

Managers and Assets Under Management as of June 30, 2018  
State of Hawaii Employees' Retirement System

Risk-Based Policy Framework

Strategic Class	Sub-Class	Manager	Assets Under Management	% of Total	Inception Date
Broad Growth	Traditional Growth				
	Global Small Cap Equity	Fidelity Institutional	447,720,561	2.72%	4/1/2017
	Global Small Cap Equity	Wellington	474,498,281	2.88%	4/1/2017
	Global Mid-Large Cap Equity	Longview	627,040,655	3.80%	9/1/2017
	Global Mid-Large Cap Equity	QMA	799,384,966	4.85%	9/1/2017
	Global Equity - Passive	BlackRock - Alpha Tilts	1,537,284,706	9.32%	6/1/2016
	Global Equity - Passive	Legal & General	1,513,173,573	9.18%	5/1/2016
	Stabilized Growth				
	Public Extended Global Credit	Tortoise Credit	239,669,734	1.45%	5/1/1990
	Public Extended Global Credit	PIMCO	175,131,728	1.06%	4/1/2015
	Public Extended Global Credit	Western Asset Management	387,555,873	2.35%	7/1/2005
	Core Real Estate (Separate)	Heitman Capital	261,574,633	1.59%	11/1/1995
	Core Real Estate	Heitman Core RE Debt Fund	51,103,879	0.31%	2/1/2018
	Core Real Estate (Separate)	INVESCO Realty	86,773,589	0.53%	8/1/1998
	Core Real Estate	Cabot Ind Core	43,986,363	0.27%	8/1/2016
	Core Real Estate	H2 Core Real Estate Debt Fund	28,063,103	0.17%	9/1/2015
	Core Real Estate	INVESCO Comm Mortgage	3,789,441	0.02%	5/1/2018
	Low Volatility Equity	Robeco	511,317,375	3.10%	10/1/2016
	Low Volatility Equity	TOBAM	522,029,523	3.17%	10/1/2016
	Options-Based Equity	Gateway Investment Advisers LLC - Put-Write	671,283,547	4.07%	9/1/2016
	Options-Based Equity	Gateway Investment Advisers LLC - Non-Replication	971,725,367	5.89%	12/1/2011
	Options-Based Equity	Neuberger Berman	647,975,468	3.93%	10/1/2016
	Options-Based Equity	UBS	652,569,059	3.96%	10/1/2016
	Private Growth				
	Private Equity	Hamilton Lane	1,227,694,532	7.45%	11/1/1997
	Private Equity	I-Squared Global Infrastructure	18,396,635	0.11%	6/1/2015
	Private Equity	Landmark XVI	576,302	0.00%	7/1/2018
	HiTIP	Stafford	22,819,788	0.14%	5/1/2009
	HiTIP	Stafford II	2,406,512	0.01%	4/1/2017
	Non-Core Real Estate - Opportunistic	BlackSand Capital Fund I	4,189,442	0.03%	9/1/2011
	Non-Core Real Estate - Opportunistic	Blackstone Real Estate VII	17,027,415	0.10%	6/1/2012
	Non-Core Real Estate - Opportunistic	Cerberus IV	12,671,037	0.08%	1/1/2017
	Non-Core Real Estate - Opportunistic	Fortress Japan Opp Fund II	6,713,694	0.04%	7/1/2012
	Non-Core Real Estate - Opportunistic	Fortress Japan Opp Fund III	17,198,781	0.10%	1/1/2015
	Non-Core Real Estate - Opportunistic	Lone Star Fund II	917,262	0.01%	6/1/2011
	Non-Core Real Estate - Opportunistic	Lone Star Fund VII	289,023	0.00%	6/1/2011
	Non-Core Real Estate - Opportunistic	Torchlight Debt Opportunity Fund V	28,544,337	0.17%	6/1/2015
	Non-Core Real Estate - Opportunistic	Torchlight Debt Fund VI	3,580,895	0.02%	3/1/2018
	Non-Core Real Estate - Value-Add	AG Asia Realty Fund III	25,530,151	0.15%	7/1/2016
	Non-Core Real Estate - Value-Add	AG Core Plus Realty Fund II	1,557,113	0.01%	4/1/2008
	Non-Core Real Estate - Value-Add	AG Core Plus Realty Fund III	6,713,785	0.04%	4/1/2012
	Non-Core Real Estate - Value-Add	AG Core Plus Realty Fund IV	22,291,042	0.14%	6/1/2015
	Non-Core Real Estate - Value-Add	AG Europe Realty II	8,337,687	0.05%	5/1/2018
	Non-Core Real Estate - Value-Add	Almanac VI	7,225,971	0.04%	11/1/2012
	Non-Core Real Estate - Value-Add	Almanac VII	26,506,581	0.16%	4/1/2015
	Non-Core Real Estate - Value-Add	BlackRock Asia IV	24,345,689	0.15%	7/1/2017
	Non-Core Real Estate - Value-Add	CBRE Strategic Partners Value Fund VI	67,917	0.00%	10/1/2012
	Non-Core Real Estate - Value-Add	CBRE Strategic Partners Value Fund VII	19,504,969	0.12%	5/1/2015
	Non-Core Real Estate - Value-Add	CBRE Strategic Partners Value B	27,700,407	0.17%	10/1/2017
	Non-Core Real Estate - Value-Add	DRA GR INC X	15,485,604	0.09%	2/1/2017
	Non-Core Real Estate - Value-Add	H2 CP (RE Debt)	24,950,192	0.15%	11/1/2016
	Non-Core Real Estate - Value-Add	iSquared Global Infrastructure II	2,833,108	0.02%	7/1/2018
	Non-Core Real Estate - Value-Add	Kayne Anderson V	11,084,858	0.07%	6/1/2018
	Non-Core Real Estate - Value-Add	KKR Rep Americas II	4,984,731	0.03%	3/1/2018
	Non-Core Real Estate - Value-Add	LaSalle Income & Growth Fund V	0	0.00%	8/1/2008
	Non-Core Real Estate - Value-Add	LaSalle Income & Growth Fund VII	22,366,350	0.14%	8/1/2016
	Non-Core Real Estate - Value-Add	Mesa West RE Inc Fund III	7,135,710	0.04%	9/1/2013
	Non-Core Real Estate - Value-Add	Mesa West RE Fund IV	6,284,687	0.04%	4/1/2017
	Non-Core Real Estate - Value-Add	Prudential Sr Housing Fund IV	16,821,689	0.10%	4/1/2012
	Non-Core Real Estate - Value-Add	Prudential Sr Housing Fund V	14,756,766	0.09%	5/1/2015
Opportunities		Lowe Enterprises	28,612,213	0.17%	1/1/2015
Principal Protection					
	US Intermediate	Bank of Hawaii	358,115,437	2.17%	11/1/2017
	US Intermediate	First Hawaiian Bank	360,108,710	2.18%	11/1/1991
	Non-US Intermediate	Eaton Vance	645,258,804	3.91%	6/1/1989
Crisis Risk Offset					
	Alternative Return Capture	Graham Quant Macro	227,274,022	1.38%	4/1/2017
	Alternative Return Capture	Mellon Risk Premia	108,469,100	0.66%	1/1/2018
	Alternative Return Capture	P/E Global Macro	214,512,899	1.30%	4/1/2017
	Alternative Return Capture	Welton MultiQuant	108,262,679	0.66%	4/1/2017
	Systematic Trend Following	AlphaSimplex	232,132,674	1.41%	1/1/2018
	Systematic Trend Following	Aspect Core Fund	222,899,106	1.35%	4/1/2017
	Systematic Trend Following	Campbell Core Trend	236,416,968	1.43%	4/1/2017
	Systematic Trend Following	Crabel Advaned Trend	220,670,610	1.34%	4/1/2017
	Treasury Duration Capture	Ryan Labs Long Treasury	549,661,473	3.33%	4/1/2017
Real Return					
	Timber	Hancock Timber	186,961,876	1.13%	9/1/1999
	GILS	BlackRock	289,824,599	1.76%	9/1/2011
	Infrastructure	KKR Global Infrastructure II	38,045,464	0.23%	12/1/2014
All Other Assets					
	Cash Account	BNY Mellon	107,713,999	0.65%	2/1/1998
	Cash Account	Bank of Hawaii	35,600,283	0.22%	1/1/1972
	Transition Account I	BNY Mellon	865,862	0.01%	4/1/2002
	Transition Account II	BNY Mellon	913	0.00%	7/1/2011
	Residual Account	BNY Mellon	87,263	0.00%	6/1/2013
Closing Accounts					
	World ex-US Equity	Franklin Templeton	1,084,857	0.01%	11/1/2011
	World ex-US Equity	JP Morgan Chase	697,186	0.00%	9/1/2005
	World ex-US Equity	Mercator Asset Mgt LP	615,075	0.00%	12/1/2003
	Emerging Markets Equity	QMA	361	0.00%	12/1/2011
	Emerging Markets Equity	Research Affiliates	9	0.00%	12/1/2011
	Non-US Intermediate	PIMCO	39,001	0.00%	3/1/1979
<b>Total Fund Value</b>			<b>16,487,093,526</b>	<b>100.00%</b>	

Source: BNY Mellon