Investment Summary – Periods Ending 12/31/2023

December	*0.5*	● Overall return of +3.8% / +9 basis points vs the Plan Target Policy Index ● US Equity (R3000) +5.3% ● Non-US Equity (MSCI EAFE +5.3%, MSCI EMG MKTS +3.9%) ● Real Estate (NCREIF ODCE) N/A ● BB Aggregate Index +3.8%
QTD	*1.7*	● Overall return of +7.3% / -17 basis points vs the Plan Target Policy Index ● US Equity (R3000) +12.1% ● Non-US Equity (MSCI EAFE +10.4%, MSCI EMG MKTS +7.9%) ● Real Estate (NCREIF ODCE) -1.9% ● BB Aggregate Index +6.8% ● Most favorable performance vs. benchmark in basis points (Jacobs Levy +201, Axium +63, Reams +62) ● Most unfavorable performance vs. benchmark in basis points (Systematic -376, Dodge & Cox -265, IFM -164, Arrowstreet -128, JPMorgan -121)
1 Year	*6.8*	● Overall return of +13.7% / +64 basis points vs the Plan Target Policy Index ● US Equity (R3000) +26.0% ● Non-US Equity (MSCI EAFE +18.2%, MSCI EMG MKTS +9.8%) ● Real Estate (NCREIF ODCE) -12.1% ● BB Aggregate Index +5.5% ● Most favorable performance vs. benchmark in basis points (Arrowstreet +507, Jacobs Levy +300, Reams +158) ● Most unfavorable performance vs. benchmark in basis points (Dodge & Cox -430, UBS Trumbull -393, UBS AgriVest -292)
3 Years	*6.8*	● Overall return of +8.1% / +366 basis points vs the Plan Target Policy Index ● US Equity (R3000) +8.5% ● Non-US Equity (MSCI EAFE +4.0%, MSCI EMG MKTS -5.1%) ● Real Estate (NCREIF ODCE) +7.1% ● BB Aggregate Index -3.3%
5 Years	*6.8*	● Overall return of +9.9% / +110 basis points vs the Plan Target Policy Index ● US Equity (R3000) +15.2% ● Non-US Equity (MSCI EAFE +8.2%, MSCI EMG MKTS +3.7%) ● Real Estate (NCREIF ODCE) +5.7% ● BB Aggregate Index +1.1%
10 Years	*7.1*	● Overall return of +8.0% / +84 basis point vs the Plan Target Policy Index
15 Years	*7.3*	● Overall return of +9.7% / +100 basis point vs the Plan Target Policy Index
20 Years	*7.5*	● Overall return of +7.6% / +65 basis points vs the Plan Target Policy Index
25 Years	*7.6*	● Overall return of +6.8% / +66 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: December 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	3.68	7.49	13.01	13.01	0.60	4.44	8.84	7.12	8.72	6.97
DJ Industrial Average Total Return Index	4.93	13.09	16.18	16.18	4.02	9.38	12.47	11.08	12.93	9.24
S&P 500	4.54	11.69	26.29	26.29	1.69	10.00	15.69	12.03	13.97	9.69
NASDAQ Composite Index	5.58	13.79	44.64	44.64	-1.22	6.04	18.75	14.80	17.42	11.66
Russell 1000	4.94	11.96	26.53	26.53	1.16	8.97	15.52	11.80	14.02	9.78
Russell 1000 Growth	4.43	14.16	42.68	42.68	0.55	8.86	19.50	14.86	16.68	11.29
Russell 1000 Value	5.54	9.50	11.46	11.46	1.52	8.86	10.91	8.40	11.09	7.99
Russell 2000	12.22	14.03	16.93	16.93	-3.55	2.22	9.97	7.16	11.30	8.11
Russell 2000 Growth	11.97	12.75	18.66	18.66	-6.52	-3.50	9.22	7.16	12.07	8.28
Russell 2000 Value	12.45	15.26	14.65	14.65	-0.98	7.94	10.00	6.76	10.27	7.68
Russell 3000	5.30	12.07	25.96	25.96	0.88	8.54	15.16	11.48	13.84	9.67
MSCI ACWI EX US SMALL CAP	6.35	10.12	15.66	15.66	-3.79	1.49	7.89	4.88	9.31	7.45
S&P DEVELOPED EX U.S. SMALLCAP	6.98	10.81	14.07	14.07	-5.32	-0.60	6.95	4.84	8.97	7.37
MSCI EAFE (NET)	5.31	10.42	18.24	18.24	0.57	4.02	8.16	4.28	6.93	5.59
MSCI EMERGING MARKETS	3.91	7.86	9.83	9.83	-6.32	-5.08	3.68	2.66	7.56	7.59
MSCI AC World IMI w/USA GROSS (NET)	5.27	11.23	21.94	21.94	-0.11	5.74	11.81	8.09	10.65	7.99
MSCI All Country World ex US IMI net	5.21	9.81	15.62	15.62	-1.79	1.53	7.19	3.97	7.04	5.92
Bloomberg U.S. Aggregate	3.83	6.82	5.53	5.53	-4.19	-3.31	1.10	1.81	2.68	3.17
Bloomberg U.S. Universal	3.79	6.83	6.17	6.17	-3.89	-2.97	1.44	2.08	3.18	3.46
Bloomberg US Mortgage Backed Securities	4.31	7.48	5.05	5.05	-3.75	-2.86	0.25	1.38	2.15	2.99
CS Leveraged Loan Index	1.61	2.85	13.04	13.04	5.76	5.64	5.56	4.44	7.38	4.75
CPI + 500 BPS 1 ML	0.21	1.24	8.28	8.28	10.34	10.93	9.21			
ICE BofA US 3-Month Treasury Bill	0.47	1.37	5.01	5.01	3.22	2.15	1.88	1.25	0.87	1.47
NCREIF ODCE 1 MO LAG	0.00	-1.90	-12.14	-12.14	3.57	7.13	5.65	8.16	5.60	7.52
NCREIF FARMLAND INDEX 1 ML	0.00	-0.26	5.98	5.98	8.07	7.22	6.16	8.01	9.78	12.54
UBS CORE FARMLAND 1ML	0.00	0.92	10.00	10.00	11.32	10.10	7.85	7.39	9.04	11.09

1 Custom Index: 80% NCRIEF 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.

Provided by State Street Analytics

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

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

Note: Real Assets have no passive alternative

SCERA Plan Annual Returns
SCERA
25%
20%
15%
10%
5%
0%
-5%
-10%
20.05%
6.17%
2.10%
9.27%
16.80%
-3.21%
16.89%
8.79%
17.44%
-5.37%
13.65%
2013
2014
2015
2016
2017
2018
2019
2020
2021
2022
2023

SCERA Plan Market Values ($Millions)
$4,000
$3,500
$3,000
$2,500
$2,000
$1,500
$1,000
$500
$0
Dec-13
Dec-14
Dec-15
Dec-16
Dec-17
Dec-18
Dec-19
Dec-20
Dec-21
Dec-22
Dec-23

	Last Value
5 Yrs	9.0%
15 Yrs	9.1%
20 Yrs	7.0%

	Last Value
4Q2023	7.2%

Source: Aon

Sonoma County Employees' Retirement Association
SUMMARY OF 'OPPORTUNISTIC" PERFORMANCE
INTERNAL RATES OF RETURN (NET-OF- BASE MANAGEMENT FEES)
Periods Ending **30-Nov-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	(57,783,754)
Net Profit/Loss ITD	13,533,397
Ending Appraised Value	4,917,912
Inception to Date IRR	7.62%
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	19,697,767
Ending Appraised Value	20,225,431
Inception to Date IRR	14.37%
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 December 31, 2023
(All $ in thousands)

		Market Value	Month	3 Mos	YTD	1 Yr	3 Yrs	5 Yrs	10 Yrs	15 Yrs	20 Yrs	ITD	Inception Date
U.S. EQUITY	**TOTAL US EQUITY**	**750,933**	**6.33**	**12.55**	**25.86**	**25.86**	**15.41**	**17.30**	**13.36**	**15.91**	**11.10**	**13.12**	**Jun-01-82**
	BENCHMARK (RUSSELL 3000)		5.30	12.07	25.96	25.96	8.54	15.16	11.48	13.84	9.67	12.09	
	JACOBS LEVY 130/30	**320,023**	**6.68**	**14.08**	**28.96**	**28.96**	**23.26**	**23.05**	**17.82**	**19.09**		**13.77**	**Mar-01-07**
	RUSSELL 3000		5.30	12.07	25.96	25.96	8.54	15.16	11.48	13.84		9.48	
	SSGA RUSSELL 1000 INDEX FUND	**293,401**	**4.94**	**12.00**	**26.59**	**26.59**	**8.97**	**15.52**				**11.53**	**Oct-01-18**
	RUSSELL 1000		4.94	11.96	26.53	26.53	8.97	15.52				11.52	
	SYSTEMATIC	**137,509**	**8.59**	**10.27**	**17.11**	**17.11**	**12.03**	**13.16**	**10.34**	**14.52**	**10.54**	**12.05**	**Jan-01-00**
	[1] *RUSSELL 2000 BLENDED*		12.22	14.03	16.93	16.93	2.22	9.97	7.62	10.86	8.11	9.39	
NON-US EQUITY	**TOTAL NON-US EQUITY**	**742,690**	**4.90**	**9.93**	**19.69**	**19.69**	**7.47**	**10.18**	**5.67**	**7.93**	**6.52**	**6.69**	**Apr-01-01**
	BENCHMARK (BLEND)		5.21	9.81	15.62	15.62	1.53	7.19	3.97	6.87	5.39	5.00	
	[2] **ARROWSTREET 130/30/20**	**316,105**	**3.77**	**8.53**	**20.69**	**20.69**	**12.12**	**14.68**	**9.15**			**9.39**	**Feb-01-11**
	[3] *MSCI INT'L EQUITY BLENDED II*		5.21	9.81	15.62	15.62	1.53	7.19	3.97			4.20	
	[4] **SSGA ACWI EX-US IMI ROL STRATEGY**	**426,585**	**5.76**	**10.99**	**18.96**	**18.96**	**4.46**	**9.13**	**5.04**			**5.76**	**Jun-01-13**
	MSCI ACWI EX-US IMI (NET)		5.21	9.81	15.62	15.62	1.53	7.19	3.97			4.73	
GLOBAL EQUITY	**TOTAL GLOBAL EQUITY**	**543,268**	**5.40**	**9.89**	**20.47**	**20.47**	**8.32**	**10.35**	**6.60**	**9.23**		**7.00**	**Apr-01-05**
	BENCHMARK (BLEND)		5.27	11.23	21.94	21.94	5.74	11.81	8.02	10.31		7.39	
	[4] **SSGA ACWI IMI ROL STRATEGY**	**230,368**	**5.48**	**11.73**	**27.24**	**27.24**	**8.19**					**8.19**	**Jan-01-21**
	MSCI ACWI IMI (NET) with USA Gross		5.27	11.23	21.94	21.94	5.74					5.74	
	DODGE & COX	**312,900**	**5.36**	**8.58**	**17.64**	**17.64**	**10.15**	**11.63**	**9.61**	**13.11**	**9.19**	**9.64**	**Aug-01-97**
	[5] *MSCI Global Equity Blended II*		5.27	11.23	21.94	21.94	5.74	11.81	8.66	11.26	8.12	7.65	

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

[2] Transitioned from separately managed long-only account into the Arrowstreet International Equity Alpha Extension Fund II on 9/1/2017. On 7/3/2023, SCERA transitioned from the 130/30 strategy to the 130/30/20 strategy.

[3] 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

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

[5] 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 December 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**	**503,242**	**3.59**	**6.10**	**7.45**	**7.45**	**-1.08**	**2.45**	**2.76**	**5.43**	**4.43**	**6.39**	**Sep-01-86**
	BENCHMARK (BB US AGGREGATE)		3.83	6.82	5.53	5.53	-3.31	1.10	1.81	2.68	3.17	5.38	
	REAMS CORE PLUS	**147,629**	**4.10**	**7.44**	**7.11**	**7.11**	**-2.39**	**3.65**	**3.29**	**6.29**	**5.05**	**5.18**	**Jul-01-01**
	BB US AGGREGATE		3.83	6.82	5.53	5.53	-3.31	1.10	1.81	2.68	3.17	3.65	
	DOUBLELINE CORE PLUS	**126,053**	**4.24**	**6.61**	**5.79**	**5.79**	**-2.39**	**0.77**				**1.95**	**Jul-01-14**
	BB US AGGREGATE		3.83	6.82	5.53	5.53	-3.31	1.10				1.49	
	BB US MORTGAGE BACKED SECURITIES INDEX		4.31	7.48	5.05	5.05	-2.86	0.25				1.04	
	PIMCO CORE PLUS	**125,591**	**4.11**	**6.81**	**5.36**	**5.36**	**-2.98**	**1.33**	**2.15**			**2.65**	**Apr-01-11**
	BB US AGGREGATE		3.83	6.82	5.53	5.53	-3.31	1.10	1.81			2.15	
	GUGGENHEIM BANK LOANS	**103,969**	**1.48**	**2.85**	**13.25**	**13.25**	**6.22**	**5.88**	**4.87**			**4.82**	**Oct-01-13**
	CREDIT SUISSE LEV LOAN INDEX		1.61	2.85	13.04	13.04	5.64	5.56	4.44			4.51	
REAL ASSETS*	**TOTAL REAL ASSETS**	**916,080**		**0.70**	**0.53**	**0.53**	**10.21**	**7.56**	**8.47**	**4.37**	**6.15**	**6.17**	**Jan-01-03**
	BENCHMARK (COMPOSITE)			-0.16	-0.75	-0.75	9.21	7.25	8.35	5.73	7.61	7.66	
	JPMORGAN STRAT. PROPERTY FUND	**177,105**		**-3.11**	**-12.08**	**-12.08**	**6.09**	**4.79**	**7.53**			**9.03**	**Jan-01-11**
	NCREIF ODCE 1 MONTH LAGGED			-1.90	-12.14	-12.14	7.13	5.65	8.16			9.26	
	UBS TRUMBULL PROPERTY FUND	**121,590**		**-1.42**	**-16.07**	**-16.07**	**2.26**	**0.82**	**4.88**	**4.03**	**6.41**	**6.43**	**Jan-01-03**
	NCREIF ODCE 1 MONTH LAGGED			-1.90	-12.14	-12.14	7.13	5.65	8.16	5.60	7.52	7.56	
	UBS AGRIVEST FARMLAND FUND	**133,841**		**0.93**	**7.08**	**7.08**	**7.66**	**6.31**	**6.52**			**8.07**	**Nov-01-10**
	CORE FARMLAND INDEX 1 MO. LAG			0.92	10.00	10.00	10.10	7.85	7.39			9.10	
	NCREIF FARMLAND INDEX 1 MO. LAG			-0.26	5.98	5.98	7.22	6.16	8.01			9.87	
	FIERA COMOX GLOBAL AGRICULTURE FUND	**126,099**		**0.04**	**1.92**	**1.92**						**1.64**	**Nov-01-22**
	NCREIF FARMLAND INDEX 1 MO. LAG			-0.26	5.98	5.98						5.10	
	IFM GLOBAL INFRASTRUCTURE FUND	**120,088**		**0.47**	**9.87**	**9.87**	**11.81**	**9.90**				**11.24**	**Sep-01-17**
	CPI + 500 bps 1 MO. LAG			2.11	8.74	8.74	10.68	9.04				8.62	
	AXINFRA NA II LP ($ weighted)	**89,567**		**2.74**	**8.69**	**8.69**	**11.37**					**9.78**	**Sep-01-19**
	CPI + 500 bps 1 MO. LAG			2.11	8.74	8.74	10.68					9.61	
	KKR DCIF	**147,790**		**2.50**	**8.56**	**8.56**						**6.86**	**May-01-22**
	CPI + 500 bps 1 MO. LAG			2.11	8.74	8.74						8.24	
STRATEGIC	**PLAN LEVEL CASH**	**31,979**	**-1.79**	**-2.96**	**-2.31**	**-2.31**	**0.28**	**0.67**	**0.63**	**0.57**		**1.12**	**May-01-06**
	91 DAY T-BILL		0.47	1.37	5.01	5.01	2.15	1.88	1.25	0.87		1.33	
	TOTAL STRATEGIC PORT EXCL OVERLAYS	**3,488,193**	**3.70**	**7.22**	**13.60**	**13.60**	**8.14**	**9.56**	**7.72**	**9.55**	**7.49**	**9.32**	**Mar-01-79**
	[6] PARAMETRIC CASH OVERLAY G/L IMPACT	**18,024**	**0.11**	**0.18**	**0.18**	**0.18**	**-0.05**	**0.54**	**0.33**			**0.33**	**Dec-01-13**
	[7] TOTAL STRATEGIC PORTFOLIO	**3,506,217**	**3.80**	**7.38**	**13.70**	**13.70**	**8.03**	**9.96**	**7.95**	**9.71**	**7.61**	**9.38**	**Mar-01-79**
Opp.	**DAVIDSON KEMPNER FUNDS ($ weighted)**	**25,143**	**-0.40**	**-0.28**	**6.86**	**6.86**	**12.89**	**9.44**		***Staff calculated IRR***		***9.78***	**Jul-01-16**
	[8] BENCHMARK		6.12	0.70	6.69	6.69	4.25	**7.19**	**Staff estimated value added**			**$16,402**	
TOTAL	**TOTAL PLAN**	**3,531,361**	**3.77**	**7.32**	**13.65**	**13.65**	**8.10**	**9.94**	**7.96**	**9.72**	**7.62**	**9.38**	**Mar-01-79**
	TOTAL PLAN TARGET POLICY		**3.68**	**7.49**	**13.01**	**13.01**	**4.44**	**8.84**	**7.12**	**8.72**	**6.97**	**9.66**	

* Real Assets returns are reported quarterly with a one month lag.

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

[7] Returns prior to Dec 2022 include impact of the Parametric EIRP overlay strategy.

[8] 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: December 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	**399,273**	**11.6%**	**10.0%**	**12.0%**	**14.0%**	**9,013**					
Total Alternative Fixed Income	**103,969**	**3.0%**	**2.0%**	**3.0%**	**4.0%**						
Total Fixed Income	**503,242**	**14.6%**	**13.0%**	**15.0%**	**17.0%**	**9,013**	**512,255**	**14.6%**	**14.0%**	**15.0%**	**16.0%**
Core Real Estate	298,694	8.6%		10.0%							
Farmland	259,940	7.5%		8.0%							
Infrastructure	357,445	10.3%		8.0%							
Total Real Assets	**916,080**	**26.5%**	**21.0%**	**26.0%**	**31.0%**		**916,080**	**26.1%**		**26.0%**	
US Large Cap Broad	320,023	9.3%		9.0%		**(6,988)**	**313,035**	**8.9%**	**8.0%**	**9.0%**	**10.0%**
US Large Cap	293,401	8.5%		8.5%		**3,175**	**296,576**	**8.5%**	**7.5%**	**8.5%**	**9.5%**
US Small Cap	137,509	4.0%		4.0%		**654**	**138,163**	**3.9%**	**3.5%**	**4.0%**	**4.5%**
Total US Equity	**750,933**	**21.7%**	**19.5%**	**21.5%**	**23.5%**	**(3,158)**	**747,775**	**21.3%**		**21.5%**	
Non- US Equity	**742,690**	**21.5%**	**19.5%**	**21.5%**	**23.5%**	**17,453**	**760,142**	**21.7%**	**20.5%**	**21.5%**	**22.5%**
Global Equity	**543,463**	**15.7%**	**14.0%**	**16.0%**	**18.0%**	**15,430**	**558,893**	**15.9%**	**15.0%**	**16.0%**	**17.0%**
Total Equities	**2,037,086**	**58.9%**	**56.0%**	**59.0%**	**62.0%**	**29,725**	**2,066,810**	**58.9%**	**57.0%**	**59.0%**	**61.0%**
Total Strategic Port. ex Cash	**3,456,408**	**100%**									
Cash (Plan + Overlays)	**50,004**					**(38,738)**	**11,266**	**0.3%**			
Opportunistic	**25,143**										
Davidson Kempner	25,143						25,143				
Total Plan Assets	**3,531,361**						**3,531,555**	**100.0%**			

Non-US as % of Total Equities - Physicals	**46.8%**
Non-US as % of Total Equities - Economic Exposure	**47.2%**
Non-US as % of Total Equities - Policy Target	**50.0%**
Non-US as % of MSCI All Country World IM Index	**38.6%**

Note: 1) The total market exposure gained/reduced in addition to the managers by using derivatives within the Parametric overlay account is $38.7 million.
2) The total physical cash (including manager cash) being overlaid by Parametric is $48.7 million.
3) The Total Cash contains $18 million for the margin account supporting the Parametric Cash overlay.
4) Parametric compensates for the excess to Policy weighting of Real Assets by adjusting downwards the targets and ranges for the other asset classes, and vice versa.