

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

As of December 31, 2022

Strategic Class	Sub-Class	Asset Class	Manager / Composite	Assets Under Management (\$)	% of Total Fund	Inception Date
Broad Growth						
	Public Growth					
	Global Equity - Passive		BlackRock	561,401,452	2.59%	06/01/2016
	Global Equity - Passive		Legal & General	707,184,311	3.26%	05/01/2016
	Global Equity - Mid-Large Cap		Alliance Bernstein	590,448,904	2.72%	03/01/2020
	Global Equity - Mid-Large Cap		Longview	772,893,516	3.57%	09/01/2017
	Global Equity - Mid-Large Cap		Wellington	580,344,134	2.68%	03/01/2020
	Global Equity - Small-Mid Cap		Wasatch	457,904,380	2.11%	01/01/2019
	Global Equity - Small-Mid Cap		Wellington	509,499,713	2.35%	04/01/2017
	Global Equity - China		Hillhouse China A Shares	171,672,665	0.79%	05/01/2022
	Global Equity - Low Volatility		Robeco	291,566,020	1.35%	10/01/2016
	Global Equity - Low Volatility		TOBAM	266,821,299	1.23%	10/01/2016
	Global Equity - Options-Based		Gateway	69,782,456	0.32%	09/01/2016
	Convertibles		Lord Abbett	340,073,094	1.57%	05/01/2021
	Global Credit		Avenue Asia Imilao	14,925,373	0.07%	12/01/2022
	Global Credit		Carval	312,603,277	1.44%	04/01/2020
	Global Credit		Fortress Lending	124,000,000	0.57%	09/01/2022
	Global Credit		HPS	555,725,655	2.56%	06/30/2019
	Global Credit		Jefferies Direct Lending	35,207,412	0.16%	09/01/2022
	Global Credit		Lafayette Square USA	14,219,486	0.07%	07/01/2022
	Global Credit		OHA	132,569,960	0.61%	07/01/2020
	Global Credit		PIMCO	97,762,294	0.45%	10/01/2021
	Global Credit		SilverRock	328,926,751	1.52%	11/01/2019
	Global Credit		SilverRock 2022	57,340,000	0.26%	12/01/2022
	Private Growth					
	Private Equity		Hamilton Lane	3,890,288,700	17.95%	11/01/1997
	Private Equity		Secondary Private Equity	60,800,587	0.28%	07/01/2018
	Private Equity		Direct Private Equity	5,154,358	0.02%	07/01/2021
	HiTIP		Stafford	12,126,070	0.06%	05/01/2009
	HiTIP		Stafford II	44,974,752	0.21%	04/01/2017
	HiTIP		Stafford III	25,011,829	0.12%	02/01/2020
	Real Assets					
	Core Real Estate		Heitman	791,242,673	3.65%	11/01/1995
	Core Real Estate		Heitman Core Real Estate Debt	48,209,861	0.22%	02/01/2018
	Core Real Estate		Invesco Comm Mortgage	97,565,185	0.45%	05/01/2018
	Core Real Estate		Prime Property	220,000,000	1.02%	07/01/2022
	Core Real Estate		RREEF	140,000,000	0.65%	08/01/2022
	Non-Core Real Estate - Opportunistic		AG Asia Realty Fund III	11,469,025	0.05%	07/01/2016
	Non-Core Real Estate - Opportunistic		AG Europe Realty II	46,808,270	0.22%	05/01/2018
	Non-Core Real Estate - Opportunistic		AG Europe Realty III	29,308,415	0.14%	05/01/2020
	Non-Core Real Estate - Opportunistic		BlackRock Asia IV	30,335,848	0.14%	07/01/2017
	Non-Core Real Estate - Opportunistic		BlackSand Capital Fund I	1,994,194	0.01%	09/01/2011
	Non-Core Real Estate - Opportunistic		BlackSand Capital Fund II	15,423,251	0.07%	04/01/2019
	Non-Core Real Estate - Opportunistic		Blackstone Real Estate VII	4,612,347	0.02%	06/01/2012
	Non-Core Real Estate - Opportunistic		Blackstone REP Euro VI	20,036,391	0.09%	12/01/2019
	Non-Core Real Estate - Opportunistic		Blackstone Real Estate IX	57,127,834	0.26%	10/01/2019
	Non-Core Real Estate - Opportunistic		Cerberus IV	38,657,288	0.18%	01/01/2017
	Non-Core Real Estate - Opportunistic		EJF Opzone 1	75,304,010	0.35%	04/01/2020
	Non-Core Real Estate - Opportunistic		Fortress Japan Opp Fund II	3,132,141	0.01%	07/01/2012
	Non-Core Real Estate - Opportunistic		Fortress Japan Opp Fund III	14,690,010	0.07%	01/01/2015
	Non-Core Real Estate - Opportunistic		Fortress Japan Opp Fund IV	12,879,477	0.06%	08/01/2018
	Non-Core Real Estate - Opportunistic		Kayne Anderson V	38,681,746	0.18%	06/01/2018
	Non-Core Real Estate - Opportunistic		Kayne Anderson VI	10,255,174	0.05%	07/01/2021
	Non-Core Real Estate - Opportunistic		KKR Rep Americas II	17,819,761	0.08%	03/01/2018
	Non-Core Real Estate - Opportunistic		LaSalle Asia VI	20,074	0.00%	11/01/2022
	Non-Core Real Estate - Opportunistic		Lone Star Fund II	42,147	0.00%	06/01/2011
	Non-Core Real Estate - Opportunistic		Lone Star Fund VII	82,394	0.00%	06/01/2011
	Non-Core Real Estate - Opportunistic		Starwood Fund XI	42,765,313	0.20%	08/01/2018
	Non-Core Real Estate - Opportunistic		Starwood Dis Op XII Glob	11,112,565	0.05%	02/01/2022
	Non-Core Real Estate - Opportunistic		Torchlight Debt Op. Fund V	4,091,606	0.02%	06/01/2015
	Non-Core Real Estate - Opportunistic		Torchlight Debt Fund VI	36,042,505	0.17%	03/01/2018
	Non-Core Real Estate - Opportunistic		Torchlight Debt Fund VII	26,571,505	0.12%	07/01/2020

Source: BNY Mellon. In 04/2022, some non-core real estate funds were reclassified between value-add and opportunistic categories to match consultant report categorization. For performance reporting, this change was made effective as of 07/01/2021.

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Broad Growth						
	Real Assets					
	Non-Core Real Estate - Value-Add		AG Core Plus Realty Fund III	585,236	0.00%	04/01/2012
	Non-Core Real Estate - Value-Add		AG Core Plus Realty Fund IV	22,165,066	0.10%	06/01/2015
	Non-Core Real Estate - Value-Add		AG Realty Value X	37,661,164	0.17%	11/01/2019
	Non-Core Real Estate - Value-Add		AG Realty Value XI	3,500,000	0.02%	11/01/2022
	Non-Core Real Estate - Value-Add		Almanac VI	2,669,400	0.01%	11/01/2012
	Non-Core Real Estate - Value-Add		Almanac VII	23,190,596	0.11%	04/01/2015
	Non-Core Real Estate - Value-Add		Almanac VIII	27,747,744	0.13%	01/01/2019
	Non-Core Real Estate - Value-Add		Almanac IX	6,614,420	0.03%	12/01/2022
	Non-Core Real Estate - Value-Add		CBRE Strategic Partners Value VII	17,263	0.00%	05/01/2015
	Non-Core Real Estate - Value-Add		CBRE Strategic Partners Value 8	46,205,531	0.21%	10/01/2017
	Non-Core Real Estate - Value-Add		CBRE Strategic Partners Value 9	21,878,681	0.10%	02/01/2020
	Non-Core Real Estate - Value-Add		DRA GR INC IX	30,321,358	0.14%	02/01/2017
	Non-Core Real Estate - Value-Add		DRA GR INC X	32,018,393	0.15%	04/01/2020
	Non-Core Real Estate - Value-Add		GLP Capital IV	40,988,501	0.19%	06/01/2021
	Non-Core Real Estate - Value-Add		Invesco RE VI	16,563,296	0.08%	10/01/2022
	Non-Core Real Estate - Value-Add		LaSalle Income & Growth Fund VII	21,271,725	0.10%	08/01/2016
	Non-Core Real Estate - Value-Add		LaSalle Income & Growth Fund VIII	23,192,261	0.11%	03/01/2020
	Non-Core Real Estate - Value-Add		Mesa West	11,895,983	0.05%	12/01/2021
	Non-Core Real Estate - Value-Add		Mesa West RE Fund IV	10,162,313	0.05%	04/01/2017
	Non-Core Real Estate - Value-Add		Prudential Sr Housing Fund V	26,823,432	0.12%	05/01/2015
	Non-Core Real Estate - Value-Add		Prudential Sr Housing Fund VI	36,519,619	0.17%	09/01/2019
	Infrastructure		KKR Global Infrastructure II	21,094,811	0.10%	12/01/2014
	Infrastructure		KKR Global Infrastructure IV	19,949,738	0.09%	05/01/2022
	Infrastructure		KKR Div Core Infrastructure	153,889,395	0.71%	05/01/2022
	Infrastructure		ISQ Global Infrastructure I	18,978,629	0.09%	06/01/2015
	Infrastructure		ISQ Global Infrastructure II	50,550,360	0.23%	07/01/2018
	Infrastructure		ISQ Global Infrastructure III	4,720,939	0.02%	01/01/2022
	Infrastructure		IFM Global Infrastructure	156,213,988	0.72%	05/01/2022
	Agriculture		PGIM US Agriculture	57,007,930	0.26%	07/01/2022
	Agriculture		UBS Agrivest Farmland	61,487,710	0.28%	10/01/2021
	Agriculture		Fiera CG Agriculture	8,244,100	0.04%	01/01/2023
	Timber		Hancock	188,414,945	0.87%	09/01/1999
	Other Real Assets		Morgan Stanley Olomana	563,334,316	2.60%	04/01/2022
Diversifying Strategies						
	Liquid Defensive					
	Defensive Return Capture		36 South	212,010,710	0.98%	03/01/2022
	Defensive Return Capture		AHL Defensive	148,139,536	0.68%	07/01/2021
	Defensive Return Capture		P/E Global	263,658,488	1.22%	04/01/2017
	Defensive Return Capture		SABA	216,544,052	1.00%	04/01/2022
	Systematic Trend Following		AlphaSimplex	272,900,767	1.26%	01/01/2018
	Systematic Trend Following		Aspect	274,478,895	1.27%	04/01/2017
	Systematic Trend Following		Crabel	403,308,100	1.86%	04/01/2017
	Systematic Trend Following		Mount Lucas	261,266,497	1.21%	04/01/2019
	Treasury Duration Capture		Bank of Hawaii	147,973,545	0.68%	11/01/2017
	Treasury Duration Capture		First Hawaiian Bank	148,055,975	0.68%	11/01/1991
	Treasury Duration Capture		SLC Management	273,104,860	1.26%	10/01/2019
	Liquid Diversifying					
	Alternative Return Capture		Brevan Howard	349,852,103	1.61%	11/01/2021
	Alternative Return Capture		Credit Suisse	228,129,811	1.05%	01/01/2022
	Alternative Return Capture		Graham	346,363,989	1.60%	04/01/2017
	Alternative Return Capture		Lombard Odier	140,510,823	0.65%	04/01/2019
	Relative Value Arbitrage		Aequim Arbitrage	63,694,250	0.29%	11/01/2020
	Relative Value Arbitrage		Aequim Relative Value Arbitrage	260,227,433	1.20%	12/01/2020
	Relative Value Arbitrage		Aristeia	299,887,983	1.38%	07/01/2021
	Relative Value Arbitrage		Broad Reach	189,170,124	0.87%	09/01/2022
	Relative Value Arbitrage		Melqart	214,005,585	0.99%	09/01/2022
	Relative Value Arbitrage		Monashee	238,317,673	1.10%	12/01/2020
	Relative Value Arbitrage		Shaolin	258,617,394	1.19%	05/01/2021
	Relative Value Arbitrage		UBS O'Conner	245,616,740	1.13%	01/01/2022
	Relative Value Arbitrage		Weiss	194,694,713	0.90%	09/01/2022

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Diversifying Strategies						
	Illiquid Diversifying					
	Idiosyncratic Return Capture		Blackstone	284,724,532	1.31%	02/01/2021
	Idiosyncratic Return Capture		Cloverlay Leahi	89,611,860	0.41%	01/01/2022
	Idiosyncratic Return Capture		CommonFund Kaala	19,000,000	0.09%	08/01/2022
	Idiosyncratic Return Capture		MYAM Asia Opportunity	144,309,124	0.67%	03/01/2022
	Idiosyncratic Return Capture		Parabellum Partners III	28,026,776	0.13%	05/01/2022
	Idiosyncratic Return Capture		Petershill IV	13,895,155	0.06%	10/01/2020
	Insurance-linked		Nephila	181,643,873	0.84%	01/01/2021
	Insurance-linked		Pillar	203,394,285	0.94%	07/01/2020
All Other Assets						
	Cash-related					
	Cash Account		Operating Account	288,934,986	1.33%	02/01/1998
	Cash Account		Other Cash	55,170,277	0.25%	01/01/1972
	Cash Account		CRO Transition Account	18,930	0.00%	04/01/2017
	Transition Account I		BNY Mellon	1,108,652	0.01%	04/01/2002
	Transition Account II		BNY Mellon	2,758,427	0.01%	07/01/2011
	Residual Account		BNY Mellon	139,393	0.00%	06/01/2013
	Cash Overlay		Parametric	68,508,218	0.32%	06/01/2019
	Closing Accounts					
	Global Equity - Small Cap		Fidelity	118,838	0.00%	04/01/2017
	World ex-US Equity		Franklin Templeton	106,309	0.00%	11/01/2011
	World ex-US Equity		JP Morgan	48,436	0.00%	09/01/2005
	World ex-US Equity		Mercator	75,690	0.00%	12/01/2003
	Emerging Markets Equity		QMA	1,499,982	0.01%	12/01/2011
	Global Equity - Options-Based		AQR	4,282	0.00%	06/30/2019
	Global Credit		Western Asset	5,991,496	0.03%	07/01/2005
	Global Credit		PIMCO	7,058,419	0.03%	04/01/2015
	Non-US Intermediate Fixed Income		Eaton Vance	299,673	0.00%	06/01/1989
Total Fund				21,670,365,958	100.00%	

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