

Managers and Assets Under Management
 State of Hawaii Employees' Retirement System
 Risk-Based Policy Framework

As of December 31, 2021

Strategic Class	Sub-Class	Manager/Composite	Assets Under Management	% of Total	Inception Date	
Broad Growth	Public Growth	Global Small Cap Equity	Wasatch	707,522,987	3.14%	1/1/2019
		Global Small Cap Equity	Wellington	598,162,786	2.66%	4/1/2017
		Global Mid-Large Cap Equity	Longview	852,383,447	3.79%	9/1/2017
		Global Mid-Large Cap Equity	AB	884,478,147	3.93%	3/1/2020
		Global Mid-Large Cap Equity	Wellington	859,936,068	3.82%	3/1/2020
		Global Equity - Passive	BlackRock	706,248,071	3.14%	6/1/2016
		Global Equity - Passive	LGIMA	1,023,585,107	4.55%	5/1/2016
		Global Credit	HPS	597,118,875	2.65%	6/30/2019
		Global Credit	Silver Rock	220,616,038	0.98%	11/1/2019
		Global Credit	Carval	149,686,888	0.67%	4/1/2020
		Global Credit	OHA	86,770,727	0.39%	7/1/2020
		Global Credit	PIMCO	99,703,557	0.44%	10/1/2021
		Convertibles	Lord Abbett	490,310,554	2.18%	5/1/2021
		Low Volatility Global Equity	Robeco	699,543,809	3.11%	10/1/2016
		Low Volatility Global Equity	TOBAM	582,213,481	2.59%	10/1/2016
		Options-Based Global Equity	Gateway	758,738,507	3.37%	9/1/2016
		Options-Based Global Equity	Geode	77,787	0.00%	10/1/2019
		Options-Based Global Equity	Neuberger Berman	726,608,188	3.23%	10/1/2016
	Private Growth	Private Equity	Hamilton Lane	3,666,117,313	16.29%	11/1/1997
		Private Equity	Secondaries PE	45,164,572	0.20%	7/1/2018
		Private Equity	Direct PE	1,980,883	0.01%	7/1/2021
		HiTIP	Stafford	17,151,490	0.08%	5/1/2009
		HiTIP	Stafford II	35,837,398	0.16%	4/1/2017
		HiTIP	Stafford III	13,792,994	0.06%	2/1/2020
	Real Assets	Core Real Estate	Heitman	647,298,379	2.88%	11/1/1995
		Core Real Estate	Heitman Core RE Debt	49,206,149	0.22%	2/1/2018
		Core Real Estate	Invesco Comm Mortgage	100,064,075	0.44%	5/1/2018
		Non-Core Real Estate - Opportunistic	AG Europe Realty III	16,664,095	0.07%	5/1/2020
		Non-Core Real Estate - Opportunistic	BlackSand Capital Fund I	2,054,571	0.01%	9/1/2011
		Non-Core Real Estate - Opportunistic	BlackSand Capital Fund II	7,184,000	0.03%	4/1/2019
		Non-Core Real Estate - Opportunistic	Blackstone Real Estate VII	10,145,422	0.05%	6/1/2012
		Non-Core Real Estate - Opportunistic	Blackstone REP Euro VI	26,331,540	0.12%	12/1/2019
		Non-Core Real Estate - Opportunistic	Blackstone Real Estate IX	37,170,691	0.17%	10/1/2019
		Non-Core Real Estate - Opportunistic	Cerberus IV	36,282,729	0.16%	1/1/2017
		Non-Core Real Estate - Opportunistic	EJF Opzone 1	61,023,101	0.27%	4/1/2020
		Non-Core Real Estate - Opportunistic	Fortress Japan Opp Fund II	2,863,221	0.01%	7/1/2012
		Non-Core Real Estate - Opportunistic	Fortress Japan Opp Fund III	11,951,910	0.05%	1/1/2015
		Non-Core Real Estate - Opportunistic	Fortress Japan Opp Fund IV	6,734,994	0.03%	8/1/2018
		Non-Core Real Estate - Opportunistic	Kayne Anderson VI	4,500,801	0.02%	7/1/2021
		Non-Core Real Estate - Opportunistic	Lone Star Fund II	51,965	0.00%	6/1/2011
		Non-Core Real Estate - Opportunistic	Lone Star Fund VII	73,207	0.00%	6/1/2011
		Non-Core Real Estate - Opportunistic	Torchlight Debt Op. Fund V	7,386,251	0.03%	6/1/2015
		Non-Core Real Estate - Opportunistic	Torchlight Debt Fund VI	39,766,381	0.18%	3/1/2018
		Non-Core Real Estate - Opportunistic	Torchlight Debt Fund VII	12,775,383	0.06%	7/1/2020
		Non-Core Real Estate - Value-Add	AG Asia Realty Fund III	12,734,346	0.06%	7/1/2016
		Non-Core Real Estate - Value-Add	AG Core Plus Realty Fund III	2,019,260	0.01%	4/1/2012
		Non-Core Real Estate - Value-Add	AG Core Plus Realty Fund IV	27,578,762	0.12%	6/1/2015
		Non-Core Real Estate - Value-Add	AG Realty Value X	33,652,463	0.15%	11/1/2019
		Non-Core Real Estate - Value-Add	AG Europe Realty II	53,226,639	0.24%	5/1/2018
		Non-Core Real Estate - Value-Add	Almanac VI	2,675,103	0.01%	11/1/2012
		Non-Core Real Estate - Value-Add	Almanac VII	23,062,631	0.10%	4/1/2015
		Non-Core Real Estate - Value-Add	Almanac VIII	17,870,481	0.08%	1/1/2019
		Non-Core Real Estate - Value-Add	BlackRock Asia IV	29,965,554	0.13%	7/1/2017
		Non-Core Real Estate - Value-Add	CBRE Strategic Partners Value VII	77,078	0.00%	5/1/2015
		Non-Core Real Estate - Value-Add	CBRE Strategic Partners Value 8	44,281,666	0.20%	10/1/2017
		Non-Core Real Estate - Value-Add	CBRE Strategic Partners Value 9	11,784,003	0.05%	2/1/2020
		Non-Core Real Estate - Value-Add	DRA GR INC IX	31,810,029	0.14%	2/1/2017
		Non-Core Real Estate - Value-Add	GLP Capital IV	20,542,099	0.09%	6/1/2021
		Non-Core Real Estate - Value-Add	DRA GR INC X	16,732,678	0.07%	4/1/2020
		Non-Core Real Estate - Value-Add	Kayne Anderson V	47,440,941	0.21%	6/1/2018
		Non-Core Real Estate - Value-Add	KKR Rep Americas II	20,124,646	0.09%	3/1/2018
		Non-Core Real Estate - Value-Add	LaSalle Income & Growth Fund VII	25,034,305	0.11%	8/1/2016
		Non-Core Real Estate - Value-Add	LaSalle Income & Growth Fund VIII	7,599,844	0.03%	3/1/2020
		Non-Core Real Estate - Value-Add	Mesa West	2,307,793	0.01%	12/1/2021
		Non-Core Real Estate - Value-Add	Mesa West RE Fund IV	6,623,961	0.03%	4/1/2017
		Non-Core Real Estate - Value-Add	Prudential Sr Housing Fund V	25,618,325	0.11%	5/1/2015
		Non-Core Real Estate - Value-Add	Prudential Sr Housing Fund VI	21,712,336	0.10%	9/1/2019
		Non-Core Real Estate - Value-Add	Starwood Fund XI	33,325,743	0.15%	8/1/2018
		Infrastructure	KKR Global Infrastructure II	23,704,871	0.11%	12/1/2014
		Infrastructure	ISQ Global Infrastructure I	17,703,816	0.08%	6/1/2015
		Infrastructure	ISQ Global Infrastructure II	45,188,520	0.20%	7/1/2018
		Infrastructure	ISQ Global Infrastructure III	3,264,864	0.01%	1/1/2022
		Agriculture	UBS Agrivest Farmland	21,000,000	0.09%	10/1/2021
		Timber	Hancock	175,462,266	0.78%	9/1/1999

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Diversifying Strategies						
Liquidity Strategies	Liquid Defensive	Defensive Return Capture	P/E Global	289,026,099	1.28%	4/1/2017
		Defensive Return Capture	AHL	236,152,905	1.05%	7/1/2021
		Systematic Trend Following	AlphaSimplex	280,765,923	1.25%	1/1/2018
		Systematic Trend Following	Aspect	284,181,922	1.26%	4/1/2017
		Systematic Trend Following	Crabel	421,229,280	1.87%	4/1/2017
		Systematic Trend Following	Mount Lucas	271,521,433	1.21%	4/1/2019
		Treasury Duration Capture	Bank of Hawaii	301,521,927	1.34%	11/1/2017
		Treasury Duration Capture	First Hawaiian Bank	299,402,065	1.33%	11/1/1991
		Treasury Duration Capture	Sun Life	903,937,660	4.02%	10/1/2019
		Liquid Diversifying	Alternative Return Capture	Graham	357,677,589	1.59%
	Alternative Return Capture		Lombard Odier	286,463,799	1.27%	4/1/2019
	Alternative Return Capture		Brevan Howard	233,315,395	1.04%	11/1/2021
	Alternative Return Capture		Credit Suisse	199,881,423	0.89%	1/1/2022
	Relative Value Arbitrage		Aequim	56,960,258	0.25%	11/1/2020
	Relative Value Arbitrage		Aequim	153,539,868	0.68%	12/1/2020
	Relative Value Arbitrage		Monashee	271,411,838	1.21%	12/1/2020
	Relative Value Arbitrage		Shaolin	234,580,078	1.04%	5/1/2021
	Relative Value Arbitrage		Aristeia	304,106,187	1.35%	7/1/2021
	Relative Value Arbitrage		UBS O'Conner	200,182,115	0.89%	1/1/2022
	Illiquid Diversifying	Insurance-linked	Nephila	183,291,310	0.81%	1/1/2021
Insurance-linked		Pillar	200,682,541	0.89%	7/1/2020	
Idiosyncratic Return Capture		Blackstone	287,955,360	1.28%	2/1/2021	
Idiosyncratic Return Capture		Cloverlay Leahi	18,517,909	0.08%	1/1/2022	
Idiosyncratic Return Capture		Petershill IV	10,406,398	0.05%	10/1/2020	
All Other Assets						
Cash-related	Cash Account	Operating Account	313,141,307	1.39%	2/1/1998	
	Cash Account	Other Cash	35,814,959	0.16%	1/1/1972	
	Transition Account I	BNY Mellon	1,030,832	0.00%	4/1/2002	
	Transition Account II	BNY Mellon	5,332,406	0.02%	7/1/2011	
	Residual Account	BNY Mellon	137,122	0.00%	6/1/2013	
	Cash Overlay	Parametric	130,408,702	0.58%	6/1/2019	
	Closing Accounts	Global Credit	Western Asset	5,893,862	0.03%	7/1/2005
		Global Credit	PIMCO	6,993,631	0.03%	4/1/2015
		Global Credit	Tortoise Credit	5,070,121	0.02%	5/1/1990
		Options-Based Equity	AQR	13,793	0.00%	6/30/2019
Non-US Intermediate Fixed Income		Eaton Vance	523,874	0.00%	6/1/1989	
Non-US Intermediate Fixed Income		Neuberger Berman	(4,304)	0.00%	9/1/2019	
GILS		BlackRock	5,465	0.00%	9/1/2011	
World ex-US Equity		Franklin Templeton	297,345	0.00%	11/1/2011	
World ex-US Equity		JP Morgan	51,602	0.00%	9/1/2005	
World ex-US Equity		Mercator	80,639	0.00%	12/1/2003	
Emerging Markets Equity	QMA	3,248,270	0.01%	12/1/2011		
Global Intermediate Fixed Income	PIMCO	2,652	0.00%	3/1/1979		
Other Assets	Opportunities	2,197,811	0.01%	1/1/2015		
Options-Based Equity	Gateway	5,584	0.00%	12/1/2011		
Global Small Cap Equity	Fidelity	172,161	0.00%	4/1/2017		
Total Fund Value			22,504,532,679	100.00%		

Source: BNY Mellon