

Managers and Assets Under Management as of September 30, 2016
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	407,930,598	2.72%
	Domestic Large Cap Value Equity	Barrow Hanley	483,166,086	3.22%
	Domestic Large Cap Value Equity	CS McKee Investment Mgrs	51,408	0.00%
	Domestic Large Cap Core Equity	Bank of Hawaii	191,581,040	1.28%
	Domestic Large Cap Core Equity	CM Bidwell & Associates	171,306,498	1.14%
	Domestic Small Cap Core Equity	Jennison Associates	308,962,388	2.06%
	Domestic Small Cap Core Equity	T Rowe Price Associates	308,897,725	2.06%
	World ex-US Equity	Franklin Templeton	453,310,754	3.02%
	World ex-US Equity	JP Morgan Chase	1,377,729	0.01%
	Emerging Markets Equity	QMA	339,526,356	2.27%
	Emerging Markets Equity	Research Affiliates	633,349	0.00%
	Global Equity - Passive	BlackRock - Alpha Tilts	790,097,997	5.27%
	Global Equity - Passive	Legal & General	1,984,996,537	13.24%
	Stabilized Growth			
	Public Extended Global Credit	Bradford & Marzec	306,742,630	2.05%
	Public Extended Global Credit	PIMCO	164,441,578	1.10%
	Public Extended Global Credit	Western Asset Management	526,862,124	3.52%
	Core Real Estate (Separate)	Heitman Capital	287,275,238	1.92%
	Core Real Estate (Separate)	INVESCO Realty	233,621,518	1.56%
	Core Real Estate	Cabot Ind Core	12,025,909	0.08%
	Core Real Estate	H2 Core Real Estate Debt Fund	29,497,401	0.20%
	Low Volatility Equity	Robeco	445,818,808	2.97%
	Low Volatility Equity	TOBAM	448,861,598	2.99%
	Options-Based Equity	Gateway Investment Advisers LLC - Put-Write	780,628,605	5.21%
	Options-Based Equity	Gateway Investment Advisers LLC - Non-Replication	1,014,267,241	6.77%
	Options-Based Equity	Neuberger Berman	452,032,138	3.02%
	Options-Based Equity	UBS	600,906,672	4.01%
	Private Growth			
	Private Equity	Hamilton Lane	837,671,574	5.59%
	HiTIP	Stafford	21,921,559	0.15%
	Non-Core Real Estate - Opportunistic	BlackSand Capital Fund I	7,394,360	0.05%
	Non-Core Real Estate - Opportunistic	Blackstone Real Estate VII	19,359,833	0.13%
	Non-Core Real Estate - Opportunistic	Fortress Japan Opp Fund II	13,300,116	0.09%
	Non-Core Real Estate - Opportunistic	Fortress Japan Opp Fund III	8,109,243	0.05%
	Non-Core Real Estate - Opportunistic	I-Squared Global Infrastructure	6,628,680	0.04%
	Non-Core Real Estate - Opportunistic	Lone Star Fund II	2,777,519	0.02%
	Non-Core Real Estate - Opportunistic	Lone Star Fund VII	3,513,739	0.02%
	Non-Core Real Estate - Opportunistic	Torchlight Debt Opportunity Fund V	7,823,576	0.05%
	Non-Core Real Estate - Value-Add	AG Asia Realty Fund III	16,012,529	0.11%
	Non-Core Real Estate - Value-Add	AG Core Plus Realty Fund II	2,295,285	0.02%
	Non-Core Real Estate - Value-Add	AG Core Plus Realty Fund III	14,757,864	0.10%
	Non-Core Real Estate - Value-Add	AG Core Plus Realty Fund IV	10,713,643	0.07%
	Non-Core Real Estate - Value-Add	Almanac VI	8,498,296	0.06%
	Non-Core Real Estate - Value-Add	Almanac VII	11,551,127	0.08%
	Non-Core Real Estate - Value-Add	CBRE Strategic Partners Value Fund V	0	0.00%
	Non-Core Real Estate - Value-Add	CBRE Strategic Partners Value Fund VI	11,391,564	0.08%
	Non-Core Real Estate - Value-Add	CBRE Strategic Partners Value Fund VII	20,173,416	0.13%
	Non-Core Real Estate - Value-Add	LaSalle Income & Growth Fund V	541,526	0.00%
	Non-Core Real Estate - Value-Add	LaSalle Income & Growth Fund VII	12,903,798	0.09%
	Non-Core Real Estate - Value-Add	Mesa West RE Inc Fund II	1	0.00%
	Non-Core Real Estate - Value-Add	Mesa West RE Inc Fund III	14,174,420	0.09%
	Non-Core Real Estate - Value-Add	Prudential Sr Housing Fund IV	17,845,259	0.12%
	Non-Core Real Estate - Value-Add	Prudential Sr Housing Fund V	3,932,486	0.03%
Opportunities		Lowe Enterprises	26,924,624	0.18%
Principal Protection				
	US Intermediate	First Hawaiian Bank	362,359,104	2.42%
	US Intermediate	Pacific Income Advisors	360,920,438	2.41%
	Non-US Intermediate	PIMCO	361,494,234	2.41%
	Non-US Intermediate	Oeschle Intl. Advisors	717,694,525	4.79%
Real Return				
	Timber	Hancock Timber	204,868,280	1.37%
	GILS	BlackRock	475,891,065	3.18%
	Infrastructure	KKR Global Infrastructure II	10,346,425	0.07%
All Other Assets				
	Cash Account	BNY Mellon	120,364,212	0.80%
	Cash Account	Bank of Hawaii	36,326,143	0.24%
	Transition Account I	BNY Mellon	12,757,426	0.09%
	Transition Account II	BNY Mellon	479,245,942	3.20%
	Residual Account	BNY Mellon	2,324	0.00%
	Closing Accounts			
	Covered Calls - Passive	Gateway - Replication	27	0.00%
	World ex-US Equity	Mercator Asset Mgt LP	663,587	0.00%
	Domestic Large Cap Growth	Sands Capital	0	0.00%
Total Fund Value			14,987,969,693	100.00%

Source: BNY Mellon