

SCERA Investment Summary – Periods Ending 12/31/2019



December	0.6	● Overall return of +2.4% / 15 basis points over the Plan Target Policy Index ● US Equity (R3000) +2.9% ● Non-US Equity (MSCI EAFE +3.3%, MSCI EMG MKTS +7.5%) ● Real Estate (NCREIF ODCE) N/A ● BB Aggregate index -0.1%
QTR	1.7	● Overall return of +5.8% / 6 basis points over the Plan Target Policy Index ● US Equity (R3000) +9.1% ● Non-US Equity (MSCI EAFE +8.2%, MSCI EMG MKTS +11.8%) ● Real Estate (NCREIF ODCE) +1.3% ● BB Aggregate index +0.2% ● Most favorable performance vs. benchmark in basis points (IFM +180, Dodge & Cox 106, GMO +44, PIMCO +40) ● Most unfavorable performance vs. benchmark in basis points (Hexavest -167, Systematic -147, JP Morgan SPF -86, Templeton -62, UBS Trumbull -40)
1 Year	7.0	● Overall return of +16.9% / 184 basis points under the Plan Target Policy Index ● US Equity (R3000) +31.0% ● Non-US Equity (MSCI EAFE +22.0%, MSCI EMG MKTS +18.4%) ● Real Estate (NCREIF ODCE) +5.6% ● BB Aggregate index +8.7% ● Most favorable performance vs. benchmark in basis points (IFM +754, Jacobs Levy +101, Reams +37) ● Most unfavorable performance vs. benchmark in basis points (Templeton -758, Hexavest -678, UBS Trumbull -605, Dodge & Cox -294, GMO -279, DoubleLine -197, JP Morgan SPF -159)
3 Years	7.2	● Overall return of +9.7% / 13 basis points under the Plan Target Policy Index ● US Equity (R3000) +14.6% ● Non-US Equity (MSCI EAFE +9.6%, MSCI EMG MKTS +11.6%) ● Real Estate (NCREIF ODCE) +7.3% ● BB Aggregate index +4.0%
5 Years	7.2	● Overall return of +8.1% / 41 basis points over the Plan Target Policy Index ● US Equity (R3000) +11.2% ● Non-US Equity (MSCI EAFE +5.7%, MSCI EMG MKTS +5.6%) ● Real Estate (NCREIF ODCE) +9.3% ● BB Aggregate index +3.1%
10 Years	7.4	● Overall return of +9.4% / 51 basis points over the Plan Target Policy Index
15 Years	7.6	● Overall return of +7.2% / 40 basis points over the Plan Target Policy Index
20 Years	7.7	● Overall return of +6.1% / 34 basis points over the Plan Target Policy Index
25 Years	7.8	● Overall return of +8.5% / 44 basis points over the Plan Target Policy Index

Notes: 1) Stoplight colors indicate performance relative to the current assumed ROR at the Plan level and relative to Aon's long-term return expectations at the asset class level.
2) All returns are gross-of-fees unless otherwise indicated.
3) The second column is a blend of the historical assumed ROR's that were in force at the time.

Sonoma County Employees' Retirement Association

SUMMARY OF PERFORMANCE

RATES OF RETURN

Periods Ending December 31, 2019



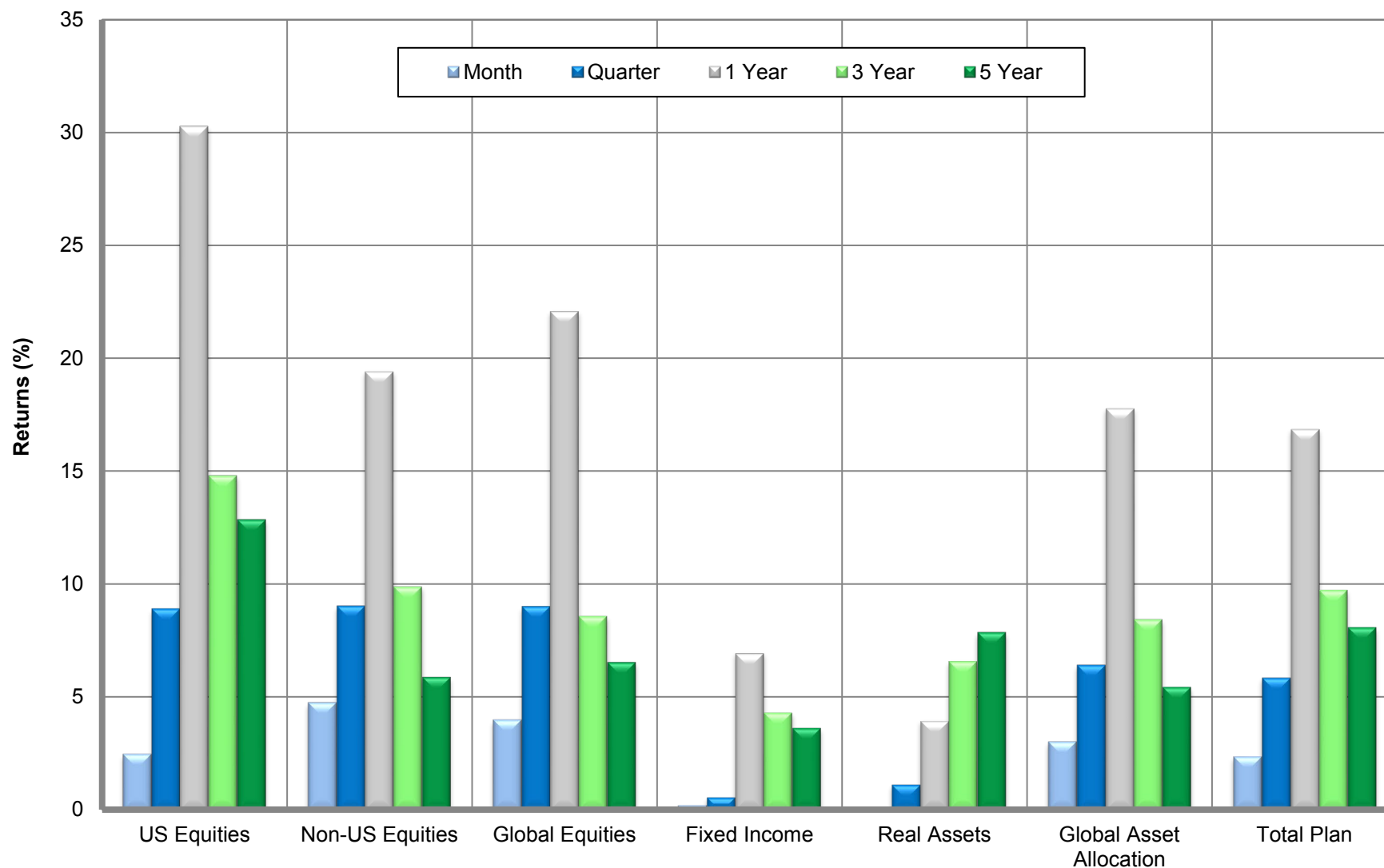
STATE STREET

	1 Mo	Qtr	YTD	1 Yr	2 Yrs	3 Yrs	5 Yrs	10 Yrs	15 Yrs	20 Yrs
SONOMA TOTAL FUND POLICY INDEX	2.21	5.78	18.73	18.73	6.79	9.86	7.66	8.92	6.79	5.74
DJ Industrial Average Total Return Index	1.87	6.67	25.34	25.34	9.99	15.73	12.59	13.40	9.45	7.18
S&P 500	3.02	9.07	31.49	31.49	12.13	15.27	11.70	13.56	9.00	6.06
NASDAQ Composite Index	3.63	12.47	36.69	36.69	15.24	19.85	14.93	16.05	11.04	
Russell 1000	2.89	9.04	31.43	31.43	11.87	15.05	11.48	13.54	9.12	6.29
Russell 1000 Growth	3.02	10.62	36.39	36.39	15.90	20.49	14.63	15.22	10.50	5.18
Russell 1000 Value	2.75	7.41	26.54	26.54	7.74	9.68	8.29	11.80	7.63	7.03
Russell 2000	2.88	9.94	25.52	25.52	5.69	8.59	8.23	11.83	7.92	7.59
Russell 2000 Growth	2.29	11.39	28.48	28.48	7.95	12.49	9.34	13.01	8.81	5.57
Russell 2000 Value	3.50	8.49	22.39	22.39	3.27	4.77	6.99	10.56	6.92	9.41
Russell 3000	2.89	9.10	31.02	31.02	11.42	14.57	11.24	13.42	9.03	6.39
MSCI ACWI EX US SMALL CAP	4.93	11.01	22.42	22.42	0.07	9.65	7.04	6.92	6.93	
S&P DEVELOPED EX U.S. SMALLCAP	4.82	11.74	24.66	24.66	0.85	10.42	8.16	8.34	7.28	7.15
GLOBAL ASSET ALLOCATION BENCHMARK	2.31	5.96	20.59	20.59	6.39	9.76	6.95			
MSCI EAFE (NET)	3.25	8.17	22.01	22.01	2.56	9.56	5.67	5.50	4.84	3.32
MSCI EMERGING MARKETS	7.46	11.84	18.42	18.42	0.58	11.57	5.61	3.68	8.50	
MSCI AC World IMI w/USA GROSS (NET)	3.57	9.13	26.75	26.75	6.92	12.43	8.68	9.23	7.33	
MSCI All Country World ex US IMI net	4.41	9.20	21.63	21.63	1.82	9.84	5.71	5.21	5.48	3.96
BBG BARC Agg Bd	-0.07	0.18	8.72	8.72	4.27	4.03	3.05	3.75	4.15	5.03
BBG BARC US Univ Idx	0.15	0.45	9.29	9.29	4.41	4.30	3.44	4.12	4.42	5.27
BBG BARC US MBS Idx	0.28	0.71	6.35	6.35	3.64	3.25	2.58	3.15	4.02	4.79
CS Leveraged Loan Index	1.61	1.68	8.17	8.17	4.60	4.48	4.54	5.18	4.65	4.74
LIBOR 1 MONTH INDEX	0.15	0.44	2.22	2.22	2.15	1.82	1.23	0.72	1.60	1.94
LIBOR + 400 BPS	0.48	1.43	6.30	6.30	6.23	5.88				
CPI + 500 BPS 1 ML	0.35	1.48	7.15	7.15	7.21					
ICE BofA US 3-Month Treasury Bill	0.14	0.46	2.28	2.28	2.08	1.67	1.07	0.58	1.39	1.78
NCREIF ODCE 1 MO LAG	0.00	1.31	5.59	5.59	7.13	7.30	9.34	10.86	7.73	8.06
NCREIF FARMLAND INDEX 1 ML	0.00	0.97	5.33	5.33	6.08	6.10	7.89	11.05	14.35	12.42
UBS CORE FARMLAND 1ML	0.00	0.99	4.81	4.81	5.63	5.47	5.64	9.05	11.85	10.69
RUSSELL 2000 BLENDED	2.88	9.94	25.52	25.52	5.69	8.59	9.32	11.76	7.69	10.00

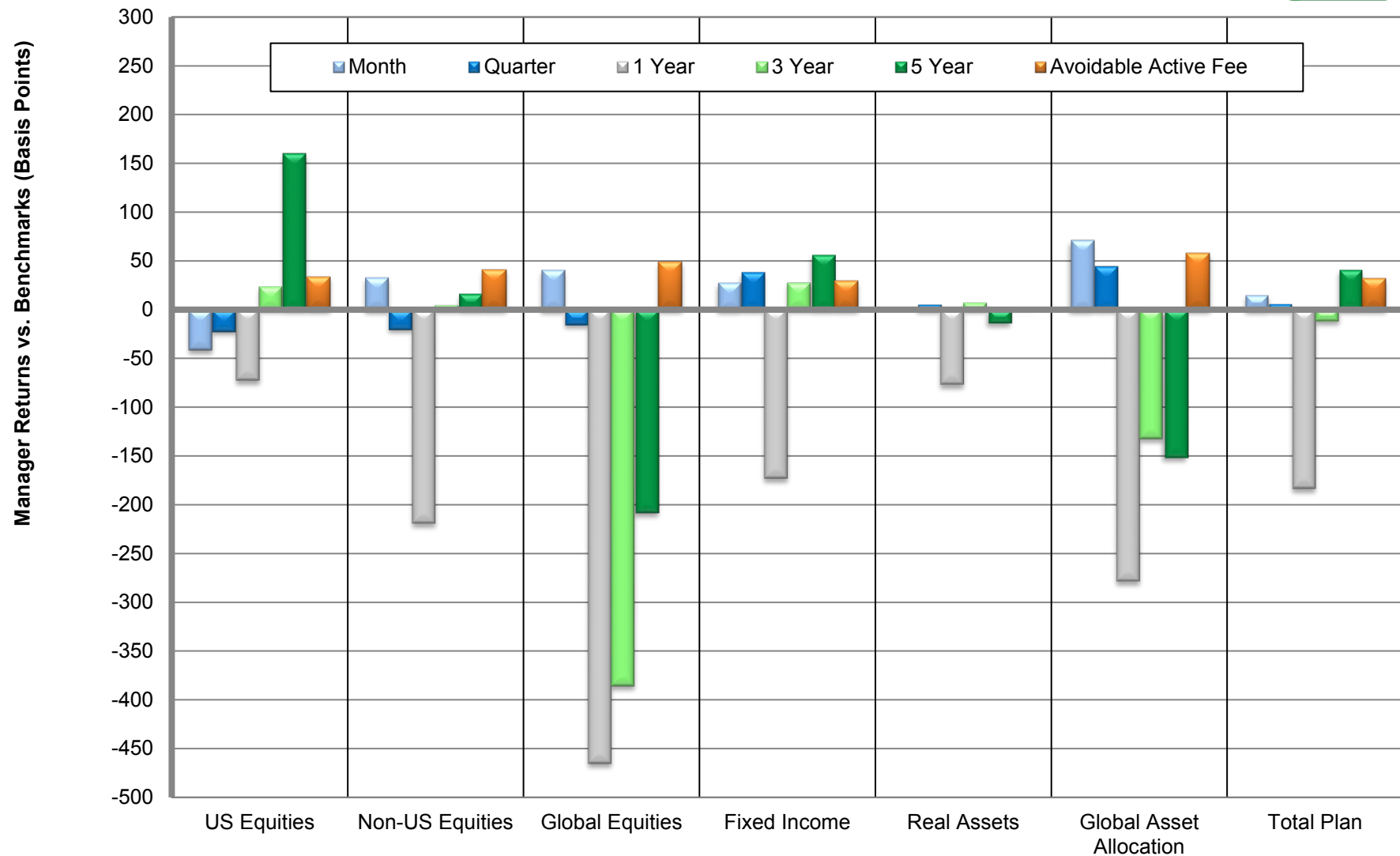
1 Custom Index: 80% NCREIF Farmland Annual Cropland Fixed/Var Rent + 20% NCREIF Farmland Permanent Cropland Fixed/Var Rent

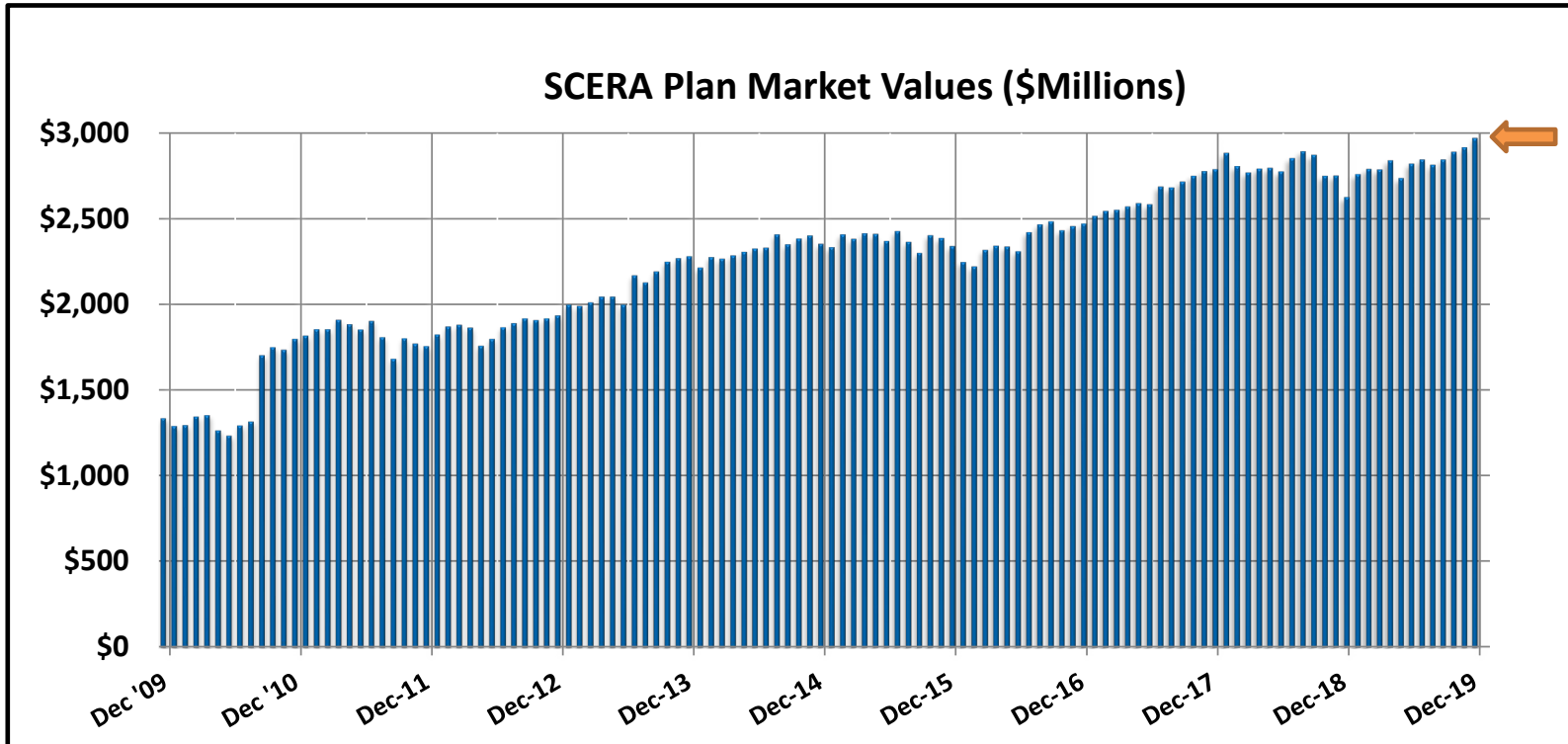
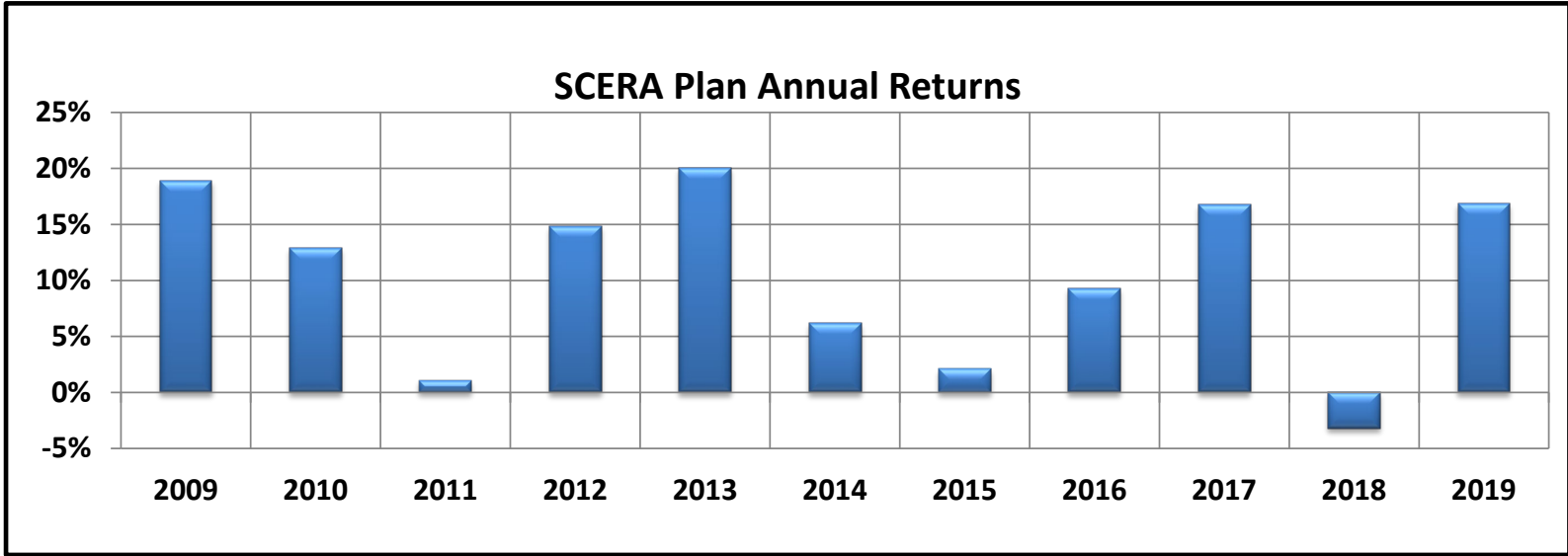
2 Russell 2000 Blended benchmark is Russell 2000 Value Index from 1/1/2000 to 12/31/2016. As of 1/1/2017 it is Russell 2000 Index.

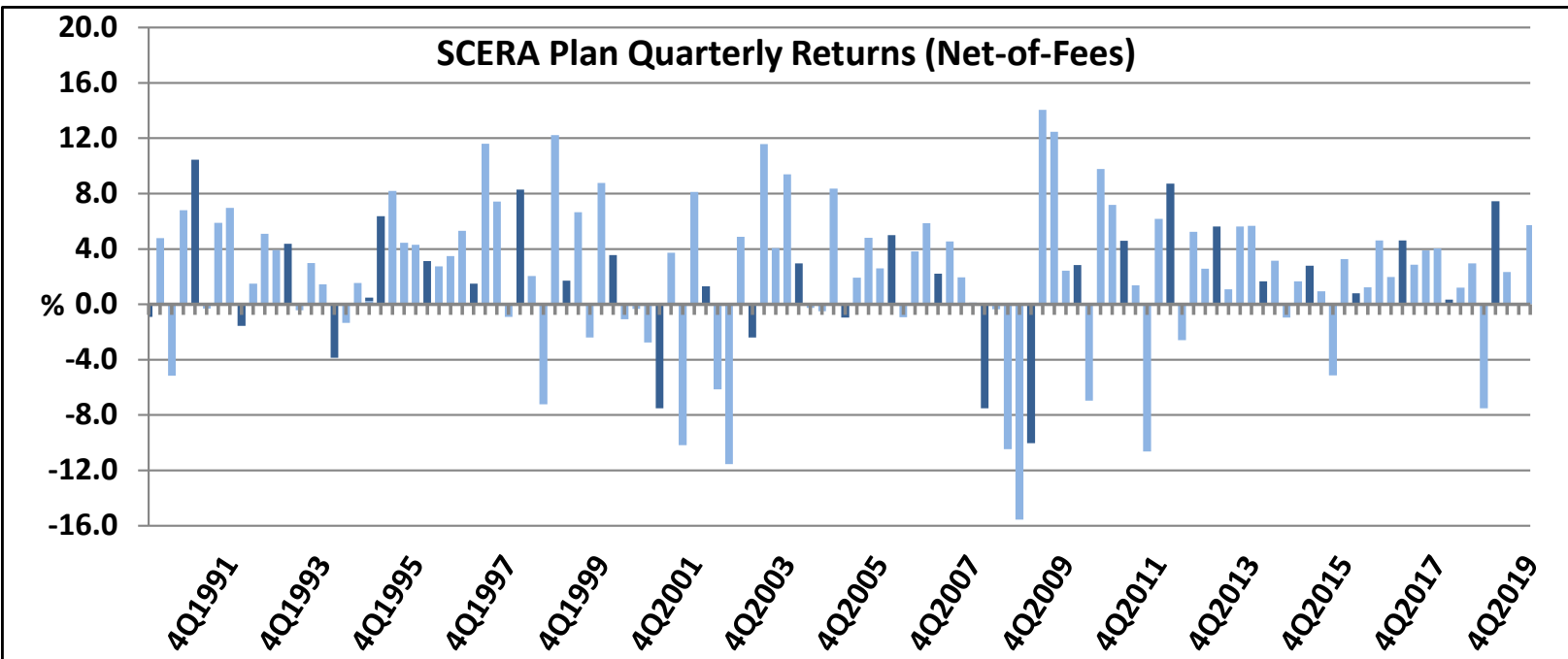
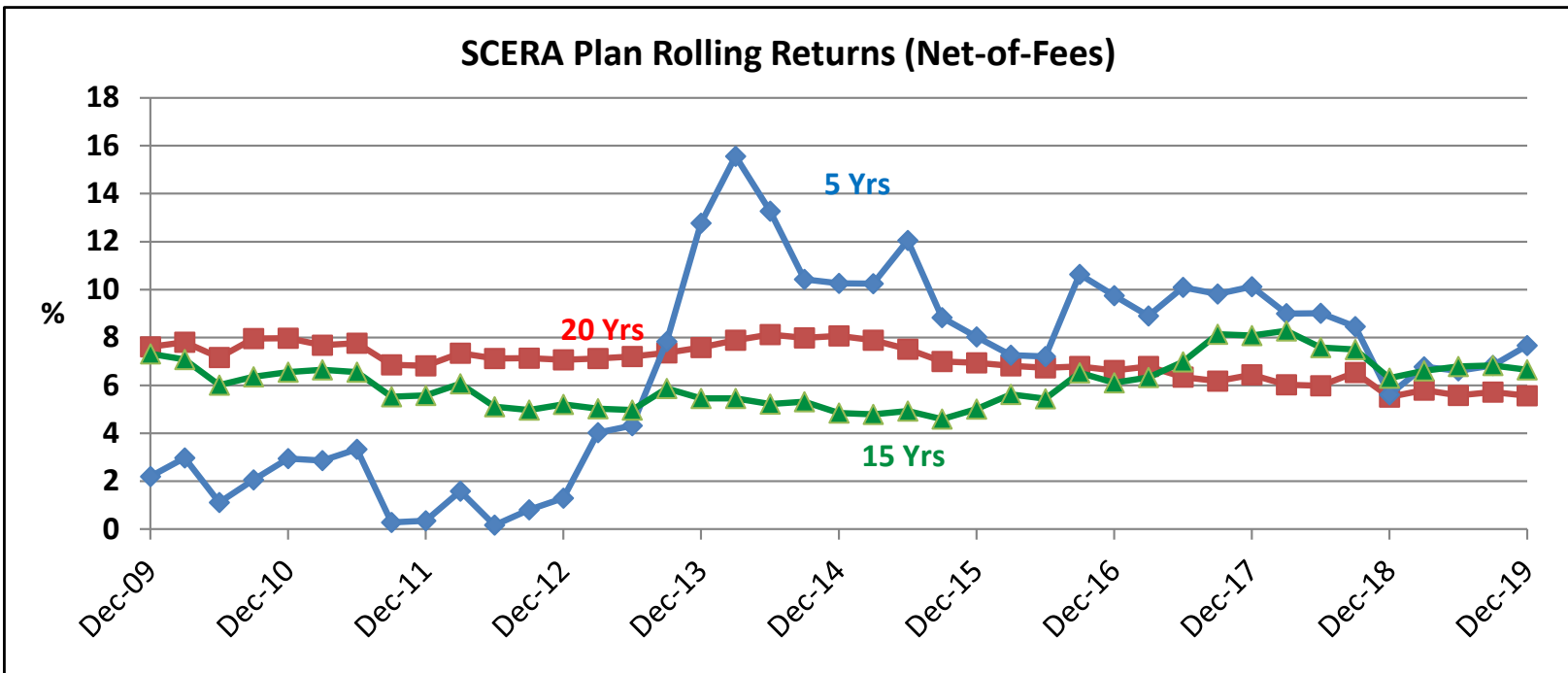
SCERA Investment Returns by Asset Class Periods Ending December 31, 2019



SCERA Asset Class Returns vs. Benchmarks Periods Ending December 31, 2019







Source: Aon Hewitt

Sonoma County Employees' Retirement Association

SUMMARY OF PERFORMANCE
RATES OF RETURN (GROSS-OF-FEES)
Periods Ending December 31, 2019
(All \$ in thousands)



		Market Value	Month	QTR	YTD	1 Yr	3 Yrs	5 Yrs	10 Yrs	15 Yrs	20 Yrs	ITD	Inception Date
U.S. EQUITY	TOTAL US EQUITY	624,569	2.48	8.88	30.29	30.29	14.80	12.84	14.92	10.00	7.91	13.00	6/1/1982
	BENCHMARK (RUSSELL 3000)		2.89	9.10	31.02	31.02	14.57	11.24	13.42	9.03	6.39	12.15	
	JACOBS LEVY 130/30	231,013	1.99	8.94	32.03	32.03	15.38	15.58	17.40			11.64	3/1/2007
	RUSSELL 3000		2.89	9.10	31.02	31.02	14.57	11.24	13.42			8.86	
	SSGA RUSSELL 1000 INDEX FUND	252,249	2.89	9.04	31.44	31.44						10.48	10/1/2018
	RUSSELL 1000		2.89	9.04	31.43	31.43						10.46	
	SYSTEMATIC	141,307	2.54	8.47	25.38	25.38	10.51	11.28	14.01	10.04	12.40	12.40	1/1/2000
	¹ RUSSELL 2000 BLENDED		2.88	9.94	25.52	25.52	8.59	9.32	11.76	7.69	10.00	10.00	
NON-U.S. EQUITY	TOTAL NON-US EQUITY	599,372	4.74	9.00	19.44	19.44	9.88	5.87	5.72	5.53		6.42	4/1/2001
	BENCHMARK (BLEND)		4.41	9.20	21.63	21.63	9.84	5.71	5.11	4.88		5.24	
	ARROWSTREET 130/30	201,907	5.77	9.14	21.57	21.57	13.51	8.41				7.80	2/1/2011
	² MSCI INT'L EQUITY BLENDED II		4.41	9.20	21.63	21.63	9.84	5.71				4.35	
	TEMPLETON	177,037	4.01	8.58	14.05	14.05	5.80	3.12	4.45			4.74	4/1/2005
	³ MSCI INT'L EQUITY BLENDED I		4.41	9.20	21.63	21.63	9.84	5.71	5.11			4.98	
	SSGA ACWI EX-US IMI INDEX FUND	220,428	4.41	9.21	21.98	21.98	10.16	5.99				5.53	6/1/2013
	MSCI ACWI EX-US IMI (NET)		4.41	9.20	21.63	21.63	9.84	5.71				5.26	
GLOBAL EQUITY	TOTAL GLOBAL EQUITY	435,693	3.98	8.98	22.11	22.11	8.58	6.53	7.92			6.84	4/1/2005
	BENCHMARK (BLEND)		3.57	9.13	26.75	26.75	12.43	8.61	8.91			7.13	
	HEXAVEST	190,733	3.76	7.47	19.97	19.97	8.55	7.36				7.04	4/1/2014
	⁴ MSCI Global Equity Blended I		3.57	9.13	26.75	26.75	12.43	8.61				7.90	
	DODGE & COX	244,960	4.15	10.19	23.82	23.82	11.17	9.96	13.09	8.59	9.74	9.79	8/1/1997
	⁵ MSCI Global Equity Blended II		3.57	9.13	26.75	26.75	9.12	7.96	11.63	7.52	6.95	7.52	
GAA	GMO, GLOBAL ASSET ALLOCATION	140,932	3.02	6.40	17.80	17.80	8.43	5.43	6.58			6.42	4/1/2005
	⁶ BENCHMARK (COMPOSITE)		2.31	5.96	20.59	20.59	9.76	6.95	7.39			6.12	

¹ Russell 2000 Value Inception to 12/31/2016 ; Russell 2000 1/1/2017 to Present

² MSCI AC World ex US (Net) 2/1/2011 to 03/31/2011 ; MSCI AC World ex US IMI (Net) 4/1/2011 to Present

³ MSCI EAFE (Net) 5/1/2001 to 9/30/2007 ; MSCI AC World ex US (Net) 10/1/2007 to 1/31/2013 ; MSCI ACWI ex US IMI (Net) 2/1/2013 to Present

⁴ MSCI AC World (Net) 5/1/2008 to 6/30/2013 ; MSCI ACWI IMI (Net) 7/1/2013 - 12/31/2015 ; MSCI ACWI IMI (Net) with USA Gross 1/1/2016 to Present

⁵ Russell 1000 Value to 9/30/2018; MSCI ACWI IMI (Net) with USA Gross 1/10/2018 to Present

⁶ MSCI AC World (Net) 4/1/2005 to 03/31/2011 ; MSCI AC World IMI (Net) 4/1/2011 to 12/31/2012 ; Composite 65% MSCI ACWI IMI (Net) & 35% BB US Aggregate Bond Index 01/01/2013 to Present

PERFORMANCE SUMMARY (GROSS-OF-FEES)

Periods Ending December 31, 2019

	Market											Inception
	Value	Month	QTR	YTD	1 Yr	3 Yrs	5 Yrs	10 Yrs	15 Yrs	20 Yrs	ITD	Date
FIXED INCOME	TOTAL FIXED INCOME	501,278	0.21	0.56	6.98	6.98	4.30	3.61	4.88	5.20	5.70	7.01 9/1/1986
	BENCHMARK (BB US AGGREGATE)		-0.07	0.18	8.72	8.72	4.03	3.05	3.75	4.15	5.03	6.13
	REAMS CORE PLUS	138,382	-0.15	0.06	9.08	9.08	4.78	3.90	5.29	5.78	5.80	7/1/2001
	BB US AGGREGATE		-0.07	0.18	8.72	8.72	4.03	3.05	3.75	4.15	4.62	
	DOUBLELINE CORE PLUS	138,914	-0.10	0.19	6.74	6.74	4.41	3.82			3.90	7/1/2014
	BB US AGGREGATE		-0.07	0.18	8.72	8.72	4.03	3.05			3.13	
	BB US MORTGAGE BACKED SECURITIES INDEX		0.28	0.71	6.35	6.35	3.25	2.58			2.72	
	PIMCO CORE PLUS	139,248	0.16	0.58	8.15	8.15	4.77	3.55			4.03	4/1/2011
	BB US AGGREGATE		-0.07	0.18	8.72	8.72	4.03	3.05			3.49	
	GUGGENHEIM BANK LOANS	84,639	1.42	1.90	8.33	8.33	4.90	5.08			4.53	10/1/2013
	CREDIT SUISSE LEV LOAN INDEX		1.61	1.68	8.17	8.17	4.48	4.54			4.25	
	NEUBERGER BERMAN (RESIDUAL)	95										

REAL ASSETS*	TOTAL REAL ASSETS	505,449		1.12	3.99	3.99	6.59	7.86	9.87	5.38	5.64	1/1/2003
	BENCHMARK (COMPOSITE)			1.07	4.76	4.76	6.52	8.00	10.15	7.27	7.60	
	UBS TRUMBULL PROPERTY FUND	132,744		0.91	-0.46	-0.46	4.13	6.78	8.98	7.45	7.72	1/1/2003
	NCREIF ODCE 1 MONTH LAGGED			1.31	5.59	5.59	7.30	9.34	10.86	7.73	8.01	
	JPMORGAN STRAT. PROPERTY FUND	137,395		0.45	4.00	4.00	6.48	8.68			10.88	1/1/2011
	NCREIF ODCE 1 MONTH LAGGED			1.31	5.59	5.59	7.30	9.34			10.89	
	IFM GLOBAL INFRASTRUCTURE FUND	102,893		2.20	10.17	10.17					13.70	9/1/2017
	CPI+5%/Year			0.40	2.62	2.62					5.13	
	UBS AGRIVEST FARMLAND FUND	132,418		1.23	4.27	4.27	5.38	5.86			8.62	11/1/2010
	CORE FARMLAND INDEX 1 MO. LAG			0.99	4.81	4.81	5.47	5.64			9.31	
	NCREIF FARMLAND INDEX 1 MO. LAG			0.97	5.33	5.33	6.10	7.89			11.66	

* Real Assets are reported with a one month lag. Real Estate returns are quarterly, infrastructure is monthly.

STRATEGIC	PLAN LEVEL CASH	59,056	0.14	0.43	2.13	2.13	1.56	0.99	0.65		1.36	5/1/2006
	91 DAY T-BILL		0.14	0.46	2.28	2.28	1.67	1.07	0.58		1.20	
	TOTAL STRATEGIC PORT EXCL OVERLAYS	2,866,351	2.29	5.65	16.14	16.14	9.37	7.86	9.29	7.10	6.01	9.46 3/1/1979
	⁷ PARAMETRIC CASH OVERLAY G/L IMPACT	28,477	0.10	0.28	0.92	0.92	0.30	0.18			0.26	12/1/2013
	PARAMETRIC EIRP OVERLAY G/L IMPACT	14,363	0.00	0.00	0.01	0.01					0.01	3/1/2017
	⁸ PARAMETRIC EIRP RETURN ON NOTIONAL		-0.04	0.12	0.47	0.47					0.30	2/1/2017
	TOTAL STRATEGIC PORTFOLIO	2,909,191	2.36	5.87	16.96	16.96	9.66	8.05	9.41	7.19	6.07	9.49 3/1/1979
	TOTAL FUND TARGET POLICY		2.21	5.78	18.73	18.73	9.86	7.66	8.92	6.79	5.74	9.97

Opp.	DAVIDSON KEMPNER FUNDS	61,098	2.08	4.65	12.67	12.67	11.75		Staff calculated IRR		11.42	7/1/2016
	⁹ BENCHMARK		1.48	4.75	11.59	11.59	9.56		Staff estimated value added		\$4,722	

TOTAL	TOTAL PLAN	2,970,289	2.36	5.84	16.89	16.89	9.73	8.07	9.43	7.19	6.08	9.49 3/1/1979
	TOTAL PLAN TARGET POLICY		2.21	5.78	18.73	18.73	9.86	7.66	8.92	6.79	5.74	9.97

⁷ Cash Overlay Impact includes the gains/losses from the GBP hedge for the investment in Davidson Kempner SOF III-A.

⁸ Returns are calculated on the notional exposure of the options which began at \$25 million on March 1, 2017 and escalated to \$75 million as of May 1, 2017. Returns expected to be in the range of 2% to 3% pa.

⁹ Opportunistic and its benchmark (which is the Total Plan Policy) return are lagged one month.

Source: State Street Analytics

Sonoma County Employees' Retirement Association

SUMMARY OF PERFORMANCE

INTERNAL RATES OF RETURN (NET-OF- BASE MANAGEMENT FEES)

Periods Ending **30-Nov-19**

Davidson Kempner Special Opportunities Funds



SOF Fund III	
	USD (000's)
Total Capital Commitment	75,000
Capital Contributions ITD	49,168
Remaining Commitment	25,832
Capital Distributions ITD	33,149
Net Profit/Loss ITD	14,133
Ending Appraised Value	30,153
Inception to Date IRR	11.27%

SOF Fund III-A	
	GBP (000's)
Total Capital Commitment	19,090
Capital Contributions ITD	4,582
Remaining Commitment	NA
Capital Distributions ITD	3,449
Net Profit/Loss ITD	-120
Ending Appraised Value	1,013
Inception to Date IRR	-1.03%

<i>Staff estimates for return incl. hedge</i>	
Inception to Date IRR	0.58%

SOF Fund IV	
	USD (000's)
Total Capital Commitment	50,000
Capital Contributions ITD	42,500
Remaining Commitment	7,500
Capital Distributions ITD	18,250
Net Profit/Loss ITD	5,385
Ending Appraised Value	29,635
Inception to Date IRR	15.27%

*Management Fee: 0.75%

Performance Fee Hurdle: 8.00%

Performance Fee: 10.00%

(*) The management fee for SOF IV is reduced to 0.5% during the one year extension to the investment period.

Source: Citco Fund Administration

Sonoma County Employees' Retirement Association
ASSET ALLOCATION vs. POLICY RANGES

Period Ending: December 31, 2019

(All \$ in thousands)



	Market Values	% of Strategic Assets	Trigger for Physical Rebalance	Policy Targets	Trigger for Physical Rebalance	Derivatives Overlay	Economic Exposure	% of Total Plan assets	Trigger for Derivative Rebalance	Policy Targets	Trigger for Derivative Rebalance
Core Plus Fixed Income	416,544	14.8%	14%	16%	18%	40,781					
Bank Loans	84,639	3.0%		3.0%							
Total Alternative Fixed Income	84,734	3.0%	2%	3.0%	4%						
Total Fixed Income	501,278	17.9%	17%	19%	21%	40,781	542,060	18.6%	18%	19%	20%
Core Real Estate	270,139	9.6%		10%							
Farmland	132,418	4.7%		5%							
Infrastructure	102,893	3.7%		3%							
Total Real Assets	505,449	18.0%	15%	18%	21%		505,449	17.4%		18%	
US Large Cap Broad	231,013	8.2%		8%		5,050	236,064	8.1%	7.0%	8.0%	9.0%
US Large Cap	252,249	9.0%		8.5%		(1,180)	251,068	8.6%	7.5%	8.5%	9.5%
US Small Cap	141,307	5.0%		5%		6,284	147,592	5.1%	4.5%	5.0%	5.5%
Total US Equity	624,569	22.2%	19.5	21.5	23.5%	10,154	634,723	21.8%		21.5%	
Non- US Equity	599,372	21.4%	19.5	21.5	23.5%	35,247	634,619	21.8%	20.5%	21.5%	22.5%
Global Equity	435,693	15.5%	13%	15%	17%	6,566	442,259	15.2%	14%	15%	16%
Total Equities	1,659,634	59.1%	55%	58%	61%	51,967	1,711,601	58.8%	56%	58%	60%
Global Asset Allocation	140,932	5.0%	3.0%	5.0%	7%	8,171	149,103	5.1%	4.5%	5.0%	5.5%
Total Strategic Port. ex Cash	2,807,295	100%									
Cash (Plan + Overlays)	101,897					(100,919)	978	0.0%			
Opportunistic	61,098						61,098		excluded from Cash Overlay but SOF III-A GBP exposure hedged		
Total Plan Assets	2,970,289						2,970,289	100%			

Non-US as % of Total Equities - Physicals
48%
Non-US as % of Total Equities - Economic Exposure
49%
Non-US as % of Total Equities - Policy Target
50%
Non-US as % of MSCI All Country World IM Index
45%

Note 1) The total market exposure gained/reduced in addition to the managers by using derivatives within the Parametric overlay account is \$100.9 million.

2) The total physical cash (including manager cash) being overlaid by Parametric is \$117 million.

3) The Total Cash contains \$10 million of "On-Call" Cash set aside for the Davidson Kempner SOF IV Fund and the Axiom Infrastructure Fund.

4) The Total Cash contains \$42.8 million for the margin accounts supporting the Parametric Cash and EIRP overlays.