Managers and Assets Under Management as of December 31, 2015 State of Hawaii Employees' Retirement System

Risk-Based Policy Framework

Strategic Class		Manager	Assets Under Management	% of Tota
Broad Growth	Domestic Large Cap Growth Equity	JP Morgan LCG	409.838.731	2.91
	Domestic Large Cap Growth Equity	Sands Capital	409,636,731	2.91
	Domestic Large Cap Growth Equity	Mellon Capital Management	681,884,969	4.84
	Domestic Large Cap Value Equity	Barrow Hanley	568,670,972	4.04
	Domestic Large Cap Value Equity	CS McKee Investment Mgrs	527,484,247	3.74
	Domestic Large Cap Value Equity Index	Mellon Capital Management	372,529,855	2.64
	Domestic Large Cap Core Equity	Bank of Hawaii	183,883,665	1.31
	Domestic Large Cap Core Equity	CM Bidwell & Associates	161,093,365	1.14
	Domestic Small Cap Core Equity	Jennison Associates	493,390,677	3.50
	Domestic Small Cap Core Equity	T Rowe Price Associates	388,106,722	2.76
	World ex-US Equity	Franklin Templeton	552,567,304	3.92
	World ex-US Equity	JP Morgan Chase	586,545,092	4.16
	World ex-US Equity	Mercator Asset Mgt LP	496,061,161	3.52
	Emerging Markets Equity	QMA	396,006,948	2.81
	Emerging Markets Equity	Research Affiliates	362,316,294	2.57
	Global Equity Index	Mellon Capital Management	1,340,324,898	9.51
	Extended Global Credit	Bradford & Marzec	327,101,109	2.32
	Extended Global Credit	PIMCO	203,078,081	1.44
	Extended Global Credit	Western Asset Management	520,113,108	3.69
	Covered Calls - Active	Gateway Investment Advisers LLC	491,317,038	3.49
	Covered Calls - Passive	Gateway Investment Advisers LLC	475,497,990	3.38
	Private Equity	Hamilton Lane	722,635,854	5.13
	HITIP	Stafford	19,827,341	0.14
Principal Protection				
	US Intermediate	First Hawaiian Bank	348,981,460	2.48
	US Intermediate	Pacific Income Advisors	348,270,865	2.47
	Non-US Intermediate	PIMCO	346,970,813	2.46
	Non-US Intermediate	Oeschle Intl. Advisors	694,919,040	4.93
Real Estate				
tour Estate	Core Real Estate	H2 Core Real Estate Debt Fund	29,514,988	0.21
	Core Real Estate (Separate)	Heitman Capital	365,286,937	2.59
	Core Real Estate (Separate)	INVESCO Realty	265,683,808	1.89
	Core Real Estate (Separate)	Lowe Enterprises	26,268,769	0.19
	Value-Add Real Estate	AG Core Plus Realty Fund II	3,273,374	0.02
	Value-Add Real Estate	AG Core Plus Realty Fund III	16,222,474	0.12
	Value-Add Real Estate	AG Core Plus Realty Fund IV	6,197,401	0.04
	Value-Add Real Estate	Almanac VI	6,941,675	0.05
	Value-Add Real Estate	Almanac VII	8,773,762	0.06
	Value-Add Real Estate	CBRE Strategic Partners Value Fund V	19,117	0.00
	Value-Add Real Estate	CBRE Strategic Partners Value Fund VI	18,001,084	0.13
	Value-Add Real Estate	CBRE Strategic Partners Value Fund VII	18,166,260	0.13
	Value-Add Real Estate	LaSalle Income & Growth Fund V	12,660,936	0.09
	Value-Add Real Estate	Mesa West RE Inc Fund II	202,811	0.00
	Value-Add Real Estate	Mesa West RE Inc Fund III	13,053,755	0.09
	Value-Add Real Estate	Prudential Sr Housing Fund IV	15,874,818	0.11
	Value-Add Real Estate	Prudential Sr Housing Fund V	2,670,193	0.02
	Opportunistic Real Estate	BlackSand Capital Fund I	4,277,611	0.03
	Opportunistic Real Estate	Blackstone Real Estate VII	21,222,548	0.15
	Opportunistic Real Estate	Fortress Japan Opp Fund II	13,480,439	0.10
	Opportunistic Real Estate	Fortress Japan Opp Fund III	3,974,383	0.03
	Opportunistic Real Estate	I-Squared Global Infrastructure	1,973,159	0.01
	Opportunistic Real Estate	Lone Star Fund II	2,883,180	0.02
	Opportunistic Real Estate	Lone Star Fund VII	5,058,331	0.04
	Opportunistic Real Estate	Torchlight Debt Opportunity Fund V	2,954,535	0.02
Real Return				
tournoturn	Timber	Hancock Timber	202,378,131	1.44
	GILS	BlackRock	432,061,642	3.07
	Infrastructure	KKR Global Infrastructure II	4,705,001	0.03
All Other Assets				
	Cash Account	BNY Mellon	73,526,665	0.52
	Cash Account	Bank of Hawaii	73,408,459	0.52
	Transition Account	BNY Mellon	128,099	0.00
	Transition Account Residual Account	BNY Mellon BNY Mellon	128,099 295,293	
Fotal Fund Value				0.00 0.00 100.00

Source: BNY Mellon

Asset-Based Policy Framework

Asset Class		Manager	Management	% of Total
Domestic Equity		Manager	Wanagement	76 01 10tai
	Large Cap Growth	JP Morgan LCG	409,838,731	2.91%
	Large Cap Growth	Sands Capital	416,719,234	2.96%
	Large Cap Growth Index	Mellon Capital Management	681,884,969	4.84%
	Large Cap Value	Barrow Hanley	568,670,972	4.04%
	Large Cap Value	CS McKee Investment Mgrs	527,484,247	3.74%
	Large Cap Value Index	Mellon Capital Management	372,529,855	2.64%
	Large Cap Core	Bank of Hawaii	183,883,665	1.31%
	Large Cap Core	CM Bidwell & Associates	161,093,365	1.14%
	Small Cap Core	Jennison Associates	493,390,677	3.50%
	Small Cap Core	T Rowe Price Associates	388,106,722	2.76%
Non-US Equity				
	World ex-US	Franklin Templeton	552,567,304	3.92%
	World ex-US	JP Morgan Chase	586,545,092	4.16%
	World ex-US	Mercator Asset Mgt LP	496,061,161	3.52%
	Emerging Markets	QMA	396,006,948	2.81%
	Emerging Markets	Research Affiliates	362,316,294	2.57%
Global Equity				
	Global Equity Index	Mellon Capital Management	1,340,324,898	9.51%
Fixed Income				
-	US Intermediate	First Hawaiian Bank	348,981,460	2.48%
	US Intermediate	Pacific Income Advisors	348,270,865	2.47%
	Non-US Intermediate	PIMCO	346,970,813	2.46%
	Non-US Intermediate	Oeschle Intl. Advisors	694,919,040	4.93%
	Extended Global Credit	Bradford & Marzec	327,101,109	2.32%
	Extended Global Credit	PIMCO	203,078,081	1.44%
	Extended Global Credit	Western Asset Management	520,113,108	3.69%
Real Estate				
tear Estate	Core Real Estate	H2 Core Real Estate Debt Fund	29,514,988	0.21%
	Core Real Estate (Separate)	Heitman Capital	365,286,937	2.59%
	Core Real Estate (Separate)	INVESCO Realty	265,683,808	1.89%
	Core Real Estate (Separate)	Lowe Enterprises	26,268,769	0.19%
	Value-Add Real Estate	AG Core Plus Realty Fund II	3,273,374	0.02%
	Value-Add Real Estate	AG Core Plus Realty Fund III	16,222,474	0.12%
	Value-Add Real Estate	AG Core Plus Realty Fund IV	6,197,401	0.04%
	Value-Add Real Estate	Almanac VI	6,941,675	0.05%
	Value-Add Real Estate	Almanac VII	8,773,762	0.06%
	Value-Add Real Estate	CBRE Strategic Partners Value Fund V	19,117	0.00%
	Value-Add Real Estate	CBRE Strategic Partners Value Fund VI		0.00%
	Value-Add Real Estate		18,001,084	0.13%
		CBRE Strategic Partners Value Fund VII	18,166,260	
	Value-Add Real Estate	LaSalle Income & Growth Fund V	12,660,936	0.09%
	Value-Add Real Estate	Mesa West RE Inc Fund II	202,811	0.00%
	Value-Add Real Estate	Mesa West RE Inc Fund III	13,053,755	0.09%
	Value-Add Real Estate	Prudential Sr Housing Fund IV	15,874,818	0.11%
	Value-Add Real Estate	Prudential Sr Housing Fund V	2,670,193	0.02%
	Opportunistic Real Estate	BlackSand Capital Fund I	4,277,611	0.03%
	Opportunistic Real Estate	Blackstone Real Estate VII	21,222,548	0.15%
	Opportunistic Real Estate	Fortress Japan Opp Fund II	13,480,439	0.10%
	Opportunistic Real Estate	Fortress Japan Opp Fund III	3,974,383	0.03%
	Opportunistic Real Estate	I-Squared Global Infrastructure	1,973,159	0.01%
	Opportunistic Real Estate	Lone Star Fund II	2,883,180	0.02%
	Opportunistic Real Estate	Lone Star Fund VII	5,058,331	0.04%
	Opportunistic Real Estate	Torchlight Debt Opportunity Fund V	2,954,535	0.02%
Private Equity				
	Private Equity	Hamilton Lane	722,635,854	5.13%
	HiTIP	Stafford	19,827,341	0.14%
Real Return				
	Timber	Hancock Timber	202,378,131	1.44%
	GILS	BlackRock	432,061,642	3.07%
	Infrastructure	KKR Global Infrastructure II	4,705,001	0.03%
Covered Calls				
	Covered Calls - Active	Gateway Investment Advisers LLC	491,317,038	3.49%
	Covered Calls - Passive	Gateway Investment Advisers LLC	475,497,990	3.38%
All Othor Accests				
All Other Assets	Cash Account	BNY Mellon	73,526,665	0.52%
	Cash Account	Bank of Hawaii	73,408,459	0.52%
	Transition Account	BNY Mellon	128,099	0.02%
	Residual Account	BNY Mellon	205 202	
	Residual Account	BNY Mellon	295,293	0.00%

Source: BNY Mellon