

# 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

Third Quarter 2013

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## **Capital Market Overview**

The third quarter of 2013 saw strong gains for global stock markets despite considerable headwinds on multiple political fronts, as well as continued investor uncertainty as to when the U.S. Federal Reserve will finally start to unwind its accommodative monetary policies. The U.S. economy's recovery from the Great Recession has picked up some steam in the first half of 2013; real Gross Domestic Product grew at an annual 2.5% rate in the second quarter of 2013, up sharply from the (revised) 1.1% growth seen in the first quarter. However, future growth prospects remain fragile as lawmakers in Washington grappled over budget issues, including the funding of the Affordable Care Act, which resulted in a partial shutdown of the Federal government as of October 1st. Inflation at the consumer level remained relatively muted; the Consumer Price Index—All Urban Consumers rose 1.52% for the twelve months ending August 2013 (the latest period available to date), and inched up a scant 0.12% in the month of August. Ten-year breakeven inflation, which fell rather dramatically in the second quarter, nudged slightly higher from 2.04% in June to 2.19% by quarter's end. Job growth advanced at a subdued pace of 120,000 jobs added per month through the first eight months of 2013. The unemployment rate stands at 7.3%, down from 7.6% in June 2013. The long civil war in Syria briefly threatened to spill over into a full-fledged international conflict over illegal use of chemical weapons, but that threat dissipated just as quickly. Crude oil and gold prices responded to the global tensions by reversing their second-quarter losses; crude oil rose 5.38% while gold jumped 8.39%. Yields on longer-dated bonds rose over the third quarter as investors rotated into shorter paper and higher-returning assets.

#### **U.S. Equity Market**

The U.S. stock market, represented by the Wilshire 5000 Total Market Index<sup>SM</sup>, posted a total return of 6.03% during the third quarter, despite pulling back 2.16% from its record high close on September 18. The quarter started with an impressive 5.44% gain in July; concerns over the Federal Reserve's possible tapering of its quantitative easing programs caused stocks to fall -2.88% in August. September found investors in relief rally mode once the Fed committed to continuing its monetary policy, but concerns over the political brinksmanship in Washington led to a late-quarter pullback and a 3.55% return for stocks in September. Small capitalization stocks have continued to outperform larger-cap equities, as investors have shrugged off economic and political volatility; the Wilshire US Large-Cap Index's 5.61% return for the quarter trailed the US Small-Cap Index's 9.58%. Micro-cap stocks in particular performed particularly strongly in the third quarter (Wilshire US Micro-Cap Index, 10.65%). In another sign of investor willingness to assume more systematic risk, growth-oriented stocks outperformed value-oriented issues for the quarter, year-to-date and twelve-month time periods (Wilshire US Large-Cap Growth, 9.29%; US Large-Cap Growth, 2.66%; US Small-Cap Growth, 12.63%; US Small-Cap Value, 6.83%). The best-performing economic sectors of the stock market in the third quarter reflected stronger consumer sentiment, increased spending and international unrest; Materials, Industrials and Information Technology stocks led other sectors with returns of 9.88%, 9.46% and 8.62% respectively. The weakest-performing sector was Telecommunication Services, with a -2.73% return for the quarter; the Utilities sector was also a notable underperformer, with a 0.38% return in the third quarter. Real estate securities continued their slide in the third quarter, the only broad sector to lose ground (Wilshire US Real Estate Securities, -2.80%).



#### **Fixed Income Market**

Bond yields moved upward fitfully in July, picking up momentum in August and peaking in early September; the bellwether 10-year U.S. Treasury yield hit 2.98% on September 5, its highest level since July 2011. Yields then drifted downward, with the 10-year Treasury settling to 2.64% on September 30, 12 basis points higher than on June 28. The yield curve steepened slightly and flattened in intermediate maturities as investors moved down the curve into shorter paper. Investment-grade and high yield corporate spreads tightened slightly over the quarter as well. Long-term bonds underperformed shorter-term issues in the third quarter as a result (Barclays U.S. Treasury Long, -2.23%; U.S. Treasury 1-3 Years, 0.29%). With investors still attempting to find yield anywhere they can find it, spreads tightened overall, leading to Treasuries underperforming all other broad investment-grade bond sectors (Barclays U.S. Treasury, 0.10%; U.S. Government-Related, 0.33%; U.S. Corporate Investment Grade, 0.82%; U.S. Securitized, 1.01%). Strong U.S. equity markets combined with tighter spreads to give high yield bonds a decisive performance advantage over investment-grade paper in the third quarter (Barclays U.S. Aggregate, 0.57%; U.S. High Yield, 2.28%).

#### Non-U.S. Markets

Global stock markets enjoyed strong performance overall for the third quarter (MSCI All Country World Ex-U.S., net dividends, 6.98% local currency terms, 10.09% US dollar terms), as tensions stemming from Syria's long civil war threatened regional stability, then quickly dissipated. Japan began to recover from recent-period lackluster performance with renewed domestic policy to stimulate its economy, while the rest of the Asia-Pacific region joined Europe and the U.S. in a worldwide stock market rally. European stocks outperformed Pacific region stocks in the third quarter (MSCI Europe net, 8.12% local, 13.62% USD; MSCI Pacific, 6.52% local, 7.99% USD). Emerging markets stocks were buoyed by improved economic indicators for China, but investors remain nervous in anticipation of the U.S. Fed preparing to wind down its current monetary policy. As a result, emerging market stock performance trailed that of developed market stocks (MSCI Emerging Markets net, 5.63% local, 5.77% USD; MSCI EAFE net, 7.50% local, 11.56% USD). Developed market bonds earned modest gains for the quarter, while emerging market debt lost ground; a weak U.S. dollar ameliorated returns for U.S. dollar-based investors (Barclays Global Aggregate Ex-U.S.: 0.96% USD-hedged, 4.38% USD unhedged; Emerging Markets Local Currency Government Universal: -2.03% USD-hedged, -1.01% USD unhedged).



# **Summary of Index Returns**For Periods Ended September 30, 2013

	<u>Quarter</u>	One <u>Year</u>	Three <u>Years</u>	Five <u>Years</u>	Ten <u>Years</u>
<b>Domestic Equity</b>					
Standard & Poor's 500	5.25%	19.35%	16.26%	10.01%	7.57%
Wilshire 5000	6.03	20.96	16.48	10.43	8.19
Wilshire 4500	10.48	31.44	18.50	13.29	10.75
Wilshire Large Cap	5.61	19.82	16.15	10.01	7.87
Wilshire Small Cap	9.58	31.36	19.36	14.30	11.31
Wilshire Micro Cap	10.65	31.96	18.90	13.50	8.06
<b>Domestic Equity</b>					
Wilshire Large Value	2.66%	19.34%	16.01%	8.72%	7.59%
Wilshire Large Growth	9.29	20.56	16.33	11.27	8.05
Wilshire Mid Value	5.48	26.62	16.96	12.15	9.62
Wilshire Mid Growth	11.72	34.65	18.94	15.59	12.33
Wilshire Small Value	6.83	27.36	17.67	12.78	10.59
Wilshire Small Growth	12.63	35.84	21.02	15.79	12.00
International Equity					
MSCI All World ex U.S. (USD)	10.09%	16.48%	5.95%	6.26%	8.77%
MSCI All World ex U.S. (local currency)	7.03	21.97	8.01	6.33	7.51
MSCI EAFE	11.56	23.77	8.47	6.35	8.01
MSCI Europe	13.62	24.23	8.73	6.03	8.46
MSCI Pacific	7.99	23.31	8.34	7.34	7.13
MSCI Emerging Markets Index	5.77	0.98	-0.33	7.22	12.80
<b>Domestic Fixed Income</b>					
Barclays Aggregate Bond	0.57%	-1.68%	2.86%	5.41%	4.59%
Barclays Credit	0.72	-1.90	4.13	8.54	5.19
Barclays Mortgage	1.03	-1.20	2.65	4.66	4.75
Barclays Treasury	0.10	-2.09	2.24	4.04	4.25
Citigroup High Yield Cash Pay	2.11	6.74	9.08	13.01	8.50
Barclays US TIPS	0.70	-6.10	4.02	5.31	5.23
91-Day Treasury Bill	0.02	0.10	0.10	0.16	1.70
International Fixed Income					
Citigroup Non-U.S. Gov. Bond	4.06%	-5.65%	0.55%	4.27%	4.91%
Citigroup World Gov. Bond	2.88	-4.60	1.02	4.25	4.80
Citigroup Hedged Non-U.S. Gov.	1.01	2.19	2.79	4.18	4.21
Currency*					
Euro vs. \$	4.14%	5.22%	-0.28%	-0.74%	1.52%
Yen vs. \$	1.23	-20.71	-5.22	1.59	1.31
Pound vs. \$	6.77	0.28	0.91	-1.90	-0.26
Real Estate					
Wilshire REIT Index	-2.80%	5.47%	12.43%	5.49%	9.46%
Wilshire RESI	-2.80	5.47	12.43	5.49	9.46



## **Summary Review of Plans** Periods Ended 9/30/2013

	Market Value	<u>Qtr</u>	1-Year	3-Year	5-Year	10-Year
TOTAL FUND for PERF	\$271.5 bil	5.4%	13.7%	10.2%	6.6%	7.2%
Total Fund Policy Benchmark <sup>1</sup>		4.8%	12.3%	10.1%	8.2%	8.0%
Actuarial Rate		1.8%	7.5%	7.6%	7.7%	7.7%
Affiliate Fund						
Judges II	\$845.2 mil	5.8%	11.9%	10.0%	8.6%	7.2%
Weighted Policy Benchmark		5.7%	11.5%	10.1%	8.4%	7.2%
Long-Term Care ("LTC")	\$3,808.7 mil	2.1%	0.6%	6.3%	7.2%	6.5%
Weighted Policy Benchmark		1.9%	0.1%	6.1%	6.8%	6.3%
CERBT Strategy 1	\$2,477.1 mil	5.8%	11.6%	9.9%	8.0%	%
Weighted Policy Benchmark		5.8%	11.4%	9.9%	8.0%	%
CERBT Strategy 2	\$449.0 mil	4.6%	8.2%	%	%	%
Weighted Policy Benchmark		4.6%	7.8%	%	%	%
CERBT Strategy 3	\$61.5 mil	3.2%	3.8%	%	-,-%	%
Weighted Policy Benchmark		3.1%	3.5%	%	%	%
Legislators' Fund						
LRS	\$123.6 mil	3.2%	4.3%	7.9%	8.8%	6.7%
Weighted Policy Benchmark		3.2%	3.7%	7.6%	8.0%	6.6%

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<sup>&</sup>lt;sup>1</sup> 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 9/30/2013

								Five-Yea	r Ratios
TOTAL FUND  Total Fund Policy Benchmark <sup>2</sup> Actuarial Rate	Market <u>Value</u> \$271.5 bil	<u>Qtr</u> 5.4% 4.8%	1-Year 13.7% 12.3% 7.5%	3-Year 10.2% 10.1% 7.6%	5-Year 6.6% 8.2% 7.7%	10-Year 7.2% 8.0% 7.7%	<u>VaR<sup>12</sup></u> \$35.7 bil	Sharpe <sup>13</sup> 0.6 0.7	Info <sup>14</sup> -0.5 0.0
	454						02 ( 2 ) !!		
GROWTH  Growth Policy Benchmark <sup>3</sup>	176.4	<b>7.9%</b> 7.0%	<b>20.5%</b> 20.7%	<b>12.3%</b> 12.8%	<b>8.1%</b> 9.6%	<b>8.5%</b> 9.2%	\$36.2 bil	0.5 0.6	-0.4 0.0
PUBLIC EQUITY	145.1	8.6%	20.8%	11.3%	8.5%	7.9%	\$28.5 bil	0.4	-0.2
Public Equity Policy Benchmark <sup>4</sup>		8.4%	19.8%	10.8%	8.8%	8.2%		0.4	0.0
PRIVATE EQUITY  Private Equity Policy Benchmark <sup>5</sup>	31.3	<b>4.6%</b> 1.8%	<b>19.0%</b> 23.0%	<b>15.8%</b> 18.7%	<b>7.6%</b> 12.7%	<b>12.8%</b> 14.2%	\$9.9 bil	0.8 0.8	-0.3 0.0
INCOME Income Policy Benchmark 6	40.4	<b>0.6%</b> 0.5%	<b>-3.9%</b> -4.9%	<b>4.4%</b> 3.8%	<b>9.0%</b> 7.2%	<b>6.5%</b> 5.7%	\$4.6 bil	1.3 1.1	0.5 0.0
REAL ASSETS 7  Real Assets Policy Benchmark 8	27.1	1.4% 3.2%	<b>11.7%</b> 10.8%	<b>11.9%</b> 12.1%	<b>-6.8%</b> 3.7%	<b>3.7%</b> 9.0%	\$3.1 bil	-0.4 0.6	-0.9 0.0
INFLATION Inflation Policy Benchmark 9	9.4	<b>2.6%</b> 2.8%	<b>-2.9%</b> -3.0%	<b>5.4%</b> 4.1%	<b>1.3%</b> 1.9%	% %	\$0.6 bil	0.1 0.2	-0.2 0.0
LIQUIDITY  Liquidity Policy Benchmark <sup>10</sup>	12.0	<b>0.1%</b> 0.4%	<b>-1.1%</b> -1.0%	<b>1.4%</b> 1.6%	1.1% 1.2%	2.3% 2.3%	\$0.5 bil	0.7 0.7	-0.5 0.0
ABSOLUTE RETURN STRATEGIES 11 Absolute Return Strategies Policy Benchmark 11	5.2	<b>1.7%</b> 1.4%	<b>6.8%</b> 5.3%	<b>3.5%</b> 5.4%	<b>3.6%</b> 5.9%	<b>5.0%</b> 7.9%		0.7 12.3	-0.4 0.0
MULTI-ASSET CLASS COMPOSITE Absolute 7.5%	0.5	<b>0.0%</b> 1.8%	% %	% %	% %	% %		N/A N/A	N/A N/A
CURRENCY + ASSET ALLOCATION TRANSITION	0.5	%	%	%	%	%		N/A	N/A
TERMINATED AGENCY POOL	0.1	-1.1%	%	%	%	%		N/A	N/A
TOTAL FUND PLUS TAP	271.6	5.4%	13.7%	10.2%	6.6%	7.2%		N/A	N/A

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

<sup>&</sup>lt;sup>3</sup> Growth Policy Benchmark equals the benchmark returns of public equity and private equity weighted at policy allocation target percentages.

<sup>&</sup>lt;sup>4</sup> The Public Equity Policy Benchmark is a custom global benchmark maintained by FTSE.

<sup>&</sup>lt;sup>5</sup> 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%.

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

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.

<sup>&</sup>lt;sup>8</sup> The Real Assets Policy Benchmark equals the benchmark returns of real estate, timber, and infrastructure weighted at policy allocation target percentages.

<sup>&</sup>lt;sup>9</sup> The Inflation Policy Benchmark equals the benchmark returns of commodities and TIPS weighted at policy allocation target percentages.

<sup>&</sup>lt;sup>10</sup> The Liquidity Policy Benchmark is a custom index maintained by State Street Bank.

<sup>&</sup>lt;sup>11</sup> 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%.

<sup>&</sup>lt;sup>12</sup> 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).

<sup>&</sup>lt;sup>13</sup> 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.

<sup>14</sup> 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.

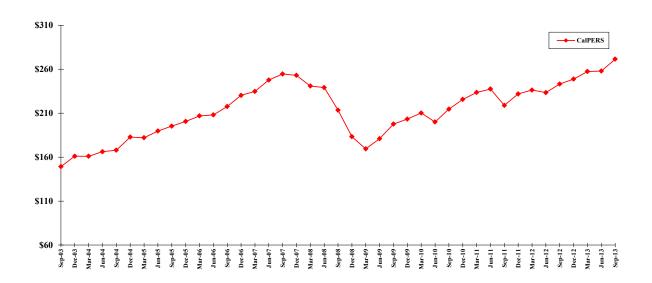


# **Total Fund Review for PERF (continued) Periods Ended 9/30/2013**

#### **Total Fund Flow**

	2003	<u>2004</u>	<u>2005</u>	<u>2006</u>	<u>2007</u>	<u>2008</u>	2009	<u>2010</u>	<u>2011</u>	2012	<u>1Q13</u>	<u>2Q13</u>	<u>3Q13</u>
Market Value (\$bil)	161.1	182.8	200.6	230.3	253.0	183.3	203.3	225.7	225.0	248.8	257.4	257.9	271.5

#### **Total Fund Market Value**



#### **Asset Allocation**

#### Asset Allocation: Actual versus Target Weights\*

	Actual Asset	Target Asset	Difference
Asset Class	Allocation	Allocation	Difference
Growth	65.2%	64.0%	1.2%
Income	14.9%	17.0%	-2.1%
Real Assets	10.0%	11.0%	-1.0%
Inflation	3.5%	4.0%	-0.5%
ARS	1.9%	0.0%	1.9%
Liquidity	4.4%	4.0%	0.4%
Multi-Asset	0.2%	0.0%	0.2%

<sup>\*</sup> Asset allocation targets are in the process of shifting to the new targets adopted by the Investment Committee in January 2008. Transitions accounts are included with their respective asset classes. The 9/30 cash allocation included transition assets that have been recaptured elsewhere since the adoption of a new asset allocation policy in July 2012.

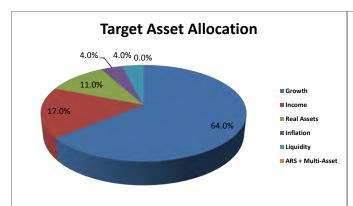


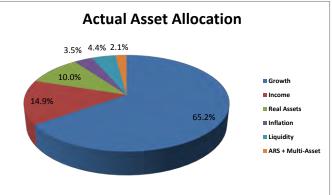
# Total Fund Review for PERF (continued) Periods Ended 9/30/2013

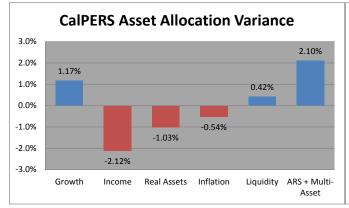
#### Expected Return/Risk and Tracking Error based on Wilshire's Asset Class Assumptions

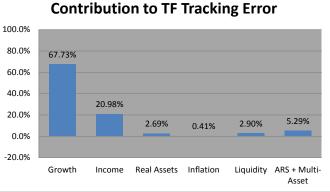


#### **Total Fund Asset Allocation**





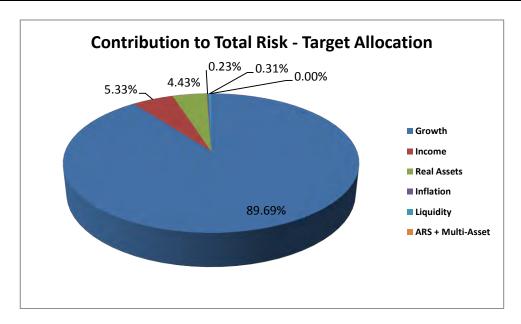


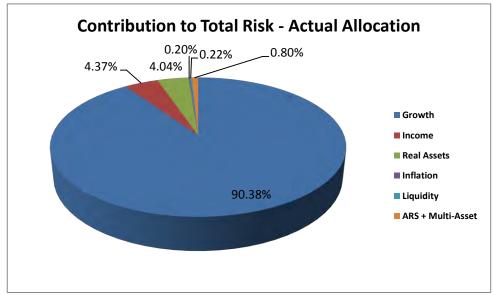




# Total Fund Review for PERF (continued) Periods Ended 9/30/2013

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





# California Public Employees' Retirement System Total Fund Attribution - Quarter As of 9/30/2013

	Actua	ıl (%)	Polic	y (%)	Differe	nce (%)	Т	otal Fund Returi	n Contribution (%)	
Asset Class	Weight	Return	Weight	Return	Weight	Return	Actual Allocation	Interaction	Active Management	Total
Growth	64.48	7.88	64.00	6.99	0.48	0.88	0.00	0.01	0.56	0.57
Public Equity	52.47	8.63	50.00	8.43	2.47	0.19	0.07	0.00	0.10	0.17
Private Equity	12.01	4.64	14.00	1.77	-1.99	2.87	0.06	-0.06	0.40	0.40
Income	15.85	0.60	17.00	0.55	-1.16	0.05	0.05	0.00	0.01	0.06
Real Assets	9.88	1.43	11.00	3.15	-1.12	-1.72	0.01	0.02	-0.19	-0.16
Inflation	3.56	2.65	4.00	2.79	-0.44	-0.14	0.01	0.00	-0.01	0.00
Absolute Return	2.19	1.73	0.00	1.36	2.19	0.38	-0.08	0.01	0.00	-0.07
Liquidity	4.04	0.12	4.00	0.37	0.04	-0.25	0.00	0.00	-0.01	-0.01
Monthly Linked Return	100.00	5.42	100.00	5.03		0.38	-0.01	0.04	0.36	0.39
Trading/Hedging/Other		-0.01		-0.20		0.18				0.18
Total		5.40		4.84		0.57				0.57

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 9/30/2013

	Actua	l (%)	Polic	y (%)	Differe	nce (%)	T	otal Fund Returr	n Contribution (%)	
Asset Class	Weight	Return	Weight	Return	Weight	Return	Actual Allocation	Interaction	Active Management	Total
Growth	64.08	16.19	64.00	15.82	0.08	0.37	-0.02	0.00	0.23	0.21
Public Equity	51.79	16.74	50.00	16.04	1.79	0.70	0.06	0.01	0.34	0.40
Private Equity	12.29	14.05	14.00	14.42	-1.71	-0.37	-0.10	0.00	-0.07	-0.18
Income	16.45	-4.29	17.00	-4.95	-0.55	0.66	0.04	0.00	0.13	0.17
Real Assets	9.65	9.74	11.00	8.09	-1.35	1.65	-0.01	-0.05	0.22	0.16
Inflation	3.62	-3.70	4.00	-3.72	-0.38	0.03	0.04	0.00	0.00	0.05
Absolute Return	2.22	6.18	0.00	3.98	2.22	2.20	-0.13	0.05	0.00	-0.08
Liquidity	3.98	-1.05	4.00	-0.98	-0.02	-0.07	0.00	0.00	0.00	-0.01
Monthly Linked Return	100.00	10.23	100.00	9.73		0.51	-0.07	0.00	0.58	0.51
Trading/Hedging/Other		0.53		-0.46		0.99		·		0.99
Total		10.77		9.27		1.50				1.50

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 9/30/2013

	Actua	l (%)	Polic	y (%)	Differe	nce (%)	T	otal Fund Returr	Contribution (%)	
Asset Class	Weight	Return	Weight	Return	Weight	Return	Actual Allocation	Interaction	Active Management	Total
Growth	64.48	7.88	64.00	6.99	0.48	0.88	0.00	0.01	0.56	0.57
Public Equity	52.47	8.63	50.00	8.43	2.47	0.19	0.07	0.00	0.10	0.17
Private Equity	12.01	4.64	14.00	1.77	-1.99	2.87	0.06	-0.06	0.40	0.40
Income	15.85	0.60	17.00	0.55	-1.16	0.05	0.05	0.00	0.01	0.06
Real Assets	9.88	1.43	11.00	3.15	-1.12	-1.72	0.01	0.02	-0.19	-0.16
Inflation	3.56	2.65	4.00	2.79	-0.44	-0.14	0.01	0.00	-0.01	0.00
Absolute Return	2.19	1.73	0.00	1.36	2.19	0.38	-0.08	0.01	0.00	-0.07
Liquidity	4.04	0.12	4.00	0.37	0.04	-0.25	0.00	0.00	-0.01	-0.01
Monthly Linked Return	100.00	5.42	100.00	5.03		0.38	-0.01	0.04	0.36	0.39
Trading/Hedging/Other		-0.01		-0.20	·	0.18		·		0.18
Total		5.40		4.84		0.57				0.57

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 9/30/2013**

• The California Public Employees' Retirement System ("CalPERS, the System") generated a total fund return of 5.4%, for the quarter ended September 30, 2013. CalPERS' return can be attributed as follows:

4.84%	Strategic Policy Allocation
-0.01%	Actual/Tactical Asset Allocation
0.36%	Active Management
0.04%	Interaction
0.18%	Trading/Currency Hedging
5.40%	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 finished the third quarter of 2013 on a solid note; the Total Fund composite was up 5.4% and outgained its strategic policy benchmark by a margin of 57 bps. Impact from the System's asset allocation variance was negligible this quarter, as positives from underweighting low return asset classes such as Income and Inflation were offset by negatives from overweight in Absolute Return, also one of the low returning asset classes. Most of this quarter's outperformance was attributed to favorable active management impact, and specifically strengths from the Growth segment. Both the public equity and private equity composites performed very well in Q3. Particularly notable was Private Equity, which beat its policy benchmark by 287 bps and helped drive Total Fund's relative results.
- The Total Fund composite's 5.4% return topped its actuarial rate this quarter; its one-year return of 13.7% and three-year return of 10.2% are also sitting comfortably above the actuarial rate return for those respective periods. However, its longer-term track record beyond the five-year mark continues to trail modestly.



# Total Fund Review for PERF (continued) Periods Ended 9/30/2013

#### Relative to the Total Fund Policy Benchmark:

- Growth Exposure: The Growth composite was the brightest spot among CalPERS' major asset classes during the third quarter, logging a gain of 7.9% that was nearly three times the next highest composite return, and beat the total fund policy benchmark by 304 bps. Public equity, the Growth composite's main component, was the primary driver of this favorable outcome; this composite rallied 8.6% as positive economic data from developed countries and continued loose monetary policy decision from the U.S. Fed's September meeting boiled sentiment in the equity markets. Reported on a 1-quarter lagged basis, PERS' private equity investments also did well, rising 4.6% that reflected the ever improving liquidity and investor risk appetite in this space.
- Income Exposure: After suffering steep losses in May and June, fixed income markets continued to experience heightened volatilities during parts of the third quarter. Yields steadily climbed through August in anticipation of the Fed tapering, only to retreat in September after the market learned that the QE program would remain unchanged. Despite the continued headline-driven swings, the Income composite did close out the quarter with a small gain, rising 0.6%, but still badly trailed the total fund policy benchmark. Within Income, the larger U.S. fixed income composite produced a meager gain of 0.3%, while the smaller international fixed income composite fared better at 3.8% in part thanks to the ground ceded by U.S. dollar against other major currencies.
- Real Assets Exposure: Real Assets could not duplicate last quarter's success when it was the highest returning major segment; it generated a positive return of 1.4% for Q3 but finished well below the 4.8% of the total fund policy benchmark. Most of this underperformance was due to the real estate component, whose returns were much more muted this quarter in the face of rising interest rate.
- Inflation Exposure: For the fourth quarter in a row, the CalPERS Inflation composite finished behind the total fund policy benchmark, 2.6% vs. 4.8%. This quarter's outcome was the combined result of both the inflation linked bonds component and the commodities component nudging just modest gains
- Liquidity: With the Fed staying course on its bond purchases, the Treasuries market stabilized at the end of the third quarter. This allowed the Liquidity composite, which has a 53% exposure to Treasuries, to earn a small positive return of 0.1%. This performance, however, trailed its own custom benchmark and came in below the total fund policy benchmark.
- **Absolute Return Strategy:** Similar to most of CalPERS' major asset classes, the Absolute Return Strategy (ARS) program generated a modest third quarter return (1.7%) that trailed the total fund policy benchmark.



#### Growth Review for PERF Periods Ended 9/30/2013

#### **Growth Allocation**

#### **Asset Allocation: Actual versus Target Weights**

Asset Class	Actual Asset Allocation	Target Asset Allocation	Difference
Growth	65.2%	64.0%	+1.2%
Public Equity	53.6%	50.0%	+3.6%
Private Equity	11.5%	14.0%	-2.5%

#### **Growth Segment Performance**

GROWTH Growth Policy Benchmark Value Added	Market <u>Value</u> 176.4	<u>Qtr</u> 7.9% 7.0% 0.9%	1-Year 20.5% 20.7% -0.2%	3-Year 12.3% 12.8% -0.5%	5-Year 8.1% 9.6% -1.5%	10-Year 8.5% 9.2% -0.7%	VaR <sup>22</sup> \$36.2 bil	5-year Sharpe Ratio <sup>23</sup> 0.5 0.6	5-year Info <u>Ratio<sup>24</sup></u> -0.4 0.0
PUBLIC EQUITY <sup>15</sup> Public Equity Policy Benchmark <sup>16</sup> Value Added	145.1	8.6% 8.4% 0.2%	<b>20.8%</b> 19.8% 1.0%	11.3% 10.8% 0.5%	<b>8.5%</b> 8.8% -0.3%	<b>7.9%</b> 8.2% -0.3%	\$28.5 bil	0.4 0.4	-0.2 0.0
US Equity Composite (ex ARS)  Custom US Equity Benchmark 17  Value Added	69.6	<b>6.5%</b> 6.5% 0.0%	23.3% 22.2% 1.1%	16.8% 16.7% 0.1%	10.8% 10.5% 0.3%	8.1% 8.1% 0.0%		0.6 0.6	0.5 0.0
Total Int'l Equity (ex ARS)  Custom Int'l Equity Benchmark 18  Value Added	73.8	10.8% 10.7% 0.1%	<b>18.5%</b> 19.9% -1.4%	<b>6.7%</b> 7.2% -0.5%	<b>7.1%</b> 6.6% 0.5%	9.2% 8.9% 0.3%		0.3 0.3	0.4 0.0
Global Equity Equitization  Custom Benchmark <sup>19</sup> Value Added	1.0	<b>7.6%</b> 8.4% -0.8%	<b>19.4%</b> 19.8% -0.4%	11.9% 10.8% 1.1%	% % %	% % %			
PRIVATE EQUITY <sup>20</sup> PE Policy Benchmark <sup>21</sup> Value Added	31.3	<b>4.6%</b> 1.8% 2.8%	19.0% 23.0% -4.0%	15.8% 18.7% -2.9%	<b>7.6%</b> 12.7% -5.1%	<b>12.8%</b> 14.2% -1.4%	\$9.9 bil	0.8 0.8	-0.3 0.0
Private Equity Partnership Investments Private Equity Distribution Stock	31.3 0.0	4.6% 6.1%	19.0% 2.4%	15.9% -18.7%	7.7% 4.7%	12.9% 3.9%			

<sup>&</sup>lt;sup>15</sup> 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.

<sup>&</sup>lt;sup>16</sup> The Public Equity Policy Benchmark is a custom global benchmark maintained by FTSE.

<sup>&</sup>lt;sup>17</sup> The Custom US Equity Benchmark currently represents the FTSE Total Market Index. It is linked historically to its prior benchmarks.

<sup>&</sup>lt;sup>18</sup> The Custom Int'l Equity Benchmark currently represents the FTSE All World ex US Index. It is linked historically to its prior benchmarks.

The Custom Global Equity Equitization Benchmark is currently the same as the Public Equity Policy Benchmark.

<sup>&</sup>lt;sup>20</sup> The performance of CalPERS' private equity (AIM) investments is 1-quarter lagged.

<sup>&</sup>lt;sup>21</sup> 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.

<sup>&</sup>lt;sup>22</sup> 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.

<sup>&</sup>lt;sup>23</sup> 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.

<sup>24</sup> 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:

- International Equity Exposure: The third quarter marked a reversal of role in global equity markets, where international equities rallied on multiple favorable developments and outperformed U.S. equities. In addition to the unchanged Fed QE bond purchasing relieving liquidity pressure faced by emerging markets, expansionary data from Europe and encouraging signs of stimulus impact out of Japan also provided solid lift to equity prices in developed markets. Both of PERS' internally managed and externally managed international equity composites reported strong gains (11.2% and 9.2%, respectively) that finished above the Growth asset class policy benchmark by a good margin.
- Corporate Governance: CalPERS' Corporate Governance portfolio netted an overall gain of 9.2% this quarter, comfortably outpacing the 7.0% of the Growth policy benchmark as well as its own policy benchmark (6.3%).
- MDP: The Manager Development Program did very well in Q3; its 9.4% return was better than the 8.8% of its own benchmark as well as the Growth policy benchmark.
- **FoF:** Similar to other equity programs, the Total Fund of Funds composite finished the third quarter strong with a return of 9.1%, beating its own and the asset class' policy measures.
- Private Equity Exposure: CalPERS' private equity investments did not quite match the level of performance generated by their public counterpart, but nonetheless still recorded solid growth in the third quarter by rising 4.6% (following a 4.8% gain in Q2 and a 4.0% gain in Q1). Even though this return came in behind the Growth policy benchmark's pace of 7.0% this quarter, the private equity composite did significantly outperform its own policy benchmark by a margin of 287 bps, therefore overall speaking it still contributed to the Growth asset class' relative success during Q3.

#### Impeded Performance:

• U.S. Equity Exposure: CalPERS' total U.S. equity composite performed very well in its own right during the third quarter, gaining over 6% as continued encouraging economic data and the Fed's decision against QE tapering provided a solid floor for equity valuations to trend up. However, this level of return somewhat paled when compared to the overall Growth policy benchmark, which was up 7.0% in Q3. Performance between the System's internal and external U.S. equity composites was similar, with the former returning 6.5% and the latter returning 6.6%.



## Public Equity Review for PERF - U.S. Equity

US Equity Composite (ex ARS)  Custom US Equity Benchmark <sup>25</sup> Value Added	Market Value 69.6	<u>Qtr</u> 6.5% 6.5% 0.0%	1-Year 23.3% 22.2% 1.1%	3-Year 16.8% 16.7% 0.1%	5-Year 10.8% 10.5% 0.3%	10-Year 8.1% 8.1% 0.0%	<u>Date</u> 12/79
Total Internal US Equity  Custom Internal US Equity Benchmark <sup>26</sup> Value Added	60.5	<b>6.5%</b> 6.5% 0.0%	22.9% 22.2% 0.7%	17.1% 16.7% 0.4%	11.0% 10.5% 0.5%	8.3% 8.1% 0.2%	6/88
Total External US Equity  Custom External US Equity Benchmark <sup>27</sup> Value Added	8.9	<b>6.6%</b> 6.0% 0.6%	<b>26.3%</b> 21.7% 4.6%	15.6% 16.3% -0.7%	10.0% 10.5% -0.5%	<b>7.5%</b> 8.4% -0.9%	12/98

## **Public Equity Review for PERF - International Equity**

Total Int'l Equity (ex ARS)  Custom Int'l Equity Benchmark <sup>28</sup> Value Added	Market Value 73.8	Otr 10.8% 10.7% 0.1%	1-Year 18.5% 19.9% -1.4%	3-Year 6.7% 7.2% -0.5%	5-Year 7.1% 6.6% 0.5%	10-Year 9.2% 8.9% 0.3%	<u>Date</u> 12/02
<b>Total Internal Int'l Equity</b> Custom Internal Int'l Equity Benchmark <sup>29</sup> Value Added	58.5	<b>11.2%</b> 11.5% -0.3%	19.3% 21.5% -2.2%	<b>7.0%</b> 8.0% -1.0%	7.1% 6.6% 0.5%	% % %	3/05
<b>Total External Int'l Equity</b> Custom External Int'l Equity Benchmark <sup>30</sup> Value Added	15.3	<b>9.2%</b> 7.9% 1.3%	<b>15.9%</b> 14.5% 1.4%	<b>5.7%</b> 4.5% 1.2%	7.9% 6.5% 1.4%	10.1% 9.5% 0.6%	6/89

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

	Market Value	<u>Qtr</u>	1-Year	3-Year	5-Year	10-Year	Date
Total Corporate Governance	4.7	9.2%	29.4%	11.1%	7.8%	7.1%	12/98
Policy Benchmark		6.3%	25.7%	12.0%	7.1%	7.1%	
Value Added		2.9%	3.7%	-0.9%	0.7%	0.0%	
Total MDP	1.7	9.4%	19.7%	13.0%	8.3%	7.5%	6/00
Policy Benchmark		8.8%	20.1%	12.6%	9.1%	8.5%	
Value Added		0.6%	-0.4%	0.4%	-0.8%	-1.0%	
Total FoF	1.1	9.1%	22.8%	14.4%	10.7%	%	3/08
Policy Benchmark		7.3%	20.7%	13.2%	10.0%	%	
Value Added		1.8%	2.1%	1.2%	0.7%	%	

<sup>&</sup>lt;sup>25</sup> The Custom US Equity Benchmark currently represents the FTSE Total Market Index. It is linked historically to its prior benchmarks.

<sup>&</sup>lt;sup>26</sup> The Custom Internal US Equity Benchmark currently represents the FTSE Total Market Index. It is linked historically to its prior benchmarks.

<sup>27</sup> The Custom External US Equity Benchmark return equals the return for each manager's benchmark weighted at the current target asset

<sup>&</sup>lt;sup>28</sup> The Custom Int'l Equity Benchmark currently represents the FTSE All World ex US Index. It is linked historically to its prior benchmarks.

<sup>&</sup>lt;sup>29</sup> 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.

<sup>30</sup> 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 9/30/2013

#### **ARS Allocation**

#### **Asset Allocation: Actual versus Target Weights**

Asset Class	Actual Asset Allocation	Target Asset Allocation	Difference
ARS	1.9%	0.0%	+1.9%

#### **ARS Segment Performance**

	Market Value	<u>Qtr</u>	<u>1-Year</u>	3-Year	<u>5-Year</u>	<u>10-Year</u>	Info	5-Year Up Capture <u>Ratio</u>		Sortino
Absolute Return Strategies	5.2	1.7%	6.8%	3.5%	3.6%	5.0%	-0.4	0.6	0.7	0.9
ARS Policy Benchmark 31		1.4%	5.3%	5.4%	5.9%	7.9%				
Value Added		0.3%	1.5%	-1.9%	-2.3%	-2.9%				
Total Direct Investments	3.7	2.4%	6.4%	4.1%	4.5%	5.5%				
Total Funds of Funds	1.5	0.2%	7.8%	2.2%	1.6%					
HFRI Fund of Funds Index		2.4%	7.3%	2.7%	2.1%	3.5%				

#### **ARS Characteristics**

		F	Rolling Correlations vs. Index								
Percentage											
of positive	Beta vs.		PERS_	<b>Domestic</b>	MSCI AW						
<b>Months</b>	<b>S&amp;P 500</b>	<u>W5000</u>	<u>2500</u>	Fixed Index	X US						
64%	0.2	0.5	0.5	-0.2	0.4						

- 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 0.2 which implies a weak 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 positive correlation to the equity markets while exhibiting a negative correlation with fixed income markets.

<sup>31</sup> The ARS Policy Benchmark consists of the Merrill Lynch 1-Year Treasury Note + 5% and is linked historically to its prior benchmark.

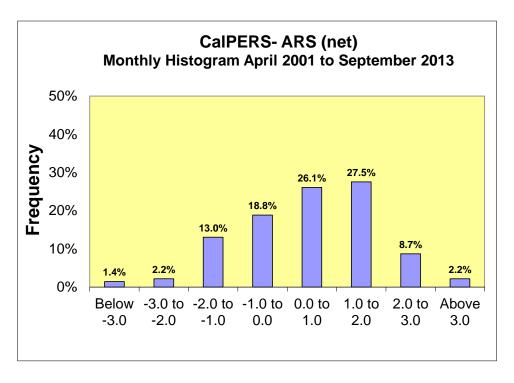
<sup>32</sup> The "Information Ratio" calculates the amount of excess performance earned per unit of excess risk, as measured by tracking error. Higher information ratios imply a greater return per risk ventured.

<sup>&</sup>lt;sup>33</sup> 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.

<sup>&</sup>lt;sup>34</sup> The Sortino Ratio is 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 9/30/2013**



• 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 9/30/2013

#### **Income Allocation**

#### **Asset Allocation: Actual versus Target Weights**

	Actual Asset	Target Asset	
Asset Class	Allocation	Allocation	Difference
Income	14.9%	17.0%	-2.1%

#### **Income Segment Performance**

INCOME  Income Policy Benchmark 35  Value Added	Market <u>Value</u> 40.4	Otr 0.6% 0.5% 0.1%	1-Year -3.9% -4.9% 1.0%	3-Year 4.4% 3.8% 0.6%	5-Year 9.0% 7.2% 1.8%	10-Year 6.5% 5.7% 0.8%	<u>VaR<sup>38</sup></u> \$4.6 bil	5-year Sharpe Ratio <sup>39</sup> 1.3 1.1	5-year Info Ratio <sup>40</sup> 0.5 0.0
U.S. Income	36.6	0.3%	-3.6%	4.7%	9.4%	6.5%		1.3	0.5
U.S. Income Policy Benchmark <sup>36</sup>		0.2%	-4.8%	4.7%	7.5%	5.8%		1.1	0.0
Value Added		0.1%	1.2%	0.0%	1.9%	0.7%			
Non-U.S. Income	3.8	3.8%	-6.8%	1.4%	6.0%	5.6%		0.6	0.9
Non-US Income Policy Benchmark 37		3.9%	-6.3%	0.5%	4.3%	4.9%		0.5	0.0
Value Added		-0.1%	-0.5%	0.9%	1.7%	0.7%			

#### **Comments Regarding Income Segment Performance**

#### Helped Performance:

• Mortgage Bonds: Thanks to the Fed's decision of upholding its bond buying program, mortgage securities staged a rally in September and erased the losses sustained in the first two months of the quarter, when interest rates trended up. CalPERS' mortgage portfolios were one of the best performers within the U.S. fixed income market during Q3, with solid gains from the internal mortgages portfolio (1.1%) and the long duration mortgage portfolio (0.9%) easily surpassing the overall Income policy benchmark.

<sup>35</sup> The Income Policy Benchmark return equals the benchmark returns for domestic and international fixed income components weighted at policy allocation target percentages.

<sup>&</sup>lt;sup>36</sup> The US Fixed Income Policy Benchmark consists of the Barclays Long Liability Index and is linked historically to its prior benchmark.

<sup>37</sup> The Non-US Fixed Income Policy Benchmark consists of the Barclays International Fixed Income and is linked historically to its prior benchmark.

<sup>&</sup>lt;sup>38</sup> 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

<sup>&</sup>lt;sup>39</sup> 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.

<sup>40</sup> 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:** Other than August, when yields rose across the board as investors were anticipating a Fed tapering decision, the System's high yield investments enjoyed healthy appreciation during the third quarter and were able to outpace the Income policy benchmark and investment grade securities. Both the internal and external high yield portfolios posted solid results for the quarter, rising 1.7% and 2.0%, respectively.
- Corporate Bonds: Similar to high yield, investment grade credits experienced a pull back during the month of August, which is sandwiched by positive growths from July and September. CalPERS' corporate bond portfolio reported a net gain of 0.8% and finished above the Income policy benchmark.
- International Fixed Income: Due to improving growth prospects out of developed Europe and China, most major currencies appreciated against the USD during the third quarter, allowing non-U.S. fixed incomes to post notably higher returns than their U.S. counterpart. With a weakening Dollar, the CalPERS international fixed income portfolio netted a total return of 3.8% this quarter. This was the highest among all Income components, and handily outperformed the Income policy benchmark.

#### Impeded Performance:

- ◆ Treasury Bonds: Unlike most other CalPERS fixed income portfolios, the PERS government portfolio was not able to finish in the positive territory after the dovish Fed policy announcement; it close out the quarter with a small amount of losses, falling -1.1%. While this was an improvement over the prior quarter when the portfolio lost -6.1%, it nonetheless detracted from the Income composite, underperforming the Income policy benchmark's 0.5% return.
- **Sovereign Bonds:** CalPERS' sovereign bonds portfolio generated a return of 0.5% that was 4 bps lower than the Income policy benchmark for the quarter.



## **Income Review for PERF (Continued)**

	Market						
DICOME	Value 40.4	Qtr	1-Year	3-Year	5-Year	10-Year	Date (199
INCOME	40.4	0.6%	-3.9%	4.4%	9.0%	6.5%	6/88
Income Policy Benchmark 41		0.5%	-4.9%	3.8%	7.2%	5.7%	
Value Added		0.1%	1.0%	0.6%	1.8%	0.8%	
Internal US Income + Opportunistic	36.6	0.3%	-3.6%	4.7%	9.4%	6.5%	12/95
Mortgage Bonds*	9.2	1.1%	-1.0%	3.2%	5.8%	5.0%	12/82
Long Duration Mortgages*	2.4	0.9%	-3.5%	4.9%	9.8%	%	6/05
Corporate Bonds*	9.0	0.8%	-1.9%	6.8%	12.8%	7.1%	3/02
U.S. Government*	12.5	-1.1%	-8.5%	3.8%	5.8%	5.1%	12/99
Sovereign Bonds* 42	1.2	0.5%	-8.4%	3.6%	6.9%	6.3%	6/96
Long Duration Corporates*	1.0	3.0%	5.7%	12.8%	18.6%	%	9/05
Custom Benchmark 43		0.2%	-4.8%	4.7%	7.5%	5.8%	
Opportunistic <sup>44</sup>	2.3	1.3%	8.0%	5.5%	10.1%	9.2%	6/00
Internal High Yield Bonds*	0.6	1.7%	3.5%	4.2%	11.9%	13.5%	9/99
External High Yield*	1.1	2.0%	9.8%	10.8%	8.6%	7.5%	3/02
High Yield Mortgage*	0.2	-4.2%	16.4%	10.1%	8.5%	%	3/08
Citigroup High Yield Cash Pay		2.2%	6.9%	9.0%	12.6%	8.4%	
Special Investments	0.0	2.0%	11.5%	4.9%	6.8%	5.8%	3/91
Total International Fixed Income	3.8	3.8%	-6.8%	1.4%	6.0%	5.6%	3/89
Custom Benchmark 45		3.9%	-6.3%	0.5%	4.3%	4.9%	
Value Added		-0.1%	-0.5%	0.9%	1.7%	0.7%	
Currency overlay 46							
Active Currency Overlay - Internally Managed	-0.3	0.0%	-0.2%	-0.5%	-0.3%	0.3%	6/92
Custom Benchmark		-0.1%	-0.2%	-0.4%	-0.3%	0.2%	
Value Added		0.1%	0.0%	-0.1%	0.0%	0.1%	

<sup>&</sup>lt;sup>41</sup> The Income Policy Benchmark return equals the benchmark returns for domestic and international fixed income components weighted at policy allocation target percentages.

<sup>&</sup>lt;sup>42</sup> The Internal Sovereign Bond market value is also included in the Internal Treasury Bond market value.

<sup>&</sup>lt;sup>43</sup> The custom benchmark consists of the Barclays Long Liability Index. Prior of 3Q 2004 the benchmark was Citigroup LPF.

<sup>&</sup>lt;sup>44</sup> 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.

<sup>&</sup>lt;sup>45</sup> The custom benchmark consists of the Barclays International Fixed Income Index and is linked historically to its prior benchmark.

<sup>&</sup>lt;sup>46</sup> The Currency Overlay program is rolled directly into total fund but it is managed by the fixed income managers. The market value is the gain or loss.

<sup>\*</sup> These portfolios and/or composites are unitized and are included across multiple plans.

<sup>\*\*</sup> These portfolios hold the collateral for the security lending program.



# **Income Review for PERF (Continued)**

	Market <u>Value</u>	Qtr	1-Year	3-Year	5-Year	10-Year	Date
Securities Lending*	12.0	0.4%	1.1%	1.3%	1.0%	2.0%	8/00
Custom Benchmark		0.0%	0.1%	0.1%	0.2%	1.7%	
Value Added		0.4%	1.0%	1.2%	0.8%	0.3%	
Internal Active Short Term**	2.7	0.0%	0.2%	%	%	%	3/11
Custom Benchmark		0.0%	0.0%	%	%	%	
Value Added		0.0%	0.2%	%	%	%	
CalPERS ESEC Cash Collateral**	9.0	0.0%	0.2%	0.2%	%	%	6/10
Custom Benchmark		0.0%	0.1%	0.1%	%	%	
Value Added		0.0%	0.1%	0.1%	%	%	
External Collateral Portfolio***	0.2	35.0%	68.9%	%	%	%	11/00

<sup>\*</sup> The Securities Lending composite is a non-PERF composite. The composite includes the Structure Investment Vehicles performance.

\*\* These portfolios hold the collateral for the securities lending program.

\*\*\* This is a structure investment vehicle.



#### Inflation Performance for PERF Period Ended 9/30/2013

#### **Inflation Allocation**

#### **Asset Allocation: Actual versus Target Weights**

	Actual Asset	Target Asset	
Asset Class	Allocation	Allocation	Difference
Inflation	3.5%	4.0%	-0.5%

#### **Inflation Performance**

INFLATION  Inflation Policy Benchmark <sup>47</sup> Value Added	Market <u>Value</u> 9.4	<u>Qtr</u> 2.6% 2.8% -0.2%	1-Year -2.9% -3.0% 0.1%	3-Year 5.4% 4.1% 1.3%	5-Year 1.3% 1.9% -0.6%	10-Year%%%	<u>VaR<sup>49</sup></u> \$0.6 bil	5-year Sharpe Ratio <sup>50</sup> 0.1 0.2	5-year Info Ratio <sup>51</sup> -0.2 0.0
Internal Commodities <sup>48</sup> GSCI Total Return Index Value Added	1.2	<b>3.4%</b> 4.8% -1.4%	<b>-4.6%</b> -4.1% -0.5%	<b>3.1%</b> 3.6% -0.5%	-8.1% -8.5% 0.4%	% % %			
Core Inflation Linked Bonds Custom Benchmark Value Added	5.9	2.3% 2.3% 0.0%	<b>-2.0%</b> -2.6% 0.6%	<b>4.9%</b> 4.5% 0.4%	5.5% 5.3% 0.2%	% % %			
Tactical Commodities  GSCI Total Return Index  Value Added	1.2	<b>4.2%</b> 4.8% -0.6%	% % %	% % %	% % %	% % %			
Tactical TIPS  CalPERS TIPS  Value Added	1.1	<b>0.1%</b> 0.7% -0.6%	% % %	% % %	% % %	% % %			

• The Inflation asset class recovered from the sharp fall it suffered last quarter as both of its inflation linked bonds (TIPS) and commodities components rebounded. The asset class as a whole rose 2.6% in the third quarter and nearly matched the pace of its policy benchmark. The TIPS portfolio recovered some lost ground in July, and even more so in September after a surprising move from the Fed by not slowing the rate of its bond purchases. This provided relief and allowed the main Core Inflation Linked Bonds portfolio to return 2.3% for the quarter. While uncertainties surrounding the U.S. government shutdown and debt ceiling limit impasse weighed heavily on precious metals and energy in late September, the commodities portfolios in general enjoyed solid gains during Q3 that weren't too far behind their stated benchmark. The Inflation asset class has done well against its policy benchmark over the one- and three-year periods, but continues to trail over the five-year mark.

<sup>47</sup> The Inflation Policy Benchmark equals the benchmark returns of commodities and TIPS weighted at policy allocation target percentages.

<sup>&</sup>lt;sup>48</sup> 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.

<sup>&</sup>lt;sup>49</sup> 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.

<sup>&</sup>lt;sup>50</sup> 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.

<sup>51</sup> 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 9/30/2013

#### **Real Assets Allocation**

#### **Asset Allocation: Actual versus Target Weights**

	Actual Asset	Target Asset	T : 00
Asset Class	Allocation	Allocation	Difference
Real Assets	10.0%	11.0%	-1.0%

#### **Real Assets Segment Performance**

REAL ASSETS  Real Assets Policy Benchmark 52  Value Added	Market Value 27.1	Otr 1.4% 3.2% -1.8%	1-Year 11.7% 10.8% 0.9%	3-Year 11.9% 12.1% -0.2%	5-Year -6.8% 3.7% -10.5%	10-Year 3.7% 9.0% -5.3%	<u>VaR<sup>56</sup></u> \$3.1 bil	5-year Sharpe <u>Ratio<sup>57</sup></u> -0.4 0.6	5-year Info <u>Ratio<sup>58</sup></u> -0.9 0.0
Real Estate <sup>53</sup> Real Estate Policy Benchmark <sup>54</sup> Value Added	23.7	1.6% 3.6% -2.0%	<b>12.4%</b> 11.5% 0.9%	13.6% 13.6% 0.0%	<b>-7.7%</b> 4.7% -12.4%	<b>3.0%</b> 9.5% -6.5%	\$3.2 bil	-0.5 0.6	-0.8 0.0
Forestland <sup>55</sup> NCREIF Timberland Index  Value Added	2.2	-0.5% 0.9% -1.4%	<b>6.2%</b> 9.4% -3.2%	<b>-2.8%</b> 3.6% -6.4%	<b>-1.3%</b> 2.0% -3.3%	% % %			
Infrastructure 55  CPI + 400 BPS 1Qtr Lag  Value Added	1.2	2.5% 1.3% 1.2%	<b>9.3%</b> 5.8% 3.5%	<b>18.9%</b> 7.0% 11.9%	15.3% 6.1% 9.2%	% % %			

♦ After rallying 6.9% in the prior quarter, CalPERS' Real Assets asset class' momentum slowed in the third quarter of 2013 as it nudged a small 1.4% gain that finished below its policy benchmark. Much of this underperformance was driven by the real estate portfolio (the largest component at over 87% of this asset class' allocation), as real estate appreciation cooled during Q3 in light of an interest raterun up. Results of Real Assets' two other smaller components were mixed, with forestland showing a small loss of -0.5% and infrastructure earning a steady gain of 2.5%. Over the near- and mid-term time periods, the Real Assets composite's performance has remained solid, although its longer-term track record continues to trail relative to its policy benchmark.

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

<sup>&</sup>lt;sup>53</sup> 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.

<sup>54</sup> 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.

<sup>55</sup> These investments are reported on a 1-quarter lagged basis.

<sup>&</sup>lt;sup>56</sup> 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.

<sup>57</sup> 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.

<sup>58</sup> 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 (Continued) Period Ended 9/30/2013

#### **Real Estate Segment Performance**

<b>Real Estate</b> <sup>59</sup> Real Estate Policy Benchmark <sup>60</sup> Value Added	Market <u>Value</u> 23.7	Otr 1.6% 3.6% -2.0%	1-Year 12.4% 11.5% 0.9%	3-Year 13.6% 13.6% 0.0%	5-Year -7.7% 4.7% -12.4%	10-Year 3.0% 9.5% -6.5%	<u>VaR<sup>61</sup></u> \$3.2 bil	5-year Sharpe Ratio <sup>62</sup> -0.5 0.6	5-year Info <u>Ratio<sup>63</sup></u> -0.8 0.0
Strategic Real Estate  Wt. NCREIF ODCE+FTSE EPRA NAREA  Value Added	16.8	<b>1.9%</b> 3.6% -1.7%	<b>15.4%</b> 11.5% 3.9%	17.7% 13.6% 4.1%	<b>3.0%</b> 4.7% -1.7%	15.7% 9.5% 6.2%			
Legacy Real Estate ex Public Wt. NCREIF ODCE+FTSE EPRA NAREI Value Added	6.9	<b>0.9%</b> 3.6% -2.7%	<b>4.7%</b> 11.5% -6.8%	<b>8.0%</b> 13.6% -5.6%	<b>-14.1%</b> 4.7% -18.8%	<b>-1.7%</b> 9.5% -11.2%			

60 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.

<sup>&</sup>lt;sup>59</sup> 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.

<sup>&</sup>lt;sup>61</sup> 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.

<sup>&</sup>lt;sup>62</sup> 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.

<sup>63</sup> 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 9/30/2013

### **Liquidity Allocation**

#### **Asset Allocation: Actual versus Target Weights**

	Actual Asset	Target Asset		
Asset Class	Allocation	Allocation	Difference	
Liquidity	4.4%	4.0%	+0.4%	

#### **Liquidity Segment Performance**

LIQUIDITY	Market Value 12.0	<u>Qtr</u> 0.1%	<u>1-Year</u> -1.1%	<u>3-Year</u> 1.4%	<u>5-Year</u> 1.1%	10-Year 2.3%	<u>VaR<sup>66</sup></u> \$0.5 bil	5-year Sharpe Ratio <sup>67</sup> N/A	5-year Info <u>Ratio<sup>68</sup></u> N/A
Liquidity Policy Benchmark 64		0.4%	-1.0%	1.6%	1.2%	2.3%			
Value Added		-0.3%	-0.1%	-0.2%	-0.1%	0.0%			
US 2-10 Year	6.4	0.3%	-1.4%	%	%	%			
Barclays Gov Liquidity 2-10 Yr Idx		0.5%	-1.3%	%	%	%			
Value Added		-0.2%	-0.1%	%	%	%			
Cash Composite	5.6	0.0%	0.1%	0.2%	0.3%	1.9%			
Csutom STIF 65		0.0%	0.0%	0.0%	0.2%	1.8%			
Value Added		0.0%	0.1%	0.2%	0.1%	0.1%			

<sup>&</sup>lt;sup>64</sup>The Liquidity Policy Benchmark is a custom index maintained by State Street Bank.

<sup>&</sup>lt;sup>65</sup> The Custom STIF Policy Benchmark is a custom index maintained by State Street Bank.

<sup>&</sup>lt;sup>66</sup> 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.

<sup>&</sup>lt;sup>67</sup> 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.

<sup>&</sup>lt;sup>68</sup> 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.

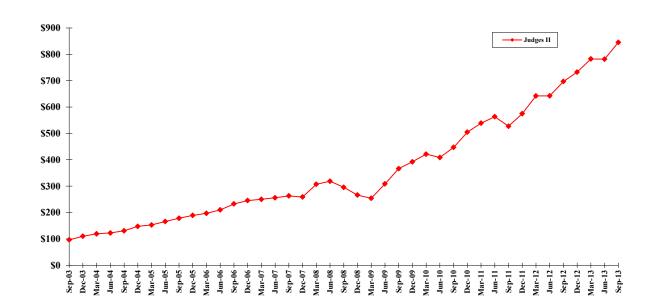


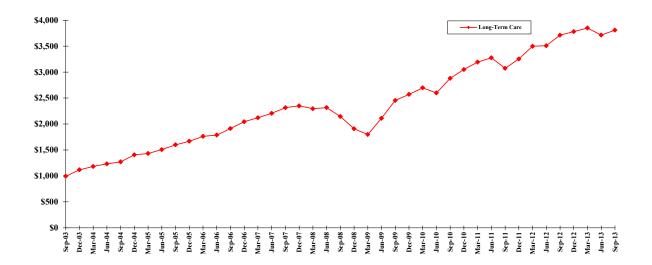
# **Affiliate Fund Information**



## Affiliate Fund Performance Period Ended September 30, 2013

#### **Growth in Assets (in \$Millions)**







#### **Total Fund Performance Results**

### **Total Fund Performance** Periods Ended September 30, 2013

Judges II Weighted Policy Benchmark <sup>69</sup>	Market <u>Value</u> \$845.2 mil	<u>Qtr</u> 5.8% 5.7	One <u>Year</u> 11.9% 11.5	Three <u>Year</u> 10.0% 10.1	Five <u>Year</u> 8.6% 8.4	Ten <u>Year</u> 7.2% 7.2
<b>Long-Term Care ("LTC")</b> Weighted Policy Benchmark <sup>69</sup>	\$3,808.7 mil	2.1 1.9	0.6 0.1	6.3 6.1	7.2 6.8	6.5 6.3

### **Total Fund Asset Allocation**

#### Judges II Asset Allocation: Actual versus Target Weights

	Actual Asset	Target Asset	
Asset Class	Allocation (%)	Allocation (%)	Difference
Global Equity	62.9	63.0	-0.1
US Fixed Income	20.1	20.0	0.1
TIPS	6.0	6.0	0.0
REITs	7.9	8.0	-0.1
Commodities	3.0	3.0	0.0
Total	100.0	100.0	0.0

#### LTC Asset Allocation: Actual versus Target Weights

	Actual Asset	Target Asset	
Asset Class	Allocation (%)	Allocation (%)	Difference
Global Equity	16.3	15.0	1.3
US Fixed Income	60.1	61.0	-0.9
TIPS	5.6	6.0	-0.4
REITs	12.0	12.0	0.0
Commodities	6.0	6.0	0.0
Total	100.0	100.0	0.0

<sup>&</sup>lt;sup>69</sup> The weighted policy benchmark returns for Judges II and LTC are based on asset class index returns weighted by asset class policy targets.



#### **Commentary – Total Fund**

- For the quarter ended September 30, 2013, the Judges II (JRS II) finished with a solid gain of 5.8% largely thanks to a strong rebound in global equity valuations. This performance bettered the weighted policy benchmark, which was up with a similar margin of 5.7%. For longer-term periods one-year and beyond, JRS II's track record has matched well against its policy benchmark.
- The Long-Term Care Program (LTC) was up for the quarter, too, although its overall return was much more modest than JRS II, at 2.1%. This was due to a higher allocation to fixed income investments, whose performance was nearly flat in Q3. The LTC did outperform the 1.9% return of its weighted policy benchmark this quarter, and its long-term track record has stayed ahead in all measured time periods shown.
- At the end of the quarter, Judges II was slightly overweight in domestic fixed income while underweight in global equity and REITs.
- The LTC was overweight in global equity while underweight in fixed income and TIPS.

#### Asset Class Performance Results – Judges II

#### Judges II Asset Class Performance Periods Ended September 30, 2013

JRS II Global Equity	Market Value \$531.8 mil	<u>Qtr</u> 8.5%	One <u>Year</u> 20.1%	Three <u>Year</u> 11.7%	Five <u>Year</u> 7.9%	Ten <u>Year</u> 7.4%
Global Equity Benchmark <sup>70</sup>		8.4	19.8	11.7	7.9	7.4
JRS II US Fixed Income	\$170.1 mil	0.3	-3.7	4.7	9.1	5.7
Custom Benchmark 71		0.2	-4.8	4.1	7.5	5.4
JRS II TIPS	\$51.0 mil	0.6	-6.0			-,-
Custom Benchmark <sup>72</sup>		0.7	-6.1			
JRS II REITs	\$67.1 mil	2.5	11.0	10.5	2.1	
Custom Benchmark <sup>73</sup>		2.4	11.0	10.5	1.7	
JRS II Commodities	\$25.2 mil	3.4	-4.6	-,-		-,-
GSCI Total Return Index		4.8	-4.1			

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.

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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.

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

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



#### Commentary – Judges II

- Global equity was the highest returning JRS II portfolio in the third quarter as it rallied up 8.5%. Both U.S. and international equity markets charged ahead in July and September, with data of continued improving global economy bolstering investor sentiment. This performance topped the 8.4% return of the custom benchmark, and the global equity portfolio has continued to track closely to the custom benchmark over longer-term periods.
- The Judges II's domestic fixed income portfolio saw marked swings during the third quarter, as yields continued the sharp rise between July and August in anticipation of Fed tapering, only to be followed by a quick reversal in mid-September after the Fed left its bond purchase program unchanged. With this backdrop, the portfolio closed out the quarter with just a small gain of 0.3%, the least among all Judges II portfolios, although this is still 12 bps better compared to its custom benchmark, the Barclays Long Liability Index. Over the one-year and longer time horizon, the fixed income portfolio has done very well against its benchmark.
- TIPS encountered similar volatilities as core fixed income did this quarter, incurring losses in August due to tamed inflation outlook and rising real yields but recovered after September's dovish Fed announcement. The TIPS portfolio earned a total gain of 0.6% for Q3, coming in marginally below the Barclays U.S. TIPS Index.
- Same as global equities, REITs also rebounded in the third quarter, albeit at a smaller magnitude. The Plan's REIT portfolio rose 2.5% and finished ahead of its custom benchmark, the FTSE EPRA/NAREIT Developed Index, by a slim margin. Through the past one-year and three-year periods, both measures have reported double-digit returns that mirrored each other.
- In spite of the drag from potential negative economic growth impact from the U.S. government shutdown and the debt ceiling impasse at the end of September, commodities generally enjoyed a solid quarter with the JRS II commodities portfolio reporting a net gain of 3.4%. For the same period, the portfolio's benchmark, the GSCI Total Return Index, was up 4.8%. The commodities portfolio's one-year track record of -4.6% currently also sits behind its benchmark by 48 bps.



#### **Asset Class Performance Results – Long-Term Care**

#### Long-Term Care Asset Class Performance Periods Ended September 30, 2013

LTC Global Equity	Market <u>Value</u> \$620.3 mil	<u>Qtr</u> 8.4%	One <u>Year</u> 18.6%	Three Year 12.3%	Five <u>Year</u> 8.3%	Ten <u>Year</u> 7.6%
Custom Benchmark <sup>74</sup>		8.3	18.7	12.3	8.2	7.6
LTC US Fixed Income	\$2,288.0mil	0.2	-4.4	4.5	8.9	5.8
Custom Benchmark 75		0.2	-4.8	4.1	7.5	5.3
LTC TIPS	\$212.8 mil	0.7	-6.2	3.9	5.5	-,-
Barclays U.S. TIPS Index		0.7	<b>-</b> 6.1	4.0	5.3	
LTC REITs	\$458.9 mil	1.9	9.8	10.1	1.8	-,-
Custom Benchmark <sup>76</sup>		1.8	9.4	10.0	1.4	
LTC Commodities	\$228.6 mil	4.7	-2.4	-,-		-,-
GSCI Total Return Index		4.8	-4.1			

#### Commentary - Long-Term Care

- The LTC global equity fund reported very favorable results in Q3, returning 8.4% that was the highest among LTC portfolios while also outpacing its own custom benchmark. The fund has a long track record and has tracked its custom benchmark closely over all measured periods shown.
- Same as the JRS II's fixed income investments, the LTC domestic fixed income portfolio earned a meager gain during the third quarter; it registered a 0.2% return that was on par with its custom benchmark, the Barclays Long Liability Index. Over the long-term, the fixed income portfolio's track record has done very well relative to its benchmark.
- After losing -7.0% the prior quarter, TIPS stabilized and was able to finish the third quarter in positive territory, nudging up a small gain of 0.7% and matched the pace of its custom benchmark, currently the Barclays U.S. TIPS Index. The TIPS portfolio is still down -6.2% over the past 12-month period, but has an average annualized gain of 5.5% over five-years that topped the benchmark.

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).

-

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.

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



### **Commentary – Long-Term Care**

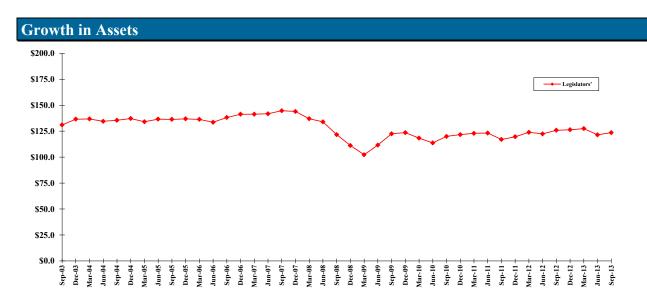
- Like global equities, REITs were able to shrug off a sluggish August and stage a comeback in September after a surprising decision by the Fed to uphold its QE bond buying pace boosted investor confidence. LTC's REIT portfolio generated a modest gain of 1.9% for the quarter and finished ahead of its custom benchmark, currently the FTSE EPRA/NAREIT Developed Liquid Index (net), by 14 bps. The portfolio's one-year and three-year track record remain very strong and it continues to add value over the last five years.
- The commodities portfolio rebounded nicely in the third quarter and was the second highest returning LTC investment. It earned a return of 4.7% that nearly matched the GSCI Total Return Index.



# **Legislators' Information**



#### California Legislators' Retirement System



#### **Total Fund Performance Results**

#### Total Fund Performance Periods Ended September 30, 2013

	Market		One	Three	Five	Ten
	<b>Value</b>	<u>Qtr</u>	<b>Year</b>	<b>Year</b>	<u>Year</u>	<u>Year</u>
LRS	\$123.6 mil	3.2%	4.3%	7.9%	8.8%	6.7%
Weighted Policy Benchmark <sup>77</sup>		3.2	3.7	7.6	8.0	6.6

#### **Asset Allocation**

**Asset Class** Policy Difference Actual Global Equity -0.1% 31.9% 32.0% **US Fixed Income** 42.2 42.0 +0.2**TIPS** 15.0 15.0 0.0 **REITs** 7.9 8.0 -0.1 Commodities <u>3.0</u> 3.0 0.0 100.0 0.0 100.0

<sup>&</sup>lt;sup>77</sup> The weighted policy benchmark returns are calculated based on asset class index returns weighted by asset class policy targets.



#### **Commentary**

- The California Legislators' Retirement System ("LRS, the System") finished the third quarter of 2013 up 3.2%, just offsetting the -3.2% losses it posted last quarter while matching its weighted policy benchmark. The System's longer-term track record also remains solid, having outperformed its policy benchmark over all measured periods shown.
- As of September 30, the System was marginally overweight in domestic fixed income while underweight in global equity and REITs.

#### **Asset Classes Performance Results**

#### Asset Class Performance Periods Ended September 30, 2013

LRS Global Equity	Market <u>Value</u> \$39.4 mil	<u>Qtr</u> 8.5%	One <u>Year</u> 20.1%	Three <u>Year</u> 12.1%	Five <u>Year</u> 8.0%	Ten <u>Year</u> 7.2%
Global Equity Benchmark <sup>78</sup>		8.4	19.8	12.1	7.9	7.1
LRS US Fixed Income	\$52.1 mil	0.3	-3.7	4.7	9.1	5.8
Custom Benchmark <sup>79</sup>		0.2	-4.8	4.1	7.5	5.8
LRS TIPS	\$18.6 mil	0.6	-6.0	4.0	5.5	-,-
Custom Benchmark <sup>80</sup>		0.7	-6.1	4.0	5.3	-,-
LRS REITs	\$9.8 mil	2.5	11.0	-,-		-,-
Custom Benchmark 81		2.4	11.0			
LRS Commodities	\$3.7 mil	3.4	-4.6	-,-		-,-
GSCI Total Return Index		4.8	-4.1			

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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.

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.

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

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



#### **Commentary**

- Global equity was the highest returning LRS portfolio in the third quarter as it rallied up 8.5%. Both U.S. and international equity markets charged ahead in July and September, with data of continued improving global economy bolstering investor sentiment. This performance topped the 8.4% return of the custom benchmark, and the global equity portfolio has continued to track closely to the custom benchmark over longer-term periods.
- The domestic core fixed income market saw marked swings during the third quarter, as yields continued the sharp rise between July and August in anticipation of Fed tapering, only to be followed by a quick reversal in mid-September after the Fed left its bond purchase program unchanged. With this backdrop, the LRS' domestic fixed income portfolio concluded the quarter with just a small gain of 0.3%, although it is 12 bps better than its custom benchmark, the Barclays Long Liability Index. Over the one-year and longer time horizon, the fixed income portfolio has done very well against its benchmark.
- TIPS encountered similar volatilities as core fixed income did this quarter, incurring losses in August due to tamed inflation outlook and rising real yields but recovered after September's dovish Fed announcement. The TIPS portfolio earned a total gain of 0.6% for Q3, coming in marginally below the Barclays U.S. TIPS Index.
- Like global equities, REITs also rebounded in the third quarter, albeit at a smaller magnitude. The LRS REIT portfolio rose 2.5% and finished ahead of its custom benchmark, the FTSE EPRA/NAREIT Developed Index, by a slim margin. Through the past 12-month period, both measures have risen 11.0%.
- In spite of the drag from the potential negative economic growth impact from the U.S. government shutdown and the debt ceiling impasse at the end of September, commodities generally enjoyed a solid quarter with the LRS commodities portfolio reporting a net gain of 3.4%. For the same period, the portfolio's benchmark, the GSCI Total Return Index, was up 4.8%. The commodities portfolio's one-year track record of -4.6% currently also sits behind its benchmark by 48 bps.



California Employers' Retiree Benefit Trust



## California Employers' Retiree Benefit Trust Strategy 1

#### **Asset Allocation**

Asset Class	Actual	Policy	Difference
Global Equity	65.8%	66.0%	-0.2%
US Bonds	18.2	18.0	+0.2
TIPS	5.0	5.0	0.0
REITS	7.9	8.0	-0.1
Commodities	3.0	3.0	0.0
Cash Equivalents	<u>0.1</u>	<u>0.0</u>	<u>+0.1</u>
_	100.0	100.0	0.0

#### **Total Fund Performance Results**

	Market		One	Three	Five	Ten
	Value 1771	<u>Qtr</u>	Year	<u>Year</u>	<u>Year</u>	<u>Year</u>
Total Fund	\$2,477.1 mil	5.8%	11.6%	9.9%	8.0%	%
Benchmark		5.8	11.4	9.9	8.0	
Global Equity	1,629.1 mil	8.4	18.7	11.9	8.1	
Benchmark		8.3	18.7	11.8	8.1	
Fixed Income	450.1 mil	0.3	-3.7	4.7	9.1	
Benchmark		0.2	-4.8	4.1	7.5	
REITs	196.9 mil	1.9	9.7	10.0	2.0	
Benchmark		1.8	9.4	10.0	1.4	
TIPS	124.4 mil	0.6	-6.0			
Benchmark		0.7	-6.1			
Commodities	74.6 mil	3.4	-4.6			
Benchmark		4.8	-4.1			
Cash±	2.0 mil	0.0	0.0	0.1	0.3	

 $<sup>\</sup>pm$  The cash component may contain residual trade balance that has yet to be settled during the periodic rebalancing process as of September 30.



## California Employers' Retiree Benefit Trust Strategy 2

#### **Asset Allocation**

Asset Class	Actual	Policy	Difference
Global Equity	49.6%	50.0%	-0.4%
US Bonds	24.1	24.0	+0.1
TIPS	15.0	15.0	0.0
REITS	7.9	8.0	-0.1
Commodities	3.0	3.0	0.0
Cash Equivalents	<u>0.4</u>	<u>0.0</u>	<u>+0.4</u>
_	100.0	100.0	0.0

#### **Total Fund Performance Results**

	Market		One	Three	Five	Ten
	<b>Value</b>	<u>Qtr</u>	<b>Year</b>	<b>Year</b>	<b>Year</b>	<b>Year</b>
Total Fund	\$449.0 mil	4.6%	8.2%	%	%	%
Benchmark		4.6	7.8			
Global Equity	222.4 mil	8.3	19.4			
Benchmark		8.3	19.4			
Fixed Income	108.2 mil	0.3	-3.7	-,-		
Benchmark		0.2	-4.8			
TIPS	67.5 mil	0.6	-6.0			
Benchmark		0.7	-6.1			
REITs	35.5 mil	1.9	9.8			
Benchmark		1.8	9.4			
Commodities	13.4 mil	3.4	-4.6			
Benchmark		4.8	-4.1			
Cash±	1.9 mil	0.0	0.0			-,-

<sup>&</sup>lt;sup>±</sup> The cash component may contain residual trade balance that has yet to be settled during the periodic rebalancing process as of September 30.



## California Employers' Retiree Benefit Trust Strategy 3

#### **Asset Allocation**

Asset Class	Actual	Policy	Difference
Global Equity	31.8%	32.0%	-0.2%
US Bonds	42.2	42.0	+0.2
TIPS	15.0	15.0	0.0
REITS	7.9	8.0	-0.1
Commodities	3.0	3.0	0.0
Cash Equivalents	<u>0.1</u>	<u>0.0</u>	<u>+0.1</u>
	100.0	100.0	0.0

#### **Total Fund Performance Results**

	Market	_	One	Three	Five	Ten
m	<u>Value</u>	<u>Qtr</u>	Year	<u>Year</u>	<u>Year</u>	<u>Year</u>
Total Fund	\$61.5 mil	3.2%	3.8%	%	%	%
Benchmark		3.1	3.5			
Global Equity	19.5 mil	8.3	19.2			
Benchmark		8.3	19.4			
Fixed Income	26.0 mil	0.3	-3.7			
Benchmark		0.2	-4.8	-,-	-,-	
TIPS	9.2 mil	0.6	-6.0			
Benchmark		0.7	-6.1			
REITs	4.9 mil	1.9	9.6			
Benchmark		1.8	9.4			
Commodities	1.9 mil	3.4	-4.6			-,-
Benchmark		4.8	-4.1			
Cash±	0.08 mil	0.0	0.0	-,-	-,-	

 $<sup>\</sup>pm$  The cash component may contain residual trade balance that has yet to be settled during the periodic rebalancing process as of September 30.



#### **Health Care Bond Fund**

#### **Total Fund Performance Results**

	Market Value	Qtr	One Year	Three Year	Five Year	Ten Year
<b>Health Care Bond Fund</b>	\$393.9 mil	0.8%	-0.6%	3.7%	6.2%	4.6%
Benchmark		0.6	-1.7	2.9	5.4	4.6



## **Supplemental Income Plans**



## **Supplemental Income Plan Performance**

#### **Net Fund Performance Results – Supplemental Contribution Plan**

#### Periods Ended September 30, 2013

				Three	Five
	<u>Value</u>	<u>Qtr</u>	<b>Year</b>	<u>Year</u>	<u>Year</u>
CalPERS International Index	\$168.7 thous	11.5	21.4	8.1	6.6
FTSE Dev. World Index Ex-US		11.5	21.5	8.1	6.8
CalPERS Small/Mid Equity Index	\$560.0 thous	9.0	29.5	18.6	12.7
Russell 2500		9.1	29.8	18.4	12.7
CalPERS Target 2010	\$130.4 thous	3.5	7.3	7.5	-,-
SIP 2010 Index		3.6	7.6	8.1	-,-
CalPERS Target 2015	\$634.3 thous	3.9	8.5	8.0	-v-
SIP 2015 Index		4.0	8.8	8.7	-v-
CalPERS Target 2020	\$125.5 thous	4.4	10.1	8.7	
SIP 2020 Index		4.5	10.4	9.3	
CalPERS Target 2025	\$127.5 thous	5.3	12.3	9.5	
SIP 2020 Index		5.3	12.6	10.2	
CalPERS Target 2030	\$10.6 thous	6.0	14.4	10.3	-,-
SIP 2030 Index		5.9	14.7	11.2	-,-
CalPERS Target 2040	\$121.2 thous	6.8	16.7	11.2	
SIP 2035 Index		6.7	17.0	12.2	
CalPERS Target Income	\$538.5 thous	2.5	4.4	6.0	
SIP Income Policy		2.6	4.6	6.3	
CalPERS Aggressive Asset Allocation Fund SIP Aggressive Policy	\$25.6 thous	6.8 6.7	16.7 17.0	11.2 12.2	 
CalPERS Moderate Asset Allocation Fund SIP Moderate Policy	\$14.4 mil	4.9 5.0	11.3 11.7	9.2 9.9	 
CalPERS Conservative Asset Allocation	\$284.9 thous	2.5	4.4	6.0	-v-
SIP Conservative Policy		2.6	4.6	6.3	-v-
CalPERS Total Return Bond Fund	\$64.7 thous	0.7	-1.1	3.4	5.8
Barclays Aggregate Bond Index		0.6	-1.7	2.9	5.4
CalPERS TIPS Securities Barclays U.S. TIP Index	\$251.2 thous	0.5 0.7	-6.4 -6.1	3.6 4.0	5.2 5.3
PIMCO Short Term Bond Fund CalPERS ML 6-month T-Bill	\$237.2 thous	0.4 0.1	0.6 0.2	-:- -:-	 



	Market <u>Value</u>	<u>Qtr</u>	One <u>Year</u>	Three <u>Year</u>	Five <u>Year</u>
CalPERS S&P 500 Equity Index S&P 500 Index	\$1.3 mil	5.2 5.2	19.1 19.3	16.2 16.3	10.0 10.0
Pyramis Select International CalPERS FTSE Dev World x-US	\$99.2 thous	11.0 11.5	20.4 21.3	8.8 8.2	 
The Boston Company SMID Growth Russell 2500 Growth	\$56.1 thous	12.7 11.9	28.2 32.0	 	 
The Boston Company SMID Value Russell 2500 Value	\$61.8 thous	8.4 6.4	26.5 27.6	 	 
SSgA STIF BofAML 3-month US T-Bill	\$764.4 thous	-0.1 0.0	-0.3 0.1	-0.1 0.1	 

# Net Fund Performance Results – State Peace Officers' & Firefighters' (POFF) Defined Contribution Plan

#### Periods Ended September 30, 2013

	Market <u>Value</u>	<u>Qtr</u>	One Year	Three Year	Five Year	Ten Year
State Peace Officers' &	\$501.7 mil	4.9%	11.4%	9.2%	6.7%	5.8%
Firefighters Plan (POFF)						
SIP Moderate Policy		5.0	11.7	9.9	7.8	6.6



## CalPERS 457 Program Net Funds Periods Ended September 30, 2013

	Market <u>Value</u>	<u>Otr</u>	One <u>Year</u>	Three <u>Year</u>	Five <u>Year</u>	Ten <u>Year</u>
CalPERS S&P 500 Equity Index	\$242.4 mil	5.2	19.0	15.9	9.8	7.3
S&P 500 Index		5.2	19.3	16.3	10.0	7.6
CalPERS Small/Mid Equity Index	\$154.4 mil	9.0	29.3	18.3	12.4	
Russell 2500 Index		9.1	29.8	18.4	12.7	
CalPERS Total Return Bond Fund	\$56.4 mil	0.7	-1.2	3.2	5.6	
Barclays Aggregate		0.6	-1.7	2.9	5.4	
CalPERS TIPS Securities	\$29.2 mil	0.5	-6.5	3.5	5.0	
Barclays U.S. TIPS Index		0.7	-6.1	4.0	5.3	
CalPERS International Index	\$19.0 mil	11.5	21.2	7.8	6.3	
FTSE Dev. World Index Ex-US		11.5	21.5	8.1	6.8	
Boston Company SMID Growth	\$9.5 mil	12.7	28.2	21.6	-,-	
Russell 2500 Growth Index		11.9	32.0	19.8	-,-	
Boston Company SMID Value	\$4.3 mil	8.4	26.5	14.1		
Russell 2500 Value Index		6.4	27.6	17.1	-,-	
Pyramis Select International	\$38.0 mil	11.0	20.3	8.6		
CalPERS FTSE Dev World x-US		11.5	21.3	8.2		
CalPERS Conservative Asset Allocation	\$38.5 mil	2.5	4.4	5.9	-,-	
SIP Conservative Index		2.6	4.6	6.3		
CalPERS Moderate Asset Allocation Fund	\$122.9 mil	4.9	11.3	9.1		
SIP Moderate Policy		5.0	11.7	9.9		
CalPERS Aggressive Asset Allocation	\$61.0 mil	6.8	16.7	11.2		
SIP Aggressive Policy		6.7	17.0	12.2		
CalPERS Target Income Fund	\$14.0 mil	2.5	4.4	5.9		
SIP Income Policy		2.6	4.6	6.3	-,-	



## CalPERS 457 Program Net Funds Periods Ended September 30, 2013

	Market <u>Value</u>	<u>Otr</u>	One <u>Year</u>	Three <u>Year</u>	Five <u>Year</u>	Ten <u>Year</u>
CalPERS Target 2005 Fund	\$2.2 mil	2.9	5.3	6.4		
SIP 2005 Policy		3.0	5.6	6.9		
CalPERS Target 2010 Fund	\$16.8 mil	3.5	7.2	7.5		
SIP 2010 Policy		3.6	7.6	8.1		
CalPERS Target 2015 Fund	\$34.3 mil	3.9	8.4	8.0		
SIP 2015 Policy		4.0	8.8	8.7		
CalPERS Target 2020 Fund	\$47.6 mil	4.4	10.0	8.6		
SIP 2020 Policy		4.5	10.4	9.3		
CalPERS Target 2025 Fund	\$22.5 mil	5.3	12.2	9.4		
SIP 2025 Policy		5.3	12.6	10.2		
CalPERS Target 2030 Fund	\$27.4 mil	6.0	14.4	10.4		
SIP 2030 Policy		5.9	14.7	11.2		
CalPERS Target 2035 Fund	\$9.1 mil	6.5	15.9	10.9		
SIP 2035 Policy		6.4	16.2	11.9		
CalPERS Target 2040 Fund	\$15.3 mil	6.8	16.7	11.2		
SIP 2040 Policy		6.7	17.0	12.2		
CalPERS Target 2045 Fund	\$2.8 mil	6.8	16.7	11.2		
SIP 2045 Policy		6.7	17.0	12.2		
CalPERS Target 2050 Fund	\$1.3 mil	6.8	16.7	11.2		
SIP 2050 Policy		6.7	17.0	12.2		
SSgA STIF	\$127.8 mil	-0.1	-0.4	-0.3		
BofAML 3-month US T-Bill		0.0	0.1	0.1		
PIMCO Short-Term Bond Fund	\$21.1 mil	0.4	0.5	0.7		
ML 6-month T-Bill		0.1	0.2	0.2		