VENTURA COUNTY EMPLOYEES' RETIREMENT ASSOCIATION

BOARD OF RETIREMENT

BUSINESS MEETING

JANUARY 29, 2018

AGENDA

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

TIME: 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:

V. ACTUARIAL INFORMATION

A. Review and Approval of Annual Actuarial Information Report as of June 30, 2017 – Segal Consulting, Paul Angelo and John Monroe.

1. June 30, 2017 Actuarial Valuation Report. 22 – 115

2. June 30, 2017 GAS 67 Actuarial Valuation Report. 116 – 138

B. Segal Response to Independent Actuarial Audit Report.
RECOMMENDED ACTION: Receive and file.

1. Segal Response. 139 – 166

VI. COMPREHENSIVE ANNUAL FINANCIAL REPORT (CAFR)

A. June 30, 2017 Comprehensive Financial Report (CAFR) – Brown Armstrong, Andrew Paulden, CPA
RECOMMENDED ACTION: Receive and file.

1. Brown Armstrong Presentation by Presenter Andrew Paulden, CPA. 167 – 256

2. Agenda. 257

3. Independent Auditor's Report. 258 – 260

4. Auditor's Report to Management, Year Ending June 30, 2017. 261 – 275

VII. INVESTMENT INFORMATION

A. NEPC – Allan Martin
VCERA – Dan Gallagher, Chief Investment Officer

1. Preliminary Performance Report Month Ending November 30, 2017. 276 – 284
RECOMMENDED ACTION: Receive and file.

2. Preliminary Performance Report Month Ending December 31, 2017. 285 – 293
RECOMMENDED ACTION: Receive and file.

B. Recommendation for the Board to Authorize C.I.O. to Accept Board Seat on Abbott Capital Management's Secondary Opportunities Fund (ASO).
RECOMMENDED ACTION: Approve.

1. Staff Letter by C.I.O., Dan Gallagher. 294 – 296

VIII. OLD BUSINESS

A. Determine Pensionability of HCA Fiscal Premium Pay.
RECOMMENDED ACTION: EXCLUDE HCA FISCAL PREMIUM PAY FROM PENSIONABLE COMPENSATION DUE TO DEFICIENCY IN MEETING PEPRA CRITERIA.

IX. NEW BUSINESS

A. Recommendation to Adopt Amendment to Pensionable Compensation Resolution Addenda to Re-Categorize Inclusion of Scheduled Overtime for Non-Safety Members to Comply with PEPRA
RECOMMENDED ACTION: Approve.

1. Staff Letter. 297 – 298
2. Proposed Amendment to Addendum (Redline). 299 – 301
3. Pensionable Compensation Resolution with Addenda. 302 – 311
4. Proposed Amendment to Resolution (Redline). 312

B. VCERA Cost-of-Living Adjustments (COLA) as of April 1, 2018.
RECOMMENDED ACTION: Approve.

1. Actuary's Annual COLA Analysis. 313 – 314

C. Quarterly Administrator's Report for October - December, 2017. 315 – 316
RECOMMENDED ACTION: Receive and file.

D. SACRS 2018-2019 Board of Director Nominations.

1. SACRS Notice. 317 – 319

E. Recommendation to Approve Fiscal Manager's Attendance at the Government Finance Officers Association's (GFOA) 2018 Annual Conference, St. Louis, MO, May 6 – 9, 2018.
RECOMMENDED ACTION: Approve.

1. Staff Letter. 320
2. GFOA 2018 Annual Conference Brochure. 321 – 340

X. INFORMATIONAL

A. Abbott Capital Management's Client Letter. 341 – 344

XI. PUBLIC COMMENT

XII. STAFF COMMENT

XIII. BOARD MEMBER COMMENT

XIV. ADJOURNMENT

VENTURA COUNTY EMPLOYEES' RETIREMENT ASSOCIATION

BOARD OF RETIREMENT

DISABILITY MEETING

JANUARY 8, 2018

MINUTES

DIRECTORS PRESENT:	Tracy Towner, Chair, Alternate Safety Employee Member William W. Wilson, Vice Chair, Public Member Steven Hintz, Treasurer-Tax Collector Mike Sedell, Public Member Robert Bianchi, Public Member Maeve Fox, General Employee Member Craig Winter, General Employee Member Arthur E. Goulet, Retiree Member Will Hoag, Alternate Retiree Member Chris Johnston, Safety Employee Member
DIRECTORS ABSENT:	Peter C. Foy, Public Member Ed McCombs, Alternate Public Member
STAFF PRESENT:	Linda Webb, Retirement Administrator Lori Nemiroff, Assistant County Counsel Henry Solis, Chief Financial Officer Dan Gallagher, Chief Investment Officer Julie Stallings, Chief Operations Officer Vickie Williams, Retirement Benefits Manager Donna Edwards, Retirement Benefits Specialist Stephanie Berkley, Retirement Benefit Specialist Chris Ayala, Program Assistant
PLACE:	Ventura County Employees' Retirement Association Second Floor Boardroom 1190 South Victoria Avenue Ventura, CA 93003
TIME:	9:00 a.m.

ITEM:

I. CALL TO ORDER

Chair Towner called the Disability Meeting of January 8, 2018, to order at 9:00 a.m.

Deputy County Clerk, Miranda Nobriga was present to administer the Oath of Office to Tracy Towner, Chris Johnston, Art Goulet, Will Hoag, and Craig Winter.

II. APPROVAL OF AGENDA

After discussion by the Board, the following motion was made:

MOTION: Approve.

Moved by Sedell, seconded by Bianchi.

Vote: Motion carried
Yes: Bianchi, Fox, Goulet, Hintz, Johnston, Sedell, Wilson, Winter
No: -
Absent: Foy, McCombs
Abstain:

III. APPROVAL OF MINUTES

A. Disability and Business Meeting of December 11, 2017.

B. Special Meeting of December 13, 2017.

Ms. Webb provided corrections to the minutes of December 11th. She said that on agenda item VI.C., the sentence "Both parties agreed to waive preparation of findings of fact and conclusions of law," should be removed, and that Trustee Goulet should be listed as voting.

Ms. Webb provided a correction for the minutes of December 13th Special Meeting, on page 14, where the word "at" should have been "a".

After discussion by the Board, the following motion was made:

MOTION: Approve Disability and Business Meeting Minutes of December 11, 2017 and Special Meeting Minutes of December 13, 2017, with Corrections.

Moved by Goulet, seconded by Bianchi.

Vote: Motion carried
Yes: Bianchi, Fox, Goulet, Hintz, Johnston, Sedell, Wilson, Winter
No: -
Absent: Foy, McCombs
Abstain:

IV. RECEIVE AND FILE PENDING DISABILITY APPLICATION STATUS REPORT

After discussion by the Board, the following motion was made:

MOTION: Approve.

Moved by Wilson, seconded by Johnston.

Vote: Motion carried
Yes: Bianchi, Fox, Goulet, Hintz, Johnston, Sedell, Wilson, Winter
No: -
Absent: Foy, McCombs
Abstain:

V. APPLICATIONS FOR DISABILITY RETIREMENT

A. Application for Service-Connected Disability Retirement - Beery, Louis E.; Case No. 16-034.

1. Application for Service-Connected Disability Retirement, filed October 25, 2016.

2. Medical Analysis and Recommendation, including Supporting Medical Documentation, submitted by County of Ventura, Risk Management, in support of the Application for Service -Connected Disability Retirement, dated December 13, 2017.

3. Hearing Notice, dated December 26, 2017.

Catherine Laveau, was present on behalf of County of Ventura Risk Management. The applicant, Louis E. Beery, was not present.

Ms. Laveau declined to make statement.

Trustee Goulet said he did not agree with the applicant's reason for not having surgery to correct his injury. He observed that the doctor's report stated that the applicant's injury was due to all of years of service for the County of Ventura; however, the applicant had retired and was later reinstated after a physical examination cleared him for service. Thus, there were two separate periods of service. He also expressed concerns that the applicant's weight and hobbies did not appear to be considered.

After discussion by the Board, the following motion was made:

MOTION: Approve Application for Service-Connected Disability Retirement.

Moved by Sedell, seconded by Fox.

Vote: Motion carried
Yes: Bianchi, Fox, Hintz, Johnston, Sedell, Wilson, Winter
No: Goulet
Absent: Foy, McCombs

Abstain:

Both parties agreed to waive preparation of findings of fact and conclusions of law.

VI. OLD BUSINESS

None.

VII. NEW BUSINESS

A. Adoption of a Resolution Authorizing Leave with Pay for Employees Absent from Work Due to Fires Occurring in December 2017.
RECOMMENDED ACTION: Approve.

1. Staff Letter.

2. Proposed VCERA Fire Resolution.

Ms. Webb informed the Board that recommended action was to allow VCERA employees who were recently impacted by the fires to have similar accommodations as those extended to employees of the County. She also said that the document's reference to the date of December 4th, should have read December 5th.

After discussion by the Board, the following motion was made:

MOTION: Approve as Amended.

Moved by Wilson, seconded by Johnston.

Vote: Motion carried
Yes: Bianchi, Fox, Goulet, Hintz, Johnston, Sedell, Wilson, Winter
No: -
Absent: Foy, McCombs
Abstain:

B. Recommendation to Approve Retirement Administrator, Linda Webb to Attend the CALAPRS 2018 General Assembly, Indian Wells, California, March 3 - 6, 2018.
RECOMMENDED ACTION: Approve.

1. Staff Letter.

2. CALAPRS 2018 General Assembly Agenda.

After discussion by the Board, the following motion was made:

MOTION: Approve.

Moved by Johnston, seconded by

Vote: Motion carried

Yes: Bianchi, Fox, Goulet, Hintz, Johnston, Sedell, Wilson, Winter
No: -
Absent: Foy, McCombs
Abstain:

C. Establishment of Personnel Review Committee.

1. Staff Letter.

Ms. Webb said that establishment of this committee is done annually. She reminded the Board that the committee's duties have expanded, given that there are now 5 VCERA employees to review.

Trustee Sedell volunteered to serve on the committee again, and suggested the Board consider rotating the committee members in the future.

After discussion by the Board, the following motion was made:

MOTION: Reappoint the Current Personnel Review Committee Members of Trustee Sedell, Trustee Johnston, and Trustee Hoag.

Moved by Goulet, seconded by Bianchi.

Vote: Motion carried
Yes: Bianchi, Fox, Goulet, Hintz, Johnston, Sedell, Wilson, Winter
No: -
Absent: Foy, McCombs
Abstain:

VIII. INFORMATIONAL

A. CALAPRS 2018 Trustees' Round Table.

IV. PUBLIC COMMENT

None.

V. STAFF COMMENT

Mr. Solis informed the Board that the RFP for Audit Services had been issued on December 30th and would close on January 31st. Staff anticipated having a recommendation to the Board at the February business meeting.

Ms. Webb said Segal Consulting would be at the January business meeting to present the Actuarial Valuation and staff planned to present a recommendation regarding enhancements to V3 system.

Mr. Gallagher reminded the Board of the upcoming NEPC Conference, and of the positive calendar year returns.

VI. BOARD MEMBER COMMENT

None.

VII. ADJOURNMENT

The meeting was adjourned at 9:18 a.m.

Respectfully submitted,

LindaWebb

LINDA WEBB, Retirement Administrator

Approved,

TRACY TOWNER, Chairman

VENTURA COUNTY EMPLOYEES' RETIREMENT ASSOCIATION

REPORT OF REGULAR AND DEFERRED RETIREMENTS AND SURVIVORS CONTINUANCES

December 2017

FIRST NAME	LAST NAME	G/S	BENEFIT SERVICE	*	DEPARTMENT	EFFECTIVE DATE
REGULAR RETIREMENTS:						
Deborah A.	Allen	G	10.77		Health Care Agency (deferred)	11/15/2017
Caridad M.	Cabana	G	8.99		Health Care Agency (deferred)	12/16/2017
Mark S.	Correia	S	32.69		Sheriff's Department	11/29/2017
Bill R.	Crisostomo	S	1.86	*	Sheriff's Department (deferred)	11/2/2017
Steven A.	Farnham	G	5.64		Library (deferred)	11/15/2017
Brad	Guzzard	S	31.26		Sheriff's Department	11/17/2017
Susan	Heller	G	20.02		CEO	12/2/2017
Andy	Hovey	G	22.84		Regional Sanitation District (deferred)	12/21/2017
Rebecca	Mc Cloud	G	23.15		Health Care Agency	12/1/2017
Diana	Munoz	G	26.49		Health Care Agency	12/1/2017
Margaret	Perez	G	32.41		Health Care Agency	11/18/2017
Estella	Sweeney	G	23.36		Health Care Agency	10/28/2017
Teresa	Titus	G	12.57		Human Services Agency	11/17/2017
Wendy	Vanden Bossche	S	5.55		Fire Protection District (non-member spouse, deferred)	11/30/2017
Charles	Walters	G	1.14		Assessor	12/2/2017
Mary	Webster	G	22.53		Public Defender	12/1/2017
DEFERRED RETIREMENTS:						
Eleanor M.	Abiva	G	5.81		Health Care Agency	10/21/2017
Roger L	Dickinson	G	8.02		Assessor	10/28/2017
Jay M.	Dobrowalski	G	10.02		Resource Management Agency	12/16/2017
Christine M.	Gaskin	G	8.63		Health Care Agency	11/27/2017
Patricia	Long	G	5.16		Health Care Agency	10/08/2017
Leticia	Magallon	G	9.79		Health Care Agency	10/17/2017
Heather A.	Skogerson	G	5.07		Animal Regulations	12/16/2017
Sarabeth J.	Weinberg	G	10.01		Sheriff's Department	11/28/2017
SURVIVORS' CONTINUANCES:						
Miriam S.	Ornelas					
Nellie	West-Small					

*** = Member Establishing Reciprocity**

Date: Tuesday, January 02, 2018
Time: 01:14: PM
User: 103745

Ventura County Retirement Assn

Check Register - Standard

Period: 06-18 As of: 1/2/2018

Company: VCERA

Check Nbr	Check Type	Check Date	Vendor ID / Vendor Name	Period To Post	Period Closed	Ref Nbr	Doc Type	Invoice Number	Invoice Date	Discount Taken	Amount Paid
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Acct / Sub:	10200		000000								
027336	CK	12/6/2017	BRENTWOODI BRENTWOOD IT	05-18		000215	VO	IT	12/6/2017	0.00	8,400.00
027337	CK	12/6/2017	CDWGOVERNM CDW GOVERNMENT	05-18		000216	VO	IT	12/6/2017	0.00	974.84
027338	CK	12/6/2017	CMP CMP & ASSOCIATES, INC	05-18		000229	VO	REISSUE	12/6/2017	0.00	551.25
027339	CK	12/6/2017	DELLMARKET DELL MARKETING L.P.	05-18		000217	VO	IT	12/6/2017	0.00	403.29
027340	CK	12/6/2017	DIGITALDEP DIGITAL DEPLOYMENT	05-18		000218	VO	IT	12/6/2017	0.00	650.00
027341	CK	12/6/2017	GALLAGHERD DAN GALLAGHER	05-18		000228	VO	TRAVEL REIMB	12/6/2017	0.00	251.56
027342	CK	12/6/2017	GOULETARTH ARTHUR E. GOULET	05-18		000219	VO	TRAVEL REIMB	12/6/2017	0.00	605.42
027343	CK	12/6/2017	INCENTIVES INCENTIVE SERVICES	05-18		000220	VO	ADMIN EXP	12/6/2017	0.00	134.69
027344	CK	12/6/2017	NATIONALAS NAPPA	05-18		000227	VO	ADMIN EXP	12/6/2017	0.00	300.00
027345	CK	12/6/2017	NOSSAMAN NOSSAMAN LLP	05-18		000221	VO	LEGAL FEES	12/6/2017	0.00	4,765.60
027346	CK	12/6/2017	SOLISHENRY HENRY SOLIS	05-18		000222	VO	TRAVEL REIMB	12/6/2017	0.00	656.22
027347	CK	12/6/2017	SPRUCEGROV SPRUCEGROVE INVESTMENT	05-18		000223	VO	INVESTMENT FEES	12/6/2017	0.00	67,254.82
027348	CK	12/6/2017	STAPLESADV STAPLES ADVANTAGE	05-18		000224	VO	ADMIN EXP	12/6/2017	0.00	1,082.14

Date: Tuesday, January 02, 2018
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Check Nbr	Check Type	Check Date	Vendor ID / Vendor Name	Period To Post	Period Closed	Ref Nbr	Doc Type	Invoice Number	Invoice Date	Discount Taken	Amount Paid
Company:	**VCERA**										
Acct / Sub:	10200		000000								
027349	CK	12/6/2017	TOWERSWATS TOWERS WATSON DELAWARI	05-18		000225	VO	ADMIN EXP	12/6/2017	0.00	18,381.52
027350	CK	12/6/2017	TOWNERTRAC TRACY TOWNER	05-18	05-18	000226	VO	TRAVEL REIMB	12/6/2017	0.00	624.88
027350	VC	12/7/2017	TOWNERTRAC TRACY TOWNER	05-18	05-18	000226	VO	TRAVEL REIMB	12/6/2017	0.00	-624.88
									Check Total		**0.00**
027351	ZC	12/7/2017	TOWNERTRAC TRACY TOWNER	05-18	05-18	000226	VO	TRAVEL REIMB	12/6/2017	0.00	624.88
027351	ZC	12/7/2017	TOWNERTRAC TRACY TOWNER	05-18	05-18	000230	AD	VOID	12/7/2017	0.00	-624.88
									Check Total		**0.00**
027352	CK	12/7/2017	TOWNERTRAC TRACY TOWNER	05-18		000231	VO	TRAVEL REIMB	12/7/2017	0.00	623.47
027353	CK	12/13/2017	BANKOFAMER BUSINESS CARD	05-18		000232	VO	ADMIN/IT	12/13/2017	0.00	1,092.87
027354	CK	12/13/2017	EXECUTIVED EXECUTIVE DATA SYSTEMS, I	05-18		000233	VO	IT	12/13/2017	0.00	585.00
027355	CK	12/13/2017	FEDEX FEDEX	05-18		000234	VO	ADMIN EXP	12/13/2017	0.00	24.74
027356	CK	12/13/2017	GLOBALCAPA GLOBAL CAPACITY	05-18		000235	VO	IT	12/13/2017	0.00	603.63
027357	CK	12/13/2017	GRSCOMPANY GABRIEL, ROEDER, SMITH & C	05-18		000236	VO	ACTUARIAL	12/13/2017	0.00	42,000.00
027358	CK	12/13/2017	HARRISWATE HARRIS WATER CONDITIONIN	05-18		000237	VO	ADMIN EXP	12/13/2017	0.00	134.50
027359	CK	12/13/2017	HOAGWILL WILL HOAG	05-18		000238	VO	TRAVEL REIMB	12/13/2017	0.00	281.26
027360	CK	12/13/2017	NEMIROFFLO LORI NEMIROFF	05-18		000239	VO	TRAVEL REIMB	12/13/2017	0.00	337.08

Date: Tuesday, January 02, 2018
Time: 01:14: PM
User: 103745

Ventura County Retirement Assn

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Period: 06-18 As of: 1/2/2018

Company: VCERA

Check Nbr	Check Type	Check Date	Vendor ID / Vendor Name	Period To Post	Period Closed	Ref Nbr	Doc Type	Invoice Number	Invoice Date	Discount Taken	Amount Paid
Company:	**VCERA**										
Acct / Sub:	10200		000000								
027361	CK	12/13/2017	SBSGROUP SBS GROUP	05-18		000240	VO	IT	12/13/2017	0.00	262.50
027362	CK	12/13/2017	SCANLANKAR KAREN SCANLAN	05-18		000241	VO	TRAVEL REIMB	12/13/2017	0.00	141.91
027363	CK	12/13/2017	SEDELLMIKE MIKE SEDELL	05-18		000242	VO	TRAVEL REIMB	12/13/2017	0.00	652.26
027364	CK	12/13/2017	TIMEWARNER TIME WARNER CABLE	05-18		000243	VO	IT	12/13/2017	0.00	294.99
027365	CK	12/13/2017	VITECHSYST VITECH SYSTEMS GROUP, INC	05-18		000244	VO	IT	12/13/2017	0.00	196.88
027366	CK	12/13/2017	WALTERSCOT BNY MELLON INV MGMT CAYN	05-18		000145	VO	INVESTMENT FEES	10/11/2017	0.00	240,224.83
027367	CK	12/13/2017	WEBBLINDA LINDA WEBB	05-18		000246	VO	TRAVEL REIMB	12/13/2017	0.00	605.31
027368	CK	12/13/2017	WESTCOASTA WEST COAST AIR CONDITION	05-18		000245	VO	IT	12/13/2017	0.00	75.00
027369	CK	12/13/2017	WILLIAMSEL ELENIDA WILLIAMS	05-18		000247	VO	TRAVEL REIMB	12/13/2017	0.00	536.70
027370	CK	12/13/2017	NEMIROFFLO LORI NEMIROFF	05-18		000248	VO	TRAVEL REIMB	12/13/2017	0.00	542.45
027371	CK	12/20/2017	ACCESSINFO ACCESS INFORMATION PROTI	06-18		000249	VO	ADMIN EXP	12/20/2017	0.00	359.73
027372	CK	12/20/2017	ATTMOBILIT AT&T MOBILITY	06-18		000250	VO	IT	12/20/2017	0.00	358.19
027373	CK	12/20/2017	BIANCHIROB ROBERT BIANCHI	06-18		000251	VO	MILEAGE REIMB	12/20/2017	0.00	57.78

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Acct / Sub: 10200 000000

Check Nbr	Check Type	Check Date	Vendor ID / Vendor Name	Period To Post	Period Closed	Ref Nbr	Doc Type	Invoice Number	Invoice Date	Discount Taken	Amount Paid
027374	CK	12/20/2017	BROWNARMST BROWN ARMSTRONG	06-18		000252	VO	ADMIN EXP	12/20/2017	0.00	4,116.52
027375	CK	12/20/2017	CAMARILLOE CAMARILLO ELECTRIC	06-18		000254	VO	ADMIN EXP	12/20/2017	0.00	365.00
027376	CK	12/20/2017	CDWGOVERNM CDW GOVERNMENT	06-18		000253	VO	IT	12/20/2017	0.00	215.39
027377	CK	12/20/2017	GOULETARTH ARTHUR E. GOULET	06-18		000255	VO	MILEAGE REIMB	12/20/2017	0.00	36.38
027378	CK	12/20/2017	NEPC NEPC, LLC	06-18		000256	VO	INVESTMENT FEES	12/20/2017	0.00	77,219.20
027379	CK	12/20/2017	NOSSAMAN NOSSAMAN LLP	06-18		000257	VO	LEGAL FEES	12/20/2017	0.00	67,951.35
027380	CK	12/20/2017	SHREDITUSA SHRED-IT USA	06-18	06-18	000259	VO	ADMIN EXP	12/20/2017	0.00	364.65
027380	VC	12/20/2017	SHREDITUSA SHRED-IT USA	06-18	06-18	000259	VO	ADMIN EXP	12/20/2017	0.00	-364.65
									Check Total		**0.00**
027381	CK	12/20/2017	STAPLESADV STAPLES ADVANTAGE	06-18		000258	VO	ADMIN EXP	12/20/2017	0.00	13.35
027382	CK	12/20/2017	THOMSONREU THOMSON REUTERS- WEST	06-18		000260	VO	IT	12/20/2017	0.00	357.00
027383	CK	12/20/2017	WEBBLINDA LINDA WEBB	06-18		000261	VO	INVESTMENT EXP	12/20/2017	0.00	15.00
027384	CK	12/20/2017	WILSONWILL WILLIAM WILSON	06-18		000262	VO	TRAVEL REIM	12/20/2017	0.00	440.25
027385	CK	12/20/2017	SHREDITUSA SHRED-IT USA	06-18		000259	VO	ADMIN EXP	12/20/2017	0.00	364.65
027385	CK	12/20/2017	SHREDITUSA	06-18		000263	AD	CANCEL	12/20/2017	0.00	-364.65

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Ventura County Retirement Assn

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Check Nbr	Check Type	Check Date	Vendor ID / Vendor Name	Period To Post	Period Closed	Ref Nbr	Doc Type	Invoice Number	Invoice Date	Discount Taken	Amount Paid
Company:	**VCERA**										
Acct / Sub:	10200		000000								
			SHRED-IT USA								
027385	CK	12/20/2017	SHREDITUSA SHRED-IT USA	06-18		000264	VO	ADMIN EXP	12/20/2017	0.00	145.86
									Check Total		**145.86**
027386	CK	12/27/2017	ABUCOURTRE PERSONAL COURT REPORTEI	06-18		000268	VO	ADMIN EXP	12/27/2017	0.00	315.00
027387	CK	12/27/2017	DYNAMICSSL DYNAMICS SL USER GROUP	06-18		000265	VO	ADMIN EXP	12/27/2017	0.00	450.00
027388	CK	12/27/2017	LINEASOLUT LINEA SOLUTIONS	06-18		000266	VO	ADMIN EXP	12/27/2017	0.00	13,975.00
027389	CK	12/27/2017	MFDAILYCOR M.F. DAILY CORPORATION	06-18		000269	VO	ADMIN EXP	12/27/2017	0.00	17,395.95
027390	CK	12/27/2017	NOSSAMAN NOSSAMAN LLP	06-18		000267	VO	LEGAL FEES	12/27/2017	0.00	9,325.40

Check Count: 58

Acct Sub Total: **587,728.61**

Check Type	Count	Amount Paid
Regular	55	588,718.14
Hand	0	0.00
Electronic Payment	0	0.00
Void	2	-989.53
Stub	0	0.00
Zero	1	0.00
Mask	0	0.00
Total:	**58**	**587,728.61**

Company Disc Total **0.00** **Company Total** **587,728.61**

Ventura County Employees' Retirement Association
Budget Summary Fiscal Year 2017-2018
For the Five Months Ended November 30, 2017 and Year-To-Date - 41.67% of Fiscal Year Expended

	Adopted 2018 Budget	Adjusted 2018 Budget	November 2017	Expended Fiscal Year to Date	Available Balance	Percent Expended
Salaries and Benefits						
Regular Salary	$3,026,300.00	$3,026,300.00	$207,880.72	$1,034,351.37	$1,991,948.63	34.18%
Extra-Help/Temporary Services	294,400.00	294,400.00	9,600.00	53,433.98	240,966.02	18.15%
Vacation Redemption	139,500.00	139,500.00	17,626.44	107,961.27	31,538.73	77.39%
Retirement Contributions	531,200.00	531,200.00	34,431.37	172,323.05	358,876.95	32.44%
OASDI Contribution	171,600.00	171,600.00	8,478.76	46,618.10	124,981.90	27.17%
FICA-Medicare	48,100.00	48,100.00	3,262.03	16,457.13	31,642.87	34.21%
Medical Insurance	302,000.00	302,000.00	17,732.00	88,719.96	213,280.04	29.38%
Life Insurance	1,300.00	1,300.00	80.60	399.55	900.45	30.73%
Unemployment Insurance	2,500.00	2,500.00	165.43	804.72	1,695.28	32.19%
Mgmt Disability Insurance	23,600.00	23,600.00	1,358.09	6,818.60	16,781.40	28.89%
Workers Compensation Insurance	23,500.00	23,500.00	1,590.22	8,109.84	15,390.16	34.51%
401K Plan Contribution	72,500.00	72,500.00	4,870.76	24,489.88	48,010.12	33.78%
Total Salaries & Benefits	$4,636,500.00	$4,636,500.00	$307,076.42	$1,560,487.45	$3,076,012.55	33.66%
Services & Supplies						
Board Member Stipend	$13,200.00	$13,200.00	$1,300.00	$4,000.00	$9,200.00	30.30%
Other Professional Services	224,700.00	224,700.00	40,258.00	89,367.89	135,332.11	39.77%
Auditing	46,000.00	46,000.00	4,116.23	35,804.72	10,195.28	77.84%
Hearing Officers	60,000.00	60,000.00	2,098.75	3,363.75	56,636.25	5.61%
Legal	350,000.00	350,000.00	29,407.60	70,833.60	279,166.40	20.24%
Election Services	9,000.00	9,000.00	0.00	0.00	9,000.00	0.00%
Actuary-Valuation	159,000.00	159,000.00	0.00	30,000.00	129,000.00	18.87%
Actuary-Misc Hrly Consult	0.00	0.00	11,544.00	11,544.00	(11,544.00)	0.00%
Actuary-Actuarial Audit	42,000.00	42,000.00	42,000.00	42,000.00	0.00	100.00%
Printing	33,000.00	33,000.00	0.00	6,820.27	26,179.73	20.67%
Postage	71,400.00	71,400.00	391.67	26,771.85	44,628.15	37.50%
Telephone	0.00	0.00	(3,649.13)	0.00	0.00	0.00%
Copy Machine	4,000.00	4,000.00	0.00	517.65	3,482.35	12.94%
General Liability	9,500.00	9,500.00	0.00	0.00	9,500.00	0.00%
Fiduciary Liability	85,000.00	85,000.00	0.00	84,588.00	412.00	99.52%
Cost Allocation Charges	33,500.00	33,500.00	16,735.00	16,735.00	16,765.00	49.96%
Education Allowance	6,000.00	6,000.00	0.00	4,000.00	2,000.00	66.67%
Training/Travel-Staff	54,200.00	54,200.00	9,255.59	14,417.78	39,782.22	26.60%
Training/Travel-Trustee	53,100.00	53,100.00	4,454.99	5,384.35	47,715.65	10.14%
Travel-Due Diligence-Staff	0.00	0.00	0.00	1,853.98	(1,853.98)	0.00%
Travel-Due Diligence-Trustee	19,400.00	19,400.00	0.00	3,433.06	15,966.94	17.70%
Mileage-Staff	8,500.00	8,500.00	601.85	984.60	7,515.40	11.58%
Mileage -Trustee	0.00	0.00	425.34	842.02	(842.02)	0.00%
Mileage-Due Diligence-Staff	0.00	0.00	0.00	235.83	(235.83)	0.00%
Mileage-Due Diligence-Trustee	0.00	0.00	69.44	269.53	(269.53)	0.00%
Auto Allowance	6,900.00	6,900.00	575.00	2,875.00	4,025.00	41.67%
Facilities-Security	3,700.00	3,700.00	0.00	0.00	3,700.00	0.00%
Facilities-Maint & Repairs	0.00	0.00	1,561.00	1,786.58	(1,786.58)	0.00%
Equipment-Maint & Repairs	2,000.00	2,000.00	0.00	0.00	2,000.00	0.00%
General Office Expense	6,000.00	6,000.00	3.00	4,479.72	1,520.28	74.66%
Books & Publications	2,500.00	2,500.00	0.00	50.00	2,450.00	2.00%
Office Supplies	18,000.00	18,000.00	1,779.24	5,157.26	12,842.74	28.65%
Memberships & Dues	13,300.00	13,300.00	2,435.00	6,585.00	6,715.00	49.51%
Bank Service Charges	0.00	0.00	96.02	552.10	(552.10)	0.00%
Offsite Storage	4,800.00	4,800.00	359.73	1,732.23	3,067.77	36.09%
Rents/Leases-Structures	209,900.00	209,900.00	17,363.95	86,819.75	123,080.25	41.36%
Non-Capital Equipment	10,000.00	10,000.00	0.00	0.00	10,000.00	0.00%
Non-Capital Furniture	40,000.00	40,000.00	0.00	19,154.70	20,845.30	47.89%
Depreciation /Amortization	1,163,500.00	1,163,500.00	120,894.86	604,474.30	559,025.70	51.95%
Total Services & Supplies	$2,762,100.00	$2,762,100.00	$304,077.13	$1,187,434.52	$1,574,665.48	42.99%
Total Sal, Ben, Serv & Supp	$7,398,600.00	$7,398,600.00	$611,153.55	$2,747,921.97	$4,650,678.03	37.14%

Technology

Ventura County Employees' Retirement Association
Budget Summary Fiscal Year 2017-2018
For the Five Months Ended November 30, 2017 and Year-To-Date - 41.67% of Fiscal Year Expended

	Adopted 2018 Budget	Adjusted 2018 Budget	November 2017	Expended Fiscal Year to Date	Available Balance	Percent Expended
Technology Hardware	$49,400.00	$49,400.00	$1,378.13	$1,662.71	$47,737.29	3.37%
Technology Hardware Support	0.00	0.00	2,088.89	2,102.97	(2,102.97)	0.00%
Technology Software	213,100.00	213,100.00	1,555.30	38,216.88	174,883.12	17.93%
Technology Software Support	19,000.00	19,000.00	9,088.50	9,088.50	9,911.50	47.83%
Technology Systems Support	263,400.00	263,400.00	(47,874.05)	91,418.20	171,981.80	34.71%
Technology Infrastruct Support	300.00	300.00	0.00	184.95	115.05	61.65%
Technology Application Support	507,000.00	507,000.00	140,928.71	230,383.73	276,616.27	45.44%
Technology Data Communication	55,800.00	55,800.00	8,037.99	19,093.04	36,706.96	34.22%
Total Technology	$1,108,000.00	$1,108,000.00	$115,203.47	$392,150.98	$715,849.02	35.39%
Capital Expenses						
Capitalized Equipment	0.00	0.00	0.00	49,278.19	(49,278.19)	0.00%
Total Capitalized Expenses	$0.00	$0.00	$0.00	$49,278.19	($49,278.19)	0.00%
Congtingency	$532,800.00	$532,800.00	$0.00	$0.00	$532,800.00	0.00%
Total Current Year	$9,039,400.00	$9,039,400.00	$726,357.02	$3,189,351.14	$5,850,048.86	35.28%

Ventura County Employees' Retirement Association
Statement of Fiduciary Net Position
As of November 30, 2017 (Unaudited)

Assets

Cash & Cash Equivalents		$194,617,496
Receivables		
Interest and Dividends	3,237,534	
Securities Sold	27,002,751	
Miscellaneous	7,274	
Total Receivables		30,247,560
Investments at Fair Value		
Domestic Equity	1,711,001,183	
Non U.S. Equity	873,101,974	
Global Equity	589,667,106	
Fixed Income	952,220,136	
Private Equity	227,213,390	
Real Estate	397,266,572	
Liquid Alternatives	418,329,325	
Cash Overlay	45,566	
Total Investments		5,168,845,251
Capital Assets, Net of Accumulated Depreciation & Amortization		13,902,909
Total Assets		5,407,613,216

Liabilities

Securities Purchased	26,734,819	
Accounts Payable	305,394	
Tax Withholding Payable	3,140,374	
Deferred Revenue (PrePaid Contributions)	102,028,440	
Total Liabilities		132,209,027
Net Position Restricted for Pensions		$5,275,404,190

Ventura County Employees' Retirement Association
Statement of Changes in Fiduciary Net Position
For The Five Months Ending November 30, 2017 (Unaudited)

ADDITIONS		
Contributions		
Employer	$75,957,477	
Employee	28,566,393	
Total Contributions		104,523,870
Investment Income		
Net Appreciation (Depreciation) in Fair Value of Investments	310,543,131	
Interest Income	7,508,774	
Dividend Income	3,668,683	
Other Investment Income	(272,906)	
Real Estate Operating Income, Net	4,476,926	
Security Lending Income	297,242	
Total Investment Income	326,221,851	
Less Investment Expenses		
Management & Custodial Fees	3,832,920	
Other Investment Expenses	146,532	
Securities Lending Borrower Rebates	211,538	
Securities Lending Management Fees	25,936	
Totat Investment Expenses	4,216,927	
Net Investment Income/(Loss)		322,004,924
Total Additions		426,528,794
DEDUCTIONS		
Benefit Payments	110,813,844	
Member Refunds and Death Benefit Payments	1,497,395	
Administrative Expenses	1,905,725	
Other Expenses	1,154,416	
Total Deductions		115,371,380
Net Increase/(Decrease)		311,157,414
Net Position Restricted For Pensions		
Beginning of Year		4,964,246,776
Ending Balance		$5,275,404,190

Ventura County Employees' Retirement Association
Investments, Cash, and Cash Equivalents
As of November 30, 2017 (Unaudited)

	Investments	Cash & Cash Equivalents
Equity		
Domestic Equity		
Blackrock - Russell 1000	$1,485,125,883	$0
Blackrock - Russell 2500	61,105,688	0
Western Asset Enhanced Equity Index Plus	164,769,613	27,175,662
Total Domestic Equity	1,711,001,183	27,175,662
Non U.S. Equity		
Blackrock - ACWI ex - US	427,555,253	0
Hexavest	93,451,602	0
Sprucegrove	229,915,919	0
Walter Scott	122,179,200	0
Total Non U.S. Equity	873,101,974	0
Global Equity		
Blackrock - ACWI Index	589,667,106	0
Total Global Equity	589,667,106	0
Fixed Income		
Blackrock - Bloomberg Barclays Aggregate Index	222,094,776	0
Loomis Sayles Multi Sector	81,785,497	428,288
Loomis Sayles Strategic Alpha	46,019,077	0
Reams	308,557,481	2
Western Asset Management	293,763,304	1,634,202
Total Fixed Income	952,220,136	2,062,492
Private Equity		
Adams Street	129,439,611	0
Drive Capital	2,651,928	0
Harbourvest	66,676,146	0
Pantheon	28,445,705	0
Total Private Equity	227,213,390	0
Real Estate		
Prudential Real Estate	141,977,647	211
RREEF	172,848	0
UBS Realty	255,116,077	0
Total Real Estate	397,266,572	211
Liquid Alternatives		
Bridgewater All Weather	309,134,701	0
Tortoise (MLPs)	109,194,624	3,254,136
Total Liquid Alternatives	418,329,325	3,254,136
Cash Overlay (Parametric)	45,566	153,597,374
In-House Cash		8,527,623
Total Investments, Cash, and Cash Equivalents	$5,168,845,251	$194,617,496

Ventura County Employees' Retirement Association
Schedule of Investment Management Fees
For the Five Months Ending November 30, 2017 (Unaudited)

Equity Managers	
Domestic Equity	
Blackrock - Russell 1000	$12,779
Blackrock - Russell 2500	2,249
Western Asset Enhanced Equity Index Plus	82,586
Total Domestic Equity	**97,614**
Non U.S. Equity	
Blackrock - ACWI ex - US	103,014
Hexavest	103,993
Sprucegrove	262,834
Walter Scott	240,225
Total Non U.S. Equity	**710,065**
Global Equity	
Blackrock - ACWI Index	56,142
Total Global Equity	**56,142**
Fixed Income Managers	
Blackrock Bloomberg Barclays Aggregate Index	17,388
Loomis Sayles Multi Sector	79,333
Loomis Sayles Strategic Alpha	45,650
Reams Asset Management	134,636
Western Asset Management	134,201
Total Fixed Income	**411,208**
Private Equity	
Abbott Capital	37,500
Adams Street	449,127
Drive Capital	
Harbourvest	310,345
Pantheon	149,897
Total Private Equity	**946,869**
Real Estate	
Prudential Real Estate Advisors	442,179
RREEF	764
UBS Realty	494,637
Total Real Estate	**937,580**
Liquid Alternatives	
Bridgewater All Weather	287,800
Tortoise (MLPs)	186,946
Total Liquid Alternatives	**474,746**
Cash Overlay (Parametric)	**42,135**
Securities Lending	
Borrower's Rebate	211,538
Management Fees	25,936
Total Securities Lending	**237,474**
Other	
Investment Consultant (NEPC)	75,000
Investment Custodian (State Street)	81,561
Total Other Fees	**156,561**
Total Investment Management Fees	**$4,070,395**

Ventura County Employees' Retirement Association

Actuarial Valuation and Review as of June 30, 2017

Segal Consulting

Segal Consulting

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December 12, 2017

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, 2017. It summarizes the actuarial data used in the valuation, establishes the funding requirements for fiscal 2018-2019 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: Paul Angelo — John Monroe

Paul Angelo, FSA, EA, MAAA, FCA	*John Monroe, ASA, EA, MAAA*
Senior Vice President and Actuary	*Vice President and Actuary*

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SECTION 1

VALUATION SUMMARY

SECTION 2

VALUATION RESULTS

SECTION 3

SUPPLEMENTAL INFORMATION

SECTION 4

REPORTING INFORMATION

Segal Consulting

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

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, 2017. 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, 2017, provided by VCERA;
- The assets of the Plan as of June 30, 2017, 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. 61

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

Ref: Pgs. 46-47

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. Note that a graphical projection of the UAAL amortization bases and payments has been included as a new Exhibit J.

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, 2018 through June 30, 2019.

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 $1.08 billion (negative) in the Interest Crediting Shortfall Tracking Account (ICSTA) has to be fully restored out of future excess earnings before any subsequent earnings can be used to provide for any supplemental benefits. The ICSTA tracks any cumulative shortfalls in investment earnings relative to earnings required to credit full interest at the assumed rate to valuation reserves.

Ref: Pgs. 16, 70

In this report, the employer and member contribution rates shown in Chart 14 and Appendix A, respectively, 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. 72-78

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.

Significant Issues in this Valuation

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

Ref: Pgs. 10-11

- The market value of assets earned a return of 13.1% for the July 1, 2016 to June 30, 2017 plan year. The valuation value of assets earned a return of 8.0% for the same period due to the deferral of most of the current year investment gain and the recognition of prior investment gains and losses. This resulted in an actuarial gain when measured against the assumed rate of return of 7.50% for the 2016/2017 year. This actuarial investment gain decreased the average employer contribution rate by 0.30% of payroll.

Ref: Pg. 23

Ref: Pg. 41

- The ratio of the valuation value of assets to actuarial accrued liabilities increased from 84.9% to 86.9%. The Association's UAAL decreased from $813 million as of June 30, 2016 to $744 million as of June 30, 2017. This decrease is primarily due to the contributions paying down a portion of the UAAL, investment gain (on the valuation value of assets) and lower than expected benefit increases for retirees and beneficiaries. The decrease is offset to some extent by higher than expected

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

individual salary increases for actives and other experience losses. A complete reconciliation of the Association's UAAL is provided in Section 3, Exhibit H.

Ref: Pg. 20

- The average employer rate decreased from 27.52% of payroll to 27.09% of payroll. This decrease is primarily due to the investment gain (on the valuation value of assets), higher than expected total actual payroll growth and lower than expected benefit increases for retirees and beneficiaries offset to some extent by higher than expected individual salary increases for actives and other experience losses. 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 even though General Tier 2 and associated PEPRA tiers are overfunded this year. This results in more stable UAAL rates for General Tier 1.

Ref: Pg. 21

- The average member rate decreased from 9.80% of payroll in the June 30, 2016 valuation to 9.75% of payroll in the June 30, 2017 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. The average member rate reflects the impact of the cessation of member contributions after 30 years of service for non-PEPRA tiers. This is a change from the prior valuation.

Ref: Pg. 5

- As indicated in Section 2, Subsection B, Chart 7 of this report, the net unrecognized investment gain as of June 30, 2017 is $0.6 million as compared to an unrecognized loss of $206 million in the June 30, 2016 valuation. This investment gain 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 **market value** basis then the deferred gain will be recognized over the next few years as shown in the footnote to Chart 7.
- The June 30, 2017 unrecognized investment gains of $0.6 million represents less than 0.1% of the market value of assets. Unless offset by future investment losses or other unfavorable experience, the recognition of the $0.6 million market gains is expected to have a minimal 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 gains were recognized immediately in the valuation value of assets, the funded ratio would increase slightly from 86.9% to 87.0%.

    For comparison purposes, if all the deferred losses in the June 30, 2016 valuation had been recognized immediately in the June 30, 2016 valuation, the funded ratio would have decreased from 84.9% to 81.1%.
  - If the net deferred gains were recognized immediately in the valuation value of assets, the average employer rate would decrease slightly from 27.09% to 27.08% of payroll.

For comparison purposes, if all the deferred losses in the June 30, 2016 valuation had been recognized immediately in the June 30, 2016 valuation, the average employer rate would have increased from 27.52% to about 30.12% of payroll.

- The actuarial valuation report as of June 30, 2017 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 Summary for the Ventura County Employees' Retirement Association

Summary of Key Valuation Results (all dollar amounts in thousands)

	June 30, 2017		June 30, 2016	
Employer Contribution Rates: [1]	Total Rate	Estimated Annual Amount[2]	Total Rate	Estimated Annual Amount[2]
General Tier 1	24.70%	$1,748	24.40%	$1,910
General Tier 2	16.09%	34,640	16.54%	35,503
General PEPRA Tier 2	16.12%	7,964	16.39%	5,776
General Tier 2C[3]	20.84%	44,883	20.72%	44,794
General PEPRA Tier 2C[3]	20.83%	17,030	20.50%	13,149
General Combined	18.68%	106,265	18.79%	101,132
Safety	54.60%	85,196	55.66%	86,496
Safety PEPRA	52.19%	10,404	53.49%	6,663
Safety Combined	54.33%	95,600	55.50%	93,159
All Categories combined	27.09%	$201,865	27.52%	$194,291
Average Member Contribution Rates: [1][4][5]	Total Rate	Estimated Annual Amount[2]	Total Rate	Estimated Annual Amount[2]
General Tier 1	10.33%	$731	10.33%	$809
General Tier 2	7.03%	15,140	7.11%	15,265
General PEPRA Tier 2	7.06%	3,488	6.96%	2,453
General Tier 2C[3]	9.66%	20,802	9.74%	21,061
General PEPRA Tier 2C[3]	9.69%	7,922	9.59%	6,152
Safety	13.94%	21,751	13.95%	21,678
Safety PEPRA	14.09%	2,809	14.42%	1,796
All Categories combined	9.75%	$72,643	9.80%	$69,214

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

(2) *Based on projected compensation for each year shown.*

(3) *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, 2017 are 0.99 for General Tier 1 and Tier 2 (non-PEPRA) and 1.00 for Safety (non-PEPRA) compared to 0.99 for General Tier 1 and Tier 2 (non-PEPRA) and 0.99 for Safety (non-PEPRA) from June 30, 2016.*

(5) *Average member contribution rates for non-PEPRA tiers as shown in this exhibit are after reflecting the impact of the cessation of member contributions after 30 years of service. This is a change from the prior valuation. Individual member rates can be found in Appendix A and B.*

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

Summary of Key Valuation Results (continued) (all dollar amounts in thousands)

	June 30, 2017	June 30, 2016
Funded Status:		
Actuarial accrued liability(AAL)[1]	$5,703,396	$5,398,756
Valuation value of assets (VVA)[1]	4,959,070	4,585,713
Market value of assets (MVA)	4,964,247	4,386,837
Funded percentage on VVA basis (VVA/AAL)	86.95%	84.94%
Funded percentage on MVA basis (MVA/AAL)	87.04%	81.26%
Unfunded actuarial accrued liability (UAAL) on VVA basis	$744,326	$813,043
Unfunded actuarial accrued liability (UAAL) on MVA basis	739,149	1,011,919
Key Assumptions:		
Interest rate	7.50%	7.50%
Inflation rate	3.00%	3.00%
Across the board salary increase	0.50%	0.50%

(1) *Excludes liabilities and assets held for supplemental medical benefit reserve and statutory contingency reserve.*

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

Summary of Key Valuation Demographic and Financial Data

	June 30, 2017	June 30, 2016	Change From Prior Year
Active Members:			
Number of members	8,636	8,509	1.5%
Average age	45.0	45.0	0.0
Average service	11.2	11.2	0.0
Projected total compensation	$744,917,386	$705,999,680	5.5%
Average projected compensation	$86,257	$82,971	4.0%
Retired Member and Beneficiaries:			
Number of members:			
Service retired	4,966	4,779	3.9%
Disability retired	831	826	0.6%
Beneficiaries	969	934	3.7%
Total	6,766	6,539	3.5%
Average age	70.2	69.8	0.4
Average monthly benefit(1)	$3,108	$3,024	2.8%
Vested Terminated Members:			
Number of terminated vested members(2)	2,809	2,639	6.4%
Average age	45.9	46.0	-0.1
Total Members:	18,211	17,687	3.0%
Summary of Financial Data (dollar amounts in thousands):			
Market value of assets	$4,964,247	$4,386,837	13.2%
Return on market value of assets	13.10%	0.49%	N/A
Actuarial value of assets	$4,963,653	$4,592,439	8.1%
Return on actuarial value of assets	8.03%	6.51%	N/A
Valuation value of assets	$4,959,070	$4,585,713	8.1%
Return on valuation value of assets	8.04%	6.52%	N/A

(1) *Excludes monthly benefits for vested fixed supplemental and supplemental medical benefit amounts.*

(2) *Includes terminated members with member contributions on deposit.*

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

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 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.

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

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: 2008 – 2017

Year Ended June 30	Active Members	Vested Terminated Members[1]	Retired Members and Beneficiaries	Total Non-Actives	Ratio of Non-Actives to Actives
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
2017	8,636	2,809	6,766	9,575	1.11

(1) *Includes terminated members with member contributions on deposit.*

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

Active Members

Plan costs are affected by the age, years of service and compensation of active members. In this year's valuation, there were 8,636 active members with an average age of 45.0, average service of 11.2 years and average compensation of $86,257. The 8,509 active members in the prior valuation had an average age of 45.0, average service of 11.2 years and average compensation of $82,971.

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

Inactive Members

In this year's valuation, there were 2,809 members with a vested right to a deferred or immediate vested benefit or entitled to a return of their member contributions versus 2,639 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, 2017

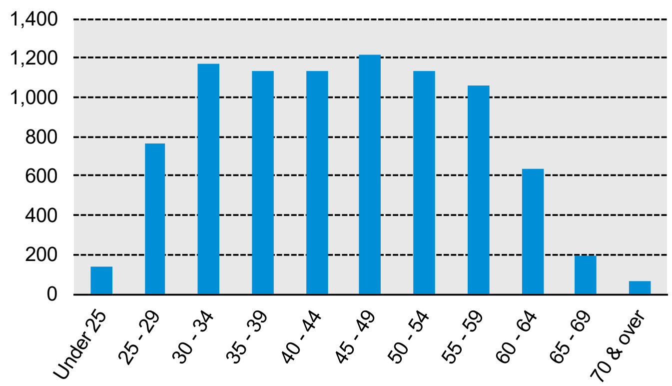
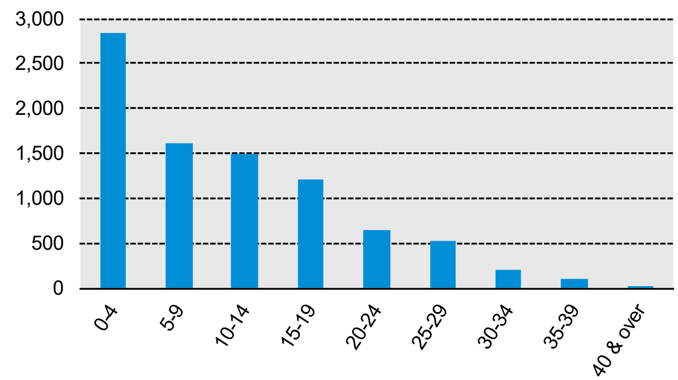


CHART 3

Distribution of Active Members by Years of Service as of June 30, 2017



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Retired Members and Beneficiaries

As of June 30, 2017, 5,797 retired members and 969 beneficiaries were receiving total monthly benefits of $21,031,819. For comparison, in the previous valuation, there were 5,605 retired members and 934 beneficiaries receiving monthly benefits of $19,776,496. These monthly benefits exclude benefits for vested fixed supplemental and supplemental medical benefit amounts.

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

Disability

Service

CHART 4

Distribution of Retired Members by Type and by Monthly Amount as of June 30, 2017

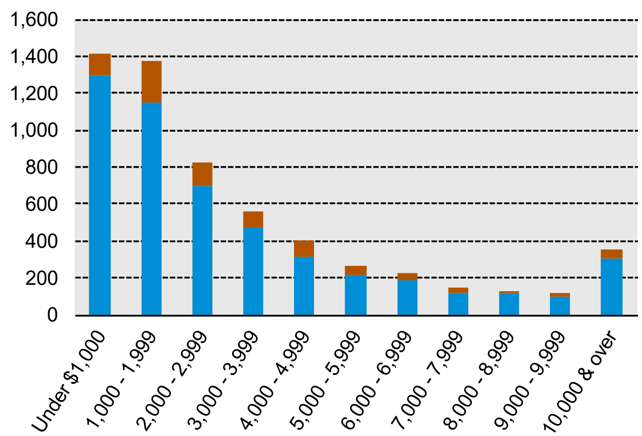
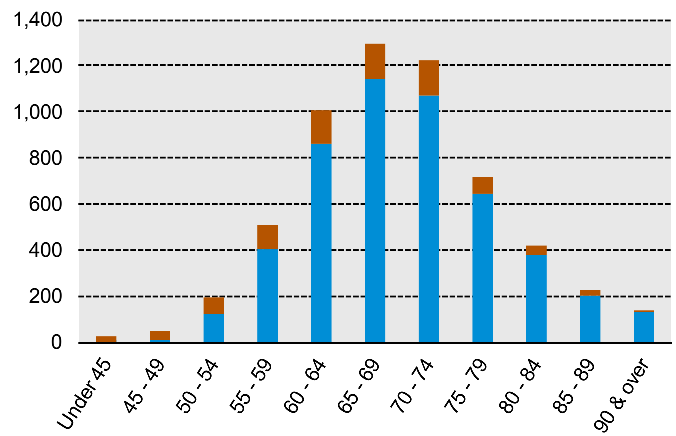


CHART 5

Distribution of Retired Members by Type and by Age as of June 30, 2017



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

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.

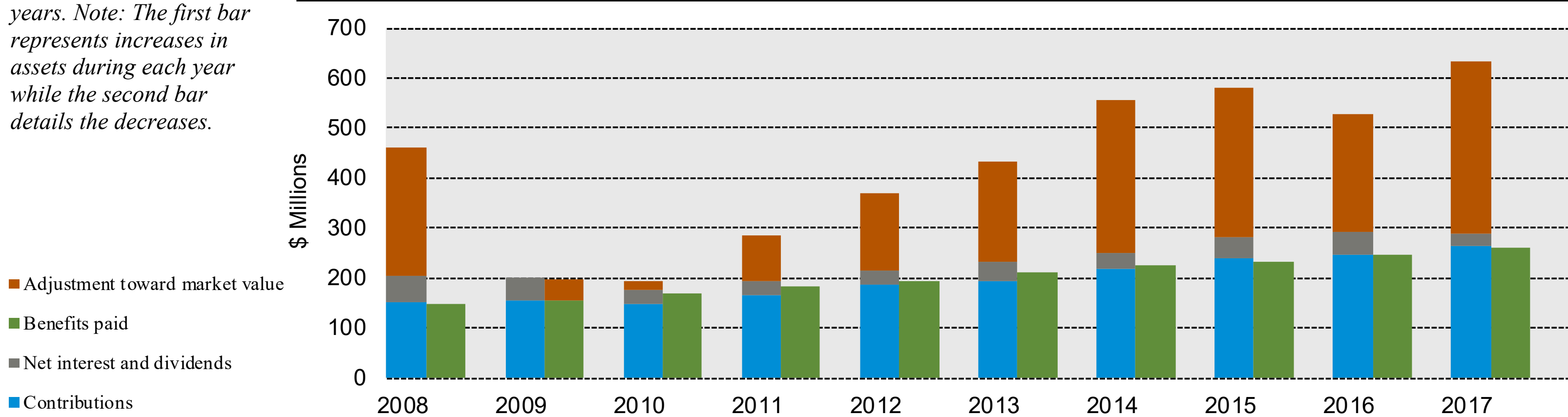
It is desirable to have level and predictable plan costs from one year to the next. For this reason, the Board of Retirement has approved an asset valuation method that gradually adjusts to market value. Under this valuation method, the full value of market fluctuations is not recognized in a single 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.

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.

CHART 6

Comparison of Increases and Decreases in the Actuarial Value of Assets for Years Ended June 30, 2008 – 2017



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

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

CHART 7

Determination of Actuarial and Valuation Value of Assets for Year Ended June 30, 2017

Six Month Period From	To	Total Actual Market Return (net)	Expected Market Return (net)	Investment Gain (Loss)	Deferred Factor	Deferred Return[1]
1/2012	6/2012	$203,623,364	$120,287,707	$83,335,657	0.0	$0
7/2012	12/2012	230,080,850	128,592,180	101,488,670	0.0	0
1/2013	6/2013	203,932,155	137,287,941	66,644,214	0.1	6,664,421
7/2013	12/2013	405,462,695	140,757,243	264,705,452	0.2	52,941,090
1/2014	6/2014	249,072,466	155,947,487	93,124,979	0.3	27,937,494
7/2014	12/2014	1,675,147	165,579,616	(163,904,469)	0.4	(65,561,788)
1/2015	6/2015	83,151,071	165,743,013	(82,591,942)	0.5	(41,295,971)
7/2015	12/2015	(131,432,997)	169,038,879	(300,471,876)	0.6	(180,283,125)
1/2016	6/2016	152,698,097	163,960,894	(11,262,797)	0.7	(7,883,958)
7/2016	12/2016	223,970,859	164,370,060	59,600,799	0.8	47,680,640
1/2017	6/2017	351,030,738	172,814,126	178,216,612	0.9	160,394,951

1.	Total Deferred Return	$593,754
2.	Net Market Value of Assets	4,964,246,776
3.	a. Actuarial Value of Assets (Item 2 – Item 1)	4,963,653,022
	b. Ratio of Actuarial Value of Assets to Net Market Value of Assets (Item 3a / Item 2)	100.0%
4.	Non-valuation reserves	
	a. Supplemental Medical Benefit	$4,582,871
	b. Statutory Contingency	0
	c. Subtotal	$4,582,871
5.	Valuation Value of Assets (Item 3a – Item 4c)	$4,959,070,151
6.	Amount of Deferred Returns to be recognized in the following valuations:	
	a. June 30, 2018	$14,147,774
	b. June 30, 2019	(54,770,237)
	c. June 30, 2020	(23,042,647)
	d. June 30, 2021	46,437,203
	e. June 30, 2022	17,821,661
	f. Subtotal	$593,754

(1) *Recognition at 10% per six month period over 5 years.*

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

CHART 8

Allocation of Valuation Value of Assets as of June 30, 2017

The calculation of the valuation value of assets from June 30, 2016 to June 30, 2017 by category is provided below:

	Allocated Assets for Funding			
	General			
	Tier 1	Tier 2	Safety	Total
1. Allocated Assets as of Beginning of Plan Year	$518,591,160	$2,016,520,818	$2,050,600,980	$4,585,712,958
2. Member Contributions	683,776	44,428,019	24,372,999	69,484,794
3. Member Buybacks	194,947	1,322,667	455,955	1,973,569
4. Employer Pick-up Contributions Credited to Member Account	33,367	899,835	2,977	936,179
5. Employer Contributions	1,826,085	97,646,868	91,286,048	190,759,001
6. Refunds of Member Contributions and Death Benefits Paid	291,822	4,342,102	530,489	5,164,413
7. Retiree Benefit Payments Excluding Supplemental Medical Payments	77,806,317	75,522,661	100,108,978	253,437,956
8. Subtotal (Items 1 + 2 + 3 + 4 + 5 – 6 – 7)	$443,231,196	$2,080,953,444	$2,066,079,492	$4,590,264,132
9. Weighted Average Fund Balance: Item 1 + ½ of (Items 2, 3, 4, 5) – ½ of (Items 6, 7)	480,911,178	2,048,737,131	2,058,340,236	4,587,988,545
10. Earnings Allocated in Proportion to Item 9	38,658,104	164,687,984	165,459,931	368,806,019
11. Valuation Value of Assets (Items 8 + 10)	$481,889,300	$2,245,641,428	$2,231,539,423	$4,959,070,151

Note: Results may not add due to rounding.

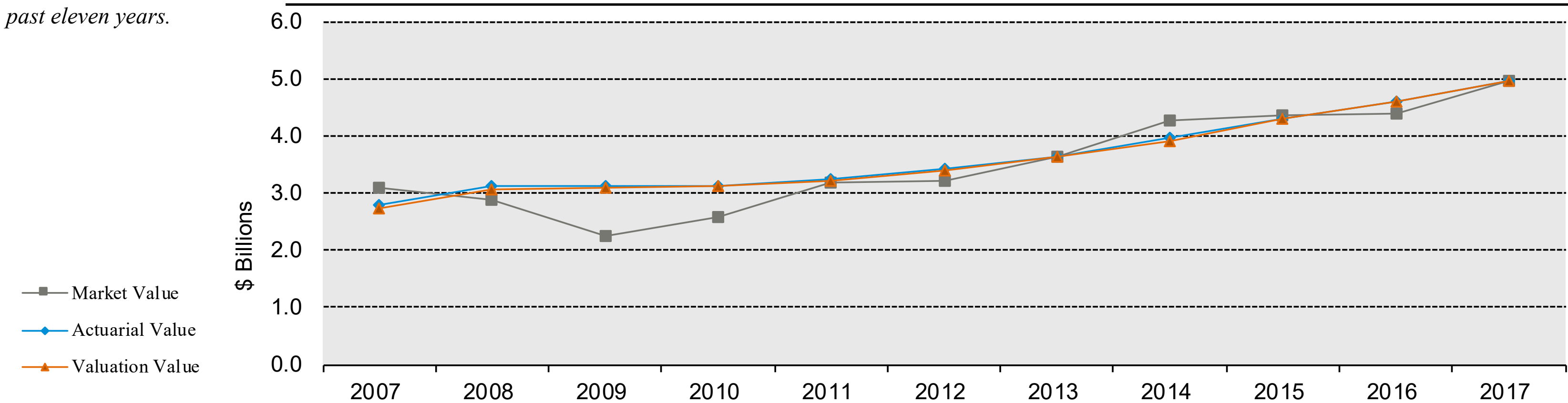
SECTION 2: Valuation Results for the Ventura County Employees' Retirement Association

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.

This chart shows the change in market value, actuarial value and valuation value over the past eleven years.

CHART 9

Market Value, Actuarial Value and Valuation Value of Assets as of June 30, 2007 – 2017



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

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 loss was $2.7 million, including a $24.7 million gain from investments and a $27.4 million loss from all other sources. The net experience variation from individual sources other than investments experience was 0.5% 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, 2017

1. Net gain from investments[1]	$24,707,000
2. Net loss from other experience[2]	(27,437,000)
3. Net experience loss: (1) + (2)	$(2,730,000)

[1] *Details in Chart 11.*

[2] *See Section 3, Exhibit H. Does not include the effect of plan or assumption changes, if any.*

Investment Rate of Return
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 2016/2017 plan year was 8.04%.

Since the actual return for the year was higher than the assumed return, the VCERA experienced an actuarial gain during the year ended June 30, 2017 with regard to its investments.

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

CHART 11

Investment Experience for Year Ended June 30, 2017 – Market Value, Actuarial Value and Valuation Value of Assets

	Market Value	Actuarial Value	Valuation Value
1. Actual return	$575,001,597	$368,806,019	$368,806,019
2. Average value of assets	4,388,040,944	4,593,642,768	4,587,988,545
3. Actual rate of return: (1) ÷ (2)	13.10%	8.03%	8.04%
4. Assumed rate of return	7.50%	7.50%	7.50%
5. Expected return: (2) x (4)	$329,103,071	$344,523,208	$344,099,141
6. Actuarial gain/(loss): (1) – (5)	245,898,526	24,282,811	24,706,878

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

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: 2008 – 2017

	Market Value Investment Return		Actuarial Value Investment Return		Valuation Value Investment Return	
Year Ended June 30	Amount	Percent	Amount	Percent	Amount	Percent
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%
2017	575,001,597	13.10%	368,806,019	8.03%	368,806,019	8.04%
Five-Year Average Return		8.91%		7.87%		7.90%
Ten-Year Average Return		5.75%		6.33%		6.44%

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

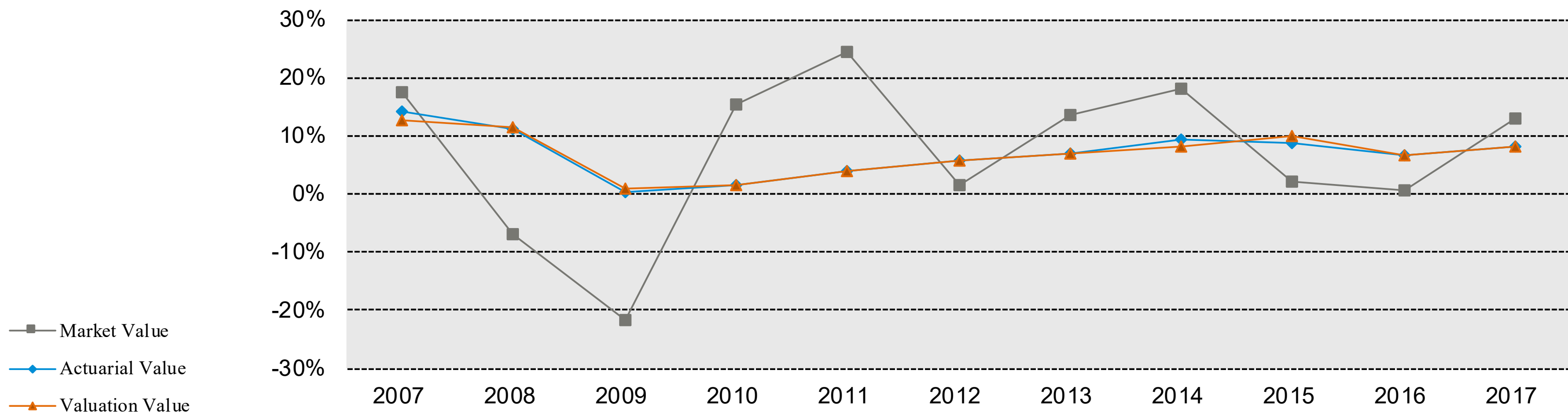
SECTION 2: Valuation Results for the Ventura County Employees' Retirement Association

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 - 2017.

CHART 13

Market, Actuarial and Valuation Rates of Return for Years Ended June 30, 2007 - 2017



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

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 loss from this other experience for the year ended June 30, 2017 amounted to $27.4 million which is 0.5% of the actuarial accrued liability. This loss was mainly due to higher than expected individual salary increase for actives offset to some extent by 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 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.

Appendix C shows employer contribution rates based on the prior methodology without a 50/50 sharing of Normal Cost for non-PEPRA Tiers.

Member Contributions

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 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 Safety members. That age is 55 for General Tier 1 members, 60 for General Tier 2 members and 50 for Safety 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 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 2 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

	June 30, 2017 Actuarial Valuation					
	BASIC		COLA		TOTAL	
General Tier 1 Members	Rate	Estimated Annual Amount[1]	Rate	Estimated Annual Amount[1]	Rate	Estimated Annual Amount[1]
Normal Cost[2]	8.20%	$580	2.75%	$195	10.95%	$775
UAAL[3]	9.06%	641	4.69%	332	13.75%	973
Total Contribution	17.26%	$1,221	7.44%	$527	24.70%	$1,748
General Tier 2 Members w/o COLA						
Normal Cost	7.03%	$15,140	0.00%	$0	7.03%	$15,140
UAAL[3]	9.06%	19,500	0.00%	0	9.06%	19,500
Total Contribution	16.09%	$34,640	0.00%	$0	16.09%	$34,640
General PEPRA Tier 2 Members w/o COLA						
Normal Cost	7.06%	$3,488	0.00%	$0	7.06%	$3,488
UAAL[3]	9.06%	4,476	0.00%	0	9.06%	4,476
Total Contribution	16.12%	$7,964	0.00%	$0	16.12%	$7,964
General Tier 2 Members w/COLA						
Normal Cost[4]	7.03%	$15,139	0.06%	$129	7.09%	$15,268
UAAL[3][5]	9.06%	19,501	4.69%	10,114	13.75%	29,615
Total Contribution	16.09%	$34,640	4.75%	$10,243	20.84%	$44,883
General PEPRA Tier 2 Members w/COLA						
Normal Cost[4]	7.06%	$5,772	0.02%	$17	7.08%	$5,789
UAAL[3][5]	9.06%	7,406	4.69%	3,835	13.75%	11,241
Total Contribution	16.12%	$13,178	4.71%	$3,852	20.83%	$17,030
All General Members[6]						
Normal Cost	7.05%	$40,119	0.06%	$341	7.11%	$40,460
UAAL	9.06%	51,524	2.51%	14,281	11.57%	65,805
Total Contribution	16.11%	$91,643	2.57%	$14,622	18.68%	$106,265

Applicable footnotes are shown on page 17.

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

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, 2017 Actuarial Valuation					
	BASIC		COLA		TOTAL	
Safety Members	Rate	Estimated Annual Amount[1]	Rate	Estimated Annual Amount[1]	Rate	Estimated Annual Amount[1]
Normal Cost[7]	11.65%	$18,178	4.85%	$7,568	16.50%	$25,746
UAAL	52.74%	82,293	(14.64%)	(22,843)	38.10%	59,450
Total Contribution	64.39%	$100,471	(9.79%)	$(15,275)	54.60%	$85,196
Safety PEPRA Members						
Normal Cost	9.96%	$1,985	4.13%	$824	14.09%	$2,809
UAAL	52.74%	10,513	(14.64%)	(2,918)	38.10%	7,595
Total Contribution	62.70%	$12,498	(10.51%)	$(2,094)	52.19%	$10,404
All Safety Members[6]						
Normal Cost	11.46%	$20,163	4.77%	$8,392	16.23%	$28,555
UAAL	52.74%	92,806	(14.64%)	(25,761)	38.10%	67,045
Total Contribution	64.20%	$112,969	(9.87%)	$(17,369)	54.33%	$95,600
All Categories Combined[6]						
Normal Cost	8.09%	$60,282	1.17%	$8,733	9.26%	$69,015
UAAL	19.38%	144,330	(1.55%)	(11,480)	17.83%	132,850
Total Contribution	27.47%	$204,612	(0.38%)	$(2,747)	27.09%	$201,865

(1) *Amounts are in thousands, assumed to be paid throughout the year, and are based on June 30, 2017 annual payroll (also in thousands) shown below:*

General Tier 1	$7,076
General Tier 2	215,358
General PEPRA Tier 2	49,409
General Tier 2C	215,345
General PEPRA Tier 2C	81,759
Safety	156,036
Safety PEPRA	19,934
Total	$744,917

(2) *The total employer rate has been adjusted by 0.31% to account for the cost associated with the cessation of member contributions after 30 years of service.*

(3) *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).*

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

(5) *Includes 0.55% in COLA UAAL costs attributed to the first two years of service accrued for the fixed 2% COLA pursuant to Government Code 31627.*

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

(7) *The total employer rate has been adjusted by 1.28% to account for the cost associated with the cessation of member contributions after 30 years of service.*

Segal Consulting

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

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

Applicable footnotes are shown on page 19.

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

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, 2016 Actuarial Valuation					
	BASIC		COLA		TOTAL	
Safety Members	Rate	Estimated Annual Amount[1]	Rate	Estimated Annual Amount[1]	Rate	Estimated Annual Amount[1]
Normal Cost[7]	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	51.58%	6,425	(12.51%)	(1,558)	39.07%	4,867
Total Contribution	61.79%	$7,697	(8.30%)	$(1,034)	53.49%	$6,663
All Safety Members[6]						
Normal Cost	11.60%	$19,469	4.83%	$8,108	16.43%	$27,577
UAAL	51.58%	86,581	(12.51%)	(20,999)	39.07%	65,582
Total Contribution	63.18%	$106,050	(7.68%)	$(12,891)	55.50%	$93,159
All Categories Combined[6]						
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

(1) *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

(2) *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.*

(3) *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).*

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

(5) *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.*

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

(7) *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.*

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The employer contribution rates as of June 30, 2017 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.

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

CHART 15

Reconciliation of Recommended Average Employer Contribution Rate from June 30, 2016 to June 30, 2017 (Dollar Amounts in Thousands)

	Contribution Rate	Estimated Annual Dollar Cost[1]
Recommended Average Employer Contribution Rate as of June 30, 2016	27.52%	$194,291
Effect of investment gain[2]	(0.30%)	$(2,235)
Effect of lower than expected contributions[3]	0.03%	223
Effect of greater than expected individual salary increases	0.42%	3,129
Effect of greater than expected total payroll growth	(0.35%)	(2,607)
Effect of lower than expected COLA benefit increase for retirees and beneficiaries	(0.25%)	(1,862)
Effect of changes in member demographics on Normal Cost	(0.11%)	(819)
Effect of net other changes[4]	0.13%	11,745
Total change	(0.43%)	$7,574
Recommended Average Employer Contribution Rate as of June 30, 2017	27.09%	$201,865

(1) *Based on projected payroll for each year.*

(2) *The Association's valuation value of assets earned 8.04% which was higher than the 7.50% assumed rate of return for 2016/2017.*

(3) *Contribution loss mainly from one-year delay in implementing higher contribution rates for Safety tiers from the June 30, 2016 valuation.*

(4) *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, 2017 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.

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

CHART 16

Reconciliation of Recommended Average Member Contribution Rate from June 30, 2016 to June 30, 2017

(Dollar Amounts in Thousands)

	Contribution Rate[1]	Estimated Annual Dollar Cost[2]
Recommended Average Member Contribution Rate in June 30, 2016 Valuation	9.80%	$69,214
Effect of changes in member demographics[3]	(0.05%)	$3,429
Total change	(0.05%)	$3,429
Recommended Average Member Contribution Rate in June 30, 2017 Valuation	9.75%	$72,643

(1) *Average member contribution rates are after reflecting the impact of the cessation of member contribution after 30 years of service for non-PEPRA tiers. This is a change from the prior valuation.*

(2) *Based on projected payroll for each year.*

(3) *Estimated annual dollar cost also reflects change in payroll from prior valuation.*

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

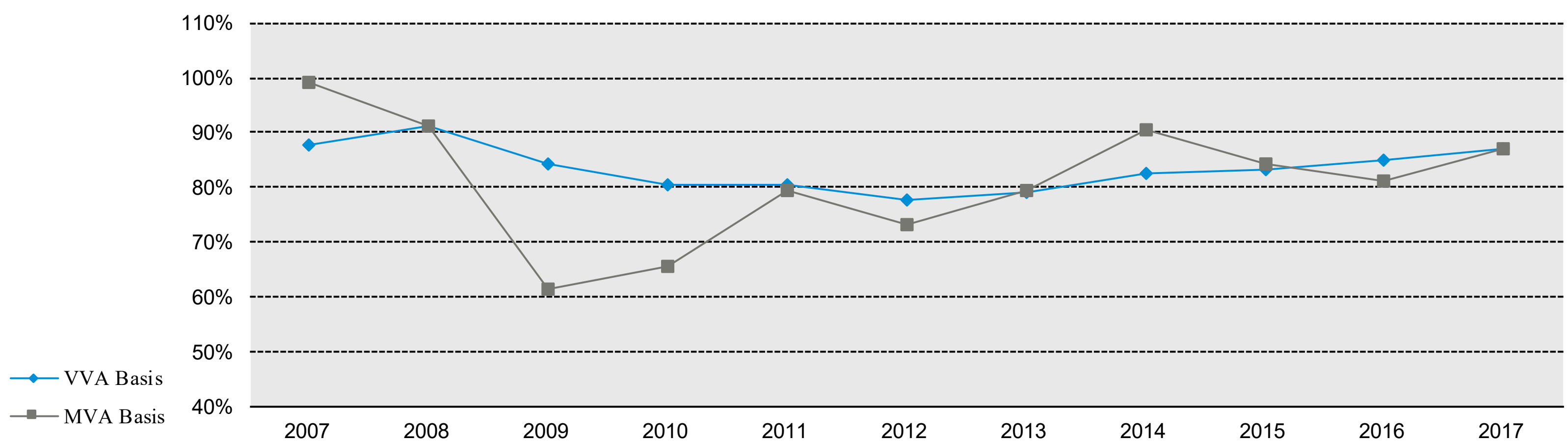
E. FUNDED RATIO

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.

CHART 17

Funded Ratio for Plan Years Ending June 30, 2007 - 2017



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

CHART 18

Schedule of Funding Progress

Actuarial Valuation Date	Valuation Value of Assets[1] (a)	Actuarial Accrued Liability (AAL)[2] (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)]
06/30/2008	$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%
06/30/2017	4,959,070,000	5,703,396,000	744,326,000	86.95%	744,917,000	99.92%

(1) *Excludes assets for supplemental medical benefit reserve and statutory contingency reserve.*

(2) *Excludes liabilities held for supplemental medical benefit reserve and statutory contingency reserve.*

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

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 6.7. This means that a 1% asset gain/(loss) (relative to the assumed investment return) translates to about 6.7% 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 7.7. This is about 15% higher than the AVR. Therefore, we would expect that contribution volatility will increase over the long term.

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.

CHART 19

Volatility Ratios for Years Ended June 30, 2009 – 2017

	Asset Volatility Ratios			Liability Volatility 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
2017	4.8	12.7	6.7	5.5	14.6	7.7

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

EXHIBIT A

Table of Plan Coverage

i. General Tier 1

	Year Ended June 30		
Category	**2017**	**2016**	**Change From Prior Year**
Active members in valuation:			
Number	49	60	-18.3%
Average age	62.5	61.7	0.8
Average service	33.5	32.7	0.8
Projected total compensation[1]	$7,076,281	$7,830,126	-9.6%
Projected average compensation	$144,414	$130,502	10.7%
Account balances	$11,606,918	$13,119,074	-11.5%
Total active vested members	49	60	-18.3%
Vested terminated members[2]	41	49	-16.3%
Retired members:			
Number in pay status	1,389	1,417	-2.0%
Average age	76.3	75.7	0.6
Average monthly benefit[3]	$3,867	$3,721	3.9%
Disabled members:			
Number in pay status	98	104	-5.8%
Average age	73.9	73.6	0.3
Average monthly benefit[3]	$2,481	$2,363	5.0%
Beneficiaries:			
Number in pay status	352	352	0.0%
Average age	79.7	79.7	0.0
Average monthly benefit[3]	$1,744	$1,695	2.9%

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

(2) *Includes terminated members with member contributions on deposit.*

(3) *Excludes vested fixed supplemental and supplemental medical benefit amounts.*

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

EXHIBIT A (continued)

Table of Plan Coverage

ii. General Tier 2 and General Tier 2C

Category	Year Ended June 30 2017	2016	Change From Prior Year
Active members in valuation:			
Number	4,868	5,155	-5.6%
Average age	49.1	48.6	0.5
Average service	14.2	13.3	0.9
Projected total compensation[1]	$430,702,974	$430,926,973	-0.1%
Projected average compensation	$88,476	$83,594	5.8%
Account balances	$398,807,087	$387,531,527	2.9%
Total active vested members	4,519	4,547	-0.6%
Vested terminated members[2]	1,986	1,971	0.8%
Retired members:			
Number in pay status	2,824	2,641	6.9%
Average age	68.6	68.2	0.4
Average monthly benefit[3]	$1,820	$1,746	4.2%
Disabled members:			
Number in pay status	335	331	1.2%
Average age	64.8	64.2	0.6
Average monthly benefit[3]	$1,505	$1,479	1.8%
Beneficiaries:			
Number in pay status	344	319	7.8%
Average age	69.4	68.2	1.2
Average monthly benefit[3]	$868	$840	3.3%

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

(2) *Includes terminated members with member contributions on deposit.*

(3) *Excludes vested fixed supplemental and supplemental medical benefit amounts.*

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

EXHIBIT A (continued)

Table of Plan Coverage

iii. General PEPRA Tier 1

Category	Year Ended June 30 2017	Year Ended June 30 2016	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(1)	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(2)	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(3)	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(3)	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(3)	N/A	N/A	N/A

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

(2) *Includes terminated members with member contributions on deposit.*

(3) *Excludes vested fixed supplemental and supplemental medical benefit amounts.*

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

EXHIBIT A (continued)

Table of Plan Coverage

iv. General PEPRA Tier 2 and General PEPRA Tier 2C

Category	Year Ended June 30 2017	Year Ended June 30 2016	Change From Prior Year
Active members in valuation:			
Number	2,211	1,800	22.8%
Average age	37.9	37.0	0.9
Average service	2.0	1.5	0.5
Projected total compensation[1]	$131,167,857	$99,384,839	32.0%
Projected average compensation	$59,325	$55,214	7.4%
Account balances	$19,960,108	$11,743,432	70.0%
Total active vested members	26	12	116.7%
Vested terminated members[2]	454	309	46.9%
Retired members:			
Number in pay status	0	0	N/A
Average age	N/A	N/A	N/A
Average monthly benefit[3]	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[3]	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[3]	N/A	N/A	N/A

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

(2) *Includes terminated members with member contributions on deposit.*

(3) *Excludes vested fixed supplemental and supplemental medical benefit amounts.*

Segal Consulting

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

EXHIBIT A (continued)

Table of Plan Coverage

v. Safety

Category	Year Ended June 30 2017	Year Ended June 30 2016	Change From Prior Year
Active members in valuation:			
Number	1,257	1,321	-4.8%
Average age	43.7	43.1	0.6
Average service	17.1	16.5	0.6
Projected total compensation[(1)]	$156,035,986	$155,400,453	0.4%
Projected average compensation	$124,134	$117,638	5.5%
Account balances	$197,710,206	$186,394,260	6.1%
Total active vested members	1,206	1,231	-2.0%
Vested terminated members[(2)]	289	287	0.7%
Retired members:			
Number in pay status	753	721	4.4%
Average age	66.7	66.4	0.3
Average monthly benefit[(3)]	$7,713	$7,514	2.6%
Disabled members:			
Number in pay status	398	391	1.8%
Average age	64.3	63.9	0.4
Average monthly benefit[(3)]	$5,560	$5,378	3.4%
Beneficiaries:			
Number in pay status	273	263	3.8%
Average age	67.6	66.8	0.8
Average monthly benefit[(3)]	$3,079	$2,940	4.7%

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

(2) *Includes terminated members with member contributions on deposit.*

(3) *Excludes vested fixed supplemental and supplemental medical benefit amounts.*

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

EXHIBIT A (continued)

Table of Plan Coverage

vi. Safety PEPRA

Category	Year Ended June 30 2017	2016	Change From Prior Year
Active members in valuation:			
Number	251	173	45.1%
Average age	29.7	29.6	0.1
Average service	2.1	1.7	0.4
Projected total compensation[1]	$19,934,288	$12,457,289	60.0%
Projected average compensation	$79,419	$72,007	10.3%
Account balances	$4,934,014	$2,654,345	85.9%
Total active vested members	1	0	N/A
Vested terminated members[2]	36	20	80.0%
Retired members:			
Number in pay status	0	0	N/A
Average age	N/A	N/A	N/A
Average monthly benefit[3]	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[3]	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[3]	N/A	N/A	N/A

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

(2) *Includes terminated members with member contributions on deposit.*

(3) *Excludes vested fixed supplemental and supplemental medical benefit amounts.*

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

EXHIBIT B

Members in Active Service and Projected Average Compensation as of June 30, 2017
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	- -	- -	- -	- -	- -	- -	- -	- -	- -	- -
	- -	- -	- -	- -	- -	- -	- -	- -	- -	- -
50 - 54	3	- -	- -	- -	1	1	1	- -	- -	- -
	$255,082	- -	- -	- -	$203,248	$245,774	$316,223	- -	- -	- -
55 - 59	15	- -	- -	- -	1	- -	3	1	9	1
	153,469	- -	- -	- -	226,807	- -	236,979	$221,772	$113,036	$125,201
60 - 64	19	- -	- -	- -	3	1	2	1	6	6
	,602	- -	- -	- -	203,699	73,267	248,548	276,895	98,271	103,910
65 - 69	6	- -	- -	- -	1	- -	1	2	2	- -
	109,454	- -	- -	- -	156,987	- -	214,710	67,097	75,415	- -
70 & over	6	- -	- -	1	- -	- -	1	- -	- -	4
	113,473	- -	- -	$199,501	- -	- -	147,904	- -	- -	83,358
Total	49	- -	- -	1	6	2	8	4	17	11
	$144,414	- -	- -	$199,501	$199,690	$159,520	$235,859	$158,215	$103,399	$98,372

Segal Consulting

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

EXHIBIT B (continued)

Members in Active Service and Projected Average Compensation as of June 30, 2017

By Age and Years of Service

ii. General Tier 2 and General Tier 2C

		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	- -	- -	- -	- -	- -	- -	- -	- -
	$47,352	$47,352	- -	- -	- -	- -	- -	- -	- -	- -
25 - 29	76	35	40	1	- -	- -	- -	- -	- -	- -
	64,633	66,640	$63,035	$58,270	- -	- -	- -	- -	- -	- -
30 - 34	417	74	261	81	1	- -	- -	- -	- -	- -
	78,991	78,798	81,266	71,933	$71,146	- -	- -	- -	- -	- -
35 - 39	578	65	255	200	58	- -	- -	- -	- -	- -
	84,347	78,025	84,786	86,519	82,012	- -	- -	- -	- -	- -
40 - 44	654	39	186	217	185	27	- -	- -	- -	- -
	87,016	81,053	83,780	90,918	87,150	$85,655	- -	- -	- -	- -
45 - 49	761	44	178	198	187	99	55	- -	- -	- -
	91,169	81,609	84,497	93,718	97,527	93,705	$85,047	- -	- -	- -
50 - 54	803	36	146	186	193	113	106	22	1	- -
	92,145	82,842	84,715	89,956	93,073	105,926	91,287	$99,492	$111,758	- -
55 - 59	830	32	159	174	148	109	100	72	36	- -
	91,513	76,210	87,222	90,877	89,299	94,870	98,872	97,747	93,157	- -
60 - 64	529	14	92	110	107	69	82	38	17	- -
	91,754	81,008	90,968	82,677	88,050	92,927	96,082	118,574	101,330	- -
65 - 69	167	7	42	41	37	17	10	9	4	- -
	89,991	79,712	83,735	90,048	92,086	90,265	87,245	107,115	120,866	- -
70 & over	50	3	6	13	8	10	4	4	2	- -
	83,097	57,598	82,276	79,721	89,413	99,194	80,502	64,300	82,788	- -
Total	4,868	352	1,365	1,221	924	444	357	145	60	- -
	$88,476	$77,884	$83,950	$88,322	$90,813	$96,483	$93,318	$103,129	$97,284	- -

Segal Consulting

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

EXHIBIT B

Members in Active Service and Projected Average Compensation as of June 30, 2017
By Age and Years of Service

iii. General PEPRA Tier 2 and General PEPRA Tier 2C

		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	98	98	- -	- -	- -	- -	- -	- -	- -	- -
	$46,466	$46,466	- -	- -	- -	- -	- -	- -	- -	- -
25 - 29	497	496	1	- -	- -	- -	- -	- -	- -	- -
	50,307	50,254	$76,217	- -	- -	- -	- -	- -	- -	- -
30 - 34	527	523	3	1	- -	- -	- -	- -	- -	- -
	58,711	58,656	71,484	$49,077	- -	- -	- -	- -	- -	- -
35 - 39	323	322	- -	1	- -	- -	- -	- -	- -	- -
	63,528	63,426	- -	96,358	- -	- -	- -	- -	- -	- -
40 - 44	229	224	1	1	3	- -	- -	- -	- -	- -
	62,149	61,905	58,829	73,476	$77,720	- -	- -	- -	- -	- -
45 - 49	186	183	1	1	1	- -	- -	- -	- -	- -
	64,313	63,856	108,638	118,775	49,078	- -	- -	- -	- -	- -
50 - 54	137	134	2	- -	1	- -	- -	- -	- -	- -
	66,880	66,407	72,632	- -	118,775	- -	- -	- -	- -	- -
55 - 59	121	121	- -	- -	- -	- -	- -	- -	- -	- -
	65,863	65,863	- -	- -	- -	- -	- -	- -	- -	- -
60 - 64	65	65	- -	- -	- -	- -	- -	- -	- -	- -
	74,861	74,861	- -	- -	- -	- -	- -	- -	- -	- -
65 - 69	19	19	- -	- -	- -	- -	- -	- -	- -	- -
	66,595	66,595	- -	- -	- -	- -	- -	- -	- -	- -
70 & over	9	9	- -	- -	- -	- -	- -	- -	- -	- -
	77,117	77,117	- -	- -	- -	- -	- -	- -	- -	- -
Total	2,211	2,194	8	4	5	- -	- -	- -	- -	- -
	$59,325	$59,173	$75,425	$84,422	$80,202	- -	- -	- -	- -	- -

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

EXHIBIT B (continued)

Members in Active Service and Projected Average Compensation as of June 30, 2017
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	1	1	- -	- -	- -	- -	- -	- -	- -	- -
	$96,661	$96,661	- -	- -	- -	- -	- -	- -	- -	- -
25 - 29	60	19	39	2	- -	- -	- -	- -	- -	- -
	105,564	99,738	$107,985	$113,701	- -	- -	- -	- -	- -	- -
30 - 34	165	16	102	47	- -	- -	- -	- -	- -	- -
	108,902	97,885	108,402	113,739	- -	- -	- -	- -	- -	- -
35 - 39	215	7	52	120	36	- -	- -	- -	- -	- -
	114,108	112,236	115,463	112,371	$118,306	- -	- -	- -	- -	- -
40 - 44	241	5	22	58	119	36	1	- -	- -	- -
	123,893	114,974	109,349	111,651	127,580	$140,529	$160,904	- -	- -	- -
45 - 49	267	1	5	19	90	107	43	2	- -	- -
	129,478	73,309	115,857	100,115	125,717	131,760	146,912	$142,878	- -	- -
50 - 54	192	2	3	14	24	38	82	27	2	- -
	137,493	159,601	119,564	104,625	115,695	135,629	141,525	162,369	$168,220	- -
55 - 59	90	- -	6	1	9	12	25	20	17	- -
	139,645	- -	148,241	72,162	109,643	122,761	140,333	152,226	152,569	- -
60 - 64	22	- -	- -	3	4	1	5	6	2	1
	139,757	- -	- -	129,427	102,619	73,370	147,251	126,154	284,537	$140,276
65 - 69	4	- -	1	1	1	- -	- -	- -	- -	1
	158,295	- -	146,713	174,043	152,043	- -	- -	- -	- -	160,381
70 & over	- -	- -	- -	- -	- -	- -	- -	- -	- -	- -
	- -	- -	- -	- -	- -	- -	- -	- -	- -	- -
Total	1,257	51	230	265	283	194	156	55	21	2
	$124,134	$104,135	$111,532	$111,452	$123,963	$133,287	$143,126	$154,021	$166,628	$150,328

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

EXHIBIT B

Members in Active Service and Projected Average Compensation as of June 30, 2017
By Age and Years of Service

v. Safety PEPRA

		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	34	34	- -	- -	- -	- -	- -	- -	- -	- -
	$72,937	$72,937	- -	- -	- -	- -	- -	- -	- -	- -
25 - 29	131	131	- -	- -	- -	- -	- -	- -	- -	- -
	75,854	75,854	- -	- -	- -	- -	- -	- -	- -	- -
30 - 34	59	59	- -	- -	- -	- -	- -	- -	- -	- -
	81,762	81,762	- -	- -	- -	- -	- -	- -	- -	- -
35 - 39	14	13	- -	1	- -	- -	- -	- -	- -	- -
	87,049	84,916	- -	$114,786	- -	- -	- -	- -	- -	- -
40 - 44	5	5	- -	- -	- -	- -	- -	- -	- -	- -
	107,703	107,703	- -	- -	- -	- -	- -	- -	- -	- -
45 - 49	3	3	- -	- -	- -	- -	- -	- -	- -	- -
	80,204	80,204	- -	- -	- -	- -	- -	- -	- -	- -
50 - 54	2	2	- -	- -	- -	- -	- -	- -	- -	- -
	137,117	137,118	- -	- -	- -	- -	- -	- -	- -	- -
55 - 59	2	2	- -	- -	- -	- -	- -	- -	- -	- -
	141,010	141,010	- -	- -	- -	- -	- -	- -	- -	- -
60 - 64	1	1	- -	- -	- -	- -	- -	- -	- -	- -
	139,490	139,490	- -	- -	- -	- -	- -	- -	- -	- -
65 - 69	- -	- -	- -	- -	- -	- -	- -	- -	- -	- -
	- -	- -	- -	- -	- -	- -	- -	- -	- -	- -
70 & over	- -	- -	- -	- -	- -	- -	- -	- -	- -	- -
	- -	- -	- -	- -	- -	- -	- -	- -	- -	- -
Total	251	250	- -	1	- -	- -	- -	- -	- -	- -
	$79,419	$79,278	- -	$114,786	- -	- -	- -	- -	- -	- -

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

EXHIBIT C

Reconciliation of Member Data – June 30, 2016 to June 30, 2017

	Active Members	Vested Terminated Members[(1)]	Pensioners	Disableds	Beneficiaries	Total
Number as of June 30, 2016	8,509	2,639	4,779	826	934	17,687
New members	713	77	0	0	79	869
Terminations – with vested rights	-294	294	0	0	0	0
Contributions refunds	-87	-82	0	0	0	-169
Retirements	-216	-83	299	0	0	0
New disabilities	-12	0	-11	23	0	0
Return to work	29	-26	-3	0	0	0
Died with or without beneficiary	-7	-7	-98	-18	-44	-174
Data adjustments	1	-3	0	0	0	-2
Number as of June 30, 2017	8,636	2,809	4,966	831	969	18,211

(1) *Includes terminated members with member contributions on deposit.*

Segal Consulting

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

EXHIBIT D

Summary Statement of Income and Expenses on an Actuarial Value Basis

	Year Ended June 30, 2017		Year Ended June 30, 2016	
Contribution income:				
Employer contributions	$190,759,001		$177,709,688	
Member contributions	72,394,542		69,469,771	
Contribution income		$263,153,543		$247,179,459
Investment income:				
Interest, dividends and other income	$44,408,458		$62,654,675	
Adjustment toward market value[1]	345,055,232		236,773,776	
Less investment and administrative fees	(20,657,671)		(18,897,272)	
Net investment income		$368,806,019		$280,531,179
Total income available for benefits		$631,959,562		$527,710,638
Less benefit payments		$(260,745,073)		$(246,403,038)
Change in reserve for future benefits		$371,214,489		$281,307,600

(1) *Equals the "non-cash" earnings on investments included in the Actuarial Value of Assets.*

Segal Consulting

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

EXHIBIT E

Summary Statement of Net Assets

	Year Ended June 30, 2017		Year Ended June 30, 2016	
Cash equivalents		$113,845,651		$287,041,397
Pension software development cost		14,507,383		12,961,635
Accounts receivable:				
Member and employer contributions	$9,565,843		$8,300,490	
Accrued interest and dividends	2,832,421		2,487,536	
Securities sold	15,863,679		5,571,076	
Other	33,621		43,714	
Total accounts receivable		28,295,564		16,402,816
Investments:				
Equities	$3,090,214,577		$2,491,464,213	
Fixed income	945,943,802		834,771,950	
Real estate	391,122,352		371,598,471	
Investments received on securities lending	44,704,884		48,243,231	
Others	413,507,540		380,549,757	
Total investments at market value		4,885,493,155		4,126,627,622
Total assets		$5,042,141,753		$4,443,033,470
Liabilities:				
Securities lending	$(44,704,883)		$(48,243,230)	
Security purchases	(27,617,313)		(2,936,604)	
Accounts payable	(5,546,947)		(4,990,540)	
Prepaid contributions	(25,834)		(26,387)	
Total liabilities		$(77,894,977)		$(56,196,761)
Net assets at market value		$4,964,246,776		$4,386,836,709
Net assets at actuarial value		$4,963,653,022		$4,592,438,533
Net assets at valuation value		$4,959,070,151		$4,585,712,958

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)

Assets	**June 30, 2017**	**June 30, 2016**
1. Total valuation value of assets	$4,959,070	$4,585,713
2. Present value of future contributions by members	545,439	513,034
3. Present value of future employer contributions for:		
a. Entry age normal cost	571,174	556,204
b. Unfunded actuarial accrued liability	744,326	813,043
4. Total current and future assets	$6,820,009	$6,467,994
Liabilities		
5. Present value of benefits for retirees and beneficiaries	$3,229,255	$3,065,942
6. Present value of benefits for vested terminated members	159,743	145,994
7. Present value of benefits for active members	3,431,011	3,256,058
8. Total liabilities	$6,820,009	$6,467,994

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

EXHIBIT G
Summary of Allocated Reserves

Reserves

	June 30, 2017	June 30, 2016
Member contributions reserve [1]	$725,090,318	$683,571,172
Employer advance reserve [1]	2,599,031,479	2,350,035,512
Offset: Interest crediting shortfall tracking account [1]	(1,084,273,390)	(1,019,896,714)
Retiree reserve [1]	2,561,943,002	2,417,425,764
Supplemental death benefit reserve [1]	15,242,982	14,773,547
Vested fixed supplemental ($108.44) reserve [1]	142,035,760	139,803,677
Undistributed earnings [1]	0	0
Valuation reserves	$4,959,070,151	$4,585,712,958
Supplemental medical ($27.50) reserve [2]	4,582,871	6,725,575
Contingency reserve [2]	0	0
Total reserves (actuarial value)	$4,963,653,022	$4,592,438,533
Market stabilization reserve [2]	593,754	(205,601,824)
Net market value	$4,964,246,776	$4,386,836,709

(1) *Included in valuation value of assets.*

(2) *Not included in valuation value of assets.*

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

EXHIBIT H
Development of Unfunded/(Overfunded) Actuarial Accrued Liability for Year Ended June 30, 2017

1.	Unfunded actuarial accrued liability at beginning of year		$813,043,000
2.	Total Normal Cost payable at middle of year		137,451,000
3.	Expected employer and member contributions		(265,578,000)
4.	Interest (whole year on (1) plus half year on (2) + (3))		56,680,000
5.	Expected unfunded actuarial accrued liability at end of year		$741,596,000
6.	Actuarial (gain)/loss due to all changes:		
	(a) Gain from investment return on valuation value of assets (8.04%)	$(24,707,000)	
	(b) Actual contributions less than expected[1]	2,515,000	
	(c) Higher than expected individual salary increases	35,441,000	
	(d) Lower than expected COLA benefit increase for retirees and beneficiaries	(21,236,000)	
	(e) Other experience	10,717,000	
	Total changes		$2,730,000
7.	Unfunded actuarial accrued liability at end of year		$744,326,000

Note: Net loss from other experience of $27,437,000 (as shown on page 8) is equal to the sum of items: 6(b) through 6(e).

[1] *Contribution loss mainly from one-year delay in implementing higher contribution rates for Safety tiers from the June 30, 2016 valuation.*

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

EXHIBIT I
Table of Amortization Bases

	Date Established	Source	Initial Amount	Outstanding Balance	Years Remaining	Payment[1]
General Tier 1	June 30, 2004	Restart of Amortization	$63,394,000	$17,721,000	2	$9,389,000
	June 30, 2005	Actuarial (Gain)/Loss	22,085,000	8,735,000	3	3,143,000
	June 30, 2006	Actuarial (Gain)/Loss	7,048,000	3,508,000	4	964,000
	June 30, 2006	Assumption Change	41,538,000	20,633,000	4	5,673,000
	June 30, 2007	Actuarial (Gain)/Loss	(19,901,000)	(11,651,000)	5	(2,610,000)
	June 30, 2008	Actuarial (Gain)/Loss	(18,128,000)	(12,013,000)	6	(2,284,000)
	June 30, 2009	Actuarial (Gain)/Loss	55,190,000	40,234,000	7	6,678,000
	June 30, 2009	Assumption Change	18,574,000	13,532,000	7	2,246,000
	June 30, 2010	Actuarial (Gain)/Loss	50,018,000	39,293,000	8	5,810,000
	June 30, 2011	Actuarial (Gain)/Loss	36,225,000	30,201,000	9	4,042,000
	June 30, 2012	Actuarial (Gain)/Loss	29,865,000	26,093,000	10	3,199,000
	June 30, 2012	Demographic Assumption Change	38,104,000	37,363,000	15	3,333,000
	June 30, 2012	Economic Assumption Change	19,517,000	19,134,000	15	1,707,000
	June 30, 2013	Actuarial (Gain)/Loss	31,670,000	28,782,000	11	3,265,000
	June 30, 2014	Actuarial (Gain)/Loss	16,119,000	15,118,000	12	1,600,000
	June 30, 2015	Actuarial (Gain)/Loss	8,457,000	8,120,000	13	807,000
	June 30, 2015	Assumption Change	47,959,000	47,806,000	18	3,739,000
	June 30, 2016	Actuarial (Gain)/Loss	45,451,000	44,667,000	14	4,196,000
	June 30, 2017	Actuarial (Gain)/Loss	53,640,000	53,640,000	15	4,785,000
				$430,916,000		$59,682,000

(1) *As of middle of year.*

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

EXHIBIT I (continued)

Table of Amortization Bases

	Date Established	Source	Initial Amount	Outstanding Balance	Years Remaining	Payment[1]
General Tier 2	June 30, 2004	Restart of Amortization	$49,731,000	$13,905,000	2	$7,367,000
	June 30, 2005	Actuarial (Gain)/Loss	7,622,000	3,014,000	3	1,085,000
	June 30, 2006	Actuarial (Gain)/Loss	(9,108,000)	(4,529,000)	4	(1,245,000)
	June 30, 2006	Assumption Change	19,085,000	9,483,000	4	2,607,000
	June 30, 2006	Plan Provision Change	14,731,000	7,314,000	4	2,011,000
	June 30, 2007	Actuarial (Gain)/Loss	(39,508,000)	(23,135,000)	5	(5,183,000)
	June 30, 2008	Actuarial (Gain)/Loss	(34,794,000)	(23,051,000)	6	(4,383,000)
	June 30, 2009	Actuarial (Gain)/Loss	71,253,000	51,938,000	7	8,620,000
	June 30, 2009	Assumption Change	22,696,000	16,537,000	7	2,745,000
	June 30, 2010	Actuarial (Gain)/Loss	47,615,000	37,410,000	8	5,532,000
	June 30, 2011	Actuarial (Gain)/Loss	(6,949,000)	(5,808,000)	9	(777,000)
	June 30, 2012	Actuarial (Gain)/Loss	(18,106,000)	(15,819,000)	10	(1,940,000)
	June 30, 2012	Demographic Assumption Change	29,420,000	28,834,000	15	2,572,000
	June 30, 2012	Economic Assumption Change	32,874,000	32,245,000	15	2,876,000
	June 30, 2013	Actuarial (Gain)/Loss	(23,823,000)	(21,666,000)	11	(2,458,000)
	June 30, 2014	Actuarial (Gain)/Loss	(49,125,000)	(46,076,000)	12	(4,877,000)
	June 30, 2015	Actuarial (Gain)/Loss	(62,406,000)	(59,982,000)	13	(5,964,000)
	June 30, 2015	Assumption Change	50,090,000	49,937,000	18	3,906,000
	June 30, 2016	Actuarial (Gain)/Loss	(28,842,000)	(28,349,000)	14	(2,663,000)
	June 30, 2017	Actuarial (Gain)/Loss	(41,622,000)	(41,622,000)	15	(3,713,000)
				$(19,420,000)		$6,118,000

[1] *As of middle of year.*

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

EXHIBIT I (continued)

Table of Amortization Bases

	Date Established	Source	Initial Amount	Outstanding Balance	Years Remaining	Payment[1]
Safety	June 30, 2004	Restart of Amortization	$210,319,000	$58,791,000	2	$31,148,000
	June 30, 2005	Actuarial (Gain)/Loss	19,142,000	7,573,000	3	2,725,000
	June 30, 2006	Actuarial (Gain)/Loss	3,418,000	1,694,000	4	466,000
	June 30, 2006	Assumption Change	42,167,000	20,945,000	4	5,759,000
	June 30, 2007	Actuarial (Gain)/Loss	(37,489,000)	(21,948,000)	5	(4,917,000)
	June 30, 2008	Actuarial (Gain)/Loss	(22,443,000)	(14,860,000)	6	(2,826,000)
	June 30, 2009	Actuarial (Gain)/Loss	78,157,000	56,971,000	7	9,456,000
	June 30, 2009	Assumption Change	49,982,000	36,436,000	7	6,048,000
	June 30, 2010	Actuarial (Gain)/Loss	108,448,000	85,214,000	8	12,601,000
	June 30, 2011	Actuarial (Gain)/Loss	8,879,000	7,409,000	9	992,000
	June 30, 2012	Actuarial (Gain)/Loss	(7,501,000)	(6,542,000)	10	(802,000)
	June 30, 2012	Demographic Assumption Change	55,513,000	54,443,000	15	4,856,000
	June 30, 2012	Economic Assumption Change	51,887,000	50,869,000	15	4,537,000
	June 30, 2013	Actuarial (Gain)/Loss	7,588,000	6,906,000	11	784,000
	June 30, 2014	Actuarial (Gain)/Loss	(54,478,000)	(51,093,000)	12	(5,408,000)
	June 30, 2015	Actuarial (Gain)/Loss	(55,657,000)	(53,497,000)	13	(5,319,000)
	June 30, 2015	Assumption Change	119,953,000	119,576,000	18	9,353,000
	June 30, 2016	Actuarial (Gain)/Loss	(17,062,000)	(16,769,000)	14	(1,575,000)
	June 30, 2017	Actuarial (Gain)/Loss	(9,288,000)	(9,288,000)	15	(828,000)
				$332,830,000		$67,050,000

(1) *As of middle of year.*

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

EXHIBIT I (continued)

Table of Amortization Bases

	Date Established	Source	Initial Amount	Outstanding Balance	Years Remaining	Payment[1]
Total VCERA	June 30, 2004	Restart of Amortization	$323,444,000	$90,417,000	2	$47,904,000
	June 30, 2005	Actuarial (Gain)/Loss	48,849,000	19,322,000	3	6,953,000
	June 30, 2006	Actuarial (Gain)/Loss	1,358,000	673,000	4	185,000
	June 30, 2006	Assumption Change	102,790,000	51,061,000	4	14,039,000
	June 30, 2006	Plan Provision Change	14,731,000	7,314,000	4	2,011,000
	June 30, 2007	Actuarial (Gain)/Loss	(96,898,000)	(56,734,000)	5	(12,710,000)
	June 30, 2008	Actuarial (Gain)/Loss	(75,365,000)	(49,924,000)	6	(9,493,000)
	June 30, 2009	Actuarial (Gain)/Loss	204,600,000	149,143,000	7	24,754,000
	June 30, 2009	Assumption Change	91,252,000	66,505,000	7	11,039,000
	June 30, 2010	Actuarial (Gain)/Loss	206,081,000	161,917,000	8	23,943,000
	June 30, 2011	Actuarial (Gain)/Loss	38,155,000	31,802,000	9	4,257,000
	June 30, 2012	Actuarial (Gain)/Loss	4,258,000	3,732,000	10	457,000
	June 30, 2012	Demographic Assumption Change	123,037,000	120,640,000	15	10,761,000
	June 30, 2012	Economic Assumption Change	104,278,000	102,248,000	15	9,120,000
	June 30, 2013	Actuarial (Gain)/Loss	15,435,000	14,022,000	11	1,591,000
	June 30, 2014	Actuarial (Gain)/Loss	(87,484,000)	(82,051,000)	12	(8,685,000)
	June 30, 2015	Actuarial (Gain)/Loss	(109,606,000)	(105,359,000)	13	(10,476,000)
	June 30, 2015	Assumption Change	218,002,000	217,319,000	18	16,998,000
	June 30, 2016	Actuarial (Gain)/Loss	(453,000)	(451,000)	14	(42,000)
	June 30, 2017	Actuarial (Gain)/Loss	2,730,000	2,730,000	15	244,000
				$744,326,000		$132,850,000

[1] *As of middle of year.*

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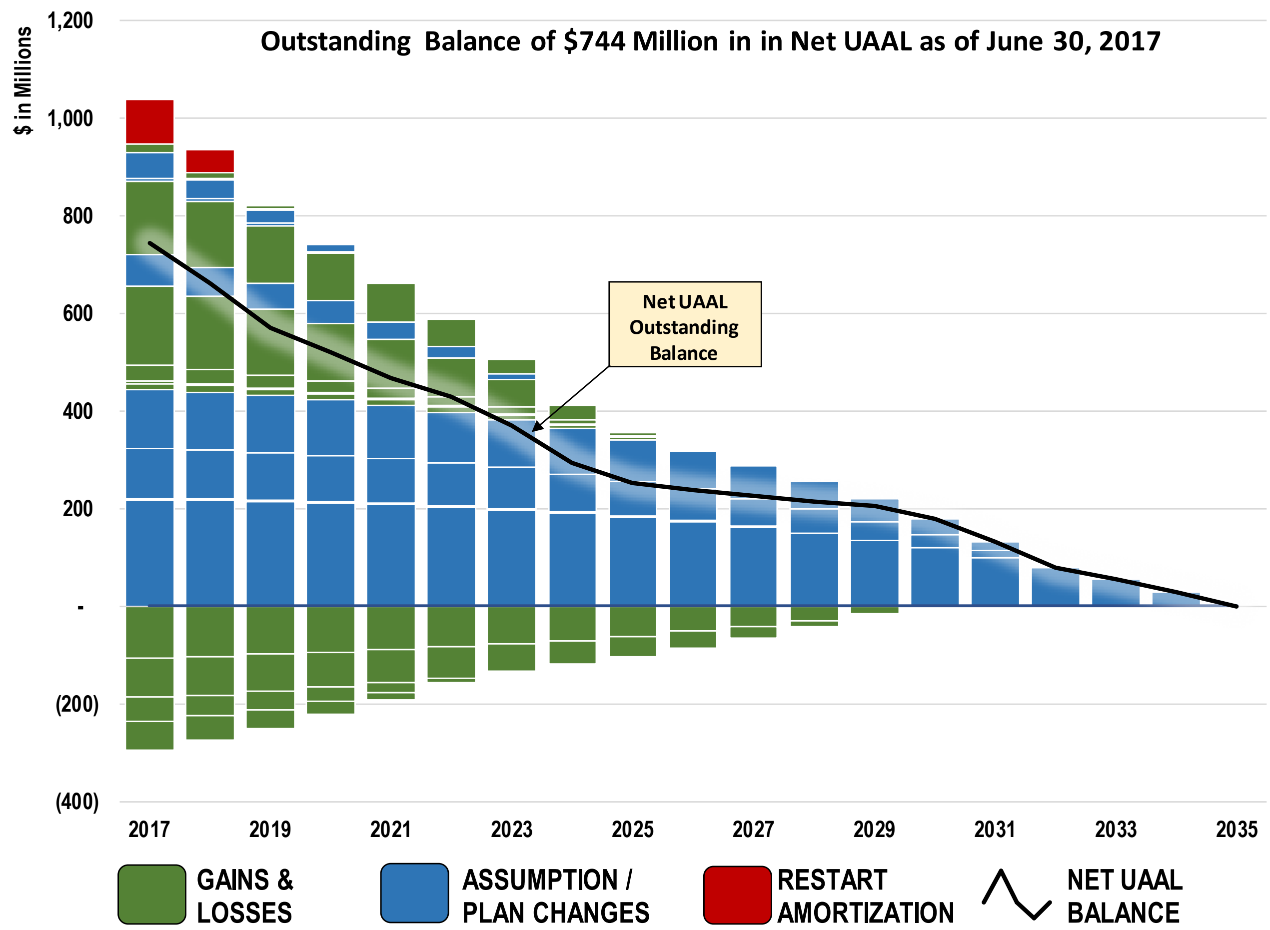
SECTION 3: Supplemental Information for the Ventura County Employees' Retirement Association

EXHIBIT J

Projection of UAAL Balances and Payments



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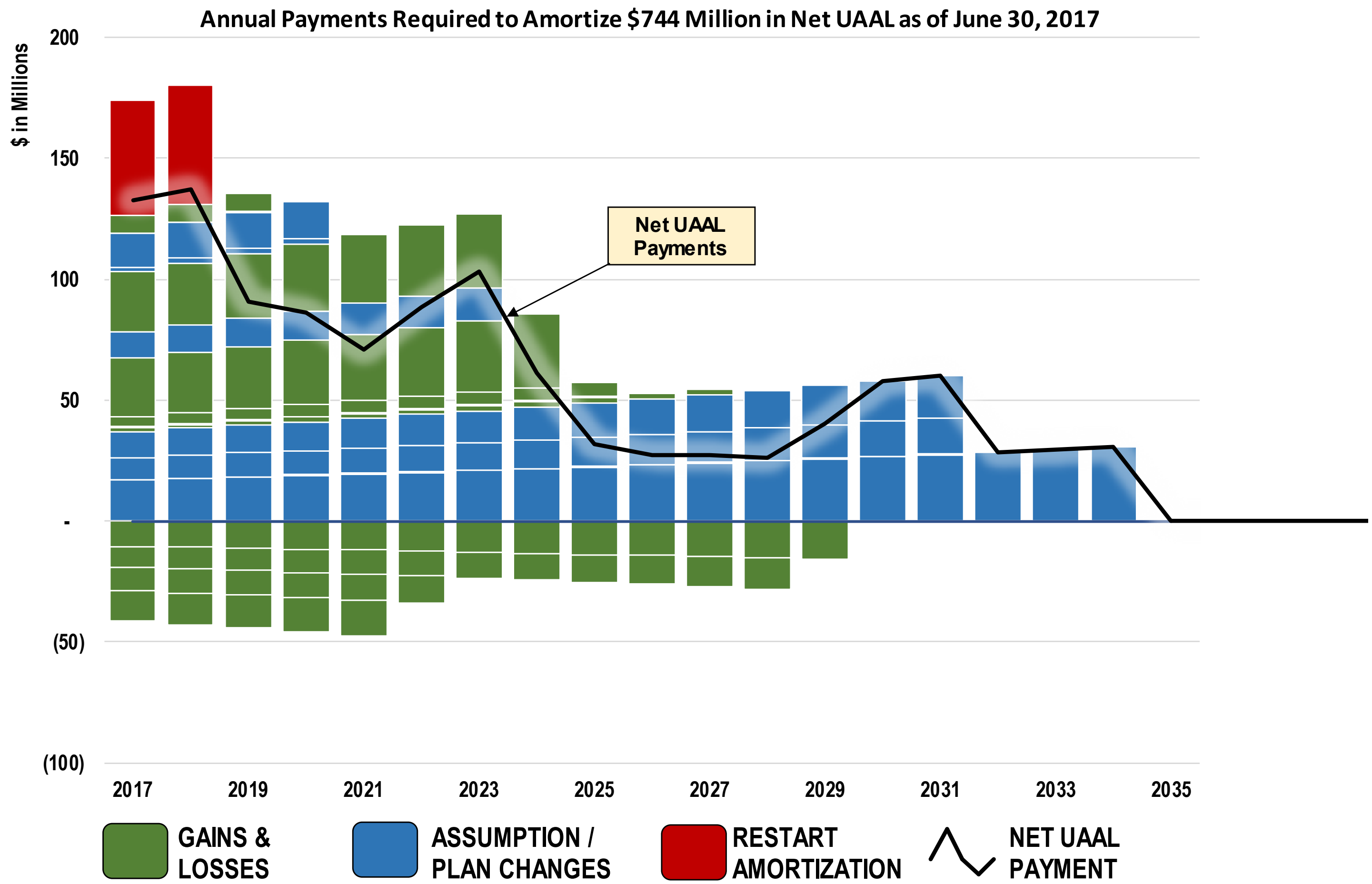
SECTION 3: Supplemental Information for the Ventura County Employees' Retirement Association

EXHIBIT J (continued)

Projection of UAAL Balances and Payments



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

EXHIBIT K

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 non-compliance 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 $215,000 for 2017 and $220,000 for 2018. 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 L
Definitions of Pension Terms

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:

(a) Investment return — the rate of investment yield that the Plan is anticipated to earn over the long-term future;

(b) Mortality rates — the death rates of employees and pensioners at each age;

(c) Retirement rates — the rate or probability of retirement at a given age;

(d) Turnover rates — the rates at which employees of various ages are expected 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 for Pensioners: 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.

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

EXHIBIT I

Summary of Actuarial Valuation Results

The valuation was made with respect to the following data supplied to us:

1.	Retired members as of the valuation date (including 969 beneficiaries in pay status)		6,766
2.	Members inactive during year ended June 30, 2017 with vested rights[1]		2,809
3.	Members active during the year ended June 30, 2017		8,636

The actuarial factors as of the valuation date are as follows (amounts in 000s):

1.	Normal cost		$143,678
2.	Present value of future benefits		6,820,009
3.	Present value of future normal costs (employer and member)		1,116,613
4.	Actuarial accrued liability[2]		5,703,396
	Retired members and beneficiaries	$3,229,255	
	Inactive members with vested rights[1]	159,743	
	Active members	2,314,398	
5.	Valuation value of assets[2] ($4,964,247 at market value as reported by Retirement Association)		4,959,070
6.	Unfunded actuarial accrued liability		$744,326

[1] *Includes terminated members with member contributions on deposit.*

[2] *Excludes liabilities and assets held for supplemental medical benefit reserve and statutory contingency reserve.*

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

EXHIBIT I (continued)
Summary of Actuarial Valuation Results

The determination of the recommended average employer contribution is as follows	Dollar Amount (in 000s)	% of Payroll
1. Total normal cost	$141,658	19.01%
2. Expected employee contributions	(72,643)	(9.75%)
3. Employer normal cost: (1) + (2)	$69,015	9.26%
4. Amortization of unfunded actuarial accrued liability	132,850	17.83%
5. Total recommended average employer contribution: (3) + (4)	$201,865	27.09%
6. Projected compensation	$744,917	

EXHIBIT II

Actuarial Assumptions and Methods

Rationale for Assumptions: 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.

Economic Assumptions

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 both PEPRA and Non-PEPRA General Tier 1 and both PEPRA and Non-PEPRA Safety. For both PEPRA and non-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.

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

Mortality Rates:

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.

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

Termination Rates Before Retirement:

	Rate (%) Mortality			
	General		Safety	
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):

	Rate (%) Disability	
Age	General[(1)]	Safety[(2)]
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

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

(2) 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[1]	
Years of Service	**General**	**Safety**
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

(1) 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.

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

Retirement Rates (%):

Age	General Tier 1 and 2	PEPRA General Tier 1 and 2	Safety	Safety PEPRA
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.
Definition of Active Members:	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 1 7.50% General Tier 2 3.50% Safety 7.25% 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

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

Individual Salary Increases:

Annual Rate of Compensation Increase

Inflation: 3.00% per year; plus "across the board" real salary increases of 0.50% per year; plus the following promotional and 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.

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

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.
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;

ii) 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.

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.
General PEPRA Tier 1	Deputy Sheriff trainees with membership dates on or after January 1, 2013 and before April 17, 2014.
General PEPRA Tier 2	All General members with membership dates on or after January 1, 2013, except as noted above for General PEPRA Tier 1.
Safety PEPRA	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).
General PEPRA Tier 1, General PEPRA Tier 2 and Safety PEPRA	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 Earnable is limited to Internal Revenue Code Section 401(a)(17). The limit as of July 1, 2017 is $270,000. The limit is indexed for inflation on an annual basis.

General PEPRA Tier 1, General PEPRA Tier 2 and Safety PEPRA: Pensionable Compensation is limited to $118,775 for 2017 ($142,530, 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).

General PEPRA: Age 52 with 5 years of service (§7522.20(a)) or age 70 regardless of service (§31672.3).

Safety PEPRA: Age 50 with 5 years of service (§7522.25(d)) or age 70 regardless of service (§31672.3).

Benefit Formula:

	Retirement Age	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

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

	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
General PEPRA Tier 1 and General PEPRA 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%xFAC1xYrs)
	55	(2.62%xFAC1xYrs)
	60 or later	(2.62%xFAC1xYrs)

	Retirement Age	Benefit Formula
Safety PEPRA (§7522.25(d))	50	(2.00%xFAS3xYrs)
	55	(2.50%xFAS3xYrs)
	57 or later	(2.70%xFAS3xYrs)

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Maximum Benefit:

General Tier 1, General Tier 2 and Safety	100% of Highest Average Compensation (§31676.1, §31676.11, §31664)
General PEPRA Tier 1, General PEPRA Tier 2 and Safety PEPRA	None

Ordinary Disability:

General Tier 1, General Tier 2, General PEPRA Tier 1 and General PEPRA 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 Safety PEPRA

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).

	An additional lump sum benefit of one-year of compensation is paid if Line-of-Duty death for Safety member (§31787.6). OR
Five or More Years of Service	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).
Death After Retirement:	
All Members	
Service Retirement or Ordinary Disability Retirement	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 one year prior to the effective retirement date or 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).
Line-of-Duty Disability	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 one year prior to the effective retirement date or 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).
Withdrawal Benefits:	
Less than Five Years of Service	Refund of accumulated employee contributions with interest (§31628) or entitled to earned benefits commencing at anytime after eligible to retire (§31629.5).
Five or More Years of Service	If contributions left on deposit, entitled to earned benefits commencing at any time after eligible to retire (§31700).
Post-retirement	
Cost-of-Living Benefits:	
General Tier 1, Safety, General PEPRA Tier 1 and Safety PEPRA	Future changes based on Consumer Price Index to a maximum of 3% per year, excess "banked" (§31870.1).

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General Tier 2 and General PEPRA 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.
General PEPRA 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.
Safety PEPRA	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-Safety PEPRA members with 30 or more years of service are exempt from paying member contributions. The same applies for Non-General PEPRA 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.

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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.*

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

Appendix A

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

	Basic		COLA		Total	
	First $350	**Over $350**	**First $350**	**Over $350**	**First $350**	**Over $350**
General Tier 1	5.37%	8.05%	1.79%	2.69%	7.16%	10.74%
General Tier 2 without COLA	4.76%	7.14%	0.00%	0.00%	4.76%	7.14%
General Tier 2 COLA	4.76%	7.14%	2.63%[1]	2.63%[1]	7.39%	9.77%
Safety	10.75%	10.75%	4.47%	4.47%	15.22%	15.22%

[1] *General Tier 2 members with COLA are required to pay COLA contributions of 2.63% of compensation based on current bargaining agreements.*

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Appendix B

Member Contribution Rates for PEPRA Members

	Basic	COLA	Total
General Tier 2 without COLA	7.06%	0.00%	7.06%
General Tier 2 with COLA	7.06%	2.63%[1]	9.69%
Safety	9.96%	4.13%	14.09%

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

[1] *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 2017 is $118,775. (For an employer that is not enrolled in Social Security, the maximum amount is $142,530) (reference Section 7522.10). These amounts should be adjusted for changes to the Consumer Price Index for All Urban Consumers after 2017 (reference Section 7522.10(d)).

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

Appendix C

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

	June 30, 2017 Actuarial Valuation					
	BASIC		COLA		TOTAL	
General Tier 1 Members	Rate	Estimated Annual Amount[1]	Rate	Estimated Annual Amount[1]	Rate	Estimated Annual Amount[1]
Normal Cost	9.12%	$645	2.79%	$198	11.91%	$843
UAAL[2]	9.06%	641	4.69%	332	13.75%	973
Total Contribution	18.18%	$1,286	7.48%	$530	25.66%	$1,816
General Tier 2 Members w/o COLA						
Normal Cost	8.30%	$17,875	0.00%	$0	8.30%	$17,875
UAAL[2]	9.06%	19,500	0.00%	0	9.06%	19,500
Total Contribution	17.36%	$37,375	0.00%	$0	17.36%	$37,375
General PEPRA Tier 2 Members w/o COLA						
Normal Cost	7.06%	$3,488	0.00%	$0	7.06%	$3,488
UAAL[2]	9.06%	4,476	0.00%	0	9.06%	4,476
Total Contribution	16.12%	$7,964	0.00%	$0	16.12%	$7,964
General Tier 2 Members w/COLA						
Normal Cost[3]	8.30%	$17,874	0.06%	$129	8.36%	$18,003
UAAL[2][4]	9.06%	19,501	4.69%	10,114	13.75%	29,615
Total Contribution	17.36%	$37,375	4.75%	$10,243	22.11%	$47,618
General PEPRA Tier 2 Members w/COLA						
Normal Cost[3]	7.06%	$5,772	0.02%	$17	7.08%	$5,789
UAAL[2][4]	9.06%	7,406	4.69%	3,835	13.75%	11,241
Total Contribution	16.12%	$13,178	4.71%	$3,852	20.83%	$17,030
All General Members[5]						
Normal Cost	8.02%	$45,654	0.06%	$344	8.08%	$45,998
UAAL	9.06%	51,524	2.51%	14,281	11.57%	65,805
Total Contribution	17.08%	$97,178	2.57%	$14,625	19.65%	$111,803

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

Appendix C (continued)

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

	June 30, 2017 Actuarial Valuation					
	BASIC		COLA		TOTAL	
Safety Members	Rate	Estimated Annual Amount[1]	Rate	Estimated Annual Amount[1]	Rate	Estimated Annual Amount[1]
Normal Cost	13.47%	$21,018	4.36%	$6,803	17.83%	$27,821
UAAL	52.74%	82,293	(14.64%)	(22,843)	38.10%	59,450
Total Contribution	66.21%	$103,311	(10.28%)	$(16,040)	55.93%	$87,271
Safety PEPRA Members						
Normal Cost	9.96%	$1,985	4.13%	$824	14.09%	$2,809
UAAL	52.74%	10,513	(14.64%)	(2,918)	38.10%	7,595
Total Contribution	62.70%	$12,498	(10.51%)	$(2,094)	52.19%	$10,404
All Safety Members[5]						
Normal Cost	13.07%	$23,003	4.34%	$7,627	17.41%	$30,630
UAAL	52.74%	92,806	(14.64%)	(25,761)	38.10%	67,045
Total Contribution	65.81%	$115,809	(10.30%)	$(18,134)	55.51%	$97,675
All Categories Combined[5]						
Normal Cost	9.22%	$68,657	1.07%	$7,971	10.29%	$76,628
UAAL	19.38%	144,330	(1.55%)	(11,480)	17.83%	132,850
Total Contribution	28.60%	$212,987	(0.48%)	$(3,509)	28.12%	$209,478

(1) *Amounts are in thousands, assumed to be paid throughout the year, and are based on June 30, 2017 annual payroll (also in thousands) shown below:*

General Tier 1	$7,076
General Tier 2	215,358
General PEPRA Tier 2	49,409
General Tier 2C	215,345
General PEPRA Tier 2C	81,759
Safety	156,036
Safety PEPRA	19,934
Total	$744,917

(2) *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).*

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

(4) *Includes 0.55% in COLA UAAL costs attributed to the first two years of service accrued for the fixed 2% COLA pursuant to Government Code 31627.*

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

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

Appendix D

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

General Tier 1 Members' Contribution Rates from the June 30, 2017 Actuarial Valuation
(Expressed as a Percentage of Monthly Payroll)

Calculated Under Recommended Assumptions

	Basic		COLA		Total	
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%

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

General Tier 1 Members' Contribution Rates from the June 30, 2017 Actuarial Valuation
(Expressed as a Percentage of Monthly Payroll)

Calculated Under Recommended Assumptions

	Basic		COLA		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%

Interest:	7.50%
COLA:	3.00%
COLA Loading:	37.30%
Mortality:	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.
Salary Increase:	See Exhibit II.

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.

Segal Consulting

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

General Tier 2 Members' Contribution Rates from the June 30, 2017 Actuarial Valuation (Expressed as a Percentage of Monthly Payroll)

Calculated Under Recommended Assumptions

	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%

Interest: 7.50%
COLA: SEIU members contribute a negotiated 2.63% for a fixed 2% COLA pursuant to Government Code 31627.
Mortality: 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.
Salary Increase: See Exhibit II.

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.

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

Safety Members' Contribution Rates from the June 30, 2017 Actuarial Valuation (Expressed as a Percentage of Monthly Payroll)

Calculated Under Recommended Assumptions

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%

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

Safety Members' Contribution Rates from the June 30, 2017 Actuarial Valuation
(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:	RP-2000 Combined Healthy Mortality Table projected with Scale BB to 2035 set back three years weighted 80% male and 20% female.
Salary Increase:	See Exhibit II.

Note: All members hired after November 1974, will pay a contribution corresponding to entry age 27. These rates are determined before any pickups by the employers.

Segal Consulting

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 Non-Combined General UAAL Rates

	June 30, 2017 Actuarial Valuation					
	BASIC		COLA		TOTAL	
General Tier 1 Members	Rate	Estimated Annual Amount[1]	Rate	Estimated Annual Amount[1]	Rate	Estimated Annual Amount[1]
Normal Cost[2]	8.20%	$580	2.75%	$195	10.95%	$775
UAAL[3]	692.43%	48,996	151.01%	10,686	843.44%	59,682
Total Contribution	700.63%	$49,576	153.76%	$10,881	854.39%	$60,457
General Tier 2 Members w/o COLA						
Normal Cost	7.03%	$15,140	0.00%	$0	7.03%	$15,140
UAAL[3]	0.45%	969	0.00%	0	0.45%	969
Total Contribution	7.48%	$16,109	0.00%	$0	7.48%	$16,109
General PEPRA Tier 2 Members w/o COLA						
Normal Cost	7.06%	$3,488	0.00%	$0	7.06%	$3,488
UAAL[3]	0.45%	222	0.00%	0	0.45%	222
Total Contribution	7.51%	$3,710	0.00%	$0	7.51%	$3,710
General Tier 2 Members w/COLA						
Normal Cost[4]	7.03%	$15,139	0.06%	$129	7.09%	$15,268
UAAL[3][5]	0.45%	969	1.21%	2,606	1.66%	3,575
Total Contribution	7.48%	$16,108	1.27%	$2,735	8.75%	$18,843
General PEPRA Tier 2 Members w/COLA						
Normal Cost[4]	7.06%	$5,772	0.02%	$17	7.08%	$5,789
UAAL[3][5]	0.45%	368	1.21%	989	1.66%	1,357
Total Contribution	7.51%	$6,140	1.23%	$1,006	8.74%	$7,146
All General Members[6]						
Normal Cost	7.05%	$40,119	0.06%	$341	7.11%	$40,460
UAAL	9.06%	51,524	2.51%	14,281	11.57%	65,805
Total Contribution	16.11%	$91,643	2.57%	$14,622	18.68%	$106,265

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

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 Non-Combined General UAAL Rates

	June 30, 2017 Actuarial Valuation					
	BASIC		COLA		TOTAL	
Safety Members	Rate	Estimated Annual Amount[1]	Rate	Estimated Annual Amount[1]	Rate	Estimated Annual Amount[1]
Normal Cost[7]	11.65%	$18,178	4.85%	$7,568	16.50%	$25,746
UAAL	52.74%	82,293	(14.64%)	(22,843)	38.10%	59,450
Total Contribution	64.39%	$100,471	(9.79%)	$(15,275)	54.60%	$85,196
Safety PEPRA Members						
Normal Cost	9.96%	$1,985	4.13%	$824	14.09%	$2,809
UAAL	52.74%	10,513	(14.64%)	(2,918)	38.10%	7,595
Total Contribution	62.70%	$12,498	(10.51%)	$(2,094)	52.19%	$10,404
All Safety Members[6]						
Normal Cost	11.46%	$20,163	4.77%	$8,392	16.23%	$28,555
UAAL	52.74%	92,806	(14.64%)	(25,761)	38.10%	67,045
Total Contribution	64.20%	$112,969	(9.87%)	$(17,369)	54.33%	$95,600
All Categories Combined[6]						
Normal Cost	8.09%	$60,282	1.17%	$8,733	9.26%	$69,015
UAAL	19.38%	144,330	(1.55%)	(11,480)	17.83%	132,850
Total Contribution	27.47%	$204,612	(0.38%)	$(2,747)	27.09%	$201,865

(1) *Amounts are in thousands, assumed to be paid throughout the year, and are based on June 30, 2017 annual payroll (also in thousands) shown below:*

General Tier 1	$7,076
General Tier 2	215,358
General PEPRA Tier 2	49,409
General Tier 2C	215,345
General PEPRA Tier 2C	81,759
Safety	156,036
Safety PEPRA	19,934
Total	$744,917

(2) *The total employer rate has been adjusted by 0.31% to account for the cost associated with the cessation of member contributions after 30 years of service.*

(3) *Basic UAAL rates have not been calculated on a combined basis for all General Tiers.*

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

(5) *Includes 0.55% in COLA UAAL costs attributed to the first two years of service accrued for the fixed 2% COLA pursuant to Government Code 31627.*

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

(7) *The total employer rate has been adjusted by 1.28% to account for the cost associated with the cessation of member contributions after 30 years of service.*

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

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 Non-Combined General UAAL Rates

	June 30, 2016 Actuarial Valuation					
	BASIC		COLA		TOTAL	
General Tier 1 Members	Rate	Estimated Annual Amount[1]	Rate	Estimated Annual Amount[1]	Rate	Estimated Annual Amount[1]
Normal Cost[2]	8.13%	$637	2.74%	$214	10.87%	$851
UAAL[3]	572.72%	44,844	104.69%	8,197	677.41%	53,041
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[3]	1.11%	2,383	0.00%	0	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[3]	1.11%	391	0.00%	0	1.11%	391
Total Contribution	8.07%	$2,844	0.00%	$0	8.07%	$2,844
General Tier 2 Members w/COLA						
Normal Cost[4]	7.11%	$15,374	0.08%	$173	7.19%	$15,547
UAAL[3][5]	1.11%	2,400	1.29%	2,790	2.40%	5,190
Total Contribution	8.22%	$17,774	1.37%	$2,963	9.59%	$20,737
General PEPRA Tier 2 Members w/COLA						
Normal Cost[4]	6.96%	$4,465	0.01%	$6	6.97%	$4,471
UAAL[3][5]	1.11%	712	1.29%	828	2.40%	1,540
Total Contribution	8.07%	$5,177	1.30%	$834	9.37%	$6,011
All General Members[6]						
Normal Cost	7.10%	$38,194	0.07%	$393	7.17%	$38,587
UAAL	9.43%	50,730	2.19%	11,815	11.62%	62,545
Total Contribution	16.53%	$88,924	2.26%	$12,208	18.79%	$101,132

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

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 Non-Combined General UAAL Rates

	June 30, 2016 Actuarial Valuation					
	BASIC		COLA		TOTAL	
Safety Members	Rate	Estimated Annual Amount[1]	Rate	Estimated Annual Amount[1]	Rate	Estimated Annual Amount[1]
Normal Cost[7]	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	51.58%	6,425	(12.51%)	(1,558)	39.07%	4,867
Total Contribution	61.79%	$7,697	(8.30%)	$(1,034)	53.49%	$6,663
All Safety Members[6]						
Normal Cost	11.60%	$19,469	4.83%	$8,108	16.43%	$27,577
UAAL	51.58%	86,581	(12.51%)	(20,999)	39.07%	65,582
Total Contribution	63.18%	$106,050	(7.68%)	$(12,891)	55.50%	$93,159
All Categories Combined[6]						
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

(1) *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

(2) *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.*

(3) *Basic UAAL rates have not been calculated on a combined basis for all General Tiers.*

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

(5) *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.*

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

(7) *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.*

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Segal Consulting

Ventura County Employees' Retirement Association

Governmental Accounting Standards (GAS) 67 Actuarial Valuation as of June 30, 2017

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November 28, 2017

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, 2017. 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, Enrolled Actuary. 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

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SECTION 1

VALUATION SUMMARY

SECTION 2

GAS 67 INFORMATION

SECTION 3

AICPA SCHEDULES

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

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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, 2017. 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, 2016, provided by VCERA;
- The assets of the Plan as of June 30, 2017, provided by VCERA;
- Economic assumptions regarding future salary increases and investment earnings; and
- Other actuarial assumptions, regarding employee terminations, retirement, death, etc.

General Observations on GAS 67 Actuarial Valuation

The following points should be considered when reviewing this GAS 67 report:

- 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 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.

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

- 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) calculated on a market value basis.
- For this report, the reporting dates for the Plan are June 30, 2017 and 2016. The NPL was measured as of June 30, 2017 and 2016, respectively, and determined based upon rolling forward the TPL from actuarial valuations as of June 30, 2016 and 2015. The Plan's Fiduciary Net Position (plan assets) 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.

Significant Issues in Valuation Year

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

- The NPL decreased from $1,065 million as of June 30, 2016 to $713 million as of June 30, 2017 primarily due to the 13.10% return on the market value of assets during 2016/2017 (that was more than the assumed return of 7.50%). Changes in these values during the last two fiscal years ending June 30, 2016 and June 30, 2017 can be found in Exhibit 3.
- The discount rate used to determine the TPL and NPL as of June 30, 2017 was 7.50%, following the same assumption used by the Association in the pension funding valuation as of June 30, 2016. The detailed calculations of the discount rate of 7.50% used in calculation of the TPL and NPL as of June 30, 2017 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.
- 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 2018.

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

Summary of Key Valuation Results

	2017	2016
Disclosure elements for fiscal year ending June 30:		
Service Cost[1]	$132,489,883	$129,269,294
Total Pension Liability	5,677,421,117	5,451,538,919
Plan's Fiduciary Net Position	4,964,246,776	4,386,836,709
Net Pension Liability	713,174,341	1,064,702,210
Schedule of contributions for fiscal year ending June 30:		
Actuarially determined contributions[2]	$190,711,815	$177,830,000
Actual employer contributions	190,711,815	177,830,000
Contribution deficiency (excess)	0	0
Demographic data for plan year ending June 30:[3]		
Number of retired members and beneficiaries	6,766	6,539
Number of vested terminated members[4]	2,809	2,639
Number of active members	8,636	8,509
Key assumptions:		
Investment rate of return	7.50%	7.50%
Inflation rate	3.00%	3.00%
Projected salary increases[5]	4.00% - 11.50%, varying by service, including inflation	4.00% - 11.50%, varying by service, including inflation

(1) *The service cost is based on the previous year's valuation, meaning the 2017 and 2016 values are based on the valuations as of June 30, 2016 and June 30, 2015, respectively. Both of the service costs have been calculated using the assumptions shown in the 2016 column as there had been no changes in the actuarial assumptions between the June 30, 2015 and 2016 valuations.*

(2) *Actuarially Determined Contributions exclude employer paid member contributions.*

(3) *Data as of June 30, 2016 is used in the measurement of the TPL as of June 30, 2017.*

(4) *Includes terminated members with member contributions on deposit.*

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

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

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.

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

- 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.

SECTION 2: GAS 67 Information for Ventura County Employees' Retirement Association

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, the Ventura Regional Sanitation District and VCERA.

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, 2017, pension plan membership consisted of the following:

Retired members or beneficiaries currently receiving benefits	6,766
Vested terminated members entitled to but not yet receiving benefits[(1)]	2,809
Active members	8,636
Total	18,211

[(1)] *Includes terminated members with member contributions on deposit.*

Note: Data as of June 30, 2017 is not used in the measurement of the TPL as of June 30, 2017.

Benefits provided. VCERA provides service retirement, disability, death and survivor benefits to eligible employees. All permanent employees of the County of Ventura or contracting district 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. The table below indicates all existing VCERA membership tiers:

Membership Tier	Retirement Eligibility
Tier 1 - General Legacy Members hired before January 1, 2013	Age 50 and 10 or more years of service credit, or 30 years or more of service credit, regardless of age. Age 70, regardless of service.
Tier 1 - Safety Legacy Members hired before January 1, 2013	Age 50 and 10 or more years of service credit, or 20 years or more of service credit, regardless of age. Age 70, regardless of service.
Tier 2 - General Legacy Members hired before January 1, 2013	Age 50 and 10 or more years of service credit, or 30 years or more of service credit, regardless of age. Age 70, regardless of service.
Tier 2 COLA - General Legacy Members hired before January 1, 2013	Age 50 and 10 or more years of service credit, or 30 years or more of service credit, regardless of age. Age 70, regardless of service.
Tier 5 - General PEPRA Members hired on or after January 1, 2013	Age 52 and five years of service credit. Age 70, regardless of service credit.
Tier 6 - General PEPRA Members hired on or after January 1, 2013	Age 52 and five years of service credit. Age 70, regardless of service credit.
Tier 7 - Safety PEPRA Members hired on or after January 1, 2013	Age 50 and five years of service credit. Age 70, regardless of service credit.
Tier 8 COLA - General PEPRA Members hired on or after January 1, 2013	Age 52 and five years of service credit. Age 70, regardless of 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.

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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 provisions of California Government Code Section 7522.20(a). 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 members first hired on or after January 1, 2013, benefits are calculated pursuant to the provisions of 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 100% of final average compensation limit on the maximum monthly retirement allowance benefit for members with membership dates on or after January 1, 2013. However, the maximum amount of compensation earnable that can be considered for purposes of retirement contributions and benefit calculations for 2017 for members hired on or after July 1, 1996 but before January 1, 2013 is $270,000. For members hired on or after January 1, 2013 who are enrolled in Social Security, the maximum amount of pensionable compensation that can be considered for purposes of retirement contributions and benefit calculations for 2017 is $118,775 ($142,530 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[1].

Final average compensation consists of the highest 12 consecutive months for Legacy Safety and Tier 1 General members. The final average compensation consists of the highest 36 consecutive months for all other tiers.

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 one year prior to the effective retirement date or 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.

[1] *Members and employers do not pay contributions on compensation in excess of the pensionable compensation caps.*

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VCERA provides an annual cost-of-living adjustment (COLA) benefit to Safety and Tier 1 General member retirees. The COLA, based upon the Consumer Price Index for the Los Angeles, Riverside, Orange County area, is capped at 3.0%. Certain Tier 2 and all Tier 8 General member retirees receive a fixed 2% COLA pursuant to collective bargaining agreements.

The employers 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, 2017 for 2016/2017 (based on the June 30, 2015 valuation) was 27.77% of compensation.

Members are required to make contributions to VCERA up to the requisite limits, regardless of the retirement plan or tier[2]. The average member contribution rate as of June 30, 2017 for 2016/2017 (based on the June 30, 2015 valuation) was 10.24% of compensation.

[2] *Safety Legacy members with 30 or more years of service are exempt from paying member contributions. The same applies for General Legacy members hired on or before March 7, 1973.*

EXHIBIT 2

Net Pension Liability

The components of the Net Pension Liability are as follows:

	June 30, 2017	June 30, 2016
Total Pension Liability	$5,677,421,117	$5,451,538,919
Plan's Fiduciary Net Position	(4,964,246,776)	(4,386,836,709)
Net Pension Liability	$713,174,341	$1,064,702,210
Plan's Fiduciary Net Position as a percentage of the Total Pension Liability	87.44%	80.47%

The Net Pension Liability (NPL) was measured as of June 30, 2017 and 2016. 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, 2016 and 2015, 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, 2017 and 2016. 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, 2017 and 2016 that were measured by actuarial valuations as of June 30, 2016 and 2015, respectively, used the same actuarial assumptions as the June 30, 2017 and 2016 funding valuations. In particular, the following actuarial assumptions were applied to all periods included in the June 30, 2017 and 2016 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, 2017 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.

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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, 2017 and June 30, 2016, 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, 2017 and June 30, 2016.

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Sensitivity of the Net Pension Liability to changes in the discount rate. The following presents the NPL of the VCERA as of June 30, 2017, 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:

	1% Decrease (6.50%)	Current Discount Rate (7.50%)	1% Increase (8.50%)
Net Pension Liability as of June 30, 2017	$1,467,487,936	$713,174,341	$97,803,646

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EXHIBIT 3

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

	2017	2016
Total Pension Liability		
1. Service cost	$132,489,883	$129,269,294
2. Interest	405,194,906	388,935,379
3. Change of benefit terms	0	0
4. Differences between expected and actual experience	(51,057,518)	(39,597,865)
5. Changes of assumptions	0	0
6. Benefit payments, including refunds of member contributions	(260,745,073)	(246,403,038)
7. Net change in Total Pension Liability	$225,882,198	$232,203,770
8. Total Pension Liability – beginning	5,451,538,919	5,219,335,149
9. Total Pension Liability – ending	$5,677,421,117	$5,451,538,919
Plan's Fiduciary Net Position		
10. Contributions – employer[1]	$190,711,815	$177,829,897
11. Contributions – employee[1]	72,441,728	69,349,562
12. Net investment income	580,525,970	25,739,302
13. Benefit payments, including refunds of member contributions	(260,745,073)	(246,403,038)
14. Administrative expense	(5,524,373)	(4,474,202)
15. Other	0	0
16. Net change in Plan's Fiduciary Net Position	$577,410,067	$22,041,521
17. Plan's Fiduciary Net Position – beginning	4,386,836,709	4,364,795,188
18. Plan's Fiduciary Net Position – ending	$4,964,246,776	$4,386,836,709
19. Net Pension Liability – ending (9) – (18)	$713,174,341	$1,064,702,210
20. Plan's Fiduciary Net Position as a percentage of the Total Pension Liability	87.44%	80.47%
21. Covered employee payroll[2]	$716,033,000	$688,233,000
22. Plan's Net Pension Liability as percentage of covered employee payroll	99.60%	154.70%

[1] *See footnote (2) under Exhibit 4 on page 8.*

[2] *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

SECTION 2: GAS 67 Information for Ventura County Employees' Retirement Association

EXHIBIT 4

Schedule of Employer Contributions – Last Ten Fiscal Years

Year Ended June 30	Actuarially Determined Contributions[1][2]	Contributions in Relation to the Actuarially Determined Contributions[2]	Contribution Deficiency (Excess)	Covered-Employee Payroll[3]	Contributions as a Percentage of Covered Employee Payroll
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	177,830,000	177,830,000	0	688,233,000	25.84%
2017	190,712,000	190,712,000	0	716,033,000	26.63%

See accompanying notes to this schedule on next page.

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

(2) *Actuarially Determined Contributions exclude employer paid member contributions.*

(3) *Covered 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.*

SECTION 2: GAS 67 Information for Ventura County Employees' Retirement Association

Notes to Exhibit 4

Methods and assumptions used to establish "actuarially determined contribution" rates:		
Valuation date	Actuarially determined contribution rates are calculated as of June 30, two years prior to the end of the fiscal year in which contributions 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 June 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 be 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 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. The Actuarial Value of Assets is reduced by the value of the supplemental medical benefit reserve and statutory contingency reserve.	
Actuarial assumptions:	June 30, 2017 Valuation Date	June 30, 2016 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	0.50%	0.50%
Projected salary increases[(1)]	General: 4.00% to 9.50% and Safety: 4.00% to 11.50%	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, 2017 funding actuarial valuation	Same as those used in the June 30, 2016 funding actuarial valuation

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

SECTION 2: GAS 67 Information for Ventura County Employees' Retirement Association

EXHIBIT 5

Projection of the Pension Plan's Fiduciary Net Position for Use in Calculation of Discount Rate as of June 30, 2017

($ in millions)

Year Beginning July 1	Projected Beginning Plan's Fiduciary Net Position (a)	Projected Total Contributions (b)	Projected Benefit Payments (c)	Projected Administrative Expenses (d)	Projected Investment Earnings (e)	Projected Ending Plan's Fiduciary Net Position (f) = (a) + (b) - (c) - (d) + (e)
2016	$4,387	$263	$261	$6	$581	$4,964
2017	4,964	252	287	6	371	5,294
2018	5,294	252	305	7	395	5,629
2019	5,629	207	322	7	418	5,926
2020	5,926	202	340	7	439	6,219
2021	6,219	177	360	8	459	6,487
2022	6,487	189	381	8	479	6,767
2023	6,767	200	401	9	500	7,057
2024	7,057	154	422	9	519	7,299
2025	7,299	122	444	9	535	7,503
2041	9,006	46	727	11	650	8,964
2042	8,964	43	739	11	646	8,903
2043	8,903	40	750	11	641	8,822
2044	8,822	37	760	11	635	8,723
2045	8,723	35	767	11	627	8,607
2090	6,117	9	25	8	458	6,551
2091	6,551	9	20	8	491	7,023
2092	7,023	10	15	9	526	7,535
2093	7,535	10	12	9	565	8,088
2094	8,088	11	9	10	606	8,686
2128	94,256	119	0 *	119	7,069	101,325
2129	101,325					
2129 Discounted Value:	29 **					

* Less than $1 million, when rounded.

** $101,325 million when discounted with interest at the rate of 7.50% per annum has a value of $29 million as of June 30, 2016.

SECTION 2: GAS 67 Information for Ventura County Employees' Retirement Association

EXHIBIT 5

Projection of the Pension Plan's Fiduciary Net Position for Use in Calculation of Discount Rate as of June 30, 2017 ($ in millions) - continued

Notes:

(1) Amounts may not total exactly due to rounding.

(2) Amounts shown in the year beginning July 1, 2016 row are actual amounts, based on the unaudited financial statements provided by VCERA.

(3) Years 2026-2040, 2046-2089, and 2095-2127 have been omitted from this table.

(4) Column (a): Except for the "discounted value" shown for 2129, none of the projected beginning Plan's Fiduciary Net Position amounts shown have been adjusted for the time value of money.

(5) Column (b): 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, 2016), plus employer contributions to the unfunded actuarial accrued liability. Contributions are assumed to occur halfway through the year, on average.

(6) Column (c): 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, 2016. The projected benefit payments reflect the cost of living increase assumptions used in June 30, 2017 valuation report and include projected benefits associated with the Supplemental Medical ($27.50) Reserve.

(7) Column (d): Projected administrative expenses are calculated as approximately 0.13% of the projected beginning Plan's Fiduciary Net Position amount. The 0.13% portion was based on the actual fiscal year 2016/2017 administrative expenses (unaudited) as a percentage of the actual beginning Plan's Fiduciary Net Position as of July 1, 2016. Administrative expenses are assumed to occur halfway through the year, on average.

(8) Column (e): 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 not 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, 2017 shown earlier in this report, pursuant to paragraph 44 of GASB Statement No. 67.

SECTION 3: AICPA Schedules for Ventura County Employees' Retirement Association

EXHIBIT A

Schedule of Employer Allocations as of June 30, 2017

July 1, 2016 to June 30, 2017

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	$505,999,477	93.133%	$172,724,006	100.000%	$678,723,483	94.789%
10	Ventura County Courts	$28,093,902	5.171%	$0	0.000%	$28,093,902	3.924%
11	Ventura County Air Pollution Control District	$4,574,946	0.842%	$0	0.000%	$4,574,946	0.639%
22	Ventura Regional Sanitation District	$4,640,460	0.854%	$0	0.000%	$4,640,460	0.648%
	Total	$543,308,786	100.000%	$172,724,006	100.000%	$716,032,792	100.000%

Allocation of June 30, 2017 Net Pension Liability (NPL)

Employer ID	Employer	General Tier 1 and 2	General Tier 1 and 2 %	Safety Tier	Safety Tier %	Total NPL	Employer Allocation Percentage
01	County of Ventura	$311,665,936	93.133%	$378,528,064	100.000%	$690,194,000	96.778%
10	Ventura County Courts	17,304,192	5.171%	0	0.000%	17,304,192	2.426%
11	Ventura County Air Pollution Control District	2,817,898	0.842%	0	0.000%	2,817,898	0.395%
22	Ventura Regional Sanitation District	2,858,251	0.854%	0	0.000%	2,858,251	0.401%
	Total	$334,646,277	100.000%	$378,528,064	100.000%	$713,174,341	100.000%

Notes:

Actual July 1, 2016 through June 30, 2017 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, 2018. The reporting date and measurement date for the plan under GAS 67 are assumed to be June 30, 2017. Consistent with the provisions of GAS 68, the assets and liabilities measured as of June 30, 2017 are not adjusted or “rolled forward” to June 30, 2018 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.

SECTION 3: AICPA Schedules for Ventura County Employees' Retirement Association

EXHIBIT B

Schedule of Pension Amounts by Employer as of June 30, 2017

Deferred Outflows of Resources	**County of Ventura**	**Ventura County Courts**	**Ventura County Air Pollution Control District**	**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)	1,042,195	26,129	4,255	4,316	1,076,895
Changes of Assumptions	96,155,094	2,410,751	392,578	398,200	99,356,623
Changes in Proportion and Differences Between Employer Contributions and Proportionate Share of Contributions	1,815,099	128,316	134,909	216,539	2,294,863
Total Deferred Outflows of Resources	$99,012,388	$2,565,196	$531,742	$619,055	$102,728,381
Deferred Inflows of Resources					
Differences Between Expected and Actual Experience	$117,865,082	$2,955,053	$481,215	$488,106	$121,789,456
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	177,510	1,607,428	74,469	435,456	2,294,863
Total Deferred Inflows of Resources	$118,042,592	$4,562,481	$555,684	$923,562	$124,084,319
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
Net Pension Liability as of June 30, 2017	$690,194,000	$17,304,192	$2,817,898	$2,858,251	$713,174,341
Pension Expense Excluding That Attributable to Employer-Paid Member Contributions					
Proportionate Share of Allocable Plan Pension Expense	$120,920,931	$3,031,668	$493,691	$500,761	$124,947,051
Net Amortization of Deferred Amounts from Changes in Proportion and Differences Between Employer Contributions and Proportionate Share of Contributions	400,763	(409,944)	30,661	(21,480)	0
Total Employer Pension Expense Excluding That Attributable to Employer-Paid Member Contributions	$121,321,694	$2,621,724	$524,352	$479,281	$124,947,051

EXHIBIT B

Schedule of Pension Amounts by Employer as of June 30, 2017 – 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, 2016 (the beginning of the measurement period ending June 30, 2017) and is 5.55 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.

Segal Consulting

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

VIA E-MAIL

January 19, 2018

Ms. Linda Webb
Retirement Administrator
Ventura County Employees' Retirement Association
1190 South Victoria Avenue, Suite 200
Ventura, CA 93003

Re: Ventura County Employees' Retirement Association (VCERA) Response to GRS' Independent Actuarial Audit of June 30, 2016 Actuarial Valuation, July 1, 2011 through June 30, 2014 Actuarial Experience Study and June 30, 2015 Review of Economic Assumptions

Dear Linda:

We have received GRS' Actuarial Audit Report ("Audit Report") dated November 10, 2017 containing their independent actuarial audit of VCERA's June 30, 2016 Actuarial Valuation, July 1, 2011 through June 30, 2014 Actuarial Experience Study and June 30, 2015 Review of Economic Assumptions prepared by Segal Consulting (Segal). In the cover letter to the Audit Report (copy attached), GRS provides the following summary of their work:

> "In our opinion, the retained actuary's work provides a fair and reasonable assessment of the financial position of VCERA. We are pleased to report that we have found no critical issues in the retained actuary's work in the VCERA parallel valuation and experience study review."

In the Executive Summary of the Audit Report, GRS provides some findings, comments and suggestions for Segal to review. Below is our response to those findings, comments and suggestions, presented in the order that they appear in the Audit Report.

REVIEW OF EXPERIENCE STUDY AND ACTUARIAL ASSUMPTIONS FINDINGS:

1. *Expand discussions of rationale*
   Segal will take this under consideration for the next actuarial experience study (July 1, 2014 through June 30, 2017).

2. *Continue to monitor the assumed rate of return*
   While Segal has not yet performed any of the analysis required to formulate our recommendations for this assumption in the next actuarial experience study, we do observe that the trend in the industry since our last review of that assumption for VCERA in 2015 has continued to move towards lower investment return assumptions. This is true among public retirement systems both in California and nationwide. There will also be pressure to lower the return assumption based on a potential recommendation to lower the price inflation assumption in the next actuarial experience study. Segal will take this under consideration for the next actuarial experience study (July 1, 2014 through June 30, 2017).

3. *Consider updating the mortality table and mortality improvement assumptions*
   Segal expects to recommend a change to use a generational mortality table in the next actuarial experience study. This is becoming a more common practice in public sector valuations and we concur with usage of this approach.

4. *Continue to monitor the Tier II retirement rates as more experience becomes available*
   Almost all of the retirement experience for General members is from Tier II members. The General Tier II retirement rate assumptions are modified at each experience study based on the actual experience for General Tier I and II members. The same retirement rate assumptions are used for Tier I because of the very small number of members left in Tier I. As with all of the demographic assumptions, we will continue to monitor as more experience becomes available.

5. *Monitor the wage increase assumption for reciprocal transfers*
   Segal will take this under consideration, however, we do not believe compensation data is readily available for reciprocal employers that are not part of VCERA.

6. *Separate commencement age for deferred vested members and transfers*
   Segal will take this under consideration for the next actuarial experience study (July 1, 2014 through June 30, 2017).

REVIEW OF REPORTS FINDINGS:

7. *Showing the Normal Cost and the Actuarial Accrued Liability by decrement*
   While this information may be useful for the auditing actuary, Segal does not believe it is necessary to add to the valuation report.

8. *Consider adding a table containing the distribution of forms of payment elected by current* retirees
   Segal does not believe this information is necessary to include in the valuation.

9. *Consider adding a description of decrement timing and pay increase timing*
   Segal will take this under consideration for the next actuarial valuation (June 30, 2018).

10. *We recommend a thorough discussion of what the expectation of the contribution basis is for the employer*
    Segal believes that this comment refers to the recommended projection of contribution results described on page D-1 of the Audit Report. Segal provides projection results to clients that request this information and would do so if requested by VCERA.

11. *Describe the adjustments made to the member payroll provided by VCERA*
    Segal will take this under consideration for the next actuarial valuation (June 30, 2018).

12. *Projected payrolls consistent with those used to develop plan liabilities should be shown for the rate development for each subcategory (Total Normal Cost, Employer Normal Cost, Member Contribution Rate, Unfunded Liability and Administrative Expense)*
    Segal will take this under consideration for the next actuarial valuation (June 30, 2018).

13. *We recommend an aggregate amortization schedule be presented to demonstrate the projected retirement of the debt*
    This type of schedule has been included in Exhibit J from the June 30, 2017 Actuarial Valuation Report.

14. *Include other disclosures as required or soon to be required under Actuarial Standards of Practice and described in Section D*
    This comment is related to the recently released Actuarial Standard of Practice (ASOP) No. 51 regarding “Assessment and Disclosure of Risk Associated with Measuring Pension Obligations and Determining Pension Plan Contributions”. Segal will be evaluating the new disclosure requirements during 2018. Note that the ASOP is not effective until VCERA’s June 30, 2019 actuarial valuation, but Segal will consider early implementation with the June 30, 2018 actuarial valuation.

Please let us know if you have any questions regarding our responses.

Sincerely,

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

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

/bqb
Enclosure (5521591)

5521601v1/05325.001

Ventura County Employees' Retirement Association

Actuarial Audit of the June 30, 2016 Actuarial Valuation, the July 1, 2011 through June 30, 2014 Actuarial Experience Study, and the June 30, 2015 Economic Actuarial Assumption Review

GRS Retirement Consulting

800.521.0498 | P: 248.799.9000 | F: 248.799.9020 | www.grsconsulting.com

November 10, 2017

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

Attention: Ms. Linda Webb

Re: Actuarial Audit

Dear Board Members:

Gabriel, Roeder, Smith & Company (GRS) is pleased to present this report of an Actuarial Audit of the July 1, 2016 Actuarial Valuation, the July 1, 2011 through June 30, 2014 Experience Study and the June 30, 2015 Economic Actuarial Assumption Review of the Retirement System administered by the Ventura County Employees' Retirement Association (VCERA). We are grateful to VCERA Staff for their cooperation throughout the actuarial audit process. In addition, we wish to thank John Monroe and Paul Monroe of Segal (retained actuary) for their assistance with this project.

The actuarial audit has several related objectives:

- Review of the data used by the retained actuary;
- Review of the benefits modeled in the valuations as they compare to the benefits actually provided by Statute and described in the member handbooks;
- Completion of a parallel actuarial valuation;
- Review of the reasonableness of results of the most recent actuarial valuation;
- Review of the Association's current actuarial funding methods and funding policies;
- Review of assumptions used by the retained actuary and the experience study on which the assumptions were based;
- Review of the presentation of the valuation results (as contained in the valuation report); and
- A statement of the professional qualifications and overall performance of the retained actuary with regard to the practices prescribed by the Actuarial Standard Boards.

The actuarial audit began with a review of the valuation report, experience study, member handbooks, and the County Employees Retirement Law of 1937 (CERL). The actuarial audit also consisted of a parallel June 30, 2016 valuation and a review of the July 1, 2011 through June 30, 2014 experience study and the June 30, 2015 review of economic assumptions. It is possible for critical or material issues that are not apparent in the review of valuation reports to be identified in the parallel valuation process. It is also important to keep in mind that an actuarial audit is not guaranteed to find all existing material issues.

Our review found no critical issues. We have, however, identified several issues for VCERA and the retained actuary to consider.

One Towne Square | Suite 800 | Southfield, Michigan 48076-3723

The results of the audit are subdivided into the following categories:

- Parallel Valuation and Review
  - Member Data
  - Summary of Plan Provisions
  - Parallel Valuation
  - Funding and Asset of Methods
  - Funding Policy
- Review of Experience Study and Actuarial Assumptions
- Review of Reports

In our opinion, the retained actuary's work provides a fair and reasonable assessment of the financial position of VCERA. We are pleased to report that we have found no critical issues in the retained actuary's work in the VCERA parallel valuation and experience study review. The issues that we have identified are believed to collectively have less than a 1% difference in total VCERA liabilities and less than a 2% difference in the total VCERA normal costs.

The actuaries submitting this report are Members of the American Academy of Actuaries (MAAA) as indicated, and meet the Qualification Standards of the American Academy of Actuaries to render the actuarial opinions contained herein.

Respectfully submitted,

David T Kausch

David T. Kausch, FSA, EA, FCA, MAAA, PhD
Senior Consultant & Actuary

Brad Lee Armstrong

Brad Lee Armstrong, ASA, EA, FCA, MAAA

Abra D. Hill

Abra D. Hill, ASA, MAAA

Derek Henning

Derek Henning, ASA, MAAA

DTK/BLA/ADH/DH:bd

Table of Contents

SECTION A

EXECUTIVE SUMMARY

Executive Summary

Background

Gabriel, Roeder, Smith & Company (GRS) was asked to perform an actuarial audit of the work performed by Segal (retained actuary) for the Ventura County Employees' Retirement Association (VCERA).

We audited the following VCERA actuarial reports:

- Actuarial Valuation and Review as of June 30, 2016 issued December 20, 2016
- Actuarial Experience Study During the period July 1, 2011 through June 30, 2014 issued April 14, 2015
- Review of Economic Actuarial Assumptions for the June 30, 2015 Actuarial Valuation issued April 14, 2015

We also performed a full replication actuarial valuation for VCERA as of June 30, 2016 using the assumptions, methods and data that Segal Consulting used.

In short, our findings can be classified in the following categories:

- Parallel Valuation and Review
- Review of Experience Studies and Actuarial Assumptions
- Review of Reports

Parallel Valuation and Review Findings

Although it can be very difficult to match another actuary's results precisely in a review, the parallel valuation results were generally within an acceptable range of reasonableness with the current actuary's results.

	GRS	Segal	Difference	% Variation
Actuarial Accrued Liability	$ 5,363,379,000	$ 5,398,756,000	$ (35,377,000)	-0.66%
Total Employer Cost (% Pay)	26.98%	27.52%	-0.54%	-1.96%

In general, we found the actuarial funding, valuation asset methods, and actuarial assumptions to be within generally acceptable ranges of practice and meet the requirements of the Actuarial Standards of Practice (ASOP).

Presented below are the main recommendations/comments that we would like to draw your attention to:

- The retained actuary's numerical results were reproducible within acceptable tolerance ranges.
- The biggest differences are in the development of the Normal Cost and the amortization of the Unfunded Actuarial Accrued Liability (UAAL). Differences in these areas are common due to variances in software and methodologies employed by actuarial firms.

Executive Summary

Review of Experience Study and Actuarial Assumptions Findings

We found the experience study to be understandable and thorough. In general, we agreed with the recommendations of the retained actuary. We recommend review of the following items:

- Expand discussions of rationale;
- Continue to monitor the assumed rate of return;
- Consider updating the mortality and mortality improvement assumptions;
- Continue to monitor the Tier II retirement rates as more experience becomes available;
- Monitor the wage increase assumption for reciprocal transfers;
- Separate commencement age for deferred vested members and transfers.

Review of Reports Findings

We found that the documentation and disclosure in the valuation report was reasonably complete.

Our specific recommendations for the valuation report are detailed in the Review section and include:

- Showing the Normal Cost and the Actuarial Accrued Liabilities by decrement;
- Consider adding a table containing the distribution of forms of payment elected by current retirees;
- Consider adding a description of decrement timing and pay increase timing;
- We recommend a thorough discussion of what the expectation of the contribution basis is for the employer;
- Describe the adjustments made to the member payroll provided by VCERA;
- Projected payrolls consistent with those used to develop plan liabilities should be shown for the rate development for each subcategory (Total Normal Cost, Employer NC, Member Contribution Rate, Unfunded Liability, and Administrative Expense);
- We recommend an aggregate amortization schedule be presented to demonstrate the projected retirement of the debt;
- Include other disclosures as required or soon to be required under Actuarial Standards of Practice and described in Section D.

Executive Summary

Our specific recommendations for the experience study report are detailed in the Review section and include:

- Include more exposure or credibility information in charts or graphs
- More discussion of rationale
- Pursue better data as legacy systems are replaced with newer technologies

Retained Actuary Qualifications

Paul Angelo and John Monroe of Segal Consulting signed or were listed on all of the documents provided to us for the purpose of conducting our actuarial audit.

We consider these reports and documents to be Actuarial Communications and Statements of Actuarial Opinion, as provided under the Qualification Standards and the Actuarial Standards of Practice promulgated by the American Academy of Actuaries.

Segal Consulting is an independent actuarial and consulting firm, with an excellent reputation and a significant actuarial practice in public retirement systems, particularly in California.

Paul Angelo represents being a Fellow of the Society of Actuaries, a Fellow of the Conferences at Consulting Actuaries, a Member of the American Academy of Actuaries and an Enrolled Actuary.

John Monroe represents being an Associate of the Society of Actuaries, a Member of the American Academy of Actuaries and an Enrolled Actuary.

We have validated the Specialists' credentials by reference to the Actuarial Directory as found on the Society of Actuaries' website, and the Roster of Active Enrolled Actuaries as of June 1, 2017, as found on the IRS.gov website.

Paul Angelo and John Monroe acknowledge meeting the Qualification Standards as promulgated by the American Academy of Actuaries to render the actuarial opinions given in the actuarial reports, studies and reviews.

We conclude that Mr. Angelo and Mr. Monroe are appropriately qualified to perform the actuarial retainer services for VCERA.

Conclusion

GRS has made several recommendations throughout the report. These recommendations are summarized in the Executive Summary, but we suggest that VCERA and the retained actuary review the entire report to read expanded discussions and determine what changes should be made for future valuations.

SECTION B

PARALLEL VALUATION AND REVIEW

Member Data

We received the member data directly from Segal Consulting. All relevant data was included in the member data. The data files used by Segal Consulting in the valuation included minor data edits based on routine questions to VCERA during the data collection process. The valuation data as provided does not appear to have any material defects.

Summary of Plan Provisions

The Summary of Plan Provisions in the valuation report appears to be consistent and relatively complete when compared to the handbook and statutes. We recommend consideration be given to the following possible additions:

- A brief description of the various optional forms of payment available to retirees.
- Describe more clearly death benefits for a deferred retirement.

Parallel Valuation Results

In our opinion, given good data and accurate plan provisions, the most important aspect of an actuarial audit is to reproduce the present value of future benefits.

To verify the accuracy of the retained actuary's valuation results, GRS performed an independent July 30, 2016 valuation of the VCERA using the "scrubbed data" of the retained actuary. The replication uses the same methods and procedures that were used by the retained actuary. The results show that the retained actuary's numerical results are reproducible within acceptable tolerance ranges.

Once the present value of future benefits has been fairly reproduced, the next most important aspect of an actuarial audit is to ensure that the retained actuary is following a prudent plan to fund the present value of future benefits. This is accomplished by the determination of the normal cost and the amortization of the unfunded actuarial accrued liability.

A comparison of major results is shown on the following pages.

July 30, 2016 Valuation Results Comparison

Development of Unfunded Liabilities

TOTAL VCERA	GRS	Segal	% Variation
Present Value of Future Benefits			
Active Member Benefits	$ 3,236,560,000	$ 3,256,058,000	-0.60%
Vested Terminated Benefits	145,485,000	145,994,000	-0.35%
Retiree Benefits	3,072,220,000	3,065,942,000	0.20%
Total Present Value of Future Benefits	**$ 6,454,265,000**	**$ 6,467,994,000**	-0.21%
Actuarial Accrued Liability			
Total Present Value of Future Benefits	$ 6,454,265,000	$ 6,467,994,000	-0.21%
Present Value of Future Normal Cost	$ 1,090,886,000	$ 1,069,238,000	2.02%
Actuarial Accured Liability	**$ 5,363,379,000**	**$ 5,398,756,000**	-0.66%
Actuarial Value of Assets	$ 4,585,713,000	$ 4,585,713,000	0.00%
Net (Surplus)/Unfunded	$ 777,666,000	$ 813,043,000	-4.35%

Since we believe matching the present value of future benefits is the most important objective of an actuarial audit, our results are extraordinarily close to Segal, causing us to believe we have met this objective.

Comparison of Normal Cost

Total Normal Cost	GRS	Segal	Difference	% Variation
General Tier 1	21.42%	21.47%	-0.05%	-0.23%
General Tier 2	14.43%	14.22%	0.21%	1.48%
General PEPRA Tier 2	13.70%	13.92%	-0.22%	-1.58%
General Tier 2C	17.25%	16.93%	0.32%	1.89%
General PEPRA Tier 2C	16.23%	16.56%	-0.33%	-1.99%
Safety	30.36%	31.86%	-1.50%	-4.71%
Safety PEPRA	28.67%	28.84%	-0.17%	-0.59%
All Categories Combined	19.29%	19.47%	-0.18%	-0.92%

July 30, 2016 Valuation Results Comparison

Development of Amortization Payment

Total VCERA

Segal

Date Established	Source	Initial Amount	Outstanding Balance	Years Remaining	Payment
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

GRS

Date Established	Source	Initial Amount	Outstanding Balance	Years Remaining	Payment	% Variation
June 30, 2004	Restart of Amortization	$ 323,444,000	$ 128,614,000	3	46,274,000	-0.02%
June 30, 2005	Actuarial (Gain)/Loss	48,849,000	24,435,000	4	6,717,000	-0.01%
June 30, 2006	Actuarial (Gain)/Loss	1,358,000	800,000	5	179,000	0.00%
June 30, 2006	Assumption Change	102,790,000	60,545,000	5	13,563,000	-0.01%
June 30, 2006	Plan Provision Change	14,731,000	8,671,000	5	1,942,000	-0.05%
June 30, 2007	Actuarial (Gain)/Loss	(96,898,000)	(64,588,000)	6	(12,280,000)	-0.01%
June 30, 2008	Actuarial (Gain)/Loss	(75,365,000)	(55,262,000)	7	(9,171,000)	-0.01%
June 30, 2009	Actuarial (Gain)/Loss	204,600,000	161,735,000	8	23,912,000	-0.02%
June 30, 2009	Assumption Change	91,252,000	72,119,000	8	10,663,000	-0.02%
June 30, 2010	Actuarial (Gain)/Loss	206,081,000	172,862,000	9	23,130,000	-0.02%
June 30, 2011	Actuarial (Gain)/Loss	38,155,000	33,538,000	10	4,111,000	-0.02%
June 30, 2012	Actuarial (Gain)/Loss	4,258,000	3,895,000	11	442,000	0.00%
June 30, 2012	Demographic Assumption Change	123,037,000	122,216,000	16	10,395,000	-0.02%
June 30, 2012	Economic Assumption Change	104,278,000	103,589,000	16	8,812,000	0.00%
June 30, 2013	Actuarial (Gain)/Loss	15,435,000	14,511,000	12	1,535,000	-0.13%
June 30, 2014	Actuarial (Gain)/Loss	(87,484,000)	(84,394,000)	13	(8,390,000)	-0.01%
June 30, 2015	Actuarial (Gain)/Loss	(109,606,000)	(107,733,000)	14	(10,119,000)	-0.02%
June 30, 2015	Assumption Change	218,002,000	217,943,000	19	16,421,000	-0.02%
June 30, 2016	Actuarial (Gain)/Loss	(35,830,000)	(35,830,000)	15	(3,196,000)	7695.12%
			$ 777,666,000		$ 124,940,000	**-2.48%**

July 30, 2016 Valuation Results Comparison

Comparison of Employer Contributions

	GRS		Segal		
Employer Contribution Rates	Rate	Estimated Annual Amount	Rate	Estimated Annual Amount	% Variation
General Tier 1[1]	23.96%	1,875	24.40%	1,910	-1.80%
General Tier 2	16.35%	35,097	16.54%	35,503	-1.15%
General PEPRA Tier 2	16.00%	5,629	16.39%	5,776	-2.38%
General Tier 2C	20.52%	44,362	20.72%	44,794	-0.97%
General PEPRA Tier 2C	19.87%	12,740	20.50%	13,149	-3.07%
General Combined	18.53%	99,702	18.79%	101,132	-1.38%
Safety[1]	54.16%	84,172	55.66%	86,496	-2.69%
Safety PEPRA	52.66%	6,559	53.49%	6,663	-1.55%
Safety Combined	54.05%	90,731	55.50%	93,159	-2.61%
All Categories Combined	26.98%	190,433	27.52%	194,291	-1.96%
Average Member Contribtution Rates					
General Tier 1	10.57%	828	10.60%	830	-0.28%
General Tier 2	7.21%	15,486	7.11%	15,265	1.41%
General PEPRA Tier 2	6.85%	2,409	6.96%	2,453	-1.58%
General Tier 2C	9.84%	21,285	9.74%	21,061	1.03%
General PEPRA Tier 2C	9.48%	6,078	9.59%	6,152	-1.15%
Safety	14.52%	22,561	15.27%	23,730	-4.91%
Safety PEPRA	14.33%	1,786	14.42%	1,796	-0.62%
All Categories Combined	9.98%	70,433	10.10%	71,287	-1.19%

	GRS	-	Segal		
Projected Total Compensation				% Variation	-
General Tier 1	7,830	-	7,830	0.00%	-
General Tier 2	214,683	-	214,696	-0.01%	-
General PEPRA Tier 2	35,169	-	35,238	-0.20%	-
General Tier 2C	216,231	-	216,231	0.00%	-
General PEPRA Tier 2C	64,125	-	64,147	-0.03%	-
Safety	155,400	-	155,401	0.00%	-
Safety PEPRA	12,455		12,457	-0.02%	
All Categories Combined	705,893		706,000	-0.02%	

(1) *Employer normal cost rate was adjusted by 0.27% for General Tier 1 Members and 1.32% for Safety Members to account for the cost associated with the cessation of member contributions after 30 years of service. These rates were not audited and we relied on Segal's calculations for our comparision.*

The biggest differences are in the development of the Normal Cost and the amortization of the Unfunded Actuarial Accrued Liability (UAAL). This is common in actuarial audits since different firms can take slightly different approaches to splitting the present value of future benefits.

Our calculation of the total dollar amount of the amortization of the UAAL is 2.48% lower than Segal's. The percentage difference in amortization payments is smaller than the percentage difference in total unfunded liabilities due to the tiered amortization used in the valuation report. We relied on Segal's calculation of the Restart of Amortization base established on July 30, 2004, and the subsequent amortization bases resulting from Plan Provision changes, Assumption changes, and Actuarial Gains and Losses, as development of those values were outside the scope of this project. This difference is within an acceptable range.

The Projected Active Member Payroll shown on the previous page is the valuation payroll projected with ½ year of base wage inflation. This is the payroll on which the Amortization of the Unfunded Liability and the Administrative Expense are based as a percent of pay.

We understand that the County contributes on a percent of payroll basis rather than the estimated dollar amounts shown. This is best practice in our opinion due to the variable member contributions rates. Therefore, the percent of payroll contribution is more pertinent than the projected dollar amount. Segal's calculated employer contribution rate is greater than the GRS calculated amount by 54 basis points, a variation of 1.96 %. This difference is within an acceptable range.

Actuarial Methods

Funding Method

We reviewed the funding method in the context of ASOP No. 4, Measuring Pension Obligations and Determining Pension Plan Costs or Contributions. This report was not reviewed for compliance with GASB Nos. 67 and 68.

The funding method is Entry Age Normal Cost (EANC), which is acceptable under the Actuarial Standards of Practice. This is also the most commonly used method in the public sector. This method is consistent with CERL 31453.6.

The Entry Age Normal actuarial cost method is being employed in the valuation of the VCERA.

Under this method, Normal Costs are determined for each individual participant as the level percentage of his or her payroll which will need to be contributed from his or her date of entry into the System until his or her departure from the System. The total Normal Cost for the System is the sum of all of the individual normal costs so determined.

The Actuarial Accrued Liability may be viewed as the accumulation of all prior Normal Cost payments (calculated as if the System always had its current benefit structure), less the prior benefit payments. It is usually calculated, as in your valuation, as the present value of all future benefit payments to current members, annuitants, and beneficiaries, less the present value of future Normal Cost payments for current active members.

Any difference between the Actuarial Accrued Liability and current plan assets is the Unfunded Actuarial Accrued Liability (UAAL). Differences between actual plan experience and experience expected based on the actuarial assumptions creates annual gains or losses which serve to decrease or increase the UAAL. Changes in assumptions, methodologies or benefit provisions also decrease or increase the UAAL but typically not annually. The UAAL created each year by source is amortized as a separate cost item; the UAAL, developed as part of the June 30, 2016 valuation report, is being amortized as a level percentage of payroll over closed periods ranging from 3 years to 19 years.

We believe that this funding method is appropriate for use by VCERA. The Entry Age Normal method is still the most commonly used for public sector defined benefit systems and continues to be our method of choice when we are in a position to influence the decision makers.

Use of the level percent of pay approach to amortize the Unfunded Actuarial Accrued Liability is both common and appropriate. Absent future changes in benefits and/or assumptions, this approach should provide the most stable and most predictable pattern of cost as a percentage of payroll. However, as each separate amortization period is completed, significant swings in year-to-year contribution requirements can result.

This is not a matter of actuarial concern, although it is not always consistent with contribution rate stability; rather it can schedule contribution rate fluctuations.

Full discussion of these issues from time-to-time can help Board members (particularly new ones) to more effectively carry out their responsibilities. These comments are intended to assist the Board in their understanding of this funding method. We strongly believe that the Entry Age Normal cost method, along with level percentage of pay amortization for the UAAL, is appropriate.

We reviewed summary results from Segal Consulting and their presentations in their valuation reports. We conclude that the retained actuary is properly applying the stated actuarial method and producing appropriate contribution rates.

Asset Valuation Method

We reviewed the asset valuation method in the context of ASOP No. 44, Selection and Use of Asset Valuation Methods for Pension Valuations.

The asset smoothing method is a 5.5-year smoothing method with no mention of a corridor around the market value of assets. The Society of Actuaries Blue Ribbon Panel on Public Pension Plan Funding report recommends an asset smoothing period of five years or less. The Conference of Consulting Actuaries Public Plans Community White Paper on Public Pension Funding Policy would categorize a 5-year smoothing method with a 50% corridor as a "model" practice. If there is a corridor, it should be mentioned in Section 2, page 4 or 5.

We recommend using a corridor that forces immediate recognition of gains and losses outside the corridor as they occur. This would be offset in future years by more rapid convergence to the market value of assets resulting in less deferral of contributions needed to replenish the fund.

In our opinion, the current asset valuation method is acceptable under the Actuarial Standards of Practice.

Funding Policy

According to the 2016 CAFR, the CERA funding policy was last reviewed with the Board in 2012. A funding policy establishes and prioritizes funding objectives and strategies.

Some good funding objectives are:

1. *Provide sufficient assets to permit the payment of all benefits under CERL.*
2. *Maintain equity among generations of taxpayers by:*
    a. *Achieving and maintaining a Funded Ratio between 90% and 110%;*
    b. *Amortizing the Unfunded Actuarial Accrued Liability over a period approximately equal to the expected average future working lifetime of the active CERA membership; and*
    c. *Setting Funding Policy so that the Inactive Funded Ratio is expected to remain above 100%.*
3. *Minimize the volatility of the employer's annual contribution rate as a percentage of covered pay by:*
    a. *Maintaining 3% of total assets as a reserve against contingencies; and*
    b. *Coordinating Funding and Investment Policies to reduce portfolio risk as the Funded Ratio improves, with the goal of taking opportunities as they present themselves.*
4. *Set a minimum contribution requirement of the normal cost.*

The funded ratio, based on Actuarial Value of Assets, as of June 30, 2016 is 84.94% in Segal's report. It is important to recognize that the contribution rate is designed to achieve 100% funding and return to the target range.

The amortization policy is stated on page 13 of Segal's actuarial valuation report. The policy uses level percent-of-payroll, layered fixed period amortization by source of UAAL. Annual gains and losses and plan amendments (with the exception of retirement incentives) are amortized over 15 years, changes in actuarial assumptions or methods are amortized over 20 years, and changes due to retirement incentives will be amortized over 5 years. This is consistent with the CCA White Paper and sufficient under ASOP No. 4.

SECTION C

REVIEW OF EXPERIENCE STUDY AND ACTUARIAL ASSUMPTIONS

Methodology

An experience study reviews the number of decrements and exposures for each demographic assumption. Segal's methodology follows standard practice methodology and allows for actuarial judgment when exposures are "insufficient" to provide credible analysis and combining groups when independent review is not feasible. These procedures are routine in experience studies, but may result in different actuaries reaching different conclusions.

We discuss each assumption in our review below.

Economic Assumptions

We reviewed the April 14, 2015 Review of Economic Actuarial Assumptions for the June 30, 2015 Actuarial Valuation in the context of ASOP No. 27, Selection of Economic Assumptions for Measuring Pension Obligations. Since ASOP No. 27 now requires assumptions to be reasonable for each valuation, you will notice we are sometimes mentioning information that was unavailable prior to April 14, 2015, but became available by the summer of 2016.

Price Inflation

Over the last 30 years, the average increase in the Consumer Price Index (CPI) was 2.61% with a standard deviation of 1.31%. It is important not to give undue weight to recent experience. We also must consider future expectations as well. One measure is the spread between yields on U.S. Treasuries and U.S. TIPS. This calculation varies depending on the maturity selected. Moreover, there may be other influences on the result such as a risk premium on Treasuries and a liquidity premium on TIPS. Nevertheless, it is a measure easily made. The longest horizon we can use for this basis is 30 years. As of December 30, 2015, the yield on 30-year Treasuries was 3.04% and inflation index TIPS was 1.31% for a raw difference of 1.73%. This is significantly lower than past experience and noticeably below the Federal Reserve's target inflation rate of 2.0%.

Another point of reference is the 2015 and 2016 Social Security Trustees reports, which assumed three scenarios of ultimate annual increases in CPI of 3.4%, 2.7%, and 2.0% for the low-cost, intermediate, and high-cost scenarios for 2015 and 3.2%, 2.6%, and 2.0% for 2016. The Social Security Trustees report uses the ultimate rates for their 75-year projections, much longer than the longest horizon we can discern from Treasuries and TIPS.

In their experience study, Segal made similar observations about future price inflation expectations. Segal also notes that the Board's investment consultant uses 3.25%, which we assume is on a 30-year horizon or is based on global market expectations. Segal recommended the price inflation assumption be reduced from 3.25% to 3.00%.

The Board's assumption of 3.00% should be compared to NEPC's current expectations, since other economic assumptions are impacted if it has been materially lowered (e.g., more than 50%). While the assumption is within Segal's reasonable range, we believe it is on the aggressive end of the range and may need to be lowered in the near future.

Wage Inflation

The average wage inflation experienced from 1990 through 2015 as measured by the Social Security Administration (SSA) was 3.51% per year, 116 basis points higher than price inflation over the same period. However, the SSA also observes that the median increase in compensation from 1990 through 2015 was 3.07% per year, 72 basis points higher than price inflation over the same period. In the public sector, we have generally observed narrowing spreads between price inflation and wage inflation. We believe that the 0.50% assumption set by the Board is reasonable. While the 0.50% spread between wages and prices is reasonable, in combination with the 3.0% price inflation assumption, the 3.50% wage inflation may be high. A high wage inflation assumption has a tendency to understate level percent of payroll amortization rates (ignoring the effect the wage inflation has on the liabilities).

COLA Growth

The COLA provisions grant an increase of CPI up to 3% for General Tier 1 and Safety members, but CPI increases above 3% are “banked” for use of future increases. The Board uses 3.00% and we find this reasonable and slightly conservative.

Generally, all economic assumptions must be consistent under ASOP No. 27, Section 3.12. We acknowledge Segal’s preference for consistency over stochastic modeling.

Discount Rate

Segal’s assumed rate of return is reasonable if it meets the following criteria:

- It is appropriate for the purpose of the measurement;
- It reflects the actuary’s professional judgment;
- It takes into account historical and current economic data that is relevant as of the measurement date;
- It reflects the actuary’s estimate of future experiences, observations of estimates inherent in market data, or a combination thereof; and
- It has no significant bias (i.e., it is not significantly optimistic or pessimistic), except when provisions for adverse deviation or other factors are included.

For purposes of budgeting contributions as a level percentage of payroll, the assumed rate of investment return is used as the discount rate to determine the present value of the system’s pension obligations.

The Board adopted an assumed rate of return of 7.50%. Segal’s report indicates the target asset allocation and their analysis of expected returns using a Segal’s California clients and comparing to the Board’s investment consultant NEPC. For purposes of our analysis, we survey nationally recognized investment consultants’ capital market assumptions and test the System’s target allocation with those assumptions. The eight investment consultants that participated this year are PCA, NEPC, BNY Mellon, JP Morgan Chase, RV Kuhns, Mercer, HEK, and Wilshire.

Segal stated that their expected geometric return was 7.50% with a 54% confidence level. For purposes of this analysis, Segal used 3.00% price inflation and a 5-year average of actual administrative and investment expenses.

We attempt to use the target asset allocation to analyze the assumed rate of return, but different investment consultants often have different asset classes and certain investment strategies (such as risk parity) may be modeled in different ways. In other words, our analysis uses the eight investment consultants and should be considered an approximation only. For consistency, we use the same methodology for all eight consultants.

NEPC is one of the eight investment consultants included in our survey. A good reasonableness check of our analysis would be to compare our results from NEPC to Segal's. In this case, we match very well. Segal shows NEPC's real arithmetic return to be 5.13%, and GRS shows 5.24%.

We summarize the arithmetic return assumption development from the eight consultants in the table below.

Investment Consultant	Investment Consultant Expected Nominal Return	Investment Consultant Inflation Assumption	Expected Real Return (2)–(3)	Actuary Inflation Assumption	Expected Nominal Return (4)+(5)	Plan Incurred Administrative Expenses	Expected Nominal Return Net of Expenses (6)-(7)	Standard Deviation of Expected Return (1-Year)
(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)	(9)
1	6.81%	2.50%	4.31%	3.00%	7.31%	0.12%	7.19%	12.82%
2	6.77%	2.20%	4.57%	3.00%	7.57%	0.12%	7.45%	11.46%
3	6.49%	1.56%	4.93%	3.00%	7.93%	0.12%	7.81%	11.60%
4	7.34%	2.26%	5.08%	3.00%	8.08%	0.12%	7.96%	11.31%
5	7.22%	2.00%	5.22%	3.00%	8.22%	0.12%	8.10%	11.81%
6	7.49%	2.25%	5.24%	3.00%	8.24%	0.12%	8.12%	13.08%
7	8.09%	2.25%	5.84%	3.00%	8.84%	0.12%	8.72%	15.07%
8	8.17%	2.20%	5.97%	3.00%	8.97%	0.12%	8.85%	12.96%
Average	**7.30%**	**2.15%**	**5.15%**	**3.00%**	**8.15%**	**0.12%**	**8.03%**	**12.52%**

Note that the average arithmetic return for the eight consultants is 8.03% (bottom of column (8)), which is roughly in line with Segal's analysis under NEPC and Segal's analysis using other California clients. Similarly, we analyze the median return as a proxy for the geometric return:

Investment Consultant	Distribution of 20-Year Average Geometric Net Nominal Return 40th	50th	60th	Probability of exceeding 7.50%
(1)	(2)	(3)	(4)	(5)
1	5.72%	6.43%	7.15%	35.39%
2	6.21%	6.85%	7.49%	39.91%
3	6.54%	7.19%	7.84%	45.17%
4	6.74%	7.37%	8.01%	48.01%
5	6.79%	7.46%	8.12%	49.33%
6	6.61%	7.34%	8.08%	47.79%
7	6.85%	7.69%	8.54%	52.30%
8	7.36%	8.09%	8.82%	58.16%
Average	**6.60%**	**7.30%**	**8.01%**	**47.01%**

For the geometric return, the average of the 50th percentile of the eight consultants is 7.02% (bottom of column (3)). One final observation we have is that the probability of exceeding 7.50% on a 20-year horizon is 47.01%, as shown at the bottom of column (5).

In general, we concur with Segal that the assumed rate of return is not unreasonable. However, it is critical to understand the impact of price inflation in this analysis. If Segal were to use the current consensus opinion price inflation assumption of 2.25%, estimated rates of return would decrease by roughly 0.75%, which would result in a median return expectation of below 7.00%. We expect that the Board may need to lower the assumed rate of return in the near future.

Demographic Assumptions

We reviewed the demographic assumptions in the context of ASOP No. 35, Selection of Demographic and Other Non-Economic Assumptions for Measuring Pension Obligations. The demographic assumptions analyzed here are based mainly on VCERA experience.

<u>Merit Salary Increases</u>

Segal uses a longitudinal study for the pay longevity and merit analysis using data from both the current and prior study. A longitudinal study uses data over the entire period of study, adjusted for the effects of wage inflation, collective bargaining agreements, and management decisions. The advantage is the use of more data, whereas the disadvantage is that this can result in the appearance of periods of negative merit and seniority. An alternative to consider in future experience studies is a transverse study. A transverse study uses data at a particular point of time and analyzes the increase in pay throughout members' careers by comparing the pay versus service with the active population. Transverse studies have the advantage that inflation uncertainty has less impact on the analysis and the disadvantage that no distinction is made for different job classifications. Transverse studies may minimize the effect of outliers and provide more robust analysis particularly in the early years of members' careers.

The new assumptions appear reasonable and consistent with the data. For the experience study report, we would recommend including a numerical measure of the "goodness of fit" of the assumption to the data, such as a piecewise least squares measure.

<u>Retirement Rates</u>

For Non-PEPRA General retirement rates, Segal recommended assumptions by age. We note the experience ages 69 and 70 appears to understate recent experience, whereas ages 71 and 72 appears to overstate recent experience. We recommend more discussions of the rationale be included in the next experience study.

For Non-PEPRA Safety retirement rates, Segal recommended separate assumptions by age. We note the experience at ages 63 and 64 appears to overstate recent experience, possibly due to limited exposure.

Due to the lack of plan experience, separate rates were not developed for Tier I and Tier II retirees. Tier II members are subject to lower multipliers than Tier I members, and thus have the possibility of having longer average career length than Tier I members. It is reasonable at this early stage, when there is little experience, to use the same rates for both Tiers. It is our recommendation that the Tier II retirement experience be monitored closely to incorporate any deviations between the two actual retirement patterns quickly into the valuation.

For General and Safety PEPRA Tiers, the only anomaly was the new rate at age 64 for General. This is another case where we recommend more discussion on rationale.

Termination Rates

Termination rates, including vested terminations, terminations with refund, and reciprocal terminations, are split between General and Safety and were analyzed on a service basis and an age and service basis. We recommend liability weighting be considered in the next experience study.

For General, we agree with Segal's recommendation.

For Safety termination rates the observed rate at 20 years of service or more seems implausible.

The termination rates appear reasonable. We recommend a little more discussion in the report to aid in the understanding of all the assumptions being made. In particular, it may be helpful to define termination, refund, and transfer in more depth.

Reciprocal terminations must have an assumption for pay increases between the time of terminating VCERA and retiring. Segal chose to use the total pay growth assumption plus 1% for this. This is a reasonable assumption; however, we recommend checking with reciprocal employers to see if newer systems are being brought online to allow better information sharing.

The ages at which vested terminated members decide to retire were not analyzed and for General was recommended to stay at age 58, which could have been written in the text on page 29 of the experience study report. Safety was recommended to stay at age 54, which could have been mentioned on page 30. These are both reasonable assumptions.

The same commencement age assumption is used for vested terminations and members who have transferred to a reciprocating employer. It is possible that members who transfer to reciprocal employers who defer retirement longer may receive a higher benefit from VCERA since the benefit reflects their final average compensation from their reciprocating employer. We recommend that future experience studies review the commencement age for deferred vested members and transfers separately.

Disability Rates

The recommended rates and the assumed incidence of duty related cases were reasonable.

Mortality

Segal's mortality rate recommendation is based on mortality tables and projection scales, which were not the most current available in April 2015. While these mortality rates and mortality improvement factors are somewhat reasonable (due to the significant period of projection using scale BB to year 2035), we recommend some version of the Society of Actuaries 2014 tables be proposed in the next experience study and a change to fully generational projections from static. This is a particular area of concern where we think further discussion of the rationale would have been helpful.

The current assumption for disabled mortality is a set forward of the tables used for healthy retirees. A set forward of tables for disability mortality distorts the mortality rates at older ages. We recommend an alternative approach for reflecting increased mortality rates for disabled retirees. It is worth noting that the RP-2014 mortality tables include rates specific to disabled retirement.

Other Demographic Assumptions

Terminal Pay

Does not appear to have been analyzed.

Family Composition

The recommendations for family composition and age differences appear reasonable.

In-Service Redemptions

Although Segal's recommendation of 7.25% for non-PEPRA active members is reasonable, no rationale was given why it was not set between 7.38% and 7.50%.

Conclusion

We believe that the actuarial assumptions are reasonable and meet the Actuarial Standards of Practice.

We recommend review of the following items:

- Expand discussions of rationale;
- Continue to monitor the assumed rate of return;
- Consider updating the mortality and mortality improvement assumptions;
- Continue to monitor the Tier II retirement rates as more experience becomes available;
- Monitor the wage increase assumption for reciprocal transfers;
- Separate commencement age for deferred vested members and transfers.

SECTION D

REVIEW OF ACTUARIAL VALUATION

We reviewed the valuation and report of Segal in the context of ASOP No. 41, Actuarial Communications promulgated by the American Academy of Actuaries.

Valuation Report

Overall, we felt the report was reasonably well organized and communicated the most pertinent results clearly and concisely.

Actuarial Certification

In our opinion, the Actuarial Certification in the valuation report could benefit from explicitly adding the following:

- A mention that the unfunded actuarial accrued liability should not be used as a settlement liability.

Report

We recommend a projection of contribution results and resulting contribution rates be included at least in the aggregate. This is not a trivial addition. Segal would have to provide a fee quote for such a change. We also note that ASOP 51, Assessment and Disclosure of Risk Associated with Measuring Pension Obligations and Determining Pension Plan Contributions, has been adopted. We recommend early compliance for the June 30, 2018 actuarial valuation.

Membership Information

- Consider adding a table containing the distribution of forms of payment elected by current retirees.
- Consider adding a table containing the distribution of active member statistics by type of COLA cost-sharing.

Statement of Current Actuarial Assumptions and Methods

- Consider adding a description of decrement timing and pay increase timing.
- Describe the adjustments made to the member payroll provided by VCERA.

2017

VENTURA COUNTY EMPLOYEES' RETIREMENT ASSOCIATION
ANNUAL REPORT

Pension Trust Fund for the County of Ventura, California
Comprehensive Annual Financial Report for the
Fiscal Year ended June 30, 2017

2017

VCERA
VENTURA COUNTY EMPLOYEES' RETIREMENT ASSOCIATION

COMPREHENSIVE ANNUAL FINANCIAL REPORT FOR THE FISCAL YEAR ENDED JUNE 30, 2017

Pension Trust Fund for the County of Ventura, Ventura County Courts and Three Districts

Issued by: Linda Webb, Retirement Administrator

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805.339.4250 • 805.339.4269 (fax) • www.vcera.org

Photo by Robert Schwemmer

Anacapa Islands

The Ventura County Employee's Retirement Association recently adopted the iconic Anacapa Arch as a key element in its new logo design. Not only is it one of the more recognizable landmarks in the county, the arch and the Anacapa Islands abound in unique ecology and historical narratives.

Channel Islands National Park

Anacapa is part of a series of islands called the Channel Islands archipelago in the Channel Islands National Park. The islands were formed by volcanic eruptions between 19 and 15 million years ago. Anacapa is the smallest of the northern islands and consists of three main islets: East, Middle, and West Anacapa. The "Arch Rock" is East island's most notable feature. Land area is approximately one square mile with over 30 sea caves.

Photos by Aaron Zhong (top) and Connar L'Ecuyer (inset)

LETTER OF TRANSMITTAL

VCERA
VENTURA COUNTY EMPLOYEES' RETIREMENT ASSOCIATION

1190 S. VICTORIA AVENUE, SUITE 200 • VENTURA, CA 93003 • PHONE: 805-339-4250 • FAX: 805-339-4269 • WWW.VCERA.ORG

December 20, 2017

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

Dear Board of Retirement Trustees:

It is with pleasure that I submit to you the Comprehensive Annual Financial Report (CAFR) of the Ventura County Employees' Retirement Association (VCERA, Association, Fund, or Plan) for the fiscal year ended June 30, 2017, the 70th year of operation. The report is intended to provide a detailed review of the Association's financial, actuarial, and investment status. VCERA has the duty and authority to administer plan benefits for employees of the County of Ventura, Ventura County Courts, Ventura County Air Pollution Control District, Ventura Regional Sanitation District and VCERA.

VCERA and its Services

VCERA was established by the County of Ventura in 1947. VCERA is administered by the Board of Retirement (the Board) and governed by the County Employees' Retirement Law of 1937 ("CERL," California Government Code Section 31450 et. seq.) and the California Public Employees' Pension Reform Act of 2013 ("PEPRA," California Government Code section 7522 et seq.).

The Board is responsible for the general management of VCERA and for determining VCERA's investment objectives, strategies, and policies. The Board appoints a Retirement Administrator, to whom is delegated the responsibility for overseeing day-to-day management of VCERA and developing its annual budget. Adoption of the budget is subject to approval by the Board.

VCERA is a public employee retirement system whose main function is to provide service retirement, disability, death, and survivor benefits to the general and/or safety members employed by the County of Ventura, the Ventura County Courts, Air Pollution Control District, Ventura Regional Sanitation District and VCERA.

Financial Information

The financial attest audit performed by Brown Armstrong Accountancy Corporation states that VCERA's financial statements are prepared by management, are presented in conformity with Generally Accepted Accounting Principles (GAAP), and are free of material misstatement. Management acknowledges it is responsible for the entire contents of this CAFR.

Maintaining appropriate internal controls is the responsibility of management; however, management recognizes no control or combination of controls can entirely free an organization from all error or misstatement. At their best, controls provide reasonable assurance such failings do not occur. The concept of reasonable assurance recognizes that the cost of a control should not exceed the benefits likely to be derived; the valuation of cost and benefits requires estimates and judgments by management.

LETTER OF TRANSMITTAL CONTINUED

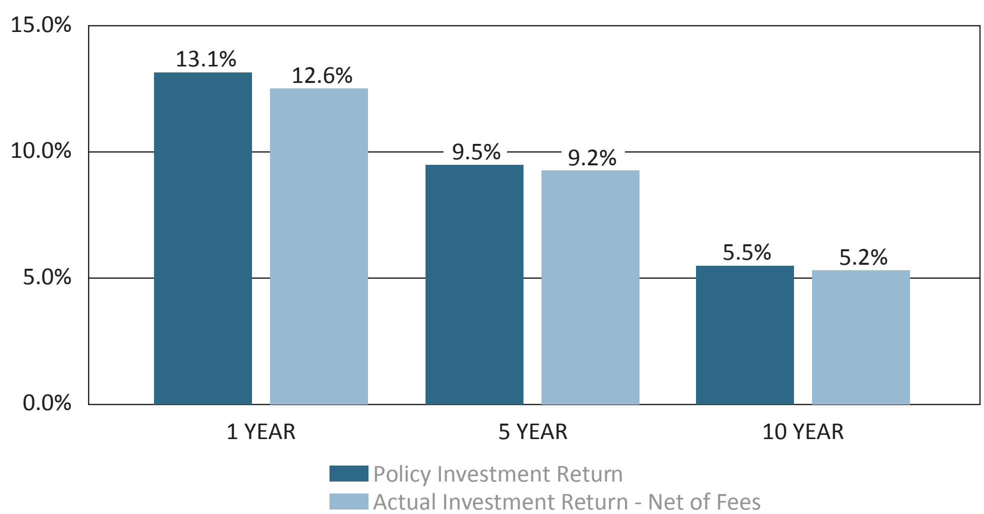
An overview of VCERA's fiscal operations is presented in the Management Discussion & Analysis (MD&A) section preceding the financial statements. This transmittal letter, when taken into consideration with the MD&A, provides an enhanced picture of the activities of the Association.

Investment Activities

The Board of Retirement's Investment Policy provides the framework for the management and oversight of VCERA's investments. The Investment Policy establishes VCERA's investment objectives and defines the principal duties of the Board, staff, custodian, investment managers, and consultants.

A pension fund's asset allocation policy implemented in a consistent and disciplined manner is generally recognized to have the most impact on a fund's performance. The asset allocation process determines a fund's optimal long-term asset class mix (target allocation), which is expected to achieve a specific set of investment objectives. The most current asset allocation plan and corresponding implementation plan was approved by the Board in 2015.

For the one-year period ending June 30, 2017, the VCERA portfolio's asset classes' investment net of fees returns versus their respective benchmarks were mixed. The publicly traded U.S. equity portfolio returned 18.6%, outperforming its benchmark by 0.1%. The non-U.S. equity portfolio returned 20.2%, underperforming its benchmark by 0.3%, whereas global equity returned 19.5%, outperforming its benchmark by 0.7%. Private equity returned 15.7%, underperforming its public market benchmark by 6.3%. Fixed income returned 2.2%, outperforming its policy benchmark by 2.5%. Real estate returned 5.5%, underperforming its benchmark by 1.4%, while liquid alternatives returned 5.1%, underperforming its benchmark by 0.6%. The total Fund returned 12.6% for the year, underperforming its policy benchmark by 0.5%. Over the five-years and ten-years ended June 30, 2017, the total Fund's annualized return was 9.2% and 5.2%, underperforming policy benchmarks by 0.3% and 0.3% respectively. The chart below compares the total fund actual and policy investment returns for one, five, and ten years.



LETTER OF TRANSMITTAL CONTINUED

Actuarial Funding Status

Pursuant to provisions in the CERL, VCERA engages an independent actuarial firm to perform annual actuarial valuations. A system actuarial valuation is performed every three years (triennial valuation). The economic and non-economic assumptions are updated at the time each triennial valuation is performed. Triennial valuations serve as the basis for the underlying assumptions that ultimately trigger changes in member and employer contribution rates necessary to properly fund the system. The latest triennial valuation was conducted as of June 30, 2014.

VCERA is funded by member and employer contributions and investment earnings on those contributions. Normal member contributions are those required to fund a specific annuity at a specified age. Member contribution rates for members who entered VCERA membership prior to January 1, 2013, vary according to the member's plan. The CERL also requires members to pay half the contributions required to fund the cost-of-living benefit, which is affected by changes in both economic and non-economic assumptions.

Liabilities not funded through member contributions are the responsibility of the employer. Changes to any of the economic and non-economic assumptions impact employer contribution rates. The employer is responsible for contributing to cover the cost of benefits expected to be accrued in the future and half of the cost-of-living benefit. These are "normal cost" contributions. The employer is also responsible for making additional contributions to eliminate any shortfalls in funding covering liabilities that have accrued in the past, which is known as the Unfunded Actuarial Accrued Liability (UAAL).

Provisions of PEPRA require equal sharing of normal costs between employers and employees. In January 2013, VCERA established two new retirement plans — PEPRA General Plan and PEPRA Safety Plan — for members with membership dates on or after January 1, 2013. Contributions for these plans are based on a single flat-rate percentage and are structured in accordance with the required 50/50 cost sharing. A member's age at first membership is not considered.

The June 30, 2017 valuation, determining the funded ratio to be 86.9 percent, recognized a UAAL of $744 million. The employer contribution rate will therefore be set equal to 17.8 percent of payroll for the amortization of the UAAL, plus the normal cost rate of 9.3 percent, for a total contribution rate of 27.1 percent of payroll for the 2018-19 fiscal year.

Significant Events, Accomplishments, and Objectives

The 2016-2017 fiscal year saw changes in the operation and administration of the retirement system by the Board and staff. Some of the more significant events and accomplishments of the past year are summarized below:

- Implemented Private Equity Separate Account Management including selecting external management firm to manage program.
- Completed and fully implemented IRS Model Regulations within the V3 pension system.
- Approved partial 2017 vintage year allocations of $30 million for one follow-on private equity fund.
- Completed and implemented redesigned VCERA logo.

Objectives for the Coming Year Include:

- Launch the Member Self Service (MSS) portal of the new pension system in FY 2017-18.
- Conduct an Actuarial Audit of the Actuarial Valuation
- Launch redesigned VCERA website and newsletter (VCERA Vibes).

LETTER OF TRANSMITTAL CONTINUED

- Complete private equity program vintage year 2017 allocations of $120 - $150 million.
- Complete triannual Actuarial Experience Study.
- Update and issue revised member handbook.

Certificate of Achievement

The Government Finance Officers Association of the United States and Canada (GFOA) awarded a Certificate of Achievement for Excellence in Financial Reporting to the Ventura County Employees' Retirement Association for its CAFR for the fiscal year ended June 30, 2016. In order to be awarded a Certificate of Achievement, a government must publish an easily readable and efficiently organized CAFR.

A Certificate of Achievement is valid for a period of one year only. Management believes that our current CAFR continues to meet the Certificate of Achievement Program's requirements and we are submitting it to the GFOA to determine its eligibility for another certificate.

Acknowledgements

The preparation of this CAFR in a timely manner is made possible by the dedicated teamwork of VCERA staff under the leadership, dedication, and support of the VCERA Board. I am sincerely grateful to the VCERA Board and staff, as well as our professional service providers, who perform so diligently to ensure successful operation and financial soundness of VCERA.

Respectfully submitted,

Linda Webb
Retirement Administrator

Government Finance Officers Association

Certificate of Achievement for Excellence in Financial Reporting

Presented to

Ventura County

Employees' Retirement Association

California

For its Comprehensive Annual
Financial Report
for the Fiscal Year Ended

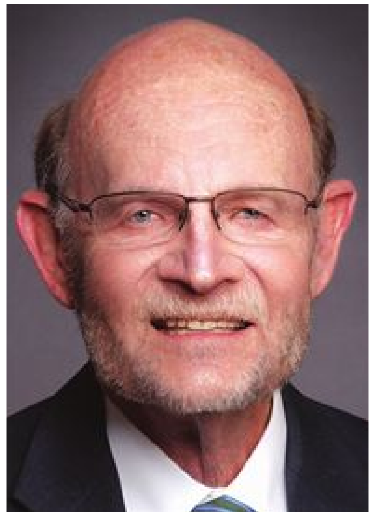
June 30, 2016

Christopher P. Morrill

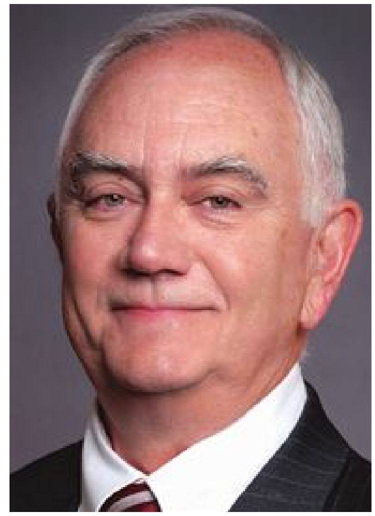
Executive Director/CEO

MEMBERS OF THE BOARD OF RETIREMENT

TRACY TOWNER
Chair
Alternate Elected by Safety Members



WILLIAM W. WILSON
Vice-Chair
Appointed by Board of Supervisors



STEVEN HINTZ
Ex-Officio Member
Treasurer-Tax Collector County of Ventura

PETER C. FOY
Appointed by Board of Supervisors

ROBERT BIANCHI
Appointed by Board of Supervisors

MICHAEL SEDELL
Appointed by Board of Supervisors

MEMBERS OF THE BOARD OF RETIREMENT CONTINUED

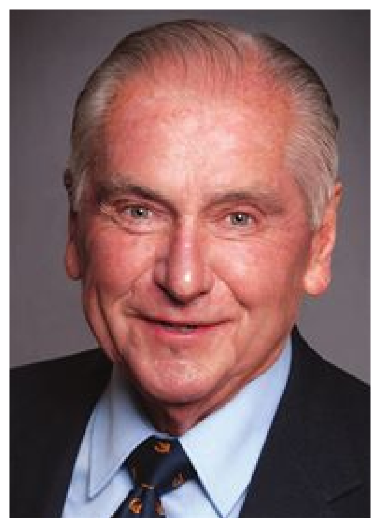
CRAIG WINTER
Elected by General Members

MAUVE FOX
Elected by General Members

ARTHUR E. GOULET
Elected by Retired Members

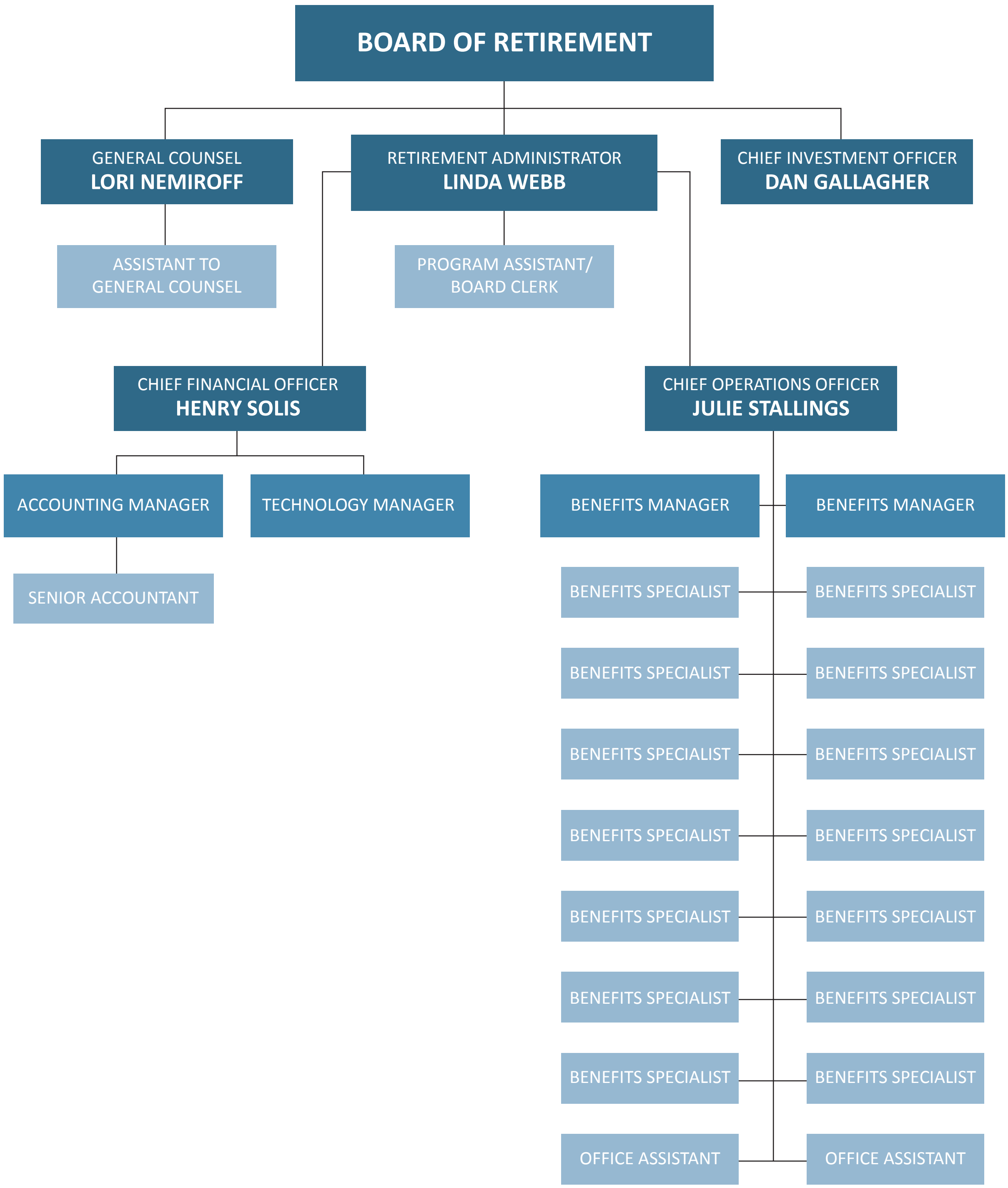
CHRIS JOHNSON
Elected by Safety Members

WILLIAM HOAG
Alternate Elected by Retired Members



ED McCOMBS
Alternate Appointed by Board of Supervisors

2017 ORGANIZATION CHART



LIST OF PROFESSIONAL CONSULTANTS

ACTUARY
Segal Consulting

CUSTODIAN
State Street Bank and Trust

INDEPENDENT AUDITOR
Brown Armstrong Accountancy Corporation

INVESTMENT CONSULTANT
NEPC, LLC
Abbott Capital Management, LLC

LEGAL COUNSEL
County Counsel of the County of Ventura
Nossaman, LLP
HansonBridgett LLP
Ice Miller LLP

TECHNICAL SUPPORT
Automatic Data Processing
Information Technology Services of the County of Ventura
Brentwood IT
Linea Solutions
SBS Group
Vitech Systems, Inc.

Please refer to the Schedule of Investment Fees on page 56 for investment professionals who provide services to VCERA.

Anacapa Lighthouse

The US Coast Guard built a light beacon in 1912 and light station in 1932 located on East Anacapa. It was the last lighthouse built by the United States Lighthouse Service. The official 2000 census population for the island lists 3 permanent residents who live at the ranger station.

Photos by Junefredo V. Apon (top) and Robert Schwemmer (inset)

BROWN ARMSTRONG
CERTIFIED PUBLIC ACCOUNTANTS

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SUITE 300
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TEL 661.324.4971
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EMAIL info@bacpas.com

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23272 MILL CREEK DRIVE
SUITE 255
LAGUNA HILLS, CA 92653
TEL 949.652.5422

STOCKTON OFFICE
5250 CLAREMONT
AVENUE
SUITE 150
STOCKTON, CA 95207
TEL 209.451.4833

BROWN ARMSTRONG
Certified Public Accountants

INDEPENDENT AUDITOR'S REPORT

Board of Retirement
Ventura County Employees' Retirement Association
Ventura, California

Report on the Financial Statements

We have audited the accompanying Statement of Fiduciary Net Position of Ventura County Employees' Retirement Association (VCERA) as of June 30, 2017, the related Statement of Changes in Fiduciary Net Position for the year then ended, and the related notes to the financial statements, which collectively comprise VCERA's basic financial statements as listed in the table of contents. We have also audited the schedule of cost sharing employer pension amounts allocated by cost sharing plan total for all entities of the columns titled net pension liability, total deferred outflows of resources, total deferred inflows of resources, and total employer pension expense (specified column totals), listed as other information in the table of contents.

Management's Responsibility for the Financial Statements

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

Auditor's Responsibility

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

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

We believe that the audit evidence we have obtained is sufficient and appropriate to provide a basis for our audit opinion.

Opinion

In our opinion, the basic financial statements referred to above present fairly, in all material respects, the fiduciary net position of VCERA as of June 30, 2017, and the changes in fiduciary net position for the year then ended, and the schedule of cost sharing employer pension amounts allocated by cost sharing plan total for all entities of the columns titled net pension liability, total deferred outflows of resources, total deferred inflows of resources, and total employer pension expense (specified column totals), listed as other information in the table of contents, in accordance with accounting principles generally accepted in the United States of America.

Other Matters

Required Supplementary Information

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

Other Supplementary Information

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

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

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

Report on Summarized Comparative Information

We have previously audited VCERA's June 30, 2016 financial statements, and our report dated January 31, 2017, expressed an unmodified opinion on those audited financial statements. In our opinion, the summarized comparative information presented herein as of and for the year ended June 30, 2016, is consistent in all material respects, with the audited financial statements from which it has been derived.

Other Reporting Required by *Government Auditing Standards*

In accordance with *Government Auditing Standards,* we have also issued our report dated December 20, 2017, on our consideration of VCERA's internal control over financial reporting and on our tests of its compliance with certain provisions of laws, regulations, contracts, and grant agreements and other matters. The purpose of that report is to describe the scope of our testing of internal control over financial reporting and compliance and the results of that testing, and not to provide an opinion on internal control over financial reporting or on compliance. That report is an integral part of an audit performed in accordance with *Government Auditing Standards* in considering VCERA's internal control over financial reporting and compliance.

BROWN ARMSTRONG
ACCOUNTANCY CORPORATION
Brown Armstrong
Accountancy Corporation

Bakersfield, California
December 20, 2017

MANAGEMENT'S DISCUSSION AND ANALYSIS

The following review of the results of Ventura County Employees' Retirement Association's (VCERA or the Plan) operations and financial condition for the year ended June 30, 2017, should be read in conjunction with the Letter of Transmittal found in the Introductory Section of the report and with the required financial statements that follow this discussion and analysis.

HIGHLIGHTS

- The Net Position Restricted for Pensions (Net Position) at the close of June 30, 2017, is $5.0 billion. All of the net position is available to meet VCERA's ongoing obligations to plan participants and their beneficiaries.
- VCERA's total Net Position Restricted for Pensions increased by $577.4 million or 13.2%. The increase for the year ended June 30, 2017, is primarily a result of positive investment returns.
- Total additions, as reflected in the Statement of Changes in Fiduciary Net Position, for the year ended June 30, 2017, are $843.7 million. This total is comprised of employer and plan member contributions of $263.2 million, net investment gain of $580.3 million and net securities lending income of $187 thousand.
- Total Deductions as reflected in the Statement of Changes in Fiduciary Net Position increased to $266.3 million or 6.1% from the prior year.
- VCERA's funding status, as measured by the actuarial value of assets divided by the actuarial value of accrued liabilities, improved from 84.9% to 86.9%.

OVERVIEW OF THE FINANCIAL STATEMENTS

The following discussion and analysis are intended to serve as an introduction to VCERA's basic financial statements. The financial statements and required disclosures are prepared in accordance with pronouncements (accounting principles and reporting guidelines) as set forth by the Governmental Accounting Standards Board (GASB). These pronouncements require certain disclosures and require VCERA to report using the full accrual basis of accounting. VCERA complies with all material requirements of these pronouncements. VCERA's basic financial statements are comprised of the following components:

1. Statement of Fiduciary Net Position
2. Statement of Changes in Fiduciary Net Position
3. Notes to the Basic Financial Statements

The **Statement of Fiduciary Net Position** is a snapshot of account balances at year-end, indicating the assets available for future payments to retirees and their beneficiaries, and any current liabilities owed.

The **Statement of Changes in Fiduciary Net Position** reflect all the activities that occurred during the year and show the impact of those activities as additions or deductions to the Plan. The trend of additions versus deductions to the Plan will indicate the condition of VCERA's financial position over time.

The Statement of Fiduciary Net Position and the Statement of Changes in Fiduciary Net Position report information about VCERA's activities. These statements include all assets and liabilities, using the full accrual basis of accounting, which is similar to the accounting used by private-sector companies. All of the current year's revenues and expenses are taken into account regardless of when cash is received or paid. All investment gains and losses, both realized and unrealized gains and losses are shown on Investments.

The Statement of Fiduciary Net Position and Statement of Changes in Fiduciary Net Position report VCERA's net position - restricted for pensions (net position is the difference between assets and liabilities) as one way to measure the Plan's financial position. Over time, increases and decreases in VCERA's net position are an indicator of whether its financial health is improving or deteriorating. Other factors, such as market conditions, should also be considered in measuring VCERA's overall financial health. Refer to VCERA's basic financial statements following this analysis.

MANAGEMENT'S DISCUSSION AND ANALYSIS CONTINUED

Notes to the Basic Financial Statements (Notes) are an integral part of the financial reports. The Notes provide additional information that is necessary to acquire a full understanding of the data provided in the financial statements including a detailed discussion of key policies, programs, investments, and activities that occurred during the year. Refer to the Notes to the Basic Financial Statements section of this report. Other information to supplement VCERA's basic financial statements is provided as follows:

Required Supplementary Information presents historical trend information concerning the changes in net pension liability, employer contributions and investment returns, and method and assumptions used to determine "actuarially determined contributions" required. This information is based on actuarial valuations and contributes to the understanding of the changes in the net pension liability of participating employers. Refer to the Required Supplementary Information section of this report.

Other Supplemental Information includes the schedules of Administrative Expenses, Investment and Payments to Consultants. Refer to Other Supplemental Information section of this report.

Other Information includes schedules of Employer Pension Amounts Allocated by Cost Sharing Plan and Cost Sharing Employer Allocations of Net Pension Liability, which are presented immediately following the Other Supplemental Information section of this report.

FINANCIAL ANALYSIS

During the fiscal year, the Plan's assets returned 12.6%, higher than the Plan's 7.50% assumed rate of return. The Non-U.S equity portfolio outperformed all other VCERA asset classes with a positive return of 20.2%. The U.S. equities portfolio gained 18.6% while the private equity portfolio gained 15.7% and global equity returned 19.5%. The fixed income portfolio returned 2.2%, while the liquid alternatives portfolio returned 5.1%.

NET POSITION RESTRICTED FOR PENSION BENEFITS

Net Position represents assets held to pay benefits earned by plan members. The Plan's Net Position increased from $4.4 billion to $5.0 billion for 2017. Investments increased by approximately $762.4 million in fiscal year 2017, as a result of an increase in the fair value of VCERA's investment portfolio. Current Assets decreased by $164.8 million in fiscal year 2017, mostly attributable to a decrease in VCERA's cash position as VCERA deployed global fixed income allocations that were converted to cash at prior year end, an increase in receivables primarily from securities sold offset by a reduction in cash collateral on loaned securities based on reduced demand in VCERA securities by borrowers. Capital Assets increased by $1.5 million, representing the total accumulated costs for the new pension administration system. Total Liabilities increased by $21.7 million in fiscal year 2017, due primarily to an increase in payables for securities purchased offset by a decrease in obligations due under the securities lending program.

($ in Thousands)	June 30, 2017	June 30, 2016	Difference	2017-2016 % Change
Current Assets	$186,847	$351,688	$(164,841)	-46.9%
Investments	4,840,788	4,078,384	762,404	18.7%
Capital Assets	14,507	12,962	1,545	11.9%
Total Assets	5,042,142	4,443,034	599,108	13.5%
Total Liabilities	(77,895)	(56,197)	(21,698)	38.6%
Net Position Restricted For Pensions	$4,964,247	$4,386,837	$577,410	13.2%

MANAGEMENT'S DISCUSSION AND ANALYSIS CONTINUED

ADDITIONS TO PLAN NET POSITION

The primary sources to finance pensions paid by VCERA are accumulated through investment income and the collection of employer and member contributions. Fiscal year 2017 results showed a 7.3% and 4.2% increase in employer and member contributions, respectively. Net investment income was higher than the prior year and added $554.8 million.

($ in Thousands)	June 30, 2017	June 30, 2016	Difference	2017-2016 % Change
Employer Contributions	$190,759	$177,709	$13,050	7.3%
Employee Contributions	72,395	69,470	2,925	4.2%
Net Investment Income	580,526	25,739	554,787	2155.4%
Total Additions	$843,680	$272,918	$570,762	209.1%

DEDUCTIONS IN NET POSITION

VCERA's assets are used primarily for the payment of pension benefits to retired members and their beneficiaries, refunds of member contributions, and plan administration costs. An increase in the number of retired members and an increase in the average pension benefit payment continued to be primary contributors to the increase in total deductions in fiscal year 2017.

Benefit payments grew by $14.2 million or 5.9% in 2017, as the Plan continues, as expected, to experience an increase in retirements. Member refunds increased slightly from the prior year while administrative expenses increased by 23.5% compared to the prior year due primarily to internal costs no longer being capitalized due to the completion of the new pension administration system .

($ in Thousands)	June 30, 2017	June 30, 2016	Difference	2017-2016 % Change
Benefit Payments	$255,581	$241,419	$14,162	5.9%
Member Refunds/Death Benefits	5,164	4,984	180	3.6%
Administrative Expenses	5,524	4,474	1,050	23.5%
Total Deductions	$266,269	$250,877	$15,392	6.1%

NET PENSION LIABILITY OF PARTICIPATING EMPLOYERS

VCERA is subject to the provisions of GASB Statement No. 67 (GASB 67), *Financial Reporting for Pension Plans*, and VCERA's participating employers are subject to the provisions of GASB Statement No. 68, *Accounting and Financial Reporting for Pensions*. These standards require governmental employers to recognize their long-term obligation for pension benefits as a liability on their balance sheets, to recognize their annual pension expense as a comprehensive measurement of the annual cost of pension benefits, and requires VCERA to provide note disclosures and required supplementary information related to the Plan's net pension liability (NPL) of participating employers.

NPL represents the excess of the total pension liability (using an entry age cost method, discounted at a discount rate that reflects the expected return on Plan assets) over fiduciary net position (valued at fair value). It's a measurement of pension liabilities using market assets that provides a consistent and standardized methodology allowing comparability of data and increased transparency of the pension liability across all governmental entities. VCERA has complied with GASB 67 for the year ended June 30, 2017.

MANAGEMENT'S DISCUSSION AND ANALYSIS CONTINUED

Based on the June 30, 2017 actuarial valuations, the NPL of participating employers on a fair value basis is $713.2 million, a decrease of approximately $351.5 million from the prior year. The decrease is primarily a result of higher investment returns than the assumed return of 7.50%. Refer to Note 4 – Net Pension Liability of Participating Employers and the Required Supplementary Information sections of this report, for further information.

REQUESTS FOR INFORMATION

The financial report is designed to provide the Board of Retirement, our membership, and other interested third parties with a general overview of VCERA's finances and to show accountability for the funds it receives.

Address questions regarding this report and/or requests for additional information to:

Chief Financial Officer, VCERA
1190 South Victoria Avenue, Suite 200
Ventura, CA 93003
VCERA.Info@Ventura.org

Respectfully submitted,

Henry C. Solis, CPA
Chief Financial Officer

BASIC FINANCIAL STATEMENTS

STATEMENT OF FIDUCIARY NET POSITION

As of June 30, 2017 (with comparative amounts for June 30, 2016)
($ in Thousands)

	June 30, 2017	June 30, 2016
ASSETS		
Cash and Cash Equivalents	$113,846	$287,042
Cash Collateral on Loaned Securities	44,705	48,243
Receivables		
Employer and Plan Member Contributions	9,566	8,300
Securities Sold	15,864	5,571
Accrued Interest and Dividends	2,832	2,488
Other	34	44
Total Receivables	28,296	16,403
Investments at Fair Value		
U.S. and Non-U.S. Equities	2,881,552	2,334,158
Fixed Income	945,944	834,772
Private Equity	208,663	157,306
Real Estate	391,122	371,598
Liquid Alternatives	413,507	380,550
Total Investments	4,840,788	4,078,384
Capital Assets, Net of Accumulated Depreciation and Amortization	14,507	12,962
Total Assets	5,042,142	4,443,034
LIABILITIES		
Payables for Securities Purchased	27,617	2,937
Other Liabilities	5,573	5,017
Securities Lending	44,705	48,243
Total Liabilities	77,895	56,197
Net Position Restricted for Pensions	$4,964,247	$4,386,837

The accompanying Notes are an integral part of these financial statements.

BASIC FINANCIAL STATEMENTS CONTINUED

STATEMENT OF CHANGES IN FIDUCIARY NET POSITION

For the Fiscal Year Ended June 30, 2017 (with comparative amounts for fiscal year ended June 30, 2016)
($ in Thousands)

	June 30, 2017	June 30, 2016
ADDITIONS		
Contributions		
Employer	$190,759	$177,709
Plan Member	72,395	69,470
Total Contributions	263,154	247,179
Investment Income		
From Investing Activities:		
Net Appreciation (Depreciation) in Fair Value of Investments	551,251	(22,492)
Investment Income	43,833	62,374
Total Investing Activity Income	595,084	39,882
Less Expenses from Investing Activities	(14,745)	(14,259)
Net Investing Activity Income	580,339	25,623
From Securities Lending Activities:		
Securities Lending Income	575	280
Less Expenses from Securities Lending Activities:		
Borrower Rebates	(304)	(114)
Management Fees	(84)	(50)
Total Expenses from Securities Lending Activities	(388)	(164)
Net Securities Lending Income	187	116
Total Net Investment Income	580,526	25,739
Total Additions	843,680	272,918
DEDUCTIONS		
Benefit Payments	255,581	241,419
Administrative Expenses	5,524	4,474
Refunds and Death Benefits	5,164	4,984
Total Deductions	266,269	250,877
Net Increase in Net Position	577,411	22,041
NET POSITION RESTRICTED FOR PENSIONS		
Beginning of Year	4,386,837	4,364,796
End of Year	$4,964,248	$4,386,837

The accompanying Notes are an integral part of these financial statements.

NOTES TO THE BASIC FINANCIAL STATEMENTS

1. SUMMARY OF SIGNIFICANT ACCOUNTING POLICIES

Reporting Entity. Ventura County Employees' Retirement Association (VCERA, Association, Fund, or Plan), with its own governing board, is an independent governmental entity separate and distinct from the County of Ventura. Actuarially determined financial data for VCERA is included in the County of Ventura's Comprehensive Annual Financial Report in the "Notes to the Basic Financial Statements" section. The specific elements of the financial accountability criteria considered in defining a reporting entity are appointment of a voting majority of the Board of Retirement (Board) and either the ability to impose will, or possibility of providing a financial benefit or imposing a financial burden. Application of the financial accountability criteria did not identify additional entities to be included in VCERA's annual report.

Basis of Accounting. The accompanying financial statements are prepared on the full accrual basis of accounting. Investment income is recognized when earned. Administrative and investment expenses are recorded when incurred. Contributions, benefit payments, and refunds are recorded when due and payable in accordance with the terms of the Plan. The net appreciation (depreciation) in the fair value of investments is recorded as an increase (decrease) in investment income based upon investment valuations.

Investment Valuation. VCERA investments are presented at fair value. The majority of the investments held by VCERA at June 30, 2017, is in the custody of, or controlled by, State Street Bank and Trust, VCERA's custodian. VCERA's investments consist of domestic and international fixed income, U.S. and Non-U.S. equities, private equity, liquid alternatives, and real estate. The diversity of the investment types that VCERA has entered into requires a wide range of techniques to determine fair value. The overall valuation processes and information sources by major asset classifications are as follows:

Fixed Income. Fixed income consists of Global negotiable obligations, which includes U.S. Government and U.S. Government-sponsored agencies' bonds, corporate debt, and securitized offerings backed by residential and commercial mortgages. Certain securities, such as U.S. government bonds, have an active market for identical securities and can typically be valued using the closing or last traded price on a specific date. Other securities that are not as actively traded are valued by pricing vendors, which use modeling techniques that include market observable inputs required to develop a fair value. Typical inputs include recent trades, yields, price quotes, cash flows, maturity, credit ratings and other assumptions based upon the specifics of the asset type.

Equities. The majority of the Association's U.S. and Non-U.S. equity securities are actively traded on major stock exchanges or over-the-counter. Investments listed or traded on a securities exchange are valued at fair value as of the close of trading on the valuation day. Fair value is determined based on the last reported trade price on the exchange considered to be the primary market for such security. Listed investments that are not traded on a particular day are valued at the last known price deemed best to reflect their fair value. Investments not traded on a securities exchange, but which are traded in any other market or over the counter, are valued based on prices obtained from third party service providers.

Private Equity. Private equity investments are made on a fund-of-funds basis or as a direct investment. The underlying equity fund portfolio consists of securities in portfolio companies as well as marketable securities. Typically, the fair value of all investments is determined by the fund manager in good faith and in compliance with the definition of fair value under accounting principles generally accepted in the United States of America (GAAP) (Financial Accounting Standards Board (FASB) Accounting Standards Codification, Topic 820). In some circumstances, partnership agreements require reporting financial information and valuations in an accounting standard other than GAAP, such as under International Financial Reporting Standards.

The measure of fair value by the fund manager is typically conducted on a quarterly basis. Marketable securities are valued according to the most recent public market price with appropriate discounts to reflect any contractual or regulatory restriction upon sale. The fair value of each investment as reported does not necessarily represent the amount that may ultimately be realized, since such amounts depend upon future circumstances that cannot reasonably be determined until the position is actually liquidated.

The Fund's evaluation of the fair value of portfolio funds is based on the most recent available valuation information provided to it by the portfolio funds, adjusted for subsequent distributions from and capital contributions to such portfolio funds, if any. The evaluation of the fair value of co-investments is based on the most recent information available at the time of valuation ascribed to such investments by the sponsor partnership. If the manager does not agree with this valuation, holds different securities than the sponsor partnership, is unable to obtain the sponsor partnership's valuation, or has information that results in a different valuation, it may use its own internal evaluation of fair value. The assumptions are based upon the nature of the investment and the underlying business. The valuation techniques vary based upon investment type and involve a certain degree of expert judgment.

Real Estate. Real estate is held either via a real estate limited partnership or a commingled fund. Real estate investments in a limited partnership or commingled fund are long-term and illiquid in nature. As a result, investors are subject to redemption restrictions, which generally limit distributions and restrict the ability of investors to exit an investment prior to its dissolution or liquidation of the underlying holdings. Interests in limited partnerships and commingled funds are valued by using the net asset value (NAV) of the portfolio. The most significant input into the NAV of such an entity is the value of its investment holdings. These holdings are valued by the general or managing partners on a continuous basis, audited annually and periodically appraised by an independent third party. The valuation assumptions are based upon both market and property specific inputs which are not observable and involve a certain degree of expert judgment.

Liquid Alternatives. Liquid alternatives are comprised of publicly traded equities and fixed income instruments. Please refer to explanation of Fixed Income and Equities on page 19.

Receivables. Receivables consist primarily of interest, dividends, and investments in transition, i.e., traded but not settled, and contributions owed by the employing entities as of June 30, 2017.

Use of Estimates. The preparation of financial statements in conformity with GAAP requires management to make estimates and assumptions that affect the reported amounts of assets and liabilities and disclosure of contingent assets and liabilities at the date of the financial statements and the reported amounts of additions and deductions during the reporting period. Actual results could differ from those estimates.

Securities Lending. Cash collateral received in the course of securities lending transactions is recorded as a current asset of VCERA, and the obligation to repay the collateral is recorded as a current liability, in accordance with the requirements of Governmental Accounting Standards Board (GASB) Statement No. 28. In addition, gross earnings received on invested cash collateral are reported as Earnings, and borrower rebates and agent fees are recorded as Borrower Rebates, and Management Fees, respectively. This Earnings, Borrower Rebates, and Management Fees amounted to $575,000, ($304,000, and $84,000), respectively, for the year ended June 30, 2017, an increase due to increased demand of securities loaned. Non-cash collateral, and the related repayment obligation, is not recorded on the books of the Association, as there is no ability to pledge or sell the collateral absent borrower default. See Note 3 for additional information on securities lending.

Income Taxes. The Internal Revenue Service (IRS) has ruled that plans such as VCERA qualify under Section 401(a) of the Internal Revenue Code and are not subject to tax under present income tax laws. On October 3, 2016, the IRS issued to VCERA a favorable Tax Determination Letter. Accordingly, no provision for income taxes has been made in the accompanying basic financial statements, as the Plan is exempt from federal and state income taxes under provisions of the Internal Revenue Code, Section 401(a), and the California Revenue and Taxation Code, Section 23701, respectively.

Implementation of new Accounting Pronouncement

VCERA implemented all applicable new GASB pronouncements in the year ended June 30, 2017, as required by each statement. The most recent applicable pronouncement(s), effective for the year ended June 30, 2017, which might have a material impact on VCERA's financial statements, are provided below.

GASB Statement No. 74 – Financial Reporting for Postemployment Benefits Other than Pension Plans. The provisions of this statement are effective for fiscal years beginning after June 15, 2016. There was no effect on the VCERA accounting or financial reporting as a result of implementing this standard.

GASB Statement No. 77 – Tax Abatement Disclosures. The requirements of this statement are effective for reporting periods beginning after December 15, 2015. There was no effect on the VCERA accounting or financial reporting as a result of implementing this standard.

GASB Statement No. 78 – Pensions Provided through Certain Multiple-Employer Defined Benefit Pension Plans. The requirements of this statement are effective for reporting periods beginning after December 15, 2015. There was no effect on the VCERA accounting or financial reporting as a result of implementing this standard.

GASB Statement No. 80 – Blending Requirements for Certain Component Units—an amendment of GASB Statement No. 14. The requirements of this statement are effective for reporting periods beginning after June 15, 2016. There was no effect on the VCERA accounting or financial reporting as a result of implementing this standard.

GASB Statement No. 82 – Pension Issues-An Amendment of GASB Statements No. 67, No. 68, and No. 73, which is effective for reporting periods beginning after June 15, 2016, addresses issues regarding the presentation of payroll-related measures in required supplementary information, selection of assumptions and deviations from the guidance in an Actuarial Standard of Practice for financial reporting purposes, and the classification of payments made by employers to satisfy plan member contribution requirements. VCERA implemented GASB 82 for the year ended June 30, 2017, and the changes mandated by the statement are reflected in VCERA's financial statements and related disclosures.

Future Governmental Accounting Standards Board Statements

GASB Statement No. 75 – Accounting and Financial Reporting for Postemployment Benefits Other than Pension Plans. The provisions of this statement are effective for fiscal years beginning after June 15, 2017. The Plan has not fully judged the effect of the implementation of GASB Statement No. 75 as of the date of the basic financial statements.

GASB Statement No. 81 – Irrevocable Split-Interest Agreements. The requirements of this statement are effective for reporting periods beginning after December 15, 2016. The Plan has not fully judged the impact of implementation of GASB Statement No. 81 as of the date of the basic financial statements.

GASB Statement No. 83 – Certain Asset Retirement Obligations. The requirements of this statement are effective for reporting periods beginning after June 15, 2018. The Plan has not fully judged the impact of implementation of GASB Statement No. 83 as of the date of the basic financial statements.

GASB Statement No. 84 – Fiduciary Activities. The requirements of this statement are effective for reporting periods beginning after December 15, 2018. The Plan has not fully judged the impact of implementation of GASB Statement No. 84 as of the date of the basic financial statements.

GASB Statement No. 85 – Omnibus 2017. The requirements of this statement are effective for reporting periods beginning after June 15, 2017. The Plan has not fully judged the impact of implementation of GASB Statement No. 85 as of the date of the basic financial statements.

GASB Statement No. 86 – Certain Debt Extinguishment Issues. The requirements of this statement are effective for reporting periods beginning after June 15, 2017. The Plan has not fully judged the impact of implementation of GASB Statement No. 86 as of the date of the basic financial statements.

GASB Statement No. 87 – Leases. The requirements of this statement are effective for reporting periods beginning after December 15, 2019. The Plan has not fully judged the impact of implementation of GASB Statement No. 87 as of the date of the basic financial statements.

2. PLAN DESCRIPTION

VCERA was established under the provisions of the California Government Code Sections 31450 et. seq., known collectively as the County Employees' Retirement Law of 1937. In September 2012, Governor Brown signed into law AB 240, known as the California Public Employees' Pension Reform Act of 2013 (PEPRA), California Government Code Section 7522 et. seq. Among other things, PEPRA provides lower benefit formulas to employees who became first time VCERA members on or after January 1, 2013 ("PEPRA members"). VCERA operates a cost sharing multi-employer defined benefit pension plan (Plan) that includes employees of the County of Ventura, Ventura County Courts, Air Pollution Control District, a special district, and Ventura Regional Sanitation District, a special district and, since January 1, 2017, employees of VCERA, (the latter four employers are not under the County of Ventura Board of Supervisors). The Plan is a pension trust fund of the County of Ventura.

VCERA provides retirement, disability, cost of living, death, and survivor benefits to its members and qualified beneficiaries.

Plan Membership. Membership is mandatory for employees with bi-weekly work schedules of 64 hours or more. Members employed up to and including June 30, 1979, and certain management personnel who entered service prior to October 16, 2001, are designated as Tier 1 members. Members employed after June 30, 1979 through December 31, 2012, are designated as Tier 2 members. Safety members (eligible Sheriff, Probation, and Fire employees) employed through December 31, 2012, are classified as Safety. New Members employed after January 1, 2013 are designated as PEPRA Tier 1, 2, or Safety.

VCERA MEMBERSHIP	2017	2016
Retired Members and Beneficiaries	6,766	6,539
Active Members		
Vested	5,801	5,850
Non-Vested	2,835	2,659
Deferred Members		
Vested	1,534	1,447
Non-Vested	1,275	1,192
Total Membership	18,211	17,687

Benefit Provisions. State law along with resolutions and ordinances adopted by the Board and Board of Supervisors establishes the Plan's benefit provisions and contribution requirements.

Retirement Allowances. In general, all employees with membership prior to January 1, 2013, with ten or more years of service are entitled to an annual retirement allowance beginning at age 50. General Member employees with membership on or after January 1, 2013, with five or more years of service are entitled to an annual retirement allowance beginning at age 52. Safety Members with membership on or after January 1, 2013, with five or more years of service are entitled to an annual retirement allowance at age 50. Allowances are based upon members' ages at retirement, final compensation, and total years of service. All members are eligible to retire at age 70 regardless of years of service.

Disability Benefits. A member who becomes permanently disabled from the performance of their duties may be granted a disability retirement allowance payable for life. If the disability is the result of a job-related injury or illness, the member may be granted a service-connected disability retirement. If the disability is not the result of a job-related injury or illness, the member may receive a non-service-connected disability retirement allowance.

Death Benefits. VCERA pays a basic death benefit to a surviving spouse or beneficiary or a member who dies while in active service which consists of the member's accumulated contributions plus an amount equal to an average month's salary to a maximum of six months' salary. If the deceased member was vested, a surviving spouse may elect, in lieu of the basic death benefit, a monthly allowance equal to 60 percent of the monthly retirement allowance to which the deceased member would have been entitled had the member been retired for non-service-connected disability as of the date of death. Benefits payable to a surviving spouse or other beneficiary of a member who dies after retirement depend upon the retirement option selected by the member at the time of retirement and whether the member's retirement was a regular service retirement, a non-service-connected disability retirement or a service-connected disability retirement. In addition, a lump sum death benefit of $5,000 is also payable to the named beneficiary of a deceased retired member.

Supplemental Benefits. On January 15, 1991, the Ventura County Board of Supervisors adopted a resolution to make operative California Government Code Section 31682. Adoption of this section permitted the Board to adopt a resolution to provide a vested supplemental benefit of $108.44 per month to all eligible retirees. Effective March 17, 2003, the Board adopted a resolution providing an additional $27.50 per month to eligible retirees receiving the vested supplemental benefit described above. The additional non-vested supplemental benefit is provided pursuant to California Government Code Sections 31691.1 and 31692.

Cost of Living Adjustment. Cost of living adjustments, based upon changes in the Consumer Price Index for the Los Angeles area, of up to 3% per annum are made for all Tier 1 and Safety retirees. On February 28, 2005, the Board adopted regulations pursuant to California Government Code Section 31627 to provide a cost of living adjustment to a majority of Tier 2 general members represented by Service Employees International Union (SEIU) Local 721. The cost of living adjustment is fixed at 2% annually and is funded by employee contributions.

Terminations. Effective January 1, 2003, members with less than five years of service may elect to leave their accumulated member contributions on deposit until first eligible to receive benefits in accordance with California Government Code Section 31628.

3. INVESTMENTS

Investment Policy. VCERA, in accordance with state statutes, invests in any form or type of investment, financial instrument, or financial transaction deemed prudent in the informed opinion of the Board. State Street Bank and Trust serves as the master custodian for the majority of VCERA's assets.

While VCERA recognizes the importance of capital preservation, it also adheres to the principle that varying degrees of investment risk are generally rewarded with compensating returns. The Board of Retirement's investment policy allows investment to the entire Global fixed income market (maturities 1 to 30 years) including treasury and government agency bonds, corporate debt, mortgages, asset-backed securities, international and emerging markets. The fixed income portfolio is largely comprised of investment grade issues (rating of BBB- {Standard & Poor's} and Baa3 {Moody's} or higher) and may include, subject to limits, opportunistic investment in non-dollar and high yield bonds. VCERA's investment policy recognizes that in the long-run equity returns

NOTES TO THE BASIC FINANCIAL STATEMENTS CONTINUED

will be greater than fixed income returns, but with expected greater volatility over shorter periods. Both domestic and international equity investing is permitted with exposure, subject to limits, to both the large and small capitalization ranges. Discretion is also permitted to international managers to invest, with limits, opportunistically in emerging market equities. Real Estate investing is also allowed with the goal to provide competitive risk adjusted returns as well as diversification benefits to VCERA's portfolio.

Asset Allocation Policy and Expected Long-Term Rate of Return by Asset Class. The allocation of investment assets within the Plan portfolio is approved by the Board as outlined in the Investment Policy. Plan assets are managed on a total return basis with a long-term objective of achieving and maintaining a fully funded status for the benefits provided through the Fund. The table that follows displays the Board's adopted asset allocation policy as of June 30, 2017 and 2016, respectively.

ASSET CLASS	Target Allocation 2017	Target Allocation 2016
U.S. Equity	28.0%	28.0%
Non-U.S. Equity	15.0%	15.0%
Global Equity	10.0%	10.0%
U.S. Fixed Income	20.0%	20.0%
Private Debt	0.0%	0.0%
Global Fixed Income	0.0%	0.0%
Real Estate	7.0%	7.0%
Global Tactical Asset Allocation	0.0%	0.0%
Private Equity	10.0%	10.0%
Liquid Alternatives	10.0%	10.0%
Total	100.0%	100.0%

Rate of Return. For the year ended June 30, 2017, the annual money-weighted rate of return on pension plan investments, net of pension plan investment expense, was 12.27%. The money weighted rate of return expresses investment performance, net of investment expense, adjusted for the changing amounts actually invested.

Investment Concentration. VCERA does not hold investments in any one organization that represent 5% or more of the Plan's Fiduciary Net Position.

Custodial Credit Risk. VCERA considers investments purchased with a maturity of 12 months or less to be short-term investments. Although not having a policy that specifically addresses the limiting of custodial credit risk, VCERA, in practice, limits custodial credit risk for deposits by maintaining substantially all cash and short-term investments in external investment pools managed by the County of Ventura and State Street Bank and Trust. All other investment securities are held by State Street Bank and Trust in VCERA's name. VCERA maintains a commercial bank account with depository insurance coverage from the Federal Deposit Insurance Corporation (FDIC).

NOTES TO THE BASIC FINANCIAL STATEMENTS CONTINUED

As of June 30, 2017 and 2016, VCERA had the following cash and short-term investments:

($ in Thousands)	June 30, 2017	June 30, 2016
State Street Bank and Trust	$106,496	$278,671
County of Ventura Treasurer's Investment Pool	4,250	8,352
Commercial Bank Account	3,100	19
Total	$113,846	$287,042

Credit Risk. VCERA requires its total fixed income holdings to be rated at a minimum AA by Standard & Poor's (S&P), Aa by Moody's, or AA by Fitch Rating. Aggregated amounts by rating category using S&P ratings are as follows:

($ in Thousands) Rating Category	Assets held at June 30, 2017	Assets held at June 30, 2016
Separate Holdings:		
AAA	$104,627	$101,149
AA	27,696	27,970
A	62,389	61,819
BBB	106,365	92,023
BB	27,977	20,178
B	7,420	9,318
CCC	3,189	5,019
CC	-	713
C	-	-
D	852	1,927
No Rating/Commingled	80,991	69,538
Total Separate Holdings	$421,506	$389,654

($ in Thousands) Rating Category	Assets held at June 30, 2017	Assets held at June 30, 2016
Pooled Investments:		
AAA	$402,705	$326,272
AA	95,580	68,056
A	64,010	46,755
BBB	73,204	67,900
BB	19,449	24,381
B	9,392	17,086
CCC	1,322	6,801
CC	108	-
Total Pooled Investments	$665,770	$557,251
Total Portfolio	$1,087,276	$946,905

Overall, the Plan's fixed income holdings were rated AA at June 30, 2017, and AA at June 30, 2016.

NOTES TO THE BASIC FINANCIAL STATEMENTS CONTINUED

Interest Rate Risk. VCERA recognizes the importance of managing its exposure to interest rate risk and has developed a policy to limit the duration of VCERA's fixed income portfolio to plus or minus 20% of the broad fixed income market as defined by the Barclays Capital Aggregate Bond Index and Barclays Global Aggregate Bond Index. Duration is an investment's exposure to fair value change arising from a change in interest rates, by investment category, and the amount held at June 30, 2017 and 2016 is as follows:

($ in Thousands) Category	Assets held at June 30, 2017	Duration (Years)	Assets held at June 30, 2016	Duration (Years)
Treasury	$304,233	3.2	$271,050	3.8
Agency	21,023	0.6	27,026	1.9
Mortgage-Backed	267,564	3.1	187,274	1.9
Asset-Backed	40,342	0.5	49,567	0.3
Credit	356,325	4.2	326,213	4.1
Foreign	48,688	4.4	36,199	4.1
Other	49,099	0.4	49,574	0.4
Total	$1,087,274	3.3	$946,903	3.1

The duration for the Barclays Capital Aggregate Bond Index as of June 30, 2017 and 2016, was 5.7 years and 5.2 years, respectively.

Foreign Currency Risk. VCERA, through its investment policy, recognizes the return and diversification benefits gained by investing in markets outside the United States. The majority of VCERA's international investments are held in commingled investment pools with other institutional investors. VCERA may also hold individual foreign securities within the fixed income allocation. Investments in countries outside the United States expose VCERA to the risk that changes in currency exchange rates may affect the fair value of these investments.

VCERA's non-U.S. equity, global equity, and fixed income investment managers may utilize forward exchange currency contracts, currency futures contracts, and currency options to minimize currency fluctuations in non-U.S. dollar denominated securities. VCERA's investment policy does not allow forward currency contracts, futures contracts or options to be utilized speculatively. Risks surrounding the contracts and options include fluctuations in exchange rates and the inability of the counterparty to meet contract and option terms. Differences between contract exchange rates and market exchange rates at settlement result in gains and losses.

As of June 30, 2017 and 2016, VCERA's forward exchange currency contracts were valued at $1.1 and $1.2 million, currency future contracts had a notional value of $189.5 and $317.2 million and currency options were valued at $96,521 and $(20,641), respectively. All forward currency contracts, futures currency contracts, and currency options have been included at fair value in the Statement of Fiduciary Net Position, and all realized and unrealized gains/losses associated with the securities have been included in the Statement of Changes in Fiduciary Net Position for the years ending June 30, 2017 and 2016, respectively.

NOTES TO THE BASIC FINANCIAL STATEMENTS CONTINUED

VCERA had the following currency exposure in its portfolios as of June 30, 2017 and 2016.

($ in Thousands) Currency	Fixed Income at June 30, 2017	Equities at June 30, 2017	Fixed Income at June 30, 2016	Equities at June 30, 2016
Australian Dollar	$-	$46,197	$302	$30,231
British Pound	77	168,068	-	123,350
Canadian Dollar	77	55,353	(13)	33,188
Danish Krone	-	17,774	-	9,859
Euro	(883)	263,968	374	169,145
Hong Kong Dollar	-	54,327	-	32,513
Japanese Yen	165	181,514	124	137,491
Mexican Peso	-	6,005	-	3,199
New Zealand Dollar	-	1,406	(26)	1,179
Norwegian Krone	1,457	11,313	17	7,653
South African Rand	-	15,498	47	9,678
Singapore Dollar	(473)	19,412	-	15,322
South Korean Won	-	31,933	-	18,203
Swedish Krona	730	19,912	-	11,735
Swiss Franc	-	78,724	-	61,338
Other/Emerging Markets	11,386	139,408	3,949	124,415
Total	$12,536	$1,110,812	$4,774	$788,499

Securities Lending. VCERA, under provisions of state statutes, and its investment policy, authorizes State Street Bank and Trust to act as agent in lending VCERA's securities to broker-dealers and other entities in the form of a loan agreement. Borrowers were required to deliver collateral in an amount equal to not less than 100%, and typically 102%, of the fair value of securities borrowed.

As of June 30, 2017 and 2016, VCERA had no credit risk exposure because the amounts VCERA owed the borrowers exceeded the amounts the borrowers owed VCERA. State Street Bank and Trust indemnified VCERA by agreeing to purchase replacement securities, or return cash collateral, in the event a borrower failed to return a lent security or pay distributions while the security was on loan. VCERA and the borrowers maintained the right to terminate all securities lending transactions on demand. The cash collateral received on each loan was invested with cash collateral of other qualified tax-exempt plan lenders, in a collective investment pool. Because loans were terminable at will, their maturity did not generally match the maturity of the investments made with cash collateral. VCERA cannot pledge or sell collateral securities without borrower default. As of June 30, 2017 and 2016, VCERA had securities on loan with a fair value of $43.7 and $47.2 million, with cash collateral of $44.7 and $48.2 million, respectively.

VCERA's net securities lending income for the years ended June 30, 2017 and 2016 is as follows:

($ in Thousands)	June 30, 2017	June 30, 2016
Gross Income	$575	$280
Expenses		
Borrower Rebates	304	114
Management Fees	84	50
Net Securities Lending Income	$187	$116

NOTES TO THE BASIC FINANCIAL STATEMENTS CONTINUED

Concentration of Credit Risk. VCERA, through policies developed and implemented by the Board, maintains the goal of having a well-diversified portfolio. As such, VCERA had no investments in any one named security that would represent more than 5% of total investments. Pooled investments and investments issued by or explicitly guaranteed by the U.S. Government are exempt from this requirement.

Derivative Financial Instruments. As part of VCERA's Investment Policy, investment managers are allowed the use of derivatives. Derivatives are financial instruments that derive their value, usefulness, and marketability from an underlying instrument which represents direct ownership of an asset or of an issuer whose payments are based on or "derived" from the performance of an agreed upon benchmark. Values of derivatives change daily. VCERA's managers are required to mark-to-market derivative positions daily. Within VCERA's investment policy, specific guidelines are put forth with investment managers who invest in derivatives. Substitution, risk control, and arbitrage are the only derivative strategies permitted; speculation is prohibited. No contingent features are present. Derivatives are carried as assets when their fair value is positive and as liabilities when their fair value is negative. Gains and losses from derivatives are included in the Statement of Changes in Fiduciary Net Position. For financial reporting purposes, all of VCERA's derivates are classified as investment derivatives. A further discussion on VCERA's valuation procedures are contained in Note 1, Summary of Significant Accounting Policies. The following types of derivatives are permitted: futures contracts, currency forward contracts, options, and swaps.

Futures Contracts. A futures contract represents an agreement to buy (long position) or sell (short position) an underlying asset at a specified future date for a specified price. Payment for the transactions is delayed until a future date, which is referred to as the settlement or expiration date. Futures contracts are standardized contracts traded on organized exchanges.

Forward Contracts. A forward contract represents an agreement to buy or sell an underlying asset at a specified future date for a specified price. Payment for the transactions is delayed until the settlement or expiration date. A forward contract is a non-standardized contract that is tailored to each specific transaction. Forward contracts are privately negotiated and are intended to be held until the settlement date. Currency forward contracts are used to control currency exposure and facilitate the settlement of international security purchase and sale transactions.

Option Contracts. An option is a type of derivative security in which a buyer (purchaser) has the right, not the obligation, to buy or sell a specified amount of an underlying security at a fixed price by exercising the option before its expiration date. The seller (writer) has an obligation to buy or sell the underlying security if the buyer decides to exercise the option.

NOTES TO THE BASIC FINANCIAL STATEMENTS CONTINUED

Swap Agreements. A swap is an agreement between two or more parties to exchange a sequence of cash flows over a period of time in the future. No principal is exchanged at the beginning of the swap. The cash flows the counter parties exchange are tied to a "notional" or contract amount. A swap agreement specifies the time period over which the periodic payments will be exchanged. The fair value represents the gains or losses as of the prior marking-to-market, which are functions of general interest rate fluctuations.

The investment derivatives schedule listed below reports the related fair value amounts as of June 30, 2017 and 2016, the notional amounts for derivatives outstanding and net appreciation (depreciation) in fair value amounts as of June 30, 2017, classified by type.

Investment Derivatives Schedule

($ in Thousands) Derivative Type	Notional Amount June 30, 2017	Fair Value June 30, 2017	Fair Value June 30, 2016	Change in Fair Value[1] 2017 - 2016
Future Contracts	$25,618	$-	$(21)	$34,860
Forward Contracts	666	(5)	25	12
Options Contracts	320	97	-	132
Credit Default Swaps	-	-	-	-
Currency Swaps	-	-	-	-
Interest Rate Swaps	1,344	(1,344)	-	(1,284)
Total Investment Derivatives	$27,948	$(1,252)	$4	$33,720

[1]Change in fair value includes realized/unrealized gains and losses including those that were opened and closed during the current fiscal year.

All investment derivative positions are included as part of investments at fair value on the Statement of Fiduciary Net Position. All changes in fair value are reported as part of Net Appreciation/(Depreciation) in fair value of investments in the Statement of Changes in Fiduciary Net Position.

Custodial Credit Risk. VCERA's investments include collateral associated with derivatives activity. As of June 30, 2017, collateral for derivatives was $14.4 million. The collateral margins are maintained in margin accounts at financial services firms that provide brokerage services. Each account is uninsured and is subject to custodial credit risk.

Credit Risk. VCERA is exposed to credit risk on investment derivatives that are traded over the counter and are reported in asset positions. Derivatives exposed to credit risk include currency forward contracts and swap agreements. As of June, 30, 2017, the fair value of derivative investments subject to credit risk was ($1,344,000), and at June 30, 2016, was $25 thousand. VCERA would be exposed to the loss of the fair value of derivatives that are in asset positions and any collateral provided to the counterparty, net of the effect of applicable netting arrangements.

VCERA requires investment managers to have Master Agreements in place to minimize credit risk. Netting arrangements legally provide VCERA with a right of setoff in the event of bankruptcy or default by the counterparty. VCERA would be exposed to loss of collateral provided to the counterparty. Collateral provided by the counterparty reduces VCERA's credit risk exposure.

NOTES TO THE BASIC FINANCIAL STATEMENTS CONTINUED

The following Credit Risk Derivatives Schedule discloses the counterparty credit ratings of VCERA's investment derivatives in asset positions by type as of June 30, 2017. These amounts represent the maximum loss that would be recognized if all counterparties fail to perform as contracted, without respect to collateral or other security, or netting arrangement. The schedule displays the fair value of investments by credit rating in increasing magnitude to risk investments, classified by S&P's rating system. As of June 30, 2017, VCERA has a maximum amount of exposure to credit risk due to default of all counterparties of ($5) thousand.

Credit Risk Derivatives Schedule

($ in Thousands) Derivative Type	Fair Value June 30, 2017	Adjusted Rating		
		AA	A	BBB
Forward Contracts	$(5)	$ -	$(5)	$ -
Total	$(5)	$ -	$(5)	$ -

Interest Rate Risk. Interest Rate Risk is the risk that changes in interest rates will adversely affect the fair value of an investment. Interest Rate Swaps is an example of a derivative investment that is highly sensitive to interest rate changes. LIBOR refers to London Interbank Offering Rate. The following tables illustrates the investment maturity period and sensitivity to interest rate changes of these investments as of June 30, 2017.

		Investment Maturities (in Years)			
($ in Thousands) Derivative Type	Fair Value June 30, 2017	Less than 1	1-5	6-10	More than 10
Pay Fixed Interest Rate Swaps	$(1,344)	$ -	$(5)	$ -	$(1,344)

($ in Thousands) Derivative Type	Receive Rates	Payable Rate	Fair Value	Notional
Pay Fixed Interest Rate Swaps	Receive variable 036-month LIBOR	Pay fixed 2.4684%	$(1,344)	$1,344

NOTES TO THE BASIC FINANCIAL STATEMENTS CONTINUED

Foreign Currency Risk. VCERA was exposed to foreign currency risk on investments in futures, swaps, and forward currency contracts denominated in foreign currencies that may be adversely affected by changes in the currency exchange rates. The following table lists the derivative investments held in foreign currencies as of June 30, 2017.

Foreign Currency Risk Schedule for Derivative Instruments

($ in Thousands) Currency	Options	Currency Forward Contracts Net Receivables	Currency Forward Contracts Net Payables	Swap Agreement	Net Exposure
Yuan Renminbi	$ -	$ -	$(5)	$ -	$(5)
Sub total	-	-	(5)	-	(5)
U.S. Dollar	97	-	-	(1,344)	(1,247)
Total	$97	$ -	$(5)	$(1,344)	$(1,252)

Commitments to Fund Partnerships. As of June 30, 2017, the total capital commitments to fund partnerships were $457.5 million. Of this amount, $232.9 million remained unfunded and is not recorded on the VCERA Statements of Fiduciary Net position as of June 30, 2017. The following table depict the total commitments and unfunded commitments, respectively, by asset class.

Total Commitments and Unfunded Commitments to Fund Parterships by Asset Class

($ in Thousands) Asset Class	Total Commitments	Unfunded Commitments
Private Equity	$457,500	$232,944
Total	$457,500	$232,944

Fair Value Measurements. VCERA categorizes its fair value measurements of its investments based on the fair value hierarchy established by generally accepted accounting principles. The fair value hierarchy, which has three levels, is based on the valuation inputs used to measure an asset's fair value. Level 1 inputs are unadjusted quoted prices in active markets for identical assets. Level 2 inputs are quoted prices for similar instruments in active markets, quoted prices for identical or similar instruments in markets that are not active, and model-derived valuations in which all significant inputs are observable. Level 3 inputs are valuations derived from valuation techniques in which significant inputs are unobservable. The table that follows depict the fair value measurements as of June 30, 2017.

NOTES TO THE BASIC FINANCIAL STATEMENTS CONTINUED

Investments and Derivative Instruments Measured at Fair Value

($ in Thousands) Investments by Fair Value Level	Total	Quoted Prices in Active Markets for Identical Assets Level 1	Significant Other Observable Inputs Level 2	Significant Unobservable Inputs Level 3
Debt Securities				
Asset Backed Securities	$38,306	$ -	$35,079	$3,227
Commercial Mortgage-Backed Securities	71,283	-	71,283	-
Corporate and Other Credit	201,303	-	201,303	-
Municipal Bonds	462	-	462	-
U.S. Government Agency	109,057	-	109,057	-
Total Debt Securities	420,411	-	417,184	3,227
Equity Securities				
U.S. Equity	6,326	6,326	-	-
Limited Partnerships	112,391	112,391	-	-
Preferred Stock	477	477	-	-
Total Equity Securities	119,194	119,194	-	-
Collateral from Securities Lending	44,705	-	44,705	-
Total Investments by Fair Value Level	$584,310	$119,194	$461,889	$3,227

Investments Measured at Net Asset Value (NAV)	
Fixed Income	$666,355
Equity	
U.S.	1,403,935
Non U.S.	798,385
Global	537,900
Liquid Alternatives	294,823
Real Estate	391,122
Private Equity	208,663
Total Investments Measured at NAV	4,301,183
Total Investments Measured at Face Value	$4,885,493

Investment Derivative Instruments				
Forward Exchange Contracts	$(5)	$(5)	$-	$-
Options Contracts	97	97	-	-
Interest Rate Swaps	(1,344)	(1,344)	-	-
Total Investment Derivative Instruments	$(1,252)	$(1,252)	$-	$-

Note: Values provided by custodian bank and presented based on securites classification. Amounts per asset class when aggregated correspond to values as presented in the Statement of Fiduciary Net Position.

NOTES TO THE BASIC FINANCIAL STATEMENTS CONTINUED

In instances where inputs used to measure fair value fall into different levels in the fair value hierarchy, fair value measurements, in their entirety, are categorized based on the lowest level input that is significant to the valuation. VCERA's assessment of the significance of particular inputs to these fair value measurements requires judgment and considers factors specific to each asset or liability. Investments are measured by type of investment as follows:

Debt securities classified in Level 2 of the fair value hierarchy are valued using the matrix pricing technique and the discounted cash flow method. Matrix pricing is used to value securities based on the securities' relationship to benchmark quoted prices. Debt securities classified in Level 3 of the fair value hierarchy are valued using the discounted cash flow method and proprietary pricing information.

Equity securities include domestic common and preferred stock and publicly traded master limited partnerships. Equity securities classified in Level 1 of the fair value hierarchy are valued using prices quoted in active markets for those securities.

Cash collateral received for securities lent is reinvested in investments, such as, short term government and high quality corporate debt securities. These securities are classified in Level 2 of the fair value hierarchy using prices quoted in active markets for similar securities.

Derivative instruments classified in Level 1 of the fair value hierarchy are valued using a market approach using prices quoted in active markets for those securities. Derivative instruments classified in Level 2 of the fair value hierarchy are valued using a market approach that considers benchmark interest rates and foreign exchange rates.

Fair value of investments in commingled fund vehicles of publicly traded securities are expressed as NAV, and are provided by custodial banks using the best available pricing sources. Fair Value of investments in real estate and private equity funds have been determined by their respective managers using a variety of different techniques such as liquidity events, market bids, and property and company appraisals. Such fair value measurements are shown in the table that follows as of June 30, 2017.

Investments Measured at NAV

($ in Thousands) Investment Type	Fair Value	Unfunded Commitments	Redemption Frequency (if Currently Eligible)[1]	Redemption Notice Period
Fixed Income	$666,355	$ -	D, M	3-15 days
Equity				
U.S.	1,403,935		D	1 day
Non U.S.	798,385	-	D, M	2-30 days
Global	537,900	-	D	1-2 days
Liquid Alternatives	294,823	-	D	5 days
Real Estate	391,122	-	Q	60-90 days
Private Equity	208,663	232,944	N/A	N/A
Total Investments Measured at NAV	$4,301,183	$232,944		

[1]D = Daily, M = Monthly, Q = Quarterly, N/A = Not Available

The investment types listed in the tables above were measured at NAV as follows:

NOTES TO THE BASIC FINANCIAL STATEMENTS CONTINUED

Investments in publicly traded equity, fixed income, and liquid alternative strategies are made through commingled fund vehicles. For each commingled fund vehicle, valuations are expressed as a NAV. VCERA's investments in these vehicles are held as undivided interests in these commingled funds, represented as shares or units of ownership. Underlying securities in these commingled funds would be valued at Level 1 or 2 of the Fair Value hierarchy.

Real Estate investments generate income in addition to capital appreciation. In addition, they serve as a hedge against inflation, and help to diversify the portfolio. VCERA's real estate exposure is obtained through open ended commingled fund equity investment vehicles. These commingled funds are diversified across property types which include office, residential, commercial, industrial, and raw land. Property exposures are held in these vehicles primarily on a direct basis, but are also achieved through holdings in publicly traded Real Estate Investment Trusts (REITS). As above, for each commingled fund vehicle, valuations are expressed as a net asset value (NAV). VCERA's investments in these vehicles are held as undivided interests in these commingled funds, represented as shares or units of ownership. Underlying holdings in these commingled funds are determined by property appraisals, and as such would be valued at Level 3 of the Fair Value hierarchy.

VCERA's private equity portfolio is globally diversified, and consists of holdings in commingled fund of funds in a limited partnership structure. Each fund of funds invests in a diversified set of underlying private equity funds, each which invests directly in portfolio companies. Underlying strategies include investments in primary, secondary, and co-investments. These investments are diversified across buyout, growth capital, venture capital, and various debt strategies, and further diversified by vintage year. For each limited partnership, valuations are expressed as a net asset value (NAV). VCERA's partnership interests in these vehicles are in proportion to its shares of each respective partnership. Underlying holdings in these limited partnership vehicles would be valued at Level 3 of the Fair Value hierarchy.

4. NET PENSION LIABILITY OF PARTICIPATING EMPLOYERS

The components of the Net Pension Liability of the Plan at June 30, 2017 and 2016, were as follows:

($ in Thousands) Net Pension Liability	June 30, 2017	June 30, 2016
Total Pension Liability	$5,677,421	$5,451,539
Plan Fiduciary Net Position	4,964,247	4,386,837
Net Pension Liability	$713,174	$1,064,702
Plan Fiduciary Net Position as a percentage of the Total Pension Liability	87.44%	80.47%

Actuarial Assumptions

One of the general goals of an actuarial valuation is to establish contribution rates that fully fund the Plan's liabilities, and that, as a percentage of payroll, remain as level as possible for each generation of active members. In preparing the actuarial valuation, the actuary employs generally accepted actuarial methods and assumptions to evaluate the Plan's assets, liabilities, and future contributions required. The actuary incorporates member data and financial information provided by the Plan with economic and demographic assumptions made about the future to estimate the Plan's financial condition as a specified point in time. For example, the actuary develops assumptions about future investment returns, future inflation rates, future increases in salaries, expected retirement ages, life expectancy, and other relevant factors. VCERA's actuary calculates actuarially determined contributions every year and reviews with the Board the economic and demographic assumptions of the Plan every three years.

NOTES TO THE BASIC FINANCIAL STATEMENTS CONTINUED

A key element in determining the Plan's liability is the projection of Benefits, which is defined as all benefits estimated to be payable through the Plan to current active and inactive employees as a result of their past service and their expected future service. The type of benefits provided by the Plan at the time of each valuation are taken into consideration when Benefits are projected.

The actuarial assumptions used to determine the Total Pension Liability as of June 30, 2017, were based on the results of the June 30, 2014, Review of Economic Assumptions and Actuarial Experience Study (Experience Study) and the June 30, 2015 review of Economic Actuarial Assumptions. For determining the Total Pension Liability the investment return assumption used is net of investment expenses only and is not net of administrative expenses.

Key methods and assumptions for actuarial determined contribution rates in the June 30, 2017, and June 30, 2016, actuarial valuations are presented as follows.

Methods and assumptions used to establish "actuarially determined contribution" rates:	
Valuation Date	June 30, 2017
Actuarial Cost Method	Entry Age Normal Actuarial Cost Method
Amortization Method	Level Percentage of Payroll
Remaining Amortization Period	15 year closed period for Unfunded Actuarial Accrued Liability (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 June 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 be 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 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. The Actuarial Value of Assets is reduced by the value of the Non-Vested Supplemental Medical Benefit Reserve and the statutory Contingency Reserve.

Actuarial Assumptions:	**June 30, 2017**	**June 30, 2016**
Investment Rate of Return[1]	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	0.50%	0.50%

NOTES TO THE BASIC FINANCIAL STATEMENTS CONTINUED

Projected Salary Increases[2]	General: 4.00% to 9.50% and Safety: 4.00% to 11.50%	General: 4.00% to 9.50% and Safety: 4.00% to 11.50%
Cost of Living Adjustments	For General Tier 1 and Safety 3.00% (actual increases are contingent upon Consumer Price Index (CPI) increases with a 3.00% maximum). For General Tier 2, Service Employees International Union members receive a fixed 2.00% cost-of-living adjustment not subject to CPI increases that applies to service after March 2003.	For General Tier 1 and Safety 3.00% (actual increases are contingent upon Consumer Price Index (CPI) increases with a 3.00% maximum). For General Tier 2, Service Employees International Union members receive a fixed 2.00% cost-of-living adjustment not subject to CPI increases that applies to service after March 2003.
Other Assumptions	Same as those used in the June 30, 2017, funding actuarial valuation.	Same as those used in the June 30, 2016, funding actuarial valuation.

[1] Includes inflation.

[2] Includes inflation at 3.00% plus real across-the-board salary increases of 0.50% plus merit and longevity increases.

Long-Term Real Rate Of Return By Asset Class

The long-term expected rate of return on the Plan's investments for 2017 use a building-block method in which expected future real rates of return (expected returns, net of pension plan investment expense and inflation) are developed for each major asset class. This information is combined to produce the long-term expected rate of return by weighting the expected future real rates of return by the target asset allocation percentage, and by adding expected inflation. 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%	

Long-term expected rate of return net of investment expenses: 7.50%

Discount Rate

The discount rate used to measure the Total Pension Liability was 7.50% as of June 30, 2017 and 2016. The projection of cash flows used to determine the discount rate assumed that Plan member contributions will be made at the current contribution rate and that employer contributions will be made at rates equal to actuarially determined contribution rates. For this purpose, only employee and employer contributions that are intended to fund benefits for current Plan members and their beneficiaries are included. Projected employer contributions that are intended to fund the service costs for future plan members and their beneficiaries, as well as projected contributions from future Plan members, are not included. Based on those assumptions, the Plan's Fiduciary Net Position was projected to be available to make all projected future benefit payments for current plan members. Therefore, the long-term expected rate of return on Plan investments was applied to all periods of projected benefit payments to determine the Total Pension Liability as of both June 30, 2017 and 2016.

The following table presents the Net Pension Liability of participating employers calculated using the current discount rate of 7.50%, as of June 30, 2017, as well as the Net Pension Liability if the discount rate were 1.00% lower or 1.00% higher.

Sensitivity of Net Pension Liability to Changes in Discount Rate
($ in Thousands)

Net Pension Liability	1% Decrease (6.50%)	Current Discount Rate (7.50%)	1% Increase (8.50%)
June 30, 2017	$1,467,488	$713,174	$97,804

5. CONTRIBUTIONS

Employer and employee contribution rates are established and amended by VCERA's Board. Contribution rates are actuarially determined using the "Entry Age Actuarial Cost Method". According to this method, the "normal cost" is the level amount that would fund the projected benefit if it were paid annually from date of employment until retirement.

The "Entry Age Actuarial Cost Method" is modified so that the employer's total normal cost is expressed as a level percentage of payroll. The level percentage of payroll method is also used to amortize the unfunded actuarial liability. For the June 30, 2017 valuation, the period for amortizing the unfunded actuarial liability is fixed at 15 years in accordance with the Board's policy adopted May 18, 2015, and the period for amortizing the future actuarial gains and losses is over its own declining 15-year period.

VCERA's employers were required to contribute $190.8 million and $177.7 million in actuarially determined contributions for the fiscal years ending June 30, 2017 and 2016, respectively.

Member contributions range from 5.96% to 13.76% depending upon member tier and plan status. In addition to the actuarially determined contributions, certain participating employers contribute, pursuant to California Government Code Section 31581.1, a portion of the contributions normally required of General Tier 1 members. These employer paid member contributions do not become part of the accumulated contributions of the member, but vest in the Employer Advance Reserves. These contributions are included in the employers' total.

6. RESERVES

VCERA's reserves are composed of member contributions, employer contributions, and accumulated investment income. The reserves do not represent the present value of assets needed to satisfy retirements and other benefits as they come due. VCERA's major reserves are as follows:

NOTES TO THE BASIC FINANCIAL STATEMENTS CONTINUED

Member Reserve. Represents members' accumulated contributions. Additions include member contributions and interest credited; deductions include transfers to Retired Member Reserve and refunds.

Employer Advance Reserve. Represents the total employer contributions made on behalf of current active members for future retirement benefits. Additions include employer contributions and interest credited; deductions include transfers to Retired Member Reserve and death benefits.

Retired Member Reserve. Represents total accumulated transfers from Member Reserve and Employer Advance Reserve and interest credited, less benefit payments made to retirees.

Vested Fixed Supplemental Reserve. Represents the funding set aside to pay the vested supplemental retirement benefit of $108.44 monthly to all eligible retirees. Additions include investment income designated by the Board and interest credited; deductions include benefit payments made to eligible retirees.

Non-Vested Supplemental Reserve. Represents the funding set aside to pay the non-vested supplemental retirement benefit of $27.50 monthly to all eligible retirees. Additions include investment income designated by the Board; deductions include benefit payments made to eligible retirees.

Death Benefit Reserve. Represents funds designated to pay death benefits pursuant to California Govern-ment Code Section 31789.5. Additions include funding from investment income and interest credited; deductions include benefits paid.

Contingency Reserve. Represents earnings of the fund in excess of the total interest credited to reserves in an amount up to 1.0% of the total market value of assets to provide for future deficiencies in interest earnings, losses on investments, and other contingencies pursuant to Government Code Section 31592.2.

Undistributed Earnings Reserve. Represents funds from current and prior year earnings not previously credited to other Valuation, Non-Valuation, and Supplemental Benefit Reserves in excess of the statutory 1.0% Contingency Reserve.

Market Stabilization Reserve. Represents the difference between the current market value of assets and the actuarial value of assets used to establish the above reserves.

Reserve balances as of June 30, 2017 and 2016, are as follows:

($ in Thousands) Reserve Account	June 30, 2017	June 30, 2016
Member	$725,090	$683,571
Employer Advance	1,514,758	1,330,139
Retired Member	2,561,943	2,417,426
Vested Fixed Supplemental	142,036	139,804
Non-Vested Supplemental	4,583	6,725
Death Benefits	15,243	14,774
Undistributed Earnings	-	-
Contingency	-	-
Market Stabilization	595	(205,602)
Total Reserves	$4,964,248	$4,386,837

NOTES TO THE BASIC FINANCIAL STATEMENTS CONTINUED

7. ADMINISTRATIVE EXPENSES

As permitted by Section 31580.2(a) of the California Government Code, the Board adopts an annual budget, financed from investment income, covering the entire expenses of Plan administration. The California Government Code provides that administrative expenses incurred in any year are not to exceed the greater of 21/100th of one percent of the accrued actuarial liability for VCERA or two million dollars ($2,000,000), as adjusted annually by the amount of the annual cost-of-living adjustment. California Government Code Section 31580.2(b) provides that expenditures for software, hardware, and computer technology are not considered a cost of administration. Administrative expenses incurred in fiscal year ended June 30, 2017 and 2016, were within the limits established by the California Government Code.

($ in Thousands)	June 30, 2017	June 30, 2016
Accrued Actuarial Liability (AAL)[1]	$5,178,157	$4,731,016
Statutory Limitation for Administrative Expense (AAL x 0.21%)	10,874	9,935
Administrative Expenses Subject to Statutory Limit	5,524	4,474
Excess of Limitation over Actual Administrative Expenses	$5,350	$5,461
Actual Administrative Expenses as a percentage of AAL	0.11%	0.09%

[1]The AAL, as determined by VCERA's actuary each year, is used to calculate the subsequent fiscal year's administrative budget authorization. The AAL as of June 30, 2015 and 2014, was approved by the Board in January 2016 and 2015, respectively, and used to establish the administrative expenditure budgets for the fiscal years ended June 30, 2017 and 2016, as shown in the table.

8. LEASE AGREEMENT

Effective April 1, 2011, VCERA entered into a seven-year extension of a commercial lease for office space with the option to renew for two additional five-year periods. In May 2017, VCERA extended the existing lease term for one additional year to March 31, 2019. Payments over the remaining lease term total $364,700. Annual amounts due under the agreement are as follows:

Fiscal Year Ending	Amount
2018	$208,400
2019	156,300

9. SUBSEQUENT EVENTS

Management has evaluated subsequent events through December 20, 2017, which is the date the financial statements were issued and determined that there are no reportable events.

REQUIRED SUPPLEMENTARY INFORMATION

SCHEDULE OF CHANGES IN NET PENSION LIABILITY OF PARTICIPATING EMPLOYERS

($ in Thousands)

		June 30, 2017	June 30, 2016	June 30, 2015	June 30, 2014	June 30, 2013
Total Pension Liability						
Service cost		$132,490	$129,269	$124,408	$122,896	$118,839
Interest		405,195	388,936	366,917	355,299	340,000
Changes of benefit terms		-	-	-	-	-
Differences between expected and actual experience		(51,058)	(39,598)	(101,178)	(48,740)	(94,020)
Changes of assumptions		-	-	234,843	-	-
Benefit Payments, including refunds of member contributions		(260,745)	(246,403)	(233,695)	(223,532)	(209,958)
Net Change in Total Pension Liability		225,882	232,204	391,295	205,923	154,861
Total Pension Liability - Beginning		5,451,539	5,219,335	4,828,040	4,622,117	4,467,256
Total Pension Liability - Ending	A	$5,677,421	$5,451,539	$5,219,335	$4,828,040	$4,622,117
Plan Fiduciary Net Position						
Contributions- employer		$190,712	$177,830	$175,099	$169,703	$150,688
Contributions- members		72,442	69,350	63,679	46,674	44,464
Net investment income		580,526	25,739	88,680	658,581	436,638
Benefit Payments, including refunds of member contributions		(260,745)	(246,403)	(233,695)	(223,532)	(209,958)
Administrative expense		(5,524)	(4,474)	(3,854)	(4,045)	(3,944)
Other		-	-	-	-	-
Net Change in Plan Fiduciary Net Position		577,411	22,042	89,909	647,381	417,888
Plan Fiduciary Net Position - Beginning		4,386,837	4,364,795	4,274,886	3,627,505	3,209,617
Plan Fiduciary Net Position - Ending	B	$4,964,247	$4,386,837	$4,364,795	$4,274,886	$3,627,505
Net Pension Liability - Ending	A-B=C	$713,174	$1,064,702	$854,540	$553,154	$994,612
Plan fiduciary net position as a percentage of the total pension liability	B/A	87.44%	80.47%	83.63%	88.54%	78.48%
Covered-employee payroll	D	$716,033	$688,233	$665,086	$642,779	$632,146
Net position liability as a percentage of covered employee payroll	C/D	99.60%	154.70%	128.49%	86.06%	157.34%

Note - Data as of June 30, 2007 through June 30, 2012 are not available in comparable format.

REQUIRED SUPPLEMENTARY INFORMATION CONTINUED

SCHEDULE OF EMPLOYER CONTRIBUTIONS

($ in Thousands)

Year Ended June 30	Actuarially Determined Contributions[1]	Actual Contributions[2]	Contribution Deficiency/ (Excess)	Covered Employee Payroll[3]	Contributions as a % of Covered-Employee Payroll
2017	$190,712	$190,712	$-	$716,033	26.63%
2016	178,748	178,748	-	688,233	25.97%
2015	173,269	173,269	-	665,086	26.05%
2014	161,247	161,247	-	642,779	25.09%
2013	142,370	142,370	-	632,146	22.52%
2012	132,386	132,386	-	637,037	20.78%
2011	111,585	111,585	-	654,829	17.04%
2010	97,324	97,324	-	634,777	15.33%
2009	105,278	105,278	-	599,173	17.57%
2008	104,429	104,429	-	551,968	18.92%

[1]All "Actuarially Determined Contributions" through June 30, 2014 were determined as the "Annual Required Contribution" as required by GASB Statement No. 25 and 27.

[2]Actuarially Determined Contributions exclude employer paid member contributions.

[3]Covered employee payroll represents only compensation earnable and pensionable compensation that go into the determination of a retirement benefit.

SCHEDULE OF INVESTMENT RETURNS

Year Ended June 30	Annual Money Weighted Rate of Return, Net of Investment Expense
2017	12.27%
2016	-2.00%
2015	1.70%
2014	18.80%
2013	13.20%

Note: Money-Weighted Rate of Return is calculated as the internal rate of return on pension plan investments, net of investment expenses. Schedule will ultimately show information for 10 years. Additional years will be displayed as they become available prospectively.

REQUIRED SUPPLEMENTARY INFORMATION CONTINUED

LATEST ACTUARIAL VALUATION OF PLAN ASSETS AND LIABILITIES

Methods and assumptions used to establish "actuarially determined contribution" rates:	
Valuation Date	June 30, 2017
Actuarial Cost Method	Entry Age Normal Actuarial Cost Method
Amortization Method	Level Percentage of Payroll
Remaining Amortization Period	15 years closed period for Unfunded Actuarial Accrued Liability (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 June 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 be 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 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. The Actuarial Value of Assets is reduced by the value of the Non-Vested Supplemental Medical Benefit Reserve and the statutory Contingency Reserve.

REQUIRED SUPPLEMENTARY INFORMATION CONTINUED

LATEST ACTUARIAL VALUATION OF PLAN ASSETS AND LIABILITIES (Continued)

Actuarial Assumptions:	June 30, 2017	June 30, 2016
Investment rate of return[1]	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	0.50%	0.50%
Projected salary increases[2]	General: 4.00% to 9.50% and Safety: 4.00% to 11.50%	General: 4.00% to 9.50% and Safety: 4.00% to 11.50%
Cost-of-living adjustments	For General Tier 1 and Safety 3.00% (actual increases are contingent upon Consumer Price Index (CPI) increases with a 3.00% maximum). For General Tier 2, Service Employees International Union members receive a fixed 2.00% cost-of-living adjustment not subject to CPI increases that applies to future service after March 2003.	For General Tier 1 and Safety 3.00% (actual increases are contingent upon Consumer Price Index (CPI) increases with a 3.00% maximum). For General Tier 2, Service Employees International Union members receive a fixed 2.00% 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, 2017, funding actuarial valuation.	Same as those used in the June 30, 2016, funding actuarial valuation.

[1] Includes inflation.

[2] Includes inflation at 3.00% plus real across-the-board salary incareases of 0.50% plus merit and longevity increases.

OTHER SUPPLEMENTARY INFORMATION

SCHEDULE OF ADMINISTRATIVE EXPENSES

For the Year Ended June 30, 2017 (with comparative amounts for June 30, 2016)
($ in Thousands)

	June 30, 2017	June 30, 2016
Personnel Services:		
Salaries	$2,484	$1,740
Employee Benefits	1,080	796
Total Personnel Services	3,564	2,536
Professional Services:		
Actuarial Fees	90	123
Computer Software and System Support (Net of Capitalized Costs)	639	491
Legal Services	333	489
Other Professional Services	309	306
Total Professional Services	1,371	1,409
Communication:		
Postage	70	56
Telecommunication	37	37
Total Communication	107	93
Other Services and Charges:		
Office Lease	196	183
Educational	99	64
Equipment	15	4
County Services	102	31
Insurance	13	13
Other Charges	57	141
Total Other Services and Charges	482	436
Total Administrative Expenses	$5,524	$4,474

OTHER SUPPLEMENTARY INFORMATION CONTINUED

SCHEDULE OF INVESTMENT EXPENSES

For the Year Ended June 30, 2017 (with comparative amounts for June 30, 2016)
($ in Thousands)

	June 30, 2017	June 30, 2016
Investment Management Fees		
Cash and Short-Term Managers	$172	$158
Equity Managers		
U.S. Equity	580	518
Non-U.S Equity	2,313	2,059
Global Equity	473	1,246
Fixed Income Managers	1,661	1,942
Private Equity Managers	3,539	2,802
Liquid Alternative Managers	1,885	1,719
Real Estate Managers	3,496	3,121
Other Investment Expenses	710	744
Total Investment Expenses	$14,829	$14,309

SCHEDULE OF PAYMENTS TO CONSULTANTS

For the Year Ended June 30, 2017 (with comparative amounts for June 30, 2016)
($ in Thousands)

	June 30, 2017	June 30, 2016
Legal Services	$333	$489
Actuarial Consulting Fees	90	123
Investment Management		
Consulting Fees	297	288
Network and Other Information		
Technology Services (includes capitalized costs)	1,421	2,803
Total Payments to Consultants	$2,141	$3,703

OTHER INFORMATION

SCHEDULE OF EMPLOYER PENSION AMOUNTS ALLOCATED BY COST SHARING PLAN

($ in Thousands)

		Deferred Outflow of Resources					Deferred Inflow of Resources					Pension Expense		
Employer/ Nonemployer (special funding situation)	Net Pension Liability	Differences Between Expected and Actual Economic Experience	Differences Between Projected and Actual Investment Earnings	Changes of Assumptions	Changes in Employer Proportion and Differences Between Contributions and Proportionate Share of Pension Expense	Total Deferred Outflow of Resources	Differences Between Expected and Actual Economic Experience	Differences Between Actual and Projected Investment Earnings	Changes of Assumptions	Changes in Employer Proportion and Differences Between Contributions and Proportionate Share of Pension Expense	Total Deferred Inflow of Resources	Proportionate Share of Plan Pension Expense	Net Amortization of Deferred Amounts from Changes in Proportion and Proportionate Share of Pension Expense	Total Employer Pension Expense
County of Ventura	$690,194	$-	$1,042	$96,155	$1,815	$99,012	$117,865	$-	$-	$178	$118,043	$120,921	$401	$121,322
Ventura County Courts	17,304	-	26	2,411	128	2,565	2,955	-	-	1,607	4,562	3,031	(410)	2,621
Ventura County Air Pollution Control District	2,818	-	4	393	135	532	481	-	-	75	556	494	31	525
Ventura Regional Sanitation District	2,858	-	4	398	217	619	488	-	-	435	923	501	(22)	479
Total	$713,174	$-	$1,076	$99,357	$2,295	$102,728	$121,789	$-	$-	$2,295	$124,084	$124,947	$-	$124,947

SCHEDULE OF COST SHARING EMPLOYER ALLOCATIONS OF NET PENSION LIABILITY

($ in Thousands)

	June 30, 2017		June 30, 2016	
Participating Employer	Allocation of Net Pension Liability (NPL)	Employer Allocation Percentage	Allocation of Net Pension Liability (NPL)	Employer Allocation Percentage
County of Ventura	$690,194	96.623%	$1,028,750	96.623%
Ventura County Courts	17,304	2.482%	26,427	2.482%
Ventura County Air Pollution Control District	2,818	0.417%	4,435	0.417%
Ventura Regional Sanitation District	2,858	0.478%	5,090	0.478%
Total	$713,174	100.000%	$1,064,702	100.000%

Note - Employer allocation percentage is weighted average allocation of General and Safety NPL as each NPL is calculated separtely for each participating employer, then combined.

Giant Coreopsis

Anacapa's once dense vegetation was dominated by the giant coreopsis (Leptosyne gigantea) which is an erect, shrubby perennial with a stout, succulent trunk growing to some eight feet tall. Stands of coreopsis provided shelter and nesting habitat for many sea and land birds. Devastated by sheep grazing in the late 1800s, the coreopsis is still found in small patches on the island.

Photos by Kerry Woods (top) and Chetan Kolluri (inset)

NEPC, LLC

Allan Martin
Partner

September 13, 2017

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

Dear Members of the Board:

The overall objective of the Ventura County Employees' Retirement Association Plan (the "Plan") is to ensure continued access to retirement, disability, and survivor benefits for current and future VCERA participants. To ensure a solid foundation for the future of the Plan, VCERA has carefully structured and implemented an investment program designed to produce superior long-term investment returns, while prudently managing the risk of the portfolio. Investment policy and asset allocation are reviewed and revised by the Board of Retirement to reflect the Plan's actuarial assumptions, accrued liabilities, and investment outlook. The following is a report on the performance of the Plan for the fiscal year ending June 30, 2017.

Although investment manager performance is a key component of the future success of the Plan, the overall asset allocation policy will be the primary determinant of such success. Modern Portfolio Theory maintains that long-term investors, who assume prudent levels of risk, will be rewarded with incremental returns above lower returning, risk-free assets (e.g. T-Bills). The Plan is required to pay accumulated/earned retirement benefits today while preparing for uncertain future investment returns and benefits. This balancing of short-term versus long-term needs is a key consideration in the overall portfolio construction process. To facilitate the balance of short-term versus long-term objectives, the Board of Retirement has adopted a diversified asset allocation structure that includes traditional asset classes such as U.S. and non-U.S. Equity and Fixed Income, as well as alternative asset classes such as Private Equity, Real Estate, and Liquid Alternative Strategies.

Market Review for the Year Ended June 30, 2017

Capital markets remained largely driven by an accommodative, yet tightening, U.S. Central Bank and stimulative actions by international Central Banks, resulting in the continuation an of an eight year valuation expansion of growth assets (equities) in the U.S, and even stronger gains for international equities. Anti-establishment political movements globally, the U.S. election outcome, divergent Central Bank policies, historically low and broadly negative real interest rates and concerns over growth in China contributed to higher levels of volatility in the first half of the year. Post the U.S. election, volatility around global risk factors was largely shrugged off by markets, resulting in U.S. equities posting their eighth consecutive positive year with a +17.9% return as measured by the S&P 500 Index. U.S. high quality fixed income investments produced a negative return (-0.3%), measured by the Bloomberg Barclays U.S. Aggregate Bond Index, driven lower by 10 year U.S. Treasury yields spiking in the wake of U.S. elections. International developed-markets equities outperformed domestic equities by 2.4% as European equity returns overcame political uncertainty and reflected signs of relative economic strength. Emerging markets equities outperformed U.S. and developed-international equities by 5.8% and 3.4% respectively. One-year core bond returns, influenced by modestly rising short-term interest rates, ranged from -0.3% in the US to negative 4.1% internationally.

900 Veterans Blvd. | Ste. 340 | Redwood City, CA 94063-1741 | TEL: 650.364.7000 | www.nepc.com
BOSTON | ATLANTA | CHARLOTTE | CHICAGO | DETROIT | LAS VEGAS | SAN FRANCISCO

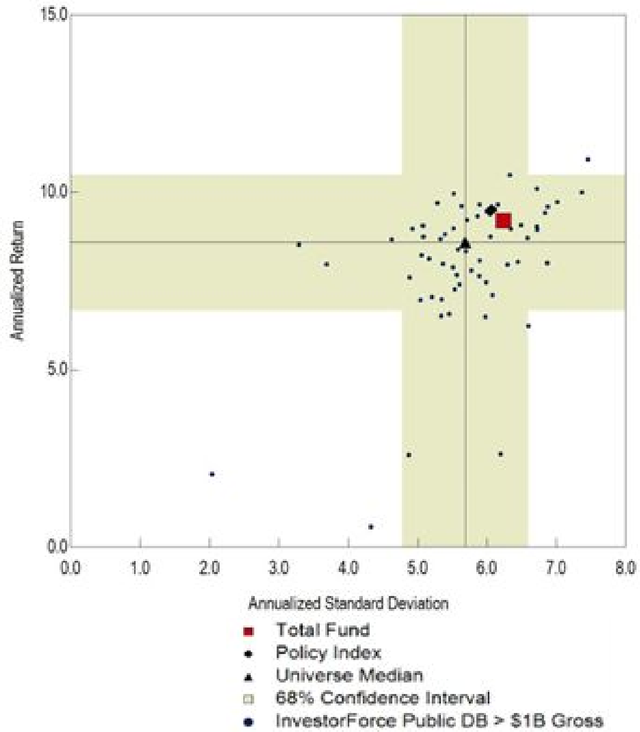
NEPC, LLC

The VCERA Investment Portfolio

The Plan returned 12.6%, net of fees (12.9% gross of fees), for the fiscal year ending June 30, 2017. By comparison, the median fund in the universe returned 12.7% for the period[1]. Contributing positively to performance during the fiscal year was the Plan's overweight to Equities versus its peers, which also allowed the Plan to outperform the actuarial assumed rate of 7.5% by 5.1% net of fees.

Over five years, the Plan ranks in the top half of the universe in risk-adjusted return with a Sharpe Ratio of 1.4. This means that the Fund has earned more return per unit of volatility taken than most of its peers.

IF Public Funds Greater than $1 Billion Universe[1] Risk-Return Comparison (Net of Fees)
5 Years Ended June 30, 2017



NEPC, LLC serves as VCERA's independent investment consultant and provides VCERA with asset allocation guidance, quarterly economic and investment market updates and performance reviews, and investment manager monitoring and selection advice. In preparing our performance analysis for the Plan, we rely on the accuracy of financial data provided by the Plan's custodian bank and investment managers. Investment performance analysis and comparisons produced by NEPC have been calculated using standard performance evaluation methodologies and are consistent with industry standards. The Plan's goals are measured against stated policy objectives, appropriate benchmarks and comparative universes over multiple time periods. This review process allows the Plan to evaluate whether established goals are being achieved on an absolute, relative, and risk-adjusted basis.

Sincerely,

Allan C Martin

Allan Martin

[1] As of June 30, 2017, the Investor Force Public Funds Greater than $1 Billion Universe was comprised of 65 total funds with approximately $500 billion in assets. Universe rankings are based on net of fee performance.

OUTLINE OF INVESTMENT POLICIES

GENERAL

The Board of Retirement (Board) established an investment policy in accordance with the provisions of the County Employees' Retirement Law of 1937 (California Government Code Sections 31450 et. seq.). Ventura County Employees' Retirement Association (VCERA or Plan) is considered a separate entity and is administered by a Board consisting of nine members, plus three alternates. VCERA's Board and its officers and employees shall discharge their duties as provided for in California Government Code Section 31595:

- Solely in the interest of, and for the exclusive purpose of, providing benefits to participants and their beneficiaries, minimizing employer contributions thereto, and defraying reasonable expenses of administering the Plan.
- With the care, skill, prudence, and diligence under the circumstances then prevailing that a prudent person acting in a like capacity and familiar with these matters would use in the conduct of an enterprise of a like character with like aims.
- Shall diversify the investments of the Plan so as to minimize the risk of loss and to maximize the rate of return, unless under the circumstances it is clearly not prudent to do so.

VCERA's assets are managed on a total return basis. While VCERA recognizes the importance of the preservation of capital, it also adheres to the principle that varying degrees of investment risk are generally rewarded with compensating returns.

External professional investment firms manage VCERA's assets. VCERA's staff, along with the investment consultants, monitor managers' activity and assists the Board with the implementation of investment policies and strategies.

ASSET ALLOCATION POLICY

VCERA has a long-term investment horizon, and utilizes an asset allocation, which encompasses a strategic long-term perspective of capital markets. It is recognized that a strategic long-run asset allocation plan implemented in a consistent and disciplined manner will be the major determinant of VCERA's investment performance.

In December 2015, the Board adopted a new allocation and implementation plan that was predicated on a number of factors including:

a. The actuarially projected liabilities, benefit payments, and the cost to both covered employees and employers.

b. Historical and long-term capital market risk and return behavior.

c. The perception of future economic conditions, including inflation and interest rate levels.

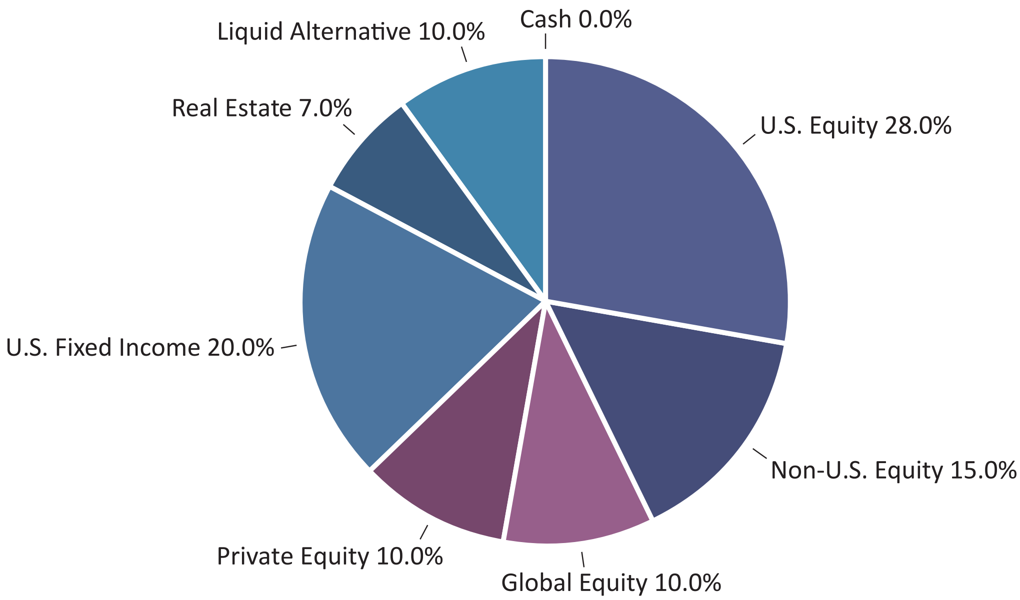
d. The relationship between current and projected assets of the Plan and its actuarial requirements.

A systematic rebalancing procedure is used to maintain asset allocations within their appropriate ranges.

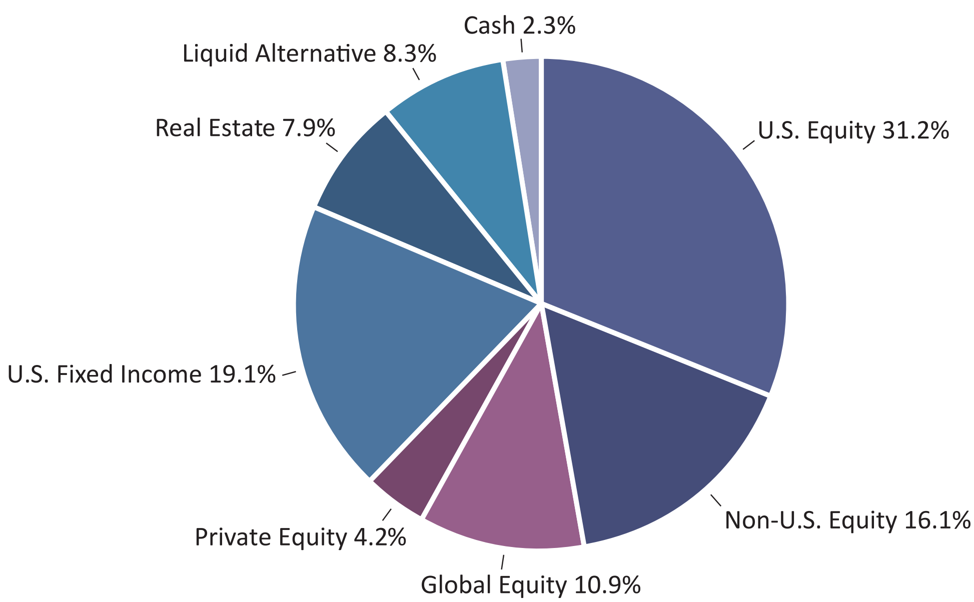
TARGET VERSUS ACTUAL ASSET ALLOCATION

As of June 30, 2017

TARGET[1]



ACTUAL[2]



[1]Represents Allocation targets in place as of June 30, 2017

[2]The actual Allocation is based upon the Investment Summary on page 52

INVESTMENT SUMMARY

As of June 30, 2017 ($ in Thousands)

Type of Investment	Fair Value	Percent of Total Fair Value
Cash and Cash Equivalents	$113,860	2.3%
Fixed Income	945,944	19.1%
Subtotal Fixed Income and Cash	1,059,804	21.4%
U.S. Equity	1,545,266	31.2%
Non-U.S. Equity	798,385	16.1%
Global Equity	537,900	10.9%
Subtotal Equities	2,881,551	58.2%
Private Equity	208,663	4.2%
Real Estate	391,122	7.9%
Liquid Alternatives	413,494	8.3%
Total Investments	$4,954,634	100.0%

SCHEDULE OF INVESTMENT RESULTS BASED ON FAIR VALUE

As of June 30, 2017

	Annualized		
	Current Year	Three-Year	Five Year
U.S. Equity	18.6%	9.1%	14.7%
Russell 3000	18.5%	9.0%	14.5%
Fixed Income	2.2%	2.7%	3.1%
Current Benchmark: Bloomberg Barclays U.S. Aggregate Index	-0.3%	2.5%	2.2%
Non-U.S. Equity	20.2%	1.8%	7.7%
Current Benchmark: MSCI ACWI ex U.S.A.	20.5%	0.8%	7.2%
Global Equity	19.5%	3.8%	9.7%
Current Benchmark: MSCI ACWI	18.8%	4.8%	10.5%
Private Equity	15.7%	12.7%	13.6%
Current Benchmark: Dow Jones U.S. Total Stock Market Index + 3%	22.0%	12.3%	17.9%
Real Estate	5.5%	9.3%	9.5%
Current Benchmark: NCREIF-ODCE	6.9%	10.3%	10.8%
Liquid Alternatives	5.1%	-1.9%	-
Benchmark: CPI + 4% (Unadjusted)	5.7%	4.9%	-
Total Fund	12.6%	4.9%	9.2%
VCERA Policy[1]	13.1%	6.0%	9.5%

[1]Current Benchmarks: 28% Russell 3000 Index, 20% Barclays Aggregate, 15% MSCI ACWI ex U.S., 10% MSCI ACWI, 10% Dow Jones U.S. Total Stock Market Index + 3%, 10% CPI + 4% Index, and 7% NCREIF ODCE Real Estate Index.

Asset Class Returns were prepared using the time-weighted rate of return net of fees. Total Fund performance is calculated based on the weighted average returns.

LARGEST EQUITY HOLDINGS (BY FAIR VALUE)

As of June 30, 2017 ($ in Thousands)

	Units	Fund Name	Fair Value
1	7,466,766	Blackrock U.S.Russell 1000 Index Fund	$1,348,310
2	29,968,371	Blackrock MSCI ACWI Equity Index Fund	537,900
3	29,639,431	Blackrock ACWI IMI ex U.S. IMI Index Fund	391,107
4	3,065,231	Sprucegrove Investment Management Group Trust	205,846
5	3,611,703	Walter Scott & Partners Limited Group Trust	112,425
6	59,585	Hexavest EAFE Equity Fund	89,006
7	1,316,651	Blackrock U.S. Russell 2500 Index Fund	55,596
8	43,380,604	Adams Street 2013 Global Fund	49,899
9	20,815,754	Harbourvest Dover Street VIII	43,884
10	19,816,071	Adams Street 2010 U.S. Fund	35,175

Note - All VCERA Equity Investments at June 30, 2017 were held in index funds and commingled investment vehicles.

LARGEST FIXED INCOME HOLDINGS (BY FAIR VALUE)

As of June 30, 2017 ($ in Thousands)

	Par	Bonds	Fair Value
1	17,080,000	U.S. Treasury N/B 11/43 3.75	$20,078
2	8,920,000	FED Home Loan Discount NT 10/17 0.01	8,892
3	6,710,000	U.S. Treasury Bill 12/17	6,677
4	6,110,000	U.S. Treasury N/B 05/45 2.875	6,296
5	5,760,000	U.S. Treasury N/B 5/25 2.125	5,724
6	4,178,021	TSY INFL IX N/B 04/21 0.125	4,172
7	3,920,000	U.S. Treasury N/B 05/47 3	4,046
8	3,460,000	U.S. Treasury N/B 02/47 3	3,569
9	3,100,000	FNMA TBA 30 YR 4 Single Family Mortgage	3,253
10	3,000,000	GNMA II TBA 30 YR 3.5 Jumbos	3,103

Note - A complete list of Portfolio Holdings is available upon request.

SCHEDULE OF INVESTMENT FEES

As of June 30, 2017 (with comparative amounts for June 30, 2016) ($ in Thousands)

	June 30, 2017	June 30, 2016
Cash and Short-Term Managers	$172	$158
Equity Managers		
U.S. Equity	580	518
Non-U.S. Equity	2,313	2,059
Global Equity	473	1,246
Fixed Income Managers	1,661	1,942
Private Equity Managers	3,539	2,802
Liquid Alternative Managers	1,885	1,719
Real Estate Managers	3,496	3,121
Other Investment Fees	710	744
Total Investment Management Fees	$14,829	$14,309

SCHEDULE OF COMMISSIONS:

VCERA's equity exposure is provided through one (1) separate account, and through seven (7) commingled trust fund pooled vehicles. Equity exposure in the separate account is provided through the use of equity index futures contracts for which commissions are not charged. VCERA buys or sells units in commingled trust fund pooled vehicles for which commissions are also not paid. Therefore, a Schedule of Commissions is not presented.

INVESTMENT MANAGERS

Equities - U.S.
BlackRock, Inc.
Western Asset Management Company

Equities - Non-U.S.
Sprucegrove Investment Management Limited
BlackRock, Inc.
Hexavest, Inc.
Walter Scott & Partners, Limited

Global Equity
Grantham, Mayo, Van Otterloo & Co., LLC (“GMO”)
BlackRock, Inc.

Private Equity
Adams Street Partners, LLC
Drive Capital, LLC
HarbourVest Partners, LLC
Pantheon Ventures (U.S.), LP

Fixed Income
BlackRock, Inc.
Loomis, Sayles & Company, LP
Reams Asset Management Company
Western Asset Management Company

Real Estate
Prudential Global Investment Management
UBS Realty Investors
RREEF America, LLC

Liquid Alternatives
Bridgewater Associates, LP
Tortoise Capital Advisors, LLC

Investment Consultant
NEPC, LLC
Abbott Capital Management, LLC

Cash Overlay
Parametric Portfolio Associates, LLC

Custodian
State Street Bank and Trust

Anacapa Wildlife

Anacapa is home to 69 species of birds including the increasingly rare Scripps's murrelet seabird. The largest breeding colony of the California brown pelican in the United States is located on the Island where it dramatically recovered from near extinction in the 1970s. The islets also host the largest breeding colony of western gulls in the world. The only native land mammal on the island is a unique subspecies of deer mouse which only exists on Anacapa.

Photos by (clockwise from top left) Joe Decruyenaer, Holly Gellerman, budgaora and Bharathwaj Shubhika

Segal Consulting

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

December 11, 2017

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

Re: Ventura County Employees' Retirement Association
June 30, 2017 Actuarial Valuation for Funding Purposes

Dear Members of the Board:

Segal Consulting (Segal) prepared the June 30, 2017 annual actuarial valuation of the Ventura County Employees' Retirement Association (VCERA). We certify that the Retirement Association valuation was performed in accordance with generally accepted actuarial principles and practices and VCERA's funding policy that was last reviewed with the Board in 2012. In particular, it is our understanding that the assumptions and methods used for funding purposes meet the parameters set by Actuarial Standards of Practice (ASOPs).

As part of the June 30, 2017 actuarial valuation, Segal received participant data from the Association's staff. This information has not been audited by us, but it has been reviewed and found to be reasonable, both internally and with prior year's information. We did not audit the Association's financial statements. For actuarial valuation purposes, Plan assets are valued at Actuarial Value. Under this method, the assets used to determine employer contribution rates take into account market value by recognizing the differences between the total return at market value and the expected investment return over ten semi-annual accounting periods.

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

In 2004, the Board elected to amortize the Association's Unfunded Actuarial Accrued Liability (UAAL) as of June 30, 2004 over a declining (or closed) 15-year period. Any change in the UAAL after June 30, 2004 is amortized over separate 15-year declining amortization periods.

Board of Retirement
Ventura County Employees' Retirement Association
December 11, 2017
Page 2

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. In addition, any change in the UAAL that arises due to retirement incentives is amortized over a separate declining period of up to 5 years. The progress being made towards meeting the funding objective through June 30, 2017 is illustrated in the Schedule of Funding Progress.

Certain information found in the Notes to Basic Financial Statements and the Required Supplementary Information (RSI) included in the Financial Section was prepared by the Association based on the results of the Governmental Accounting Standards (GAS) 67 actuarial valuation as of June 30, 2017 prepared by Segal. For the Financial Section of the Comprehensive Annual Financial Report (CAFR), Segal provided the Schedule of Changes in Net Pension Liability and Schedule of Employer Contributions as shown in the RSI. A listing of the other schedules prepared by the Association based on the results of the actuarial valuation as of June 30, 2017 for funding purposes is listed below.

1. Summary of Actuarial Assumptions and Methods as of June 30, 2017
2. Active Member Valuation Data
3. Schedule of Retirees and Beneficiaries Added to and Removed from the Rolls
4. Actuarial Analysis of Financial Experience
5. Actuarial Solvency Test
6. Schedule of Funding Progress
7. Probability of Occurrence

The valuation assumptions included in the Actuarial Section were adopted by the Retirement Board based on our recommendations following the June 30, 2014 Actuarial Experience Study and the June 30, 2015 Review of Economic Actuarial Assumptions. It is our opinion that the assumptions used in the June 30, 2017 valuation produce results which, in the aggregate, anticipate the expected future experience of the Plan. Actuarial valuations are performed on an annual basis. An experience analysis is performed every three years and the next experience analysis is due to be performed during the first half of 2018.

In the June 30, 2017 valuation, the ratio of the valuation value of assets to actuarial accrued liabilities increased from 84.9% to 86.9% and the average employer contribution rate decreased from 27.52% of payroll to 27.09% of payroll.

The valuation value of assets included $0.6 million in deferred investment gains, which represented less than 0.1% of the market value of assets. If these deferred investment gains were recognized immediately in the valuation value of assets, the funded percentage would have

Board of Retirement
Ventura County Employees' Retirement Association
December 11, 2017
Page 3

increased slightly from 86.9% to 87.0% and the aggregate employer contribution rate, expressed as a percent of payroll, would have decreased slightly from 27.09% to about 27.08%.

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.

Sincerely,

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

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

AW/bbf

SUMMARY OF ACTUARIAL ASSUMPTIONS AND METHODS

As of June 30, 2017

Actuarial Assumptions And Methods

Recommended by the Actuary and adopted by the Board of Retirement.

Actuarial Cost Method

Entry age normal actuarial cost method

Actuarial Asset Valuation Method

Five-year smoothing of fair value.

Amortization of Gains and Losses

Experience gains and losses are amortized over 15 years. Effective June 30, 2012, any changes in Unfunded Actuarial Accrued Liability (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 be amortized over a 20-year closed period effective with that valuation.

Investment Rate of Return

7.50% per annum; 4.50% real rate of return and 3.00% inflation.

Projected Salary Increases

4.00% – 11.50% varying by service. Includes inflation at 3.00%, "across the board" increases of .50% plus merit and longevity increases.

Terminations of Employment Rates

0.6% to 14.0%

Cost-of-Living Adjustments

0% to 3% for General Tier 1 and Safety members tied to the change in Consumer Price Index. 2% cost-of-living adjustment for eligible General Tier 2 members.

Expectation of Life After Retirement

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

Expectation of Life After Disability

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. Safety Members: RP-2000 Combined Healthy Mortality Table projected with Scale BB to 2035 set forward two years.

Date of Adoption

May 18, 2015

ACTIVE MEMBER VALUATION DATA

Valuation Date	Plan Type	Member Count	Annual Salary	Average Annual Salary	Percent Increase/ (Decrease) In Average Salary	Average Age	Average Service
June 30, 2017	General	7,128	$568,947,112	$79,819	4.05%	45.7	10.5
	Safety	1,508	175,970,274	116,691	3.86%	41.3	14.6
	Total	8,636	$744,917,386	$86,257	3.96%	45.0	11.2
June 30, 2016	General	7,015	$538,141,938	$76,713	2.25%	45.7	10.5
	Safety	1,494	167,857,742	112,355	0.41%	41.5	14.8
	Total	8,509	$705,999,680	$82,971	1.45%	45.0	11.4
June 30, 2015	General	6,778	$508,504,947	$75,023	3.34%	46.1	10.6
	Safety	1,521	170,200,899	111,901	5.02%	41.5	14.3
	Total	8,299	$678,705,846	$81,782	3.57%	45.3	11.4
June 30, 2014	General	6,672	$484,378,825	$72,599	-0.01%	46.2	10.5
	Safety	1,538	163,878,217	106,553	-1.17%	41.4	14.0
	Total	8,210	$648,257,042	$78,959	-0.27%	45.3	11.2
June 30, 2013	General	6,563	$476,507,030	$72,605	-0.21%	46.4	10.6
	Safety	1,505	162,256,156	107,811	1.16%	41.2	13.9
	Total	8,068	$638,763,186	$79,172	0.16%	45.4	11.2
June 30, 2012	General	6,529	$475,042,839	$72,759	0.42%	46.4	10.5
	Safety	1,490	158,804,521	106,580	-1.51%	41.4	13.9
	Total	8,019	$633,847,360	$79,043	-0.24%	45.4	11.1
June 30, 2011	General	6,516	$472,121,275	$72,456	-3.01%	46.0	10.0
	Safety	1,524	164,916,105	108,213	-5.26%	40.7	13.6
	Total	8,040	$637,037,380	$79,234	-3.16%	45.1	10.9
June 30, 2010	General	6,505	$483,722,608	$74,362	3.34%	46.0	9.9
	Safety	1,498	171,105,613	114,223	7.00%	40.8	13.8
	Total	8,003	$654,828,221	$81,823	3.70%	45.0	10.6
June 30, 2009	General	6,501	$469,960,577	$72,291	4.81%	45.7	9.6
	Safety	1,544	164,817,315	106,747	3.90%	40.5	13.4
	Total	8,045	$634,777,892	$78,903	4.40%	44.7	10.3
June 30, 2008	General	6,378	$439,929,857	$68,976	4.63%	45.4	9.4
	Safety	1,550	159,243,261	102,738	5.83%	40.1	12.9
	Total	7,928	$599,173,118	$75,577	4.79%	44.4	10.1

SCHEDULE OF RETIREES AND BENEFICIARIES ADDED TO AND REMOVED FROM PAYROLL

	Retirees and Beneficiaries								
Fiscal Year Ended June 30	**At Beginning of Year**	**Added**	**Removed**	**At End of Year**	**Added to Payroll (in 000s)**	**Removed from Payroll (in 000s)**	**Total Retiree Payroll (in 000s)**	**Percent Increase in Payroll**	**Average Annual Allowance**
2017	6,539	372	(145)	6,766	$20,489	$(6,327)	$255,581	5.87%	$37,296
2016	6,338	396	(195)	6,539	$18,570	$(5,574)	$241,419	5.69%	$36,288
2015	6,121	398	(181)	6,338	$16,977	$(6,658)	$228,423	4.73%	$36,040
2014	5,888	394	(161)	6,121	$17,698	$(4,832)	$218,104	6.27%	$35,632
2013	5,658	378	(148)	5,888	$18,164	$(4,257)	$205,238	7.27%	$34,857
2012	5,481	327	(150)	5,658	$13,054	$(1,792)	$191,332	6.25%	$33,816
2011	5,267	358	(144)	5,481	$16,502	$(2,461)	$180,070	8.46%	$32,853
2010	5,041	350	(124)	5,267	$15,885	$(2,945)	$166,029	8.45%	$31,522
2009	4,914	252	(125)	5,041	$13,508	$(3,088)	$153,089	7.30%	$30,369
2008	4,770	300	(156)	4,914	$16,102	$(5,641)	$142,669	7.91%	$29,033

ACTUARIAL ANALYSIS OF FINANCIAL EXPERIENCE

($ in Thousands)

	June 30, 2017	June 30, 2016	June 30, 2015	June 30, 2014	June 30, 2013	June 30, 2012	June 30, 2011	June 30, 2010	June 30, 2009	June 30, 2008
Prior Valuation Unfunded (Excess Funded) Accrued Liability	$813,043	$875,827	$820,215	$953,354	$975,867	$774,964	$761,459	$573,553	$290,048	$376,025
Salary Increases Greater (Less) Than Expected	35,441	(19,801)	17,095	(56,617)	(49,186)	(93,786)	(131,928)	(19,314)	(9,590)	19,961
Asset Return (Greater) Less Than Expected	(24,707)	42,251	(81,080)	(13,827)	25,512	72,404	127,192	202,739	213,344	(90,891)
Other Experience Factors	(79,451)	(85,234)	(98,405)	(62,695)	1,161	(5,030)	18,241	4,481	(11,501)	(15,047)
Change In Actuarial Assumptions	-	-	218,002	-	-	227,315	-	-	91,252	-
Ending Valuation Unfunded (Excess Funded) Accrued Liability	$744,326	$813,043	$875,827	$820,215	$953,354	$975,867	$774,964	$761,459	$573,553	$290,048

ACTUARIAL SOLVENCY TEST

($ in Thousands)

Aggregate Actuarial Accrued Liabilities for:								
Valuation Date	Active Member Contrib.	Retired Member Contrib.	Active Members (Employer Financed Portion)	Total Liabilities	Actuarial Value of Assets	Active Member Contrib.	Retired Member Contrib.	Active Member Employer Financed
June 30, 2017	$725,090	$2,561,943	$2,416,363	$5,703,396	$4,959,070	100%	100%	69%
June 30, 2016	683,571	2,417,426	2,297,759	5,398,756	4,585,713	100%	100%	65%
June 30, 2015	647,597	2,269,555	2,261,005	5,178,157	4,302,330	100%	100%	61%
June 30, 2014	611,921	2,150,677	1,968,418	4,731,016	3,910,801	100%	100%	58%
June 30, 2013	584,474	2,051,529	1,939,060	4,575,063	3,621,709	100%	100%	51%
June 30, 2012	569,893	1,919,116	1,884,218	4,373,227	3,397,360	100%	100%	48%
June 30, 2011	549,207	1,810,062	1,636,083	3,995,352	3,220,388	100%	100%	53%
June 30, 2010	525,190	1,674,735	1,677,518	3,877,443	3,115,984	100%	100%	55%
June 30, 2009	499,205	1,545,347	1,619,149	3,663,701	3,090,148	100%	100%	65%
June 30, 2008	466,332	1,470,874	1,408,598	3,345,804	3,055,756	100%	100%	79%

SCHEDULE OF FUNDING PROGRESS

($ in Thousands)

Actuarial Valuation Date	Valuation Value of Assets (a)	Actuarial Accrued Liability (AAL) Entry Age (b)	Unfunded (Overfunded) AAL (UAAL) (b-a)	Funded Ratio (a/b)	Covered Payroll[1] (c)	UAAL as an Unfunded (Overfunded) Percentage of Covered Payroll ((b-a)/c)
June 30, 2017	$4,959,070	$5,703,396	$744,326	86.95%	$744,917	99.92%
June 30, 2016	4,585,713	5,398,756	813,043	84.94%	706,000	115.16%
June 30, 2015	4,302,230	5,178,157	875,927	83.08%	678,706	129.06%
June 30, 2014	3,910,801	4,731,016	820,215	82.66%	648,257	126.53%
June 30, 2013	3,621,709	4,575,063	953,354	79.16%	638,763	149.25%
June 30, 2012	3,397,360	4,373,227	975,867	77.69%	633,848	153.96%
June 30, 2011	3,220,338	3,995,352	775,014	80.60%	637,037	121.66%
June 30, 2010	3,115,984	3,877,443	761,459	80.36%	654,828	116.28%
June 30, 2009	3,090,148	3,663,701	573,553	84.34%	634,777	90.36%
June 30, 2008	3,055,756	3,345,804	290,048	91.33%	589,173	49.23%

[1]Based on the expected covered-employee payroll

SUMMARY OF PLAN BENEFITS

Summarized below are some of the more significant provisions of the County Employees' Retirement Law of 1937 that are presently applicable to the Ventura County Employees' Retirement Association (VCERA or Plan).

Membership

All permanent employees of the County of Ventura or contracting district 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 and is subject to the provisions of California's Public Employees' Pension Reform Act of 2013 (PEPRA), California Government Code 7522 et seq. and Assembly Bill (AB) 197. All other employees are classified as 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 general members employed after January 1, 2013, are designated as PEPRA Tiers and are subject to the provisions of California Government Code 7522 et seq. and AB 197.

Vesting

A member is fully vested upon accruing five years of retirement service credit under VCERA, or combined service under VCERA and a reciprocal retirement system.

Employer Contributions

The County of Ventura and contracting districts contribute to the 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.

Member Contributions

All members are required to make contributions to VCERA, regardless of the plan or tier in which they are included. The contribution rate applicable to the member is applied to total compensation earnable. The employer, as a result of provisions contained in individual collective bargaining agreements, may pay a portion of the member contribution.

Contributions are deducted from the member's bi-weekly payroll check and credited to the member's account. Interest is credited to the member's account semiannually on June 30 and December 31, based upon the total contributions on deposit. Upon separation from service, a member may elect a refund of all accumulated contributions and interest credited.

SUMMARY OF PLAN BENEFITS CONTINUED

Service Retirement Benefit

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

Safety members hired prior to January 1, 2013, are eligible to retire once they attain the age of 50 and have acquired 10 or more years of retirement service credit. A safety member with 20 years of service is eligible to retire regardless of age. Safety members first hired on or after January 1, 2013, are eligible to retire once they have attained the age of 50, and have acquired five 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, retirement plan, and tier. Safety member benefits are calculated pursuant to the provisions of California Government Code Section 31664 for those members hired prior to January 1, 2013. The monthly allowance is equal to 1/50th of final compensation times years of accrued retirement service credit times age factor from California Government Code Section 31664. For those Safety members first hired on or after January 1, 2013, benefits 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 said California Government Code Section 7522.25(d).

General member benefits are calculated pursuant to the provisions of California Government Code Sections 31676.11 and 31676.1 for members hired prior to January 1, 2013. 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 the age factor from either California Government Code 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 California Government Code Section 7522.20(a).

The maximum monthly retirement allowance is 100% of final compensation.

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, registered domestic partner, or minor child(ren). An eligible surviving spouse, or registered domestic partner, is one married to the member one year prior to the effective retirement date. There are four optional retirement allowances the member may choose. Each of the optional retirement allowances requires a reduction in the unmodified retirement allowance to allow the member the ability to provide certain benefits to a surviving spouse, registered domestic partner, minor child(ren), or named beneficiary having an insurable interest in the life of the member.

Cost-Of-Living

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

SUMMARY OF PLAN BENEFITS CONTINUED

Disability Retirement Benefits

VCERA provides disability retirement benefits for service-connected and non-service-connected injury or disease. To qualify for a disability retirement the member must be permanently incapacitated for the performance of duty. A member may be retired with a service-connected disability regardless of years of retirement service credit. The monthly allowance for a service-connected disability retirement is equal to 50% of final average compensation, but not less than the member would have received for a regular service retirement, if eligible. Upon the death of a member receiving a service-connected disability allowance, the surviving spouse married to the member at the time of retirement, or eligible minor children, shall receive a 100% continuance of the benefit unless the member elected an optional retirement allowance.

A member must have a minimum of five years of retirement service credit to qualify for a non- service-connected disability retirement. The general member benefit payable for a non-service-connected disability is equal to 90% of 1/6th of final compensation for each year of service not to exceed 1/3rd of final compensation. For safety members, the nonservice-connected disability retirement benefit payable is 90% of 1/5th of final compensation, not to exceed 1/3rd of final compensation.

Active Member Death Benefits

If the member has less than five years of retirement service credit, the death benefit consists of the member's accumulated retirement contributions, plus one month's salary for each completed year of service; maximum is six months salary (Basic Death Benefit).

If the member has completed five years of service and has an eligible surviving spouse or minor child(ren), the beneficiary may elect (a) a refund of the member's accumulated contributions, plus one month's salary for each year of completed service to a maximum of six month's salary, or (b) a monthly retirement allowance equal to 60% of the deceased member's earned benefit at the time of death, or (c) a combined benefit consisting of the Basic Death Benefit plus a monthly allowance reduced by the actuarial equivalent of the Basic Death Benefit. If there is no eligible surviving spouse or minor child(ren), the benefit paid to the named beneficiary will be that described in (a) above.

If a member dies in service as the result of a job-related injury or illness, an eligible surviving spouse or minor child(ren) may be eligible for a monthly benefit equal to 100% of the deceased member's earned benefit at the time of death.

Retired Member Death Benefits

If the member retired from service, or with a nonservice-connected disability, the benefit payable to an eligible surviving spouse would be an amount equal to 60% or 100% (dependent upon the option the member selected at retirement) of the member's unmodified retirement allowance. If the member retired with a service-connected disability retirement, the surviving spouse would receive a 100% continuance of the unmodified retirement allowance. If there is no eligible surviving spouse, benefits may be payable to a minor child(ren).

In addition, a lump sum death benefit of $5,000 is also payable to the named beneficiary or the estate of a deceased retired member.

PROBABILITY OF SEPARATION FROM ACTIVE SERVICE

(In Percentages)

Age Nearest	Rates of Mortality	Rates of Disability	Rates of Retirement Non PEPRA	Rates of Retirement PEPRA
General Members - Male				
25	0.0003	0.0002	0.0000	0.0000
30	0.0004	0.0004	0.0000	0.0000
35	0.0006	0.0008	0.0000	0.0000
40	0.0009	0.0013	0.0000	0.0000
45	0.0013	0.0021	0.0000	0.0000
50	0.0018	0.0031	0.0250	0.0000
55	0.0029	0.0041	0.0450	0.0400
60	0.0048	0.0054	0.1200	0.0900
65	0.0077	0.0069	0.3000	0.2000
70	N/A	0.0090	0.2000	0.5000
General Members - Female				
25	0.0002	0.0002	0.0000	0.0000
30	0.0003	0.0004	0.0000	0.0000
35	0.0005	0.0008	0.0000	0.0000
40	0.0007	0.0013	0.0000	0.0000
45	0.0011	0.0021	0.0000	0.0000
50	0.0017	0.0031	0.0250	0.0000
55	0.0025	0.0041	0.0450	0.0400
60	0.0039	0.0054	0.1200	0.0900
65	0.0072	0.0069	0.3000	0.2000
70	N/A	0.0090	0.2000	0.5000

General Members Years of Service	Withdrawal[1]
Less than 1	0.1400
5	0.0400
10	0.0325
15	0.0250
20 & Over	0.0200

[1]No withdrawal is assumed after a member is first assumed to retire

PROBABILITY OF SEPARATION FROM ACTIVE SERVICE CONTINUED

(In Percentages)

Age Nearest	Rates of Mortality	Rates of Disability	Rates of Retirement Non PEPRA	Rates of Retirement PEPRA
Safety Members - Male				
25	0.0003	0.0011	0.0000	0.0000
30	0.0003	0.0024	0.0000	0.0000
35	0.0005	0.0036	0.0000	0.0000
40	0.0008	0.0058	0.0100	0.0100
45	0.0011	0.0088	0.0100	0.0100
50	0.0016	0.0148	0.0250	0.0250
55	0.0024	0.0288	0.2200	0.2200
60	0.0041	0.0504	0.2200	0.2200
65	0.0064	0.0000	1.0000	1.0000
Safety Members - Female				
25	0.0002	0.0011	0.0000	0.0000
30	0.0002	0.0024	0.0000	0.0000
35	0.0003	0.0036	0.0000	0.0000
40	0.0005	0.0058	0.0100	0.0100
45	0.0008	0.0088	0.0100	0.0100
50	0.0012	0.0148	0.0250	0.0250
55	0.0018	0.0288	0.2200	0.2200
60	0.0027	0.0504	0.2200	0.2200
65	0.0044	0.0000	1.0000	1.0000

Safety Members Years of Service	Withdrawal[1]
Less than 1	0.1000
5	0.0275
10	0.0140
15	0.0085
20 & Over	0.0060

[1]No withdrawal is assumed after a member is first assumed to retire

Anacapa Arch

Known as the Arch Rock, this natural bridge is 40-foot high just off the tip of East Anacapa. Rising to an altitude of 930 feet is Vela Peak located on West Anacapa. Interestingly, fossils of pygmy mammoths from 13,000 years ago have been found on the other Channel Islands and it is reasonable to assume they were also present on Anacapa during that period.

Photo by bgv23 (top) and Aaron Zhong (inset)

STATISTICAL INFORMATION OVERVIEW

The objective of the Statistical Information Overview Section is to provide historical perspective, context, and detail to assist in utilizing the Basic Financial Statements, Notes to the Financial Statements, and Supplementary information to understand and assess the status of the Pension Plan administered by VCERA as of the fiscal year end. This section also includes multi-year trend of financial and operating information to facilitate comprehensive understanding of how VCERA's financial position and performance has changed over time. More specifically, the financial and operating information provides contextual data of VCERA's changes in fiduciary net position, benefits, refunds, contribution rates and retirement benefits. The financial and operating trend information is located on the following pages.

The Statistical Information provided here is divided into two main categories: Financial Trends Information and Operating Information.

Financial Trends Information is intended to assist readers in understanding how VCERA's financial position has changed over time. The ***Changes in Pension Plan Fiduciary Net Position*** presents additions by source, deductions by type, and the total change in fiduciary net position for each year. The ***Schedule of Pension Benefit Expenses by Type*** presents benefit and member refunds and death benefits deductions by type of benefit and by member type.

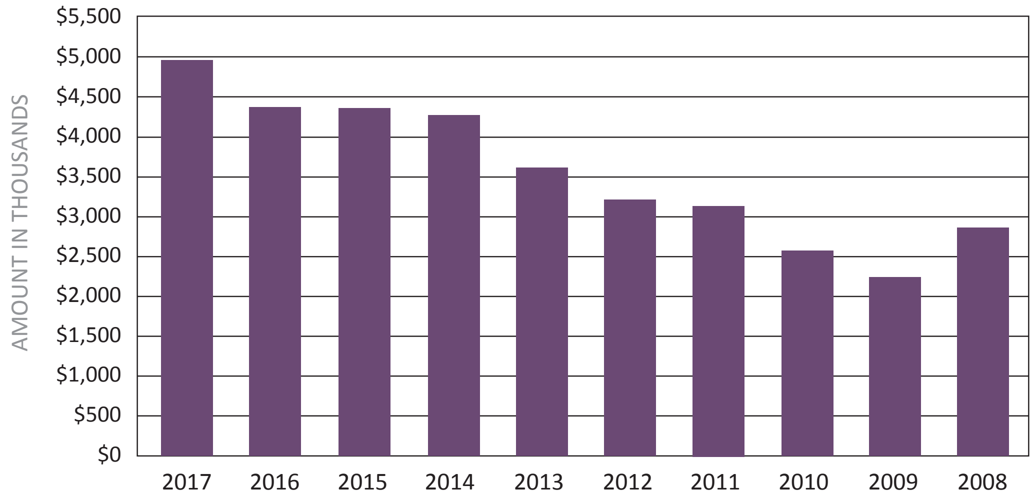
Operating Information provides contextual information about VCERA's operations and membership to assist readers in using financial statement information to comprehend and evaluate VCERA's fiscal condition. The ***Active and Deferred Members*** provides membership statistics for active vested and non-vested members as well as deferred members. The ***Retired Members by Type of Pension Benefit*** presents benefit information for the current year by benefit type and dollar levels. The ***Schedule of Average Monthly Benefit Payments*** reflects the number of newly retired members, average monthly benefit and average final salary, shown in five-year increments. The ***Participating Employers and Active Members*** presents the employers and their corresponding covered employees. The Employer Contribution Rates are also provided as additional information.

CHANGES IN PENSION PLAN FIDUCIARY NET POSITION LAST TEN FISCAL YEARS (In Thousands)

	June 30, 2017	June 30, 2016	June 30, 2015	June 30, 2014	June 30, 2013
ADDITIONS					
Employer Contributions	$190,759	$177,710	$175,099	$169,703	$150,688
Member Contributions	72,395	69,470	63,679	46,674	44,464
Net Investment Income	580,526	25,739	88,681	658,580	436,638
Total Additions	843,680	272,919	327,459	874,957	631,790
DEDUCTIONS					
Benefits	255,581	241,419	228,423	218,105	205,238
Administrative	5,524	4,474	3,854	4,045	3,944
Member Refunds	5,164	4,984	5,272	5,428	4,720
Miscellaneous	-	-	-	-	-
Total Deductions	266,269	250,877	237,549	227,578	213,902
Change In Pension Plan Fiduciary Net Position	$577,411	$22,042	$89,910	$647,379	$417,888

	June 30, 2012	June 30, 2011	June 30, 2010	June 30, 2009	June 30, 2008
ADDITIONS					
Employer Contributions	$140,773	$120,053	$105,703	$113,916	$112,798
Member Contributions	44,487	44,238	42,466	42,326	39,611
Net Investment Income	50,683	627,327	347,087	(625,183)	(208,519)
Total Additions (Declines)	235,943	791,618	495,256	(468,941)	(56,110)
DEDUCTIONS					
Benefits	191,332	180,070	166,029	153,089	142,669
Administrative	3,536	4,387	3,227	3,536	3,268
Member Refunds	3,783	4,388	4,081	3,253	3,960
Miscellaneous	-	-	-	-	20
Total Deductions	198,651	188,845	173,337	159,878	149,917
Change In Pension Plan Fiduciary Net Position	$37,292	$602,773	$321,919	$(628,819)	$(206,027)

TOTAL PLAN NET POSITION



SCHEDULE OF PENSION BENEFIT EXPENSES BY TYPE

Last Ten Fiscal Years ($ in Thousands)

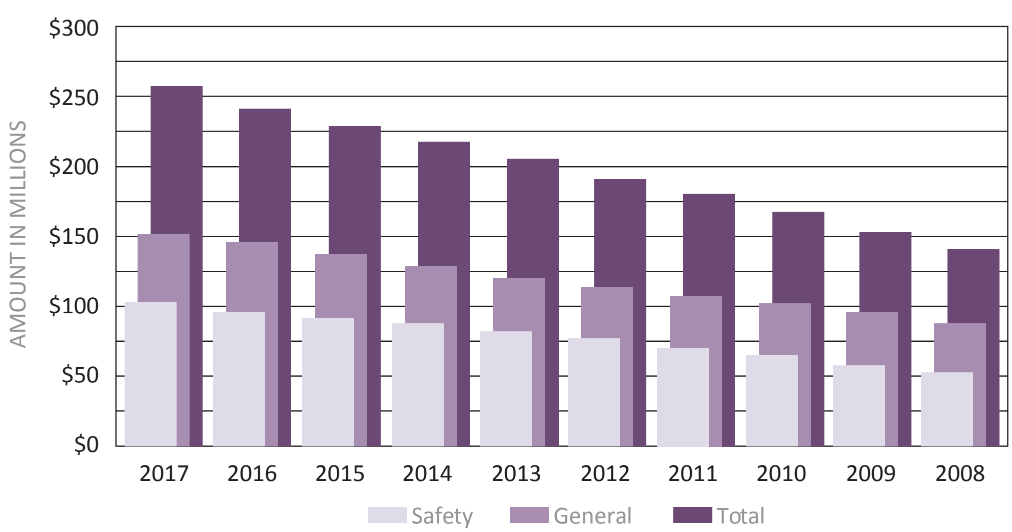
	June 30, 2017	June 30, 2016	June 30, 2015	June 30, 2014	June 30, 2013
Service Retirement					
General	$131,108	$125,219	$116,593	$110,052	$103,665
Safety	69,333	62,618	61,918	58,404	54,789
Total	200,441	187,837	178,511	168,456	158,454
Disability Retirement					
General	9,945	9,966	9,711	10,172	9,639
Safety	26,753	26,895	24,426	24,332	22,890
Total	36,698	36,861	34,137	34,504	32,529
Survivor Continuances					
General	10,660	9,894	9,335	9,141	8,513
Safety	7,784	6,827	6,440	6,003	5,742
Total	18,444	16,721	15,775	15,144	14,255
Total Retired Members					
General	151,712	145,079	135,639	129,365	121,817
Safety	103,869	96,340	92,784	88,739	83,421
Total	255,581	241,419	228,423	218,104	205,238
Member Refunds & Death Benefits					
General	4,634	4,160	4,703	5,094	4,263
Safety	530	824	569	334	457
Total	$5,164	$4,984	$5,272	$5,428	$4,720

SCHEDULE OF PENSION BENEFIT EXPENSES BY TYPE CONTINUED

Last Ten Fiscal Years ($ in Thousands)

	June 30, 2012	June 30, 2011	June 30, 2010	June 30, 2009	June 30, 2008
Service Retirement					
General	$96,889	$91,046	$83,373	$77,662	$72,278
Safety	49,706	45,010	39,353	35,039	31,145
Total	146,595	136,056	122,726	112,701	103,423
Disability Retirement					
General	9,585	9,484	10,051	9,638	9,114
Safety	21,808	21,331	21,163	19,265	18,147
Total	31,393	30,815	31,214	28,903	27,261
Survivor Continuances					
General	8,017	7,909	7,365	6,950	6,500
Safety	5,328	5,291	4,724	4,535	4,485
Total	13,345	13,200	12,089	11,485	10,985
Total Retired Members					
General	114,491	108,439	100,789	94,250	87,892
Safety	76,842	71,632	65,240	58,839	53,777
Total	191,333	180,071	166,029	153,089	141,669
Member Refunds & Death Benefits					
General	3,379	3,859	2,606	2,679	3,526
Safety	404	530	622	574	435
Total	$3,783	$4,389	$3,228	$3,253	$3,961

PENSION BENEFIT PAYMENTS



ACTIVE AND DEFERRED MEMBERS

Last Ten Fiscal Years

	June 30, 2017	June 30, 2016	June 30, 2015	June 30, 2014	June 30, 2013
Active Vested					
General	4,594	4,619	4,632	4,699	4,669
Safety	1,207	1,231	1,245	1,274	1,260
Active Non-vested					
General	2,534	2,396	2,146	1,973	1,894
Safety	301	263	276	264	245
Total Active Members					
General	7,128	7,015	6,778	6,672	6,563
Safety	1,508	1,494	1,521	1,538	1,505
Deferred Members					
General	2,484	2,332	2,140	2,052	1,978
Safety	325	307	301	287	271
Total	11,445	11,148	10,740	10,549	10,317

	June 30, 2012	June 30, 2011	June 30, 2010	June 30, 2009	June 30, 2008
Active Vested					
General	4,516	4,278	4,078	4,069	3,970
Safety	1,221	1,193	1,158	1,187	1,188
Active Non-vested					
General	2,013	2,238	2,427	2,432	2,408
Safety	269	331	340	357	362
Total Active Members					
General	6,529	6,516	6,505	6,501	6,378
Safety	1,490	1,524	1,498	1,544	1,550
Deferred Members					
General	1,891	1,838	1,780	1,795	1,762
Safety	270	259	260	260	245
Total	10,180	10,137	10,043	10,100	9,935

RETIRED MEMBERS BY TYPE OF PENSION BENEFIT

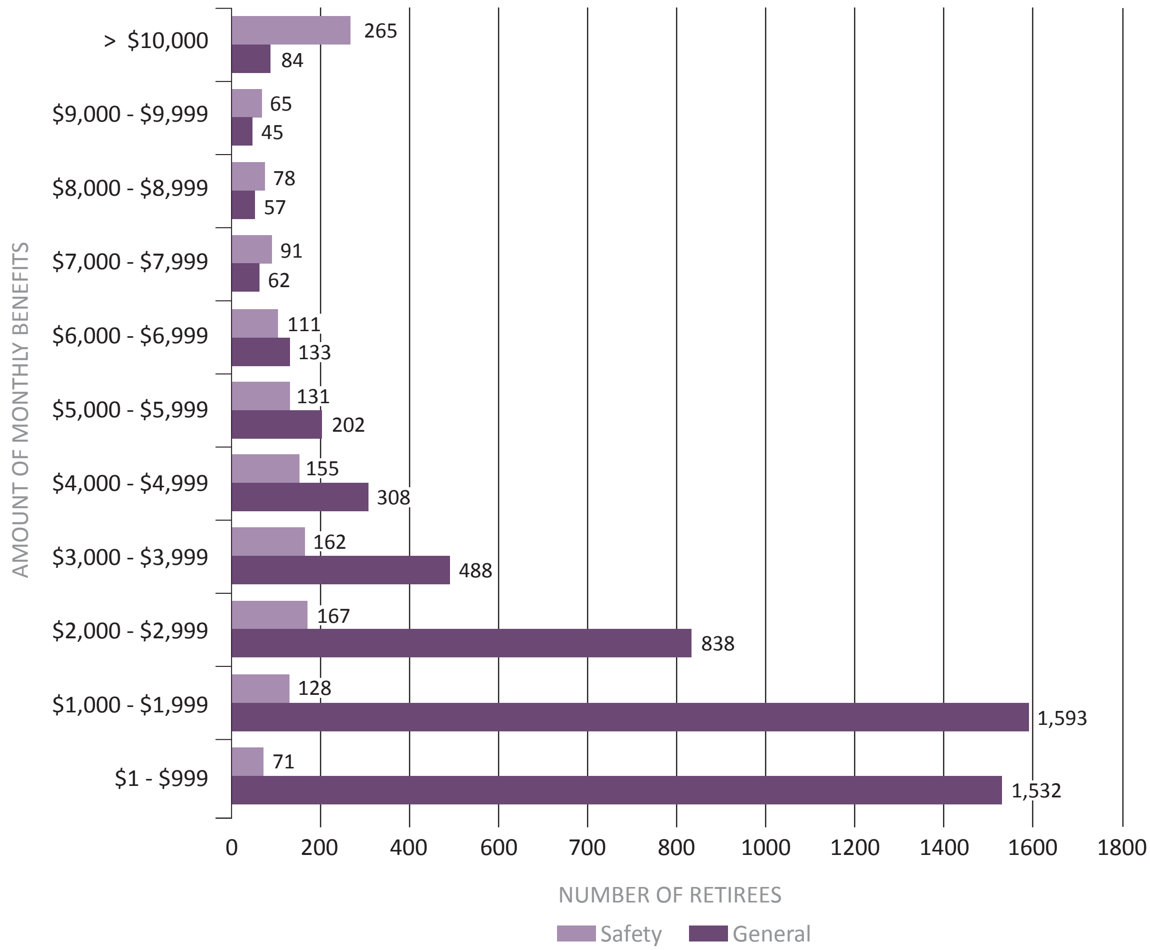
As of June 30, 2017

Amount of Monthly Benefit	Number of Retirees	Type of Retirement[1]		
		A	B	C
General Members				
$1 - $999	1,532	1,134	64	334
$1,000 - $1,999	1,593	1,149	237	207
$2,000 - $2,999	838	676	80	82
$3,000 - $3,999	488	427	35	26
$4,000 - $4,999	308	280	7	21
$5,000 - $5,999	202	180	3	19
$6,000 - $6,999	133	127	2	4
$7,000 - $7,999	62	61	1	-
$8,000 - $8,999	57	54	1	2
$9,000 - $9,999	45	44	1	-
> $10,000	84	82	1	1
Totals	5,342	4,214	432	696
Safety Members				
$1 - $999	71	53	13	5
$1,000 - $1,999	128	75	12	41
$2,000 - $2,999	167	55	44	68
$3,000 - $3,999	162	57	64	41
$4,000 - $4,999	155	43	67	45
$5,000 - $5,999	131	46	63	22
$6,000 - $6,999	111	55	36	20
$7,000 - $7,999	91	60	16	15
$8,000 - $8,999	78	53	22	3
$9,000 - $9,999	65	49	14	2
> $10,000	265	207	46	12
Totals	1,424	753	397	274
Grand Total	6,766	4,967	829	970

[1]Type of Retirement:

A - Service Retiree
B - Disability Retiree
C - Beneficiary/Continuant/Survivor

RETIRED MEMBERS RECEIVING BENEFITS



SCHEDULE OF AVERAGE MONTHLY BENEFIT PAYMENTS

2014-2017

Years of Credited Service	5-9	10-14	15-19	20-24	25-29	30+
Retirees - 2017						
General Members						
Average Monthly Benefit	$999	$1,757	$2,801	$3,527	$3,798	$5,141
Average Final Average Salary	$6,018	$6,627	$8,185	$7,476	$7,088	$8,344
Number of New Retirees	33	55	37	37	30	45
Safety Members						
Average Monthly Benefit	$1,650	$2,785	$3,926	$5,354	$8,868	$9,405
Average Final Average Salary	$9,830	$9,696	$8,890	$10,097	$11,750	$12,047
Number of New Retirees	3	4	3	5	12	24
Retirees - 2016						
General Members						
Average Monthly Benefit	$902	$1,694	$2,608	$3,433	$4,168	$5,455
Average Final Average Salary	$5,427	$6,493	$7,835	$7,326	$7,225	$8,215
Number of New Retirees	35	54	30	31	29	46
Safety Members						
Average Monthly Benefit	$1,621	$2,329	$4,491	$5,430	$8,605	$8,504
Average Final Average Salary	$9,830	$7,789	$8,710	$9,975	$11,254	$11,425
Number of New Retirees	3	3	6	6	17	35
Retirees - 2015						
General Members						
Average Monthly Benefit	$1,094	$1,835	$2,535	$3,156	$4,737	$5,969
Average Final Average Salary	$6,296	$6,725	$6,716	$6,941	$8,200	$7,913
Number of New Retirees	34	57	36	54	27	30
Safety Members						
Average Monthly Benefit	$2,288	$2,843	$6,112	$4,199	$7,827	$11,376
Average Final Average Salary	$8,230	$8,843	$11,928	$7,873	$11,778	$13,039
Number of New Retirees	4	6	2	7	13	14
Retirees - 2014						
General Members						
Average Monthly Benefit	$1,222	$1,823	$2,194	$3,114	$4,208	$5,176
Average Final Average Salary	$6,626	$6,614	$6,219	$6,737	$7,475	$7,127
Number of New Retirees	40	66	36	48	26	21
Safety Members						
Average Monthly Benefit	$2,599	$4,138	$4,444	$4,864	$7,305	$12,835
Average Final Average Salary	$8,760	$10,770	$10,378	$9,755	$11,132	$14,645
Number of New Retirees	7	5	2	3	6	13

SCHEDULE OF AVERAGE MONTHLY BENEFIT PAYMENTS CONTINUED
2010-2013

Years of Credited Service	5-9	10-14	15-19	20-24	25-29	30+
Retirees - 2013						
General Members						
Average Monthly Benefit	$1,278	$1,749	$2,514	$3,344	$4,905	$5,803
Average Final Average Salary	$6,614	$6,741	$7,147	$7,061	$7,821	$7,886
Number of New Retirees	27	74	37	39	23	36
Safety Members						
Average Monthly Benefit	$1,387	$3,234	$4,051	$6,453	$6,426	$11,371
Average Final Average Salary	$10,367	$8,893	$8,302	$11,913	$10,856	$12,610
Number of New Retirees	9	3	4	4	7	26
Retirees - 2012						
General Members						
Average Monthly Benefit	$950	$1,831	$2,653	$2,996	$4,065	$6,683
Average Final Average Salary	$5,888	$6,580	$6,667	$6,522	$7,144	$8,971
Number of New Retirees	46	57	28	31	22	26
Safety Members						
Average Monthly Benefit	$1,219	$2,928	$2,915	$7,491	$9,827	$10,422
Average Final Average Salary	$7,910	$8,631	$5,263	$12,690	$13,347	$12,150
Number of New Retirees	9	6	1	14	6	22
Retirees - 2011						
General Members						
Average Monthly Benefit	$1,169	$1,835	$2,497	$3,824	$5,203	$6,494
Average Final Average Salary	$6,376	$6,466	$6,489	$8,145	$9,263	$8,729
Number of New Retirees	59	76	34	46	24	28
Safety Members						
Average Monthly Benefit	$2,089	$3,021	$5,528	$6,822	$7,925	$12,281
Average Final Average Salary	$9,315	$13,110	$10,450	$12,291	$10,547	$13,718
Number of New Retirees	10	4	4	8	11	24
Retirees - 2010						
General Members						
Average Monthly Benefit	$1,146	$1,765	$2,372	$3,694	$4,368	$5,674
Average Final Average Salary	$6,540	$6,376	$6,356	$8,000	$8,063	$7,409
Number of New Retirees	42	47	36	33	19	31
Safety Members						
Average Monthly Benefit	$2,889	$3,231	$2,919	$6,632	$7,520	$11,226
Average Final Average Salary	$13,166	$8,312	$8,033	$12,022	$11,082	$13,032
Number of New Retirees	5	9	11	9	8	23

SCHEDULE OF AVERAGE MONTHLY BENEFIT PAYMENTS CONTINUED

2008-2009

Years of Credited Service	5-9	10-14	15-19	20-24	25-29	30+
Retirees - 2009						
General Members						
Average Monthly Benefit	$1,708	$2,053	$3,271	$3,681	$4,226	$5,416
Average Final Average Salary	$4,460	$8,125	$8,094	$7,599	$7,883	$7,190
Number of New Retirees	29	23	13	11	9	23
Safety Members						
Average Monthly Benefit	$2,613	$2,754	$4,605	$5,595	$10,741	$11,951
Average Final Average Salary	$9,309	$7,503	$11,038	$11,809	$13,642	$14,329
Number of New Retirees	11	4	2	3	1	14
Retirees - 2008						
General Members						
Average Monthly Benefit	$968	$1,445	$2,003	$3,886	$4,010	$5,879
Average Final Average Salary	$6,221	$5,638	$5,659	$8,256	$6,745	$7,693
Number of New Retirees	36	44	35	20	30	14
Safety Members						
Average Monthly Benefit	$3,527	$4,053	$4,672	$6,663	$8,934	$10,340
Average Final Average Salary	$9,730	$12,444	$10,888	$11,394	$11,897	$11,398
Number of New Retirees	7	5	4	6	10	11

PARTICIPATING EMPLOYERS AND ACTIVE MEMBERS

Last Ten Fiscal Years

	June 30, 2017	June 30, 2016	June 30, 2015	June 30, 2014	June 30, 2013	June 30, 2012	June 30, 2011	June 30, 2010	June 30, 2009	June 30, 2008
County of Ventura										
General Members	6,659	6,552	6,319	6,212	6,104	6,031	6,069	6,057	6,044	5,932
Safety Members	1,508	1,494	1,521	1,538	1,505	1,490	1,524	1,498	1,544	1,550
Total	8,167	8,046	7,840	7,750	7,609	7,521	7,593	7,555	7,588	7,482
Participating Agencies (General Membership)										
Ventura Regional Sanitation District	63	66	68	69	61	60	60	61	69	65
Ventura County Courts	361	352	345	345	350	387	387	387	388	381
Ventura County Air Pollution Control District	45	45	46	46	48	51	-	-	-	-
Total	469	463	459	460	459	498	447	448	457	446
Total Active Membership										
General Members	7,128	7,015	6,778	6,672	6,563	6,529	6,516	6,505	6,501	6,378
Safety Members	1,508	1,494	1,521	1,538	1,505	1,490	1,524	1,498	1,544	1,550
Total	8,636	8,509	8,299	8,210	8,068	8,019	8,040	8,003	8,045	7,928

EMPLOYER CONTRIBUTION RATES

Last Ten Fiscal Years

Year	Tier 1	Tier 2	PEPRA Tier 1	PEPRA Tier 2	Safety	PEPRA Safety
June 30, 2017	23.85%	16.80%	N/A	16.67%	54.56%	52.77%
June 30, 2016	22.93%	18.07%	N/A	16.63%	53.87%	50.30%
June 30, 2015	47.39%	16.74%	44.01%	16.41%	51.65%	52.42%
June 30, 2014	37.35%	18.42%	28.36%	16.15%	54.57%	48.99%
June 30, 2013	171.83%	10.15%	13.99%	14.67%	46.63%	43.16%
June 30, 2012	114.29%	10.16%	N/A	N/A	43.86%	43.86%
June 30, 2011	79.92%	8.82%	N/A	N/A	37.94%	37.94%
June 30, 2010	46.89%	7.70%	N/A	N/A	31.06%	31.06%
June 30, 2009	49.29%	8.47%	N/A	N/A	32.78%	32.78%
June 30, 2008	50.69%	9.61%	N/A	N/A	35.25%	35.25%
Other Participating Agencies						
June 30, 2017	23.85%	16.80%	N/A	16.67%	N/A	N/A
June 30, 2016	22.93%	18.07%	N/A	16.63%	N/A	N/A
June 30, 2015	47.39%	16.74%	44.01%	16.41%	N/A	N/A
June 30, 2014	37.35%	18.42%	28.36%	16.15%	N/A	N/A
June 30, 2013	171.83%	10.15%	13.99%	14.67%	N/A	N/A
June 30, 2012	114.29%	10.16%	N/A	N/A	N/A	N/A
June 30, 2011	79.92%	8.82%	N/A	N/A	N/A	N/A
June 30, 2010	46.89%	7.70%	N/A	N/A	N/A	N/A
June 30, 2009	49.29%	8.47%	N/A	N/A	N/A	N/A
June 30, 2008	50.69%	9.61%	N/A	N/A	N/A	N/A

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BROWN ARMSTRONG
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Ventura County Employees' Retirement Association
Board of Retirement presentation of the June 30, 2017 audit results
By: Andrew J. Paulden, CPA
Brown Armstrong Accountancy Corporation
January 29, 2018

1. Purpose of the Audit

2. The Audit Process
   a. Timeline coordination with VCERA staff
   b. Understanding and evaluation of VCERA internal controls through inquiry and observation
   c. Confirmation of account balances, legal, active and retired participants, and actuary
   d. Interim testing
   e. Final fieldwork
   f. Report presentation

3. Significant Audit Areas/Scope of Audit Work
   a. Risk based approach
   b. Investments and related earnings
   c. Participant data and actuarial information
   d. Employee and employer contributions
   e. Benefit payments

4. Audit Reports
   a. Independent Auditor's Report (opinion) on financial statements – unmodified ("clean") opinion
   b. Required Communication to the Board of Retirement in Accordance with Professional Standards – SAS 114
   c. Independent Auditor's Report on Internal Control over Financial Reporting and on Compliance and Other Matters Based on an Audit of Financial Statements Performed in Accordance with *Government Auditing Standards*
   d. Agreed Upon Conditions Report Designed to Increase Efficiency, Internal Controls, and/or Financial Reporting

5. Questions and/or Comments?

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Certified Public Accountants

INDEPENDENT AUDITOR'S REPORT

Board of Retirement
Ventura County Employees' Retirement Association
Ventura, California

Report on the Financial Statements

We have audited the accompanying Statement of Fiduciary Net Position of Ventura County Employees' Retirement Association (VCERA) as of June 30, 2017, the related Statement of Changes in Fiduciary Net Position for the year then ended, and the related notes to the financial statements, which collectively comprise VCERA's basic financial statements as listed in the table of contents. We have also audited the schedule of cost sharing employer pension amounts allocated by cost sharing plan total for all entities of the columns titled net pension liability, total deferred outflows of resources, total deferred inflows of resources, and total employer pension expense (specified column totals), listed as other information in the table of contents.

Management's Responsibility for the Financial Statements

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

Auditor's Responsibility

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

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

We believe that the audit evidence we have obtained is sufficient and appropriate to provide a basis for our audit opinion.

Opinion

In our opinion, the basic financial statements referred to above present fairly, in all material respects, the fiduciary net position of VCERA as of June 30, 2017, and the changes in fiduciary net position for the year then ended, and the schedule of cost sharing employer pension amounts allocated by cost sharing plan total for all entities of the columns titled net pension liability, total deferred outflows of resources, total deferred inflows of resources, and total employer pension expense (specified column totals), listed as other information in the table of contents, in accordance with accounting principles generally accepted in the United States of America.

Other Matters

Required Supplementary Information

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

Other Supplementary Information

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

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

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

Report on Summarized Comparative Information

We have previously audited VCERA's June 30, 2016 financial statements, and our report dated January 31, 2017, expressed an unmodified opinion on those audited financial statements. In our opinion, the summarized comparative information presented herein as of and for the year ended June 30, 2016, is consistent in all material respects, with the audited financial statements from which it has been derived.

Other Reporting Required by *Government Auditing Standards*

In accordance with *Government Auditing Standards,* we have also issued our report dated December 20, 2017, on our consideration of VCERA's internal control over financial reporting and on our tests of its compliance with certain provisions of laws, regulations, contracts, and grant agreements and other matters. The purpose of that report is to describe the scope of our testing of internal control over financial reporting and compliance and the results of that testing, and not to provide an opinion on internal control over financial reporting or on compliance. That report is an integral part of an audit performed in accordance with *Government Auditing Standards* in considering VCERA's internal control over financial reporting and compliance.

BROWN ARMSTRONG
ACCOUNTANCY CORPORATION
Brown Armstrong
Accountancy Corporation

Bakersfield, California
December 20, 2017

VENTURA COUNTY EMPLOYEES' RETIREMENT ASSOCIATION

REPORT TO MANAGEMENT

FOR THE YEAR ENDED JUNE 30, 2017

**VENTURA COUNTY EMPLOYEES'
RETIREMENT ASSOCIATION**

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BROWN ARMSTRONG

Certified Public Accountants

REQUIRED COMMUNICATION TO THE BOARD OF RETIREMENT
IN ACCORDANCE WITH PROFESSIONAL STANDARDS

Board of Retirement
Ventura County Employees' Retirement Association
Ventura, California

We have audited the financial statements of Ventura County Employees' Retirement Association (VCERA) for the year ended June 30, 2017, and have issued our report thereon dated December 20, 2017. Professional standards require that we provide you with information about our responsibilities under auditing standards generally accepted in the United States of America, as well as certain information related to the planned scope and timing of our audit. We have communicated such information in our letter to you dated August 23, 2016. Professional standards also require that we communicate to you the following information related to our audit.

Significant Audit Findings

Qualitative Aspects of Accounting Practices

Management is responsible for the selection and use of appropriate accounting policies. The significant accounting policies used by VCERA are described in Note 1 to the financial statements. VCERA implemented Governmental Accounting Standards Board (GASB) Statement No. 74, *Financial Reporting for Postemployment Benefits Other than Pension Plans;* GASB Statement No. 77, *Tax Abatement Disclosures;* GASB Statement No. 78, *Pensions Provided through Certain Multiple-Employer Defined Benefit Pension Plans;* GASB Statement No. 80, *Blending Requirements for Certain Component Multiple-Employer Defined Benefit Pension Plans;* and GASB Statement No. 82, *Pension Issues—an amendment of GASB Statements No. 67, No. 68, and No. 73,* during fiscal year 2017.

We noted no transactions entered into by VCERA during the year for which there is a lack of authoritative guidance or consensus. All significant transactions have been recognized in the financial statements in the proper period.

Accounting estimates are an integral part of the financial statements prepared by management and are based on management's knowledge and experience about past and current events and assumptions about future events. Certain accounting estimates are particularly sensitive because of their significance to the financial statements and because of the possibility that future events affecting them may differ significantly from those expected. The most sensitive estimates affecting the financial statements were:

> Management's estimate of the fair value of investments is derived by various methods as detailed in Note 1 to the financial statements. We evaluated the key factors and assumptions used to develop the estimate of the fair value of investments in determining that it is reasonable in relation to the financial statements taken as a whole.

> The estimates of the contribution amounts and net pension liability are based on the actuarially-presumed interest rate and assumptions. We evaluated the key factors and assumptions used to develop the estimates of the contribution amounts and net pension liability in determining that they are reasonable in relation to the financial statements taken as a whole.

Certain financial statement disclosures are particularly sensitive because of their significance to financial statement users. The most sensitive disclosures affecting the financial statements were:

> The disclosures for deposits and investments in Notes 1 and 3 to the financial statements, Summary of Significant Accounting Policies and Deposits and Investment Risk Disclosures, respectively, were derived from VCERA's investment policy. Management's estimate of the fair value of investments was derived by various methods as detailed in the notes.

> Additionally, the disclosures related to net pension liability and actuarial assumptions in Note 4 were derived from the actuarial valuations, which involved estimates of the value of reported amounts and probabilities about the occurrence of events far into the future.

The financial statement disclosures are neutral, consistent, and clear.

Difficulties Encountered in Performing the Audit
We encountered no significant difficulties in dealing with management in performing and completing our audit.

Corrected and Uncorrected Misstatements
Professional standards require us to accumulate all misstatements identified during the audit, other than those that are clearly trivial, and communicate them to the appropriate level of management. Management has corrected all such misstatements. In addition, none of the misstatements detected as a result of audit procedures and corrected by management were material, either individually or in the aggregate, to the financial statements taken as a whole.

Disagreements with Management
For purposes of this letter, a disagreement with management is a financial accounting, reporting, or auditing matter, whether or not resolved to our satisfaction, that could be significant to the financial statements or the auditor's report. We are pleased to report that no such disagreements arose during the course of our audit.

Management Representations
We have requested certain representations from management that are included in the Management Representation Letter dated December 20, 2017.

Management Consultations with Other Independent Accountants
In some cases, management may decide to consult with other accountants about auditing and accounting matters, similar to obtaining a "second opinion" on certain situations. If a consultation involves application of an accounting principle to VCERA's financial statements or a determination of the type of auditor's opinion that may be expressed on those statements, our professional standards require the consulting accountant to check with us to determine that the consultant has all the relevant facts. To our knowledge, there were no such consultations with other accountants.

Other Audit Findings or Issues
We generally discuss a variety of matters, including the application of accounting principles and auditing standards, with management each year prior to retention as VCERA's auditors. However, these discussions occurred in the normal course of our professional relationship and our responses were not a condition to our retention.

Other Matters

We applied certain limited procedures to the Management's Discussion and Analysis, Schedule of Employer Contributions, Schedule of Investment Returns, Latest Actuarial Valuation of Plan Assets and Liabilities, and Schedule of Changes in Net Pension Liability of Participating Employers, which are required supplementary information (RSI) that supplements the basic financial statements. Our procedures consisted of inquiries of management regarding the methods of preparing the information and comparing the information for consistency with management's responses to our inquiries, the basic financial statements, and other knowledge we obtained during the audit of the basic financial statements. We did not audit the RSI and do not express an opinion or provide any assurance on the RSI.

We were engaged to report on the Schedule of Administrative Expenses, Schedule of Investment Expenses, and Schedule of Payments to Consultants, which accompany the financial statements but are not RSI. With respect to this other supplementary information, we made certain inquiries of management and evaluated the form, content, and methods of preparing the information to determine that the information complies with accounting principles generally accepted in the United States of America, the method of preparing it has not changed from the prior period, and the information is appropriate and complete in relation to our audit of the financial statements. We compared and reconciled the supplementary information to the underlying accounting records used to prepare the financial statements or to the financial statements themselves.

We were not engaged to report on the introductory, investment, actuarial, and statistical sections, which accompany the financial statements but are not RSI. We did not audit or perform other procedures on this other information and we do not express an opinion or provide any assurance on it.

****

This information is intended solely for the use of the Board of Retirement and management of Ventura County Employees' Retirement Association and is not intended to be, and should not be, used by anyone other than these specified parties.

BROWN ARMSTRONG
ACCOUNTANCY CORPORATION

Brown Armstrong
Accountancy Corporation

Bakersfield, California
December 20, 2017

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BROWN ARMSTRONG
Certified Public Accountants

INDEPENDENT AUDITOR'S REPORT ON INTERNAL CONTROL OVER FINANCIAL REPORTING AND ON COMPLIANCE AND OTHER MATTERS BASED ON AN AUDIT OF FINANCIAL STATEMENTS PERFORMED IN ACCORDANCE WITH *GOVERNMENT AUDITING STANDARDS*

Board of Retirement
Ventura County Employees' Retirement Association
Ventura, California

We have audited, in accordance with the auditing standards generally accepted in the United States of America and the standards applicable to financial audits contained in *Government Auditing Standards* issued by the Comptroller General of the United States, the financial statements of Ventura County Employees' Retirement Association (VCERA), as of and for the year ended June 30, 2017, and the related notes to the financial statements, which collectively comprise VCERA's basic financial statements, and have issued our report thereon dated December 20, 2017.

Internal Control Over Financial Reporting

In planning and performing our audit of the financial statements, we considered VCERA's internal control over financial reporting (internal control) to determine the audit procedures that are appropriate in the circumstances for the purpose of expressing our opinions on the financial statements, but not for the purpose of expressing an opinion on the effectiveness of VCERA's internal control. Accordingly, we do not express an opinion on the effectiveness of VCERA's internal control.

A *deficiency in internal control* exists when the design or operation of a control does not allow management or employees, in the normal course of performing their assigned functions, to prevent, or detect and correct, misstatements on a timely basis. A *material weakness* is a deficiency, or a combination of deficiencies, in internal control, such that there is a reasonable possibility that a material misstatement of the entity's financial statements will not be prevented, or detected and corrected, on a timely basis. A *significant deficiency* is a deficiency, or a combination of deficiencies, in internal control that is less severe than a material weakness, yet important enough to merit attention by those charged with governance.

Our consideration of internal control was for the limited purpose described in the first paragraph of this section and was not designed to identify all deficiencies in internal control that might be material weaknesses or significant deficiencies. Given these limitations, during our audit we did not identify any deficiencies in internal control that we consider to be material weaknesses. However, material weaknesses may exist that have not been identified.

Compliance and Other Matters

As part of obtaining reasonable assurance about whether VCERA's financial statements are free of material misstatement, we performed tests of its compliance with certain provisions of laws, regulations, contracts, and grant agreements, noncompliance with which could have a direct and material effect on the determination of financial statement amounts. However, providing an opinion on compliance with those provisions was not an objective of our audit and, accordingly, we do not express such an opinion. The results of our tests disclosed no instances of noncompliance or other matters that are required to be reported under *Government Auditing Standards*.

Purpose of this Report

The purpose of this report is solely to describe the scope of our testing of internal control and compliance and the results of that testing, and not to provide an opinion on the effectiveness of VCERA's internal control or on compliance. This report is an integral part of an audit performed in accordance with *Government Auditing Standards* in considering VCERA's internal control and compliance. Accordingly, this report is not suitable for any other purpose.

BROWN ARMSTRONG
ACCOUNTANCY CORPORATION

Brown Armstrong
Accountancy Corporation

Bakersfield, California
December 20, 2017

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BROWN ARMSTRONG
Certified Public Accountants

AGREED UPON CONDITIONS REPORT DESIGNED TO INCREASE EFFICIENCY, INTERNAL CONTROLS, AND/OR FINANCIAL REPORTING

Board of Retirement
Ventura County Employees' Retirement Association
Ventura, California

In planning and performing our audit of the financial statements of Ventura County Employees' Retirement Association (VCERA) for the year ended June 30, 2017, in accordance with auditing standards generally accepted in the United States of America, we considered VCERA's internal control structure over financial reporting (internal control) as a basis for designing our auditing procedures for the purpose of expressing our opinion on the financial statements, but not for the purpose of expressing an opinion on the effectiveness of VCERA's internal control. Accordingly, we do not express an opinion on the effectiveness of VCERA's internal control.

A *deficiency in internal control* exists when the design or operation of a control does not allow management or employees, in the normal course of performing their assigned functions, to prevent, or detect and correct, misstatements on a timely basis. A *material weakness* is a deficiency, or a combination of deficiencies, in internal control, such that there is a reasonable possibility that a material misstatement of the entity's financial statements will not be prevented, or detected and corrected on a timely basis. A *significant deficiency* is a deficiency, or a combination of deficiencies, in internal control that is less severe than a material weakness, yet important enough to merit attention by those charged with governance

Our consideration of internal control was for the limited purpose described in the first paragraph and was not designed to identify all deficiencies in internal control that might be significant deficiencies or material weaknesses and, therefore, there can be no assurance that all such deficiencies have been identified. In addition, because of inherent limitations in internal control, including the possibility of management override of controls, misstatements due to error or fraud may occur and not be detected by such controls. We did not identify any deficiencies in internal control that we considered to be material weaknesses.

During our audit we became aware of matters that are opportunities for strengthening of internal controls and operations efficiency. The recommendations listed in this report summarize the comments and suggestions regarding these matters.

Current Year Conditions and Recommendations

Condition 2017-1

Administrative access to VCERA's V3 system is improperly segregated (2017). During our examination of administrative access to VCERA's systems, we noted that Shalini Nunna, Retirement Benefits Manager, has been assigned the roles needed to administer users within the V3 system. While we noted that Shalini administers V3 user accounts only in the event that the individuals primarily responsible for this process are not available, provision of such access represents a problematic lack of segregation of duties in that an employee responsible overseeing financial transactions is also capable of administering Information Technology (IT) security within V3. This increases the risk that unauthorized financial transactions are processed as well as the risk that unauthorized changes are made to the system itself, including unauthorized changes to user accounts within the system.

Recommendation

It is recommended that VCERA examine the permissions assigned to Shalini Nunna and seek to remove her ability to administer user accounts within the V3 system to eliminate the potential for a conflict of duties if possible. If necessary, VCERA may wish to inquire of Vitech support in order to determine how user administration permissions can be removed from Shalini's user account without restricting her from performing her other assigned responsibilities.

Until VCERA is able to remove the user administration permissions from the individuals noted above, or if it is determined that such access cannot be removed due to system constraints, it is recommended that that a regular monitoring control be established whereby all access permission changes during a specified period (e.g., on a daily basis for the previous 24 hours, on a weekly basis for the previous week) are automatically reported by the V3 application. This report should be reviewed to confirm that all changes were properly approved, and should be reviewed by a member of management without the ability to change user access permissions within the V3 system.

Management Response

VCERA has changed Shalini Nunna's access and permissions so that she may no longer administer user accounts.

Condition 2017-2

Procedures for requesting and documenting the removal of user account access are not consistently followed (2017). VCERA has implemented a procedure by which an email is sent to all staff when an employee announces their retirement; per our inquiries, most terminations that take place occur due to retirement, and such emails are utilized by staff responsible for user administration procedures as a notification to remove the retiring staff's access to VCERA's systems. During our tests of VCERA's termination procedures, however, we noted that an email was not sent to all staff (nor the staff responsible for user administration within the in-scope systems) regarding the non-retirement termination of a sample employee we identified as having left VCERA within the audit period: Lori White, Office Assistant. Failure to notify staff responsible for user administration of employee terminations increases the risk that these individuals are unaware of the need to disable or remove the user accounts belonging terminating employees, and that these accounts remain active beyond the employee's termination date. This was evident in our testing procedures, as the Active Directory and V3 user accounts belonging to Lori White remained active for roughly one month following her final day of work. User accounts that remain active beyond an employee's termination date represent a security risk as they could allow unauthorized access to VCERA systems in the event that the account is compromised or somehow utilized by the terminated employee or other staff members.

Additionally, although VCERA's established procedures dictate that Chris Ayala, Program Assistant/Clerk of the Board, is to utilize a checklist to document procedures relating to termination processes, including the process of submitting a ServiceNow ticket to County of Ventura (the County) IT to request that terminated employees Active Directory user accounts are disabled/removed, no such checklist was available for Lori White and was not utilized during the termination procedures performed for the retirement of a second sample employee we identified as having left VCERA within the audit period (though audit staff noted that the retirement pre-dated Chris's transfer to the Program Assistant/Clerk of the Board position), Charles Fleming, Benefits Specialist. Audit staff also noted that the process of locking a terminated employee's access to V3 is not documented except by SQL tables, which record the "Last Updated" date for V3 user accounts; this "Last Updated" date does not reflect the type of update last made, however, and therefore may or may not reflect the date on which a terminated employee's user account was locked (e.g., if roles were removed from the use account or if the user account was re-enabled and disabled again at a later date for business-use purposes). Failure to document the user access removal procedures utilized at the time of an employee's termination, including those relating to the removal of access to Active Directory and V3, increases the risk that the appropriate procedures are not adequately and consistently followed, and prevents VCERA from verifying that these procedures take place within an appropriate timeframe and with proper authorization. This was again evident in our testing procedures, as the Active Directory user account belonging to Charles Fleming appears to have remained active for roughly nine months following his termination date, and as noted above, this represents a security risk as the active account could have allowed unauthorized access to VCERA systems in the event that it was compromised or somehow utilized by the terminated employee or other staff members.

Recommendation

It is recommended that VCERA immediately notify the individuals responsible for user administration within VCERA's systems whenever an employee is terminated or a termination date is set, regardless of the circumstances (i.e., retirement, involuntary termination, or voluntary termination), so that the associated user accounts can be promptly disabled or removed as needed. It is further recommended that all user access termination processes, including the initial notification process and the actual procedures performed (e.g., ServiceNow ticket submission, locking within V3) by individuals responsible for user administration, are documented in order to allow management to verify that such procedures are taking place within an appropriate timeframe. Such documentation should include (at a minimum) the requestor's name and/or management approval and date of the original request (for instance, a retained copy of the termination announcement or notification email) as well as the name of the individual completing the termination procedures and the date on which they were performed.

Management Response

VCERA has created the New Hire and Termination Spreadsheets that Chris Ayala is utilizing when processing the requisite paperwork for these processes. In addition, VCERA is creating a System Security Access Request Form for all V3-related system access. This will be used to add and delete system access for all VCERA New Hires and Terminations, as well as document any changes to permissions for existing staff. The spreadsheets will require manager signoff.

Chris Ayala will copy the vcera-it@ mailbox on all SREQ relating to account creation/deletion, as well as maintain a separate spreadsheet with times/dates of request and completion of account tasks.

Condition 2017-3

Reviews of Active Directory user accounts are not regularly performed (2017). Although reviews of Active Directory user accounts and their group memberships and assigned permissions are performed by Jo Ford on a periodic basis, such as when the County's billing structure for IT services changed during the audit period, such processes are not formalized and are not performed on a regular basis. Failure to review user accounts and their assigned permissions, group memberships, and role assignments within these systems increases the risk that valid user accounts (e.g., those belonging to current employees) may have access to system functions or shared files that are not commensurate with current job responsibilities, if assigned to an employee, or current functional requirements, if a system or service account. Concerns regarding this risk were raised by VCERA staff during the onsite meetings, as staff are unsure as to whether access to sensitive data held within shared folders secured by Active Directory permissions is appropriately configured. Failure to perform such reviews also increases the risk that unneeded or unauthorized user accounts are not identified and removed or disabled in a timely manner. Examples of accounts that may need removing might include temporary accounts utilized for projects that have concluded or those that were mistakenly left active at the time of an employee's termination. This risk was evident during our testing, as it was noted that the Active Directory user accounts belonging to two sample employees that terminated during the audit period, Lori White and Charles Fleming, were not removed for a month and nine months, respectively, after their termination dates.

Recommendation

It is recommended that VCERA implement (on an annual basis, at a minimum) reviews of user accounts within its Active Directory system and their associated group memberships and permissions to ensure that no unneeded or unauthorized user accounts, such as those belonging to terminated employees, are active, and to ensure that the group memberships assigned within the system are appropriate for the individual's job responsibilities. If necessary, management may wish to initially include an examination of existing groups (e.g., "Finance") and their memberships and determine which folders such groups are given access to. Any shared or system accounts utilized by VCERA staff should also be included in these reviews.

Management Response

The recommended review of group memberships and permissions of various accounts is now being performed by Jo Ford every quarter, though VCERA does not have administrative control over our own domain within the County infrastructure. This responsibility will be permanently tasked to the Technology Officer when that position is filled.

Condition 2017-4

Password requirements for VCERA's Active Directory and V3 systems are not configured to match the requirements specified by the County's Master Information Technology Security Policy (2017). During our examination of the password requirement settings within VCERA's Active Directory and V3 systems, it was noted that the requirements configured within V3 are not configured to match the requirements specified by the County's "Master Information Technology Security Policy," which had been adopted by VCERA as its own information security policy. Additionally, no minimum password age has been configured within Active Directory or V3, and complexity requirements are disabled within Active Directory. The following discrepancies and weak requirements were noted:

Requirement Description	"Master Information Technology Security Policy" Requirement	Active Directory Setting	V3 Setting
Minimum Password Length	6 alphanumeric characters	8 characters	At least 8 characters
Password expires (aging)	120 days	120 days	Not set for employee users; 160 days for self-service users
Minimum password age	Not specified	0 days	Not configured
Complex passwords	Not specified	Disabled	Must contain at least one alphabetical character, one number, and at least one special character
Password History (Number of passwords that cannot be reused)	Systems will be configured to disallow re-use of passwords for 5 generations	12 passwords remembered	Not configured for employee users; 3 passwords remembered for self-service users
Account lockout after X number of failed attempts	5 or less incorrect password attempts	5 invalid logon attempts	4 incorrect attempts for employee users; 3 incorrect attempts for self-service users
Duration of account lockout	Minimum of 15 minutes	15 minutes	Until manually unlocked

Weak requirements are noted by blue text. Inconsistencies with policy are noted by red text.

<u>Recommendation</u>

It is recommended that VCERA examine and revise where appropriate the password requirement settings within Active Directory and V3 to ensure that strong password requirements have been implemented. It is also specifically recommended that the minimum password age is set to greater than zero days, so as to ensure that the password history requirement cannot be easily circumvented, and that complexity requirements are enabled within Active Directory. VCERA may alternatively wish to consider implementing requirements based on currently-emerging NIST-recommended password requirements, as deemed appropriate by management.

<u>Management Response</u>

Inconsistencies (red):
Password expires (aging): VCERA has changed the V3 settings so that users must now reset their passwords every 120 days, and cannot re-use the last 5 passwords.

Weaknesses (blue):
VCERA cannot change the County master security policy, though we could have our own Active Directory policy for just VCERA that addresses the blue items. V3 is capable of all the settings suggested aside from Minimum Password Age, which would have to be an enhancement. VCERA is currently exploring several enhancements with Vitech, and will include this in that list as a priority enhancement.

<u>Condition 2017-5</u>

Established procedures for requesting and documenting the process of creating user accounts for new hires are not consistently followed (2017). VCERA has implemented a procedure by which an email is sent to all staff when a new employee is hired; per our inquiries, such emails are utilized by staff responsible for user administration procedures as a notification to create user accounts (or to request their creation, as in the case of Active Directory user accounts) for the new employee. During our tests of VCERA's onboarding procedures, however, we noted that an email was not sent to all staff (nor the staff responsible for user administration within the in-scope systems) regarding the hiring of a sample employee we identified as having been hired within the audit period: Jacqueline Pineda, Office Assistant. Additionally, we noted that, per established procedures, VCERA staff members responsible for creating V3 user accounts notify the sender of the all-staff email once the user account has been created in order to allow the requestor to review the assigned roles and confirm that they are appropriate. However, no such notification was sent following the creation of Jacqueline's V3 user account. Failure to follow established procedures during the user account creation request and documentation processes prevents management from confirming that these processes take place with appropriate authorization and that appropriate roles are assigned within the V3 system according to employees' job requirements.

<u>Recommendation</u>

It is recommended that VCERA reinforce its user account creation processes to ensure that established procedures are followed whenever new user accounts are created. In particular, VCERA should ensure that user accounts are created only following established notification procedures and only when such notifications originate from staff members authorized to request the creation of user accounts. Additionally, VCERA should ensure that a process is in place to confirm the appropriateness of permissions assigned within VCERA's various systems, including V3, and that this process is followed whenever an employee is provided with access.

<u>Management Response</u>

VCERA has created the New Hire and Termination Spreadsheets that Chris Ayala (Human Resources (HR) coordinator) is now using when processing the requisite paperwork for these processes. In addition, VCERA is creating a System Security Access Request Form for all V3-related system access. This will be used to add and delete system access for all VCERA New Hires and Terminations, as well as document any changes to permissions for existing staff. When Chris receives a request for a new staff member from Management, he will document the request in a maintained spreadsheet containing the security groups the users are assigned to for each system. He will request to the V3 Admin to create the V3 account also. The final step would be a manager signoff as completed.

Condition 2017-6

Formalized IT risk assessments are not conducted on an annual basis (2017). Although Linda Webb, VCERA's Retirement Administrator, works with VCERA staff to assess high-level IT-related risks as part of VCERA's annual Business Plan, such assessments are not performed using a comprehensive or formal methodology, and do not include all areas of IT-related risk; a complete and formal risk assessment of IT-related risk has not been conducted. This increases the possibility that VCERA management is unaware of potential IT-related risks that may prevent the organization from fulfilling its financial reporting requirements and/or performing its day-to-day business processes effectively.

Recommendation

It is recommended that VCERA perform a full IT risk assessment, including an evaluation of its control activities as they relate to significant applications that support VCERA's financial reporting procedures. These assessments should include all areas of IT risk, including those not pertaining to cybersecurity. The IT risk assessment should result in a comprehensive IT risk matrix that lists all known IT risks and the actions and/or activities that VCERA performs to mitigate the risks. If feasible, VCERA should conduct the process of evaluating IT-related risks on an annual basis to ensure that any new IT-related risks associated with changes to the IT environment and IT staffing, as well as any that may have been missed in prior year assessments, are identified and addressed. Audit staff acknowledge, however, that VCERA may need additional time to make significant progress towards implementing mitigating controls following their initial assessment, such that a follow-up risk assessment may or may not take place the following year. If considered appropriate, given the size of the organization and lack of in-house IT staff, VCERA may want to consider outsourcing the risk assessment to a third-party with knowledge of similar organizations and who can assist VCERA in identifying and evaluating significant risks and developing cost-effective solutions to address these areas.

Management Response

VCERA wholeheartedly agrees with this recommendation. The formal business plan submitted to the Board of Retirement will be amended to recommend this as a goal for the coming year. One responsibility of the Technology Officer will be to identify an external vendor to perform such a formal assessment.

Condition 2017-7

The results of audits completed by third-party IT service providers are not reviewed on a regular basis (2017). During our inquiries regarding the use of third-party service providers, we noted that VCERA management does not currently have a formal process in place to obtain the results of audits completed by its third-party service providers, such SherWeb, the offsite backup storage company for VCERA's non-V3 backups, and VSG Hosting, the company that hosts VCERA's V3 system, as well as the subservice organization utilized by VSG Hosting to provide the physical co-location facility in which VCERA's V3 system is hosted and certain additional services. Failure to establish a clear and repeatable procedure for in-depth reviews of audit reports from these three vendors prevents VCERA from confirming that financial data held by the vendors is secure, and that any financial data provided through the services provided by these vendors is accurate and reliable. Additionally, failure to review such reports prevents VCERA from determining whether any follow-up, such as discussion of identified exceptions or failures of vendors' controls with relevant parties, or in-depth investigation of the implementation status of any required applicable complementary user entity controls, is necessary.

Recommendation

It is recommended that VCERA formalize its SOC report review process to ensure that reports issued by the vendors noted above, as well as any other IT service providers that undergo audit processes, are continually obtained in a timely manner for each applicable period and that these reports are reviewed in a timely manner. Key aspects for management to note during their review is whether the service auditor provided an unqualified or qualified opinion; any exceptions noted for individual controls tested should be reviewed to determine if additional risks are noted that will affect management's procedures, data accuracy and integrity, and/or use of the related application(s) (if applicable) and if such risks need to be addressed. Additionally, VCERA should confirm the location(s) in which their V3 systems are hosted and verify that key controls in place at the location(s), including but not limited to backup services, cybersecurity infrastructure, and physical and logical security controls, are covered by the SOC reports obtained from VSG Hosting and its co-location subservice organization. If VCERA management is not confident that key controls are covered within the SOC report, they may wish to explore the possibility of exercising due diligence by conducting their own IT audit and/or walkthrough of the service providers' locations to evaluate the vendors' controls and internal procedures. Finally, VCERA should also formally evaluate whether any complementary user entity controls noted within SOC reports are properly implemented at VCERA as applicable. VCERA should develop strategies for implementing any such controls that are not already in place.

While VCERA management should determine the best methods by which to document its reviews and any required follow-up procedures, all documentation should include the following at a minimum: the dates on which the report(s) was obtained and reviewed, the name of the individual(s) conducting the review, the results of the review (e.g., whether any exceptions were noted), and a determination as to the status of any required complementary user entity controls (if any such controls are identified as not yet implemented, the documentation should also include details as to the proposed implementation steps and include updates on this process). If any additional follow-up is required as a result of the review, such as communication of noted exceptions to relevant departmental management or additional inquiry with the service provider, VCERA should also include the details (e.g., copies of email chains) and results of these procedures in their documentation.

Management Response

VCERA only recently obtained the SOC report for Sherweb, after several requests. The Technology Officer will be responsible for annually requesting the latest SOC reports for all vendors, analyze them and recommend action when needed. This includes V3, Smartbear, ADP, Liberty, and Solomon. A due diligence site visit to VCERA's hosting facility has been approved.

Condition 2017-8

Procedures for controlling physical access to the server room are not consistently followed or are not in place (2017). During our inquiries regarding the physical security controls in place in regards to the server room at VCERA's main offices, we noted that both proximity badges and physical keys can be used to access the server room. While both access methods are considered appropriate, VCERA does not maintain a list of individuals who have access to physical keys that can be used to access the server room. Failure to document such a list prevents management from confirming that access to physical keys is appropriate and that only authorized individuals have been provided with such access.

Additionally, during our examination of the list of individuals provided with access to the server room via proximity badge, we noted that two employees (one terminated and the other had access as the Program Assistant) were still listed as having access to the server room: Stephanie Caiazza, Program Assistant, and Lori White, Office Assistant. Failure to revoke terminated employees' access to the server room via proximity badge at the time of their termination increases the risk of unauthorized access to the server room in the event that the badges are utilized by the terminated employee or other staff members who have not been given access to the server room.

Recommendation

It is recommended that VCERA determine which individuals have been given a physical key that can be used to unlock the server room, as well as which individuals have access to shared physical keys (e.g., those kept in a lockbox), and document this list to ensure that only authorized individuals have access to the server room via physical key. Once this list has been documented, it is further recommended that VCERA management regularly reviews this list on an annual basis at a minimum, and that the process is documented to ensure that it is completed as scheduled.

It is also recommended that VCERA reinforce its termination procedures to ensure that access to the server room – whether via proximity badge or physical key – is immediately revoked whenever an employee is terminated, and that this process is documented to ensure that it is completed as scheduled.

Management Response

This has been incorporated into the attached New Hire and Termination Checklist. VCERA has requested a list of employees who have access to the server room (via badge) from the General Services Agency (GSA) to review, and access will be revoked for the majority of employees. Further, the door to the server room will be rekeyed (as well as the common doors) to reset access and permissions to specific office areas. Chris Ayala will serve as primary coordinator, as part of the ingress/egress process and will document in the aforementioned spreadsheet which badge IDs have access to specific doors.

NEPC, LLC

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VCERA
VENTURA COUNTY EMPLOYEES' RETIREMENT ASSOCIATION

Ventura County Employees' Retirement Association

Preliminary Performance Report
Month Ending November 30, 2017

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Ventura County Employees' Retirement Association

Total Fund Performance Detail Net of Fees

	Market Value ($)	% of Portfolio	Policy %	1 Mo (%)	Fiscal YTD (%)	YTD (%)	1 Yr (%)	3 Yrs (%)	5 Yrs (%)	10 Yrs (%)	Return (%)	Since
Total Fund	**5,358,247,651**	**100.0**	**100.0**	**1.3**	**6.4**	**14.3**	**16.4**	**6.9**	**9.4**	**5.7**	**8.1**	**Apr-94**
Policy Index				*1.5*	*6.7*	*15.0*	*16.8*	*7.7*	*9.8*	*5.9*	*8.2*	*Apr-94*
Over/Under				-0.2	-0.3	-0.7	-0.4	-0.8	-0.4	-0.2	-0.1	
60% MSCI ACWI (Net) / 40% CITI WGBI				*1.7*	*6.7*	*15.9*	*17.1*	*5.5*	*6.5*	*4.0*	*--*	*Apr-94*
Total Fund ex Parametric*	**5,206,288,236**	**97.2**	**--**	**1.3**	**6.4**	**14.2**	**16.3**	**6.8**	**9.3**	**5.6**	**8.1**	**Apr-94**
Total Fund ex Private Equity	**5,131,241,424**	**95.8**	**--**	**1.3**	**6.5**	**14.3**	**16.3**	**6.7**	**8.9**	**--**	**9.5**	**Jan-12**
Policy Index				*1.5*	*6.7*	*15.0*	*16.8*	*7.7*	*9.8*	*5.9*	*10.2*	*Jan-12*
Over/Under				-0.2	-0.2	-0.7	-0.5	-1.0	-0.9		-0.7	
Total US Equity	**1,741,584,284**	**32.5**	**28.0**	**3.1**	**10.3**	**20.1**	**22.5**	**10.9**	**15.8**	**8.3**	**9.4**	**Dec-93**
Russell 3000				*3.0*	*10.1*	*19.9*	*22.3*	*10.7*	*15.6*	*8.5*	*9.7*	*Dec-93*
Over/Under				0.1	0.2	0.2	0.2	0.2	0.2	-0.2	-0.3	
Western U.S. Index Plus	195,352,714	3.6		3.1	11.4	21.2	24.3	11.5	16.4	7.0	5.9	May-07
S&P 500				*3.1*	*10.2*	*20.5*	*22.9*	*10.9*	*15.7*	*8.3*	*7.6*	*May-07*
Over/Under				0.0	1.2	0.7	1.4	0.6	0.7	-1.3	-1.7	
Blackrock Russell 1000 Index	1,485,125,883	27.7		3.1	10.1	--	--	--	--	--	12.3	May-17
Russell 1000				*3.0*	*10.1*	*20.3*	*22.6*	*10.7*	*15.7*	*8.4*	*12.3*	*May-17*
Over/Under				0.1	0.0						0.0	
Blackrock Russell 2500 Index	61,105,688	1.1		3.3	9.9	--	--	--	--	--	11.4	May-17
Russell 2500				*3.3*	*9.9*	*16.4*	*18.7*	*10.4*	*14.8*	*9.1*	*11.3*	*May-17*
Over/Under				0.0	0.0						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.

Ventura County Employees' Retirement Association

Total Fund Performance Detail Net of Fees

	Market Value ($)	% of Portfolio	Policy %	1 Mo (%)	Fiscal YTD (%)	YTD (%)	1 Yr (%)	3 Yrs (%)	5 Yrs (%)	10 Yrs (%)	Return (%)	Since
Total Non-US Equity	**873,101,974**	**16.3**	**15.0**	**0.8**	**9.2**	**23.8**	**27.0**	**6.8**	**7.7**	**2.1**	**6.7**	**Mar-94**
MSCI ACWI ex USA				*0.8*	*9.0*	*24.4*	*27.6*	*5.7*	*7.1*	*1.5*	*5.5*	*Mar-94*
Over/Under				0.0	0.2	-0.6	-0.6	1.1	0.6	0.6	1.2	
MSCI EAFE				*1.0*	*8.1*	*23.1*	*27.3*	*6.0*	*8.2*	*1.5*	*5.1*	*Mar-94*
MSCI ACWI ex USA Local Currency				*-0.5*	*7.2*	*16.5*	*20.3*	*7.7*	*10.8*	*3.2*	*--*	*Mar-94*
MSCI EAFE Local Currency				*-0.5*	*5.9*	*13.9*	*19.0*	*7.6*	*11.9*	*3.1*	*5.1*	*Mar-94*
BlackRock ACWI ex-U.S. Index	427,555,253	8.0		0.9	9.3	25.1	28.3	6.6	7.7	2.0	3.1	Mar-07
MSCI ACWI ex USA				*0.8*	*9.0*	*24.4*	*27.6*	*5.7*	*7.1*	*1.5*	*2.6*	*Mar-07*
Over/Under				0.1	0.3	0.7	0.7	0.9	0.6	0.5	0.5	
MSCI ACWI ex USA Local Currency				*-0.5*	*7.2*	*16.5*	*20.3*	*7.7*	*10.8*	*3.2*	*3.6*	*Mar-07*
Sprucegrove	229,915,919	4.3		0.4	11.5	24.0	27.5	7.0	8.1	3.3	8.0	Mar-02
MSCI ACWI ex USA				*0.8*	*9.0*	*24.4*	*27.6*	*5.7*	*7.1*	*1.5*	*7.0*	*Mar-02*
Over/Under				-0.4	2.5	-0.4	-0.1	1.3	1.0	1.8	1.0	
MSCI EAFE				*1.0*	*8.1*	*23.1*	*27.3*	*6.0*	*8.2*	*1.5*	*6.4*	*Mar-02*
MSCI ACWI ex USA Local Currency				*-0.5*	*7.2*	*16.5*	*20.3*	*7.7*	*10.8*	*3.2*	*5.6*	*Mar-02*
MSCI EAFE Local Currency				*-0.5*	*5.9*	*13.9*	*19.0*	*7.6*	*11.9*	*3.1*	*4.8*	*Mar-02*
Hexavest	93,451,602	1.7		1.3	4.8	16.4	21.0	4.6	6.9	--	5.1	Dec-10
MSCI EAFE				*1.0*	*8.1*	*23.1*	*27.3*	*6.0*	*8.2*	*1.5*	*5.9*	*Dec-10*
Over/Under				0.3	-3.3	-6.7	-6.3	-1.4	-1.3		-0.8	
MSCI EAFE Local Currency				*-0.5*	*5.9*	*13.9*	*19.0*	*7.6*	*11.9*	*3.1*	*8.4*	*Dec-10*
Walter Scott	122,179,200	2.3		0.6	8.3	24.8	26.4	8.6	7.6	--	6.4	Dec-10
MSCI ACWI ex USA				*0.8*	*9.0*	*24.4*	*27.6*	*5.7*	*7.1*	*1.5*	*4.7*	*Dec-10*
Over/Under				-0.2	-0.7	0.4	-1.2	2.9	0.5		1.7	
MSCI ACWI ex USA Local Currency				*-0.5*	*7.2*	*16.5*	*20.3*	*7.7*	*10.8*	*3.2*	*7.5*	*Dec-10*
MSCI EAFE				*1.0*	*8.1*	*23.1*	*27.3*	*6.0*	*8.2*	*1.5*	*5.9*	*Dec-10*
Total Global Equity	**589,667,106**	**11.0**	**10.0**	**2.0**	**9.6**	**22.5**	**25.2**	**7.7**	**10.3**	**3.6**	**6.3**	**May-05**
MSCI ACWI				*1.9*	*9.4*	*22.0*	*24.6*	*8.0*	*10.9*	*4.4*	*7.2*	*May-05*
Over/Under				0.1	0.2	0.5	0.6	-0.3	-0.6	-0.8	-0.9	
BlackRock MSCI ACWI Equity Index	589,667,106	11.0		2.0	9.6	22.5	25.2	8.5	11.4	--	11.9	Aug-12
MSCI ACWI				*1.9*	*9.4*	*22.0*	*24.6*	*8.0*	*10.9*	*4.4*	*11.4*	*Aug-12*
Over/Under				0.1	0.2	0.5	0.6	0.5	0.5		0.5	

Ventura County Employees' Retirement Association

Total Fund Performance Detail Net of Fees

	Market Value ($)	% of Portfolio	Policy %	1 Mo (%)	Fiscal YTD (%)	YTD (%)	1 Yr (%)	3 Yrs (%)	5 Yrs (%)	10 Yrs (%)	Return (%)	Since
Total Private Equity	**227,006,227**	**4.2**	**10.0**	**0.2**	**5.2**	**13.6**	**17.6**	**12.1**	**14.5**	**--**	**14.0**	**Jan-12**
DJ U.S. Total Stock Market Index + 3%				3.3	11.4	23.2	25.9	14.0	19.0	--	19.1	*Jan-12*
Over/Under				-3.1	-6.2	-9.6	-8.3	-1.9	-4.5		-5.1	
Adams Street Global Fund Series	129,443,631	2.4		0.0	3.0	8.5	12.0	9.0	12.1	--	12.1	Jan-12
DJ U.S. Total Stock Market Index + 3%				3.3	11.4	23.2	25.9	14.0	19.0	--	19.1	*Jan-12*
Over/Under				-3.3	-8.4	-14.7	-13.9	-5.0	-6.9		-7.0	
Harbourvest	66,542,915	1.2		0.9	9.7	23.2	27.4	19.1	--	--	19.7	Aug-13
DJ U.S. Total Stock Market Index + 3%				3.3	11.4	23.2	25.9	14.0	19.0	--	16.3	*Aug-13*
Over/Under				-2.4	-1.7	0.0	1.5	5.1			3.4	
Pantheon Global Secondary Funds	28,445,707	0.5		0.0	6.3	21.0	27.9	13.2	14.8	--	12.5	Jan-12
DJ U.S. Total Stock Market Index + 3%				3.3	11.4	23.2	25.9	14.0	19.0	--	19.1	*Jan-12*
Over/Under				-3.3	-5.1	-2.2	2.0	-0.8	-4.2		-6.6	
Drive Capital Fund	2,573,974	0.0		-2.9	-7.2	-33.7	-33.7	--	--	--	-45.4	Sep-16
DJ U.S. Total Stock Market Index + 3%				3.3	11.4	23.2	25.9	14.0	19.0	--	23.2	*Sep-16*
Over/Under				-6.2	-18.6	-56.9	-59.6				-68.6	

*One or more accounts have been excluded from the composite for the purposes of performance calculations and market value.

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

Ventura County Employees' Retirement Association

Private Equity Limited Partnership Performance

												Since Inception		
Fund Name	Vintage Year	Initial Investment Date	Commitment	Capital Called to Date[1]	Outstanding Commitment[1]	Call Ratio	Add'l Fees[2]	Distributions to Date	Valuation	Total Value	Net Benefit	IRR	Distributions to Paid In Multiple (DPI)	Total Value to Paid In Multiple (TVPI)
Adams Street 2010 U.S. Fund	2010	5/21/2010	$42,500,000	$36,188,750	$6,311,250	85%	$15,213	$18,681,786	$35,061,255	$53,743,041	$17,539,078	12.8%	0.52x	1.49x
Adams Street 2010 Non-U.S. Dev. Mkts Fund	2010	5/21/2010	$25,500,000	$21,254,249	$4,245,751	83%	$1,589	$10,529,344	$17,602,142	$28,131,486	$6,875,648	9.4%	0.5x	1.32x
Adams Street 2010 Non-U.S. Emg Mkts Fund	2010	1/3/2011	$8,500,000	$6,868,000	$1,632,000	81%	$0	$1,193,443	$8,218,962	$9,412,405	$2,544,405	9.2%	0.17x	1.37x
Adams Street 2010 Direct Fund	2010	5/21/2010	$8,500,000	$8,046,100	$453,900	95%	$6,697	$7,196,986	$5,573,731	$12,770,717	$4,739,126	12.0%	0.89x	1.59x
Adams Street 2013 Global Fund	2013	6/27/2013	$75,000,000	$49,950,000	$25,050,000	67%	$10,728	$4,679,630	$52,830,780	$57,510,410	$7,549,682	6.4%	0.09x	1.15x
Adams Street 2016 Global Fund	2016	12/22/2016	$60,000,000	$9,960,000	$50,040,000	17%	$0	$0	$10,649,274	$10,649,274	$693,301	21.1%	0x	1.07x
Drive Capital Fund II	2016	9/1/2016	$15,000,000	$3,018,985	$11,984,305	20%	$3,210	$0	$2,573,973	$2,573,973	($366,977)	-27.1%	0x	0.85x
GTCR Fund XII	2017	9/29/2017	$30,000,000	--	$30,000,000	0%	--	--	--	--	--	--	--	--
Insight Venture Partners X	2017	10/13/2017	$25,000,000	--	$25,000,000	0%	--	--	--	--	--	--	--	--
HarbourVest - Dover Street VIII	2013	5/30/2013	$67,500,000	$58,472,454	$9,112,500	87%	$84,954	$41,774,315	$42,504,508	$84,278,823	$23,018,716	20.9%	0.71x	1.44x
HarbourVest - Dover Street IX	2016	12/16/2016	$60,000,000	$9,600,000	$50,400,000	16%	$0	$2,132,342	$10,442,418	$12,574,760	$2,974,760	66.5%	0.22x	1.31x
HarbourVest - PRTNS CO INVEST IV L.P.	2017	6/2/2017	$30,000,000	$12,571,740	$17,625,000	42%	$0	$0	$13,335,740	$13,335,740	$960,740	15.2%	0x	1.06x
Pantheon Global Secondary Fund IV	2010	8/20/2010	$15,000,000	$9,960,000	$5,040,000	66%	$0	$10,935,001	$4,216,466	$15,151,467	$5,191,467	13.8%	1.10x	1.52x
Pantheon Global Secondary Fund V	2015	2/26/2015	$50,000,000	$21,091,509	$28,908,491	42%	($162,514)	$3,562,603	$24,216,636	$27,779,239	$6,850,244	21.3%	0.17x	1.32x
Total VCERA Private Equity Program	***--***	***5/21/2010***	***$512,500,000***	***$246,981,787***	***$265,803,197***	***48%***	***-$40,123***	***$100,685,450***	***$227,225,885***	***$327,911,335***	***$78,570,190***	***13.3%***	***0.41x***	***1.33x***

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 6/30/2017 NAVs cash-adjusted for cash flows through 11/30/2017.

Ventura County Employees' Retirement Association

Total Fund Performance Detail Net of Fees

	Market Value ($)	% of Portfolio	Policy %	1 Mo (%)	Fiscal YTD (%)	YTD (%)	1 Yr (%)	3 Yrs (%)	5 Yrs (%)	10 Yrs (%)	Return (%)	Since
Total US Fixed Income	**956,076,516**	**17.8**	**20.0**	**0.0**	**1.0**	**3.9**	**4.2**	**2.9**	**2.4**	**5.3**	**5.9**	**Feb-94**
BBgBarc US Aggregate TR				*-0.1*	*0.8*	*3.1*	*3.2*	*2.1*	*2.0*	*4.0*	*5.4*	*Feb-94*
Over/Under				0.1	0.2	0.8	1.0	0.8	0.4	1.3	0.5	
BlackRock U.S. Debt Fund	222,094,776	4.1		-0.1	0.8	3.1	3.3	2.2	2.1	4.1	5.2	Nov-95
BBgBarc US Aggregate TR				*-0.1*	*0.8*	*3.1*	*3.2*	*2.1*	*2.0*	*4.0*	*5.2*	*Nov-95*
Over/Under				0.0	0.0	0.0	0.1	0.1	0.1	0.1	0.0	
Western	296,523,380	5.5		0.0	1.3	5.3	5.6	3.5	3.3	5.2	6.2	Dec-96
BBgBarc US Aggregate TR				*-0.1*	*0.8*	*3.1*	*3.2*	*2.1*	*2.0*	*4.0*	*5.2*	*Dec-96*
Over/Under				0.1	0.5	2.2	2.4	1.4	1.3	1.2	1.0	
Reams	308,557,483	5.8		-0.2	0.5	2.3	2.5	2.6	1.5	5.3	5.4	Sep-01
Reams Custom Index				*0.1*	*0.6*	*1.2*	*1.3*	*0.8*	*0.4*	*3.2*	*3.9*	*Sep-01*
Over/Under				-0.3	-0.1	1.1	1.2	1.8	1.1	2.1	1.5	
BBgBarc US Aggregate TR				*-0.1*	*0.8*	*3.1*	*3.2*	*2.1*	*2.0*	*4.0*	*4.4*	*Sep-01*
3-Month LIBOR + 3%				*0.4*	*1.8*	*3.9*	*4.3*	*3.8*	*3.6*	*3.8*	*4.8*	*Sep-01*
Loomis Strategic Alpha	46,019,077	0.9		0.3	2.0	3.2	3.8	2.6	--	--	2.8	Jul-13
BBgBarc US Aggregate TR				*-0.1*	*0.8*	*3.1*	*3.2*	*2.1*	*2.0*	*4.0*	*2.9*	*Jul-13*
Over/Under				0.4	1.2	0.1	0.6	0.5			-0.1	
3-Month LIBOR + 3%				*0.4*	*1.8*	*3.9*	*4.3*	*3.8*	*3.6*	*3.8*	*3.6*	*Jul-13*
Loomis Sayles Multi Strategy	82,881,800	1.5		0.3	2.4	8.0	8.8	4.2	4.6	6.6	6.6	Jul-05
Loomis Custom Index				*-0.2*	*1.2*	*4.1*	*4.8*	*3.1*	*3.1*	*5.1*	*5.2*	*Jul-05*
Over/Under				0.5	1.2	3.9	4.0	1.1	1.5	1.5	1.4	
BBgBarc US Govt/Credit TR				*-0.1*	*0.8*	*3.5*	*3.7*	*2.2*	*2.0*	*4.0*	*4.2*	*Jul-05*

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.

Ventura County Employees' Retirement Association

Total Fund Performance Detail Net of Fees

	Market Value ($)	% of Portfolio	Policy %	1 Mo (%)	Fiscal YTD (%)	YTD (%)	1 Yr (%)	3 Yrs (%)	5 Yrs (%)	10 Yrs (%)	Return (%)	Since
Total Real Estate	**397,266,572**	**7.4**	**7.0**	**0.0**	**1.6**	**3.8**	**5.5**	**8.8**	**9.4**	**2.6**	**7.8**	**Mar-94**
NCREIF ODCE Net				0.0	1.6	4.7	6.7	9.8	10.6	4.1	8.1	*Mar-94*
Over/Under				0.0	0.0	-0.9	-1.2	-1.0	-1.2	-1.5	-0.3	
Prudential Real Estate	141,977,647	2.6		0.0	2.1	5.1	7.5	10.5	11.1	3.7	6.1	Jun-04
NCREIF ODCE Net				0.0	1.6	4.7	6.7	9.8	10.6	4.1	7.0	*Jun-04*
Over/Under				0.0	0.5	0.4	0.8	0.7	0.5	-0.4	-0.9	
NCREIF ODCE				*0.0*	*1.9*	*5.4*	*7.7*	*10.8*	*11.6*	*5.0*	*8.0*	*Jun-04*
UBS Real Estate	255,116,077	4.8		0.0	1.3	3.2	4.4	8.0	8.5	4.2	7.3	Mar-03
NCREIF ODCE Net				0.0	1.6	4.7	6.7	9.8	10.6	4.1	7.2	*Mar-03*
Over/Under				0.0	-0.3	-1.5	-2.3	-1.8	-2.1	0.1	0.1	
NCREIF ODCE				*0.0*	*1.9*	*5.4*	*7.7*	*10.8*	*11.6*	*5.0*	*8.2*	*Mar-03*
RREEF	172,848	0.0		0.0	-0.8	-4.8	-5.1	-4.5	4.8	-6.3	-6.2	Sep-07
NCREIF ODCE Net				0.0	1.6	4.7	6.7	9.8	10.6	4.1	4.0	*Sep-07*
Over/Under				0.0	-2.4	-9.5	-11.8	-14.3	-5.8	-10.4	-10.2	
NCREIF ODCE				*0.0*	*1.9*	*5.4*	*7.7*	*10.8*	*11.6*	*5.0*	*4.9*	*Sep-07*
Total Liquid Alternatives	**421,585,557**	**7.9**	**10.0**	**-0.2**	**1.8**	**4.3**	**6.9**	**-0.7**	**--**	**--**	**4.6**	**Apr-13**
CPI + 4% (Unadjusted)				0.3	2.3	5.8	6.2	5.5	9.1	--	6.2	*Apr-13*
Over/Under				-0.5	-0.5	-1.5	0.7	-6.2			-1.6	
Bridgewater All Weather Fund	309,134,701	5.8		0.5	5.9	10.0	11.8	3.4	--	--	5.5	Aug-13
CPI + 5% (Unadjusted)				0.3	2.7	6.8	7.2	6.5	--	--	6.3	*Aug-13*
Over/Under				0.2	3.2	3.2	4.6	-3.1			-0.8	
Tortoise Energy Infrastructure	112,450,856	2.1		-2.0	-8.0	-8.7	-4.6	-9.2	--	--	0.1	Apr-13
Wells Fargo MLP Index				-1.6	-6.9	-9.7	-5.1	-12.0	-0.5	--	-3.9	*Apr-13*
Over/Under				-0.4	-1.1	1.0	0.5	2.8			4.0	
Overlay	**151,959,415**	**2.8**	**0.0**									
Parametric	151,959,415	2.8										

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.

Real Estate Valuation is as of 09/30/2017.

Ventura County Employees' Retirement Association

Total Fund

Cash Flow Summary

Month Ending November 30, 2017

	Beginning Market Value	Contributions	Withdrawals	Net Cash Flow	Fees	Net Investment Change	Ending Market Value
Adams Street Global Fund Series	$129,940,164	$0	-$496,533	-$496,533	$0	$0	$129,443,631
BlackRock ACWI ex-U.S. Index	$423,663,566	$0	$0	$0	-$37,296	$3,891,687	$427,555,253
BlackRock MSCI ACWI Equity Index	$578,240,975	$0	$0	$0	-$21,322	$11,426,131	$589,667,106
Blackrock Russell 1000 Index	$1,441,132,640	$0	$0	$0	-$12,793	$43,993,243	$1,485,125,883
Blackrock Russell 2500 Index	$59,158,784	$0	$0	$0	-$1,018	$1,946,904	$61,105,688
BlackRock U.S. Debt Fund	$222,362,596	$0	$0	$0	-$10,736	-$267,820	$222,094,776
Bridgewater All Weather Fund	$307,552,975	$0	$0	$0	-$97,736	$1,581,726	$309,134,701
Drive Capital Fund	$2,651,929	$0	$0	$0	$0	-$77,954	$2,573,974
Harbourvest	$65,960,330	$0	$0	$0	$0	$582,585	$66,542,915
Hexavest	$92,214,384	$0	$0	$0	-$35,317	$1,237,219	$93,451,602
Loomis Sayles Multi Strategy	$82,647,833	$0	$0	$0	-$26,554	$233,967	$82,881,800
Loomis Strategic Alpha	$45,867,947	$0	$0	$0	-$15,340	$151,130	$46,019,077
Pantheon Global Secondary Funds	$28,730,707	$0	-$285,000	-$285,000	$0	$0	$28,445,707
Parametric	$170,538,569	$781,533	-$18,000,000	-$17,218,467	-$26,695	-$1,360,687	$151,959,415
Prudential Real Estate	$141,977,647	$0	$0	$0	$0	$0	$141,977,647
Reams	$309,012,985	$0	$0	$0	-$44,820	-$455,502	$308,557,483
RREEF	$172,848	$0	$0	$0	$0	$0	$172,848
Sprucegrove	$228,823,164	$0	$0	$0	-$67,482	$1,092,755	$229,915,919
Tortoise Energy Infrastructure	$114,690,524	$0	$0	$0	-$58,568	-$2,239,668	$112,450,856
UBS Real Estate	$255,116,077	$0	$0	$0	$0	$0	$255,116,077
Walter Scott	$121,344,571	$0	$0	$0	-$82,965	$834,628	$122,179,200
Western	$296,422,753	$0	$0	$0	-$49,565	$100,627	$296,523,380
Western U.S. Index Plus	$189,525,235	$0	$0	$0	-$36,919	$5,827,479	$195,352,714
Total	**$5,307,749,202**	**$781,533**	**-$18,781,533**	**-$18,000,000**	**-$625,127**	**$68,498,449**	**$5,358,247,651**

Information Disclaimer and Reporting Methodology

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.
- This report is provided as a management aid for the client's internal use only. Information contained in this report does not constitute a recommendation by NEPC.
- 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.

PRELIMINARY MONTHLY PERFORMANCE REPORT

VENTURA COUNTY EMPLOYEES' RETIREMENT ASSOCIATION

December 31, 2017

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BOSTON | ATLANTA | CHARLOTTE | CHICAGO | DETROIT | LAS VEGAS | PORTLAND | SAN FRANCISCO

Ventura County Employees' Retirement Association

TOTAL FUND PERFORMANCE DETAIL NET OF FEES

	Market Value ($)	% of Portfolio	Policy %	1 Mo (%)	3 Mo (%)	Fiscal YTD (%)	1 Yr (%)	3 Yrs (%)	5 Yrs (%)	10 Yrs (%)	Return (%)	Since
Total Fund	**5,412,480,678**	**100.0**	**100.0**	**1.3**	**3.9**	**7.8**	**15.8**	**7.6**	**9.4**	**5.9**	**8.2**	**Apr-94**
Policy Index				*1.2*	*4.1*	*8.0*	*16.4*	*8.4*	*9.8*	*6.1*	*8.2*	*Apr-94*
Over/Under				0.1	-0.2	-0.2	-0.6	-0.8	-0.4	-0.2	0.0	
60% MSCI ACWI (Net) / 40% CITI WGBI				*1.0*	*3.8*	*7.8*	*17.1*	*6.4*	*6.5*	*4.2*	*--*	*Apr-94*
Total Fund ex Parametric	**5,276,974,531**	**97.5**	**--**	**1.3**	**3.9**	**7.8**	**15.7**	**7.6**	**9.3**	**5.8**	**8.2**	**Apr-94**
Total Fund ex Private Equity	**5,172,502,319**	**95.6**	**--**	**1.2**	**4.0**	**7.8**	**15.8**	**7.4**	**8.9**	**--**	**9.6**	**Jan-12**
Policy Index				*1.2*	*4.1*	*8.0*	*16.4*	*8.4*	*9.8*	*6.1*	*10.3*	*Jan-12*
Over/Under				0.0	-0.1	-0.2	-0.6	-1.0	-0.9		-0.7	
Total US Equity	**1,760,783,794**	**32.5**	**28.0**	**1.1**	**6.6**	**11.5**	**21.4**	**11.3**	**15.8**	**8.5**	**9.4**	**Dec-93**
Russell 3000				*1.0*	*6.3*	*11.2*	*21.1*	*11.1*	*15.5*	*8.7*	*9.7*	*Dec-93*
Over/Under				0.1	0.3	0.3	0.3	0.2	0.3	-0.2	-0.3	
Western U.S. Index Plus	197,789,623	3.7		1.2	6.9	12.8	22.7	12.2	16.5	7.4	5.9	May-07
S&P 500				*1.1*	*6.6*	*11.4*	*21.8*	*11.4*	*15.8*	*8.5*	*7.7*	*May-07*
Over/Under				0.1	0.3	1.4	0.9	0.8	0.7	-1.1	-1.8	
Blackrock Russell 1000 Index	1,501,688,720	27.7		1.1	6.6	11.4	--	--	--	--	13.6	May-17
Russell 1000				*1.1*	*6.6*	*11.4*	*21.7*	*11.2*	*15.7*	*8.6*	*13.6*	*May-17*
Over/Under				0.0	0.0	0.0					0.0	
Blackrock Russell 2500 Index	61,305,451	1.1		0.3	5.2	10.3	--	--	--	--	11.7	May-17
Russell 2500				*0.3*	*5.2*	*10.2*	*16.8*	*10.1*	*14.3*	*9.2*	*11.7*	*May-17*
Over/Under				0.0	0.0	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.

Ventura County Employees' Retirement Association

TOTAL FUND PERFORMANCE DETAIL NET OF FEES

	Market Value ($)	% of Portfolio	Policy %	1 Mo (%)	3 Mo (%)	Fiscal YTD (%)	1 Yr (%)	3 Yrs (%)	5 Yrs (%)	10 Yrs (%)	Return (%)	Since
Total Non-US Equity	**892,509,805**	**16.5**	**15.0**	**2.2**	**5.0**	**11.6**	**26.5**	**8.7**	**7.5**	**2.5**	**6.8**	**Mar-94**
MSCI ACWI ex USA				*2.2*	*5.0*	*11.5*	*27.2*	*7.8*	*6.8*	*1.8*	*5.6*	*Mar-94*
Over/Under				0.0	0.0	0.1	-0.7	0.9	0.7	0.7	1.2	
MSCI EAFE				*1.6*	*4.2*	*9.9*	*25.0*	*7.8*	*7.9*	*1.9*	*5.2*	*Mar-94*
MSCI ACWI ex USA Local Currency				*1.5*	*4.2*	*8.8*	*18.2*	*8.8*	*10.4*	*3.5*	*--*	*Mar-94*
MSCI EAFE Local Currency				*1.2*	*3.7*	*7.1*	*15.2*	*8.5*	*11.4*	*3.3*	*5.1*	*Mar-94*
BlackRock ACWI ex-U.S. Index	437,710,700	8.1		2.4	5.2	11.9	28.1	8.6	7.4	2.4	3.3	Mar-07
MSCI ACWI ex USA				*2.2*	*5.0*	*11.5*	*27.2*	*7.8*	*6.8*	*1.8*	*2.8*	*Mar-07*
Over/Under				0.2	0.2	0.4	0.9	0.8	0.6	0.6	0.5	
MSCI ACWI ex USA Local Currency				*1.5*	*4.2*	*8.8*	*18.2*	*8.8*	*10.4*	*3.5*	*3.7*	*Mar-07*
Sprucegrove	236,456,815	4.4		2.8	5.8	14.7	27.5	9.0	8.0	3.7	8.2	Mar-02
MSCI ACWI ex USA				*2.2*	*5.0*	*11.5*	*27.2*	*7.8*	*6.8*	*1.8*	*7.1*	*Mar-02*
Over/Under				0.6	0.8	3.2	0.3	1.2	1.2	1.9	1.1	
MSCI EAFE				*1.6*	*4.2*	*9.9*	*25.0*	*7.8*	*7.9*	*1.9*	*6.5*	*Mar-02*
MSCI ACWI ex USA Local Currency				*1.5*	*4.2*	*8.8*	*18.2*	*8.8*	*10.4*	*3.5*	*5.7*	*Mar-02*
MSCI EAFE Local Currency				*1.2*	*3.7*	*7.1*	*15.2*	*8.5*	*11.4*	*3.3*	*4.9*	*Mar-02*
Hexavest	94,281,380	1.7		0.8	2.5	5.7	17.4	6.3	6.7	--	5.1	Dec-10
MSCI EAFE				*1.6*	*4.2*	*9.9*	*25.0*	*7.8*	*7.9*	*1.9*	*6.0*	*Dec-10*
Over/Under				-0.8	-1.7	-4.2	-7.6	-1.5	-1.2		-0.9	
MSCI EAFE Local Currency				*1.2*	*3.7*	*7.1*	*15.2*	*8.5*	*11.4*	*3.3*	*8.5*	*Dec-10*
Walter Scott	124,060,910	2.3		1.5	4.9	9.9	26.6	9.9	7.4	--	6.6	Dec-10
MSCI ACWI ex USA				*2.2*	*5.0*	*11.5*	*27.2*	*7.8*	*6.8*	*1.8*	*4.9*	*Dec-10*
Over/Under				-0.7	-0.1	-1.6	-0.6	2.1	0.6		1.7	
MSCI ACWI ex USA Local Currency				*1.5*	*4.2*	*8.8*	*18.2*	*8.8*	*10.4*	*3.5*	*7.7*	*Dec-10*
MSCI EAFE				*1.6*	*4.2*	*9.9*	*25.0*	*7.8*	*7.9*	*1.9*	*6.0*	*Dec-10*
Total Global Equity	**599,349,407**	**11.1**	**10.0**	**1.6**	**5.8**	**11.4**	**24.5**	**9.3**	**10.1**	**3.9**	**6.4**	**May-05**
MSCI ACWI				*1.6*	*5.7*	*11.2*	*24.0*	*9.3*	*10.8*	*4.7*	*7.3*	*May-05*
Over/Under				0.0	0.1	0.2	0.5	0.0	-0.7	-0.8	-0.9	
BlackRock MSCI ACWI Equity Index	599,349,407	11.1		1.6	5.8	11.4	24.5	9.8	11.2	--	12.0	Aug-12
MSCI ACWI				*1.6*	*5.7*	*11.2*	*24.0*	*9.3*	*10.8*	*4.7*	*11.6*	*Aug-12*
Over/Under				0.0	0.1	0.2	0.5	0.5	0.4		0.4	

Ventura County Employees' Retirement Association

TOTAL FUND PERFORMANCE DETAIL NET OF FEES

	Market Value ($)	% of Portfolio	Policy %	1 Mo (%)	3 Mo (%)	Fiscal YTD (%)	1 Yr (%)	3 Yrs (%)	5 Yrs (%)	10 Yrs (%)	Return (%)	Since
Total Private Equity	**239,978,359**	**4.4**	**10.0**	**2.8**	**3.1**	**8.2**	**16.9**	**13.0**	**15.1**	**--**	**14.3**	**Jan-12**
DJ U.S. Total Stock Market Index + 3%				1.3	7.1	12.8	24.7	14.4	18.9	--	19.1	*Jan-12*
Over/Under				1.5	-4.0	-4.6	-7.8	-1.4	-3.8		-4.8	
Adams Street Global Fund Series	133,737,393	2.5		4.4	4.4	7.6	13.4	10.2	13.1	--	12.7	Jan-12
DJ U.S. Total Stock Market Index + 3%				1.3	7.1	12.8	24.7	14.4	18.9	--	19.1	*Jan-12*
Over/Under				3.1	-2.7	-5.2	-11.3	-4.2	-5.8		-6.4	
Harbourvest	66,119,273	1.2		0.0	0.9	9.7	23.2	19.1	--	--	19.3	Aug-13
DJ U.S. Total Stock Market Index + 3%				1.3	7.1	12.8	24.7	14.4	18.9	--	16.3	*Aug-13*
Over/Under				-1.3	-6.2	-3.1	-1.5	4.7			3.0	
Pantheon Global Secondary Funds	31,268,033	0.6		2.6	2.6	9.1	24.1	15.1	15.4	--	12.8	Jan-12
DJ U.S. Total Stock Market Index + 3%				1.3	7.1	12.8	24.7	14.4	18.9	--	19.1	*Jan-12*
Over/Under				1.3	-4.5	-3.7	-0.6	0.7	-3.5		-6.3	
Drive Capital Fund	2,573,974	0.0		0.0	-2.9	-7.2	-33.7	--	--	--	-43.3	Sep-16
DJ U.S. Total Stock Market Index + 3%				1.3	7.1	12.8	24.7	14.4	18.9	--	22.7	*Sep-16*
Over/Under				-1.3	-10.0	-20.0	-58.4				-66.0	
Abbott Secondary Opportunities	3,279,685	0.1										
CVI Credit Value Fund	1,500,000	0.0										
Abbott Capital Cash	1,500,000	0.0										

Please Note:
Private Equity performance is shown on a time-weighted return basis. Values are cash adjusted with current month cash flows.
Abbott Secondary Opportunities, and CVI Value Fund funded 12/2017.

Ventura County Employees' Retirement Association

PRIVATE EQUITY LIMITED PARTNERSHIP PERFORMANCE

												Since Inception		
Fund Name	Vintage Year	Initial Investment Date	Commitment	Capital Called to Date[1]	Outstanding Commitment[1]	Call Ratio	Add'l Fees[2]	Distributions to Date	Valuation	Total Value	Net Benefit	IRR	Distributions to Paid In Multiple (DPI)	Total Value to Paid In Multiple (TVPI)
Abbott Secondary Opportunities, LP.	2017	12/21/2017	$25,000,000	$4,779,685	$20,583,031	19%	--	$1,500,000	$2,875,000	$4,375,000	-$404,685	-100%	0.31x	0.92x
Adams Street 2010 U.S. Fund	2010	5/21/2010	$42,500,000	$37,442,500	$5,057,500	88%	$15,213	$20,305,453	$35,853,396	$56,158,849	$18,701,136	13.2%	0.54x	1.50x
Adams Street 2010 Non-U.S. Dev. Mkts Fund	2010	5/21/2010	$25,500,000	$21,254,249	$4,245,751	83%	$1,589	$11,784,023	$17,528,905	$29,312,928	$8,057,090	10.6%	0.55x	1.38x
Adams Street 2010 Non-U.S. Emg Mkts Fund	2010	1/3/2011	$8,500,000	$7,378,000	$1,122,000	87%	$0	$1,507,798	$8,818,035	$10,325,833	$2,947,833	10.2%	0.2x	1.4x
Adams Street 2010 Direct Fund	2010	5/21/2010	$8,500,000	$8,046,100	$453,900	95%	$6,697	$7,693,519	$5,423,150	$13,116,669	$5,063,872	12.4%	0.96x	1.63x
Adams Street 2013 Global Fund	2013	6/27/2013	$75,000,000	$49,950,000	$25,050,000	67%	$10,728	$4,679,630	$55,265,820	$59,945,450	$9,984,722	8.1%	0.09x	1.2x
Adams Street 2016 Global Fund	2016	12/22/2016	$60,000,000	$9,960,000	$50,040,000	17%	$0	$0	$10,878,847	$10,878,847	$918,847	22.5%	0x	1.09x
Clearlake Capital Partners	2017	12/22/2017	$9,950,000	--	$9,950,000	0%	--	--	--	--	--	--	--	--
CVI Credit Value Fund IV	2017	12/31/2017	$30,000,000	$1,500,000	$28,500,000	5%	--	--	$1,500,000	$1,500,000	--	--	0x	1x
Drive Capital Fund II	2016	9/1/2016	$15,000,000	$3,018,985	$11,984,305	20%	$3,210	$0	$2,573,973	$2,573,973	-$448,222	-23.7%	0x	0.85x
GTCR Fund XII	2017	9/29/2017	$30,000,000	--	$30,000,000	0%	--	--	--	--	--	--	--	--
Insight Venture Partners X	2017	10/13/2017	$25,000,000	--	$25,000,000	0%	--	--	--	--	--	--	--	--
HarbourVest - Dover Street VIII	2013	5/30/2013	$67,500,000	$59,147,454	$8,437,500	88%	$84,954	$46,566,930	$40,585,660	$87,152,590	$27,920,182	21.9%	0.79x	1.47x
HarbourVest - Dover Street IX	2016	12/16/2016	$60,000,000	$12,600,000	$47,400,000	21%	$0	$3,388,361	$12,615,715	$16,004,076	$3,404,076	65.0%	0.27x	1.27x
HarbourVest - PRTNS CO INVEST IV L.P.	2017	6/2/2017	$30,000,000	$14,521,740	$15,675,000	48%	$0	$0	$16,043,068	$16,043,068	$1,521,328	25.0%	0x	1.1x
Pantheon Global Secondary Fund IV	2010	8/20/2010	$15,000,000	$9,960,000	$5,040,000	66%	$0	$11,535,001	$3,862,210	$15,397,211	$5,437,211	14.1%	1.16x	1.55x
Pantheon Global Secondary Fund V	2015	2/26/2015	$50,000,000	$24,941,509	$25,058,491	50%	($162,514)	$4,775,205	$27,393,227	$32,168,433	$7,389,438	21.6%	0.19x	1.29x
Total VCERA Private Equity Program	**--**	***5/21/2010***	***$577,450,000***	***$264,500,222***	***$313,597,478***	***46%***	***-$40,123***	***$113,735,920***	***$241,217,006***	***$354,952,927***	***$90,492,828***	***14.2%***	***0.43x***	***1.34x***

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 9/30/2017 NAVs cash-adjusted for cash flows through 12/31/2017.

Ventura County Employees' Retirement Association

TOTAL FUND PERFORMANCE DETAIL NET OF FEES

	Market Value ($)	% of Portfolio	Policy %	1 Mo (%)	3 Mo (%)	Fiscal YTD (%)	1 Yr (%)	3 Yrs (%)	5 Yrs (%)	10 Yrs (%)	Return (%)	Since
Total US Fixed Income	**959,995,760**	**17.8**	**20.0**	**0.4**	**0.4**	**1.4**	**4.4**	**3.2**	**2.5**	**5.4**	**5.9**	**Feb-94**
BBgBarc US Aggregate TR				*0.5*	*0.4*	*1.2*	*3.5*	*2.2*	*2.1*	*4.0*	*5.4*	*Feb-94*
Over/Under				-0.1	0.0	0.2	0.9	1.0	0.4	1.4	0.5	
BlackRock U.S. Debt Fund	223,128,516	4.1		0.5	0.4	1.3	3.6	2.3	2.2	4.1	5.2	Nov-95
BBgBarc US Aggregate TR				*0.5*	*0.4*	*1.2*	*3.5*	*2.2*	*2.1*	*4.0*	*5.2*	*Nov-95*
Over/Under				0.0	0.0	0.1	0.1	0.1	0.1	0.1	0.0	
Western	298,407,973	5.5		0.6	0.7	1.9	6.0	3.6	3.4	5.3	6.2	Dec-96
BBgBarc US Aggregate TR				*0.5*	*0.4*	*1.2*	*3.5*	*2.2*	*2.1*	*4.0*	*5.2*	*Dec-96*
Over/Under				0.1	0.3	0.7	2.5	1.4	1.3	1.3	1.0	
Reams	309,158,438	5.7		0.2	0.0	0.6	2.5	2.9	1.5	5.3	5.4	Sep-01
Reams Custom Index				*0.1*	*0.4*	*0.7*	*1.3*	*0.8*	*0.4*	*3.2*	*3.9*	*Sep-01*
Over/Under				0.1	-0.4	-0.1	1.2	2.1	1.1	2.1	1.5	
BBgBarc US Aggregate TR				*0.5*	*0.4*	*1.2*	*3.5*	*2.2*	*2.1*	*4.0*	*4.4*	*Sep-01*
3-Month LIBOR + 3%				*0.4*	*1.1*	*2.2*	*4.4*	*3.8*	*3.6*	*3.8*	*4.8*	*Sep-01*
Loomis Strategic Alpha	46,094,642	0.9		0.1	0.6	2.1	3.3	2.8	--	--	2.7	Jul-13
BBgBarc US Aggregate TR				*0.5*	*0.4*	*1.2*	*3.5*	*2.2*	*2.1*	*4.0*	*2.9*	*Jul-13*
Over/Under				-0.4	0.2	0.9	-0.2	0.6			-0.2	
3-Month LIBOR + 3%				*0.4*	*1.1*	*2.2*	*4.4*	*3.8*	*3.6*	*3.8*	*3.6*	*Jul-13*
Loomis Sayles Multi Strategy	83,206,191	1.5		0.4	0.8	2.7	8.4	4.6	4.4	6.6	6.6	Jul-05
Loomis Custom Index				*0.4*	*0.4*	*1.6*	*4.5*	*3.4*	*3.1*	*5.2*	*5.2*	*Jul-05*
Over/Under				0.0	0.4	1.1	3.9	1.2	1.3	1.4	1.4	
BBgBarc US Govt/Credit TR				*0.5*	*0.5*	*1.3*	*4.0*	*2.4*	*2.1*	*4.1*	*4.2*	*Jul-05*

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.

Ventura County Employees' Retirement Association

TOTAL FUND PERFORMANCE DETAIL NET OF FEES

	Market Value ($)	% of Portfolio	Policy %	1 Mo (%)	3 Mo (%)	Fiscal YTD (%)	1 Yr (%)	3 Yrs (%)	5 Yrs (%)	10 Yrs (%)	Return (%)	Since
Total Real Estate	**397,098,124**	**7.3**	**7.0**	**0.0**	**0.0**	**1.6**	**3.8**	**7.7**	**9.1**	**2.5**	**7.8**	**Mar-94**
NCREIF ODCE Net				1.9	1.9	3.5	6.7	9.4	10.5	4.1	8.1	*Mar-94*
Over/Under				-1.9	-1.9	-1.9	-2.9	-1.7	-1.4	-1.6	-0.3	
Prudential Real Estate	141,977,647	2.6		0.0	0.0	2.1	5.1	9.2	10.8	3.5	6.1	Jun-04
NCREIF ODCE Net				1.9	1.9	3.5	6.7	9.4	10.5	4.1	7.1	*Jun-04*
Over/Under				-1.9	-1.9	-1.4	-1.6	-0.2	0.3	-0.6	-1.0	
NCREIF ODCE				*2.1*	*2.1*	*4.0*	*7.6*	*10.4*	*11.5*	*5.0*	*8.1*	*Jun-04*
UBS Real Estate	255,116,077	4.7		0.0	0.0	1.3	3.2	7.0	8.2	4.0	7.3	Mar-03
NCREIF ODCE Net				1.9	1.9	3.5	6.7	9.4	10.5	4.1	7.3	*Mar-03*
Over/Under				-1.9	-1.9	-2.2	-3.5	-2.4	-2.3	-0.1	0.0	
NCREIF ODCE				*2.1*	*2.1*	*4.0*	*7.6*	*10.4*	*11.5*	*5.0*	*8.3*	*Mar-03*
RREEF	4,399	0.0		0.0	0.0	-0.8	-4.8	-5.1	4.4	-6.3	-6.1	Sep-07
NCREIF ODCE Net				1.9	1.9	3.5	6.7	9.4	10.5	4.1	4.2	*Sep-07*
Over/Under				-1.9	-1.9	-4.3	-11.5	-14.5	-6.1	-10.4	-10.3	
NCREIF ODCE				*2.1*	*2.1*	*4.0*	*7.6*	*10.4*	*11.5*	*5.0*	*5.1*	*Sep-07*
Total Liquid Alternatives	**433,538,967**	**8.0**	**10.0**	**2.8**	**2.8**	**4.7**	**7.2**	**1.1**	**--**	**--**	**5.1**	**Apr-13**
CPI + 4% (Unadjusted)				0.3	0.9	2.7	6.3	5.7	9.8	--	6.2	*Apr-13*
Over/Under				2.5	1.9	2.0	0.9	-4.6			-1.1	
Bridgewater All Weather Fund	314,550,694	5.8		1.8	4.1	7.8	11.9	4.7	--	--	5.8	Aug-13
CPI + 5% (Unadjusted)				0.4	1.2	3.2	7.3	6.7	--	--	6.3	*Aug-13*
Over/Under				1.4	2.9	4.6	4.6	-2.0			-0.5	
Tortoise Energy Infrastructure	118,988,274	2.2		5.8	-0.7	-2.7	-3.5	-6.6	--	--	1.3	Apr-13
Wells Fargo MLP Index				4.5	-0.7	-2.7	-5.7	-9.1	0.9	--	-3.0	*Apr-13*
Over/Under				1.3	0.0	0.0	2.2	2.5			4.3	
Overlay	**129,226,462**	**2.4**	**0.0**									
Parametric	129,226,462	2.4										

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.

Real Estate Valuation is as of 09/30/2017.

Ventura County Employees' Retirement Association

TOTAL FUND

Cash Flow Summary

	Month Ending December 31, 2017						
	Beginning Market Value	Contributions	Withdrawals	Net Cash Flow	Fees	Net Investment Change	Ending Market Value
Abbott Capital Cash	$0	$1,500,000	$0	$1,500,000	$0	$0	$1,500,000
Abbott Secondary Opportunities	$0	$4,779,685	-$1,500,000	$3,279,685	$0	$0	$3,279,685
Adams Street Global Fund Series	$129,443,631	$1,763,750	-$3,192,701	-$1,428,951	$0	$5,722,713	$133,737,393
BlackRock ACWI ex-U.S. Index	$427,555,253	$0	$0	$0	-$38,143	$10,155,447	$437,710,700
BlackRock MSCI ACWI Equity Index	$589,667,106	$0	$0	$0	-$21,645	$9,682,301	$599,349,407
Blackrock Russell 1000 Index	$1,485,125,883	$0	$0	$0	-$12,931	$16,562,836	$1,501,688,720
Blackrock Russell 2500 Index	$61,105,688	$0	$0	$0	-$1,022	$199,764	$61,305,451
BlackRock U.S. Debt Fund	$222,094,776	$0	$0	$0	-$10,771	$1,033,740	$223,128,516
Bridgewater All Weather Fund	$309,134,701	$0	$0	$0	-$98,865	$5,415,993	$314,550,694
CVI Credit Value Fund	$0	$1,500,000	$0	$1,500,000	$0	$0	$1,500,000
Drive Capital Fund	$2,573,974	$0	$0	$0	$0	$0	$2,573,974
Harbourvest	$66,542,915	$5,625,000	-$6,048,634	-$423,634	$0	-$8	$66,119,273
Hexavest	$93,451,602	$0	$0	$0	-$35,594	$829,778	$94,281,380
Loomis Sayles Multi Strategy	$82,881,800	$0	$0	$0	-$26,635	$324,391	$83,206,191
Loomis Strategic Alpha	$46,019,077	$0	$0	$0	-$15,365	$75,565	$46,094,642
Pantheon Global Secondary Funds	$28,445,707	$2,650,000	-$612,603	$2,037,397	$0	$784,929	$31,268,033
Parametric	$151,959,415	$7,779,281	-$31,075,330	-$23,296,049	-$19,117	$563,095	$129,226,462
Prudential Real Estate	$141,977,647	$0	$0	$0	$0	$0	$141,977,647
Reams	$308,557,483	$0	$0	$0	-$44,895	$600,955	$309,158,438
RREEF	$172,848	$0	-$168,448	-$168,448	$0	$0	$4,399
Sprucegrove	$229,915,919	$0	$0	$0	-$68,845	$6,540,896	$236,456,815
Tortoise Energy Infrastructure	$112,448,759	$0	$0	$0	-$61,973	$6,539,515	$118,988,274
UBS Real Estate	$255,116,077	$0	$0	$0	$0	$0	$255,116,077
Walter Scott	$122,179,200	$0	$0	$0	-$83,905	$1,881,711	$124,060,910
Western	$296,523,380	$0	$0	$0	-$49,801	$1,884,593	$298,407,973
Western U.S. Index Plus	$195,352,714	$0	$0	$0	-$37,224	$2,436,910	$197,789,623
Total	**$5,358,245,554**	**$25,597,716**	**-$42,597,716**	**-$17,000,000**	**-$626,730**	**$71,235,123**	**$5,412,480,678**

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.
- This report is provided as a management aid for the client's internal use only. Information contained in this report does not constitute a recommendation by NEPC.
- 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.

VCERA
VENTURA COUNTY EMPLOYEES' RETIREMENT ASSOCIATION

January 29, 2018

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

SUBJECT: RECOMMENDATION THAT THE BOARD AUTHORIZE VCERA'S CIO DAN GALLAGHER TO ACCEPT ON BEHALF OF VCERA THE ADVISORY BOARD SEAT OFFERED FOR ABBOTT'S SECONDARY OPPORTUNITIES FUND (ASO)

Dear Board Members:

Please authorize me to accept an invitation from Abbott to join Abbott's Secondary Opportunities Fund's Limited Partner Advisory Board as VCERA's representative. Below is a summary description of the composition, role, and governance procedures of the Limited Partner Advisory Board (Advisory Board) for Abbott's Secondary Opportunities Fund.

Discussion
Abbott intends to establish and maintain an advisory board consisting of five (5) investors in the Abbott Secondary Funds. The role of a limited partner advisory board is to consult with a general partner (GP) with respect to governance issues such as material conflicts of interest, valuation methodologies, and approval of proposed investments that exceed certain concentration limits.

The appointment of any member to the Advisory Board shall be subject to and conditioned upon confidentiality and use restrictions on Partnership Information provided to such member. Partnership Information provided to such member of the Advisory Board shall be maintained by such member in confidence and shall be subject to the same disclosure and use restrictions set forth in the Limited Partnership Agreement (LPA) as though such Partnership Information had been provided to a Limited Partner.

The Advisory Board may adopt rules and procedures relating to the conduct of its affairs, provided they are not inconsistent with the organizational documents of the relevant Fund. Neither the Advisory Board nor any member thereof (acting in such capacity) shall have the power to bind the Partnership or any authority to act for the Partnership or on its behalf.

The advantages to VCERA of advisory board membership are gathering a more detailed knowledge of the Fund investments than would otherwise be possible, and networking with other limited partners for knowledge of additional opportunities and risks in the asset class and in the marketplace. Advisory board (in-person) meetings are frequently held the day before or the day after the Fund's annual meeting. Supplemental advisory board meetingare mostly conducted via conference calls. Attendance at the annual meeting offers attendees an opportunity to meet with members of the GP's team, and the time periods immediately before or after the annual meeting are frequently used to conduct manager due diligence since key GP personnel are available in one place at one time.

The disadvantages of participation on an advisory board are additional staff time commitments, and potential legal exposure for recommendations or decisions of the advisory board. Staff time required typically is attendance at the actual advisory board meeting, plus one conference call per year.

Members of advisory boards as well as the Limited Partner who employs them are usually indemnified and held harmless, solely out of the assets of the Fund, from all loss or liability which they may incur by reason of their involvement in advising/consulting with respect to the activities of the Fund, unless such loss/liability results from fraud, gross negligence, bad faith, etc. Identified risks and associated risk mitigation include the following:

1. Breach of fiduciary duty to other LPs if the advisory board should act in best interest of VCERA, disadvantaging another limited partner.
   This risk is mitigated by the Limited Partnership Agreement (LPA) provision that no LP has fiduciary duty to other LPs. The Limited Partnership Agreement, Section 3.5(d) states, "To the maximum extent permitted by law, no member of the Advisory Board (and no Person that such member represents) shall, in such capacity, owe any duties, including fiduciary duties, to the Partnership or the other Partners, other than to act in good faith in performing activities as a member of the Advisory Board; provided, however, that (i) any act or omission by such member in connection with the performance of its duties as a member of the Advisory Board that such member reasonably believed to be in the best interests of the Limited Partner it represents on the Advisory Board shall not constitute bad faith hereunder and (ii) the foregoing is not intended as a waiver of any duties owed by a member of the Advisory Board to a Limited Partner such member represents."

2. An advisory board member or its appointing limited partner could be sued as result of a bad decision.
   This risk is mitigated by LPA Section 5.2.2(k) which states: "Expenses payable by the Partnership include, without limitation, all costs and expenses (including attorneys' fees) relating to litigation and threatened litigation involving the Partnership, including indemnification expenses (to the extent permitted by the governing documents of the Partnership) and reasonable premiums for liability insurance to protect the Partnership, the General Partner, their respective partners, any service providers, the members of the Advisory Board and any of their respective partners, members, managers, stockholders, officers, directors, employees, consultants, agents or Affiliates in connection with the activities of the Partnership."

3. Headline risk - advisory board and annual meetings may look like boondoggles.
   There is no way to fully control for this perception risk for attendance at any meeting or conference by a public fund. However, this risk is mitigated by Board's fiduciary responsibility for monitoring the investment risk for a $25,000,000 long term investment.

4. Headline risk - the inappropriate influence of investment managers from payment of advisory board attendance costs.
   Advisory board members are typically reimbursed for reasonable travel expenses in connection with attendance at the advisory board meeting. Reimbursement for each attendee's travel expense comes from assets of the Fund. However, expenses in connection with advisory board attendance are paid collectively by every limited partner as part of their management fees, and thus have already been budgeted and paid by the limited partners. Reimbursement of costs for attendance at advisory board meetings would be made by the fund directly to VCERA.

Advisory board seats are highly coveted in the industry by limited partners for their unique information advantage. These seats are generally offered to only a select, small subset of investors, and are most commonly offered to the largest investors in the Fund. Given the expected 'bite-size' of VCERA's future investments, I don't expect many advisory board seat invitations going forward.

I believe that acceptance of any advisory board seat, including the seat currently offered by Abbott for its Secondary Opportunities Fund (ASO) is in the best interest of VCERA, and therefore recommend the following:

RECOMMEND: THAT THE BOARD AUTHORIZE VCERA'S CIO DAN GALLAGHER TO ACCEPT ON BEHALF OF VCERA THE ADVISORY BOARD SEAT OFFERED FOR ABBOTT'S SECONDARY OPPORTUNITIES FUND, AND AUTHORIZE ATTENDANCE AT FUTURE ADVISORY BOARD MEETINGS.

Sincerely,

Daniel P. Gallagher

Dan Gallagher
Chief Investment Officer

VCERA
VENTURA COUNTY EMPLOYEES' RETIREMENT ASSOCIATION

January 29, 2018

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

SUBJECT: RECOMMENDATION TO ADOPT AMENDMENT TO PENSIONABLE COMPENSATION RESOLUTION ADDENDUM TO LIMIT INCLUSION OF SCHEDULED OVERTIME FOR ELIGIBLE SAFETY MEMBERS ONLY, IN COMPLIANCE WITH PEPRA

Dear Board Members,

Background

When the Public Employees' Pension Reform Act (PEPRA) became effective in January 2013, the County of Ventura made pensionability determinations for each of their hundreds of pay and compensation codes under the new law, remitting retirement contributions on the codes deemed pensionable and not remitting contributions on those not deemed pensionable.

Subsequently, VCERA staff conducted a comprehensive review of the same codes, with the assistance and review of outside Counsel. On October 19, 2015, the Board of Retirement took action on the pensionability of the individual codes for PEPRA members, and as a result, two addenda were added to the Board's Resolution Regarding Pensionable Compensation Determinations ("Resolution") for 1) codes to be included effective January 1, 2013 (Addendum 1); and 2) codes to be included effective January 3, 2016 (Addendum 2).

Staff and Counsel now are recommending an amendment to the Addendum 1 to the Resolution for the specific code(s) used for scheduled overtime. Though the County has been including scheduled overtime in pensionable compensation since PEPRA's effective date for all PEPRA members, such inclusion is ***only*** permissible under PEPRA for qualifying Safety members, as defined in Section 207(k) of Title 29 of the United States Code, e.g., members engaged in active law enforcement or active fire suppression.

> Govt. Code Section 7522.34(c)(8) (PEPRA)
> *(c) Notwithstanding any other law, "pensionable compensation" of a new member does not include the following:*
> *… (8) Compensation for overtime work, other than as defined in Section 207(k) of Title 29 of the United States Code.*

Section 207(k) of Title 29 of the United States Code provides a formula for overtime pay requirements based on work periods for certain safety employees engaged in fire protection or law enforcement activities. (See also 29 Code Fed. Regs., § 553.230.) Pursuant to the Code of Federal Regulations, Section 207(k) of Title 29 of the United States Code does not cover civilian employees of a fire district who engage in support activities such as those performed by dispatchers. (See 29 Code Fed. Regs., § 553.210.) Section 207(k) similarly does not cover civilian employees of a law enforcement agency who do not have the power to arrest (See 29 Code Fed. Regs., § 553.211.) With this narrow exception for qualifying Safety members, no overtime is pensionable under PEPRA Therefore, the County's initial assessment of scheduled overtime codes as pensionable for all PEPRA members was incorrect. Then, VCERA staff's subsequent review of the code in 2015 missed the General/Safety member pensionability distinction when it recommended "continued inclusion" to the Board. Had this distinction been made, staff would have recommended inclusion of scheduled overtime for ONLY qualifying Safety members and not the entire PEPRA member population.

Staff has reviewed the overtime codes currently listed on Addendum 1 (effective January 1, 2013) of the Board's Resolution, as shown in the table below. Five (5) codes shown are used exclusively for Safety members, so no change is recommended. Two (2) of the codes (O4S and SCO) are used exclusively for non-Safety members, so staff recommends removal of those codes. Code RT4 is used for both Safety and non-Safety members; for this reason, staff recommends the words "ELIGIBLE SAFETY MEMBERS ONLY" be added to communicate that RT4 must either be used for Safety members only, or a new code be designated in its place for Safety members exclusively. (If new code is designated, staff will update the Addendum accordingly.)

EARNINGS CODE	DESCRIPTION	ANALYSIS
N12	4850 27-Day FLSA Premium >7/02	ELIGIBLE SAFETY MEMBERS ONLY
OTH	27-Day FLSA Overtime Premium	ELIGIBLE SAFETY MEMBERS ONLY
OTR	VCPFA Scheduled OT Retirement	ELIGIBLE SAFETY MEMBERS ONLY
N4H	4850 Non-Tax 4 hr OT	ELIGIBLE SAFETY MEMBERS ONLY
OT4	Scheduled Overtime Retirement	ELIGIBLE SAFETY MEMBERS ONLY
O4S	Scheduled OT Retirement SST	REMOVE – CODE IS USED FOR NON-SAFETY MEMBERS
SCO	Scheduled Overtime	REMOVE – CODE IS USED FOR NON-SAFETY MEMBERS
RT4	Retro Scheduled OT	ADD LANGUAGE "ELIGIBLE SAFETY MEMBERS ONLY"

To align the Resolution addenda with the US Code, CERL and PEPRA, staff recommends amending Addendum 1 to specify inclusion of scheduled overtime in pensionable compensation only for qualifying Safety members as defined in Section 207(k) of the U.S. Code.

The proposed changes to Addendum 1 are provided in redline format. Note that an additional redlined item is a cleanup resulting from the Board's action on December 13, 2017 regarding Market-Based Premium Pay (MBPP).

In addition to the Addendum redline, provided is a proposed amendment to page 5 of the Resolution to clarify the frequency the Retirement Administrator brings new codes to the Board and to reference and incorporate the Resolution's addenda.

<u>RECOMMENDED ACTION</u>:

1) **ADOPT PROPOSED AMENDMENT TO ADDENDUM 1 OF THE BOARD OF RETIREMENT'S RESOLUTION ON PENSIONABLE COMPENSATION CONSIDERATIONS TO COMPLY WITH CERL, PEPRA AND THE U.S. CODE.**
2) **ADOPT PROPOSED AMENDMENT TO THE BOARD'S PENSIONABLE COMPENSATION RESOLUTION.**

I would be pleased to respond to any questions on this matter at our January 8, 2018 meeting.

Sincerely,

Linda Webb
Retirement Administrator

Addendaum 1 ~~to Item Nos. 2(a) and (b) of~~ to the Pensionable Compensation Resolution

EFFECTIVE: JANUARY 1, 2013

EARNINGS CODE	EARNINGS CODE DESCRIPTION
40H	40 Hour Work Week
48A	PP 4850 Adjustment
48H	4850 Time Safety Hourly
48S	4850 Time Safety Salary
ADM	Administrative Leave Salary
BHH	Bank Holiday Hourly
BHS	Bank Holiday Salary
BSH	Bereavement Hourly FLSA
BSS	Bereavement Salary FLSA
BVH	Bereavement Hourly
BVS	Bereavement Salary
CTH	Comp Taken Hourly FLSA
CTK	Comp Time Taken NonFLSA
CTS	Comp Time Taken Salary
EDS	Educational Leave Salary
EDU	Educational Leave Hourly
FHH	Floating Holiday Non FLSA
FLH	Floating Holiday Hourly
FLS	Floating Holiday Salary
FSH	Sick - Family Sick Hourly
FSS	Sick - Family Sick Salary
HOH	Holiday Taken Hourly
HOL	Holiday - Hourly Non FLSA
HOS	Holiday Taken Salary
HW2	Holiday Worked Salary Sheriff
HWS	Holiday Worked 1.0x
NAHRLY	Hourly Compensation
IPH	Industrial Leave Hourly
IPS	Industrial Leave Salary
JDH	Jury Duty Hourly
JDS	Jury Duty Salary
JUR	Jury Duty Hourly Non FLSA
LPH	Leave with Pay Hourly
LPS	Leave with Pay Salary
MLH	Military Leave Paid Hourly
MLN	Military Leave Hourly Non FLSA
MLS	Military Leave Paid Salary

Addenda to Item Nos. 2(a) and (b) of the Pensionable Compensation Resolution
EFFECTIVE: January 1, 2013

EARNINGS CODE	EARNINGS CODE DESCRIPTION
NHS	4850 Non Tax Hol Taken Salary
NHT	4850 Non Tax Holiday Taken
PHS	PDP Holiday Worked 1.0
PSH	Sick - Personal Sick Hourly
PSS	Sick - Personal Sick Salary
R48	Retro 4850 Reg & Hol Pay
RAJ	PP Regular Earnings Adjustment
REG	Regular
RRP	Retro Regular Pay
RTC	Retro Comp Time Taken
SFH	Family Sick - Hourly Non FLSA
SPH	Sick - Personal Hourly NonFLSA
USB	Union Steward Bank
VAH	Vacation Hourly NonFLSA
VAS	Vacation Salary
VSH	Vacation Hourly FLSA
VSS	Vacation Salary FLSA
FUH	Court Furlough With Pay Hourly
FUS	Court Furlough With Pay Salary
VFH	Court Voluntary Furlough Pay
VFJ	Voluntary Furlough Adjustment
VFS	Court Voluntary Furlough Pay
N12	4850 27-Day FLSA Premium >7/02
OTH	27-Day FLSA Overtime Premium
OTR	VCPFA Scheduled OT Retirement
N4H	4850 Non-Tax 4 hr OT
~~O4S~~	~~Scheduled OT Retirement SST~~
OT4	Scheduled Overtime Retirement
RT4	Retro Scheduled OT VCSCOA (ELIGIBLE SAFETY MEMBERS ONLY)
DAT	DA On-Call Flex Time Taken
MLN	Military Leave Hourly Non FLSA
~~SCO~~	~~Scheduled Overtime~~
BIWKLY	Biweekly Compensation
JAILCK	Jail Cook Shift Leader Pay
ROS	Retro Overtime Safety
YRATE	Y-Rate Differential for Biweekly Employees
YRATEH	Y-Rate Differential for Hourly Employees
~~**TENTATIVE APPROVAL SUBJECT TO INCLUSION ON A PUBLICLY-AVAILABLE PAY SCHEDULE**~~	
CLS123	Clinical Laboratory Scientist I/II/III Premium Pay
HISTOL	Histologist Premium Pay
LPTAST	Licensed Physical Therapy Assistant

Page 2 of 3

Addenda to Item Nos. 2(a) and (b) of the Pensionable Compensation Resolution
EFFECTIVE: January 1, 2013

EARNINGS CODE	EARNINGS CODE DESCRIPTION
PHARM	Pharmacy Premium Pay
PRNRES	Principal Respiratory Therapist Premium Pay
PSYCH	Psychologist Premium Pay
RADSPE	Radiologic Specialist Premium Pay
RADTEC	Radiologic Technologist Premium Pay
SPEECH	Speech Pathologist Premium Pay
THRPST	Therapist Premium Pay

RESOLUTION OF THE BOARD OF RETIREMENT OF VENTURA COUNTY EMPLOYEES' RETIREMENT ASSOCIATION (VCERA) REGARDING PENSIONABLE COMPENSATION DETERMINATIONS

WHEREAS, the Ventura County Employees' Retirement Association ("VCERA") and the VCERA Board of Retirement ("Board") are governed by the County Employees Retirement Law of 1937 (Gov. Code sections 31450, et seq.) ("CERL") and the Public Employees' Pension Reform Act of 2013 (Gov. Code sections 7522., et seq.), enacted by Assembly Bill 340 (regular session 2011-2012), effective January 1, 2013 ("PEPRA").

WHEREAS, this Resolution implements PEPRA's provisions regarding the determination of "pensionable compensation" in Government Code section 7522.34 ("Pensionable Compensation"), which applies to VCERA members for their service rendered on or after January 1, 2013 as "new members" under Government Code 7522.04(f) of PEPRA ("New Members").

WHEREAS, this Resolution identifies items of compensation that the Board presently believes are permitted, or required, to be included in, or excluded from, Pensionable Compensation for purposes of the effective administration of retirement system benefits and collection of contributions. **If, however, the Board later concludes that it has identified an item herein as either includable or excludable in a manner that is inconsistent with Board policy as determined by that later Board, or with a determination by the legislature, a court of competent jurisdiction, or other persuasive administrative legal authority such as the California Attorney General, the Board reserves the right to change its prior determination and to make appropriate adjustments both prospectively and/or retroactively, as this Resolution is not intended to, and does not, create any vested rights in members to the past, present, or future determinations set forth herein. Where this Resolution conflicts with any subsequent Board amendment to it, that subsequent Board-amended Resolution shall prevail.**

WHEREAS, Government Code section 7522.34, subdivision (a), defines Pensionable Compensation as "the normal monthly rate of pay or base pay of the member paid in cash to similarly situated members of the same group or class of employment for services rendered on a full-time basis during normal working hours, pursuant to publicly available pay schedules."

WHEREAS, the Board interprets the above-quoted subdivision (a) as permitting pay items to be included in Pensionable Compensation if they are within <u>either</u> the normal monthly rate of pay <u>or</u> the base pay of the member. Such pay items must also comply with the other requirements of subdivision (a) that they be paid:

1. In cash,
2. Not only to the member but also to similarly situated members of the same group or class of employment,
3. For services rendered on a full-time basis,
4. For services rendered during normal working hours,

5. Pursuant to publicly available pay schedules, and
6. Not paid to enhance a member's retirement benefit.

WHEREAS, Government Code section 7522.34, subdivision (c), also identifies categories of payments that are not included in Pensionable Compensation under any circumstances, which are enumerated as follows:

1. Any compensation determined by the board to have been paid to increase a member's retirement benefit under that system.
2. Compensation that had previously been provided in kind to the member by the employer or paid directly by the employer to a third party other than the retirement system for the benefit of the member and which was converted to and received by the member in the form of a cash payment.
3. Any one-time or ad hoc payments made to a member.
4. Severance or any other payment that is granted or awarded to a member in connection with or in anticipation of a separation from employment, but is received by the member while employed.
5. Payments for unused vacation, annual leave, personal leave, sick leave, or compensatory time off, however denominated, whether paid in a lump sum or otherwise, regardless of when reported or paid.
6. Payments for additional services rendered outside of normal working hours, whether paid in a lump sum or otherwise.
7. Any employer-provided allowance, reimbursement, or payment, including, but not limited to, one made for housing, vehicle, or uniforms.
8. Compensation for overtime work, other than as defined in Section 207(k) of Title 29 of the United States Code.
9. Employer contributions to deferred compensation or defined contribution plans.
10. Any bonus paid in addition to the compensation described in subdivision (a).
11. Any other form of compensation a public retirement board determines is inconsistent with the requirements of subdivision (a).
12. Any other form of compensation a public retirement board determines should not be pensionable compensation.

NOW, THEREFORE, BE IT RESOLVED that the VCERA Board of Retirement declares the following:

1. The foregoing Recitals are incorporated herein by this reference.

2. The following pay types shall be included in Pensionable Compensation under section 7522.34, subdivision (a), and retirement contributions will be taken on all such payments, as follows:

    a) Regular salary, including scheduled step increases;

    b) FLSA premium pay for law enforcement and fire protection as defined in Section 207(k) of Title 29 of the United States Code.

    c) Additional pay types will be included in Pensionable Compensation if the following criteria are met:

       Special assignment payments or differentials, and payments for possessing specified certificates, certifications or licenses will be included only if the assignment, certification or license is part of a member's regularly assigned responsibilities on a matter that is a normal or essential function of the job and is not performed or received solely during the final average compensation period, and is part of the regular assignment of other members in the same group or class. The amounts must also be (i) paid in cash to similarly situated members of the same group or class of employment; (ii) paid for services rendered on a full-time basis; (iii) paid only for services rendered during normal working hours; (iv) paid pursuant to publicly available pay schedules; and (v) affirmatively and specifically approved by the Board as consistent with the Board policy set forth in this Resolution.

3. The following pay types shall be excluded from Pensionable Compensation under the referenced numerical subdivisions of Government Code section 7522.34, subdivision (c), and retirement contributions will not be collected on those payments for New Members:

    a) Allowances (e.g., clothing, uniform, automobile, housing) (subdiv. (7)).

    b) In-kind benefits converted to cash (subdiv. (2)).

    c) All leave cash outs, regardless of when paid (e.g., annual, sick, floating holiday, personal, comp time) (subdiv. (5)).

    d) Reimbursements and allowances (including, but not limited to, automobile, housing, moving, relocation, tool, meal, boot, cell phone, or license) (subdiv. (7)).

e) Overtime, unless it is FLSA premium pay for certain safety members as defined by statute (subdiv. (8)).

f) Severance pay, regardless of when or how paid (subdiv. (4)).

g) Lump sum payment of comp time at promotion (subdiv. (5)).

h) Bonuses that are not part of 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 (subdiv. (10)).

i) Employer contributions to deferred compensation or defined contribution plans (subdiv. (9)).

j) Payments for additional services rendered outside of normal working hours (including, but not limited to, call-back, standby pay, off-duty canine care, or extra-shift work) (subdiv. (6)).

k) Payments made to enhance a retirement benefit as determined by the Board of Retirement (subdivs. (11) and (12)).

4. The "publicly available pay schedule" requirement in Government Code section 7522.34 means each employer plan sponsor of VCERA ("Employer") must publish publically the amount of the pay item that is to be included in its employees' Pensionable Compensation by meeting all of the following criteria:

a) Has been duly approved and adopted by the Employer's governing body in accordance with requirements of applicable public meetings laws;

b) Identifies the position title for every employee position used by the Employer;

c) Specifies the Pensionable Compensation amount of each identified position, which may be stated as a single amount or as multiple amounts within a range;

d) Indicates the conditions for payment of the item of Pensionable Compensation, including, but not limited to, eligibility for, and amount of each component of pay;

e) Is posted at the office of the Employer or immediately accessible and available for public review from the Employer during normal business hours or posted on the Employer's internet website;

f) Indicates an effective date and date of any revisions;

g) Is retained by the Employer and available for public inspection for not fewer than five years; and

h) Does not reference another document in lieu of disclosing the item of Pensionable Compensation other than those outlined in a "labor policy or agreement," as described and limited below:

(i) A labor policy or agreement means any of the following: a Memorandum of Agreement; a Management, Confidential Clerical and Other Unrepresented Employees Resolution, or other similar document used by the Employer to specify the Pensionable Compensation of represented and unrepresented employees, as specifically approved by the VCERA Board of Retirement.

(ii) Identifying a percentage increase in salary, in lieu of a dollar amount, in a labor policy or agreement does comply with this interpretation of a "pay schedule".

5. The Retirement Administrator, with assistance of VCERA's legal counsel, is responsible for implementing the Board's determinations and policy decisions related to Pensionable Compensation. The VCERA Retirement Administrator will analyze pay codes to determine whether they constitute Pensionable Compensation or not under this Resolution, and will bring such determinations to the VCERA Board for action. The Chair of the Board may, but is not obligated to, appoint an ad hoc committee of the Board to address or recommend responses to any Pensionable Compensation implementation challenges, as appropriate.

6. Employers are responsible for coding of pay code categories consistent with this VCERA Resolution and subsequent VCERA determinations made consistent with this Resolution, and subject to the VCERA Retirement Administrator's review. Employers are responsible for notifying VCERA's Retirement Administrator regarding the facts and circumstances of any pay items they consider may be an exception to the Resolution and policy set forth herein, for review by the VCERA Retirement Administrator. Employers are also responsible for notifying the VCERA Retirement Administrator of new pay codes for Pensionable Compensation review by VCERA no later than the time of implementation of the codes.

7. The VCERA Retirement Administrator will review Employer pay code listings for compliance with this Resolution and policy established hereby as part of staff administrative procedures. When reviewing items of compensation, VCERA will audit pay items to identify those that may have a primary purpose to enhance retirement benefits, involve the manipulation of compensation by members or Employers to enhance benefits, and receipt of ad hoc payments or any other compensation considered to be inconsistent with the pension reform legislation provisions.

8. VCERA members or Employers may appeal a determination regarding pensionability of a particular pay item by the Retirement Administrator to the Retirement Board, through a VCERA administrative appeal process, as appropriate. The administrative appeal process, if implemented, may, but is not required, to follow the hearing process provides in Government Code sections 31533 and 31534.

ADOPTED AND APPROVED by the Board of Retirement of the Ventura County Employees' Retirement Association on the 7th day of November 2014.

Tracy Towner, Chair of the Board

Addenda to Item Nos. 2(a) and (b) of the Pensionable Compensation Resolution

EFFECTIVE: JANUARY 1, 2013

EARNINGS CODE	EARNINGS CODE DESCRIPTION
40H	40 Hour Work Week
48A	PP 4850 Adjustment
48H	4850 Time Safety Hourly
48S	4850 Time Safety Salary
ADM	Administrative Leave Salary
BHH	Bank Holiday Hourly
BHS	Bank Holiday Salary
BSH	Bereavement Hourly FLSA
BSS	Bereavement Salary FLSA
BVH	Bereavement Hourly
BVS	Bereavement Salary
CTH	Comp Taken Hourly FLSA
CTK	Comp Time Taken NonFLSA
CTS	Comp Time Taken Salary
EDS	Educational Leave Salary
EDU	Educational Leave Hourly
FHH	Floating Holiday Non FLSA
FLH	Floating Holiday Hourly
FLS	Floating Holiday Salary
FSH	Sick - Family Sick Hourly
FSS	Sick - Family Sick Salary
HOH	Holiday Taken Hourly
HOL	Holiday - Hourly Non FLSA
HOS	Holiday Taken Salary
HW2	Holiday Worked Salary Sheriff
HWS	Holiday Worked 1.0x
NAHRLY	Hourly Compensation
IPH	Industrial Leave Hourly
IPS	Industrial Leave Salary
JDH	Jury Duty Hourly
JDS	Jury Duty Salary
JUR	Jury Duty Hourly Non FLSA
LPH	Leave with Pay Hourly
LPS	Leave with Pay Salary
MLH	Military Leave Paid Hourly
MLN	Military Leave Hourly Non FLSA
MLS	Military Leave Paid Salary
NHS	4850 Non Tax Hol Taken Salary
NHT	4850 Non Tax Holiday Taken

Addenda to Item Nos. 2(a) and (b) of the Pensionable Compensation Resolution
EFFECTIVE: January 1, 2013

EARNINGS CODE	EARNINGS CODE DESCRIPTION
PHS	PDP Holiday Worked 1.0
PSH	Sick - Personal Sick Hourly
PSS	Sick - Personal Sick Salary
R48	Retro 4850 Reg & Hol Pay
RAJ	PP Regular Earnings Adjustment
REG	Regular
RRP	Retro Regular Pay
RTC	Retro Comp Time Taken
SFH	Family Sick - Hourly Non FLSA
SPH	Sick - Personal Hourly NonFLSA
USB	Union Steward Bank
VAH	Vacation Hourly NonFLSA
VAS	Vacation Salary
VSH	Vacation Hourly FLSA
VSS	Vacation Salary FLSA
FUH	Court Furlough With Pay Hourly
FUS	Court Furlough With Pay Salary
VFH	Court Voluntary Furlough Pay
VFJ	Voluntary Furlough Adjustment
VFS	Court Voluntary Furlough Pay
N12	4850 27-Day FLSA Premium >7/02
OTH	27-Day FLSA Overtime Premium
OTR	VCPFA Scheduled OT Retirement
N4H	4850 Non-Tax 4 hr OT
O4S	Scheduled OT Retirement SST
OT4	Scheduled Overtime Retirement
RT4	Retro Scheduled OT VCSCOA
DAT	DA On-Call Flex Time Taken
MLN	Military Leave Hourly Non FLSA
SCO	Scheduled Overtime
BIWKLY	Biweekly Compensation
JAILCK	Jail Cook Shift Leader Pay
ROS	Retro Overtime Safety
YRATE	Y-Rate Differential for Biweekly Employees
YRATEH	Y-Rate Differential for Hourly Employees
TENTATIVE APPROVAL SUBJECT TO INCLUSION ON A PUBLICLY-AVAILABLE PAY SCHEDULE	
CLS123	Clinical Laboratory Scientist I/II/III Premium Pay
HISTOL	Histologist Premium Pay
LPTAST	Licensed Physical Therapy Assistant
PHARM	Pharmacy Premium Pay
PRNRES	Principal Respiratory Therapist Premium Pay
PSYCH	Psychologist Premium Pay
RADSPE	Radiologic Specialist Premium Pay

Addenda to Item Nos. 2(a) and (b) of the Pensionable Compensation Resolution
EFFECTIVE: January 1, 2013

EARNINGS CODE	EARNINGS CODE DESCRIPTION
RADTEC	Radiologic Technologist Premium Pay
SPEECH	Speech Pathologist Premium Pay
THRPST	Therapist Premium Pay

Addenda to Item No. 3 of the Pensionable Compensation Resolution

EFFECTIVE: JANUARY 3, 2016

EARNINGS CODE	EARNINGS CODE DESCRIPTION
L07	Longevity CNA 7 Years
L12	Longevity CNA 12 Years
L17	Longevity CNA 17 Years
42P	4/2 Sheriff Patrol Bonus
ASN	Assignment Bonus - Nurses
ASR	Sheriff Records Assignment Pay
BMB	Bomb Squad Bonus
EMD	Emergency Medical Dispatch
HAZ	Hazard Material Response Team
HMT	Helicopter Maint Certification
HPS	HIRT Premium Pay VCPFA
IAD	Inpatient Assign Differential
LDT	Lead Disaster Behavioral Health
LMH	Licensed Mental Health Assoc
MTR	Motorcycle Bonus
NS1	NOCS - IUOE 7.5%
NS4	NOCS - 10% - Addl Pay
NSM	Nurse Specialty Pay - MGMT
NSP	Nurse Specialty Pay
PAL	Paramedic Level I VCPFA Line
PFL	Paramedic Fire Engineer Line
PM4	P.M. Shift - 5% - Addl Pay
PPA	Paramedic Premium Pay Level I
PPC	Paramedic Premium Pay Level II
PPF	Paramedic Prem Fire Engineers
PPP	Paramedic Premium Pay Level P
PSD	POST- Public Safety Dispatcher
SAP	Sheriffs' Assignment Pay
SIP	Sheriffs’ Investigation Pay
SPD	Staff Pay Differential - VCPFA
SPF	Staff Pay Diff - MT Bat Chiefs
SPM	Staff Pay Differential - MT
SPO	Superv Deputy Probation Officer
ARP	Armed Premium VCPPOA PVP
ARU	Armed Unit Premium

PROPOSED CHANGE TO VCERA BOARD OF RETIREMENT'S
PENSIONABLE COMPENATION RESOLUTION
(PAGE 5, NUMBERED ITEM 5, REDLINE FORMAT)

5. The Retirement Administrator, with the assistance of VCERA's legal counsel, is responsible for implementing the Board's determinations and policy decisions related to Pensionable Compensation. The VCERA Retirement Administrator will analyze pay codes to determine whether they constitute Pensionable Compensation or not under this Resolution, and will bring such determinations to the VCERA Board for action on an annual basis, but more frequently if warranted. The Chair of the Board may, but is not obligated to, appoint an ad hoc committee of the Board to address or recommend responses to any Pensionable Compensation implementation challenges, as appropriate. Pay codes approved as pensionable compensation by the Board will be maintained and updated by the Retirement Administrator by effective date in the form of addenda to this Resolution.

Segal Consulting

100 Montgomery Street Suite 500 San Francisco, CA 94104-4308
T 415.263.8260 www.segalco.com

John W. Monroe ASA, MAAA, EA
Vice President & Actuary
jmonroe@segalco.com

January 19, 2018

Ms. Linda Webb
Retirement Administrator
Ventura County Employees' Retirement Association
1190 South Victoria Avenue, Suite 200
Ventura, CA 93003

Re: Ventura County Employees' Retirement Association
Cost-of-Living Adjustments (COLA) as of April 1, 2018

Dear Linda:

We have determined the cost-of-living adjustments for the Association in accordance with Section 31870.1, as provided in the enclosed exhibit.

The cost-of-living factor to be used by the Association on April 1, 2018 is determined by comparing the December CPI for the Los Angeles-Riverside-Orange County Area (with 1982-84 as the base period) in each of the past two years. The ratio of the past two December indices, 259.220 in 2017 and 250.189 in 2016, is 1.0361. The County Law section cited above indicates that the resulting percentage change of 3.61% should be rounded to the nearest one-half percent, which is 3.5%. Please note the above cost-of-living adjustment calculated using established procedures for VCERA may result in adjustments different from those calculated using alternative procedures by other systems.

The actual cost-of-living adjustment is dependent on tier. The CPI adjustment to be applied on April 1, 2018 is provided in Column (4) of the enclosed exhibit. The COLA bank on April 1, 2018 is provided in Column (5).

Please give us a call if you have any questions.

Sincerely,

John Monroe

John Monroe

MAM/hy
Enclosure

5522300v3/05325.001

Ventura County Employees' Retirement Association
Cost-Of-Living Adjustment
As of April 1, 2018

Retirement Date			(1) April 1, 2017 Accumulated Carry-over	(2) CPI Change*	(3) CPI Rounded**	(4) CPI Used***	(5) April 1, 2018 Accumulated Carry-over****
All Tier 1 and Safety Section 31870.1 Maximum Annual COLA			3.0%				
On or Before 4/1/1975			50.0%	3.61%	3.5%	3.0%	50.5%
04/02/1975	to	04/01/1976	42.5%	3.61%	3.5%	3.0%	43.0%
04/02/1976	to	04/01/1977	35.0%	3.61%	3.5%	3.0%	35.5%
04/02/1977	to	04/01/1978	31.5%	3.61%	3.5%	3.0%	32.0%
04/02/1978	to	04/01/1979	27.5%	3.61%	3.5%	3.0%	28.0%
04/02/1979	to	04/01/1980	23.0%	3.61%	3.5%	3.0%	23.5%
04/02/1980	to	04/01/1981	15.0%	3.61%	3.5%	3.0%	15.5%
04/02/1981	to	04/01/1982	2.5%	3.61%	3.5%	3.0%	3.0%
04/02/1982	to	04/01/1983	0.0%	3.61%	3.5%	3.0%	0.5%
04/02/1983	to	04/01/1984	0.0%	3.61%	3.5%	3.0%	0.5%
04/02/1984	to	04/01/1985	0.0%	3.61%	3.5%	3.0%	0.5%
04/02/1985	to	04/01/1986	0.0%	3.61%	3.5%	3.0%	0.5%
04/02/1986	to	04/01/1987	0.0%	3.61%	3.5%	3.0%	0.5%
04/02/1987	to	04/01/1988	0.0%	3.61%	3.5%	3.0%	0.5%
04/02/1988	to	04/01/1989	0.0%	3.61%	3.5%	3.0%	0.5%
04/02/1989	to	04/01/1990	0.0%	3.61%	3.5%	3.0%	0.5%
04/02/1990	to	04/01/1991	0.0%	3.61%	3.5%	3.0%	0.5%
04/02/1991	to	04/01/1992	0.0%	3.61%	3.5%	3.0%	0.5%
04/02/1992	to	04/01/1993	0.0%	3.61%	3.5%	3.0%	0.5%
04/02/1993	to	04/01/1994	0.0%	3.61%	3.5%	3.0%	0.5%
04/02/1994	to	04/01/1995	0.0%	3.61%	3.5%	3.0%	0.5%
04/02/1995	to	04/01/1996	0.0%	3.61%	3.5%	3.0%	0.5%
04/02/1996	to	04/01/1997	0.0%	3.61%	3.5%	3.0%	0.5%
04/02/1997	to	04/01/1998	0.0%	3.61%	3.5%	3.0%	0.5%
04/02/1998	to	04/01/1999	0.0%	3.61%	3.5%	3.0%	0.5%
04/02/1999	to	04/01/2000	0.0%	3.61%	3.5%	3.0%	0.5%
04/02/2000	to	04/01/2001	0.0%	3.61%	3.5%	3.0%	0.5%
04/02/2001	to	04/01/2002	0.0%	3.61%	3.5%	3.0%	0.5%
04/02/2002	to	04/01/2003	0.0%	3.61%	3.5%	3.0%	0.5%
04/02/2003	to	04/01/2004	0.0%	3.61%	3.5%	3.0%	0.5%
04/02/2004	to	04/01/2005	0.0%	3.61%	3.5%	3.0%	0.5%
04/02/2005	to	04/01/2006	0.0%	3.61%	3.5%	3.0%	0.5%
04/02/2006	to	04/01/2007	0.0%	3.61%	3.5%	3.0%	0.5%
04/02/2007	to	04/01/2008	0.0%	3.61%	3.5%	3.0%	0.5%
04/02/2008	to	04/01/2009	0.0%	3.61%	3.5%	3.0%	0.5%
04/02/2009	to	04/01/2010	0.0%	3.61%	3.5%	3.0%	0.5%
04/02/2010	to	04/01/2011	0.0%	3.61%	3.5%	3.0%	0.5%
04/02/2011	to	04/01/2012	0.0%	3.61%	3.5%	3.0%	0.5%
04/02/2012	to	04/01/2013	0.0%	3.61%	3.5%	3.0%	0.5%
04/02/2013	to	04/01/2014	0.0%	3.61%	3.5%	3.0%	0.5%
04/02/2014	to	04/01/2015	0.0%	3.61%	3.5%	3.0%	0.5%
04/02/2015	to	04/01/2016	0.0%	3.61%	3.5%	3.0%	0.5%
04/02/2016	to	04/01/2017	0.0%	3.61%	3.5%	3.0%	0.5%
04/02/2017	to	04/01/2018		3.61%	3.5%	3.0%	0.5%

* Based on ratio of December 2017 CPI to December 2016 CPI for the Los Angeles - Riverside - Orange County Area.
** Based on CPI change rounded to nearest one-half percent.
*** These are the cost-of-living adjustment factors to be applied on April 1, 2018.
**** These are the carry-over of the cost-of-living adjustments that have not been used on April 1, 2018.

January 29, 2018

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

SUBJECT: QUARTERLY RETIREMENT ADMINISTRATOR'S REPORT FOR THE PERIOD OF OCTOBER – DECEMBER 2017

Dear Board Members:

In compliance with VCERA's Monitoring & Reporting Policy, this report will include information regarding travel, training, key meetings and media communications, as well as other key issues for October through December of 2017. In some cases, this report contains not only activity of the Retirement Administrator, but of the VCERA staff as a whole.

<u>General</u>

The fourth quarter of 2017, staff made progress in several key areas. For issues involving actuarial reports and reviews, staff coordinated the finalization and presentation of the actuarial audit report conducted by Gabriel Roeder Smith. Segal completed the draft of the 2017 actuarial valuation, and staff reviewed that report and gave feedback in advance of finalization.

In the area of benefits administration, a great deal of time was dedicated to working with Counsel and benefits staff through issues related to service credit and compensation that is pensionable for certain alternative work schedules that incorporated scheduled overtime. This work is still in progress.

Initial information has been gathered on potential office location options and provided to the real estate committee. Senior staff worked through projections of space needs in coordination with this effort.

In the area of staffing and personnel, the position requirements for the newly allocated Communications Officer was developed with the necessary documents completed for County HR's assessment.

The three (3) trustee elections were coordinated in the 4th quarter, and staff worked with Elections to follow the process to allow for efficient and compliant elections.
Staff continued to analyze and work through identified V3 enhancements, with particular focus on those related to Member Self Service (MSS). I anticipate the list of those enhancements to be brought to the Board in February.

Perhaps the most significant issue that was resolved in the 4th quarter was the resolution of Market-Based Premium Pay (MBPP). Following changes to the SEIU MOA being formalized by the Board of Supervisors, the VCERA Board took action to fully include MBPP pay items in pensionable compensation for PEPRA members.

Travel & Training
During the 4th quarter, I attended the National Pension Education Association (NPEA) annual conference, the SACRS Fall Conference, and the Nossaman Fiduciary Forum.

Board/Policy/Compliance
The Board adopted a supplemental resolution to the Pensionable Compensation Resolution to clarify “similarly situated members of a group or class of employment” and pave the way for inclusion of MBPP in pensionable compensation.

Media
Staff did not respond to any media inquiries in the 4th quarter.

Key Meetings
In addition to internal and external meetings related to the topics described earlier in this report, on the evening of December 13th, I presented information to SEIU representatives about the SEIU COLA to explain its history and how the COLA is implemented at retirement.

Please contact me with any questions you may have regarding this quarterly report.

Sincerely,

Linda Webb

Linda Webb
Retirement Administrator

SACRS

Providing insight. Fostering oversight.

January 9, 2018

To: SACRS Trustees & SACRS Administrators/CEO's
From: Ray McCray, SACRS Immediate Past President, Nominating Committee Chair
SACRS Nominating Committee
Re: SACRS Board of Director Elections 2018-2019 Elections

SACRS BOD 2018-2019 election process will begin **January 2018**. Please review the following timeline and distribute to your Board of Trustees.

DEADLINE	DESCRIPTION
March 1, 2018	Any regular member may submit nominations for the election of a Director to the Nominating Committee, provided the Nominating Committee receives those nominations prior to the first Business Day after March 1 of each calendar year. Nominations shall not be accepted from the floor on the day of the election.
March 25, 2018	The Nominating Committee will report a final ballot to each regular member County Retirement System prior to March 25.
May 18, 2018	Nominating Committee to conduct elections during the SACRS Business Meeting at the Spring Conference (May 15-18, 2018).
May 18, 2018	Board of Directors take office for 1 year

Per SACRS Bylaws, Article VIII, Section 1. Board of Director and Section 2. Elections of Directors:

Section 1. Board of Directors. The Board shall consist of the officers of SACRS as described in Article VI, Section 1, the immediately Past President, and two (2) regular members.

A. Immediate Past President. The immediate Past President, while he or she is a regular member of SACRS, shall also be a member of the Board. In the event the immediate Past President is unable to serve on the Board, the most recent Past President who qualifies shall serve as a member of the Board.

B. Two (2) Regular Members. Two (2) regular members shall also be members of the Board with full voting rights.

Section 2. Elections of Directors. Any regular member may submit nominations for the election of a Director to the Nominating Committee, provided the Nominating Committee receives those nominations prior to the first Business Day after March 1 of each calendar year. Nominations shall not be accepted from the floor on the day of the election.

The Nominating Committee will report a final ballot to each regular member County Retirement System prior to March 25.

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 Directors on his or her board agenda. The Administrator shall acknowledge the completion of these responsibilities with the Nominating Committee.

Director elections shall take place during the first regular meeting of each calendar year. The election shall be conducted by an open roll call vote, and shall conform with Article V, Sections 6 and 7 of the Bylaws.

Newly elected Directors shall assume their duties at the conclusion of the meeting at which they are elected, with the exception of the office of Treasurer. The incumbent Treasurer shall co-serve with the newly elected Treasurer through the completion of the current fiscal year.

Interested candidates should submit their letter of intent and the form included in this letter to the Nominating Committee no later than the cut-off dates listed in the schedule. Candidates may submit for only one position on the Board:

- President
- Vice President
- Treasurer
- Secretary
- Regular Member 1
- Regular Member 2

The elections will be held at the SACRS Spring Conference May 15 – 18, 2018 at the Anaheim Marriott, Anaheim, CA. Elections will be held during the Annual Business meeting on Friday, May 18, 2018.

If you have any questions, please contact me at Ray McCray, raym1@sbcglobal.net or (209) 417-4472.

Thank you for your prompt attention to this timely matter.

Sincerely,

Ray McCray

Ray McCray, San Joaquin CERA Trustee
SACRS Nominating Committee Chair

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

SACRS

Providing insight. Fostering oversight.

SACRS Nomination Submission Form
SACRS Board of Directors Elections 2018-2019

All interested candidates must complete this form and submit it along with a letter of intent. **Both the form and the letter of intent must be submitted no later than March 1, 2018.** Please submit to the Nominating Committee Chair at raym1@sbcglobal.net or to SACRS at sulema@sacrs.org. If you have any questions, please feel free to contact Sulema Peterson at SACRS at (916) 441-1850.

Name of Candidate	
Candidate Contact Information (Phone Number, Email Address and Mailing Address MUST be included)	
Name of Retirement System Candidate Currently Serves On	
Current Position On Retirement Board (Chair, Alternate, Retiree, General Elected, Etc)	
Applying for SACRS Board of Directors Position (You may only select one)	○ President ○ Vice President ○ Treasurer ○ Secretary ○ Regular Member
Brief Bio	

VCERA
VENTURA COUNTY EMPLOYEES' RETIREMENT ASSOCIATION

January 29, 2018

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

SUBJECT: AUTHORIZATION FOR FISCAL MANAGER TO ATTEND THE GFOA ANNUAL CONFERENCE MAY 6th – 9th IN ST. LOUIS, MO.

Dear Board Members:

Staff requests authorization for Karen Scanlan, Fiscal Manager, to attend the Government Finance Officers Association annual conference, May 6th – 9th, 2018. The cost to attend is approximately $1,300 including airfare, mileage, lodging and other related expenses. There is no conference registration as Ms. Scanlan was awarded a First-Time Annual Conference Attendee Scholarship. A savings to VCERA of $380.00.

VCERA staff will be pleased to respond to any questions you may have on this matter at January 29, 2018 business meeting.

Sincerely,

Linda Webb

Linda Webb
Retirement Administrator

Government Finance Officers Association

112th Annual Conference

May 6–9, 2018 ▪ St. Louis, Missouri

Go to www.gfoa.org to register today!

Earn more than 20 CPE credits

#GFOA2018

About St. Louis

In the heart of a revitalized downtown, a vibrant new hospitality district continues to grow and thrive. With world-class hotels, restaurants, museums, and entertainment venues that will make your stay a memorable one. St. Louis is an accessible and affordable destination that will keep you entertained with magnificent cultural institutions, theatre, live music, sports, and much more.

In St. Louis, the month of May is characterized by rising high temperatures, with daily highs from 72°F to 81°F over the course of the month and rarely exceeding 89°F or dropping below 61°F.

For more information on what to do while in St. Louis, visit https://explorestlouis.com/gfoa/.

Blues music in St. Louis

City Garden

Milles Fountain

Saint Louis Zoo McDonnell Polar Bear Point

TABLE OF CONTENTS

MESSAGE FROM GFOA PRESIDENT

Join Us!

Dear Colleague:

I invite you to GFOA's 112th Annual Conference, May 6–9, 2018, in St. Louis, Missouri. GFOA's Annual Conference is a great opportunity to learn new skills, share real-world experiences with your peers, and join the larger conversation about how we can be advocates for our communities at the federal level.

As finance officers we are involved in the core functions of our organizations—budgets and accounting, economic development, debt management, treasury and cash management, labor relations, and risk management. Within these broad functions, the finance officer is viewed as the professional who can approach problems with precision, accuracy, and a long-term view. We are often brought in as the "experts"—the problem solvers/advisors, and, ultimately, the final arbiters of the analysis that our principals and elected officials turn to.

In our increasingly complex world, we need to be ever more nimble and adaptable. By attending GFOA's Annual Conference, you'll gain resources and learn tools you need to better serve your communities.

See you in St. Louis!

Patrick McCoy

Patrick J. McCoy
GFOA President
Director of Finance
Metropolitan Transportation Authority, New York

MY FIRST GFOA CONFERENCE

"My first GFOA conference was in 2003, in my hometown of New York City. I volunteered with the local host committee, and what a great experience it was. I continued my involvement with GFOA, attending conferences and joining the Committee on Governmental Debt Management. Since then, I have increasingly relied on GFOA resources in my role as the finance director of the Metropolitan Transportation Authority in New York. Being a GFOA member has been a source of pride, and it has made me more effective within my organization."

-Patrick J. McCoy

CONFERENCE OVERVIEW

WHY ATTEND?

CONCURRENT SESSIONS. A rich array of concurrent sessions cover a broad range of topics, allowing participants to tailor their conference experience to their own needs and circumstances.

PRECONFERENCE SESSIONS. Special preconference sessions provide an opportunity to explore selected topics of interest in even greater depth.

GENERAL SESSIONS. Experience direct contact with nationally recognized speakers addressing topics important to public finance professionals.

DISCUSSION GROUPS. Meet peers and discuss topics directly relevant to school districts, utilities, large governments, small governments, and the next generation of finance officers.

NETWORKING OPPORTUNITIES. Renew contacts and build you professional network.

SOCIAL EVENTS. Wind down from a full day of learning and connect with colleagues during GFOA's Welcome Reception and Closing Event.

CPE CREDIT. Earn more than 20 CPE credits at the annual conference, with even more credits available for those who elect to participate in preconference sessions.

EXHIBIT HALL. GFOA's exhibit hall will put participants in contact with vendors that offer practical tools and solutions for a broad range of professional challenges. Stroll through the hall to view new products, ask questions, and see live demonstrations of services that can save your government time and money. Join us on Sunday morning to kick off this year's hall with music and a ribbon cutting ceremony! Watch for new events in the exhibit hall!

If you know vendors that should be exhibiting at this year's show, please e-mail conference@gfoa.org.

SCHEDULE OF EVENTS

The following events (unless otherwise noted) will be held at America's Center Convention Complex, 701 Convention Plaza, St. Louis, Missouri 63101.

Preconference Seminars

May 4, 2018
8:30 am – 4:30 pm
8:30 am – 12:30 pm
1:00 pm – 5:00 pm

May 5, 2018
8:30 am – 12:30 pm
1:00 pm – 5:00 pm

Concurrent Sessions

May 6, 2018
1:30 pm – 2:20 pm
2:40 pm – 3:30 pm
3:45 pm – 4:45 pm — *Keynote Address*

May 7, 2018
8:30 am – 10:10 am — *Opening General Session, including Keynote speaker*

10:30 am – 12:10 pm
12:10 pm – 1:10 pm — *Lunch*
1:30 pm – 2:20 pm
2:40 pm – 3:55 pm
4:15 pm – 5:30 pm

Concurrent Sessions (continued)

May 8, 2018
8:30 am – 10:00 am — *General Session, including Keynote speaker and Annual Business Meeting*

10:20 am – 12:00 pm
12:15 pm – 1:15 pm — *Lunch*
2:00 pm – 3:15 pm
3:35 pm – 4:50 pm

May 9, 2018
8:30 am – 10:10 am
10:30 am – 12:10 pm

Welcome Reception

May 6, 2018
5:00 pm – 6:30 pm

Exhibits

May 6, 2018
9:30 am – 1:30 pm — *To open the hall, festivities will include a ribbon-cutting ceremony, giveaway prizes to the first 112 delegates (excludes guests and children) to enter the hall, and refreshments.*

4:30 pm – 6:30 pm — *The Exhibit Hall will continue to stay open during GFOA's Welcome Reception*

May 7, 2018
11:30 am – 5:30 pm

May 8, 2018
10:00 am – 2:30 pm

Closing Event

May 8, 2018
7:30 pm – 10:30 pm — *This event will take place at the Peabody Opera House*

FIRST-TIMERS SCHOLARSHIP

GFOA IS COMMITTED TO YOUR GROWTH

APPLY FOR A FIRST-TIME ANNUAL CONFERENCE ATTENDEE SCHOLARSHIP

The Annual Conference is an incomparable opportunity for professional growth, and we want all GFOA members to have the chance to attend. For that reason, we are pleased to offer the First-Time Annual Conference Attendee Scholarship program to GFOA active government members. In four years, the scholarship has enabled almost 1,700 recipients to attend their first Annual Conference.

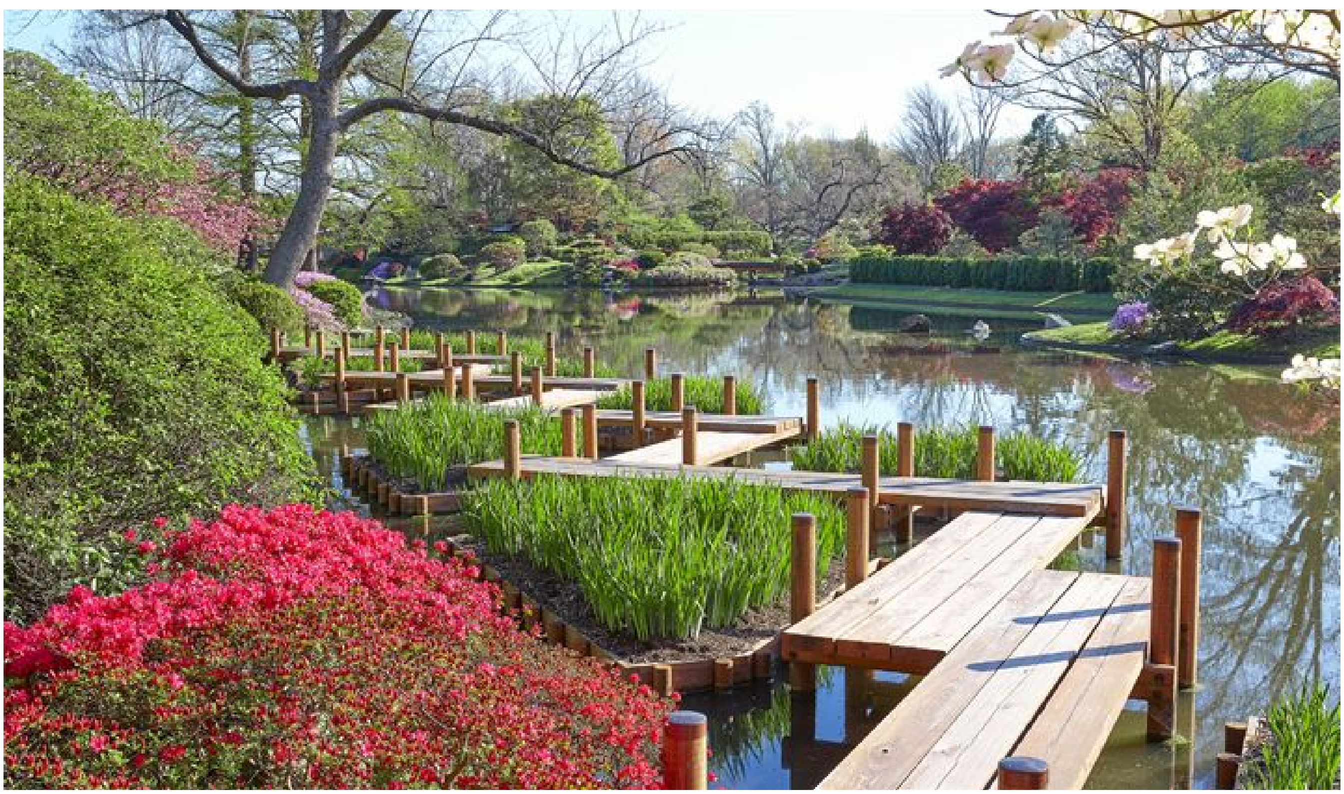
DETAILS

- GFOA will award up to 50 scholarships per state or province.
- Applicants must be GFOA active government members who have never attended an Annual Conference. We've made it easy—applicants who are not yet GFOA members can use the scholarship application to join GFOA all in one step!

BENEFITS

- The scholarship **covers the full conference registration fee**.
- Scholarship recipients will participate in GFOA's **mentorship program** during the Annual Conference as an introduction to the event and also the many ways to become more involved with GFOA.
- Scholarship recipients are invited to kick-off their experience at the **First-Timers Brunch**. Attendees will have the opportunity to network with their peers and mentors, GFOA's Executive Board, and staff.

GFOA active government members who have never attended the Annual Conference before are encouraged to submit an application request to firstannualconference@gfoa.org.



Missouri Botanical Garden

PROGRAM

NEW THIS YEAR – GFOA TO ADD THIRD FEATURED "KEYNOTE" SPEAKER

GFOA's 112th Annual Conference will include three featured keynote speakers. In addition to GFOA's traditional schedule of keynote presentations to lead off Monday and Tuesday, GFOA will be adding a featured presentation on Sunday afternoon just prior to the Welcome Reception. Keynote presentations will focus on delivering a perspective about current events, public finance knowledge, and essential leadership skills that can benefit all finance professionals. Speakers will be announced on GFOA's website.

FEATURED SUNDAY SESSION

Sunday, May 6 — 3:45 pm – 4:45 pm

OPENING SESSION

Monday, May 7 — 8:30 am – 10:10 am

GENERAL SESSION AND BUSINESS MEETING

Tuesday, May 8 — 8:30 am – 10:00 am

2017 General Session in Denver, Colorado

CPE CREDITS

It is possible to earn more than 20 continuing professional education (CPE) credits at GFOA's annual conference. Additional CPE credits can be earned by attending one or more of GFOA's preconference seminars.

GFOA is registered with the National Association of State Boards of Accountancy (NASBA) as a sponsor of continuing professional education on the National Registry of CPE Sponsors. State boards of accountancy have final authority on the acceptance of individual courses for CPE credit. Complaints regarding registered sponsors may be submitted to the National Registry of CPE Sponsors through its website: www.learningmarket.org.

National Registry of CPE Sponsors
150 Fourth Avenue North, Suite 700,
Nashville, TN 37219-2417
www.nasba.org

Session Tracks

ACCOUNTING, AUDITING, AND FINANCIAL REPORTING

In recent years there have been numerous changes to accounting and auditing standards. Consequently, government finance officials need to make sure that they and their staff are current with new developments. GFOA advocates that state and local governments prepare financial statements in accordance with generally accepted accounting principles (GAAP), and is dedicated to providing participants with information to better understand the changing requirements. The conference will include sessions that will focus on accounting and financial reporting topics ranging from new Governmental Accounting Standards Board (GASB) pronouncements to how to prepare for an audit.

Featured sessions will include:

- **Accounting and Auditing Year in Review** — This session, long a staple at the annual conference, will provide a comprehensive overview of the key developments in accounting, auditing, and financial reporting that affect state and local governments.
- **New Lease Accounting** — The GASB has issued a new accounting and financial reporting standard for leases. This session will highlight the changes to lease accounting and what state and local governments need to know to implement the new standard.
- **OPEB** — With 2018 being the first year for many government employers to implement the new other post-employment benefit (OPEB) reporting standards, sessions will include how to address the implementation challenges of OPEB and how to understand actuarial information.
- **Prepare for the Audit** — Session presenters will provide participants with some helpful tips to make the audit process less time consuming and more efficient for the auditee. The session will look at the planning, fieldwork, and wrap-up stages of the audit process, including how to respond to findings that may arise.

BUDGETING AND FINANCIAL PLANNING

An organization's budget process sets policy, identifies operational goals, and provides a financial plan for all spending throughout the period. The budget also acts as a building block for establishing long-term fiscal sustainability, organizational resilience, financial stewardship, and public trust. GFOA has long been a proponent of best practices in budgeting, focusing on long-term financial planning, program budgeting, performance management, citizen engagement, and budget transparency. Sessions at the conference will include how to build technical skills as well as enhance leadership strategies for improving an organization's budget process.

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Featured sessions will include:

- **Developing Goals and Defining Priorities** — Budgeting starts with having well-defined goals that can be used to reinforce an organization's mission and align spending. This session will provide practical strategies for working with department heads and elected officials on establishing those priorities.
- **Business Continuity and Finance** — In a world of never-ending uncertainty and fiscal challenges, governments need to be able to recover from unexpected events, including natural disasters and economic disturbances, and have leaders in place who recognize the importance of financial resilience and its link to the budget. This session will explain how to build principles of business continuity into budgeting and planning.
- **Capital Project Budgeting** — Finance officers play a key role in coordinating capital projects, estimating project costs (often over multiple years), and identifying appropriate funding streams. This session will feature leaders in capital budgeting discussing lessons learned and tools needed for developing capital project budgets.
- **Budget Transparency** — Budget transparency goes beyond printing or posting a budget document on social media. Attend this session to learn about effective strategies that go beyond the budget document to ensure that budget decisions and information are communicated and understood.

DEBT MANAGEMENT AND CAPITAL FINANCE

Effective financing of infrastructure and capital equipment is a core aspect of public finance and is critical to having the appropriate capacity to deliver government services, develop strong communities, and ensure fiscal sustainability. Finance officers play a critical role in managing a government's capital program and need to be able to maintain existing assets, develop long-term plans, finance new projects, and manage the complex environment in which governments issue and manage debt obligations. Sessions will focus on GFOA's best practices and on implementing policies and procedures to execute effective management of capital programs, debt management strategies, and disclosure requirements, as well as providing attendees with overall insights on the current market.

Featured sessions will include:

- **Debt Management for Small Governments** — Small governments face numerous hurdles in their debt management program. This session will focus on effective strategies for issuing debt, hiring outside professionals, meeting disclosure requirements, and utilizing checklists and policies and procedures to best manage these responsibilities.
- **Improving Your Bond Rating** — As bond rating agencies update their rating criteria, governments should be aware of these changes and become acquainted with the factors the agencies look for when rating their government's bonds. Panelists will discuss how to put your government's best foot forward in rating presentations, ongoing rating surveillance, and when you should look to improve your entity's ratings.
- **Bond Market Update** — The market has seen greater fluctuations over the last year than in the recent past. Experts will address the factors that are affecting the market and the types of products that are being used by governments to manage a changing interest-rate environment.
- **Disclosure Update** — The Municipal Securities Rulemaking Board (MSRB) and the Securities and Exchange Commission (SEC), as well as investors, continue to stress the importance of good disclosure practices. This session will review GFOA's best practices related to disclosure, provide insights about how to improve your entity's disclosure and investor outreach programs, as well as increase your awareness about what may be on the horizon regarding regulatory action and issuer disclosure practices.

TREASURY AND INVESTMENT MANAGEMENT

At its core, treasury management involves implementing appropriate procedures for the receiving and dissemination of funds and having an investment strategy that protects the safety, liquidity, and yield of a government's financial assets. Managing those assets, however, also requires detailed knowledge in investment strategy, cash management, internal control, and risk mitigation, and working effectively with a network of service providers, including banks, advisors, and other financial service providers. Sessions at GFOA's annual conference will focus on providing information for challenges facing finance officers from governments of all sizes.

Featured sessions will include:

- **Investment Strategies** — GFOA recently released best practices on many facets related to a government's investment program, stressing the importance of having robust and clear investment policies. This session will provide a discussion about the components of an investment policy, as well cover investing options that address the pros and cons for various strategies used by governments of all types and sizes.
- **Analyzing Bank Fees** — Governments procuring banking services face a daunting task of understanding the often complex and confusing series of bank service fees. This session will work to decode the mystery and provide tips for governments to gain a level of transparency in banking service procurements.

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- **Understanding PCI Compliance and Accepting Payment Cards** — Governments accepting payment cards must be aware of and comply with industry standards to ensure a secure processing environment. This session will provide information that all finance officers need to know about PCI standards and how they should address potential risks facing their governments when processing electronic payments.
- **Treasury Management and ERP Systems** — Treasury management software provides functions to manage cash flow, investment portfolios, debt programs, and more. However, many governments struggle to integrate these systems with a larger ERP system. Attend this session to learn how to create a more efficient enterprise-wide financial system.

PENSION AND BENEFIT ADMINISTRATION

GFOA members have identified health-care costs and pension liabilities as two of the most pressing challenges facing governments. Recent changes in accounting rules have highlighted the financial impact of these employee benefits, but the reality of pension and health-care cost trends have been clear for years. Both will continue to increase as a percentage of government spending, creating issues for long-term financial sustainability if not addressed. GFOA conference sessions will present information on market trends, strategies for addressing challenges and lowering costs, and guidance on reforms that will help keep these essential components of public-sector compensation sustainable and effective as tools for recruiting and retaining staff — while ensuring the fiscal health of governments.

Featured sessions will include:

- **Price Transparency in Health Care** — As consumers, governments are at a significant disadvantage in shopping for health care. Price information is not transparent, and making comparisons across options is not easy. Attend this session to better understand the issues and to learn what steps governments can take to get the information they need to make more informed decisions about their health-care benefits.
- **Myth versus Reality in Wellness Plans** — Governments have been implementing wellness plans for years as a strategy for increasing engagement, reducing health-care costs, and improving overall employee health — with mixed results. This session will highlight lessons learned and discuss the facts governments need to know about wellness plans in the public sector.
- **Pension and OPEB Funding Strategies** — Achieving sustainable funding for their pension and OPEB plans is one of governments' main fiscal concerns. Attendees at this session will learn the essential strategic elements, starting with the most essential practices for avoiding volatility and higher contributions.
- **Understanding Actuarial Valuations and Assumptions** — Underlying pension and OPEB reporting is a set of actuarial valuations and assumptions. This session will help attendees master a crucial fiscal responsibility — understanding and interpreting your government's actuarial reports. You will also learn practical steps for improving the accuracy of the information.

RISK MANAGEMENT

Governments face a number of risks, including legal, economic, political, and environmental, along with other factors that may affect their financial position. Risk management involves identifying potential events and developing plans and strategies to mitigate the potential impact and provide for continued business operations, long-term fiscal sustainability, and organizational resilience. Sessions will focus on the finance officers' specific role in risk management and helping prepare their organizations for the forces and challenges facing it.

Featured sessions will include:

- **Be Prepared for Your Next Disaster** — We always hope the next hurricane, flood, fire, or "unknown unknown" will not hit us, but governments have to be prepared for the worst. In this session, attendees will learn effective strategies for creating a resilient disaster plan, from capital planning to social media.
- **Cyber Insurance** — Governments have traditionally bought cyber insurance at a much lower rate than the private sector, but should we be reconsidering? Cyber-attacks on governments are becoming more frequent and more sophisticated, creating a risk that governments can no longer afford to ignore. In this session, you will learn how cyber insurance works, covering expenses, including legal defense costs, computer forensics, and breach notification and remediation.
- **Health-Care Cost Containment** — Health-care benefits account for a huge percentage of a government's expenses, so failing to manage them effectively is not an option. This session will explain some of the keys to containing costs long term, including price transparency, virtual care, and population health management.
- **Fund Balance Policies** — To operate sustainably, governments have to maintain adequate levels of fund balance to effectively mitigate and manage current and future risks. In this session, attendees will learn how to establish a formal policy for restricted and unrestricted fund balance, and will review examples of effective financial policies.

PROGRAM

TECHNOLOGY

Finance officers depend on technology, and must understand how to leverage technology to improve financial outcomes. GFOA's technology sessions will focus on core technologies essential for day-to-day operations of a finance office, and will discuss and explore emerging trends, new developments, and the ever-evolving relationship between information technology for finance.

Featured sessions will include:

- **Technology and Security – The Finance Officer's Guide** — As systems become integrated and more government information is housed on the Internet, finance officers must be aware of the security risks and mitigating strategies for safeguarding sensitive information. This session will feature Internet security experts to provide an overview of key elements of a security strategy.
- **Five-Year Technology Forecast** — If you question how fast technology can evolve, think about what cell phone technology looked like 10 years ago. No one can predict the future, but GFOA will assemble a panel of experts to offer a glimpse into the future and will cover trends and potential developments. From cloud technologies to the Internet-of-things to blockchain, the panel will discuss the potential impacts on public finance.
- **Technology Roundtable** — This session will feature an interactive discussion that will focus on answering members' questions related to technology. A panel of subject matter experts, practitioners, and other leaders will answer your most pressing technology questions.

LEADERSHIP DEVELOPMENT

GFOA understands the role of the finance offices in providing organizational-wide leadership. GFOA is committed to enhancing the leadership skills of finance officers and promoting practices that lead to more efficient processes, improved communication, better managed teams, and cross-department collaboration that is necessary for high-performing organizations. Sessions at the annual conference will include speakers from innovative governments and other experts who will help build leadership and communication skills.

Featured sessions will include:

- **Building Trust in Your Organization and in Government** — Government leaders cannot "order" stakeholders to behave in a sustainable way. Instead, they must inspire pride, loyalty, and enthusiasm among stakeholders so that followers will want to help make the organization financially sustainable. This session will explore strategies from effective leaders in building trust.
- **Culture and the Workplace** — Generational change technology and overall shifts in "traditional" work environments, such as work-from-home and new workspace design, are changing workplace culture. This session will feature discussion about building an effective workplace culture in a modern work environment.
- **Ethics and the Finance Office** — Today's world presents not only technical challenges for today's finance leader, it also presents ethical challenges. This session will provide timely insight on ethics and what it means to act with a high degree of integrity.
- **Managing Human Capital** — As finance officers, we are trained how to generate return on investment from our financial assets, develop process improvements that generate efficiencies, and manage infrastructure so that it provides optional service over its lifespan. However, many finance officers lack training in maximizing their staff or "human capital." This session will explore strategies that managers can use to aid in the professional development of employees working in the finance office.

ANALYTICS

Whether the issue relates to budget estimates, cash flow forecasts, cost benefit analyses, fiscal impact studies, or policy analysis, finance officers must be able to deliver accurate and reliable analyses along with factual information for decision making. GFOA understands that skills related to data analysis, forecasting, and — most importantly — communication, can be continually refined and improved. Sessions will focus on practical strategies for not only improving the quality of projections, but for ensuring that decision makers truly understand the message.

Featured sessions will include:

- **Economic Development Analysis** — GFOA recommends that finance officers have a seat at the table to analyze the fiscal and economic impacts of development incentives and programs. This session will provide practical strategies and tools for analyzing economic development proposals.
- **ERP Business Intelligence** — "Smart" Cities, Data-Driven Decision Making, and Performance Management rely on having data. ERP systems have that data, but often lack the tools to make it accessible to analysts, managers, and policy makers. This session will explore the capabilities of business intelligence in modern ERP systems and how to unlock that potential for your government.
- **Data Visualization** — Analysis is not always about numbers, complex formulas, and pivot tables. Often, analysts need to think creatively about how to effectively communicate budget information. This session will cover how to use websites, infographics, images, dashboards, videos, and more in communicating your message.

PROGRAM

PRINCIPLES OF PUBLIC FINANCE

GFOA exists to promote excellence in state and local government financial management and publishes a series of best practices that provide guidance to governments and finance officers. GFOA has best practices across a variety of topics, including accounting, auditing, financial reporting, budgeting, capital planning, debt management, economic development, pension and benefit administration, and treasury and investment management that serve as the foundation for communicating the principles of sound financial management in the public sector.

Featured sessions will include:

- **Accounting and Auditing Best Practices** — This session will focus specifically on the best practices that GFOA has developed relating to accounting, auditing, and financial reporting. Key best practices will be discussed with emphasis on governments providing lessons learned on how to effectively implement the best practices.
- **Budgeting Best Practices** — GFOA's best practices in budgeting focus on the four steps in the National Advisory Council on State and Local Budgeting (NACSLB) framework. The session will provide an overview of budget best practices.
- **Debt Management Best Practices** — This session will highlight GFOA's best practices related to debt issuance. Attendees will hear from their peers whose experiences demonstrate the importance of developing and implementing debt policy and procedures. GFOA's best practices will be highlighted for members to better understand the ins-and-outs of debt issuance and management, and assembling the financing team.
- **Treasury Management Best Practices** — This session will focus on the suite of best practices and advisories developed by GFOA to help finance officers better understand policies, procedures, and optimal techniques related to their cash management and investing duties.

Missouri History Museum

TARGETED NETWORKING SESSIONS

GFOA's annual conference provides numerous opportunities for networking with your peers. Many GFOA sessions will feature roundtable panels or opportunities for discussion. GFOA social events also provide time to make connections and build your network. In addition, GFOA has planned special networking sessions for members looking to engage on specific issues.

Delegates working in any of the following arenas should attend these events specifically planned to bring them together with their peers:

- **School Budgeting** — GFOA's Alliance for Excellence in School District Budgeting will meet to provide an opportunity for discussion centered on improving the budget process to best align to strategies for improving student achievement.
- **Small Government Forum** — GFOA's Small Government Forum is a discussion group that identifies and explores topics of interest to governments with populations less than 25,000.
- **Urban Forum** — GFOA's Urban Forum will provide networking opportunities and speakers on issues facing large organizations for GFOA attendees representing governments from metropolitan areas with over 1,000,000 people.
- **Utility Finance Forum** — Utility finance requires detailed knowledge in rate setting, enterprise accounting, asset management, and understanding regulations. This networking group is composed of GFOA members from utility organizations, and municipalities that operate utilities.
- **Women's Public Finance Network** — The Women's Public Finance Network is a voluntary association of elected and appointed officials, and other women finance professionals to encourage active involvement and full participation of women members in the organization, policy-making process, and programs of GFOA.
- **Black Caucus** — GFOA's Black Caucus supports the aspirations and achievements of African-American public finance officers, helps them to pursue professional development opportunities, and sponsors projects to assist African-Americans seeking careers in government finance.
- **Young Professional Networking Event** — As more and more governments experience retirement of the "Baby Boomer" generation, young professionals are ascending to leadership roles. To support that rise, it is essential for young finance professionals to build and maintain their network. This group is focused on GFOA members under 40.

FULL PROGRAM SESSION DETAILS COMING IN JANUARY 2018.

PRECONFERENCE SEMINARS

GFOA's preconference seminars provide an opportunity for attendees to get in-depth training on topics vitally important to finance officers. Come to St. Louis a day or two early and multiply the benefits you'll get by signing up for these added training offerings. Preconference sessions will be held at America's Center Convention Complex.

Friday, May 4, 2018

ALLIANCE FOR EXCELLENCE IN SCHOOL BUDGETING – SPRING CONFERENCE

Friday, May 4, 2018 | 8:30 am – 4:30 pm

GFOA's Alliance for Excellence in School Budgeting is a networked group of districts working collaboratively to implement best practices in school budgeting. This session will provide practical strategies, lessons learned, and case study examples about HOW leading school districts from around the United States have implemented improved budget practices. GFOA's best practices in school budgeting is a framework for enhancing a school district's budget and planning processes. The framework includes practical recommendations on all aspects of the process from better collaboration, goal setting, strategy prioritization, utilizing cost effectiveness measurements to the development of a strategic financial plan and how to leverage the budget document as a communications device.

LEADERSHIP FROM THE FINANCE OFFICE: BUILDING SKILLS FOR COMMUNICATION AND TEAMWORK

Friday, May 4, 2018 | 8:30 am – 12:30 pm

Teamwork and communication are essential for every finance office. Finance officers not only manage their own departments, but also play an effective role in establishing a collaborative team culture across the organization to better allocate resources, deliver effective programs, and ensure accountability. This session will be focused on two components: 1) identifying practical strategies and tips to better manage a team and create a collaborative culture, and 2) developing communication skills, which are critical to the success of every team.

BEST PRACTICES IN PLANNING AND BUDGETING FOR CAPITAL PROJECTS

Friday, May 4, 2018 | 1:00 pm – 5:00 pm

GFOA's recent member survey indicated that governments struggle most with implementing best practices related to capital planning and capital budgeting. This session is designed to provide an overview of GFOA's best practices related to creating a multi-year capital plan that includes prioritizing capital project requests, developing a capital budget, and maintaining ongoing capital asset management. Speakers will include leading government practitioners who will provide case studies illustrating how the finance office can best manage the development of infrastructure, plan and budget for large capital purchases, manage current assets to achieve the best return on investment, and ensure the long-term financial sustainability of the organization.

LEADERSHIP FROM THE FINANCE OFFICE: NEGOTIATION WORKSHOP

Friday, May 4, 2018 | 1:00 pm – 5:00 pm

Finance officers face many scenarios where negotiation skills are critical. In many situations finance officers have a seat at the table or are looked to for their leadership. Such common instances occur while creating contract purchases or professional service contracts with vendors, establishing economic development, public-private partnership or intergovernmental agreements, or during collective bargaining with employees. In addition, finance officers have an opportunity to negotiate internally as part of the budget process, within their own spheres, as well as through their daily interaction with other departments. This session will be a "hands-on" skill-building workshop and will incorporate case studies and role playing to provide participants with practical tips on how they can represent their governments more effectively at the negotiating table.

Saturday, May 5, 2018

DEBT MANAGEMENT 101

Saturday, May 5, 2018 | 8:30 am – 12:30 pm

The municipal marketplace is rapidly evolving due to market changes and following a recent push from investors and the federal government for stronger disclosures. This session will provide an overview for issuers, especially small and infrequent issuers, about how current debt issuance and management trends are affecting public-sector entities. Course instructors will guide participants through their responsibilities before, during and after bonds are sold, common transaction stakeholders, rating agency expectations, disclosure standards, as well as other functions of debt management. The course will feature practical examples, highlights of recent regulatory changes, and interactive discussion about each topic. Relevant best practices, advisories, and resources created by GFOA's Committee on Governmental Debt Management will also be discussed. Session participants will gain a better understanding of the debt issuance process, managing their debt responsibilities and practical guidance about how to navigate an increasingly complex marketplace.

ESTABLISHING AN INVESTMENT PROGRAM

Saturday, May 5, 2018 | 8:30 am – 12:30 pm

Governments should have an investment policy in place to ensure the appropriate safeguarding of public funds. GFOA's best practices on developing an investment program and investment policy identify essential components of a policy, including scope and investment objectives, suitable and authorized investments, investment diversification, risk and performance standards, and suggestions of how to work with outside professionals for comment or review. This session will cover GFOA's best practices, provide guidance on how governments should approach developing or updating a current policy, and deliver key examples of how to implement an investment policy that addresses not only a government's unique needs, but market products and conditions as well.

LEADERSHIP FROM THE FINANCE OFFICE: DISASTER PLANNING AND ORGANIZATIONAL RESILIENCE

Saturday, May 5, 2018 | 8:30 am – 12:30 pm

Local governments are beset by forces that threaten to impair both their financial position and ability to deliver services. These forces can take the form of an extreme event like a natural or man-made disaster, or an economic downturn. They could also come in the form of social or environmental stressors that slowly wear down a local government, such as crime, homelessness, drug abuse, deteriorating infrastructure, or climate change. The practice of resiliency is the art of being prepared for such events to mitigate at their devastating impact and to provide a structure that enables recovery as quickly as possible. At this session, you will learn from government leaders who have been on the forefront of developing resiliency plans and strategies and how the finance officer plays a role in disaster preparedness.

ACCOUNTING FOR A DISASTER

Saturday, May 5, 2018 | 1:00 pm – 5:00 pm

The impacts of a natural disaster can be devastating for a community and a government's budget. The Federal Emergency Management Agency (FEMA) has programs in place to provide funding for areas impacted by disasters; however, they also require that governments follow strict rules in properly accounting for disaster costs. This is equally true with many private insurers and other state programs that may be available. Finance officials need to be ready to account for the losses and understand how to recoup funds prior to a disaster. In this session we will look at what governments need to do to be prepared to track costs associated with a natural disaster before it is too late. Topics will include establishing what needs to be tracked, training staff to understand requirements, tracking and documenting required cost information as part of your financial system, and how to properly complete reimbursement claims for FEMA. This session will also cover the accounting and financial reporting for temporary or permanently impaired capital assets that are likely to occur during a disaster.

PRECONFERENCE SEMINARS

Saturday, May 5, 2018 (CONTINUED)

HEALTH CARE PROCUREMENT IN THE CURRENT ENVIRONMENT

Saturday, May 5, 2018 | 1:00 pm – 5:00 pm

Increasing employee health care costs present many challenges for local governments as they strive to stretch budget resources further and further to provide essential services. Procurement of health care and planning and forecasting benefit costs have a large impact on the overall financial sustainability of an organization. This session will provide information to finance officers about how to approach procurement of heath care, how to structure a competitive process, what to look for when analyzing proposals, and how to negotiate the best deal for your organization — including what is best for both employees and the long-term finances of the government.

Taking a full-day session on Friday? Enjoy a continental breakfast and lunch.

Taking a morning session on Friday or Saturday? A continental breakfast will be available in your session room.

Taking an afternoon session on Friday or Saturday? An afternoon snack will be available in your session room.

Taking a morning and afternoon session on Friday or Saturday? Enjoy a continental breakfast and afternoon snack in your session room, as well as a grab-and-go lunch.

TOURS

TOURS

The following tours will be offered for GFOA attendees and guests. The tours have been chosen specifically for GFOA, and will allow you to explore the best of the city and surrounding regions:

- **Gateway Arch Walking Tour**
- **Baseball & Brews Tour** — (Busch Stadium – home of the Cardinals/Anheuser-Busch Brewery)
- **Forest Park** — "Meet Me in St. Louis" – (self-guided tours of St. Louis Zoo, Missouri History Museum, and Art Museum) – transportation will be provided complimentary by GFOA
- **The Grand Tour** — (Fox Theater/Missouri Botanical Garden)
- **A Little Taste of St. Louis** — (driving tour of St. Louis neighborhoods sampling signature food items)
- **Microbrewery Madness** — (Square One Brewery & Distillery/Schlafly Brewery)
- **The Anheuser-Busch Connection** — (Grant's Farm – estate of August Busch, Jr./Anheuser-Busch Brewery)

Detailed information, including schedule, pricing, and ordering will be posted to www.gfoa.org.

Anheuser Busch Clydesdale

CARDINALS BASEBALL

GFOA will be arranging group ticket options for the Sunday, May 6, 2018, baseball game versus the Chicago Cubs and the Monday, May 7, 2018, game versus the Minnesota Twins. Full details along with links to a purchasing site will be available to GFOA attendees in January (game times subject to change).
Tickets are limited.

WELCOME RECEPTION AND CLOSING EVENT

Meet and Mingle Welcome Reception
(FOLLOWING THE KEYNOTE ADDRESS)

SUNDAY, MAY 6, 2018 • 5:00 PM – 6:30 PM

America's Center Convention Complex

Complimentary to all registered attendees and guests

Help GFOA kick off the start to our 112th Annual Conference by joining us for a welcome reception! Enjoy beverages and appetizers in the convention center as you mingle with friends and colleagues and make some new acquaintances along the way. The exhibit hall will be open during this time, so take advantage of this opportunity to stroll the hall.

This informal reception will finish early enough to allow maximum flexibility for dinner plans or an evening to explore St. Louis. See you there!

Night at the Peabody

TUESDAY, MAY 8, 2018 • 7:30 PM – 10:30 PM

Peabody Opera House

(1400 Market Street, St. Louis, Missouri 63103)

Ticketed event, which includes live entertainment, beverages, and dessert
Space is limited

Join us in the beautifully restored Peabody Opera House for a night not to be missed!

We are very excited to welcome the talented **Huey Lewis and The News** for an exclusive concert for GFOA conference attendees and guests in a one-of-a-kind venue! Huey Lewis and The News are truly one of America's great Rock & Roll bands. As they enter their 39th year together selling over 20 million albums in the process, their music has outlasted countless trends, and is as fresh today as ever. These Grammy Award winners have written and performed such classic ***Top Ten Hits*** as "Heart of Rock & Roll," "Stuck With You," "If This Is It," "Hip To Be Square," "Do You Believe In Love," and "Workin' For A Livin." The group also wrote and performed "The Power of Love" and "Back in Time" for the hit film *Back To The Future*.

What better way to top off your conference stay than with great friends and entertainment—buy your tickets today!

You must be registered for the conference to purchase an evening event ticket. Ticket price includes entertainment, beverages, and dessert. Courtesy roundtrip shuttle service will be provided for GFOA attendees to the Peabody Opera House beginning at 7:00 pm.

Adults: $25
Children and young adults under 21: $10
Children under 5: complimentary

Peabody Opera House *Photo Credit — Tom Paule*

Huey Lewis and The News

REGISTRATION

IMPORTANT ACTION DATES

First discount deadline
February 1, 2018

Second discount deadline
March 23, 2018

Full registration fee required
March 24, 2018

REGISTRATION FEES INCLUDE

- Concurrent sessions on Sunday through Wednesday (delegates only)
- Welcome Reception on Sunday night (delegates and guests)
- Access to the Exhibit Hall on Sunday through Tuesday (delegates and guests)
- General sessions on Monday and Tuesday mornings (delegates only)
- Luncheons on Monday and Tuesday (delegates only)
- Networking and discussion groups held throughout the conference (delegates only)

REGISTRATION FEE DISCOUNTS

Take advantage of the following discounts:

- Receive a 10 percent discount on your conference registration fee when three or more people from your jurisdiction register together (registrations must be submitted and paid together). This discount does not apply to preconference seminars.
- Qualify for the early registration fee discounts. Payment must be received by the deadline dates listed in this brochure.
- Join GFOA today and receive $25 off the conference registration fee with a paid new membership.

CONFIRMATIONS

Registration confirmations and invoices will be sent as PDF attachments via e-mail from training@gfoa.org to the **registrant only**. Please add this address to your allowed senders list.

GUEST REGISTRATION

There is no registration fee for guests or children, but they must be preregistered. Guests will be admitted to the Sunday Welcome Reception and to the exhibit hall during designated hours. Conference sessions and the luncheons on Monday and Tuesday are not open to guests and children.

SUBSTITUTIONS

(Government entities only)
A one-for-one substitution of a nonmember for an active member is allowed. If your organization has a current GFOA member on the staff who is not attending conference, a nonmember may attend in their place at the lower member rate. Please provide the name or the membership number of the GFOA member on the registration form.

CANCELLATION AND REFUND POLICY

March 29, 2018
No fee for cancellations received before this date.

March 30, 2018
Cancellations postmarked between March 30 and April 30 will be refunded, less a 25 percent service fee.

May 1, 2018
Cancellations postmarked between May 1 and May 5 will be refunded, less a 50 percent service fee.

May 6, 2018
No refunds will be issued this date forward.

Register online @ www.gfoa.org or fill out the form in this brochure and mail or fax it to GFOA (fax: 312-977-4806), or scan the completed registration form and e-mail it to conference@gfoa.org. Phone registrations cannot be accepted. Check the registration discount dates and save money by registering early.

GETTING THERE

AIRLINE DISCOUNT CODES

Flying to the St. Louis Lambert International Airport is a convenient way to visit St Louis. GFOA has arranged for discounts with the following airlines:

DELTA

(www.delta.com) **Meeting ID – NMR4Z**
When booking online, select Meeting Event Code and enter the Meeting ID in the box provided on the search flight page.

UNITED

(www.united.com) **Z-code – ZEAD**
Agreement code – 988710
To book travel online, enter the Z-code followed by the Agreement code (i.e., ZEAD988710) in the offer code box.

SOUTHWEST

Go to www.swabiz.com/flight/search-flight.html?cid=99622471 to save with discounted rates. Save 10% on Anytime & Business Select® fares and 3% on select Wanna Get Away® fares for travel to and from the conference. Book your travel between November 1 and April 15 to take advantage of the discounted rates. Discounts are available for travel April 29 through May 13. 50% bonus Rapid Reward points for attendee travel to and from the conference with a Rapid Rewards # added to your reservation. (To enroll in the Rapid Rewards program, visit www.southwest.com/corporaterapidrewards.)

RAIL

METROLINK

Metro's light-rail network, MetroLink, has been called one of the best mass transit systems in the country. The rail system offers multiple lines and stops through St. Louis County and City and the Metro East stopping at or near many of St. Louis attractions.

To plan your trip, you can use their online Trip Planner, Google Transit, or download the Metro On The Go app (available on the App Store and Google Play) and plan your trip from your mobile device. www.metrostlouis.org/.

DOWNTOWN & FOREST PARK TROLLEY

There is a more economical way to get around downtown St. Louis these days, thanks to the **Metro Downtown Trolley**. Colorful Metro buses that have been painted to look like trolleys travel a circuit that links riders to many of downtown's most popular destinations, including St. Louis Union Station, Busch Stadium, the America's Center Convention Complex, City Museum, and dozens of restaurants and hotels. http://www.stladventurepass.com/downtown-trolley.html

In addition to the Downtown Trolley, visitors can explore Forest Park onboard the **Metro Forest Park Trolley**. The Forest Park Trolley is a great way for Forest Park visitors to conveniently navigate through the Park and its many attractions. The Forest Park Trolley operates daily between 9:00 a.m. and 7:00 p.m. from April through September and will connect all of the popular Forest Park attractions with the Forest Park-DeBaliviere MetroLink Station.

Tickets for both Trolleys are $2 for adults and $1 for children (ages 5-12) for unlimited use all day.

RENTAL CAR

HERTZ

To reserve special meeting rates, please include the CV# when making reservations.
1-800-654-2240 or www.hertz.com **CV# – 04SJ0006**

TAXI SERVICE

Terminal 1: Exit Door 14 to Garage Yellow Level
Terminal 2: Exit Door 12

Exact fares depend on final destination. Each taxi will have an Airport Use Fee of $4.00 per pickup (approximate fare from airport to convention center is $50 with tip).

Airport taxis are regulated by the Metropolitan Taxicab Commission.

For more information regarding Airport Taxis, please visit www.stlouislamberttaxi.com.

AIRPORT SHUTTLE

GO BEST EXPRESS AIRPORT SHUTTLE

Provides a clean, safe, affordable way of getting from the airport to downtown hotels. This express, non-stop bus service runs every 30 minutes from 4:00 a.m. to 11:00 p.m. for only $25 one way www.gobestexpress.com/.

WHERE TO STAY IN ST. LOUIS

Reserve your room in GFOA's official hotel block and you'll have a great opportunity to network with other conference attendees outside the convention center. GFOA will run dedicated shuttle between the Pear Tree Inn and Drury Inn Union Station and the convention center. GFOA will run courtesy shuttle between the Westin, Hilton Ballpark, and Drury Plaza and the convention center.

All other hotels in the GFOA official block are within walking distance to the convention center. Specific routes and schedules will be posted on www.gfoa.org as they become available.

GUARANTEEING YOUR ROOM RESERVATION

Experient is the Official Housing Provider for GFOA's 112th Annual Conference. GFOA has worked diligently with the hotels in St. Louis to establish room blocks for attendees and exhibitors. **Solicitation of hotel reservations from any company or housing provider other than Experient is not approved by GFOA.** Reservations made by unaffiliated organizations may appear to be for lower rates; however, they may be illegitimate, have unreasonable cancellation or change penalties, or be completely non-refundable. Please be aware of and report any unauthorized solicitation to GFOA.

Reservations will be processed on a first-come, first-served basis. If available, a hotel will be assigned in order of your preference, or closest to event if not available. You can expect to receive a confirmation within two business days of booking your room reservation. If you have not received your acknowledgement within 10 days of mailing or faxing your housing reservation form, please contact GFOA's Housing Department at GFOA@experient-inc.com or 1-800-967-8717 (International callers 1-847-996-5846).

A major credit card number valid until June 2018 or later or a check for one night's room and tax (add 17.92% tax) is required to secure a reservation. Credit cards are held as a guarantee only by the Housing Bureau, but may be charged by the hotel after April 12, 2018. A charge of one night's room and tax will be charged or forfeited on reservations that do not arrive (no-shows) and are not cancelled before 72 hours of arrival. Early departures after check-in are subject to penalty fees set by hotel.

Checks must be received by April 4, 2018, and must be made payable to Experient/GFOA Housing. Reservations indicating a deposit guarantee, for which no check has been submitted, are subject to cancellation. Please base the amount of the check on the rate at the hotel of your first preference. **Note:** Institutional purchase orders are NOT accepted. Cancellations within 72 hours of arrival will forfeit one night's room and tax. Refunds to those who guaranteed accommodations with a check deposit will be mailed after the end of the event.

HOUSING POLICIES

The lowest available room rates at event hotels have been specially negotiated. Other booking channels are continuously monitored to track down rival rates.

INTERNET:
Use Experient's online system to simplify your group/block booking and reserve your rooms in real-time with an immediate confirmation. Log on to www.gfoa.org and look for the housing link.

PHONE:
8:00 am – 5:00 pm CST, Mon – Fri
1-800-967-8717 (Domestic)
1-847-996-5846 (International callers)

MAIL:
Experient/GFOA Housing
5202 President's Court
Frederick, MD 21703

FAX:
1-301-694-5124

E-MAIL:
GFOA@experient-inc.com

CHANGES AND CANCELLATIONS

Cancellations within 72 hours of arrival will be charged one night's room and tax.

ROOM REQUESTS

Use the grid on the enclosed housing reservation form to indicate your room type(s) and number of rooms you are requesting per night. Enter your hotel choices in order of preference. For more space, attach an additional page, or log on to www.gfoa.org where you can easily make your group booking through Experient's online system. Please indicate any special needs.

OFFICIAL HOTELS AND AREA MAP

***The conference will take place at America's Center Convention Complex.**

	Hotel	Distance to CC	Limited Government Rate Single/ Double	Group Rate Single/ Double
1	Courtyard St. Louis Downtown/Convention Center	0.1		$179/$189
2	Drury Inn & Suites St. Louis Convention Center	0.1	$130	$160/$170
3	Embassy Suites by Hilton St. Louis Downtown	0.1	$130	$189
4	Holiday Inn St. Louis Downtown Convention Center	0.1	$130	
5	Magnolia Saint Louis	0.1		$219
6	Marriott St. Louis Grand	0.1	$130	$214
7	Hampton Inn St. Louis-Downtown (At the Gateway Arch)	0.2	$130	
8	Hilton St. Louis Downtown at the Arch	0.3		$169
9	Drury Plaza Hotel St. Louis at the Arch	0.4	$130	$160/$170
10	Four Seasons Hotel St. Louis	0.4		$205
11	Hilton St. Louis at the Ballpark	0.4		$169
12	Hyatt Regency St. Louis at the Arch	0.4	$130	$209
13	Lumiere Place Casino and Hotel	0.4		$186
14	The Westin St. Louis	0.6	$130	$189
15	Drury Inn St. Louis at Union Station	1.1	$130	$160/$170
16	Pear Tree Inn Union Station	1.2	$130	$160/$170

! Experient will be the ONLY official housing company for GFOA's Annual Conference and will not contact attendees directly to make a reservation.

Top reasons to book your hotel room in GFOA's Official Hotel Block

SUPPORT GFOA

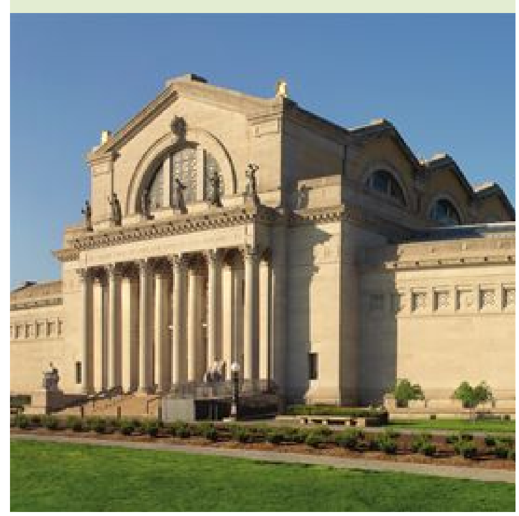
Booking in the official hotel block helps GFOA continue to offer the best, most competitive hotel rates in the future as well as keeps your registration fee increases to a minimum. It shows GFOA's value to the city and allows GFOA to negotiate better room blocks and rates for you.

RESERVATION PROTECTION

In the event a hotel overbooks, Experient protects those booked in the official hotel block. Rooms booked outside of the official hotel block do not receive this protection.

WAIT LIST

Booking in the block grants the ability to be placed on a wait list online for additional hotel nights needed.



Saint Louis Art Museum

MEMBERSHIP AND SOCIAL MEDIA

NOT A MEMBER? HELP US REACH 20,000 MEMBERS BY 2020!

WE'RE ALMOST THERE! Become a member of GFOA and join forces with more than 19,100 colleagues dedicated to enhancing and promoting the professional management of governments for the public benefit.

As a member of GFOA, you have access to:

- Training
- Consulting
- Technical Services
- Networking
- Awards Programs
- *Government Finance Review* magazine
- *e-Newsletter*
- Discounts
- Best Practice guidance

Already a member? Encourage your colleagues to join whether they're in the public or private sector: add members to your government's existing membership or encourage your peers who are interested in public finance but practicing in the private sector to join as Associate members.

If you have any questions about membership, e-mail membership@gfoa.org.

Go to www.gfoa.org to read about GFOA member benefits and to download a membership application and fee schedule today!

Riverboat on the Mississippi River

CONNECT WITH GFOA

@GFOA
(#GFOA & #GFOA2018)
@GFOAJobs
@chrisgfoa

GFOA of the US & Canada
GFOA Members Group

Government Finance Officers Association (GFOA)

KEEP WATCH ON GFOA'S WEBSITE FOR UPDATES ABOUT THE ANNUAL CONFERENCE

REGISTER EARLY AND SAVE!

GFOA ST. LOUIS CHECKLIST

- Register for conference
- Register for preconference seminars
- Purchase tickets to GFOA's Closing Event
- Reserve a hotel room from GFOA's official block of rooms
- Make your travel arrangements

Watch www.gfoa.org for the latest details on all conference events.

ABOUT GFOA

Government Finance Officers Association (GFOA), founded in 1906, represents more than 19,100 public finance officials throughout the United States and Canada. GFOA's mission is to promote excellence in state and local government financial management. GFOA views itself as a resource, educator, facilitator, and advocate for both its members and areas that affect state and local government finance. To meet the many needs of its members, the organization provides best practice guidance, leadership, professional development, resources and tools, networking opportunities, award programs and advisory services, concentrated in the following areas:

- accounting, auditing, and financial reporting
- budgeting
- capital planning
- debt management
- financial management
- pension and benefit administration
- treasury and investment management

Government Finance Officers Association
203 North LaSalle Street, Suite 2700
Chicago, Illinois 60601-1210
312.977.9700 | fax: 312.977.4806
www.gfoa.org | #GFOA2018

ABBOTT CAPITAL

Abbott Capital Management, LLC

1290 AVENUE OF THE AMERICAS
9TH FLOOR
NEW YORK, NY 10104
212 757-2700 *tel*
212 757-0835 *fax*

January 2018

To our valued clients:

The phrase "**Record Breaking"** has become such a part of our daily rhetoric that I have begun to wonder when our minds begin to filter out these attempts to grab and capture our attention and ultimately mute our ability to fully comprehend the grand picture. Last year provided us endless "record breaking" moments including devastating natural disasters in Puerto Rico, Texas and, more recently, California. Meanwhile, the headlines in 2017 in the private equity industry also had their share of record breaking events, exemplified by Softbank's Vision Fund with nearly $100 billion of committed capital, the reported record level of dry powder (over $900 billion, per Pitchbook) and purchase price multiples, etc. As I said at our 2017 Annual Client Conference this past September, it is not a question of "if" but rather "how and when" the current bull market will end and how are we positioning our portfolios now for the future.

One phrase often heard in our offices is ***intellectual honesty*** as we strive to challenge ourselves and one another to find the best ideas and solutions for our clients, encourage open dialogue, and apply critical thinking in our research and decision making. Seeking to "break records" to capture an industry award or raise the biggest fund is simply not, and has never been, in our DNA. However, there is one record that Abbott will **always** hold ourselves accountable to, and that is our track record of consistently seeking to identify a limited number of both primary and secondary venture capital, growth equity, buyout and special situations investments that have the potential to deliver attractive long term returns. Our years of experience have prepared us to maintain investment discipline through all economic cycles and 2017 was no exception to that mindset.

So for the Abbott team, we begin the 2018 vintage year with a heightened awareness of the longevity and vulnerability of the current worldwide economic expansion, and with an even firmer commitment and motivation to maintain the only record that matters to Abbott: a track record of serving our clients' interests first, year in and year out.

Abbott Organization and Team Developments:

During the course of 2017, we continued to invest additional resources across the firm and we welcomed several new members to the Abbott team: **Moritz Turck**, Senior Investment Associate (London); **Shaf Shaikh**, Senior Investment Analyst; **Declan Feeney**, Investment Analyst; **Ryan Green**, Director-Business Development; **Sean Long**, Vice President-Client Relations; **Kristin Kunert**, Associate-Client Relations; **Dillon Booth**, Analyst-Client Relations; **Chris Campbell**, Paralegal-Legal and Compliance; and **Harriet Markham**, File Administrator-Operations & Support Services.

We are also pleased to announce the following well-deserved promotions across the Abbott team, effective January 1st:

Investments:

Jennie Benza, Principal

Client Relations:

Jon Cleary, Senior Analyst

Operations and Support Services:

Jennifer Lagnado, Director of Corporate Operations

Fund Administration:

Mila Suley, Senior Fund Accountant

As we look to Abbott's future, we want to share with you that Charlie van Horne has announced his intention to retire from Abbott at the end of 2018. Charlie joined Abbott as a Managing Director in March 2001 to lead our Client Relations and Business Development team. Over the course of his tenure with Abbott, Charlie has been instrumental in working with Abbott's clients and helping Abbott develop our **Annual Program** and many of the specialized strategies that are now offered on Abbott's investment platform. Beyond 2018, Charlie will serve as a Senior Advisor to Abbott and, in typical Charlie form, we know he will always be ready and willing to do whatever it takes for our clients and Abbott.

Our current team of 11 Managing Directors and 46 professionals in New York and London continues to have a deep and broad mix of private equity investment, client service and fund administration experience. Charlie's future transition, balanced by our team promotions and additions, illustrates to both our clients and our colleagues that Abbott is committed to maintaining a vibrant and multi-generational leadership team that is built for the long term.

2017 Investment and Portfolio Highlights

For Abbott and our clients, 2017 was another active year as measured by our investment and exit activity across our active portfolios. Distributions across all strategies increased significantly and were punctuated by a notable uptick from some of our growth equity GPs. Abbott client portfolios, in the aggregate, received approximately $1.4 billion in cash and stock distributions during 2017, vs. $1.035 billion in 2016. Meanwhile, capital contributed by all client accounts totaled approximately $913 million to underlying funds in 2017, vs. $828 million in 2016. As more year-end industry wide data becomes available, we look forward to comparing

ABBOTT CAPITAL

and analyzing these results and sharing our views with you in our more comprehensive annual market review letter.

In terms of new primary investment activity, our deal flow in 2017 kept pace with 2016 as we reviewed over 525 primary investment opportunities and committed approximately $825 million to 21 funds. As we continue to underwrite new potential GP relationships and re-underwrite existing relationships, the challenges (particularly in a strong fundraising environment where new funds are often over-subscribed solely from existing limited partners) and objectives remain the same. In 2017, we identified and closed on several commitments that were new Abbott relationships that we had been tracking and evaluating for many years including, ***Charlesbank***, ***Chequers***, ***CRV*** , ***Clayton Dubilier & Rice***, ***Egeria***, ***Primus*** and ***RLH***.

With respect to our secondary deal flow, we reviewed 125 potential secondary transactions comprising nearly 1,400 underlying fund positions with reported net asset value of approximately $13.9 billion. While market conditions continued to favor sellers from a pricing perspective, Abbott successfully closed on four secondary transactions totaling approximately $60 million. In one situation, Abbott co-led a secondary investment focused on the recapitalization of a multi-unit franchisee in a fast growing value-oriented health club brand in the U.S. This investment is expected to enable continued unit expansion through both new unit builds and acquisitions in the U.S. and in Canada.

2017/2018 New Business Highlights

We begin 2018 with a strong base of capital from our longstanding clients as well as one new separately managed account relationship. In May, we were selected by **Ventura County Employees' Retirement Association** to manage and build a diversified account of private equity partnerships.

Meanwhile our **Annual Program (AP)** continues to be available each year for investors either seeking our core, diversified allocation or a custom allocation that enables each investor to tailor their investment strategy to meet their specific portfolio goals and objectives. In June 2017, **Annual Program 2017** held its final closing at $407 million in commitments with support from many of our existing investors. **Annual Program 2018** is on track to hold its first closing in January and hold closings through June 30, 2018. AP 2018 is expected to begin making investments in the first half of 2018 and **Annual Program 2019** will be available following the final closing of AP 2018.

Finally, in December, we held the final closing on **Abbott Secondary Opportunities (ASO)** with approximately $208 million of committed capital. Investors in ASO include both existing Abbott clients as well as over 20 new clients including pension funds, endowments, foundations and family offices. Since ASO's initial investments in mid-2016, ASO has now completed seven investments and there have already been several attractive realizations in the portfolio which enabled ASO to make its first distribution of approximately six percent of committed capital to limited partners at the end of the year. While ASO marks an important ***milestone*** (not a "record") in Abbott's history as our first dedicated fund exclusively focused on secondary investments, our cycle-tested secondary investment track record consists of over 50 investments totaling approximately $460 million since 1987.

Looking forward, we are in the early stages of re-initiating a **Co-Investment** strategy primarily focused on equity investments that will seek to take advantage of the co-investment deal flow available to us from some

ABBOTT CAPITAL

of our best performing growth equity, buyout and special situations funds. We look forward to sharing our views and preliminary plans with you.

Upcoming Webcasts – 2018

As we seek to maintain an active dialogue and frequent communications with our clients, we will host **a webcast on February 27, 2018 at 12:00pm ET** to provide a briefing on the market and our commingled funds. Later in the year, we will host our Client Conference and Annual Meeting via webcast as well. In 2019, we plan to hold an in-person Client Conference and Annual Meeting. More information on the webcasts will follow shortly.

As always, we are grateful for the trust you have placed with Abbott. On behalf of my partners and the entire Abbott team, we thank you for your continued partnership and support and wish each of you a happy and prosperous New Year.

Sincerely,

Jonathan Roth

Jonathan D. Roth

Managing Director, President