

Strategic Class	Sub-Class	Manager/Composite	Assets Under Management	% of Total	Inception Date
Broad Growth					
	Public Growth				
	Global Small Cap Equity	Wasatch	719,196,000	3.34%	1/1/2019
	Global Small Cap Equity	Wellington	649,790,454	3.02%	4/1/2017
	Global Mid-Large Cap Equity	Longview	853,467,468	3.97%	9/1/2017
	Global Mid-Large Cap Equity	AB	908,376,919	4.22%	3/1/2020
	Global Mid-Large Cap Equity	Wellington	846,925,753	3.94%	3/1/2020
	Global Equity - Passive	BlackRock	764,758,719	3.55%	6/1/2016
	Global Equity - Passive	LGIMA	1,416,730,743	6.58%	5/1/2016
	Global Credit	HPS	590,698,749	2.74%	6/30/2019
	Global Credit	Silver Rock	212,156,488	0.99%	11/1/2019
	Global Credit	Carval	130,073,011	0.60%	4/1/2020
	Global Credit	OHA	31,738,433	0.15%	7/1/2020
	Global Credit	PIMCO	212,684,493	0.99%	4/1/2015
	Convertibles	Lord Abbett	486,951,971	2.26%	5/1/2021
	Low Volatility Global Equity	Robeco	650,605,348	3.02%	10/1/2016
	Low Volatility Global Equity	TOBAM	613,187,987	2.85%	10/1/2016
	Options-Based Global Equity	Gateway	724,894,637	3.37%	9/1/2016
	Options-Based Global Equity	Geode	406,094,579	1.89%	10/1/2019
	Options-Based Global Equity	Neuberger Berman	702,576,987	3.26%	10/1/2016
	Private Growth				
	Private Equity	Hamilton Lane	2,933,949,223	13.63%	11/1/1997
	Private Equity	Secondaries PE	47,758,278	0.22%	7/1/2018
	Private Equity	Direct PE	2,250,000	0.01%	7/1/2021
	HiTIP	Stafford	16,400,499	0.08%	5/1/2009
	HiTIP	Stafford II	26,267,433	0.12%	4/1/2017
	HiTIP	Stafford III	5,688,839	0.03%	2/1/2020
	Real Assets				
	Core Real Estate	Heitman	555,664,611	2.58%	11/1/1995
	Core Real Estate	Heitman Core RE Debt	49,920,767	0.23%	2/1/2018
	Core Real Estate	Cabot Ind Core	661,733	0.00%	8/1/2016
	Core Real Estate	Invesco Comm Mortgage	101,546,232	0.47%	5/1/2018
	Non-Core Real Estate - Opportunistic	AG Europe Realty III	9,637,813	0.04%	5/1/2020
	Non-Core Real Estate - Opportunistic	BlackSand Capital Fund I	2,102,962	0.01%	9/1/2011
	Non-Core Real Estate - Opportunistic	BlackSand Capital Fund II	3,811,000	0.02%	4/1/2019
	Non-Core Real Estate - Opportunistic	Blackstone Real Estate VII	8,701,209	0.04%	6/1/2012
	Non-Core Real Estate - Opportunistic	Blackstone REP Euro VI	19,641,364	0.09%	12/1/2019
	Non-Core Real Estate - Opportunistic	Blackstone Real Estate IX	28,180,914	0.13%	10/1/2019
	Non-Core Real Estate - Opportunistic	Cerberus IV	35,409,533	0.16%	1/1/2017
	Non-Core Real Estate - Opportunistic	EJF Opzone 1	61,023,101	0.28%	4/1/2020
	Non-Core Real Estate - Opportunistic	Fortress Japan Opp Fund II	2,913,405	0.01%	7/1/2012
	Non-Core Real Estate - Opportunistic	Fortress Japan Opp Fund III	14,473,104	0.07%	1/1/2015
	Non-Core Real Estate - Opportunistic	Fortress Japan Opp Fund IV	5,522,396	0.03%	8/1/2018
	Non-Core Real Estate - Opportunistic	Kayne Anderson VI	1,392,405	0.01%	7/1/2021
	Non-Core Real Estate - Opportunistic	Lone Star Fund II	49,854	0.00%	6/1/2011
	Non-Core Real Estate - Opportunistic	Lone Star Fund VII	141,868	0.00%	6/1/2011
	Non-Core Real Estate - Opportunistic	Torchlight Debt Op. Fund V	9,765,968	0.05%	6/1/2015
	Non-Core Real Estate - Opportunistic	Torchlight Debt Fund VI	50,192,432	0.23%	3/1/2018
	Non-Core Real Estate - Opportunistic	Torchlight Debt Fund VII	10,195,706	0.05%	7/1/2020
	Non-Core Real Estate - Value-Add	AG Asia Realty Fund III	12,408,317	0.06%	7/1/2016
	Non-Core Real Estate - Value-Add	AG Core Plus Realty Fund II	35,466	0.00%	4/1/2008
	Non-Core Real Estate - Value-Add	AG Core Plus Realty Fund III	1,969,754	0.01%	4/1/2012
	Non-Core Real Estate - Value-Add	AG Core Plus Realty Fund IV	37,119,983	0.17%	6/1/2015
	Non-Core Real Estate - Value-Add	AG Realty Value X	22,552,843	0.10%	11/1/2019
	Non-Core Real Estate - Value-Add	AG Europe Realty II	61,255,781	0.28%	5/1/2018
	Non-Core Real Estate - Value-Add	Almanac VI	2,618,919	0.01%	11/1/2012
	Non-Core Real Estate - Value-Add	Almanac VII	20,911,987	0.10%	4/1/2015
	Non-Core Real Estate - Value-Add	Almanac VIII	15,272,236	0.07%	1/1/2019
	Non-Core Real Estate - Value-Add	BlackRock Asia IV	31,799,733	0.15%	7/1/2017
	Non-Core Real Estate - Value-Add	CBRE Strategic Partners Value VII	77,301	0.00%	5/1/2015
	Non-Core Real Estate - Value-Add	CBRE Strategic Partners Value 8	44,371,172	0.21%	10/1/2017
	Non-Core Real Estate - Value-Add	CBRE Strategic Partners Value 9	12,196,011	0.06%	2/1/2020
	Non-Core Real Estate - Value-Add	DRA GR INC IX	39,162,331	0.18%	2/1/2017
	Non-Core Real Estate - Value-Add	GLP Capital IV	30,394,726	0.14%	6/1/2021
	Non-Core Real Estate - Value-Add	DRA GR INC X	10,370,621	0.05%	4/1/2020
	Non-Core Real Estate - Value-Add	Kayne Anderson V	53,665,111	0.25%	6/1/2018
	Non-Core Real Estate - Value-Add	KKR Rep Americas II	41,036,606	0.19%	3/1/2018
	Non-Core Real Estate - Value-Add	LaSalle Income & Growth Fund VII	22,514,946	0.10%	8/1/2016
	Non-Core Real Estate - Value-Add	LaSalle Income & Growth Fund VIII	13,374,830	0.06%	3/1/2020
	Non-Core Real Estate - Value-Add	Mesa West RE Inc Fund III	16,212	0.00%	9/1/2013
	Non-Core Real Estate - Value-Add	Mesa West RE Fund IV	7,824,528	0.04%	4/1/2017
	Non-Core Real Estate - Value-Add	Prudential Sr Housing Fund IV	549,067	0.00%	4/1/2012
	Non-Core Real Estate - Value-Add	Prudential Sr Housing Fund V	25,618,325	0.12%	5/1/2015
	Non-Core Real Estate - Value-Add	Prudential Sr Housing Fund VI	10,711,815	0.05%	9/1/2019
	Non-Core Real Estate - Value-Add	Starwood Fund XI	35,327,704	0.16%	8/1/2018
	Infrastructure	KKR Global Infrastructure II	33,444,624	0.16%	12/1/2014
	Infrastructure	ISQ Global Infrastructure I	17,164,200	0.08%	6/1/2015
	Infrastructure	ISQ Global Infrastructure II	41,577,125	0.19%	7/1/2018
	Timber	Hancock	177,661,832	0.83%	9/1/1999

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

As of June 30, 2021

Strategic Class	Sub-Class	Manager/Composite	Assets Under Management	% of Total	Inception Date		
Diversifying Strategies							
Liquidity Strategies	Liquid Defensive	Defensive Return Capture	P/E Global	265,435,095	1.23%	4/1/2017	
		Defensive Return Capture	AHL	200,000,000	0.93%	7/1/2021	
		Systematic Trend Following	AlphaSimplex	275,356,091	1.28%	1/1/2018	
		Systematic Trend Following	Aspect	271,068,451	1.26%	4/1/2017	
		Systematic Trend Following	Crabel	406,164,222	1.89%	4/1/2017	
		Systematic Trend Following	Mount Lucas	284,918,983	1.32%	4/1/2019	
	Liquid Diversifying	Treasury Duration Capture	Bank of Hawaii	302,779,461	1.41%	11/1/2017	
		Treasury Duration Capture	First Hawaiian Bank	300,663,510	1.40%	11/1/1991	
		Treasury Duration Capture	Sun Life	924,222,776	4.29%	10/1/2019	
		Alternative Return Capture	Graham	365,873,521	1.70%	4/1/2017	
		Alternative Return Capture	Lombard Odier	194,093,984	0.90%	4/1/2019	
		Relative Value Arbitrage	Aequim	56,145,928	0.26%	11/1/2020	
	Illiquid Diversifying	Relative Value Arbitrage	Aequim	146,165,298	0.68%	12/1/2020	
		Relative Value Arbitrage	Monashee	308,778,135	1.43%	12/1/2020	
		Relative Value Arbitrage	Shaolin	190,905,656	0.89%	5/1/2021	
		Relative Value Arbitrage	Aristeia	294,316,945	1.37%	7/1/2021	
		Insurance-linked	Nephila	150,231,128	0.70%	1/1/2021	
		Insurance-linked	Pillar	154,645,873	0.72%	7/1/2020	
All Other Assets	Cash-related	Idiosyncratic Return Capture	Blackstone	204,385,492	0.95%	2/1/2021	
		Idiosyncratic Return Capture	Petershill IV	3,224,059	0.01%	10/1/2020	
All Other Assets	Cash-related	Cash Account	Operating Account	285,538,831	1.33%	2/1/1998	
		Cash Account	Other Cash	50,112,924	0.23%	1/1/1972	
		Transition Account I	BNY Mellon	966,125	0.00%	4/1/2002	
		Transition Account II	BNY Mellon	7,605,820	0.04%	7/1/2011	
		Residual Account	BNY Mellon	137,095	0.00%	6/1/2013	
		Cash Overlay	Parametric	110,737,449	0.51%	6/1/2019	
	Closing Accounts	Global Credit	Western Asset	5,895,759	0.03%	7/1/2005	
		Global Credit	Tortoise Credit	5,295,753	0.02%	5/1/1990	
		Options-Based Equity	AQR	13,791	0.00%	6/30/2019	
		Non-US Intermediate Fixed Income	Eaton Vance	553,872	0.00%	6/1/1989	
		Non-US Intermediate Fixed Income	Neuberger Berman	(4,349)	0.00%	9/1/2019	
		GILS	BlackRock	5,758	0.00%	9/1/2011	
		World ex-US Equity	Franklin Templeton	310,100	0.00%	11/1/2011	
		World ex-US Equity	JP Morgan	53,822	0.00%	9/1/2005	
		World ex-US Equity	Mercator	84,107	0.00%	12/1/2003	
		Emerging Markets Equity	QMA	3,341,147	0.02%	12/1/2011	
		Global Intermediate Fixed Income	PIMCO	2,669	0.00%	3/1/1979	
		Other Assets	Opportunities	1,939,482	0.01%	1/1/2015	
		Options-Based Equity	Gateway	918	0.00%	12/1/2011	
		Global Small Cap Equity	Fidelity	178,845	0.00%	4/1/2017	
		Total Fund Value			21,519,320,017	100.00%	

Source: BNY Mellon