

Investment Summary – Periods Ending 3/31/2023

March	0.5	- Overall return of +0.9% / -99 basis points vs the Plan Target Policy Index - US Equity (R3000) +2.7% - Non-US Equity (MSCI EAFE +2.5%, MSCI EMG MKTS +3.0%) - Real Estate (NCREIF ODCE) N/A - BB Aggregate Index +2.5%
YTD	1.6	- Overall return of +3.9% / -60 basis points vs the Plan Target Policy Index - US Equity (R3000) +7.2% - Non-US Equity (MSCI EAFE +8.5%, MSCI EMG MKTS +4.0%) - Real Estate (NCREIF ODCE) -5.0% - BB Aggregate Index +3.0% - Most favorable performance vs. benchmark in basis points (IFM +225, Reams +93, KKR +55) - Most unfavorable performance vs. benchmark in basis points (Dodge & Cox -325, Axiom -298, UBS AgriVest -263, Jacobs Levy -59)
1 Year	6.8	- Overall return of -0.5% / +274 basis points vs the Plan Target Policy Index - US Equity (R3000) -8.6% - Non-US Equity (MSCI EAFE -1.4%, MSCI EMG MKTS -10.7%) - Real Estate (NCREIF ODCE) +7.5% - BB Aggregate Index -4.8% - Most favorable performance vs. benchmark in basis points (Jacobs Levy +1339, Systematic +922, Arrowstreet +749, Dodge & Cox +414, Reams +138, Guggenheim +72) - Most unfavorable performance vs. benchmark in basis points (UBS AgriVest -586, Axiom -534, IFM -329, JP Morgan SPF -283, UBS Trumbull -156, DoubleLine -63, PIMCO -49)
3 Years	6.8	- Overall return of +14.1% / +305 basis points vs the Plan Target Policy Index - US Equity (R3000) +18.5% - Non-US Equity (MSCI EAFE +13.0%, MSCI EMG MKTS +7.8%) - Real Estate (NCREIF ODCE) +9.9% - BB Aggregate Index -2.8%
5 Years	6.9	- Overall return of +7.2% / +81 basis points vs the Plan Target Policy Index - US Equity (R3000) +10.5% - Non-US Equity (MSCI EAFE +3.5%, MSCI EMG MKTS -0.9%) - Real Estate (NCREIF ODCE) +8.7% - BB Aggregate Index +0.9%
10 Years	7.1	Overall return of +8.4% / +93 basis point vs the Plan Target Policy Index
15 Years	7.3	Overall return of +7.1% / +70 basis point vs the Plan Target Policy Index
20 Years	7.5	Overall return of +8.4% / +61 basis points vs the Plan Target Policy Index
25 Years	7.6	Overall return of +6.6% / +58 basis points vs the Plan Target Policy Index

Notes: 1) Stoplight colors indicate performance relative to the assumed ROR for the period 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: March 31, 2023



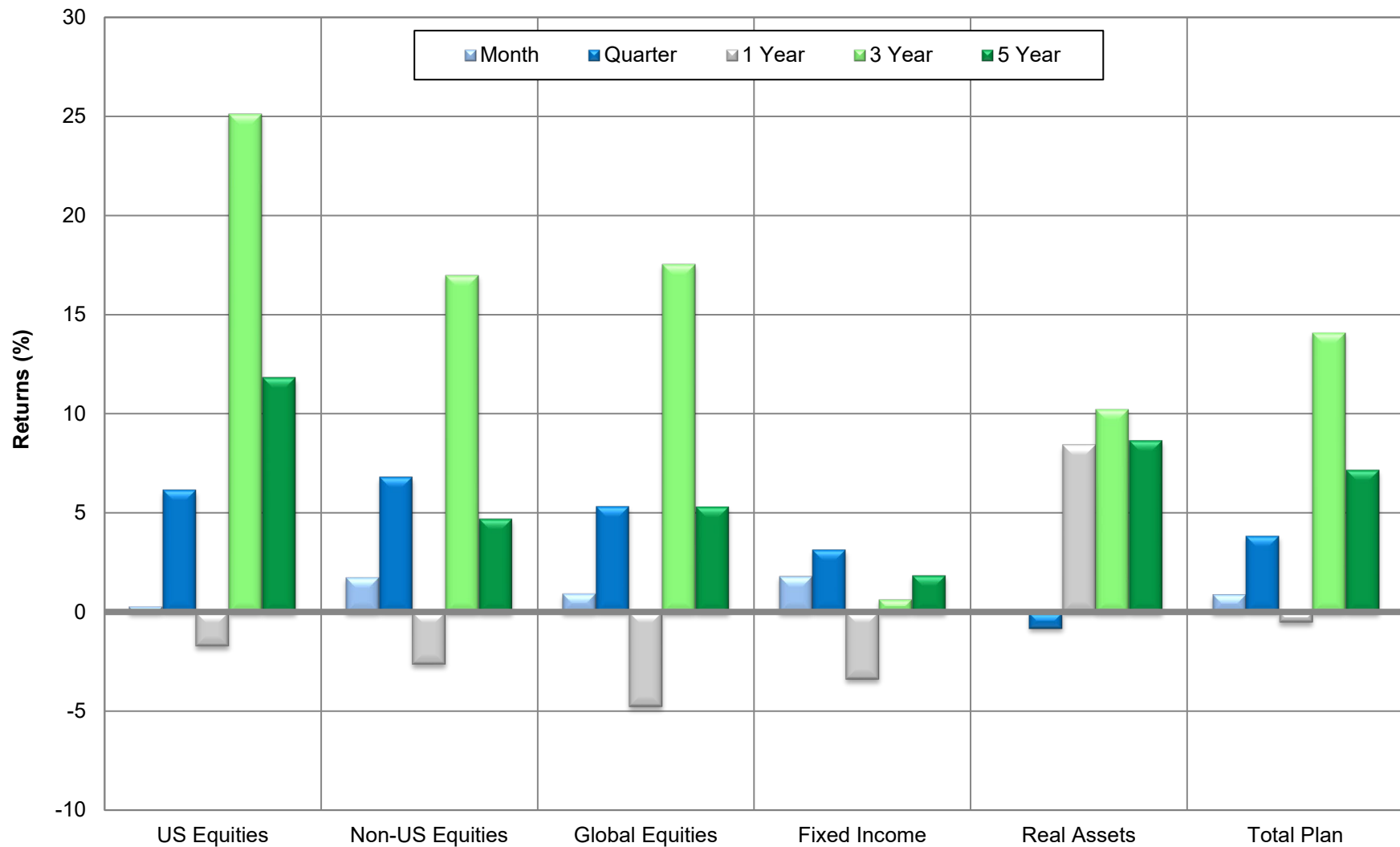
STATE STREET

	1 Month	QTR	YTD	1 Year	2 Year	3 Year	5 Year	10 Year	15 Year	20 year
SONOMA TOTAL FUND POLICY INDEX	1.89	4.45	4.45	-3.26	1.24	11.07	6.36	7.43	6.35	7.83
DJ Industrial Average Total Return Index	2.08	0.93	0.93	-1.98	2.47	17.31	9.01	11.15	9.57	10.04
S&P 500	3.67	7.50	7.50	-7.73	3.30	18.60	11.19	12.24	10.06	10.37
NASDAQ Composite Index	6.78	17.05	17.05	-13.28	-3.20	17.56	12.60	15.30	13.02	
Russell 1000	3.16	7.46	7.46	-8.39	1.86	18.55	10.87	12.01	10.02	10.48
Russell 1000 Growth	6.84	14.37	14.37	-10.90	1.21	18.58	13.66	14.59	12.11	11.57
Russell 1000 Value	-0.46	1.01	1.01	-5.91	2.50	17.93	7.50	9.13	7.68	9.15
Russell 2000	-4.78	2.74	2.74	-11.61	-8.74	17.51	4.71	8.04	8.10	9.76
Russell 2000 Growth	-2.47	6.07	6.07	-10.60	-12.48	13.36	4.26	8.49	8.67	10.04
Russell 2000 Value	-7.17	-0.66	-0.66	-12.96	-5.17	21.01	4.55	7.22	7.24	9.24
Russell 3000	2.67	7.18	7.18	-8.58	1.15	18.48	10.45	11.73	9.90	10.44
MSCI ACWI EX US SMALL CAP	0.23	4.70	4.70	-10.37	-5.31	15.04	1.67	5.06	4.21	9.57
S&P DEVELOPED EX U.S. SMALLCAP	0.27	6.57	6.57	-8.90	-6.16	13.70	1.47	5.86	4.39	9.59
MSCI EAFE (NET)	2.48	8.47	8.47	-1.38	-0.12	12.99	3.52	5.00	3.00	7.32
MSCI EMERGING MARKETS	3.03	3.96	3.96	-10.70	-11.03	7.83	-0.91	2.00	2.65	10.04
MSCI AC World IMI w/USA GROSS (NET)	2.49	7.03	7.03	-7.41	-0.67	15.95	6.88	8.27	6.44	9.21
MSCI All Country World ex US IMI net	2.13	6.56	6.56	-5.84	-3.58	12.20	2.35	4.28	2.82	7.75
Bloomberg U.S. Aggregate	2.54	2.96	2.96	-4.78	-4.47	-2.77	0.91	1.36	2.71	3.18
Bloomberg U.S. Universal	2.35	2.93	2.93	-4.61	-4.42	-2.02	1.05	1.62	3.01	3.50
Bloomberg US Mortgage Backed Securities	1.95	2.53	2.53	-4.85	-4.88	-3.31	0.20	1.00	2.36	2.97
CS Leveraged Loan Index	-0.10	3.11	3.11	2.12	2.67	8.38	3.55	3.86	4.75	4.70
CPI + 500 BPS 1 ML	0.97	2.29	2.29	11.31	12.27	10.40	9.03			
ICE BofA US 3-Month Treasury Bill	0.43	1.07	1.07	2.50	1.28	0.89	1.41	0.87	0.69	1.32
NCREIF ODCE 1 MO LAG	0.00	-4.97	-4.97	7.47	14.58	9.93	8.68	10.10	6.23	8.28
NCREIF FARMLAND INDEX 1 ML	0.00	3.26	3.26	9.64	8.73	6.82	6.40	8.83	10.24	12.61
UBS CORE FARMLAND 1ML	0.00	4.26	4.26	13.00	11.49	9.09	7.61	7.88	9.26	11.09

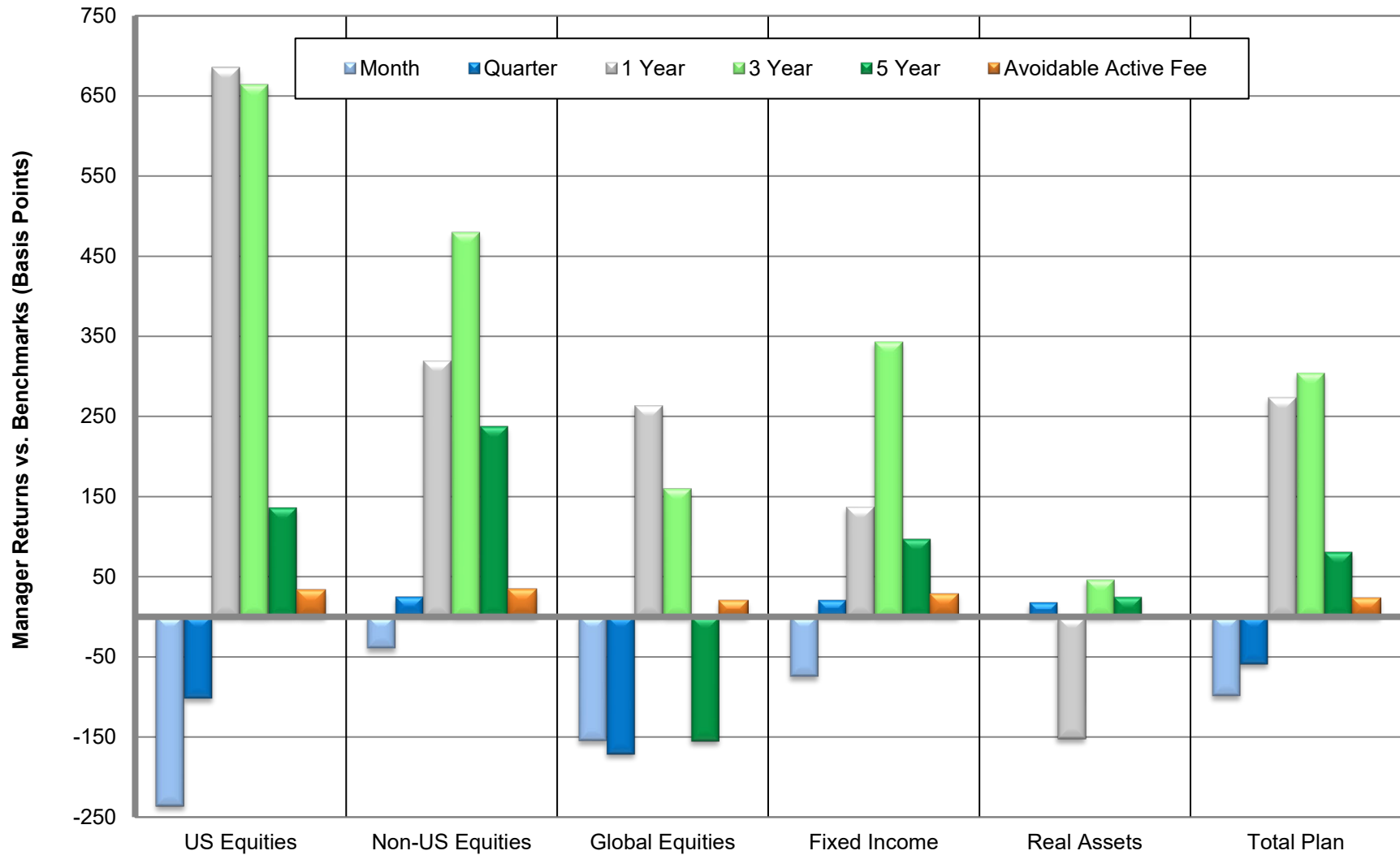
1 Custom Index: 80% NCREIF Farmland Annual Cropland Fixed/Var Rent + 20% NCREIF Farmland Permanent Cropland Fixed/Var Rent

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.

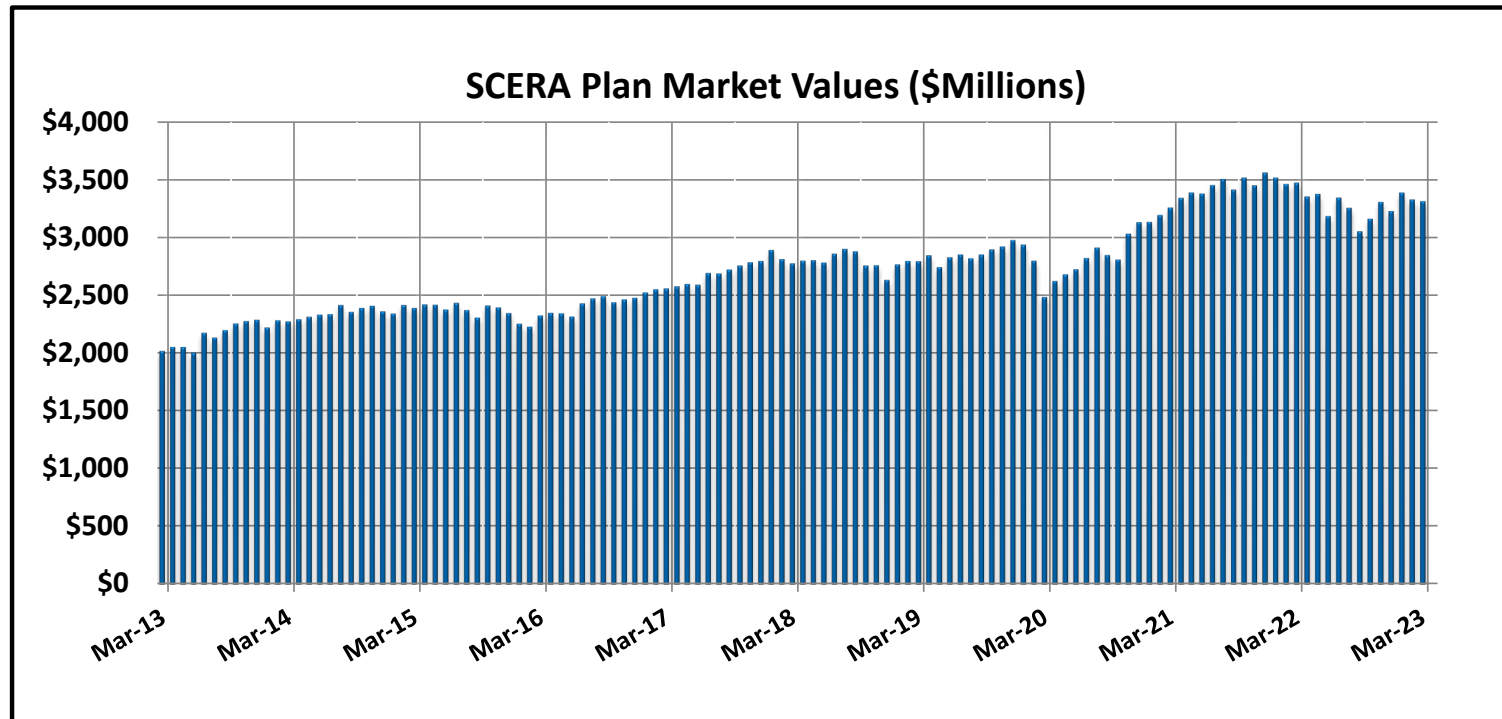
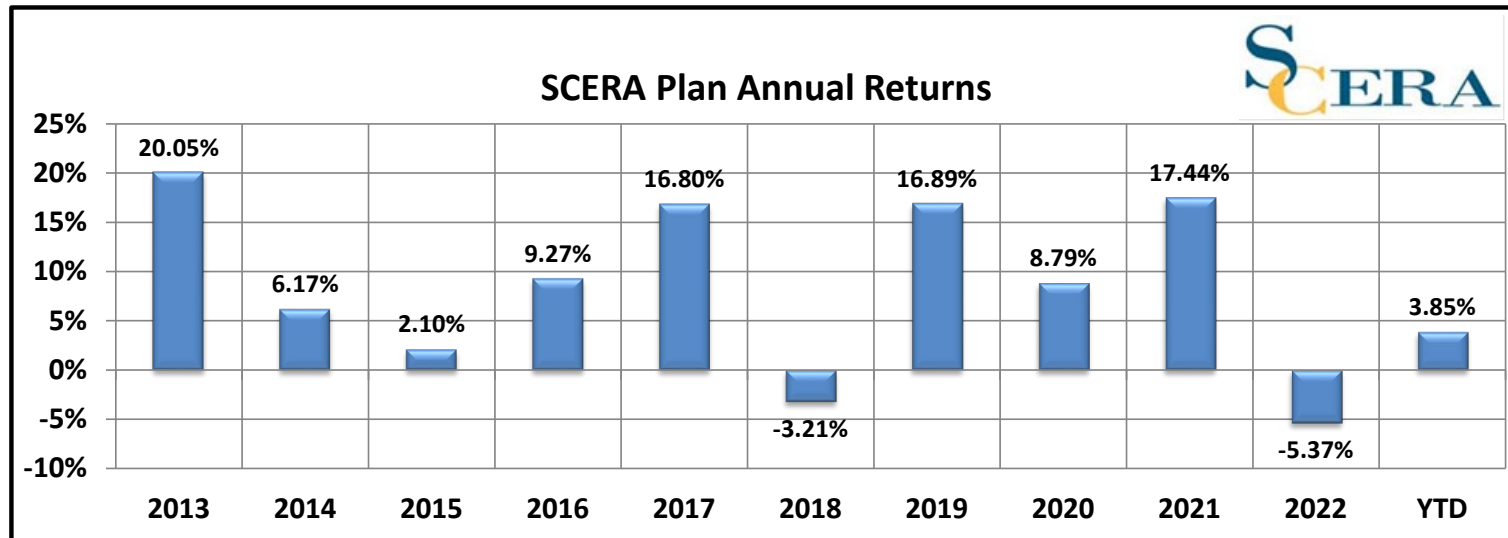
SCERA Investment Returns by Asset Class Periods Ending March 31, 2023

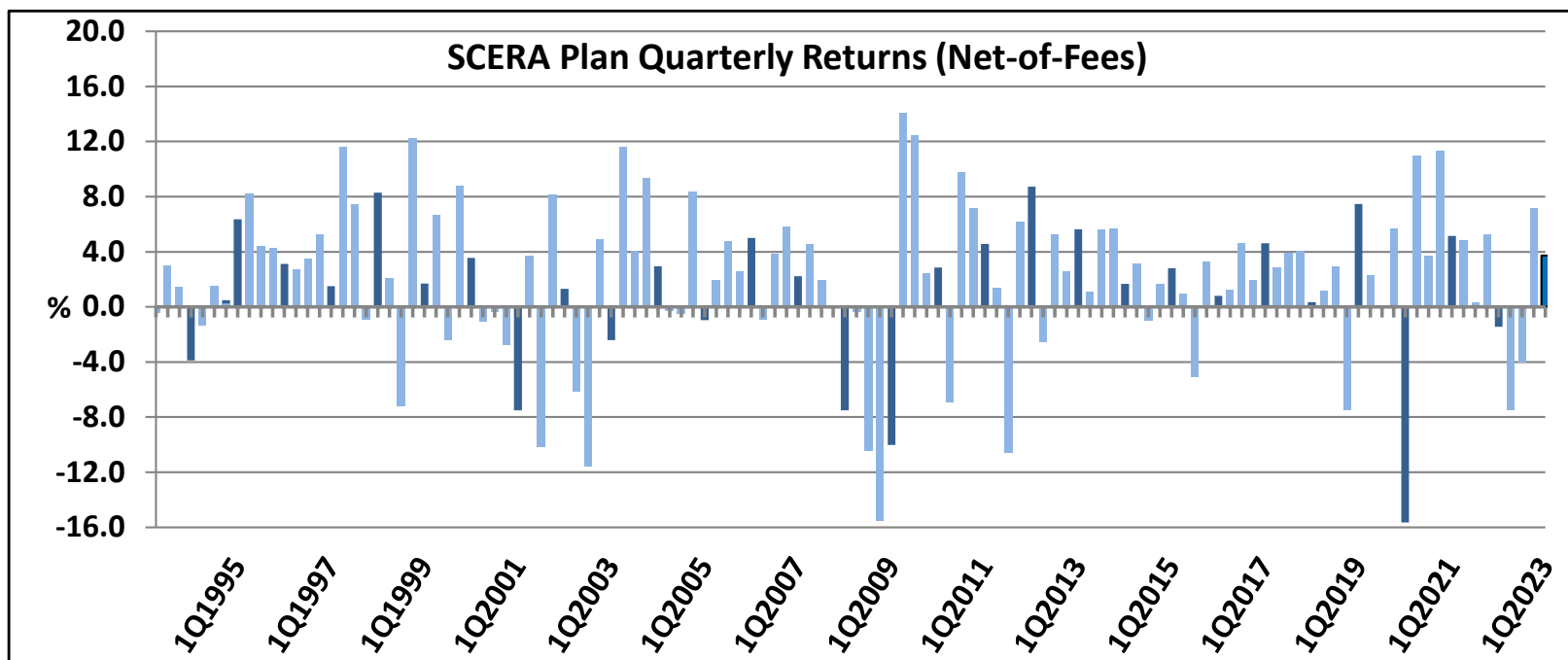
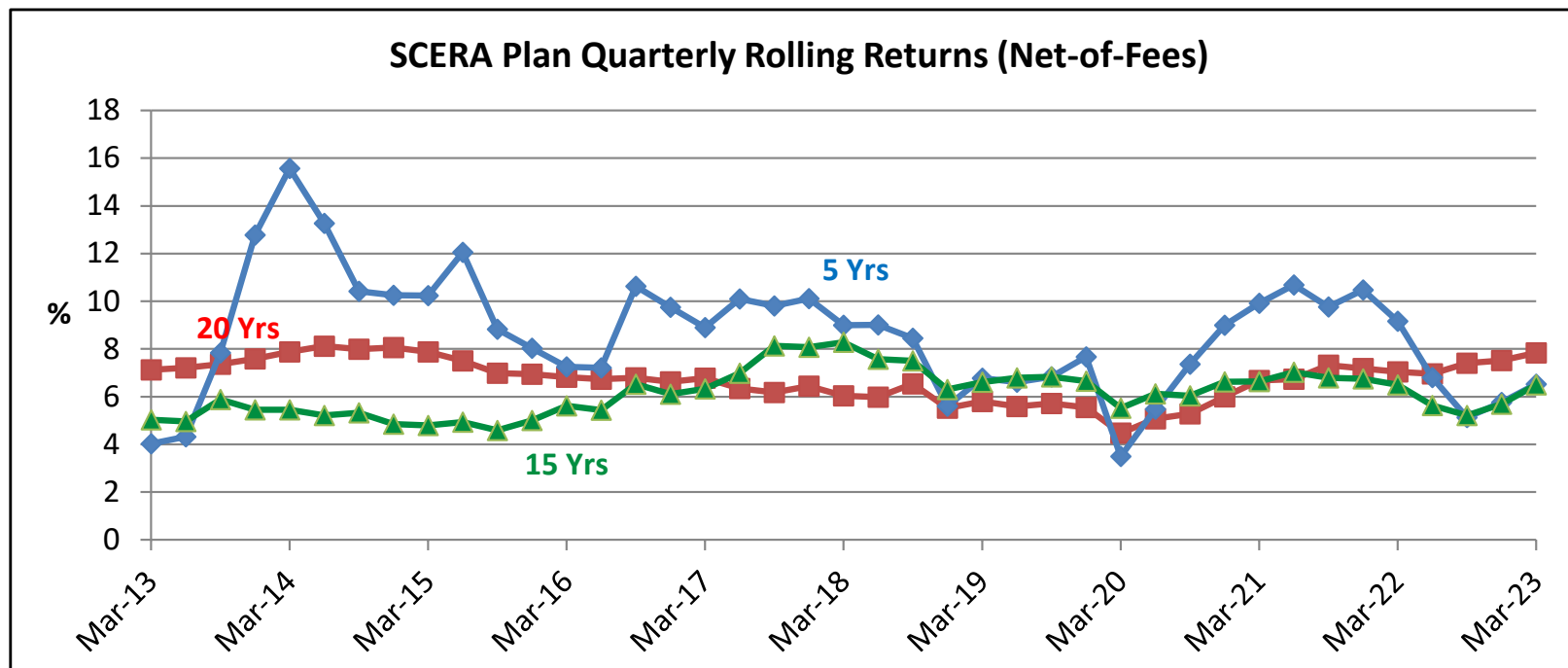


SCERA Asset Class Returns vs. Benchmarks Periods Ending March 31, 2023



Note: Real Assets have no passive alternative





Source: Aon Hewitt

Sonoma County Employees' Retirement Association
SUMMARY OF "OPPORTUNISTIC" PERFORMANCE
INTERNAL RATES OF RETURN (NET-OF- BASE MANAGEMENT FEES)
Periods Ending **28-Feb-23**



DK SOF Fund III	
	USD
Total Capital Commitment	75,000,000
Capital Contributions ITD	(49,168,269)
Remaining Commitment	25,831,731
Capital Contributions ITD	49,168,269
Capital Distributions ITD	(57,183,068)
Net Profit/Loss ITD	13,728,366
Ending Appraised Value	5,713,567
Inception to Date IRR	7.82%
Initial Closing Date	8/24/2015
Investment Period Start Date	1/1/2016
Harvest Period Start Date	7/1/2017
Term End Date	7/1/2021

DK SOF Fund IV	
	USD
Total Capital Commitment	50,000,000
Capital Contributions ITD	(44,750,000)
Remaining Commitment	5,250,000
Capital Contributions ITD	44,750,000
Capital Distributions ITD	(44,222,336)
Net Profit/Loss ITD	18,753,275
Ending Appraised Value	19,280,939
Inception to Date IRR	14.99%
Initial Closing Date	7/28/2017
Investment Period Start Date	7/28/2017
Harvest Period Start Date	1/28/2020
Term End Date	1/28/2023

Note: The manager is not required to return all capital by the Fund "End Date" but is merely required to begin the process. There is no hard and fast date by which all capital must be returned.

Management Fee: 0.75%
Performance Fee Hurdle: 8.00%
Performance Fee: 10.00%

Source: Citco Fund Administration

Sonoma County Employees' Retirement Association

SUMMARY OF PERFORMANCE

RATES OF RETURN (GROSS-OF-FEES)

Periods Ending March 31, 2023

(All \$ in thousands)



													Inception Date
		Market Value	Month	3 Mos	YTD	1 Yr	3 Yrs	5 Yrs	10 Yrs	15 Yrs	20 Yrs	ITD	
U.S. EQUITY	TOTAL US EQUITY	679,767	0.31	6.16	6.16	-1.73	25.12	11.81	13.95	11.61	11.94	12.90	Jun-01-82
	BENCHMARK (RUSSELL 3000)		2.67	7.18	7.18	-8.58	18.48	10.45	11.73	9.90	10.44	11.88	
	JACOBS LEVY 130/30	300,126	-0.22	6.59	6.59	4.81	32.08	16.91	18.27	14.67		13.11	Mar-01-07
	RUSSELL 3000		2.67	7.18	7.18	-8.58	18.48	10.45	11.73	9.90		8.85	
	SSGA RUSSELL 1000 INDEX FUND	257,347	3.16	7.47	7.47	-8.45	18.54					9.52	Oct-01-18
	RUSSELL 1000		3.16	7.46	7.46	-8.39	18.55					9.52	
	SYSTEMATIC	122,293	-4.04	2.53	2.53	-2.39	24.13	6.98	11.41	11.02	11.92	11.82	Jan-01-00
	¹ RUSSELL 2000 BLENDED		-4.78	2.74	2.74	-11.61	17.51	4.71	8.24	7.92	9.76	9.10	
NON-US EQUITY	TOTAL NON-US EQUITY	702,298	1.73	6.80	6.80	-2.64	17.00	4.72	6.12	3.90	8.13	6.38	Apr-01-01
	BENCHMARK (BLEND)		2.13	6.56	6.56	-5.84	12.20	2.35	4.28	2.72	7.15	4.78	
	ARROWSTREET 130/30	302,771	1.36	6.51	6.51	1.65	23.85	8.98	9.74			8.88	Feb-01-11
	² MSCI INT'L EQUITY BLENDED II		2.13	6.56	6.56	-5.84	12.20	2.35	4.28			3.76	
	³ SSGA ACWI EX-US IMI ROL STRATEGY	399,526	2.01	7.02	7.02	-5.63	14.52	3.75				5.08	Jun-01-13
	MSCI ACWI EX-US IMI (NET)		2.13	6.56	6.56	-5.84	12.20	2.35				4.23	
GLOBAL EQUITY	TOTAL GLOBAL EQUITY	503,438	0.94	5.32	5.32	-4.77	17.56	5.33	6.83	5.58		6.50	Apr-01-05
	BENCHMARK (BLEND)		2.49	7.03	7.03	-7.41	15.95	6.88	8.18	6.12		6.93	
	³ SSGA ACWI IMI ROL STRATEGY	25,262	2.46	7.23	7.23	-7.34						2.93	Jan-01-21
	MSCI ACWI IMI (NET) with USA Gross		2.49	7.03	7.03	-7.41						1.67	
	SSGM INTERIM ACCOUNT	202,145	2.63	7.25	7.25	-6.61						-3.61	Aug-01-21
	MSCI ACWI IMI (NET) with USA Gross		2.49	7.03	7.03	-7.41						-5.18	
	DODGE & COX	276,032	-0.39	3.78	3.78	-3.27	20.40	7.71	10.72	9.00	10.44	9.40	Aug-01-97
	⁴ MSCI Global Equity Blended II		2.49	7.03	7.03	-7.41	15.95	7.32	9.04	7.62	9.11	7.34	

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 Effective 3/5/2021, SCERA implemented rule of law (ROL) guidelines into the passive strategies managed by SSGA.

⁴ Russell 1000 Value to 9/30/2018; MSCI ACWI IMI (Net) with USA Gross 1/10/2018 to Present

PERFORMANCE SUMMARY (GROSS-OF-FEES)												
Periods Ending March 31, 2023												
	Market Value	Month	3 Mos	YTD	1 Yr	3 Yrs	5 Yrs	10 Yrs	15 Yrs	20 Yrs	ITD	Inception Date
FIXED INCOME	TOTAL FIXED INCOME	519,150	1.79	3.16	3.16	-3.40	0.67	1.88	2.20	4.28	4.47	6.41 Sep-01-86
	BENCHMARK (BB US AGGREGATE)		2.54	2.96	2.96	-4.78	-2.77	0.91	1.36	2.71	3.18	5.42
	REAMS CORE PLUS	143,180	3.01	3.89	3.89	-3.40	0.84	3.51	2.99	5.05	5.18	5.21 Jul-01-01
	BB US AGGREGATE		2.54	2.96	2.96	-4.78	-2.77	0.91	1.36	2.71	3.18	3.66
	DOUBLELINE CORE PLUS	140,858	1.83	3.02	3.02	-5.41	-1.50	0.69				1.82 Jul-01-14
	BB US AGGREGATE		2.54	2.96	2.96	-4.78	-2.77	0.91				1.34
	BB US MORTGAGE BACKED SECURITIES INDEX		1.95	2.53	2.53	-4.85	-3.31	0.20				0.85
	PIMCO CORE PLUS	140,414	1.88	2.58	2.58	-5.27	-1.86	1.21	1.56			2.59 Apr-01-11
	BB US AGGREGATE		2.54	2.96	2.96	-4.78	-2.77	0.91	1.36			2.08
	GUGGENHEIM BANK LOANS	94,697	-0.20	3.15	3.15	2.84	8.16	3.90				4.18 Oct-01-13
	CREDIT SUISSE LEV LOAN INDEX		-0.10	3.11	3.11	2.12	8.38	3.55				3.87
REAL ASSETS*	TOTAL REAL ASSETS	821,302		-0.81	-0.81	8.42	10.26	8.65	9.32	3.93	6.42	6.34 Jan-01-03
	BENCHMARK (COMPOSITE)			-0.98	-0.98	9.94	9.79	8.40	9.42	5.80	7.94	7.94
	JPMORGAN STRAT. PROPERTY FUND	200,247		-4.97	-4.97	4.64	8.69	7.70	9.58			10.31 Jan-01-11
	NCREIF ODCE 1 MONTH LAGGED			-4.97	-4.97	7.47	9.93	8.68	10.10			10.56
	UBS TRUMBULL PROPERTY FUND	140,941		-5.21	-5.21	5.91	5.72	4.35	6.99	4.97	7.42	7.32 Jan-01-03
	NCREIF ODCE 1 MONTH LAGGED			-4.97	-4.97	7.47	9.93	8.68	10.10	6.23	8.28	8.27
	UBS AGRIVEST FARMLAND FUND	127,978		1.63	1.63	7.14	7.07	6.11	6.77			8.13 Nov-01-10
	CORE FARMLAND INDEX 1 MO. LAG			4.26	4.26	13.00	9.09	7.61	7.88			9.21
	NCREIF FARMLAND INDEX 1 MO. LAG			3.26	3.26	9.64	6.82	6.40	8.83			10.27
	FIERA COMOX GLOBAL AGRICULTURE FUND	16,346										Nov-01-22
	NCREIF FARMLAND INDEX 1 MO. LAG											
	IFM GLOBAL INFRASTRUCTURE FUND	114,759		4.00	4.00	8.18	9.40	11.37				11.75 Sep-01-17
	CPI + 500 bps 1 MO. LAG			1.75	1.75	11.47	10.05	8.90				8.54
	AXINFRA NA II LP (\$ weighted)	81,542		-1.23	-1.23	6.13	9.15					8.85 Sep-01-19
	CPI + 500 bps 1 MO. LAG			1.75	1.75	11.47	10.05					9.70
	KKR DCIF	139,490		2.30	2.30							5.29 May-01-22
	CPI + 500 bps 1 MO. LAG			1.75	1.75							6.80
* Real Assets are reported with a one month lag. Real Estate returns are quarterly, infratructure is monthly.												
Opp. STRATEGIC	PLAN LEVEL CASH	38,272	0.58	-1.41	-1.41	1.74	0.61	1.14	0.73	0.75		1.22 May-01-06
	91 DAY T-BILL		0.43	1.07	1.07	2.50	0.89	1.41	0.87	0.69		1.16
	TOTAL STRATEGIC PORT EXCL OVERLAYS	3,264,227	0.86	3.72	3.72	-0.52	13.70	6.80	8.09	6.88	8.31	9.27 Mar-01-79
	⁵ PARAMETRIC CASH OVERLAY G/L IMPACT	17,563	0.06	0.15	0.15	-0.06	0.74	0.46				0.36 Dec-01-13
	⁶ TOTAL STRATEGIC PORTFOLIO	3,281,790	0.91	3.85	3.85	-0.60	14.27	7.13	8.35	7.04	8.43	9.32 Mar-01-79
	DAVIDSON KEMPNER FUNDS (\$ weighted)	24,995	-0.36	3.70	3.70	6.95	9.95	9.83	Staff calculated IRR		10.01	Jul-01-16
	⁷ BENCHMARK		-2.14	0.34	0.34	-4.49	6.98	5.75	Staff estimated value added		\$14,903	
TOTAL	TOTAL PLAN	3,306,784	0.90	3.85	3.85	-0.52	14.12	7.17	8.36	7.05	8.44	9.33 Mar-01-79
	TOTAL PLAN TARGET POLICY		1.89	4.45	4.45	-3.26	11.07	6.36	7.43	6.35	7.83	9.63
⁵ Cash Overlay Impact includes the gains/losses from the GBP hedge for the investment in Davidson Kempner SOF III-A. ⁶ Returns prior to Dec 2022 include impact of Parametric EIRP overlay strategy. ⁷ Opportunistic and its benchmark (which is the Total Plan Policy) return are lagged one month.												
Source: State Street Analytics												

Sonoma County Employees' Retirement Association

ASSET ALLOCATION vs. POLICY RANGES

Period Ending: March 31, 2023

(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	424,453	13.2%	12.0%	14.0%	16.0%	20,236					
Total Alternative Fixed Income	94,697	2.9%	2.0%	3.0%	4.0%						
Total Fixed Income	519,150	16.1%	15.0%	17.0%	19.0%	20,236	539,387	16.4%	16.0%	17.0%	18.0%
Core Real Estate	341,188	10.6%		10.0%							
Farmland	144,323	4.5%		5.0%							
Infrastructure	335,791	10.4%		8.0%							
Total Real Assets	821,302	25.5%	20.0%	23%	26.0%		821,302	25.0%		23.0%	
US Large Cap Broad	300,126	9.3%		9.0%		(15,905)	284,221	8.7%	8.0%	9.0%	10.0%
US Large Cap	257,347	8.0%		8.5%		16,017	273,364	8.3%	7.5%	8.5%	9.5%
US Small Cap	122,293	3.8%		4.0%		2,576	124,869	3.8%	3.5%	4.0%	4.5%
Total US Equity	679,767	21.1%	19.5%	21.5%	23.5%	2,688	682,454	20.8%		21.5%	
Non- US Equity	702,298	21.8%	19.5%	21.5%	23.5%	(14,628)	687,670	21.0%	20.5%	21.5%	22.5%
Global Equity	503,438	15.6%	15.0%	17.0%	19.0%	42,155	545,594	16.6%	16.0%	17.0%	18%
Total Equities	1,885,503	58.4%	57.0%	60.0%	63.0%	30,215	1,915,718	58.4%	58.0%	60.0%	62%
Total Strategic Port. ex Cash	3,225,955	100%									
Cash (Plan + Overlays)	55,835					(50,452)	5,383	0.2%			
Opportunistic	24,995										
Davidson Kempner	24,995						24,995				
Total Plan Assets	3,306,784						3,306,784	100.0%			

Non-US as % of Total Equities - Physicals

48.1%

Non-US as % of Total Equities - Economic Exposure

47.4%

Non-US as % of Total Equities - Policy Target

50.0%

Non-US as % of MSCI All Country World IM Index

40.5%

Note 1) The total market exposure gained/reduced in addition to the managers by using derivatives within the Parametric overlay account is \$50.5 million.

2) The total physical cash (including manager cash) being overlaid by Parametric is \$60.9 million.

3) The Total Cash contains \$17.6 million for the margin account supporting the Parametric Cash overlay.

4) Normal physical rebalancings have been suspended until the funding of new infrastructure investments which will reduce the policy weights for fixed income & equities.

Parametric compensates for the excess to Policy weighting of Real Assets by adjusting downwards the targets and ranges for the other asset classes.