## VENTURA COUNTY EMPLOYEES' RETIREMENT ASSOCIATION

## **BOARD OF RETIREMENT**

## **BUSINESS MEETING**

### January 23, 2017

## **AGENDA**

PLACE: Ventura County Employees' Retirement Association Second Floor Boardroom 1190 South Victoria Avenue Ventura, CA 93003

#### **<u>TIME</u>**: 9:00 a.m.

Members of the public may comment on any item under the Board's jurisdiction by filling out a speaker form and presenting it to the Clerk. Unless otherwise directed by the Chair, comments related to items on the agenda will be heard when the Board considers that item. Comments related to items not on the agenda will generally be heard at the time designated for Public Comment.

### ITEM:

I.	CA	LL TO ORDER	Master Page No.					
II.	<u>AP</u>	APPROVAL OF AGENDA						
III.	<u>C0</u>							
	A.	Approve Regular and Deferred Retirements and Survivors Continuances for the Month of December 2016	4					
	В.	Receive and File Report of Checks Disbursed in December 2016	5 – 8					
	C.	Receive and File Budget Summary for FY 2016-17 Month Endi December 31, 2016	ng 9					
	D.	Receive and File Statement of Fiduciary Net Position, Statement Changes in Fiduciary Net Position, Schedule of Investments a Cash Equivalents, and Schedule of Investment Management Fe for the Period Ending November 30, 2016.	nd					

-		OF RETIREMENT January 23, 2017 SS MEETING	AGENDA PAGE 2
IV.	<u>IN\</u>	ESTMENT INFORMATION	
	A.	NEPC – Tony Ferrera VCERA – Dan Gallagher, Chief Investment Officer	
		<ol> <li>Preliminary Performance Report Month Ending November 30, 2016</li> <li>RECOMMENDED ACTION: Receive and file.</li> </ol>	16 – 23
		<ol> <li>Preliminary Performance Report Month Ending December 31, 2016 RECOMMENDED ACTION: Receive and file.</li> </ol>	24 – 32
<b>V</b> .	<u>AC</u>	TUARIAL INFORMATION	
	A.	Review and Approval of Annual Actuarial Information Report as a June 30, 2016 – The Segal Company, Paul Angelo and John Monroe.	of
		1. June 30, 2016 Actuarial Valuation Report	33 – 124
		2. June 30, 2016 GAS 67 Actuarial Valuation Report	125 – 146
	В.	2017 PEPRA Annual Compensation Limit RECOMMENDED ACTION: Approve	
		1. Staff Letter	147
		2. California Actuarial Advisory Panel PEPRA Pensio Compensation Limits for the Calendar Year 2017	n 148 – 150
VI.	<u>OL</u>	D BUSINESS	
	A.	Update on Request to Auditor-Controller for Read-Only/Quer Access to VCHRP Retirement Tables	У
		1. Staff Letter	151 – 152
		2. Steering Committee Response of October 16, 2016	153
	В.	Consideration and Submission of Additional Information on Retire Reinstatement Rules	е
		1. Letter from Trustee Goulet	154

<b>BOARD OF RETIREMENT</b>
BUSINESS MEETING

VI.

January 23, 2017

### AGENDA PAGE 3

### **OLD BUSINESS (continued)** C. Consideration and Possible Action to Seek Legislative Sponsor for Amendment to Government Code Section 31522.11 1. Letter from Chair Towner 155 VII. **NEW BUSINESS** A. SACRS 2017-2018 Board of Director Nominations 156 - 1571. SACRS Memorandum Report & Recommendation on PEPRA Pensionable Compensation B. Analysis 1. Staff Letter 158 - 1602. Attachment A: Additional Pay Code Analysis 161 - 1623. Excerpt from September 22, 2015 Board of Supervisors Letter 163 – 165 Creating HCA Fiscal Premium Pay 166 4. Section 410 of COV Management Resolution 5. Memorandum to COV Regarding Pensionability of CNA 167 - 168**Retention Premium Payment** 6. Memorandum Regarding Analysis of Additional Pay Codes, Ashley Dunning, Nossaman, LLP (To be provided) C. Update on Status of RFP for Actuarial Audit Services VIII. **INFORMATIONAL** A. SJCERA Announcement of New CEO 169 IX. **PUBLIC COMMENT** Х. STAFF COMMENT XI. **BOARD MEMBER COMMENT**

XII. ADJOURNMENT

#### VENTURA COUNTY EMPLOYEES' RETIREMENT ASSOCIATION REPORT OF REGULAR AND DEFERRED RETIREMENTS AND SURVIVORS CONTINUANCES

DECEMBER 2016							
FIRST NAME	LAST NAME	G/S	DATE OF MEMBERSHIP	TOTAL SERVICE	OTHER SERVICE	DEPARTMENT	EFFECTIVE DATE
		0/0		OERTIGE	OLIVIOL	DEFARTMENT	DATE
REGULAR RET	IREMENTS:						
Charles J.	Barbosa	G	2/25/1996	20.78		Courts	11/30/16
Brenda	Bell	G	9/28/1980	36.09		General Services Agency	11/05/16
Lucrecia	Campos-Juarez	G	8/25/1985	19.74		Human Services Agency (deferred)	10/24/16
Robin H.	Estes	G	8/2/1981	34.32		District Attorney	11/05/16
Margaret	Friis	G	11/10/1991	24.51	B=0.27230	Health Care Agency	11/19/16
Ana Rosa	Guerrero	G	6/20/1993	22.51		Health Care Agency	12/01/16
John	Hoelker	S	9/25/1983	36.20	D=2.98790	Sheriff's Department	11/30/16
Luz	Huezo	G	5/13/2002	13.19		Health Care Agency	11/13/16
Edwin R.	Jacobe	G	8/7/1988	28.27	B=0.0962	General Services Agency	12/02/16
Donna J.	Kuonen	G	3/7/1999	17.82	B=0.1154	Human Services Agency	11/19/16
Kristie L.	Lange	G	11/2/1987	2.48 *	C=32.3333	Courts (deferred)	11/26/16
Joseph B.	Lopez	G	3/17/1991	25.72		Human Services Agency	12/04/16
Rodolfo H.	Lopez	G	12/23/1990	25.63		Health Care Agency	11/05/16
Jane	Nolan	G	6/26/1988	28.75	B=0.3372	Fire Protection District	11/19/16
Gary	Peterson	G	8/11/1985	31.33		General Services Agency	12/03/16
John J.	Рорр	S	6/28/1987	29.38		Sheriff's Department	11/05/16
Stanley E.	Potts	G	7/13/1986	34.60	D=4.1880	Health Care Agency	12/02/16
Celina	Ramirez	G	11/12/1989	26.76	B=0.09590	Human Services Agency	11/05/16
Heather A.	Ropa	G	1/1/2006	10.71		Health Care Agency (deferred)	10/13/16
Nancy B.	Schaefer	G	11/18/2002	14.02		CEO	11/19/16
Kristen A.	Spilman	G	11/5/2006	10.03		Sheriff's Department	11/11/16
DEFERRED RE	TIREMENTS:						
Caridad	Cabana	G	12/02/2007	8.98		Health Care Agency	12/01/2016
Angelica	Gutierrez Arechiga	G	06/04/2006	9.51		Health Care Agency	12/01/2016
Nathan G. Terese E.	Mims Satterfield	G	11/16/2008	7.54		Health Care Agency Child Support Services	12/03/2016
Amanda	Tovar	G G	11/26/2001 01/15/2006	13.44 8.91		Health Care Agency	11/30/2016 11/23/2016
Megan E.	Underlin	G	12/13/2009	5.75		Health Care Agency	11/23/2016
Maya	Winwood	G	06/06/2004	7.11		Health Care Agency	11/17/2016
Simin	Zarrabian	G	07/11/2010	5.16		Health Care Agency	12/01/2016
		-					

#### SURVIVORS' CONTINUANCES:

Roice A.	Bassett
Ann M.	Erwin
Mary T.	Killingsworth
Corazon J.	Lee
Jennifer J.	Osler
Matthias J.	Yoong

\* = Member Establishing Reciprocity

A = Previous Membership

B = Other County Service (eg Extra Help)

C = Reciprocal Service

D = Public Service

**Ventura County Retirement Assn** Page: Time: 12:05PM Report: 03630.rpt **Check Register - Standard** 103745 Company: VCERA User: Period: 06-17 As of: 1/3/2017 Check Check Check Vendor ID Period Ref Doc Invoice Invoice Discount Amount Date Vendor Name To Post Closed Nbr Date Taken Paid Nbr Type Type Number **VCERA** Company: Acct / Sub: 1002 00 026800 CK 12/7/2016 101495 06-17 021651 0.00 VO TRAVEL REIMB 12/7/2016 743.76 JULIE STALLINGS 026801 12/7/2016 BARNEY 06-17 021652 VO ADMIN EXP 12/7/2016 0.00 1,885.35 CK A.B.U. COURT REPORTING, II 026802 0.00 12/7/2016 COUNTY 06-17 021653 VO LEGAL FEES 12/7/2016 18.743.25 CK COUNTY COUNSEL 0.00 026803 12/7/2016 HANSONBRID 06-17 021654 VO LEGAL FEES 12/7/2016 386.10 CK HANSON BRIDGETT LLP 026804 CK 12/7/2016 HARRIS 06-17 021655 VO ADMIN EXP 12/7/2016 0.00 109.50 HARRIS WATER CONDITIONI 026805 12/7/2016 INCENTIVE 06-17 021656 VO ADMIN EXP 12/7/2016 0.00 53.75 CK INCENTIVE SERVICES 026806 CK 12/7/2016 **ILPA** 06-17 021657 VO ADMIN EXP 12/7/2016 0.00 1,499.00 INSTITUTIONAL LIMITED PAR 026807 12/7/2016 NOSSAMAN 06-17 021658 VO LEGAL FEES 12/7/2016 0.00 2.845.62 CK NOSSAMAN LLP 06-17 021659 12/7/2016 0.00 026808 CK 12/7/2016 PRUDENTIAL VO INVESTMENT FEES 133,118.97 PRUDENTIAL INSURANCE 026809 CK 12/7/2016 VOLT 06-17 021660 VO ADMIN EXP 12/7/2016 0.00 2,374.42 VOLT 0.00 026810 CK 12/7/2016 ZIGMAN 06-17 06-17 021661 VO ADMIN EXP 12/7/2016 1,968.50 LOUIS M. ZIGMAN, ESQ 026810 VO 0.00 VC 12/7/2016 ZIGMAN 06-17 06-17 021661 ADMIN EXP 12/7/2016 -1,968.50LOUIS M. ZIGMAN, ESQ Check Total 0.00 026811 CK 12/7/2016 ZIGMAN 06-17 021661 VO ADMIN EXP 12/7/2016 0.00 1.968.50 LOUIS M. ZIGMAN, ESQ 026811 06-17 021662 VOID 0.00 CK 12/7/2016 ZIGMAN AD 12/7/2016 -1,968.50LOUIS M. ZIGMAN, ESQ

Date:

Tuesday, January 03, 2017

1 of 4

Date: Time: User:	Tuesday, January 03, 2017       Ventura County Retirement Assn         12:05PM       Check Register - Standard         103745       Period: 06-17 As of: 1/3/2017					Page: Report: Company:	2 of 4 03630.rpt VCERA				
Check Nbr	Check Type	Check Date	Vendor ID Vendor Name	Peri To Post		Ref Nbr	Doc Туре	Invoice Number	Invoice Date	Discount Taken	Amount Paid
026811	СК	12/7/2016	ZIGMAN LOUIS M. ZIGMAN, ESQ	06-17		021663	VO	ADMIN EXP	12/7/2016	0.00	1,968.75
026812	СК	12/14/2016	ADP ADP, LLC	06-17		021664	VO	ADMIN EXP	Check Tot 12/14/2016	<b>al</b> 0.00	<b>1,968.75</b> 2,341.11
026813	СК	12/14/2016	AT&T AT&T MOBILITY	06-17		021665	VO	IT	12/14/2016	0.00	339.88
026814	СК	12/14/2016	MEGAPATH GLOBAL CAPACITY	06-17		021666	VO	IT/PAS	12/14/2016	0.00	603.63
026815	СК	12/14/2016	NPEA NPEA	06-17		021667	VO	ADMIN EXP	12/14/2016	0.00	725.00
026816	СК	12/14/2016	NAPPA NAPPA	06-17		021668	VO	ADMIN EXP	12/14/2016	0.00	450.00
026817	СК	12/14/2016	NOSSAMAN NOSSAMAN LLP	06-17		021669	VO	LEGAL FEES	12/14/2016	0.00	19,924.50
026818	СК	12/14/2016	OPERS PUBLIC PENSION FINANCIAL	06-17		021670	VO	ADMIN EXP	12/14/2016	0.00	150.00
026819	СК	12/14/2016	SMARTBEAR SMARTBEAR SOFTWARE, IN	06-17 (		021671	VO	PAS	12/14/2016	0.00	3,344.56
026820	СК	12/14/2016	SEGAL SEGAL CONSULTING	06-17		021672	VO	ACTUARY FEES	12/14/2016	0.00	6,220.00
026821	СК	12/14/2016	LINEA LINEA SOLUTIONS	06-17		021673	VO	IT/PAS	12/14/2016	0.00	62,451.25
026822	СК	12/14/2016	VOLT VOLT	06-17		021674	VO	ADMIN EXP	12/14/2016	0.00	911.35
026823	СК	12/21/2016	100748 CHRIS JOHNSTON	06-17		021675	VO	TRAVEL REIMB	12/21/2016	0.00	716.86
026824	СК	12/21/2016	990002 ARTHUR E. GOULET	06-17		021676	VO	TRVL/MIL REIMB	12/21/2016	0.00	450.27

Date: Time: User:	Tuesday, Jan 12:05PM 103745							Page: Report: Company:	3 of 4 03630.rpt VCERA		
Check Nbr	Check Type	Check Date	Vendor ID Vendor Name	Peri To Post		Ref Nbr	Doc Туре	Invoice Number	Invoice Date	Discount Taken	Amount Paid
026825	СК	12/21/2016	990006 MICHAEL SEDELL	06-17		021677	VO	TRVL/MIL REIMB	12/21/2016	0.00	1,589.01
026826	СК	12/21/2016	ACCESS ACCESS INFORMATION MAN	06-17		021678	VO	ADMIN EXP	12/21/2016	0.00	330.05
026827	СК	12/21/2016	BROWN BROWN ARMSTRONG	06-17 		021679	VO	ADMIN EXP	12/21/2016	0.00	3,144.15
026828	СК	12/21/2016	DILIGENT DILIGENT CORPORATION	06-17		021680	VO	IT	12/21/2016	0.00	1,332.84
026829	СК	12/21/2016	NAPPA NAPPA	06-17		021681	VO	ADMIN EXP	12/21/2016	0.00	535.00
026830	СК	12/21/2016	NOSSAMAN NOSSAMAN LLP	06-17		021682	VO	LEGAL FEES	12/21/2016	0.00	2,880.00
026831	СК	12/21/2016	REUTERS THOMSON REUTERS- WEST	06-17		021683	VO	IT	12/21/2016	0.00	345.10
026832	СК	12/21/2016	SHRED-IT SHRED-IT USA	06-17		021684	VO	ADMIN EXP	12/21/2016	0.00	201.60
026833	СК	12/21/2016	TWC TIME WARNER CABLE	06-17		021685	VO	IT	12/21/2016	0.00	294.99
026834	СК	12/21/2016	VSG VSG HOSTING, INC	06-17		021686	VO	IT	12/21/2016	0.00	19,500.00
026835	СК	12/21/2016	WISSLEY DEBORAH Z. WISSLEY	06-17		021687	VO	ADMIN EXP	12/21/2016	0.00	10,535.00
026836	СК	12/21/2016	990008 ROBERT BIANCHI	06-17		021688	VO	MILEAGE REIMB	12/21/2016	0.00	29.16
026837	СК	12/21/2016	ILPA INSTITUTIONAL LIMITED PAR	06-17		021689	VO	ADMIN EXP	12/21/2016	0.00	5,198.00

Time:	Tuesday, January 03, 2017 12:05PM 103745 <b>Ventura County Retirement Assn</b> <u>Check Register - Standard</u> Period: 06-17 As of: 1/3/2017							Page: Report: Company:	4 of 4 03630.rpt VCERA	
Check Nbr	Check Type	Check Date	Vendor ID Vendor Name	Period To Post Closed	Ref Nbr	Dос Туре	Invoice Number	Invoice Date	Discount Taken	Amount Paid
026838	СК	12/28/2016	BARNEY A.B.U. COURT REPORTING,	06-17 II	021690	VO	ADMIN EXP	12/28/2016	0.00	315.00
026839	СК	12/28/2016	BOFA BUSINESS CARD	06-17	021691	VO	ADMIN/IT/PAS	12/28/2016	0.00	4,700.06
026840	СК	12/28/2016	BLACKROCK BLACKROCK INSTL TRUST	06-17 C	021692	VO	INVESTMENT FEES	12/28/2016	0.00	190,099.68
026841	СК	12/28/2016	LINEA LINEA SOLUTIONS	06-17	021693	VO	PAS	12/28/2016	0.00	4,740.79
026842	СК	12/28/2016	MF M.F. DAILY CORPORATION	06-17	021694	VO	ADMIN EXP	12/28/2016	0.00	17,009.62
026843	СК	12/28/2016	SPRUCE SPRUCEGROVE INVESTME	06-17 N	021695	VO	INVESTMENT FEES	12/28/2016	0.00	57,002.39
026844	СК	12/28/2016	CORPORATE STAPLES ADVANTAGE	06-17	021696	VO	ADMIN EXP	12/28/2016	0.00	1,522.86
026845	СК	12/28/2016	VOLT VOLT	06-17	021697	VO	ADMIN EXP	12/28/2016	0.00	1,684.15
Check Co	unt:	47						Acct Sub Total:		585,346.33
			CI	eck Type		Count	Amount Paid			
				egular		46	587,314.83			
				ind		0	0.00			
				ectronic Payment		0	0.00			
			Vo			1	-1,968.50			
			St	uu		0	0.00			

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Company Disc Total

Zero Mask

Total:

0.00

0.00

0.00

Company Total

585,346.33

585,346.33

#### VENTURA COUNTY EMPLOYEES' RETIREMENT ASSOCIATION BUDGET SUMMARY FISCAL YEAR 2016-2017 December 2016 - 50.00% of Fiscal Year Expended

	Adopted	Adjusted				
EXPENDITURE DESCRIPTIONS	2016/2017	2016/2017		Year to Date	Available	Percent
	Budget	Budget	Dec-16	Expended	Balance	Expended
Salaries & Benefits:	Daagot	Duugot	000 10	<u>Exponded</u>	Dalarioo	Exponded
Salaries	\$ 2,370,800.00	\$ 2,397,612.00	\$ 192,850.06	\$ 1,062,244.85	\$ 1,335,367.15	44.30%
Extra-Help	192,400.00	192,400.00	13,807.42	71,410.18	120,989.82	37.12%
Overtime	3,000.00	3,000.00	0.00	0.00	3,000.00	0.00%
Supplemental Payments	74,400.00	75,322.00	3,131.20	26,044.20	49,277.80	34.58%
Vacation Redemption	131,300.00	131,300.00	13,323.78	158,731.35	(27,431.35)	120.89%
Retirement Contributions	432,100.00	437,235.00	31,154.85	181,108.71	256,126.29	41.42%
OASDI Contributions	141,800.00	143,515.00	8,217.17	53,749.13	89,765.87	37.45%
FICA-Medicare	37,800.00	38,202.00	2,987.72	17,812.58	20,389.42	46.63%
Retiree Health Benefit	4,000.00	4,000.00	0.00	3,970.75	29.25	99.27%
Group Health Insurance	194,300.00	197,212.00	14,850.00	85,070.47	112,141.53	43.14%
Life Insurance/Mgmt	1,100.00	1,125.00	86.50	495.59	629.41	44.05%
Unemployment Insurance	2,400.00	2,427.00	192.34	1,052.85	1,374.15	43.38%
Management Disability Insurance	18,400.00	18,609.00	1,291.31	7,330.67	11,278.33	39.39%
Worker' Compensation Insurance	19,900.00	20,138.00	1,586.65	9,326.64	10,811.36	46.31%
401K Plan Contribution	48,600.00	49,403.00	4,502.34	24,549.34	24,853.66	49.69%
Transfers In	135,500.00	135,500.00	2,143.25	23,668.92	111,831.08	17.47%
Transfers Out	(135,500.00)	(135,500.00)	(2,143.25)	(23,668.92)	(111,831.08)	17.47%
Total Salaries & Benefits	\$ 3,672,300.00	\$ 3,711,500.00	\$ 287,981.34	\$ 1,702,897.31	\$ 2,008,602.69	45.88%
Services & Supplies:	¢ 05 400 00	¢ 05 400 00	¢ 0.000.01	¢ 47.000.00	¢ 40.400.00	40.000/
Telecommunication Services - ISF	\$ 35,400.00	\$ 35,400.00	\$ 3,388.21	\$ 17,236.08	\$ 18,163.92	48.69%
General Insurance - ISF	13,100.00	13,100.00	6,539.50	6,539.50	6,560.50	49.92%
Office Equipment Maintenance	2,000.00	2,000.00	168.00	475.04	1,524.96	23.75%
Membership and Dues	14,700.00	14,700.00	600.00	9,945.00	4,755.00	67.65%
Education Allowance	8,000.00	8,000.00	0.00	2,000.00	6,000.00	25.00%
Cost Allocation Charges	89,500.00	89,500.00	0.00	0.00	89,500.00	0.00%
Printing Services - Not ISF	12,000.00	12,000.00	0.00	1,014.61	10,985.39	8.46%
Books & Publications	3,000.00	3,000.00	0.00	358.09	2,641.91	11.94%
Office Supplies	20,000.00	20,000.00	1,576.61	6,629.67	13,370.33	33.15%
Postage & Express	60,000.00	60,000.00	7,478.75	23,546.37	36,453.63	39.24%
Printing Charges - ISF	18,000.00	18,000.00	8.50	8.50	17,991.50	0.05%
Copy Machine Services - ISF	4,500.00	4,500.00	0.00	536.85	3,963.15	11.93%
Board Member Fees	13,300.00	13,300.00	500.00	5,100.00	8,200.00	38.35%
Professional Services	1,292,100.00	1,292,100.00	71,732.00	430,426.20	861,673.80	33.31%
Storage Charges	4,200.00	4,200.00	330.05	2,220.24	1,979.76	52.86%
Equipment	6,000.00	6,000.00	0.00	0.00	6,000.00	0.00%
Office Lease Payments	205,000.00	205,000.00	17,009.62	101,744.48	103,255.52	49.63%
Private Vehicle Mileage	12,500.00	12,500.00	1,213.88	6,562.59	5,937.41	52.50%
Conference, Seminar and Travel	138,400.00	138,400.00	11,321.28	62,412.16	75,987.84	45.10%
Furniture	15,000.00	15,000.00	0.00	783.62	14,216.38	5.22%
Facilities Charges	13,300.00	13,300.00	225.50	1,593.00	11,707.00	11.98%
Judgement & Damages	0.00	0.00	0.00	0.00	0.00	#DIV/0!
Transfers In	20,000.00	20,000.00	226.48	2,501.18	17,498.82	12.51%
Transfers Out	(20,000.00)	(20,000.00)	(226.48)			12.51%
			,			
Total Services & Supplies	\$ 1,980,000.00	\$ 1,980,000.00	\$ 122,091.90	\$ 679,132.00	\$ 1,300,868.00	34.30%
	÷ 1,000,000.00	÷ 1,000,000.00	+ 122,001.00	÷ 0.0,102.00	+ 1,000,000.00	01.0070
Total Sal, Ben, Serv & Supp	\$ 5,652,300.00	\$ 5,691,500.00	\$ 410,073.24	\$ 2,382,029.31	\$ 3,309,470.69	41.85%
	φ 0,002,000.00	φ 0,001,000.00	φ +10,073.24	ψ 2,002,023.31	ψ 0,000,470.09	T1.00 /0
Technology:						
Computer Hardware	\$ 45,000.00	\$ 45,000.00	\$ 1,881.25	3,345.53	\$ 41,654.47	7.43%
Computer Software	216,000.00	216.000.00	6,847.08	42,558.96	173,441.05	19.70%
Systems & Application Support	449,000.00	449,000.00	37,793.92	185,349.46	263,650.55	41.28%
Pension Administration System	353,000.00	353,000.00	48,040.79	382,691.94	(29,691.94)	108.41%
		200,000.00	,		(_0,001.04)	
Total Taphpalassi	¢ 1.063.000.00	¢ 1.063.000.00	¢ 04 500 00	¢ 640.045.00	¢ 440.054.40	E7 760/
Total Technology	\$ 1,063,000.00	\$ 1,063,000.00	\$ 94,563.03	\$ 613,945.88	\$ 449,054.12	57.76%
Contingency	\$ 786,000.00	\$ 746,800.00	\$ -	\$-	\$ 746,800.00	0.00%
Total Current Year	\$ 7,501,300.00	\$ 7,501,300.00	\$ 504,636.27	\$ 2,995,975.19	\$ 4,505,324.81	39.94%
	ψ 7,301,300.00	ψ 1,501,500.00	ψ 507,050.27	ψ 2,333,313.19	ψ +,000,024.01	JJ.J4 /0

### VENTURA COUNTY EMPLOYEES' RETIREMENT ASSOCIATION STATEMENT OF FIDUCIARY NET POSITION NOVEMBER 30, 2016 (UNAUDITED)

### ASSETS

CASH & CASH EQUIVALENTS	\$203,174,262
RECEIVABLES	
ACCRUED INTEREST AND DIVIDENDS SECURITY SALES MISCELLANEOUS TOTAL RECEIVABLES	2,518,993 5,142,419 10,373 <b>7,671,786</b>
INVESTMENTS AT FAIR VALUE	
DOMESTIC EQUITY SECURITIES DOMESTIC EQUITY INDEX FUNDS INTERNATIONAL EQUITY SECURITIES INTERNATIONAL EQUITY INDEX FUNDS GLOBAL EQUITY PRIVATE EQUITY DOMESTIC FIXED INCOME - CORE PLUS DOMESTIC FIXED INCOME - U.S. INDEX REAL ESTATE ALTERNATIVES CASH OVERLAY - PARAMETRIC TOTAL INVESTMENTS CAPITAL ASSET - SOFTWARE DEVELOPMENT TOTAL ASSETS	98,121,757 1,310,491,988 352,315,452 332,991,118 470,920,403 166,743,977 694,902,491 214,900,634 376,510,603 394,462,419 <u>6,666</u> 4,412,367,508 12,961,635 4,636,175,191
LIABILITIES	
SECURITY PURCHASES PAYABLE ACCOUNTS PAYABLE TAX WITHHOLDING PAYABLE PREPAID CONTRIBUTIONS	9,634,149 267,172 2,847,981 91,631,111
TOTAL LIABILITIES	104,380,413
NET POSITION RESTRICTED FOR PENSIONS	\$4,531,794,778

#### VENTURA COUNTY EMPLOYEES' RETIREMENT ASSOCIATION STATEMENT OF CHANGES IN FIDUCIARY NET POSITION FOR THE FIVE MONTHS ENDING NOVEMBER 30, 2016 (UNAUDITED)

### ADDITIONS

CONTRIBUTIONS	
EMPLOYER	\$72,318,873
EMPLOYEE	27,494,249
TOTAL CONTRIBUTIONS	99,813,121
INVESTMENT INCOME	
NET APPRECIATION (DEPRECIATION) IN FAIR VALUE OF INVESTMENTS	139,716,575
	5,919,722
DIVIDEND INCOME	8,239,606
REAL ESTATE OPERATING INCOME, NET	4,143,631
SECURITY LENDING INCOME	206,281
TOTAL INVESTMENT INCOME	158,225,815
LESS INVESTMENT EXPENSES	
MANAGEMENT & CUSTODIAL FEES	3,739,666
SECURITIES LENDING BORROWER REBATES	106,301
SECURITIES LENDING MANAGEMENT FEES	36,721
TOTAL INVESTMENT EXPENSES	3,882,689
NET INVESTMENT INCOME/(LOSS)	154,343,126
TOTAL ADDITIONS	254,156,248
DEDUCTIONS	
BENEFIT PAYMENTS	104,772,471
MEMBER REFUNDS	1,946,791
ADMINISTRATIVE EXPENSES	2,478,917
TOTAL DEDUCTIONS	109,198,178
NET INCREASE/(DECREASE)	144,958,069
NET POSITION RESTRICTED FOR PENSIONS	
BEGINNING OF YEAR	4,386,836,709
ENDING BALANCE	¢1 521 701 770
	\$4,531,794,778

### VENTURA COUNTY EMPLOYEES' RETIREMENT ASSOCIATION INVESTMENTS AND CASH EQUIVALENTS NOVEMBER 30, 2016 (UNAUDITED)

EQUITY		
DOMESTIC EQUITY WESTERN ASSET INDEX PLUS	\$98,121,757	\$56,725,411
TOTAL DOMESTIC EQUITY	98,121,757	56,725,411
TOTAL DOMESTIC EQUIT	36,121,737	50,725,411
DOMESTIC INDEX FUNDS		
BLACKROCK - US EQUITY MARKET	1,258,999,627	0
BLACKROCK - EXTENDED EQUITY TOTAL EQUITY INDEX FUNDS	<u>51,492,361</u> 1,310,491,988	<u> </u>
TOTAL EQUITY INDEX FUNDS	1,310,491,988	0
INTERNATIONAL EQUITY		
SPRUCEGROVE	179,611,495	0
HEXAVEST	76,858,428	0
	95,845,529	<u> </u>
TOTAL INTERNATIONAL EQUITY	352,315,452	U
INTERNATIONAL INDEX FUNDS		
BLACKROCK - ACWIXUS	332,991,118	0
TOTAL INTERNATIONAL INDEX FUNDS	332,991,118	0
GLOBAL EQUITY		
BLACKROCK - GLOBAL INDEX	470,920,403	0
TOTAL GLOBAL EQUITY	470,920,403	0
PRIVATE EQUITY ADAMS STREET	103,500,101	0
PANTHEON	15,397,543	0 0
HARBOURVEST	47,393,741	ů 0
DRIVE CAPITAL	452,592	0
TOTAL PRIVATE EQUITY	166,743,977	0
FIXED INCOME		
	70.010.000	0 750 500
LOOMIS SAYLES AND COMPANY LOOMIS SAYLES - ALPHA	72,812,602 44,167,735	2,753,526 0
REAMS	300,502,158	95
WESTERN ASSET MANAGEMENT	277,419,997	3,686,188
TOTAL DOMESTIC	694,902,491	6,439,809
DOMESTIC INDEX FUNDS		
BLACKROCK - US DEBT INDEX	214,900,634	0
TOTAL DOMESTIC INDEX FUNDS	214,900,634	0
REAL ESTATE PRUDENTIAL REAL ESTATE	132,029,661	(1)
RREEF	182,152	(4) 0
UBS REALTY	244,298,789	Ő
TOTAL REAL ESTATE	376,510,603	(4)

### VENTURA COUNTY EMPLOYEES' RETIREMENT ASSOCIATION INVESTMENTS AND CASH EQUIVALENTS NOVEMBER 30, 2016 (UNAUDITED)

ALTERNATIVES BRIDGEWATER TORTOISE (MLP's) TOTAL ALTERNATIVES	281,515,500 	0 <u>4,192,925</u> <b>4,192,925</b>
CASH OVERLAY - PARAMETRIC	6,666	125,410,351
IN HOUSE CASH		10,405,770
TOTAL INVESTMENTS AND CASH	\$4,412,367,508	\$203,174,262

#### VENTURA COUNTY EMPLOYEES' RETIREMENT ASSOCIATION SCHEDULE OF INVESTMENT MANAGEMENT FEES FOR THE FIVE MONTHS ENDED NOVEMBER 30, 2016 (UNAUDITED)

## EQUITY MANAGERS

DOMESTIC	
BLACKROCK - US EQUITY	\$63,379
BLACKROCK - EXTENDED EQUITY	4,919
WESTERN ASSET INDEX PLUS	70,784
TOTAL	139,082
INTERNATIONAL	
BLACKROCK - ACWIXUS	70,440
SPRUCEGROVE	226,404
HEXAVEST	92,787
WALTER SCOTT	217,395_
TOTAL	607,026
GLOBAL	
GRANTHAM MAYO VAN OTTERLOO (GMO)	297,518
BLACKROCK - GLOBAL INDEX	24,065
TOTAL	321,583
PRIVATE EQUITY	
ADAMS STREET	359,553
HARBOURVEST	209,085
PANTHEON	149,932
TOTAL	718,570
FIXED INCOME MANAGERS DOMESTIC	
BLACKROCK - US DEBT INDEX	27,297
LOOMIS, SAYLES AND COMPANY LOOMIS ALPHA	75,663 43,664
REAMS ASSET MANAGEMENT	131,989
WESTERN ASSET MANAGEMENT	133,054
TOTAL	411,666
REAL ESTATE PRUDENTIAL REAL ESTATE ADVISORS	283,715
RREEF	2,166
UBS REALTY	582,488
TOTAL	868,369
ALTERNATIVES	
BRIDGEWATER	277,906
TORTOISE	185,775
TOTAL	463,681
CASH OVERLAY - PARAMETRIC	55,583
SECURITIES LENDING	
BORROWERS REBATE	106,301
MANAGEMENT FEES	36,721
TOTAL	143,023

#### VENTURA COUNTY EMPLOYEES' RETIREMENT ASSOCIATION SCHEDULE OF INVESTMENT MANAGEMENT FEES FOR THE FIVE MONTHS ENDED NOVEMBER 30, 2016 (UNAUDITED)

OTHER	
INVESTMENT CONSULTANT	72,500
INVESTMENT CUSTODIAN	81,606
TOTAL	154,106
TOTAL INVESTMENT MANAGEMENT FEES	\$3,882,689



### YOU DEMAND MORE. So do we.<sup>SM</sup>



# Ventura County Employees' Retirement Association

Preliminary Performance Report Month Ending November 30, 2016

Anthony Ferrara, CAIA, Consultant Allan Martin, Partner

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# Total Fund Performance Detail Net of Fees

	Market Value (\$)	% of Portfolio	Policy %	1 Mo (%)	3 Mo (%)	YTD (%)	Fiscal YTD (%)	1 Yr (%)	3 Yrs (%)	5 Yrs (%)	10 Yrs (%)	Return (%)	Since
Total Fund	4,598,418,709	100.0	100.0	0.8	0.1	6.6	2.7	5.4	4.5	8.8	5.0	7.8	Apr-94
Policy Index				<u>1.0</u>	<u>0.2</u>	<u>6.8</u>	<u>3.4</u>	<u>5.8</u>	<u>5.3</u>	<u>8.9</u>	<u>5.3</u>	<u>7.9</u>	Apr-94
Over/Under				-0.2	-0.1	-0.2	-0.7	-0.4	-0.8	-0.1	-0.3	-0.1	
Allocation Index				1.3	0.4	6.6	3.5	5.4	4.8	8.2	4.8		Apr-94
60% MSCI ACWI (Net)/40% CITI WGBI				-1.4	-3.2	4.5	-0.6	3.7	1.6	5.1	3.6		Apr-94
Total Fund ex Parametric	4,476,456,359	97.3	-	0.8	0.1	6.3	3.1	5.1	4.3	8.6	4.8	7.8	Apr-94
Total Fund ex Private Equity	4,432,158,597	96.4		0.8	0.0	6.7	2.6	5.3	4.2			8.1	Jan-12
Policy Index				<u>1.0</u>	<u>0.2</u>	<u>6.8</u>	<u>3.4</u>	<u>5.8</u>	<u>5.3</u>	<u>8.9</u>	<u>5.3</u>	<u>8.9</u>	Jan-12
Over/Under				-0.2	-0.2	-0.1	-0.8	-0.5	-1.1			-0.8	
Total US Equity	1,467,291,890	31.9	28.0	4.5	2.4	10.8	6.8	8.5	8.7	14.6	6.7	8.9	Dec-93
Russell 3000				<u>4.5</u>	<u>2.4</u>	<u>10.6</u>	<u>6.7</u>	<u>8.3</u>	<u>8.6</u>	<u>14.3</u>	<u>7.1</u>	<u>9.2</u>	Dec-93
Over/Under				0.0	0.0	0.2	0.1	0.2	0.1	0.3	-0.4	-0.3	
BlackRock Equity Market Fund	1,258,999,627	27.4		4.5	2.4	10.6	6.8	8.4	8.7	14.4		7.2	Dec-07
Dow Jones U.S. Total Stock Market				<u>4.4</u>	<u>2.3</u>	<u>10.5</u>	<u>6.7</u>	<u>8.2</u>	<u>8.6</u>	<u>14.3</u>	<u>7.1</u>	<u>7.2</u>	Dec-07
Over/Under				0.1	0.1	0.1	0.1	0.2	0.1	0.1		0.0	
Western U.S. Index Plus	156,799,902	3.4		3.5	1.7	11.0	5.9	8.9	9.5	15.8		4.1	May-07
S&P 500				<u>3.7</u>	<u>1.8</u>	<u>9.8</u>	<u>5.7</u>	<u>8.1</u>	<u>9.1</u>	<u>14.4</u>	<u>6.9</u>	<u>6.2</u>	May-07
Over/Under				-0.2	-0.1	1.2	0.2	0.8	0.4	1.4		-2.1	
BlackRock Extended Equity Index	51,492,361	1.1		7.9	4.7	14.0	11.2	9.6	6.9	14.2	7.8	11.6	Oct-02
Dow Jones U.S. Completion Total Stock Market				<u>7.8</u>	<u>4.6</u>	<u>13.7</u>	<u>11.1</u>	<u>9.3</u>	<u>6.8</u>	<u>14.0</u>	<u>7.7</u>	<u>11.5</u>	Oct-02
Over/Under				0.1	0.1	0.3	0.1	0.3	0.1	0.2	0.1	0.1	

Policy Index: Currently, 28% Russell 3000, 20% Barclays Aggregate, 15% MSCI ACWI ex U.S., 10% MSCI ACWI, 10% DJ U.S. Total Stock Market Index + 3%, 10% CPI+4% Index, and 7% NCREIF ODCE Real Estate Index.

Prior to January 2016 the Total U.S. Equity Benchmark was a dynamic hybrid using the respective managers' market value weights within the U.S. Equity component toward their benchmark. Prior to May 2013, the Dow Jones U.S. Total Stock Market Index. Prior to May 2007, the Russell 3000 Index.

CPI+4% and CPI+5% are estimated due to CPI monthly lag.



# Total Fund Performance Detail Net of Fees

	Market Value (\$)	% of Portfolio	Policy %	1 Mo (%)	3 Mo (%)	YTD (%)	Fiscal YTD (%)	1 Yr (%)	3 Yrs (%)	5 Yrs (%)	10 Yrs (%)	Return (%)	Since
Total Non-US Equity	685,306,570	14.9	15.0	-1.9	-2.2	3.9	3.4	2.1	-1.3	5.2	1.3	5.9	Mar-94
MSCI ACWI ex USA				<u>-2.3</u>	<u>-2.5</u>	<u>1.9</u>	<u>2.9</u>	<u>0.0</u>	<u>-2.3</u>	<u>4.2</u>	<u>1.0</u>	<u>4.6</u>	Mar-94
Over/Under				0.4	0.3	2.0	0.5	2.1	1.0	1.0	0.3	1.3	
MSCI EAFE				-2.0	-2.8	-2.3	2.2	-3.7	-2.2	5.6	0.7	4.2	Mar-94
BlackRock ACWI ex-U.S. Index	332,991,118	7.2		-2.4	-2.6	2.1	2.9	0.5	-1.7	4.8		0.8	Mar-07
MSCI ACWI ex USA				<u>-2.3</u>	<u>-2.5</u>	<u>1.9</u>	<u>2.9</u>	<u>0.0</u>	<u>-2.3</u>	<u>4.2</u>	<u>1.0</u>	<u>0.3</u>	Mar-07
Over/Under				-0.1	-0.1	0.2	0.0	0.5	0.6	0.6		0.5	
Sprucegrove	179,611,495	3.9		-0.2	1.3	8.8	8.5	5.3	-1.1	5.6	1.9	6.8	Mar-02
MSCI ACWI ex USA				<u>-2.3</u>	<u>-2.5</u>	<u>1.9</u>	<u>2.9</u>	<u>0.0</u>	<u>-2.3</u>	<u>4.2</u>	<u>1.0</u>	<u>5.7</u>	Mar-02
Over/Under				2.1	3.8	6.9	5.6	5.3	1.2	1.4	0.9	1.1	
MSCI EAFE				-2.0	-2.8	-2.3	2.2	-3.7	-2.2	5.6	0.7	5.1	Mar-02
Hexavest	76,858,428	1.7		-1.6	-4.2	-0.1	-0.6	-0.4	-1.6	4.9		2.6	Dec-10
MSCI EAFE				<u>-2.0</u>	<u>-2.8</u>	<u>-2.3</u>	<u>2.2</u>	<u>-3.7</u>	<u>-2.2</u>	<u>5.6</u>	<u>0.7</u>	<u>2.6</u>	Dec-10
Over/Under				0.4	-1.4	2.2	-2.8	3.3	0.6	-0.7		0.0	
Walter Scott	95,845,529	2.1		-3.4	-5.2	3.8	-0.3	3.3	0.0	5.8		3.4	Dec-10
MSCI ACWI ex USA				<u>-2.3</u>	<u>-2.5</u>	<u>1.9</u>	<u>2.9</u>	<u>0.0</u>	<u>-2.3</u>	<u>4.2</u>	<u>1.0</u>	<u>1.2</u>	Dec-10
Over/Under				-1.1	-2.7	1.9	-3.2	3.3	2.3	1.6		2.2	
Total Global Equity	470,920,403	10.2	10.0	0.8	0.0	6.6	4.7	4.5	2.0	7.8	2.8	4.8	May-05
MSCI ACWI				<u>0.8</u>	<u>-0.3</u>	<u>5.6</u>	<u>4.3</u>	<u>3.7</u>	<u>3.0</u>	<u>8.9</u>	<u>3.6</u>	<u>5.8</u>	May-05
Over/Under				0.0	0.3	1.0	0.4	0.8	-1.0	-1.1	-0.8	-1.0	
BlackRock MSCI ACWI Equity Index	470,920,403	10.2		0.8	-0.2	6.0	4.5	4.2	3.4			9.2	Jul-12
MSCI ACWI				<u>0.8</u>	<u>-0.3</u>	<u>5.6</u>	<u>4.3</u>	<u>3.7</u>	<u>3.0</u>	<u>8.9</u>	<u>3.6</u>	<u>8.8</u>	Jul-12
Over/Under				0.0	0.1	0.4	0.2	0.5	0.4			0.4	



# Total Fund Performance Detail Net of Fees

	Market Value (\$)	% of Portfolio	Policy %	1 Mo (%)	3 Mo (%)	YTD (%)	Fiscal YTD (%)	1 Yr (%)	3 Yrs (%)	5 Yrs (%)	10 Yrs (%)	Return (%)	Since
Total Private Equity	166,260,112	3.6	10.0	-0.1	3.0	3.9	3.4	6.3	13.8			13.2	Jan-12
DJ U.S. Total Stock Market Index + 3%				<u>4.7</u>	<u>3.1</u>	<u>13.5</u>	<u>8.0</u>	<u>11.5</u>	<u>11.8</u>	<u>17.7</u>		<u>17.8</u>	Jan-12
Over/Under				-4.8	-0.1	-9.6	-4.6	-5.2	2.0			-4.6	
Adams Street Global Fund Series	103,500,107	2.3		0.0	3.1	3.7	3.1	6.6	12.5			12.1	Jan-12
DJ U.S. Total Stock Market Index + 3%				<u>4.7</u>	<u>3.1</u>	<u>13.5</u>	<u>8.0</u>	<u>11.5</u>	<u>11.8</u>	<u>17.7</u>		<u>17.8</u>	Jan-12
Over/Under				-4.7	0.0	-9.8	-4.9	-4.9	0.7			-5.7	
Harbourvest- Dover Street VIII	47,044,640	1.0		-0.1	0.7	3.1	2.1	6.0	18.0			17.0	Jul-13
DJ U.S. Total Stock Market Index + 3%				<u>4.7</u>	<u>3.1</u>	<u>13.5</u>	<u>8.0</u>	<u>11.5</u>	<u>11.8</u>	<u>17.7</u>		<u>15.0</u>	Jul-13
Over/Under				-4.8	-2.4	-10.4	-5.9	-5.5	6.2			2.0	
Pantheon Global Secondary Funds	15,397,544	0.3		0.0	11.2	9.2	11.2	7.7	11.6			9.6	Jan-12
DJ U.S. Total Stock Market Index + 3%				<u>4.7</u>	<u>3.1</u>	<u>13.5</u>	<u>8.0</u>	<u>11.5</u>	<u>11.8</u>	<u>17.7</u>		<u>17.8</u>	Jan-12
Over/Under				-4.7	8.1	-4.3	3.2	-3.8	-0.2			-8.2	
Drive Capital Fund	317,822	0.0		-29.3	-29.3							-29.3	Sep-16
DJ U.S. Total Stock Market Index + 3%				<u>4.7</u>	<u>3.1</u>	<u>13.5</u>	<u>8.0</u>	<u>11.5</u>	<u>11.8</u>	<u>17.7</u>		<u>3.1</u>	Sep-16
Over/Under				-34.0	-32.4							-32.4	

Please Note: Private Equity performance is shown on a time-weighted return basis. Values are cash adjusted with current month cash flows.

Drive Capital Fund, funded 9/1/2016



# Private Equity Limited Partnership Performance

													Since Inception	I
Fund Name	Vintage Year	Initial Investment Date	Commitment	Capital Called to Date <sup>1</sup>	Outstanding Commitment <sup>1</sup>	Call Ratio	Add'l Fees <sup>2</sup>	Distributions to Date	Valuation	Total Value	Net Benefit	IRR		Total Value to Paid In Multiple (TVPI)
Adams Street 2010 U.S. Fund	2010	5/21/2010	\$42,500,000	\$32,852,500	\$9,647,500	77%	\$15,213	\$14,394,035	\$32,931,189	\$47,325,224	\$14,457,511	5.6%	0.44x	1.44x
Adams Street 2010 Non-U.S. Dev. Mkts Fund	2010	5/21/2010	\$25,500,000	\$19,545,749	\$5,954,251	77%	\$1,589	\$7,653,243	\$15,577,320	\$23,230,563	\$3,683,225	7.2%	0.39x	1.19x
Adams Street 2010 Non-U.S. Emg Mkts Fund	2010	1/3/2011	\$8,500,000	\$6,111,500	\$2,388,500	72%	\$0	\$314,436	\$7,510,516	\$7,824,952	\$1,713,452	9.1%	0.05x	1.28x
Adams Street 2010 Direct Fund	2010	5/21/2010	\$8,500,000	\$7,879,500	\$620,500	93%	\$6,697	\$4,831,957	\$7,079,912	\$11,911,869	\$4,025,672	12.0%	0.61x	1.51x
Total Adams Street 2010	2010	5/21/2010	\$85,000,000	\$66,389,249	\$18,610,751	78%	\$23,499	\$27,193,671	\$63,098,937	\$90,292,608	\$23,879,860	11.1%	0.41x	1.36x
Adams Street 2013 Global Fund	2013	6/27/2013	\$75,000,000	\$41,475,000	\$33,525,000	55%	\$10,728	\$3,108,905	\$40,401,164	\$43,510,069	\$2,024,341	3.1%	0.07x	1.05x
Adams Street 2016 Global Fund	TBD	TBD	\$60,000,000	S0	\$60,000,000	0%	\$0	\$0	\$0	\$0	\$0	100		177
Drive Capital Fund II	2016	9/1/2016	\$15,000,000	\$449,382	\$14,550,618	3%	\$3,210	\$0	\$449,382	\$449,382	(\$3,210)	-0.4%		0.99x
HarbourVest - Dover Street VIII	2013	5/30/2013	\$67,500,000	\$55,687,500	\$11,812,500	83%	\$84,954	\$27,490,441	\$47,393,741	\$74,884,182	\$19,111,728	22.7%	0.49x	1.34x
HarbourVest - Dover Street IX	TBD	TBD	\$60,000,000	\$0	\$60,000,000	0%	\$0	\$0	\$0	\$0	\$0			14
Pantheon Global Secondary Fund IV	2010	8/20/2010	\$15,000,000	\$9,960,000	\$5,040,000	66%	\$0	\$8,310,001	\$6,050,666	\$14,360,667	\$4,400,667	13.8%	0.83x	1.44x
Pantheon Global Secondary Fund V	2015	2/26/2015	\$50,000,000	\$7,441,510	\$42,558,490	15%	(\$137,480)	\$0	\$9,346,877	\$9,346,877	\$2,042,847	16.5%	077	1.28x
Total VCERA Private Equity Program	-	5/21/2010	\$427,500,000	\$181,402,641	\$246,097,359	42%	(\$15,089)	\$66,103,018	\$166,740,767	\$232,843,785	\$51,456,233	12.4%	0.36x	1.28x

1. Includes recycled/recallable distributions received to date.

2. Add'l Fees represents notional interest paid/(received).

2. Add'l Fees for Pantheon Global Secondary Fund V includes notional interest paid/(received) and management fee rebates paid to VCERA.

Note: Private equity performance data is reported net of fees.

Performance shown is based on 6/30/2016 NAVs cash-adjusted for cash flows through 11/30/2016.



# Total Fund Performance Detail Net of Fees

	Market Value (\$)	% of Portfolio	Policy %	1 Mo (%)	3 Mo (%)	YTD (%)	Fiscal YTD (%)	1 Yr (%)	3 Yrs (%)	5 Yrs (%)	10 Yrs (%)	Return (%)	Since
Total US Fixed Income	915,687,541	19.9	20.0	-1.8	-2.0	4.6	-0.9	3.8	2.6	3.8	5.5	6.0	Feb-94
BBgBarc US Aggregate TR				<u>-2.4</u>	<u>-3.2</u>	<u>2.5</u>	<u>-2.7</u>	<u>2.2</u>	<u>2.8</u>	<u>2.4</u>	<u>4.3</u>	<u>5.5</u>	Feb-94
Over/Under				0.6	1.2	2.1	1.8	1.6	-0.2	1.4	1.2	0.5	
BlackRock U.S. Debt Fund	214,900,634	4.7		-2.4	-3.2	2.5	-2.7	2.2	2.9	2.5	4.4	5.3	Nov-95
BBgBarc US Aggregate TR				<u>-2.4</u>	<u>-3.2</u>	<u>2.5</u>	<u>-2.7</u>	<u>2.2</u>	<u>2.8</u>	<u>2.4</u>	<u>4.3</u>	<u>5.3</u>	Nov-95
Over/Under				0.0	0.0	0.0	0.0	0.0	0.1	0.1	0.1	0.0	
Western	280,265,773	6.1		-2.7	-3.2	3.9	-2.0	3.4	3.9	4.3	5.1	6.2	Dec-96
BBgBarc US Aggregate TR				<u>-2.4</u>	<u>-3.2</u>	<u>2.5</u>	<u>-2.7</u>	<u>2.2</u>	<u>2.8</u>	<u>2.4</u>	<u>4.3</u>	<u>5.3</u>	Dec-96
Over/Under				-0.3	0.0	1.4	0.7	1.2	1.1	1.9	0.8	0.9	
Reams	300,502,253	6.5		-0.6	-0.2	5.8	0.4	4.6	0.8	3.3	5.7	5.6	Sep-01
Reams Custom Index				<u>0.1</u>	<u>0.2</u>	<u>0.7</u>	<u>0.4</u>	<u>0.7</u>	<u>0.4</u>	<u>1.2</u>	<u>3.6</u>	<u>4.1</u>	Sep-01
Over/Under				-0.7	-0.4	5.1	0.0	3.9	0.4	2.1	2.1	1.5	
BBgBarc US Aggregate TR				-2.4	-3.2	2.5	-2.7	2.2	2.8	2.4	4.3	4.5	Sep-01
Loomis Sayles Multi Strategy	75,851,146	1.6		-2.2	-2.2	7.3	0.7	5.4	4.0	6.1	6.3	6.4	Jul-05
Loomis Custom Index				<u>-1.7</u>	<u>-2.0</u>	<u>6.3</u>	<u>-0.2</u>	<u>5.2</u>	<u>3.1</u>	<u>3.9</u>	<u>5.1</u>	<u>5.2</u>	Jul-05
Over/Under				-0.5	-0.2	1.0	0.9	0.2	0.9	2.2	1.2	1.2	
BBgBarc US Govt/Credit TR				-2.7	-3.8	2.8	-3.2	2.4	2.8	2.5	4.3	4.3	Jul-05
Loomis Strategic Alpha	44,167,735	1.0		0.3	1.1	5.5	2.9	4.6	2.5			2.5	Jul-13
BBgBarc US Aggregate TR				<u>-2.4</u>	<u>-3.2</u>	<u>2.5</u>	<u>-2.7</u>	<u>2.2</u>	<u>2.8</u>	<u>2.4</u>	<u>4.3</u>	<u>2.8</u>	Jul-13
Over/Under				2.7	4.3	3.0	5.6	2.4	-0.3			-0.3	

Reams Custom Index: Merrill Lynch 3 Month Libor Constant Maturity Index, prior to February 2013 the Barclays Aggregate.

Loomis Custom Index: 65% Barclays Aggregate, 30% Citigroup High Yield Market Index and 5% JPM Non-US Hedged Bond Index.



# Total Fund Performance Detail Net of Fees

	Market Value (\$)	% of Portfolio	Policy %	1 Mo (%)	3 Mo (%)	YTD (%)	Fiscal YTD (%)	1 Yr (%)	3 Yrs (%)	5 Yrs (%)	10 Yrs (%)	Return (%)	Since
Total Real Estate	377,332,470	8.2	7.0	0.0	1.5	5.1	1.5	8.1	10.7	10.3	3.7	7.9	Mar-94
NCREIF ODCE Net				<u>0.0</u>	<u>1.8</u>	<u>5.8</u>	<u>1.8</u>	<u>9.1</u>	<u>11.4</u>	<u>11.3</u>	<u>5.0</u>	<u>8.1</u>	Mar-94
Over/Under				0.0	-0.3	-0.7	-0.3	-1.0	-0.7	-1.0	-1.3	-0.2	
Prudential Real Estate	132,029,661	2.9		0.0	1.8	5.7	1.8	8.9	12.1	11.7	4.7	6.0	Jun-04
NCREIF ODCE Net				<u>0.0</u>	<u>1.8</u>	<u>5.8</u>	<u>1.8</u>	<u>9.1</u>	<u>11.4</u>	<u>11.3</u>	<u>5.0</u>	<u>7.0</u>	Jun-04
Over/Under				0.0	0.0	-0.1	0.0	-0.2	0.7	0.4	-0.3	-1.0	
NCREIF ODCE				0.0	2.1	6.5	2.1	10.1	12.4	12.4	6.0	8.0	Jun-04
UBS Real Estate	244,298,789	5.3		0.0	1.5	4.9	1.5	7.8	9.8	9.6	5.4	7.5	Mar-03
NCREIF ODCE Net				<u>0.0</u>	<u>1.8</u>	<u>5.8</u>	<u>1.8</u>	<u>9.1</u>	<u>11.4</u>	<u>11.3</u>	<u>5.0</u>	<u>7.3</u>	Mar-03
Over/Under				0.0	-0.3	-0.9	-0.3	-1.3	-1.6	-1.7	0.4	0.2	
NCREIF ODCE				0.0	2.1	6.5	2.1	10.1	12.4	12.4	6.0	8.2	Mar-03
RREEF	1,004,019	0.0		0.0	-12.6	-16.2	-12.6	-17.0	5.2	10.2		-6.3	Sep-07
NCREIF ODCE Net				<u>0.0</u>	<u>1.8</u>	<u>5.8</u>	<u>1.8</u>	<u>9.1</u>	<u>11.4</u>	<u>11.3</u>	<u>5.0</u>	<u>3.7</u>	Sep-07
Over/Under				0.0	-14.4	-22.0	-14.4	-26.1	-6.2	-1.1		-10.0	
NCREIF ODCE				0.0	2.1	6.5	2.1	10.1	12.4	12.4	6.0	4.7	Sep-07
Total Liquid Alternatives	393,657,373	8.6	10.0	-0.5	-1.7	9.0	0.1	6.4	1.5			4.0	Apr-13
CPI + 4% (Unadjusted)				<u>0.5</u>	<u>1.5</u>	<u>6.1</u>	<u>2.1</u>	<u>6.1</u>	<u>5.9</u>	<u>10.8</u>		<u>6.3</u>	Apr-13
Over/Under				-1.0	-3.2	2.9	-2.0	0.3	-4.4			-2.3	
Bridgewater All Weather Fund	276,516,194	6.0		-1.8	-2.5	8.2	-0.2	5.3	2.6			3.6	Aug-13
CPI + 5% (Unadjusted)				<u>0.5</u>	<u>1.7</u>	<u>7.0</u>	<u>2.5</u>	<u>7.1</u>	<u>6.3</u>			<u>6.1</u>	Aug-13
Over/Under				-2.3	-4.2	1.2	-2.7	-1.8	-3.7			-2.5	
Tortoise Energy Infrastructure	117,141,179	2.5		2.7	0.4	10.8	0.8	9.2	-1.0			1.4	Apr-13
Wells Fargo MLP Index				<u>3.2</u>	<u>0.2</u>	<u>16.3</u>	<u>1.5</u>	<u>9.1</u>	<u>-5.5</u>	<u>3.5</u>		<u>-3.4</u>	Apr-13
Over/Under				-0.5	0.2	-5.5	-0.7	0.1	4.5			4.8	
Overlay	121,962,350	2.7	0.0										
Parametric	121,962,350	2.7											

Total Real Estate Benchmark: NCREIF ODCE; prior to January 2006, the NCREIF Property Index.

Real Estate managers and NCREIF ODCE are valued on a quarterly basis. Performance is not applicable in mid-quarter months, therefore 0% return is shown.

CPI+4% and CPI+5% is estimated by carrying the last available month forward.

Real Estate Valuation is as of 9/30/2016.



# Total Fund

**Cash Flow Summary** 

			Month E	nding November 30	, 2016		
	Beginning Market Value	Withdrawals	Contributions	Net Cash Flow	Fees	Net Investment Change	Ending Market Value
Adams Street Global Fund Series	\$103,942,146	-\$3,629,554	\$3,187,500	-\$442,054	\$0	\$15	\$103,500,107
BlackRock ACWI ex-U.S. Index	\$341,127,406	\$0	\$0	\$0	-\$29,416	-\$8,136,289	\$332,991,118
BlackRock Equity Market Fund	\$1,204,901,735	\$0	\$0	\$0	-\$23,067	\$54,097,891	\$1,258,999,627
BlackRock Extended Equity Index	\$47,701,789	\$0	\$0	\$0	-\$3,408	\$3,790,573	\$51,492,361
BlackRock MSCI ACWI Equity Index	\$467,133,120	\$0	\$0	\$0	-\$17,364	\$3,787,283	\$470,920,403
BlackRock U.S. Debt Fund	\$220,114,690	\$0	\$0	\$0	-\$10,497	-\$5,214,056	\$214,900,634
Bridgewater All Weather Fund	\$281,515,500	\$0	\$0	\$0	-\$90,941	-\$4,999,306	\$276,516,194
Drive Capital Fund	\$449,382	\$0	\$0	\$0	\$0	-\$131,560	\$317,822
Harbourvest- Dover Street VIII	\$47,866,394	-\$751,783	\$0	-\$751,783	\$0	-\$69,971	\$47,044,640
Hexavest	\$78,057,751	\$0	\$0	\$0	-\$29,786	-\$1,199,323	\$76,858,428
Loomis Sayles Multi Strategy	\$77,549,652	\$0	\$0	\$0	-\$24,796	-\$1,698,506	\$75,851,146
Loomis Strategic Alpha	\$44,016,605	\$0	\$0	\$0	-\$14,723	\$151,130	\$44,167,735
Pantheon Global Secondary Funds	\$15,397,544	\$0	\$0	\$0	\$0	\$0	\$15,397,544
Parametric	\$141,821,264	-\$23,880,483	\$4,848,467	-\$19,032,016	-\$16,696	-\$826,898	\$121,962,350
Prudential Real Estate	\$132,029,661	\$0	\$0	\$0	\$0	\$0	\$132,029,661
Reams	\$302,312,728	\$0	\$0	\$0	-\$43,813	-\$1,810,475	\$300,502,253
RREEF	\$1,004,019	\$0	\$0	\$0	\$0	\$0	\$1,004,019
Sprucegrove	\$179,915,260	\$0	\$0	\$0	-\$57,002	-\$303,764	\$179,611,495
Tortoise Energy Infrastructure	\$113,983,196	\$0	\$0	\$0	-\$61,011	\$3,157,983	\$117,141,179
UBS Real Estate	\$244,298,789	\$0	\$0	\$0	\$0	\$0	\$244,298,789
Walter Scott	\$99,167,024	\$0	\$0	\$0	-\$69,798	-\$3,321,495	\$95,845,529
Western	\$287,973,869	\$0	\$0	\$0	-\$47,533	-\$7,708,096	\$280,265,773
Western U.S. Index Plus	\$151,525,641	\$0	\$0	\$0	-\$32,100	\$5,274,261	\$156,799,902
Total	\$4,583,805,166	-\$28,261,820	\$8,035,967	-\$20,225,853	-\$571,950	\$34,839,396	\$4,598,418,709





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# Ventura County Employees' Retirement Association

Preliminary Performance Report Month Ending December 31, 2016

Anthony Ferrara, CAIA, Consultant Allan Martin, Partner

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## Total Fund Performance Detail Net of Fees

	Market Value (\$)	% of Portfolio	Policy %	1 Mo (%)	3 Mo (%)	YTD (%)	Fiscal YTD (%)	1 Yr (%)	3 Yrs (%)	5 Yrs (%)	10 Yrs (%)	Return (%)	Since
Total Fund	4,664,718,714	100.0	100.0	1.7	1.0	8.4	4.4	8.4	4.5	9.0	5.0	7.8	Apr-94
Policy Index				<u>1.4</u>	<u>1.1</u>	<u>8.3</u>	<u>4.8</u>	<u>8.3</u>	<u>5.3</u>	<u>9.1</u>	<u>5.3</u>	<u>7.9</u>	Apr-94
Over/Under				0.3	-0.1	0.1	-0.4	0.1	-0.8	-0.1	-0.3	-0.1	
Allocation Index				1.6	1.5	8.3	5.2	8.3	4.9	8.4	4.9		Apr-94
60% MSCI ACWI (Net)/40% CITI WGBI				1.0	-2.8	5.5	0.4	5.5	1.7	5.3	3.7		Apr-94
Total Fund ex Parametric	4,565,095,433	97.9		1.7	1.1	8.1	4.8	8.1	4.4	8.8	4.9	7.8	Apr-94
Total Fund ex Private Equity	4,481,593,233	96.1		1.6	1.0	8.4	4.3	8.4	4.3	8.3		8.3	Jan-12
Policy Index				<u>1.4</u>	<u>1.1</u>	<u>8.3</u>	<u>4.8</u>	<u>8.3</u>	<u>5.3</u>	<u>9.1</u>	<u>5.3</u>	<u>9.1</u>	Jan-12
Over/Under				0.2	-0.1	0.1	-0.5	0.1	-1.0	-0.8		-0.8	
Total US Equity	1,497,012,239	32.1	28.0	2.0	4.3	13.0	9.0	13.0	8.5	14.9	6.8	8.9	Dec-93
Russell 3000				<u>2.0</u>	<u>4.2</u>	<u>12.7</u>	<u>8.8</u>	<u>12.7</u>	<u>8.4</u>	<u>14.6</u>	<u>7.2</u>	<u>9.2</u>	Dec-93
Over/Under				0.0	0.1	0.3	0.2	0.3	0.1	0.3	-0.4	-0.3	
BlackRock Equity Market Fund	1,283,784,079	27.5		2.0	4.2	12.8	8.9	12.8	8.5	14.7		7.4	Dec-07
Dow Jones U.S. Total Stock Market				<u>1.9</u>	<u>4.1</u>	<u>12.6</u>	<u>8.8</u>	<u>12.6</u>	<u>8.4</u>	<u>14.6</u>	<u>7.2</u>	<u>7.4</u>	Dec-07
Over/Under				0.1	0.1	0.2	0.1	0.2	0.1	0.1		0.0	
Western U.S. Index Plus	160,786,886	3.4		2.5	4.2	13.8	8.6	13.8	9.5	16.1		4.3	May-07
S&P 500				<u>2.0</u>	<u>3.8</u>	<u>12.0</u>	<u>7.8</u>	<u>12.0</u>	<u>8.9</u>	<u>14.7</u>	<u>6.9</u>	<u>6.3</u>	May-07
Over/Under				0.5	0.4	1.8	0.8	1.8	0.6	1.4		-2.0	
BlackRock Extended Equity Index	52,441,274	1.1		1.8	5.7	16.1	13.2	16.1	6.5	14.6	8.0	11.6	Oct-02
Dow Jones U.S. Completion Total Stock Market				<u>1.8</u>	<u>5.5</u>	<u>15.7</u>	<u>13.1</u>	<u>15.7</u>	<u>6.4</u>	<u>14.4</u>	<u>7.9</u>	<u>11.6</u>	Oct-02
Over/Under				0.0	0.2	0.4	0.1	0.4	0.1	0.2	0.1	0.0	

Policy Index: Currently, 28% Russell 3000, 20% Barclays Aggregate, 15% MSCI ACWI ex U.S., 10% MSCI ACWI, 10% DJ U.S. Total Stock Market Index + 3%, 10% CPI+4% Index, and 7% NCREIF ODCE Real Estate Index.

Prior to January 2016 the Total U.S. Equity Benchmark was a dynamic hybrid using the respective managers' market value weights within the U.S. Equity component toward their benchmark. Prior to May 2013, the Dow Jones U.S. Total Stock Market Index. Prior to May 2007, the Russell 3000 Index.

CPI+4% and CPI+5% are estimated due to CPI monthly lag.

# Total Fund Performance Detail Net of Fees

	Market Value (\$)	% of Portfolio	Policy %	1 Mo (%)	3 Mo (%)	YTD (%)	Fiscal YTD (%)	1 Yr (%)	3 Yrs (%)	5 Yrs (%)	10 Yrs (%)	Return (%)	Since
Total Non-US Equity	703,258,824	15.1	15.0	2.6	-0.9	6.6	6.1	6.6	-0.7	6.0	1.2	6.0	Mar-94
MSCI ACWI ex USA				<u>2.6</u>	<u>-1.3</u>	<u>4.5</u>	<u>5.6</u>	<u>4.5</u>	<u>-1.8</u>	<u>5.0</u>	<u>1.0</u>	<u>4.7</u>	Mar-94
Over/Under				0.0	0.4	2.1	0.5	2.1	1.1	1.0	0.2	1.3	
MSCI EAFE				3.4	-0.7	1.0	5.7	1.0	-1.6	6.5	0.7	4.4	Mar-94
MSCI ACWI ex USA Local Currency				3.3	4.9	7.0	11.6	7.0	4.9	10.1	2.6		Mar-94
MSCI EAFE Local Currency				4.5	7.1	5.3	13.5	5.3	5.5	11.8	2.2	4.7	Mar-94
BlackRock ACWI ex-U.S. Index	341,371,584	7.3		2.5	-1.6	4.7	5.4	4.7	-1.3	5.5		1.1	Mar-07
MSCI ACWI ex USA				<u>2.6</u>	<u>-1.3</u>	<u>4.5</u>	<u>5.6</u>	<u>4.5</u>	<u>-1.8</u>	<u>5.0</u>	<u>1.0</u>	<u>0.6</u>	Mar-07
Over/Under				-0.1	-0.3	0.2	-0.2	0.2	0.5	0.5		0.5	
MSCI ACWI ex USA Local Currency				3.3	4.9	7.0	11.6	7.0	4.9	10.1	2.6	2.3	Mar-07
Sprucegrove	184,817,177	4.0		2.9	2.6	11.9	11.6	11.9	-0.5	6.2	1.7	7.0	Mar-02
MSCI ACWI ex USA				<u>2.6</u>	<u>-1.3</u>	<u>4.5</u>	<u>5.6</u>	<u>4.5</u>	<u>-1.8</u>	<u>5.0</u>	<u>1.0</u>	<u>5.9</u>	Mar-02
Over/Under				0.3	3.9	7.4	6.0	7.4	1.3	1.2	0.7	1.1	
MSCI EAFE				3.4	-0.7	1.0	5.7	1.0	-1.6	6.5	0.7	5.3	Mar-02
MSCI ACWI ex USA Local Currency				3.3	4.9	7.0	11.6	7.0	4.9	10.1	2.6	4.9	Mar-02
MSCI EAFE Local Currency				4.5	7.1	5.3	13.5	5.3	5.5	11.8	2.2	4.2	Mar-02
Hexavest	79,915,903	1.7		3.9	-0.8	3.8	3.3	3.8	-0.7	6.0		3.2	Dec-10
MSCI EAFE				<u>3.4</u>	<u>-0.7</u>	<u>1.0</u>	<u>5.7</u>	<u>1.0</u>	<u>-1.6</u>	<u>6.5</u>	<u>0.7</u>	<u>3.2</u>	Dec-10
Over/Under				0.5	-0.1	2.8	-2.4	2.8	0.9	-0.5		0.0	
MSCI EAFE Local Currency				4.5	7.1	5.3	13.5	5.3	5.5	11.8	2.2	7.4	Dec-10
Walter Scott	97,154,160	2.1		1.3	-4.9	5.1	1.0	5.1	0.3	6.3		3.6	Dec-10
MSCI ACWI ex USA				<u>2.6</u>	<u>-1.3</u>	<u>4.5</u>	<u>5.6</u>	<u>4.5</u>	<u>-1.8</u>	<u>5.0</u>	<u>1.0</u>	<u>1.6</u>	Dec-10
Over/Under				-1.3	-3.6	0.6	-4.6	0.6	2.1	1.3		2.0	<b>-</b> (a)
MSCI ACWI ex USA Local Currency				3.3	4.9	7.0	11.6	7.0	4.9	10.1	2.6	6.0	Dec-10
Total Global Equity	481,253,407	10.3	10.0	2.2	1.3	9.0	7.0	9.0	2.2	8.3	2.8	5.0	May-05
MSCI ACWI				<u>2.2</u>	<u>1.2</u>	<u>7.9</u>	<u>6.6</u>	<u>7.9</u>	<u>3.1</u>	<u>9.4</u>	<u>3.6</u>	<u>6.0</u>	May-05
Over/Under	101 070 107	10.0		0.0	0.1	1.1	0.4	1.1	-0.9	-1.1	-0.8	-1.0	
BlackRock MSCI ACWI Equity Index	481,253,407	10.3		2.2	1.3	8.4	6.8	8.4	3.6			9.5	Jul-12
MSCIACWI				<u>2.2</u>	<u>1.2</u>	<u>7.9</u>	<u>6.6</u>	<u>7.9</u>	<u>3.1</u>	<u>9.4</u>	<u>3.6</u>	<u>9.1</u>	Jul-12
Over/Under				0.0	0.1	0.5	0.2	0.5	0.5			0.4	



December 31, 2016

# Total Fund Performance Detail Net of Fees

	Market Value (\$)	% of Portfolio	Policy %	1 Mo (%)	3 Mo (%)	YTD (%)	Fiscal YTD (%)	1 Yr (%)	3 Yrs (%)	5 Yrs (%)	10 Yrs (%)	Return (%)	Since
Total Private Equity	183,125,480	3.9	10.0	3.5	3.4	7.6	7.1	7.6	13.6	13.8		13.8	Jan-12
DJ U.S. Total Stock Market Index + 3%				<u>2.2</u>	<u>4.9</u>	<u>16.0</u>	<u>10.4</u>	<u>16.0</u>	<u>11.6</u>	<u>18.0</u>		<u>18.0</u>	Jan-12
Over/Under				1.3	-1.5	-8.4	-3.3	-8.4	2.0	-4.2		-4.2	
Adams Street Global Fund Series	111,847,290	2.4		3.2	3.2	7.1	6.5	7.1	12.2	12.6		12.6	Jan-12
DJ U.S. Total Stock Market Index + 3%				<u>2.2</u>	<u>4.9</u>	<u>16.0</u>	<u>10.4</u>	<u>16.0</u>	<u>11.6</u>	<u>18.0</u>		<u>18.0</u>	Jan-12
Over/Under				1.0	-1.7	-8.9	-3.9	-8.9	0.6	-5.4		-5.4	
Harbourvest- Dover Street VIII	49,057,580	1.1		3.4	3.1	6.7	5.6	6.7	17.5			17.7	Jul-13
DJ U.S. Total Stock Market Index + 3%				<u>2.2</u>	<u>4.9</u>	<u>16.0</u>	<u>10.4</u>	<u>16.0</u>	<u>11.6</u>	<u>18.0</u>		<u>15.3</u>	Jul-13
Over/Under				1.2	-1.8	-9.3	-4.8	-9.3	5.9			2.4	
Pantheon Global Secondary Funds	21,902,789	0.5		5.7	5.7	15.5	17.5	15.5	12.7	10.7		10.7	Jan-12
DJ U.S. Total Stock Market Index + 3%				<u>2.2</u>	<u>4.9</u>	<u>16.0</u>	<u>10.4</u>	<u>16.0</u>	<u>11.6</u>	<u>18.0</u>		<u>18.0</u>	Jan-12
Over/Under				3.5	0.8	-0.5	7.1	-0.5	1.1	-7.3		-7.3	
Drive Capital Fund	317,822	0.0		0.0	-29.3							-29.3	Sep-16
DJ U.S. Total Stock Market Index + 3%				<u>2.2</u>	<u>4.9</u>	<u>16.0</u>	<u>10.4</u>	<u>16.0</u>	<u>11.6</u>	<u>18.0</u>		<u>5.3</u>	Sep-16
Over/Under				-2.2	-34.2							-34.6	

Please Note: Private Equity performance is shown on a time-weighted return basis. Values are cash adjusted with current month cash flows.

Drive Capital Fund, funded 9/1/2016

# Private Equity Limited Partnership Performance

													Since Inception	N
Fund Name	Vintage Year	Initial Investment Date	Commitment	Capital Called to Date <sup>1</sup>	Outstanding Commitment <sup>1</sup>	Call Ratio	Add'l Fees <sup>2</sup>	Distributions to Date	Valuation	Total Value	Net Benefit	IRR	Distributions to Paid In Multiple (DPI)	
Adams Street 2010 U.S. Fund	2010	5/21/2010	\$42,500,000	\$32,852,500	\$9,647,500	77%	\$15,213	\$14,394,035	\$33,872,065	\$48,266,100	\$15,398,387	5.6%	0.44x	1.47x
Adams Street 2010 Non-U.S. Dev. Mkts Fund	2010	5/21/2010	\$25,500,000	\$20,591,249	\$4,908,751	81%	\$1,589	\$8,141,472	\$16,744,994	\$24,886,466	\$4,293,628	7.7%	0.4x	1.21x
Adams Street 2010 Non-U.S. Emg Mkts Fund	2010	1/3/2011	\$8,500,000	\$6,621,500	\$1,878,500	78%	\$0	\$738,789	\$7,833,407	\$8,572,196	\$1,950,696	9.1%	0.11x	1.29x
Adams Street 2010 Direct Fund	2010	5/21/2010	\$8,500,000	\$7,879,500	\$620,500	93%	\$6,697	\$4,831,957	\$7,407,542	\$12,239,499	\$4,353,302	12.0%	0.61x	1.55x
Total Adams Street 2010	2010	5/21/2010	\$85,000,000	\$67,944,749	\$17,055,251	80%	\$23,499	\$28, 106, 253	\$65,858,008	\$93,964,261	\$25,996,013	10.9%	0.41x	1.38x
Adams Street 2013 Global Fund	2013	6/27/2013	\$75,000,000	\$44,250,000	\$30,750,000	59%	\$10,728	\$3,108,905	\$44,395,263	\$47,504,168	\$3,243,440	4.4%	0.07x	1.07x
Adams Street 2016 Global Fund	2016	12/22/2016	\$60,000,000	\$1,500,000	\$58,500,000	3%	\$0	\$0	\$1,594,044	\$1,594,044	\$94,044	0.0%	0x	1.06x
Drive Capital Fund II	2016	9/1/2016	\$15,000,000	\$449,382	\$14,550,618	3%	\$3,210	\$0	\$449,382	\$449,382	(\$3,210)	-0.4%	-	0.99x
HarbourVest - Dover Street VIII	2013	5/30/2013	\$67,500,000	\$56,362,500	\$11,137,500	84%	\$84,954	\$29,369,898	\$47,534,125	\$76,904,023	\$20,456,569	22.7%	0.52x	1.36x
HarbourVest - Dover Street IX	2016	12/16/2016	\$60,000,000	\$2,400,000	\$57,600,000	4%	\$0	\$841,532	\$1,737,342	\$2,578,874	\$178,874	4.0%	5 <b></b>	
Pantheon Global Secondary Fund IV	2010	8/20/2010	\$15,000,000	\$9,960,000	\$5,040,000	66%	\$0	\$8,805,001	\$5,555,666	\$14,360,667	\$4,400,667	13.4%	0.88x	1.44x
Pantheon Global Secondary Fund V	2015	2/26/2015	\$50,000,000	\$13,391,510	\$36,608,490	27%	(\$87,343)	\$12,568	\$15,284,309	\$15,296,877	\$1,992,710	77.7%		1.15x
Total VCERA Private Equity Program	-	5/21/2010	\$427,500,000	\$196,258,141	\$231,241,859	46%	\$35,048	\$70,244,157	\$182,408,139	\$252,652,296	\$56,359,107	13.1%	0.36x	1.29x

1. Includes recycled/recallable distributions received to date.

2. Add'l Fees represents notional interest paid/(received).

2. Add'l Fees for Pantheon Global Secondary Fund V includes notional interest paid/(received) and management fee rebates paid to VCERA.

Note: Private equity performance data is reported net of fees.

Performance shown is based on 6/30/2016 NAVs cash-adjusted for cash flows through 12/31/2016.



December 31, 2016

# Total Fund Performance Detail Net of Fees

	Market Value (\$)	% of Portfolio	Policy %	1 Mo (%)	3 Mo (%)	YTD (%)	Fiscal YTD (%)	1 Yr (%)	3 Yrs (%)	5 Yrs (%)	10 Yrs (%)	Return (%)	Since
Total US Fixed Income	918,240,759	19.7	20.0	0.3	-1.9	4.9	-0.6	4.9	2.7	3.5	5.6	6.0	Feb-94
BBgBarc US Aggregate TR				<u>0.1</u>	<u>-3.0</u>	<u>2.6</u>	<u>-2.5</u>	<u>2.6</u>	<u>3.0</u>	<u>2.2</u>	<u>4.3</u>	<u>5.4</u>	Feb-94
Over/Under				0.2	1.1	2.3	1.9	2.3	-0.3	1.3	1.3	0.6	
BlackRock U.S. Debt Fund	215,199,689	4.6		0.1	-3.0	2.7	-2.5	2.7	3.1	2.3	4.4	5.3	Nov-95
BBgBarc US Aggregate TR				<u>0.1</u>	<u>-3.0</u>	<u>2.6</u>	<u>-2.5</u>	<u>2.6</u>	<u>3.0</u>	<u>2.2</u>	<u>4.3</u>	<u>5.3</u>	Nov-95
Over/Under				0.0	0.0	0.1	0.0	0.1	0.1	0.1	0.1	0.0	
Western	281,028,251	6.0		0.3	-3.1	4.1	-1.8	4.1	4.1	4.1	5.2	6.2	Dec-96
BBgBarc US Aggregate TR				<u>0.1</u>	<u>-3.0</u>	<u>2.6</u>	<u>-2.5</u>	<u>2.6</u>	<u>3.0</u>	<u>2.2</u>	<u>4.3</u>	<u>5.3</u>	Dec-96
Over/Under				0.2	-0.1	1.5	0.7	1.5	1.1	1.9	0.9	0.9	
Reams	301,131,501	6.5		0.2	-0.3	6.0	0.6	6.0	0.8	2.9	5.8	5.6	Sep-01
Reams Custom Index				<u>0.1</u>	<u>0.2</u>	<u>0.7</u>	<u>0.4</u>	<u>0.7</u>	<u>0.4</u>	<u>1.0</u>	<u>3.7</u>	<u>4.1</u>	Sep-01
Over/Under				0.1	-0.5	5.3	0.2	5.3	0.4	1.9	2.1	1.5	
BBgBarc US Aggregate TR				0.1	-3.0	2.6	-2.5	2.6	3.0	2.2	4.3	4.5	Sep-01
Loomis Sayles Multi Strategy	76,449,106	1.6		0.8	-2.0	8.2	1.5	8.2	4.1	6.0	6.4	6.4	Jul-05
Loomis Custom Index				<u>0.7</u>	<u>-1.5</u>	<u>7.0</u>	<u>0.4</u>	<u>7.0</u>	<u>3.4</u>	<u>3.7</u>	<u>5.2</u>	<u>5.2</u>	Jul-05
Over/Under				0.1	-0.5	1.2	1.1	1.2	0.7	2.3	1.2	1.2	
BBgBarc US Govt/Credit TR				0.2	-3.4	3.0	-3.0	3.0	3.0	2.3	4.4	4.2	Jul-05
Loomis Strategic Alpha	44,432,213	1.0		0.6	1.7	6.1	3.5	6.1	2.4			2.6	Jul-13
BBgBarc US Aggregate TR				<u>0.1</u>	<u>-3.0</u>	<u>2.6</u>	<u>-2.5</u>	<u>2.6</u>	<u>3.0</u>	<u>2.2</u>	<u>4.3</u>	<u>2.7</u>	Jul-13
Over/Under				0.5	4.7	3.5	6.0	3.5	-0.6			-0.1	

Reams Custom Index: Merrill Lynch 3 Month Libor Constant Maturity Index, prior to February 2013 the Barclays Aggregate.

Loomis Custom Index: 65% Barclays Aggregate, 30% Citigroup High Yield Market Index and 5% JPM Non-US Hedged Bond Index.

# Total Fund Performance Detail Net of Fees

	Market Value (\$)	% of Portfolio	Policy %	1 Mo (%)	3 Mo (%)	YTD (%)	Fiscal YTD (%)	1 Yr (%)	3 Yrs (%)	5 Yrs (%)	10 Yrs (%)	Return (%)	Since
Total Real Estate	378,553,248	8.1	7.0	0.0	0.0	5.1	1.5	5.1	9.8	9.8	3.2	7.9	Mar-94
NCREIF ODCE Net				<u>0.0</u>	<u>0.0</u>	<u>5.8</u>	<u>1.8</u>	<u>5.8</u>	<u>10.4</u>	<u>10.7</u>	<u>4.6</u>	<u>8.1</u>	Mar-94
Over/Under				0.0	0.0	-0.7	-0.3	-0.7	-0.6	-0.9	-1.4	-0.2	
Prudential Real Estate	133,250,439	2.9		0.0	0.0	5.7	1.8	5.7	10.8	11.0	4.4	5.9	Jun-04
NCREIF ODCE Net				<u>0.0</u>	<u>0.0</u>	<u>5.8</u>	<u>1.8</u>	<u>5.8</u>	<u>10.4</u>	<u>10.7</u>	<u>4.6</u>	<u>7.0</u>	Jun-04
Over/Under				0.0	0.0	-0.1	0.0	-0.1	0.4	0.3	-0.2	-1.1	
NCREIF ODCE				0.0	0.0	6.5	2.1	6.5	11.3	11.7	5.6	8.0	Jun-04
UBS Real Estate	244,298,789	5.2		0.0	0.0	4.9	1.5	4.9	9.1	9.1	4.8	7.5	Mar-03
NCREIF ODCE Net				<u>0.0</u>	<u>0.0</u>	<u>5.8</u>	<u>1.8</u>	<u>5.8</u>	<u>10.4</u>	<u>10.7</u>	<u>4.6</u>	<u>7.2</u>	Mar-03
Over/Under				0.0	0.0	-0.9	-0.3	-0.9	-1.3	-1.6	0.2	0.3	
NCREIF ODCE				0.0	0.0	6.5	2.1	6.5	11.3	11.7	5.6	8.2	Mar-03
RREEF	1,004,019	0.0		0.0	0.0	-16.2	-12.6	-16.2	4.2	10.0		-6.3	Sep-07
NCREIF ODCE Net				<u>0.0</u>	<u>0.0</u>	<u>5.8</u>	<u>1.8</u>	<u>5.8</u>	<u>10.4</u>	<u>10.7</u>	<u>4.6</u>	<u>3.7</u>	Sep-07
Over/Under				0.0	0.0	-22.0	-14.4	-22.0	-6.2	-0.7		-10.0	
NCREIF ODCE				0.0	0.0	6.5	2.1	6.5	11.3	11.7	5.6	4.6	Sep-07
Total Liquid Alternatives	403,651,475	8.7	10.0	2.5	-0.4	11.7	2.7	11.7	2.0			4.6	Apr-13
CPI + 4% (Unadjusted)				<u>0.2</u>	<u>0.8</u>	<u>6.0</u>	<u>2.0</u>	<u>6.0</u>	<u>5.2</u>	<u>9.6</u>		<u>6.1</u>	Apr-13
Over/Under				2.3	-1.2	5.7	0.7	5.7	-3.2			-1.5	
Bridgewater All Weather Fund	281,132,456	6.0		1.7	-1.7	10.0	1.5	10.0	3.3			4.0	Aug-13
CPI + 5% (Unadjusted)				<u>0.3</u>	<u>1.0</u>	<u>7.0</u>	<u>2.5</u>	<u>7.0</u>	<u>6.2</u>			<u>5.9</u>	Aug-13
Over/Under				1.4	-2.7	3.0	-1.0	3.0	-2.9			-1.9	
Tortoise Energy Infrastructure	122,519,020	2.6		4.5	2.9	15.9	5.4	15.9	-0.8			2.6	Apr-13
Wells Fargo MLP Index				<u>5.1</u>	<u>3.5</u>	<u>22.2</u>	<u>6.6</u>	<u>22.2</u>	<u>-4.5</u>	<u>3.4</u>		<u>-2.0</u>	Apr-13
Over/Under				-0.6	-0.6	-6.3	-1.2	-6.3	3.7			4.6	
Overlay	99,623,281	2.1	0.0										
Parametric	99,623,281	2.1											

Total Real Estate Benchmark: NCREIF ODCE; prior to January 2006, the NCREIF Property Index.

Real Estate managers and NCREIF ODCE are valued on a quarterly basis. Performance is not applicable in mid-quarter months, therefore 0% return is shown.

CPI+4% and CPI+5% is estimated by carrying the last available month forward.

Real Estate Valuation is as of 6/30/2016.



December 31, 2016

# Total Fund

**Cash Flow Summary** 

		Cash Flow S	Summary							
	Month Ending December 31, 2016									
	Beginning Market Value	Withdrawals	Contributions	Net Cash Flow	Fees	Net Investment Change	Ending Market Value			
Adams Street Global Fund Series	\$103,500,107	-\$912,582	\$5,830,500	\$4,917,918	\$0	\$3,429,265	\$111,847,290			
BlackRock ACWI ex-U.S. Index	\$332,991,118	\$0	\$0	\$0	-\$30,114	\$8,380,466	\$341,371,584			
BlackRock Equity Market Fund	\$1,258,999,627	\$0	\$0	\$0	-\$23,480	\$24,784,453	\$1,283,784,079			
BlackRock Extended Equity Index	\$51,492,361	\$0	\$0	\$0	-\$3,455	\$948,913	\$52,441,274			
BlackRock MSCI ACWI Equity Index	\$470,920,403	\$0	\$0	\$0	-\$17,708	\$10,333,004	\$481,253,407			
BlackRock U.S. Debt Fund	\$214,900,634	\$0	\$0	\$0	-\$10,507	\$299,055	\$215,199,689			
Bridgewater All Weather Fund	\$276,516,194	\$0	\$0	\$0	-\$91,903	\$4,616,262	\$281,132,456			
Drive Capital Fund	\$317,822	\$0	\$0	\$0	\$0	\$0	\$317,822			
Harbourvest- Dover Street VIII	\$47,044,640	-\$841,532	\$1,195,543	\$354,011	\$0	\$1,658,929	\$49,057,580			
Hexavest	\$76,858,428	\$0	\$0	\$0	-\$30,805	\$3,057,475	\$79,915,903			
Loomis Sayles Multi Strategy	\$75,851,146	\$0	\$0	\$0	-\$24,946	\$597,959	\$76,449,106			
Loomis Strategic Alpha	\$44,167,735	\$0	\$0	\$0	-\$14,811	\$264,477	\$44,432,213			
Pantheon Global Secondary Funds	\$15,397,544	-\$507,568	\$5,950,000	\$5,442,432	\$0	\$1,062,813	\$21,902,789			
Parametric	\$121,962,350	-\$29,130,169	\$5,996,728	-\$23,133,440	-\$9,344	\$794,371	\$99,623,281			
Prudential Real Estate	\$132,029,661	\$0	\$1,220,778	\$1,220,778	\$0	\$0	\$133,250,439			
Reams	\$300,502,253	\$0	\$0	\$0	-\$43,891	\$629,248	\$301,131,501			
RREEF	\$1,004,019	\$0	\$0	\$0	\$0	\$0	\$1,004,019			
Sprucegrove	\$179,611,495	\$0	\$0	\$0	-\$58,087	\$5,205,682	\$184,817,177			
Tortoise Energy Infrastructure	\$117,141,179	\$0	\$0	\$0	-\$63,812	\$5,377,841	\$122,519,020			
UBS Real Estate	\$244,298,789	\$0	\$0	\$0	\$0	\$0	\$244,298,789			
Walter Scott	\$95,845,529	\$0	\$0	\$0	-\$70,452	\$1,308,632	\$97,154,160			
Western	\$280,265,773	\$0	\$0	\$0	-\$47,629	\$762,478	\$281,028,251			

Western U.S. Index Plus

Total

\$160,786,886

\$4,664,718,714

\$3,986,984

\$77,498,306

\$0

-\$31,391,851

\$0

\$20,193,549

\$0

-\$11,198,302

-\$32,598

-\$573,542

\$156,799,902

\$4,598,418,709

#### **Information Disclaimer**

- Past performance is no guarantee of future results.
- All investments carry some level of risk. Diversification and other asset allocation techniques are not guaranteed to ensure profit or protect against losses.
- NEPC's source for portfolio pricing, calculation of accruals, and transaction information is the plan's custodian bank. Information on market indices and security characteristics is received from other sources external to NEPC. While NEPC has exercised reasonable professional care in preparing this report, we cannot guarantee the accuracy of all source information contained within.
- Some index returns displayed in this report or used in calculation of a policy, allocation or custom benchmark may be preliminary and subject to change.
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- This report may contain confidential or proprietary information and may not be copied or redistributed to any party not legally entitled to receive it.

#### **Reporting Methodology**

- The client's custodian bank is NEPC's preferred data source unless otherwise directed. NEPC generally reconciles custodian data to manager data. If the custodian cannot provide accurate data, manager data may be used.
- Trailing time period returns are determined by geometrically linking the holding period returns, from the first full month after inception to the report date. Rates of return are annualized when the time period is longer than a year. Performance is presented gross and/or net of manager fees as indicated on each page.
- For managers funded in the middle of a month, the "since inception" return will start with the first full month, although actual inception dates and cash flows are taken into account in all Composite calculations.
- This report may contain forward-looking statements that are based on NEPC's estimates, opinions and beliefs, but NEPC cannot guarantee that any plan will achieve its targeted return or meet other goals.





Actuarial Valuation and Review as of June 30, 2016

This report has been prepared at the request of the Board of Retirement to assist in administering the Fund. This valuation report may not otherwise be copied or reproduced in any form without the consent of the Board of Retirement and may only be provided to other parties in its entirety. The measurements shown in this actuarial valuation may not be applicable for other purposes.

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December 20, 2016

Board of Retirement Ventura County Employees' Retirement Association 1190 S. Victoria Avenue, Suite 200 Ventura, CA 93003-6572

Dear Board Members:

We are pleased to submit this Actuarial Valuation and Review as of June 30, 2016. It summarizes the actuarial data used in the valuation, establishes the funding requirements for fiscal 2017-2018 and analyzes the preceding year's experience.

This report was prepared in accordance with generally accepted actuarial principles and practices at the request of the Board to assist in administering the Plan. The census and financial information on which our calculations were based was provided by the Retirement Association. That assistance is gratefully acknowledged.

The measurements shown in this actuarial valuation may not be applicable for other purposes. Future actuarial measurements may differ significantly from the current measurements presented in this report due to such factors as the following: plan experience differing from that anticipated by the economic or demographic assumptions; changes in economic or demographic assumptions; increases or decreases expected as part of the natural operation of the methodology used for these measurements (such as the end of an amortization period); and changes in plan provisions or applicable law.

The actuarial calculations were completed under the supervision of John Monroe, ASA, EA, MAAA. 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 herein. To the best of our knowledge, the information supplied in the actuarial valuation is complete and accurate. Further, in our opinion, the assumptions as approved by the Board are reasonably related to the experience of and the expectations for the Plan.

We look forward to reviewing this report at your next meeting and to answering any questions.

Sincerely,

Segal Consulting, a Member of The Segal Group, Inc.

By:

AW/jl

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

Somol

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

### **SECTION 1**

#### VALUATION SUMMARY

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### **SECTION 2**

#### VALUATION RESULTS

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### **SECTION 4**

### **REPORTING INFORMATION**

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★ Segal Consulting

#### **Purpose and Scope**

This report has been prepared by Segal Consulting to present a valuation of the Ventura County Employees' Retirement Association (VCERA) as of June 30, 2016. The valuation was performed to determine whether the assets and contributions are sufficient to provide the prescribed benefits. The contribution requirements presented in this report are based on:

- > The benefit provisions of the Retirement Association, as administered by VCERA;
- The characteristics of covered active members, terminated vested members, and retired members and beneficiaries as of June 30, 2016, provided by VCERA;
- > The assets of the Plan as of June 30, 2016, provided by VCERA;
- > Economic assumptions regarding future salary increases and investment earnings; and
- > Other actuarial assumptions, regarding employee terminations, retirement, death, etc.

One of the general goals of an actuarial valuation is to establish contributions that fully fund the system's liabilities, and which, as a percentage of payroll, remain as level as possible for each generation of active members. Annual actuarial valuations measure the progress toward this goal, as well as test the adequacy of the contribution rates.

In preparing this valuation, we have employed generally accepted actuarial methods and assumptions to evaluate the Association's assets, liabilities and future contribution requirements. Our calculations are based upon member data and financial information provided to us by the Association's staff. This information has not been audited by us, but it has been reviewed and found to be consistent, both internally and with the prior year's information.

- *Ref: Pg. 59* The contribution requirements are determined as a percentage of payroll. The Association's employer rates provide for both normal cost and a contribution to amortize any unfunded or overfunded actuarial accrued liabilities. In 2004, the Board elected to amortize the Association's Unfunded Actuarial Accrued Liability (UAAL) as of June 30, 2004 over a declining 15-year period. Any change in the UAAL after June 30, 2004 is amortized over separate 15-year declining amortization periods.
- *Ref: Pgs.* 42-45 Effective with the June 30, 2012 valuation, any change in the UAAL that arises due to assumption changes is amortized over separate 20-year declining amortization periods. Also, any change in the UAAL that arises due to retirement incentives is annualized over separate declining amortization period of up to 5 years. A schedule of current amortization amounts may be found in Section 3, Exhibit I.

	SECTION 1: Valuation Summary for the Ventura County Employees' Retirement Association
	The rates calculated in this report may be adopted by the Board for the fiscal year that extends from July 1, 2017 through June 30, 2018.
	The Actuarial Standards Board has adopted a revised Actuarial Standard of Practice (ASOP) No. 4 that provides guidelines for actuaries to follow when measuring pension obligations. For a plan such as that offered by the Retirement Association that may use undesignated excess earnings to provide supplemental benefits, the valuation report must indicate that the impact of any such future use of undesignated excess earnings on the future financial condition of the plan has not been explicitly measured or otherwise reflected in the valuation. However, it should be noted that under the Board's Interest Crediting Policy, the balance of \$1.02 billion (negative) in the Contra Account has to be fully restored out of future excess earnings before any subsequent earnings can be used to provide for any supplemental benefits.
	Significant Issues in this Valuation
	The following key findings were the result of this actuarial valuation:
Ref: Pgs. 16, 68	➤ In this report, the employer and member contribution rates shown in Chart 14 and Appendix A are calculated based on a 50/50 sharing of Normal Cost for both PEPRA and non-PEPRA Tiers. For purposes of these calculations, we have been previously directed by VCERA to assume that the cessation of member contributions after 30 years of service for non-PEPRA members continues per the County Employees Retirement Law (CERL) and that the cost associated with this provision is to be paid for by employers.
Ref: Pgs. 70-76	The employer and member contribution rates calculated under the prior method (i.e., no 50/50 sharing of Normal Cost for non-PEPRA tiers) are shown in Appendix C and Appendix D, respectively.
Ref: Pg. 10	The market value of assets earned a return of 0.5% for the July 1, 2015 to June 30, 2016 plan year. The valuation value of assets earned a return of 6.5% for the same period due to the deferral of most of the current year investment loss and the recognition of prior investment gains and losses. This resulted in an actuarial loss when measured against the assumed rate of return of 7.50% for the 2015/2016 year. This actuarial investment loss increased the average employer contribution rate by 0.53% of payroll.
Ref: Pg. 23	> The ratio of the valuation value of assets to actuarial accrued liabilities increased from 83.1% to 84.9%. The Association's UAAL decreased from \$876 million as of June 30, 2015 to \$813 million as of June 30, 2016. This decrease is primerily
Ref: Pg. 41	UAAL decreased from \$876 million as of June 30, 2015 to \$813 million as of June 30, 2016. This decrease is primarily due to contributions paying down a portion of the UAAL, lower than expected individual salary increase for actives and lower than expected benefit increases for retirees and beneficiaries. The decrease is offset to some extent by the investment loss (on the valuation value of assets). A complete reconciliation of the Association's UAAL is provided in Section 3, Exhibit H.

# SECTION 1: Valuation Summary for the Ventura County Employees' Retirement Association

Ref: Pg. 20	>	The average employer rate decreased from 27.77% of payroll to 27.52% of payroll. This decrease is primarily due to lower than expected individual salary increases for actives and lower than expected benefit increases for retirees and beneficiaries offset to some extent by the investment loss (on the valuation value of assets). A complete reconciliation of the Association's employer rate is provided in Section 2, Subsection D, Chart 15.
		As previously adopted by the Board, we have continued to calculate the Basic and COLA UAAL rates on a combined basis for all General Tiers. This results in more stable UAAL rates for General Tier 1.
Ref: Pg. 21	>	The average member rate decreased from 10.24% of payroll in the June 30, 2015 valuation to 10.10% of payroll in the June 30, 2016 valuation. This decrease was mainly the result of a change in the membership demographics. A complete reconciliation of the member rate is provided in Section 2, Subsection D, Chart 16.
Ref: Pg. 5	>	As indicated in Section 2, Subsection B, Chart 7 of this report, the net unrecognized investment <u>loss</u> as of June 30, 2016 is \$206 million as compared to an unrecognized <u>gain</u> of \$54 million in the June 30, 2015 valuation. This investment loss will be recognized in the determination of the valuation value of assets for funding purposes over the next few years. This means that even if the plan earns the current assumed rate of investment return of 7.50% per year (net of expenses) on a <b>market value</b> basis then the deferred losses will be recognized over the next few years as shown in the footnote to Chart 7.
	>	The June 30, 2016 unrecognized investment losses of \$206 million represents about 4.7% of the market value of assets. Unless offset by future investment gains or other favorable experience, the recognition of the \$206 million market losses is expected to have an impact on the Association's future funded ratio and average employer contribution rate. This potential impact may be illustrated as follows:
		• If the net deferred losses were recognized immediately in the valuation value of assets, the funded ratio would decrease from 84.9% to 81.1%.
		For comparison purposes, if all the deferred gains in the June 30, 2015 valuation had been recognized immediately in the June 30, 2015 valuation, the funded ratio would have increased from 83.1% to 84.1%.
		• If the net deferred losses were recognized immediately in the valuation value of assets, the average employer rate would increase from 27.52% to about 30.12% of payroll.
		For comparison purposes, if all the deferred gains in the June 30, 2015 valuation had been recognized immediately in the June 30, 2015 valuation, the average employer rate would have decreased from 27.77% to about 27.06% of payroll.
	>	The actuarial valuation report as of June 30, 2016 is based on financial information as of that date. Changes in the value of assets subsequent to that date are not reflected. Declines in asset values will increase the actuarial cost of the Plan, while increases will decrease the actuarial cost of the Plan.

# Impact of Future Experience on Contribution Rates

Future contribution requirements may differ from those determined in the valuation because of:

- > Differences between actual experience and anticipated experience;
- > Changes in actuarial assumptions or methods;
- > Changes in statutory provisions; and
- > Differences between the contribution rates determined by the valuation and those adopted by the Board.

SECTION 1:	Valuation Summar	y for the Ventura Co	unty Employees	Retirement Association
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	June	e 30, 2016	June	June 30, 2015	
Employer Contribution Rates: (1)	Total Rate	Estimated Annual Amount <sup>(2)</sup>	Total Rate	Estimated Annual Amount <sup>(2)</sup>	
General Tier 1	24.40%	\$1,910	23.85%	\$2,060	
General Tier 2	16.54%	35,503	16.80%	35,864	
General PEPRA Tier 2	16.39%	5,776	16.67%	3,666	
General Tier $2C^{(3)}$	20.72%	44,794	20.52%	45,829	
General PEPRA Tier 2C <sup>(3)</sup>	20.50%	13,149	20.33%	8,361	
General Combined	18.79%	101,132	18.84%	95,780	
Safety	55.66%	86,496	54.56%	88,725	
Safety PEPRA	53.49%	6,663	52.77%	4,001	
Safety Combined	55.50%	93,159	54.48%	92,726	
All Categories combined	27.52%	\$194,291	27.77%	\$188,506	
Average Member Contribution Rates: (1)(4)	Total Rate	Estimated Annual Amount <sup>(2)</sup>	Total Rate	Estimated Annual Amount <sup>(2)</sup>	
General Tier 1	10.60%	\$830	10.09%	\$872	
General Tier 2	7.11%	15,265	7.16%	15,283	
General PEPRA Tier 2	6.96%	2,453	7.03%	1,546	
General Tier $2C^{(3)}$	9.74%	21,061	9.79%	21,861	
General PEPRA Tier 2C <sup>(3)</sup>	9.59%	6,152	9.66%	3,972	
Safety	15.27%	23,730	15.27%	24,832	
Safety PEPRA	14.42%	1,796	14.68%	1,113	
All Categories combined	10.10%	\$71,287	10.24%	\$69,479	

<sup>(1)</sup> Before reflection of any member rate that may be "picked-up" by the employer. Contributions are assumed to be paid throughout the year.

<sup>(2)</sup> Based on projected compensation for each year shown.

<sup>(3)</sup> Throughout this report, this category represents those Tier 2 members who contribute a negotiated 2.63% of compensation for a fixed 2% COLA pursuant to Government Code 31627 that applies to service after March 2003.

(4) The non-refundability factors as of June 30, 2016 are 0.99 for General Tier 1 and Tier 2 (non-PEPRA) and 0.99 for Safety (non-PEPRA) compared to 0.98 for General Tier 1 and Tier 2 (non-PEPRA) and 0.99 for Safety (non-PEPRA) from June 30, 2015.

v

SECTION 1:	Valuation Summar	y for the Ventura C	ounty Employee	s' Retirement Association
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	June 30, 2016	June 30, 2015
Funded Status:		
Actuarial accrued liability(AAL) <sup>(1)</sup>	\$5,398,756	\$5,178,157
Valuation value of assets (VVA) <sup>(1)</sup>	4,585,713	4,302,330
Market value of assets (MVA)	4,386,837	4,364,795
Funded percentage on VVA basis (VVA/AAL)	84.94%	83.09%
Funded percentage on MVA basis (MVA/AAL)	81.26%	84.29%
Unfunded actuarial accrued liability (UAAL) on VVA basis	\$813,043	\$875,827
Unfunded actuarial accrued liability (UAAL) on MVA basis	1,011,919	813,362
Key Assumptions:		
Interest rate	7.50%	7.50%
Inflation rate	3.00%	3.00%
Across the board salary increase	0.50%	0.50%

<sup>(1)</sup> Excludes liabilities and assets held for supplemental medical benefit reserve and statutory contingency reserve.

	June 30, 2016	June 30, 2015	Percentage Change
Active Members:			
Number of members	8,509	8,299	2.5%
Average age	45.0	45.2	N/A
Average service	11.2	11.2	N/A
Projected total compensation	\$705,999,680	\$678,705,846	4.0%
Average projected compensation	\$82,971	\$81,782	1.5%
Retired Member and Beneficiaries:			
Number of members:			
Service retired	4,779	4,657	2.6%
Disability retired	826	834	-1.0%
Beneficiaries	934	847	10.3%
Total	6,539	6,338	3.2%
Average age	69.8	69.6	N/A
Average monthly benefit <sup>(1)</sup>	\$3,024	\$2,936	3.0%
Vested Terminated Members:			
Number of terminated vested members <sup>(2)</sup>	2,639	2,441	8.1%
Average age	46.0	46.2	N/A
Total Members:	17,687	17,078	3.6%
Summary of Financial Data (dollar amounts in thousands):			
Market value of assets	\$4,386,837	\$4,364,795	0.5%
Return on market value of assets	0.49%	1.98%	N/A
Actuarial value of assets	\$4,592,439	\$4,311,131	6.5%
Return on actuarial value of assets	6.51%	8.60%	N/A
Valuation value of assets	\$4,585,713	\$4,302,330	6.6%
Return on valuation value of assets	6.52%	9.82%	N/A

<sup>(1)</sup> Excludes monthly benefits for vested fixed supplemental and supplemental medical benefit amounts.

<sup>(2)</sup> Includes terminated members with member contributions on deposit.

#### **Important Information about Actuarial Valuations**

An actuarial valuation is a budgeting tool with respect to the financing of future projected obligations of a pension plan. It is an estimated forecast – the actual long-term cost of the plan will be determined by the actual benefits and expenses paid and the actual investment experience of the plan.

In order to prepare an actuarial valuation, Segal Consulting ("Segal") relies on a number of input items. These include:

- > <u>Plan of benefits</u> Plan provisions define the rules that will be used to determine benefit payments, and those rules, or the interpretation of them, may change over time. It is important to keep Segal informed with respect to plan provisions and administrative procedures, and to review the plan description in this report to confirm that Segal has correctly interpreted the plan of benefits.
- Participant data An actuarial valuation for a plan is based on data provided to the actuary by VCERA. Segal does not audit such data for completeness or accuracy, other than reviewing it for obvious inconsistencies compared to prior data and other information that appears unreasonable. It is important for Segal to receive the best possible data and to be informed about any known incomplete or inaccurate data.
- > Assets This valuation is based on the market value of assets as of the valuation date, as provided by VCERA.
- Actuarial assumptions In preparing an actuarial valuation, Segal projects the benefits to be paid to existing plan participants for the rest of their lives and the lives of their beneficiaries. This projection requires actuarial assumptions as to the probability of death, disability, withdrawal, and retirement of each participant for each year. In addition, the benefits projected to be paid for each of those events in each future year reflect actuarial assumptions as to salary increases and cost-of-living adjustments. The projected benefits are then discounted to a present value, based on the assumed rate of return that is expected to be achieved on the plan's assets. There is a reasonable range for each assumption used in the projection and the results may vary materially based on which assumptions are selected. It is important for any user of an actuarial valuation to understand this concept. Actuarial assumptions are periodically reviewed to ensure that future valuations reflect emerging plan experience. While future changes in actuarial assumptions may have a significant impact on the reported results, that does not mean that the previous assumptions were unreasonable.

The user of Segal's actuarial valuation (or other actuarial calculations) should keep the following in mind:

> The valuation is prepared at the request of the VCERA. Segal is not responsible for the use or misuse of its report, particularly by any other party.

- An actuarial valuation is a measurement of the plan's assets and liabilities at a specific date. Accordingly, except where otherwise noted, Segal did not perform an analysis of the potential range of future financial measures. The actual long-term cost of the plan will be determined by the actual benefits and expenses paid and the actual investment experience of the plan.
- > If the Association is aware of any event or trend that was not considered in this valuation that may materially change the results of the valuation, Segal should be advised, so that we can evaluate it.
- Segal does not provide investment, legal, accounting, or tax advice. Segal's valuation is based on our understanding of applicable guidance in these areas and of the plan's provisions, but they may be subject to alternative interpretations. The Board should look to their other advisors for expertise in these areas.

As Segal Consulting has no discretionary authority with respect to the management or assets of VCERA, it is not a fiduciary in its capacity as actuaries and consultants with respect to VCERA.



#### A. MEMBER DATA

The Actuarial Valuation and Review considers the number and demographic characteristics of covered members, including active members, vested terminated members, retired members and beneficiaries. This section presents a summary of significant statistical data on these member groups.

More detailed information for this valuation year and the preceding valuation can be found in Section 3, Exhibits A, B, and C.

#### A historical perspective of how the member population has changed over the past ten valuations can be seen in this chart.

CHART 1

Member Population: 2007 – 2016

Year Ended June 30	Active Members	Vested Terminated Members <sup>(1)</sup>	Retired Members and Beneficiaries	Total Non-Actives	Ratio of Non-Actives to Actives
2007	7,653	1,864	4,770	6,634	0.87
2008	7,928	2,007	4,914	6,921	0.87
2009	8,045	2,055	5,041	7,096	0.88
2010	8,003	2,040	5,267	7,307	0.91
2011	8,040	2,097	5,481	7,578	0.94
2012	8,019	2,161	5,658	7,819	0.98
2013	8,068	2,249	5,888	8,137	1.01
2014	8,210	2,339	6,121	8,460	1.03
2015	8,299	2,441	6,338	8,779	1.06
2016	8,509	2,639	6,539	9,178	1.08

<sup>(1)</sup> Includes terminated members with member contributions on deposit.

#### **Active Members**

Plan costs are affected by the age, years of service and compensation of active members. In this year's valuation, there were 8,509 active members with an average age of 45.0, average service of 11.2 years and average compensation of \$82,971. The 8,299 active members in the prior valuation had an average age of 45.2, average service of 11.2 years and average compensation of \$81,782.

Among the active members, there were none with unknown age.

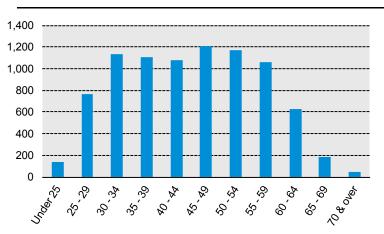
#### **Inactive Members**

In this year's valuation, there were 2,639 members with a vested right to a deferred or immediate vested benefit or entitled to a return of their member contributions versus 2,441 in the prior valuation.

#### These graphs show a distribution of active members by age and by years of service.

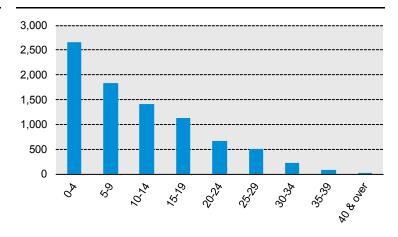
# CHART 2

Distribution of Active Members by Age as of June 30, 2016



#### CHART 3

Distribution of Active Members by Years of Service as of June 30, 2016

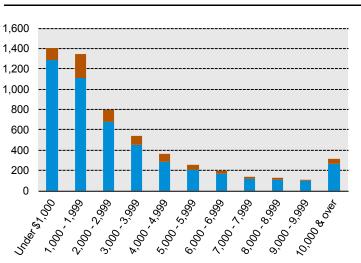


#### **Retired Members and Beneficiaries**

As of June 30, 2016, 5,605 retired members and 934 beneficiaries were receiving total monthly benefits of \$19,776,496. For comparison, in the previous valuation, there were 5,491 retired members and 847 beneficiaries receiving monthly benefits of \$18,609,671. These monthly benefits exclude benefits for vested fixed supplemental and supplemental medical benefit amounts.

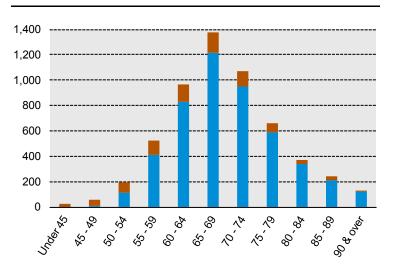
# CHART 4

Distribution of Retired Members by Type and by Monthly Amount as of June 30, 2016



# CHART 5

Distribution of Retired Members by Type and by Age as of June 30, 2016



These graphs show a distribution of the current retired members based on their monthly amount and age, by type of pension.

DisabilityService

3

#### **B.** FINANCIAL INFORMATION

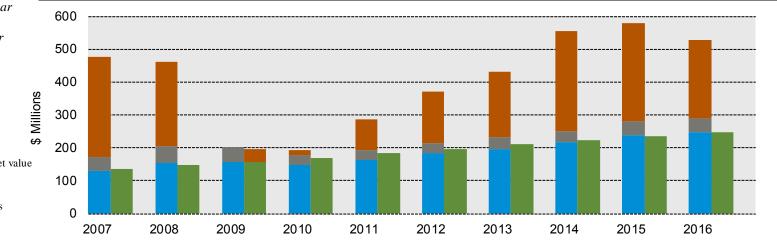
Retirement plan funding anticipates that, over the long term, both contributions and net investment earnings (less investment fees and administrative expenses) will be needed to cover benefit payments.

Retirement plan assets change as a result of the net impact of these income and expense components. The adjustment toward market value shown in the chart is the "non-cash" earnings on investments implicitly included in the actuarial value of assets. Additional financial information, including a summary of these transactions for the valuation year, is presented in Section 3, Exhibits D and E. It is desirable to have level and predictable plan costs from one year to the next. For this reason, the Board of Retirement has approved an asset valuation method that gradually adjusts to market value. Under this valuation method, the full value of market fluctuations is not recognized in a single year and, as a result, the asset value and the plan costs are more stable.

The amount of the adjustment to recognize market value is treated as income, which may be positive or negative. Realized and unrealized gains and losses are treated equally and, therefore, the sale of assets has no immediate effect on the actuarial value.

#### CHART 6

Comparison of Increases and Decreases in the Actuarial Value of Assets for Years Ended June 30, 2007 – 2016



The chart depicts the components of changes in the actuarial value of assets over the last ten years. Note: The first bar represents increases in assets during each year while the second bar details the decreases.

- Adjustment toward market value
- ■Benefits paid
- $\blacksquare$  Net interest and dividends
- Contributions



4

	Six Month		Total Actual Market	Expected Market	Investment Gain	Deferred	Deferred Return <sup>(1</sup>
	From	To	Return (net)	Return (net)	(Loss)	Factor	
6	5/2011 Combined ne		¢(15C 47C 001)	¢127.074.122	\$(63,892,227)	0.0	\$
	7/2011	12/2011	\$(156,476,001)	\$127,074,122	(283,550,123)	0.0	0.000.54
	1/2012 7/2012	6/2012 12/2012	203,623,364 230,080,850	120,287,707	83,335,657	0.1 0.2	8,333,56
	1/2012	6/2012		128,592,180 137,287,941	101,488,670	0.2	20,297,73
	7/2013	12/2013	203,932,155 405,462,695	140,757,243	66,644,214	0.3	19,993,26
	1/2013	6/2014	249,072,466	140,737,243	264,705,452	0.4	105,882,18
	7/2014	12/2014	1,675,147	165,579,616	93,124,979 (163,904,469)	0.5	46,562,48 (98,342,681
	1/2014	6/2015	83,151,071	165,743,013	(103,904,409) (82,591,942)	0.0	(57,814,359
	7/2015	12/2015	(131,432,997)	169,038,879	(300,471,876)	0.8	(240,377,50)
	1/2016	6/2016	152,698,097	163,960,894	(11,262,797)	0.0	(10,136,51)
T	otal Deferred Return		102,000,007	105,500,051	(11,202,777)	0.9	\$(205,601,824
	et Market Value of						4,386,836,70
. a.	Actuarial Value	of Assets (Item 2 –	Item 1)				4,592,438,53
b.			Net Market Value of Ass	ets (Item 3a / Item 2)			104.7
. N	on-valuation reserve						
a.	Supplemental M	edical Benefit					\$6,725,57
b.	. Statutory Contin	gency					
c.	Subtotal						\$6,725,57
. V	aluation Value of A	ssets (Item 3a – Item	n 4c)				\$4,585,712,95
. A	mount of Deferred	Returns to be recogn	ized in the following value	ations:			
a.	June 30, 2017						\$1,880,01
b.	June 30, 2018						(33,415,709
c.	June 30, 2019						(102,333,71
d.	June 30, 2020						(70,606,12
e.	June 30, 2021						(1,126,28
f.	Subtotal						\$(205,601,824

#### SECTION 2: Valuation Results for the Ventura County Employees' Retirement Association

<sup>(2)</sup> Net deferred loss as of June 30, 2011 was combined and will be recognized over 4.5 years in level semi-annual amounts.

#### The chart shows the determination of the actuarial and valuation value of assets as of the valuation date.

CHART 7

# CHART 8

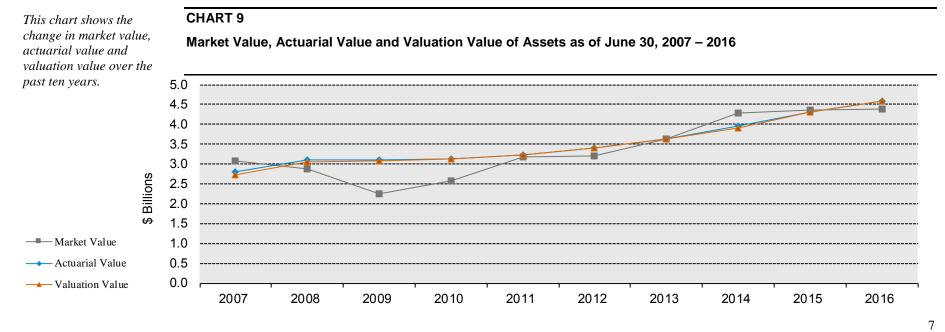
#### Allocation of Valuation Value of Assets as of June 30, 2016

The calculation of the valuation value of assets from June 30, 2015 to June 30, 2016 by category is provided below:

_	Allocated Assets for Funding			
	General			
-	Tier I	Tier II	Safety	Total
1. Allocated Assets as of Beginning of Plan Year	\$556,650,633	\$1,834,188,078	\$1,911,491,713	\$4,302,330,424
2. Member Contributions	750,689	41,713,366	24,442,381	66,906,436
3. Member Buybacks	260,048	952,143	432,558	1,644,749
4. Employer Pick-up Contributions Credited to Member Account	42,801	962,455	(86,670)	918,586
5. Employer Contributions	1,991,857	89,697,071	86,020,760	177,709,688
6. Refunds of Member Contributions and Death Benefits Paid	293,746	3,866,002	824,131	4,983,879
<ol> <li>Retiree Benefit Payments Excluding Supplemental Medical Payments</li> </ol>	74,748,721	68,665,293	95,930,211	239,344,225
8. Subtotal (Items $1 + 2 + 3 + 4 + 5 - 6 - 7$ )	\$484,653,561	\$1,894,981,818	\$1,925,546,400	\$4,305,181,779
9. Weighted Average Fund Balance: Item $1 + \frac{1}{2}$ of (Items 2, 3, 4, 5) $-\frac{1}{2}$ of (Items 6, 7)	520,652,097	1,864,584,948	1,918,519,057	4,303,756,102
10. Earnings Allocated in Proportion to Item 9	33,937,599	121,539,000	125,054,580	280,531,179
11. Valuation Value of Assets (Items 8 + 10)	\$518,591,160	\$2,016,520,818	\$2,050,600,980	\$4,585,712,958

Note: Results may not add due to rounding.

The market value, actuarial value, and valuation value of assets are representations of VCERA's financial status. As investment gains and losses are gradually taken into account, the actuarial value of assets tracks the market value of assets, but with less volatility. The valuation value of assets is the actuarial value, excluding any non-valuation reserves. The valuation value of assets is significant because VCERA's liabilities are compared to these assets to determine what portion, if any, remains unfunded. Amortization of the unfunded actuarial accrued liability is an important element in determining the contribution requirement.



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#### C. ACTUARIAL EXPERIENCE

To calculate the required contribution, assumptions are made about future events that affect the amount and timing of benefits to be paid and assets to be accumulated. Each year actual experience is measured against the assumptions. If overall experience is more favorable than anticipated (an actuarial gain) the contribution requirement will decrease from the previous year. On the other hand, the contribution requirement will increase if overall actuarial experience is less favorable than expected (an actuarial loss).

Taking account of experience gains or losses in one year without making a change in assumptions reflects the belief that the single year's experience was a short-term development and that, over the long term, experience will return to the original assumptions. For contribution requirements to remain stable, assumptions should approximate experience.

If assumptions are changed, the contribution requirement is adjusted to take into account a change in experience anticipated for all future years.

The total experience gain was \$0.5 million, including a \$42.3 million loss from investments and a \$42.7 million gain from all other sources. The net experience variation from individual sources other than investments experience was 0.8% of the actuarial accrued liability. A discussion of the major components of the actuarial experience is on the following pages.

This chart provides a summary of the actuarial experience during the past year.

# CHART 10

Actuarial Experience for Year Ended June 30, 2016

1.	Net loss from investments <sup>(1)</sup>	\$(42,251,000)
2.	Net gain from other experience <sup>(2)</sup>	42,704,000
3.	Net experience gain: $(1) + (2)$	\$453,000

<sup>(1)</sup> Details in Chart 11.

<sup>(2)</sup> See Section 3, Exhibit H. Does not include the effect of plan or assumption changes, if any.

#### **Investment Rate of Return**

CHART 11

A major component of projected asset growth is the assumed rate of return. The assumed return should represent the expected long-term rate of return, based on VCERA's investment policy. For valuation purposes, the assumed rate of return on the valuation value of assets is 7.50%. The actual rate of return on the valuation value of assets for the 2015/2016 plan year was 6.52%.

Since the actual return for the year was less than the assumed return, the VCERA experienced an actuarial loss during the year ended June 30, 2016 with regard to its investments.

# This chart shows the gain/(loss) due to investment experience.

Investment Experience for Year Ended June 30, 2016 – Market Value, Actuarial Value and Valuation Value of Assets

	Market Value	Actuarial Value	Valuation Value
1. Actual return	\$21,265,100	\$280,531,179	\$280,531,179
2. Average value of assets	4,365,183,399	4,311,519,144	4,303,756,102
3. Actual rate of return: $(1) \div (2)$	0.49%	6.51%	6.52%
4. Assumed rate of return	7.50%	7.50%	7.50%
5. Expected return: (2) x (4)	327,388,755	323,363,936	322,781,708
6. Actuarial gain/(loss): (1) – (5)	<u>\$(306,123,655)</u>	<u>\$(42,832,757)</u>	<u>\$(42,250,529)</u>

Because actuarial planning is long term, it is useful to see how the assumed investment rate of return has followed actual experience over time. The chart below shows the rate of return on an actuarial, valuation, and market basis for the last ten years.

#### CHART 12

Investment Return – Market Value, Actuarial Value and Valuation Value: 2007 – 2016

	Market Value Investment Return		Actuarial Value Investment Return		Valuation Value Investment Return	
Year Ended June 30	Amount	Percent	Amount	Percent	Amount	Percent
2007	\$458,962,761	17.48%	\$344,644,568	14.06%	\$308,000,514	12.68%
2008	(211,806,573)	(6.86)	307,776,354	11.01	310,176,628	11.32
2009	(628,718,568)	(21.86)	5,186,654	0.17	31,242,785	1.02
2010	343,005,717	15.33	43,756,165	1.41	43,756,185	1.42
2011	622,940,028	24.34	121,406,541	3.89	121,406,541	3.91
2012	47,147,363	1.49	184,787,098	5.72	184,909,716	5.75
2013	432,694,392	13.51	237,282,497	6.97	237,282,497	7.00
2014	654,535,161	18.06	338,343,729	9.32	294,307,214	8.13
2015	84,826,216	1.98	341,233,326	8.60	384,442,119	9.82
2016	21,265,100	0.49	280,531,179	6.51	280,531,179	6.52
Five-Year Average R	eturn	6.66%		7.45%		7.49%
Ten-Year Average Re	eturn	5.70%		6.67%		6.68%

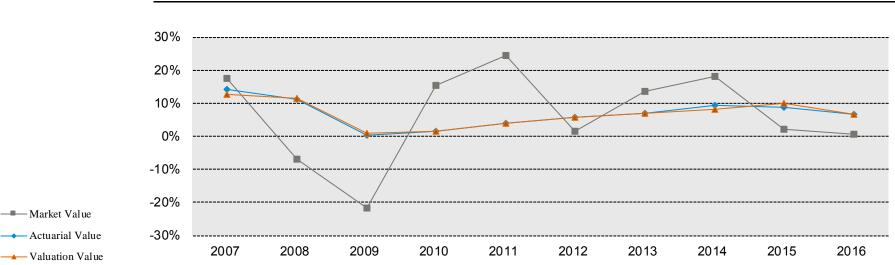
Note: Each year's yield is weighted by the average asset value in that year.

Market, Actuarial and Valuation Rates of Return for Years Ended June 30, 2007 - 2016

Subsection B described the actuarial asset valuation method that gradually takes into account fluctuations in the market value rate of return. The effect of this is to stabilize the actuarial rate of return, which contributes to leveling pension plan costs.

#### This chart illustrates how this leveling effect has actually worked over the years 2007 - 2016.

CHART 13



-Market Value

#### **Other Experience**

There are other differences between the expected and the actual experience that appear when the new valuation is compared with the projections from the previous valuation. These include:

- > the extent of turnover among the participants,
- > retirement experience (earlier or later than expected),
- > mortality (more or fewer deaths than expected),
- > the number of disability retirements,
- > salary increases different than assumed, and
- > COLA increases for retirees different than assumed.

The net gain from this other experience for the year ended June 30, 2016 amounted to \$42.7 million which is 0.8% of the actuarial accrued liability. This gain was mainly due to lower than expected individual salary increase for actives and lower than expected COLA increases for retirees and beneficiaries. See Exhibit H for a detailed development of the Unfunded Actuarial Accrued Liability.

### **D.** EMPLOYER AND MEMBER CONTRIBUTIONS

Employer contributions consist of two components:

Normal Cost	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-related benefits. Accumulation includes annual crediting of interest at the assumed investment earning rate. The contribution rate is expressed as a level percentage of the member's compensation.
Contribution to the Unfunded	
Actuarial Accrued Liability (UAAL)	The annual contribution rate that, if paid annually over the UAAL amortization period, would accumulate to the amount necessary to fully fund the UAAL. Accumulation includes annual crediting of interest at the assumed investment earning rate. The contribution (or rate credit in the case of a negative unfunded actuarial accrued liability) is calculated to remain as a level percentage of future active member payroll (including payroll for new members as they enter the Association) assuming a constant number of active members. In order to remain as a level percentage of payroll, amortization payments (credits) are scheduled to increase at the combined annual inflation and "across the board" increases rate of 3.50%. The June 30, 2004 UAAL is being amortized over a 15-year declining period effective June 30, 2004. The change in UAAL that arises due to actuarial gains or losses or due to plan amendments (with the exception of retirement incentives) at each valuation is amortized over its own declining 15-year period. Effective with the June 30, 2012 valuation, any change in UAAL that arises due to changes in actuarial assumptions or methods is amortized over its own declining 20-year period and any change in UAAL due to retirement incentives is amortized over its own declining period of up to 5 years.
	VCERA's UAAL is determined separately for each tier depending on the assets and liabilities for that tier. Note that Non-PEPRA tiers are combined with PEPRA tiers for UAAL purposes.

Effective with the June 30, 2012 valuation, the Basic UAAL rate has been calculated on a combined basis for all General Tiers. Effective with the June 30, 2014 valuation, the COLA UAAL rate has been calculated on a combined basis for General Tiers that

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	have a COLA. The recommended employer contribution rates determined under this combined methodology are provided on Chart 14. For reference purposes only, Appendix E shows the employer contribution rates under the previous non-combined methodology.
	The employer contribution rates shown in Chart 14 are calculated based on a 50/50 sharing of Normal Cost for non-PEPRA Tiers. For purposes of these calculations, we have been previously directed by VCERA to assume that the cessation of member contributions after 30 years of service for non-PEPRA members continues per the County Employees Retirement Law (CERL) and that the cost associated with this provision is to be paid for by employers.
Member Contributions	Appendix C shows employer contribution rates based on the prior methodology <u>without</u> a 50/50 sharing of Normal Cost for non-PEPRA Tiers.
Non-PEPRA Members	The non-PEPRA member contribution rates are provided in Appendix A. Please note that the member rates provided in the report are the full rate before reflecting any employer pickup. General Tier 2 members eligible for the fixed 2% cost-of-living benefit contribute a negotiated 2.63% of compensation per year towards the cost of that benefit that is reflected in this report.
	Appendix D shows member contribution rates based on the prior methodology as defined in Articles 6 and 6.8 of the 1937 CERL for General members and Safety members. The basic member contribution rate is determined so that the accumulation of a member's basic contributions made in a given year until a certain age will be sufficient to fund an annuity at that age that is equal to 1/120 of Final Average Compensation for General members and 1/100 of Final Average Compensation for General members. It is assumed that contributions are made annually at the same rate, starting at entry age. In addition to their basic contributions, General Tier 1 and Safety members pay one-half of the total normal cost necessary to fund their cost-of-living benefits. Member contributions accumulate with interest at the lesser of the assumed investment earning rate or the rate on ten year U.S. Treasury
	notes. Any difference between the assumed investment earning rate and the actual 14

	interest crediting rate will be credited to the County Advance reserve. Please note that in calculating the basic member rate, we follow the Board's past practice and have not included any in-service pay redemptions that may potentially increase a member's final average compensation and hence retirement benefit.
PEPRA Members	Pursuant to Section 7522.30(a) of the Government Code, members under PEPRA tiers are required to contribute at least 50% of the Normal Cost. In addition, there are certain additional requirements that would have to be met such as requiring the new employees to pay the contribution rate of "similarly situated employees", if it is greater. (reference: Section 7522.30(c)). We further understand that different rules may have to be applied for collectively bargained employees, non-represented, managerial or other supervisory employees. (reference: Section 7522.30(e)). In preparing the Normal Cost rates in this report, we have assumed that exactly 50% of the Normal Cost would be paid by the new members and we have taken into account in this valuation only the requirements of Section 7522.30(c), but not the requirements of Section 7522.30(e). The only exception to this is that we have also shown the PEPRA Tier 2 with COLA contribution rates including the member COLA contribution rate of 2.63% of compensation based on current bargaining agreements.
	Also of note is that based on our discussions with VCERA, we have used the discretion made available by Section 31620.5(a) to no longer round the PEPRA member's contribution rates to the nearest one quarter of one percent as was previously required by PEPRA. This is consistent with established practice for the Non-PEPRA plans and should allow for exactly one-half of the normal cost for the PEPRA plans to be paid by the employees and one-half by the employers. In addition, Section 31620.5(b) also provides that the "one percent rule" under Section 7522.30(d) does not apply. This section formerly limited the circumstances under which the PEPRA member rate would change.
	The PEPRA member contribution rates are provided in Appendix B.
Tier 2 COLA Procedures	This benefit has been valued consistent with the methodologies described in our October 9, 2006 report entitled "Funding Policies and Procedures for General Tier II COLA Benefit".

#### SECTION 2: Valuation Results for the Ventura County Employees' Retirement Association

#### CHART 14a

Recommended Employer Contribution Rates (Dollar Amounts in Thousands) Based on 50/50 Sharing of Normal Cost for All Tiers (PEPRA and Non-PEPRA) – Current Valuation with Combined General UAAL Rates

		J	une 30, 2016	6 Actuarial Valuation		
	BASIC		COLA		TOTAL	
		Estimated Annual		Estimated Annual		Estimated Annual
General Tier 1 Members	Rate	Amount <sup>(1)</sup>	Rate	Amount <sup>(1)</sup>	Rate	Amount <sup>(1)</sup>
Normal Cost <sup>(2)</sup>	8.13%	\$637	2.74%	\$214	10.87%	\$851
UAAL <sup>(3)</sup>	<u>9.43%</u>	<u>738</u>	4.10%	<u>321</u>	<u>13.53%</u>	<u>1,059</u>
Total Contribution	17.56%	\$1,375	6.84%	\$535	24.40%	\$1,910
General Tier 2 Members w/o COLA						
Normal Cost	7.11%	\$15,265	0.00%	\$0	7.11%	\$15,265
UAAL <sup>(3)</sup>	<u>9.43%</u>	20,238	0.00%	<u>0</u>	<u>9.43%</u>	20,238
Total Contribution	16.54%	\$35,503	0.00%	\$0	16.54%	\$35,503
General PEPRA Tier 2 Members w/o COLA						
Normal Cost	6.96%	\$2,453	0.00%	\$0	6.96%	\$2,453
UAAL <sup>(3)</sup>	<u>9.43%</u>	<u>3,323</u>	<u>0.00%</u>	<u>0</u>	<u>9.43%</u>	<u>3,323</u>
Total Contribution	16.39%	\$5,776	0.00%	\$0	16.39%	\$5,776
General Tier 2 Members w/COLA						
Normal Cost <sup>(4)</sup>	7.11%	\$15,374	0.08%	\$173	7.19%	\$15,547
UAAL <sup>(3)(5)</sup>	<u>9.43%</u>	20,382	4.10%	<u>8,865</u>	<u>13.53%</u>	<u>29,247</u>
Total Contribution	16.54%	\$35,756	4.18%	\$9,038	20.72%	\$44,794
General PEPRA Tier 2 Members w/COLA						
Normal Cost <sup>(4)</sup>	6.96%	\$4,465	0.01%	\$6	6.97%	\$4,471
UAAL <sup>(3)(5)</sup>	<u>9.43%</u>	<u>6,049</u>	4.10%	2,629	13.53%	<u>8,678</u>
Total Contribution	16.39%	\$10,514	4.11%	\$2,635	20.50%	\$13,149
All General Members <sup>(6)</sup>						
Normal Cost	7.10%	\$38,194	0.07%	\$393	7.17%	\$38,587
UAAL	9.43%	<u>50,730</u>	<u>2.19%</u>	<u>11,815</u>	<u>11.62%</u>	62,545
Total Contribution	16.53%	\$88,924	2.26%	\$12,208	18.79%	\$101,132

#### CHART 14a (continued)

Recommended Employer Contribution Rates (Dollar Amounts in Thousands) Based on 50/50 Sharing of Normal Cost for All Tiers (PEPRA and Non-PEPRA) – Current Valuation with Combined General UAAL Rates

			June 30, 2016	6 Actuarial Valuation			
	E	BASIC		COLA		TOTAL	
		Estimated Annual	l	Estimated Annual		Estimated Annua	
Safety Members	Rate	Amount <sup>(1)</sup>	Rate	Amount <sup>(1)</sup>	Rate	Amount <sup>(1)</sup>	
Normal Cost <sup>(7)</sup>	11.71%	\$18,197	4.88%	\$7,584	16.59%	\$25,781	
UAAL	<u>51.58%</u>	80,156	-12.51%	<u>-19,441</u>	<u>39.07%</u>	<u>60,715</u>	
Total Contribution	63.29%	\$98,353	-7.63%	-\$11,857	55.66%	\$86,496	
Safety PEPRA Members							
Normal Cost	10.21%	\$1,272	4.21%	\$524	14.42%	\$1,796	
UAAL	<u>51.58%</u>	6,425	-12.51%	-1,558	<u>39.07%</u>	4,867	
Total Contribution	61.79%	\$7,697	-8.30%	-\$1,034	53.49%	\$6,663	
All Safety Members <sup>(6)</sup>							
Normal Cost	11.60%	\$19,469	4.83%	\$8,108	16.43%	\$27,577	
UAAL	<u>51.58%</u>	86,581	-12.51%	-20,999	<u>39.07%</u>	65,582	
Total Contribution	63.18%	\$106,050	-7.68%	-\$12,891	55.50%	\$93,159	
All Categories Combined <sup>(6)</sup>							
Normal Cost	8.17%	\$57,663	1.20%	\$8,501	9.37%	\$66,164	
UAAL	19.45%	137,311	-1.30%	-9,184	18.15%	128,127	
Total Contribution	27.62%	\$194,974	-0.10%	-\$683	27.52%	\$194,291	

<sup>(1)</sup> Amounts are in thousands, assumed to be paid throughout the year, and are based on June 30, 2016 annual payroll (also in thousands) shown below:

General Tier 1	\$7,830
General Tier 2	214,696
General PEPRA Tier 2	35,238
General Tier 2C	216,231
General PEPRA Tier 2C	64,147
Safety	155,401
Safety PEPRA	12,457
Total	\$706,000

<sup>(2)</sup> The total employer rate has been adjusted by 0.27% to account for the cost associated with the cessation of member contributions after 30 years of service.

<sup>(3)</sup> Basic UAAL rates have been calculated on a combined basis for all General Tiers. COLA UAAL rates have been calculated on a combined basis for all General Tiers that have a COLA (excludes General Tier 2 without COLA and General PEPRA Tier 2 without COLA).

<sup>(4)</sup> *Reflects General Tier 2 member COLA contribution rate of 2.63% based on current bargaining agreements.* 

<sup>(5)</sup> Includes 0.47% in COLA UAAL costs attributed to the first two years of service accrued for the fixed 2% COLA pursuant to Government Code 31627.

<sup>(6)</sup> These aggregated rates are provided for informational purposes only as we understand that the tier specific rates will be implemented.

<sup>(7)</sup> The total employer rate has been adjusted by 1.32% to account for the cost associated with the cessation of member contributions after 30 years of service.

#### SECTION 2: Valuation Results for the Ventura County Employees' Retirement Association

#### CHART 14b

Recommended Employer Contribution Rates (Dollar Amounts in Thousands) Based on 50/50 Sharing of Normal Cost for All Tiers (PEPRA and Non-PEPRA) – Prior Valuation with Combined General UAAL Rates

		J	une 30, 2015	5 Actuarial Valuation		
	BASIC		COLA		TOTAL	
	_	Estimated Annual	_	Estimated Annual	_	Estimated Annual
General Tier 1 Members	Rate	Amount <sup>(1)</sup>	Rate	Amount <sup>(1)</sup>	Rate	Amount <sup>(1)</sup>
Normal Cost <sup>(2)</sup>	7.90%	\$683	2.67%	\$230	10.57%	\$913
UAAL <sup>(3)</sup>	<u>9.64%</u>	<u>833</u>	<u>3.64%</u>	<u>314</u>	13.28%	<u>1,147</u>
Total Contribution	17.54%	\$1,516	6.31%	\$544	23.85%	\$2,060
General Tier 2 Members w/o COLA						
Normal Cost	7.16%	\$15,283	0.00%	\$0	7.16%	\$15,283
UAAL <sup>(3)</sup>	<u>9.64%</u>	20,581	<u>0.00%</u>	<u>0</u>	<u>9.64%</u>	20,581
Total Contribution	16.80%	\$35,864	0.00%	\$0	16.80%	\$35,864
General PEPRA Tier 2 Members w/o COLA						
Normal Cost	7.03%	\$1,546	0.00%	\$0	7.03%	\$1,546
UAAL <sup>(3)</sup>	<u>9.64%</u>	2,120	<u>0.00%</u>	<u>0</u>	<u>9.64%</u>	<u>2,120</u>
Total Contribution	16.67%	\$3,666	0.00%	\$0	16.67%	\$3,666
General Tier 2 Members w/COLA						
Normal Cost <sup>(4)</sup>	7.16%	\$15,988	0.08%	\$179	7.24%	\$16,167
$UAAL^{(3)(5)}$	<u>9.64%</u>	21,531	<u>3.64%</u>	<u>8,131</u>	13.28%	29,662
Total Contribution	16.80%	\$37,519	3.72%	\$8,310	20.52%	\$45,829
General PEPRA Tier 2 Members w/COLA						
Normal Cost <sup>(4)</sup>	7.03%	\$2,890	0.02%	\$9	7.05%	\$2,899
UAAL <sup>(3)(5)</sup>	<u>9.64%</u>	<u>3,964</u>	<u>3.64%</u>	<u>1,498</u>	13.28%	<u>5,462</u>
Total Contribution	16.67%	\$6,854	3.66%	\$1,507	20.33%	\$8,361
All General Members <sup>(6)</sup>						
Normal Cost	7.16%	\$36,390	0.08%	\$418	7.24%	\$36,808
UAAL	9.64%	49,029	<u>1.96%</u>	<u>9,943</u>	11.60%	<u>58,972</u>
Total Contribution	16.80%	\$85,419	2.04%	\$10,361	18.84%	\$95,780

#### CHART 14b (continued)

Recommended Employer Contribution Rates (Dollar Amounts in Thousands) Based on 50/50 Sharing of Normal Cost for All Tiers (PEPRA and Non-PEPRA) – Prior Valuation with Combined General UAAL Rates

			June 30, 2015	5 Actuarial Valuation			
	E	BASIC		COLA		TOTAL	
		Estimated Annual		Estimated Annual		Estimated Annual	
Safety Members	Rate	Amount <sup>(1)</sup>	Rate	Amount <sup>(1)</sup>	Rate	Amount <sup>(1)</sup>	
Normal Cost <sup>(7)</sup>	11.63%	\$18,913	4.84%	\$7,870	16.47%	\$26,783	
UAAL	47.33%	<u>76,968</u>	<u>-9.24%</u>	-15,026	<u>38.09%</u>	61,942	
Total Contribution	58.96%	\$95,881	-4.40%	-\$7,156	54.56%	\$88,725	
Safety PEPRA Members							
Normal Cost	10.40%	\$789	4.28%	\$324	14.68%	\$1,113	
UAAL	47.33%	3,589	-9.24%	<u>-701</u>	38.09%	2,888	
Total Contribution	57.73%	\$4,378	-4.96%	-\$377	52.77%	\$4,001	
All Safety Members <sup>(6)</sup>							
Normal Cost	11.58%	\$19,702	4.81%	\$8,194	16.39%	\$27,896	
UAAL	47.33%	80,557	<u>-9.24%</u>	-15,727	<u>38.09%</u>	64,830	
Total Contribution	58.91%	\$100,259	-4.43%	-\$7,533	54.48%	\$92,726	
All Categories Combined <sup>(6)</sup>							
Normal Cost	8.26%	\$56,092	1.27%	\$8,612	9.53%	\$64,704	
UAAL	<u>19.09%</u>	129,586	<u>-0.85%</u>	<u>-5,784</u>	18.24%	123,802	
Total Contribution	27.35%	\$185,678	0.42%	\$2,828	27.77%	\$188,506	

<sup>(1)</sup> Amounts are in thousands, assumed to be paid throughout the year, and are based on June 30, 2015 annual payroll (also in thousands) shown below:

General Tier 1	\$8,640
General Tier 2	213,455
General PEPRA Tier 2	21,992
General Tier 2C	223,301
General PEPRA Tier 2C	41,116
Safety	162,619
Safety PEPRA	7,582
Total	\$678,705

<sup>(2)</sup> The total employer rate has been adjusted by 0.48% to account for the cost associated with the cessation of member contributions after 30 years of service.

<sup>(3)</sup> Basic UAAL rates have been calculated on a combined basis for all General Tiers. COLA UAAL rates have been calculated on a combined basis for all General Tiers that have a COLA (excludes General Tier 2 without COLA and General PEPRA Tier 2 without COLA).

<sup>(4)</sup> Reflects General Tier 2 member COLA contribution rate of 2.63% based on current bargaining agreements.

<sup>(5)</sup> Includes 0.54% in COLA UAAL costs attributed to the first two years of service accrued for the fixed 2% COLA pursuant to Government Code 31627.

<sup>(6)</sup> These aggregated rates are provided for informational purposes only as we understand that the tier specific rates will be implemented.

<sup>(7)</sup> The total employer rate has been adjusted by 1.20% to account for the cost associated with the cessation of member contributions after 30 years of service.

The employer contribution rates as of June 30, 2016 are based on all of the data described in the previous sections, the actuarial assumptions described in Section 4, and the Plan provisions adopted at the time of preparation of the Actuarial Valuation. They include all changes affecting future costs, adopted benefit changes, actuarial gains and losses and changes in the actuarial assumptions.

#### **Reconciliation of Recommended Employer Contribution Rate**

The chart below details the changes in the recommended average employer contribution rate from the prior valuation to the current year's valuation.

#### CHART 15

The chart reconciles the employer contribution from the prior valuation to the amount determined in this valuation.

Reconciliation of Recommended Average Employer Contribution Rate from June 30, 2015 to June 30, 2016 (Dollar Amounts in Thousands)

	Contribution Rate	Estimated Annual Dollar Cost <sup>(1)</sup>
Recommended Average Employer Contribution Rate as of June 30, 2015	27.77%	\$188,506
Effect of investment loss <sup>(2)</sup>	0.53%	\$3,742
Effect of difference between actual and expected contributions <sup>(3)</sup>	0.14%	988
Effect of difference in actual versus expected individual salary increases	-0.25%	-1,765
Effect of difference in actual versus expected total payroll growth	-0.09%	-635
Effect of lower than expected COLA benefit increase for retirees and beneficiaries	-0.26%	-1,836
Effect of changes in member demographics on Normal Cost	-0.16%	-1,130
Effect of higher than expected mortality for retirees and beneficiaries	-0.11%	-777
Effect of net other changes <sup>(4)</sup>	<u>-0.05%</u>	<u>7,198</u>
Fotal change	<u>-0.25%</u>	<u>\$5,785</u>
Recommended Average Employer Contribution Rate as of June 30, 2016	27.52%	\$194,291

<sup>(1)</sup> *Based on projected payroll for each year.* 

<sup>(2)</sup> The Association's valuation value of assets earned 6.52% which was lower than the 7.50% assumed rate of return for 2015/2016.

<sup>(3)</sup> Contribution loss mainly from one-year delay in implementing higher contribution rates for Safety tiers from the June 30, 2015 valuation.

<sup>(4)</sup> Other differences in actual versus expected experience including mortality, disability, withdrawal, retirement and in-service redemption experience. Estimated annual dollar cost also reflects change in payroll from prior valuation. The member contribution rates as of June 30, 2016 are based on all of the data described in the previous sections, the actuarial assumptions described in Section 4, and the Plan provisions adopted at the time of preparation of the Actuarial Valuation.

#### **Reconciliation of Recommended Member Contribution Rate**

The chart below details the changes in the recommended average member contribution rate from the prior valuation to the current year's valuation.

# CHART 16

The chart reconciles the member contribution from the prior valuation to the amount determined in this valuation.

Reconciliation of Recommended Average Member Contribution Rate from June 30, 2015 to June 30, 2016 (Dollar Amounts in Thousands)

10.24%	\$69,479
-0.14%	<u>\$1,808</u>
<u>-0.14%</u>	<u>\$1,808</u>
10.10%	\$71,287
_	<u>-0.14%</u>

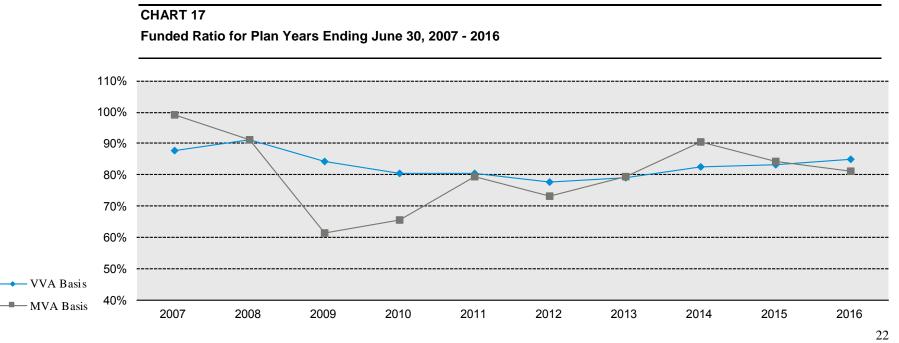
<sup>(1)</sup> Based on projected payroll for each year.

<sup>(2)</sup> Estimated annual dollar cost also reflects change in payroll from prior valuation.

#### E. FUNDED RATIO

A commonly reported piece of information regarding the Plan's financial status is the funded ratio. These ratios compare the valuation value of assets and market value of assets to the actuarial accrued liabilities of the Plan as calculated. High ratios indicate a well-funded plan with assets sufficient to cover the plan's actuarial accrued liabilities. Lower ratios may indicate recent changes to benefit structures, funding of the plan below actuarial requirements, poor asset performance, or a variety of other factors. The chart below depicts a history of the funded ratio for this plan. Chart 18 on the next page shows the Plan's schedule of funding progress for the last ten years.

The funded status measures shown in this valuation are appropriate for assessing the need for or amount of future contributions. However, they are not necessarily appropriate for assessing the sufficiency of Plan assets to cover the estimated cost of settling the Plan's benefit obligations. As the chart below shows, the measures are different depending on whether the valuation or market value of assets is used.



★ Segal Consulting

# CHART 18

Schedule of Funding Progress

Actuarial Valuation Date	Valuation Value of Assets <sup>(1)</sup> (a)	Actuarial Accrued Liability (AAL) <sup>(2)</sup> (b)	Unfunded/ (Overfunded) AAL (UAAL) (b) - (a)	Funded Ratio (a) / (b)	Projected Covered Payroll (c)	UAAL as a Percentage of Projected Covered Payroll [(b) - (a) / (c)]
06/30/2007	\$2,736,558,000	\$3,112,583,000	\$376,025,000	87.92%	\$551,968,000	68.12%
06/30/2008	3,055,756,000	3,345,804,000	290,048,000	91.33%	599,173,000	48.41%
06/30/2009	3,090,148,000	3,663,701,000	573,553,000	84.34%	634,777,000	90.36%
06/30/2010	3,115,984,000	3,877,443,000	761,459,000	80.36%	654,829,000	116.28%
06/30/2011	3,220,388,000	3,995,352,000	774,964,000	80.60%	637,037,000	121.65%
06/30/2012	3,397,360,000	4,373,227,000	975,867,000	77.69%	633,848,000	153.96%
06/30/2013	3,621,709,000	4,575,063,000	953,354,000	79.16%	638,764,000	149.25%
06/30/2014	3,910,801,000	4,731,016,000	820,215,000	82.66%	648,257,000	126.53%
06/30/2015	4,302,330,000	5,178,157,000	875,827,000	83.09%	678,705,000	129.04%
06/30/2016	4,585,713,000	5,398,756,000	813,043,000	84.94%	706,000,000	115.16%

<sup>(1)</sup> Excludes assets for supplemental medical benefit reserve and statutory contingency reserve.

<sup>(2)</sup> Excludes liabilities held for supplemental medical benefit reserve and statutory contingency reserve.

#### F. VOLATILITY RATIOS

Retirement plans are subject to volatility in the level of required contributions. This volatility tends to increase as retirement plans become more mature.

The Asset Volatility Ratio (AVR), which is equal to the market value of assets divided by total payroll, provides an indication of the potential contribution volatility for any given level of investment volatility. A higher AVR indicates that the plan is subject to a greater level of contribution volatility. This is a current measure since it is based on the current level of assets.

For VCERA, the current AVR is about 6.2. This means that a 1% asset gain/(loss) (relative to the assumed investment return) translates to about 6.2% of one-year's payroll. Since VCERA amortizes actuarial gains and losses over a period of 15 years, there would be a 0.6% of payroll decrease/(increase) in the required contribution for each 1% asset gain/(loss). The Liability Volatility Ratio (LVR), which is equal to the Actuarial Accrued Liability divided by payroll, provides an indication of the longer-term potential for contribution volatility for any given level of investment volatility. This is because, over an extended period of time, the plan's assets should track the plan's liabilities. For example, if a plan is 50% funded on a market value basis, the liability volatility ratio would be double the asset volatility ratio and the plan sponsor should expect contribution volatility to increase over time as the plan becomes better funded.

The LVR also indicates how volatile contributions will be in response to changes in the Actuarial Accrued Liability due to actual experience or to changes in actuarial assumptions.

For VCERA, the current LVR is about 7.6. This is about 23% higher than the AVR. Therefore, we would expect that contribution volatility will increase over the long term.

# CHART 19

Volatility Ratios for Years Ended June 30, 2009 - 2016

	Asse	t Volatility R	atios	<u>Liabili</u>	ty Volatility I	Ratios
Year Ended June 30	General	Safety	Total	General	Safety	Total
2009	2.8	5.7	3.5	4.4	9.8	5.8
2010	3.1	6.3	3.9	4.4	10.1	5.9
2011	3.9	8.2	5.0	4.7	10.8	6.3
2012	3.8	8.7	5.1	5.1	12.3	6.9
2013	4.3	9.7	5.7	5.3	12.7	7.2
2014	4.9	11.5	6.6	5.4	12.9	7.3
2015	4.8	11.4	6.4	5.6	13.8	7.6
2016	4.5	11.7	6.2	5.5	14.5	7.6

This chart shows how the asset and liability volatility ratios have varied over time, both for the plan in total and separately for General and Safety.

#### SECTION 3: Supplemental Information for the Ventura County Employees' Retirement Association

	Year Ende	Year Ended June 30		
Category	2016	2015	Change From Prior Year	
Active members in valuation:				
Number	60	75	-20.0%	
Average age	61.7	61.1	N/A	
Average service	32.7	32.6	N/A	
Projected total compensation <sup>(1)</sup>	\$7,830,126	\$8,640,084	-9.4%	
Projected average compensation	\$130,502	\$115,201	13.3%	
Account balances	\$13,119,074	\$15,052,653	-12.8%	
Total active vested members	60	75	-20.0%	
Vested terminated members <sup>(2)</sup>	49	55	-10.9%	
Retired members:				
Number in pay status	1,417	1,474	-3.9%	
Average age	75.7	75.3	N/A	
Average monthly benefit <sup>(3)</sup>	\$3,721	\$3,565	4.4%	
Disabled members:				
Number in pay status	104	110	-5.5%	
Average age	73.6	73.5	N/A	
Average monthly benefit <sup>(3)</sup>	\$2,363	\$2,318	1.9%	
Beneficiaries:				
Number in pay status	352	346	1.7%	
Average age	79.7	79.7	N/A	
Average monthly benefit <sup>(3)</sup>	\$1,695	\$1,602	5.8%	

<sup>(1)</sup> Calculated by increasing annualized bi-weekly compensations as of valuation date by one-half year of inflation and "across the board" salary increases.

<sup>(2)</sup> Includes terminated members with member contributions on deposit.

EXHIBIT A

#### SECTION 3: Supplemental Information for the Ventura County Employees' Retirement Association

	Year End	Year Ended June 30		
Category	2016	2015	– Change From Prior Year	
Active members in valuation:				
Number	5,155	5,494	-6.2%	
Average age	48.6	47.9	N/A	
Average service	13.3	12.3	N/A	
Projected total compensation <sup>(1)</sup>	\$430,926,973	\$436,756,384	-1.3%	
Projected average compensation	\$83,594	\$79,497	5.2%	
Account balances	\$387,531,527	\$375,523,585	3.2%	
Total active vested members	4,547	4,556	-0.2%	
Vested terminated members <sup>(2)</sup>	1,971	1,933	2.0%	
Retired members:				
Number in pay status	2,641	2,481	6.4%	
Average age	68.2	67.8	N/A	
Average monthly benefit <sup>(3)</sup>	\$1,746	\$1,669	4.6%	
Disabled members:				
Number in pay status	331	336	-1.5%	
Average age	64.2	63.6	N/A	
Average monthly benefit <sup>(3)</sup>	\$1,479	\$1,463	1.1%	
Beneficiaries:				
Number in pay status	319	274	16.4%	
Average age	68.2	67.9	N/A	
Average monthly benefit <sup>(3)</sup>	\$840	\$806	4.2%	

<sup>(1)</sup> Calculated by increasing annualized bi-weekly compensations as of valuation date by one-half year of inflation and "across the board" salary increases.

<sup>(2)</sup> Includes terminated members with member contributions on deposit.

EXHIBIT A (continued)

#### Supplemental Information for the Ventura County Employees' Retirement Association **SECTION 3:**

	Year Ende			
Category	2016	2015	- Change From Prior Year	
Active members in valuation:				
Number	0	0	N/A	
Average age	N/A	N/A	N/A	
Average service	N/A	N/A	N/A	
Projected total compensation <sup>(1)</sup>	N/A	N/A	N/A	
Projected average compensation	N/A	N/A	N/A	
Account balances	N/A	N/A	N/A	
Total active vested members	0	0	N/A	
Vested terminated members <sup>(2)</sup>	3	3	0.0%	
Retired members:				
Number in pay status	0	0	N/A	
Average age	N/A	N/A	N/A	
Average monthly benefit <sup>(3)</sup>	N/A	N/A	N/A	
Disabled members:				
Number in pay status	0	0	N/A	
Average age	N/A	N/A	N/A	
Average monthly benefit <sup>(3)</sup>	N/A	N/A	N/A	
Beneficiaries:				
Number in pay status	0	0	N/A	
Average age	N/A	N/A	N/A	
Average monthly benefit <sup>(3)</sup>	N/A	N/A	N/A	

<sup>(1)</sup> Calculated by increasing annualized bi-weekly compensations as of valuation date by one-half year of inflation and "across the board" salary increases.

<sup>(2)</sup> Includes terminated members with member contributions on deposit.

EXHIBIT A (continued) Table of Plan Coverage

#### SECTION 3: Supplemental Information for the Ventura County Employees' Retirement Association

	Year Ende	Year Ended June 30		
Category	2016	2015	Change From Prior Year	
Active members in valuation:				
Number	1,800	1,209	48.9%	
Average age	37.0	36.8	N/A	
Average service	1.5	1.1	N/A	
Projected total compensation <sup>(1)</sup>	\$99,384,839	\$63,108,479	57.5%	
Projected average compensation	\$55,214	\$52,199	5.8%	
Account balances	\$11,743,432	\$5,968,682	96.8%	
Total active vested members	12	1	1100.0%	
Vested terminated members <sup>(2)</sup>	309	149	107.4%	
Retired members:				
Number in pay status	0	0	N/A	
Average age	N/A	N/A	N/A	
Average monthly benefit <sup>(3)</sup>	N/A	N/A	N/A	
Disabled members:				
Number in pay status	0	0	N/A	
Average age	N/A	N/A	N/A	
Average monthly benefit <sup>(3)</sup>	N/A	N/A	N/A	
Beneficiaries:				
Number in pay status	0	0	N/A	
Average age	N/A	N/A	N/A	
Average monthly benefit <sup>(3)</sup>	N/A	N/A	N/A	

<sup>(1)</sup> Calculated by increasing annualized bi-weekly compensations as of valuation date by one-half year of inflation and "across the board" salary increases.

<sup>(2)</sup> Includes terminated members with member contributions on deposit.

EXHIBIT A (continued)

	Year End	ed June 30	
Category	2016	2015	Change From Prior Year
Active members in valuation:			
Number	1,321	1,405	-6.0%
Average age	43.1	42.5	N/A
Average service	16.5	15.4	N/A
Projected total compensation <sup>(1)</sup>	\$155,400,453	\$162,618,523	-4.4%
Projected average compensation	\$117,638	\$115,743	1.6%
Account balances	\$186,394,260	\$175,551,244	6.2%
Total active vested members	1,231	1,245	-1.1%
Vested terminated members <sup>(2)</sup>	287	297	-3.4%
Retired members:			
Number in pay status	721	702	2.7%
Average age	66.4	66.0	N/A
Average monthly benefit <sup>(3)</sup>	\$7,514	\$7,153	5.0%
Disabled members:			
Number in pay status	391	388	0.8%
Average age	63.9	63.7	N/A
Average monthly benefit <sup>(3)</sup>	\$5,378	\$5,192	3.6%
Beneficiaries:			
Number in pay status	263	227	15.9%
Average age	66.8	67.7	N/A
Average monthly benefit <sup>(3)</sup>	\$2,940	\$2,896	1.5%

<sup>(1)</sup> Calculated by increasing annualized bi-weekly compensations as of valuation date by one-half year of inflation and "across the board" salary increases.

<sup>(2)</sup> Includes terminated members with member contributions on deposit.

EXHIBIT A (continued) Table of Plan Coverage

<sup>(3)</sup> *Excludes vested fixed supplemental and supplemental medical benefit amounts.* 

	Year Ende	ed June 30	
Category	2016	2015	Change From Prior Year
Active members in valuation:			
Number	173	116	49.1%
Average age	29.6	29.3	N/A
Average service	1.7	1.2	N/A
Projected total compensation <sup>(1)</sup>	\$12,457,289	\$7,582,376	64.3%
Projected average compensation	\$72,007	\$65,365	10.2%
Account balances	\$2,654,345	\$1,259,585	110.7%
Total active vested members	0	0	N/A
Vested terminated members <sup>(2)</sup>	20	4	400.0%
Retired members:			
Number in pay status	0	0	N/A
Average age	N/A	N/A	N/A
Average monthly benefit <sup>(3)</sup>	N/A	N/A	N/A
Disabled members:			
Number in pay status	0	0	N/A
Average age	N/A	N/A	N/A
Average monthly benefit <sup>(3)</sup>	N/A	N/A	N/A
Beneficiaries:			
Number in pay status	0	0	N/A
Average age	N/A	N/A	N/A
Average monthly benefit <sup>(3)</sup>	N/A	N/A	N/A

<sup>(1)</sup> Calculated by increasing annualized bi-weekly compensations as of valuation date by one-half year of inflation and "across the board" salary increases.

<sup>(2)</sup> Includes terminated members with member contributions on deposit.

EXHIBIT A (continued)

<sup>(3)</sup> Excludes vested fixed supplemental and supplemental medical benefit amounts.

#### **EXHIBIT B**

Members in Active Service and Projected Average Compensation as of June 30, 2016 By Age and Years of Service

#### i. General Tier 1

	Years of Service											
Age	Total	0-4	5-9	10-14	15-19	20-24	25-29	30-34	35-39	40 & over		
Under 25												
25 - 29												
30 - 34												
35 - 39												
40 - 44												
45 - 49	1				1							
	\$193,449				\$193,449							
50 - 54	2					2						
	268,572					\$268,572						
55 - 59	18				3		3	1	11			
	145,566				183,416		\$226,245	\$213,177	\$107,094			
60 - 64	28				1	1	3	2	15	6		
	113,366				217,496	70,755	226,859	169,756	84,672	\$99,304		
65 - 69	6			1	2	2	1					
	140,226			\$187,288	179,798	121,350	51,774					
70 & over	5					1				4		
	92,747					132,354				82,846		
Total	60			1	7	6	7	3	26	10		
	\$130,502			\$187,288	\$188,684	\$163,825	\$201,584	\$184,230	\$94,158	\$92,721		

### EXHIBIT B (continued)

Members in Active Service and Projected Average Compensation as of June 30, 2016 By Age and Years of Service

### ii. General Tier 2

Years of Service										
Age	Total	0-4	5-9	10-14	15-19	20-24	25-29	30-34	35-39	40 & over
Under 25	3	3								
	\$50,988	\$50,988								
25 - 29	131	70	61							
	63,129	63,170	\$63,082							
30 - 34	491	125	296	70						
	75,371	77,414	76,113	\$68,586						
35 - 39	621	98	280	185	58					
	80,551	78,824	81,223	82,406	\$74,312					
40 - 44	658	77	202	204	144	28	3			
	82,401	79,893	80,916	84,336	83,489	\$80,670	\$79,105			
45 - 49	801	69	203	191	182	112	44			
	85,928	74,566	81,281	85,318	91,833	92,917	85,614			
50 - 54	870	64	195	196	162	125	96	29	3	
	86,040	80,922	81,034	86,634	87,829	93,506	87,250	\$81,274	\$81,470	
55 - 59	850	53	158	181	137	115	111	77	18	
	87,290	83,113	79,312	84,506	86,939	89,506	97,345	96,144	86,247	
60 - 64	529	36	105	100	103	74	62	38	11	
	87,761	86,200	86,245	78,082	87,606	89,022	94,070	99,302	112,899	
65 - 69	162	13	44	38	26	19	10	9	3	
	85,722	72,374	79,682	88,128	88,238	91,915	89,848	95,897	96,385	
70 & over	39	2	11	12	5	3	3	3		
	78,518	56,752	74,812	75,215	79,209	129,580	83,020	63,119		
Total	5,155	610	1,555	1,177	817	476	329	156	35	
	\$83,594	\$77,073	\$79,539	\$83,162	\$86,779	\$91,113	\$91,689	\$93,500	\$95,083	

#### EXHIBIT B

Members in Active Service and Projected Average Compensation as of June 30, 2016 By Age and Years of Service

#### iii. PEPRA General Tier 2

	Years of Service										
Age	Total	0-4	5-9	10-14	15-19	20-24	25-29	30-34	35-39	40 & over	
Under 25	113	113									
	\$42,375	\$42,375									
25 - 29	452	452									
	48,123	48,123									
30 - 34	417	417									
	55,795	55,795									
35 - 39	251	251									
	57,640	57,640									
40 - 44	166	166									
	59,884	59,884									
45 - 49	139	139									
	62,349	62,349									
50 - 54	97	97									
	59,467	59,467									
55 - 59	100	100									
	64,203	64,203									
60 - 64	48	48									
	67,270	67,270									
65 - 69	15	15									
	66,513	66,513									
70 & over	2	2									
	44,019	44,019									
Total	1,800	1,800									
	\$55,214	\$55,214									

### EXHIBIT B (continued)

Members in Active Service and Projected Average Compensation as of June 30, 2016 By Age and Years of Service

#### iv. Safety

	Years of Service										
Age	Total	0-4	5-9	10-14	15-19	20-24	25-29	30-34	35-39	40 & Over	
Under 25	2	2									
	\$90,423	\$90,423									
25 - 29	88	38	49	1							
	96,731	92,428	\$100,569	\$72,142							
30 - 34	188	28	123	36	1						
	103,634	93,739	106,037	103,653	\$84,459						
35 - 39	220	14	56	102	47	1					
	109,154	97,297	110,769	105,857	117,339	\$136,213					
40 - 44	247	4	24	53	122	41	3				
	118,397	106,691	106,920	104,544	121,547	134,000	\$129,235				
45 - 49	268	1	8	25	85	97	51	1			
	123,077	111,672	108,896	101,582	115,071	127,759	139,878	\$154,768			
50 - 54	194	2	3	12	24	35	89	27	2		
	130,016	146,511	108,117	98,192	114,429	118,359	137,020	151,777	\$122,910		
55 - 59	90	1	5	1	10	5	28	26	14		
	137,952	143,221	140,619	66,199	104,308	124,910	134,486	147,540	159,561		
60 - 64	22		4	1	3	1	6	3	3	1	
	138,734		152,836	82,759	113,258	118,048	129,758	126,402	208,966	\$115,578	
65 - 69	2		1							1	
	145,342		138,705							151,979	
70 & over											
Total	1,321	90	273	231	292	180	177	57	19	2	
	\$117,638	\$96,163	\$107,649	\$103,934	\$117,597	\$127,266	\$137,064	\$148,561	\$163,504	\$133,779	

#### EXHIBIT B

Members in Active Service and Projected Average Compensation as of June 30, 2016 By Age and Years of Service

### v. PEPRA Safety

	Years of Service										
Age	Total	0-4	5-9	10-14	15-19	20-24	25-29	30-34	35-39	40 & over	
Under 25	24	24									
	\$68,509	\$68,509									
25 - 29	92	92									
	66,686	66,686									
30 - 34	38	38									
	75,820	75,820									
35 - 39	9	9									
	81,629	81,630									
40 - 44	3	3									
	77,688	77,688									
45 - 49	2	2									
	91,599	91,599									
50 - 54	3	3									
	124,670	124,670									
55 - 59	2	2									
	135,954	135,954									
60 - 64											
65 - 69											
70 & over											
Total	173	173									
	\$72,007	\$72,007									

#### **EXHIBIT C**

	Active Members	Vested Terminated Members <sup>(1)</sup>	Pensioners	Disableds	Beneficiaries	Total
Number as of June 30, 2015	8,299	2,441	4,657	834	847	17,078
Data clean up:						
(a) Combined account <sup>(2)</sup>	N/A	-25	N/A	N/A	N/A	-25
(b) Status reclassification <sup>(3)</sup>	N/A	N/A	-35	N/A	35	0
New members	853	107	0	0	87	1,047
Terminations – with vested rights	-302	302	0	0	0	0
Contributions refunds	-131	-67	0	0	0	-198
Retirements	-223	-69	292	0	0	0
New disabilities	-15	-2	-7	24	0	0
Return to work	44	-44	0	0	0	0
Died with or without beneficiary	-15	-1	-128	-32	-35	-211
Data adjustments	-1	-3	0	0	0	-4
Number as of June 30, 2016	8,509	2,639	4,779	826	934	17,687

Reconciliation of Member Data – June 30, 2015 to June 30, 2016

<sup>(1)</sup> Includes terminated members with member contributions on deposit.

<sup>(2)</sup> Combined 25 ex-spouse/alternate records with the associated active member account before receiving benefit distributions.

<sup>(3)</sup> 35 ex-spouse/alternate payees previously reported as retirees are now reclassified as beneficiaries.

### EXHIBIT D

Summary Statement of Income and Expenses on an Actuarial Value Basis

	Year Ended J	une 30, 2016	Year Ended June 30, 2015		
Contribution income:					
Employer contributions	\$177,709,688		\$175,099,550		
Member contributions	69,469,771		63,678,770		
Contribution income		\$247,179,459		\$238,778,320	
Investment income:					
Interest, dividends and other income	\$62,654,675		\$60,743,969		
Adjustment toward market value <sup>(1)</sup>	236,773,776		298,995,273		
Less investment and administrative fees	(18,897,272)		(18,505,915)		
Net investment income		<u>\$280,531,179</u>		<u>\$341,233,327</u>	
Total income available for benefits		\$527,710,638		\$580,011,647	
Less benefit payments		\$(246,403,038)		\$(233,695,213)	
Change in reserve for future benefits		\$281,307,600		\$346,316,434	

<sup>(1)</sup> Equals the "non-cash" earnings on investments included in the Actuarial Value of Assets.

### EXHIBIT E

Summary Statement of Net Assets

	Year Ended J	une 30, 2016	Year Ended J	lune 30, 2015
Cash equivalents		\$287,041,397		\$59,061,354
Pension software development cost		12,961,635		9,426,005
Accounts receivable:				
Member and employer contributions	\$8,300,490		\$6,872,228	
Accrued interest and dividends	2,487,536		3,213,855	
Securities sold	5,571,076		38,357,646	
Other	43,714		32,056	
Total accounts receivable		\$16,402,816		\$48,475,785
Investments:				
Equities	\$2,491,464,213		\$2,526,596,112	
Fixed income	834,771,950		1,013,748,941	
Real estate	371,598,471		340,986,568	
Investments received on securities lending	48,243,231		63,260,292	
Others	<u>380,549,757</u>		<u>415,341,030</u>	
Total investments at market value		4,126,627,622		<u>\$4,359,932,943</u>
Total assets		\$4,443,033,470		\$4,476,896,087
Liabilities:				
Securities lending	\$(48,243,230)		\$(63,260,292)	
Security purchases	(2,936,604)		(46,451,889)	
Accounts payable	(4,990,540)		(2,361,658)	
Prepaid contributions	(26,387)		<u>(27,060)</u>	
Total liabilities		\$(56,196,761)		\$(112,100,899)
Net assets at market value		<u>\$4,386,836,709</u>		<u>\$4,364,795,188</u>
Net assets at actuarial value		<u>\$4,592,438,533</u>		<u>\$4,311,130,933</u>
Net assets at valuation value		<u>\$4,585,712,958</u>		\$4,302,330,424

#### EXHIBIT F

#### **Actuarial Balance Sheet**

An overview of the Plan's funding is given by an Actuarial Balance Sheet. In this approach, we first determine the amount and timing of all future payments that will be made by the Plan for current participants. We then discount these payments at the valuation interest rate to the date of the valuation, thereby determining their present value. We refer to this present value as the "liability" of the Plan. Second, we determine how this liability will be met. These actuarial "assets" include the net amount of assets already accumulated by the Plan, the present value of future member contributions, the present value of future employer normal cost contributions, and the present value of future employer payments to amortize the UAAL.

#### Actuarial Balance Sheet (\$ in 000s)

As	<u>sets</u>	<u>June 30, 2016</u>	<u>June 30, 2015</u>
1.	Total valuation value of assets	\$4,585,713	\$4,302,330
2.	Present value of future contributions by members	513,034	495,597
3.	Present value of future employer contributions for:		
	a. Entry age normal cost	556,204	554,183
	b. Unfunded actuarial accrued liability	813,043	875,827
4.	Total current and future assets	\$6,467,994	\$6,227,937
Lia	bilities		
5.	Present value of benefits for retirees and beneficiaries	\$3,065,942	\$2,901,805
6.	Present value of benefits for vested terminated members	145,994	134,344
7.	Present value of benefits for active members	3,256,058	<u>3,191,788</u>
8.	Total liabilities	\$6,467,994	\$6,227,937

### EXHIBIT G

## **Summary of Allocated Reserves**

F	Reserves	
	<u>June 30, 2016</u>	June 30, 2015
Member contributions reserve <sup>(1)</sup>	\$683,571,172	\$647,597,355
Employer advance reserve <sup>(1)</sup>	2,350,035,512	2,119,359,715
Offset: Interest crediting shortfall tracking account (1)	(1,019,896,714)	(885,633,697)
Retiree reserve <sup>(1)</sup>	2,417,425,764	2,269,554,677
Supplemental death benefit reserve <sup>(1)</sup>	14,773,547	14,301,038
Vested fixed supplemental (\$108.44) reserve <sup>(1)</sup>	139,803,677	137,151,336
Undistributed earnings <sup>(1)</sup>	0	0
Valuation reserves	\$4,585,712,958	\$4,302,330,424
Supplemental medical (\$27.50) reserve <sup>(2)</sup>	6,725,575	8,800,509
Contingency reserve <sup>(2)</sup>	0	0
Fotal reserves (actuarial value)	\$4,592,438,533	\$4,311,130,933
Market stabilization reserve <sup>(2)</sup>	(205,601,824)	53,664,255
Net market value	\$4,386,836,709	\$4,364,795,188

<sup>(1)</sup> Included in valuation value of assets.

(2) Not included in valuation value of assets.

### EXHIBIT H

Development of Unfunded/(Overfunded) Actuarial Accrued Liability for Year Ended June 30, 2016

1. Unfunded actuarial accrued liability at beginning of year		\$875,827,000
2. Total Normal Cost payable at middle of year		134,183,000
3. Expected employer and member contributions		(257,985,000)
4. Interest (whole year on (1) plus half year on $(2) + (3)$ )		61,471,000
5. Expected unfunded actuarial accrued liability at end of year		<u>\$813,496,000</u>
6. Actuarial (gain)/loss due to all changes:		
(a) Loss from investment return on valuation value of assets (6.52%)	\$42,251,000	
(b) Actual contributions less than expected <sup>(1)</sup>	11,204,000	
(c) Lower than expected individual salary increases	(19,801,000)	
(d) Lower than expected COLA benefit increase for retirees and beneficiaries	(20,350,000)	
(e) Higher than expected mortality for retirees and beneficiaries	(8,940,000)	
(f) Other experience	(4,817,000)	
Total changes		<u>\$(453,000)</u>
7. Unfunded actuarial accrued liability at end of year		<u>\$813,043,000</u>

Note: Net gain from other experience of \$42,704,000 (as shown on page 8) is equal to the sum of items: 6(b) through 6(f).

<sup>(1)</sup> Contribution loss mainly from one-year delay in implementing higher contribution rates for Safety tiers from the June 30, 2015 valuation.

### EXHIBIT I

## **Table of Amortization Bases**

	Date Established	Source	Initial Amount	Outstanding Balance	Years Remaining	Payment <sup>(1)</sup>
General Tier 1	June 30, 2004	Restart of Amortization	\$63,394,000	\$25,207,000	3	\$9,071,000
	June 30, 2005	Actuarial (Gain)/Loss	22,085,000	11,045,000	4	3,037,000
	June 30, 2006	Actuarial (Gain)/Loss	7,048,000	4,158,000	5	932,000
	June 30, 2006	Assumption Change	41,538,000	24,466,000	5	5,481,000
	June 30, 2007	Actuarial (Gain)/Loss	(19,901,000)	(13,265,000)	6	(2,522,000)
	June 30, 2008	Actuarial (Gain)/Loss	(18,128,000)	(13,295,000)	7	(2,207,000)
	June 30, 2009	Actuarial (Gain)/Loss	55,190,000	43,632,000	8	6,452,000
	June 30, 2009	Assumption Change	18,574,000	14,677,000	8	2,170,000
	June 30, 2010	Actuarial (Gain)/Loss	50,018,000	41,949,000	9	5,614,000
	June 30, 2011	Actuarial (Gain)/Loss	36,225,000	31,850,000	10	3,905,000
	June 30, 2012	Actuarial (Gain)/Loss	29,865,000	27,249,000	11	3,091,000
	June 30, 2012	Demographic Assumption Change	38,104,000	37,851,000	16	3,220,000
	June 30, 2012	Economic Assumption Change	19,517,000	19,382,000	16	1,649,000
	June 30, 2013	Actuarial (Gain)/Loss	31,670,000	29,805,000	12	3,155,000
	June 30, 2014	Actuarial (Gain)/Loss	16,119,000	15,553,000	13	1,546,000
	June 30, 2015	Actuarial (Gain)/Loss	8,457,000	8,308,000	14	780,000
	June 30, 2015	Assumption Change	47,959,000	47,948,000	19	3,613,000
	June 30, 2016	Actuarial (Gain)/Loss	45,451,000	45,451,000	15	4,054,000
				\$401,971,000		\$53,041,000

<sup>(1)</sup> As of middle of year.

## **Table of Amortization Bases**

	Date Established	Source	Initial Amount	Outstanding Balance	Years Remaining	Payment <sup>(1)</sup>
General Tier 2	June 30, 2004	Restart of Amortization	\$49,731,000	\$19,779,000	3	\$7,118,000
	June 30, 2005	Actuarial (Gain)/Loss	7,622,000	3,813,000	4	1,048,000
	June 30, 2006	Actuarial (Gain)/Loss	(9,108,000)	(5,368,000)	5	(1,203,000)
	June 30, 2006	Assumption Change	19,085,000	11,244,000	5	2,519,000
	June 30, 2006	Plan Provision Change	14,731,000	8,671,000	5	1,943,000
	June 30, 2007	Actuarial (Gain)/Loss	(39,508,000)	(26,339,000)	6	(5,008,000)
	June 30, 2008	Actuarial (Gain)/Loss	(34,794,000)	(25,517,000)	7	(4,235,000)
	June 30, 2009	Actuarial (Gain)/Loss	71,253,000	56,322,000	8	8,329,000
	June 30, 2009	Assumption Change	22,696,000	17,932,000	8	2,652,000
	June 30, 2010	Actuarial (Gain)/Loss	47,615,000	39,938,000	9	5,345,000
	June 30, 2011	Actuarial (Gain)/Loss	(6,949,000)	(6,129,000)	10	(751,000)
	June 30, 2012	Actuarial (Gain)/Loss	(18,106,000)	(16,521,000)	11	(1,874,000)
	June 30, 2012	Demographic Assumption Change	29,420,000	29,213,000	16	2,485,000
	June 30, 2012	Economic Assumption Change	32,874,000	32,668,000	16	2,779,000
	June 30, 2013	Actuarial (Gain)/Loss	(23,823,000)	(22,442,000)	12	(2,375,000)
	June 30, 2014	Actuarial (Gain)/Loss	(49,125,000)	(47,397,000)	13	(4,712,000)
	June 30, 2015	Actuarial (Gain)/Loss	(62,406,000)	(61,337,000)	14	(5,762,000)
	June 30, 2015	Assumption Change	50,090,000	50,077,000	19	3,774,000
	June 30, 2016	Actuarial (Gain)/Loss	(28,842,000)	(28,842,000)	15	(2,573,000)
				\$29,765,000		\$9,499,000

<sup>(1)</sup> As of middle of year.

## **Table of Amortization Bases**

	Date Established	Source	Initial Amount	Outstanding Balance	Years Remaining	Payment <sup>(1)</sup>
Safety	June 30, 2004	Restart of Amortization	\$210,319,000	\$83,628,000	3	\$30,094,000
	June 30, 2005	Actuarial (Gain)/Loss	19,142,000	9,577,000	4	2,633,000
	June 30, 2006	Actuarial (Gain)/Loss	3,418,000	2,010,000	5	450,000
	June 30, 2006	Assumption Change	42,167,000	24,835,000	5	5,564,000
	June 30, 2007	Actuarial (Gain)/Loss	(37,489,000)	(24,984,000)	6	(4,751,000)
	June 30, 2008	Actuarial (Gain)/Loss	(22,443,000)	(16,450,000)	7	(2,730,000)
	June 30, 2009	Actuarial (Gain)/Loss	78,157,000	61,781,000	8	9,136,000
	June 30, 2009	Assumption Change	49,982,000	39,510,000	8	5,843,000
	June 30, 2010	Actuarial (Gain)/Loss	108,448,000	90,975,000	9	12,175,000
	June 30, 2011	Actuarial (Gain)/Loss	8,879,000	7,817,000	10	958,000
	June 30, 2012	Actuarial (Gain)/Loss	(7,501,000)	(6,833,000)	11	(775,000)
	June 30, 2012	Demographic Assumption Change	55,513,000	55,152,000	16	4,692,000
	June 30, 2012	Economic Assumption Change	51,887,000	51,539,000	16	4,384,000
	June 30, 2013	Actuarial (Gain)/Loss	7,588,000	7,148,000	12	757,000
	June 30, 2014	Actuarial (Gain)/Loss	(54,478,000)	(52,550,000)	13	(5,225,000)
	June 30, 2015	Actuarial (Gain)/Loss	(55,657,000)	(54,704,000)	14	(5,139,000)
	June 30, 2015	Assumption Change	119,953,000	119,918,000	19	9,037,000
	June 30, 2016	Actuarial (Gain)/Loss	(17,062,000)	(17,062,000)	15	(1,522,000)
				\$381,307,000		\$65,581,000

<sup>(1)</sup> As of middle of year.

### **Table of Amortization Bases**

	Date Established	Source	Initial Amount	Outstanding Balance	Years Remaining	Payment <sup>(1)</sup>
Total VCERA	June 30, 2004	Restart of Amortization	\$323,444,000	\$128,614,000	3	\$46,283,000
	June 30, 2005	Actuarial (Gain)/Loss	48,849,000	24,435,000	4	6,718,000
	June 30, 2006	Actuarial (Gain)/Loss	1,358,000	800,000	5	179,000
	June 30, 2006	Assumption Change	102,790,000	60,545,000	5	13,564,000
	June 30, 2006	Plan Provision Change	14,731,000	8,671,000	5	1,943,000
	June 30, 2007	Actuarial (Gain)/Loss	(96,898,000)	(64,588,000)	6	(12,281,000)
	June 30, 2008	Actuarial (Gain)/Loss	(75,365,000)	(55,262,000)	7	(9,172,000)
	June 30, 2009	Actuarial (Gain)/Loss	204,600,000	161,735,000	8	23,917,000
	June 30, 2009	Assumption Change	91,252,000	72,119,000	8	10,665,000
	June 30, 2010	Actuarial (Gain)/Loss	206,081,000	172,862,000	9	23,134,000
	June 30, 2011	Actuarial (Gain)/Loss	38,155,000	33,538,000	10	4,112,000
	June 30, 2012	Actuarial (Gain)/Loss	4,258,000	3,895,000	11	442,000
	June 30, 2012	Demographic Assumption Change	123,037,000	122,216,000	16	10,397,000
	June 30, 2012	Economic Assumption Change	104,278,000	103,589,000	16	8,812,000
	June 30, 2013	Actuarial (Gain)/Loss	15,435,000	14,511,000	12	1,537,000
	June 30, 2014	Actuarial (Gain)/Loss	(87,484,000)	(84,394,000)	13	(8,391,000)
	June 30, 2015	Actuarial (Gain)/Loss	(109,606,000)	(107,733,000)	14	(10,121,000)
	June 30, 2015	Assumption Change	218,002,000	217,943,000	19	16,424,000
	June 30, 2016	Actuarial (Gain)/Loss	(453,000)	(453,000)	15	(41,000)
				\$813,043,000		\$128,121,000

<sup>(1)</sup> As of middle of year.

# EXHIBIT J

#### Section 415 Limitations

Section 415 of the Internal Revenue Code (IRC) specifies the maximum benefits that may be paid to an individual from a defined benefit plan and the maximum amounts that may be allocated each year to an individual's account in a defined contribution plan.

A qualified pension plan may not pay benefits in excess of the Section 415 limits. The ultimate penalty for noncompliance is disqualification: active participants could be taxed on their vested benefits and the IRS may seek to tax the income earned on the plan's assets.

In particular, Section 415(b) of the IRC limits the maximum annual benefit payable at the Normal Retirement Age to a dollar limit of \$160,000 indexed for inflation. That limit is \$210,000 for 2016 and \$215,000 for 2017. Normal Retirement Age for these purposes is age 62. These are the limits in simplified terms. They must be adjusted based on each participant's circumstances, for such things as age at retirement, form of benefits chosen and after tax contributions. Limits are also affected by the "grandfather" election under Section 415(b)(10).

For non-PEPRA members, benefits in excess of the limits may be paid through a qualified governmental excess plan that meets the requirements of Section 415(m).

Legal Counsel's review and interpretation of the law and regulations should be sought on any questions in this regard.

Contribution rates determined in this valuation have not been reduced for the Section 415 limitations. Actual limitations will result in gains as they occur.

### EXHIBIT K

#### **Definitions of Pension Terms**

for Pensioners:

The following list defines certain technical terms for the convenience of the reader: **Assumptions or Actuarial Assumptions:** The estimates on which the cost of the Plan is calculated including: Investment return — the rate of investment yield that the Plan is anticipated to (a) earn over the long-term future; Mortality rates — the death rates of employees and pensioners at each age; (b) <u>Retirement rates</u> — the rate or probability of retirement at a given age; (c) Turnover rates — the rates at which employees of various ages are expected (d) to leave employment for reasons other than death, disability, or retirement. Normal Cost: The amount of contributions required to fund the determined cost allocated to the current year of service, as a level % of payroll over the members' career. Actuarial Accrued Liability for Actives: The equivalent of the accumulated normal costs allocated to the years before the valuation date. Actuarial Accrued Liability

The single sum value of lifetime benefits to benefits to existing pensioners. This sum takes account of life expectancies appropriate to the ages of the pensioners and the interest that the sum is expected to earn before it is entirely paid out in benefits.

Unfunded/(Overfunded) Actuarial Accrued Liability:	The extent to which the actuarial accrued liability of the Plan exceeds (or is exceeded by) the assets of the Plan.
Amortization of the Unfunded/ (Overfunded) Actuarial Accrued Liability:	Payments made over a period of years equal in value to the Plan's unfunded or overfunded actuarial accrued liability.
Rate of Investment Return:	The rate of earnings of the Plan from its investments, including interest, dividends and capital gain and loss adjustments, computed as a percentage of the average value of the fund. For actuarial purposes, the investment return often reflects a smoothing of the market gains and losses to avoid significant swings in the value of assets from one year to the next.
Payroll or Compensation:	Compensation Earnable and Pensionable Compensation expected to be paid to active members during the twelve months following the valuation date. Only Compensation Earnable and Pensionable Compensation that would possibly go into the determination of retirement benefits are included.

## EXHIBIT I

## Summary of Actuarial Valuation Results

The valuation was made with respect to the following data supp	lied to us:	
1. Retired members as of the valuation date (including 934 beneficiaries in	pay status)	6,539
2. Members inactive during year ended June 30, 2016 with vested rights <sup>(1)</sup>		2,639
3. Members active during the year ended June 30, 2016		8,509
The actuarial factors as of the valuation date are as follows (am	punts in 000s):	
1. Normal cost		\$137,451
2. Present value of future benefits		6,467,994
3. Present value of future normal costs (employer and member)		1,069,238
4. Actuarial accrued liability <sup>(2)</sup>		5,398,756
Retired members and beneficiaries	\$3,065,942	
Inactive members with vested rights <sup>(1)</sup>	145,994	
Active members	2,186,820	
5. Valuation value of $assets^{(2)}$ (\$4,386,837 at market value as reported by R	etirement Association)	4,585,713
6. Unfunded actuarial accrued liability		\$813,043

<sup>(1)</sup> Includes terminated members with member contributions on deposit.

<sup>(2)</sup> *Excludes liabilities and assets held for supplemental medical benefit reserve and statutory contingency reserve.* 

## **Summary of Actuarial Valuation Results**

Th	e determination of the recommended average employer contribution is as follows	Dollar Amount (in 000s)	% of Payroll
1.	Total normal cost	\$137,451	19.47%
2.	Expected employee contributions	-71,287	<u>-10.10%</u>
3.	Employer normal cost: $(1) + (2)$	\$66,164	9.37%
4.	Amortization of unfunded actuarial accrued liability	128,127	18.15%
5.	Total recommended average employer contribution: $(3) + (4)$	\$194,291	27.52%
6.	Projected compensation	\$706,000	

## EXHIBIT II

## **Actuarial Assumptions and Methods**

Rationale for Assumptions: <u>Economic Assumptions</u>	The information and analysis used in selecting each assumption that has a significant effect on this actuarial valuation is shown in the July 1, 2011 through June 30, 2014 Actuarial Experience Study and June 30, 2015 Economic Actuarial Assumptions Report both dated April 14, 2015. Unless otherwise noted, all actuarial assumptions and methods shown below apply to both PEPRA and Non-PEPRA members.
Net Investment Return:	7.50%, net of investment and administration expenses.
Member Contribution Crediting Rate:	3.00% (actual increase is based on projected long term ten-year Treasury rate).
Consumer Price Index:	Increase of 3.00% per year; retiree COLA increases due to CPI are subject to a 3.0% maximum change per year for General Tier 1 and Safety. For General Tier 2, SEIU members receive a fixed 2% cost-of-living adjustment, not subject to changes in the CPI, that applies to future service after March 2003.
Payroll Growth:	Inflation of 3.00% per year plus "across the board" real salary increases of 0.50% per year.
Increase in the Internal Revenue Code Section 401(a)(17) Compensation Limit:	Increase of 3.00% per year from the valuation date.
Increase in Section 7522.10 Compensation Limit:	Increase of 3.00% per year from the valuation date.

### **Demographic Assumptions**

Healthy:	For General Members: RP-2000 Combined Healthy Mortality Table projected with Scale BB to 2035 set back one year for males and set forward one year for females.
	For Safety Members: RP-2000 Combined Healthy Mortality Table projected with Scale BB to 2035 set back three years.
Disabled:	For General Members: RP-2000 Combined Healthy Mortality Table projected with Scale BB to 2035 set forward six years for males and eight years for females.
	For Safety Members: RP-2000 Combined Healthy Mortality Table projected with Scale BB to 2035 set forward two 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.

The above mortality tables contain about a 10% margin, based on actual to expected deaths, as a provision appropriate to reasonably anticipate future mortality improvement, based on a review of mortality experience as of the measurement date.

Member Contribution Rates:	For General Members: RP-2000 Combined Healthy Mortality Table projected with Scale BB to 2035 set back one year for males and set forward one year for females weighted one-third male and two-thirds female.
	For Safety Members: RP-2000 Combined Healthy Mortality Table projected with Scale BB to 2035 set back three years weighted 80% male and 20% female.

## **Termination Rates Before Retirement:**

Rate (%) Mortality				
	Gei	neral	Sa	fety
Age	Male	Female	Male	Female
25	0.03	0.02	0.03	0.02
30	0.04	0.03	0.03	0.02
35	0.06	0.05	0.05	0.03
40	0.09	0.07	0.08	0.05
45	0.13	0.11	0.11	0.08
50	0.18	0.17	0.16	0.12
55	0.29	0.25	0.24	0.18
60	0.48	0.39	0.41	0.27
65	0.77	0.72	0.64	0.44

All pre-retirement deaths are assumed to be non-duty related.

### **Termination Rates Before Retirement (continued):**

<b>Rate</b> (%)					
Disability					
Age	General <sup>(1)</sup>	Safety <sup>(2)</sup>			
25	0.02	0.11			
30	0.04	0.24			
35	0.08	0.36			
40	0.13	0.58			
45	0.21	0.88			
50	0.31	1.48			
55	0.41	2.88			
60	0.54	5.04			
65	0.69	0.00			
70	0.90	0.00			

<sup>(1)</sup> 35% of General disabilities are assumed to be duty disabilities and the other 65% are assumed to be ordinary disabilities.

<sup>(2)</sup> 90% of Safety disabilities are assumed to be duty disabilities and the other 10% are assumed to be ordinary disabilities.

# **Termination Rates Before Retirement (continued):**

Rate (%)     Withdrawal <sup>(1)</sup>				
Less than 1	14.00	10.00		
1	10.00	6.00		
2	8.00	5.50		
3	7.00	5.00		
4	6.00	4.00		
5	4.00	2.75		
6	3.75	2.50		
7	3.50	2.00		
8	3.50	1.80		
9	3.25	1.60		
10	3.25	1.40		
11	3.00	1.20		
12	3.00	1.00		
13	2.75	0.95		
14	2.75	0.90		
15	2.50	0.85		
16	2.50	0.80		
17	2.25	0.75		
18	2.00	0.70		
19	2.00	0.65		
20 or more	2.00	0.60		

<sup>(1)</sup> The greater of a refund of member contributions and a deferred annuity is valued when a member withdraws.

No withdrawal is assumed after a member is first assumed to retire.

rement Rates (%	)•	PEPRA		
Age	General Tier 1 and 2	General Tier 1 and 2	Safety	PEPRA Safety
40	0.00	0.00	1.00	0.00
41	0.00	0.00	1.00	0.00
42	0.00	0.00	1.00	0.00
43	0.00	0.00	1.00	0.00
44	0.00	0.00	1.00	0.00
45	0.00	0.00	1.00	0.00
46	0.00	0.00	1.00	0.00
47	0.00	0.00	1.00	0.00
48	0.00	0.00	1.00	0.00
49	0.00	0.00	1.50	0.00
50	2.50	0.00	2.50	5.00
51	2.50	0.00	2.00	2.00
52	3.00	2.00	3.00	4.00
53	3.50	2.00	4.00	6.00
54	4.00	2.50	17.00	16.00
55	4.50	4.00	22.00	20.00
56	5.00	4.50	22.00	20.00
57	6.00	5.00	20.00	18.00
58	8.00	6.00	19.00	18.00
59	8.00	7.00	22.00	25.00
60	12.00	9.00	22.00	25.00
61	15.00	11.00	25.00	25.00
62	22.00	20.00	35.00	40.00
63	20.00	20.00	40.00	40.00
64	22.00	18.00	40.00	40.00
65	30.00	20.00	100.00	100.00
66	35.00	30.00	100.00	100.00
67	35.00	30.00	100.00	100.00
68	35.00	30.00	100.00	100.00
69	20.00	30.00	100.00	100.00
70	20.00	50.00	100.00	100.00
71	20.00	50.00	100.00	100.00
72	20.00	50.00	100.00	100.00
73	20.00	50.00	100.00	100.00
74	30.00	50.00	100.00	100.00
75	100.00	100.00	100.00	100.00

Retirement Age and Benefit for Deferred Vested Members:	For deferred vested members, we make the following retirement assumption: General Age: 59 Safety Age: 54		
	We assume that 50% and 60% of future General and Safety deferred vested members, respectively, will continue to work for a reciprocal employer. For reciprocals, we assume 4.00% compensation increases per annum.		
Future Benefit Accruals:	1.0 year of service per year.		
Unknown Data for Members:	Same as those exhibited by members with similar known characteristics. If not specified, members are assumed to be male.		
<b>Definition of Active Members:</b>	All active members of VCERA as of the valuation date.		
Percent Married:	70% of male members and 55% of female members are assumed to be married at pre- retirement death or retirement. There is no explicit assumption for children's benefits.		
Age of Spouse:	Female (or male) spouses are 3 years younger (or older) than their spouses.		
In-Service Redemptions:			
Non-PEPRA Formulas	The following assumptions for in-service redemptions pay as a percentage of final average compensation are used:		
	General Tier 17.50%General Tier 23.50%Safety7.25%		
	For determining the cost of the basic benefit (i.e., non-COLA component), the cost of this pay element is currently recognized in the valuation as an employer only cost and does not affect member contribution rates.		
PEPRA Formulas	None		

Individual Salary Increases:				
	Annual Rate of Compensation Increase			
	Inflation: 3.00% per year increases of 0.50% per y merit increases:			
	Years of Service	General	Safety	
	Less than 1	6.00%	8.00%	
	1	4.25	6.25	
	2	3.25	4.75	
	3	2.75	4.00	
	4	2.25	3.25	
	5	1.75	3.00	
	6	1.25	2.25	
	7	1.00	1.50	
	8	0.75	1.25	
	9	0.50	1.00	
	10	0.50	0.75	
	11	0.50	0.75	
	12	0.50	0.75	
	13	0.50	0.75	
	14	0.50	0.75	
	15	0.50	0.75	
	16	0.50	0.50	
	17	0.50	0.50	
	18	0.50	0.50	
	19	0.50	0.50	
	20 and Over	0.50	0.50	

Average Entry Age for Member Contribution Rates:

For non-PEPRA members hired after November 1974, they will pay a contribution corresponding to a General and Safety member hired at entry age 35 and 27, respectively.

Actuarial Methods			
Actuarial Cost Method:	Entry Age Actuarial Cost Method. Entry Age is the age at the member's hire date. Normal Cost and Actuarial Accrued Liability are calculated on an individual basis and are based on costs allocated as a level percentage of compensation, as if the current benefit formulas for each individual have always been in effect (i.e., "replacement life").		
Actuarial Value of Assets:	Market value of assets less unrecognized returns in each of the last ten semi-annual accounting periods. Unrecognized returns are equal to the difference between the actual market return and the expected return on market value and are recognized over a five-year period. Deferred gains and losses as of June 30, 2011 have been combined and will be recognized in equal amounts over a period of four and a half years from that date.		
Valuation Value of Assets:	Actuarial Value of Assets, reduced by the value of the supplemental medical benefit reserve and statutory contingency reserve.		
Amortization Policy:	The UAAL, (i.e., the difference between the Actuarial Accrued Liability and the Valuation Value of Assets), as of June 30, 2011 shall continue to be amortized over separate 15-year period amortization layers based on the valuations during which each separate layer was previously established.		
	Any new UAAL as a result of actuarial gains or losses identified in the annual valuation as of June 30 will be amortized over a period of 15 years.		
	Any new UAAL as a result of change in actuarial assumptions or methods will be amortized over a period of 20 years.		
	Unless an alternative amortization period is recommended by the Actuary and accepted by the Board based on the results of an actuarial analysis:		
	i) with the exception noted in ii., below, the increase in UAAL as a result of any plan amendments will be amortized over a period of 15 years;		
	<ul> <li>the increase in UAAL resulting from a temporary retirement incentive, including the impact of benefits resulting from additional service permitted in Section 31641.04 of the 1937 CERL (Golden Handshake), will be funded over a period of up to 5 years.</li> </ul>		

	The UAAL will be amortized over "closed" amortization periods so that the amortization period for each layer decreases by one year with each actuarial valuation.
	The UAAL will be amortized as a level percentage of payroll so that the amortization amount in each year during the amortization period shall be expected to be a level percentage of covered payroll, taking into consideration the current assumption for general payroll increase.
	If an overfunding exists (i.e., the total of all UAAL becomes negative so that there is a surplus), such surplus and any subsequent surpluses will be amortized over an "open" amortization period of 30 years. Any prior UAAL amortization layers will be considered fully amortized, and any subsequent UAAL, will be amortized over 15 years as the first of a new series of amortization layers.
	These amortization policy components will apply separately to each of VCERA's UAAL cost groups.
	Basic UAAL contribution rates have been calculated on a combined basis for all General Tiers. COLA UAAL contribution rates have been calculated on a combined basis for all General Tiers that have a COLA.
Changes in Actuarial Assumptions and Methods:	There have been no changes in actuarial assumptions or methods since the previous actuarial valuation.

### EXHIBIT III

#### Summary of Plan Provisions

This exhibit summarizes the major provisions of the VCERA included in the valuation. It is not intended to be, nor should it be interpreted as, a complete statement of all plan provisions.

Membership Eligibility:	All regular employees of the County of Ventura or contracting district, scheduled to work 64 or more hours biweekly, are eligible to become a member of the Retirement Association subject to classification below:
General Tier 1	All General members with membership dates before June 30, 1979, plus Deputy Sheriff trainees and certain executive management with membership dates before January 1, 2013.
General Tier 2	All General members with membership dates on or after June 30, 1979 and before January 1, 2013, except as noted above for General Tier 1.
Safety	All Safety members with membership dates before January 1, 2013.
PEPRA General Tier 1	Deputy Sheriff trainees with membership dates on or after January 1, 2013 and before April 17, 2014.
PEPRA General Tier 2	All General members with membership dates on or after January 1, 2013, except as noted above for PEPRA General Tier 1.
PEPRA Safety	All Safety members with membership dates on or after January 1, 2013.
Final Compensation for Benefit Determination:	
General Tier 1 and Safety	Highest consecutive twelve months of compensation earnable (§31462.1)(FAC1).
General Tier 2	Highest consecutive thirty-six months of compensation earnable (§31462)(FAC3).
PEPRA General Tier 1, PEPRA General Tier 2 and PEPRA Safety	Highest consecutive thirty-six months of pensionable compensation (§7522.32) (FAS3)

Compensation Limit:	
General Tier 1, General Tier 2	
and Safety	For members with membership dates on or after July 1, 1996, Compensation Earnabl is limited to Internal Revenue Code Section 401(a)(17). The limit as of July 1, 2016 i \$265,000. The limit is indexed for inflation on an annual basis.
PEPRA General Tier 1, PEPRA	
General Tier 2 and PEPRA Safety	Pensionable Compensation is limited to \$117,020 for 2016 (\$140,424, if not enrolled in Social Security). The limit is indexed for inflation on an annual basis.
Service:	Years of service. (Yrs)
Service Retirement Eligibility:	
General	Age 50 with 10 years of service, or age 70 regardless of service, or after 30 years, regardless of age (§31672).
Safety	Age 50 with 10 years of service, or age 70 regardless of service, or after 20 years, regardless of age (§31663.25).
PEPRA General	Age 52 with 5 years of service (§7522.20(a)) or age 70 regardless of service (§31672.3).
PEPRA Safety	Age 50 with 5 years of service (§7522.25(d)) or age 70 regardless of service (§31672.3).

**Benefit Formula:** 

	<b>Retirement Age</b>	Benefit Formula
General Tier 1 (§31676.11)	50	(1.24%xFAC1 - 1/3x1.24%x\$350x12)xYrs
	55	(1.67%xFAC1 – 1/3x1.67%x\$350x12)xYrs
	60	(2.18% xFAC1 - 1/3x2.18% x\$350x12) xYrs
	62	(2.35% xFAC1 - 1/3x2.35% x\$350x12) xYrs
	65 or later	(2.61% xFAC1 - 1/3x2.61% x\$350x12)xYrs

	Retirement Age	Benefit Formula
General Tier 2 (§31676.1)	50	(1.18% xFAC3 - 1/3x1.18% x\$350x12) xYrs
	55	(1.49%xFAC3 - 1/3x1.49%x\$350x12)xYrs
	60	(1.92% xFAC3 - 1/3x1.92% x\$350x12) xYrs
	62	(2.09%xFAC3 - 1/3x2.09%x\$350x12)xYrs
	65 or later	(2.43% xFAC3 - 1/3x2.43% x\$350x12) xYrs
	Retirement Age	Benefit Formula
PEPRA General Tier 1 and PEPRA		
General Tier 2 (§7522.20(a))	52	(1.00%xFAS3 x Yrs)
	55	(1.30%xFAS3 x Yrs)
	60	(1.80%xFAS3 x Yrs)
	62	(2.00%xFAS3 x Yrs)
	65	(2.30%xFAS3 x Yrs)
	67 or later	(2.50% xFAS3 x Yrs)
	Retirement Age	Benefit Formula
Safety (Non-Integrated) (§31664)	50	(2.00% xFAC1 xYrs)
	55	(2.62%xFAC1xYrs)
	60 or later	(2.62% xFAC1xYrs)
	Retirement Age	Benefit Formula
PEPRA Safety (§7522.25(d))	50	(2.00%xFAS3xYrs)
	55	(2.50%xFAS3xYrs)

Maximum Benefit:	
General Tier 1, General Tier 2 and Safety	100% of Highest Average Compensation (§31676.1, §31676.11, §31664)
PEPRA General Tier 1, PEPRA General Tier 2 and PEPRA Safety	None
Ordinary Disability:	
General Tier 1, General Tier 2, PE	PRA General Tier 1 and PEPRA General Tier 2
Eligibility	Five years of service (§31720).
Benefit Formula	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 (§31727).
Safety and PEPRA Safety	
Eligibility	Five years of service (§31720).
Benefit Formula	1.8% per year of service. If the benefit does not exceed one-third of Final Compensation, the service is projected to 55, but total benefit cannot be more than one-third of Final Compensation (§31727.2).
Line-of-Duty Disability:	
All Members	
Eligibility	No age or service requirements (§31720).
Benefit Formula	50% of the Final Compensation or 100% of Service Retirement benefit, if larger (§31727.4).
Pre-Retirement Death:	
All Members	
Less than Five Years of Service	Refund of employee contributions with interest, plus one month's compensation for each year of service to a maximum of six month's compensation (§31781).
	50% of Final Compensation or 100% of Service Retirement benefit, if larger, payable to spouse if Line-of-Duty death (§31787).

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An additional lump sum benefit of one-year of compensation is paid if Line-of-Duty death for Safety member (§31787.6).
OR
60% of the greater of Service Retirement or Ordinary Disability Retirement benefit payable to surviving eligible spouse (§31765.1, §31781.1), in lieu of above.
An additional lump sum benefit of one-year of compensation is paid if Line-of-Duty death for Safety member (§31787.6).
60% of member's unmodified allowance continued to eligible spouse (§31760.1). In addition, there is a \$5,000 lump sum benefit payable to member's beneficiary (§31789.3). An eligible spouse is a surviving spouse who was married to the member at least two years prior to the date of death and has attained age 55 on or prior to the date of death (§31760.2, §31785.1).
100% of member's allowance continued to eligible spouse (§31786). In addition, there is a \$5,000 lump sum benefit payable to member's beneficiary (§31789.3). An eligible spouse is a surviving spouse who was married to the member at least two years prior to the date of death and has attained age 55 on or prior to the date of death (§31786.1).
Refund of accumulated employee contributions with interest (§31628) or entitled to earned benefits commencing at anytime after eligible to retire (§31629.5).
If contributions left on deposit, entitled to earned benefits commencing at any time after eligible to retire (§31700).
Future changes based on Consumer Price Index to a maximum of 3% per year, excess "banked" (§31870.1).



General Tier 2 and PEPRA General Tier 2	SEIU members receive a fixed 2% cost-of-living adjustment, not subject to changes in the CPI, that applies to future service after March, 2003. This benefit has been valued consistent with the methodologies described in our October 9, 2006 report entitled "Funding Policies and Procedures for General Tier II COLA Benefit".
Supplemental Benefit:	A supplemental benefit in the amount of \$108.44 per month is paid to retirees and their survivors.
Member Contributions:	Please refer to Appendix A for the specific rates.
General Tier 1 and Safety	Provide for 50% of total Normal Cost.
General Tier 2	Provide for 50% of total basic Normal Cost. In addition, for General Tier 2 with COLA members, the current member COLA contribution rate of 2.63% of compensation has been reflected.
PEPRA General Tier 2	Provide for 50% of total basic Normal Cost. In addition, for General Tier 2 with COLA members, the current member COLA contribution rate of 2.63% of compensation has been reflected.
PEPRA Safety	Provide for 50% of total Normal Cost.
Other Information:	For Non-PEPRA members hired after November 1974, they will pay a contribution corresponding to a General and Safety member hired at entry age 35 and 27, respectively. Non-PEPRA Safety members with 30 or more years of service are exempt from paying member contributions. The same applies for Non-PEPRA General members hired on or before March 7, 1973.
Plan Provisions Not Valued:	The Board of Retirement has approved a Supplemental Medical Benefit. This benefit is funded from Undistributed Excess Earnings, paid from a reserve that is not included in the Valuation Value of Assets and is subject at all times to the availability of funds.
	The Supplemental Medical Benefit is \$27.50 per month and is payable to virtually all retirees and beneficiaries.

**Plan Changes:** 

There have been no changes in plan provisions since the previous actuarial valuation.

**NOTE:** The summary of major plan provisions is designed to outline principle plan benefits as interpreted for purposes of the actuarial valuation. If the Association should find the plan summary not in accordance with the actual provisions, the Association should alert Segal, to ensure the proper provisions are valued.

#### Appendix A

Member Contribution Rates Based on 50/50 Sharing of Normal Cost for Non-PEPRA Tiers

	Ва	Basic		PLA	Total	
	First \$350	Over \$350	First \$350	Over \$350	First \$350	Over \$350
General Tier 1	5.35%	8.03%	1.79%	2.68%	7.14%	10.71%
General Tier 2 without COLA	4.82%	7.23%	0.00%	0.00%	4.82%	7.23%
General Tier 2 COLA	4.82%	7.23%	2.63% <sup>(1)</sup>	2.63% <sup>(1)</sup>	7.45%	9.86%
Safety	10.78%	10.78%	4.49%	4.49%	15.27%	15.27%

<sup>(1)</sup> General Tier 2 members with COLA are required to pay COLA contributions of 2.63% of compensation based on current bargaining agreements.

#### Appendix B

#### Member Contribution Rates for PEPRA Members

	Basic	COLA	Total
General Tier 2 without COLA	6.96%	0.00%	6.96%
General Tier 2 with COLA	6.96%	2.63% <sup>(1)</sup>	9.59%
Safety	10.21%	4.21%	14.42%

The PEPRA member contribution rate is 50% of the Normal Cost.

<sup>(1)</sup> General Tier 2 members with COLA are required to pay COLA contributions of 2.63% of compensation based on current bargaining agreements.

Note: It is our understanding that in the determination of pension benefits under the PEPRA tier formulas, the compensation that can be taken into account for 2016 is \$117,020. (For an employer that is not enrolled in Social Security, the maximum amount is \$140,424) (reference Section 7522.10). These amounts should be adjusted for changes to the Consumer Price Index for All Urban Consumers after 2016 (reference Section 7522.10(d)).

#### Appendix C

Employer Contribution Rates (Dollar Amounts in Thousands) <u>Without</u> 50/50 Sharing of Normal Cost for Non-PEPRA Tiers – Current Valuation with Combined General UAAL Rates

		J	une 30, 2016	6 Actuarial Valuation		
	В	ASIC		COLA		TOTAL
General Tier 1 Members	Rate	Estimated Annual Amount <sup>(1)</sup>	Rate	Estimated Annual Amount <sup>(1)</sup>	Rate	Estimated Annual Amount <sup>(1)</sup>
Normal Cost	9.04%	\$708	2.77%	\$217	11.81%	\$925
UAAL <sup>(2)</sup>	9.43%	<u>738</u>	4.10%	<u>321</u>	13.53%	1,059
Total Contribution	18.47%	\$1,446	6.87%	\$538	25.34%	\$1,984
eneral Tier 2 Members w/o COLA						
Normal Cost	8.45%	\$18,142	0.00%	\$0	8.45%	\$18,142
UAAL <sup>(2)</sup>	<u>9.43%</u>	20,238	0.00%	<u>0</u>	<u>9.43%</u>	20,238
Total Contribution	17.88%	\$38,380	0.00%	\$0	17.88%	\$38,380
General PEPRA Tier 2 Members w/o COLA	L L					
Normal Cost	6.96%	\$2,453	0.00%	\$0	6.96%	\$2,453
UAAL <sup>(2)</sup>	<u>9.43%</u>	<u>3,323</u>	0.00%	<u>0</u>	<u>9.43%</u>	<u>3,323</u>
Total Contribution	16.39%	\$5,776	0.00%	\$0	16.39%	\$5,776
General Tier 2 Members w/COLA						
Normal Cost <sup>(3)</sup>	8.45%	\$18,272	0.08%	\$173	8.53%	\$18,445
$UAAL^{(2)(4)}$	<u>9.43%</u>	20,382	4.10%	8,865	<u>13.53%</u>	<u>29,247</u>
Total Contribution	17.88%	\$38,654	4.18%	\$9,038	22.06%	\$47,692
General PEPRA Tier 2 Members w/COLA						
Normal Cost <sup>(3)</sup>	6.96%	\$4,465	0.01%	\$6	6.97%	\$4,471
$UAAL^{(2)(4)}$	<u>9.43%</u>	<u>6,049</u>	4.10%	2,629	13.53%	<u>8,678</u>
Total Contribution	16.39%	\$10,514	4.11%	\$2,635	20.50%	\$13,149
Il General Members <sup>(5)</sup>						
Normal Cost	8.18%	\$44,040	0.08%	\$396	8.26%	\$44,436
UAAL	<u>9.43%</u>	<u>50,730</u>	<u>2.19%</u>	<u>11,815</u>	<u>11.62%</u>	<u>62,545</u>
Total Contribution	17.61%	\$94,770	2.27%	\$12,211	19.88%	\$106,981

#### Appendix C (continued)

Employer Contribution Rates (Dollar Amounts in Thousands) <u>Without</u> 50/50 Sharing of Normal Cost for Non-PEPRA Tiers – Current Valuation with Combined General UAAL Rates

			June 30, 2010	6 Actuarial Valuation		
		BASIC		COLA		TOTAL
Safety Members	Rate	Estimated Annual Amount <sup>(1)</sup>	Rate	Estimated Annual Amount <sup>(1)</sup>	Rate	Estimated Annual Amount <sup>(1)</sup>
Normal Cost	13.55%	\$21,057	4.40%	\$6,837	17.95%	\$27,894
UAAL	<u>51.58%</u>	80,156	-12.51%	-19,441	<u>39.07%</u>	60,715
Total Contribution	65.13%	\$101,213	-8.11%	-\$12,604	57.02%	\$88,609
Safety PEPRA Members						
Normal Cost	10.21%	\$1,272	4.21%	\$524	14.42%	\$1,796
UAAL	<u>51.58%</u>	6,425	-12.51%	<u>-1,558</u>	<u>39.07%</u>	4,867
Total Contribution	61.79%	\$7,697	-8.30%	-\$1,034	53.49%	\$6,663
All Safety Members <sup>(5)</sup>						
Normal Cost	13.30%	\$22,329	4.39%	\$7,361	17.69%	\$29,690
UAAL	51.58%	86,581	-12.51%	-20,999	39.07%	65,582
Total Contribution	64.88%	\$108,910	-8.12%	-\$13,638	56.76%	\$95,272
All Categories Combined <sup>(5)</sup>						
Normal Cost	9.40%	\$66,369	1.10%	\$7,757	10.50%	\$74,126
UAAL	<u>19.45%</u>	137,311	<u>-1.30%</u>	<u>-9,184</u>	<u>18.15%</u>	128,127
Total Contribution	28.85%	\$203,680	-0.20%	-\$1,427	28.65%	\$202,253

<sup>(1)</sup> Amounts are in thousands, assumed to be paid throughout the year, and are based on June 30, 2016 annual payroll (also in thousands) shown below. General Tier 1 \$7,830

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General Tier 2	214,696
General PEPRA Tier 2	35,238
General Tier 2C	216,231
General PEPRA Tier 2C	64,147
Safety	155,401
Safety PEPRA	12,457
Total	\$706,000

<sup>(2)</sup> Basic UAAL rates have been calculated on a combined basis for all General Tiers. COLA UAAL rates have been calculated on a combined basis for all General Tiers that have a COLA (excludes General Tier 2 without COLA and General PEPRA Tier 2 without COLA).

<sup>(3)</sup> Reflects General Tier 2 member COLA contribution rate of 2.63% based on current bargaining agreements.

<sup>(4)</sup> Includes 0.47% in COLA UAAL costs attributed to the first two years of service accrued for the fixed 2% COLA pursuant to Government Code 31627.

<sup>(5)</sup> These aggregated rates are provided for informational purposes only as we understand that the tier specific rates will be implemented.

#### Appendix D

Member Contribution Rates <u>Without</u> 50/50 Sharing of Normal Cost for Non-PEPRA Tiers

Calculated Under Recommended Assumptions								
	Ba	asic	CC	DLA	То	tal		
Entry Age	First \$350	Over \$350	First \$350	Over \$350	First \$350	Over \$350		
15	3.24%	4.86%	1.21%	1.82%	4.45%	6.68%		
16	3.24%	4.86%	1.21%	1.82%	4.45%	6.68%		
17	3.31%	4.96%	1.23%	1.85%	4.54%	6.81%		
18	3.38%	5.06%	1.25%	1.89%	4.63%	6.95%		
19	3.44%	5.17%	1.29%	1.92%	4.73%	7.09%		
20	3.51%	5.27%	1.32%	1.97%	4.83%	7.24%		
21	3.59%	5.38%	1.33%	2.00%	4.92%	7.38%		
22	3.66%	5.49%	1.36%	2.04%	5.02%	7.53%		
23	3.73%	5.60%	1.39%	2.08%	5.12%	7.68%		
24	3.81%	5.71%	1.42%	2.13%	5.23%	7.84%		
25	3.88%	5.82%	1.45%	2.17%	5.33%	7.99%		
26	3.96%	5.94%	1.47%	2.21%	5.43%	8.15%		
27	4.04%	6.06%	1.51%	2.26%	5.55%	8.32%		
28	4.12%	6.18%	1.53%	2.30%	5.65%	8.48%		
29	4.20%	6.30%	1.57%	2.35%	5.77%	8.65%		
30	4.28%	6.42%	1.60%	2.40%	5.88%	8.82%		
31	4.37%	6.55%	1.62%	2.44%	5.99%	8.99%		
32	4.45%	6.68%	1.66%	2.49%	6.11%	9.17%		
33	4.54%	6.81%	1.69%	2.54%	6.23%	9.35%		
34	4.63%	6.95%	1.73%	2.59%	6.36%	9.54%		
35	4.72%	7.08%	1.77%	2.65%	6.49%	9.73%		
36	4.82%	7.22%	1.79%	2.70%	6.61%	9.92%		
37	4.91%	7.37%	1.83%	2.74%	6.74%	10.11%		
38	5.01%	7.51%	1.87%	2.81%	6.88%	10.32%		

#### General Tier 1 Members' Contribution Rates from the June 30, 2016 Actuarial Valuation (Expressed as a Percentage of Monthly Payroll)

	Basic		CO	LA	Total	
Entry Age	First \$350	Over \$350	First \$350	Over \$350	First \$350	Over \$350
39	5.11%	7.66%	1.90%	2.86%	7.01%	10.52%
40	5.21%	7.82%	1.95%	2.92%	7.16%	10.74%
41	5.32%	7.98%	1.99%	2.98%	7.31%	10.96%
42	5.43%	8.14%	2.02%	3.04%	7.45%	11.18%
43	5.54%	8.32%	2.07%	3.10%	7.61%	11.42%
44	5.66%	8.50%	2.12%	3.17%	7.78%	11.67%
45	5.79%	8.69%	2.16%	3.24%	7.95%	11.93%
46	5.91%	8.87%	2.21%	3.31%	8.12%	12.18%
47	6.03%	9.04%	2.24%	3.37%	8.27%	12.41%
48	6.14%	9.21%	2.29%	3.43%	8.43%	12.64%
49	6.23%	9.35%	2.33%	3.49%	8.56%	12.84%
50	6.31%	9.47%	2.36%	3.53%	8.67%	13.00%
51	6.37%	9.56%	2.38%	3.56%	8.75%	13.12%
52	6.42%	9.62%	2.39%	3.59%	8.81%	13.21%
53	6.43%	9.64%	2.39%	3.59%	8.82%	13.23%
54 & Over	6.37%	9.55%	2.37%	3.56%	8.74%	13.11%
nterest:	7.50%					
COLA:	3.00%					
COLA Loading:	37.30%					
Aortality:		-		ected with Scale BB e-third male and two	to 2035 set back one -thirds female	e year for males
alary Increase:	See Exhibit	•				

# General Tier 1 Members' Contribution Rates from the June 30, 2016 Actuarial Valuation (Expressed as a Percentage of Monthly Payroll)

SECTION 4: Reporting Information for the Ventura County Employees' Retirement Association

	Basic	: Only		Basic Only	
Entry Age	First \$350	Over \$350	Entry Age	First \$350	Over \$350
16	2.66%	3.99%	38	4.13%	6.20%
17	2.72%	4.08%	39	4.21%	6.32%
18	2.77%	4.16%	40	4.29%	6.44%
19	2.83%	4.25%	41	4.38%	6.57%
20	2.89%	4.33%	42	4.47%	6.70%
21	2.95%	4.42%	43	4.55%	6.83%
22	3.01%	4.51%	44	4.65%	6.97%
23	3.07%	4.61%	45	4.74%	7.11%
24	3.13%	4.70%	46	4.84%	7.26%
25	3.20%	4.80%	47	4.94%	7.41%
26	3.26%	4.89%	48	5.05%	7.57%
27	3.33%	4.99%	49	5.15%	7.72%
28	3.39%	5.09%	50	5.25%	7.88%
29	3.46%	5.19%	51	5.35%	8.02%
30	3.53%	5.30%	52	5.44%	8.16%
31	3.60%	5.40%	53	5.51%	8.27%
32	3.67%	5.51%	54	5.57%	8.36%
33	3.75%	5.62%	55	5.61%	8.42%
34	3.82%	5.73%	56	5.63%	8.45%
35	3.89%	5.84%	57	5.61%	8.42%
36	3.97%	5.96%	58	5.81%	8.72%
37	4.05%	6.08%	59 & over	6.02%	9.03%
nterest:	7.50%				
OLA:	SEIU members con	tribute a negotiated	d 2.63% for a fixed	12% COLA pursua	nt to Government Code 316
fortality:					35 set back one year for ma
	and set forward one	• •			-
alary Increase	See Exhibit II	,	6 mile		

## General Tier 2 Members' Contribution Rates from the June 30, 2016 Actuarial Valuation (Expressed as a Percentage of Monthly Payroll)

Reporting Information for the Ventura County Employees' Retirement Association

**Calculated Under Recommended Assumptions** 

Salary Increase: See Exhibit II.

SECTION 4:

Note: All members hired after November 1974, will pay a contribution corresponding to entry age 35. These rates are determined before any pickups by the employer.

Entry Age	Basic	COLA	Total
15	7.74%	4.43%	12.17%
16	7.74%	4.43%	12.17%
17	7.74%	4.43%	12.17%
18	7.74%	4.43%	12.17%
19	7.74%	4.43%	12.17%
20	7.74%	4.43%	12.17%
21	7.74%	4.43%	12.17%
22	7.90%	4.52%	12.42%
23	8.07%	4.61%	12.68%
24	8.23%	4.71%	12.94%
25	8.40%	4.81%	13.21%
26	8.57%	4.91%	13.48%
27	8.75%	5.01%	13.76%
28	8.93%	5.11%	14.04%
29	9.12%	5.22%	14.34%
30	9.31%	5.33%	14.64%
31	9.51%	5.44%	14.95%
32	9.71%	5.56%	15.27%
33	9.93%	5.67%	15.60%
34	10.12%	5.79%	15.91%
35	10.32%	5.91%	16.23%
36	10.54%	6.02%	16.56%
37	10.76%	6.15%	16.91%
38	10.99%	6.29%	17.28%
39	11.24%	6.43%	17.67%
40	11.48%	6.56%	18.04%
41	11.71%	6.70%	18.41%
42	11.94%	6.83%	18.77%
43	12.12%	6.93%	19.05%
44	12.23%	7.00%	19.23%

## Safety Members' Contribution Rates from the June 30, 2016 Actuarial Valuation (Expressed as a Percentage of Monthly Payroll)

Reporting Information for the Ventura County Employees' Retirement Association

★ Segal Consulting

**SECTION 4:** 

(Expressed as a Percentage of Monthly Payroll)							
Calculated Under Recommended Assumptions							
	Entry Age	Basic	COLA	Total			
· · · · · · · · · · · · · · · · · · ·	45	12.34%	7.06%	19.40%			
	46	12.40%	7.10%	19.50%			
	47	12.42%	7.11%	19.53%			
	48	12.33%	7.05%	19.38%			
	49 & Over	12.11%	6.92%	19.03%			
Interest:	7.50%						
COLA:	3.00%						
COLA Loading:	57.20%						
Mortality:		ed Healthy Mortality Ta le and 20% female.	ble projected with Scale	BB to 2035 set back three years			
Salary Increase:	See Exhibit II.						
		s hired after November termined before any pic		ution corresponding to entry age			

Safety Members' Contribution Rates from the June 30, 2016 Actuarial Valuation

#### SECTION 4: Reporting Information for the Ventura County Employees' Retirement Association

#### Appendix E

Employer Contribution Rates (Dollar Amounts in Thousands) For Reference Purposes Only – Current Valuation Based on 50/50 Sharing of Normal Cost for All Tiers (PEPRA and Non-PEPRA) with <u>Non-Combined</u> General UAAL Rates

			June 30, 2010	6 Actuarial Valuation	n	
	В	ASIC		COLA		TOTAL
		Estimated Annual		Estimated Annual		Estimated Annua
General Tier 1 Members	Rate	Amount <sup>(1)</sup>	Rate	Amount <sup>(1)</sup>	Rate	Amount <sup>(1)</sup>
Normal Cost <sup>(2)</sup>	8.13%	\$637	2.74%	\$214	10.87%	\$851
UAAL <sup>(3)</sup>	<u>572.72%</u>	44,844	<u>104.69%</u>	<u>8,197</u>	<u>677.41%</u>	<u>53,041</u>
Total Contribution	580.85%	\$45,481	107.43%	\$8,411	688.28%	\$53,892
General Tier 2 Members w/o COLA						
Normal Cost	7.11%	\$15,265	0.00%	\$0	7.11%	\$15,265
UAAL <sup>(3)</sup>	<u>1.11%</u>	2,383	0.00%	<u>0</u>	1.11%	2,383
Total Contribution	8.22%	\$17,648	0.00%	\$0	8.22%	\$17,648
General PEPRA Tier 2 Members w/o COLA						
Normal Cost	6.96%	\$2,453	0.00%	\$0	6.96%	\$2,453
UAAL <sup>(3)</sup>	<u>1.11%</u>	<u>391</u>	0.00%	<u>0</u>	1.11%	<u>391</u>
Total Contribution	8.07%	\$2,844	0.00%	\$0	8.07%	\$2,844
General Tier 2 Members w/COLA						
Normal Cost <sup>(4)</sup>	7.11%	\$15,374	0.08%	\$173	7.19%	\$15,547
UAAL <sup>(3)(5)</sup>	<u>1.11%</u>	2,400	<u>1.29%</u>	<u>2,790</u>	2.40%	<u>5,190</u>
Total Contribution	8.22%	\$17,774	1.37%	\$2,963	9.59%	\$20,737
General PEPRA Tier 2 Members w/COLA						
Normal Cost <sup>(4)</sup>	6.96%	\$4,465	0.01%	\$6	6.97%	\$4,471
UAAL <sup>(3)(5)</sup>	<u>1.11%</u>	<u>712</u>	1.29%	<u>828</u>	2.40%	<u>1,540</u>
Total Contribution	8.07%	\$5,177	1.30%	\$834	9.37%	\$6,011
II General Members <sup>(6)</sup>						
Normal Cost	7.10%	\$38,194	0.07%	\$393	7.17%	\$38,587
UAAL	9.43%	50,730	2.19%	11,815	11.62%	<u>62,545</u>
Total Contribution	16.53%	\$88,924	2.26%	\$12,208	18.79%	\$101,132

#### Appendix E (continued)

Employer Contribution Rates (Dollar Amounts in Thousands) For Reference Purposes Only – Current Valuation Based on 50/50 Sharing of Normal Cost for All Tiers (PEPRA and Non-PEPRA) with <u>Non-Combined</u> General UAAL Rates

			June 30, 2010	6 Actuarial Valuation		
	E	BASIC		COLA		TOTAL
		Estimated Annual		Estimated Annual		Estimated Annual
Safety Members	Rate	Amount <sup>(1)</sup>	Rate	Amount <sup>(1)</sup>	Rate	Amount <sup>(1)</sup>
Normal Cost <sup>(7)</sup>	11.71%	\$18,197	4.88%	\$7,584	16.59%	\$25,781
UAAL	51.58%	80,156	-12.51%	-19,441	39.07%	60,715
Total Contribution	63.29%	\$98,353	-7.63%	-\$11,857	55.66%	\$86,496
Safety PEPRA Members						
Normal Cost	10.21%	\$1,272	4.21%	\$524	14.42%	\$1,796
UAAL	<u>51.58%</u>	6,425	-12.51%	-1,558	<u>39.07%</u>	4,867
Total Contribution	61.79%	\$7,697	-8.30%	-\$1,034	53.49%	\$6,663
All Safety Members <sup>(6)</sup>						
Normal Cost	11.60%	\$19,469	4.83%	\$8,108	16.43%	\$27,577
UAAL	<u>51.58%</u>	86,581	-12.51%	-20,999	<u>39.07%</u>	65,582
Total Contribution	63.18%	\$106,050	-7.68%	-\$12,891	55.50%	\$93,159
All Categories Combined <sup>(6)</sup>						
Normal Cost	8.17%	\$57,663	1.20%	\$8,501	9.37%	\$66,164
UAAL	<u>19.45%</u>	<u>137,311</u>	-1.30%	-9,184	18.15%	128,127
Total Contribution	27.62%	\$194,974	-0.10%	-\$683	27.52%	\$194,291

<sup>(1)</sup> Amounts are in thousands, assumed to be paid throughout the year, and are based on June 30, 2016 annual payroll (also in thousands) shown below:

General Tier 1	\$7,830
General Tier 2	214,696
General PEPRA Tier 2	35,238
General Tier 2C	216,231
General PEPRA Tier 2C	64,147
Safety	155,401
Safety PEPRA	12,457
Total	\$706.000

<sup>(2)</sup> The total employer rate has been adjusted by 0.27% to account for the cost associated with the cessation of member contributions after 30 years of service.

<sup>(3)</sup> Basic UAAL rates have not been calculated on a combined basis for all General Tiers.

<sup>(4)</sup> Reflects General Tier 2 member COLA contribution rate of 2.63% based on current bargaining agreements.

<sup>(5)</sup> Includes 0.47% in COLA UAAL costs attributed to the first two years of service accrued for the fixed 2% COLA pursuant to Government Code 31627.

<sup>(6)</sup> These aggregated rates are provided for informational purposes only as we understand that the tier specific rates will be implemented.

<sup>(7)</sup> The total employer rate has been adjusted by 1.32% to account for the cost associated with the cessation of member contributions after 30 years of service.

#### Appendix E (continued)

Employer Contribution Rates (Dollar Amounts in Thousands) For Reference Purposes Only – Prior Valuation Based on 50/50 Sharing of Normal Cost for All Tiers (PEPRA and Non-PEPRA) with <u>Non-Combined</u> General UAAL Rates

COLA Estimated Annual Amount <sup>(1)</sup> \$230 <u>6,399</u> \$6,629 \$0 <u>0</u> \$0	Rate 10.57% 547.81% 558.38% 7.16% 1.62%	TOTAL Estimated Annual Amount <sup>(1)</sup> \$913 <u>47,331</u> \$48,244 \$15,282
Amount <sup>(1)</sup> \$230 <u>6,399</u> \$6,629 \$0 <u>0</u>	10.57% <u>547.81%</u> 558.38% 7.16%	Amount <sup>(1)</sup> \$913 <u>47,331</u> \$48,244
\$230 <u>6,399</u> \$6,629 \$0 <u>0</u>	10.57% <u>547.81%</u> 558.38% 7.16%	\$913 <u>47,331</u> \$48,244
<u>6,399</u> \$6,629 \$0 <u>0</u>	<u>547.81%</u> 558.38% 7.16%	<u>47,331</u> \$48,244
\$6,629 \$0 <u>0</u>	558.38% 7.16%	\$48,244
\$0 <u>0</u>	7.16%	,
<u>0</u>		¢15 292
<u>0</u>		\$15 282
	1 620/	\$15,283
\$0	1.02%	<u>3,458</u>
	8.78%	\$18,741
\$0	7.03%	\$1,546
<u>0</u>	<u>1.62%</u>	<u>356</u>
\$0	8.65%	\$1,902
\$179	7.24%	\$16,167
<u>2,993</u>	2.96%	<u>6,610</u>
\$3,172	10.20%	\$22,777
\$9	7.05%	\$2,899
<u>551</u>	<u>2.96%</u>	<u>1,217</u>
\$560	10.01%	\$4,116
\$418	7.24%	\$36,808
<u>9,943</u>	<u>11.60%</u>	<u>58,972</u>
	18.84%	_
	$ \begin{array}{r}                                     $	$\begin{array}{c c} \underline{0} & \underline{1.62\%} \\ \$0 & \$.65\% \\ \\ \$179 & 7.24\% \\ \underline{2.993} & \underline{2.96\%} \\ \$3,172 & 10.20\% \\ \\ \$9 & 7.05\% \\ \underline{551} & \underline{2.96\%} \\ \$560 & 10.01\% \\ \\ \$418 & 7.24\% \end{array}$

#### Appendix E (continued)

Employer Contribution Rates (Dollar Amounts in Thousands) For Reference Purposes Only – Prior Valuation Based on 50/50 Sharing of Normal Cost for All Tiers (PEPRA and Non-PEPRA) with <u>Non-Combined</u> General UAAL Rates

			June 30, 2015	5 Actuarial Valuation		
	H	BASIC		COLA		TOTAL
		Estimated Annual		Estimated Annual		Estimated Annual
Safety Members	Rate	Amount <sup>(1)</sup>	Rate	Amount <sup>(1)</sup>	Rate	Amount <sup>(1)</sup>
Normal Cost <sup>(7)</sup>	11.63%	\$18,913	4.84%	\$7,870	16.47%	\$26,783
UAAL	47.33%	76,968	-9.24%	-15,026	38.09%	61,942
Total Contribution	58.96%	\$95,881	-4.40%	-\$7,156	54.56%	\$88,725
Safety PEPRA Members						
Normal Cost	10.40%	\$789	4.28%	\$324	14.68%	\$1,113
UAAL	47.33%	3,589	<u>-9.24%</u>	<u>-701</u>	<u>38.09%</u>	2,888
Total Contribution	57.73%	\$4,378	-4.96%	-\$377	52.77%	\$4,001
All Safety Members <sup>(6)</sup>						
Normal Cost	11.58%	\$19,702	4.81%	\$8,194	16.39%	\$27,896
UAAL	47.33%	80,557	<u>-9.24%</u>	-15,727	<u>38.09%</u>	64,830
Total Contribution	58.91%	\$100,259	-4.43%	-\$7,533	54.48%	\$92,726
All Categories Combined <sup>(6)</sup>						
Normal Cost	8.26%	\$56,092	1.27%	\$8,612	9.53%	\$64,704
UAAL	19.09%	129,586	-0.85%	-5,784	18.24%	123,802
Total Contribution	27.35%	\$185,678	0.42%	\$2,828	27.77%	\$188,506

<sup>(1)</sup> Amounts are in thousands, assumed to be paid throughout the year, and are based on June 30, 2015 annual payroll (also in thousands) shown below:

General Tier 1	\$8,640
General Tier 2	213,455
General PEPRA Tier 2	21,992
General Tier 2C	223,301
General PEPRA Tier 2C	41,116
Safety	162,619
Safety PEPRA	7,582
Total	\$678,705

<sup>(2)</sup> The total employer rate has been adjusted by 0.48% to account for the cost associated with the cessation of member contributions after 30 years of service.

<sup>(3)</sup> Basic UAAL rates have not been calculated on a combined basis for all General Tiers.

<sup>(4)</sup> Reflects General Tier 2 member COLA contribution rate of 2.63% based on current bargaining agreements.

<sup>(5)</sup> Includes 0.54% in COLA UAAL costs attributed to the first two years of service accrued for the fixed 2% COLA pursuant to Government Code 31627.

<sup>(6)</sup> These aggregated rates are provided for informational purposes only as we understand that the tier specific rates will be implemented.

<sup>(7)</sup> The total employer rate has been adjusted by 1.20% to account for the cost associated with the cessation of member contributions after 30 years of service.

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## Ventura County Employees' Retirement Association

Governmental Accounting Standards (GAS) 67 Actuarial Valuation as of June 30, 2016

This report has been prepared at the request of the Board of Retirement to assist VCERA in preparing items related to the pension plan in their financial report. This valuation report may not otherwise be copied or reproduced in any form without the consent of the Board of Retirement and may only be provided to other parties in its entirety. The measurements shown in this actuarial valuation may not be applicable for other purposes.

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December 20, 2016

Board of Retirement Ventura County Employees' Retirement Association 1190 S. Victoria Avenue, Suite 200 Ventura, CA 93003-6572

Dear Board Members:

We are pleased to submit this Governmental Accounting Standards (GAS) 67 Actuarial Valuation as of June 30, 2016. It contains various information that will need to be disclosed in order to comply with GAS 67.

This report was prepared in accordance with generally accepted actuarial principles and practices at the request of the Board to assist VCERA in preparing items related to the pension plan in their financial report. The census and financial information on which our calculations were based was prepared by VCERA. That assistance is gratefully acknowledged.

The measurements shown in this actuarial valuation may not be applicable for other purposes. Future actuarial measurements may differ significantly from the current measurements presented in this report due to such factors as the following: plan experience differing from that anticipated by the economic or demographic assumptions; changes in economic or demographic assumptions; increases or decreases expected as part of the natural operation of the methodology used for these measurements (such as the end of an amortization period); and changes in plan provisions or applicable law.

The actuarial calculations were completed under the supervision of John Monroe, ASA, MAAA, EA. 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 herein. To the best of our knowledge, the information supplied in the actuarial valuation is complete and accurate. Further, in our opinion, the assumptions as approved by the Board are reasonably related to the experience of and expectations for the Plan.

We look forward to reviewing this report with you and to answering any questions.

Sincerely,

Segal Consulting, a Member of The Segal Group, Inc.

By:

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

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

JZM/gxk

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## **SECTION 1**

### VALUATION SUMMARY

Purpose .....i Significant Issues in Valuation Year.....i

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## **SECTION 2**

#### **GAS 67 INFORMATION**

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Schedules of Changes in Net Pension Liability – Last Two Fiscal Years ......7

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#### EXHIBIT 5

Projection of the Pension Plan's Fiduciary Net Position for Use in Calculation of Discount Rate as of June 30, 2016 ...... 10

## **SECTION 3**

#### AICPA SCHEDULES

#### EXHIBIT A

#### EXHIBIT B

Schedule of Pension Amounts	
by Employer as of	
June 30, 20161	3

#### Purpose

This report has been prepared by Segal Consulting to present certain disclosure information required by Governmental Accounting Standards (GAS) 67 as of June 30, 2016. This valuation is based on:

- > The benefit provisions of VCERA, as administered by the Board;
- The characteristics of covered active members, terminated vested members, and retired members and beneficiaries as of June 30, 2015, provided by VCERA;
- > The assets of the Plan as of June 30, 2016, provided by VCERA;
- > Economic assumptions regarding future salary increases and investment earnings; and
- > Other actuarial assumptions, regarding employee terminations, retirement, death, etc.

#### **Significant Issues in Valuation Year**

The following key findings were the result of this actuarial valuation:

- The Governmental Accounting Standards Board (GASB) rules only define pension liability and expense for financial reporting purposes, and do not apply to contribution amounts for actual pension funding purposes. Employers and plans can still develop and adopt funding policies under current practices.
- When measuring pension liability GASB uses the same actuarial cost method (Entry Age method) and the same type of discount rate (expected return on assets) as VCERA uses for funding. This means that the Total Pension Liability (TPL) measure for financial reporting shown in this report is determined on generally the same basis as VCERA's Actuarial Accrued Liability (AAL) measure for funding. We note that the same is generally true for the Normal Cost component of the annual plan cost for funding and financial reporting.
- The TPL and the Plan's Fiduciary Net Position include liabilities and assets held for the Supplemental Medical (\$27.50) Reserve. The TPL only includes a liability up to the amount in the Supplemental Medical (\$27.50) Reserve. This is because we understand that the Supplemental Medical (\$27.50) benefit is a nonvested benefit and once the reserve is depleted no further benefits would need to be paid.
- The Net Pension Liability (NPL) is equal to the difference between the TPL and the Plan's Fiduciary Net Position. The Plan's Fiduciary Net Position is equal to the market value of assets and therefore, the NPL measure is very similar to an Unfunded Actuarial Accrued Liability (UAAL) on a market value basis.

- For this report, the reporting dates for the Plan are June 30, 2016 and 2015. The NPL was measured as of June 30, 2016 and 2015, respectively, and determined based upon rolling forward the TPL from actuarial valuations as of June 30, 2015 and 2014. The Plan's Fiduciary Net Position was valued as of the measurement dates. In addition, any changes in actuarial assumptions or plan provisions that occurred between the valuation date and the measurement date have been reflected.
- The NPL increased from \$855 million as of June 30, 2015 to \$1,065 million as of June 30, 2016 primarily due to the 0.49% return on the market value of assets during 2015/2016 (that was less than the assumed return of 7.50%). Changes in these values during the last two fiscal years ending June 30, 2016 and June 30, 2015 can be found in Exhibit 3.
- The discount rate used to determine the TPL and NPL as of June 30, 2016 was 7.50%, following the same assumption used by the Association in the pension funding valuation as of June 30, 2015. The detailed calculations of the discount rate of 7.50% used in calculation of the TPL and NPL as of June 30, 2016 can be found in Exhibit 5 of Section 2. Various other information that is required to be disclosed can be found throughout Exhibits 1 through 4 in Section 2.
- Based on discussions with VCERA and their auditors, starting with the June 30, 2016 measurement date for the plan, member paid employer contributions are now included as part of the Actuarially Determined Contribution (ADC). Previously, these amounts were classified as member contributions and excluded from the information shown in Exhibit 4. In addition, a similar change has been made in the determination of the Schedule of Pension Amounts shown in Exhibit B. Additionally, also starting with the June 30, 2016 measurement date, employer paid member contributions are excluded from employer contribution in the determination of the amounts shown in Exhibit B. For the results shown in Exhibit B, neither of these changes have been applied on a retroactive basis prior to the 2015-2016 fiscal year.
- Section 3 contains two schedules that the American Institute of Certified Public Accountants (AICPA) recommends be prepared by cost sharing pension plans. These two schedules contain summary information related to GAS 68 and are based on many of the results that will be shown in a separate GAS 68 report. The first schedule shows the method used for allocating the NPL along with the NPL amounts allocated amongst all of the employers in VCERA. The second schedule is a summary that shows the allocated NPL, deferred outflows and inflows of resources and pension expense by employer. Further information regarding GAS 68 including additional information that employers will need to disclose will be provided in a separate report that is anticipated to be completed during the first quarter of 2017.

#### **Summary of Key Valuation Results**

	2016	2015
Disclosure elements for fiscal year ending June 30:		
Service Cost <sup>(1)</sup>	\$129,269,294	\$124,407,916
Total Pension Liability	5,451,538,919	5,219,335,149
Plan's Fiduciary Net Position	4,386,836,709	4,364,795,188
Net Pension Liability	1,064,702,210	854,539,961
Schedule of contributions for fiscal year ending June 30:		
Actuarially determined contributions <sup>(2)</sup>	\$178,748,000	\$173,269,000
Actual employer contributions	178,748,000	173,269,000
Contribution deficiency (excess)	0	0
Demographic data for plan year ending June 30: <sup>(3)</sup>		
Number of retired members and beneficiaries	6,539	6,338
Number of vested terminated members <sup>(4)</sup>	2,639	2,441
Number of active members	8,509	8,299
Key assumptions:		
Investment rate of return	7.50%	7.50%
Inflation rate	3.00%	3.00%
Projected salary increases <sup>(5)</sup>	4.00% - 11.50%, varying by service, including inflation	4.00% - 11.50%, varying by service, including inflation

<sup>(1)</sup> Please note that service cost is always based on the previous year's assumptions, meaning both the 2016 and 2015 values are based on the assumptions as of the preceding June 30.

<sup>(2)</sup> Actuarially Determined Contributions exclude employer paid member contributions. Starting from 2016, actuarially determined contributions include member paid employer contribution.

<sup>(3)</sup> Data as of June 30, 2015 is used in the measurement of the TPL as of June 30, 2016.

<sup>(4)</sup> Includes terminated members with member contributions on deposit.

<sup>(5)</sup> Includes inflation at 3.00% plus real across-the-board salary increases of 0.50% plus merit and longevity increases that vary by service.

#### **Important Information about Actuarial Valuations**

An actuarial valuation is a budgeting tool with respect to the financing of future projected obligations of a pension plan. It is an estimated forecast – the actual long-term cost of the plan will be determined by the actual benefits and expenses paid and the actual investment experience of the plan.

In order to prepare an actuarial valuation, Segal Consulting ("Segal") relies on a number of input items. These include:

- Plan of benefits Plan provisions define the rules that will be used to determine benefit payments, and those rules, or the interpretation of them, may change over time. It is important to keep Segal informed with respect to plan provisions and administrative procedures, and to review the plan description in this report (as well as the plan summary included in our funding valuation report) to confirm that Segal has correctly interpreted the plan provisions.
- Participant data An actuarial valuation for a plan is based on data provided to the actuary by VCERA. Segal does not audit such data for completeness or accuracy, other than reviewing it for obvious inconsistencies compared to prior data and other information that appears unreasonable. It is important for Segal to receive the best possible data and to be informed about any known incomplete or inaccurate data.
- > Assets This valuation is based on the market value of assets as of the valuation date, as provided by VCERA.
- Actuarial assumptions In preparing an actuarial valuation, Segal projects the benefits to be paid to existing plan participants for the rest of their lives and the lives of their beneficiaries. This projection requires actuarial assumptions as to the probability of death, disability, withdrawal, and retirement of each participant for each year. In addition, the benefits projected to be paid for each of those events in each future year reflect actuarial assumptions as to salary increases and cost-of-living adjustments. The projected benefits are then discounted to a present value, based on the assumed rate of return that is expected to be achieved on the plan's assets. There is a reasonable range for each assumption used in the projection and the results may vary materially based on which assumptions are selected. It is important for any user of an actuarial valuation to understand this concept. Actuarial assumptions are periodically reviewed to ensure that future valuations reflect emerging plan experience. While future changes in actuarial assumptions may have a significant impact on the reported results, that does not mean that the previous assumptions were unreasonable.

The user of Segal's actuarial valuation (or other actuarial calculations) should keep the following in mind:

> The valuation is prepared at the request of the Board to assist VCERA in preparing items related to the pension plan in their financial reports. Segal is not responsible for the use or misuse of its report, particularly by any other party.

- An actuarial valuation is a measurement of the plan's assets and liabilities at a specific date. Accordingly, except where otherwise noted, Segal did not perform an analysis of the potential range of future financial measures. The actual long-term cost of the plan will be determined by the actual benefits and expenses paid and the actual investment experience of the plan.
- > If VCERA is aware of any event or trend that was not considered in this valuation that may materially change the results of the valuation, Segal should be advised, so that we can evaluate it.
- Segal does not provide investment, legal, accounting, or tax advice. Segal's valuation is based on our understanding of applicable guidance in these areas and of the plan's provisions, but they may be subject to alternative interpretations. The Board should look to their other advisors for expertise in these areas.

As Segal Consulting has no discretionary authority with respect to the management or assets of VCERA, it is not a fiduciary in its capacity as actuaries and consultants with respect to VCERA.

#### **EXHIBIT 1**

General Information – "Financial Statements", Note Disclosures and Required Supplementary Information for a Cost-Sharing Pension Plan

#### **Plan Description**

*Plan administration.* The Ventura County Employees' Retirement Association (VCERA) was established by the County of Ventura in 1947. VCERA is administered by the Board of Retirement and governed by the County Employees' Retirement Law of 1937 (California Government Code Section 31450 et. seq.) and the California Public Employees' Pension Reform Act of 2013 or "PEPRA" (California Government Code Section 7522 et. seq.). VCERA is a cost-sharing multiple employer public employee retirement system whose main function is to provide service retirement, disability, death and survivor benefits to the safety and general members employed by the County of Ventura. VCERA also provides retirement benefits to the employee members of the Ventura County Courts, Air Pollution Control District, and the Ventura Regional Sanitation District.

The management of VCERA is vested with the VCERA Board of Retirement. The Board consists of nine members and three alternates. The County Treasurer is elected by the general public and a member of the Board of Retirement by law. Four members and one alternate, one of whom may be a County Supervisor, are appointed by the Board of Supervisors. Two members are elected by the general membership; one member and one alternate are elected by the safety membership, one member and one alternate are elected by the retired members of the Association. All members of the Board of Retirement serve terms of three years except for the County Treasurer whose term runs concurrent with his term as County Treasurer.

Plan membership. At June 30, 2016, pension plan membership consisted of the following:

Retired members or beneficiaries currently receiving benefits	6,539
Vested terminated members entitled to but not yet receiving benefits <sup>(1)</sup>	2,639
Active members	<u>8,509</u>
Total	17,687
<sup>(1)</sup> Includes terminated members with member contributions on deposit.	

Note: Data as of June 30, 2016 is not used in the measurement of the TPL as of June 30, 2016.

*Benefits provided.* VCERA provides service retirement, disability, death and survivor benefits to eligible employees. All permanent employees of the County of Ventura or contracting districts who work a regular schedule of 64 or more hours per bi-weekly pay period become members of VCERA upon appointment. There are separate retirement plans for safety and

general member employees. Safety membership is extended to those involved in active law enforcement, fire suppression, and probation. Any new Safety Member who becomes a member on or after January 1, 2013 is designated PEPRA Safety. All other employees are classified as general members. There are four tiers applicable to general members. Those hired prior to June 30, 1979, and certain management personnel who entered service prior to October 16, 2001, are included in Tier 1. Those hired after that date are included in Tier 2. New Members employed after January 1, 2013 are designated as PEPRA Tier 1 or 2.

General members prior to January 1, 2013, are eligible to retire once they attain the age of 70 regardless of service or at age 50 and have acquired 10 or more years of retirement service credit. A member with 30 years of service is eligible to retire regardless of age. General members who are first hired on or after January 1, 2013, are eligible to retire once they have attained the age of 70 regardless of service or at age 52, and have acquired five or more years of retirement service credit.

Safety members prior to January 1, 2013, are eligible to retire once they attain the age of 70 regardless of service or at age 50 and have acquired 10 or more years of retirement service credit. A member with 20 years of service is eligible to retire regardless of age. Safety members who are first hired on or after January 1, 2013, are eligible to retire once they have attained the age of 70 regardless of service or at age 50, and have acquired five or more years of retirement service credit.

The retirement benefit the member will receive is based upon age at retirement, final average compensation, years of retirement service credit and retirement plan and tier.

General member benefits for Tier 1 and Tier 2 are calculated pursuant to the provisions of sections 31676.11 and 31676.1, respectively. The monthly allowance is equal to 1/90th of the first \$350 of final compensation, plus 1/60th of the excess final compensation times years of accrued retirement service credit times age factor from either section 31676.11 (Tier 1) or 31676.1 (Tier 2). General member benefits for those who are first hired on or after January 1, 2013, are calculated pursuant to the provision California Government Code Section 7522.25(d). The monthly allowance is equal to the final compensation multiplied by years of accrued retirement credit multiplied by the age factor from section 7522.20(a).

Safety member benefits are calculated pursuant to the provisions of California Government Code Section 31664. The monthly allowance is equal to 1/50th of final compensation times years of accrued retirement service credit times age factor from Section 31664. For those Safety member benefits first hired on or after January 1, 2013, are calculated pursuant to the provision California Government Code Section 7522.25(d). The monthly allowance is equal to the final compensation multiplied by years of accrued retirement credit multiplied by the age factor from section 7522.25(d).

For members with membership dates before January 1, 2013, the maximum monthly retirement allowance is 100% of final compensation. There is no final compensation limit on the maximum retirement benefit for members with membership dates on or after January 1, 2013. However, the maximum amount of compensation earnable that can be taken into account for 2016

for members with membership dates on or after July 1, 1996 but before January 1, 2013 is \$265,000. For members with membership dates on or after January 1, 2013 the maximum amount of pensionable compensation that can be taken into account for 2016 is equal to \$117,020 for those enrolled in Social Security (\$140,424 for those not enrolled in Social Security). These limits are adjusted on an annual basis. Members are exempt from paying member contributions and employers are exempt from paying employer contributions on compensation in excess of the annual cap.

Final average compensation consists of the highest 12 consecutive months for a Safety or Tier 1 General member and the highest 36 consecutive months for a Tier 2, PEPRA Tier 1 and 2, General and PEPRA Safety member.

The member may elect an unmodified retirement allowance, or choose an optional retirement allowance. The unmodified retirement allowance provides the highest monthly benefit and a 60% continuance to an eligible surviving spouse. An eligible surviving spouse is one married to the member at least two years prior to the date of death and has attained age 55 on or prior to the date of death. There are four optional retirement allowances the member may choose. Each of the optional retirement allowances requires a reduction in the unmodified retirement allowance in order to allow the member the ability to provide certain benefits to a surviving spouse or named beneficiary having an insurable interest in the life of the member.

VCERA provides an annual cost-of-living benefit to Safety and Tier 1 General member retirees. The cost-of-living adjustment, based upon the Consumer Price Index for the Los Angeles, Riverside, Orange County area, is capped at 3.0%. Certain Tier 2 general member retirees receive a fixed 2% cost-of-living adjustment pursuant to collective bargaining agreements.

The County of Ventura and contracting districts contribute to the retirement plan based upon actuarially determined contribution rates adopted by the Board of Retirement. Employer contribution rates are adopted annually based upon recommendations received from VCERA's actuary after the completion of the annual actuarial valuation. The average employer contribution rate as of June 30, 2016 for 2015-2016 (based on the June 30, 2014 valuation) was 28.11% of compensation.

Members are required to make contributions to VCERA regardless of the retirement plan or tier in which they are included. The average member contribution rate as of June 30, 2016 for 2015-2016 (based on the June 30, 2014 valuation) was 8.61% of compensation.

#### EXHIBIT 2

#### **Net Pension Liability**

The components of the Net Pension Liability are as follows:		
	June 30, 2016	June 30, 2015
Total Pension Liability	\$5,451,538,919	\$5,219,335,149
Plan's Fiduciary Net Position	(4,386,836,709)	(4,364,795,188)
Net Pension Liability	1,064,702,210	\$854,539,961
Plan's Fiduciary Net Position as a percentage of the Total Pension Liability	80.47%	83.63%

The Net Pension Liability (NPL) was measured as of June 30, 2016 and 2015. The Plan's Fiduciary Net Position (plan assets) was valued as of the measurement date while the Total Pension Liability (TPL) was determined based upon rolling forward the TPL from actuarial valuations as of June 30, 2015 and 2014, respectively.

*Plan provisions.* The plan provisions used in the measurement of the NPL are the same as those used in the VCERA actuarial valuations as of June 30, 2016 and 2015. The TPL and the Plan's Fiduciary Net Position include liabilities and assets held for the Supplemental Medical (\$27.50) Reserve.

Actuarial assumptions and methods. The TPLs as of June 30, 2016 and 2015 that were measured by actuarial valuations as of June 30, 2015 and 2014, respectively, used the same actuarial assumptions as the June 30, 2016 and 2015 funding valuations. In particular, the following actuarial assumptions were applied to all periods included in the June 30, 2016 and 2015 measurements:

Inflation	3.00%
Salary increases	4.00% to 11.50%, varying by service, including inflation
Investment rate of return	7.50%, net of pension plan investment expense, including inflation
Other assumptions	Same as those used in June 30, 2016 funding valuation

The Entry Age Actuarial Cost Method used in VCERA's annual actuarial valuation has also been applied in measuring the service cost and TPL with one exception. For purposes of measuring the service cost and TPL, we have reflected the same plan provisions used in determining the member's Actuarial Present Value of Projected Benefits. This is different from the version of this method applied in VCERA's annual funding valuation, where the Normal Cost and Actuarial Accrued Liability are determined as if the current benefit accrual rate had always been in effect.

The long-term expected rate of return on pension plan investments was determined in 2015 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. These returns are 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 allocation and projected arithmetic real rates of return for each major asset class, after deducting inflation but before deducting investment expenses, used in the derivation of the long-term expected investment rate of return assumption are summarized in the following table:

Asset Class	Target Allocation	Long-Term Expected Real Rate of Return
Large Cap U.S. Equity	27.74%	5.90%
Small Cap U.S. Equity	3.41%	6.60%
Developed International Equity	14.73%	6.95%
Emerging Market Equity	3.12%	8.44%
U.S. Core Fixed Income	14.00%	0.71%
Real Estate	7.00%	4.65%
Private Debt/Credit Strategies	5.00%	6.01%
Absolute Return (Risk Parity)	16.00%	4.13%
Real Assets (Master Limited Partnerships)	4.00%	6.51%
Private Equity	5.00%	9.25%
Total	100.00%	

*Discount rate:* The discount rate used to measure the TPL was 7.50% as of both June 30, 2016 and June 30, 2015, respectively. The projection of cash flows used to determine the discount rate assumed plan member contributions will be made at the current contribution rates and that employer contributions will be made at rates equal to the actuarially determined contribution rates. For this purpose, only 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 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 was applied to all periods of projected benefit payments to determine the TPL as of both June 30, 2016 and June 30, 2015.

*Sensitivity of the Net Pension Liability to changes in the discount rate.* The following presents the NPL of the VCERA as of June 30, 2016, calculated using the discount rate of 7.50%, as well as what the VCERA's NPL would be if it were calculated using a discount rate that is 1-percentage-point lower (6.50%) or 1-percentage-point higher (8.50%) than the current rate:

	Current				
	1% Decrease (6.50%)	Discount Rate (7.50%)	1% Increase (8.50%)		
Net Pension Liability as of June 30, 2016	\$1,793,746,374	\$1,064,702,210	\$469,826,329		

#### EXHIBIT 3

Schedules of Changes in Net Pension Liability - Last Two Fiscal Years

	2016	2015
Total Pension Liability		
1. Service Cost	\$129,269,294	\$124,407,916
2. Interest	388,935,379	366,917,714
3. Change of benefit terms	0	0
<ol> <li>Differences between expected and actual experience</li> </ol>	(39,597,865)	(101,178,076)
5. Changes of assumptions	0	234,842,926
6. Benefit payments, including refunds of member contributions	(246,403,038)	(233,695,213)
7. Net change in Total Pension Liability	\$232,203,770	\$391,295,267
8. Total Pension Liability – beginning	<u>5,219,335,149</u>	4,828,039,882
9. Total Pension Liability – ending	<u>\$5,451,538,919</u>	<u>\$5,219,335,149</u>
Plan's Fiduciary Net Position		
10. Contributions – employer	\$178,748,483(1)	\$175,099,550
11. Contributions – plan members	68,430,976 <sup>(1)</sup>	63,678,770
12. Net investment income	25,739,302	88,680,323
13. Benefit payments, including refunds of member contributions	(246,403,038)	(233,695,213)
14. Administrative expense	(4,474,202)	(3,854,106)
15. Other expenses	0	0
16. Net change in Plan's Fiduciary Net Position	\$22,041,521	\$89,909,324
17. Plan's Fiduciary Net Position – beginning	4,364,795,188	4,274,885,864
18. Plan's Fiduciary Net Position – ending	\$4,386,836,709	\$4,364,795,188
19. Net Pension Liability – ending (9) – (18)	<u>\$1,064,702,210</u>	<u>\$854,539,961</u>
20. Plan's Fiduciary Net Position as a percentage of the Total Pension Liability	80.47%	83.63%
21. Covered employee payroll <sup>(2)</sup>	\$688,233,000	\$665,086,000
22. Plan's Net Pension Liability as percentage of covered employee payroll	154.70%	128.49%

<sup>(1)</sup> See footnote (2) under Exhibit 4 on page 8.

<sup>(2)</sup> Covered employee payroll represents compensation earnable and pensionable compensation. Only compensation earnable and pensionable compensation that would possibly go into the determination of retirement benefits are included.

#### Notes to Schedule:

Benefit changes: None

#### **EXHIBIT 4**

Schedule of Employer's Contributions – Last Ten Fiscal Years

Year Ended June 30	Actuarially Determined Contributions <sup>(1)(2)</sup>	Contributions in Relation to the Actuarially Determined Contributions <sup>(2)</sup>	Contribution Deficiency (Excess)	Covered-Employee Payroll <sup>(3)</sup>	Contributions as a Percentage of Covered Employee Payroll
2007	\$86,455,000	\$86,455,000	\$0	\$519,145,000	16.65%
2008	104,429,000	104,429,000	0	551,968,000	18.92%
2009	105,278,000	105,278,000	0	599,173,000	17.57%
2010	97,324,000	97,324,000	0	634,777,000	15.33%
2011	111,585,000	111,585,000	0	654,829,000	17.04%
2012	132,386,000	132,386,000	0	637,037,000	20.78%
2013	142,370,000	142,370,000	0	632,146,000	22.52%
2014	161,247,000	161,247,000	0	642,779,000	25.09%
2015	173,269,000	173,269,000	0	665,086,000	26.05%
2016	178,748,000	178,748,000	0	688,233,000	25.97%

See accompanying notes to this schedule on next page.

<sup>(1)</sup> All "Actuarially Determined Contributions" through June 30, 2014 were determined as the "Annual Required Contribution" under GAS 25 and 27.

<sup>(2)</sup> Actuarially Determined Contributions exclude employer paid member contributions. Starting from 2016, actuarially determined contributions include member paid employer contribution.

<sup>(3)</sup> Covered employee payroll represents compensation earnable and pensionable compensation. Only compensation earnable and pensionable compensation that would possibly go into the determination of retirement benefits are included.

Notes to Exhibit 4					
Methods and assumptions used to establish "actuarially determined contribution" rates:					
Valuation date	Actuarially determined contribution rates ar end of the fiscal year in which contributions	re calculated as of June 30, two years prior to the s are reported			
Actuarial cost method	Entry Age Actuarial Cost Method				
Amortization method	Level percent of payroll				
Remaining amortization period	15 years for UAAL as of June 30, 2004. Any changes in UAAL after June 30, 2004 are separately amortized over a 15-year closed period effective with that valuation. Effective Jur 30, 2012, any changes in UAAL due to actuarial gains or losses or due to plan amendments (with the exception of a change due to retirement incentives) will be amortized over a 15-year closed period effective with that valuation (up to a 5-year closed period for retirement incentives). Any change in UAAL due to changes in actuarial assumptions or methods will b amortized over a 20-year closed period effective with that valuation.				
Asset valuation method	Market value of assets less unrecognized returns in each of the last ten semi-annual accountin periods. Unrecognized returns are equal to the difference between the actual market return and the expected return on market value and are recognized over a five-year period. The Actuarial Value of Assets is reduced by the value of the supplemental medical benefit reserve and statutory contingency reserve.				
Actuarial assumptions:	June 30, 2016 Valuation Date	June 30, 2015 Valuation Date			
Investment rate of return	7.50%, net of pension plan administration and investment expenses, including inflation	7.50%, net of pension plan administration and investment expenses, including inflation			
Inflation rate	3.00%	3.00%			
Real across-the-board salary increase Projected salary increases <sup>(1)</sup>	0.50% General: 4.00% to 9.50% and Safety: 4.00% to 11.50%	0.50% General: 4.00% to 9.50% and Safety: 4.00% to 11.50%			
Cost of living adjustments	For General Tier 1 and Safety, 3% (actual increases are contingent upon CPI increases with a 3.00% maximum). For General Tier 2, SEIU members receive a fixed 2% cost-of- living adjustment not subject to CPI increases that applies to future service after March 2003.	For General Tier 1 and Safety, 3% (actual increases are contingent upon CPI increases with a 3.00% maximum). For General Tier 2, SEIU members receive a fixed 2% cost-of- living adjustment not subject to CPI increases that applies to future service after March 2003			
Other assumptions	Same as those used in the June 30, 2016 funding actuarial valuation	Same as those used in the June 30, 2015 funding actuarial valuation			

<sup>(1)</sup> Includes inflation at 3.00% plus real across-the-board salary increases of 0.50% plus merit and longevity increases.

#### **EXHIBIT 5**

Projection of the Pension Plan's Fiduciary Net Position for Use in Calculation of Discount Rate as of June 30, 2016 (\$ in millions)

Year Beginning	Projected Beginning Plan's Fiduciary Net Position	Projected Total Contributions	Projected Benefit Payments	Projected Administrative Expenses	Projected Investment Earnings	Projected Ending Plan's Fiduciary Net Position
July 1	<u>(a)</u>	(b)	(c)	(d)	(e)	(f) = (a) + (b) - (c) - (d) + (e)
2015	\$4,365	\$247	\$246	\$4	\$26	\$4,387
2016	4,387	251	270	4	328	4,691
2017	4,691	252	288	5	350	5,001
2018	5,001	257	306	5	373	5,320
2019	5,320	219	325	5	395	5,602
2020	5,602	220	342	6	415	5,890
2021	5,890	201	362	6	436	6,158
2022	6,158	216	382	6	456	6,441
2023	6,441	228	403	7	476	6,736
2024	6,736	184	424	7	496	6,985
2040	8,742	41	710	9	631	8,694
2041	8,694	38	722	9	627	8,627
2042	8,627	35	733	9	621	8,542
2043	8,542	32	742	9	614	8,437
2044	8,437	30	750	9	606	8,314
2089	3,340	5	24	3	250	3,567
2090	3,567	5	18	4	267	3,817
2091	3,817	5 5	14	4	286	4,089
2092	4,089	5	11	4	306	4,386
2093	4,386	5	8	4	329	4,707
2127	51,029	52	0 *	52	3,827	54,856
2128	54,856				- ) -	- ,
2128 E	Discounted Value: 15 **					

\* Less than \$1 million, when rounded.

\*\* \$54,856 million when discounted with interest at the rate of 7.50% per annum has a value of \$15 million as of June 30, 2015.

#### EXHIBIT 5

Projection of the Pension Plan's Fiduciary Net Position for Use in Calculation of Discount Rate as of June 30, 2016

(\$ in millions) - continued

#### Notes:

- (1) Amounts may not total exactly due to rounding.
- (2) Amounts shown in the year beginning July 1, 2015 row are actual amounts, based on the unaudited financial statements provided by VCERA.
- (3) Years 2025-2039, 2045-2088, and 2094-2126 have been omitted from this table.
- (4) <u>Column (a)</u>: Except for the "discounted value" shown for 2128, none of the projected beginning Plan's Fiduciary Net Position amounts shown have been adjusted for the time value of money.
- (5) <u>Column (b)</u>: Projected total contributions include employee and employer normal cost rates applied to closed group projected payroll (based on covered active members as of June 30, 2015), plus employer contributions to the unfunded actuarial accrued liability. Contributions are assumed to occur halfway through the year, on average.
- (6) <u>Column (c)</u>: Projected benefit payments have been determined in accordance with paragraph 39 of GASB Statement No. 67, and are based on the closed group of active, inactive vested, retired members, and beneficiaries as of June 30, 2015. The projected benefit payments reflect the cost of living increase assumptions used in June 30, 2016 valuation report and include projected benefits associated with the Supplemental Medical (\$27.50) Reserve.
- (7) <u>Column (d)</u>: Projected administrative expenses are calculated as approximately 0.10% of the projected beginning Plan's Fiduciary Net Position amount. The 0.10% portion was based on the actual fiscal year 2015/2016 administrative expenses (unaudited) as a percentage of the actual beginning Plan's Fiduciary Net Position as of July 1, 2015. Administrative expenses are assumed to occur halfway through the year, on average.
- (8) <u>Column (e)</u>: Projected investment earnings are based on the assumed investment rate of return of 7.50% per annum.
- (9) As illustrated in this Exhibit, the Plan's Fiduciary Net Position was projected to be available to make all projected future benefit payments for current Plan members. In other words, there is no projected "cross-over date" when projected benefits are <u>not</u> covered by projected assets. Therefore, the long-term expected rate of return on Plan investments of 7.50% per annum was applied to all periods of projected benefit payments to determine the Total Pension Liability as of June 30, 2016 shown earlier in this report, pursuant to paragraph 44 of GASB Statement No. 67.

#### **EXHIBIT A**

#### Schedule of Employer Allocations as of June 30, 2016

#### July 1, 2015 to June 30, 2016 Actual Compensation by Employer and Tier

Employer ID	Employer	General Tier 1 and 2	General Tier 1 and 2 %	Safety Tier	Safety Tier %	Total Compensation	Total %
01	County of Ventura	\$480,177,367	92.902%	\$171,370,467	100.000%	\$651,547,835	94.670%
10	Ventura County Courts	\$26,965,643	5.217%	\$0	0.000%	\$26,965,643	3.917%
11	Ventura County Air Pollution Control Department	\$4,525,665	0.876%	\$0	0.000%	\$4,525,665	0.658%
22	Ventura Regional Sanitation District	\$5,194,018	<u>1.005%</u>	\$0	0.000%	\$5,194,018	0.755%
	Total	\$516,862,695	100.000%	\$171,370,467	100.000%	\$688,233,162	100.000%

#### Allocation of June 30, 2016 Net Pension Liability (NPL)

							Employer Allocation
Employer ID	Employer	General Tier 1 and 2	General Tier 1 and 2 %	Safety Tier	Safety Tier %	Total NPL	Percentage
01	County of Ventura	\$470,584,445	92.902%	\$558,165,333	100.000%	\$1,028,749,778	96.623%
10	Ventura County Courts	26,426,927	5.217%	0	0.000%	26,426,927	2.482%
11	Ventura County Air Pollution Control Department	4,435,252	0.876%	0	0.000%	4,435,252	0.417%
22	Ventura Regional Sanitation District	5,090,253	<u>1.005%</u>	<u>0</u>	0.000%	5,090,253	0.478%
	Total	\$506,536,877	100.000%	\$558,165,333	100.000%	\$1,064,702,210	100.000%

#### Notes:

Actual July 1, 2015 through June 30, 2016 compensation information was provided by VCERA. Results may not total due to rounding.

The Net Pension Liability (NPL) for each tier is the Total Pension Liability (TPL) minus the Plan's Fiduciary Net Position. The TPL for each tier is obtained from internal valuation results based on the actual participants in each tier. The Plan's Fiduciary Net Position for each tier was determined by adjusting each tier's internally tracked valuation value of assets (which is used to determine employer contribution rates by tier) by the ratio of the total VCERA Plan's Fiduciary Net Position to total VCERA valuation value of assets. Based on this methodology, any non-valuation reserves (such as the \$27.50 Supplemental Medical Benefit) are allocated amongst the tiers based on each tier's valuation value of assets.

The Safety Tier only has one employer (County of Ventura), so all of the NPL for that tier is allocated to the County.

For the two other tiers that have multiple employers, the NPL is allocated based on the actual compensation for each employer in the tier during the period ending on the measurement date within the tier.

- Calculate ratio of employer's compensation to the total compensation for the tier.
- This ratio is multiplied by the NPL for the tier to determine the employer's proportionate share of the NPL for the tier.
- If the employer is in several tiers, the employer's total allocated NPL is the sum of its allocated NPL from each tier.

- Proportionate share of total plan NPL is then the ratio of the employer's total allocated NPL to the total NPL of all employers.

- In this allocation, General Tier 1 and 2 were treated as one tier (combined) consistent with the determination of the Basic UAAL rate in the actuarial valuation.

For purposes of the above results, the reporting date for the employer under GAS 68 is June 30, 2017. The reporting date and measurement date for the plan under GAS 67 are assumed to be June 30, 2016. Consistent with the provisions of GAS 68, the assets and liabilities measured as of June 30, 2016 are <u>not</u> adjusted or "rolled forward" to June 30, 2017 for employer reporting under GAS 68. Other results, such as the total deferred inflows and outflows would also be allocated based on the same proportionate shares determined above.

## EXHIBIT B

### Schedule of Pension Amounts by Employer as of June 30, 2016

Deferred Outflows of Resources	County of Ventura	Ventura County Courts	Ventura County Air Pollution Control Department	Ventura Regional Sanitation District	Total for All Employers
Differences Between Expected and Actual Experience	\$0	\$0	\$0	\$0	\$0
Net Excess of Projected Over Actual Earnings on					
Pension Plan Investments (If Any)	227,678,203	5,848,687	981,590	1,126,552	235,635,032
Changes of Assumptions	139,638,674	3,587,093	602,025	690,932	144,518,724
Changes in Proportion and Differences Between Employer Contributions and Proportionate Share of					
Contributions	1,673,923	229,353	193,264	287,160	2,383,700
<b>Total Deferred Outflows of Resources</b>	\$368,990,800	\$9,665,133	\$1,776,879	\$2,104,644	\$382,537,456
Deferred Inflows of Resources					
Differences Between Expected and Actual Experience	\$111,838,105	\$2,872,941	\$482,168	\$553,375	\$115,746,589
Net Excess of Actual Over Projected Earnings on Pension Plan Investments (If Any)	0	0	0	0	0
Changes of Assumptions	0	0	0	0	0
Changes in Proportion and Differences Between Employer Contributions and Proportionate Share of					
Contributions	317,281	2,027,358	39,061	0	2,383,700
<b>Total Deferred Inflows of Resources</b>	\$112,155,386	\$4,900,299	\$521,229	\$553,375	\$118,130,289
Net Pension Liability as of June 30, 2015	\$822,801,569	\$24,428,566	\$3,456,606	\$3,853,220	\$854,539,961
Net Pension Liability as of June 30, 2016	\$1,028,749,778	\$26,426,927	\$4,435,252	\$5,090,253	\$1,064,702,210
Pension Expense Excluding That Attributable to Emp	loyer-Paid Mem	ber Contributions	1		
Proportionate Share of Allocable Plan Pension Expense	\$163,900,087	\$4,210,330	\$706,623	\$810,977	\$169,628,017
Net Amortization of Deferred Amounts from Changes in Proportion and Differences Between Employer Contributions and Proportionate Share of					
Contributions	278,204	(393,867)	42,226	73,437	0
Total Employer Pension Expense Excluding That Attributable to Employer-Paid Member	¢1.44.150.204				¢1.00.000.017
Contributions	\$164,178,291	\$3,816,463	\$748,849	\$884,414	\$169,628,017

#### EXHIBIT B

#### Schedule of Pension Amounts by Employer as of June 30, 2016 – continued

#### Notes:

Amounts shown in this exhibit excluding the differences between employer contributions and proportionate share of contributions were allocated by employer based on the Employer Allocation Percentage calculated in Exhibit A.

In determining the pension expense:

- Any differences between projected and actual investment earnings on pension plan investments are recognized over a period of five years beginning with the year in which they occur.
- Differences between expected and actual experience and between employer contributions and proportionate share of contributions are recognized over the average of the expected remaining service lives of all employees that are provided with pensions through VCERA determined as of June 30, 2015 (the beginning of the measurement period ending June 30, 2016) and is 5.57 years.

The average of the expected remaining service lives of all employees was determined by:

- Calculating each active employees' expected remaining service life as the present value of \$1 per year of future service at zero percent interest.
- Setting the remaining service life to zero for each nonactive or retired members.
- Dividing the sum of the above amounts by the total number of active employee, nonactive and retired members.

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January 23, 2017

Board of Retirement Ventura County Employee Retirement Association 1190 South Victoria Avenue Ventura, CA 93003

### SUBJECT: PEPRA ANNUAL COMPENSATION LIMIT FOR 2017

Dear Board Members,

The California Public Employees' Pension Reform Act (PEPRA) limits the pensionable compensation used in the calculation of retirement benefits. Specifically, the PEPRA statues set an initial limit of the Social Security maximum, or 120% of the maximum for member plans not integrated with Social Security. VCERA General Member plans are integrated with Social Security, while the Safety Member plans are not. Additionally, PEPRA instructs "retirement systems" to adjust the compensation limit annually for inflation based upon annual changes to the Consumer Price Index for All Urban Consumers.

As an advisory organization, the California Actuarial Advisory Panel (CAAP) issues a letter annually for California public retirement systems, detailing its calculation of the PEPRA compensation limits. In 2014, the VCERA Board of Retirement directed staff to identify the annual adjustments to the PEPRA compensation limits and submit them to the Board for approval.

In November 2016, CAAP again calculated the compensation limit amounts using the required criteria, with the results producing no change for 2017; they remain as follows:

- \$118,775 (integrated with Social Security)
- \$142,530 (not integrated with Social Security)

The calculation steps are detailed in the full published letter, which is attached.

### RECOMMENDED ACTION: ADOPT THE 2016 PEPRA COMPENSATION LIMITS OF \$118,775 AND \$142,530 AS CALCULATED BY THE CALIFORNIA ACTUARIAL ADVISORY PANEL (CAAP).

I would be pleased to respond to any questions on this matter at our January 23, 2017 meeting.

Sincerely,

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Linda Webb Retirement Administrator

Attachment

# California Actuarial Advisory Panel



Paul Angelo Senior Vice President and Actuary Segal Consulting Chairperson

John Bartel President Bartel Associates Vice Chairperson

lan Altman Managing Partner Altman and Cronin Benefit Consultants, LLC

David Driscoll Principal and Consulting Actuary Buck Consultants

David Lamoureux Deputy System Actuary California State Teachers' Retirement System

> Graham Schmidt Consulting Actuary Cheiron, Inc.

November 23, 2016

# SUBJECT: PEPRA Compensation Limit for 2017 (Code Section 7522.10)

To Whom It May Concern:

Pursuant to a request from a Public Agency, the California Actuarial Advisory Panel (the Panel) is publishing this letter to provide a calculation of the Pension Compensation Limits for the Calendar Year 2017.

# **Background**

Pursuant to Government Code section 7507.2(b), the responsibilities of the Panel include "Replying to policy questions from public retirement systems in California" and "Providing comment upon request by public agencies." In 2013, members of the Panel received a request from a public retirement system (the San Joaquin County Employees' Retirement Association) to compute and publish the annual compensation limit prescribed by the California Public Employees' Pension Reform Act of 2013 (PEPRA), as amended by Senate Bill No. 13 (SB 13). This request was made to address a concern that minor calculation or rounding differences could result in different systems calculating slightly different pension compensation limits.

The Panel agreed to calculate the dollar amounts of the pension compensation limits for 2014 and future years, as we believe that the use of a uniform compensation limit will provide administrative benefits to California's public retirement systems. However, as the Panel is an advisory body only (Government Code section 7507.2(e) states that "The opinions of the California Actuarial Advisory Panel are nonbinding and advisory only"), the Panel encourages each system to independently review the calculation of the pension compensation limits contained in this letter.

> State Controller's Office Division of Accounting and Reporting P.O. Box 942850, Sacramento, CA 94250 Phone: 916-322-3702 Fax: 916-323-4807

To Whom It May Concern November 23, 2016 Page 2

# <u>Analysis</u>

Section 7522.10 of the Government Code is as follows:

7522.10. (a) On and after January 1, 2013, each public retirement system shall modify its plan or plans to comply with the requirements of this section for each public employer that participates in the system.

(b) Whenever pensionable compensation, as defined in Section 7522.34, is used in the calculation of a benefit, the pensionable compensation shall be subject to the limitations set forth in subdivision (c).

(c) The pensionable compensation used to calculate the defined benefit paid to a new member who retires from the system shall not exceed the following applicable percentage of the contribution and benefit base specified in Section 430(b) of Title 42 of the United States Code on January 1, 2013:

(1) One hundred percent for a member whose service is included in the federal system.

(2) One hundred twenty percent for a member whose service is not included in the federal system.

(d) (1) The retirement system shall adjust the pensionable compensation described in subdivision (c) based on the annual changes to the Consumer Price Index for All Urban Consumers: U.S. City Average, calculated by dividing the Consumer Price Index for All Urban Consumers: U.S. City Average, for the month of September in the calendar year preceding the adjustment by the Consumer Price Index for All Urban Consumers: U.S. City Average, for the month of September of the previous year rounded to the nearest thousandth. The adjustment shall be effective annually on January 1, beginning in 2014.

The annual compensation pensionable compensation limit computed by the Panel for 2016 was \$117,020 for those included in the federal Social Security system and \$140,424 for those not included.

The Consumer Price Indices for All Urban Consumers (CPI-U) U.S. City Average for the months of September 2015 and 2016 are as follows<sup>1</sup>:

- September, 2016: 241.428
- September, 2015: 237.945

<sup>&</sup>lt;sup>1</sup> <u>http://data.bls.gov/timeseries/CUUR0000SA0</u>

The annual change, computed by dividing the 2016 Index by the 2015 Index, rounded to the nearest thousandth is as follows:

• 241.428 ÷ 237.945 = 1.015

Applying this annual adjustment to the 2016 limits yields the following limits for calendar year 2017:

- \$117,020 x 1.015 = \$118,775 (included in federal system)
- \$140,424 x 1.015 = \$142,530 (not included in federal system)

The indexation of the maximum compensation to be used by CalSTRS using the February CPI-U, based on AB 1381 passed by the legislature in 2013, is not addressed in this letter.

# **Conclusion**

The calculations described above indicate the compensation limit for PEPRA members for Calendar Year 2017 will increase to \$118,775 for members participating in the federal system (7522.10(c)(1) limit) and \$142,530 for members not participating in the federal system (7522.10(c)(2) limit). The Panel intends to provide similar calculations in future years. The contents of this letter are nonbinding and advisory only, and we encourage each public retirement system to independently evaluate these calculations.

Sincerely,

Paul Angelo Chair, California Actuarial Advisory Panel

cc: Panel members:

John Bartel, Vice Chair Ian Altman David Driscoll David Lamoureux Graham Schmidt

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January 23, 2017

Board of Retirement Ventura County Employees' Retirement Association 1190 South Victoria Avenue, Suite 200 Ventura, CA 93003

# SUBJECT: UPDATE ON REQUEST TO COUNTY OF VENTURA AUDITOR CONTROLLER AND STEERING COMMITTEE FOR VCHRP RETIREMENT TABLE ACCESS

Dear Board Members:

The following update is submitted to the Board of Retirement on VCERA's request for read-only and query access to eight (8) retirement tables in the retirement module of the County's VCHRP payroll system.

### Brief Background

In May of 2016, VCERA formally requested this read-only and query access through the A-C's formal written process. That request was denied. Shortly after, VCERA appealed this denial with Auditor-Controller, who referred the request to the VCHRP Steering Committee.

On July 18, 2016, the Retirement Administrator, Board Chair and COO attended the VCHRP Steering Committee.

On October 19, 2016, the Steering Committee responded for VCERA's request (memorandum provided) and gave a brief explanation of their proposed alternative for providing additional data. The committee also asked to discuss its proposed solution.

On November 14, 2016 and January 11, 2017, VCERA staff met with members of the Auditor-Controller's staff and steering committee member Ed Althof.

On January 17, 2017, Garrick Leedy in the Payroll Division of the Auditor-Controller's office notified VCERA that the Steering Committee had decided to provide view-only access to three (3) of the eight (8 retirement tables VCERA had requested.

January 23, 2017 VCHRP Retirement Table Access Update Page **2** of **2** 

These tables are shown below; those now granted with view-only access are highlighted. The access does not allow VCERA to query the employee data.

VC Employee Data:		
<ul> <li>VC Adjustment History</li> </ul>		
<ul> <li>VC Estimated Pay</li> </ul>		
<ul> <li>VC Estimated Pay Adjustments</li> </ul>		

Mr. Leedy indicated VCERA's full request remains under consideration.

Staff will update the Board when the Steering Committee rules on the remainder of the access request.

Sincerely,

Sudaliebe

Linda Webb Retirement Administrator





# **VCHRP Steering Committee**

DATE: October 16, 2016

- TO: Ventura County Employee Retirement Association (VCERA) Linda Webb, Retirement Administrator 1190 South Victoria Avenue, Suite 200 Ventura, CA 93003
- FROM: VCHRP Steering Committee

# SUBJECT: Response to VCERA Programming Request, July 18, 2016

This letter serves as written response to the request by VCERA's Retirement Administrator, Linda Webb for Read Only Access to VCHRP to enable VCERA the ability to diagnose their data or system issues more proactively.

It is our understanding that retirement associations typically do not have access to payroll systems they service primarily because the payroll system contains additional confidential and private information that is not pertinent to the administration of retirement plans, i.e. matters such as health plan enrollments, garnishments, and another personnel related matters. However, it is our intent to provide VCERA all the information that is needed for the efficient and full administration of the retirement system. To that end; the VCHRP Security Administrator analyzed the current VCERA configuration and bi-weekly data files provided by the county to VCERA and determined the following:

- That all the data requested by VCERA are contained in the current data feeds, other than a small subset of data found in four tables. It is recommended that this data be provided in a separate interface file.
- To be consistent with decentralized timekeeping departments/agencies, a recommendation to modify access to menus, tables and query access for those VCERA employees who provide payroll clerical services for VCERA employees only is proposed.
- Upon review of the access requested, and our proposal to add additional data elements in an independent bi-weekly file, the county proposes a meeting to conduct a walk-through of the comparison of the requested data with the current and proposed bi-weekly data files received for VCERA.

Please let the VCHRP Steering Committee know if there are any questions and provide us with potential dates and times we can coordinate a walk-through of the comparison analysis.

Many thanks!

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January 23, 2017

Board of Retirement Ventura County Employees' Retirement Association 1190 South Victoria Avenue, Suite 200 Ventura, CA 93003-6572

Subject: Reinstatement of Retirees

Dear Board Members:

At our last meeting, I raised the question as to what retirement plan a retiree should be placed upon reinstatement to active employment.

As you may recall, during our discussion, I stated that I did not recall the Board having dealt with a reinstatement since PEPRA became effective, but our Chief Counsel indicated that we had, and had placed the retiree who had previously sought reinstatement into the retirement plan in effect on December 31, 2012 (Tier 2). Based on this, we did the same with the two applicants under consideration for reinstatement. Additionally, the Board agreed to look into the issue further.

As it turns out, I had raised the same issue when the retiree reinstatement was considered previously, albeit not at the Board meeting. What I had done was query the chief consultants of the two relevant Legislative Committees through which PEPRA had passed prior to enactment by the Legislature. Their response was that they would definitely not consider an applicant for reinstatement "a new member" as defined under PEPRA, and that their interpretation would be that such applicant would go into the same tier and have the same contribution rate that the county would apply to a new employee of the county who is not subject to PEPRA because of reciprocity (i.e., the retirement plan in effect as of December 31, 2012).

The action the Board took then, and in the most recent cases, was consistent with their interpretation. Accordingly, from my perspective, there is no need to look into the matter further.

I'd be happy to answer any question the Board might have.

Respectfully,

anthe Double

Arthur E. Goulet Retiree Trustee

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January 23, 2017

Board of Retirement Ventura County Employees' Retirement Association 1190 South Victoria Avenue, Suite 200 Ventura, CA 93003-6572

Subject: Legislative Proposal

Dear Board Members:

When our Board was implementing the provisions of AB 1291, and in the process of hiring VCERA's first employees, who were previously county employees, we learned the County was unwilling to agree to the transfer of their existing annual leave accruals based upon possible tax consequences. In particular, the County based their position on those employees transitioning from County employment to VCERA employment as terminating employment within the meaning of Labor Code section 227.3 and, accordingly, had to be paid the value of the leave accruals. Again, the County was concerned that it might be subject to penalties and was unwilling to take the "risk".

As you may recall, at that time I expressed concern the inability to transfer leave accruals could affect VCERA's succession planning. While I am not aware that any of our new employees is contemplating leaving our employ for other jobs, or retiring in the near term, I believe it would be in VCERA's interest for succession planning to seek legislation that clearly authorizes leave transfers. Therefore, I am proposing that I be authorized to find an author for a "technical" bill amending CERL in the following format:

Section 31522.11 is added to the Government Code, to read:

All leave balances accrued by County employees appointed by a board of retirement as retirement system employees under any provision of this Act shall be transferred from the county to the retirement system, including full payment to the retirement system on those balances to the extent not already a financial obligation of the retirement system, and such employees shall not be deemed to have terminated employment under Labor Code section 227.3.

Similar language has been included in previous legislation, especially in connection with transition of city or county employees to newly created joint powers authorities.

I also request authority to engage a lobbyist to assist in the legislative effort, in a contractual amount not to exceed \$25,000.

I'd be happy to answer any question the Board might have.

Respectfully,

Tracy Towner Board Chair



October 14, 2016

- To: SACRS Trustees & SACRS Administrators/CEO's
- From: Yves Chery, SACRS Immediate Past President, Nominating Committee Chair SACRS Nominating Committee
- Re: SACRS Board of Director Elections 2017-2018 Elections

SACRS BOD 2017-2018 election process will begin January 2017. Please review the following timeline and distribute to your Board of Trustees, per the bylaws:

DEADLINE	DESCRIPTION				
February 1, 2017	Nominating Committee receives nominations				
	from SACRS membership				
March 1, 2017	Nominating Committee submits its				
	recommended ballot to each 1937 Act Board				
March 25, 2017	Nominating Committee receives nominations				
	from any 1937 Act Board				
April 1, 2017	Nominating Committee submits final ballot to				
	each 1937 Act Board – ballot consists of				
	recommended ballot plus anybody else who is				
	nominated but not recommended by the				
	Nominating Committee (April 1 is a				
	Saturday; next business day applies)				
May 19, 2017	Conduct elections during the SACRS				
	Business Meeting (At end of the May 2017				
	conference)				
May 19, 2017	Board of Directors take office for 1 year				

Per SACRS Bylaws, Article VI ~ Section 2 – Election, Qualification and Term of Office

"The officers of SACRS shall be regular members of SACRS. The officers shall be elected by majority vote of the quorum of delegates and alternate delegates present at the first meeting in each calendar year and shall hold office for one (1) year and until a successor is elected."

Per SACRS Bylaws, Article VI ~Section 4 - Officer Elections

"...The Board of any regular member County Retirement System may submit write-in candidates to be included in the Nominating Committee's final ballot provided the Nominating Committee receives those write-in candidates prior to March 25th.

<sup>1415</sup> L St. Suite 1000 | Sacramento, CA 95814 | T (916) 441-1850 | F (916) 441-6178 | www.sacrs.org OPERATING UNDER COUNTY EMPLOYEES RETIREMENT LAW OF 1937, GOVERNMENT CODE 31450 ET SEQ



The Nominating Committee will report a final ballot to each regular member County Retirement System prior to April 1.

The Administrator of each regular member County Retirement System shall be responsible for communicating the Nominating Committee's recommended ballot and final ballot to each trustee and placing the election of SACRS Officers on his or her Board agenda. The Administrator shall acknowledge the completion of these responsibilities with the Nominating Committee..."

Interested candidates should submit their letter of intent and brief bio to the Nomination Committee no later than the cut-off dates listed in the schedule. The elections will be held at the SACRS Spring Conference May 16-19, 2017, at the Napa Valley Marriott in Napa, CA. Elections will be held during the Annual Business meeting on Friday, May 19, 2017.

If you have any questions, please contact me directly at <u>ychery2013@gmail.com</u>. Thank you for your prompt attention to this timely matter.

Sincerely,

# Yves Chery

Yves Chery, Los Angeles CERA Trustee SACRS Nominating Committee Chair

CC: SACRS Board of Directors SACRS Nominating Committee Members Sulema H. Peterson, SACRS Administrator

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January 23, 2017

Board of Retirement Ventura County Employees' Retirement Association 1190 South Victoria Avenue, Suite 200 Ventura, CA 93003

### SUBJECT: STAFF REPORT AND ANALYSIS OF ADDITIONAL PAY CODES UNDER PEPRA & UPDATE ON PREVIOUS BOARD ACTION OF OCTOBER 2015

Dear Board Members:

#### Background

In October 2015, the VCERA Board of Retirement took action on pensionability of individual pay codes pursuant to its November 2014 resolution interpreting "pensionable compensation" under Government Code section 7522.34. That action identified pay codes to be included in, and excluded from, "pensionable compensation" applicable to VCERA members who first join the retirement system (without reciprocity) on or after January 1, 2013. The Public Employees' Pension Reform Act of 2013 (PEPRA) describes these members as "new members" (PEPRA Members).

Subsequent to when the pay code information was gathered and presented to the Board of Retirement for action, 9 new codes were introduced and implemented by the County of Ventura. Staff and Outside Counsel have analyzed these new codes, using the same criteria and approach used in developing recommendations to the Board in 2015. Detailed information and analysis of each code is provided in Attachment A.

#### Analysis Summary

Our analysis indicates that of the nine (9) codes, two (2) meet the criteria of pensionable compensation and seven (7) do not. A summary of these are listed below:

Code	Description	Analysis	Reason
NRP	Nurses Retention Premium	Meets Criteria	All in classification are eligible based on objective criteria; recurring payment, not bonus.
R12	Retro 4850 27 Day FLSA Premium	Meets Criteria	Retro code for earn code already included.
NPP	Nurses Premium Pay ED & ICU \$8	Does Not Meet Criteria	Temporary pay item
FCM	Flex Credit	Does Not Meet Criteria	Excluded allowance
SPV	Supervisor Differential	Does Not Meet Criteria	Paid for temporary supervisory assignments

### **Summary of New Code Analysis**

PEPRA Pensionable Compensation Analysis Recommendations Page | 2

Code	Description	Analysis	Reason		
RPA	Retro PEPRA Additional	Does Not Meet	Retro code for earn codes already		
	Pay	Criteria	excluded.		
XRC	Current Year Retro	Does Not Meet	Code to track overpayments; no		
	Repayments	Criteria	application to VCERA		
TMS	Taxable Meal Stipend	Does Not Meet	Excluded employer-provided		
	Reimbursement	Criteria	reimbursement		
HFP*	HCA Fiscal Premium	Does Not Meet	Discretionary pay item, per		
	Pay VCMC	Criteria	Management Resolution		

\*County of Ventura disagrees with VCERA analysis.

The only code for which there is disagreement between VCERA and the County of Ventura is the HCA Fiscal Premium Pay VCMC.

### HCA Fiscal Premium Pay

HCA Fiscal Premium Pay has a discretionary component and may be withheld at a later date without a change in duties. Section 410 of the County of Ventura Management Resolution provides:

"At the sole discretion of the Director-Health Care Agency and upon his/her recommendation, the Director-Human Resources **may** approve a premium pay at the rate of seven and one-half percent (7.5%) of the employee's base bi-weekly pay (exclusive of other additions) for employees in the classifications of Fiscal Manager I-IV and Assistant Chief Financial Officer-HCA who are assigned to positions in the Ventura County Medical Center and/or Santa Paula Hospital. The premium provided by this section is "at will", meaning it may be discontinued at any time without cause and without any pre-deprivation process at the sole discretion of the Director-Health Care Agency." (Emphasis added.) <sup>1</sup>

HCA Fiscal Premium Pay is comparable to items previously excluded from pensionable compensation by the Board of Retirement in its October 19, 2015 action, such as supplemental pay for attorneys (pay code TSC). The pay description for this attorney premium in the Management Resolution also indicates it is at the sole discretion of the Appointing Authority, and may be discontinued at any time without cause and without any pre-deprivation process.

The Board's November 2014 resolution interpreting Government Code section 7522.34 subdivision (a)(10) – "pensionable compensation", excludes discretionary pay:

"... Bonuses that are not part of the normal monthly rate of pay of the member and similarly situated members for full-time service during normal working hours pursuant to publicly available pay schedules (including, but not limited to, special non-essential skills bonus; temporary promotion bonus; productivity bonuses; **discretionary or temporary special assignment bonuses**..." (Emphasis added.)

The County of Ventura has programmed this pay code as "excluded"; however, the Human Resources Director has indicated that the County believes HCA Fiscal Premium Pay to be in the nature of base pay and should be "included."

Background materials on the creation of HCA Fiscal Premium Pay are provided.

<sup>&</sup>lt;sup>1</sup> Job titles and classifications for positions currently receiving HCA Premium Pay changed, effective September 25, 2016. County of Ventura indicates an update to the Management Resolution language is pending.

PEPRA Pensionable Compensation Analysis Recommendations Page | 3

### **Corrective Action**

At implementation, the County of Ventura made a preliminary determination for each code as to pensionability. In each instance, VCERA and Outside Counsel agree with these preliminary determinations, with the following two (2) exceptions:

- NPP (Nurses Premium Pay) was programmed in the County payroll system as "included" (pensionable) incorrectly, but the Auditor-Controller's office reports that the code was never used and is currently inactive. So, currently no corrective action is needed; if the code is moved to active status, it should be categorized as "excluded".
- 2. NRP (Nurses Retention Premium) was programmed in the County payroll system as "excluded" (not pensionable) incorrectly for PEPRA members the first quarterly payment made in April 2016. (It was categorized as "included" for compensation earnable for classic members.) After discussion with County HR, the Auditor-Controller, Labor Relations and consultation with Outside Counsel, on May 4, 2016 VCERA deemed this pay item to be pensionable for PEPRA members (memorandum provided). Because the first payment of NRP was issued on April 29, 2016, one payroll cycle had NRP classified incorrectly. Corrective action is needed for the first pay cycle from "exclude" to "include."

### Update on Corrective Action Requested in 2015

The October 19, 2015 action taken by the Board of Retirement for inclusion/exclusion of established pay codes resulted in a request to the County of Ventura and the Ventura Regional Sanitation District (VRSD) to change their practice for certain codes prospectively, effective January 3, 2016. Our records indicate that those prospective changes were completed.

For 27 codes (22 for the County of Ventura (COV) and 5 for VRSD), *retroactive* corrective action was requested, effective January 1, 2013 to coincide with PEPRA's effective date. For 26 of these, the requested action was to correct past inclusion (reversal of employer contributions and refund of employee contributions). The remaining code was to correct past exclusion (additional employer contributions and member contributions due.)

Our records indicate that the requested retroactive changes have not yet been completed by COV or VRSD. The Auditor-Controller's staff indicates they cannot estimate when they can begin processing these corrections. VRSD reports they anticipate their corrections to be completed by the end of the fiscal year.

<u>RECOMMENDATION</u>: APPROVE AND ADOPT STAFF RECOMMENDATIONS REGARDING THE INCLUSION IN OR EXCLUSION FROM PENSIONABLE COMPENSATION THE SPECIFIC PAY CODES PROVIDED IN ATTACHMENT A, EFFECTIVE ON THE INITIAL DATES OF PAYMENT BY THE COUNTY OF VENTURA, IN SUPPORT OF, AND AS ADDENDUMS TO, THE BOARD RESOLUTION OF NOVEMBER 2014 REGARDING PENSIONABLE COMPENSATION DETERMINATIONS.

Staff will be happy to answer any questions at the January 23, 2017 business meeting.

Sincerely,

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Linda Webb Retirement Administrator

Attachm	ent A - Pensionable C	Compensation						
Employer: \	Ventura County				1			
Earnings Code	Earnings Code Description	Additional Description	MOA Reference	County Includes/ Excludes	I Rotoronco	VCERA Analysis	VCERA Analysis Meets Criteria / Doesn't Meet Criteria / Other	Current Effective Date
NPP	Nurses Premium Pay ED & ICU \$8	Market-based premium pay of \$8 per hour for nurses assigned to the Emergency Dept and Intensive Care Unit. This premium pay was approved temporarily for a 60-day period during recruitment and retention discussions. The premium was extended on October 19, 2015 for 60 days; December 18, 2015 for 60 days; February 24, 2016 for 14 days; and March 8, 2016 for 6 days.	BOS Letter 10/20/15	Includes	7522.34 (a)	Payment to be received for a temporary period of time by a subgroup of similary situated members within a group or class.	Doesn't Meet Criteria	12/20/15
NDD	Nurses Retention Promium	This premium shall serve to make up the difference between their pre-MBPP base hourly rate and their post-implementation base hourly rate, should it fall short of a six		Includes	7522 24(a)	It is a continuing payment, as opposed to a one-time or ad hoc payment (even though many will not be eligible after the first 1-2 rounds of payments). For PEPRA members specifically, it appears to take the place of market-based premium pay, which is pensionable under the VCERA Board's resolution.	Mooto Critoria	4/26/16
NRP	Nurses Retention Premium	percent (6%) increase.	agreement	Includes	7522.34(a)		Meets Criteria	4/26/16
R12	Retro 4850 27 Day FLSA Premium	This will pay retro on the current earnings N12 code.	VCPFA	Includes	7522.34 (a)	Compensation for overtime worked as defined in Section 207(k) for Title 29 of the USC.	Meets Criteria	12/20/15
R12	Fleinium		Management	Includes	7522.54 (a)	In-kind conversion and excluded	Meets Chiena	12/20/13
FCM	Flex Credit Mgmt	Flexible Credit Allowance	Resolution	Excludes	7522.34 (a)	allowance	Doesn't Meet Criteria	12/18/16
HFP	HCA Fiscal Premium Pay	For retention of hospital Fiscal Managers assigned to the hospital (I, II, III, IV and Assistant Chief Financial Officer- HCA, excluding the hospital CFO- HCA)	BOS Letter 9/22/2015		7522.34 (a)	Discretionary pay item. This premium pay is paid at the sole discretion of the Director-Health Care Agency and may be discontinued at any time without cause.	Doesn't Meet Criteria	

Earnings Code	Earnings Code Description	Additional Description	MOA Reference	County Includes/ Excludes	7522.34 Reference	VCERA Analysis	VCERA Analysis Meets Criteria / Doesn't Meet Criteria / Other	Current Effective Date
		Was formerly a comp rate code added into				Payment for temporary supervisory assignments. Thus, the payment is by definition not for regularly assigned normal or essential job functions, nor is it available to all similarly situated members of the same		
SPV	Supervisor Differential	base pay.	All unions	Excludes	7522.34(a)	group or class of employment.	Doesn't Meet Criteria	12/20/15
		Per County: "This code is to pay the PEPRA employees any retro they might				Retroactive payment of additional		
RPA	Retro PEPRA Add'l Pay	have regarding their additional pay items."	All unions	Excludes		pay items that are not pensionable.	Doesn't Meet Criteria	12/20/15
XRC	Current Year Retro Repayments	Per County: "This code is used to collect repay dollars from employees- this does not affect retirement."	All unions	Excludes	7522.34(c) 3	This code is use to track overpayments and has no application to VCERA.	Doesn't Meet Criteria	5/8/16
TMS	Taxable Meal Stipend Reimburs	Code used for tax meal reimbursements.	All unions	Excludes	7522.34(c) 7	Excluded employer-provided reimbursement.	Doesn't Meet Criteria	6/19/16

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restructured into three distinct sections: Recruitment, Labor Relations, and Support Services.

Five additional staff are requested. Support staff: One (1) regular Management Assistant III-C will provide clerical and administrative support, freeing the time of professional staff to focus on the HCA's pressing recruitment and labor relations matters. Thus reducing the time-to-hire and time to resolve sensitive employment matters.

Professional staff: One (1) regular Personnel Management Analyst, two (2) regular Personnel Analyst I's, and one (1) regular Personnel Analyst II are requested to provide more timely recruitments, labor relations, and support services. The Personnel Management Analyst will be responsible for managing the Labor Relations unit, along with responding to and handling the most sensitive Labor Relations issues that arise. The position will also oversee the Return to Work/Leave of Absence subsection. The HCA typically has 140 employees on varying leaves at any one time. The Personnel Analyst I and II will be assigned to the recruitment section; this team accounted for 36% of all County recruitments during FY 14-15. Due to the highly specialized needs of the HCA, the HCA has a number of difficult to recruit classifications which, in addition to traditional recruitment methodologies, require extensive sourcing and outreach of potential qualified candidates. The other Personnel Analyst I will provide direction, guidance and coordination to staff within the Certification Unit, which supports recruitments by facilitating candidate testing and on-boarding.

## <u>Recommendation No. 7 – Amend the Management Resolution</u>

Approve an amendment to the Management, Confidential Clerical and Other Unrepresented Employees Resolution to add Section 410, Health Care Agency Hospital Fiscal Premium Pay (page 21 of attached red-line Resolution). This change will have no material impact on the funding status of the retirement system.

## Discussion for Recommendation No. 7 – Amend the Management Resolution

Central to the Health Care Agency is the Fiscal Department, and specifically the fiscal managers at the hospital who are responsible for leading and managing staff and whose goal it is to ensure regulatory compliance, accurate accounting, timely invoicing for services rendered, payments, and the compilation of a significant variety of required annual and periodic complex reports.

As previously noted, the significant growth of our healthcare system, combined with changes of the healthcare industry have led to a more complex work environment, with correspondent additional staff responsibility and workload.

CEO-HR reviewed the following California counties that have a healthcare fiscal classification comparable to the Ventura County benchmark classification of Fiscal Manager IV: Los Angeles, Riverside, San Bernardino, San Mateo and Santa Clara. These public entities were selected because they have significant healthcare

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operations, specifically hospital operations, administered by each county and they have specialized healthcare fiscal management job classifications. Our review indicates that for classifications that are comparable to the benchmark Ventura County classification, Fiscal Manager IV, the market median base salary is at \$11,450.80 monthly, which is 13.5% above the Ventura County classification of Fiscal Manager IV (\$10,086.58 monthly). This survey suggests that other public entities recognize the relative additional complexity and responsibility associated with fiscal management in a hospital setting compared to non-hospital settings.

Additionally, our analysis shows that in the critical management positions, which are responsible for oversight of regulatory compliance, the average job tenure is only two years. High turnover in management positions leads to a loss of institutional memory and a greater risk of errors and omissions.

One step to enhance retention within the VCMC Fiscal department is the creation of a pay differential for hospital fiscal managers, which recognizes the increased complexity of fiscal management within hospital accounting. It is recommended that a 7.5% premium pay be established for fiscal management classifications assigned to the hospital in the Fiscal Manager series to include Fiscal Manager I, II, III, IV and Assistant Chief Financial Officer-HCA, excluding the hospital Chief Financial Officer-HCA.

It should be noted that further review of the classification will be undertaken to determine if, in the long-term, HCA specific fiscal job classifications are warranted. Additionally, CEO-HR will review additional fiscal management classifications within the HCA such as the Chief Financial Officer-HCA ("CFO-HCA") classification. A recent Hospital Association of Southern California survey indicates that the compensation for classifications similar to the CFO-HCA may be significantly higher than that currently offered by Ventura County which has remained unfilled for a period of nineteen (19) months. We will return to your Board at a later date to report our findings and recommendations on this matter.

There are six (6) positions, which include the two positions requested in this Board Letter, which are affected by this recommendation. The estimated annual cost impact including benefits as a result of this premium is approximately \$72,000. The appropriation request is included in recommendation #4 above.

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This letter has been reviewed by the County Executive Office, County Counsel, and the Auditor-Controller's Office. If you have any questions regarding this item, please contact me at (805) 654-2561.

Respectfully,

S.Alin

SHAWN ATIN Human Resources Director

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MICHAEL POWERS County Executive Officer

c: Jeff Burgh, Auditor-Controller Matt Carroll, Assistant County Executive Officer Leroy Smith, County Counsel

Attachments

Sec. 410 **Health Care Agency Fiscal Premium Pay:** At the sole discretion of the Director-Health Care Agency and upon his/her recommendation, the Director-Human Resources may approve a premium pay at the rate of seven and one-half percent (7.5%) of the employee's base bi-weekly pay (exclusive of other additions) for employees in the classifications of Fiscal Manager I-IV and Assistant Chief Financial Officer-HCA who are assigned to positions in the Ventura County Medical Center and/or Santa Paula Hospital. The premium provided by this section is "at will", meaning it may be discontinued at any time without cause and without any pre-deprivation process at the sole discretion of the Director-Health Care Agency.

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May 4, 2016

Michael Powers County Executive Officer County of Ventura 800 South Victoria Avenue Ventura, CA 93009

Attention: Shawn Atin, Human Resources Director

# SUBJECT: RETIREMENT/VCERA PENSIONABILITY OF CNA "RETENTION PREMIUM PAYMENT"

Dear Mr. Powers,

Recently, VCERA was asked to provide an analysis of the recently-negotiated CNA "Retention Premium Payment" (RPP) for the purposes of pensionability and reporting. We have done so, with the assistance of both County Counsel and VCERA's outside counsel.

Based on our review of the County of Ventura Tentative Agreement with the California Nurses Association dated March 10, 2016, ("Agreement"), our discussions, and the subsequent information provided by your office and the Auditor-Controller's office, we understand the following to be correct regarding this payment.

- Eligibility for, and entitlement to, the RPP is established on the first day of the quarterly period ("eligibility date").
- In order for a nurse to be eligible for the RPP, he or she must be covered by the CNA contract at the eligibility date.
- The amount of the RPP is determined by the rate of pay applicable for the pay period in which the eligibility date falls.
- Though the calculation is based on the regularly-scheduled hours worked in the prior quarter, the RPP itself is not a retroactive pay increase.
- If a nurse terminates employment subsequent to the beginning of a quarter (eligibility date), regardless of whether the payment has been issued, he or she will still receive the RPP for that quarter.
- If a nurse's rate of pay changes with an effective date subsequent to the beginning of a quarter (such as for a merit increase) the amount of the quarter's corresponding RPP will not be adjusted as a result.
- Pursuant to the Agreement, the RPP will be issued through the term of the Memorandum of Understanding to all nurses who are eligible.

Powers May 4, 2016 Page 2

### **Pensionability**

Bearing in mind these points, VCERA staff has determined the RPP to be pensionable for both Legacy and PEPRA members. The payment is in the nature of salary, as its purpose is to make up the difference in base salary for nurses whose pay does increase by 6% under the terms of the Agreement; it is not a one-time, ad-hoc payment, but a recurring one, and; it appears to take the place of market-based premium pay items that were previously determined by the Board of Retirement to be pensionable.

## Reporting

The County of Ventura must report compensation to VCERA for the pay period in which it was earned, regardless of when it was paid. (Govt. Code § 31542.5.) Based on the above contract points, VCERA views the RPP as "earned" on the eligibility date, and not the date of the payment. Accordingly, the RPP payment should be reported to VCERA for the pay period in which the eligibility date falls, not the pay period in which the payment dates are scheduled approximately a month after the eligibility dates; thus, when the RPPs are issued, the County should process retroactive adjustments for the previous pay period in which the eligibility date fell.

The authority to determine pensionable compensation ultimately lies with the VCERA Board of Retirement. Staff is scheduled to bring any new pay codes to the Board on an annual basis to recommend pensionability under PEPRA. Pay codes added during the 2016 calendar year are scheduled for review at the January 2017 VCERA business meeting. At that time, the code of "NRP", which is what has been reported to VCERA as the code to be used for the RPPs, will be brought to the Board for the ultimate determination.

If the County of Ventura would like to appeal staff's analysis of the RPP payment as pensionable, it may request that the Board of Retirement review it sooner than January 2017. If this is the case, please submit an appeal in writing to my attention so that it may be brought to the Board for a determination at the June 6<sup>th</sup>, 2015 disability meeting.

Sincerely,

udally.

Linda Webb Retirement Administrator

CC: Board of Retirement, VCERA Jeff Burgh, Auditor-Controller Zach Goldman, California Nurses Association



# San Joaquin County Employees' Retirement Association

January 18, 2017

# FOR IMMEDIATE RELEASE

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On January 13, 2017, the Board of Retirement of the San Joaquin County Employees' Retirement Association (SJCERA) unanimously appointed Ms. Johanna Shick as the new Chief Executive Officer. SJCERA is the pension plan for employees of San Joaquin County and participating employers, and provides retirement and related benefits to nearly 13,000 members.

Ms. Shick's appointment will formally commence on January 23, 2017. She will oversee SJCERA's \$2.5 billion pension fund and staff. Ms. Shick has more than 18 years' experience in public pension administration, most recently serving as the Assistant Administrator/Chief Benefits Officer for the San Diego County Employees Retirement Association, a \$10.1 billion pension fund that administers retirement and related benefits for more than 41,000 members. Ms. Shick also served in various roles for the Washington State Department of Retirement Systems.

END

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