



CalPERS
CIO Performance Report

PERIOD ENDING DECEMBER 31, 2016



Table of Contents

Section I: Total Fund

Total Fund Summary & Total Fund Plus Terminated Agency (TAP) Summary

Section II: Public Equity

Public Equity Summary

Internal Equity

Internal Domestic Equity

Internal International Developed Equity

Internal Emerging Market Equity

External Equity

External Domestic Traditional Equity

External International Developed Traditional Equity

External Emerging Market Equity

Corporate Governance

Emerging Manager Program

Section III: Private Equity

Private Equity Summary & Performance by Strategy

Private Equity Top 20 General Partners by Exposure

Private Equity Performance by General Partner

Section IV: Income

Global Income Summary

Domestic Income

External International & External High Yield

Table of Contents *continued*

Section V: Real Assets

- Real Assets Summary
- Real Estate Top 20 Partners by Exposure
- Real Estate Partnerships Performance
- Forestland & Infrastructure Partnerships

Section VI: Inflation

- Inflation Summary

Section VII: Liquidity

- Liquidity Summary

Section VIII: Absolute Return Strategies

- ARS Equitization & Total ARS Summary
- Direct Investments
- Fund of Funds

Section IX: Total Fund Portfolios

- Multi - Asset Class & Total Plan Level Portfolios

Section X: Affiliate Investment Programs

- Affiliate Investment Programs Summary
- Judges II Retirement Fund, Legislators' Retirement System & Long-Term Care Fund
- California Employers' Retirement Benefit Trust (CERBT) Fund
 - CERBT Strategy 1
 - CERBT Strategy 2
 - CERBT Strategy 3

Section XI: Other Programs

- Securities Lending Summary, Short-Term Liquidity & Terminated Agency Pool Summary
- Current Emerging Manager and Transition Manager Performance Summary

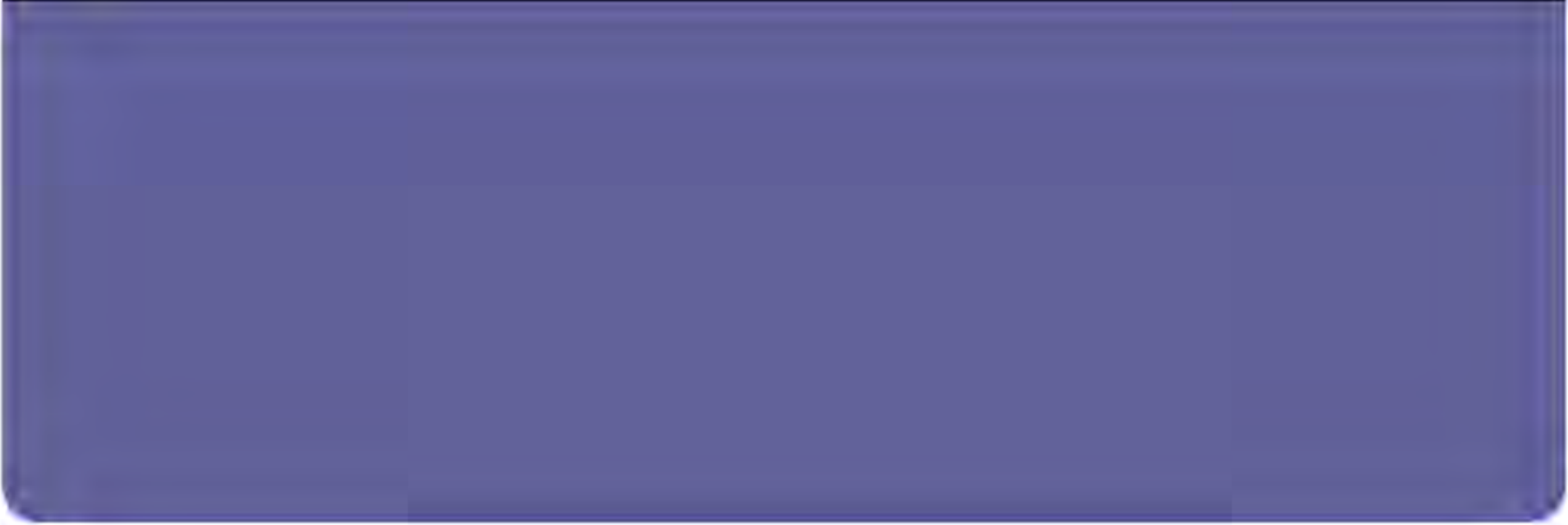
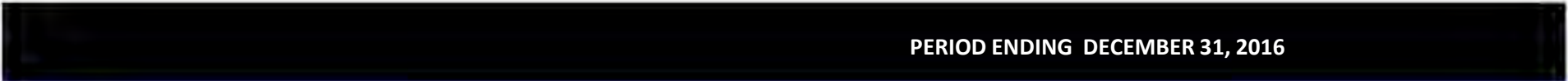
Section XII: Asset Class Benchmarks & Definitions



Section I
Total Fund



PERIOD ENDING DECEMBER 31, 2016



Section I: Total Fund

Total Fund Summary and Total Fund Plus Terminated Agency Pool (TAP) Summary

TOTAL FUND SUMMARY	December 31, 2016			1-Month		3-Months		FYTD			1-Yr		3-Yr		5-Yr		10-YR	
	Ending Market Value (MM)	% of Total Fund Assets	Asset Allocation Target Range %	Net Rate of Return	Excess Bps	Net Rate of Return	Excess Bps	Net Rate of Return	Excess Bps	\$ Value Added (MM) ²	Net Rate of Return	Excess Bps	Net Rate of Return	Excess Bps	Net Rate of Return	Excess Bps	Net Rate of Return	Excess Bps
GROWTH	169,309	55.9	47-61	1.98	(1)	2.19	(12)	7.44	(26)	(451)	9.32	(119)	4.69	(32)	10.64	(99)	4.92	(102)
PUBLIC EQUITY	143,880	47.5	39-53	2.18	(1)	1.87	25	7.67	14	207	9.77	76	3.89	17	10.55	30	4.17	(31)
PRIVATE EQUITY	25,429	8.4	4-12	0.88	2	4.03	(223)	5.92	(286)	(734)	6.61	(1,005)	8.82	(140)	11.49	(489)	9.84	(295)
INCOME	57,098	18.9	15-25	0.28	9	(5.27)	17	(3.95)	63	367	5.36	119	4.52	52	3.36	96	6.09	70
REAL ASSETS	32,984	10.9	8-18	N/A	N/A	1.88	19	3.49	(8)	(29)	5.77	(254)	10.85	28	11.28	63	(0.78)	(819)
REAL ESTATE	27,860	9.2	6-16	N/A	N/A	1.75	(8)	3.60	(17)	(47)	6.79	(230)	11.75	33	12.48	88	(1.18)	(943)
FORESTLAND	1,988	0.7	0-2	N/A	N/A	0.40	(26)	0.23	(143)	(28)	(9.38)	(1,267)	(2.07)	(967)	(1.75)	(866)	-	-
INFRASTRUCTURE	3,137	1.0	0-2	N/A	N/A	4.03	288	4.57	118	33	8.33	281	14.00	894	11.97	667	-	-
INFLATION	28,721	9.5	6-12	1.52	1	(1.60)	2	(1.70)	(64)	(139)	6.32	(0)	(3.65)	83	(2.20)	26	-	-
LIQUIDITY	13,179	4.4	(2)-7	0.06	1	0.15	6	0.30	12	15	0.55	22	0.84	(35)	0.44	(30)	1.49	(16)
TRUST LEVEL ⁴	1,502	0.5		-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
TOTAL FUND	302,793	100.0		1.51	5	0.28	6	3.85	(2)	(60)	7.67	(82)	4.64	(19)	8.57	(7)	4.41	(116)
CALPERS POLICY INDEX ¹				1.47		0.22		3.87			8.49		4.83		8.64		5.57	

TOTAL FUND 20-YEAR NET RATE OF RETURN 6.84

TOTAL FUND INCEPTION DATE NET RATE OF RETURN (07/01/1988) 8.32

TOTAL FUND PLUS TAP SUMMARY	December 31, 2016		1-Month		3-Months		FYTD			1-Yr		3-Yr		5-Yr		10-YR	
	Ending Market Value (MM)	% of Total Fund Plus TAP Assets	Net Rate of Return	Excess Bps	Net Rate of Return	Excess Bps	Net Rate of Return	Excess Bps	Net Rate of Return	Excess Bps	Net Rate of Return	Excess Bps	Net Rate of Return	Excess Bps	Net Rate of Return	Excess Bps	
TOTAL FUND	302,793	99.96	1.51	5	0.28	6	3.85	(2)	7.67	(82)	4.64	(19)	8.57	(7)	4.41	(116)	
TERMINATED AGENCY POOL ³	131	0.04	(0.31)	-	(4.61)	-	(4.19)	-	5.04	-	5.25	-	-	-	-	-	
TOTAL FUND PLUS TAP	302,924	100.0	1.51		0.28		3.85		7.67		4.64		8.57		4.41		

¹ See Section XII for components of CalPERS Policy Index. Current Asset Class Policy Benchmark performance is linked to their respective prior Policy Benchmark.

² Value Added is the excess bps converted into a dollar value by multiplying the excess bps by the fiscal year-to-date average market value.

³ The Terminated Agency Pool (TAP) was funded in July 2013 and exists to provide benefit payments to members who are employees of agencies that have terminated their contract with CalPERS.

⁴ Trust Level includes Absolute Return Strategies, Multi-Asset Class, and Transition and Plan Level portfolios

Section I: Total Fund
Trust Level

TRUST LEVEL SUMMARY	December 31, 2016		1-Month		3-Months		FYTD			1-Yr		3-Yr		5-Yr		10-YR	
	Ending Market Value (MM)	% of Total Assets	Net Rate of Return	Excess Bps	Net Rate of Return	Excess Bps	Net Rate of Return	Excess Bps	\$ Value Added (MM) ³	Net Rate of Return	Excess Bps	Net Rate of Return	Excess Bps	Net Rate of Return	Excess Bps	Net Rate of Return	Excess Bps
ABSOLUTE RETURN STRATEGIES ¹	280	18.6	0.76	28	(3.54)	(482)	(7.33)	(991)	(33)	(6.50)	(1,229)	(0.01)	(539)	2.42	(291)	1.76	(473)
MULTI-ASSET CLASS COMPOSITE ²	1,212	80.7	2.29	168	0.75	(108)	2.41	(127)	(15)	2.95	(455)	4.48	(302)	-	-	-	-
TRANSITION + PLAN LEVEL PORTFOLIOS	9	0.6	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
TRUST LEVEL	1,502	100.0															

¹ Absolute Return Strategies performance history is included in Public Equity prior to July 1, 2011. Ending market value and returns includes Public Equity Transition portfolio.

² The Multi-Asset Class was initially funded in December 2012.

³ Value Added is the excess bps converted into a dollar value by multiplying the excess bps by the fiscal year-to-date average market value.

Section II
Public Equity

PERIOD ENDING DECEMBER 31, 2016

Section II: Public Equity

Public Equity Summary

PUBLIC EQUITY SUMMARY	December 31, 2016		1-Month		3-Months		FYTD			1-Yr		3-Yr		5-Yr		10-YR	
	Ending Market Value (MM)	% of Total Assets	Net Rate of Return	Excess Bps	Net Rate of Return	Excess Bps	Net Rate of Return	Excess Bps	\$ Value Added (MM) ²	Net Rate of Return	Excess Bps	Net Rate of Return	Excess Bps	Net Rate of Return	Excess Bps	Net Rate of Return	Excess Bps
INTERNAL DOMESTIC EQUITY	68,509	47.6	1.88	7	4.40	71	9.38	74	510	13.35	100	8.22	25	14.79	36	7.37	35
INTERNAL INT'L DEVELOPED EQUITY	38,581	26.8	3.13	3	(0.48)	16	6.33	19	78	3.87	43	(0.67)	26	7.05	35	1.68	14
INTERNAL EMERGING MARKET EQUITY	6,529	4.5	0.80	38	(2.50)	83	5.33	77	55	15.10	269	(0.87)	(6)	2.28	(10)	-	-
EXTERNAL DOMESTIC TRADITIONAL EQUITY	6,258	4.3	1.95	(18)	7.18	178	13.11	290	168	13.34	(205)	8.29	(58)	15.27	44	6.44	(55)
EXTERNAL INT'L DEVELOPED TRADITIONAL EQUITY	17,085	11.9	2.29	(27)	(0.72)	(121)	4.13	(262)	(442)	5.20	(170)	0.49	17	8.04	137	2.35	52
EXTERNAL EMERGING MARKET EQUITY	3,508	2.4	1.31	68	(4.62)	(156)	2.45	(231)	(83)	13.38	36	(1.56)	(63)	2.23	25	2.56	18
CORPORATE GOVERNANCE	501	0.3	(1.25)	(277)	(9.16)	(682)	4.59	(60)	(4)	12.99	1,754	6.37	424	12.39	280	3.48	79
EMERGING MANAGER PROGRAM	2,897	2.0	1.50	(32)	0.75	(100)	8.11	(100)	(28)	11.32	12	-	-	-	-	-	-
OTHER ⁴	13	0.0	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
TOTAL PUBLIC EQUITY¹	143,880	100.0	2.18	(1)	1.87	25	7.67	14	207	9.77	76	3.89	17	10.55	30	4.17	(31)

¹ Absolute Return Strategies performance history is included in Public Equity prior to July 1, 2011. Ending market value and returns includes Public Equity Transition, Venture, and Internal Holding accounts.

² Value Added is the Excess BPS converted into a dollar value by multiplying the excess bps by the fiscal year-to-date average market value.

³ Total Emerging Manger Fund of Funds (FOF) Transition portfolios are included in Ending Market Value.

⁴ Includes Public Equity Transition, Venture, and Internal Holding Accounts.

Section II: Public Equity

Internal Equity

	December 31, 2016		1-Month		3-Months		FYTD			1-Yr		3-Yr		5-Yr		10-YR	
	Ending Market Value (MM)	% of Total Assets	Net Rate of Return	Excess Bps	Net Rate of Return	Excess Bps	Net Rate of Return	Excess Bps	\$ Value Added (MM) ¹	Net Rate of Return	Excess Bps	Net Rate of Return	Excess Bps	Net Rate of Return	Excess Bps	Net Rate of Return	Excess Bps
INTERNAL DOMESTIC EQUITY																	
DOMESTIC FUNDAMENTAL	6,339	9.3	2.25	44	8.85	492	14.03	514	294	20.63	810	8.32	29	15.52	102	7.25	19
INT DOM FTSE 3000 PERF ACCTG	48,131	70.3	1.82	0	4.16	23	9.16	28	136	12.77	24	8.10	7	14.61	12	7.25	19
INT MICROCAP PERF ACCTG	437	0.6	3.84	91	8.00	292	21.21	547	21	17.88	469	3.63	277	14.95	454	6.59	424
INT MOMENTUM US TIMI 3000	1,103	1.6	2.04	22	1.88	(205)	4.83	(405)	(50)	7.81	(472)	-	-	-	-	-	-
INTERNAL VOLADJ US TMI 3000	2,186	3.2	2.20	38	4.34	41	7.31	(157)	(38)	12.06	(47)	8.50	47	-	-	-	-
SYNTHETIC ENHANCED EQUITY	9,124	13.3	1.72	0	2.77	63	8.07	110	109	13.55	223	9.11	127	15.78	165	-	-
GE VOLATILITY CAPTURE FUND	57	0.1	1.69	(28)	4.63	80	9.59	176	1	14.67	271	-	-	-	-	-	-
INTERNAL QUALITY US TMI 3000	1,133	1.7	2.23	41	5.09	116	8.28	(60)	(6)	-	-	-	-	-	-	-	-
TOTAL INTERNAL DOMESTIC EQUITY	68,509	100.0	1.88	7	4.40	71	9.38	74	510	13.35	100	8.22	25	14.79	36	7.37	35

	December 31, 2016		1-Month		3-Months		FYTD			1-Yr		3-Yr		5-Yr		10-YR	
	Ending Market Value (MM)	% of Total Assets	Net Rate of Return	Excess Bps	Net Rate of Return	Excess Bps	Net Rate of Return	Excess Bps	\$ Value Added (MM) ¹	Net Rate of Return	Excess Bps	Net Rate of Return	Excess Bps	Net Rate of Return	Excess Bps	Net Rate of Return	Excess Bps
INTERNAL INT'L DEVELOPED EQUITY																	
CALPERS DEV EX US DBI	1,465	3.8	3.13	(9)	(3.44)	(307)	1.02	(537)	(71)	1.13	(223)	(0.79)	33	-	-	-	-
FUNDAMENTAL DEVELOPED INTL(Ex Tobacco)	4,180	10.8	4.13	91	4.75	512	13.28	689	290	8.95	559	0.07	118	8.59	205	-	-
INT DEVELOPED SMALL CAP INDEX PERF ACCTG	3,873	10.0	2.31	1	(3.04)	6	4.16	24	10	3.89	50	0.32	35	7.94	39	-	-
INTERNAL GLBL ENV STRATEGY HSBCCI	668	1.7	2.64	45	(1.34)	(295)	2.07	(546)	(36)	9.87	87	2.83	(88)	8.05	(221)	-	-
INTERNAL INTL EQ PERF ACCTG	25,503	66.1	3.17	(5)	(0.39)	(2)	6.38	(1)	(3)	3.46	10	(1.03)	9	6.66	12	1.38	8
INTERNAL DEVELOPED INTL VOLATILITY ADJ	1,422	3.7	3.00	(13)	(1.66)	(99)	4.28	(184)	(22)	1.37	(200)	-	-	-	-	-	-
INT MOMENTUM DEV EX US US ALLCAP	686	1.8	1.57	(156)	(6.25)	(559)	(1.95)	(807)	(46)	(1.96)	(532)	-	-	-	-	-	-
INTERNAL QUALITY DEVELOPED EX US	784	2.0	2.76	(36)	(2.74)	(207)	-	-	-	-	-	-	-	-	-	-	-
TOTAL INTERNAL INT'L DEVELOPED EQUITY	38,581	100.0	3.13	3	(0.48)	16	6.33	19	78	3.87	43	(0.67)	26	7.05	35	1.68	14

	December 31, 2016		1-Month		3-Months		FYTD			1-Yr		3-Yr		5-Yr		10-YR	
	Ending Market Value (MM)	% of Total Assets	Net Rate of Return	Excess Bps	Net Rate of Return	Excess Bps	Net Rate of Return	Excess Bps	\$ Value Added (MM) ¹	Net Rate of Return	Excess Bps	Net Rate of Return	Excess Bps	Net Rate of Return	Excess Bps	Net Rate of Return	Excess Bps
INTERNAL EMERGING MARKET EQUITY																	
CALPERS EMERGING MARKETS DBI	351	5.4	1.95	143	(3.59)	(34)	0.87	(374)	(23)	9.03	(376)	(3.41)	(259)	-	-	-	-
EM SMALL CAP PERF Acctg	570	8.7	(0.49)	7	(4.00)	18	4.69	67	4	8.94	124	0.02	94	-	-	-	-
FUNDAMENTAL EMERGING MARKETS	962	14.7	1.62	110	3.64	689	14.95	1,033	133	35.02	2,223	1.28	211	3.32	118	-	-
INTERNAL EMERGING MARKET PERF ACCTG	3,127	47.9	0.51	(0)	(3.13)	12	4.82	21	6	13.20	41	(0.61)	21	2.33	19	-	-
STRUCTURED EMERGING MARKETS	850	13.0	1.70	118	(3.13)	11	2.47	(215)	(19)	13.04	26	(2.02)	(119)	1.59	(55)	-	-
INT EMERGING MARKET VOL ADJ	323	5.0	0.33	(16)	(5.11)	(184)	1.94	(272)	(12)	8.20	(421)	-	-	-	-	-	-
EMERGING MARKETS QUALITY FUND	180	2.8	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
EM MOMENTUM STRATEGY	166	2.5	0.13	(35)	(4.77)	(151)	2.70	(196)	(5)	8.35	(406)	-	-	-	-	-	-
TOTAL INTERNAL EMERGING MARKET EQUITY	6,529	100.0	0.80	38	(2.50)	83	5.33	77	55	15.10	269	(0.87)	(6)	2.28	(10)	-	-

¹ Value Added is the excess bps converted into a dollar value by multiplying the excess bps by the fiscal year-to-date average market value.

Section II: Public Equity

External Equity

	December 31, 2016		1-Month		3-Months		FYTD			1-Yr		3-Yr		5-Yr		10-YR	
	Ending Market Value (MM)	% of Total Assets	Net Rate of Return	Excess Bps	Net Rate of Return	Excess Bps	Net Rate of Return	Excess Bps	\$ Value Added (MM) ¹	Net Rate of Return	Excess Bps	Net Rate of Return	Excess Bps	Net Rate of Return	Excess Bps	Net Rate of Return	Excess Bps
EXTERNAL DOMESTIC TRADITIONAL EQUITY																	
BOSTON COMPANY	1,034	16.5	2.20	(29)	10.64	355	16.82	564	53	19.17	97	9.25	5	16.63	159	7.57	164
FIRST QUADRANT LONG/SHORT	1,884	30.1	2.15	37	4.60	99	6.65	(151)	(27)	8.81	(295)	9.09	81	15.68	116	-	-
JP MORGAN LG/SH DOM EQUITY	1,804	28.8	1.34	(58)	5.34	150	12.28	425	72	10.75	(115)	8.75	(0)	16.23	157	-	-
PZENA INVESTMENT MANAGEMENT	875	14.0	2.11	(38)	13.57	648	24.14	1,296	99	25.95	775	9.51	31	17.11	206	5.78	(16)
HUBER SMID	661	10.6	2.41	19	6.60	(83)	16.06	(122)	(7)	10.36	(1,100)	-	-	-	-	-	-
TOTAL EXTERNAL DOMESTIC TRADITIONAL EQUITY	6,258	100.0	1.95	(18)	7.18	178	13.11	290	168	13.34	(205)	8.29	(58)	15.27	44	6.44	(55)
EXTERNAL INT'L DEVELOPED TRADITIONAL EQUITY																	
ARROWSTREET CAPITAL	3,506	20.5	2.73	2	(0.36)	69	5.14	(64)	(22)	5.19	29	(0.06)	95	8.44	274	5.43	388
BAILLIE GIFFORD	2,348	13.7	0.68	(203)	(3.75)	(270)	5.44	(34)	(8)	4.57	(32)	0.80	181	7.99	230	4.55	300
PYRAMIS GLOBAL	991	5.8	2.99	(21)	(1.67)	(108)	3.75	(228)	(22)	(1.21)	(449)	(2.08)	(106)	6.49	(6)	-	-
TOBAM ANTI-BENCHMARKING	958	5.6	0.81	(138)	(5.59)	(720)	(3.43)	(1,096)	(109)	1.32	(768)	-	-	-	-	-	-
HERMES	674	3.9	3.95	(150)	(3.50)	(338)	3.33	(201)	(14)	(2.10)	(313)	-	-	-	-	-	-
ALLIANZ - GLOBAL	2,033	11.9	3.04	85	2.20	59	6.77	(77)	(15)	5.62	(339)	-	-	-	-	-	-
EPOCH GLOBAL	2,192	12.8	3.56	137	(0.64)	(226)	(0.72)	(825)	(181)	8.01	(99)	-	-	-	-	-	-
WELLINGTON	2,201	12.9	1.25	(94)	(0.64)	(225)	5.23	(230)	(50)	6.35	(265)	-	-	-	-	-	-
ARROWSTREET GLOBAL	2,182	12.8	2.27	8	2.99	138	6.81	(72)	(15)	9.00	(1)	-	-	-	-	-	-
TOTAL EXTERNAL INT'L DEVELOPED TRADITION EQ	17,085	100.0	2.29	(27)	(0.72)	(121)	4.13	(262)	(442)	5.20	(170)	0.49	17	8.04	137	2.35	52
EXTERNAL EMERGING MARKET EQUITY																	
GENESIS ASSET MANAGERS	1,219	34.7	0.02	(60)	(3.99)	(92)	0.75	(400)	(50)	12.39	(63)	(2.61)	(168)	2.34	36	4.54	216
LAZARD EMERGING MKTS	1,633	46.6	3.37	275	(1.55)	151	6.94	218	35	22.74	971	(1.44)	(50)	3.27	129	-	-
WASATCH ADVISORS	656	18.7	(1.20)	(68)	(12.48)	(835)	(4.79)	(882)	(63)	(2.87)	(1,088)	-	-	-	-	-	-
TOTAL EXTERNAL EMERGING MARKET EQUITY	3,508	100.0	1.31	68	(4.62)	(156)	2.45	(231)	(83)	13.38	36	(1.56)	(63)	2.23	25	2.56	18

¹ Value Added is the excess bps converted into a dollar value by multiplying the excess bps by the fiscal year-to-date average market value.

Section II: Public Equity

Corporate Governance

	December 31, 2016		1-Month		3-Months		FYTD			1-Yr		3-Yr		5-Yr		10-YR	
	Ending Market Value (MM)	% of Total Assets	Net Rate of Return	Excess Bps	Net Rate of Return	Excess Bps	Net Rate of Return	Excess Bps	\$ Value Added (MM) ¹	Net Rate of Return	Excess Bps	Net Rate of Return	Excess Bps	Net Rate of Return	Excess Bps	Net Rate of Return	Excess Bps
CORPORATE GOVERNANCE																	
CARTICA CAPITAL PARTNERS, LP	406	81.2	(0.14)	(86)	(9.52)	(671)	3.41	(164)	(7)	11.42	(212)	(3.29)	(253)	4.46	231	-	-
CORPORATE GOVERNANCE PASSTHROUGH	5	0.9	N/M	-	N/M	-	N/M	-	-	N/M	-	N/M	-	N/M	-	-	-
KNIGHT VINKE INSTITUTIONAL PARTNERS	84	16.7	(6.75)	(1,196)	(11.45)	(1,059)	18.90	1,492	12	74.98	7,835	21.47	2,724	20.20	1,617	3.62	403
RELATIONAL INVESTORS MID-CAP FUND	4	0.8		(197)		(979)	-	(1,475)	(0)	0.00	(2,653)	(22.61)	(3,242)	(4.68)	(2,034)	-	-
TAIYO FUND MGMT	1	0.3	8.12	477	145.29	13,048	21.87	(3)	(0)	26.00	2,786	13.09	783	16.90	108	6.27	728
TOTAL CORPORATE GOVERNANCE	501	100.0	(1.25)	(277)	(9.16)	(682)	4.59	(60)	(4)	12.99	1,754	6.37	424	12.39	280	3.48	79

¹ Value Added is the excess bps converted into a dollar value by multiplying the excess bps by the fiscal year-to-date average market value.

N/M = Not Meaningful

Section II: Public Equity
Emerging Manager Program

	December 31, 2016		1-Month		3-Months		FYTD			1-Yr		3-Yr		5-Yr		10-YR	
	Ending Market Value (MM)	% of Total Assets	Net Rate of Return	Excess Bps	Net Rate of Return	Excess Bps	Net Rate of Return	Excess Bps	\$ Value Added (MM) ¹	Net Rate of Return	Excess Bps	Net Rate of Return	Excess Bps	Net Rate of Return	Excess Bps	Net Rate of Return	Excess Bps
EMERGING MANAGER PROGRAM																	
PROGRESS INVESTMENT II	516	17.8	0.11	(137)	2.10	(89)	10.39	(66)	(3)	15.48	(2)	-	-	-	-	-	-
LEGATO EMERGING MANAGER	743	25.6	2.45	96	(2.48)	(143)	5.03	9	1	17.43	11	-	-	-	-	-	-
STRATEGIC INVESTMENTS II	554	19.1	0.96	(85)	2.77	(202)	10.21	(124)	(7)	8.98	(5.87)	-	-	-	-	-	-
LEIA GEM INVESTMENTS	556	19.2	2.07	(37)	4.76	9	13.04	(77)	(4)	11.55	(5.32)	-	-	-	-	-	-
FIS CALBEAR FUND	528	18.2	1.52	(45)	(1.93)	(57)	3.36	(292)	(15)	1.55	(2.48)	-	-	-	-	-	-
TOTAL EMERGING MANAGER PROGRAM	2,897	100.0	1.50	(32)	0.75	(100)	8.11	(100)	(28)	11.32	12	-	-	-	-	-	-

¹ Value Added is the excess bps converted into a dollar value by multiplying the excess bps by the fiscal year-to-date average market value.

² Total Emerging Manger FOF Transition portfolios are included in Ending Market Value.

Section III
Private Equity

PERIOD ENDING DECEMBER 31, 2016

Section III: Private Equity

Private Equity Summary and Performance by Strategy

	December 31, 2016		1-Month		3-Months		FYTD			1-Yr		3-Yr		5-Yr		10-YR	
	Ending Market Value (MM)	% of Total Assets	Net Rate of Return	Excess Bps	Net Rate of Return	Excess Bps	Net Rate of Return	Excess Bps	\$ Value Added (MM) ²	Net Rate of Return	Excess Bps	Net Rate of Return	Excess Bps	Net Rate of Return	Excess Bps	Net Rate of Return	Excess Bps
TOTAL PRIVATE EQUITY SUMMARY ¹																	
PE PARTNERSHIP INVESTMENTS	25,404	99.9	0.89	3	4.06	(219)	5.95	(283)	(725)	6.72	(994)	8.89	(132)	11.58	(479)	9.93	(286)
PRIVATE EQUITY DISTRIBUTION STOCK ³	24	0.1	(11.73)	(1,259)	(19.53)	(2,579)	(11.26)	(2,003)	(6)	(37.59)	(5,424)	(35.11)	(4,533)	(31.52)	(4,790)	(13.66)	(2,645)
TOTAL PRIVATE EQUITY	25,429	100.0	0.88	2	4.03	(223)	5.92	(286)	(734)	6.61	(1,005)	8.82	(140)	11.49	(489)	9.84	(295)

	December 31, 2016		3-Months	FYTD	1-Yr	3-Yr	5-Yr	10-Yr
	Ending Market Value (MM)	% of Total Assets	Net Rate of Return	Net Rate of Return	Net Rate of Return	Net Rate of Return	Net Rate of Return	Net Rate of Return
PRIVATE EQUITY STRATEGY ¹								
Buyout	14,773	58.1	3.59	6.34	9.65	10.11	11.92	10.88
Growth Expansion	4,126	16.2	5.17	7.38	6.47	7.79	10.43	8.32
Credit Related	2,981	11.7	4.08	6.27	(0.55)	3.24	12.02	10.36
Venture Capital	1,255	4.9	6.08	(1.97)	(6.34)	5.10	5.37	4.94
Opportunistic	2,043	8.0	3.72	5.79	7.55	16.65	11.98	6.77
Currency/Unclassified	251	1.0	NM	NM	NM			
TOTAL PRIVATE EQUITY STRATEGY	25,429	100.0	4.03	5.92	6.61	8.82	11.49	9.84

¹ Private Equity time weighted rate of returns are computed by State Street Bank and are based on General Partners' most recent received financial statements and any cash adjustments received prior to two business days before the end of the quarter.

² Value Added is the excess bps converted into a dollar value by multiplying the excess bps by the fiscal year-to-date average market value.

³ Private Equity Stock Distribution Portfolio is highly concentrated and significant tracking errors are expected due to its use of the Global Equity based Private Equity Policy Benchmark.

NM = Not Meaningful data

Section III: Private Equity

Private Equity Top 20 General Partner by Exposure

	December 31, 2016	
	Ending Market Value (MM)	% of Total Private Equity
TOP 20 PRIVATE EQUITY PARTNERS EXPOSURE ¹		
Blackstone Group	2,595	10.2%
Apollo Management	1,904	7.5%
Carlyle Group	1,593	6.3%
CERBERUS	1,368	5.4%
TPG Capital	1,186	4.7%
Advent International	953	3.7%
KKR and Co.	871	3.4%
CVC Capital Partners	862	3.4%
57 STARS	680	2.7%
Asia Alternative Assets	678	2.7%
GCM Grosvenor	650	2.6%
Silver Lake	607	2.4%
Yucaipa	599	2.4%
California Emerging Ventures	572	2.2%
Riverstone LLC	527	2.1%
Hellman and Friedman Capital Partners	495	1.9%
Bridgepoint Capital	485	1.9%
Permira	390	1.5%
Insight Capital	356	1.4%
Ares Management LLC	352	1.4%
TOP 20 PRIVATE EQUITY PARTNERS EXPOSURE	17,722	69.7%
OTHER PRIVATE EQUITY PARTNERS EXPOSURE	7,707	30.3%
TOTAL PRIVATE EQUITY PARTNERS EXPOSURE	25,429	100%

¹ Private Equity Partners exposure data is based on General Partners' most recent received financial statements and any cash adjustments received prior to two business days before the end of the quarter.

Section III: Private Equity

Private Equity Performance by General Partner

PRIVATE EQUITY GENERAL PARTNERS ¹	December 31, 2016		3-Months	FYTD	1-Yr	3-Yr	5-Yr	10-Yr
	Ending Market		Net Rate of Return	Net Rate of Return	Net Rate of Return	Net Rate of Return	Net Rate of Return	Net Rate of Return
	Value (MM)	% of Total Assets						
57 STARS	680	2.7	1.03	3.60	(0.43)	7.00	4.24	
Aberdare	36	0.1	11.42	1.37	(21.27)	(1.80)	10.89	1.39
Advent International	953	3.7	10.19	9.44	21.96	12.34	17.53	23.25
Affinity Equity Partners	41	0.2	(2.18)	(22.81)	(21.24)	(7.99)	1.81	(21.31)
Aisling Capital	79	0.3	19.09	8.56	(4.83)	9.21	13.31	4.96
Alta Communications	0	0.0	(11.62)	(23.00)	(86.79)	(49.76)	(34.31)	(36.00)
Apollo Management	1,904	7.5	3.66	7.48	1.25	1.83	19.09	12.21
ArcLight	38	0.2	42.91	76.95	43.96	43.85	26.00	16.78
Ares Management LLC	352	1.4	5.21	8.97	18.41	16.06	19.47	13.92
Asia Alternative Assets	678	2.7	1.08	1.90	5.58	34.28	28.12	
Avenue Capital Partners	104	0.4	3.45	(1.06)	(11.91)	(6.72)	0.35	2.44
Baring	44	0.2	3.21	14.73	26.51	(14.24)	(1.23)	
Birch Hill Equity Partners	159	0.6	2.92	11.68	32.53	20.29	13.09	10.01
Blackstone Group	2,595	10.2	6.48	7.18	5.12	11.09	13.09	10.57
Bridgepoint Capital	485	1.9	0.41	(1.62)	9.30	7.84	9.02	8.81
CERBERUS	1,368	5.4	3.57	6.92	7.75	20.40		
CLEARLAKE CAPITAL	97	0.4	14.04	21.11	33.94	28.51		
CVC Capital Partners	862	3.4	7.23	20.71	27.07	14.49	14.23	13.36
California Emerging Ventures	572	2.2	10.61	5.64	5.97	12.31	10.62	8.52
Capital Dynamics	192	0.8	(0.00)	(10.22)	(14.99)	(7.63)	(12.45)	
Carlyle Group	1,593	6.3	1.84	5.21	10.59	11.55	11.83	13.52
Castlelake Partners	27	0.1	(1.84)	(6.49)	(11.28)	(1.90)	4.28	13.27
Clarus Ventures	70	0.3	10.11	8.68	3.63	22.27	24.28	9.59
Clearwater Capital	69	0.3	(0.64)	(2.15)	(8.98)	(3.91)	(0.32)	1.88
Coller Capital	79	0.3	4.49	(3.53)	(14.42)	6.94	6.06	7.98

¹ Private Equity time weighted rate of returns are computed by State Street Bank and are based on General Partners' most recent received financial statements and any cash adjustments received prior to two business days before the end of the quarter.

Section III: Private Equity

Private Equity Performance by General Partner

PRIVATE EQUITY GENERAL PARTNERS ¹	December 31, 2016		3-Months	FYTD	1-Yr	3-Yr	5-Yr	10-Yr
	Ending Market Value (MM)	% of Total Assets	Net Rate of Return	Net Rate of Return	Net Rate of Return	Net Rate of Return	Net Rate of Return	Net Rate of Return
Craton Equity Partners	6	0.0	4.39	3.10	(33.81)	(30.14)	(23.53)	
Currency	13	0.1	119.89	211.67	887.39	340.32	139.75	
EM Alternatives	74	0.3	(0.54)	6.43	2.55	5.32	6.51	
Essex Woodlands Health Ventures	100	0.4	4.75	(9.63)	(15.45)	(0.81)	5.96	
First Reserve	223	0.9	(8.88)	(7.60)	(37.98)	(34.26)	(18.94)	(5.31)
Francisco Partners	180	0.7	0.13	0.16	5.75	9.41	10.09	8.99
GCM Grosvenor	650	2.6	1.44	1.32	1.11	8.98	10.59	12.43
GSO Capital Partners	59	0.2	(35.22)	231.44				
Gael Partners, LLC	10	0.0	4.07	11.17	10.16	2.33	6.55	8.14
Generation Partners	0	0.0	(0.00)	(1.92)	(2.63)	(1.41)	(6.60)	(4.33)
Green Equity Investors	267	1.1	5.15	8.76	13.44	14.57	18.60	29.82
Hamilton Lane	214	0.8	4.01	8.23	7.85	17.68	15.82	
HarbourVest Partners, LLC	28	0.1	(4.49)	(8.79)	(13.61)	2.33	3.01	(0.32)
Hellman and Friedman Capital Partners	495	1.9	4.29	9.85	15.97	31.73	25.80	22.13
Inner City Venture	6	0.0	(0.95)	6.90	99.54	43.92	30.58	27.99
Insight Capital	356	1.4	10.60	13.41	13.13	16.25	15.61	19.16
Jasper Ridge Partners	300	1.2	5.71	9.31	11.65	14.78	17.12	4.80
KKR and Co.	871	3.4	4.55	10.14	17.23	11.92	9.73	7.32
KMCP	106	0.4	2.13	1.14	(5.53)	(16.79)	5.68	8.77
KPS	62	0.2	5.38	22.38	30.62	29.49	27.41	
Khosla Ventures	274	1.1	(1.27)	(10.46)	(18.96)	0.07	2.54	
Kline Hawkes California	20	0.1	(0.06)	(0.16)	(6.83)	5.12	(16.03)	(4.72)
Lime Rock	124	0.5	17.47	35.83	22.48	8.60	3.44	5.10
Lion Capital	15	0.1	15.07	(7.05)	(22.61)	(20.27)	(17.89)	
MHR	178	0.7	4.96	4.94	(3.54)	(7.42)	9.97	4.45

¹ Private Equity time weighted rate of returns are computed by State Street Bank and are based on General Partners' most recent received financial statements and any cash adjustments received prior to two business days before the end of the quarter.

Section III: Private Equity

Private Equity Performance by General Partner

PRIVATE EQUITY GENERAL PARTNERS ¹	December 31, 2016		3-Months	FYTD	1-Yr	3-Yr	5-Yr	10-Yr
	Ending Market Value (MM)	% of Total Assets	Net Rate of Return	Net Rate of Return	Net Rate of Return	Net Rate of Return	Net Rate of Return	Net Rate of Return
Madison Dearborn Partners	73	0.3	2.82	5.24	7.34	12.14	15.39	9.87
Magnum Capital	59	0.2	0.79	2.45	18.62	22.41	8.88	
New Mountain Capital LLC	331	1.3	11.99	18.56	31.19	22.13	22.50	16.53
Oak Hill Capital Partners	197	0.8	1.93	3.35	7.07	15.05	14.74	11.80
Oaktree Capital Management	132	0.5	1.62	(2.37)	(6.38)	(0.98)	3.11	
Onex	299	1.2	2.96	4.37	8.89			
Palladium	106	0.4	1.64	2.29	(8.40)	5.68	16.05	11.31
Permira	390	1.5	4.89	5.99	18.22	6.51	12.04	6.51
Polish Enterprise	154	0.6	2.00	15.87	18.88	12.76	13.15	10.44
Providence Equity Partners	184	0.7	(0.34)	0.53	0.80	10.94	7.01	5.69
Rhone Partners	16	0.1	2.24	1.43	(0.94)	8.42	22.00	13.66
Richardson Financial Group	9	0.0	(0.18)	0.51	3.25	(3.36)	4.61	(2.46)
Riverstone LLC	527	2.1	0.76	7.46	(10.74)	(7.13)	(2.22)	
Riverwood Capital LLC	80	0.3	17.22	17.84	26.02	26.64	28.81	
SAIF Partners	308	1.2	8.97	8.40	8.18	16.18	7.84	
Sageview Capital LLC	82	0.3	0.00	0.00	(0.79)	3.58	2.13	
Sankaty Advisors	317	1.2	4.77	7.27	7.12			
Silver Lake	607	2.4	7.39	6.45	31.14	23.28	13.82	14.70
Stonepoint Capital	205	0.8	5.83	12.46	17.84			
THL Equity Advisors	153	0.6	4.02	7.15	8.53	16.06	15.41	7.00
TPG Capital	1186	4.7	3.99	6.79	5.21	12.62	12.70	10.56
Tailwind	174	0.7	(0.20)	8.09	14.94	13.28	17.37	
The Jordon Company	101	0.4	(5.77)	(7.32)	(0.62)	6.99	11.56	
TowerBrook Capital Partners	242	0.9	5.07	3.41	10.93	13.43	11.07	13.26
Unclassified	196	0.8	7.39					

¹ Private Equity time weighted rate of returns are computed by State Street Bank and are based on General Partners' most recent received financial statements and any cash adjustments received prior to two business days before the end of the quarter.

Section III: Private Equity

Private Equity Performance by General Partner

	December 31, 2016		3-Months	FYTD	1-Yr	3-Yr	5-Yr	10-Yr
	Ending Market Value (MM)	% of Total Assets	Net Rate of Return	Net Rate of Return	Net Rate of Return	Net Rate of Return	Net Rate of Return	Net Rate of Return
PRIVATE EQUITY GENERAL PARTNERS ¹								
VantagePoint Venture Partners	45	0.2	(7.06)	(9.34)	(16.45)	(20.47)	(18.83)	(13.16)
W Capital Partners	47	0.2	6.50	8.93	7.23	0.73	3.10	5.22
WLR Recovery	89	0.3	3.33	0.38	0.97	2.29	1.80	2.69
Wellspring Capital Management	106	0.4	10.73	13.49	30.93	22.21	8.17	
Welsh and Carson and Anderson and Stowe	216	0.9	1.86	9.00	7.66	13.53	14.46	10.29
Yucaipa	599	2.4	(2.46)	(3.45)	(10.92)	(6.84)	(0.13)	1.16
PRIVATE EQUITY PARTNERSHIP INVESTMENTS ²	25,429	100.0	4.03	5.92	6.61	8.82	11.49	9.84

¹ Private Equity time weighted rate of returns are computed by State Street Bank and are based on General Partners' most recent received financial statements and any cash adjustments received prior to two business days before the end of the quarter.

² Private Equity Partnership Investments totals include Currency and unclassified investments.

Section IV
Income

PERIOD ENDING DECEMBER 31, 2016

Section IV: Income

Global Income Summary

	December 31, 2016		1-Month		3-Months		FYTD			1-Yr		3-Yr		5-Yr		10-Yr	
	Ending Market Value (MM)	% of Total Assets	Net Rate of Return	Excess Bps	Net Rate of Return	Excess Bps	Net Rate of Return	Excess Bps	\$ Value Added (MM) ¹	Net Rate of Return	Excess Bps	Net Rate of Return	Excess Bps	Net Rate of Return	Excess Bps	Net Rate of Return	Excess Bps
TOTAL GLOBAL FIXED INCOME SUMMARY																	
TOTAL DOMESTIC FIXED INCOME	51,394	90.0	0.27	5	(4.91)	17	(3.55)	68	355	5.73	140	5.38	53	3.99	84	6.43	84
FI TOTAL INTERNATIONAL	5,704	10.0	0.32	37	(8.42)	23	(7.30)	37	22	2.87	28	(2.95)	73	(2.28)	61	2.96	95
TOTAL GLOBAL FIXED INCOME	57,098	100.0	0.28	9	(5.27)	17	(3.95)	63	367	5.36	119	4.52	52	3.36	96	6.09	70

¹ Value Added is the excess bps converted into a dollar value by multiplying the excess bps by the fiscal year-to-date average market value.

Section IV: Income

Domestic Income

	December 31, 2016		1-Month		3-Months		FYTD			1-Yr		3-Yr		5-Yr		10-Yr	
	Ending Market Value (MM)	% of Total Assets	Net Rate of Return	Excess Bps	Net Rate of Return	Excess Bps	Net Rate of Return	Excess Bps	\$ Value Added (MM) ²	Net Rate of Return	Excess Bps	Net Rate of Return	Excess Bps	Net Rate of Return	Excess Bps	Net Rate of Return	Excess Bps
DOMESTIC FIXED INCOME																	
BB HIGH YIELD FUND ¹	420	0.8	1.73	32	1.00	2	6.24	75	4	16.19	242	-	-	-	-	-	-
PASSIVE FALLEN ANGELS	102	0.2	2.96	104	6.09	409	11.88	418	5	31.11	1,315	9.99	571	-	-	-	-
DURATION MANAGEMENT ¹	13,159	25.6	(0.37)	4	(7.65)	46	(7.15)	98	115	4.29	220	5.05	(29)	2.34	39	5.46	(42)
EQUITABLE CCMF	1	0.0	0.67	70	2.03	404	4.10	553	0	8.40	662	8.30	528	8.75	661	8.24	402
GOVERNMENTS ¹	8,405	16.4	(0.43)	(3)	(8.05)	6	(7.90)	23	22	2.47	38	5.39	5	1.92	(3)	-	-
HIGH YIELD BOND MANAGERS ACCOUNTING ¹	879	1.7	1.62	(30)	2.26	26	7.98	27	3	17.91	(5)	5.72	144	8.93	203	7.82	74
HIGH YIELD MORTGAGE ¹	337	0.7	0.24	(168)	2.11	11	5.95	(175)	(6)	6.62	(1,134)	6.38	211	12.01	511	-	-
HIGH YIELD SOVEREIGN ¹	86	0.2	1.00	40	(3.01)	495	(0.10)	688	6	6.53	196	9.21	390	-	-	-	-
HIGH YIELD ¹	69	0.1	13.01	1,109	13.35	1,135	16.81	911	13	47.00	2,904	11.51	723	11.87	497	12.40	531
HIGHLAND CLN - LONGHORN A ¹	42	0.1	7.73	658	8.70	645	13.27	785	17	19.91	1,003	4.80	104	6.40	105	-	-
HIGHLAND CLN - LONGHORN B ¹	150	0.3	3.18	127	9.17	717	15.32	762	11	21.99	402	5.89	162	10.60	370	-	-
INTERNAL INV-GRADE CORP ¹	9,798	19.1	1.35	4	(3.66)	61	(1.03)	116	127	10.79	130	6.37	24	6.40	136	7.43	67
LONG DURATION CORPORATES ¹	2,198	4.3	1.17	95	(6.46)	(139)	(5.46)	(123)	(30)	6.28	195	2.72	(213)	6.72	373	8.22	239
LONG DURATION MTG ¹	3,748	7.3	0.01	(21)	(2.84)	224	(1.22)	301	122	4.83	50	5.21	36	3.84	86	6.51	49
MHLP-BRS ¹	61	0.1	0.64	66	1.53	354	3.53	496	3	5.43	366	7.16	413	10.09	795	6.87	264
NON-TRADITIONAL HIGH YIELD ¹	120	0.2	(0.00)	(192)	0.31	(169)	8.24	53	1	15.98	(198)	20.85	1,657	16.62	972	-	-
OPPORTUNISTIC ¹	208	0.4	-	-	-	-	-	-	-	0.00	-	(10.32)	-	(10.31)	-	(10.31)	-
AGENCY MORTGAGE ¹	5,958	11.6	(0.06)	(6)	(2.12)	(15)	(1.45)	(6)	(4)	1.81	14	3.28	21	2.34	28	-	-
INTERNAL MTG STRUCTURE ¹	3,414	6.6	0.05	7	(1.81)	20	(1.00)	43	16	3.11	134	6.10	307	5.28	314	6.00	177
PERS INTERNAL BONDS SOVEREIGN ¹	1,871	3.6	0.78	19	(7.95)	1	(6.68)	30	6	5.02	45	5.43	11	3.60	29	5.94	(34)
TACTICAL HIGH YIELD CORPORATES	368	0.7	1.77	(85)	-	-	-	-	-	-	-	-	-	-	-	-	-
TOTAL DOMESTIC FIXED INCOME	51,394	100.0	0.27	5	(4.91)	17	(3.55)	68	355	5.73	140	5.38	53	3.99	84	6.43	84

¹ Unitized portfolios owned by other retirement plans. Ending Market Value represents the PERF's ownership in the portfolio.

² Value Added is the excess bps converted into a dollar value by multiplying the excess bps by the fiscal year-to-date average market value.

Section IV: Income

FI Total International and External High Yield

	December 31, 2016		1-Month		3-Months		FYTD			1-Yr		3-Yr		5-Yr		10-Yr	
	Ending Market Value (MM)	% of Total Assets	Net Rate of Return	Excess Bps	Net Rate of Return	Excess Bps	Net Rate of Return	Excess Bps	\$ Value Added (MM) ²	Net Rate of Return	Excess Bps	Net Rate of Return	Excess Bps	Net Rate of Return	Excess Bps	Net Rate of Return	Excess Bps
FI TOTAL INTERNATIONAL³																	
ALLIANCE BERNSTEIN INSTITUTIONAL INVESTM	585	10.2	0.48	53	(8.02)	63	(6.99)	68	4	3.36	77	(3.15)	53	(2.49)	41	-	-
BARING ASSET MANAGEMENT	484	8.5	(0.47)	13	(9.70)	(24)	(8.68)	(6)	(0)	(0.64)	(153)	(3.96)	26	(3.12)	10	2.17	33
INT INTL FIXED INCOME	1,666	29.2	0.14	19	(8.79)	(15)	(7.79)	(11)	(2)	2.94	35	(3.01)	67	-	-	-	-
PIMCO	1,001	17.6	0.40	45	(8.16)	49	(6.64)	103	11	2.83	23	(2.62)	106	(2.02)	88	-	-
INTL EMERGING MARKETS FIXED INCOME	216	3.8	3.08	96	(4.86)	67	(3.62)	36	1	8.76	56	-	-	-	-	-	-
INTL DEVELOPED MARKETS FIXED INCOME	1,235	21.6	(0.58)	2	(9.65)	(20)	(8.66)	(3)	(0)	1.18	(12)	-	-	-	-	-	-
INTL FIXED INCOME TRANSITION ACCOUNT	0	0.0	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
BLUEBAY ASSET MANAGEMENT	197	3.4	1.97	(16)	(5.57)	(5)	(4.56)	(59)	-	-	-	-	-	-	-	-	-
INVESTEC ASSET MANAGEMENT EM	227	4.0	2.63	50	(5.17)	36	(4.17)	(20)	-	6.93	(126)	-	-	-	-	-	-
NEUBERGER BERMAN EM	94	1.6	2.64	52	(5.79)	(27)	-	-	-	-	-	-	-	-	-	-	-
FI TOTAL INTERNATIONAL	5,704	100.0	0.32	37	(8.42)	23	(7.30)	37	22	2.87	28	(2.95)	73	(2.28)	61	2.96	95

	December 31, 2016		1-Month		3-Months		FYTD			1-Yr		3-Yr		5-Yr		10-Yr	
	Ending Market Value (MM)	% of Total Assets	Net Rate of Return	Excess Bps	Net Rate of Return	Excess Bps	Net Rate of Return	Excess Bps	\$ Value Added (MM) ²	Net Rate of Return	Excess Bps	Net Rate of Return	Excess Bps	Net Rate of Return	Excess Bps	Net Rate of Return	Excess Bps
EXTERNAL HIGH YIELD FIXED INCOME																	
COLUMBIA HIGH YIELD ¹	284		2.13	(36)	1.86	(131)	7.83	(242)	(7)	16.79	(608)	5.33	182	8.34	102	-	-
HIGH YIELD NOMURA ¹	757		1.99	7	2.71	71	8.88	118	10	20.10	214	6.02	290	9.76	258	8.91	176

¹ Unitized portfolios owned by multiple retirement plans. Portfolios roll up to the PERF High Yield Bond Managers portfolio.

² Value Added is the excess bps converted into a dollar value by multiplying the excess bps by the fiscal year-to-date average market value.

³ Ending market value and returns includes Fixed Income Transition portfolio.

Section V
Real Assets

PERIOD ENDING DECEMBER 31, 2016

Section V: Real Assets
Real Assets Summary

	September 30 ,2016		1- Month		3-Months		FYTD			1-Yr		3-Yr		5-Yr		10-Yr	
	Ending Market Value (MM)	% of Total Assets	Net Rate of Return	Excess Bps	Net Rate of Return	Excess Bps	Net Rate of Return	Excess Bps	\$ Value Added (MM) ²	Net Rate of Return	Excess Bps	Net Rate of Return	Excess Bps	Net Rate of Return	Excess Bps	Net Rate of Return	Excess Bps
REAL ASSETS¹																	
FORESTLAND	1,988	6.0	N/M	N/M	0.40	(26)	0.23	(143)	(28)	(9.38)	(1,267)	(2.07)	(967)	(1.75)	(866)	-	-
INFRASTRUCTURE	3,137	9.5	N/M	N/M	4.03	288	4.57	118	33	8.33	281	14.00	894	11.97	667	-	-
REAL ESTATE	27,860	84.5	N/M	N/M	1.75	(8)	3.60	(17)	(47)	6.79	(230)	11.75	33	12.48	88	(1.18)	(943)
TOTAL REAL ASSETS	32,984	100.0	N/M	N/M	1.88	19	3.49	(8)	(29)	5.77	(254)	10.85	28	11.28	63	(0.78)	(819)

¹ Partnership Market Values and Returns are based on the General Partners' September 30, 2016 financial statements.

² Value Added is the excess bps converted into a dollar value by multiplying the excess bps by the fiscal year-to-date average market value.

Section V: Real Assets

Real Estate Top 20 Partners by Exposure

	As of September 30, 2016	
	Ending Market Value (MM)	% of Total Private Real Estate
TOP 20 REAL ESTATE PARTNERS EXPOSURE¹		
Miller Capital Advisory	5,337	19.2
GI Partners	4,654	16.7
CommonWealth Partners	4,225	15.2
GID Investment Advisors, LLC	3,177	11.4
First Washington	1,772	6.4
CIM	1,313	4.7
Hines	1,222	4.4
Institutional Housing Partners	943	3.4
ARA Management	861	3.1
Pacific Urban Residential	683	2.5
Bentall Kennedy	669	2.4
Invesco	538	1.9
Resmark Equity Partners	480	1.7
Canyon Capital Realty Advisors	308	1.1
Klein Financial Corporation	286	1.0
JP Morgan Asset Management	151	0.5
Stockbridge Capital	100	0.4
AGI Resmark Partners	87	0.3
Hearthstone Advisors	55	0.2
Xander Group	32	0.1
TOP 20 REAL ESTATE PARTNERS EXPOSURE	26,894	96.5
OTHER REAL ESTATE PARTNERS EXPOSURE	966	3.5
TOTAL REAL ESTATE PARTNERS EXPOSURE	27,860	100.0

¹Partnership Market Values and Returns are based on the General Partners' September 30, 2016 financial statements.

Section V: Real Assets

Real Estate Partnerships Performance

REAL ESTATE PARTNERSHIPS ¹	As of September 30, 2016		QTR	FYTD	1 Yr	3 Yr	5 Yr
	Ending Market Value (MM)	% Of Total Assets	Net Rate of Return	Net Rate of Return	Net Rate of Return	Net Rate of Return	Net Rate of Return
301 Capitol Mall, LP	16	0.1%	(0.51)	(1.29)	(2.90)	3.40	(3.30)
AEW Senior Housing Company LLC	1	0.0%	(0.18)	(0.60)	(0.40)	17.80	14.30
AEW-SHP Managed Portfolio	3	0.0%	(0.01)	(2.29)	(8.90)	(1.70)	
AGI Resmark Housing Fund, LLC	87	0.3%	27.01	26.92	31.00		
ARA Asia Dragon Fund II	47	0.2%	11.67	16.42	40.10	10.00	
ARA China Long Term Hold	812	2.9%	6.28	1.46	5.60	10.00	
Asia Pacific Property Fund SCSP	151	0.5%	(0.30)	(0.30)			
BlackRock Europe Parallel Property Fund II L.P.	2	0.0%	22.46				
CalEast Industrial Investors, LLC	154	0.6%	0.40	4.22	5.30	3.00	2.20
CalEast Solstice - Base	2,268	8.1%	1.64	2.46			
CalEast Solstice - DT Land	454	1.6%	(3.95)	(7.28)			
CalEast Solstice - DT Other	818	2.9%	(0.18)	1.25			
CalEast Solstice, LLC	(61)	-0.2%					
CalWest - CalPERS	20	0.1%	(12.72)	(7.47)	(5.10)	(2.90)	
Canyon Catalyst Fund, LLC	302	1.1%	6.44	8.69	19.60	21.30	
Canyon Johnson Urban Fund, III	6	0.0%	(0.78)	(27.13)	(20.30)	2.80	7.60
CBRE Strategic Partners UK Fund II	(22)	-0.1%					
CIM Fund III, LP	625	2.2%	1.31	1.99	4.00	9.40	13.60
CIM Urban Real Estate Fund, LP	201	0.7%	(2.85)	(1.65)	(11.00)	0.10	3.50
CIM Urban REIT LLC	471	1.7%	0.63	1.31	4.10	5.80	7.60
FSP - Base	2,760	9.9%	2.58	9.22	15.80	20.90	
FSP - DT 2011	744	2.7%	0.87	2.99	6.20	17.60	
FSP - DT 2012 and Beyond	817	2.9%	(0.23)	0.47	6.00	18.60	
Global Innovation Partners, LLC	10	0.0%					
Global Retail Investors LLC	(269)	-1.0%	0.21	5.00	13.00	13.30	17.60
GRI - Base	2,050	7.4%	3.21	6.86	10.10	15.00	
GRI - DT 2011	(9)	0.0%	0.73	5.39	5.80	18.90	14.00
HC Green Development Fund LP	211	0.8%	(0.04)	(0.18)	(0.50)	(2.20)	16.20
HCB Interests II LP	119	0.4%	0.73	0.76	10.50	12.40	17.60
HCB LTH	496	1.8%	(3.33)	8.43	24.90	(11.70)	
HCC Interests LP	21	0.1%	(0.43)	(1.08)	(54.40)	(22.40)	(14.40)
HCM Holdings II LP	3	0.0%	(50.45)	(43.53)	(90.00)	(48.60)	(34.10)
HCR LTH LLC	367	1.3%	1.31	3.47	(1.40)	1.60	
Hearthstone Housing Partners III, LLC	40	0.1%	54.02	34.39	13.20	6.00	(0.20)
Hearthstone Path-of-Growth Fund, LLC	14	0.0%	(3.66)	(28.47)	(48.80)	(28.40)	(20.90)
Hines European Development Fund LP	4	0.0%	(1.66)	(4.42)	(6.40)		
IHP Investment Fund I, L.P.	70	0.3%	1.79	(0.33)	0.60	11.60	6.50
IHP Investment Fund II, L.P.	12	0.0%	(15.08)	(8.53)	(7.00)	10.20	10.40
IHP Investment Fund III, L.P.	343	1.2%	(1.83)	(0.86)	(10.30)	9.00	3.20
IMI - Base	5,337	19.2%	3.08	6.52	16.60	23.50	
IMP - Base	3,097	11.1%	1.99	2.72	5.80	12.00	
IMP - DT 2011	(18)	-0.1%	(0.03)	1.84	15.10	15.90	14.80
IMP - DT 2012 and Beyond	416	1.5%	3.22	8.71	23.50	19.20	

¹Partnership Market Values and Returns are based on the General Partners' September 30, 2016 financial statements.

Section V: Real Assets

Real Estate Partnerships Performance

	As of September 30, 2016		QTR	FYTD	1-Yr	3-Yr	5-Yr
	Ending Market Value (MM)	% Of Total Assets	Net Rate of Return	Net Rate of Return	Net Rate of Return	Net Rate of Return	Net Rate of Return
REAL ESTATE PARTNERSHIPS¹							
Institutional Core Multifamily Investors	538	1.9%	1.39	4.12	11.80	9.30	
Institutional Logistics Partners, LLC	669	2.4%	2.83	6.80	15.90	15.20	
Institutional Multifamily Partners	-318	-1.1%	(0.00)	2.86	13.30	13.30	19.50
KC 2011, LLC	198	0.7%	(2.61)	2.75	7.90	6.80	9.30
KSC Affordable Housing Investment Fund, LLC	89	0.3%	1.02	(3.01)	4.70	6.20	6.10
Land Management Company, LLC	466	1.7%	(9.51)	(10.55)	(1.60)		
National Office Partners, LLC (CWP)	-96	-0.3%	1.63	(7.78)	(6.70)	16.70	23.30
Newland National Partners IV, LLC	4	0.0%	(44.48)	(32.36)	(43.40)	(39.80)	(31.70)
ORA Multifamily Investments I, LLC	240	0.9%	8.39	10.34	15.50	26.10	
ORA Residential Investments I, L.P.	240	0.9%	8.07	6.93	18.70	26.00	29.50
Pacific Multifamily Investors, LLC	683	2.5%	3.55	6.25	11.30		
PERS-400 R STREET	18	0.1%	3.33	2.70	10.40	14.40	16.20
PLA Retail Fund I, LP	2	0.0%	(2.85)	(6.48)	(31.00)	(7.70)	0.10
PRECO Account Partnership III, LP	7	0.0%	(0.51)	(0.72)	(9.80)	(3.50)	(3.90)
Project Knight Note Receivable - Secondary Sale	898	3.2%	0.00	0.00			
Stockbridge Hollywood Park Co-Investors, LP	78	0.3%	3.19	0.78	5.80	19.90	13.90
Stockbridge Real Estate Fund II -B, LP	21	0.1%	0.80	(0.05)	(8.30)	10.50	10.80
TechCore, LLC	1,007	3.6%	2.62	9.30	14.10	15.10	
TPG Hospitality Investments IV, LLC	32	0.1%	(53.92)	(35.35)	(25.00)	(25.90)	
Whitney Ranch Venture, LLC	52	0.2%	9.83	14.39	(37.60)		
Xander Co-Investment	32	0.1%	(1.53)	(3.84)	(7.70)	(11.60)	(24.60)
Trailing Partnerships(Legacy)	3	0.0%					
Trailing Partnerships(Strategic)	5	0.0%					
TOTAL REAL ESTATE	27,860	100.0%	1.75	3.60	6.79	11.75	12.48

¹Partnership Market Values and Returns are based on the General Partners' September 30, 2016 financial statements.

Section V: Real Assets

Forestland and Infrastructure Partnerships

	As of September 30, 2016		QTR	FYTD	1-Yr	3-Yr	5-Yr
	Ending Market Value (MM)	% of Total Forestland Assets	Net Rate of Return	Net Rate of Return	Net Rate of Return	Net Rate of Return	Net Rate of Return
FORESTLAND PARTNERSHIPS¹							
Lincoln Timber L.P.	1,550	78.0%	0.36	0.04	-14.10	-3.00	-2.80
Sylvanus LLC	438	22.0%	0.57	0.91	12.00	1.40	2.10
TOTAL FORESTLAND	1,988	100%	0.40	0.23	(9.38)	(2.07)	(1.75)

	As of September 30, 2016		QTR	FYTD	1-Yr	3-Yr	5-Yr
	Ending Market Value (MM)	% of Total Infrastructure Assets	Net Rate of Return	Net Rate of Return	Net Rate of Return	Net Rate of Return	Net Rate of Return
INFRASTRUCTURE PARTNERSHIPS¹							
Alinda Infrastructure Fund I, L.P.	90	2.9%	0.64	-0.25	1.90	11.00	10.50
Alinda Infrastructure Fund II, L.P.	336	10.7%	-0.18	0.54	3.50	11.70	7.00
CIM Infrastructure Fund, L.P.	439	14.0%	-1.18	-0.16	-1.60	12.30	9.40
Carlyle Infrastructure Partners, L.P.	32	1.0%	3.00	1.10	10.10	4.60	3.90
Global Infrastructure Partners II, L.P. (GIP II)	212	6.8%	5.12	6.99	18.00	21.30	
Golden Reef Infrastructure Trust	0	0.0%					
Golden State Matterhorn, LLC	0	0.0%					
Harbert Gulf Pacific Power, LLC (HGPP)	759	24.2%	7.56	7.69	2.40		
Harbert Power Fund V, L.P. (HPF V)	48	1.5%	1.97	6.03	8.20		
North Haven Infrastructure Partners II LP	44	1.4%	0.96	2.59	1.50		
UBS International Infrastructure Fund II (B), L.P.	17	0.5%	-0.28	-9.78			
UBS International Infrastructure Fund II (C), L.P.	36	1.2%	-0.28	-9.76			
Infrastructure Direct Investments	1,124	35.8%	5.90	6.70	21.20	25.80	22.50
TOTAL INFRASTRUCTURE	3,137	100%	4.03	4.57	8.33	14.00	11.97

¹Partnership Market Values and Returns are based on the General Partners' September 30, 2016 financial statements.

Section VI
Inflation

PERIOD ENDING DECEMBER 31, 2016

Section VI: Inflation

Inflation Summary

INFLATION	December 31, 2016		1-Month		3-Months		FYTD			1-Yr		3-Yr		5-Yr		10-Yr	
	Ending Market Value (MM)	% of Total Assets	Net Rate of Return	Excess Bps	Net Rate of Return	Excess Bps	Net Rate of Return	Excess Bps	\$ Value Added (MM) ¹	Net Rate of Return	Excess Bps	Net Rate of Return	Excess Bps	Net Rate of Return	Excess Bps	Net Rate of Return	Excess Bps
CORE INFLATION LINKED BONDS	18,926	65.9	0.38	(13)	(4.35)	(11)	(2.25)	(8)	(12)	3.98	(22)	1.18	34	1.11	24	-	-
INTERNAL COMMODITIES PERF ACCTG	5,333	18.6	4.73	1	5.83	7	1.14	(23)	(9)	10.91	(45)	(20.43)	17	(13.31)	(18)	-	-
TACTICAL INFLATION ASSETS	4,462	15.5	2.70	39	2.21	56	(4.04)	(420)	(139)	9.91	147	(8.40)	91	-	-	-	-
TOTAL INFLATION²	28,721	100.0	1.52	1	(1.60)	2	(1.70)	(64)	(139)	6.32	(0)	(3.65)	83	(2.20)	26	-	-

¹ Value Added is the excess bps converted into a dollar value by multiplying the excess bps by the fiscal year-to-date average market value.

² Policy Benchmark for Total Inflation is a static 75/25% ratio. Actual program weights differ significantly resulting in an un-intuitive degree of excess performance.

TACTICAL INFLATION ASSETS	December 31, 2016		1-Month		3-Months		FYTD			1-Yr		3-Yr		5-Yr		10-Yr	
	Ending Market Value (MM)	% of Total Assets	Net Rate of Return	Excess Bps	Net Rate of Return	Excess Bps	Net Rate of Return	Excess Bps	\$ Value Added (MM) ¹	Net Rate of Return	Excess Bps	Net Rate of Return	Excess Bps	Net Rate of Return	Excess Bps	Net Rate of Return	Excess Bps
TACTICAL COMMODITIES	2,497	56.0	5.66	95	7.94	218	(7.46)	(883)	(104)	9.82	(155)	(20.93)	(33)	-	-	-	-
TACTICAL TIPS	1,965	44.0	(0.08)	1	(2.44)	(3)	(1.55)	(9)	(2)	4.33	(35)	2.10	(16)	-	-	-	-
TACTICAL INFLATION ASSETS	4,462	100.0	2.70	39	2.21	56	(4.04)	(420)	(139)	9.91	147	(8.40)	91	-	-	-	-

¹ Value Added is the excess bps converted into a dollar value by multiplying the excess bps by the fiscal year-to-date average market value.

Section VII
Liquidity

PERIOD ENDING DECEMBER 31, 2016

Section VII: Liquidity
Liquidity Summary

LIQUIDITY	December 31, 2016		1-Month		3-Months		FYTD			1-Yr		3-Yr		5-Yr		10-Yr	
	Ending Market Value (MM)	% of Total Assets	Net Rate of Return	Excess Bps	Net Rate of Return	Excess Bps	Net Rate of Return	Excess Bps	\$ Value Added (MM) ¹	Net Rate of Return	Excess Bps	Net Rate of Return	Excess Bps	Net Rate of Return	Excess Bps	Net Rate of Return	Excess Bps
PERS INTERNAL SHORT TERM PORTFOLIO	13,179	100.0	0.06	0	0.15	0	0.30	4	4	0.57	10	0.33	10	0.24	8	1.00	6
TOTAL LIQUIDITY	13,179	100.0	0.06	1	0.15	6	0.30	12	15	0.55	22	0.84	(35)	0.44	(30)	1.49	(16)

¹ Value Added is the excess bps converted into a dollar value by multiplying the excess bps by the fiscal year-to-date average market value.

Section VIII

Absolute Return Strategies

PERIOD ENDING DECEMBER 31, 2016

Section VIII: Absolute Return Strategies

ARS Equitization and Total ARS Summary

ABSOLUTE RETURN EQUITIZATION STRATEGIES	December 31, 2016		1-Month		3-Months		FYTD			1-Yr		3-Yr		5-Yr		10-Yr	
	Ending Market Value (MM)	% of Total Assets	Net Rate of Return	Excess Bps	Net Rate of Return	Excess Bps	Net Rate of Return	Excess Bps	\$ Value Added (MM) ¹	Net Rate of Return	Excess Bps	Net Rate of Return	Excess Bps	Net Rate of Return	Excess Bps	Net Rate of Return	Excess Bps
TOTAL ARS	280	100.0	0.76	28	(3.54)	(482)	(7.33)	(991)	(33)	(6.50)	(1,229)	(0.01)	(539)	2.42	(291)	1.76	(473)
ARS OVERLAY PORTFOLIO ²																	
TOTAL ARS WITH EQUITIZATION	280	100.0	0.76	(143)	(3.54)	(516)	(7.33)	(1,486)	(49)	(6.50)	(1,550)	(0.01)	(372)	7.41	(235)	4.16	(445)

ABSOLUTE RETURN STRATEGIES SUMMARY ³	December 31, 2016		1-Month		3-Months		FYTD			1-Yr		3-Yr		5-Yr		10-Yr	
	Ending Market Value (MM)	% of Total Assets	Net Rate of Return	Excess Bps	Net Rate of Return	Excess Bps	Net Rate of Return	Excess Bps	\$ Value Added (MM) ¹	Net Rate of Return	Excess Bps	Net Rate of Return	Excess Bps	Net Rate of Return	Excess Bps	Net Rate of Return	Excess Bps
DIRECT INVESTMENTS	277	98.9	0.79	31	(3.50)	(477)	(7.36)	(994)	(32)	(6.23)	(1,202)	(0.04)	(542)	2.40	(293)	2.07	(442)
FUND OF HEDGE FUNDS	2	0.7	(0.48)	(95)	(6.44)	(771)	(7.13)	(971)	(0)	(14.07)	(1,986)	0.46	(492)	2.71	(263)	1.30	(520)
ARS TRANSITION	1	0.4	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
TOTAL ARS	280	100.0	0.76	28	(3.54)	(482)	(7.33)	(991)	(33)	(6.50)	(1,229)	(0.01)	(539)	2.42	(291)	1.76	(473)

ABSOLUTE RETURN STRATEGIES SUMMARY ³ (Preliminary month-end returns provided by International Fund Services (IFS))	December 31, 2016		1-Month		3-Months		FYTD			1-Yr		3-Yr		5-Yr		10-Yr	
	Ending Market Value (MM)	% of Total Assets	Net Rate of Return	Excess Bps	Net Rate of Return	Excess Bps	Net Rate of Return	Excess Bps	\$ Value Added (MM) ¹	Net Rate of Return	Excess Bps	Net Rate of Return	Excess Bps	Net Rate of Return	Excess Bps	Net Rate of Return	Excess Bps
DIRECT INVESTMENTS	275	99.2	(0.64)	(111)	(0.15)	(142)	(7.18)	(975)		(9.86)	(1,565)	(0.63)	(600)	2.17	(316)	2.05	(445)
FUND OF HEDGE FUNDS	2	0.8	-	(47)	(12.41)	(1,368)	(13.05)	(1,562)		(17.65)	(2,344)	(3.10)	(848)	0.79	(454)	-	(617)
TOTAL ARS	277	100.0	(0.64)	(111)	(0.25)	(152)	(7.17)	(974)		(0.66)	(1,566)	(0.66)	(604)	2.20	(313)	1.73	(476)

¹ Value Added is the excess bps converted into a dollar value by multiplying the excess bps by the fiscal year-to-date average market value.

² Portfolio market value and returns roll directly to Total Fund and the Absolute Return Equitization strategy. The portfolio funded October 2011 and the returns are not shown on the report at the portfolio level because the returns are not meaningful (N/M).

³ Absolute Return Strategies(ARS) Program Performance Review is based on the Absolute Total Return Strategy and not the Absolute Return Equitization Strategy.

Section VIII: Absolute Return Strategies

Direct Investments

	December 31, 2016		1-Month	3-Months	FYTD	1-Yr	3-Yr	5-Yr	10-Yr
	Ending Market Value (MM)	% of Total Assets	Net Rate of Return	Net Rate of Return	Net Rate of Return	Net Rate of Return	Net Rate of Return	Net Rate of Return	Net Rate of Return
DIRECT INVESTMENTS (Preliminary month-end returns provided by IFS)									
Black River Commodity Multi - Strategy Fund LLC	0	0.1	0.00	(36.13)	(74.91)	(89.14)	(64.46)	(49.41)	-29.851
Brookside Capital Partners Fund, L.P.	2	0.8	0.00	(5.95)	4.94	10.78	(1.06)	6.58	8.54
Carlyle Multi Strat Partners LP	1	0.4	0.00	0.00	4.98	(9.44)	2.35	1.49	-
Chatham Eureka Fund LP	221	80.3	(2.17)	(2.18)	(12.99)	(16.05)	(2.15)	3.05	-
Deephaven Global Multi-Strategy Fund LLC	0	0.2	0.00	(4.57)	2.08	(0.63)	(6.52)	17.67	3.97
OZ Domestic Partners II, L.P.	6	2.2	0.75	(3.26)	(6.66)	(6.25)	(1.63)	0.83	3.72857
OZ Eureka Fund, LP	43	15.7	7.66	11.26	19.07	21.23	10.12	12.65	-
SuttonBrook Eureka Fund LP	1	0.3	0.00	(0.03)	(0.22)	(72.08)	(33.36)	(40.27)	-
TOTAL DIRECT INVESTMENTS	275	100.0	(0.64)	(0.15)	(7.18)	(9.86)	(0.63)	2.17	2.05

Section VIII: Absolute Return Strategies

Fund of Funds

FUND OF FUNDS (Preliminary month-end returns provided by IFS)	December 31, 2016		1-Month	3-Months	FYTD	1-Yr	3-Yr	5-Yr	10-Yr
	Ending Market Value	% of Total Assets	Net Rate of Return	Net Rate of Return	Net Rate of Return	Net Rate of Return	Net Rate of Return	Net Rate of Return	Net Rate of Return
STUBS FOF	0	20.9		(20.13)	(20.72)	(30.21)	73.30	39.90	-
EUROPEAN FUND OF FUNDS	0	10.2		(45.77)	(48.10)	(51.82)	(20.43)	(10.71)	-
FUND OF EMERGING HEDGE FUNDS	1	68.9		(0.04)	(0.30)	6.08	0.58	3.78	-
TOTAL FUND OF FUNDS	2	100.0	-	(12.41)	(13.05)	(17.65)	(3.10)	0.79	-

STUBS FOF (Preliminary month-end returns provided by IFS)	December 31, 2016		1-Month	3-Months	FYTD	1-Yr	3-Yr	5-Yr	10-Yr
	Ending Market Value	% of Total Assets	Net Rate of Return	Net Rate of Return	Net Rate of Return	Net Rate of Return	Net Rate of Return	Net Rate of Return	Net Rate of Return
AIS Highbury Liquidating SPV Fund, LP	0	100.0		(20.02)	(20.63)	(30.99)	162.64	19.64	-
TOTAL STUB FUND OF FUNDS	0	100.0	-	(20.13)	(20.72)	(30.21)	73.30	39.90	-

FUND OF EMERGING HEDGE FUNDS (Preliminary month-end returns provided by IFS)	December 31, 2016		1-Month	3-Months	FYTD	1-Yr	3-Yr	5-Yr	10-Yr
	Ending Market Value	% of Total Assets	Net Rate of Return	Net Rate of Return	Net Rate of Return	Net Rate of Return	Net Rate of Return	Net Rate of Return	Net Rate of Return
Rock Creek 1848 Fund, LP	1	100.0		(0.04)	(0.07)	7.31	(1.66)	2.78	-
TOTAL FUND OF EMERGING HEDGE FUNDS	1	100.0	-	(0.04)	(0.30)	6.08	0.58	3.78	-

Section IX
Total Fund Portfolios

PERIOD ENDING DECEMBER 31, 2016

Section IX: Total Fund Portfolios

Multi-Asset Class and Total Plan Level Portfolios

	December 31, 2016		1-Month		3-Months		FYTD		1-Yr		3-Yr		5-Yr		10-Yr	
	Ending Market Value (MM)	% of Total Assets	Net Rate of Return	Excess Bps	Net Rate of Return	Excess Bps	Net Rate of Return	Excess Bps	Net Rate of Return	Excess Bps	Net Rate of Return	Excess Bps	Net Rate of Return	Excess Bps	Net Rate of Return	Excess Bps
MULTI-ASSET CLASS																
STANDARD LIFE INVESTMENTS MAC LP	578	47.7	2.11	150	2.22	40	3.40	(28)	(3.59)	(1,109)	2.07	(543)	-	-	-	-
AQR MULTI-ASSET CLASS FUND LP	634	52.3	2.45	184	(0.56)	(239)	1.53	(215)	9.73	223	6.87	(63)	-	-	-	-
TOTAL MULTI-ASSET CLASS	1,212	100.0	2.29	168	0.75	(108)	2.41	(127)	2.95	(455)	4.48	(302)				

	December 31, 2016		1-Month		3-Months		FYTD		1-Yr		3-Yr		5-Yr		10-Yr	
	Ending Market Value (MM)		Net Rate of Return	Excess Bps	Net Rate of Return	Excess Bps	Net Rate of Return	Excess Bps	Net Rate of Return	Excess Bps	Net Rate of Return	Excess Bps	Net Rate of Return	Excess Bps	Net Rate of Return	Excess Bps
PLAN LEVEL PORTFOLIOS																
FIXED INCOME PLAN LEVEL TRANSITION	0		-	-	-	-	-	-	-	-	-	-	-	-	-	-
GLOBAL EQUITY PLAN LEVEL TRANSITION	0		-	-	-	-	-	-	-	-	-	-	-	-	-	-
INFLATION PLAN LEVEL TRANSITION	(0)		-	-	-	-	-	-	-	-	-	-	-	-	-	-
MHLP PERSONAL LOANS	9		(0.50)	(48)	(0.26)	175	1.24	267	4.29	251	5.09	207	-	-	-	-

Section X

Affiliate Investment Programs

PERIOD ENDING DECEMBER 31, 2016

Section X: Affiliate Investment Programs
Affiliate Investment Programs Summary

	December 31, 2016		1-Month		3-Months		FYTD			1-Yr		3-Yr		5-Yr		10-Yr	
	Ending Market Value (MM)	% of Total Assets	Net Rate of Return	Excess Bps	Net Rate of Return	Excess Bps	Net Rate of Return	Excess Bps	\$ Value Added (MM) ¹	Net Rate of Return	Excess Bps	Net Rate of Return	Excess Bps	Net Rate of Return	Excess Bps	Net Rate of Return	Excess Bps
DEFINED BENEFIT, HEALTH, AND OPEB PLANS																	
JUDGES' RETIREMENT FUND	41	0.3	0.06	2	0.16	8	0.31	13	0	0.55	22	0.26	12	0.17	5	0.95	15
JUDGES' RETIREMENT SYSTEM II FUND	1,218	9.2	1.59	4	(1.15)	16	2.27	36	4	7.63	44	3.62	15	7.92	28	4.78	(1)
LEGISLATORS' RETIREMENT SYSTEM FUND	115	0.9	1.01	4	(2.37)	11	(0.21)	32	0	6.46	44	3.63	16	5.56	42	5.18	25
HEALTH CARE FUND	435	3.3	0.14	(1)	(2.98)	(1)	(2.55)	(2)	(0)	2.63	(2)	3.24	21	2.90	67	4.55	21
LONG-TERM CARE FUND	4,226	31.8	1.04	(4)	(3.51)	(7)	(2.28)	(13)	(6)	5.18	(21)	3.21	12	4.38	28	3.70	8
CERBT STRATEGY 1 FUND	4,866	36.6	1.73	7	(0.92)	17	2.65	36	16	7.58	66	3.46	38	7.84	35	-	-
CERBT STRATEGY 2 FUND	743	5.6	1.40	9	(1.87)	16	0.90	36	3	6.96	69	3.43	29	6.58	35	-	-
CERBT STRATEGY 3 FUND	226	1.7	1.01	5	(2.50)	11	(0.45)	32	1	6.24	59	3.56	30	5.25	34	-	-
DEFERRED COMPENSATION 457 PLAN																	
CALPERS TARGET INCOME FUND	84	0.6	0.51	(2)	(1.33)	(7)	(0.04)	(19)	(0)	2.86	(28)	1.98	(28)	3.74	(19)	-	-
CALPERS TARGET 2015 FUND	77	0.6	0.51	(2)	(1.33)	(7)	(0.04)	(19)	(0)	2.86	(29)	1.98	(28)	5.04	(34)	-	-
CALPERS TARGET 2020 FUND	114	0.9	0.65	(3)	(1.13)	(8)	0.57	(22)	(0)	3.50	(29)	2.00	(29)	5.69	(35)	-	-
CALPERS TARGET 2025 FUND	84	0.6	0.98	(3)	(0.74)	(8)	1.71	(27)	(0)	4.64	(27)	2.13	(28)	6.51	(39)	-	-
CALPERS TARGET 2030 FUND	81	0.6	1.24	(3)	(0.39)	(9)	2.57	(31)	(0)	5.65	(25)	2.21	(28)	7.27	(43)	-	-
CALPERS TARGET 2035 FUND	47	0.4	1.50	(3)	(0.07)	(9)	3.48	(36)	(0)	6.61	(21)	2.32	(27)	7.91	(49)	-	-
CALPERS TARGET 2040 FUND	41	0.3	1.77	(3)	0.26	(9)	4.39	(42)	(0)	7.63	(16)	2.39	(26)	8.30	(49)	-	-
CALPERS TARGET 2045 FUND	16	0.1	1.97	(3)	0.55	(9)	4.99	(45)	(0)	8.28	(13)	2.51	(26)	8.41	(48)	-	-
CALPERS TARGET 2050 FUND	7	0.1	1.97	(4)	0.55	(9)	4.99	(45)	(0)	8.28	(14)	2.51	(26)	8.41	(49)	-	-
CALPERS TARGET 2055 FUND	3	0.0	1.97	(3)	0.55	(9)	4.99	(45)	(0)	8.28	(14)	2.53	(24)	-	-	-	-
STATE STREET STIF	108	0.8	0.03	(2)	0.07	(2)	0.12	(7)	(0)	0.18	(15)	-	-	-	-	-	-
STATE STREET US SHORT TERM BOND	40	0.3	0.03	(3)	(0.51)	(12)	(0.63)	(27)	(0)	0.75	(54)	0.38	(52)	-	-	-	-
STATE STREET US BOND INDEX SL	62	0.5	0.11	(4)	(3.09)	(11)	(2.74)	(21)	(0)	2.23	(41)	2.72	(31)	-	-	-	-
STATE STREET REAL ASSET NL	5	0.0	1.91	(8)	0.31	(8)	0.93	(33)	(0)	13.76	(86)	(1.37)	(52)	-	-	-	-
STATE STREET RUSSELL ALL CAP INDEX SL	480	3.6	1.91	(4)	4.13	(8)	8.60	(19)	(1)	12.34	(40)	8.10	(33)	-	-	-	-
STATE STREET GBL ALL CAP EQ EX-US SL	55	0.4	2.45	(5)	(1.67)	(9)	4.55	(82)	(0)	4.82	42	(1.63)	(19)	-	-	-	-
SUPPLEMENTAL CONTRIBUTION PLAN																	
CALPERS TARGET INCOME FUND	20	0.1	0.50	(4)	(1.36)	(11)	(0.11)	(26)	(0)	2.73	(42)	1.84	(41)	3.67	(25)	-	-
CALPERS TARGET 2015 FUND	18	0.1	0.50	(4)	(1.36)	(11)	(0.11)	(26)	(0)	2.73	(42)	1.85	(41)	4.97	(41)	-	-
CALPERS TARGET 2020 FUND	24	0.2	0.64	(4)	(1.16)	(11)	0.50	(28)	(0)	3.36	(43)	1.86	(42)	5.62	(43)	-	-
CALPERS TARGET 2025 FUND	21	0.2	0.96	(4)	(0.77)	(11)	1.64	(34)	(0)	4.50	(40)	2.00	(41)	6.44	(45)	-	-
CALPERS TARGET 2030 FUND	15	0.1	1.23	(4)	(0.43)	(12)	2.51	(38)	(0)	5.52	(39)	2.07	(42)	7.15	(55)	-	-
CALPERS TARGET 2035 FUND	7	0.1	1.49	(4)	(0.10)	(12)	3.41	(43)	(0)	6.48	(35)	2.21	(38)	-	-	-	-
CALPERS TARGET 2040 FUND	3	0.0	1.76	(4)	0.23	(12)	4.32	(49)	(0)	7.49	(30)	2.25	(40)	8.23	(56)	-	-
CALPERS TARGET 2045 FUND	1	0.0	1.96	(5)	0.52	(12)	4.93	(52)	(0)	8.14	(27)	2.40	(36)	-	-	-	-
CALPERS TARGET 2050 FUND	0	0.0	1.96	(5)	0.51	(12)	4.92	(52)	(0)	8.29	(13)	2.43	(33)	-	-	-	-
CALPERS TARGET 2055 FUND	0	0.0	1.96	(5)	0.54	(10)	4.95	(49)	(0)	8.17	(25)	-	-	-	-	-	-
STATE STREET STIF	1	0.0	0.02	(3)	0.03	(5)	0.05	(13)	(0)	0.05	(28)	-	-	-	-	-	-
STATE STREET US SHORT TERM BOND	0	0.0	0.02	(4)	(0.54)	(16)	(0.70)	(33)	(0)	0.62	(67)	0.25	(65)	-	-	-	-
STATE STREET US BOND INDEX SL	0	0.0	0.09	(5)	(3.12)	(15)	(2.81)	(28)	(0)	2.10	(55)	2.59	(44)	-	-	-	-
STATE STREET REAL ASSET NL	0	0.0	1.90	(9)	0.28	(11)	0.87	(39)	(0)	13.62	(100)	(1.50)	(64)	-	-	-	-
STATE STREET RUSSELL ALL CAP INDEX SL	3	0.0	1.90	(5)	4.10	(11)	8.53	(26)	(0)	12.19	(54)	7.96	(47)	-	-	-	-
STATE STREET GBL ALL CAP EQ EX-US SL	0	0.0	2.44	(6)	(1.70)	(12)	4.48	(89)	(0)	4.69	28	(1.76)	(31)	-	-	-	-
TOTAL AFFILIATE INVESTMENT PROGRAMS	13,288	100.0															

¹ Value Added is the excess bps converted into a dollar value by multiplying the excess bps by the fiscal year-to-date average market value.

Section X: Affiliate Investment Programs

Judges' II Retirement Fund, Legislators' Retirement System Fund and Long-Term Care Fund

	December 31, 2016		1-Month		3-Months		FYTD			1-Yr		3-Yr		5-Yr		10-Yr	
	Ending Market Value (MM)	% of Total Assets	Net Rate of Return	Excess Bps	Net Rate of Return	Excess Bps	Net Rate of Return	Excess Bps	\$ Value Added (MM) ¹	Net Rate of Return	Excess Bps	Net Rate of Return	Excess Bps	Net Rate of Return	Excess Bps	Net Rate of Return	Excess Bps
JUDGES' RETIREMENT SYSTEM II FUND																	
JRS II CASH	0	0.0	0.06	2	0.17	9	0.32	14	0	0.55	23	0.66	52	0.41	29	1.07	27
JRS II COMMODITIES	37	3.0	4.73	1	5.84	7	1.56	20	0	11.81	44	(20.27)	33	(13.20)	(8)	-	-
JRS II DOMESTIC FIXED INCOME	418	34.3	0.27	5	(4.91)	16	(3.56)	67	3	5.74	141	5.37	51	3.98	99	6.31	57
JRS II GLOBAL EQUITY	603	49.5	2.16	(3)	1.72	11	7.69	16	1	9.19	19	3.80	9	10.38	13	3.93	7
JRS II REITS	100	8.2	3.04	(1)	(5.34)	5	(3.95)	7	0	5.02	4	6.79	1	10.33	(0)	1.25	34
JRS II TIPS	60	4.9	(0.10)	(0)	(2.46)	(5)	(1.53)	(6)	(0)	4.59	(10)	2.10	(16)	0.84	(5)	-	-
TOTAL JUDGES' RETIREMENT SYSTEM II FUND	1,218	100.0	1.59	4	(1.15)	16	2.27	36	4	7.63	44	3.62	15	7.92	28	4.78	(1)

	December 31, 2016		1-Month		3-Months		FYTD			1-Yr		3-Yr		5-Yr		10-Yr	
	Ending Market Value (MM)	% of Total Assets	Net Rate of Return	Excess Bps	Net Rate of Return	Excess Bps	Net Rate of Return	Excess Bps	\$ Value Added (MM) ¹	Net Rate of Return	Excess Bps	Net Rate of Return	Excess Bps	Net Rate of Return	Excess Bps	Net Rate of Return	Excess Bps
LEGISLATORS' RETIREMENT SYSTEM FUND																	
LRS CASH	0	0.0	0.06	2	0.16	8	0.49	31	0	0.72	39	0.33	20	0.21	9	0.97	17
LRS COMMODITIES	3	3.0	4.73	1	5.84	7	1.57	20	0	11.87	50	(20.28)	32	(13.21)	(8)	-	-
LRS DOMESTIC FIXED INCOME	45	39.0	0.27	5	(4.91)	16	(3.56)	67	0	5.73	140	5.38	53	3.98	100	6.30	57
LRS GLOBAL EQUITY	27	23.7	2.16	(3)	1.72	11	7.69	16	0	9.22	22	3.82	11	10.39	14	4.03	7
LRS REITS	9	8.2	3.04	(1)	(5.32)	7	(3.93)	9	0	5.05	6	6.80	2	10.33	0	-	-
LRS TIPS	30	26.1	(0.10)	(0)	(2.46)	(5)	(1.52)	(5)	(0)	4.60	(9)	2.12	(14)	0.85	(5)	4.39	3
TOTAL LEGISLATORS' RETIREMENT SYSTEM FUND	115	100.0	1.01	4	(2.37)	11	(0.21)	32	0	6.46	44	3.63	16	5.56	42	5.18	25

	December 31, 2016		1-Month		3-Months		FYTD			1-Yr		3-Yr		5-Yr		10-Yr	
	Ending Market Value (MM)	% of Total Assets	Net Rate of Return	Excess Bps	Net Rate of Return	Excess Bps	Net Rate of Return	Excess Bps	\$ Value Added (MM) ¹	Net Rate of Return	Excess Bps	Net Rate of Return	Excess Bps	Net Rate of Return	Excess Bps	Net Rate of Return	Excess Bps
LONG-TERM CARE FUND																	
LTC CASH	0	0.0	0.06	2	0.16	8	0.27	9	0	0.55	22	0.11	(3)	0.07	(5)	0.90	10
LTC COMMODITIES	235	5.6	4.67	(4)	5.69	(7)	1.29	(8)	(0)	11.70	33	(20.53)	7	(12.93)	19	-	-
LTC DOMESTIC FIXED INCOME	2,586	61.2	0.20	(1)	(4.98)	9	(4.18)	5	1	4.28	(6)	4.87	2	3.27	29	5.93	21
LTC GLOBAL EQUITY	633	15.0	2.18	2	1.34	7	7.08	17	1	8.73	37	3.54	30	10.02	20	3.98	12
LTC REITS	516	12.2	3.04	7	(5.80)	19	(4.88)	35	2	3.17	80	6.14	74	9.61	53	0.70	38
LTC TIPS	255	6.0	(0.11)	(1)	(2.43)	(2)	(1.47)	0	0	4.66	(3)	2.25	(0)	0.89	(1)	4.41	5
TOTAL LONG-TERM CARE FUND	4,226	100.0	1.04	(4)	(3.51)	(7)	(2.28)	(13)	(6)	5.18	(21)	3.21	12	4.38	28	3.70	8

Section X: Affiliate Investment Programs

California Employers' Retirement Benefit Trust (CERBT) Fund

	December 31, 2016		1-Month		3-Months		FYTD			1-Yr		3-Yr		5-Yr		10-Yr	
	Ending Market Value (MM)	% of Total Assets	Net Rate of Return	Excess Bps	Net Rate of Return	Excess Bps	Net Rate of Return	Excess Bps	\$ Value Added (MM) ¹	Net Rate of Return	Excess Bps	Net Rate of Return	Excess Bps	Net Rate of Return	Excess Bps	Net Rate of Return	Excess Bps
CERBT STRATEGY 1																	
CERBT S1 CASH	7	0.1	0.07	2	0.33	25	0.46	28	0	0.67	35	0.27	13	0.17	5	-	-
CERBT S1 COMMODITIES	148	3.0	4.73	1	5.83	7	1.53	16	0	11.03	(34)	(20.56)	4	(13.40)	(27)	-	-
CERBT S1 DOMESTIC FIXED INCOME	1,326	27.2	0.27	6	(4.91)	17	(3.58)	65	9	5.69	136	5.38	53	3.98	100	-	-
CERBT S1 GLOBAL EQUITY	2,751	56.5	2.19	3	1.36	9	7.12	21	6	8.83	47	3.61	37	10.05	28	-	-
CERBT S1 REITs	397	8.2	3.04	7	(5.81)	18	(4.88)	35	1	3.18	81	6.18	78	9.63	55	-	-
CERBT S1 TIPS	238	4.9	(0.10)	(0)	(2.46)	(5)	(1.52)	(6)	(0)	4.59	(9)	2.11	(15)	0.85	(5)	-	-
CERBT STRATEGY 1	4,866	100.0	1.73	7	(0.92)	17	2.65	36	18	7.58	66	3.46	38	7.84	35	-	-

	December 31, 2016		1-Month		3-Months		FYTD			1-Yr		3-Yr		5-Yr		10-Yr	
	Ending Market Value (MM)	% of Total Assets	Net Rate of Return	Excess Bps	Net Rate of Return	Excess Bps	Net Rate of Return	Excess Bps	\$ Value Added (MM) ¹	Net Rate of Return	Excess Bps	Net Rate of Return	Excess Bps	Net Rate of Return	Excess Bps	Net Rate of Return	Excess Bps
CERBT STRATEGY 2																	
CERBT S2 CASH	0	0.0	0.07	3	0.20	12	0.36	18	0	0.60	28	0.31	17	0.19	7	-	-
CERBT S2 COMMODITIES	23	3.0	4.64	(7)	5.81	5	1.46	9	0	11.15	(21)	(20.51)	9	(13.36)	(23)	-	-
CERBT S2 DOMESTIC FIXED INCOME	292	39.3	0.30	8	(4.89)	19	(3.55)	68	2	5.73	140	5.38	53	3.98	100	-	-
CERBT S2 GLOBAL EQUITY	294	39.6	2.20	4	1.37	10	7.13	23	1	8.77	41	3.57	33	10.02	25	-	-
CERBT S2 REITs	61	8.2	3.09	12	(5.76)	23	(4.83)	39	0	3.21	85	6.15	74	9.60	53	-	-
CERBT S2 TIPS	73	9.9	(0.09)	0	(2.45)	(4)	(1.52)	(5)	(0)	4.59	(9)	2.07	(19)	0.82	(7)	-	-
CERBT STRATEGY 2	743	100.0	1.40	9	(1.87)	16	0.90	36	3	6.96	69	3.43	29	6.58	35	-	-

	December 31, 2016		1-Month		3-Months		FYTD			1-Yr		3-Yr		5-Yr		10-Yr	
	Ending Market Value (MM)	% of Total Assets	Net Rate of Return	Excess Bps	Net Rate of Return	Excess Bps	Net Rate of Return	Excess Bps	\$ Value Added (MM) ¹	Net Rate of Return	Excess Bps	Net Rate of Return	Excess Bps	Net Rate of Return	Excess Bps	Net Rate of Return	Excess Bps
CERBT STRATEGY 3																	
CERBT S3 CASH	1	0.3	0.06	2	0.13	5	0.30	12	0	0.54	22	0.42	28	0.26	14	-	-
CERBT S3 COMMODITIES	7	3.0	5.10	38	6.27	51	1.92	55	0	11.74	38	(20.30)	30	(13.23)	(10)	-	-
CERBT S3 DOMESTIC FIXED INCOME	88	39.0	0.16	(6)	(5.02)	5	(3.68)	55	0	5.59	126	5.28	43	3.93	94	-	-
CERBT S3 GLOBAL EQUITY	54	23.7	2.14	(1)	1.32	5	7.08	17	0	8.74	38	3.59	35	9.99	23	-	-
CERBT S3 REITs	18	8.1	2.80	(17)	(6.01)	(2)	(5.09)	14	0	2.92	56	6.10	69	9.55	48	-	-
CERBT S3 TIPS	59	25.9	(0.14)	(5)	(2.50)	(9)	(1.56)	(9)	(0)	4.56	(13)	2.13	(12)	0.86	(4)	-	-
TOTAL CERBT STRATEGY 3	226	100.0	1.01	5	(2.50)	11	(0.45)	32	1	6.24	59	3.56	30	5.25	34	-	-

¹ Value Added is the Excess BPS converted into a dollar value by multiplying the excess bps by the fiscal year-to-date average market value.

Section XI
Other Programs

PERIOD ENDING DECEMBER 31, 2016

Section XI: Other Programs

Securities Lending Program, Short Term Liquidity, and Terminated Agency Pool Performance Summary

	December 31, 2016		1-Month		3-Months		FYTD			1-Yr		3-Yr		5-Yr		10-Yr	
	Ending Market Value (MM)	% of Total Assets	Net Rate of Return	Excess Bps	Net Rate of Return	Excess Bps	Net Rate of Return	Excess Bps	\$ Value Added (MM) ¹	Net Rate of Return	Excess Bps	Net Rate of Return	Excess Bps	Net Rate of Return	Excess Bps	Net Rate of Return	Excess Bps
SECURITIES LENDING PROGRAM																	
CALPERS ESEC CASH COLLATERAL EXTERNAL COLLATERAL PORTFOLIO ²	4,322	41.4	0.03	(1)	(0.66)	(77)	(0.56)	(77)	(60)	(0.35)	(74)	0.12	(8)	0.13	(4)	-	-
INTERNAL SEC LEND PORTFOLIO	0	0.0					-	-	-	-	-	-	-	-	-	-	-
	6,116	58.6	0.07	1	0.18	4	0.37	10	3	0.70	23	0.40	19	0.33	21	-	-
SEC LENDING INT & EXT REINVEST	10,438	100.0	0.04	(0)	(0.15)	(27)	(0.03)	(26)	(29)	0.20	(22)	0.32	11	0.58	41	1.04	24

	December 31, 2016		1-Month		3-Months		FYTD			1-Yr		3-Yr		5-Yr		10-Yr	
	Ending Market Value (MM)		Net Rate of Return	Excess Bps	Net Rate of Return	Excess Bps	Net Rate of Return	Excess Bps	\$ Value Added (MM) ¹	Net Rate of Return	Excess Bps	Net Rate of Return	Excess Bps	Net Rate of Return	Excess Bps	Net Rate of Return	Excess Bps
SHORT TERM LIQUIDITY																	
SHORT TERM LIQUIDITY	4,543		0.07	1	0.17	3	0.33	6	5	0.60	13	0.32	9	0.23	7	-	-

	December 31, 2016		1-Month		3-Months		FYTD			1-Yr		3-Yr		5-Yr		10-Yr	
	Ending Market Value (MM)		Net Rate of Return	Excess Bps	Net Rate of Return	Excess Bps	Net Rate of Return	Excess Bps		Net Rate of Return	Excess Bps	Net Rate of Return	Excess Bps	Net Rate of Return	Excess Bps	Net Rate of Return	Excess Bps
TERMINATED AGENCY POOL																	
TERMINATED AGENCY POOL ³	131		(0.31)	-	(4.61)	-	(4.19)	-		5.04	-	5.25	-	-	-	-	-

¹ Value Added is the Excess BPS converted into a dollar value by multiplying the excess bps by the fiscal year-to-date average market value.

² Structured Investment Vehicle

³ Terminated Agency Pool funded July 2013

Current Emerging Manager and Transition Manager Performance Summary

September 30, 2016		1-Month		3-Months		FYTD		1-Yr		3-Yr		5-Yr		10-YR	
CURRENT EMERGING MANAGER SUMMARY ¹	Ending Market Value (MM)	Net Rate of Return	Excess Bps	Net Rate of Return	Excess Bps	Net Rate of Return	Excess Bps	Net Rate of Return	Excess Bps	Net Rate of Return	Excess Bps	Net Rate of Return	Excess Bps	Net Rate of Return	Excess Bps
PUBLIC EQUITY ²															
Funds Held in Fund of Fund Structure	2,874	1.33	12	7.30	8	7.30	8	15.21	93	N/A	N/A	N/A	N/A	N/A	N/A
<i>International</i>	1,710	2.03	81	7.27	4	7.27	4	17.62	334	N/A	N/A	N/A	N/A	N/A	N/A
<i>Domestic</i>	1,164	0.38	(84)	7.48	25	7.48	25	12.06	(222)	N/A	N/A	N/A	N/A	N/A	N/A
PRIVATE EQUITY ³															
Non Fund of Fund Investments	4,271	0.01	23	(0.73)	(310)	(0.73)	(310)	(3.27)	(368)	5.51	(547)	6.84	(411)	6.83	(573)
<i>International</i>	1,663	0.07	22	1.24	(113)	1.24	(113)	3.05	264	14.75	377	9.94	(101)	11.48	(108)
<i>Domestic</i>	2,608	(0.03)	22	(1.94)	(431)	(1.94)	(431)	(6.77)	(718)	1.48	(950)	4.94	(601)	5.56	(700)
REAL ESTATE															
Non Fund of Fund Investments	405	N/A		(5.35)	(718)	(5.35)	(718)	7.46	(162)	2.92	(850)	15.50	390	N/M	
<i>International</i>	N/A	N/A		N/A		N/A		N/A		N/A		N/A		N/A	
<i>Domestic</i>	405	N/A		(5.35)	(718)	(5.35)	(718)	7.46	(162)	2.92	(850)	15.50	390	N/M	
Funds Held in Fund of Fund Structure ⁴	302	N/A		6.40	457	6.40	263	19.63	1,055	21.31	989	N/A		N/A	
<i>International</i>	N/A	N/A		N/A		N/A		N/A		N/A		N/A		N/A	
<i>Domestic</i>	302	N/A		6.40	457	6.40	263	19.63	1,055	21.31	989	N/A		N/A	
TRANSITION MANAGER SUMMARY ¹															
PUBLIC EQUITY															
Non Fund of Fund Investments	2,333	0.85	(9)	5.39	(119)	5.39	(119)	7.78	(310)	N/A	N/A	N/A	N/A	N/A	N/A
<i>International</i>	1,713	0.85	(9)	4.18	(240)	4.18	(240)	8.79	(209)	N/A	N/A	N/A	N/A	N/A	N/A
<i>Domestic</i>	620	0.85	(9)	8.88	230	8.88	230	5.08	(580)	N/A	N/A	N/A	N/A	N/A	N/A

¹ The data contained in this report reflects funds identified as current emerging managers or transition managers and their performance as of 09/30/16. This report does not include fund of fund advisors except for private equity. Excess basis points were calculated using the appropriate asset class policy benchmark (unless otherwise footnoted). Performance for this report is shown as Time-Weighted Returns.

² Public Equity performance is performance of the Global Equity - Emerging Manager composite. Managers' performance is compared to a composite benchmark consisting of asset-weighted individual benchmarks of the total current emerging manager or transition manager universe (i.e. at the asset class level each emerging manager is compared to their respective benchmark, not the Public Equity policy benchmark).

³ Private Equity performance is the performance of the Private Equity - Emerging Manager composite/hierarchy.

⁴ N/M means that time weighted returns cannot be calculated because the partnership had negative net assets for at least one quarter during the time period.

Section XII

**Asset Class Benchmarks &
Definitions**

PERIOD ENDING DECEMBER 31, 2016

Section XII: Asset Class Benchmarks Definitions

Asset Class Benchmarks

BENCHMARK	BENCHMARK COMPONENTS As of October 1, 2016	BENCHMARK COMPONENTS July 1, 2015 - September 30, 2016	BENCHMARK COMPONENTS July 1, 2014 - June 30, 2015
Total Fund*	Growth 54% Income 20% Real Assets 13% Inflation 9% Liquidity 4%	Growth 61% Income 20% Real Assets 12% Inflation 6% Liquidity 1%	Growth 61% Income 19% Real Assets 12% Inflation 6% Liquidity 2%
Growth Benchmark	Public Equity 85.2% FSTE CalPERS Global (All-World, All Capitalization) customized to exclude Board directed divestments Private Equity 14.8% (67% FTSE U.S. TMI + 33% FTSE AW ex US TMI) + 3% 1 Qtr Lag	Public Equity 83.6% FSTE CalPERS Global (All-World, All Capitalization) customized to exclude Board directed divestments Private Equity 16.4% (67% FTSE U.S. TMI + 33% FTSE AW ex US TMI) + 3% 1 Qtr Lag	Public Equity 84% FSTE CalPERS Global (All-World, All Capitalization) customized to exclude Board directed divestments Private Equity 16% (67% FTSE U.S. TMI + 33% FTSE AW ex US TMI) + 3% 1 Qtr Lag
Income Benchmark	90% Barclays Long Liability + 10% Barclays International Fixed Income Index GDP weighted ex-US	90% Barclays Long Liability + 10% Barclays International Fixed Income Index GDP weighted ex-US	90% Barclays Long Liability + 10% Barclays International Fixed Income Index GDP weighted ex-US
Liquidity Benchmark	Liquidity Portfolio 100% 91-Day Treasury Bills	Liquidity Portfolio 100% 91-Day Treasury Bills	Liquidity Portfolio 75% Barclays Treasury 2 - 10-Yr Cash 25% 1-Month T-Bill
Real Assets Benchmark	Real Estate 84.6% NCREIF ODCE (Net) Infrastructure 7.7% CPI + 4% 1 Qtr Lag Forestland 7.7% NCREIF Timberland (Gross) 1 Qtr lag	Real Estate 83.4% NCREIF ODCE (Net) Infrastructure 8.3% CPI + 4% 1 Qtr Lag Forestland 8.3% NCREIF Timberland (Gross) 1 Qtr lag	Real Estate 83% NCREIF ODCE (Net) Infrastructure 8.5% CPI + 4% 1 Qtr Lag Forestland 8.5% NCREIF Timberland (Gross) 1 Qtr lag
Inflation Benchmark	Inflation Linked Bonds Portfolio 75% 67% Barclays Capital Global Inflation US + 33% Barclays Capital Global Inflation Linked Bonds (U.K., France, Italy, Germany, Canada) Commodities Portfolio 25% S&P GSCI 500 Total Return Index	Inflation Linked Bonds Portfolio 75% 67% Barclays Capital Global Inflation US + 33% Barclays Capital Global Inflation Linked Bonds (U.K., France, Italy, Germany, Canada) Commodities Portfolio 25% S&P GSCI 500 Total Return Index	Inflation Linked Bonds Portfolio 75% 67% Barclays Capital Global Inflation US + 33% Barclays Capital Global Inflation Linked Bonds (U.K., France, Italy, Germany, Canada) Commodities Portfolio 25% S&P GSCI 500 Total Return Index

*Benchmark linked to prior policy benchmarks from inception

Section XII: Asset Class Benchmarks Definitions

Total Fund Policy Benchmark Target Weights Transition Schedule

ASSET CLASS	Interim Targets¹	POLICY TARGETS
Global Equity	46%	47%
Private Equity	<u>8%</u>	<u>12%</u>
GROWTH	54%	59%
INCOME	20%	19%
Infrastructure/Forestland	2%	3%
Real Estate	<u>11%</u>	<u>11%</u>
REAL ASSETS	13%	14%
INFLATION	9%	6%
LIQUIDITY	4%	2%
TOTAL FUND POLICY	100%	100%

¹ Interim Strategic Targets were adopted by the Board and effective October 1, 2016.

Section XII: Asset Class Benchmarks

Affiliate Investment Program Benchmarks

Program	ASSET CLASS BENCHMARK	POLICY BENCHMARK
Judge's Retirement System Fund	Cash	91-day Treasury Bill
Judge's Retirement System II Fund	Global Equity U.S. Fixed Income TIPS Commodities REITs	CalPERS Custom FTSE Global Composite Barclays Long Liability Index Barclays U.S. TIPS Index, Series L S&P GSCI Total Return Daily FTSE EPRA/NAREIT Developed Index
Legislators' Retirement System Fund	Global Equity U.S. Fixed Income TIPS Commodities REITs	CalPERS Custom FTSE Global Composite Barclays Long Liability Index Barclays U.S. TIPS Index, Series L S&P GSCI Total Return Daily FTSE EPRA/NAREIT Developed Index
Public Employees' Health Care Fund	U.S. Fixed Income	Barclays U.S. Aggregate Bond Index
Long-Term Care Fund	Global Equity U.S. Fixed Income TIPS Commodities REITs	MSCI ACWI IMI (Net) Barclays Long Liability Index Barclays U.S. Treasury Inflation Protected Securities (TIPS) Index S&P GSCI Total Return Daily FTSE EPRA/NAREIT Developed Liquid (Net)
California Employers' Retiree Benefit Trust (CERBT) Funds 1, 2 & 3	Global Equity U.S. Fixed Income TIPS Commodities REITs	MSCI ACWI IMI (Net) Barclays Long Liability Index Barclays U.S. TIPS Index, Series L S&P GSCI Total Return Daily FTSE EPRA/NAREIT Developed Liquid (Net)

Section XII: Asset Class Benchmarks Definitions

Definitions

CASH IN – The total contributions, net of temporary returns of capital, made by CalPERS towards investments.

CASH OUT – The total distributions received by CalPERS from its investments.

CONTRIBUTIONS – The total amount of cash that has been called from limited partners.

DISTRIBUTIONS – The total amount of cash and stock that has been paid out to limited partners.

EXCESS BPS – Excess basis points (BPS) is the difference between the portfolio or composite return and the benchmark return multiplied by 100 to convert the Excess BPS to a whole number.

Excess BPS Calculation

Excess BPS = (Portfolio or Composite Return – Benchmark Return) x 100

INTERNAL RATE OF RETURN (IRR) – Dollar weighted rate of return that shows profitability as a percentage, showing the return on each dollar invested. IRR equates the present value of a partnership's estimated cash flows (CF) with the present value of the partnership's costs. Before fees (BF) IRR is calculated before all expensed fees such as Asset Management, Disposition, Incentive Fees, etc. After fees (AF) IRR is calculated after all expensed fees such as Asset Management, Disposition, Incentive Fees, etc.

IRR is the quarterly discount rate that makes the following relationship hold:

Present Value (inflows) = Present Value (investment costs)

IRR Calculation

$IRR = CFO + CF1 / (1+IRR) + CF2 / (1+IRR)^2 + CF3 / (1+IRR)^3 \dots CFn / (1+IRR)^n$

IRR COMPARED TO TIME WEIGHTED RATE OF RETURN (TWRR) - According to the Global Investment Performance Standards (GIPS); using IRR is a more accurate method than TWRR to measure private equity funds. An IRR reflects the effects of the timing of cash flows in a portfolio. The IRR is required for private equity assets because the firm controls the cash flows into and out of the portfolio. A time-weighted rate of return (TWRR) will not offer the best measure for an investor to compare returns between private equity funds because the TWRR will not capture the critical effects of cash flow management within the control of the private equity manager.

INVESTMENT MULTIPLE – A measure of a fund's performance showing the fund's total value as a multiple of its cost basis. The computation is as follows:

Investment Multiple Calculation

(Distributions + Market Value) / Contributions

MARKET VALUE: PRIVATE ASSETS - An opinion of value as of a certain date as stated by either the investment advisor or independent appraiser. Market value differs from amount funded or net investment in that the value includes unrealized gains or losses during the holding period.

MARKET VALUE: PUBLIC ASSETS AT SECURITY LEVEL - Ending market value in the performance system is calculated as the shares * price + income accrual. Market Value is generally computed by the Custodian based on CalPERS pricing hierarchy.

MARKET VALUE: PUBLIC ASSETS AT PORTFOLIO LEVEL - Ending market value in the performance system is calculated as the sum of the underlying securities' ending market values as described above +/- any open receivables or payables (uninvested assets). This is consistent with the Net Asset Value or Total Net Assets reported in accounting.

REALIZED GAIN OR LOSS – The gain or loss CalPERS realized from the disposition of an asset.

RATE OF RETURNS - CalPERS performance uses a daily Modified-Dietz methodology which is geometrically linked to produce time-weighted returns for longer periods.

Daily Return Calculation

Rate of Return_{Daily} = Dollar Value Added / Average Balance

Where:

Dollar Value Added = Gains/losses due to price appreciation and income

Average Balance = Beginning Market Value + Net Cash Flows

Daily returns are then geometrically linked to produce multi-period returns. The linking formula is as follows:

$$R_{Monthly} = ((1 + R_1) \times (1 + R_2) \times \dots \times (1 + R_n)) - 1$$

TOTAL EXPOSURE – Total Exposure is the current reported value of investments plus remaining amount of unfunded commitments.

UNREALIZED GAIN OR LOSS – The difference between an asset's cost and market value.

VALUE ADDED – Value Added is the excess BPS converted into a dollar value by multiplying the excess BPS multiplied by the fiscal year-to-date average market value.

Value Added Calculation

Value Added = ((Portfolio or Composite Return – Benchmark Return) x 100) x fiscal year-to-date average market value

DISCLAIMER - Only actively traded portfolios are listed in CIO Report

XII - 3 CalPERS CIO Performance Report

Prepared by:



CalPERS Investment Office
Investment Servicing
400 Q Street
Sacramento, CA. 95814