

Managers and Assets Under Management as of March 31, 2020
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	427,428,815	2.64%	1/1/2019
		Global Small Cap Equity	Wellington	333,762,020	2.06%	4/1/2017
		Global Mid-Large Cap Equity	Longview	571,601,376	3.53%	9/1/2017
		Global Mid-Large Cap Equity	QMA	662,972,119	4.10%	9/1/2017
		Global Mid-Large Cap Equity	Alliance Bernstein	123,640,445	0.76%	3/1/2020
		Global Mid-Large Cap Equity	Wellington GL	111,964,795	0.69%	3/1/2020
	Stabilized Growth	Global Equity - Passive	BlackRock - Alpha Tilts	998,545,769	6.17%	6/1/2016
		Global Equity - Passive	Legal & General	1,220,511,676	7.54%	5/1/2016
		Public Extended Global Credit	Tortoise Credit	4,380,219	0.03%	5/1/1990
		Public Extended Global Credit	HPS Credit	414,527,634	2.56%	6/30/2019
		Public Extended Global Credit	Silverrock Credit	100,656,313	0.62%	
		Public Extended Global Credit	PIMCO	178,032,201	1.10%	4/1/2015
		Public Extended Global Credit	Western Asset Management	330,427,700	2.04%	7/1/2005
		Public Extended Global Credit	Carval Credit	45,000,000	0.28%	4/1/2020
		Core Real Estate (Separate)	Heltman Capital	450,819,266	2.78%	11/1/1995
		Core Real Estate	Heltman Core RE Debt Fund	50,162,709	0.31%	2/1/2018
		Core Real Estate (Separate)	INVECO Realty	56,577	0.00%	8/1/1998
		Core Real Estate	Cabot Ind Core	44,828,702	0.28%	8/1/2016
		Core Real Estate	H2 Core Real Estate Debt Fund	0	0.00%	9/1/2015
		Core Real Estate	INVECO Comm Mortgage	81,004,497	0.50%	5/1/2018
		Low Volatility Equity	Robeco	461,668,059	2.85%	10/1/2016
	Low Volatility Equity	TOBAM	402,747,274	2.49%	10/1/2016	
	Options-Based Equity	AGR	568,548,128	3.51%	6/30/2019	
	Options-Based Equity	Gateway Investment Advisers LLC - Put-Write	579,498,895	3.58%	9/1/2016	
	Options-Based Equity	Gateway Investment Advisers LLC - Non-Replication	0	0.00%	12/1/2011	
	Options-Based Equity	Geode	550,721,273	3.40%	10/1/2019	
	Options-Based Equity	Neuberger Berman	568,102,880	3.51%	10/1/2016	
Private Growth	Private Equity	Hamilton Lane	1,855,685,766	11.46%	11/1/1997	
	Private Equity	I-Squared Global Infrastructure	16,891,649	0.10%	6/1/2015	
	Private Equity	I-Squared Global Infrastructure II	31,968,628	0.20%	7/1/2018	
	Private Equity	Secondary Private Equity	27,673,714	0.17%	7/1/2018	
	HITIP	Stafford	20,753,101	0.13%	5/1/2009	
	HITIP	Stafford II	11,125,929	0.07%	4/1/2017	
	HITIP	Stafford III	714,257	0.00%	2/1/2020	
	Non-Core Real Estate - Opportunistic	BlackSand Capital Fund I	2,485,171	0.02%	9/1/2011	
	Non-Core Real Estate - Opportunistic	BlackSand Capital Fund II	3,560,669	0.02%	4/1/2019	
	Non-Core Real Estate - Opportunistic	Blackstone Real Estate VII	10,214,632	0.06%	6/1/2012	
	Non-Core Real Estate - Opportunistic	Blackstone REP EURO VI	3,161,017	0.02%		
	Non-Core Real Estate - Opportunistic	Blackstone Real Estate IX	8,866,854	0.05%	10/1/2019	
	Non-Core Real Estate - Opportunistic	Cerberus IV	31,302,658	0.19%	1/1/2017	
	Non-Core Real Estate - Opportunistic	EJF OPZONE 1	30,000,000	0.19%	4/1/2020	
	Non-Core Real Estate - Opportunistic	Fortress Japan Opp Fund II	3,182,412	0.02%	7/1/2012	
	Non-Core Real Estate - Opportunistic	Fortress Japan Opp Fund III	13,433,362	0.08%	1/1/2015	
	Non-Core Real Estate - Opportunistic	Fortress Japan Opp Fund IV	2,369,405	0.01%	8/1/2018	
	Non-Core Real Estate - Opportunistic	Lone Star Fund II	478,637	0.00%	6/1/2011	
	Non-Core Real Estate - Opportunistic	Lone Star Fund VII	164,288	0.00%	6/1/2011	
	Non-Core Real Estate - Opportunistic	Torchlight Debt Opportunity Fund V	11,515,092	0.07%	6/1/2015	
	Non-Core Real Estate - Opportunistic	Torchlight Debt Fund VI	28,568,048	0.18%	3/1/2018	
	Non-Core Real Estate - Value-Add	AG Asia Realty Fund III	21,590,288	0.13%	7/1/2016	
	Non-Core Real Estate - Value-Add	AG Core Plus Realty Fund II	1,092,622	0.01%	4/1/2008	
	Non-Core Real Estate - Value-Add	AG Core Plus Realty Fund III	4,311,231	0.03%	4/1/2012	
	Non-Core Real Estate - Value-Add	AG Core Plus Realty Fund IV	39,191,879	0.24%	6/1/2015	
	Non-Core Real Estate - Value-Add	AG Realty Value X	7,066,245	0.04%	11/1/2019	
	Non-Core Real Estate - Value-Add	AG Europe Realty II	45,258,606	0.28%	5/1/2018	
	Non-Core Real Estate - Value-Add	Almanac VI	3,553,303	0.02%	11/1/2012	
	Non-Core Real Estate - Value-Add	Almanac VII	17,164,091	0.11%	4/1/2015	
	Non-Core Real Estate - Value-Add	Almanac VIII	5,296,337	0.03%	1/1/2019	
	Non-Core Real Estate - Value-Add	BlackRock Asia IV	35,544,888	0.22%	7/1/2017	
	Non-Core Real Estate - Value-Add	CBRE Strategic Partners Value Fund VI	33,047	0.00%	10/1/2012	
	Non-Core Real Estate - Value-Add	CBRE Strategic Partners Value Fund VII	1,270,477	0.01%	5/1/2015	
	Non-Core Real Estate - Value-Add	CBRE Strategic Partners Value 8	47,504,340	0.29%	10/1/2017	
	Non-Core Real Estate - Value-Add	CBRE Strategic Partners Value 9	5,710,189	0.04%	2/1/2020	
	Non-Core Real Estate - Value-Add	DRA GR INC X	34,897,713	0.21%	2/1/2017	
	Non-Core Real Estate - Value-Add	DRA GR INC X	6,178,947	0.04%	4/1/2020	
	Non-Core Real Estate - Value-Add	H2 CP (RE Debt)	29,699,257	0.18%	11/1/2016	
	Non-Core Real Estate - Value-Add	Kayne Anderson V	31,393,094	0.19%	6/1/2018	
	Non-Core Real Estate - Value-Add	KKR Rep Americas II	28,177,787	0.17%	3/1/2018	
	Non-Core Real Estate - Value-Add	LaSalle Income & Growth Fund VII	21,684,955	0.13%	8/1/2016	
	Non-Core Real Estate - Value-Add	LaSalle Income Growth Fund VIII	7,515,500	0.05%	3/1/2018	
	Non-Core Real Estate - Value-Add	Mesa West RE Inc Fund III	1,003,471	0.01%	9/1/2013	
Non-Core Real Estate - Value-Add	Mesa West RE Fund IV	12,047,732	0.07%	4/1/2017		
Non-Core Real Estate - Value-Add	Prudential SI Housing Fund IV	851,069	0.01%	4/1/2012		
Non-Core Real Estate - Value-Add	Prudential SI Housing Fund V	23,742,733	0.15%	5/1/2015		
Non-Core Real Estate - Value-Add	Prudential SI Housing Fund VI	4,196,768	0.03%	9/1/2019		
Non-Core Real Estate - Value-Add	Starwood Fund XI	10,029,176	0.06%	8/1/2018		
Opportunities		Lowe Enterprises	30,178,590	0.19%	1/1/2015	
Principal Protection	US Intermediate	Bank of Hawaii	335,005,903	2.07%	11/1/2017	
	US Intermediate	First Hawaiian Bank	334,460,693	2.07%	11/1/1991	
	Non-US Intermediate	Eaton Vance	644,459	0.00%	6/1/1989	
Non-US Intermediate	Neuberger Global Fixed	97,978,125	0.61%	9/1/2019		
Crisis Risk Offset	Alternative Return Capture	ARP Alternative Return Capture	196,035,311	1.21%	4/1/2019	
	Alternative Return Capture	Graham Quant Macro	322,740,000	1.99%	4/1/2017	
	Alternative Return Capture	Lombard Odier Risk Premia	208,875,246	1.29%	4/1/2019	
	Alternative Return Capture	P/E Global Macro	320,346,639	1.98%	4/1/2017	
	Systematic Trend Following	AlphaSimplex	187,124,864	1.16%	1/1/2018	
	Systematic Trend Following	Aspect Core Fund	187,770,178	1.16%	4/1/2017	
	Systematic Trend Following	Campbell Core Trend	171,412,871	1.06%	4/1/2017	
	Systematic Trend Following	Crabell Advanced Trend	208,717,521	1.29%	4/1/2017	
	Systematic Trend Following	Mount Lucas	186,745,047	1.15%	4/1/2019	
	Treasury Duration Capture	Ryan Labs Long Treasury	147,073	0.00%	4/1/2017	
	Treasury Duration Capture	Ryan Labs Treasury Custody	499,376,741	3.08%	10/1/2019	
	Real Return	Timber	Hancock Timber	186,325,506	1.15%	9/1/1999
GILS		BlackRock	190,663,115	1.18%	9/1/2011	
Infrastructure		KKR Global Infrastructure II	44,772,533	0.28%	12/1/2014	
All Other Assets	Cash Account	BNY Mellon	393,377,457	2.43%	2/1/1998	
	Cash Account	Bank of Hawaii	43,935,530	0.27%	1/1/1972	
	Transition Account I	BNY Mellon	3,839,492	0.02%	4/1/2002	
	Transition Account II	BNY Mellon	948	0.00%	7/1/2011	
	Residual Account	BNY Mellon	136,857	0.00%	6/1/2013	
Parametric Overlay		194,299,186	1.20%	6/1/2019		
Closing Accounts	World ex-US Equity	Franklin Templeton	672,125	0.00%	11/1/2011	
	World ex-US Equity	JP Morgan Chase	334,799	0.00%	9/1/2005	
	World ex-US Equity	Mercator Asset Mgt LP	242,148	0.00%	12/1/2020	
	Emerging Markets Equity	QMA	420,030	0.00%	12/1/2011	
	Non-US Intermediate	PIMCO	2,515	0.00%	3/1/1979	
	Global Small Cap Equity	Fidelity Institutional	166,951	0.00%	4/1/2017	
Total Fund Value			16,188,338,825	100.00%		