

Managers and Assets Under Management as of March 31, 2019
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	172,023	0.00%	4/1/2017
		Global Small Cap Equity	Wasatch	427,991,803	2.57%	1/1/2019
		Global Small Cap Equity	Wellington	442,590,935	2.66%	4/1/2017
		Global Mid-Large Cap Equity	Longview	664,068,766	3.98%	9/1/2017
		Global Mid-Large Cap Equity	QMA	792,247,032	4.75%	9/1/2017
		Global Equity - Passive	BlackRock - Alpha Tilts	1,251,343,144	7.51%	6/1/2016
	Global Equity - Passive	Legal & General	1,368,831,973	8.21%	5/1/2016	
	Stabilized Growth	Public Extended Global Credit	Tortoise Credit	249,790,143	1.50%	5/1/1990
		Public Extended Global Credit	PIMCO	185,251,180	1.11%	4/1/2015
		Public Extended Global Credit	Western Asset Management	406,242,963	2.44%	7/1/2005
		Core Real Estate (Separate)	Heitman Capital	300,161,626	1.80%	11/1/1995
		Core Real Estate	Heitman Core RE Debt Fund	50,144,923	0.30%	2/1/2018
		Core Real Estate (Separate)	INVESCO Realty	24,638,756	0.15%	8/1/1998
		Core Real Estate	Cabot Ind Core	45,945,663	0.28%	8/1/2016
		Core Real Estate	H2 Core Real Estate Debt Fund	25,208,843	0.15%	9/1/2015
		Core Real Estate	INVESCO Comm Mortgage	38,036,652	0.23%	5/1/2018
		Low Volatility Equity	Robeco	537,411,836	3.22%	10/1/2016
		Low Volatility Equity	TOBAM	509,820,893	3.06%	10/1/2016
		Options-Based Equity	Gateway Investment Advisers LLC - Put-Write	674,691,918	4.05%	9/1/2016
		Options-Based Equity	Gateway Investment Advisers LLC - Non-Replication	991,238,415	5.95%	12/1/2011
		Options-Based Equity	Neuberger Berman	660,383,334	3.96%	10/1/2016
		Options-Based Equity	UBS	541,154,425	3.25%	10/1/2016
		Private Growth	Private Equity	Hamilton Lane	1,473,625,770	8.84%
	Private Equity		I-Squared Global Infrastructure	15,493,360	0.09%	6/1/2015
	Private Equity		I-Squared Global Infrastructure II	11,957,871	0.07%	7/1/2018
	Private Equity		Secondary Private Equity	7,669,344	0.05%	7/1/2018
	HiTIP		Stafford	23,308,215	0.14%	5/1/2009
	HiTIP		Stafford II	7,225,029	0.04%	4/1/2017
	Non-Core Real Estate - Opportunistic		BlackSand Capital Fund I	1,973,450	0.01%	9/1/2011
	Non-Core Real Estate - Opportunistic		BlackSand Capital Fund II	1,384,842	0.01%	4/1/2019
	Non-Core Real Estate - Opportunistic		Blackstone Real Estate VII	13,522,354	0.08%	6/1/2012
	Non-Core Real Estate - Opportunistic		Cerberus IV	21,315,800	0.13%	1/1/2017
Non-Core Real Estate - Opportunistic	Fortress Japan Opp Fund II		6,031,834	0.04%	7/1/2012	
Non-Core Real Estate - Opportunistic	Fortress Japan Opp Fund III		15,973,109	0.10%	1/1/2015	
Non-Core Real Estate - Opportunistic	Fortress Japan Opp Fund IV		371,527	0.00%	8/1/2018	
Non-Core Real Estate - Opportunistic	Lone Star Fund II		597,498	0.00%	6/1/2011	
Non-Core Real Estate - Opportunistic	Lone Star Fund VII		249,851	0.00%	6/1/2011	
Non-Core Real Estate - Opportunistic	Torchlight Debt Opportunity Fund V		30,864,639	0.19%	6/1/2015	
Non-Core Real Estate - Opportunistic	Torchlight Debt Fund VI		2,494,140	0.01%	3/1/2018	
Non-Core Real Estate - Value-Add	AG Asia Realty Fund III		26,688,537	0.16%	7/1/2016	
Non-Core Real Estate - Value-Add	AG Core Plus Realty Fund II		1,579,660	0.01%	4/1/2008	
Non-Core Real Estate - Value-Add	AG Core Plus Realty Fund III		4,964,293	0.03%	4/1/2012	
Non-Core Real Estate - Value-Add	AG Core Plus Realty Fund IV		34,159,654	0.20%	6/1/2015	
Non-Core Real Estate - Value-Add	AG Europe Realty II		25,577,671	0.15%	5/1/2018	
Non-Core Real Estate - Value-Add	Almanac VI		5,661,694	0.03%	11/1/2012	
Non-Core Real Estate - Value-Add	Almanac VII		30,094,281	0.18%	4/1/2015	
Non-Core Real Estate - Value-Add	Almanac VIII		702,300	0.00%	1/1/2019	
Non-Core Real Estate - Value-Add	BlackRock Asia IV		37,693,772	0.23%	7/1/2017	
Non-Core Real Estate - Value-Add	CBRE Strategic Partners Value Fund VI		36,699	0.00%	10/1/2012	
Non-Core Real Estate - Value-Add	CBRE Strategic Partners Value Fund VII		5,495,422	0.03%	5/1/2015	
Non-Core Real Estate - Value-Add	CBRE Strategic Partners Value B		44,666,985	0.27%	10/1/2017	
Non-Core Real Estate - Value-Add	DRA GR INC X		21,604,042	0.13%	2/1/2017	
Non-Core Real Estate - Value-Add	H2 CP (RE Debt)	20,697,586	0.12%	11/1/2016		
Non-Core Real Estate - Value-Add	Kayne Anderson V	20,638,137	0.12%	6/1/2018		
Non-Core Real Estate - Value-Add	KKR Rep Americas II	15,368,495	0.09%	3/1/2018		
Non-Core Real Estate - Value-Add	LaSalle Income & Growth Fund VII	22,990,407	0.14%	8/1/2016		
Non-Core Real Estate - Value-Add	Mesa West RE Inc Fund III	3,181,047	0.02%	9/1/2013		
Non-Core Real Estate - Value-Add	Mesa West RE Fund IV	6,128,893	0.04%	4/1/2017		
Non-Core Real Estate - Value-Add	Prudential Sr Housing Fund IV	16,945,407	0.10%	4/1/2012		
Non-Core Real Estate - Value-Add	Prudential Sr Housing Fund V	16,487,579	0.10%	5/1/2015		
Non-Core Real Estate - Value-Add	Starwood Fund XI	4,441,150	0.03%	8/1/2018		
Opportunities		Lowe Enterprises	28,893,812	0.17%	1/1/2015	
Principal Protection	US Intermediate	Bank of Hawaii	311,654,982	1.87%	11/1/2017	
	US Intermediate	First Hawaiian Bank	312,709,327	1.88%	11/1/1991	
	Non-US Intermediate	Eaton Vance	537,608,465	3.23%	6/1/1989	
Crisis Risk Offset	Alternative Return Capture	ARP Alternative Return Capture	223,376,094	1.34%	4/1/2019	
	Alternative Return Capture	Graham Quant Macro	306,994,405	1.84%	4/1/2017	
	Alternative Return Capture	Lombard Odier Risk Premia	224,396,620	1.35%	4/1/2019	
	Alternative Return Capture	Mellon Risk Premia	1,357,815	0.01%	1/1/2018	
	Alternative Return Capture	P/E Global Macro	274,857,448	1.65%	4/1/2017	
	Alternative Return Capture	Welton MultiQuant	2,106,648	0.01%	4/1/2017	
	Systematic Trend Following	AlphaSimplex	197,634,180	1.19%	1/1/2018	
	Systematic Trend Following	Aspect Core Fund	196,704,903	1.18%	4/1/2017	
	Systematic Trend Following	Campbell Core Trend	194,090,531	1.16%	4/1/2017	
	Systematic Trend Following	Crabel Advanced Trend	196,479,614	1.18%	4/1/2017	
	Systematic Trend Following	Mount Lucas	191,214,277	1.15%	4/1/2019	
	Treasury Duration Capture	Ryan Labs	551,246,302	3.31%	4/1/2017	
	Real Return	Timber	Hancock Timber	186,150,225	1.12%	9/1/1999
GILS		BlackRock	300,328,974	1.80%	9/1/2011	
Infrastructure		KKR Global Infrastructure II	42,767,229	0.26%	12/1/2014	
All Other Assets	Cash Account	BNY Mellon	152,072,272	0.91%	2/1/1998	
	Cash Account	Bank of Hawaii	39,927,673	0.24%	1/1/1972	
	Transition Account I	BNY Mellon	3,511,753	0.02%	4/1/2002	
	Transition Account II	BNY Mellon	929	0.00%	7/1/2011	
	Residual Account	BNY Mellon	134,091	0.00%	6/1/2013	
	Closing Accounts					
World ex-US Equity	Franklin Templeton	1,062,669	0.01%	11/1/2011		
World ex-US Equity	JP Morgan Chase	679,123	0.00%	9/1/2005		
World ex-US Equity	Mercator Asset Mgt LP	600,520	0.00%	12/1/2003		
Emerging Markets Equity	QMA	3,572	0.00%	12/1/2011		
Non-US Intermediate	PIMCO	950	0.00%	3/1/1979		
Total Fund Value			16,665,794,992	100.00%		

Source: BNY Mellon