

Managers and Assets Under Management as of March 31, 2017
State of Hawaii Employees' Retirement System

Risk-Based Policy Framework

Strategic Class	Sub-Class	Manager	Assets Under Management	% of Total
Broad Growth				
	Traditional Growth			
	Domestic Large Cap Growth Equity	JP Morgan LCG	350,464,556	2.28%
	Domestic Large Cap Value Equity	Barrow Hanley	296,821,574	1.93%
	Domestic Large Cap Core Equity	Bank of Hawaii	201,413,249	1.31%
	Domestic Large Cap Core Equity	CM Bidwell & Associates	189,709,279	1.23%
	World ex-US Equity	Franklin Templeton	387,968,272	2.52%
	Emerging Markets Equity	QMA	315,463,283	2.05%
	Global Small Cap Equity	Fidelity Institutional	378,625,289	2.46%
	Global Small Cap Equity	Wellington	387,302,360	2.52%
	Global Equity - Passive	BlackRock - Alpha Tilts	861,543,427	5.61%
	Global Equity - Passive	Legal & General	1,851,260,788	12.05%
	Stabilized Growth			
	Public Extended Global Credit	Bradford & Marzec	229,418,022	1.49%
	Public Extended Global Credit	PIMCO	168,245,884	1.09%
	Public Extended Global Credit	Western Asset Management	383,132,201	2.49%
	Core Real Estate (Separate)	Heitman Capital	291,153,412	1.89%
	Core Real Estate (Separate)	INVESCO Realty	211,111,633	1.37%
	Core Real Estate	Cabot Ind Core	28,554,489	0.19%
	Core Real Estate	H2 Core Real Estate Debt Fund	30,530,491	0.20%
	Low Volatility Equity	Robeco	465,713,736	3.03%
	Low Volatility Equity	TOBAM	445,326,230	2.90%
	Options-Based Equity	Gateway Investment Advisers LLC - Put-Write	619,074,573	4.03%
	Options-Based Equity	Gateway Investment Advisers LLC - Non-Replication	981,767,453	6.39%
	Options-Based Equity	Neuberger Berman	610,022,561	3.97%
	Options-Based Equity	UBS	608,684,882	3.96%
	Private Growth			
	Private Equity	Hamilton Lane	929,302,170	6.05%
	HITIP	Stafford	18,920,445	0.12%
	Non-Core Real Estate - Opportunistic	BlackSand Capital Fund I	5,054,598	0.03%
	Non-Core Real Estate - Opportunistic	Blackstone Real Estate VII	18,506,054	0.12%
	Non-Core Real Estate - Opportunistic	Cerberus IV	1,625,487	0.01%
	Non-Core Real Estate - Opportunistic	Fortress Japan Opp Fund II	11,703,732	0.08%
	Non-Core Real Estate - Opportunistic	Fortress Japan Opp Fund III	11,174,487	0.07%
	Non-Core Real Estate - Opportunistic	I-Squared Global Infrastructure	14,510,060	0.09%
	Non-Core Real Estate - Opportunistic	Lone Star Fund II	2,583,463	0.02%
	Non-Core Real Estate - Opportunistic	Lone Star Fund VII	1,917,990	0.01%
	Non-Core Real Estate - Opportunistic	Torchlight Debt Opportunity Fund V	10,716,043	0.07%
	Non-Core Real Estate - Value-Add	AG Asia Realty Fund III	12,654,303	0.08%
	Non-Core Real Estate - Value-Add	AG Core Plus Realty Fund II	1,890,030	0.01%
	Non-Core Real Estate - Value-Add	AG Core Plus Realty Fund III	9,681,803	0.06%
	Non-Core Real Estate - Value-Add	AG Core Plus Realty Fund IV	15,735,837	0.10%
	Non-Core Real Estate - Value-Add	Almanac VI	7,758,493	0.05%
	Non-Core Real Estate - Value-Add	Almanac VII	14,465,723	0.09%
	Non-Core Real Estate - Value-Add	CBRE Strategic Partners Value Fund VI	3,471,264	0.02%
	Non-Core Real Estate - Value-Add	CBRE Strategic Partners Value Fund VII	20,879,088	0.14%
	Non-Core Real Estate - Value-Add	DRA GR INC X	4,410,293	0.03%
	Non-Core Real Estate - Value-Add	H2 CP (RE Debt)	33,086,934	0.22%
	Non-Core Real Estate - Value-Add	LaSalle Income & Growth Fund V	134,967	0.00%
	Non-Core Real Estate - Value-Add	LaSalle Income & Growth Fund VII	16,313,712	0.11%
	Non-Core Real Estate - Value-Add	Mesa West RE Inc Fund II	11,074	0.00%
	Non-Core Real Estate - Value-Add	Mesa West RE Inc Fund III	11,488,105	0.07%
	Non-Core Real Estate - Value-Add	Mesa West RE Fund IV	2,770,358	0.02%
	Non-Core Real Estate - Value-Add	Prudential Sr Housing Fund IV	18,725,054	0.12%
	Non-Core Real Estate - Value-Add	Prudential Sr Housing Fund V	8,391,971	0.05%
Opportunities		Lowe Enterprises	26,998,134	0.18%
Principal Protection				
	US Intermediate	First Hawaiian Bank	357,427,057	2.33%
	US Intermediate	Pacific Income Advisors	355,536,908	2.31%
	Non-US Intermediate	PIMCO	262,457,557	1.71%
	Non-US Intermediate	Oeschle Intl. Advisors	417,340,107	2.72%
Crisis Risk Offset				
	Alternative Return Capture	Graham Quant Macro	125,000,000	0.81%
	Alternative Return Capture	P/E Global Macro	125,000,000	0.81%
	Alternative Return Capture	Welton MultiQuant	153,000,000	1.00%
	Systematic Trend Following	Aspect Core Fund	201,500,000	1.31%
	Systematic Trend Following	Campbell Core Trend	201,500,000	1.31%
	Systematic Trend Following	Crabel Advaned Trend	201,500,000	1.31%
	Treasury Duration Capture	Ryan Labs Long Treasury	382,500,000	2.49%
Real Return				
	Timber	Hancock Timber	210,080,802	1.37%
	GILS	BlackRock	478,456,184	3.11%
	Infrastructure	KKR Global Infrastructure II	17,050,408	0.11%
All Other Assets				
	Cash Account	BNY Mellon	105,654,180	0.69%
	Cash Account	Bank of Hawaii	36,538,986	0.24%
	Transition Account I	BNY Mellon	159,720,077	1.04%
	Transition Account II	BNY Mellon	47,141,055	0.31%
	Residual Account	BNY Mellon	22,821	0.00%
Closing Accounts				
	Domestic Large Cap Value Equity	CS McKee Investment Mgrs	51,615	0.00%
	Domestic Large Cap Growth	Sands Capital	0	0.00%
	Domestic Small Cap Core Equity	Jennison Associates	4,166	0.00%
	Domestic Small Cap Core Equity	T Rowe Price Associates	6	0.00%
	World ex-US Equity	JP Morgan Chase	1,318,520	0.01%
	World ex-US Equity	Mercator Asset Mgt LP	637,790	0.00%
	Emerging Markets Equity	Research Affiliates	657,709	0.00%
Total Fund Value			15,368,285,258	100.00%

Source: BNY Mellon