

Managers and Assets Under Management as of June 30, 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	Wasatch	464,946,683	2.71%	1/1/2019		
		Global Small Cap Equity	Wellington	457,497,382	2.66%	4/1/2017		
		Global Mid-Large Cap Equity	Longview	674,480,366	3.93%	9/1/2017		
		Global Mid-Large Cap Equity	QMA	787,659,330	4.58%	9/1/2017		
		Global Equity - Passive	BlackRock - Alpha Tilts	1,183,167,722	6.89%	6/1/2016		
		Global Equity - Passive	Legal & General	1,420,489,701	8.27%	5/1/2016		
	Stabilized Growth	Public Extended Global Credit	Tortoise Credit	109,935,119	0.64%	5/1/1990		
			HPS Credit	150,000,000	0.87%	6/30/2019		
			PIMCO	191,345,648	1.11%	4/1/2015		
			Western Asset Management	421,424,868	2.45%	7/1/2005		
			Heitman Capital	353,862,029	2.06%	11/1/1995		
			Heitman Core RE Debt Fund	50,975,661	0.30%	2/1/2018		
			INVESCO Realty	228,897	0.00%	8/1/1998		
			Cabot Ind Core	42,684,676	0.25%	8/1/2016		
			H2 Core Real Estate Debt Fund	18,138,056	0.11%	9/1/2015		
			INVESCO Comm Mortgage	54,706,571	0.32%	5/1/2018		
			Robeco	559,527,050	3.26%	10/1/2016		
			TOBAM	469,682,533	2.73%	10/1/2016		
			AQR	397,492,647	2.31%	6/30/2019		
			Gateway Investment Advisers LLC - Put-Write	685,588,345	3.99%	9/1/2016		
			Gateway Investment Advisers LLC - Non-Replication	1,015,081,550	5.91%	12/1/2011		
			Neuberger Berman	672,381,964	3.91%	10/1/2016		
			Private Growth	Private Equity	Hamilton Lane	1,545,843,712	9.00%	11/1/1997
					I-Squared Global Infrastructure	17,439,702	0.10%	6/1/2015
					I-Squared Global Infrastructure II	13,707,358	0.08%	7/1/2018
					Secondary Private Equity	7,369,601	0.04%	7/1/2018
					Stafford	23,266,353	0.14%	5/1/2009
					Stafford II	8,198,749	0.05%	4/1/2017
					BlackSand Capital Fund I	2,632,396	0.02%	9/1/2011
					BlackSand Capital Fund II	437,157	0.00%	4/1/2019
					Blackstone Real Estate VII	13,050,197	0.08%	6/1/2012
					Cerberus IV	28,117,245	0.16%	1/1/2017
					Fortress Japan Opp Fund II	5,270,102	0.03%	7/1/2012
	Fortress Japan Opp Fund III	18,126,875			0.11%	1/1/2015		
	Fortress Japan Opp Fund IV	977,876			0.01%	8/1/2018		
	Lone Star Fund II	618,303			0.00%	6/1/2011		
	Lone Star Fund VII	251,781			0.00%	6/1/2011		
	Torchlight Debt Opportunity Fund V	35,825,949			0.21%	6/1/2015		
	Torchlight Debt Fund VI	15,284,681			0.09%	3/1/2018		
	AG Asia Realty Fund III	26,628,321			0.16%	7/1/2016		
	AG Core Plus Realty Fund II	1,348,818			0.01%	4/1/2008		
	AG Core Plus Realty Fund III	4,628,115			0.03%	4/1/2012		
	AG Core Plus Realty Fund IV	35,327,488			0.21%	6/1/2015		
	AG Europe Realty II	27,186,364			0.16%	5/1/2018		
	Almanac VI	5,381,223			0.03%	11/1/2012		
	Almanac VII	31,335,903			0.18%	4/1/2015		
	Almanac VIII	2,052,089			0.01%	1/1/2019		
	BlackRock Asia IV	38,959,326			0.23%	7/1/2017		
	CBRE Strategic Partners Value Fund VI	36,174			0.00%	10/1/2012		
	CBRE Strategic Partners Value Fund VII	5,497,321			0.03%	5/1/2015		
	CBRE Strategic Partners Value B	46,685,425			0.27%	10/1/2017		
	DRA GR INC X	31,351,540			0.18%	2/1/2017		
	H2 CP (RE Debt)	20,293,329			0.12%	11/1/2016		
	Kayne Anderson V	21,456,214			0.12%	6/1/2018		
	KKR Rep Americas II	17,279,905			0.10%	3/1/2018		
	LaSalle Income & Growth Fund VII	20,296,291			0.12%	8/1/2016		
	Mesa West RE Inc Fund III	2,316,935			0.01%	9/1/2013		
	Mesa West RE Fund IV	9,145,716			0.05%	4/1/2017		
	Prudential Sr Housing Fund IV	16,599,799			0.10%	4/1/2012		
	Prudential Sr Housing Fund V	23,354,751			0.14%	5/1/2015		
	Starwood Fund XI	4,825,818			0.03%	8/1/2018		
	Opportunities				Lowe Enterprises	30,074,362	0.18%	1/1/2015
	Principal Protection	US Intermediate			Bank of Hawaii	318,289,825	1.85%	11/1/2017
First Hawaiian Bank					318,761,878	1.86%	11/1/1991	
Eaton Vance			548,617,622	3.19%	6/1/1989			
Crisis Risk Offset	Alternative Return Capture	ARP Alternative Return Capture	215,500,335	1.25%	4/1/2019			
		Graham Quant Macro	313,743,195	1.83%	4/1/2017			
		Lombard Odier Risk Premia	217,723,452	1.27%	4/1/2019			
		P/E Global Macro	265,486,184	1.55%	4/1/2017			
		AlphaSimplex	210,770,928	1.23%	1/1/2018			
		Aspect Core Fund	209,230,607	1.22%	4/1/2017			
		Campbell Core Trend	204,204,740	1.19%	4/1/2017			
		Crabel Advanced Trend	207,462,615	1.21%	4/1/2017			
		Mount Lucas	191,933,414	1.12%	4/1/2019			
		Ryan Labs	584,527,171	3.40%	4/1/2017			
		Real Return	Timber	Hancock Timber	187,835,981	1.09%	9/1/1999	
				BlackRock	309,702,001	1.80%	9/1/2011	
KKR Global Infrastructure II	46,566,453			0.27%	12/1/2014			
All Other Assets	Cash Account	BNY Mellon	154,310,193	0.90%	2/1/1998			
		Bank of Hawaii	38,640,646	0.22%	1/1/1972			
		BNY Mellon	4,404,549	0.03%	4/1/2002			
		BNY Mellon	935	0.00%	7/1/2011			
		BNY Mellon	134,930	0.00%	6/1/2013			
		Parametric Overlay	289,345,231	1.68%	6/1/2019			
		Closing Accounts	World ex-US Equity	Franklin Templeton	1,076,138	0.01%	11/1/2011	
				JP Morgan Chase	689,480	0.00%	9/1/2005	
				Mercator Asset Mgt LP	609,802	0.00%	12/1/2003	
				QMA	3,600	0.00%	12/1/2011	
PIMCO	2,467			0.00%	3/1/1979			
Fidelity Institutional	174,935	0.00%	4/1/2017					
Total Fund Value			17,179,525,368	100.00%				

Source: BNY Mellon