W Wilshire

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

Fourth Quarter 2014

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WILSHIRE CONSULTING

CalPERS	
Performance Analysis	
December 31, 2014	

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Capital Market Overview

Global markets presented a mixed picture for U.S.-based investors during all of 2014, and the fourth quarter was no exception; domestic stocks and bonds enjoyed a quarter of strong performance, foreign asset performance varied depending on regional events and a global plunge in oil and natural gas prices introduced notable volatility into capital markets at year end. The U.S. economy provided welcome good news when the Commerce Department revealed that U.S. real Gross Domestic Product increased at an annual 5.0% rate in the third quarter of 2014, a second quarter of strong recovery from the -2.1% rate in the first quarter. All of the major components of GDP (Consumer, Business, Government) were up for the quarter. A drop in the U.S. trade deficit resulted in a net positive for domestic growth. Exports improved just as the U.S. dollar was strengthening, while falling oil prices kept the price of imports down. The second half of 2014 brought transformational shifts in two major economic factors: oil prices and the U.S. dollar. Oil began its steep decline in June and finished the year with West Texas Intermediate crude below \$55, a level that has not been sustained since 2004. The U.S. dollar began its rise shortly after the drop in oil commenced and by year end, the U.S. Dollar Index yersus major currencies was up 12%. Several factors have been driving these phenomena: Decreased demand for oil and gas in the face of a global economic slowdown outside the U.S., increased energy reserves, new energy sources including U.S. shale oil, and the typical depression in commodities prices that accompanies a strengthening U.S. dollar. Solid jobs growth continued into the fourth quarter as total nonfarm employment increased an average 278,000 jobs per month during the three months ending November, higher than the 2014 running average of 241,000 jobs per month. The unemployment rate has fallen from 6.7% in December 2013 to 5.6% in November 2014, a level last seen in June 2008. The expansion of the U.S. economy has not been accompanied by higher inflation, thanks in part to the worldwide slide in energy prices. At year-end, tenyear breakeven inflation-the market's consensus forecast, calculated as the difference between yields on ten-year nominal Treasuries and TIPS-stood at 1.68%, down from 1.97% at the end of the previous quarter. Consumer inflation as measured by change in the Consumer Price Index, All Urban Consumers, was remarkably muted during 2014; fourth quarter CPI-U actually fell -1.35%, and for all of 2014 CPI-U only rose 0.76%, its lowest increase since 2008's 0.09%. Despite the Federal Reserve's ending of its Quantitative Easing program of accommodative monetary policy, long U.S. Treasury yields continued their move downward in the fourth quarter, while short-term Treasury yields actually rose.

U.S. Equity Market

The U.S. stock market, represented by the Wilshire 5000 Total Market IndexSM, finished the year strong despite a basically flat December. The index was up 5.26% for the fourth quarter and 12.71% for all of 2014. Equity investors were apparently not troubled by a few notable events during the year, including a negative quarter for real GDP growth, numerous geopolitical events and the end of the Federal Reserve's third round of quantitative easing. The U.S. stock market has not suffered a negative quarter for 2.5 years now, the second longest "winning" streak in the history of the Wilshire 5000 Index (the longest streak being 3.5 years during the second part of the 1990's). Large capitalization stocks underperformed smaller shares for the quarter with the Wilshire Large-Cap IndexSM up 4.98% versus 7.71% for the Wilshire US Small-Cap IndexSM. Larger shares nearly doubled small cap stocks for the year, up 13.46% versus a gain of 6.80%. The Wilshire US Micro-Cap IndexSM was up 7.19% for the quarter but only 2.74% for all of 2014. Results for growth stocks versus value during the fourth quarter were mixed as growth led in the

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large-cap segment but trailed value stocks within small caps. Most equity sectors were up during the quarter with the exception of Telecom and Energy, which was down big on plummeting oil prices. The clear winner was Utilities (up 13.10%), which benefitted from lower input costs, while Consumer Discretionary was up 8.77% and Consumer Staples was up 8.48%. Energy stocks were down -12.37% in aggregate. Real estate-related equities ended 2014 with a strong fourth quarter showing from U.S. real estate stocks (Wilshire US Real Estate Securities IndexSM, 15.03% fourth quarter, 31.53% calendar 2014); global real estate securities saw their gains reduced by the surging U.S. dollar (Wilshire US Global ex-US RESISM, 0.91% fourth quarter, 6.78% calendar 2014).

Fixed Income Market

The U.S. Treasury yield curve ended 2014 considerably flatter, with yields sharply lower in maturities beyond five years. Investors rotated up the curve into higher-yielding paper in the fourth quarter, with two-year yields rising 9 basis points to 0.67%, ten-year yields dropping -35 bps to 2.17% and thirty-year yields sliding -46 bps to 2.75%. Long-dated Treasuries, naturally, soundly outperformed shorter bonds (Barclays U.S. Long Treasury, 8.62% fourth quarter, 25.07% calendar 2014; Barclays U.S. Treasury 1-3 Years, 0.19% fourth quarter, 0.63% calendar 2014). Investment-grade credit spreads tightened over the first half of the year, then ended 2014 slightly wider (Barclays U.S. Corporate, 1.77% fourth quarter, 7.46% calendar 2014; Barclays U.S. Securitized, 1.74% fourth quarter, 5.88% calendar 2014; Barclays U.S. Treasury, 1.93% fourth quarter, 5.05% calendar 2014). High yield credit spreads widened to end 2014 closer to historical averages (Barclays U.S. High Yield, -1.00% fourth quarter, 2.45% calendar 2014; Barclays U.S. Aggregate, 1.79% fourth quarter, 5.97% calendar 2014).

Non-U.S. Markets

Europe closed 2014 with relatively muted gains, as regional economic growth slowed down markedly in relation to the U.S. economy. Inflation rates in Europe have fallen to levels that have raised the specter of deflation, leading many analysts to expect further intervention by central banks to jump-start economic growth (MSCI Europe, net dividends, local currency: 0.00% fourth quarter, 4.66% calendar 2014). Pacific regional markets, in contrast, continued their strong performance despite Japan's recent descent into recession (MSCI Pacific, net, local currency: 5.22% fourth quarter, 7.89% calendar 2014). China's own economic slowdown, combined with Russia's recent struggles with a sagging ruble and sinking oil prices, held back emerging market performance overall (MSCI Emerging Markets, net, local: 0.01% fourth quarter, 5.17% calendar 2014; MSCI EAFE, net, local: 1.77% fourth quarter, 5.92% calendar 2014). The U.S. dollar's appreciation against other world currencies in 2014 reduced dollar-based investors' gains considerably (MSCI EAFE, net, USD terms: -3.57% fourth quarter, -4.90% calendar 2014). Low yields in the developed markets have resulted in strong performance for offshore bonds in local currency terms; emerging market debt also benefited from low yields worldwide (Barclays Global Aggregate ex-USD, dollar-hedged: 2.60% fourth quarter, 8.79% calendar 2014; Barclays Emerging Markets Local Currency Government Universal, dollar hedged: 2.10% fourth quarter, 5.71% calendar 2014). The strong U.S. dollar, however, eroded global market gains for U.S.-based investors in these assets (Barclays Global Aggregate ex-USD, USD terms: -2.99% fourth quarter, -3.08% calendar 2014; Barclays Emerging Markets Local Currency Government Universal, USD terms: -0.99% fourth quarter, 3.01% calendar 2014).

CalPERS Performance Analysis December 31, 2014	WILSHIRE CONSULTING

Summary of Index Returns For Periods Ended December 31, 2014

	<u>Quarter</u>	One <u>Year</u>	Three <u>Years</u>	Five <u>Years</u>	Ten <u>Years</u>
Domestic Equity					
Standard & Poor's 500	4.93%	13.69%	20.41%	15.45%	7.67%
Wilshire 5000	5.26	12.71	20.29	15.54	7.99
Wilshire 4500	6.72	7.97	20.80	16.77	9.26
Wilshire Large Cap	4.98	13.46	20.22	15.38	7.87
Wilshire Small Cap	7.71	6.80	20.81	17.04	9.51
Wilshire Micro Cap	7.19	2.74	22.86	15.82	6.06
Domestic Equity					
Wilshire Large Value	4.84%	13.00%	19.02%	15.31%	7.09%
Wilshire Large Growth	5.15	13.96	21.60	15.49	8.59
Wilshire Mid Value	5.42	11.60	20.38	16.23	8.34
Wilshire Mid Growth	4.29	6.61	19.92	16.59	10.79
Wilshire Small Value	8.60	9.09	21.05	16.31	8.88
Wilshire Small Growth	6.70	4.23	20.47	17.65	10.09
International Equity					
MSCI All World ex U.S. (USD)	-3.87%	-3.87%	8.99%	4.43%	5.13%
MSCI All World ex U.S. (local currency)	1.17	7.06	14.92	7.69	6.48
MSCI EAFE	-3.57	-4.90	11.06	5.33	4.43
MSCI Europe	-4.35	-6.18	11.86	5.28	4.60
MSCI Pacific	-2.08	-2.70	9.60	5.65	4.18
MSCI Emerging Markets Index	-4.50	-2.19	4.04	1.78	8.43
Domestic Fixed Income					
Barclays Aggregate Bond	1.79%	5.97%	2.66%	4.45%	4.71%
Barclays Credit	1.76	7.53	4.84	6.25	5.46
Barclays Mortgage	1.79	6.08	2.37	3.73	4.75
Barclays Treasury	1.93	5.05	1.38	3.91	4.38
Citigroup High Yield Cash Pay	-1.35	1.80	7.86	8.65	7.32
Barclays US TIPS	-0.03	3.64	0.44	4.11	4.37
91-Day Treasury Bill	0.00	0.04	0.07	0.09	1.54
International Fixed Income					
Citigroup Non-U.S. Gov. Bond	-2.91%	-2.68%	-1.94%	0.85%	2.64%
Citigroup World Gov. Bond	-1.49	-0.48	-0.97	1.67	3.08
Citigroup Hedged Non-U.S. Gov.	3.02	9.77	5.51	4.61	4.70
Currency*					
Euro vs. \$	-4.21%	-12.18%	-2.32%	-3.35%	-1.16%
Yen vs. \$	-8.51	-12.34	-13.75	-4.93	-1.56
Pound vs. \$	-3.82	-5.86	0.11	-0.70	-2.06
Real Estate					
Wilshire REIT Index	15.13%	31.78%	16.43%	17.26%	8.26%
Wilshire RESI	15.03	31.53	16.46	17.23	8.15



Summary Review of Plans Periods Ended 12/31/2014

	Market Value	<u>Qtr</u>	1-Year	<u>3-Year</u>	<u>5-Year</u>	<u> 10-Year</u>
TOTAL FUND for PERF	\$295.8 bil	0.7%	6.5%	11.9%	9.8%	6.2%
Total Fund Policy Benchmark ¹		0.6%	6.8%	12.0%	9.6%	7.1%
Actuarial Rate		1.8%	7.5%	7.5%	7.6%	7.7%
Affiliate Fund						
Judges II	\$1,023.9 mil	1.1%	5.7%	11.6%	9.8%	6.4%
Weighted Policy Benchmark		1.1%	5.7%	11.3%	9.7%	6.4%
Long-Term Care ("LTC")	\$4,145.5 mil	1.4%	7.3%	6.5%	7.0%	5.4%
Weighted Policy Benchmark		1.1%	7.1%	6.1%	6.7%	5.1%
CERBT Strategy 1	\$3,384.3 mil	1.0%	5.2%	11.5%	9.3%	%
Weighted Policy Benchmark		0.9%	5.0%	11.2%	9.2%	%
CERBT Strategy 2	\$609.1 mil	1.1%	5.7%	9.5%	%	%
Weighted Policy Benchmark		1.1%	5.5%	9.2%	%	%
CERBT Strategy 3	\$156.9 mil	1.3%	6.7%	7.5%	%	%
Weighted Policy Benchmark		1.2%	6.4%	7.1%	%	%
Legislators' Fund						
LRS	\$124.5 mil	1.3%	6.8%	7.9%	8.3%	6.2%
Weighted Policy Benchmark		1.2%	6.7%	7.4%	8.0%	6.0%

⁶⁶ 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 12/31/2014

							<u>r VaR¹²</u> \$40.5 bil	5-Year	Ratios <u>Info¹⁴</u> 0.1 0.0
TOTAL FUND Total Fund Policy Benchmark ² Actuarial Rate	Market <u>Value</u> \$295.8 bil	<u>Qtr</u> 0.7% 0.6% 1.8%	<u>1-Year</u> 6.5% 6.8% 7.5%	<u>3-Year</u> 11.9% 12.0% 7.5%	<u>5-Year</u> 9.8% 9.6% 7.6%			Sharpe ¹³ 1 1.3 1.3	
GROWTH Growth Policy Benchmark ³	187.3	0.8% 0.5%	6.2% 6.9%	15.3% 17.0%	11.4% 11.4%	7.0% 7.9%	\$39.3 bil	1.0 0.9	0.0 0.0
PUBLIC EQUITY Public Equity Policy Benchmark ⁴	156.8	0.8% 0.8%	4.6% 4.6%	15.5% 15.2%	10.3% 9.9%	6.3% 6.6%	\$32.0 bil	0.7 0.7	0.8 0.0
PRIVATE EQUITY Private Equity Policy Benchmark ⁵	30.5	0.9% -1.0%	14.6% 17.1%	15.3% 23.1%	15.9% 16.7%	12.9% 15.2%	\$10.1 bil	3.1 1.2	-0.1 0.0
INCOME Income Policy Benchmark ⁶	53.6	2.5% 2.4%	9.9% 9.6%	4.3% 3.1%	7.3% 6.3%	6.5% 5.8%	\$6.7 bil	1.6 1.3	0.9 0.0
REAL ASSETS ⁷ Real Assets Policy Benchmark ⁸	29.6	0.8% 2.7%	13.0% 10.8%	12.3% 10.8%	8.4% 10.6%	3.1% 8.9%	\$4.1 bil	1.2 2.4	-0.4 0.0
INFLATION Inflation Policy Benchmark ⁹	14.8	-6.4% -7.8%	-5.1% -6.9%	- 1.7% -1.9%	2.6% 1.5%	%	\$1.0 bil	0.3 0.2	0.4 0.0
LIQUIDITY Liquidity Policy Benchmark ¹⁰	6.6	0.4% 1.0%	1.5% 2.5%	0.4% 0.9%	1.1% 1.4%	2.2% 2.4%	\$0.3 bil	0.7 0.8	-0.8 0.0
ABSOLUTE RETURN STRATEGIES ¹¹ Absolute Return Strategies Policy Benchmark ¹¹	2.8	1.7% 1.2%	4.6% 5.2%	5.6% 5.2%	4.5% 5.4%	4.4% 7.1%		1.4 30.8	-0.3 0.0
MULTI-ASSET CLASS COMPOSITE Absolute 7.5%	1.2	2.7% 1.8%	9.7% 7.5%	% %	% %	%		N/A N/A	N/A N/A
CURRENCY + ASSET ALLOCATION TRANSITION	0.0	%	%	%	%	%		N/A	N/A
TERMINATED AGENCY POOL TOTAL FUND PLUS TAP	0.1 295.9	4.2% 0.7%	13.3% 6.5%	% 11.9%	% 9.8%	% 6.2%		N/A N/A	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.

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

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

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

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%.

^o 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.

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.

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.

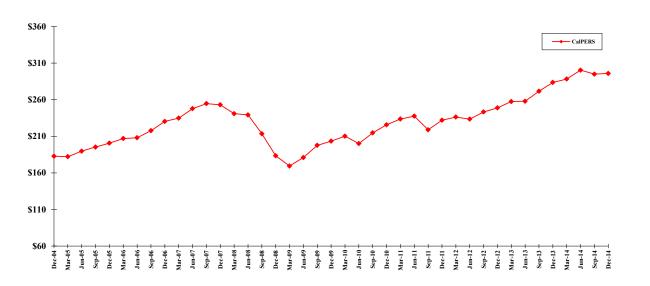
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Total Fund Review for PERF (continued) Periods Ended 12/31/2014

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>1Q14</u>	<u>2Q14</u>	<u>3Q14</u>	<u>4Q14</u>
Market Value (\$bil)	200.6	230.3	253.0	183.3	203.3	225.7	225.0	248.8	283.5	288.2	300.3	294.9	295.8

Total Fund Market Value

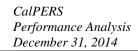


Asset Allocation

Asset Allocation: Actual versus Target Weights*

Asset Class	Actual Asset Allocation	Target Asset Allocation	Difference
Growth	63.3%	61.0%	2.3%
Income	18.1%	19.0%	-0.9%
Real Assets	10.0%	12.0%	-2.0%
Inflation	5.0%	6.0%	-1.0%
ARS	0.9%	0.0%	0.9%
Liquidity	2.2%	2.0%	0.2%
Multi-Asset	0.4%	0.0%	0.4%

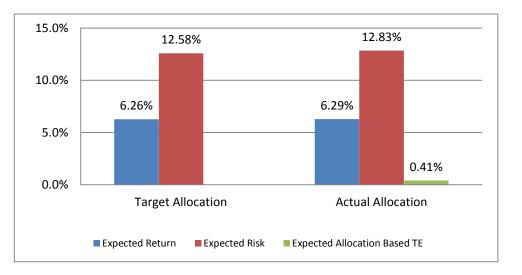
^{*} Asset allocation targets are in the process of shifting to the new targets adopted by the Investment Committee in May 2014. Transitions accounts are included with their respective asset classes.



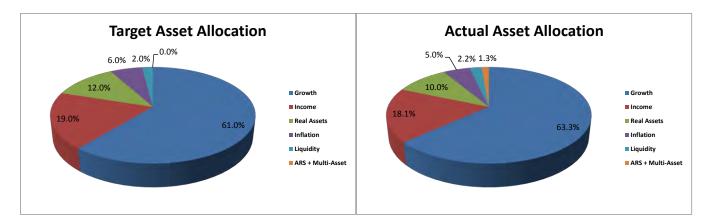


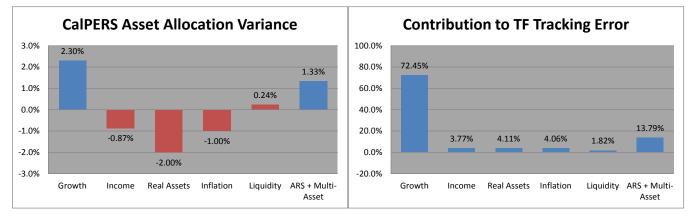
Total Fund Review for PERF (continued) Periods Ended 12/31/2014

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



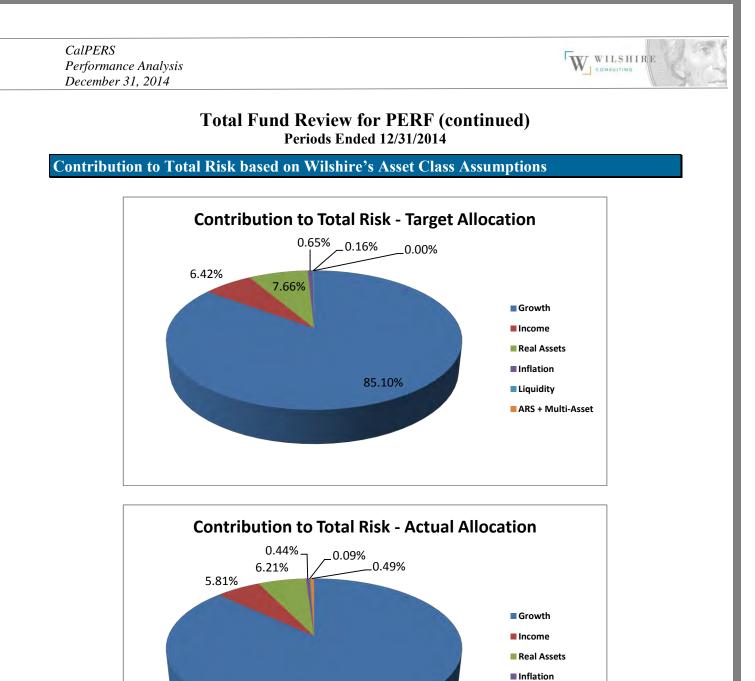
Total Fund Asset Allocation





Liquidity

ARS + Multi-Asset



86.95%

California Public Employees' Retirement System Total Fund Attribution - Quarter As of 12/31/2014

	Actua	Actual (%)		Policy (%)		nce (%)	Т	otal Fund Return	n Contribution (%)	
Asset Class	Weight	Return	Weight	Return	Weight	Return	Actual Allocation	Interaction	Active Management	Total
Growth	63.59	0.84	61.00	0.52	2.59	0.32	-0.01	0.01	0.20	0.20
Public Equity	53.11	0.83	51.00	0.80	2.11	0.03	0.00	0.00	0.02	0.02
Private Equity	10.48	0.87	10.00	-0.99	0.48	1.85	-0.01	0.01	0.18	0.18
Income	17.88	2.47	19.00	2.41	-1.12	0.06	-0.02	0.00	0.01	-0.01
Real Assets	10.10	0.84	12.00	2.69	-1.91	-1.85	-0.04	0.04	-0.23	-0.23
Inflation	5.28	-6.40	6.00	-7.77	-0.72	1.37	0.06	-0.01	0.09	0.14
Absolute Return	1.50	1.69	0.00	1.16	1.50	0.53	0.01	0.01	0.00	0.01
Liquidity	1.67	0.45	2.00	0.97	-0.33	-0.52	0.00	0.00	-0.01	-0.01
Monthly Linked Return	100.00	0.74	100.00	0.64		0.10	0.00	0.04	0.06	0.10
Trading/Hedging/Other		0.00		0.00		0.00				0.00
Total		0.75		0.64		0.10				0.10

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 12/31/2014

	Actua	l (%)	Policy	y (%)	Differer	Difference (%)		otal Fund Return	n Contribution (%)	
Asset Class	Weight	Return	Weight	Return	Weight	Return	Actual Allocation	Interaction	Active Management	Total
Growth	64.39	6.19	62.50	6.94	1.89	-0.74	-0.23	0.07	-0.34	-0.50
Public Equity	53.77	4.60	50.50	4.62	3.27	-0.02	-0.10	0.00	-0.01	-0.11
Private Equity	10.63	14.59	12.00	17.06	-1.37	-2.47	-0.13	0.06	-0.35	-0.41
Income	16.59	9.92	18.00	9.57	-1.41	0.35	-0.07	0.00	0.06	0.00
Real Assets	9.93	12.97	11.50	10.81	-1.57	2.17	-0.11	-0.01	0.21	0.09
Inflation	4.15	-5.14	5.00	-6.87	-0.85	1.73	0.12	-0.01	0.11	0.21
Absolute Return	1.90	4.57	0.00	5.19	1.90	-0.62	-0.05	-0.02	0.00	-0.07
Liquidity	3.04	1.48	3.00	2.52	0.04	-1.04	0.01	0.00	-0.03	-0.03
Monthly Linked Return	100.00	6.62	100.00	6.93		-0.30	-0.33	0.02	0.00	-0.30
Trading/Hedging/Other		-0.10		-0.09		-0.01				-0.01
Total		6.52		6.84		-0.32				-0.32

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 12/31/2014

	Actua	Actual (%)		Policy (%)		nce (%)	Т	otal Fund Return	n Contribution (%)	
Asset Class	Weight	Return	Weight	Return	Weight	Return	Actual Allocation	Interaction	Active Management	Total
Growth	63.51	-0.95	61.00	-0.80	2.51	-0.15	-0.02	-0.01	-0.11	-0.13
Public Equity	53.06	-1.97	51.00	-1.88	2.06	-0.09	-0.04	0.00	-0.05	-0.09
Private Equity	10.46	4.34	10.00	4.82	0.46	-0.48	0.02	0.00	-0.06	-0.04
Income	17.85	2.39	19.00	2.02	-1.15	0.37	-0.02	0.00	0.07	0.04
Real Assets	10.04	2.26	12.00	5.23	-1.96	-2.97	-0.12	0.06	-0.35	-0.41
Inflation	4.97	-11.09	6.00	-12.57	-1.03	1.48	0.11	-0.01	0.10	0.19
Absolute Return	1.63	2.22	0.00	2.50	1.63	-0.28	0.05	-0.01	0.00	0.04
Liquidity	1.99	0.52	2.00	0.97	-0.01	-0.45	0.00	0.00	-0.01	-0.01
Monthly Linked Return	100.00	-0.51	100.00	-0.24		-0.27	-0.01	0.03	-0.30	-0.27
Trading/Hedging		-0.01		0.00		-0.01				-0.01
Total		-0.51		-0.24		-0.27				-0.27

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 12/31/2014

• The California Public Employees' Retirement System ("CalPERS, the System") generated a total fund return of 0.7%, for the quarter ended December 31, 2014. CalPERS' return can be attributed as follows:

0.64%	Strategic Policy Allocation
0.00%	Actual/Tactical Asset Allocation
0.06%	Active Management
0.04%	Interaction
0.10%	Trading/Currency Hedging
0.75%	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 endured ups and downs in the last quarter of 2014 but was able to close out the period on a positive note. The System earned a total return of 0.7% as most of its major asset classes recorded small amount of gains; this compared favorably to the strategic policy benchmark, which had a marginally smaller return of 0.6%. The impact of overall asset allocation variances for the quarter was nil, with positive from smaller-than-target exposure to Inflation, the weakest performing PERS segment (in both absolute and relative terms) offset by negatives from underweighting the higher returning asset classes such as Income and Real Assets. In terms of the active management contribution, which was a small positive this quarter, most of the System's asset classes did well against their respective policy benchmarks and helped overcome the lone weak spot in Real Assets (with a -185 bps underperformance).
- Due to the softer market conditions in the second half of 2014, the Total Fund composite's 0.7% Q4 return and 6.5% one-year return trailed against the stated 7.5% actuarial rate of return. Over the midterm horizon, the System's double-digit three- and five-year returns do sit comfortably above the actuarial rate. The ten-year track record, which remained at 7.2%, currently trails by a modest amount.



Total Fund Review for PERF (continued) Periods Ended 12/31/2014

Relative to the Total Fund Policy Benchmark:

- Growth Exposure: The Growth composite remains CalPERS' largest asset class exposure, accounting for 63% of the plan assets as of December 31. Given its size, the composite also continues to serve as a meaningful performance driver and it was no different in Q4. For the quarter, Growth reported a total net return of 0.8%; while the degree of gain was small, it was better than the Growth policy benchmark as well as the total fund policy benchmark, which were up 0.5% and 0.6%, respectively. The composite saw opposite-sized contributions from its two main components, with the larger sized public equity piece rising 0.8% that was on par with the global equity benchmark's pace, and the smaller private equity portfolio turning in a 0.9% gain that represented a 185 bps outperformance versus its own allocation benchmark.
- Income Exposure: In a rare occurrence, the Income composite finished the fourth quarter of 2014 atop the leaderboard among CalPERS' major asset classes. With most major developed/emerging economies mired in weak/no growth conditions and weighing on business earnings outlook, the strength of U.S. economy once again propelled the Dollar to appreciate against other currencies. This unique combination attracted more global investors seeking to manage risk in their portfolios as well as to earn higher income, allowing the Income composite to score gains in all three months of the quarter that led to a 2.5% total Q4 return. This was marginally better than the Income policy benchmark and handily outperformed the total fund policy's 0.6% pace. Within Income, the U.S. fixed income component led the way by rallying 3.2%, while the international fixed income composite, hampered by the strong Dollar, fell -4.0%.
- **Real Assets Exposure:** Similar to the third quarter, Real Assets once again posted tepid return to close out the fourth quarter. While relative to total fund policy benchmark Real Assets' 0.8% gain this quarter appeared favorable, the asset class notably underperformed its own policy benchmark by 185 bps, therefore making it a net detractor to the System. Most of Real Assets' weaknesses came from the private real estate portfolio, which continued to generate low rate of appreciation that lagged its benchmark measure.
- Inflation Exposure: The CalPERS Inflation composite was the lowest returning major asset class this quarter, logging a net loss of -6.4%. However, this performance actually finished ahead of the composite's own benchmark by a margin of 137 bps, therefore from an attribution standpoint Inflation did contribute to helping Total Fund beat the total fund policy benchmark. The composite's losses were solely attributed to its commodities portfolios, which on average were driven down -27% in Q4 by the accelerated sharp fall in energy and industrial metal prices.
- Liquidity: The Liquidity composite's 0.4% return did not match the total fund policy benchmark, while it also missed its own asset class benchmark, which was up 1.0%. Both of the Liquidity's Treasury and cash components actually performed in line with expectations. Rather, it was the notable underweight to the Treasury portfolio (41% of Liquidity assets vs. a target of 75%) that drove this quarter's underperformance.
- Absolute Return Strategy: The Absolute Return Strategy (ARS) program generated a small amount of gain of 1.7% that topped the total fund policy benchmark.

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Growth Review for PERF Periods Ended 12/31/2014

Growth Allocation

Asset Allocation: Actual versus Target Weights

Asset Class	Actual Asset Allocation	Target Asset Allocation	Difference
Growth	<u>63.3%</u>	61.0%	+2.3%
Public Equity	53.0%	51.0%	+2.0%
Private Equity	10.3%	10.0%	+0.3%

Growth Segment Performance

GROWTH Growth Policy Benchmark Value Added	Market <u>Value</u> 187.3	<u>Qtr</u> 0.8% 0.5% 0.3%	<u>1-Year</u> 6.9% -0.7%	<u>3-Year</u> 15.3% 17.0% -1.7%	5-Year 11.4% 11.4% 0.0%	<u>10-Year</u> 7.0% 7.9% -0.9%	<u>VaR²¹</u> \$39.3 bil	5-year Sharpe <u>Ratio²²</u> 1.0 0.9	5-year Info <u>Ratio²³</u> 0.0 0.0
PUBLIC EQUITY ¹⁵ Public Equity Policy Benchmark ¹⁶ Value Added	156.8	0.8% 0.8% 0.0%	4.6% 4.6% 0.0%	15.5% 15.2% 0.3%	10.3% 9.9% 0.4%	6.3% 6.6% -0.3%	\$32.0 bil	0.7 0.7	0.8 0.0
US Equity Composite Custom US Equity Benchmark ¹⁷ Value Added	84.9	4.9% 4.8% 0.1%	12.2% 12.3% -0.1%	20.9% 20.6% 0.3%	15.8% 15.5% 0.3%	8.0% 7.9% 0.1%		1.1 1.1	0.5 0.0
Total Int'l Equity Custom Int'l Equity Benchmark ¹⁸ Value Added	71.9	-3.4% -3.3% -0.1%	-2.9% -2.8% -0.1%	10.3% 10.6% -0.3%	5.5% 5.3% 0.2%	5.6% 5.4% 0.2%		0.3 0.3	0.2 0.0
PRIVATE EQUITY ¹⁹ PE Policy Benchmark ²⁰ Value Added	30.5	0.9% -1.0% 1.9%	14.6% 17.1% -2.5%	15.3% 23.1% -7.8%	15.9% 16.7% -0.8%	12.9% 15.2% -2.3%	\$10.1 bil	3.1 1.2	-0.1 0.0
Private Equity Partnership Investments Private Equity Distribution Stock	30.5 0.0	0.9% -0.3%	14.6% -21.5%	15.4% -24.4%	16.0% -11.3%	13.1% -2.4%			

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: Despite a brief selloff in the month of October that was in part influenced by Ebola contagion scare and the disappointing OPEC decision on not cutting crude production, U.S. equity market largely trended up during the fourth quarter by riding on positive economic data. With this favorable backdrop, CalPERS' total U.S. equity composite rose nearly 5%, which easily made it the highest returning component within the Growth asset class, and comfortably outpaced the Growth policy benchmark's 0.5% gain. The System's internal and external U.S. equity composites did equally well, with the former posting a slightly higher return than the latter, 4.9% vs. 4.6%.
- Private Equity Exposure: CalPERS' private equity investments continued to generate positive returns. Following a 3.4% rise in the third quarter, the private equity program's pace slowed but was still able to close out Q4 with a small gain of 0.9%. This level of performance was similar to what public equities generated, but relative to the private equity benchmark it represented a sizable outperformance of 185 bps, thus making private equity a contributor allowing the overall asset class to finish ahead of the Growth policy benchmark's 0.5% return this quarter.
- **Corporate Governance:** PERS' Corporate Governance portfolio also rebounded in Q4, netting a small 1.0% return that finished ahead of the Growth policy benchmark.
- **MDP:** Similar to Corporate Governance, the Manager Development Program saw a return of 1.1% for the quarter, performing better than the Growth policy benchmark.
- **FoF:** The Total Fund of Funds composite recorded a modest gain for the quarter, earning 2.0% that compared favorably to the overall Growth policy benchmark.

Impeded Performance:

• International Equity Exposure: Non-U.S. equities performance diverged from U.S. equities during Q4. A strong U.S. Dollar, the lack of growth in developed Europe, and the collapse of oil prices hampering oil exporting emerging markets countries all continued to act as headwinds for international equities. PERS' international equity portfolios were not immune to these macro challenges, both the internally managed international equity composite (-3.7%) and the externally managed composite (-2.4%) finished the quarter in the red and underperformed the Growth policy benchmark.



Public Equity Review for PERF - U.S. Equity

US Equity Composite (ex ARS) Custom US Equity Benchmark ²⁴ Value Added	<u>Market</u> <u>Value</u> 84.9	<u>Otr</u> 4.9% 4.8% 0.1%	<u>1-Year</u> 12.2% 12.3% -0.1%	<u>3-Year</u> 20.9% 20.6% 0.3%	<u>5-Year</u> 15.8% 15.5% 0.3%	<u>10-Year</u> 8.0% 7.9% 0.1%	<u>Date</u> 12/79
Total Internal US Equity <i>Custom Internal US Equity Benchmark</i> ²⁵ <i>Value Added</i>	77.2	4.9% 4.8% 0.1%	12.3% 12.3% 0.0%	20.9% 20.6% 0.3%	15.9% 15.5% 0.4%	8.2% 7.9% 0.3%	6/88
Total External US Equity <i>Custom External US Equity Benchmark</i> ²⁶ <i>Value Added</i>	7.4	4.6% 4.9% -0.3%	11.3% 12.6% -1.3%	21.0% 20.2% 0.8%	15.0% 15.3% -0.3%	7.2% 8.0% -0.8%	12/98

Public Equity Review for PERF - International Equity

Total Int'l Equity (ex ARS) Custom Int'l Equity Benchmark ²⁷ Value Added	<u>Market</u> <u>Value</u> 71.9	<u>Otr</u> -3.4% -3.3% -0.1%	<u>1-Year</u> -2.9% -2.8% -0.1%	<u>3-Year</u> 10.3% 10.6% -0.3%	<u>5-Year</u> 5.5% 5.3% 0.2%	<u>10-Year</u> 5.6% 5.4% 0.2%	<u>Date</u> 12/02
Total Internal Int'l Equity Custom Internal Int'l Equity Benchmark ²⁸ Value Added	56.7	-3.7% -3.7% 0.0%	-3.4% -4.3% 0.9%	10.4% 10.8% -0.4%	5.4% 5.4% 0.0%	% %	3/05
Total External Int'l Equity Custom External Int'l Equity Benchmark ²⁹ Value Added	15.1	-2.4% -2.6% 0.2%	-1.2% -0.6% -0.6%	10.3% 9.3% 1.0%	5.8% 4.5% 1.3%	6.4% 6.1% 0.3%	6/89

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

	Market						
	<u>Value</u>	<u>Qtr</u>	<u>1-Year</u>	3-Year	5-Year	<u> 10-Year</u>	Date
Total Corporate Governance	2.8	1.0%	3.5%	15.5%	10.2%	4.8%	12/98
Policy Benchmark		4.3%	9.9%	17.7%	11.1%	6.1%	
Value Added		-3.3%	-6.4%	-2.2%	-0.9%	-1.3%	
Total MDP	2.1	1.1%	5.0%	16.4%	11.5%	6.4%	6/00
Policy Benchmark		1.5%	6.3%	16.7%	11.5%	7.3%	
Value Added		-0.4%	-1.3%	-0.3%	0.0%	-0.9%	
Total FoF	1.1	2.0%	1.4%	15.2%	12.0%	%	3/08
Policy Benchmark		2.6%	4.8%	15.8%	11.9%	%	
Value Added		-0.6%	-3.4%	-0.6%	0.1%	%	

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 12/31/2014

ARS Allocation

Asset Allocation: Actual versus Target Weights										
Asset Class		Actual AssetTarget AssetAllocationAllocation			Di					
ARS		0	.9%		0.0%			+0.9%		
ARS Segment Perforn	nance									
	<u>Market</u> Value	Qtr	1-Year	3-Year	5-Year	10-Year	Info	5-Year Up Capture Ratio	Sharpe	5-Year Sortino Ratio ³³
Absolute Return Strategies	2.8	1.7%	4.6%	5.6%	4.5%	4.4%	-0.3	0.8	1.4	1.8
ARS Policy Benchmark ³⁰		1.2%	5.2%	5.2%	5.4%	7.1%				
Value Added		0.5%	-0.6%	0.4%	-0.9%	-2.7%				
Total Direct Investments	2.4	2.1%	5.0%	5.8%	5.2%	5.0%				
Total Funds of Funds	0.3	-1.4%	1.5%	4.6%	2.3%					
HFRI Fund of Funds Index		0.8%	3.2%	5.6%	3.3%	3.0%				

ARS Characteristics

		R	Rolling Correlations vs. Index								
Percentage											
of positive	Beta vs.		PERS	Domestic	MSCI AW						
Months	<u>S&P 500</u>	<u>W5000</u>	<u>2500</u>	Fixed Index	<u>X US</u>						
66%	0.1	0.4	0.4	-0.1	0.3						

- 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 0.1 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.

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

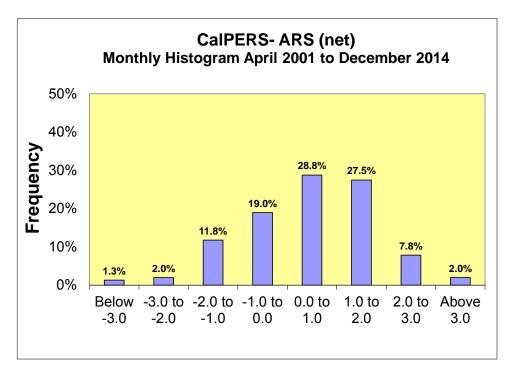
³¹ The "Information Ratio" calculates the amount of excess performance earned per unit of excess risk, as measured by tracking error. Higher information ratios imply a greater return per risk ventured.

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 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.

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Absolute Return Strategies Review for PERF (Continued) Period Ended 12/31/2014



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 12/31/2014

Income Allocation

Asset Class					versus Target Weights Target Asset Allocation			nce	
Income		18.1%		19.0%			-0.9%		
Income Segment Perform INCOME Income Policy Benchmark ³⁴ Value Added	Market <u>Value</u> 53.6	<u>Qtr</u> 2.5% 2.4% 0.1%	<u>1-Year</u> 9.9% 9.6% 0.3%	<u>3-Year</u> 4.3% 3.1% 1.2%	<u>5-Year</u> 7.3% 6.3% 1.0%	<u>10-Year</u> 6.5% 5.8% 0.7%	<u>VaR³⁷</u> \$6.7 bil	5-year Sharpe <u>Ratio³⁸</u> 1.6 1.3	5-year Info <u>Ratio³⁹</u> 0.9 0.0
U.S. Income U.S. Income Policy Benchmark ³⁵ Value Added	48.7	3.2% 3.3% -0.1%	11.4% 11.3% 0.1%	5.0% 3.8% 1.2%	7.9% 7.0% 0.9%	6.9% 6.1% 0.8%		1.7 1.4	0.7 0.0
Non-U.S. Income Non-US Income Policy Benchmark ³⁶ Value Added	4.9	-4.0% -5.2% 1.2%	-3.0% -5.4% 2.4%	-1.9% -3.0% 1.1%	1.9% 0.4% 1.5%	3.3% 2.4% 0.9%		0.3 0.0	1.9 0.0

Comments Regarding Income Segment Performance

Helped Performance:

- Treasury Bonds: Treasuries was once again the highest returning fixed income segment during the fourth quarter. With investors showing increased risk aversion in the second half of the year, pushing yields of 10-year Treasury down another 35 bps to 2.17% in Q4 while driving up credit spreads on corporate debt, the PERS government portfolio rallied 4.4% this quarter and easily outpaced other spread sectors. Relative to the Income policy benchmark, this represented an outperformance of 197 bps.
- Mortgage Bonds: Despite the Fed officially ended its Quantitative Easing operation in October, mortgage-backed securities continued to see solid demand that helped support prices throughout the fourth quarter. PERS' \$10 billion mortgage portfolio benefited from this positive technical and returned 3.2% that compared favorably to 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.

CalPERS	
Performance Analys	is
December 31, 2014	



Sovereign Bonds: Low yields from the U.S. and many developed markets continued to drive capital towards other better quality and higher yielding issues abroad. CalPERS' sovereign bonds portfolio saw very strong appreciation this quarter, gaining 4.0% and outperformed the Income policy benchmark.

Impeded Performance:

- International Fixed Income: International bonds were one of the main weak spots within the Income asset class during Q4, largely thanks to the strong U.S. Dollar eroding gains for U.S.-based investors. The CalPERS international fixed income portfolio finished the quarter below the Income policy benchmark, losing -4.0%.
- **High Yield Bonds:** The same market dynamics that favored Treasuries worked against high yield's favor, as credits with heathier fundamentals outperformed during rising market turbulence (which in Q4 was largely driven by the plunging oil prices that dragged down the entire energy sector). Both the internal and external high yield portfolios posted weak results for the quarter, with returns of 0.3% and -0.8% respectively, that trailed relative to the Income policy benchmark.
- **Corporate Bonds:** The drop in Treasury yields did provide a floor for investment grade bonds, as investors looked for ways to enhance their portfolio returns while growth prospect remains in the steady-but-low gear phase. The CalPERS internal corporate bond portfolio was able to benefit from this and generate solid return in Q4, but its 2.4% pace narrowly missed the Income policy benchmark by a margin of 4 bps.



Income Review for PERF (Continued)

	Market Value	Qtr	1-Year	3-Year	5-Year	10-Year	Date
INCOME	53.6	2.5%	<u>9.9%</u>	<u>4.3%</u>	<u>-10a1</u> 7.3%	6.5%	6/88
Income Policy Benchmark ⁴⁰		2.4%	9.6%	3.1%	6.3%	5.8%	
Value Added		0.1%	0.3%	1.2%	1.0%	0.7%	
Internal US Income + Opportunistic	48.7	3.2%	11.4%	5.0%	7.9%	6.9%	12/95
Mortgage Bonds	10.1	3.2%	8.1%	4.5%	6.1%	5.5%	12/82
Long Duration Mortgages*	4.2	2.5%	8.6%	4.0%	8.2%	%	6/05
Corporate Bonds*	12.0	2.4%	13.0%	8.6%	9.8%	7.6%	3/02
U.S. Government*	17.1	4.4%	13.3%	2.4%	7.1%	5.9%	12/99
Sovereign Bonds* 41	2.2	4.0%	15.8%	5.7%	8.5%	6.9%	6/96
Long Duration Corporates*	2.1	2.2%	7.7%	11.2%	13.1%	%	9/05
Custom Benchmark ⁴²		3.3%	11.3%	3.8%	7.0%	6.1%	
Opportunistic ⁴³	3.6	-0.4%	6.3%	8.8%	9.5%	7.2%	6/00
Internal High Yield Bonds*	0.9	0.3%	14.1%	11.2%	8.9%	12.5%	9/99
External High Yield*	1.6	-0.8%	3.2%	9.7%	10.2%	6.0%	3/02
High Yield Mortgage*	0.3	-2.3%	5.0%	15.4%	13.2%	%	3/08
Citigroup High Yield Cash Pay		-1.5%	1.8%	7.8%	8.6%	7.3%	
Special Investments	3.4	1.9%	8.0%	9.6%	6.6%	6.4%	3/91
Total International Fixed Income	4.9	-4.0%	-3.0%	-1.9%	1.9%	3.3%	3/89
Custom Benchmark ⁴⁴		-5.2%	-5.4%	-3.0%	0.4%	2.4%	
Value Added		1.2%	2.4%	1.1%	1.5%	0.9%	
Securities Lending ⁴⁵	9.7	0.0%	0.3%	0.7%	1.2%	1.8%	8/00
Custom Benchmark		0.0%	0.1%	0.1%	0.1%	1.6%	
Value Added		0.0%	0.2%	0.6%	1.1%	0.2%	
Internal Active Short Term**	2.7	0.1%	0.2%	0.2%	%	%	3/11
Custom Benchmark		0.0%	0.0%	0.0%	%	%	
Value Added		0.1%	0.2%	0.2%	%	%	
CalPERS ESEC Cash Collateral**	6.9	-0.1%	0.1%	0.1%	%	%	6/10
Custom Benchmark		0.0%	0.1%	0.1%	%	%	
Value Added		-0.1%	0.0%	0.0%	%	%	
External Collateral Portfolio***	0.1	6.4%	14.9%	30.8%	%	%	11/00

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

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 hold the collateral for the security lending program.

^{***} This is a structure investment vehicle.



Inflation Performance for PERF Period Ended 12/31/2014

Inflation Allocation

E	Asset Allo	Actual			arget W get Asset	eights			
Asset Class		Alloca	tion	All	ocation		Differen	nce	
Inflation		5.	0%		6.0%		-1.0	%	
Inflation Performance									
INFLATION Inflation Policy Benchmark ⁴⁶	Market <u>Value</u> 14.8	<u>Otr</u> -6.4% -7.8%	<u>1-Year</u> -5.1% -6.9%	<u>3-Year</u> -1.7% -1.9%	<u>5-Year</u> 2.6% 1.5%	<u>10-Year</u> %	<u>VaR⁴⁸</u> \$1.0 bil	5-year Sharpe <u>Ratio⁴⁹</u> 0.3 0.2	5-year Info <u>Ratio⁵⁰</u> 0.4 0.0
Value Added		-7.8%	-0.9%	0.2%	1.1%	%		0.2	0.0
Internal Commodities ⁴⁷ GSCI Total Return Index Value Added	1.9	-27.2% -27.7% 0.5%	-32.6% -33.1% 0.5%	-13.2% -12.9% -0.3%	-6.4% -6.5% 0.1%	% %			
Core Inflation Linked Bonds Custom Benchmark Value Added	10.8	0.3% -0.5% 0.8%	4.7% 3.4% 1.3%	2.2% 1.8% 0.4%	4.8% 4.3% 0.5%	% %			
Tactical Commodities GSCI Total Return Index Value Added	1.0	-27.4% -27.7% 0.3%	-32.8% -33.1% 0.3%	% %	% %	% %			
Tactical TIPS CalPERS TIPS Value Added	1.2	0.0% 0.0% 0.0%	3.7% 3.6% 0.1%	% % %	- % % %	% %			

Due to persistent unfavorable macro technicals, Inflation was the only PERS asset class to record back-to-back quarters of negative returns in 2014: the asset class was down -5.0% in Q3 while losing another -6.4% in Q4. Although relatively speaking, both performance numbers fared better than the policy benchmark, which was down -5.2% and -7.8% for the respective periods. Facing the combination of low inflationary pressure and falling interest rates, the inflation-linked bonds portfolio, which represents the bulk of the Inflation assets (at 73%), posted little gains for the quarter but was actually 76 bps better than its assigned benchmark. What weighed heavily on the asset class' overall return was its commodities exposure, as the accelerated sharp fall in energy and industrial metals prices posed huge headwind to investments in this space. As a result, PERS' commodities portfolios lost in excess of -27% on average during the fourth quarter. The inflation asset class has a one-year return of -5.1% and five-year return of 2.6%, both ranked near the bottom of leaderboard among PERS' major asset classes, but they do compare favorably to its own custom policy benchmark.

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 12/31/2014

Real Assets Allocation

Asset Class	sset Allo	cation: Actual versus Target WeigActual AssetTarget AssetAllocationAllocation		eights Difference					
Real Assets		10.	.0%		12.0%		-2.0%		
Real Assets Segment Pe	erforman	ice							
	Market <u>Value</u>	<u>Qtr</u>	<u>1-Year</u>	<u>3-Year</u>	<u>5-Year</u>	<u>10-Year</u>	VaR ⁵⁵	5-year Sharpe <u>Ratio⁵⁶</u>	5-year Info <u>Ratio⁵⁷</u>
REAL ASSETS <i>Real Assets Policy Benchmark</i> ⁵¹ <i>Value Added</i>	29.6	0.8% 2.7% -1.9%	13.0% 10.8% 2.2%	12.3% 10.8% 1.5%	8.4% 10.6% -2.2%	3.1% 8.9% -5.8%	\$4.1 bil	1.2 2.4	-0.4 0.0
Real Estate ⁵² Real Estate Policy Benchmark ⁵³ Value Added	25.2	0.8% 3.0% -2.2%	13.1% 11.4% 1.7%	13.4% 11.7% 1.7%	9.1% 12.0% -2.9%	2.4% 9.6% -7.2%	\$4.1 bil	1.2 2.4	-0.4 0.0
Forestland ⁵⁴ NCREIF Timberland Index Value Added	2.2	-0.3% 1.5% -1.8%	3.7% 10.4% -6.7%	0.3% 7.4% -7.1%	-0.7% 3.6% -4.3%	% % %			
Infrastructure ⁵⁴ CPI + 400 BPS 1Qtr Lag Value Added	2.1	2.2% 0.9% 1.3%	23.3% 5.7% 17.6%	13.6% 5.7% 7.9%	18.1% 6.5% 11.6%	% %			

After opening 2014 with a very strong pace, Real Assets lost its momentum in the second half of the year; the asset class returned just 1.4% in Q3 and further slowed to 0.8% in the fourth quarter. Q4's performance level finished near the bottom of the leaderboard among PERS' major asset classes, while also missing its policy benchmark by a margin of -185 bps. Most of this underperformance was driven by the real estate investments: the System had a small overweight in this component (85% of total Real Assets vs. 83% goal set by AA target), which magnified the impact of the poor absolute and relative returns here (0.8% real estate composite vs. 3.0% benchmark). As for Real Assets' two equal-sized, smaller components, their Q4 performance contributions largely offset one another, with the forestland portfolio posting small losses while the infrastructure piece nudging 2.2% gains. Despite this quarter's misstep, it did not detract much from Real Assets' solid one- and three-year track record, however the asset class remains behind the policy benchmark over the long-term.

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.



Real Assets Review for PERF (Continued) Period Ended 12/31/2014

Real Estate Segment Performance

Real Estate ⁵⁸ Real Estate Policy Benchmark ⁵⁹ Value Added	Market <u>Value</u> 25.2	<u>Qtr</u> 0.8% 3.0% -2.2%	<u>1-Year</u> 13.1% 11.4% 1.7%	<u>3-Year</u> 13.4% 11.7% 1.7%	<u>5-Year</u> 9.1% 12.0% -2.9%	<u>10-Year</u> 2.4% 9.6% -7.2%	<u>VaR⁶⁰</u> \$4.1 bil	5-year Sharpe <u>Ratio⁶¹</u> 1.2 2.4	5-year Info <u>Ratio⁶²</u> -0.4 0.0
Strategic Real Estate Wt. NCREIF ODCE+FTSE EPRA NAREI Value Added	19.1 T	0.7% 3.0% -2.3%	12.5% 11.4% 1.1%	14.9% 11.7% 3.2%	13.5% 12.0% 1.5%	15.0% 9.6% 5.4%			
Legacy Real Estate ex Public Wt. NCREIF ODCE+FTSE EPRA NAREI Value Added	6.2 T	1.2% 3.0% -1.8%	15.0% 11.4% 3.6%	9.9% 11.7% -1.8%	4.9% 12.0% -7.1%	-1.8% 9.6% -11.4%			

⁵⁸ 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.

⁵⁹ 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.

⁶⁰ 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.

⁶¹ 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.

⁶² 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.

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Liquidity Review for PERF Period Ended 12/31/2014

Liquidity Allocation

Asset Class	sset Allo	Actual Alloca	Asset	Targ	arget W get Asset ocation	U	Differer		
Liquidity Liquidity Segment Perf	ormance		.2%		2.0%		+0.2	70	
	Market							5-year Sharpe	5-year Info
LIQUIDITY	Value 6.6	<u>Qtr</u> 0.4%	<u>1-Year</u> 1.5%	<u>3-Year</u> 0.4%	<u>5-Year</u> 1.1%	<u>10-Year</u> 2.2%	<u>VaR⁶⁵</u> \$0.3 bil	Ratio ⁶⁶ N/A	Ratio ⁶⁷ N/A
Liquidity Policy Benchmark ⁶³ Value Added	0.0	1.0% -0.6%	2.5% -1.0%	0.9% -0.5%	1.4% -0.3%	2.4% -0.2%		1011	1.018
US 2-10 Year Barclays Gov Liquidity 2-10 Yr Idx Value Added	2.7	1.2% 1.3% -0.1%	3.4% 3.4% 0.0%	1.1% 1.2% -0.1%	% % %	% %			
Cash Composite Csutom STIF ⁶⁴ Value Added	3.9	0.1% 0.0% 0.1%	0.2% 0.0% 0.2%	0.1% 0.0% 0.1%	0.2% 0.0% 0.2%	1.8% 1.7% 0.1%			

⁶³The Liquidity Policy Benchmark is a custom index maintained by State Street Bank.

⁶⁴ The Custom STIF Policy Benchmark is a custom index maintained by State Street Bank.

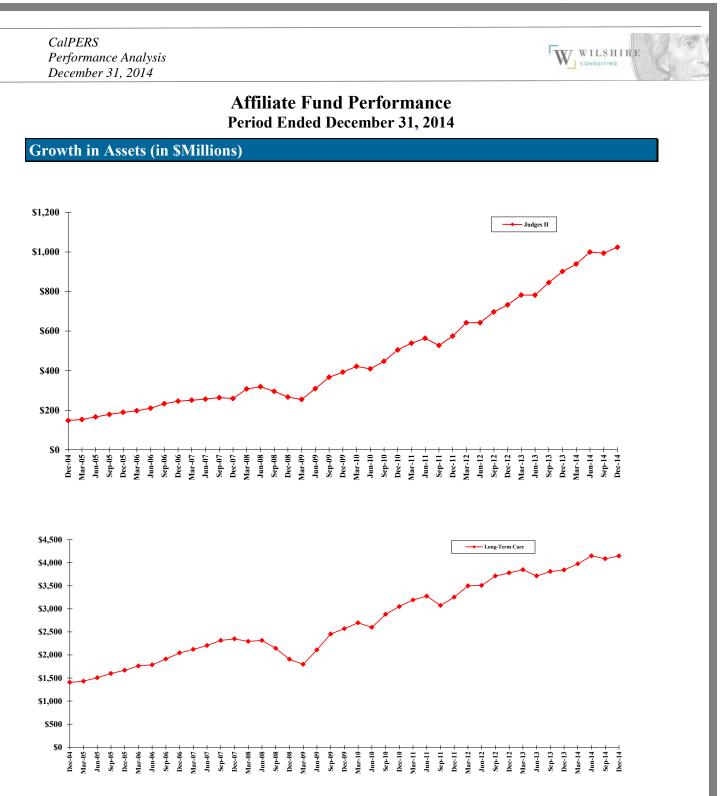
⁶⁵ VaR (Value at Risk) measures how much the portfolio might decrease over a 12 month period in extreme cases. The VAR estimate shows how much the portfolio value might fall in the worst 5% of 12 month periods. VAR is calculated using total risk (standard deviation) and market value.

⁶⁶ 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.

⁶⁷ 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





Total Plan Performance Results

Total Plan Performance Periods Ended December 31, 2014

Judges II Weighted Policy Benchmark ⁶⁸	Market <u>Value</u> \$1,023.9 mil	<u>Qtr</u> 1.1% 1.1	One <u>Year</u> 5.7% 5.7	Three <u>Year</u> 11.6% 11.3	Five <u>Year</u> 9.8% 9.7	Ten <u>Year</u> 6.4% 6.4
Long-Term Care ("LTC")	\$4,145.5 mil	1.4	7.3	6.5	7.0	5.4
Weighted Policy Benchmark ⁶⁸		1.1	7.1	6.1	6.7	5.1

Total Plan Asset Allocation

Judges II Asset Allocation: Actual versus Target Weights

	Actual Asset	Target Asset	
Asset Class	Allocation (%)	Allocation (%)	Difference
Global Equity	50.6	50.0	0.6
US Fixed Income	33.7	34.0	-0.3
TIPS	4.9	5.0	-0.1
REITs	8.0	8.0	0.0
Commodities	2.8	3.0	-0.2
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	15.0	15.0	0.0
US Fixed Income	62.1	61.0	1.1
TIPS	6.0	6.0	0.0
REITs	12.1	12.0	0.1
Commodities	4.8	6.0	-1.2
Total	100.0	100.0	0.0

⁶⁸ 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 Plan

- While the tone in many aspects of the market remained soft in the fourth quarter, most asset classes (with the exception of commodities) were able to find a floor and rebounded from late-third quarter's quick pullback. This allowed the Judges II (JRS II) to finish Q4 with a small positive of 1.1% gain, while bringing its year-to-date rise to 5.7%, both of which matched its weighted policy benchmark. Over the long-term, JRS II's track record has stayed on par with the policy benchmark as well.
- The Long-Term Care Program (LTC) saw similar performance as JRS II did in Q4, but it netted a slightly higher total return of 1.4% primarily due to its larger allocation to investment grade fixed income and REITs, both of which recorded very strong appreciations in the quarter. Relative to its policy benchmark, the LTC's Q4 return met expectations while further added to its incremental outperformance over time.
- At the end of the quarter, Judges II's asset allocation showed a bias towards global equity while having small underweight in investment grade fixed income, TIPS and commodities.
- The LTC's asset allocation nearly mirrored its adopted targets. The only notable differences were small overweight in investment grade fixed income and underweight in commodities.

Asset Class Performance Results – Judges II

Periods Ended December 31, 2014						
	Market <u>Value</u>	<u>Qtr</u>	One <u>Year</u>	Three <u>Year</u>	Five <u>Year</u>	Ten <u>Year</u>
JRS II Global Equity	\$518.1 mil	0.8%	4.6%	15.3%	10.1%	5.9%
Global Equity Benchmark 69		0.8	4.6	15.2	10.1	5.9
JRS II US Fixed Income	\$344.7 mil	3.2	11.4	5.0	7.8	6.5
Custom Benchmark ⁷⁰		3.3	11.3	3.8	7.0	5.9
JRS II TIPS	\$50.4 mil	0.0	3.4	0.4		
Custom Benchmark ⁷¹		0.0	3.6	0.4		
JRS II REITS	\$82.1 mil	8.1	16.0	15.9	12.0	4.7
Custom Benchmark 72		8.1	15.9	15.9	12.0	4.9
JRS II Commodities	\$28.6 mil	-27.5	-32.9	-13.3		
GSCI Total Return Index		-27.7	-33.1	-12.9		

Judges II Asset Class Performance Periods Ended December 31, 2014

³⁰ 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.

¹⁰ 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.

⁷¹ The TIPS benchmark is the Barclays U.S. TIPS Index.

⁷² The REIT Custom Benchmark is the FTSE EPRA/NAREIT Developed Index. Historically, it has been the Wilshire RESI and REIT Indices.

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Commentary – Judges II

- Global equity performance diverged in the fourth quarter, with the ever improving economic data drove U.S. equity indices to finish at all-time highs while the rest of the developed markets and emerging markets struggled in the face of various weak growth concerns. The net result of this mixed bag of performance had the global equity portfolio posting just a small 0.8% gain in Q4, and finishing up the full year with a modest 4.6% return. On a relative basis, both measures matched the portfolio's custom benchmark pace and the global equity fund continues to perform in line with expectations in the long run.
- After taking a pause in the third quarter, U.S. bond momentum resumed in Q4 as the clear health of the U.S. economy reignited the strengthening of the Dollar, which in turn made U.S. bonds (particularly government issues) haven for global investors seeking to manage risk in their portfolios as well as to earn higher income. This increased interest supported bond prices' appreciation, as evidenced by the 10-year Treasury yields dropping another 35 bps to 2.17% at the end of December. The Judges II domestic fixed income portfolio benefited from this trend and jumped 3.2% in Q4, nearly matching the 3.3% pace of its custom Barclays index. For the full year of 2014, the fixed income portfolio has a 11.4% return that compares well to the benchmark's 11.3%; its track record over longer time periods is continuing to do well, too.
- With inflation outlook notably dampened by the continued sharp fall of crude oil prices, TIPS was the laggard among investment grade fixed incomes during the fourth quarter: both JRS II's TIPS portfolio and the Barclays U.S. TIPS Index finished the quarter flat. For the year, the portfolio earned a modest total return of 3.4% that's not far from the index measure's 3.6% return.
- Real estate related equities ended 2014 with a strong showing from U.S. real estate stocks. The REIT portfolio followed closely to the custom REIT index, rising 8.1% during Q4 and was the highest returning Judges II component. The portfolio rallied 16.0% in 2014 and holds an annualized return of 15.9% over the past three years, both of which are on par with the custom benchmark's pace.
- Headwinds in the commodity space did not let up in the fourth quarter, with price decline of energy and industrial metals accelerated during the period as pressures from over-supply of crude oil production and weak global economic growth outlook mounted. Following a slide of -12.7% in Q3, the JRS II commodities portfolio fell another -27.5% in Q4. For comparison, the GSCI Total Return Index lost -27.7% in the same period. This quarter's drop brought the commodities portfolio's full-year loss to -32.9%, while this sits at the bottom of the leaderboard among major asset classes, it is 17 bps better relative to the benchmark measure.



Asset Class Performance Results – Long-Term Care

	Periods Ende	d Decem	ber 31, 20	14		
LTC Global Equity	Market <u>Value</u> \$623.1 mil	<u>Qtr</u> 0.7%	One <u>Year</u> 4.1%	Three <u>Year</u> 14.8%	Five <u>Year</u> 10.3%	Ten <u>Year</u> 6.1%
Custom Benchmark ⁷³		0.6	3.8	14.6	10.2	6.0
LTC US Fixed Income	\$2,575.1mil	3.3	11.4	4.3	7.4	6.5
Custom Benchmark ⁷⁴		3.3	11.3	3.8	7.0	5.9
LTC TIPS	\$247.2 mil	0.0	3.7	0.4	4.1	
Barclays U.S. TIPS Index		0.0	3.6	0.4	4.1	
LTC REITs	\$500.3 mil	7.8	15.7	15.2	11.6	
Custom Benchmark ⁷⁵		7.7	15.0	14.9	11.4	
LTC Commodities	\$199.8 mil	-27.6	-33.1	-12.6		
GSCI Total Return Index		-27.7	-33.1	-12.9		

Long-Term Care Asset Class Performance

Commentary – Long-Term Care

- While weaknesses remain in many equity markets around the world, the LTC global equity fund was able to rebound from a hectic third quarter by riding the strengths of U.S. stock performance into a small 0.7% Q4 return. This represented a small performance edge against the fund's own custom benchmark, while allowing it to continue tracking the benchmark closely over all measured periods.
- The LTC domestic fixed income portfolio once again recorded a market-like return as it followed its custom benchmark and ran up 3.3% in Q4. This quarter's strong showing further added to the fixed income portfolio's track record, as it has produced very respectable gains over time that also compared favorably to its benchmark.

²⁵ 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).

⁴⁴ 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.

⁷⁵ Effective 12/12/2012, the REIT Custom Benchmark changed to the FTSE EPRA/NAREIT Developed Liquid (net) Index.

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Commentary – Long-Term Care

- Same as the JRS II's TIPS investment, the LTC TIPS portfolio was flat in the fourth quarter primarily due to the complete lack of inflationary pressure as total energy prices continued their drop. Including prior quarter's -2.0% loss, the TIPS portfolio closed out the year with just a small 3.7% gain. As usual, these figures mimicked the custom benchmark, the Barclays U.S. TIPS Index.
- Besides a short pause in late third quarter, public REITs have performed quite well during 2014 and ended the year on a very strong note: the LTC REIT portfolio was up 7.8% for the quarter and 15.7% for the full year, both of which count as the best among LTC portfolios while also beating out its custom benchmark, the FTSE EPRA/NAREIT Developed Liquid Index (net). This portfolio's longer-term track record remains very strong and it continues to add value over the three- and five-year periods.
- For the second consecutive quarter, the commodities portfolio incurred double-digit losses as it was down -27.6% in Q4. Combined with a -12.5% drop from Q3, the portfolio finished the year of 2014 down -33.1%. While both the quarter and YTD returns were the worst among LTC major asset classes, they were consistent with the GSCI Total Return Index.

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Legislators' Information



Total Plan Performance Periods Ended December 31, 2014

	Market Value	Qtr	One <u>Year</u>	Three Year	Five Year	Ten Year
LRS	\$124.5 mil	<u>011</u> 1.3%	<u>1 car</u> 6.8%	<u>1 ear</u> 7.9%	<u>1 car</u> 8.3%	6.2%
Weighted Policy Benchmark ⁷⁶		1.2	6.7	7.4	8.0	6.0

Asset Allocation

Asset Class	Actual	Policy	Difference
Global Equity	24.5%	24.0%	+0.5%
US Fixed Income	38.9	39.0	-0.1
TIPS	25.7	26.0	-0.3
REITs	8.1	8.0	+0.1
Commodities	<u>2.8</u>	<u>3.0</u>	<u>-0.2</u>
	100.0	100.0	0.0

⁷⁶ The weighted policy benchmark returns are calculated based on asset class index returns weighted by asset class policy targets.

Commentary

- Similar to the Long-Term Care Program, the California Legislators' Retirement System ("LRS, the System") benefited from a larger allocation to investment grade fixed income, which recorded very strong price appreciation during the fourth quarter, that helped LRS offset relatively weak results from TIPS and commodities and finish the quarter with a modest 1.3% return, 7 bps ahead of its weighted policy benchmark. This quarter's steady-pace gain allowed the System to build its longer-term track record on solid footing, where it remains a step ahead of the benchmark in all measured periods shown.
- As of December 31, the System was marginally overweight in global equity and REITs while underweight in investment grade fixed income, TIPS and commodities.

Asset Classes Performance Results

LRS Global Equity	Market <u>Value</u> \$30.5 mil	<u>Qtr</u> 0.8%	One <u>Year</u> 4.6%	Three <u>Year</u> 15.3%	Five <u>Year</u> 10.4%	Ten <u>Year</u> 5.8%
Global Equity Benchmark 77		0.8	4.6	15.2	10.4	5.7
LRS US Fixed Income	\$48.4 mil	3.2	11.4	5.0	7.9	6.6
Custom Benchmark ⁷⁸		3.3	11.3	3.8	7.0	6.2
LRS TIPS	\$32.0 mil	0.0	3.4	0.4	4.1	4.1
Custom Benchmark ⁷⁹		0.0	3.6	0.4	4.1	4.3
LRS REITS	\$10.0 mil	8.1	16.0	15.9		
Custom Benchmark ⁸⁰		8.1	15.9	15.9		
LRS Commodities	\$3.5 mil	-27.5	-32.9	-13.3		
GSCI Total Return Index		-27.7	-33.1	-12.9		

Asset Class Performance Periods Ended December 31, 2014

¹¹ 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.

¹⁸ 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.

⁷⁹ The current benchmark is the Barclays U.S. TIPS Index. Prior of July 2007 the benchmark was the Barclays Long Liability TIPS Index.

⁸⁰ The REIT Custom Benchmark is the FTSE EPRA/NAREIT Developed Index.

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Commentary

- Global equity performance diverged in the fourth quarter, with the ever improving economic data drove U.S. equity indices to finish at all-time highs while the rest of the developed markets and emerging markets struggled in the face of various weak growth concerns. The net result of this mixed bag of performance had the LRS global equity portfolio posting just a small 0.8% gain in Q4, and finishing up the full year with a modest 4.6% return. On a relative basis, both measures matched the portfolio's custom benchmark pace and the global equity fund continues to perform in line with expectations in the long run.
- After taking a pause in the third quarter, U.S. bond momentum resumed in Q4 as the clear health of the U.S. economy reignited the strengthening of the Dollar, which in turn made U.S. bonds (particularly government issues) haven for global investors seeking to manage risk in their portfolios as well as to earn higher income. This increased interest supported bond prices' appreciation, as evidenced by the 10-year Treasury yields dropping another 35 bps to 2.17% at the end of December. The LRS domestic fixed income portfolio benefited from this trend and jumped 3.2% in Q4, nearly matching the 3.3% pace of its custom Barclays index. For the full year of 2014, the fixed income portfolio has a 11.4% return that compares well to the benchmark's 11.3%; its track record over longer time periods is continuing to do well, too.
- With inflation outlook notably dampened by the continued sharp fall of crude oil prices, TIPS was the laggard among investment grade fixed incomes during the fourth quarter: both LRS' TIPS portfolio and the Barclays U.S. TIPS Index finished the quarter flat. For the year, the portfolio earned a modest total return of 3.4% that's not far from the index measure's 3.6% return.
- Real estate related equities ended 2014 with a strong showing from U.S. real estate stocks. The REIT portfolio followed closely to the custom REIT index, rising 8.1% during Q4 and was the highest returning LRS component. The portfolio rallied 16.0% in 2014 and holds an annualized return of 15.9% over the past three years, both of which are on par with the custom benchmark's pace.
- Headwinds in the commodity space did not let up in the fourth quarter, with price decline of energy and industrial metals accelerated during the period as pressures from over-supply of crude oil production and weak global economic growth outlook mounted. Following a slide of -12.7% in Q3, the LRS commodities portfolio fell another -27.5% in Q4. For comparison, the GSCI Total Return Index lost -27.7% in the same period. This quarter's drop brought the commodities portfolio's full-year loss to -32.9%, while this sits at the bottom of the leaderboard among major asset classes, it is 17 bps better relative to the benchmark measure.



California Employers' Retiree Benefit Trust

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California Employers' Retiree Benefit Trust Strategy 1

Asset Allocation

Asset Class	Actual	Policy	Difference
Global Equity	56.9%	57.0%	-0.1%
US Bonds	27.0	27.0	0.0
TIPS	5.0	5.0	0.0
REITS	8.0	8.0	0.0
Commodities	2.9	3.0	-0.1
Cash Equivalents	<u>0.3</u>	0.0	+0.3
_	100.0	100.0	0.0

Trust Performance Results

Trust Performance Periods Ended December 31, 2014

Market <u>Value</u> \$3,384.3 mil	<u>Qtr</u> 1.0% 0.9	One <u>Year</u> 5.2% 5.0	Three <u>Year</u> 11.5% 11.2	Five <u>Year</u> 9.3% 9.2	Ten <u>Year</u> %
1,924.8 mil	0.7	4.2	14.8	10.1	
912.3 mil	3.2	11.5	5.0	7.9	
271.5 mil	7.8	15.7	15.3	11.6	
168.4 mil	0.0	3.5	0.4		
97.3 mil	0.0 -27.3	3.6 -32.8	0.4		
10.0 mil	-27.7	-33.1	-12.9	 0 1	
	<u>Value</u> \$3,384.3 mil 1,924.8 mil 912.3 mil 271.5 mil 168.4 mil	Value $\$3,384.3 \text{ mil}$ Qtr 1.0% 0.9 $1,924.8 \text{ mil}$ 0.7 0.6 912.3 mil 3.2 3.3 271.5 mil 7.8 7.7 168.4 mil 0.0 0.0 97.3 mil -27.3 -27.7	Value $\$3,384.3 \text{ mil}$ Qtr 1.0% Year 5.2% 0.9 1,924.8 mil 0.7 0.6 4.2 0.6 1,924.8 mil 0.7 0.6 4.2 3.8 912.3 mil 3.2 3.3 11.5 11.3 271.5 mil 7.8 7.7 15.7 15.0 168.4 mil 0.0 0.0 3.5 0.0 97.3 mil -27.3 -27.7 -32.8 -33.1	Value $\$3,384.3 \text{ mil}$ Qtr 1.0% Year 5.2% Year 11.5% 1,924.8 mil0.7 0.6 4.2 3.8 14.8 14.6 912.3 mil3.2 3.3 11.5 11.3 5.0 	Value $\$3,384.3 \text{ mil}$ Otr 1.0% Year 5.2% Year 11.5% Year 9.3% 1,924.8 mil0.7 0.6 4.2 3.8 14.8 14.6 10.1 9.9 912.3 mil3.2 3.3 11.5 11.3 5.0 3.8 7.9 7.0 912.3 mil3.2 3.3 11.5 11.3 5.0 3.8 7.0271.5 mil7.8 7.7 15.7 15.0 15.3 14.9 11.6 11.4 168.4 mil0.0 0.0 3.5 3.6 0.4 $$ $$ -27.7 -33.1 -12.9 $$

 $[\]pm$ The cash component may contain residual trade balance that has yet to be settled during the periodic rebalancing process as of December 31.

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California Employers' Retiree Benefit Trust Strategy 2

Asset Allocation

Asset Class	Actual	Policy	Difference
Global Equity	40.5%	40.0%	+0.5%
US Bonds	38.6	39.0	-0.4
TIPS	9.8	10.0	-0.2
REITS	8.0	8.0	0.0
Commodities	2.8	3.0	-0.2
Cash Equivalents	0.3	0.0	+0.3
-	100.0	100.0	0.0

Trust Performance Results

Trust Performance Periods Ended December 31, 2014

Total CERBT Strategy 2 Benchmark	Market <u>Value</u> \$609.1 mil	<u>Qtr</u> 1.1% 1.1	One <u>Year</u> 5.7% 5.5	Three <u>Year</u> 9.5% 9.2	Five <u>Year</u> %	Ten <u>Year</u> %
Global Equity	246.7 mil	0.7	4.2	14.8		
Benchmark		0.6	3.8	14.6		
Domestic Fixed Income	235.3 mil	3.2	11.4	5.0		
Benchmark		3.3	11.3	3.8		
TIPS	59.8 mil	-0.1	3.3	0.4		
Benchmark		0.0	3.6	0.4		
REITs	48.7 mil	7.7	15.6	15.2		
Benchmark		7.7	15.0	14.9		
Commodities	16.8 mil	-27.3	-32.8	-13.2		
Benchmark		-27.7	-33.1	-12.9		
Cash±	1.9 mil	0.0	0.1	0.1		

 $[\]pm$ The cash component may contain residual trade balance that has yet to be settled during the periodic rebalancing process as of December 31.

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California Employers' Retiree Benefit Trust Strategy 3

Asset Allocation

Asset Class	Actual	Policy	Difference
Global Equity	24.5%	24.0%	+0.5%
US Bonds	38.9	39.0	-0.1
TIPS	25.7	26.0	-0.3
REITS	8.1	8.0	+0.1
Commodities	2.8	3.0	-0.2
Cash Equivalents	<u>0.1</u>	0.0	+0.1
*	100.0	100.0	0.0

Trust Performance Results

Trust Performance Periods Ended December 31, 2014

	Market		One	Three	Five	Ten
	Value	<u>Qtr</u>	<u>Year</u>	<u>Year</u>	<u>Year</u>	<u>Year</u>
Total CERBT Strategy 3	\$156.9 mil	1.3%	6.7%	7.5%	%	%
Benchmark		1.2	6.4	7.1		
Global Equity	38.4 mil	0.8	4.2	14.7		
Benchmark		0.6	3.8	14.6		
Domestic Fixed Income	61.0 mil	3.0	11.3	5.0		
Benchmark		3.3	11.3	3.8		
TIPS	40.4 mil	0.0	3.6	0.5		
Benchmark		0.0	3.6	0.4		
REITS	12.6 mil	7.9	15.8	15.2		
Benchmark		7.7	15.0	14.9		
Commodities	4.4 mil	-27.1	-32.5	-13.1		
Benchmark		-27.7	-33.1	-12.9		
Cash±	0.08 mil	0.0	4.4	1.5		

 $[\]pm$ The cash component may contain residual trade balance that has yet to be settled during the periodic rebalancing process as of December 31.

Ten

<u>Year</u>

4.7

5.1%

Health Care Bond Fund

Fund Performance Results Fund Performance Periods Ended December 31, 2014 Market One Three Five Year <u>Value</u> Year <u>Qtr</u> Year \$420.7 mil 2.3% 3.8% 5.2% **Health Care Bond Fund** 6.6% Benchmark 1.8 6.0 2.7 4.4



Supplemental Income Plans

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Supplemental Income Plan Performance

Net Fund Performance Results – Supplemental Contribution Plan

	Periods Ended December 31, 2014					
	Market	One	Three	Five		
	Value	<u>Qtr</u>	<u>Year</u>	<u>Year</u>	<u>Year</u>	
CalPERS Target 2015	\$2.077 mil	0.9	3.2	7.6	6.6	
SIP 2015 Policy		0.9	3.7	8.0	7.5	
CalPERS Target 2020	\$1.389 mil	0.7	3.2	8.7	7.2	
SIP 2020 Policy		0.8	3.8	9.2	8.1	
CalPERS Target 2025	\$995.4 thous	0.5	3.1	9.9		
SIP 2025 Policy		0.6	3.6	10.4		
CalPERS Target 2030	\$262.2 thous	0.2	2.9	11.0	8.4	
SIP 2030 Policy		0.4	3.5	11.7	9.3	
CalPERS Target 2035	\$141.1 thous	0.1	3.0			
SIP 2035 Policy		0.3	3.5			
CalPERS Target 2040	\$42.9 thous	-0.1	2.8	12.6	9.2	
SIP 2040 Policy		0.1	3.4	13.4	10.2	
CalPERS Target 2045	\$125.2 thous	-0.1	2.8			
SIP 2045 Policy		0.0	3.3			
CalPERS Target 2050	\$20.6 thous	-0.2	2.8			
SIP 2050 Policy		0.0	3.3			
CalPERS Target 2055	\$0.0 thous					
SIP 2055 Policy						
CalPERS Target Income	\$11.044 mil	0.9	3.2	5.4	5.4	
SIP Income Policy		0.9	3.7	5.5	6.1	
SSgA Russell All Cap Index SL	\$2.439 mil	5.1	12.1			
Russell 3000		5.2	12.6			
SSgA Global All Cap ex-US SL	\$287.2 thous	-4.5	-4.7			
MSCI ACWI ex-US IMI (N)		-3.9	-3.9			
SSgA US Bond Index SL	\$181.4 thous	1.8	5.6			
Barclays Aggregate Bond Index		1.8	6.0			
SSgA US Short Term Bond	\$243.8 thous	0.0	0.1			
BarclaysUS Gov/Credit		0.2	0.8			
SSgA Real Asset NL	\$52.8 thous	-3.7	-1.6			
Real Assets Blended Index		-3.6	-0.9			
SSgA STIF	\$904.9 thous	-0.1		-,-		
BofAML 3-month US T-Bill	4, t i , t u t u t	0.0				

Periods Ended December 31, 2014



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

	Periods Ended D	ecember	31, 2014			
	Market <u>Value</u>	Qtr	One Year	Three <u>Year</u>	Five Year	Ten <u>Year</u>
State Peace Officers' & Firefighters Plan (POFF)	\$357.6 mil	0.3%	3.2%	9.7%	7.8%	4.8%
SIP Moderate Policy		0.4	3.4	10.0	8.6	5.6

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Net Fund Performance Results – 457 Program

	Market <u>Value</u>	<u>Qtr</u>	One <u>Year</u>	Three <u>Year</u>	Five <u>Year</u>	Ten <u>Year</u>
CalPERS Target Income Fund	\$93.5 mil	0.9	3.4	5.4	5.3	
SIP Income Policy		0.9	3.7	5.5	6.1	
CalPERS Target 2015 Fund SIP 2015 Policy	\$84.5 mil	0.9 0.9	3.4 3.7	7.6 8.0	6.6 7.5	
CalPERS Target 2020 Fund SIP 2020 Policy	\$106.6 mil	0.8 0.8	3.4 3.8	8.7 9.2	7.2 8.1	
CalPERS Target 2025 Fund	\$68.5 mil	0.5	3.2	9.9	7.8	
SIP 2025 Policy		0.6	3.6	10.4	8.6	-,-
CalPERS Target 2030 Fund	\$68.8 mil	0.3	3.1	11.1	8.4	
SIP 2030 Policy		0.4	3.5	11.7	9.3	
CalPERS Target 2035 Fund	\$36.5 mil	0.1	3.0	12.1	8.9	
SIP 2035 Policy		0.3	3.5	12.8	9.9	
CalPERS Target 2040 Fund	\$31.7 mil	-0.1	2.9	12.6	9.2	
SIP 2040 Policy		0.1	3.4	13.4	10.2	
CalPERS Target 2045 Fund	\$9.2 mil	-0.2	2.9	12.7	9.2	
SIP 2045 Policy		0.0	3.3	13.4	10.2	
CalPERS Target 2050 Fund	\$4.0 mil	-0.2	2.9	12.7	9.2	
SIP 2050 Policy		0.0	3.3	13.4	10.2	
CalPERS Target 2055 Fund	\$2.4 mil	-0.1	2.9	-,-	-,-	
SIP 2055 Policy		0.0	3.3	-,-	-,-	
SSgA Russell All Cap Index SL	\$490.8 mil	5.1	12.2	-,-	-,-	
<i>Russell 3000</i>		5.2	12.6	-,-	-,-	
SSgA Global All Cap ex-US SL	\$59.9 mil	-4.4	-4.6			
MSCI ACWI ex-US IMI (N)		-3.9	-3.9			
SSgA US Bond Index SL	\$59.4 mil	1.8	5.7			
Barclays Aggregate Bond Index		1.8	6.0			
SSgA US Short Term Bond	\$41.6 mil	0.0	0.2			
Barclays US Gov/Credit		0.2	0.8			
S SgA Real Asset NL	\$3.8 mil	-3.6	-1.5			
Real Assets Blended Index		-3.6	-0.9			
SSgA STIF	\$114.9 mil	-0.1				
BofAML 3 Month US TBill		0.0				