

Managers and Assets Under Management as of September, 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	Public Growth	Global Small Cap Equity	Wasatch	586,151,356	3.25%	1/1/2019		
		Global Small Cap Equity	Wellington	431,557,663	2.40%	4/1/2017		
		Global Mid-Large Cap Equity	Longview	689,911,018	3.83%	9/1/2017		
		Global Mid-Large Cap Equity	Alliance Bernstein	803,151,375	4.46%	3/1/2020		
		Global Mid-Large Cap Equity	Wellington GL	747,818,824	4.15%	3/1/2020		
		Global Equity - Passive	BlackRock - Alpha Tilts	716,971,020	3.98%	6/1/2016		
		Global Equity - Passive	Legal & General	1,424,265,833	7.91%	5/1/2016		
		Public Extended Global Credit	HPS Credit	466,357,083	2.59%	6/30/2019		
		Public Extended Global Credit	Silverrock Credit	142,357,080	0.79%			
		Public Extended Global Credit	PIMCO	201,107,127	1.12%	4/1/2015		
		Public Extended Global Credit	Carval Credit	74,426,401	0.41%	4/1/2020		
		Public Extended Global Credit	OHA Tactical	6,101,753	0.03%	7/1/2020		
		Low Volatility Equity	Robeco	528,745,258	2.94%	10/1/2016		
		Low Volatility Equity	TOBAM	522,870,425	2.90%	10/1/2016		
		Options-Based Equity	AQR	631,231,428	3.50%	6/30/2019		
		Options-Based Equity	AQR Prime Broker	61,667,883	0.34%	9/1/2020		
		Options-Based Equity	Gateway Investment Advisers LLC - Put-Write	716,565,556	3.98%	9/1/2016		
		Options-Based Equity	Geode	609,832,236	3.72%	10/1/2019		
		Options-Based Equity	Neuberger Berman	705,058,248	3.91%	10/1/2016		
		Private Growth	Private Equity	Hamilton Lane	2,007,430,810	11.15%	11/1/1997	
				Secondary Private Equity	39,511,083	0.22%	7/1/2018	
				HITIP	18,565,657	0.10%	5/1/2009	
				HITIP	14,889,515	0.08%	4/1/2017	
				HITIP	1,424,982	0.01%	2/1/2020	
Real Assets	Core Real Estate	Core Real Estate (Separate)	Heitman Capital	431,798,644	2.40%	11/1/1995		
		Core Real Estate	Heitman Core RE Debt Fund	48,963,727	0.27%	2/1/2018		
		Core Real Estate	Cabot Ind Core	45,032,319	0.25%	8/1/2016		
		Core Real Estate	INVESCO Comm Mortgage	82,433,630	0.46%	5/1/2018		
		Non-Core Real Estate - Opportunistic	AG EUROPE REALTY III	6,602,562	0.04%	5/1/2020		
		Non-Core Real Estate - Opportunistic	BlackSand Capital Fund I	2,216,715	0.01%	9/1/2011		
		Non-Core Real Estate - Opportunistic	BlackSand Capital Fund II	3,228,440	0.02%	4/1/2019		
		Non-Core Real Estate - Opportunistic	Blackstone Real Estate VII	8,176,874	0.05%	6/1/2012		
		Non-Core Real Estate - Opportunistic	Blackstone REP EURO VI	9,797,204	0.05%	12/1/2019		
		Non-Core Real Estate - Opportunistic	Blackstone Real Estate IX	14,460,907	0.08%	10/1/2019		
		Non-Core Real Estate - Opportunistic	Cerberus IV	32,285,847	0.18%	1/1/2017		
		Non-Core Real Estate - Opportunistic	EJF OPZONE 1	30,858,279	0.17%	4/1/2020		
		Non-Core Real Estate - Opportunistic	Fortress Japan Opp Fund II	3,019,913	0.02%	7/1/2012		
		Non-Core Real Estate - Opportunistic	Fortress Japan Opp Fund III	13,304,405	0.07%	1/1/2015		
		Non-Core Real Estate - Opportunistic	Fortress Japan Opp Fund IV	1,992,243	0.01%	8/1/2018		
		Non-Core Real Estate - Opportunistic	Lone Star Fund II	401,500	0.00%	6/1/2011		
		Non-Core Real Estate - Opportunistic	Lone Star Fund VII	173,958	0.00%	6/1/2011		
		Non-Core Real Estate - Opportunistic	Torchlight Debt Opportunity Fund V	11,005,830	0.06%	6/1/2015		
		Non-Core Real Estate - Opportunistic	Torchlight Debt Fund VI	49,599,719	0.28%	3/1/2018		
		Non-Core Real Estate - Opportunistic	Torchlight Debt Fund VII	4,970,263	0.03%	7/1/2020		
		Non-Core Real Estate - Value-Add	AG Asia Realty Fund III	17,638,712	0.10%	7/1/2016		
		Non-Core Real Estate - Value-Add	AG Core Plus Realty Fund II	498,650	0.00%	4/1/2008		
		Non-Core Real Estate - Value-Add	AG Core Plus Realty Fund III	4,109,644	0.02%	4/1/2012		
		Non-Core Real Estate - Value-Add	AG Core Plus Realty Fund IV	39,329,161	0.22%	6/1/2015		
		Non-Core Real Estate - Value-Add	AG Realty Value X	10,700,279	0.06%	11/1/2019		
		Non-Core Real Estate - Value-Add	AG Europe Realty II	45,778,847	0.25%	5/1/2018		
		Non-Core Real Estate - Value-Add	Almanac VI	2,533,772	0.01%	11/1/2012		
		Non-Core Real Estate - Value-Add	Almanac VII	19,222,450	0.11%	4/1/2015		
		Non-Core Real Estate - Value-Add	Almanac VIII	6,911,879	0.04%	1/1/2019		
		Non-Core Real Estate - Value-Add	BlackRock Asia IV	35,322,668	0.20%	7/1/2017		
		Non-Core Real Estate - Value-Add	CBRE Strategic Partners Value Fund VI	48,044	0.00%	10/1/2012		
		Non-Core Real Estate - Value-Add	CBRE Strategic Partners Value Fund VII	643,402	0.00%	5/1/2015		
		Non-Core Real Estate - Value-Add	CBRE Strategic Partners Value 8	49,094,501	0.27%	10/1/2017		
		Non-Core Real Estate - Value-Add	CBRE Strategic Partners Value 9	10,403,146	0.06%	2/1/2020		
		Non-Core Real Estate - Value-Add	DRA GR INC IX	34,315,520	0.19%	2/1/2017		
		Non-Core Real Estate - Value-Add	DRA GR INC X	6,130,491	0.03%	4/1/2020		
		Non-Core Real Estate - Value-Add	H2 CP (RE Debt)	2,314,830	0.01%	11/1/2016		
		Non-Core Real Estate - Value-Add	Kayne Anderson V	39,724,767	0.22%	6/1/2018		
		Non-Core Real Estate - Value-Add	KKR Rep Americas II	30,037,329	0.17%	3/1/2018		
		Non-Core Real Estate - Value-Add	LaSalle Income & Growth Fund VII	21,285,941	0.12%	8/1/2016		
		Non-Core Real Estate - Value-Add	LaSalle Income Growth Fund VIII	7,446,682	0.04%	3/1/2020		
		Non-Core Real Estate - Value-Add	Mesa West RE Inc Fund III	966,481	0.01%	9/1/2013		
		Non-Core Real Estate - Value-Add	Mesa West RE Fund IV	12,140,728	0.07%	4/1/2017		
		Non-Core Real Estate - Value-Add	Prudential Sr Housing Fund IV	546,171	0.00%	4/1/2012		
		Non-Core Real Estate - Value-Add	Prudential Sr Housing Fund V	25,014,931	0.14%	5/1/2015		
		Non-Core Real Estate - Value-Add	Prudential Sr Housing Fund VI	3,997,926	0.02%	9/1/2019		
		Non-Core Real Estate - Value-Add	Starwood Fund XI	20,686,890	0.11%	8/1/2018		
		Infrastructure	KKR Global Infrastructure II	32,667,882	0.18%	12/1/2014		
		Infrastructure	ISQ Global Infrastructure (RE)	17,685,264	0.10%	6/1/2015		
		Infrastructure	ISQ Global Infrastructure II	33,242,012	0.18%	7/1/2018		
		Timber	Timber	184,890,925	1.03%	9/1/1999		
		Diversifying Strategies	Liquid Defensive	Alternative Return Capture	P/E Global Macro	341,490,394	1.90%	4/1/2017
				Systematic Trend Following	AlphaSimplex	219,814,802	1.22%	1/1/2018
				Systematic Trend Following	Aspect Core Fund	224,249,579	1.25%	4/1/2017
				Systematic Trend Following	Crabel Advanced Trend	333,664,434	1.85%	4/1/2017
				Systematic Trend Following	Mount Lucas	197,144,025	1.09%	4/1/2019
				US Intermediate	Bank of Hawaii	340,113,486	1.89%	11/1/2017
GILS	BlackRock			204,390,473	1.13%	9/1/2011		
US Intermediate	First Hawaiian Bank			338,740,022	1.88%	11/1/1991		
Non-US Intermediate	Neuberger Global Fixed			103,641,596	0.58%	9/1/2019		
Treasury Duration Capture	Ryan Labs Long Treasury			57,073	0.00%	4/1/2017		
Treasury Duration Capture	Ryan Labs Treasury Custody			616,035,625	3.42%	10/1/2019		
Liquid Diversifying	Alternative Return Capture			ARP Alternative Return Capture	188,621,668	1.05%	4/1/2019	
	Alternative Return Capture			Graham Quant Macro	311,370,503	1.73%	4/1/2017	
	Alternative Return Capture			Lombard Odier Risk Premia	201,322,864	1.12%	4/1/2019	
Illiquid Diversifying	Treasury Duration Capture			AB TALL OPPORTUNITY 2020	5,000,000	0.03%	7/1/2020	
	Treasury Duration Capture			PILLAR ENSO FUND	26,469,218	0.15%	7/1/2020	
	Treasury Duration Capture			PETERSHILL IV	145,000	0.00%	10/1/2020	
	Treasury Duration Capture			WELLINGTON TALF	25,420,454	0.14%	6/1/2020	
Opportunities		Lowe Enterprises	23,115,910	0.13%	1/1/2015			
All Other Assets	Closing Accounts	Cash Account	BNY Mellon	425,646,826	2.36%	2/1/1998		
		Cash Account	Bank of Hawaii	47,815,386	0.27%	1/1/1972		
		Transition Account I	BNY Mellon	949,368	0.01%	4/1/2002		
		Transition Account II	BNY Mellon	5,386,666	0.03%	7/1/2011		
		Residual Account	BNY Mellon	137,040	0.00%	6/1/2013		
		Overlay	Parametric Overlay	88,715,483	0.49%	6/1/2019		
		Public Extended Global Credit	Western Asset	5,997,161	0.03%	7/1/2005		
		Core Real Estate	Avalon Center at Garden Grove	134	0.00%	7/1/2013		
		Core Real Estate	Northsight Financial Office	3,561	0.00%	7/1/2013		
		Non-US Intermediate	Eaton Vance	569,325	0.00%	6/1/1989		
		Public Extended Global Credit	Tortoise Credit	5,227,960	0.03%	5/1/1990		
		World ex-US Equity	Franklin Templeton	689,056	0.00%	11/1/2011		
		World ex-US Equity	JP Morgan Chase	357,937	0.00%	9/1/2005		
		World ex-US Equity	Mercator Asset Mgt LP	258,994	0.00%	12/1/2003		
		Emerging Markets Equity	QMA	3,420,152	0.02%	12/1/2011		
Non-US Intermediate	PIMCO	2,593	0.00%	3/1/1979				
		Fidelity Institutional	177,413	0.00%	4/1/2017			
			18,009,784,697	100.00%				