VENTURA COUNTY EMPLOYEES' RETIREMENT ASSOCIATION

BOARD OF RETIREMENT

BUSINESS MEETING

JANUARY 28, 2019

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.

<u>ITEM:</u>

I.	CAL	LL TO ORDER	Master Page No.
II.	<u>APF</u>	PROVAL OF AGENDA	1 – 4
III.	APF	PROVAL OF MINUTES	
	A.	Disability Minutes of January 7, 2019.	5 – 10
IV.	COI	NSENT AGENDA	
	A.	Approve Regular and Deferred Retirements and Survivors Continuances for Month of December 2018.	the 11
	B.	Receive and File Report of Checks Disbursed in December 2018.	12 – 15
	C.	Receive and File Budget Summary for FY 2018-19 Month Ending December 31, 2018.	16 – 17
	D.	Receive and File Statement of Fiduciary Net Position, Statement of Charin Fiduciary Net Position, Schedule of Investments, Cash and Cequivalents, and Schedule of Investment Management Fees for the Peending November 30, 2018.	Cash

		OF RETIREMENT JANUARY 28, 2019 S MEETING	AGENDA PAGE 2
٧.	COI	MPREHENSIVE ANNUAL FINANCIAL REPORT (CAFR)	
	A.	June 30, 2018 Comprehensive Financial Report (CAFR) – Brown Armstrong, Rosalva Flores, Partner and Alaina Sanchez, Manager. RECOMMENDED ACTION: Receive and File.	
		1. Comprehensive Annual Financial Report – June 30, 2018.	22 – 116
		2. Brown Armstrong Presentation (in PowerPoint) by Rosalva Flores, Partner and Alaina Sanchez, Manager.	117 – 127
		3. Independent Auditor's Report.	128 – 130
		4. Report to the Board of Retirement.	131 – 151
VI.	INV	ESTMENT MANAGER PRESENTATIONS	
	A.	Receive Annual Investment Presentation, Prudential Real Estate Investors – PGIM, Catherine Minor, and Marcus Berry.	152 – 196
VII.	INV	ESTMENT INFORMATION	
		NEPC – Allan Martin. VCERA – Dan Gallagher, Chief Investment Officer.	
	A.	Recommendation for \$100M Investment in LaSalle Growth & Income Fund VIII – US Real Estate Value Add Fund. RECOMMENDED ACTION: Approve.	
		Staff Letter by CIO, Dan Gallagher.	197
		2. Memorandum from NEPC.	198 – 202
		3. LaSalle Income & Growth Fund VIII Presentation by, Jim Hutchinson and Mathew Walley.	203 – 229
	B.	Recommendation for \$100M Allocation to US Treasury Portfolio Managed by Reams Asset Management. RECOMMENDED ACTION: Approve.	
		1. Staff Letter by CIO, Dan Gallagher.	230 – 231
	C.	Preliminary Performance Report Month Ending November 30, 2018. RECOMMENDED ACTION: Receive and File.	232 – 242
	D.	Preliminary Performance Report Month Ending December 31, 2018. RECOMMENDED ACTION: Receive and File.	243 – 253

JANUARY 28, 2019

BOARD OF RETIREMENT

BUS	INES	S MEETING	PAGE 3
VIII.	<u>OLI</u>	D BUSINESS	
	A.	Request for Authority for Retirement Administrator to Extend Office Lease. RECOMMENDED ACTION: Approve.	
		1. Staff Letter.	254
IX.	<u>NEV</u>	W BUSINESS	
	A.	Request for Continued Engagement of Hanson Bridgett for Tax Compliance Counsel. RECOMMENDED ACTION: Approve.	
		1. Staff Letter.	255
	B.	Request to Reschedule Board Consideration of Disability Cases to be Heard at February Disability Meeting. RECOMMENDED ACTION: Approve.	
		1. Staff Letter.	256
	C.	Recommendation for Authorization for Accounting Manager, Karen Scanlan to Attend the Dynamics SL User Group (DSLUG) Conference, April 15 - 18, 2019, in Anaheim, CA. Recommended Action: Approve.	
		1. Staff Letter.	257
		2. DSLUG 2019 Conference Schedule.	258 – 267
	D.	SACRS 2018-2019 Board of Director Nominations.	
		1. SACRS Notice.	268 – 270
	E.	Quarterly Administrator's Report for October - December 2018. RECOMMENDED ACTION: Receive and file.	271 – 273
	F.	Quarterly Chief Investment Officer's Report for October - December 2018. RECOMMENDED ACTION: Receive and file.	274
Χ.	<u>INF</u>	ORMATIONAL	
	A.	CALAPRS Advanced Principles of Pension Management for Trustees Notice.	275 – 278
	B.	CALAPRS General Assembly Notice.	279 – 280
XI.	PUE	BLIC COMMENT	
XII.	STA	AFF COMMENT	

AGENDA

BOARD OF RETIREMENT BUSINESS MEETING

JANUARY 28, 2019

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XIII. BOARD MEMBER COMMENT

XIV. <u>ADJOURNMENT</u>

VENTURA COUNTY EMPLOYEES' RETIREMENT ASSOCIATION

BOARD OF RETIREMENT

DISABILITY MEETING

JANUARY 7, 2019

MINUTES

TRUSTEES William W. Wilson, Chair, Public Member Robert Bianchi, Vice-Chair, Public Member

Mike Sedell, Public Member Dan Shapiro, General Member Arthur E. Goulet, Retiree Member Will Hoag, Alternate Retiree Member Ed McCombs, Alternate Public Member

TRUSTEES Steven Hintz, Treasurer-Tax Collector

ABSENT: Craig Winter, General Member

Chris Johnston, Safety Member

STAFF Linda Webb, Retirement Administrator **PRESENT:** Dan Gallagher, Chief Investment Officer

Leah Oliver, Chief Technology Officer

Lori Nemiroff, General Counsel

Vickie Williams, Retirement Benefits Manager Donna Edwards, Retirement Benefits Specialist Nancy Jensen, Retirement Benefits Specialist

Josiah Vencel, Communications Officer

Chris Ayala, Program Assistant Shalaine Nolan, Office Assistant III

PLACE: Ventura County Employees' Retirement Association

Second Floor Boardroom 1190 South Victoria Avenue

Ventura, CA 93003

TIME: 9:00 a.m.

JANUARY 7, 2019

MINUTES PAGE 2

ITEM:

I. CALL TO ORDER

Chair Wilson called the Disability Meeting of January 7, 2019, to order at 9:04 a.m.

Mark Lunn, County Clerk and Recorder, was present and administered the Oath of Office to Dan Shapiro.

II. APPROVAL OF AGENDA

MOTION: Approve.

Moved by Bianchi, seconded by Goulet.

Vote: Motion carried

Yes: Bianchi, Goulet, Hoag, McCombs, Sedell, Shapiro, Wilson

No: -

Absent: Hintz, Johnston, Winter

Abstain: -

III. <u>APPROVAL OF MINU</u>TES

A. Disability and Business Meeting of December 10, 2018.

Trustee Goulet provided a correction to the minutes, saying the motion related to item IX.A. was missing.

Ms. Webb also provided corrections: on Master Page 6, second sentence of the last paragraph, "this" should be added after "in"; the last sentence starting with, "He noted ...," should be stricken; and on Master Page 7, in the first sentence, "once" should be inserted before the word "that."

Trustee Goulet suggested that on Master Page 9, in the last sentence on the page, "that" should follow "said" for clarity.

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

MOTION: Approve as Corrected.

Moved by Bianchi, seconded by Goulet.

Vote: Motion carried

Yes: Bianchi, Goulet, Hoag, McCombs, Sedell, Shapiro, Wilson

No: -

Absent: Hintz, Johnston, Winter

Abstain: -

JANUARY 7, 2019

MINUTES PAGE 3

IV. RECEIVE AND FILE PENDING DISABILITY APPLICATION STATUS REPORT

MOTION: Receive and File.

Moved by Sedell, seconded by Bianchi.

Vote: Motion carried

Yes: Bianchi, Goulet, Hoag, McCombs, Sedell, Shapiro, Wilson

No: -

Absent: Hintz, Johnston, Winter

Abstain: -

Following the vote on this item, the Board advanced to agenda item V.B. "Application for Service-Connected Disability Retirement - Hill, Christopher W.; Case No. 17-019."

V. APPLICATIONS FOR DISABILITY RETIREMENT

- A. Application for Service-Connected Disability Retirement Horton, Merrill S.; Case No. 17-022.
 - Application for Service-Connected Disability Retirement, filed October 23, 2017.
 - 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 4, 2018.
 - 3. Hearing Notice, dated December 11, 2018.

Catherine Laveau was present on behalf of County of Ventura Risk Management. Donna Edwards was present on behalf of VCERA. The applicant, Merrill S. Horton, was also present.

Ms. Laveau declined to make a statement.

Mr. Horton declined to make a statement.

MOTION: Approve Application for Service-Connected Disability Retirement.

Moved by Sedell, seconded by Bianchi.

Vote: Motion carried

Yes: Bianchi, Goulet, Hoag, McCombs, Sedell, Shapiro, Wilson

No: -

Absent: Hintz, Johnston, Winter

Abstain: -

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

Following the vote on this item, the Board advanced to agenda item VII.A. "Establishment of Personnel Review Committee."

JANUARY 7, 2019

MINUTES PAGE 4

- B. Application for Service-Connected Disability Retirement Hill, Christopher W.; Case No. 17-019.
 - 1. Application for Service-Connected Disability Retirement, filed August 23, 2017.
 - 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 24, 2018.
 - 3. Hearing Notice, dated December 31, 2018.

Catherine Laveau was present on behalf of County of Ventura Risk Management. Donna Edwards was present on behalf of VCERA. Laurence D. Grossman, Attorney at Law, was present on behalf of the applicant, Christopher W. Hill, who was not present.

Ms. Laveau declined to make a statement.

Mr. Grossman declined to make a statement.

MOTION: Approve Application for Service-Connected Disability Retirement.

Moved by Bianchi, seconded by McCombs.

Vote: Motion carried

Yes: Bianchi, Goulet, Hoag, McCombs, Sedell, Shapiro, Wilson

No:

Absent: Hintz, Johnston, Winter

Abstain: -

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

Following the vote on this item, the Board returned to agenda item V.A. "Application for Service-Connected Disability Retirement - Horton, Merrill S.; Case No. 17-022."

VI. OLD BUSINESS

None.

VII. NEW BUSINESS

- A. Establishment of Personnel Review Committee.
 - 1. Staff Letter.

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

<u>MOTION</u>: Reappoint the Previous Personnel Review Committee Members—Trustees Hoag, Johnston and Sedell—and Appoint Trustee Shapiro to Serve as an Alternate in the Event that Trustee Johnston was Unable to Serve.

JANUARY 7, 2019

MINUTES PAGE 5

Moved by Goulet, seconded by Bianchi.

Vote: Motion carried

Yes: Bianchi, Goulet, Hoag, McCombs, Sedell, Shapiro, Wilson

No: -

Absent: Hintz, Johnston, Winter

Abstain: -

B. Report on Due Diligence Visit to HarbourVest Submitted by Trustees Bianchi and Sedell, and CIO Dan Gallagher.

RECOMMENDED ACTION: Receive and file.

C. Report on Due Diligence Visit to Prudential Submitted by Trustees Bianchi and Sedell, and CIO Dan Gallagher.

RECOMMENDED ACTION: Receive and file.

MOTION: Receive and File Due Diligence Reports for HarbourVest and Prudential.

Moved by Goulet, seconded by Bianchi.

Vote: Motion carried

Yes: Bianchi, Goulet, Hoag, McCombs, Sedell, Shapiro, Wilson

No: -

Absent: Hintz, Johnston, Winter

Abstain: -

VIII. INFORMATIONAL

IX. PUBLIC COMMENT

None.

X. STAFF COMMENT

Ms. Webb provided a brief update on the status of the office search and related negotiations. She said an extension of the current lease likely would be needed to accommodate the final negotiations.

Trustee Sedell asked Chair Wilson if an agenda item could be added to the Business Meeting on January 28th to authorize the Retirement Administrator to execute an extension of VCERA's lease with M.F. Daily because of previous complications regarding lease extensions.

XI. BOARD MEMBER COMMENT

None.

XII. ADJOURNMENT

JANUARY 7, 2019

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MINUTES PAGE 6

The meeting was adjourned at 9:23 a.m.

Respectfully submitted,

LINDA WEBB, Retirement Administrator

Approved,

WILLIAM W. WILSON, Chairman

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

December 2018										
FIRST NAME	LAST NAME	G/S	DATE OF MEMBERSHIP	BENEFIT SERVICE*	DEPARTMENT	EFFECTIVE DATE				
REGULAR RE	TIREMENTS:									
Mark	Barglowski	G	11/30/2008	5.02	Health Care Agency (deferred)	12/3/2018				
Denise	Barrett	G	8/6/1983	11.28	Regional Sanitation District (deferred)	12/4/2018				
Paul	Blumenfeld	G	1/29/2006	12.80	Information Technology Services	11/23/2018				
Wayne	Boteler	G	3/12/2006	12.74	Fire Protection District	11/30/2018				
Geoffrey	Dean	S	2/19/1978	40.76	Sheriff's Department	11/10/2018				
Deborah	Deloye-Navarro	S	9/4/1988	29.22	Probation Agency	12/1/2018				
Amy	Fonzo	G	3/10/1996	4.92	Human Services Agency (deferred)	9/16/2018				
Patti	Freyschlag	G	12/13/1998	19.89	Human Services Agency	11/23/2018				
Vincent	Grant	S	07/08/1990	35.93	Sheriff's Department	12/1/2018				
Ruben	Herrera	G	12/22/2003	14.48	Human Services Agency	11/21/2018				
Joyce	L'Heureux	G	11/2/2008	8.49	Health Care Agency (deferred)	12/1/2018				
Cynthia	Martinez	G	9/21/2001	17.03	Health Care Agency	11/29/2018				
Diana	Mendoza	G	1/11/1998	18.68	District Attorney	12/1/2018				
Susan	Mikula	G	11/2/2005	13.09	Ventura County Library	12/1/2018				
Dawn	Miller	G	8/15/1993	4.93	Health Care Agency (deferred)	12/15/2018				
Rogelio	Montiel	G	1/7/2002	12.90	General Services Agency	11/21/2018				
Estela	Nava	G	10/17/1978	40.04	Sheriff's Department	11/17/2018				
Catherine	Rodriguez	G	2/5/2007	11.59	CEO - Human Resources	12/1/2018				
Roseann	Salas	G	8/27/2006	11.28	Auditor-Controller	11/17/2018				
David	Spiker	S	5/18/1997	25.24	Sheriff's Department	11/17/2018				
Jeffrey	Steiger	G	6/5/1994	3.81	Health Care Agency (deferred)	12/1/2018				
DEFERRED RI	ETIREMENTS:				(
JEI EINKED IN										
Royce T.	Carter	G	09/23/2013	5.16	Health Care Agency	11/23/2018				
Erasmo A	Cortez	G	03/03/2013	5.54	Health Care Agency	11/28/2018				
Tara R.	Diller	G	02/02/2014	4.85 *	Animal Services	12/05/2018				

SURVIVORS' CONTINUANCES:

Debra Dodd Wyatt Drennen Sherry Garberich

Sherry Garberich-Brockus Sally Gearhart

Sally Gearhart
Marlene Martin-Betts
Irene Murrieta
Barbara Safe
Kit Sauer
Lenora Viveros
Walter Williams

^{* =} Excludes reciprocal service or service from any previous retirements

^{** =} Member establishing reciprocity

Thursday, January 03, 2019 09:15AM 103745 Date:

Time: User:

Ventura County Retirement Assn

Check Register - Standard Period: 06-19 As of: 1/3/2019

1 of 4 03630.rpt VCERA Page: Report: Company:

Check Nbr	Check Type	Check Date	Vendor ID Vendor Name	Period To Post Clo	Ref Nbr	Doc Type	Invoice Number	Invoice Date	Discount Taken	Amount Paid
Company:	VCE	RA								
Acct / Sub: 027846	10200 CK	12/4/2018	000000 BIANCHIROB ROBERT BIANCHI	06-19	000709	VO	TRAVEL REIMB	12/4/2018	0.00	146.72
027847	CK	12/4/2018	DIGITALDEP DIGITAL DEPLOYMENT	06-19	000710	VO	IΤ	12/4/2018	0.00	650.00
027848	CK	12/4/2018	EXECUTIVED EXECUTIVE DATA SYSTEMS	06-19	000711	VO	IT	12/4/2018	0.00	585.00
027849	CK	12/4/2018	GALLAGHERD DAN GALLAGHER	06-19	000712	VO	TRAVEL REIMB	12/4/2018	0.00	1,585.50
027850	CK	12/4/2018	HARRISWATE HARRIS WATER CONDITIONI	06-19	000715	VO	ADMIN EXP	12/4/2018	0.00	164.50
027851	CK	12/4/2018	INTERNATIO INTERNATIONAL FOUNDATION	06-19	000716	VO	ADMIN EXP	12/4/2018	0.00	1,635.00
027852	CK	12/4/2018	NEMIROFFLO LORI NEMIROFF	06-19	000713	VO	TRAVEL REIMB	12/4/2018	0.00	1,079.16
027853	CK	12/4/2018	OLIVERLEAH LEAH OLIVER	06-19	000714	VO	TUITION REIMB	12/4/2018	0.00	2,000.00
027854	CK	12/4/2018	SEDELLMIKE MICHAEL SEDELL	06-19	000717	VO	TRAVEL REIMB	12/4/2018	0.00	1,368.16
027855	CK	12/4/2018	SEGALCONSU SEGAL CONSULTING	06-19	000718	VO	ACTUARY FEES	12/4/2018	0.00	13,000.00
027856	СК	12/4/2018	SPRUCEGROV SPRUCEGROVE INVESTMEN	06-19	000719	VO	INVESTMENT FEES	12/4/2018	0.00	63,137.93
027857	CK	12/4/2018	VSGHOSTING VSG HOSTING, INC.	06-19	000720	VO	IT	12/4/2018	0.00	62,940.00
027858	CK	12/4/2018	WEBBLINDA LINDA WEBB	06-19	000721	VO	TRAVEL REIMB	12/4/2018	0.00	480.91

Thursday, January 03, 2019 09:15AM 103745 Date:

Time: User:

Ventura County Retirement Assn

Check Register - Standard Period: 06-19 As of: 1/3/2019

2 of 4 03630.rpt VCERA Page: Report: Company:

Check Nbr	Check Type	Check Date	Vendor ID Vendor Name	Perio To Post C	Ref Nbr	Doc Type	Invoice Number	Invoice Date	Discount Taken	Amount Paid
027859	CK	12/12/2018	ABUCOURTRE VERITEXT	06-19	000722	VO	ADMIN EXP	12/12/2018	0.00	315.00
027860	СК	12/12/2018	ACCESSINFO ACCESS INFORMATION PRO	06-19)	000723	VO	ADMIN EXP	12/12/2018	0.00	375.94
027861	CK	12/12/2018	BRENTWOODI BRENTWOOD IT	06-19	000728	VO	IT	12/12/2018	0.00	10,710.00
027862	СК	12/12/2018	BROWNARMST BROWN ARMSTRONG	06-19	000725	VO	ADMIN EXP	12/12/2018	0.00	3,488.00
027863	СК	12/12/2018	EDWARDSDON DONNA EDWARDS	06-19	000726	VO	TRAVEL REIMB	12/12/2018	0.00	99.34
027864	СК	12/12/2018	FEDEX FEDEX	06-19	000727	VO	ADMIN EXP	12/12/2018	0.00	8.65
027865	СК	12/12/2018	GALLAGHERD DAN GALLAGHER	06-19	000729	VO	TRAVEL REIMB	12/12/2018	0.00	162.09
027866	СК	12/12/2018	NATIONALAS NAPPA	06-19	000724	VO	ADMIN EXP	12/12/2018	0.00	555.00
027867	СК	12/12/2018	NOSSAMAN NOSSAMAN LLP	06-19	000730	VO	LEGAL FEES	12/12/2018	0.00	17,908.65
027868	СК	12/12/2018	SHREDITUSA SHRED-IT USA	06-19	000731	VO	ADMIN EXP	12/12/2018	0.00	158.46
027869	СК	12/12/2018	STAPLESADV STAPLES ADVANTAGE	06-19	000732	VO	ADMIN EXP	12/12/2018	0.00	53.86
027870	СК	12/12/2018	STATEBAROF THE STATE BAR OF CALIFOR	— 06-19	000733	VO	ADMIN EXP	12/12/2018	0.00	383.00
027871	СК	12/19/2018	ABUCOURTRE VERITEXT	06-19	000734	VO	ADMIN EXP	12/19/2018	0.00	1,165.65

Thursday, January 03, 2019 09:15AM 103745 Date: Time:

User:

Ventura County Retirement Assn

Check Register - Standard Period: 06-19 As of: 1/3/2019

3 of 4 03630.rpt VCERA Page: Report: Company:

Check Nbr	Check Type	Check Date	Vendor ID Vendor Name	_ Period To Post Closed	Ref I Nbr	Doc Type	Invoice Number	Invoice Date	Discount Taken	Amount Paid
027872	CK	12/19/2018	ATTMOBILIT AT&T MOBILITY	06-19	000735	VO	IT	12/19/2018	0.00	406.98
027873	СК	12/19/2018	BANKOFAMER BUSINESS CARD	06-19	000736	VO	ADMIN/IT	12/19/2018	0.00	2,867.66
027874	СК	12/19/2018	BIANCHIROB ROBERT BIANCHI	06-19	000737	VO	MILEAGE REIMB	12/19/2018	0.00	29.43
027875	СК	12/19/2018	CLONINGERJ JAMES P. CLONINGER	06-19	000738	VO	ADMIN EXP	12/19/2018	0.00	875.00
027876	CK	12/19/2018	JENSENNANC NANCY JENSEN	06-19	000739	VO	TRAVEL REIMB	12/19/2018	0.00	483.12
027877	CK	12/19/2018	LINEASOLUT LINEA SOLUTIONS	06-19	000740	VO	ADMIN EXP	12/19/2018	0.00	10,699.13
027878	CK	12/19/2018	PUBLICRETI PRISM	06-19	000742	VO	ІТ	12/19/2018	0.00	300.00
027879	СК	12/19/2018	SCANLANKAR KAREN SCANLAN	06-19	000741	VO	TRAVEL REIM	12/19/2018	0.00	394.02
027880	СК	12/19/2018	SEGALCONSU SEGAL CONSULTING	06-19	000744	VO	ACTUARY FEES	12/19/2018	0.00	1,440.00
027881	СК	12/19/2018	STROUDDESI STROUD DESIGN, INC	06-19	000743	VO	ADMIN EXP	12/19/2018	0.00	226.93
027882	СК	12/19/2018	TIMEWARNER TIME WARNER CABLE	06-19	000745	VO	IT	12/19/2018	0.00	294.99
027883	СК	12/19/2018	WILLIAMSEL ELENIDA WILLIAMS	06-19	000746	VO	TRAVEL REIMB	12/19/2018	0.00	424.66
027884	СК	12/26/2018	CDWGOVERNM CDW GOVERNMENT	06-19	000747	VO	IT	12/26/2018	0.00	2,352.71
027885	СК	12/26/2018	FEDEX FEDEX	06-19	000748	VO	ADMIN EXP	12/26/2018	0.00	26.20

Date: Thursday, January 03, 2019

Time: 09:15AM User: 103745

Ventura County Retirement Assn

Check Register - Standard Period: 06-19 As of: 1/3/2019 Page: 4 of 4 Report: 03630.rpt Company: VCERA

Check Nbr	Check Type	Check Date	Vendor ID Vendor Name	Peri To Post	Ref Nbr	Doc Type	Invoice Number	Invoice Date	Discount Taken	Amount Paid
027886	СК	12/26/2018	MEGAPATH MEGAPATH	06-19	000749	VO	ΙΤ	12/26/2018	0.00	595.57
027887	СК	12/26/2018	MFDAILYCOR M.F. DAILY CORPORATION	06-19	000750	VO	ADMIN EXP	12/26/2018	0.00	17,884.87
027888	CK	12/26/2018	NEPC NEPC, LLC	06-19	000751	VO	INVESTMENT EXP	12/26/2018	0.00	77,500.00
027889	CK	12/26/2018	PENSIONREA PENSION REAL ESTATE ASS	06-19 S	000752	VO	INVESTMENT EXP	12/26/2018	0.00	330.00
027890	CK	12/26/2018	STROUDDESI STROUD DESIGN, INC	06-19	000753	VO	ADMIN EXP	12/26/2018	0.00	471.25
027891	СК	12/26/2018	THOMSONREU THOMSON REUTERS- WEST	06-19	000754	VO	IT	12/26/2018	0.00	461.00
027892	CK	12/26/2018	WESTCOASTA WEST COAST AIR CONDITIO	06-19 I	000755	VO	IT	12/26/2018	0.00	75.00
027893	CK	12/31/2018	STAPLESKAR KAREN J. STAPLES	06-19	000756	VO	PENSION PAYMENT	12/31/2018	0.00	8,239.17
Check Count:		48						Acct Sub Total:		310,534.21

Check Type	Count	Amount Paid
Regular	48	310,534.21
Hand	0	0.00
Electronic Payment	0	0.00
Void	0	0.00
Stub	0	0.00
Zero	0	0.00
Mask	0	0.00
Total:	48	310,534.21

Company Disc Total 0.00 Company Total 310,534.21

Ventura County Employees' Retirement Association Budget Summary Fiscal Year 2018-2019 For the Six Months Ended December 31, 2018 and Year-To-Date - 50.00% of Fiscal Year Expended

	Adopted 2019	Adjusted 2019	December	Expended Fiscal	Available	Percent
	Budget	Budget	2018	Year to Date	Balance	Expended
Salaries and Benefits						
Regular Salary	\$3,215,800.00	\$3,215,800.00	\$245,274.95	\$1,402,657.92	\$1,813,142.08	43.62%
Extra-Help/Temporary Services	158,500.00	158,500.00	34,582.26	56,173.64	102,326.36	35.44%
Supplemental Payments	63,500.00	63,500.00	4,457.96	23,914.63	39,585.37	37.66%
Vacation Redemption	146,800.00	146,800.00	24,025.85	134,752.72	12,047.28	91.79%
Retirement Contributions	546,000.00	546,000.00	40,707.60	231,233.58	314,766.42	42.35%
OASDI Contribution	196,700.00	196,700.00	10,946.47	62,900.45	133,799.55	31.98%
FICA-Medicare	55,500.00	55,500.00	3,948.10	22,440.93	33,059.07	40.43%
Medical Insurance Life Insurance	327,600.00 1,100.00	327,600.00 1,100.00	22,588.00 93.00	131,567.00 537.85	196,033.00 562.15	40.16% 48.90%
Unemployment Insurance	2,300.00	2,300.00	175.22	978.64	1,321.36	42.55%
Mgmt Disability Insurance	23,500.00	23,500.00	1,596.28	9,052.02	14,447.98	38.52%
Workers Compensation Insurance	23,600.00	23,600.00	1,932.81	10,993.73	12,606.27	46.58%
401K Plan Contribution	81,700.00	81,700.00	5,803.58	34,271.92	47,428.08	41.95%
Total Salaries & Benefits	\$4,842,600.00	\$4,842,600.00	\$396,132.08	\$2,121,475.03	\$2,721,124.97	44.76%
Services & Supplies						
Board Member Stipend	\$13,200.00	\$13,200.00	\$800.00	\$5,000.00	\$8,200.00	37.88%
Other Professional Services	173,800.00	173,800.00	(11,444.02)	85,589.05	88,210.95	49.25%
Auditing	51,400.00	51,400.00	3,488.00	31,934.94	19,465.06	62.13%
Hearing Officers	50,000.00	50,000.00	875.00	875.00	49,125.00	1.75%
Legal	275,000.00	275,000.00	17,908.65	148,147.80	126,852.20	53.87%
Election Services	12,000.00	12,000.00	0.00	0.00	12,000.00	0.00%
Actuary-Valuation	61,000.00 13,000.00	61,000.00 13,000.00	0.00 13,000.00	30,500.00 13,000.00	30,500.00 0.00	50.00% 100.00%
Actuary-GASB 67 Actuary-415 Calculation	0.00	0.00	1,076.00	1,076.00	(1,076.00)	0.00%
Actuary-Misc Hrly Consult	16,000.00	16,000.00	364.00	364.00	15,636.00	2.28%
Printing	33,000.00	33,000.00	698.18	5,687.97	27,312.03	17.24%
Postage	70,000.00	70,000.00	4,606.41	26,385.92	43,614.08	37.69%
Copy Machine	3,000.00	3,000.00	621.33	981.69	2,018.31	32.72%
General Liability	15,100.00	15,100.00	7,542.50	7,542.50	7,557.50	49.95%
Fiduciary Liability	86,000.00	86,000.00	0.00	83,609.01	2,390.99	97.22%
Cost Allocation Charges	30,200.00	30,200.00	0.00	15,099.00	15,101.00	50.00%
Education Allowance	4,000.00	4,000.00	2,000.00	4,000.00	0.00	100.00%
Training/Travel-Staff	76,100.00	76,100.00	4,569.53	19,734.23	56,365.77	25.93% 13.87%
Training/Travel-Trustee Travel-Due Diligence-Staff	53,500.00 7,800.00	53,500.00 7,800.00	(125.00) 1,514.76	7,420.23 3,052.26	46,079.77 4,747.74	39.13%
Travel-Due Diligence-Trustee	13,400.00	13,400.00	2,334.74	4,229.30	9,170.70	31.56%
Mileage-Staff	4,800.00	4,800.00	570.13	1,332.82	3,467.18	27.77%
Mileage -Trustee	5,000.00	5,000.00	29.43	1,084.12	3,915.88	21.68%
Mileage-Due Diligence-Staff	1,000.00	1,000.00	70.74	143.01	856.99	14.30%
Mileage-Due Diligence-Trustee	1,000.00	1,000.00	49.05	49.05	950.95	4.91%
Auto Allowance	6,900.00	6,900.00	575.00	3,450.00	3,450.00	50.00%
Facilities-Security	2,700.00	2,700.00	264.56	1,579.40	1,120.60	58.50%
Facilities-Maint & Repairs	2,300.00	2,300.00	75.00	150.00	2,150.00	6.52%
Equipment-Maint & Repairs	2,000.00	2,000.00	0.00	0.00	2,000.00	0.00%
General Office Expense	10,400.00	10,400.00	164.50	2,252.70	8,147.30	21.66%
Books & Publications Office Supplies	2,500.00 18,000.00	2,500.00 18,000.00	0.00 140.04	581.78 4,932.72	1,918.22 13,067.28	23.27% 27.40%
Memberships & Dues	13,500.00	13,500.00	2,648.00	12,388.00	1,112.00	91.76%
Bank Service Charges	1,500.00	1,500.00	125.74	627.95	872.05	41.86%
Offsite Storage	4,800.00	4,800.00	375.94	3,842.45	957.55	80.05%
Rents/Leases-Structures	217,600.00	217,600.00	17,884.87	107,309.22	110,290.78	49.31%
Non-Capital Equipment	23,900.00	23,900.00	0.00	0.00	23,900.00	0.00%
Non-Capital Furniture	15,000.00	15,000.00	0.00	125.00	14,875.00	0.83%
Depreciation /Amortization	1,460,600.00	1,460,600.00	121,716.16	730,296.96	730,303.04	50.00%
Total Services & Supplies	\$2,851,000.00	\$2,851,000.00	\$194,519.24	\$1,364,374.08	\$1,486,625.92	47.86%
Total Sal, Ben, Serv & Supp	\$7,693,600.00	\$7,693,600.00	\$590,651.32	\$3,485,849.11	\$4,207,750.89	45.31%

Ventura County Employees' Retirement Association Budget Summary Fiscal Year 2018-2019 For the Six Months Ended December 31, 2018 and Year-To-Date - 50.00% of Fiscal Year Expended

	Adopted	Adjusted		Expended		
	2019	2019	December	Fiscal	Available	Percent
	Budget	Budget	2018	Year to Date	Balance	Expended
Technology						
Technology Hardware	\$67,100.00	\$67,100.00	\$1,574.83	\$34,917.49	\$32,182.51	52.04%
Technology Hardware Support	0.00	0.00	0.00	3,968.32	(3,968.32)	0.00%
Technology Software	214,600.00	214,600.00	1,762.00	40,240.78	174,359.22	18.75%
Technology Software Support	15,500.00	15,500.00	1,780.57	8,147.97	7,352.03	52.57%
Technology Systems Support	266,800.00	266,800.00	63,590.00	131,273.75	135,526.25	49.20%
Technology Infrastruct Support	500.00	500.00	0.00	339.98	160.02	68.00%
Technology Application Support	310,400.00	310,400.00	3,985.80	102,642.85	207,757.15	33.07%
Technology Data Communication	55,700.00	55,700.00	4,063.52	26,502.49	29,197.51	47.58%
Total Technology	\$930,600.00	\$930,600.00	\$76,756.72	\$348,033.63	\$582,566.37	37.40%
Congtingency	\$688,100.00	\$688,100.00	\$0.00	\$0.00	\$688,100.00	0.00%
Total Current Year	\$9,312,300.00	\$9,312,300.00	\$667,408.04	\$3,833,882.74	\$5,478,417.26	41.17%

Ventura County Employees' Retirement Association Statement of Fiduciary Net Position As of November 30, 2018 (Unaudited)

Assets

Cash & Cash Equivalents		\$146,804,356
Receivables		
Interest and Dividends Securities Sold Miscellaneous Total Receivables	4,005,077 9,210,104 3,181	13,218,362
Investments at Fair Value		
Domestic Equity Non U.S. Equity Global Equity Fixed Income Private Equity Real Assets Cash Overlay Total Investments	1,681,743,674 857,372,781 586,459,411 997,273,585 344,579,693 839,873,644 129,509	5,307,432,297
Total Investments		0,007,402,207
Capital Assets, Net of Accumulated Depreciation & Amortization		12,495,700
Total Assets		5,479,950,715
Liabilities		
Securities Purchased Accounts Payable Tax Withholding Payable Deferred Revenue (PrePaid Contributions)	40,690,555 486,953 3,100,148 101,376,166	
Total Liabilities		145,653,822
Net Position Restricted for Pensions		\$5,334,296,893

Ventura County Employees' Retirement Association Statement of Changes in Fiduciary Net Position For The Five Months Ending November 30, 2018 (Unaudited)

ADDITIONS

Contributions Employer Employee Total Contributions	\$75,947,457 28,461,769	104,409,226
Investment Income Net Appreciation (Depreciation) in Fair Value of Investments Interest Income Dividend Income Other Investment Income Real Estate Operating Income, Net Security Lending Income Total Investment Income	(53,409,339) 8,105,448 5,188,920 2,988,868 512,873 (36,613,230)	
Less Investment Expenses Management & Custodial Fees Other Investment Expenses Securities Lending Borrower Rebates Securities Lending Management Fees Total Investment Expenses	4,725,144 233,460 428,598 28,667 5,415,869	
Net Investment Income/(Loss)	_	(42,029,098)
Total Additions		62,380,127
DEDUCTIONS		
Benefit Payments Member Refunds and Death Benefit Payments Administrative Expenses Other Expenses Total Deductions	119,829,568 1,783,174 2,045,096 887,919	124,545,756
Net Increase/(Decrease)		(62,165,629)
Net Position Restricted For Pensions		
Beginning of Year		5,396,462,523
Ending Balance		\$5,334,296,894

Ventura County Employees' Retirement Association Investments, Cash, and Cash Equivalents As of November 30, 2018 (Unaudited)

Equity Stackrock - Russell 1000 \$1,427,414,611 \$0 \$1 \$2,003,830 \$0 \$0 \$1,427,414,611 \$1,621,903,830 \$0 \$1,627,903,830 \$0 \$1,627,903,830 \$0 \$1,627,903,830 \$0 \$1,627,903,830 \$0 \$1,627,903,830 \$0 \$1,627,903,830 \$0 \$1,627,903,830 \$0 \$1,627,903,830 \$0 \$1,627,903,830 \$0 \$1,627,903,830 \$0 \$1,627,903,830 \$0 \$1,627,903,830 \$0 \$1,627,903,830 \$0 \$1,627,903,830 \$0 \$1,627,903,830 \$0 \$1,627,903,830 \$0 \$1,627,903,830 \$0 \$1,627,903,903 \$0 \$1,627,903,903 \$0 \$1,627,903,903 \$0 \$0 \$0 \$0 \$0 \$0 \$0		Investments	Cash & Cash Equivalents
Blackrock - Russell 1000 \$1,427,414,611 \$0 \$0 \$2,038,33 \$0 \$0 \$0 \$0 \$2,038,33 \$0 \$0 \$0 \$0 \$0 \$0 \$0	Equity		
Blackrock - Russell 2500 \$2,038.830 192,290.232 30,769,917 Total Domestic Equity Index Plus 192,290.232 30,769,917 Total Domestic Equity 1,681,743,674 30,769,917 Total Domestic Equity 1,681,743,674 30,769,917 Total Rome 192,0265,821 30,689,832,506 60,832,50		M4 407 444 044	Φ0
Western Asset Enhanced Equity Index Plus 1,681,743,674 30,769,917 Total Domestic Equity 1,681,743,674 30,769,917 Non U.S. Equity Blackrock - ACWI ex - US			•
Total Domestic Equity			
Non U.S. Equity Blackrock - ACWI ex - US			
Blackrock - ACW lex - US	Total Dolliestic Equity	1,001,740,074	30,703,317
Blackrock - ACW lex - US	Non U.S. Equity		
Sprucegrove Walter Scott		438,795,286	0
Walter Scott 120,265,821 0 Total Non U.S. Equity 857,372,781 0 Global Equity 586,459,411 0 Total Global Equity 586,459,411 0 Fixed Income Blackrock - Bloomberg Barclays Aggregate Index 269,179,171 0 Loomis Sayles Multi Sector 80,524,287 1,305,085 Loomis Sayles Strategic Alpha 46,925,857 0 Reams 307,405,687 9 Western Asset Management 293,238,583 10,562,378 Total Fixed Income 997,273,585 11,867,472 Private Equity 4 49,25,867 9 Abott Capital (34,391) 0 A Abott Secondaries 12,748,689 0 0 Adams Street 160,829,384 0 0 Battery Ventures 3,216,048 0 0 Buenaventure One 17,952,434 0 0 Buenaventure Two 110,410 0 0 Clearlake Investors 9,033,084 0 0 <td>Hexavest</td> <td>86,832,506</td> <td>0</td>	Hexavest	86,832,506	0
Total Non U.S. Equity S57,372,781			
Section			
Blackrock - ACWI Index 586,459,411 0 0 0 0 0 0 0 0 0	Total Non U.S. Equity	857,372,781	0
Blackrock - ACWI Index 586,459,411 0 0 0 0 0 0 0 0 0	Clobal Equity		
Total Global Equity 586,459,411 0 Fixed Income Blackrock - Bloomberg Barclays Aggregate Index 269,179,171 0 Loomis Sayles Multi Sector 80,524,287 1,305,085 Loomis Sayles Strategic Alpha 46,925,857 0 Reams 307,405,687 0 Western Asset Management 293,238,583 10,562,378 Total Fixed Income 997,273,585 11,867,472 Private Equity Abott Capital (34,391) 0 Abbott Secondaries 12,748,689 0 Adams Street 160,829,384 0 Battery Ventures 3,216,048 0 Buenaventure One 17,952,434 0 Buenaventure Two 110,410 0 Carval Investors 9,033,084 0 Clearlake Investors 3,125,752 0 Drive Capital 5,900,660 0 ECI 11 GP LP 300,000 0 GTCR Fund XII 3,719,658 0 Monroe Capital 1,107,227 0		586 459 411	0
Pixed Income Blackrock - Bloomberg Barclays Aggregate Index 269,179,171 0 1,005,085 1,005,			
Blackrock - Bloomberg Barclays Aggregate Index	Total Global Equity	360,433,411	
Blackrock - Bloomberg Barclays Aggregate Index	Fixed Income		
Loomis Sayles Strategic Alpha 46,925,857 0 Reams 307,405,687 9 9 Western Asset Management 293,238,583 10,562,378 Total Fixed Income 997,273,585 11,867,472 Private Equity Abbott Capital (34,391) 0 0 Abbott Secondaries 12,748,689 0 0 Abbott Secondaries 12,748,689 0 0 0 0 0 0 0 0 0		269,179,171	
Reams 307,405,687 9 Western Asset Management 293,238,583 10,562,378 Total Fixed Income 997,273,585 11,867,472 Private Equity Abbott Capital (34,391) 0 Abbott Secondaries 12,748,689 0 Adams Street 160,829,384 0 Buenaventure One 17,952,434 0 Buenaventure Two 110,410 0 Caval Investors 9,033,084 0 Clearlake Investors 9,033,084 0 Clearlake Investors 3,125,752 0 Drive Capital 5,900,660 0 ECI 11 GP LP 300,000 0 GTCR Fund XII 3,719,658 0 Harbourvest 81,418,808 0 Insight Ventures 6,993,613 0 Monroe Capital 1,107,227 0 Pantheon 38,158,315 0 Total Private Equity 344,579,693 0 Real Assets 153,766,357 0 <td></td> <td></td> <td>1,305,085</td>			1,305,085
Western Asset Management 293,238,583 10,562,378 Total Fixed Income 997,273,585 11,867,472 Private Equity Private Equity Private Equity Abbott Capital (34,391) 0 Abbott Secondaries 12,748,689 0 Adams Street 160,829,384 0 Battery Ventures 3,216,048 0 Buenaventure One 17,952,434 0 Buenaventure Two 110,410 0 Carval Investors 9,033,084 0 Clearlake Investors 9,033,084 0 Clearlake Investors 3,125,752 0 Drive Capital 5,900,660 0 Drive Capital 3,719,658 0 Harbouryest 81,418,808 0 Harbouryest 81,418,808 0 Insight Ventures 6,993,613 0 Monroe Capital 1,107,227 0 Pantheon 38,158,315 0 Total Private Equity 344,579,693 0			

Ventura County Employees' Retirement Association Schedule of Investment Management Fees For the Five Months Ending November 30, 2018 (Unaudited)

Equity Managers Domestic Equity	mauditedj
Blackrock - Russell 1000	\$3,250
Blackrock - Russell 2500	19,310
Western Asset Enhanced Equity Index Plus	96,716
Total Domestic Equity	119,276
Non U.S. Equity	400.050
Blackrock - ACWI ex - US Hexavest	103,959 104.365
Sprucegrove	200,084
Walter Scott	221,882
Total Non U.S. Equity	630,289
Global Equity	
Blackrock - ACWI Index	60,570
Total Global Equity	60,570
Fixed Income Managers	
Blackrock Bloomberg Barclays Aggregate Index	26,351 47,256
Loomis Sayles Multi Sector Loomis Sayles Strategic Alpha	79,594
Reams Asset Management	133,986
Western Asset Management	131,555
Total Fixed Income	418,742
Private Equity	
Abbott Capital	39,876
Abbott Secondary Opportunities Adams Street	110,990 457,939
Battery Ventures	65,904
Carval, CVI A Fund	1,667
Clearlake	32,118
Drive Capital	75,000
ECI 11 GP LP GTCR XII/A & B	352,617
Harbourvest	359,981
Insight Venture Partners	189,763
Monroe Capital	40= 004
Pantheon	137,981
Total Private Equity	1,823,837
Real Assets	470.014
Prudential Real Estate Advisors UBS Realty	472,014 479,785
Bridgewater All Weather	295,811
Tortoise (MLPs)	193,482
Total Real Assets	1,441,092
Cash Overlay (Parametric)	74,649
Securities Lending	
Borrower's Rebate	428,598
Management Fees	28,667
Total Securities Lending	457,264
Other	
Investment Consultant (NEPC)	77,500
Investment Custodian (State Street)	79,189
Total Other Fees	156,689
Total Investment Management Fees	\$5,182,409

2018 ANNUAL REPORT

Ventura County Employees' Retirement Association



Pension Trust Fund for the County of Ventura, California
Comprehensive Annual Financial Report
for the Fiscal Year Ended June 30, 2018



COMPREHENSIVE ANNUAL FINANCIAL REPORT FOR THE FISCAL YEAR ENDED JUNE 30, 2018

Pension Trust Fund for the County of Ventura, Ventura County Superior Court, Ventura County Air Pollution Control District, Ventura Regional Sanitation District and VCERA Issued by: Linda Webb, Retirement Administrator

> 1190 South Victoria Avenue, Suite 200, Ventura, CA 93003-6572 805.339.4250 • 805.339.4269 (fax) • www.vcera.org

Industry in Ventura County











Endowed with numerous natural and developed resources, Ventura County boasts several industries that are critical to the stability, wellbeing and future of its residents. Each featured industry in this report uniquely shapes the culture and character of the county in ways that make it a great place to live and work.

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Perhaps the most well-known industry in Ventura County, both among locals and visitors, is tourism. Featuring 22 miles of uninterrupted coastline, a mild Mediterranean climate, diverse arts and culture, abundant food and wine, outdoor activities and scenic islands, Ventura County is a go-to locale for leisure-seekers. The City of Ventura alone attracts more per-capita "leisure spending" than California as a whole, although many visitors opt for the no-cost beaches that face the majestic Channel Islands sitting 11 miles offshore.



Life guard station overlooking beachgoers (photo by Kamilo Bustamante) Kayakers approach Channel Islands (photo by Doug Mangum)

LETTER OF TRANSMITTAL



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

December 31, 2018

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, 2018. 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 Superior Court, 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, 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 general and safety members employed by the County of Ventura and participating special districts.

FINANCIAL INFORMATION

The financial attest audit performed by Brown Armstrong Accountancy Corporation states that VCERA's financial statements are prepared by management, presented in conformity with Generally Accepted Accounting Principles (GAAP), and 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 that 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. VCERA's management believes it has sufficient controls in place to mitigate the inherent risk within its financial reporting and accounting systems.

2018 COMPREHENSIVE ANNUAL FINANCIAL REPORT PAGE 1

LETTER OF TRANSMITTAL

CONTINUED

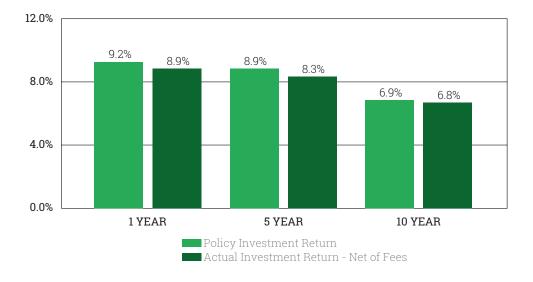
An overview of VCERA's fiscal operations is presented in the Management Discussion & Analysis (MD&A) section preceding the financial statements. This transmittal letter, when taken into consideration with the MD&A, provides an enhanced picture of the activities of the Association.

INVESTMENT ACTIVITIES

The Board of Retirement's (the Board) 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. The Board adopted a new Asset Allocation in May 2018.

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 May 2018.

For the one-year period ended June 30, 2018, VCERA's portfolio's asset classes' investment net-of-fees returns versus their respective benchmarks were mixed. The publicly-traded U.S. equity portfolio returned 14.8%, matching its benchmark. The non-U.S. equity portfolio returned 8.1%, outperforming its benchmark by 0.8%. Global equity returned 11.2%, outperforming its benchmark by 0.5%. Private equity returned 17.9%, underperforming its public market benchmark by 0.3%. Fixed income returned 0.1%, outperforming its policy benchmark by 0.5%. Performance returns for the newly adopted asset classes were not readily available as of June 30, 2018. The Total Fund returned 8.9% for the year, underperforming its policy benchmark by 0.3%. Over the five-year and ten-year periods ended June 30, 2018, the Total Fund's annualized returns were 8.3% and 6.8%, underperforming policy benchmarks by 0.6% and 0.1% respectively. The chart below compares the Total Fund's 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 systemwide actuarial valuation (i.e., Experience Study) is performed every three years, at which time VCERA's economic and non-economic assumptions are updated. Triennial Experience Studies 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 Experience Study was conducted as of June 30, 2017.

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 benefit tier. The CERL also requires members to pay half the contributions required to fund the cost-of-living adjustment (COLA) 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 COLA benefit. These are "normal cost" contributions. The employer is also responsible for making additional contributions to eliminate any shortfalls in funding (i.e., 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 new PEPRA benefit tiers for general and safety members with membership dates on or after January 1, 2013. Contributions for these tiers 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, 2018 valuation, determining the funded ratio to be 87.8%, a recognized UAAL of \$747 million. The employer contribution rate will therefore be set equal to 20.5% of payroll for the amortization of the UAAL, plus the normal cost rate of 8.5%, for a total contribution rate of 29.0% of payroll for the 2019-20 fiscal year.

SIGNIFICANT EVENTS, ACCOMPLISHMENTS, AND OBJECTIVES

The 2017-18 fiscal year (FY) 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:

- Completed an Actuarial Audit of the Actuarial Valuation.
- · Completed triennial Actuarial Experience Study.
- Implemented advanced programming in pension administration system to accommodate IRS model regulations.
- · Launched redesigned VCERA Website.
- · Issued revised member handbook.

LETTER OF TRANSMITTAL

CONTINUED

OBJECTIVES FOR THE COMING YEAR:

- Launch the Member Self Service (MSS) portal of the new pension system.
- Expand member education resources and materials.
- Launch redesigned VCERA newsletter (VCERA Vibes).
- Hire Chief Technology Officer.
- Hire Communications Officer.

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, 2017. 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 the 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

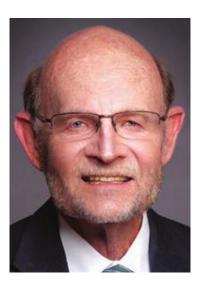
For its Comprehensive Annual
Financial Report
for the Fiscal Year Ended

June 30, 2017

Christopher P. Morrill

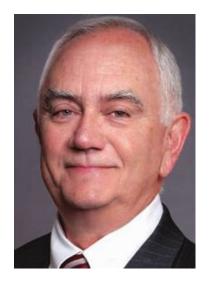
Executive Director/CEO

MEMBERS OF THE BOARD OF RETIREMENT



Chair (vacant)Alternate Elected by
Safety Members

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



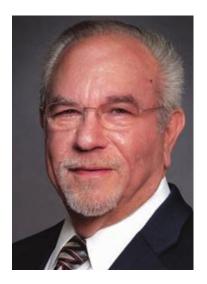
STEVEN HINTZ Ex-Officio Member Treasurer-Tax Collector County of Ventura



PETER C. FOYAppointed 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 WINTERElected by General Members



MAUVE FOXElected by General Members



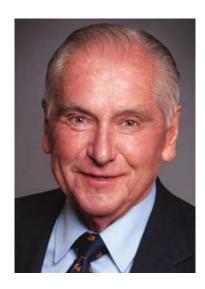
ARTHUR E. GOULET Elected by Retired Members



CHRIS JOHNSTONElected by Safety Members

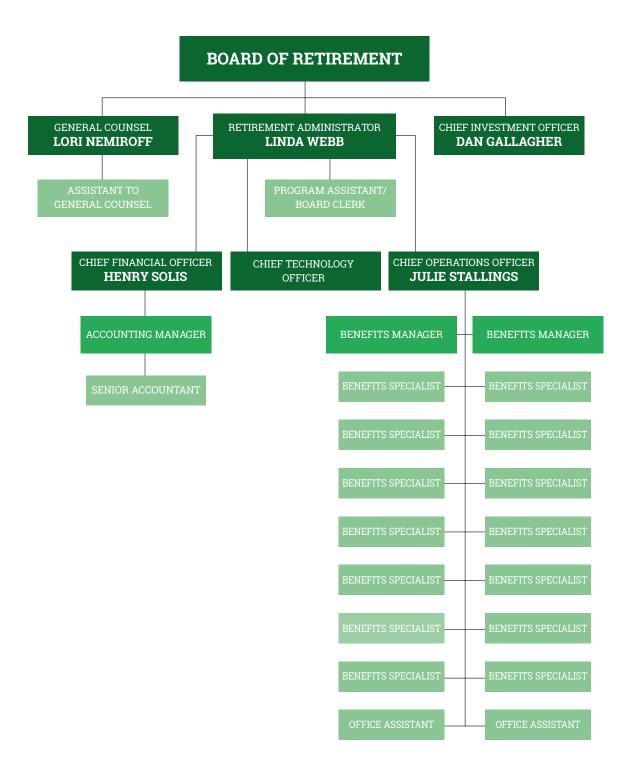


WILLIAM HOAG Alternate Elected by Retired Members



ED McCOMBSAlternate Appointed by
Board of Supervisors

2018 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

Nossaman, LLP Hanson Bridgett LLP

TECHNICAL SUPPORT

Automatic Data Processing
Information Technology Services of the County of Ventura
Brentwood IT
Velosio
Vitech Systems, Inc.

Please refer to the Schedule of Investment Managers on page 58 for investment professionals who provide services to VCERA.

FINANCIAL SECTION



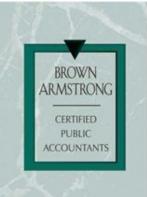


Agriculture is a thriving industry with deep historical roots in Ventura County. Despite residential and commercial development in the cities, major farming areas remain in rural Moorpark, rural Ventura, the Oxnard Plain and the Santa Clara River Valley. Valued at \$2.1 billion in 2017, Ventura County agriculture is led by its chief product, strawberries—a \$654 million crop—followed by lemons, celery, nursery stock, raspberries and avocados. Unfortunately, future avocado harvests will suffer due to recent fires that charred local fields.



Lettuce field in Oxnard (photo by fiveeightfour) Freshly picked, local strawberry (photo by Benjamin44)

FINANCIAL SECTION



BROWN ARMSTRONG

Certified Public Accountants

INDEPENDENT AUDITOR'S REPORT

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

BAKERSFIELD OFFICE (MAIN OFFICE)

4200 TRUXTUN AVENUE SUITE 300 BAKERSFIELD, CA 93309 TEL 661.324.4971 FAX 661.324.4997 EMAIL info@bacpas.com

FRESNO OFFICE

10 RIVER PARK PLACE EAST SUITE 208 FRESNO, CA 93720 TEL 559.476,3592

LAGUNA HILLS OFFICE

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

STOCKTON OFFICE

1919 GRAND CANAL BLVD SUITE C6 STOCKTON, CA 95207 TEL 888.565,1040

WWW.BACPAS.COM

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

Report on the Financial Statements and the Other Information

We have audited the accompanying Statement of Fiduciary Net Position of Ventura County Employees' Retirement Association (VCERA) as of June 30, 2018, 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 Allocations of VCERA and the Schedule of 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 (other information) as of and for the year ended June 30, 2018 (specified column totals), listed as other information in the table of contents.

Management's Responsibility for the Financial Statements and the Other Information

Management is responsible for the preparation and the fair presentation of these financial statements and the other information 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 and the other information that are free from material misstatement, whether due to fraud or error.

Auditor's Responsibility

Our responsibility is to express opinions on these financial statements and the other information based on our audits. We conducted our audits 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 audits 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 and other information. The procedures selected depend on the auditor's judgment, including the assessment of the risks of material misstatement of the financial statements and other information, 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 and other information 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 and other information.

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

Opinions

In our opinion, the basic financial statements and other information referred to above present fairly, in all material respects, the fiduciary net position of VCERA as of June 30, 2018, and the respective changes in fiduciary net position for the year then ended, and the Schedule of Cost Sharing Employer Allocations of VCERA for the year ended June 30, 2018; and the Schedule of 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 (RSI), 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 Governmental Accounting Standards Board (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 RSI in accordance with auditing standards generally accepted in the United States of America, which consisted of inquiries of management about the methods of preparing the information and comparing the information for consistency with management's responses to our inquiries, the basic financial statements, and other knowledge we obtained during our audit of the basic financial statements. We do not express an opinion or provide any assurance on the information because the limited procedures do not provide us with sufficient evidence to express an opinion or provide any assurance.

Other Supplementary Information

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

The other supplementary information, 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, 2017 financial statements, and our report dated December 20, 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, 2017, 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 31, 2018, 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

Grown Armstrong Secountainey Corporation

Bakersfield, California December 31, 2018

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 fiscal year ended June 30, 2018, 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, 2018 was \$5.4 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 \$432.2 million, or 8.7%. The increase for the fiscal year ended June 30, 2018 continues to be primarily driven by positive investment returns.
- Total additions, as reflected in the Statement of Changes in Fiduciary Net Position, for the fiscal year ended June 30, 2018 are \$717.6 million. This total is comprised of employer and plan member contributions of \$271.7 million, net investment gain of \$445.7 million and net securities lending income of \$180 thousand.
- Total deductions, as reflected in the Statement of Changes in Fiduciary Net Position, increased to \$285.4 million, or 7.2%, from the prior year.
- VCERA's funded status, as measured by the actuarial value of assets divided by the actuarial value of accrued liabilities, improved from 86.9% to 87.8%.

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, are included in the "Investments" line item.

The Statement of Fiduciary Net Position and Statement of Changes in Fiduciary Net Position report VCERA's net position - restricted for pensions as one way to measure the Plan's financial position. ("Net position" is the difference between assets and liabilities.) 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 the required "actuarially determined contributions." This information is based on actuarial valuations and contributes to the understanding of the changes in the net pension liability of participating employers.

Other Supplemental Information includes the schedules of Administrative Expenses, Investment Expenses 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 8.9% (net of fees), higher than the Plan's 7.50% assumed rate of return (7.25% for periods after June 30, 2018). The private equity portfolio outperformed all other VCERA asset classes with a return of 17.9%. The U.S. equity portfolio gained 14.8%, the global equity portfolio gained 11.2%, and the non-U.S. equity portfolio gained 8.1%. The fixed income portfolio returned 0.1%. For other asset class returns refer to the Schedule of Investment Returns on page 55.

RESERVES

Reserves are not required, nor recognized, under GAAP. These are not shown separately on the Statement of Fiduciary Net Position, but they equate to, and are accounts within, the Fiduciary Net Position restricted for pension benefits and are vital to VCERA's operations.

VCERA's reserves are established from contributions and the accumulation of investment income, after satisfying investment and administrative expenses (see Table on page that follows). Furthermore, VCERA has in place a five-year smoothing methodology for investment gains/(losses). Under GAAP, investments are stated at fair value instead of cost and include the recognition of the unrealized gains and losses in the current period. The difference between the fair value of assets inclusive of the cumulative unrealized gains and losses and the amounts reported from the five-year smoothing methodology (or actuarial value) comprises the Market Stabilization Reserve.

The Board has adopted an interest crediting and excess earning policy for the Plan to credit semi-annual interest to reserves and to determine the use of excess earnings, if any. On December 31, 2017 and June 30, 2018, all reserve accounts except for Member, Non-Vested Supplemental and Contingency reserve accounts are credited interest at a rate of one half of the actuarial assumption rate adopted by the Board, currently set at 3.75% (7.50% divided by two).

For Member reserves the board has established the rate for crediting interest to be set at one half the rate of the United States ten (10) year Treasury note as quoted in the Wall Street Journal for December 31st and June 30th not to exceed one half of the actuarial assumption rate adopted by the Board currently set at 3.75%. On December 31, 2017 and June 30, 2018, member accounts were credited interest at a rate of 1.205% and 1.424%, respectively, less than the actuarial assumption rate. The crediting of interest plus employer and member contributions and the increase in the fair value of investments in the fiscal year ended June 30, 2018, resulted in an increase of \$432.2 million in the total reserves as of June 30, 2018.

MANAGEMENT'S DISCUSSION AND ANALYSIS

CONTINUED

(\$ in Thousands)		
Reserve Account	June 30, 2018	June 30, 2017
Member	\$758,313	\$725,090
Employer Advance	1,696,067	1,514,758
Retired Member	2,768,422	2,561,943
Vested Fixed Supplemental	144,181	142,036
Non-Vested Supplemental	2,369	4,583
Death Benefits	15,794	15,244
Undistributed Earnings	-	-
Contingency	-	-
Market Stabilization	11,317	594
Total Reserves	\$5,396,463	\$4,964,248

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 \$5.0 billion to \$5.4 billion in fiscal year 2018. Investments increased by approximately \$442.6 million in fiscal year 2018, as a result of an increase in the fair value of VCERA's investment portfolio. Current Assets increased by \$12.4 million in fiscal year 2018, mostly attributable to an increase in VCERA's cash position, an increase in receivables primarily from securities sold and an increase in cash collateral on loaned securities based on increased demand in VCERA securities by borrowers. Capital Assets decreased by \$1.4 million, representing the amortization/depreciation of the pension administration system and equipment. Total Liabilities increased by \$21.5 million in fiscal year 2018, due primarily to an increase in payables for securities purchased and an increase in obligations due under the securities lending program.

(\$ in Thousands)	June 30, 2018	June 30, 2017	Difference	2018-2017 % Change
Current Assets	\$199,288	\$186,847	\$12,441	6.7%
Investments, at fair value	5,283,436	4,840,788	442,648	9.1%
Capital Assets, Net	13,104	14,507	(1,403)	-9.7%
Total Assets	5,495,828	5,042,142	453,686	9.0%
Total Liabilities	99,365	77,895	21,470	27.6%
Net Position Restricted For Pensions	\$5,396,463	\$4,964,247	\$432,216	8.7%

MANAGEMENT'S DISCUSSION AND ANALYSIS

CONTINUED

ADDITIONS AND DEDUCTIONS TO PLAN NET POSITION

The primary sources of assets to finance VCERA-paid benefits are investment income and the collection of employer and member contributions. Fiscal year 2018 results showed a 3.6% and 2.3% increase in employer and member contributions, respectively. Net investment income was lower than the prior year but still added \$445.9 million.

VCERA's assets are used primarily for the payment of pension benefits to retired members and their beneficiaries, refunds of member contributions, death benefits 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 2018.

Benefit payments grew by \$16.7 million or 6.5% in 2018, as the Plan continues, as expected, to experience an increase in retirements. Member refunds and death benefit payments increased from the prior year. Administrative/Other expenses represent cost of operating the plan. This category increased by 39.3% compared to the prior year due primarily to amortization/depreciation and ongoing costs of the pension administration system.

(\$ in Thousands)	June 30, 2018	June 30, 2017	Difference	2018-2017 % Change
Employer Contributions	\$197,683	\$190,759	\$6,924	3.6%
Employee Contributions	74,044	72,395	1,649	2.3%
Net Investment Income	445,902	580,526	(134,624)	-23.2%
Total Additions (Declines)	717,629	843,680	(126,051)	-14.9%
Benefit Payments	272,288	255,581	16,707	6.5%
Member Refunds & Death Benefit Payments	5,430	5,164	266	5.2%
Administrative/Other Expenses	7,696	5,524	2,172	39.3%
Total Deductions	285,414	266,269	19,145	7.2%
Net Increase (Decrease)	432,215	577,411	(145,196)	-25.1%
Fiduciary Net Poistion Beginning of Year	4,964,248	4,386,837	577,411	13.2%
Fiduciary Net Position at End of the Year	\$5,396,463	\$4,964,248	\$432,215	8.7%

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 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

MANAGEMENT'S DISCUSSION AND ANALYSIS

CONTINUED

methodology allowing comparability of data and increased transparency of the pension liability across all governmental entities. VCERA has complied with GASB 67 for the fiscal year ended June 30, 2018.

Based on the June 30, 2018 actuarial valuation, the NPL of participating employers on a fair value basis is \$725.5 million, a slight increase of approximately \$12.3 million from the prior year. 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, VCERA 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, 2018 WITH COMPARATIVE AMOUNTS FOR JUNE 30, 2017 (\$ IN THOUSANDS)

	June 30, 2018	June 30, 2017
ASSETS		
Cash and Cash Equivalents	\$119,099	\$113,846
Cash Collateral on Loaned Securities	47,615	44,705
Receivables		
Employer and Plan Member Contributions	10,505	9,566
Securities Sold	18,440	15,864
Accrued Interest and Dividends	3,593	2,832
Other	36	34
Total Receivables	32,574	28,296
Investments at Fair Value		
U.S. and Non-U.S. Equities	3,213,510	2,881,552
Fixed Income	942,574	945,944
Private Equity	276,326	208,663
Real Assets	851,026	804,629
Total Investments	5,283,436	4,840,788
Capital Assets, Net of Accumulated Depreciation and Amortization	13,104	14,507
Total Assets	5,495,828	5,042,142
LIABILITIES		
Payables for Securities Purchased	45,858	27,617
Payables and Other Liabilities	5,892	5,572
Securities Lending	47,615	44,705
Total Liabilities	99,365	77,894
Net Position Restricted for Pensions	\$5,396,463	\$4,964,248

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, 2018 WITH COMPARATIVE AMOUNTS FOR FISCAL YEAR ENDED JUNE 30, 2017 (\$ IN THOUSANDS)

	June 30, 2018	June 30, 2017
ADDITIONS		
Contributions		
Employer	\$197,683	\$190,759
Member	74,044	72,395
Total Contributions	271,727	263,154
Investment Income		
From Investing Activities:		
Net Appreciation (Depreciation) in Fair Value of Investments	416,909	551,251
Investment Income	44,410	43,833
Total Investing Activity Income (Loss)	461,319	595,084
Less Expenses from Investing Activities	(15,597)	(14,745)
Net Investing Activity Income (Loss)	445,722	580,339
From Securities Lending Activities:		
Securities Lending Income	955	575
Less Expenses from Securities Lending Activities:		
Borrower Rebates	(703)	(304)
Management Fees	(72)	(84)
Total Expenses from Securities Lending Activities	(775)	(388)
Net Securities Lending Income	180	187
Total Net Investment Income (Loss)	445,902	580,526
Total Additions	717,629	843,680
EDUCTIONS		
Benefit Payments	272,288	255,581
Administrative Expenses	4,881	5,524
Other Expenses	2,815	-
Member Refunds & Death Benefits	5,430	5,164
Total Deductions	285,414	266,269
Net Increase/Decrease in Net Position	432,215	577,411
IET POSITION RESTRICTED FOR PENSIONS		
Beginning of Year	4,964,248	4,386,837
End of Year	\$5,396,463	\$4,964,248

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 investments held by VCERA at June 30, 2018, 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, and real assets. 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, non-U.S. 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

NOTES TO THE BASIC FINANCIAL STATEMENTS

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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, i.e., 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 Assets. Real Assets are comprised of liquid alternatives and real estate. Liquid alternatives are comprised of publicly traded equities and fixed income instruments. Please refer to explanation of Fixed Income and Equities on page 19. 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.

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, 2018.

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 \$955,000, (\$703,000, and \$72,000), respectively, for the fiscal year ended June 30, 2018, 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.

NOTES TO THE BASIC FINANCIAL STATEMENTS

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Implementation of new Accounting Pronouncement

VCERA implemented all applicable new GASB pronouncements for the fiscal year ended June 30, 2018, as required by each statement. The most recent applicable pronouncement(s), effective for the year ended June 30, 2018, which did not have a material impact on VCERA's financial statements, are provided below.

GASB Statement No. 75 – Accounting and Financial Reporting for Postemployment Benefits Other than Pensions. The provisions of this statement are effective for fiscal years beginning after June 15, 2017. There was no effect on the VCERA accounting or financial reporting as a result of implementing this standard.

GASB Statement No. 81 – *Irrevocable Split-Interest Agreements*. The requirements of this statement are effective for reporting periods beginning after December 15, 2016. There was no effect on the VCERA accounting or financial reporting as a result of implementing this standard.

GASB Statement No. 85 – *Omnibus 2017.* The requirements of this statement are effective for reporting periods beginning after June 15, 2017. VCERA implemented GASB 85 for the year ended June 30, 2018, and the changes mandated by the statement are reflected in VCERA's financial statements and related disclosures. There was no material impact on VCERA's financial statements as a result of the implementation of GASB 85.

GASB Statement No. 86 – *Certain Debt Extinguishment Issues*. The requirements of this statement are effective for reporting periods beginning after June 15, 2017. There was no effect on the VCERA accounting or financial reporting as a result of implementing this standard.

Future Governmental Accounting Standards Board 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 determined that this standard will not be applicable as the plan does not have these types of transactions.

GASB Statement No. 84 – *Fiduciary Activities.* The requirements of this statement are effective for reporting periods beginning after December 15, 2018. The Plan has determined that this standard will not be applicable as the plan does not have these types of transactions.

GASB Statement No. 87 – *Leases.* The requirements of this statement are effective for reporting periods beginning after December 15, 2019. The Plan has determined that this standard will not be applicable as the plan does not have these types of transactions.

GASB Statement No. 88 – Certain Disclosures Related to Debt, including Direct Borrowings and Direct Placements. The provisions of this statement are effective for fiscal years beginning after June 15, 2018. The Plan has determined that this standard will not be applicable as the plan does not have these types of transactions.

GASB Statement No. 89 – Accounting for Interest Cost Incurred before the End of a Construction Period. The provisions of this statement are effective for fiscal years beginning after December 15, 2019. The Plan has determined that this standard will not be applicable as the plan does not have these types of transactions.

GASB Statement No. 90 – *Majority Equity Interests.* The requirements of this statement are effective for reporting periods beginning after December 15, 2018. The Plan has determined that this standard will not be applicable as the plan does not have these types of transactions.

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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 provided 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 eligible employees of the County of Ventura, Ventura County Superior Court, Ventura County Air Pollution Control District, Ventura Regional Sanitation District, and, since January 1, 2017, certain management employees of VCERA. (The latter four employers are not governed by the County of Ventura's Board of Supervisors.) The Plan is a pension trust fund of the County of Ventura.

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

Plan Membership. Membership is mandatory for employees with biweekly work schedules of 64 hours or more. General 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. General 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 Tier 1 members. New members first employed on or after January 1, 2013 are designated as PEPRA members.

VCERA MEMBERSHIP	2018	2017
Retired Members and Beneficiaries	7,038	6,766
Active Members		
Vested	5,762	5,801
Non-Vested	2,849	2,835
Deferred Members		
Vested	1,506	1,534
Non-Vested	1,403	1,275
Total Membership	18,558	18,211

Benefit Provisions. State law along with resolutions and ordinances adopted by the Board of Retirement and Board of Supervisors establish 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 members who entered VCERA 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 who entered VCERA 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' benefit tiers, ages at retirement, final average compensation, and total years of retirement service credit. 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 duties may be granted a disability retirement allowance by the VCERA Board of Retirement, 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 nonservice-connected disability retirement.

NOTES TO THE BASIC FINANCIAL STATEMENTS

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Death Benefits. For a member who dies while in active service, VCERA pays a "basic death benefit" to a surviving spouse or beneficiary, consisting of the member's accumulated contributions and interest plus an amount equal to an average month's salary for every year of completed service, up to 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 retired with a nonservice-connected disability as of the date of death. For a retired member, the benefits payable to a surviving spouse or other beneficiary depend upon the retirement option selected by the member at the time of retirement and whether the member's retirement was for service, nonservice-connected disability or service-connected disability. 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, non-vested \$27.50 per month to eligible retirees receiving the vested supplemental benefit described above. The non-vested supplemental benefit is provided pursuant to California Government Code Sections 31691.1 and 31692.

Cost-of-Living Adjustment. Cost-of-living adjustments (COLA), based upon changes in the Consumer Price Index for the Los Angeles area, of up to 3% per annum are made for all General Tier 1 and safety retirees. On February 28, 2005, the Board adopted regulations pursuant to California Government Code Section 31627 to provide a retiree COLA to general members who were represented by Service Employees International Union (SEIU) Local 721. The "SEIU COLA" is fixed at 2% annually and 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, and 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 term, equity returns 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

NOTES TO THE BASIC FINANCIAL STATEMENTS

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for the benefits provided through the Fund. The table below displays the Board's adopted asset allocation policy as of June 30, 2018 and 2017, respectively.

ASSET CLASS	Actual Allocation 2018	Target Allocation 2018	Actual Allocation 2017	Target Allocation 2017
U.S. Equity	32.4%	26.0%	31.2%	28.0%
Non-U.S. Equity	16.0%	17.0%	16.1%	15.0%
Global Equity	11.1%	10.0%	10.9%	10.0%
U.S. Fixed Income	17.4%	16.0%	19.1%	20.0%
Private Debt	0.0%	3.0%	0.0%	0.0%
Global Fixed Income	0.0%	0.0%	0.0%	0.0%
Real Estate	0.0%	0.0%	7.9%	7.0%
Global Tactical Allocation	0.0%	0.0%	0.0%	0.0%
Real Assets	15.8%	18.0%	0.0%	0.0%
Private Equity	5.1%	10.0%	4.2%	10.0%
Liquid Alternatives	0.0%	0.0%	8.3%	10.0%
Cash and Equivalents	2.2%	0.0%	2.3%	0.0%
Total	100.0%	100.0%	100.0%	100.0%

Note - The asset allocation from the investment consultant will differ from actuary asset allocation. The actuary groups asset classes differently but they represent the same overall grouping noted here.

Money-Weighted Rate of Return. For the fiscal year ended June 30, 2018, the annual money-weighted rate of return on pension plan investments, net of pension plan investment expense, was 8.92%. The money-weighted rate of return expresses investment performance, net of investment expense, adjusted for the changing amounts actually invested.

Time-Weighted Rate of Return. For the fiscal year ended June 30, 2018, the annual time-weighted rate of return on pension plan investments, net of pension plan investment expense, was 8.90%. The time-weighted rate of return expresses investment performance, net of investment expense, while offsetting the effects of investment inflows and outflows.

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).

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As of June 30, 2018 and 2017, VCERA had the following cash and short-term investments:

(\$ in Thousands)	June 30, 2018	June 30, 2017
State Street Bank and Trust	\$111,535	\$109,726
County of Ventura Treasurer's Investment Pool	4,459	1,020
Commercial Bank Account	3,105	3,100
Total	\$119,099	\$113,846

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, 2018	Assets held at June 30, 2017
Separate Holdings:		
AAA	\$92,509	\$104,627
AA	30,958	27,696
A	80,597	62,389
BBB	115,804	106,365
ВВ	26,885	27,977
В	7,216	7,420
ccc	3,384	3,189
СС	148	-
D	486	852
No Rating/Commingled	101,014	80,991
Total Separate Holdings	\$459,001	\$421,506
(\$ in Thousands) Rating Category	Assets held at June 30, 2018	Assets held at June 30, 2017
Pooled Investments:		
AAA	\$428,183	\$402,705
AA	96,649	95,580
A	55,800	64,010
BBB	58,114	73,204
ВВ	24,112	19,449
В	9,463	9,392
CCC	1,412	1,322
CC	-	108
Total Pooled Investments	\$673,733	\$665,770
Total Portfolio	\$1,132,734	\$1,087,276

Overall, the Plan's fixed income holdings were rated AA at June 30, 2018, and AA at June 30, 2017.

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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 ±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. The amounts held at June 30, 2018 and 2017 are as follows:

(\$ in Thousands) Category	Assets held at June 30, 2018	Duration (Years)	Assets held at June 30, 2017	Duration (Years)
Treasury	\$375,693	3.9	\$304,233	3.2
Agency	14,152	0.7	21,023	0.6
Mortgage-Backed	284,622	3.4	267,564	3.1
Asset-Backed	48,627	1.2	40,342	0.5
Credit	356,200	4.4	356,325	4.2
Foreign	50,882	5.0	48,688	4.4
Other	2,559	7.6	49,099	0.4
Total	\$1,132,735	3.8	\$1,087,274	3.1

The duration for the Barclays Capital Aggregate Bond Index as of June 30, 2016 and 2017, was 5.8 years and 5.7 years, respectively.

NOTES TO THE BASIC FINANCIAL STATEMENTS

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Foreign Currency Risk. Foreign Currency Risk is the risk that changes in exchange rates will adversely affect the fair value of an investment or deposit. VCERA's authorized managers are permitted to invest in approved countries or regions, as stated in their respective investment guidelines.

The following schedule represents VCERA's exposure to Foreign Currency Risk in U.S. dollars. VCERA is invested in several non-U.S. commingled funds. This means VCERA owns units of commingled funds, and the fund holds actual securities and/or currencies. The values shown include VCERA's pro rata portion of non-U.S. commingled fund holdings.

(\$ in Thousands) Currency	Fixed Income at June 30, 2018	Equities at June 30, 2018	Fixed Income at June 30, 2017	Equities at June 30, 2017
Australian Dollar	\$ -	\$55,803	\$ -	\$46,197
British Pound	331	190,662	77	168,068
Canadian Dollar	96	57,896	77	55,353
Danish Krone	-	18,342	-	17,774
Euro	(522)	284,700	(883)	263,968
Hong Kong Dollar	-	45,162	-	54,327
Japanese Yen	23	174,558	165	181,514
Mexican Peso		5,079		6,005
New Zealand Dollar	-	1,349	-	1,406
Norwegian Krone	136	15,831	1,457	11,313
South African Rand	273	17,777	-	15,498
Singapore Dollar	-	19,823	(473)	19,412
South Korean Won	-	33,444	-	31,933
Swedish Krona	-	16,481	730	19,912
Swiss Franc	-	80,675	-	78,724
Other/Emerging Markets	9,069	204,473	11,386	139,408
Total Securities Subject to Foreign Currency Risk	\$9,406	\$1,222,055	\$12,536	\$1,110,812

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, 2018 and 2017, 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, 2018 and 2017, VCERA had securities on loan with a fair value of \$46.7 million and \$43.7 million, with cash collateral of \$47.6 million and \$44.7 million, respectively.

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VCERA's net securities lending income for the fiscal years ended June 30, 2018 and 2017 is as follows:

(\$ in Thousands)	June 30, 2018	June 30, 2017
Gross Income	\$955	\$575
Expenses		
Borrower Rebates	703	304
Management Fees	72	84
Net Securities Lending Income	\$180	\$187

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

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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, 2018 and 2017, the notional amounts for derivatives outstanding and net appreciation (depreciation) in fair value amounts as of June 30, 2018, classified by type.

Investment Derivatives Schedule

(\$ in Thousands) Derivative Type	Notional Amount June 30, 2018	Fair Value June 30, 2018	Fair Value June 30, 2017	Change in Fair Value ¹ 2018 - 2017
Future Contracts	\$360,915	\$-	\$-	\$23,348
Forward Contracts	2,329	157	(5)	(15)
Options Contracts	382	(35)	97	(85)
Credit Default Swaps	4,930	(225)	0	46
Interest Rate Swaps	104,883	(11)	(1,344)	2,335
Total Investment Derivatives	\$473,439	\$(114)	\$(1,252)	\$25,629

¹Change 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, 2018, collateral for derivatives was \$19.5 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, 2018, the fair value of derivative investments subject to credit risk was (\$11 thousand), and at June 30, 2017, it was (\$1,344,000). 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

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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, 2018. 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, 2018, VCERA has a maximum amount of exposure to credit risk due to default of all counterparties of \$157 thousand.

Credit Risk Derivatives Schedule

(\$ in Thousands) Derivative Type	Fair Value June 30, 2018	Adjusted Rating			
		AA	Α	BBB	
Forward Contracts	\$157	\$ -	\$40	\$117	
Total	\$157	\$ -	\$40	\$117	

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 illustrate the investment maturity period and sensitivity to interest rate changes of these investments as of June 30, 2018.

Investment Maturities (in Years)

(\$ in Thousands) Derivative Type	Fair Value June 30, 2018	Less than 1	1-5	6-10	More than 10
Credit Default Swaps Bought	\$(225)	\$ -	\$(225)	\$-	\$-
Pay Fixed Interest Rate Swaps	366	-	-	59	307
Receive Fixed Interest Rate Swaps	(377)	-	(311)	-	(66)
Total	\$(236)	\$ -	\$(536)	\$59	\$241

Derivative Instruments Highly Sensitive to Interest Rate Changes:

(\$ in Thousands) Derivative Type	Receive Rates	Payable Rate	Fair Value	Notional
Pay Fixed Interest Rate Swaps	Receive variable 03-month LIBOR	Pay fixed 2.63000%	\$296	\$4,394
Pay Fixed Interest Rate Swaps	Receive variable 03-month LIBOR	Pay fixed 2.95000%	11	3,525
Pay Fixed Interest Rate Swaps	Receive variable 03-month FEDL	Pay variable 3-month LIBOR	59	62,681
Receive Fixed Interest Rate Swaps	Receive fixed 2.25000%	Pay variable 3-month LIBOR	(177)	7,488
Receive Fixed Interest Rate Swaps	Receive fixed 2.63000%	Pay variable 3-month LIBOR	(66)	982
Receive Fixed Interest Rate Swaps	Receive fixed 7.35050%	Pay variable 1-month TIIE	(106)	6,493
Receive Fixed Interest Rate Swaps	Receive fixed 2.85000%	Pay variable 3-month LIBOR	(28)	19,320
Total Interest Rate Swaps			\$(11)	\$104,883

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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, 2018.

Foreign Currency Risk Schedule for Derivative Instruments

	_	Currency Forward	l Contracts		
(\$ in Thousands) Currency	Options	Net Receivables	Net Payables	Swap Agreement	Net Exposure
Yuan Renminbi	\$ -	\$ -	\$2	\$ -	\$2
Euro Currency Unit	-	-	67	-	67
Mexican Peso	-	-	10	(106)	(96)
South African Rand	-	-	78	-	78
Sub total	-	-	157	(106)	51
U.S. Dollar	(35)	-	-	(130)	(165)
Total	\$(35)	\$ -	\$157	\$(236)	\$(114)

Commitments to Fund Partnerships. As of June 30, 2018, the total capital commitments to fund partnerships were \$658.8 million. Of this amount, \$352.5 million remained unfunded and is not recorded on the VCERA Statements of Fiduciary Net Position as of June 30, 2018. The following table depicts the total commitments and unfunded commitments by asset class.

Total Commitments and Unfunded Commitments to Fund Parterships by Asset Class as of June 30, 2018

(\$ in Thousands) Asset Class	Total Commitments	Unfunded Commitments
Private Equity	\$658,800	\$352,476
Total	\$658,800	\$352,476

Fair Value Measurements. VCERA categorizes its fair value measurements of its investments based on the fair value hierarchy established by generally accepted accounting principles (GAAP). 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. On the page that follows, the table depicts the fair value measurements as of June 30, 2018.

NOTES TO THE BASIC FINANCIAL STATEMENTS

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Investments and Derivative	Instruments	Measured	at Fair	Value
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		Quoted Prices in Active Markets for Identical Assets	Significant Other Observable Inputs	Significant Unobservable Inputs
(\$ in Thousands) Investments by Fair Value Level	Total	Level 1	Level 2	Level 3
Debt Securities				
Asset Backed Securities	\$56,995	\$-	\$56,327	\$668
Commercial Mortgage-Backed Securities	69,393	-	69,393	-
Corporate and Other Credit	226,988	-	226,988	-
Municipal Bonds	-	-	-	-
U.S. Government Agency	104,937	-	104,937	-
Total Debt Securities	458,313	-	457,645	668
Equity Securities				
U.S. Equity	13,596	13,466	130	-
Limited Partnerships	104,216	104,216	-	_
Preferred Stock	494	494	-	_
Total Equity Securities	118,306	118,176	130	-
Collateral from Securities Lending	47,615	<u> </u>	47,615	-
Total Investments by Fair Value Level	\$624,234	\$118,176	\$505,390	\$668
Investments Measured at Net Asset Value (NAV))			
Fixed Income	\$673,974			
Equity				
U.S.	1,559,341			
Non-U.S.	865,705			
Global	598,302			
Real Assets	733,377			
Private Equity	276,118			
Total Investments Measured at NAV	4,706,817			
Total Investments	\$5,331,051			
Investment Derivative Instruments				
Forward Exchange Contracts	\$157	\$157	\$ -	\$ -
Options Contracts	(35)	(44)	9	
Credit Default Swaps	(225)	-	(225)	
Interest Rate Swaps	(11)	-	(11)	-
Total Investment Derivative Instruments	\$(114)	\$113	\$(227)	\$ -
	. 11	1.1. 1.00		

Note: Values provided by custodian bank and presented based on securities 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

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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 net asset value (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, 2018.

Investments Measured at Net Asset Value

		Fair Value Measurement Using		
(\$ in Thousands) Investment Type	Fair Value	Unfunded Commitments	Redemption Frequency (if Currently Eligible) ¹	Redemption Notice Period
Fixed Income	\$673,974		D, M	3-15 days
Equity				
U.S.	1,559,341		D	1 day
Non-U.S.	865,705		D, M	2-30 days
Global	598,302		D	1-2 days
Real Assets	733,377		D, Q	5-90 days
Private Equity	276,118	352,476	N/A	N/A
Total Investments Measured at NAV	\$4,706,817	\$352,476		

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

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

NOTES TO THE BASIC FINANCIAL STATEMENTS

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Investments in publicly traded equity, fixed income, and the liquid alternative strategies within the Real Assets category 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 within the Real Assets category 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 of 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.

Special Purpose Entities. During the reporting period VCERA created Special Purpose Entities (SPEs) for use in Its investment portfolio.

As of June 30, 2018, the VCERA private equity portfolio utilized two Limited Liability Companies (LLC's). The following is a summary of the LLC's financial positions.

	2018
Assets	\$541
Less: Liabilities	-
Net Assets	\$541
Net Income	\$-

In October 2017, the VCERA Board approved creation of a Fund-of-One for direct private equity investments to be managed by Abbott Capital Management, LLC (Abbott). In November 2017, the VCERA Board approved the creation of two limited liability corporations (LLCs) to hold the direct private equity investments. No specific dollar amount of investment was committed for these LLCs as the private equity portfolio is managed in totality and Abbott determines whether the private equity is held directly or through the Fund-of-One.

NOTES TO THE BASIC FINANCIAL STATEMENTS

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4. NET PENSION LIABILITY OF PARTICIPATING EMPLOYERS

The components of the Net Pension Liability (NPL) of the Plan at June 30, 2018 and 2017, were as follows:

(\$ in Thousands)		
Net Pension Liability	June 30, 2018	June 30, 2017
Total Pension Liability	\$6,121,953	\$5,677,421
Plan Fiduciary Net Position	5,396,463	4,964,248
Net Pension Liability	\$725,490	\$713,174
Plan Fiduciary Net Position as a percentage of the	88.15%	87.44%

The NPL was measured as of June 30, 2018 and 2017. 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 2017 and 2016, respectively.

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 at 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.

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, 2018 were based on the results of the June 30, 2017 Review of Economic Assumptions and Actuarial Experience Study (Experience Study) adopted by the Board of Retirement in June 2018. For determining the Total Pension Liability, the investment return assumption used is net of investment expenses only and is not net of administrative expenses.

NOTES TO THE BASIC FINANCIAL STATEMENTS

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The actuarial assumptions used to determine the total pension liability as of June 30, 2018 were based on the results of the most recent Actuarial Experience Study which covered the period from July 1, 2014 through June 30, 2017. These same assumptions were used in the June 30, 2018 actuarial valuation, which is used to determine contribution rates for funding purposes. Key methods and assumptions used in the latest actuarial valuation and the total pension liability are presented below.

Methods and assumptions used in Annual Actuarial Valuation and Total Pension Liability:

Valuation Date

June 30, 2018 and June 30, 2017

Actuarial Assumptions and Methods

The TPL as of June 30, 2018 was remeasured by (1) revaluing the TPL as of June 30, 2017 (before the roll forward) to include the following actuarial assumptions that the Retirement Board has adopted for use in the pension funding valuation as of June 30, 2018 and (2) using this revalued TPL in rolling forward the results from June 30, 2017 to June 30, 2018. In particular, the following actuarial assumptions were applied to all periods included in the June 30, 2018 measurement:

Inflation 2.75%

Salary increases 3.75% to 11.75%, varying by service, including inflation

Investment rate of return 7.25%, net of pension plan investment expense, including

inflation

Other assumptions Same as those used in June 30, 2018 funding valuation

The TPL as of June 30, 2017 was measured as of June 30, 2016 using the same actuarial assumptions in the pension funding valuation as of June 30, 2017 and rolled forward the results from June 30, 2016 to June 30, 2017. In particular, the following actuarial assumptions were applied to all periods included in the June 30, 2017 measurement:

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

NOTES TO THE BASIC FINANCIAL STATEMENTS

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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	27.04%	5.32%
Small Cap U.S. Equity	4.48%	6.07%
Developed International Equity	17.32%	6.68%
Emerging Market Equity	4.16%	8.87%
U.S. Core Fixed Income	9.00%	1.04%
Real Estate	8.00%	4.65%
Master Limited Partnerships	4.00%	6.31%
Absolute Return (Fixed Income)	7.00%	1.71%
Private Debt/Credit Strategies	3.00%	5.50%
Absolute Return (Risk Parity)	6.00%	4.63%
Private Equity	10.00%	8.97%
Total	100.00%	

Note: Long-term expected rate of return net of investment expenses is 7.25%. Also, the actuary groups asset classes differently than the investment consultant. While the asset class target allocation does not match the investment consultants, they are considered the same.

Discount Rate

The discount rate used to measure the Total Pension Liability was 7.25% as of June 30, 2018 and 7.50% as of June 30, 2017. 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, 2018 and 2017.

NOTES TO THE BASIC FINANCIAL STATEMENTS

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The following table presents the Net Pension Liability of participating employers calculated using the current discount rate of 7.25% as of June 30, 2018 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	Current Discount Rate	1% Increase
	(6.25%)	(7.25%)	(8.25%)
June 30, 2018	\$1,564,365	\$725,490	\$34,036

5. CONTRIBUTIONS

Employer and employee contribution rates are approved 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 accrued liability (UAAL). For the June 30, 2018 valuation, the period for amortizing the UAAL is fixed at 15 years 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 \$197.7 million and \$190.8 million in actuarially determined contributions for the fiscal years ending June 30, 2018 and 2017, respectively.

Member contributions range from 5.96% to 13.76% depending upon members' benefit tier. 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 Reserve. 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:

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.

NOTES TO THE BASIC FINANCIAL STATEMENTS

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Death Benefit Reserve. Represents funds designated to pay death benefits pursuant to California Government 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, 2018 and 2017, are as follows:

(\$ in Thousands)

Reserve Account	June 30, 2018	June 30, 2017
Member	\$758,313	\$725,090
Employer Advance	1,696,067	1,514,758
Retired Member	2,768,422	2,561,943
Vested Fixed Supplemental	144,181	142,036
Non-Vested Supplemental	2,369	4,583
Death Benefits	15,794	15,244
Undistributed Earnings	-	-
Contingency	-	-
Market Stabilization	11,317	594
Total Reserves	\$5,396,463	\$4,964,248

NOTES TO THE BASIC FINANCIAL STATEMENTS

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7. ADMINISTRATIVE EXPENSES

As permitted by GC Section 31580.2(a), the Board adopts an annual budget, financed from investment income, covering the entire expense 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 \$2,000,000, as adjusted annually by the amount of the annual COLA. 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 years ended June 30, 2018 and 2017 were within the limits established by the California Government Code.

(\$ in Thousands)	June 30, 2018	June 30, 2017
Accrued Actuarial Liability (AAL) ¹	\$5,398,756	\$5,178,157
Statutory Limitation for Administrative Expense (AAL x 0.21%)	11,337	10,874
Administrative Expenses Subject to Statutory Limit	4,881	5,524
Excess of Limitation over Actual Administrative Expenses	\$6,456	\$5,350
Actual Administrative Expenses as a percentage of AAL	0.09%	0.11%

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, 2016 and 2015, was approved by the Board in January 2017 and 2016, respectively, and used to establish the administrative expenditure budgets for the fiscal years ended June 30, 2018 and 2017, 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 \$161,100.

9. COMMITMENTS AND CONTINGENCIES

Capital Commitments. VCERA's private equity investment managers identify and acquire investments on a discretionary basis. Each manager's investment activity and discretion is controlled by the contract, subscription agreement, limited partnership agreement and/or other contractual documents applicable to each manager. Such investments are further restricted by the amount of capital allocated or committed to each manager. VCERA has contracted with a private equity consultant to assist in managing a portion of the private equity program, which includes full discretion in manager selection. In addition, the Board retains discretionary control to approve private equity managers and committment amounts as often as necessary to reflect VCERA's investment preferences, as well as changes in market conditions. The table on the page that follows lists Outstanding Capital Commitments as of June 30, 2018.

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Outstanding Capital Commitments June 30, 2018 (\$ in Thousands)

Investment Manager	Investment Type	Total Capital Commitment	Outstanding Capital Commitment
Abbott Secondaries Opportunities, LP.	Private Equity	\$25,000	\$18,791
Adams Street 2010 U.S. Fund	Private Equity	42,500	5,057
Adams Street 2010 Non-U.S. Developed Markets Fund	Private Equity	25,500	3,175
Adams Street 2010 Non-U.S, Emerging Markets Fund	Private Equity	8,500	1,122
Adams Street 2010 Direct Fund	Private Equity	8,500	454
Adams Street 2013 Global Fund	Private Equity	75,000	21,750
Adams Street 2016 Global Fund	Private Equity	60,000	43,050
Battery Ventures XII	Private Equity	9,050	8,516
Battery Ventures XII Side Fund	Private Equity	5,050	4,999
Buenaventure One , LLC	Private Equity	37,250	36,714
Clearlake Capital Partners V	Private Equity	9,950	7,761
CVI Credit Value Fund IV	Private Equity	30,000	27,000
Drive Capital Fund II	Private Equity	15,000	10,279
GTCR Fund XII	Private Equity	30,000	29,256
Insight Ventures Partners X	Private Equity	25,000	22,250
HarbourVest - Dover Street VIII	Private Equity	67,500	7,763
HarbourVest - Dover Street IX	Private Equity	60,000	40,800
HarbourVest - Co-Investment Fund IV	Private Equity	30,000	9,041
M/C Partners VIII	Private Equity	10,000	10,000
Pantheon Global Secondary Fund IV	Private Equity	15,000	5,040
Pantheon Global Secondary Fund V	Private Equity	50,000	19,658
The Resolute Fund IV	Private Equity	20,000	20,000
Total Outstanding Commitments			\$352,476

10. SUBSEQUENT EVENTS

Management has evaluated subsequent events through December 31, 2018, 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, 2018	June 30, 2017	June 30, 2016	June 30, 2015	June 30, 2014	June 30, 2013
Total Pension Liability							
Service cost		\$138,877	\$132,490	\$129,269	\$124,408	\$122,896	\$118,839
Interest		427,800	405,195	388,936	366,917	355,299	340,000
Changes of benefit terms		-	-	-	-	-	-
Differences between expected and actual experience		26,564	(51,058)	(39,598)	(101,178)	(48,740)	(94,020)
Changes of assumptions		129,009	-	-	234,843	-	-
Benefit Payments, including refunds of member contributions		(277,718)	(260,745)	(246,403)	(233,695)	(223,532)	(209,958)
Net Change in Total Pension Liability		444,532	225,882	232,204	391,295	205,923	154,861
Total Pension Liability - Beginning		5,677,421	5,451,539	5,219,335	4,828,040	4,622,117	4,467,256
Total Pension Liability - Ending (A)		\$6,121,953	\$5,677,421	\$5,451,539	\$5,219,335	\$4,828,040	\$4,622,117
Plan Fiduciary Net Position							
Contributions- employer ¹		\$197,638	\$190,712	\$177,830	\$175,099	\$169,703	\$150,688
Contributions- members ¹		74,089	72,442	69,350	63,679	46,674	44,464
Net investment income		445,902	580,526	25,739	88,680	658,581	436,638
Benefit Payments, including refunds of member contributions		(277,718)	(260,745)	(246,403)	(233,695)	(223,532)	(209,958)
Administrative expense		(4,881)	(5,524)	(4,474)	(3,854)	(4,045)	(3,944)
Other		(2,815)	-	-	-	-	-
Net Change in Plan Fiduciary Net Position		432,215	577,411	22,042	89,909	647,381	417,888
Plan Fiduciary Net Position - Beginning		4,964,248	4,386,837	4,364,795	4,274,886	3,627,505	3,209,617
Plan Fiduciary Net Position - Ending (B)		\$5,396,463	\$4,964,248	\$4,386,837	\$4,364,795	\$4,274,886	\$3,627,505
Net Pension Liability - Ending	A-B=C	\$725,490	\$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	88.15%	87.44%	80.47%	83.63%	88.54%	78.48%
Covered payroll (D) ²		\$736,994	\$716,033	\$688,233	\$665,086	\$642,779	\$632,146
Net position liability as a percentage of covered payroll	C/D	98.44%	99.60%	154.70%	128.49%	86.06%	157.34%

Note - Data as of June 30, 2009 through June 30, 2012 are not available in comparable format.

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¹ Actuarially determined contributions exclude employer paid member contributions.

 $^{^2}$ Covered payroll represents payroll on which contributions to the pension plan are based.

REQUIRED SUPPLEMENTARY INFORMATION

CONTINUED

SCHEDULE OF EMPLOYER CONTRIBUTIONS

(\$ IN THOUSANDS)

Fiscal Year Ended June 30	Actuarially Determined Contributions ¹	Actual Employer Contributions ²	Contribution Deficiency/ (Excess)	Covered Payroll ³	Contributions as a % of Covered Employee Payroll
2018	\$197,638	\$197,638	\$ -	\$736,994	26.82%
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%

¹ All "Actuarially Determined Contributions" through June 30, 2014 were determined as the "Annual Required Contribution" as required by GASB 25 and 27.

SCHEDULE OF INVESTMENT RETURNS

Fiscal Year Ended June 30	Annual Money Weighted Rate of Return, Net of Investment Expense
2018	8.92%
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, adjusted for changing amounts actually invested.

Trend Information: Schedule will ultimately show information for 10 years. Additional years will be presented as they become available prospectively.

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.

REQUIRED SUPPLEMENTARY INFORMATION

CONTINUED

LATEST ACTUARIAL VALUATION OF PLAN ASSETS AND LIABILITIES

Methods and assumptions used to e	stablish "actuarially determined contribu	ntion" 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 Unfunded Actuarial Accrued Liability (UAAL) as of 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 the statutory Contingency Reserve.			
Actuarial Assumptions:	June 30, 2018 Valuation Date	June 30, 2017 Valuation Date		
Actuarial Assumptions: Investment rate of return	June 30, 2018 Valuation Date 7.25% net of pension plan administration and investment expenses, including inflation	June 30, 2017 Valuation Date 7.50% net of pension plan administration and investment expenses, including inflation		
	7.25% net of pension plan administra- tion and investment expenses, includ-	7.50% net of pension plan administration and investment expenses, includ-		
Investment rate of return	7.25% net of pension plan administra- tion and investment expenses, includ- ing inflation	7.50% net of pension plan administra- tion and investment expenses, includ- ing inflation		
Investment rate of return Inflation rate Real across-the-board	7.25% net of pension plan administration and investment expenses, including inflation 2.75%	7.50% net of pension plan administration and investment expenses, including inflation 3.00%		

¹ Includes inflation at 2.75% plus real across-the-board salary increases of 0.50% plus merit and longevity increases for June 30, 2018 and 3.00% plus real across-the-board salary increases of 0.50% plus merit and longevity increases for June 30, 2017.

Same as those used in the June 30,

2018, funding actuarial valuation.

Other Assumptions

Same as those used in the June 30,

2017, funding actuarial valuation.

OTHER SUPPLEMENTARY INFORMATION

SCHEDULE OF ADMINISTRATIVE EXPENSES

FOR THE FISCAL YEAR ENDED JUNE 30, 2018 WITH COMPARATIVE AMOUNTS FOR JUNE 30, 2017 (\$ IN THOUSANDS)

	June 30, 2018	June 30, 2017
Personnel Services:		
Salaries	\$2,726	\$2,484
Employee Benefits	1,181	1,080
Total Personnel Services	3,907	3,564
Consultant & Professional Services:		
External Audit Fees	44	48
Legal Consultants	37	333
Professional Services	240	266
Total Professional Services	321	647
Operating Expenses:		
Administrative Support	98	90
General Expenses	57	44
Computer Software	2	639
Education & Travel	51	99
Transportation	13	13
Equipment	-	15
Facilities Operations	217	196
Insurance	94	98
Printing	14	12
Postage	55	70
Telecommunications	52	37
Total Operating Expenses	653	1,313
Total Administrative Expenses	\$4,881	\$5,524

FINANCIAL SECTION

OTHER SUPPLEMENTARY INFORMATION

CONTINUED

SCHEDULE OF INVESTMENT EXPENSES

FOR THE FISCAL YEAR ENDED JUNE 30, 2018 WITH COMPARATIVE AMOUNTS FOR JUNE 30, 2017 (\$ IN THOUSANDS)

	June 30, 2018	June 30, 2017
Cash and Short-Term Managers	\$196	\$172
Equity Managers		
U.S. Equity	505	580
Non-U.S Equity	2,586	2,313
Global Equity	237	473
Fixed Income Managers	1,671	1,661
Private Equity Managers	4,363	3,539
Real Assets	4,855	5,381
Other Investment Expenses	1,184	626
Total Investment Expenses	\$15,597	\$14,745

SCHEDULE OF PAYMENTS TO CONSULTANTS

FOR THE FISCAL YEAR ENDED JUNE 30, 2018 WITH COMPARATIVE AMOUNTS FOR JUNE 30, 2017 (\$ IN THOUSANDS)

	June 30, 2018	June 30, 2017
Actuarial		
Valuation and Consulting Services	\$190	\$90
Audit		
External Audit Services	44	48
Legal		
Investment Legal Counsel	260	223
Other Legal Services	37	110
Total Legal	297	333
Management		
Information Technology Consulting	614	1,421
Total Payments to Consultants	\$1,145	\$1,892

FINANCIAL SECTION

OTHER INFORMATION

SCHEDULE OF EMPLOYER PENSION AMOUNTS ALLOCATED BY COST SHARING PLAN

(\$ IN THOUSANDS)

Pension Expense Excluding That Attributable to Employer-Paid Member Contributions

		Deferred Outflow of Resources					Deferred Inflow of Resources				Contributions			
	Net Pension	Differences Between Expected and Actual	Net Excess of Projected Over Actual Earnings on Pension Plan Investments	Changes of	Changes in Proportion and Differences Between Employer Contributions and Proportionate Share	Total Deferred Outflows of	Differences Between Expected and Actual	Net Excess of Actual Over Projected Earnings on Pension Plan Investments	Changes of	Changes in Proportion and Differences Between Employer Contributions and Proportionate Share of	Total Deferred Inflows of	Proportionate Share of Allocable Plan Pension	Net Amortization of Deferred Amounts from Changes in Proportion and Differences Between Employer Contributions and Proportionate Share of	Total Employer Pension Expense Excluding that Attributable to Employer- Paid Member
Employer	Liability	Experience	(If Any)	Assumptions	Contributions	Resources	Experience	(If Any)	Assumptions	Contributions	Resources	Expense	Contributions	Contributions
County of Ventura	\$698,072	\$20,895	\$-	\$153,628	\$1,275	\$175,798	\$73,873	\$39,574	\$ -	\$2,988	\$116,435	\$120,394	\$(258)	\$120,136
Ventura County Courts	20,635	618	-	4,541	2,202	7,361	2,184	1,170	-	1,096	4,450	3,559	76	3,635
Air Pollution Control District	3,104	93	-	683	280	1,056	329	176	-	52	557	535	75	610
Ventura Regional Sanitation District	3,679	110	-	810	719	1,639	389	209	-	340	938	635	107	742
Total	\$725,490	\$21,716	\$ -	\$159,662	\$4,476	\$185,854	\$76,775	\$41,129	\$-	\$4,476	\$122,380	\$125,123	\$-	\$125,123

FINANCIAL SECTION

OTHER INFORMATION

CONTINUED

SCHEDULE OF COST SHARING EMPLOYER ALLOCATIONS

(\$ IN THOUSANDS)

	June 30,	2018	June 30, 20)17	
Participating Employer	Allocation of Net Pension Liability (NPL)	Employer Allocation Percentage	Allocation of Net Pension Liability (NPL)	Employer Allocation Percentage	
County of Ventura	\$698,072	96.221%	\$690,194	96.778%	
Ventura County Courts	20,635	2.844%	17,304	2.426%	
Air Pollution Control District	3,104	0.428%	2,818	0.395%	
Ventura Regional Sanitation District	3,679	0.507%	2,858	0.401%	
Total	\$725,490	100.000%	\$713,174	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.





HEALTHCARE

Forming the core of the local healthcare industry are the public Ventura County Medical Center (VCMC), the region's only academic teaching hospital, and the nonprofit Community Memorial Hospital (CMH), Ventura's largest private-sector employer. The pair of healthcare systems have recently invested more than \$600 million in capital improvements to better serve residents, particularly the local "safety net" population. Ventura County also benefits from hundreds of clinics, medical offices, labs and other specialty services that drive innovation and care.



Ventura County Medical Center's new North Tower (photo by Bass Images)

Recovery room at Community Memorial Hospital (photo by Christopher Charles)



Allan Martin Partner

October 15, 2018

Mr. Dan Gallagher Chief Investment Officer Ventura County Employees' Retirement Association 1190 South Victoria Avenue, Suite 200 Ventura, CA 93003

Dear Mr. Gallagher,

The overall objective of the Ventura County Employees' Retirement Association Plan (VCERA) is to ensure continued access to retirement, disability and survivor benefits for current and future VCERA participants, solely in the interest of, and for the exclusive purpose of participants and their beneficiaries, minimizing employer contributions and defraying reasonable expenses of administering the system. To ensure a solid foundation for the future of the Plan, VCERA carefully plans and implements an investment program designed to earn the highest possible long-term rate of return consistent with a level of risk that the Board believes is appropriate given the plan's assets and liabilities, funded status and capital markets outlook. Investment policy and asset allocation are reviewed and revised by the Board of Retirement, at least annually, to reflect the Fund's actuarial assumptions, accrued liabilities, and economic and investment outlook. The following is a report on the performance of the Fund for the year ended June 30, 2018 with background on the underlying market environment.

Market Review for the Year Ended June 30, 2018

The U.S. economic expansion entered its ninth year, approaching a record for duration, powered by fiscal stimulus from the Tax Cuts and Jobs Act of 2017, corporate earnings growth and investment of repatriated cash. Although the Federal Reserve Bank maintained its path of methodically increasing interest rates, US equity market volatility remained relatively low with equities appearing to price in near-term expectation of further economic growth. U.S. stocks, as a result, posted their ninth consecutive year of positive returns and outperformed international equities by 7.6%. Global capital markets continued to be largely driven by accommodative Central Bank policy with the European Central Bank and Bank of Japan indicating that stimulative monetary policy may persist into 2019 and perhaps beyond. Volatile global markets became a mainstay in the year ending June 30, 2018 as concerns over anti-establishment political change, historically low and negative real interest rates and fears over U.S. trade policy caused uncertainty in investor sentiment. Uncertainty related to these risks was reflected in market volatility, although these risks were largely shrugged off by US equities, resulting in U.S. equities posting a robust 14.4% return as measured by the S&P 500 Index. International developed-markets equities (6.8% for the year) performed well but lagged domestic equities. Private Equity returns (an area of increased emphasis by VCERA) were also strong, with VCERA's Private Equity portfolio generating a 17.9% net-of-fee return for the fiscal year. Driven by increasing interest rates, U.S. high quality fixed income investments generated a negative return for the second consecutive year, returning -0.4% as measured by the Bloomberg Barclays U.S. Aggregate Bond Index.

The VCERA Investment Portfolio

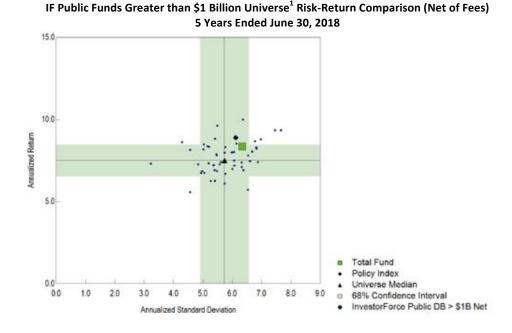
The VCERA total investment portfolio return, net of fees, was 8.9% (9.1% gross of fees) for the year ended June 30, 2018. By comparison, the median fund in the Investor Force peer group universe of large Public Funds returned 8.0% resulting in a top quartile ranking for the VCERA Fund. Contributing positively to performance

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



during the fiscal year was the Plan's overweight to Equities versus its peers, which also contributed to the Plan outperforming the actuarial assumed rate of 7.5% by 1.4% net of fees.

The Fund's five-year return for the period ended June 30, 2018 was 8.3% per year, net of fees, outperforming the actuarial assumed rate of 7.5% and ranking in the top quartile of the peer group returns and ranking in the top half of its peer group on a risk-adjusted basis with a Sharpe Ratio of 1.2. This signifies that the Fund has earned more return per unit of volatility risk taken than most of its peers.



With the majority of the global capital markets exhibiting relatively high valuations and divergent relative economic strength, the potential for downside risk and volatility are increasingly likely. Broader diversification can help protect portfolios from significant declines. VCERA's portfolio continues to diversify to be positioned to withstand significant declines in equity markets.

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 Martin, Partner

allan a Martin

 $^{^{1}\,\}text{Universe}$ rankings are based on gross of fee performance unless otherwise noted.

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 from the County of Ventura and is administered by a Board consisting of nine members plus three alternates. VCERA's Board, 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 that 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.

On May 21, 2018, the Board adopted a new allocation and subsequently an implementation plan that was predicated on a number of factors, including:

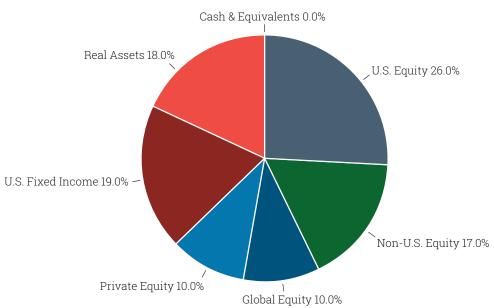
- a. The actuarially projected liabilities, benefit payments, and costs to both covered employees and employers.
- b. Historical and long-term capital market risk and return behavior.
- c. The perception of future economic conditions, including inflation and interest rate levels.
- d. The relationship between current and projected assets of the Plan and its actuarial requirements.

The portfolio is rebalanced, as necessary, to maintain asset allocations within their appropriate ranges.

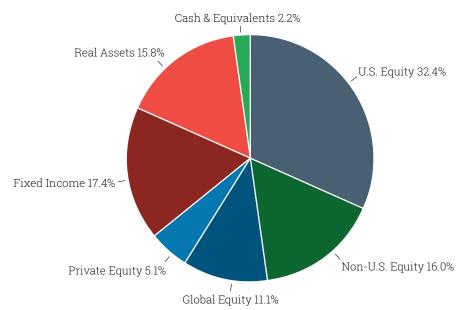
TARGET VERSUS ACTUAL ASSET ALLOCATION

AS OF JUNE 30, 2018

TARGET 1



ACTUAL



¹Represents Allocation targets in place as of June 30, 2018

INVESTMENT SUMMARY

AS OF JUNE 30, 2018 (\$ IN THOUSANDS)

Type of Investment	Fair Value	Percent of Total Fair Value
Cash and Cash Equivalents	\$119,099	2.2%
Fixed Income	942,574	17.4%
Subtotal Fixed Income and Cash	1,061,673	19.6%
U.S. Equity	1,749,502	32.4%
Non-U.S. Equity	865,705	16.0%
Global Equity	598,303	11.1%
Subtotal Equities	3,213,510	59.5%
Private Equity	276,326	5.1%
Real Assets	851,026	15.8%
Total Investments	\$5,402,535	100.0%

SCHEDULE OF INVESTMENT RETURNS BASED ON FAIR VALUE

AS OF JUNE 30, 2018 (\$ IN THOUSANDS)

Annualized

		Allilualizeu	
	Current Year ²	Three-Year ²	Five Year ²
U.S. Equity	14.8%	11.6%	13.5%
Russell 3000	14.8%	11.6%	13.2%
Fixed Income	0.1%	2.5%	2.6%
Current Benchmark: Bloomberg Barclays U.S. Aggregate Index	-0.4%	1.7%	2.3%
Non-U.S. Equity	8.1%	6.3%	6.6%
Current Benchmark: MSCI ACWI ex U.S.A.	7.3%	5.1%	6.0%
Global Equity	11.2%	8.1%	8.8%
Current Benchmark: MSCI ACWI	10.7%	8.2%	9.4%
Private Equity	17.9%	14.1%	15.6%
Current Benchmark: Russell 3000 + 3%	18.2%	14.9%	16.7%
Real Estate	7.3%	7.7%	9.2%
Current Benchmark: NCREIF-ODCE	7.5%	8.4%	10.0%
Liquid Alternatives	4.8%	1.6%	4.2%
Benchmark: CPI + 4% (Unadjusted)	7.0%	5.9%	6.4%
Total Fund	8.9%	7.3%	8.3%
VCERA Policy ¹	9.2%	7.9%	8.9%

 $^{^1}$ Current Benchmarks: 28% Russell 3000 Index, 20% Barclays Aggregate, 15% MSCI ACWI ex U.S., 10% MSCI ACWI, 10% Russell 3000 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.

On May 21, 2018, the Board adopted a new Asset Allocation which groups asset classes differently than shown here. Investment Returns for the new asset classes were not available as of June 30, 2018.

² Investment Returns are net of fees.

LARGEST EQUITY HOLDINGS (BY FAIR VALUE)

AS OF JUNE 30, 2018 (\$ IN THOUSANDS)

	Units	Fund Name	Fair Value
1	7,224,586	Blackrock U.S.Russell 1000 Index Fund	\$1,494,649
2	29,968,371	Blackrock MSCI ACWI Equity Index Fund	598,303
3	29,639,431	Blackrock ACWI IMI ex U.S. IMI Index Fund	315,631
4	3,065,231	Sprucegrove Investment Management Group Trust	228,056
5	3,611,703	Walter Scott & Partners Limited Group Trust	124,005
6	59,585	Hexavest EAFE Equity Fund	90,793
7	1,316,651	Blackrock U.S. Russell 2500 Index Fund	64,692
8	47,024,524	Adams Street 2013 Global Fund	61,816
9	16,302,249	Adams Street 2010 U.S. Fund	37,053
10	23,093,307	Pantheon Global Second Fund V	35,175

Note - All VCERA Equity Investments at June 30, 2018 were held in index funds and commingled investment vehicle.

LARGEST FIXED INCOME HOLDINGS (BY FAIR VALUE)

AS OF JUNE 30, 2018 (\$ IN THOUSANDS)

	Par	Bonds	Fair Value
1	17,320	U.S. Treasury N/B 11/43 3.75	\$19,690
2	8,500	U.S. Treasury Bill 12/18	8,425
3	4,500	FHLMC TBA 30 YR 3.5 Gold Single Family	4,476
4	4,400	FNMA TBA 30 YR 3.0 Gold Single Family Mortgage	4,262
5	4,230	U.S. Treasury N/B 02/47 3.00	4,245
6	3,339	FNMA Pool BH2623 FN 08/47 Fixed 4.00	3,408
7	3,000	FNMA TBA 30 YR 3.5 Single Family Mortgage	2,986
8	3,000	FNMA TBA 30 YR 3.5 Single Family Mortgage	2,986
9	2,900	FNMA TBA 15 YR 3.5 Single Family Mortgage	2,935
10	2,850	U.S. Treasury N/B 11/47 2.75	2,328

Note - A complete list of Portfolio Holdings is available upon request.

SCHEDULE OF INVESTMENT FEES

AS OF JUNE 30, 2018 (WITH COMPARATIVE AMOUNTS FOR JUNE 30, 2017) (\$ IN THOUSANDS)

	June 30, 2018	June 30, 2017
Cash and Short-Term Managers	\$196	\$172
Equity Managers		
U.S. Equity	505	580
Non-U.S. Equity	2,586	2,313
Global Equity	237	473
Fixed Income Managers	1,671	1,661
Private Equity Managers	4,363	3,539
Real Assets	4,855	5,381
Other Investment Expenses	1,184	626
Total Investment Management Fees	\$15,597	\$14,745

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.

BlackRock, Inc.
Hexavest, Inc.
Sprucegrove Investment Management Limited
Walter Scott & Partners, Limited

Global Equity

BlackRock, Inc.

Private Equity

Abbott Capital
Adams Street Partners, LLC
Battery Ventures
Buenaventure One, LLC
Buenaventure Two, LLC
Carval Investors
Clearlake Capital Partners, LP
Drive Capital, LLC
GTCR LLC
HarbourVest Partners, LLC
Insight Ventures
Pantheon Ventures (US) LP
The Resolute Fund IV, LP

Fixed Income

BlackRock, Inc. Loomis, Sayles & Company, LP Reams Asset Management Company Western Asset Management Company

Real Assets

Bridgewater Associates, LP Prudential Global Investment Management Tortoise Capital Advisors, LLC UBS Realty Investors

Investment Consultant

NEPC, LLC Abbott Capital Management, LLC

Cash Overlay

Parametric Portfolio Associates, LLC

Custodian

State Street Bank and Trust





As the largest employer in Ventura County, with a \$1.9 billion annual impact on the local economy, the Naval Base Ventura County (NBVC) workforce represents about five percent of all jobs in the county. NBVC is a large, diverse installation that operates three warfare centers and offers almost all the Navy's shore services. In addition to supporting combat missions across the globe, NBVC runs an award-winning environmental program that manages natural and cultural resources, such as the 2,500-acre coastal wetlands in Point Magu.



E-2C Hawkeyes flying north along the Mugu Rock coastline (photo by NBVC) USS George Dewey docked at Naval Base

Ventura County (photo by NBVC)

ACTUARIAL INFORMATION OVERVIEW

INTRODUCTION

The actuarial process at the Ventura County Employees' Retirement Association (VCERA) is governed by provisions in the County Employees Retirement Law of 1937 (CERL), California Government Code section 31450 et seq. Section 31453 requires VCERA to obtain an actuarial valuation of the pension plan at least once every three years. It further requires the VCERA Board to transmit its recommendations related to contribution rates to the Ventura County Board of Supervisors. The Board of Supervisors adopts and adjusts contribution rates in accordance with VCERA's recommendations.

CHANGES IN PENSION BENEFIT TERMS

The California Public Employees' Pension Reform Act of 2013 (PEPRA), California Government Code section 7522 et seq., changed benefits for new members of VCERA who entered membership on or after January 1, 2013. These members joined either a General PEPRA benefit tier or a Safety PEPRA benefit tier. The provisions of PEPRA apply for the current actuarial valuation. Due to the limited membership in these tiers as of the June 30, 2013 valuation, demographic profiles for this group were approximated using the data profiles of current active members that had been hired in the year prior to the last valuation as of June 30, 2012 and used to determine the "normal cost" rate for this group. This methodology and contribution rates were adopted by the Board of Retirement at its December 17, 2012 meeting and incorporated into subsequent actuarial valuations.

FUNDING POLICY

In February 2018, the Board of Retirement adopted a new Actuarial Funding Policy, which requires annual adjustment of the employer contribution rates based on the annual valuation performed by VCERA's actuary. Segal Consulting, the Plan's consulting actuary, performed the most recent actuarial valuation as of June 30, 2018, and recommended changes to the employer and employee contribution rates. At its January 2018 meeting, the VCERA Board adopted Segal Consulting's June 30, 2017 actuarial valuation report.

CHANGES IN PENSION PLAN ASSUMPTIONS

In addition to the annual valuations, VCERA requires its actuary to review the reasonableness of the Plan's economic and demographic actuarial assumptions every three years. This review, commonly referred to as the investigation of experience or the experience study, is accomplished by comparing actual experience during the preceding three years to what was expected to happen according to the actuarial assumptions. Based on this review, the actuary recommends changes in the assumptions or methodology that will better project benefit liabilities and asset growth. Based on the actuary's recommendations, the VCERA Board adopts methods and assumptions to be used in future valuations. At its June 2018 meeting, the VCERA Board adopted Segal Consulting's recommendations based on the 2017 Investigation of Experience for Retirement Benefit Assumptions with a modification to the mortality improvement scale recommendation. The VCERA Board also adopted a decrease in the discount rate from 7.50% to 7.25%.

ACTUARIAL INFORMATION OVERVIEW

CONTINUED

EMPLOYEE CONTRIBUTIONS

As part of the experience study, the actuary recommends adjustments to employee contribution rates, if necessary, due to changes in the underlying assumptions and methodologies used in calculating employee rates for age-based contributory benefit tiers. Therefore, it is expected that the age-based employee rates will change no more frequently than every three years, when the actuary reviews the assumptions and methodologies.

For new members under PEPRA, and for other employees whose labor contracts provide for single-rate employee contribution rates on the basis of 50-50 cost sharing (i.e., County of Ventura, APCD and VCERA), the actuary is asked to recommend rates that are one-half the normal cost rate. If there are changes to these total normal cost rates, the actuary recommends new employee contribution rates.

EMPLOYER CONTRIBUTIONS

The members and employers are responsible for contributing to the cost of benefits to be earned each year. These contributions are known as normal cost contributions. The portion not funded by expected member contributions is the responsibility of the employers and is referred to as the employer normal cost. Employer contributions are reviewed and changes are recommended each year by the consulting actuary. The actuary recommended new employer normal cost contribution rates for all employers based on the June 30, 2018 valuation; VCERA anticipates that the County will implement these rates between July 1 and September 28, 2019.

The employers are also responsible for contributing funding shortfalls related to liabilities accrued in the past, including changes in the economic and demographic assumptions impacting past service. This portion of the employer's contribution rate is known as the Unfunded Actuarial Accrued Liability (UAAL) contribution.

The latest actuarial valuation as of June 30, 2018, increased the employer normal cost rate from 9.26 percent to 9.77 percent. The change in the normal cost contribution rates from year to year is generally due to multiple factors. This year, the normal cost rate was impacted by new assumptions adopted for the 2018 valuation, normal actuarial experience, a reduction in the discount rate from 7.5% to 7.25%, and a change in plan proportion as new members are hired into the PEPRA benefit tiers. The employers' required contribution rate to finance the UAAL over a layered 15- to 20-year period increased from 17.83 percent to 18.72 percent. Member contribution rates increased for all contributing members, effective with the 2018 actuarial valuation, due to new assumptions adopted with the 2017 Investigation of Experience.

ACTUARIAL COST METHOD

The entry age normal actuarial cost method is used for both funding requirements and financial reporting purposes. The entry age normal method allocates costs to each future year as a level percentage of payroll, which is ideal for employers to budget for future costs.

AUDITS

VCERA periodically conducts actuarial audits of retirement benefit valuations and experience studies. The most recent triennial valuation and experience study was completed as of June 30, 2017 and, thereafter, the Plan's audit actuary, Gabriel, Roeder, Smith & Company (GRS), performed an audit of Segal Consulting's 2014 experience study, 2016 valuation report and 2015 economic actuarial assumption review. In regard to the audit of the experience study, GRS concluded: "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."

ACTUARIAL INFORMATION OVERVIEW

CONTINUED

OTHER ACTUARIAL INFORMATION

Actuarially Determined Contributions: The Schedule of Employer Contributions included in the Required Supplementary Information Section provides 10 years of actuarially determined contributions in relation to the actual contributions provided to the Plan.

Actuarial Methods and Assumptions: A description of the actuarial methods and assumptions for the Plan valuation used by VCERA's actuary are included in this Actuarial Section. In addition, the Financial Section provides a summary of the actuarial methods and significant assumptions used to prepare the valuation report, which determines the Plan's funding requirements. The Financial Section also discusses the actuarial methods and significant assumptions used for financial reporting and required Governmental Accounting Standards Board (GASB) Statement No. 67 disclosures.

The following additional information is included in this section:

- Actuary's Certification Letter
- Summary of Actuarial Assumptions and Methods
- · Active Member Valuation Data
- Schedule of Retirees and Beneficiaries Added to and Removed from Payroll
- Actuarial Analysis of Financial Experience
- Schedule of Funded Liabilities by Type
- · Schedule of Funding Progress
- Probability of Separation from Active Service

A Summary of Major Plan Provisions for the Pension Plan is available upon request from VCERA.



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November 27, 2018

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

Re: Ventura County Employees' Retirement Association June 30, 2018 Actuarial Valuation for Funding Purposes

Dear Members of the Board:

Segal Consulting (Segal) prepared the June 30, 2018 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, 2018 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 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.

Benefits, Compensation and HR Consulting. Member of The Segal Group. Offices throughout the United States and Canada

Board of Retirement Ventura County Employees' Retirement Association November 27, 2018 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, 2018 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, 2018 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, 2018 for funding purposes is listed below.

- 1. Summary of Actuarial Assumptions and Methods as of June 30, 2018
- 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. Schedule of Funded Liabilities by Type
- 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 July 1, 2014 through June 30, 2017 Actuarial Experience Study report dated May 24, 2018. It is our opinion that the assumptions used in the June 30, 2018 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 2021.

In the June 30, 2018 valuation, the ratio of the valuation value of assets to actuarial accrued liabilities increased from 86.9% to 87.8% and the average employer contribution rate increased from 27.09% of payroll to 28.49% of payroll.

The valuation value of assets included \$11.3 million in deferred investment gains, which represented about 0.2% 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 November 27, 2018 Page 3

increased from 87.8% to 88.0% and the aggregate employer contribution rate, expressed as a percent of payroll, would have decreased from 28.49% to about 28.36%.

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

Momoe

AW/bbf

SUMMARY OF ACTUARIAL ASSUMPTIONS AND METHODS

AS OF JUNE 30, 2018

Actuarial Assumptions and Methods

Recommended by the Actuary and adopted by the Board of Retirement.

Actuarial Cost Method

Entry age normal.

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

7.25% per annum; 4.50% real rate of return and 2.75% inflation.

Projected Salary Increases

3.75% – 11.75% varying by service. Includes inflation at 2.75%, "across the board" increases of 0.50%, plus merit and longevity increases.

Terminations of Employment Rates

0.6% to 14.0%

Cost-of-Living Adjustments

0-3% COLA for General Tier 1 and safety members tied to the change in Consumer Price Index. Flat 2% COLA for eligible General Tier 2 members represented by SEIU.

Expectation of Life After Retirement

General Members: Headcount-Weighted RP-2014 Healthy Annuitant Mortality Table times 90% for males and 100% for females, projected generationally with the two-dimensional mortality improvement scale MP-2017. Safety Members: Headcount-Weighted RP-2014 Healthy Annuitant Mortality Table times 75% for males and 85% for females, projected generationally with the two-dimensional mortality improvement scale MP-2017.

Expectation of Life After Disability

General Members: Headcount-Weighted RP-2014 Disabled Retiree Mortality Table times 100% for males and 100% for females, projected generationally with the two-dimensional mortality improvement scale MP-2017. Safety Members: Headcount-Weighted RP-2014 Healthy Annuitant Mortality Table times 100% for males and 115% for females, projected generationally with the two-dimensional mortality improvement scale MP-2017.

Date of Adoption

June 4, 2018

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, 2018	General	7,086	\$581,080,493	\$82,004	2.74%	45.8	10.7
	Safety	1,525	\$179,734,722	\$117,859	1.00%	41.1	14.2
	Total	8,611	\$760,815,215	\$88,354	2.43%	44.9	11.3
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	-2.57%	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	2.86%	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

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
2018	6,766	467	(195)	7,038	\$22,900	\$(6,193)	\$272,288	6.54%	\$38,760
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	\$18,163	\$(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

ACTUARIAL ANALYSIS OF FINANCIAL EXPERIENCE

(\$ IN THOUSANDS)

	June 30, 2018	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
Prior 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
Salary Increases Greater (Less) Than Expected	(4,839)	35,441	(19,801)	17,095	(56,617)	(49,186)	(93,786)	(131,928)	(19,314)	(9,590)
Asset Return (Greater) Less Than Expected	(55,696)	(24,707)	42,251	(81,080)	(13,827)	25,512	72,404	127,192	202,739	213,344
Other Experience Factors	(85,320)	(79,451)	(85,234)	(98,405)	(62,695)	1,161	(5,030)	18,241	4,481	(11,501)
Change In Actuarial Assumptions	148,510	-	-	218,002	-	-	227,315	-	-	91,252
Ending Valuation Unfunded (Excess Funded) Accrued Liability	\$746,981	\$744,326	\$813,043	\$875,827	\$820,215	\$953,354	\$975,867	\$774,964	\$761,459	\$573,553

SCHEDULE OF FUNDED LIABILITIES BY TYPE

(\$ 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, 2018	\$758,314	\$2,768,422	\$2,603,022	\$6,129,758	\$5,382,777	100%	100%	71.30%
June 30, 2017	725,090	2,561,943	2,416,363	5,703,396	4,959,070	100%	100%	69.20%
June 30, 2016	683,571	2,417,426	2,297,759	5,398,756	4,585,713	100%	100%	64.62%
June 30, 2015	647,597	2,269,555	2,261,005	5,178,157	4,302,330	100%	100%	61.26%
June 30, 2014	611,921	2,150,677	1,968,418	4,731,016	3,910,801	100%	100%	58.33%
June 30, 2013	584,474	2,051,529	1,939,060	4,575,063	3,621,709	100%	100%	50.83%
June 30, 2012	569,893	1,919,116	1,884,218	4,373,227	3,397,360	100%	100%	48.21%
June 30, 2011	549,207	1,810,062	1,636,083	3,995,352	3,220,388	100%	100%	52.63%
June 30, 2010	525,190	1,674,735	1,677,518	3,877,443	3,115,984	100%	100%	54.61%
June 30, 2009	499,205	1,545,347	1,619,149	3,663,701	3,090,148	100%	100%	64.58%

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, 2018	\$5,382,777	\$6,129,758	\$746,981	87.81%	\$760,815	98.18%
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%

 $^{^{\}mathrm{1}}\,\mathrm{Based}$ on the expected covered 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 scheduled to work 64 or more hours per biweekly pay period become members of VCERA upon appointment. There are separate benefit tiers 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 hired on or after January 1, 2013, is designated as a California Public Employees' Pension Reform Act of 2013 (PEPRA) member and is subject to the provisions of the PEPRA found in 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 General Tier 1. Employees hired after that date are included in General Tier 2. Any new general member hired on or after January 1, 2013, is designated as a PEPRA member and is subject to the provisions of California Government Code 7522 et seq. and AB 197.

Vesting

A member is vested upon accruing five years of retirement service credit under VCERA or via 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 benefit tier in which they are included. The contribution rate applicable to the member is applied to total pensionable earnings, which includes base pay and additional pay items allowable by law. The employer, as a result of provisions contained in individual collective bargaining agreements, may pay a portion of the member's contribution.

Contributions are deducted from the member's biweekly 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 (PEPRA) 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 (PEPRA) are eligible to retire once they have attained the age of 50 and have acquired five years of retirement service credit.

The retirement benefit a member will receive is based upon age at retirement, final average compensation, years of retirement service credit and benefit 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 multiplied by the 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 of California Government Code Section 7522.25(d). The monthly allowance is equal to the final compensation multiplied by years of accrued retirement service credit multiplied by the age factor from 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 first hired on or after January 1, 2013, are calculated pursuant to the provision of California Government Code Section 7522.20(a). The monthly allowance is equal to the final compensation multiplied by years of accrued retirement service 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 General Tier 1 member and the highest 36 consecutive months for a General Tier 2 or PEPRA member (general and safety).

At retirement, a member may elect an unmodified retirement allowance or an optional modified retirement allowance. The Unmodified Option provides the highest monthly benefit to the retiree 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 or registered to the member for at least one year prior to the retirement date. There are four modified options the member may choose. Each modified option 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 who has an insurable interest in the life of the member

Cost-Of-Living

VCERA provides an annual cost-of-living benefit to safety and General Tier I 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%. General member retirees who were represented by SEIU and accrued service after March 2003 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 a service-connected or nonservice-connected injury or disease. To qualify for a disability retirement, the member must be permanently incapacitated from 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 child(ren), shall receive a 100% continuance of the benefit.

A member must have a minimum of five years of retirement service credit to qualify for a nonservice-connected disability retirement. The general member benefit payable for a nonservice-connected disability is equal to 90% of one-sixth of final compensation for each year of service not to exceed one-third of final compensation. For safety members, the nonservice-connected disability retirement benefit payable is 90% of one-fifth of final compensation, not to exceed one-third 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 up to 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 up to a maximum of six months' salary, or (b) a monthly retirement allowance equal to 60% of the deceased member's earned benefit if he/she had retired with a nonservice-connected disability 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 for 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 or registered domestic partner, 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)

General Members - Male 25 0.0005 0.0002 0.0000 30 0.0005 0.0003 0.0000 35 0.0005 0.0006 0.0010 0.0011 0.0000 40 0.0010 0.0017 0.0000 0.0000 50 0.0017 0.0023 0.0200 55 0.0027 0.0031 0.0475 60 0.0045 0.0041 0.1050 65 0.0078 0.0054 0.2800 General Members - Female 25 0.0002 0.0002 0.0003 0.0000 30 0.0002 0.0003 0.0000 35 0.0003 0.0006 0.0000	0.0000 0.0000 0.0000 0.0000 0.0000
30 0.0005 0.0003 0.0000 35 0.0005 0.0006 0.0000 40 0.0010 0.0017 0.0000 45 0.0010 0.0017 0.0023 0.0200 50 0.0027 0.0031 0.0475 60 0.0045 0.0041 0.1050 65 0.0078 0.0054 0.2800 General Members - Female 25 0.0002 0.0002 0.0000 30 0.0002 0.0003 0.0000 35 0.0003 0.0006 0.0000	0.0000 0.0000 0.0000 0.0000
35 0.0005 0.0006 0.0000 40 0.0006 0.0011 0.0000 45 0.0010 0.0017 0.0000 50 0.0017 0.0023 0.0200 55 0.0027 0.0031 0.0475 60 0.0045 0.0041 0.1050 65 0.0078 0.0054 0.2800 General Members - Female 25 0.0002 0.0002 0.0000 30 0.0002 0.0003 0.0000 35 0.0003 0.0006 0.0000	0.0000 0.0000 0.0000 0.0000
40 0.0006 0.0011 0.0000 45 0.0010 0.0017 0.0000 50 0.0017 0.0023 0.0200 55 0.0027 0.0031 0.0475 60 0.0045 0.0041 0.1050 65 0.0078 0.0054 0.2800 General Members - Female 25 0.0002 0.0002 0.0000 30 0.0002 0.0003 0.0000 35 0.0003 0.0006 0.0000	0.0000 0.0000 0.0000
45 0.0010 0.0017 0.0000 50 0.0017 0.0023 0.0200 55 0.0027 0.0031 0.0475 60 0.0045 0.0041 0.1050 65 0.0078 0.0054 0.2800 General Members - Female 25 0.0002 0.0002 0.0000 30 0.0002 0.0003 0.0000 35 0.0003 0.0006 0.0000	0.0000
50 0.0017 0.0023 0.0200 55 0.0027 0.0031 0.0475 60 0.0045 0.0041 0.1050 65 0.0078 0.0054 0.2800 General Members - Female 25 0.0002 0.0002 0.0000 30 0.0002 0.0003 0.0000 35 0.0003 0.0006 0.0000	0.0000
55 0.0027 0.0031 0.0475 60 0.0045 0.0041 0.1050 65 0.0078 0.0054 0.2800 General Members - Female 25 0.0002 0.0002 0.0000 30 0.0002 0.0003 0.0000 35 0.0003 0.0006 0.0000	
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65 0.0078 0.0054 0.2800 General Members - Female 25 0.0002 0.0002 0.0003 0.0000 30 0.0002 0.0003 0.0000 0.0000 35 0.0003 0.0006 0.0000	0.0400
General Members - Female 25 0.0002 0.0002 0.0003 0.0000 30 0.0002 0.0003 0.0000 35 0.0003 0.0006 0.0000	0.0900
25 0.0002 0.0002 0.0000 30 0.0002 0.0003 0.0000 35 0.0003 0.0006 0.0000	0.2000
30 0.0002 0.0003 0.0000 35 0.0003 0.0006 0.0000	
35 0.0003 0.0006 0.0000	0.0000
	0.0000
	0.0000
40 0.0004 0.0011 0.0000	0.0000
45 0.0007 0.0017 0.0000	0.0000
50 0.0011 0.0023 0.0200	0.0000
55 0.0017 0.0031 0.0475	0.0400
60 0.0024 0.0041 0.1050	0.0900
65 0.0036 0.0054 0.2800	0.2000

Ceneral	Members
Generai	Members

Years of Service	Withdrawal ¹
Less than 1	0.1400
5	0.0500
10	0.0325
15	0.0250
20 & Over	0.0200

 $^{^{\}rm 1}\,{\rm No}$ with drawal is assumed after a member is first assumed to retire

PROBABILITY OF SEPARATION FROM ACTIVE SERVICE

CONTINUED (IN PERCENTAGES)

	Rates of		Rates of Retirement	Rates of Retirement
Age Nearest	Mortality	Rates of Disability	Non PEPRA	PEPRA
Safety Members - Male				
25	0.0005	0.0011	0.0100	0.0000
30	0.0005	0.0024	0.0100	0.0000
35	0.0005	0.0036	0.0100	0.0000
40	0.0006	0.0052	0.0100	0.0000
45	0.0010	0.0084	0.0100	0.0000
50	0.0017	0.0130	0.0200	0.0400
55	0.0027	0.0276	0.2000	0.2000
60	0.0045	0.0564	0.2500	0.2500
65	0.0078	0.0280	1.0000	1.0000
Safety Members - Female				
25	0.0002	0.0011	0.0100	0.0000
30	0.0002	0.0024	0.0100	0.0000
35	0.0003	0.0036	0.0100	0.0000
40	0.0004	0.0052	0.0100	0.0000
45	0.0007	0.0084	0.0100	0.0000
50	0.0011	0.0130	0.0200	0.0400
55	0.0017	0.0276	0.2000	0.2000
60	0.0024	0.0564	0.2500	0.2500
65	0.0036	0.0280	1.0000	1.0000

Safety	Members
--------	----------------

Years of Service	Withdrawal ¹
Less than 1	0.1100
5	0.0300
10	0.0140
15	0.0085
20 & Over	0.0060

 $^{^{\}rm l}\,\mbox{No}$ with drawal is assumed after a member is first assumed to retire



Medical laboratory constructed by Anderson Construction in Camarillo



MANUFACTURING

Boasting nearly 4,000 jobs in the City of Ventura alone, the manufacturing sector of Ventura County produces essential supplies for oil, medical, transportation, construction, food and electronics industries in the U.S. and globally. Meeting these business needs positions local manufacturers among the region's largest revenue generators. In addition, two well-known apparel companies call the county home: Patagonia, a maker of high-end outdoor clothing, and Fashion Farms, which specializes in women's undergarments. Great ideas, talented engineers and precise execution make Ventura County manufacturing ripe for growth.



Medical laboratory constructed by Anderson Construction in Camarillo

"Spider arms" designed and fabricated by One Off Effects in Oxnard

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 trends 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.

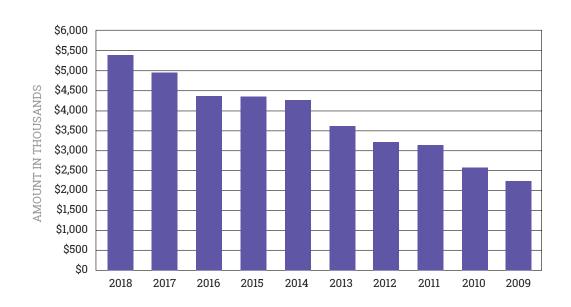
CHANGES IN PENSION PLAN FIDUCIARY NET POSITION

LAST TEN FISCAL YEARS (IN THOUSANDS)

	June 30, 2018	June 30, 2017	June 30, 2016	June 30, 2015	June 30, 2014
ADDITIONS					
Employer Contributions	\$197,683	\$190,759	\$177,710	\$175,099	\$169,703
Member Contributions	74,044	72,395	69,470	63,679	46,674
Net Investment Income	445,902	580,526	25,739	88,681	658,580
Total Additions	717,629	843,680	272,919	327,459	874,957
DEDUCTIONS					
Benefits	272,288	255,581	241,419	228,423	218,105
Administrative	4,881	5,524	4,474	3,854	4,045
Member Refunds & Death Payments	5,430	5,164	4,984	5,272	5,428
Other Expenses	2,814	-	-	-	-
Total Deductions	285,413	266,269	250,877	237,549	227,578
Change In Pension Plan Fiduciary Net Position	\$432,216	\$577,411	\$22,042	\$89,910	\$647,379

	June 30, 2013	June 30, 2012	June 30, 2011	June 30, 2010	June 30, 2009
ADDITIONS					
Employer Contributions	\$150,688	\$140,773	\$120,053	\$105,703	\$113,916
Member Contributions	44,464	44,487	44,238	42,466	42,326
Net Investment Income	436,638	50,683	627,327	347,087	(625,183)
Total Additions (Declines)	631,790	235,943	791,618	495,256	(468,941)
DEDUCTIONS					
Benefits	205,238	191,332	180,070	166,029	153,089
Administrative	3,944	3,536	4,387	3,227	3,536
Member Refunds & Death Payments	4,720	3,783	4,388	4,081	3,253
Other Expenses	-	-	-	-	-
Total Deductions	213,902	198,651	188,845	173,337	159,878
Change In Pension Plan Fiduciary Net Position	\$417,888	\$37,292	\$602,773	\$321,919	\$(628,819)

TOTAL PLAN NET POSITION



SCHEDULE OF PENSION BENEFIT EXPENSES BY TYPE

LAST 10 FISCAL YEARS (\$ IN THOUSANDS)

	June 30, 2018	June 30, 2017	June 30, 2016	June 30, 2015	June 30, 2014
Service Retirement					
General	\$139,476	\$131,107	\$125,219	\$116,593	\$110,052
Safety	75,110	69,332	62,618	61,918	58,404
Total	214,586	200,439	187,837	178,511	168,456
Disability Retirement					
General	10,065	9,945	9,966	9,711	10,172
Safety	28,479	26,753	26,895	24,426	24,332
Total	38,544	36,698	36,861	34,137	34,504
Survivor Continuances					
General	11,180	10,660	9,894	9,335	9,141
Safety	7,978	7,784	6,827	6,440	6,003
Total	19,158	18,444	16,721	15,775	15,144
Total Retired Members					
General	160,721	151,712	145,079	135,639	129,365
Safety	111,567	103,869	96,340	92,784	88,739
Total	272,288	255,581	241,419	228,423	218,104
Member Refunds & Death	Benefits				
General	5,082	4,634	4,160	4,703	5,094
Safety	348	530	824	569	334
Total	\$5,430	\$5,164	\$4,984	\$5,272	\$5,428

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SCHEDULE OF PENSION BENEFIT EXPENSES BY TYPE

LAST 10 FISCAL YEARS (\$ IN THOUSANDS) CONTINUED

	June 30, 2013	June 30, 2012	June 30, 2011	June 30, 2010	June 30, 2009
Service Retirement					
General	\$103,665	\$96,889	\$91,046	\$83,373	\$77,662
Safety	54,789	49,706	45,010	39,353	35,039
Total	158,454	146,595	136,056	122,726	112,701
Disability Retirement					
General	9,639	9,585	9,484	10,051	9,638
Safety	22,890	21,808	21,331	21,163	19,265
Total	32,529	31,393	30,815	31,214	28,903
Survivor Continuances					
General	8,513	8,017	7,909	7,365	6,950
Safety	5,742	5,328	5,291	4,724	4,535
Total	14,255	13,345	13,200	12,089	11,485
Total Retired Members					
General	121,817	114,491	108,439	100,789	94,250
Safety	83,421	76,842	71,632	65,240	58,839
Total	205,238	191,333	180,071	166,029	153,089
Member Refunds & Death	n Benefits				
General	4,263	3,379	3,859	2,606	2,679
Safety	457	404	530	622	574
Total	\$4,720	\$3,783	\$4,389	\$3,228	\$3,253

PENSION BENEFIT PAYMENTS



2018 COMPREHENSIVE ANNUAL FINANCIAL REPORT PAGE 79

ACTIVE AND DEFERRED MEMBERS

LAST TEN FISCAL YEARS

	June 30, 2018	June 30, 2017	June 30, 2016	June 30, 2015	June 30, 2014
Active Vested					
General	4,562	4,594	4,619	4,632	4,699
Safety	1,200	1,207	1,231	1,245	1,274
Active Non-vested					
General	2,524	2,534	2,396	2,146	1,973
Safety	325	301	263	276	264
Total Active Members					
General	7,086	7,128	7,015	6,778	6,672
Safety	1,525	1,508	1,494	1,521	1,538
Deferred Members					
General	2,570	2,484	2,332	2,140	2,052
Safety	339	325	307	301	287
Total	11,520	11,445	11,148	10,740	10,549

	June 30, 2013	June 30, 2012	June 30, 2011	June 30, 2010	June 30, 2009
Active Vested					
General	4,669	4,516	4,278	4,078	4,069
Safety	1,260	1,221	1,193	1,158	1,187
Active Non-vested					
General	1,894	2,013	2,238	2,427	2,432
Safety	245	269	331	340	357
Total Active Members					
General	6,563	6,529	6,516	6,505	6,501
Safety	1,505	1,490	1,524	1,498	1,544
Deferred Members					
General	1,978	1,891	1,838	1,780	1,795
Safety	271	270	259	260	260
Total	10,317	10,180	10,137	10,043	10,100

RETIRED MEMBERS BY TYPE OF PENSION BENEFIT

AS OF JUNE 30, 2018

Amount of Monthly Benefit	ount of Monthly Benefit Number of Retirees		Type of Retirement ¹		
		A	В	С	
General Members					
\$1 - \$999	1,537	1,153	59	325	
\$1,000 - \$1,999	1,606	1,176	222	208	
\$2,000 - \$2,999	912	739	82	91	
\$3,000 - \$3,999	531	462	40	29	
\$4,000 - \$4,999	321	292	8	21	
\$5,000 - \$5,999	222	198	2	22	
\$6,000 - \$6,999	140	136	2	2	
\$7,000 - \$7,999	79	75	2	2	
\$8,000 - \$8,999	56	55	-	1	
\$9,000 - \$9,999	47	43	2	2	
> \$10,000	101	99	1	1	
Totals	5,552	4,428	420	704	
Safety Members					
\$1 - \$999	73	56	14	3	
\$1,000 - \$1,999	119	75	8	36	
\$2,000 - \$2,999	167	59	43	65	
\$3,000 - \$3,999	170	61	58	51	
\$4,000 - \$4,999	150	45	56	49	
\$5,000 - \$5,999	148	47	75	26	
\$6,000 - \$6,999	100	49	37	14	
\$7,000 - \$7,999	87	53	22	12	
\$8,000 - \$8,999	92	59	21	12	
\$9,000 - \$9,999	72	56	13	3	
> \$10,000	308	246	52	10	
Totals	1,486	806	399	281	
Grand Total	7,038	5,234	819	985	

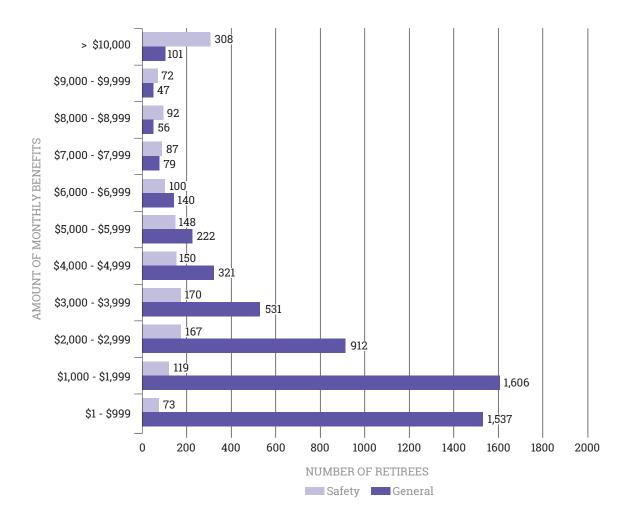
¹ Type of Retirement:

A - Service Retiree

B - Disability Retiree

C - Beneficiary/Continuant/Survivor

RETIRED MEMBERS RECEIVING BENEFITS



SCHEDULE OF AVERAGE MONTHLY BENEFIT PAYMENTS

2015-2018

Years of Credited Service	5-9	10-14	15-19	20-24	25-29	30+
Retirees - 2018						
General Members						
Average Monthly Benefit	\$991	\$1,835	\$2,659	\$3,599	\$4,475	\$5,706
Average Final Average Salary	\$6,062	\$7,191	\$7,523	\$7,879	\$8,515	\$9,118
Number of Active Retirees	44	70	50	55	49	55
Safety Members						
Average Monthly Benefit	\$2,519	\$2,788	\$4,046	\$5,236	\$9,104	\$10,750
Average Final Average Salary	\$5,585	\$8,754	\$8,497	\$9,129	\$12,452	\$13,089
Number of Active Retirees	2	10	4	7	22	34
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 Active 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 Active 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 Active 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 Active 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 Active 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 Active Retirees	4	6	2	7	13	14

SCHEDULE OF AVERAGE MONTHLY BENEFIT PAYMENTS

2011-2014

Average Final Average Salary Number of Active Retirees 40 66 36 48 26 Safety Members Average Monthly Benefit \$2,599 \$4,138 \$4,444 \$4,864 \$7,305 \$12, Average Final Average Salary Number of Active Retirees 7 5 2 3 6 Retirees - 2013 General Members Average Final Average Salary \$6,614 \$5,741 \$7,147 \$7,061 \$7,821 \$7,4 Number of Active Retirees 7 7 7 3 39 23 Safety Members Average Final Average Salary \$6,614 \$5,741 \$7,147 \$7,061 \$7,821 \$7,4 Number of Active Retirees 27 74 37 39 23 Safety Members Average Monthly Benefit \$1,387 \$3,234 \$4,051 \$6,453 \$6,426 \$11,4 Average Final Average Salary \$10,367 \$8,893 \$8,302 \$11,913 \$10,856 \$12,4 Number of Active Retirees 9 3 4 4 7 Retirees - 2012 General Members Average Monthly Benefit \$950 \$1,831 \$2,653 \$2,996 \$4,065 \$6,4 Average Final Average Salary \$5,888 \$6,580 \$6,667 \$6,522 \$7,144 \$8,4 Number of Active Retirees 46 57 28 31 22 Safety Members Average Monthly Benefit \$1,1219 \$2,928 \$2,915 \$7,491 \$9,827 \$10,4 Average Final Average Salary \$7,910 \$8,631 \$5,263 \$12,690 \$13,347 \$12,4 Number of Active Retirees 9 6 1 14 6 Retirees - 2011 General Members Average Final Average Salary \$7,910 \$8,631 \$5,263 \$12,690 \$13,347 \$12,4 Number of Active Retirees 9 6 1 14 6 Retirees - 2011 General Members Average Final Average Salary \$7,910 \$8,631 \$5,263 \$12,690 \$13,347 \$12,4 Number of Active Retirees 9 6 1 14 6 Retirees - 2011 General Members Average Final Average Salary \$7,910 \$8,631 \$5,263 \$12,690 \$13,347 \$12,4 Number of Active Retirees 9 6 1 14 6	Years of Credited Service	5-9	10-14	15-19	20-24	25-29	30+
Average Monthly Benefit \$1,222 \$1,823 \$2,194 \$3,114 \$4,208 \$5, Average Final Average Salary \$6,626 \$6,614 \$6,219 \$6,737 \$7,475 \$7, Number of Active Retirees \$40 \$66 \$36 \$48 \$26\$ \$3644 \$48 \$4864 \$48,64	Retirees - 2014						
Average Final Average Salary Number of Active Retirees 40 66 36 48 26 Safety Members Average Monthly Benefit \$2,599 \$4,138 \$4,444 \$4,864 \$7,305 \$12, Average Final Average Salary Number of Active Retirees 7 5 2 3 6 Retirees - 2013 General Members Average Final Average Salary \$6,614 \$6,741 \$7,147 \$7,061 \$7,821 \$7,400 \$10,378 \$10,378 \$10,379 \$10,	General Members						
Number of Active Retirees	Average Monthly Benefit	\$1,222	\$1,823	\$2,194	\$3,114	\$4,208	\$5,176
Safety Members	Average Final Average Salary	\$6,626	\$6,614	\$6,219	\$6,737	\$7,475	\$7,127
Average Monthly Benefit \$2,599 \$4,138 \$4,444 \$4,864 \$7,305 \$12, Average Final Average Salary \$8,760 \$10,770 \$10,378 \$9,755 \$11,132 \$14, Number of Active Retirees 7 5 2 3 6 8 8 8 8 8 8 8 8 8 8 8 8 8 8 8 8 8 8	Number of Active Retirees	40	66	36	48	26	21
Average Final Average Salary Number of Active Retirees 7 5 2 3 6 Retirees - 2013 General Members Average Monthly Benefit \$1,278 \$1,749 \$2,514 \$3,344 \$4,905 \$5,740 \$1,000 \$1,0	Safety Members						
Number of Active Retirees 7	Average Monthly Benefit	\$2,599	\$4,138	\$4,444	\$4,864	\$7,305	\$12,835
Retirees - 2013 Schemal Members St. 278 St. 278 St. 274 St. 3,344 St. 905 St. 5,54 St. 278 St. 274 St. 2	Average Final Average Salary	\$8,760	\$10,770	\$10,378	\$9,755	\$11,132	\$14,645
Average Monthly Benefit S1,278 S1,749 S2,514 S3,344 S4,905 S5, Average Final Average Salary S6,614 S6,741 S7,147 S7,061 S7,821 S7, Number of Active Retirees 27 74 37 39 23 Safety Members	Number of Active Retirees	7	5	2	3	6	13
Average Monthly Benefit \$1,278 \$1,749 \$2,514 \$3,344 \$4,905 \$5,5000 Average Final Average Salary \$6,614 \$6,741 \$7,147 \$7,061 \$7,821 \$7,5000 Average Final Average Salary \$6,614 \$6,741 \$7,147 \$7,061 \$7,821 \$7,5000 Average Final Average Salary \$27 74 37 39 23 \$23 \$24 \$24,051 \$37,000 Average Monthly Benefit \$1,387 \$3,234 \$4,051 \$6,453 \$6,426 \$11,400 Average Final Average Salary \$10,367 \$8,893 \$8,302 \$11,913 \$10,856 \$12,400 Average Final Average Salary \$10,367 \$8,893 \$8,302 \$11,913 \$10,856 \$12,400 Average Monthly Benefit \$950 \$1,831 \$2,653 \$2,996 \$4,065 \$6,400 Average Final Average Salary \$5,888 \$6,580 \$6,667 \$6,522 \$7,144 \$8,400 Average Final Average Salary \$5,888 \$6,580 \$6,667 \$6,522 \$7,144 \$8,400 Average Final Average Salary \$7,910 \$8,631 \$5,263 \$12,690 \$13,347 \$12,400 Average Final Average Salary \$7,910 \$8,631 \$5,263 \$12,690 \$13,347 \$12,400 Average Final Average Salary \$7,910 \$8,631 \$5,263 \$12,690 \$13,347 \$12,400 Average Final Average Salary \$7,910 \$8,631 \$5,263 \$12,690 \$13,347 \$12,400 Average Final Average Salary \$7,910 \$8,631 \$5,263 \$12,690 \$13,347 \$12,400 Average Final Average Salary \$7,910 \$8,631 \$5,263 \$12,690 \$13,347 \$12,400 Average Final Average Salary \$7,910 \$8,631 \$5,263 \$12,690 \$13,347 \$12,400 Average Final Average Salary \$7,910 \$8,631 \$5,263 \$12,690 \$13,347 \$12,400 Average Final Average Salary \$7,910 \$8,631 \$5,263 \$12,690 \$13,347 \$12,400 Average Final Average Salary \$6,376 \$6,466 \$6,469 \$8,495 \$8,145 \$9,263 \$8,400 Average Final Average Salary \$6,376 \$6,466 \$6,469 \$8,495 \$8,145 \$9,263 \$8,400 Average Final Average Salary \$6,376 \$6,466 \$6,469 \$8,495 \$8,145 \$9,263 \$8,400 Average Final Average Salary \$6,376 \$6,466 \$6,469 \$8,495 \$8,145 \$9,263 \$8,400 Average Final Average Salary \$6,376 \$6,466 \$6,469 \$8,495 \$8,145 \$9,263 \$8,400 Average Final Average Salary \$6,376 \$6,466 \$6,469 \$8,495 \$8,145 \$9,263 \$8,400 Average Final Average Salary \$6,376 \$6,466 \$6,469 \$8,495 \$8,145 \$9,263 \$8,400 Average Final Average Salary \$6,376 \$6,466 \$6,489 \$8,145 \$9,263 \$8,400 Average Final Average Salary \$6,376 \$6,466 \$6,489 \$8,145 \$9,	Retirees - 2013						
Average Final Average Salary \$6,614 \$6,741 \$7,147 \$7,061 \$7,821 \$7,1000 \$7,1000 \$	General Members						
Number of Active Retirees 27 74 37 39 23 Safety Members Average Monthly Benefit \$1,387 \$3,234 \$4,051 \$6,453 \$6,426 \$11,000 Average Final Average Salary \$10,367 \$8,893 \$8,302 \$11,913 \$10,856 \$12,000 Number of Active Retirees 9 3 4 4 7 Retirees - 2012 General Members Average Monthly Benefit \$950 \$1,831 \$2,653 \$2,996 \$4,065 \$6,600 Average Final Average Salary \$5,888 \$6,580 \$6,667 \$6,522 \$7,144 \$8,000 Number of Active Retirees 46 57 28 31 22 Safety Members Average Monthly Benefit \$1,219 \$2,928 \$2,915 \$7,491 \$9,827 \$10,000 Average Final Average Salary \$7,910 \$8,631 \$5,263 \$12,690 \$13,347 \$12,000 Retirees - 2011 General M	Average Monthly Benefit	\$1,278	\$1,749	\$2,514	\$3,344	\$4,905	\$5,803
Safety Members Average Monthly Benefit \$1,387 \$3,234 \$4,051 \$6,453 \$6,426 \$11, Average Final Average Salary \$10,367 \$8,893 \$8,302 \$11,913 \$10,856 \$12, Number of Active Retirees 9 3 4 4 7 Retirees - 2012 General Members Average Monthly Benefit \$950 \$1,831 \$2,653 \$2,996 \$4,065 \$6, Average Final Average Salary \$5,888 \$6,580 \$6,667 \$6,522 \$7,144 \$8, Number of Active Retirees 46 57 28 31 22 Safety Members Average Monthly Benefit \$1,219 \$2,928 \$2,915 \$7,491 \$9,827 \$10,400 Average Final Average Salary \$7,910 \$8,631 \$5,263 \$12,690 \$13,347 \$12,500 Retirees - 2011 General Members Average Monthly Benefit \$1,169 \$1,835 \$2,497 \$3,824 \$5,203 \$6,400 Average Final Average Salary \$6,376 \$6,466 \$6,489 \$8,145 \$9,263 \$8,700	Average Final Average Salary	\$6,614	\$6,741	\$7,147	\$7,061	\$7,821	\$7,886
Average Monthly Benefit \$1,387 \$3,234 \$4,051 \$6,453 \$6,426 \$11, Average Final Average Salary \$10,367 \$8,893 \$8,302 \$11,913 \$10,856 \$12, Number of Active Retirees 9 3 4 4 7 Retirees - 2012 General Members Average Monthly Benefit \$950 \$1,831 \$2,653 \$2,996 \$4,065 \$6,600 \$4,000 \$4	Number of Active Retirees	27	74	37	39	23	36
Average Final Average Salary \$10,367 \$8,893 \$8,302 \$11,913 \$10,856 \$12, Number of Active Retirees 9 3 4 4 4 7 Retirees - 2012 General Members Average Monthly Benefit \$950 \$1,831 \$2,653 \$2,996 \$4,065 \$6, Average Final Average Salary \$5,888 \$6,580 \$6,667 \$6,522 \$7,144 \$8, Number of Active Retirees 46 57 28 31 22 Safety Members Average Monthly Benefit \$1,219 \$2,928 \$2,915 \$7,491 \$9,827 \$10,400 \$10,000	Safety Members						
Number of Active Retirees 9 3 4 4 7 Retirees - 2012 General Members Average Monthly Benefit \$950 \$1,831 \$2,653 \$2,996 \$4,065 \$6,046 Average Final Average Salary \$5,888 \$6,580 \$6,667 \$6,522 \$7,144 \$8,04 Number of Active Retirees 46 57 28 31 22 Safety Members Average Monthly Benefit \$1,219 \$2,928 \$2,915 \$7,491 \$9,827 \$10,40 Average Final Average Salary \$7,910 \$8,631 \$5,263 \$12,690 \$13,347 \$12,50 Number of Active Retirees 9 6 1 14 6 Retirees - 2011 General Members Average Monthly Benefit \$1,169 \$1,835 \$2,497 \$3,824 \$5,203 \$6,466 Average Final Average Salary \$6,376 \$6,466 \$6,489 \$8,145 \$9,263 \$8,70 Nu	Average Monthly Benefit	\$1,387	\$3,234	\$4,051	\$6,453	\$6,426	\$11,371
Retirees - 2012 General Members Section of Active Retirees \$950 \$1,831 \$2,653 \$2,996 \$4,065 \$6,607 Average Final Average Salary \$5,888 \$6,580 \$6,667 \$6,522 \$7,144 \$8,700 Number of Active Retirees 46 57 28 31 22 Safety Members Average Monthly Benefit \$1,219 \$2,928 \$2,915 \$7,491 \$9,827 \$10,400 Average Final Average Salary \$7,910 \$8,631 \$5,263 \$12,690 \$13,347 \$12,700 Number of Active Retirees 9 6 1 14 6 Retirees - 2011 General Members Average Monthly Benefit \$1,169 \$1,835 \$2,497 \$3,824 \$5,203 \$6,400 Average Final Average Salary \$6,376 \$6,466 \$6,489 \$8,145 \$9,263 \$8,700 Number of Active Retirees 59 76 34 46 24	Average Final Average Salary	\$10,367	\$8,893	\$8,302	\$11,913	\$10,856	\$12,610
General Members Average Monthly Benefit \$950 \$1,831 \$2,653 \$2,996 \$4,065 \$6,67 Average Final Average Salary \$5,888 \$6,580 \$6,667 \$6,522 \$7,144 \$8,722 Number of Active Retirees 46 57 28 31 22 Safety Members Average Monthly Benefit \$1,219 \$2,928 \$2,915 \$7,491 \$9,827 \$10,4 Average Final Average Salary \$7,910 \$8,631 \$5,263 \$12,690 \$13,347 \$12,50 Number of Active Retirees 9 6 1 14 6 Retirees - 2011 General Members Average Monthly Benefit \$1,169 \$1,835 \$2,497 \$3,824 \$5,203 \$6,46,46,46,46,46,46,46,46,46,46,46,46,46	Number of Active Retirees	9	3	4	4	7	26
Average Monthly Benefit \$950 \$1,831 \$2,653 \$2,996 \$4,065 \$6,600 Average Final Average Salary \$5,888 \$6,580 \$6,667 \$6,522 \$7,144 \$8,800 Number of Active Retirees 46 57 28 31 22 Safety Members Average Monthly Benefit \$1,219 \$2,928 \$2,915 \$7,491 \$9,827 \$10,000 Average Final Average Salary \$7,910 \$8,631 \$5,263 \$12,690 \$13,347 \$12,000 Number of Active Retirees 9 6 1 14 6 Retirees - 2011 General Members Average Monthly Benefit \$1,169 \$1,835 \$2,497 \$3,824 \$5,203 \$6,000 Average Final Average Salary \$6,376 \$6,466 \$6,489 \$8,145 \$9,263 \$8,000 Number of Active Retirees 59 76 34 46 24	Retirees - 2012						
Average Final Average Salary \$5,888 \$6,580 \$6,667 \$6,522 \$7,144 \$8, Number of Active Retirees 46 57 28 31 22 Safety Members Average Monthly Benefit \$1,219 \$2,928 \$2,915 \$7,491 \$9,827 \$10,000 Average Final Average Salary \$7,910 \$8,631 \$5,263 \$12,690 \$13,347 \$12,000 Number of Active Retirees 9 6 1 14 6 Retirees - 2011 General Members Average Monthly Benefit \$1,169 \$1,835 \$2,497 \$3,824 \$5,203 \$6,400 Average Final Average Salary \$6,376 \$6,466 \$6,489 \$8,145 \$9,263 \$8,700 Number of Active Retirees 59 76 34 46 24	General Members						
Number of Active Retirees 46 57 28 31 22 Safety Members Safety Members Average Monthly Benefit \$1,219 \$2,928 \$2,915 \$7,491 \$9,827 \$10,40 Average Final Average Salary \$7,910 \$8,631 \$5,263 \$12,690 \$13,347 \$12,600 Number of Active Retirees 9 6 1 14 6 Retirees - 2011 General Members Average Monthly Benefit \$1,169 \$1,835 \$2,497 \$3,824 \$5,203 \$6,46,46,46,46,46,46,46,46,46,46,46,46,46	Average Monthly Benefit	\$950	\$1,831	\$2,653	\$2,996	\$4,065	\$6,683
Safety Members Average Monthly Benefit \$1,219 \$2,928 \$2,915 \$7,491 \$9,827 \$10,4 Average Final Average Salary \$7,910 \$8,631 \$5,263 \$12,690 \$13,347 \$12,6 Number of Active Retirees 9 6 1 14 6 Retirees - 2011 General Members Average Monthly Benefit \$1,169 \$1,835 \$2,497 \$3,824 \$5,203 \$6,46,46,46,46,46,46,46,46,46,46,46,46,46	Average Final Average Salary	\$5,888	\$6,580	\$6,667	\$6,522	\$7,144	\$8,971
Average Monthly Benefit \$1,219 \$2,928 \$2,915 \$7,491 \$9,827 \$10,4 Average Final Average Salary \$7,910 \$8,631 \$5,263 \$12,690 \$13,347 \$12,690 Number of Active Retirees 9 6 1 14 6 Retirees - 2011 General Members Average Monthly Benefit \$1,169 \$1,835 \$2,497 \$3,824 \$5,203 \$6,466 \$6,489 \$8,145 \$9,263 \$8,70 Number of Active Retirees 59 76 34 46 24	Number of Active Retirees	46	57	28	31	22	26
Average Final Average Salary \$7,910 \$8,631 \$5,263 \$12,690 \$13,347 \$12,690 Number of Active Retirees 9 6 1 14 6 Retirees - 2011 General Members Average Monthly Benefit \$1,169 \$1,835 \$2,497 \$3,824 \$5,203 \$6,466 \$6,489 \$8,145 \$9,263 \$8,70 Number of Active Retirees 59 76 34 46 24	Safety Members						
Number of Active Retirees 9 6 1 14 6 Retirees - 2011 General Members Average Monthly Benefit \$1,169 \$1,835 \$2,497 \$3,824 \$5,203 \$6,400 Average Final Average Salary \$6,376 \$6,466 \$6,489 \$8,145 \$9,263 \$8,70 Number of Active Retirees 59 76 34 46 24	Average Monthly Benefit	\$1,219	\$2,928	\$2,915	\$7,491	\$9,827	\$10,422
Retirees - 2011 General Members Average Monthly Benefit \$1,169 \$1,835 \$2,497 \$3,824 \$5,203 \$6,46,466 Average Final Average Salary \$6,376 \$6,466 \$6,489 \$8,145 \$9,263 \$8,70 Number of Active Retirees 59 76 34 46 24	Average Final Average Salary	\$7,910	\$8,631	\$5,263	\$12,690	\$13,347	\$12,150
General Members Average Monthly Benefit \$1,169 \$1,835 \$2,497 \$3,824 \$5,203 \$6,466 Average Final Average Salary \$6,376 \$6,466 \$6,489 \$8,145 \$9,263 \$8,70 Number of Active Retirees 59 76 34 46 24	Number of Active Retirees	9	6	1	14	6	22
Average Monthly Benefit \$1,169 \$1,835 \$2,497 \$3,824 \$5,203 \$6,466 Average Final Average Salary \$6,376 \$6,466 \$6,489 \$8,145 \$9,263 \$8,700 Number of Active Retirees 59 76 34 46 24	Retirees - 2011						
Average Final Average Salary \$6,376 \$6,466 \$6,489 \$8,145 \$9,263 \$8,145 Number of Active Retirees 59 76 34 46 24	General Members						
Number of Active Retirees 59 76 34 46 24	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 Active Retirees	59	76	34	46	24	28
Safety Members	Safety Members						
Average Monthly Benefit \$2,089 \$3,021 \$5,528 \$6,822 \$7,925 \$12,	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,	Average Final Average Salary	\$9,315	\$13,110	\$10,450	\$12,291	\$10,547	\$13,718
Number of Active Retirees 10 4 4 8 11	Number of Active Retirees	10	4	4	8	11	24

SCHEDULE OF AVERAGE MONTHLY BENEFIT PAYMENTS

2009-2010

Years of Credited Service	5-9	10-14	15-19	20-24	25-29	30+
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 Active 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 Active Retirees	5	9	11	9	8	23
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 Active 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 Active Retirees	11	4	2	3	1	14

PARTICIPATING EMPLOYERS AND ACTIVE MEMBERS

LAST TEN FISCAL YEARS

	June 30, 2018	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
County of Ventura										
General Members	6,607	6,654	6,552	6,319	6,212	6,104	6,031	6,069	6,057	6,044
Safety Members	1,525	1,508	1,494	1,521	1,538	1,505	1,490	1,524	1,498	1,544
Total	8,132	8,162	8,046	7,840	7,750	7,609	7,521	7,593	7,555	7,588
Participating Agencies (General Membership)										
Ventura Regional Sanitation District	68	63	66	68	69	61	60	60	61	69
Ventura County Courts	362	361	352	345	345	350	387	387	387	388
Ventura County Air Pollution Control District	44	45	45	46	46	48	51	-	-	-
Ventura County Employees' Retirement Association	5	5	-	-	-	-	-	-	-	-
Total	479	474	463	459	460	459	498	447	448	457
Total Active Members	hip									
General Members	7,086	7,128	7,015	6,778	6,672	6,563	6,529	6,516	6,505	6,501
Safety Members	1,525	1,508	1,494	1,521	1,538	1,505	1,490	1,524	1,498	1,544
Total	8,611	8,636	8,509	8,299	8,210	8,068	8,019	8,040	8,003	8,045

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EMPLOYER CONTRIBUTION RATES

LAST TEN FISCAL YEARS

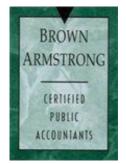
Year	Tier 1	Tier 2	PEPRA Tier 1	PEPRA Tier 2	Safety	PEPRA Safety
June 30, 2018	24.40%	16.54%	N/A	16.39%	55.66%	53.49%
June 30, 2017	23.85%	16.80%	N/A	16.67%	54.56%	52.77%
June 30, 2016	22.93%	18.07%	N/A	16.63%	53.87%	50.30%
June 30, 2015	47.39%	16.74%	44.01%	16.41%	51.65%	52.42%
June 30, 2014	37.35%	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%
Other Participating	Agonoios					
June 30, 2018	24.40%	16.54%	N/A	16.39%	N/A	N/A
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	47.78%	16.74%	N/A	16.41%	N/A	N/A
June 30, 2014	37.35%	18.42%	N/A	16.15%	N/A	N/A
June 30, 2013	171.83%	10.15%	N/A	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

Ventura County Employees' Retirement Association

Board of Retirement Presentation of the June 30, 2018 Year End Financial Statement Audit

Brown Armstrong Accountancy Corporation

4200 Truxtun Avenue, Suite 300 | Bakersfield, CA 93309 | 661.324.4971 | Fax 661.324.4997 23272 Mill Creek Drive, Suite 255 | Laguna Hills, CA 932653 | 949.652.5422



Presented By: Rosalva Flores, CPA, Partner

Alaina Sanchez, CPA, Manager

January 28, 2019

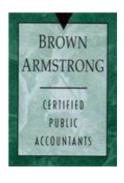
The Board of Retirement of the Ventura County Employees' Retirement Association 1190 South Victoria Avenue, Suite 200 Ventura, California 93003

We are pleased to present to you the results of our audit of the Ventura County Employees' Retirement Association (VCERA) financial statements and other information for the year ended June 30, 2018.

We look forward to presenting the results of the audit and addressing your questions.

Sincerely,

Rosalva Flores, CPA, Partner Alaina Sanchez, CPA, Manager Brown Armstrong Accountancy Corporation



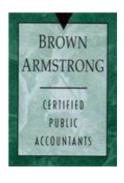
Agenda

	Page
Scope of Services Recap	4
 Audit Timeline/Critical Dates List 	5
 Audit Areas of Focus 	
Significant Risk Areas	6
Significant Audit Areas	7
 Results of the Audit 	
Audit Opinion Issued	8
 Required Communication (SAS 114 Letter) 	8
Other Reports Issued	9
 Financial Statement Review 	10
Thank Staff/Questions?	11



Scope of Services Recap

- ❖ Audit of VCERA's financial statements and other information 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* (GAS), issued by the Comptroller General of the United States
- Other communications and reports required by professional standards including:
 - ➤ Required Communication at the Conclusion of an Audit in Accordance with Professional Standards (SAS 114)
 - ➤ Report on Internal Control Over Financial Reporting and on Compliance and Other Matters in Accordance with GAS



Audit Timeline/Critical Dates List

- ➤ Population and Information Requests June 2018
- Fieldwork August 20, 2018
 - On-site Testing of Internal Controls
 - Walkthroughs and Understanding of Key Accounting Areas
 - Update Minutes and Agreements
 - Substantiate material Accounts and Balances
 - Review Confirmation Responses
 - Exit meeting with VCERA's Management
- ➤ Draft Reports and Recommendations December 2018
- ➤ Draft Audit Reports December 2018
- ➤ Audit Opinions Issued December 31, 2018
- ➤ Board of Retirement Presentation of Audit Results January 28, 2019



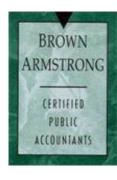
Audit Areas of Focus

Significant Risk Areas	Brown Armstrong's Response
Revenue recognition	 Test of controls was performed over contribution amounts as part of participant data Confirmations from third parties Other substantive analytics were also performed
Management override of controls	 An understanding of controls over journal entries was obtained and a sample of individual journal entries was performed Inquiries performed with individual(s) involved in the financial reporting process, and ensuring no inappropriate or unusual activity was noted relating to journal entry processing Performed walkthroughs of significant audit areas to review adequate segregation of duties



Audit Areas of Focus

Significant Audit Areas	Brown Armstrong's Response
Investments and related earnings	 Walkthrough of controls performed High level analytics performed on income Confirmation with custodian, managers, and consultants Reviewed GASB Statement No. 72 valuation inputs and testing of Level determinations Obtained audited financial statements and SOC reports
Participant data and actuary	 Walkthrough and test of controls Testing of participant data, including active and terminated members, and employer payroll Confirmed with participants, employers and actuary GASB Statement No. 67 and No. 68 Money weighted return RSI and Other Information schedules
Benefit payments	Walkthrough and test of controlsTesting of benefit paymentsHigh level analytics
Employer and employee contributions	 Walkthrough and test of controls Confirmed with employers High level analytics



Results of the Audit

Report	Summary
Report on Financial Statements and Other Information (Opinion)	• Unmodified
Required Communication to the Members of the Board of Retirement in Accordance with Professional Standards (SAS 114)	 Significant Estimates Reviewed Fair Value of Investments Contribution and Net Pension Liability ✓ Based on actuary assumptions Corrected and Uncorrected Misstatements - None Disagreements with Management – None Implementation of GASB Statement No. 75, Accounting and Financial Reporting for Postemployment Benefits Other than Pensions; Statement No. 81, Irrevocable Split-Interest Agreements; Statement No. 85, Omnibus 2017; and Statement No. 86, Certain Debt Extinguishment Issues – No significant impact.



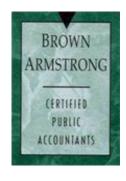
Results of the Audit

Report	Opinion or Required Communication
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	 No noncompliance noted No material weaknesses noted No significant deficiencies or control deficiencies identified
Agreed Upon Conditions Report Designed to Increase Efficiency, Internal Controls, and/or Financial Reporting (Management Letter)	 Financial Systems Observations 2018-1 User account access removal (2017-2) 2018-2 Active Directory user accounts (2017-3) 2018-3 Strong password requirements (2017-4) 2018-4 Test scripts and results of Microsoft Dynamics SL system upgrade Business Process Improvement Observations (IT Controls) 2015-5 Formalized IT risk assessments (2017-6) 2018-6 Physical access controls to the server room (2017-8) 2018-7 Access to G drive



Financial Statement Review

- Questions on the Financial Statements
- GFOA Award



Thank Staff/Questions?

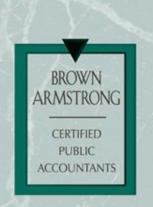






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Brown Armstrong Accountancy Corporation
Tel: 661.324.4971 | Email rflores@bacpas.com

Alaina Sanchez, CPA | Manager Brown Armstrong Accountancy Corporation Tel: 949.652.5422 | Email asanchez@bacpas.com



BROWN ARMSTRONG

Certified Public Accountants

INDEPENDENT AUDITOR'S REPORT

To the Board of Retirement of Ventura County Employees' Retirement Association Ventura. California

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Report on the Financial Statements and the Other Information

We have audited the accompanying Statement of Fiduciary Net Position of Ventura County Employees' Retirement Association (VCERA) as of June 30, 2018, 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 Allocations of VCERA and the Schedule of 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 (other information) as of and for the year ended June 30, 2018 (specified column totals), listed as other information in the table of contents.

Management's Responsibility for the Financial Statements and the Other Information

Management is responsible for the preparation and the fair presentation of these financial statements and the other information 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 and the other information that are free from material misstatement, whether due to fraud or error.

Auditor's Responsibility

Our responsibility is to express opinions on these financial statements and the other information based on our audits. We conducted our audits 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 audits 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 and other information. The procedures selected depend on the auditor's judgment, including the assessment of the risks of material misstatement of the financial statements and other information, 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 and other information 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

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

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

Opinions

In our opinion, the basic financial statements and other information referred to above present fairly, in all material respects, the fiduciary net position of VCERA as of June 30, 2018, and the respective changes in fiduciary net position for the year then ended, and the Schedule of Cost Sharing Employer Allocations of VCERA for the year ended June 30, 2018; and the Schedule of 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 (RSI), 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 Governmental Accounting Standards Board (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 RSI in accordance with auditing standards generally accepted in the United States of America, which consisted of inquiries of management about the methods of preparing the information and comparing the information for consistency with management's responses to our inquiries, the basic financial statements, and other knowledge we obtained during our audit of the basic financial statements. We do not express an opinion or provide any assurance on the information because the limited procedures do not provide us with sufficient evidence to express an opinion or provide any assurance.

Other Supplementary Information

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

The other supplementary information, 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, 2017 financial statements, and our report dated December 20, 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, 2017, 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 31, 2018, 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

Grown Armstrong Secountainey Corporation

Bakersfield, California December 31, 2018

VENTURA COUNTY EMPLOYEES' RETIREMENT ASSOCIATION

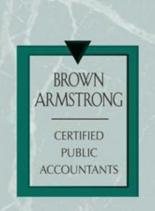
REPORT TO THE BOARD OF RETIREMENT

FOR THE YEAR ENDED JUNE 30, 2018

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 (SAS 114)

To the Board of Retirement of Ventura County Employees' Retirement Association Ventura. California

We have audited the financial statements, the Schedule of Cost Sharing Employer Allocations, and the Schedule of 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 pension expense, specified column totals (other information) of Ventura County Employees' Retirement Association (VCERA) for the year ended June 30, 2018, and have issued our report thereon dated December 31, 2018. 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 June 8, 2018. Professional standards also require that we communicate to you the following information related to our audit.

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Significant Audit Matters

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, Summary of Significant Accounting Policies, to the financial statements. As described in Note 1 to the financial statements, VCERA implemented Governmental Accounting Standards Board (GASB) Statement No. 75, Accounting and Financial Reporting for Postemployment Benefits Other than Pensions; GASB Statement No. 81, Irrevocable Split-Interest Agreements; GASB Statement No. 85, Omnibus 2017; and GASB Statement No. 86, Certain Debt Extinguishment Issues, during fiscal year 2018. Implementation of these standards did not have a significant impact on the financial statements or notes of VCERA. 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 was derived by various methods as detailed in Note 1, Summary of Significant Accounting Policies, and Note 3, Investments, 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.

REGISTERED with the Public Company Accounting Oversight Board and MEMBER of the American Institute of Certified Public Accountants The estimates of the contribution amounts and net pension liability as detailed in Note 1, Summary of Significant Accounting Policies, Note 4, Net Pension Liability of Participating Employers, and Note 5, Contributions, 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 Investments, 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 funding policies, net pension liability, and actuarial assumptions in Notes 4 and 5 to the financial statements, Net Pension Liability of Participating Employers and Contributions, respectively, 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. No such misstatements were noted during our audit.

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 31, 2018.

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 Changes in Net Pension Liability of Participating Employers, Schedule of Employer Contributions, Schedule of Investment Returns, and Latest Actuarial Valuation of Plan Assets and Liabilities, 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 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. In our opinion, the other supplementary information is fairly stated, in all material respects, to the basic financial statements as a whole.

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.

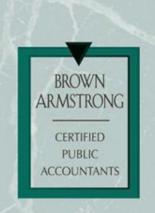
Restriction on Use

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

Scountancy Corporation

Bakersfield, California December 31, 2018



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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

To the Board of Retirement of 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, 2018, and the related notes to the financial statements, which collectively comprise VCERA's basic financial statements, the Schedule of Cost Sharing Employer Allocations, and the Schedule of 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 pension expense, specified column totals (other information) and have issued our report thereon dated December 31, 2018.

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 VCERA'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 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*.

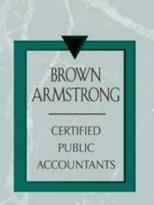
Purpose of this Report

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 Amstrong Secountainey Corporation

Bakersfield, California December 31, 2018



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Certified Public Accountants

AGREED UPON CONDITIONS REPORT DESIGNED TO INCREASE EFFICIENCY, INTERNAL CONTROLS, AND/OR FINANCIAL REPORTING (MANAGEMENT LETTER)

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

In planning and performing our audit of the financial statements, the Schedule of Cost Sharing Employer Allocations, and the Schedule of 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 pension expense, specified column totals (other information) of Ventura County Employees' Retirement Association (VCERA) for the year ended June 30, 2018, 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 VCERA's financial statements will not be prevented, or detected and corrected on a timely basis.

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 material weaknesses. Given these limitations during our audit, we did not identify any deficiencies in internal control that might be material weaknesses. However, material weaknesses may exist that have not been identified.

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.

We will review the status of these comments during our next audit engagement. We have already discussed the comments and suggestions with various VCERA personnel, and we will be pleased to discuss these in further detail at your convenience, to perform any additional study of these matters, or to assist you in implementing the recommendations.

Current Year Conditions and Recommendations

A. Financial Systems Observations

Condition 2018-1 - User account access removal

VCERA has recently implemented updated controls related to its user access removal procedures. VCERA now utilizes a V3 User Access Request Form, which must be signed by the associated hiring manager, and is used to request changes to V3-related system access. Also, System Access Request and Termination checklists are now used to document the overall user administration processes. However, user access removal requests are not consistently submitted in a timely manner. During our procedures performed, we noted the following for one individual tested (Program Administrator I):

- The email request to disable the associated Active Directory user account was sent to County of Ventura (County) Information Technology (IT) staff three business days after the employee's termination date.
- The V3 User Access Request Form associated with the process of disabling the associated V3
 user account was submitted three business days after the employee's termination date.

Failure to notify staff responsible for user administration of employee terminations in a timely manner 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 risk is further elevated by the fact that the removal of access to the Active Directory system (and therefore, to the VCERA network and the files it secures) must be performed by County IT staff, whose availability or lack thereof may prolong the timeline for user access removal procedures, as was seen in regards to the sample termination tested during the current year's audit procedures: access to the Active Directory system was removed a week after the request was submitted to the County's IT group. 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.

Recommendation

It is recommended that VCERA reinforce its established user access removal procedures to ensure that County IT and the VCERA staff responsible for performing user access administration within the V3 system are notified immediately via the established user access request methods when an employee is terminated or a termination date is set so that the associated user accounts can be promptly disabled or removed as needed.

Management Response

VCERA continues to use the New Hire and Termination Spreadsheets that Chris Ayala is utilizing when processing requisite paperwork for these processes. The System Security Access Request Form for all V3-related system access is currently in place and is 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 access request requires CTO and Manager approval. Additionally, account creation/deletion service requests that are sent to County IT are copied to the VCERA IT mailbox. All access forms must be signed by hiring manager and CTO. Forms and log can be provided upon request.

Condition 2018-2 – Active Directory user accounts

VCERA IT staff indicated periodic reviews of the Active Directory user accounts are being performed to ensure that no unneeded or unauthorized user accounts are active. However, there is no established formal review policy or process, such as on a quarterly basis. Failure to establish a formal and consistent process of reviewing user accounts, such as quarterly, 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. Additionally, due to the fact that VCERA does not have administrative access to the Active Directory domain, the organization does not perform reviews of its Active Directory user accounts to ensure that the group memberships and/or permissions assigned within the system are appropriate. This 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. Concerns regarding this risk were raised by VCERA staff during the prior year audit, as VCERA staff are unclear as to whether access to sensitive data held within shared folders secured by Active Directory permissions is appropriately configured.

Recommendation

It is recommended that VCERA establish a formal policy/process to perform regular reviews of user accounts within its Active Directory system and their associated group memberships and permissions. The review should be done at least annually to ensure that the group memberships assigned within the system are appropriate for each individual with current job responsibilities, if assigned to an employee. Given that VCERA does not have administrative access to the Active Directory system, management should collaborate with County IT staff in order to establish these review procedures, and may wish to begin by requesting a list of the Active Directory groups currently in place and determining how the groups should be used to restrict access to sensitive information. Once this process is complete, VCERA should then determine which files and folders these groups are given access to in order to determine if the groups' membership lists and their associated access levels are appropriate. Alternatively, if VCERA's Active Directory user accounts all reside within the same group, management may wish to instead begin by identifying any highly sensitive and restricted folders and/or files and requesting documentation from County IT demonstrating which individuals have been assigned the permissions required to access such resources. Once management has established the key groups and/or resources to be reviewed, VCERA should repeat the review process and regularly request the associated documentation on an annual basis, at a minimum, and any shared or system accounts utilized by VCERA should also be included in these reviews.

Management Response

No change. VCERA AD group membership is periodically checked by CTO, especially after hire or termination.

Condition 2018-3 - Strong password requirements within the Active Directory and V3 systems

During our review of the password requirement settings within VCERA's Active Directory and V3 systems, it was noted that the requirements configured within V3 have been recently updated to ensure that they meet or exceed the requirements specified by the County's "Master Information Technology Security Policy," which has been adopted by VCERA as its own information security policy. However, no minimum password age has been configured within Active Directory or V3, and complexity requirements are disabled within Active Directory. The following 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	120 days for employee users; 180 days for self-service users
Minimum password age	Not specified	0 days	Not configured

Requirement Description	"Master Information Technology Security Policy" Requirement	Active Directory Setting	V3 Setting
Complex passwords	Not specified	Disabled	Must contain at least one alphabetical character, one number, and at least one special character
Password History (# of passwords that can't be reused)	Systems will be configured to disallow re-use of passwords for 5 generations	12 passwords remembered	5 passwords remembered
Account lockout after X number of failed attempts	5 or less incorrect password attempts	5 invalid logon attempts	5 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.

Recommendation

It is recommended that VCERA work with the V3 system's software provider in order to implement the ability to enforce a minimum password age within the system. Once implemented, it is recommended that this setting is configured to enforce a minimum password age of greater than zero days so as to ensure that the system's password history requirement cannot be easily circumvented.

Management should also examine the password requirements currently enforced by the County's Active Directory system and evaluate the possibility of requesting a customized password policy that enforces complexity requirements and requires a minimum password age of greater than zero days. Management may wish to consider implementing alternative requirements, however, such as those based on currently-emerging NIST-recommended password requirements, as deemed appropriate.

Management Response

VCERA cannot change the County master security policy, though we could have our own Active Directory policy for just VCERA. V3 is not capable of a Minimum Password Age, which would require an enhancement to the application. VCERA is currently exploring several enhancements with Vitech and will include this in that list as a priority enhancement.

<u>Condition 2018-4</u> – Test scripts not utilized during VCERA's upgrade of the Microsoft Dynamics SL system, and testing results were not documented

During our inquiries with VCERA staff regarding the upgrade of the Microsoft Dynamics SL system from version 2012 to version 2015, which was completed at the beginning of the audit period, it was noted that although VCERA staff verified certain critical data, such as the system's new chart of accounts as well as journal entries, the trial balance, and the statement of reserves, testing was performed over conference calls and without the use of predetermined test scripts or plans. Although the organization performed user acceptance testing of the new system, all user acceptance testing results were not documented. Failure to document and utilize test plans and document the results of testing processes when implementing new systems or upgrades to existing systems prevents VCERA from confirming the full functionality of the system/upgrade prior to the go-live date/move to production. This increases the risk that key processes are performed incorrectly, and that incorrect processing of financial transactions could occur.

Recommendation

It is recommended that VCERA consider formalizing its testing process by creating and documenting testing plans and their associated results whenever a new system is introduced and whenever existing systems are upgraded. If one set of testing scripts or plans is used to verify all implementations/changes, it should be formally described and documented and included as part of the test planning phase for each implementation/change; individual test procedures that are developed for particular implementations/changes should also be documented during the test planning process for the associated implementation/change. All test plans should include identification of key processes affected by the implementation or upgrade, and should be reviewed to confirm that adequate testing of identified processes is included. The results of all tests should be formally documented, including indication as to which tests were successful and/or unsuccessful as well as the steps taken to resolve any detected errors and the results of any subsequent re-tests until the tests are successful.

Management Response

IT performs routine backend tasks when Dynamics is upgraded, to ensure functionality and connectivity. Fiscal works with the Dynamics Consultant to identify key processes and tasks to test, to confirm functionality of the application and validate data. Fiscal will work on developing a test plan to be reviewed and vetted by IT, who will assist with reviewing the thoroughness of the test plan and assist with documenting the testing results for posterity. Both the IT backend testing process and the functional testing process will be used by IT and other VCERA departments for future technology and software upgrades. The test plans and documentation will be customized to adhere to the departmental data and business processes related to the technology/software being upgraded.

B. Business Process Improvement Observations (IT Controls Only)

Condition 2018-5 - Formalized IT risk assessments are not conducted on an annual basis

The Retirement Administrator works with VCERA staff to assess high-level IT-related risks as part of VCERA's annual Business Plan. However, 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 might be 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. We acknowledge 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 limited 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

County IT performs routine penetration testing and vulnerability scanning of the County infrastructure. The VCERA's vulnerability scanning reports are reviewed by the CTO. Vitech performs routine vulnerability scans and penetration testing of VCERA's hosted environment. The CTO is reviewing VCERA's infrastructure to identify areas of potential risk that will need to be assessed semi-annually either by the CTO, a third-party or a combination of both.

Condition 2018-6 - Physical access controls to the server room

During our inquiries of the physical security controls in place in regards to the server room at VCERA's main offices, we noted that electronic card-based access to the VCERA server room was reviewed and updated recently, and VCERA has determined which individuals have access to the physical keys needed to unlock the server room without an electronic card. However, we noted that a process to regularly review access to the server room has not been formally established. Failure to regularly review access to the server room increases the risk that unauthorized electronic cards and/or physical keys, such as those belonging to terminated employees, employees who have transferred to a different department, or third-party service providers/vendors whose contracts have concluded are not identified and disabled and/or collected on a timely basis, which results in an increased security risk of unauthorized physical access to the data center and the equipment and data retained there in the event that the electronic card and/or physical key is utilized by individuals who have not been authorized to access the server room. This risk was evident in our testing, as during our evaluation of the access list for the data center, we noted that the list included two terminated employees whose access to the server room had not been disabled.

Recommendation

It is recommended that the lists of individuals with electronic card and/or physical key access to the server room are reviewed on an annual basis at a minimum, and that this process is documented to ensure that it is completed as scheduled. The review should be conducted by a VCERA staff member with direct knowledge of the organization's current employee roster and associated job duty assignments, as well as direct knowledge of any currently contracted vendors and County IT staff that require access to the server room. If necessary, the reviewer should also consult with departmental management to ensure that any electronic cards and/or physical keys are appropriately authorized and given only to active employees whose job duties require access to the server room.

Management Response

The electronic card access to the server room is reviewed and updated annually by the CTO and all unauthorized vendors and staff are escorted by the CTO or VCERA Staff who have badge access to the room. Several individuals were removed, and some added. It was determined that only 2 people have a key to the server room, and both of these are already on the electronic access list. Keys are kept in a locked key safe.

Condition 2018-7 - Access to G drive

During our audit procedures, we noted VCERA's access to the County's G drive is not restricted. Although some folders are restricted, users of the drive are able to add and delete files. As VCERA is starting to go paperless, the G drive is utilized more frequently to store documents. While the County performs nightly backups, there could be files deleted during the day and lost work for that day.

Recommendation

Users of the drive can inadvertently delete critical files. We recommend VCERA implement a policy and coordinate with the County regarding access controls to the G drive.

Management Response

The G drive's permissions are managed by Active Directory, security groups, with more restrictive permissions set on some folders. All files on the G drive are backed up nightly and previous versions is enabled, which allows for documents to be reverted back to a previously saved version. Additionally, file level auditing (which records details on additions, deletions, modifications and moves for all files and folders) has been configured and activity is retained for up to 6 months. The CTO is reviewing the current security groups and permissions to determine if stricter access is required.

Status of Prior Year Conditions and Recommendations

A. Financial Systems Observations

Condition 2017-1 - Administrative Access

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.

Current Year Status

Implemented.

Condition 2017-2 - User account access removal

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 Avala, 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 reenabled 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.

Current Year Status

Refer to the current year condition 2018-1 – User account access removal.

Condition 2017-3 - Active Directory user accounts

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.

Current Year Status

Refer to the current year condition 2018-2 – Active Directory user accounts.

Condition 2017-4 – Strong password requirements within the Active Directory and V3 systems

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	··· I 6 alphanumeric I		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.

Recommendation

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.

Management Response

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.

Current Year Status

Refer to the current year condition 2018-3 – Strong password requirements within the Active Directory and V3 systems.

Condition 2017-5 - User Accounts for new Hires

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.

Recommendation

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.

Management Response

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.

Current Year Status

Implemented.

B. Business Process Improvement Observations (IT Controls Only)

Condition 2017-6 – Formalized IT risk assessments are not conducted on an annual basis

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.

Current Year Status

Refer to the current year Condition 2018-5 – Formalized IT risk assessments are not conducted on an annual basis.

Condition 2017-7 - Third Party Service Providers Audits

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.

Current Year Status

Will be revisited in 2019 due to VCERA implementing a review process and assigning to the new Chief Technology Officer, who has not yet been hired.

<u>Condition 2017-8</u> – Physical access controls to the server room

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.

Current Year Status

Refer to the current year Condition 2018-6 – Physical access controls to the server room.

Restriction on Use

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
fecountancy Corporation

Bakersfield, California December 31, 2018

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PGIM REAL ESTATE REPRESENTATIVES



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U.S. Core Fund or U.S. Core Fund Composite reflects the combined assets and performance of all assets held by U.S. Core Fund SA and U.S. Core Fund LP. Although this is not an actual fund in which any client is invested, it is indicative of the overall performance of the U.S. Core Fund investment strategy and, therefore, the U.S. Core Fund Composite returns and portfolio metrics will be provided to NCREIF for inclusion in the NFI-ODCE and other NCREIF Indices. U.S. Core Fund may also refer to the U.S. Core Fund portfolio and asset management teams.

Important Note on Historical Information: Economic terms and other portfolio metrics reported for U.S. Core Fund, U.S. Core Fund SA, or U.S. Core Fund LP that include periods to the formation of U.S. Core Fund LP reflect information for U.S. Core Fund SA for those periods prior to January 1, 2013. Prior to the formation of U.S. Core Fund LP, U.S. Core Fund and U.S. Core Fund SA were one in the same.

Please see Appendix for important disclosures about U.S. Core Fund's structure.

Note: Data as of December 31, 2018 is preliminary and subject to change. Unless otherwise stated, all return information provided in this presentation is before the deduction of Manager Compensation/Fees and is not a guarantee or a reliable indicator of future results. All performance targets throughout this presentation are made as of December 31, 2018 and are not guaranteed. Effective January 1, 2013, PGIM Real Estate changed its method for calculating income and appreciation returns to one which uses separate geometric linking for each component, which is consistent with recent changes in Global Investment Performance Standards. As a result, when linking multiple periods' returns, the cumulative effect of cross compounding may cause the sum of income and appreciation returns to not equal the total return. Please refer to the Appendix for returns after the deduction of Manager Compensation/Fees and for other important disclosures regarding the information contained herein. Unless otherwise stated, photos of properties throughout this deck reflect U.S. Core Fund's current assets

I. PGIM Real Estate Overview

PGIM Real Estate



Strength & Stability

Deep Financial Strength and a Long History of Real Estate Experience



Prudential Financial, Inc. (PFI)

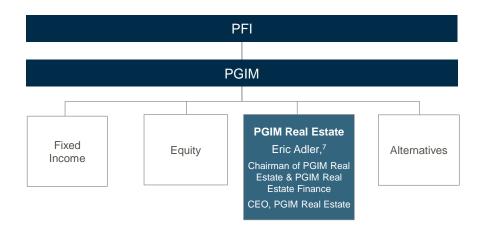
- Over 140 years of managing assets
- Listed on the NYSE (New York Stock Exchange, NYSE: PRU)
- US\$1.41 trillion¹ of AUM
- One of the largest insurance companies in the United States
- A rated (Issuer Credit Rating)² by Standard & Poor's

PGIM

- Global Asset Manager with over US\$1 trillion³ of AUM
- Top 10 Worldwide Institutional Money Manager⁴
- \$165.2 billion in combined real estate equity and debt AUM and AUA⁵

PGIM Real Estate

US\$70.9 billion⁶ gross AUM globally



¹As of September 30, 2018. ²As of November 7, 2018. Source: Standard & Poor's. ³ Includes all assets managed by PGIM, Inc., the principal asset management business of PFI. Assets include public and private fixed income, public equity – both fundamental and quantitative and real estate) as of September 30, 2018. ⁴ Pensions & Investments' Top Money Managers list, as of May 28, 2018. Based on PFI's total worldwide assets under management as of December 31, 2017. ⁵ Inclusive of PGIM Real Estate and PGIM Real Estate Finance AUM and AUA. As of September 30, 2018. ⁶ As of September 30, 2018, total net assets under management equal \$50.4 billion. ⁷ As of July 1, 2018.

PGIM Real Estate Americas — U.S. Business

(File

Extensive Resources Committed to Delivering Innovative Strategies

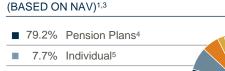
Overview
AUM: \$49.5B gross ¹
314 Employees / 174 Investment Professionals ²
6 Cities

U.S. ACQUISITIONS & SALES HISTORY (\$ BILLIONS)





DISTRIBUTION BY FUND (BASED ON GAV)¹ 51.1% U.S. Core Fund 27.0% U.S. Core Plus Fund 7.5% Single Client Accounts 7.5% U.S. Value-Add Fund 3.0% Other Commingled Funds 2.0% Debt Strategies 2.0% Senior Housing



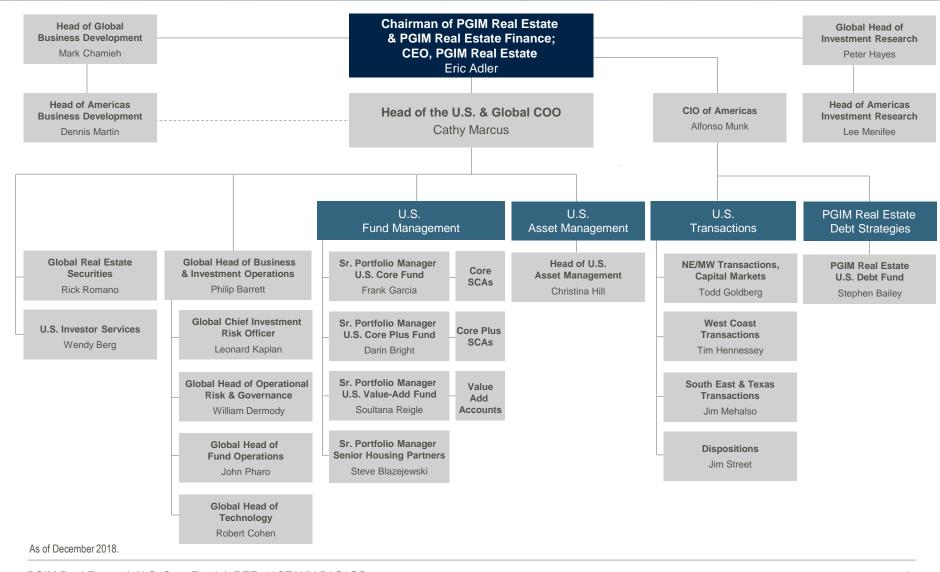
SOURCE OF FUNDS' CAPITAL



¹ As of September 30, 2018, total net U.S. assets under management equal \$36.1 billion. ² Staffing as of September 30, 2018 in allocated full-time employees. ³ Non-U.S. entities make up 6.2% of U.S. NAV. ⁴ Comprised of Public Pension (40.0%), Private Pension (23.1%), Union Pension (16.1%). ⁵ Comprised of Retail/Mass Affluent (1.1%), Defined Contribution (6.6%), High Net Worth 0.0%), Family Office (0.1%). Note: Percentages may not sum to 100% due to rounding.

PGIM Real Estate U.S. Organization Chart





U.S. Core Fund Family of Funds

As of December 31, 2018



	U.S. Core Fund ¹	U.S. Core Plus Fund ¹	U.S. Value-Add Fund	
Strategy	Core	Core-Plus	Value-Add	
Structure & Status Open-End, Perpetual Life (Accepting new commitments)		Open-End, Perpetual Life (Accepting new commitments)	Open-End, Perpetual Life (Accepting new commitments thru 1Q19)	
Objective	NFI-ODCE	NFI-ODCE +100 bps	11.00% to 14.00% ²	
Portfolio Leverage	≤ 30%	≤ 40%	≤ 65%	
Targeted Non-Core Exposure	≤ 10%	≤ 35%	≤ 60%	
Return Focus Income		Income + Appreciation	Appreciation	
Property Type Focus	Fully Diversified	Diversified	Diversified	
Geographic Focus	U.S. Diversified	U.S. Diversified	U.S. Diversified	
Size GAV NAV	\$25.2B \$20.2B	\$13.8B \$8.7B	\$4.2B \$1.9B	
Inception	1970	1980	2003	

¹ U.S. Core Fund represents the aggregate or composite of U.S. Core Fund LP and U.S. Core Fund Separate Account (U.S. Core Fund SA). U.S. Core Plus Fund represents the aggregate or composite of U.S. Core Plus Fund LP and U.S. Core Plus Fund Separate Account (U.S. Core Plus Fund SA).

² Net target return for U.S. Value-Add Fund is 9.3%-12.3%. There is no guarantee that targeted returns will be achieved.

U.S. Near-Term Real Estate Market Outlook



Stable real estate market environment

- Core returns in the 6-8% range
- High occupancies
- Robust investment activity, with industrial in favor, retail and CBD office out of favor

Stable pricing with balanced investor demand

- Cap rates holding steady
- Ample debt availability but gradually rising borrowing costs
- · Yield spreads in non-gateway and infill suburban markets more attractive

Solid and improving demand drivers

- Robust job gains, moderate wage growth
- Consumer and business confidence remains at 18-year highs

Persistent income growth

- Apartment and industrial construction remains active, matched by demand
- All property types experiencing positive rent growth

Short-term favors office and industrial, stronger long-term outlook for apartments and storage

- Office: demand rebounding in gateway and tech markets
- Industrial: strong demand, robust rent growth
- Apartments: moderate rent growth continues despite high supply
- Retail: grocery-anchored remains a defensive play as mall and power center vacancies rise
- Storage: rent gains moderating as supply is absorbed





Eleven Times Square (New York, NY)

II. U.S. Core Fund Review

PGIM Real Estate



Ventura County Employees' Retirement Association

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U.S. Core Fund SA Assets as of September 30, 2018

Contributions (03/31/2005 Inception Date)				
03/31/2005 \$40,000,000.				
09/30/2005	\$20,000,000.00			
Total Contributions	\$60,000,000.00			
Investment Earnings				
Investment Income	\$65,535,380.10			
Appreciation	\$29,700,291.80			
Total Investment Earnings	\$95,235,671.90			
Disbursements				
Withdrawals	\$0			
Deducted Fees	(\$1,469,314.90)			
Cash Flow Distributions	\$0			
Total Disbursements	(\$1,469,314.90)			

NET DOLLAR-WEIGHTED PERFORMANCE 12% 10.19% 10% 7.92% 7.88% 6.54% 4.30% 2.19% 2% 0% 3RD QTR 1 Year 3 Year 5 Year 10 Year Inception

Operating Cash Flow		Capital Commitments	
Total Distributed	\$0	Undrawn Commitments	\$0
Total Reinvested	\$51,929,148		
Current Election	Reinvesting		
3Q18 Cash Flow	\$1,279,797		

Note: Past performance is not a guarantee or reliable indicator of future results.

Market Value

PGIM Real Estate | U.S. Core Fund | REF: 19CTANY-B8G6CC Confidential information. Not for further distribution.

\$153,766,357.00

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Disclaimer Regarding U.S. Core Fund Information Presented



Unless indicated otherwise by referencing U.S. Core Fund SA or U.S. Core Fund LP specifically, this presentation contains financial and other information about U.S. Core Fund Composite ("U.S. Core Fund", "U.S. Core Fund Composite" or the "Fund"). U.S. Core Fund Composite reflects the aggregate holdings, leverage, and operations of U.S. Core Fund SA and U.S. Core Fund LP. While U.S. Core Fund Composite is not a fund in which any investor may invest, its performance is indicative of each of U.S. Core Fund SA and U.S. Core Fund LP and is reported to ODCE. U.S. Core Fund SA and U.S. Core Fund LP are separate investment vehicles with separate terms (including fee structures) that invest in substantially the same assets, as further described in "U.S. Core Fund Structure" in the Appendix section **U.S. Core Fund SA, U.S. Core Fund LP, and Net Returns Addendum**. The performance of each of U.S. Core Fund SA and U.S. Core Fund LP, on a separate basis, may differ materially from U.S. Core Fund Composite.

For information about the performance and other data regarding the fund in which they are invested (i.e., U.S. Core Fund SA or U.S. Core Fund LP, as applicable), investors should review the **U.S. Core Fund SA, U.S. Core Fund LP, and Net Returns Addendum** in the Appendix and consult the statements and reports provided to them pursuant to their investment agreements, including their individual client statements, financial statements and quarterly reports, in each case, which include data exclusively related to U.S. Core Fund LP or U.S. Core Fund SA, as the case may be.

U.S. Core Fund¹ Summary

Income-Oriented Core Fund



- Open-end commingled U.S. core real estate fund delivering outperformance since NFI-ODCE inception²
- Diversified income stream has accounted for 85%+ of total gross return since inception
- Scale provides substantial diversification and access to irreplaceable assets in gateway markets
- Overweight to gateway markets; exposure to select dynamic secondary markets; and attractive sector weightings to all major property types and self storage

Inception Date	July 1970
Since Inception Gross Return	9.0% (7.9% net)
Benchmark	NFI-ODCE
Gross Asset Value	\$25.2B
Net Asset Value	\$20.2B
Number of Investments	267



100 Park Avenue (New York, NY)

¹ U.S. Core Fund Composite (or "U.S. Core Fund") represents the aggregate or composite of U.S. Core Fund LP and U.S. Core Fund Separate Account (U.S. Core Fund SA). As of December 31, 2018. ² NFI-ODCE inception date March 31, 1978.

Note: Past performance is not a guarantee or a reliable indicator of future results.

U.S. Core Fund's Team





PORTFOLIO MANAGEMENT TEAM



Frank E. Garcia
Managing Director
Senior PM
Years with Firm: 5
RE Experience: 26



Joanna Mulford
Managing Director
PM & Fund's CFO
Years with Firm: 29
RE Experience: 22



James Glen
Managing Director
PM
Years with Firm: 4
RE Experience: 18



Catherine Minor
Vice President
Assistant PM
Years with Firm: 3
RE Experience: 20

ASSET MANAGEMENT LEADS



West
Kristin Paul
(8 / 21)



Midwest
Mark Vande Hey
(23 / 39)



East
Carly Miller
(11 / 21)



Apartment Yetta Tropper (4 / 24)



Retail
Alison Hallberg
(13 / 13)

- Experienced portfolio management team with complementary skill sets
- 34 asset managers aligned by region and strategy
- Three additional portfolio-level team members focused on strategic and analytical support
- Additional oversight/input from PGIM Real Estate's Head of Americas Asset Management and other resources¹

Chicago
6 Asset Managers

New York / Madison
18 Asset Managers

10 Asset Managers

(xx / xx) = Years with PGIM Real Estate / Real Estate experience.

¹ U.S. Core Fund benefits from the following shared services across the PGIM Real Estate platform: Research, Transactions, Capital Markets, Risk Management, Human Resources, Systems, Legal, Valuation and Compliance. U.S. Core Fund also benefits from four operational staff support. Note: As of December 31, 2018.

U.S. Core Fund Composite Snapshot¹

As of December 31, 2018

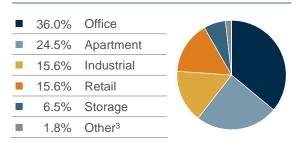


Scale	
Gross Asset Value	\$25.2B
Net Asset Value	\$20.2B
Number of Investments	267
Number of Clients	331

Key Risk Metrics	Actual	Guideline
Core	91.9%	<u>></u> 90%
Leverage Ratio	19.9%	<u><</u> 30%
Debt to Income Multiple	4.8x	<u><</u> 5.0x

Client Activity	4Q18	Full-Year
Deposits	\$143.1M	\$838.7M
Cash Flow Reinvested	\$75.2M	\$325.1M
Withdrawals	\$363.7M	\$1,464.3M
Cash Flow Distributions	\$94.4M	\$325.1M

PROPERTY TYPE DIVERSIFICATION²



GEOGRAPHIC DIVERSIFICATION²

39.0%	East	
34.0%	West	
19.2%	South	
7.8%	Midwest	



International Place (Boston, MA)

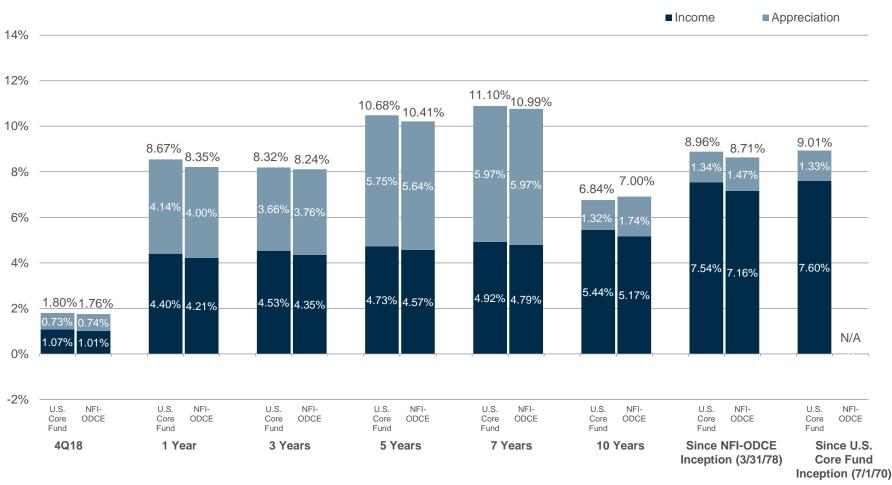
¹U.S. Core Fund Composite represents combined assets held by U.S. Core Fund SA and U.S. Core Fund LP. ² Based on U.S. Core Fund's preliminary share of gross market value in properties and debt investments. ³ Other includes Harbor Garage, Land, and tax incentive notes connected to real estate investments. Note: Please see page 11 for important information regarding U.S. Core Fund Composite.

U.S. Core Fund Composite Gross Performance

As of December 31, 2018



U.S. Core Fund COMPOSITE GROSS RETURNS VS. NFI-ODCE GROSS RETURNS1



¹ Performance information regarding U.S. Core Fund SA or U.S. Core Fund LP, as applicable, along with performance net of manager compensation/fees, appears in the Appendix. Returns for periods prior to January 1, 2013 are based upon U.S. Core Fund SA only. Note: Returns shown are time-weighted rates of return calculated in conformity with performance reporting standards and are before the deduction of Manager Compensation/Fees. Returns for NFI-ODCE are based on the preliminary report published by NCREIF on January 14, 2019. Past performance is not a guarantee or a reliable indicator of future results.

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U.S. Core Fund Drivers of Performance

One-Year Ending December 31, 2018



Unlevered Returns by Property Type: 1-Year					
Property Type	Income	Appreciation	Total	Relative Contribution (bps) ¹	
Industrial	4.76%	9.09%	14.17%	+93	
Storage	5.45%	2.95%	8.52%	+6	
Office	4.31%	2.61%	7.00%	-25	
Apartment	3.66%	2.84%	6.58%	-24	
Retail	5.43%	-0.07%	5.35%	-37	
Total ²	4.41%	3.15%	7.66%		

Sector Highlight — Industrial

Strong tenant demand drives rents and occupancy

- Supported by growth in e-commerce
- Same property occupancy increased to 96.8%
- Healthy TTM NOI growth of 5.4% generated outsized appreciation



Eastgate B (Perryman, MD)

Top Markets by Relative Unlevered Return Contribution: 1-Year					
Market	Income	Appreciation	Total	Relative Contribution (bps) ¹	
Los Angeles	3.76%	6.00%	9.92%	+33	
San Francisco	4.27%	5.92%	10.38%	+33	
Seattle	4.82%	12.49%	17.76%	+19	
Atlanta	5.01%	5.02%	10.21%	+9	
Austin	4.71%	6.06%	10.98%	+4	

Market Highlight — Los Angeles

Los Angeles was the top relative contributor

- The greater LA industrial market remains one of the strongest in the country with vacancy of only 1.5%
- Dense and desirable submarkets supported the residential sector
- U.S. Core Fund's overweight is supporting performance



Perris Valley Logistics (Perris, CA)

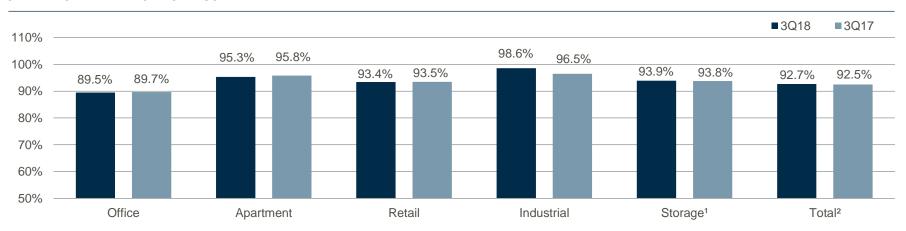
¹Relative contribution is calculated by subtracting the benchmark's unlevered total return (ODCE at contract share) from the Fund's individual sector/market return, then multiplying that relative return by the sector's/market's weighting in the Fund. ²Total includes Harbor Garage, Land, and tax incentive notes connected to real estate investments. Note: As of December 31, 2018. Past performance is not a guarantee or a reliable indicator of future results.

U.S. Core Fund Occupancy & Income Growth

As of September 30, 2018



SAME PROPERTY LEASED STATUS



HISTORICAL TOTAL OCCUPANCY (2012 Q4 - 2018 Q3)



Same Property NOI ³	YTD NOI (\$ millions)	YTD NOI Growth %
Office	\$394.8	8.6%
Industrial	\$128.0	7.0%
Storage	\$65.2	0.9%
Retail	\$161.3	0.3%
Apartment	\$144.4	(1.1%)
Total Same Property NOI4	\$901.7	4.5%

¹ Represents average leased status for the quarter. ² Same property leased status for total portfolio weighted based on gross market value. ³ 100% Property level unlevered. To provide a more meaningful basis for comparison between periods, property net income excludes income from properties that were purchased or sold during the comparative time periods, land, and debt investments. ⁴ Total Same property NOI of \$901.7 million represents 98% of U.S. Core Fund's total NOI. Includes Harbor Garage, which represents \$8.0 million of NOI. Note: Results are not guaranteed. Past performance is not a guarantee or reliable indicator of future results.

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U.S. Core Fund's Strategic Plan 2018-2020

Strategy for Long-Term Attractive Risk Adjusted Performance



- Shift to long-term strategic property type weightings
- Remain overweight to strategic markets and continue to explore select tactical markets
- Preference for urban and infill suburban locations with access to amenities and transit
- Continually upgrade portfolio through acquisitions, build-to-core investments, and tactical sales
- Ongoing focus on risk and income preservation
 - Active asset management
 - Maintain healthy debt metrics
 - Remain near 10% guideline on non-core with focus on build-to-core apartments and industrial



The Modern I (Fort Lee, NJ)

U.S. Core Fund's Strategic Markets

Research-Driven Market Focus to Provide Long-Term Outperformance



Approximately 80% of U.S. Core Fund's exposure is in its Strategic Markets which is overweight to the



Asset images are as follows: International Place (Boston, MA); Eleven Times Square (New York, NY); 500 8th Street (Washington, D.C.); Fillmore Center (San Francisco, CA); Perris Valley Logistics Center (Perris, CA). Note: Above basis points (bps) are compared to NFI-ODCE. Please see page 11 for important information regarding U.S. Core Fund Composite. NFI-ODCE does not publish detailed market information. Market information is based on CSA definitions and calculated by extracting NFI-ODCE property data from the NCREIF Research Database. Data as of September 30, 2018.

U.S. Core Fund Property Type Strategy

Shifting to Long-Term Strategic Allocations



	Change in Exposure (bps) since 3Q-17 ¹	3Q-18 Exposure ¹	Target Movement 2019-2021	Fund Target 2019-2021 ²	NFI-ODCE 3Q-18 ³
Office	-290 bps	36.8%	↓	30-35%	36.9%
Apartment	+330 bps	24.2%	↑	25-30%	25.7%
Retail	-110 bps	15.6%	↓	10-15%	17.8%
Industrial	+130 bps	14.9%	↑	15-20%	15.7%
Storage	+10 bps	6.5%	\leftrightarrow	5-10%	2.2%

¹ Based upon U.S. Core Fund's share of GMV in properties and debt investments. ² There is no guarantee that these targets will be achieved. ³ Diversification as of 3Q18 is based on NFI-ODCE gross market value in the NCREIF Performance Attribution Report.

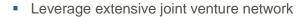
U.S. Core Fund Non-Core Component

Build-to-Core Pipeline Generating New Trophy Assets with Upside





The Quincy (New Brunswick, NJ)



- Lower risk apartment and industrial development
- Non-core exposure is in line with the benchmark¹
- Maintain non-core exposure near guideline

■ Core ■ Non-Core

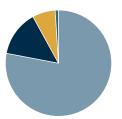
CURRENT EXPOSURE² 93.4% 6.6% COMMITTED EXPOSURE³ 91.2% 8.8%

57% Development 29% Lease-Up 6% Pre-Development



NON-CORE INVESTMENT STRATEGY





¹ Based on IPD's definition of non-core. ² Based on U.S. Core Fund's share of gross market value in properties and debt investments. Based on net equity, exposure breakout is Core: 94.0%; Non-Core: 6.0%. ³ Current exposure plus unfunded commitments and assumes no stabilization of non-core assets; basis on which guideline is measured.

■ Core ■ Non-Core

Transaction Activity

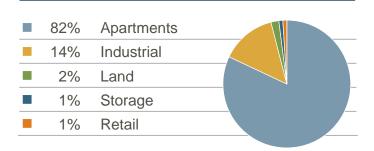
One-Year Ending September 30, 2018



Acquisitions: \$1.3B¹ (22 assets)

- Purchased or building long-term hold core assets
- Predominantly apartments and industrial
- Geographically diverse locations

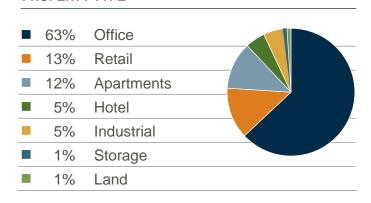
PROPERTY TYPE¹



Dispositions: \$1.4B² (16 assets)

- Upgraded portfolio and disposed of tactical assets
- Reduced office and commodity retail
- Exited hotels

PROPERTY TYPE²



¹ Based on U.S. Core Fund's % of gross investment. ² Based on U.S. Core Fund's % sales price.

U.S. Core Fund – 2018 Outlook & Objectives



	2018 Objectives	2018 Results ¹	Comments
Performance	Income: 4.5% - 5.0% Appreciation: 1.5% - 3.0%	4.40% 4.14%	 Exceeded target thanks
	Total: 6.0% - 8.0% ²	8.67%³	
Transactions	Acquisitions: \$1.5B - \$2.0B Dispositions: \$0.5B - \$1.0B	\$1,019.8M \$853.8M	 Maintained a disciplined approach to investing, acquiring less than original projection Success selling tactical and non-strategic assets with volume at the high-end of our target range
Risk Profile	Leverage Ratio: 20% - 25% Debt-to-Income Multiple: ≤ 5.0x Non-Core Investments: ≤10.0%	19.9% 4.8x 8.1%	 Risk Metrics are in line with long-term targets Focused on lower-risk opportunities within non-core
Portfolio Strategy	 Increase exposure to Apartment a Reduce exposure to Office and R Continue monitoring risk metrics 		 Since 4Q-18: Apartment + 260 bps Industrial + 140 bps Office - 250 bps Retail - 70 bps

¹ Past performance is not a guarantee or a reliable indicator of future results. 2 Total net target returns of 5 to 7%. Target returns are not guaranteed. 3 Total 2018 net return of 7.80%.

PGIM Real Estate & U.S. Core Fund Sustainability – Mission & Recognition

As of September 30, 2018

Our Sustainability Mission

To incorporate sustainability practices into our real estate investment process and the management of our global portfolio that results in increased operating efficiency, and contribute to delivering superior risk-adjusted returns for our investors and cost savings and health benefits for our property occupants, while being a good global citizen and respecting the needs of all stakeholders.

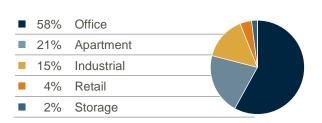
Our Sustainability Objectives

- Improve investment returns for our clients
- Become a landlord of choice
- Practice good global citizenship starting with the communities we serve

U.S. Core Fund Recognition

- In the 2018 Global Real Estate Sustainability Benchmark (GRESB)² survey, U.S. Core Fund earned a GRESB 4-star rating against its peer group of diversified, non-listed U.S. funds.
- U.S. Core Fund earned a GRESB Green Star in the 2018 survey. U.S. Core Fund earned scores of 90 for Management and Policy, 73 for Implementation and Measurement and 78 overall. PGIM Real Estate has earned a total of 25 GRESB Green Stars in the past two years.
- 49 U.S. Core Fund buildings at 46 assets (\$9.2B or 39% of GMV)³ have achieved LEED or National Green Building Standard certification
- 27 U.S. Core Fund buildings (\$6.9B or 29% of GMV)³ have earned the U.S. EPA's Energy Star Certification for 2018, with more properties expected to achieve certification in 2018
- In total, 53 buildings⁴ at 50 assets (\$10.1B or 42% of GMV)³ have earned LEED, NGBS or Energy Star certification

CERTIFIED ASSETS BY PROPERTY TYPE¹



CERTIFICATION TYPE¹



11 Times Square earned a 5-star GRESB rating in 2018, ranking 6th of the 34 Based on asset count. Source: GRESB Benchmark Report 2018 as of September 6, 2018. Based on U.S. Core Fund's share of GMV. 4 20 assets (\$6.0B) have achieved both a LEED and Energy Star Certification. 5 Existing DMMS in its an acquired or owned operating entity that is certified at the LEED standards. 6 Core & Shell – Address the new building design and construction process for buildings where interiors are not part of the initial design process.

Appendix:
U.S. Core Fund SA, U.S. Core Fund
LP, and
Net Returns Addendum

PGIM Real Estate



U.S. Core Fund LP

Management Fee



U.S. Core Fund Management Fee Schedule			
Investor NAV ¹	Fee Rate		
First \$25 million	100 bps		
Over \$25 million up to \$50 million	95 bps		
Over \$50 million up to \$100 million	85 bps		
Over \$100 million up to \$200 million	75 bps		
Over \$200 million up to \$300 million	70 bps		
Over \$300 million	65 bps		

Effective Fees for Different Sized Accounts			
Investor NAV ¹	Fee Rate		
\$25M	100 bps		
\$50M	98 bps		
\$100M	91 bps		
\$150M	86 bps		
\$250M	81 bps		

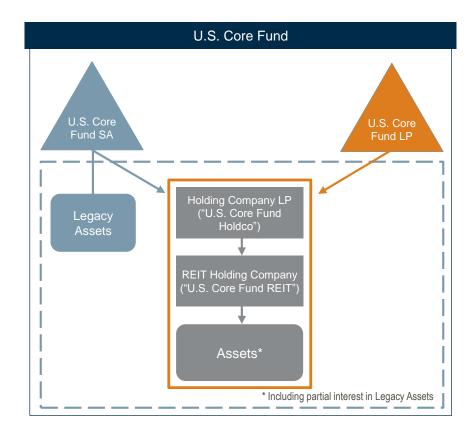
¹Cash balances greater than 5% of the Fund's NAV will not incur a fee.

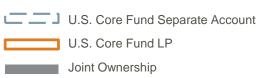
U.S. Core Fund Structure



Summary of Structure

- U.S. Core Fund is comprised of U.S. Core Fund SA, an insurance company separate account, and U.S. Core Fund LP, a Delaware limited partnership
- U.S. Core Fund LP, which was launched in 2013, will invest in all assets U.S. Core Fund SA elects to acquire, through a real estate investment trust ("U.S. Core Fund REIT") that is expected to be domestically (U.S.) controlled
- U.S. Core Fund SA holds a direct partial interest in certain assets ("Legacy Assets") acquired prior to the launch of U.S. Core Fund LP. U.S. Core Fund LP and U.S. Core Fund SA have exposure to the remaining interest in these properties through U.S. Core Fund REIT
- As of September 30, 2018, U.S. Core Fund SA and U.S. Core Fund LP represent approximately 73% and 27% of U.S. Core Fund REIT, respectively
- With limited exceptions, all new investors in U.S. Core Fund will invest through U.S. Core Fund LP
- Non-U.S. investors with tax structuring needs can invest directly into U.S. Core Fund LP or indirectly through a vehicle that will act as a "blocker"





Note: "U.S. Core Fund" represents the aggregate or composite of U.S. Core Fund SA and U.S. Core Fund LP vehicles.

U.S. Core Fund Legacy Assets

As of September 30, 2018



			Acquisition	Fund's Share GMV	Fund's Share Cost	Net Market Value ¹	% of REIT GMV
	Location	Property Type	Date	(\$M)	(\$M)	(\$M)	(\$M)
Post Montgomery Tower & Galleria	CA	Office / Retail	12/18/1984	\$713.5	\$455.7	\$718.1	48.7%
The Fillmore Center	CA	Residential	12/22/2004	667.0	279.7	669.8	50.0%
100 Park Avenue	NY	Office	8/1/1974	409.3	209.9	231.8	99.6%
EmeryStation West	CA	Office	5/27/2016	168.2	90.8	119.4	91.4%
EmeryStation East	CA	Office	10/30/2008	161.6	78.2	124.2	49.9%
Signature Point	CA	Residential	9/24/2004	139.6	79.3	140.7	50.0%
EmeryStation I	CA	Office	12/21/2004	103.1	49.4	85.6	49.9%
EmeryStation II	CA	Office	12/31/2004	97.3	46.8	72.2	49.9%
North Hollywood – Milano	CA	Residential	1/29/2008	77.9	50.6	77.8	49.9%
2600 10th Street	CA	Office	1/24/2007	35.8	31.8	34.5	49.9%
Heritage Square	CA	Office	12/31/2004	24.2	11.0	17.1	49.9%
EmeryStation Triangle	CA	Industrial	8/27/2007	13.7	5.4	13.3	49.9%
Total				\$2,611.2	\$1,388.5	\$2,304.57	\$1,568.1
							60.1%

¹ Reflects U.S. Core Fund's share excluding joint venture partner interests and net of debt.

U.S. Core Fund LP Key Information

As of September 30, 2018



The Basics ¹	
Gross Asset Value	\$24.3B
Net Asset Value	\$19.2B
Cash Balance	\$428.1M
The Debt Picture	
Fixed/Floating % ²	74% / 26%
Recourse Leverage Ratio	2.8%
Weighted Average Cost of Debt (Fixed/Floating)	4.0%
Weighted Average Maturity	5.2 Yrs

Strategic Market Exposure		
Market	Exposure ³	(Under)/Overweight to ODCE ⁴
New York	18.8%	+320 bps
Los Angeles	15.1%	+210 bps
Washington, D.C.	11.1%	+440 bps
San Francisco	8.9%	-180 bps
Boston	8.0%	-40 bps
Chicago	6.7%	-50 bps
Miami	6.6%	+190 bps
Total	75.2%	

Returns vs. NFI-ODCE ⁵						
	Inco	me	Apprec	iation	Total Return	
Time Period	U.S. Core Fund LP	NFI-ODCE	U.S. Core Fund LP	NFI-ODCE	U.S. Core Fund LP	NFI-ODCE
Current Quarter	1.05%	1.04%	1.33%	1.05%	2.38%	2.09%
1-Year	4.48%	4.26%	4.16%	4.28%	8.78%	8.68%
3-Year	4.60%	4.39%	4.03%	4.26%	8.77%	8.80%
5-Year	4.84%	4.62%	5.99%	5.88%	11.04%	10.72%
10-Year	5.46%	5.19%	-0.48%	0.37%	4.98%	5.58%
Since NFI-ODCE Inception (3/31/78)	7.57%	7.18%	1.32%	1.46%	8.97%	8.72%
Since U.S. Core Fund Inception (7/1/70)	7.62%	N/A	1.32%	N/A	9.02%	N/A

¹"Gross Asset Value," "Net Asset Value" and "Cash Balance" represent the value of the assets held by U.S. Core Fund SA and U.S. Core Fund LP without netting out U.S. Core Fund SA's respective interest therein. U.S. Core Fund LP's net asset value is \$5,195.7M as of September 30, 2018. ² Includes floating rate loans with caps. ³ Based on U.S. Core Fund LP's share of gross market value in properties and debt investments. ⁴ NFI-ODCE does not publish detailed market information. Market information is based on CSA definitions and calculated by extracting NFI-ODCE property data from the NCREIF Research Database. Data as of September 30, 2018. ⁵ Returns shown are time-weighted rates of return calculated in conformity with performance reporting standards and are before the deduction of Manager Compensation/Fees. Returns for NFI-ODCE are based on the final report published by NCREIF on October 30, 2018. Past performance is not a guarantee or a reliable indicator of future results. Please refer to the appendix for further information.

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U.S. Core Fund SA Key Information

As of September 30, 2018



The Basics ¹	
Gross Asset Value	\$25.3B
Net Asset Value	\$20.2B
Cash Balance	\$429.2M
The Debt Picture	
Fixed/Floating % ²	74% / 26%
Recourse Leverage Ratio	2.7%
Weighted Average Cost of Debt (Fixed/Floating)	4.0%
Weighted Average Maturity	5.2 Yrs

Strategic Market Exposure		
Market	Exposure ³	(Under)/Overweight to ODCE4
New York	18.0%	+240 bps
Los Angeles	14.7%	+170 bps
San Francisco	12.2%	+150 bps
Washington, D.C.	10.6%	+390 bps
Boston	7.7%	-70 bps
Chicago	6.5%	-70 bps
Miami	6.3%	+160 bps
Total	76.0%	

Returns vs. NFI-ODCE ⁵							
	Inco	me	Appreci	Appreciation		Total Return	
Time Period	U.S. Core Fund SA	NFI-ODCE	U.S. Core Fund SA	NFI-ODCE	U.S. Core Fund SA	NFI-ODCE	
Current Quarter	1.05%	1.04%	1.35%	1.05%	2.40%	2.09%	
1-Year	4.46%	4.26%	4.20%	4.28%	8.80%	8.68%	
3-Year	4.57%	4.39%	4.09%	4.26%	8.80%	8.80%	
5-Year	4.77%	4.62%	6.09%	5.88%	11.08%	10.72%	
10-Year	5.44%	5.19%	-0.46%	0.37%	5.00%	5.58%	
Since NFI-ODCE Inception (3/31/78)	7.56%	7.18%	1.33%	1.46%	8.97%	8.72%	
Since U.S. Core Fund Inception (7/1/70)	7.62%	N/A	1.33%	N/A	9.02%	N/A	

¹ "Gross Asset Value," "Net Asset Value," "Net Asset Value" and "Cash Balance" represent the value of the assets held by U.S. Core Fund SA and U.S. Core Fund LP without netting out U.S. Core Fund LP's respective interest therein. U.S. Core Fund SA's net asset value is \$15,020.2M as of September 30, 2018. ² Includes floating rate loans with caps. ³ Based on U.S. Core Fund SA's share of gross market value in properties and debt investments. ⁴ NFI-ODCE does not publish detailed market information. Market information is based on CSA definitions and calculated by extracting NFI-ODCE property data from the NCREIF Research Database. Data as of September 30, 2018. ⁵ Returns shown are time-weighted rates of return calculated in conformity with performance reporting standards and are before the deduction of Manager Compensation/Fees. Returns for NFI-ODCE are based on the final report published by NCREIF on October 30, 2018. Past performance is not a guarantee or a reliable indicator of future results. Please refer to the appendix for further information.

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U.S. Core Fund Risk Metrics & Diversification

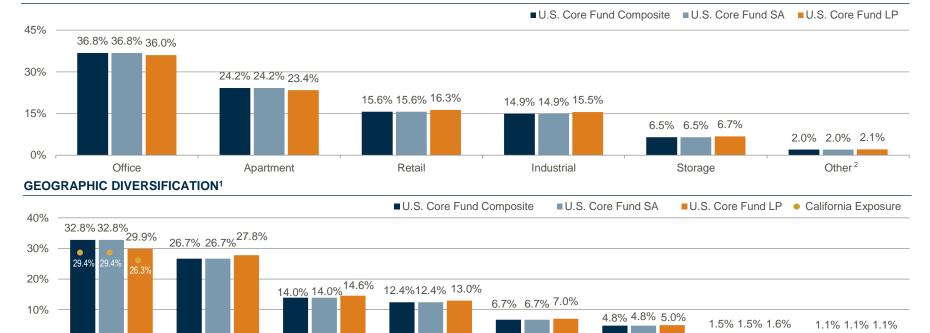
As of September 30, 2018



Key Risk Metrics	Guideline	U.S. Core Fund Composite	U.S. Core Fund SA	U.S. Core Fund LP
Core	<u>></u> 90%	91.2%	91.2%	90.9%
Leverage Ratio	≤ 30%	20.2%	20.2%	20.6%
Debt to Income Multiple	≤ 5x	4.9x	4.9x	5.0x
Single Asset Exposure	< 5%	International Place, 6.1%	International Place, 6.1%	International Place, 6.4%

PROPERTY TYPE DIVERSIFICATION1

Pacific



¹ Based on U.S. Core Fund's share of gross market value in properties and debt investments. ² Other includes Harbor Garage, Land, and tax incentive notes connected to real estate investments. Note: Please see page 11 for important information regarding U.S. Core Fund Composite.

EN Central

Southwest

Mountain

Mideast

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Northeast

Southeast

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WN Central

Endnotes



- U.S. Core Fund Separate Account ("U.S. Core Fund SA") is the original U.S. Core Fund fund structured as an insurance company separate
 account with an inception date of July 1970.
- U.S. Core Fund LP is the new investment vehicle formed on January 1, 2013 to invest in substantially all of the existing portfolio of U.S. Core Fund SA assets (as of December 31, 2012) as well as all assets that PICA, on behalf of U.S. Core Fund SA, elects to invest in going forward.
- U.S. Core Fund or U.S. Core Fund Composite reflects the combined performance of all assets held by U.S. Core Fund SA and U.S. Core Fund LP. Although this is not an actual fund in which any client is invested, it is indicative of the overall performance of the U.S. Core Fund investment strategy and, therefore, the U.S. Core Fund Composite returns and portfolio metrics will be provided to NCREIF for inclusion in the NFI-ODCE and other NCREIF Indices. U.S. Core Fund may also refer to the U.S. Core Fund portfolio and asset management teams.
- U.S. Core Fund REIT is the entity through which U.S. Core Fund LP will make all of its investments. As of December 31, 2018, U.S. Core Fund LP and U.S. Core Fund SA own approximately 29.0% and 71.0% of U.S. Core Fund REIT, respectively. Any reference to U.S. Core Fund LP's dollar exposure throughout this document refers to that of U.S. Core Fund REIT, unless otherwise noted.
- Important Note on Historical Information: Economic terms and other portfolio metrics reported for U.S. Core Fund, U.S. Core Fund SA, or U.S. Core Fund LP that include periods to the formation of U.S. Core Fund LP reflect information for U.S. Core Fund SA for those periods prior to January 1, 2013. Prior to the formation of U.S. Core Fund LP, U.S. Core Fund and U.S. Core Fund SA were one and the same.

U.S. Core Fund Composite Total Returns After Management Fees



As of December 31, 2018

U.S. Core Fund COMPOSITE NET RETURNS VS. NFI-ODCE NET RETURNS¹



¹ Returns shown prior to January 1, 2013 are based upon U.S. Core Fund SA only.

Note: Returns for NFI-ODCE are based on the preliminary report published by NCREIF on January 14, 2019. Returns shown are time-weighted rates of return after deduction of Manager Compensation/Fees. Past performance is not a guarantee or a reliable indicator of future results.

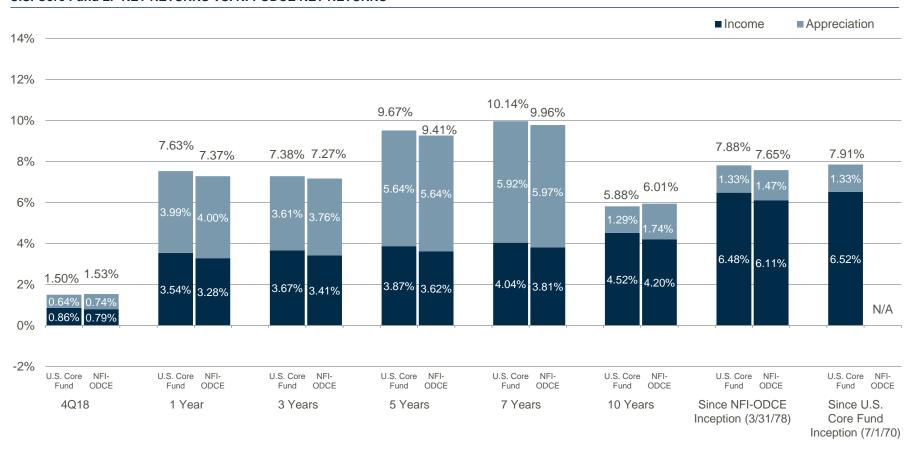
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U.S. Core Fund LP Total Returns After Management Fees



As of December 31, 2018

U.S. Core Fund LP NET RETURNS VS. NFI-ODCE NET RETURNS¹



¹ Returns shown prior to January 1, 2013 are based upon U.S. Core Fund SA only.

Note: Returns for NFI-ODCE are based on the preliminary report published by NCREIF on January 14, 2019. Returns shown are time-weighted rates of return after deduction of Manager Compensation/Fees. Past performance is not a guarantee or a reliable indicator of future results. Please see page 11 for important information regarding U.S. Core Fund Composite.

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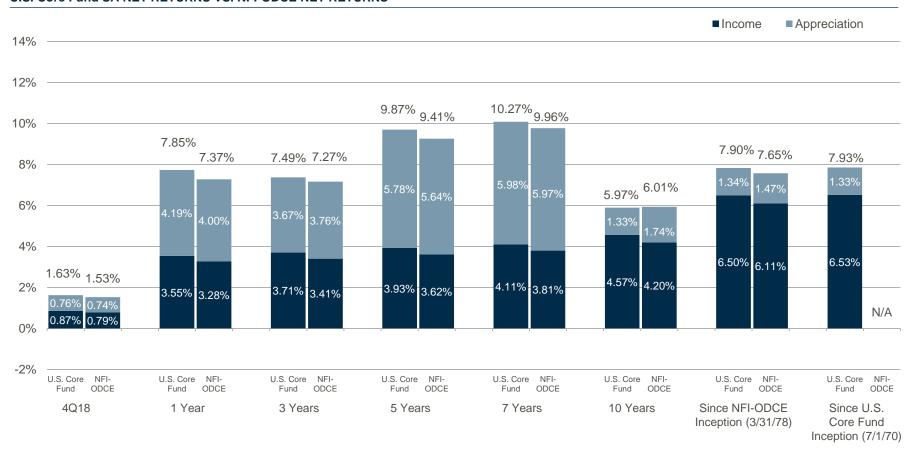
35

U.S. Core Fund SA Total Returns After Management Fees



As of December 31, 2018

U.S. Core Fund SA NET RETURNS VS. NFI-ODCE NET RETURNS¹



¹ Returns shown prior to January 1, 2013 are based upon U.S. Core Fund SA only.

Note: Returns for NFI-ODCE are based on the preliminary report published by NCREIF on January 14, 2019. Returns shown are time-weighted rates of return after deduction of Manager Compensation/Fees. Past performance is not a guarantee or a reliable indicator of future results. Please see page 11 for important information regarding U.S. Core Fund Composite.

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PGIM Real Estate's Definition of Core



- Office, retail, warehouse, storage, and residential properties that were more than 80% leased when purchased and hotels that were operating at, or near, market occupancy. (For the sake of clarity, properties will not move out of the core category if their occupancy falls below the 80% threshold subsequent to acquisition)
- Properties (office, retail, warehouse, multi-family, or storage) that were developed, renovated, or purchased and have now achieved leasing of 80% or more of the total leasable area
- Properties undergoing minor renovation/expansion that does not have a material impact on occupancy or operation
- Build-to-suit investments that are 80% or more pre-leased and where the Fund has reasonable protection from completion and cost overrun risk
- Investment activities incidental to the Fund's main strategies:
 - Listed securities or purchase money mortgages accepted as part of the consideration in a property sale
 - Senior first mortgages with an LTV at origination of 65% or less

Catherine Minor

Vice President, U.S. Core Fund Assistant Portfolio Manager





catherine.minor@pgim.com (415) 486-3835

Number of Years of Real Estate Experience: 20 Number of Years with the Firm: 3

Catherine Minor is an assistant portfolio manager for U.S. Core Fund working all aspects of managing the Fund, including portfolio strategy, investment selection and disposition, asset management, and portfolio reporting.

Prior to this role, Catherine served as an asset manager for U.S. Core Plus Fund, covering approximately \$2 billion of retail, office, multifamily, and mixed-use assets on the West Coast. She has 18 years of experience in property acquisitions, financing, entitlements, design, ground-up and tenant improvement construction, asset management, and leasing. Her experience ranges across all product types, including office, residential, hospitality, warehouse, medical office, senior living, mixed-use developments, and public private partnerships.

Catherine began her career working at DPR Construction in San Diego and San Francisco, and later transitioned to development. She joined Deutsche Bank (formerly RREEF) in 2007 as an asset manager in the value-add and development group and worked for Google in corporate real estate from 2012 to 2014.

Catherine holds a bachelor's degree in civil engineering from Brown University, and a master's degree in business administration from Haas School of Business, UC Berkeley. She is an active member of ULI and was recognized by the *San Francisco Business Times* as a Northern California Real Estate Woman of Influence in 2013.

Marcus E. Berry III

Executive Director, U.S. Business Development





marcus.berry@pgim.com (415) 486-3832

Number of Years of Real Estate Experience: 14 Number of Years with the Firm: 4

Marcus E. Berry III is an executive director at PGIM Real Estate and a member of the U.S. Business Development group. Based in San Francisco, Marcus is responsible for managing relationships with major corporate, public, and Taft Hartley pension funds in the western United States.

Marcus joined PGIM Real Estate in 2014.

Previously, Marcus was a vice president with TA

Associates Realty from 2006 to 2014, where his
responsibilities included the acquisition of office and
industrial assets on the West Coast, the asset
management and repositioning of more than three
million square feet of value-add office and industrial
space, and marketing to major corporate and public

pension funds, endowments, and foundations located on the West Coast. Earlier, Marcus worked at Ryder Stilwell Properties where he oversaw a diversified portfolio of office, industrial, multifamily, and retail assets across the west and southwest United States on behalf of high-net-worth clients. Before his career in real estate, Marcus led business development initiatives for a series of venture capital-backed technology companies.

Marcus has a bachelor's degree in international affairs from the University of Colorado, Boulder, and a master of business administration in real estate finance from the University of Southern California.

Valuation Policy



Properties held by the Fund are accounted for at fair value in accordance with applicable contractual requirements and in compliance with authoritative accounting guidance ("U.S. GAAP"). Property level debt is also accounted for at fair value based on the amount at which the impact of the liability could be measured in a current transaction exclusive of direct transactions costs. The Fund's current valuation procedure is as follows:

The Chief Real Estate Appraiser of PGIM, Inc. (the "Chief Appraiser") is responsible for the valuation process of the Fund's investments and approves final gross real estate values. The Chief Appraiser position is independent of PGIM Real Estate and reports directly to the Chief Financial Officer of PGIM, Inc. The Chief Appraiser retains an independent Appraisal Management Firm ("AMF") to run the day-to-day operation of the appraisal process. The AMF is responsible to assist with the selection, hiring, oversight, rotation and/or termination of third-party appraisal firms. Third-party appraisers are typically rotated on a three-year cycle and are selected from the Chief Appraiser's Approved Vendor's List through a competitive bid process. To be included in the list, individual experts are interviewed, referenced and a sampling of their work is reviewed to understand capabilities and competencies of the appraiser. In addition to the administrative services, the AMF collects asset manager comments and provides independent reviews of the appraisal reports and opines on the reasonableness of the value conclusions in order to maintain documentation and monitoring of the independence and accuracy of the valuations. The reported fair values are based on the external appraisal conclusions following the completion of the formal internal and external reviews and sign-offs. However, in the rare instance a material fact or error be identified and considered unresolved during the AMF review process, the AMF is responsible to provide the substantiation and compelling evidence to make an adjustment to the appraised value and it would be reported to the Fund investors.

Real estate properties (including properties under development) and other investments are appraised every quarter with the exception of properties recently acquired or under a letter of intent for sale. The fair value of land held for development is considered to be acquisition cost, including soft costs incurred prior to development, assuming it is the assumption a market participant would use. Income producing real estate property appraisals primarily rely on the income approach to value (DCF) with consideration of the cost and market approaches, as applicable. Real estate property appraisals and the AMF appraisal reviews are performed in accordance with the Uniform Standards of Professional Appraisal Practice ("USPAP"), which is the standard for real estate appraisals in the United States. USPAP is consistent in principle with the Red Book Real Estate Valuation Standards set by Royal Institute Chart of Surveyor and the International Valuation Standards as set forth by the International Valuation Standards Council.

As described above, the estimated market value of real estate and real estate related assets is determined through an appraisal process. These estimated market values may vary significantly from the prices at which the real estate investments would sell, since market prices of real estate investments can only be determined by negotiation between a willing buyer and seller. Valuations should be considered only estimates of value and not a measure of realizable value. In addition, such valuations should be viewed as subject to change with the passage of time.



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These materials do not take into account individual client circumstances, objectives or needs. No determination has been made regarding the suitability of any securities, financial instruments or strategies for particular clients or prospects. The information contained herein is provided on the basis and subject to the explanations, caveats and warnings set out in this notice and elsewhere herein. Any discussion of risk management is intended to describe PGIM Real Estate efforts to monitor and manage risk but does not imply low risk.

All performance and targets contained herein are subject to revision by PGIM Real Estate and are provided solely as a guide to current expectations. There can be no assurance that any product or strategy described herein will achieve any targets or that there will be any return of capital. Past performance is not a guarantee or a reliable indicator of future results. No representations are made by PGIM Real Estate as to the actual composition or performance of any account.



U.S. Core Fund: The basis for the performance target set forth within this presentation is based on a fund that is a broadly diversified, core portfolio that invests primarily in existing, income-producing properties with strong cash flow that is expected to increase over time and thereby provide the potential for capital appreciation. Target returns are expected to be achieved over a complete market cycle which can be defined as a period of time whereby valuations have bottomed (hit a trough), rose to a peak and then declined to the trough point again. PGIM Real Estate has based this investment objective on certain assumptions that it believes are reasonable. There is no guarantee, however, that any or all of such assumptions will prove to be accurate in the face of actual changes in the market or other material changes in regional or local markets specific to this strategy. Factors necessary to achieve this performance target include a property type and geographic diversification strategy, which is intended to reduce risk and maintain a broadly diversified portfolio. Property selection and performance impact the ability to achieve the target returns, including asset location, asset class, and property type assets, investment strategy and the capitalization of investment. Property and Fund performance are subject to healthy economic conditions in the U.S. market and sub-markets where investments are located. Factors that would mitigate against achieving this performance target would include, but are not limited to, unforeseen sudden and drastic changes in economic and capital markets and/or demographic trends affecting the U.S. or a particular market or sub market that could impact property performance and/or investors' demand for commercial real estate. There can be no guarantee that this target will be achieved.

U.S. Core Plus Fund: The basis for the performance target set forth within this presentation is based on a fund that is a broadly diversified equity real estate portfolio that seeks to structure investments to enhance risk-adjusted returns. Target returns are expected to be achieved over a complete market cycle which can be defined as a period of time whereby valuations have bottomed (hit a trough), rose to a peak and then declined to the trough point again. PGIM Real Estate has based this investment objective on certain assumptions that it believes are reasonable. There is no guarantee, however, that any or all of such assumptions will prove to be accurate in the face of actual changes in the market or other material changes in regional or local markets specific to this strategy. Factors necessary to achieve this performance target include a diversification strategy, which is intended to reduce risk and maintain a broadly diversified portfolio. Property selection and performance impact the ability to achieve the target returns, including asset location, asset class, property type of asset, investment strategy and the capitalization of investment. Property and Fund performance are subject to healthy economic conditions in the U.S. market and sub-markets where investments are located. Factors that would mitigate against achieving this performance target would include, but are not limited to, unforeseen sudden and drastic changes in economic and capital markets and/or demographic trends affecting the U.S. or a particular market or sub market that could impact property performance and/or investors' demand for commercial real estate.



U.S. Value-Add Fund: The basis for the performance target set forth within this presentation is based on a fund that seeks to execute a value-added strategy by acquiring real estate investments located in diverse markets and to structure investments to enhance risk-adjusted returns. Target returns are expected to be achieved over a complete market cycle which can be defined as a period of time whereby valuations have bottomed (hit a trough), rose to a peak and then decline to the trough point again. PGIM Real Estate has based this investment objective on certain assumptions that it believes are reasonable. There is no guarantee, however, that any or all of such assumptions will prove to be accurate in the face of actual changes in the market or other material changes in regional or local markets specific to this strategy. Factors necessary to achieve this performance target include a diversification strategy, which is intended to reduce risk and maintain a broadly diversified portfolio. Property selection and performance impact the ability to achieve the target returns, including asset location, asset class, property type of asset, investment strategy and the capitalization of investment. Property and Fund performance are subject to healthy economic conditions in the U.S. market and sub-markets where investments are located. Factors that would mitigate against achieving this performance target would include, but are not limited to, unforeseen sudden and drastic changes in economic and capital markets and/or demographic trends affecting the U.S. or a particular market or sub market, lack of opportunities in the market and/or investors' demand for commercial real estate. There can be no quarantee that this target will be achieved.

The financial indices referenced herein as benchmarks are provided for informational purposes only. The holdings and portfolio characteristics may differ from those of the benchmark(s), and such differences may be material. Factors affecting portfolio performance that do not affect benchmark performance may include portfolio rebalancing, the timing of cash flows, credit quality, diversification and differences in volatility. In addition, financial indices do not reflect the impact of fees, applicable taxes or trading costs which reduce returns. Unless otherwise noted, financial indices assume reinvestment of dividends. You cannot make a direct investment in an index. The statistical data regarding such indices has not been independently verified by PGIM Real Estate.

References to specific securities and their issuers are for illustrative purposes only and are not intended and should not be interpreted as recommendations to purchase or sell such securities. The securities referenced may or may not be held in portfolios managed by PGIM Real Estate and, if such securities are held, no representation is being made that such securities will continue to be held.

Net returns shown herein are time-weighted rates of return after deduction of manager compensation. Actual manager compensation schedules and other expenses are described in the individual U.S. Core Fund SA contracts and the governing documents of U.S. Core Fund LP and its subsidiaries. Please see Part 2 of the PGIM Inc. Form ADV, for more information concerning manager compensation.



These materials do not purport to provide any legal, tax or accounting advice. These materials are not intended for distribution to or use by any person in any jurisdiction where such distribution would be contrary to local law or regulation.

The information contained herein is provided by the PGIM Real Estate, a business unit of PGIM. PGIM is the investment manager of U.S. Core Fund SA and U.S. Core Fund LP.

In addition to this document, PGIM Real Estate or its agent may distribute to you an offering memorandum (the "PPM") and the constitutional documents of the Fund (including a limited partnership agreement and/or other governing fund document and a subscription agreement or the Investment Brief for U.S. Core Fund LP and constitutional documents of U.S. Core Fund LP together with the PPM, the "Memorandum"). You should review and carefully consider these documents, especially the risk factors explained within them, and should seek advice from your legal, tax, and other relevant advisers before making any decision to subscribe for interests in the Fund. If there is any conflict between this document and the Memorandum and constitutional documents of the Fund, the Memorandum and constitutional documents shall prevail. You must rely solely on the information contained in the Fund's Memorandum and constitutional documents in making any decision to invest.

There can be no assurance that the Fund will meet any performance targets referenced herein. An investor could lose some or all of its investment in the Fund. Investments are not guaranteed by the Fund, PGIM Real Estate, their respective affiliates, or any governmental agency.

Certain securities products and services are distributed by Prudential Investment Management Services LLC, a Prudential Financial company and member of SIPC.

Risk Factors: Investments in commercial real estate and real estate-related entities are subject to various risks, including adverse changes in domestic or international economic conditions, local market conditions and the financial conditions of tenants; changes in the number of buyers and sellers of properties; increases in the availability of supply of property relative to demand; changes in availability of debt financing; increases in interest rates, exchange rate fluctuations, the incidence of taxation on real estate, energy prices and other operating expenses; changes in environmental laws and regulations, planning laws and other governmental rules and fiscal policies; changes in the relative popularity of properties risks due to the dependence on cash flow; risks and operating problems arising out of the presence of certain construction materials; and acts of God, uninsurable losses and other factors which are beyond the control of the Manager and the Fund. As compared with other asset classes, real estate is a relatively illiquid investment. Therefore, investors' withdrawal requests may not be satisfied for significant periods of time. Other than its general fiduciary duties with respect to investors, PGIM Real Estate has no specific obligation to take any particular action (such as liquidation of investments) to satisfy withdrawal requests. In addition, as recent experience has demonstrated, real estate is subject to long-term cyclical trends that give rise to significant volatility in real estate values.



The Interests have not been and will not be registered under the U.S. Securities Act and are being offered and sold in compliance with Regulation D under the U.S. Securities Act. The Interests are subject to restrictions on transferability and resale and may not be transferred or resold except as permitted under Regulation D under the U.S. Securities Act and the applicable state, foreign and other securities laws, pursuant to registration or exemption therefrom. The transferability of Interests will be further restricted by the terms of the Partnership Agreement of the applicable Fund. Prospective Investors should be aware that they may be required to bear the financial risks of this investment for an indefinite period of time.

NCREIF Fund Index-Open End Diversified Core Equity (NFI-ODCE): The NFI-ODCE, short for NCREIF Fund Index — Open End Diversified Core Equity, is a capitalization-weighted, gross of fee, time-weighted return index with an inception date of December 31, 1977. Other supplemental data such as equal-weight and net of fee returns are also provided by NCREIF for informational proposes and additional analysis. To be eligible for NFI-ODCE membership, each member fund must be marketed as an open-end fund with a diversified core investment strategy primarily investing in private equity real estate. All members funds must adhere to the following index inclusion criteria:

(1) At least 80% of market value of net assets must be invested in real estate (20% cap on cash and equivalents); (2) At least 80% of market value of real estate net assets must be invested in private equity real estate properties (20% cap on assets invested in but not limited to, property debt, public company equity/debt or private company equity/debt); (3) At least 95% of real estate net assets must be located in U.S. markets; (4) At least 80% of market value of real estate net assets must be invested in office, industrial, apartment and retail property types; (6) No more than 65% (+/for market forces) of market value of real estate net assets in one property type or region as defined by the NCREIF Property Index (NPI); and (5) No more than 40% leverage. Each member fund must also comply with the NCREIF PREA Reporting standards. Note: A benchmark Index is not professionally managed. Investors cannot invest directly in an index.

The NCREIF Property Index (NPI): The NCREIF Property Index ("NPI") is a quarterly index tracking the performance of core institutional property markets in the U.S. The objective of the NPI is to provide a historical measurement of property-level returns to increase the understanding of, and lend credibility to, real estate as an institutional investment asset class. The universe of investments is: (1) Comprised exclusively of operating properties acquired, at least in part, on behalf of tax-exempt institutions and held in a fiduciary environment.; (2) Includes properties with leverage, but all returns are reported on an unleveraged basis; and (3) Includes Apartment, Hotel, Industrial, Office and Retail properties, and sub-types within each type. The database fluctuates quarterly as participants acquire properties, as new members join NCREIF, and as properties are sold. Sold properties are removed from the Index in the quarter the sales take place (historical data remains). Each property's market value is determined by real estate appraisal methodology, consistently applied. Please note that when returns are computed for the NPI, the returns for the levered properties are computed on a de-levered basis, i.e., the impact of financing is excluded. Note: A benchmark Index is not professionally managed. Investors cannot invest directly in an index.

These materials are for informational or educational purposes. In providing these materials, PGIM (i) is not acting as your fiduciary and is not giving advice in a fiduciary capacity and (ii) is not undertaking to provide impartial investment advice as PGIM will receive compensation for its investment management services.



January 28, 2018

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

SUBJECT: \$100 MILLION INVESTMENT IN LASALLE GROWTH AND INCOME FUND VIII

Dear Board Members:

NEPC and I jointly recommend that the Board approve \$100 million allocation to value added real estate fund LaSalle Growth and Income Fund VIII.

Discussion

The Board adopted a revised asset allocation at its meeting of May 21, 2018 which included a 2% allocation targeted to non-core real estate. NEPC has identified LaSalle as a top-performing value-added (non-core) real estate manager and has assigned it a #1 rating on their focus placement list of non-core real estate managers.

LaSalle has offered a 15 basis points discounted annual fee to those investing in the fund's first close. An additional 15 basis points discount is available to investors making a fund commitment of \$100 million. VCERA would be eligible for both fee discounts, effectively reducing the annual management fee from 150 to 120 basis points, or an annual savings of approximately \$300,000 for the life of the fund over the undiscounted fee.

This allocation would be funded from core real estate and drawn-down over the fund's investment period of 3 to 4 years.

As this fund is highly rated by NEPC and is set for a final close before the Board's next meeting, staff recommends that the Board approve this investment, as more fully described in the attached NEPC report.

THEREFORE, IT IS RECOMMENDED THAT THE BOARD:

- 1. Approve an allocation of \$100 million to LaSalle Growth and Income Fund VIII and,
- 2. Subject to legal review, authorize the Board Chair or the Retirement Administrator or in the absence of both, the Chief Investment Officer, to approve and execute the required documentation.

Respectfully submitted,

Daniel P. Gallagher

Dan Gallagher

Chief Investment Officer



To: Ventura County Employees' Retirement Association

From: NEPC Consulting Team

Date: January 28, 2019

Subject: Non-Core Real Estate Manager Recommendation

Recommendation

NEPC and VCERA staff recommend that the Board of the Ventura County Employees' Retirement Association ("VCERA" or the "Plan") consider a commitment of \$100.0 million to LaSalle Income & Growth Fund VIII ("Fund VIII" or the "Fund"). The Fund has been rated "1" by the NEPC Alternative Assets Committee indicating high conviction in this product. NEPC and VCERA staff believe that the LaSalle Income & Growth Fund VIII fits well in the Plan's portfolio for the following reasons:

- The Manager (LaSalle Investment Management) pursues a conservative, value-add real estate strategy, and will seek diversification by both property type and geography within the United States. This strategy is a good fit as the Plan's first non-core real estate investment.
- While the Fund will allocate across the four main property types (apartments, office, retail, and industrial), LaSalle is particularly focused on assets that are more linked to demographic trends as a return driver, rather than GDP growth.
- As part of its conservative investment philosophy, the Manager intends to place an emphasis on assets that have current income in place at acquisition. Since the inception of the series, the Income & Growth Funds have generated a levered 7% income yield, comprising nearly half of the total return.
- LaSalle has a strong organization and deep team; the management of the Fund will be led by Joseph Munoz and James Hutchinson, who have invested together for over 10 years. Mr. Hutchinson founded the Income & Growth fund series 22 years ago. Mr. Munoz started his career at LaSalle in 2004 as a member of the U.S. Acquisitions Team and has been dedicated to the Income & Growth series since 2007. Mr. Munoz and Mr. Hutchinson are supported by a deep platform of investment professionals and back office resources.

Overview of Ventura Real Estate Program

As of September 30, 2018, VCERA had approximately \$426 million of net asset value invested in real estate. This exposure includes investments with Prudential and UBS, both in open-end core real estate funds. The Board of VCERA recently approved a 2% target to non-core real estate (~\$100 Million)



Team Overview

The LaSalle Real Estate Group has a total of 210 employees, including 11 that will be fully dedicated to the Fund. The Fund is managed by Joseph Munoz and James Hutchinson who have invested together for over 10 years. Mr. Hutchinson founded the Income & Growth fund series 22 years ago. Mr. Munoz started his career at LaSalle in 2004 as a member of the U.S. Acquisitions Team and has been dedicated to the Income & Growth series since 2007. As of March 31, 2018, the Income & Growth Fund Series has raised \$2.6 billion of equity commitments and invested \$5.8 billion in 98 investments since Income & Growth Fund I. The Income & Growth Team is located in Chicago, IL. In addition to the 11 dedicated investment professionals, the LaSalle Real Estate Group has dedicated employees across acquisitions, due diligence, research and client services as well as back office staff.

Fund Summary

LaSalle Income & Growth Fund VIII will invest in the four main property types (apartments, office, retail, and industrial) across primary and secondary markets in the US. The Fund will seek to acquire existing income producing properties and improve them through hands-on asset management. By focusing on the acquisition of existing buildings, the Fund seeks to derive at least half of the overall return from income. Fund VIII will invest in non-core assets in major markets and high-quality properties in targeted secondary markets – properties that the Manager believes are temporarily out of favor, but will be attractive in the near future.

LaSalle will use secular demand trends to influence sector selection across the property types. Fund VIII will target three main demand trends; aging population, human capital and consumer behavior. Within multifamily, LaSalle believes that housing choices will be driven by age and phase of life. The Fund will target suburban apartments in top school districts and active adult communities that provide medical assistance. Multifamily will be the largest target allocation in Fund VIII, as the Manager has observed strong demand for multifamily assets with school access for children among 35-44-year-old tenants. There is a lack of supply in these markets as many top tier school districts are not building new apartments despite older millennial demand. The Fund will also target active adult multifamily, as these properties are not operationally intensive. Demand continues to grow as 70+ year-old tenants are looking to downsize for less maintenance and expenses, as well as being in close proximity to adult children and having access to amenities and social activities. Within the office sector, the Fund will invest in high amenity products in emerging urban locations that will be able to attract top talent. Within retail and industrial the Fund will invest in distribution centers and high traffic, non-luxury urban retail. LaSalle believes that retail and industrial demand is driven by convenience versus experience.

The Fund is targeting a 12% to 14% net internal rate of return (IRR) and a 1.6x net total-value to paid-in (TVPI) multiple.

Target Investment Types

The Fund will invest in multifamily, office, retail and industrial properties across the US. Fund VIII will target existing properties with in-place cash flow that need improvement.

Target Geographic Focus

The Fund will focus in primary and secondary markets across the United States.



 $\frac{\textbf{Target Deal Size}}{\textbf{The Fund will target equity investments ranging from $40 million to $50 million per}$

Fund Terms

Investment Vehicle	LaSalle Income & Growth Fund VIII, L.P.
Investment Manager	LaSalle Investment Management, LLC
Target Size/Max Size	\$1 billion / \$1.5 billion
Target Final Close Date	Q3 2019
Investment Period	Three years from final closing, subject to a one-year extension
Fund Term	Eight years subject to three one-year extension
Sponsor's Investment	\$30 million (3% of target Fund size)
Assets Under Management	\$60 billion (as of June 30, 2018)
Investment Focus	Value-Add
Geographic Focus	United States
Projected Number of Investments	Approximately 20-25 investments
Deal Size	\$40M to \$50M in equity
Target Fund Return	12% net IRR/ 1.6x-1.8x net multiple
Leverage	65% maximum at the portfolio level
Annual Management Fee	1.5% of committed capital with fee discounts available for early close, size and loyalty
Organizational Costs	Up to \$1.5M in organizational costs
Carried Interest	20.0%
Preferred Return	9.0% then 13.0%
Distribution Waterfall	 100% to investors until all contributed capital is returned, plus a 9% annually compounded return 80% to investors and 20% to the Manager until investors receive a 13% annually compounded return 60% to investors and 40% to the Manager until the Manager has received 20% of total distributed capital (a catch-up) 80% to investors and 20% to the Manager thereafter
Fund Auditor	Mayer Brown LLP
Website	www.lasalle.com



Track Record of Prior Funds

Fund-Level Re	eturns								
Fund	Vintage Year	Capital Committed	Capital Funded	Reported Value	Amount Distributed	Total Value, Net of Carry	TVPI Multiple	DPI Multiple	Current Net IRR
Fund III	2002	\$168	\$150	\$0	\$224	\$224	1.5x	1.5x	9.2%
Fund IV	2005	\$509	\$495	\$0	\$343	\$343	0.7x	0.7x	(5.5%)
Fund V	2008	\$729	\$677	\$0	\$1,133	\$1,133	1.7x	1.7x	13.0%
Fund VI	2013	\$362	\$345	\$177	\$339	\$516	1.5x	1.0x	13.2%
Fund VII	2016	\$511	\$320	\$381	\$0	\$381	1.2x	0.0x	13.7%

Data provided by Manager as of June 30, 2018.



NEPC Research Ratings Definitions

Rating	Definition
1	A high conviction investment product. Product has a clear and economically-grounded investment thesis, and is managed by an investment team that is sufficiently resourced and incented to execute on the thesis.
2	NEPC has a positive view of the strategy. Strategy has a compelling and sound investment thesis. The manager is sufficiently resourced and incented to execute on the thesis. Strengths outweigh the weaknesses, but the strategy does not meet all requirements for a 1 rating.
3	A satisfactory investment product. The strategy lacks a compelling investment thesis, however there are no significant concerns around the manager's viability.
4	The strategy may have an unclear or ambiguous investment thesis or the manager may lack the ability to execute on the stated thesis. The strategy likely has strengths and weaknesses and the weaknesses may outweigh the strengths.
5	A strategy that lacks an investment thesis or NEPC has no confidence in the manager's ability to execute on the thesis, and/or the investment firm may not be viable. Serious issues have been identified with an investment manager or product. This rating aligns with a Terminate Due Diligence status for client-owned products.
NR	Due diligence has not been sufficiently completed on the product or manager.



LaSalle Presenters



Jim Hutchinson Chairman Income & Growth Fund Series

- International Director and North American Investment Committee member
- 33 years at LaSalle
- Founded and has led Income & Growth Fund series since 1997
- 12 years in acquisition group of LaSalle
- Previously a Senior Manager at Deloitte
- BA in Mathematics from Brown University
- · MBA from Indiana University



Matthew Walley Client Executive Client Capital Group

- Senior Managing Director responsible for serving LaSalle's institutional clients in the Western U.S. and Canada
- 19 years at LaSalle
- Previously Vice President of Institutional Services at WP Carey & Co
- MBA from New York University's Stern School of Business
- · MA from Oxford University, England
- Member of the Pension Real Estate Association, the State Association of County Retirement Systems ("SACRS") and the California Association of Public Retirement System

Stable Organization Focused Solely on Real Estate

Jones Lang LaSalle Incorporated

250 YEARS OF REAL ESTATE EXPERIENCE

> \$7.9B IN REVENUE IN 2017

NYSE TICKER: JLL



Stats: 750+ employees in 24 offices in 17 countries

Scope: Real estate investment management

Open and closed-end commingled funds,

Services: separate accounts, strategic partnerships,

real estate debt, public real estate securities



Stats: 82,000 employees in 300 offices in 80 countries

Scope: Professional real estate services

Agency leasing, capital markets, consulting,

Services: energy & sustainability, facilities management,

lease administration, project management &

development, tenant representation

\$60.5B in assets under management



Source: LaSalle Investment Management as of September 30, 2018. LaSalle is a wholly-owned independently operated subsidiary of Jones Lang LaSalle Incorporated. The LaSalle Income & Growth Fund Series seeks to provide investors with both income and value creation by pursuing underperforming properties in the U.S.

FUNDS

 $22 \, \mathrm{years}$

SINCE INCEPTION

181
TRANSACTIONS

\$11.3b

¹As of September 2018. Transactions and transaction volume reflected above are inclusive of both real estate asset acquisitions and dispositions for Funds I – VII

Dedicated Fund Team within an Extensive Investment Platform



7,000+ JLL U.S. Professionals

Capital Markets | Global Corporate Finance | Tenant Representation | Project Management | Land Sale and Acquisitions Research | Property Management | Agency Leasing | Facility Services | Retail Services

Note: As of September 30, 2018. There can be no assurance that professionals currently employed by LaSalle will continue to be employed by LaSalle. JLL is the parent company of LaSalle Investment Management and any transactions with JLL will be done on an arms-length basis.

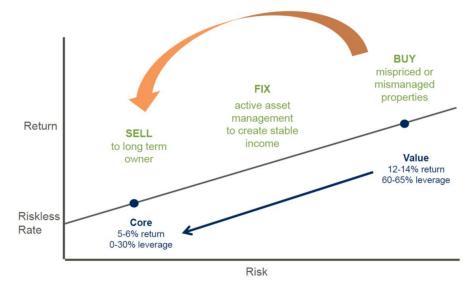
LaSalle Income & Growth Value-Add Strategy

FUNDAMENTALS

- Identify properties that can be repositioned to suit modern tenants
- Invest in four major property types: multifamily, office, industrial and retail
- Employ active asset management techniques to achieve substantial current income for each property
- Utilize moderate leverage, up to 65%, to enhance diversification and investment performance¹

POTENTIAL OPPORTUNITY

- Balance returns from income and appreciation across the portfolio to reduce risk
- Seek to achieve 14-16% gross IRR (net 12%+)²



Source: LaSalle Investment Management. The chart above is for illustrative purposes only and should not be relied upon to make predications of actual future performance. The chart reflects the opinion of LaSalle Investment Management regarding the risk and return profiles of investment strategies that are considered core, value-add and opportunistic. Ultimately, returns realized by the Fund will depend on numerous factors that are subject to uncertainty. No investment strategy or methodology can reduce all risk. Please see the disclaimer at the end of this presentation for a disclosure regarding general real estate risks.

¹ The Fund will employ leverage in connection with its investments and operations. The higher leverage employed, the more likely a substantial loss or gain in the value of the investment will occur. The use of leverage will result in interest expense and other costs to the Fund that may not be covered by distributions made to the Fund or appreciation of investment.

² Return objectives are for illustrative purposes only and should not be relied upon to make predictions of actual future performance. Ultimately returns realized by the Fund will depend on numerous factors that are subject to uncertainty. No investment strategy or methodology can reduce all risk. Accordingly, there can be no assurance that projected returns will be realized. Please see the disclaimer at the end of this presentation for additional disclosure on target returns. Gross returns do not reflect advisory fees, carried interest or other fees paid to LaSalle, which have the effect of reducing returns to investors.

LaSalle Income & Growth Fund VIII Philosophy

Four Major Property Sectors Across the U.S.	 Strategic property sector over-weights based on market conditions and in-house proprietary research forecasts Diversification by property type, geography, tenant, industry and market characteristics Targeted but flexible approach
Risk Management	 Income focused, expecting half of total returns to derive from income¹ Thoughtful use of leverage²
Value-Add Returns	• Seek to achieve 14-16% gross IRR (net 12%+) and 1.6x gross equity multiple ³

¹ Ultimately returns realized by the Fund will depend on numerous factors that are subject to uncertainty. Accordingly, there can be no assurance that returns will be realized. Please see the disclaimer at the end of this presentation for additional disclosure on target returns.

²The Fund will employ leverage in connection with its investments and operations. The use of such credit facility may enhance returns above those that would have been achieved without the use of a credit facility. The higher leverage employed, the more likely a substantial loss or gain in the value of the investment will occur. The use of leverage will result in interest expense and other costs to the Fund that may not be covered by distributions made to the Fund or appreciation of investment.

³ Return objectives are for illustrative purposes only and should not be relied upon to make predictions of actual future performance. Ultimately returns realized by the Fund will depend on numerous factors that are subject to uncertainty. No investment strategy or methodology can reduce all risk. Accordingly, there can be no assurance that projected returns will be realized. Gross returns do not reflect advisory fees, carried interest or other fees paid to LaSalle, which have the effect of reducing returns to investors. The internal rate of return ("IRR") and equity multiple ("EM") are calculated on a leveraged basis (gross or net, as noted) using actual daily cash flows (contributions and distributions) for all funds and a projected cash flow assuming a liquidation at carrying value as of the relevant quarter end for any active fund. Accordingly, the actual returns may differ materially from the returns shown herein. In addition, the returns reflect the use of a credit facility to pay for certain investments and expenses, which allow the funds to delay calling capital from investors on a short-term basis. The use of such credit facility may enhance returns above those that would have been achieved without the use of a credit facility. Please see the disclaimer at the end of this presentation for additional disclosure on target returns.

Secular Trends Are Creating Opportunities

EXISTING BUILDINGS NEED SIGNIFICANT INVESTMENT TO MEET HIGH EXPECTATIONS OF MODERN TENANTS

TECHNOLOGY, SHARING & COMMUNITY **DEMOGRAPHICS** Secular Trend CONVENIENCE OF E-COMMERCE 35-44 YEAR OLD PARENTS **COMPETITION FOR WORKERS ACTIVE 70+ YEAR OLDS** SHARED SPACES & COMMUNITY DISTRIBUTION CENTERS IN GROWING METROS **Opportunity SUBURBAN APARTMENTS** IN TOP SCHOOL DISTRICTS **HIGH AMENITY OFFICE ACTIVE ADULT APARTMENTS** HIGH TRAFFIC URBAN RETAIL

Note: The above exhibit is provided for illustrative purposes only and is provided as an example of the type of strategy LaSalle intends to pursue in order to execute the Fund, which is subject to change without notice. No investment strategy or methodology can reduce all risks of investing in the Fund.

Chicago Office Property

MODERNIZING OFFICE SPACE



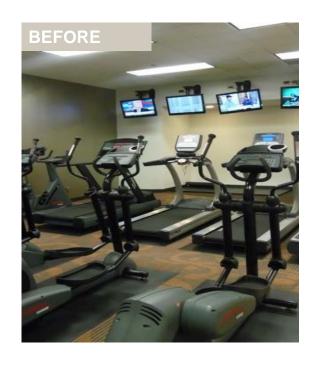


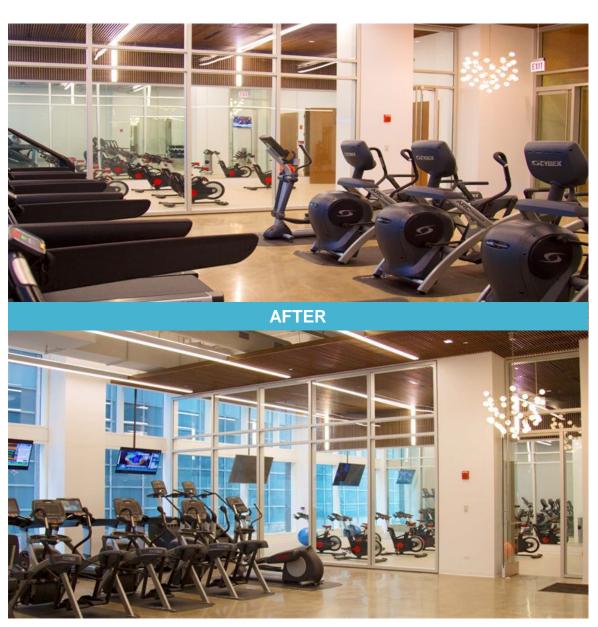


For illustrative purposes only.

Chicago Office Property

DELIVERING MODERNIZED AMENITIES





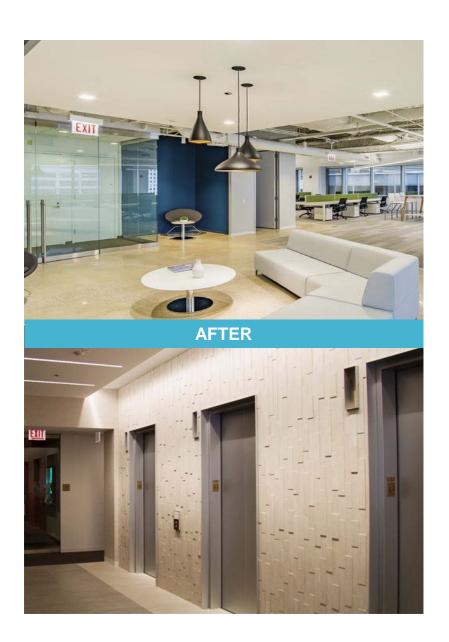
For illustrative purposes only.

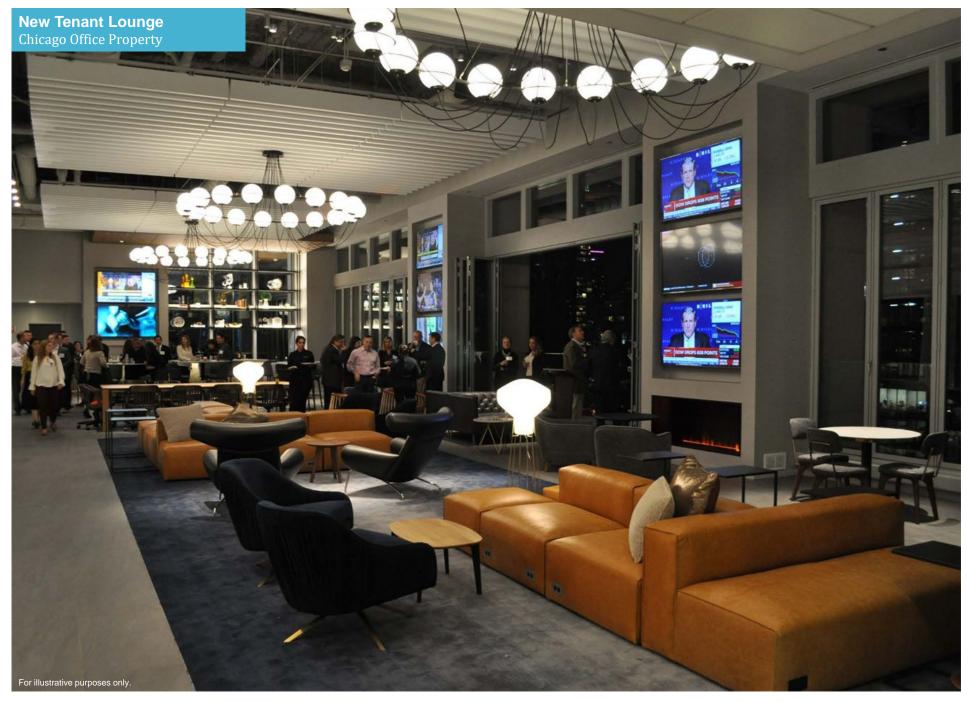
Chicago Office Property

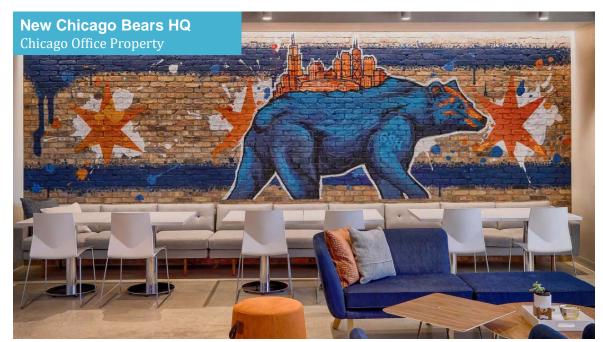
MODERNIZING OFFICE SPACE

















For illustrative purposes only.

Suburban Dallas

MULTIFAMILY UNIT RENOVATIONS







For illustrative purposes only.

Suburban Dallas

DELIVERING MODERNIZED AMENTIES















For illustrative purposes only.

Expertise Leads to Superior Execution for Investors

Focused Investing Across Four Property Sectors

- Focused on demographic driven investments
- Ability to shift focus as market conditions change

Value-Add Returns

 Seek to achieve 14-16% gross IRR (net 12%+) and 1.6x gross equity multiple¹

Risk Management

- Targeting income as a significant component of the total return
- Appropriate leverage supported by property cashflow

¹ Return objectives are for illustrative purposes only and should not be relied upon to make predictions of actual future performance. Ultimately returns realized by the Fund will depend on numerous factors that are subject to uncertainty. No investment strategy or methodology can reduce all risk. Accordingly, there can be no assurance that projected returns will be realized. Gross returns do not reflect advisory fees, carried interest or other fees paid to LaSalle, which have the effect of reducing returns to investors. The internal rate of return ("IRR") and equity multiple ("EM") are calculated on a leveraged basis (gross or net, as noted) using actual daily cash flows (contributions and distributions) for all funds and a projected cash flow assuming a liquidation at carrying value as of the relevant quarter end for any active fund. Accordingly, the actual returns may differ materially from the returns shown herein. In addition, the returns reflect the use of a credit facility to pay for certain investments and expenses, which allow the funds to delay calling capital from investors on a short-term basis. The use of such credit facility may enhance returns above those that would have been achieved without the use of a credit facility. Please see the disclaimer at the end of this presentation for additional disclosure on target returns.

Strong Track Record Through Multiple Cycles

FUND	VINTAGE YEAR	CAPITAL COMMITTED	CAPITAL FUNDED	REPORTED VALUE	AMOUNT DISTRIBUTED	TOTAL VALUE, NET OF CARRY	TVPI MULTIPLE	DPI MULTIPLE	NET IRR
Fund III	2002	\$168	\$150	\$0	\$224	\$224	1.5x	1.5x	9.2%
Fund IV	2005	\$509	\$495	\$0	\$343	\$343	0.7x	0.7x	(5.5%)
Fund V	2008	\$729	\$677	\$0	\$1,133	\$1,133	1.7x	1.7x	13.0%
Fund VI	2013	\$362	\$345	\$177	\$339	\$516	1.5x	1.0x	13.2%
Fund VII	2016	\$511	\$320	\$381	\$0	\$381	1.2x	0.0x	13.7%

Excerpt from NEPC Recommendation Data as of June 30, 2018

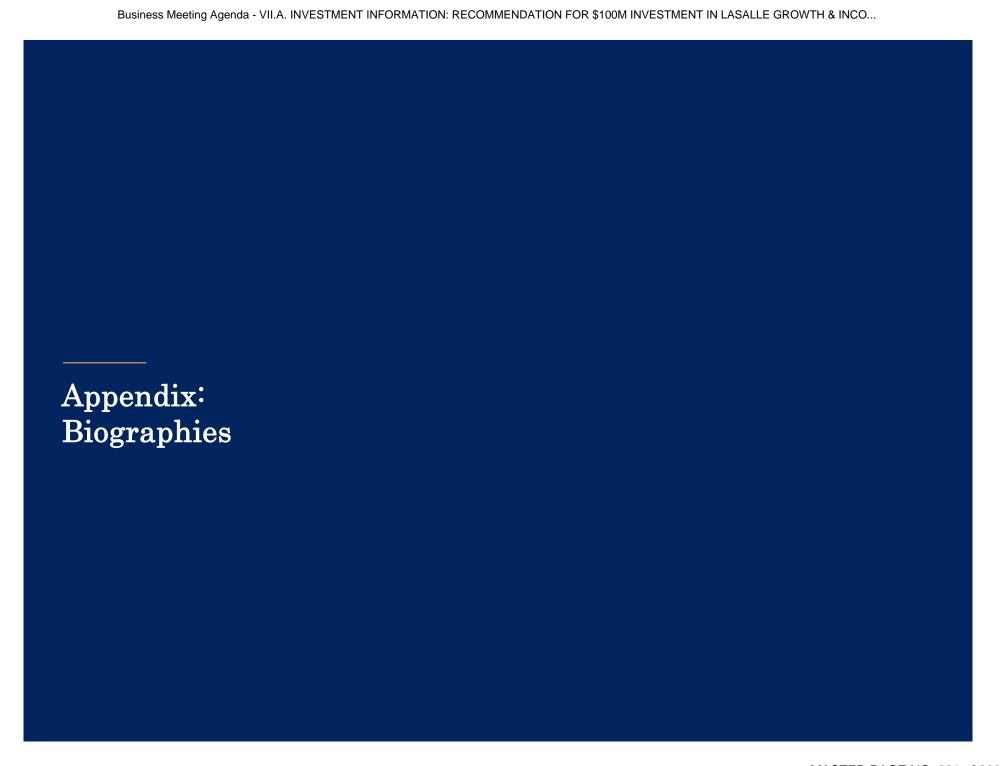
IRR and equity multiples above are on a realized basis for liquidated funds, and assuming liquidation at carrying value as of June 30, 2018 for funds not yet fully liquidated. Past performance is not indicative of future results. There can be no assurance that these or comparable returns will be achieved by the Fund in the future. Gross returns do not reflect advisory fees, carried interest or other fees, which have the effect of reducing returns to investors. The IRR is calculated on a leveraged basis (gross or net, as noted) using actual daily cash flows (contributions and distributions) for the respective fund. Gross returns and gross equity multiples are based on LaSalle's latest estimates of projected leveraged returns and cash flows and taking into account both realized and unrealized investments. Accordingly, the actual returns and equity multiples for active funds may differ materially from the returns shown herein. In addition, the returns reflect the use of a credit facility to fund certain investments and expenses, which allow the funds to delay calling capital from investors on a short-term basis. The use of such credit facility may enhance returns above those that would have been achieved without the use of a credit facility.

Principal Fund Terms

TERMS	SUMMARY
Structure	Closed-end vehicle
Target Size	US\$1 billion in equity
Sponsor Co-Investment	3% of total commitments (\$30 million) + Fund personnel co-investments
Initial Closing Date	December 2018
Target Returns ¹	14-16% Gross IRR / 12%+ Net IRR
Fund Leverage ²	65% of the greater of investment cost and aggregate investment value at portfolio level 75% of the greater of investment cost and investment value at the property level
Headline Asset Management Fee	1.50%
Performance Fee	80 / 20 split over a preferred return of 9% until investors achieve a 13% return Then 60 / 40 until the GP has received 20% of distributions; thereafter 80 / 20 split

¹ Return objectives are for illustrative purposes only and should not be relied upon to make predictions of actual future performance. Ultimately returns realized by the Fund will depend on numerous factors that are subject to uncertainty. No investment strategy or methodology can reduce all risk. Accordingly, there can be no assurance that projected returns will be realized. Please see the disclaimer at the end of this presentation for additional disclosure on target returns. Gross returns do not reflect advisory fees, carried interest or other fees paid to LaSalle, which have the effect of reducing returns to investors.

²The LaSalle Income & Growth Fund Series has historically employed leverage in connection with its investments, and expects to do so for LaSalle Income & Growth Fund VIII. The higher leverage employed, the more likely a substantial loss or gain in the value of the investment will occur. The use of leverage will result in interest expense and other costs to the Fund that may not be covered by distributions made to the Fund or appreciation of investment.



FUND LEADERSHIP



Jim Hutchinson
Chairman of LaSalle
Income & Growth Fund Series

Client Team Member,
LaSalle Income & Growth Fund VIII

Mr. Munoz, a Managing Director with more than 14 years of experience at LaSalle, serves as the President of LaSalle Income & Growth Fund VIII and Chief Investment Officer of the Fund Series. He is primarily responsible for Fund investment strategy and execution of Investments, joint ventures and financings. Since joining the firm in 2004, Mr. Munoz has completed over \$5 billion in property transactions. He has also served as asset manager for over \$500 million of portfolio properties, including office, multifamily, retail and industrial property types. His significant direct operating experience with the repositioning of properties is instrumental to the formation of Fund investment strategy.

Prior to joining the LaSalle Income & Growth Fund Team, Mr. Munoz was a member of LaSalle's Acquisitions group. Mr. Munoz earned a BA in Economics from the University of Pennsylvania and an MBA from the Kellogg School of Management at Northwestern University.

Mr. Hutchinson, an International Director with more than 32 years of experience at LaSalle, serves as Chairman of the LaSalle Income & Growth Fund Series and President of Funds VI and VII. He has been leading the LaSalle Income & Growth Funds since the inception of the first fund in the Fund Series in 1996. In addition, Mr. Hutchinson serves as a member of LaSalle's Americas Investment Committee.

Prior to joining LaSalle, Mr. Hutchinson was a senior manager in the audit division of Deloitte & Touche in Chicago. Mr. Hutchinson earned a BA in Mathematics from Brown University and an MBA from Indiana University.

Mr. Hutchinson has prepared Joe Munoz as his future successor, working alongside him on all aspects of portfolio management since the start of LaSalle Income & Growth Fund V (2007).

ADDITIONAL CLIENT TEAM MEMBERS







Mr. Gaur is a Global Co-Head of the Client Capital Group at LaSalle and jointly leads the 40+ person global client relationship, capital raising, marketing and public relations teams. He also helps lead new business development, investor relationships and product development around the world in coordination with a London-based Co-Head. Mr. Gaur is also a member of LaSalle's Global Management Committee supporting the development and execution of the firm's business strategy.

Prior to joining LaSalle, Mr. Gaur was a Managing Director and Partner at The Carlyle Group. Before Carlyle, he held senior positions at Greenhill and Co and Credit Suisse's Real Estate Private Fund Group. He also worked at The John Buck Company and Coopers & Lybrand.

Mr. Gaur received an MBA and BA from The University of Chicago and currently holds Series 7, 24 and 63 licenses.

Mr. Gries is Head of U.S. Transactions for LaSalle, a position he assumed in August 2017. Mr. Gries leads a team of acquisitions and dispositions professionals that are responsible for sourcing, underwriting and executing new investments and asset sales across the U.S. He also serves on both the LaSalle Americas Investment Committee and the LaSalle Americas Board. Mr. Gries is an active participant in the firm's capital raising efforts, and is directly involved in the formation and execution of joint ventures and large portfolio transactions.

Prior to joining LaSalle, he held leadership positions over the course of a 16-year career with Deutsche Asset Management, Americas Real Assets ("RREEF"), most recently serving as Managing Director, Real Estate Transactions.

Mr. Gries earned a BA in Economics from the University of Illinois.

Mr. Kleinman is a Managing Director of LaSalle's Research & Strategy Group. He is an active participant in the development of investment strategies for clients, assesses market conditions associated with specific investment decisions, develops office market forecasting tools and monitors capital market conditions.

Prior to joining LaSalle in 2005, Mr. Kleinman worked at the Initiative for a Competitive Inner City and as a Strategy Consultant at the Monitor Group in Cambridge, Massachusetts, and Melbourne, Australia.

He is currently co-chair of the NCREIF Research Committee. Mr. Kleinman received a Master's degree in Urban Studies from the London School of Economics and a BA in Economics and American Studies from Williams College.

INVESTMENTS



Christa Petruska
Investment Officer

Ms. Hassan, a Vice President at LaSalle with more than 9 years of real estate experience, serves as an Investment Officer for the LaSalle Income & Growth Funds. She is primarily responsible for supporting the investment and financing activity of the Fund Series and is an Asset Manager for Income & Growth Fund VII.

Ms. Hassan joined LaSalle in 2014 as a member of LaSalle's Acquisitions group. During her tenure at LaSalle, she has completed \$2.4 billion in property transactions.

Ms. Hassan earned a BS in Finance from the University of Illinois and an MBA with a concentration in Real Estate Finance and Investment from the Kellstadt Graduate School of Business at DePaul University.

Ms. Petruska, a Vice President at LaSalle, serves as an Investment Officer for the LaSalle Income and Growth Funds. She is responsible for supporting the investment and financing activity of the Fund Series and is an Asset Manager for Income & Growth Fund VII.

Prior to joining LaSalle in 2017, Ms. Petruska underwrote and closed 19 transactions totaling \$1.6 billion of equity through her previous roles as a Senior Associate at Abu Dhabi Investment Authority and as an Analyst at Morgan Stanley.

Ms. Petruska earned a BA in Economics and Chinese from UCLA and an MBA from Harvard Business School.

ASSET MANAGEMENT



Ty Spearing
Asset Manager



Michelle Gottlieb Asset Manager



Zac Bublitz
Asset Manager

Mr. Spearing, a Managing Director with more than 25 years of experience at LaSalle, serves as an Asset Manager for the LaSalle Income & Growth Funds. He is primarily responsible for all aspects of asset management for the Fund Series. In previous roles at LaSalle, Mr. Spearing led the Florida Office Property Company, a LaSalle sponsored fund, and also served as Controller for the first fund in the Income & Growth Fund Series.

Prior to joining LaSalle, Mr. Spearing was a senior auditor at Deloitte & Touche. Mr. Spearing earned a BS from Indiana University and is also a Certified Public Accountant.

Ms. Gottlieb, a Senior Vice President with more than 10 years of experience at LaSalle, serves as an Asset Manager for the LaSalle Income & Growth Funds. Ms. Gottlieb has been dedicated to the Income & Growth Fund Series since starting her career as an analyst at LaSalle.

She returned to the LaSalle and the Income & Growth Fund Team as an Asset Manager after earning an MBA from the Kellogg School of Management at Northwestern University. Ms. Gottlieb also earned a BBA from the University of Wisconsin.

Mr. Bublitz is an Associate at LaSalle and a dedicated member of the Income & Growth Fund team. He supports the Fund Series' asset and portfolio management activities involving asset transactions, debt, valuations, financial reporting, and analyses.

Mr. Bublitz joined LaSalle after earning degrees in Finance and Applied & Computational Mathematics from the University of Notre Dame.

ACCOUNTING





Mr. Gorz, a Senior Vice President with more than 26 years of experience at LaSalle, serves as the Portfolio Controller for the LaSalle Income & Growth Funds. He is primarily responsible for managing all aspects of financial reporting for the Fund Series.

Since joining LaSalle in 1992, Mr. Gorz has gained extensive experience working on various commingled funds and separate accounts during his tenure.

Mr. Gorz earned a BA from the University of Illinois and is also a Certified Public Accountant.

Mr. Diamond is the Assistant Portfolio Controller for the LaSalle Income & Growth Funds. Mr. Diamond's current responsibilities include preparing all aspects of financial reporting for the Fund Series.

Prior to joining LaSalle, Mr. Diamond started his career with Ernst & Young in the business tax services sector.

Mr. Diamond earned a BS and MAS from the University of Illinois and is also a Certified Public Accountant.

IMPORTANT NOTICE AND DISCLAIMERS

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Returns forecasts are for illustrative purposes, are used to calculate hypothetical future returns, do not reflect actual investment results and are not guarantees of future results. Potential returns are based on a number of assumptions, may not be realized and are subject to risk. Changes in assumptions could produce materially different results. A complete explanation of our assumptions used as the basis for the analysis presented herein is available upon request. This Presentation is not intended to forecast or predict future events. No scenario can predict all potential changes in rates, investor behaviours or economic conditions, or how such changes might affect returns. Actual results experienced by clients may vary significantly from the hypothetical illustrations shown. Results from this analysis are estimates only and are not guaranteed. Investment summaries are provided as examples of the types of investment that may be appropriate for the Fund. Such investments are not representative of the proposed investment portfolio as a whole and are meant for illustrative purposes only; they are not meant as a projection or estimate of the Fund's returns or returns on any of its investments. If the Fund uses leverage in connection with certain investments, the higher the leverage employed, the more likely a substantial loss or gain in the value of the investment will occur. The use of leverage will result in interest expenses and other costs to the Fund that may not be covered by distributions made to the Fund or appreciation of investments.

Where returns of existing funds in the LaSalle Income & Growth series are presented, "Gross Returns" and "Gross Equity Multiples" are based on LaSalle's latest estimates of projected leveraged returns and cash flow, in USD, after local taxes, before fund level fees and expenses taking into account realized investments and unrealized investments. Returns will be reduced by advisory fees and other expenses incurred. LaSalle's typical fee arrangements are disclosed in its Form ADV, Part 2A. "Net Returns" are after all fund level fees and expenses, including any advisory or performance fees paid to LaSalle or its affiliates. Realized returns are based on LaSalle's estimates assuming current foreign exchange rates with approximate adjustments for hedges.

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Investments in private real estate funds are speculative and involve special risk and there can be no assurance that a fund's investment objectives will be realized or that suitable investments may be identified. An investor could lose all or a substantial portion of his or her investment. Private funds are generally not subject to the same regulatory oversight as registered funds. Investments may involve complex tax structures resulting in delays in distributing important tax information, may not be required to provide periodic pricing or valuation information, lack diversification, limited transparency, and may employ leverage and other speculative investment practices. A comprehensive list of potential risk factors is outlined in the Fund's Private Placement Memorandum.

Target Returns

LaSalle makes no guarantee that the Fund will be able to achieve these targets in the long term. Targets are objectives and should not be construed as providing any assurance as to the results that may be realized in the future from investments in the Fund. Many factors affect Fund performance including changes in market conditions and interest rates and changes in response to other economic, political or financial developments. These targets are being shown for information purposes only and should not be relied upon to make predictions of actual future performances. The information underlying any targets or other forecasts has been obtained from or is based upon sources believed to be reliable, but LaSalle assumes any responsibility for, or makes any representation or warranty, express or implied as to the adequacy, accuracy or completeness of, any such information.

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JURISDICTIONAL NOTICES

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Interests in the Fund are being offered as a private placement to a limited number of investors and will not be registered under the U.S. Securities Act of 1933, as amended (the "Securities Act"), or the securities regulatory authority of any state or other jurisdiction of the United States and may not be offered, sold, re-sold, taken up, exercised, renounced, transferred, delivered or distributed, directly or indirectly, within the United States to or for the account or benefit of U.S. Persons (as defined in Regulation S of the Securities Act) except pursuant to an exemption from, or in a transaction not subject to, the registration requirements of the Securities Act and applicable state securities laws. In addition, transfer or other disposition of the interests is restricted as provided in the limited partnership agreement of the Fund. The Fund will not be registered as an investment company under the U.S. Investment Company Act of 1940, as amended, and the rules and regulations promulgated thereunder (collectively, the "Investment Company Act"). Consequently, investors will not be afforded the protections of the Investment Company Act.

This Presentation is not an offer to sell to any person, or a solicitation to any person (I) to buy interests in the Fund in any state or jurisdiction in which such an offer would be prohibited by law; (II) who is not an "accredited investor" as defined in the rules and regulations promulgated under the Securities Act; or (III) who is not a "qualified purchaser" as defined in the rules and regulations promulgated under the Investment Company Act.

Securities will be offered to US investors through LaSalle Investment Management Distributors, LLC ("LIMD"), a registered broker-dealer with the SEC and a member of FINRA. LIMD's status as a registered broker-dealer and member of FINRA should not be construed to imply that either the SEC or FINRA has approved or endorsed LIMD's or LaSalle's qualifications or the services either offers or that LIMD or LaSalle or their representatives possess a particular level of skill, expertise or training.

Important Notice to Potential Investors Located in the European Economic Area ("EEA")

Once established, the Fund will be an alternative investment fund, and an affiliate of LaSalle will be the alternative investment fund manager ("AIFM") for the purposes of the EU Alternative Investment Fund Managers Directive (Directive 2011/61/EU) ("AIFMD").

This document has not been approved by any supervisory authority and may not be used for and does not constitute an offer, or a solicitation of any offer, to sell, subscribe, purchase or make any commitments for any interests in the Fund. For the avoidance of doubt, this document may not be distributed other than (i) in circumstances where the AIFM holds the applicable registrations, authorizations or licenses in respect of the Fund pursuant to laws of any EEA Member State implementing AIFMD (a list of jurisdictions in which the Fund may be marketed pursuant to AIFMD is available from LaSalle on request), or (ii) where the AIFM does not hold such authorizations, etc. in circumstances which either (A) do not require a registration, authorization, license or other form of authorization pursuant to the AIFMD or (B) at the unsolicited request of the recipient, in which case the recipient acknowledges and agrees that this document and any other materials relating to the Fund are provided solely at the request of the recipient and not as a result of any unsolicited marketing by LaSalle, the AIFM or any of its affiliates. In relation to each EEA Member State which has implemented Directive 2003/71/EC (as amended) (the "Prospectus Directive"), this document does not, and shall not, constitute an offer to the public of any interests in the Fund nor an invitation to the public in connection with any offer. No action has been undertaken or will be undertaken to make an offer to the public of the interests requiring a publication of a prospectus in any Member State. As a result, the interests may only be offered in relevant Member States (A) to qualified investors; or (B) in any other circumstances not requiring publication of a prospectus pursuant to Article 3(2) of the Prospectus Directive.

Interests in the Fund may not be offered, sold or otherwise made available to any retail investor within the meaning of Regulation (EU) no 1286/2014 (the "PRIIPS Regulation") in the territory of the EEA, including investment made in the EEA by such entities or persons from third countries in the territory of the EEA. Consequently, no key information document required by the PRIIPS Regulation for offering or selling interests in the Fund or otherwise making interests in the Fund available for retail investors in the EEA will be prepared.

MIFID II product governance / professional investors and ECPs only target market. Solely for the purposes of the manufacturer's product approval process, the target market assessment in respect of Interests in the Fund has led to the conclusion that: (i) the target market for the Interests is eligible counterparties and professional clients only, each as defined in Directive 2014/65/EU (as amended, "MiFID II"); and (ii) all channels for distribution of the Interests to eligible counterparties and professional clients are appropriate. Any person subsequently offering, selling or recommending the Interests (a "distributor") should take into consideration the manufacturer's target market assessment; however, a distributor subject to MiFID II is responsible for undertaking its own target market assessment in respect of the Units (by either adopting or refining the manufacturer's target market assessment) and determining appropriate distribution channels.

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The Fund will be an unregulated collective investment scheme whose promotion is restricted by the United Kingdom's Financial Services and Markets Act 2000 ("FSMA"). Accordingly, an offer of interests in the Luxembourg Partnership shall only be addressed by LaSalle to persons (A) outside the United Kingdom receiving it non-electronically, or (B) who qualify as Professional Investors for the purposes of Annex II to MiFID II.

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The Presentation is designed for institutional and wholesale investors only. This Presentation is not being (and should not be) distributed to any person in Australia who is not a 'wholesale client' as defined in section 761G of the Corporations Act 2001 (Cth). We believe you are an institutional investor, a non-private pension fund, a large corporation, an investment fund which has not been established solely for the purpose of investing in the investment opportunity, or that you are a professional investor. A product disclosure statement in respect of the investment opportunity will not be issued in Australia and will not be lodged or registered with ASIC or with any regulatory body in any other country.

* Investors in Australia must note:

(i) LaSalle Investment Management, Inc. is exempt from the requirement to hold an Australian financial services licence under the Corporations Act 2001 (Cth) in respect of the financial services; and

(ii) LaSalle Investment Management, Inc. is regulated by the SEC under the laws of the United States, which differ from Australian laws.

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Important Notice to Potential Investors Located in Korea

If you are a prospective investor in Korea, you represent and warrant that you fall within the definition of "Qualified Professional Investors" (as defined in the Financial Investment Services and Capital Markets Act). The material is intended to provide information on potential investment opportunities that LaSalle are contemplating and it does not constitute an offer to buy or sell or a solicitation of an offer to buy or sell any securities or any interests in investment funds and is subject to correction, completion and amendment without notice. Before the sales of the investment opportunity, LaSalle will first register the fund with the Financial Services Commission pursuant to the Financial Investment Services and Capital Markets Act of Korea and engage a locally licensed entity to further explain the details of the fund(s) and risks associated with investment therein so as to allow you to make your investment decision on a fully disclosed basis.

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LaSalle Investment Management K.K. ("LaSalle K.K.") is registered for Type II business and Investment Advisory business under the Financial Instruments Exchange Law ("FIEL") in Japan. Each prospective investor further represents and warrants that (i) it is not a fund (including, without limitation, general partner, manager or operator) of a collective investment scheme, and there are no indirect investors (kansetsu shushi-sha) as defined in Article 16, Paragraph 1, Item 13 of Cabinet Office Ordinance on Definitions under Article 2 of the FIEL, as to the prospective investor, (ii) it does not fall under any disqualifying Qualified Institutional Investor as defined under (a) through (c) of Article 63, Paragraph 1, Item 1 of the FIEL, and (ii) if it is a trustee of a trust, the Interests will not be distributed to its beneficiaries or entrustor in kind under the underlying trust deed or agreement.

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The recipient acknowledges and agrees that this Presentation and any other materials relating to the Fund are provided solely at the request of such person and not as a result of any unsolicited marketing by the Fund, LaSalle or their affiliates in respect of the Fund. Further, any subsequent application to subscribe for interests in the Fund by such persons will be made at the initiative of such persons.



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January 28, 2019

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

SUBJECT: RECOMMENDATION TO CONTRACT WITH REAMS ASSET MANAGEMENT FOR MANAGEMENT OF \$100 MILLION U.S. TREASURY SECURITIES PORTFOLIO

Background

VCERA's asset allocation plan provides for a dedicated 2% allocation to U.S. Treasury securities to offset additional equity risk from increasing private equity (PE) investments. The total private equity allocation *target* is 10%.

As a percentage of the total portfolio, VCERA's *actual* private equity valuations have been accelerating. In June 2015, PE represented 3% of VCERA's portfolio. In June 2017 the Board hired its first dedicated PE consultant to help build out the program. By June of 2018, the net asset value of VCERA's PE program had increased to 5.5%, and by the end of December represents approximately 7%. This increase has been driven by more PE commitments being made, and by more funds entering their investment phase. To hedge some of this increased PE equity risk, staff and NEPC recommend now populating the U.S. Treasury allocation.

Implementation

One way of hedging equity risk in a portfolio is by diversifying into U.S. Treasury securities (Treasuries). The reason for this is typically a large sell-off in equities is accompanied by a flight-to-quality rally in Treasuries.

Short term Treasuries, like 90-day or 1-year Treasury bills, provide principle protection yet offer little "upside" to hedge the loss the total portfolio would experience from the declines in equity. In contrast, long-term Treasuries, such as the 30-year, greatly benefit from a flight to quality, but sharply underperform with rising interest rates or yield curve steepening.

The balance between appropriately hedging equity risk and minimizing damage from curve steepening is impossible to pinpoint, but 10-year Treasuries provide a balance between these two. With a little over eight years of duration, they will provide a flight-to-quality benefit in a sharp equity sell off, but they also avoid the longest end of the curve that is most exposed to a yield curve steepening. 10-year Treasuries also offer an attractive way to get carry (bond yield) while incurring no credit risk.

1190 S. VICTORIA AVENUE, SUITE 200 • VENTURA, CA 93003 PHONE: 805-339-4250 • FAX: 805-339-4269 • WWW.VCERA.ORG We believe that the least expensive and simplest way to hedge some PE equity risk is to hold the new issue 10-year U.S. Treasury note. To keep this exposure constant, each time the U.S. Treasury issues a new 10-year note, the manager sells the old one and buys the new issue.

In discussions with all of VCERA's bond managers, Reams offered to manage a separate account portfolio rolling a new issue 10-year Treasury note for VCERA at the lowest price, an annual fee of one basis point.

RECOMMENDED: THAT THE BOARD CONTRACT WITH REAMS ASSET MANAGEMENT FOR A \$100 MILLION SEPARATE ACCOUNT ROLLING NEW-ISSUE 10-YEAR U.S. TREASURY NOTES, AND AUTHORIZE THE BOARD CHAIR OR RETIREMENT ADMINISTRATOR TO EXECUTE THE CONTRACT.

Respectfully submitted,

Dan Gallagher

Chief Investment Officer

Q P. Gallagker

PRELIMINARY MONTHLY PERFORMANCE REPORT

VENTURA COUNTY EMPLOYEES' RETIREMENT ASSOCIATION

November 30, 2018

Allan Martin, Partner
Anthony Ferrara, CAIA, Consultant
Michael Miranda, CFA, Senior Analyst





BOSTON | ATLANTA | CHARLOTTE | CHICAGO | DETROIT | LAS VEGAS | PORTLAND | SAN FRANCISCO

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 (%)	Inception (%)	Inception Date
Total Fund	5,418,496,826	100.0	100.0	0.9	-0.6	0.3	1.7	7.7	6.2	10.1	7.9	Apr-94
Policy Index				<u>1.2</u>	<u>-0.3</u>	<u>0.9</u>	<u>2.0</u>	<u>8.0</u>	<u>6.8</u>	<u>9.9</u>	<u>8.0</u>	Apr-94
Over/Under				-0.3	-0.3	-0.6	-0.3	-0.3	-0.6	0.2	-0.1	
60% MSCI ACWI (Net) / 40% FTSE WGBI				1.1	-2.1	-2.7	-1.7	6.1	3.8	7.3		Apr-94
60% S&P 500 / 40% BBgBarc Aggregate				1.5	1.4	2.5	3.3	7.8	7.5	10.2	8.2	Apr-94
Total Fund ex Parametric	5,377,871,518	99.3	-	0.9	-0.7	0.2	1.6	7.6	6.1	9.9	7.9	Apr-94
Total Fund ex Private Equity	5,074,394,634	93.6		1.0	-0.9	-0.5	0.9	7.4	5.9		8.2	Jan-12
Policy Index				<u>1.2</u>	<u>-0.3</u>	<u>0.9</u>	<u>2.0</u>	<u>8.0</u>	<u>6.8</u>	<u>9.9</u>	<u>9.0</u>	Jan-12
Over/Under				-0.2	-0.6	-1.4	-1.1	-0.6	-0.9		-0.8	
Total US Equity	1,696,063,216	31.3	28.0	2.0	1.6	4.6	5.8	12.0	10.7	14.9	9.3	Dec-93
Russell 3000				<u>2.0</u>	<u>1.2</u>	<u>4.5</u>	<u>5.5</u>	<u>11.8</u>	<u>10.6</u>	<u>14.5</u>	<u>9.5</u>	Dec-93
Over/Under				0.0	0.4	0.1	0.3	0.2	0.1	0.4	-0.2	
Western U.S. Index Plus	206,609,775	3.8		1.7	2.0	4.2	5.5	12.6	11.5	17.4	5.8	May-07
S&P 500				<u>2.0</u>	<u>2.4</u>	<u>5.1</u>	<u>6.3</u>	<u>12.2</u>	<u>11.1</u>	<u>14.3</u>	<u>7.5</u>	May-07
Over/Under				-0.3	-0.4	-0.9	-0.8	0.4	0.4	3.1	-1.7	
Blackrock Russell 1000 Index	1,427,414,611	26.3		2.0	1.8	4.8	6.0				11.6	May-17
Russell 1000				<u>2.0</u>	<u>1.9</u>	<u>4.8</u>	<u>5.9</u>	<u>11.9</u>	<u>10.9</u>	<u>14.5</u>	<u>11.6</u>	May-17
Over/Under				0.0	-0.1	0.0	0.1				0.0	
Blackrock Russell 2500 Index	62,038,830	1.1		1.9	-4.1	1.2	1.5				8.1	May-17
Russell 2500				<u>1.9</u>	<u>-4.2</u>	<u>1.1</u>	<u>1.4</u>	<u>10.0</u>	<u>8.2</u>	<u>15.1</u>	<u>8.0</u>	May-17
Over/Under				0.0	0.1	0.1	0.1				0.1	

Policy Index: Currently, 28% Russell 3000, 20% BBgBarc US Aggregate, 15% MSCI ACWI ex U.S., 10%MSCI ACWI, 10% Russell 3000 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.

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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 (%)	Inception (%)	Inception Date
Total Non-US Equity	857,372,781	15.8	15.0	0.5	-6.4	-9.4	-7.4	6.3	2.5	8.2	6.1	Mar-94
MSCI ACWI ex USA				<u>0.9</u>	<u>-6.6</u>	<u>-10.1</u>	<u>-8.1</u>	<u>5.4</u>	<u>1.8</u>	<u>7.7</u>	<u>4.9</u>	Mar-94
Over/Under				-0.4	0.2	0.7	0.7	0.9	0.7	0.5	1.2	
MSCI EAFE				-0.1	-6.8	-9.4	-7.9	4.1	1.8	7.5	4.6	Mar-94
MSCI ACWI ex USA NR LCL				0.7	-4.8	-5.9	-4.5	5.1	5.3	8.5		Mar-94
MSCI EAFE NR LCL				-0.2	-4.5	-5.5	-4.3	3.7	5.4	8.3	4.7	Mar-94
BlackRock ACWI ex-U.S. Index	438,795,286	8.1		0.9	-7.2	-10.4	-8.3	5.7	2.2	8.2	2.1	Mar-07
MSCI ACWI ex USA IMI				<u>0.9</u>	<u>-7.2</u>	<u>-10.6</u>	<u>-8.5</u>	<u>5.5</u>	<u>2.0</u>	<u>8.1</u>	<u>1.9</u>	<i>Mar-</i> 07
Over/Under				0.0	0.0	0.2	0.2	0.2	0.2	0.1	0.2	
MSCI ACWI ex USA NR LCL	044 470 400	0.0		0.7	-4.8	-5.9	-4.5	5.1	5.3	8.5	2.9	Mar-07
Sprucegrove	211,479,168	3.9		-0.8	-7.4	-10.9	-8.3	7.2	2.5	8.9	7.0	Mar-02
MSCI ACWI ex USA Over/Under				<u>0.9</u> -1.7	<u>-6.6</u> -0.8	<u>-10.1</u> -0.8	<u>-8.1</u> -0.2	<u>5.4</u> 1.8	<u>1.8</u> 0.7	<u>7.7</u> 1.2	<u>6.0</u> 1.0	Mar-02
MSCI EAFE				-1.7 -0.1	-0.8	-0.6 -9.4	-0.2 -7.9	1.0 4.1	1.8	7.5	5.5	Mar-02
MSCI ACWI ex USA NR LCL				-0.1 0.7	-0.0 -4.8	-9. 4 -5.9	-7.9 -4.5	4 .1 5.1	5.3	8.5	5.0	Mar-02
MSCI EAFE NR LCL				-0.2	-4.5	-5.5	-4.3	3.7	5. <i>4</i>	8.3	4.2	Mar-02
Hexavest	86,832,506	1.6		-0.4	-4.5	-8.3	-7.5	3.7	1.3		3.4	Dec-10
MSCI EAFE	00,002,000			-0.1	-6.8	-9.4	<u>-7.9</u>	<u>4.1</u>	<u>1.8</u>	<u>7.5</u>	4.0	Dec-10
Over/Under				-0.3	2.3	1.1	0.4	-0.4	-0.5		-0.6	
MSCI EAFE NR LCL				-0.2	-4.5	-5.5	-4.3	3.7	5.4	8.3	6.7	Dec-10
Walter Scott	120,265,821	2.2		2.3	-3.3	-3.8	-2.4	8.4	4.3		5.3	Dec-10
MSCI ACWI ex USA				<u>0.9</u>	<u>-6.6</u>	<u>-10.1</u>	<u>-8.1</u>	<u>5.4</u>	<u>1.8</u>	<u>7.7</u>	<u>3.0</u>	Dec-10
Over/Under				1.4	3.3	6.3	5.7	3.0	2.5		2.3	
MSCI ACWI ex USA NR LCL				0.7	-4.8	-5.9	-4.5	5.1	5.3	8.5	5.9	Dec-10
MSCI EAFE				-0.1	-6.8	-9.4	-7.9	4.1	1.8	7.5	4.0	Dec-10
Total Global Equity	586,459,411	10.8	10.0	1.5	-2.0	-2.2	-0.6	9.1	5.7	9.1	5.8	May-05
MSCI ACWI				<u>1.5</u>	<u>-2.1</u>	<u>-2.6</u>	<u>-1.0</u>	<u>8.6</u>	<u>6.2</u>	<u>10.7</u>	<u>6.6</u>	<i>May-</i> 05
Over/Under				0.0	0.1	0.4	0.4	0.5	-0.5	-1.6	-0.8	
BlackRock MSCI ACWI Equity Index	586,459,411	10.8		1.5	-2.0	-2.2	-0.6	9.0	6.6		9.8	Aug-12
MSCIACWI				<u>1.5</u>	<u>-2.1</u>	<u>-2.6</u>	<u>-1.0</u>	<u>8.6</u>	<u>6.2</u>	<u>10.7</u>	9.4	Aug-12
Over/Under				0.0	0.1	0.4	0.4	0.4	0.4		0.4	



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 (%)	Inception (%)	Inception Date
Total Private Equity	344,102,192	6.4	10.0	0.0	5.0	14.7	18.0	13.8	15.4		14.5	Jan-12
Russell 3000 + 3%				<u>2.2</u>	<u>2.5</u>	<u>7.3</u>	<u>8.7</u>	<u>15.1</u>	<u>13.9</u>	<u>17.9</u>	<u>17.6</u>	Jan-12
Over/Under				-2.2	2.5	7.4	9.3	-1.3	1.5		-3.1	
Cambridge Associates Global All PE (Qtr Lag)				0.0	4.4	12.7	17.3	11.7	13.2	9.6	12.9	Jan-12
Adams Street Global Fund Series	160,621,864	3.0		-0.3	4.5	14.3	19.4	12.5	13.8		13.1	Jan-12
Russell 3000 + 3%				<u>2.2</u>	<u>2.5</u>	<u>7.3</u>	<u>8.7</u>	<u>15.1</u>	<u>13.9</u>	<u>17.9</u>	<u>17.6</u>	Jan-12
Over/Under				-2.5	2.0	7.0	10.7	-2.6	-0.1		-4.5	
Harbourvest	80,545,793	1.5		-0.2	6.8	19.0	19.0	17.1	20.0		19.6	Aug-13
Russell 3000 + 3%				<u>2.2</u>	<u>2.5</u>	<u>7.3</u>	<u>8.7</u>	<u>15.1</u>	<u>13.9</u>	<u>17.9</u>	<u>14.9</u>	Aug-13
Over/Under				-2.4	4.3	11.7	10.3	2.0	6.1		4.7	
Pantheon Global Secondary Funds	38,465,959	0.7		0.0	5.6	13.9	16.9	17.2	15.8		13.1	Jan-12
Russell 3000 + 3%				<u>2.2</u>	<u>2.5</u>	<u>7.3</u>	<u>8.7</u>	<u>15.1</u>	<u>13.9</u>	<u>17.9</u>	<u>17.6</u>	Jan-12
Over/Under				-2.2	3.1	6.6	8.2	2.1	1.9		-4.5	
Drive Capital Fund	5,811,980	0.1		-1.5	1.6	-2.5	-2.5				-29.4	Sep-16
Russell 3000 + 3%				<u>2.2</u>	<u>2.5</u>	<u>7.3</u>	<u>8.7</u>	<u>15.1</u>	<u>13.9</u>	<u>17.9</u>	<u>16.5</u>	Sep-16
Over/Under				-3.7	-0.9	-9.8	-11.2				-45.9	
Abbott Secondary Opportunities	12,359,251	0.2		0.0	21.3	21.3					21.3	Jan-18
Russell 3000 + 3%				<u>2.2</u>	<u>2.5</u>	<u>7.3</u>	<u>8.7</u>	<u>15.1</u>	<u>13.9</u>	<u>17.9</u>	<u>7.3</u>	Jan-18
Over/Under				-2.2	18.8	14.0					14.0	
CVI Credit Value Fund	9,228,314	0.2		-0.5	2.4	4.7					4.7	Jan-18
Russell 3000 + 3%				<u>2.2</u>	<u>2.5</u>	<u>7.3</u>	<u>8.7</u>	<u>15.1</u>	<u>13.9</u>	<u>17.9</u>	<u>7.3</u>	Jan-18
Over/Under				-2.7	-0.1	-2.6					-2.6	
Clearlake Capital Partners V	3,602,883	0.1		17.6	32.9						29.7	Mar-18
Russell 3000 + 3%				<u>2.2</u>	<u>2.5</u>	<u>7.3</u>	<u>8.7</u>	<u>15.1</u>	<u>13.9</u>	<u>17.9</u>	<u>5.4</u>	Mar-18
Over/Under				15.4	30.4						24.3	
Battery Ventures XII	3,157,998	0.1		-2.2	-8.0						-8.0	Apr-18
Russell 3000 + 3%				<u>2.2</u>	<u>2.5</u>	<u>7.3</u>	<u>8.7</u>	<u>15.1</u>	<u>13.9</u>	<u>17.9</u>	<u>7.2</u>	Apr-18
Over/Under				-4.4	-10.5						-15.2	

Please Note:

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



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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 (%)	Inception (%)	Inception Date
Insight Venture Partners X	7,035,623	0.1		4.5	-5.7						-5.7	May-18
Russell 3000 + 3% Over/Under				<u>2.2</u> 2.3	<u>2.5</u> -8.2	<u>7.3</u>	<u>8.7</u>	<u>15.1</u>	<u>13.9</u>	<u>17.9</u>	<u>6.6</u> -12.3	<i>May-18</i>
GTCR Fund XII	3,783,933	0.1		0.0	-38.7						-38.7	Jun-18
Russell 3000 + 3% Over/Under				<u>2.2</u> -2.2	<u>2.5</u> -41.2	<u>7.3</u>	<u>8.7</u>	<u>15.1</u>	<u>13.9</u>	<u>17.9</u>	<u>3.4</u> -42.1	Jun-18
Buenaventure One, LLC	17,931,376	0.3		0.0	-0.2						-0.2	Jul-18
Russell 3000 + 3% Over/Under				<u>2.2</u> -2.2	<u>2.5</u> -2.7	<u>7.3</u>	<u>8.7</u>	<u>15.1</u>	<u>13.9</u>	<u>17.9</u>	<u>2.5</u> -2.7	Jul-18
ECI 11 Buenaventure Two, LLC Monroe Capital Fund III	394,065 55,928 1,107,227	0.0 0.0 0.0										

Please Note: Private Equity performance is shown on a time-weighted return basis. Values are cash adjusted with current month cash flows. ECI 11 funded 11/30/2018.

Buenaventure Two, LLC funded 11/06/2018. Monroe Capital Fund III funded 11/15/2018.

VENTURA COUNTY EMPLOYEES' RETIREMENT ASSOCIATION PRIVATE EQUITY LIMITED PARTNERSHIP PERFORMANCE

													Since Incepti	on
		Initial		Capital	Outstanding								Distributions	
Fund Name	Vintage Year		Commitment	Called to	Commitment	Call Ratio	Add'l Fees ²	Distributions to Date	Valuation	Total Value	Net Benefit	IRR	to Paid In Multiple	Paid In Multiple
		Date		Date ¹	1	ruuo	1003	to Buto					(DPI)	(TVPI)
Abbott Secondary Opportunities, LP.	2017	12/21/2017	\$25,000,000	\$13,348,706	\$12,014,011	53%		\$2,000,000	\$12,359,249	\$14,359,249	\$1,010,543	18.5%	0.15x	1.08x
Adams Street 2010 U.S. Fund	2010	5/21/2010	\$42,500,000	\$37,442,500	\$5,057,500	88%	\$15,213	\$25,869,869	\$35,614,402	\$61,484,271	\$24,026,558	13.7%	0.69x	1.64x
Adams Street 2010 Non-U.S. Dev. Mkts Fund	2010	5/21/2010	\$25,500,000	\$22,325,249	\$3,174,751	88%	\$1,589	\$15,702,344	\$17,074,957	\$32,777,301	\$10,450,463	11.2%	0.7x	1.47x
Adams Street 2010 Non-U.S. Emg Mkts Fund	2010	1/3/2011	\$8,500,000	\$7,633,000	\$867,000	90%	\$0	\$2,030,308	\$9,942,102	\$11,972,410	\$4,339,410	11.5%	0.27x	1.57x
Adams Street 2010 Direct Fund	2010	5/21/2010	\$8,500,000	\$8,046,100	\$453,900	95%	\$6,697	\$9,077,781	\$4,869,473	\$13,947,254	\$5,894,457	12.8%	1.13x	1.73x
Adams Street 2013 Global Fund	2013	6/27/2013	\$75,000,000	\$56,625,000	\$18,375,000	76%	\$10,728	\$8,075,792	\$66,678,199	\$74,753,991	\$18,118,263	10.0%	0.14x	1.32x
Adams Street 2016 Global Fund	2016	12/22/2016	\$60,000,000	\$21,150,000	\$38,850,000	35%	\$0	\$2,082,389	\$22,082,443	\$24,164,832	\$3,014,832	16.9%	0.1x	1.14x
Adams Street Co-Investment Fund IV A	2018	9/24/2018	\$30,000,000	\$4,567,808	\$25,500,000	15%	\$67,808	-	\$4,500,000	\$4,500,000	-\$67,808	-9.1%		0.99x
Battery Ventures XII	2018	2/1/2018	\$9,050,000	\$2,045,300	\$7,004,700	23%	\$0	\$0	\$1,916,991	\$1,916,991	-\$128,309	-20.8%	0x	0.94x
Battery Ventures XII Side Fund	2018	2/1/2018	\$5,050,000	\$1,267,550	\$3,782,450	25%	\$0	\$0	\$1,241,008	\$1,241,008	-\$26,542	-9.2%	0x	0.98x
Buenaventure One, LLC	2018	1/5/2018	\$57,172,500	\$18,355,590	\$38,816,910	32%		\$403,156	\$17,931,381	\$18,334,537		-0.6%		1x
CapVest Equity Partners IV	2018	7/11/2018	\$12,544,576		\$12,544,576	0%		-						-
Clearlake Capital Partners V	2017	12/22/2017	\$9,950,000	\$2,919,258	\$7,031,552	29%	\$46,158	\$38,159	\$3,571,705	\$3,609,864	\$644,448	54.3%	0.01x	1.24x
CVI Credit Value Fund IV	2017	12/31/2017	\$30,000,000	\$9,000,000	\$21,000,000	30%		\$6,147	\$9,228,311	\$9,234,458	\$234,458	5.7%	0x	1.03x
Drive Capital Fund II	2016	9/1/2016	\$15,000,000	\$6,355,302	\$8,647,908	42%	\$3,210	\$0	\$5,811,980	\$5,811,980	-\$546,532	-8.5%	0x	0.91x
ECI 11	2018	7/5/2018	\$9,607,545	\$394,065	\$9,607,545	0%		-	\$300,414	\$300,414		-96.7%		0.76x
GGV Capital VII	2018	8/15/2018	\$10,160,000		\$10,160,000	0%		-						-
GGV Capital VII Plus	2018	8/15/2018	\$2,540,000		\$2,540,000	0%		-		-				-
GGV Discovery II	2018	8/15/2018	\$2,100,000		\$2,100,000	0%		-						-
GTCR Fund XII	2017	9/29/2017	\$30,000,000	\$4,548,000	\$25,547,792	15%		\$264,502	\$2,754,397	\$3,018,899	-\$1,529,101	-87.3%	0.06x	0.66x
Insight Venture Partners X	2017	10/13/2017	\$25,000,000	\$7,250,000	\$17,750,000	29%		\$8,561	\$7,035,624	\$7,044,185	-\$205,815	-6.8%	0x	0.97x
HarbourVest - Dover Street VIII	2013	5/30/2013	\$67,500,000	\$60,834,954	\$6,750,000	90%	\$84,954	\$64,366,660	\$29,161,527	\$93,528,187	\$32,608,279	21.5%	1.06x	1.54x
HarbourVest - Dover Street IX	2016	12/16/2016	\$60,000,000	\$27,600,000	\$32,400,000	46%	\$0	\$6,905,211	\$27,985,526	\$34,890,737	\$7,290,737	37.3%	0.25x	1.26x
HarbourVest - PRTNS CO INVEST IV L.P.	2017	6/2/2017	\$30,000,000	\$21,156,100	\$9,040,640	71%	\$0	\$0	\$23,534,996	\$23,534,996	\$2,378,896	9.6%	0x	1.11x
HarbourVest - PRTNS CO INVEST V L.P.	2018	7/31/2018	\$35,000,000		\$35,000,000	0%		-		-				
Hellman & Friedman Capital Partners IX	2018	9/28/2018	\$19,800,000		\$19,800,000	0%		-						-
M/C Partners VIII	2018	4/2/2018	\$10,000,000		\$10,000,000	0%		-		-				
Monroe Capital Private Credit Fund III	2018	9/5/2018	\$25,000,000	\$1,250,000	\$23,750,000	0%		\$142,773	\$1,107,227	\$1,250,000		0.0%	-	1x
Pantheon Global Secondary Fund IV	2010	8/20/2010	\$15,000,000	\$9,960,000	\$5,040,000	66%	\$0	\$12,450,001	\$3,354,279	\$15,804,280	\$5,844,280	14.1%	1.25x	1.59x
Pantheon Global Secondary Fund V	2015	2/26/2015	\$50,000,000	\$32,141,509	\$17,858,491	64%	(\$162,514)	\$8,412,603	\$35,099,082	\$43,511,685	\$11,532,690	19.3%	0.26x	1.35x
The Resolute Fund IV	2018	5/2/2018	\$20,000,000		\$20,000,000	0%		-	\$299,648	\$299,648				
Riverside Micro-Cap Fund V	2018	8/21/2018	\$10,000,000		\$10,000,000	0%		-	-	-				
Total VCERA Private Equity Program	-	5/21/2010	\$835,474,621	\$376,215,991	\$460,464,726	45%	\$73,843	\$157,836,256	\$343,454,921	\$501,291,177	\$124,884,207	14.3%	0.42x	1.33x

^{1.} Includes recycled/recallable distributions received to date.

Performance shown is based on 11/30/2018 recent statement of investments produced by Abbott Capital.



^{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.

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 (%)	Inception (%)	Inception Date
Total US Fixed Income	996,414,294	18.4	20.0	0.5	-0.2	-1.6	-1.2	2.2	2.1	6.6	5.6	Feb-94
BBgBarc US Aggregate TR Over/Under				<u>0.6</u> -0.1	<u>-0.2</u> 0.0	<u>-1.8</u> 0.2	<u>-1.3</u> 0.1	<u>1.3</u> 0.9	<u>2.0</u> 0.1	<u>3.7</u> 2.9	<u>5.1</u> 0.5	Feb-94
BlackRock U.S. Debt Fund	269,179,171	5.0		0.6	-0.2	-1.8	-1.3	1.4	2.1	3.7	4.9	Nov-95
BBgBarc US Aggregate TR Over/Under				<u>0.6</u> 0.0	<u>-0.2</u> 0.0	<u>-1.8</u> 0.0	<u>-1.3</u> 0.0	<u>1.3</u> 0.1	<u>2.0</u> 0.1	<u>3.7</u> 0.0	<u>4.9</u> 0.0	Nov-95
Western	290,533,899	5.4		0.6	-0.7	-2.8	-2.2	2.2	3.0	6.4	5.8	Dec-96
BBgBarc US Aggregate TR Over/Under				<u>0.6</u> 0.0	<u>-0.2</u> -0.5	<u>-1.8</u> -1.0	<u>-1.3</u> -0.9	<u>1.3</u> 0.9	<u>2.0</u> 1.0	<u>3.7</u> 2.7	<u>4.9</u> 0.9	Dec-96
Reams	307,405,768	5.7		0.7	-0.1	-0.7	-0.5	2.2	0.9	7.2	5.0	Sep-01
Reams Custom Index Over/Under				<u>0.2</u> 0.5	<u>1.0</u> -1.1	<u>2.1</u> -2.8	<u>2.3</u> -2.8	<u>1.4</u> 0.8	<u>1.0</u> -0.1	<u>3.2</u> 4.0	3.8 1.2	Sep-01
BBgBarc US Aggregate TR				0.6	-0.2	-1.8	-1.3	1.3	2.0	3.7	4.1	Sep-01
3-Month LIBOR + 3%				0.5	2.3	4.9	5.3	4.4	4.0	3.7	4.8	Sep-01
Loomis Strategic Alpha	46,925,857	0.9		-0.2	0.5	1.4	1.6	3.3	2.5		2.5	Jul-13
BBgBarc US Aggregate TR Over/Under				<u>0.6</u> -0.8	<u>-0.2</u> 0.7	<u>-1.8</u> 3.2	<u>-1.3</u> 2.9	<u>1.3</u> 2.0	<u>2.0</u> 0.5	<u>3.7</u>	<u>2.1</u> 0.4	Jul-13
3-Month LIBOR + 3%				0.5	2.3	4.9	5.3	4.4	4.0	3.7	3.9	Jul-13
Loomis Sayles Multi Strategy	82,369,599	1.5		0.0	0.4	-1.4	-1.0	4.3	3.9	9.8	6.0	Jul-05
Loomis Custom Index Over/Under				<u>0.2</u> -0.2	<u>-0.1</u> 0.5	<u>-1.1</u> -0.3	<u>-0.7</u> -0.3	<u>3.0</u> 1.3	<u>2.7</u> 1.2	<u>6.1</u> 3.7	<u>4.7</u> 1.3	Jul-05
BBgBarc US Govt/Credit TR				0.5	-0.3	-2.2	-1.7	1.4	2.0	3.7	3.8	Jul-05

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

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



TOTAL FUND PERFORMANCE DETAIL NET OF FEES

	Market Value (\$)	% of Portfolio	Policy %	1 Mo (%)	Fiscal YTD (%)	YTD (%)	1 Yr (%)	3 Yrs (%)	5 Yrs (%)	10 Yrs (%)	Inception (%)	Inception Date
Total Real Estate	426,285,321	7.9	7.0	0.0	1.6	5.2	7.4	7.0	9.0	3.4	7.8	Mar-94
NCREIF ODCE Net Over/Under				<u>0.0</u> 0.0	<u>1.9</u> -0.3	<u>5.8</u> -0.6	<u>7.7</u> -0.3	<u>7.8</u> -0.8	<u>9.7</u> -0.7	<u>4.6</u> -1.2	<u>8.1</u> -0.3	Mar-94
Prudential Real Estate	153,766,356	2.8		0.0	2.3	6.4	8.3	8.2	10.4	4.2	6.2	Jun-04
NCREIF ODCE Net Over/Under				<u>0.0</u> 0.0	<u>1.9</u> 0.4	<u>5.8</u> 0.6	<u>7.7</u> 0.6	<u>7.8</u> 0.4	<u>9.7</u> 0.7	<u>4.6</u> -0.4	<u>7.0</u> -0.8	Jun-04
NCREIF ODCE				0.0	2.1	6.5	8.7	8.8	10.7	5.6	8.0	Jun-04
UBS Real Estate	272,518,965	5.0		0.0	1.2	4.6	6.8	6.3	8.1	4.6	7.3	Mar-03
NCREIF ODCE Net				<u>0.0</u>	<u>1.9</u>	<u>5.8</u>	<u>7.7</u>	<u>7.8</u>	<u>9.7</u>	<u>4.6</u>	<u>7.2</u>	Mar-03
Over/Under				0.0	-0.7	-1.2	-0.9	-1.5	-1.6	0.0	0.1	
NCREIF ODCE				0.0	2.1	6.5	8.7	8.8	10.7	5.6	8.2	Mar-03
Total Real Assets	417,586,503	7.7	10.0	-0.3	-3.9	-3.8	-1.1	4.0	2.0		3.5	Apr-13
CPI + 4% (Unadjusted) Over/Under				<u>0.0</u> -0.3	<u>1.7</u> -5.6	<u>6.0</u> -9.8	<u>6.3</u> -7.4	<u>6.1</u> -2.1	<u>6.0</u> -4.0		<u>6.2</u> -2.7	Apr-13
Bridgewater All Weather Fund	303,877,915	5.6		0.0	-3.2	-3.4	-1.7	5.0	3.5		4.1	Aug-13
CPI + 5% (Unadjusted) Over/Under				<u>0.1</u> -0.1	<u>2.1</u> -5.3	<u>6.9</u> -10.3	<u>7.3</u> -9.0	<u>7.1</u> -2.1	<u>6.6</u> -3.1		<u>6.5</u> -2.4	Aug-13
Tortoise Energy Infrastructure	113,708,589	2.1		-1.0	-5.7	-5.0	0.5	1.5	-1.5		0.1	Apr-13
Overlay	94,213,106	1.7	0.0									
Parametric	39,068,088	0.7										
Abbott Capital Cash	55,145,018	1.0										

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 9/30/2018.



TOTAL FUND

		Cash Flow S	ummary				
				nding November 30	, 2018		
	Beginning Market Value	Contributions	Withdrawals	Net Cash Flow	Fees	Net Investment Change	Ending Market Value
Abbott Capital Cash	\$86,470,180	\$1,836,880	-\$33,304,941	-\$31,468,061	\$0	\$142,899	\$55,145,018
Abbott Secondary Opportunities	\$12,359,251	\$0	\$0	\$0	\$0	\$0	\$12,359,251
Adams Street Global Fund Series	\$162,441,613	\$214,807	-\$1,604,944	-\$1,390,137	\$0	-\$429,613	\$160,621,864
Battery Ventures XII	\$2,221,898	\$994,150	\$0	\$994,150	\$0	-\$58,050	\$3,157,998
BlackRock ACWI ex-U.S. Index	\$435,033,007	\$0	\$0	\$0	-\$38,233	\$3,762,279	\$438,795,286
BlackRock MSCI ACWI Equity Index	\$577,777,574	\$0	\$0	\$0	-\$21,215	\$8,681,837	\$586,459,411
Blackrock Russell 1000 Index	\$1,398,903,444	\$0	\$0	\$0	-\$12,312	\$28,511,167	\$1,427,414,611
Blackrock Russell 2500 Index	\$60,866,877	\$0	\$0	\$0	-\$1,034	\$1,171,952	\$62,038,830
BlackRock U.S. Debt Fund	\$267,562,193	\$0	\$0	\$0	-\$12,306	\$1,616,978	\$269,179,171
Bridgewater All Weather Fund	\$304,011,242	\$0	\$0	\$0	-\$96,641	-\$133,327	\$303,877,915
Buenaventure One, LLC	\$12,394,533	\$5,536,844	\$0	\$5,536,844	\$0	-\$1	\$17,931,376
Buenaventure Two, LLC	\$0	\$55,928	\$0	\$55,928	\$0	\$0	\$55,928
Clearlake Capital Partners V	\$2,432,220	\$693,532	\$0	\$693,532	\$0	\$477,131	\$3,602,883
CVI Credit Value Fund	\$7,776,776	\$1,500,000	\$0	\$1,500,000	\$0	-\$48,462	\$9,228,314
Drive Capital Fund	\$5,900,662	\$0	\$0	\$0	\$0	-\$88,682	\$5,811,980
ECI 11	\$0	\$394,065	\$0	\$394,065	\$0	\$0	\$394,065
GTCR Fund XII	\$3,783,933	\$0	\$0	\$0	\$0	\$0	\$3,783,933
Harbourvest	\$78,658,853	\$2,023,195	\$0	\$2,023,195	\$0	-\$136,255	\$80,545,793
Hexavest	\$87,123,637	\$0	\$0	\$0	-\$33,111	-\$291,131	\$86,832,506
Insight Venture Partners X	\$6,733,611	\$0	\$0	\$0	\$0	\$302,011	\$7,035,623
Loomis Sayles Multi Strategy	\$82,352,404	\$0	\$0	\$0	-\$26,426	\$17,195	\$82,369,599
Loomis Strategic Alpha	\$47,001,422	\$0	\$0	\$0	-\$15,642	-\$75,565	\$46,925,857



TOTAL FUND

			Month E	nding November 30	, 2018		
	Beginning Market Value	Contributions	Withdrawals	Net Cash Flow	Fees	Net Investment Change	Ending Market Value
Monroe Capital Fund III	\$0	\$1,107,227	\$0	\$1,107,227	\$0	\$0	\$1,107,227
Pantheon Global Secondary Funds	\$38,465,959	\$0	\$0	\$0	\$0	\$0	\$38,465,959
Parametric	\$38,700,721	\$0	\$0	\$0	-\$4,297	\$367,368	\$39,068,088
Prudential Real Estate	\$153,766,356	\$0	\$0	\$0	\$0	\$0	\$153,766,356
Reams	\$305,145,082	\$0	\$0	\$0	-\$44,676	\$2,260,686	\$307,405,768
Sprucegrove	\$213,062,054	\$0	\$0	\$0	-\$63,641	-\$1,582,885	\$211,479,168
Tortoise Energy Infrastructure	\$114,834,001	\$0	\$0	\$0	-\$59,223	-\$1,125,412	\$113,708,589
UBS Real Estate	\$272,518,965	\$0	\$0	\$0	\$0	\$0	\$272,518,965
Walter Scott	\$117,524,235	\$0	\$0	\$0	-\$82,008	\$2,741,586	\$120,265,821
Western	\$288,809,991	\$0	\$0	\$0	-\$48,817	\$1,723,908	\$290,533,899
Western U.S. Index Plus	\$203,066,054	\$0	\$0	\$0	-\$38,326	\$3,543,720	\$206,609,775
Total	\$5,387,698,749	\$14,356,628	-\$34,909,885	-\$20,553,257	-\$597,908	\$51,351,335	\$5,418,496,826



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- 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.
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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, 2018

Allan Martin, Partner
Anthony Ferrara, CAIA, Consultant
Michael Miranda, CFA, Senior Analyst





BOSTON | ATLANTA | CHARLOTTE | CHICAGO | DETROIT | LAS VEGAS | PORTLAND | SAN FRANCISCO

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 (%)	Inception (%)	Inception Date
Total Fund	5,191,285,680	100.0	100.0	-3.9	-7.7	-4.4	-3.6	6.7	5.0	9.5	7.7	Apr-94
Policy Index				<u>-4.4</u>	<u>-8.0</u>	<u>-4.7</u>	<u>-3.6</u>	<u>6.7</u>	<u>5.5</u>	<u>9.1</u>	<u>7.7</u>	Apr-94
Over/Under				0.5	0.3	0.3	0.0	0.0	-0.5	0.4	0.0	
60% MSCI ACWI (Net) / 40% FTSE WGBI				-3.3	-7.1	-5.3	-5.8	5.2	3.0	6.5		Apr-94
60% S&P 500 / 40% BBgBarc Aggregate				-4.7	-7.6	-3.3	-2.3	6.5	6.2	9.4	8.0	Apr-94
Total Fund ex Parametric	5,143,154,038	99.1		-4.1	-7.9	-4.7	-3.9	6.5	4.9	9.3	7.6	Apr-94
Total Fund ex Private Equity	4,816,486,241	92.8		-4.4	-8.4	-5.3	-4.8	6.2	4.6		7.4	Jan-12
Policy Index				<u>-4.4</u>	<u>-8.0</u>	<u>-4.7</u>	<u>-3.6</u>	<u>6.7</u>	<u>5.5</u>	<u>9.1</u>	<u>8.2</u>	Jan-12
Over/Under				0.0	-0.4	-0.6	-1.2	-0.5	-0.9		-0.8	
Total US Equity	1,540,549,958	29.7	28.0	-9.2	-14.0	-7.7	-5.0	9.2	8.1	13.6	8.8	Dec-93
Russell 3000				<u>-9.3</u>	<u>-14.3</u>	<u>-8.2</u>	<u>-5.2</u>	<u>9.0</u>	<u>7.9</u>	<u>13.2</u>	<u>9.1</u>	Dec-93
Over/Under				0.1	0.3	0.5	0.2	0.2	0.2	0.4	-0.3	
Western U.S. Index Plus	187,644,466	3.6		-9.2	-14.3	-7.4	-5.3	9.7	8.8	16.0	4.9	May-07
S&P 500				<u>-9.0</u>	<u>-13.5</u>	<u>-6.9</u>	<u>-4.4</u>	<u>9.3</u>	<u>8.5</u>	<u>13.1</u>	<u>6.6</u>	May-07
Over/Under				-0.2	-0.8	-0.5	-0.9	0.4	0.3	2.9	-1.7	
Blackrock Russell 1000 Index	1,297,680,697	25.0		-9.1	-13.8	-7.4	-4.7				4.9	May-17
Russell 1000				<u>-9.1</u>	<u>-13.8</u>	<u>-7.4</u>	<u>-4.8</u>	<u>9.1</u>	<u>8.2</u>	<u>13.3</u>	<u>4.8</u>	May-17
Over/Under				0.0	0.0	0.0	0.1				0.1	
Blackrock Russell 2500 Index	55,224,796	1.1		-11.0	-18.5	-14.6	-9.9				0.4	May-17
Russell 2500 Over/Under				<u>-11.0</u> 0.0	<u>-18.5</u> 0.0	<u>-14.7</u> 0.1	<u>-10.0</u> 0.1	<u>7.3</u>	<u>5.1</u>	<u>13.2</u>	<u>0.3</u> 0.1	May-17

Policy Index: Currently, 28% Russell 3000, 20% BBgBarc US Aggregate, 15% MSCI ACWI ex U.S., 10%MSCI ACWI, 10% Russell 3000 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.

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 (%)	Inception (%)	Inception Date
Total Non-US Equity	823,353,475	15.9	15.0	-4.0	-11.0	-10.2	-13.0	5.5	1.5	7.1	5.9	Mar-94
MSCI ACWI ex USA				<u>-4.5</u>	<u>-11.5</u>	<u>-10.8</u>	<u>-14.2</u>	<u>4.5</u>	<u>0.7</u>	<u>6.6</u>	<u>4.7</u>	Mar-94
Over/Under				0.5	0.5	0.6	1.2	1.0	8.0	0.5	1.2	
MSCI EAFE				-4.9	-12.5	-11.4	-13.8	2.9	0.5	6.3	4.3	Mar-94
MSCI ACWI ex USA NR LCL				-5.0	-10.9	-9.5	-10.6	4.2	4.1	7.8	-	Mar-94
MSCI EAFE NR LCL				-5.9	-12.2	-10.1	-11.0	2.6	3.8	7.5	4.4	Mar-94
BlackRock ACWI ex-U.S. Index	418,477,871	8.1		-4.6	-11.9	-11.5	-14.6	4.6	1.0	7.1	1.7	Mar-07
MSCI ACWI ex USA IMI				<u>-4.7</u>	<u>-11.9</u>	<u>-11.5</u>	<u>-14.8</u>	<u>4.4</u>	<u>0.8</u>	<u>7.0</u>	<u>1.4</u>	<i>Mar-07</i>
Over/Under				0.1	0.0	0.0	0.2	0.2	0.2 4.1	0.1	0.3	14 07
MSCI ACWI ex USA NR LCL	204,625,925	3.9		-5.0 -3.3	-10.9 -11.1	-9.5 -10.4	-10.6 -13.8	4.2 7.1	1.6	7.8 7.9	2.4 6.7	<i>Mar-07</i> Mar-02
Sprucegrove MSCI ACWI ex USA	204,020,920	3.9		-3.3 <u>-4.5</u>	-11.1 -11.5	-10.4	-13.0 -14.2	4.5	0.7	6.6	5.7	Mar-02
Over/Under				-4.0 1.2	<u>-11.5</u> 0.4	<u>-10.6</u> 0.4	<u>-14.2</u> 0.4	<u>4.5</u> 2.6	<u>0.7</u> 0.9	<u>0.0</u> 1.3	<u>5.7</u> 1.0	Mai-02
MSCI EAFE				-4.9	-12.5	-11.4	-13.8	2.9	0.5	6.3	5.2	Mar-02
MSCI ACWI ex USA NR LCL				-5.0	-10.9	-11. 4 -9.5	-10.6	4.2	4.1	7.8	4.6	Mar-02
MSCI EAFE NR LCL				-5.9	-12.2	-10.1	-11.0	2.6	3.8	7.5	3.8	Mar-02
Hexavest	84.046.977	1.6		-3.2	-8.4	-7.6	-11.3	2.7	0.4		2.9	Dec-10
MSCI EAFE	- 1,-12,-1			<u>-4.9</u>	-12.5	-11.4	-13.8	2.9	0.5	6.3	3.3	Dec-10
Over/Under				1.7	4.1	3.8	2.5	-0.2	-0.1		-0.4	
MSCI EAFE NR LCL				-5.9	-12.2	-10.1	-11.0	2.6	3.8	7.5	5.9	Dec-10
Walter Scott	116,202,702	2.2		-3.4	-9.6	-6.7	-7.1	7.3	3.5		4.8	Dec-10
MSCI ACWI ex USA				<u>-4.5</u>	<u>-11.5</u>	<u>-10.8</u>	<u>-14.2</u>	<u>4.5</u>	<u>0.7</u>	<u>6.6</u>	<u>2.3</u>	Dec-10
Over/Under				1.1	1.9	4.1	7.1	2.8	2.8		2.5	
MSCI ACWI ex USA NR LCL				-5.0	-10.9	-9.5	-10.6	4.2	4.1	7.8	5.2	Dec-10
MSCI EAFE				-4.9	-12.5	-11.4	-13.8	2.9	0.5	6.3	3.3	Dec-10
Total Global Equity	545,347,212	10.5	10.0	-7.0	-12.7	-8.9	-9.0	7.3	3.9	7.8	5.2	May-05
MSCIACWI				<u>-7.0</u>	<u>-12.8</u>	<u>-9.0</u>	<u>-9.4</u>	<u>6.6</u>	<u>4.3</u>	<u>9.5</u>	<u>6.0</u>	May-05
Over/Under				0.0	0.1	0.1	0.4	0.7	-0.4	-1.7	-0.8	
BlackRock MSCI ACWI Equity Index	545,347,212	10.5		-7.0	-12.7	-8.9	-9.0	7.1	4.7		8.4	Aug-12
MSCI ACWI				<u>-7.0</u>	<u>-12.8</u>	<u>-9.0</u>	<u>-9.4</u>	<u>6.6</u>	<u>4.3</u>	<u>9.5</u>	<u>8.0</u>	Aug-12
Over/Under				0.0	0.1	0.1	0.4	0.5	0.4		0.4	



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 (%)	Inception (%)	Inception Date
Total Private Equity	374,799,439	7.2	10.0	3.2	3.1	8.3	18.4	14.2	15.2		14.9	Jan-12
Russell 3000 + 3%				<u>-9.1</u>	<u>-13.6</u>	<u>-6.8</u>	<u>-2.4</u>	<u>12.2</u>	<u>11.1</u>	<u>16.5</u>	<u>15.8</u>	Jan-12
Over/Under				12.3	16.7	15.1	20.8	2.0	4.1		-0.9	
Cambridge Associates Global All PE (Qtr Lag)				3.4	3.4	8.1	16.6	13.6	12.8	11.1	13.2	Jan-12
Adams Street Global Fund Series	173,586,029	3.3		4.6	4.4	9.4	19.6	13.2	13.9		13.7	Jan-12
Russell 3000 + 3%				<u>-9.1</u>	<u>-13.6</u>	<u>-6.8</u>	<u>-2.4</u>	<u>12.2</u>	<u>11.1</u>	<u>16.5</u>	<u>15.8</u>	Jan-12
Over/Under				13.7	18.0	16.2	22.0	1.0	2.8		-2.1	
Harbourvest	84,171,685	1.6		3.1	2.7	10.1	22.7	17.2	19.7		19.9	Aug-13
Russell 3000 + 3%				<u>-9.1</u>	<u>-13.6</u>	<u>-6.8</u>	<u>-2.4</u>	<u>12.2</u>	<u>11.1</u>	<u>16.5</u>	<u>12.6</u>	Aug-13
Over/Under				12.2	16.3	16.9	25.1	5.0	8.6		7.3	
Pantheon Global Secondary Funds	39,845,681	0.8		2.9	2.9	8.7	17.3	18.9	15.8		13.4	Jan-12
Russell 3000 + 3%				<u>-9.1</u>	<u>-13.6</u>	<u>-6.8</u>	<u>-2.4</u>	<u>12.2</u>	<u>11.1</u>	<u>16.5</u>	<u>15.8</u>	Jan-12
Over/Under				12.0	16.5	15.5	19.7	6.7	4.7		-2.4	
Drive Capital Fund	5,811,980	0.1		0.0	-1.5	1.6	-2.5				-28.5	Sep-16
Russell 3000 + 3%				<u>-9.1</u>	<u>-13.6</u>	<u>-6.8</u>	<u>-2.4</u>	<u>12.2</u>	<u>11.1</u>	<u>16.5</u>	<u>11.3</u>	Sep-16
Over/Under				9.1	12.1	8.4	-0.1				-39.8	
Abbott Secondary Opportunities	12,219,909	0.2		3.9	3.9	26.0	26.0				26.0	Jan-18
Russell 3000 + 3%				<u>-9.1</u>	<u>-13.6</u>	<u>-6.8</u>	<u>-2.4</u>	<u>12.2</u>	<u>11.1</u>	<u>16.5</u>	<u>-2.4</u>	Jan-18
Over/Under				13.0	17.5	32.8	28.4				28.4	
CVI Credit Value Fund	10,718,254	0.2		-0.1	1.0	2.3	4.6				4.6	Jan-18
Russell 3000 + 3%				<u>-9.1</u>	<u>-13.6</u>	<u>-6.8</u>	<u>-2.4</u>	<u>12.2</u>	<u>11.1</u>	<u>16.5</u>	<u>-2.4</u>	Jan-18
Over/Under				9.0	14.6	9.1	7.0				7.0	
Clearlake Capital Partners V	4,658,973	0.1		0.0	17.6	32.9					29.7	Mar-18
Russell 3000 + 3%				<u>-9.1</u>	<u>-13.6</u>	<u>-6.8</u>	<u>-2.4</u>	<u>12.2</u>	<u>11.1</u>	<u>16.5</u>	<u>-4.2</u>	Mar-18
Over/Under				9.1	31.2	39.7					33.9	
Battery Ventures XII	3,157,998	0.1		0.0	-2.2	-8.0					-8.0	Apr-18
Russell 3000 + 3%				<u>-9.1</u>	<u>-13.6</u>	<u>-6.8</u>	<u>-2.4</u>	<u>12.2</u>	<u>11.1</u>	<u>16.5</u>	<u>-2.5</u>	Apr-18
Over/Under				9.1	11.4	-1.2					-5.5	

Please Note:

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



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 (%)	Inception (%)	Inception Date
Insight Venture Partners X	10,035,627	0.2		0.0	0.6	-5.7					-5.7	May-18
Russell 3000 + 3%				<u>-9.1</u>	<u>-13.6</u>	<u>-6.8</u>	<u>-2.4</u>	<u>12.2</u>	<u>11.1</u>	<u>16.5</u>	<u>-3.1</u>	May-18
Over/Under				9.1	14.2	1.1					-2.6	
GTCR Fund XII	3,569,355	0.1		-5.7	-5.7	-42.2					-42.2	Jun-18
Russell 3000 + 3%				<u>-9.1</u>	<u>-13.6</u>	<u>-6.8</u>	<u>-2.4</u>	<u>12.2</u>	<u>11.1</u>	<u>16.5</u>	<u>-6.0</u>	Jun-18
Over/Under				3.4	7.9	-35.4					-36.2	
Buenaventure One, LLC	17,820,574	0.3		-0.6	-0.8	-0.8					-0.8	Jul-18
Russell 3000 + 3%				<u>-9.1</u>	<u>-13.6</u>	<u>-6.8</u>	<u>-2.4</u>	<u>12.2</u>	<u>11.1</u>	<u>16.5</u>	<u>-6.8</u>	Jul-18
Over/Under				8.5	12.8	6.0					6.0	
ECI 11	1,241,760	0.0		-2.6							-2.6	Dec-18
Russell 3000 + 3%				<u>-9.1</u>	<u>-13.6</u>	<u>-6.8</u>	<u>-2.4</u>	<u>12.2</u>	<u>11.1</u>	<u>16.5</u>	<u>-9.1</u>	Dec-18
Over/Under				6.5							6.5	
Buenaventure Two, LLC	55,928	0.0		0.0							0.0	Dec-18
Russell 3000 + 3%				<u>-9.1</u>	<u>-13.6</u>	<u>-6.8</u>	<u>-2.4</u>	<u>12.2</u>	<u>11.1</u>	<u>16.5</u>	<u>-9.1</u>	Dec-18
Over/Under				9.1							9.1	
Monroe Capital Fund III	6,001,831	0.1		0.0							0.0	Dec-18
Russell 3000 + 3%				<u>-9.1</u>	<u>-13.6</u>	<u>-6.8</u>	<u>-2.4</u>	<u>12.2</u>	<u>11.1</u>	<u>16.5</u>	<u>-9.1</u>	Dec-18
Over/Under				9.1							9.1	
The Resolute Fund IV L.P	1,903,855	0.0										

Please Note: Private Equity performance is shown on a time-weighted return basis. Values are cash adjusted with current month cash flows. The Resolute Fund IV L.P funded 12/07/2018.



VENTURA COUNTY EMPLOYEES' RETIREMENT ASSOCIATION PRIVATE EQUITY LIMITED PARTNERSHIP PERFORMANCE

													Since Incept	ion
		Initial		Capital	Outstanding								Distributions	Total Value to
Fund Name	Vintage Year	Investment Date	Commitment	Called to Date ¹	Commitment 1	Call Ratio	Add'l Fees ²	Distributions to Date	Valuation	Total Value	Net Benefit	IRR	to Paid In Multiple (DPI)	Paid In Multiple (TVPI)
Abbott Secondary Opportunities, LP.	2017	12/21/2017	\$25,000,000	\$13,348,706	\$12,014,011	53%	_	\$2,625,000	\$12,219,907	\$14,844,907	\$1,496,201	23.4%	0.2x	1.11x
ABRY Partners IX	2019	12/6/2018	\$7,600,000		\$7,600,000	0%						-		-
Adams Street 2010 U.S. Fund	2010	5/21/2010	\$42,500,000	\$37,442,500	\$5,057,500	88%	\$15,213	\$25,869,869	\$36,820,450	\$62,690,319	\$25,232,606	14.1%	0.69x	1.67x
Adams Street 2010 Non-U.S. Dev. Mkts Fund	2010	5/21/2010	\$25,500,000	\$22,325,249	\$3,174,751	88%	\$1,589	\$15,702,344	\$17,545,522	\$33,247,866	\$10,921,028	11.5%	0.7x	1.49x
Adams Street 2010 Non-U.S. Emg Mkts Fund	2010	1/3/2011	\$8,500,000	\$7,633,000	\$867,000	90%	\$0	\$2,030,308	\$9,914,136	\$11,944,444	\$4,311,444	11.2%	0.27x	1.56x
Adams Street 2010 Direct Fund	2010	5/21/2010	\$8,500,000	\$8,046,100	\$453,900	95%	\$6,697	\$9,077,781	\$5,547,673	\$14,625,454	\$6,572,657	13.7%	1.13x	1.82x
Adams Street 2013 Global Fund	2013	6/27/2013	\$75,000,000	\$56,625,000	\$18,375,000	76%	\$10,728	\$8,075,792	\$70,923,287	\$78,999,079	\$22,363,351	11.7%	0.14x	1.4x
Adams Street 2016 Global Fund	2016	12/22/2016	\$60,000,000	\$28,200,000	\$31,800,000	47%	\$0	\$3,621,043	\$28,506,158	\$32,127,201	\$3,927,201	19.8%	0.13x	1.14x
Adams Street Co-Investment Fund IV A	2018	9/24/2018	\$30,000,000	\$4,567,808	\$25,500,000	15%	\$67,808		\$4,500,000	\$4,500,000	-\$67,808	-6.0%	-	0.99x
Astong VII	2019	12/17/2018	\$8,807,183		\$8,807,183	0%					-	-	-	
Battery Ventures XII	2018	2/1/2018	\$9,050,000	\$2,045,300	\$7,004,700	23%	\$0	\$0	\$1,916,991	\$1,916,991	-\$128,309	-16.3%	0x	0.94x
Battery Ventures XII Side Fund	2018	2/1/2018	\$5,050,000	\$1,267,550	\$3,782,450	25%	\$0	\$0	\$1,241,008	\$1,241,008	-\$26,542	-6.7%	0x	0.98x
Buenaventure One, LLC	2018	1/5/2018	\$57,172,500	\$18,355,590	\$38,816,910	32%	-	\$403,156	\$17,820,572	\$18,223,728	-	-2.6%	-	0.99x
CapVest Equity Partners IV	2018	7/11/2018	\$12,610,285		\$12,610,285	0%					-	-	-	
Clearlake Capital Partners V	2017	12/22/2017	\$9,950,000	\$3,976,011	\$5,974,799	40%	\$46,158	\$38,823	\$4,619,260	\$4,658,083	\$635,914	44.1%	0.01x	1.17x
CVI Credit Value Fund IV	2017	12/31/2017	\$30,000,000	\$10,500,000	\$19,500,000	35%		\$6,147	\$10,728,311	\$10,734,458	\$234,458	4.7%	0x	1.02x
Drive Capital Fund II	2016	9/1/2016	\$15,000,000	\$6,355,302	\$8,647,908	42%	\$3,210	\$0	\$5,811,980	\$5,811,980	-\$546,532	-7.9%	0x	0.91x
ECI 11	2018	7/5/2018	\$9,532,886	\$1,252,530	\$8,280,356	0%			\$955,863	\$955,863	-	-99.3%	-	0.76x
GGV Capital VII	2018	8/15/2018	\$10,160,000		\$10,160,000	0%		-			-		-	
GGV Capital VII Plus	2018	8/15/2018	\$2,540,000		\$2,540,000	0%		-			-		-	
GGV Discovery II	2018	8/15/2018	\$2,100,000		\$2,100,000	0%		-			-		-	
GTCR Fund XII	2017	9/29/2017	\$30,000,000	\$4,548,000	\$25,547,792	15%		\$264,502	\$2,754,397	\$3,018,899	-\$1,529,101	-76.6%	0.06x	0.66x
Insight Venture Partners X	2017	10/13/2017	\$25,000,000	\$10,250,000	\$14,750,000	41%		\$8,561	\$10,035,624	\$10,044,185	-\$205,815	-5.4%	0x	0.98x
HarbourVest - Dover Street VIII	2013	5/30/2013	\$67,500,000	\$60,834,954	\$6,750,000	90%	\$84,954	\$66,622,008	\$26,906,179	\$93,528,187	\$32,608,279	21.5%	1.1x	1.54x
HarbourVest - Dover Street IX	2016	12/16/2016	\$60,000,000	\$31,800,000	\$28,200,000	53%	\$0	\$7,282,016	\$31,808,721	\$39,090,737	\$7,290,737	33.8%	0.23x	1.23x
HarbourVest - PRTNS CO INVEST IV L.P.	2017	6/2/2017	\$30,000,000	\$22,428,591	\$7,768,149	75%	\$0	\$1,736,653	\$24,908,366	\$26,645,019	\$4,216,428	15.7%	0.08x	1.19x
HarbourVest - PRTNS CO INVEST V L.P.	2018	7/31/2018	\$35,000,000		\$35,000,000	0%	_						-	-
Hellman & Friedman Capital Partners IX	2018	9/28/2018	\$19,800,000		\$19,800,000	0%	-	-			-		-	-
M/C Partners VIII	2018	4/2/2018	\$10,000,000		\$10,000,000	0%	-	-	-		_		-	-
Monroe Capital Private Credit Fund III	2018	9/5/2018	\$25,000,000	\$6,250,000	\$18,750,000	0%		\$248,169	\$6,001,831	\$6,250,000	-	0.0%	-	1x
Pantheon Global Secondary Fund IV	2010	8/20/2010	\$15,000,000	\$9,960,000	\$5,040,000	66%	\$0	\$12,450,001	\$3,342,817	\$15,792,818	\$5,832,818	14.1%	1.25x	1.59x
Pantheon Global Secondary Fund V	2015	2/26/2015	\$50,000,000	\$33,566,509	\$16,433,491	67%	(\$162,514)	\$9,600,205	\$36,490,269	\$46,090,474	\$12,686,479	20.2%	0.29x	1.37x
The Resolute Fund IV	2018	5/2/2018	\$20,000,000	\$1,903,855	\$18,096,145	0%	- ,	_	\$2,047,844	\$2,047,844	_	203.1%	_	1.08x
Riverside Micro-Cap Fund V	2018	8/21/2018	\$10,000,000		\$10,000,000	0%	-	-			-		-	
Total VCERA Private Equity Program		5/21/2010	\$851.872.854	\$403.482.555	\$449.202.330	47%	\$73.843	\$165.662.378	\$373.367.166	\$539.029.544	\$135.825.494	14.8%	0.41x	1.34x

Includes recycled/recallable distributions received to date.

Performance shown is based on 12/31/2018 statement of investments produced by Abbott Capital.



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.

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 (%)	Inception (%)	Inception Date
Total US Fixed Income	1,012,479,844	19.5	20.0	1.6	1.3	1.4	0.0	3.1	2.5	6.3	5.7	Feb-94
BBgBarc US Aggregate TR Over/Under				<u>1.8</u> -0.2	<u>1.6</u> -0.3	<u>1.7</u> -0.3	<u>0.0</u> 0.0	<u>2.1</u> 1.0	<u>2.5</u> 0.0	<u>3.5</u> 2.8	<u>5.1</u> 0.6	Feb-94
BlackRock U.S. Debt Fund	274,110,828	5.3		1.8	1.6	1.7	0.0	2.1	2.6	3.6	5.0	Nov-95
BBgBarc US Aggregate TR Over/Under				<u>1.8</u> 0.0	<u>1.6</u> 0.0	<u>1.7</u> 0.0	<u>0.0</u> 0.0	<u>2.1</u> 0.0	<u>2.5</u> 0.1	<u>3.5</u> 0.1	<u>4.9</u> 0.1	Nov-95
Western	297,084,068	5.7		2.2	1.5	1.5	-0.6	3.1	3.5	6.2	5.9	Dec-96
BBgBarc US Aggregate TR Over/Under				<u>1.8</u> 0.4	<u>1.6</u> -0.1	<u>1.7</u> -0.2	<u>0.0</u> -0.6	<u>2.1</u> 1.0	<u>2.5</u> 1.0	3.5 2.7	<u>5.0</u> 0.9	Dec-96
Reams	311,909,321	6.0		1.5	1.5	1.3	0.7	3.0	1.1	6.6	5.1	Sep-01
Reams Custom Index Over/Under				<u>0.2</u> 1.3	<u>0.7</u> 0.8	<u>1.3</u> 0.0	<u>2.4</u> -1.7	<u>1.5</u> 1.5	<u>1.0</u> 0.1	<u>2.9</u> 3.7	3.8 1.3	Sep-01
BBgBarc US Aggregate TR 3-Month LIBOR + 3%				1.8 0.5	1.6 1.4	1.7 2.8	0.0 5.4	2.1 4.5	2.5 4.0	3.5 3.7	4.2 4.8	Sep-01 Sep-01
Loomis Strategic Alpha	46,548,032	0.9		-0.8	-1.1	-0.4	0.6	3.3	2.2		2.3	Jul-13
BBgBarc US Aggregate TR Over/Under				<u>1.8</u> -2.6	<u>1.6</u> -2.7	<u>1.7</u> -2.1	<u>0.0</u> 0.6	<u>2.1</u> 1.2	<u>2.5</u> -0.3	<u>3.5</u>	<u>2.4</u> -0.1	Jul-13
3-Month LIBOR + 3%				0.5	1.4	2.8	5.4	4.5	4.0	3.7	4.0	Jul-13
Loomis Sayles Multi Strategy	82,827,595	1.6		0.5	-0.1	1.0	-0.8	5.2	3.9	8.9	6.0	Jul-05
Loomis Custom Index Over/Under				<u>0.6</u> -0.1	<u>-0.3</u> 0.2	<u>0.4</u> 0.6	<u>-0.6</u> -0.2 -0.4	3.6 1.6 2.2	2.8 1.1 2.5	<u>5.6</u> 3.3 3.5	<u>4.7</u> 1.3 3.9	Jul-05
BBgBarc US Govt/Credit TR				1.9	1.5	1.5	-0.4	2.2	2.0	3.5	3.9	Jul-05

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

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



TOTAL FUND PERFORMANCE DETAIL NET OF FEES

	Market Value (\$)	% of Portfolio	Policy %	1 Mo (%)	3 Mo (%)	Fiscal YTD (%)	1 Yr (%)	3 Yrs (%)	5 Yrs (%)	10 Yrs (%)	Inception (%)	Inception Date
Total Real Estate	426,285,321	8.2	7.0	0.0	0.0	1.6	5.2	6.0	8.4	5.1	7.7	Mar-94
NCREIF ODCE Net				<u>1.5</u>	<u>1.5</u>	<u>3.4</u>	<u>7.4</u>	<u>7.3</u>	<u>9.4</u>	<u>6.0</u>	<u>8.1</u>	Mar-94
Over/Under				-1.5	-1.5	-1.8	-2.2	-1.3	-1.0	-0.9	-0.4	
Prudential Real Estate	153,766,356	3.0		0.0	0.0	2.3	6.4	7.2	9.7	5.9	6.2	Jun-04
NCREIF ODCE Net				<u>1.5</u>	<u>1.5</u>	<u>3.4</u>	<u>7.4</u>	<u>7.3</u>	<u>9.4</u>	<u>6.0</u>	<u>7.1</u>	Jun-04
Over/Under				-1.5	-1.5	-1.1	-1.0	-0.1	0.3	-0.1	-0.9	
NCREIF ODCE				1.8	1.8	3.9	8.3	8.2	10.4	7.0	8.1	Jun-04
UBS Real Estate	272,518,965	5.2		0.0	0.0	1.2	4.6	5.4	7.7	5.6	7.2	Mar-03
NCREIF ODCE Net				<u>1.5</u>	<u>1.5</u>	<u>3.4</u>	<u>7.4</u>	<u>7.3</u>	<u>9.4</u>	<u>6.0</u>	<u>7.3</u>	Mar-03
Over/Under				-1.5	-1.5	-2.2	-2.8	-1.9	-1.7	-0.4	-0.1	
NCREIF ODCE				1.8	1.8	3.9	8.3	8.2	10.4	7.0	8.3	Mar-03
Total Real Assets	402,539,646	7.8	10.0	-3.6	-7.9	-7.3	-7.3	3.5	1.1		2.8	Apr-13
CPI + 4% (Unadjusted)				<u>0.0</u>	<u>0.5</u>	<u>1.7</u>	<u>6.0</u>	<u>6.1</u>	<u>5.6</u>		<u>6.1</u>	Apr-13
Over/Under				-3.6	-8.4	-9.0	-13.3	-2.6	-4.5		-3.3	
Bridgewater All Weather Fund	298,783,262	5.8		-1.7	-4.5	-4.8	-5.0	5.3	3.2		3.7	Aug-13
CPI + 5% (Unadjusted)				<u>0.1</u>	<u>0.7</u>	<u>2.2</u>	<u>7.0</u>	<u>7.1</u>	<u>6.6</u>		<u>6.4</u>	Aug-13
Over/Under				-1.8	-5.2	-7.0	-12.0	-1.8	-3.4		-2.7	
Tortoise Energy Infrastructure	103,756,384	2.0		-8.8	-16.3	-14.0	-13.3	-1.0	-4.0		-1.5	Apr-13
Tortoise MLP Index				<u>-9.6</u>	<u>-16.7</u>	<u>-12.4</u>	<u>-13.4</u>	<u>-0.4</u>	<u>-6.8</u>		<u>-4.9</u>	Apr-13
Over/Under				0.8	0.4	-1.6	0.1	-0.6	2.8		3.4	
Overlay	65,930,785	1.3	0.0									
Parametric	48,131,642	0.9										
Abbott Capital Cash	17,799,143	0.3										

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 9/30/2018.



TOTAL FUND

		Cash Flow S	ummary				
			Month E	nding December 31	, 2018		
	Beginning Market Value	Contributions	Withdrawals	Net Cash Flow	Fees	Net Investment Change	Ending Market Value
Abbott Capital Cash	\$55,145,018	\$5,123,056	-\$42,552,246	-\$37,429,190	\$0	\$83,316	\$17,799,143
Abbott Secondary Opportunities	\$12,359,251	\$0	-\$625,000	-\$625,000	\$0	\$485,658	\$12,219,909
Adams Street Global Fund Series	\$160,621,864	\$7,050,000	-\$1,538,654	\$5,511,346	\$0	\$7,452,820	\$173,586,029
Battery Ventures XII	\$3,157,998	\$0	\$0	\$0	\$0	\$0	\$3,157,998
BlackRock ACWI ex-U.S. Index	\$438,795,286	\$0	\$0	\$0	-\$36,540	-\$20,317,415	\$418,477,871
BlackRock MSCI ACWI Equity Index	\$586,459,411	\$0	\$0	\$0	-\$19,845	-\$41,112,200	\$545,347,212
Blackrock Russell 1000 Index	\$1,427,414,611	\$0	\$0	\$0	-\$11,231	-\$129,733,915	\$1,297,680,697
Blackrock Russell 2500 Index	\$62,038,830	\$0	\$0	\$0	-\$920	-\$6,814,034	\$55,224,796
BlackRock U.S. Debt Fund	\$269,179,171	\$0	\$0	\$0	-\$12,470	\$4,931,657	\$274,110,828
Bridgewater All Weather Fund	\$303,877,915	\$0	\$0	\$0	-\$95,580	-\$5,094,653	\$298,783,262
Buenaventure One, LLC	\$17,931,376	\$0	\$0	\$0	\$0	-\$110,802	\$17,820,574
Buenaventure Two, LLC	\$55,928	\$0	\$0	\$0	\$0	\$0	\$55,928
Clearlake Capital Partners V	\$3,602,883	\$1,056,089	\$0	\$1,056,089	\$0	\$1	\$4,658,973
CVI Credit Value Fund	\$9,228,314	\$1,500,000	\$0	\$1,500,000	\$0	-\$10,060	\$10,718,254
Drive Capital Fund	\$5,811,980	\$0	\$0	\$0	\$0	\$0	\$5,811,980
ECI 11	\$394,065	\$858,465	\$0	\$858,465	\$0	-\$10,770	\$1,241,760
GTCR Fund XII	\$3,783,933	\$0	\$0	\$0	\$0	-\$214,577	\$3,569,355
Harbourvest	\$80,545,793	\$5,472,491	-\$4,368,806	\$1,103,685	\$0	\$2,522,207	\$84,171,685
Hexavest	\$86,832,506	\$0	\$0	\$0	-\$32,182	-\$2,785,530	\$84,046,977
Insight Venture Partners X	\$7,035,623	\$3,000,000	\$0	\$3,000,000	\$0	\$4	\$10,035,627
Loomis Sayles Multi Strategy	\$82,369,599	\$0	\$0	\$0	-\$26,540	\$457,996	\$82,827,595
Loomis Strategic Alpha	\$46,925,857	\$0	\$0	\$0	-\$15,516	-\$377,825	\$46,548,032



TOTAL FUND

	Month Ending December 31, 2018										
	Beginning Market Value	Contributions	Withdrawals	Net Cash Flow	Fees	Net Investment Change	Ending Market Value				
Monroe Capital Fund III	\$1,107,227	\$5,000,000	-\$105,396	\$4,894,604	\$0	\$0	\$6,001,831				
Pantheon Global Secondary Funds	\$38,465,959	\$262,603	-\$12,603	\$250,000	\$0	\$1,129,722	\$39,845,681				
Parametric	\$39,068,088	\$0	\$0	\$0	-\$5,053	\$9,063,554	\$48,131,642				
Prudential Real Estate	\$153,766,356	\$0	\$0	\$0	\$0	\$0	\$153,766,356				
Reams	\$307,405,768	\$0	\$0	\$0	-\$45,239	\$4,503,552	\$311,909,321				
Sprucegrove	\$211,479,168	\$0	\$0	\$0	-\$62,214	-\$6,853,243	\$204,625,925				
The Resolute Fund IV L.P	\$0	\$1,903,855	\$0	\$1,903,855	\$0	\$0	\$1,903,855				
Tortoise Energy Infrastructure	\$113,708,589	\$0	\$0	\$0	-\$54,040	-\$9,952,205	\$103,756,384				
UBS Real Estate	\$272,518,965	\$0	\$0	\$0	\$0	\$0	\$272,518,965				
Walter Scott	\$120,265,821	\$0	\$0	\$0	-\$79,976	-\$4,063,118	\$116,202,702				
Western	\$290,533,899	\$0	\$0	\$0	-\$49,636	\$6,550,168	\$297,084,068				
Western U.S. Index Plus	\$206,609,775	\$0	\$0	\$0	-\$35,956	-\$18,965,309	\$187,644,466				
Total	\$5,418,496,826	\$31,226,559	-\$49,202,705	-\$17,976,146	-\$582,937	-\$209,235,000	\$5,191,285,680				

The Resolute Fund IV L.P funded 12/07/2018.



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.





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

SUBJECT: REQUEST FOR BOARD AUTHORIZATION FOR RETIREMENT ADMINISTRATOR TO EXECUTE OFFICE LEASE EXTENSION

Dear Board Members:

As the Board is aware, for some time staff has been working with CBRE on securing a new long-term lease for office space. While the process is progressing, pricing and negotiations are still in process.

VCERA's current office lease extension expires at the end of March 2019. Staff requests authorization to execute an extension of up to 6 months in order to complete negotiations. The office search committee appointed by the Board will ultimately bring a recommendation to the Board for final consideration, once all pricing plans and negotiations are thoroughly reviewed by the committee and a formal proposal is presented to the full Board for consideration.

<u>RECOMMENDED ACTION</u>: AUTHORIZE RETIREMENT ADMINISTRATOR TO EXTEND CURRENT OFFICE LEASE UP TO 6 MONTHS.

VCERA staff will be pleased to respond to any questions at the January 28, 2019 business meeting.

Sincerely,

Linda Webb



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

SUBJECT: CONTINUED ENGAGEMENT OF HANSON BRIDGETT FOR TAX COMPLIANCE COUNSEL

Dear Board Members:

Background: History and Current Status

In 2010, VCERA engaged Hanson Bridgett LLP to provide legal services and to provide advice and counsel on tax compliance issues in connection with any potential filing for a determination letter application with the Internal Revenue Service. With Hanson Bridgett's help, VCERA filed an application with the IRS for plan tax determination in January 2011 and was provided a favorable determination letter in January 2014.

In addition to filing for tax determination, VCERA also applied to participate in the IRS' Voluntary Compliance Program (VCP), which permits pension plans to proactively propose revisions or corrections to plan documents and/or procedures to maintain favorable tax determination. As part of the favorable ruling letter, the IRS identified areas of non-compliance. Hanson Bridgett assisted with this process as well, and staff brought the resulting Model Regulations to the Board for adoption at the November 2015 business meeting.

In October of 2015, the Board of Retirement approved a new engagement of Hanson Bridgett for tax compliance counsel for up to \$25,000. This amount has been sufficient for more than 3 years, during which time Hanson Bridgett provided continued guidance as needed for implementation of tax regulations in VCERA's pension administration system (V3), as well as issues related to AB 1291, 415 annual limits, cleanup resolution of 414(u), and most recently, and guidance on VCERA's adopted 401(a)9 regulation which staff anticipates bringing to the Board for action in February.

<u>RECOMMENDED ACTION</u>: AUTHORIZE RETIREMENT ADMINISTRATOR TO ENGAGE HANSON BRIDGETT, LLC FOR TAX-RELATED LEGAL SERVICES, FOR AN AMOUNT NOT TO EXCEED \$25,000.

VCERA staff will be pleased to respond to any questions at the January 28, 2019 business meeting.

Sincerely,

Linda Webb



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

SUBJECT: RECOMMENDATION TO POSTPONE BOARD REVIEW OF FEBRUARY DISABILITY

CASES FROM FEBRUARY 11TH TO FEBRUARY 25TH

Dear Board Members:

As the Board is aware, the February disability meeting is scheduled for February 11th. County of Ventura Risk Management has indicated that both Ms. Laveau and Mr. Pode are unavailable on that date due to a conflicting commitment. Risk Management has respectfully requested that the cases be heard at the February business meeting.

Staff has no objection to accommodating this request and believes the cases can be heard at the business meeting if that is the Board's direction.

<u>RECOMMENDED ACTION</u>: CANCEL DISABILITY MEETING SCHEDULED FOR FEBRUARY 11, 2019 AND DIRECT STAFF TO BRING DISABILITY CASES TO THE BOARD FOR CONSIDERATION AT THE FEBRUARY 25, 2019 BUSINESS MEETING.

VCERA staff will be pleased to respond to any questions at the January 28, 2019 business meeting.

Sincerely,

Linda Webb



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

SUBJECT: AUTHORIZATION FOR FISCAL MANAGER KAREN SCANLAN TO ATTEND THE 2019

DYNAMICS SL USER GROUP (DSLUG) CONFERENCE APRIL 15TH - 18TH IN

ANAHEIM, CALIFORNIA

Dear Board Members:

Staff recommends authorization for Fiscal Manager, Karen Scanlan to attend the DSLUG conference in Anaheim, California, April 15th - 18th. Dynamics SL is the financial accounting system software used by VCERA and this conference will provide opportunities to gain knowledge of the system and network with other users of this financial software. The estimated cost to attend is \$1800, including registration, hotel, meals and other related expenses. Sufficient funds are in the current adopted budget for this request.

VCERA staff will be pleased to respond to any questions you may have on this matter at the January 28, 2019 business meeting.

Sincerely,

Linda Webb

DSLUG Conference | April 15-18, 2019 | Anaheim, CA - DSLUG Conference



https://www.dslugconference.com/home

Join your Dynamics SL community in Anaheim

April 15-18, 2019 | Anaheim, CA

Registration is now open! Claim your seat.

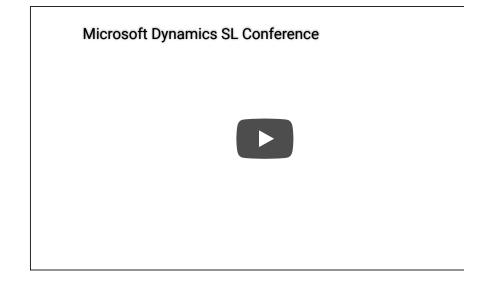
REGISTER NOW

Come to Learn, Stay to Grow

Join your Dynamics SL peers and subject matter experts in sunny Anaheim, CA at the DSLUG Conference – a powerhouse of exchange and energy with over 120 sessions that will boost your expertise and kick your business into high gear. Attendees will have direct access to content not found elsewhere.

Attend DSLUG and look forward to:

- Exceptional Dynamics SL education Attendees will have access to technical and functional training designed for all product roles, industries, and experience levels in a focused environment that you can utilize year-round.
- Engaging, dedicated networking opportunities Participate in countless networking opportunities to create lasting relationships by connecting in-person with other
 Dynamics SL professionals, partners and Microsoft team members.
- Interaction with industry experts, Microsoft, and vendors – Learn about forthcoming product feature updates, explore solutions, and gain valuable insights that will bring big returns for years to come.



We're looking forward to seeing you in Anaheim for the premier annual Dynamics SL learning and networking event!

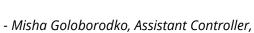


Make the most of your time at DSLUG Conference and take advantage of expert-led Academy training!

VIEW CLASSES

The DSLUG Conference provides education opportunities for all "comfort levels" of SL users, whether you just logged in a month ago or 5 years ago.

You talk, you network and quickly realize you share a lot in common with people literally from around the world.



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Showcase your products and services while building your brand recognition.

Become a DSLUG sponsor.

VIEW OPPORTUNITIES



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2019 DSLUG Conference

A Accounting/Finance	B BI & Reporting	D Developer	T Distribution & Service	G General	I IT & Technical	K Keynote	P Project/Payroll
S Sponsor N Spons	or DD Q SQL						
ARRIVAE - MONDAY							

APRIL 15 • MONDAY		
1:00pm – 3:00pm	N Full Circle Budget - Simplify and Automate Excel Budgeting for General Ledger and Project Controller Speakers: Matthew Adamowicz	ТВА
3:00pm – 5:00pm	N Electronic Payments & More – Dive into the eBanking Suite from SK Global Software Speakers: Tim Kahne	ТВА

A Accounting/Finance	B BI & Reporting	D Developer	T Distribution & Service	G General	I IT & Technical	K Keynote	P Project/Payroll
S Sponsor N Spon	sor DD Q SQL						

APRIL 16 • TUESDAY		
8:15am – 9:45am	K Opening General Session: DSLUG Community & Dynamics SL Roadmap Speakers: Brandon Hoog	Platinum Ballroon
10:15am – 11:15am	A Accounts Payable Management Best Practices	TBA
10:15am – 11:15am	B Can You Feel the (Excel) Love Tonight? - Advanced Excel Reporting	TBA
10:15am – 11:15am	B You've Got a Friend in Me - BI in DSL: From Developer to Manager to Executive Speakers: David Vinson	TBA
10:15am – 11:15am	T Did it stay or did it go? Tracking Service transactions from creation of a Customer/Site through to General Ledger	TBA
10:15am – 11:15am	Transaction Import and Object Model	TBA
10:15am – 11:15am	P Configuring Time and Expense for Projects	TBA
10:15am – 11:15am	P Reconciling Projects to the GL	TBA
10:15am – 11:15am	Q SQL 101 - Basic SQL queries for beginners	TBA
11:30am – 12:30pm	A Best Practices for Security	TBA
11:30am – 12:30pm	B One Jump Ahead - Management Reporter for avid Financial Report People Speakers: Derrick Krebs	TBA
11:30am – 12:30pm	D Simple Screen Customizations You Can't Live Without	TBA
11:30am – 12:30pm	T What to do, what to do: Inventory Management or "How to Handle the Weird Stuff"	TBA
11:30am – 12:30pm	G What's Coming Next in Dynamics SL	TBA
11:30am – 12:30pm	P Flexible Billings: Understanding Flexible Billings Speakers: Donna Hurst	TBA
11:30am – 12:30pm	Q SQL 201 - Intermediate SQL statements Speakers: Michael Lee	TBA
1:45pm – 2:45pm	S Get the Most Out of SL with Integrations to Increase Your Productivity - Presented by Solomon Cloud Solutions Speakers: Pat Gibson	TBA

1:45pm – 2:45pm	S Gulfstream's Barcode Gateway - Distribution & Inventory! Do you know where your inventory is? Speakers: Grant J Ubell	TBA
3:00pm – 4:30pm	A Automated AP and Paperless Shootout	TBA
3:00pm – 4:30pm	A Budgets & Forecasting Using SL Data	TBA
3:00pm – 4:30pm	B Be Our Guest - Intro to Dynamics SL Reporting Speakers: Anthony Rice	ТВА
3:00pm – 4:30pm	B Down the Rabbit Hole - Management Reporter Tips & Tricks Speakers: Derrick Krebs	ТВА
3:00pm – 4:30pm	Top Tricks and Tips from the Distribution Experts of OM: From entry to processing	TBA
3:00pm – 4:30pm	Web Apps: Deployment Guide	TBA
3:00pm – 4:30pm	P Dynamics SL Web Apps Overview	TBA
3:00pm – 4:30pm	Q How SL uses SQL (stored procedures, views, security, web apps, QQ)	TBA
4:45pm – 5:45pm	A Accounts Receivable Best Practices	TBA
4:45pm – 5:45pm	B A Whole New World - Reporting in DSL - Cloud vs OnPrem	TBA
4:45pm – 5:45pm	B Put those Crystal Reports back where they came from, or so help me! - Crystal Reports 101	TBA
4:45pm – 5:45pm	D Integrating DSL into and out of other systems	TBA
4:45pm – 5:45pm	T That needs to be reconciled?: Review the methods required to reconcile inventory to GL Speakers: Dermot Bowden	ТВА
4:45pm – 5:45pm	SL Hosting - In House vs Private Cloud vs Azure Speakers: James Bowman	ТВА
4:45pm – 5:45pm	P Intro to Project/Payroll Speakers: Tony Murnion	ТВА
4:45pm – 5:45pm	Q SQL Toolbox: sharing SQL code	TBA

1/24/2019

2019 DSLUG Conference: Print Schedule

Accounting/Finance	B BI & Reporting D Developer T Distribution & Service G General I IT & Technical K Keynote P Pro	oject/Payroll
S Sponsor N Spor	nsor DD Q SQL	
APRIL 17 • WEDNESD	DAY	
8:30am – 10:00am	A Making SL Your OWN - Financial Perspective Speakers: Malissa Oberle	ТВА
8:30am – 10:00am	A Management Reporter Advanced for Finance Professionals	TBA
8:30am – 10:00am	B Be Our Guest - Intro to Dynamics SL Reporting - Repeat Speakers: Anthony Rice	ТВА
8:30am – 10:00am	B Hakuna Matata - Power Bl In Depth for Accountants and Others Speakers: JR Price	ТВА
8:30am – 10:00am	D Web Apps: Customizing	TBA
8:30am – 10:00am	Power Apps & Flow 101	TBA
8:30am – 10:00am	P Best Practices for Managing a Payroll Department	TBA
8:30am – 10:00am	P Demystifying Allocations in Dynamics SL Project Speakers: ? Jeffrey Vonasek	ТВА
8:30am – 10:00am	Q SQL 301 - Advanced SQL queries	TBA
10:15am – 11:45am	A Dynamics SL Bootcamp Speakers: Paige Rodgers	ТВА
10:15am – 11:45am	A Excel-Based Reporting for Financial Professionals	TBA
10:15am – 11:45am	B The Bear Necessities - Quick Query Hints & Tips Speakers: Randy Andrews	ТВА
10:15am – 11:45am	B When You Wish Upon a Star - Architecting DSL for Reporting - Cloud vs OnPrem Speakers: JJ Seely - NuScale	ТВА
10:15am – 11:45am	D Let Custom Menus Work for You	TBA
10:15am – 11:45am	T Purchasing 2.0: A higher end look into the Purchasing Module	TBA
10:15am – 11:45am	Power Apps & Flow 201	TBA
10:15am – 11:45am	P Flexible Billings-Diving Deeper Speakers: Donna Hurst	ТВА

10:15am – 11:45am	Q SQL 401 - Expert SQL queries	ТВА
1:15pm – 2:15pm	S PaperSave Voucher Automation and Beyond Speakers: Tammy Bower	ТВА
1:15pm – 2:15pm	S Purchasing and AP Automation the PN3 Way Speakers: Derrick Hicks	ТВА
1:15pm – 2:15pm	S XL Statements: Financial Reporting Designed for SL Speakers: Jonathan Van Houtte	ТВА
2:30pm – 3:30pm	A GL, AP, AR Closing Practices - Month End & Year End Speakers: Dermot Bowden	ТВА
2:30pm – 3:30pm	A How to Achieve Executive Buy-in Speakers: Tim Young & Rob Guerriero	ТВА
2:30pm – 3:30pm	B 101 Dalmations Spreadmarts - Wrangling your Data to your advantage Speakers: David Vinson	ТВА
2:30pm – 3:30pm	D Common Customization Issues Speakers: Paige Rodgers	ТВА
2:30pm – 3:30pm	T Managing Service Users from an IT Perspective: Resolving data and processing issues related to Service Series Transactions.	TBA
2:30pm – 3:30pm	G Web Apps: Troubleshooting & Diagnostics	TBA
2:30pm – 3:30pm	Application Server - How to Automate Your World	TBA
2:30pm – 3:30pm	P Best Practices for Setup of Project, Tasks and Subtasks	TBA
2:30pm – 3:30pm	Q DBA Roundtable	TBA
4:00pm – 5:00pm	A Financial Statement Boot Camp Using Management Reporter	TBA
4:00pm – 5:00pm	A Project Reporting for Finance Professionals	TBA
4:00pm – 5:00pm	B Bibbidi Bobbidi Boo - Power Bl Connected to Dynamics SL	TBA
4:00pm – 5:00pm	B The Data never bothered me anyway! - Which BI tool to use?	TBA
4:00pm – 5:00pm	D What have you customized? Speakers: Dwight Neate	ТВА
4:00pm – 5:00pm	T Modernize your inventory system: What does SL do vs 3rd party	TBA
4:00pm – 5:00pm	P Excel-Based Reporting for Projects	TBA

1/24/2019 2019 DSLUG Conference: Print Schedule 4:00pm - 5:00pm P How to Successfully Configure and Use Dynamics SL for a Government Contractor TBA Speakers: Steve Toth 4:00pm - 5:00pm Q Intermediate level DBA topics TBA **APRIL 18 • THURSDAY** 10:00am - 11:00am A Cash Manager Functionality Tips & Tricks TBA 10:00am - 11:00am Managing your Fixed Assets TBA 10:00am - 11:00am B Colors of the Wind - What is Data Visualization? TBA Speakers: Jeffrey Goldstein 10:00am - 11:00am D Customizations Configuration for Control & Security TBA 10:00am - 11:00am To Count or not to count, that is the question: The ins and outs of doing a physical count correctly TBA 10:00am - 11:00am G Prepare for your SL2018 Upgrade TBA **Project Series Reporting and Analysis** 10:00am - 11:00am TBA 10:00am - 11:00am Q Disaster recovery TBA 11:15am - 12:15pm A GL Reconciling Sub ledgers TBA 11:15am - 12:15pm B Part of Your World - Dynamics SL Real World Reporting TBA B You've Got a Friend in Me - BI in DSL: From Developer to Manager to Executive 11:15am - 12:15pm TBA Speakers: David Vinson 11:15am - 12:15pm T Service Dispatch Series A to Z: Any and All Things Service Dispatch related - The Good, the Bad, the Ugly TBA Speakers: Mary Reiter 11:15am - 12:15pm **Best Practices for VM Configurations for Dynamics SL** TBA 11:15am - 12:15pm **Project Controller Setup & Implementation for Beginners** TBA Speakers: Linda Weiler 11:15am - 12:15pm Q DBA topics: maintaining databases TBA





November 16, 2018

To: SACRS Trustees & SACRS Administrators/CEO's

From: Ray McCray, SACRS Immediate Past President, Nominating Committee Chair

SACRS Nominating Committee

SACRS Board of Director Elections 2019-2020 Elections Re:

SACRS BOD 2019-2020 election process will begin January 2019. Please review the following timeline and distribute to your Board of Trustees.

DEADLINE	DESCRIPTION
March 1, 2019	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, 2019	The Nominating Committee will report a final ballot to each
	regular member County Retirement System prior to March 25
May 10, 2019	Nomination Committee to conduct elections during the SACRS
	Business Meeting at the Spring Conference (May 7-10, 2019)
May 10, 2019	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.

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

Providing insight, Fostering oversight,



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 these 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 Nomination Committee no later than the cut-off dates listed in the schedule.

The elections will be held at the SACRS Spring Conference May 7-10, 2019 at the Resort at Squaw Creek, Lake Tahoe, CA. Elections will be held during the Annual Business meeting on Friday, May 10, 2019.

If you have any questions, please contact me at Ray McCray, raym1@sbcglobal.net or (209) 471- 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

Providing insight. Fostering oversight.



SACRS Nomination Submission Form SACRS Board of Directors Elections 2019-2020

All interested candidates must complete this form and submit along with a letter of intent. Both the form and the letter of intent must be submitted no later than March 1, 2019. Please submit to the Nominating Committee Chair at raym1@sbcglobal.net AND 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	
(Please include – Phone	
Number, Email Address	
and Mailing Address)	
Name of Retirement System Candidate	
Currently Serves On	
Current Position On	
Candidates Retirement	
Board (Chair, Alternate, Retiree, General Elected,	
Etc)	
Applying for SACRS	o President
Board of Directors Position (select only one)	Vice PresidentTreasurer
rosition (select only one)	o Secretary
	Regular Member
Brief Bio	



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 2018

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 2018. In some cases, this report contains not only activity of the Retirement Administrator, but of the VCERA staff as a whole.

General

VCERA's new Chief Technology Officer (CTO), Leah Oliver, began work on November 5th, the culmination of a long process of work to establish an acceptable job classification, and to identify the best candidate. This demanded a considerable amount of time in the month of October.

VCERA's fiscal staff spent considerable time working with the system auditor, completing the annual Comprehensive Annual Financial Report (CAFR) and submitting it to the Government Finance Officers Association (GFOA).

Staff continued to meet regularly with the Auditor-Controller's office on outstanding data corrections, and also collaborated with A-C staff on a reporting challenge associated with a previous schedule used for County fire dispatchers. The resolution of this item is still pending.

Considerable progress was made in the quarter in the areas of communications and member service, with our new Communications Officer Josiah Vencel moving several projects forward significantly. The *VCERA Vibes* newsletter made its debut, and the first edition was mailed to members. We look forward to it being an ongoing source of valuable information for our membership. Further, all text and content on the VCERA website has been reviewed, and when needed, modified and clarified. This process should be completed in these first months of 2019.

Q4 2018 Report Page 2

The process for issuing annual member benefit statements will be changing in 2019, as our staff intends to perform considerable work internally that was formerly outsourced. This will result in a significantly lower cost, and more control over certain aspects of the process. This was an area of focus during the quarter, and staff met with County Human Resources on working through the transition details.

In the area of disability retirement, staff completed the form designed for an employer-filed application for disability on behalf of a member when circumstances warrant. Throughout the quarter, staff continued to work through procedural and legal aspects of several unique cases that have come before the Board recently.

Staff continued to work closely with CBRE and the real estate committee on securing office space for VCERA in anticipation of the conclusion of our current office lease.

VCERA staff has had ongoing interest in adopting a 9/80 work schedule, which was discussed extensively in the 4th quarter. VCERA began a voluntary trial period of a 9/80 schedule for interested employees, beginning mid-January and running through June.

Travel & Training

During the 4th quarter, I attended the Nossaman Fiduciary Forum in San Francisco on October 18-19, as well as the SACRS Fall Conference in Indian Wells, November 13-16.

Board/Policy/Compliance

During the quarter, staff worked with Elections to coordinate the process to fill the elected General Member trustee position previously held by Maeve Fox; we welcomed new Trustee Dan Shapiro and prepared the tools and materials needed for him to begin his term of service.

The annual work with VCERA's actuary to allow for the timely issuing of the annual valuation was completed, as well as considerable work with both General Counsel and outside tax counsel on VCERA's 401(a)9 model regulation, as evidenced by the appearance of an item on today's business meeting agenda. Staff prepared information for the Board and membership regarding the pending exhaustion of the benefit reserve funding the \$27.50 supplement benefit payment to retirees.

Media

Staff responded to media inquiries during the 4th quarter regarding the annual actuarial valuation, the General Member election, the disability process for former County CFO Catherine Rodriguez, and the appointment of both Chair and Vice Chair in relation to Tracy Towner's Civil Service Commission appeal. Staff also issued a brief response to an inquiry by a freelance reporter concerning various alleged "reports" that more directly related to employment issues than retirement issues.

Key Meetings

Much of the work already mentioned required meetings with key County HR and A-C staff. In addition, I attended the October 30th meeting of REAVC to provide information on the process allowing for retiree benefits (with corresponding deductions) to be permitted by the Board; this was to assist in the

Q4 2018 Report Page 3

group's consideration of a supplemental insurance benefit for its members. Our staff enjoyed a visit on December 17th from Jenny Sadoski, the I.T. Director from the Orange County Employees Retirement System (OCERS). OCERS also uses V3 as their pension administration system, and had valuable "lessons learned" information, as well as relating how OCERS has addressed issues facing VCERA now or in the future.

Finally, the VCERA staff enjoyed an end-of-year gathering on December 18th to reflect on the year's challenges and successes, and to discuss expectations for 2019.

Please contact me with any questions you may have regarding this quarterly report.

Sincerely,

Linda Webb



SUBJECT: CHIEF INVESTMENT OFFICER'S QUARTERLY REPORT FOR THE PERIOD OCTOBER THROUGH DECEMBER 2018

Dear Board Members:

Below is a summary of fourth quarter 2018 investment activity.

Private investment:

- \$16.3 million new private equity commitments by Abbott Capital across two funds
- \$25 million new private credit commitment to BlueBay Direct Lending Fund III

Investment presentations:

- Abbott Capital Management: private equity
- Blackrock: U.S. large and small-mid cap equity index portfolios; non-U.S. and global equity index portfolios; U.S. fixed income index portfolio
- BlueBay: private credit
- Reams Asset Management: fixed income
- Loomis Sayles: Strategic Alpha and Multi-Sector fixed income portfolios
- NEPC: Third quarter, and September and October monthly investment performance reports;
 2018 Capital Markets Review and preliminary 2019 outlook
- Western Asset Management: fixed income portfolio; portable alpha (equity) portfolio
- Staff: California Government Code Section 7514.7 Annual Report- mandatory public disclosure requirement for alternative investments; 2019 investment presentation and onsite due diligence calendars

On-site investment due diligence visits:

• Completed with no due diligence concerns: HarbourVest and Prudential

Other:

- UBS' report of labor action at its Marriott hotels, and news release that no properties were in areas impacted by either the Camp Fire nor the Woolsey fire
- On-site Due Diligence reports for Hexavest and Sprucegrove

Respectfully submitted,

Dan Gallagher

Chief Investment Officer



MARCH 27-29, 2019

UCLA LUSKIN CONFERENCE CENTER LOS ANGELES, CA



Advanced Principles of Pension Management

for Trustees

FOR THE CALIFORNIA ASSOCIATION OF PUBLIC RETIREMENT SYSTEMS

Advanced Principles of Pension Management

for Trustees

ADVANCED PRINCIPLES OF PENSION MANAGEMENT

The Advanced course is about building trustee skills and strengthening board governance. Pension trustees have many opportunities to learn about the disciplines required to run a pension system: institutional investing, actuarial science, benefits law, etc. But another highly important area of knowledge is the business of being a trustee and of contributing to a well-functioning board. The **CALAPRS Advanced Principles of Pension Management** course exposes veteran trustees to the most effective pension management thinking to help them enhance their service to their retirement systems.

COURSE RATINGS

100% of last year's participants agreed that the course would "enhance their performance and leadership abilities as a board member," and that they would, "recommend the program to their colleagues."

THE PROGRAM

Course attendees will hear from and discuss issues with top-level presenters in the areas of board/staff roles, governance, pension law, economic forecasting and actuarial science.

CURRICULUM | YOUR COURSE OF STUDY

Over the course of two days, attendees will be immersed in a powerful learning process—acquiring the skills they need to lead their organizations effectively.



The 2019 Program will cover:

- o Policy-Based Boards
- o Effective Planning
- Economics Forecasting Methods and the annual forecast of the UCLA Anderson School
- o Good Governance & the Investment Team
- Wearing the Right Hat at the Right Time The Fiduciary Duties of Public Pension System Board Members
- Advanced Actuarial Principles

PARTICIPANTS | WHO IS RIGHT FOR THE PROGRAM?

The program is designed for an experienced group of trustees. Trustees should have already acquired a basic understanding of board governance practices, actuarial and investment principles, and fiduciary responsibility. CALAPRS recommends that newer trustees first attend the trustee training course at Pepperdine University entitled: "Principles of Pension Management for Trustees" which is specifically designed for new trustees. The course was previously held at Stanford University.

CALAPRS | 575 MARKET ST., STE. 2125, SAN FRANCISCO, CA 94105 | P: 415.764.4860 | INFO@CALAPRS.ORG | WWW.CALAPRS.ORG

EXPERIENCE UCLA'S TRADITION OF EXCELLENCE AT THE LUSKIN CONFERENCE CENTER

In the heart of UCLA's vibrant campus, the new UCLA Meyer and Renee Luskin Conference Center is set amid iconic campus buildings and the exhilarating backdrop of daily student life. The Luskin Conference Center is a place where the best academic minds, innovators, researchers, political leaders, and societal visionaries meet to exchange ideas that help shape the world.



The UCLA Luskin Conference Center is an ideal central meeting place where California's public pension trustees can gather for a transformational academic experience that transcends the acquisition of knowledge, skills, and tools—and fosters professional, intellectual, and personal development.

Participants will receive a Certificate of Completion for this program.

PROGRAM DATES March 27-29, 2019

LEARNING COMMITMENT

Active involvement in all classroom sessions, case discussions, and other program activities is expected. Participants devote considerable time and intellect to the learning experience. Therefore, they must be free of outside responsibilities during the two days of the program.

THE FACULTY

The Advanced Principles Program is taught by a faculty of highly regarded experts and experienced professionals in the field of public pension management.

TUITION

Program tuition is \$3,100 for CALAPRS members and \$3,400 for non-members and includes all lodging, meals, and materials. Tuition must be paid in full by March 8, 2019.

ACCOMMODATIONS

Program tuition includes all meals and lodging on the nights of March 27 and 28, 2019 at the acclaimed UCLA Luskin Conference Center, located at 425 Westwood Plaza, Los Angeles, CA. To ensure full participation, all participants are required to stay on-site in the provided private, comfortable hotel rooms.

REGISTRATION

Applications must be received by February 15, 2019. Since space is limited, CALAPRS reserves the right to limit the number of trustees accepted from each retirement system, if need be.

Advanced Principles of Pension Management for Trustees

March 27-29, 2019 Los Angeles, CA

APPLICATION FOR ENROLLMENT

Due by February 15, 2019

Applications must be received by February 15, 2018. Since space is limited, CALAPRS reserves the right to limit the number of trustees accepted from each retirement system, if need be. Accepted applicants will be notified via email on February 20, 2019

Applicant Qualifications: The Advanced Principles Program is designed for an experienced group of trustees. In evaluating readiness for this program, trustees should have already acquired a basic understanding of board governance practices, actuarial and investment principles, and fiduciary responsibility. CALAPRS recommends that newer trustees first attend the initial trustee training course at Pepperdine University entitled: "Principles of Pension Management for Trustees" that is specifically designed for new trustees. The course was previously held at Stanford University.

Applicant Information	
Trustee's Name (for certificate/name badge):	
Retirement System:	
Trustee Type: ☐ Elected ☐ Appointed ☐ Ex-Officio Date B	Became a Trustee: Date Current Term Expires:
Trustee's Mailing Address:	
Trustee's Phone :	Trustee's Email:
Emergency Contact (name, phone):	
Dietary Restrictions (if any):	
Administrative Contact (name, email):	
☐ I have <u>e-mailed</u> this applicant's biography (≤150 words) to	register@calaprs.org for printing in the attendee materials.
Auglious Cinness	
Applicant Signature	
If admitted, I agree to attend the Advanced Principles progr may result in forfeiture of my Certificate of Completion, as o	am in full and acknowledge that missing one or more sessions letermined by the Faculty.
Trustee Signature (required)	Date <u>:</u>
Administrator Approval	
Administrator Name:	Email:
Administrator Signature (required):	
Tuition Payment	
☐ \$3,100 CALAPRS Member ☐ \$3,400 Non-member	

Program tuition must be paid in full by March 8, 2019. Tuition includes all meals, materials, and mandatory lodging for all participants for the nights of March 27 and 28 in the UCLA Luskin Conference Center. Payable by check_only_made out and mailed to "CALAPRS". A separate invoice will not be sent.



If, due to a disability, you have any special needs, call 415-764-4860 to let us know. We will do our best to accommodate your needs.



Mail, email or fax form and payment to CALAPRS

575 Market Street, Suite 2125 San Francisco, CA 94105

Phone: 415-764-4860 Fax: 415-764-4915 register@calaprs.org www.calaprs.org



CALAPRS

EDUCATION • COMMUNICATION • NETWORKING California Association of Public Retirement Systems

General Assembly

MARCH 2-5, 2019 MONTEREY MARRIOTT MONTEREY, CA

California's Public Retirement Systems: Mission-Driven

California Association of Public Employees' Retirement Systems (CALAPRS) 575 Market Street, Suite 2125, San Francisco, CA 94105 P: 415-764-4860 | info@calaprs.org | www.calaprs.org

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CALAPRS GENERAL ASSEMBLY 2019 — PROGRAM

The California Association of Public Retirement Systems, CALAPRS, invites you to attend the General Assembly on March 2-5, 2019 at the Monterey Marriott in Monterey, CA. The General Assembly is an educational conference for retirement system trustees, senior staff, and annual sponsors of CALAPRS.

SATURDAY, MARCH 2

4:00 – 6:00 PM | Early-Bird Registration

SUNDAY, MARCH 3

10:00 AM - 5:00 PM | Registration

2:00 PM | Opening Remarks

Speakers: Donna Lum, CalPERS, CALAPRS President and

Steve Delaney, OCERS, Conference Chair

2:15 PM | Communicating the Value of Public Service

Speaker: Bob Wilson, Missouri Local Government

Employees Retirement System (LAGERS)

3:15 PM | Networking Break

3:45 PM | Pension Administration System Implementations in California: A Panel Discussion

Moderator: Andrew Roth, CalSTRS

Panelists: Marcelle Rossman, SDCERS; Amy Burke, San Luis Obispo County Pension Trust; and Eric Stern, SCERS

7:00 PM – 9:30 PM | Dinner at the Monterey Bay Aquarium

Guests welcome. Transportation provided.

MONDAY, MARCH 4

7:00 AM - 4:00 PM | Registration

7:15 AM - 8:15 AM | Breakfast

8:15 AM | Opening Remarks & Toigo Award Presentation

Speakers: Donna Lum, CalPERS, CALAPRS President and Steve Delaney, OCERS, Conference Chair

8:30 AM | Reimagining the Future

Speaker: Frank Diana, Futurist

9:30 AM | Networking Break

10:00 AM | What's New in Mortality?

Speaker: David Lamoureux, CalSTRS

11:00 AM | Cyber Security

Speakers: Brian Abellera, Federal Bureau of Investigation,

and Matt Eakin, OCERS

12:00 PM | Lunch

1:30 PM | Blockchain

Speaker: To be Announced

2:30 PM | Networking Break

3:00 PM | Private Credit:

Threats and Opportunities - A Panel Discussion

Moderator: James Walsh, Albourne America, LLC

5:00 PM - 6:00 PM | Hosted Reception

TUESDAY, MARCH 5

7:15 AM - 8:15 AM | Breakfast

8:15 AM | Lean Six Sigma Training

Speaker: Suzanne Jenike, OCERS; and Ric Van Der Linden, ProgressivEdge, Inc.

9:00 AM | CEM Benchmarking: Research Highlights in Pension Administration and Investments

Speaker: Tom Scheibelhut, CEM Benchmarking, Inc.

9:45 AM | Networking Break

10:15 AM | Generation CX: The Evolution of Member Communications

Speaker: Jonathan Clark, MBA, RPMI, United Kingdom

11:00 AM - 11:15 AM | Closing Remarks & Adjourn

Speakers: Donna Lum, CalPERS, CALAPRS President and Steve Delaney, OCERS, Conference Chair

WHAT TO KNOW...

Register online at:

http://www.calaprs.org/generalassembly

Registration fee:

- Retirement Systems: \$150/person
- Sponsors: \$1500/company (2 representatives)

Book your room at: Monterey Marriott, 350 Calle Principal, Monterey, CA 93940

- Online: https://book.passkey.com/go/calaprs2019
- By phone: 831-649-4234

Room Rate: \$221/night

Government rate rooms, \$140/night, may be available on a first come, first serve basis.

Cut-Off: February 8, 2019 — Book early, rooms may sell out!