages.

⁷ Real Assets include real estate, whose returns are net of investment management fees and all expenses, including property level operations expenses netted from property income. This method differs from GASB 31, which requires all investment expenses be identified for inclusion in the System's general purpose financial statements.

⁸ The Real Assets Policy Benchmark equals the benchmark returns of real estate, timber, and infrastructure weighted at policy allocation target percentages.

⁹ The Inflation Policy Benchmark equals the benchmark returns of commodities and TIPS weighted at policy allocation target percentages.

¹⁰ The Liquidity Policy Benchmark is a custom index maintained by State Street Bank.

¹¹ The Absolute Return Strategies program was excluded from Public Equity on July 1, 2011. Public Equity history does not include Absolute Return Strategies performance. The Absolute Return Strategies Policy Benchmark is currently Merrill Lynch Treasury 1-Year Note + 5%.

¹² VaR (Value at Risk) measures how much the portfolio might decrease over a 12 month period in extreme cases. The VAR estimate shows how much the portfolio value might fall in the worst 5% of 12 month periods. VAR is calculated using total risk (standard deviation) and market value ((Expected Return - (1.65 X SD)) X MV).

¹³ The Sharpe Ratio or reward-to-variability ratio is a measure of the mean excess return per unit of risk in an investment strategy. The Sharpe ratio is used to characterize how well the return of an asset compensates the investor for the total risk taken. The 5-year period was selected to provide sufficient data points for a meaningful calculation, but is still short enough to reflect the changes to the investment programs over the last few years.

¹⁴ The "Information Ratio" calculates the amount of excess performance earned per unit of excess risk, as measured by tracking error. Higher information ratios imply a greater return per unit of excess risk ventured.

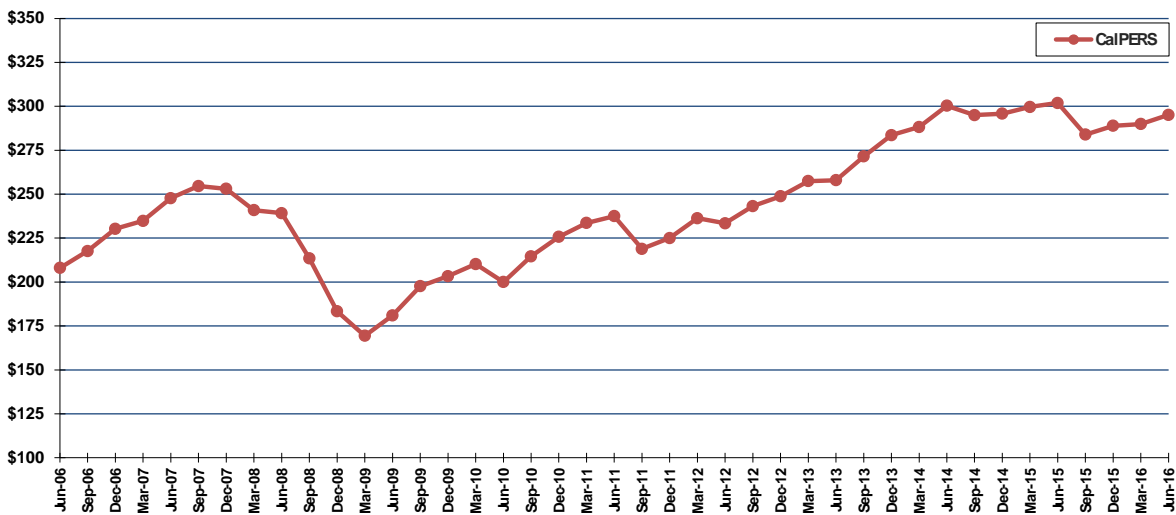


Total Fund Review for PERF (continued)
 Periods Ended 6/30/2016

Total Fund Flow

	<u>2005</u>	<u>2006</u>	<u>2007</u>	<u>2008</u>	<u>2009</u>	<u>2010</u>	<u>2011</u>	<u>2012</u>	<u>2013</u>	<u>2014</u>	<u>4Q15</u>	<u>1Q16</u>	<u>2Q16</u>
Market Value (\$bil)	200.6	230.3	253.0	183.3	203.3	225.7	225.0	248.8	283.6	295.8	288.9	289.9	295.1

Total Fund Market Value



Asset Allocation

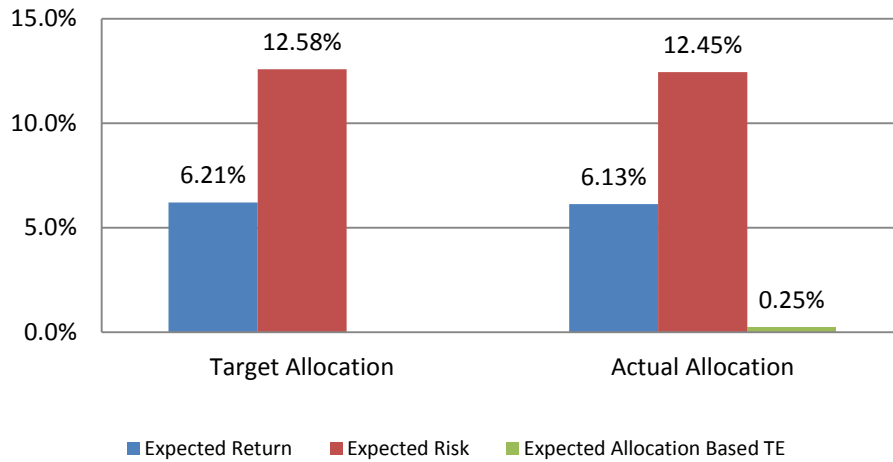
Asset Class	Actual (%)	Policy (%)	Difference (%)
Growth	60.8	61.0	-0.2
Income	20.3	20.0	+0.3
Real Assets	10.8	12.0	-1.2
Inflation	6.0	6.0	0.0
ARS	0.1	0.0	+0.1
Liquidity	1.5	1.0	+0.5
Multi-Asset	0.4	0.0	+0.4
Total	100.0	100.0	0.0

* Asset allocation targets are in the process of shifting to the new targets adopted by the Investment Committee in May 2014. Transitions accounts are included with their respective asset classes.

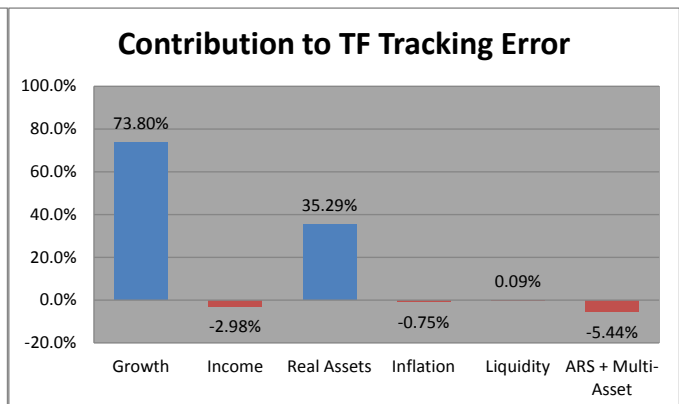
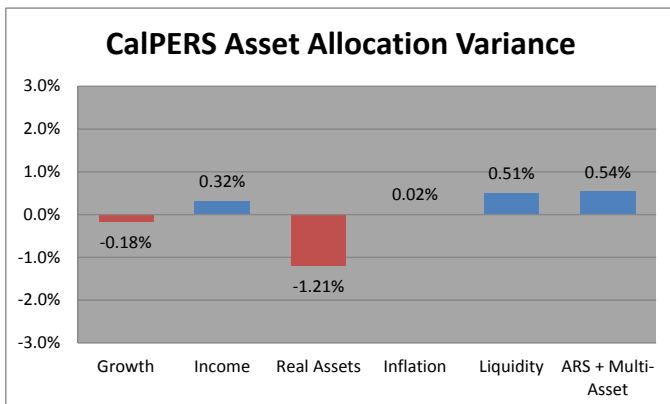
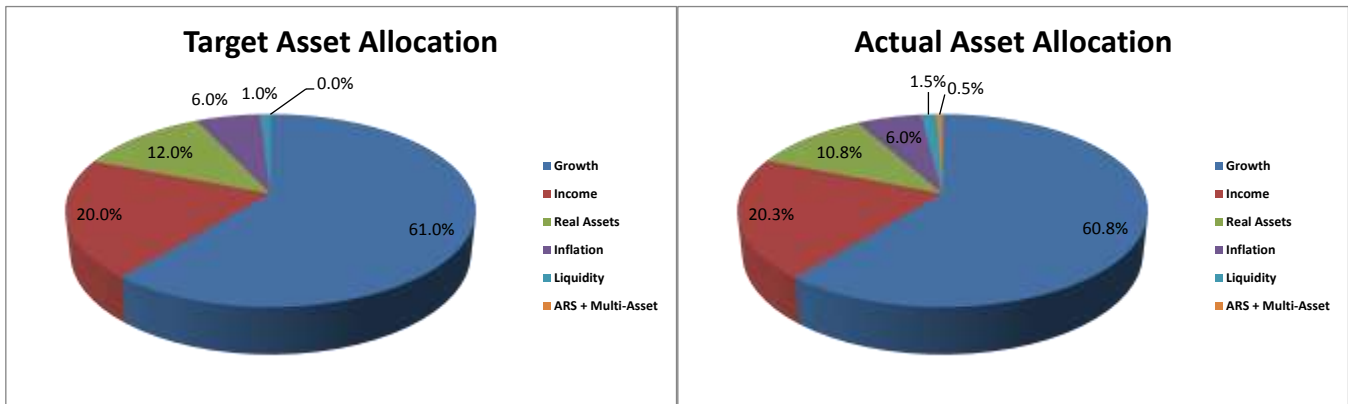


Total Fund Review for PERF (continued)
 Periods Ended 6/30/2016

Expected Return/Risk and Tracking Error based on Wilshire's Asset Class Assumptions



Total Fund Asset Allocation

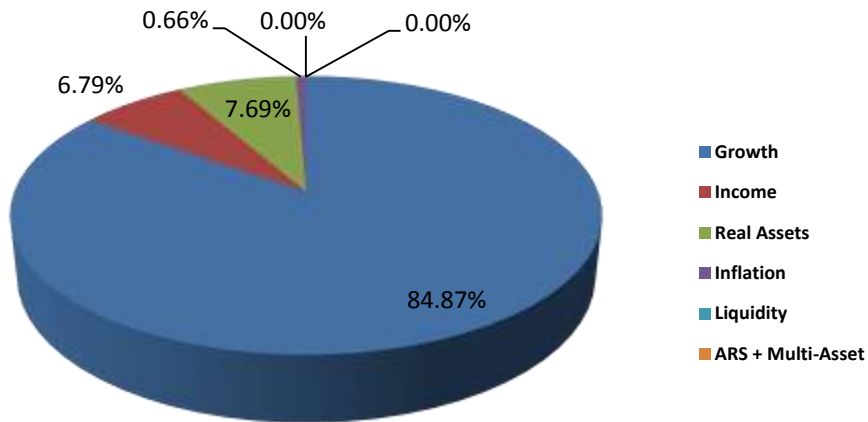




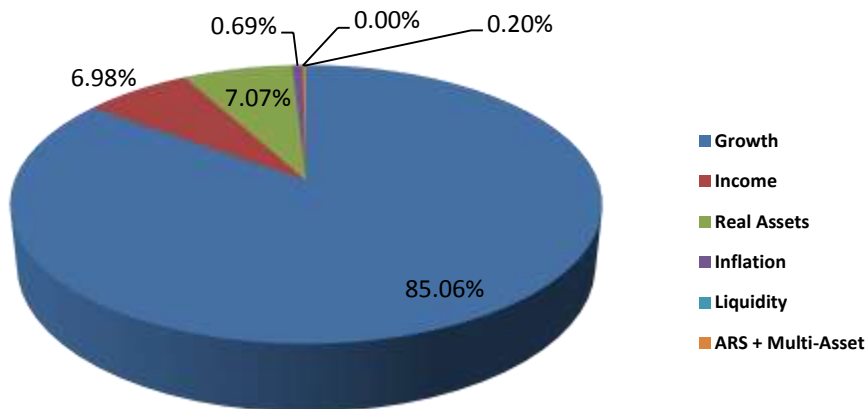
Total Fund Review for PERF (continued)
Periods Ended 6/30/2016

Contribution to Total Risk based on Wilshire's Asset Class Assumptions

Contribution to Total Risk - Target Allocation



Contribution to Total Risk - Actual Allocation





**California Public Employees' Retirement System
 Total Fund Attribution - Quarter
 As of 6/30/2016**

Asset Class	Actual (%)		Policy (%)		Difference (%)		Total Fund Return Contribution (%)			
	Weight	Return	Weight	Return	Weight	Return	Actual Allocation	Interaction	Active Management	Total
Growth	62.29	1.18	61.00	1.25	1.29	-0.07	-0.02	0.02	-0.05	-0.04
Public Equity	53.06	1.32	51.00	1.18	2.06	0.14	-0.01	0.00	0.07	0.07
Private Equity	9.23	0.38	10.00	1.06	-0.77	-0.68	-0.01	0.02	-0.12	-0.10
Income	19.87	3.93	20.00	3.64	-0.13	0.29	0.00	0.00	0.06	0.06
Real Assets	10.42	1.88	12.00	1.74	-1.58	0.14	0.00	0.00	0.02	0.02
Inflation	5.93	4.62	6.00	4.36	-0.07	0.27	0.00	0.00	0.02	0.01
Absolute Return	0.55	-0.66	0.00	1.52	0.55	-2.19	0.00	-0.01	0.00	-0.01
Liquidity	0.95	0.13	1.00	0.07	-0.05	0.05	0.00	0.00	0.00	0.00
Monthly Linked Return	100.00	1.99	100.00	1.96		0.03	-0.02	0.01	0.04	0.03
Trading/Hedging/Other		-0.02		0.00		-0.02				-0.02
Total		1.97		1.96		0.01				0.01

The Total Fund Attribution displays the return contribution of each asset class to the total fund. This is done by monthly linking each program's allocation at the beginning of the month with each month's returns to determine if tactical allocation and active management within asset classes helped or hurt performance. The interaction effect is a cross-factor, used to help further explain the combined impact of a portfolio's selection and allocation decisions within a segment.



**California Public Employees' Retirement System
 Total Fund Attribution - Calendar Year-to-Date
 As of 6/30/2016**

Asset Class	Actual (%)		Policy (%)		Difference (%)		Total Fund Return Contribution (%)			
	Weight	Return	Weight	Return	Weight	Return	Actual Allocation	Interaction	Active Management	Total
Growth	62.05	1.75	61.00	2.61	1.05	-0.86	-0.16	0.07	-0.48	-0.57
Public Equity	52.62	1.94	51.00	1.37	1.62	0.58	-0.11	0.01	0.29	0.19
Private Equity	9.43	0.65	10.00	7.24	-0.57	-6.59	-0.05	0.07	-0.78	-0.76
Income	20.02	9.69	20.00	9.17	0.02	0.53	-0.06	0.01	0.10	0.04
Real Assets	10.77	2.20	12.00	4.58	-1.23	-2.37	-0.01	0.02	-0.28	-0.27
Inflation	5.44	8.16	6.00	7.47	-0.56	0.69	-0.01	-0.01	0.04	0.02
Absolute Return	0.56	0.90	0.00	3.13	0.56	-2.23	-0.01	-0.01	0.00	-0.02
Liquidity	1.17	0.24	1.00	0.15	0.17	0.10	0.01	0.00	0.00	0.01
Monthly Linked Return	100.00	3.67	100.00	4.45		-0.78	-0.24	0.08	-0.62	-0.78
Trading/Hedging/Other		0.01		0.00		0.01				0.01
Total		3.68		4.45		-0.77				-0.77

The Total Fund Attribution displays the return contribution of each asset class to the total fund. This is done by monthly linking each program's allocation at the beginning of the month with each month's returns to determine if tactical allocation and active management within asset classes helped or hurt performance. The interaction effect is a cross-factor, used to help further explain the combined impact of a portfolio's selection and allocation decisions within a segment.



**California Public Employees' Retirement System
 Total Fund Attribution - Fiscal Year-to-Date
 As of 6/30/2016**

Asset Class	Actual (%)		Policy (%)		Difference (%)		Total Fund Return Contribution (%)			
	Weight	Return	Weight	Return	Weight	Return	Actual Allocation	Interaction	Active Management	Total
Growth	62.57	-2.57	61.00	-3.08	1.57	0.51	-0.24	0.03	0.44	0.23
Public Equity	53.00	-3.38	51.00	-3.97	2.00	0.58	-0.20	0.01	0.30	0.11
Private Equity	9.57	1.70	10.00	-0.83	-0.43	2.53	-0.04	0.02	0.14	0.11
Income	19.46	9.28	20.00	9.31	-0.55	-0.03	-0.14	0.01	-0.01	-0.14
Real Assets	10.76	5.97	12.00	11.15	-1.24	-5.18	-0.15	0.05	-0.58	-0.68
Inflation	5.25	-3.64	6.00	-5.00	-0.75	1.35	0.07	-0.01	0.09	0.14
Absolute Return	0.60	-1.67	0.00	5.62	0.60	-7.29	0.03	-0.04	0.00	-0.01
Liquidity	1.37	0.36	1.00	0.19	0.37	0.17	0.05	0.00	0.00	0.05
Monthly Linked Return	100.00	0.62	100.00	1.02		-0.41	-0.38	0.03	-0.06	-0.41
Trading/Hedging/Other		0.00		0.00		0.00				0.00
Total		0.61		1.02		-0.41				-0.41

The Total Fund Attribution displays the return contribution of each asset class to the total fund. This is done by monthly linking each program's allocation at the beginning of the month with each month's returns to determine if tactical allocation and active management within asset classes helped or hurt performance. The interaction effect is a cross-factor, used to help further explain the combined impact of a portfolio's selection and allocation decisions within a segment.



Total Fund Review for PERF (continued) Periods Ended 6/30/2016

- ◆ The California Public Employees’ Retirement System (“CalPERS, the System”) generated a total fund return of 1.97%, for the quarter ended June 30, 2016. CalPERS’ return can be attributed as follows:

1.96%	Strategic Policy Allocation
-0.02%	Actual/Tactical Asset Allocation
0.04%	Active Management
0.01%	Interaction
<u>-0.02%</u>	Trading/Currency Hedging
1.97%	Total Return

- ◆ The total fund attribution table on the previous page displays the return contribution of each asset class to the total fund. This table will allow the Board to see if tactical allocation and active management within asset classes helped or hurt performance during the quarter.
 - Strategic Policy: The contribution to total return from each asset class, calculated as the percentage allocated to each asset class multiplied by the benchmark for that asset class.
 - Actual Allocation: The return contribution during the quarter 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 US fixed income segment outperformed its custom benchmark during the quarter and contributed positively to active management).
 - Interaction: Captures the interaction of managers’ performance and asset class weighting differences.
 - 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.
- ◆ CalPERS investments’ 1.97% total second quarter return matched the pace of its strategic policy benchmark, as neither active management nor asset allocation made any meaningful contribution to drive relative performance. The active management component was a small positive. With the exception of the Absolute Return Strategies program, which has no official allocation target and is in the process of winding down, all major asset classes followed their respective allocation benchmarks and reported gains this quarter, where the Income and the Inflation asset classes were the best relative performers (by +29 bps and +27 bps, respectively). As for asset allocation variance, the overall effect here was a very minor but small negative that primarily stemmed from the overweight to Growth, which was among the lowest returning major asset classes in Q2.



Total Fund Review for PERF (continued) Periods Ended 6/30/2016

Relative to the Total Fund Policy Benchmark:

- ◆ **Growth Exposure:** For the second consecutive quarter in 2016 the Growth composite was able to generate a positive total return, although in both absolute and relative terms its performance remained on the soft side: its 1.2% Q2 return was the smallest among CalPERS' five major asset classes save for Liquidity, and finished behind the total fund policy benchmark (2.0%) as well as its own policy benchmark (1.3%). Public equity, which usually acts as the main performance driver of this asset class with 85% of the Growth assets, managed a very modest 1.3% return as a whole, due to its early-quarter momentum being offset by the June slide following an unexpected U.K. referendum outcome. The smaller private equity component was also muted this quarter with a 0.4% gain and did not contribute to the overall Growth composite's results.
- ◆ **Income Exposure:** Macro developments during the second quarter had favorable impact on PER's fixed income investments. While most of the interest rate movement occurred in the second half of the quarter, driven by anxieties over the Brexit uncertainties, overall speaking yields did fall again in Q2, highlighted by the -29 bps decline registered by the 10-year U.S. Treasury yield that settled at 1.49% as of June 30. Together with the Fed's decision to hold off on a rate hike at the June meeting over job growth worries, the flight-to-safety rotation seen during this quarter greatly benefited the Income composite, driving it up 3.9%. This outpaced the Income policy benchmark by 30 bps and naturally outperformed when compared to the total fund policy benchmark. For Q2, the two main components within Income both did well too, with the U.S. fixed income portfolio rallying 4.2% while the international fixed income portfolio gained 2.2%.
- ◆ **Real Assets Exposure:** Real Assets reported a Q2 return of 1.9%, making it the one constant within the CalPERS asset class mix where it has reported twenty three-straight quarters of gains. This performance narrowly missed the total fund policy benchmark by a margin of -7 bps, but was good enough to beat its own asset class benchmark's 1.7% pace, therefore still making Real Assets a small contributor in relative terms. The main performance driver here remains the private real estate component, which constituted 84% of RA's total assets; it generated a respectable, steady-rate return of 2.2% during the second quarter. Unfortunately part of that was offset by the struggling forestland portfolio that was down -4.5%.
- ◆ **Inflation Exposure:** PERS' Inflation asset class has done well in the first half of 2016. Following a successful first quarter, where it was up 3.4%, the Total Inflation composite concluded Q2 with another round of solid performance, rising 4.6%. This represented a +266 bps outperformance versus the total fund policy benchmark and a 27 bps outperformance relative to the composite's own benchmark. Results of the main inflation-linked bonds component, which accounted for 74% of the Inflation assets, were subdued given the declining inflation expectations. Most of the composite's performance this quarter was supported by the commodities component, which saw double-digit jump in light of the oil-led commodity prices recovery.
- ◆ **Liquidity:** The Liquidity composite saw a very small but positive gain of 0.1% this quarter, coming in below the total fund policy benchmark but was on par with its own asset class benchmark. Starting Q3 2015, the composite is solely comprised of short term investment funds.
- ◆ **Absolute Return Strategy:** The Absolute Return Strategy (ARS) program registered a small loss of -0.7%, underperforming the total fund policy benchmark.



Growth Review for PERF

Periods Ended 6/30/2016

Growth Allocation

Asset Allocation: Actual versus Target Weights

Asset Class	Actual Asset Allocation	Target Asset Allocation	Difference
Growth	<u>60.8%</u>	<u>61.0%</u>	<u>-0.2%</u>
Public Equity	51.9%	51.0%	+0.9%
Private Equity	8.9%	10.0%	-1.1%

Growth Segment Performance

	Market Value						VaR ²¹	5-year Sharpe	5-year Info
		Qtr	1-Year	3-Year	5-Year	10-Year		Ratio ²²	Ratio ²³
GROWTH	179.5	1.2%	-2.6%	7.3%	6.8%	5.4%	\$37.5 bil	0.6	-0.1
<i>Growth Policy Benchmark Value Added</i>		1.3%	-3.1%	7.4%	7.0%	6.4%		0.6	0.0
		-0.1%	0.5%	-0.1%	-0.2%	-1.0%			
PUBLIC EQUITY ¹⁵	153.1	1.3%	-3.4%	6.8%	6.1%	4.7%	\$31.1 bil	0.4	0.7
<i>Public Equity Policy Benchmark ¹⁶ Value Added</i>		1.2%	-4.0%	6.5%	5.9%	5.0%		0.4	0.0
		0.1%	0.6%	0.3%	0.2%	-0.3%			
US Equity Composite	81.5	2.5%	1.0%	10.6%	11.3%	7.3%		0.9	0.1
<i>Custom USEquity Benchmark ¹⁷ Value Added</i>		2.6%	1.1%	10.7%	11.3%	7.3%		0.9	0.0
		-0.1%	-0.1%	-0.1%	0.0%	0.0%			
Total Int'l Equity	71.6	0.0%	-8.2%	2.8%	1.3%	2.6%		0.1	-0.1
<i>Custom Int'l Equity Benchmark ¹⁸ Value Added</i>		-0.3%	-9.1%	2.5%	1.4%	2.4%		0.1	0.0
		0.3%	0.9%	0.3%	-0.1%	0.2%			
PRIVATE EQUITY ¹⁹	26.4	0.4%	1.7%	10.0%	9.7%	10.2%	\$8.7 bil	2.3	-0.1
<i>PEPolicy Benchmark ²⁰ Value Added</i>		1.1%	-0.8%	10.8%	10.6%	12.7%		0.8	0.0
		-0.7%	2.5%	-0.8%	-0.9%	-2.5%			
Private Equity Partnership Investments	26.4	0.4%	1.8%	10.0%	9.8%	10.3%			
Private Equity Distribution Stock	0.0	-7.0%	-54.1%	-31.4%	-31.3%	-11.6%			

¹⁵ Includes domestic equity, international equity, corporate governance, and MDP ventures. It does not include asset allocation transition accounts; those accounts are reflected in total fund but are not included in any composite.

¹⁶ The Public Equity Policy Benchmark is a custom global benchmark maintained by FTSE.

¹⁷ The Custom US Equity Benchmark currently represents the FTSE Total Market Index. It is linked historically to its prior benchmarks.

¹⁸ The Custom Int'l Equity Benchmark currently represents the FTSE All World ex US Index. It is linked historically to its prior benchmarks.

¹⁹ The performance of CalPERS' private equity (AIM) investments is 1-quarter lagged.

²⁰ The AIM Policy Benchmark currently equals 3% + 1-quarter lagged (67% FTSE US TMI + 33% FTSE AW x-US TMI), and is linked historically to its prior benchmarks.

²¹ VaR (Value at Risk) measures how much the portfolio might decrease over a 12 month period in extreme cases. The VAR estimate shows how much the portfolio value might fall in the worst 5% of 12 month periods. VAR is calculated using total risk (standard deviation) and market value.

²² The Sharpe Ratio or reward-to-variability ratio is a measure of the mean excess return per unit of risk in an investment strategy. The Sharpe ratio is used to characterize how well the return of an asset compensates the investor for the risk taken.

²³ The "Information Ratio" calculates the amount of excess performance earned per unit of excess risk, as measured by tracking error. Higher information ratios imply a greater return per unit of excess risk ventured.



Growth Review for PERF (continued)

Comments Regarding Growth Segment Performance

Helped Performance:

- ◆ **U.S. Equity Exposure:** Building on the positive trend from the first quarter, PERS' U.S. equity composite mostly stepped higher in Q2. With the rebound in oil prices and improving corporate earnings outlook countering a surprisingly weak May jobs report, the composite registered mild but steady advance throughout the quarter, save for the last week of trading in June when the Brexit vote outcome roiled global markets. Despite the sharp rise in trading volatility at the end of June, the U.S. equity composite still rounded up the second quarter with a solid gain of 2.5%, handily beating the Growth policy benchmark's 1.3% return while nearly-mirroring its own policy benchmark's 2.6% pace. Results for the trailing 12-months, as well as over the 3- and 5-year periods were similar, where the composite's performance has comfortably outpaced the Growth policy while tracking closely to its own policy benchmark. At the sub-composite level, both of the System's internal and external U.S. equity components did well too, with the former finishing up 2.7% and the latter up 1.5%.
- ◆ **Corporate Governance:** While the process of reducing/winding down of some of the Corporate Governance portfolios remains on-going, the overall program has continued to generate welcoming performance: it was up 4.9% during the second quarter, and has cumulatively returned 5.5% in the last 12-month period. Both figures outperformed the Growth policy benchmark as well as the program's own policy benchmark.

Impeded Performance:

- ◆ **International Equity Exposure:** International equities did not fare as well as their U.S. counterpart during the second quarter – PERS' international equity composite essentially finished this period flat, as positive sentiment from early quarter was soon replaced by a selling mood that was in no small part driven by the concerns leading up to, and the shocking outcome of, the Brexit referendum. This quarter's performance came in below the Growth policy benchmark's 1.3% pace, although it did compare better to the composite's own policy benchmark return of -0.3%. Within the international equity segment, the larger-sized internally managed composite was down -0.3%, while the smaller externally managed composite produced more encouraging results with a 1.3% return.
- ◆ **Private Equity Exposure:** Performance of the CalPERS private equity program can be considered as steady thus far in 2016, but its pace has slowed considerably over the last two years. The program saw a minimal rise of 0.3% during the first three months of this year, and followed that up by returning 0.4% in Q2. While still in the positive territory, this level of performance was considered soft in relative terms, as the total Growth asset class policy benchmark returned 1.3% for both periods; the private equity program's own policy benchmark also reported higher returns of 6.1% and 1.1% in these respective periods.



Public Equity Review for PERF - U.S. Equity

	<u>Market Value</u>	<u>Qtr</u>	<u>1-Year</u>	<u>3-Year</u>	<u>5-Year</u>	<u>10-Year</u>	<u>Date</u>
US Equity Composite (ex ARS)	81.5	2.5%	1.0%	10.6%	11.3%	7.3%	12/79
<i>Custom USEquity Benchmark</i> ²⁴		2.6%	1.1%	10.7%	11.3%	7.3%	
<i>Value Added</i>		-0.1%	-0.1%	-0.1%	0.0%	0.0%	
Total Internal USEquity	73.3	2.7%	1.5%	10.8%	11.5%	7.6%	6/88
<i>Custom Internal USEquity Benchmark</i> ²⁵		2.6%	1.4%	10.7%	11.3%	7.3%	
<i>Value Added</i>		0.1%	0.1%	0.1%	0.2%	0.3%	
Total External USEquity	8.2	1.5%	-3.5%	9.0%	9.5%	6.0%	12/98
<i>Custom External USEquity Benchmark</i> ²⁶		2.6%	0.5%	9.9%	11.0%	7.1%	
<i>Value Added</i>		-1.1%	-4.0%	-0.9%	-1.5%	-1.1%	

Public Equity Review for PERF - International Equity

	<u>Market Value</u>	<u>Qtr</u>	<u>1-Year</u>	<u>3-Year</u>	<u>5-Year</u>	<u>10-Year</u>	<u>Date</u>
Total Int'l Equity (ex ARS)	71.6	0.0%	-8.2%	2.8%	1.3%	2.6%	12/02
<i>Custom Int'l Equity Benchmark</i> ²⁷		-0.3%	-9.1%	2.5%	1.4%	2.4%	
<i>Value Added</i>		0.3%	0.9%	0.3%	-0.1%	0.2%	
Total Internal Int'l Equity	60.1	-0.3%	-8.2%	2.8%	1.3%	2.5%	3/05
<i>Custom Internal Int'l Equity Benchmark</i> ²⁸		-0.6%	-9.2%	2.3%	1.0%	2.3%	
<i>Value Added</i>		0.3%	1.0%	0.5%	0.3%	-.%	
Total External Int'l Equity	20.8	1.3%	-6.2%	3.3%	1.7%	3.2%	6/89
<i>Custom External Int'l Equity Benchmark</i> ²⁹		0.4%	-9.5%	2.1%	0.6%	2.6%	
<i>Value Added</i>		0.9%	3.3%	1.2%	1.1%	0.6%	

Public Equity Review for PERF - Corporate Governance/MDP/FoF

	<u>Market Value</u>	<u>Qtr</u>	<u>1-Year</u>	<u>3-Year</u>	<u>5-Year</u>	<u>10-Year</u>	<u>Date</u>
Total Corporate Governance	0.8	4.9%	5.5%	10.6%	8.0%	4.3%	12/98
<i>Policy Benchmark</i>		-2.8%	-14.6%	4.9%	6.3%	3.3%	
<i>Value Added</i>		7.7%	20.1%	5.7%	1.7%	1.0%	

²⁴ The Custom US Equity Benchmark currently represents the FTSE Total Market Index. It is linked historically to its prior benchmarks.

²⁵ The Custom Internal US Equity Benchmark currently represents the FTSE Total Market Index. It is linked historically to its prior benchmarks.

²⁶ The Custom External US Equity Benchmark return equals the return for each manager's benchmark weighted at the current target asset allocation.

²⁷ The Custom Int'l Equity Benchmark currently represents the FTSE All World ex US Index. It is linked historically to its prior benchmarks.

²⁸ The Custom Internal Int'l Equity Benchmark currently represents the FTSE Developed World ex US/Tobacco Index. This benchmark is linked historically to its prior benchmarks.

²⁹ The Custom External Int'l Equity Benchmark return equals the return for each manager's benchmark weighted at the current target asset allocation.



Absolute Return Strategies Review for PERF

Period Ended 6/30/2016

ARS Allocation

Asset Allocation: Actual versus Target Weights

Asset Class	Actual Asset Allocation	Target Asset Allocation	Difference
ARS	0.1%	0.0%	+0.1%

ARS Segment Performance

	<u>Market</u>		<u>1-Year</u>	<u>3-Year</u>	<u>5-Year</u>	<u>10-Year</u>	<u>5-Year</u>	<u>5-Year Up</u>	<u>5-Year</u>	<u>5-Year</u>
	<u>Value</u>	<u>Qtr</u>					<u>Info</u>	<u>Capture</u>	<u>Sharpe</u>	<u>Sortino</u>
Absolute Return Strategies	0.4	-0.7%	-1.7%	4.1%	3.4%	3.3%	-0.5	0.6	1.0	1.4
ARS Policy Benchmark ³⁰		1.5%	5.6%	5.4%	5.4%	6.8%				
Value Added		-2.2%	-7.3%	-1.3%	-2.0%	-3.5%				
Total Direct Investments	0.4	-0.5%	-1.9%	4.3%	3.6%	3.7%				
Total Funds of Funds	0.0	-8.3%	-0.7%	4.1%	3.4%	2.5%				
HFRI Fund of Funds Index		0.6%	-0.4%	3.9%	2.1%	2.3%				

ARS Characteristics

Percentage of positive Months	Beta vs. S&P 500	<u>Rolling Correlations vs. Index</u>			
		<u>Domestic</u>			
		<u>MSCI</u> <u>W5000</u>	<u>AW x-</u> <u>US</u>	<u>Fixed</u> <u>Benchmark</u>	<u>Real Estate</u> <u>Benchmark</u>
63%	0.0	-0.2	0.0	-0.1	0.1

- ◆ Beta vs. S&P 500: This measures the amount of stock market risk in the portfolio. A beta of 1.0 would indicate that the portfolio's performance should closely track the stock market, while a beta higher than 1.0 implies greater-than-market risk and possibly leverage. The portfolio's beta is close to 0.0 which implies a weak to almost no relationship to stock market return, which is appropriate for this program.
- ◆ Correlation vs. various indices: We have calculated the historical correlation between the ARS and CalPERS' other main asset classes. Over a market cycle, the ARS has shown very low correlation to the equity markets while also exhibiting a weak negative correlation with fixed income markets.

³⁰ The ARS Policy Benchmark consists of the Merrill Lynch 1-Year Treasury Note + 5% and is linked historically to its prior benchmark.

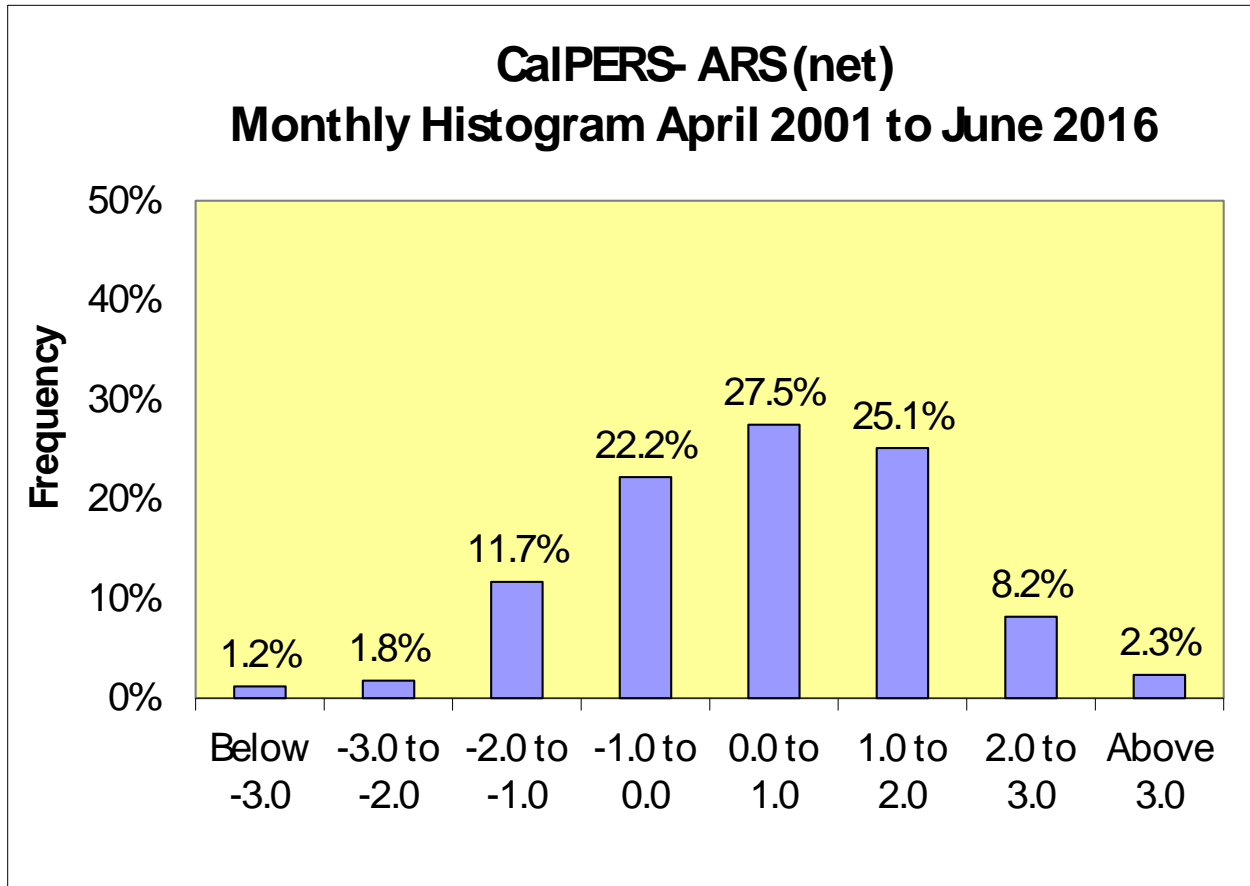
³¹ The "Information Ratio" calculates the amount of excess performance earned per unit of excess risk, as measured by tracking error. Higher information ratios imply a greater return per risk ventured.

³² The Sharpe Ratio or reward-to-variability ratio is a measure of the mean excess return per unit of risk in an investment strategy. The Sharpe ratio is used to characterize how well the return of an asset compensates the investor for the risk taken.

³³ The Sortino Ratio is a measure of a risk-adjusted return of an investment asset. It is an extension of the Sharpe Ratio. While the Sharpe ratio takes into account any volatility, in return of an asset, Sortino ratio differentiates volatility due to up and down movements. The up movements are considered desirable and not accounted in the volatility.



Absolute Return Strategies Review for PERF (Continued)
Period Ended 6/30/2016



- ◆ Histogram: The ARS is designed to generate small amounts of return on a consistent basis. This chart shows the frequency of monthly performance results. A significant number of outlying monthly performance returns would indicate insufficient risk controls. We believe that the distribution of monthly returns is as expected.



Income Review for PERF Periods Ended 6/30/2016

Income Allocation

Asset Allocation: Actual versus Target Weights

Asset Class	Actual Asset Allocation	Target Asset Allocation	Difference
Income	20.3%	20.0%	+0.3%

Income Segment Performance

	Market Value						VaR ³⁷	5-year Sharpe Ratio ³⁸	5-year Info Ratio ³⁹
		Qtr	1-Year	3-Year	5-Year	10-Year			
INCOME	59.9	3.9%	9.3%	6.2%	5.9%	7.1%	\$7.6 bil	1.2	0.7
<i>Income Policy Benchmark³⁴</i>		3.6%	9.3%	5.5%	5.3%	6.5%		1.0	0.0
<i>Value Added</i>		0.3%	0.0%	0.7%	0.6%	0.6%			
U.S. Income	53.4	4.2%	9.6%	6.9%	6.6%	7.5%		1.3	0.6
<i>U.S. Income Policy Benchmark³⁵</i>		3.8%	9.6%	6.2%	6.0%	6.8%		1.1	0.0
<i>Value Added</i>		0.4%	0.0%	0.7%	0.6%	0.7%			
Non-U.S. Income	6.5	2.1%	6.7%	0.5%	-0.5%	4.0%		-0.1	0.9
<i>Non-US Income Policy Benchmark³⁶</i>		2.2%	6.7%	-0.1%	-1.2%	3.2%		-0.2	0.0
<i>Value Added</i>		-0.1%	0.0%	0.6%	0.7%	0.8%			

Comments Regarding Income Segment Performance

Helped Performance:

- ◆ **Corporate Bonds:** With investors continued seeking incremental yields wherever available, investment grade credits were a key beneficiary to this ongoing trend. Within this backdrop CalPERS' corporate bond investments generated welcoming gains this quarter, with the \$11.9 billion internal corporate bond portfolio returning 6.0% and the long duration corporate bond portfolio returning 5.4%; both outperformed the Income policy benchmark by a large margin.
- ◆ **Sovereign Bonds:** The sovereign bond market was another bright spot during the second quarter, thanks to recovering commodity prices that helped propping up some of the non-U.S. sovereign bonds as well as the overall investor preference for safety. The \$2.2 billion sovereign bond portfolio was up 5.5% and easily beat the Income policy benchmark.

³⁴ The Income Policy Benchmark return equals the benchmark returns for domestic and international fixed income components weighted at policy allocation target percentages.

³⁵ The US Fixed Income Policy Benchmark consists of the Barclays Long Liability Index and is linked historically to its prior benchmark.

³⁶ The Non-US Fixed Income Policy Benchmark consists of the Barclays International Fixed Income and is linked historically to its prior benchmark.

³⁷ VaR (Value at Risk) measures how much the portfolio might decrease over a 12 month period in extreme cases. The VAR estimate shows how much the portfolio value might fall in the worst 5% of 12 month periods. VAR is calculated using total risk (standard deviation) and market value.

³⁸ The Sharpe Ratio or reward-to-variability ratio is a measure of the mean excess return per unit of risk in an investment strategy. The Sharpe ratio is used to characterize how well the return of an asset compensates the investor for the risk taken.

³⁹ The "Information Ratio" calculates the amount of excess performance earned per unit of excess risk, as measured by tracking error. Higher information ratios imply a greater return per risk ventured.



- ◆ **High Yield Bonds:** Similar to investment grade corporate bonds, high yield fixed income received continued investor interests and rose throughout the second quarter. This segment also received additional tailwind from energy-related issues, fueled by the sizable rebound of oil prices. All told, both of CalPERS' internal and external high yield portfolios finished the quarter above the Income policy benchmark, with the former gaining 5.1% and the latter up 6.0%.

Impeded Performance:

- ◆ **Mortgage Bonds:** Performance in the mortgage sector has largely been consistent over the last three years, and CalPERS' \$10.5 billion mortgage portfolio was no exception: it generated a steady-rate return of 1.5% in Q2. However, relative to the Income policy benchmark this performance paled by more than -211 bps while also markedly trailed the System's government and corporate bond portfolios.
- ◆ **International Fixed Income:** The international bond portfolio was positive for the quarter. But given the continued strength of U.S. Dollar its 2.1% overall return was considered soft relative to the other PERS credit portfolios, thereby making it a detractor to the Income asset class.



Income Review for PERF (Continued)

	Market Value	Qtr	1-Year	3-Year	5-Year	10-Year	Date
INCOME	59.9	3.9%	9.3%	6.2%	5.9%	7.1%	6/88
<i>Income Policy Benchmark</i> ⁴⁰		3.6%	9.3%	5.5%	5.3%	6.5%	
<i>Value Added</i>		0.3%	0.0%	0.7%	0.6%	0.6%	
Internal US Income + Opportunistic	53.4	4.2%	9.6%	6.9%	6.6%	7.5%	12/95
Mortgage Bonds	10.5	1.5%	4.7%	5.6%	4.5%	5.8%	12/82
Long Duration Mortgages*	4.1	2.5%	7.4%	5.6%	5.2%	7.3%	6/05
Corporate Bonds*	11.9	6.0%	10.1%	7.8%	8.1%	8.3%	3/02
U.S. Government*	19.7	-1.2%	-0.3%	0.6%	5.4%	5.6%	12/99
Sovereign Bonds* ⁴¹	2.2	5.5%	10.3%	7.9%	6.7%	7.5%	6/96
Long Duration Corporates*	2.7	5.4%	15.6%	6.6%	9.5%	9.6%	9/05
<i>Custom Benchmark</i> ⁴²		3.8%	9.6%	6.2%	6.0%	6.8%	
Opportunistic ⁴³	4.1	4.6%	2.7%	6.0%	5.0%	5.1%	6/00
Internal High Yield Bonds*	1.0	5.1%	5.0%	8.8%	6.7%	10.1%	9/99
External High Yield*	1.8	6.0%	1.1%	4.4%	6.2%	5.6%	3/02
High Yield Mortgage*	0.3	2.1%	1.1%	5.9%	9.6%	-.%	3/08
<i>Citigroup High Yield Cash Pay</i>		5.8%	0.9%	3.7%	5.4%	7.1%	
Special Investments	0.0	2.0%	8.4%	8.3%	9.0%	7.1%	3/91
Total International Fixed Income	6.5	2.1%	6.7%	0.5%	-0.5%	4.0%	3/89
<i>Custom Benchmark</i> ⁴⁴		2.2%	6.7%	-0.1%	-1.2%	3.2%	
<i>Value Added</i>		-0.1%	0.0%	0.6%	0.7%	0.8%	
Securities Lending ⁴⁵	12.5	0.1%	0.4%	0.5%	0.6%	1.3%	8/00
<i>Custom Benchmark</i>		0.1%	0.3%	0.1%	0.1%	1.0%	
<i>Value Added</i>		0.0%	0.1%	0.4%	0.5%	0.3%	
Internal Active Short Term**	2.7	0.2%	0.5%	0.3%	0.3%	-.%	3/11
<i>Custom Benchmark</i>		0.1%	0.3%	0.1%	0.1%	-.%	
<i>Value Added</i>		0.1%	0.2%	0.2%	0.2%	-.%	
CalPERSESEC Cash Collateral**	9.8	0.1%	0.4%	0.3%	0.3%	-.%	6/10
<i>Custom Benchmark</i>		0.1%	0.3%	0.1%	0.1%	-.%	
<i>Value Added</i>		0.0%	0.1%	0.2%	0.2%	-.%	

⁴⁰ The Income Policy Benchmark return equals the benchmark returns for domestic and international fixed income components weighted at policy allocation target percentages.

⁴¹ The Internal Sovereign Bond market value is also included in the Internal Treasury Bond market value.

⁴² The custom benchmark consists of the Barclays Long Liability Index. Prior of 3Q 2004 the benchmark was Citigroup LPF.

⁴³ Opportunistic includes internal and external high yield. Internal High Yield's market value is included in both the Total Internal Bonds and the Opportunistic Market Values.

⁴⁴ The custom benchmark consists of the Barclays International Fixed Income Index and is linked historically to its prior benchmark.

⁴⁵ The Securities Lending composite is a non-PERF composite. The composite includes the Structure Investment Vehicles performance.

* These portfolios and/or composites are unitized and are included across multiple plans.

** These portfolios hold the collateral for the security lending program.



Inflation Performance for PERF Period Ended 6/30/2016

Inflation Allocation

Asset Allocation: Actual versus Target Weights

Asset Class	Actual Asset Allocation	Target Asset Allocation	Difference
Inflation	6.0%	6.0%	0.0%

Inflation Performance

	Market Value						VaR ⁴⁸	5-year Sharpe Ratio ⁴⁹	5-year Info Ratio ⁵⁰
		Qtr	1-Year	3-Year	5-Year	10-Year			
INFLATION	17.8	4.6%	-3.6%	-2.6%	-1.5%	-.%	\$1.3 bil	-0.2	0.3
<i>Inflation Policy Benchmark</i> ⁴⁶		4.4%	-5.0%	-3.6%	-2.0%	-.%		-0.3	0.0
<i>Value Added</i>		0.2%	1.4%	1.0%	0.5%	-.%			
Internal Commodities ⁴⁷	3.0	12.6%	-26.0%	-20.0%	-14.3%	-.%			
<i>GSCI Total Return Index</i>		12.7%	-26.1%	-19.8%	-14.0%	-.%			
<i>Value Added</i>		-0.1%	0.1%	-0.2%	-0.3%	-.%			
Core Inflation Linked Bonds	12.1	1.5%	2.4%	2.3%	2.6%	-.%			
<i>Custom Benchmark</i>		1.6%	2.4%	1.9%	2.2%	-.%			
<i>Value Added</i>		-0.1%	0.0%	0.4%	0.4%	-.%			
Tactical Commodities	1.7	18.1%	-20.0%	-17.8%	-.%	-.%			
<i>GSCI Total Return Index</i>		12.7%	-26.1%	-19.8%	-.%	-.%			
<i>Value Added</i>		5.4%	6.1%	2.0%	-.%	-.%			
Tactical TIPS	1.0	1.7%	4.2%	2.1%	-.%	-.%			
<i>CalPERSTIPS</i>		1.7%	4.4%	2.3%	-.%	-.%			
<i>Value Added</i>		0.0%	-0.2%	-0.2%	-.%	-.%			

- ◆ Inflation was PERS' highest returning asset class this quarter, with a 4.6% return that also compared favorably to its own asset class benchmark by +26 bps. Most of Q2's gains were driven by the commodities component, as results from the asset class' main inflation-linked portfolios (which represented 74% of Inflation's assets as of June 30) were relatively quiet: both of the core and tactical TIPS portfolios saw their returns slowed to low single-digit in Q2, echoing a drop of inflation expectations where soft CPI readings and weak payrolls report in May that led to some concerns of potential weakness in the U.S. economy. The asset class' smaller commodities allocation, on the other hand, saw strong double-digit advance that was supported mainly by the stabilization/rebound in energy and precious metal prices. As a result, the PERS internal commodities portfolio and tactical commodities portfolio finished the second quarter rallying 12.6% and 18.1% respectively, contributing to Inflation's overall success. Inflation's 1-, 3-, and 5-year annualized returns, while still negative, are currently better than the asset class benchmark as well.

⁴⁶ The Inflation Policy Benchmark equals the benchmark returns of commodities and TIPS weighted at policy allocation target percentages.

⁴⁷ The internal commodities overlay portfolio is a derivatives portfolio which has no market value but a notional value approximately equal to the size of the commodities collateral.

⁴⁸ VaR (Value at Risk) measures how much the portfolio might decrease over a 12 month period in extreme cases. The VAR estimate shows how much the portfolio value might fall in the worst 5% of 12 month periods. VAR is calculated using total risk (standard deviation) and market value.

⁴⁹ The Sharpe Ratio or reward-to-variability ratio is a measure of the mean excess return per unit of risk in an investment strategy. The Sharpe ratio is used to characterize how well the return of an asset compensates the investor for the risk taken.

⁵⁰ The "Information Ratio" calculates the amount of excess performance earned per unit of excess risk, as measured by tracking error. Higher information ratios imply a greater return per unit of excess risk ventured.



Real Assets Review for PERF Period Ended 6/30/2016

Real Assets Allocation

Asset Allocation: Actual versus Target Weights

Asset Class	Actual Asset Allocation	Target Asset Allocation	Difference
Real Assets	10.8%	12.0%	-1.2%

Real Assets Segment Performance

	Market Value						VaR ⁵⁵	5-year Sharpe Ratio ⁵⁶	5-year Info Ratio ⁵⁷
		Qtr	1-Year	3-Year	5-Year	10-Year			
REAL ASSETS	31.8	1.9%	6.0%	10.6%	11.1%	-0.1%	\$4.4 bil	1.6	0.0
<i>Real Assets Policy Benchmark</i> ⁵¹		1.7%	11.1%	11.5%	11.0%	7.8%		2.6	0.0
<i>Value Added</i>		0.2%	-5.1%	-0.9%	0.1%	-7.9%			
Real Estate ⁵²	27.3	2.2%	7.1%	11.5%	12.4%	-0.5%	\$4.4 bil	1.6	0.0
<i>Real Estate Policy Benchmark</i> ⁵³		2.0%	12.6%	12.6%	12.1%	8.7%		2.5	0.0
<i>Value Added</i>		0.2%	-5.5%	-1.1%	0.3%	-9.2%			
Forestland ⁵⁴	2.0	-2.6%	-9.6%	-2.6%	-2.6%	-.%			
<i>NCREIF Timberland Index</i>		-0.3%	2.9%	7.7%	6.6%	-.%			
<i>Value Added</i>		-2.3%	-12.5%	-10.3%	-9.2%	-.%			
Infrastructure ⁵⁴	2.6	1.8%	9.0%	14.9%	11.7%	-.%			
<i>CPI + 400 BPS 1Qtr Lag</i>		1.7%	5.0%	4.8%	5.3%	-.%			
<i>Value Added</i>		0.1%	4.0%	10.1%	6.4%	-.%			

- ◆ Programs within Real Assets saw mixed results during Q2. For the most part, this asset class' performance continued to be driven primarily by the real estate program, where it is solely comprised of private real estate investments and currently accounts for 86% of RA's total assets (against a 83.3% allocation target). For the quarter, real estate return held steady with a 2.2% gain that represented +28 bps of net of fee out-performance. As for Real Assets' two smaller components, the forestland portfolio extended its -7.1% Q1 struggle by losing another -2.6% this quarter, while the infrastructure piece saw a steady rise of 1.8%. The favorable performance from real estate and infrastructure, combined with an underweight to the poor-performing forestland portfolio (current weight of 6.2% vs. a target allocation of 8.3% within RA), allowed this asset class to finish Q2 modestly ahead of its asset class benchmark, 1.9% to 1.7%. Over longer time horizon, however, RA's returns have largely trailed its benchmark, except at the 5-year mark.

⁵¹ The Real Assets Policy Benchmark equals the benchmark returns of real estate, timber, and infrastructure weighted at policy allocation target percentages.

⁵² The Real Estate performance is reported on a 1-quarter lagged basis. The Real Estate total returns are net of investment management fees and all expenses, including property level operations expenses netted from property income. This method differs from GASB 31, which requires all investment expenses be identified for inclusion in the System's general purpose financial statements.

⁵³ The Real Estate Policy Benchmark consists of the NCREIF ODCE Index (1-quarter lagged) and the FTSE EPRA/NAREIT Developed Index weighted at their policy allocation target percentages. It is historically linked to its prior benchmarks.

⁵⁴ These investments are reported on a 1-quarter lagged basis.

⁵⁵ VaR (Value at Risk) measures how much the portfolio might decrease over a 12 month period in extreme cases. The VAR estimate shows how much the portfolio value might fall in the worst 5% of 12 month periods. VAR is calculated using total risk (standard deviation) and market value.

⁵⁶ The Sharpe Ratio or reward-to-variability ratio is a measure of the mean excess return per unit of risk in an investment strategy. The Sharpe ratio is used to characterize how well the return of an asset compensates the investor for the risk taken.

⁵⁷ The "Information Ratio" calculates the amount of excess performance earned per unit of excess risk, as measured by tracking error. Higher information ratios imply a greater return per unit of excess risk ventured.





Liquidity Review for PERF Period Ended 6/30/2016

Liquidity Allocation

Asset Allocation: Actual versus Target Weights

Asset Class	Actual Asset Allocation	Target Asset Allocation	Difference
Liquidity	1.5%	1.0%	+0.5%

Liquidity Segment Performance

	Market Value	Qtr	1-Year	3-Year	5-Year	10-Year	VaR ⁶⁰	5-year	5-year
								Sharpe Ratio ⁶¹	Info Ratio ⁶²
LIQUIDITY	4.5	0.1%	0.4%	0.6%	1.1%	1.9%	\$0.0 bil	N/A	N/A
<i>Liquidity Policy Benchmark</i> ⁵⁸		0.1%	0.2%	1.1%	1.5%	3.3%			
<i>Value Added</i>		0.0%	0.2%	-0.5%	-0.4%	-1.4%			
Cash Composite	4.5	0.1%	0.4%	0.2%	0.2%	1.3%			
<i>Custom STIF</i> ⁵⁹		0.1%	0.3%	0.1%	0.1%	1.2%			
<i>Value Added</i>		0.0%	0.1%	0.1%	0.1%	0.1%			

⁵⁸The Liquidity Policy Benchmark is a custom index maintained by State Street Bank.

⁵⁹The Custom STIF Policy Benchmark is a custom index maintained by State Street Bank.

⁶⁰VaR (Value at Risk) measures how much the portfolio might decrease over a 12 month period in extreme cases. The VAR estimate shows how much the portfolio value might fall in the worst 5% of 12 month periods. VAR is calculated using total risk (standard deviation) and market value.

⁶¹The Sharpe Ratio or reward-to-variability ratio is a measure of the mean excess return per unit of risk in an investment strategy. The Sharpe ratio is used to characterize how well the return of an asset compensates the investor for the risk taken.

⁶²The "Information Ratio" calculates the amount of excess performance earned per unit of excess risk, as measured by tracking error. Higher information ratios imply a greater return per unit of excess risk ventured.



Affiliate Fund Information

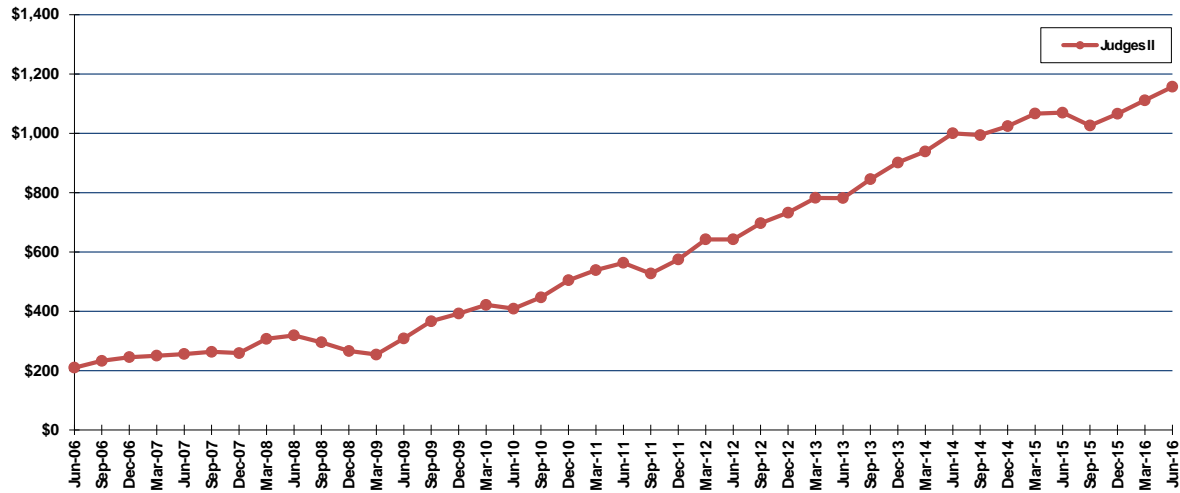


Judges' Retirement System II Fund



Judges II Performance Period Ended June 30, 2016

Growth in Assets (in \$Millions)



Total Plan Asset Allocation

Asset Class	Actual (%)	Policy (%)	Difference (%)
Global Equity	49.2	50.0	-0.8
US Fixed Income	34.8	34.0	+0.8
TIPS	4.9	5.0	-0.1
REITS	8.2	8.0	+0.2
Commodities	2.9	3.0	-0.1
Cash/Short-Term	0.0	0.0	0.0
Total Judges II	100.0	100.0	0.0

Commentary – Judges II

- ◆ The 61% risk assets/39% fixed income target asset allocation mix has worked well for Judges II (“JRS II, the Plan”), allowing it to earn fairly consistent returns over time. This same theme was repeated during the second quarter of 2016, where despite the shocking Brexit referendum outcome sent market volatility spiking at the end of June, the Plan still generated a steady 2.7% total return that was on par with its weighted policy benchmark. Outside of core fixed income, which showed very well in Q2, JRS II’s diversification into REIT and commodities also contributed positively as these two strong-performing portfolios helped offset weaker results from global equity and TIPS. Over longer time horizon, JRS II’s track record has fared well against the policy benchmark as well.
- ◆ At the end of the quarter, Judges II’s asset allocation showed a light bias towards investment grade fixed income and REITs while having small underweight in global equity, TIPS and commodities.
- ◆ For the second consecutive quarter, global equities’ performance was muted. But contrary to Q1, where stocks opened with a whimper then gained steam later on positive influence from sliding oil prices and dovish Fed comment, the global equity portfolio saw its positive Q2 momentum gradually eroded by rising British referendum jitters and eventually, the Brexit outcome. Even though the voting outcome weighed heavily on stock valuations at the end of the quarter, the overall portfolio did still finish the quarter with a small 1.1% gain, just shy of its custom benchmark’s 1.2% pace. Longer-term track record has remained in fine shape, where the global equity fund continues to perform in line with expectations over periods one-year and beyond.
- ◆ The impact of the Brexit vote was not limited to equities. The surprising referendum result, as well as the broad uncertainty surrounding future economic impact on the U.K. and the European Union, had investors scrambling for principal protection. While the 10-year Treasury yield was trending up at the end of May given the increasing likelihood of a U.S. Fed rate hike then, it quickly reversed course in June, particularly after the U.K.’s decision to leave the EU. This jolt of flight-to-safety shift sent yields sharply lower in June and gave Judges II’s fixed income portfolio a huge tailwind, pushing it to end the second quarter with a big gain of 4.2%. This strong finish topped the custom Barclays Index’s 3.8% Q2 return, while also further boosting the fixed income portfolio’s longer-term track record, in both absolute and relative terms.
- ◆ The steady rise of oil prices and the moderation of the strength of the US Dollar have thus far not translated into sizable movement in inflation readings: headline Consumer Price Index was up 0.7% for the three months ending May and up just 1.1% during the past twelve months. Within this backdrop, inflation protected bonds were unable to keep up with the core fixed income securities during Q2, with both the JRS II TIPS portfolio and the Barclays U.S. TIPS Index recording positive but relatively small gains of 1.7%.
- ◆ Real estate-related stocks continued to do well. Following a 5.5% rise in the first quarter, JRS II’s REIT portfolio advanced another 3.7% in the second quarter. This represented a year-to-date gain of 9.3%, making it one of the highest returning JRS II investments thus far in 2016. Both measures, as well as the REIT portfolio’s longer-term returns, currently remain on par with the custom REIT benchmark’s pace.
- ◆ The star of the quarter was the commodities marketplace, and JRS II’s commodities investments fully participated in Q2’s energy-led rally. This portfolio posted a 13.1% return that beat the GSCI Commodity Total Return Index by 38 bps, making it the strongest performer within the Judges II program this quarter.



For the trailing one-year and three-year periods, though, both the commodities portfolio and the index measure performed similarly and remained squarely in the red.

Net of Fee Plan Performance Results – Judges II

	Market Value	Qtr	One Year	Three Year	Five Year	Ten Year
Judges II	\$1,156.6 mil	2.7%	1.6%	6.4%	6.6%	5.6%
<i>Weighted Policy Benchmark⁶³</i>		2.7	1.7	6.2	6.6	5.7
JRS II Global Equity	\$569.1 mil	1.1	-3.8	6.6	6.1	4.5
<i>Global Equity Benchmark⁶⁴</i>		1.2	-4.0	6.5	6.1	4.4
JRS II US Fixed Income	\$402.7 mil	4.2	9.7	6.9	6.6	7.3
<i>Custom Benchmark⁶⁵</i>		3.8	9.6	6.2	6.0	6.8
JRS II TIPS	\$56.9 mil	1.7	4.3	2.1	-.	-.
<i>Custom Benchmark⁶⁶</i>		1.7	4.4	2.3	-.	-.
JRS II REITs	\$94.5 mil	3.7	12.5	9.0	8.6	3.4
<i>Custom Benchmark⁶⁷</i>		3.7	12.6	8.9	8.6	3.1
JRS II Commodities	\$33.4 mil	13.1	-25.4	-20.0	-.	-.
<i>GSCI Total Return Index</i>		12.7	-26.1	-19.8	-.	-.

⁶³ The weighted policy benchmark returns are calculated based on asset class index returns weighted by asset class policy targets.

⁶⁴ The JRS II Global Equity Benchmark is a custom global benchmark maintained by FTSE starting on 9/8/2011. Prior of that it is calculated as an asset weighted benchmark of its underlying domestic and international funds.

⁶⁵ The current US Fixed Income Custom Benchmark is the 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.

⁶⁶ The TIPS benchmark is the Barclays U.S. TIPS Index.

⁶⁷ The REIT Custom Benchmark is the FTSE EPRA/NAREIT Developed Index. Historically, it has been the Wilshire RESI and REIT Indices.

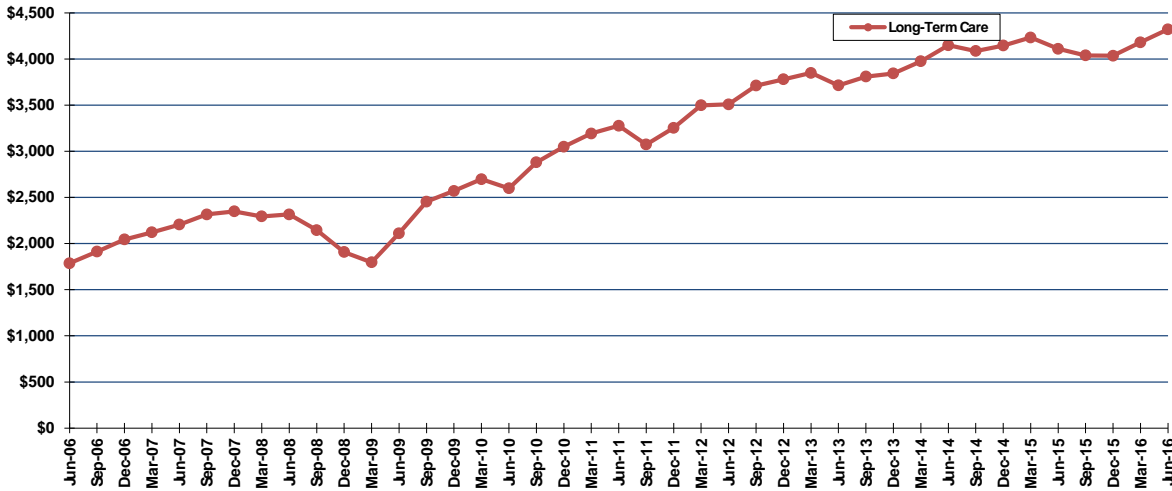


Long-Term Care Fund



LTC Performance
 Period Ended June 30, 2016

Growth in Assets (in \$Millions)



Total Plan Asset Allocation

Asset Class	Actual (%)	Policy (%)	Difference (%)
Global Equity	13.8	15.0	-1.2
US Fixed Income	62.5	61.0	+1.5
TIPS	6.0	6.0	0.0
REITS	12.5	12.0	+0.5
Commodities	5.2	6.0	-0.8
Cash/Short-Term	0.0	0.0	0.0
Total LTC	100.0	100.0	0.0

Commentary – LTC

- ◆ With a target of 61% assets assigned to core fixed income (and 62.5% actual weight as of June 30), this more conservative asset allocation played into the Long-Term Care Program's favor ("LTC, the Program") in the second quarter. This sizable exposure to the core fixed income segment, which saw strong gains thanks to heavy late-quarter safe-haven buy in, helped make LTC the highest returning Affiliates program with a total Q2 return of 3.6%. For the same period, the Program's policy benchmark reported a slightly higher return of 3.7%. Over longer time horizon, LTC's track record has done well, continuing to outpace the policy benchmark for all measured periods shown.
- ◆ The LTC's asset allocation did not show too much deviation from its adopted targets, with small overweight in U.S. fixed income and REITs while underweight in global equity and commodities.
- ◆ For the second consecutive quarter, global equities' performance was muted. But contrary to Q1, where stocks opened with a whimper then gained steam later on positive influence from sliding oil prices and dovish Fed comment, the global equity portfolio saw its positive Q2 momentum gradually eroded by rising British referendum jitters and eventually, the Brexit outcome. Even though the voting outcome weighed heavily on stock valuations at the end of June, the overall portfolio did still finish the quarter with a small 1.2% gain, just ahead of its custom benchmark's 1.1% pace. Longer-term track record has remained in fine shape, where the global equity fund continues to perform in line with expectations over periods one-year and beyond.
- ◆ The impact of the Brexit vote was not limited to equities. The surprising referendum result, as well as the broad uncertainty surrounding future economic impact on the U.K. and the European Union, had investors scrambling for principal protection. While the 10-year Treasury yield was trending up at the end of May given the increasing likelihood of a U.S. Fed rate hike then, it quickly reversed course in June, particularly after the U.K.'s decision to leave the EU. This jolt of flight-to-safety shift sent yields sharply lower in June and gave LTC's fixed income portfolio a huge tailwind, pushing it to end the second quarter with a big gain of 3.7%. This strong finish nearly mirrored the custom Barclays Index's 3.8% Q2 return, while also further boosting the fixed income portfolio's longer-term track record, in both absolute and relative terms.
- ◆ The steady rise of oil prices and the moderation of the strength of the US Dollar have thus far not translated into sizable movement in inflation readings: headline Consumer Price Index was up 0.7% for the three months ending May and up just 1.1% during the past twelve months. Within this backdrop, inflation protected bonds were unable to keep up with the core fixed income securities during Q2, with both the LTC TIPS portfolio and the Barclays U.S. TIPS Index recording positive but relatively small gains of 1.7%.
- ◆ Real estate-related stocks continued to do well. Following a 5.1% rise in the first quarter, LTC's REIT portfolio advanced another 3.2% in the second quarter. This represented a year-to-date gain of 8.5%, making it one of the highest returning LTC investments thus far in 2016. Both measures, as well as the REIT portfolio's longer-term returns, are currently ahead of the custom benchmark by a steady margin.
- ◆ The star of the quarter was the commodities marketplace, and LTC's commodities investments fully participated in Q2's energy-led rally. This portfolio posted a 12.7% return, tying the GSCI Commodity Total Return Index that also made it the strongest performer within the LTC program this quarter. For the trailing one-year and three-year periods, the portfolio's returns remain squarely in the red but they too, are on par with the pace of the benchmark.



Net of Fee Plan Performance Results – LTC

	Market Value	Qtr	One Year	Three Year	Five Year	Ten Year
Long-Term Care ("LTC")	\$4,320.7 mil	3.6%	5.5%	4.9%	4.3%	5.0%
<i>Weighted Policy Benchmark⁶⁸</i>		3.7	5.2	4.6	4.2	4.8
LTC Global Equity	\$597.1 mil	1.2	-3.5	6.4	6.4	4.5
<i>Custom Benchmark⁶⁹</i>		1.1	-3.9	6.1	6.2	4.5
LTC US Fixed Income	\$2,698.5mil	3.7	9.6	6.2	6.0	7.0
<i>Custom Benchmark⁷⁰</i>		3.8	9.6	6.2	6.0	6.8
LTC TIPS	\$258.7 mil	1.7	4.3	2.3	2.6	4.9
<i>Barclays U.S. TIPS Index</i>		1.7	4.4	2.3	2.6	4.8
LTC REITs	\$540.9 mil	3.2	12.1	8.3	8.1	3.0
<i>Custom Benchmark⁷¹</i>		3.1	11.1	7.6	7.7	2.6
LTC Commodities	\$225.2 mil	12.7	-25.9	-19.7	-.	-.
<i>GSCI Total Return Index</i>		12.7	-26.1	-19.8	-.	-.

⁶⁸ The weighted policy benchmark returns are calculated based on asset class index returns weighted by asset class policy targets.

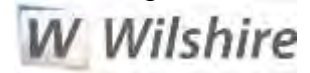
⁶⁹ Effective 12/12/2012 the domestic and international equity asset classes were aggregated into a single global equity asset class, benchmarked against the MSCI ACWI IMI (net).

⁷⁰ The LTC US Fixed Income Custom Benchmark is the 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 the Barclays Aggregate Bond Index.

⁷¹ Effective 12/12/2012, the REIT Custom Benchmark changed to the FTSE EPRA/NAREIT Developed Liquid (net) Index.

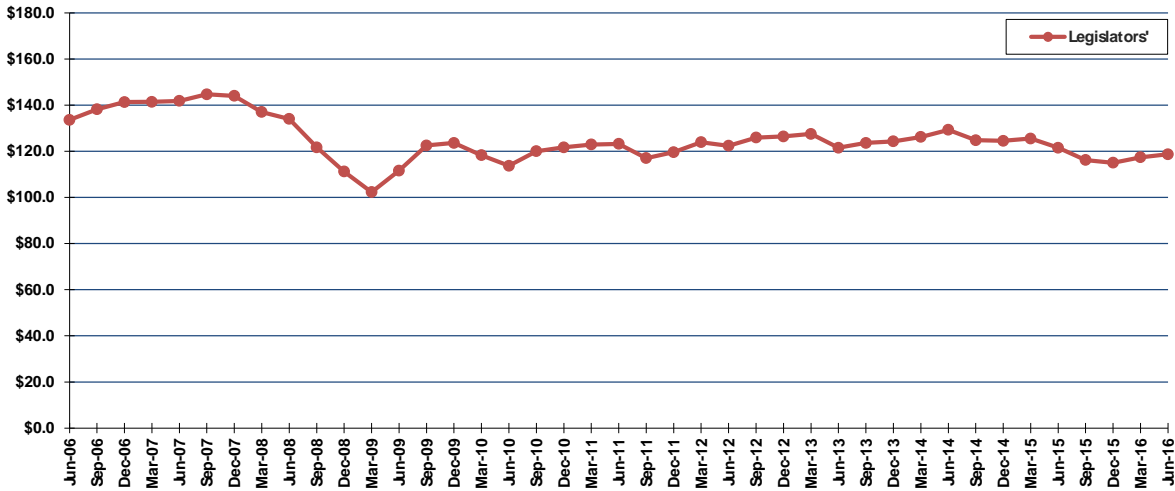


Legislators' Retirement System Fund



LRS Performance
 Period Ended June 30, 2016

Growth in Assets (in \$Millions)



Total Plan Asset Allocation

Asset Class	Actual (%)	Policy (%)	Difference (%)
Global Equity	23.4	24.0	-0.6
US Fixed Income	39.8	39.0	+0.8
TIPS	25.8	26.0	-0.2
REITS	8.1	8.0	+0.1
Commodities	2.9	3.0	-0.1
Cash/Short-Term	0.0	0.0	0.0
Total LRS	100.0	100.0	0.0

Commentary – LRS

- ◆ The California Legislators' Retirement System ("LRS, the System") produced a modest-sized gain in the second quarter of 2016, with a 3.0% return that outpaced its weighted policy benchmark by 10 bps. Similar to what Judges II and the Long-Term Care Program experienced in Q2, LRS' sizable exposure (and a slight overweight) to core investment grade fixed income turned out to be very beneficial, as this segment saw a sharp rally due to the Brexit vote fallout and helped compensate for the soft results from global equity. The System's investments into REITs and commodities, albeit at a smaller allocation, also proved helpful as both segments recorded solid appreciations this quarter that contributed to the overall Total Fund return.
- ◆ As of June 30, the System was marginally overweight in investment grade fixed income and REITs while underweight in global equity, TIPS and commodities.
- ◆ For the second consecutive quarter, global equities' performance was muted. But contrary to Q1, where stocks opened with a whimper then gained steam later on positive influence from sliding oil prices and dovish Fed comment, the global equity portfolio saw its positive Q2 momentum gradually eroded by rising British referendum jitters and eventually, the Brexit outcome. Even though the voting outcome weighed heavily on stock valuations at the end of June, the overall portfolio did still finish the quarter with a small 1.2% gain, tying its custom benchmark's pace. Longer-term track record has remained in fine shape, where the global equity fund continues to perform in line with expectations over periods one-year and beyond.
- ◆ The impact of the Brexit vote was not limited to equities. The surprising referendum result, as well as the broad uncertainty surrounding future economic impact on the U.K. and the European Union, had investors scrambling for principal protection. While the 10-year Treasury yield was trending up at the end of May given the increasing likelihood of a U.S. Fed rate hike then, it quickly reversed course in June, particularly after the U.K.'s decision to leave the EU. This jolt of flight-to-safety shift sent yields sharply lower in June and gave LTC's fixed income portfolio a huge tailwind, pushing it to end the second quarter with a big gain of 4.2%. This strong finish topped the custom Barclays Index's 3.8% Q2 return, while also further boosting the fixed income portfolio's longer-term track record, in both absolute and relative terms.
- ◆ The steady rise of oil prices and the moderation of the strength of the US Dollar have thus far not translated into sizable movement in inflation readings: headline Consumer Price Index was up 0.7% for the three months ending May and up just 1.1% during the past twelve months. Within this backdrop, inflation protected bonds were unable to keep up with the core fixed income securities during Q2, with both the LRS TIPS portfolio and the Barclays U.S. TIPS Index recording positive but relatively small gains of 1.7%.
- ◆ Real estate-related stocks continued to do well. Following a 5.5% rise in the first quarter, LRS' REIT portfolio advanced another 3.7% in the second quarter. This represented a year-to-date gain of 9.3%, making it one of the highest returning LRS investments thus far in 2016. Both measures, as well as the REIT portfolio's longer-term returns, currently remain on par with the custom REIT benchmark's pace.
- ◆ The star of the quarter was the commodities marketplace, and LRS' commodities investments fully participated in Q2's energy-led rally. This portfolio posted a 13.1% return that beat the GSCI Commodity Total Return Index by 41 bps, making it the strongest performer within the LRS program this quarter. For the trailing one-year and three-year periods, though, the portfolio's returns remain squarely in the red but they too, are on par with the pace of the benchmark.



Net of Fee Plan Performance Results – LRS

	Market Value	Qtr	One Year	Three Year	Five Year	Ten Year
LRS	\$118.7 mil	3.0%	4.0%	5.6%	5.8%	6.1%
<i>Weighted Policy Benchmark⁷²</i>		2.9	4.2	5.3	5.7	5.9
LRS Global Equity	\$27.8 mil	1.2	-3.8	6.6	6.3	4.5
<i>Global Equity Benchmark⁷³</i>		1.2	-4.0	6.5	6.2	4.5
LRS US Fixed Income	\$47.2 mil	4.2	9.6	6.9	6.6	7.4
<i>Custom Benchmark⁷⁴</i>		3.8	9.6	6.2	6.0	6.9
LRS TIPS	\$30.7 mil	1.7	4.3	2.2	2.6	4.8
<i>Custom Benchmark⁷⁵</i>		1.7	4.4	2.3	2.6	4.8
LRS REITs	\$9.6 mil	3.7	12.5	9.0	-.-	-.-
<i>Custom Benchmark⁷⁶</i>		3.7	12.6	8.9	-.-	-.-
LRS Commodities	\$3.4 mil	13.1	-25.4	-20.0	-.-	-.-
<i>GSCI Total Return Index</i>		12.7	-26.1	-19.8	-.-	-.-

⁷² The weighted policy benchmark returns are calculated based on asset class index returns weighted by asset class policy targets.

⁷³ The LRS Global Equity Benchmark is a custom global benchmark maintained by FTSE starting on 9/8/2011. Prior of that it is calculated as an asset weighted benchmark of its underlying domestic and international funds.

⁷⁴ The current benchmark is the 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.

⁷⁵ The current benchmark is the Barclays U.S. TIPS Index. Prior of July 2007 the benchmark was the Barclays Long Liability TIPS Index.

⁷⁶ The REIT Custom Benchmark is the FTSE EPRA/NAREIT Developed Index.

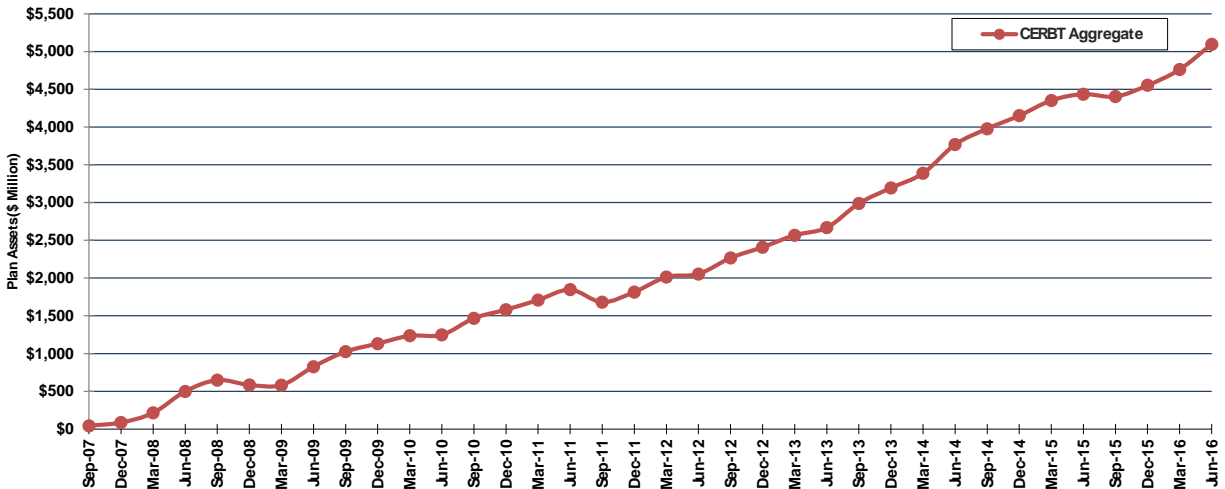


California Employees' Retiree Benefit Trust



California Employers' Retiree Benefit Trust Aggregate Periods Ended June 30, 2016

Growth in Assets (in \$Millions)



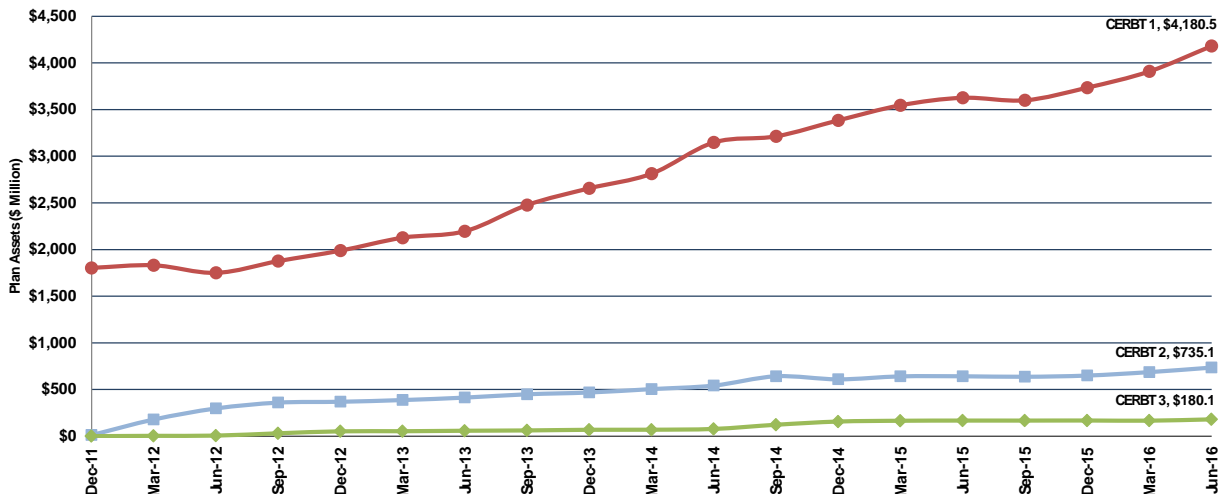
Net of Fee Trust Performance – Aggregate

Periods Ended June 30, 2016

	Market Value	Qtr	One Year	Three Year	Five Year	Ten Year
CERBT Aggregate	\$5,095.7 mil	2.6%	1.4%	6.1%	5.9%	--%
<i>CERBT Trust Aggregate Benchmark</i>		2.4	1.1	5.7	5.7	--

California Employers' Retiree Benefit Trust Strategy 1, 2, 3 Periods Ended June 30, 2016

Growth in Assets (in \$Millions)





California Employers' Retiree Benefit Trust Strategy 1

Asset Allocation

Asset Class	Actual	Policy	Difference
Global Equity	55.7%	57.0%	-1.3%
US Bonds	27.0	27.0	0.0
TIPS	4.8	5.0	-0.2
REITS	8.0	8.0	0.0
Commodities	3.1	3.0	+0.1
Cash Equivalents	1.5	0.0	+1.5
Total CERBT 1	100.0	100.0	0.0

Net of Fee Trust Performance Results

Trust Performance Periods Ended June 30, 2016

	Market Value	Qtr	One Year	Three Year	Five Year	Ten Year
CERBT Strategy 1	\$4,180.5 mil	2.5%	1.0%	6.1%	6.0%	-.-%
<i>Total CERBT Strat. 1 Benchmark</i>		2.4	0.7	5.8	5.8	-.-
Global Equity	2,328.3 mil	1.2	-3.4	6.5	6.3	-.-
<i>CERBT S1 Global Equity Benchmark</i>		1.1	-3.9	6.1	6.0	-.-
Domestic Fixed Income	1,130.6 mil	4.2	9.6	6.9	6.6	-.-
<i>CalPERS Custom Long Liability</i>		3.8	9.6	6.2	6.0	-.-
REITS	332.9 mil	3.3	12.1	8.4	8.1	-.-
<i>PERS FTSE/EPRA NAREIT Dev.</i>		3.1	11.1	7.6	7.7	-.-
TIPS	199.4 mil	1.7	4.3	2.2	-.-	-.-
<i>CalPERS TIPS</i>		1.7	4.4	2.3	-.-	-.-
Commodities	128.4 mil	12.3	-26.5	-20.2	-.-	-.-
<i>GSCI Total Return</i>		12.7	-26.1	-19.8	-.-	-.-
Cash[±]	60.9 mil	0.1	0.3	0.1	0.1	-.-

[±] The cash component may contain residual trade balance that has yet to be settled during the periodic rebalancing process as of June 30.



California Employers' Retiree Benefit Trust Strategy 2

Asset Allocation

Asset Class	Actual	Policy	Difference
Global Equity	39.0%	40.0%	-1.0%
US Bonds	39.0	39.0	0.0
TIPS	9.8	10.0	-0.2
REITS	8.0	8.0	0.0
Commodities	3.2	3.0	+0.2
Cash Equivalents	0.9	0.0	+0.9
Total CERBT 2	100.0	100.0	0.0

Net of Fee Trust Performance Results

Trust Performance Periods Ended June 30, 2016

	Market Value	Qtr	One Year	Three Year	Five Year	Ten Year
CERBT Strategy 2	\$735.1 mil	2.9%	2.9%	5.8%	-.-%	-.-%
<i>Total CERBT Strat. 2 Benchmark</i>		2.7	2.8	5.5	-.-	-.-
Global Equity	286.9 mil	1.2	-3.5	6.4	-.-	-.-
<i>CERBT S2 Global Equity Benchmark</i>		1.1	-3.9	6.1	-.-	-.-
Domestic Fixed Income	286.8 mil	4.2	9.6	6.9	-.-	-.-
<i>CalPERS Custom Long Liability</i>		3.8	9.6	6.2	-.-	-.-
TIPS	72.0 mil	1.7	4.3	2.1	-.-	-.-
<i>CalPERS TIPS</i>		1.7	4.4	2.3	-.-	-.-
REITs	58.9 mil	3.2	12.0	8.3	-.-	-.-
<i>PERS FTSE/EPRA NAREIT Dev Liquid</i>		3.1	11.1	7.6	-.-	-.-
Commodities	23.7 mil	12.5	-26.4	-20.2	-.-	-.-
<i>GSCI Total Return</i>		12.7	-26.1	-19.8	-.-	-.-
Cash[±]	6.7 mil	0.1	0.3	0.2	-.-	-.-

[±] The cash component may contain residual trade balance that has yet to be settled during the periodic rebalancing process as of June 30.



California Employers' Retiree Benefit Trust Strategy 3

Asset Allocation

Asset Class	Actual	Policy	Difference
Global Equity	23.1%	24.0%	-0.9%
US Bonds	38.4	39.0	-0.6
TIPS	24.9	26.0	-1.1
REITS	7.9	8.0	-0.1
Commodities	3.2	3.0	0.2
Cash Equivalents	2.5	0.0	+2.5
Total CERBT 3	100.0	100.0	0.0

Net of Fee Trust Performance Results

Trust Performance Periods Ended June 30, 2016

	Market Value	Qtr	One Year	Three Year	Five Year	Ten Year
CERBT Strategy 3	\$180.1 mil	3.0%	4.1%	5.5%	-.-%	-.-%
<i>Total CERBT Strat. 3 Benchmark</i>		2.8	4.1	5.1	-.-	-.-
Global Equity	41.6 mil	1.2	-3.5	6.5	-.-	-.-
<i>CERBT S3 Global Equity Benchmark</i>		1.1	-3.9	6.1	-.-	-.-
Domestic Fixed Income	69.2 mil	4.2	9.6	6.9	-.-	-.-
<i>CalPERS Custom Long Liability</i>		3.8	9.6	6.2	-.-	-.-
TIPS	44.9 mil	1.7	4.3	2.2	-.-	-.-
<i>CalPERS TIPS</i>		1.7	4.4	2.3	-.-	-.-
REITs	14.2 mil	3.2	12.0	8.4	-.-	-.-
<i>PERS FTSE/EPRA NAREIT Dev.</i>		3.1	11.1	7.6	-.-	-.-
Commodities	5.8 mil	12.6	-26.3	-20.1	-.-	-.-
<i>GSCI Total Return</i>		12.7	-26.1	-19.8	-.-	-.-
Cash[±]	4.5 mil	0.1	0.3	0.3	-.-	-.-

[±] The cash component may contain residual trade balance that has yet to be settled during the periodic rebalancing process as of June 30.

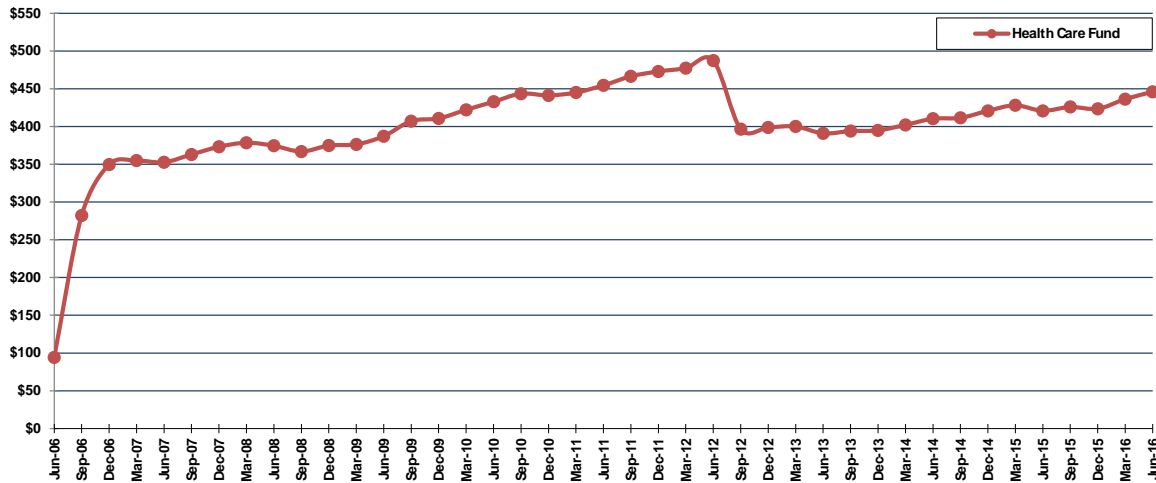


Health Care Fund



Health Care Fund Periods Ended June 30, 2016

Growth in Assets (in \$Millions)



Net of Fee Fund Performance

Fund Performance Periods Ended June 30, 2016

	Market Value	Qtr	One Year	Three Year	Five Year	Ten Year
Health Care Fund	\$445.9 mil	2.2%	6.0%	4.5%	4.3%	5.1%
<i>Barclays US Aggregate Bond Idx</i>		2.2	6.0	4.1	3.8	5.1

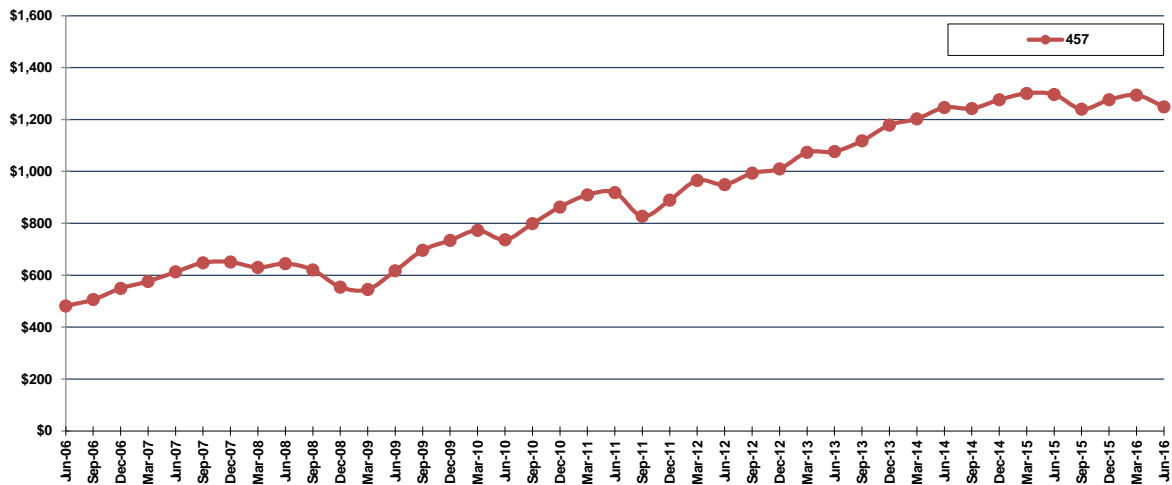
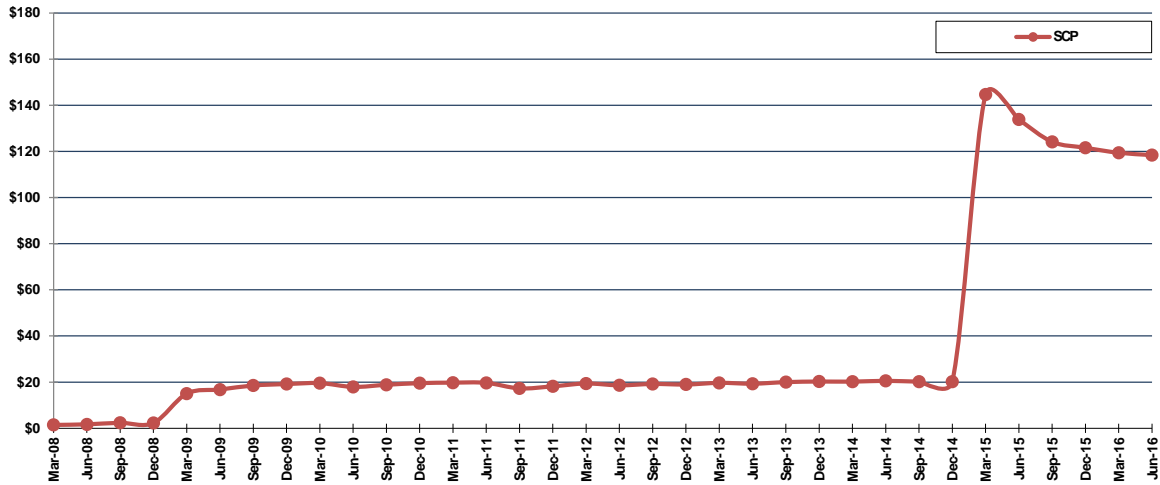


Supplemental Income Plans



Supplemental Income Plan Performance⁷⁶

Growth in Assets (in \$Millions)



⁷⁶ SCP experienced a steep increase in assets during the first 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 participant's 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.



Net Fund Performance – Supplemental Contribution Plan

Periods Ended June 30, 2016

	Market Value	Qtr	One Year	Three Year	Five Year	Ten Year
CalPERS Target Income Fund	\$21.2 mil	1.3%	1.9%	3.2%	3.6%	--
<i>SIP Income Policy</i>		1.3	2.3	3.6	4.0	--
CalPERS Target 2015 Fund	\$19.8 mil	1.3	1.9	3.7	4.1	--
<i>SIP 2015 Policy</i>		1.3	2.3	4.1	4.8	--
CalPERS Target 2020 Fund	\$25.1 mil	1.3	0.9	4.1	4.4	--
<i>SIP 2020 Policy</i>		1.3	1.3	4.5	5.0	--
CalPERS Target 2025 Fund	\$21.8 mil	1.4	0.0	4.3	4.6	--
<i>SIP 2025 Policy</i>		1.4	0.2	4.7	5.3	--
CalPERS Target 2030 Fund	\$14.9 mil	1.6	-0.9	4.6	4.9	--
<i>SIP 2030 Policy</i>		1.5	-0.7	4.9	5.6	--
CalPERS Target 2035 Fund	\$6.7 mil	1.7	-1.7	--	--	--
<i>SIP 2035 Policy</i>		1.5	-1.5	--	--	--
CalPERS Target 2040 Fund	\$3.0 mil	1.8	-2.6	5.0	5.2	--
<i>SIP 2040 Policy</i>		1.6	-2.5	5.2	6.0	--
CalPERS Target 2045 Fund	\$0.8 mil	1.8	-2.9	--	--	--
<i>SIP 2045 Policy</i>		1.6	-2.8	--	--	--
CalPERS Target 2050 Fund	\$0.025 mil	2.0	-2.8	--	--	--
<i>SIP 2050 Policy</i>		1.6	-2.8	--	--	--
CalPERS Target 2055 Fund	\$0.006 mil	1.8	-2.9	--	--	--
<i>SIP 2055 Policy</i>		1.6	-2.8	--	--	--
SSgA Russell All Cap Index SL	\$2.8 mil	2.5	1.8	--	--	--
<i>Russell 3000</i>		2.6	2.1	--	--	--
SSgA Global All Cap ex-US SL	\$0.2 mil	0.0	-9.3	--	--	--
<i>MSCI ACWI ex-US IMI (N)</i>		-0.7	-9.6	--	--	--
SSgA US Bond Index SL	\$0.5 mil	2.1	5.5	--	--	--
<i>Barclays Aggregate Bond Index</i>		2.2	6.0	--	--	--
SSgA US Short Term Bond	\$0.3 mil	0.5	1.0	--	--	--
<i>Barclays US Gov/Credit</i>		0.7	1.6	--	--	--
SSgA Real Asset NL	\$0.1 mil	7.2	-1.1	--	--	--
<i>Real Assets Blended Index</i>		7.3	-0.6	--	--	--
SSgA STIF	\$1.2 mil	0.0	-0.2	--	--	--
<i>BofAML 3 Month US TBill</i>		0.1	0.2	--	--	--
SCP AGGREGATE	\$118.4 mil	1.4	0.6	3.9	4.4	--
<i>CalPERS CUSTOM SCP PLAN INDEX</i>		1.4	0.9	4.2	5.0	--



Net Fund Performance – 457 Program

Periods Ended June 30, 2016

	Market Value	Qtr	One Year	Three Year	Five Year	Ten Year
CalPERS Target Income Fund	\$84.6 mil	1.3	2.1	3.3	3.6	--
<i>SIP Income Policy</i>		1.3	2.3	3.6	4.0	--
CalPERS Target 2015 Fund	\$77.3 mil	1.3	2.1	3.9	4.2	--
<i>SIP 2015 Policy</i>		1.3	2.3	4.1	4.8	--
CalPERS Target 2020 Fund	\$109.8 mil	1.4	1.1	4.2	4.4	--
<i>SIP 2020 Policy</i>		1.3	1.3	4.5	5.0	--
CalPERS Target 2025 Fund	\$77.5 mil	1.4	0.1	4.5	4.6	--
<i>SIP 2025 Policy</i>		1.4	0.2	4.7	5.3	--
CalPERS Target 2030 Fund	\$75.5 mil	1.6	-0.7	4.7	5.0	--
<i>SIP 2030 Policy</i>		1.5	-0.7	4.9	5.6	--
CalPERS Target 2035 Fund	\$43.1 mil	1.7	-1.6	5.0	5.2	--
<i>SIP 2035 Policy</i>		1.5	-1.5	5.1	5.8	--
CalPERS Target 2040 Fund	\$36.9 mil	1.8	-2.5	5.1	5.3	--
<i>SIP 2040 Policy</i>		1.6	-2.5	5.2	6.0	--
CalPERS Target 2045 Fund	\$13.0 mil	1.9	-2.8	5.1	5.3	--
<i>SIP 2045 Policy</i>		1.6	-2.8	5.2	5.9	--
CalPERS Target 2050 Fund	\$5.9 mil	1.9	-2.8	5.1	5.3	--
<i>SIP 2050 Policy</i>		1.6	-2.8	5.2	5.9	--
CalPERS Target 2055 Fund	\$2.7 mil	1.9	-2.8	--	--	--
<i>SIP 2055 Policy</i>		1.6	-2.8	--	--	--
SSgA Russell All Cap Index SL	\$454.2 mil	2.5	1.9	--	--	--
<i>Russell 3000</i>		2.6	2.1	--	--	--
SSgA Global All Cap ex-US SL	\$53.6 mil	0.0	-9.1	--	--	--
<i>MSCI ACWI ex-US IMI (N)</i>		-0.7	-9.6	--	--	--
SSgA US Bond Index SL	\$63.3 mil	2.1	5.6	--	--	--
<i>Barclays Aggregate Bond Index</i>		2.2	6.0	--	--	--
SSgA US Short Term Bond	\$41.4 mil	0.5	1.1	--	--	--
<i>Barclays US Gov/Credit</i>		0.7	1.6	--	--	--
SSgA Real Asset NL	\$4.0 mil	7.2	-1.0	--	--	--
<i>Real Assets Blended Index</i>		7.3	-0.6	--	--	--
SSgA STIF	\$106.2 mil	0.0	0.0	--	--	--
<i>BofAML 3 Month US TBill</i>		0.1	0.2	--	--	--
457 AGGREGATE	\$1249.0 mil	1.7	0.7	5.5	5.5	4.5
<i>CalPERS CUSTOM 457 PLAN INDEX</i>		1.7	0.9	5.8	6.0	5.0