

**Contra Costa County Employees' Retirement Association**  
Asset Allocation as of December 31, 2017

	Market Value	Percentage of Total Fund	Phase 2b Target Percentage	Phase 2b Over/(Under)	Long Term Target	Long Term Over/(Under)
<b>Liquidity</b>						
Insight	837,519,570	9.9%	12.6%	-2.7%		
Sit	489,041,194	5.8%	6.2%	-0.4%		
Dimensional Fund Advisors	408,202,187	4.8%	6.2%	-1.4%		
<b>Total Liquidity</b>	<b>1,734,762,951</b>	<b>20.5%</b>	<b>25.0%</b>	<b>-4.5%</b>	<b>27.0%</b>	<b>-6.5%</b>
		<b>Range</b>				
		<b>16% - 28%</b>				
<b>Growth</b>						
<b>Domestic Equity</b>						
Boston Partners	404,800,288	4.8%	4.5%	0.3%		
Jackson Square	401,340,082	4.7%	4.5%	0.2%		
BlackRock Index Fund	119,996,103	1.4%	1.3%	0.1%		
Emerald Advisors	288,874,678	3.4%	3.0%	0.4%		
Ceredex	265,221,052	3.1%	3.0%	0.1%		
<b>Total Domestic Equity</b>	<b>1,480,232,202</b>	<b>17.5%</b>	<b>16.3%</b>	<b>1.2%</b>	<b>6.0%</b>	<b>11.5%</b>
<b>Global &amp; International Equity</b>						
Pyrford (BMO)	462,487,249	5.5%	5.2%	0.3%	6.0%	-0.5%
William Blair	495,236,391	5.9%	5.2%	0.7%	6.0%	-0.1%
First Eagle	367,319,441	4.3%	4.3%	0.0%		
Artisan Global Opportunities	380,816,392	4.5%	4.3%	0.2%		
PIMCO/RAE Emerging Markets	370,514,509	4.4%	4.2%	0.2%	5.0%	-0.6%
TT Emerging Markets	358,984,501	4.2%	4.2%	0.0%	5.0%	-0.8%
<b>Total Global &amp; International Equity</b>	<b>2,435,358,483</b>	<b>28.8%</b>	<b>27.4%</b>	<b>1.4%</b>	<b>22.0%</b>	<b>6.8%</b>
<b>Private Equity</b>	843,549,000	10.0%	9.6%	0.4%	12.0%	-2.0%
<b>Private Credit</b>	147,579,000	1.7%	2.4%	-0.7%	12.0%	-10.3%
<b>Real Estate - Value Add</b>	158,441,000	1.9%	4.0%	-2.1%	4.0%	-2.1%
<b>Real Estate - Opportunistic &amp; Distressed</b>	448,370,000	5.3%	4.0%	1.3%	4.0%	1.3%
<b>Real Estate - REIT (Adelante)</b>	68,201,810	0.8%	1.0%	-0.2%	1.0%	-0.2%
<b>High Yield (Allianz)</b>	358,938,580	4.2%	4.3%	-0.1%		
<b>Total Other Growth Assets</b>	<b>2,025,079,391</b>	<b>23.9%</b>	<b>25.3%</b>	<b>-1.4%</b>	<b>33.0%</b>	<b>-9.1%</b>
<b>Total Growth Assets</b>	<b>5,940,670,076</b>	<b>70.2%</b>	<b>69.0%</b>	<b>1.2%</b>	<b>61.0%</b>	<b>9.2%</b>
		<b>Range</b>				
		<b>60% - 80%</b>				
<b>Risk Diversifying</b>						
AFL-CIO	327,131,114	3.9%	3.5%	0.4%	3.0%	0.9%
Diversifying Strategies (Wellington)	189,869,327	2.2%	2.5%	-0.3%	9.0%	-6.8%
<b>Total Risk Diversifying</b>	<b>517,000,441</b>	<b>6.1%</b>	<b>6.0%</b>	<b>0.1%</b>	<b>12.0%</b>	<b>-5.9%</b>
		<b>Range</b>				
		<b>0% - 10%</b>				
<b>Cash and Overlay</b>						
Overlay (Parametric)	38,887,711	0.5%	0.0%	0.5%		
Cash	228,772,333	2.7%	0.0%	2.7%	0.0%	2.7%
<b>Total Cash and Overlay</b>	<b>267,660,044</b>	<b>3.2%</b>	<b>0.0%</b>	<b>3.2%</b>	<b>0.0%</b>	<b>3.2%</b>
<b>Total Fund</b>	<b>8,460,093,512</b>	<b>100%</b>	<b>100%</b>	<b>0%</b>	<b>100%</b>	<b>0%</b>

\*Phase 2b targets and ranges reflect Phase 2b asset allocation targets accepted by the Board on July 12, 2017 (BOR Resolution 2017-6)

**Private Market Investments  
As of December 31, 2017**

**REAL ESTATE - Value Add**

	Inception Date	Target Termination	# of Extension	Discretion by GP/LP	New Target Termination	Funding Commitment	Market Value	% of Total Asset	Outstanding Commitment
Invesco IREF II	05/30/07	12/31/15	in full liq.			85,000,000	444,000	0.01%	
Invesco IREF III	08/01/13	08/01/20				35,000,000	13,282,000	0.16%	
Invesco IREF IV	12/01/14	12/01/21				35,000,000	19,294,000	0.23%	3,190,000
Long Wharf FREG IV	08/14/13	09/30/21				25,000,000	17,187,000	0.20%	
Long Wharf FREG V	10/31/16	09/30/24				50,000,000	24,602,000	0.29%	23,987,000
LaSalle Income & Growth Fund VI	01/31/12	01/31/19				75,000,000	36,016,000	0.43%	3,946,000
LaSalle Income & Growth Fund VII	10/31/16	09/30/24				75,000,000	47,616,000	0.56%	27,449,000
						<b>505,000,000</b>	<b>158,441,000</b>	<b>1.87%</b>	<b>58,572,000</b>

Outstanding Commitments

58,572,000

Total

217,013,000

**REAL ESTATE -Opportunistic & Distressed**

	Inception Date	Target Termination	# of Extension	Discretion by GP/LP	New Target Termination	Funding Commitment	Market Value	% of Total Asset	Outstanding Commitment
DLJ Real Estate Capital Partners, L.P. III	06/30/05	06/30/14	in full liq.			75,000,000	28,167,000	0.33%	
DLJ Real Estate Capital Partners, L.P. IV	12/31/07	09/30/18				100,000,000	86,709,000	1.02%	
DLJ Real Estate Capital Partners, L.P. V	07/31/13	12/31/22				75,000,000	31,734,000	0.38%	36,086,000
Oaktree Real Estate Opportunities Fund V	02/01/11	02/01/21				50,000,000	9,347,000	0.11%	
Oaktree Real Estate Opportunities Fund VI	09/30/13	09/30/20				80,000,000	61,351,000	0.73%	5,682,000
Oaktree Real Estate Opportunities Fund VII	02/28/15	02/28/23				65,000,000	5,865,000	0.07%	55,250,000
Siguler Guff Distressed Real Estate Opp. Fund	07/30/11	07/30/22				75,000,000	48,910,000	0.58%	11,993,000
Siguler Guff Distressed Real Estate Opp. Fund II	08/31/13	08/31/25				70,000,000	54,160,000	0.64%	21,752,000
Siguler Guff Distressed Real Estate Opp. II Co-Inv	01/31/16	10/31/25				25,000,000	17,746,000	0.21%	7,967,000
Paulson Real Estate Fund II	11/10/13	11/10/20				20,000,000	22,424,000	0.27%	
Angelo Gordon Realty Fund VIII	12/31/11	12/31/18				80,000,000	41,217,000	0.49%	18,145,000
Angelo Gordon Realty Fund IX	10/10/14	10/10/22				65,000,000	40,740,000	0.48%	31,091,000
						<b>780,000,000</b>	<b>448,370,000</b>	<b>5.30%</b>	<b>187,966,000</b>

Outstanding Commitments

187,966,000

Total

636,336,000

**PRIVATE CREDIT**

	Inception Date	Target Termination	# of Extension	Discretion by GP/LP	New Target Termination	Funding Commitment	Market Value	% of Total Asset	Outstanding Commitment
Torchlight Debt Opportunity Fund II	09/28/06	09/30/16	in full liq.			128,000,000	40,375,000	0.48%	
Torchlight Debt Opportunity Fund III	09/30/08	06/30/16	2nd 1 YR	LP	06/30/18	75,000,000	4,803,000	0.06%	
Torchlight Debt Opportunity Fund IV	08/01/12	08/30/20				60,000,000	44,331,000	0.52%	
Torchlight Debt Opportunity Fund V	12/31/14	09/17/22				75,000,000	46,855,000	0.55%	37,500,000
Torchlight Debt Opportunity Fund VI	12/31/17	09/17/24				40,000,000	0	0.00%	40,000,000
Angelo Gordon Energy Credit Opportunities	09/10/15	09/10/20				16,500,000	11,215,000	0.13%	
						<b>394,500,000</b>	<b>147,579,000</b>	<b>1.74%</b>	<b>77,500,000</b>

Outstanding Commitments

77,500,000

Total

225,079,000

**Private Market Investments  
As of December 31, 2017**

<b>PRIVATE EQUITY</b>	<b>Inception Date</b>	<b>Target Termination</b>	<b># of Extension</b>	<b>Discretion by GP/LP</b>	<b>New Target Termination</b>	<b>Funding Commitment</b>	<b>Market Value</b>	<b>% of Total Asset</b>	<b>Outstanding Commitment</b>
Adams Street Partners	12/22/95	INDEFINITE				180,000,000	128,215,000	1.52%	74,805,000
Adams Street Secondary II	12/31/08	12/31/20				30,000,000	10,211,000	0.12%	12,637,000
Adams Street Secondary V	10/31/12	10/31/22				40,000,000	23,087,000	0.27%	15,740,000
Adams Street Venture Innovation Fund	03/09/16	03/09/28				75,000,000	3,413,000	0.04%	71,587,000
Bay Area Equity Fund	06/14/04	12/31/14	2nd 2 YR	LP	12/31/2017	10,000,000	2,965,000	0.04%	
Bay Area Equity Fund II	2/29/09	12/31/19				10,000,000	8,615,000	0.10%	
Carpenter Community BancFund	10/31/09	10/31/19				30,000,000	4,399,000	0.05%	
EIF USPF I	11/08/02	11/08/15	in full liq.	LP	11/08/15	30,000,000	755,000	0.01%	
EIF USPF II	06/15/05	06/15/15	3rd 1 YR	LP	06/15/18	50,000,000	35,104,000	0.41%	
EIF USPF III	02/28/07	02/28/17	1st 1 YR	LP	02/28/18	65,000,000	45,637,000	0.54%	
EIF USPF IV	06/28/10	06/28/20				50,000,000	51,759,000	0.61%	
Oaktree Private Investment Fund 2009	02/28/10	12/15/19				40,000,000	12,370,000	0.24%	
Ocean Avenue Fund II	05/07/14	05/07/24				30,000,000	22,157,000	0.26%	6,384,000
Ocean Avenue Fund III	12/09/15	12/09/25				50,000,000	9,579,000	0.07%	40,000,000
Paladin III	08/15/08	08/15/18				25,000,000	26,064,000	0.31%	
Pathway	11/09/98	05/31/21				125,000,000	24,766,000	0.29%	14,246,000
Pathway 2008	12/26/08	12/26/23				30,000,000	20,838,000	0.25%	5,738,000
Pathway 6	05/24/11	05/24/26				40,000,000	33,114,000	0.39%	10,809,000
Pathway 7	02/07/13	02/07/23				70,000,000	51,022,000	0.60%	18,977,000
Pathway 8	11/23/15	11/23/25				50,000,000	21,185,000	0.25%	32,842,000
Siguler Guff CCCERA Opportunities	06/03/14	05/31/25				200,000,000	139,999,000	1.65%	87,098,000
Siguler Guff Secondary Opportunities	12/31/16	12/31/26				50,000,000	11,046,000	0.13%	34,297,000
<b>Real Assets</b>									
Aether III & III Surplus	11/30/13	11/30/20				75,000,000	80,300,000	0.95%	13,772,000
Aether IV	01/01/16	01/01/28				50,000,000	17,726,000	0.21%	31,436,000
ARES EIF V	09/09/15	11/19/25				50,000,000	13,872,000	0.16%	38,561,000
Commonfund Capital Natural Resources IX	06/30/13	06/30/20				50,000,000	40,270,000	0.48%	12,875,000
Wastewater Opportunity Fund	12/31/15	11/30/22				25,000,000	5,081,000	0.06%	18,950,000
						<b>1,545,000,000</b>	<b>843,549,000</b>	<b>10.02%</b>	<b>540,754,000</b>
<b>Outstanding Commitments</b>							<b>540,754,000</b>		
<b>Total</b>							<b>1,384,303,000</b>		

Market value column is the latest ending quarter plus any additional capital calls after the ending quarter.

The Target Termination column is the beginning of liquidation of the fund, however, some funds may be extended for an additional two or three years.