

Managers and Assets Under Management as of September 30, 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			
	Global Small Cap Equity	Fidelity Institutional	413,862,012	2.54%
	Global Small Cap Equity	Wellington	441,973,043	2.71%
	Global Mid-Large Cap Equity	Longview	588,076,281	3.60%
	Global Mid-Large Cap Equity	QMA	775,228,568	4.75%
	Global Equity - Passive	BlackRock - Alpha Tilts	1,548,249,290	9.49%
	Global Equity - Passive	Legal & General	1,862,988,092	11.41%
	Stabilized Growth			
	Public Extended Global Credit	Bradford & Marzec	239,556,800	1.47%
	Public Extended Global Credit	PIMCO	175,601,350	1.08%
	Public Extended Global Credit	Western Asset Management	398,191,625	2.44%
	Core Real Estate (Separate)	Heitman Capital	246,878,469	1.51%
	Core Real Estate (Separate)	INVESCO Realty	223,508,927	1.37%
	Core Real Estate	Cabot Ind Core	39,683,801	0.24%
	Core Real Estate	H2 Core Real Estate Debt Fund	31,257,473	0.19%
	Low Volatility Equity	Robeco	500,573,854	3.07%
	Low Volatility Equity	TOBAM	484,022,414	2.97%
	Options-Based Equity	Gateway Investment Advisers LLC - Put-Write	657,517,524	4.03%
	Options-Based Equity	Gateway Investment Advisers LLC - Non-Replication	1,041,146,335	6.38%
	Options-Based Equity	Neuberger Berman	646,125,647	3.96%
	Options-Based Equity	UBS	638,053,287	3.91%
	Private Growth			
	Private Equity	Hamilton Lane	1,063,330,009	6.52%
	Private Equity	I-Squared Global Infrastructure	14,679,353	0.09%
	HiTIP	Stafford	19,894,981	0.12%
	HiTIP	Stafford II	685,106	0.00%
	Non-Core Real Estate - Opportunistic	BlackSand Capital Fund I	6,521,666	0.04%
	Non-Core Real Estate - Opportunistic	Blackstone Real Estate VII	17,558,291	0.11%
	Non-Core Real Estate - Opportunistic	Cerberus IV	4,756,288	0.03%
	Non-Core Real Estate - Opportunistic	Fortress Japan Opp Fund II	10,446,746	0.06%
	Non-Core Real Estate - Opportunistic	Fortress Japan Opp Fund III	11,513,580	0.07%
	Non-Core Real Estate - Opportunistic	Lone Star Fund II	2,221,633	0.01%
	Non-Core Real Estate - Opportunistic	Lone Star Fund VII	971,582	0.01%
	Non-Core Real Estate - Opportunistic	Torchlight Debt Opportunity Fund V	25,357,236	0.16%
	Non-Core Real Estate - Value-Add	AG Asia Realty Fund III	14,592,406	0.09%
	Non-Core Real Estate - Value-Add	AG Core Plus Realty Fund II	1,912,852	0.01%
	Non-Core Real Estate - Value-Add	AG Core Plus Realty Fund III	8,848,380	0.05%
	Non-Core Real Estate - Value-Add	AG Core Plus Realty Fund IV	17,786,827	0.11%
	Non-Core Real Estate - Value-Add	Almanac VI	8,130,651	0.05%
	Non-Core Real Estate - Value-Add	Almanac VII	16,769,772	0.10%
	Non-Core Real Estate - Value-Add	BlackRock Asia IV	16,937,150	0.10%
	Non-Core Real Estate - Value-Add	CBRE Strategic Partners Value Fund VI	2,172,324	0.01%
	Non-Core Real Estate - Value-Add	CBRE Strategic Partners Value Fund VII	19,094,792	0.12%
	Non-Core Real Estate - Value-Add	CBRE Strategic Partners Value B	17,161,192	0.11%
	Non-Core Real Estate - Value-Add	DRA GR INC X	11,045,753	0.07%
	Non-Core Real Estate - Value-Add	H2 CP (RE Debt)	29,391,286	0.18%
	Non-Core Real Estate - Value-Add	LaSalle Income & Growth Fund V	138,906	0.00%
	Non-Core Real Estate - Value-Add	LaSalle Income & Growth Fund VII	17,949,270	0.11%
	Non-Core Real Estate - Value-Add	Mesa West RE Inc Fund II	0	0.00%
	Non-Core Real Estate - Value-Add	Mesa West RE Inc Fund III	9,212,442	0.06%
	Non-Core Real Estate - Value-Add	Mesa West RE Fund IV	4,116,841	0.03%
	Non-Core Real Estate - Value-Add	Prudential Sr Housing Fund IV	18,227,976	0.11%
	Non-Core Real Estate - Value-Add	Prudential Sr Housing Fund V	10,891,751	0.07%
Opportunities		Lowe Enterprises	29,166,792	0.18%
Principal Protection				
	US Intermediate	First Hawaiian Bank	362,682,647	2.22%
	US Intermediate	Pacific Income Advisors	361,229,850	2.21%
	Non-US Intermediate	PIMCO	269,669,212	1.65%
	Non-US Intermediate	Oeschle Intl. Advisors	429,486,486	2.63%
Crisis Risk Offset				
	Alternative Return Capture	Graham Quant Macro	153,689,443	0.94%
	Alternative Return Capture	P/E Global Macro	150,080,689	0.92%
	Alternative Return Capture	Welton MultiQuant	144,830,419	0.89%
	Systematic Trend Following	Aspect Core Fund	227,562,840	1.39%
	Systematic Trend Following	Campbell Core Trend	215,934,420	1.32%
	Systematic Trend Following	Crabel Advaned Trend	232,629,094	1.43%
	Treasury Duration Capture	Ryan Labs Long Treasury	382,136,097	2.34%
Real Return				
	Timber	Hancock Timber	208,719,622	1.28%
	GILS	BlackRock	476,580,977	2.92%
	Infrastructure	KKR Global Infrastructure II	19,524,214	0.12%
All Other Assets				
	Cash Account	BNY Mellon	250,830,781	1.54%
	Cash Account	Bank of Hawaii	39,962,449	0.24%
	Transition Account I	BNY Mellon	5,703,675	0.03%
	Transition Account II	BNY Mellon	26,441	0.00%
	Residual Account	BNY Mellon	21,614	0.00%
Closing Accounts				
	Domestic Large Cap Core Equity	Bank of Hawaii	7	0.00%
	Domestic Large Cap Core Equity	CM Bidwell & Associates	4	0.00%
	Domestic Large Cap Value Equity	Barrow Hanley	309,484	0.00%
	Domestic Large Cap Value Equity	CS McKee Investment Mgrs	143,456	0.00%
	Domestic Large Cap Growth Equity	JP Morgan LCG	2	0.00%
	Domestic Large Cap Growth Equity	Sands Capital	0	0.00%
	Domestic Small Cap Core Equity	Jennison Associates	87,075	0.00%
	Domestic Small Cap Core Equity	T Rowe Price Associates	6,382	0.00%
	World ex-US Equity	Franklin Templeton	2,034,386	0.01%
	World ex-US Equity	JP Morgan Chase	1,376,446	0.01%
	World ex-US Equity	Mercator Asset Mgt LP	674,075	0.00%
	Emerging Markets Equity	QMA	266,856	0.00%
	Emerging Markets Equity	Research Affiliates	570,459	0.00%
	Covered Calls	Gateway - Replication	1,360	0.00%
Total Fund Value			16,320,749,590	100.00%

Source: BNY Mellon