VENTURA COUNTY EMPLOYEES' RETIREMENT ASSOCIATION

BOARD OF RETIREMENT

DISABILITY & BUSINESS MEETING

DECEMBER 18, 2023

AGENDA

PLACE: Ventura County Employees' Retirement Association
Second Floor, Boardroom
1190 S. Victoria Avenue, Suite 200
Ventura, CA 93003

The public may listen to the Public Session and offer comments by calling: +1 669-219-2599, using Meeting ID: 848-8511-0133. Persons may also submit written comments to publiccomment@vcera.org prior to and during the Board meeting. Please include your name, agenda item, the last 4 numbers of the telephone number that will be used to call in, and your comment. Public comment emails will be read into the record or summarized if lengthy.

The Board may take action on any item on the agenda, and agenda items may be taken out of order.

TIME: 9:00 a.m.

ITEM:

I. CALL TO ORDER

A. Roll Call.

II. APPROVAL OF AGENDA

III. CONSENT AGENDA

Notice: Any item appearing on the Consent Agenda may be moved to the Regular Agenda at the request of any Trustee who would like to propose changes to or have discussion on the item.

A. Approve Regular and Deferred Retirements and Survivors Continuances for the Month of November 2023.

B. Receive and File Pending Disability Application Status Report.

C. Approval of the Minutes for the Special Meeting of December 4, 2023.

D. Approval PEPRA Annual Pensionable Compensation Limits for 2024.

1. Staff Letter from Chief Financial Officer.

2. California Actuarial Advisory Panel PEPRA Pension Compensation Limits for the Calendar Year 2024.

E. Approval of the June 30, 2023 Annual Comprehensive Financial Report (ACFR).

1. Staff Letter from Chief Financial Officer.

III. CONSENT AGENDA (continued)

2. Annual Comprehensive Financial Report (ACFR) – June 30, 2023.

3. Auditor Report to the Board of Retirement and Finance Committee.

IV. APPLICATIONS FOR DISABILITY RETIREMENT

A. Application for Nonservice and Service-connected Disability Retirement—Thin, Allan; Case No. 20-018. (New Model)

1. Proposed Findings of Fact, Conclusions of Law and Recommended Decision to Deny the Application for Nonservice and Service-connected Disability Retirement, filed by Robert Klepa, Hearing Officer, dated August 30, 2023.

2. Applicant's Objections to the Hearing Officer's Report, filed by Danny Polhamus, Applicant's Attorney, dated September 14, 2023.

3. VCERA's Objections to the Hearing Officer's Report, filed by Vivian Shultz, VCERA's Attorney, dated September 15, 2023.

4. County of Ventura-Risk Management's Response to the Hearing Officer's Report, filed by Stephen Roberson, Attorney for Respondent, dated September 21, 2023.

5. Staff Recommendation to Grant the Application for Nonservice-connected Disability Retirement, dated September 6, 2021, with Addendum A and Addendum B.

6. Application for Nonservice and Service-connected Disability Retirement, filed by Applicant on September 2, 2020.

7. Hearing Notice, dated October 3, 2023.

B. Application for Service-connected Disability Retirement—Arce, Tomas; Case No. 21-022. (New Model) (Fire)

1. Staff Recommendation to Grant the Application for Service-connected Disability Retirement, dated November 15, 2023.

2. Supporting Documentation for Staff Recommendation.

3. Application for Service-connected Disability Retirement, filed by Thomas Wicke, Applicant's Attorney, dated July 26, 2021.

4. Hearing Notice, dated November 15, 2023.

C. Application for Service-connected Disability Retirement and Reassignment—Nisbet, Heather; Case No. 22-006. (New Model)

1. Staff Recommendation to Grant the Application for Service-connected Disability Retirement, dated December 6, 2023.

IV. APPLICATIONS FOR DISABILITY RETIREMENT (continued)

2. Supporting Documentation for Staff Recommendation.

3. Application for Service-connected Disability Retirement, filed by Applicant, dated February 23, 2022.

4. Hearing Notice, dated December 6, 2023.

D. Application for Service-connected Disability Retirement—Schaper, Robert; Case No. 22-008. (New Model) (Fire)

1. Staff Recommendation to Grant the Application for Service-connected Disability Retirement, dated December 7, 2023.

2. Applicant’s Response to Staff Recommendation, filed by Thomas Wicke, Applicant’s Attorney, dated November 22, 2023.

3. Supporting Documentation for Staff Recommendation.

4 Application for Service-connected Disability Retirement, filed by Thomas Wicke, Applicant’s Attorney, dated March 3, 2022.

5. Hearing Notice, dated December 8, 2023.

V. INVESTMENT MANAGER PRESENTATIONS

A. Annual Investment Presentation from Loomis Sayles, Fred Sweeney, and Stephanie Lord.

VI. INVESTMENT INFORMATION

VCERA – Dan Gallagher, Chief Investment Officer.
NEPC – Allan Martin and Rose Dean.

A. Preliminary Performance Report Month Ending November 30, 2023.
RECOMMENDED ACTION: Receive and file.

VII. OLD BUSINESS

A. Alameda Implementation Status Report Dated December 18, 2023.
RECOMMENDED ACTION: Receive and File.

VIII. NEW BUSINESS

A. Administrative Appeal Filed by Brenda Lemos re Calculation of Reciprocal Disability Retirement Benefits.

1. Staff Memo to Applicant Regarding Benefit Recalculation and Overpayment, dated February 2, 2023.

2. Request to Appeal Letter, filed by Stefon Jackson, Appellant’s Attorney, dated May 10, 2023.

VIII. **NEW BUSINESS (continued)**

3. Appellant's Opening Brief, filed by Stefon Jackson, Appellant's Attorney, dated October 26, 2023.

4. VCERA's Response to Appellant's Opening Brief, filed by Ashley Dunning, VCERA's Attorney, dated December 8, 2023; Declaration of Josiah Vencel in Support of VCERA's Response, dated December 7, 2023.

5. Hearing Notice, dated December 7, 2023.

B. Review and Approval of Annual Actuarial Valuation Report as of June 30, 2023 – Segal Consulting, Paul Angelo.
RECOMMENDED ACTION: Approve.

1. June 30, 2023 Actuarial Valuation Report.

C. Review of GAS 67 Actuarial Valuation Report as of June 30, 2023 – Segal Consulting, Paul Angelo.
RECOMMENDED ACTION: Receive and File.

1. June 30, 2023 GAS 67 Actuarial Valuation Report.

D. Periodic Review of Interest Crediting Policy.
RECOMMENDED ACTION: Approve.

1. Informational Session – Interest Crediting and the Contra Reserve, Paul Angelo.

2. Staff Letter from Chief Financial Officer.

3. Interest Crediting Policy Proposed (Redline).

4. Interest Crediting Policy Proposed (Clean).

E. Authorization of Up to 2 VCERA Trustees and CIO to Attend NEPC's 2024 Public Funds Workshop in Tempe, Arizona on January 30 – 31, 2024.
RECOMMENDED ACTION: Approve.

1. Staff Letter from Chief Investment Officer.

F. Appointment of 2024 Chair and Vice Chair.

1. Staff Letter from Interim Retirement Administrator.

G. Designation Of Representatives For Labor Negotiations With Prospective Unrepresented Employees: Mike Sedell, Sue Horgan, and Pam Derby

IX. CLOSED SESSION

A. **CONFERENCE WITH LEGAL COUNSEL – ANTICIPATED LITATION** Significant Exposure to Litigation Pursuant to Paragraph (2) of Subdivision (d) of Govt. Code Section 54956.9: One (1) Case: Administrative Appeal Filed by Brenda Lemos re Calculation of Reciprocal Disability Retirement Benefits.

B. **CONFERENCE WITH LABOR NEGOTIATORS, GOVT. CODE SECTION 54957.6**

Agency Designated Representatives:
Mike Sedell
Sue Horgan
Pam Derby

Prospective Unrepresented VCERA Employee:
Retirement Administrator

X. INFORMATIONAL

A. Western Asset Management's Invitation to the 135th Rose Parade – Reminder.

XI. PUBLIC COMMENT

XII. STAFF COMMENT

XIII. BOARD MEMBER COMMENT

XIV. ADJOURNMENT

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

November 2023

FIRST NAME	LAST NAME	G/S	DATE OF MEMBERSHIP	BENEFIT SERVICE		D	DEPARTMENT	EFFECTIVE DATE
REGULAR RETIREMENTS:								
VINCENT	ALVAREZ	S	2/25/1996	27.82			SHERIFF'S OFFICE	11/3/2023
MICHAEL CURTIS	BAKER	S	4/15/1990	33.65			SHERIFF'S OFFICE	11/4/2023
DOLORES MARIE	CONLIN	G	10/11/2018	3.61	*	D	PUBLIC WORKS AGENCY	10/28/2023
HOLLY J	DOERING	G	9/3/2013	3.40		D	HEALTH CARE AGENCY	11/14/2023
CLAUDIA ELENA	FLORES	S	8/24/1997	26.19			PROBATION AGENCY	10/29/2023
ELIZABETH A	FLORES	G	4/23/2006	11.83			HEALTH CARE AGENCY	10/17/2023
SCOTT D	HENDRICKSON	G	4/4/1999	22.75			DISTRICT ATTORNEY	9/16/2023
MARK C	HIBBERD	G	8/1/2010	15.66			INFORMATION TECHNOLOGY SERVICES	11/1/2023
SUSAN M	KELLY	G	DRO Non-Member	5.09			HEALTH CARE AGENCY	10/1/2023
CHRISTINE RENEE	LANKFORD	G	2/28/2008	13.15			HUMAN SERVICES AGENCY	10/6/2023
LORRAINE E	LEONARD	G	10/23/2016	4.02		D	HUMAN SERVICES AGENCY	3/31/2022
DAVID ALEXANDER	MAHER	G	5/6/2007	8.83		D	HEALTH CARE AGENCY	11/3/2023
ELDA D	MARTINEZ	G	7/19/1992	30.93			HUMAN SERVICES AGENCY	10/27/2023
ROSS JOSEPH	MATARAZZO	G	10/4/1999	23.83			GENERAL SERVICES AGENCY	10/28/2023
SHANNON JANE	PASHLEY	G	1/15/2006	17.43		D	SHERIFF'S OFFICE	11/1/2023
SCOTT AUSTIN	PETERSON	S	10/29/1989	33.95			DISTRICT ATTORNEY	10/6/2023
LANA MARIE	POWERS	G	8/23/1998	25.27			HUMAN SERVICES AGENCY	11/10/2023
PETE	QUIJADA	G	3/20/2011	10.95		D	HUMAN SERVICES AGENCY	11/3/2023
BERTHA	RODRIGUEZ	G	4/27/2003	20.46			HUMAN SERVICES AGENCY	10/13/2023
EDWARD RONALD	SCHMIDT	G	4/9/2017	6.50			PUBLIC WORKS AGENCY	10/13/2023
JOHN R	WILSON	G	7/9/1989	39.94			SUPERIOR COURT	11/11/2023
DONALD W	WOODCOCK	G	7/27/1997	24.15			HEALTH CARE AGENCY	11/18/2023
DEFERRED RETIREMENTS:								
STEPHEN FREEDOM	ACREE	S	12/11/2022	0.76			FIRE PROTECTION DISTRICT	9/11/2023
SILVESTRE	ALVAREZ	G	3/5/2000	23.19	*		FIRE PROTECTION DISTRICT	9/1/2023
GLADYS	AMEZCUA	G	5/14/2023	0.33			HEALTH CARE AGENCY	9/9/2023
ALEXANDRIA AUXILIADORA	ARIAS	G	3/5/2023	0.52			HEALTH CARE AGENCY	9/9/2023
KELSEY LYNN	BANNAN	G	6/13/2021	1.41			HEALTH CARE AGENCY	8/20/2023
JENNIFER LINDSEY	BOATRIGHT	G	6/11/2023	0.20			HEALTH CARE AGENCY	9/2/2023
CHARLES VICTOR	BOZONIER	G	10/6/2019	3.96	**		INFORMATION TECHNOLOGY SERVICES	9/30/2023
EMILY ANN	BURTON	G	11/28/2021	1.81			VENTURA COUNTY LIBRARY	9/15/2023
LIZBETH	COVARRUBIAS	G	5/28/2023	0.21			HEALTH CARE AGENCY	9/6/2023
ADAM RYAN	DANIEL	G	6/12/2022	1.20			AGRICULTURAL COMMISSIONER	8/24/2023
CESAR	DE LA TRINIDAD	G	1/6/2014	8.80	*		REGIONAL SANITATION DISTRICT	8/30/2023
JOHN J	ENNEKING	S	12/7/2003	20.57			FIRE PROTECTION DISTRICT	9/29/2023
LYNNIE IVONNE	FAHEY	G	10/21/2018	4.92	*		SUPERIOR COURT	9/30/2023
EUGENE JAY CAYABYAB	FERMIN	G	8/4/2013	10.09			COUNTY EXECUTIVE OFFICE	9/9/2023
NANCY	FERNANDEZ	G	8/6/2023	0.10			HEALTH CARE AGENCY	9/11/2023
SILVIA	GONZALEZ VILLICANA	G	10/16/2011	11.32			HUMAN SERVICES AGENCY	9/1/2023
FRANCES T	HART	G	7/23/2023	0.11			HUMAN SERVICES AGENCY	9/5/2023
KARINA	HEREDIA	G	6/17/2018	3.36			SUPERIOR COURT	9/11/2023
LISETTE ESPERANZA	HERRERA	G	4/17/2022	0.97			HEALTH CARE AGENCY	9/4/2023
MARINE DERMADZHYAN	KITKA	G	9/2/2014	8.28	**		DISTRICT ATTORNEY	8/5/2023
SANDRA GUADALUPE	MAGALLON	G	12/25/2022	0.69			HEALTH CARE AGENCY	9/2/2023
BUSE BURCAK JR.	MAURICE	G	7/23/2023	0.09			HUMAN SERVICES AGENCY	8/28/2023
ZACHARY JOSEPH	MILLER	G	5/14/2023	0.28			GENERAL SERVICES AGENCY	9/2/2023
MARVELIA	MONTES	G	7/24/2022	1.07			HEALTH CARE AGENCY	9/8/2023
KIMBERLY MICHELLE	O'NEILL	G	5/14/2023	0.12			HEALTH CARE AGENCY	8/18/2023
MIGUEL	ORTEGA SANCHEZ	G	5/15/2022	1.35			PUBLIC WORKS AGENCY	9/15/2023
MEGAN ELIZABETH	RAYBURN	G	8/13/2017	4.49			DISTRICT ATTORNEY	8/26/2023
ERICA MARIELA	SANTOS	G	4/30/2023	0.26			HEALTH CARE AGENCY	8/18/2023
MEGHAN ANN	STALLINGS	G	10/2/2022	0.92			SHERIFF'S OFFICE	9/2/2023
NATHANIEL D	SUMMERVILLE	G	3/25/2018	5.43	**		PUBLIC WORKS AGENCY	9/2/2023
NOEL	VIERMA	G	6/27/2021	2.18			HEALTH CARE AGENCY	9/1/2023
JESSICA LICHELLE	VIZZO	G	2/21/2021	2.23			RESOURCE MANAGEMENT AGENCY	8/19/2023

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

November 2023

FIRST NAME	LAST NAME	G/S	DATE OF MEMBERSHIP	BENEFIT SERVICE	D	DEPARTMENT	EFFECTIVE DATE
SURVIVORS' CONTINUANCES:							
HEIDI	CHRISTENSEN						
LINDA L.	CONAHEY						
KAREN M	CORLEY						
DANIEL W	CROW						
MARY E	DRIVER						

*** = Excludes reciprocal service or service from any previous retirements**
**** = Member establishing reciprocity**
G = General Member
S = Safety Member
D = Deferred Member

VENTURA COUNTY EMPLOYEES' RETIREMENT ASSOCIATION

BOARD OF RETIREMENT

SPECIAL MEETING

DECEMBER 4, 2023

MINUTES

TRUSTEES PRESENT:	Mike Sedell, Chair, Public Member Arthur E. Goulet, Vice-Chair, Retired Member Don Brodt, Public Member Aaron Grass, Safety Employee Member Cecilia Hernandez-Garcia, General Employee Member Will Hoag, Alternate Retired Member Sue Horgan, Treasurer-Tax Collector Tommie E. Joe, Public Member Kelly Long, Public Member Anthony Rainey, Public Member Jordan Roberts, General Employee Member
TRUSTEES ABSENT:	
STAFF PRESENT:	Rick Santos, Interim Retirement Administrator Amy Herron, Chief Operations Officer Lori Nemiroff, General Counsel La Valda Marshall, Chief Financial Officer Josiah Vencel, Retirement Benefits Manager Brian Owen, Sr. Information Technology Specialist Michael Sanchez, Sr. Information Technology Specialist Chris Ayala, Program Assistant
PLACE:	Ventura County Employees' Retirement Association Second Floor, Boardroom 1190 S. Victoria Avenue, Suite 200 Ventura, CA 93003
TIME:	9:00 a.m.

ITEM:

I. CALL TO ORDER

A. Roll Call.

Chair Sedell called the Special Meeting of December 4, 2023, to order at 9:05 a.m.

Roll Call:

Trustees Present: Donald Brodt, Aaron Grass, Art Goulet, Cecilia Hernandez-Garcia, Sue Horgan, Tommie Joe, Kelly Long, Anthony Rainey, Jordan Roberts, Mike Sedell

Trustees Absent: Will Hoag

II. APPROVAL OF AGENDA

MOTION: Approve.

Moved by Joe, seconded by Roberts

Vote: Motion carried
Yes: Grass, Goulet, Hernandez-Garcia, Horgan, Joe, Long, Rainey, Roberts, Sedell
No: -
Absent: -
Abstain: -

III. CONSENT AGENDA

A. Approve Business Meeting Minutes of November 20, 2023.

MOTION: Approve Consent Agenda.

Moved by Goulet, seconded by Joe

Vote: Motion carried
Yes: Grass, Goulet, Hernandez-Garcia, Horgan, Joe, Long, Rainey, Roberts, Sedell
No: -
Absent: -
Abstain: -

IV. OLD BUSINESS

A. None.

V. NEW BUSINESS

A. Fiduciary Governance Report to the Board of Retirement, Presentation from Ashley K. Dunning, VCERA Fiduciary Counsel, and Rick Santos, VCERA Interim Retirement Administrator.

1. VCERA Board Governance Report.

2. Fiduciary Governance Presentation.

Mr. Santos explained that Ashley Dunning VCERA's Fiduciary Counsel would be presenting the Fiduciary Governance presentation first, as a segway into a second presentation which showed the path that VCERA may take in the next 3 to 5 years as part of a future strategic plan.

Ms. Dunning then presented Fiduciary Governance Report Presentation to the Board.

Trustee Hoag arrived at the meeting at 9:15 a.m.

<u>Board Meeting Calendar</u>
There was some discussion regarding the board meeting schedule and whether moving it from the "first and third" to the "second and fourth" Monday of the month would be desired, and whether there should be one or two meetings per month.

Chair Sedell suggested that they agendize the issue for a future meeting so that the Board could discuss it further, also considering that there were 3 new trustees that would be joining the Board at the beginning of the new year.

Trustee Long then asked if staff could also provide some potential calendars with the "first and third" and "second and fourth" meeting options to review at that time.

Mr. Gallagher noted that the later in the month that the Board meeting was scheduled, the more likely it would be that staff would be able to get the investment and financial reports, which would also affect the CFO, Ms. Marshall.

<u>Agenda Posting Timeline</u>
Trustee Long felt that having staff publish the agenda materials 5 days before the meeting was a good goal, even though by statute they had to publish the agenda 72 hours before the meeting and would have that cushion of time if needed.

Ms. Dunning said she would frame it as an expectation and a desire by the Board to staff that the materials would be posted 5 calendar days in advance of a Board meeting, as opposed to a requirement.

<u>Disability Cases on Consent Agenda</u>
Ms. Dunning noted that putting "recommended to grant" disability retirement cases on the Consent Agenda could help further streamline meetings.

Trustee Goulet noted that if a disability retirement case was being recommended by staff for denial, then the case automatically goes to a Hearing Officer.

Trustee Long noted that while attending a recent training event, she and Mr. Santos had spoken with a representative from the Los Angeles County Employees' Retirement Association (LACERA), and this issue was discussed. They said that they put their disability retirement cases on the Consent Agenda so that the member case was not rehashed at a board meeting, which could bring up some negative feelings for the member. So, the recommendation that Ms. Dunning noted may be a way to respect the members privacy and feelings, and not just to speed up the process, since no one wants to come to a public meeting and ask for assistance.

Trustee Grass left the meeting at 9:56 a.m. and returned at 9:59 a.m.

Trustee Goulet did not believe that LACERA was a good example, since they were a much larger system and therefore have hundreds of disability applications to consider. They also have a Disability Committee with special legislation, where the committee members were paid to review the disability cases and the cases that were recommended for approval would go onto the Consent Agenda. Also, in the case where the disability case had gone to a Hearing Officer and was returning to the Board with a recommendation, he felt that they should not be put on the Consent Agenda because staff or the employer may object to the Hearing Officer's recommendation. Lastly, if the case was being recommended for denial, the member should have the ability to speak to their case before the Board.

Ms. Dunning clarified that the recommendation was to only put "recommend to grant" cases on the Consent Agenda. (This would not include cases where there was a recommendation to deny or where there was an objection from the applicant or employer.)

Trustee Grass felt that it would be prudent to have the attorneys for the parties to the disability cases attend the Board meeting where their case was on the consent agenda, because their case could be pulled from consent for discussion.

Standing Committee Calendars
Ms. Dunning said that another recommendation would be to have a set calendar for standing committees along with the regular Board meeting calendar.

Trustee Long left the meeting at 10:05 a.m., and returned at 10:08 a.m.

Trustee Goulet said that as the Chair of the only standing committee (i.e., Finance Committee), he did not feel the need for a set calendar because if the materials for the meeting were not ready, then there would be no reason to have a meeting. Currently meetings were scheduled as needed.

Ms. Dunning said that she appreciated the comments from the Chair of the Finance Committee because that was valuable information. In her experience, she had seen calendars with quarterly meetings for Finance Committees work effectively, and she believed it provided better oversight because they would be telling staff what they would like reported on and when.

Trustee Roberts noted that he liked the idea of scheduling quarterly meetings for the Finance Committee considering their busy schedules.

After hearing this presentation, the Board took at break at 10:16 a.m.

The Board returned from break at 10:26 a.m. 01.04.00

B. VCERA Today & Tomorrow, Presentation from Rick Santos, VCERA Interim Retirement Administrator, and Leah Oliver, VCERA Chief Technology Officer.

1. State of VCERA Analysis.

2. VCERA Today & Tomorrow Presentation.

Mr. Santos, VCERA Interim Retirement Administrator, and Leah Oliver, VCERA Chief Technology Officer, presented the VCERA Today & Tomorrow Presentation to the Board of Retirement.

Disability Cases on Consent Agenda
Mr. Santos noted that he would call for the question of putting items on the consent agenda that were "recommend to grant" without objection. Also, he had asked Mr. Vencel to provide an Executive Summary that was an even more condensed version of the whole disability case report, which they planned to bring to the Board at the December 18th meeting.

Trustee Roberts left the meeting at 11:46 a.m., and returned at 11:49 a.m., before the vote on the item.

Trustee Grass left the meeting at 11:53 a.m., and returned at 11:55 a.m., before the vote on the item.

Trustee Joe left the meeting at 12:20 p.m., and returned at 12:22 p.m., before the vote on the item.

Chair Sedell said that they should consider not making the change to the consent agenda until the January 8, 2024 meeting to provide enough time to inform the stakeholders.

MOTION: Put Uncontested Disability Retirement Cases on Consent Agenda, Effective January 8, 2024, and Provide Advanced Notification to Stakeholders.

Moved by Grass, seconded by Roberts

Vote: Motion carried
Yes: Grass, Goulet, Hernandez-Garcia, Horgan, Joe, Long, Rainey, Roberts, Sedell
No: -
Absent: -
Abstain: -

CTO Position to District Status
Mr. Santos the explained that another item that he would recommend was for the Board to move ahead with getting legislation to have the Chief Technology Officer (CTO) position changed from a County employee to a VCERA employee, under district status, similar to the other executive managers, which was already previously approved by the Board.

Trustee Long noted that the County did not have a position on this issue or objection to it. They viewed it as a VCERA issue.

Chair Sedell noted that he believed that Mr. Atin (County Human Resources Director) was going to prepare a letter for the legislation that said that the County did not object, but this had not been done yet, and so there may have been some miscommunication, but the Board needed to move the process along. The recommended Governance Committee could also look into whether there were other positions that should be considered.

Mr. Santos then said the next step would be for the next Board Chair to get the local legislator on board to move the process along.

Trustee Goulet said that he would be happy to provide the language to change the legislation to Mr. Santos.

Ms. Oliver then presented the IT-related part of the presentation to the Board, explaining the current technology issues that VCERA was facing as well as making recommendations for the future.

The Board then took a 15-minute break for Lunch at 12:33 p.m.

The Board returned from break at 12:53 p.m.

Chair Sedell said that the Board would move into their Closed Session meeting, after hearing the other items on the agenda first.

The Board then advanced to agenda item, IX. Staff Comment.

C. Proposal to Place “Recommendation to Grant without Objection” Disability Cases On Consent Agendas.

RECOMMENDED ACTION: Approve.

1. Staff Letter from Interim Retirement Administrator.

VI. CLOSED SESSION

A. It is the intention of the Personnel Review Committee to Meet in Closed Session, Pursuant to Government Code Section 54957(b)(1), to Discuss the Following Item.

1. Public Employee Appointment.
   Title: Retirement Administrator.

The Board entered into Closed Session at 12:55 p.m.

VII. INFORMATIONAL

None.

VIII. PUBLIC COMMENT

None.

IX. STAFF COMMENT

None.

X. BOARD MEMBER COMMENT

None.

Chair Sedell said that since there were no comments from the Public, Staff, or the Board, they would move into their Closed Session meeting. He did not anticipate that the Board would have any announcements at the end of the Closed Session meeting, so they would adjourn from Closed Session, unless there was an announcement to make.

The Board then returned to agenda item, VI.A., Closed Session.

XI. ADJOURNMENT

The Chair adjourned the meeting at the conclusion of the Closed Session.

Respectfully submitted,

____

RICHARD SANTOS, Interim Retirement Administrator

Approved,

____

MIKE SEDELL, Chair

VCERA
VENTURA COUNTY EMPLOYEES' RETIREMENT ASSOCIATION

December 18, 2023

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

SUBJECT: PEPRA ANNUAL COMPENSATION LIMIT FOR 2024

Dear Board Members,

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

As an advisory organization, the California Actuarial Advisory Panel (CAAP) issues a letter annually for California public retirement systems, detailing its calculation of the PEPRA compensation limits. In March of 2014, the VCERA Board of Retirement directed staff to identify the annual adjustments to the PEPRA compensation limits and submit them to the Board for approval. In October 2023, CAAP again calculated the compensation limit amounts using the required criteria, with the results producing an increase to both amounts, as follows:

- $151,446 (integrated with Social Security)
- $181,734 (not integrated with Social Security)

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

<u>RECOMMENDED ACTION</u>: ADOPT THE 2024 PEPRA COMPENSATION LIMITS OF $151,446 AND $181,734 AS CALCULATED BY THE CALIFORNIA ACTUARIAL ADVISORY PANEL (CAAP).

I would be pleased to respond to any questions at today's December 18, 2023, meeting.

Sincerely,

La Valda R. Marshall

La Valda R. Marshall
Chief Financial Officer

STATE OF CALIFORNIA

California Actuarial Advisory Panel

October 27, 2023

**SUBJECT: PEPRA Compensation Limit for 2024
(Code Section 7522.10)**

To Whom It May Concern:

Pursuant to a request from a Public Agency, the California Actuarial Advisory Panel (the Panel) is publishing this letter to provide a calculation of the Pension Compensation Limits for the Calendar Year 2024.

Background

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

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

State Controller's Office
California Actuarial Advisory Panel
c/o State Accounting and Reporting Division
P.O. Box 942850, Sacramento, CA 94250
Phone: 916-252-6093 Fax: 916-323-4807

Analysis

Section 7522.10 of the Government Code is as follows:

7522.10. (a) On and after January 1, 2013, each public retirement system shall modify its plan or plans to comply with the requirements of this section for each public employer that participates in the system.
(b) Whenever pensionable compensation, as defined in Section 7522.34, is used in the calculation of a benefit, the pensionable compensation shall be subject to the limitations set forth in subdivision (c).
(c) The pensionable compensation used to calculate the defined benefit paid to a new member who retires from the system shall not exceed the following applicable percentage of the contribution and benefit base specified in Section 430(b) of Title 42 of the United States Code on January 1, 2013:
(1) One hundred percent for a member whose service is included in the federal system.
(2) One hundred twenty percent for a member whose service is not included in the federal system.
(d) (1) The retirement system shall adjust the pensionable compensation described in subdivision (c) based on the annual changes to the Consumer Price Index for All Urban Consumers: U.S. City Average, calculated by dividing the Consumer Price Index for All Urban Consumers: U.S. City Average, for the month of September in the calendar year preceding the adjustment by the Consumer Price Index for All Urban Consumers: U.S. City Average, for the month of September of the previous year rounded to the nearest thousandth. The adjustment shall be effective annually on January 1, beginning in 2014.

The annual pensionable compensation limit computed by the Panel for 2023 was $146,042 for those included in the federal Social Security system and $175,250 for those not included.

The Consumer Price Indices for All Urban Consumers (CPI-U) U.S. City Average for the months of September 2022 and 2023 are as follows[1]:

- September, 2023: 307.789
- September, 2022: 296.808

The annual change, computed by dividing the 2023 Index by the 2022 Index, rounded to the nearest thousandth is as follows:

- 307.789 ÷ 296.808 = 1.037

[1] http://data.bls.gov/timeseries/CUUR0000SA0

Applying this annual adjustment to the 2023 limits yields the following limits for calendar year 2024:

- $146,042 x 1.037 = $151,446 (included in federal system)
- $175,250 x 1.037 = $181,734 (not included in federal system)

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

Conclusion

The calculations described above indicate the compensation limit for PEPRA members for Calendar Year 2024 will increase to $151,446 for members participating in the federal system (7522.10(c)(1) limit) and $181,734 for members not participating in the federal system (7522.10(c)(2) limit). The Panel intends to provide similar calculations in future years. The contents of this letter are nonbinding and advisory only, and we encourage each public retirement system to independently evaluate these calculations.

Sincerely,

Paul Angelo
Chair, California Actuarial Advisory Panel

cc: Panel members
John Bartel, Vice Chair
David Driscoll
Anne Harper
David Lamoureux
Graham Schmidt
Todd Tauzer
Scott Terando

December 18, 2023

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

SUBJECT: Approve the June 30, 2023 Annual Comprehensive Financial Report (ACFR).

At its December 11, 2023 meeting, the Finance Committee (FC) considered and reviewed the June 30, 2023 ACFR and Related Documents.

In its lengthy and detailed review, the FC asked many questions, requested a number of editorial-type changes and several corrections (listed below), all of which the Staff capably responded to or accepted.

ACFR Report

Page 21	Section: Row:	Reporting Entity 4: Change MCERA to VCERA
Page 25	Section: Row:	Cost-of-Living Adjustment 3: after "2005" and before "the Board", ADD "after the County Board of Supervisors established this COLA,"
Page 27	Chart	Updated by Stroud Design, Inc. in 12.11.2023 ACFR Draft
Page 28	Charts	Updated by Stroud Design, Inc. in 12.11.2023 ACFR Draft
Page 29	Charts	Updated by Stroud Design, Inc. in 12.11.2023 ACFR Draft In column Fixed Income at June 30, 2023 Row: Australian Dollar change "$" to "$ -"
Page 41	Section: Row:	6: Lease Agreement – Lease History 5: change "eight" to "eighth"
Page 49	Section: Row:	Remaining Amortization Period 1 – Delete "15 years of Unfunded Actuarial Accrued Liability (UAAL) as of June 30, 2004 are separately amortized over a 15 year closed period effective with that valuation." Replace with "Experience gains and losses are amortized over 15 years.
Page 68		Requested/Received Updated Segal Letter to include a revised 4th paragraph, 1st sentence.. It now reads – "Any changes in the UAAL that arise due to actuarial gains or losses or plan amendments, with the exception noted

below, are amortized over separate 15-year declining (or closed) amortization periods."

<u>Related Document – Brown Armstrong Draft Report to the Board of Retirement and Finance Committee</u>

Page 1	Correct title from "EQUIRED COMMUNICATION…" TO "REQUIRED COMMUNICATION…"

After review of all the items pertaining to the AFCR, the FC unanimously adopted a motion recommending that the Board approve the revised ACFR and Related Documents.

<u>RECOMMENDATION</u>: APPROVE THE JUNE 30, 2023 Annual Comprehensive Financial Report (ACFR).

VCERA staff will be pleased to respond to any questions you may have on this matter at today's December 18, 2023, Combined Disability and Business Meeting.

Sincerely,

La Valda R. Marshall

La Valda R. Marshall
Chief Financial Officer

Ventura County Employees' Retirement Association
Annual Comprehensive Financial Report

Pension Trust Fund and Component Unit for the County of Ventura, California
for the Fiscal Year Ended June 30, 2023

OUR MUSEUMS

A Glimpse into the Life and Times
of Ventura County

Annual Comprehensive Financial Report for the Fiscal Year Ended June 30, 2023

Pension Trust Fund and Component Unit
for the County of Ventura, California, Ventura County
Superior Court, Ventura County Air Pollution Control District,
Ventura Regional Sanitation District and VCERA

Issued by: Rick Santos, Interim Retirement Administrator

VCERA is committed to you during your public service career and retirement. VCERA offers presentations for new members and those approaching retirement, in-person and virtual consultations, a website with educational material, and a Member Service Portal. When you retire, VCERA ensures consistent distribution of monthly benefits and delivers essential communication to members so they can enjoy the freedom that retirement brings to the fullest. Please visit www.vcera.org for more information.

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

Ronald Reagan Presidential Library and Museum

The Ronald Reagan Presidential Library is a unique California destination, overlooking beautiful valleys and the Pacific Ocean. Hundreds of historical artifacts and galleries highlight the life and times of America's 40th president, including materials from his tenure as governor. The Simi Valley-based museum features Air Force One, Marine One, a presidential limousine, a section of the Berlin Wall, an F-117 Nighthawk Stealth Fighter, an F-14 jet, an M-1 Abrams tank, a replica of the Oval Office, and much more.

Letter of Transmittal

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

December 14, 2023

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

Dear Board of Retirement Trustees and Plan Participants:

I am pleased to present the Ventura County Employees' Retirement Association (VCERA, Association, Fund, or Plan) Annual Comprehensive Financial Report (ACFR) for the fiscal year ended June 30, 2023. The report is intended to provide a detailed review of VCERA's financial, actuarial and investment status. VCERA has the duty and authority to administer plan benefits for employees of the County of Ventura and outside participating employers, Ventura County Superior Court, Ventura County Air Pollution Control District, Ventura Regional Sanitation District and VCERA.

VCERA AND ITS SERVICES

VCERA was established in 1947 to provide retirement allowances and other benefits to the general and safety members employed by Ventura County. Subsequently, VCERA expanded its membership program to include the following outside employers:

- Ventura County Superior Court
- Ventura County Air Pollution Control District (APCD)
- Ventura Regional Sanitation District (VRSD)
- Ventura County Employees' Retirement Association

Since its inception, VCERA has been governed by the California Constitution, the County Employees Retirement Law of 1937 (CERL), and the regulations, procedures, and policies adopted by VCERA's Board of Retirement (the Board). The Ventura County Board of Supervisors may also adopt resolutions, as permitted by the CERL, which may affect benefits of VCERA members. As of January 13, 2013, VCERA is also governed by the Public Employees' Pension Reform Act of 2013 (PEPRA). Both the CERL and PEPRA are contained in the California Government Code (GC).

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 of overseeing the day-to-day management of VCERA and developing its annual administrative budget. Adoption of the budget is subject to approval by the Board.

FINANCIAL INFORMATION

The independent 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 content of this ACFR.

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 that 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 executive management is confident that VCERA's established controls and the interactions of those controls detect all significant occurrences and prevent noteworthy inaccuracies.

An overview of VCERA's fiscal operations is presented in the Management's 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 VCERA's operational activities.

INVESTMENT ACTIVITIES

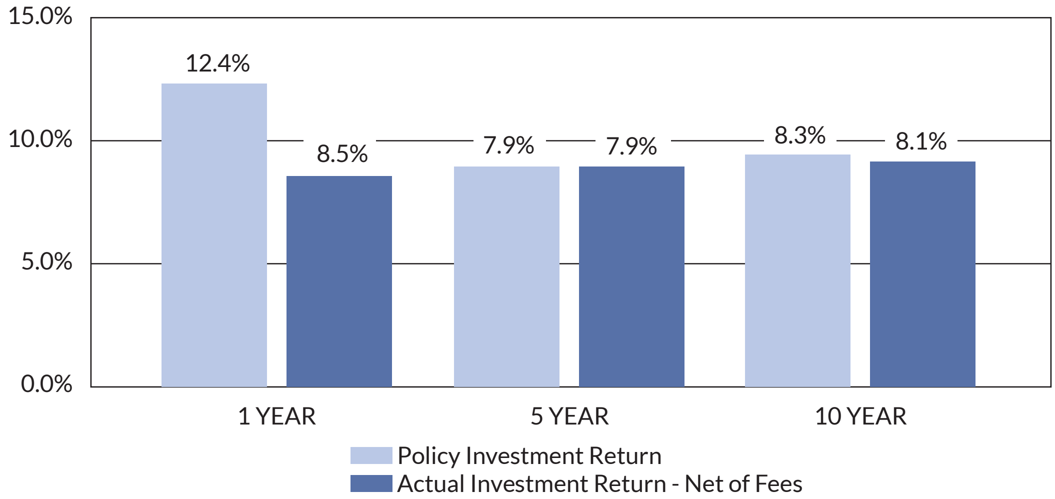
The Board's Investment Policy provides the framework for the management and oversight of VCERA's investments. The Investment Policy establishes VCERA's investment objectives and defines the principal duties of the Board, staff, custodian, investment managers, and consultants. The Board adopted a new asset allocation and corresponding implementation plan in April 2022.

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.

For the one-year period ended June 30, 2023, VCERA's Total Fund investment portfolio returned 8.5% net-of-fees, underperforming its policy benchmark by 3.9%. The publicly traded U.S. equity portfolio returned 19.1%, outperforming its benchmark by 0.1%. The non-U.S. equity portfolio returned 16.2%, outperforming its benchmark by 3.5%. Global equity returned 17.0%, outperforming its benchmark by 0.5%. Private equity returned (4.3%), underperforming its public market benchmark by 25.3%. Fixed income returned 2.2%, outperforming its benchmark by 2.29%. Private Credit returned 6.1%, underperforming its benchmark by 3.3%. Real Estate returned (10.5%), outperforming its benchmark by 0.2%. Real Assets returned 8.3%, outperforming it benchmark by 3.3%. Over the five-year and ten-year periods ended June 30, 2023, the Total Fund's annualized returns were 7.9% and 8.1%, respectively, with the five-year return in line with its policy benchmark and the ten-year underperforming its benchmark by 0.2%, respectively. The chart below compares the Total Fund's actual and policy investment returns for one, five and ten years.

ACTUARIAL FUNDING STATUS

Pursuant to provisions in the CERL, VCERA engages an independent actuarial firm to perform annual actuarial valuations. A system-wide actuarial valuation (i.e., Experience Study) is performed every three years, at which



Letter of Transmittal CONTINUED

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, 2020.

VCERA is funded by member and employer contributions and investment earnings. 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 a 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 regular employer and member contributions and investment earnings 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 the cost of the COLA for safety and legacy members. 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).

PEPRA provisions require equal sharing of normal costs between employers and employees. Employees must pay 50% of the normal cost, but may pay more, if collectively bargained. 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, 2023, actuarial valuation determined VCERA's funded ratio to be 97.1% with a recognized UAAL of $230 million. The employer contribution rate will therefore be set equal to 8.5% of payroll for the amortization of the UAAL, plus the normal cost rate of 10.1%, for a total contribution rate of 18.6% of payroll for the 2023-2024 fiscal year.

SIGNIFICANT EVENTS, ACCOMPLISHMENTS, AND OBJECTIVES

The 2022-23 fiscal year saw changes in the operation and administration of the retirement system by the Board and staff. Some of the more significant events and accomplishments of the past year are summarized below:

- Work with County Auditor-Controller office to accelerate Alameda Decision correction process.
- Collaborate with County on Data-scrubbing efforts.
- Expand trustee onboarding and education program.
- Conducted penetration testing to ensure proper data security.
- Successful transition to PrimeGov, VCERA's agenda management software.

OBJECTIVES FOR THE COMING YEAR

- Hire an Interim Retirement Administrator and recruit and hire a Retirement Administrator, due to the August 2023 resignation of Linda Webb.
- Work with County Auditor-Controller's office to accelerate Alameda Decision correction process.
- Finalize Alameda implementation methodology, including corrections, refunds, and policies.
- Expand VCERA's member portal to allow for secure document uploads.
- Mature and grow VCERA IT to support business applications and deliver refined services to members and staff.

Letter of Transmittal CONTINUED

CERTIFICATE OF ACHIEVEMENT

The Government Finance Officers Association of the United States and Canada (GFOA) awarded VCERA a Certificate of Achievement for Excellence in Financial Reporting in recognition of our ACFR for the fiscal year ended June 30, 2022. This award recognizes contributions to the practice of government finance exemplifying outstanding financial management. In doing so, they stress practical, documented work that offers leadership to the profession.

A Certificate of Achievement is valid for a period of one year only. Management believes that the current ACFR continues to meet the Certificate of Achievement Program's requirements, and it will be submitted to the GFOA to determine its eligibility for another certificate.

ACKNOWLEDGEMENTS

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

Respectfully submitted,

Rick Santos, CFA, ASA, MAAA
Interim Retirement Administrator

Government Finance Officers Association

Certificate of Achievement for Excellence in Financial Reporting

Presented to

Ventura County Employees' Retirement Association California

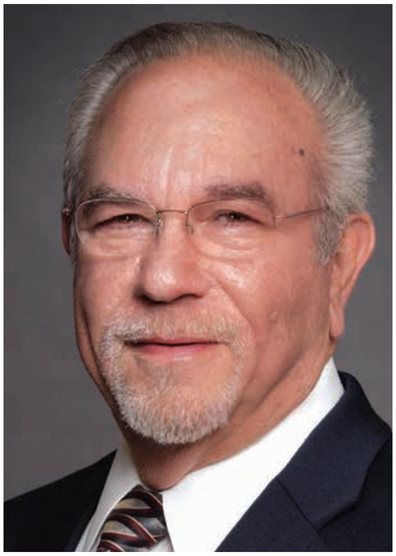
For its Annual Comprehensive Financial Report For the Fiscal Year Ended

June 30, 2022

Christopher P. Morrill

Executive Director/CEO

Members of the Board of Retirement



MICHAEL SEDELL
Chair
Appointed by Ventura County
Board of Supervisors

ARTHUR E. GOULET
Vice-Chair
Elected by Retired Members

AARON GRASS
Elected by Safety Members

KELLY LONG
Appointed by Ventura County
Board of Supervisors

TOMMIE E. JOE
Appointed by Ventura County
Board of Supervisors

SUE HORGAN
Ex-Officio Member

Members of the Board of Retirement CONTINUED

WILLIAM HOAG
Alternate Elected by
Retired Members

VACANT
Alternate Appointed by Ventura
County Board of Supervisors

VACANT
Appointed by Ventura County
Board of Supervisors

ROBERT ASHBY
Alternate Elected by
Safety Members

JORDAN ROBERTS
Elected by General Members

CECILIA HERNANDEZ-GARCIA
Elected by General Members

2023 Organization Chart

- **BOARD OF RETIREMENT**
  - **LORI NEMIROFF** — General Counsel
    - **PAMELA BOWMAN** — Legal Management
  - **RICK SANTOS** — Interim Retirement Administrator
    - **LA VALDA MARSHALL** — Chief Financial Officer
      - **KARLA MAIRENA** — Accounting Manager
        - **ELDA BOUDAGHIANS** — Sr. Accountant
          - **SUSANA MAGANA** — Sr. Accounting Technician
    - **AMY HERRON** — Chief Operations Officer
      - **CHRIS AYALA** — Board Clerk/HR/Program Asst.
      - **VACANT** — Public Information Officer
      - **ANDREA DONATI** — Office Assistant
      - **VERONICA PINZON** — Office Assistant
      - **SHALINI NUNNA** — Retirement Benefits Manager
        - **DOUGLAS ARNETT** — Retirement Benefits Specialist
          - **TERI CRUZ** — Retirement Benefits Specialist
        - **ANGIE TOLENTINO** — Retirement Benefits Specialist
          - **CHANTELL GARCIA** — Retirement Benefits Specialist
            - **CHRIS OLIVO** — Retirement Benefits Specialist
      - **JOSIAH VENCEL** — Retirement Benefits Manager
        - **NANCY JENSEN** — Retirement Benefits Specialist
          - **STEPHANIE BERKLEY** — Retirement Benefits Specialist
      - **REBEKAH VILLALOBOS** — Retirement Benefits Manager
        - **GINA SIMONELLI** — Retirement Benefits Specialist
          - **CHRISTINA WEBB** — Retirement Benefits Specialist
            - **SIERRA WALSH** — Retirement Benefits Specialist
              - **JACKIE PINEDA** — Retirement Benefits Specialist
        - **LYDIA BAKHOUM** — Retirement Benefits Specialist
          - **SHANA BARROW** — Retirement Benefits Specialist
            - **JESS ANGELES** — Retirement Benefits Specialist
    - **LEAH OLIVER** — Chief Technology Officer
      - **BRIAN OWEN** — Sr. Information Tech. Spec.
        - **MICHAEL SANCHEZ** — Sr. Information Tech. Spec.
          - **MICHELLE HERNANDEZ** — System Administrator
            - **DAVID RODRIGUEZ** — System Administrator
  - **DAN GALLAGHER** — Chief Investment Officer

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
Ice Miller, LLP

TECHNICAL SUPPORT
Automatic Data Processing
Information Technology Services of the County of Ventura
Brentwood IT
Digamax - LimeCyber
Digital Deployment
Gartner
Tyler Technologies
Velosio
Vitech Systems, Inc.
VSG Hosting
WIP, Inc.

Please refer to the Investment Section for a list of Investment Management Fees and Investment Managers on pages 62 and 63, respectively.

Chumash Indian Museum

Located in Thousand Oaks, the Chumash Indian Museum is a physical repository of knowledge of the Chumash people, who populated present-day Ventura County centuries ago. The museum features guided tours, nature hikes, a replica Chumash village and a living history center filled with artifacts of historical and cultural significance. Visitors will step back in time when walking the grounds.

BROWN ARMSTRONG
CERTIFIED PUBLIC ACCOUNTANTS

www.ba.cpa
661-324-4971

INDEPENDENT AUDITOR'S REPORT

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

Report on the Audit of the Basic Financial Statements and Other Information

Opinions

We have audited the accompanying Statement of Fiduciary Net Position of Ventura County Employees' Retirement Association (VCERA), a pension trust fund and fiduciary component unit of the County of Ventura, as of June 30, 2023, the Statement of Changes in Fiduciary Net Position for the fiscal year then ended, and the related notes to the basic 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 as of June 30, 2023, 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 excluding that attributable to employer-paid member contributions (other information) as of and for the fiscal year ended June 30, 2023, specified column totals, listed as other information in the table of contents.

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, 2023, and the respective changes in fiduciary net position for the fiscal year then ended, and the Schedule of Cost Sharing Employer Allocations of VCERA as of June 30, 2023; and the Schedule of Employer Pension Amounts Allocated by Cost Sharing Plan total for all entities of the specified column totals as of and for the fiscal year ended June 30, 2023, in accordance with accounting principles generally accepted in the United States of America (US GAAP).

Basis for Opinions

We conducted our audit in accordance with auditing standards generally accepted in the United States of America (US GAAS) and the standards applicable to financial audits contained in *Government Auditing Standards* (US GAS), issued by the Comptroller General of the United States. Our responsibilities under those standards are further described in the Auditor's Responsibilities for the Audit of the Basic Financial Statements and Other Information section of our report. We are required to be independent of VCERA and to meet our other ethical responsibilities, in accordance with the relevant ethical requirements relating to our audit. We believe that the audit evidence we have obtained is sufficient and appropriate to provide a basis for our audit opinions.

Responsibilities of Management for the Basic Financial Statements and Other Information

Management is responsible for the preparation and the fair presentation of the basic financial statements and the other information in accordance with US GAAP, and for the design, implementation, and maintenance of internal control relevant to the preparation and fair presentation of basic financial statements and the other information that are free from material misstatement, whether due to fraud or error.

In preparing the basic financial statements and other information, management is required to evaluate whether there are conditions or events, considered in the aggregate, that raise substantial doubt about VCERA's ability to continue as a going concern for twelve months beyond the financial statement date, including any currently known information that may raise substantial doubt shortly thereafter.

Management is also responsible for maintaining a current plan instrument, including all VCERA plan amendments; administering VCERA; and determining that VCERA's transactions that are presented and disclosed in the basic financial statements and other information are in conformity with the VCERA's plan provisions, including maintaining sufficient records with respect to each of the participants, to determine the benefits due or which may become due to such participants.

Auditor's Responsibilities for the Audit of the Basic Financial Statements and Other Information

Our objectives are to obtain reasonable assurance about whether the basic financial statements and other information as a whole are free from material misstatement, whether due to fraud or error, and to issue an auditor's report that includes our opinions. Reasonable assurance is a high level of assurance but is not absolute assurance and therefore is not a guarantee that an audit conducted in accordance with US GAAS and US GAS will always detect a material misstatement when it exists. The risk of not detecting a material misstatement resulting from fraud is higher than for one resulting from error, as fraud may involve collusion, forgery, intentional omissions, misrepresentations, or the override of internal control. Misstatements are considered material if there is a substantial likelihood that, individually or in the aggregate, they would influence the judgment made by a reasonable user based on the financial statements.

In performing an audit in accordance with US GAAS and US GAS, we:

- Exercise professional judgment and maintain professional skepticism throughout the audit.
- Identify and assess the risks of material misstatement of the basic financial statements, whether due to fraud or error, and design and perform audit procedures responsive to those risks. Such procedures include examining, on a test basis, evidence regarding the amounts and disclosures in the basic financial statements.
- Obtain an understanding of internal control relevant to the audit 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, no such opinion is expressed.
- Evaluate the appropriateness of accounting policies used and the reasonableness of significant accounting estimates made by management, as well as evaluate the overall presentation of the basic financial statements.
- Conclude whether, in our judgment, there are conditions or events, considered in the aggregate, that raise substantial doubt about VCERA's ability to continue as a going concern for a reasonable period of time.

We are required to communicate with those charged with governance regarding, among other matters, the planned scope and timing of the audit, significant audit findings, and certain internal control-related matters that we identified during the audit.

Required Supplementary Information

US GAAP require that the management's discussion and analysis (MD&A) and the required supplementary 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 MD&A and RSI in accordance with US GAAS, 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 basic financial statements that collectively comprise VCERA's basic financial statements and other information. The other supplementary information, as listed in the table of contents, is presented for purposes of additional analysis and are not a required part of the basic financial statements. Such information is the responsibility of management and was derived from and relates directly to the underlying accounting and other records used to prepare the basic financial statements. The 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 US GAAS. In our opinion, the other supplementary information is fairly stated, in all material respects, in relation to the basic financial statements as a whole.

Additional Information

Management is responsible for the additional information included in the Annual Comprehensive Financial Report. The additional information comprises the introductory, investment, actuarial, and statistical sections but does not include the basic financial statements and our auditor's report thereon. Our opinions on the basic financial statements do not cover the additional information, and we do not express an opinion or any form of assurance thereon.

In connection with our audit of the basic financial statements, our responsibility is to read the additional information and consider whether a material inconsistency exists between the additional information and the basic financial statements and other information, or the additional information otherwise appears to be materially misstated. If, based on the work performed, we conclude that an uncorrected material misstatement of the additional information exists, we are required to describe it in our report.

Report on Summarized Comparative Information

We have previously audited VCERA's June 30, 2022 basic financial statements and other information, and our report dated March 13, 2023, expressed an unmodified opinion on those audited financial statements. In our opinion, the summarized comparative information presented herein as of and for the fiscal year ended June 30, 2022, is consistent in all material respects, with the audited basic financial statements and other information from which it has been derived.

Other Reporting Required by US GAS

In accordance with US GAS, we have also issued our report dated December 14, 2023, 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 agreements and other matters. The purpose of that report is solely to describe the scope of our testing of internal control over financial reporting and compliance and the results of that testing, and not to provide an opinion on the effectiveness of VCERA's internal control over financial reporting or on compliance. That report is an integral part of an audit performed in accordance with US GAS in considering VCERA's internal control over financial reporting and compliance.

BROWN ARMSTRONG
ACCOUNTANCY CORPORATION

Brown Armstrong
Accountancy Corporation

Bakersfield, California
December 14, 2023

Management's Discussion and Analysis

The following review of the results of VCERA or the Plan operations and financial condition for the fiscal year ended June 30, 2023, should be read in conjunction with the Letter of Transmittal found in the Introductory Section of this 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, 2023 was $7.6 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 $552.9 million, or 7.9%. The increase for the fiscal year ended June 30, 2023 was 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, 2023 are $943.5 million. This total is comprised of employer and plan member contributions of $272.5 million, net investment income gain of $670.8 million and net securities lending income of $222 thousand.
- Total deductions, as reflected in the Statement of Changes in Fiduciary Net Position, increased to $390.6 million, or 6.7%, from the prior year.
- VCERA's funded status, as measured by the actuarial value of assets divided by the actuarial value of accrued liabilities, decreased from 97.2% to 97.1%.

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 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 fiscal 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** reflects all the activities that occurred during the year and shows the impact of those activities as additions to or deductions from the Plan. The trend of additions to versus deductions from 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.

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 Supplementary Information includes the Schedules of Administrative Expenses, Investment Expenses and Payments to Consultants. Refer to the Other Supplementary Information Section of this report.

Other Information includes Schedules of Employer Pension Amounts Allocated by Cost Sharing Plan and Cost Sharing Employer Allocations, which are presented immediately following the Other Supplementary Information Section of this report.

FINANCIAL ANALYSIS

During the fiscal year, the Plan's assets returned 8.5% (net of fees), higher than the Plan's 7.0% assumed rate of return. The Private Equity portfolio underperformed with a return of (4.3%). The U.S. Equity portfolio gained 19.1%, the Global Equity portfolio gained 17.0%, the Non-U.S. Equity portfolio gained 16.2%, the Private Credit portfolio gained 6.1% and the Fixed Income portfolio gained 2.2%. For other asset class returns, refer to the Schedule of Investment Returns on page 60.

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 earnings policy for the Plan to credit semi-annual interest to reserves and to determine the use of excess earnings, if any. On December 31, 2022 and June 30, 2023, all reserve accounts except for Member, Non-Vested Supplemental and Contingency reserve accounts were credited interest at a rate of one-half of the actuarial assumption rate adopted by the Board, currently at 3.50% (7.00% 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 10-year Treasury Note, as quoted in the Wall Street Journal for December 31 and June 30, not to exceed one-half of the actuarial assumption rate adopted by the Board, currently at 3.50%. On December 31, 2022 and June 30, 2023, member accounts were credited interest at a rate of 1.940% and 1.922%, respectively, less than the actuarial assumption rate. The increase in the fair value of investments and increase in benefit payments in the fiscal year ended June 30, 2023, resulted in an increase of $552.9 million in the total reserves as of June 30, 2023.

($ in Thousands) Reserve Account	June 30, 2023	June 30, 2022
Member	$947,972	$888,174
Employer Advance	2,837,574	2,712,188
Retired Member	3,685,528	3,510,987
Vested Fixed Supplemental	151,036	150,247
Non-Vested Supplemental	60	62
Death Benefit	18,595	18,010
Undistributed Earnings	-	-
Contingency	-	-
Market Stabilization	(62,527)	(254,336)
Total Reserves	$7,578,238	$7,025,332

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 $7.0 billion to $7.6 billion. Investments increased by approximately $529.1 million, as a result of an increase in the fair value of VCERA's investment portfolio. Current Assets decreased by $30.3 million, mostly attributable to an increase in cash by $11.8 million and decrease in collateral on loaned securities by $50.5 million based on the decreased demand in VCERA's market securities by borrowers. Capital Assets decreased by $1.8 million, representing the amortization/depreciation of leasehold improvements, pension administration system and equipment. Total Liabilities decreased by $55.9 million, due primarily to a decrease in obligations due under the securities lending program.

($ in Thousands)	June 30, 2023	June 30, 2022	Difference	2022-2023 % Change
Current Assets	$228,000	$258,324	$(30,324)	-11.7%
Investments, at fair value	7,426,082	6,897,016	529,066	7.7%
Capital Assets, Net	7,832	9,593	(1,761)	-18.4%
Total Assets	7,661,914	7,164,933	496,981	6.9%
Total Liabilities	83,676	139,601	(55,925)	-40.1%
Net Position Restricted For Pensions	$7,578,238	$7,025,332	552,906	7.9%

ADDITIONS TO AND DEDUCTIONS FROM 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 2023 results showed a 0.1% decrease in employer contributions and 11.0% increase in member contributions. Net investment income was higher than the prior year by $1.2 billion due to higher than expected investment returns.

Management's Discussion and Analysis CONTINUED

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 2023.

Benefit payments grew by $22.4 million, or 6.4%, in 2023, 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 costs of operating the Plan and increased by 1.7% as compared to the prior year.

($ in Thousands)	June 30, 2023	June 30, 2022	Difference	2022-2023 % Change
Employer Contributions	$178,532	$178,688	$(156)	-0.1%
Member Contributions	93,974	84,699	9,275	11.0%
Net Investment Income (Loss)	670,999	(553,406)	1,224,405	221.2%
Total Additions (Declines)	943,505	(290,019)	1,233,524	425.3%
Benefit Payments	372,643	350,244	22,399	6.4%
Member Refunds & Death Benefit Payments	8,694	6,854	1,840	26.8%
Administrative/Other Expenses	9,262	9,104	158	1.7%
Total Deductions	390,599	366,202	24,397	6.7%
Net Increase/(Decrease)	552,906	(656,221)	1,209,127	-184.3%
Fiduciary Net Position Beginning of Year	7,025,332	7,681,553	(656,221)	-8.5%
Fiduciary Net Position at End of the Year	$7,578,238	$7,025,332	$552,906	7.9%

NET PENSION LIABILITY OF PARTICIPATING EMPLOYERS

VCERA is subject to the provisions of GASB Statement No. 67 (GASB 67), Financial Reporting for Pension Plans - an amendment of GASB Statement No. 25, and VCERA's participating employers are subject to the provisions of GASB Statement No. 68, Accounting and Financial Reporting for Pensions - an amendment of GASB Statement No. 27. These standards require governmental employers to recognize their long-term obligation for pension benefits as a liability on their balance sheets and 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 is a measurement of pension liabilities using market assets that provides a consistent and standardized methodology allowing comparability of data and increased transparency of the pension liability across all governmental entities. VCERA has complied with GASB 67 for the fiscal year ended June 30, 2023.

Based on the June 30, 2023 GASB 67 actuarial valuation, the NPL (Asset) of participating employers on a fair value basis is $229.3 million, a decrease of approximately $208.8 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,

La Valda R. Marshall

La Valda Marshall, MBA
Chief Financial Officer

Basic Financial Statements

STATEMENT OF FIDUCIARY NET POSITION

AS OF JUNE 30, 2023 WITH COMPARATIVE AMOUNTS FOR JUNE 30, 2022
($ IN THOUSANDS)

	June 30, 2023	June 30, 2022
ASSETS		
Cash and Cash Equivalents	$150,195	$138,440
Collateral on Loaned Securities	56,544	107,023
Receivables		
Employer and Plan Member Contributions	4,175	3,545
Securities Sold	11,886	5,411
Accrued Interest and Dividends	4,989	3,892
Other	211	13
Total Receivables	21,261	12,861
Investments at Fair Value		
U.S. and Non-U.S. Equities: Publicly Traded	3,927,318	3,419,187
Private Equity	1,365,269	1,237,710
Fixed Income: Publicly Traded	749,540	845,314
Private Credit	491,399	320,986
Real Assets	892,556	1,073,819
Total Investments at Fair Value	7,426,082	6,897,016
Capital Assets, Net of Accumulated Depreciation and Amortization	7,832	9,593
Total Assets	7,661,914	7,164,933
LIABILITIES		
Payables for Securities Purchased	18,260	23,879
Payables and Other Liabilities	8,872	8,699
Securities Lending	56,544	107,023
Total Liabilities	83,676	139,601
Net Position Restricted for Pensions	$7,578,238	$7,025,332

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

STATEMENT OF CHANGES IN FIDUCIARY NET POSITION

FOR THE FISCAL YEAR ENDED JUNE 30, 2023 WITH COMPARATIVE AMOUNTS FOR FISCAL YEAR ENDED JUNE 30, 2022
($ IN THOUSANDS)

	June 30, 2023	June 30, 2022
ADDITIONS		
Contributions		
Employer	$178,532	$178,688
Member	93,974	84,699
Total Contributions	272,506	263,387
Investment Income		
From Investing Activities:		
Net Appreciation in Fair Value of Investments	643,252	(591,168)
Investment Income	72,029	72,397
Total Investing Activity Income	715,281	(518,771)
Less Expenses from Investing Activities	(44,504)	(34,886)
Net Investing Activity Income	670,777	(553,657)
From Securities Lending Activities:		
Securities Lending Income	2,572	481
Less Expenses from Securities Lending Activities:		
Borrower Rebates	(2,254)	(123)
Management Fees	(96)	(107)
Total Expenses from Securities Lending Activities	(2,350)	(230)
Net Securities Lending Income	222	251
Total Net Investment Income	670,999	(553,406)
Total Additions	943,505	(290,019)
DEDUCTIONS		
Benefit Payments	372,643	350,244
Member Refunds & Death Benefits Payments	8,694	6,854
Administrative Expenses	6,838	6,169
Other Expenses	2,424	2,935
Total Deductions	390,599	366,202
Net Increase (Decrease) in Net Position	552,906	(656,221)
NET POSITION RESTRICTED FOR PENSIONS		
Beginning of Year	7,025,332	7,681,553
End of Year	$7,578,238	$7,025,332

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

1. SUMMARY OF SIGNIFICANT ACCOUNTING POLICIES

Reporting Entity. VCERA is an independent government entity, with its own governing board. The VCERA Board of Retirement is a nine-member body with three alternate positions. The Board consists of five trustees, four appointed and one alternate by the Ventura County Board of Supervisors, four trustees who are elected by the VCERA membership (two general, one safety and one retiree), and the County of Ventura Treasurer, Ex-Officio. The safety and retiree positions have elected alternate members. Except the County Treasurer, Ex-Officio, all trustees serve a three-year term with no limit on the number of terms that can be served. However, due to the implementation of the Governmental Accounting Standards Board (GASB) Statement No. 84, *Fiduciary Activities*, the County of Ventura (County) determined that VCERA met the requirements of GASB No. 84 and is a fiduciary component unit of the County. As such, they are included as a component unit in the County's financial statements as presented in its ACFR for the fiscal year ended June 30, 2023. The report is available at https:/www.ventura.org/auditor-controllers-office/.

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, 2023, are 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., non-U.S. and global equities, private equity, private credit 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.

Private Credit. Private credit is an asset class comprised of higher yielding, illiquid investment opportunities that cover a range of risk/return profiles. This includes debt that is secured and senior in the capital structure with fixed income-like characteristics and distressed debt that has very equity-like risk and returns. 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 GAAP (Financial Accounting Standards Board (FASB) Accounting Standards Codification, Topic 820).

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 GAAP and FASB Accounting Standards Codification, Topic 820. In some circumstances, partnership agreements require reporting financial information and valuations in an accounting standard other than GAAP, such as under International Financial Reporting Standards.

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

The Fund's evaluation of the fair value of portfolio funds is based on the most recent available valuation information provided to it by the portfolio funds, adjusted for subsequent distributions from and capital contributions to such portfolio funds, if any. The evaluation of the fair value of co-investments is based on the most recent information available at the time of valuation ascribed to such investments by the sponsor partnership. If the manager does not agree with this valuation (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 is comprised of risk parity, Master Limited Partnerships (MLPs), commodities and real estate. Risk parity is comprised of publicly traded equities, commodities and fixed income instruments. Please refer to explanation of Fixed Income and Equities on page 21. MLPs are comprised of publicly traded master limited partnerships. 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, 2023.

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 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. These earnings, borrower rebates, and management fees amounted to $2,572,000, $(2,254,000) and $(96,000), respectively, for the fiscal year ended June 30, 2023, due to decreased market 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 Sections 401(a) of the Internal Revenue Code (IRC) 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 IRC and the California Revenue and Taxation Code, Section 23701, respectively.

Implementation of GASB Pronouncements

VCERA implemented all applicable new GASB pronouncements for the fiscal year ended June 30, 2023, as required by each statement. The most recent applicable pronouncement(s), effective for the fiscal year ended June 30, 2023, are:

GASB Statement No. 91 – *Conduit Debt Obligations.* The requirements of this statement are effective for reporting periods beginning after December 15, 2021. There was no effect on VCERA's accounting or financial reporting as a result of implementing this standard.

GASB Statement No. 94 – *Public-Private and Public-Public Partnerships and Availability Payment Arrangements.* The requirements of this statement are effective for reporting periods beginning after June 15, 2022. There was no effect on VCERA's accounting or financial reporting as a result of implementing this standard.

GASB Statement No. 96 – *Subscription-Based Information Technology Arrangements.* The requirements of this statement are effective for reporting periods beginning after June 15, 2022. There was no effect on VCERA's accounting or financial reporting as a result of implementing this standard.

GASB Statement No. 97 – Certain Component Unit Criteria, and Accounting and Financial Reporting for Internal Revenue Code Section 457 Deferred Compensation Plans – an amendment of GASB Statements No. 14 and No. 84 and a supersession of GASB Statement No. 32. The requirements of this statement are effective for reporting periods beginning after June 15, 2021. There was no effect on VCERA's accounting or financial reporting as a result of implementing this standard.

GASB Statement No. 99 – *Omnibus 2022.* The requirements related to extension of the use of LIBOR, accounting for SNAP distributions, disclosures of nonmonetary transactions, pledges of future revenues by pledging governments, clarification of certain provisions in Statement 34, as amended, and terminology updates related to Statement 53 and Statement 63 are effective upon issuance. The requirements related to leases, PPPs, and SBITAs are effective for reporting periods beginning after June 15, 2022, and all reporting periods thereafter. The requirements related to financial guarantees and the classification and reporting of derivative instruments within the scope of Statement 53 are effective for reporting periods beginning after June 15, 2023, and all reporting periods thereafter. There was no effect on VCERA's accounting or financial reporting as a result of implementing this standard.

Future GASB include:

GASB Statement No. 100 – *Accounting Changes and Error Corrections, an amendment of GASB Statement No. 62.* The Statement prescribes the accounting and financial reporting for accounting changes and error corrections as follows: Changes in accounting principles and error corrections should be reported retroactively by restating prior periods. Changes to or within the financial reporting entity should be reported by adjusting beginning balances of the current period. Changes in accounting estimates should be reported prospectively by recognizing the change in the current period. If a new pronouncement does not contain specific transition provisions, then the requirements of this Statement for changes in accounting principles should be applied when implementing the new pronouncement. The aggregate amount of adjustments to and restatements of beginning net position, fund balance, or fund net position, as applicable, should be displayed by reporting unit. In addition, information about the quantitative effects on beginning balances of each accounting change and error correction should be disclosed by reporting unit in a tabular format and reconciled to the beginning balances as previously reported to the restated beginning balances. Descriptive information about accounting changes and error corrections, such as their nature should be disclosed. The Plan has not fully judged the impact on this implementation of the statement on the financial statements.

GASB Statement No. 101 – *Compensated Absences.* The requirements of this Statement are effective for reporting periods beginning after December 15, 2023, and all reporting periods thereafter. Earlier application is encouraged. Governments commonly provide benefits to employees in the form of compensated absences. The objective of this Statement is to better meet the information needs of financial statement users by updating the recognition and measurement guidance for compensated absences. This Statement establishes standards of accounting and financial reporting for (a) compensated absences and (b) associated salary-related payments, including certain defined contribution pensions and defined contribution other postemployment benefits (OPEB). The requirements of this Statement apply to the financial statements of all state and local governments. The Plan has not fully judged the impact on this implementation of the statement on the financial statements.

2. PLAN DESCRIPTION

VCERA was established under the provisions of the GC Sections 31450 et. seq., known collectively as CERL. It is also subject to the California PEPRA, GC Section 7522 et. seq. PEPRA provided lower benefit formulas to employees who became first-time VCERA members on or after January 1, 2013. VCERA operates a cost-sharing, multi-employer defined benefit pension plan (Plan) that includes eligible employees of the County, Ventura County Superior Court, APCD, VRSD, 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 their 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	2023	2022
Retired Members and Beneficiaries	8,257	8,007
Active Members		
Vested	5,952	5,986
Non-Vested	3,432	3,091
Deferred Members		
Vested	1,491	1,426
Non-Vested	2,594	2,386
Total Memberships	21,726	20,896

Benefit Provisions. State law along with resolutions and ordinances adopted by the Board 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, 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.

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 County Board of Supervisors adopted a resolution to make operative GC 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 was provided pursuant to GC Sections 31691.1 and 31692 and it was terminated on July 1, 2019, due to depletion of the reserve set aside to fund it.

Cost-of-Living Adjustment. COLA, based upon changes in the Consumer Price Index for the Los Angeles-Long Beach-Anaheim area, of up to 3% per annum are made for all General Tier 1 and Safety retirees. On February 28, 2005, after the County Board of Supervisors established this COLA, the Board adopted regulations pursuant to GC 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 is primarily funded by member 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 GC 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'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, private credit 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. Private Equity is also permitted via limited partnerships. Discretion is also permitted to international managers to invest, with limits, opportunistically in emerging market equities. Real estate investing is also allowed with the goal to provide competitive risk-adjusted returns as well as diversification benefits to VCERA's portfolio.

Asset Allocation Policy and Expected Long-Term Rate of Return by Asset Class. The allocation of investment assets within the Plan portfolio is approved by the Board, as outlined in the Investment Policy. Plan assets are managed on a total return basis with a long-term objective of achieving and maintaining a fully funded status for the benefits provided through the Fund. The table below displays the Board's adopted asset allocation policy as of June 30, 2023 and 2022, respectively.

ASSET CLASS	Actual Allocation 2023	Target Allocation 2023	Actual Allocation 2022	Target Allocation 2022
U.S. Equity	26.9%	26.0%	25.9%	26.0%
Non-U.S. Equity	14.6%	15.0%	13.7%	15.0%
Global Equity	9.9%	9.0%	9.6%	9.0%
Private Equity	17.9%	18.0%	18.5%	18.0%
U.S. Fixed Income	9.8%	8.0%	10.9%	8.0%
Private Credit	6.4%	8.0%	4.2%	8.0%
Real Assets	5.2%	6.0%	7.5%	6.0%
Real Estate	6.5%	8.0%	7.5%	8.0%
Cash and Equivalents	2.8%	2.0%	2.2%	2.0%
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. This schedules reflects asset allocation for investment purposes and not actuarial. The actuarial version will usually only change during each triannual study as it remains constant for preparation of the annual actuarial valuation report.

Money-Weighted Rate of Return. For the fiscal year ended June 30, 2023, the annual money-weighted rate of return on pension plan investments, net of pension plan investment expense, was 8.50%. 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, 2023, the annual time-weighted rate of return on pension plan investments, net of pension plan investment expense, was 8.5%. The time-weighted rate of return expresses investment performance, net of investment expense, while offsetting the effects of investment inflows and outflows.

Concentration of Credit Risk. Concentration of credit risk is the risk of loss attributed to the magnitude of a government's investment in a single issuer. As of June 30, 2023 and 2022, the Association had no single issuer that exceeds 5% of the total investments per GASB Statement No. 40 disclosure requirements or any one issuer which represents 5% of more of the total fiduciary net position in accordance with GASB Statement No. 67. Investments issued or explicitly guaranteed by the U.S. government and investments in mutual funds, external investment pools, and other pooled investments are exempt from the disclosure requirements.

The Association's investment policy does not allow more than 5% of the total portfolio fair value to be invested in any one issuer, and as of June 30, 2023 and 2022, the Association had no issuer that exceeds 5% of the total portfolio fair value.

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. Effective July 1, 2021 VCERA no longer maintains a commercial bank account with depository insurance coverage from the Federal Deposit Insurance Corporation (FDIC).

As of June 30, 2023, and 2022, VCERA had the following cash and short-term investments:

($ in Thousands)	June 30, 2023	June 30, 2022
State Street Bank and Trust	$131,116	$126,099
County of Ventura Treasurer's Investment Pool	19,079	12,341
Total	$150,195	$138,440

Credit Risk. VCERA requires its overall weighted 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, 2023	Assets held at June 30, 2022
Separate Holdings:		
AAA	$21,609	$23,175
AA	14,373	14,440
A	52,712	45,253
BBB	105,985	93,233
BB	22,536	15,442
B	6,329	6,033
CCC	2,604	11,061
No Rating/Commingled	239,219	155,143
Total Separate Holdings	$465,367	$363,780

($ in Thousands) Rating Category	Assets held at June 30, 2023	Assets held at June 30, 2022
Pooled Investments:		
AAA	$226,320	$263,604
AA	42,569	23,677
A	61,498	95,519
BBB	89,059	172,561
BB	15,555	13,773
B	5,146	4,648
CCC	1,305	1,219
CC	1,901	10,009
No Rating	5,615	98,527
Total Pooled Investments	$448,968	$683,536
Total Portfolio	$914,335	$1,047,316

Note - The Total Portfolio amount does not agree to the Fixed Income amount in the Investment Section of the Statement of Fiduciary Net Position due to one investment classified under "Equities" having fixed income holdings.

Overall, the Plan's fixed income holdings were rated A at June 30, 2023 and 2022.

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 Bloomberg Barclays U.S. Aggregate Bond Index and Bloomberg 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, 2023 and 2022 are as follows:

($ in Thousands) Category	Assets held at June 30, 2023	Duration (Years)	Assets held at June 30, 2022	Duration (Years)
Treasury	$212,188	6.3	$344,618	5.9
Agency	51,835	4.2	17,856	0.9
Mortgage-Backed	154,918	5.1	134,545	3.4
Asset-Backed	64,313	3.7	39,751	1.6
Credit	421,765	5.7	467,041	4.3
Foreign	2,320	-	36,609	5.5
Other	6,995	0.2	6,896	0.3
Total	$914,335	6.6	$1,047,316	7.2

Notes - The duration for the Bloomberg Barclays Aggregate Bond Indices as of June 30, 2023 and 2022, was 6.7 years and 5.8 years, respectively. Also, the Total Portfolio amount does not agree to the amount reported in the Fixed Income investment category of the Statement of Fiduciary Net Position due to one investment classified under "Equities" having fixed income holdings.

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 schedule below 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, 2023	Equities at June 30, 2023	Fixed Income at June 30, 2022	Equities at June 30, 2022
Australian Dollar	$ -	$61,840	$2,566	$49,511
British Pound	8,463	216,145	2,917	188,710
Canadian Dollar	3,929	117,827	4,705	90,093
Danish Krone	1,000	24,159	-	33,101
Euro	17,186	187,611	6,097	372,759
Hong Kong Dollar	-	45,410	-	48,772
Japanese Yen	(2,640)	282,328	5,924	190,116
Mexican Peso	15,948	6,793	2,277	6,340
New Zealand Dollar	-	1,887	-	1,742
Norwegian Krone	679	6,768	5,866	11,913
South African Rand	(8,372)	7,360	-	10,067
Singapore Dollar	3,034	27,228	-	19,252
South Korean Won	(1,002)	29,626	4,334	37,497
Swedish Krona	(3,338)	26,419	-	25,118
Swiss Franc	4,799	166,494	-	97,702
Other/Emerging Markets	7,405	368,830	22,298	309,486
Total Securities Subject to Foreign Currency Risk	$47,091	$1,576,724	$56,984	$1,492,179

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, 2023, and 2022, 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, 2023, and 2022, VCERA had securities on loan with a fair value of $55.5 million and $120.4 million, with collateral of $56.5 million and $107.0 million, respectively.

VCERA's net securities lending income for the fiscal years ended June 30, 2023, and 2022, is as follows:

($ in Thousands)	June 30, 2023	June 30, 2022
Gross Income	$2,572	$481
Expenses		
Borrower Rebates	(2,254)	(123)
Management Fees	(96)	(107)
Net Securities Lending Income	$222	$251

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 derivatives 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. Futures are financial agreements to buy or sell an underlying asset at a specified future date and price. Futures contracts are standardized contracts traded on organized exchanges and they are marked-to-market daily. The futures exchange reduces counterparty credit risk by acting as a central counterparty. It does this by collecting a daily margin payment from one trade participant and crediting it to the other, based on price changes in the underlying asset.

Currency Forwards. 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 transaction 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.

VCERA's currency forwards analysis for the fiscal years ended June 30, 2023, and 2022, is as follows:

Currency Forwards Analysis
as of June 30, 2023 ($ in Thousands)

		Currency Forward Contracts			
Currency	Options	Net Receivables	Net Payables	Swap Agreement	Net Exposure
Australian Dollar	$ -	$ -	$4	$-	$4
Canadian Dollar	-	-	(3)	-	(3)
Yuan Renminbi Offshore	-	-	-	-	-
Czech Koruna	-	-	-	-	-
Euro Currency Unit	-	-	(3)	-	(3)
British Pound Sterling	-	-	(13)	-	(13)
Japanese Yen	-	-	16	-	16
Mexican Peso	-	-	(38)	-	(38)
Sub total	-	0	(37)	-	(37)
U.S. Dollar	45	-	-	284	329
Total	$45	$0	$(37)	$284	$292

Currency Forwards Analysis
as of June 30, 2022 ($ in Thousands)

		Currency Forward Contracts			
Currency	Options	Net Receivables	Net Payables	Swap Agreement	Net Exposure
Australian Dollar	$ -	$ -	$31	$ -	$31
Canadian Dollar	-	-	10	-	10
Yuan Renminbi Offshore	-	-	4	-	4
Euro Currency Unit	-	-	6	-	6
British Pound Sterling	-	-	46	-	46
Japanese Yen	-	-	15	-	15
Mexican Peso	-	(9)	5	-	4
Sub total	-	(9)	117	-	108
U.S. Dollar	(392)	-	-	7,006	6,614
Total	$(392)	$(9)	$117	$7,006	$6,722

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.

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 net appreciation (depreciation) in fair value and related fair value amounts as of June 30, 2023, and the notional amounts for derivatives outstanding, classified by derivative type.

Investment Derivatives

Derivative Type ($ in Thousands)	Net Appreciation/ (Depreciation) in Fair Value June 30, 2023	Fair Value June 30, 2023	Notional Value (Dollars)	Notional Shares (Units)
Credit Default Swaps Bought	($555)	($214)	$13,451	-
Credit Default Swaps Written	120	38	1,358	-
Fixed Income Futures Long	(12,648)	-	161,882	-
Fixed Income Futures Short	19,579	-	(197,629)	-
Foreign Currency Futures Long	(420)	-	3,800	-
Futures Options Bought	(1,726)	485	875	-
Futures Options Written	1,579	(440)	(1,491)	-
FX Forwards	(91)	(37)	2,527	-
Index Futures Long	55,903	-	97	-
Index Futures Short	(14)	-	-	-
Pay Fixed Interest Rate Swaps	3,580	1,348	29,279	-
Receive Fixed Interest Rate Swaps	(1,789)	(888)	37,283	-
Total	$63,518	$292	$51,432	-

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.

Counterparty 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 certain swap agreements. To minimize counterparty credit risk exposure, VCERA's investment managers continually monitor credit ratings of counterparties. In addition, collateral provided by the counterparty reduces VCERA's counterparty credit risk exposure. Should there be a counterparty failure, VCERA would be exposed to the loss of the fair value of derivatives that have unrealized gains and any collateral provided to the counterparty, net of applicable netting arrangements. VCERA requires investment managers to have Master Agreements in place to minimize credit risk. Netting arrangements provide VCERA with a legal right of setoff in the event of bankruptcy or default by the counterparty.

The following schedule displays the fair value of investments with each counterpart's S&P, Fitch, and Moody's credit rating by counterparty name alphabetically.

Counterparty Credit Risk Analysis

Counterparty Name ($ in Thousands)	Total Fair Value June 30, 2023	S&P Rating	Fitch Rating	Moody's Rating
Bank of America, N.A.	$ 1	A+	AA	Aa1
BNP Paribas SA	0	A+	A+	Aa3
Goldman Sachs Bank USA	17	BBB+	A	A2
Goldman Sachs CME	622	BBB+	A	A2
JPMorgan Chase Bank N.A.	4	A+	AA	Aa2
UBS CME	739	A+	A+	Aa3
UBS ICE	38	A+	A+	Aa3
Total	$1,419			

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. These investments are disclosed in the following table, not including holdings within commingled structure.

($ in Thousands) Derivative Type	Notional Value (Dollar)	Notional Shares (Units)	Fair Value June 30, 2023	Investment Maturities (in Years) Less than 1	1-5	6-10	More than 10
Credit Default Swaps Bought	$13,451	-	$(214)	$ -	$(214)	$ -	$ -
Credit Default Swaps Written	1,358	-	38	-	38	-	-
Pay Fixed Interest Rate Swaps	29,279	-	1,348	-	116	251	981
Receive Fixed Interest Rate Swaps	37,283	-	(888)	-	(875)	(13)	-
Total	$81,371	-	$284	$-	$(935)	$238	$981

Fair Value Measurements. VCERA categorizes its fair value measurements of its investments based on the fair value hierarchy established by 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. The table on the following page depicts the fair value measurements as of June 30, 2023.

Investments and Derivative Instruments Measured at Fair Value as of June 30, 2023

($ in Thousands)		Quoted Prices in Active Markets for Identical Assets	Significant Other Observable Inputs	Significant Unobservable Inputs
Investments by Fair Value Level	**Total**	**Level 1**	**Level 2**	**Level 3**
Debt Securities				
Asset Backed Securities	45,001	$825	$44,176	$ -
Commercial Mortgage-Backed Securities	44,237	-	44,237	-
Corporate and Other Credit	184,562	-	184,562	-
U.S. Government Agency	147,867	-	147,867	-
Total Debt Securities	421,667	825	420,842	-
Equity Securities				
U.S. Equity	40,688	-	40,688	-
Limited Partnerships	277,972	63,582	-	214,390
Preferred Stock	589	589	-	-
Total Equity Securities	319,249	64,171	40,688	214,390
Collateral from Securities Lending	56,544	-	56,544	-
Total Investments by Fair Value Level	$797,460	$64,996	$518,074	$214,390

Investments Measured at Net Asset Value (NAV)	
Fixed Income	$451,392
Private Credit	491,399
Equity	
U.S.	1,892,046
Non-U.S.	1,116,363
Global	754,113
Real Assets	614,584
Private Equity	1,365,269
Total Investments Measured at NAV	6,685,166
Total Investments	$7,482,626

Investment Derivative Instruments				
Forward Exchange Contracts	$(37)	$(37)	$ -	$ -
Futures Options Contracts	45	45	-	-
Credit Default Swaps	(176)	-	(176)	-
Interest Rate Swaps	460	-	460	-
Total Investment Derivative Instruments	$292	$8	$284	$ -

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.

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 1 of the fair value hierarchy are valued using a market approach using prices quoted in active markets for those securities. 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.

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. Equity 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. Equity securities classified in level 3 of the fair value hierarchy are valued using the discounted cash flow method and proprietary pricing information.

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 assets (real estate), private credit 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, 2023.

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	$451,392		D, M	1-15 days
Private Credit	491,399	460,951	N/E	N/E
Equity				
U.S.	1,892,046		D	1 day
Non-U.S.	1,116,363		D, M	2-30 days
Global	754,113		D	1-2 days
Private Equity	1,365,269	842,153	N/E	N/E
Real Assets	614,584	95,973	D, Q, N/E	0-90 days
Total Investments Measured at NAV	$6,685,166	$1,399,077		

[1] D = Daily, M = Monthly, Q = Quarterly, N/E = Not Eligible

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

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 Level 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 they 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 credit and equity portfolios are globally diversified and consist of holdings in commingled fund of funds in a limited partnership structure. Each fund of funds invests in a diversified set of underlying private credit and 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. The Private Equity Held for Investment – Separate Accounts is held in the form of limited liability companies Buenaventure One, LLC, and Buenaventure Two, LLC, and are Delaware limited liability companies in accordance with the Delaware Limited Liability Company Act and are qualified tax-exempt under Internal Revenue Code 501(c)(25). In the State of California, Buenaventure One and Buenaventure Two are qualified as tax-exempt under California Revenue and Taxation Code 23701x.

The two limited liability companies were created to hold direct private equity investments as a Fund-of-One to be managed by Abbott Capital Management, LLC (Abbott). 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.

As of June 30, 2023, the following is a summary of the LLC's financial positions.

Limited Liability Companies Financial Position as of June 30, 2023 ($ in Thousands)	
Assets	$211,180
Less: Liabilities	18
Net Assets	$211,162
Net Income	$3,368

4. NET PENSION LIABILITY OF PARTICIPATING EMPLOYERS

The components of the Net Pension Liability (NPL) of the Plan at June 30, 2023 and 2022, were as follows:

($ in Thousands) Net Pension Liability	June 30, 2023	June 30, 2022
Total Pension Liability	$7,807,508	$7,463,430
Plan Fiduciary Net Position	7,578,238	7,025,332
Net Pension Liability (Asset)	$229,270	$438,098
Plan Fiduciary Net Position as a percentage of the Total Pension Liability	97.06%	94.13%

The NPL was measured as of June 30, 2023 and 2022. The Plan's Fiduciary Net Position (plan assets) was valued as of the measurement date while the Total Pension Liability (TPL) was determined based upon rolling forward the TPL from actuarial valuations as of June 30, 2022 and 2021, 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 members 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 TPL as of June 30, 2023 were based on the results of the June 30, 2020 Review of Economic Assumptions and Actuarial Experience Study (Experience Study) adopted by the Board in June 2021. For determining the TPL, the investment return assumption used is net of investment expenses only and is not net of administrative expenses.

The actuarial assumptions used to determine the TPL as of June 30, 2023 were based on the results of the most recent Actuarial Experience Study which covered the period from July 1, 2017 through June 30, 2020. These same assumptions were used to revalue the June 30, 2022 TPL (before the roll forward). The actuarial assumptions were used to prepare the 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 on the following page.

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

Valuation Date	June 30, 2023
Actuarial Assumptions and Methods	The TPLs as of June 30, 2023 and 2022 were determined by actuarial valuations as of June 30, 2022 and 2021, respectively. The actuarial assumptions used were based on the results of an experience study for the period from July 1, 2017 through June 30, 2020 and they are the same assumptions used in the June 30, 2023 and 2022, funding valuations for VCERA. In particular, the following actuarial assumptions were applied to all periods included in the measurement:

Inflation	2.50%
Salary increases	General: 3.75% to 10.00% and Safety: 4.00% to 12.00%, varying by service, including inflation and real across-the-board salary increase.
Investment rate of return	7.00% net of pension plan investment expenses, including inflation.
Other assumptions	See analysis of actuarial experience during the period July 1, 2017 through June 30, 2020.

Long-Term Real Rate of Return by Asset Class

For preparation of the actuarial valuation, the long-term expected rate of return on the Plan's investments uses 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 and subtracting expected investment expenses and a risk margin. The target allocation and projected arithmetic real rates of return for each major asset class, after deducting inflation, but before deducting investment expenses, used in the derivation of the long-term expected investment rate of return assumption, are summarized in the following table:

Asset Class	Target Allocation	Long-Term Expected Real Rate of Return
Large Cap U.S. Equity	27.69%	5.39%
Small Cap U.S. Equity	3.96%	6.58%
Developed International Equity	16.04%	6.39%
Emerging Market Equity	4.31%	8.60%
Core Fixed Income	5.00%	0.83%
Treasuries	2.00%	0.00%
Real Estate	8.00%	5.01%
Private Equity	16.00%	10.00%
Private Debt/Credit Strategies	6.00%	5.02%
Infrastructure	4.00%	5.89%
Natural Resources	2.00%	11.24%
Absolute Return (Fixed Income)	5.00%	2.17%
Total	100.00%	6.06%

Note - Long-term expected rate of return net of investment expenses: 7.00%. Also, the actuary groups asset classes differently than the investment consultant. While the asset class target allocation does not match the investment consultant's, they are considered the same.

Discount Rate

The discount rate used to measure the Total Pension Liability was 7.00% as of June 30, 2023 and 2022. 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 member 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, 2023 and 2022.

The following table presents the Net Pension Liability of participating employers calculated using the current discount rate of 7.00% as of June 30, 2023 and 2022, 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 as of June 30, 2023
($ in Thousands)

Net Pension Liability (Asset)	1% Decrease (6.00%)	Current Discount Rate (7.00%)	1% Increase (8.00%)
June 30, 2023	$1,257,136	$229,270	($620,044)

5. CONTRIBUTIONS

Employer and member 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 UAAL. For the June 30, 2020 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. 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.

VCERA's employers were required to contribute $178.5 million and $178.7 million in actuarially determined contributions for the fiscal years ending June 30, 2023 and 2022, respectively.

Depending on members' benefit tiers, their contribution rates ranged from 4.52% to 13.21% (without 50/50 cost sharing) and 4.93% to 15.22% (with 50/50 cost sharing), as reflected in the June 30, 2020 actuarial valuation. In addition to the actuarially determined contributions, certain participating employers contribute, pursuant to GC 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 the balance of members' accumulated contributions. Additions include member contributions and credited interest; deductions include refunds of members contributions and transfers to Retired Member Reserve upon member retirement.

Notes to the Basic Financial Statements CONTINUED

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. This supplemental benefit was terminated on July 1, 2019, due to the depletion of the reserve used to fund this benefit.

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

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.

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 fair value of assets to provide for future deficiencies in interest earnings, losses on investments, and other contingencies pursuant to GC Section 31592.2.

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

Reserve balances as of June 30, 2023 and 2022, are as follows:

($ in Thousands)

Reserve Account	June 30, 2023	June 30, 2022
Member	$947,972	$888,174
Employer Advance	2,837,574	2,712,188
Retired Member	3,685,528	3,510,987
Vested Fixed Supplemental	151,036	150,247
Non-Vested Supplemental	60	62
Death Benefit	18,595	18,010
Market Stabilization	(62,527)	(254,336)
Total Reserves	$7,578,238	$7,025,332

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 GC 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. GC 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, 2023 and 2022, were within the limits established by the GC.

($ in Thousands)	June 30, 2023	June 30, 2022
Accrued Actuarial Liability (AAL) [1] (June 30, 2022 and 2021)	$7,154,885	$6,747,772
Statutory Limitation for Administrative Expense (AAL x 0.21%)	15,025	14,170
Administrative Expenses Subject to Statutory Limit	6,838	6,169
Excess of Limitation over Actual Administrative Expenses	$8,187	$8,001
Actual Administrative Expenses as a percentage of AAL	0.10%	0.09%

[1] The AAL, as determined by VCERA's actuary each year, is used to calculate the subsequent fiscal year's administrative budget authorization. The AAL as of June 30, 2021 and 2020, was approved by the Board in January 2022 and 2021, respectively, and used to establish the administrative expenditure budgets for the fiscal years ended June 30, 2023 and 2022, as shown in the table.

8. LEASE AGREEMENT

Lease History. VCERA, for the purpose of accommodating the administrative office of the Plan, entered into a lease agreement with the authorized agent for the Landlord. In December 2001, VCERA entered into the first written lease agreement. Effective May 9, 2019, VCERA entered into a ten-year lease extension, effective upon successful completion of tenant improvements, of a commercial lease for office space with the option to renew for two additional five-year periods. It is the eighth-extension amendment. VCERA occupies 10,289 rentable square feet and 9,146 usable square feet. VCERA initially paid a monthly rate of $2.05 per square foot as well as 33.86% of operating expenses and taxes. The monthly Base Rent shall increase annually by 3%. On June 30, 2023, there are 7 years remaining on this lease. The sum of the payments paid for the fiscal year ended June 30, 2023, are $271,209 for base rent and $10,224 for operating expenses and taxes.

Remaining Payments. Payments over the remaining lease term are estimated to be $2,027,000. Annual amounts due under the agreement are as follows:

Fiscal Year Ending:	Amount ($ in Thousands)
2024	$279
2025	288
2026	296
2027	305
2028	315
2029-2030	544
Total	$2,027

9. COMMITMENTS AND CONTINGENCIES

Disability Cases. In the normal course of business, denials of applications for benefits are appealed to the Superior Court. The outcome of these decisions will have no material impact on the financial status of VCERA.

Alameda Decision. On July 30, 2020, the California Supreme Court issued a decision in *Alameda County Deputy Sheriff's Assoc. et al., v. Alameda County Employees' Retirement Association, et al.* referred to as the "Alameda Decision" which impacted VCERA's pension plan. The Supreme Court has determined that certain elements of compensation are not pensionable and must be excluded from the calculation of final average compensation. Some of these elements of compensation have been included in VCERA members' final average compensation and will now be excluded, which may result in reduced benefit allowances. The impact may result in a lower total pension liability and issuance of refunds to members who paid contributions on compensation that is no longer allowed. The plan sponsor and other interested parties have challenged VCERA's interpretation and implementation. VCERA has retained counsel to represent it in this matter. As a result of ongoing litigation, the estimated reduction in pension liability and total refund amounts have not been determined.

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 commitment amounts as often as necessary to reflect VCERA's investment preferences, as well as changes in market conditions. The following table lists Outstanding Capital Commitments as of June 30, 2023.

Outstanding Capital Commitments as of June 30, 2023 ($ in Thousands)

Fund Name	Vintage Year	Investment Type	Total Capital Commitment	Outstanding Capital Commitment
Arbour Lane Credit Opp III A	2021	Private Credit	$30,000	$17,200
Bain Capital Special Situations Asia Fund II	2021	Private Credit	25,000	22,500
Blue Bay Direct Lending Fund III	2019	Private Credit	25,000	8,709
Bridge Debt Strategies III	2019	Private Credit	25,000	1,151
Bridge Debt Strategies IV	2021	Private Credit	25,000	839
Crayhill Principal Strategies II	2021	Private Credit	25,000	25,000
Crayhill Principal Strategies III	2023	Private Credit	25,000	10,796
Crescent Cove Opportunity Fund LP	2022	Private Credit	50,000	37,500
Cross Ocean USD ESS Fund IV	2021	Private Credit	50,000	35,263
CVI Credit Value Fund IV	2017	Private Credit	30,000	3,000
CVI Credit Value Fund V	2021	Private Credit	30,000	10,500
Harbourvest Direct Lending	2021	Private Credit	25,000	6,000
HarbourView Royalties Fund I	2023	Private Credit	30,000	15,357
Kennedy Lewis Capital Partners III	2023	Private Credit	30,000	30,000
Monroe Capital Opportunity Fund II	2023	Private Credit	25,000	25,000
Monroe Capital Private Credit Fund III	2018	Private Credit	25,000	3,747
Monroe Capital Private Credit Fund IV	2022	Private Credit	30,000	4,500
Pantheon Credit Opportunity II	2022	Private Credit	50,000	18,591

Outstanding Capital Commitments as of June 30, 2023 ($ in Thousands)

Fund Name	Vintage Year	Investment Type	Total Capital Commitment	Outstanding Capital Commitment
PIMCO Corporate Opportunities Fund III	2020	Private Credit	50,000	5,000
PIMCO Corporate Opportunities Fund IV	2022	Private Credit	100,000	100,000
Torchlight Debt Fund VII	2021	Private Credit	25,000	12,500
Torchlight Debt Fund VIII	2022	Private Credit	40,000	38,000
VWH Partners III LP	2022	Private Credit	50,000	29,798
Abbott Secondaries Opportunities, LP.	2017	Private Equity	25,000	288
Abbott Secondaries Opportunities II, LP.	2020	Private Equity	40,000	17,066
ABRY Partners IX	2019	Private Equity	10,600	3,137
Adams Street 2010 U.S. Fund	2010	Private Equity	42,500	5,058
Adams Street 2010 Non-U.S. Developed Markets Fund	2010	Private Equity	25,500	2,537
Adams Street 2010 Non-U.S, Emerging Markets Fund	2010	Private Equity	8,500	867
Adams Street 2010 Direct Fund	2010	Private Equity	8,500	332
Adams Street 2013 Global Fund	2013	Private Equity	75,000	5,680
Adams Street 2016 Global Fund	2016	Private Equity	60,000	10,615
Adams Street Co-Investment Fund IV	2018	Private Equity	30,000	5,063
Adams Street Co-Investment Fund V	2022	Private Equity	35,000	26,250
Adams StreetGlobal Secondary Fund 7	2022	Private Equity	25,000	19,625
Advent International GPE IX	2019	Private Equity	10,000	649
Advent International GPE X	2022	Private Equity	20,000	15,350
Astorg VII	2019	Private Equity	8,730	503
Astorg VIII	2022	Private Equity	18,406	9,870
Battery Ventures XII	2018	Private Equity	9,050	889
Battery Ventures XII Side Fund	2018	Private Equity	5,050	277
Battery Ventures XIII	2020	Private Equity	9,240	1,460
Battery Ventures XIII Side Fund	2020	Private Equity	6,160	1,035
Battery Ventures XIV	2022	Private Equity	10,000	7,990
BlackFin Financial Services Fund IV	2023	Private Equity	20,257	20,257
Buenaventure One , LLC	2018	Private Equity	289,600	138,089
CapVest Equity Partners IV	2019	Private Equity	12,487	4,262
CapVest Equity Partners V	2021	Private Equity	18,837	18,491
Charlesbank Equity Fund X	2020	Private Equity	24,000	13,535
Charlesbank Equity Overage Fund X	2020	Private Equity	6,000	1,370
Charlesbank Technology Opportunities Fund II	2023	Private Equity	30,000	30,000
Clearlake Capital Partners V	2017	Private Equity	9,950	2,006
Clearlake Capital Partners VI	2020	Private Equity	18,700	522
Clearlake Capital Partners VII	2021	Private Equity	20,000	9,725

Outstanding Capital Commitments as of June 30, 2023 ($ in Thousands)

Fund Name	Vintage Year	Investment Type	Total Capital Commitment	Outstanding Capital Commitment
CRV XVIII	2020	Private Equity	15,000	2,888
CRV XIX	2022	Private Equity	10,000	7,925
CVC Capital Partners VIII	2020	Private Equity	19,945	8,521
Drive Capital Fund II	2016	Private Equity	15,000	57
Drive Capital Fund III	2019	Private Equity	7,500	1,245
Drive Capital Fund IV	2021	Private Equity	10,000	5,667
Drive Capital Overdrive Fund I	2019	Private Equity	7,500	133
Drive Capital Overdrive Fund II	2021	Private Equity	10,000	5,337
ECI 11	2018	Private Equity	9,776	947
ECI 12	2022	Private Equity	21,084	21,084
Flexpoint Fund IV-A	2019	Private Equity	10,650	4,545
Flexpoint Overage Fund IV-A	2019	Private Equity	3,550	1,007
Genstar Capital Partners IX	2019	Private Equity	7,500	1,157
Genstar Capital Partners IX Opportunities Program	2019	Private Equity	2,500	343
Genstar Capital Partners X	2021	Private Equity	15,000	5,468
Genstar Capital Partners X Opportunities Program	2021	Private Equity	5,000	1,794
Genstar Capital Partners XI	2023	Private Equity	20,000	20,000
GGV Capital VII	2019	Private Equity	10,160	508
GGV Capital VII Plus	2019	Private Equity	2,540	64
GGV Capital VIII	2020	Private Equity	9,180	3,810
GGV Capital VIII Plus	2020	Private Equity	2,295	1,239
GGV Discovery II	2019	Private Equity	2,100	84
GGV Discovery III	2020	Private Equity	3,825	1,893
Great Hill Equity Partners VII	2019	Private Equity	8,900	741
Great Hill Equity Partners VIII	2021	Private Equity	25,000	19,793
Green Equity Investors VIII	2019	Private Equity	15,000	1,699
Green Equity Investors IX	2022	Private Equity	13,300	13,300
GTCR Fund XII	2017	Private Equity	30,000	5,467
GTCR Fund XIII	2020	Private Equity	30,000	14,656
GTCR Fund XIV	2023	Private Equity	20,000	20,000
GTCR Strategic Growth Fund I	2022	Private Equity	10,000	8,578
HarbourVest - Dover Street VIII	2013	Private Equity	67,500	5,400
HarbourVest - Dover Street IX	2016	Private Equity	60,000	7,200
HarbourVest - Dover Street X	2019	Private Equity	40,000	13,900
HarbourVest - Dover Street XI	2023	Private Equity	40,000	37,600
HarbourVest - Co-Investment Fund IV	2017	Private Equity	30,000	5,732
HarbourVest - Co-Investment Fund V	2019	Private Equity	35,000	7,875

Outstanding Capital Commitments as of June 30, 2023 ($ in Thousands)

Fund Name	Vintage Year	Investment Type	Total Capital Commitment	Outstanding Capital Commitment
HarbourVest - Co-Investment Fund VI	2021	Private Equity	35,000	17,500
Hellman & Freidman Capital Partners IX	2019	Private Equity	19,800	537
Hellman & Freidman Capital Partners X	2021	Private Equity	20,000	5,607
Hellman & Freidman Capital Partners XI	2023	Private Equity	20,000	20,000
Insight Ventures Partners X	2017	Private Equity	25,000	855
Jade Equity Investors II	2022	Private Equity	6,700	6,700
Kinderhook Capital Fund 7	2022	Private Equity	10,000	6,390
M/C Partners VIII	2019	Private Equity	10,000	2,353
M/C Partners IX	2022	Private Equity	10,000	10,000
Oak HC/FT Partners III	2019	Private Equity	15,000	1,348
Oak HC/FT Partners IV	2021	Private Equity	10,000	1,440
Oak HC/FT Partners V	2021	Private Equity	10,000	8,630
Pantheon Global Secondary Fund IV	2010	Private Equity	15,000	2,040
Pantheon Global Secondary Fund V	2015	Private Equity	50,000	10,383
Pantheon Global Secondary Fund VI	2018	Private Equity	25,000	7,887
Pantheon Global Secondary Fund VII	2022	Private Equity	25,000	19,151
Pantheon Investors VII	2023	Private Equity	20,000	20,000
Prairie Capital Fund VII	2021	Private Equity	10,800	6,156
The Resolute Fund IV	2018	Private Equity	20,000	2,494
Ridgemont Equity Partners IV	2021	Private Equity	20,000	18,448
Riverside Micro-Cap Fund V	2018	Private Equity	10,000	1,920
Riverside Micro-Cap Fund VI	2021	Private Equity	20,000	14,438
TA XIII	2019	Private Equity	10,000	200
TA XIV	2021	Private Equity	10,000	3,400
TA XV	2023	Private Equity	20,000	20,000
Vitruvian Investment Partnership IV	2020	Private Equity	20,365	3,821
Brookfield Infra Fund IV B	2019	Real Assets	50,000	2,495
HarbourVest Real Assets Fund IV	2019	Real Assets	100,000	44,000
Alterra IOS Venture II LP	2022	Real Estate	35,000	12,490
LaSalle Income and Growth Fund VIII	2019	Real Estate	10,000	36,988
Total Outstanding Commitments			$3,114,537	$1,399,077

10. SUBSEQUENT EVENTS

The Board has approved new commitments of $220 million to the private investments portfolios. New commitments approved for Adams Street Partners ($25 million), Bridge Debt Strategies ($20 million), HarbourVest Partners ($95 million), PIMCO ($25 million), Pantheon ($55 million).

Management has evaluated subsequent events through December 14, 2023 which is the date the financial statements were issued.

Required Supplementary Information

SCHEDULE OF CHANGES IN NET PENSION LIABILITY OF PARTICIPATING EMPLOYERS

($ IN THOUSANDS)

		June 30, 2023	June 30, 2022	June 30, 2021	June 30, 2020	June 30, 2019
Total Pension Liability						
Service cost		$174,224	$165,664	$152,049	$149,470	$145,338
Interest		521,289	501,493	487,569	466,254	444,176
Changes of benefit terms		-	-	-	-	-
Differences between expected and actual experience		29,901	(23,718)	8,880	17,238	7,838
Changes of assumptions		-	-	122,031		-
Benefit Payments, including refunds of member contributions		(381,337)	(357,098)	(332,965)	(315,624)	(297,119)
Net Change in Total Pension Liability		344,077	286,343	437,564	317,338	300,233
Total Pension Liability - Beginning		7,463,431	7,177,088	6,739,524	6,422,186	6,121,953
Total Pension Liability - Ending (A)		$7,807,508	$7,463,430	$7,177,088	$6,739,524	$6,422,186
Plan Fiduciary Net Position						
Contributions- employer [1]		$178,535	$178,667	$178,628	$214,553	$199,891
Contributions- members [1]		93,971	84,720	79,654	79,277	75,199
Net investment income		670,999	(553,407)	1,849,958	209,235	368,665
Benefit Payments, including refunds of member contributions		(381,337)	(357,098)	(332,965)	(315,624)	(297,119)
Administrative expense		(6,838)	(6,169)	(5,523)	(5,367)	(5,342)
Other		(2,424)	(2,935)	(3,050)	(2,583)	(2,397)
Net Change in Plan Fiduciary Net Position		552,906	(656,222)	1,766,702	179,491	338,897
Plan Fiduciary Net Position - Beginning		7,025,332	7,681,554	5,914,852	5,735,361	5,396,463
Plan Fiduciary Net Position - Ending (B)		$7,578,238	$7,025,332	$7,681,554	$5,914,852	$5,735,360
Net Pension Liability - Ending	A-B=C	$229,270	$438,098	$(504,466)	$824,672	$686,826
Plan fiduciary net position as a percentage of the total pension liability	B/A	97.06%	94.13%	107.03%	87.76%	89.31%
Covered payroll (D) [2]		$905,128	$834,433	$785,121	$768,619	$754,657
Net pension liability as a percentage of covered payroll	C/D	25.33%	52.50%	-64.25%	107.29%	91.01%

Amounts may differ from the June 30, 2023 audited financial statements due to rounding.

[1] Actuarially determined contributions exclude employer paid member contributions.

[2] Covered payroll represents payroll on which contributions to the pension plan are based.

SCHEDULE OF CHANGES IN NET PENSION LIABILITY OF PARTICIPATING EMPLOYERS

($ IN THOUSANDS) CONTINUED

		June 30, 2018	June 30, 2017	June 30, 2016	June 30, 2015	June 30, 2014
Total Pension Liability						
Service cost		$138,877	$132,490	$129,269	$124,408	$122,896
Interest		427,800	405,195	388,936	366,917	355,299
Changes of benefit terms		-	-	-	-	-
Differences between expected and actual experience		26,564	(51,058)	(39,598)	(101,178)	(48,740)
Changes of assumptions		129,009	-	-	234,843	-
Benefit Payments, including refunds of member contributions		(277,718)	(260,745)	(246,403)	(233,695)	(223,532)
Net Change in Total Pension Liability		444,532	225,882	232,204	391,295	205,923
Total Pension Liability - Beginning		5,677,421	5,451,539	5,219,335	4,828,040	4,622,117
Total Pension Liability - Ending (A)		$6,121,953	$5,677,421	$5,451,539	$5,219,335	$4,828,040
Plan Fiduciary Net Position						
Contributions- employer [1]		$197,638	$190,712	$177,830	$175,099	$169,703
Contributions- members [1]		74,089	72,442	69,350	63,679	46,674
Net investment income		445,902	580,526	25,739	88,680	658,581
Benefit Payments, including refunds of member contributions		(277,718)	(260,745)	(246,403)	(233,695)	(223,532)
Administrative expense		(4,881)	(5,524)	(4,474)	(3,854)	(4,045)
Other		(2,815)	-	-	-	-
Net Change in Plan Fiduciary Net Position		432,215	577,411	22,042	89,909	647,381
Plan Fiduciary Net Position - Beginning		4,964,248	4,386,837	4,364,795	4,274,886	3,627,505
Plan Fiduciary Net Position - Ending (B)		$5,396,463	$4,964,248	$4,386,837	$4,364,795	$4,274,886
Net Pension Liability - Ending	A-B=C	$725,490	$713,173	$1,064,702	$854,540	$553,154
Plan fiduciary net position as a percentage of the total pension liability	B/A	88.15%	87.44%	80.47%	83.63%	88.54%
Covered payroll (D) [2]		$736,994	$716,033	$688,233	$665,086	$642,779
Net pension liability as a percentage of covered payroll	C/D	98.44%	99.60%	154.70%	128.49%	86.06%

Amounts may differ from the June 30, 2023 audited financial statements due to rounding.

[1] Actuarially determined contributions exclude employer paid member contributions.

[2] Covered payroll represents payroll on which contributions to the pension plan are based.

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 Payroll
2023	$178,535	$178,535	-	905,128	19.72%
2022	$178,667	$178,667	-	834,433	21.41%
2021	178,628	178,628	-	785,121	22.75%
2020	214,553	214,553	-	768,619	27.91%
2019	199,891	199,891	-	754,657	26.49%
2018	197,638	197,638	-	736,994	26.82%
2017	190,712	190,712	-	716,033	26.63%
2016	177,830	177,830	-	688,233	25.84%
2015	173,269	173,269	-	665,086	26.05%
2014	161,247	161,247	-	642,779	25.09%

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

[2] Actuarially Determined Contributions exclude employer paid member contributions.

[3] Covered employee payroll represents payroll on which contributions to the pension plan are based.

SCHEDULE OF INVESTMENT RETURNS

Fiscal Year Ended June 30	Annual Money Weighted Rate of Return, Net of Investment Expense
2023	8.50%
2022	(5.43%)
2021	30.40%
2020	2.40%
2019	6.74%
2018	8.92%
2017	12.27%
2016	(2.00%)
2015	1.70%
2014	18.80%

Note - Money-Weighted Rate of Return is calculated as the internal rate of return on pension plan investments, net of investment expenses, adjusting for changing amounts actually invested.

LATEST ACTUARIAL VALUATION OF PLAN ASSETS AND LIABILITIES

Methods and assumptions used to establish "actuarially determined contribution" rates:	
Valuation Date	Actuarially determined contribution rates are calculated as of June 30, two years prior to the end of the fiscal year in which contributions are reported.
Actuarial Cost Method	Entry Age Actuarial Cost Method
Amortization Method	Level percent of payroll for total unfunded actuarial accrued liability
Remaining Amortization Period	Experience gains and losses are amortized over 15 years. 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	Fair 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 of the non-vested supplemental ($27.50) reserve and the statutory contingency reserve.

Actuarial Assumptions:	**June 30, 2021 Valuation (used for the year ended June 30, 2023 ADC)**
Investment rate of return	7.00% net of pension plan administration and investment expenses, including inflation
Inflation rate	2.50%
Real across-the-board salary increase	0.50%
Projected salary increases [1]	General: 3.75% to 10.00% and Safety: 4.00% to 12.00%, varying by service, including inflation and real across-the-board salary increase.
Consumer Price Index (CPI) and Cost of living adjustments (COLA)	CPI Increases of 2.75% per year. Retiree COLA increases of 2.75% per year for both PEPRA and Non-PEPRA General Tier 1 and both PEPRA and Non-PEPRA Safety. For both PEPRA and Non-PEPRA General Tier 2, members represented by SEIU receive a fixed 2.00% COLA that applies to future service after March 2003. Members represented by CNA receive a fixed 2% COLA that applies to future service after July 2023. For both PEPRA and Non-PEPRA General Tier 1 and both PEPRA and Non-PEPRA Safety members that have COLA banks, we assume they receive 3.0% COLA increases until their COLA banks are exhausted and 2.75% thereafter. For both PEPRA and Non-PEPRA General Tier 2 members represented by SEIU and CNA, the fixed 2% COLA increase is not subject to changes in the CPI.
Other Assumptions	Same as those used in the June 30, 2021, funding actuarial valuation.

[1] Includes inflation at 2.75% plus real across-the-board salary increases of 0.50% plus merit and promotion increases that vary by service.

Other Supplementary Information

SCHEDULE OF ADMINISTRATIVE EXPENSES

FOR THE FISCAL YEAR ENDED JUNE 30, 2023 WITH COMPARATIVE AMOUNTS FOR JUNE 30, 2022
($ IN THOUSANDS)

	June 30, 2023	June 30, 2022
Personnel Services:		
Salaries and Wages	$3,694	$3,393
Employee Benefits	1,749	1,659
Total Personnel Services	5,443	5,052
Consultant & Professional Services:		
External Audit Fees	49	47
Legal Consultants	180	160
Professional Services	190	154
Total Consultant & Professional Services	419	361
Operating Expenses:		
Administrative Support	154	112
General Expenses	45	38
Education and Travel	53	25
Transportation	10	9
Facilities Operations	319	301
Insurance	168	125
Printing	74	29
Postage	74	40
Telecommunications	79	77
Total Operating Expenses	976	756
Total Administrative Expenses	$6,838	$6,169

Other Supplementary Information CONTINUED

SCHEDULE OF INVESTMENT EXPENSES

FOR THE FISCAL YEAR ENDED JUNE 30, 2023 WITH COMPARATIVE AMOUNTS FOR JUNE 30, 2022
($ IN THOUSANDS)

	June 30, 2023	June 30, 2022
Cash and Short-Term Managers	$190	$195
Equity		
U.S. Equity: Publicly Traded	549	736
Non-U.S Equity: Publicly Traded	2,047	3,091
Global Equity: Publicly Traded	284	337
Private Equity	18,605	16,227
Fixed Income		
Fixed Income: Publicly Traded Core, Unconstrained and Dedicated	1,390	1,644
Private Credit	11,431	3,682
Real Assets		
Real Assets	4,416	3,482
Real Estate	4,025	3,906
Other Investment Fees	1,567	1,586
Total Investment Management Fees	$44,504	$34,886

SCHEDULE OF PAYMENTS TO CONSULTANTS

FOR THE FISCAL YEAR ENDED JUNE 30, 2023 WITH COMPARATIVE AMOUNTS FOR JUNE 30, 2022
($ IN THOUSANDS)

	June 30, 2023	June 30, 2022
Actuarial		
Valuation and Consulting Services	$170	$131
Audit		
External Audit Services	49	47
Legal		
Investment Legal Counsel	466	556
Other Legal Services	180	160
Total Legal	646	716
Management		
Information Technology Consulting	180	559
Total Payments to Consultants	$1,045	$1,453

SCHEDULE OF EMPLOYER PENSION AMOUNTS ALLOCATED BY COST SHARING PLAN

AS OF AND FOR THE FISCAL YEAR ENDED JUNE 30, 2023 ($ IN THOUSANDS)

		Deferred Outflow of Resources					Deferred Inflow of Resources					Pension Expense Excluding That Attributable to Employer-Paid Member Contributions		
Employer/ Nonemployer (special funding situation)	Net Pension Liability	Differences Between Expected and Actual Experience	Net Excess of Projected Over Actual Earnings on Pension Plan Investments (If Any)	Changes of Assumptions	Changes in Proportion and Differences Between Employer Contributions and Proportionate Share Contributions	Total Deferred Outflows of Resources	Differences Between Expected and Actual Experience	Net Excess of Actual Over Projected Earnings on Pension Plan Investments (If Any)	Changes of Assumptions	Changes in Proportion and Differences Between Employer Contributions and Proportionate Share of Contributions	Total Deferred Inflows of Resources	Proportionate Share of Allocable Plan Pension Expense	Net Amortization of Deferred Amounts from Changes in Proportion and Differences Between Employer Contributions and Proportionate Share of Contributions	Total Employer Pension Expense Excluding that Attributable to Employer-Paid Member Contributions
County of Ventura	$222,505	$31,911	$ -	$50,626	$4,889	$87,426	$13,973	$22,066	$-	$1,846	$37,885	$105,750	$773	$106,523
Ventura County Superior Court	5,423	778	-	1,234	1,274	3,286	341	537	-	3,499	4,377	2,577	(552)	2,025
Ventura County Air Pollution Control District	726	104	-	165	542	811	46	72	-	621	739	345	(56)	289
Ventura Regional Sanitation District	616	88	-	140	30	258	39	61	-	768	868	293	(165)	128
Total	$229,270	$32,881	$ -	$52,165	$6,735	$91,781	$14,399	$22,736	$-	$6,734	$43,869	$108,965	$ -	$108,965

SCHEDULE OF COST SHARING EMPLOYER ALLOCATIONS

($ IN THOUSANDS)

	June 30, 2023		June 30, 2022	
Participating Employer	Allocation of Net Pension Liability (NPL)/(Asset)	Employer Allocation Percentage	Allocation of Net Pension Liability (NPL)/(Asset)	Employer Allocation Percentage
County of Ventura	$222,505	97.049%	$419,341	95.719%
Ventura County Superior Court	5,423	2.365%	13,595	3.103%
Ventura County Air Pollution Control District	726	0.317%	2,002	0.457%
Ventura Regional Sanitation District	616	0.269%	3,160	0.721%
Total	$229,270	100.000%	$438,098	100.000%

Note - Employer allocation percentage is weighted average allocation of General and Safety NPL/(Asset) as each NPL/(Asset) is calculated separately for each participating employer, then combined.

Fillmore Historical Museum

Before Southern Pacific Railroad arrived in the late 1800s, the Fillmore region was populated by livestock and Native Americans. Residential buildings and a train depot popped up to service travelers, but locomotive traffic eventually decreased with the advent of the automobile. The Fillmore Historical Museum preserves the century-old history of Fillmore by maintaining the 1887 Fillmore Depot, the 1905 Hinckley House and the 1919 Rancho Sespe Bunkhouse. In 1974, Southern Pacific closed the Fillmore Depot, but a local teacher purchased it for $1.05 and made it the home of the Fillmore Historical Museum.

Allan Martin
Partner

October 23, 2023

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

Dear Board Members:

The overall objective of the Ventura County Employees' Retirement Association (VCERA) is to ensure continued access to retirement, disability, and survivor benefits for current and future VCERA participants. To ensure a solid foundation for the future of the Fund, VCERA carefully plans and implements an investment program designed to generate superior long-term investment returns, while prudently managing the risk in the portfolio. Investment policy and asset allocation are reviewed by the Board of Retirement, at least annually, and 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 fiscal year ended June 30, 2023, with background on the underlying capital market environment.

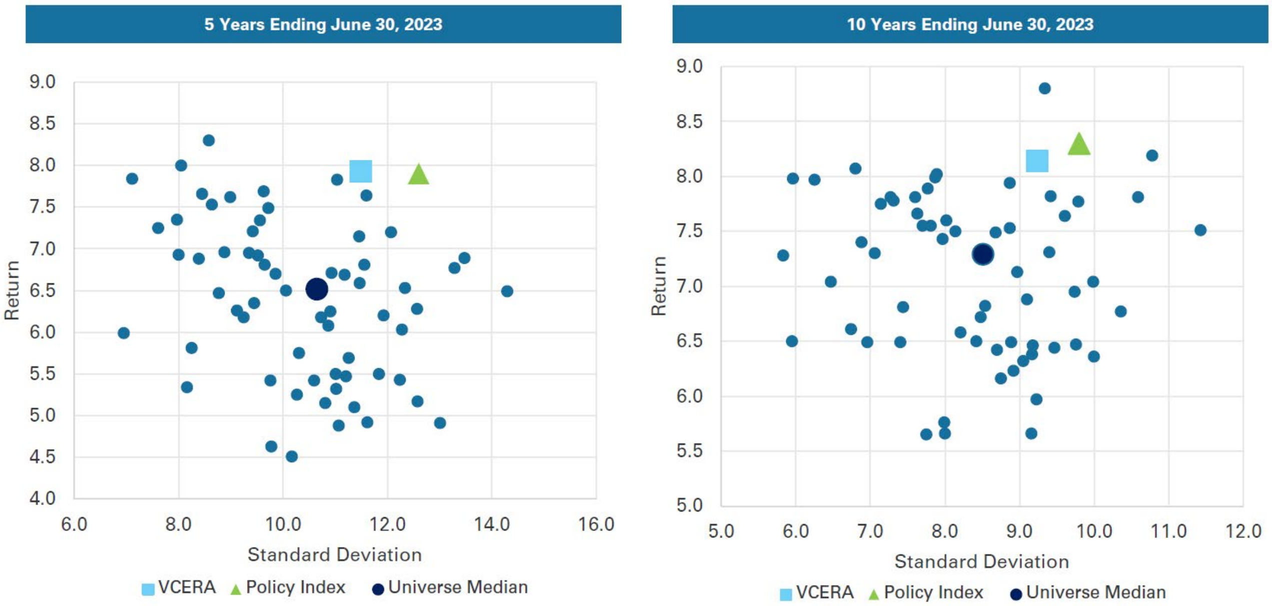
Market Review for the Year Ended June 30, 2023

The fiscal year ended June 30, 2023, was one characterized by strong returns in risky assets such as stocks while interest sensitive fixed income, inflation-sensitive assets, commodities, and real estate declined in value. The U.S. economy demonstrated resilience in the face of rapidly rising interest rates, posting moderate GDP growth and exhibiting signs of a healthy labor market. The fiscal year ended with inflation levels increasing 3.1% on a year-over-year basis, which is a notable deceleration from last year's 9.1% increase, although it remains above the Federal Reserve's target inflation rate of 2.0%. In its efforts to combat inflation, over the past fiscal year, the Federal Reserve raised the Fed Funds rate eight times, from a range of 1.50% - 1.75% ending FY 2022 to 5.00% - 5.25% ending FY 2023. Similar actions were taken by central banks globally. With the resilient U.S. economy and decelerating inflation as the backdrop, U.S. stocks posted strong returns of 19.6% as measured by the S&P 500 Index. International developed stocks also had a strong year with a return of 18.8% as measured by the MSCI EAFE Index. Emerging markets stocks underperformed both U.S. and international-developed markets, posting an anemic 1.8% return as measured by the MSCI Emerging Markets Index. Typically considered a safe-haven asset, U.S. high quality fixed income returns posted a second consecutive negative yearly return as the pace of interest rate hikes eroded value in the Bloomberg U.S. Aggregate Bond Index which returned -0.9%.

The VCERA Investment Portfolio

The VCERA total investment portfolio return, net of fees, was 8.5% annualized for the year ended June 30, 2023, underperforming its policy benchmark by 3.9%. The median fund in the Investment Metrics peer group universe of large Public Funds returned 7.7% annually in the same period. The Fund's five-year return net-of-fees for the period ended June 30, 2023, was 7.9% and ranked in the 7th percentile of its peer group (i.e., VCERA's annualized returns were higher than 93% of its peer group in the 5 years ending 6/30/2023). Over the past 10 years, the Fund's return of 8.1% per annum outperformed the fund's target actuarial rate of return of 7.0% and ranks in the 9^{th} percentile of its peer group. The plan's five-year and ten-year volatility, as measured by standard deviation, ranked in the 72^{nd} and 71^{st} percentiles in its peer group, respectively. On a risk-adjusted basis as measured by the Sharpe Ratio, VCERA ranked in the 30^{th} percentile for the five-year period and in the 40^{th} percentile for the ten-year period.

InvMetrics Public Funds Greater than $1 Billion Universe Risk-Return Comparison (Net of Fees)



As strong capital market returns were realized across risky assets such as stocks in the past fiscal year, NEPC continues to be supportive of VCERA's chosen asset allocation which reduces the Fund's volatility risk to meet its actuarial targets more consistently. Lower public equity exposure and broader diversification can help protect portfolios from significant declines, as evidenced by the most recent returns. VCERA's portfolio continues to be positioned to take advantage of contractual income-based investments and Private Equity investments, which have often produced superior risk-adjusted returns over the last decade.

NEPC, LLC serves as VCERA's independent investment consultant, providing VCERA with asset allocation guidance, quarterly economic and investment market updates, 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, including calculation of returns using a time-weighted rate-of-return methodology based on market values reported by the custodian. The Plan's goals are measured against stated policy objectives, appropriate benchmarks, and comparative universes over multiple time periods. This review process allows the Board to evaluate whether established goals are being achieved on an absolute, relative, and risk-adjusted basis.

Sincerely,

Allan Martin, Partner

Outline of Investment Policies

General

The Board of Retirement (Board) established an investment policy in accordance with the provisions of CERL GC Sections 31450 et. seq. VCERA 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, officers and employees shall discharge their duties as provided for in GC 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 assist 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.

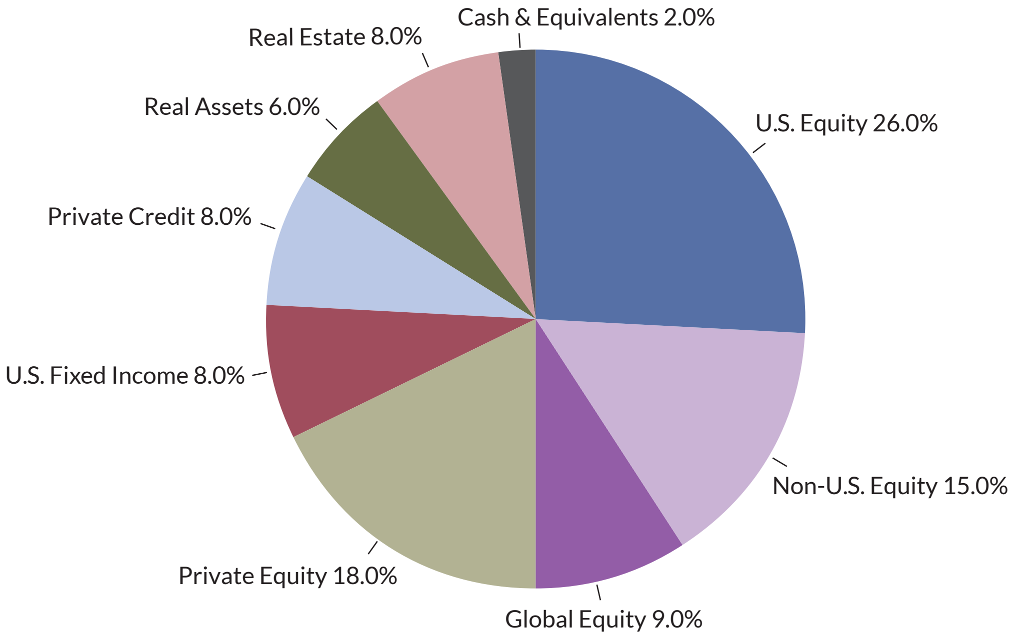
On April 18, 2022, the Board adopted a new allocation and subsequently an implementation plan that was predicated on factors that include:

a. The actuarially projected liabilities, benefit payments, and costs to both covered members 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

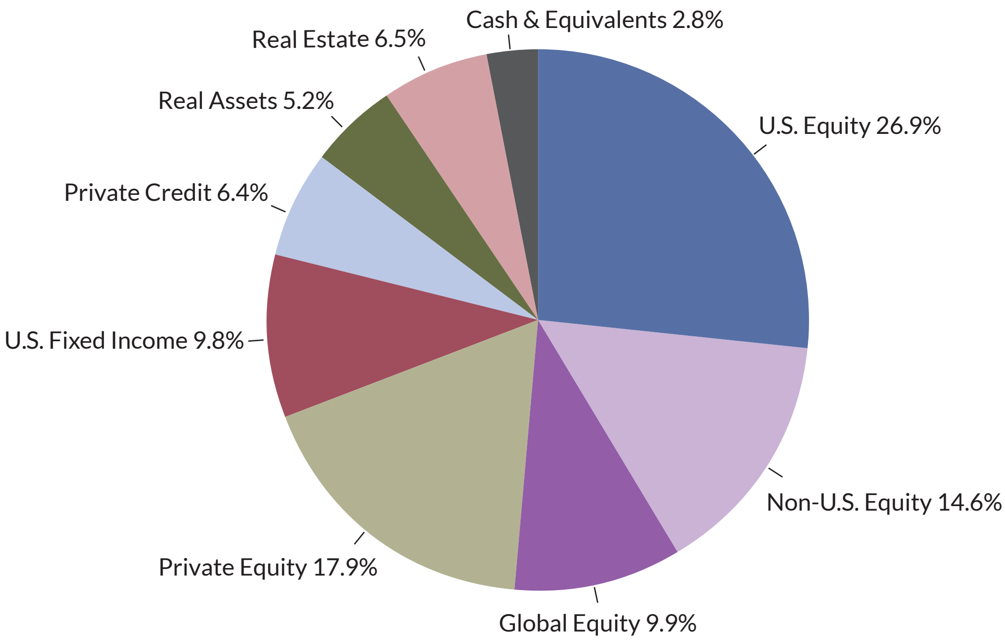
The portfolio is rebalanced, as necessary, to maintain asset allocations within their appropriate ranges.

Target Versus Actual Asset Allocation AS OF JUNE 30, 2023

TARGET *



ACTUAL **



* Represents Allocation targets in place as of June 30, 2023.

** Numbers depicted in the actual chart reflect cash market exposures.
Nominal asset class target exposures are maintained via the overlay rebalancing program.

Investment Summary AS OF JUNE 30, 2023 ($ IN THOUSANDS)

Type of Investment	Fair Value	Percent of Total Fair Value
Cash and Cash Equivalents	$150,195	2.1%
Cash Collateral - Securities Lending	56,544	0.7%
Publicly Traded Fixed Income	749,540	9.8%
Private Credit	491,399	6.4%
Subtotal Fixed Income and Cash	1,447,678	19.0%
U.S. Equity: Publicly Traded	2,056,842	26.9%
Non-U.S. Equity: Publicly Traded	1,116,363	14.6%
Global Equity: Publicly Traded	754,113	9.9%
Private Equity	1,365,269	17.9%
Subtotal Equities	5,292,587	69.3%
Real Assets	397,851	5.2%
Real Estate	494,705	6.5%
Subtotal Real Assets	892,556	11.7%
Total Investments	$7,632,821	100.0%

Schedule of Investment Returns Based on Fair Value

AS OF JUNE 30, 2023

		Annualized	
	Current Year	Three-Year	Five Year
U.S. Equity: Publicly Traded	19.1%	14.0%	11.6%
Current Benchmark: Russell 3000	19.0%	13.9%	11.4%
Non-U.S. Equity: Publicly Traded	16.2%	8.0%	3.7%
Current Benchmark: MSCI ACWI ex U.S.A	12.7%	7.2%	3.5%
Global Equity: Publicly Traded	17.0%	11.4%	8.5%
Current Benchmark: MSCI ACWI	16.5%	11.0%	8.1%
Private Equity	-4.3%	24.8%	18.1%
Current Benchmark: Russell 3000 + 3%	21.3%	16.5%	14.3%
Fixed Income: Publicly Traded Core and Unconstrained	2.2%	-1.5%	2.2%
Current Benchmark: Bloomberg Barclays U.S. Aggregate Index	-0.9%	-4.0%	0.8%
Private Credit	6.1%	12.6%	8.5%
Current Benchmark: 50% ICE BofA US HY BB-B Rated Constrained Index	9.4%	5.0%	4.7%
Real Estate	-10.5%	5.8%	3.8%
Current Benchmark: NCREIF-ODCE	-10.7%	7.0%	5.6%
Real Assets (excluding Real Estate)	8.3%	7.7%	3.5%
Benchmark: Real Assets Index	5.0%	7.9%	6.4%
Total Fund	8.5%	10.1%	7.9%
VCERA Policy*	12.4%	9.2%	7.9%

* Current Benchmarks: 25% Russell 3000 Index, 20% Bloomberg Barclays US Aggregate Bond Index, 16% MSCI ACWI ex U.S., 10% MSCI ACWI, 15% Russell 3000 Index + 3%, 6% CPI + 2% Index, and 8% NCREIF ODCE Real Estate Index

Asset Class Returns are presented using the time-weighted rate of return net of fees. Total Fund performance is calculated based on the weighted average returns.

Largest Equity Holdings (by Fair Value)

AS OF JUNE 30, 2023 ($ IN THOUSANDS)

	Units	Fund Name	Fair Value
1	4,956,010	Blackrock U.S.Russell 1000 Index Fund	$1,802,883
2	25,059,292	Blackrock ACWI Index Fund	754,113
3	33,126,238	Blackrock ACWI IMI ex U.S. IMI Index Fund	566,360
4	5,501,989	Walter Scott and Partners	280,195
5	23,919,130	Sprucegrove Investment Management, LTD	269,808
6	-	Adams Street Partnership	253,633
7	-	Buenaventure One	209,050
8	209,094,328	Western Asset US Enhanced Equity Index Plus	164,795
9	-	HarbourVest	164,321
10	1,316,651	BlackRock U.S. Russell 2500 Index Fund	89,164

Note - Majority of VCERA Equity Investments at June 30, 2023 were held in commingled investment vehicles.
Funds without units represent a Private Equity holding.

Largest Fixed Income Holdings (by Fair Value)

AS OF JUNE 30, 2023 ($ IN THOUSANDS)

	Par	Bonds	Fair Value
1	39,625,000	US TREASURY N/B 02/33 3.500	$38,597
2	37,575,000	US TREASURY N/B 04/28 3.500	36,512
3	15,257,000	US TREASURY N/B 11/27 3.450	14,964
4	10,552,000	US TREASURY N/B 02/48 1.000	10,552
5	10,060,000	US TREASURY N/B 11/27 2.980	9,686
6	7,700,000	US TREASURY N/B 11/52 4.000	7,909
7	5,025,000	US TREASURY N/B 10/24 2.770	4,871
8	4,618,000	US TREASURY N/B 05/48 1.000	4,618
9	4,371,000	US TREASURY N/B 06/30 3.130	3,960
10	4,134,095	US TREASURY N/B 01/33 1.125	3,960

Note - A complete list of portfolio holdings is available upon request.

Schedule of Investment Fees

AS OF JUNE 30, 2023 (WITH COMPARATIVE AMOUNTS FOR JUNE 30, 2022 ($ IN THOUSANDS)

	June 30, 2023	June 30, 2022
Cash and Short-Term	$190	$195
Equity		
U.S. Equity: Publicly Traded	549	736
Non-U.S. Equity: Publicly Traded	2,047	3,091
Global Equity: Publicly Traded	284	337
Private Equity	18,605	16,227
Fixed Income		
Fixed Income: Publicly Traded Core, Unconstrained, and Dedicated	1,390	1,644
Private Credit	11,431	3,682
Real Assets		
Real Assets	4,258	3,482
Real Estate	4,183	3,906
Other Investment Fees	1,567	1,586
Total Investment Management Fees	$44,504	$34,886

Schedule of Commissions:
VCERA's equity exposure is provided through one (1) separate account and six (6) commingled trust fund pooled vehicles. Equity exposure in the separate account is provided through the use of equity index futures contracts for which futures contracts commission charges are immaterial. 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 AS OF JUNE 30, 2023

Equities - U.S.
BlackRock, Inc.
Western Asset Management Company

Equities - Non-U.S.
BlackRock, Inc.
Hexavest
Sprucegrove Investment Management Limited
Walter Scott & Partners, Limited

Global Equity
BlackRock, Inc.

Private Equity
Abbott Capital Management, LLC
Abry Partners, L.P.
Adams Street Partners, LLC
Advent International GPE
Astorg
Battery Ventures
Buenaventure One, LLC
Buenaventure Two, LLC
Capvest Equity Partners, LLC
Charlesbank Capital Partners LLC
Clearlake Capital Partners, L.P.
CRV, LLC
CVC Capital Partners
Drive Capital, LLC
ECI 11 GP, L.P.
Flexpoint, LLC
Genstar Capital Partners, LLC
GGV Capital, LLC
Great Hill Partners, LLC
Green Equity Investors, L.P.
GTCR LLC
HarbourVest Partners, LLC
Hellman & Freidman Capital, LLC
Insight Ventures
Kinderhook Capital
M/C Partners, L.P.
Oak HC/FT Associates, L.P.
Pantheon Ventures (US) L.P.
Prairie Capital, L.P.
The Resolute Fund, L.P.
Ridgemont Equity Partners IV, LP.
TA Associates, L.P.
The Riverside Fund V, LP.
Vitruvian Partners, LLP

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

Private Credit
Arbour Lane
Arcmont
Bain Capital
Bridge Investment Group LLC
CarVal Investors, L.P.
Crayhill Capital Management, L.P.
Crescent Cove Opportunities
Cross Ocean
HarbourVest
Harbour View Royalties Fund
Kennedy Lewis Capital Partners
Monroe Capital Management Advisors, LLC
Pantheon Private Debt
Pacific Investment Management Company (PIMCO) LLC
Torchlight. L.P.
VWH Partners

Real Assets
Alterra IOS Venture
Bridgewater Associates, LP
Brookfield Infrastructure Group
HarbourVest Partners, LLC
Tortoise Capital Advisors, L.L.C.

Real Estate
Lasalle, LLC
Prudential Global Investment Management
UBS Realty Investors

Investment Consultant
NEPC, LLC
Abbott Capital Management, LLC

Cash Overlay
Parametric Portfolio Associates, LLC

Custodian
State Street Bank and Trust

Ventura County Agriculture Museum

In its artifacts and displays, the Ventura County Agriculture Museum seeks to preserve the history of the region's farming and ranching legacy by featuring the innovations and people who made it possible. Located in the historic Mill Building in downtown Santa Paula, the museum opened in 2011 to exhibit historical agricultural tools, such as retired tractors and farming implements, to ensure this rich regional history is passed on to the next generation.

Actuarial Information Overview

INTRODUCTION

The actuarial process at VCERA is governed by provisions in CERL GC 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 of Retirement (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.

FUNDING POLICY

In February 2018, the Board adopted a new Actuarial Funding Policy (Funding Policy), which requires annual adjustment of the employer contribution rates based on the annual valuation performed by VCERA's actuary. The Funding Policy conforms to the standards mandated in PEPRA. Segal Consulting, the Plan's consulting actuary, performed the most recent actuarial valuation as of June 30, 2022, and recommended changes to the employer and member contribution rates. At its January 2023 meeting, the Board adopted Segal Consulting's June 30, 2022 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 Board adopts methods and assumptions to be used in future valuations. At its June 2021 meeting, the Board adopted Segal Consulting's recommendations based on the 2020 Investigation of Experience for Retirement Benefit Assumptions. The Board also adopted a decrease in the discount rate from 7.25% to 7.00%.

MEMBER CONTRIBUTIONS

As part of the experience study, the actuary recommends adjustments to member contribution rates, if necessary, due to changes in the underlying assumptions and methodologies used in calculating member rates for age-based contributory benefit tiers. Therefore, it is expected that the age-based member 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 members whose labor contracts provide for single-rate member contribution rates based on 50-50 cost sharing (i.e., County, APCD, VRSD, Ventura County Superior Court 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 member contribution rates.

Actuarial Information Overview CONTINUED

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, 2023 valuation; VCERA anticipates that the County will implement these rates between July 1 and September 17, 2024.

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 UAAL contribution.

The latest actuarial valuation as of June 30, 2023, decreased the employer normal cost rate from 10.16% to 10.12%. The change in the normal cost contribution rates from year to year is generally due to multiple factors. The employers' required contribution rate to finance the UAAL over a layered 15- to 20-year period increased from 8.07% to 8.44%. Member contribution rates increased for Non-PEPRA General Tier 1 and PEPRA Safety contributing members and decreased for all other members, effective with the 2022 actuarial valuation, due to new assumptions adopted with the 2020 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 last actuarial audit was performed by Gabriel, Roeder, Smith & Company (GRS) of Segal Consulting's 2014 experience study, 2015 economic actuarial assumption review, and 2016 valuation report. Regarding 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."

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 GASB Statement No. 67 disclosures.

Actuarial Information Overview CONTINUED

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
- Summary of Plan Benefits
- Probability of Separation from Active Service

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

Segal

180 Howard Street,
Suite 1100
San Francisco, CA 94105-6147
segalco.com

December 12, 2023

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

Re: Ventura County Employees' Retirement Association (VCERA)
June 30, 2023 Actuarial Valuation for Funding Purposes

Dear Members of the Board:

Segal prepared the June 30, 2023 annual actuarial valuation of the Ventura County Employees' Retirement Association (VCERA). We certify that the VCERA valuation was performed in accordance with generally accepted actuarial principles and practices and VCERA's Actuarial Funding Policy that was last reviewed and approved by the Board in 2022. In particular, it is our opinion 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, 2023 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 fair value by recognizing the differences between the total return at fair 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. The employer contribution rate provides for both current cost (normal cost) and a level percentage of payroll to amortize any unfunded actuarial accrued liability (UAAL).

Any changes in the UAAL that arise due to actuarial gains or losses or plan amendments, with the exception noted below, are amortized over separate 15-year declining (or closed) amortization periods. Effective with the June 30, 2012 valuation, any changes in the UAAL that arise due to assumption or method changes are amortized over separate 20-year declining amortization periods. In addition, any changes in the UAAL that arise due to retirement incentives are amortized over separate declining periods of up to 5 years. The progress being

Board of Retirement
Ventura County Employees' Retirement Association
December 12, 2023
Page 2

made towards meeting the funding objective through June 30, 2023 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) Statement No. 67 actuarial valuation as of June 30, 2023 prepared by Segal. For the Financial Section of the Annual Comprehensive Financial Report, 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, 2023 for funding purposes is listed below.

1. Summary of Actuarial Assumptions and Methods as of June 30, 2023
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, 2017 through June 30, 2020 Actuarial Experience Study report dated June 3, 2021. It is our opinion that the assumptions used in the June 30, 2023 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 after the completion of the June 30, 2023 valuation and assumptions approved in that analysis will be applied in the June 30, 2024 valuation.

In the June 30, 2023 valuation, the ratio of the valuation value of assets to actuarial accrued liabilities decreased slightly from 97.2% to 97.1%. The average employer contribution rate increased from 18.23% of payroll to 18.56% of payroll, and the average member contribution rate increased from 10.49% of payroll to 10.76% of payroll.

* Effective with the June 30, 2020 valuation, the Board approved an adjustment to the remaining amortization periods for certain amortization layers in order to minimize the contribution rate tail volatility associated with the UAAL layers that were to be fully amortized between the 2021 and 2023 valuations (these UAAL layers were first established in 2006, 2007 and 2008) and in the 2029 and 2030 valuations (these UAAL layers were first established in 2014 and 2015). This was done by setting the remaining amortization periods for the 2006, 2007, and 2008 UAAL amortization layers to 4 years and the 2014 and 2015 UAAL actuarial gain/loss amortization layers to 12 years, effective with the June 30, 2020 valuation.

Board of Retirement
Ventura County Employees' Retirement Association
December 12, 2023
Page 3

Under the asset smoothing method, the total unrecognized investment loss is $62.5 million as of June 30, 2023. This investment loss will be recognized in the determination of the actuarial value of assets for funding purposes in the next few years. The deferred loss of $62.5 million represents about 0.8% of the market value of assets as of June 30, 2023. Unless offset by future investment gains or other favorable experience, the recognition of the $62.5 million market loss is expected to have an impact on the Association's future funded percentage and contribution rate requirements. This potential impact may be illustrated as follows:

- If the net deferred losses were recognized immediately and entirely in the valuation value of assets, the funded ratio would decrease from 97.1% to 96.3%.
- If the net deferred losses were recognized immediately and entirely in the valuation value of assets, the average employer contribution rate would increase from 18.56% to 19.15% of payroll.

The actuarial calculations were completed under the supervision of Molly Calcagno, ASA, MAAA, Enrolled Actuary. We are members of the American Academy of Actuaries and we meet the Qualification Standards of the American Academy of Actuaries to render the actuarial opinion contained herein.

Sincerely,

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

JY/jl

Summary of Actuarial Assumptions and Methods

As of June 30, 2023

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 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.

In April 2020, the Board directed the Actuary to adjust the remaining amortization periods for certain amortization layers in order to minimize the contribution rate tail volatility associated with the UAAL layers that were first established in 2006, 2007, 2008, and in 2014 and 2015. Effective with the 2020 actuarial valuation the remaining amortization periods for the 2006, 2007, and 2008 UAAL amortization layers were set to 4 years and those for the 2014 and 2015 UAAL actuarial gains/loss amortization layers were set to 12 years.

Investment Rate of Return
7.00% per annum; 4.50% real rate of return and 2.50% inflation.

Projected Salary Increases
3.75% – 12.00% varying by service. Includes inflation at 2.50%, "across the board" increases of 0.50%, plus merit and longevity increases.

Terminations of Employment Rates
0.5% to 13.5%

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 (Legacy) and General Tier 8 (PEPRA) members represented by SEIU.

Expectation of Life After Retirement
General Members: Pub-2010 General Healthy Retiree Amount-Weighted Above-Median Mortality Table (separate tables for males and females) with rates increased by 5% for females, projected generationally with the two-dimensional mortality improvement scale MP-2020. Safety Members: Pub-2010 Safety Healthy Retiree Amount-Weighted Above-Median Mortality Table (separate tables for males and females), projected generationally with the two-dimensional mortality improvement scale MP-2020.

Summary of Actuarial Assumptions and Methods CONTINUED

Expectation of Life After Disability

General Members: Pub-2010 Non-Safety Disabled Retiree Amount-Weighted Mortality Table (separate tables for males and females), projected generationally with the two-dimensional mortality improvement scale MP-2020. Safety Members: : Pub-2010 Safety Disabled Retiree Amount-Weighted Mortality Table (separate tables for males and females), projected generationally with the two-dimensional mortality improvement scale MP-2020.

Expectation of Life All Beneficiaries

Pub-2010 General Contingent Survivor Amount-Weighted Above-Median Mortality Table (separate tables for males and females) with rates increased by 10% for females, projected generationally with the two-dimensional mortality improvement scale MP-2020.

Date of Adoption

June 7, 2021

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, 2023	General	7,828	$734,293,867	$93,804	5.04%	45.0	9.9
	Safety	1,556	206,748,242	132,872	1.52%	40.6	13.5
	Total	9,384	$941,042,109	$100,282	4.26%	44.2	10.5
June 30, 2022	General	7,576	$676,584,766	$89,306	-0.52%	45.1	10.1
	Safety	1,501	196,457,846	130,885	3.79%	41.1	14.2
	Total	9,077	$873,042,612	$96,182	-0.12%	44.3	10.6
June 30, 2021	General	6,967	$625,451,916	$89,773	3.55%	45.8	11.0
	Safety	1,524	192,184,175	126,105	3.85%	41.3	14.3
	Total	8,491	$817,636,091	$96,294	3.61%	44.9	11.5
June 30, 2020	General	7,090	$614,684,741	$86,697	3.42%	45.8	10.8
	Safety	1,554	188,696,801	121,427	0.86%	41.1	14.2
	Total	8,644	$803,381,542	$92,941	2.90%	44.9	11.4
June 30, 2019	General	7,153	$599,646,399	$83,831	2.23%	45.7	10.7
	Safety	1,543	185,755,638	120,386	2.14%	41.1	14.2
	Total	8,696	$785,402,037	$90,318	2.22%	44.9	11.3
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	11.2
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

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
2023	8,007	463	(213)	8,257	$32,088	($9,689)	$372,643	6.40%	$45,131
2022	7,751	470	(214)	8,007	$31,210	($8,686)	$350,244	6.87%	$43,742
2021	7,521	471	(241)	7,751	$26,648	($9,061)	$327,720	5.67%	$42,281
2020	7,280	446	(205)	7,521	$26,148	($8,790)	$310,133	5.93%	$41,236
2019	7,038	442	(200)	7,280	$28,243	($7,756)	$292,775	7.52%	$40,216
2018	6,766	467	(195)	7,038	$22,900	($6,193)	$272,288	6.54%	$38,688
2017	6,539	372	(145)	6,766	$20,489	($6,327)	$255,581	5.87%	$37,774
2016	6,338	396	(195)	6,539	$18,570	($5,574)	$241,419	5.69%	$36,920
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

Actuarial Analysis of Financial Experience ($ IN THOUSANDS)

	June 30, 2023	June 30, 2022	June 30, 2021	June 30, 2020	June 30, 2019	June 30, 2018	June 30, 2017	June 30, 2016	June 30, 2015	June 30, 2014
Prior Valuation Unfunded (Excess Funded) Accrued Liability	$211,721	$506,731	$703,736	$774,862	$746,981	$744,326	$813,043	$875,827	$820,215	$953,354
Salary Increases Greater (Less) Than Expected	(23,096)	(304)	27,129	6,418	(2,944)	(4,839)	35,441	(19,801)	17,095	(56,617)
Asset Return (Greater) Less Than Expected	35,836	(263,070)	(243,314)	8,603	88,043	(55,696)	(24,707)	42,251	(81,080)	(13,827)
Other Experience Factors	5,635	(31,636)	(95,623)	(86,147)	(57,218)	(85,320)	(79,451)	(85,234)	(98,405)	(62,695)
Change In Actuarial Assumptions	-	-	114,803	-	-	148,510	-	-	218,002	-
Ending Valuation Unfunded (Excess Funded) Accrued Liability	$230,096	$211,721	$506,731	$703,736	$774,862	$746,981	$744,326	$813,043	$875,827	$820,215

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, 2023	$947,972	$3,685,528	$3,237,301	$7,870,801	$7,640,765	100%	100%	92.89%
June 30, 2022	888,174	3,510,987	3,092,166	7,491,327	7,279,606	100%	100%	93.15%
June 30, 2021	859,467	3,280,460	3,014,958	7,154,885	6,648,154	100%	100%	83.19%
June 30, 2020	825,923	3,123,805	2,798,044	6,747,772	6,044,036	100%	100%	74.85%
June 30, 2019	793,803	2,963,427	2,682,158	6,439,388	5,664,526	100%	100%	71.11%
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%

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, 2023	$7,640,705	$7,870,801	$230,096	97.08%	$941,042	24.45%
June 30, 2022	7,279,606	7,491,327	211,721	97.17%	873,043	24.25%
June 30, 2021	6,648,154	7,154,885	$506,731	92.92%	817,636	61.98%
June 30, 2020	6,044,036	6,747,772	703,736	89.57%	803,382	87.60%
June 30, 2019	5,664,526	6,439,388	774,862	87.97%	785,402	98.66%
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%

[1] Based on the expected covered payroll

Summary of Plan Benefits (AS OF JUNE 30,2023)

Summarized below are some of the more significant provisions of CERL that are presently applicable to VCERA.

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 PEPRA member and is subject to the provisions of the PEPRA found in GC 7522 et seq. and Assembly Bill (AB) 197 of 2012. 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 GC 7522 et seq. and AB 197 of 2012.

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 and contracting districts contribute to the Plan based upon actuarially determined contribution rates adopted by the Board. 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 GC 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 GC Section 31664. For those safety members first hired on or after January 1, 2013, benefits are calculated pursuant to the provision of GC 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 GC Section 7522.25(d).

General member benefits are calculated pursuant to the provisions of GC 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 GC 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 GC 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 GC 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 Adjustment

VCERA provides an annual cost-of-living adjustment (COLA) to Safety and General Tier I retirees. The COLA is based on the Consumer Price Index for the Los Angeles-Long Beach-Anaheim area (with 1982-84 as the base period) and is capped at 3.0%. General member retirees who were represented by SEIU and accrued service after March 15, 2003 receive a fixed 2% COLA 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)

Age Nearest	Rates of Mortality	Rates of Disability	Rates of Retirement Non PEPRA		Rates of Retirement PEPRA
			Less Than 30 Years of Service	30 or More Years of Service	
General Members - Male					
20	0.0004	0.0001	0.0000	0.5000	0.0000
25	0.0002	0.0001	0.0000	0.5000	0.0000
30	0.0003	0.0002	0.0000	0.5000	0.0000
35	0.0004	0.0004	0.0000	0.5000	0.0000
40	0.0006	0.0008	0.0000	0.5000	0.0000
45	0.0009	0.0012	0.0000	0.5000	0.0000
50	0.0013	0.0019	0.0200	0.0200	0.0000
55	0.0019	0.0024	0.0450	0.0500	0.0400
60	0.0028	0.0031	0.1050	0.1400	0.0900
65	0.0041	0.0041	0.3000	0.4500	0.2000
70	0.0061	0.0045	0.2500	0.2500	0.5500
General Members - Female					
20	0.0001	0.0001	0.0000	0.5000	0.0000
25	0.0001	0.0001	0.0000	0.5000	0.0000
30	0.0001	0.0002	0.0000	0.5000	0.0000
35	0.0002	0.0004	0.0000	0.5000	0.0000
40	0.0003	0.0008	0.0000	0.5000	0.0000
45	0.0005	0.0012	0.0000	0.5000	0.0000
50	0.0008	0.0019	0.0200	0.0200	0.0000
55	0.0011	0.0024	0.0450	0.0500	0.0400
60	0.0017	0.0031	0.1050	0.1400	0.0900
65	0.0027	0.0041	0.3000	0.4500	0.2000
70	0.0044	0.0045	0.2500	0.2500	0.5500

General Members Years of Service	Withdrawal [1]
Less than 1	0.1350
5	0.0500
10	0.0350
15	0.0275
20 & Over	0.0175

[1] No termination is assumed after a member is first assumed to retire.

Probability of Separation from Active Service CONTINUED

Age Nearest	Rates of Mortality	Rates of Disability	Rates of Retirement Non PEPRA		Rates of Retirement PEPRA
Safety Members - Male			Less Than 30 Years of Service	30 or More Years of Service	
20	0.0004	0.0003	0.0150	0.0150	0.0000
25	0.0003	0.0006	0.0150	0.0150	0.0000
30	0.0004	0.0024	0.0150	0.0150	0.0000
35	0.0004	0.0038	0.0150	0.0150	0.0000
40	0.0005	0.0052	0.0150	0.0150	0.0000
45	0.0007	0.0084	0.0150	0.0150	0.0000
50	0.0010	0.0112	0.0200	0.0200	0.0400
55	0.0015	0.0252	0.2000	0.3700	0.2000
60	0.0023	0.0586	0.3500	0.3500	0.3000
65	0.0035	0.0000	1.0000	1.0000	1.0000
70	0.0066	0.0000	1.0000	1.0000	1.0000
Safety Members - Female					
20	0.0002	0.0003	0.0150	0.0150	0.0000
25	0.0002	0.0006	0.0150	0.0150	0.0000
30	0.0002	0.0024	0.0150	0.0150	0.0000
35	0.0003	0.0038	0.0150	0.0150	0.0000
40	0.0004	0.0052	0.0150	0.0150	0.0000
45	0.0006	0.0084	0.0150	0.0150	0.0000
50	0.0008	0.0112	0.0200	0.0200	0.0400
55	0.0011	0.0252	0.2000	0.3700	0.2000
60	0.0014	0.0586	0.3500	0.3500	0.3000
65	0.0020	0.0000	1.0000	1.0000	1.0000
70	0.0039	0.0000	1.0000	1.0000	1.0000

Safety Members Years of Service	Withdrawal [1]
Less than 1	0.1000
5	0.0250
10	0.0150
15	0.0095
20 & Over	0.0050

[1] No termination is assumed after a member is first assumed to retire.

Mullin Automotive Museum

The Mullin Automotive Museum has one obsession—20th-century French automotive design—that reflects the passion of its founder, Peter Mullin, a collector of worldwide vintage automobiles. The Oxnard-based museum's permanent exhibit, L'epoque Des Carrossiers ("The Art and Times of the French Coachbuilders"), features more than 30 stunning vehicles that prove car making was once an art form. In addition to sculpture and artifacts, guests will see French automobiles deemed by connoisseurs to be "the best of the best," such as the 1936 Bugatti Type 57SC Atlantic and the 1937 Talbot-Lago T150-C SS "Goutte d'Eau." This museum is a rare gem of Ventura County.

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 Basic 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:

- *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.
- *Pension Benefit Expenses by Type* presents benefit and member refunds and lump-sum death benefits deductions by type of benefit (e.g. Service and Disability Retirement from General and Safety Plans).

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:

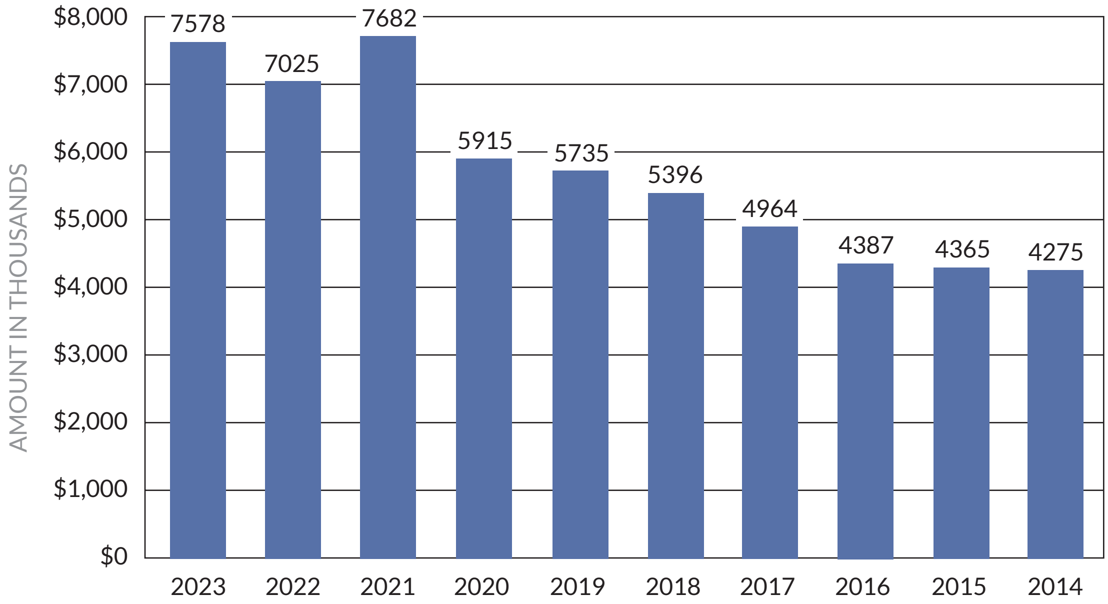
- *Active and Deferred Members* provides membership statistics for active vested and non-vested members as well as deferred members.
- *Retired Members by Type of Pension Benefit* presents benefit information for the current year by benefit type and dollar levels.
- *Schedule of Average Monthly Benefit Payments* reflects the number of newly retired members, average monthly benefit and average final salary, shown in five-year increments.
- *Participating Employers and Active Members* presents the employers and their corresponding covered employees.
- *Employer Contribution Rates* is also provided as additional information.

Changes in Pension Plan Fiduciary Net Position

LAST TEN FISCAL YEARS (IN THOUSANDS)

	June 30, 2023	June 30, 2022	June 30, 2021	June 30, 2020	June 30, 2019	June 30, 2018	June 30, 2017	June 30, 2016	June 30, 2015	June 30, 2014
ADDITIONS										
Employer Contributions	$178,532	$178,688	$178,628	$214,553	$199,891	$197,683	$190,759	$177,710	$175,099	$169,703
Member Contributions	93,974	84,699	79,654	79,277	75,199	74,044	72,395	69,470	63,679	46,674
Net Investment Income	670,999	(553,406)	1,849,958	209,236	368,665	445,902	580,526	25,739	88,681	658,580
Total Additions	943,505	(290,019)	2,108,240	503,066	643,755	717,629	843,680	272,919	327,459	874,957
DEDUCTIONS										
Benefits	372,643	350,244	327,720	310,133	292,775	272,288	255,581	241,419	228,423	218,105
Administrative	6,838	6,169	5,523	5,367	5,342	4,881	5,524	4,474	3,854	4,045
Member Refunds & Death Payments	8,694	6,854	5,246	5,491	4,344	5,430	5,164	4,984	5,272	5,428
Other Expenses	2,424	2,935	3,050	2,583	2,397	2,815	-	-	-	-
Total Deductions	390,599	366,202	341,539	323,574	304,858	285,414	266,269	250,877	237,549	227,578
Change In Pension Plan Fiduciary Net Position	$552,906	$(656,221)	$1,766,701	$179,492	$338,897	$432,215	$577,411	$22,042	$89,910	$647,379

Total Plan Net Position

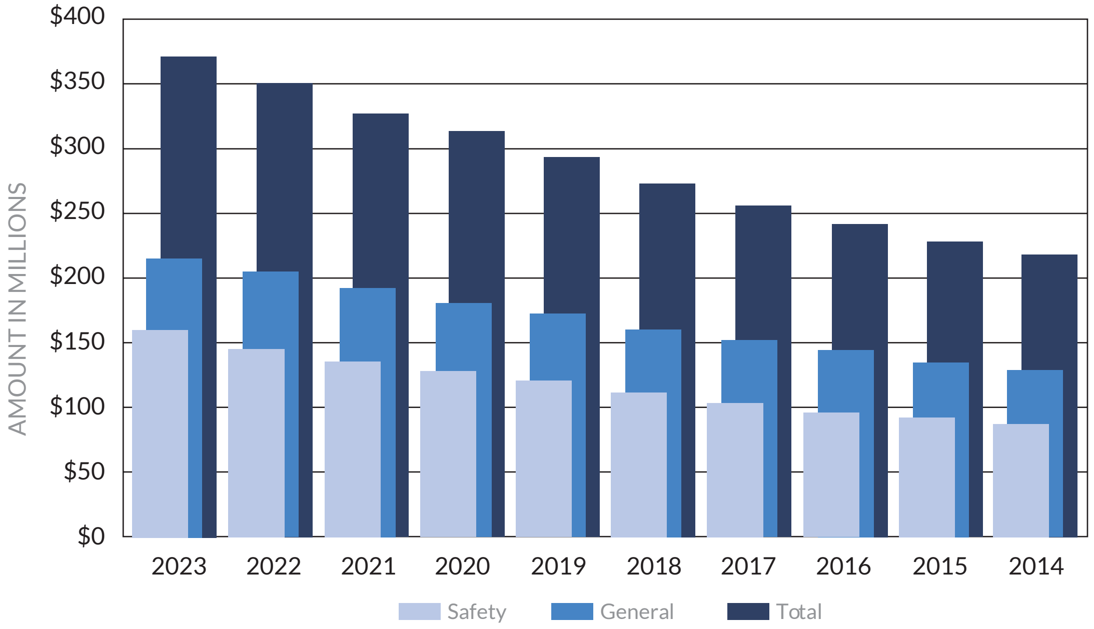


Schedule of Pension Benefit Expenses by Type

LAST TEN FISCAL YEARS (IN THOUSANDS)

	June 30, 2023	June 30, 2022	June 30, 2021	June 30, 2020	June 30, 2019	June 30, 2018	June 30, 2017	June 30, 2016	June 30, 2015	June 30, 2014
Service Retirement										
General	$189,431	$179,052	$168,127	$159,000	$150,543	$139,476	$131,107	$125,219	$116,593	$110,052
Safety	109,098	100,750	93,433	87,717	81,736	75,110	69,332	62,618	61,918	58,404
Total	298,529	279,802	261,560	246,717	232,279	214,586	200,439	187,837	178,511	168,456
Disability Retirement										
General	10,124	9,500	9,682	9,921	9,853	10,065	9,945	9,966	9,711	10,172
Safety	35,827	34,102	32,223	31,226	30,072	28,479	26,753	26,895	24,426	24,332
Total	45,951	43,602	41,905	41,147	39,925	38,544	36,698	36,861	34,137	34,504
Survivor Continuances										
General	15,285	14,967	13,363	12,435	11,763	11,180	10,660	9,894	9,335	9,141
Safety	12,878	11,873	10,893	9,834	8,808	7,978	7,784	6,827	6,440	6,003
Total	28,162	26,840	24,256	22,269	20,571	19,158	18,444	16,721	15,775	15,144
Total Retired Members										
General	214,840	203,519	191,171	181,357	172,159	160,721	151,712	145,079	135,639	129,365
Safety	157,803	146,725	136,549	128,776	120,616	111,567	103,869	96,340	92,784	88,739
Total	372,643	350,244	327,720	310,133	292,775	272,288	255,581	241,419	228,423	218,104
Member Refunds & Death Benefits										
General	7,765	6,059	4,776	4,958	3,929	5,082	4,634	4,160	4,703	5,094
Safety	929	795	470	533	415	348	530	824	569	334
Total	$8,694	$6,854	5,246	$5,491	$4,344	$5,430	$5,164	$4,984	$5,272	$5,428

Pension Benefit Payments



Active and Deferred Members LAST TEN FISCAL YEARS

	June 30, 2023	June 30, 2022	June 30, 2021	June 30, 2020	June 30, 2019	June 30, 2018	June 30, 2017	June 30, 2016	June 30, 2015	June 30, 2014
Active Vested										
General	4,768	4,798	4,763	4,709	4,681	4,562	4,594	4,619	4,632	4,699
Safety	1,184	1,188	1,199	1,198	1,205	1,200	1,207	1,231	1,245	1,274
Active Non-vested										
General	3,060	2,778	2,204	2,381	2,472	2,524	2,534	2,396	2,146	1,973
Safety	372	313	325	356	338	325	301	263	276	264
Total Active Members										
General	7,828	7,576	6,967	7,090	7,153	7,086	7,128	7,015	6,778	6,672
Safety	1,556	1,501	1,524	1,554	1,543	1,525	1,508	1,494	1,521	1,538
Deferred Members										
General	3,674	3,403	3,106	2,853	2,695	2,570	2,484	2,332	2,140	2,052
Safety	411	409	385	365	346	339	325	307	301	287
Total	13,469	12,889	11,982	11,862	11,737	11,520	11,445	11,148	10,740	10,549

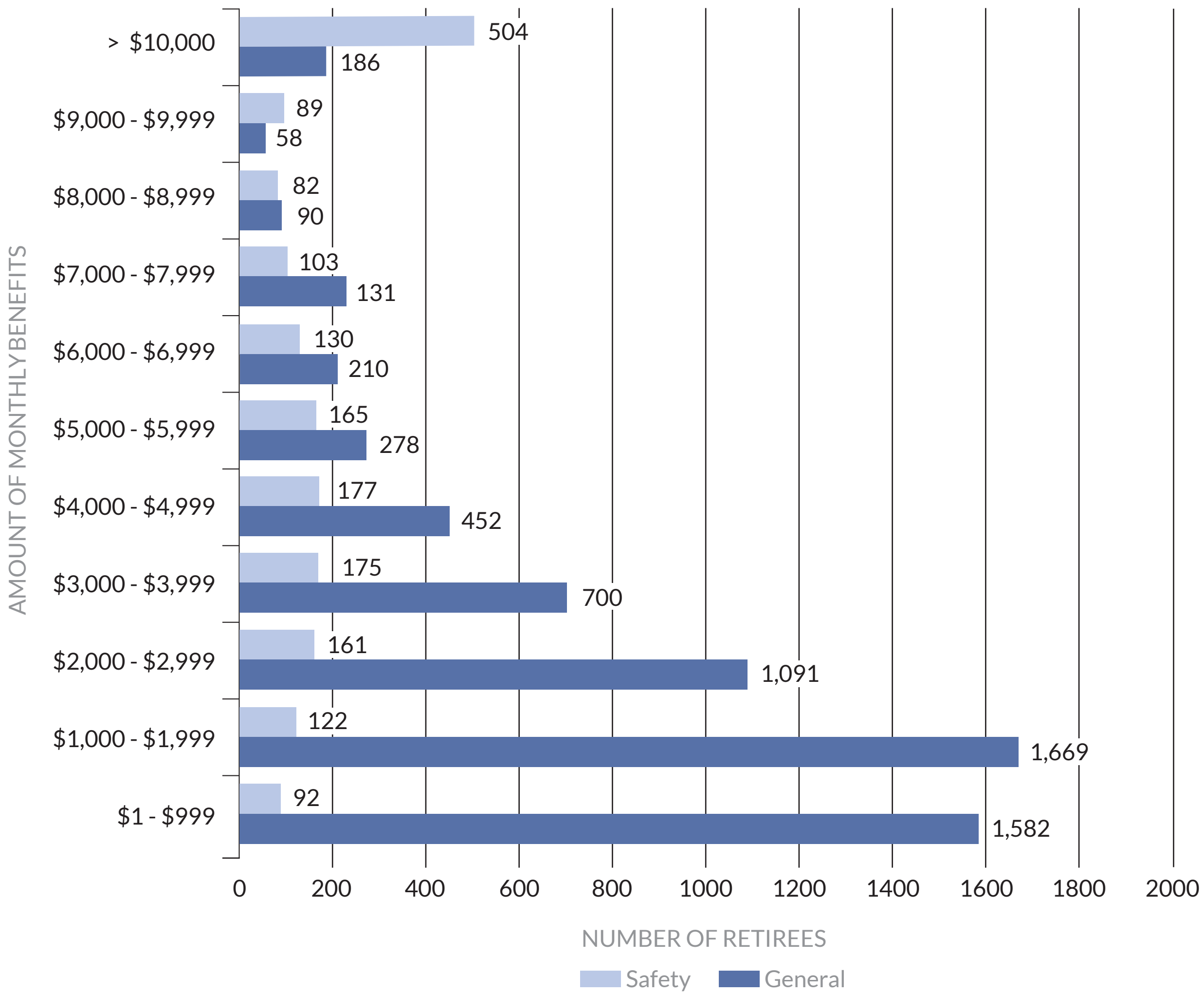
Retired Members by Type of Pension Benefit AS OF JUNE 30,2023

Amount of Monthly Benefit	Number of Retirees	Type of Retirement [1]		
		A	B	C
General Members				
$1 - $999	1,582	1,189	60	333
$1,000 - $1,999	1,669	1,285	181	203
$2,000 - $2,999	1,091	902	76	113
$3,000 - $3,999	700	589	43	68
$4,000 - $4,999	452	408	15	29
$5,000 - $5,999	278	254	3	21
$6,000 - $6,999	210	192	1	17
$7,000 - $7,999	131	123	2	6
$8,000 - $8,999	90	83	2	5
$9,000 - $9,999	58	56	-	2
> $10,000	186	178	3	5
Totals	6,447	5,259	386	802
Safety Members				
$1 - $999	92	62	21	9
$1,000 - $1,999	122	85	4	33
$2,000 - $2,999	161	85	26	50
$3,000 - $3,999	175	71	40	64
$4,000 - $4,999	177	84	44	49
$5,000 - $5,999	165	46	71	48
$6,000 - $6,999	130	37	64	29
$7,000 - $7,999	103	50	29	24
$8,000 - $8,999	92	51	22	19
$9,000 - $9,999	89	55	20	14
> $10,000	504	393	82	29
Totals	1,810	1,019	423	368
Grand Total	8,257	6,278	809	1,170

[1] Type of Retirement:

A - Service Retiree
B - Disability Retiree
C - Beneficiary/Continuant/Survivor

Retired Members Receiving Benefits AS OF JUNE 30,2023



Schedule of Average Monthly Benefit Payments 2020-2023

Years of Credited Service	5-9	10-14	15-19	20-24	25-29	30+
Retirees - 2023						
General Members						
Average Monthly Benefit	$994	$2,026	$2,952	$4,089	$4,089	$6,071
Average Final Average Salary	$6,626	$8,141	$8,770	$9,377	$8,416	$9,295
Number of Active Members Who Retired	54	42	47	49	31	73
Safety Members						
Average Monthly Benefit	$1,816	$1,798	$3,928	$5,073	$8,237	$9,100
Average Final Average Salary	$9,898	$5,963	$10,493	$9,398	$13,014	$15,750
Number of Active Members Who Retired	7	3	6	11	33	39
Retirees - 2022						
General Members						
Average Monthly Benefit	$1,156	$2,127	$2,837	$4,022	$5,304	$5,913
Average Final Average Salary	$7,304	$7,955	$7,834	$9,036	$11,204	$9,991
Number of Active Members Who Retired	52	65	50	45	48	76
Safety Members						
Average Monthly Benefit	$2,008	$2,860	$4,510	$6,856	$8,465	$11,264
Average Final Average Salary	$12,507	$10,833	$8,552	$9,869	$11,796	$14,837
Number of Active Members Who Retired	2	3	5	15	24	40
Retirees - 2021						
General Members						
Average Monthly Benefit	$1,081	$2,205	$2,754	$4,037	$4,909	$6,780
Average Final Average Salary	$6,754	$8,215	$8,003	$9,328	$8,979	$10,985
Number of Active Members Who Retired	39	60	50	49	33	56
Safety Members						
Average Monthly Benefit	$2,240	$2,136	$3,033	$6,242	$8,843	$10,027
Average Final Average Salary	$9,556	$8,506	$8,557	$10,650	$13,174	$13,812
Number of Active Members Who Retired	5	3	5	12	7	39
Retirees - 2020						
General Members						
Average Monthly Benefit	$942	$1,864	$2,699	$3,649	$4,561	$6,033
Average Final Average Salary	$6,798	$7,242	$8,190	$7,860	$8,916	$10,325
Number of Active Members Who Retired	46	64	60	39	43	47
Safety Members						
Average Monthly Benefit	$1,823	$3,719	$4,332	$4,880	$7,655	$12,147
Average Final Average Salary	$9,108	$8,187	$8,696	$9,401	$10,979	$14,423
Number of Active Members Who Retired	5	4	5	3	12	26

Schedule of Average Monthly Benefit Payments 2016-2019

Years of Credited Service	5-9	10-14	15-19	20-24	25-29	30+
Retirees - 2019						
General Members						
Average Monthly Benefit	$905	$1,825	$2,687	$3,726	$4,365	$5,980
Average Final Average Salary	$5,902	$7,409	$7,911	$8,863	$7,880	$8,959
Number of Active Members Who Retired	52	85	57	28	34	54
Safety Members						
Average Monthly Benefit	$909	$2,728	$3,017	$5,322	$6,922	$10,802
Average Final Average Salary	$6,131	$9,110	$7,417	$9,607	$10,095	$12,919
Number of Active Members Who Retired	4	3	4	15	15	37
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 Members Who Retired	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 Members Who Retired	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 Members Who Retired	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 Members Who Retired	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 Members Who Retired	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 Members Who Retired	3	3	6	6	17	35

Schedule of Average Monthly Benefit Payments 2014-2015

Years of Credited Service	5-9	10-14	15-19	20-24	25-29	30+
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 Members Who Retired	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 Members Who Retired	4	6	2	7	13	14
Retirees - 2014						
General Members						
Average Monthly Benefit	$1,222	$1,823	$2,194	$3,114	$4,208	$5,176
Average Final Average Salary	$6,626	$6,614	$6,219	$6,737	$7,475	$7,127
Number of Active Members Who Retired	40	66	36	48	26	21
Safety Members						
Average Monthly Benefit	$2,599	$4,138	$4,444	$4,864	$7,305	$12,835
Average Final Average Salary	$8,760	$10,770	$10,378	$9,755	$11,132	$14,645
Number of Active Members Who Retired	7	5	2	3	6	13

Participating Employers and Active Members LAST TEN FISCAL YEARS

	June 30, 2023	June 30, 2022	June 30, 2021	June 30, 2020	June 30, 2019	June 30, 2018	June 30, 2017	June 30, 2016	June 30, 2015	June 30, 2014
County of Ventura										
General Members	7,402	7,154	6,527	6,582	6,640	6,607	6,654	6,552	6,319	6,212
Safety Members	1,556	1,501	1,524	1,554	1,544	1,525	1,508	1,494	1,521	1,538
Total	8,958	8,655	8,051	8,136	8,184	8,132	8,162	8,046	7,840	7,750
Participating Agencies (General Membership)										
Ventura Regional Sanitation District	44	52	64	79	76	68	63	66	68	69
Ventura County Superior Court	334	323	331	383	388	362	361	352	345	345
Ventura County Air Pollution Control District	43	42	40	41	43	44	45	45	46	46
Ventura County Employees' Retirement Association	5	5	5	5	5	5	5	-	-	-
Total	426	422	440	508	512	479	474	463	459	460
Total Active Membership										
General Members	7,828	7,576	6,967	7,090	7,152	7,086	7,128	7,015	6,778	6,672
Safety Members	1,556	1,501	1,524	1,554	1,544	1,525	1,508	1,494	1,521	1,538
Total	9,384	9,077	8,491	8,644	8,696	8,611	8,636	8,509	8,299	8,210

Employer Contribution Rates LAST TEN FISCAL YEARS

Year	Tier 1	Tier 2	PEPRA Tier 1	PEPRA Tier 2	Safety	PEPRA Safety
County of Ventura and Other Participating Agencies with 50/50 Sharing of Normal Cost						
June 30, 2023	24.56%	13.85%	N/A	13.80%	34.51%	31.34%
June 30, 2022	23.57%	14.31%	N/A	14.49%	37.61%	35.17%
June 30, 2021	24.26%	14.83%	N/A	14.94%	39.78%	37.32%
June 30, 2020	25.75%	17.04%	N/A	17.09%	55.20%	52.89%
June 30, 2019	24.70%	16.09%	N/A	16.12%	54.60%	52.19%
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	22.61%	16.80%	N/A	16.63%	53.87%	50.30%
June 30, 2015	49.49%	17.36%	46.11%	17.03%	52.79%	53.56%
June 30, 2014	37.35%	18.42%	28.36%	16.15%	54.57%	48.99%
Other Participating Agencies without 50/50 Sharing of Normal Cost						
June 30, 2023	25.55%	15.02%	N/A	13.80%	N/A	N/A
June 30, 2022	24.27%	15.53%	N/A	14.49%	N/A	N/A
June 30, 2021	24.76%	16.12%	N/A	14.94%	N/A	N/A
June 30, 2020	26.05%	18.40%	N/A	17.09%	N/A	N/A
June 30, 2019	25.66%	17.36%	N/A	16.12%	N/A	N/A
June 30, 2018	25.34%	17.88%	N/A	16.39%	N/A	N/A
June 30, 2017	24.34%	18.18%	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	50.20%	18.68%	46.11%	17.03%	N/A	N/A
June 30, 2014	37.35%	18.42%	28.36%	16.15%	N/A	N/A

Note - Prior to 2015 employer rates were the same for all participating employers.

VENTURA COUNTY EMPLOYEES' RETIREMENT ASSOCIATION

REPORT TO THE BOARD OF RETIREMENT AND FINANCE COMMITTEE

FOR THE FISCAL YEAR ENDED JUNE 30, 2023

**VENTURA COUNTY EMPLOYEES'
RETIREMENT ASSOCIATION**

TABLE OF CONTENTS

REQUIRED COMMUNICATION TO THE BOARD OF RETIREMENT AND FINANCE COMMITTEE IN ACCORDANCE WITH PROFESSIONAL STANDARDS (SAS 114)

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

We have audited the basic financial statements, and 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 excluding that attributable to employer-paid member contributions, specified column totals (other information) of Ventura County Employees' Retirement Association (VCERA) for the fiscal year ended June 30, 2023. Professional standards require that we provide you with information about our responsibilities under auditing standards generally accepted in the United States of America and *Government Auditing Standards*, 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 July 9, 2023. Professional standards also require that we communicate to you the following information related to our audit.

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 basic financial statements. As described in Note 1 to the basic financial statements, VCERA implemented Governmental Accounting Standards Board (GASB) Statement No. 91, *Conduit Debt Obligation,* Statement No. 94, *Public-Private and Public-Public Partnership and Availability Payment Arrangements,* Statement No. 96, *Subscription-Based Information Technology Arrangements,* Statement No. 97, *Certain Component Unit Criteria, and Accounting and Financial Reporting for Internal Revenue Cost Section 457 Deferred Compensation Plans – an amendment of GASB Statement No. 15 and No. 84 and a supersession of GASB Statement No. 32,* and Statement No. 99, *Omnibus 2022,* during the fiscal year ended June 30, 2023. We noted no transactions entered into by VCERA during the fiscal year for which there is a lack of authoritative guidance or consensus. All significant transactions have been recognized in the basic financial statements in the proper period.

Accounting estimates are an integral part of the basic 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 basic financial statements and because of the possibility that future events affecting them may differ significantly from those expected. The most sensitive estimates affecting the basic 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. We evaluated the methods, assumptions, and data used to develop the estimate of the fair value of investments in determining that it is reasonable in relation to the basic financial statements taken as a whole.

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10 River Park Place East, Suite 208
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STOCKTON
2423 West March Lane, Suite 202
Stockton, CA 95207
209-451-4833

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 methods, assumptions, and data used to develop the estimates of the contribution amounts and net pension liability in determining that they are reasonable in relation to the basic financial statements taken as a whole.

Certain basic financial statement disclosures are particularly sensitive because of their significance to basic financial statement users. The most sensitive disclosures affecting the basic financial statements were:

The disclosures for deposits and investments in Notes 1 and 3 to the basic 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 basic 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 basic 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 misstatements were detected as a result of our audit procedures.

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 basic 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 14, 2023.

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 basic 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 RSI that supplement 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 basic financial statements but are not RSI. With respect to this other supplementary information, we made certain inquiries of management and evaluated the form, content, and methods of preparing the information to determine that the information complies with accounting principles generally accepted in the United States of America, the method of preparing it has not changed from the prior period, and the information is appropriate and complete in relation to our audit of the basic financial statements. We compared and reconciled the other supplementary information to the underlying accounting records used to prepare the basic financial statements or to the basic 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 basic financial statements but are not RSI. Such information has 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 it.

Restriction on Use

This information is intended solely for the use of the Board of Retirement, Finance Committee, and management of Ventura County Employees' Retirement Association and is not intended to be, and should not be, used by anyone other than these specified parties.

BROWN ARMSTRONG
ACCOUNTANCY CORPORATION

Brown Armstrong
Accountancy Corporation

Bakersfield, California
December 14, 2023

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 and Finance Committee 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), a pension trust fund and fiduciary component unit of the County of Ventura, as of and for the fiscal year ended June 30, 2023, and the related notes to the financial statements, which collectively comprise VCERA's basic financial statements, and the Schedule of Cost Sharing Employer Allocations as of June 30, 2023; 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 excluding that attributable to employer-paid member contributions, specified column totals (other information) as of and for the fiscal year ended June 30, 2023, and have issued our report thereon dated December 14, 2023.

Report on Internal Control Over Financial Reporting

In planning and performing our audit of the basic financial statements and other information, we considered VCERA's internal control over financial reporting (internal control) as a basis for designing audit procedures that are appropriate in the circumstances for the purpose of expressing our opinions on the basic financial statements and other information, 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 basic 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 or significant deficiencies may exist that were not identified.

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Report on Compliance and Other Matters

As part of obtaining reasonable assurance about whether VCERA's basic financial statements and other information 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 basic financial statement and other information. 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 CORPCRATION

Brown Armstrong
Accountancy Corporation

Bakersfield, California
December 14, 2023

VENTURA COUNTY EMPLOYEES' RETIREMENT

DECEMBER 18, 2023

Presented By

Stephanie S. Lord, CFA, CIC
Director, Relationship Management

presented by:

STEPHANIE S. LORD, CFA, CIC
Director, Relationship Management

contents

loomis sayles **at a glance**

ASSETS UNDER MANAGEMENT
BY CLIENT BASE

- US institutional
- Non-US institutional
- US retail
- Non-US retail

INVESTMENT EXPERTISE
ACROSS ASSET CLASSES

Fixed income: **$225.9 B**

Equity: **$77.2 B**

- Investment Grade Corporates
- Mortgage & Structured Finance
- Equities
- Developed Country Treasurys
- Emerging Market Debt
- High Yield Corporates
- Municipals
- Other
- Bank Loans
- Government Related
- Convertible Bonds

SERVING CLIENTS **WITH INTEGRITY** & A **GLOBAL PERSPECTIVE** SINCE

1926

BOSTON • CHICAGO • DETROIT • MINNEAPOLIS • SAN FRANCISCO

LONDON • SINGAPORE • UTRECHT

As of 9/30/2023. The Utrecht office opened on November 1, 2020.
Due to rounding, pie chart total may not equal 100%. Other includes cash & equivalents and derivatives.
Total AUM includes the assets of both Loomis, Sayles & Co., LP, and Loomis Sayles Trust Company, LLC. ($36.6 billion for the Loomis Sayles Trust Company).
Loomis Sayles Trust Company is a wholly owned subsidiary of Loomis, Sayles & Company, L.P.

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CREDIT RESEARCH

Alpha generation through differentiated insights

Providing insight and differentiated perspectives across the credit classes, risk spectrum, and capital structure

EQUITY

Driving alpha through independent thinking

Active long-term strategies built on differentiated non-consensus insight

MACRO STRATEGIES

Focused insights for investment team impact

Tailor-made research and data driven assessments of global macro investment conditions, opportunities and risks

MORTGAGE & STRUCTURED FINANCE

Opportunities outside traditional asset classes

Deploying fundamental research to uncover hidden alpha potential in complex structured markets

QUANTITATIVE RESEARCH & RISK ANALYSIS

Bringing together the art and science of investing

Translating market data and investor intuition into actionable signals

TRADING

Beyond trade execution

+50 trading professionals integrated within all investment processes every step of the way

ESG

Integrate and engage

Education and tools for investment teams to incorporate material ESG factors

INVESTMENT RISK OVERSIGHT

Ensuring investment teams meet client objectives

A common foundation underlying all strategies:

- Sound philosophy
- Rigorous, repeatable process
- Proprietary research
- Disciplined portfolio construction
- Integrated risk management

TECHNOLOGY

Translating data into insight

Tapping the power of our proprietary In2! technology platform, integrating more than 5 billion data points each day

BUSINESS INFRASTRUCTURE

Specialized expertise for critical services

Integrated legal, compliance, distribution, marketing, relationship management & client service teams

alpha engines

FIXED INCOME

ALPHA STRATEGIES	DISCIPLINED ALPHA	EMERGING MARKET DEBT	EURO CREDIT	FULL DISCRETION	GLOBAL	MORTGAGE & STRUCTURED FINANCE	MUNICIPAL	PRIVATE CREDIT‡	RELATIVE RETURN
Credit Asset Emerging Market Debt Blended World Credit Asset Multi-Asset Income Inflation Protected (TIPS) Systematic Investing Strategies	Core Intermediate Corporate Intermediate Credit Long Corporate Long Gov't Corp Long Credit Global Disciplined Alpha**	Corporate Local Currency Short Duration Asia Credit	Euro Investment Grade Credit Sustainable Euro Investment Grade Credit Euro High Yield Credit	Core Plus Full Discretion Multisector Full Discretion Multisector Credit Strategic Alpha Flexible Income High Yield Full Discretion High Yield Conservative US High Yield Global High Yield Full Discretion Global High Yield Senior Loan Senior Floating Rate & Fixed Income CLO	Global Bond Global Credit Global Debt Unconstrained Global Disciplined Alpha*** International Bond	Agency MBS Core Securitized IG Securitized Credit (ERISA) Opportunistic Securitized Credit Dedicated CLOs	Short Intermediate Medium Crossover†	Private Fixed Income Investment Grade Private Fixed Income	Short Duration Inter. Duration Core Core Plus IG Corporate IG Inter. Corp Long Corporate Long Credit Long Gov't/Credit US Active Treasury
$10.0 B**	$17.4 B	$3.1 B	$1.6 B	$62.8 B*	$24.3 B	$13.1 B**	$6.0 B	-	$98.2 B

EQUITY

GROWTH EQUITY STRATEGIES	GLOBAL EMERGING MARKETS EQUITY	GLOBAL EQUITY OPPORTUNITIES	SPECIALTY GROWTH STRATEGIES	SMALL CAP VALUE
All Cap Growth Global Growth International Growth Large Cap Growth Long/Short Growth Equity	Global Emerging Markets Equity Global Emerging Markets Equity Long/Short	Global Allocation Global Equity Opportunities	Small Cap Growth Small/Mid Cap Growth Mid Cap Growth	Small Cap Value Small/Mid Cap Core
$61.1 B	$377.3 M	$13.5 B	$5.7 B	$2.5 B

As of 9/30/2023.
**Effective 6/30/2023, Bank Loans strategy assets under management are included in Full Discretion assets under management. **Includes accounts that may also be counted as part of other strategies ***Co-managed investment strategy. † Accounts may be co-managed along with other teams as appropriate. ‡ The Private Credit team joined the firm in January 2022.*

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our ESG evolution

OUR FIRMWIDE COMMITMENT TO ESG HELPS ENABLE ONGOING INNOVATION AND TECHNOLOGICAL SUPPORT, AND ENSURES WE ARE RESPONSIVE TO MARKET DEVELOPMENTS AND CLIENT OBJECTIVES

2012-2015 — LAYING FOUNDATIONS

- Established internal ESG Committee
- Became signatory to UK Stewardship Code and UN PRI
- Added third-party ESG datasets to e.g. MSCI, Sustainalytics

2016-2019 — EXPANDING CAPABILITIES

- Developed repositories for portfolio, client and disclosure reporting
- Added more third-party datasets
- Created proprietary engagement database
- Incorporated ESG into portfolio risk reviews
- Appointed first head of ESG

2019-2022 — DRIVING DIFFERENTIATION

- Developed proprietary credit research ratings and enhanced engagement framework
- Incorporated ESG into credit research relative value framework
- Hired new head of ESG and added 3 dedicated employees
- Created guiding principles on climate change
- Filed SFDR Article 8 disclosures for several funds
- Published first sustainability report and first TCFD-aligned report
- Launched ESG Awareness packets

2023+ — ACCELERATING INNOVATION

- Develop suite of tools in support of client's Net Zero commitments, e.g. Net Zero Pathway Diagnostic Report
- Enhance fixed income engagement approach with a focus on quality over quantity
- Further evolve engagement reporting for equity and fixed income
- Increase focus on disseminating proprietary ESG research and thought leadership
- Refine fixed income materiality maps with an emphasis on small number of material issues

full discretion investing

TEAM BELIEFS & CAPABILITIES

The market is inefficient at pricing specific risk.

We believe fundamental research paints a clearer picture of intrinsic value. We use this foundation to help identify mispriced securities when markets are short-term focused, illiquid, or irrational due to factors including fear and greed.

A credit cycle view can help identify opportunities and risks.

We follow a disciplined top-down framework to analyze the factors driving the macroeconomic cycle, evaluate how they might affect asset valuations, and seek to harvest credit risk premiums.

Risk management is integral, not an add-on.

We believe in a rigorous investment process that seeks to balance risk/reward tradeoffs effectively and integrates risk management at every step.

CORE PLUS	MULTISECTOR				LEVERAGED FINANCE	
Core Plus Full Discretion	Multisector Full Discretion	Multisector Credit	Strategic Alpha Strategic Alpha Opportunistic	Flexible Income	High Yield Full Discretion High Yield Conservative US High Yield Global High Yield Full Discretion	Senior Loan Senior Floating Rate & Fixed Income CLO

CUSTOM SOLUTIONS		
Insurance	Buy & Maintain	Liability-Driven Investing

Views and opinions are subject to change at any time without notice. Other industry analysts and investment personnel may have different views and opinions.

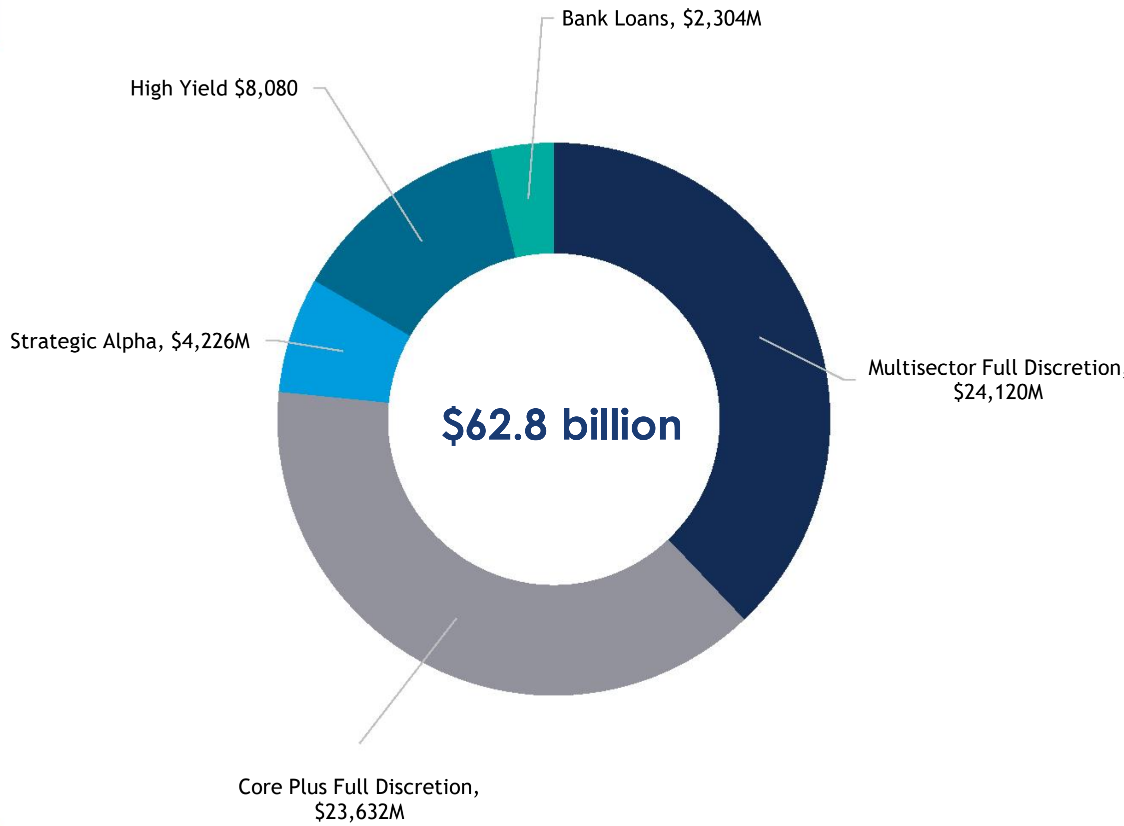
There is no guarantee that the investment objective will be realized or that the strategy will generate positive or excess return.
Any investment that has the possibility for profits also has the possibility of losses, including the loss of principal.

full discretion product

LOOMIS SAYLES FULL DISCRETION TEAM ASSETS UNDER MANAGEMENT

$62.8 billion as of September 30, 2023

	ASSETS ($ MILLIONS)
CORE PLUS	
Core Plus Full Discretion	23,632
MULTISECTOR	
Multisector Full Discretion	24,120
Strategic Alpha	4,226
Flexible Income	341
Multisector Credit	112
LEVERAGED FINANCE	
High Yield	
High Yield Full Discretion	2,921
High Yield Conservative	2,376
US High Yield	2,593
Global High Yield Full Discretion	190
Bank Loans	
Senior Loan	1,365
Senior Floating Rate & Fixed Income	939



As of 9/30/2023.
Due to rounding, pie chart total may not equal 100%. Total strategy assets include all assets managed by the respective team.

investment team

HIGHLY EXPERIENCED TEAM SUPPORTED BY DEEP FIRM RESOURCES

CORE PLUS	MULTISECTOR				LEVERAGED FINANCE	
Core Plus Full Discretion[1]	**Multisector Full Discretion[2]**	**Multisector Credit[3]**	**Strategic Alpha[4]**	**Flexible Income**	**High Yield[5]**	**Bank Loans[6]**
Portfolio Managers Matt Eagan, CFA Elaine Stokes Brian Kennedy	**Portfolio Managers** Matt Eagan, CFA Elaine Stokes Brian Kennedy	**Portfolio Managers** Matt Eagan, CFA Elaine Stokes Brian Kennedy Peter Sheehan	**Portfolio Managers** Matt Eagan, CFA Elaine Stokes Brian Kennedy Todd Vandam, CFA	**Portfolio Managers** Matt Eagan, CFA Scott Darci, CFA	**Portfolio Managers** Matt Eagan, CFA Elaine Stokes Brian Kennedy Todd Vandam, CFA Peter Sheehan	**Portfolio Managers** John Bell Michael Klawitter, CFA Heather Young, CFA Christos Maniatis^
Associate Portfolio Manager Bryan Hazelton, CFA	**Associate Portfolio Manager** Bryan Hazelton, CFA	**Associate Portfolio Managers** Bryan Hazelton, CFA Chris Romanelli, CFA	**Associate Portfolio Manager** Scott Darci, CFA		**Associate Portfolio Manager** Chris Romanelli, CFA	

STRATEGISTS

Peter Sheehan - **Credit**
Steve LaPlante, CFA - **Securitized**
Bryan Hazelton, CFA - **Investment Grade**
Scott Darci, CFA - **Equity & Derivatives**
Chris Romanelli, CFA - **High Yield**
Hassan Malik, PhD, CFA - **Sovereign & FX**

KEY SUPPORT

DEDICATED RESEARCH ANALYSTS	INVESTMENT DIRECTORS	INVESTMENT ANALYSTS		PORTFOLIO SPECIALISTS
Nicole Ranzinger	David Zielinski, CFA	Shong Xiao, CFA	Jack Rotondi, CFA	Rigas Gartaganis
Ryan Yackel	Cheryl Stober	Chidiebere Okpoebo	Alex Thieck	Boeurn Kan-Crawford
Zachary South	Kristen Doyle	Elizabeth DiTomasso, CFA	Meredith Sweeney	Matt Tierney
James Davie	Matthew Green			Amy Steede

FIRM RESOURCES (TEAM MEMBERS)

Macro Strategies (15)	Credit Research (67)	Quant. Research & Risk Analysis (13)	Private Credit (5)
Fixed Income Trading (46)	Mortgage & Structured Finance (19)	Investment Strategy & Risk Management (10)	ESG (4)

As of 9/30/2023
Effective 12/31/2023, Elaine Stokes will step down as Portfolio Manager for all Full Discretion strategies and vehicles.
Effective 2/29/2024, John Bell will step down as Portfolio Manager from Bank Loans.
^Christos Maniatis is only a PM for the CLO strategy within Bank Loans.
Additional products managed by the respective teams include: [1]Investment Grade Bond, Investment Grade Fixed Income [2]Bond, Fixed Income, Strategic Income [3]Credit Income [4]Strategic Alpha Opportunistic [5]High Yield Full Discretion, Global High Yield Full Discretion, High Yield Conservative, US High Yield, Global High Yield, High Income, High Income Opportunities, Institutional High Income [6]Senior Loan, Senior Floating Rate & Fixed Income, CLO.
The strategies described herein may be offered through separate accounts or commingled vehicles. Investment vehicles are subject to eligibility and availability. Separate accounts are available based on client preference and mandate size. This material should not be considered a solicitation to buy, or an offer to sell, any product or service to any person in any jurisdiction where such activity would be unlawful.

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investment process

OUR RIGOROUS INVESTMENT PROCESS COMBINES A TOP-DOWN FRAMEWORK, BOTTOM-UP RESEARCH AND RISK ASSESSMENT

TOP DOWN

CREDIT CYCLE FRAMEWORK

- Credit Cycle Outlook
- Valuation Dashboard
- Credit Risk Premiums
- Sector
- Industry
- Quality Bias
- Duration

Establish Overall Risk Posture and Sectors that Appear Attractive

BOTTOM UP

INTENSIVE RESEARCH

- Fallen Angels
- Cheap For Rating
- Upgrade Candidates
- Stressed/Distressed
- Capital Preservation/Avoid Losers
- New Issue Premium

Primary Drivers of Excess Return

RISK ASSESSMENT

MULTI-FACETED ANALYTICAL TOOLS

- Research Intensity
- Regime Tool
- Scenario Analysis
- Portfolio Analytics
- ESG Risk Considerations
- Stress Testing
- Attribution

Full Risk Awareness

There is no guarantee that the investment objective will be realized or that the strategy will generate positive or excess return. Any investment that has the possibility for profits also has the possibility of losses, including the loss of principal.

bottom up - core philosophy

WHAT DISTINGUISHES LOOMIS SAYLES FULL DISCRETION INVESTING

ENTERPRISE VALUE	• We follow an equity-like approach to valuation by focusing on long-term enterprise value and identifying risks to that value. • This gives us the conviction to buy in dislocated markets and take contrarian positions.
POSITIVE CONVEXITY	• We are deep value investors, targeting discount bonds backed by call protection and strong fundamentals. • By building positive convexity into our portfolios, we seek to maximize total return while minimizing downside risks.
REPEATABLE STRATEGIES	• Enterprise value and portfolio convexity are the core of what we do. • We consistently use six security selection strategies—each rooted in these core principles—to help identify and capitalize on mispricings throughout market cycles.

Any investment that has the possibility for profits also has the possibility of losses, including the loss of principal.
There is no guarantee that the objective will be realized or that the strategy will generate positive or excess return.

VCERA - MULTISECTOR FULL DISCRETION

guideline summary

BENCHMARK

- 65% Bloomberg Aggregate, 30% FTSE High Yield Mkt, 5% JP Morgan ex US Hedged $US

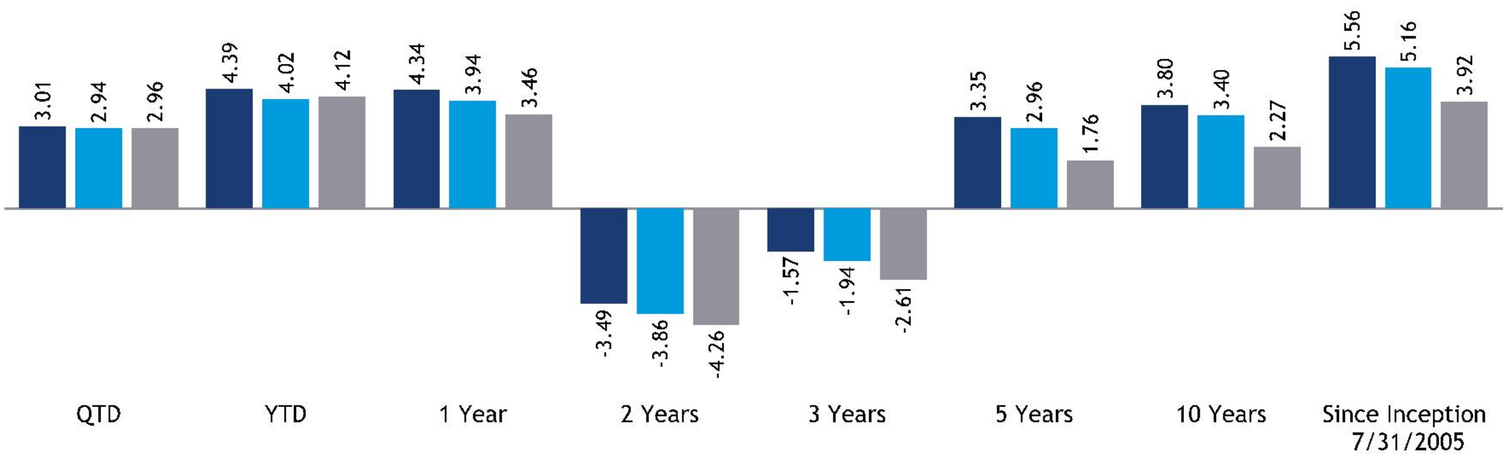
GUIDELINES & LIMITATIONS

- Issuer: 5% maximum market value in a single US issuer, with the exception of US Government, Agency and GSE issuers.
- Emerging Market: 10% maximum market value in emerging market securities not domiciled in the JP Morgan Government Bond Index and 2% maximum market value in securities issued by a single entity domiciled in a country not included in the JP Morgan Government Bond Index (Emerging Market Index).
- Country: 40% maximum market value in bonds issued by non-US entities, including yankees, sovereign debt, structured notes linked to non-US markets, supranationals, and emerging market bonds.
- Currency: Maximum 20% market value in non-US dollar denominated securities
- Duration: The duration of the portfolio shall be within the range of +/- 2 years of the duration of the benchmark.
- Credit Quality: Account may not purchase securities rated below C, at the time of purchase, by Moody, S&P and Fitch. If a security is not rated by either of Moody, S&P, or Fitch, the Loomis Sayles rating of "c" or better applies.
- The minimum average rating of the portfolio shall be equivalent to Moody or S&P Baa3/BBB- or higher (best). If not rated by either of the rating agencies, the Loomis Sayles rating equivalent (bbb-) will be used.
- Account may hold up to 55% market value in the aggregate of securities not rated investment grade by Moody, S&P, or Fitch, foreign bonds, non-144A private placements and unusually interest rate sensitive MBS. In the case of split rated securities, the higher rating will govern split-rated securities. If these securities are not rated (NR), Loomis Sayles rating will be used.
- Account must hold at least 65% market value in securities rated equal to or above Baa3/BBB-/BBB- by Moody, S&P or Fitch. In the case of split rated securities, the higher rating will govern split-rated securities. If these securities are not rated (NR), Loomis Sayles rating will be used.
- Account cannot purchase CLO's rated below Ba2/BB/BB by Moody, S&P, and Fitch (best). Use Loomis Sayles rating if NR/NR/NR.
- Account may not purchase equity securities, excluding preferred stock, but may hold equities resulting from conversions, exchanges or debt restructurings; account may hold no more than 5% market value in such equity securities.

Guideline summary is not a complete restatement of guidelines. The slide is intended to be a summary to aid in the review process.

performance

TRAILING RETURNS AS OF 11/30/2023 (%)



	QTD	YTD	1 Year	2 Years	3 Years	5 Years	10 Years	Since Inception 7/31/2005
Excess Return (Gross)	+0.05	+0.27	+0.88	+0.77	+1.04	+1.59	+1.53	+1.64

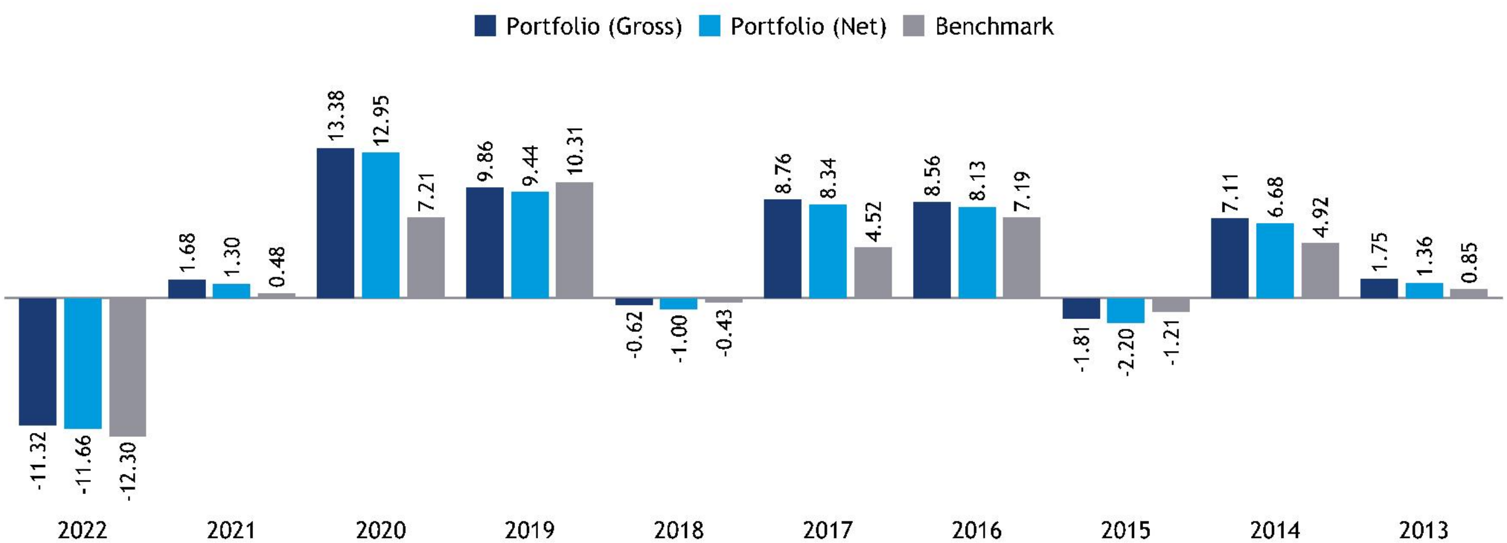
PORTFOLIO VALUATION (USD)

	Portfolio 11/30/2022	Portfolio 11/30/2023
Total	82,138,903	85,704,463

Benchmarks: 60% Barclays Agg, 35% Citigroup HY Mkt, 5% JPM X US Hdg $US (7/31/2005 - 11/30/2007). 65% BBG Agg 30% FTSE High Yield, 5% JPM Ex US Hedged US (11/30/2007 - 11/30/2023).
The current benchmark is 65% BBG Agg 30% FTSE High Yield, 5% JPM Ex US Hedged US Index.

performance

CALENDAR YEAR RETURNS AS OF 11/30/2023 (%)



	2022	2021	2020	2019	2018	2017	2016	2015	2014	2013
Excess Return (Gross)	+0.98	+1.20	+6.17	-0.45	-0.19	+4.24	+1.37	-0.61	+2.19	+0.90

Benchmarks: 60% Barclays Agg, 35% Citigroup HY Mkt, 5% JPM X US Hdg $US (7/31/2005 - 11/30/2007). 65% BBG Agg 30% FTSE High Yield, 5% JPM Ex US Hedged US (11/30/2007 - 11/30/2023).
The current benchmark is 65% BBG Agg 30% FTSE High Yield, 5% JPM Ex US Hedged US Index.

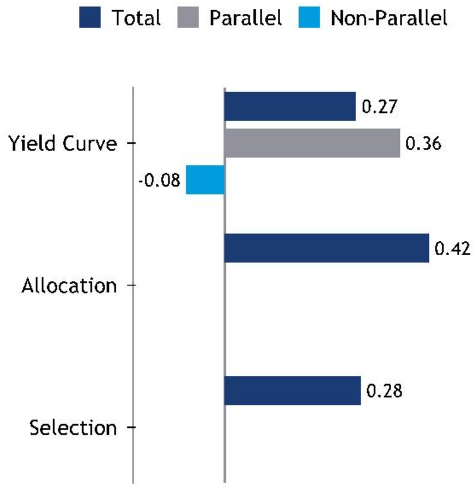
attribution analysis

11/30/2022 TO 11/30/2023

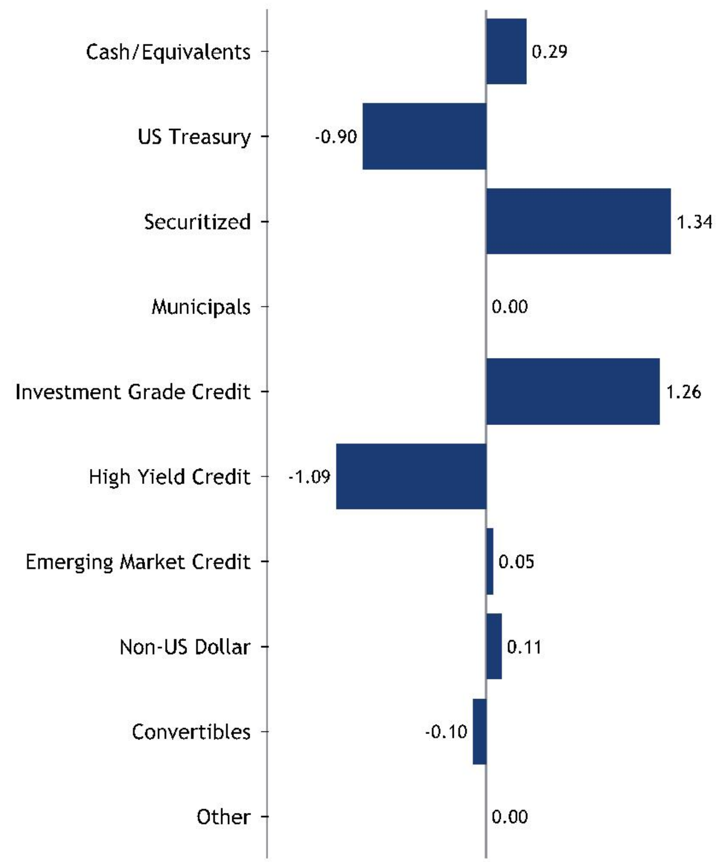
TOTAL RETURNS

	Total Return
Portfolio Return	4.34
Benchmark Return	3.47
Excess Return	0.87

EXCESS RETURN ATTRIBUTION



EXCESS RETURN ATTRIBUTION BY SECTOR



Figures on the bar chart may not add up to total excess return as they exclude impact of trading and pricing differences.
Other includes the following industries: Government Guarantee, Government Sponsored, and Owned No Guarantee.
The current benchmark is 65% BBG Agg 30% FTSE High Yield, 5% JPM Ex US Hedged US Index.

attribution analysis

11/30/2022 TO 11/30/2023

SECTOR DISTRIBUTION

	Portfolio Final Weight	Benchmark Final Weight	Portfolio Average Weight	Benchmark Average Weight	Portfolio Return	Benchmark Return	Total Effect
Securitized	17.27	18.65	17.82	19.03	7.99	0.45	1.34
Investment Grade Credit	38.29	18.59	37.01	17.40	6.89	3.34	1.26
Cash/Equivalents	15.89	0.00	14.30	0.00	4.97	3.46	0.29
Non-US Dollar	2.67	5.00	0.86	5.00	3.16	1.64	0.11
Emerging Market Credit	4.64	1.16	4.52	1.19	4.00	2.87	0.05
Municipals	0.00	0.39	0.00	0.41	0.00	2.36	0.00
Other	0.00	0.66	0.00	0.73	0.00	3.13	0.00
Convertibles	4.26	0.00	4.61	0.00	0.98	3.46	-0.10
US Treasury	1.00	26.91	6.25	26.70	-0.60	0.14	-0.90
High Yield Credit	15.99	28.65	14.63	29.55	7.06	8.92	-1.09

Total Effects are impacted by sector returns, allocation shifts and market timing. Total Effect includes yield curve impact.
Other includes the following industries: Government Guarantee, Government Sponsored, and Owned No Guarantee.
The current benchmark is 65% BBG Agg 30% FTSE High Yield, 5% JPM Ex US Hedged US Index.

attribution analysis

11/30/2022 TO 11/30/2023

Ventura County Employees' Retirement

TOP 10 INDUSTRIES BY TOTAL EFFECT

	Portfolio Weight	Benchmark Weight	Total Effect
Treasuries	19.38	31.70	1.31
Agency	0.00	17.61	0.57
CLO	3.98	0.00	0.40
Banking	8.40	3.88	0.27
Finance Companies	5.35	0.97	0.20
Home Equity	4.47	0.00	0.17
ABS Other	1.99	0.03	0.13
Car Loan	3.79	0.14	0.10
Communications	9.10	5.63	0.07
Technology	6.64	3.68	0.07

BOTTOM 10 INDUSTRIES BY TOTAL EFFECT

	Portfolio Weight	Benchmark Weight	Total Effect
Futures	0.00	0.00	-1.95
Financial Other	0.69	0.38	-0.12
Non Agency CMBS	1.50	0.60	-0.10
Capital Goods	2.71	4.08	-0.10
Transportation	0.86	1.08	-0.09
Consumer Non Cyclical	5.57	5.93	-0.07
Consumer Cyclical	7.90	8.08	-0.06
Energy	4.85	4.77	-0.04
Reits	0.39	0.97	-0.03
Industrial Other	0.15	0.45	-0.03

Out-of-benchmark allocations defaulted to security selection.
The current benchmark is 65% BBG Agg 30% FTSE High Yield, 5% JPM Ex US Hedged US Index.

attribution analysis

11/30/2022 TO 11/30/2023

TOP 10 ISSUERS BY TOTAL EFFECT

	Portfolio Weight	Benchmark Weight	Total Effect
U S Treasury	18.89	26.70	1.24
Federal National Mortgage Association	0.00	13.29	0.44
Uber Technologies Inc	1.90	0.15	0.13
Govt Natl Mtg Assn	0.00	3.91	0.12
Rocket Mortgage LLC	1.50	0.09	0.12
Credit Suisse Group AG	0.40	0.04	0.11
Aimco	0.85	0.00	0.09
Teva Pharmaceutical Industries Ltd	1.26	0.00	0.08
Micron Technology Inc	1.21	0.02	0.06
Continental Resources Inc/OK	1.05	0.01	0.06

BOTTOM 10 ISSUERS BY TOTAL EFFECT

	Portfolio Weight	Benchmark Weight	Total Effect
Futures	0.00	0.00	-1.95
Southwest Airlines Co	0.30	0.01	-0.10
CommScope Inc	0.31	0.14	-0.07
BioMarin Pharmaceutical Inc	0.76	0.00	-0.07
Carvana Co	0.00	0.08	-0.06
Ubs-Barclays Commerical Mortage Trust	0.01	0.00	-0.06
Credit Suisse Mtg Cap Certificates	0.42	0.00	-0.05
Kaisa Group Holdings Ltd	0.07	0.00	-0.05
iHeartMedia Inc	0.35	0.07	-0.05
Ford Motor Co	0.01	0.98	-0.03

The current benchmark is 65% BBG Agg 30% FTSE High Yield, 5% JPM Ex US Hedged US Index.

attribution analysis

11/30/2022 TO 11/30/2023

CURRENCY DISTRIBUTION

	Portfolio Weight Pre-Hedge	Portfolio Weight Post-Hedge	Currency Contribution	Bond Contribution	Hedging Effect	Total Effect
Argentine Peso	0.02	0.02	-0.02	0.01	0.00	0.00
Australian Dollar	0.00	0.00	0.00	0.01	0.00	0.00
Brazilian Real	0.14	0.14	-0.02	0.01	0.00	0.00
British Pound Sterling	0.00	0.00	-0.04	0.05	0.03	0.05
Canadian Dollar	0.08	-0.02	0.00	0.01	0.00	0.00
Danish Krone	0.00	0.00	0.00	0.00	0.00	0.00
Euro	0.35	0.05	-0.13	0.13	0.08	0.08
Indonesian Rupiah	0.15	0.15	-0.01	0.01	0.00	-0.01
Japanese Yen	0.00	0.00	0.11	0.08	-0.21	-0.02
Mexican Peso	0.05	0.05	-0.01	0.01	0.00	0.00
South African Rand	0.15	0.15	-0.02	0.01	0.00	0.00
Swedish Krona	0.00	0.00	0.00	0.00	0.00	0.00
US Dollar	99.07	99.07	0.00	0.87	0.00	0.87
Unrealized FX Gain/Loss	0.00	0.00	0.00	0.00	0.00	0.00

Weights reflect end of period holdings. Effects are as of the entire period. Bond Contribution is the sum of Country Allocation and Local Market effects.
The current benchmark is 65% BBG Agg 30% FTSE High Yield, 5% JPM Ex US Hedged US Index.

portfolio summary

AS OF 11/30/2023

	Portfolio 11/30/2023	Benchmark 11/30/2023	Portfolio 11/30/2022	Benchmark 11/30/2022
Yield to Worst (%)	6.57	5.96	6.45	5.66
Effective Duration (years)	5.47	5.40	5.08	5.59
Effective Maturity (years)	5.33	7.30	5.06	7.56
OAS * (bps)	192	144	220	171
Coupon (%)	3.94	3.78	3.33	3.44
Current Yield (%)	4.32	5.68	3.72	3.99
Average Quality	BAA2	A2	BAA1	A2
Number of Securities	604	15,869	587	15,233
Number of Issuers	301	1,998	296	2,027

Quality	Portfolio 11/30/2023	Benchmark 11/30/2023	Portfolio 11/30/2022	Benchmark 11/30/2022
AAA	20.51	48.19	26.36	49.12
AA	2.03	4.84	2.06	4.29
A	7.62	9.52	8.61	9.10
BAA	45.33	9.45	41.07	8.63
BA	14.71	17.00	12.47	17.29
B	5.58	8.53	5.88	8.97
CAA	1.80	2.45	0.81	2.58
CA	0.00	0.03	0.00	0.02
C	0.04	0.00	0.09	0.00
NR	2.37	0.00	2.65	0.00

** OAS is option adjusted spread.*
Client Guideline Quality Methodology presented.
The current benchmark is 65% BBG Agg 30% FTSE High Yield, 5% JPM Ex US Hedged US Index.

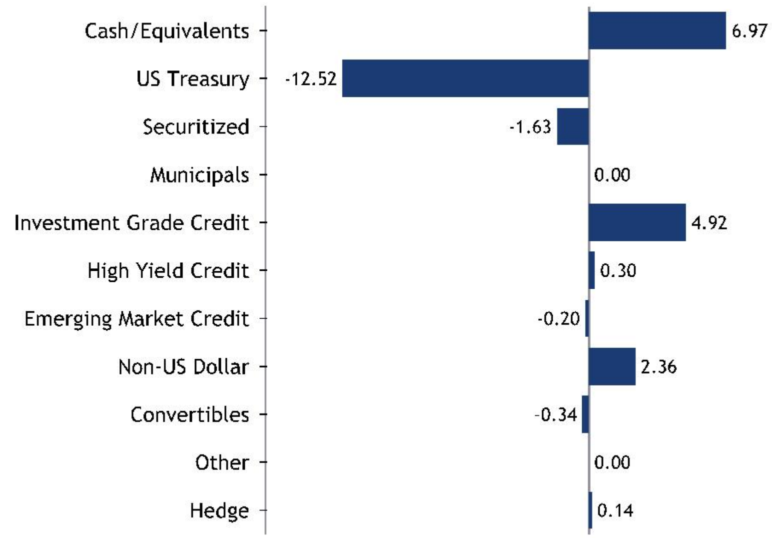
sector allocation

11/30/2022 TO 11/30/2023 (%)

SECTOR DISTRIBUTION

	Portfolio 11/30/2023	Over/Under Weight
Cash/Equivalents	15.89	15.89
US Treasury	1.00	-25.91
Securitized	17.27	-1.38
Municipals	0.00	-0.39
Investment Grade Credit	38.29	19.71
High Yield Credit	15.99	-12.66
Emerging Market Credit	4.64	3.48
Non-US Dollar	2.27	2.27
Convertibles	4.26	4.26
Other	0.00	-0.66
Hedge	0.39	-4.61

SECTOR ALLOCATION CHANGE



Other includes the following industries: Government Guarantee, Government Sponsored, and Owned No Guarantee.
The current benchmark is 65% BBG Agg 30% FTSE High Yield, 5% JPM Ex US Hedged US Index.

country of risk allocation

AS OF 11/30/2023

Total Developed Countries Exposure	Portfolio Weight %	Benchmark Weight %
Developed	93.00	98.84
Americas	84.95	89.10
United States	79.80	86.89
Cayman Islands	4.00	0.00
Canada	0.83	2.20
Bermuda	0.33	0.01
Asia	0.21	2.25
Japan	0.21	2.25
Europe	5.50	6.10
United Kingdom	1.93	1.65
France	1.42	0.97
Ireland	0.67	0.07
Switzerland	0.35	0.13
Germany	0.33	0.94
Luxembourg	0.33	0.23
Spain	0.24	0.49
Italy	0.24	0.78
Other	0.00	0.84
Oceania	2.34	0.50
Australia	2.34	0.50
Other	0.00	0.03
Other	0.00	0.03
Supranational **	0.00	0.87
Other	0.00	0.87

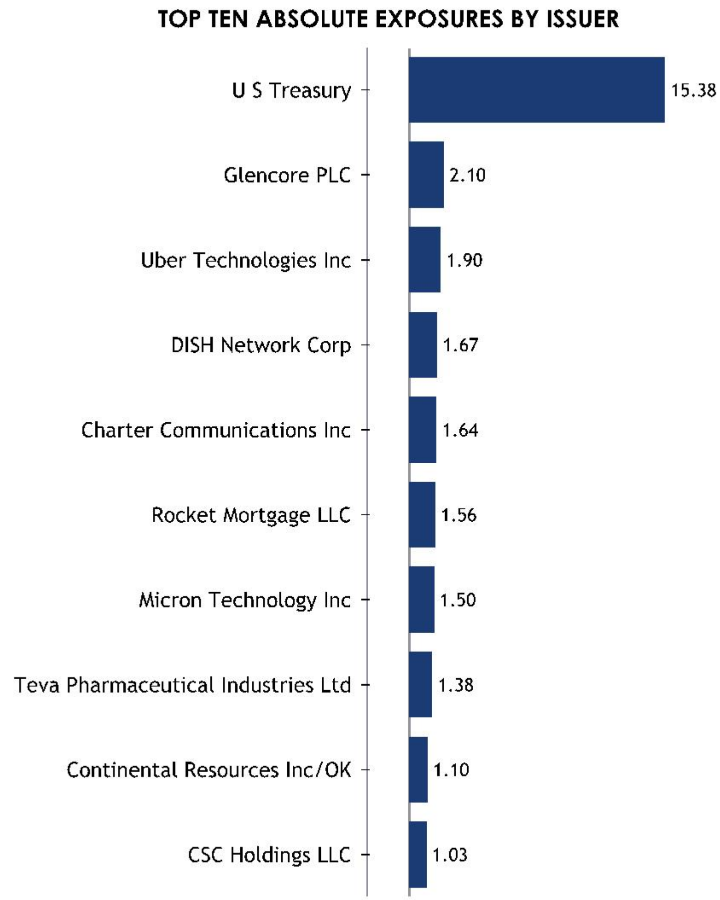
Total EM Countries Exposure (USD & Non USD)	Portfolio Weight %	Benchmark Weight %
Emerging Markets *	7.00	1.16
Africa	2.20	0.18
South Africa	1.34	0.00
Zambia	0.66	0.11
Nigeria	0.20	0.00
Other	0.00	0.07
Americas	2.53	0.53
Mexico	1.48	0.20
Brazil	1.03	0.06
Peru	0.02	0.05
Other	0.00	0.22
Asia	0.58	0.38
Indonesia	0.24	0.06
Malaysia	0.19	0.00
China	0.15	0.11
Other	0.00	0.21
Europe	0.00	0.04
Other	0.00	0.04
Middle East	1.70	0.03
Israel	1.70	0.03
Total	100.00	100.00

Non Dollar Exposure	Portfolio Weight %	Benchmark Weight %
Total Non USD †	2.01	0.00
Developed	0.04	0.00
Euro	0.07	0.00
Australian Dollar	0.00	0.00
British Pound Sterling	0.00	0.00
Danish Krone	0.00	0.00
Japanese Yen	0.00	0.00
Canadian Dollar	-0.03	0.00
Emerging Markets	1.97	0.00
Brazilian Real	0.74	0.00
Mexican Peso	0.50	0.00
South African Rand	0.49	0.00
Indonesian Rupiah	0.24	0.00
Argentine Peso	0.00	0.00

** Emerging markets includes countries with middle or low income economies, as designated by the World Bank, also taking into consideration capital market liquidity and accessibility.*
*** Supranational includes debt from an entity sponsored by a combination of multiple governments to promote economic development.*
† Values shown include impact of hedging, if utilized.
Due to active management, country and currency allocation will evolve over time. Due to rounding, totals may not equal 100%.
The current benchmark is 65% BBG Agg 30% FTSE High Yield, 5% JPM Ex US Hedged US Index.

absolute exposures by issuer

AS OF 11/30/2023 (%)



The current benchmark is 65% BBG Agg 30% FTSE High Yield, 5% JPM Ex US Hedged US Index.

VCERA - STRATEGIC ALPHA NHIT

guideline summary

BENCHMARK

- ICE BofAML 3 Month US Treasury Bill

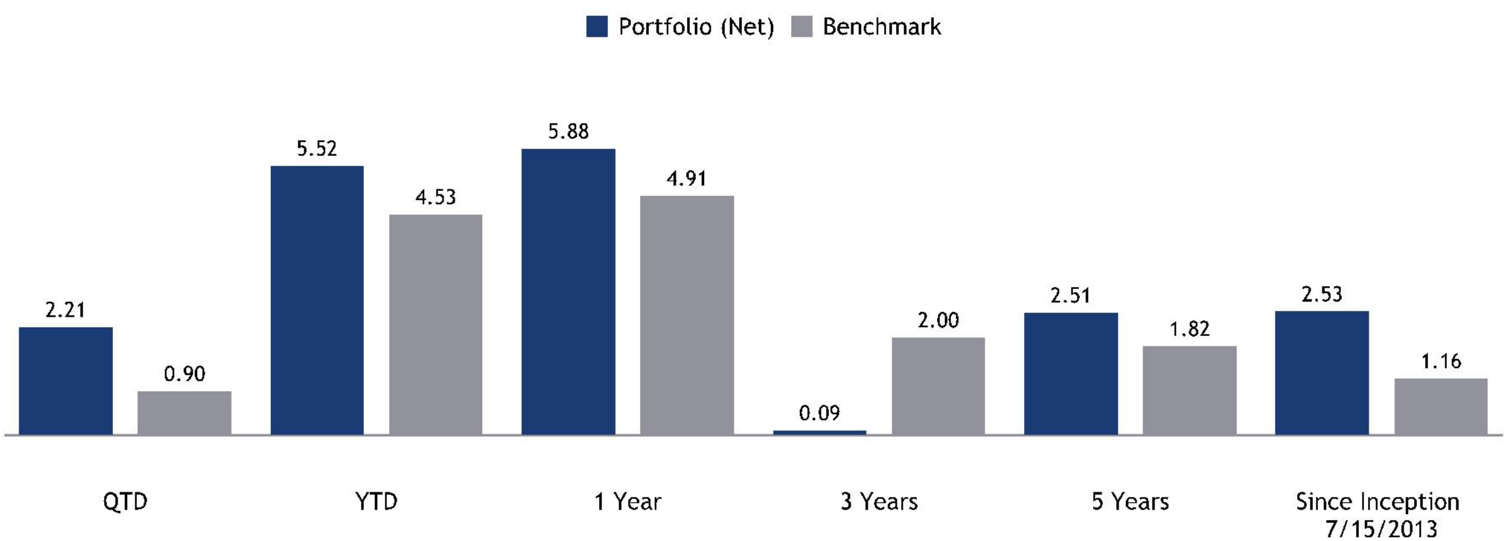
GUIDELINES & LIMITATIONS

- Minimum Credit Quality: The Fund will not hold more than +/-50% MV in securities rated below Baa3/BBB-/BBB- by Moody, S&P and Fitch (best) as determined at the time of purchase. If unrated, Loomis rating applies.
- Emerging Markets: The Account's net emerging market currency exposure shall be limited to +/-20% as determined at the time of purchase.
- Convertibles & Residual Equity: The Account's net equity exposure is +/-5%, excluding Preferred Stock, Convertible Preferred Stock and Commingled Pools as determined at the time of purchase.
- Duration: The effective duration of the Fund will not exceed 5 years and may be as low as -2 years.
- Industry Concentration: The Fund's net exposure to any individual industry is +/- 25%, excluding securities issued or guaranteed by Government issuers as determined at time of purchase.
- Currency: The Account's net individual currency, excluding U.S. dollar shall be limited to +/-15% as determined at the time of purchase.

Guideline summary is not a complete restatement of guidelines. The slide is intended to be a summary to aid in the review process.

portfolio review

TRAILING RETURNS AS OF 11/30/2023 (%)

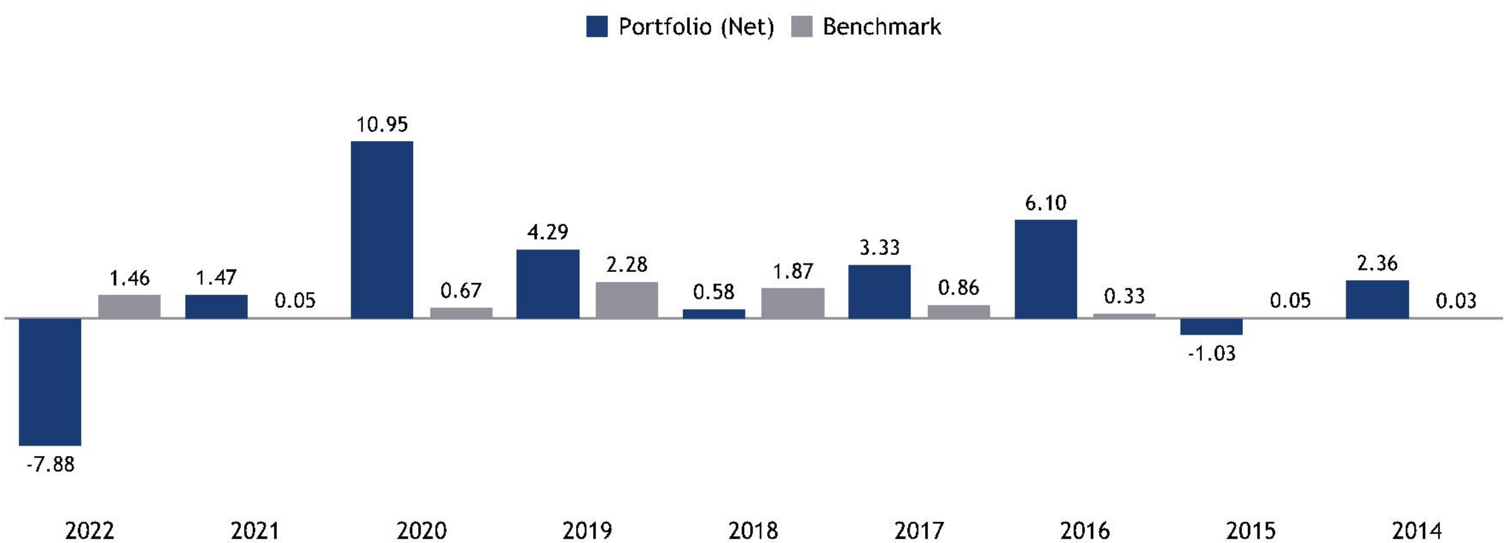


	QTD	YTD	1 Year	3 Years	5 Years	Since Inception 7/15/2013
Excess Return (Net)	+1.32	+0.99	+0.97	-1.91	+0.68	+1.37

Sources: Bloomberg and Loomis Sayles.
The current benchmark is ICE BofAML 3-Month U.S. Treasury Bill Index.
Performance data shown represents past performance and is no guarantee of, and not necessarily indicative of, future results.
Performance for multiyear periods is annualized. Gross returns are net of trading costs. Net returns are gross returns less effective management fees.

portfolio review

CALENDAR YEAR RETURNS AS OF 11/30/2023 (%)



	2022	2021	2020	2019	2018	2017	2016	2015	2014
Excess Return (Net)	-9.34	+1.42	+10.28	+2.01	-1.29	+2.47	+5.77	-1.08	+2.33

Sources: Bloomberg and Loomis Sayles.
The current benchmark is ICE BofAML 3-Month U.S. Treasury Bill Index.
Performance data shown represents past performance and is no guarantee of, and not necessarily indicative of, future results.
Performance for multiyear periods is annualized. Gross returns are net of trading costs. Net returns are gross returns less effective management fees.

portfolio summary

11/30/2022 TO 11/30/2023

PORTFOLIO SUMMARY

	Portfolio 11/30/2023	Portfolio 11/30/2022	Change 11/30/2022 to 11/30/2023
Yield to Worst (%)	6.79	6.79	0.00
Effective Duration (years)	4.02	2.23	1.79
Coupon (%)	4.52	3.84	0.68
Maturity (years)	4.44	3.89	0.56
Average Quality	BAA2	BAA2	-
Number of Issuers	276	266	10

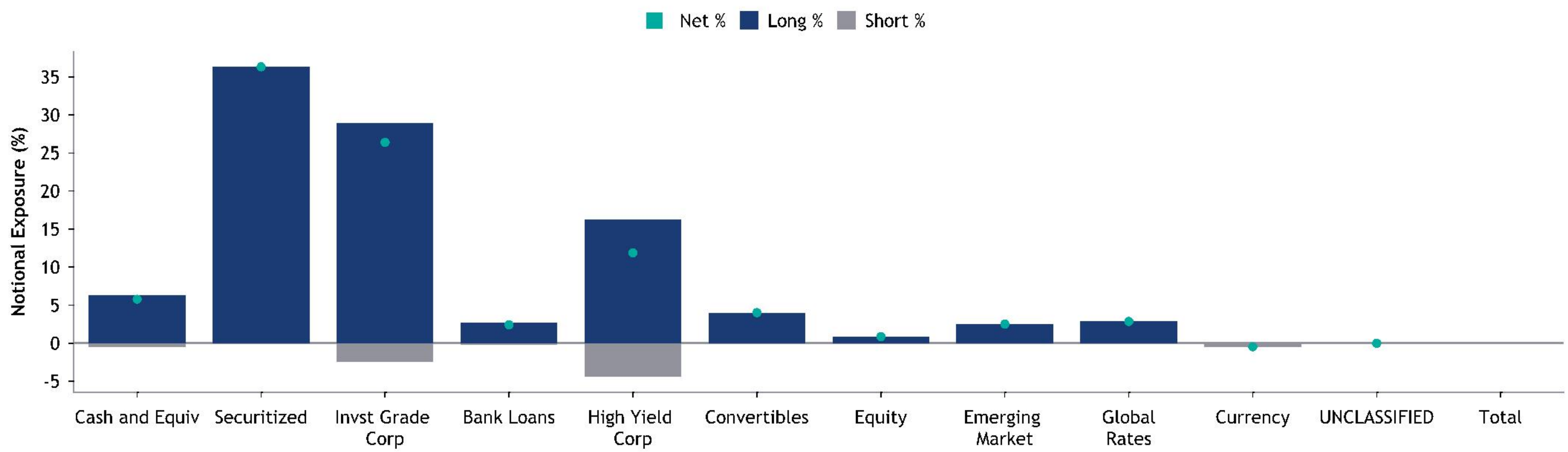
QUALITY SUMMARY

	Portfolio % 11/30/2023	Portfolio % 11/30/2022	Change in Exposure % 11/30/2022 to 11/30/2023
Investment Grade	69.98	67.69	2.29
AAA	12.01	16.12	-4.11
AA	5.62	5.37	0.25
A	12.79	13.43	-0.63
BBB	39.56	32.78	6.77
High Yield	19.06	16.13	2.93
BB	15.40	15.53	-0.13
B	0.34	-1.97	2.32
CCC & Below	3.32	2.58	0.74
NR**	3.61	3.74	-0.12

Source: Loomis Sayles.
Rating categories include unrated securities of comparable quality as determined by Loomis Sayles. Equity securities are deemed to have a duration and maturity value of zero.
***NR consists of non-rated issues plus securities such as common stock, ADR's, ETF's, CDX's and forwards.*

portfolio review

NOTIONAL EXPOSURE BY STRATEGY AS OF 11/30/2023

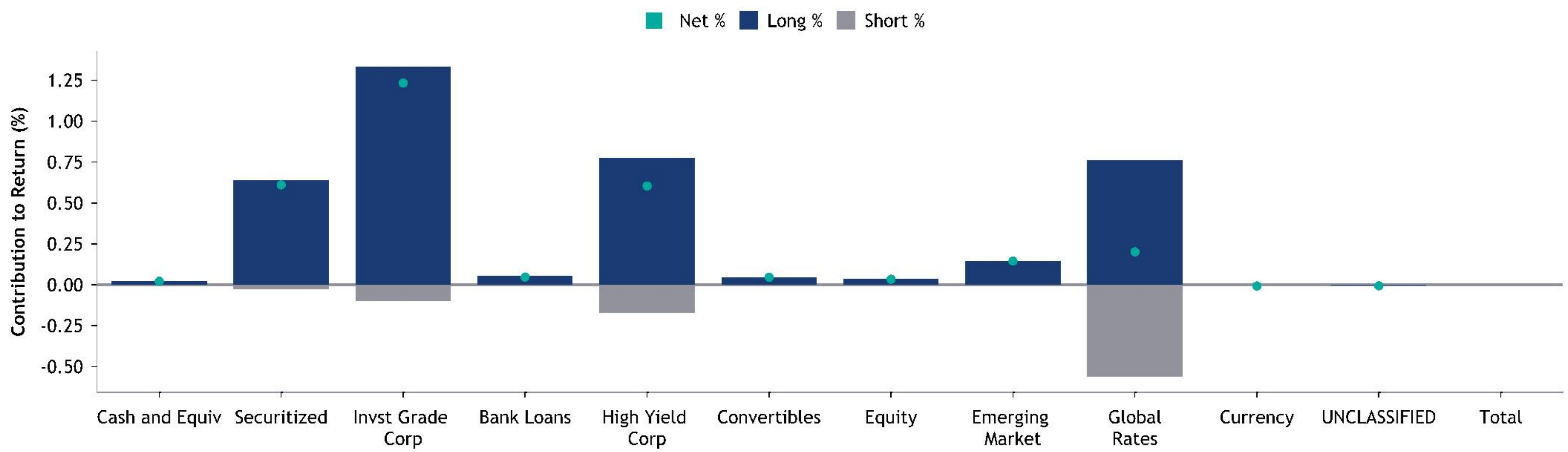


	Cash and Equiv	Securitized	Invst Grade Corp	Bank Loans	High Yield Corp	Convertibles	Equity	Emerging Market	Global Rates	Currency	UNCLASSIFIED	Total
Long %	6.27	36.33	28.91	2.68	16.28	4.02	0.88	2.53	2.86	-	-	100.75
Short %	-0.49	-	-2.51	-0.25	-4.39	-	-	-	-	-0.46	-	-8.10
Net %	5.78	36.33	26.40	2.43	11.89	4.02	0.88	2.53	2.86	-0.46	-	92.65
Change 11/30/2022 to 11/30/2023	-6.70	1.64	5.85	2.24	0.78	-0.60	0.39	-0.94	2.85	-0.46	-	-

Source: Loomis Sayles.
Strategies are based on internal Loomis Sayles classifications. Certain portfolio exposures may be excluded from this chart because, in our view, they are best represented in terms of contribution to duration as shown later in the presentation. Portfolio Strategy Exposure does not include derivative offsets, included in the portfolio's total net assets. The portfolio's long and short investment exposures may, at times, each reach 100% of the assets invested in the portfolio (excluding derivatives used for duration, interest rate or yield curve management and cash and cash equivalents), although these exposures may be higher or lower at any given time.

portfolio review

MONTH TO DATE CONTRIBUTION (GROSS) AS OF 11/30/2023



	Cash and Equiv	Securitized	Invst Grade Corp	Bank Loans	High Yield Corp	Convertibles	Equity	Emerging Market	Global Rates	Currency	UNCLASSIFIED	Total
Long %	0.02	0.64	1.33	0.06	0.78	0.05	0.03	0.15	0.76	-	-0.01	3.81
Short %	-	-0.03	-0.10	-0.01	-0.17	-	-	-	-0.56	-0.01	-	-0.87
Net %	0.02	0.61	1.23	0.05	0.60	0.05	0.03	0.15	0.20	-0.01	-0.01	2.93

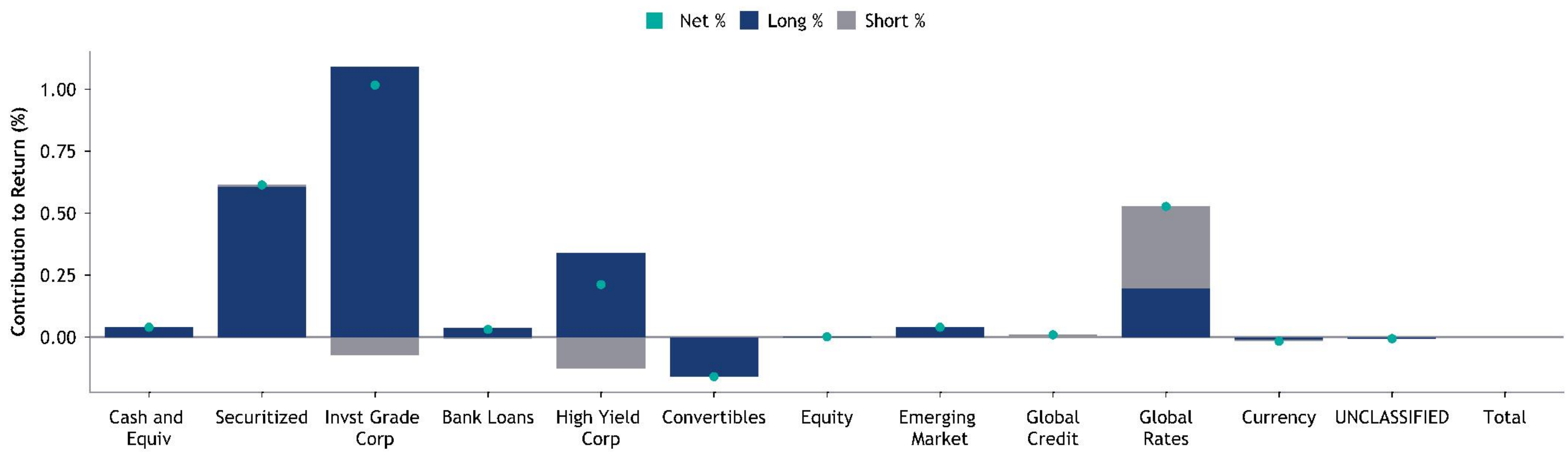
Source: Loomis Sayles.

Performance data shown represents past performance and is no guarantee of, and not necessarily indicative of, future results.

Strategies are based on internal Loomis Sayles classifications. Due to the differences in calculation methodologies, the total return shown for attribution may differ from the actual return for the account. Please see the returns for actual return information. Contribution account returns are gross of fees

portfolio review

QUARTER TO DATE CONTRIBUTION (GROSS) AS OF 11/30/2023



	Cash and Equiv	Securitized	Invst Grade Corp	Bank Loans	High Yield Corp	Convertibles	Equity	Emerging Market	Global Credit	Global Rates	Currency	UNCLASSIFIED	Total
Long %	0.04	0.61	1.09	0.04	0.34	-0.16	-	0.04	-	0.20	-0.01	-0.01	2.18
Short %	-	0.01	-0.07	-0.01	-0.13	-	-	-	0.01	0.33	-0.01	-	0.13
Net %	0.04	0.61	1.02	0.03	0.21	-0.16	-	0.04	0.01	0.53	-0.02	-0.01	2.31

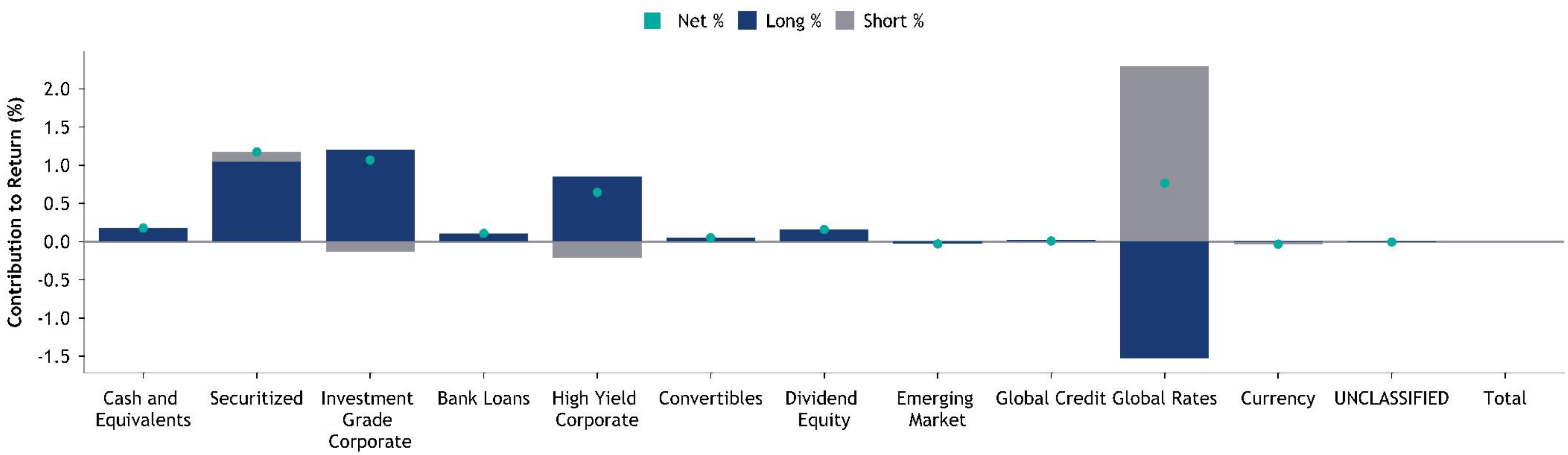
Source: Loomis Sayles.

Performance data shown represents past performance and is no guarantee of, and not necessarily indicative of, future results.

Strategies are based on internal Loomis Sayles classifications. Due to the differences in calculation methodologies, the total return shown for attribution may differ from the actual return for the account. Please see the returns for actual return information. Contribution account returns are gross of fees

portfolio review

6 MONTH CONTRIBUTION (GROSS) AS OF 11/30/2023



	Cash and Equivalents	Securitized	Investment Grade Corporate	Bank Loans	High Yield Corporate	Convertibles	Dividend Equity	Emerging Market	Global Credit	Global Rates	Currency	UNCLASSIFIED	Total
Long %	0.18	1.04	1.20	0.10	0.85	0.05	0.16	-0.03	0.02	-1.53	-0.01	-0.01	2.03
Short %	-	0.13	-0.13	-	-0.21	-	-	-	-0.01	2.30	-0.02	-	2.06
Net %	0.18	1.17	1.07	0.11	0.64	0.05	0.16	-0.03	0.01	0.77	-0.03	-0.01	4.09

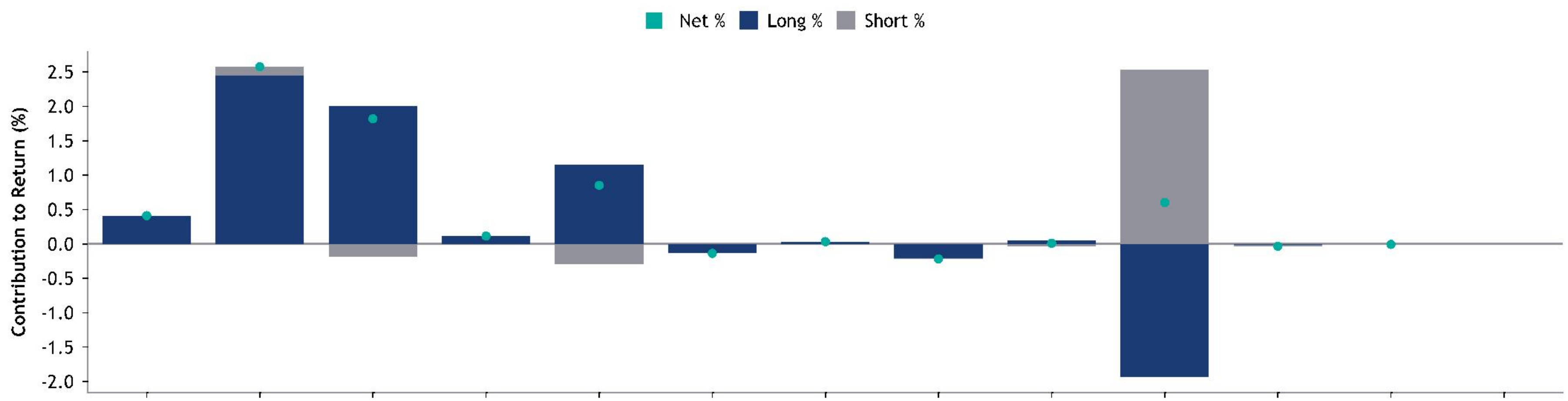
Source: Loomis Sayles.

Performance data shown represents past performance and is no guarantee of, and not necessarily indicative of, future results.

Strategies are based on internal Loomis Sayles classifications. Due to the differences in calculation methodologies, the total return shown for attribution may differ from the actual return for the account. Please see the returns for actual return information. Contribution account returns are gross of fees

portfolio review

YEAR TO DATE CONTRIBUTION (GROSS) AS OF 11/30/2023



	Cash and Equiv	Securitized	Invst Grade Corp	Bank Loans	High Yield Corp	Convertibles	Equity	Emerging Market	Global Credit	Global Rates	Currency	UNCLASSIFIED	Total
Long %	0.41	2.45	2.00	0.12	1.15	-0.14	0.03	-0.21	0.05	-1.93	-0.02	-0.01	3.92
Short %	-	0.12	-0.18	-	-0.29	-	-	-0.01	-0.04	2.54	-0.01	-	2.11
Net %	0.41	2.57	1.82	0.11	0.85	-0.14	0.03	-0.22	0.01	0.60	-0.03	-0.01	6.03

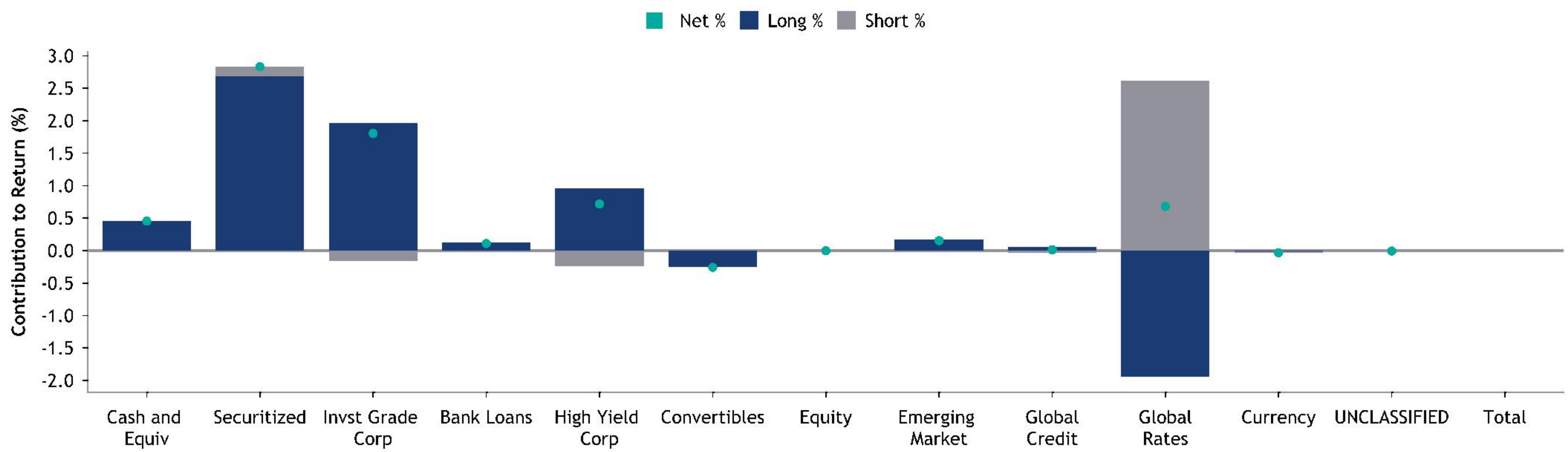
Source: Loomis Sayles.

Performance data shown represents past performance and is no guarantee of, and not necessarily indicative of, future results.

Strategies are based on internal Loomis Sayles classifications. Due to the differences in calculation methodologies, the total return shown for attribution may differ from the actual return for the account. Please see the returns for actual return information. Contribution account returns are gross of fees

portfolio review

ONE YEAR CONTRIBUTION (GROSS) AS OF 11/30/2023



	Cash and Equiv	Securitized	Invst Grade Corp	Bank Loans	High Yield Corp	Convertibles	Equity	Emerging Market	Global Credit	Global Rates	Currency	UNCLASSIFIED	Total
Long %	0.46	2.69	1.97	0.12	0.96	-0.26	-	0.17	0.05	-1.94	-0.02	-0.01	4.19
Short %	-	0.14	-0.16	-0.01	-0.24	-	-	-0.01	-0.04	2.62	-0.01	-	2.29
Net %	0.46	2.83	1.81	0.11	0.72	-0.26	-	0.15	0.01	0.68	-0.03	-0.01	6.47

Source: Loomis Sayles.

Performance data shown represents past performance and is no guarantee of, and not necessarily indicative of, future results.

Strategies are based on internal Loomis Sayles classifications. Due to the differences in calculation methodologies, the total return shown for attribution may differ from the actual return for the account. Please see the returns for actual return information. Contribution account returns are gross of fees

portfolio review

CONTRIBUTION (GROSS) AS OF 11/30/2023

	Prior Year Contribution to Return			Prior 3 Years Contribution to Return			Prior 5 Years Contribution to Return		
	Net	Long	Short	Net	Long	Short	Net	Long	Short
Cash and Equiv	0.46	0.46	-	0.04	0.04	-	0.08	0.08	-
Securitized	2.83	2.69	0.14	0.64	0.56	0.08	1.14	1.11	0.04
Invst Grade Corp	1.81	1.97	-0.16	-0.04	0.01	-0.05	1.12	1.17	-0.05
Bank Loans	0.11	0.12	-0.01	0.05	0.04	0.01	0.07	0.07	-
High Yield Corp	0.72	0.96	-0.24	-0.28	-0.24	-0.03	0.57	0.58	-0.01
Convertibles	-0.26	-0.26	-	-0.18	-0.18	-	-0.05	-0.05	-
Equity	-	-	-	0.09	0.08	-	-0.04	0.03	-0.07
Emerging Market	0.15	0.17	-0.01	-0.72	-0.71	-0.01	-0.29	-0.21	-0.08
Global Credit	0.01	0.05	-0.04	-	-	-	0.01	-	0.01
Global Rates	0.68	-1.94	2.62	0.67	-1.15	1.78	0.43	-0.35	0.77
Currency	-0.03	-0.02	-0.01	-0.01	-0.01	-	-0.08	-0.11	0.04
Risk Mgmt	-	-	-	-	-	-	0.01	0.01	-0.01
UNCLASSIFIED	-0.01	-0.01	-	-	-	-	-	-	-
Total	6.47	4.19	2.29	0.25	-1.57	1.77	2.86	2.29	0.63

Source: Loomis Sayles.

Performance data shown represents past performance and is no guarantee of, and not necessarily indicative of, future results.

Investment return and value will vary and you may have a gain or loss when shares are sold. Current performance may be lower or higher than shown. Gross returns are net of administrative costs and trading costs.

industry

CORPORATE CREDIT BREAKOUT

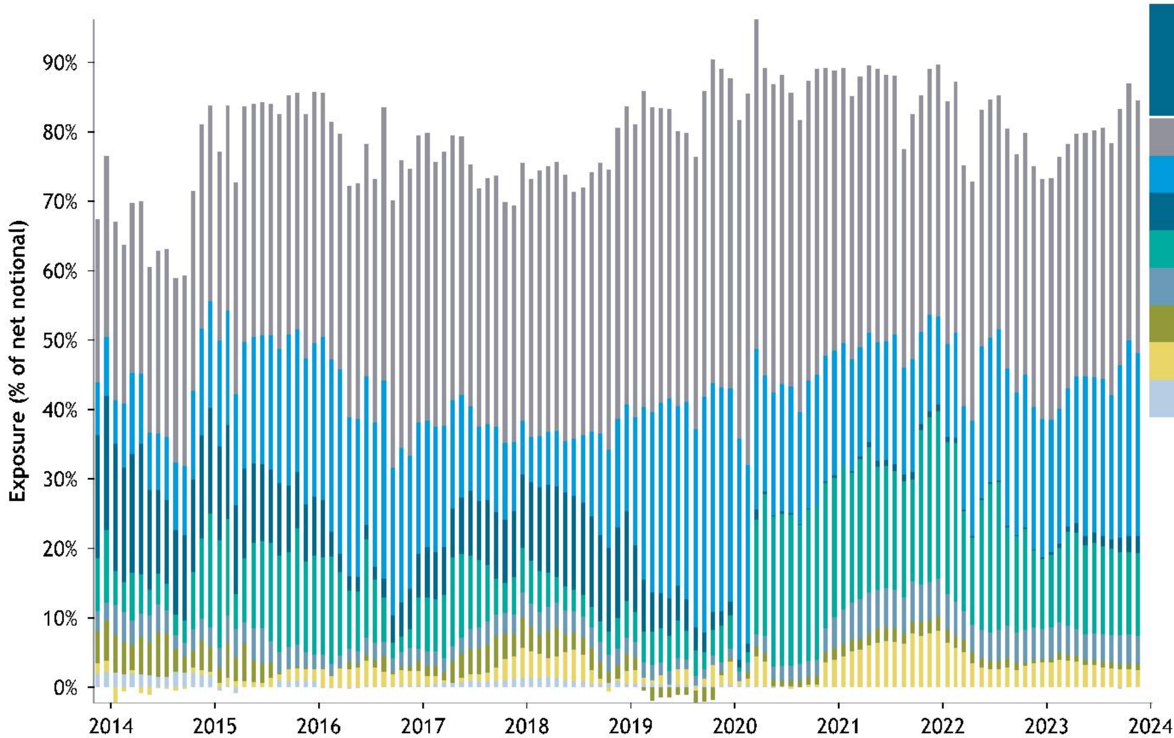
	Portfolio % 11/30/2023	Portfolio % 11/30/2022	Change 11/30/2022 to 11/30/2023 %
Education	0.05	-	0.05
Student Lns	0.05	-	0.05
Financial Institutions	15.87	13.36	2.51
Banking	9.84	8.32	1.52
Finance Companies	4.41	3.84	0.56
Financial Other	0.58	0.77	-0.19
Insurance	1.01	0.20	0.81
Reits	0.03	0.22	-0.18
Industrial	38.34	36.92	1.42
Basic Industry	4.40	2.22	2.18
Capital Goods	3.23	3.60	-0.37
Communications	8.03	9.56	-1.54
Consumer Cyclical	8.02	8.79	-0.77
Consumer Non Cyclical	4.78	5.42	-0.64
Energy	4.22	3.06	1.17
Technology	4.95	3.10	1.85
Transportation	0.69	1.09	-0.40
Utility	0.52	0.89	-0.38
Electric	0.52	0.89	-0.38
Total	54.78	51.17	3.61

Source: Loomis Sayles.
The industry breakout in this chart utilizes the Barclays Industry Level 3 scheme, which may differ from other sector breakouts in the presentation material, due to different methodologies.

alpha generation

CREDIT

The portfolio's flexibility in credit market beta allows it to tactically adjust these allocations throughout various market environment and economic regimes



Historical Exposure (%)	Actual Min (%)	Actual Max (%)	11/30/2023 (%)	Change 11/30/2022 to 11/30/2023
Securitized	8.05	53.52	36.33	1.64
Invst Grade Corp	-5.09	33.91	26.40	5.85
Bank Loans	0.02	19.27	2.43	2.24
High Yield Corp	0.59	24.10	11.89	0.78
Convertibles	1.31	6.04	4.02	-0.60
Equity	-2.06	6.39	0.88	0.39
Emerging Market	-2.24	8.07	2.53	-0.94
Global Credit	-0.84	2.27	-	0.03

Source: Loomis Sayles, as of 11/30/2023

Due to active management, allocations will evolve over time. The chart above shows credit markets only. Certain portfolio exposures may be excluded from this chart because in our view, they are best represented in terms of contribution to duration as shown later in the presentation.

credit

SECURITIZED BREAKOUT

	Portfolio % 11/30/2023	Portfolio % 11/30/2022	Change 11/30/2022 to 11/30/2023 %
ABS	14.84	12.53	2.31
Aircraft-Related	2.35	1.79	0.55
Automotive Rental Fleet	0.63	0.79	-0.16
Commercial Fleet Leasing	0.14	0.07	0.06
Container Leasing	0.28	0.38	-0.10
Dealer Floorplan	0.12	-	0.12
Equipment Lessors	0.16	0.12	0.04
Infrastructure	0.54	-	0.54
Near Prime Auto Loans	0.90	0.80	0.09
Personal Consumer Loans	1.44	0.86	0.58
Prime Auto Leases	0.04	-	0.04
Prime Auto Loans	0.08	0.02	0.06
Private Student Loans	0.92	0.86	0.06
Refinanced Private Student	1.45	1.48	-0.03
Solar	0.40	-	0.40
Special Situations ABS	0.53	0.33	0.20
Subprime Auto Loans	3.37	3.32	0.05
Timeshare	0.37	0.44	-0.06
Whole Business	1.13	1.26	-0.13
AGENCY CMBS	0.22	0.23	-
Derivative	0.22	0.23	-
AGENCY CMO	0.92	-	0.92
CMO	0.92	-	0.92
CDO/CLO	6.33	6.10	0.23
AAA	1.19	-	1.19
Lower Mezz	2.77	3.51	-0.74
Senior Mezz	2.37	2.59	-0.22
CMBS	6.30	6.47	-0.18
2.0/3.0 Conduit Senior	-	-	-
2.0/3.0 Conduit Subs	2.83	3.46	-0.63
SA/SB Fixed	1.93	1.68	0.25
SA/SB Floating	1.54	1.34	0.20

	Portfolio % 11/30/2023	Portfolio % 11/30/2022	Change 11/30/2022 to 11/30/2023 %
RMBS	6.21	8.01	-1.80
Credit Risk Transfer (CRTs)	0.32	0.63	-0.31
Legacy RMBS	0.33	0.38	-0.05
Non-Performing Loans (NPLs)	2.88	3.45	-0.57
RMBS 2.0 Prime	-	-	-
Re-Performing Loans (RPLs)	0.85	1.18	-0.33
Single Family Rental (SFRs)	1.83	2.37	-0.54
Total	34.82	33.34	1.48

Source: Loomis Sayles, as of 11/30/2023

alpha generation

CURVE

The portfolio's flexibility in yield curve positioning allows it to potentially generate alpha under parallel and non-parallel increases or decreases in interest rates. Global rate strategies, such as flatteners or steepeners, may be employed on non-US yield curves.

Key Rate Duration Profile (Years) by Strategy

	6 mos	2	5	10	20	30	CTD Total	Change 11/30/2022 to 11/30/2023
Securitized	0.03	0.27	0.44	0.08	-	-	0.83	0.21
Invst Grade Corp	0.04	0.08	0.42	0.62	0.06	0.11	1.34	0.38
High Yield Corp	0.01	0.14	0.29	0.08	0.05	0.02	0.60	-0.17
Emerging Market	-	0.01	0.06	0.03	-	-	0.10	-0.13
Global Credit	-	-	-	-	-	-	-	-
Global Rates	-	1.42	0.59	-0.76	-0.10	-0.13	1.02	1.52
Other	0.03	0.06	0.04	-	-	-	0.13	-0.04
Total	**0.10**	**1.99**	**1.84**	**0.06**	**0.01**	**0.01**	**4.02**	**1.78**

Key Rate Duration Profile (Years) by Country

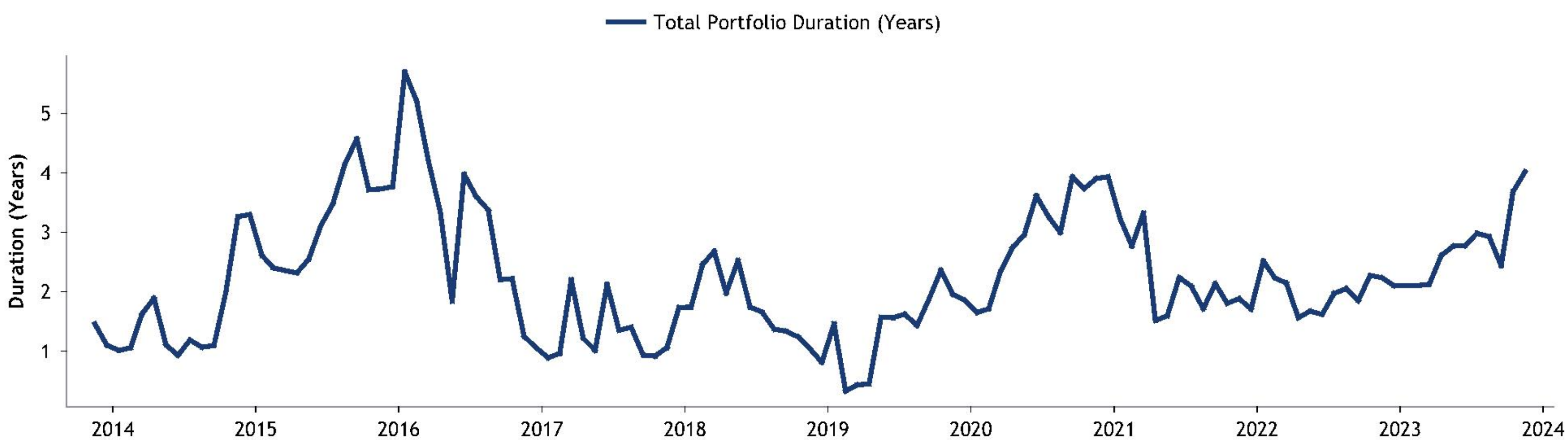
	6 mos	2	5	10	20	30	CTD Total	Change 11/30/2022 to 11/30/2023
Australia	-	-	0.04	0.10	-	-	0.15	0.13
Israel	-	0.01	0.03	0.01	0.06	0.02	0.13	0.02
Mexico	-	0.01	0.03	0.05	-	-	0.09	-0.04
United States	0.08	1.92	1.55	-0.25	-0.05	-0.01	3.24	1.63
Other	0.02	0.06	0.19	0.14	0.01	-	0.41	0.04
Total	**0.10**	**1.99**	**1.84**	**0.06**	**0.01**	**0.01**	**4.02**	**1.78**

Source: Loomis Sayles, as of 11/30/2023
Other includes the following strategy categories, which typically exhibit little to no duration: Bank Loans, Cash & Equivalents, Convertibles and Equity.

alpha generation

CURVE

Seeks to benefit from movements in global interest rates. Portfolio's flexibility allows duration to be adjusted tactically.



	Actual Min (%)	Actual Max (%)	11/30/2023 (%)	11/30/2022 (%)
Total Portfolio Duration (Years)	0.33	5.70	4.02	2.23

Source: Loomis Sayles, as of 11/30/2023

alpha generation

CURRENCY

Currency Exposure

	11/30/2023			11/30/2022			Change in Exposure % 11/30/2022 to 11/30/2023
	Total %	Physical %	Forward %	Total %	Physical %	Forward %	
South African Rand	0.51	0.51	-	-	-	-	0.51
Brazilian Real	0.50	0.50	-	-	-	-	0.50
Mexican Peso	0.50	0.50	-	-	-	-	0.50
Uruguay Peso	0.39	0.39	-	-	-	-	0.39
Indonesian Rupiah	0.25	0.25	-	-	-	-	0.25
Euro	0.06	0.81	-0.75	-	0.45	-0.46	0.06
Argentine Peso	-	-	-	0.01	0.01	-	-0.01
Colombian Peso	-	-	-	-0.03	0.16	-0.19	0.03

Source: Loomis Sayles.
Currency exposure excludes credit derivatives.

country of risk allocation

AS OF 11/30/2023

	Net Portfolio %	Duration (Years)	Change in Exposure % 11/30/2022 to 11/30/2023
Developed	85.09	3.64	4.55
Asia	0.19	0.01	-0.03
Japan	0.10	-	-0.11
Uzbekistan	0.08	-	0.08
Europe	4.06	0.20	0.96
Germany	0.91	0.04	0.28
Ireland	0.77	0.04	0.77
Italy	0.45	0.02	-0.10
Luxembourg	0.24	0.02	0.24
Netherlands	0.42	-	0.01
Spain	0.24	-	0.22
Switzerland	0.98	0.03	0.19
United Kingdom	0.70	0.04	-0.19
Other	-0.65	-	-0.45
North America (ex-US)	1.34	0.03	0.47
Canada	1.34	0.03	0.47
Oceania	2.65	0.15	1.97
Australia	2.49	0.15	1.98
New Zealand	0.16	-	-
Other	0.13	-	0.13
Jersey	0.13	-	0.13
South/Central America	6.07	0.02	-0.14
Cayman Islands	6.07	0.02	-0.14
United States	70.66	3.24	1.17
United States	70.66	3.24	1.17

	Net Portfolio %	Duration (Years)	Change in Exposure % 11/30/2022 to 11/30/2023
EM	7.56	0.38	1.55
Africa	1.30	0.05	0.25
Nigeria	0.13	-	-0.07
South Africa	0.51	0.03	0.51
Zambia	0.66	0.01	-0.18
Asia	0.98	0.05	-0.02
China	0.47	0.01	-0.40
Indonesia	0.25	0.02	0.25
Malaysia	0.14	0.01	0.01
South Korea	0.12	0.01	0.12
Europe	-	-	-
Middle East	1.85	0.13	-0.16
Israel	1.85	0.13	-0.16
North America (ex-US)	2.24	0.09	1.17
Bermuda	0.16	-	-0.38
Mexico	2.08	0.09	1.55
South/Central America	1.19	0.06	0.31
Brazil	0.80	0.04	0.07
Uruguay	0.39	0.02	0.39
Total Net	92.65	4.02	6.10

Source: Loomis Sayles.
Country exposure excludes currency forwards. Eurozone contains multi-country exposures. Country of Risk reflects the location of the issuer's primary business activities and not necessarily country of incorporation.

issuers and industry

AS OF 11/30/2023

TOP LONG ISSUERS

	Portfolio %
United States of America	4.04
Glencore PLC	2.32
Uber Technologies Inc	2.09
Charter Communications Inc	2.03
DISH Network Corp	1.63
Rock Holdings Inc	1.61
Teva Pharmaceutical Industries Ltd	1.53
Cemex SAB de CV	1.51
Morgan Stanley	1.42
Bank of America Corp	1.30
Total	19.49

TOP 10 INDUSTRIES

	Portfolio %
Banking	9.84
Communications	8.03
Consumer Cyclical	8.02
CLO	6.63
Home Equity	6.21
Non Agency CMBS	6.00
ABS Other	5.75
Car Loan	5.11
Technology	4.95
Consumer Non Cyclical	4.78
Total	65.33

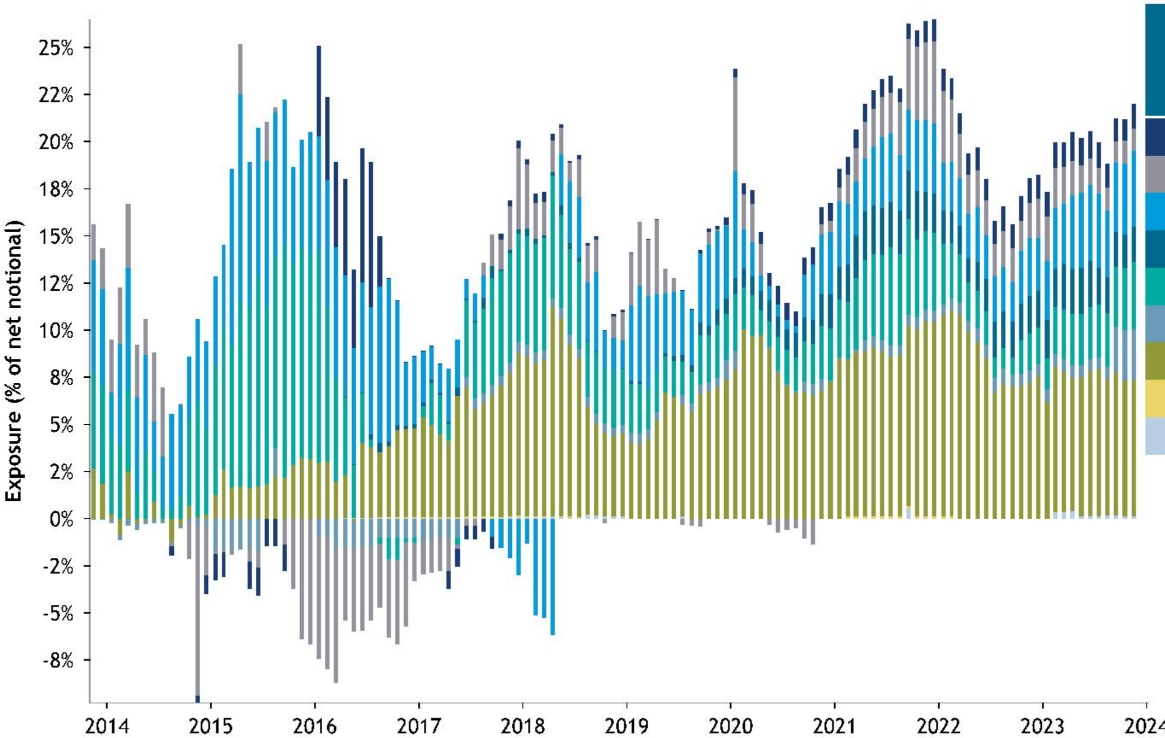
TOP SHORT ISSUERS

	Portfolio %
CDX 41 HY 500 12/20/28	-6.61
Total	-6.61

Source: Loomis Sayles.
Top Ten shown does not include cash, cash equivalents and currencies. Industries are based on internal Loomis Sayles classifications.

historical net region exposure

AS OF 11/30/2023 (%)

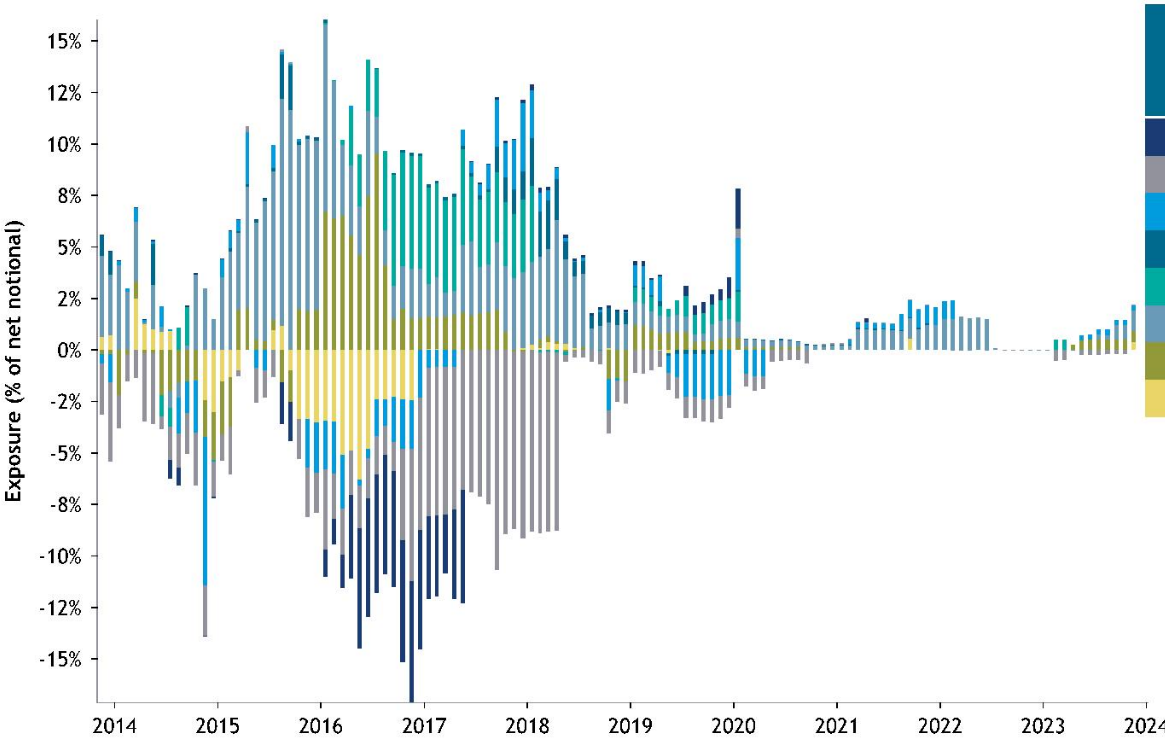


Historical Exposure (%)	Actual Min (%)	Actual Max (%)	11/30/2023 (%)	Change 11/30/2022 to 11/30/2023
Africa	-1.53	7.72	1.30	-0.02
Asia	-9.07	5.01	1.16	-0.66
Europe	-6.16	12.22	4.06	0.96
Middle East	0.05	2.58	1.85	-0.16
North America (ex-US)	-1.17	12.42	3.59	1.64
Oceania	-1.71	2.69	2.65	1.97
South/Central America	-1.23	11.08	7.25	0.06
Supranational	0.01	0.14	-	-
Other	0.03	0.70	0.13	0.13

Source: Loomis Sayles.
Due to active management, exposures will evolve over time. Country exposure excludes currency forwards. Country of Risk reflects the location of the issuer's primary business activities and not necessarily country of incorporation.

historical net currency exposure

AS OF 11/30/2023 (%)

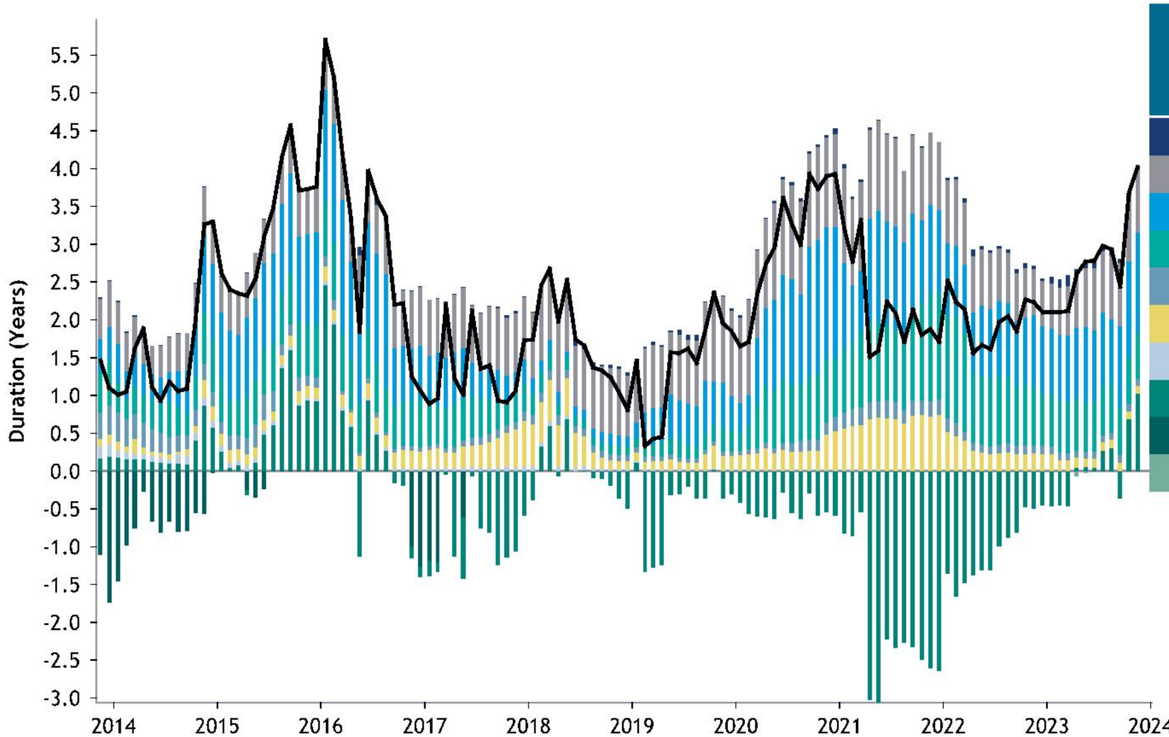


Historical Exposure (%)	Actual Min (%)	Actual Max (%)	11/30/2023 (%)	Change 11/30/2022 to 11/30/2023
AUD, NZD, CAD	-5.90	1.96	-	-
EUR	-10.69	0.47	0.06	0.06
ASIA	-7.18	3.34	0.25	0.25
GBP	-0.95	2.35	-	-
SCANDINAVIA	-1.03	5.51	-	-
LATIN AMERICA	-0.79	11.64	1.00	1.02
EUROPE, ME, AFR	-2.54	9.54	0.51	0.51
OTHER	-6.29	2.50	0.39	0.39

Source: Loomis Sayles.
Due to active management, exposures will evolve over time. Currency exposure excludes credit derivatives.

historical contribution to duration (years) by strategy

AS OF 11/30/2023

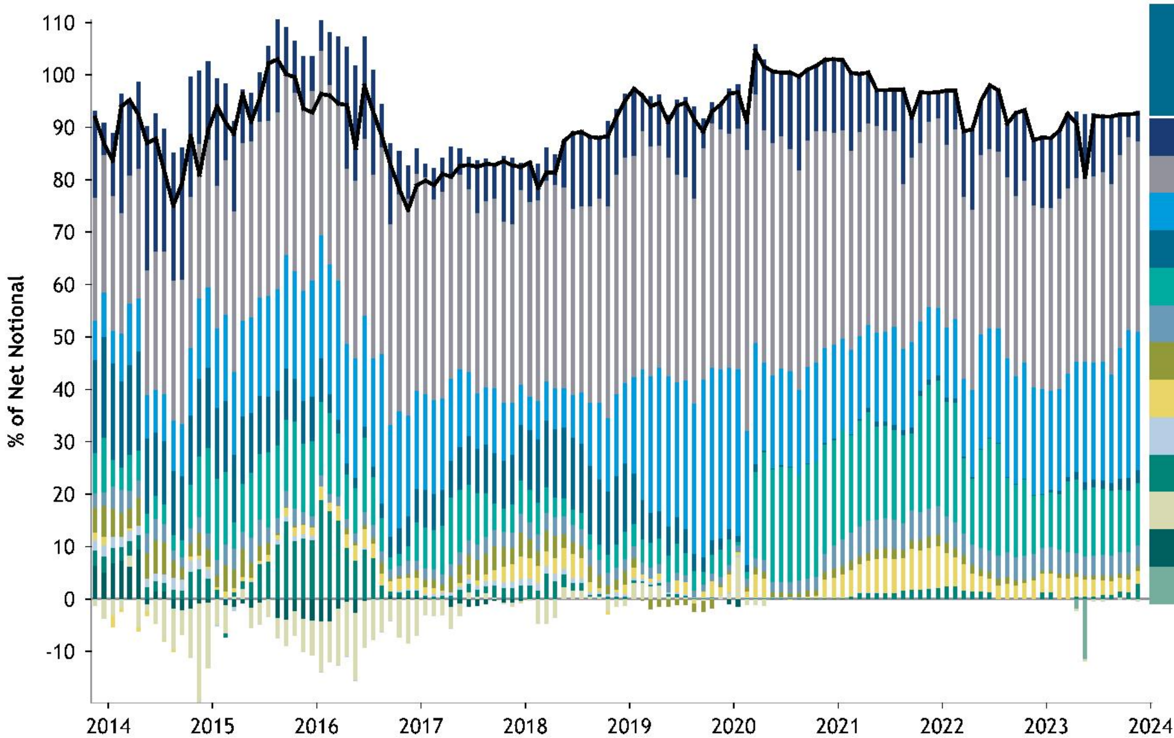


Historical Duration	Actual Min (%)	Actual Max (%)	11/30/2023 (%)	Change 11/30/2022 to 11/30/2023
Cash and Equiv	-	0.14	0.03	-0.02
Securitized	0.30	1.27	0.83	0.21
Invst Grade Corp	0.09	1.78	1.34	0.38
High Yield Corp	0.10	1.43	0.60	-0.17
Convertibles	0.04	0.46	0.10	-0.02
Emerging Market	0.04	0.74	0.10	-0.13
Global Credit	-	0.24	-	-
Global Rates	-3.06	2.45	1.02	1.52
Risk Mgmt	-2.08	0.01	-	-
UNCLASSIFIED	-0.07	-	-	-

Source: Loomis Sayles.
Due to active management, exposures will evolve over time.

historical gross strategy exposure

AS OF 11/30/2023 (%)



Historical Exposure (%)	Actual Min (%)	Actual Max (%)	11/30/2023 (%)	Change 11/30/2022 to 11/30/2023
Cash and Equiv	2.54	31.31	5.78	-6.70
Securitized	8.05	53.52	36.33	1.64
Invst Grade Corp	-5.09	33.91	26.40	5.85
Bank Loans	0.02	19.27	2.43	2.24
High Yield Corp	0.59	24.10	11.89	0.78
Convertibles	1.31	6.04	4.02	-0.60
Equity	-2.06	6.39	0.88	0.39
Emerging Market	-2.24	8.07	2.53	-0.94
Global Credit	-0.84	2.27	-	0.03
Global Rates	-0.81	18.85	2.86	2.85
Currency	-18.97	7.93	-0.46	-0.46
Risk Mgmt	-4.28	9.45	-	-
UNCLASSIFIED	-11.47	0.02	-	-

Source: Loomis Sayles.
Due to active management, exposures will evolve over time. Strategies are based on internal Loomis Sayles classifications. Certain portfolio exposures may be excluded from this chart because, in our view, they are best represented in terms of contribution to duration as shown later in the presentation. Portfolio Strategy Exposure does not include derivative offsets, included in the portfolio's total net assets.

Full Discretion Market Outlook

macroeconomic environment and outlook

AVERAGE ANNUAL FORECAST	US DOMESTIC		GLOBAL		WESTERN EUROPE		ASIA PACIFIC		LATIN AMERICA	
	2023	2024	2023	2024	2023	2024	2023	2024	2023	2024
Real GDP Growth	2.4%	1.2%	2.8%	2.6%	0.6%	0.8%	4.0%	4.0%	1.6%	1.6%
Headline CPI Inflation	4.1%	2.2%	6.1%	4.4%	5.7%	2.8%	2.3%	2.7%	23.5%	25.6%
Current Account Balance (% GDP)	-3.2%	-3.2%	-	-	-	-	-	-	-	-
Interest Rates (10-year); End Of Year 2023	4.6%	-	-	-	-	-	-	-	-	-

OUR VIEWS:

SOFT LANDING VS DOWNTURN

- We still see elevated Downturn risks given significant tightening of monetary policy and financial conditions. Real-time economic data has been decelerating, but is not yet showing signs of recession. There is still uncertainty regarding the lag time of policy impacts.
- There have been some early indications that the labor market is gradually loosening; quit rates have been normalizing and unemployment has been slowly ticking up (now at 3.9%). However, non-farm payrolls still look decent and wage growth is still elevated (though off its peak).
- October CPI data surprised to the downside and showed further disinflation (y/y core CPI at 4.0%, m/m core CPI at 0.2%). Services CPI remains elevated and there is still a long way to go for inflation to fall back towards target.

CONSUMER & CORPORATE FUNDAMENTALS

- We have been seeing a pick-up in consumer loan delinquencies. However, we still see signs of a healthy consumer on aggregate, primarily backed by savings, strong household balance sheets, and a healthy labor market.
- Overall large cap earnings rebounded this past quarter after falling in the prior few quarters. Expectations for 2024 are optimistic about a continued uptrend. Small and mid-cap earnings remain generally under pressure.
- While the most recent Senior Loan Officer Survey reading was less extreme relative to earlier this year, it still suggests tight credit conditions; we expect this to eventually bleed into the real economy with a lag.
- Default expectations remain fairly subdued despite recession risks, as corporate balance sheets still look relatively healthy overall.

GLOBAL GROWTH OUTLOOK

- Global manufacturing PMI dropped in October (-0.4 to 48.8) after showing some tentative signs of a rebound in prior months. This data challenges optimism around a potential cyclical upturn in manufacturing. Meanwhile, services PMIs have been decelerating, but remain above 50 (expansionary).
- European growth has been stagnant, and we expect that theme to continue over the near-medium term, in line with weak PMI data. Europe's energy shock could still bring headwinds for the economy.
- China had been showing signs of stabilization with stronger than expected Q3 GDP data. However, weak PMIs and sluggish private sector credit demand suggest the economy is not yet on stable footing. Property issues continue to act as a drag. Stimulus is unlikely to produce a growth overshoot.
- Geopolitical risks have escalated given the events taking place in the Middle East. We anticipate further upside risks to oil if the conflict broadens.

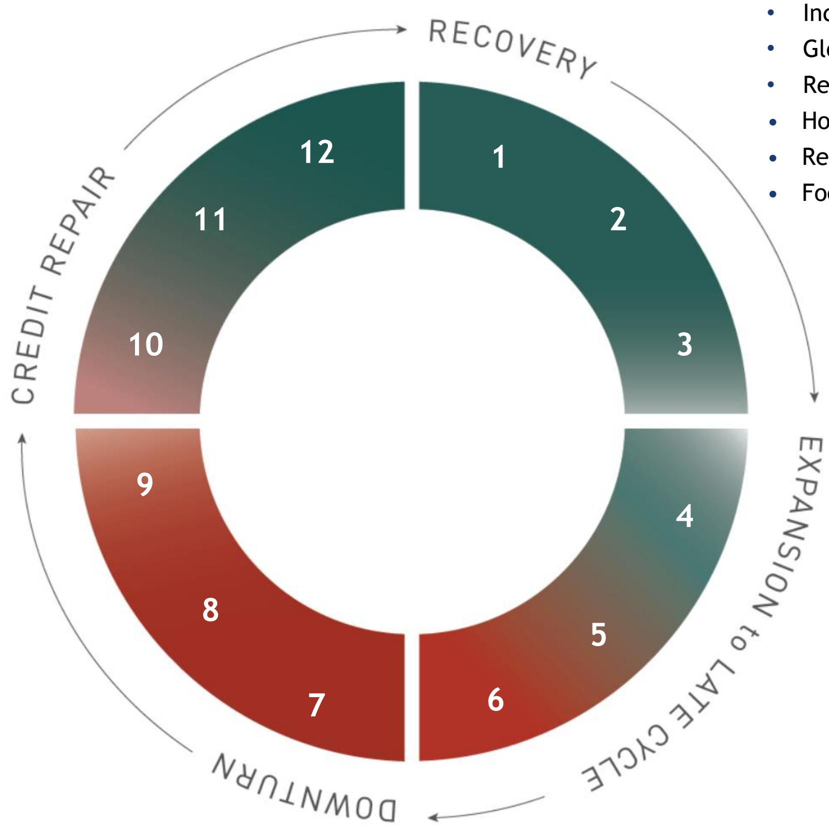
MONETARY POLICY AND INTEREST RATES

- US rates rallied since early November after lower non-farm payrolls, further disinflation, and perceived dovishness from the Fed. We believe the Fed is likely finished hiking given growth risks, but we acknowledge potential for "higher for longer" policy if inflation remains sticky.
- The ECB is expected to remain on hold in the near term, but further monetary tightening should come via balance sheet reduction.
- The BoJ adjusted its Yield Curve Control (YCC) framework, changing the 1% upper bound to a reference rate, signifying greater flexibility. We anticipate potential removal of YCC later this year and normalization of Negative Interest Rate Policy (NIRP) in early 2024.

Source: Loomis Sayles and Bloomberg. Data as of 11/14/2023. Forecasts for US Domestic are based on Loomis Sayles Macro Strategies Group. Forecasts for Global, Western Europe, Asia Pacific and Latin America are based on Bloomberg consensus. This material is provided for informational purposes only and should not be construed as investment advice. Any opinions or forecasts contained herein reflect the current subjective judgments and assumptions of the Macro Strategies Group only, and do not necessarily reflect the views of Loomis, Sayles & Company, L.P. This information is subject to change at any time without notice.

credit cycle

INDUSTRIES



- Aerospace (1.5)

- Airlines (3)
- Defense (3.5)
- Oil Field Services (3.5)

- Supermarkets (4)
- Independents (4)
- Global Banks (4)
- Retailers, incl Specialty (4)
- Home Construction (4.5)
- Restaurants (4.5)
- Food & Beverage (4.5)

- Integrated (5)
- Midstream (5)
- Technology (5)
- Consumer Products (5)
- US Building Materials (5)
- Packaging (5)
- Construction Machinery (5)
- Diversified Manufacturing (5)
- Chemicals (5)
- Healthcare (5)
- Automotive (5)
- Pharmaceuticals (5)
- Life Insurance (5)
- Lodging (5.5)
- Health Insurers (5.5)
- Tobacco (5.5)
- Electric (5.5)
- Environmental (5.5)

- Finance Companies (6)
- Paper (6)
- REITS (6)
- Refiners (6)
- Railroads (6)
- Cable/Telecom (6)
- Metals & Mining (6)
- US Banks (6)
- P&C (6.5)

- Media/Entertainment (7)

Views as of 9/30/2023. This material is provided for informational purposes only and should not be construed as investment advice. Investment decisions should consider the individual circumstances of the particular investor. This reflects the current opinions of the presenter and views are subject to change at any time without notice. Other industry analysts and investment personnel may have different views and opinions.

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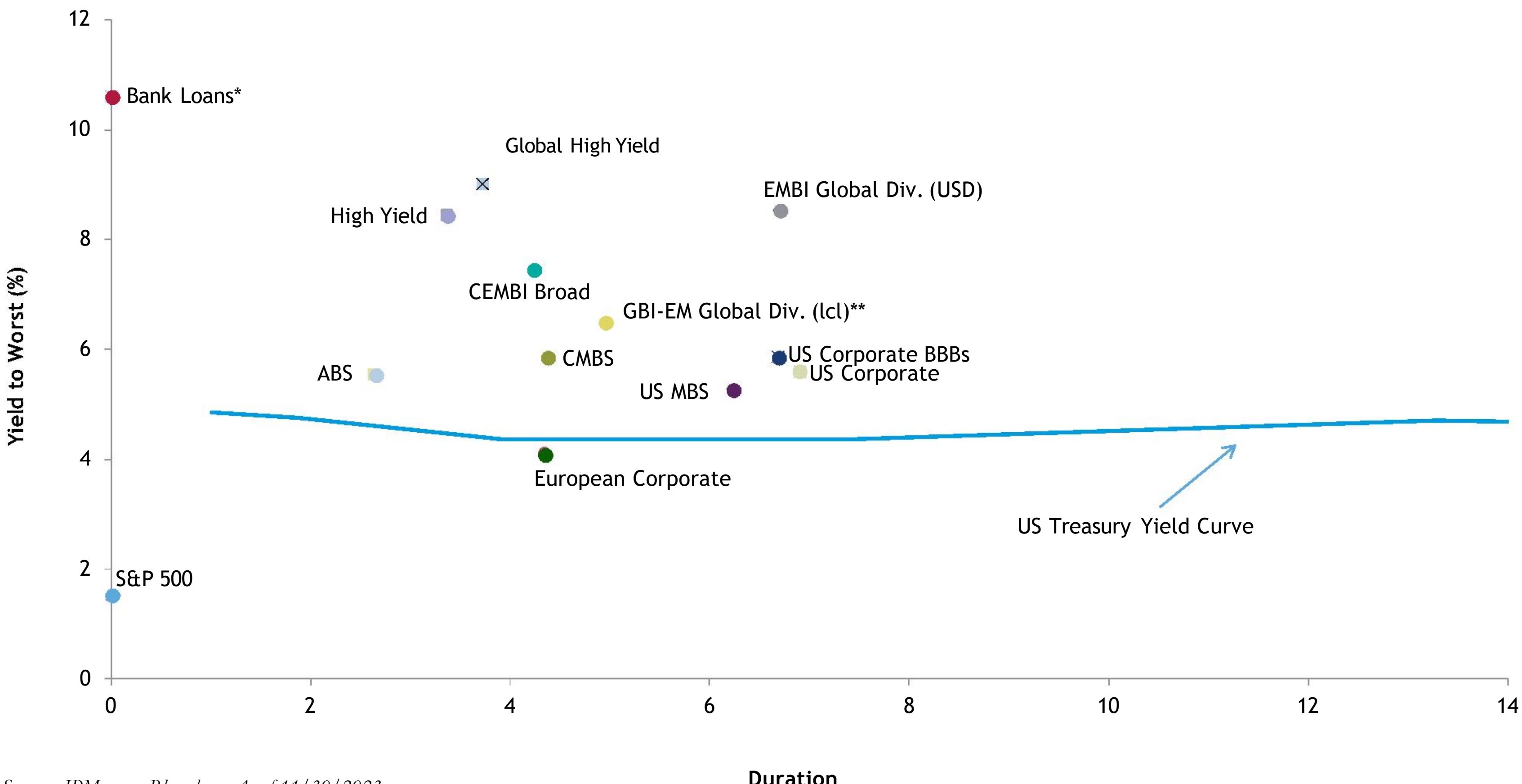
multisector flexibility is key

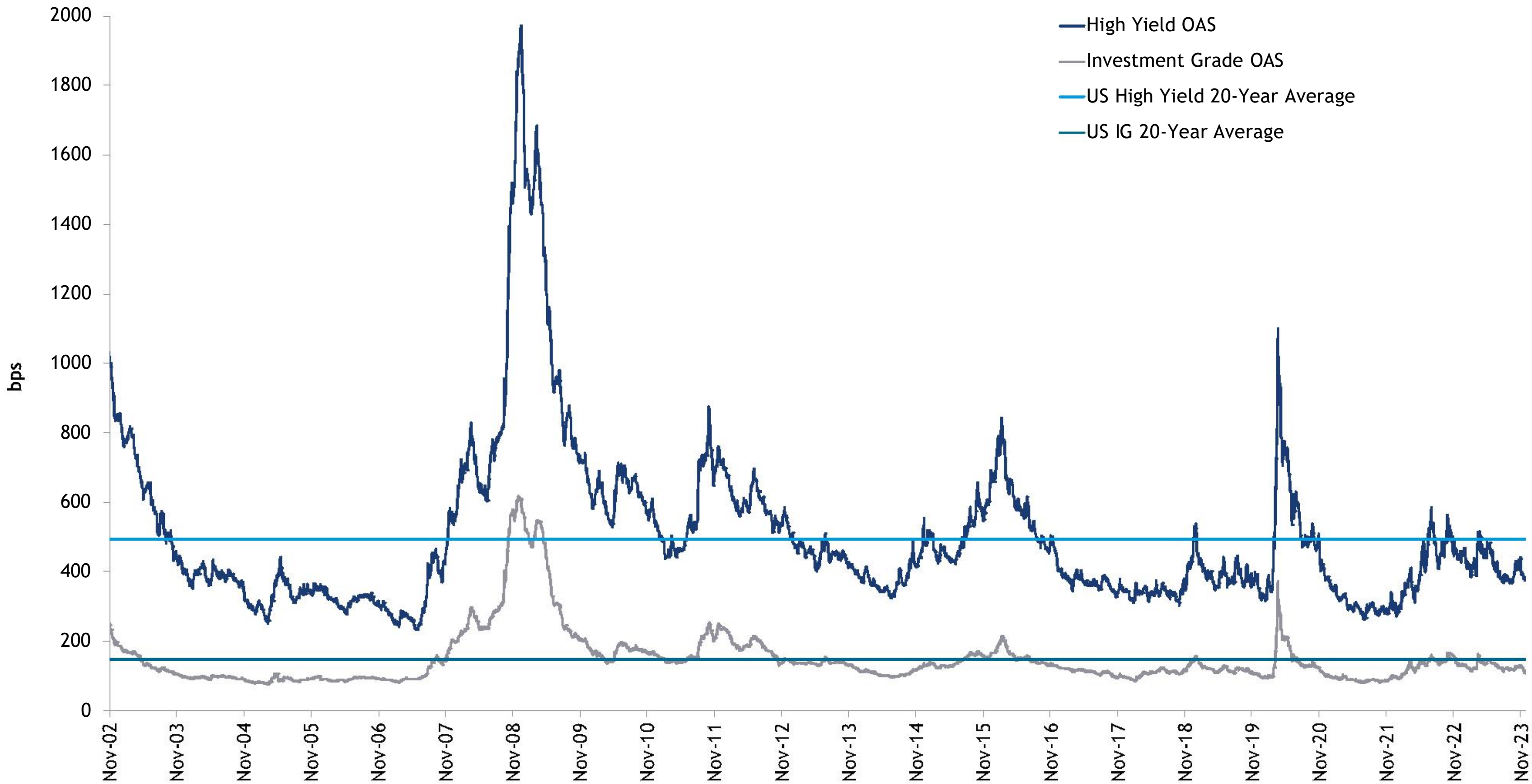
SECTOR YIELDS VS. LIKE DURATION TREASURYS YTD



Sources: JPMorgan, Bloomberg. As of 11/30/2023.
**Bank loan effective yield and S&P dividend yield replace YTW. Bank Loan effective yield is as of 11/30/2023.*
***GBI-EMYTM replaces YTW.*
The chart presented above is shown for illustrative purposes only. Some or all of the information on this chart may be dated, and, therefore, should not be the basis to purchase or sell any securities. The information is not intended to represent any actual portfolio. Information obtained from outside sources is believed to be correct, but Loomis Sayles cannot guarantee its accuracy. This material cannot be copied, reproduced or redistributed without authorization.
Indices are unmanaged and do not incur fees. It is not possible to invest directly in an index.
Past performance is no guarantee of future results.

bond market environment

US INVESTMENT GRADE AND HIGH YIELD OPTION-ADJUSTED SPREADS



Source: Barclays. As of 11/30/2023.

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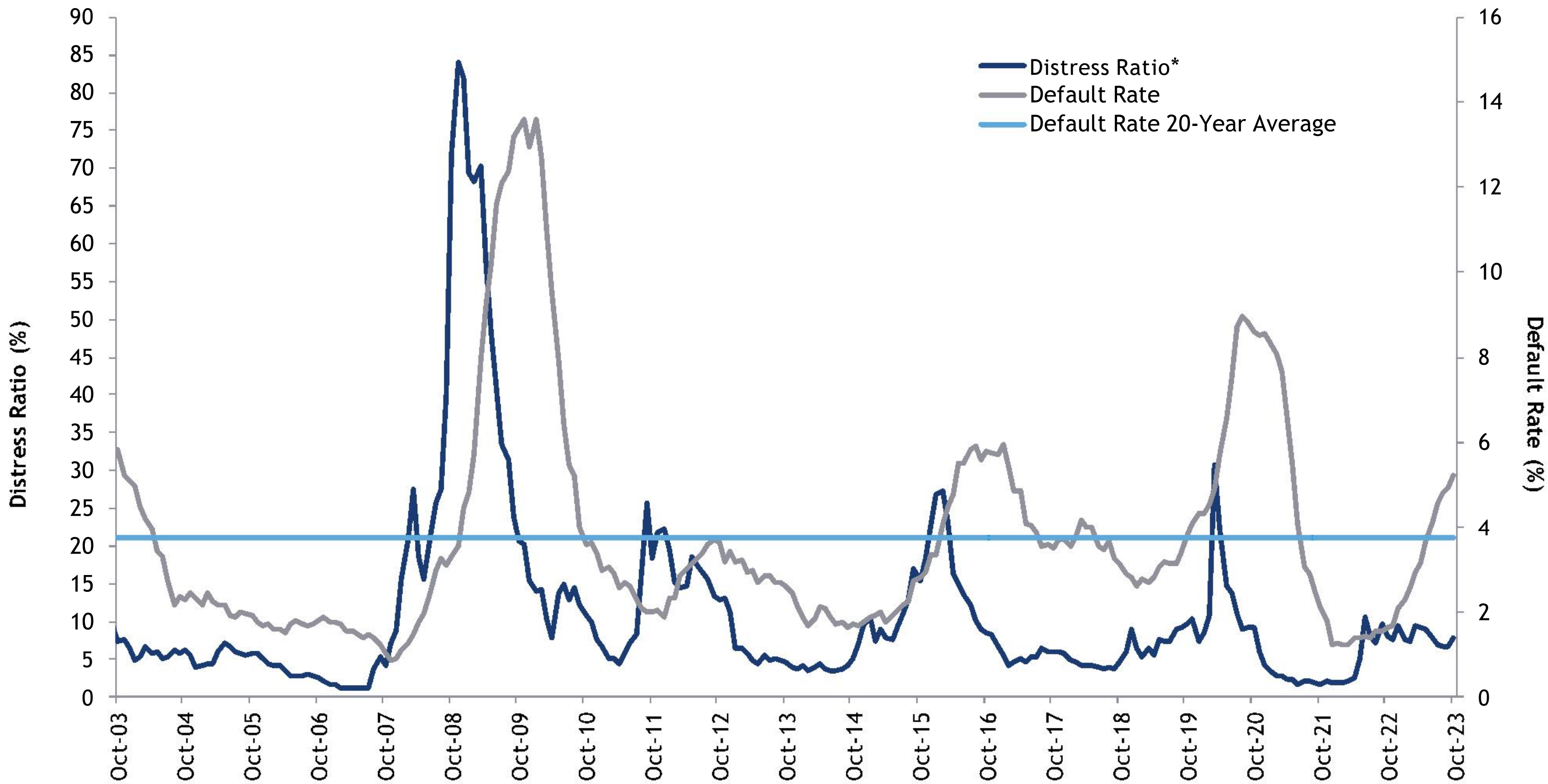
bond market environment

"DISTRESSED" SECURITIES AND DEFAULT RATES HAVE DECREASED SINCE EARLY 2010



'Distressed' securities reached pre-Lehman levels in December 2009.

Source: Bloomberg, Merrill Lynch, Moody's. As of 10/31/2023.

**Percent of bonds in Merrill Lynch High Yield Master Index with Spreads 1000 bps over Treasurys.*

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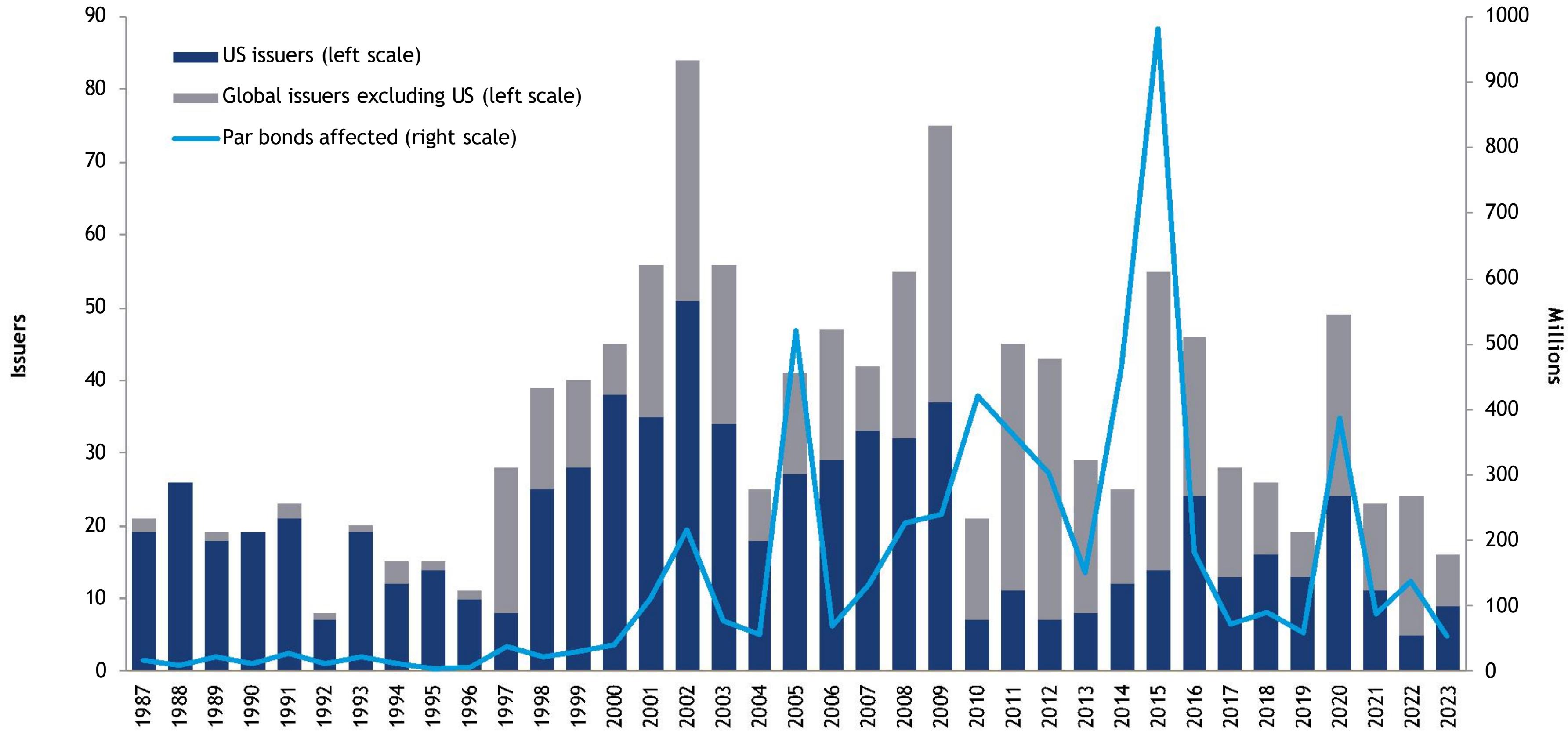
bond market environment

GLOBAL AND US "FALLEN ANGELS"

As of 10/31/2023



Source: S&P as of 10/31/2023.
Number of issuers in a given year whose rating has fallen from investment grade to speculative grade.
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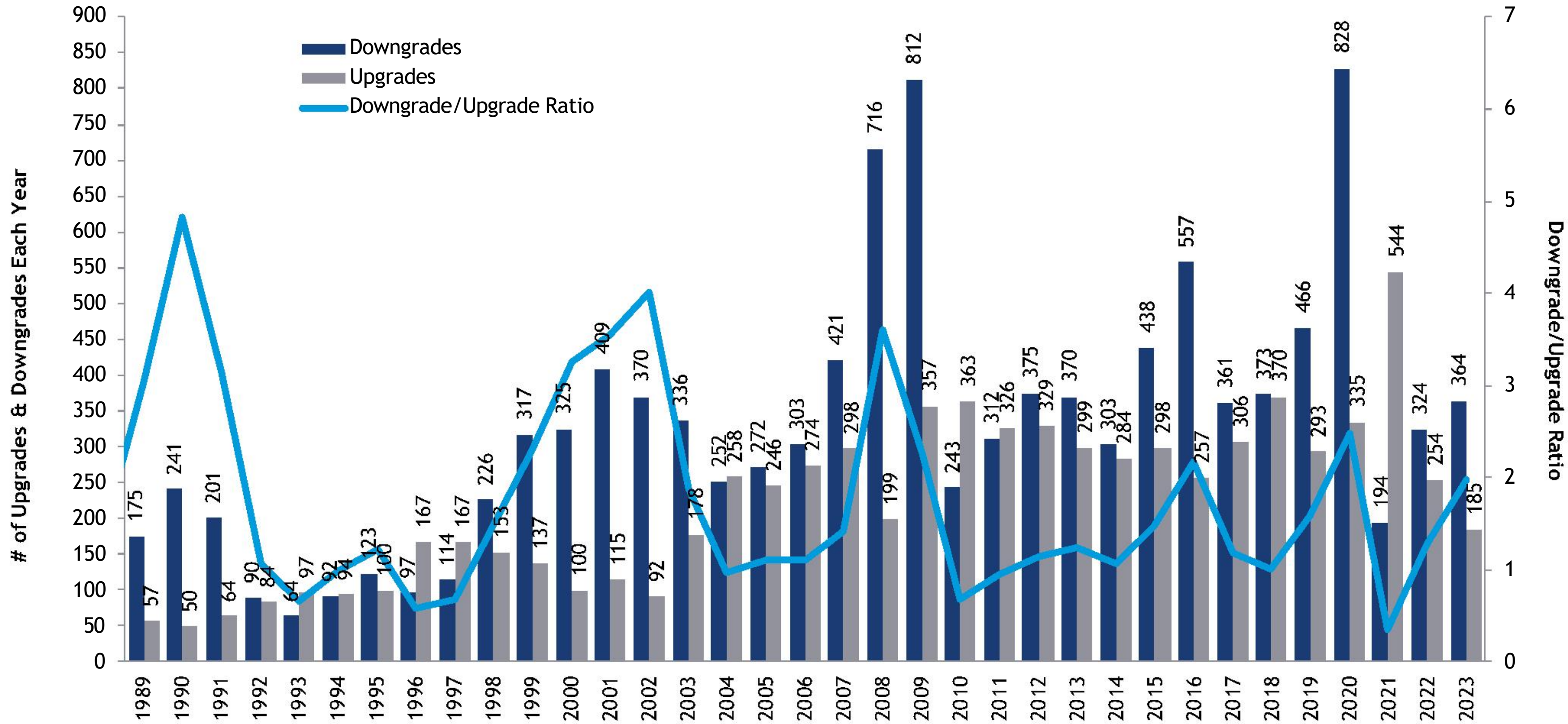
bond market environment

US HIGH YIELD CREDIT QUALITY TRENDS

As of 10/31/2023



Source: Moodys. **As of 10/31/2023.**
Trends are based on historical data.
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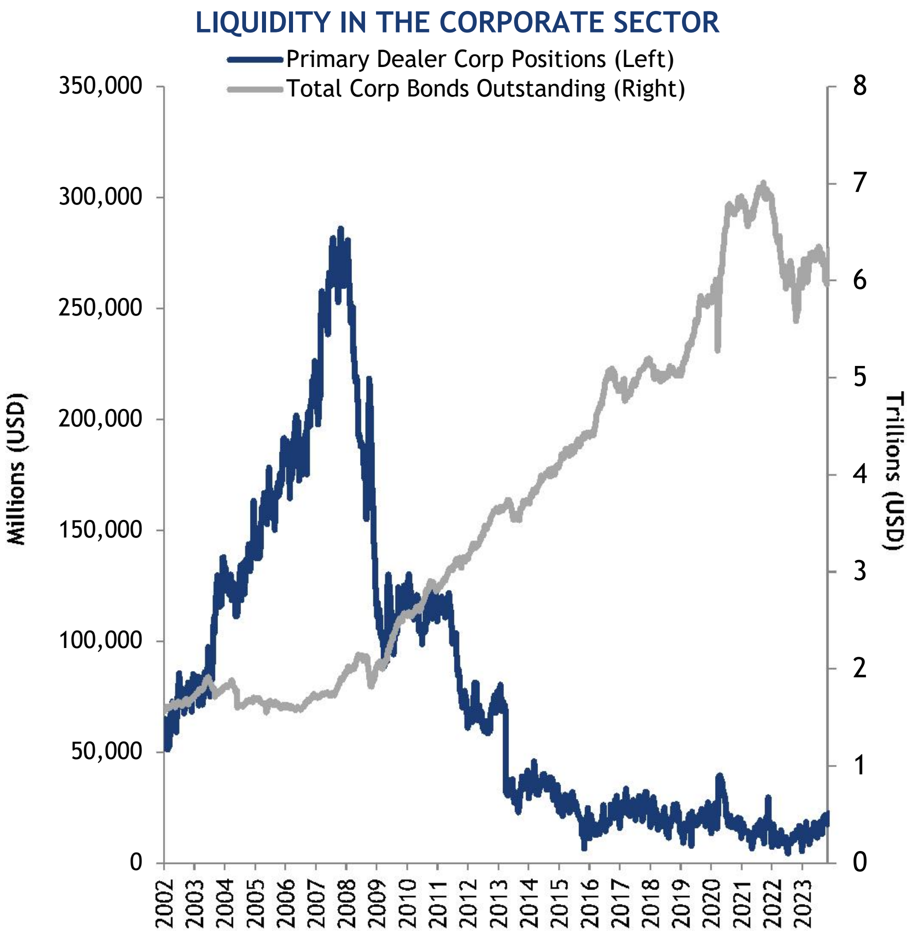
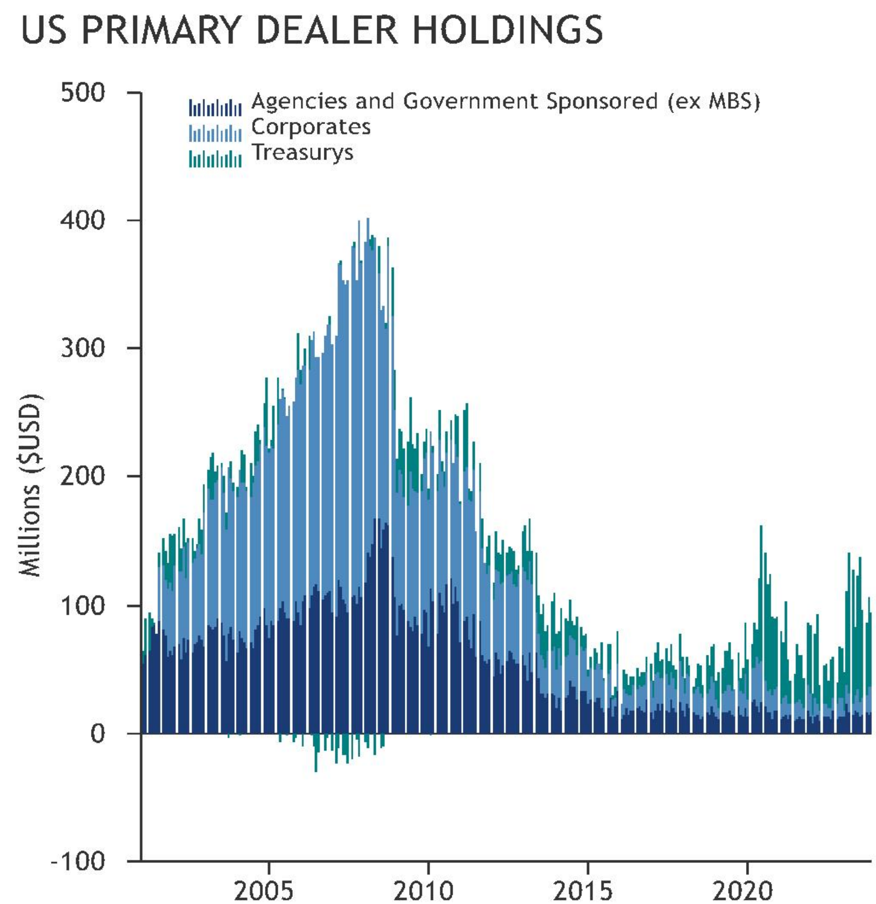
market illiquidity remains a concern





Source: LSEG Datastream, data as of 11/22/2023.

Data: Bloomberg, as of 11/22/2023.

Used with permission from Bloomberg Finance L.P.

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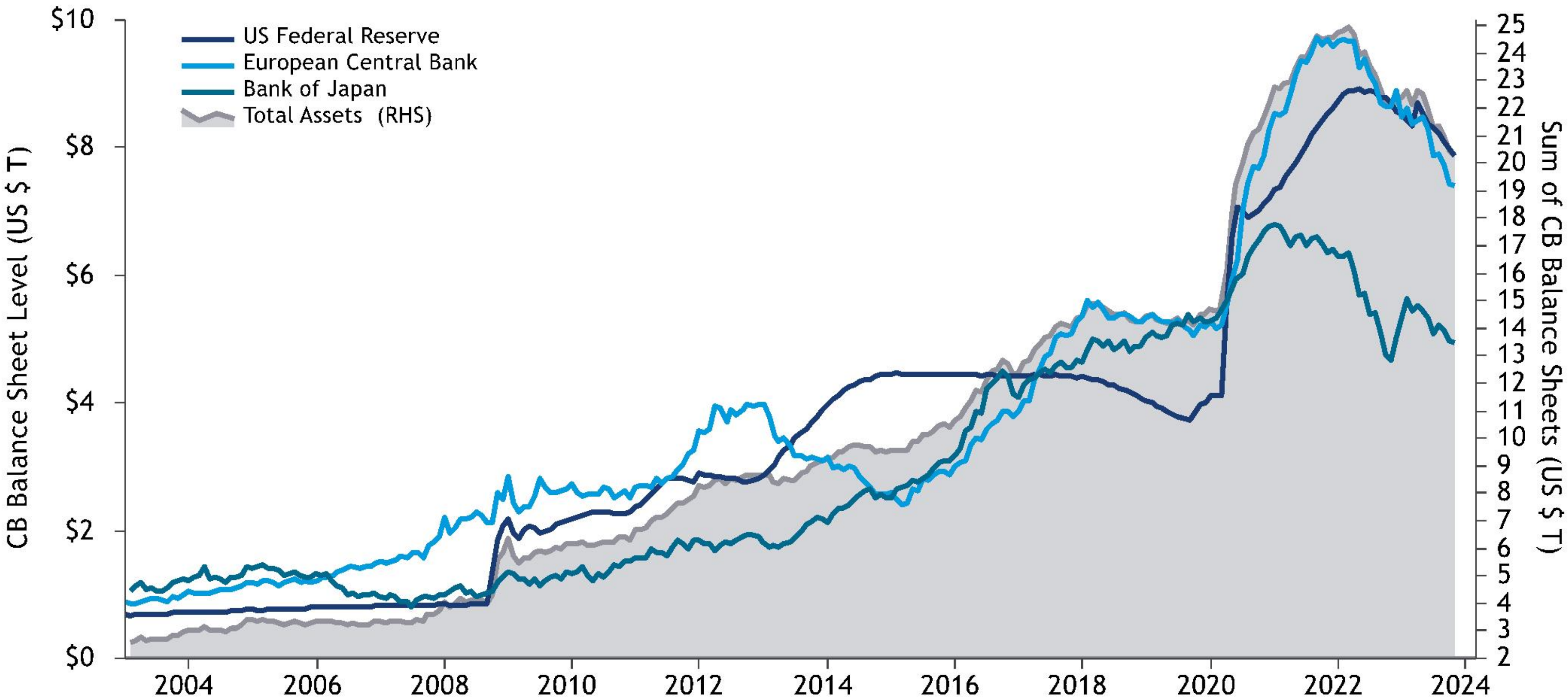
central bank balance sheets

GRADUAL NORMALIZATION AFTER CONSIDERABLE MONETARY EXPANSION

G3 Central Bank Balance Sheets

US $ Trillion



Source: LSEG Datastream, data as of 11/28/2023.

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disclosure

Past performance is no guarantee of future results.

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Gross returns are net of trading costs. Net returns are gross returns less effective management fees. Returns for multi-year periods are annualized.

Indices are unmanaged and do not incur fees. It is not possible to invest directly in an index.

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Diversification does not ensure a profit or guarantee against a loss.

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An electronic version of this presentation book is available upon request.

VCERA
VENTURA COUNTY EMPLOYEES' RETIREMENT ASSOCIATION

MONTHLY PERFORMANCE REPORT

VENTURA COUNTY EMPLOYEES' RETIREMENT ASSOCIATION

NOVEMBER 30, 2023

Allan Martin, Partner
Rose Dean, CFA, Principal
Leah Tongco, Consulting Analyst

NEPC

TOTAL FUND PERFORMANCE DETAIL

	Allocation			Performance (%)								
	Market Value ($)	% of Portfolio	Policy (%)	1 Mo (%)	FYTD (%)	YTD (%)	1 Yr (%)	3 Yrs (%)	5 Yrs (%)	10 Yrs (%)	Inception (%)	Inception Date
Total Fund	**7,668,827,625**	**100.0**	**100.0**	**5.6**	**1.8**	**9.8**	**7.2**	**6.2**	**8.5**	**7.3**	**8.0**	**Apr-94**
Policy Index				7.0	2.1	12.6	8.7	5.5	8.4	7.5	8.0	
Over/Under				-1.4	-0.3	-2.8	-1.5	0.7	0.1	-0.2	0.0	
60% MSCI ACWI (Net)/ 40% Bloomberg Global Agg				7.6	1.5	10.4	8.0	0.9	5.3	4.7	-	
Over/Under				-2.0	0.3	-0.6	-0.8	5.3	3.2	2.6	-	
60% S&P 500 / 40% Bloomberg Aggregate				7.3	1.9	12.9	8.8	4.1	8.0	7.8	8.2	
Over/Under				-1.7	-0.1	-3.1	-1.6	2.1	0.5	-0.5	-0.2	
Total Fund ex Parametric	**7,624,994,401**	**99.4**	**100.0**	**5.5**	**1.8**	**9.6**	**7.1**	**6.4**	**8.4**	**7.4**	**7.4**	**Nov-13**
Total US Equity	**2,103,575,120**	**27.4**	**26.0**	**9.4**	**3.1**	**19.9**	**12.9**	**8.4**	**11.9**	**11.3**	**9.7**	**Jan-94**
Russell 3000				9.3	3.0	19.6	12.6	8.3	11.8	11.0	9.8	
Over/Under				0.1	0.1	0.3	0.3	0.1	0.1	0.3	-0.1	
Western U.S. Index Plus	191,589,399	2.5		10.1	2.9	21.2	14.0	8.5	11.9	11.7	7.6	Jun-07
S&P 500 Index				9.1	3.3	20.8	13.8	9.8	12.5	11.8	9.0	
Over/Under				1.0	-0.4	0.4	0.2	-1.3	-0.6	-0.1	-1.4	
Blackrock Russell 1000 Index	1,825,011,082	23.8		9.4	3.3	20.6	13.6	8.7	12.3	-	12.1	May-17
Russell 1000 Index				9.3	3.3	20.6	13.6	8.7	12.2	-	12.1	
Over/Under				0.1	0.0	0.0	0.0	0.0	0.1	-	0.0	
Blackrock Russell 2500 Index	86,974,639	1.1		9.0	-2.5	6.2	-0.1	3.3	7.0	-	7.2	May-17
Russell 2500 Index				9.0	-2.5	6.1	-0.3	3.3	6.9	-	7.2	
Over/Under				0.0	0.0	0.1	0.2	0.0	0.1	-	0.0	

TOTAL FUND PERFORMANCE DETAIL

	Allocation			Performance (%)								
	Market Value ($)	% of Portfolio	Policy (%)	1 Mo (%)	FYTD (%)	YTD (%)	1 Yr (%)	3 Yrs (%)	5 Yrs (%)	10 Yrs (%)	Inception (%)	Inception Date
Total Non-US Equity	**1,105,479,478**	**14.4**	**15.0**	**9.4**	**-1.1**	**10.5**	**9.9**	**1.8**	**4.9**	**3.7**	**5.9**	**Mar-94**
MSCI ACWI ex USA				9.0	0.6	10.1	9.3	1.7	5.1	3.4	4.9	
Over/Under				0.4	-1.7	0.4	0.6	0.1	-0.2	0.3	1.0	
BlackRock ACWI ex-U.S. Index	570,452,630	7.4		9.1	0.7	10.1	9.4	1.8	5.3	3.7	3.0	Apr-07
MSCI AC World ex USA IMI (Net)				9.1	0.7	9.9	9.2	1.7	5.1	3.5	2.8	
Over/Under				0.0	0.0	0.2	0.2	0.1	0.2	0.2	0.2	
Sprucegrove	263,110,428	3.4		9.0	-2.6	10.1	9.6	3.7	4.1	3.3	6.3	Apr-02
MSCI EAFE (Net)				9.3	0.5	12.3	12.4	3.8	6.0	3.9	5.6	
Over/Under				-0.3	-3.1	-2.2	-2.8	-0.1	-1.9	-0.6	0.7	
MSCI EAFE Value Index (Net)				7.9	3.8	13.4	14.8	7.4	5.0	2.8	5.2	
Over/Under				1.1	-6.4	-3.3	-5.2	-3.7	-0.9	0.5	1.1	
Walter Scott	271,916,421	3.5		10.6	-3.2	11.9	11.4	0.1	7.4	5.8	6.1	Jan-11
MSCI EAFE (Net)				9.3	0.5	12.3	12.4	3.8	6.0	3.9	4.8	
Over/Under				1.3	-3.7	-0.4	-1.0	-3.7	1.4	1.9	1.3	
MSCI EAFE Growth Index				10.7	-2.5	11.6	10.3	0.3	6.9	5.1	5.8	
Over/Under				-0.1	-0.7	0.3	1.1	-0.2	0.5	0.7	0.3	
Total Global Equity	**745,274,076**	**9.7**	**9.0**	**9.3**	**2.4**	**17.0**	**12.4**	**6.1**	**9.5**	**7.6**	**6.8**	**May-05**
MSCI AC World Index (Net)				9.2	2.3	16.6	12.0	5.7	9.1	7.6	7.2	
Over/Under				0.1	0.1	0.4	0.4	0.4	0.4	0.0	-0.4	
BlackRock MSCI ACWI Equity Index	745,274,076	9.7		9.3	2.4	17.0	12.4	6.0	9.5	8.0	9.6	Aug-12
MSCI AC World Index (Net)				9.2	2.3	16.6	12.0	5.7	9.1	7.6	9.2	
Over/Under				0.1	0.1	0.4	0.4	0.3	0.4	0.4	0.4	
Total Private Equity	**1,407,541,337**	**18.4**	**18.0**	**0.6**	**2.3**	**1.4**	**3.4**	**19.9**	**17.4**	**16.4**	**15.8**	**Jan-12**
Private Equity Benchmark				9.5	3.8	21.8	14.9	10.6	14.6	14.2	16.3	
Over/Under				-8.9	-1.5	-20.4	-11.5	9.3	2.8	2.2	-0.5	

TOTAL FUND PERFORMANCE DETAIL

	Allocation			Performance (%)								
	Market Value ($)	% of Portfolio	Policy (%)	1 Mo (%)	FYTD (%)	YTD (%)	1 Yr (%)	3 Yrs (%)	5 Yrs (%)	10 Yrs (%)	Inception (%)	Inception Date
US Fixed Income	**693,013,526**	**9.0**	**8.0**	**4.6**	**0.7**	**3.7**	**3.4**	**-2.5**	**2.4**	**2.3**	**5.1**	**Mar-94**
Blmbg. U.S. Aggregate Index				4.5	-0.4	1.6	1.2	-4.5	0.7	1.4	4.3	
Over/Under				0.1	1.1	2.1	2.2	2.0	1.7	0.9	0.8	
BlackRock U.S. Debt Fund	156,473,956	2.0		4.5	-0.4	1.8	1.2	-4.5	0.7	1.4	4.2	Dec-95
Blmbg. U.S. Aggregate Index				4.5	-0.4	1.6	1.2	-4.5	0.7	1.4	4.1	
Over/Under				0.0	0.0	0.2	0.0	0.0	0.0	0.0	0.1	
Western	188,492,593	2.5		5.4	-0.6	2.3	1.7	-5.3	1.2	2.1	4.9	Jan-97
Blmbg. U.S. Aggregate Index				4.5	-0.4	1.6	1.2	-4.5	0.7	1.4	4.1	
Over/Under				0.9	-0.2	0.7	0.5	-0.8	0.5	0.7	0.8	
Reams	214,034,654	2.8		4.2	1.9	5.9	5.8	0.5	4.0	2.4	4.8	Oct-01
Blmbg. U.S. Aggregate Index				4.5	-0.4	1.6	1.2	-4.5	0.7	1.4	3.3	
Over/Under				-0.3	2.3	4.3	4.6	5.0	3.3	1.0	1.5	
Reams Custom Index				0.4	2.2	4.6	4.9	2.0	2.0	1.4	3.4	
Over/Under				3.8	-0.3	1.3	0.9	-1.5	2.0	1.0	1.4	
Loomis Strategic Alpha	48,307,860	0.6		2.9	3.4	5.5	5.9	0.1	2.5	2.5	2.5	Aug-13
Blmbg. U.S. Aggregate Index				4.5	-0.4	1.6	1.2	-4.5	0.7	1.4	1.4	
Over/Under				-1.6	3.8	3.9	4.7	4.6	1.8	1.1	1.1	
Loomis Sayles Multi Strategy	85,704,463	1.1		4.6	1.4	4.0	3.9	-1.9	3.0	3.4	5.2	Aug-05
5% Bmbg. U.S. Int Agg / 65% Blmbg. U.S. Agg / 30% FTSE HY				4.5	0.9	4.0	3.5	-2.6	1.8	2.2	3.9	
Over/Under				0.1	0.5	0.0	0.4	0.7	1.2	1.2	1.3	
Treasuries	**75,088,840**	**1.0**	**2.0**	**3.9**	**-0.5**	**1.1**	**0.1**	**-6.9**	**-**	**-**	**-1.0**	**Apr-19**
Blmbg. U.S. Treasury: 7-10 Year				4.5	-2.0	-0.4	-1.5	-6.4	-	-	-1.0	
Over/Under				-0.6	1.5	1.5	1.6	-0.5	-	-	0.0	
Reams 10-Year Treasuries	75,088,840	1.0		3.9	-0.5	1.1	0.1	-6.9	-	-	-1.0	Apr-19
Blmbg. U.S. Treasury: 7-10 Year				4.5	-2.0	-0.4	-1.5	-6.4	-	-	-1.0	
Over/Under				-0.6	1.5	1.5	1.6	-0.5	-	-	0.0	
Private Credit	**537,056,730**	**7.0**	**8.0**	**1.5**	**4.0**	**9.6**	**9.9**	**9.8**	**8.8**	**-**	**8.2**	**Jan-18**
50% CS Leveraged Loan / 50% ICE BofA US HY BB-B Rated Constrained Index				2.9	4.2	10.1	9.9	3.7	5.3	-	5.0	
Over/Under				-1.4	-0.2	-0.5	0.0	6.1	3.5	-	3.2	

Ventura County Employees' Retirement Association

November 30, 2023

TOTAL FUND PERFORMANCE DETAIL

	Allocation			Performance (%)								
	Market Value ($)	% of Portfolio	Policy (%)	1 Mo (%)	FYTD (%)	YTD (%)	1 Yr (%)	3 Yrs (%)	5 Yrs (%)	10 Yrs (%)	Inception (%)	Inception Date
Total Real Estate	**530,264,663**	**6.9**	**8.0**	**-1.1**	**-0.8**	**-6.7**	**-11.2**	**5.7**	**3.3**	**6.1**	**7.0**	**Apr-94**
NCREIF ODCE Net				0.0	-2.1	-8.1	-12.9	6.2	4.7	7.2	7.5	
Over/Under				-1.1	1.3	1.4	1.7	-0.5	-1.4	-1.1	-0.5	
Prudential Real Estate	208,742,745	2.7		0.0	0.0	-3.7	-9.2	7.7	6.3	8.3	6.3	Jul-04
NCREIF ODCE Net				0.0	-2.1	-8.1	-12.9	6.2	4.7	7.2	6.4	
Over/Under				0.0	2.1	4.4	3.7	1.5	1.6	1.1	-0.1	
UBS Real Estate	217,363,178	2.8		-2.3	-2.3	-12.5	-17.2	1.4	0.0	4.0	5.5	Apr-03
NCREIF ODCE Net				0.0	-2.1	-8.1	-12.9	6.2	4.7	7.2	6.6	
Over/Under				-2.3	-0.2	-4.4	-4.3	-4.8	-4.7	-3.2	-1.1	
LaSalle Income + Growth VIII Limited Partnership	66,921,682	0.9		0.0	0.4	0.7	0.7	21.6	-	-	10.6	Mar-20
NCREIF ODCE Net				0.0	-2.1	-8.1	-12.9	6.2	-	-	4.7	
Over/Under				0.0	2.5	8.8	13.6	15.4	-	-	5.9	
Alterra IOS Venture II	36,362,059	0.5		-2.5	3.1	8.1	8.1	-	-	-	1.5	May-22
NCREIF ODCE Net				0.0	-2.1	-8.1	-12.9	-	-	-	-5.6	
Over/Under				-2.5	5.2	16.2	21.0	-	-	-	7.1	
Alterra IOS Ventura III LP	875,000	0.0		-	-	-	-	-	-	-	-	Dec-23
NCREIF ODCE Net				-	-	-	-	-	-	-	-	
Over/Under				-	-	-	-	-	-	-	-	
Total Real Assets	**375,548,491**	**4.9**	**6.0**	**4.1**	**5.7**	**12.5**	**9.1**	**6.8**	**5.4**	**3.7**	**4.4**	**May-13**
Real Assets Index				0.0	1.5	5.3	5.2	7.8	6.3	6.2	6.3	
Over/Under				4.1	4.2	7.2	3.9	-1.0	-0.9	-2.5	-1.9	
Bridgewater All Weather Fund	113,371,701	1.5		6.5	0.2	4.6	0.2	-1.9	2.8	3.1	3.4	Sep-13
CPI + 5% (Unadjusted)				0.2	2.7	8.2	8.3	11.0	9.2	7.9	7.8	
Over/Under				6.3	-2.5	-3.6	-8.1	-12.9	-6.4	-4.8	-4.4	
Tortoise Energy Infrastructure	132,980,739	1.7		6.5	14.1	21.6	15.4	31.9	9.3	3.8	4.4	May-13
Tortoise MLP Index				6.0	18.0	26.1	20.8	32.4	10.3	2.6	2.9	
Over/Under				0.5	-3.9	-4.5	-5.4	-0.5	-1.0	1.2	1.5	
Brookfield Infra Fund IV B LP	50,512,927	0.7		0.0	4.7	11.7	7.2	10.7	-	-	9.6	Apr-20
CPI + 2% (Unadjusted)				0.0	1.5	5.3	5.2	7.8	-	-	6.9	
Over/Under				0.0	3.2	6.4	2.0	2.9	-	-	2.7	
Brookfield Infra Fund V B LP	12,048,288	0.2		0.0	-3.3	-	-	-	-	-	-3.3	Jun-23
CPI + 2% (Unadjusted)				0.0	1.5	-	-	-	-	-	2.0	
Over/Under				0.0	-4.8	-	-	-	-	-	-5.3	
Harbourvest Real Assets Fund IV L.P.	66,634,835	0.9		0.0	2.3	13.6	20.3	-	-	-	31.5	Apr-21
CPI + 2% (Unadjusted)				0.0	1.5	5.3	5.2	-	-	-	7.8	
Over/Under				0.0	0.8	8.3	15.1	-	-	-	23.7	

TOTAL FUND PERFORMANCE DETAIL

	Allocation			Performance (%)								
	Market Value ($)	% of Portfolio	Policy (%)	1 Mo (%)	FYTD (%)	YTD (%)	1 Yr (%)	3 Yrs (%)	5 Yrs (%)	10 Yrs (%)	Inception (%)	Inception Date
Overlay	**95,985,365**	**1.3**	**0.0**									
Parametric	43,833,224	0.6										
Abbott Capital Cash	52,152,140	0.7										
Total Private Equity	**1,407,541,337**	**18.4**	**18.0**	**0.6**	**2.3**	**1.4**	**3.4**	**19.9**	**17.4**	**16.4**	**15.8**	**Jan-12**
Private Equity Benchmark				9.5	3.8	21.8	14.9	10.6	14.6	14.2	16.3	
Over/Under				-8.9	-1.5	-20.4	-11.5	9.3	2.8	2.2	-0.5	
Adams Street Global Fund Series	250,583,623	3.3		0.0	0.5	-1.3	-2.1	19.8	16.4	15.1	14.5	Jan-12
Russell 3000 + 2%				9.5	3.8	21.8	14.9	10.4	14.0	13.4	15.5	
Over/Under				-9.5	-3.3	-23.1	-17.0	9.4	2.4	1.7	-1.0	
Harbourvest	113,335,328	1.5		0.0	3.5	7.0	32.1	16.5	14.3	17.1	17.0	Aug-13
Russell 3000 + 2%				9.5	3.8	21.8	14.9	10.4	14.0	13.4	13.9	
Over/Under				-9.5	-0.3	-14.8	17.2	6.1	0.3	3.7	3.1	
Pantheon Global Secondary Funds	54,929,024	0.7		0.0	-1.8	-2.7	2.2	15.7	9.2	12.4	11.5	Jan-12
Russell 3000 + 2%				9.5	3.8	21.8	14.9	10.4	14.0	13.4	15.5	
Over/Under				-9.5	-5.6	-24.5	-12.7	5.3	-4.8	-1.0	-4.0	
Drive Capital Fund II	14,719,640	0.2		0.0	-7.9	-53.7	-53.7	-10.8	4.0	-	-7.7	Sep-16
Russell 3000 + 2%				9.5	3.8	21.8	14.9	10.4	14.0	-	14.4	
Over/Under				-9.5	-11.7	-75.5	-68.6	-21.2	-10.0	-	-22.1	
Abbott Secondary Opportunities	10,323,135	0.1		0.0	2.1	10.2	10.2	19.2	20.2	-	20.7	Jan-18
Russell 3000 + 2%				9.5	3.8	21.8	14.9	10.4	14.0	-	12.9	
Over/Under				-9.5	-1.7	-11.6	-4.7	8.8	6.2	-	7.8	
Clearlake Capital Partners V	11,606,237	0.2		-2.4	-1.7	-2.4	-4.4	7.0	18.7	-	21.4	Mar-18
Russell 3000 + 2%				9.5	3.8	21.8	14.9	10.4	14.0	-	13.0	
Over/Under				-11.9	-5.5	-24.2	-19.3	-3.4	4.7	-	8.4	
Battery Ventures XII	24,008,780	0.3		-3.6	-6.5	-17.3	-17.9	20.4	22.0	-	17.5	Apr-18
Russell 3000 + 2%				9.5	3.8	21.8	14.9	10.4	14.0	-	13.5	
Over/Under				-13.1	-10.3	-39.1	-32.8	10.0	8.0	-	4.0	
Insight Venture Partners X	51,596,284	0.7		0.9	5.1	5.2	6.3	17.0	23.3	-	19.3	May-18
Russell 3000 + 2%				9.5	3.8	21.8	14.9	10.4	14.0	-	13.6	
Over/Under				-8.6	1.3	-16.6	-8.6	6.6	9.3	-	5.7	
GTCR Fund XII	34,271,973	0.4		5.7	8.0	7.2	7.2	18.8	14.8	-	3.7	Jun-18
Russell 3000 + 2%				9.5	3.8	21.8	14.9	10.4	14.0	-	13.2	
Over/Under				-3.8	4.2	-14.6	-7.7	8.4	0.8	-	-9.5	

TOTAL FUND PERFORMANCE DETAIL

	Allocation			Performance (%)								
	Market Value ($)	% of Portfolio	Policy (%)	1 Mo (%)	FYTD (%)	YTD (%)	1 Yr (%)	3 Yrs (%)	5 Yrs (%)	10 Yrs (%)	Inception (%)	Inception Date
Buenaventure One, LLC	217,960,342	2.8		0.0	1.6	2.0	2.0	23.4	15.7	-	14.4	Jul-18
Russell 3000 + 2%				9.5	3.8	21.8	14.9	10.4	14.0	-	13.3	
Over/Under				-9.5	-2.2	-19.8	-12.9	13.0	1.7	-	1.1	
ECI 11	8,748,576	0.1		3.1	-7.3	5.8	6.8	16.1	-	-	19.8	Jan-19
Russell 3000 + 2%				9.5	3.8	21.8	14.9	10.4	-	-	16.5	
Over/Under				-6.4	-11.1	-16.0	-8.1	5.7	-	-	3.3	
Buenaventure Two, LLC	2,201,620	0.0		0.0	1.6	1.9	1.9	20.6	28.7	-	28.7	Dec-18
Russell 3000 + 2%				9.5	3.8	21.8	14.9	10.4	14.0	-	14.0	
Over/Under				-9.5	-2.2	-19.9	-13.0	10.2	14.7	-	14.7	
The Resolute Fund IV L.P	34,997,100	0.5		0.0	5.7	16.0	20.7	24.9	-	-	38.9	Jan-19
Russell 3000 + 2%				9.5	3.8	21.8	14.9	10.4	-	-	16.5	
Over/Under				-9.5	1.9	-5.8	5.8	14.5	-	-	22.4	
GGV Capital VII L.P.	12,506,625	0.2		-1.7	-7.0	-10.5	-10.5	9.9	-	-	2.5	Feb-19
Russell 3000 + 2%				9.5	3.8	21.8	14.9	10.4	-	-	14.8	
Over/Under				-11.2	-10.8	-32.3	-25.4	-0.5	-	-	-12.3	
GGV Discovery II, L.P.	3,805,603	0.0		-0.9	-3.2	-4.8	-4.8	24.6	-	-	16.5	Feb-19
Russell 3000 + 2%				9.5	3.8	21.8	14.9	10.4	-	-	14.8	
Over/Under				-10.4	-7.0	-26.6	-19.7	14.2	-	-	1.7	
Drive Capital Overdrive Fund I	9,284,909	0.1		0.0	-0.4	-23.1	-23.1	8.4	-	-	13.5	May-19
Russell 3000 + 2%				9.5	3.8	21.8	14.9	10.4	-	-	13.3	
Over/Under				-9.5	-4.2	-44.9	-38.0	-2.0	-	-	0.2	
Riverside Micro Cap Fund V, LP	11,770,964	0.2		0.0	-1.1	2.8	10.1	22.1	-	-	6.3	May-19
Russell 3000 + 2%				9.5	3.8	21.8	14.9	10.4	-	-	13.3	
Over/Under				-9.5	-4.9	-19.0	-4.8	11.7	-	-	-7.0	
GGV Capital VII Plus, LP	3,094,350	0.0		-3.4	-4.4	0.4	0.4	5.0	-	-	6.8	Jun-19
Russell 3000 + 2%				9.5	3.8	21.8	14.9	10.4	-	-	15.3	
Over/Under				-12.9	-8.2	-21.4	-14.5	-5.4	-	-	-8.5	
Astorg VII L.P.	10,814,512	0.1		5.7	25.6	2.1	5.9	20.2	-	-	7.0	Jul-19
Russell 3000 + 2%				9.5	3.8	21.8	14.9	10.4	-	-	13.8	
Over/Under				-3.8	21.8	-19.7	-9.0	9.8	-	-	-6.8	
Astorg VIII L.P.	8,212,892	0.1		5.7	-2.9	-2.9	-2.9	-	-	-	-2.2	Aug-22
Russell 3000 + 2%				9.5	3.8	21.8	14.9	-	-	-	11.0	
Over/Under				-3.8	-6.7	-24.7	-17.8	-	-	-	-13.2	
M/C Partners Fund VIII LP. Limited Partnership	8,578,089	0.1		-1.2	-1.1	-1.6	-3.9	11.6	-	-	-6.7	Jul-19
Russell 3000 + 2%				9.5	3.8	21.8	14.9	10.4	-	-	13.8	
Over/Under				-10.7	-4.9	-23.4	-18.8	1.2	-	-	-20.5	

TOTAL FUND PERFORMANCE DETAIL

	Allocation			Performance (%)								
	Market Value ($)	% of Portfolio	Policy (%)	1 Mo (%)	FYTD (%)	YTD (%)	1 Yr (%)	3 Yrs (%)	5 Yrs (%)	10 Yrs (%)	Inception (%)	Inception Date
Genstar Capital Partners IX	10,096,547	0.1		4.7	8.3	10.3	10.2	28.6	-	-	-195.9	Aug-19
Russell 3000 + 2%				9.5	3.8	21.8	14.9	10.4	-	-	13.6	
Over/Under				-4.8	4.5	-11.5	-4.7	18.2	-	-	-209.5	
Genstar IX Opportunities Fund I	2,941,001	0.0		2.2	1.0	0.4	0.3	21.6	-	-	17.6	Aug-19
Russell 3000 + 2%				9.5	3.8	21.8	14.9	10.4	-	-	13.6	
Over/Under				-7.3	-2.8	-21.4	-14.6	11.2	-	-	4.0	
ABRY Partners IX, LP	12,970,190	0.2		0.0	0.4	4.3	17.6	19.1	-	-	5.0	Sep-19
Russell 3000 + 2%				9.5	3.8	21.8	14.9	10.4	-	-	14.4	
Over/Under				-9.5	-3.4	-17.5	2.7	8.7	-	-	-9.4	
Advent International GPE IX LP	11,946,217	0.2		-7.9	-6.8	-8.8	-8.8	21.9	-	-	21.3	Nov-19
Russell 3000 + 2%				9.5	3.8	21.8	14.9	10.4	-	-	13.9	
Over/Under				-17.4	-10.6	-30.6	-23.7	11.5	-	-	7.4	
Drive Capital Fund III LP	7,093,331	0.1		0.0	-0.8	-13.2	-13.2	6.9	-	-	2.6	Dec-19
Russell 3000 + 2%				9.5	3.8	21.8	14.9	10.4	-	-	13.1	
Over/Under				-9.5	-4.6	-35.0	-28.1	-3.5	-	-	-10.5	
Oak HC/FT Partners III LP	22,987,696	0.3		0.0	1.6	-3.9	-3.9	20.2	-	-	15.7	Dec-19
Russell 3000 + 2%				9.5	3.8	21.8	14.9	10.4	-	-	13.1	
Over/Under				-9.5	-2.2	-25.7	-18.8	9.8	-	-	2.6	
TA XIII A LP	12,576,764	0.2		0.0	3.9	4.4	4.4	27.0	-	-	20.7	Jan-20
Russell 3000 + 2%				9.5	3.8	21.8	14.9	10.4	-	-	12.5	
Over/Under				-9.5	0.1	-17.4	-10.5	16.6	-	-	8.2	
Dover Street X, LP	33,468,238	0.4		0.0	4.3	7.2	5.6	27.2	-	-	29.8	Feb-20
Russell 3000 + 2%				9.5	3.8	21.8	14.9	10.4	-	-	12.8	
Over/Under				-9.5	0.5	-14.6	-9.3	16.8	-	-	17.0	
Hellman & Friedman CP IX	26,657,326	0.3		0.7	3.7	19.4	19.4	13.4	-	-	10.1	Apr-20
Russell 3000 + 2%				9.5	3.8	21.8	14.9	10.4	-	-	20.7	
Over/Under				-8.8	-0.1	-2.4	4.5	3.0	-	-	-10.6	
Clearlake Capital Partners VI	28,059,953	0.4		0.9	2.7	9.9	6.9	23.7	-	-	23.8	Jun-20
Russell 3000 + 2%				9.5	3.8	21.8	14.9	10.4	-	-	15.7	
Over/Under				-8.6	-1.1	-11.9	-8.0	13.3	-	-	8.1	
Flexpoint Fund IV	8,444,685	0.1		3.7	3.7	-26.2	-26.2	10.7	-	-	12.3	Jun-20
Russell 3000 + 2%				9.5	3.8	21.8	14.9	10.4	-	-	15.7	
Over/Under				-5.8	-0.1	-48.0	-41.1	0.3	-	-	-3.4	
Battery Ventures XIII	16,710,963	0.2		0.1	-2.3	-4.3	-4.3	12.9	-	-	11.7	Jun-20
Russell 3000 + 2%				9.5	3.8	21.8	14.9	10.4	-	-	15.7	
Over/Under				-9.4	-6.1	-26.1	-19.2	2.5	-	-	-4.0	

TOTAL FUND PERFORMANCE DETAIL

	Allocation			Performance (%)								
	Market Value ($)	% of Portfolio	Policy (%)	1 Mo (%)	FYTD (%)	YTD (%)	1 Yr (%)	3 Yrs (%)	5 Yrs (%)	10 Yrs (%)	Inception (%)	Inception Date
Green Equity Investors IX LP	163,250	0.0		0.0	-	-	-	-	-	-	27.6	Sep-23
Russell 3000 + 2%				9.5	-	-	-	-	-	-	1.9	
Over/Under				-9.5	-	-	-	-	-	-	25.7	
Green Equity Investors VIII, L.P.	15,810,358	0.2		0.0	4.8	12.8	12.8	5.9	-	-	5.7	Nov-20
Russell 3000 + 2%				9.5	3.8	21.8	14.9	10.4	-	-	14.4	
Over/Under				-9.5	1.0	-9.0	-2.1	-4.5	-	-	-8.7	
CapVest Private Equity Partners IV, SCSp	12,310,612	0.2		20.3	18.2	21.2	21.8	40.2	-	-	40.2	Dec-20
Russell 3000 + 2%				9.5	3.8	21.8	14.9	10.4	-	-	10.4	
Over/Under				10.8	14.4	-0.6	6.9	29.8	-	-	29.8	
Drive Capital Fund IV LP	5,013,593	0.1		0.0	-2.8	-4.1	-4.1	-	-	-	-5.0	Jan-22
Russell 3000 + 2%				9.5	3.8	21.8	14.9	-	-	-	0.2	
Over/Under				-9.5	-6.6	-25.9	-19.0	-	-	-	-5.2	
Great Hill Equity Partners VII	9,529,059	0.1		7.5	10.6	32.0	32.0	-	-	-	79.2	Jan-21
Russell 3000 + 2%				9.5	3.8	21.8	14.9	-	-	-	9.0	
Over/Under				-2.0	6.8	10.2	17.1	-	-	-	70.2	
Great Hill Equity Partners VIII	4,100,284	0.1		-4.3	13.1	-9.1	-9.1	-	-	-	-9.1	Dec-22
Russell 3000 + 2%				9.5	3.8	21.8	14.9	-	-	-	14.9	
Over/Under				-13.8	9.3	-30.9	-24.0	-	-	-	-24.0	
Vitruvian Investment Partners IV	19,699,851	0.3		4.7	3.5	12.2	16.3	-	-	-	-100.0	Jan-21
Russell 3000 + 2%				9.5	3.8	21.8	14.9	-	-	-	9.0	
Over/Under				-4.8	-0.3	-9.6	1.4	-	-	-	-109.0	
CRV XVIII, L.P.	15,222,802	0.2		-1.1	-3.3	-10.3	-10.3	-	-	-	0.9	Mar-21
Russell 3000 + 2%				9.5	3.8	21.8	14.9	-	-	-	8.4	
Over/Under				-10.6	-7.1	-32.1	-25.2	-	-	-	-7.5	
GGV Capital VIII, L.P.	6,392,848	0.1		-1.6	5.1	4.0	4.0	-	-	-	9.9	May-21
Russell 3000 + 2%				9.5	3.8	21.8	14.9	-	-	-	5.3	
Over/Under				-11.1	1.3	-17.8	-10.9	-	-	-	4.6	
GGV Discovery III, L.P.	2,956,678	0.0		-0.2	-0.1	3.4	3.4	-	-	-	21.7	May-21
Russell 3000 + 2%				9.5	3.8	21.8	14.9	-	-	-	5.3	
Over/Under				-9.7	-3.9	-18.4	-11.5	-	-	-	16.4	
Oak HC/FT Partners IV, L.P.	10,987,480	0.1		0.0	11.7	14.8	14.8	-	-	-	12.1	May-21
Russell 3000 + 2%				9.5	3.8	21.8	14.9	-	-	-	5.3	
Over/Under				-9.5	7.9	-7.0	-0.1	-	-	-	6.8	
Prairie Capital VII, LP	4,734,544	0.1		0.4	-0.3	-5.9	-5.9	-	-	-	-0.6	Jun-21
Russell 3000 + 2%				9.5	3.8	21.8	14.9	-	-	-	5.2	
Over/Under				-9.1	-4.1	-27.7	-20.8	-	-	-	-5.8	

TOTAL FUND PERFORMANCE DETAIL

	Allocation			Performance (%)								
	Market Value ($)	% of Portfolio	Policy (%)	1 Mo (%)	FYTD (%)	YTD (%)	1 Yr (%)	3 Yrs (%)	5 Yrs (%)	10 Yrs (%)	Inception (%)	Inception Date
GGV Capital VIII Plus, L.P.	1,095,522	0.0		0.0	0.0	-1.4	-1.4	-	-	-	1.8	Jul-21
Russell 3000 + 2%				9.5	3.8	21.8	14.9	-	-	-	4.3	
Over/Under				-9.5	-3.8	-23.2	-16.3	-	-	-	-2.5	
Flexpoint Overage Fund IV A, L.P.	3,078,298	0.0		-0.6	1.4	15.3	15.3	-	-	-	10.9	Jul-21
Russell 3000 + 2%				9.5	3.8	21.8	14.9	-	-	-	4.3	
Over/Under				-10.1	-2.4	-6.5	0.4	-	-	-	6.6	
Abbott Secondary Opportunities II, L.P.	29,698,715	0.4		0.0	5.4	11.9	11.9	-	-	-	51.6	Jul-21
Russell 3000 + 2%				9.5	3.8	21.8	14.9	-	-	-	4.3	
Over/Under				-9.5	1.6	-9.9	-3.0	-	-	-	47.3	
Genstar X Opportunities Fund I, LP	3,465,017	0.0		2.7	2.2	4.5	4.5	-	-	-	6.2	Sep-21
Russell 3000 + 2%				9.5	3.8	21.8	14.9	-	-	-	2.4	
Over/Under				-6.8	-1.6	-17.3	-10.4	-	-	-	3.8	
Charlesbank Overage Fund X	6,076,060	0.1		3.5	11.8	18.7	18.7	-	-	-	13.9	Sep-21
Russell 3000 + 2%				9.5	3.8	21.8	14.9	-	-	-	2.4	
Over/Under				-6.0	8.0	-3.1	3.8	-	-	-	11.5	
Charlesbank Equity Fund X	14,885,121	0.2		0.4	2.8	12.0	12.0	-	-	-	8.2	Sep-21
Russell 3000 + 2%				9.5	3.8	21.8	14.9	-	-	-	2.4	
Over/Under				-9.1	-1.0	-9.8	-2.9	-	-	-	5.8	
GTCR Fund XIII	15,795,220	0.2		2.7	5.5	1.0	1.0	-	-	-	27.4	Sep-21
Russell 3000 + 2%				9.5	3.8	21.8	14.9	-	-	-	2.4	
Over/Under				-6.8	1.7	-20.8	-13.9	-	-	-	25.0	
Hellman & Friedman CP X	15,907,365	0.2		3.5	8.1	19.3	19.3	-	-	-	3.5	Nov-21
Russell 3000 + 2%				9.5	3.8	21.8	14.9	-	-	-	1.5	
Over/Under				-6.0	4.3	-2.5	4.4	-	-	-	2.0	
Genstar Capital Partners X LP	13,729,100	0.2		1.2	-0.1	2.7	2.7	-	-	-	8.1	Dec-21
Russell 3000 + 2%				9.5	3.8	21.8	14.9	-	-	-	2.2	
Over/Under				-8.3	-3.9	-19.1	-12.2	-	-	-	5.9	
TA XIV A LP	6,418,771	0.1		0.0	5.4	4.1	4.1	-	-	-	-4.1	Dec-21
Russell 3000 + 2%				9.5	3.8	21.8	14.9	-	-	-	2.2	
Over/Under				-9.5	1.6	-17.7	-10.8	-	-	-	-6.3	
CVC Capital Partners VIII A LP	16,104,251	0.2		5.7	4.5	5.2	14.3	-	-	-	18.0	Dec-21
Russell 3000 + 2%				9.5	3.8	21.8	14.9	-	-	-	2.2	
Over/Under				-3.8	0.7	-16.6	-0.6	-	-	-	15.8	
CVC Capital Partners VIII AIV	135,478	0.0		3.2	-	-	-	-	-	-	3.2	Nov-23
Russell 2000 Value + 2%				9.2	-	-	-	-	-	-	9.2	
Over/Under				-6.0	-	-	-	-	-	-	-6.0	

TOTAL FUND PERFORMANCE DETAIL

	Allocation			Performance (%)								
	Market Value ($)	% of Portfolio	Policy (%)	1 Mo (%)	FYTD (%)	YTD (%)	1 Yr (%)	3 Yrs (%)	5 Yrs (%)	10 Yrs (%)	Inception (%)	Inception Date
Drive Capital Overdrive	6,371,093	0.1		0.0	81.5	4.5	4.5	-	-	-	-1.1	Jan-22
Russell 3000 + 2%				9.5	3.8	21.8	14.9	-	-	-	0.2	
Over/Under				-9.5	77.7	-17.3	-10.4	-	-	-	-1.3	
Kinderhook Capital Fund 7	8,499,456	0.1		4.1	9.5	92.4	92.4	-	-	-	26.2	Mar-22
Russell 3000 + 2%				9.5	3.8	21.8	14.9	-	-	-	5.1	
Over/Under				-5.4	5.7	70.6	77.5	-	-	-	21.1	
Pantheon Global Secondary Funds VII	4,503,795	0.1		0.0	6.8	17.5	17.5	-	-	-	19.2	Apr-22
Russell 3000 + 2%				9.5	3.8	21.8	14.9	-	-	-	3.2	
Over/Under				-9.5	3.0	-4.3	2.6	-	-	-	16.0	
Harbourvest PTN Co Inv VI LP	25,372,151	0.3		0.0	5.1	10.6	4.0	-	-	-	0.7	May-22
Russell 3000 + 2%				9.5	3.8	21.8	14.9	-	-	-	9.6	
Over/Under				-9.5	1.3	-11.2	-10.9	-	-	-	-8.9	
Clearlake Capital Partners VII	12,060,735	0.2		0.8	1.5	6.3	6.3	-	-	-	3.0	Jun-22
Russell 3000 + 2%				9.5	3.8	21.8	14.9	-	-	-	10.2	
Over/Under				-8.7	-2.3	-15.5	-8.6	-	-	-	-7.2	
Battery Ventures XIV	1,721,957	0.0		-3.6	-6.2	-10.0	-10.0	-	-	-	-	Jul-22
Russell 3000 + 2%				9.5	3.8	21.8	14.9	-	-	-	17.7	
Over/Under				-13.1	-10.0	-31.8	-24.9	-	-	-	-	
Oak HC/FT Partners V	1,570,638	0.0		0.0	-1.2	-8.0	-8.0	-	-	-	-	Jul-22
Russell 3000 + 2%				9.5	3.8	21.8	14.9	-	-	-	17.7	
Over/Under				-9.5	-5.0	-29.8	-22.9	-	-	-	-	

Ventura County Employees' Retirement Association

November 30, 2023

TOTAL FUND PERFORMANCE DETAIL

	Allocation			Performance (%)								
	Market Value ($)	% of Portfolio	Policy (%)	1 Mo (%)	FYTD (%)	YTD (%)	1 Yr (%)	3 Yrs (%)	5 Yrs (%)	10 Yrs (%)	Inception (%)	Inception Date
Advent International GPE X LP	5,570,388	0.1		-3.3	-2.5	-5.1	-5.1	-	-	-	-18.5	Oct-22
Russell 3000 + 2%				9.5	3.8	21.8	14.9	-	-	-	26.2	
Over/Under				-12.8	-6.3	-26.9	-20.0	-	-	-	-44.7	
GTCR Strategic Growth 1/A	1,103,127	0.0		1.9	-5.9	-48.3	-48.3	-	-	-	-43.2	Oct-22
Russell 3000 + 2%				9.5	3.8	21.8	14.9	-	-	-	26.2	
Over/Under				-7.6	-9.7	-70.1	-63.2	-	-	-	-69.4	
GTCR Strategic Growth 1/B	1,667,445	0.0		8.5	17.7	45.5	45.5	-	-	-	40.7	Oct-22
Russell 3000 + 2%				9.5	3.8	21.8	14.9	-	-	-	26.2	
Over/Under				-1.0	13.9	23.7	30.6	-	-	-	14.5	
Riverside Micro Cap Fund VI, LP	6,269,501	0.1		0.0	4.3	6.5	-4.2	-	-	-	-3.6	Oct-22
Russell 3000 + 2%				9.5	3.8	21.8	14.9	-	-	-	26.2	
Over/Under				-9.5	0.5	-15.3	-19.1	-	-	-	-29.8	
Ridgemont Equity Partners IV	8,041,149	0.1		-1.9	-2.6	9.8	-	-	-	-	9.8	Jan-23
Russell 3000 + 2%				9.5	3.8	21.8	-	-	-	-	21.8	
Over/Under				-11.4	-6.4	-12.0	-	-	-	-	-12.0	
CapVest Private Equity Partners V, SCSp	97,588	0.0		-62.6	-87.4	-	-	-	-	-	-87.4	Apr-23
Russell 3000 + 2%				9.5	3.8	-	-	-	-	-	13.1	
Over/Under				-72.1	-91.2	-	-	-	-	-	-100.5	
Genstar Capital Partners XI	79,523	0.0		-	-	-	-	-	-	-	-	Dec-23
Russell 3000 + 2%				-	-	-	-	-	-	-	-	
Over/Under				-	-	-	-	-	-	-	-	

TOTAL FUND PERFORMANCE DETAIL

	Allocation			Performance (%)								
	Market Value ($)	% of Portfolio	Policy (%)	1 Mo (%)	FYTD (%)	YTD (%)	1 Yr (%)	3 Yrs (%)	5 Yrs (%)	10 Yrs (%)	Inception (%)	Inception Date
Private Credit	**537,056,730**	**7.0**	**8.0**	**1.5**	**4.0**	**9.6**	**9.9**	**9.8**	**8.8**	**-**	**8.2**	**Jan-18**
50% CS Leveraged Loan / 50% ICE BofA US HY BB-B Rated Constrained Index				2.9	4.2	10.1	9.9	3.7	5.3	-	5.0	
Over/Under				-1.4	-0.2	-0.5	0.0	6.1	3.5	-	3.2	
CVI Credit Value Fund IV	23,273,735	0.3		0.6	3.4	7.5	9.3	11.2	7.7	-	7.3	Jan-18
50% CS Leveraged Loan / 50% ICE BofA US HY BB-B Rated Constrained Index				2.9	4.2	10.1	9.9	3.7	5.3	-	5.0	
Over/Under				-2.3	-0.8	-2.6	-0.6	7.5	2.4	-	2.3	
Monroe Capital Private Credit Fund III	21,669,412	0.3		3.1	5.7	13.4	13.4	12.1	11.8	-	11.8	Dec-18
50% CS Leveraged Loan / 50% ICE BofA US HY BB-B Rated Constrained Index				2.9	4.2	10.1	9.9	3.7	5.3	-	5.3	
Over/Under				0.2	1.5	3.3	3.5	8.4	6.5	-	6.5	
Bluebay Direct Lending Fund III	19,503,680	0.3		-4.5	0.5	5.8	7.4	9.6	-	-	9.4	Apr-19
50% CS Leveraged Loan / 50% ICE BofA US HY BB-B Rated Constrained Index				2.9	4.2	10.1	9.9	3.7	-	-	4.8	
Over/Under				-7.4	-3.7	-4.3	-2.5	5.9	-	-	4.6	
Pimco Private Income Fund	74,767,765	1.0		1.7	3.6	5.2	5.2	7.4	-	-	8.2	Nov-19
50% CS Leveraged Loan / 50% ICE BofA US HY BB-B Rated Constrained Index				2.9	4.2	10.1	9.9	3.7	-	-	4.4	
Over/Under				-1.2	-0.6	-4.9	-4.7	3.7	-	-	3.8	
Bridge Debt Strategies III Limited Partner	13,265,367	0.2		2.6	4.8	7.1	8.7	8.5	-	-	7.1	Jan-20
50% CS Leveraged Loan / 50% ICE BofA US HY BB-B Rated Constrained Index				2.9	4.2	10.1	9.9	3.7	-	-	4.0	
Over/Under				-0.3	0.6	-3.0	-1.2	4.8	-	-	3.1	
PIMCO Corp Opps Fund III	52,709,321	0.7		2.8	5.0	5.3	5.3	20.9	-	-	27.2	May-20
50% CS Leveraged Loan / 50% ICE BofA US HY BB-B Rated Constrained Index				2.9	4.2	10.1	9.9	3.7	-	-	6.9	
Over/Under				-0.1	0.8	-4.8	-4.6	17.2	-	-	20.3	
Torchlight Debt Fund VII, L.P.	13,334,400	0.2		0.1	0.2	2.6	3.8	-	-	-	3.4	Jan-21
50% CS Leveraged Loan / 50% ICE BofA US HY BB-B Rated Constrained Index				2.9	4.2	10.1	9.9	-	-	-	3.2	
Over/Under				-2.8	-4.0	-7.5	-6.1	-	-	-	0.2	
Torchlight Debt Fund VIII, L.P.	4,597,895	0.1		-0.6	-2.0	-17.2	-	-	-	-	-17.2	Jan-23
50% CS Leveraged Loan / 50% ICE BofA US HY BB-B Rated Constrained Index				2.9	4.2	10.1	-	-	-	-	10.1	
Over/Under				-3.5	-6.2	-27.3	-	-	-	-	-27.3	
Crayhill Principal Strategies Fund II	15,428,673	0.2		-0.9	0.7	0.2	0.2	-	-	-	13.1	May-21
50% CS Leveraged Loan / 50% ICE BofA US HY BB-B Rated Constrained Index				2.9	4.2	10.1	9.9	-	-	-	2.7	
Over/Under				-3.8	-3.5	-9.9	-9.7	-	-	-	10.4	
CVI Credit Value Fund A V	23,021,665	0.3		0.0	3.1	8.1	8.2	-	-	-	6.0	Jun-21
50% CS Leveraged Loan / 50% ICE BofA US HY BB-B Rated Constrained Index				2.9	4.2	10.1	9.9	-	-	-	2.6	
Over/Under				-2.9	-1.1	-2.0	-1.7	-	-	-	3.4	

TOTAL FUND PERFORMANCE DETAIL

	Allocation			Performance (%)								
	Market Value ($)	% of Portfolio	Policy (%)	1 Mo (%)	FYTD (%)	YTD (%)	1 Yr (%)	3 Yrs (%)	5 Yrs (%)	10 Yrs (%)	Inception (%)	Inception Date
Bridge Debt Strategies Fund IV LP	24,016,366	0.3		2.7	5.7	9.3	10.7	-	-	-	7.0	Aug-21
50% CS Leveraged Loan / 50% ICE BofA US HY BB-B Rated Constrained Index				2.9	4.2	10.1	9.9	-	-	-	2.2	
Over/Under				-0.2	1.5	-0.8	0.8	-	-	-	4.8	
Cross Ocean USD ESS Fund IV	35,315,347	0.5		5.3	12.5	16.3	16.3	-	-	-	10.8	Sep-21
50% CS Leveraged Loan / 50% ICE BofA US HY BB-B Rated Constrained Index				2.9	4.2	10.1	9.9	-	-	-	2.1	
Over/Under				2.4	8.3	6.2	6.4	-	-	-	8.7	
Harbourvest Direct Lending L	19,518,782	0.3		0.0	4.0	10.2	10.2	-	-	-	6.3	Sep-21
50% CS Leveraged Loan / 50% ICE BofA US HY BB-B Rated Constrained Index				2.9	4.2	10.1	9.9	-	-	-	2.1	
Over/Under				-2.9	-0.2	0.1	0.3	-	-	-	4.2	
Bain Capital Special Situations Asia Fund II	4,534,213	0.1		-0.8	4.2	18.9	19.1	-	-	-	13.5	Nov-21
50% CS Leveraged Loan / 50% ICE BofA US HY BB-B Rated Constrained Index				2.9	4.2	10.1	9.9	-	-	-	2.1	
Over/Under				-3.7	0.0	8.8	9.2	-	-	-	11.4	
Arbour Lane Credit Opp III A	19,030,808	0.2		3.7	7.3	14.6	14.6	-	-	-	1.2	Dec-21
50% CS Leveraged Loan / 50% ICE BofA US HY BB-B Rated Constrained Index				2.9	4.2	10.1	9.9	-	-	-	2.5	
Over/Under				0.8	3.1	4.5	4.7	-	-	-	-1.3	

TOTAL FUND PERFORMANCE DETAIL

	Allocation			Performance (%)								
	Market Value ($)	% of Portfolio	Policy (%)	1 Mo (%)	FYTD (%)	YTD (%)	1 Yr (%)	3 Yrs (%)	5 Yrs (%)	10 Yrs (%)	Inception (%)	Inception Date
Monroe Private Capital Fund IV	25,181,285	0.3		3.2	6.5	12.1	12.1	-	-	-	9.5	Jan-22
50% CS Leveraged Loan / 50% ICE BofA US HY BB-B Rated Constrained Index				2.9	4.2	10.1	9.9	-	-	-	1.9	
Over/Under				0.3	2.3	2.0	2.2	-	-	-	7.6	
Crescent Cove Opportunity Fund LP	26,988,712	0.4		0.0	5.6	13.3	12.9	-	-	-	7.9	Jun-22
50% CS Leveraged Loan / 50% ICE BofA US HY BB-B Rated Constrained Index				2.9	4.2	10.1	9.9	-	-	-	5.9	
Over/Under				-2.9	1.4	3.2	3.0	-	-	-	2.0	
Pantheon Credit Opportunity II	36,188,502	0.5		0.0	-7.2	30.1	30.1	-	-	-	27.5	Nov-22
50% CS Leveraged Loan / 50% ICE BofA US HY BB-B Rated Constrained Index				2.9	4.2	10.1	9.9	-	-	-	10.7	
Over/Under				-2.9	-11.4	20.0	20.2	-	-	-	16.8	
VWH Partners III LP	43,598,032	0.6		3.3	7.0	10.8	10.8	-	-	-	10.8	Dec-22
50% CS Leveraged Loan / 50% ICE BofA US HY BB-B Rated Constrained Index				2.9	4.2	10.1	9.9	-	-	-	9.9	
Over/Under				0.4	2.8	0.7	0.9	-	-	-	0.9	
Harbourview Royalties I	19,562,171	0.3		0.0	2.6	-	-	-	-	-	1.3	Apr-23
50% CS Leveraged Loan / 50% ICE BofA US HY BB-B Rated Constrained Index				2.9	4.2	-	-	-	-	-	6.5	
Over/Under				-2.9	-1.6	-	-	-	-	-	-5.2	
Kennedy Lewis Capital Partners Master Fund III LP	16,299,944	0.2		0.0	4.3	-	-	-	-	-	4.3	May-23
50% CS Leveraged Loan / 50% ICE BofA US HY BB-B Rated Constrained Index				2.9	4.2	-	-	-	-	-	5.6	
Over/Under				-2.9	0.1	-	-	-	-	-	-1.3	
PIMCO Corp Opps Fund IV	5,239,305	0.1		2.7	6.2	-	-	-	-	-	6.2	May-23
50% CS Leveraged Loan / 50% ICE BofA US HY BB-B Rated Constrained Index				2.9	4.2	-	-	-	-	-	5.6	
Over/Under				-0.2	2.0	-	-	-	-	-	0.6	
Adams Street PCF III A LP	11,352	0.0		-	-	-	-	-	-	-	-	Dec-23
50% CS Leveraged Loan / 50% ICE BofA US HY BB-B Rated Constrained Index				-	-	-	-	-	-	-	-	
Over/Under				-	-	-	-	-	-	-	-	

Policy Index as of May, 2022: 26% Russell 3000 Index, 15% MSCI ACWI ex U.S., 9% MSCI ACWI, 18% Private Equity Benchmark, 10% Bloomberg US Aggregate, 8% 50% CS Leveraged Loan/50% ICE BofA US HY BB-B Rated Constrained Index, 8% NCREIF ODCE, 6% Real Assets Index.
Total U.S. Equity Benchmark: Russell 3000 Index. Prior to January 2016, the Benchmark is 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.
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.
Reams Custom Index: Merrill Lynch 3 Month Libor Constant Maturity Index, prior to February 2013 the Bloomberg Aggregate.
Loomis Custom Index: 65% Bloomberg US Aggregate, 30% Citigroup High Yield Market Index and 5% JPM Non-US Hedged Bond Index.
Total Real Estate Benchmark: NCREIF ODCE; prior to January 2006, the NCREIF Property Index.
Total Real Assets Benchmark CPI + 4% from inception until 6/30/2019; CPI +2% from 6/30/2019 to present.
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.
Please Note: Private Equity performance is shown on a time-weighted return basis. Values are cash adjusted with current month cash flows. Fiscal year ends 6/30.

DISCLAIMERS & DISCLOSURES

Past performance is no guarantee of future results.

Returns for pooled funds, e.g. mutual funds and collective investment trusts, are collected from third parties; they are not generally calculated by NEPC. Returns for separate accounts, with some exceptions, are calculated by NEPC. Returns are reported net of manager fees unless otherwise noted.

A “since inception” return, if reported, begins with the first full month after funding, although actual inception dates (e.g. the middle of a month) and the timing of cash flows are taken into account in Composite return calculations.

NEPC’s preferred data source is the plan’s custodian bank or record-keeper. If data cannot be obtained from one of the preferred data sources, data provided by investment managers may be used. Information on market indices and security characteristics is received from additional providers. While NEPC has exercised reasonable professional care in preparing this report, we cannot guarantee the accuracy of all source information contained within. In addition, some index returns displayed in this report or used in calculation of a policy index, allocation index or other custom benchmark may be preliminary and subject to change.

All investments carry some level of risk. Diversification and other asset allocation techniques are not guaranteed to ensure profit or protect against losses.

The opinions presented herein represent the good faith views of NEPC as of the date of this presentation and are subject to change at any time. Neither fund performance nor universe rankings contained in this report should be considered 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.

Source of private fund performance benchmark data: Cambridge Associates, via Refinitiv

December 18, 2023

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

SUBJECT: ALAMEDA IMPLEMENTATION STATUS REPORT DATED DECEMBER 18, 2023

Dear Board Members:

<u>Background</u>
Staff are working to implement the July 30, 2020, California Supreme Decision, Alameda County Deputy Sheriffs' Association v. Alameda County Employees' Retirement Association (2020) 9 Cal.5th 1032, 1070 ("*Alameda*"), based on the latest direction received from the Board of Retirement on April 17, 2023.

<u>Summary & Highlights</u>
The VPAC team includes several VCERA staff, plus coordination with the following partners:

- County of Ventura – providing calculations for excluded & situational pay codes, as well as partial assistance w/flex credits
- MBS – providing tool development & flex credit calculations
- Simpler Systems – providing reporting tool

Four fixed-term positions (one office assistant, two benefit specialists, and one business analyst) have been budgeted to help increase staffing resources for the *Alameda* implementation project. Interviews have been conducted for all four positions and selections will be made soon. We anticipate start dates in January and then training will commence.

The County has reviewed the additional tasks needed for the flex credit calculations and produced a rough timeline through June of 2024 to complete this and the other remaining tasks. This has been incorporated into the latest project plan.

VCERA has contracted with MBS to provide the additional calculations needed outside of the V3 pension administration system for flex credits and interest. Since the last status report, the technical setup for MBS was completed and they started working on the assigned tasks. They are now working on task #3 out of about 25 total steps.

Once the corrected data is loaded into V3, VCERA staff will perform several steps to update individual member accounts (retiree benefits and contribution refund processing). In order to speed up some of that processing, VCERA has engaged the system vendor Vitech to make some system enhancements that are currently under development and in testing. There are currently 6 items in the queue for Vitech; one is in testing, one is expected to be delivered for testing soon, one is in development, two are not started (but less critical), and the final one is a 6-part item of which 4 parts are in testing, 1 part is in development, and 1 part is not started yet.

Staff determined that some historical data review and spreadsheet modifications are needed to perform the manual calculations for VRSD members, so the actual calculations will not begin until January.

Staff met with Simpler Systems to provide an overview of the V3 system and key datasets. Next steps include meeting with the vendor to provide more information on the database and to drill down into more detail on each major dataset.

Staff are working on some additional communications regarding the status of the *Alameda* implementation and some clarification on the change to the County's flexible credit allowance structure and how that was impacted by *Alameda*.

Estimated Project Timeline & Budget

The project timeline has been adjusted to reflect the following:

- More time needed by Vitech to develop the requested system enhancements
- The County's rough estimate for the portion of work they will perform on flex credits
- The likely timing of training new staff based on the status of the recruitments
- The projected end date for MBS based on the delay due to the initial technical setup
- An adjusted start date for the VRSD manual corrections due to year end bandwidth

All of the above adjustments were made to Phase 1. Phase 2 will be adjusted as needed once more progress has been made and additional elements are known.

Year	Months	Task	Assigned	Status
Phase 1: Calculate pensionable earnings & member contributions				
2023	May – June	Planning	VCERA	Completed
2023	May – June	Stop Contributions	County	Completed
2023	July – **June**	Correction Files Format/Workflow **& Flex Credit Calcs**	County	In Progress
2023-**24**	July – **Mar** +	System Enhancements	Vitech	In Progress
2023-**24**	July – **Jan**	Data Cleanup & Prep Tasks	VCERA/County	In Progress
2023-**24**	Sep – Dec + **Jan – Mar**	Recruit **&** Onboard/Train Staff	VCERA	In Progress

2023-24	Sep – June +	Queries/Reporting	Simpler Systems	In Progress
2023-24	Nov – **Sep** +	Tools Dev/Flex Credit Calcs	MBS/Consultants	In Progress
2024	**Jan** – Mar	VRSD Corrections (manual)	VCERA	
2024	Jan – **June** +	Send Correction Files	County	
2024	Jan – Mar	Test & Verify System Enhancements	VCERA IT & Ops	
2024	Apr – Sep	Review/Test Tools & Corrections	VCERA IT & Ops	
Phase 2: Calculate retirement benefits & process refunds w/interest				
2024	Sep – Dec	Perform Calcs/Pay Refunds & Rollovers	VCERA	
2025	Jan – Sep +			

+ indicates a task that may continue further to completion

Items in bold have been updated since the prior status report.

DISCLAIMER: This timeline is an estimate based on initial review of the project scope. Actual timeline may fluctuate due to factors including resources, vendor timelines, processing complexity, and unanticipated priorities. Updates to this estimated timeline will be published as more information becomes available.

Staff recognize the immense undertaking of this project, and are considering whether some additional project management resources may be needed to assist with some of the administrative needs for this project. Staff will review options and return to the board to discuss this at a later date.

<u>RECOMMENDATION:</u> RECEIVE & FILE ALAMEDA IMPLEMENTATION STATUS REPORT DATED DECEMBER 18, 2023

VCERA staff will be pleased to respond to any questions you may have on this matter at the December 18, 2023, Business & Disability Meeting.

Sincerely,

Amy Herron

Amy Herron
Chief Operations Officer

Ventura County Employees' Retirement Association

Actuarial Valuation and Review

As of June 30, 2023

Segal

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December 12, 2023

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

Dear Board Members:

We are pleased to submit this Actuarial Valuation and Review as of June 30, 2023. It summarizes the actuarial data used in the valuation, analyzes the preceding year's experience, and establishes the funding requirements for July 1, 2024 to June 30, 2025.

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

Segal does not audit the data provided. The accuracy and comprehensiveness of the data is the responsibility of those supplying the data. To the extent we can, however, Segal does review the data for reasonableness and consistency. Based on our review of the data, we have no reason to doubt the substantial accuracy of the information on which we have based this report and we have no reason to believe there are facts or circumstances that would affect the validity of these results.

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

The actuarial calculations were completed under the supervision of Molly Calcagno, ASA, Enrolled Actuary, MAAA. We are members of the American Academy of Actuaries and we meet the Qualification Standards of the American Academy of Actuaries to render the actuarial opinion herein. To the best of our knowledge, the information supplied in this actuarial valuation is complete and accurate. The assumptions used in this actuarial valuation were selected by the Board based upon our analysis and recommendations. In our opinion, the assumptions are reasonable and take into account the experience of the Plan and reasonable expectations. In addition, in our opinion, the combined effect of these assumptions is expected to have no significant bias.

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

Sincerely,

Segal

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

Molly Calcagno, ASA, EA, MAAA
Senior Actuary

JY/jl

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Section 1: Actuarial Valuation Summary

Purpose and Basis

This report was prepared by Segal to present a valuation of the Ventura County Employees' Retirement Association ("VCERA" or "the Association") as of June 30, 2023. The valuation was performed to determine whether the assets and contribution rates are sufficient to provide the prescribed benefits.

The contribution requirements presented in this report are based on:

- The benefit provisions of the pension plan, as administered by the Board of Retirement;
- The characteristics of covered active members, inactive vested members, and retired members and beneficiaries as of June 30, 2023, provided by VCERA;
- The assets of the plan as of June 30, 2023, provided by VCERA;
- Economic assumptions regarding future salary increases and investment earnings adopted by the Board of Retirement for the June 30, 2023 valuation;
- Other actuarial assumptions regarding employee terminations, retirement, death, etc. adopted by the Board of Retirement for the June 30, 2023 valuation; and
- The funding policy adopted by the Board of Retirement.

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

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

The contribution requirements are determined as a percentage of payroll. The Association's employer rates provide for both Normal Cost and a contribution to amortize any unfunded or overfunded Actuarial Accrued Liabilities. In this valuation, we have applied the funding policy last reviewed and approved by the Board in 2022. Details of the funding policy are provided in *Section 4, Exhibit 1* on pages 88 and 89.

Section 1: Actuarial Valuation Summary

A schedule of current amortization balances and payments may be found in *Section 3, Exhibit H* starting on page 70. A graphical projection of the Unfunded Actuarial Accrued Liability (UAAL) amortization balances and payments has been included in *Section 3, Exhibit I* on pages 74 and 75.

The Actuarial Standards Board Actuarial Standard of Practice (ASOP) No. 4 provides guidelines for actuaries to follow when measuring pension obligations. For a plan such as that offered by the Retirement Association that may use undesignated excess earnings to provide supplemental benefits, the valuation report must indicate that the impact of any such future use of undesignated excess earnings on the future financial condition of the plan has not been explicitly measured or otherwise reflected in the valuation. However, it should be noted that under the Board's Interest Crediting Policy, the balance of $1.34 billion (negative) in the Interest Crediting Shortfall Tracking Account (also known as the Contra Reserve) has to be fully restored out of future excess earnings before any subsequent earnings can be used to provide for any supplemental benefits. The Contra Reserve tracks any cumulative shortfalls in investment earnings relative to earnings required to credit full interest at the assumed rate to valuation reserves.

In this report, the employer and member contribution rates shown in *Section 2, Subsection F* and *Section 4, Exhibit 3*, respectively, are calculated based on a 50/50 sharing of Normal Cost for both PEPRA and non-PEPRA Tiers. For purposes of these calculations, we have been previously directed by VCERA to assume that the cessation of member contributions after 30 years of service for non-PEPRA members continues per the County Employees Retirement Law (CERL) and that the cost associated with this provision is to be paid for by employers.

The employer and member contribution rates calculated under the prior method (i.e., under the CERL statutory formula without 50/50 sharing of Normal Cost for non-PEPRA tiers) are shown in *Section 4, Exhibit 4* and *Exhibit 5*, respectively, starting on page 100.

Effective with future service accrued on or after July 1, 2023, California Nurses Association (CNA) members will receive a fixed 2% COLA. This valuation report shows the General COLA UAAL contribution rates on a combined basis for all General Tiers that have a COLA and the General Tier 2 COLA Normal Cost contribution rates on a combined basis for Service Employees International Union (SEIU) and CNA. Segal will provide a stand-alone letter that calculates the separate contribution rates to be payable for each of the General Tiers at a later date.

The rates calculated in this report may be adopted by the Board for the fiscal year that extends from July 1, 2024 through June 30, 2025.

Valuation Highlights

1. A fixed 2% COLA for General Tier 2 future service earned effective July 1, 2023 has been adopted for active members in the California Nurses Association (CNA). This plan provision change increased the UAAL by $3.0 million. The average employer contribution rate increase as a result of this plan provision change was 0.10% of payroll and the average member contribution rate increase was 0.24% of payroll.[1] Note that this valuation report shows the General COLA UAAL contribution rates on a combined basis for all General Tiers that have a COLA, and the General Tier 2 COLA Normal Cost contribution rates on a combined basis for Service Employees International Union (SEIU) and CNA. Segal will provide a stand-alone letter that calculates the separate contribution rates to be payable for each of the General Tiers at a later date.
2. This valuation reflects two minor technical actuarial refinements as follows:
   a. applying beginning of year timing of decrements for exiting from active membership status in calculating the normal cost rate; and
   b. aligning projected salary in current life and replacement life when calculating normal cost rates for active members.

   The refinements resulted in a one-time net decrease of 0.18% in the average employer rate and a one-time net increase of 0.07% in the average member contribution rate.[2]
3. *Pg. 40* The ratio of the Valuation Value of Assets to Actuarial Accrued Liability decreased slightly from 97.2% to 97.1%. This ratio is one measure of funding status, and its history is a measure of funding progress. The ratio of the Market Value of Assets to the Actuarial Accrued Liability increased from 93.8% to 96.3%. These measurements are not necessarily appropriate for assessing the sufficiency of plan assets to cover the estimated cost of settling the plan's benefit obligation or the need for of the amount of future contributions.
4. *Pg. 32* The Association's UAAL (which is based on the Valuation Value of Assets) has increased from $212 million to $230 million. The increase in UAAL is primarily due to individual salary increases greater than expected for active members, investment return (after smoothing) less than the 7.00% assumed rate, and COLA increases greater than expected for General Tier 1 and Safety retirees and beneficiaries offset to some extent by actual contributions greater than expected due to the scheduled one-year delay in implementing contributions rates determined in the last valuation. A complete reconciliation of the Association's UAAL is provided in *Section 2, Subsection E*.
5. *Pg. 26* The actuarial loss of $73.2 million,[3] or 0.9% of the Actuarial Accrued Liability, is due to an investment loss of $35.8 million, or 0.5% of the Actuarial Accrued Liability, a contribution gain of $22.5 million, or 0.3% of the Actuarial Accrued Liability, and a net experience loss from sources other than investments and contributions of $59.9, or 0.8% of the Actuarial Accrued Liability prior to reflection of plan provision change. This loss was primarily due to individual salary increases higher than expected.

[1] The plan provision change only affects the member contribution rate for CNA members. The increase for CNA members was 2.63% of payroll.
[2] There was an increase in the average member contribution rate when the rates are composited on salaries after applying beginning of year decrements even though the individual member contribution rates decreased for most of the groups as a result of this refinement.
[3] Includes effect of two minor technical actuarial refinements.

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6. The average employer contribution rate calculated in this valuation increased from 18.23% of payroll to 18.56% of payroll. This increase is primarily due to individual salary increases greater than expected for active members, investment return (after smoothing) less than the 7.00% assumed rate, and COLA increases greater than expected for General Tier 1 and Safety retirees and beneficiaries offset to some extent by the effect of amortizing prior year's UAAL over a larger than expected projected total salary and actual contributions greater than expected due to the scheduled one-year delay in implementing contributions rates determined in the last valuation. A complete reconciliation of the Association's average employer rate is provided in *Section 2, Subsection F*.

   As previously adopted by the Board, we have continued to calculate the Basic and COLA UAAL rates on a combined basis for all General Tiers even though General Tier 2 and associated PEPRA tiers are overfunded this year. This results in more stable UAAL rates for General Tier 1.

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7. Several UAAL amortization layers established between June 30, 2006 valuation and June 30, 2009 valuation will be fully amortized in the June 30, 2024 valuation. This alone will result in a reduction in the UAAL contribution rate of over 3% of payroll for the plan in total (approximately 2% of payroll for General and 7% of payroll for Safety) in the June 30, 2024 valuation.

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8. The average member rate calculated in this valuation increased from 10.49% of payroll to 10.76% of payroll. This change is primarily due to the plan provision change to provide a fixed 2% COLA on future service for CNA members. A complete reconciliation of the Association's average member rate is provided in *Section 2, Subsection F*.

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9. The rate of return on the Market Value of Assets was 9.49% for the 2022-2023 plan year. The return on the Valuation Value of Assets was 6.50% for the same period after considering the gradual recognition of current and prior years' investment gains and losses. This resulted in an actuarial loss when measured against the assumed rate of return of 7.00%. This actuarial investment loss increased the average employer contribution rate by 0.34% of payroll.

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10. The total unrecognized net investment loss as of June 30, 2023 is about $62.5 million as compared to an unrecognized net investment loss of $254.3 million in the previous valuation. This net deferred investment loss of $62.5 million will be recognized in the determination of the Actuarial Value of Assets for funding purposes in the next few years as shown in *Section 2, Subsection B*.

    The net deferred losses of $62.5 million represent about 0.8% of the Market Value of Assets. Unless offset by future investment gains or other favorable experience, the recognition of the $62.5 million market losses is expected to have an impact on the Association's future funded ratio and contribution rate requirements. This potential impact may be illustrated as follows:

    a. If the net deferred losses in this year's valuation were recognized immediately and entirely in the Valuation Value of Assets, the funded ratio would decrease from 97.1% to 96.3%.

       For comparison purposes, if all the net deferred losses in the June 30, 2022 valuation had been recognized immediately in the June 30, 2022 valuation, the funded ratio in last year's valuation would have decreased from 97.2% to 93.8%.

    b. If the net deferred losses in this year's valuation were recognized immediately and entirely in the Valuation Value of Assets, the average employer contribution rate would increase from 18.56% to 19.15% of payroll.

For comparison purposes, if all the net deferred losses in the June 30, 2022 valuation had been recognized immediately in the June 30, 2022 valuation, the average employer contribution rate in last year's valuation would have increased from 18.23% to 20.82% of payroll.

11. The footnote on page 23 shows that under the asset smoothing method the $62.5 million in net deferred losses will be recognized in the next four and a half years, but in a very non-level (uneven) pattern. In particular, there will be gains of $80.3 million and $45.8 million recognized in the next two years, followed by offsetting losses of $129.0 million and $95.4 million in the two years after that, followed by one final year of gains of $35.8 million, so as to ultimately recognize all of the current total net deferred losses of $62.5 million. This means that, absent any new gains or losses in the future, there will be two years of decreases in the employer contribution rate followed by two years of increases followed by a year of decreases before the $62.5 million in net deferred losses are fully recognized.

    In keeping with model actuarial practice for this situation as well as Section II, Item 5b of the Board's Actuarial Funding Policy, and similar to what was proposed and adopted for the June 30, 2012 valuation, the asset smoothing method could be modified, effective July 1, 2024, by combining the net deferred loss of $62.5 million from the current valuation into a single four and a half year smoothing "layer" and thereby recognizing that loss over the next four and a half years in four level amounts of approximately $13.9 million in each year with an additional amount of $6.9 million in the next half year. This would reduce the volatility associated with the current pattern of deferred gain/loss recognition and thereby result in both more stable funded ratios (on a valuation value basis) and more level employer contribution rates.

    This change would have no impact on the current June 30, 2023 valuation results as the total amount of unrecognized losses as of June 30, 2023 would remain unchanged. Additionally, we recommend using a four and a half year smoothing period for the combined deferred losses as that will complete the recognition of the net deferred loss over the same period as under the current separate smoothing layers. We can provide more details of this policy option as requested.

12. On July 30, 2020, the California Supreme Court issued a decision in the Alameda County Deputy Sheriffs' Assn. et al. v. Alameda County Employees' Retirement Assn. litigation that clarified what should be considered compensation earnable for non-PEPRA members and pensionable compensation for PEPRA members. In response, the Board adopted a series of Resolutions to implement certain aspects of the Alameda Decision. The October 2020 Resolution set forth exclusions from compensation earnable and pensionable compensation consisting of payment for services outside of normal working hours (e.g., standby and call-back pay), excess leave cash-outs beyond what is both earned and payable in each 12-month period, and leave donations which are an "in-kind" benefit. The July 2021 Resolution limited inclusion of flexible benefit plan allowances, or "flex credit," to the "employee-only" rate for labor agreements that provide tiered rates for healthcare coverage, subject to further modification based on pending legislation concerning flex credit. Following the subsequent veto of such legislation, the Board adopted a Resolution in April of 2023, excluding from compensation earnable flex credit amounts in excess of what all members in a bargaining group may receive in unrestricted cash, which are deemed "in-kind" benefits. As discussed with VCERA staff, the effect of the Alameda Decision will be reflected as gains and losses as issues are settled and corrections are made to the membership data provided for each valuation. In addition, any

additional impact on the UAAL related to recovery of benefits and/or refunds of member contributions previously paid in conjunction with these pay items has not been reflected in this valuation but will be reflected in future valuations once it is known.

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13. The Actuarial Standards Board approved Actuarial Standard of Practice No. 51 (ASOP 51) regarding risk assessment, which was first effective with VCERA's June 30, 2019 actuarial valuation. ASOP 51 requires actuaries to identify and assess risks that "may reasonably be anticipated to significantly affect the plan's future financial condition". Examples of key risks listed that are particularly relevant to VCERA are asset/liability mismatch risk, investment risk, and longevity risk. The standard also requires an actuary to consider if there is any ongoing contribution risk to the plan, however it does not require the actuary to evaluate the particular ability or willingness of contributing entities to make contributions when due, nor does it require the actuary to assess the likelihood or consequences of future changes in applicable law.

    The actuary's initial assessment can be strictly a qualitative discussion about potential adverse experience and the possible effect on future results, but it may also include quantitative numerical demonstrations where informative. The actuary is also encouraged to consider a recommendation as to whether a more detailed assessment or risk report would be significantly beneficial for the intended user in order to examine particular financial risks. When making that recommendation, the actuary will take into account such factors as the plan's design, risk profile, maturity, size, funded status, asset allocation, cash flow, possible insolvency and current market conditions.

    Because the actuarial valuation results are dependent on a fixed set of assumptions and data as of a specific date, there is risk that emerging results may differ, perhaps significantly, as actual experience is fluid and will not exactly track current assumptions. This potential divergence may have a significant impact on the future financial condition of the plan. We have not been engaged to perform a detailed analysis of the potential range of the impact of risk relative to the Association's future financial condition, but have included a brief discussion of key risks that may affect the Association in *Section 2, Subsection J*. A more detailed assessment of the risks tailored to specific interests or concerns of the Board would provide the Board with a better understanding of the inherent risks. This assessment would further discuss and highlight information and risks particular to VCERA such as detailed historical experience and key events, growing plan maturity, heightened contribution sensitivity to asset and liability changes, and projected sensitivity to potential future investment returns through selected scenario or stress test projections.

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    Note that this year the risk assessment section includes the disclosure of a "Low-Default-Risk Obligation Measure" (LDROM). This disclosure, along with commentary on the significance of the LDROM, is a new requirement under Actuarial Standard of Practice No. 4 (ASOP 4) for all pension funding actuarial valuation reports.

14. Segal strongly recommends an actuarial funding policy that targets 100% funding of the Actuarial Accrued Liability. Generally, this implies payments that are ultimately at least enough to cover Normal Cost, interest on the UAAL and the principal balance. The funding policy adopted by the Board as described in *Section 4, Exhibit 1* meets this standard.

15. This report constitutes an actuarial valuation for the purpose of determining the actuarially determined contribution (ADC) under the plan's funding policy and measuring the progress of that funding policy. The Net Pension Liability (NPL) and Pension Expense under

Governmental Accounting Standards Board (GASB) Statements No. 67 and No. 68, for inclusion in the plan and employer's financial statements as of June 30, 2023, will be provided separately. The accounting disclosures will utilize different methodologies from those employed in the funding valuation, as required by the GASB. However, the ADC in this valuation is expected to be used as the ADC for GASB financial reporting.

16. It is important to note that this actuarial valuation is based on plan assets as of June 30, 2023. The plan's funded status does not reflect short-term fluctuations of the market, but rather is based on the market values on the last day of the plan year. Moreover, this actuarial valuation does not include any possible short-term or long-term impacts on mortality of the covered population that may emerge after June 30, 2023 due to COVID-19. Segal is available to prepare projections of potential outcomes of market conditions and other demographic experience upon request.

Summary of Key Valuation Results

		June 30, 2023		June 30, 2022	
		Total Rate	Estimated Annual Dollar Amount[1] ($ in '000s)	Total Rate	Estimated Annual Dollar Amount[1] ($ in '000s)
Employer Contribution Rates:[2]	• General Tier 1	20.30%	$278	22.64%	$397
	• General Tier 2	11.01%	18,464	10.91%	21,549
	• General PEPRA Tier 2	11.05%	12,342	10.92%	14,084
	• General Tier 2 w/ COLA[3]	16.89%	34,643	17.91%	32,088
	• General PEPRA Tier 2 w/ COLA[3]	16.84%	41,833	17.84%	30,183
	• General Combined	14.64%	107,560	14.53%	98,301
	• Safety	33.11%	46,093	31.74%	45,381
	• Safety PEPRA	31.03%	20,956	29.04%	15,530
	• Safety Combined	32.43%	67,049	31.00%	60,911
	All Categories Combined	**18.56%**	**$174,609**	**18.23%**	**$159,212**
Average Member Contribution Rates:[2,4,5]	• General Tier 1	11.83%	$162	12.21%	$214
	• General Tier 2	7.70%	12,913	7.72%	15,248
	• General PEPRA Tier 2	7.74%	8,645	7.73%	9,970
	• General Tier 2 w/ COLA[3]	10.33%	21,188	10.35%	18,543
	• General PEPRA Tier 2 w/ COLA[3]	10.37%	25,761	10.36%	17,528
	• Safety	15.76%	21,940	15.27%	21,833
	• Safety PEPRA	15.70%	10,603	15.41%	8,241
	All Categories Combined	**10.76%**	**$101,212**	**10.49%**	**$91,577**

1 Based on projected compensation for each year.
2 Before reflection of any member rate that may be "picked-up" by the employer. Contributions are assumed to be paid throughout the year.
3 Throughout this report, this category represents those Tier 2 members who contribute a negotiated 2.63% of compensation for a fixed 2% COLA pursuant to Government Code 31627 that applies to service after March 2003 for SEIU members and July 2023 for CNA members.
4 The non-refundability factors are 1.00 for General Tier 1, Tier 2 (non-PEPRA) and Safety (non-PEPRA) for both June 30, 2023 and June 30, 2022.
5 Average member contribution rates for non-PEPRA tiers as shown in this exhibit are after reflecting the impact of the cessation of member contributions after 30 years of service. Individual member rates can be found in *Section 4, Exhibit 3*.

Summary of Key Valuation Results (continued)

		June 30, 2023 ($ in '000s)	June 30, 2022 ($ in '000s)
Actuarial Accrued Liability as of June 30:	• Retired members and beneficiaries	$4,640,127	$4,399,379
	• Inactive vested members[1]	250,638	234,807
	• Active members	2,980,036	2,857,141
	• Total Actuarial Accrued Liability	$7,870,801	$7,491,327
	• Normal Cost for plan year beginning June 30	$196,440	$180,302
Assets as of June 30:	• Market Value of Assets (MVA)	$7,578,238	$7,025,332
	• Valuation Value of Assets (VVA)[2]	7,640,705	7,279,606
Funded status as of June 30:	• Unfunded Actuarial Accrued Liability on Market Value of Assets basis	$292,563	$465,995
	• Funded percentage on MVA basis	96.28%	93.78%
	• Unfunded Actuarial Accrued Liability on Valuation Value of Assets basis	$230,096	$211,721
	• Funded percentage on VVA basis	97.08%	97.17%
Key assumptions:	• Net investment return	7.00%	7.00%
	• Price inflation	2.50%	2.50%
	• Payroll growth increase	3.00%	3.00%
	• Cost of living adjustments		
	– Tiers with 3.00% COLA	2.75%	2.75%
	– Tiers with fixed 2.00% COLA	2.00%	2.00%
	– Tiers without COLA	0.00%	0.00%
	• Amortization period on VVA basis[3]	15	15

1 Includes inactive members with member contributions on deposit.
2 Excludes non-valuation reserves.
3 Changes in UAAL as a result of gains or losses and changes in plan provisions for each valuation are amortized over separate 15-year periods while changes in UAAL as a result of changes in actuarial assumptions or methods are amortized over separate 20-year periods. Details of the funding policy are provided in *Section 4, Exhibit 1*.

Summary of Key Valuation Results (continued)

		June 30, 2023	June 30, 2022	Change From Prior Year
Demographic data as of June 30:	**Active Members:**			
	• Number of members	9,384	9,077	3.4%
	• Average age	44.2	44.5	-0.3
	• Average service	10.5	10.8	-0.3
	• Total projected compensation	$941,042,109	$873,042,611	7.8%
	• Average projected compensation	$100,282	$96,182	4.3%
	Retired Members and Beneficiaries:			
	• Number of members:			
	• Service retired	6,278	6,067	3.5%
	• Disability retired	809	801	1.0%
	• Beneficiaries	1,170	1,139	2.7%
	• Total	8,257	8,007	3.1%
	• Average age	71.3	71.1	0.2
	• Average monthly benefit	$3,758	$3,653	2.9%
	Inactive Vested Members:			
	• Number of members[1]	4,085	3,812	7.2%
	• Average age	45.6	45.7	-0.1
	Total Members:	21,726	20,896	4.0%

[1] Includes inactive members with member contributions on deposit.

Important Information About Actuarial Valuations

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

In order to prepare a valuation, Segal relies on a number of input items. These include:

Plan Provisions	Plan provisions define the rules that will be used to determine benefit payments, and those rules, or the interpretation of them, may change over time. Even where they appear precise, outside factors may change how they operate. It is important to keep Segal informed with respect to plan provisions and administrative procedures, and to review the plan summary included in our report to confirm that Segal has correctly interpreted the plan of benefits.
Participant Information	An actuarial valuation for a plan is based on data provided to the actuary by the Association. Segal does not audit such data for completeness or accuracy, other than reviewing it for obvious inconsistencies compared to prior data and other information that appears unreasonable. It is important for Segal to receive the best possible data and to be informed about any known incomplete or inaccurate data.
Financial Information	The valuation is based on the Market Value of Assets as of the valuation date, as provided by the Association. The Association uses a “Valuation Value of Assets” that differs from market value to gradually reflect six-month changes in the Market Value of Assets in determining the contribution requirements.
Actuarial Assumptions	In preparing an actuarial valuation, Segal starts by developing a forecast of the benefits to be paid to existing plan participants for the rest of their lives and the lives of their beneficiaries. This requires actuarial assumptions as to the probability of death, disability, withdrawal, and retirement of participants in each year, as well as forecasts of the plan’s benefits for each of those events. In addition, the benefits forecasted for each of those events in each future year reflect actuarial assumptions as to salary increases and cost-of-living adjustments (if any). The forecasted benefits are then discounted to a present value, typically based on an estimate of the rate of return that will be achieved on the plan’s assets. All of these factors are uncertain and unknowable. Thus, there will be a range of reasonable assumptions, and the results may vary materially based on which assumptions are selected within that range. That is, there is no right answer (except with hindsight). It is important for any user of an actuarial valuation to understand and accept this constraint. The actuarial model may use approximations and estimates that will have an immaterial impact on our results. In addition, the actuarial assumptions may change over time, and while this can have a significant impact on the reported results, it does not mean that the previous assumptions or results were unreasonable or wrong.
Models	Segal valuation results are based on proprietary actuarial modeling software. The actuarial valuation models generate a comprehensive set of liability and cost calculations that are presented to meet regulatory, legislative and client requirements. Our Actuarial Technology and Systems unit, comprised of both actuaries and programmers, is responsible for the initial development and maintenance of these models. The models have a modular structure that allows for a high degree of accuracy, flexibility and user control. The client team programs the assumptions and the plan provisions, validates the models, and reviews test lives and results, under the supervision of the responsible actuary.

Section 1: Actuarial Valuation Summary

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

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

An actuarial valuation is a measurement at a specific date – it is not a prediction of a plan's future financial condition. Accordingly, except where otherwise noted, Segal did not perform an analysis of the potential range of future financial measures. The actual long-term cost of the plan will be determined by the actual benefits and expenses paid and the actual investment experience of the plan. Future contribution requirements may differ from those determined in the valuation because of:

- Differences between actual experience and anticipated experience;
- Changes in actuarial assumptions or methods;
- Changes in statutory provisions; and
- Differences between the contribution rates determined by the valuation and those adopted by the Board of Retirement.[1]

Some actuarial results in this report are not rounded, but that does not imply precision.

If the Association is aware of any event or trend that was not considered in this valuation that may materially change the results of the valuation, Segal should be advised, so that we can evaluate it.

Segal does not provide investment, legal, accounting, or tax advice. Segal's valuation is based on our understanding of applicable guidance in these areas and of the plan's provisions, but they may be subject to alternative interpretations. The Association should look to their other advisors for expertise in these areas.

While Segal maintains extensive quality assurance procedures, an actuarial valuation involves complex computer models and numerous inputs. In the event that an inaccuracy is discovered after presentation of Segal's valuation, Segal may revise that valuation or make an appropriate adjustment in the next valuation.

Segal's report shall be deemed to be final and accepted by the Association upon delivery and review. The Association should notify Segal immediately of any questions or concerns about the final content.

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

[1] VCERA has a proven track record of adopting the Actuarially Determined Contributions as determined by the valuation and based on the Board's Actuarial Funding Policy.

Section 2: Actuarial Valuation Results

A. Member Data

The Actuarial Valuation and Review considers the number and demographic characteristics of covered members, including active members, inactive vested members, retired members and beneficiaries.

This section presents a summary of significant statistical data on these member groups.

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

Member Population: 2014 – 2023

Year Ended June 30	Active Members	Inactive Vested Members[1]	Retired Members and Beneficiaries	Total Non-Actives	Ratio of Non-Actives to Actives	Ratio of Retired Members and Beneficiaries to Actives
2014	8,210	2,339	6,121	8,460	1.03	0.75
2015	8,299	2,441	6,338	8,779	1.06	0.76
2016	8,509	2,639	6,539	9,178	1.08	0.77
2017	8,636	2,809	6,766	9,575	1.11	0.78
2018	8,611	2,909	7,038	9,947	1.16	0.82
2019	8,696	3,041	7,280	10,321	1.19	0.84
2020	8,644	3,218	7,521	10,739	1.24	0.87
2021	8,491	3,491	7,751	11,242	1.32	0.91
2022	9,077	3,812	8,007	11,819	1.30	0.88
2023	9,384	4,085	8,257	12,342	1.32	0.88

[1] Includes inactive members with member contributions on deposit.

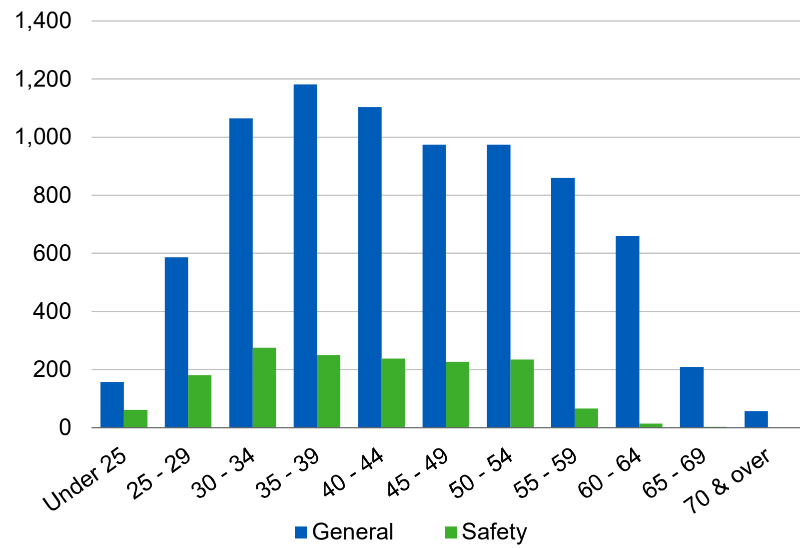
Active Members

Plan costs are affected by the age, years of service and compensation of active members. In this year's valuation, there were 9,384 active members with an average age of 44.2, average years of service of 10.5 years and average compensation of $100,282. The 9,077 active members in the prior valuation had an average age of 44.5, average service of 10.8 years and average compensation of $96,182.

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

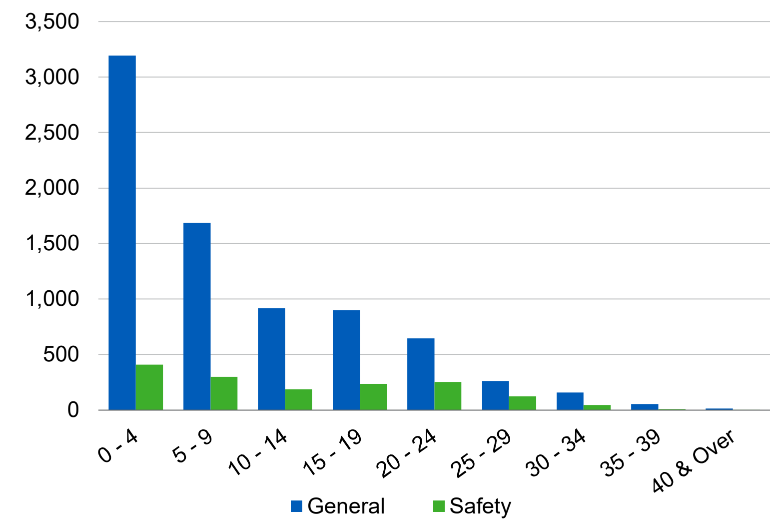
Distribution of Active Members as of June 30, 2023

Actives by Age



Average age	44.2
Prior year average age	44.5
Difference	(0.3)

Actives by Years of Service



Average years of service	10.5
Prior year average years of service	10.8
Difference	(0.3)

Inactive Members

In this year's valuation, there were 4,085 members with a vested right to a deferred or immediate vested benefit or entitled to a return of their member contributions versus 3,812 in the prior valuation.

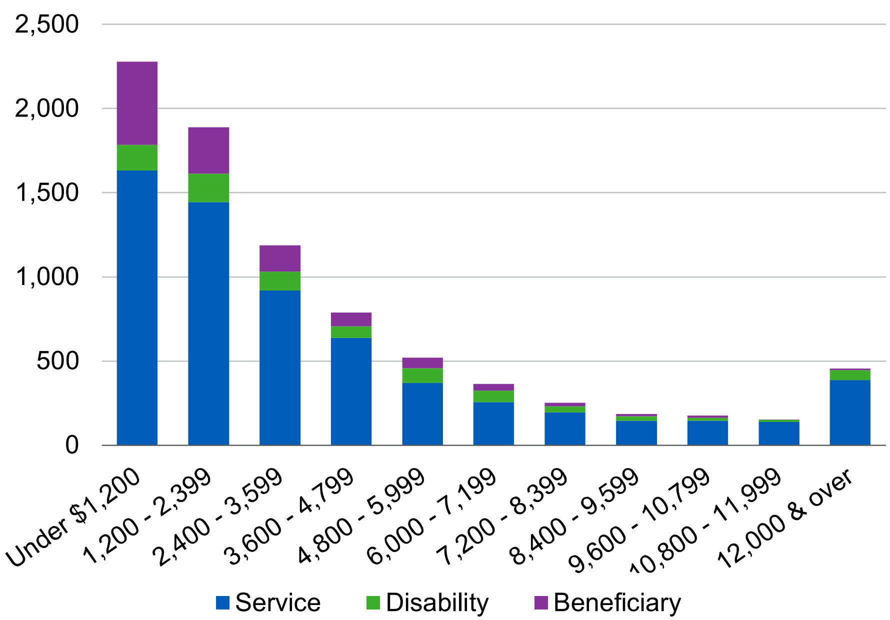
Retired Members and Beneficiaries

As of June 30, 2023, 7,087 retired members and 1,170 beneficiaries were receiving total monthly benefits of $31,028,363. For comparison, in the previous valuation, there were 6,868 retired members and 1,139 beneficiaries receiving total monthly benefits of $29,249,724. These monthly benefits exclude any benefits for vested fixed supplemental and non-vested supplemental benefit amounts.

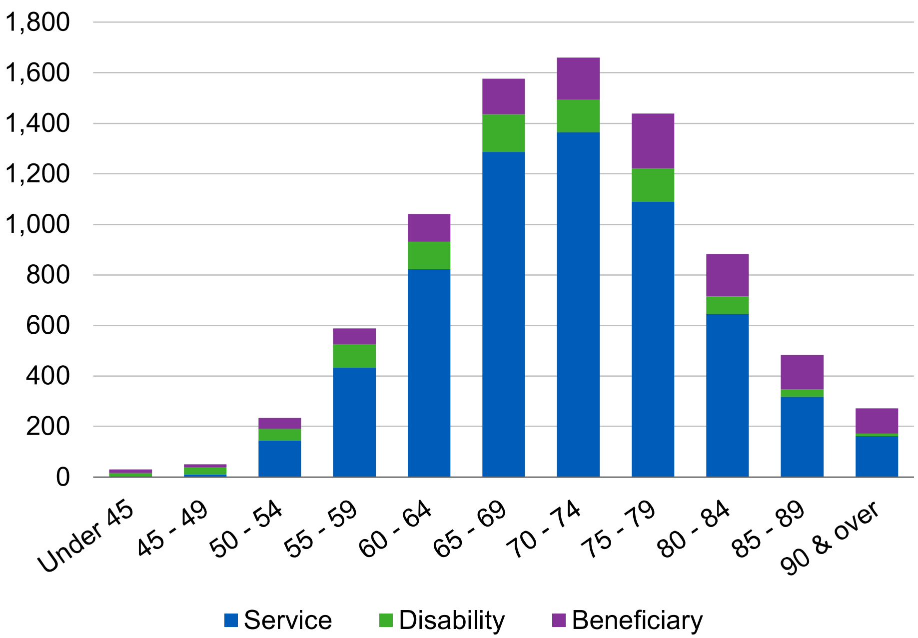
As of June 30, 2023, the average monthly benefit for retired members and beneficiaries is $3,758, compared to $3,653 in the previous valuation. The average age for retired members and beneficiaries is 71.3 in the current valuation, compared with 71.1 in the prior valuation.

Distribution of Retired Members and Beneficiaries as of June 30, 2023

Retired Members and Beneficiaries by Type and Monthly Amount



Retired Members and Beneficiaries by Type and Age



Historical Plan Population

The chart below demonstrates the progression of the active population over the last ten years. The chart also shows the growth among the retired population over the same time period.

Member Data Statistics: 2014 – 2023

	Active Members			Retired Members and Beneficiaries		
Year Ended June 30	Count	Average Age	Average Service	Count	Average Age	Average Monthly Amount
2014	8,210	45.3	11.2	6,121	69.4	$2,897
2015	8,299	45.2	11.2	6,338	69.6	2,936
2016	8,509	45.0	11.2	6,539	69.8	3,024
2017	8,636	45.0	11.2	6,766	70.2	3,108
2018	8,611	44.9	11.3	7,038	70.3	3,230
2019	8,696	44.9	11.3	7,280	70.5	3,329
2020	8,644	44.9	11.4	7,521	70.7	3,423
2021	8,491	45.0	11.6	7,751	70.9	3,512
2022	9,077	44.5	10.8	8,007	71.1	3,653
2023	9,384	44.2	10.5	8,257	71.3	3,758

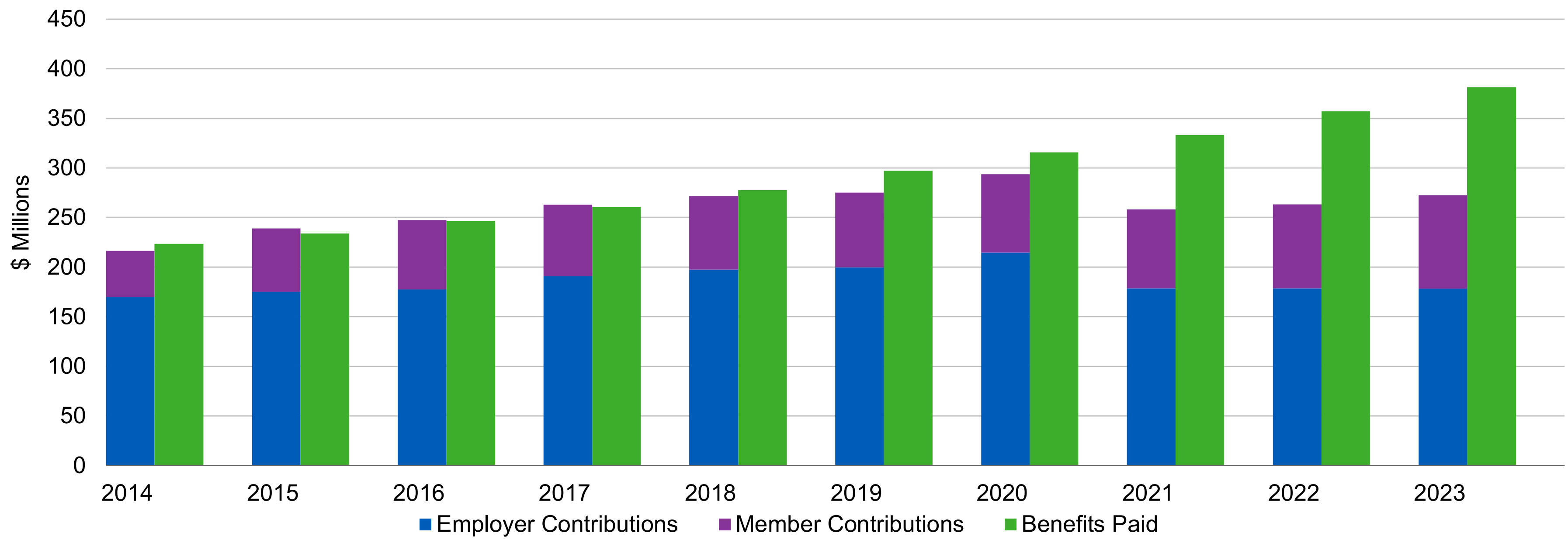
B. Financial Information

Retirement plan funding anticipates that, over the long term, both contributions and investment earnings (less investment fees and administrative expenses) will be needed to cover benefit payments. Retirement plan assets change as a result of the net impact of these income and expense components.

Additional financial information, including a summary of transactions for the valuation year, is presented in *Section 3, Exhibits D, E, F* and *G*.

It is desirable to have level and predictable plan costs from one year to the next. For this reason, the Board has approved an asset valuation method that gradually adjusts to market value. Under this valuation method, the full value of market fluctuations is not recognized in a single year and, as a result, the valuation asset value and the plan costs are more stable. The amount of the adjustment to recognize market value is treated as income, which may be positive or negative. Realized and unrealized gains and losses are treated equally and, therefore, the sale of assets has no immediate effect on the actuarial value.

Comparison of Contributions Made with Benefits for Years Ended June 30, 2014 – 2023



Determination of Actuarial Value of Assets for Year Ended June 30, 2023

		Actual Return	Expected Return	Investment Gain/Loss	Percent Deferred	Unrecognized Amount[1]
1	**Market Value of Assets**					**$7,578,237,848**
2	Calculation of unrecognized return					
	a. Six months ended June 30, 2018	$38,736,481	$200,860,519	$(162,124,038)	0%	$0
	b. Six months ended December 31, 2018	(247,595,921)	201,992,652	(449,588,573)	0	0
	c. Six months ended June 30, 2019	608,522,342	192,294,765	416,227,577	10	41,622,758
	d. Six months ended December 31, 2019	363,251,754	207,517,685	155,734,069	20	31,146,814
	e. Six months ended June 30, 2020	(161,966,237)	220,290,552	(382,256,789)	30	(114,677,037)
	f. Six months ended December 31, 2020	963,486,000	213,744,479	749,741,521	40	299,896,608
	g. Six months ended June 30, 2021	877,898,342	247,317,215	630,581,127	50	315,290,563
	h. Six months ended December 31, 2021	443,525,133	277,610,478	165,914,655	60	99,548,793
	i. Six months ended June 30, 2022	(1,006,035,394)	291,989,759	(1,298,025,153)	70	(908,617,607)
	j. Six months ended December 31, 2022	59,053,538	244,852,200	(185,798,662)	80	(148,638,929)
	k. Six months ended June 30, 2023	602,682,492	245,014,538	357,667,954	90	321,901,159
	l. Total unrecognized return[2]					$(62,526,878)
3	**Actuarial Value of Assets 1 - 2l**					**$7,640,764,726**
4	Actuarial Value of Assets as a percentage of Market Value of Assets **3 / 1**					100.8%
5	Non-valuation reserves:					
	a. Non-vested Supplemental Benefit					$59,768
	b. Statutory Contingency					0
	c. Subtotal					$59,768
6	**Valuation Value of Assets 3 – 5c**					**$7,640,704,958**

Note: Results may be slightly off due to rounding

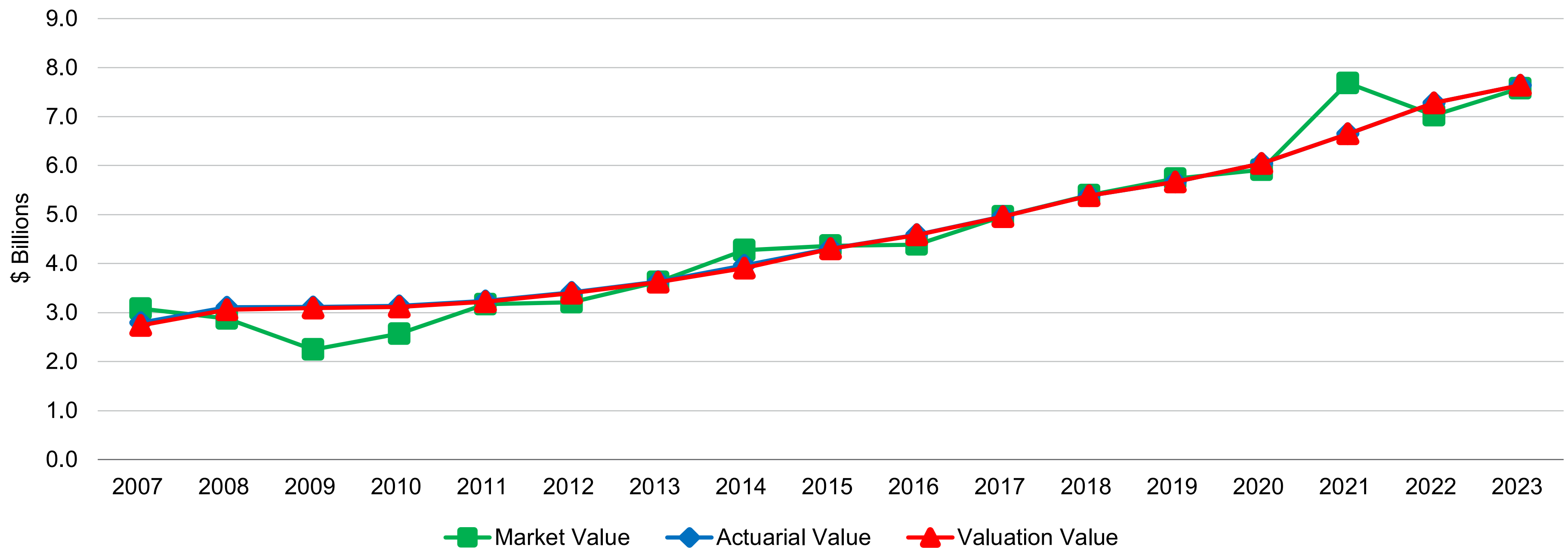
[1] Recognition at 10% per six-month period over 5 years.
[2] Deferred return as of June 30, 2023 recognized in each of the next five years:

a.	Amount recognized on June 30, 2024	$80,334,502
b.	Amount recognized on June 30, 2025	45,790,610
c.	Amount recognized on June 30, 2026	(128,990,128)
d.	Amount recognized on June 30, 2027	(95,428,657)
e.	Amount recognized on June 30, 2028	35,766,795
f.	Subtotal	$(62,526,878)

Section 2: Actuarial Valuation Results

The Market Value, Actuarial Value and Valuation Value of Assets are representations of the plan's financial status. As investment gains and losses are gradually taken into account, the Actuarial Value of Assets tracks the Market Value of Assets. The Valuation Value of Assets is the actuarial value, excluding any non-valuation reserves. The Valuation Value of Assets is significant because the plan's liabilities are compared to these assets to determine what portion, if any, remains unfunded. Amortization of the Unfunded Actuarial Accrued Liability is an important element in determining the contribution requirement.

Market Value, Actuarial Value, and Valuation Value of Assets as of June 30, 2007 – 2023



Allocation of Valuation Value of Assets as of June 30, 2023

		Allocated Assets for Funding			
		General Tier 1	General Tier 2	Safety	Total
1	**Allocated Assets as of Beginning of Plan Year**	**$232,537,221**	**$3,721,705,149**	**$3,325,363,470**	**$7,279,605,840**
2	Member Contributions	143,049	60,402,887	30,536,113	91,082,049
3	Member Buybacks	43,744	1,458,635	511,309	2,013,688
4	Employer Pick-up Contributions Credited to Member Account	16,498	861,798	0	878,296
5	Employer Contributions	419,389	113,496,579	64,616,384	178,532,352
6	Refunds of Member Contributions and Death Benefits Paid	285,796	7,479,525	928,806	8,694,127
7	Retiree Benefit Payments Excluding Non-vested Supplemental Payments	81,470,546	138,557,018	152,612,660	372,640,224
8	Subtotal (Items 1 + 2 + 3 + 4 + 5 – 6 – 7)	$151,403,559	$3,751,888,505	$3,267,485,810	$7,170,777,874
9	Weighted Average Fund Balance: Item 1 + ½ of (Items 2, 3, 4, 5) – ½ of (Items 6, 7)	191,970,390	3,736,796,827	3,296,424,640	7,225,191,857
10	Earnings Allocated in Proportion to Item 9	12,485,770	243,041,579	214,399,735	469,927,084
11	**Valuation Value of Assets (Items 8 + 10)**	**$163,889,329**	**$3,994,930,084**	**$3,481,885,545**	**$7,640,704,958**

Note: Results may not total due to rounding.

C. Actuarial Experience

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

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

If assumptions are changed, the contribution requirement is adjusted to take into account a change in experience anticipated for all future years. There are no changes in actuarial assumptions reflected in this valuation.

The net total loss is $73.2 million, which includes $35.8 million from investment losses, a gain of $22.5 million from contribution experience and $59.9 million in losses from all other sources. The net experience variation from individual sources other than investments and contributions was 0.8% of the Actuarial Accrued Liability. A discussion of the major components of the actuarial experience is on the following pages.

Actuarial Experience for Year Ended June 30, 2023

1	Net loss from investments[1]	$35,836,000
2	Net gain from contribution experience	(22,465,000)
3	Net loss from other experience[2]	59,850,000
4	**Net experience loss: 1 + 2 + 3**	**$73,221,000**

[1] Details on next page.
[2] See *Section 2, Subsection E* for further details. Does not include the effect of plan or assumption changes, if any, but does include the effect of two minor technical actuarial refinements discussed on page 8.

Investment Experience

A major component of projected asset growth is the assumed rate of return. The assumed return should represent the expected long-term rate of return, based on the plan's investment policy. The rate of return on the Market Value of Assets was 9.49% for the year ended June 30, 2023.

For valuation purposes, the assumed rate of return on the Valuation Value of Assets is 7.00%. The actual rate of return on a valuation basis for the 2022-2023 plan year was 6.50%. Because the actual return for the year was less than the assumed return, the plan experienced an actuarial loss during the year ended June 30, 2023 with regard to its investments.

Investment Experience for Year Ended June 30, 2023

		Market Value	Actuarial Value	Valuation Value
1	Net investment income	$661,736,030	$469,927,084	$469,927,084
2	Average value of assets	6,970,917,105	7,225,252,929	7,225,191,857
3	Rate of return: **1 ÷ 2**	9.49%	6.50%	6.50%
4	Assumed rate of return	7.00%	7.00%	7.00%
5	Expected investment income: **2 x 4**	$487,964,197	$505,767,705	$505,763,430
6	**Actuarial gain/(loss): 1 - 5**	**$173,771,833**	**$(35,840,621)**	**$(35,836,346)**

Section 2: Actuarial Valuation Results

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

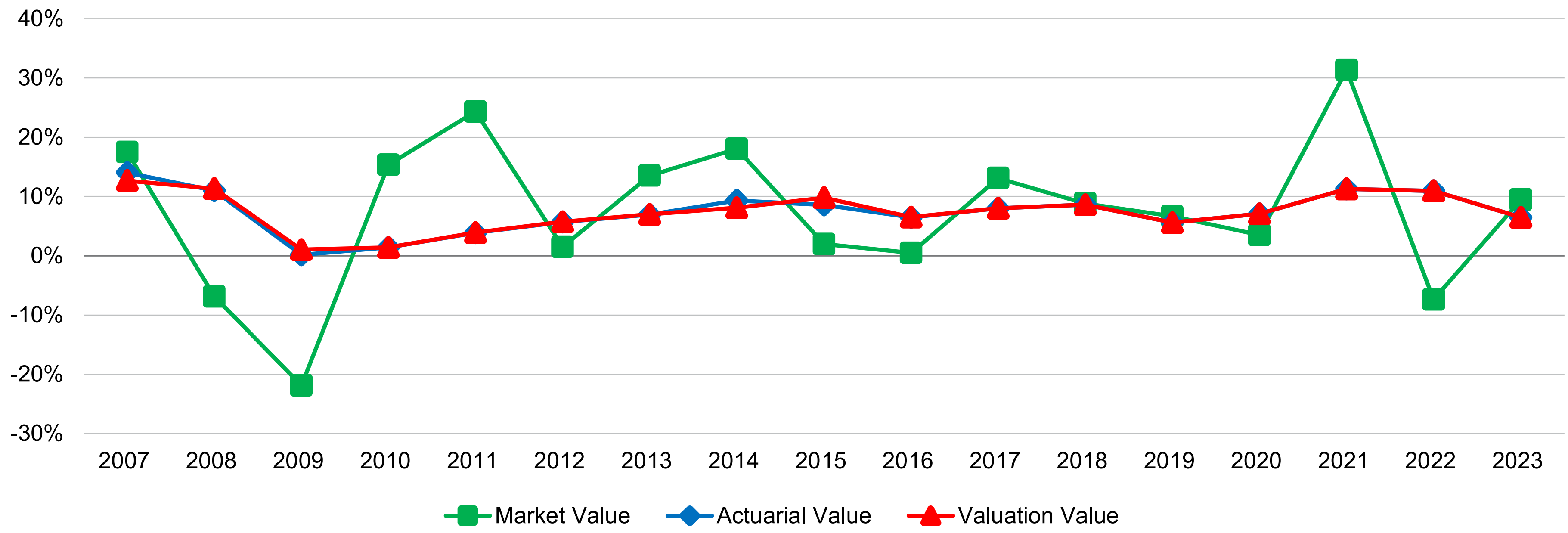
Investment Return – Market Value, Actuarial Value and Valuation Value: 2014 – 2023

	Market Value Investment Return[1]		Actuarial Value Investment Return[1]		Valuation Value Investment Return[1]	
Year Ended June 30	**Amount**	**Percent**	**Amount**	**Percent**	**Amount**	**Percent**
2014	$654,535,161	18.06%	$338,343,729	9.32%	$294,307,214	8.13%
2015	84,826,216	1.98%	341,233,326	8.60%	384,442,119	9.82%
2016	21,265,100	0.49%	280,531,179	6.51%	280,531,179	6.52%
2017	575,001,597	13.10%	368,806,019	8.03%	368,806,019	8.04%
2018	438,207,040	8.83%	427,484,168	8.62%	427,484,169	8.62%
2019	360,926,420	6.70%	301,492,986	5.61%	301,492,986	5.61%
2020	201,285,517	3.52%	401,285,288	7.10%	401,285,287	7.10%
2021	1,841,384,342	31.33%	678,799,332	11.30%	678,799,332	11.30%
2022	(562,510,261)	(7.37%)	725,160,862	10.99%	725,160,862	10.99%
2023	661,736,030	9.49%	469,927,084	6.50%	469,927,084	6.50%
Most recent five-year geometric average return		**8.03%**		**8.27%**		**8.27%**
Most recent ten-year geometric average return		**8.16%**		**8.24%**		**8.25%**

[1] Net of administrative and investment expenses.

Section 2, Subsection B described the actuarial asset valuation method that gradually recognizes fluctuations in the market value rate of return. The goal of this is to stabilize the actuarial rate of return and to produce more level pension plan costs.

Market, Actuarial and Valuation Rates of Return for Years Ended June 30, 2007 – 2023



Contributions

Contributions for the year ended June 30, 2023 totaled $272.5 million, compared to the projected amount of $250.8 million. This resulted in a gain of $22.5 million from contribution experience for the year, when adjusted for timing.

Non-Investment Experience

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

- the extent of turnover among participants,
- retirement experience (earlier or later than projected),
- mortality (more or fewer deaths than projected),
- the number of disability retirements (more or fewer than projected),
- salary increases (greater or smaller than projected), and
- cost-of-living adjustments (COLAs) higher or lower than anticipated.

The net loss from this other experience for the year ended June 30, 2023 amounted to $59.9 million, which is 0.8% of the Actuarial Accrued Liability. See *Section 2, Subsection E* for a detailed development of the Unfunded Actuarial Accrued Liability.

D. Other Changes in the Actuarial Accrued Liability

The Actuarial Accrued Liability as of June 30, 2023 is $7.9 billion, an increase of $0.4 billion, or 5.1%, from the Actuarial Accrued Liability as of the prior valuation date. The liability is expected to grow each year with Normal Cost and interest, and to decline due to benefit payments made. Additional fluctuations can occur due to actual experience that differs from expected (as discussed in the previous subsection).

This valuation reflects two minor actuarial refinements as follows:

a. applying beginning of year timing of decrements for exiting from active membership status in calculating the normal cost rate; and
b. aligning projected salary in current life and replacement life when calculating normal cost rates for active members.

The refinements resulted in a one-time net decrease of 0.18% in the average employer rate and a one-time net increase of 0.07% in the average member contribution rate.[1]

Actuarial Assumptions and Methods

There were no changes in actuarial assumptions or methods since the prior valuation.

Details on actuarial assumptions and methods are in *Section 4, Exhibit 1*.

Plan Provisions

A fixed 2% COLA for General Tier 2 future service earned effective July 1, 2023 has been adopted for active members in the California Nurses Association (CNA). This plan provision change increased the UAAL by $3.0 million. The average employer contribution rate increase as a result of this plan provision change was 0.10% of payroll and the average member contribution rate increase was 0.24% of payroll.[2] Note that this valuation report shows the General COLA UAAL contribution rates on a combined basis for all General Tiers that have a COLA, and the General Tier 2 COLA Normal Cost contribution rates on a combined basis for Service Employees International Union (SEIU) and CNA. Segal will provide a stand-alone letter that calculates the separate contribution rates to be payable for each of the General Tiers at a later date.

A summary of plan provisions is in *Section 4, Exhibit 2*.

1 There was an increase in the average member contribution rate when the rates are composited on salaries after applying beginning of year decrements even though the individual member contribution rates decreased for most of the groups as a result of this refinement.
2 The plan provision change only affects the member contribution rate for CNA members. The increase for CNA members was 2.63% of payroll.

E. Development of Unfunded Actuarial Accrued Liability

Development for Year Ended June 30, 2023 ($ in '000s)

1	**Unfunded Actuarial Accrued Liability at beginning of year**		**$211,721**
2	Total Normal Cost at middle of year		180,302
3	Expected employer and member contributions		(250,789)
4	Interest		12,615
5	Expected Unfunded Actuarial Accrued Liability		$153,849
6	Changes due to:		
	a. Investment return less than expected (after "smoothing")	$35,836	
	b. Actual contributions greater than expected	(22,465)	
	c. COLA increases greater than expected	13,416	
	d. Individual salary increases greater than expected	69,530	
	e. Other experience gains[1]	(23,096)	
	f. Fixed 2% COLA for General Tier 2 future service for CNA members	3,026	
	Total changes		$76,247
7	**Unfunded Actuarial Accrued Liability at end of year**		**$230,096**

Note: The sum of items 6c through 6e equals the "Net loss from other experience" shown in *Section 2, Subsection C*.

[1] Other differences in actual versus expected experience including (but not limited to) retirement, mortality, disability, termination and in-service redemption experience. This also includes the effect of two minor technical actuarial refinements discussed on the prior page that reduced the UAAL by $19.3 million.

F. Recommended Contribution

The recommended contribution is equal to the employer Normal Cost payment and a payment on the Unfunded Actuarial Accrued Liability. As of June 30, 2023, the average recommended employer contribution is 18.56% of compensation.

The Board sets the funding policy used to calculate the recommended contribution based on layered 15-year amortization periods for gains or losses and plan amendments (20-year periods for changes in actuarial assumptions or methods) as a level percentage of payroll. See *Section 4, Exhibit 1* for further details on the funding policy. Based on this policy, there is no negative amortization and each amortization layer is fully funded in 15 years (20 years for changes in actuarial assumptions or methods). As shown in the graphical projection of the UAAL amortization balances and payments found in *Section 3, Exhibit I*, before taking into consideration the deferred investment gains/losses that will be recognized in the next several valuations, the UAAL of the Plan is expected to be fully amortized by 2041, assuming all assumptions are realized and contribution are made in accordance with the funding policy.

The contribution requirement as of June 30, 2023 is based on the data previously described, the actuarial assumptions and Plan provisions described in *Section 4*, including all changes affecting future costs adopted at the time of the actuarial valuation, actuarial gains and losses, and changes in the actuarial assumptions.

The current funding policy is intended to fully fund the cost of the benefits and to allocate the cost of benefits reasonably and equitably over time while minimizing the volatility of employer contributions. The recommended contribution is expected to remain level as a percent of payroll, except when any current amortization layer is fully amortized, assuming there are no future actuarial gains or losses. Furthermore, the funded ratio is expected to increase as the UAAL is methodically funded by employer contributions.

Average Recommended Employer Contribution for Year Ended June 30

	All Tiers Combined	2023 Amount ($ in '000s)	2023 % of Projected Compensation	2022 Amount ($ in '000s)	2022 % of Projected Compensation
1	Total Normal Cost	$196,440	20.88%	$180,302	20.65%
2	Expected member Normal Cost contributions	101,212	10.76%	91,577	10.49%
3	Employer Normal Cost: **1 - 2**	$95,228	10.12%	$88,725	10.16%
4	Actuarial Accrued Liability	7,870,801		7,491,327	
5	Valuation Value of Assets	7,640,705		7,279,606	
6	Unfunded Actuarial Accrued Liability (UAAL): **4 - 5**	$230,096		$211,721	
7	Payment on UAAL	$79,381	8.44%	$70,487	8.07%
8	Total average recommended employer contribution: **3 + 7**	$174,609	18.56%	$159,212	18.23%
9	**Projected compensation**	**$941,042**		**$873,043**	

Note: Contributions are assumed to be paid at the middle of the year.

Reconciliation of Average Recommended Employer Contribution Rate

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

Reconciliation from June 30, 2022 to June 30, 2023

		Contribution Rate	Estimated Annual Dollar Amount[1] ($ in '000s)
1	**Average Recommended Employer Contribution as of June 30, 2022**	**18.23%**	**$159,212**
2	Effect of investment return less expected (after "smoothing")	0.34%	$3,200
3	Effect of actual contributions greater than expected	(0.21%)	(1,976)
4	Effect of COLA increases greater than expected	0.13%	1,223
5	Effect of individual salary increases greater than expected	0.66%	6,211
6	Effect of amortizing prior year's UAAL over a larger than expected projected total payroll	(0.36%)	(3,388)
7	Effect of changes in demographics of members amongst tiers on Normal Cost	(0.11%)	(1,035)
8	Effect of other experience gains[2]	(0.22%)	10,221
9	Effect of fixed 2% COLA for General Tier 2 future service for CNA members	0.10%	941
10	Total change	0.33%	$15,397
11	**Average Recommended Employer Contribution as of June 30, 2023**	**18.56%**	**$174,609**

1 Based on projected compensation for each year.

2 Other differences in actual versus expected experience including (but not limited to) retirement, mortality, disability, termination and in-service redemption experience. Estimated annual dollar cost also reflects change in payroll from prior valuation. This also includes the impact of the effect of two minor technical actuarial refinements discussed as detailed on page 31 that reduced the employer contribution rate by 0.18% of payroll.

Reconciliation of Average Recommended Member Contribution Rate

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

Reconciliation from June 30, 2022 to June 30, 2023

		Contribution Rate[1]	Estimated Annual Dollar Amount[2] ($ in '000s)
1	**Average Recommended Member Contribution as of June 30, 2022**	**10.49%**	**$91,577**
2	Effect of changes in member demographics amongst tiers, including the technical actuarial refinements[3]	0.03%	7,376
3	Effect of fixed 2% COLA for General Tier 2 future service for CNA members	0.24%	2,259
4	Total change	0.27%	$9,635
5	**Average Recommended Member Contribution as of June 30, 2023**	**10.76%**	**$101,212**

[1] Average member contribution rates are after reflecting the impact of the cessation of member contribution after 30 years of service for non-PEPRA tiers.
[2] Based on projected compensation for each year.
[3] Estimated annual dollar cost also reflects change in payroll from prior valuation.

Recommended Employer Contribution Rate

	June 30, 2023 Actuarial Valuation Recommended Rates for FY 2024-25				June 30, 2022 Actuarial Valuation Recommended Rates for FY 2023-24			
	Basic	COLA	Total	Estimated Annual Dollar Amount[1] ($ in '000s)	Basic	COLA	Total	Estimated Annual Dollar Amount[1] ($ in '000s)
General Tier 1 Members								
Normal Cost[2]	8.90%	2.95%	11.85%	$162	10.00%	3.13%	13.13%	$230
UAAL[3]	3.31%	5.14%	8.45%	116	3.19%	6.32%	9.51%	167
Total Contributions	**12.21%**	**8.09%**	**20.30%**	**$278**	**13.19%**	**9.45%**	**22.64%**	**$397**
General Tier 2 Members								
Normal Cost	7.70%	0.00%	7.70%	$12,913	7.72%	0.00%	7.72%	$15,248
UAAL[3]	3.31%	0.00%	3.31%	5,551	3.19%	0.00%	3.19%	6,301
Total Contributions	**11.01%**	**0.00%**	**11.01%**	**$18,464**	**10.91%**	**0.00%**	**10.91%**	**$21,549**
General PEPRA Tier 2 Members								
Normal Cost	7.74%	0.00%	7.74%	$8,645	7.73%	0.00%	7.73%	$9,970
UAAL[3]	3.31%	0.00%	3.31%	3,697	3.19%	0.00%	3.19%	4,114
Total Contributions	**11.05%**	**0.00%**	**11.05%**	**$12,342**	**10.92%**	**0.00%**	**10.92%**	**$14,084**
General Tier 2 Members w/ COLA								
Normal Cost[4,5]	7.70%	0.74%	8.44%	$17,311	7.72%	0.68%	8.40%	$15,050
UAAL[3,6]	3.31%	5.14%	8.45%	17,332	3.19%	6.32%	9.51%	17,038
Total Contributions	**11.01%**	**5.88%**	**16.89%**	**$34,643**	**10.91%**	**7.00%**	**17.91%**	**$32,088**
General PEPRA Tier 2 Members w/ COLA								
Normal Cost[4,5]	7.74%	0.65%	8.39%	$20,842	7.73%	0.60%	8.33%	$14,093
UAAL[3,6]	3.31%	5.14%	8.45%	20,991	3.19%	6.32%	9.51%	16,090
Total Contributions	**11.05%**	**5.79%**	**16.84%**	**$41,833**	**10.92%**	**6.92%**	**17.84%**	**$30,183**
All General Members[7]								
Normal Cost	7.72%	0.43%	8.15%	$59,873	7.73%	0.34%	8.07%	$54,591
UAAL	3.31%	3.18%	6.49%	47,687	3.19%	3.27%	6.46%	43,710
Total Contributions	**11.03%**	**3.61%**	**14.64%**	**$107,560**	**10.92%**	**3.61%**	**14.53%**	**$98,301**

Note: Applicable footnotes are shown on next page.

Recommended Employer Contribution Rate (continued)

	June 30, 2023 Actuarial Valuation Recommended Rates for FY 2024-25				June 30, 2022 Actuarial Valuation Recommended Rates for FY 2023-24			
	Basic	COLA	Total	Estimated Annual Dollar Amount[1] ($ in '000s)	Basic	COLA	Total	Estimated Annual Dollar Amount[1] ($ in '000s)
Safety Members								
Normal Cost[8]	12.75%	5.03%	17.78%	$24,752	13.01%	5.10%	18.11%	$25,893
UAAL	39.32%	(23.99%)	15.33%	21,341	38.87%	(25.24%)	13.63%	19,488
Total Contributions	**52.07%**	**(18.96%)**	**33.11%**	**$46,093**	**51.88%**	**(20.14%)**	**31.74%**	**$45,381**
Safety PEPRA Members								
Normal Cost	11.26%	4.44%	15.70%	$10,603	11.05%	4.36%	15.41%	$8,241
UAAL	39.32%	(23.99%)	15.33%	10,353	38.87%	(25.24%)	13.63%	7,289
Total Contributions	**50.58%**	**(19.55%)**	**31.03%**	**$20,956**	**49.92%**	**(20.88%)**	**29.04%**	**$15,530**
All Safety Members[7]								
Normal Cost	12.26%	4.84%	17.10%	$35,355	12.48%	4.89%	17.37%	$34,134
UAAL	39.32%	(23.99%)	15.33%	31,694	38.87%	(25.24%)	13.63%	26,777
Total Contributions	**51.58%**	**(19.15%)**	**32.43%**	**$67,049**	**51.35%**	**(20.35%)**	**31.00%**	**$60,911**
All Categories Combined[7]								
Normal Cost	8.72%	1.40%	10.12%	$95,228	8.80%	1.36%	10.16%	$88,725
UAAL	11.22%	(2.78%)	8.44%	79,381	11.22%	(3.15%)	8.07%	70,487
Total Contributions	**19.94%**	**(1.38%)**	**18.56%**	**$174,609**	**20.02%**	**(1.79%)**	**18.23%**	**$159,212**

1 Based on projected compensation for each year shown on next page.
2 The total General Tier 1 employer rate has been adjusted by 0.01% and 0.46% for June 30, 2023 and June 30, 2022, respectively, to account for the cost associated with the cessation of member contributions after 30 years of service.
3 Basic UAAL rates have been calculated on a combined basis for all General Tiers. COLA UAAL rates have been calculated on a combined basis for all General Tiers that have a COLA (excludes General Tier 2 without COLA and General PEPRA Tier 2 without COLA). Segal will provide a stand-alone letter that calculates the separate COLA UAAL contribution rates to be payable for each of the General Tiers at a later date.
4 COLA Normal Cost rates have been calculated on a combined basis for SEIU and CNA. Segal will provide a stand-alone letter that calculates the separate COLA Normal Cost contribution rates to be payable for SEIU and CNA at a later date.
5 Reflects General Tier 2 member COLA contribution rate of 2.63% based on current bargaining agreements.
6 Includes 0.32% and 0.33% in COLA UAAL costs for June 30, 2023 and June 30, 2022, respectively, attributed to the first two years of service accrued for the fixed 2% COLA pursuant to Government Code 31627. Note these rates are calculated as a percentage of SEIU only payroll.
7 These aggregated rates are provided for informational purposes only as we understand that the tier specific rates will be implemented.
8 The total Safety employer rate has been adjusted by 1.01% and 1.42% for June 30, 2023 and June 30, 2022, respectively, to account for the cost associated with the cessation of member contributions after 30 years of service.

Recommended Employer Contribution Rate (continued)

The projected compensation that is used to estimate the annual dollar amount shown on the prior pages as of June 30, 2023 and June 30, 2022 are as follows:

	June 30, 2023 Projected Compensation ($ in '000s)	June 30, 2022 Projected Compensation ($ in '000s)
General Tier 1	$1,369	$1,753
General Tier 2[1]	167,702	197,508
General PEPRA Tier 2[1]	111,697	128,975
General Tier 2 w/ COLA[1]	205,107	179,161
General PEPRA Tier 2 w/ COLA[1]	248,418	169,188
Safety	139,212	142,978
Safety PEPRA	67,537	53,480
Total	**$941,042**	**$873,043**

[1] The projected compensation for CNA members is included in General Tier 2 w/ COLA and General PEPRA Tier 2 w/ COLA as of June 30, 2023. Previously, the projected compensation for these members was included in General Tier 2 and General PEPRA Tier 2.

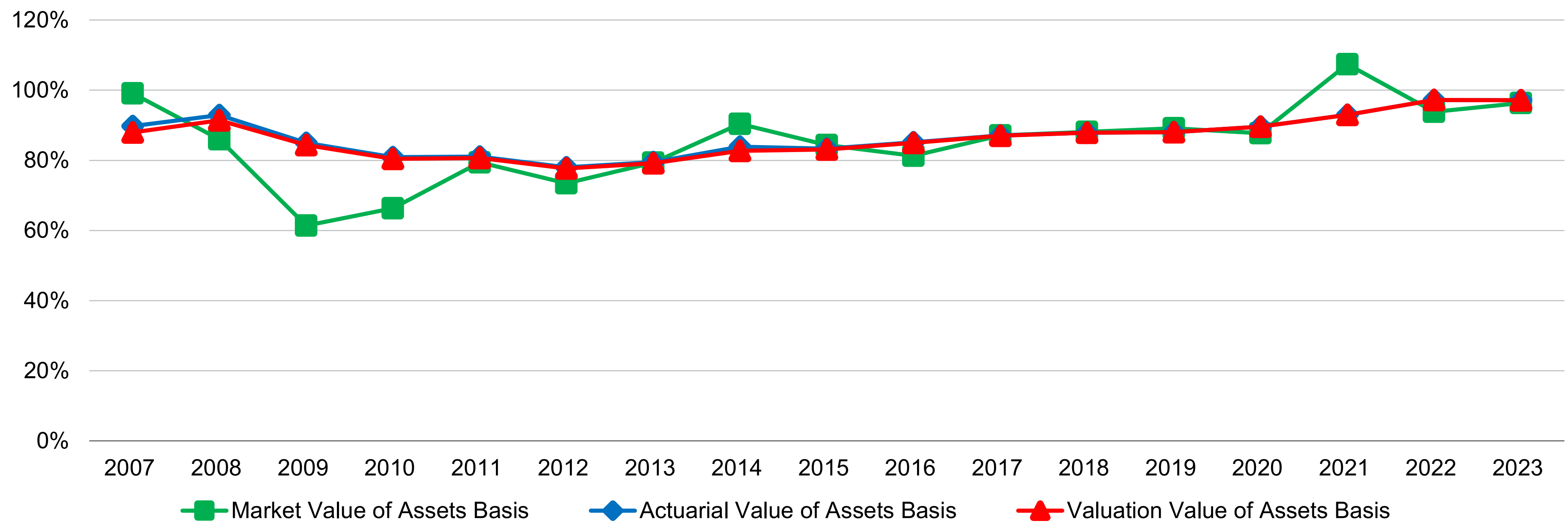
G. Funded Status

A commonly reported piece of information regarding the plan's financial status is the funded ratio. These ratios compare the Market, Actuarial and Valuation Value of Assets to the Actuarial Accrued Liability of the plan. Higher ratios indicate a relatively well-funded plan while lower ratios may indicate recent changes to actuarial assumptions, funding of the plan below actuarial requirements, poor asset performance, or a variety of other causes.

The chart below depicts a history of the funded ratio for the plan. The chart on the next page shows the plan's schedule of funding progress for the last ten years.

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

Funded Ratio for Years Ended June 30, 2007 – 2023



Schedule of Funding Progress for Years Ended June 30, 2014 – 2023

Actuarial Valuation Date as of June 30	Valuation Value of Assets (a)	Actuarial Accrued Liability (AAL) (b)	Unfunded AAL (UAAL) (b) - (a)	Funded Ratio (%) (a) / (b)	Projected Covered Payroll (c)	UAAL as a Percentage of Projected Covered Payroll (%) [(b) - (a)] / (c)
2014	$3,910,801,000	$4,731,016,000	$820,215,000	82.66%	$648,257,000	126.53%
2015	4,302,330,000	5,178,157,000	875,827,000	83.09%	678,705,000	129.04%
2016	4,585,713,000	5,398,756,000	813,043,000	84.94%	706,000,000	115.16%
2017	4,959,070,000	5,703,396,000	744,326,000	86.95%	744,917,000	99.92%
2018	5,382,777,000	6,129,758,000	746,981,000	87.81%	760,815,000	98.18%
2019	5,664,526,000	6,439,388,000	774,862,000	87.97%	785,403,000	98.66%
2020	6,044,036,000	6,747,772,000	703,736,000	89.57%	803,381,000	87.60%
2021	6,648,154,000	7,154,885,000	506,731,000	92.92%	817,636,000	61.98%
2022	7,279,606,000	7,491,327,000	211,721,000	97.17%	873,043,000	24.25%
2023	7,640,705,000	7,870,801,000	230,096,000	97.08%	941,042,000	24.45%

H. Actuarial Balance Sheet

An overview of the plan's funding is given by an Actuarial Balance Sheet. In this approach, first the amount and timing of all future payments that will be made by the plan for current participants is determined. Then these payments are discounted at the valuation interest rate to the date of the valuation, thereby determining the present value, referred to as the Actuarial Present Value of Future Benefits of the plan.

Second, this Actuarial Present Value of Future Benefits is compared to the assets. The "assets" for this purpose include the net amount of assets already accumulated by the plan, the present value of future member contributions, the present value of future employer Normal Cost contributions, and the present value of future employer amortization payments for the Unfunded Actuarial Accrued Liability.

Actuarial Balance Sheet

	Year Ended	
	June 30, 2023 ($ in '000s)	**June 30, 2022 ($ in '000s)**
Actuarial Present Value of Future Benefits		
• Present value of benefits for retired members and beneficiaries	$4,640,127	$4,399,379
• Present value of benefits for inactive vested members[1]	250,638	234,807
• Present value of benefits for active members	4,645,077	4,358,054
Total Actuarial Present Value of Future Benefits	**$9,535,842**	**$8,992,240**
Current and future assets		
• Total Valuation Value of Assets	$7,640,705	$7,279,606
• Present value of future contributions by members	852,021	759,225
• Present value of future employer contributions for:		
– Entry age Normal Cost	813,020	741,688
– Unfunded Actuarial Accrued Liability	230,096	211,721
Total of current and future assets	**$9,535,842**	**$8,992,240**

[1] Includes inactive members with member contributions on deposit.

I. Volatility Ratios

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

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

The current AVR is about 8.1. This means that a 1% asset gain or loss (relative to the assumed investment return) translates to about 8.1% of one year's payroll. Because actuarial gains and losses are amortized over 15 years, there would be a 0.7% of payroll decrease/(increase) in the required contribution for each 1% asset gain/(loss).

The Liability Volatility Ratio (LVR), which is equal to the Actuarial Accrued Liability divided by payroll, provides an indication of the longer-term potential for contribution volatility for any given level of investment volatility. This is because, over an extended period of time, the plan's assets should track the plan's liabilities.

The LVR also indicates how volatile contributions will be in response to changes in the Actuarial Accrued Liability due to actual experience or to changes in actuarial assumptions. The current total plan LVR is about 8.4, but is 5.9 for General compared to 17.1 for Safety. This means, for example, that assumption changes will have a greater impact on employer contribution rates for Safety than for General.

Volatility Ratios for Years Ended 2014 – 2023

Year Ended June 30	Asset Volatility Ratio			Liability Volatility Ratio		
	General	Safety	Total	General	Safety	Total
2014	4.9	11.5	6.6	5.4	12.9	7.3
2015	4.8	11.4	6.4	5.6	13.8	7.6
2016	4.5	11.7	6.2	5.5	14.5	7.6
2017	4.8	12.7	6.7	5.5	14.6	7.7
2018	5.1	13.6	7.1	5.9	15.2	8.1
2019	5.2	14.1	7.3	5.9	15.5	8.2
2020	5.2	14.3	7.4	6.1	15.9	8.4
2021	6.7	18.3	9.4	6.4	16.4	8.8
2022	5.6	16.3	8.0	6.1	17.1	8.6
2023	5.6	16.7	8.1	5.9	17.1	8.4

J. Risk Assessment

Because the actuarial valuation results are dependent on a fixed set of assumptions and data as of a specific date, there is risk that emerging results may differ, perhaps significantly, as actual experience is fluid and will not exactly track current assumptions. This potential divergence may have a significant impact on the future financial condition of the plan.

This report does not contain a detailed analysis of the potential range of future measurements, but does include a concise discussion of some of the primary risks that may affect the plan's future financial condition. A more detailed assessment of the risks tailored to specific interests or concerns of the Board would provide the Board with a better understanding of the inherent risks in the plan that can inform both financial preparation and future decision making. This assessment would enable us to work with the Board to highlight and illustrate particular risks or potential future outcomes they may be interested in discussing and could include scenario testing, sensitivity testing, stress testing and stochastic modeling.

This section provides descriptions and basic assessments of the primary risks that are likely to have an ongoing influence on the plan's financial health, as well as a discussion of historical trends and maturity measures:

Risk Assessments

- Asset/Liability Mismatch Risk (the potential that future plan experience does not affect asset and liability values in the same way, causing them to diverge)

  The most significant asset/liability mismatch risk to the plan is investment risk, as discussed below. In fact, investment risk has the potential to impact asset/liability mismatch in two ways. The first mismatch is evident in annual valuations: when asset values deviate from assumptions they are typically independent from liability changes. The second mismatch can be caused when systemic asset deviations from assumptions may signal the need for an assumption change, which causes liability values and contribution rates to move in the opposite direction from any change in the expected experience of asset growth rates.

  Asset/liability mismatch can also be caused by demographic assumption risk such as longevity, which affects liabilities but have no impact on asset levels. This risk is also discussed below.

- Investment Risk (the risk that investment returns will be different than expected)

  The investment return assumption is a long-term, static assumption for valuation purposes even though in reality market experience can be quite volatile in any given year. That volatility can cause significant changes in the financial condition of the plan, affecting both funded status and contribution rates. The inherent year-to-year volatility is reduced by smoothing through the Actuarial Value of Assets, however investment experience can still have a sizable impact. As discussed in *Section 2, Subsection I*, *Volatility Ratios*, on page 43, a 1% asset gain or loss (relative to the assumed investment return) translates to about 8.1% of one-year's payroll. Because actuarial gains and losses are amortized over 15 years, there would be a 0.7% of payroll decrease/(increase) in the required contribution for each 1% asset gain or loss.

The single year market value rate of return over the last 10 years has ranged from a low of -7.37% to a high of 31.33%.

- Longevity Risk (the risk that mortality experience will be different than expected)

  The actuarial valuation includes current life expectancy assumptions and an expectation of future improvement in life expectancy, which are significant assumptions given the relatively long duration of liabilities for pension plans. Emerging plan experience that does not match these expectations will result in increases or decreases in the actuarially determined contribution over time. This risk can be reduced by using tables appropriate for the plan (public experience tables) that are weighted by benefit levels, and by using generational mortality projections. Effective with the June 30, 2021 valuation, the Board has adopted benefit weighted mortality tables with the generational mortality projections.

- Other Risks

  In addition to longevity, the valuation includes a variety of other assumptions that are unlikely to match future experience exactly. One example is projected salary scales over time. As salary is central to the determination of benefits paid in retirement, deviations from the projected salary scales could have a material impact on the benefits anticipated for each member. Examples of demographic assumptions include retirement, termination and disability assumptions, and will likely vary in significance for different groups (for example, disability assumptions are typically more significant for Safety groups).

Some plans also carry significant contribution risk, defined as the potential for actual future contributions deviating from expected future contributions. However, the employers have a proven track-record of making the Actuarially Determined Contributions based on the Board’s Actuarial Funding Policy, so contribution risk is minimal.

Evaluation of Historical Trends

Past experience can help demonstrate the sensitivity of key results to the plan’s actual experience. Over the past ten years:

- The funded percentage on the Valuation Value of Assets basis has increased from 82.7% to 97.1%. This is primarily due to contributions made to amortize the UAAL (i.e., amortizing each layer of UAAL over 15 years as a level percentage of pay). For a more detailed history see *Section 2, Subsection G, Funded Status* starting on page 40.
- The geometric average investment return on the Valuation Value of Assets over the last 10 years was 8.25%. This includes a high of an 11.30% return and a low of 5.61%. The average over the last 5 years was 8.27%. For more details see the Investment Return table in *Section 2, Subsection C* on page 28.

- The primary source of new UAAL was the strengthening of assumptions through multiple assumption changes. For example, the assumption changes in 2015 reduced the discount rate from 7.75% to 7.50% and updated mortality tables, adding $218 million in unfunded liability. The assumption changes in 2018 reduced the discount rate from 7.50% to 7.25% and again updated mortality tables, adding $149 million in unfunded liability. The assumption changes in 2021 reduced the discount rate from 7.25% to 7.00% and again updated mortality tables, adding $115 million in unfunded liability. For more details on the unfunded liability changes see *Section 3, Exhibit H, Table of Amortization Bases* starting on page 70.
- The plan's funding policy effectively deals with these unfunded liabilities over time. This can be seen most clearly in *Section 3, Exhibit I, Projection of UAAL Balances and Payments* provided on pages 74 and 75.

Maturity Measures

In the last 10 years the ratio of members in pay status to active participants has increased from 0.75 to 0.88. An increased ratio indicates that the plan has grown in maturity over time. This is to be expected, but is also informative to understanding plan sensitivity to particular risks. For more details see *Section 2, Subsection A, Member Data* on page 18.

As pension plans mature, the cash needed to fulfill benefit obligations will increase over time. Therefore, cash flow projections and analysis should be performed to assure that the Plan's asset allocation is aligned to meet emerging pension liabilities. For the prior year, benefits paid were $109 million more than contributions received. Plans with high levels of negative cash flows may have a need for a larger allocation to income generating assets, which can create a drag on investment return. However, this plan is relatively well funded with a funded ratio of 97.1%. For more details on historical cash flows see the Comparison of Contributions with Benefits in *Section 2, Subsection B, Financial Information* on page 22.

A further discussion of plan maturity measures and how they relate to changes in assets and liabilities is included in *Section 2, Subsection I, Volatility Ratios* on page 43.

Low-Default-Risk Obligation Measure (LDROM)

In December 2021, the Actuarial Standards Board issued a revision of Actuarial Standard of Practice No. 4 (ASOP 4) *Measuring Pension Obligations and Determining Pension Plan Costs or Contributions*. One of the revisions to ASOP 4 requires the disclosure of a Low-Default-Risk Obligation Measure (LDROM) when performing a funding valuation. The LDROM presented in this report is calculated using the same methodology and assumptions used to determine the Actuarial Accrued Liability (AAL) used for funding, except for the discount rate. The LDROM is required to be calculated using "a discount rate…derived from low-default-risk fixed income securities whose cash flows are reasonably consistent with the pattern of benefits expected to be paid in the future."

Section 2: Actuarial Valuation Results

The LDROM is a calculation assuming a plan's assets are invested in an all-bond portfolio, generally lowering expected long-term investment returns. The discount rate selected and used for this purpose is the Bond Buyer General Obligation 20-year Municipal Bond Index Rate, published at the end of each week. The last published rate in June of the measurement period, by The Bond Buyer, is 3.65% for use effective June 30, 2023. This is the rate used to determine the discount rate for valuing reported public pension plan liabilities in accordance with Governmental Accounting Standards when plan assets are projected to be insufficient to make projected benefit payments, and the 20-year period reasonably approximates the duration of public pension plan liabilities. The LDROM is not used to determine a plan's funded status or Actuarially Determined Contribution Rate. The plan's expected return on assets, currently 7.00%, is used for these calculations.

As of June 30, 2023, the LDROM for the Plan is $12.4 billion. The difference between the plan's AAL of $7.9 billion and the LDROM can be thought of as the increase in the AAL if the entire portfolio were invested in low-default-risk securities. Alternatively, this difference could also be viewed as representing the expected savings from investing in the plan's diversified portfolio compared to investing only in low-default-risk securities.

ASOP 4 requires commentary to help the intended user understand the significance of the LDROM with respect to the funded status of the plan, plan contributions, and the security of participant benefits. In general, if plan assets were invested exclusively in low-default-risk securities, the funded status would be lower and the Actuarially Determined Contribution would be higher. While investing in a portfolio with low-default-risk securities may be more likely to reduce investment volatility and the volatility of employer contributions, it also may be more likely to result in higher employer contributions or lower benefits.

Section 3: Supplemental Information

Exhibit A: Table of Plan Coverage

Total Plan

Category	Year Ended June 30 2023	Year Ended June 30 2022	Change From Prior Year
Active members in valuation:			
• Number	9,384	9,077	3.4%
• Average age	44.2	44.5	-0.3
• Average years of service	10.5	10.8	-0.3
• Total projected compensation[1]	$941,042,109	$873,042,611	7.8%
• Average projected compensation	$100,282	$96,182	4.3%
• Account balances	$828,051,431	$777,642,396	6.5%
• Total active vested members	5,952	5,986	-0.6%
Inactive vested members:[2]			
• Number	4,085	3,812	7.2%
• Average age	45.6	45.7	-0.1
Retired members:			
• Number in pay status	6,278	6,067	3.5%
• Average age	71.3	71.2	0.1
• Average monthly benefit[3]	$3,927	$3,823	2.7%
Disabled members:			
• Number in pay status	809	801	1.0%
• Average age	67.8	67.5	0.3
• Average monthly benefit[3]	$4,500	$4,347	3.5%
Beneficiaries:			
• Number in pay status	1,170	1,139	2.7%
• Average age	74.1	73.6	0.5
• Average monthly benefit[3]	$2,340	$2,258	3.6%

1 Calculated by increasing annualized bi-weekly compensation as of valuation date by one-half year of inflation and “across the board” salary increases.
2 Includes inactive members with member contributions on deposit.
3 Excludes vested fixed supplemental benefit amount.

Exhibit A: Table of Plan Coverage (continued)

General Tier 1

Category	Year Ended June 30 2023	Year Ended June 30 2022	Change From Prior Year
Active members in valuation:			
• Number	6	8	-25.0%
• Average age	68.3	68.7	-0.4
• Average years of service	37.5	33.7	3.8
• Total projected compensation[1]	$1,369,456	$1,753,044	-21.9%
• Average projected compensation	$228,243	$219,130	4.2%
• Account balances	$2,318,471	$2,969,258	-21.9%
• Total active vested members	6	8	-25.0%
Inactive vested members:[2]			
• Number	33	35	-5.7%
• Average age	49.0	48.3	0.7
Retired members:			
• Number in pay status	1,050	1,117	-6.0%
• Average age	79.1	78.6	0.5
• Average monthly benefit[3]	$5,219	$4,944	5.5%
Disabled members:			
• Number in pay status	67	67	0.0%
• Average age	76.7	75.7	1.0
• Average monthly benefit[3]	$3,314	$3,217	3.0%
Beneficiaries:			
• Number in pay status	328	329	-0.3%
• Average age	81.2	80.5	0.7
• Average monthly benefit[3]	$2,385	$2,324	2.6%

[1] Calculated by increasing annualized bi-weekly compensation as of valuation date by one-half year of inflation and “across the board” salary increases.
[2] Includes inactive members with member contributions on deposit.
[3] Excludes vested fixed supplemental benefit amount.

Exhibit A: Table of Plan Coverage (continued)

General Tier 2

Category	Year Ended June 30 2023	Year Ended June 30 2022	Change From Prior Year
Active members in valuation:[1]			
• Number	1,151	1,439	-20.0%
• Average age	51.9	51.7	0.2
• Average years of service	19.7	18.2	1.5
• Total projected compensation[2]	$167,701,403	$197,507,386	-15.1%
• Average projected compensation	$145,701	$137,253	6.2%
• Account balances	$173,982,369	$192,349,163	-9.5%
• Total active vested members	1,143	1,413	-19.1%
Inactive vested members:[3]			
• Number	857	871	-1.6%
• Average age	53.1	52.8	0.3
Retired members:			
• Number in pay status	2,249	2,159	4.2%
• Average age	70.9	70.6	0.3
• Average monthly benefit[4]	$2,590	$2,489	4.1%
Disabled members:			
• Number in pay status	222	224	-0.9%
• Average age	69.7	68.9	0.8
• Average monthly benefit[4]	$1,613	$1,594	1.2%
Beneficiaries:			
• Number in pay status	322	313	2.9%
• Average age	73.7	73.2	0.5
• Average monthly benefit[4]	$1,132	$1,074	5.4%

[1] As of June 30, 2023, 233 CNA active members were reclassified from General Tier 2 to General Tier 2 w/ COLA.
[2] Calculated by increasing annualized bi-weekly compensation as of valuation date by one-half year of inflation and “across the board” salary increases.
[3] Includes inactive members with member contributions on deposit.
[4] Excludes vested fixed supplemental benefit amount.

Exhibit A: Table of Plan Coverage (continued)

General Tier 2 w/ COLA

Category	Year Ended June 30 2023	Year Ended June 30 2022	Change From Prior Year
Active members in valuation:[1]			
• Number	2,050	2,022	1.4%
• Average age	51.8	51.1	0.7
• Average years of service	17.8	17.4	0.4
• Total projected compensation[2]	$205,107,544	$179,161,361	14.5%
• Average projected compensation	$100,052	$88,606	12.9%
• Account balances	$256,050,149	$229,794,749	11.4%
• Total active vested members	2,000	1,986	0.7%
Inactive vested members:[3]			
• Number	1,042	1,058	-1.5%
• Average age	49.8	49.1	0.7
Retired members:			
• Number in pay status	1,890	1,785	5.9%
• Average age	69.8	69.4	0.4
• Average monthly benefit[4]	$2,158	$2,083	3.6%
Disabled members:			
• Number in pay status	95	90	5.6%
• Average age	65.3	64.6	0.7
• Average monthly benefit[4]	$1,717	$1,639	4.8%
Beneficiaries:			
• Number in pay status	152	145	4.8%
• Average age	70.1	69.0	1.1
• Average monthly benefit[4]	$1,140	$1,125	1.3%

1 As of June 30, 2023, 233 CNA active members were reclassified from General Tier 2 to General Tier 2 w/ COLA.
2 Calculated by increasing annualized bi-weekly compensation as of valuation date by one-half year of inflation and “across the board” salary increases.
3 Includes inactive members with member contributions on deposit.
4 Excludes vested fixed supplemental benefit amount.

Exhibit A: Table of Plan Coverage (continued)

General PEPRA Tier 1

Category	Year Ended June 30 2023	Year Ended June 30 2022	Change From Prior Year
Active members in valuation:			
• Number	0	0	N/A
• Average age	N/A	N/A	N/A
• Average years of service	N/A	N/A	N/A
• Total projected compensation[1]	N/A	N/A	N/A
• Average projected compensation	N/A	N/A	N/A
• Account balances	N/A	N/A	N/A
• Total active vested members	0	0	N/A
Inactive vested members:[2]			
• Number	2	2	0.0%
• Average age	48.0	47.0	1.0
Retired members:			
• Number in pay status	0	0	N/A
• Average age	N/A	N/A	N/A
• Average monthly benefit[3]	N/A	N/A	N/A
Disabled members:			
• Number in pay status	0	0	N/A
• Average age	N/A	N/A	N/A
• Average monthly benefit[3]	N/A	N/A	N/A
Beneficiaries:			
• Number in pay status	0	0	N/A
• Average age	N/A	N/A	N/A
• Average monthly benefit[3]	N/A	N/A	N/A

[1] Calculated by increasing annualized bi-weekly compensation as of valuation date by one-half year of inflation and “across the board” salary increases.
[2] Includes inactive members with member contributions on deposit.
[3] Excludes vested fixed supplemental benefit amount.

Exhibit A: Table of Plan Coverage (continued)

General PEPRA Tier 2

Category	Year Ended June 30 2023	Year Ended June 30 2022	Change From Prior Year
Active members in valuation:[1]			
• Number	1,091	1,368	-20.2%
• Average age	42.6	41.8	0.8
• Average years of service	4.5	3.7	0.8
• Total projected compensation[2]	$111,697,421	$128,974,513	-13.4%
• Average projected compensation	$102,381	$94,280	8.6%
• Account balances	$33,084,501	$32,193,738	2.8%
• Total active vested members	492	480	2.5%
Inactive vested members:[3]			
• Number	594	476	24.8%
• Average age	41.5	41.6	-0.1
Retired members:			
• Number in pay status	25	18	38.9%
• Average age	68.3	67.5	0.8
• Average monthly benefit[4]	$855	$936	-8.7%
Disabled members:			
• Number in pay status	1	0	N/A
• Average age	56.7	N/A	N/A
• Average monthly benefit[4]	$3,661	N/A	N/A
Beneficiaries:			
• Number in pay status	0	0	N/A
• Average age	N/A	N/A	N/A
• Average monthly benefit[4]	N/A	N/A	N/A

1 As of June 30, 2023, 478 CNA active members were reclassified from General PEPRA Tier 2 to General PEPRA Tier 2 w/ COLA.
2 Calculated by increasing annualized bi-weekly compensation as of valuation date by one-half year of inflation and “across the board” salary increases.
3 Includes inactive members with member contributions on deposit.
4 Excludes vested fixed supplemental benefit amount.

Exhibit A: Table of Plan Coverage (continued)

General PEPRA Tier 2 w/COLA

Category	Year Ended June 30 2023	Year Ended June 30 2022	Change From Prior Year
Active members in valuation:[1]			
• Number	3,530	2,739	28.9%
• Average age	39.4	39.0	0.4
• Average years of service	3.7	3.5	0.2
• Total projected compensation[2]	$248,418,042	$169,188,462	46.8%
• Average projected compensation	$70,373	$61,770	13.9%
• Account balances	$78,218,560	$53,552,808	46.1%
• Total active vested members	1,127	911	23.7%
Inactive vested members:[3]			
• Number	1,146	961	19.3%
• Average age	39.5	39.3	0.2
Retired members:			
• Number in pay status	45	29	55.2%
• Average age	66.7	66.6	0.1
• Average monthly benefit[4]	$733	$703	4.3%
Disabled members:			
• Number in pay status	1	0	N/A
• Average age	59.0	N/A	N/A
• Average monthly benefit[4]	$1,181	N/A	N/A
Beneficiaries:			
• Number in pay status	0	0	N/A
• Average age	N/A	N/A	N/A
• Average monthly benefit[4]	N/A	N/A	N/A

1 As of June 30, 2023, 478 CNA active members were reclassified from General PEPRA Tier 2 to General PEPRA Tier 2 w/ COLA.
2 Calculated by increasing annualized bi-weekly compensation as of valuation date by one-half year of inflation and “across the board” salary increases.
3 Includes inactive members with member contributions on deposit.
4 Excludes vested fixed supplemental benefit amount.

Exhibit A: Table of Plan Coverage (continued)

Safety

Category	Year Ended June 30 2023	Year Ended June 30 2022	Change From Prior Year
Active members in valuation:			
• Number	880	952	-7.6%
• Average age	46.6	46.1	0.5
• Average years of service	20.4	19.8	0.6
• Total projected compensation[1]	$139,211,711	$142,977,595	-2.6%
• Average projected compensation	$158,195	$150,187	5.3%
• Account balances	$246,353,990	$237,740,212	3.6%
• Total active vested members	876	947	-7.5%
Inactive vested members:[2]			
• Number	262	279	-6.1%
• Average age	46.1	45.8	0.3
Retired members:			
• Number in pay status	1,014	956	6.1%
• Average age	67.2	67.2	0.0
• Average monthly benefit[3]	$9,078	$8,932	1.6%
Disabled members:			
• Number in pay status	423	420	0.7%
• Average age	66.0	66.0	0.0
• Average monthly benefit[3]	$6,837	$6,577	4.0%
Beneficiaries:			
• Number in pay status	368	352	4.5%
• Average age	69.7	69.4	0.3
• Average monthly benefit[3]	$3,851	$3,717	3.6%

[1] Calculated by increasing annualized bi-weekly compensation as of valuation date by one-half year of inflation and “across the board” salary increases.
[2] Includes inactive members with member contributions on deposit.
[3] Excludes vested fixed supplemental benefit amount.

Exhibit A: Table of Plan Coverage (continued)

Safety PEPRA

Category	Year Ended June 30 2023	Year Ended June 30 2022	Change From Prior Year
Active members in valuation:			
• Number	676	549	23.1%
• Average age	32.7	32.6	0.1
• Average years of service	4.5	4.5	0.0
• Total projected compensation[1]	$67,536,531	$53,480,251	26.3%
• Average projected compensation	$99,906	$97,414	2.6%
• Account balances	$38,043,389	$29,042,468	31.0%
• Total active vested members	308	241	27.8%
Inactive vested members:[2]			
• Number	149	130	14.6%
• Average age	33.4	32.4	1.0
Retired members:			
• Number in pay status	5	3	66.7%
• Average age	60.7	61.3	-0.6
• Average monthly benefit[3]	$1,865	$1,380	35.1%
Disabled members:			
• Number in pay status	0	0	N/A
• Average age	N/A	N/A	N/A
• Average monthly benefit[3]	N/A	N/A	N/A
Beneficiaries:			
• Number in pay status	0	0	N/A
• Average age	N/A	N/A	N/A
• Average monthly benefit[3]	N/A	N/A	N/A

[1] Calculated by increasing annualized bi-weekly compensation as of valuation date by one-half year of inflation and “across the board” salary increases.
[2] Includes inactive members with member contributions on deposit.
[3] Excludes vested fixed supplemental benefit amount.

Exhibit B: Members in Active Service as of June 30, 2023 by Age, Years of Service, and Average Projected Compensation

Total Plan

		Years of Service								
Age	Total	0 – 4	5 – 9	10 – 14	15 – 19	20 – 24	25 – 29	30 – 34	35 – 39	40 & over
Under 25	219	217	2	—	—	—	—	—	—	—
	$58,069	$57,572	$112,040	—	—	—	—	—	—	—
25 – 29	767	690	77	—	—	—	—	—	—	—
	$70,180	$67,767	$91,803	—	—	—	—	—	—	—
30 – 34	1,341	831	441	69	—	—	—	—	—	—
	$81,796	$74,106	$90,384	$119,514	—	—	—	—	—	—
35 – 39	1,432	601	464	266	100	1	—	—	—	—
	$93,924	$79,077	$92,680	$119,939	$119,245	$142,248	—	—	—	—
40 – 44	1,343	422	302	236	294	88	1	—	—	—
	$106,237	$82,980	$93,995	$126,702	$127,668	$132,709	$158,480	—	—	—
45 – 49	1,201	285	215	166	223	262	49	1	—	—
	$112,499	$86,661	$96,434	$118,222	$124,635	$132,633	$149,928	$164,780	—	—
50 – 54	1,210	218	187	137	201	247	166	52	2	—
	$119,890	$89,095	$98,061	$116,358	$125,229	$138,389	$146,068	$144,627	$122,058	—
55 – 59	926	177	123	110	158	161	98	83	16	—
	$113,964	$89,498	$98,113	$119,201	$113,677	$126,919	$139,653	$120,879	$149,738	—
60 – 64	674	117	113	76	123	106	52	45	31	11
	$108,314	$95,223	$98,221	$109,802	$112,431	$110,855	$124,109	$109,491	$124,258	$146,019
65 – 69	214	37	47	34	29	23	16	18	6	4
	$107,915	$91,794	$98,188	$107,888	$107,383	$99,632	$131,075	$147,959	$115,089	$139,438
70 & over	57	9	16	7	8	9	2	1	4	1
	$102,233	$100,740	$91,042	$96,762	$100,800	$118,910	$79,851	$143,194	$134,441	$69,358
Total	**9,384**	**3,604**	**1,987**	**1,101**	**1,136**	**897**	**384**	**200**	**59**	**16**
	$100,282	**$77,354**	**$94,037**	**$119,364**	**$121,597**	**$129,653**	**$141,013**	**$127,259**	**$130,851**	**$139,582**

Exhibit B: Members in Active Service as of June 30, 2023 by Age, Years of Service, and Average Projected Compensation (continued)

General Tier 1

		Years of Service								
Age	**Total**	**0 – 4**	**5 – 9**	**10 – 14**	**15 – 19**	**20 – 24**	**25 – 29**	**30 – 34**	**35 – 39**	**40 & over**
Under 25	—	—	—	—	—	—	—	—	—	—
	—	—	—	—	—	—	—	—	—	—
25 – 29	—	—	—	—	—	—	—	—	—	—
	—	—	—	—	—	—	—	—	—	—
30 – 34	—	—	—	—	—	—	—	—	—	—
	—	—	—	—	—	—	—	—	—	—
35 – 39	—	—	—	—	—	—	—	—	—	—
	—	—	—	—	—	—	—	—	—	—
40 – 44	—	—	—	—	—	—	—	—	—	—
	—	—	—	—	—	—	—	—	—	—
45 – 49	—	—	—	—	—	—	—	—	—	—
	—	—	—	—	—	—	—	—	—	—
50 – 54	—	—	—	—	—	—	—	—	—	—
	—	—	—	—	—	—	—	—	—	—
55 – 59	1	—	—	—	—	—	1	—	—	—
	$369,462	—	—	—	—	—	$369,462	—	—	—
60 – 64	—	—	—	—	—	—	—	—	—	—
	—	—	—	—	—	—	—	—	—	—
65 – 69	4	—	—	—	—	1	1	—	—	2
	$232,659	—	—	—	—	$304,623	$294,861	—	—	$165,576
70 & over	1	—	—	—	—	—	—	—	—	1
	$69,358	—	—	—	—	—	—	—	—	$69,358
Total	**6**	**—**	**—**	**—**	**—**	**1**	**2**	**—**	—	**3**
	$228,243	**—**	**—**	**—**	**—**	**$304,623**	**$332,162**	—	—	**$133,503**

Exhibit B: Members in Active Service as of June 30, 2023
by Age, Years of Service, and Average Projected Compensation (continued)

General Tier 2

		Years of Service								
Age	Total	0 – 4	5 – 9	10 – 14	15 – 19	20 – 24	25 – 29	30 – 34	35 – 39	40 & over
Under 25	—	—	—	—	—	—	—	—	—	—
	—	—	—	—	—	—	—	—	—	—
25 – 29	—	—	—	—	—	—	—	—	—	—
	—	—	—	—	—	—	—	—	—	—
30 – 34	12	—	—	12	—	—	—	—	—	—
	$125,742	—	—	$125,742	—	—	—	—	—	—
35 – 39	79	4	7	55	13	—	—	—	—	—
	$134,584	$156,993	$125,478	$136,090	$126,217	—	—	—	—	—
40 – 44	175	7	18	59	67	24	—	—	—	—
	$142,507	$155,051	$145,416	$150,515	$138,212	$128,973	—	—	—	—
45 – 49	201	18	12	36	63	61	11	—	—	—
	$143,001	$162,451	$164,417	$146,733	$144,733	$132,328	$124,868	—	—	—
50 – 54	264	8	11	38	70	87	40	10	—	—
	$145,059	$193,685	$151,622	$131,098	$147,600	$144,892	$144,688	$137,128	—	—
55 – 59	214	4	8	37	46	43	40	27	9	—
	$155,277	$210,934	$165,960	$156,746	$139,398	$164,167	$170,859	$134,604	$146,446	—
60 – 64	148	1	6	19	39	31	17	16	14	5
	$147,217	$247,254	$189,272	$136,061	$146,848	$131,336	$166,686	$136,279	$156,850	$162,297
65 – 69	44	2	3	11	8	3	4	10	2	1
	$150,074	$194,247	$124,771	$138,003	$140,952	$139,385	$132,565	$174,218	$174,357	$155,469
70 & over	14	—	1	3	2	4	1	1	2	—
	$140,175	—	$195,507	$99,887	$130,801	$162,436	$99,492	$143,194	$156,626	—
Total	**1,151**	**44**	**66**	**270**	**308**	**253**	**113**	**64**	**27**	**6**
	$145,701	**$174,237**	**$154,088**	**$142,003**	**$142,467**	**$142,179**	**$154,503**	**$141,741**	**$154,662**	**$161,159**

Exhibit B: Members in Active Service as of June 30, 2023 by Age, Years of Service, and Average Projected Compensation (continued)

General Tier 2 w/COLA

		Years of Service								
Age	**Total**	**0 – 4**	**5 – 9**	**10 – 14**	**15 – 19**	**20 – 24**	**25 – 29**	**30 – 34**	**35 – 39**	**40 & over**
Under 25	—	—	—	—	—	—	—	—	—	—
	—	—	—	—	—	—	—	—	—	—
25 – 29	—	—	—	—	—	—	—	—	—	—
	—	—	—	—	—	—	—	—	—	—
30 – 34	20	—	6	14	—	—	—	—	—	—
	$90,373	—	$110,810	$81,615	—	—	—	—	—	—
35 – 39	201	6	35	119	41	—	—	—	—	—
	$98,216	$111,608	$105,681	$99,751	$85,430	—	—	—	—	—
40 – 44	310	13	36	123	109	29	—	—	—	—
	$102,730	$103,810	$94,920	$107,912	$99,676	$101,444	—	—	—	—
45 – 49	348	16	22	96	111	93	10	—	—	—
	$100,148	$84,159	$91,770	$104,539	$103,552	$97,136	$92,232	—	—	—
50 – 54	368	10	17	85	114	82	45	14	1	—
	$103,266	$81,072	$91,020	$110,379	$107,612	$102,010	$96,993	$85,437	$68,188	—
55 – 59	385	14	11	67	108	94	45	43	3	—
	$100,000	$99,485	$108,656	$98,403	$101,402	$100,851	$98,584	$97,498	$86,278	—
60 – 64	314	8	18	53	83	71	33	28	16	4
	$97,563	$92,158	$98,095	$102,253	$94,912	$98,059	$101,474	$94,191	$92,851	$100,239
65 – 69	86	3	2	20	20	18	11	7	4	1
	$94,678	$74,845	$121,149	$93,995	$94,122	$82,086	$115,643	$107,227	$85,455	$71,132
70 & over	18	—	1	3	6	5	1	—	2	—
	$87,879	—	$79,331	$84,173	$90,800	$84,089	$60,211	—	$112,257	—
Total	**2,050**	**70**	**148**	**580**	**592**	**392**	**145**	**92**	**26**	**5**
	$100,052	**$93,300**	**$98,849**	**$103,188**	**$100,314**	**$98,675**	**$99,339**	**$95,396**	**$91,499**	**$94,417**

Exhibit B: Members in Active Service as of June 30, 2023 by Age, Years of Service, and Average Projected Compensation (continued)

General PEPRA Tier 2

		Years of Service								
Age	Total	0 – 4	5 – 9	10 – 14	15 – 19	20 – 24	25 – 29	30 – 34	35 – 39	40 & over
Under 25	37	37	—	—	—	—	—	—	—	—
	$59,538	$59,538	—	—	—	—	—	—	—	—
25 – 29	111	99	12	—	—	—	—	—	—	—
	$75,646	$75,672	$75,431	—	—	—	—	—	—	—
30 – 34	199	122	75	2	—	—	—	—	—	—
	$92,442	$91,622	$93,694	$95,474	—	—	—	—	—	—
35 – 39	191	100	88	3	—	—	—	—	—	—
	$104,727	$105,326	$104,193	$100,416	—	—	—	—	—	—
40 – 44	142	85	54	3	—	—	—	—	—	—
	$113,955	$116,099	$109,079	$140,977	—	—	—	—	—	—
45 – 49	108	52	52	4	—	—	—	—	—	—
	$112,395	$119,027	$104,863	$124,109	—	—	—	—	—	—
50 – 54	101	47	51	3	—	—	—	—	—	—
	$109,978	$109,683	$111,457	$89,455	—	—	—	—	—	—
55 – 59	94	48	43	3	—	—	—	—	—	—
	$112,996	$114,967	$108,489	$146,042	—	—	—	—	—	—
60 – 64	69	35	33	1	—	—	—	—	—	—
	$121,306	$127,355	$116,448	$69,938	—	—	—	—	—	—
65 – 69	28	11	15	2	—	—	—	—	—	—
	$110,794	$111,963	$112,176	$93,996	—	—	—	—	—	—
70 & over	11	4	7	—	—	—	—	—	—	—
	$107,006	$119,670	$99,770	—	—	—	—	—	—	—
Total	**1,091**	**640**	**430**	**21**	—	—	—	—	—	—
	$102,381	**$100,475**	**$104,692**	**$113,142**	—	—	—	—	—	—

Exhibit B: Members in Active Service as of June 30, 2023 by Age, Years of Service, and Average Projected Compensation (continued)

General PEPRA Tier 2 w/COLA

		Years of Service								
Age	Total	0 – 4	5 – 9	10 – 14	15 – 19	20 – 24	25 – 29	30 – 34	35 – 39	40 & over
Under 25	120	120	—	—	—	—	—	—	—	—
	$49,442	$49,442	—	—	—	—	—	—	—	—
25 – 29	475	451	24	—	—	—	—	—	—	—
	$61,322	$61,089	$65,701	—	—	—	—	—	—	—
30 – 34	834	595	231	8	—	—	—	—	—	—
	$69,170	$67,261	$74,032	$70,758	—	—	—	—	—	—
35 – 39	711	446	258	7	—	—	—	—	—	—
	$73,314	$69,934	$78,409	$100,920	—	—	—	—	—	—
40 – 44	477	298	170	9	—	—	—	—	—	—
	$73,775	$69,572	$79,499	$104,812	—	—	—	—	—	—
45 – 49	317	191	116	10	—	—	—	—	—	—
	$73,670	$69,391	$80,779	$72,927	—	—	—	—	—	—
50 – 54	242	140	98	4	—	—	—	—	—	—
	$76,771	$73,392	$81,403	$81,583	—	—	—	—	—	—
55 – 59	165	104	59	2	—	—	—	—	—	—
	$72,317	$69,041	$77,575	$87,573	—	—	—	—	—	—
60 – 64	128	71	54	3	—	—	—	—	—	—
	$75,426	$75,865	$74,031	$90,141	—	—	—	—	—	—
65 – 69	48	21	26	1	—	—	—	—	—	—
	$79,099	$73,893	$83,181	$82,282	—	—	—	—	—	—
70 & over	13	5	7	1	—	—	—	—	—	—
	$79,737	$85,597	$69,063	$125,155	—	—	—	—	—	—
Total	**3,530**	**2,442**	**1,043**	**45**	—	—	—	—	—	—
	$70,373	**$66,954**	**$77,652**	**$87,210**	—	—	—	—	—	—

Exhibit B: Members in Active Service as of June 30, 2023 by Age, Years of Service, and Average Projected Compensation (continued)

Safety

		Years of Service								
Age	Total	0 – 4	5 – 9	10 – 14	15 – 19	20 – 24	25 – 29	30 – 34	35 – 39	40 & over
Under 25	—	—	—	—	—	—	—	—	—	—
	—	—	—	—	—	—	—	—	—	—
25 – 29	—	—	—	—	—	—	—	—	—	—
	—	—	—	—	—	—	—	—	—	—
30 – 34	33	3	1	29	—	—	—	—	—	—
	$148,825	$147,960	$171,776	$148,123	—	—	—	—	—	—
35 – 39	133	6	5	75	46	1	—	—	—	—
	$143,596	$131,978	$141,519	$142,341	$147,413	$142,248	—	—	—	—
40 – 44	199	3	2	40	118	35	1	—	—	—
	$151,110	$149,059	$155,354	$152,592	$147,540	$161,176	$158,480	—	—	—
45 – 49	216	2	8	20	49	108	28	1	—	—
	$161,121	$177,621	$165,674	$154,044	$146,552	$163,373	$180,378	$164,780	—	—
50 – 54	223	4	7	7	17	78	81	28	1	—
	$169,341	$142,561	$171,831	$140,355	$151,255	$169,382	$174,014	$176,900	$175,929	—
55 – 59	59	—	1	1	4	24	12	13	4	—
	$166,434	—	$150,206	$106,156	$149,309	$162,286	$170,492	$169,712	$204,740	—
60 – 64	14	2	1	—	1	4	2	1	1	2
	$170,060	$156,372	$181,929	—	$224,291	$179,245	$135,685	$109,272	$170,495	$196,882
65 – 69	3	—	—	—	1	1	—	1	—	—
	$121,914	—	—	—	$104,050	$91,197	—	$170,495	—	—
70 & over	—	—	—	—	—	—	—	—	—	—
	—	—	—	—	—	—	—	—	—	—
Total	**880**	**20**	**25**	**172**	**236**	**251**	**124**	**44**	**6**	**2**
	$158,195	**$146,057**	**$162,017**	**$146,769**	**$147,748**	**$164,711**	**$174,367**	**$172,818**	**$194,230**	**$196,882**

Exhibit B: Members in Active Service as of June 30, 2023 by Age, Years of Service, and Average Projected Compensation (continued)

Safety PEPRA

		Years of Service								
Age	Total	0 – 4	5 – 9	10 – 14	15 – 19	20 – 24	25 – 29	30 – 34	35 – 39	40 & over
Under 25	62	60	2	—	—	—	—	—	—	—
	$73,891	$72,619	$112,040	—	—	—	—	—	—	—
25 – 29	181	140	41	—	—	—	—	—	—	—
	$90,073	$83,689	$111,874	—	—	—	—	—	—	—
30 – 34	243	111	128	4	—	—	—	—	—	—
	$104,430	$89,546	$116,363	$135,598	—	—	—	—	—	—
35 – 39	117	39	71	7	—	—	—	—	—	—
	$110,240	$95,197	$117,186	$123,594	—	—	—	—	—	—
40 – 44	40	16	22	2	—	—	—	—	—	—
	$111,220	$95,907	$119,824	$139,074	—	—	—	—	—	—
45 – 49	11	6	5	—	—	—	—	—	—	—
	$111,086	$104,876	$118,539	—	—	—	—	—	—	—
50 – 54	12	9	3	—	—	—	—	—	—	—
	$109,991	$118,032	$85,868	—	—	—	—	—	—	—
55 – 59	8	7	1	—	—	—	—	—	—	—
	$132,358	$129,427	$152,870	—	—	—	—	—	—	—
60 – 64	1	—	1	—	—	—	—	—	—	—
	$175,250	—	$175,250	—	—	—	—	—	—	—
65 – 69	1	—	1	—	—	—	—	—	—	—
	$152,870	—	$152,870	—	—	—	—	—	—	—
70 & over	—	—	—	—	—	—	—	—	—	—
	—	—	—	—	—	—	—	—	—	—
Total	**676**	**388**	**275**	**13**	—	—	—	—	—	—
	$99,906	**$87,263**	**$116,338**	**$129,669**	—	—	—	—	—	—

Exhibit C: Reconciliation of Member Data

	Active Members	Inactive Vested Members[1]	Retired Members	Disabled Members	Beneficiaries	Total
Number as of June 30, 2022	**9,077**	**3,812**	**6,067**	**801**	**1,139**	**20,896**
• New members	1,088	116	0	0	82	1,286
• Terminations – with vested rights	(438)	438	0	0	0	0
• Contribution refunds	(123)	(98)	0	0	0	(221)
• Retirements	(253)	(109)	362	0	0	0
• New disabilities	(15)	(4)	(8)	27	0	0
• Return to work	60	(60)	0	0	0	0
• Died with or without beneficiary	(12)	(8)	(143)	(18)	(51)	(232)
• Data adjustments	0	(2)	0	(1)	(0)	(3)
Number as of June 30, 2023	**9,384**	**4,085**	**6,278**	**809**	**1,170**	**21,726**

[1] Includes inactive members with member contributions on deposit.

Exhibit D: Summary Statement of Income and Expenses on a Market Value Basis

	Year Ended June 30, 2023		Year Ended June 30, 2022	
Net assets at market value at the beginning of the year		**$7,025,332,391**		**$7,681,553,297**
Contribution income:				
• Employer contributions	$178,532,352		$178,688,292	
• Member contributions	93,974,033		84,698,789	
Net contribution income		$272,506,385		$263,387,082
Investment income:				
• Interest, dividends, asset appreciation and other income	$717,852,770		$(518,289,941)	
• Less investment and administrative fees	(53,692,010)		(41,285,688)	
• Less other expenses	(2,424,730)		(2,934,633)	
Net investment income		$661,736,030		$(562,510,261)
Total income available for benefits		**$934,242,415**		**$(299,123,179)**
Less benefit payments:				
• Benefits paid	$(372,642,831)		$(350,243,601)	
• Member refunds	(8,694,127)		(6,854,126)	
Net benefit payments		$(381,336,958)		$(357,097,727)
Change in net assets at market value		**$552,905,457**		**$(656,220,906)**
Net assets at market value at the end of the year		**$7,578,237,848**		**$7,025,332,391**

Note: Results may not total due to rounding.

Exhibit E: Summary Statement of Plan Assets

	June 30, 2023		June 30, 2022	
Cash equivalents		$150,194,748		$138,439,567
Cash collateral on loaned securities		56,543,781		107,023,385
Capital assets, net of accumulated depreciation and amortization		7,832,454		9,593,215
Accounts receivable:				
• Member and employer contributions	$4,174,625		$3,545,026	
• Accrued interest and dividends	4,988,657		3,891,979	
• Securities sold	11,886,317		5,411,584	
• All other	210,692		12,909	
Total accounts receivable		$21,260,292		$12,861,498
Investments:				
• Equities	$5,292,586,940		$4,656,896,435	
• Fixed income	1,240,938,850		1,166,300,685	
• Others	892,556,771		1,073,818,964	
Total investments at market value		$7,426,082,560		$6,897,016,084
Total assets		$7,661,913,835		$7,164,933,749
Liabilities:				
• Collateral held for loaned securities	$(56,543,781)		$(107,023,385)	
• Security purchases	(18,259,991)		(23,879,374)	
• Account payable	(7,405,974)		(6,980,666)	
• Others	(1,466,240)		(1,717,934)	
Total liabilities		$(83,675,986)		$(139,601,359)
Net assets at market value		**$7,578,237,848**		**$7,025,332,391**
Net assets at actuarial value		**$7,640,764,726**		**$7,279,668,215**
Net assets at valuation value		**$7,640,704,958**		**$7,279,605,840**

Note: Results may not total due to rounding.

Exhibit F: Summary of Reported Reserve Information

	June 30, 2023	June 30, 2022
Used in Development of Valuation Value of Assets:		
• Member contributions reserve	$947,972,132	$888,173,867
• Employer advance reserve	4,175,176,136	3,906,019,694
• Offset: Interest crediting shortfall tracking account (Contra reserve)	(1,337,601,703)	(1,193,831,910)
• Retiree reserve	3,685,528,043	3,510,987,095
• Supplemental death benefit reserve	18,594,756	18,010,323
• Vested fixed supplemental ($108.44) reserve	151,035,594	150,246,771
• Undistributed earnings	0	0
Subtotal: Valuation Value of Assets	$7,640,704,958	$7,279,605,840
Not Used in Development of Valuation Value of Assets:		
• Non-vested supplemental ($27.50) reserve	$59,768	$62,375
• Contingency reserve	0	0
Subtotal	$59,768	$62,375
Subtotal: Actuarial Value of Assets	$7,640,764,726	$7,279,668,215
• Market stabilization reserve	(62,526,878)	(254,335,824)
Total: Gross Market Value of Assets	**$7,578,237,848**	**$7,025,332,391**

Note: Results may not total due to rounding.

Exhibit G: Development of the Fund through June 30, 2023

Year Ended June 30	Employer Contributions	Member Contributions	Net Investment Return[1]	Benefit Payments	Market Value of Assets at Year-End	Valuation Value of Assets at Year-End	Valuation Value as a Percent of Market Value
2014	$169,703,083	$46,674,443	$654,535,161	$223,532,290	$4,274,885,864	$3,910,800,797	91.48%
2015	175,099,550	63,678,770	84,826,217	233,695,213	4,364,795,188	4,302,330,424	98.57%
2016	177,709,688	69,469,771	21,265,100	246,403,038	4,386,836,709	4,585,712,958	104.53%
2017	190,759,001	72,394,542	575,001,597	260,745,073	4,964,246,776	4,959,070,151	99.90%
2018	197,682,857	74,044,246	438,207,040	277,718,396	5,396,462,523	5,382,777,075	99.75%
2019	199,932,498	75,157,256	360,926,420	297,118,538	5,735,360,159	5,664,526,062	98.76%
2020	214,587,909	79,242,637	201,285,517	315,624,151	5,914,852,070	6,044,035,808	102.18%
2021	178,662,058	79,620,088	1,841,384,342	332,965,261	7,681,553,297	6,648,153,534	86.55%
2022	178,688,292	84,698,789	(562,510,261)	357,097,727	7,025,332,391	7,279,605,840	103.62%
2023	178,532,352	93,974,033	661,736,030	381,336,958	7,578,237,848	7,640,704,958	100.82%

Note: Results may not total due to rounding.

[1] On a market basis, net of investment fees, administrative expenses and other expenses.

Exhibit H: Table of Amortization Bases

General Tier 1

Type	Date Established	Initial Amount ($ in '000s)	Initial Period	Outstanding Balance ($ in '000s)	Years Remaining	Annual Payment ($ in '000s)
Actuarial loss	June 30, 2006	$7,048	15	$297	1[1]	$308
Assumption change	June 30, 2006	41,538	15	1,745	1[1]	1,810
Actuarial gain	June 30, 2007	(19,901)	15	(1,575)	1[1]	(1,634)
Actuarial gain	June 30, 2008	(18,128)	15	(2,029)	1[1]	(2,105)
Actuarial loss	June 30, 2009	55,190	15	7,764	1	8,053
Assumption change	June 30, 2009	18,574	15	2,612	1	2,709
Actuarial loss	June 30, 2010	50,018	15	13,258	2	7,007
Actuarial loss	June 30, 2011	36,225	15	13,579	3	4,875
Actuarial loss	June 30, 2012	29,865	15	14,065	4	3,858
Demographic assumption change	June 30, 2012	38,104	20	30,111	9	4,022
Economic assumption change	June 30, 2012	19,517	20	15,414	9	2,059
Actuarial loss	June 30, 2013	31,670	15	17,614	5	3,938
Actuarial loss	June 30, 2014	16,119	15	11,435	9[1]	1,527
Actuarial loss	June 30, 2015	8,457	15	6,292	9[1]	840
Assumption change	June 30, 2015	47,959	20	42,711	12	4,513
Actuarial loss	June 30, 2016	45,451	15	34,301	8	5,063
Actuarial loss	June 30, 2017	53,640	15	43,227	9	5,774
Actuarial loss	June 30, 2018	51,584	15	43,828	10	5,364
Assumption change	June 30, 2018	3,972	20	3,793	15	338
Actuarial loss	June 30, 2019	80,777	15	71,843	11	8,137
Actuarial loss	June 30, 2020	71,845	15	66,328	12	7,009
Actuarial loss	June 30, 2021	51,026	15	48,568	13	4,821
Assumption change	June 30, 2021	(170)	20	(158)	18	(12)
Actuarial loss	June 30, 2022	78,621	15	76,898	14	7,213
Actuarial loss	June 30, 2023	88,299	15	88,299	15	7,865
Subtotal				**$650,220**		**$93,352**

[1] Reflects the adjustment to UAAL amortization periods made in 2020.

Exhibit H: Table of Amortization Bases (continued)

General Tier 2

Type	Date Established	Initial Amount ($ in '000s)	Initial Period	Outstanding Balance ($ in '000s)	Years Remaining	Annual Payment ($ in '000s)
Actuarial gain	June 30, 2006	$(9,108)	15	$(382)	1[1]	$(396)
Assumption change	June 30, 2006	19,085	15	802	1[1]	832
Plan provision change	June 30, 2006	14,731	15	618	1[1]	641
Actuarial gain	June 30, 2007	(39,508)	15	(3,127)	1[1]	(3,244)
Actuarial gain	June 30, 2008	(34,794)	15	(3,892)	1[1]	(4,037)
Actuarial loss	June 30, 2009	71,253	15	10,021	1	10,394
Assumption change	June 30, 2009	22,696	15	3,190	1	3,309
Actuarial loss	June 30, 2010	47,615	15	12,625	2	6,672
Actuarial gain	June 30, 2011	(6,949)	15	(2,608)	3	(936)
Actuarial gain	June 30, 2012	(18,106)	15	(8,527)	4	(2,339)
Demographic assumption change	June 30, 2012	29,420	20	23,233	9	3,103
Economic assumption change	June 30, 2012	32,874	20	25,986	9	3,471
Actuarial gain	June 30, 2013	(23,823)	15	(13,265)	5	(2,965)
Actuarial gain	June 30, 2014	(49,125)	15	(34,853)	9[1]	(4,656)
Actuarial gain	June 30, 2015	(62,406)	15	(46,512)	9[1]	(6,213)
Assumption change	June 30, 2015	50,090	20	44,612	12	4,714
Actuarial gain	June 30, 2016	(28,842)	15	(21,774)	8	(3,214)
Actuarial gain	June 30, 2017	(41,622)	15	(33,550)	9	(4,482)
Actuarial gain	June 30, 2018	(86,831)	15	(73,788)	10	(9,031)
Assumption change	June 30, 2018	111,232	20	106,024	15	9,444
Actuarial gain	June 30, 2019	(8,940)	15	(7,948)	11	(900)
Actuarial gain	June 30, 2020	(62,406)	15	(57,624)	12	(6,089)
Actuarial gain	June 30, 2021	(184,009)	15	(175,172)	13	(17,389)
Assumption change	June 30, 2021	89,334	20	88,210	18	6,892
Actuarial gain	June 30, 2022	(262,350)	15	(256,609)	14	(24,070)
Actuarial gain	June 30, 2023	(61,190)	15	(61,190)	15	(5,451)
Plan provision change	June 30, 2023	3,026	15	3,026	15	270
Subtotal				**$(482,474)**		**$(45,670)**

[1] Reflects the adjustment to UAAL amortization periods made in 2020.

Exhibit H: Table of Amortization Bases (continued)

Safety

Type	Date Established	Initial Amount ($ in '000s)	Initial Period	Outstanding Balance ($ in '000s)	Years Remaining	Annual Payment ($ in '000s)
Actuarial loss	June 30, 2006	$3,418	15	143	1[1]	148
Assumption change	June 30, 2006	42,167	15	1,772	1[1]	1,838
Actuarial gain	June 30, 2007	(37,489)	15	(2,966)	1[1]	(3,077)
Actuarial gain	June 30, 2008	(22,443)	15	(2,510)	1[1]	(2,604)
Actuarial loss	June 30, 2009	78,157	15	10,993	1	11,403
Assumption change	June 30, 2009	49,982	15	7,031	1	7,293
Actuarial loss	June 30, 2010	108,448	15	28,756	2	15,198
Actuarial loss	June 30, 2011	8,879	15	3,331	3	1,196
Actuarial gain	June 30, 2012	(7,501)	15	(3,526)	4	(967)
Demographic assumption change	June 30, 2012	55,513	20	43,867	9	5,860
Economic assumption change	June 30, 2012	51,887	20	40,976	9	5,473
Actuarial loss	June 30, 2013	7,588	15	4,230	5	946
Actuarial gain	June 30, 2014	(54,478)	15	(38,647)	9[1]	(5,162)
Actuarial gain	June 30, 2015	(55,657)	15	(41,484)	9[1]	(5,541)
Assumption change	June 30, 2015	119,953	20	106,818	12	11,288
Actuarial gain	June 30, 2016	(17,062)	15	(12,883)	8	(1,901)
Actuarial gain	June 30, 2017	(9,288)	15	(7,480)	9	(999)
Actuarial gain	June 30, 2018	(29,088)	15	(24,717)	10	(3,025)
Assumption change	June 30, 2018	33,306	20	31,741	15	2,827
Actuarial loss	June 30, 2019	48,977	15	43,560	11	4,934
Actuarial gain	June 30, 2020	(26,527)	15	(24,494)	12	(2,588)
Actuarial gain	June 30, 2021	(125,962)	15	(119,911)	13	(11,904)
Assumption change	June 30, 2021	25,639	20	25,312	18	1,978
Actuarial gain	June 30, 2022	(54,877)	15	(53,674)	14	(5,035)
Actuarial loss	June 30, 2023	46,112	15	46,112	15	4,107
Subtotal				**$62,350**		**$31,686**

[1] Reflects the adjustment to UAAL amortization periods made in 2020.

Exhibit H: Table of Amortization Bases (continued)

Total VCERA

Type	Date Established	Initial Amount ($ in '000s)	Initial Period	Outstanding Balance ($ in '000s)	Years Remaining	Annual Payment ($ in '000s)
Actuarial loss	June 30, 2006	$1,358	15	58	1[1]	60
Assumption change	June 30, 2006	102,790	15	4,319	1[1]	4,480
Plan provision change	June 30, 2006	14,731	15	618	1[1]	641
Actuarial gain	June 30, 2007	(96,898)	15	(7,668)	1[1]	(7,955)
Actuarial gain	June 30, 2008	(75,365)	15	(8,431)	1[1]	(8,746)
Actuarial loss	June 30, 2009	204,600	15	28,778	1	29,850
Assumption change	June 30, 2009	91,252	15	12,833	1	13,311
Actuarial loss	June 30, 2010	206,081	15	54,639	2	28,877
Actuarial loss	June 30, 2011	38,155	15	14,302	3	5,135
Actuarial loss	June 30, 2012	4,258	15	2,012	4	552
Demographic assumption change	June 30, 2012	123,037	20	97,211	9	12,985
Economic assumption change	June 30, 2012	104,278	20	82,376	9	11,003
Actuarial loss	June 30, 2013	15,435	15	8,579	5	1,919
Actuarial gain	June 30, 2014	(87,484)	15	(62,065)	9[1]	(8,291)
Actuarial gain	June 30, 2015	(109,606)	15	(81,704)	9[1]	(10,914)
Assumption change	June 30, 2015	218,002	20	194,141	12	20,515
Actuarial gain	June 30, 2016	(453)	15	(356)	8	(52)
Actuarial loss	June 30, 2017	2,730	15	2,197	9	293
Actuarial gain	June 30, 2018	(64,335)	15	(54,677)	10	(6,692)
Assumption change	June 30, 2018	148,510	20	141,558	15	12,609
Actuarial loss	June 30, 2019	120,814	15	107,455	11	12,171
Actuarial gain	June 30, 2020	(17,088)	15	(15,790)	12	(1,668)
Actuarial gain	June 30, 2021	(258,945)	15	(246,515)	13	(24,472)
Assumption change	June 30, 2021	114,803	20	113,364	18	8,858
Actuarial gain	June 30, 2022	(238,606)	15	(233,385)	14	(21,892)
Actuarial loss	June 30, 2023	73,221	15	73,221	15	6,521
Plan provision change	June 30, 2023	3,026	15	3,026	15	270
Total				**$230,096**		**$79,368**

[1] Reflects the adjustment to UAAL amortization periods made in 2020.

Exhibit I: Projection of UAAL Balances and Payments

Outstanding Balance of $230 Million in Net UAAL as of June 30, 2023

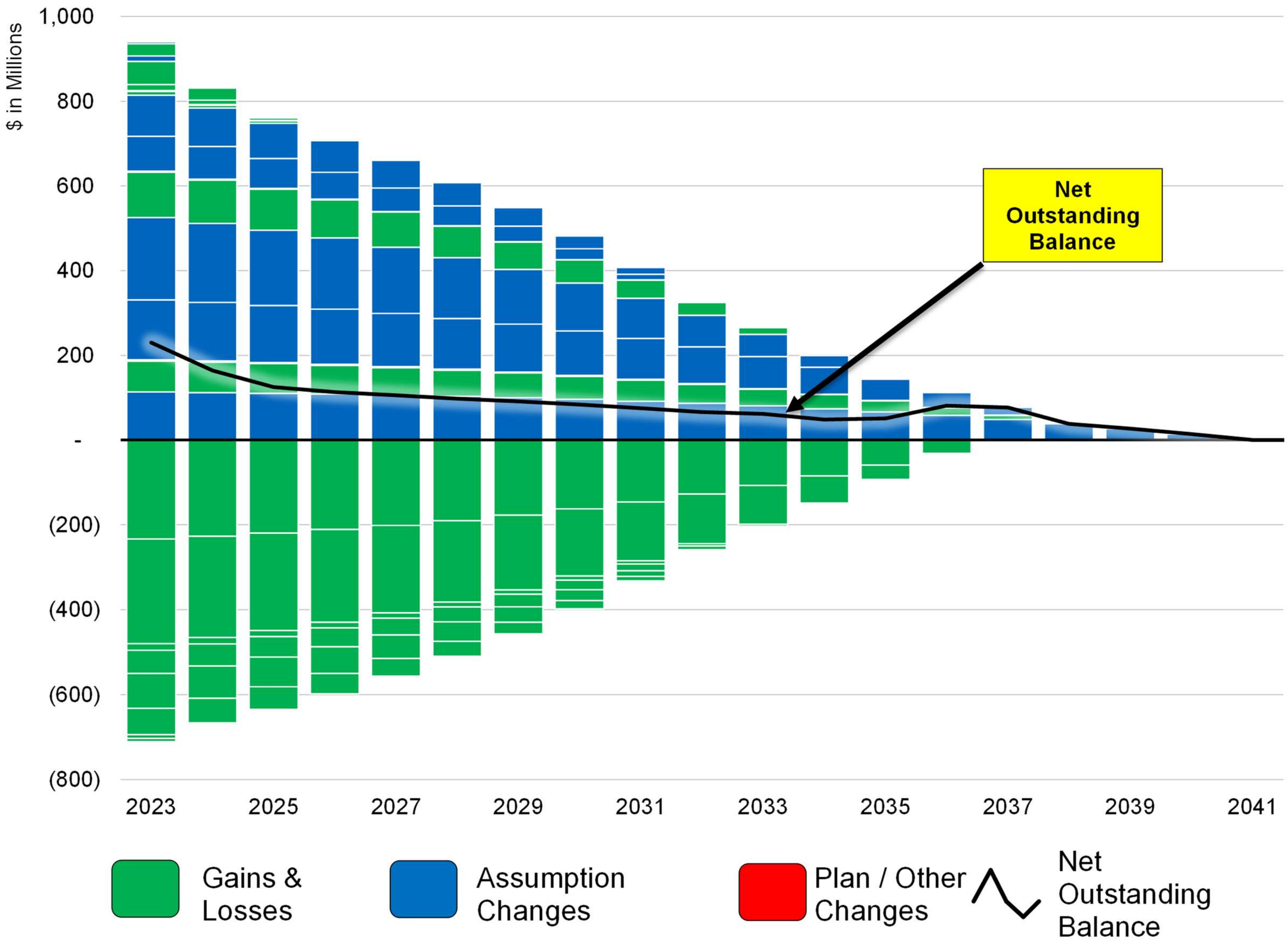


Exhibit I: Projection of UAAL Balances and Payments (continued)

Annual Payments Required to Amortize $230 Million in Net UAAL as of June 30, 2023

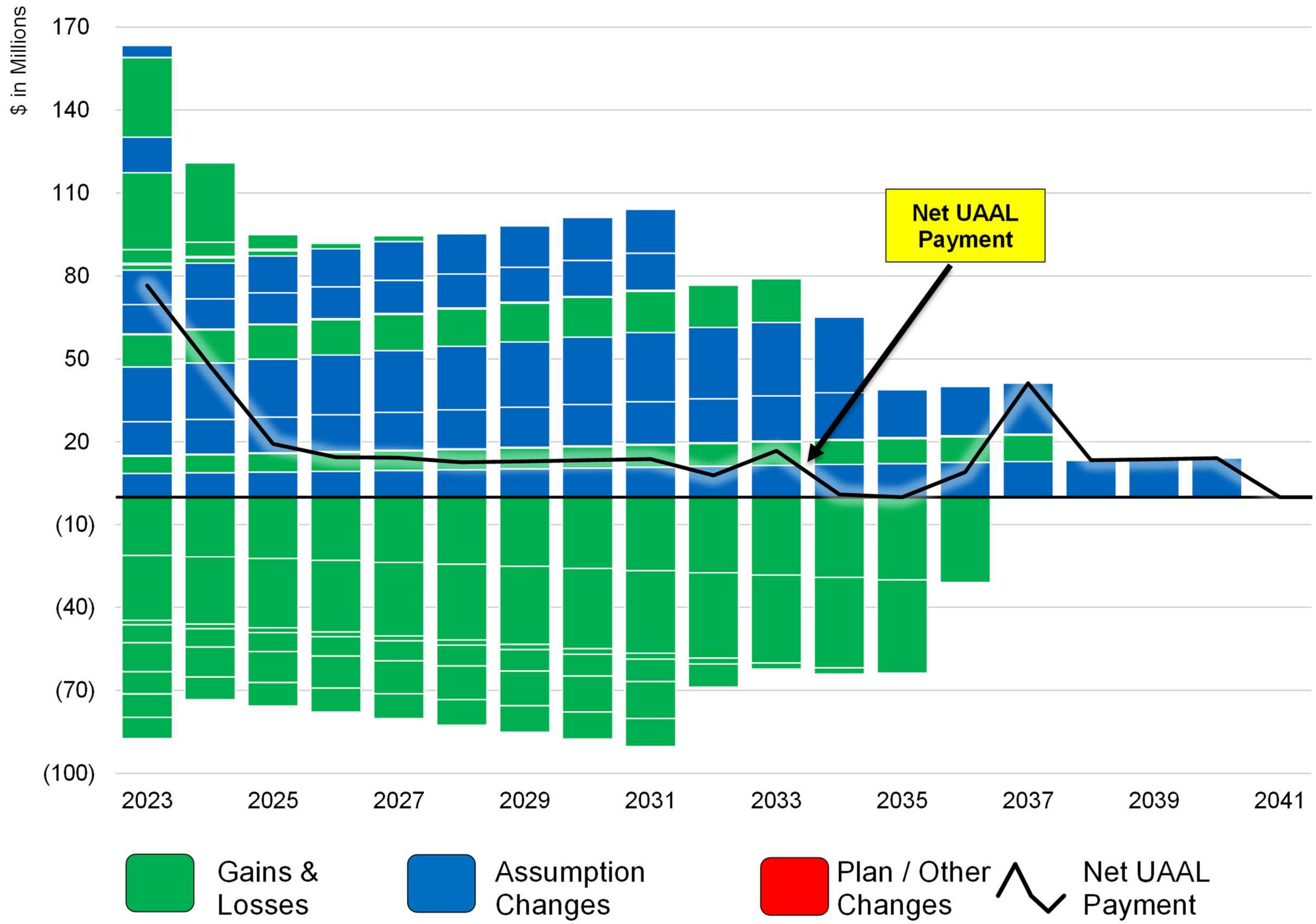


Exhibit J: Definition of Pension Terms

The following list defines certain technical terms for the convenience of the reader:

Actuarial Accrued Liability for Actives:	The equivalent of the accumulated Normal Costs allocated to the years before the valuation date.
Actuarial Accrued Liability for Pensioners and Beneficiaries:	The single-sum value of lifetime benefits to existing pensioners and beneficiaries. This sum takes account of life expectancies appropriate to the ages of the annuitants and the interest that the sum is expected to earn before it is entirely paid out in benefits.
Actuarial Cost Method:	A procedure allocating the Actuarial Present Value of Future Benefits to various time periods; a method used to determine the Normal Cost and the Actuarial Accrued Liability that are used to determine the actuarially determined contribution.
Actuarial Gain or Loss:	A measure of the difference between actual experience and that expected based upon a set of Actuarial Assumptions, during the period between two Actuarial Valuation dates. To the extent that actual experience differs from that assumed, Actuarial Accrued Liabilities emerge which may be the same as forecasted, or may be larger or smaller than projected. Actuarial gains are due to favorable experience, e.g., assets earn more than projected, salary increases are less than assumed, members retire later than assumed, etc. Favorable experience means actual results produce actuarial liabilities not as large as projected by the actuarial assumptions. On the other hand, actuarial losses are the result of unfavorable experience, i.e., actual results yield in actuarial liabilities that are larger than projected. Actuarial gains will shorten the time required for funding of the actuarial balance sheet deficiency while actuarial losses will lengthen the funding period.
Actuarially Equivalent:	Of equal actuarial present value, determined as of a given date and based on a given set of Actuarial Assumptions.
Actuarial Present Value (APV):	The value of an amount or series of amounts payable or receivable at various times, determined as of a given date by the application of a particular set of Actuarial Assumptions. Each such amount or series of amounts is: Adjusted for the probable financial effect of certain intervening events (such as changes in compensation levels, marital status, etc.) Multiplied by the probability of the occurrence of an event (such as survival, death, disability, termination, etc.) on which the payment is conditioned, and Discounted according to an assumed rate (or rates) of return to reflect the time value of money.

Section 3: Supplemental Information

Actuarial Present Value of Future Plan Benefits:	The Actuarial Present Value of benefit amounts expected to be paid at various future times under a particular set of Actuarial Assumptions, taking into account such items as the effect of advancement in age, anticipated future compensation, and future service credits. The Actuarial Present Value of Future Plan Benefits includes the liabilities for active members, retired members, beneficiaries receiving benefits, and inactive members entitled to either a refund or a future retirement benefit. Expressed another way, it is the value that would have to be invested on the valuation date so that the amount invested plus investment earnings would provide sufficient assets to pay all projected benefits and expenses when due.
Actuarial Valuation:	The determination, as of a valuation date, of the Normal Cost, Actuarial Accrued Liability, Actuarial Value of Assets, and related Actuarial Present Values for a plan. An Actuarial Valuation for a governmental retirement system typically also includes calculations of items needed for compliance with GASB, such as the Actuarially Determined Contribution (ADC) and the Net Pension Liability (NPL).
Actuarial Value of Assets (AVA):	The value of the Fund's assets as of a given date, used by the actuary for valuation purposes. This may be the market or fair value of plan assets, but commonly plans use a smoothed value in order to reduce the year-to-year volatility of calculated results, such as the funded ratio and the ADC.
Actuarially Determined:	Values that have been determined utilizing the principles of actuarial science. An actuarially determined value is derived by application of the appropriate actuarial assumptions to specified values determined by provisions of the plan.
Actuarially Determined Contribution (ADC):	The employer's periodic required contributions, expressed as a dollar amount or a percentage of covered plan compensation, determined under the plan's funding policy. The ADC consists of the Employer Normal Cost and the Amortization Payment.
Amortization Method:	A method for determining the Amortization Payment. The most common methods used are level dollar and level percentage of payroll. Under the Level Dollar method, the Amortization Payment is one of a stream of payments, all equal, whose Actuarial Present Value is equal to the UAAL. Under the Level Percentage of Pay method, the Amortization Payment is one of a stream of increasing payments, whose Actuarial Present Value is equal to the UAAL. Under the Level Percentage of Pay method, the stream of payments increases at the assumed rate at which total covered payroll of all active members will increase.
Amortization Payment:	The portion of the pension plan contribution, or ADC, that is designed to pay interest on and to amortize the UAAL.

Assumptions or Actuarial Assumptions:	The estimates upon which the cost of the Fund is calculated, including: Investment return - the rate of investment yield that the Fund will earn over the long-term future; Mortality rates - the death rates of employees and pensioners; life expectancy is based on these rates; Retirement rates - the rate or probability of retirement at a given age or service; Disability rates - the probability of disability retirement at a given age; Termination rates - the rates at which employees of various ages are expected to leave employment for reasons other than death, disability, or retirement; Salary increase rates - the rates of salary increase due to inflation and productivity growth.
Closed Amortization Period:	A specific number of years that is counted down by one each year, and therefore declines to zero with the passage of time. For example, if the amortization period is initially set at 30 years, it is 29 years at the end of one year, 28 years at the end of two years, etc. See Open Amortization Period.
Decrements:	Those causes/events due to which a member's status (active-inactive-retiree-beneficiary) changes, that is: death, retirement, disability, or withdrawal.
Defined Benefit Plan:	A retirement plan in which benefits are defined by a formula applied to the member's compensation and/or years of service.
Defined Contribution Plan:	A retirement plan, such as a 401(k) plan, a 403(b) plan, or a 457 plan, in which the contributions to the plan are assigned to an account for each member, the plan's earnings are allocated to each account, and each member's benefits are a direct function of the account balance.
Employer Normal Cost:	The portion of the Normal Cost to be paid by the employer. This is equal to the Normal Cost less expected member contributions.
Experience Study:	A periodic review and analysis of the actual experience of the Fund that may lead to a revision of one or more actuarial assumptions. Actual rates of decrement and salary increases are compared to the actuarially assumed values and modified as deemed appropriate by the Actuary.
Funded Ratio:	The ratio of the Valuation Value of Assets (VVA) to the Actuarial Accrued Liability (AAL). Plans sometimes calculate a market funded ratio, using the Market Value of Assets (MVA), rather than the VVA.
Investment Return:	The rate of earnings of the Fund from its investments, including interest, dividends and capital gain and loss adjustments, computed as a percentage of the average value of the fund. For actuarial purposes, the investment return often reflects a smoothing of the capital gains and losses to avoid significant swings in the value of assets from one year to the next.

Normal Cost:	That portion of the Actuarial Present Value of pension plan benefits and expenses allocated to a valuation year by the Actuarial Cost Method. Any payment with respect to an Unfunded Actuarial Accrued Liability is not part of Normal Cost (see Amortization Payment). For pension plan benefits that are provided in part by employee contributions, Normal Cost refers to the total of employee contributions and employer Normal Cost unless otherwise specifically stated.
Open Amortization Period:	An open amortization period is one which is used to determine the Amortization Payment but which does not change over time. If the initial period is set as 30 years, the same 30-year period is used in determining the Amortization Period each year. In theory, if an Open Amortization Period with level percentage of payroll is used to amortize the Unfunded Actuarial Accrued Liability, the UAAL will never decrease, but will become smaller each year, in relation to covered payroll, if the actuarial assumptions are realized.
Unfunded Actuarial Accrued Liability:	The excess of the Actuarial Accrued Liability over the Valuation Value of Assets. This value may be negative, in which case it may be expressed as a negative Unfunded Actuarial Accrued Liability, also called the Funding Surplus or an Overfunded Actuarial Accrued Liability.
Valuation Date or Actuarial Valuation Date:	The date as of which the value of assets is determined and as of which the Actuarial Present Value of Future Plan Benefits is determined. The expected benefits to be paid in the future are discounted to this date.
Valuation Value of Assets:	The Actuarial Value of Assets reduced by the value of non-valuation reserves.

Section 4: Actuarial Valuation Basis

Exhibit 1: Actuarial Assumptions and Methods

Rationale for Assumptions:	The information and analysis used in selecting each assumption that has a significant effect on this actuarial valuation is shown in the July 1, 2017 through June 30, 2020 Actuarial Experience Study dated June 3, 2021. Unless otherwise noted, all actuarial assumptions and methods shown below apply to members for all tiers. These assumptions were adopted by the Board.
Economic Assumptions	
Net Investment Return:	7.00%; net of investment and administrative expenses. Based on the Actuarial Experience Study reference above, expected investment expenses represent about 0.15% of the Actuarial Value of Assets.
Member Contribution Crediting Rate:	2.50% (actual increase is based on projected long term ten-year Treasury rate).
Inflation:	Increase of 2.50% per year.
Cost of Living Adjustments (COLA):	Retiree COLA increases of 2.75% are subject to a 3.00% maximum change per year for both PEPRA and Non-PEPRA General Tier 1 and both PEPRA and Non-PEPRA Safety. For both PEPRA and non-PEPRA General Tier 2, SEIU members receive a fixed 2% cost-of-living adjustment, not subject to changes in the CPI that applies to future service after March 2003 (members represented by CNA receive a fixed 2% COLA that applies to future service after July 2023).
Payroll Growth:	Inflation of 2.50% per year plus “across the board” real salary increases of 0.50% per year, used to amortize the UAAL as a level percentage of payroll.
Increase in Internal Revenue Code Section 401(a)(17) Compensation Limit:	Increase of 2.50% per year from the valuation date.
Increase in Section 7522.10 Compensation Limit:	Increase of 2.50% per year from the valuation date.

Section 4: Actuarial Valuation Basis

Salary Increases:

The annual rate of compensation increase includes: inflation at 2.50%, plus "across the board" salary increases of 0.50% per year, plus the following merit and promotion increases:

Years of Service	Rate (%) General	Rate (%) Safety
Less than 1	7.00	9.00
1 – 2	5.25	6.25
2 – 3	4.00	4.75
3 – 4	3.50	4.50
4 – 5	3.00	4.25
5 – 6	2.75	4.00
6 – 7	2.50	2.75
7 – 8	2.25	1.75
8 – 9	2.00	1.50
9 – 10	1.75	1.25
10 – 11	1.50	1.20
11 – 12	1.40	1.15
12 – 13	1.30	1.10
13 – 14	1.20	1.05
14 – 15	1.10	1.00
15 – 16	1.00	1.00
16 – 17	0.95	1.00
17 – 18	0.90	1.00
18 – 19	0.85	1.00
19 – 20	0.80	1.00
20 & Over	0.75	1.00

Demographic Assumptions:	
Post-Retirement Mortality Rates:	*Healthy* • **General Members:** Pub-2010 General Healthy Retiree Amount-Weighted Above-Median Mortality Table (separate tables for males and females) with rates increased by 5% for females, projected generationally with the two-dimensional mortality improvement scale MP-2020. • **Safety Members:** Pub-2010 Safety Healthy Retiree Amount-Weighted Above-Median Mortality Table (separate tables for males and females), projected generationally with the two-dimensional mortality improvement scale MP-2020. *Disabled* • **General Members:** Pub-2010 Non-Safety Disabled Retiree Amount-Weighted Mortality Table (separate tables for males and females), projected generationally with the two-dimensional mortality improvement scale MP-2020. • **Safety Members:** Pub-2010 Safety Disabled Retiree Amount-Weighted Mortality Table (separate tables for males and females), projected generationally with the two-dimensional mortality improvement scale MP-2020. *All Beneficiaries* • Pub-2010 General Contingent Survivor Amount-Weighted Above-Median Mortality Table (separate tables for males and females) with rates increased by 10% for females, projected generationally with the two-dimensional mortality improvement scale MP-2020. The Pub-2010 mortality tables and adjustments as shown above reflect the mortality experience as of the measurement date. The generational projection is a provision for future mortality improvement.

Pre-Retirement Mortality Rates:

General Members: Pub-2010 General Employee Amount-Weighted Above-Median Mortality Table (separate tables for males and females), projected generationally with the two-dimensional mortality improvement scale MP-2020.

Safety Members: Pub-2010 Safety Employee Amount-Weighted Above-Median Mortality Table (separate tables for males and females), projected generationally with the two-dimensional mortality improvement scale MP-2020.

	Rate (%)			
	General[1]		Safety[1]	
Age	Male	Female	Male	Female
20	0.04	0.01	0.04	0.02
25	0.02	0.01	0.03	0.02
30	0.03	0.01	0.04	0.02
35	0.04	0.02	0.04	0.03
40	0.06	0.03	0.05	0.04
45	0.09	0.05	0.07	0.06
50	0.13	0.08	0.10	0.08
55	0.19	0.11	0.15	0.11
60	0.28	0.17	0.23	0.14
65	0.41	0.27	0.35	0.20
70	0.61	0.44	0.66	0.39

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

[1] Generational projections beyond the base year (2010) are not reflected in the above mortality rates.

Mortality Rates for Member Contributions:

General Members: Pub-2010 General Healthy Retiree Amount-Weighted Above-Median Mortality Table (separate tables for males and females) with rates increased by 5% for females, projected 30 years (from 2010) with the two-dimensional mortality improvement scale MP-2020, weighted one-third male and two-thirds female.

Safety Members: Pub-2010 Safety Healthy Retiree Amount-Weighted Above-Median Mortality Table (separate tables for males and females), projected 30 years (from 2010) with the two-dimensional mortality improvement scale MP-2020, weighted 80% male and 20% female.

Disability Incidence:

	Rate (%)	
Age	**General**	**Safety**
20	0.01	0.03
25	0.01	0.06
30	0.02	0.24
35	0.04	0.38
40	0.08	0.52
45	0.12	0.84
50	0.19	1.12
55	0.24	2.52
60	0.31	5.86
65	0.41	0.00
70	0.45	0.00

30% of General disabilities are assumed to be service connected (duty) disabilities and the other 70% are assumed to be non-service connected (ordinary) disabilities.

90% of Safety disabilities are assumed to be service connected (duty) disabilities and the other 10% are assumed to be non-service connected (ordinary) disabilities.

Termination:

Years of Service	Rate (%) General	Rate (%) Safety
Less than 1	13.50	10.00
1 – 2	9.50	5.50
2 – 3	8.50	5.25
3 – 4	6.75	4.50
4 – 5	5.50	4.25
5 – 6	5.00	2.50
6 – 7	4.00	2.25
7 – 8	3.50	2.00
8 – 9	3.50	1.80
9 – 10	3.50	1.60
10 – 11	3.50	1.50
11 – 12	3.25	1.40
12 – 13	3.25	1.20
13 – 14	3.00	1.10
14 – 15	2.75	1.00
15 – 16	2.75	0.95
16 – 17	2.50	0.85
17 – 18	2.50	0.75
18 – 19	2.00	0.50
19 – 20	1.75	0.50
20 & Over	1.75	0.50

The greater of a refund of member contributions and a deferred annuity is valued when a member terminates.

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

Retirement Rates:

Age	General Tier 1 and 2: Less than 30 Years of Service	General Tier 1 and 2: 30 or More Years of Service	Safety Non-PEPRA: Less than 30 Years of Service	Safety Non-PEPRA: 30 or More Years of Service	General PEPRA Tier 1 and 2	Safety PEPRA
Under 50	0.00	50.00	1.50	1.50	0.00	0.00
50	2.00	2.00	2.00	2.00	0.00	4.00
51	2.25	2.25	1.75	1.75	0.00	1.75
52	2.75	2.75	2.25	2.25	1.50	3.25
53	3.00	3.00	3.25	3.25	1.50	5.50
54	3.25	4.00	15.00	20.00	2.00	16.00
55	4.50	5.00	20.00	37.00	4.00	20.00
56	5.25	6.00	20.00	25.00	4.75	20.00
57	5.50	7.00	22.00	30.00	5.25	20.00
58	6.00	9.00	22.00	33.00	5.50	18.00
59	8.00	9.50	22.00	35.00	6.50	25.00
60	10.50	14.00	35.00	35.00	9.00	30.00
61	13.00	20.00	35.00	45.00	11.00	30.00
62	22.00	30.00	35.00	45.00	20.00	35.00
63	18.00	25.00	35.00	45.00	18.00	35.00
64	18.00	25.00	35.00	45.00	16.00	35.00
65	30.00	45.00	100.00	100.00	20.00	100.00
66	35.00	50.00	100.00	100.00	30.00	100.00
67	35.00	47.50	100.00	100.00	35.00	100.00
68	27.50	47.50	100.00	100.00	25.00	100.00
69	25.00	25.00	100.00	100.00	35.00	100.00
70	25.00	25.00	100.00	100.00	55.00	100.00
71	25.00	25.00	100.00	100.00	55.00	100.00
72	25.00	25.00	100.00	100.00	55.00	100.00
73	25.00	25.00	100.00	100.00	55.00	100.00
74	25.00	25.00	100.00	100.00	55.00	100.00
75	100.00	100.00	100.00	100.00	100.00	100.00

Section 4: Actuarial Valuation Basis

Retirement Age and Benefit for Deferred Vested Members:	Future current and future deferred vested members, retirement age assumptions are as follows: **General Retirement Age** Reciprocal members: 60 Other members: 60 **Safety Retirement Age** Reciprocal members: 55 Other members: 52 Future deferred vested members who terminate with less than five years of service and are not vested are assumed to retire at age 70 for both General and Safety if they decide to leave their contributions on deposit. 45% of future General and 60% of future Safety deferred vested members are assumed to continue to work for a reciprocal employer. For reciprocals, 3.75% and 4.00% compensation increases are assumed per annum for General and Safety, respectively.
Future Benefit Accruals:	1.0 year of service per year of employment.
Unknown Data for Members:	Same as those exhibited by members with similar known characteristics. If not specified, members are assumed to be male.
Definition of Active Members:	All active members of VCERA as of the valuation date.
Form of Payment:	All active and inactive members are assumed to elect the unmodified option at retirement.
Percent Married:	For all active and inactive members, 70% of male members and 55% of female members are assumed to be married at pre-retirement death or retirement. There is no explicit assumption for children's benefits.
Age and Gender of Spouse:	For all active and inactive members, male members are assumed to have a female spouse who is 3 years younger than the member and female members are assumed to have a male spouse who is 2 years older than the member.
In-Service Redemptions:	The following assumptions for in-service redemptions pay as a percentage of final average compensation are used: General Tier 1: 8.00% General Tier 2: 3.50% Safety: 6.50% General PEPRA: 0.00% Safety PEPRA: 0.00% For determining the cost of the basic benefit (i.e., non-COLA component), the cost of this pay element is currently recognized in the valuation as an employer only cost and does not affect member contribution rates.

Average Entry Age for Member Contribution Rates:	For non-PEPRA members hired after November 1974 who are not contributing fifty percent of Normal Cost, they will pay a contribution corresponding to a General and Safety member hired at entry age 35 and 27, respectively.
Actuarial Funding Policy	
Actuarial Cost Method:	Entry Age Actuarial Cost Method. Entry Age is the age on the valuation date minus the lesser of years of employment or years of benefit service. Normal Cost and Actuarial Accrued Liability are calculated on an individual basis and are based on costs allocated as a level percentage of compensation, as if the current benefit formula for each individual has always been in effect (i.e., “replacement life within a tier”).
Actuarial Value of Assets:	Market Value of Assets (MVA) 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 the market value, and are recognized annually over a five-year period.
Valuation Value of Assets:	Actuarial Value of Assets, reduced by the value of the non-vested supplemental benefit reserve and statutory contingency reserve.

Amortization Policy:	The UAAL as of June 30, 2011 shall continue to be amortized over separate 15-year period amortization layers based on the valuations during which each separate layer was previously established. Any new UAAL as a result of actuarial gains or losses identified in the annual valuation as of June 30 will be amortized over a period of 15 years. Any new UAAL as a result of change in actuarial assumptions or methods will be amortized over a period of 20 years. Unless an alternative amortization period is recommended by the Actuary and accepted by the Board based on the results of an actuarial analysis: • With the exception noted below, the increase in UAAL as a result of any plan amendments will be amortized over a period of 15 years. • The increase in UAAL resulting from a temporary retirement incentive, including the impact of benefits resulting from additional service permitted in Section 31641.04 of the 1937 CERL (Golden Handshake), will be funded over a period of up to 5 years. The UAAL will be amortized over "closed" amortization periods so that the amortization period for each layer decreases by one year with each actuarial valuation. The UAAL will be amortized as a level percentage of payroll so that the amortization amount in each year during the amortization period shall be expected to be a level percentage of covered payroll, taking into consideration the current assumption for general payroll increase (i.e., wage inflation). If an overfunding or "surplus" exists (i.e., the VVA exceeds the AAL, so that the total of all UAAL amortization layers becomes negative), any prior UAAL amortization layers will be considered fully amortized, and any subsequent UAAL will be amortized as the first of a new series of amortization layers, using the above amortization periods. If the surplus exceeds 20% of the AAL per Section 7522.52 of the Government Code, then the amount of surplus in excess of 20% of the AAL (and any subsequent surpluses in excess of that amount) will be amortized over an "open" amortization period of 30 years, but only if the other conditions of Section 7522.52 have also been met. If those conditions are not met, then the surplus will not be amortized and the full Normal Cost will be contributed. These amortization policy components will generally apply separately to each of VCERA's UAAL cost groups with the exception that the conditions of Section 7522.52 apply to the total plan. Basic UAAL contribution rates have been calculated on a combined basis for all General Tiers. COLA UAAL contribution rates have been calculated on a combined basis for all General Tiers that have a COLA. In April 2020, the Board directed Segal to adjust the remaining amortization periods for certain amortization layers in order to minimize the contribution rate tail volatility associated with the UAAL layers that were first established in 2006, 2007 and 2008, and in 2014 and 2015. Effective with the 2020 actuarial valuation the remaining amortization periods for the 2006, 2007, and 2008 UAAL amortization layers were set to 4 years and those for the 2014 and 2015 UAAL actuarial gain/loss amortization layers were set to 12 years.

Other Actuarial Methods	
Employer Contributions:	Employer contributions consist of two components: *Normal Cost* The annual contribution rate that, if paid annually from a member's first year of membership through the year of retirement, would accumulate to the amount necessary to fully fund the member's retirement-related benefits. Accumulation includes annual crediting of interest at the assumed investment earning rate. The contribution rate is expressed as a level percentage of the member's compensation. *Contribution to the Unfunded Actuarial Accrued Liability (UAAL)* The annual contribution rate that, if paid annually over the UAAL amortization period, would accumulate to the amount necessary to fully fund the UAAL. Accumulation includes annual crediting of interest at the assumed investment earning rate. The contribution (or rate credit in the case of a negative UAAL) is calculated to remain as a level percentage of future active member payroll (including payroll for new members as they enter the Association) assuming a constant number of active members. In order to remain as a level percentage of payroll, amortization payments (credits) are scheduled to increase at the annual rate of 3.00% (i.e., 2.50% inflation plus 0.50% "across the board" salary increase). The amortization policy is described on the previous page. The recommended employer contributions shown in *Section 2, Subsection F* are calculated based on a 50/50 sharing of Normal Cost for non-PEPRA Tiers. For purposes of these calculations, we have been previously directed by VCERA to assume that the cessation of member contributions after 30 years of service for non-PEPRA members continues per the County Employees Retirement Law (CERL) and that the cost associated with this provision is to be paid for by employers. The employer contributions shown in *Section 4, Exhibit 4* are calculated under the prior method (i.e., without 50/50 sharing of Normal Cost for non-PEPRA tiers).

Section 4: Actuarial Valuation Basis

Member Contributions:	The member contribution rates for all members are provided in *Section 4, Exhibit 3*, which are calculated based on a 50/50 sharing of Normal Cost. Member contributions accumulate with interest at the lesser of the assumed investment earning rate or the rate on ten-year U.S. Treasury notes. Any difference between the assumed investment earning rate and the actual interest crediting rate will be credited to the County Advance reserve. Please note that in calculating the basic member rate, we follow the Board's past practice and have not included any in-service pay redemptions that may potentially increase a member's final average compensation and hence retirement benefit. The member rates provided in the report are the full rate before reflecting any employer pickup. General Tier 2 members eligible for the fixed 2% cost-of-living benefit contribute a negotiated 2.63% of compensation per year towards the cost of that benefit that is reflected in this report. **Non-PEPRA Members (Prior Methodology)** The member contributions shown in *Section 4, Exhibit 5* are calculated under the prior method (i.e., <u>without</u> 50/50 sharing of Normal Cost for non-PEPRA tiers). The basic member contribution rate is determined so that the accumulation of a member's basic contributions made in a given year until a certain age will be sufficient to fund an annuity at that age that is equal to 1/120 of Final Average Compensation for General members and 1/100 of Final Average Compensation for Safety members. That age is 55 for General Tier 1 members, 60 for General Tier 2 members and 50 for Safety members. It is assumed that contributions are made annually at the same rate, starting at entry age. In addition to their basic contributions, General Tier 1 and Safety members pay one-half of the total Normal Cost necessary to fund their cost-of-living benefits. **PEPRA Members** Pursuant to Section 7522.30(a) of the Government Code, members under PEPRA tiers are required to contribute at least 50% of the Normal Cost. In addition, there are certain additional requirements that would have to be met such as requiring the new employees to pay the contribution rate of "similarly situated employees", if it is greater. (reference: Section 7522.30(c)). We further understand that different rules may have to be applied for collectively bargained employees, non-represented, managerial or other supervisory employees. (reference: Section 7522.30(e)). In preparing the Normal Cost rates in this report, we have assumed that exactly 50% of the Normal Cost would be paid by the new members and we have taken into account in this valuation only the requirements of Section 7522.30(c), but not the requirements of Section 7522.30(e). The only exception to this is that we have also shown the PEPRA Tier 2 with COLA contribution rates including the member COLA contribution rate of 2.63% of compensation based on current bargaining agreements. Also of note is that based on our discussions with VCERA, we have used the discretion made available by AB1380 to not round the PEPRA member's contribution rates to the nearest one quarter of one percent as was previously required by PEPRA.
Tier 2 COLA Procedures	This benefit has been valued consistent with the methodologies described in our October 9, 2006 report entitled "Funding Policies and Procedures for General Tier 2 COLA Benefit".

Internal Revenue Code Section 415:	Section 415 of the Internal Revenue Code (IRC) specifies the maximum benefits that may be paid to an individual from a defined benefit plan and the maximum amounts that may be allocated each year to an individual's account in a defined contribution plan. A qualified pension plan may not pay benefits in excess of the Section 415 limits. The ultimate penalty for non-compliance is disqualification: active participants could be taxed on their vested benefits and the IRS may seek to tax the income earned on the plan's assets. In particular, Section 415(b) of the IRC limits the maximum annual benefit payable at the Normal Retirement Age to a dollar limit of $160,000 indexed for inflation. That limit is $265,000 for 2023. Normal Retirement Age for these purposes is age 62. These are the limits in simplified terms. They must be adjusted based on each participant's circumstances, for such things as age at retirement, form of benefits chosen and after-tax contributions. Non-PEPRA benefits in excess of the limits may be paid through a qualified governmental excess plan that meets the requirements of Section 415(m). Legal Counsel's review and interpretation of the law and regulations should be sought on any questions in this regard. Contribution rates determined in this valuation have not been reduced for the Section 415 limitations. However, it is anticipated that PEPRA members will not be limited in the future due to the PEPRA compensation limit applied in the determination of their benefit. Actual limitations will result in actuarial gains as they occur.
Changed Actuarial Assumptions and Methods:	There have been no changes in actuarial assumptions or methods since the last valuation.

Exhibit 2: Summary of Plan Provisions

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

Plan Year:	July 1 through June 30
Membership Eligibility:	All regular employees of the County of Ventura or contracting district, scheduled to work 64 or more hours biweekly, are eligible to become a member of the plan subject to classification below:
General Tier 1	All General members with membership dates before June 30, 1979, plus Deputy Sheriff trainees and certain executive management with membership dates before January 1, 2013.
General Tier 2	All General members with membership dates on or after June 30, 1979 and before January 1, 2013, except as noted above for General Tier 1.
General PEPRA Tier 1	Deputy Sheriff trainees with membership dates on or after January 1, 2013 and before April 17, 2014.
General PEPRA Tier 2	All General members with membership dates on or after January 1, 2013, except as noted above for General PEPRA Tier 1.
Safety	All Safety members with membership dates before January 1, 2013.
Safety PEPRA	All Safety members with membership dates on or after January 1, 2013.
Final Compensation for Benefit Determination:	
General Tier 1 and Safety	Highest consecutive twelve months of compensation earnable (§31462.1) (FAS1).
General Tier 2	Highest consecutive thirty-six months of compensation earnable (§31462) (FAS3).
General PEPRA Tier 1, General PEPRA Tier 2 and Safety PEPRA	Highest consecutive thirty-six months of pensionable compensation (§7522.10(c), §7522.32 and §7522.34) (FAS3).
Compensation Limit:	
General Tier 1, General Tier 2 and Safety	For members with membership dates on or after July 1, 1996, Compensation Earnable is limited to Internal Revenue Code Section 401(a)(17). The limit as of July 1, 2023 is $330,000. The limit is indexed for inflation on an annual basis.
General PEPRA Tier 1, General PEPRA Tier 2 and Safety PEPRA	Pensionable Compensation is limited to $146,042 for 2023 ($175,250, if not enrolled in Social Security). The limit is indexed for inflation on an annual basis.
Service:	Years of service. (Yrs).

Section 4: Actuarial Valuation Basis

Service Retirement Eligibility:		
General	Age 50 with 10 years of service, or age 70 regardless of service, or after 30 years regardless of age (§31672).	
Safety	Age 50 with 10 years of service, or age 70 regardless of service, or after 20 years regardless of age (§31663.25).	
General PEPRA	Age 52 with 5 years of service (§7522.20(a)) or age 70 regardless of service (§31672.3).	
Safety PEPRA	Age 50 with 5 years of service (§7522.25(d)) or age 70 regardless of service (§31672.3).	
Benefit Formula:		
General Tier 1 (§31676.11)	**Retirement Age**	**Benefit Formula**
	50	1.24% x (FAS1 – $1,400) x Yrs
	55	1.67% x (FAS1 – $1,400) x Yrs
	60	2.18% x (FAS1 – $1,400) x Yrs
	62	2.35% x (FAS1 – $1,400) x Yrs
	65 and over	2.61% x (FAS1 – $1,400) x Yrs
General Tier 2 (§31676.1)	**Retirement Age**	**Benefit Formula**
	50	1.18% x (FAS3 – $1,400) x Yrs
	55	1.49% x (FAS3 – $1,400) x Yrs
	60	1.92% x (FAS3 – $1,400) x Yrs
	62	2.09% x (FAS3 – $1,400) x Yrs
	65 and over	2.43% x (FAS3 – $1,400) x Yrs
General PEPRA Tier 1 and General PEPRA Tier 2 (§7522.20(a))	**Retirement Age**	**Benefit Formula**
	52	1.00% x FAS3 x Yrs
	55	1.30% x FAS3 x Yrs
	60	1.80% x FAS3 x Yrs
	62	2.00% x FAS3 x Yrs
	65	2.30% x FAS3 x Yrs
	67 and over	2.50% x FAS3 x Yrs

Benefit Formula (continued)		
Safety (§31664)	**Retirement Age**	**Benefit Formula**
	50	2.00% x FAS1 x Yrs
	55 and over	2.62% x FAS1 x Yrs
Safety PEPRA (§7522.25(d))	**Retirement Age**	**Benefit Formula**
	50	2.00% x FAS3 x Yrs
	55	2.50% x FAS3 x Yrs
	57 and over	2.70% x FAS3 x Yrs
Maximum Benefit:		
General Tier 1, General Tier 2 and Safety	100% of Highest Average Compensation (§31676.1, §31664.11, §31664).	
General PEPRA Tier 1, General PEPRA Tier 2 and Safety PEPRA	There is no final compensation limit on the maximum retirement benefit.	
Ordinary Disability:		
General		
Eligibility	Five years of service (§31720).	
Benefit	1.5% per year of service. If the benefit does not exceed one-third of Final Compensation, the service is projected to 65, but the total benefit cannot be more than one-third of Final Compensation (§31727). For all members, 100% of the Service Retirement benefit will be paid, if greater.	
Safety		
Eligibility	Five years of service (§31720).	
Benefit	1.8% per year of service. If the benefit does not exceed one-third of Final Compensation, the service is projected to 55, but the total benefit cannot be more than one-third of Final Compensation (§31727.2). For all members, 100% of the Service Retirement benefit will be paid, if greater.	
Line-of-Duty Disability:		
Eligibility	No age or service requirements (§31720).	
Benefit	50% of the Final Compensation or 100% of Service Retirement benefit, if greater (§31727.4).	

Pre-Retirement Death:	
All Members	
Eligibility	None.
Basic lump sum benefit	Refund of member contributions with interest, plus one month's compensation for each year of service, to a maximum of six months' compensation (§31781).
Line-of-Duty Death	50% of Final Compensation or 100% of Service Retirement benefit, if greater, payable to spouse or minor children (§31787). An additional lump sum payment of one-year of compensation is paid if Line-of-Duty death for Safety member (§31787.6).
Vested Members	
Eligibility	Five years of service.
Basic benefit	60% of the greater of Service Retirement or Ordinary Disability Retirement benefit payable to surviving eligible spouse or eligible children (§31765.1, §31781.1), in lieu of the basic lump sum benefit above (§31781). An additional lump sum payment of one-year of compensation is paid if Line-of-Duty death for Safety member (§31787.6).
Death After Retirement:	
All Members	
Service Retirement or Ordinary Disability Retirement	Unless another option was selected at retirement, 60% of member's unmodified allowance continued to eligible spouse (§31760.1). An eligible spouse is a surviving spouse who was married to the member one year prior to the effective retirement date or at least two years prior to the date of death and has attained age 55 on or prior to the date of death (§31760.2, §31785.1).
Line-of-Duty Disability	Unless another option was selected at retirement, 100% of member's unmodified allowance continued to eligible spouse (§31786). An eligible spouse is a surviving spouse who was married to the member one year prior to the effective retirement date or at least two years prior to the date of death and has attained age 55 on or prior to the date of death (§31786.1).
Additional Death Benefit	A lump sum benefit of $5,000 lump sum benefit payable to member's beneficiary (§31789.3).
Withdrawal Benefits:	
Less than Five Years of Service	Refund of accumulated member contributions with interest (§31628). A member may also elect to leave contributions on deposit in the retirement fund (§31629.5).
Five or More Years of Service	If contributions left on deposit, a member is entitled to earned benefits commencing at any time after eligible to retire (§31700). Service for eligibility includes service credited as an employee of a reciprocal system.

Post-retirement Cost-of-Living Benefits:	
General Tier 1, Safety, General PEPRA Tier 1 and Safety PEPRA	Future changes based on changes to the Consumer Price Index to a maximum of 3% per year, excess "banked" (§31870.1).
General Tier 2 and General PEPRA Tier 2	Members represented by SEIU receive a fixed 2% cost-of-living adjustment, not subject to changes in the CPI that applies to future service after March 2003 (members represented by CNA receive a fixed 2% COLA that applies to future service after July 2023). This benefit has been valued consistent with the methodologies described in our October 9, 2006 report entitled "Funding Policies and Procedures for General Tier II COLA Benefit".
Supplemental Benefit:	A supplemental benefit in the amount of $108.44 per month is paid to retirees and their survivors.
Member Contributions:	Please refer to *Section 4, Exhibit 3* for the specific rates.
General Tier 1, Safety and Safety PEPRA	Provide for 50% of total Normal Cost.
General Tier 2 and General PEPRA Tier 2	Provide for 50% of total basic Normal Cost. In addition, for General Tier 2 with COLA members, the current member COLA contribution rate of 2.63% of compensation has been reflected.
Other Information:	For Non-PEPRA members hired after November 1974, they will pay a contribution corresponding to a General and Safety member hired at entry age 35 and 27, respectively. Safety Non-PEPRA members with 30 or more years of service are exempt from paying member contributions. The same applies for Non-General PEPRA members hired on or before March 7, 1973.
Plan Provisions Not Valued:	The Board of Retirement has approved a non-vested supplemental benefit. This benefit is funded from Undistributed Excess Earnings, paid from a reserve that is not included in the Valuation Value of Assets and is subject at all times to the availability of funds. The non-vested supplemental benefit of $27.50 per month paid to retirees and their survivors terminated upon issuance of the June 2019 payment. This was due to the depletion of the funds in this reserve.
Changed Plan Provisions:	Effective with this valuation, members represented by CNA receive a fixed 2% COLA that applies to future service after July 2023.

Note: The summary of major plan provisions is designed to outline principal plan benefits as interpreted for purposes of the actuarial valuation. If the Association should find the plan summary not in accordance with the actual provisions, the Association should alert the actuary so they can both be sure the proper provisions are valued.

Exhibit 3: Member Contribution Rates

50/50 Sharing of Normal Cost for Non-PEPRA Tiers

	Basic		COLA		Total	
	First $350	Over $350	First $350	Over $350	First $350	Over $350
General Tier 1	5.97%	8.95%	1.97%	2.96%	7.94%	11.91%
General Tier 2	5.19%	7.79%	0.00%	0.00%	5.19%	7.79%
General Tier 2 w/ COLA[1]	5.19%	7.79%	2.63%	2.63%	7.82%	10.42%
Safety	12.03%	12.03%	4.74%	4.74%	16.77%	16.77%

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

Exhibit 3: Member Contribution Rates (continued)

Member Contribution Rates for PEPRA Members

	Basic	COLA	Total
General Tier 2	7.74%	0.00%	7.74%
General Tier 2 w/ COLA[1]	7.74%	2.63%	10.37%
Safety	11.26%	4.44%	15.70%

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

Exhibit 4: Employer Contribution Rates Under the CERL Statutory Formula, without 50/50 Sharing of Normal Cost for Non-PEPRA Tiers

	June 30, 2023 Actuarial Valuation Recommended Rates for FY 2024-25				June 30, 2022 Actuarial Valuation Recommended Rates for FY 2023-24			
	Basic	COLA	Total	Estimated Annual Dollar Amount[1] ($ in '000s)	Basic	COLA	Total	Estimated Annual Dollar Amount[1] ($ in '000s)
General Tier 1 Members								
Normal Cost	9.77%	3.04%	12.81%	$175	11.47%	3.36%	14.83%	$260
UAAL[2]	3.31%	5.14%	8.45%	116	3.19%	6.32%	9.51%	167
Total Contributions	**13.08%**	**8.18%**	**21.26%**	**$291**	**14.66%**	**9.68%**	**24.34%**	**$427**
General Tier 2 Members								
Normal Cost	8.74%	0.00%	8.74%	$14,657	8.79%	0.00%	8.79%	$17,361
UAAL[2]	3.31%	0.00%	3.31%	5,551	3.19%	0.00%	3.19%	6,301
Total Contributions	**12.05%**	**0.00%**	**12.05%**	**$20,208**	**11.98%**	**0.00%**	**11.98%**	**$23,662**
General PEPRA Tier 2 Members								
Normal Cost	7.74%	0.00%	7.74%	$8,645	7.73%	0.00%	7.73%	$9,970
UAAL[2]	3.31%	0.00%	3.31%	3,697	3.19%	0.00%	3.19%	4,114
Total Contributions	**11.05%**	**0.00%**	**11.05%**	**$12,342**	**10.92%**	**0.00%**	**10.92%**	**$14,084**
General Tier 2 Members w/ COLA								
Normal Cost[3,4]	8.74%	0.74%	9.48%	$19,444	8.79%	0.68%	9.47%	$16,967
UAAL[2,5]	3.31%	5.14%	8.45%	17,332	3.19%	6.32%	9.51%	17,038
Total Contributions	**12.05%**	**5.88%**	**17.93%**	**$36,776**	**11.98%**	**7.00%**	**18.98%**	**$34,005**
General PEPRA Tier 2 Members w/ COLA								
Normal Cost[3,4]	7.74%	0.65%	8.39%	$20,842	7.73%	0.60%	8.33%	$14,093
UAAL[2,5]	3.31%	5.14%	8.45%	20,991	3.19%	6.32%	9.51%	16,090
Total Contributions	**11.05%**	**5.79%**	**16.84%**	**$41,833**	**10.92%**	**6.92%**	**17.84%**	**$30,183**
All General Members[6]								
Normal Cost	8.25%	0.43%	8.68%	$63,763	8.33%	0.34%	8.67%	$58,651
UAAL	3.31%	3.18%	6.49%	47,687	3.19%	3.27%	6.46%	43,710
Total Contributions	**11.56%**	**3.61%**	**15.17%**	**$111,450**	**11.52%**	**3.61%**	**15.13%**	**$102,361**

Note: Applicable footnotes are shown on next page.

Exhibit 4: Employer Contribution Rates Under the CERL Statutory Formula, without 50/50 Sharing of Normal Cost for Non-PEPRA Tiers (continued)

	June 30, 2023 Actuarial Valuation Recommended Rates for FY 2024-25				June 30, 2022 Actuarial Valuation Recommended Rates for FY 2023-24			
	Basic	COLA	Total	Estimated Annual Dollar Amount[1] ($ in '000s)	Basic	COLA	Total	Estimated Annual Dollar Amount[1] ($ in '000s)
Safety Members								
Normal Cost	15.01%	4.43%	19.44%	$27,063	15.17%	4.48%	19.65%	$28,095
UAAL	39.32%	(23.99%)	15.33%	21,341	38.87%	(25.24%)	13.63%	19,488
Total Contributions	**54.33%**	**(19.56%)**	**34.77%**	**$48,404**	**54.04%**	**(20.76%)**	**33.28%**	**$47,583**
Safety PEPRA Members								
Normal Cost	11.26%	4.44%	15.70%	$10,603	11.05%	4.36%	15.41%	$8,241
UAAL	39.32%	(23.99%)	15.33%	10,353	38.87%	(25.24%)	13.63%	7,289
Total Contributions	**50.58%**	**(19.55%)**	**31.03%**	**$20,956**	**49.92%**	**(20.88%)**	**29.04%**	**$15,530**
All Safety Members[6]								
Normal Cost	13.79%	4.43%	18.22%	$37,666	14.05%	4.45%	18.50%	$36,336
UAAL	39.32%	(23.99%)	15.33%	31,694	38.87%	(25.24%)	13.63%	26,777
Total Contributions	**53.11%**	**(19.56%)**	**33.55%**	**$69,360**	**52.92%**	**(20.79%)**	**32.13%**	**$63,113**
All Categories Combined[6]								
Normal Cost	9.47%	1.31%	10.78%	$101,429	9.62%	1.26%	10.88%	$94,987
UAAL	11.22%	(2.78%)	8.44%	79,381	11.22%	(3.15%)	8.07%	70,487
Total Contributions	**20.69%**	**(1.47%)**	**19.22%**	**$180,810**	**20.84%**	**(1.89%)**	**18.95%**	**$165,474**

1 Based on projected compensation for each year shown on page 39.

2 Basic UAAL rates have been calculated on a combined basis for all General Tiers. COLA UAAL rates have been calculated on a combined basis for all General Tiers that have a COLA (excludes General Tier 2 without COLA and General PEPRA Tier 2 without COLA). Segal will provide a stand-alone letter that calculates the separate COLA UAAL contribution rates to be payable for each of the General Tiers at a later date.

3 COLA Normal Cost rates have been calculated on a combined basis for SEIU and CNA. Segal will provide a stand-alone letter that calculates the separate COLA Normal Cost contribution rates to be payable for SEIU and CNA at a later date.

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

5 Includes 0.32% and 0.33% in COLA UAAL costs for June 30, 2023 and June 30, 2022, respectively, attributed to the first two years of service accrued for the fixed 2% COLA pursuant to Government Code 31627. Note these rates are calculated as a percentage of SEIU only payroll.

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

Exhibit 5: Member Contribution Rates Under the CERL Statutory Formula, without 50/50 Sharing of Normal Cost for Non-PEPRA Tiers

General Tier 1

	Basic		COLA		Total	
Entry Age	First $350	Over $350	First $350	Over $350	First $350	Over $350
16	3.76%	5.64%	1.32%	1.99%	5.08%	7.63%
17	3.83%	5.74%	1.35%	2.03%	5.18%	7.77%
18	3.90%	5.86%	1.38%	2.07%	5.28%	7.93%
19	3.98%	5.97%	1.41%	2.11%	5.39%	8.08%
20	4.06%	6.08%	1.43%	2.15%	5.49%	8.23%
21	4.13%	6.20%	1.46%	2.19%	5.59%	8.39%
22	4.21%	6.32%	1.49%	2.23%	5.70%	8.55%
23	4.29%	6.44%	1.52%	2.28%	5.81%	8.72%
24	4.38%	6.57%	1.54%	2.32%	5.92%	8.89%
25	4.46%	6.69%	1.57%	2.36%	6.03%	9.05%
26	4.55%	6.82%	1.60%	2.41%	6.15%	9.23%
27	4.63%	6.95%	1.64%	2.46%	6.27%	9.41%
28	4.72%	7.09%	1.67%	2.50%	6.39%	9.59%
29	4.82%	7.22%	1.70%	2.55%	6.52%	9.77%
30	4.91%	7.36%	1.73%	2.60%	6.64%	9.96%
31	5.01%	7.51%	1.76%	2.65%	6.77%	10.16%
32	5.10%	7.66%	1.80%	2.70%	6.90%	10.36%
33	5.21%	7.81%	1.84%	2.76%	7.05%	10.57%
34	5.31%	7.96%	1.87%	2.81%	7.18%	10.77%
35	5.41%	8.12%	1.92%	2.87%	7.33%	10.99%
36	5.52%	8.28%	1.95%	2.92%	7.47%	11.20%
37	5.63%	8.44%	1.98%	2.98%	7.61%	11.42%
38	5.73%	8.60%	2.03%	3.04%	7.76%	11.64%

Exhibit 5: Member Contribution Rates Under the CERL Statutory Formula, without 50/50 Sharing of Normal Cost for Non-PEPRA Tiers (continued)

General Tier 1 (continued)

	Basic		COLA		Total	
Entry Age	**First $350**	**Over $350**	**First $350**	**Over $350**	**First $350**	**Over $350**
39	5.84%	8.76%	2.06%	3.09%	7.90%	11.85%
40	5.95%	8.92%	2.10%	3.15%	8.05%	12.07%
41	6.05%	9.08%	2.14%	3.21%	8.19%	12.29%
42	6.16%	9.24%	2.17%	3.26%	8.33%	12.50%
43	6.26%	9.40%	2.22%	3.32%	8.48%	12.72%
44	6.37%	9.56%	2.25%	3.37%	8.62%	12.93%
45	6.47%	9.70%	2.28%	3.43%	8.75%	13.13%
46	6.56%	9.83%	2.31%	3.47%	8.87%	13.30%
47	6.64%	9.95%	2.34%	3.52%	8.98%	13.47%
48	6.71%	10.06%	2.36%	3.55%	9.07%	13.61%
49	6.77%	10.16%	2.40%	3.59%	9.17%	13.75%
50	6.83%	10.25%	2.42%	3.62%	9.25%	13.87%
51	6.88%	10.32%	2.42%	3.64%	9.30%	13.96%
52	6.91%	10.36%	2.44%	3.66%	9.35%	14.02%
53	6.88%	10.33%	2.44%	3.65%	9.32%	13.98%
54 & Over	6.79%	10.19%	2.40%	3.60%	9.19%	13.79%

Interest:	7.00% per annum
COLA:	2.75%
Mortality:	See *Section 4, Exhibit 1*
Salary Increase:	Inflation (2.50%) + Across-the-Board Increase (0.50%) + Merit (See *Section 4, Exhibit 1*)
COLA Loading Factor:	35.32%

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

Exhibit 5: Member Contribution Rates Under the CERL Statutory Formula, without 50/50 Sharing of Normal Cost for Non-PEPRA Tiers (continued)

General Tier 2

	Basic		COLA		Total	
Entry Age	First $350	Over $350	First $350	Over $350	First $350	Over $350
16	3.12%	4.68%	0.00%	0.00%	3.12%	4.68%
17	3.18%	4.77%	0.00%	0.00%	3.18%	4.77%
18	3.24%	4.86%	0.00%	0.00%	3.24%	4.86%
19	3.30%	4.96%	0.00%	0.00%	3.30%	4.96%
20	3.37%	5.05%	0.00%	0.00%	3.37%	5.05%
21	3.43%	5.15%	0.00%	0.00%	3.43%	5.15%
22	3.50%	5.25%	0.00%	0.00%	3.50%	5.25%
23	3.57%	5.35%	0.00%	0.00%	3.57%	5.35%
24	3.64%	5.46%	0.00%	0.00%	3.64%	5.46%
25	3.71%	5.56%	0.00%	0.00%	3.71%	5.56%
26	3.78%	5.67%	0.00%	0.00%	3.78%	5.67%
27	3.85%	5.78%	0.00%	0.00%	3.85%	5.78%
28	3.93%	5.89%	0.00%	0.00%	3.93%	5.89%
29	4.00%	6.00%	0.00%	0.00%	4.00%	6.00%
30	4.08%	6.12%	0.00%	0.00%	4.08%	6.12%
31	4.16%	6.23%	0.00%	0.00%	4.16%	6.23%
32	4.24%	6.35%	0.00%	0.00%	4.24%	6.35%
33	4.32%	6.48%	0.00%	0.00%	4.32%	6.48%
34	4.40%	6.60%	0.00%	0.00%	4.40%	6.60%
35	4.49%	6.73%	0.00%	0.00%	4.49%	6.73%
36	4.58%	6.86%	0.00%	0.00%	4.58%	6.86%
37	4.67%	7.00%	0.00%	0.00%	4.67%	7.00%
38	4.76%	7.14%	0.00%	0.00%	4.76%	7.14%
39	4.85%	7.28%	0.00%	0.00%	4.85%	7.28%
40	4.94%	7.42%	0.00%	0.00%	4.94%	7.42%

Exhibit 5: Member Contribution Rates Under the CERL Statutory Formula, without 50/50 Sharing of Normal Cost for Non-PEPRA Tiers (continued)

General Tier 2 (continued)

	Basic		COLA		Total	
Entry Age	**First $350**	**Over $350**	**First $350**	**Over $350**	**First $350**	**Over $350**
41	5.04%	7.56%	0.00%	0.00%	5.04%	7.56%
42	5.13%	7.70%	0.00%	0.00%	5.13%	7.70%
43	5.23%	7.84%	0.00%	0.00%	5.23%	7.84%
44	5.32%	7.98%	0.00%	0.00%	5.32%	7.98%
45	5.41%	8.12%	0.00%	0.00%	5.41%	8.12%
46	5.50%	8.26%	0.00%	0.00%	5.50%	8.26%
47	5.59%	8.39%	0.00%	0.00%	5.59%	8.39%
48	5.68%	8.52%	0.00%	0.00%	5.68%	8.52%
49	5.76%	8.65%	0.00%	0.00%	5.76%	8.65%
50	5.84%	8.76%	0.00%	0.00%	5.84%	8.76%
51	5.90%	8.86%	0.00%	0.00%	5.90%	8.86%
52	5.96%	8.94%	0.00%	0.00%	5.96%	8.94%
53	6.01%	9.02%	0.00%	0.00%	6.01%	9.02%
54	6.06%	9.08%	0.00%	0.00%	6.06%	9.08%
55	6.08%	9.12%	0.00%	0.00%	6.08%	9.12%
56	6.08%	9.12%	0.00%	0.00%	6.08%	9.12%
57	6.03%	9.05%	0.00%	0.00%	6.03%	9.05%
58	6.23%	9.34%	0.00%	0.00%	6.23%	9.34%
59 & Over	6.44%	9.66%	0.00%	0.00%	6.44%	9.66%

Interest:	7.00% per annum
COLA:	Members represented by SEIU and CNA contribute a negotiated 2.63% for a fixed 2% COLA pursuant to Government Code 31627.
Mortality:	See *Section 4, Exhibit 1*
Salary Increase:	Inflation (2.50%) + Across-the-Board Increase (0.50%) + Merit (See *Section 4, Exhibit 1*)

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

Exhibit 5: Member Contribution Rates Under the CERL Statutory Formula, without 50/50 Sharing of Normal Cost for Non-PEPRA Tiers (continued)

Safety

Entry Age	Basic	COLA	Total
16	7.96%	4.46%	12.42%
17	8.10%	4.53%	12.63%
18	8.24%	4.61%	12.85%
19	8.39%	4.69%	13.08%
20	8.53%	4.77%	13.30%
21	8.68%	4.85%	13.53%
22	8.83%	4.94%	13.77%
23	8.98%	5.02%	14.00%
24	9.14%	5.11%	14.25%
25	9.30%	5.20%	14.50%
26	9.46%	5.29%	14.75%
27	9.63%	5.39%	15.02%
28	9.80%	5.48%	15.28%
29	9.97%	5.58%	15.55%
30	10.15%	5.68%	15.83%
31	10.33%	5.78%	16.11%
32	10.52%	5.89%	16.41%
33	10.72%	6.00%	16.72%
34	10.92%	6.11%	17.03%
35	11.13%	6.23%	17.36%
36	11.35%	6.35%	17.70%

Exhibit 5: Member Contribution Rates Under the CERL Statutory Formula, without 50/50 Sharing of Normal Cost for Non-PEPRA Tiers (continued)

Safety (continued)

Entry Age	Basic	COLA	Total
37	11.57%	6.47%	18.04%
38	11.80%	6.60%	18.40%
39	12.04%	6.73%	18.77%
40	12.29%	6.87%	19.16%
41	12.54%	7.01%	19.55%
42	12.79%	7.15%	19.94%
43	12.95%	7.24%	20.19%
44	12.99%	7.27%	20.26%
45	13.02%	7.28%	20.30%
46	13.04%	7.30%	20.34%
47	13.07%	7.31%	20.38%
48	12.99%	7.27%	20.26%
49 & Over	12.70%	7.10%	19.80%

Interest:	7.00% per annum
COLA:	2.75%
Mortality:	See *Section 4, Exhibit 1*
Salary Increase:	Inflation (2.50%) + Across-the-Board Increase (0.50%) + Merit (See *Section 4, Exhibit 1*)
COLA Loading Factor:	55.94%

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

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Ventura County Employees' Retirement Association

Governmental Accounting Standards Board Statement No. 67 (GAS 67) Actuarial Valuation

As of June 30, 2023

Segal

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December 12, 2023

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

Dear Board Members:

We are pleased to submit this Governmental Accounting Standards Board Statement No. 67 (GAS 67) Actuarial Valuation as of June 30, 2023. It contains various information that will need to be disclosed in order to comply with GAS 67. Please refer to the Actuarial Valuation as of June 30, 2023, for the data, assumptions, and plan of benefits underlying these calculations.

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

The measurements shown in this actuarial valuation may not be applicable for other purposes. Future actuarial measurements may differ significantly from the current measurements presented in this report due to such factors as the following: plan experience differing from that anticipated by the economic or demographic assumptions; changes in economic or demographic assumptions; and changes in plan provisions or applicable law.

The actuarial calculations were completed under the supervision of Molly Calcagno, ASA, Enrolled Actuary, MAAA. We are members of the American Academy of Actuaries and we meet the Qualification Standards of the American Academy of Actuaries to render the actuarial opinion herein. To the best of our knowledge, the information supplied in the actuarial valuation is complete and accurate. Further, in our opinion, the assumptions as approved by the Board are reasonably related to the experience of and expectations for the Plan. The assumptions used in this actuarial valuation were selected by the Board based upon our analysis and recommendations. In our opinion, the assumptions are reasonable and take into account the experience of the Plan and reasonable expectations. In addition, in our opinion, the combined effect of these assumptions is expected to have no significant bias.

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

Sincerely,

Segal

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

Molly Calcagno, ASA, MAAA, EA
Senior Actuary

JY/jl

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Section 1: Actuarial Valuation Summary

Purpose and basis

This report has been prepared by Segal to present certain disclosure information required by Governmental Accounting Standards Board Statement No. 67 (GAS 67) as of June 30, 2023. This report is based on:

- The benefit provisions of VCERA, as administered by the Board of Retirement;
- The characteristics of covered active members, inactive vested members, and retired members and beneficiaries as of June 30, 2022, provided by VCERA;
- The assets of the Plan as of June 30, 2023, provided by VCERA;
- Economic assumptions regarding future salary increases and investment earnings adopted by the Board of Retirement for the June 30, 2023 valuation; and
- Other actuarial assumptions, regarding employee terminations, retirement, death, etc. adopted by the Board of Retirement for the June 30, 2023 valuation.

General observations on GAS 67 actuarial valuation

1. It is important to note that Governmental Accounting Standards Board (GASB) rules only define pension liability and expense for financial reporting purposes, and do not apply to contribution amounts for actual pension funding purposes. Employers and plans should develop and adopt funding policies under current practices.
2. When measuring pension liability, GASB uses the same actuarial cost method (Entry Age method) and the same type of discount rate (expected return on assets) as VCERA uses for funding. This means that the Total Pension Liability (TPL) measure for financial reporting shown in this report is determined on generally the same basis as VCERA's Actuarial Accrued Liability (AAL) measure for funding. We note that the same is generally true for the Normal Cost component of the annual plan cost for funding and financial reporting.
3. It is our understanding that VCERA terminated the non-vested supplemental ($27.50) reserve after the June 2019 payment due to the depletion of that Reserve. Any remaining amount in that Reserve is available to pay retroactive benefits, if any. Note that we have included the Reserve amount in the Plan's Fiduciary Net Position but have not included any corresponding liability amount in the TPL.

4. The Net Pension Liability (NPL) is equal to the difference between the TPL and the Plan's Fiduciary Net Position. The Plan's Fiduciary Net Position is equal to the market value of assets and therefore, the NPL measure is very similar to an Unfunded Actuarial Accrued Liability (UAAL) calculated on a market value basis. The NPL reflects all investment gains and losses as of the measurement date. This is different from the UAAL on a valuation value of assets basis in the funding valuation that reflects investment gains and losses over a five-year period.

Highlights of the valuation

1. For this report, the reporting dates for the Plan are June 30, 2023 and 2022. The NPL was measured as of June 30, 2023 and 2022, respectively, and determined based upon rolling forward the TPL from actuarial valuations as of June 30, 2022 and 2021. The Plan's Fiduciary Net Position (plan assets) was valued as of the measurement dates. In addition, any changes in actuarial assumptions or plan provisions that occurred between the valuation date and the measurement date have been reflected.
2. The NPL decreased from $438 million as of June 30, 2022 to $229 million as of June 30, 2023 primarily due to the 9.63% return[1] on the market value of assets during 2022/2023 (that was greater than the assumed return of 7.00%). Changes in these values during the last two fiscal years ending June 30, 2023 and June 30, 2022 can be found in *Section 2, Schedules of changes in Net Pension Liability* on page 19.
3. The discount rate used to determine the TPL and NPL as of June 30, 2023 was 7.00% following the same assumption used by VCERA in the funding valuation as of the same date. The detailed derivation of the discount rate of 7.00% used in calculation of the TPL and NPL as of June 30, 2023 can be found in *Section 3, Appendix A.* Various other information that is required to be disclosed can be found throughout *Section 2*.
4. *Section 3* contains two schedules that the American Institute of Certified Public Accountants (AICPA) recommends be prepared by cost sharing pension plans. These two schedules contain summary information related to GAS 68 and are based on many of the results that will be shown in a separate GAS 68 report. The first schedule shows the method used for allocating the NPL along with the NPL amounts allocated amongst all of the employers in VCERA. The second schedule is a summary that shows the allocated NPL, deferred outflows and inflows of resources and pension expense by employer. Further information regarding GAS 68 including additional information that employers will need to disclose will be provided in a separate report that is anticipated to be completed during the first quarter of 2023.
5. On July 30, 2020, the California Supreme Court issued a decision in the Alameda County Deputy Sheriffs' Assn. et al. v. Alameda County Employees' Retirement Assn. litigation that clarified what should be considered compensation earnable for non-PEPRA members and pensionable compensation for PEPRA members. In response, the Board adopted a series of

[1] Gross of administrative and other expenses.

Resolutions to implement certain aspects of the Alameda Decision. The October 2020 Resolution set forth exclusions from compensation earnable and pensionable compensation consisting of payment for services outside of normal working hours (e.g., standby and call-back pay), excess leave cash-outs beyond what is both earned and payable in each 12-month period, and leave donations which are an “in-kind” benefit. The July 2021 Resolution limited inclusion of flexible benefit plan allowances, or “flex credit,” to the “employee-only” rate for labor agreements that provide tiered rates for healthcare coverage, subject to further modification based on pending legislation concerning flex credit. Following the subsequent veto of such legislation, the Board adopted a Resolution in April of 2023, excluding from compensation earnable flex credit amounts in excess of what all members in a bargaining group may receive in unrestricted cash, which are deemed “in-kind” benefits. As discussed with VCERA staff, the effect of the Alameda Decision will be reflected as gains and losses as issues are settled and corrections are made to the membership data provided for each valuation. Our understanding is that the June 30, 2022 membership data (used in the roll forward to determine the TPL as of June 30, 2023) provided reflected some of the reclassifications of the pay codes that have been adopted by the Board for active members, including standby and call-back pay. Any additional changes in the membership data after June 30, 2022 as a result of the Alameda Decision will be reflected in future valuations once they are known. In addition, any additional impact on the Plan’s Fiduciary Net Position related to recovery of benefits and/or refunds of member contributions previously paid in conjunction with these pay items has not been reflected in this valuation but will be reflected in future valuations once it is known.

6. It is important to note that this actuarial valuation is based on plan assets as of June 30, 2023. The plan’s funded status does not reflect short-term fluctuations of the market, but rather is based on the market values on the last day of the plan year. Moreover, this actuarial valuation does not include any possible short-term or long-term impacts on mortality of the covered population that may emerge after June 30, 2023 due to COVID-19. Segal is available to prepare projections of potential outcomes of market conditions and other demographic experience upon request.

Summary of key valuation results

Measurement Date		June 30, 2023	June 30, 2022
Disclosure elements for plan year ending June 30:	• Service cost[2]	$174,224,167	$165,663,753
	• Total Pension Liability	7,807,507,543	7,463,430,523
	• Plan's Fiduciary Net Position	7,578,237,848	7,025,332,391
	• Net Pension Liability	229,269,695	438,098,132
Schedule of contributions for plan year ending June 30:	• Actuarially determined contributions[3]	$178,535,140	$178,667,231
	• Actual contributions	178,535,140	178,667,231
	• Contribution deficiency / (excess)	0	0
Demographic data for plan year ending June 30:[4]	• Number of retired members and beneficiaries	8,257	8,007
	• Number of inactive vested members[5]	4,085	3,812
	• Number of active members	9,384	9,077
Key assumptions as of June 30:	• Investment rate of return	7.00%	7.00%
	• Inflation rate	2.50%	2.50%
	• Projected salary increases[6]	General: 3.75% to 10.00% and Safety: 4.00% to 12.00%	General: 3.75% to 10.00% and Safety: 4.00% to 12.00%
	• Cost of living adjustments		
	– Tiers with 3.00% COLA	2.75%	2.75%
	– Tiers with fixed 2% COLA	2.00%	2.00%
	– Tiers without COLA	0.00%	0.00%

[2] The service cost is based on the previous year's valuation, meaning the 2023 and 2022 values are based on the valuations as of June 30, 2022 and June 30, 2021, respectively. Both service costs have been calculated using the assumptions shown in the June 30, 2022 measurement date column, as there have been no changes in the actuarial assumptions between the June 30, 2022 and June 30, 2021 valuations.

[3] Actuarially Determined Contributions exclude employer paid member contributions.

[4] Data as of June 30, 2022 is used in the measurement of the TPL as of June 30, 2023.

[5] Includes inactive members with member contributions on deposit.

[6] Includes inflation at 2.50% plus real across-the-board salary increases of 0.50% plus merit and promotion increases that vary by service.

Important information about actuarial valuations

In order to prepare a valuation, Segal relies on a number of input items. These include:

Plan Provisions	Plan provisions define the rules that will be used to determine benefit payments, and those rules, or the interpretation of them, may change over time. Even where they appear precise, outside factors may change how they operate. It is important to keep Segal informed with respect to plan provisions and administrative procedures, and to review the plan summary included in our report to confirm that Segal has correctly interpreted the plan of benefits.
Participant Information	An actuarial valuation for a plan is based on data provided to the actuary by VCERA. Segal does not audit such data for completeness or accuracy, other than reviewing it for obvious inconsistencies compared to prior data and other information that appears unreasonable. It is important for Segal to receive the best possible data and to be informed about any known incomplete or inaccurate data.
Financial Information	This valuation is based on the fair value of assets as of the measurement date, as provided by VCERA.
Actuarial Assumptions	In preparing an actuarial valuation, Segal starts by developing a forecast of the benefits to be paid to existing plan participants for the rest of their lives and the lives of their beneficiaries. This requires actuarial assumptions as to the probability of death, disability, withdrawal, and retirement of participants in each year, as well as forecasts of the plan's benefits for each of those events. In addition, the benefits forecasted for each of those events in each future year reflect actuarial assumptions as to salary increases and cost-of-living adjustments. The forecasted benefits are then discounted to a present value, typically based on an estimate of the rate of return that will be achieved on the plan's assets. All of these factors are uncertain and unknowable. Thus, there will be a range of reasonable assumptions, and the results may vary materially based on which assumptions are selected within that range. That is, there is no right answer (except with hindsight). It is important for any user of an actuarial valuation to understand and accept this constraint. The actuarial model may use approximations and estimates that will have an immaterial impact on our results. In addition, the actuarial assumptions may change over time, and while this can have a significant impact on the reported results, it does not mean that the previous assumptions or results were unreasonable or wrong.
Models	Segal valuation results are based on proprietary actuarial modeling software. The actuarial valuation models generate a comprehensive set of liability and cost calculations that are presented to meet regulatory, legislative and client requirements. Our Actuarial Technology and Systems unit, comprised of both actuaries and programmers, is responsible for the initial development and maintenance of these models. The models have a modular structure that allows for a high degree of accuracy, flexibility and user control. The client team programs the assumptions and the plan provisions, validates the models, and reviews test lives and results, under the supervision of the responsible actuary.

Section 1: Actuarial Valuation Summary

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

The valuation is prepared at the request of the Board to assist VCERA in preparing items related to the pension plan in their financial reports. Segal is not responsible for the use or misuse of its report, particularly by any other party.
An actuarial valuation is a measurement at a specific date – it is not a prediction of a plan's future financial condition. Accordingly, except where otherwise noted, Segal did not perform an analysis of the potential range of future financial measures. The actual long-term cost of the plan will be determined by the actual benefits and expenses paid and the actual investment experience of the plan.
Actuarial results in this report are not rounded, but that does not imply precision.
If VCERA is aware of any event or trend that was not considered in this valuation that may materially change the results of the valuation, Segal should be advised, so that we can evaluate it.
Segal does not provide investment, legal, accounting, or tax advice. Segal's valuation is based on our understanding of applicable guidance in these areas and of the plan's provisions, but they may be subject to alternative interpretations. The Board should look to their other advisors for expertise in these areas.
While Segal maintains extensive quality assurance procedures, an actuarial valuation involves complex computer models and numerous inputs. In the event that an inaccuracy is discovered after presentation of Segal's valuation, Segal may revise that valuation or make an appropriate adjustment in the next valuation.
Segal's report shall be deemed to be final and accepted by the Association upon delivery and review. The Association should notify Segal immediately of any questions or concerns about the final content.

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

Section 2: GAS 67 Information

General information about the pension plan

Plan Description

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

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

Plan membership. At June 30, 2023, pension plan membership consisted of the following:

Retired members or beneficiaries currently receiving benefits	8,257
Inactive vested members entitled to but not yet receiving benefits[1]	4,085
Active members	9,384
Total	**21,726**

Note: Data as of June 30, 2023 is not used in the measurement of the TPL as of June 30, 2023.

[1] Includes inactive members with member contributions on deposit.

Section 2: GAS 67 Information

Benefits provided. VCERA provides service retirement, disability, death and survivor benefits to eligible employees. All permanent employees of the County of Ventura or contracting district who work a regular schedule of 64 or more hours per bi-weekly pay period become members of VCERA upon appointment. There are separate retirement plans for safety and general member employees. Safety membership is extended to those involved in active law enforcement, fire suppression, and probation. The table below indicates all existing VCERA membership tiers:

Membership Tier	Retirement Eligibility
Tier 1 - General Legacy Members hired before January 1, 2013	Age 50 and 10 or more years of service credit, or 30 years or more of service credit, regardless of age. Age 70, regardless of service.
Tier 1 - Safety Legacy Members hired before January 1, 2013	Age 50 and 10 or more years of service credit, or 20 years or more of service credit, regardless of age. Age 70, regardless of service.
Tier 2 - General Legacy Members hired before January 1, 2013	Age 50 and 10 or more years of service credit, or 30 years or more of service credit, regardless of age. Age 70, regardless of service.
Tier 2 COLA - General Legacy Members hired before January 1, 2013	Age 50 and 10 or more years of service credit, or 30 years or more of service credit, regardless of age. Age 70, regardless of service.
Tier 5[1] - General PEPRA Members hired on or after January 1, 2013	Age 52 and five years of service credit. Age 70, regardless of service credit.
Tier 6[2] - General PEPRA Members hired on or after January 1, 2013	Age 52 and five years of service credit. Age 70, regardless of service credit.
Tier 7[3] - Safety PEPRA Members hired on or after January 1, 2013	Age 50 and five years of service credit. Age 70, regardless of service credit.
Tier 8[2] COLA - General PEPRA Members hired on or after January 1, 2013	Age 52 and five years of service credit. Age 70, regardless of service credit.

[1] These are also referred to as PEPRA Tier 1.

[2] These are also referred to as PEPRA Tier 2.

[3] These are also referred to as Safety PEPRA.

Section 2: GAS 67 Information

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

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

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

For members with membership dates before January 1, 2013, the maximum monthly retirement allowance is 100% of final compensation. There is no 100% of final average compensation limit on the maximum monthly retirement allowance benefit for members with membership dates on or after January 1, 2013. However, the maximum amount of compensation earnable that can be considered for purposes of retirement contributions and benefit calculations for 2023 for members hired on or after July 1, 1996 but before January 1, 2013 is $330,000. For members hired on or after January 1, 2013 who are enrolled in Social Security, the maximum amount of pensionable compensation that can be considered for purposes of retirement contributions and benefit calculations for 2023 is $146,042 ($175,250 for those not enrolled in Social Security). These limits are adjusted on an annual basis. Members are exempt from paying member contributions and employers are exempt from paying employer contributions on compensation in excess of the annual cap.[1]

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

The member may elect an unmodified retirement allowance, or choose an optional retirement allowance. The unmodified retirement allowance provides the highest monthly benefit and a 60% continuance to an eligible surviving spouse. An eligible surviving spouse is one married to the member one year prior to the effective retirement date or at least two years prior to the date of death and has attained age 55 on or prior to the date of death. There are four optional retirement allowances the member may choose. Each of the

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

optional retirement allowances requires a reduction in the unmodified retirement allowance in order to allow the member the ability to provide certain benefits to a surviving spouse or named beneficiary having an insurable interest in the life of the member.

VCERA provides an annual cost-of-living adjustment (COLA) benefit to Safety and Tier 1 General member retirees. The COLA, based upon the change in the December-to-December Consumer Price Index for the Los Angeles-Long Beach-Anaheim Area, is capped at 3.0%. Certain Tier 2 and all Tier 8 General member retirees receive a fixed 2% COLA that applies to future service after March 2003 for SEIU members (or July 2023 for CNA members) pursuant to collective bargaining agreements.

The employers contribute to the retirement plan based upon actuarially determined contribution rates adopted by the Board of Retirement. Employer contribution rates are adopted annually based upon recommendations received from VCERA's actuary after the completion of the annual actuarial valuation. The average employer contribution rate as of June 30, 2023 for 2022/2023 (based on the June 30, 2021 valuation) was 21.32% of compensation.

Members are required to make contributions to VCERA up to the requisite limits, regardless of the retirement plan or tier.[1] The average member contribution rate as of June 30, 2023 for 2022/2023 (based on the June 30, 2021 valuation) was 10.55% of compensation.

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

Net Pension Liability

The components of the Net Pension Liability were as follows:

Measurement Date	June 30, 2023	June 30, 2022
Total Pension Liability	$7,807,507,543	$7,463,430,523
Plan's Fiduciary Net Position	(7,578,237,848)	(7,025,332,391)
Net Pension Liability	**$229,269,695**	**$438,098,132**
Plan's Fiduciary Net Position as a percentage of the Total Pension Liability	97.06%	94.13%

The Net Pension Liability (NPL) was measured as of June 30, 2023 and 2022. The Plan's Fiduciary Net Position (plan assets) was valued as of the measurement date while the Total Pension Liability (TPL) was determined based upon rolling forward the TPL from actuarial valuations as of June 30, 2022 and 2021, respectively.

Plan provisions. The plan provisions used in the measurement of the NPL as of June 30, 2023 and 2022 are the same as those used in the VCERA actuarial valuations as of June 30, 2023 and 2022. The TPL and the Plan's Fiduciary Net Position include liabilities and assets held for the non-vested supplemental ($27.50) reserve.[1]

Actuarial assumptions and actuarial cost method. The TPLs as of June 30, 2023 and 2022 were determined by actuarial valuations as of June 30, 2022 and 2021, respectively. The actuarial assumptions used were based on the results of an experience study for the period from July 1, 2017 through June 30, 2020 and they are the same assumptions used in the June 30, 2023 and 2022 funding valuations for VCERA. In particular, the following actuarial assumptions were applied to all periods included in the measurement:

[1] It is our understanding that the VCERA has terminated the non-vested supplemental reserve after the June 2019 payment due to the depletion of that Reserve.

Investment rate of return:	7.00%, net of pension plan investment expense, including inflation
Inflation rate:	2.50%
Real across-the-board salary increase:	0.50%
Projected salary increases:	General: 3.75% to 10.00% and Safety: 4.00% to 12.00%, varying by service, including inflation and real across-the-board salary increase
Cost of living adjustments (COLA):	Retiree COLA increases of 2.75% per year for both PEPRA and Non-PEPRA General Tier 1 and both PEPRA and Non-PEPRA Safety. For both PEPRA and non-PEPRA General Tier 2, members represented by SEIU receive a fixed 2% COLA that applies to future service after March 2003 (members represented by CNA receive a fixed 2% COLA that applies to future service after July 2023). For both PEPRA and Non-PEPRA General Tier 1 and both PEPRA and Non-PEPRA Safety members that have COLA banks, we assume they receive 3.0% COLA increases until their COLA banks are exhausted and 2.75% thereafter. For both PEPRA and non-PEPRA General Tier 2 members represented by SEIU and CNA, the fixed 2% COLA increase is not subject to changes in the CPI.
Other assumptions:	See analysis of actuarial experience during the period July 1, 2017 through June 30, 2020

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

Determination of discount rate and investment rates of return

The long-term expected rate of return on pension plan investments[1] was determined in 2021 using a building-block method in which expected future real rates of return (expected returns, net of inflation) are developed for each major asset class. These returns are combined to produce the long-term expected rate of return by weighting the expected future real rates of return by the target asset allocation percentage, adding expected inflation and subtracting expected investment expenses and a risk margin. The target allocation and projected arithmetic real rates of return for each major asset class, after deducting inflation but before deducting investment expenses, are shown in the following tables. This information was used in the derivation of the long-term expected investment rate of return assumption in the June 30, 2023 and 2022 actuarial valuations. This information will change every three years based on the actuarial experience study.

June 30, 2023

Asset Class	Target Allocation	Long-Term Expected Arithmetic Real Rate of Return
Large Cap Equity	27.69%	5.39%
Small Cap Equity	3.96%	6.58%
Developed International Equity	16.04%	6.39%
Emerging Market Equity	4.31%	8.60%
Core Bonds	5.00%	0.83%
Treasuries	2.00%	0.00%
Real Estate	8.00%	5.01%
Private Equity	16.00%	10.00%
Private Debt/Credit Strategies	6.00%	5.02%
Infrastructure	4.00%	5.89%
Natural Resources	2.00%	11.24%
Absolute Return Fixed Income	5.00%	2.17%
Total	**100.00%**	**6.06%**

[1] Note that the investment return assumption for funding purposes is developed net of both investment and administrative expenses; however, the same investment return assumption is used for financial reporting purposes, where it is considered gross of administrative expenses.

Section 2: GAS 67 Information

Discount rate. The discount rate used to measure the TPL was 7.00% as of June 30, 2023 and 2022. The projection of cash flows used to determine the discount rate assumed plan member contributions will be made at the current contribution rate and that employer contributions will be made at rates equal to the actuarially determined contribution rates. For this purpose, only employer contributions that are intended to fund benefits for current plan members and their beneficiaries are included. Projected employer contributions that are intended to fund the service costs for future plan members and their beneficiaries, as well as projected contributions from future plan members, are not included. Based on those assumptions, the Plan's Fiduciary Net Position was projected to be available to make all projected future benefit payments for current plan members. Therefore, the long-term expected rate of return on pension plan investments was applied to all periods of projected benefit payments to determine the TPL as of both June 30, 2023 and 2022.

Discount rate sensitivity

Sensitivity of the Net Pension Liability to changes in the discount rate. The following presents the NPL as of June 30, 2023, calculated using the discount rate of 7.00%, as well as what the NPL would be if it were calculated using a discount rate that is 1-percentage-point lower (6.00%) or 1-percentage-point higher (8.00%) than the current rate:

	1% Decrease (6.00%)	Current Discount Rate (7.00%)	1% Increase (8.00%)
Net Pension Liability as of June 30, 2023	$1,257,136,303	$229,269,695	$(620,044,385)

Schedule of changes in Net Pension Liability – Last two fiscal years

Measurement Date	June 30, 2023	June 30, 2022
Total Pension Liability		
• Service cost	$174,224,167	$165,663,753
• Interest	521,289,035	501,494,181
• Change of benefit terms	0	0
• Differences between expected and actual experience	29,900,776	(23,717,377)
• Changes of assumptions	0	0
• Benefit payments, including refunds of member contributions	(381,336,958)	(357,097,727)
Net change in Total Pension Liability	**$344,077,020**	**$286,342,830**
Total Pension Liability – beginning	**7,463,430,523**	**7,177,087,693**
Total Pension Liability – ending	**$7,807,507,543**	**$7,463,430,523**
Plan's Fiduciary Net Position		
• Contributions – employer[1]	$178,535,140	$178,667,231
• Contributions – employee[1]	93,971,245	84,719,851
• Net investment income	670,998,749	(553,406,546)
• Benefit payments, including refunds of member contributions	(381,336,958)	(357,097,727)
• Administrative expense	(6,837,989)	(6,169,082)
• Other expense	(2,424,730)	(2,934,633)
Net change in Plan's Fiduciary Net Position	**$552,905,457**	**$(656,220,906)**
Plan's Fiduciary Net Position – beginning	**7,025,332,391**	**7,681,553,297**
Plan's Fiduciary Net Position – ending	**$7,578,237,848**	**$7,025,332,391**
Net Pension Liability – ending	**$229,269,695**	**$438,098,132**
Plan's Fiduciary Net Position as a percentage of the Total Pension Liability	**97.06%**	**94.13%**
Covered payroll[2]	**$905,128,000**	**$834,433,000**
Net Pension Liability as percentage of covered payroll	**25.33%**	**52.50%**

Notes to Schedule:

Benefit changes: None

[1] See footnote 2 on the following page.

[2] Covered payroll represents payroll on which contributions to the pension plan are based.

Schedule of employer contributions – Last ten fiscal years

Year Ended June 30	Actuarially Determined Contributions[1,2]	Contributions in Relation to the Actuarially Determined Contributions[1,2]	Contribution Deficiency / (Excess)	Covered Payroll[3]	Contributions as a Percentage of Covered Payroll
2014	$161,247,000	$161,247,000	$0	$642,779,000	25.09%
2015	173,269,000	173,269,000	0	665,086,000	26.05%
2016	177,830,000	177,830,000	0	688,233,000	25.84%
2017	190,712,000	190,712,000	0	716,033,000	26.63%
2018	197,638,000	197,638,000	0	736,994,000	26.82%
2019	199,890,664	199,890,664	0	754,657,000	26.49%
2020	214,553,123	214,553,123	0	768,619,000	27.91%
2021	178,628,118	178,628,118	0	785,121,000	22.75%
2022	178,667,231	178,667,231	0	834,433,000	21.41%
2023	178,535,140	178,535,140	0	905,128,000	19.72%

See accompanying notes to this schedule on the next page.

[1] All “Actuarially Determined Contributions” through June 30, 2014 were determined as the “Annual Required Contribution” under GAS 25 and 27.

[2] Actuarially Determined Contributions exclude employer paid member contributions.

[3] Covered payroll represents payroll on which contributions to the pension plan are based.

Section 2: GAS 67 Information

Notes to Schedule:

Methods and assumptions used to establish "actuarially determined contribution" rates:

Valuation date:	Actuarially determined contribution rates are calculated as of June 30, two years prior to the end of the fiscal year in which contributions are reported
Actuarial cost method:	Entry Age Actuarial Cost Method
Amortization method:	Level percent of payroll for total unfunded actuarial accrued liability
Remaining amortization period:	15 years for UAAL as of June 30, 2004. Any changes in UAAL after June 30, 2004 are separately amortized over a 15-year closed period effective with that valuation. Effective June 30, 2012, any changes in UAAL due to actuarial gains or losses or due to plan amendments (with the exception of a change due to retirement incentives) will be amortized over a 15-year closed period effective with that valuation (up to a 5-year closed period for retirement incentives). Any change in UAAL due to changes in actuarial assumptions or methods will be amortized over a 20-year closed period effective with that valuation.
Asset valuation method:	Market value of assets less unrecognized returns in each of the last ten semi-annual accounting periods. Unrecognized returns are equal to the difference between the actual market return and the expected return on market value and are recognized over a five-year period. The Actuarial Value of Assets is reduced by the value of the non-vested supplemental ($27.50) reserve and statutory contingency reserve.

Section 2: GAS 67 Information

Actuarial assumptions:

Valuation Date:	June 30, 2021 Valuation (used for the year ended June 30, 2023 ADC)
Investment rate of return:	7.00%, net of pension plan administration and investment expenses, including inflation
Inflation rate:	2.50%
Real across-the-board salary increase:	0.50%
Projected salary increases:	General: 3.75% to 10.00% and Safety: 4.00% to 12.00%, varying by service, including inflation and real across-the-board salary increase
Cost of living adjustments (COLA):	Retiree COLA increases of 2.75% per year for both PEPRA and Non-PEPRA General Tier 1 and both PEPRA and Non-PEPRA Safety. For both PEPRA and non-PEPRA General Tier 2, members represented by SEIU receive a fixed 2% COLA that applies to future service after March 2003 (members represented by CNA receive a fixed 2% COLA that applies to future service after July 2023). For both PEPRA and Non-PEPRA General Tier 1 and both PEPRA and Non-PEPRA Safety members that have COLA banks, we assume they receive 3.0% COLA increases until their COLA banks are exhausted and 2.75% thereafter. For both PEPRA and non-PEPRA General Tier 2 members represented by SEIU and CNA, the fixed 2% COLA increase is not subject to changes in the CPI.
Other assumptions:	Same as those used in the June 30, 2021 funding actuarial valuation

Section 3: Appendices

Appendix A: Projection of Plan's Fiduciary Net Position for use in the Calculation of Discount Rate as of June 30, 2023 ($ in millions)

Year Beginning July 1,	Projected Beginning Plan's Fiduciary Net Position (a)	Projected Total Contributions (b)	Projected Benefit Payments (c)	Projected Administrative Expenses (d)	Projected Investment Earnings (e)	Projected Ending Plan's Fiduciary Net Position (f) = (a) + (b) - (c) - (d) + (e)
2022	$7,025	$273	$381	$9	$671	$7,578
2023	7,578	229	427	10	523	7,893
2024	7,893	156	427	10	542	8,154
2025	8,154	151	447	11	559	8,406
2026	8,406	155	468	11	576	8,659
2027	8,659	159	489	11	594	8,911
2028	8,911	156	511	12	610	9,154
2029	9,154	152	532	12	626	9,389
2030	9,389	149	554	12	642	9,613
2031	9,613	145	576	13	657	9,827
2047	11,293	62	879	15	760	11,221
2048	11,221	57	892	15	755	11,125
2049	11,125	53	905	15	747	11,007
2050	11,007	50	915	15	738	10,865
2051	10,865	46	924	14	728	10,701
2096	102	2	34	0 *	6	76
2097	76	2	26	0 *	4	56
2098	56	1	20	0 *	3	41
2099	41	1	15	0 *	2	29
2100	29	1	11	0 *	2	21
2101	21	1	8	0 *	1	14
2133	0	0	0 *	0 *	0	0
2134	0					
2134 Discounted Value:	0					

* Less than $1 million, when rounded.

Appendix A: Projection of Plan's Fiduciary Net Position for use in the Calculation of Discount Rate as of June 30, 2023 (continued)

Notes:

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

(2) Amounts shown in the year beginning July 1, 2022 row are actual amounts, based on the unaudited financial statements provided by VCERA.

(3) Various years have been omitted from this table.

(4) Column (a): Except for the "discounted value" shown for 2134, none of the projected beginning Plan's Fiduciary Net Position amounts shown have been adjusted for the time value of money.

(5) Column (b): Projected total contributions include employee and employer normal cost rates applied to closed group projected payroll (based on covered active members as of June 30, 2022), plus employer contributions to the unfunded actuarial accrued liability. Contributions are assumed to occur halfway through the year, on average.

(6) Column (c): Projected benefit payments have been determined in accordance with paragraph 39 of GASB Statement No. 67, and are based on the closed group of active, inactive vested, retired members, and beneficiaries as of June 30, 2022. The projected benefit payments reflect the cost of living increase assumptions used in the June 30, 2023 valuation report (with the exception of the fixed 2% COLA that applies to future service after July 2023 for members represented by CNA).

(7) Column (d): Projected administrative expenses are calculated as approximately 0.13% of the projected beginning Plan's Fiduciary Net Position amount. The 0.13% portion was based on the actual fiscal year 2022/2023 administrative and other expenses (unaudited) as a percentage of the actual beginning Plan's Fiduciary Net Position as of July 1, 2022. Administrative expenses are assumed to occur halfway through the year, on average.

(8) Column (e): Projected investment earnings are based on the assumed investment rate of return of 7.00% per annum.

(9) As illustrated in this appendix, the Plan's Fiduciary Net Position was projected to be available to make all projected future benefit payments for current Plan members. In other words, there is no projected "cross-over date" when projected benefits are not covered by projected assets. Therefore, the long-term expected rate of return on Plan investments of 7.00% per annum was applied to all periods of projected benefit payments to determine the Total Pension Liability as of June 30, 2023 shown earlier in this report, pursuant to Paragraph 44 of GASB Statement No. 67.

10) This projection is based on a model developed by our Actuarial Technology and Systems unit, comprised of both actuaries and programmers. The model allows the client team, under the supervision of the responsible actuary, control over the entry of future expected contribution income, benefit payments and administrative expenses. The projection of the Plan's Fiduciary Net Position and the discounting of benefits is part of the model.

Appendix B: Determination of proportionate share

July 1, 2022 to June 30, 2023

Actual Compensation by Employer and Tier

Employer ID	Employer	General Tier 1 and 2	General Tier 1 and 2 %	Safety Tier	Safety Tier %	Total Compensation	Total %
01	County of Ventura	$658,714,260	94.150%	$205,487,481	100.000%	$864,201,741	95.478%
10	Ventura County Courts	32,806,978	4.689%	0	0.000%	32,806,978	3.625%
11	Ventura County Air Pollution Control District	4,392,308	0.628%	0	0.000%	4,392,308	0.485%
22	Ventura Regional Sanitation District	3,727,110	0.533%	0	0.000%	3,727,110	0.412%
	Total	**$699,640,655**	**100.000%**	**$205,487,481**	**100.000%**	**$905,128,136**	**100.000%**

Allocation of June 30, 2023 Net Pension Liability (NPL)

Employer ID	Employer	General Tier 1 and 2	General Tier 1 and 2 %	Safety Tier	Safety Tier %	Total NPL	Employer Allocation Percentage
01	County of Ventura	$108,885,733	94.150%	$113,618,812	100.000%	$222,504,545	97.049%
10	Ventura County Courts	5,423,007	4.689%	0	0.000%	5,423,007	2.365%
11	Ventura County Air Pollution Control District	726,050	0.628%	0	0.000%	726,050	0.317%
22	Ventura Regional Sanitation District	616,093	0.533%	0	0.000%	616,093	0.269%
	Total	**$115,650,883**	**100.000%**	**$113,618,812**	**100.000%**	**$229,269,695**	**100.000%**

Note: Results may not total due to rounding.

Appendix B: Determination of proportionate share (continued)

Notes to Schedule:

Actual July 1, 2022 through June 30, 2023 compensation information was provided by VCERA. Results may not total due to rounding.

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

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

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

a. Calculate ratio of employer's compensation to the total compensation for the tier.
b. This ratio is multiplied by the NPL for the tier to determine the employer's proportionate share of the NPL for the tier.
c. If the employer is in several tiers, the employer's total allocated NPL is the sum of its allocated NPL from each tier.
d. In this allocation, General Tier 1 and 2 were treated as one tier (combined) consistent with the determination of the Basic UAAL rate in the actuarial valuation.

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

For purposes of the above results, the reporting date for the employer under GAS 68 is June 30, 2024. The reporting date and measurement date for the plan under GAS 67 are June 30, 2023. Consistent with the provisions of GAS 68 the assets and liabilities measured as of June 30, 2023 are not adjusted or “rolled forward” to June 30, 2024 for employer reporting under GAS 68. Other results, such as the total deferred inflows and outflows would also be allocated based on the same proportionate shares determined above.

Appendix C: Pension amounts by employer as of June 30, 2023

Deferred Outflows of Resources	County of Ventura	Ventura County Courts	Ventura County Air Pollution Control District
Differences Between Expected and Actual Experience	$31,910,977	$777,752	$104,128
Net Excess of Projected Over Actual Earnings on Pension Plan Investments (If Any)	0	0	0
Changes of Assumptions	50,626,490	1,233,898	165,198
Changes in Proportion and Differences Between Employer Contributions and Proportionate Share of Contributions	4,888,580	1,273,977	542,203
Total Deferred Outflows of Resources	**$87,426,047**	**$3,285,627**	**$811,529**
Deferred Inflows of Resources			
Differences Between Expected and Actual Experience	$13,973,318	$340,566	$45,596
Net Excess of Actual Over Projected Earnings on Pension Plan Investments (If Any)	22,065,582	537,795	72,002
Changes of Assumptions	0	0	0
Changes in Proportion and Differences Between Employer Contributions and Proportionate Share of Contributions	1,846,235	3,499,022	621,238
Total Deferred Inflows of Resources	**$37,885,135**	**$4,377,383**	**$738,836**
Net Pension Liability			
Net Pension Liability as of June 30, 2022	$420,364,285	$13,645,785	$2,009,292
Net Pension Liability as of June 30, 2023	$222,504,545	$5,423,007	$726,050
Pension Expense			
Proportionate Share of Allocable Plan Pension Expense	$105,749,791	$2,577,394	$345,070
Net Amortization of Deferred Amounts from Changes in Proportion and Differences Between Employer Contributions and Proportionate Share of Contributions	773,322	(551,812)	(56,492)
Total Employer Pension Expense Excluding That Attributable to Employer-Paid Member Contributions	**$106,523,113**	**$2,025,582**	**$288,578**

Appendix C: Pension amounts by employer as of June 30, 2023 (continued)

Deferred Outflows of Resources	Ventura Regional Sanitation District	Total for All Empoyers
Differences Between Expected and Actual Experience	$88,358	$32,881,215
Net Excess of Projected Over Actual Earnings on Pension Plan Investments (If Any)	0	0
Changes of Assumptions	140,180	52,165,766
Changes in Proportion and Differences Between Employer Contributions and Proportionate Share of Contributions	30,055	6,734,815
Total Deferred Outflows of Resources	**$258,593**	**$91,781,796**
Deferred Inflows of Resources		
Differences Between Expected and Actual Experience	$38,691	$14,398,171
Net Excess of Projected Over Actual Earnings on Pension Plan Investments (If Any)	61,097	22,736,476
Changes of Assumptions	0	0
Changes in Proportion and Differences Between Employer Contributions and Proportionate Share of Contributions	768,320	6,734,815
Total Deferred Inflows of Resources	**$868,108**	**$43,869,462**
Net Pension Liability		
Net Pension Liability as of June 30, 2022	$2,078,770	$438,098,132
Net Pension Liability as of June 30, 2023	$616,093	$229,269,695
Pension Expense		
Proportionate Share of Allocable Plan Pension Expense	$292,811	$108,965,066
Net Amortization of Deferred Amounts from Changes in Proportion and Differences Between Employer Contributions and Proportionate Share of Contributions	(165,018)	0
Total Employer Pension Expense Excluding That Attributable to Employer-Paid Member Contributions	**$127,793**	**$108,965,066**

Appendix C: Pension amounts by employer as of June 30, 2023 (continued)

Amounts shown in this appendix, excluding the differences between employer contributions and proportionate share of contributions, were allocated by employer based on the Employer Allocation Percentage calculated in Appendix B.

In determining the pension expense:

- Any differences between projected and actual investment earnings on pension plan investments are recognized over a period of five years beginning with the year in which they occur.
- Differences between expected and actual experience and between employer contributions and proportionate share of contributions are recognized over the average of the expected remaining service lives of all employees that are provided with pensions through VCERA determined as of June 30, 2022 (the beginning of the measurement period ending June 30, 2023) and is 5.17 years.

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

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

Appendix D: Definition of Terms

Definitions of certain terms as they are used in Statement 67. The terms may have different meanings in other contexts.

Actuarial Present Value of Projected Benefit Payments:	Projected benefit payments discounted to reflect the expected effects of the time value (present value) of money and the probabilities of payment.
Actuarial Valuation:	The determination, as of a point in time (the actuarial valuation date), of the service cost, Total Pension Liability, and related actuarial present value of projected benefit payments for pensions performed in conformity with Actuarial Standards of Practice unless otherwise specified by the GASB.
Actuarial Valuation Date:	The date as of which an actuarial valuation is performed.
Actuarially Determined Contribution:	A target or recommended contribution to a defined benefit pension plan for the reporting period, determined in conformity with Actuarial Standards of Practice based on the most recent measurement available when the contribution for the reporting period was adopted.
Ad Hoc Cost-of-Living Adjustments (Ad Hoc COLAs):	Cost-of-living adjustments that require a decision to grant by the authority responsible for making such decisions.
Ad Hoc Postemployment Benefit Changes:	Postemployment benefit changes that require a decision to grant by the authority responsible for making such decisions.
Automatic Cost-of-Living Adjustments (Automatic COLAs):	Cost-of-living adjustments that occur without a requirement for a decision to grant by a responsible authority, including those for which the amounts are determined by reference to a specified experience factor (such as the earnings experience of the pension plan) or to another variable (such as an increase in the consumer price index).
Automatic Postemployment Benefit Changes:	Postemployment benefit changes that occur without a requirement for a decision to grant by a responsible authority, including those for which the amounts are determined by reference to a specified experience factor (such as the earnings experience of the pension plan) or to another variable (such as an increase in the consumer price index).
Cost-of-Living Adjustments:	Postemployment benefit changes intended to adjust benefit payments for the effects of inflation.
Cost-Sharing Multiple-Employer Defined Benefit Pension Plan (Cost-Sharing Pension Plan):	A multiple-employer defined benefit pension plan in which the pension obligations to the employees of more than one employer are pooled and pension plan assets can be used to pay the benefits of the employees of any employer that provides pensions through the pension plan.
Covered Payroll:	Payroll on which contributions to the pension plan are based.
Defined Benefit Pension Plans:	Pension plans that are used to provide defined benefit pensions.

Defined Benefit Pensions:	Pensions for which the income or other benefits that the employee will receive at or after separation from employment are defined by the benefit terms. The pensions may be stated as a specified dollar amount or as an amount that is calculated based on one or more factors such as age, years of service, and compensation. (A pension that does not meet the criteria of a defined contribution pension is classified as a defined benefit pension for purposes of Statement 67.)
Defined Contribution Pension Plans:	Pension plans that are used to provide defined contribution pensions.
Defined Contribution Pensions:	Pensions having terms that (1) provide an individual account for each employee; (2) define the contributions that an employer is required to make (or the credits that it is required to provide) to an active employee's account for periods in which that employee renders service; and (3) provide that the pensions an employee will receive will depend only on the contributions (or credits) to the employee's account, actual earnings on investments of those contributions (or credits), and the effects of forfeitures of contributions (or credits) made for other employees, as well as pension plan administrative costs, that are allocated to the employee's account.
Discount Rate:	The single rate of return that, when applied to all projected benefit payments, results in an actuarial present value of projected benefit payments equal to the total of the following: 1. The actuarial present value of benefit payments projected to be made in future periods in which (a) the amount of the pension Plan's Fiduciary Net Position is projected (under the requirements of Statement 67) to be greater than the benefit payments that are projected to be made in that period and (b) pension plan assets up to that point are expected to be invested using a strategy to achieve the long-term expected rate of return, calculated using the long-term expected rate of return on pension plan investments. 2. The actuarial present value of projected benefit payments not included in (1), calculated using the municipal bond rate.
Entry Age Actuarial Cost Method:	A method under which the actuarial present value of the projected benefits of each individual included in an actuarial valuation is allocated on a level basis over the earnings or service of the individual between entry age and assumed exit age(s). The portion of this actuarial present value allocated to a valuation year is called the normal cost. The portion of this actuarial present value not provided for at a valuation date by the actuarial present value of future normal costs is called the actuarial accrued liability.
Inactive Employees:	Terminated individuals that have accumulated benefits but are not yet receiving them, and retirees or their beneficiaries currently receiving benefits.
Multiple-Employer Defined Benefit Pension Plan:	A defined benefit pension plan that is used to provide pensions to the employees of more than one employer.
Net Pension Liability (NPL):	The liability of employers and non-employer contributing entities to employees for benefits provided through a defined benefit pension plan.

Other Postemployment Benefits:	All postemployment benefits other than retirement income (such as death benefits, life insurance, disability, and long-term care) that are provided separately from a pension plan, as well as postemployment healthcare benefits, regardless of the manner in which they are provided. Other postemployment benefits do not include termination benefits.
Pension Plans:	Arrangements through which pensions are determined, assets dedicated for pensions are accumulated and managed and benefits are paid as they come due.
Pensions:	Retirement income and, if provided through a pension plan, postemployment benefits other than retirement income (such as death benefits, life insurance, and disability benefits). Pensions do not include postemployment healthcare benefits and termination benefits.
Plan Members:	Individuals that are covered under the terms of a pension plan. Plan members generally include (1) employees in active service (active plan members) and (2) terminated employees who have accumulated benefits but are not yet receiving them and retirees or their beneficiaries currently receiving benefits (inactive plan members).
Postemployment:	The period after employment.
Postemployment Benefit Changes:	Adjustments to the pension of an inactive employee.
Postemployment Healthcare Benefits:	Medical, dental, vision, and other health-related benefits paid subsequent to the termination of employment.
Projected Benefit Payments:	All benefits estimated to be payable through the pension plan to current active and inactive employees as a result of their past service and their expected future service.
Public Employee Retirement System:	A special-purpose government that administers one or more pension plans; also may administer other types of employee benefit plans, including postemployment healthcare plans and deferred compensation plans.
Real Rate of Return:	The rate of return on an investment after adjustment to eliminate inflation.
Service Costs:	The portions of the actuarial present value of projected benefit payments that are attributed to valuation years.
Single-Employer Defined Benefit Pension Plan (Single-Employer Pension Plan):	A defined benefit pension plan that is used to provide pensions to employees of only one employer.
Termination Benefits:	Inducements offered by employers to active employees to hasten the termination of services, or payments made in consequence of the early termination of services. Termination benefits include early-retirement incentives, severance benefits, and other termination-related benefits.
Total Pension Liability (TPL):	The portion of the actuarial present value of projected benefit payments that is attributed to past periods of employee service in conformity with the requirements of Statement 67.

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Ventura County Employees' Retirement Association

Informational Session: Interest Crediting and the Contra Reserve

December 18, 2023

Paul Angelo, FSA and Molly Calcagno, ASA

 5768705v4

Segal

Agenda

Interest Crediting and Excess Earnings Policy

Interest Crediting and Contra Reserve

Balance in Contra Reserve

Difference between Unfunded Actuarial Accrued Liability (UAAL) and Contra Reserve

Interest Crediting and Excess Earnings Policy

- Interest Crediting Procedures and Undesignated Excess Earnings Allocation Policy
  - Assets maintained in reserves as required by 1937 CERL
    - Interest credited to reserves every 6 months
  - Policy calls for crediting reserves at assumed valuation interest rate (currently 7.00%)*
    - Available earnings determined using 5-year** smoothed earnings

* Member account balances credited at one-half the rate of return on the United States ten (10) year Treasury note as quoted in the Wall Street Journal.

** Ten semi-annual periods used in practice.

Interest Crediting and Excess Earnings Policy

- VCERA maintains reserves that have interest credited every six months
  - Determine Available Earnings for the period
    - All current period earnings on Actuarial Value of Assets (after smoothing)
    - Prior year's balance in the Statutory Contingency Reserve, Additional Contingency Reserve, and Undistributed Earnings Reserve
  - Determine earnings needed for interest credits
    - Applied to valuation reserves
    - Using current investment return assumption as the interest rate

Interest Crediting and Excess Earnings Policy

- If Available Earnings are enough, do those interest credits with any remaining Available Earnings:
  - – Restore Contra Reserve to zero
  - – Restore Statutory Contingency Reserve to 1% of market value
  - – Restore Additional Contingency Reserve to target, currently 0%
  - – Credit Interest on Supplemental Benefit Reserves, if any
  - – Allocated remaining Available Earnings to Undesignated Earnings
    - Potential uses include transferring to valuation reserves to increase funding of statutory benefits and/or funding new supplemental benefits
- If Available Earnings are insufficient (or negative to start):
  - – Increase Contra Reserve by any shortfall

Interest Crediting and Contra Reserve

- What if actual 5-year smoothed earnings are less than amount required to credit interest at assumed rate
  - Shortfall tracked as a "Contra Reserve"
    - Set up by the Board to track interest crediting shortfalls
  - Under VCERA policy any Contra Reserve balance must be made up by future excess (undesignated) earnings before VCERA Board can consider using any remaining excess earnings
    - In other words, future excess earnings must first be used to "zero out" prior shortfalls tracked in the Contra Reserve
    - Other conditions must also be met, including restoring Statutory Contingency Reserve to 1%
  - This means that, in effect, excess earnings is measured on a cumulative basis rather than one year at a time

Interest Crediting and Contra Reserve

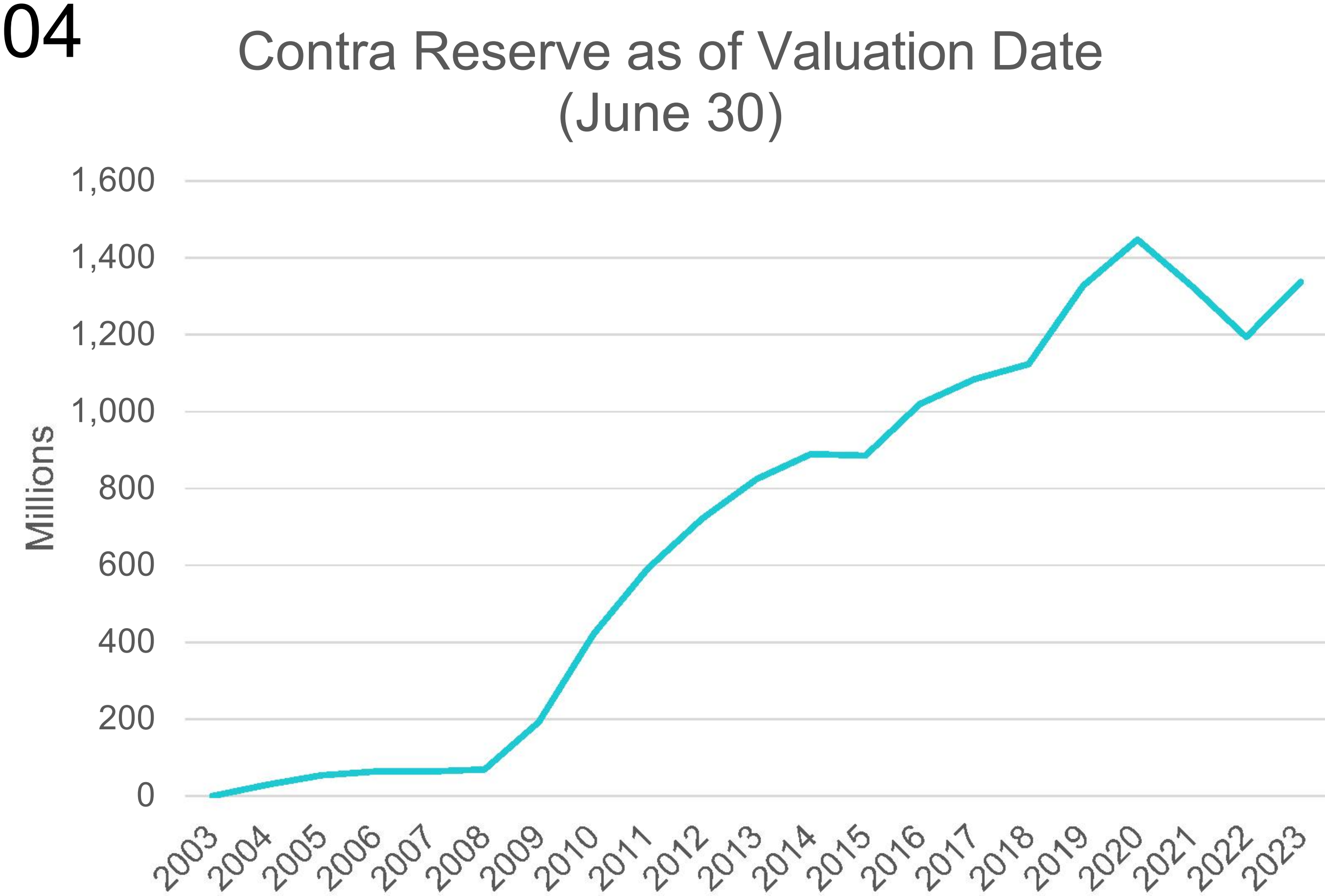
- Contra Reserve concept
  - Difference comes when a good year follows a bad year
    - Scenario X: earn 7.00%, then 7.00%
    - Scenario Y: earn 0.00%, then 14.00%
      - For this example, forget about the Statutory Contingency Reserve, asset smoothing and compounded interest
  - Should excess earnings be any different in these scenarios?
    - Without Contra Reserve, Scenario Y would have excess earnings in year 2 by ignoring the shortfall in year 1
    - With Contra Reserve, neither Scenario results in excess earnings
      - In Scenario Y, 7.00% shortfall in year 1 tracked in Contra Reserve
      - No excess in year 2 as 14.0% used to credit 7.00% interest and then zero out the 7.00% Contra Reserve
      - Cumulatively, no excess over both years

Interest Crediting and Contra Reserve

- Tracking interest crediting shortfall in Contra Reserve
  - Allows measurement of shortfall on a cumulative basis instead of by each single period (6-month) basis
    - Amount actually tracked in Contra Reserve depends on when governing body decides to start doing so
  - Once tracking starts, a shortfall year creates a balance in the Contra Reserve
  - And it only gets zeroed out when plan subsequently earns what it would take to have <u>cumulatively</u> earned the valuation interest rate
    - Including assumed earnings on prior interest shortfalls

Balance in Contra Reserve

- Current balance is $1.3 billion at 6/30/2023
  - Prior year balance was $1.2 billion at 6/30/2022
  - Largest balance was $1.4 billion at 6/30/2020
- Progress to current balance started from $29.6 million at 6/30/2004



Difference Between UAAL and Contra Reserve

- Change in Contra Reserve
  - Balance increased from $29.6 million (6/30/2004) and peaked at $1.4 billion (6/30/2020)
  - Employer contributions and favorable non-investment experience do not affect the Contra Reserve
  - Favorable investment experience reduces Contra Reserve (e.g., from $1.4 billion in 2020 to $1.2 billion in 2022)
- Contra Reserve zeroed out only after plan earns more than assumed on cumulative basis since 2004

Difference Between UAAL and Contra Reserve

- Change in UAAL (Unfunded Actuarial Accrued Liability)
  - UAAL increased from $369 million (6/30/2004), peaked at $976 million (6/30/2012), and has since dropped to $230 million (6/30/2023)
  - Decease in UAAL from 6/30/2012 to 6/30/2023 is primarily due to employer contributions and favorable investment experience, as well as favorable non-investment experience

Difference Between UAAL and Contra Reserve

- Contra Reserve and UAAL work very differently:
  - UAAL tracks all changes in assets and liabilities, including contributions, investment and demographic gains/losses, and assumption changes
  - In particular, UAAL is reduced by UAAL contributions paid by employers, but Contra Reserve is not
  - So plan can be in surplus but still be tracking prior investment losses in Contra Reserve
    - Not there yet, but as of 6/30/2023 there was $1.3 billion in Contra Reserve vs (only) $230 million in UAAL

Questions and Discussion

VCERA
VENTURA COUNTY EMPLOYEES' RETIREMENT ASSOCIATION

December 18, 2023

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

SUBJECT: PERIODIC REVIEW AND UPDATE OF INTEREST CREDITING POLICY

Dear Board Members:

The Interest Crediting Policy is periodically reviewed and updated as needed. It was last reviewed on April 20, 2015.

In consultation with Segal, Staff is proposing the following updates to the policy.

- **CURRENT RESERVES:**
  - <u>Valuation Reserves</u>:
    1. Change County Advance Reserves to Employer Advance Reserves.
    2. Capitalize the "C" in contributions.

  - <u>Retiree Member Reserves (Annuity & Pension)</u>:
    1. Change County Advance Reserves to Employer Advance Reserves.

  - <u>Contra Reserve</u>:
    1. Change County Advance Reserves to Employer Advance Reserves.

- **RATES OF INTEREST AT WHICH RESERVES ARE CREDITED:**
  - <u>Regular Interest Rate</u>:
    1. Delete "target rate to be credited" to read "rate to be credited."
    2. Add "Contra Reserve" after "Deposit Reserves."

- **CREDITING INTEREST**:
  - <u>Step 2 – Credit interest to Member Deposit Reserve (MDR) at the Member Crediting Rate</u>:
    1. Current 04-20-2015 Policy reads "MDR."

  - <u>Step 3 – Credit interest on Non-Member Valuation Reserves at Regular Interest Rate</u>:
    1. Delete "This included interest on any Contra Reserve balances

  - <u>Step 4 – Additional Credit for Valuation Reserve</u>:
    1. Change County Advance Reserves to Employer Advance Reserves.

- Step 8 – Determine use(s) of any remaining Available Earnings in the Undistributed Earnings Reserve:
    1. Delete – "transfers necessary to fund the Fixed Supplemental Benefit ($27.50 Supplement) Reserve,"
    2. Delete – "Including, but not limited to, a Supplemental Targeted Adjustment for Retirees Cost-of-Living Benefit (historically, STAR COLA)."
    3. Replace items 1 and 2 with- …"subject to CERL."

- **POLICY HISTORY:**
    - Add a section named "POLICY HISTORY."
    - Update history to read – "The Board last reviewed and approved this policy on December 18, 2023. The Board previously reviewed and approved this policy on April 20, 2015 and March 17, 2008.

RECOMMENDATION: APPROVE PROPOSED UPDATES TO THE INTEREST CREDITING POLICY.

VCERA staff will be pleased to respond to any questions you may have on this matter at today's December 18, 2023, Combined Disability and Business Meeting.

Sincerely,

La Valda R. Marshall

La Valda Marshall
Chief Financial Officer

VENTURA COUNTY EMPLOYEES' RETIREMENT ASSOCIATION

INTEREST CREDITING AND EXCESS EARNINGS POLICY

(Redline 12.18.2023)

PURPOSE OF POLICY:

The purpose of this policy is to establish the process to be used by the Ventura County Employees' Retirement Association ("VCERA") to credit semi-annual interest to reserves and to determine the use of excess earnings. This policy shall include, but may not be limited to, the following:

(1) defining the reserves maintained by VCERA,

(2) determining the rates of interest at which reserves are to be credited,

(3) determining the priorities and sequence by which interest will be credited to the reserves, and

(4) determining the use of excess earnings.

CURRENT RESERVES:

VCERA maintains the following reserves:

Valuation Reserves:

Member Deposit Reserves - The reserves to which member contributions are credited, including those contributions made by the employer on behalf of the member pursuant to Government Code section 31581.2. Contributions may be refunded to the member upon separation from service or left on deposit by the member upon separation from service (deferred retirement). Upon the retirement of a member a transfer is made to Retiree Member Reserves (Annuity).

~~County~~Employer Advance Reserves - The reserves to which employer contributions are credited, including those contributions made by the employer on behalf of the member pursuant to Government Code section 31581.1. Employer ~~C~~contributions are not refunded to the member at the time of separation. Upon the retirement of a member a transfer is made to the Retiree Member Reserves (Pension).

Retiree Member Reserves (Annuity & Pension) - The reserves to which transfers are made from Member Deposit Reserves and Employer~~County~~ Advance Reserves at the time of a member's retirement. The total of these reserves should equal the present value of the total benefit due to all retirees and eligible beneficiaries.

Vested Fixed Supplemental Benefit ($108.44 Supplement) Reserve - The reserve for the payment of the vested ~~-~~fixed $108.44 monthly supplemental benefit provided pursuant to Government Code section 31682.

Supplemental Death Benefit ($5000 Death) Reserve - This reserve is used for the payment of the $5,000 lump sum death benefit.

Contra Reserve - For accounting and valuation purposes, the Contra Reserve shall be maintained as an offset to the ~~County~~Employer Advance Reserves.

Undistributed Earnings Reserve - The amount of earnings from current and prior years not previously credited to other Valuation, Non-valuation, and Supplemental Benefit Reserves, in excess of the Statutory 1.0% Contingency Reserve and Additional Contingency Reserve, if any.

Non-valuation Reserves:

Statutory Contingency Reserve - This reserve is 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.

Additional Contingency Reserve - Any additional reserve maintained at the discretion of the Board to further provide for future deficiencies in interest earnings, losses on investments and other contingencies. Current Board policy is not to maintain an Additional Contingency Reserve.

Supplemental Benefit Reserve:

Fixed Supplemental Benefit ($27.50 Supplement) Reserve - This reserve was established in March 2003 for the payment of the fixed monthly $27.50 monthly payment to those retirees and surviving beneficiaries eligible to receive the vested $108.44 monthly benefit. This reserve was funded by an initial discretionary transfer of $25 million from Undistributed Earnings, which would have been sufficient to continue to pay the benefit in perpetuity only if sufficient Excess Earnings in future years were to exist at a level that would permit future Boards to credit the Reserve with interest at the then-assumed 8.25% per year rate, and even then, only if future Boards decide to continue to make such discretionary interest credits at such assumed rates.

Financial Statement Reserves:

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

RATES OF INTEREST AT WHICH RESERVES ARE CREDITED:

Regular Interest Rate - This is the ~~target~~ rate to be credited to all Valuation Reserves except the Member Deposit Reserves, Contra Reserve and the Undistributed Earnings Reserve. By statute, this rate means interest at 2 1/2 percent a year until otherwise determined by the Board compounded semiannually on June 30th and December 31st (Government Code section 31472). Regular interest shall be credited semiannually on June 30th and December 31st to all contributions in the retirement fund which have been on deposit for six months immediately prior to that date (Government Code section 31591). With respect to the rates of interest to be credited to members and to the County or District, the Board may, in its sound discretion, recommend a rate that is higher or lower than the actuarial interest assumption rate adopted by the Board. Board policy is to set the semiannual regular interest rate equal to one half of the current actuarial interest assumption rate adopted by the Board.

Member Crediting Rate - Member accounts shall be credited each June 30 and December 31 in an amount equal to one-half the rate of return on the United States ten (10) year Treasury note as quoted in the Wall Street Journal. Interest shall be credited to those contributions on deposit six months prior using the rate of the ten year U.S Treasury note on that June 30 or December 31 interest crediting date (or the last business day of the month if earlier). In no event shall the semiannual rate of interest credited exceed one-half of the prevailing actuarial interest assumption rate adopted by the Board.

Timing of Rate Determination - The actuarial interest rate used for crediting interest to non-member reserves on December 31 and June 30 shall be the rate that corresponds to the actuarial interest rate used to calculate the current employer and employee contribution rates.

CREDITING OF INTEREST:

Designated Reserves shall be credited semiannually as follows:

Step 1 - Determine "Available Earnings" for accounting period as the sum of:

a. Earnings of the retirement fund based on the actuarial value of assets, expressed in dollars. This could be a negative amount.

b. Balance in the Statutory Contingency Reserve

c. Balance in any Additional Contingency Reserve

d. Balance in Undistributed Earnings Reserve

Step 2 - **Credit interest to Member Deposit Reserve (MDR) at the Member Crediting Rate**

Deduct this ~~MOR~~ MDR Interest amount from Available Earnings. If this amount of ~~MOR~~ MDR Interest is more than Available Earnings, charge the shortfall to the Contra Reserve.

Step 3 - **Credit interest on Non-Member Valuation Reserves at Regular Interest Rate**

~~This includes interest on any Contra Reserve balances.~~ If Available Earnings are not sufficient, charge the shortfall to the Contra Reserve.

Step 4 - **Additional Credit for Valuation Reserve**

This Additional Credit is the difference between the amount of interest credited at Step 2 and the amount that would have been credited using the Regular Interest Rate. Transfer this Additional Credit, if any, from Available Earnings to the ~~County~~Employer Advance Reserve. If Available Earnings are not sufficient, charge the shortfall to the Contra Reserve.

USE OF EXCESS EARNINGS

These steps only apply to Available Earnings remaining at the end of each measuring year, after the second semi-annual interest crediting.

Step 5 - **Reduce the Balance in the Contra Reserve**

Transfer any remaining Available Earnings into the Contra Reserve up to the amount sufficient to bring the balance to zero, to make up for any cumulative earnings shortfall.

Step 6 - **Restore the Statutory and Additional Contingency Reserves to target levels**

Transfer from remaining Available Earnings into Statutory Contingency Reserve the amount required to maintain the Statutory Contingency Reserve balance at 1% of total market value. Transfer from remaining Available Earnings into any

Additional Contingency Reserve the amount required to maintain the percentage of market value set by the Board.

Step 7 - Credit Interest on Supplemental Benefit Reserve(s)

Remaining Available Earnings, if any, shall be used to credit interest to the Supplemental Benefit Reserves at the regular interest rate, for the full current year. If remaining Available Earnings are not sufficient, prorate among the Supplemental Benefit Reserve(s).

Step 8 - Determine use(s) of any remaini~~mm~~ng Available Earnings in the Undistributed Earnings Reserve.

Remaining Available Earnings, if any, shall be maintained in the Undistributed Earnings Reserve and shall be available for other uses at the Board's discretion, after the Board reasonably and in good faith determines that such uses are in the overall best interests of VCERA's members and beneficiaries. Potential uses may include~~ transfers necessary to fund the Fixed Supplemental Benefit ($27.50 Supplement) Reserve,~~ transfers to other Valuation Reserves, and/or funding of new supplemental benefits subject to CERL~~ including, but not limited to, a Supplemental Targeted Adjustment for Retirees Cost-of-Living Benefit (historically, STAR COLA)~~. Prior to any transfer to Non-valuation Reserves, the Board shall obtain from its actuary a statement of the impact of the transfer on current and future employer and employee contributions determined in accordance with the Board's current funding policy. The actuary shall also advise the Board of any changes to its current funding policy that should be considered as a result of the proposed transfer.

POLICY HISTORY

The Board last reviewed and approved ~~This~~ this policy ~~approved, as amended, by the Board of Retirement~~ on ~~April 20, 2015June 26~~December 18, 2023**.** The Board previously reviewed and approved this policy on April 20, 2015 and March 17, 2008.

VENTURA COUNTY EMPLOYEES' RETIREMENT ASSOCIATION

INTEREST CREDITING AND EXCESS EARNINGS POLICY

PURPOSE OF POLICY:

The purpose of this policy is to establish the process to be used by the Ventura County Employees' Retirement Association ("VCERA") to credit semi-annual interest to reserves and to determine the use of excess earnings. This policy shall include, but may not be limited to, the following:

(1) defining the reserves maintained by VCERA,

(2) determining the rates of interest at which reserves are to be credited,

(3) determining the priorities and sequence by which interest will be credited to the reserves, and

(4) determining the use of excess earnings.

CURRENT RESERVES:

VCERA maintains the following reserves:

Valuation Reserves:

Member Deposit Reserves - The reserves to which member contributions are credited, including those contributions made by the employer on behalf of the member pursuant to Government Code section 31581.2. Contributions may be refunded to the member upon separation from service or left on deposit by the member upon separation from service (deferred retirement). Upon the retirement of a member a transfer is made to Retiree Member Reserves (Annuity).

Employer Advance Reserves - The reserves to which employer contributions are credited, including those contributions made by the employer on behalf of the member pursuant to Government Code section 31581.1. Employer contributions are not refunded to the member at the time of separation. Upon the retirement of a member a transfer is made to the Retiree Member Reserves (Pension).

Retiree Member Reserves (Annuity & Pension) - The reserves to which transfers are made from Member Deposit Reserves and Employer Advance Reserves at the time of a member's retirement. The total of these reserves should equal the present value of the total benefit due to all retirees and eligible beneficiaries.

Vested Fixed Supplemental Benefit ($108.44 Supplement) Reserve - The reserve for the payment of the vested fixed $108.44 monthly supplemental benefit provided pursuant to Government Code section 31682.

Supplemental Death Benefit ($5000 Death) Reserve - This reserve is used for the payment of the $5,000 lump sum death benefit.

Contra Reserve - For accounting and valuation purposes, the Contra Reserve shall be maintained as an offset to the Employer Advance Reserves.

Undistributed Earnings Reserve - The amount of earnings from current and prior years not previously credited to other Valuation, Non-valuation, and Supplemental Benefit Reserves, in excess of the Statutory 1.0% Contingency Reserve and Additional Contingency Reserve, if any.

Non-valuation Reserves:

Statutory Contingency Reserve - This reserve is 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.

Additional Contingency Reserve - Any additional reserve maintained at the discretion of the Board to further provide for future deficiencies in interest earnings, losses on investments and other contingencies. Current Board policy is not to maintain an Additional Contingency Reserve.

Supplemental Benefit Reserve:

Fixed Supplemental Benefit ($27.50 Supplement) Reserve - This reserve was established in March 2003 for the payment of the fixed monthly $27.50 monthly payment to those retirees and surviving beneficiaries eligible to receive the vested $108.44 monthly benefit. This reserve was funded by an initial discretionary transfer of $25 million from Undistributed Earnings, which would have been sufficient to continue to pay the benefit in perpetuity only if sufficient Excess Earnings in future years were to exist at a level that would permit future Boards to credit the Reserve with interest at the then-assumed 8.25% per year rate, and even then, only if future Boards decide to continue to make such discretionary interest credits at such assumed rates.

Financial Statement Reserves:

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

RATES OF INTEREST AT WHICH RESERVES ARE CREDITED:

Regular Interest Rate - This is the rate to be credited to all Valuation Reserves except the Member Deposit Reserves, Contra Reserve and the Undistributed Earnings Reserve. By statute, this rate means interest at 2 1/2 percent a year until otherwise determined by the Board compounded semiannually on June 30th and December 31st (Government Code section 31472). Regular interest shall be credited semiannually on June 30th and December 31st to all contributions in the retirement fund which have been on deposit for six months immediately prior to that date (Government Code section 31591). With respect to the rates of interest to be credited to members and to the County or District, the Board may, in its sound discretion, recommend a rate that is higher or lower than the actuarial interest assumption rate adopted by the Board. Board policy is to set the semiannual regular interest rate equal to one half of the current actuarial interest assumption rate adopted by the Board.

Member Crediting Rate - Member accounts shall be credited each June 30 and December 31 in an amount equal to one-half the rate of return on the United States ten (10) year Treasury note as quoted in the Wall Street Journal. Interest shall be credited to those contributions on deposit six months prior using the rate of the ten year U.S Treasury note on that June 30 or December 31 interest crediting date (or the last business day of the month if earlier). In no event shall the semiannual rate of interest credited exceed one-half of the prevailing actuarial interest assumption rate adopted by the Board.

Timing of Rate Determination - The actuarial interest rate used for crediting interest to non-member reserves on December 31 and June 30 shall be the rate that corresponds to the actuarial interest rate used to calculate the current employer and employee contribution rates.

CREDITING OF INTEREST:

Designated Reserves shall be credited semiannually as follows:

Step 1 - Determine "Available Earnings" for accounting period as the sum of:

a. Earnings of the retirement fund based on the actuarial value of assets, expressed in dollars. This could be a negative amount.

b. Balance in the Statutory Contingency Reserve

c. Balance in any Additional Contingency Reserve

d. Balance in Undistributed Earnings Reserve

Step 2 - Credit interest to Member Deposit Reserve (MDR) at the Member Crediting Rate

Deduct this MDR Interest amount from Available Earnings. If this amount of MDR Interest is more than Available Earnings, charge the shortfall to the Contra Reserve.

Step 3 - Credit interest on Non-Member Valuation Reserves at Regular Interest Rate

If Available Earnings are not sufficient, charge the shortfall to the Contra Reserve.

Step 4 - Additional Credit for Valuation Reserve

This Additional Credit is the difference between the amount of interest credited at Step 2 and the amount that would have been credited using the Regular Interest Rate. Transfer this Additional Credit, if any, from Available Earnings to the Employer Advance Reserve. If Available Earnings are not sufficient, charge the shortfall to the Contra Reserve.

USE OF EXCESS EARNINGS

These steps only apply to Available Earnings remaining at the end of each measuring year, after the second semi-annual interest crediting.

Step 5 - Reduce the Balance in the Contra Reserve

Transfer any remaining Available Earnings into the Contra Reserve up to the amount sufficient to bring the balance to zero, to make up for any cumulative earnings shortfall.

Step 6 - Restore the Statutory and Additional Contingency Reserves to target levels

Transfer from remaining Available Earnings into Statutory Contingency Reserve the amount required to maintain the Statutory Contingency Reserve balance at 1% of total market value. Transfer from remaining Available Earnings into any

Additional Contingency Reserve the amount required to maintain the percentage of market value set by the Board.

Step 7 - Credit Interest on Supplemental Benefit Reserve(s)

Remaining Available Earnings, if any, shall be used to credit interest to the Supplemental Benefit Reserves at the regular interest rate, for the full current year. If remaining Available Earnings are not sufficient, prorate among the Supplemental Benefit Reserve(s).

Step 8 - Determine use(s) of any remaining Available Earnings in the Undistributed Earnings Reserve.

Remaining Available Earnings, if any, shall be maintained in the Undistributed Earnings Reserve and shall be available for other uses at the Board's discretion, after the Board reasonably and in good faith determines that such uses are in the overall best interests of VCERA's members and beneficiaries. Potential uses may include transfers to other Valuation Reserves, and/or funding of new supplemental benefits subject to CERL. Prior to any transfer to Non-valuation Reserves, the Board shall obtain from its actuary a statement of the impact of the transfer on current and future employer and employee contributions determined in accordance with the Board's current funding policy. The actuary shall also advise the Board of any changes to its current funding policy that should be considered as a result of the proposed transfer.

POLICY HISTORY

The Board last reviewed and approved this policy on December 18, 2023. The Board previously reviewed and approved this policy on April 20, 2015 and March 17, 2008.

VCERA
VENTURA COUNTY EMPLOYEES' RETIREMENT ASSOCIATION

December 18, 2023

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

SUBJECT: APPOINTMENT OF 2024 CHAIR AND VICE CHAIR

Dear Board Members:

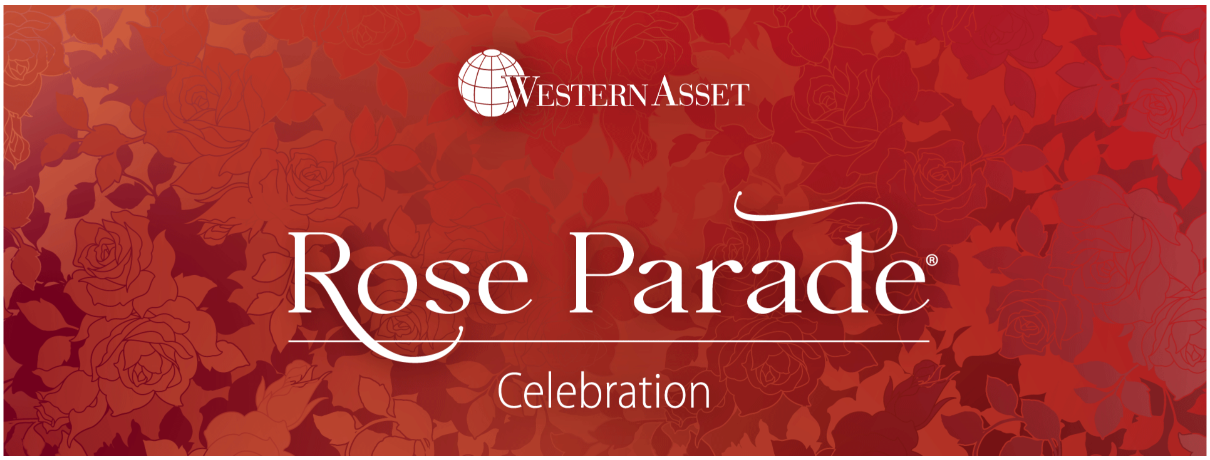
The Board of Retirement Bylaws and Regulations require the Board to take action at the first meeting in December to appoint a Chair and Vice Chair for the upcoming calendar year. The Regulations state that no member shall serve in either capacity until he/she has served on the Board for a minimum of one year.

VCERA Counsel and I will be pleased to respond to any questions you may have at the December 18, 2023, meeting.

Sincerely,

Risk Santos
Interim Retirement Administrator

From: Gallagher, Dan
To: Ayala, Chris
Subject: FW: Reminder - Invitation to Western Asset"s Rose Parade Celebration
Date: Tuesday, December 5, 2023 10:29:46 AM



Western Asset's Rose Parade Celebration is almost here!

Register by Friday, December 15, 2023, to secure your spot.

We are delighted to invite you to join us in Pasadena on New Year's Day, Monday, January 1, to watch the 2024 Tournament of Roses®.

The Rose Parade presented by Honda is viewed by millions of people around the globe each year and features a spectacular display of elaborate floats decorated with flowers and other all-natural materials, alongside world-class marching bands, equestrian groups and more.

As our guests, you will have the opportunity to watch the parade from the Western Asset balcony, a premier location along the parade route. A festive breakfast buffet will be served starting at 6:30 a.m., and the parade will begin at 8 a.m.

This year's parade theme, *Celebrating a World of Music: The Universal Language*, encourages us all to unite in our shared love of music, across cultures and around the globe.

Our float, *Together in Harmony*, celebrates the power of collaboration and the beauty we can experience when diverse voices join in song. The float reminds us that when people embrace the variety of talents among us and complement each other's contributions, the possibilities are endless. The parade and our float will be broadcast on livestreams and major networks including ABC, NBC, RFD TV, Univision and, in the Los Angeles area, KTLA.

The favor of your reply is requested by December 15, 2023. We hope you and your family can attend.

RSVP

Decline Invitation

Here's to a happy and healthy 2024!

Assuming this event is allowed under your Plan's travel and entertainment policy, if there are others at your organization who should be extended an invitation, such as Trustees or Board members, please send their names and email addresses to RoseParadeRSVP@westernasset.com. We will send them the invitation directly so they can easily submit their RSVP.

Western Asset Management Company, LLC

385 East Colorado Boulevard, Pasadena, California 91101