

## Public Employees Retirement Fund (PERF) Portfolio &amp; Partnership Report



As of June 30, 2019

## Public Equity Ending Market Value &amp; Performance Summary (By Portfolio)

Portfolio	Ending Market Value (mil)	10-Yr			5-Yr			3-Yr			1-Yr		
		Net Return	BM Return	Excess Bps	Net Return	BM Return	Excess Bps	Net Return	BM Return	Excess Bps	Net Return	BM Return	Excess Bps
Allianz - Global	\$ 2,600.4	-	-	-	-	-	-	10.9%	12.2%	(123)	2.2%	5.3%	(311)
Arrowstreet Global	\$ 8,794.5	-	-	-	-	-	-	14.3%	12.2%	217	7.5%	5.3%	226
Baillie Gifford	\$ 2,004.5	10.0%	7.1%	292	5.5%	2.8%	271	11.9%	9.8%	210	1.4%	1.8%	(37)
CalPERS AB Global	\$ 645.4	-	-	-	-	-	-	-	-	-	2.6%	3.1%	(55)
CalPERS Cap Weighted Transition	\$ 233.8	-	-	-	-	-	-	-	-	-	-	-	-
CalPERS Dev Small Cap Index	\$ 3,628.2	8.8%	8.4%	36	2.3%	1.9%	41	7.8%	7.3%	48	(6.3%)	(6.7%)	46
CalPERS EM	\$ 3,139.8	6.2%	6.1%	7	3.5%	3.3%	19	10.7%	10.5%	19	4.2%	4.1%	11
CalPERS EM Small Cap	\$ 571.1	-	-	-	2.1%	1.1%	104	8.6%	7.4%	113	(4.3%)	(5.4%)	110
CalPERS External Int'l Transition	\$ 0.1	-	-	-	-	-	-	-	-	-	-	-	-
CalPERS Fundamental Dev Int'l	\$ 1.9	-	-	-	-	-	-	-	-	-	-	-	-
CalPERS Fundamental EM	\$ 0.1	-	-	-	-	-	-	-	-	-	-	-	-
CalPERS GE Active Mgr Completion	\$ 176.7	-	-	-	-	-	-	-	-	-	-	-	-
CalPERS GE Cap Wtd Beta Replication	\$ 11,374.2	-	-	-	-	-	-	-	-	-	-	-	-
CalPERS Global All Cap AXA ESG	\$ 1,005.5	-	-	-	-	-	-	-	-	-	12.4%	5.3%	709
CalPERS Global All Cap AXA ESG - BR	\$ 103.0	-	-	-	-	-	-	-	-	-	-	-	-
CalPERS Global All Cap Quality	\$ 3,094.9	-	-	-	-	-	-	-	-	-	-	-	-
CalPERS Global All Cap Momentum	\$ 3,047.9	-	-	-	-	-	-	-	-	-	-	-	-
CalPERS Global All Cap Value	\$ 6,197.3	-	-	-	-	-	-	-	-	-	2.7%	5.3%	(257)
CalPERS Global All Cap Vol Adj	\$ 3,086.0	-	-	-	-	-	-	-	-	-	-	-	-
CalPERS Gbl Max Diversification	\$ 0.1	-	-	-	-	-	-	-	-	-	-	-	-
CalPERS Int'l Dev	\$ 24,377.5	7.3%	7.2%	12	2.8%	2.7%	12	9.9%	9.8%	13	1.3%	1.1%	15
CalPERS Lazard	\$ 927.9	-	-	-	-	-	-	-	-	-	2.5%	3.1%	(68)
CalPERS QMA	\$ 886.6	-	-	-	-	-	-	-	-	-	0.6%	3.1%	(256)
CalPERS QSI	\$ 920.5	-	-	-	-	-	-	-	-	-	4.1%	5.3%	(114)
CalPERS QSI Global ESG - BR	\$ 103.8	-	-	-	-	-	-	-	-	-	-	-	-
CalPERS Factor Weighted	\$ 54,324.5	-	-	-	-	-	-	-	-	-	13.4%	13.5%	(8)
CalPERS Mom Dev ex US All Cap	\$ 1.0	-	-	-	-	-	-	-	-	-	-	-	-
CalPERS Mom Strategy	\$ 0.1	-	-	-	-	-	-	-	-	-	-	-	-
CalPERS Quality Dev ex US	\$ 0.3	-	-	-	-	-	-	-	-	-	-	-	-
CalPERS US Enhanced	\$ 5,537.2	-	-	-	-	-	-	-	-	-	9.2%	9.1%	12
CalPERS US FTSE 3000	\$ 40,213.2	14.7%	14.6%	9	10.1%	10.0%	3	14.4%	14.3%	5	8.9%	9.0%	(6)
CalPERS Volatility Adj Dev Int'l	\$ 1.6	-	-	-	-	-	-	-	-	-	-	-	-
Cartica Capital Partners, LP	\$ 473.7	-	-	-	0.6%	3.2%	(259)	6.4%	10.7%	(423)	(0.2%)	4.4%	(463)
Epoch Global	\$ 1,271.9	-	-	-	-	-	-	7.3%	12.2%	(487)	8.7%	5.3%	339
Genesis	\$ 0.7	-	-	-	-	-	-	-	-	-	-	-	-
Hermes	\$ 812.4	-	-	-	-	-	-	7.6%	9.9%	(231)	(2.0%)	2.7%	(476)
JP Morgan Long/Short	\$ 2,463.5	15.0%	14.7%	34	10.2%	10.7%	(50)	15.3%	14.4%	85	8.6%	10.6%	(193)
Lazard	\$ 892.1	6.3%	6.2%	14	0.4%	3.2%	(280)	7.8%	10.5%	(271)	5.1%	4.3%	79
Pyramis Global	\$ 0.7	-	-	-	-	-	-	-	-	-	-	-	-
Taiyo Fund (Public)	\$ 0.5	-	-	-	-	-	-	-	-	-	-	-	-
Tobam Ventures	\$ 7.2	-	-	-	-	-	-	-	-	-	8.3%	9.0%	(67)
Wellington	\$ 2,987.7	-	-	-	-	-	-	12.6%	12.2%	45	7.3%	5.3%	206
<b>Total Public Equity</b>	<b>\$ 185,910.1</b>	<b>11.1%</b>	<b>10.9%</b>	<b>20</b>	<b>6.7%</b>	<b>6.7%</b>	<b>(8)</b>	<b>12.3%</b>	<b>12.5%</b>	<b>(25)</b>	<b>6.1%</b>	<b>6.2%</b>	<b>(16)</b>

## Public Employees Retirement Fund (PERF) Portfolio &amp; Partnership Report

As of June 30, 2019



## Private Equity Ending Market Value &amp; Performance Summary (By Partnership)

Partnership <sup>1</sup>	Ending Market Value (mil)	10-Yr	5-Yr	3-Yr	1-Yr
		Net Return	Net Return	Net Return	Net Return
AACP AP Investors	\$ 1.0	12.1%	43.2%	22.4%	85.3%
AACP China Growth	\$ 1.8	-0.9%	-11.4%	-18.7%	-27.9%
AACP China Venture Invest	\$ 3.3	2.3%	3.4%	-1.1%	-18.0%
AACP India A	\$ 0.1	-10.1%	-27.6%	-57.4%	-67.0%
AACP India B	\$ 9.2	10.0%	8.3%	11.3%	10.6%
AACP India C	\$ 8.1	11.3%	3.5%	-21.4%	-5.0%
Aberdare Ventures IV LP	\$ 28.4	-	-9.0%	-2.4%	-16.2%
Advent International GPE V D	\$ 4.3	NM	-3.5%	7.5%	-24.1%
Advent International GPE VI A	\$ 96.9	14.8%	9.4%	4.9%	-2.0%
Advent International GPE VII C LP	\$ 374.2	-	-	17.5%	4.0%
Advent International GPE VIII	\$ 488.1	-	-	-	17.9%
Advent Latin American PEF III	\$ 6.4	2.3%	3.0%	12.0%	8.1%
Advent Latin American Private	\$ 43.2	5.5%	-3.9%	1.5%	-9.4%
Advent Latin American Private	\$ 65.2	-	1.6%	1.9%	-8.0%
Affinity Asia Pacific Fund III	\$ 27.8	8.1%	-9.8%	-14.0%	-26.0%
Aisling Capital II	\$ 4.3	-	17.2%	48.8%	140.8%
Aisling Capital III	\$ 21.7	NM	NM	NM	NM
AP Alternative Assets LP	\$ 1.1	25.7%	-5.7%	-7.1%	-8.3%
Apollo Co Investors (MHE), LP	\$ 31.2	-	-	-24.8%	-43.7%
Apollo Credit Opport Fund I LP	\$ 19.7	-	2.8%	20.3%	19.9%
Apollo Euro Principal Finance	\$ 0.4	14.6%	4.2%	-3.8%	-11.8%
Apollo Global Management	\$ 14.8	-	-	-	152.0%
Apollo Investment Fund IV	\$ 0.2	-14.6%	-29.8%	-50.3%	-15.5%
Apollo Investment Fund V	\$ 2.3	-24.9%	-46.0%	-26.6%	-38.9%
Apollo Investment Fund VI	\$ 8.0	13.2%	-3.4%	-2.1%	-8.2%
Apollo Investment Fund VII LP	\$ 140.4	21.7%	-0.3%	-0.9%	-13.7%
Apollo Investment Fund VIII	\$ 434.4	-	7.5%	12.1%	-1.5%
Apollo Investment Fund IX	\$ 43.2	-	-	-	-
Apollo SVF Mgmt L P	\$ 150.4	6.5%	-5.7%	-2.5%	-5.8%
Arclight Energy Partners Fund IV	\$ 8.6	22.1%	29.7%	38.3%	24.2%
Ares Corporate Opportunity Fund LP	\$ 4.3	1.2%	-2.6%	-13.6%	-20.9%
Ares Corp Opportunity Fund II	\$ 6.6	12.7%	-1.1%	-1.3%	-9.8%
Ares Corporate Opportunity Fund III	\$ 267.5	20.7%	18.9%	20.2%	-4.6%
Ares Corp Opportunity Fund V L.P.	\$ 285.3	-	-	-	7.9%
Asia Alternatives Capital	\$ 9.2	6.6%	-2.5%	-13.1%	-29.2%
Asia Alternatives Capital II	\$ 55.1	15.5%	18.7%	8.3%	-4.6%
Avatar International Investors LP	\$ 37.8	-	-	-	13.2%
Avatar NA Investors LP	\$ 7.6	-	-	-	-0.7%
Avenue Special Situations Fund VI (A) LP	\$ 10.8	-	-5.5%	-0.6%	-0.5%
Banc of America Cal Comm	\$ 10.4	-0.6%	-5.3%	-11.2%	-16.2%
Baring Vostok Priv EQ Fund IV	\$ 39.1	8.6%	-2.7%	16.7%	-10.0%

<sup>1</sup> Private Equity Partnerships time weighted rate of returns are computed by State Street Bank. Market values are based on General Partners' most recent received financial statements and any cash adjustments made through the reporting date. Only partnerships with market values greater than \$50,000 are included in reporting.

\*NM (not meaningful) due a posting of income or appreciation/depreciation relative to a small or negative market value which results in a misleading performance return.

## Public Employees Retirement Fund (PERF) Portfolio &amp; Partnership Report

As of June 30, 2019



## Private Equity Ending Market Value &amp; Performance Summary (By Partnership)

Partnership <sup>1</sup>	Ending Market Value (mil)	10-Yr	5-Yr	3-Yr	1-Yr
		Net Return	Net Return	Net Return	Net Return
BDC III C LP	\$ 85.8	-	-	-	49.3%
BE VI LP	\$ 18.1	-	-	-	-
Birch Hill Equity Partners III LP	\$ 20.8	15.4%	15.1%	9.5%	-6.4%
Birch Hill Equity Partners IV LP	\$ 123.8	-	17.4%	22.9%	29.7%
Blackstone Capital PRTS VI LP	\$ 439.9	-	13.3%	17.3%	11.6%
Blackstone Communications I	\$ 0.8	8.4%	14.7%	1.4%	-10.2%
Blackstone First Eagle	\$ 83.0	-	-	17.0%	1.9%
Blackstone GST	\$ 218.8	-	16.9%	29.8%	-15.6%
Blackstone Mgmt Partners IV	\$ 8.8	16.9%	9.7%	20.3%	59.7%
Blackstone Mgmt Partners V	\$ 27.4	12.6%	7.7%	3.3%	-4.8%
Blackstone Tactical	\$ 63.5	-	-	-	-
Blackstone Tactical Opportunity	\$ 57.0	-	-	-	-
Blackstone Tactical Opportunity Fund	\$ 101.1	-	-	7.6%	-5.6%
Blackstone Tactical Opportunity LP	\$ 415.7	-	12.1%	11.1%	8.7%
Blackstone Tactical Opportunity Fund II	\$ 397.0	-	-	16.3%	11.3%
Blackstone TOF	\$ 63.0	-	-	13.4%	1.9%
Bridgepoint Europe II C LP	\$ 0.3	-	-	-32.4%	-28.4%
Bridgepoint Europe III C LP	\$ 8.3	-	-	7.6%	4.6%
Bridgepoint Europe III D	\$ 49.5	6.7%	5.0%	8.9%	6.2%
Bridgepoint Europe IV B LP	\$ 45.7	-	-	21.2%	22.7%
Bridgepoint Europe IV D	\$ 173.4	-	-	21.5%	22.7%
Bridgepoint Europe V LP	\$ 408.9	-	-	16.0%	9.0%
California Asia Investors LP	\$ 346.0	24.9%	25.6%	2.2%	-6.5%
California EM Ventures II LLC	\$ 40.2	4.5%	1.8%	-2.9%	-15.6%
California EM Ventures IV LLC	\$ 166.6	12.5%	11.4%	5.5%	6.8%
California Emerging Ventures III LLC	\$ 42.4	8.1%	4.1%	1.8%	0.9%
California Emerging Ventures LLC	\$ 4.3	-9.8%	-25.7%	-22.8%	-24.2%
California Mezz Investment Fund LP	\$ 37.4	-	-	3.3%	-3.8%
Capital Link Fund I	\$ 154.9	7.0%	1.8%	-2.3%	-6.6%
Capital Link Fund II	\$ 132.4	12.8%	18.4%	19.0%	23.5%
Carlyle Acosta Co-Investment LP	\$ 35.0	-	-	-27.7%	-46.2%
Carlyle Asia Growth Partners III	\$ 2.3	-	-1.4%	-8.5%	-20.2%
Carlyle Asia Growth Partners IV	\$ 37.8	-	-1.5%	-6.6%	-24.3%
Carlyle Asia Partners GP II	\$ 1.5	38.0%	56.1%	104.2%	37.0%
Carlyle Asia Partners III	\$ 31.7	11.0%	12.1%	1.1%	0.7%
Carlyle Asia Partners V	\$ 42.5	-	-	-	-
Carlyle Europe Partners II	\$ 0.8	NM	NM	NM	-0.3%
Carlyle Europe Partners III LP	\$ 36.1	23.2%	28.6%	28.8%	-18.1%
Carlyle Europe Partners V	\$ 24.1	-	-	-	-
Carlyle Europe Tech Partners II	\$ 7.1	27.9%	37.2%	60.0%	-4.7%

<sup>1</sup> Private Equity Partnerships time weighted rate of returns are computed by State Street Bank. Market values are based on General Partners' most recent received financial statements and any cash adjustments made through the reporting date. Only partnerships with market values greater than \$50,000 are included in reporting.

\*NM (not meaningful) due a posting of income or appreciation/depreciation relative to a small or negative market value which results in a misleading performance return.

## Public Employees Retirement Fund (PERF) Portfolio &amp; Partnership Report

As of June 30, 2019



## Private Equity Ending Market Value &amp; Performance Summary (By Partnership)

Partnership <sup>1</sup>	Ending Market Value (mil)	10-Yr	5-Yr	3-Yr	1-Yr
		Net Return	Net Return	Net Return	Net Return
Carlyle Global Fin Serv Partners	\$ 7.6	-28.9%	58.1%	93.4%	11.1%
Carlyle Havasu Co-Investment LP	\$ 65.1	-	-	-3.5%	-10.0%
Carlyle Japan Partners II	\$ 2.9	-2.0%	-2.9%	-8.6%	-62.3%
Carlyle Mexico Partners	\$ 1.1	3.4%	9.2%	8.5%	-5.6%
Carlyle Partners IV, L.P.	\$ 6.2	17.3%	-1.2%	-8.2%	-12.6%
Carlyle Partners V	\$ 103.4	17.7%	15.1%	18.7%	7.2%
Carlyle Partners VI L.P.	\$ 501.9	-	10.2%	17.1%	7.3%
Carlyle Partners VII L.P.	\$ 213.3	-	-	-	-
Carlyle Realty III LP	\$ 22.3	17.6%	32.6%	19.2%	11.0%
Carlyle Strategic Partners II	\$ 2.5	17.6%	10.3%	19.9%	55.7%
Carlyle Strategic Partners IV	\$ 42.5	-	-	-	17.6%
Carlyle US Equity Opportunity	\$ 114.3	-	-	5.8%	-5.9%
Carlyle Venture Partners II LP	\$ 10.9	7.0%	24.6%	4.4%	3.6%
Carlyle Venture Partners III	\$ 1.5	12.5%	12.7%	10.0%	21.9%
Carlyle/River Renew+Alt Energy II	\$ 130.9	4.0%	0.4%	2.7%	-1.3%
Carlyle/Riverstone Glb E+P IV	\$ 152.1	1.9%	-7.9%	1.1%	-13.7%
Carlyle/Riverstone Global	\$ 20.1	4.2%	3.8%	24.8%	22.6%
CDH Fund V,LP	\$ 208.8	-	10.1%	13.3%	5.0%
Centerbridge Cap Partners III	\$ 94.7	-	-	12.5%	16.2%
Centinela Investment Partners	\$ 2.7	-	-	-	22.1%
Central Valley Fund II SBIC LP LP	\$ 10.1	-	18.0%	15.7%	18.8%
Cerberus Cal II Partners LP	\$ 324.0	-	-	-	-12.7%
Cerberus CP Partners LP	\$ 681.3	-	16.6%	8.3%	16.0%
Cerberus Institutional Partner LP	\$ 298.8	-	8.2%	6.3%	8.5%
CHK Mid Con Co-Investment Vehicle	\$ 6.4	-	-29.8%	-10.9%	-18.6%
CHK Mid Con Royalty LP	\$ 1.4	-	-	-9.3%	-17.6%
Clarus Lifesciences I LP	\$ 5.8	3.1%	-6.8%	2.9%	-21.1%
Clarus Lifesciences II LP	\$ 9.7	NM	5.8%	-1.9%	3.4%
Clayton Dubilier + Rice Fund X	\$ 57.7	-	-	-	-1.3%
Clearlake Capital Partners III LP	\$ 33.5	-	51.5%	78.2%	70.7%
Clearlake Capital Partners IV LP	\$ 67.6	-	-	32.6%	32.3%
Clearlake Capital Partners V	\$ 49.1	-	-	-	58.5%
Clearlake Opportunity Partners (P) LP	\$ 38.0	-	-	-	16.7%
Clearwater Capital Partners	\$ 2.3	1.0%	-8.0%	-10.2%	-20.8%
Clearwater Capital Partners Fund III	\$ 39.3	3.7%	-5.7%	-6.9%	-8.6%
Coller International Partners	\$ 31.2	8.5%	4.3%	2.5%	20.6%
Corporate Partners LP	\$ 1.0	-12.9%	-42.0%	-41.9%	-54.3%
Craton Equity Investors I L.P	\$ 0.1	-44.2%	-64.3%	-76.3%	-85.9%
CVC Capital Partners VI	\$ 569.1	-	-	-	-
CVC Capital Partners VII	\$ 108.7	-	-	-	-

<sup>1</sup> Private Equity Partnerships time weighted rate of returns are computed by State Street Bank. Market values are based on General Partners' most recent received financial statements and any cash adjustments made through the reporting date. Only partnerships with market values greater than \$50,000 are included in reporting.

\*NM (not meaningful) due a posting of income or appreciation/depreciation relative to a small or negative market value which results in a misleading performance return.

## Public Employees Retirement Fund (PERF) Portfolio &amp; Partnership Report

As of June 30, 2019



## Private Equity Ending Market Value &amp; Performance Summary (By Partnership)

Partnership <sup>1</sup>	Ending Market Value (mil)	10-Yr	5-Yr	3-Yr	1-Yr
		Net Return	Net Return	Net Return	Net Return
CVC Compounding Capital	\$ 923.0	-	-	-	4.4%
CVC CREDIT Strategic Inv A LP	\$ 9.2	-	-	13.0%	-8.9%
CVC EURO Equity Partners III	\$ 13.7	35.2%	17.0%	7.2%	-6.5%
CVC European Equity Partners IV(B)LP	\$ 0.3	17.4%	7.5%	13.1%	4.4%
CVC European Equity Tandom Fund B	\$ 0.4	11.6%	5.8%	17.4%	14.0%
CVC European Equity V LP	\$ 106.5	28.6%	43.7%	65.2%	68.0%
EM Alternative Investments	\$ 48.3	7.7%	3.4%	4.2%	-7.9%
Essex W Health Ventures VIII	\$ 66.6	-	-	-	-6.9%
First Reserve Fund XI LP	\$ 24.5	-10.4%	-23.3%	17.3%	39.3%
First Reserve Fund XII	\$ 58.6	-9.6%	-21.0%	-12.7%	-18.1%
First Reserve Fund XIII, LP	\$ 276.2	-	-	20.0%	15.6%
Foundation Radiology	\$ 15.2	-	-	-	-
Francisco Partners	\$ 0.4	0.8%	-4.2%	0.5%	61.0%
Francisco Partners II LP	\$ 29.0	6.7%	-1.7%	0.8%	-7.3%
Francisco Partners III LP	\$ 71.5	-	25.3%	31.9%	21.1%
Grandval	\$ 10.0	-	-	-	-
Grandval II	\$ 33.8	-	-	-	-
GCM Grosvenor DEM LP	\$ 72.9	-	8.0%	10.7%	12.1%
GCM Grosvenor DEM II LP	\$ 136.9	-	-	5.2%	11.4%
GCM Grosvenor DEM III LP	\$ 20.5	-	-	-	-
Golden State Investment Fund	\$ 118.2	13.9%	12.1%	14.4%	24.2%
Green Equity Investors IV	\$ 1.4	37.6%	48.8%	46.9%	272.9%
Green Equity Investors V LP	\$ 220.2	25.6%	22.8%	30.9%	43.5%
GSO Capital Opportunity	\$ 1.7	-	-	-	-39.6%
GSO Capital Opportunity Fund II L.P.	\$ 90.4	-	9.5%	10.9%	4.2%
GSO Capital Solutions,LP	\$ 17.4	-	-2.2%	1.9%	3.6%
GSO Capital Solutions Fund II LP	\$ 123.2	-	-	6.4%	-14.0%
GSO Energy Partners C LP	\$ 272.3	-	-0.1%	3.0%	-3.0%
GSO Energy Partners C II	\$ 180.6	-	-	29.0%	6.8%
H + F Capital Partners VIII LP	\$ 522.3	-	-	-	7.2%
H + F Hockey Partners LP	\$ 114.6	-	29.0%	41.4%	42.4%
H + F Kronos LP	\$ 153.2	-	-	-	56.7%
Hellman + Friedman Cap PAR VI	\$ 34.3	20.9%	13.7%	7.1%	-12.3%
Hellman + Friedman VII L.P.	\$ 395.6	-	32.0%	39.4%	27.1%
ICV Partners II LP	\$ 0.6	2.3%	-10.4%	-37.1%	-77.1%
Insight Venture Partners V	\$ 5.1	-	24.4%	29.5%	1.1%
Insight Venture Partners VI	\$ 16.5	-	14.2%	19.8%	-1.7%
Insight Venture Partners IX LP	\$ 174.6	-	-	33.7%	36.3%
Insight Venture Partners X LP	\$ 190.2	-	-	-	9.4%
Insight VP Growth BO Co-Invest B	\$ 714.9	-	-	41.2%	39.5%

<sup>1</sup> Private Equity Partnerships time weighted rate of returns are computed by State Street Bank. Market values are based on General Partners' most recent received financial statements and any cash adjustments made through the reporting date. Only partnerships with market values greater than \$50,000 are included in reporting.

\*NM (not meaningful) due a posting of income or appreciation/depreciation relative to a small or negative market value which results in a misleading performance return.

## Public Employees Retirement Fund (PERF) Portfolio &amp; Partnership Report



As of June 30, 2019

## Private Equity Ending Market Value &amp; Performance Summary (By Partnership)

Partnership <sup>1</sup>	Ending Market Value (mil)	10-Yr	5-Yr	3-Yr	1-Yr
		Net Return	Net Return	Net Return	Net Return
Ithaca LP	\$ 139.5	-	-	20.6%	12.1%
Kholsa Ventures III	\$ 47.1	16.1%	16.5%	33.5%	47.6%
Kholsa Ventures Seed, LP	\$ 31.9	-	-13.6%	-27.6%	0.3%
KKR 2006	\$ 123.0	17.3%	15.4%	20.6%	39.2%
KKR AsiaN Fund	\$ 12.8	-	-	-	-
KKR AsiaN Fund II	\$ 545.5	-	-	11.4%	4.8%
KKR European Fund II	\$ 1.4	6.8%	-12.0%	-20.1%	18.5%
KKR European Fund III	\$ 30.3	6.6%	12.5%	13.8%	-3.3%
KKR Millennium Fund	\$ 0.1	9.4%	-1.3%	-9.8%	-44.6%
KPS Special Situations Fund III	\$ 20.9	31.8%	35.6%	44.4%	110.8%
Lackstone Capital Partners VII	\$ 312.1	-	-	-	19.7%
Lime Rock Partners IV	\$ 0.1	48.9%	78.5%	140.9%	-42.5%
Lime Rock Partners IV	\$ 81.0	-	-	-	-3.2%
Lime Rock Partners V	\$ 24.1	0.4%	-5.6%	9.8%	-9.8%
Lindsay Goldberg IV LP	\$ 151.4	-	-	35.6%	4.1%
Lion Capital Fund II L.P.	\$ 7.6	-10.7%	-20.1%	-17.3%	-67.8%
Madison Dearborn Cap Partner IV	\$ 5.5	-	-	-	-
Madison Dearborn Cap Partner V	\$ 6.0	22.8%	26.4%	40.7%	87.4%
MHR Institutional ADV II LLC	\$ 25.3	6.8%	-0.7%	11.7%	24.2%
MHR Institutional INV III	\$ 122.8	7.2%	-5.3%	-2.6%	-19.7%
New Mountain Partners II	\$ 2.2	31.0%	34.9%	-9.5%	-54.0%
New Mountain Partners III	\$ 268.7	14.0%	18.1%	19.5%	7.3%
Newbridge Asia IV LP	\$ 3.5	11.3%	-2.2%	10.8%	-38.7%
Oak Hill Capital Partners II	\$ 2.0	-	-	-	-
Oak Hill CR Partners III LTD	\$ 95.3	10.5%	11.9%	6.9%	2.8%
Oaktree Opportunity Fund VIII B LP	\$ 70.9	-	4.9%	11.3%	6.6%
Onex Partners IV LP	\$ 248.9	-	-	0.2%	-6.8%
Onex Partners V LP	\$ 39.3	-	-	-	-
Onex SIG Co-Investment LP	\$ 122.5	-	-	13.1%	0.2%
PAG Asia I LP	\$ 109.5	-	25.7%	27.2%	19.6%
PAGAC Drone Holdings I LP	\$ 70.2	-	-	11.9%	-3.3%
Palladium Equity Partners III	\$ 19.1	10.8%	-6.3%	-8.4%	-31.5%
Palladium Equity Partners V	\$ 21.1	-	-	-	-
Patria Brazilian PE FD V LP	\$ 62.4	-	-	14.1%	9.0%
PCG Clean Energy + Technology	\$ 66.3	-14.8%	-16.8%	-24.0%	-42.5%
PCG Corporate Partners II	\$ 98.0	8.0%	3.1%	12.2%	-11.7%
PCG Int'l Emerging Market	\$ 144.4	7.9%	4.0%	5.1%	-2.7%
PCGI Global Opportunity Fund 2	\$ 497.8	-5.9%	9.3%	10.9%	5.9%
Permira Europe III LP 2	\$ 0.6	-16.7%	-33.3%	1.8%	7.8%
Permira Growth Opportunities	\$ 20.0	-	-	-	-

<sup>1</sup> Private Equity Partnerships time weighted rate of returns are computed by State Street Bank. Market values are based on General Partners' most recent received financial statements and any cash adjustments made through the reporting date. Only partnerships with market values greater than \$50,000 are included in reporting.

\*NM (not meaningful) due a posting of income or appreciation/depreciation relative to a small or negative market value which results in a misleading performance return.

## Public Employees Retirement Fund (PERF) Portfolio &amp; Partnership Report



As of June 30, 2019

## Private Equity Ending Market Value &amp; Performance Summary (By Partnership)

Partnership <sup>1</sup>	Ending Market Value (mil)	10-Yr	5-Yr	3-Yr	1-Yr
		Net Return	Net Return	Net Return	Net Return
Permira IV	\$ 34.9	-	14.6%	16.7%	3.5%
Permira V LP 2	\$ 309.2	-	11.3%	22.6%	22.8%
Permira VI L.P.1	\$ 378.1	-	-	-	7.5%
Polish Enterprise Fund VI	\$ 11.5	26.4%	48.2%	80.5%	-31.6%
Providence Equity Partners V LP	\$ 2.1	-11.4%	-26.1%	-40.5%	-50.5%
Providence Equity VI	\$ 87.5	6.6%	1.6%	-5.0%	-18.7%
Resolute Fund II	\$ 84.7	8.6%	6.3%	2.9%	-0.1%
RFG Private Equity	\$ 0.3	6.4%	0.9%	8.0%	15.8%
Riverstone Fieldwood Partners	\$ 4.3	-	-39.6%	-51.2%	-48.8%
Riverstone Global Energy + Power V	\$ 264.8	-	-2.9%	4.7%	-11.2%
Riverstone Global Energy Power VI	\$ 325.0	-	-	-	-15.9%
Riverwood Cap Partners LP	\$ 54.7	-	15.0%	9.1%	7.1%
Sacramento Partners	\$ 134.3	16.8%	17.5%	23.3%	42.2%
SAIF Partners III	\$ 170.5	-	18.0%	15.9%	1.2%
SAIF Partners IV, LP	\$ 156.2	-	6.6%	4.5%	-0.1%
Sankaty Managed	\$ 267.6	-	-	9.4%	9.1%
Silver Lake Partners II	\$ 1.1	14.5%	7.0%	-5.8%	-0.1%
Silver Lake Partners III	\$ 95.6	26.6%	22.8%	21.6%	-7.0%
Silver Lake Partners IV, L.P.	\$ 439.2	-	-	24.8%	35.6%
Silver Lake Partners V, L.P.	\$ 169.1	-	-	-	-
Silver Lake Technology Investors	\$ 48.6	-	-	-	0.5%
Silver Lake Technology Investors IV	\$ 103.1	-	-	27.8%	21.0%
Siris Partners III LP	\$ 42.9	-	-	8.3%	5.5%
Siris Partners IV LP	\$ 14.3	-	-	-	-
SL SPV 1, L.P.	\$ 106.8	-	-	-	28.3%
SL SPV 2, L.P.	\$ 61.4	-	-	-	-
T VI Co Investment A LP	\$ 64.1	-	-	38.7%	44.6%
Tailwind Capital Partners LP	\$ 4.7	11.2%	2.8%	1.2%	-6.2%
Tailwind Capital Partners II, LP	\$ 120.9	-	10.2%	9.7%	-12.7%
Tailwind Capital Partners III, LP	\$ 36.8	-	-	-	-
TCP II Co-Investment B LP	\$ 54.4	-	-	14.7%	-2.3%
TCV X LP	\$ 7.8	-	-	-	-
The Rise Fund (A), L.P.	\$ 42.4	-	-	-	18.7%
The Second European Equity	\$ 1.2	-19.9%	-31.8%	-32.4%	-31.2%
THL Managers VI	\$ 35.6	9.2%	8.9%	5.0%	8.6%
Towerbrook Investors II	\$ 11.1	12.7%	5.7%	0.1%	21.1%
Towerbrook Investors III L.P.	\$ 32.7	8.3%	-0.1%	-3.6%	-15.7%
Towerbrook Investors IV LP	\$ 310.9	-	30.2%	22.0%	18.2%
Towerbrook Structured Opp Fund	\$ 158.0	-	-	-	10.4%
TPG Asia V	\$ 71.5	14.9%	16.4%	18.0%	7.9%

<sup>1</sup> Private Equity Partnerships time weighted rate of returns are computed by State Street Bank. Market values are based on General Partners' most recent received financial statements and any cash adjustments made through the reporting date. Only partnerships with market values greater than \$50,000 are included in reporting.

\*NM (not meaningful) due a posting of income or appreciation/depreciation relative to a small or negative market value which results in a misleading performance return.

## Public Employees Retirement Fund (PERF) Portfolio &amp; Partnership Report

As of June 30, 2019



## Private Equity Ending Market Value &amp; Performance Summary (By Partnership)

Partnership <sup>1</sup>	Ending Market Value (mil)	10-Yr	5-Yr	3-Yr	1-Yr
		Net Return	Net Return	Net Return	Net Return
TPG Asia VII (A)	\$ 83.9	-	-	-	-4.4%
TPG BioTechnology Partner	\$ 11.0	-	-3.4%	38.5%	182.9%
TPG BioTechnology Partners III	\$ 56.7	-	-3.0%	-1.2%	36.1%
TPG Credit Strategies LP	\$ 9.6	-0.7%	-18.2%	-23.1%	-31.5%
TPG Golden Bear Partners LP	\$ 75.2	-	-	-	-
TPG Growth IV, L.P.	\$ 30.6	-	-	-	-
TPG Partners IV	\$ 5.7	7.8%	-11.5%	-19.3%	-37.1%
TPG Partners V	\$ 38.4	11.1%	5.8%	2.7%	-4.8%
TPG Partners VI	\$ 202.6	10.1%	8.4%	6.6%	-0.8%
TPG Star	\$ 51.3	6.5%	-3.5%	-8.9%	-20.6%
TPG Venture Holding	\$ 46.8	14.7%	32.3%	3.7%	5.4%
Trident VI, LP	\$ 253.0	-	-	23.3%	27.2%
Trident VII, L.P.	\$ 201.9	-	-	-	12.3%
Triton Fund IV L.P. LP	\$ 53.3	-	-	10.8%	-5.2%
Valor Equity Partners IV, L.P.	\$ 64.8	-	-	-	24.7%
Vantagepoint 2006	\$ 27.2	-11.2%	-13.0%	-10.4%	5.1%
Vantagepoint CLEANTech Partner	\$ 5.3	-12.2%	-19.6%	-16.6%	-8.0%
Vicente Cap Partners Growth Equity Fund	\$ 27.3	-	-	0.6%	-1.8%
Vista Equity Partners Fund	\$ 55.3	-	-	-	-
W Capital Partners II	\$ 7.5	4.7%	-2.5%	-6.0%	-20.7%
WCAS XIII L.P.	\$ 27.2	-	-	-	-
Wellspring Capital Partners V	\$ 66.7	-	23.8%	19.1%	14.6%
Wellspring V LP	\$ 14.2	-	-	20.1%	14.6%
Welsh Carson Anderson + Stowe	\$ 317.5	-	-	33.8%	37.7%
Welsh Carson Anderson Stowe XI	\$ 44.2	-	9.3%	8.3%	1.4%
Wigmore Street II(BDC III) LP	\$ 16.3	-	-	-	21.4%
Wigmore Street Co-Investment	\$ 118.8	-	-	32.5%	36.1%
Wigmore Street Co-investment VI LP	\$ 16.0	-	-	-	-
WLR Recovery Fund II LP	\$ 0.4	-0.9%	2.2%	-12.5%	32.3%
WLR Recovery Fund III	\$ 6.9	-17.1%	-28.9%	-40.7%	-13.5%
WLR Recovery Fund IV	\$ 22.7	4.1%	-5.5%	-6.4%	-25.0%
Yucaipa American Alliance Fund	\$ 19.3	3.6%	1.9%	21.5%	108.9%
Yucaipa American Alliance II	\$ 382.6	8.4%	2.1%	10.0%	25.8%
Yucaipa Corp Initiative Fund	\$ 12.2	-1.9%	-1.7%	8.3%	47.9%
Yucaipa Corp Initiatives II LP	\$ 52.6	-6.0%	4.7%	3.4%	3.6%
Other <sup>2</sup>	\$ 45.4	-	-	-	-
<b>Total Private Equity</b>	<b>\$ 26,471.6</b>	<b>14.0%</b>	<b>9.6%</b>	<b>12.5%</b>	<b>7.7%</b>

<sup>1</sup> Private Equity Partnerships time weighted rate of returns are computed by State Street Bank. Market values are based on General Partners' most recent received financial statements and any cash adjustments made through the reporting date. Only partnerships with market values greater than \$50,000 are included in reporting.

<sup>2</sup>Other includes Cash, Unclassified & Distributed Stock.



## Public Employees Retirement Fund (PERF) Portfolio &amp; Partnership Report



As of June 30, 2019

## Income Ending Market Value &amp; Performance Summary (By Portfolio)

Portfolio	Ending Market Value (mil)	10-Yr			5-Yr			3-Yr			1-Yr		
		Net Return	BM Return	Excess Bps	Net Return	BM Return	Excess Bps	Net Return	BM Return	Excess Bps	Net Return	BM Return	Excess Bps
Alliance Bernstein	\$ 522.1	2.5%	1.4%	101	(0.8%)	(0.8%)	4	1.6%	1.7%	(13)	3.9%	4.7%	(76)
Baring Asset Mgmt	\$ 316.2	1.9%	1.2%	66	(0.7%)	(1.2%)	51	1.9%	1.2%	67	5.2%	4.1%	105
CalPERS Agency Mortgage	\$ 10,318.3	-	-	-	2.8%	2.6%	24	2.2%	2.1%	16	6.4%	6.2%	23
CalPERS BB/B High Yield	\$ 217.9	-	-	-	-	-	-	-	-	-	-	-	-
CalPERS BB/B High Yield FOF	\$ 11,722.1	-	-	-	-	-	-	-	-	-	8.4%	8.0%	43
CalPERS Equitable CCMF	\$ 0.8	8.3%	3.5%	476	8.3%	2.6%	574	8.3%	2.1%	620	8.4%	6.4%	207
CalPERS Governments	\$ 37,839.6	-	-	-	4.2%	4.2%	4	1.8%	1.7%	13	10.5%	10.5%	(1)
CalPERS High Yield	\$ 21.8	13.9%	8.8%	510	13.4%	4.3%	904	19.6%	7.3%	1,227	12.1%	6.8%	538
CalPERS High Yield Bond Managers	\$ 1,757.5	10.0%	8.8%	118	5.1%	4.3%	81	7.5%	7.3%	20	6.8%	6.8%	5
CalPERS High Yield Mortgage	\$ 352.1	12.2%	8.8%	339	6.6%	4.3%	229	8.5%	7.3%	116	4.7%	6.8%	(207)
CalPERS IFI Completion Fund	\$ 1,201.9	-	-	-	-	-	-	-	-	-	4.0%	4.7%	(72)
CalPERS Int'l Dev Markets	\$ 1,374.9	-	-	-	-	-	-	1.5%	1.2%	27	4.7%	4.1%	57
CalPERS Int'l Emerging Markets	\$ 209.5	-	-	-	-	-	-	4.6%	3.7%	90	7.8%	6.7%	113
CalPERS Int'l Fixed Income	\$ 3,252.5	-	-	-	(0.1%)	(0.8%)	68	2.4%	1.7%	65	5.6%	4.7%	97
CalPERS Investment Grade Corp	\$ 19,842.1	8.8%	8.0%	81	5.6%	5.2%	33	5.9%	5.0%	96	14.3%	13.8%	44
CalPERS Long Duration Mortgage	\$ 2,573.2	6.8%	5.4%	147	3.6%	4.0%	(43)	2.3%	2.9%	(62)	5.5%	10.1%	(468)
CalPERS Member Home Loan Program	\$ 40.1	7.2%	3.5%	373	7.0%	2.6%	441	7.2%	2.1%	508	5.6%	6.4%	(79)
CalPERS Non-Traditional High Yield	\$ 85.8	-	-	-	13.7%	4.3%	934	7.2%	7.3%	(14)	(9.8%)	6.8%	(1,658)
CalPERS Opportunistic	\$ 177.7	-	-	-	-	-	-	-	-	-	-	-	-
CalPERS Passive Fallen Angels	\$ 76.4	-	-	-	7.1%	4.3%	278	8.8%	7.3%	145	8.4%	6.8%	165
CalPERS Sovereign Bonds	\$ 2,328.6	7.3%	6.8%	51	5.3%	5.1%	23	4.7%	4.2%	48	16.0%	15.4%	59
CalPERS Spread Segment Duration Mgmt	\$ 50.0	-	-	-	-	-	-	-	-	-	-	-	-
CalPERS Structured Mortgage	\$ 10,097.4	6.3%	3.5%	276	4.9%	2.6%	235	3.1%	2.1%	100	6.7%	6.4%	37
Highland CLN - Longhorn A	\$ 10.4	4.8%	6.3%	(153)	(0.9%)	3.9%	(480)	(1.8%)	5.4%	(725)	(2.2%)	4.1%	(638)
Highland CLN - Longhorn B	\$ 58.8	10.0%	8.8%	115	2.0%	4.3%	(229)	6.7%	7.3%	(60)	(4.2%)	6.8%	(1,094)
Investec Asset Mgmt	\$ 182.2	-	-	-	-	-	-	3.6%	3.7%	(9)	5.9%	6.7%	(78)
Neuberger Berman	\$ 202.1	-	-	-	-	-	-	-	-	-	5.9%	6.7%	(77)
PIMCO	\$ 1,460.1	3.5%	1.4%	202	(0.0%)	(0.8%)	77	2.8%	1.7%	110	5.8%	4.7%	109
<b>Total Income</b>	<b>\$ 106,292.2</b>	<b>6.6%</b>	<b>5.2%</b>	<b>137</b>	<b>4.1%</b>	<b>3.5%</b>	<b>56</b>	<b>3.3%</b>	<b>2.7%</b>	<b>62</b>	<b>9.6%</b>	<b>9.3%</b>	<b>31</b>

## Public Employees Retirement Fund (PERF) Portfolio &amp; Partnership Report

As of June 30, 2019



## Real Assets Ending Market Value &amp; Performance Summary (By Partnership)

Partnership <sup>1</sup>	Ending Market Value (mil)	10-Yr	5-Yr	3-Yr	1-Yr
		Net Return	Net Return	Net Return	Net Return
ARA Asia Dragon Fund II	\$ 0.7	-	NM	NM	NM
ARA China Long Term Hold	\$ 983.3	-	8.0 %	7.1 %	-5.1 %
Asia Pacific Property Fund SCSP	\$ 273.9	-	-	-	0.8 %
Blackstone Property Europe Hedge	\$ 18.5	-	-	-	NM
Blackstone Property Partners Europe, L.P.	\$ 785.0	-	-	-	-0.5 %
CalEast Canada Limited Partnership	\$ 3.3	-	-5.4 %	1.2 %	-1.0 %
CalEast Industrial Investors, LLC	\$ 1.5	-	4.8 %	3.1 %	5.6 %
CalEast Solstice - Base	\$ 3,820.7	-	-	12.9 %	15.1 %
CalEast Solstice - DT Land	\$ 222.5	-	-	-14.0 %	-8.9 %
CalEast Solstice - DT Other	\$ 682.5	-	-	4.1 %	-1.8 %
CalWest - CalPERS GIP	\$ 11.0	-	-	-	-
Canyon Catalyst Fund II, LLC	\$ 368.4	-	-	-	11.2 %
Canyon Catalyst Fund, LLC	\$ 0.2	-	NM	NM	NM
Canyon Johnson Urban Fund, III	\$ 0.3	4.7 %	-9.9 %	-24.6 %	-3.1 %
CIM Fund III, LP	\$ 336.2	-22.5 %	6.0 %	4.6 %	3.2 %
CIM Urban Real Estate Fund, LP	\$ 315.7	-0.3 %	-4.7 %	-6.0 %	-4.5 %
CIM Urban REIT LLC	\$ 248.7	5.7 %	3.1 %	2.6 %	1.0 %
FSP - Base	\$ 5,988.3	-	11.0 %	8.2 %	6.6 %
GRI - Base	\$ 2,371.0	-	9.6 %	8.3 %	6.5 %
GRI - DT 2012 and Beyond	\$ 19.8	-	-	-	-
HC Green Development Fund LP	\$ 204.6	5.1 %	-2.6 %	-3.3 %	-4.2 %
HC NOP Holdings L.P.	\$ 0.7	-	-	-	-
HCB Interests II LP	\$ 75.0	8.3 %	-2.4 %	-6.0 %	-9.0 %
HCB LTH	\$ 416.4	-	-8.1 %	0.8 %	-10.5 %
HCC Interests LP	\$ 5.4	NM	-17.6 %	-7.2 %	-3.4 %
HCM Holdings II LP	\$ 0.1	NM	NM	NM	-14.3 %
HCR LTH Hedge	\$ 14.7	-	-	-	-
HCR LTH LLC	\$ 349.5	-	-3.9 %	2.7 %	6.0 %
Hearthstone Housing Partners II, LLC	\$ 0.7	NM	NM	NM	NM
Hines European Development Fund LP	\$ 7.1	NM	NM	-3.3 %	-1.3 %

<sup>1</sup>Real Asset Partnerships time weighted rate of returns are computed by AREIS Investment Book of Record. Market values are based on General Partners' most recent received financial statements and any cash adjustments made through the reporting date. Only partnerships with market values greater than \$50,000 are included in reporting.

\*NM (not meaningful) due a posting of income or appreciation/depreciation relative to a small or negative market value which results in a misleading performance return.

## Public Employees Retirement Fund (PERF) Portfolio &amp; Partnership Report



As of June 30, 2019

## Real Assets Ending Market Value &amp; Performance Summary (By Partnership)

Partnership <sup>1</sup>	Ending Market Value (mil)	10-Yr	5-Yr	3-Yr	1-Yr
		Net Return	Net Return	Net Return	Net Return
IHP Investment Fund III, L.P.	\$ 281.4	-3.8 %	0.6 %	-2.6 %	-4.5 %
IMI - Base	\$ 6,247.2	-	9.0 %	1.8 %	-7.9 %
IMP Abaca	\$ 189.7	-	-	-	-
IMP - Base	\$ 4,886.6	-	8.6 %	6.8 %	5.9 %
IMP - DT 2012 and Beyond	\$ 369.5	-	17.2 %	15.9 %	13.4 %
IMP - ICM	\$ 626.8	-	-	-	-
Institutional Logistics Partners, LLC	\$ 878.4	-	15.8 %	15.1 %	21.4 %
KC 2011, LLC	\$ 149.0	-	19.2 %	19.9 %	30.4 %
KSC Affordable Housing Investment Fund, LLC	\$ 1.5	2.0 %	1.2 %	-3.1 %	-8.9 %
Land Management Company, LLC	\$ 423.3	-	-	3.6 %	5.0 %
LaSalle Japan Logistics Fund II LP	\$ 0.2	NM	NM	NM	NM
National Office Partners, LLC (CWP)	\$ 0.3	-	NM	NM	NM
ORA Multifamily Investments I, LLC	\$ 43.7	30.7 %	16.3 %	15.2 %	9.6 %
ORA Residential Investments I, L.P.	\$ 125.1	11.8 %	11.8 %	6.5 %	-0.1 %
Pacific Multifamily Investors, LLC	\$ 1,308.0	-	10.5 %	10.9 %	10.6 %
PLA Retail Fund I, LP	\$ 1.4	-3.5 %	-12.2 %	-13.4 %	-12.8 %
Sacramento Venture - Base	\$ 49.6	-	-	-	14.1 %
Sacramento Venture - DT	\$ 48.5	-	-	-	-1.9 %
SF Mission Street Partners, LLC	\$ 3.5	-	-	-	-
Stockbridge Hollywood Park Co-Investors, LP	\$ 68.4	10.8 %	14.6 %	9.0 %	7.7 %
Stockbridge Real Estate Fund II -B, LP	\$ 26.9	-9.6 %	7.1 %	8.1 %	1.3 %
Strategic Property Fund Asia SCSP	\$ 273.9	-	-	-	0.8 %
TechCore, LLC	\$ 1,366.6	-	12.2 %	11.2 %	8.7 %
Whitney Ranch Venture, LLC	\$ 40.4	-	-7.7 %	20.4 %	-7.7 %
Xander Co-Investment	\$ 0.7	-17.3 %	-15.3 %	-16.9 %	-12.0 %
<b>Total Real Estate</b>	<b>\$ 34,753.5</b>	<b>4.0%</b>	<b>7.6%</b>	<b>5.9%</b>	<b>3.4%</b>

<sup>1</sup>Real Asset Partnerships time weighted rate of returns are computed by AREIS Investment Book of Record. Market values are based on General Partners' most recent received financial statements and any cash adjustments made through the reporting date. Only partnerships with market values greater than \$50,000 are included in reporting.

\*NM (not meaningful) due a posting of income or appreciation/depreciation relative to a small or negative market value which results in a misleading performance return.

## Public Employees Retirement Fund (PERF) Portfolio &amp; Partnership Report



As of June 30, 2019

## Real Assets Ending Market Value &amp; Performance Summary (By Partnership)

Partnership <sup>1</sup>	Ending Market Value (mil)	10-Yr	5-Yr	3-Yr	1-Yr
		Net Return	Net Return	Net Return	Net Return
Alinda Infrastructure Fund I, L.P.	\$ 0.2	4.2 %	0.4 %	-6.5 %	-25.9 %
Alinda Infrastructure Fund II, L.P.	\$ 135.0	-	0.6 %	-6.7 %	-8.9 %
Archmore International Infrastructure Fund II (B), L.P.	\$ 47.5	-	-	0.6 %	-0.7 %
Archmore International Infrastructure Fund II (C), L.P.	\$ 101.0	-	-	0.6 %	-0.7 %
CalPERS - Unitized Collateral Account	\$ 39.2	-	-	-	2.4 %
Carlyle Infrastructure Partners, L.P.	\$ 4.4	5.9 %	7.6 %	11.1 %	-15.8 %
CIM Infrastructure Fund, L.P.	\$ 425.8	24.7 %	4.9 %	1.9 %	2.2 %
Concession Investment Holdings, LLC	\$ 566.8	-	-	-	15.5 %
Golden Reef Infrastructure Trust	\$ 457.1	-	-	NM	3.1 %
Golden Reef Infrastructure Trust Hedge	\$ 2.8	-	-	-	NM
Harbert Gulf Pacific Power, LLC (HGPP)	\$ 1,201.6	-	7.6 %	12.9 %	8.2 %
Harbert Power Fund V, L.P. (HPF V)	\$ 86.8	-	11.1 %	12.5 %	11.2 %
Ivy Investment Vehicle LDC (SWPM)	\$ 863.9	-	30.8 %	32.3 %	14.6 %
Ivy Investment Vehicle Hedge	\$ 47.0	-	NM	NM	NM
Neptune Regional Transmission System, LLC	\$ 273.0	-	8.7 %	14.8 %	13.8 %
North Haven Infrastructure Partners II LP	\$ 311.9	-	-	15.8 %	14.8 %
Tower Bridge Infrastructure Partners, L.P.	\$ 305.8	-	18.9 %	16.7 %	17.7 %
<b>Total Infrastructure</b>	<b>\$ 4,777.8</b>	<b>17.9%</b>	<b>12.7%</b>	<b>13.8%</b>	<b>11.1%</b>

Partnership <sup>1</sup>	Ending Market Value (mil)	10-Yr	5-Yr	3-Yr	1-Yr
		Net Return	Net Return	Net Return	Net Return
Lincoln Timber L.P.	\$ 915.1	-3.8 %	-4.3 %	-3.3 %	-11.9 %
Southern Diversified	\$ 2.2	-	-	-	0.8 %
Sylvanus LLC	\$ 428.6	6.2 %	0.6 %	2.6 %	4.1 %
<b>Total Forestland</b>	<b>\$ 1,335.1</b>	<b>(2.2%)</b>	<b>-3.7%</b>	<b>-2.8%</b>	<b>-10.7%</b>

<sup>1</sup>Real Asset Partnerships time weighted rate of returns are computed by AREIS Investment Book of Record. Market values are based on General Partners' most recent received financial statements and any cash adjustments made through the reporting date. Only partnerships with market values greater than \$50,000 are included in reporting.

\*NM (not meaningful) due a posting of income or appreciation/depreciation relative to a small or negative market value which results in a misleading performance return.

## Public Employees Retirement Fund (PERF) Portfolio &amp; Partnership Report



As of June 30, 2019

## Liquidity Ending Market Value &amp; Performance Summary (By Portfolio)

Portfolio	Ending Market Value (mil)	10-Yr			5-Yr			3-Yr			1-Yr		
		Net Return	BM Return	Excess Bps	Net Return	BM Return	Excess Bps	Net Return	BM Return	Excess Bps	Net Return	BM Return	Excess Bps
CalPERS Short Term	\$ 3,705.0	0.7%	0.5%	14	1.1%	0.9%	23	1.7%	1.4%	31	2.6%	2.2%	47
<b>Total Liquidity</b>	<b>\$ 3,705.0</b>	<b>1.1%</b>	<b>1.2%</b>	<b>(9)</b>	<b>1.3%</b>	<b>1.2%</b>	<b>10</b>	<b>1.7%</b>	<b>1.3%</b>	<b>37</b>	<b>2.6%</b>	<b>2.2%</b>	<b>45</b>

## Trust Level Ending Market Value &amp; Performance Summary (By Portfolio)

Portfolio	Ending Market Value (mil)	10-Yr			5-Yr			3-Yr			1-Yr		
		Net Return	BM Return	Excess Bps	Net Return	BM Return	Excess Bps	Net Return	BM Return	Excess Bps	Net Return	BM Return	Excess Bps
Absolute Return Strategies	\$ 184.3	1.2%	5.8%	(459)	(3.0%)	6.1%	(909)	(6.6%)	6.5%	(1,314)	(13.6%)	8.1%	(2,170)
AQR MAC Fund LP	\$ 728.8	-	-	-	4.8%	7.5%	(274)	5.3%	7.5%	(224)	(0.4%)	7.5%	(789)
CalPERS GE Vol. Cap.	\$ 6.7	-	-	-	-	-	-	(5.4%)	8.3%	(1,367)	(38.0%)	(5.8%)	(3,224)
CalPERS Int Hldg Fixed Income	\$ 0.8	NM	NM	-	NM	NM	-	NM	NM	-	NM	NM	-
CalPERS MHLP	\$ 4.7	-	-	-	3.8%	2.6%	120	3.0%	2.1%	87	0.5%	6.4%	(592)
CalPERS Securities Lending	\$ 0.3	NM	NM	-	NM	NM	-	NM	NM	-	NM	NM	-
CalPERS TLPM Completion	\$ 571.8	-	-	-	-	-	-	-	-	-	7.3%	7.2%	17
Fidelity MAC	\$ 1,026.6	-	-	-	-	-	-	-	-	-	7.1%	7.7%	(63)
FIS CalBear	\$ 615.6	-	-	-	-	-	-	6.2%	9.1%	(284)	(8.0%)	(2.5%)	(544)
Legato	\$ 887.8	-	-	-	-	-	-	7.7%	9.5%	(186)	1.0%	0.4%	55
LEIA GEM	\$ 673.3	-	-	-	-	-	-	10.9%	10.7%	21	(4.3%)	(4.2%)	(10)
Perella Weinberg MAC	\$ 548.2	-	-	-	-	-	-	-	-	-	15.3%	7.7%	756
Progress II	\$ 602.2	-	-	-	-	-	-	8.7%	10.4%	(178)	(2.6%)	0.7%	(325)
Standard Life MAC	\$ 315.7	-	-	-	2.0%	7.4%	(541)	2.9%	7.3%	(440)	10.3%	7.0%	331
Strategic II	\$ 700.0	-	-	-	-	-	-	11.5%	13.7%	(217)	(1.3%)	3.3%	(465)
<b>Total Trust Level</b>	<b>\$ 6,867.0</b>	-	-	-	-	-	-	-	-	-	-	-	-

## Risk Mitigation Ending Market Value &amp; Contribution to Total Fund (By Portfolio)

Portfolio	Ending Market Value (mil)	Contribution to Total Fund (bps)			
		10-Yr	5-Yr	3-Yr	1-Yr
CalPERS Left Tail Risk	\$ 21.0	-	-	-	(2)
Longtail Alpha	\$ 58.9	-	-	-	(2)
Universa	\$ 94.7	-	-	-	(2)
<b>Total Risk Mitigation</b>	<b>\$ 174.6</b>	-	-	-	<b>(6)</b>

## Plan Level Transition Ending Market Value &amp; Performance Summary (By Portfolio)

Portfolio	Ending Market Value (mil)	10-Yr			5-Yr			3-Yr			1-Yr		
		Net Return	BM Return	Excess Bps	Net Return	BM Return	Excess Bps	Net Return	BM Return	Excess Bps	Net Return	BM Return	Excess Bps
CalPERS Fixed Income Transition	\$ 0.0	NM	NM	-	NM	NM	-	NM	NM	-	NM	NM	-
CalPERS Inflation Transition	\$ 0.0	-	-	-	NM	NM	-	NM	NM	-	NM	NM	-
CalPERS Small Cap Transition	\$ 0.0	NM	NM	-	NM	NM	-	NM	NM	-	NM	NM	-
<b>Total Plan Level Transition</b>	<b>\$ 0.0</b>	-	-	-	-	-	-	-	-	-	-	-	-

\*NM (not meaningful) due a posting of income or appreciation/depreciation relative to a small or negative market value which results in a misleading performance return.