Managers and Assets Under Management as of December 31, 2014 State of Hawaii Employees' Retirement System

Risk-Based Policy Framework

			Assets Under	
Strategic Class Broad Growth		Manager	Management	% of Total
Broad Growth	Domestic Large Cap Growth Equity	JP Morgan LCG	378,920,644	2.69%
	Domestic Large Cap Growth Equity	Sands Capital	404,470,544	2.87%
	Domestic Large Cap Growth Equity Index	Mellon Capital Management	682,935,739	4.85%
	Domestic Large Cap Value Equity	Barrow Hanley	581,312,153	4.13%
	Domestic Large Cap Value Equity	CS McKee Investment Mgrs	557,142,100	3.96%
	Domestic Large Cap Value Equity Index	Mellon Capital Management	428,680,135	3.04%
	Domestic Large Cap Core Equity	Bank of Hawaii	193,223,235	1.37%
	Domestic Large Cap Core Equity	CM Bidwell & Associates	162,809,593	1.16%
	Domestic Small Cap Core Equity	Jennison Associates	591,182,008	4.20%
	Domestic Small Cap Core Equity	T Rowe Price Associates	427,461,792	3.04%
	World ex-US Equity World ex-US Equity	JP Morgan Chase Franklin Templeton	606,491,502 546,748,346	4.31% 3.88%
	World ex-US Equity World ex-US Equity	Mercator Asset Mgt LP	519,697,451	3.69%
	Emerging Markets Equity	Research Affiliates	516,409,931	3.67%
	Emerging Markets Equity	QMA	517,784,829	3.68%
	Global Equity Index	Mellon Capital Management	1,366,508,568	9.70%
	Extended Global Credit	Bradford & Marzec	458,425,085	3.26%
	Extended Global Credit	Western Asset Management	595,885,871	4.23%
	Covered Calls - Active	Gateway Investment Advisers LLC	417,440,684	2.96%
	Covered Calls - Passive	Gateway Investment Advisers LLC	403,525,458	2.87%
	Private Equity	Hamilton Lane	584,928,938	4.15%
	HiTIP	Macquarie Funds Group (HiTIP)	15,925,295	0.11%
Principal Protection	LIC Intowns odiate	First Housian Bank/Diahan Street	470 450 000	4.070/
	US Intermediate US Intermediate	First Hawaiian Bank/Bishop Street Pacific Income Advisors	179,453,083	1.27% 1.13%
	Non-US Intermediate	PIMCO	159,536,597 569,208,811	4.04%
	Non-US Intermediate	Oeschle Intl. Advisors	503,607,210	3.58%
	Non 33 memodiate	Cooline IIII. Naviooro	000,007,210	0.0070
Real Estate				
	Core Real Estate (Separate)	Heitman Capital	391,467,158	2.78%
	Core Real Estate (Separate)	INVESCO Realty	291,169,950	2.07%
	Value-Add Real Estate	AG Core Plus Realty Fund II	6,671,269	0.05%
	Value-Add Real Estate	AG Core Plus Realty Fund III	20,175,239	0.14%
	Value-Add Real Estate	Almanac VI	4,910,671	0.03%
	Value-Add Real Estate Value-Add Real Estate	CBRE Strategic Partners Value Fund 5 CBRE Strategic Partners Value Fund 6	83,208 19,096,762	0.00% 0.14%
	Value-Add Real Estate	LaSalle Income & Growth Fund V	29,126,614	0.14%
	Value-Add Real Estate	Prudential Sr Housing Fund IV	13,242,987	0.21%
	Value-Add Real Estate	Mesa West RE Inc Fund II	6,359,905	0.05%
	Value-Add Real Estate	Mesa West RE Inc Fund III	8,771,422	0.06%
	Opportunistic Real Estate	Lone Star Fund VII	6,840,296	0.05%
	Opportunistic Real Estate	Lone Star RE Fund II	4,597,129	0.03%
	Opportunistic Real Estate	BlackSand Capital Fund I	3,318,015	0.02%
	Opportunistic Real Estate	Blackstone Real Estate VII	19,864,156	0.14%
	Opportunistic Real Estate	Fortress Japan Opp Fund II	14,191,014	0.10%
D 15 /				
Real Return	Timber	Hancock Timber	184,093,384	1.31%
	GILS	BlackRock	445,231,097	3.16%
	Infrastructure	KKR Global Infrastructure II	1,129,390	0.01%
	3011 30131 0		1,120,000	0.0170
All Other Assets				
	Cash Account	BNY Mellon	211,492,477	1.50%
	Cash Account	Bank of Hawaii	28,868,661	0.21%
	Transition Account	BNY Mellon	219,847	0.00%
	Residual Account	BNY Mellon	41,505	0.00%
Total Fund Value			14,080,677,757	100.00%

Source: BNY Mellon

Managers and Assets Under Management as of December 31, 2014 State of Hawaii Employees' Retirement System

Asset-Based Policy Framework

Damestic Equity Lings Cop Growth Lings Cop Growth Indox Melon Copital Management 981,312,153 4,17%				Assets Under	
Large Cap Growth JP Morgan LCG 378 320,644 2.67% 2.6	Asset Class		Manager	Management	% of Total
Large Cap Growth Sands Capital 404,470,544 2,476 2,485 2,476 2,476 2,485 2,476 2,485 2,476 2,485 2,476 2,485 2,476 2,485 2,476 2,485 2,476 2,485 2,485 2,476 2,485 2,485 2,476 2,485 2,4	Domestic Equity	Large Can Growth	IP Morgan I CG	378 020 644	2 60%
Large Cap Growth Index Barrow Harley Bernard Harley			_		
Large Cap Value Barrow Harley 681,312,153 4,15% 1,276 1,27		• •	· · · · · · · · · · · · · · · · · · ·		
Largic Cap' Value Index Mellon Capital Management 428,880,135 3,04%		• •	· · · · · · · · · · · · · · · · · · ·		
Largic Cap Core Bank of Hawaii 193,223,235 1,37% 1,3			CS McKee Investment Mgrs	557,142,100	3.96%
Large Cap Core CM Bickvell & Associates 162,809,658 1.16% Small Cap Core Jennison Associates 591,182,006 4.20% 3.04%		Large Cap Value Index	Mellon Capital Management	428,680,135	3.04%
Small Cap Core Jennison Associates 591,182,008 4,20% 3,04% 7,7461,792 3,04% 3,04% 3,04% 3,04% 3,04% 3,04% 3,04% 3,04% 3,04% 3,04% 3,04% 3,04% 3,04% 3,04% 3,04% 3,04% 3,04%		• •		193,223,235	
Non-US Equity World ex-US		• •	CM Bidwell & Associates		
Non-US Equity		•			
World ex-US		Small Cap Core	T Rowe Price Associates	427,461,792	3.04%
World ex-US	Non-US Equity				
World ex-US	55 = 40,	World ex-US	JP Morgan Chase	606,491,502	4.31%
World ex-US			_		
Emerging Markets Research Affiliales 516,409,931 3.67%		World ex-US	•		
Emerging Markets		Emerging Markets			
Fixed Income			QMA	517,784,829	3.68%
Fixed Income	Clobal Equity				
Fixed Income	Global Equity	Global Equity Index	Mellon Capital Management	1,366,508,568	9.70%
US Fixed Income		, ,	, ,	, , ,	
US Fixed Income	Fixed Income	LIC Fixed Income	First Haussian Bank/Bighan Street	170 452 002	4.070/
Core Plus Fixed Income					
Core Plus Fixed Income					
Core Plus Fixed Income					
Non US Fixed Income Oeschle Intl. Advisors 503,607,210 3.58%					
Real Estate					
Core Real Estate (Separate)		Non OS Fixed income	Oeschie Inti. Advisors	303,007,210	3.30 //
Core Real Estate (Separate) INVESCO Realty Value-Add Real Estate AG Core Plus Realty Fund II 6,671,269 0.05% Value-Add Real Estate AG Core Plus Realty Fund III 20,175,239 0.14% Value-Add Real Estate AG Core Plus Realty Fund III 20,175,239 0.14% Value-Add Real Estate Almanac VI 4,910,671 0.03% Value-Add Real Estate CBRE Strategic Partners Value Fund 5 83,208 0.00% Value-Add Real Estate CBRE Strategic Partners Value Fund 6 19,096,762 0.14% Value-Add Real Estate LaSalle Income & Growth Fund V 29,126,614 0.21% Value-Add Real Estate Prudential Sr Housing Fund IV 13,242,987 0.09% Value-Add Real Estate Mesa West RE Inc Fund II 6,359,905 0.05% Value-Add Real Estate Mesa West RE Inc Fund III 6,359,905 0.05% Value-Add Real Estate Mesa West RE Inc Fund III 6,840,296 0.05% 0.0500 0	Real Estate				
Value-Add Real Estate		` · · ·	·		
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Value-Add Real Estate			· · · · · · · · · · · · · · · · · · ·		
Value-Add Real Estate CBRE Strategic Partners Value Fund 5 83,208 0.00% Value-Add Real Estate CBRE Strategic Partners Value Fund 6 19,096,762 0.14% Value-Add Real Estate LaSalle Income & Growth Fund V 29,126,614 0.21% Value-Add Real Estate Prudential Sr Housing Fund IV 13,242,987 0.09% Value-Add Real Estate Mesa West RE Inc Fund II 6,359,905 0.05% Value-Add Real Estate Mesa West RE Inc Fund III 6,359,905 0.05% Value-Add Real Estate Mesa West RE Inc Fund III 6,840,296 0.05% 0.050%			•		
Value-Add Real Estate CBRE Strategic Partners Value Fund 6 19,096,762 0.14% Value-Add Real Estate LaSalle Income & Growth Fund V 29,126,614 0.21% Value-Add Real Estate Prudential Sr Housing Fund IV 13,242,987 0.09% Value-Add Real Estate Mesa West RE Inc Fund II 6,359,905 0.05% Value-Add Real Estate Mesa West RE Inc Fund II 8,771,422 0.06% 0.05%					
Value-Add Real Estate			<u> </u>		
Value-Add Real Estate Prudential Sr Housing Fund IV 13,242,987 0.09% Value-Add Real Estate Mesa West RE Inc Fund II 6,359,905 0.05% Value-Add Real Estate Mesa West RE Inc Fund III 8,771,422 0.06% Opportunistic Real Estate Lone Star Fund III 6,840,296 0.05% Opportunistic Real Estate Lone Star Fund III 4,597,129 0.03% Opportunistic Real Estate Lone Star RE Fund II 4,597,129 0.03% Opportunistic Real Estate BlackSand Capital Fund I 3,318,015 0.02% Opportunistic Real Estate BlackStone Real Estate VII 19,864,156 0.14% Opportunistic Real Estate Fortress Japan Opp Fund II 14,191,014 0.10% Private Equity Hamilton Lane 584,928,938 4.15% HiTIP Macquarie Funds Group 15,925,295 0.11% Alberta Funds Group 15,925,			<u> </u>		
Value-Add Real Estate Mesa West RE Inc Fund II 6,359,905 0.05% Value-Add Real Estate Mesa West RE Inc Fund III 8,771,422 0.06% Opportunistic Real Estate Lone Star Fund VII 6,840,296 0.05% Opportunistic Real Estate Lone Star Fund III 4,597,129 0.03% Opportunistic Real Estate BlackSand Capital Fund I 3,318,015 0.02% Opportunistic Real Estate BlackSand Capital Fund I 19,864,156 0.14% Opportunistic Real Estate BlackStone Real Estate VII 19,864,156 0.14% Opportunistic Real Estate Fortress Japan Opp Fund II 14,191,014 0.10%					
Value-Add Real Estate			· · · · · · · · · · · · · · · · · · ·		
Opportunistic Real Estate					
Opportunistic Real Estate					
Opportunistic Real Estate		• •			
Opportunistic Real Estate		• •			
Private Equity		• •			
Private Equity Hamilton Lane Macquarie Funds Group 584,928,938 4.15% 4.15% 5.25,295 Real Return Timber GILS BlackRock MKR Global Infrastructure II 184,093,384 1.31% 4.15% 4.		• •			
Private Equity Hamilton Lane 584,928,938 4.15% Macquarie Funds Group 15,925,295 0.11%	Private Equity	Opportunistic Real Estate	Fortress Japan Opp Fund II	14,191,014	0.10%
Timber	, ,	Private Equity	Hamilton Lane	584,928,938	4.15%
Timber Hancock Timber 184,093,384 1.31% GILS BlackRock 445,231,097 3.16% 1.00% 1.0		HiTIP	Macquarie Funds Group	15,925,295	0.11%
Timber Hancock Timber 184,093,384 1.31% GILS BlackRock 445,231,097 3.16% 1.00% 1.0	Real Return				
GILS	. toal itotalli	Timber	Hancock Timber	184,093,384	1.31%
Covered Calls - Active Gateway Investment Advisers LLC 417,440,684 2.96% Covered Calls - Passive Gateway Investment Advisers LLC 403,525,458 2.87% All Other Assets Cash Account BNY Mellon 211,492,477 1.50% Cash Account Bank of Hawaii 28,868,661 0.21% Transition Account BNY Mellon 219,847 0.00% Residual Account BNY Mellon 41,505 0.00%		GILS	BlackRock		3.16%
Covered Calls - Active Covered Calls - Passive Gateway Investment Advisers LLC 417,440,684 2.96% Gateway Investment Advisers LLC 403,525,458 2.87% All Other Assets Cash Account BNY Mellon 211,492,477 1.50% Cash Account Bank of Hawaii 28,868,661 0.21% Transition Account BNY Mellon 219,847 0.00% Residual Account BNY Mellon 41,505 0.00%		Infrastructure	KKR Global Infrastructure II	1,129,390	0.01%
Covered Calls - Active Covered Calls - Passive Gateway Investment Advisers LLC 417,440,684 2.96% Gateway Investment Advisers LLC 403,525,458 2.87% All Other Assets Cash Account BNY Mellon 211,492,477 1.50% Cash Account Bank of Hawaii 28,868,661 0.21% Transition Account BNY Mellon 219,847 0.00% Residual Account BNY Mellon 41,505 0.00%	Covered Calls				
Covered Calls - Passive Gateway Investment Advisers LLC 403,525,458 2.87% All Other Assets Cash Account BNY Mellon 211,492,477 1.50% Cash Account Bank of Hawaii 28,868,661 0.21% Transition Account BNY Mellon 219,847 0.00% Residual Account BNY Mellon 41,505 0.00%	Ouvered Calls	Covered Calls - Active	Gateway Investment Advisers LLC	417.440.684	2.96%
Cash Account BNY Mellon 211,492,477 1.50% Cash Account Bank of Hawaii 28,868,661 0.21% Transition Account BNY Mellon 219,847 0.00% Residual Account BNY Mellon 41,505 0.00%			· · · · · · · · · · · · · · · · · · ·		
Cash Account BNY Mellon 211,492,477 1.50% Cash Account Bank of Hawaii 28,868,661 0.21% Transition Account BNY Mellon 219,847 0.00% Residual Account BNY Mellon 41,505 0.00%	All Other Assets				
Cash AccountBank of Hawaii28,868,6610.21%Transition AccountBNY Mellon219,8470.00%Residual AccountBNY Mellon41,5050.00%	All Other Assets	Cash Account	BNY Mellon	211.492.477	1.50%
Transition Account BNY Mellon 219,847 0.00% Residual Account BNY Mellon 41,505 0.00%					
Residual Account BNY Mellon 41,505 0.00%					
Total Fund Value 14,080,677,757 100.00%		2 2 3 3 3 3 3 4 3 5 4 3 5	2		2.3073
	Total Fund Value			14,080,677,757	100.00%

Source: BNY Mellon