



AGENDA

RETIREMENT BOARD MEETING

REGULAR MEETING
July 13, 2016
9:00 a.m.

Retirement Board Conference Room
The Willows Office Park
1355 Willow Way, Suite 221
Concord, California

THE RETIREMENT BOARD MAY DISCUSS AND TAKE ACTION ON THE FOLLOWING:

1. Pledge of Allegiance.
2. Accept comments from the public.
3. Board Reorganization:
 - a. Election of Chair (Phillips, incumbent).
 - b. Election of Vice-Chair (Smithy, incumbent).
 - c. Election of Secretary (Gordon, incumbent).
4. Routine items for July 13, 2016.
 - a. Approve certifications of membership.
 - b. Approve service and disability allowances.
 - c. Accept disability applications and authorize subpoenas as required.
 - d. Approve death benefits.
 - e. Accept Asset Allocation Report

CLOSED SESSION

5. The Board will go into closed session under Gov. Code Section 54957 to consider recommendations from the Medical Advisor and/or staff regarding the following disability retirement applications:

<u>Member</u>	<u>Type Sought</u>	<u>Recommendation</u>
a. Guy Worth	Service Connected	Service Connected

6. The Board will continue in closed session pursuant to Govt. Code Section 54956.9(d)(1) to confer with legal counsel regarding pending litigation:

Public Employees Union, Local No. 1, et al. v. CCCERA, et al., Contra Costa County Superior Court, Case No. N14-1221

The Retirement Board will provide reasonable accommodations for persons with disabilities planning to attend Board meetings who contact the Retirement Office at least 24 hours before a meeting.

OPEN SESSION

7. Presentation from Brown Armstrong on the audit of the December 31, 2015 financial statements.
8. Consider authorizing the attendance of Board and/or staff:
 - a. 2016 Public Funds Forum, Robbins Geller Rudman & Dowd, September 6-8, 2016, Park City, UT. (Note: 2 Board members and 1 staff previously approved)
 - b. Roundtable for Consultants & Institutional Investors, Institutional Investor, October 19-21, 2016, Chicago, IL. (Note: Conflict with meeting)
9. Miscellaneous
 - a. Staff Report
 - b. Outside Professionals' Report
 - c. Trustees' comments

The Retirement Board will provide reasonable accommodations for persons with disabilities planning to attend Board meetings who contact the Retirement Office at least 24 hours before a meeting.

Items requiring Board Action

A. Certifications of Membership – see list and classification forms.

B. Service and Disability Retirement Allowances:

<u>Name</u>	<u>Number</u>	<u>Effective Date</u>	<u>Option Type</u>	<u>Group</u>	<u>Selected</u>
Andrade, Irma	46668	3/1/16	SR	Tier II & III	Unmod
Beard, Paul	46503	3/26/16	SR	S/A	Unmod
Black, Terry	48937	3/25/16	SR	S/A	Unmod
Bunch, Lesley	48059	3/31/16	SR	Tier II & III	Unmod
County, Roderic	55493	3/25/16	SR	S/A	Unmod
Evans, Steve	53953	3/30/16	SR	S/A	Unmod
Finch, Henry	44987	3/31/16	SR	Tier I	Unmod
Flynn, Bruce	47556	3/1/16	SR	Tier II & III	Unmod
Ford, Barry	47722	3/30/16	SR	Tier II & III	Unmod
Gaitan, Nury	50205	3/31/16	SR	Tier II & III	Unmod
Galaviz, Maria	46573	3/31/16	SR	Tier II & III	Unmod
Garro, Donna	46987	3/26/16	SR	Tier II & III	Unmod
Garro, Raul	46275	3/26/16	SR	Tier III	Unmod
Grottkau, James	48810	3/31/16	SR	S/A	Unmod
Johnson-Jenkins, Teishetta	38236	3/31/16	SR	Tier II & III	Unmod
Jones, Ian	53211	3/26/16	SR	S/A	Unmod
Joseph, Beverly	42606	3/31/16	SR	Tier II & III	Option 1
Kader, Philip	75389	3/26/16	SR	S/A	Unmod
King-Meredith, Annie	55879	3/31/16	SR	Tier III	Unmod
Malone, Wendy	38550	3/31/16	SR	Tier II & III	Unmod
Mangini, Eugene	52562	3/31/16	SR	Tier II & III	Unmod
Matthews, Renee	51900	3/31/16	SR	Tier II & III	Unmod
Medlock, Nancy	45565	2/26/16	SR	Tier II & III	Unmod
Moore, Joseph	45969	3/31/16	SR	S/A	Unmod
Nelson, Catherine	64016	3/31/16	SR	Tier III	Unmod
Noble, Jeri	57123	3/19/16	SR	Tier III	Unmod
Nunez, Hortencia	53615	3/16/16	SR	Tier III	Unmod
Pelser, David	32315	10/3/15	SR	Tier I	Option 2
Perata, Steven	52984	3/25/16	SR	S/A	Unmod
Pitta-Flannery, Josephine	D9500	3/31/16	SR	Tier III	Option 1
Power, Ronald	39393	3/31/16	SR	Tier III	Unmod
Purvis, Emily	51278	3/31/16	SR	Tier II & III	Unmod
Reyes-Griffith, Linda	44791	3/31/16	SR	Tier II & III	Unmod

KEY:

Group
I = Tier I
II = Tier II
III = Tier III
 S/A = Safety Tier A
 S/C = Safety Tier C

Option
 * = County Advance
 Selected w/option

Type
 NSP = Non-Specified
 SCD = Service Connected Disability
 SR = Service Retirement
 NSCD = Non-Service Connected Disability

CONTRA COSTA COUNTY EMPLOYEES' RETIREMENT ASSOCIATION

BOARD OF RETIREMENT

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July 13, 2016

Roberts, Robert	52986	3/21/16	SR	S/A	Unmod
Shelton-Littles, Marlee	48188	3/31/16	SR	Tier II & III	Unmod
Smith, Beatrice	48005	3/30/16	SR	Tier II & III	Option 1
Surges, Joseph	30043	4/1/16	SR	Tier II & III	Unmod
Taraskewich, Edward	62949	3/31/16	SR	Tier II & III	Unmod
Thompson, Donna	55892	3/31/16	SR	Tier II & III	Unmod
Tomy, Lin	46473	4/30/16	SR	Tier II & III	Unmod
West, JoAnn	53781	3/30/16	SR	Tier I	Unmod
Zell-Bennett, Tracy	D9500	3/15/16	SR	Tier II & III	Unmod

C. Disability Retirement Applications: The Board's Hearing Officer is hereby authorized to issue subpoenas in the following cases involving disability applications:

<u>Name</u>	<u>Number</u>	<u>Filed</u>	<u>Type</u>
Evans, Steve	53953	6/21/16	SCD
Plake, Brian	54223	6/27/16	SCD
Worth, Guy	68969	6/6/16	SCD

D. Deaths:

<u>Name</u>	<u>Date of Death</u>	<u>Employer as of Date of Death</u>
Castillo, Jose S	4/29/2016	Beneficiary
Devere, Joseph	5/19/2016	Contra Costa County
Evans, Theo	5/24/2016	Contra Costa County & Beneficiary
Fedje, Ingrid	5/21/2016	Alternate Payee
Flynn, Clarence	4/9/2016	City of Pittsburg
Harris, Watrine	6/9/2016	Contra Costa County
Lomeli, Alfred	6/26/2016	Contra Costa County
Marshall, Charles	6/9/2016	Contra Costa County Fire Protection District
Matthews, Tina	5/7/2016	Contra Costa County - Active Death
Nelson, Donnell	5/29/2016	Contra Costa County
O'Bryan, Charles	6/11/2016	Contra Costa County Fire Protection District
Osterlye, Nina	5/18/2016	Contra Costa County
Powell, Barbara	5/28/2016	Contra Costa County
Sanford, Donald	5/31/2016	Contra Costa County
Taylor, Maxine	6/10/2016	Beneficiary

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CERTIFICATION OF MEMBERSHIPS

<i>Name</i>	<i>Employee Number</i>	<i>Tier</i>	<i>Membership Date</i>	<i>Employer</i>
Alejandro, Katrina	83196	P5.2	05/01/16	Contra Costa County
Alejandro, Mayra	83174	P5.2	05/01/16	Contra Costa County
Amador, Adriana	83188	P5.2	05/01/16	Contra Costa County
Arias, Jorge	83209	P5.2	05/01/16	Contra Costa County
Armstrong, Cheryl	82404	P5.2	05/01/16	Contra Costa County
Ayala, Martha	83173	P5.2	05/01/16	Contra Costa County
Barkley, Shane	83199	P5.2	05/01/16	Contra Costa County
Berber, Hector	83184	P5.2	05/01/16	Contra Costa County
Bossett, Lisa	83171	P5.2	05/01/16	Contra Costa County
Bottoff, Beth	83232	P5.2	05/01/16	Contra Costa County
Bowers, Thais	82598	P5.2	05/01/16	Contra Costa County
Brady, Samantha	82432	P5.2	05/01/16	Contra Costa County
Brar, Navjot	82650	P5.2	05/01/16	Contra Costa County
Brim, Nancy	83248	P5.2	05/01/16	Contra Costa County
Brown, Kevin	83255	S/E	05/01/16	Contra Costa County Fire Protection District
Bugarin, Marilen	81347	P5.2	05/01/16	Contra Costa County
Calica-Knighton, Charlene	D9990	I	05/01/16	Housing Authority
Carr, Armanise	82606	P5.2	05/01/16	Contra Costa County
Carson, Julian	83200	P5.2	05/01/16	Contra Costa County
Castro, Monica	81784	P5.2	05/01/16	Contra Costa County
Coble, Casey	83258	P5.2	05/01/16	Contra Costa County
Coleman II, Kenneth	83093	P5.2	05/01/16	Contra Costa County
Cretti, Caroline	79195	P5.2	05/01/16	Contra Costa County
Cullum, Matthew	83226	P5.2	05/01/16	Contra Costa County
Daroza, Maria	83194	P5.2	05/01/16	Contra Costa County
Del Rosario, Princess	82386	P5.2	05/01/16	Contra Costa County
Delgadillo, Alexis	82155	P5.2	05/01/16	Contra Costa County
Dewitt, Patricia	83172	P5.2	05/01/16	Contra Costa County
Diaz, Javier	83216	P5.2	05/01/16	Contra Costa County
Domantay, Lynnea	82321	P5.2	05/01/16	Contra Costa County
Dotts, Kevin	83230	P5.2	05/01/16	Contra Costa County
Duarte, Roberto	83176	P5.2	05/01/16	Contra Costa County
Durniak, Alexander	83202	P5.2	05/01/16	Contra Costa County
Edwin, Herbert	83192	P5.2	05/01/16	Contra Costa County
Enemark, Matthew	82463	P5.2	05/01/16	Contra Costa County
Escover, Kevin	83231	P5.2	05/01/16	Contra Costa County
Evans, Julie	82120	P5.2	05/01/16	Contra Costa County
French-Hayes, Joyce	83110	P5.2	05/01/16	Contra Costa County
Galvan, Miguel	81422	P5.2	05/01/16	Contra Costa County
Garcia Licona, Maria	73357	III	05/01/16	Contra Costa County
Garcia, Sonny	79622	P5.2	05/01/16	Contra Costa County
Gardner, Randell	76089	P5.2	05/01/16	Contra Costa County
Gardner, Robert	83257	P5.2	05/01/16	Contra Costa County

Key:

I = Tier I	P4.2 = PEPR Tier 4 (2% COLA)	S/A = Safety Tier A
II = Tier II	P4.3 = PEPR Tier 4 (3% COLA)	S/C = Safety Tier C
III = Tier III	P5.2 = PEPR Tier 5 (2% COLA)	S/D = Safety Tier D
	P5.3 = PEPR Tier 5 (3% COLA)	S/E = Safety Tier E

CERTIFICATION OF MEMBERSHIPS

<i>Name</i>	<i>Employee Number</i>	<i>Tier</i>	<i>Membership Date</i>	<i>Employer</i>
Gonczeruk, Anton	83254	S/E	05/01/16	Contra Costa County Fire Protection District
Graham, Ryan	83259	S/E	05/01/16	Contra Costa County Fire Protection District
Groode, Tamra	64609	P5.2	05/01/16	Contra Costa County
Gustavson, David	83191	P5.2	05/01/16	Contra Costa County
Gutierrez, Jazmin	83177	P5.2	05/01/16	Contra Costa County
Harper, Jan	83207	P5.2	05/01/16	Contra Costa County
Hart, Michael	83111	P5.2	05/01/16	Contra Costa County
Heinitz, Alexandra	83233	P5.2	05/01/16	Contra Costa County
Hunter, Jesse	D9990	P4.3	05/01/16	Housing Authority
Ibeabuchi, Ngozi	82649	P5.2	05/01/16	Contra Costa County
Jasinska, Eliza	83056	P5.2	05/01/16	Contra Costa County
Jauregui Ibarra, Jose	83190	P5.2	05/01/16	Contra Costa County
Johnson, Jacob	83235	P5.2	05/01/16	Contra Costa County
Johnson, Renee	83178	P5.2	05/01/16	Contra Costa County
Johnson, Susan	83112	P5.2	05/01/16	Contra Costa County
Jones, Precious	83283	P5.2	05/01/16	Contra Costa County
Kelley, Michael	83247	P5.2	05/01/16	Contra Costa County
Khanachet, Dina	D7830	P4.3	05/01/16	San Ramon Valley Fire Protection District
Kipp, Kerry	80910	P5.2	05/01/16	Contra Costa County
Kirby, Robert	83236	P5.2	05/01/16	Contra Costa County
Kraft, Susan	83139	P5.2	05/01/16	Contra Costa County
Landry Jr., Richard	83249	S/E	05/01/16	Contra Costa County Fire Protection District
Leech, Amy	83144	III	05/01/16	Contra Costa County
Lenihan, Jennifer	83157	P5.2	05/01/16	Contra Costa County
Linares, Shannon	83185	P5.2	05/01/16	Contra Costa County
Lunardi, Jennifer	82260	P5.2	05/01/16	Contra Costa County
Martin, Joyce	76619	III	05/01/16	Contra Costa County
Mason, Virginia	66651	P5.2	05/01/16	Contra Costa County
Matthews, Claudia	82952	P5.2	05/01/16	Contra Costa County
McClough, Jaquita	82678	P5.2	05/01/16	Contra Costa County
McDermott, Carin	81323	P5.2	04/01/16	Contra Costa County
McDonald, Lala	83180	P5.2	05/01/16	Contra Costa County
Medeiros, Tina	78371	P5.2	05/01/16	Contra Costa County
Melendez, Brittany	83179	P5.2	05/01/16	Contra Costa County
Mendizabal, Maria	83166	P5.2	05/01/16	Contra Costa County
Millar, Josiah	82360	P5.2	05/01/16	Contra Costa County
Miller, Curtis	76015	III	05/01/16	Contra Costa County
O, Anne	83205	P5.2	05/01/16	Contra Costa County
Orduna, Amgelina	83224	P5.2	05/01/16	Contra Costa County
Oroquita, Shantel	83167	P5.2	05/01/16	Contra Costa County
Page, Jackie	82305	P5.2	05/01/16	Contra Costa County
Panuco, Judith	83203	P5.2	05/01/16	Contra Costa County
Perez Diaz, Sorina	83181	P5.2	05/01/16	Contra Costa County
Perry, LaConnie	82313	P5.2	05/01/16	Contra Costa County
Picard, Allison	83109	III	05/01/16	Contra Costa County

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III = Tier III	P5.2 = PEPR Tier 5 (2% COLA)	S/D = Safety Tier D
	P5.3 = PEPR Tier 5 (3% COLA)	S/E = Safety Tier E

CERTIFICATION OF MEMBERSHIPS

<i>Name</i>	<i>Employee Number</i>	<i>Tier</i>	<i>Membership Date</i>	<i>Employer</i>
Pineda, Leonard	83193	P5.2	05/01/16	Contra Costa County
Poehnelt, Travis	83195	P5.2	05/01/16	Contra Costa County
Polen, Michael	77561	P5.2	05/01/16	Contra Costa County
Prendergast, Denise	83092	P5.2	05/01/16	Contra Costa County
Proctor, Michael	83242	P5.2	05/01/16	Contra Costa County
Qasimi, Isabella	81008	P5.2	05/01/16	Contra Costa County
Ramos, Darlene	83229	P5.2	05/01/16	Contra Costa County
Ramos, Diana	77586	P5.3	05/01/16	Contra Costa County
Ramos, Maria	76996	P5.2	05/01/16	Contra Costa County
Rapp, Merridith	83164	P5.2	05/01/16	Contra Costa County
Rayonez, Lorraine	83215	P5.2	05/01/16	Contra Costa County
Reyes-Shaffer, Sofia	83165	P5.2	05/01/16	Contra Costa County
Robinson, Amy	83057	P5.2	05/01/16	Contra Costa County
Robinson, Jessica	83168	P5.2	05/01/16	Contra Costa County
Rodriguez Cabrera, Dayana	83162	P5.2	05/01/16	Contra Costa County
Rodwell, Stephen	D7830	P4.3	05/01/16	San Ramon Valley Fire Protection District
Roliz, Vanessa	64739	P5.2	05/01/16	Contra Costa County
Ruiz, Adriana	82677	P5.2	05/01/16	Contra Costa County
Samonte, Eleazer	83243	P5.2	05/01/16	Contra Costa County
Sanchez, Celia	83169	P5.2	05/01/16	Contra Costa County
Sanchez, Edgar	83271	P5.2	05/01/16	Contra Costa County
Shaver, Michelle	83218	P5.2	05/01/16	Contra Costa County
Sheppard Jr., Duran	83170	P5.2	05/01/16	Contra Costa County
Shiple, Margaret	82645	P5.2	05/01/16	Contra Costa County
Siino, John	83197	P5.2	05/01/16	Contra Costa County
Sill, Nathan	D7830	P4.3	05/01/16	San Ramon Valley Fire Protection District
Simpson, Sarah	82438	P5.2	05/01/16	Contra Costa County
Solis, Marilou	83221	P5.2	05/01/16	Contra Costa County
Sparacino, Cari	80716	P5.2	05/01/16	Contra Costa County
Stephens, Mercedes	83119	P5.2	05/01/16	Contra Costa County
Stokes, Scott	83244	P5.2	05/01/16	Contra Costa County
Sturtz, Natalya	83104	P5.2	05/01/16	Contra Costa County
Susanto, Christine	83222	P5.2	05/01/16	Contra Costa County
Taylor, Porshe	80607	P5.2	05/01/16	Contra Costa County
Terry, Nastastia	83026	P5.2	05/01/16	Contra Costa County
Thomas, Dana	81122	P5.2	05/01/16	Contra Costa County
Thrower, Tamara	83182	P5.2	05/01/16	Contra Costa County
Toleyos, Joyselito	81252	P5.2	05/01/16	Contra Costa County
Tongol, Rossel	83134	P5.2	05/01/16	Contra Costa County
Torres, Eddy	83274	P5.2	05/01/16	Contra Costa County
Torres, Jose	83198	P5.2	05/01/16	Contra Costa County
Torres, Miguel	82276	P5.2	05/01/16	Contra Costa County
Trewhella, Florabel	82754	P5.2	05/01/16	Contra Costa County
Trias, Karmen	83143	P5.2	05/01/16	Contra Costa County
Vargas, Alexandra	79280	P5.2	05/01/16	Contra Costa County
Wagner, Hillary	81048	P5.2	05/01/16	Contra Costa County
Walker, Guy	83183	P5.2	05/01/16	Contra Costa County

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CERTIFICATION OF MEMBERSHIPS

<i>Name</i>	<i>Employee Number</i>	<i>Tier</i>	<i>Membership Date</i>	<i>Employer</i>
Walker, Tracy	83163	P5.2	05/01/16	Contra Costa County
Wall, Russell	83225	P5.2	05/01/16	Contra Costa County
Warren, Nakia	82646	P5.2	05/01/16	Contra Costa County
Washington, Linda	82359	P5.2	05/01/16	Contra Costa County
Wattley, Sherry	81144	P5.2	05/01/16	Contra Costa County
Weng, Annie	83011	P5.2	05/01/16	Contra Costa County
Whitaker, Cynthia	82262	P5.2	05/01/16	Contra Costa County
White, Rhonda	54930	III	05/01/16	Contra Costa County
Wilder, Luana	78773	P5.2	05/01/16	Contra Costa County
Williams, Ronnie	83201	P5.2	05/01/16	Contra Costa County
Winn, Ashley	82361	P5.2	05/01/16	Contra Costa County
Xiong, Zoua	83097	P5.2	05/01/16	Contra Costa County
Zhou, Yu	83098	P5.2	05/01/16	Contra Costa County

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TIER CHANGES

<i>Name</i>	<i>Employee Number</i>	<i>Old Tier</i>	<i>New Tier</i>	<i>Effective Date</i>	<i>Employer</i>	<i>Reason for Change</i>
Adams, Brooke	82845	P4.3	I	2/1/2016	Contra Costa County Fire Protection District	Reciprocity
McNamara, John	39652	S/A	S/A	4/1/2016	Contra Costa County Fire Protection District	30 year mbr
Stadlander, Kim	81959	P4.3	I	12/1/2015	First Five of Contra Costa	Reciprocity
Voos, Michelle	82942	P5.2	III	3/1/2016	Contra Costa County	Reciprocity

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ASSET ALLOCATION

Current Assets (Market Value)

\$7,281,969,000

Reporting Month End: May 31, 2016

Prepared By: Chih-Chi Chu

Robeco

Jackson Square Partners (fka Delaware)

Emerald Advisors

Intech (Core)

PIMCO Stocks+ Absolute Return

Ceredex

Total Domestic Equity

Plyford (BMO)

William Blair

Total International Equity

JPMorgan Global Opportunities

First Eagle

Artisan Global Opportunities

Intech (Global Low Volatility)

Total Global Equity

Total Equity

AFL-CIO Housing Investment Trust

PIMCO Total Return

GSAM "Park" Portfolio

Goldman Sachs Asset Management

Lord Abbett

Torchlight Debt Opportunity Funds

Total Domestic Fixed Income

Lazard Asset Management

Total Global Fixed Income

Allianz Global Investors (fka Nicholas Applegate)

Total High Yield Fixed Income

Wellington Real Total Return

PIMCO All Asset

Private Real Asset

Total Real Asset

Total Real Estate

Total Alternative Investments

County Treasurer

State Street Bank

Total Cash & Equivalents

Total Market Opportunities

TOTAL ASSETS

Meeting Date
07/13/16
Agenda Item
#4e.

A	B	C	D	C-B	D-A	Range
% of Target	Target Assets	Market Value	Actual Assets	Over (Under)	Over (Under)	
4.1%	298,560,729	327,582,000	4.50%	29,021,271	0.40%	
4.1%	298,560,729	301,576,000	4.14%	3,015,271	0.04%	
2.9%	211,177,101	219,988,000	3.02%	8,810,899	0.12%	
3.8%	276,714,822	283,707,000	3.90%	6,992,178	0.10%	
3.8%	276,714,822	254,322,000	3.49%	(22,392,822)	(0.31%)	
2.9%	211,177,101	248,836,000	3.42%	37,658,899	0.52%	
21.6%	1,572,905,304	1,636,011,000	22.47%	63,105,696	0.87%	
5.3%	385,944,357	404,180,000	5.55%	18,235,643	0.25%	
5.3%	385,944,357	403,728,000	5.54%	17,783,643	0.24%	
10.6%	771,888,714	807,908,000	11.09%	36,019,286	0.49%	
4.0%	291,278,760	267,452,000	3.67%	(23,826,760)	(0.33%)	
4.0%	291,278,760	311,051,000	4.27%	19,772,240	0.27%	
4.0%	291,278,760	315,826,000	4.34%	24,547,240	0.34%	
0.3%	21,845,907	23,404,000	0.32%	1,558,093	0.02%	
12.3%	895,682,187	917,733,000	12.60%	22,050,813	0.30%	
44.5%	3,240,476,205	3,361,652,000	46.16%	121,175,795	1.66%	40% TO 55%
3.3%	240,304,977	231,157,000	3.17%	(9,147,977)	(0.13%)	
5.6%	407,790,264	347,637,000	4.77%	(60,153,264)	(0.83%)	
0.0%	0	4,000	0.00%	4,000	0.00%	
4.6%	334,970,574	323,793,000	4.45%	(11,177,574)	(0.15%)	
4.6%	334,970,574	325,518,000	4.47%	(9,452,574)	(0.13%)	
1.9%	138,357,411	131,828,000	1.81%	(6,529,411)	(0.09%)	
20.0%	1,456,393,800	1,359,937,000	18.68%	(96,456,800)	(1.32%)	
4.0%	291,278,760	238,218,000	3.27%	(53,060,760)	(0.73%)	
24.0%	1,747,672,560	1,598,155,000	21.95%	(149,517,560)	(2.05%)	20% TO 30%
5.0%	364,098,450	325,839,000	4.47%	(38,259,450)	(0.53%)	
5.0%	364,098,450	325,839,000	4.47%	(38,259,450)	(0.53%)	2% TO 9%
0.8%	54,614,768	176,834,000	2.43%	122,219,233	1.68%	
1.8%	127,434,458	121,209,000	1.66%	(6,225,458)	(0.09%)	
2.5%	182,049,225	68,038,000	0.93%	(114,011,225)	(1.57%)	
5.0%	364,098,450	366,081,000	5.03%	1,982,550	0.03%	0% TO 10%
12.5%	910,246,125	890,987,000	12.24%	(19,259,125)	(0.26%)	10% TO 16%
8.0%	582,557,520	626,800,000	8.61%	44,242,480	0.61%	5% TO 12%
		-	0.00%			
		74,459,000	1.02%			
0.5%	36,409,845	74,459,000	1.02%	38,049,155	0.52%	0% TO 1%
0.5%	36,409,845	37,996,000	0.52%	1,586,155	0.02%	0% TO 5%
100.0%	7,281,969,000	7,281,969,000	100%	0	0%	

UNDER REVIEW:

Nogales Investors - Performance, Board Action 5/28/08

Wellington - Personnel Change, Board Action 4/13/16

Private Market Investments
As of May 31, 2016

REAL ESTATE INVESTMENTS	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. II	07/31/99	07/31/09	3rd 2 YR	LP	6/30/2015	40,000,000	3,010,000	0.04%	
DLJ Real Estate Capital Partners, L.P. III	06/30/05	06/30/14	1st 2 YR	GP	6/30/2016	75,000,000	45,351,000	0.62%	18,958,000
DLJ Real Estate Capital Partners, L.P. IV	12/31/07	09/30/16				100,000,000	81,296,000	1.12%	19,113,000
DLJ Real Estate Capital Partners, L.P. V	07/31/13	12/31/22				75,000,000	41,561,000	0.57%	39,072,000
Hearthstone Partners II	06/17/98	12/31/09				6,250,000	(38,000)	0.00%	
Invesco IREF I	10/22/03	04/30/11	3rd 1 YR	GP	4/30/2014	50,000,000	6,187,000	0.08%	
Invesco IREF II	05/30/07	12/31/15				85,000,000	17,913,000	0.25%	
Invesco IREF III	08/01/13	08/01/20				35,000,000	22,953,000	0.32%	20,305,000
Invesco IREF IV	12/01/14	12/01/21				35,000,000	19,352,000	0.27%	19,223,000
Long Wharf FREG II	07/18/03	02/28/12	NOT DEF	LP	12/31/2014	50,000,000	794,000	0.01%	
Long Wharf FREG III	03/30/07	12/30/15				75,000,000	12,887,000	0.18%	
Long Wharf FREG IV	08/14/13	09/30/21				25,000,000	24,459,000	0.34%	
Oaktree Real Estate Opportunities Fund V	12/15/11	12/31/16				50,000,000	48,332,000	0.66%	
Oaktree Real Estate Opportunities Fund VI	09/30/13	09/30/20				80,000,000	99,415,000	1.37%	5,682,000
Oaktree Real Estate Opportunities Fund VII	02/28/15	02/28/23				65,000,000	0	0.00%	65,000,000
Oaktree Real Estate Opp. Fund	12/31/11	12/31/16				75,000,000	74,917,000	1.03%	11,993,000
Siguler Guff Distressed Real Estate Opp. Fund II	08/31/13	08/31/20				20,000,000	10,000,000	0.14%	15,000,000
Siguler Guff Distressed Real Estate Opp. Fund II Co-In	01/31/16	11/10/20				80,000,000	66,724,000	0.92%	3,574,000
Paulson Real Estate Fund II	11/10/13	12/31/18				65,000,000	9,100,000	0.12%	18,145,000
Angelo Gordon Realty Fund VIII	12/31/11	12/31/18				75,000,000	91,111,000	1.25%	55,900,000
Angelo Gordon Realty Fund IX	10/10/14	10/10/22				75,000,000	93,253,000	1.28%	3,946,000
LaSalle Income & Growth Fund VI	01/31/12	01/31/19				0	0		
Adelante Capital Management (REIT)						1,361,250,000	890,987,000	12.24%	340,816,000
INVESCO International REIT						0	56,718,000	0.78%	
Total						1,361,250,000	890,987,000	12.24%	340,816,000
Outstanding Commitments							340,816,000		
Total							1,231,803,000		

PRIVATE DEBT INVESTMENTS	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				128,000,000	54,730,000	0.75%	
Torchlight Debt Opportunity Fund III	09/30/08	09/30/16				75,000,000	10,309,000	0.14%	
Torchlight Debt Opportunity Fund IV	08/01/12	08/30/20				60,000,000	63,004,000	0.87%	0
Torchlight Debt Opportunity Fund V	12/31/14	09/17/22				75,000,000	3,785,000	0.05%	71,250,000
Total						338,000,000	131,828,000	1.81%	71,250,000
Outstanding Commitments							71,250,000		
Total							203,078,000		

**Private Market Investments
As of May 31, 2016**

ALTERNATIVE INVESTMENTS	Inception Date	Target Termination	# of Extension	Discretion by GP/LP	New Target Termination	Funding Commitment	Market Value	% of Total Asset	Outstanding Commitment
Adams Street Partners	12/22/95	INDEFINITE				180,000,000	133,114,000	1.83%	92,865,000
Adams Street Secondary II	12/31/08	12/31/20				30,000,000	23,037,000	0.32%	12,637,000
Adams Street Secondary V	10/31/12	10/31/22				40,000,000	18,365,000	0.25%	21,884,000
Adams Street Venture Innovation Fund	03/09/16	03/09/28				75,000,000	0	0.00%	75,000,000
Pathway	11/09/98	05/31/21				125,000,000	59,259,000	0.81%	18,249,000
Pathway 2008	12/26/08	12/26/23				30,000,000	24,382,000	0.33%	6,931,000
Pathway 6	05/24/11	05/24/26				40,000,000	28,290,000	0.39%	15,231,000
Pathway 7	02/07/13	02/07/23				70,000,000	28,808,000	0.40%	40,846,000
Pathway 8	11/23/15	11/23/25				50,000,000	4,075,000	0.06%	45,925,000
Signaler Gulf CCCERA Opportunities	06/03/14	05/31/25				200,000,000	57,119,000	0.78%	145,858,000
EIF USPF I	11/08/02	11/08/12	3rd 1YR	LP	11/08/15	30,000,000	815,000	0.01%	0
EIF USPF II	06/15/05	06/15/15				50,000,000	39,090,000	0.54%	0
EIF USPF III	02/28/07	02/28/17				65,000,000	61,758,000	0.85%	0
EIF USPF IV	06/28/10	06/28/20				50,000,000	49,715,000	0.68%	2,519,000
Regales Investment	02/15/04	02/15/14			old last Inv.	15,000,000	0	0.00%	0
Bay Area Equity Fund	06/14/04	01/15/13	1st 2 YR	LP	1/15/2015	10,000,000	5,750,000	0.08%	0
Bay Area Equity Fund II	2/29/09	12/31/17				10,000,000	10,985,000	0.15%	514,000
Paladin III	11/30/07	12/31/17				25,000,000	21,156,000	0.29%	0
Carpenter Community BancFund	01/31/08	01/31/16				30,000,000	41,618,000	0.57%	1,479,000
Ocean Avenue Fund II	06/11/14	05/31/24				30,000,000	14,464,000	0.20%	14,884,000
Ocean Avenue Fund III	06/11/14	05/31/24				50,000,000	5,000,000	0.07%	45,000,000
Outstanding Commitments						1,155,000,000	626,800,000	8.54%	539,822,000
Total							539,822,000		1,166,622,000

MARKET OPPORTUNITIES	Inception Date	Target Termination	# of Extension	Discretion by GP/LP	New Target Termination	Funding Commitment	Market Value	% of Total Asset	Outstanding Commitment
Oaktree Private Investment Fund 2009	02/28/10	01/31/17				40,000,000	22,996,000	0.32%	5,163,000
Angelo Gordon Energy Credit Opportunities	09/10/15	09/10/20				75,000,000	15,000,000	0.21%	60,000,000
Outstanding Commitments						115,000,000	37,996,000	0.52%	65,163,000
Total							65,163,000		103,159,000

REAL ASSET INVESTMENTS	Inception Date	Target Termination	# of Extension	Discretion by GP/LP	New Target Termination	Funding Commitment	Market Value	% of Total Asset	Outstanding Commitment
Commonfund Capital Natural Resources IX	06/30/13	06/30/20				50,000,000	24,789,000	0.34%	25,000,000
Wastewater Opportunity Fund	12/31/15	11/30/22				25,000,000	1,165,000	0.02%	23,835,000
Aether III & III Surplus	11/30/13	11/30/20				75,000,000	41,584,000	0.57%	34,806,000
Aether IV	01/01/16	01/01/28				50,000,000	500,000	0.01%	49,500,000
ARES/EIF V	09/09/15	09/09/25				50,000,000	0	0.00%	50,000,000
Outstanding Commitments						250,000,000	68,038,000	0.93%	183,141,000
Total							183,141,000		251,179,000

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.

Contra Costa County Employees' Retirement Association

Comprehensive Annual Financial Report

for the Year Ended December 31, 2015



CCCERA's mission is to deliver retirement benefits to members and their beneficiaries through prudent asset management and effective administration, in accordance with all plan provisions.

Featured photography:

On cover: The Last Schooner (*Patrick Smith*)

Contra Costa County Employees' Retirement Association

Comprehensive Annual Financial Report

for the Year Ended December 31, 2015

Issued by:

Chief Executive Officer
Gail Strohl

Contra Costa County Employees' Retirement Association
1355 Willow Way, Suite 221
Concord, California 94520-5728
cccera.org

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Letter of Transmittal

June 21, 2016

Board of Retirement
Contra Costa County Employees' Retirement Association
1355 Willow Way, Suite 221
Concord, CA 94520-5728

Dear Board Members:

I am pleased to present the Contra Costa County Employees' Retirement Association's (CCCERA) Comprehensive Annual Financial Report (CAFR) for the year ended December 31, 2015, our 70th year of operation.

CCCERA is a public employee retirement system that was established by the County of Contra Costa (County) on July 1, 1945, and is administered by the Board of Retirement (Board) to provide service retirement, disability, death, and survivor benefits for County employees and 16 other participating agencies under the California State Government Code, Section 31450 *et seq.* (County Employees Retirement Law of 1937) and Section 7522 *et seq.* (California Public Employees' Pension Reform Act of 2013).

REPORT CONTENTS

CCCERA management is responsible for both the accuracy of the data and the completeness and fairness of the presentation of financial information within this CAFR, including all disclosures. The CAFR is divided into five sections:

The **INTRODUCTORY SECTION** includes a description of CCCERA's management and organizational structure, a letter of transmittal, a listing of the members of the Board, and a listing of professional consultants.

The **FINANCIAL SECTION** presents the financial condition of CCCERA. This section contains the opinion of the independent certified public accountants, Brown Armstrong Accountancy Corporation, Management's Discussion and Analysis of CCCERA's financial activities, the financial statements, and the related supplementary financial information.

The **INVESTMENT SECTION** provides an overview of CCCERA's investment program. This section contains reports on investment activity, investment policies, investment results, and various investment schedules and charts/graphs.

The ACTUARIAL SECTION communicates CCCERA's funding status and presents other actuarial related information. This section contains the certification of the consulting actuary, Segal Consulting, actuarial statistics, and general plan provisions.

The STATISTICAL SECTION presents information on CCCERA's operations on a multi-year basis.

CCCERA AND ITS SERVICES

CCCERA was established on July 1, 1945, to provide retirement allowances and other benefits to the safety and general members employed by the County. Currently, Contra Costa County and 16 other participating agencies are members of CCCERA. The participating agencies include:

- Bethel Island Municipal Improvement District
- Byron, Brentwood, Knightsen Union Cemetery District
- Central Contra Costa Sanitary District
- Contra Costa County Employees' Retirement Association
- Contra Costa Housing Authority
- Contra Costa Mosquito and Vector Control District
- First 5 – Children & Families Commission
- In-Home Supportive Services Authority (IHSS)
- Local Agency Formation Commission (LAFCO)
- Rodeo Sanitary District
- Superior Court of Contra Costa County
- Contra Costa Fire Protection District
- East Contra Costa Fire Protection District
- Moraga-Orinda Fire District
- Rodeo-Hercules Fire Protection District
- San Ramon Valley Fire Protection District

In addition, CCCERA administers retirement, disability, or survivor benefits to retirees or beneficiaries of the following former participating agencies:

- Alamo-Lafayette Cemetery District
- City of Pittsburg
- Delta Diablo Sanitation District
- Diablo Water District
- Ironhouse Sanitary District
- Kensington Fire Protection District
- Superintendent of Schools - Contra Costa County Office of Education
- Stege Sanitary District

CCCERA is governed by the California Constitution, the County Employees Retirement Law of 1937 (CERL), the California Public Employees' Pension Reform Act of 2013 (PEPRA), and the regulations, procedures, and policies adopted by CCCERA's Board of Retirement. The Contra Costa County Board of Supervisors may also adopt resolutions, as permitted by CERL, which may affect benefits of CCCERA members.

The 12 member Board of Retirement is responsible for the general management of CCCERA. Of the twelve members, three are alternates, one for the appointed members, one for safety, and one for retirees. Five board members are appointed by the Contra Costa County Board of Supervisors, one as an alternate. Four board members, including the safety alternate, are elected by CCCERA's active membership. Two board members are elected by the retirees, one as an alternate. The county treasurer serves as an ex-officio member. Board members, with the exception of the county treasurer, serve three year terms in office, with no term limits.

FINANCIAL INFORMATION

This report has been prepared in accordance with generally accepted accounting principles (GAAP) in the United States of America as promulgated by the Governmental Accounting Standards Board (GASB). GAAP requires that management provide a narrative introduction, overview, and analysis to accompany the basic financial statements in the form of management's discussion and analysis (MD&A). This letter of transmittal is designed to complement the MD&A and should be read in conjunction with it. CCCERA's MD&A can be found immediately following the independent auditor's report.

Management of CCCERA is responsible for establishing and maintaining an internal control structure designed to ensure CCCERA's assets are protected from loss, theft, or misuse. The internal controls are designed to provide reasonable, but not absolute, assurance that these objectives are met. Reasonable assurance recognizes the cost of a control relative to the benefits likely to be derived and that these judgments by management are based on estimates. Responsibility for the accuracy, completeness, fair representation of information and all disclosures rests with CCCERA's management. The accounting firm of Brown Armstrong Accountancy Corporation, a certified public accounting firm, provides financial statement independent audit services to CCCERA. The financial audit provides reasonable assurance that CCCERA's financial statements are presented in conformity with GAAP and are free from material misstatement.

ACTUARIAL FUNDING STATUS

CCCERA contracts with an independent actuarial consulting firm, Segal Consulting, to act as the Plan's actuary and conduct annual actuarial valuations, which are presented to the Board annually. On a triennial basis, the actuary also conducts an experience study of the members of CCCERA and makes recommendations to the Board on all economic and non-economic assumptions. The most recent triennial experience study was performed as of December 31, 2015.

CCCERA's funding objective is to meet long-term defined benefit obligations through contributions and investment income. Funds are derived from the excess of additions, which include contributions and investment earnings, over deductions which are comprised of benefits and administrative expenses. Funds are accumulated to meet future benefit obligations to retirees and beneficiaries. This accumulated balance is referred to as the "net position restricted for pensions" in the Statement of Fiduciary Net Position in the Financial Section

of the report. Due to GASB Statement No. 67, the total pension liability is not reported in the basic financial statements, but is disclosed in Note 5, *Net Pension Liability*, to the basic financial statements and in the required supplementary information. The total pension liability is determined by the Plan's actuary and is a measure of the present value of actuarial accrued liabilities estimated to be payable in the future to current retirees, beneficiaries, and active members for service earned to date. The net pension liability is measured as the total pension liability less the amount of the Plan's fiduciary net position. The net pension liability is an accounting measurement for financial statement purposes.

Segal Consulting's actuarial valuation as of December 31, 2014, determined the funding ratio to be 81.7%, using approved assumptions. This ratio compares the actuarial value of assets of the Plan to the actuarial accrued liabilities of the Plan. High ratios indicate a well-funded plan with assets sufficient to cover the Plan's actuarial liabilities. Lower ratios may indicate recent changes to benefit structures, funding of a plan below actuarial requirements, poor asset performance, or a variety of other changes. For a more in-depth review of the funding of the Plan, see the actuarial section of this report.

INVESTMENTS

The Board maintains exclusive control of all retirement system investments and is responsible for establishing investment objectives, strategies, and policies. The California Constitution and Government Code Sections 31594 and 31595 authorize the Board to invest in any investment deemed prudent in the Board's opinion.

The Board has adopted an Investment Policy, which provides the framework for the management of CCCERA's investments. This policy establishes CCCERA's investment objectives and defines the principal duties of the Board, staff, custodian bank, and investment managers. The asset allocation is an integral part of the Investment Policy and is designed to provide an optimum mix of asset classes with return expectations that reflect expected liabilities. A summary of the asset allocation can be found in the investment section of this report.

On a fair value basis, the total net position restricted for pensions increased from \$6.9 billion at December 31, 2014, to \$7.0 billion at December 31, 2015. For the year ended December 31, 2015, CCCERA's investment portfolio returned 2.6%, before investment management fees, reflecting market conditions throughout the year. CCCERA's annualized rate of return was 9.0% over the last three years, 8.7% over the last five years, and 6.7% over the last 10 years, gross of investment expenses.

AWARDS

The Government Finance Officers Association of the United States and Canada (GFOA) awarded a Certificate of Achievement for Excellence in Financial Reporting to CCCERA for its CAFR for the year ended December 31, 2014. The Certificate of Achievement is a prestigious national award recognizing conformance with the highest standards for preparation of state and local government financial reports.

In order to be awarded a Certificate of Achievement, a government unit must publish an easily readable and efficiently organized CAFR, the contents of which meet or exceed program standards. The CAFR must satisfy both accounting principles generally accepted in the United States of America and applicable legal requirements.

A Certificate of Achievement is valid for a period of one year only. It is believed that the current report continues to conform to the Certificate of Achievement program requirements, and it is being submitted to the GFOA for evaluation.

CCCERA was awarded the Public Pension Coordinating Council's (PPCC) Public Pension Standards Award in 2015. The Public Pension Standards are intended to reflect minimum expectations for public retirement system management and administration, and to serve as a benchmark by which all defined benefit public plans should be measured.

SERVICE EFFORTS AND ACCOMPLISHMENTS

Accounting Department –

The accounting department's main goal is to ensure accounting accuracy for financial reporting purposes as well as to be in compliance with accounting standards. Responsibilities continue to increase as CCCERA's investment portfolio grows to include additional investment managers and investment types. In 2015, the funding process was redesigned to include additional automation.

Administrative Department –

The administrative department is responsible for member communications, member record maintenance and retention as well as supporting the other departments, executives and Board of Retirement. In 2015, CCCERA deployed a new website to more effectively communicate with members and the public. Updated legacy and PEPRA handbooks are now available on the website.

Benefits Department –

Delivering retirement benefits to members and their beneficiaries in accordance with all plan provisions begins and ends in the benefits department. This department is responsible for counseling members as they plan for retirement, calculating retirement allowances under the available options, and entering retiring members into the pension administration system under the correct payment option.

The benefits department processes both service retirements as well as disability retirements. The monthly retiree payroll is also performed by the benefits staff including making annual cost-of-living adjustments and fulfilling annual tax reporting requirements. In 2015, documentation was updated for service and disability retirement processes.

Compliance Department –

The compliance department supports CCCERA's executive management and the Board by providing guidance for compliance with laws, regulations, general plan operations, and public policy. The main focus of the department is to assist in preparing and implementing policies and procedures, including internal audit procedures in order to comply with statutory and Board policy requirements.

In 2015, the compliance department created a procedures standards and practices guide and an audit committee guide. In addition, this department created a compensation earnable determination process and review tool to provide advisories to employers.

Human Resources Department –

On August 22, 2014, the Governor signed Senate Bill (SB) 673 allowing CCCERA to become an independent employer on January 1, 2015. Many resolutions and human resources documents were created and CCCERA conducted its first open enrollment for employee benefits.

Member Services Department –

The member services department is responsible for entering members into the retirement system, processing new member enrollments, evaluating reciprocal memberships, setting up and maintaining employee master retirement file records in accordance with all plan provisions. This department also processes employee and employer contributions.

In 2015, the Member Services department was created as a separate and distinct department from the Benefits department. A new Member Services manager was hired and trained to further grow and develop the department. New avenues for increasing effectiveness and efficiencies continue to be explored.

Information Technology Department –

The information technology (IT) department has continued to provide technical expertise in computer and communications technology. Its mission is to plan, direct, and coordinate implementation of CCCERA's information technology program; sets and enforces technology and data security standards and policies; and to provide information technology products, services, guidance, and direction to all departments. In 2015, the IT department began planning to become independent of both voice and data services provided by Contra Costa County.

Investment Department –

The investment department supports the Board by implementing the Board's strategic asset allocation decisions and providing primary oversight of the investment portfolio. This department is primarily responsible for monitoring external asset managers to ensure that they are pursuing their stated investment strategy and that each strategy continues to fulfill the Board's stated investment goals.

In 2015, the investment department collaborated with Association's external investment consultant to craft a new portfolio construction philosophy and a new target asset mix. This department continues to lay the groundwork necessary to successfully implement the Board's desired asset allocation.

ACKNOWLEDGEMENT

The compilation of this report reflects the combined and dedicated effort of many individuals on CCCERA's staff. It is intended to provide complete and reliable information as the basis for making management decisions, as a means of determining compliance with legal provisions, and as a means of determining responsible stewardship of the funds of CCCERA.

Thank you to the Board, the consultants, and staff for their commitment to CCCERA.

Respectfully submitted,



Gail Strohl
Chief Executive Officer

Retirement Board *(As of December 31, 2015)*

Chairperson

John B. Phillips

Term Expires June 30, 2017

Appointed/Elected by Board of Supervisors

Vice-Chairperson

Todd Smithey

Term Expires June 30, 2017

Appointed/Elected by General Members

Secretary

Scott Gordon

Term Expires June 30, 2016

Appointed/Elected by Board of Supervisors

Jerry Telles

Term Expires June 30, 2016

Appointed/Elected by Retirees

Brian Hast

Term Expires June 30, 2016

Appointed/Elected by General Members

Debora Allen

Term Expires June 30, 2017

Appointed/Elected by Board of Supervisors

Candace Andersen

Term Expires June 30, 2017

Appointed/Elected by Board of Supervisors

Gabe Rodrigues

Term Expires June 30, 2017

Appointed/Elected by Safety Members

County Treasurer

Russell V. Watts

Permanent by Office

(Alternate)

Jerry R. Holcombe

Term Expires June 30, 2017

Appointed/Elected by Board of Supervisors

(Alternate)

Louie Kroll

Term Expires June 30, 2016

Appointed/Elected by Retirees

(Alternate)

William Pigeon

Term Expires June 30, 2017

Appointed/Elected by Safety Members

Professional Consultants *(As of December 31, 2015)*

Actuary

- **Segal Consulting**

Benefit Statement Consultant

- **Segal Consulting**

Auditor

- **Brown Armstrong Accountancy Corporation**

Legal Counsel

- **Ice Miller, LLP**

- **Laughlin, Falbo, Levy & Moresi, LLP**
- **Reed Smith LLP**
- **Wiley Price & Radulovich, LLP**

Investment Consultant

- **Verus**

Master Custodian

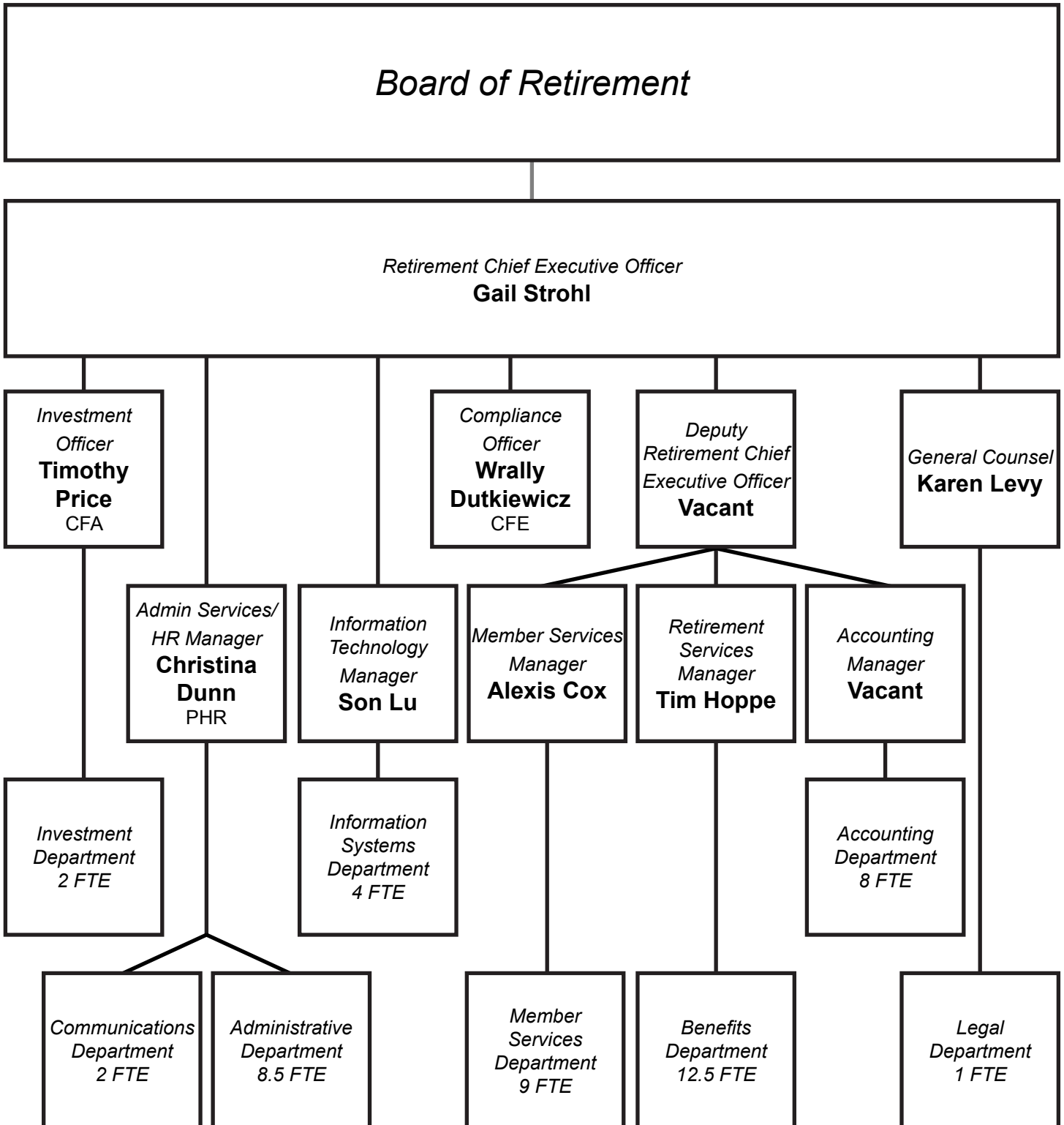
- **State Street Bank & Trust**

Proxy Guideline Voting Agent Service

- **Institutional Shareholder Services, Inc. (ISS)**

Note: List of Investment Managers is located on page 67 of this report.

Administrative Organization Chart (As of December 31, 2015)



GFOA Certificate of Achievement Award



Government Finance Officers Association

Certificate of Achievement for Excellence in Financial Reporting

Presented to

**Contra Costa County
Employees' Retirement Association
California**

For its Comprehensive Annual
Financial Report
for the Fiscal Year Ended

December 31, 2014

A handwritten signature in black ink that reads "Jeffrey R. Egan".

Executive Director/CEO

PPCC Public Pension Standards Award



Public Pension Coordinating Council

***Public Pension Standards Award
For Funding and Administration
2015***

Presented to

***Contra Costa County Employees'
Retirement Association***

In recognition of meeting professional standards for
plan funding and administration as
set forth in the Public Pension Standards.

Presented by the Public Pension Coordinating Council, a confederation of

National Association of State Retirement Administrators (NASRA)
National Conference on Public Employee Retirement Systems (NCPERS)
National Council on Teacher Retirement (NCTR)

A handwritten signature in black ink that reads "Alan H. Winkle". The signature is fluid and cursive, with the first name "Alan" and last name "Winkle" clearly legible.

Alan H. Winkle
Program Administrator

II. Financial Section

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BROWN
ARMSTRONG

CERTIFIED
PUBLIC
ACCOUNTANTS

BROWN ARMSTRONG

Certified Public Accountants

INDEPENDENT AUDITOR'S REPORT

To the Board of Retirement and Audit Committee of
Contra Costa County Employees' Retirement Association
Concord, California

Report on the Financial Statements

We have audited the accompanying statement of fiduciary net position of the Contra Costa County Employees' Retirement Association (CCCERA), a pension trust fund of the County of Contra Costa, California, as of December 31, 2015, and the related statement of changes in fiduciary net position for the year then ended and the related notes to the financial statements, which collectively comprise CCCERA's basic financial statements as listed in the table of contents.

Management's Responsibility for the Financial Statements

Management is responsible for the preparation and fair presentation of these financial statements in accordance with accounting principles generally accepted in the United States of America; this includes the design, implementation, and maintenance of internal control relevant to the preparation and fair presentation of financial statements that are free from material misstatement, whether due to fraud or error.

Auditor's Responsibility

Our responsibility is to express an opinion on these financial statements based on our audit. We conducted our audit in accordance with auditing standards generally accepted in the United States of America and the standards applicable to financial audits contained in *Government Auditing Standards*, issued by the Comptroller General of the United States. Those standards require that we plan and perform the audit to obtain reasonable assurance about whether the financial statements are free from material misstatement.

An audit involves performing procedures to obtain audit evidence about the amounts and disclosures in the financial statements. The procedures selected depend on the auditor's judgment, including the assessment of the risks of material misstatement of the financial statements, whether due to fraud or error. In making those risk assessments, the auditor considers internal control relevant to CCCERA's preparation and fair presentation of the financial statements in order to design audit procedures that are appropriate in the circumstances, but not for the purpose of expressing an opinion on the effectiveness of CCCERA's internal control. Accordingly, we express no such opinion. An audit also includes evaluating the appropriateness of accounting policies used and the reasonableness of significant accounting estimates made by management, as well as evaluating the overall financial statement presentation of the financial statements. We believe that the audit evidence we have obtained is sufficient and appropriate to provide a basis for our audit opinion.

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FRESNO, CA 93711
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PASADENA OFFICE

260 S. LOS ROBLES AVENUE
SUITE 310
PASADENA, CA 91101
TEL 626.204.6542
FAX 626.204.6547

STOCKTON OFFICE

5250 CLAREMONT AVENUE
SUITE 150
STOCKTON, CA 95207
TEL 209.451.4833

REGISTERED with the Public Company
Accounting Oversight Board and
MEMBER of the American Institute of
Certified Public Accountants

Opinion

In our opinion, the financial statements referred to above present fairly, in all material respects, the fiduciary net position of CCCERA as of December 31, 2015, and the changes in fiduciary net position for the year then ended, in accordance with accounting principles generally accepted in the United States of America.

Emphasis of Matter

As discussed in Note 5 to the financial statements, the net pension liability of the participating employers as of December 31, 2015, was \$1,507,127 thousand. The fiduciary net position as a percentage of the total liability as of December 31, 2015, was 82.2%. The actuarial valuations are very sensitive to the underlying actuarial assumptions including a discount rate as of December 31, 2015, of 7.0%, which represents the long-term expected rate of return. Our opinion is not modified with respect to this matter.

Additionally, as discussed in Note 2 to the financial statements, the financial statements include investments that are not listed on national exchanges or for which quoted market prices are not available. These investments include real assets, real estate, and alternative investments. Such investments totaled \$1,504,499 thousand (18.7% of total assets) at December 31, 2015. Where a publicly listed price is not available, the management of CCCERA uses alternative sources of information including audited financial statements, unaudited interim reports, independent appraisals, and similar evidence to determine the fair value of the investments. Our opinion is not modified with respect to these matters.

Other Matters

Required Supplementary Information

Accounting principles generally accepted in the United States of America require that the management's discussion and analysis and required supplementary information, as listed in the table of contents, be presented to supplement the basic financial statements. Such information, although not a part of the basic financial statements, is required by the Governmental Accounting Standards Board, who considers it to be an essential part of financial reporting for placing the basic financial statements in an appropriate operational, economic, or historical context. We have applied certain limited procedures to the required supplementary information in accordance with auditing standards generally accepted in the United States of America, which consisted of inquiries of management about the methods of preparing the information and comparing the information for consistency with management's responses to our inquiries, the basic financial statements, and other knowledge we obtained during our audit of the basic financial statements. We do not express an opinion or provide any assurance on the information because the limited procedures do not provide us with sufficient evidence to express an opinion or provide any assurance.

Other Supplementary Information

Our audit was conducted for the purpose of forming an opinion on the financial statements that collectively comprise CCCERA's basic financial statements. The other supplementary information and the introductory, investment, actuarial, and statistical sections as listed in the table of contents are presented for purposes of additional analysis and are not a required part of the basic financial statements.

The other supplementary information is the responsibility of management and was derived from and relates directly to the underlying accounting and other records used to prepare the basic financial statements. Such information has been subjected to the auditing procedures applied in the audit of the basic financial statements and certain additional procedures, including comparing and reconciling such information directly to the underlying accounting and other records used to prepare the basic financial statements or to the basic financial statements themselves, and other additional procedures in accordance with auditing standards generally accepted in the United States of America. In our opinion, the other supplementary information is fairly stated in all material respects in relation to the basic financial statements as a whole.

The introductory, investment, actuarial, and statistical sections have not been subjected to the auditing procedures applied in the audit of the basic financial statements and, accordingly, we do not express an opinion or provide any assurance on them.

Report on Summarized Comparative Information

We have previously audited CCCERA's December 31, 2014 financial statements, and our report dated June 11, 2015, expressed an unmodified opinion on those audited financial statements. In our opinion, the summarized comparative information presented herein as of December 31, 2014, is consistent, in all material respects, with the audited financial statements from which it has been derived.

Other Reporting Required by *Government Auditing Standards*

In accordance with *Government Auditing Standards*, we have also issued our report dated June 21, 2016, on our consideration of CCCERA's internal control over financial reporting and on our tests of its compliance with certain provisions of laws, regulations, contracts, agreements, and other matters. The purpose of that report is to describe the scope of our testing of internal control over financial reporting and compliance and the results of that testing, and not to provide an opinion on the internal control over financial reporting or on compliance. That report is an integral part of an audit performed in accordance with *Government Auditing Standards* in considering CCCERA's internal control over financial reporting and compliance.

BROWN ARMSTRONG
ACCOUNTANCY CORPORATION

Brown Armstrong
Accountancy Corporation

Bakersfield, California
June 21, 2016



Management's Discussion and Analysis

As management of the Contra Costa County Employees' Retirement Association (CCCERA), we offer readers of CCCERA's financial statements this narrative overview and analysis of the financial position and results of operations for the year ended December 31, 2015 with comparative totals. The information presented here, in conjunction with the Notes to the Financial Statements beginning on page 31, provide a clear picture of CCCERA's overall financial status and activities.

Financial Highlights

- The net position – restricted for pensions of CCCERA at the close of December 31, 2015 and 2014 totaled \$7.0 billion and \$6.9 billion, respectively. All of the net position is available to meet CCCERA's ongoing obligations to plan participants and their beneficiaries.
- CCCERA's total net position – restricted for pensions increased by \$67.7 million, or 1.0%, and \$450.6 million, or 7%, as of December 31, 2015 and 2014, respectively. The increases in 2015 and 2014 are primarily a result of positive investment returns as well as contributions received.
- Total Additions, as reflected in the Statement of Changes in Fiduciary Net Position, for the years ended December 31, 2015 and 2014 were \$492.7 million and \$862.1 million, respectively. This includes employer and plan member contributions of \$409.1 million, investment income of \$82.4 million, and net securities lending income of \$1.2 million for the year ended December 31, 2015, along with employer and plan member contributions of \$372.0 million, investment income of \$488.9 million and net securities lending income of \$1.2 million for the year ended December 31, 2014. The 42.8% decrease in additions to net position over the prior year is mainly due to a decrease in net investment income.
- Total Deductions, as reflected in the Statement of Changes in Fiduciary Net Position, totaled \$425.0 million for the year ended December 31, 2015, an increase of \$13.5 million over the year ended

December 31, 2014, or approximately 3.3%, mainly attributed to the increase in retiree payroll. Benefits paid to retirees and beneficiaries increased from \$387.0 million in 2014 to \$400.8 million in 2015, or approximately 3.5%. This increase can be attributed to an increase in the number of new retirees and an annual cost-of-living (COLA) increase.

- CCCERA's funding objective is to meet long-term benefit obligations through contributions and investment income. As of December 31, 2014, the date of CCCERA's last actuarial pension plan valuation, the funded status for CCCERA (the ratio of the valuation of assets to the actuarial liabilities) was 81.7%, compared to 76.4% in the previous year. The increase in the funding ratio is due to contributions in excess of the value of benefits earned as well as investment earnings in excess of the assumed rate.
- The total investment portfolio finished 2015 with a gross return of 2.6%, compared to 8.4% in 2014.
- Based on the Governmental Accounting Standards Board (GASB) Statement No. 67, CCCERA has a net pension liability (NPL) of \$1.5 billion and \$1.2 billion as of December 31, 2015 and 2014, respectively. The Plan fiduciary net position as a percentage of the total pension liability is 82.2% and 85.2% as of December 31, 2015 and 2014, respectively. The net pension liability as a percentage of covered payroll is 212.3% and 178.1% as of December 31, 2015 and 2014, respectively. Refer to Note 5, *Net Pension Liability*, and Required Supplementary Information sections of this report for more information.

Overview of the Financial Statements

This Management's Discussion and Analysis is intended to serve as an introduction to CCCERA's financial statements, which are comprised of these components:

1. Statement of Fiduciary Net Position
2. Statement of Changes in Fiduciary Net Position

Contra Costa County Employees' Retirement Association
Management's Discussion and Analysis (Continued)

3. Notes to the Financial Statements
4. Required Supplementary Information
5. Notes to the Required Supplementary Information
6. Other Supplementary Information
7. Other Information

Please note, however, that this report also contains clarifying information to supplement the basic financial statements listed above.

The Statement of Fiduciary Net Position is a snapshot of account balances at year-end. It discloses the assets and any liabilities that are owed as of year-end. The net position, which is the assets less liabilities reflect the funds available for future use.

The Statement of Changes in Fiduciary Net Position provides a view of all the activities that occurred during the year and shows the impact of those activities as additions and deductions to the Plan.

Both financial statements and the required disclosures are in compliance with the accounting principles and reporting guidelines as set forth by the Governmental Accounting Standards Board (GASB), using the accrual basis of accounting. CCCERA complies with all material requirements of these principles and guidelines.

The Statement of Fiduciary Net Position and the Statement of Changes in Fiduciary Net Position report information about CCCERA's financial position and activities. These statements include all assets and liabilities, using the accrual basis of accounting, which is similar to the accounting used by most private-sector companies. All of the current year's revenues and expenses are recognized when they are earned and incurred, regardless of when cash is received or paid. All investment purchases and sales are reported as of the trade date, not the settlement date. Investments are reported at current fair value. Both realized and unrealized investment gains and losses are recognized. Each component of capital assets is depreciated over its useful life.

These two statements report CCCERA's net position restricted for pensions and is one way to measure the

Plan's financial position. Over time, increases and decreases in CCCERA's net position are indicators of whether its financial position is improving or deteriorating. Other factors, such as market conditions, should be considered in measuring CCCERA's overall financial position. The increase in CCCERA's fiduciary net position for the year ended December 31, 2015, was 1.0%. This increase is due primarily to investment returns generated as well as contributions received. CCCERA's total fund return was 2.6% for the year ending December 31, 2015.

CCCERA's Statement of Fiduciary Net Position and Statement of Changes in Fiduciary Net Position appear on pages 29 and 30.

Notes to the Financial Statements provide additional information that is essential to a full understanding of the data provided in the financial statements. The Notes provide detailed discussion of key policies, programs, and activities that occurred during the year. Asset allocation, the long-term expected rate of return, discount rate, key actuarial assumptions, and the Schedule of Net Pension Liability based on GASB 67 are also included in this section. Notes to the Financial Statements appear on pages 31 - 52.

Required Supplementary Information follows the notes and includes several GASB 67 schedules. The Schedule of Net Pension Liability in the notes section together with the Schedule of Changes in Net Pension Liability and Related Ratios provides an up-to-date financial indication of the extent to which the total pension liability is covered by the fiduciary net position of the pension plan. This information will improve the financial statements users' ability to compare the total pension liability for similar types of pension plans. Please note that liabilities on these schedules are calculated solely for financial reporting purposes and are not intended to provide information about the funding of CCCERA's benefits.

Another schedule, the Schedule of Employer Contributions, helps the reader determine if plan sponsors are meeting the actuarially determined contributions over a period of time. Information about rates of return on pension plan investments, taking account of monetary flows into and out

Contra Costa County Employees' Retirement Association
 Management's Discussion and Analysis (Continued)

of the market, is provided. The Schedule of Investment Returns includes a money-weighted return performance calculation which is net of investment expenses. These schedules, as well as Notes to the Required Supplementary Information, appear on pages 53 - 55.

The Schedule of Funding Progress for funding purposes is presented in the Actuarial Section on page 73.

Other Supplementary Information includes the Schedule of Administrative Expenses, Schedule of Investment Expenses, and Schedule of Payments to Consultants. It appears on pages 56 - 58.

Financial Analysis

As of December 31, 2015, CCCERA has \$7.0 billion in net position restricted for pensions, which means that assets of \$8.1 billion exceed liabilities of \$1.1 billion. As of December 31, 2014, CCCERA's net position restricted for pensions totaled \$6.9 billion. The net position restricted for pensions is available to meet CCCERA's ongoing obligation to plan participants and their beneficiaries.

As of December 31, 2015, the net position restricted for pensions increased by 1.0% over 2014, primarily due to changes in the fair value of investments. Current assets and current liabilities also changed by offsetting amounts due to the recording of the securities lending cash collateral.

Despite recent market volatility and competitive retirement benefits, CCCERA remains in a good financial position to meet its obligations to plan participants and beneficiaries.

CAPITAL ASSETS — Capital assets with an initial cost of more than \$5,000 and an estimated useful life in excess of three years may be capitalized and depreciated/amortized. Depreciation/amortization is calculated using the straight-line method over the estimated useful lives of the assets. CCCERA's capital assets decreased from \$0.5 million as of December 31, 2014 to \$0.3 million (net of accumulated depreciation and amortization) as of December 31, 2015. The investment in capital assets includes servers, equipment, furniture, and leasehold improvements. The total decrease in CCCERA's investment in capital assets from 2014 to 2015 was 35.5% primarily due to the normal

amortization and depreciation of assets taken by CCCERA annually.

Starting in 2008, CCCERA follows Government Code Section 31580.3, which allows expensing of software, hardware, and computer technology consulting services in support of the software or hardware used in the administration of the retirement system. During 2015 and 2014, CCCERA expensed \$273,792 and \$130,679 of software, hardware, and computer technology consulting services, respectively.

FIDUCIARY NET POSITION				
<i>(Dollars in Thousands)</i>				
Assets	2015	2014	Amount Increase/ (Decrease)	Percent Increase/ (Decrease)
Current and Other Assets	\$1,125,848	\$1,441,269	(\$315,421)	(21.9%)
Investments at Fair Value	6,922,863	6,705,204	217,659	3.2%
Capital Assets	302	468	(166)	(35.5%)
Total Assets	8,049,013	8,146,941	(97,928)	(1.2%)
Liabilities				
Current Liabilities	1,072,431	1,238,031	(165,600)	(13.4%)
Total Liabilities	1,072,431	1,238,031	(165,600)	(13.4%)
NET POSITION - RESTRICTED FOR PENSIONS	\$6,976,582	\$6,908,910	\$67,672	1.0%

CCCERA has annual valuations completed by its independent actuary, Segal Consulting. The purpose of the valuation is to determine the future contributions by the members and employers needed to provide for the prescribed benefits. The valuation takes into account CCCERA's policy to smooth the impact of market volatility by spreading each year's investment gains or losses over five years. Despite variations in the stock market, CCCERA's management and actuary concur that CCCERA remains in a financial position that will enable the Plan to meet its obligations to participants and beneficiaries. CCCERA remains focused on the long-term performance of the fund, dependent on a strong and successful investment program, risk management, and strategic planning. CCCERA's latest Actuarial Valuation is as of December 31, 2014.

Contra Costa County Employees' Retirement Association
Management's Discussion and Analysis (Continued)

RESERVES — Pension plans establish reserves for various anticipated liabilities. CCCERA's reserves have been established to account for the accumulation of employer and employee contributions, the amounts available to meet the obligation of retired members as well as other items. A complete listing of CCCERA's reserves and corresponding balances for December 31, 2015 are presented in Note 8, *Reserves and Designations*.

CCCERA'S ACTIVITIES

CHANGES IN FIDUCIARY NET POSITION				
<i>(Dollars in Thousands)</i>				
Additions:	2015	2014	Amount Increase/ (Decrease)	Percent Increase/ (Decrease)
Employer Contributions	\$323,720	\$293,760	\$29,960	10.2%
Plan Member Contributions	85,361	78,258	7,103	9.1%
Net Investment Income	82,429	488,873	(406,444)	(83.1%)
Net Securities Lending Income	1,165	1,167	(2)	(0.1%)
Total Additions	492,675	862,058	(369,383)	(42.8%)
Deductions:				
Pension Benefits	400,759	387,026	13,733	3.5%
Refunds	4,434	6,798	(2,364)	(34.8%)
Administrative	8,115	6,980	1,135	16.3%
Other Expenses	11,695	10,662	1,033	9.7%
Total Deductions	425,003	411,466	13,537	3.3%
INCREASE IN NET POSITION - RESTRICTED FOR PENSIONS	\$67,672	\$450,592	(\$382,920)	(85.0%)

ADDITIONS TO FIDUCIARY NET POSITION — The primary sources of funding for CCCERA member benefits are employer contributions, plan member contributions, and net investment income. Total additions to fiduciary net position for the years ended December 31, 2015 and 2014, were \$492.7 million and \$862.1 million, respectively. The decrease in the current year is primarily due to investment gains being lower than in the previous year. The Net Investment Income, before securities lending, for the years ended December 31, 2015 and 2014 totaled \$82.4 million

and \$488.9 million, respectively. The investment section of this report reviews the result of investment activity for the year ended December 31, 2015. Employer Contributions were \$323.7 million as of December 31, 2015, an increase of \$30.0 million, or 10.2%, over 2014. Plan Member Contributions were \$85.4 million as of December 31, 2015, an increase of \$7.1 million, or 9.1%, from prior year. The increases are mostly due to higher employer and employee contribution rates.

DEDUCTIONS FROM FIDUCIARY NET POSITION

— CCCERA was created to provide lifetime retirement annuities, survivor benefits, and permanent disability benefits to qualified members and their beneficiaries. The cost of such programs includes recurring benefit payments as designated by the Plan, refund of contributions to terminated employees, and the cost of administering the system. Total deductions from fiduciary net position for the years ended December 31, 2015 and 2014, were \$425.0 million and \$411.5 million, respectively. Retirement allowances, survivor benefits, and permanent disability benefits were \$400.8 million as of December 31, 2015, an increase of \$13.7 million, or 3.5%, over 2014. The growth in benefit payments was due to the combined effects of the following: (1) the net increase in the number of retirees and beneficiaries for the year and (2) the increase in the average retirement allowance of those who were added to the retirement payroll.

Member refunds were \$4.4 million in 2015, a decrease of \$2.4 million, or 34.8%, from 2014. Member refunds were high in 2014 due to a higher amount of terminated members who requested withdrawals.

Administrative expense was \$8.1 million for 2015. Administrative expense covers the basic costs of operating the retirement system, including information technology systems. Operating costs include staffing, office expense, depreciation/amortization, and miscellaneous expenses. The system's administrative expenses increased by \$1.1 million, or 16.3%, in 2015. The increase was mainly due to increased full-time equivalent staff salaries and benefits.

The Board of Retirement approves the annual budget for CCCERA. California Government Code Section 31580.2(a) limits the annual administrative expense to not exceed the greater of either of the following: (1) twenty-one hundredths of one percent (0.21%) of the accrued actuarial

Contra Costa County Employees' Retirement Association
 Management's Discussion and Analysis (Continued)

liability of the retirement system; or (2) two million dollars (\$2,000,000), as adjusted annually by the amount of the annual cost-of-living adjustment computed in accordance with Article 16.5. CCCERA has consistently met its administrative expense budget for the current year and prior years.

Deductions of \$425.0 million are less than additions of \$492.7 million, resulting in an increase of \$67.7 million in fiduciary net position for the year ended December 31, 2015.

CHANGE IN FIDUCIARY NET POSITION — The change in fiduciary net position consists of total additions reduced by total deductions. The change in fiduciary net position decreased by \$382.9 million for the year ended December 31, 2015. This decrease is due to investment gains being lower than in the previous year.

NET PENSION LIABILITY— CCCERA is subject to the provisions of GASB Statement No. 67, *Financial Reporting for Pension Plans*, beginning with the year ended December 31, 2014 and CCCERA's participating employers are subject to the provisions of GASB Statement No. 68, *Accounting and Financial Reporting for Pensions*, beginning with the fiscal year ended June 30, 2015. These standards require governments to recognize their long-term obligation for pension benefits as a liability on their balance sheets, to recognize their annual pension expense as a comprehensive measurement of the annual cost of pension benefits, and expands note disclosures and Required Supplementary Information for pension plans and their participating employers.

Pursuant to GASB Statement No. 67, the funded status and unfunded actuarial accrued liability (UAAL) of the Plan are no longer presented in the notes or required supplementary information. The UAAL was determined by subtracting the excess of the actuarial accrued liability (discounted at the Plan's assumed rate of return) from the actuarial value of assets (determined by smoothing values over a certain number of years to reduce volatility) and represented the costs allocated to date for current plan members that are not covered by the actuarial value of assets. The UAAL has now been replaced by the net pension liability (NPL), which represents the excess of the total pension liability (using an entry age cost method, discounted at a discount rate that reflects the expected return on assets) over fiduciary net position (valued at fair value). NPL is similar

to UAAL but uses market assets, not smoothed assets. This is a conceptual shift by the GASB in the measurement of pension liabilities to provide a consistent, standardized methodology that allows comparability of data and increased transparency of the pension liability across all plans. CCCERA has complied with GASB Statement No. 67 for the years ended December 31, 2015 and December 31, 2014.

Based on Segal Consulting's Governmental Accounting Standards (GAS) 67 Actuarial Valuation as of December 31, 2015, the Net Pension Liability (NPL) of participating employers on a market basis is \$1.5 billion as of December 31, 2015 and \$1.2 billion as of December 31, 2014. The increase is primarily due to the 0.94% return on the market value of assets during 2015 (that was less than the assumed return of 7.25%) and to changes in actuarial assumptions. The \$1.5 billion was measured using the new actuarial assumptions and the NPL would have been lower by about \$72 million if measured using the old assumptions. Refer to Note 5, *Net Pension Liability* and the Required Supplementary Information section of this report for further information.

Changes in Net Pension Liability As of December 31, 2015 and 2014				
<i>(Dollars in Thousands)</i>				
	2015 (a)	2014 (b)	Amount Increase/ (Decrease) (c) = (a) - (b)	Percent Increase/ (Decrease) (c) / (b)
Total Pension Liability	\$8,483,709	\$8,104,611	\$379,098	4.7%
Less Plan Fiduciary Net Position	6,976,582	6,908,910	67,672	1.0%
Net Pension Liability	\$1,507,127	\$1,195,701	\$311,426	26.0%

PENSION REFORM — Governor Jerry Brown signed the California Public Employees' Pension Reform Act of 2013 (PEPRA), which became effective January 1, 2013. While it has been called one of the largest pieces of pension reform legislation on record, it had minimal impact on current and retired CCCERA members hired prior to January 1, 2013. Most changes and provisions affected new public employees hired on or after January 1, 2013. Some new provisions that did impact current or retired

CCCERA members were changes in what can be included in compensation for retirement purposes, new restrictions on the ability of a retiree to return to work with a CCCERA employer without reinstatement as an active member unless certain conditions are met, and elimination of employers' ability to adopt an enhanced benefit formula and apply it to past service. In addition, for new public employees, the legislation reduces benefit formulas, limits pensionable income, expands the final compensation period from one year to three years, and requires the new employee to pay a larger share of normal costs.

OVERALL ANALYSIS — For the years ended December 31, 2015 and 2014, CCCERA's financial position and results from operations have experienced an increase over the prior year. For 2015, CCCERA's net position increased to \$7.0 billion from \$6.9 billion in 2014. The overall increase in net position for December 31, 2015 is primarily attributable to the appreciation in the fair value of the Plan's broadly diversified portfolio. Despite fluctuations in the financial markets, CCCERA remains in a sound financial position to meet its obligations to plan participants and beneficiaries. The current financial position results from a strong and successful investment program, risk management and strategic planning. As a long-term investor, CCCERA can take advantage of price volatility along with a diversified exposure to domestic and international equities, fixed income investments, natural resources, real estate, infrastructure, private equity and overlay programs.

CCCERA's Fiduciary Responsibilities

CCCERA's Board of Retirement (Board) and management are fiduciaries of the pension trust fund. Under the California Constitution and other applicable law, the assets can only be used for the exclusive benefit of plan participants and their beneficiaries and to defray the administrative and investment expenses of the Plan.

Requests for Information

The Comprehensive Annual Financial Report (CAFR) is designed to provide the Board, our membership, taxpayers, investment managers, and others with a general overview of CCCERA's financial position and to show accountability for the funds it receives.

Questions concerning any of the information provided in this report or requests for additional financial information should be addressed to:

Contra Costa County Employees'
Retirement Association
Attn: Accounting Division
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Respectfully submitted,



Gail Strohl
Chief Executive Officer
June 21, 2016

Basic Financial Statements

Statement of Fiduciary Net Position

Statement of Fiduciary Net Position		
As of December 31, 2015 (With Comparative Totals)		
	<i>(Dollars in Thousands)</i>	
ASSETS	2015	2014
Cash:		
Cash equivalents	\$298,031	\$336,510
Cash collateral - securities lending	285,451	277,254
TOTAL CASH & CASH EQUIVALENTS	583,482	613,764
Receivables:		
Contributions	8,497	8,860
Investment trades	494,429	772,963
Investment income	22,027	25,968
Installment contract (see Note 11)	17,116	18,489
Other	114	284
TOTAL RECEIVABLES	542,183	826,564
Investments at fair value:		
Stocks	2,843,799	2,850,120
Bonds	2,269,754	2,051,100
Real assets	355,497	329,286
Real estate	859,796	934,127
Alternative investments	594,017	540,571
TOTAL INVESTMENTS	6,922,863	6,705,204
Other assets:		
Prepaid expenses/deposits	183	941
Capital assets, net of accumulated depreciation/amortization of \$2,574 and \$2,350, respectively	302	468
TOTAL ASSETS	8,049,013	8,146,941
LIABILITIES		
INVESTMENT TRADES	618,462	778,448
SECURITIES LENDING	285,451	277,254
EMPLOYER CONTRIBUTIONS UNEARNED	150,472	164,557
RETIREMENT ALLOWANCE PAYABLE	6,782	6,505
ACCOUNTS PAYABLE	6,586	6,975
CONTRIBUTIONS REFUNDABLE	2,084	1,936
OTHER LIABILITIES	2,594	2,356
TOTAL LIABILITIES	1,072,431	1,238,031
NET POSITION - RESTRICTED FOR PENSIONS	\$6,976,582	\$6,908,910

See accompanying notes to the financial statements.

Statement of Changes in Fiduciary Net Position

Statement of Changes in Fiduciary Net Position

For the year ended December 31, 2015 (With Comparative Totals)

(Dollars In Thousands)

ADDITIONS	2015	2014
Contributions:		
Employer contributions	\$323,720	\$293,760
Plan member contributions	85,361	78,258
TOTAL CONTRIBUTIONS	409,081	372,018
Investment income:		
Net (depreciation)/appreciation in fair value of investments	(97,824)	247,523
Net appreciation in fair value of real estate	40,704	114,444
Interest	89,665	77,476
Dividends	46,800	46,415
Real estate income, net	47,769	47,666
Investment expense	(43,059)	(41,600)
Other expense	(1,626)	(3,051)
NET INVESTMENT INCOME, BEFORE SECURITIES LENDING	82,429	488,873
Securities lending income (expense):		
Earnings	961	836
Rebates	593	720
Fees	(389)	(389)
NET SECURITIES LENDING INCOME	1,165	1,167
NET INVESTMENT INCOME	83,594	490,040
TOTAL ADDITIONS	492,675	862,058
DEDUCTIONS		
Benefits paid	400,759	387,026
Contribution prepayment discount	9,983	9,538
Administrative	8,115	6,980
Refunds of contributions	4,434	6,798
Other	1,712	1,124
TOTAL DEDUCTIONS	425,003	411,466
NET INCREASE IN NET POSITION	67,672	450,592
NET POSITION - RESTRICTED FOR PENSIONS		
Beginning of year	6,908,910	6,458,318
END OF YEAR	\$6,976,582	\$6,908,910

See accompanying notes to the financial statements.

Notes to the Financial Statements *(December 31, 2015)*

Note 1. Plan Description

The Contra Costa County Employees' Retirement Association (CCCERA) is governed by the Board of Retirement (Board) under the County Employees Retirement Law of 1937 (CERL); the California Public Employees' Pension Reform Act of 2013 (PEPRA); and the California State Constitution. Members should refer to CERL and PEPRA for more complete information.

General

CCCERA is a defined benefit plan (the Plan) initially organized under the provisions of CERL on July 1, 1945. It provides benefits upon retirement, death or disability of members. Prior to 2010, CCCERA operated as a cost-sharing, multiple employer defined benefit pension plan that covered substantially all of the employees of the County of Contra Costa (the County) and 16 other member agencies.

In October 2009, the Retirement Board depooled CCCERA's assets, actuarial accrued liability (AAL), and normal cost both by tier and employer for determining employer contribution rates. This Board action yielded 12 separate cost groups by employer, with the exception of smaller employers (those with less than 50 active members at that time) who continue to be pooled with the applicable County tier. The December 31, 2009 valuation was the first to incorporate the new "depooled" employer contribution rates, and those rates were effective July 1, 2011.

CCCERA's membership as of December 31, 2015 and 2014 is presented below.

Comparative Membership		
CURRENT MEMBERS:	2015	2014
Vested		
General, Tier 1 Enhanced	512	509
General, Tier 1 Non-enhanced	6	7
General, Tier 2	-	-
General, Tier 3 Enhanced	4,437	4,421
General, Tier 4 (2% Max COLA)	-	-
General, Tier 4 (3% Max COLA)	-	-
General, Tier 5 (2% Max COLA)	3	-
General, Tier 5 (3%/4% Max COLA)	1	-
TOTAL GENERAL	4,959	4,937
Safety, Tier A Enhanced	967	990
Safety, Tier A Non-enhanced	14	13
Safety, Tier C Enhanced	76	68
Safety, Tier D	-	-
Safety, Tier E	-	-
TOTAL SAFETY	1,057	1,071
TOTAL VESTED	6,016	6,008
Non-Vested		
General, Tier 1 Enhanced	68	86
General, Tier 1 Non-enhanced	4	4
General, Tier 2	-	-
General, Tier 3 Enhanced	1,005	1,308
General, Tier 4 (2% Max COLA)	5	2
General, Tier 4 (3% Max COLA)	78	44
General, Tier 5 (2% Max COLA)	1,150	439
General, Tier 5 (3%/4% Max COLA)	947	954
TOTAL GENERAL	3,257	2,837
Safety, Tier A Enhanced	67	60
Safety, Tier A Non-enhanced	-	1
Safety, Tier C Enhanced	71	96
Safety, Tier D	92	81
Safety, Tier E	142	76
TOTAL SAFETY	372	314
TOTAL NON-VESTED	3,629	3,151
TOTAL CURRENT MEMBERS	9,645	9,159

Contra Costa County Employees' Retirement Association
Notes to the Financial Statements (Continued)

Comparative Membership (Continued)		
RETIREES AND BENEFICIARIES RECEIVING BENEFITS:		
	2015	2014
General - Service	5,528	5,439
General - Beneficiary	1,013	917
General - Nonservice-Connected Disability	153	149
General - Service-Connected Disability	254	261
TOTAL GENERAL	6,948	6,766
Safety - Service	1,210	1,226
Safety - Beneficiary	392	368
Safety - Nonservice-Connected Disability	21	20
Safety - Service-Connected Disability	497	491
TOTAL SAFETY	2,120	2,105
TOTAL RETIREES AND BENEFICIARIES	9,068	8,871
INACTIVE VESTED MEMBERS ENTITLED TO BUT NOT YET RECEIVING BENEFITS:		
General, Tier 1 Enhanced	226	225
General, Tier 1 Non-enhanced	12	14
General, Tier 2	220	248
General, Tier 3 Enhanced	1,590	1,613
General, Tier 4 (2% Max COLA)	-	-
General, Tier 4 (3% Max COLA)	4	3
General, Tier 5 (2% Max COLA)	132	23
General, Tier 5 (3%/4% Max COLA)	209	140
TOTAL GENERAL	2,393	2,266
Safety, Tier A Enhanced	301	310
Safety, Tier A Non-enhanced	6	7
Safety, Tier C Enhanced	61	51
Safety, Tier D	13	10
Safety, Tier E	16	3
TOTAL SAFETY	397	381
TOTAL INACTIVE VESTED MEMBERS	2,790	2,647
TOTAL MEMBERSHIP	21,503	20,677

CCCERA, with its own governing board, is an independent governmental entity, separate and distinct from the County of Contra Costa. CCCERA is presented in the County's basic financial statements as a pension trust fund. Costs of administering the Plan are financed through contributions and investment earnings.

Effective January 1, 2015, California Senate Bill 673 (SB 673) makes the CCCERA retirement system an independent "district" and the employer for its entire staff, subject to terms and conditions of employment established by the Board.

Benefit Provisions

The Plan is currently divided into thirteen benefit levels in accordance with CERL and PEPRA. These levels are known as General Tier 1 (Enhanced and Non-enhanced); General Tier 2, General Tier 3 Enhanced, General Tier 4 (2% and 3% maximum Cost-of-Living Adjustments (COLAs)), General Tier 5 (2% and 3%/4% maximum COLAs), Safety Tier A (Enhanced and Non-enhanced), Safety Tier C Enhanced, Safety Tier D, and Safety Tier E.

On October 1, 2002, the Contra Costa County Board of Supervisors adopted Resolution No. 2002/608, which provides enhanced benefit changes commonly known as 3% at 50 for safety members and 2% at 55 for general members, effective on July 1, 2002 and January 1, 2003, respectively. Effective January 1, 2005, the enhanced benefits were applied to the bargaining units represented by the California Nurses Association and the nonrepresented employees within similar classifications as employees in bargaining units represented by the California Nurses Association, as well as the supervisors and managers of those employees. Effective July 1, 2005, East Contra Costa Fire Protection District adopted the enhanced benefit structure for its employees. In addition, each Special District that is a participant of CCCERA, and whose staff are not County employees covered by Resolution No. 2002/608, may elect to participate in the enhanced benefits. As of December 31, 2012, nine (9) general member agencies and four (4) safety member agencies have adopted enhanced benefits for their employees. A fifth safety member agency adopted enhanced benefits for its general members in 2003, but not for safety members. Under PEPRA, which became effective January 1, 2013, Districts that have not adopted enhanced benefits will no longer be allowed to do so.

Legislation was signed by the Governor in 2002 which allowed the County, effective October 1, 2002, to provide Tier 3 to all new employees, to move those previously in Tier 2 to Tier 3 as of that date, and to apply all future service as Tier 3. Tier 3 was originally created on October 1, 1998, and made available to all members with five or

Contra Costa County Employees' Retirement Association
Notes to the Financial Statements (Continued)

more years of Tier 2 service who elected to transfer to Tier 3 coverage.

All members who moved to Tier 3 with five or more years of service prior to October 1, 2002, or were moved to Tier 3 effective October 1, 2002, January 1, 2005, or February 1, 2006, continue to have Tier 2 benefits for service prior to that date unless the service is converted to Tier 3. As of December 31, 2006, there are no active Tier 2 member accounts. Tier 1 includes members not mandated to be in Tier 2 or Tier 3 and reciprocal members who were placed in Tier 1 membership.

Safety includes members in active law enforcement, active fire suppression work, or certain other "Safety" classifications as defined in sections of CERL made operative by the Board of Supervisors.

Effective January 1, 2007, Contra Costa County and the Deputy Sheriff's Association agreed to adopt a new Safety Tier C for sworn employees hired by the County after December 31, 2006. A Deputy Sheriff hired on or after January 1, 2007 through November 30, 2012, had a 3% at 50 benefit formula with a 2% maximum COLA and a 36 month final average salary period. Due to PEPRA, a Deputy Sheriff hired on or after January 1, 2013, will have a 2.7% at 57 benefit formula with a 36 month average final compensation period with compensation limited as noted below. The 2% maximum annual COLA is unchanged.

Effective January 1, 2012, new hires and employees within the Labor Coalition are now responsible for the payment of 100% of the employees' basic retirement benefit contributions, determined annually by the Retirement Board, without the County paying any part of the employees' contributions.

On September 12, 2012, the Governor of California signed into law Assembly Bill (AB) 197, with an effective date of January 1, 2013. The measure changed how county retirement boards were permitted to calculate their current members' retirement allowances. In November 2012, members and their representative bargaining units filed a lawsuit challenging the validity of the new law. By operation of a court-imposed Stay Order, CCCERA was prohibited from implementing the new law during the course of the litigation. On May 12, 2014, the Contra Costa County Superior Court entered a Judgment in the litigation and a Writ directing CCCERA to proceed to comply with

AB 197 for all retirements effective on or after July 12, 2014. The matter was appealed. The Court of Appeal was requested to issue a "stay" of the implementation of AB 197 past July 11, 2014 during the pendency of the appeal. On June 30, 2014, the Court of Appeal issued an order denying the request for an additional "stay." CCCERA was therefore required to implement the AB 197 changes in calculating benefits for all retirements with an effective date of July 12, 2014 or later. Retirements with an effective date of July 11, 2014 or before were calculated under the pre-AB 197 rules.

California Public Employees' Pension Reform Act (PEPRA)

In September 2012, the California Public Employees' Pension Reform Act of 2013 (PEPRA) was signed into law by the Governor of California, establishing new tiers for General and Safety employees entering CCCERA membership on or after January 1, 2013. The benefit formula for General members is 2.5% at age 67 and the Safety formula is 2.7% at age 57. Benefits under the new PEPRA tiers are based on a three-year final average compensation period. Additionally, PEPRA limits the amount of compensation CCCERA can use to calculate a retirement benefit. The 2015 compensation limits are \$117,020 for members covered by Social Security and \$140,424 for members not covered by Social Security. These limits were not changed for 2016. The PEPRA annual compensation limits will be adjusted in future years based on changes in the Consumer Price Index. Most CCCERA General members (including County employees) are covered by Social Security, while CCCERA Safety members and some General members (including fire district employees) are not covered by Social Security.

In September 2013, the Governor approved Assembly Bill 1380 (AB 1380), which makes various technical corrections and conforming changes that align the CERL with the provisions of the PEPRA. In particular, the bill clarifies that Tier 4, Tier 5, Safety Tier D and Safety Tier E members are eligible to retire at age 70, regardless of years of service; that the Board may, but is not required to, round these members contribution rates to the nearest quarter of one percent; and those rates may be adjusted for any change in the normal cost rate. AB 1380 was effective January 1, 2014. On January 22, 2014, CCCERA's Board exercised the discretion made available by AB 1380 to no longer round the members' contribution rates for PEPRA

Contra Costa County Employees' Retirement Association
Notes to the Financial Statements (Continued)

members to the nearest quarter of one percent as previously required by PEPRA. This should allow for exactly one-half of the Normal Cost to be paid by the employees and by the employers covered under the PEPRA tiers.

In November 2012, the County Board of Supervisors approved two memoranda of understanding (deputy district attorneys and public defenders) that stipulated new CCCERA members who become members after December 31, 2012 within these bargaining units will earn retirement benefits that will be subject to a maximum annual COLA of 2%. As a result, CCCERA created a second Tier 5 for general members subject to this COLA provision. Other bargaining units (including units covering Tier 4 members) have since agreed to this COLA provision for those who become members after a certain date. Members in bargaining units subject to this COLA provision will be placed in General Tier 4 or 5 (2% max COLA) or Safety Tier E.

In September 2013, the Board approved using base pay only for purposes of pensionable compensation for PEPRA members and to exclude all other special compensation beyond base pay. In addition, the Board clarified that separate pay items for premium pay to comply with the Fair Labor Standards Act (FLSA) and the Fire Retirement Allotment for the Moraga-Orinda Fire District are to be excluded from pensionable compensation. In September 2014, the Board adopted a written policy to this effect, "Policy On Determining Pensionable Compensation Under PEPRA For Purposes Of Calculating Retirement Benefits."

Benefits are administered by the Board under the provisions of CERL and PEPRA. Annual COLAs to retirement benefits are provided for under CERL. Service retirements are based on age, length of service, and final compensation. Employees may withdraw contributions plus interest credited or leave them on deposit for a deferred retirement when they terminate or transfer to a reciprocal retirement system.

Pertinent provisions for each section follow:

General – Tier 1

Members may elect service retirement at age 70 regardless of service, at age 50 with 10 years of service, or with 30 years of service regardless of age. Disability retirements may be granted as service connected with no minimum service credit required or non-service connected with five

years of service credit required. The retirement benefit is based on Government Code Section 31676.11 for the Non-enhanced tier and Section 31676.16 for the Enhanced tier. The final compensation is based on a one-year average.

General – Tier 2

Members may elect service retirement at age 70 regardless of service, at age 50 with 10 years of service, or with 30 years of service regardless of age. Previously, disability retirements were granted as service connected with no minimum service credit required or non-service connected with ten years of service credit required. Those members who elected in 1980 to transfer from Tier 1 to Tier 2 were eligible for non-service connected disability retirement with five years of service. The definition of a disability is stricter under Tier 2 than under Tier 1. The retirement benefit is based on Government Code Section 31752. The final compensation is based on a three-year average.

General – Tier 3

Members may elect service retirement at age 70 regardless of service, at age 50 with 10 years of service, or with 30 years of service regardless of age. Disability retirements may be granted as service connected with no minimum service credit or non-service connected with ten years of service credit required. The definition of disability is the same as Tier 2. The retirement benefit is based on Government Code Section 31676.16. The final compensation is based on a one-year average.

General – Tier 4

Members may elect service retirement at age 70 regardless of service, or at age 52 with 5 years of service. Disability retirements may be granted as service connected with no minimum service credit or non-service connected with five years of service credit required. The definition of disability is the same as Tier 1. The retirement benefit is based on Government Code Section 7522.20. The final compensation is based on a three-year average.

General – Tier 5

Members may elect service retirement at age 70 regardless of service, or at age 52 with 5 years of service. Disability retirements may be granted as service connected with no minimum service credit or non-service connected with ten years of service credit required. The definition of disability is the same as Tier 3. The retirement benefit is based on Government Code Section 7522.20. The final compensation is based on a three-year average.

Safety Tier A

Members may elect service retirement at age 70 regardless of service, or at age 50 with 10 years of service, or with 20 years of service regardless of age. Disability retirements may be granted as service connected with no minimum service credit required or non-service connected with five years of service credit required. The retirement benefit is based on Government Code Section 31664 for the Non-enhanced tier and Section 31664.1 for the Enhanced tier. The final compensation is based on a one-year average.

Safety Tier C

Members may elect service retirement at age 70 regardless of service, or at age 50 with 10 years of service, or with 20 years of service regardless of age. Disability requirements may be granted as service connected with no minimum service credit required or non-service connected with five years of service credit required. The retirement benefit is based on Government Code Section 31664.1. The final compensation is based on a three-year average.

Safety Tier D and Tier E

Members may elect service retirement at age 70 regardless of service, or at 50 with 5 years of service. Disability retirements may be granted as service connected with no minimum service credit required or non-service connected with five years of service credit required. The retirement benefit is based on Government Code Section 7522.25(d). The final compensation is based on a three-year average. Safety Tiers D and E differ only in the COLA provision.

Additional information regarding CCCERA's benefits is included in the Benefit Handbook, available at cccera.org.

Cost-of-Living Adjustments (COLA)

The CERL authorizes the Retirement Board to grant annual automatic and ad hoc cost-of-living increases to all eligible retired members. Article 16.5 requires the Board to apply a COLA effective April 1st of each year. This adjustment is based on the change in the San Francisco-Oakland-San Jose area Consumer Price Index and is limited to the maximum of two percent for certain Tier 4 and Tier 5 members, depending on Memoranda of Understanding (MOU), and all Safety Tier C and Safety Tier E members; a maximum of three percent for Tier 1, Tier 3 (service retirement), certain Tier 4 and Tier 5 (service retirement), Safety Tier A and Safety Tier D members; and a maximum of four percent for Tier 2, Tier 3 (disability retirement),

and certain Tier 5 (disability retirement) members. Government Code Section 31874.3 allows the granting of a supplemental cost-of-living benefit, on a prefunded basis, to eligible retirees whose unused Consumer Price Index increase accumulations equal or exceed 20 percent. This supplemental increase is a permanent part of the retirees' monthly benefit and is known as "New Dollar Power".

Terminations

Effective January 1, 2003, a member with less than five years of service may elect to leave accumulated contributions on deposit in the retirement fund regardless of years of service as a result of the enactment of AB 2766, which amends Section 31629.5 of CERL. A member who continues membership under this ruling is granted a deferred status and is subject to the same age, service, and disability requirements that apply to other members for service or disability retirement.

Note 2.

Summary of Significant Accounting Policies

Basis of Accounting

CCCERA's financial statements are prepared using the accrual basis of accounting in accordance with accounting principles generally accepted in the United States of America (GAAP), under which revenues are recognized when earned and deductions are recorded when the liability is incurred. Employee and employer contributions are recognized as revenue when due, pursuant to formal commitments, as well as statutory or contractual requirements. Investment income is recognized as revenue when earned. Retirement benefits and refunds of prior contributions are recognized when due and payable in accordance with the terms of the Plan. Other expenses are recognized when the corresponding liabilities are incurred. All investment purchases and sales are recorded on the trade date. The net appreciation/(depreciation) in fair value of investments held by CCCERA is recorded as an increase/(decrease) to investment income based on the valuation of investments at June 30th and December 31st.

Cash Equivalents

Cash equivalents include deposits in the County Treasurer's commingled cash pool and certain investments held by the County Treasurer, custodian bank, and other investment managers. Cash equivalents are highly liquid investments with maturities of three months or less when purchased. Short-term investments with the custodian bank include foreign currencies, cash held in short-term investment funds and other short-term, highly liquid investments. Short-term investments considered cash equivalents are recorded at cost, which approximates fair value.

Methods Used to Value Investments

Plan investments are reported at fair value. Fair value is the amount that a plan can reasonably expect to receive for an investment in a current sale between a willing buyer and a willing seller, other than in a forced or liquidation sale. The fair values of equity and fixed income securities are derived from quoted market prices. The fair values of private market investments are estimated from fair values provided by real estate investment funds, generally using periodic independent appraisals, and alternative investment managers. Investments listed as alternative investments are comprised of private equity partnerships which invest in a diversified portfolio of venture capital, buyout, and other special situations, partnerships, and the U.S. power industry. CCCERA's Real Asset program contains investments in both publicly traded securities and private partnerships. These investments include, but are not limited to, equities, bonds, TIPS (Treasury Inflation Protected Securities), commodities, and natural resources. The goal of this program is to provide a hedge against inflation and to reduce market volatility over the investment cycle.

Certain alternative investments are reported in CCCERA's financial records on a quarter lag due to reporting constraints at the investment level. Four quarters of activity are recorded in each calendar year. At year-end, investment activity is shown through September 30th of that particular year. In addition, Willows Office Park, a real estate investment, is appraised every three years, with the most recent appraisal being February 24, 2014.

Asset Allocation Policy

The allocation of investment assets within CCCERA's portfolio is approved by the Board as outlined in the investment policy. Plan assets are managed on a total return basis with a long-term objective of achieving and maintaining a fully funded status for the benefits provided through the Plan. The following table provides the Board's adopted asset allocation policy as of December 31, 2015.

Asset Allocation Policy	
As of December 31, 2015	
Asset Class	Target Allocation
Global Equity	42.60%
Global Fixed Income	24.40%
High Yield Fixed Income	5.00%
Real Estate	12.50%
Real Assets	5.00%
Alternative Investments	10.00%
Opportunistic	0.00%
Cash	0.50%
TOTAL	100.00%

Receivables

Receivables consist primarily of interest, dividends, installment contracts, investments in transition (i.e., traded but not yet settled) and contributions owed by the employing entities as of December 31, 2015 and 2014.

Capital Assets

Capital assets, consisting of software, leasehold improvements, and furniture and office equipment, are presented at historical cost, less accumulated depreciation and amortization. Capital assets with an initial cost of more than \$5,000 and an estimated useful life in excess of three years are capitalized and depreciated/amortized. Depreciation/amortization is calculated using the straight-line method, with estimated lives ranging from five to ten years for all leasehold improvements and pension administration system assets, and five years for office equipment.

Income Taxes

The Internal Revenue Service has ruled that plans such as CCCERA qualify under Section 401(a) of the Internal Revenue Code and are not subject to tax under present tax laws. In December 2014, CCCERA received a favorable letter of determination from the Internal Revenue Service (IRS). Accordingly, no provision for income taxes has been made in the accompanying basic financial statements, as the Plan is exempt from federal and state income taxes under provisions of the Internal Revenue Code, Section 401, and California Revenue and Taxation Code, Section 23701, respectively.

Use of Estimates

The preparation of CCCERA's financial statements in conformity with accounting principles generally accepted in the United States of America requires management to make estimates and assumptions that affect the amounts reported in the financial statements and accompanying notes. Actual results could differ from those estimates.

Note 3. Deposits and Investment Risk Disclosures

Investment Stewardship

Except as otherwise expressly restricted by the California Constitution and by law, the Board may, at its discretion, invest, or delegate CCCERA to invest, the assets of CCCERA through the purchase, holding, or sale of any form or type of instrument, or financial transaction when prudent in the informed opinion of the Board. In addition, the Board has established an investment policy, which places limits on the compositional mix of cash, fixed income and equity securities, real assets, alternative investments, and real estate investments. CCCERA currently employs external investment managers to manage its assets subject to the guidelines of the investment policy.

Investment Risk

Investments are subject to certain types of risks, including interest rate risk, credit risk (including custodial credit risk and concentrations of credit risk), and foreign currency risk. CCCERA has no formal policy relating to interest rate risk. The following describes those risks:

Interest Rate Risk

The fair value of fixed maturity investments fluctuates in response to changes in market interest rates. Increases in prevailing interest rates generally translate into decreases in fair value of those investments. The fair value of interest sensitive instruments may also be affected by the creditworthiness of the issuer, prepayment options, relative values of alternative investments, and other general market conditions. Certain fixed maturity investments may have call provisions that could result in shorter maturity periods.

Holdings of Fixed Income Futures are allowed, on an unleveraged basis, such that the market notional value of all long contracts shall be covered by cash, cash receivables, or cash equivalents with one year or less in duration.

The following schedule is a list of fixed income and short-term investments and the related maturity schedule for CCCERA as of December 31, 2015:

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Investment Maturities (In Years)					
As of December 31, 2015					
<i>(Dollars in Thousands)</i>					
<i>Investment Type</i>	<i>Less than 1 year</i>	<i>1-5 years</i>	<i>6-10 years</i>	<i>More than 10 years</i>	<i>Fair Value</i>
Collateralized Mortgage Backed Securities (CMBS)	\$16,007	\$149,307	\$92,736	\$203,684	\$461,734
Collateralized Mortgage Obligations (CMO)	19	3,188	3,080	44,696	50,983
Corporate Bonds	78,949	397,159	456,651	109,825	1,042,584
Short-Term Investment Fund (STIF) Instruments	54,353	-	-	227,694	282,047
US Treasury Notes & Bonds	12,472	109,837	152,956	74,696	349,961
US Agencies (GNMA, FNMA, FHLMC)	-	12,076	16,879	330,510	359,465
TOTALS:	\$161,800	\$671,567	\$722,302	\$991,105	\$2,546,774

Custodial Credit Risk

Custodial credit risk for deposits is the risk that, in the event of a financial institution's failure, CCCERA would not be able to recover its deposits. Deposits are exposed to custodial credit risk if they are not insured or not collateralized. Under California Government Code, a financial institution is required to secure deposits in excess of \$250,000 made by state or local governmental units by pledging securities held in the form of an undivided collateral pool. The market value of the pledged securities in the collateral pool must equal at least 110% of the total amount deposited by the public agencies. California law also allows financial institutions to secure governmental deposits by pledging first deed mortgage notes having a value of 150% of the secured public deposits. Such collateral is held by the pledging financial institution's trust department or agent in CCCERA's name.

At year-end, the carrying amount of CCCERA's cash deposits in non-interest bearing accounts was \$5,282,813 (which are included in cash equivalents) and the bank

balance was \$5,821,401. The difference between the bank balance and the carrying amount represents outstanding checks and deposits in transit. Effective January 1, 2013, funds deposited in a non-interest bearing account no longer receive unlimited deposit insurance coverage by the Federal Deposit Insurance Corporation (FDIC). Beginning January 1, 2013, any non-interest bearing transaction deposit account over \$250,000 is not insured by the FDIC.

Custodial credit risk for investments is the risk that, in the event of the failure of the counterparty to a transaction, CCCERA would not be able to recover the value of the investment or collateral securities that are in the possession of an outside party. Investment securities are exposed to custodial credit risk if the securities are uninsured, not registered in CCCERA's name, and held by the counterparty. CCCERA's investment securities are not exposed to custodial credit risk because all securities held by CCCERA's custodial bank are in CCCERA's name.

CCCERA has no general policy on custodial credit risk for deposits.

Money-Weighted Rate of Return

For the years ended December 31, 2015 and 2014, the annual money-weighted rate of return on the assets of the Plan, net of investment expense, was 1.19 percent and 7.51 percent, respectively. The money-weighted rate of return expresses investment performance, net of investment expense, adjusted for the timing of cash flows and the changing amounts actually invested.

At the April 23, 2014 Board meeting, the Board adopted an investment return assumption for financial reporting purposes that is net of investment expenses and not net of administrative expenses equal to 7.25% per year.

Investment Concentrations

The Board's investment policies and guidelines permit investments in numerous specified asset classes to take advantage of professional investment management advice and a well-diversified portfolio. As of December 31, 2015 and 2014, CCCERA did not hold investments in any one organization that represents five percent (5%) or more of the Plan's fiduciary net position. Investments issued or explicitly guaranteed by the U.S. government and pooled

Contra Costa County Employees' Retirement Association
Notes to the Financial Statements (Continued)

investments are excluded from this requirement.

Credit Risk

CCCERA's general investment policy is to apply the prudent-person rule. Investments are made as a prudent person would be expected to act, with discretion and for the exclusive purposes of providing benefits, minimizing contributions, and defraying reasonable expenses of administering the Plan. Investments should be diversified so as to minimize the risk of loss and to maximize the rate of return unless, under the circumstances, it is clearly prudent not to do so.

Nationally recognized statistical rating organizations provide ratings of debt securities' quality based on a variety of factors. For example, the financial condition of the issuer provides investors with some idea of the issuer's ability to meet its obligations. Fixed-maturity investments may consist of rated or non-rated securities. Ratings can range from AAA (highest quality) to D (default). Debt securities with ratings of BBB or higher are considered investment grade issues, and debt securities with ratings of BB or lower are non-investment grade issues. Debt securities in the non-investment grade category are more speculative and are often referred to as "high-yield". This is due to the fact that lower rated debt securities generally carry a higher interest rate to compensate the buyer for taking on additional risk. To control credit risk, credit quality guidelines have been established.

The Global Core Plus Fixed Income Portfolio must meet the following credit qualities:

- Obligations of the U.S. Treasury.
- Obligations guaranteed by an agency of the United States.
- Government, agency, quasi-government and supranational bonds.
- Certificates of deposit and banker's acceptance of credit-worthy banks.
- Corporate, asset backed and mortgage backed securities and structured notes and other evidences of debt.
- Eligible instruments issued pursuant to Securities and Exchange Commission (SEC) Rule 144(a) or Regulation S.

- Commercial paper (including variable rate notes) of issuers rated not less than P-2 by Moody's Investor Services (Moody's) and A-2 by Standard & Poor's.
- Lower risk planned amortization class (PAC) collateralized mortgage obligations ("CMO") and Sequential CMOs. CMOs other than PACs and Sequentials are limited to a maximum of 10% of the fixed income portfolio at cost.
- Currency Forwards and Non-Deliverable Forwards (NDFs). Such currency forwards shall only be with counterparty banks with A or better credit ratings by Standard & Poor's or Moody's.
- Derivatives may be used to obtain exposure to the fixed income markets, to adjust portfolio risk, and to reduce unwanted exposure to foreign currencies.
- Use of derivatives other than noted above, including credit default swaps, interest rate swaps (except for centrally cleared), IOs (Interest Only), POs (Principal Only), inverse floaters and CMO support bonds, shall not in the aggregate exceed 15% of the portfolio measured at the time of investment.
- Other securities as detailed in accordance with the Investment Manager's agreement with CCCERA.

The High Yield Bond Portfolio must meet the same credit qualities as the Global Core Plus Fixed Income Portfolio listed above and/or:

- High yield securities as specified in accordance with the manager's investment agreement with CCCERA.

The following is a schedule of the credit risk ratings of CCCERA's fixed income and short-term investments as of December 31, 2015 as rated by Standard & Poor's (Dollars in Thousands):

Contra Costa County Employees' Retirement Association
Notes to the Financial Statements (Continued)

Credit Risk Ratings As of December 31, 2015	
Quality Ratings	Fair Value
AAA	\$332,795
AA+	46,332
AA	34,463
AA-	28,310
A+	45,732
A	80,727
A-	68,362
BBB+	131,904
BBB	74,494
BBB-	102,154
BB+	79,546
BB	60,993
BB-	76,788
B+	67,237
B	43,673
B-	52,072
CCC+	21,022
CCC	18,315
CCC-	5,064
CC	2,719
C	481
D	6,174
NR	1,167,416
TOTAL CREDIT RISK FIXED INCOME SECURITIES	\$2,546,773

Investment Type	Quality Rating Range
Asset-backed securities*	AAA to CCC
Convertible bonds	Not rated
CMBS	AAA to CCC
CMO*	AAA to D
Corporate bonds*	AAA to CCC-
Municipals	AAA to BBB+
Private placements	AAA to BBB+
Real estate investment trust*	A- to B+
Short-term	AA to A+
U.S. & foreign agencies*	AAA to CCC+
Mutual funds	Not rated

*Investment type contained one or more investments that were not rated.

Foreign Currency Risk

Foreign currency risk is the risk that changes in exchange rates may adversely affect the fair value of an investment. CCCERA has no formal policy related to foreign currency risk. CCCERA's external investment managers may invest in international securities and must follow CCCERA's investment guidelines pertaining to these types of investments.

CCCERA's exposure to foreign currency risk in U.S. dollars as of December 31, 2015 is as follows:

Foreign Currency Risk As of December 31, 2015			
<i>(Dollars in Thousands)</i>			
Currency	Fixed Income	Equity	Total
Australian Dollar	\$17,316	\$14,014	\$31,330
Brazilian Real	4,864	4,331	9,195
British Pound Sterling	42,182	109,751	151,933
Canadian Dollar	21,051	15,371	36,422
Colombian Peso	2,891	-	2,891
Danish Krone	2,229	17,545	19,774
Euro Currency	72,279	148,051	220,330
Hong Kong Dollar	3,933	46,897	50,830
Hungarian Forint	5,729	-	5,729
Indian Rupee	2,752	5,494	8,246
Indonesian Rupiah	-	767	767
Israeli Shekel	996	-	996
Japanese Yen	72,871	115,169	188,040
Malaysian Ringgit	-	-	-
Mexican Peso	14,948	4,805	19,753
New Zealand Dollar	14,018	-	14,018
Norwegian Krone	12,154	6,078	18,232
Philippines Peso	10,119	-	10,119
Polish Zloty	5,808	-	5,808
Singapore Dollar	7,952	3,939	11,891
South African Rand	-	8,601	8,601
South Korean Won	4,590	13,187	17,777
Swedish Krona	2,105	14,509	16,614
Swiss Franc	4,300	27,343	31,643
Taiwan New Dollar	-	8,748	8,748
Thailand Bait	1,304	1,309	2,613
Turkish Lira	1	-	1
United Arab Emirates Dirham	-	551	551
Yuan Renminbi - China	5,600	-	5,600
TOTAL SECURITIES SUBJECT TO FOREIGN CURRENCY RISK	\$331,992	\$566,460	\$898,452

Note 4. Securities Lending Transactions

The investment policy, adopted by the Board, permits the use of a securities lending program with its principal custodian bank. Securities lending is an investment management activity that mirrors the fundamentals of a loan transaction. Securities are lent to brokers and dealers (borrower), and in turn CCCERA receives cash as collateral and invests the collateral with the goal of earning a higher yield than the interest rate paid to the borrower. Earnings generated above and beyond the interest paid to the borrower represent the net income to CCCERA from the transaction. The custodian bank provides loss indemnification to CCCERA if the borrower fails to return the securities.

The custodian bank manages the securities lending program and receives cash and/or securities as collateral. The collateral cash can be invested and is automatically rolled into a Short-Term Investment Fund (STIF). The collateral securities cannot be pledged or sold by CCCERA without borrower default. The collateral is marked-to-market daily, and if the market value of the securities rises, CCCERA receives additional collateral.

Securities on loan must be collateralized at 102 percent and 105 percent of the fair value of domestic securities and international equity securities, respectively, plus accrued interest (in the case of debt securities).

There are no restrictions on the amount of the securities that can be loaned at one time. CCCERA has the right to terminate any loan in whole or in part by providing the custodian bank with written notice (a "Recall Notice"). Because the loans are terminable at will, the term to maturity of the security loans is generally not matched with the term to maturity of the cash collateral. At year-end, CCCERA had no credit risk exposure to borrowers, because the amount of collateral received exceeded the value of securities on loan. As of December 31, 2015, there were no violations of legal or contractual provisions. CCCERA had no losses on securities lending transactions resulting from the default of a borrower for the years ended December 31, 2015 and 2014.

At year-end, additional funds of \$1.4 million are owed to borrowers for CCCERA's collateral overpayments on CCCERA's securities on loan. This is known as the "calculated mark" and will settle on the first business day of January 2016. CCCERA has no credit risk exposure to borrowers because the collateral exceeds the amount borrowed. The fair value of investments on loan at December 31, 2015 is \$311.7 million which was collateralized by cash and securities in the amount of \$320.3 million. The fair value of the cash collateral in the amount of \$285.5 million has been reported both as an asset and liability in the accompanying Statement of Fiduciary Net Position.

Securities Lending

The following securities were on loan and collateral received as of December 31, 2015:

(Dollars in Thousands)

Securities on Loan	Fair Value of Securities on Loan	Cash Collateral*	Non-Cash Collateral	Calculated Mark*	Collateral Percentage
U.S. Corporate Fixed and Equity	\$204,274	\$176,077	\$34,882	(\$1,700)	102.4%
U.S. Government	107,443	109,374	-	282	102.1%
TOTAL	\$311,717	\$285,451	\$34,882	(\$1,418)	102.3%

*Additional funds known as the "calculated mark" are due from/to the borrower to bring collateral to 102% for domestic securities.

Note 5. Net Pension Liability

Statement No. 67 of the Governmental Accounting Standards Board (GASB) requires public pension plans to provide a net pension liability. The net pension liability is measured as the total pension liability less the amount of the pension plan's fiduciary net position. The net pension liability is an accounting measurement for financial statement reporting purposes. The components of CCCERA's (the Plan's) net pension liability as of December 31, 2015 and 2014 are as follows:

Net Pension Liability

(Dollars in Thousands)

	As of December 31, 2015	As of December 31, 2014
Total Pension Liability (a)	\$8,483,709	\$8,104,611
Plan Fiduciary Net Position (b)	6,976,582	6,908,910
Net Pension Liability (a) - (b)	\$1,507,127	\$1,195,701
Plan Fiduciary Net Position as a Percentage of the Total Pension Liability (b)/(a)	82.2%	85.2%

Actuarial Assumptions

Actuarial valuations of an ongoing plan involve estimates of the value of reported amounts and assumptions about the probability of occurrence of events far into the future. Examples include assumptions about future employment, mortality, and investment returns. Actuarially determined amounts are subject to continual review or modification as actual results are compared with past expectations and new estimates are made about the future.

Projections of benefits for financial reporting purposes are based on the substantive plan (the Plan as understood by the employers and plan members) and include the types of benefits provided at the time of each valuation. The total pension liability as of December 31, 2015 and 2014 was determined by completing a roll-forward calculation based on actuarial valuations as of December 31, 2014 and 2013, respectively, using the following actuarial assumptions applied to all prior periods included in the measurement in accordance with the requirements of GASB Statement No. 67. Key methods and assumptions used are presented in the following table.

Key Methods and Assumptions Used in Valuation of Total Pension Liability

Valuation Date	Actuarial determined contribution rates are calculated as of December 31, two and a half years prior to the end of the fiscal year in which contributions are reported.
Actuarial Experience Study	3 Year Period Ending December 31, 2012
Actuarial Cost Method	Entry Age
Amortization Method	Level percent of payroll (4.00% payroll growth assumed)
Remaining Amortization Period	Remaining balance of December 31, 2007 Unfunded Actuarial Accrued Liability (UAAL) is amortized over a fixed (decreasing or closed) period with 8 years remaining as of December 31, 2014. Any changes in UAAL after December 31, 2007 is separately amortized over a fixed 18-year period effective with that valuation. Effective December 31, 2013, any changes in UAAL due to plan amendments (with the exception of a change due to retirement incentives) will be amortized over a 10-year fixed period effective with that valuation. The entire increase in UAAL resulting from a temporary retirement incentive will be funded in full upon adoption of the incentive.
Asset Valuation Method	5 year Smoothed Market, excluding non-valuation reserves and designations*
Actuarial Assumptions:	December 31, 2014
Investment Rate of Return	7.25%, net of pension plan investment expense, including inflation
Inflation Rate	3.25%
Projected Salary Increases	General: 4.75% to 13.50% Safety: 4.75% to 14.00%, varying by service, including inflation.
Cost-of-Living Adjustments	3.00% per year except for Tier 3 and PEPRA Tier 5 (3% COLA) disability benefits and Tier 2 benefits that are valued as a 3.25% increase per year. Safety Tier C, PEPRA Tier E, PEPRA Tier 4 (2% COLA) and Tier 5 (2% COLA) members are assumed to increase at 2.00% per year. All increases are contingent upon actual increases in Consumer Price Index (CPI).
Other Assumptions:	Generally the same as those used in the December 31, 2014 funding actuarial valuation.

Key Methods and Assumptions Used in Valuation of Total Pension Liability (Continued)

Actuarial Assumptions: December 31, 2015	
Investment Rate of Return	7.00%, net of pension plan investment expense, including inflation
Inflation Rate	2.75%
Projected Salary Increases	General: 4.00% to 13.25% Safety: 4.00% to 13.75%, varying by service, including inflation.
Cost-of-Living Adjustments	2.75% per year except for Safety Tier C, PEPRA Tier E benefits and PEPRA Tier 4 (2% COLA) and Tier 5 (2% COLA). Benefits for members covered under certain memoranda of understanding are assumed to increase at 2% per year. All increases are contingent upon actual increases in Consumer Price Index (CPI).
Other Assumptions:	Generally the same as those used in the December 31, 2015 funding actuarial valuation.

*Market value of assets less unrecognized returns in each of the last nine semi-annual accounting periods. Unrecognized return is equal to the difference between the actual market return and the expected return on the market value, and is recognized semi-annually over a five-year period. The Actuarial Value of Assets is reduced by the value of the non-valuation reserves and designations.

Long-Term Expected Real Rate of Return

The long-term expected rate of return on Plan investments was determined in 2016 using a building-block method in which expected future real rates of return (expected returns, net of inflation) are developed for each major asset class. This information is combined to produce the long-term expected rate of return by weighting the expected future real rates of return by the target asset allocation percentage, adding expected inflation, and subtracting expected investment expenses and a risk margin. The target allocations (approved by the Board) and projected arithmetic real rates of return for each major asset class, after deducting inflation, but before investment expenses, used in the derivation of the long-term expected investment rate of return assumption for each major asset class are summarized in the following table.

Long-Term Expected Real Rate of Return

Asset Class	Target Allocation	Weighted Average Long-Term Expected Real Rate of Return (Arithmetic)
Large Cap U.S. Equity	6.00%	5.75%
Developed International Equity	10.00%	6.99%
Emerging Markets Equity	14.00%	8.95%
Short-Term Govt/Credit	24.00%	0.20%
U.S. Treasury	2.00%	0.30%
Real Estate	7.00%	4.45%
Cash & Equivalents	1.00%	-0.46%
Risk Diversifying Strategies	2.00%	4.30%
Private Credit	17.00%	6.30%
Private Equity	17.00%	8.10%
TOTAL	100.00%	

Mortality Rates

Mortality rates used in the latest actuarial valuation are based on the RP-2000 Combined Healthy Mortality Table projected to 2030 using Projection Scale AA, set back one year for General Members and two years for Safety Members. The rates used in evaluating disability allowances were based on the RP-2000 Combined Healthy Mortality Table projected to 2030 using Projection Scale AA, set forward six years for males and seven years for females for General and three years for Safety.

Discount Rate

The discount rate used to measure the total pension liability was 7.00% and 7.25% as of December 31, 2015 and December 31, 2014, respectively. The projection of cash flows used to determine the discount rate assumed Plan member contributions will be made at the current contribution rate and that employer contributions will be made at rates equal to the actuarially determined contribution rates. For this purpose, only employee and employer contributions that are intended to fund benefits for current Plan members and their beneficiaries are included. Projected employer contributions that are intended to fund the service costs for future Plan members and their beneficiaries, as well as projected contributions from future Plan members, are not included. Based on those assumptions, the Plan's fiduciary net position was

Contra Costa County Employees' Retirement Association
Notes to the Financial Statements (Continued)

projected to be available to make all projected future benefit payments for current Plan members. Therefore, the long-term expected rate of return on pension plan investments of 7.00% and 7.25% was applied to all periods of projected benefit payments to determine the total pension liability as of December 31, 2015 and December 31, 2014, respectively.

The following table presents the net pension liability of participating employers calculated using the discount rate of 7.00% as of December 31, 2015 as well as what the net pension liability would be if it were calculated using a discount rate that is 1-percentage-point lower (6.00%) or 1-percentage-point higher (8.00%) than the current rate.

Sensitivity of Net Pension Liability to Changes in the Discount Rate			
As of December 31, 2015			
<i>(Dollars in Thousands)</i>			
	1% Decrease (6.00%)	Current Rate Discount (7.00%)	1% Increase (8.00%)
Net Pension Liability	\$2,677,647	\$1,507,127	\$553,959

Note 6. Derivative Financial Instruments

As of December 31, 2015, the derivative instruments held by CCCERA are considered investments and not hedges for accounting purposes. The term hedging, as it is used elsewhere in the notes to these financial statements, denotes an economic activity and not an accounting method.

The gains and losses from this activity are recognized as incurred in the Statement of Changes in Fiduciary Net Position.

CCCERA currently employs external investment managers to manage its assets as permitted by the California Government Code and CCCERA's investment policy and specific managers hold investments in swaps, options, futures, forward settlement contracts, rights and warrants and enter into forward foreign currency exchange security contracts within fixed income financial instruments.

The fair value of options, futures, rights and warrants is determined based upon quoted market prices. The fair value of derivative investments that are not exchange traded, such as swaps, and TBAs (To Be Announced) is determined

by an external pricing service using various proprietary methods, based upon the type of derivative instrument. Futures contracts are marked to market at the end of each trading day, and the settlement of gains or losses occur on the following business day through variation margins. The fair value of international currency forwards represents the unrealized gain or loss on the related contracts, which is calculated as the difference between the specified contract exchange rate and the exchange rate at the end of the reporting period.

Forward foreign currency exchange contracts are used primarily to hedge against changes in exchange rates related to foreign securities. Due to the level of risk associated with certain derivative investment securities, it is conceivable that changes in the values of investment securities will occur in the near term, and such changes could affect the amounts reported in the financial statements.

CCCERA could be exposed to risk if the counterparties to the contracts are unable to meet the terms of the contracts. CCCERA's investment managers seek to control this risk through counterparty credit evaluations and approvals, counterparty credit limits, and exposure monitoring procedures. CCCERA anticipates that the counterparties will be able to satisfy their obligations under the contracts. The following table is a summary of derivative instruments at December 31, 2015 with the net appreciation/ (depreciation) that has occurred during the year:

Contra Costa County Employees' Retirement Association
Notes to the Financial Statements (Continued)

Fair Value				
As of December 31, 2015				
<i>(Dollars in Thousands)</i>				
<i>Investment Derivatives by Type</i>	<i>Net Appreciation/ (Depreciation) in Fair Value Amount</i>	<i>Classifications</i>	<i>Fair Value</i>	<i>Notional Amount</i>
Credit Default Swaps Bought	\$2	Debt Securities	(\$46)	\$4,050
Credit Default Swaps Written	(1,053)	Debt Securities	290	77,819
Fixed Income Futures Long	2,747	Debt Securities	-	93,588
Fixed Income Futures Short	(92)	Debt Securities	-	(164,455)
Fixed Income Options Bought	(133)	Debt Securities	930	256,300
Fixed Income Options Written	959	Debt Securities	(891)	(330,700)
Foreign Currency Options Bought	(329)	Debt Securities	41	15,633
Foreign Currency Options Written	1,216	Debt Securities	(839)	(25,954)
Futures Options Bought	(25)	Debt Securities	2	300
Futures Options Written	140	Debt Securities	-	-
FX Forwards	10,330	Contracts	1,565	457,705
Index Futures Long	2,790	Debt Securities	-	114
Index Options Written	49	Debt Securities	-	-
Pay Fixed Interest Rate Swaps	(4,651)	Debt Securities	(3,263)	414,703
Receive Fixed Interest Rate Swaps	(3,441)	Debt Securities	(2,692)	192,796
Rights	(41)	Equities	-	-
Warrants	90	Equities	231	59
TOTAL	\$8,558		(\$4,672)	

Valuation methods are more fully described in Note 2, *Summary of Significant Accounting Policies*, to the basic financial statements. CCCERA's derivative instruments that are not exchange traded, including the swaps disclosed above, are valued using methods employed for debt securities. CCCERA's investment policy does not require collateral to be held for derivative investments.

Futures contracts are instruments that derive their value from underlying indices or reference rates and are marked to market daily. Settlement of gains or losses occur the following business day. As a result, those instruments and other similar instruments do not have a fair value at December 31, 2015, or any other trading day. Daily settlement of gains and losses enhances internal controls as it limits counterparty credit risk. Futures variation margin accounts are also settled daily and recognized in the financial statements under net appreciation/(depreciation) in fair value as they are incurred.

Foreign currency contracts are obligations to buy or sell a currency at a contractual exchange rate and quantity on a specific date in the future. The fair value of the foreign currency forwards is the unrealized gain or loss calculated as the difference between the contractual exchange rate and the closing exchange rate as of December 31, 2015.

Counterparty Credit Risk

Counterparty credit ratings of CCCERA's non-exchange traded investment derivative instruments (approximately \$7.65 million) and subject to loss as of December 31, 2015, ranged from AA- to BBB+ per Standard & Poor's rating with similar ratings from Moody's and Fitch Ratings (Fitch). No instruments that were non-exchange traded lacked ratings. In a case where a wholly owned broker-dealer does not engage the rating companies for a standalone rating, the subsidiary is assigned the parent company rating as the broker-dealer is an integral part of their business model(s). With the exception of forward trade commitments, CCCERA has a policy of requiring collateral posting provisions in non-exchange traded derivative instruments where it is market practice. As of December 31, 2015, CCCERA does not hold any collateral related to its non-exchange traded derivative instruments. The approximate \$7.65 million represents the maximum loss that would be recognized at December 31, 2015 should the counterparties fail to perform. While no netting arrangements are used by CCCERA, the amount represents a net position of exposure for similar instruments.

Derivative Instruments Subject to Credit Risk

As of December 31, 2015, the following is a table of investment providers that are subject to credit risk, percentage of net exposure, and ratings:

Contra Costa County Employees' Retirement Association
Notes to the Financial Statements (Continued)

Investment Provider Exposure to Credit Risk

At December 31, 2015

Counterparty	Percentage of Net Exposure	Standard & Poor's
CITIBANK N.A.	25%	A
HSBC BANK USA	14%	AA-
CREDIT SUISSE FOB LCH	9%	A
JPMORGAN CHASE BANK N.A.	9%	A+
MORGAN STANLEY CME	8%	BBB+
JP MORGAN CHASE BANK	8%	A+
MORGAN STANLEY AND CO. INTERNATIONAL	6%	BBB+
ROYAL BANK OF CANADA	4%	AA-
BANK OF AMERICA, N.A.	4%	A
UBS AG	4%	A
CREDIT SUISSE FOB CME	3%	A
DEUTSCHE BANK AG	1%	BBB+
BNP PARIBAS SA	1%	A+
CREDIT SUISSE FOB ICE	1%	A
MORGAN STANLEY BANK, N.A.	1%	A
GOLDMAN SACHS	1%	BBB+
16 OTHERS	Less than 1%	BBB+ to AA-

Custodial Credit Risk

The custodial credit risk for exchange traded derivative instruments is made in accordance with custodial credit risk disclosure requirements outlined in Generally Accepted Accounting Principles (GAAP). As of December 31, 2015, all of CCCERA's investments are held in CCCERA's name and are not subject to custodial credit risk.

Interest Rate Risk

As of December 31 2015, CCCERA is exposed to interest rate risk on its swaps and options. Since CCCERA's investment managers can buy and sell the swaps and options on a daily basis, the investment managers actively manage the portfolio to minimize interest rate risk and it is unlikely that the swaps and options will be held to maturity. The total fair value subject to interest rate risk as of December 31, 2015 and maturities are as follows:

Interest Rate Risk

(Dollars in Thousands)

Investment Derivatives by Type	Fair Value	Less Than 1 Year	1-5 Years	6-10 Years	More than 10 Years
Credit Default Swaps Bought	(\$46)	\$ -	(\$46)	\$ -	\$ -
Credit Default Swaps Written	290	30	592	-	(332)
Fixed Income Options Bought	930	124	806	-	-
Fixed Income Options Written	(891)	(167)	(724)	-	-
Pay Fixed Interest Rate Swaps	(3,262)	-	(1,252)	(1,699)	(311)
Receive Fixed Interest Rate Swaps	(2,692)	-	448	(3,031)	(109)
TOTAL	(\$5,671)	(\$13)	(\$176)	(\$4,730)	(\$752)

The interest rate swaps and options are highly sensitive to interest rate changes. As of December 31, 2015, they had a fair value of approximately \$(5.7) million and an approximate notional value of \$544.1 million.

FOREIGN CURRENCY RISK IN INTERNATIONAL INVESTMENT SECURITIES

CCCERA is exposed to foreign currency risk on its various investments denominated in foreign currencies. As of December 31, 2015, the following currencies were either in a receivable position (purchased) or payable position (sold) with net exposure, denominated in United States Dollars:

Contra Costa County Employees' Retirement Association
Notes to the Financial Statements (Continued)

Foreign Currency Risk in International Investment Securities

(Dollars in Thousands)

Currency Name	Options	Net Receivable (Purchased)	Net Payable (Sold)	Swaps	Exposure
AUSTRALIAN DOLLAR	\$-	\$134	(\$327)	(\$23)	(\$216)
BRAZILIAN REAL	-	(478)	1,597	(3,618)	(2,499)
CANADIAN DOLLAR	-	(33)	300	106	373
CHILEAN PESO	-	-	40	-	40
COLOMBIAN PESO	-	(3)	(12)	-	(15)
CZECH KORUNA	-	6	(4)	-	2
DANISH KRONE	-	(3)	87	-	84
EURO CURRENCY	(188)	103	(222)	91	(216)
HUNGARIAN FORINT	-	2	50	-	52
INDIAN RUPEE	-	22	(23)	-	(1)
INDONESIAN RUPIAH	-	-	(19)	-	(19)
JAPANESE YEN	-	1,277	(996)	(86)	195
MALAYSIAN RINGGIT	-	3	1	-	4
MEXICAN PESO	-	(170)	351	(23)	158
ISRAELI SHEKEL	-	-	1	-	1
NEW TAIWAN DOLLAR	-	(1)	30	-	29
NEW ZEALAND DOLLAR	-	141	(731)	17	(573)
NORWEGIAN KRONE	-	(42)	238	-	196
PHILIPPINE PESO	-	-	(51)	-	(51)
POLISH ZLOTY	-	22	(10)	-	12
BRITISH POUND STERLING	-	(10)	366	(257)	99
RUSSIAN RUBLE	-	(150)	38	-	(112)
SINGAPORE DOLLAR	-	-	(21)	-	(21)

Foreign Currency Risk in International Investment Securities
(Continued)

(Dollars in Thousands)

Currency Name	Options	Net Receivable (Purchased)	Net Payable (Sold)	Swaps	Exposure
SOUTH AFRICAN RAND	-	(4)	2	-	(2)
SOUTH KOREAN WON	-	(161)	37	-	(124)
SWEDISH KRONA	-	36	(15)	59	80
TURKISH LIRA	-	4	(3)	-	1
UAE DIRHAM	-	-	(2)	-	(2)
YUAN RENMINBI	-	25	136	-	161
YUAN RENMINBI OFFSHORE	-	(67)	75	-	8
TOTAL	(\$188)	\$653	\$913	(\$3,734)	(\$2,356)

Contingent Features

As of December 31, 2015, CCCERA held no investments with contingent features.

**Note 7.
Contributions**

Participating employers and active Plan members are required to contribute a percentage of covered salary to the Plan. This requirement is pursuant to Government Code Sections 31453.5, 31454 and 7522.52 for participating employers, and Government Code Sections 31621.6, 31639.25 and 7522.30 for active Plan members. The contribution requirements are established and may be amended by the Board pursuant to Article 1 of CERL, which is consistent with the Plan's Actuarial Funding Policy. The contribution rates are adopted yearly, based on an annual actuarial valuation, conducted by an independent actuary, that considers the mortality, service (including age at entry into the Plan, if applicable, and tier), and compensation experience of the members and beneficiaries, and also includes an evaluation of the Plan's assets and liabilities. Participating employers may pay a portion of the active Plan members' contributions through negotiations and bargaining agreements subject to restrictions in CERL and PEPRA.

Contra Costa County Employees' Retirement Association
Notes to the Financial Statements (Continued)

Employers are required to contribute at an actuarially determined rate calculated on the alternate funding method permitted by Government Code Section 31453.5. Pursuant to provisions of CERL, the Retirement Board recommends annual contribution rates for approval by the Board of Supervisors. These contribution rates are determined in accordance with the Plan's Actuarial Funding Policy, which has the following goals:

1. To determine future contributions that, together with current Plan assets, are expected to be sufficient to provide for all benefits provided by CCCERA;
2. To seek reasonable and equitable allocation of the cost of benefits over time including the goal that annual contributions should, to the extent reasonably possible, maintain a close relationship to both the expected cost of each year of service and to variations around that expected cost;
3. To manage and control future contribution volatility to the extent reasonably possible, consistent with other policy goals; and,
4. To support the general public policy goals of accountability and transparency by being clear as to both intent and effect, allowing for an assessment of whether, how and when the Plan sponsors will meet the funding requirements of the Plan.

The "Entry Age" method is used to determine the normal cost and the Actuarial Accrued Liability (AAL). Under this method, the employer contribution rate provides for current cost (normal cost) plus a level percentage of payroll to amortize the Unfunded Actuarial Accrued Liability (UAAL). Normal cost under the Entry Age method is the annual contribution rate that, if paid annually from a member's first year of membership through the year of retirement, would accumulate to the amount necessary to fully fund the member's retirement benefit if all underlying assumptions are met. The UAAL is the difference between the Actuarial Accrued Liability and the Actuarial Value of Assets.

The rates for Legacy members (those subject to a benefit formula in CERL) are set to provide a retirement benefit equal to a fractional part of the highest year(s) salary, based on membership and tier. The rates for PEPRA members (new members on or after January 1, 2013) are equal to one-half the normal cost of their defined benefit plan.

Member contribution rates for CCCERA members are between 7.98% and 22.43% of annual covered salary, depending on employer and tier. Certain Safety members (including Legacy members with Contra Costa Fire Protection District and Moraga-Orinda Fire District) contribute an additional 9.0% of the employer's increase in contributions attributed to the adoption of the enhanced (3% at 50) benefit. Member contributions are refundable upon termination of employment.

As of December 31, 2015, Contra Costa County and eight other CCCERA employers subsidize some portion of the employee basic retirement contribution for at least some employees.

During the year ended December 31, 2015, contributions totaled approximately \$409.1 million which included \$323.7 million in employer contributions and \$85.4 million in employee contributions. The contribution figures also include employee and employer purchase, redeposit, and conversion amounts.

Government Code Section 31582(b) allows the Board of Supervisors to authorize the County auditor to make an advance payment of all or part of the County's estimated annual contribution to the retirement fund. Government Code Section 31585 makes the same appropriations and transfers available to districts. Contra Costa County and 9 participating employers "prepay" or make advance payments of all of the employer's estimated annual contributions discounted by the assumed interest rate in effect on July 1. At the end of the fiscal year, a "true-up" is completed and employers are either billed for an underpayment or apply their overpayment towards the following year contributions.

Ten-year historical trend information, designed to provide information about CCCERA's progress in accumulating sufficient assets to pay benefits when due, is presented in the actuarial section of this report on page 69.

As noted in Note 1, *Plan Description*, the Governor approved Assembly Bill 1380 (AB 1380) in September 2013, which makes various technical corrections and conforming changes that align CERL with the provisions of PEPRA. In particular, the bill stipulates that the Board may, but is not required to, round the member contribution rates for PEPRA members to the nearest quarter of one

percent, and those rates may be adjusted for any change in the normal cost rate. AB 1380 was effective January 1, 2014. On January 22, 2014, CCCERA's Board exercised the discretion made available by AB 1380 to no longer round the member's contribution rates for PEPRA members to the nearest quarter of one percent as previously required. This should allow for exactly one-half of the Normal Cost to be paid by the employees and by the employers covered under the PEPRA plan.

Note 8. Reserves and Designations

All employer and Plan member contributions are allocated to various reserve accounts based on the recommendation of the Plan's actuary, as approved by the Board and, where applicable, as required by the CERL. CCCERA currently does not set aside a separate reserve for purposes of benefit increases or reduced employer contributions. Reserves are established from member and employer contributions and the accumulations of investment income after satisfying investment and administrative expenses. The reserves do not represent the present value of assets needed, as determined by actuarial valuation, to satisfy retirements and other benefits as they become due. Following are brief explanations of the reserves and designations used by CCCERA:

Member Deposits Reserve represents the balance of members' accumulated contributions. Additions include member contributions and credited interest; deductions include refunds of member contributions and transfers to Retired Member Reserve upon retirement.

Employer Advance Reserve represents the balance of employer contributions for future retirement payments to current active members. Additions include contributions from the employer and related earnings; deductions include transfers to Retired Member Reserve, lump sum death benefits, and supplemental disability payments under legislated rehabilitation programs.

Retired Member Reserve represents transfers of accumulated contributions of members who have retired, employer contributions needed to fund retired member benefits as determined by the actuary and credited interest less payments to retired members.

Contra Tracking Account represents the amount of interest credited to the reserve accounts that has not been paid for out of current or excess earnings. A balance in this account is the result of applying the full interest crediting policy of the Board and will be reduced to zero before replenishing the Contingency Reserve or allocating earnings to any discretionary uses.

Post Retirement Death Benefit Reserve represents the balance of transfers from excess earnings and related earnings, less lump sum death benefit payments to the beneficiaries of retirees.

Contingency Reserve represents reserves accumulated for future earnings deficiencies, investment losses and other contingencies. Additions include investment income and other revenues. Deductions include investment expenses, administrative expenses, interest allocated to other reserves, funding of Supplemental COLA, and transfers of excess earnings to other Reserves and other Designations. The Contingency Reserve is used to satisfy the California Government Code requirement that CCCERA reserve one percent of its assets against deficiencies in interest earnings in other years, losses on investments, and other contingencies. As of December 31, 2003, the Contingency Reserve was completely used to pay interest to the reserve accounts. This account will be replenished in subsequent periods when there are sufficient earnings according to the interest crediting policy for CCCERA.

Total Deferred Return represents the unrecognized return after smoothing of investment gains and losses based on a five-year smoothing method. This method smooths only the semi-annual deviation of total market return (net of expenses) from the actuarial assumption, currently 7.25 percent per annum.

Reserved and designated fiduciary net position as of December 31, 2015 and 2014 are as follows:

Reserved and Designated Fiduciary Net Position
As of December 31, 2015 and 2014

(Dollars in Thousands)

	2015	2014
Valuation Reserves:		
Member Deposits Reserve		
Basic	\$659,742	\$586,388
Cost-of-Living	351,692	312,832
Employer Advance Reserve		
Basic	1,718,272	1,494,235
Cost-of-Living	696,901	608,072
Retired Member Reserve		
Basic	3,145,208	3,109,447
Cost-of-Living	2,260,504	2,138,360
New Dollar Power Cost-of-Living Supplement	6,867	8,503
Contra Tracking Account	(1,702,385)	(1,700,341)
TOTAL VALUATION RESERVES	7,136,801	6,557,496
Supplemental Reserves:		
Post Retirement Death Benefit Reserve	15,135	15,064
Other Reserves/Designations		
Contingency Reserve (one percent)	0	0
TOTAL ALLOCATED RESERVES/DESIGNATIONS	7,151,936	6,572,560
Total Deferred Return	(175,354)	336,350
NET POSITION - RESTRICTED FOR PENSIONS	\$6,976,582	\$6,908,910

Note 9. Actuarial Valuation

The CERL requires an actuarial valuation to be performed at least every three years for the purpose of measuring the Plan's funding progress and setting contribution rates. CCCERA exceeds this requirement by engaging an independent actuarial consulting firm to perform an actuarial valuation for the pension plan annually. The purpose of the valuation is to evaluate the assets and liabilities of the Plan and determine necessary changes in member and employer contribution rates. The actuarial assumptions and methods have been selected in order to help ensure the systematic funding of future benefit payments for CCCERA members, and to maintain equity among generations of participants and taxpayers.

Actuarial standards guide the frequency to which an investigation of experience (experience study) is performed. CCCERA engages an independent actuarial consulting firm to perform the experience study at least every three years. The economic and demographic assumptions are reviewed and updated as required each time an experience study is performed. If assumptions are modified as a result of the experience study, member and employer contribution requirements are adjusted to take into account the change in the projected experience of the Plan. The most recent complete review of economic and demographic assumptions was for the period January 1, 2010 through December 31, 2012.

The valuation discloses the actuarial value of assets at \$6.6 billion with an actuarial accrued liability of \$8.0 billion for a funded ratio of 81.7%. The UAAL is \$1.5 billion, which is 210.64% of the \$698 million projected covered payroll. A schedule of CCCERA's funding progress may be found in the actuarial section on page 73. The schedule of funding progress presents multi-year trend information about whether the actuarial value of Plan assets is increasing or decreasing relative to the actuarial accrued liability for benefits over time.

Additional information regarding the actuarial methods and significant assumptions used as of the latest actuarial valuation of Plan assets and liabilities is shown in the following table.

Latest Actuarial Valuation of Plan Assets and Liabilities

Valuation Date	December 31, 2014
Actuarial Cost Method	Entry Age
Amortization Method	Level percent of payroll for total unfunded liability (4.00% payroll growth assumed)
Remaining Amortization Period	Remaining balance of December 31, 2007 UAAL is amortized over a fixed (decreasing or closed) period with 8 years remaining as of December 31, 2014. Any changes in UAAL after December 31, 2007 will be separately amortized over a fixed 18-year period effective with that valuation. Effective December 31, 2013, any changes in UAAL due to plan amendments (with the exception of a change due to retirement incentives) will be amortized over a 10-year fixed period effective with that valuation. The entire increase in UAAL resulting from a temporary retirement incentive will be funded in full upon adoption of the incentive.
Asset Valuation Method	5 year Smoothed Market, excluding non-valuation reserves and designations. Market value of assets less unrecognized returns in each of the last nine semi-annual accounting periods. Unrecognized return is equal to the difference between the actual market return and the expected return on the market value, and is recognized semi-annually over a five-year period. The Actuarial Value of Assets is reduced by value of the non-valuation reserves and designations.
Actuarial Assumptions:	
Investment Rate of Return	7.25%, net of investment and administrative expenses
Inflation Rate	3.25%
Real Across-the-Board Salary Increases	0.75%
Projected Salary Increases - General	4.75% to 13.50%*
Projected Salary Increases - Safety	4.75% to 14.00%*
Cost-of-Living Adjustments	3% per year except for Tier 3 and PEPRA Tier 5 (3% COLA) disability benefits and Tier 2 benefits that are valued as a 3.25% increase per year. Safety Tier C, PEPRA Tier E and PEPRA Tier 4 and Tier 5 (2% COLA) members are assumed to increase at 2% per year. All increases are contingent upon actual increases in Consumer Price Index (CPI).

*Includes inflation at 3.25% plus "across the board" salary increases of 0.75%, plus merit and promotional increases.

Note 10. Lease Obligation

For 2015, CCCERA owns the Willows Office Park located at 1355 Willow Way, Concord, California and has held this property as a real estate investment since 1984. The property manager for the Willows Office Park is Transwestern. CCCERA has entered into a fair market lease to occupy a portion of the building. A commitment under an operating lease agreement for office facilities provides for minimum future rental payments through September 30, 2019. These future minimum rental payments as of December 31, 2015 are as follows:

Lease Obligation	
Year Ending December 31	Amount
2016	\$409,129
2017	421,110
2018	433,091
2019*	331,558
TOTAL	\$1,594,888

* Lease expires September 30, 2019.

Note 11. Paulson Lawsuit Settlement

During the year ended December 31, 1999, CCCERA settled its litigation, entitled *Vernon D. Paulson, et al. vs. Board of Retirement of the Contra Costa County Employees' Retirement Association, et al.* The lawsuit was brought on behalf of a class of retired members of CCCERA regarding the inclusions and the exclusions from "final" compensation that are used in calculating member's retirement benefits. A settlement agreement was entered into with all parties and each employer was invoiced for their share of the \$34.2 million additional liability plus interest up to the date of the payment. All employers except Contra Costa County have paid off their liability. Contra Costa County chose to pay its share of the liability due over 19.5 years and entered into an agreement with CCCERA. The following summary lists the pertinent details of the County's agreement plus the amounts due at December 31, 2015.

Installment Payments Due from Paulson Final Liability

(Dollars in Thousands)

Contra Costa County

Agreement Details:	
Effective Date of Agreement	December 16, 2003
First Payment Due	August 1, 2004
Last Payment Due	February 1, 2024
Rate of Interest	8%
Annual Principal and Interest Payment	\$2,760
Original Principal	\$28,065
Receivable at December 31, 2015:	
Future Principal Payments	\$16,564
Interest Accrued for 2015	552
	\$17,116

**Note 12.
Litigation, Commitments, and
Contingencies**

CCCERA is subject to legal proceedings and claims arising in the ordinary course of its operations. CCCERA's management and legal counsel estimate that the ultimate outcome of such litigation will not have a material effect on CCCERA's financial statements.

On November 28, 2012, the Contra Costa County Deputy Sheriffs Association (DSA) and other employee groups filed a petition for a writ of mandate with the Contra Costa County Superior Court, seeking to prevent CCCERA from implementing AB 197. AB 197 added Subdivision 31461(b) to the CERL, mandating certain exclusions from compensation for retirement purposes. The Court issued a stay order in this matter, requiring that CCCERA suspend implementation of AB 197 and continue to follow its pre-AB 197 policy on final average salary calculations for 60 days after a final judgment is entered. Final judgment was entered on May 12, 2014, and the matter has been appealed. The Court of Appeal declined to enter an additional stay, and CCCERA was required to implement the Superior Court's final judgment and writ of mandate as

to all retirements on or after July 12, 2014. Final resolution of this lawsuit in the courts could take several years.

On August 21, 2014, the DSA and other employee groups filed a petition for a writ of mandate with the Contra Costa County Superior Court, seeking a permanent injunction requiring CCCERA to include multiple in-service leave cash outs in pensionable pay so long as the cash outs were paid or payable during the final average salary period. The lawsuit is related to the 2012 lawsuit referenced above, in that it involves questions regarding whether certain leave payments are "earned and payable" in the final average salary period and therefore pensionable. Final resolution in the court could take several years.

As of December 31, 2015, CCCERA was committed to future investments in real estate of \$343.7 million, in private debt of \$71.2 million, in alternative investments of \$445.8 million, in market opportunities of \$65.2 million and in real assets of \$96.7 million.

**Note 13.
Subsequent Events**

Subsequent events were evaluated through June 21, 2016, which is the date the financial statements were available to be issued. CCCERA did not have any other events requiring recording or disclosure in the financial statements for the year ended December 31, 2015.

Required Supplementary Information

Schedule of Changes in Net Pension Liability and Related Ratios

The schedule of changes in net pension liability displays the components of the total pension liability and plan fiduciary net position for the Plan, calculated in conformity with the requirements of GASB Statement No. 67. Covered employee payroll represents the payroll of employees that are provided with pensions through the pension plan.

Schedule of Changes in Net Pension Liability and Related Ratios
For the Year ended December 31, 2015

(Dollars In Thousands)

	December 31, 2015	December 31, 2014	December 31, 2013
Total Pension Liability			
Service cost	\$192,923	\$192,257	\$196,463
Interest	582,343	561,216	564,441
Changes of benefit terms	-	-	-
Differences between expected and actual experience	(62,118)	(183,605)	(77,223)
Changes of assumptions	72,186	(76)	(232,887)
Actual benefit payments, including refunds of employee contributions	(406,236)	(394,948)	(374,639)
Net Change in Total Pension Liability	\$379,098	\$174,844	\$76,156
Total Pension Liability - Beginning	8,104,611	7,929,767	7,853,611
Total Pension Liability - Ending (a)	\$8,483,709	\$8,104,611	\$7,929,767
Plan Fiduciary Net Position			
Contributions - employer	\$323,720	\$293,760	\$235,017
Contributions - employee	85,360	78,258	72,373
Net investment income	73,611	480,502	877,761
Benefit payments, including refunds of employee contributions	(406,236)	(394,948)	(374,639)
Administrative expense	(8,115)	(6,980)	(6,776)
Other	(668)	-	-
Net Changes in Plan Fiduciary Net Position	\$67,672	\$450,592	\$803,736
Plan Fiduciary Net Position - Beginning	6,908,910	6,458,318	5,654,581
Plan Fiduciary Net Position - Ending (b)	\$6,976,582	\$6,908,910	\$6,458,318
Net Pension Liability/(Asset) - Ending (a) - (b) = (c)	\$1,507,127	\$1,195,701	\$1,471,449
PLAN FIDUCIARY NET POSITION AS A PERCENTAGE OF THE TOTAL PENSION LIABILITY (b) / (a)	82.24%	85.25%	81.44%
COVERED EMPLOYEE PAYROLL (d)	\$709,819	\$671,486	\$638,636
NET PENSION LIABILITY AS PERCENTAGE OF COVERED EMPLOYEE PAYROLL (c) / (d)	212.33%	178.07%	230.41%

*Schedule is intended to show information for 10 years. Additional years will be displayed as they become available.

Schedule of Employer Contributions

Schedule of Employer Contributions

For the Years 2006 through 2015

(Dollars In Thousands)

Year Ended December 31	Actuarially Determined Contributions (a)	Contributions in Relation to the Actuarially Determined Contributions (b)	Contribution Deficiency/ (Excess) (b) - (a)	Covered Employee Payroll (c)	Contributions as a Percentage of Covered Employee Payroll (b) / (c)
2006	\$179,755	\$179,755 (1)	\$-	\$627,546	28.64%
2007	196,930	196,930	-	653,953	30.11%
2008	206,519	206,519	-	671,618	30.75%
2009	195,632	195,632	-	704,948	27.75%
2010	183,951	183,951	-	694,444	26.49%
2011	200,389	200,389	-	687,443	29.15%
2012	212,321	212,321	-	666,394	31.86%
2013	228,017	228,017 (2)	-	638,636	35.70%
2014	288,760	288,760 (3)	-	671,486	43.00%
2015	321,220	321,220 (4)	-	709,819	45.25%

(1) Excludes Pension Obligation Bond proceeds of \$11,693; (2) Excludes additional contributions towards UAAL of \$7,000; (3) Excludes additional contributions towards UAAL of \$5,000; (4) Excludes additional contributions towards UAAL of \$2,500. See accompanying notes to this schedule on page 55.

Schedule of Investment Returns

Schedule of Investment Returns

For Years 2013 through 2015*

	2015	2014	2013
Annual Money-Weighted Rate of Return, Net of Investment Expense	1.19%	7.51%	15.62%

*Schedule is intended to show information for 10 years. Additional years will be displayed as they become available.

Notes to the Required Supplementary Information

Note 1. Schedule of Changes in Net Pension Liability and Related Ratios

The total pension liability contained in this schedule was provided by the Plan's actuary, Segal Consulting. The net pension liability is measured as the total pension liability less the amount of the fiduciary net position of the Plan.

Note 2 Schedule of Employer Contributions

The required employer contributions and percent of those contributions actually made are presented in this schedule. Actuarial assumptions used for this schedule are presented below.

Additional Actuarial Information for 2015 Methods and assumptions used to establish "actuarially determined contribution" rates:	
Valuation Date	Actuarially determined contribution rates are calculated as of December 31, two and a half years prior to the end of the fiscal year in which contributions are reported.
Actuarial Cost Method	Entry Age
Amortization Method	Level percent of payroll (4.00% payroll growth assumed)
Remaining Amortization Period	Remaining balance of December 31, 2007 UAAL is amortized over a fixed (decreasing or closed) period with 8 years remaining as of December 31, 2014. Any changes in UAAL after December 31, 2007 will be separately amortized over a fixed 18-year period effective with that valuation. Effective December 31, 2013, any changes in UAAL due to plan amendments (with the exception of a change due to retirement incentives) will be amortized over a 10-year fixed period effective with that valuation. The entire increase in UAAL resulting from a temporary retirement incentive will be funded in full upon adoption of the incentive.
Asset Valuation Method	5 year Smoothed Market, excluding non-valuation reserves and designations.*

Additional Actuarial Information for 2015 (Continued)	
Actuarial Assumptions:	
Investment Rate of Return	7.00%, net of pension plan investment expenses, including inflation.
Inflation Rate	2.75%
Real Across-the-Board Salary Increases	0.50%
Projected Salary Increases - General	4.00% to 13.25%**
Projected Salary Increases - Safety	4.00% to 13.75%**
Cost-of-Living Adjustments	2.75% per year except for Safety Tier C, PEPRA Tier E benefits and PEPRA Tiers 4 and 5 (2% COLA). Benefits for members covered under certain memoranda of understanding are assumed to increase at 2% per year. All increases are contingent upon actual increases in Consumer Price Index (CPI).
Other Assumptions	Generally the same as those used in the December 31, 2015 funding actuarial valuation.

*Market value of assets less unrecognized returns in each of the last nine semi-annual accounting periods. Unrecognized return is equal to the difference between the actual market return and the expected return on the market value, and is recognized semi-annually over a five-year period. The Actuarial Value of Assets is reduced by the value of the non-valuation reserves and designations.

**Includes inflation at 2.75% plus "across the board" salary increases of 0.50%, plus merit and promotional increases.

The information presented in the required supplementary schedules was determined as part of the Governmental Accounting Standards (GAS) 67 actuarial valuation as of December 31, 2015 provided by the Plan's actuary. Additional information as of the actuarial valuation as of December 31, 2014 is in the actuarial section.

Note 3 Schedule of Investment Returns

The money-weighted rate of return expresses investment performance, net of investment expense, adjusted for the timing of cash flows and the changing amounts actually invested.

Other Supplementary Information

Schedule of Administrative Expenses

Schedule of Administrative Expenses

For the Year Ended December 31, 2015 (with Comparative Totals)

(Dollars In Thousands)

	2015	2014
Personnel Services:		
Salaries and Wages	\$3,524	\$2,949
Employee Retirement	2,529	2,246
TOTAL PERSONNEL SERVICES	6,053	5,195
Professional Services:		
Actuary - Benefit Statement	70	59
Computer and Software Services and Support	279	298
County Counsel - Disability	-	20
Disability Hearing Officer/Medical Reviews	80	21
External Audit Fees	65	48
Contra Costa Dept of Information Technology	41	35
Newsletters	9	9
Other Professional Services	253	231
TOTAL PROFESSIONAL SERVICES	797	721
Office Expenses:		
Office Lease	382	389
Office Supplies	70	54
Minor Equipment and Computer Supplies	11	8
Postage	80	66
Equipment Lease	29	27
Requested Maintenance	4	1
Communications/Telephone	106	35
Printing and Publications	22	27
TOTAL OFFICE EXPENSES	704	607
Miscellaneous:		
Fiduciary and Staff - Education/Travel	135	79
Fiduciary and Staff - Meetings/Other Travel	2	2
Insurance	186	162
Memberships	20	14
TOTAL MISCELLANEOUS	343	257
DEPRECIATION AND AMORTIZATION	218	200
TOTAL ADMINISTRATIVE EXPENSES	\$8,115	\$6,980

Schedule of Investment Expenses

Schedule of Investment Expenses		
For the Year Ended December 31, 2015 (With Comparative Totals)		
	<i>(Dollars In Thousands)</i>	
	2015	2014
Investment Management Fees, by portfolio:		
Stocks	\$12,807	\$12,550
Bonds	6,716	6,053
Real Assets	2,302	1,834
Real Estate	10,166	10,020
Alternative	8,454	8,480
Cash and Short-Term	4	7
TOTAL INVESTMENT MANAGEMENT FEES	40,449	38,944
Investment Consulting Fees:		
Consulting Services	491	400
Attorney Services	76	46
Actuarial Services	313	321
TOTAL INVESTMENT CONSULTING FEES	880	767
INVESTMENT CUSTODIAN FEES	623	1,083
OTHER INVESTMENT RELATED EXPENSES	1,107	806
TOTAL INVESTMENT EXPENSES	\$43,059	\$41,600

Schedule of Payments to Consultants

Schedule of Payments to Consultants		
For the Year Ended December 31, 2015 (With Comparative Totals)		
<i>Type of Service</i>	<i>(Dollars In Thousands)</i>	
	2015	2014
ACTUARIAL SERVICES	\$313	\$321
BENEFIT STATEMENT SERVICES	70	59
DATA PROCESSING	41	35
AUDIT SERVICES	65	48
Legal Services:		
Investment Legal Counsel	76	46
Disabilities	73	66
Other Legal Services	333	274
TOTAL LEGAL SERVICES	482	386
INVESTMENT CONSULTANT FEES	468	383
INVESTMENT CUSTODIAN FEES	627	1,083
PROXY GUIDELINE VOTING AGENT SERVICE	23	17
TOTAL PAYMENTS TO CONSULTANTS	\$2,089	\$2,332

III. Investment Section

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Chief Investment Officer's Report

April 25, 2016

Trustees, Board of Retirement
Contra Costa County Employees' Retirement Association

Re: Chief Investment Officer Review of 2015 Investment Results

Members of the Board:

The Contra Costa County Employees' Retirement Association (CCCERA) experienced a difficult, though positive, calendar year ending December 31, 2015, reflecting the volatility of the global equity markets, the resurgent strength of the US dollar and the continued decline of oil prices. It should be noted that the bulk of CCCERA investments performed well compared to both their benchmarks and against a universe of peer funds as well as against the fund's long-term objectives. The positive returns were driven by strong results in private equity and real estate and to a lesser extent by the domestic fixed income markets. Most other asset classes delivered flat to moderately negative results.

All return figures in this review are presented gross of fees and time-weighted, and are calculated by CCCERA's investment consultant, Verus.

Total Fund Performance

CCCERA's Total Fund returned 2.6% (gross of investment management fees) for the year ending December 31, 2015. This was less than the long-term objective of delivering CPI plus 400 basis points, which was 4.8% for 2015. Relative to the peer universe, CCCERA's 2015 performance exceeded the median public fund return of 0.3% and ranked in the 6th percentile of public funds. Over the past 10 years ending December 31, 2015, CCCERA has returned 6.7% and ranked in the 5th percentile of public funds.

Strategic Review of Asset Allocation and Portfolio Construction

The Board undertook a strategic review of asset allocation in 2015. The process culminated with the adoption of a new portfolio construction process and associated asset allocation targets in December 2015. The new strategic position adopts an internally developed process, known as the Functionally Focused Portfolio (FFP), to assign portfolio allocations according to strategic priorities as defined by the Board. Key to the FFP approach is the adoption of a dedicated portfolio to provide monthly cash flows to fund benefit payments. The Board selected a version of FFP that will target 48 months of projected benefits in this dedicated allocation. The remainder of the CCCERA funds will be deployed in a long-term growth allocation and a smaller diversifying allocation.

Asset Allocation

As of December 31, 2015, CCCERA's market value of assets was \$7.1 billion, an increase of approximately \$0.1 billion from the December 31, 2014 market value of \$7.0 billion. This was primarily the result of investment returns generated in 2015.

CCCERA assets as of December 31, 2015 were within approximately 2% of their respective target allocations. All assets were rebalanced to target in January 2016.

Sincerely,

A handwritten signature in black ink that reads "Timothy Price".

Timothy Price, CFA
Chief Investment Officer

General Information and Proxy Summary

CCCERA's funding objective is to meet long-term benefit obligations through contributions and investment income. The Plan's main investment objective is for the total fund return to exceed the CPI plus 400 basis points over a market cycle. This is accomplished by the implementation of a carefully planned and executed long-term investment program.

The California Constitution and Government Code Sections 31594 and 31595 authorize the Board of Retirement (Board) to invest in any investment deemed prudent in the Board's opinion. Investment decisions are to be made in the sole interest and for the exclusive purpose of providing benefits, minimizing employer contributions, and defraying reasonable expenses for administering the system. Investments are to be diversified to minimize the risk of loss and to maximize the rate of return, unless under the circumstances it is clearly prudent to not do so. The Board has adopted an Investment Policy, which

provides the framework for the management of CCCERA's investments. This policy establishes CCCERA's investment policies and objectives and defines the principal duties of the Board, staff, custodian bank and investment managers. For the year ended December 31, 2015, the total fund gain was 2.6%, less than the targeted return of 4.8% (CPI plus 400 basis points) but greater than the median public fund return of 0.6%.

Summary of Proxy Voting Guidelines and Procedures

Voting of proxy ballots shall be in accordance with CCCERA's Proxy Voting Guidelines. CCCERA utilizes the services of Institutional Shareholder Services to research and vote CCCERA's U.S. proxy ballots in order to protect and enhance returns.

Investment Results Based on Fair Value*

Investment Results Based on Fair Value*				
As of December 31, 2015				
		<i>(annualized)</i>		
	Current Year	3 Year	5 Year	10 Year
Domestic Equity	1.1%	15.3%	12.9%	7.9%
Benchmark:				
Russell 3000	0.5%	14.7%	12.2%	7.4%
International Equity	-1.2%	5.3%	4.1%	2.9%
Benchmarks:				
MSCI ACWI ex-US	-5.3%	1.9%	1.5%	3.4%
MSCI EAFE Gross	-0.4%	5.5%	4.1%	3.5%
Global Equity	2.2%	10.0%	6.9%	--
Benchmark:				
MSCI ACWI	-2.4%	7.7%	6.1%	--
Domestic Fixed Income	1.7%	3.4%	5.4%	5.9%
Benchmarks:				
Barclays U.S. Universal	0.4%	1.5%	3.5%	4.7%
Barclays Aggregate	0.6%	1.4%	3.2%	4.5%
High Yield	-3.5%	2.0%	5.2%	7.1%
Benchmark:				
BofA ML HYMaster II	-4.6%	1.6%	4.8%	6.8%
Global Fixed Income	-3.0%	-2.1%	1.1%	3.0%
Benchmark:				
Barclays Global Aggregate	-3.2%	-1.7%	0.9%	3.7%
Inflation Hedge**	-5.6%	-1.7%	--	--
Benchmark:				
CPI + 4%	4.8%	5.0%	--	--
Real Estate	12.3%	14.4%	14.1%	7.1%
Benchmarks:				
Real Estate Benchmark	8.2%	11.3%	12.2%	8.3%
NCREIF (ODCE) Index	15.0%	13.8%	13.7%	6.5%
NCREIF Property Index	13.3%	12.0%	12.2%	7.8%
Alternatives	14.0%	15.4%	13.9%	12.7%
Benchmark:				
S&P 500 + 4% Lagged	3.4%	16.9%	17.8%	11.1%
Opportunistic***	-11.0%	4.1%	3.7%	--
Benchmark:				
CPI + 4	4.8%	5.0%	5.6%	--
Total Fund	2.6%	9.0%	8.7%	6.7%
Benchmark:				
CPI + 4%	4.8%	5.0%	5.6%	5.9%

* Using time-weighted rate of return based on the market rate of return.

** Inflation Hedge Managers hired in 2013.

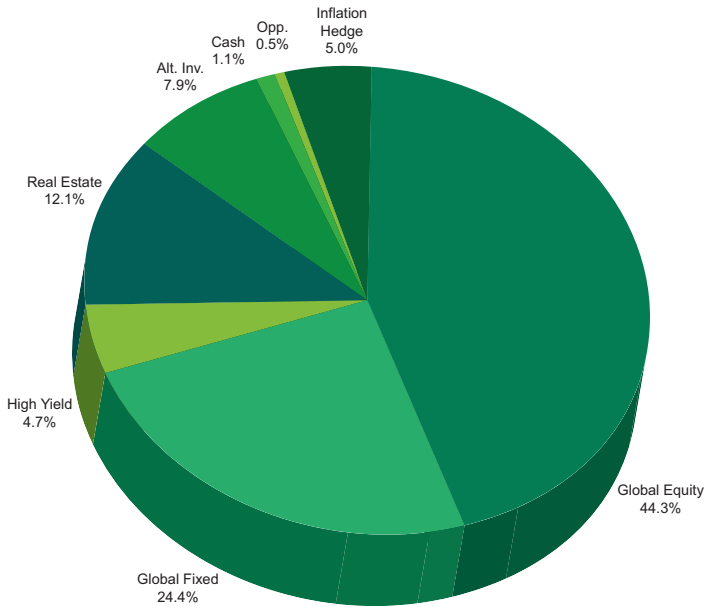
***Historically, funds were reflected in aggregate.

Asset Allocation

The asset allocation is an integral part of the Investment Policy. When a new asset class is implemented or a current asset class target is changed, the Plan's policy is modified to reflect the change or revision. The Board implements the asset allocation plan by hiring investment managers to invest assets on CCCERA's behalf, subject to specific guidelines incorporated into each firm's contract. In December 2015 the Board adopted a new asset allocation that is expected to be implemented in 2016. CCCERA's Chief Investment Officer and the outside investment consultant (Verus) assist the Board with the design and implementation of the asset allocation as depicted in the following chart:

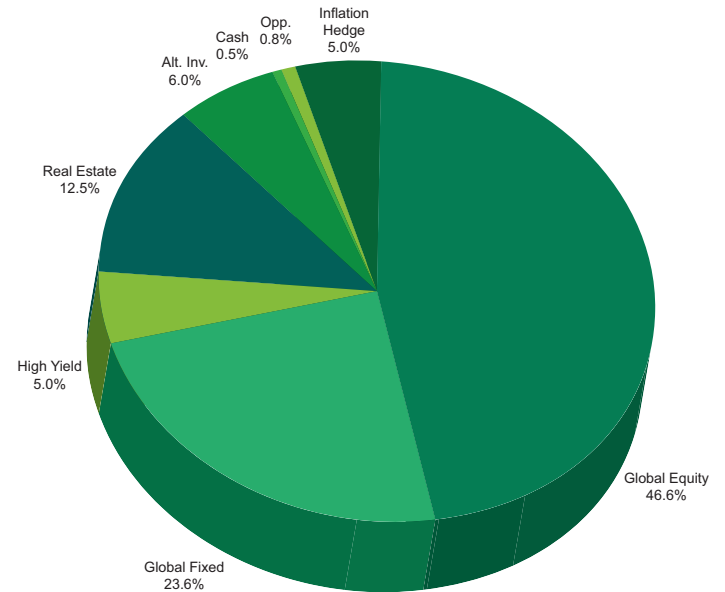
Actual Asset Allocation

As of December 31, 2015



Current Target Asset Allocation

As of December 31, 2015



Note: Results may not add due to rounding.

Schedule of Top Ten Equities and Fixed Income Securities

Top 10 Equity Securities

As of December 31, 2015

(Dollars in Thousands)

CUSIP	Shares	Security Name	Fair Value
594918104	541,466	MICROSOFT CORP	\$30,041
G0177J108	64,192	ALLERGAN PLC	20,060
92826C839	257,947	VISA INC CLASS A SHARES	20,004
151020104	150,733	CELGENE CORP	18,052
989TGM908	15,249	GOLD COMMODITY IN OUNCES	16,181
931427108	181,868	WALGREENS BOOTS ALLIANCE INC	15,487
747525103	304,505	QUALCOMM INC	15,221
57636Q104	150,272	MASTERCARD INC CLASS A	14,630
53071M104	515,136	LIBERTY INTERACTIVE CORP Q A	14,074
285512109	203,825	ELECTRONIC ARTS INC	14,007
TOTAL LARGEST EQUITY HOLDINGS			\$177,757

Top 10 Fixed Income Securities

As of December 31, 2015

(Dollars in Thousands)

CUSIP	Security Name	Cost	Fair Value
99S00O533	BWU00DRI1 IRS USD R V 03MLIBOR	\$116,609	\$116,600
99S00O563	BWU00D8Q4 IRS USD R V 03MLIBOR	59,112	59,400
99S003602	BWU00DAD0 IRS USD R V 03MLIBOR	50,026	49,800
99S003MC0	BWU00DAQ1 IRS USD R V 03MLIBOR	47,213	47,400
99S003562	SWU00D7N2 IRS USD R F 2.00000	43,230	43,047
912828L24	US TREASURY N/B	43,185	42,999
912828H45	TSY INFL IX N/B	40,989	39,297
912828A34	US TREASURY N/B	31,241	31,197
21H040616	GNMA II TBA 30 YR 4	22,249	22,301
99S0PA4F6	SWPC0B1G7 CDS USD R F 1.00000	22,075	22,020
TOTAL LARGEST FIXED HOLDINGS			\$474,061

Schedule of Investment Management Fees

Investment Management Fees

For the year ended December 31, 2015

(Dollars in Thousands)

Investment Activity

Stock Managers

Domestic	\$6,308
International	6,499
TOTAL STOCK MANAGERS	12,807

Bond Managers

Domestic	5,979
International	737
TOTAL BOND MANAGERS	6,716

REAL ASSET MANAGERS	2,302
----------------------------	--------------

REAL ESTATE MANAGERS	10,166
-----------------------------	---------------

ALTERNATIVE INVESTMENT MANAGERS	8,454
--	--------------

CASH & SHORT-TERM	4
------------------------------	----------

TOTAL FEES FROM INVESTMENT ACTIVITY (see page 57)	40,449
--	---------------

Securities Lending Activity

Management Fee	389
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Borrower Rebate	(593)
-----------------	-------

TOTAL FEES FROM SECURITIES LENDING ACTIVITY	(204)
--	--------------

TOTAL INVESTMENT MANAGEMENT FEES	\$40,245
---	-----------------

Investment Summary

Investment Summary		
For the year ended December 31, 2015		
<i>(Dollars in Thousands)</i>		
<i>Type of Investment</i>	Fair Value	Percent of Total Fair Value
Short-Term		
Deposit	\$5,283	0.07%
Short-Term Investments held by Fiscal Agent	578,199	7.70%
TOTAL SHORT-TERM INVESTMENTS	583,482	7.77%
Long-Term		
BONDS		
U.S. Government and Agency Instruments	1,295,467	17.25%
Domestic Corporate Bonds	614,406	8.19%
International Bonds	359,880	4.79%
TOTAL BONDS	2,269,754	30.24%
STOCKS		
Domestic Stocks	1,004,982	13.39%
Global Stocks	1,098,557	14.64%
International	740,260	9.86%
TOTAL STOCKS	2,843,799	37.89%
REAL ASSETS	355,497	4.74%
REAL ESTATE	873,849	11.64%
ALTERNATIVE INVESTMENTS	579,964	7.72%
TOTAL LONG-TERM INVESTMENTS AT FAIR VALUE	6,922,863	92.23%
TOTAL SHORT AND LONG-TERM INVESTMENTS	\$7,506,345	100.00%

Investment Managers *(As of December 31, 2015)*

Domestic Equity

Ceredex Value Advisors
Robeco Boston Partners
Jackson Square Partners
Emerald Advisors, Inc.
Intech
PIMCO

International Equity

Pyrford International
William Blair & Company

Global Equity

J.P. Morgan Asset Management
First Eagle Investment Management
Artisan
Intech

Fixed Income - Domestic

AFL-CIO Housing Investment Trust
Goldman Sachs
Torchlight
Lord Abbett
PIMCO

Fixed Income - High Yield

Allianz Global Investors

Fixed Income - Global

Lazard Asset Management

Real Assets

Aether Investment Partners
Commonfund
Equilibrium Capital
PIMCO
Wellington

Real Estate

Adelante Capital Management
Angelo Gordon
DLJ Real Estate Capital Partners LP
Long Wharf Real Estate Partners
Hearthstone Advisors
Invesco Real Estate
Oaktree
Siguler Guff
LaSalle
Paulson & Co.

Alternative Assets

Adams Street Partners
Carpenter Bancfund
DBL Investors
Energy Investors Funds Group
Nogales Investors LLC
Ocean Avenue Capital Partners
Paladin Capital Management
Pathway Capital Management
Siguler Guff

Opportunistic

Oaktree Capital
Angelo Gordon Energy

Cash & Short-Term

Contra Costa County Treasurer
State Street Bank

Securities Lending Program

State Street Corporation

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IV. Actuarial Section

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73	Schedule of Funding Progress	81	Solvency Test
74	Latest Actuarial Valuation Methods and Assumptions	81	Retirants and Beneficiaries Added To and Removed From Retiree Payroll
78	Summary of December 31, 2014 and 2013 Valuation Results	82	Actuarial Analysis of Financial Experience
79	Summary of Significant Results	83	Summary of Major Pension Plan Provisions



Actuary Certification Letter



100 Montgomery Street Suite 500 San Francisco, CA 94104-4308
T 415.263.8200 www.segalco.com

May 11, 2016

Board of Retirement
Contra Costa County Employees' Retirement Association
1355 Willow Way, Suite 221
Concord, CA 94520

**Re: Contra Costa County Employees' Retirement Association
December 31, 2014 Actuarial Valuation for Funding Purposes**

Dear Members of the Board:

Segal Consulting (Segal) prepared the December 31, 2014 annual actuarial valuation of the Contra Costa County Employees' Retirement Association (CCCERA). We certify that the valuation was performed in accordance with generally accepted actuarial principles and practices and CCCERA's funding policy that was last reviewed with the Board in 2014. In particular, it is our understanding that the assumptions and methods used for funding purposes meet the parameters set by Actuarial Standards of Practice (ASOPs).

As part of the December 31, 2014 actuarial valuation, Segal conducted an examination of all participant data for reasonableness. However, the scope of this examination does not qualify as an audit. Summaries of the employee data used in performing the actuarial valuations over the past several years are provided in our valuation report. We did not audit the Association's financial statements, however, the Association's auditor attested to the Association's financial statements. For actuarial valuation purposes, retirement plan assets are valued at Actuarial Value. Under this method, the assets used to determine employer contribution rates take into account market value by recognizing the semi-annual differences between the total return at market value and the expected investment return over a five-year period.

One of the general goals of an actuarial valuation is to establish contribution rates, which, over time, will remain level as a percentage of payroll for each generation of active members. Actuarial funding is based on the Entry Age Cost Method. Under this method, the employer contribution rate provides for current cost (normal cost) plus a level percentage of payroll to amortize any unfunded actuarial accrued liability (UAAL).

In 2008, the Board of Retirement elected to amortize the remaining balance of the Association's unfunded actuarial accrued liability as of December 31, 2007 over a declining (or closed) period with 8 years remaining as of December 31, 2014. Any change in unfunded actuarial accrued liability that arises due to actuarial gains or losses or due to changes in actuarial assumptions or

Contra Costa County Employees' Retirement Association
Actuary Certification Letter *(Continued)*

Board of Retirement
May 11, 2016
Page 2

methods at each valuation after December 31, 2007 is amortized over its own declining (or closed) 18-year period. Effective with the December 31, 2013 valuation, any change in unfunded actuarial accrued liability that arises due to plan amendments is amortized over its own declining (or closed) 10-year period (with the exception of a change due to retirement incentives, which is funded in full upon adoption of the incentive). The progress being made towards meeting the funding objective through December 31, 2014 is illustrated in the Schedule of Funding Progress.

Certain information found in the Notes to Basic Financial Statements and the Required Supplementary Information (RSI) included in the Financial Section was prepared by the Association based on the results of the Governmental Accounting Standards Board (GASB) Statement No. 67 actuarial valuation as of December 31, 2015 prepared by Segal. For the Financial Section of the Comprehensive Annual Financial Report (CAFR), Segal provided the Schedule of Changes in Net Pension Liability of Participating Employers and Schedule of Employer Contributions as shown in the RSI. A listing of the other supporting schedules prepared by the Association based on additional information provided by Segal and the results of the actuarial valuation as of December 31, 2014 for funding purposes is listed below.

- Schedule of Funding Progress
- Schedule of Employer Contributions
- Latest Actuarial Valuation Methods and Assumptions
- Summary of Valuation Results
- Summary of Significant Results
- Schedule of Active Member Valuation Data
- Retirants and Beneficiaries Added to and Removed from Retiree Payroll
- Solvency Test
- Actuarial Analysis of Financial Experience
- Summary of Statistical Data
- Schedule of Benefits Expenses by Type
- Schedule of Retired Members by Type of Benefit
- Schedule of Average Benefit Payment Amounts
- Participating Employers and Active Members

The valuation assumptions included in the Actuarial Section were adopted by the Retirement Board based on the December 31, 2012 Experience Study (for both the economic and non-

Contra Costa County Employees' Retirement Association
Actuary Certification Letter *(Concluded)*

Board of Retirement
May 11, 2016
Page 3

economic assumptions) or in conjunction with the December 31, 2013 actuarial valuation. It is our opinion that the assumptions used in the December 31, 2014 valuation produce results, which, in aggregate, reflect the future experience of the retirement plan. Actuarial valuations are performed on an annual basis. An experience analysis is performed every three years and the next experience analysis is due to be performed as of December 31, 2015.

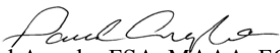
In the December 31, 2014 valuation, the ratio of the valuation value of assets to actuarial accrued liabilities (funded percentage) increased from 76.4% to 81.7% while the funded percentage on a market value of assets basis increased from 83.5% to 86.1%. The aggregate employer contribution rate has decreased from 43.58% of payroll to 40.06% of payroll, while the aggregate employee contribution rate has decreased from 11.91% of payroll to 11.84% of payroll.

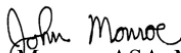
Under the asset smoothing method, the total unrecognized investment gains are \$336 million as of December 31, 2014. These investment gains will be recognized in the determination of the actuarial value of assets for funding purposes in the next few years. The deferred gains of \$336 million represent about 5% of the market value of assets as of December 31, 2014. Unless offset by future investment losses or other unfavorable experience, the recognition of the \$336 million market gains is expected to have an impact on the Association's future funded percentage and contribution rate requirements. This potential impact may be illustrated as follows:

- If the deferred gains were recognized immediately in the valuation value of assets, the funded percentage would increase from 81.7% to 85.9%.
- If the deferred gains were recognized immediately in the valuation value of assets, the aggregate employer rate would decrease from 40.1% to about 36.5% of payroll.

We are members of the American Academy of Actuaries and we meet the Qualification Standards of the American Academy of Actuaries to render the actuarial opinion contained herein.

Sincerely,


Paul Angelo, FSA, MAAA, FCA, EA
Senior Vice President and Actuary


John Monroe, ASA, MAAA, EA
Vice President and Actuary

AT/gxk

5380716v1/05337.002

Schedule of Funding Progress

Funded Ratio is a measurement of the funded status of the Plan. The Funded Ratio is calculated by dividing the Valuation Assets by the Actuarial Accrued Liability. In the following table, CCCERA's Funded Ratio indicates assets are approximately 18% less than liabilities. The most significant reasons for the increase in the funded ratio have been the market appreciation of investments and contributions by the employer and employee.

Schedule of Funding Progress For Years 2005 through 2014

(Dollars in Thousands)

Actuarial Valuation Date	Actuarial Value of Assets ¹ (a)	Actuarial Accrued Liability (AAL) ² (b)	Unfunded AAL (UAAL) (b) - (a)	Funded Ratio (a) / (b)	Covered Payroll (c)	UAAL as a Percentage of Covered Payroll [(b) - (a)] / (c)
12/31/2005	\$4,062,057	\$4,792,428	\$730,371	84.8%	\$627,546	116.4%
12/31/2006	4,460,871	5,293,977	833,106	84.3%	653,953	127.4%
12/31/2007	5,016,137	5,581,048	564,911	89.9%	671,618	84.1%
12/31/2008	5,282,505	5,972,471	689,966	88.5%	704,948	97.9%
12/31/2009	5,290,114	6,314,787	1,024,673	83.8%	694,444	147.6%
12/31/2010	5,341,822	6,654,037	1,312,215	80.3%	687,443	190.9%
12/31/2011	5,426,719	6,915,312	1,488,593	78.5%	666,394	223.4%
12/31/2012	5,482,257	7,761,316	2,279,059	70.6%	652,312	349.4%
12/31/2013	5,907,416	7,731,097	1,823,681	76.4%	679,429	268.4%
12/31/2014	6,557,496	8,027,438	1,469,942	81.7%	697,832	210.6%

(1) Excludes assets for non-valuation reserves.

(2) Excludes liabilities for non-valuation reserves.

Latest Actuarial Valuation Methods and Assumptions

The Entry Age Actuarial Cost Method was used in conjunction with the following actuarial assumptions. The actuarial assumptions used in the valuations are intended to estimate the future experience of the members of CCCERA and of CCCERA itself in areas that affect the projected benefit flow and anticipated investment earnings.

The actuarial assumptions and methods listed below were recommended by the Plan's independent actuary, Segal Consulting, and were approved by the Board.

The actuarial assumptions used to determine the liabilities for the December 31, 2014 valuation are based on the results of the actuarial experience study for the period January 1, 2010, through December 31, 2012. The study was prepared using updated economic and demographic assumptions, and mortality rates adopted by the Board in February 2013. The experience study was adopted by the Board in May 2013. An actuarial valuation is performed annually.

Actuarial Assumptions and Cost Method	
Valuation Date	December 31, 2014
Actuarial Cost Method	Entry Age
Amortization Method	Level Percent of payroll for total unfunded liability (4.00% payroll growth assumed)
Remaining Amortization Period	Remaining balance of December 31, 2007 UAAL is amortized over a fixed (decreasing or closed) period with 8 years remaining as of December 31, 2014. Any changes in UAAL after December 31, 2007 will be separately amortized over a fixed 18-year period effective with that valuation. Effective December 31, 2013, any changes in UAAL due to plan amendments (with the exception of a change due to retirement incentives) will be amortized over a 10-year fixed period effective with that valuation. The entire increase in UAAL resulting from a temporary retirement incentive will be funded in full upon adoption of the incentive.
Asset Valuation Method	5 year Smoothed Market, excluding non-valuation reserves and designations. Market value of assets less unrecognized returns in each of the last nine semi-annual accounting periods. Unrecognized return is equal to the difference between the actual market return and the expected return on the market value, and is recognized semi-annually over a five-year period. The Actuarial Value of Assets is reduced by the value of the non-valuation reserves and designations.
Actuarial Assumptions:	
Investment Rate of Return	7.25%, net of investment and administrative expenses
Inflation Rate	3.25%
Real Across-the-Board Salary Increases	0.75%
Projected Salary Increases - General	4.75% to 13.50%*
Projected Salary Increases - Safety	4.75% to 14.00%*
Cost-of-Living Adjustments	3% per year except for Tier 3 and PEPRA Tier 5 (3% COLA) disability benefits and Tier 2 benefits that are valued as a 3.25% increase per year. Safety Tier C, PEPRA Tier E and PEPRA Tiers 4 and 5 (2% COLA) members are assumed to increase at 2% per year. All increases are contingent upon actual increases in Consumer Price Index (CPI).

*Includes inflation at 3.25% plus "across the board" salary increases of 0.75%, plus merit and promotional increases. The average total assumed salary increase for active members in the December 31, 2014 valuation is 7.1%.

Actuarial Assumptions and Methods (Continued)	
Healthy	
General Members	RP-2000 Combined Healthy Mortality Table projected to 2030 with Scale AA, set back one year.
Safety Members	RP-2000 Combined Healthy Mortality Table projected to 2030 with Scale AA, set back two years.
Disabled	
General Members	RP-2000 Combined Healthy Mortality Table projected to 2030 with Scale AA, set forward six years for males and seven years for females.
Safety Members	RP-2000 Combined Healthy Mortality Table projected to 2030 with Scale AA, set forward three years.
Beneficiaries	Beneficiaries are assumed to have the same mortality as a General Member of the opposite sex who has taken a service (non-disability) retirement.
Employee Contribution Rate	
General Members	RP-2000 Combined Healthy Mortality Table projected to 2030 with Scale AA, set back one year, weighted 30% male and weighted 70% female.
Safety Members	RP-2000 Combined Healthy Mortality Table projected to 2030 with Scale AA, set back two years, weighted 85% male and weighted 15% female.
Pre-Retirement Mortality	Based upon the Experience Analysis as of 12/31/12.
Withdrawal Rates	Based upon the Experience Analysis as of 12/31/12.
Disability Rates	Based upon the Experience Analysis as of 12/31/12.
Service Retirement Rates	Based upon the Experience Analysis as of 12/31/12.
Salary Scales	Total increases of 5.64% per year reflecting approximately 3.25% for inflation, 0.75% for additional real "across-the-board" salary increases and approximately 1.64% for merit and longevity.
Marriage Assumption At Retirement	
Male members	75%
Female members	50%
Value of Assets for Contribution Rate Purposes	Actuarial Value as described in Actuarial Valuation Methods Section of Valuation Report

Contra Costa County Employees' Retirement Association
 Latest Actuarial Valuation Methods and Assumptions (Continued)

Retirement Rates (%)								
Age	General				Safety			
	Tier 1 (Enhanced)	Tier 3 (Enhanced)	Tier 1 (Non-Enhanced)	Tiers 4 and 5 (PEPRA)	Tier A (Enhanced)	Tier C (Enhanced)	Tier A (Non-Enhanced)	Tiers D and E (PEPRA)
45	--	--	--	--	2.00	1.00	0.00	0.00
50	5.00	4.00	3.00	0.00	25.00	15.00	5.00	5.00
55	20.00	10.00	10.00	5.00	30.00	20.00	6.00	6.00
60	30.00	15.00	25.00	10.00	40.00	35.00	20.00	20.00
65	40.00	40.00	40.00	27.00	100.00	100.00	100.00	100.00
70	100.00	40.00	100.00	50.00	--	--	--	--
75	100.00	100.00	100.00	100.00	--	--	--	--

Termination Rates (%) Before Retirement Mortality					
Age	General		Safety		
	Male	Female	Male	Female	
25	0.03	0.01	0.02	0.01	
30	0.04	0.02	0.03	0.02	
35	0.06	0.03	0.05	0.03	
40	0.08	0.04	0.08	0.04	
45	0.10	0.07	0.09	0.06	
50	0.12	0.09	0.11	0.08	
55	0.17	0.18	0.16	0.15	
60	0.37	0.38	0.33	0.34	
65	0.74	0.74	0.66	0.66	

All pre-retirement deaths are assumed to be non-service connected.

Termination Rates (%) Before Retirement				
Disability				
Age	General Tier 1*	General Tier 3**	Safety***	
20	0.01	0.01	0.02	0.02
25	0.02	0.02	0.22	0.22
30	0.04	0.03	0.42	0.42
35	0.08	0.05	0.56	0.56
40	0.16	0.08	0.66	0.66
45	0.32	0.13	0.94	0.94
50	0.52	0.17	2.54	2.54
55	0.66	0.21	4.10	4.10
60	0.70	0.27	4.80	4.80
65	0.70	0.36	5.00	5.00
70	0.70	0.44	5.00	5.00

* 70% of General Tier 1 disabilities are assumed to be duty disabilities. The other 30% are assumed to be ordinary disabilities.

** 35% of General Tier 3 disabilities are assumed to be duty disabilities. The other 65% are assumed to be ordinary disabilities.

***100% of Safety disabilities are assumed to be duty disabilities.

Termination Rates (%) Before Retirement		
Withdrawal*		
Years of Service	General	Safety
Less than 1	13.50	11.50
1	9.00	6.50
2	9.00	5.00
3	6.00	4.00
4	4.50	3.50
5	4.00	3.00
6	3.75	2.75
7	3.50	2.50
8	3.25	2.25
9	3.00	2.00
10	2.75	1.90
11	2.50	1.80
12	2.40	1.70
13	2.30	1.60
14	2.20	1.50
15	2.10	1.40
16	2.00	1.30
17	2.00	1.20
18	2.00	1.10
19	2.00	1.00
20 or more	2.00	1.00

* The member is assumed to receive the greater of the member's contribution balance or a deferred retirement benefit. No withdrawal is assumed after a member is first assumed to retire.

Summary of December 31, 2014 and 2013 Valuation Results

Summary of December 31, 2014 & 2013 Valuation Results

	December 31, 2014		December 31, 2013	
	Total Rate	Estimated Annual Amount	Total Rate	Estimated Annual Amount
Average Employer Contribution Rates*:				
General				
Cost Group #1 - County and Small Districts (Tiers 1 and 4)	33.14%	\$7,471,910	35.48%	\$8,400,094
Cost Group #2 - County and Small Districts (Tiers 3 and 5)	29.36%	147,184,037	32.28%	154,922,757
Cost Group #3 - Central Contra Costa Sanitary District	55.71%	15,653,379	60.51%	16,446,846
Cost Group #4 - Contra Costa Housing Authority	41.76%	2,138,471	43.65%	2,196,992
Cost Group #5 - Contra Costa County Fire Protection District	31.59%	1,124,433	35.04%	1,283,642
Cost Group #6 - Small Districts (Non-Enhanced Tiers 1 and 4)	26.62%	220,891	29.13%	230,791
Safety				
Cost Group #7 - County (Tiers A and D)	77.77%	47,801,788	80.27%	53,484,103
Cost Group #8 - Contra Costa and East County Fire Protection Districts	78.93%	24,149,147	82.98%	26,034,468
Cost Group #9 - County (Tiers C and E)	70.63%	13,024,297	74.50%	11,435,422
Cost Group #10 - Moraga-Orinda Fire District	69.66%	4,887,061	70.45%	5,293,654
Cost Group #11 - San Ramon Valley Fire Protection District	83.79%	13,965,831	88.33%	14,581,928
Cost Group #12 - Rodeo-Hercules Fire Protection District	89.27%	1,977,156	110.23%	1,784,422
ALL EMPLOYERS COMBINED	40.06%	\$279,598,401	43.58%	\$296,095,119

Average Member Contribution Rates*:				
General				
Cost Group #1 - County and Small Districts (Tiers 1 and 4)	10.63%	\$2,396,574	10.58%	\$2,504,556
Cost Group #2 - County and Small Districts (Tiers 3 and 5)	10.54%	52,834,487	10.60%	50,889,675
Cost Group #3 - Central Contra Costa Sanitary District	11.65%	3,273,422	11.10%	3,016,823
Cost Group #4 - Contra Costa Housing Authority	10.95%	560,790	11.17%	562,261
Cost Group #5 - Contra Costa County Fire Protection District	10.86%	386,572	11.05%	404,760
Cost Group #6 - Small Districts (Non-Enhanced Tiers 1 and 4)	12.37%	102,637	12.41%	98,322
Safety				
Cost Group #7 - County (Tiers A and D)	17.52%	10,768,805	17.41%	11,600,517
Cost Group #8 - Contra Costa and East County Fire Protection Districts	17.19%	5,259,475	17.18%	5,390,352
Cost Group #9 - County (Tiers C and E)	14.08%	2,596,473	13.66%	2,096,818
Cost Group #10 - Moraga-Orinda Fire District	17.10%	1,199,666	17.01%	1,278,057
Cost Group #11 - San Ramon Valley Fire Protection District	17.28%	2,880,327	16.88%	2,786,567
Cost Group #12 - Rodeo-Hercules Fire Protection District	16.16%	357,914	15.90%	257,382
ALL CATEGORIES COMBINED	11.84%	\$82,617,142	11.91%	\$80,886,090

Key Actuarial Assumptions				
Annual Interest Rate:	7.25%		7.25%	
Annual Inflation Rate:	3.25%		3.25%	
Across-the-Board Salary Increase	0.75%		0.75%	
Average Annual Salary Increase	5.64%		5.70%	

*Based on projected payroll as of each valuation date shown. These rates do not include any employer subvention of member contributions or any member subvention of employer contributions. The rates shown are averages based on all members regardless of their membership date.

Summary of Significant Results

Summary of Significant Results			
<i>Association Membership</i>	December 31, 2014	December 31, 2013	Increase/ (Decrease)
Active Members:			
1. Number of Members	9,159	9,124	0.4%
2. Average Age	45.8	45.8	N/A
3. Average Service	9.9	10.1	(2.0%)
4. Projected Total Payroll (Compensation)	\$697,831,837	\$679,428,911	2.7%
5. Average Projected Monthly Payroll	\$6,349	\$6,206	2.3%
Retired Members and Beneficiaries:			
1. Number of Members:			
Service Retirement	6,665	6,438	3.5%
Disability Retirement	921	927	(0.6%)
Beneficiaries	1,285	1,260	2.0%
2. Average Age	69.4	69.3	N/A
3. Actual Retired Payroll	\$387,026,328	\$369,809,403	4.7%
4. Average Monthly Benefit	\$3,669	\$3,579	2.5%
Vested Terminated Members:			
1. Number of Terminated Vested Members*	2,647	2,345	12.9%
2. Average Age	46.7	47.0	(0.6%)
Summary of Financial Data:			
Market Value of Assets (MVA)	\$6,908,910,230	\$6,458,317,596	7.0%
Return on MVA	7.35%	15.50%	
Actuarial Value of Assets (AVA)	\$6,572,560,432	\$5,922,449,192	11.0%
Return on AVA	11.39%	9.01%	
Valuation Value of Assets (VVA)	\$6,557,496,101	\$5,907,416,432	11.0%
Return on VVA	11.40%	9.02%	
Funded Status:			
Actuarial Accrued Liability (AAL)	\$8,027,438,213	\$7,731,097,407	3.8%
Unfunded Actuarial Accrued Liability (UAAL) on VVA basis	\$1,469,942,112	\$1,823,680,975	(19.4%)
Funded Ratio			
GASB Statement No. 25	81.7%	76.4%	

*Includes 1,176 terminated members with less than five years of service as of December 31, 2014 and 933 as of December 31, 2013.

Schedule of Active Member Valuation Data

Schedule of Active Member Valuation Data					
Valuation Date	Plan Type	Number	Projected Payroll	Average Annual Salary	% Increase/ (Decrease) in Average Salary
12/31/2005	General	7,594	\$480,015,003	\$63,210	2.76%
	Safety	1,611	147,531,405	91,578	4.82%
	Total	9,205	627,546,408	68,175	3.04%
12/31/2006	General	7,602	505,165,640	66,452	5.13%
	Safety	1,608	148,787,523	92,530	1.04%
	Total	9,210	653,953,163	71,005	4.15%
12/31/2007	General	7,806	518,874,107	66,471	0.03%
	Safety	1,615	152,743,825	94,578	2.21%
	Total	9,421	671,617,932	71,289	0.40%
12/31/2008	General	7,781	544,409,663	69,967	5.26%
	Safety	1,604	160,538,005	100,086	5.82%
	Total	9,385	704,947,668	75,114	5.37%
12/31/2009	General	7,406	536,090,505	72,386	3.46%
	Safety	1,532	158,353,494	103,364	3.28%
	Total	8,938	694,443,999	77,696	3.44%
12/31/2010	General	7,325	533,351,975	72,813	0.59%
	Safety	1,486	154,091,231	103,695	0.32%
	Total	8,811	687,443,206	78,021	0.42%
12/31/2011	General	7,183	518,213,291	72,144	(0.92%)
	Safety	1,446	148,180,855	102,476	(1.18%)
	Total	8,629	666,394,146	77,227	(1.02%)
12/31/2012	General	7,244	513,920,662	70,944	(1.66%)
	Safety	1,396	138,391,516	99,134	(3.26%)
	Total	8,640	652,312,178	75,499	(2.24%)
12/31/2013	General	7,682	540,431,355	70,350	(0.84%)
	Safety	1,442	138,997,556	96,392	(2.77%)
	Total	9,124	679,428,911	74,466	(1.37%)
12/31/2014	General	7,774	561,430,096	72,219	2.66%
	Safety	1,385	136,401,741	98,485	(2.17%)
	Total	9,159	\$697,831,837	\$76,191	2.32%

Solvency Test

Solvency Test (Dollars in Thousands)							
Valuation Data	Aggregate Accrued Liabilities (AAL) For			Reported Assets	Portion of Accrued Liabilities Covered by Reported Assets		
	1 Active Member Contributions*	2 Retirants and Beneficiaries	3 Active Members Employer Portion		1	2	3
12/31/2005	\$354,585	\$2,468,601	\$1,969,242	\$4,062,057	100%	100%	63%
12/31/2006	399,864	2,820,634	2,073,479	4,460,871	100%	100%	60%
12/31/2007	446,284	3,070,770	2,063,994	5,016,137	100%	100%	73%
12/31/2008	554,267	3,239,593	2,178,611	5,282,505	100%	100%	68%
12/31/2009	598,973	3,523,414	2,192,400	5,290,114	100%	100%	53%
12/31/2010	645,975	3,811,751	2,196,311	5,341,822	100%	100%	40%
12/31/2011	637,614	4,268,202	2,009,496	5,426,719	100%	100%	26%
12/31/2012	653,236	4,990,760	2,117,320	5,482,257	100%	97%	0%
12/31/2013	844,668	5,086,529	1,799,900	5,907,416	100%	100%	0%
12/31/2014	\$899,220	\$5,328,622	\$1,799,596	\$6,557,496	100%	100%	18%

*Beginning 12/31/2013, Active Member Contributions are set equal to the reserve account maintained for member contributions.

Retirants and Beneficiaries Added To and Removed From Retiree Payroll

Retirants and Beneficiaries Added To and Removed From Retiree Payroll										
Year	At Beginning of Year	Added During Year	Allowances Added	Removed During Year	Allowances Removed	At End of Year	Retiree Payroll	% Increase in Retiree Payroll	Average Annual Allowance	% Increase in Annual Allowance
2005	6,118	494	\$22,298,799	(175)	\$(5,171,802)	6,437	\$196,106,294	9.57%	\$30,465	4.14%
2006	6,437	357	23,469,814	(148)	(3,518,632)	6,646	216,057,476	10.17%	32,509	6.71%
2007	6,646	492	24,184,795	(227)	(4,586,247)	6,911	235,656,024	9.07%	34,099	4.89%
2008	6,911	317	20,853,808	(216)	(6,065,270)	7,012	250,444,562	6.28%	35,717	4.74%
2009	7,012	505	22,693,682	(225)	(6,271,784)	7,292	266,866,460	6.56%	36,597	2.47%
2010	7,292	486	27,459,315	(219)	(5,356,600)	7,559	288,969,175	8.28%	38,228	4.46%
2011	7,559	758	37,949,896	(232)	(6,621,254)	8,085	320,297,817	10.84%	39,616	3.63%
2012	8,085	657	34,622,498	(225)	(7,351,271)	8,517	347,569,044	8.51%	40,809	3.01%
2013	8,517	379	30,637,741	(271)	(8,397,382)	8,625	369,809,403	6.40%	42,876	5.07%
2014	8,625	494	\$25,732,590	(248)	\$(8,515,665)	8,871	\$387,026,328	4.66%	\$43,628	1.75%

Actuarial Analysis of Financial Experience

Actuarial Analysis of Financial Experience

Changes in the Unfunded Actuarial Accrued Liability (UAAL) for Years Ended December 31, 2005 through 2014
(Dollars in Thousands)

December 31	Expected UAAL	Change in Plan Provisions	Change in Assumptions/ Methods	(Gain) or Loss			UAAL
				Investment Return	Active Salary Increases	Other*	
2005	\$681,825	\$2,552	-	\$81,310	\$(12,310)	\$(23,006)	\$730,371
2006	715,423	-	210,158	(30,120)	(46,757)	(15,598)	833,106
2007	809,840	-	-	(171,935)	(47,443)	(25,550)	564,912
2008	515,421	1,101	-	154,986	5,838	12,620	689,966
2009	674,485	-	63,871	394,647	(47,181)	(61,149)	1,024,673
2010	1,050,996	-	15,521	313,478	(83,073)	15,293	1,312,215
2011	1,293,836	-	-	264,597	(77,127)	7,287	1,488,593
2012	1,463,568	-	570,154	297,215	(102,697)	50,818	2,279,058
2013	2,238,120	-	(205,332)	(96,259)	(114,771)	1,923	1,823,681
2014	\$1,773,291	-	\$(52)	\$(244,463)	\$(68,060)	\$9,226	\$1,469,942

*Other experience includes employer and employee contributions, mortality, disability, withdrawal and retirement other than expected.

Summary of Major Pension Plan Provisions

Major Provisions of the Present System

Briefly summarized below are the major provisions of CERL and PEPRA, as amended through December 31, 2013, and as adopted by Contra Costa County and special district employers.

A. GENERAL MEMBERS —

- Tier 1 Non-Enhanced (Government Code (GC) 31676.11)
- Tier 1 and Tier 3 Plans Enhanced (GC 31676.16)
- Tier 2 Plan (GC 31752)
- PEPRA Tier 4 and Tier 5 Plan (GC 7522.20 (a))

Coverage

Tier 1:

- a. All General Members hired before July 1, 1980, and electing not to transfer to Tier 2 Plan.
- b. Reciprocal General Members hired before October 1, 2002, electing to not enter Tier 2 Plan.
- c. Participating agencies who have elected Tier 1.
- d. Certain General Members with membership dates before January 1, 2013 hired by specific employers who did not adopt Tier 2 are placed in Tier 1.

Tier 2:

- a. All General Members hired before July 1, 1980, and most General Members hired on or after August 1, 1980, electing to transfer to the Tier 2 Plan. Effective October 1, 2002, Tier 2 was eliminated for all County employees (except CNA employees); employees were placed in Tier 3.

CNA employees in Tier 2 were placed in Tier 3 as of January 1, 2005.

One special district's Tier 2 employees were placed in Tier 3 effective February 1, 2006.

Tier 3:

All County General Members (except CNA employees) hired on or after October 1, 2002, are placed in Tier 3. All CNA employees hired on or after January 1, 2005, are placed in Tier 3. All Contra Costa Mosquito and Vector Control District employees hired on or after February 1, 2006 are placed in Tier 3. General Members with membership dates before January 1, 2013 who are not placed in Tier 1 are placed in Tier 3.

All Tier 2 members for each of the agencies listed above were placed in Tier 3 as of the above respective dates.

PEPRA Tier 4:

All General Members hired on or after January 1, 2013 hired by specific employers who did not adopt Tier 2 are placed in Tier 4.

PEPRA Tier 5:

All General Members hired on or after January 1, 2013 who are not placed in Tier 4 are placed in Tier 5.

Final Compensation (FC)

Tier 1 and Tier 3 Plans (GC 31462.1, 31462):

- a. Highest consecutive twelve months of compensation earnable.

Tier 2 Plan (GC 31462):

- a. Highest consecutive thirty-six months of compensation earnable.

PEPRA Tier 4 and Tier 5 Plans (GC 7522.32, 7522.34):

- a. Highest consecutive thirty-six months of pensionable compensation. Compensation subject to annual limit.

Contra Costa County Employees' Retirement Association
 Summary of Major Pension Plan Provisions (Continued)

Service Retirement

Maximum Benefit: 100% of Final Compensation

Tier 1 and Tier 3 Plans:

- a. Requirement (GC 31672): Age 50 with 10 years of service, or age 70 regardless of service, or after 30 years of service, regardless of age.
- b. Non-Enhanced Benefit (GC 31676.11)

*** Current Tier 1 and Tier 3 members retiring at age 62½ or older will receive the higher benefits formula under GC 31676.11. Employees with membership dates on or after the benefit enhancement effective date will retire with benefits computed under GC 31676.16.*

The offsets shown in all of the above formulas only apply to members integrated with Social Security.

Retirement

Age	Benefit Formula
50:	$(1.24\% \times FC - 1/3 \times 1.24\% \times \$350 \times 12) \times Yrs$
55:	$(1.67\% \times FC - 1/3 \times 1.67\% \times \$350 \times 12) \times Yrs$
60:	$(2.18\% \times FC - 1/3 \times 2.18\% \times \$350 \times 12) \times Yrs$
62:	$(2.35\% \times FC - 1/3 \times 2.35\% \times \$350 \times 12) \times Yrs$
65 or later:	$(2.61\% \times FC - 1/3 \times 2.61\% \times \$350 \times 12) \times Yrs$

Maximum Benefit: 100% of Final Compensation.

Tier 2 Plan:

- a. Requirement: Age 50 with 10 years of service, or age 70 regardless of service, or after 30 years of service, regardless of age.
- b. Benefit (GC 31752)

Retirement

Age	Benefit Formula
50:	$(0.83\% \times FC \times Yrs - 0.57\% \times Yrs \times PIA)$
55:	$(1.13\% \times FC \times Yrs - 0.87\% \times Yrs \times PIA)$
60:	$(1.43\% \times FC \times Yrs - 1.37\% \times Yrs \times PIA)$
62:	$(1.55\% \times FC \times Yrs - 1.67\% \times Yrs \times PIA)$
65 or later:	$(1.73\% \times FC \times Yrs - 1.67\% \times Yrs \times PIA)$

Maximum Benefit: None.

**Not greater than 30 years, where PIA is the Social Security Primary Insurance Amount.*

- c. Tier 1 and 3 Plan Enhanced Benefit (GC 31676.16)

Retirement

Age	Benefit Formula
50:	$(1.43\% \times FC - 1/3 \times 1.43\% \times \$350 \times 12) \times Yrs$
55:	$(2.00\% \times FC - 1/3 \times 2.00\% \times \$350 \times 12) \times Yrs$
60:	$(2.26\% \times FC - 1/3 \times 2.26\% \times \$350 \times 12) \times Yrs$
62:	$(2.37\% \times FC - 1/3 \times 2.37\% \times \$350 \times 12) \times Yrs$
65 or later:	$(2.42\% \times FC - 1/3 \times 2.42\% \times \$350 \times 12) \times Yrs^{**}$

PEPRA Tier 4 and Tier 5 Plans

- a. Requirement (GC 7522.20 (a), 31672.3): Age 52 with 5 years of service, or age 70 regardless of service.
- b. Benefit (GC 7522.20 (a))

Retirement

Age	Benefit Formula
52:	$1.00\% \times FC \times 3 \times Yrs$
55:	$1.30\% \times FC \times 3 \times Yrs$
60:	$1.80\% \times FC \times 3 \times Yrs$
62:	$2.00\% \times FC \times 3 \times Yrs$
65:	$2.30\% \times FC \times 3 \times Yrs$
67 or later:	$2.50\% \times FC \times 3 \times Yrs$

Maximum Benefit: None.

Disability Retirement

Tier 1 and Tier 4:

- a. Requirements (GC 31720)
 - (1) Service-connected: None
 - (2) Nonservice-connected: five years of service
- b. Benefit
 - (1) Service-connected: 50% Final Compensation or Service retirement benefit, if greater. (GC 31727.4)
 - (2) Nonservice-connected: 1.5% per year of service. If the benefit does not exceed one-third of Final Compensation, the service is projected to 65, but total benefit cannot be more than one-third of Final Compensation. (GC 31727)

Tier 2, Tier 3, and Tier 5:

- a. Requirements (GC 31720.1)
 - (1) Service-connected: None
 - (2) Nonservice-connected: ten years of service

Contra Costa County Employees' Retirement Association
Summary of Major Pension Plan Provisions (Continued)

- (3) Definition of disability is more strict than in Tier 1 Plan. - OR -
- b. Benefit (GC 31727.01)
- (1) Service-connected or nonservice-connected is 40% Final Compensation plus 10% Final Compensation for each minor child (maximum of three). - AND -
- (2) Disability benefits are offset by other plans of the County except Workers' Compensation and Social Security. c. Lump sum payment of \$5,000. (GC 31789.5)

Death Before Retirement

All tiers other than General Tier 2:

- a. No eligibility requirement: Refund of employee contributions with interest plus one month's compensation for each year of service to a maximum of 6 months compensation (GC 31781); 50% of Final Compensation payable to spouse if Line of Duty Death (GC 31787);
- AND -
- b. Lump sum payment of \$7,000 less any Social Security lump sum payment. (GC 31789.01, 31789.5)

- OR -

- b. 5 years of service (10 years for Tiers 3 and 5): Option 2 (100%) continuance of Service Retirement or Ordinary Disability benefit payable to designated beneficiary.

General Tier 2:

- a. Prior to eligibility to retire (less than ten years):
- (1) \$2,000 lump sum benefit offset by any Social Security payment Return of contributions
- b. While eligible to retire (ten years or service-connected death) 60% of Service or Disability Retirement Benefit (minimum benefit is 24% of Final Compensation) plus, for each minor child, 10% of the allowance otherwise paid to the member. Minimum family benefit is 60% of the member's allowance. Maximum family benefit is 100% of member's allowance.

Death After Retirement

All tiers other than General Tier 2 (GC 31760.1, 31760.2)

- a. After Service Retirement or Nonservice-Connected Disability - 60% of unmodified allowance continued to eligible spouse.

- b. After Service-Connected Disability - 100% of the allowance continued to eligible spouse. (GC 31786, 31786.1)

- AND -

- c. Lump sum payment of \$5,000. (GC 31789.5)

General Tier 2 (GC 31760.11)

- a. After Service or Disability Retirement 60% of unmodified allowance continued to eligible spouse plus 20% of allowance to each minor child. Minimum benefit is 60% of allowance. Maximum benefit is 100% of allowance.

- AND -

- b. Lump sum payment of \$7,000 less any Social Security lump sum payment. (GC 31789.01, 31789.5)

Withdrawal Benefits

May elect a refund of accumulated contributions or defer retirement until eligible.

Less than five years of service: Age 70

At least five years of service:

Tier 1, Tier 2 and Tier 3

The later of age 50 and when the member would have reached 10 years of service had the member remained a full-time employee.

Tier 4 and Tier 5

Age 52

Cost-of-Living (COL) Benefits

Tier 1, Tier 3, Tier 4 and Tier 5

Based on changes in CPI.

3% maximum change per year except for Tier 3 and PEPRA Tier 5 disability benefits which can increase 4% per year. Benefits for PEPRA Tier 4 and Tier 5 members covered under certain Memoranda of Understanding have a maximum of 2% per year.

Contra Costa County Employees' Retirement Association
Summary of Major Pension Plan Provisions (Continued)

Tier 2

Based on changes in CPI.

4% maximum change per year.

Employee's Contribution Rates

Tier 1 Non-Enhanced (GC 31621.1)

- a. Basic: to provide for an average annuity at age 55 equal to 1/120 of FC1.
- b. COL: to provide for one-half of future COL costs.

Tier 1 and Tier 3 Enhanced (GC 31621)

- a. Basic: to provide for an average annuity at age 60 equal to 1/120 of FC1.
- b. COL: to provide for one-half of future COL costs.

PEPRA General Tiers 4 and 5 (GC 7522.30)

- a. 50% of the total Normal Cost rate.

Employer Contribution Rates

Tier 1, Tier 3, Tier 4 and Tier 5

Enough to make up for the balance of the basic and COL contributions needed plus the amount required to amortize the Unfunded Actuarial Accrued Liability.

Other Information

Transfers from the Tier 1 Plan to the Tier 2 Plan were made on an individual voluntary irrevocable basis. Credit is given under the Tier 2 Plan for future service only. The COL maximum is 4% only for the credit under the Tier 2 Plan.

Transferred Tier 2 Plan members keep the five year requirement for nonservice-connected disability. Those who were members on or before March 7, 1973 will be exempt from paying member contributions after 30 years of service.

B. SAFETY MEMBERS —

- Tiers A and C (GC 31664 and 31664.1)
- PEPRA SAFETY MEMBERS Tiers D and E (GC 7522.25(d))

Coverage

Tiers A and C

- a. Safety members with membership dates before January 1, 2013.
- b. County Sheriff's Department Safety members hired on or after January 1, 2007, but before January 1, 2013 are placed in Safety Tier C Enhanced.

Tiers D and E

- a. Safety members with membership dates on or after January 1, 2013. Safety members from certain bargaining units are placed in Safety Tier E.

Final Compensation (FC)

Tiers A and C (GC 31462.1, 31462)

- a. Highest consecutive twelve months of compensation earnable.
- b. Highest consecutive thirty-six months of compensation earnable for Safety Tier C.

Tiers D and E (GC 7522.32, 7522.34)

- a. Highest consecutive thirty-six months of pensionable compensation. Compensation will be subject to annual limit.

Service Retirement

Tiers A and C

- a. Requirement (GC 31663.25): Age 50 with 10 years of service, or age 70 regardless of service, or after 20 years of service, regardless of age.
- b. Non-Enhanced Benefit at Retirement (GC 31664) (Rodeo-Hercules Fire Protection District)

Age	Benefit Formula
50	2.00% x FC1 x Yrs
55 or later	2.62% x FC1 x Yrs

Contra Costa County Employees' Retirement Association
 Summary of Major Pension Plan Provisions (Continued)

Maximum Benefit: 100% of Final Compensation

- c. Enhanced Benefit at Retirement (GC 31664.1) - (All others)

Age	Benefit Formula
50 or later	3.00% x FC1 x Yrs (Tier A); 3.00% x FC3 x Yrs (Tier C)

Maximum Benefit: 100% of Final Compensation

PEPRA Tiers D and E

- a. Requirement (GC 7522.25(a) and 31672.3): Age 50 with 5 years of service, or age 70 regardless of service.
- b. Benefit at Retirement (GC 7522.25 (d))

Age	Benefit Formula
50	2.00% x FC3 x Yrs
55	2.50% x FC3x Yrs
57 or later	2.70% x FC3 x Yrs

Maximum Benefit: None

Disability Retirement

- a. Requirements (GC 31720)
 - (1) Service-connected: None
 - (2) Nonservice-Connected: five years of service
- b. Benefit
 - (1) Service-connected: 50% Final Compensation or Service Retirement benefit if greater. (GC 31727.4)
 - (2) Nonservice-Connected: 1.8% per year of service. If the benefit does not exceed one-third of Final Compensation, the service projected to 55, but total benefit cannot be more than one-third of Final Compensation. (GC 31727.2)

Death Before Retirement

Non-service Connected

- a. Prior to retirement eligibility (less than 5 years)
 - (1) One month's salary for each year of service to a maximum of six month's compensation.
 - (2) Return of contributions.

- b. While eligible to retire (after five years) 60% of Service or Disability Retirement Benefit.

Service connected

- a. 50% of Final Compensation

Death After Retirement

- a. After Service Retirement or Nonservice-Connected Disability - 60% of unmodified allowance continued to eligible spouse. (GC 31785, 31785.1)

- OR -

- b. After Service-Connected Disability - 100% of the allowance continued to eligible spouse. (GC 31786, 31786.1)

- AND -

- c. Lump sum payment of \$5,000. (GC 31789.5)

Withdrawal Benefits

May elect a refund of accumulated contributions or defer retirement until eligible.

Less than five years of service: Age 70

At least five years of service:

Tier A and Tier C

The later of age 50 and when the member would have reached 10 years of service had the member remained a full-time employee.

Tier D and Tier E

Age 50

Cost-of-Living (COL) Benefits

- a. Based on change in CPI; 3% maximum change per year for Safety Tier A and Tier D.
- b. Based on change in CPI; 2% maximum change per year for Safety Tier C and Tier E.

Employees' Safety Tier A Non-Enhanced (Section 31664) Contribution Rates

- a. Basic - to provide for an average annuity at age 50 equal to 1/100 of FC1 (Tier A). (GC 31639.25)
- b. COL - to provide for one-half of future COL costs.

Employees' Safety Tier A and Tier C Enhanced (Section 31664.1) Contribution Rates

- a. Basic - to provide for an average annuity at age 50 equal to 1/100 of FC1 (Tier A). (GC 31139.25)

Basic - to provide for an average annuity at age 50 equal to 1/100 of FC3 (Tier C).
- b. COL - to provide for one-half of future COL costs.

PEPRA Safety Tiers D and E (GC 7522.30) Contribution Rates

- a. 50% of the total Normal Cost rate.

Employer Contribution Rate

Tiers A, C, D, and E

Enough to make up the balance of the basic and COL contributions needed plus the amount required to amortize the Unfunded Actuarial Accrued Liability.

Other Information

Safety members under the enhanced benefit formula with membership dates on or before January 1, 2013 will be exempt from paying member contributions after 30 years of service.

V. Statistical Section

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Summary of Statistical Data

The objective of the Statistical Section is to provide users with additional detailed information in order to promote a more comprehensive understanding of CCCERA's financial statements, note disclosures and supplemental information. In addition, the multi-year trend information for the financial and operating segments of CCCERA provided in this section is intended to facilitate understanding of how the financial activities and positions have changed over time. The information is presented in two major categories: Financial Trends Information and Operating Information.

Financial Trends Information is intended to assist readers in understanding how CCCERA's financial activities and positions have changed over time. The Changes in Fiduciary Net Position for Years 2006 – 2015 presents additions by source, deductions by type, and the total change in fiduciary net position for each year. The Schedule of Benefit Expenses by Type for the Last Ten Years presents benefit deductions by type of benefit, such as by Service Retirement and Disability Retirement, as well as by General and Safety benefits.

Operating Information is intended to provide contextual information about CCCERA's operations and membership to assist readers in using financial statement information to comprehend and evaluate CCCERA's fiscal condition. This section includes the Schedule of Retired Members by Type of Benefit, which presents information for the current period. The Schedule of Average Benefit Payment Amounts for the Last Ten Years shows the average monthly benefit, and number of retirees and beneficiaries, organized by five-year increments. Participating Employers and Active Members for Years 2006 – 2015 presents the employers and number of their corresponding covered employees.

Changes in Fiduciary Net Position For Years 2006 - 2015

Changes in Fiduciary Net Position					
For Years 2006 - 2015					
	<i>(Dollars In Thousands)</i>				
	2015	2014	2013	2012	2011
Additions					
Employer Pension Obligation Bond Proceeds	\$ -	\$ -	\$ -	\$ -	\$ -
Employer Contributions	323,720	293,760	235,017	212,321	200,389
Plan Member Contributions	85,361	78,258	72,373	73,362	61,575
Net Investment Income (Loss)	82,429	488,873	884,870	680,538	100,363
Net Securities Lending Income	1,165	1,167	1,148	1,535	951
Total Additions	492,675	862,058	1,193,408	967,756	363,278
Deductions					
Pension Benefits	400,759	387,026	369,809	347,569	320,297
Refunds	4,434	6,798	3,844	3,276	3,909
Administrative Expense	8,115	6,980	6,776	6,030	6,290
Other Expenses	11,695	10,662	9,242	8,590	7,649
Total Deductions	425,003	411,466	389,671	365,465	338,145
CHANGE IN FIDUCIARY NET POSITION	\$67,672	\$450,592	\$803,737	\$602,291	\$25,133
	2010	2009	2008	2007	2006
Additions					
Employer Pension Obligation Bond Proceeds	\$ -	\$ -	\$ -	\$ -	\$ 11,693
Employer Contributions	183,951	195,614	206,519	196,930	179,755
Plan Member Contributions	64,330	66,536	76,452	75,591	73,469
Net Investment Income (Loss)	605,672	748,861	(1,467,872)	306,459	614,913
Net Securities Lending Income	1,097	2,436	3,392	1,208	658
Total Additions	855,050	1,013,447	(1,181,509)	580,188	880,488
Deductions					
Pension Benefits	288,969	266,866	250,445	235,656	216,057
Refunds	2,647	4,628	3,730	3,113	3,232
Administrative Expense	5,283	7,359	5,601	5,942	4,860
Other Expenses	7,723	7,563	8,133	7,370	7,052
Membership Withdrawal	-	-	-	-	-
Total Deductions	304,622	286,416	267,909	252,081	231,201
CHANGE IN FIDUCIARY NET POSITION	\$550,428	\$727,031	\$(1,449,418)	\$328,107	\$649,287

Schedule of Benefit Expenses by Type *(Annual Benefit Amounts)*

Schedule of Benefit Expenses by Type

Annual Benefit Amounts as of December 31 of Each Year

(Dollars In Thousands)

	2014	2013	2012	2011	2010	2009	2008	2007	2006	2005
Service Retirement Payroll:										
General	\$198,783	\$188,945	\$179,079	\$163,514	\$144,304	\$131,646	\$121,929	\$113,955	\$104,164	\$ 94,018
Safety	107,103	102,791	96,403	87,198	78,221	70,782	66,953	62,705	56,215	49,532
Total	305,886	291,736	275,482	250,712	222,525	202,428	188,882	176,660	160,379	143,550
Disability Retirement Payroll:										
General	12,215	12,371	12,049	11,974	12,013	12,134	12,072	11,899	11,910	11,608
Safety	33,631	32,346	29,725	28,341	27,349	26,708	24,845	23,529	21,283	19,867
Total	45,846	44,717	41,774	40,315	39,362	38,842	36,917	35,428	33,193	31,475
Beneficiary Payroll:										
General	20,249	19,511	18,011	17,825	16,727	16,144	16,030	15,312	14,449	13,850
Safety	15,044	13,845	12,302	11,445	10,355	9,452	8,616	8,256	8,036	7,231
Total	35,293	33,356	30,313	29,270	27,082	25,596	24,646	23,568	22,485	21,081
Total Benefit Expense:										
General	231,248	220,827	209,139	193,313	173,044	159,924	150,031	141,166	130,523	119,476
Safety	155,777	148,982	138,430	126,984	115,925	106,942	100,414	94,490	85,534	76,630
TOTAL	\$387,026	\$369,809	\$347,569	\$320,297	\$288,969	\$266,866	\$250,445	\$235,656	\$216,057	\$196,106

Schedule of Retired Members by Type of Benefit

Schedule of Retired Members by Type of Benefit

Summary of Monthly Allowances Being Paid as of December 31, 2014

<i>Amount of Monthly Benefit</i>	Number of Retirees & Beneficiaries	Service	Disability	Beneficiary
General Members				
\$0 to \$999	1,532	1,200	6	326
\$1,000 to \$1,999	1,667	1,254	138	275
\$2,000 to \$2,999	1,214	903	156	155
\$3,000 to \$3,999	799	646	82	71
\$4,000 to \$4,999	496	431	19	46
\$5,000 to \$5,999	326	299	6	21
\$6,000 to \$6,999	241	226	3	12
\$7,000 to \$7,999	155	149	0	6
\$8,000 to \$8,999	109	106	0	3
\$9,000 to \$9,999	68	67	0	1
\$10,000 & Over	159	158	0	1
TOTALS	6,766	5,439	410	917
Safety Members				
\$0 to \$999	98	51	6	41
\$1,000 to \$1,999	133	56	7	70
\$2,000 to \$2,999	163	58	47	58
\$3,000 to \$3,999	322	91	148	83
\$4,000 to \$4,999	259	98	106	55
\$5,000 to \$5,999	177	122	32	23
\$6,000 to \$6,999	141	107	25	9
\$7,000 to \$7,999	169	135	30	4
\$8,000 to \$8,999	159	118	29	12
\$9,000 to \$9,999	136	102	28	6
\$10,000 & Over	348	288	53	7
TOTALS	2,105	1,226	511	368

Schedule of Average Benefit Payment Amounts

Schedule of Average Benefit Payment Amounts
 Estimates Based on Years of Credited Service - General and Safety Combined

<i>Retirement Effective Date</i>	<i>Years of Credited Service</i>							<i>Totals</i>
	0-5	5-10	10-15	15-20	20-25	25-30	30+	
1/1/2014 - 12/31/2014								
Average monthly benefit	\$1,292	\$1,139	\$1,976	\$3,048	\$4,431	\$6,048	\$5,318	\$3,408
Average Final Compensation	\$7,236	\$6,426	\$6,959	\$7,834	\$8,740	\$9,941	\$8,260	\$7,959
Number of retired members	11	51	98	77	68	66	33	404
1/1/2013 - 12/31/2013								
Average monthly benefit	\$533	\$1,150	\$1,824	\$3,215	\$4,454	\$5,020	\$4,991	\$2,739
Average Final Compensation	\$7,171	\$6,454	\$6,399	\$8,744	\$8,625	\$8,993	\$9,138	\$7,537
Number of retired members	12	52	87	41	43	27	15	277
1/1/2012 - 12/31/2012								
Average monthly benefit	\$1,953	\$1,160	\$2,096	\$3,690	\$4,897	\$5,991	\$6,272	\$3,871
Average Final Compensation	\$10,284	\$5,938	\$6,949	\$8,901	\$9,206	\$9,710	\$8,780	\$8,344
Number of retired members	19	70	126	77	149	81	58	580
1/1/2011 - 12/31/2011								
Average monthly benefit	\$436	\$1,334	\$1,853	\$2,663	\$4,325	\$6,315	\$6,829	\$4,091
Average Final Compensation	\$7,653	\$5,871	\$6,543	\$7,091	\$8,476	\$9,629	\$9,410	\$8,044
Number of retired members	12	77	102	86	156	114	116	663
1/1/2010 - 12/31/2010								
Average monthly benefit	\$559	\$1,148	\$1,781	\$3,019	\$4,619	\$6,126	\$6,837	\$4,018
Average Final Compensation	\$8,826	\$6,015	\$6,670	\$7,280	\$9,422	\$9,473	\$9,099	\$8,081
Number of retired members	9	55	73	56	57	69	81	400
1/1/2009 - 12/31/2009								
Average monthly benefit	\$1,039	\$1,368	\$1,844	\$2,697	\$4,532	\$6,595	\$7,046	\$3,810
Average Final Compensation*	\$-	\$-	\$-	\$-	\$-	\$-	\$-	\$-
Number of retired members	17	67	70	73	78	62	62	429
1/1/2008 - 12/31/2008								
Average monthly benefit	\$1,499	\$1,454	\$2,108	\$3,334	\$4,426	\$5,971	\$7,145	\$3,738
Average Final Compensation*	\$-	\$-	\$-	\$-	\$-	\$-	\$-	\$-
Number of retired members	15	45	38	51	43	42	28	262

(Schedule continued on next page)

Contra Costa County Employees' Retirement Association
 Schedule of Average Benefit Payment Amounts *(Continued)*

Schedule of Average Benefit Payment Amounts
 Estimates Based on Years of Credited Service - General and Safety Combined

<i>Retirement Effective Date</i>	<i>Years of Credited Service</i>							Totals
	0-5	5-10	10-15	15-20	20-25	25-30	30+	
1/1/2007 - 12/31/2007								
Average monthly benefit	\$862	\$1,044	\$1,685	\$2,350	\$3,044	\$6,010	\$7,608	\$3,287
Average Final Compensation*	\$ -	\$-	\$-	\$-	\$ -	\$-	\$-	\$ -
Number of retired members	21	65	71	79	64	66	51	417
1/1/2006 - 12/31/2006								
Average monthly benefit	\$624	\$1,066	\$1,170	\$2,365	\$3,981	\$5,511	\$6,864	\$3,684
Average Final Compensation*	\$-	\$-	\$-	\$-	\$-	\$-	\$-	\$ -
Number of retired members	16	24	50	53	44	48	65	300
1/1/2005 - 12/31/2005								
Average monthly benefit	\$722	\$1,143	\$1,394	\$2,095	\$3,611	\$5,910	\$5,834	\$3,418
Average Final Compensation*	\$-	\$-	\$-	\$-	\$-	\$-	\$-	\$-
Number of retired members	23	38	82	83	59	62	107	454

* Average Final Compensation is not available on a historical basis due to system constraints. It will be presented starting with the data for 2010 and subsequent years.

Contra Costa County Employees' Retirement Association
 Schedule of Average Benefit Payment Amounts (Continued)

Schedule of Average Benefit Payment Amounts

Estimates Based on Annualized Benefit Amounts at December 31 of Each Year

GENERAL TIER 1	<i>Years of Retirement</i>								
	0-4	5-9	10-14	15-19	20-24	25-29	30-34	35-39	40+
2014 Average Monthly Benefit	\$4,505	\$4,453	\$4,203	\$3,336	\$2,952	\$2,325	\$1,927	\$2,069	\$1,543
Number Retirees & Beneficiaries	471	515	612	543	482	405	322	169	59
2013 Average Monthly Benefit	\$4,531	\$4,417	\$3,861	\$3,123	\$2,784	\$2,240	\$1,868	\$1,999	\$1,465
Number Retirees & Beneficiaries	500	559	602	528	487	435	317	158	47
2012 Average Monthly Benefit	\$4,697	\$4,202	\$3,693	\$2,854	\$2,618	\$2,055	\$1,986	\$1,773	\$1,490
Number Retirees & Beneficiaries	535	631	594	510	514	434	324	141	40
2011 Average Monthly Benefit	\$4,522	\$4,107	\$3,419	\$2,824	\$2,415	\$1,936	\$1,923	\$1,721	\$1,483
Number Retirees & Beneficiaries	524	633	621	550	486	440	328	124	32
2010 Average Monthly Benefit	\$4,261	\$3,933	\$3,238	\$2,744	\$2,336	\$1,764	\$1,900	\$1,531	\$1,477
Number Retirees & Beneficiaries	501	658	594	548	506	467	314	107	24
2009 Average Monthly Benefit	\$3,997	\$3,747	\$3,003	\$2,628	\$2,133	\$1,748	\$1,843	\$1,466	\$1,402
Number Retirees & Beneficiaries	530	633	580	550	535	461	293	94	26
2008 Average Monthly Benefit	\$4,135	\$3,506	\$2,897	\$2,490	\$2,057	\$1,773	\$1,830	\$1,388	\$1,509
Number Retirees & Beneficiaries	546	632	560	578	564	478	264	79	23
2007 Average Monthly Benefit	\$3,905	\$3,326	\$2,611	\$2,314	\$1,874	\$1,836	\$1,670	\$1,295	\$1,324
Number Retirees & Beneficiaries	632	631	537	607	578	478	241	59	18
2006 Average Monthly Benefit	\$3,856	\$3,139	\$2,575	\$2,164	\$1,783	\$1,660	\$1,604	\$1,138	\$1,376
Number Retirees & Beneficiaries	617	649	584	584	607	480	223	54	14
2005 Average Monthly Benefit	\$3,679	\$2,903	\$2,453	\$2,077	\$1,643	\$1,641	\$1,496	\$1,209	\$1,550
Number Retirees & Beneficiaries	659	619	587	594	628	467	194	48	19

NOTE: Average Final Compensation is not available on a historical basis due to system constraints for this schedule.

Contra Costa County Employees' Retirement Association
 Schedule of Average Benefit Payment Amounts (Continued)

Schedule of Average Benefit Payment Amounts									
Estimates Based on Annualized Benefit Amounts at December 31 of Each Year									
GENERAL TIER 2	<i>Years of Retirement</i>								
	0-4	5-9	10-14	15-19	20-24	25-29	30-34	35-39	40+
2014 Average Monthly Benefit	\$413	\$671	\$762	\$1,109	\$1,005	\$1,365	\$732		
Number Retirees & Beneficiaries	39	73	114	206	100	21	4		
2013 Average Monthly Benefit	\$440	\$654	\$919	\$1,003	\$1,140	\$922	\$524		
Number Retirees & Beneficiaries	45	77	136	202	85	15	3		
2012 Average Monthly Benefit	\$602	\$613	\$943	\$1,016	\$1,082	\$951	\$517		
Number Retirees & Beneficiaries	58	78	161	186	75	11	2		
2011 Average Monthly Benefit	\$600	\$651	\$1,023	\$890	\$1,091	\$923	\$661		
Number Retirees & Beneficiaries	67	80	209	158	51	9	1		
2010 Average Monthly Benefit	\$653	\$721	\$1,039	\$821	\$1,290	\$662			
Number Retirees & Beneficiaries	71	109	215	143	30	8			
2009 Average Monthly Benefit	\$611	\$713	\$1,045	\$802	\$1,153	\$703			
Number Retirees & Beneficiaries	74	126	232	114	27	6			
2008 Average Monthly Benefit	\$835	\$886	\$995	\$1,065	\$913	\$617			
Number Retirees & Beneficiaries	82	144	232	101	17	4			
2007 Average Monthly Benefit	\$751	\$887	\$967	\$1,014	\$906	\$468			
Number Retirees & Beneficiaries	89	176	210	83	13	2			
2006 Average Monthly Benefit	\$731	\$956	\$849	\$895	\$829	\$592			
Number Retirees & Beneficiaries	89	225	176	58	12	1			
2005 Average Monthly Benefit	\$749	\$978	\$778	\$986	\$726	\$768			
Number Retirees & Beneficiaries	120	232	155	33	12	8			

NOTE: Average Final Compensation is not available on a historical basis due to system constraints for this schedule.

Contra Costa County Employees' Retirement Association
 Schedule of Average Benefit Payment Amounts *(Continued)*

Schedule of Average Benefit Payment Amounts									
Estimates Based on Annualized Benefit Amounts at December 31 of Each Year									
GENERAL TIER 3	<i>Years of Retirement</i>								
	0-4	5-9	10-14	15-19	20-24	25-29	30-34	35-39	40+
2014 Average Monthly Benefit	\$2,772	\$2,577	\$1,811	\$1,520	\$1,634				
Number Retirees & Beneficiaries	1,364	844	375	46	2				
2013 Average Monthly Benefit	\$2,769	\$2,374	\$1,518	\$1,677	\$1,594				
Number Retirees & Beneficiaries	1,297	776	306	3	2				
2012 Average Monthly Benefit	\$2,798	\$2,210	\$1,397	\$680	\$1,563				
Number Retirees & Beneficiaries	1,286	724	220	1	2				
2011 Average Monthly Benefit	\$2,672	\$2,020	\$1,291	\$660	\$1,518				
Number Retirees & Beneficiaries	1,102	626	164	1	2				
2010 Average Monthly Benefit	\$2,443	\$1,849	\$1,267	\$1,698	\$1,156				
Number Retirees & Beneficiaries	886	518	90	2	2				
2009 Average Monthly Benefit	\$2,347	\$1,651	\$1,465	\$1,213	\$1,183	\$1,965			
Number Retirees & Beneficiaries	852	398	54	6	3	1			
2008 Average Monthly Benefit	\$2,237	\$1,441	\$1,154	\$1,479	\$1,035				
Number Retirees & Beneficiaries	768	324	2	3	1				
2007 Average Monthly Benefit	\$2,020	\$1,327	\$1,115	\$1,287					
Number Retirees & Beneficiaries	752	224	2	3					
2006 Average Monthly Benefit	\$1,831	\$1,211							
Number Retirees & Beneficiaries	600	177							
2005 Average Monthly Benefit	\$1,667	\$1,170							
Number Retirees & Beneficiaries	538	97							

NOTE: Average Final Compensation is not available on a historical basis due to system constraints for this schedule.

Contra Costa County Employees' Retirement Association
 Schedule of Average Benefit Payment Amounts *(Concluded)*

Schedule of Average Benefit Payment Amounts									
Estimates Based on Annualized Benefit Amounts at December 31 of Each Year									
SAFETY TIER A and TIER C	<i>Years of Retirement</i>								
	0-4	5-9	10-14	15-19	20-24	25-29	30-34	35-39	40+
2014 Average Monthly Benefit	\$6,837	\$7,376	\$6,771	\$5,715	\$5,227	\$4,298	\$4,157	\$4,170	\$3,397
Number Retirees & Beneficiaries	487	426	403	263	205	121	89	73	38
2013 Average Monthly Benefit	\$6,858	\$7,145	\$6,583	\$5,150	\$5,117	\$4,155	\$4,255	\$3,986	\$3,093
Number Retirees & Beneficiaries	493	421	404	226	186	123	90	69	33
2012 Average Monthly Benefit	\$6,946	\$7,113	\$6,165	\$5,023	\$4,738	\$3,951	\$4,108	\$3,599	\$3,272
Number Retirees & Beneficiaries	487	471	364	205	158	125	91	61	28
2011 Average Monthly Benefit	\$6,763	\$7,040	\$5,513	\$4,892	\$4,409	\$3,909	\$3,880	3,711	\$2,940
Number Retirees & Beneficiaries	437	486	304	215	142	125	87	55	26
2010 Average Monthly Benefit	\$6,791	\$6,521	\$5,452	\$4,623	\$4,380	\$3,637	\$3,891	\$3,555	\$2,818
Number Retirees & Beneficiaries	406	453	287	223	133	107	86	50	21
2009 Average Monthly Benefit	\$6,620	\$6,093	\$5,110	\$4,706	\$3,929	\$3,756	\$3,780	\$3,178	\$2,619
Number Retirees & Beneficiaries	426	406	268	222	126	98	88	41	21
2008 Average Monthly Benefit	\$6,644	\$6,126	\$4,800	\$4,813	\$3,884	\$3,903	\$3,810	\$2,926	\$2,453
Number Retirees & Beneficiaries	409	406	236	202	128	101	83	30	16
2007 Average Monthly Benefit	\$6,517	\$5,758	\$4,573	\$4,438	\$3,625	\$3,909	\$3,397	\$2,830	\$2,420
Number Retirees & Beneficiaries	465	362	229	168	128	107	76	22	19
2006 Average Monthly Benefit	\$6,475	\$5,143	\$4,442	\$4,039	\$3,451	\$3,771	\$3,379	\$2,508	\$2,135
Number Retirees & Beneficiaries	467	301	244	150	132	105	62	25	10
2005 Average Monthly Benefit	\$5,984	\$5,042	\$4,171	\$3,911	\$3,339	\$3,684	\$3,160	\$3,053	\$1,635
Number Retirees & Beneficiaries	455	289	243	140	115	103	61	20	9

NOTE: Average Final Compensation is not available on a historical basis due to system constraints for this schedule.

Participating Employers and Active Members for Years 2006 - 2015

Participating Employers and Active Members for Years 2006 - 2015											
County of Contra Costa:	2015	% of Totals	2014	2013	2012	2011	2010	2009	2008	2007	2006
General Members	7,308	75.77%	6,897	6,784	6,357	6,280	6,403	6,429	6,802	6,871	6,668
Safety Members	936	9.70%	894	951	912	888	935	956	1,020	1,023	1,025
TOTAL:	8,244	85.47%	7,791	7,735	7,269	7,168	7,338	7,385	7,822	7,894	7,693
Participating Agencies:											
Bethel Island Municipal Improvement District	1	0.01%	1	2	2	2	3	3	3	3	5
Byron, Brentwood, Knightsen Union Cemetery District	5	0.06%	5	5	5	5	4	3	3	5	5
Central Contra Costa Sanitary District	272	2.82%	262	260	255	248	252	266	266	257	258
Contra Costa County Employees' Retirement Association	48	0.50%	43	44	38	36	37	37	37	35	35
Contra Costa Housing Authority	84	0.87%	82	83	83	91	92	91	90	92	97
Contra Costa Mosquito and Vector Control District	33	0.34%	33	34	33	35	35	35	37	35	35
Delta Diablo Sanitation District*	-	0.00%	-	-	-	-	-	-	-	-	-
Diablo Water District*	-	0.00%	-	-	-	-	-	-	-	-	-
Local Agency Formation Commission (LAFCO)	2	0.02%	2	2	2	2	2	2	2	1	1
Ironhouse Sanitary District*	-	0.00%	-	-	-	-	-	-	-	-	-
Rodeo Sanitary District	8	0.08%	7	7	6	8	7	8	8	7	7
In-Home Supportive Services Authority (IHSS)	13	0.13%	12	12	12	12	12	12	13	16	15
First 5 - Children & Families Commission	26	0.27%	22	21	20	22	24	22	16	14	14
Contra Costa County Fire Protection District	304	3.15%	297	286	299	331	321	349	354	344	354
East Contra Costa Fire Protection District	35	0.36%	38	49	38	48	49	50	50	52	55
Moraga-Orinda Fire District	62	0.64%	62	70	62	65	73	73	71	71	66
Rodeo-Hercules Fire Protection District	24	0.25%	23	15	14	17	21	21	21	21	21
Superior Court of Contra Costa County	332	3.44%	324	344	342	357	360	405	407	395	370
San Ramon Valley Fire Protection District	152	1.58%	155	155	160	182	181	180	185	179	179
TOTAL:	1,401	14.53%	1,368	1,389	1,371	1,461	1,473	1,557	1,563	1,527	1,517
TOTAL ACTIVE MEMBERSHIP	9,645	100.00%	9,159	9,124	8,640	8,629	8,811	8,942	9,385	9,421	9,210

*Districts that terminated their membership with CCCERA

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Contra Costa County Employees' Retirement Association
1355 Willow Way, Suite 221
Concord, California 94520-5728
cccera.org

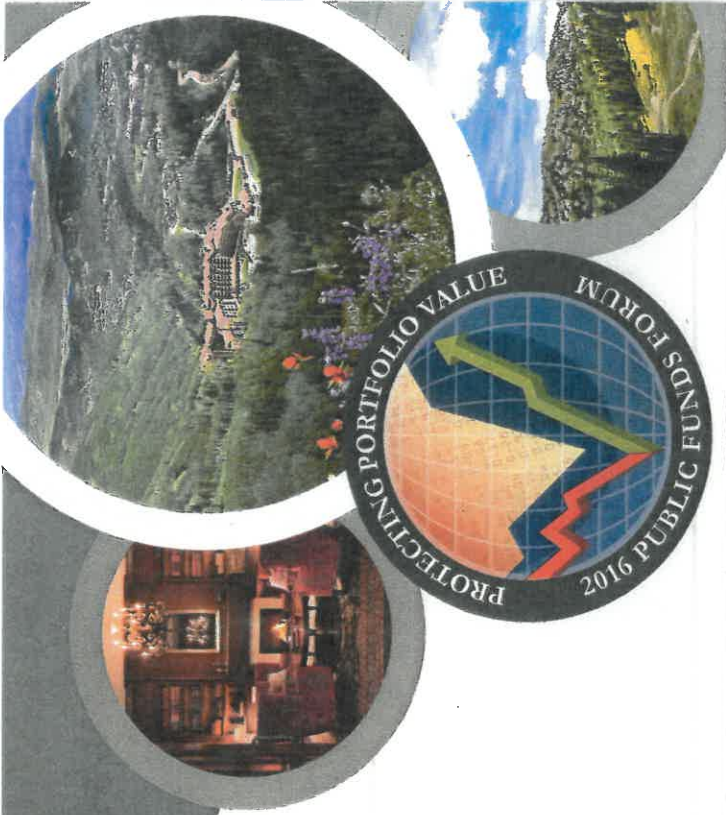
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Meeting Date
07/3/16
 Agenda Item
#8a.

2016 Public Funds Forum

SEPTEMBER 6-8, 2016
 MONTAGE DEER VALLEY | PARK CITY, UTAH

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 Journalist & Best-Selling Author of Flash Boys, Money Ball and The Blind Side

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Roundtable for Consultants & Institutional Investors

October 19-21, 2016 ■ Four Seasons Hotel ■ Chicago, IL

Roundtable Co-Chairs

George A. Tarlas, **Asset Consulting Group**

Michael D. Joyce, **The Marco Consulting Group**

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David R. Druley, **Cambridge Associates LLC**

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Charlie Georgalas, **Colonial Consulting, LLC**

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Richard Sichel, **Investment Performance Services, LLC**

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Brian Wrubel, **Marquette Associates, Inc.**

Stephen P. McCourt, **Meketa Investment Group**

Michael P. Manning, **NEPC, LLC**

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Robin Pellish, **Rocaton Investment Advisors, LLC**

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In the Long Run...

You can go the distance, we'll find out.

In the long run...in the long run.

- Don Henley & Glenn Frye, The Eagles (1979)

Introduction

As the investment landscape continues to vex and challenge, every aspect of the asset management industry is being re-examined, re-evaluated and re-designed. Whereas in the past investors could rely on the tried and true, today's environment requires significantly more thoughtfulness and creativity. New asset classes and strategies abound in order to meet return expectations in an environment characterized by sluggish economic growth and low interest rates. However, with "new and improved" comes "risk and uncertainty." Investment consultants are tasked with evaluating these new offerings and determining their appropriateness for a particular client set. But is greater complexity the answer or should a back-to-the-basics philosophy be encouraged? And as technology continues to accelerate reporting and valuation capabilities, how can investors be confident that their long-term investment objectives are the correct approach in an increasingly short-term oriented world?

The 2016 *Roundtable for Consultants & Institutional Investors* will explore the interaction and interdependency of the various constituents of the asset management industry and provide a venue to discuss the opportunities and challenges in today's marketplace.

Tuesday, October 18, 2016 (Pre-Roundtable)

4:00pm

Registration for Asset Owners

5.00pm

Private Conversation for Asset Owners

Join us for special investor-only private conversation on the eve of the Roundtable's official start. Exchange ideas, review the program in advance, dig into the discussion topics and get to know your peers, all in a relaxed and private setting.

6:00pm

Registration for Investment Consultants & Asset Managers

6:00 -7:00pm

Informal Welcome Reception for All Delegates

Wednesday, October 19, 2016

7:30-8:30am

Registration & Buffet Breakfast

8:30 – 8:45am

Welcome and Introductory Remarks

Robin Coffey, *Executive Director*, Institutional Investor Memberships

Michael D. Joyce, Esq., CEBS, *Executive Vice President, Senior Consultant*, The Marco Consulting Group

8:45 – 9:15am

Navigating the Global Economy

Many of the same global macroeconomic themes that have plagued investors over the past few years continue unabated resulting in increased volatility and economic uncertainty. The specter of deflation continues to haunt economies around the world and has caused some nations to set negative interest rates. The ECB has missed its inflation target for three years straight. How will they continue to combat a weak eurozone and their own fears of deflation? In a pivotal election year, the US started off 2016 with fears of slowing growth even though it continued to 'trump' other developed economies. This led the Federal Reserve to pull back on its original plan to have four further interest rate hikes throughout the year, but the question still remains not if, but when their next rate hike will be. The effects of low oil prices have been felt by the globe but especially in emerging markets dependent on its export. However, the main emerging markets story continues to be focused on China where lessened global demand has led to the evaporation of the once double-digit growth of the economy. As cracks continue to appear in the veneer, will the Chinese government be able to turn the slide in momentum around? These issues and others will remain on the table in some way for the foreseeable future, but what the world will need to know as we move into 2017 is to what extent.

Caroline Miller, *Chief Strategist*, BCA Research

9:15 – 10:00am

Chipping Away At Frozen Growth

The extraordinary turbulence on global markets during the second half of last year resulted in falling investor risk tolerance and capital redemptions from underperforming hedge funds. Unfavorable developed-nation demographics, a sizable debt overhang, and other systematic issues threaten to mire the world in slow growth for the foreseeable future. In this context, what do investors need to know, where are the investment pitfalls, and what macro trends are likely to result in a real return in the coming years and decades. Is the global economy on a path to sustainable growth or should investors remain wary of seemingly positive fundamentals? What political decisions will carry the most weight? This panel of industry leaders will share their views on the state of the industry and how investors can best balance their quest for alpha with their need for consistent returns.

Moderator: Josh Friedlander, *Editor*, Absolute Return

Jonathan R. Levin, *Managing Director, Office of the Chairman*, GCM Grosvenor

Tim Matson, *Executive Vice President, Chief Investment Officer*, Reinsurance Group of America, Incorporated

Jim Vos, *Chief Executive Officer*, Aksia

Additional Speakers to be announced.

10:00 – 10:30am

Coffee Break

10:30 – 11:30am

And Now For Something Completely Different!: Part I

Innovative Portfolio Construction: Alternative Selection and Strategies

In the context of increasingly uncertain market conditions, and picking up on the previous sessions, this panel will discuss the best ways to take advantage of opportunities that are found away from traditional paths. How does an investor break up seemingly overwhelming global economic issues into a series of manageable concerns? Has appetite for risk increased or is a more cautious approach necessary? What/where are the opportunities and speed bumps? How can hedge fund fee structures, amid sub-optimal aggregated industry performance, be justified? In the case of long-only hedge fund strategies, how far can mix-and-match go in realizing investors' expectations? What if a certain amount of liquidity is required, and what are the implications of utilizing more liquid alternatives? How much should you pay for alternative risk premia and exotic beta? How can investors with limited resources ferret out attractive opportunities and identify potential partners in niche asset classes given their own staffing and resource constraints? This panel will discuss the role of hedge funds and alternative strategies and how investors can measure the true costs and benefits of such allocations.

Moderator: David Druley, Chairman and CEO, Cambridge Associates LLC

Anurag Pandit, Chief Investment Officer, ALSAC/ St. Jude Children's Research Hospital

Additional speakers to be announced.

11:30 – 12:30pm

Alternative Think Tanks: Breakout Discussion Groups

Innovative Portfolio Construction

Picking up on the morning's sessions, these breakout groups will discuss best practices and key criteria for investing in hedge funds and other alternative strategies in the current investment environment. Delegates will explore where and why investors are allocating now, the key considerations they face in implementation and what they require from their consultants and manager partners.

THINK TANK LEADERS:

- I. **Arn Andrews, Chief Investment Officer/Assistant Director, City of San Jose Department of Retirement Services**
Ronald Funderburk, Credit/Inflation Director, North Carolina Department of State Treasurer
George Hauptfuhrer, Consultant, Prime, Buchholz & Associates, Inc.

- II. **Jim Bell, CFA, Director of Hedge Fund Research, Colonial Consulting, LLC**
James P. Maloney, Acting Chief Investment Officer/Chairman of Investment Committee, Chicago Policemen's Annuity and Benefit Fund

Additional Think Tank Co-leaders to be announced

- III. **Jim Bethea, Vice President & Chief Investment Officer, University of Iowa Foundation**
Michael D. Joyce, Esq., CEBS, Executive Vice President, Senior Consultant, The Marco Consulting Group
Additional Think Tank Co-leader to be announced

- IV. **Debashis Chowdhury, CFA, President, Canterbury Consulting**

Additional Think Tank Co-leaders to be announced

v. **Daniel George**, *Chief Investment Officer*, Ellwood Associates

Additional Think Tank Co-leaders to be announced

VI. **Scott Harsh**, *President & Chief Executive Officer*, Fund Evaluation Group, LLC

Additional Think Tank Co-leaders to be announced

12:30 – 1:30pm

Seated Lunch

1:30 – 2:15pm

Featured Speaker

Cybersecurity – Cost, Risk or Asset?

The answer is all three. Companies today must look at cybersecurity in a very holistic manner; it is not just an IT issue. Cybersecurity is a cost to be controlled and in this speech, Major General Brett Williams offers a model for thinking about how much “cyber stuff” is enough and how to avoid spending money without increasing capability. Cybersecurity also represents a risk that must be managed, and it must be managed within the company’s overall risk framework. Williams discusses cyber risk in relation to overall business success. Finally, cybersecurity must be considered an asset. Increasingly customers are going to evaluate product and service providers along the lines of cybersecurity. Sound cybersecurity practices provide a competitive advantage and therefore generate revenue in today’s market. A major challenge for today’s senior executive is understanding enough about the technical nature of cyber to make appropriate strategic level decisions. In this presentation, Williams offers a plain language overview of cyberspace—what it is and how to put it in context with the rest of your enterprise.

Major General Brett T. Williams, USAF, (Ret), *Director of Operations*, U.S. Cyber Command (2012-2014); *Director of Communications*, U.S. Pacific Command (2009-2011); *Combat-Experienced Fighter Pilot*

2:15 – 3:15pm

Concurrent Workshops:

1. Direct Lending

Investors are asking about increasingly unusual and exotic ways to raise the yield on their portfolios. With traditional banks disintermediated from the lending landscape post-financial crises, private funds have stepped in to act as go-betweens for borrowers and lenders. With interest rates so low, it could be very tempting to replace traditional fixed income with these direct-lending vehicles in order to achieve greater returns. What does an investor need to know before jumping in and how can the true costs and benefits be measured? This panel will look at the opportunities and challenges of the direct lending universe from a number of perspectives.

Moderator: Stephen L. Nesbitt, *Chief Executive Officer*, Cliffwater LLC

David B. Golub, *President*, Golub Capital

Nathaniel Molinari, *Senior Investment/Treasury Analyst*, AEGIS Insurance Services

Additional speakers to be announced.

2. The Outlook for Real Assets

Allocations to real assets—like real estate, agriculture, timber, energy and infrastructure —can potentially help with many investment goals, while adding valuable diversification to a traditional stock and bond portfolio. However, adding real

assets requires a well-defined investment objective, as well as a clear plan for implementation, including the size of the real assets allocation within the overall portfolio, the mix of real assets exposures, and the vehicles by which these exposures will be delivered. Whether a real assets allocation is attained through direct exposures or through a liquid real assets portfolio, skilled asset allocation capabilities are required to maintain portfolio objectives and react to changing market regimes over time. Within this broad group of investments – including energy, real estate, infrastructure, natural resources and commodities – many questions need to be addressed. Among these are: What will be the effect of rising interest rates? How can dislocations in the energy sector be exploited? Where are we in the real estate market cycle, publically and privately? Why are institutions continuing to allocate money to core infrastructure and how does one obtain better transparency, lower fees, and more flexible terms? Are there buying opportunities in the commodities space and when do passive strategies make sense? This panel will explore these issues and more.

Moderator: Jamie Shen, *Senior Vice President & Practice Leader of Alternative Investments*, Callan Associates Inc.

Sean Ruhmann, *Partner, Director of Private Markets Research*, NEPC, LLC

Additional speakers to be announced.

3:15 – 3:45pm

Coffee Break

3:45 – 4:30pm

Private Equity

Despite a slowing global economy and increased volatility in exchange-traded equity markets, PE continues to post strong returns relative to other alternative asset classes. However, this flushness of capital has created tremendous pressure for PE funds to streamline and differentiate their offerings. Furthermore, given that most developed-market economies are struggling, while China remains in the grips of a major slowdown, is a slowdown inevitable? And if so, how can PE firms position their funds to ride out a downturn.

Moderator: Jonathan Lach, *Partner*, Albourne Partners

Lee A. Gardella, *Managing Director, Head of Risk Management*, Adveq

Andreas Beroutsos, *Caisse de depot et placement du Quebec*

Additional speakers to be announced.

4:30 – 5:30pm

Healthcare Happy Hour

5:45pm

Buses depart Four Seasons for Carnivale Restaurant

702 W Fulton St, Chicago, IL 60661

6:15-8:30pm

Reception, Dinner & *Annual Investor Intelligence Network (IIN) Awards for Healthcare Investors and Investment Consultants*

Since opening in 2005, Carnivale has established itself as one of the premier dining experiences in Chicago's West Loop. Featuring authentic Nuevo Latino cuisine, Carnivale's vibrant décor and festive atmosphere will serve as the perfect backdrop for our IIN Awards celebration.

Thursday, October 20, 2016

7.15-8.30am

Private Breakfasts & Conversations:

- **Healthcare Executives**
 - **Breakfast Co-Chairs:** *to be announced*

- **Insurance Executives**
 - **Breakfast Co-Chair:** **Alton R. Cogert, CFA, CPA, CAIA, CGMA**, *President and Chief Executive Officer, Strategic Asset Alliance*

7.45-8.45 am

Registration & Buffet Breakfast

8:45-9:00am

Welcome and Introductory Remarks

Robin Coffey, *Executive Director, Institutional Investor Memberships*

George Tarlas, *Senior Managing Director, Asset Consulting Group*

9:00 – 9:45am

Featured Speaker

Henry McVey, *Member & Head of Global Macro & Asset Allocation, CIO of KKR Balance Sheet, Kohlberg Kravis Roberts & Co.*

9:45 – 10:30am

And Now For Something Completely Different!: Part II

Innovative Asset Allocation: Where Do You Find Value?

With so many aspects of the investment environment seeming in motion, from higher interest rates coupled with a broader slowdown in markets outside the US, what's an asset owner to do? While faith in starting with a top down asset allocation remains undiminished, the methods of determining that asset allocation are under fire. How can asset owners increase the probability of earning required rates of return while thoughtfully mitigating risk? Which asset classes should see their allocations increase or decrease? Should traditional ideas about asset classes be supplanted by new categories, such as return seeking assets? Or are those just new names for stocks and bonds? What about risk budgeting, risk parity, and all the other ideas now on offer? How can a fund/plan best position itself to ensure it can handle the mistakes when they happen and how can you communicate that risk upward to help trustees and other stakeholders understand these judgments better? And how should investment executives work with their boards, committee, and consultants in this new world of asset allocation? This panel of industry experts will discuss and debate these issues and more.

Moderator: Andrew Junkin, *President, Wilshire Associates*

Brian Singer, *Partner, Head of Dynamic Allocation Strategies Team, William Blair Investment Management*

Derek Drummond, *Managing Analyst, State of Wisconsin Investment Board*

Rip Reeves, *Chief Investment Officer/Treasurer, AEGIS Insurance Services*

Additional speakers to be announced.

10:30-11:00am

Coffee Break

11:00 – 11:45am

Where's The Edge?

The more uncertainty in the markets, the more investors are demanding greater portfolio oversight and guidance from their advisors. But with product proliferation accelerating, and the sheer number of asset managers growing annually, how do consultants help their clients parse through the all noise? Based on their firm's unique view of the capital markets, how are they advising their clients, for both the near and longer term? Not just across product and strategy lines but also across specific geographical regions? And how has their firm's approach to manager research and selection evolved? This panel of industry leaders will provide insight into what they see as the top challenges confronting today's investors and where the best opportunities lie.

Moderator: George Tarlas, Senior Managing Director, Asset Consulting Group

Stephen T. Cummings, President, Aon Hewitt Investment Consulting, Inc.

Shelly Heier, CFA, CAIA, President & COO, Senior Consultant, Verus

Stephen P. Holmes, President, Summit Strategies Group

Michael P. Manning, CFA, CAIA, Managing Partner, NEPC, LLC

11:45- 12:45pm

Think Tanks of Investable Ideas: Breakout Discussion Groups

Asset Allocation and the Roles of the Investor, Consultant and Manager in the Decision-Making Process

Reflecting on the earlier sessions, these breakout discussion groups will examine the latest thinking about who should decide what in the asset allocation process and what are the best metrics on which they should be measured.

THINK TANK LEADERS:

- I. **Robert DiMeo, Managing Director, DiMeo Schneider & Associates, LLC**
Jeff Gabrione, Director of Research, The Bogdahn Group
Additional Think Tank Co-leader to be announced

- II. **Jerome (Jerry) Hitpas, Senior Vice President, Investments and Risk Management, Trustmark Insurance Company**
Cynthia Potter, Managing Director, Cardinal Investment Advisors LLC

- III. **Tarik Dalton, Director of Multi-Strategy, North Carolina Department of State Treasurer**
Dave Russell, CFA, Senior Consultant and Senior Investment Strategist, Investment Performance Services, LLC
Additional Think Tank Co-leader to be announced

- IV. **Kevin J. Turner, CFA, Managing Director, Consulting, Russell Investments**
Additional Think Tank Co-leaders to be announced

- V. **Alan D. Biller, Ph.D, CEO & Founder, Alan Biller & Associates**
Angela Miller-May, Director of Investments, Chicago Teachers' Pension Fund
Neil Rue, CFA, Managing Director, Pension Consulting Alliance
- VI. **Jim Treanor, Principal & Head of Research, Slocum**
Additional Think Tank Co-leaders to be announced
- VII. **David E. Erickson, CFA, Chief Investment Officer, Ascension Investment Management**
Additional Think Tank Co-leader to be announced

12:45 – 1:45pm

Seated Lunch

1:45 – 2:30pm

Featured Speaker

With only a few weeks to go before the Presidential election, national political pollster and pundit Peter Hart will discuss how the race is shaping up and what the implications will be, for both the winners and the losers.

Peter D. Hart, Founder, Hart Research Associates

2:30 – 3:15pm

Featured Speaker

Speakers to be announced.

3:15 – 3:30pm

Coffee Break

3:30 – 4:15pm

Concurrent Workshops:

1. Currencies and Hedging Policies

As equity portfolios are increasingly globalized, the currency exposure rises. With central bank intervention influencing the world's money supply across all denominations, along with spiking volatility and the constant need for liquidity, the world's currency markets can have a significant effect on the overall outcome of a portfolio. Yet questions abound such as: what is the relationship between volatility and currency returns? Can currencies be forecasted via fundamentals, cycles and trends? How does currency hedging differ from looking at currency as an asset class and what are the different implementation approaches to both? This panel will explore how currency exposure can best be managed in order to reduce portfolio volatility and risk.

Moderator: Robin Pellish, Chief Executive Officer, Rocaton Investment Advisors, LLC

Additional speakers to be announced.

2. Staying Ahead of the Curve: Understanding the Implications of the DOL Fiduciary Rule

As the first generation of Americans that have had a defined contribution plan as an option for their primary retirement savings vehicle begin to retire, the conversation is beginning to focus more and more to the decumulation phase. This coincides with a recent ruling by the Department of Labor regarding fiduciary responsibility on the part of the provider. The fiduciary standard, which takes effect April 2017, says that products not only have to be good enough; they must also be in the best interest of a given client's investment goals. How will this ruling affect employers, specifically their ability to offer appropriate lifetime income options? How does a plan sponsor ensure maximum participation and an ideal investment line up? What is the ideal model to ensure adequate retirement savings, both from a growth and principal protection standpoint? This panel will discuss the impact of the DOL ruling and its implications on those who provide advice, guidance and education to employees within a retirement plan.

Moderator: Frances Denmark, Senior Writer, Institutional Investor

Steven M. Carlson, Head of Investments, Americas, Willis Towers Watson

Stephen W. McCaffrey, Senior Counsel for Plans, National Grid USA

Additional speakers to be announced.

4:15 – 5:00pm

Active, Passive, Other?

A More Thoughtful Look at the Active/Passive Decision

Does the fabric of the capital markets make it more or less easy for active managers to make a return and meet a plan's mandates? And what are the qualifications to do so? If the returns to active risk have a cycle of their own, what has been the cause of relatively different performance on both the traditional and alternative side? How and where should a plan spend its management fee dollars? This presentation and panel conversation will examine the merits of an active versus passive approach to portfolio management.

Presentation:

This presentation will provide a statistical analysis of the returns to active risk over time, both recent and historical, along with the reasons, proffered by various industry constituents - active managers/academics/others, including the authors – as to the reasons as to what drives those trends. This will include the recent underperformance of many active managers and strategies.

Jim "James" Voytko, President, Director of Research, Senior Consultant, Principal, RVK, Inc.

Panel Discussion:

Using the presentation as a springboard, this panel will discuss what they believe are the most compelling reasons as to the recent trend and whether they believe these reasons suggest equally great difficulties going forward for getting returns for taking active risk.

Moderator: Jim "James" Voytko, President, Director of Research, Senior Consultant, Principal, RVK, Inc.

Leslie Lenzo, CFA, Vice President, Treasury & Chief Investment Officer, Advocate Health Care

Additional speakers to be announced.

5:45pm

Walk from Four Seasons to Del Frisco's Double Eagle Steak House

6:00-9:00pm

Reception & Dinner at Del Frisco's Double Eagle Steak House

Located in the heart of Chicago's Gold Coast neighborhood, Del Frisco's occupies three floors of the former Esquire Theater. Its lavish interior was designed to preserve the landmark theatre's historic architectural elements and create an intimate dining environment featuring a magnificent three-story wine tower.

Friday, October 21, 2016

7:15 – 8:30am

Private Breakfast for Heads of Consulting Firms

Breakfast Chair: Michael P. Manning, CFA, CAIA, Managing Partner, NEPC, LLC

7:45 – 8:45am

Buffet Breakfast

8:45 – 9:30am

Governance, Outsourcing and Fiduciary Responsibility: The In's, The Out's and Everything In-Between

Fostering a culture of good governance requires constant constructive interaction among senior fiduciaries— the investment committee, governing board and senior management— charged with aligning investment policies with the core operations and financial structure of the sponsoring institution. All of these factors, must be considered when evaluating various models: outsourced, advisory, in-house or a customized approach. How do you ensure a proper alignment of interests among the various stakeholders? How does the governance structure and fiduciary responsibilities change, or not, when working with an OCIO? What due diligence measures should be adopted to effectively evaluate different providers? This panel will examine these issues and more.

Moderator: Anthony Johnson, Director of Midwest Consulting, RVK, Inc.

Stephen P. McCourt, CFA, Managing Principal, Co-CEO, Meketa Investment Group

Richard Nuzum, North America Investments Business Leader, Mercer

Additional speakers to be announced.

9:30 – 10:15am

Concurrent Workshops:

1. Making a Difference While Making an ROI

Virtually every corner of the institutional investment universe is now at least dabbling in “responsible investing” space for reasons that range from addressing climate change and social injustices to simple economics. Whether it's called ESG, SRI or impactful investing, the convergence of principles with performance continues to grow as asset owners work with managers to execute strategies that provide the returns needed in keeping with risk considerations and overall portfolio design. But even as growing numbers of stakeholders demand a fiduciary obligation to address these issues, there still remain plenty of naysayers who insist that investing is about making money first, while social and environmental issues are noble impediments to that cause. But the momentum is clearly on the side of this swelling movement with investors adopting a more holistic approach to evaluating companies that is less about excluding than it is about measuring and calculating the longer-term impacts of corporate actions and policies. This panel will discuss their experience with socially responsible investing and provide their thoughts on how they see this practice evolving. How is risk assessed across asset classes? How satisfied are investors with results of their "impact" investments? How are they developing

expertise, and how do they hold their service providers accountable? What role do investment consultants play? This panel will explore these issues and more.

Moderator: Jessica Matthews, Associate Director, Mission-Related Investing Group, Cambridge Associates

Jessica Cook, Senior Director of Business Development, Ascension Investment Management

Additional speakers to be announced.

2. China: The Path Forward

The future direction of the Chinese economy is a major source of uncertainty in global markets. As the country transitions from a manufacturing-led to a consumer-led economy, and from a state-directed to a free market, does the entire world have to catch a giant cold when it sneezes? With much of the world leveraged to the Chinese economic and policy developments, the health of its economy is central to market discussions. What is the outlook regarding GDP growth, monetary policy, the yuan and capital outflows? This panel will provide a closer view on the outlook for China and the implications for current and future investment.

Moderator: Michael A. Rosen, Principal & Chief Investment Officer, Angeles Investment Advisors LLC

Philip Ehrmann, Senior Managing Director and Senior Portfolio Manager, Manulife Asset Management

Jeffery J. Schutes, Senior Partner, Mercer

Additional speakers to be announced.

10:15-10:45am

Coffee Break

10:45-11.45am

Jeffrey Gundlach Speaks Out

Bond market guru Jeffrey Gundlach offers his views on a wide range of topics including the outlook for the financial markets, direction of central bank policies and the changing parameters of the asset management business. Gundlach, a veteran of market booms and swoons, will comment on what it takes to prosper in a constantly evolving and challenging economic environment.

Moderator: Harvey Shapiro, Senior Advisor, Euromoney Institutional Investor PLC

Jeffrey E. Gundlach, Co-Founder, Chief Executive Officer, Chief Investment Officer, DoubleLine Capital

11:45-12:30pm

Cracking the Code: Investing Responsibly with Big Data

A former Coast Guard officer, Scott Borgerson and his team of quants are looking to use maritime data mining to ride the high seas of success. Their theory: by analyzing satellite intel on cargo ships, which are responsible for transporting 90% of all global trade, economic supply and demand across the planet can be extrapolated, mispriced securities identified and trades placed to take advantage of any dislocations. This presentation will discuss how investors can identify signals from noise, the hazards of sloppy statistics and spurious correlations, and how to approach risk management by calculating an edge and spreading your bets. Is the ocean really a crystal ball? Borgerson believes so!

Scott Borgerson, CEO, CargoMetrics Technologies LLC

12.30-1.30 pm

Buffet Lunch

Roundtable Concludes



MEMORANDUM

Date: July 13, 2016

To: CCCERA Board of Retirement

From: Wrally Dutkiewicz, Compliance Officer

Subject: Recoupment of Panel Management Pay Pension Overpayments from Contra Costa County

As directed by the CCCERA Board of Retirement on March 9, 2016, CCCERA requested that the County pay the recoupment amount because of the County's erroneous reporting of non-pensionable panel management pay as pensionable on-call pay. The request was placed on the County Board of Supervisors May 10th, 2016 meeting agenda, and the Board of Supervisors approved the payment to CCCERA. The full recoupment amount of \$115,629 was subsequently received by CCCERA which represents the amount of pension overpayments received by four retired County physicians plus interest through May 1st, 2016.

In accordance with I.R.S. Revenue Proc. 2015-27, Sec. 3.02(3), CCCERA has fully recouped the pension overpayments from the employer. Therefore, no further recoupment will be sought by CCCERA from the four physicians with respect to panel management pay and the pension overpayment attributed to its inclusion in the final average salary periods for the retirees.

Letters notifying the four affected retirees of the successful recoupment were sent on June 23rd, 2016.