

Notice of Public Meeting

The Board of Retirement

of the San Mateo County Employees' Retirement Association will meet on

Tuesday, September 27, 2022, at 10:00 A.M.

In accordance with Government Code § 54953 and § 54954, the Members of the Board will be participating via Zoom video conference and teleconference. Pursuant to Government Code § 54953 and § 54954.3, members of the public, to the extent required by law, will have the opportunity to directly address the Board concerning matters within the jurisdiction of the Board. The public can participate and provide comment using the instructions below:

To Join the Meeting

- To join the meeting via video conference, click here: https://us06web.zoom.us/j/89681574416
- To join the meeting via telephone, dial: (669) 900-9128, and enter Meeting ID: 896 8157 4416

Public Comment During the Meeting

Persons wishing to address the Board should follow the steps below:

- If joining via video conference, please use the "raise your hand" feature in Zoom during the Oral Communications from the Public period.
- If joining via teleconference dial in, please dial *9 to "raise your hand" during the Oral Communications from the Public period.

You will be called on at the appropriate time. At the beginning of your comment, please state your name.

Public Comment Prior to the Meeting

Persons who wish to address the Board may submit written comments via email to <u>samcera@samcera.org</u> at least 30 minutes before the start of the Board meeting. Please include your name, agenda item, and your comment. The Board will have the email read into the record and attached to the minutes.

For help joining a Zoom meeting, see: https://support.zoom.us/hc/enus/articles/201362193

PUBLIC SESSION – The Board will meet in Public Session at 10:00 a.m.

1. Call to Order, Roll Call and Miscellaneous Business

- 2. Oral Communications
 - 2.1 Oral Communications from the Board
 - 2.2 Oral Communications from the Public

3. Approval of the Minutes

3.1 Approval of Board Meeting Minutes from August 23, 2022

4. Approval of the Consent Agenda*

- 4.1 Disability Retirements (none)
- 4.2 Survivor Death Benefits
- 4.3 Service Retirements
- 4.4 Continuances
- 4.5 Deferred Retirements
- 4.6 Member Account Refunds
- 4.7 Member Account Rollovers

- 4.8 Member Account Redeposits
- 4.9 Acceptance of Trustees' Reports of Educational Activities
- 4.10 Approval of Questions for Annual Review of Brown Armstrong
- 4.11 Approval of Resolutions that Define Compensation Earnable and Pensionable Compensation

5. Benefit & Actuarial Services

- 5.1 Consideration of Agenda Items, if any, Removed from the Consent Agenda
- 5.2 Presentation of the June 30, 2022 Annual Actuarial Valuation by Milliman, Inc
- 5.3 Approval of Resolution Accepting the Fiscal Year 2023-2024 Employer and Member Contribution Rates and Recommendations

6. Investment Services

- 6.1 Report on Preliminary Monthly Portfolio Performance Report for the Period Ended August 31, 2022
- 6.2 Report on Opportunistic Credit Manager Annual Reviews
- 6.3 Approval of Resolution Amending SamCERA's Investment Policy Statement (Policy Benchmark Change)

7. Board & Management Support

7.1 Approval of a Resolution Setting the Board of Retirement's Regular Meeting Schedule for Calendar Year 2023.

8. Management Reports

- 8.1 Chief Executive Officer's Report
- 8.2 Assistant Executive Officer's Report
- 8.3 Chief Investment Officer's Report
- 8.4 Chief Legal Counsel's Report

CLOSED SESSION – The Board may meet in closed session prior to adjournment

C1 Consideration of Disability Items, if any, removed from the Consent Agenda

9. Report on Actions Taken in Closed Session

10. Adjournment in Memory of the Following Deceased Members:

Letana, Karla	August 5, 2022	Human Services Agency
Dellamonica, Laura	August 15, 2022	San Mateo County Health
Lamotte, Guy	August 19, 2022	Assessor's Office
Franklin, Robert	August 19, 2022	Probation
Williams, Dannielle	August 19, 2022	Mental Health
Johnson, Vernon	August 19, 2022	Probation
Blum, Donald	August 22, 2022	General Services
Loring, Helen	August 25, 2022	Social Services
Esposito, Lorie	August 29, 2022	Child and Family Services
Carle, Elva	August 31, 2022	Mental Health
O'Shea, Mary	September 4, 2022	Probation
Masini, Louis	September 6, 2022	Environmental Management

Scott Hood, Chief Executive Officer

Posted: September 21, 2022

(* All items on the Consent Agenda are approved by one roll call motion unless a request is made by a Board member that an item be withdrawn or transferred to the Regular Agenda. Any item on the Consent Agenda may be transferred to the Regular Agenda. Any 4.1 items removed from the Consent Agenda will be taken up under Closed Session; all other items removed from the Consent Agenda will be taken up under Closed Session; all other items removed from the Consent Agenda will be taken up under Closed Session; all other items removed from the Consent Agenda will be taken up under closed Session; all other items removed from the Consent Agenda will be taken up under closed Session; all other items removed from the Consent Agenda will be taken up under item 5.1.)

THE BOARD NORMALLY MEETS AT 100 MARINE PARKWAY, SUITE 160, WHICH IS LOCATED ON THE SE CORNER OF TWIN DOLPHIN & MARINE PARKWAY IN REDWOOD CITY. Detailed directions are available on the "Contact Us" page of the website <u>www.samcera.org</u>. Free Parking is available in all lots in the vicinity of the building. A copy of the Board of Retirement's open session agenda packet is available for review at the SamCERA offices and on our website unless the writings are privileged or otherwise exempt from disclosure under the provisions of the California Public Records Act. Office hours are Monday through Thursday 7 a.m.– 6 p.m.

IN COMPLIANCE WITH THE CALIFORNIA GOVERNMENT CODE AND THE AMERICANS WITH DISABILITIES ACT: *SamCERA*'s facilities and board and committee meetings are accessible to individuals with disabilities. Contact *SamCERA* at (650) 599-1234 at least three business days prior to the meeting if (1) you need special assistance or a disability-related modification or accommodation, including auxiliary aids or services, in order to participate in this meeting; or (2) you have a disability and wish to receive the agenda, meeting notice, agenda packet or other writings that may be distributed at the meeting in an alternative format. Notification in advance of the meeting will enable *SamCERA* to make reasonable arrangements to ensure full accessibility to this meeting and the materials related to it.

SAN MATEO COUNTY EMPLOYEES' RETIREMENT ASSOCIATION AUGUST 23, 2022 – REGULAR BOARD MEETING MINUTES

2208.1 Call to Order, Roll Call and Miscellaneous Business

Call to Order: Mr. Battey, Acting Chair, called the Regular Meeting of the Board of Retirement to order at 10:00 a.m.

Roll Call:

Present: Sandie Arnott, Mark Battey, Al David, Kurt Hoefer, Kimathi Marangu, Elaine Orr, Robert Raw, and Alma Salas. Absent: Katherine O'Malley. Alternates: Nicole McKay. Staff: Michael Coultrip, Lili Dames, Scott Hood, JulieAnne Nagal, Doris Ng, Paul Okada, Gladys Smith, and Anne Trujillo. Consultants and speakers: Joe Abdou, Garrett Dinsmore, Margaret Jadallah, and John Nicolini (Verus).

2208.1.1 **Announcement of Appointment of Board Committees:** Mr. Battey announced the committee appointments for FY 22-23 on Ms. O'Malley's behalf.

Standing Committees: Audit Committee: Al David, Elaine Orr, Kimathi Marangu and Sandie Arnott, Chair Investment Committee: Mark Battey, Kurt Hoefer and Robert Raw, Chair

Ad Hoc Committee: CEO Evaluation Committee: Katherine O'Malley, Nicole McKay and Alma Salas, Chair

- 2208.2.1 **Oral Communications from the Board:** None.
- 2208.2.2 **Oral Communications from the Public:** Mr. Battey asked if there was any public comment from those individuals participating on the telephone or via Zoom. There were no public comments. Ms. Trujillo reported there were no written comments received ahead of the meeting.
- 2208.3.1 **Approval of Special Board Meeting Minutes from July 26, 2022:** Mr. Battey asked if there were any changes or corrections, or objections, to the meeting minutes from the special Board meeting held on July 26, 2022. There were no changes, corrections, or objections presented.

Action: Mr. Raw moved to approve the minutes from the special Board meeting on July 26, 2022. The motion was seconded by Mr. David and carried with a vote of 8-0, with trustees Arnott, Battey, David, Hoefer, Marangu, Orr, Raw, and Salas all in favor; none opposed.

2208.3.2 **Approval of Board Meeting Minutes from July 26, 2022:** Mr. Battey requested a correction to agenda item 2207.3.1 to reflect his and Mr. Marangu's abstention. He asked if there were any additional changes or corrections, or objections, to the meeting minutes from the regular Board meeting held on July 26, 2022. There were no additional changes.

Action: Ms. Salas moved to approve the minutes from the regular Board meeting on July 26, 2022, as corrected. The motion was seconded by Mr. David and carried with a vote of 8-0, with trustees Arnott, Battey, David, Hoefer, Marangu, Orr, Raw, and Salas all in favor; none opposed.

2208.4.0 **Approval of the Consent Agenda:** Mr. Battey asked if there were any items to be removed for discussion from the Consent Agenda. No items were removed.

Action: Mr. Raw moved to approve the items on the Consent Agenda. The motion was seconded by Mr. Kimathi and carried with a vote of 8-0, with trustees Arnott, Battey, David, Hoefer, Marangu, Orr, Raw, and Salas all in favor; none opposed.

2208.4.1 **Disability Retirements:**

a) The Board terminated the disability retirement application submitted by the Public Health department on behalf of **Judith Ochoa** per Article VI, section 6.5 and 6.6 of the Board Regulation regarding Disability Retirement.

2208.4.2 Survivor Death Benefits: None.

2208.4.3 Service Retirements:

Name	Effective Retirement Date	Department
Aguirre, Gail	June 11, 2022	Mental Health
Apecechea, Rick	July 1, 2022	Sheriff's Office
Arredondo, Rebecca	April 1, 2022	Correctional Health
Asselin, Robert	July 1, 2022	Probation
Booker, Anita	June 11, 2022	Public Health
Brooks, Susan	June 30, 2022	Deferred - Aging & Adult Services
Buada, Maria	June 10, 2022	San Mateo County Health
Cheung, David	June 11, 2022	San Mateo County Health
Furman, John	June 18, 2022	Behavioral Health
Grant Mann, Laika	June 18, 2022	Superior Court
Gurkovic, Jesse	June 11, 2022	Sheriff's Office
Hegney, Julie	March 16, 2022	Deferred – Environmental Health
Jiron, Carlos	July 1, 2022	Sheriff's Office
Johnson, Linda S	June 14, 2022	Mental Health
Kim, Joyce	June 4, 2022	San Mateo County Health
Kiner, Rochelle	June 3, 2022	Public Works
Lake, Jane	July 1, 2022	Human Services Agency
Lomax, Eric	June 14, 2022	San Mateo County Health
Martinez Yano, Elizabeth	June 3, 2022	Deferred - Sheriff's Office
Pavon, Ana-Elba	June 18, 2022	Deferred - Library
Pena, Lorena	June 3, 2022	Human Services Agency
Pidlaoan, Shirley	July 1, 2022	Human Services Agency
Renderos, Edith	June 4, 2022	Human Services Agency
Shirkhani, Alireza	June 2, 2022	Human Services Agency
Smiley-Klingler, Lori	June 10, 2022	Probation
Wood, Bernadette	June 15, 2022	Human Services Agency
Yee, Karen	June 4, 2022	Human Services Agency

Survivor's Name:

Davidson, Lawrence Duncan, Ollie Letona, Augusto Prasad, Nalini Pugliese, Linda

2208.4.5 Deferred Retirements:

Name

Aponte, Allan Carlos, Jessica Daly, Walter Engle, Theresa Giangerelli, Janelle Henry, Rose Higuera, Diana Johnson, Jack Kempel, Chad Kenevan, Bridget Kinsella, Ashlee Lei, Katie Ng, Bonny Ortiz, Marisa Ramos, Dulce Ross-Perkins, Melissa Sosa, Alexis Susa, Samantha Mae

Beneficiary of:

Dekker-Davidson, Beverly Duncan, Betisy Letona, Bertha Prasad, Ramendra Pugliese, Michael

Retirement Plan Type

G7, Vested – Auto Defer – Code 31700 G7, Vested – Auto Defer – Code 31700 S7, Vested – Auto Defer – Code 31700 G7, Vested - Reciprocity G3/G4, Vested – Auto Defer – Code 31700 G7, Vested G7, Vested – Auto Defer – Code 31700 G7, Non-Vested - Reciprocity G7, Vested – Auto Defer – Code 31700 G4, Vested – Auto Defer – Code 31700 G7, Vested – Auto Defer – Code 31700 G7, Non-Vested - Reciprocity G7, Non-Vested - Reciprocity G4, Vested G7, Vested – Auto Defer – Code 31700 G4, Vested G5, Vested – Auto Defer – Code 31700 G7, Non-Vested - Reciprocity

2208.4.6 Member Account Refunds:

The Board ratified the actions as listed below for the following members regarding refunds:

Name

Daskam, Zaria Dingus, Sidney Jackson, Randi Pena, Ofelia Santos, Dennis

Retirement Plan Type

G7, Non-vested G7, Non-vested G7, Non-vested G7, Non-vested G4, Vested

2208.4.7 Member Account Rollovers:

The Board ratified the actions as listed below for the following members regarding rollovers:

Name	Retirement Plan Type
Afsar, Khalid	G7, Non-vested
Chavarria, Vilma	G4, Vested
Weiss, Elizabeth	G4, Non-vested

The Board ratified the rollovers as listed below for the following individuals:

Name	Retirement Plan Type
Vergara, Luis	G4

- 2208.4.9 Acceptance of Trustees' Reports of Educational Activities: None.
- 2208.4.10 Adopt a Resolution Finding that Conducting In-Person Meetings Would Present an Imminent Risk to the Health and Safety of Attendees: The Board approved a resolution finding that the COVID-19 pandemic state of emergency continues to present imminent risks to the health or safety of in-person attendees and authorizing the use of teleconferencing for Board and Committee meetings pursuant to Government Code Section 54953(e).
- 2208.4.11 **Report on California Government Code Section 7514.7 Annual Disclosure for 2021:** The Board accepted the Report on California Government Code Section 7514.7 Annual Disclosure for 2021.
- 2208.4.12 Acceptance of Semi-Annual Compliance Certification Statements for Period Ended June 30, 2022: The Board accepted the semi-annual Compliance Certification Statements for SamCERA's non-alternative investment managers as of June 30, 2022.
- 2208.4.13 **Ratification of Legal Services Agreement:** The Board approved a resolution ratifying a legal services agreement with Mullen Coughlin, LLP.
- 2208.4.14 **Report on Securities Lending Program:** The Board accepted the report on SamCERA's Securities Lending Program as of June 30, 2022.
- 2208.4.15 **Report on Preliminary Financial Statements for the Fiscal Year Ended June 30, 2022:** The Board accepted the Preliminary Financial Statements for the Fiscal Year Ended June 30, 2022.
- 2208.4.16 **Report on Budget-to-Actual for the Fiscal Year Ended June 30, 2022:** The Board accepted the Preliminary Report on Budget-to-Actual for the fiscal year ended June 30, 2022.
- 2208.4.17 **Reaffirm Policy and Procedures for Interest Crediting:** The Board reaffirmed the Board's Interest Crediting Policy with minor language edits for clarity and ease of administration.
- 2208.4.18 **Reaffirm Policy for Use of Electronic Signatures:** The Board reaffirmed the "Policy Allowing for the Use and Acceptance of Electronic Signatures for Documents Submitted by a Member."
- 2208.5.1 Consideration of Agenda Items, if any, Removed from the Consent Agenda: None.
- 2208.5.2 **Approval of Resolution Adopting the Proposed Board Funding Policy:** Mr. Hood presented the proposed funding policy from last month's meeting and requested formal adoption from the Board.

Action: Mr. Raw moved to adopt the proposed funding policy. The motion was seconded by Mr. Hoefer and carried with a vote of 8-0, with trustees Arnott, Battey, David, Hoefer, Marangu, Orr, Raw, and Salas all in favor; none opposed.

2208.6.1 **Report on Preliminary Monthly Portfolio Performance Report for the Period Ended July 31, 2022:** Mr. Coultrip reported that SamCERA's net preliminary return for July was 2.9% bringing the preliminary trailing twelve month return ending July 2022 to -2.2% net, matching the return of the policy

benchmark. He reported most asset classes were higher in July as market participants bet that weaker economic growth and cooling inflation expectations would allow the U.S. Fed to pivot to a more dovish posture. As a result, longer-duration growth assets and risk assets in general appreciated during the month. This item was informational and for discussion only, no action was taken.

- 2208.6.2 **Report on Quarterly Investment Performance Report for Period ended June 30, 2022:** Mr. Coultrip reported that the 2nd quarter net total return was -6.3%, which was 90 bps higher than the -7.2% policy benchmark return. Public equity (U.S equity) and alternatives (absolute return) were the main contributors of relative performance, while inflation hedge was the main detractor. Mr. Nicolini and Mr. Abdou presented the quarterly performance report and answered questions from the Board.
- 2208.6.3 **Report on Core Fixed Income Manager Annual Reviews:** Ms. Ng reported that staff and consultant held annual review meetings with core bond managers, NISA Investment Advisors, FIAM and DoubleLine LP, on June 23rd; and Western Asset on June 30th. Each meeting consisted of a firm/organizational update, investment process review, performance review and attribution, and current positioning/market outlook. There were no significant concerns identified during the portfolio reviews. This item was informational and for discussion only, no action was taken.
- 2208.6.4 **Report on Opportunistic Credit Manager Annual Reviews:** Ms. Ng reviewed the meeting notes from the annual reviews with opportunistic credit bond managers, Franklin Templeton (June 30th), PIMCO, Beach Point, and Brigade Capital Management (July 28th). This item was informational and for discussion only, no action was taken.
- 2208.6.5 Approval of Proposed Alternative Investment (to be heard in Closed Session, Confidential Under Gov. Code §54956.81 and §6254.26, see item C2): This item was heard in Closed Session at 10:53 a.m. and reconvened in Open Session at 11:11 a.m. See Closed Session report under C2.
- 2208.7.1 **Approval to Reschedule the October 25, 2022 Board Meeting:** Mr. Hood informed the Board that based on the survey results received, staff recommends the October Board meeting be changed to November 1st or another appropriate date so staff can publish the meeting notice and reflect the new information on SamCERA's website. There were no other dates suggested.

Action: Mr. Raw moved to approve a change to the date and time of the regularly scheduled October 25, 2022 meeting to November 1st. The motion was seconded by Ms. Arnott and carried with a vote of 8-0, with trustees Arnott, Battey, David, Hoefer, Marangu, Orr, Raw, and Salas all in favor; none opposed.

- 2208.8.1 **Chief Executive Officer's Report:** Mr. Hood reported that staff is working on updates to their strategic plan and also provided an update on the boardroom technology upgrade. He informed the Board that a special meeting will take place at 9:55 a.m. before the September regular meeting. He previewed a few items on the agenda which includes a presentation on the annual valuation and contribution rates from Milliman, Inc. and the proposed Board schedule for 2023.
- 2208.8.2 Assistant Executive Officer's Report: Ms. Smith informed the Board that the Elections Office did not receive any candidacy paperwork for the vacant Seventh Member Alternate seat and that a request for another Special Election will likely take place early next year. Ms. Smith answered questions from the Board regarding the Special Election process. She also reported that she will be sending out the survey link to the annual actuarial survey for Milliman, Inc. Ms. Trujillo shared upcoming educational opportunities with the Board.

- 2208.8.3 **Chief Investment Officer's Report:** Mr. Coultrip informed the Board that Verus will be conducting enterprise risk tolerance interviews with each trustee as part of the asset liability study. He also shared rebalancing activities that took place in the month.
- 2208.8.4 **Chief Legal Counsel's Report:** Mr. Okada provided the Board with an update on the proposed legislative bills, AB 1944 and AB 2449, which concern Brown Act teleconference/remote participation.
 - C1 Consideration of Disability Items, if any, removed from the Consent Agenda: None.
 - C2 Approval of Proposed Alternative Investment (to be heard in Closed Session, Confidential Under Gov. Code §54956.81 and §6254.26, see item C2): The Board met in Closed Session regarding the approval of proposed alternative investments:

Regarding a follow-on commitment of \$15 million to Angelo Gordon Credit Solutions Fund 2A (Annex) Dislocation Fund LP, as part of SamCERA's growth risk-bucket within opportunistic credit (fixed income asset class), there was a motion by David, seconded by Hoefer, to approve by a vote of 8-0-0.

Ayes:Arnott, Battey, David, Hoefer, Marangu, Orr, Raw, and SalasNos:NoneAbstain:NoneAbsent:O'MalleyMotion carried 8-0-0

Additionally, Mr. Okada reported that the Board, at its April 28, 2022 meeting, authorized the sale of SamCERA's interests in three funds -- Angeles Equity Partners I L.P., JLL Partners Fund VII L.P., and New Enterprise Associates 14 L.P. – in the secondary marketplace.

Regarding the proposed secondary sale, a motion was made by Battey and seconded by Orr, to authorize and direct the Chief Executive Officer to sell the above-referenced non-strategic funds and to authorize the Chief Executive Officer to negotiate and execute all documents in connection with such transaction(s); provided that such sales, in the aggregate, must equal or exceed 87% of funds' aggregate NAV -- as of December 31, 2021 for JLL and NEA, and as of September 30, 2021, for Angeles given that updated information beyond September 30, 2021, was not yet available for Angeles.

The motion was approved by a vote of 7-0-0:

Ayes:	Trustees Arnott, Battey, Bowler, Hoefer, Orr, Raw, and Salas (voting for 2nd
	Member (O'Malley) pursuant to Cal. Govt Code 31520.6)
Nos:	None
Abstain:	None
Absent:	Trustees David, Hackleman, and O'Malley were absent

Mr. Okada reported that the investment transaction has closed and that the reporting of this Closed Session action is pursuant to Government Code Section 54957.1(a)(7) which provides for the reporting of the approval of sales of investments at the first open meeting following the closing of such transactions.

No other reportable action was taken.

2208.10 Adjournment: Mr. Battey adjourned the meeting at 11:23 a.m. in memory of the deceased members listed below.

Kirkpatrick, Sandra	June 28, 2022	Assessor's Office
Muscio, Helen	July 6, 2022	Probation
Turner, Leslie	July 8, 2022	Hospital
Abbott, Barbara	July 14, 2022	Courts
Damante, Lawrence	July 21, 2022	General Services
Collaco, Angela	July 22, 2022	Social Services
Keegan, Virginia	July 25, 2022	Information Services
Galleguillos, Roy	July 30, 2022	Sheriff's
Lyle, Norma	July 24, 2022	District Attorney's Office
Alsterlind, Keith	July 27, 2022	Probation
Byczkowski, Hedwiga	August 3, 2022	Behavioral Health
Schroyer, Donald	August 3, 2022	Controller's

Mark Battey Acting Chair

SAN MATEO COUNTY EMPLOYEES' RETIREMENT ASSOCIATION **Board of Retirement**

September 27, 2022

Agenda Items 4.1-4.9

- TO: Board of Retirement
- Elizabeth LeNguyen, Retirement Benefits Manager FROM:

SUBJECT: Approval of Consent Agenda Items 4.1 – 4.9

4.1 Disability Retirements

None.

4.2 Survivor Death Benefits

None.

4.3 Service Retirements

The Board ratifies the service retirement for the individuals listed below as follows:

Name	Effective Retirement Date	Department
Austin, Robert	July 30, 2022	Probation
Chao, Kathryn	July 9, 2022	Probation
Debbs, Josephine	July 28, 2022	San Mateo County Health
Dennis, Shelley	July 18, 2022	Deferred - Probation
Haberlach, Nicholas	July 21, 2022	Probation
Henry, Sharon	July 15, 2022	Def'd - District Attorney's Office
Kelleher, Susan	July 26, 2022	San Mateo County Health
Lee, Susan	July 6, 2022	Probation
Lew, Sheldon	July 30, 2022	San Mateo County Health
Maguire, Elizabeth	August 1, 2022	Def'd - District Attorney's Office
McDonald, Colleen	July 31, 2022	Deferred - San Mateo Co Health
Nicdao, Divina	July 6, 2022	Deferred - County Mgr's Office
Raman, Reenu	July 10, 2022	Sheriff's Office
Reyes, Estela	July 6, 2022	Family Health Services
Sarabia, Christopher	July 2, 2022	Deferred – Public Works
Settles, Jean	July 9, 2022	Information Services

Tafreshiha, Hadi (Shawn		
Nezami)	July 29, 2022	Information Services
Viola, John	July 9, 2022	Information Services

4.4 Continuances

The Board ratifies the granting of a continuance to the following individuals:

Survivor's Name	Beneficiary of:
Dames, Daniel	Dames, Elizabeth
Griswold, Candyce	Griswold, Barney
Keegan, Stephen	Keegan, Virginia
Mirosnkoff, Roseann	Mirosnkoff, Peter
Wilson, Suzanne	Wilson, Brent

4.5 Deferred Retirements

The Board ratifies the deferred retirements as listed below for the following individuals:

Name	Retirement Plan Type
Cervantes, Julia	G5, Vested - Reciprocity
Coit, Benjamin	G4, Vested - Auto Defer – Code 31700
Escalante, Hilda	G7, Vested - Auto Defer – Code 31700
Evans, Elizabeth	G7, Vested
Faulkner, Sharon	G7, Vested - Auto Defer – Code 31700
Garcia, Briana	G7, Vested - Auto Defer – Code 31700
Johnson, Dana	P4, Vested - Auto Defer – Code 31700
Kelkar, Aditi	G5, Vested - Auto Defer – Code 31700
Kwok, Christopher	G7, Vested - Auto Defer – Code 31700
Liang, Cindy	G4, Vested
McCoy, Joshua	G5, Vested
Peters, Christopher	S7, Vested - Auto Defer – Code 31700
Rahman, Nabeela	G4, Vested
Ruiz Rivas, Concepcion	G5, Vested - Auto Defer – Code 31700
Thunstedt, Bryan	G7, Vested - Auto Defer – Code 31700
Vo, Denise	G7, Vested

4.6 Member Account Refunds

The Board ratifies the refunds as listed below for the following individuals:

Name	Retirement Plan Type
Ayers, Ryan	S7, Non-vested
Gonsalves Carpalino, Jericho	G7, Non-vested
Gonzalez Diaz, Alan	G7, Non-vested
Logia, Jenifer K	G7, Non-vested
Lopez, Guadalupe	G7, Non-vested
Shearer, Lesley	G7, Non-vested
Sheekha, Fnu	G7, Non-vested
Toroca, Caroline M	G4, Vested
Velasquez, Jose Manjarrez	S4, Vested

4.7 Member Account Rollovers

The Board ratifies the rollovers as listed below for the following individuals:

Name	Retirement Plan Type
Alexander, Lauren Nicole	G7, Non-vested
Cheung, Sam	G7, Non-vested
Van Donge, Christine Mary	G7, Non-vested
Viray, Ludivico	G7, Non-vested

4.8 Member Account Redeposits

None.

4.9 Acceptance of Trustees' Reports of Educational Activities

None.

September 27, 2022

Agenda Item 4.10

то:	Board of Retirement
FROM:	Gladys Smith, Assistant Executive Officer
SUBJECT:	Approval of Questions for Annual Review of Brown Armstrong Accountancy

Recommendation

Approve the evaluation questions in the "Questions for Annual Auditor Consultant Evaluation."

Discussion

The questions in the attached document will be submitted to SamCERA's auditor, Brown Armstrong, prior to the annual review, which will be scheduled for the December 6, 2022, Board meeting. In addition, there will be a survey of trustees and staff regarding Brown Armstrong's performance.

Staff will provide Brown Armstrong's responses to the questionnaire as well as the survey results at the December meeting.

Attachment

Questions for Annual Actuarial Consultant Evaluation

Questions for Annual Auditor Consultant Evaluation

Please provide information about the following events and activities and whether they occurred during Fiscal Year 2021-22.

Organizational Update

- 1) Provide an update on your firm's organization, with particular emphasis on changes to your management structure over the past twelve months. All significant changes should be accompanied by an explanation. An updated organizational chart should accompany this response.
- 2) Update all significant personnel changes or expected changes to the "SamCERA Team."
- 3) Has your firm or any of its employees been involved in regulatory or litigation actions related to your business in the past twelve months?
- 4) Has a peer review been performed on any of your firm's audit products? If yes, discuss the review and the findings. Any material findings or recommendations must be accompanied by an explanation.
- 5) Are any of your operations outsourced? If the answer is yes, provide details regarding the firm(s) with which your firm has contracted.
- 6) Please describe how your firm monitors and manages cyber security risks as they relate to confidential SamCERA data/information. Has your firm experienced any problems with cyber security in the past 18 months? What is your cyber security breach policy? What procedures do you have in place for a cyber security breach?

Client Update

- 7) What is your firm's philosophy and current policy regarding new business?
- 8) Please list all clients gained or lost in the past eighteen months.

Outlook Beyond Fiscal Year 2021-22

- 9) What issues are other clients concerned with regarding products, services, education and governance that your staff has not addressed with SamCERA?
- 10) Should SamCERA be made aware of significant changes that your clients are making?

11) Relative to your expertise, what trends are occurring in the retirement industry that SamCERA should be tracking?

Conclusion

- 12) How can SamCERA better assist you in accomplishing the goals it has established for your firm?
- 13) How can we better utilize your firm's capabilities?
- 14) Is there any information that would be timely pursuant to SamCERA's annual review?
- 15) What audit related changes should SamCERA consider that were not mentioned in your audit or audit presentation?

SAN MATEO COUNTY EMPLOYEES' RETIREMENT ASSOCIATION **Board of Retirement**

September 27, 2022 TO: **Board of Retirement** Gladys Smith, Assistant Executive Officer hlady FROM: SUBJECT: Amending Resolutions Defining Compensation Earnable and Pensionable Compensation

Recommendation

Approve amendments to (1) the Resolution defining Compensation Earnable, pursuant to Government Code §31461 for members who are not subject to Government Code §7522.34 and (2) the Resolution defining Pensionable Compensation for members who are subject to Government Code §7522.34 to:

(a) Include as pensionable earning the following Automated Timekeeping System (ATKS) codes:

ATKS Code	Earning Description
113	Paid Leave for Donor

Background

Depending upon a member's date of hire and other factors, a member is either subject to Government Code §31461 in the County Employees Retirement Law ("CERL") or §7522.34 of the Public Employees' Pension Reform Act (PEPRA). Under CERL, Compensation Earnable is used: (1) to calculate final compensation in order to determine a member's pension benefit and (2) to calculate the ongoing contributions to be paid by the member and the employer. For the PEPRA members, "Pensionable Compensation" is used for the same purposes. The Board determines which elements of compensation are to be included in pensionable earnings.

Discussion

At its June 14, 2022 meeting, the Board of Supervisors approved a resolution authorizing the implementation of an organ and bone marrow donor leave program for the County of San Mateo. A new earnings code, 113 – Paid Leave for Donor, was created to track hours and earnings for this specific leave.

Staff will address any specific questions that the Board may have. The attached resolutions each rescind the current resolutions and restate the resolutions in their entirety, adding the new earnings codes.

Attachments

Resolution Defining Compensation Earnable pursuant to Government Code §31461 Resolution Defining Pensionable Compensation pursuant to Government Code §7522.34

Agenda Item 4.11

SAN MATEO COUNTY EMPLOYEES' RETIREMENT ASSOCIATION

RESOLUTION 2022-___

RESOLUTION DEFINING COMPENSATION EARNABLE PURSUANT TO GOVERNMENT CODE §31461 FOR MEMBERS WHO ARE NOT SUBJECT TO GOVERNMENT CODE §7522.34

- WHEREAS, for those current members who became active members prior to January 1, 2013, and those members who became active members on or after January 1, 2013, but who are not subject to Government Code §7522.34 of the California Public Employees' Pension Reform Act, the determination of compensation earnable for remuneration earned by those members is governed by Government Code §31461; and
- WHEREAS, Government Code §31461 provides that compensation earnable by a member means the average compensation as determined by the Board, for the period under consideration upon the basis of the average number of days ordinarily worked by persons in the same grade or class of positions during the period, and at the same rate of pay; and
- WHEREAS, Government Code §31461 provides that this Board determine which items of remuneration earned by members shall constitute "Compensation Earnable"; and
- WHEREAS, the Board has reviewed the current pay items and has determined which of those items are to be included in "Compensation Earnable" and which items are not to be included; and
- WHEREAS, it is necessary for this Board from time to time to amend its determinations of compensation earnable due to changes made by SamCERA employers in their compensation schedules as well as changes in the law, and the creation of new earning codes resulting from labor negotiations, the Board finds that new pay codes designations should be added; Therefore, be it;
- **RESOLVED**, that Resolution number 2022-07 is rescinded, and pursuant to Government Code §31461 as interpreted by the courts, the Board hereby makes the following determinations to be effective September 18, 2022, as to what is included in "Compensation Earnable" and items of remuneration that are not included:

Pay Code	Description
001	Regular hours worked
001-G	Regular hours worked (grace paid)
001-M	Regular hours worked (mandatory meeting)
001-T	Regular hours worked (training)
001-TW	Regular hours worked (telecom)
006	Sheriff's 84/12 Plan
00680	84/12 Plan (Sheriff)
010	Release time with pay

1. Compensation earnable shall include:

Pay Code	Description
011	Training/Officer of the Day/Courtroom Clerk Electronic Recording
012	Pay Night shift differential
013	Special night shift differential
014	Special duty hours
013	Instruction /Testing/Density with a Contification
010	Charge new differential
019	Charge pay differential
020	Split sniit
021-L1	Dilingual pay
021-L2	Blingual pay
022	
023	weekend pay
027	On-call hours
035	Sick leave with pay
035B	Sick Leave Supplemental Pay
035-R	Reserve Sick Hours
036	Sick leave with pay (work-related injury)
036-R	Reserve Sick – work related injury
041	Vacation hours with pay
041-A	X-Vacation hours with pay
041B	Vacation Supplemental pay
041H	Vacation hours with pay on holiday
043	Holiday hours regular pay
043CNA	Holiday premium for PT CNA
044	Holiday worked at 1.5
045	Holiday hours worked at straight time
045-P	Holiday hours worked at straight time
0450	Holiday hours worked at straight time-overflow
048	Accumulated holiday hours taken
048-A	X-Accumulated holiday hours taken
048B	Accumulated Holiday Supplemental pay
048H	Holiday hours taken on holiday
052	Comp time hours used
052-A	X-Comp/Admin Leave Hours Used
052B	Comp Time Supplemental pay
052H	Comp time hours used on holiday
054	Administrative leave
055	Jury duty with pay
057	Military-leave with pay
050	Education leave with pay
058	Other leave with pay
059	Disability leave with pay

Pay Code	Description
064	Management overtime used
080	Uniform/tool allowance
080A	Uniform/tool allowance annual
081	Transportation allowance
087	Bi-weekly special pay
088	Miscellaneous special pay
090	Voluntary time off used
093	Furlough w/o pay used with payment of contributions
1TW	Regular hours teleworked
102	Admin leave cash out
104	LTC shift differential
104B	LTC shift differential adjustment
110	Compulsory time off
112	Bereavement leave
113	Paid leave for donor
127	On-call days/hours – Post 2012
130	Lactation Pay
131	Winter Recess HRs Regular Pay
133	Accum Winter Recess Hrs Taken
313	LC4850 night shift differential
315	LC4850 special duty
359	LC4850 disability with pay
502	Admin leave cash out w/1-time deferred comp
557	Educational lv with pay
635	Emergency Sick Leave
636	Emergency FMLA Paid
638	Supplemental COVID-19 Emergency Sick Leave
641	Essential Worker COVD19 Leave
827	Special on call
306	LC4850WC 84/12 plan shf
30680	LC4850WC 84/12 plan shf

2. Compensation Earnable, at a minimum, shall <u>not</u> include, in any case, the following pay items.

A. The following pay codes are <u>not</u> included:

Pay Code	Description
007	EH relief nurse pm shift differential
009	EH relief nurse night shift differential
025	Call back pay
025-P	Call back pay (premium)
025S	Call back pay SART nurses
025-S	Call back pay SART nurses
026	Part-time double shift differential

Pay Code	Description
028	On call EH. relief nurse
029	Part-time double shift differential
037	Layoff sick leave
040	Terminal vacation
046	Holiday hours accrued
046CNA	Holiday premium hours accrued for PT CNA
046-P	Holiday hours accumulated at straight time
047	Holiday hours accrued at 1.5
049	Terminal holiday pay
050	Terminal compensatory pay
051	Comp Time Earned at 1.5
051-P	Premium portion for call back
053	Comp time earned at straight time
060	Absent without leave
061	Leave without pay
061-A	X-Leave without pay
062	Disability leave without pay
063	Terminal MOT Pay
065	Overtime training hours
066	Overtime at time and one-half
069	Overtime special duty desk officer
069-P	Overtime special duty desk officer
070	Overtime special duty
073	Overtime special duty night shift
075	Overtime night shift premium hours
076	Rest period/Court CART differential
079	Overtime special shift differential
083	Worker's compensation payment
084	Employee incentives
085	Disability payment
086	Taxable benefits-DP
089	Relocation Allowance
091	Terminal VTO pay
096	County Deferred Comp Contribution
097	Miscellaneous terminal pay
101	LTD payments
103	FMLA earnings
105	Miscellaneous subsidies
106	FSLA adjustments
106 80	FSLA adjustment for 84/12
106 980-P1	FSLA adjustment 9/80 period 1
106 980-P2	FSLA adjustment 9/80 period 2

Pay Code	Description
107	Overtime at straight time
108	Comp hours earned at straight time (OT)
111	Terminal compulsory time off
125	Call back pay st.
132	Winter Recess Hours Accrued
134	Terminal Winter Recess Pay
203	Wellness Dividend
225	Call back pay flat rate
383	LC4850 worker's compensation payment
637	Emergency FMLA Unpaid
640	Terminal EW COVID19 Leave
642	Essential Worker Onsite
803	SART nurses meeting/service-flat rate
804	SART nurses training and education-flat rate
P25	Call in phone

B. Payments associated with the provision of insurance benefits, or other third-party payments such as professional membership dues that are not received in cash by a member.

C. Payments by a SamCERA employer of member-required contributions to the retirement system under Government Code sections 31581.1, 31630, 31639.85 or under a memorandum of understanding (MOU) between members (or their representatives) and the SamCERA employer.

3. Pursuant to Government Code §31461(b) compensation earnable, shall not include in any case the following:

A. Any compensation determined by the Board to have been paid to enhance a member's retirement benefit under that system. That compensation may include:

(1) Compensation that had previously been provided in kind to the member by the employer or paid directly by the employer to a third party other than the retirement system for the benefit of the member, and which was converted to and received by the member in the form of a cash payment in the final average salary period.

(2) Any one-time or ad hoc payment made to a member, but not to all similarly situated members in the member's grade or class.

(3) Any payment that is made solely due to the termination of the member's employment, but is received by the member while employed, except those payments that do not exceed what is earned and payable in each 12-month period during the final average salary period regardless of when reported or paid.

B. Payments for unused vacation, annual leave, personal leave, sick leave, or compensatory time off, however denominated, whether paid in a lump sum or otherwise, in an amount that exceeds that

which may be earned and payable in each 12-month period during the final average salary period, regardless of when reported or paid.

C. Payments for additional services rendered outside of normal working hours, whether paid in a lump sum or otherwise.

D. Payments made at the termination of employment, except those payments that do not exceed what is earned and payable in each 12-month period during the final average salary period, regardless of when reported or paid.

4. Pursuant to Government Code §31641(c), the terms listed above in paragraph 3 are intended to be consistent with and not in conflict with the holdings in *Salus v. San Diego County Employees Retirement Association* (2004) 117 Cal.App.4th 734 and *In re Retirement Cases* (2003)110 Cal.App.4th 426.

BE IT FURTHER RESOLVED, that the above listed determinations by the Board of what is included or not included in compensation earnable, shall be in effect until such time as action taken by the Board or action by the Legislature or the Courts as a matter of law requires a different determination.

* * * * *

Regularly passed and adopted, by the San Mateo County Employees' Retirement Association, Board of Retirement, on September 27, 2022.

Ayes, Trustees:

Noes, Trustees:

Absent, Trustees:

Abstain, Trustees:

Alma Salas, Board Secretary SamCERA

SAN MATEO COUNTY EMPLOYEES' RETIREMENT ASSOCIATION

RESOLUTION 2022-___

RESOLUTION DEFINING PENSIONABLE COMPENSATION PURSUANT TO GOVERNMENT CODE §7522.34 FOR MEMBERS WHO ARE NOT SUBJECT TO GOVERNMENT CODE §31461

- WHEREAS, for those members who became active members on or after January 1, 2013, and who are subject to the California Public Employees' Pension Reform Act contained in Government Code §7522 et seq., the determination of their pensionable compensation is governed by Government Code §7522.34; and
- WHEREAS, the pensionable compensation for those employee members who are subject to Government Code §7522.34 shall be the normal monthly rate of pay or base pay of the member paid in cash to similarly situated members of the same group or class of employment for services rendered on a full-time basis during normal working hours, pursuant to publicly available pay schedules; and
- WHEREAS, the Board has reviewed the current pay items and has determined which of those items are to be included in "Pensionable Compensation" and which items are not to be included; and
- WHEREAS, it is necessary for this Board, from time to time, to amend its determinations of pensionable compensation due to changes made by SamCERA employers in their compensation schedules as well as changes in the law, and the creation of new earning codes resulting from labor negotiations, the Board finds that new pay codes designations should be added; Therefore, be it;
- **RESOLVED**, Resolution number 2022-08 is rescinded, and pursuant to Government Code §7522.34 as interpreted by the courts, the Board hereby makes the following determinations to be effective September 18, 2022, as to what is included in "Pensionable Compensation" and items of remuneration that are not included:
- 1. Pensionable compensation shall include:

Pay Code	Description
001	Regular hours worked
001-G	Regular hours worked (grace paid)
001-M	Regular hours work (mandatory meeting)
001-T	Regular hours worked (training)
001-TW	Regular hours worked (telecom)
006	Sheriff's 84/12 Plan
00680	84/12 Plan (Sheriff)
010	Release time with pay
011	Training/Officer of the Day/Courtroom Clerk Electronic Recording
	Pay
013	Night shift differential
014	Special night shift differential
015	Special duty hours

RESOLUTION 2022-4DEFINING PENSIONABLE COMPENSATION

Pay Code	Description
016	Inspection/Testing/Repair with a Certification
019	Charge pay differential
020	Split shift
021-L1	Bilingual pay
021-L2	Bilingual pay
022	Staffing differential
023	Weekend pay
035	Sick leave with pay
035B	Sick Leave Supplemental Pay
035-R	Reserve Sick Hours
036	Sick leave with pay (work-related injury)
036-R	Reserve Sick – work related injury
041	Vacation hours with pay
041-A	X-Vacation hours with pay
041B	Vacation Supplemental pay
041H	Vacation hours with pay on holiday
043	Holiday hours regular pay
043CNA	Holiday premium for PT CNA
044	Holiday worked at 1.5
045	Holiday hours worked at straight time
045-P	Holiday hours worked at straight time
048	Accumulated holiday hours taken
048-A	X-Accumulated holiday hours taken
048B	Accumulated Holiday Supplemental pay
048H	Holiday hours taken on holiday
052	Comp time hours used
052-A	X-Comp/Admin leave hours used
052B	Comp Time Supplemental pay
052H	Comp time hours used on holiday
054	Administrative leave
055	Jury duty with pay
056	Military leave with pay
057	Educational leave with pay
058	Other leave with pay
059	Disability leave with pay
064	Management overtime used
087	Bi-weekly special pay
090	Voluntary time off used
093	Furlough w/o pay used with payment of contributions
1TW	Regular Hours Teleworked
104	LTC shift differential
104B	LTC shift differential adjustment
110	Compulsory time off
112	Bereavement leave
113	Paid leave for donor

Pay Code	Description
130	Lactation Pay
131	Winter Recess HRs Regular Pay
133	Accum Winter Recess Hrs Taken
313	LC4850 night shift differential
315	LC4850 special duty
359	LC4850 disability with pay
557	Educational lv with pay
635	Emergency Sick Leave
636	Emergency FMLA Paid
638	Supplemental COVID-19 Emergency Sick Leave
641	Essential Worker COVD19 Leave
30680	LC4850WC 84/12 plan shf

Pensionable compensation, at a minimum, shall <u>not</u> include, in any case, the following payitems.
A. The following pay codes are <u>not</u> included:

Pay Code	Description
007	EH relief nurse pm shift differential
009	EH relief nurse night shift differential
025	Call back pay
025-P	Call back pay (premium)
025S	Call back pay SART nurses
025-S	Call back pay SART nurses
026	Part-time double shift differential
027	On-call hours
028	On call E.H. relief nurse
029	Part-time double shift differential
037	Layoff sick leave
040	Terminal vacation
0450	Holiday hours worked at straight time-overflow
046	Holiday hours accrued
046CNA	Holiday premium hours accrued for PT CNA
046-P	Holiday hours accumulated at straight time
047	Holiday hours accrued at 1.5
049	Terminal holiday pay
050	Terminal compensatory pay
051	Comp Time Earned at 1.5
051-P	Premium portion for call back
053	Comp time earned at straight time
060	Absent without leave
061	Leave without pay
061-A	X-Leave without pay
062	Disability leave without pay
063	Terminal MOT Pay
065	Overtime training hours

Pay Code	Description
066	Overtime at time and one-half
069	Overtime special duty desk officer
069-P	Overtime for mandatory meeting
070	Overtime special duty
073	Overtime special duty night shift
075	Overtime night shift premium hours
076	Rest period/Court CART differential
079	Overtime special shift differential
080	Uniform/tool allowance
080A	Uniform/tool allowance annual
081	Transportation allowance
083	Worker's compensation payment
084	Employee incentives
085	Disability payment
086	Taxable benefits-DP
088	Miscellaneous special pay
089	Relocation Allowance
091	Terminal VTO pay
096	County Deferred Comp Contribution
097	Miscellaneous terminal pay
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106 980-P1	FSLA adjustment 9/80 period 1
106 980-P2	FSLA adjustment 9/80 period 2
107	Overtime at straight time
108	Comp hours earned at straight time (OT)
111	Terminal compulsory time off
125	Call back pay st.
127	On-call days/hours – Post 2012
132	Winter Recess Hours Accrued
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642	Essential Worker Onsite
803	SART nurses meeting/service flat rate
804	SART nurses training and education flat rate
827	Special on call

Pay Code	Description
P25	Call in phone

- B. Pursuant to Government Code §7522.34, pensionable compensation does not include the following:
 - 1) Any compensation determined by the Board to have been paid to increase a member's retirement benefit.
 - 2) Compensation that had previously been provided in kind to the member by the employer or paid directly by the employer to a third party other than the retirement system for the benefit of the member and which was converted to and received by the member in the form of a cash payment. Any one-time or ad hoc payments made to a member.
 - 3) Severance or any other payment that is granted or awarded to a member in connection with or in anticipation of a separation from employment but is received by the member while employed.
 - 4) Payments for unused vacation, annual leave, personal leave, sick leave, or compensatory time off, however denominated, whether paid in a lump sum or otherwise, regardless of when reported or paid.
 - 5) Payments for additional services rendered outside of normal working hours, whether paid in a lump sum or otherwise.
 - 6) Any employer-provided allowance, reimbursement, or payment, including, but not limited to, one made for housing, vehicle, or uniforms.
 - 7) Compensation for overtime work, other than as defined in Section 207(k) of Title 29 of the United States Code.
 - 8) Employer contributions to deferred compensation or defined contribution plans.
 - 9) Any bonus paid in addition to the compensation described in subdivision (a) of Government Code §7522.34.
 - 10) Any other form of compensation the Board determines is inconsistent with the requirements of subdivision §7522.34 (a).
 - 11) Any other form of compensation that this Board determines should not be pensionable compensation.
- Pursuant to Government Code §7522.10, whenever pensionable compensation, as defined in §7522.34, is used in the calculation of a benefit, the pensionable compensation shall be subject to the monetary limitations set forth in subdivision §7522.10.

BE IT FURTHER RESOLVED, that the above listed determinations by the Board of what is included or not included in pensionable compensation, shall be in effect until such time as this Board, the Legislature, or the Courts take action that as a matter of law requires a different determination.

* * * * *

Regularly passed and adopted, by the San Mateo County Employees' Retirement Association, Board of Retirement, on September 27, 2022.

Ayes, Trustees:

Noes, Trustees:

Absent, Trustees:

Abstain, Trustees:

Alma Salas, Board Secretary SamCERA

SAN MATEO COUNTY EMPLOYEES' RETIREMENT ASSOCIATION **Board of Retirement**

September 27, 2022

Agenda Item 5.2

TO: Board of Retirement

Scott Hood, Chief Executive Officer FROM:

Presentation of the June 30, 2022, Actuarial Valuation Report by Milliman, Inc. SUBJECT:

Recommendation

Milliman, Inc. will discuss the results of its Actuarial Valuation Report. This is for information only.

Background

Nick Collier and Craig Glyde, of Milliman, Inc., will present the results and recommendations of SamCERA's Actuarial Valuation Report as of June 30, 2022. This year's actuarial valuation process resulted in:

- A decrease in the Employer Statutory Contribution rate from 38.33% (effective July 1, 2022) to 26.19% (effective July 1, 2023).
- A slight increase in the member contribution rates for the County and Courts PEPRA Plans (effective July 1, 2023).
- An increase in the funded ratio of the system from 88.1% as of June 30, 2021, to 90.7% as of June 30, 2022.

Attachments

Milliman Presentation on 2022 Valuation San Mateo County Employees' Retirement Association June 30th, 2022 Actuarial Valuation

Actuarial Funding Valuation as of June 30, 2022 for SamCERA

Nick Collier and Craig Glyde SEPTEMBER 27, 2022



Overview

- Key 2022 funding valuation findings and results
 - GASB 67/68 financial report valuation will be completed next month
- Looking forward
- Summary of recommendations for FY 2023-2024
 - Employer contribution rates
 - Plan 7 member contribution rates



Results: Funded Ratio

- AAL increased approximately \$300 million (approx. 5%)
 - Salary increases and retiree COLAs larger than expected
 - Other demographic experience had minor impact
- Valuation assets increased approximately \$430 million (approx. 8%)
 - Strong funding
 - Actuarial return of 7.1% due to recognition of prior period investment gains
 - Deferred losses of approximately \$333 million, due to investment losses for FYE 2022

	June 30, 2022		June 30, 2021	
(\$Millions)				
Actuarial Accrued Liability	\$	6,530.0	\$	6,227.1
Valuation Assets (Total)		5,922.9		5,489.0
Unfunded Actuarial Accrued Liability	\$	607.1	\$	738.1
Funded Ratio (AVA Basis)		90.7%		88.1%

C Millimar

Results: Statutory Contribution Rates

- Significant decrease due to full amortization of the 2008 UAAL layer
- Recommend adopting new employer Statutory Contribution Rates
- Detail by plan in Exhibit 10 of report

	Fiscal Year		
	July 1, 2023	July 1, 2022	Change
Gross Normal Cost Rate	23.64%	24.04%	(0.40)%
Member Contribution Rate	(12.27)%	(12.49)%	0.22%
Employer Normal Cost Rate	11.37%	11.55%	(0.18)%
UAAL Amortization Rate	16.04%	29.21%	(13.17)%
Calculated Employer Rate	27.41%	40.76%	(13.35)%
Deferred Recognition of Assumption Change	(1.22)%	(2.43)%	1.21%
Employer Rate with Phase-in	26.19%	38.33%	(12.14)%
County Contribution Rate	26.19%	38.51%	(12.32)%
Courts Contribution Rate	26.02%	35.73%	(9.71)%
SMCM&VCD Contribution Rate	25.06%	12.10%	12.96%

Statutory Contribution Rates - Impact of SCAs

- CSCA equals \$230.2M, DSCA equals \$0.6M as of June 30, 2022
 - CSCA: County statutory contribution rate calculated excluding CSCA, then credit based on 15-year layered amortization of CSCA
 - DSCA: District statutory contribution rate calculated excluding DSCA. FY 2023 credit will exhaust DSCA absent additional employer contributions.

	Fiscal Year Beginning July 1, 2023				
	All Emplovers	County	Courts	SMCM&VCD	
Preliminary Rate with Phase-In CSCA Credit DSCA Credit	30.58% (4.38)% (0.01)%	30.78% (4.59)%	26.02% - -	27.78% - (2.72)%	
Employer Contribution Rate	26.19%	26.19%	26.02%	25.06%	

C Millimar

Changes by Employer Class

- SCR decreased for each employer class, except SMCM&VCD
 - SMCM&VCD increased due to full usage of DSCA



C Milliman
Member Contribution Rates

- Recommend adopting new Plan 7 member contribution rates
 - Plan 7 member rates are equal to 50% of the plan's Normal Cost Rate and tend to change annually based on year-to-year changes in the population and assumptions
 - Plan 7 employee members account for more than 50% of all employees
 - Detail in Appendix D of report (sample rates below)

	Fiscal Year	Beginning	Percent	
	July 1, 2023	July 1, 2022	Change	
General Members	9.30%	9.17%	0.13%	
SMCM&VCD Members	9.45%	10.12%	(0.67)%	
Probation Members	15.78%	15.74%	0.04%	
Safety Members	15.81%	15.66%	0.15%	



Changes Since Last Year – Statutory Contribution Rate



C Milliman

Changes Since Last Year – Funded Ratio



C Milliman

Looking Forward SCR – All Assumptions Met





Looking Forward Funded Ratio – All Assumptions Met





Looking Forward SCR – Return Volatility



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Looking Forward SCR – Alternate Methodologies



C Milliman

Note: 15-Year amortization reset scenarios assume reset occurs with 2023 valuation and actuarial assets are reset to be equal to market value.

Summary of recommendations

- Adopt new employer statutory contribution rates effective July 1, 2023
 - See Exhibits 10, 10a–10d of report for details
 - County General = 22.09% (32.02% in FY22-23)
 - Courts = 26.02% (35.73% in FY22-23)
 - Mosquito & Vector Control District = 25.06% (12.10% in FY22-23)
 - County Safety = 47.35% (73.94% in FY22-23)
 - County Probation = 53.75% (69.52% in FY22-23)
- Adopt new Plan 7 member contribution rates effective July 1, 2023
 - As shown on page 7
 - See Appendix D of 2022 funding valuation report for complete listing of member rates
 - No recommended changes to other plans



C Milliman



Questions



Caveats and Disclaimers

This presentation is based on the data, methods, assumptions and plan provisions described in our actuarial valuation report dated September 16, 2022. The statements of reliance and limitations on the use of this material is reflected in the actuarial report and still apply to this presentation.

These statements include reliance on data provided, on actuarial certification, and the purpose of the report.

Milliman's work product was prepared exclusively for SamCERA for a specific and limited purpose. It is a complex, technical analysis that assumes a high level of knowledge concerning SamCERA's operations, and uses SamCERA's data, which Milliman has not audited. It is not for the use or benefit of any third party for any purpose. Any third party recipient of Milliman's work product who desires professional guidance should not rely upon Milliman's work product, but should engage qualified professionals for advice appropriate to its own specific needs.



San Mateo County Employees' Retirement Association

June 30, 2022 Actuarial Valuation

Prepared by:

Nick Collier, ASA, EA, MAAA Consulting Actuary

Craig Glyde, ASA, EA, MAAA Consulting Actuary

Milliman, Inc. 1301 Fifth Avenue, Suite 3800 Seattle, WA 98101-2605 Tel +1 206 624 7940 milliman.com



1301 Fifth Avenue Suite 3800 Seattle, WA 98101-2605 USA

Tel +1 206 624 7940

milliman.com

September 19, 2022

Board of Retirement San Mateo County Employees' Retirement Association 100 Marine Parkway, Suite 125 Redwood City, CA 4065-5208

Dear Members of the Board:

As requested, we have completed an actuarial valuation for the San Mateo County Employees' Retirement Association (SamCERA). The purpose of the valuation is to recommend the employer and member contribution rates for the fiscal year beginning July 1, 2023.

Actuarial Certification – Per SamCERA Consulting Contract

This actuarial valuation has been completed in accordance with generally accepted actuarial principles and practices, including Actuarial Standards of Practice (ASOPs) Nos. 4, 27, and 35. In particular, it reflects the actuary's responsibility under Section 5.8 ("Actuary's Responsibility) of ASOP No. 4 (1993 Reformatted Edition) for assessing the implications of overall results, in terms of short-range and long-range benefit security and expected cost progression. Note that this section no longer exists in the current ASOP No. 4; however, Milliman will continue to assess the results pursuant to the prior section.

To the best of our knowledge, the information supplied in this actuarial valuation is complete and accurate. Further, in our best professional judgment, the assumptions and methodologies as adopted by the Board of Retirement, individually and in combination, are reasonably related to the experience of and the expectations for SamCERA, and will not, in and of themselves, expose SamCERA to "unsound financial risk." In this regard, we consider "unsound financial risk" to mean the following:

- A substantial likelihood that future required contribution rates as a percentage of payroll will be dramatically higher than the rates shown in this report, given the uncertainties of actuarial projections and assuming the full payment of all recommended contributions; or
- A substantial likelihood that SamCERA's assets will be insufficient to pay benefit payments when due, given the uncertainties of actuarial projections and assuming the full payment of all recommended contributions.

In preparing this report, we have complied with all quality assurance procedures detailed on page 26 of our October 22, 2018 proposal titled "Actuarial Consulting Services Proposal."

Actuarial Certification – Milliman

The major findings of the valuation are contained in this report. This report reflects the benefit provisions as of June 30, 2022 and member contribution rates effective July 1, 2023. In preparing this report, we relied, without audit, on information (some oral and some in writing) supplied by SamCERA staff. This information includes, but is not limited to, statutory provisions, employee data, and financial information. We found this information to be reasonably consistent and comparable with information used for other purposes. The valuation results depend on the integrity of this information. If any of this information is inaccurate or incomplete, our results may be different, and our calculations may need to be revised.

This work product was prepared solely for SamCERA for the purposes described herein and may not be appropriate to use for other purposes. Milliman does not intend to benefit and assumes no duty or liability to other parties who receive this work. Milliman recommends that third parties be aided by their own actuary or other qualified professional when reviewing the Milliman work product. sme0371



Board of Retirement September 19, 2022 Page 2

All costs, liabilities, rates of interest, and other factors for SamCERA have been determined on the basis of actuarial assumptions and methods which are individually reasonable (taking into account the experience of SamCERA and reasonable expectations) and which, in combination, offer a reasonable estimate of anticipated experience affecting SamCERA. Further, in our opinion, each actuarial assumption used is reasonably related to the experience of the Plan and to reasonable expectations, which, in combination, represent a reasonable estimate of anticipated estimate of anticipated experience for SamCERA.

The valuation results were developed using models employing standard actuarial techniques. We have reviewed the models, including their inputs, calculations, and outputs for consistency, reasonableness, and appropriateness to the intended purpose and in compliance with generally accepted actuarial practice and relevant actuarial standards of practice. Reliance on other experts is reflected in Milliman's capital market assumptions, and in Milliman's expected return model maintained by Milliman investment consultants.

This valuation report is only an estimate of SamCERA's financial condition as of a single date. It can neither predict SamCERA's future condition nor guarantee future financial soundness. Actuarial valuations do not affect the ultimate cost of benefits, only the timing of contributions. While the valuation is based on an array of individually reasonable assumptions, other assumption sets may also be reasonable and valuation results based on those assumptions would be different. No one set of assumptions is uniquely correct. Determining results using alternative assumptions is outside the scope of our engagement.

Future actuarial measurements may differ significantly from the current measurements presented in this report due to such factors as the following: plan experience differing from that anticipated by the economic or demographic assumptions; changes in economic or demographic assumptions; increases or decreases expected as part of the natural operation of the methodology used for these measurements (such as the end of an amortization period or additional cost or contribution requirements based on the Plan's funded status); and changes in plan provisions or applicable law. Due to the limited scope of our assignment, we did not perform an analysis of the potential range of future measurements. The Board of Retirement has the final decision regarding the appropriateness of the assumptions and adopted them as indicated in Appendix A.

Actuarial computations presented in this report are for purposes of determining the recommended funding amounts for SamCERA. The calculations in this report have been made on a basis consistent with our understanding of SamCERA's current funding requirements. Determinations for purposes other than meeting these requirements may be significantly different from the results contained in this report. Accordingly, additional determinations may be needed for other purposes.

Milliman's work is prepared solely for the internal business use of SamCERA. SamCERA may place the final version of this report on its website. Milliman's "work" to create this report, to the extent that Milliman's work is not subject to disclosure under applicable public records laws, may not be provided to third parties without Milliman's prior written consent. Milliman does not intend to benefit or create a legal duty to any third party recipient of its work product. Milliman's consent to release its work product to any third party may be conditioned on the third party signing a Release, subject to the following exceptions:

- (a) SamCERA may provide a copy of Milliman's work, in its entirety, to its professional service advisors who are subject to a duty of confidentiality and who agree to not use Milliman's work for any purpose other than to benefit SamCERA.
- (b) SamCERA may provide a copy of Milliman's work, in its entirety, to other governmental entities, as required by law.

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Board of Retirement September 19, 2022 Page 3

No third party recipient of Milliman's work product should rely upon Milliman's work product. Such recipients should engage qualified professionals for advice appropriate to their own specific needs.

The consultants who worked on this assignment are retirement actuaries. Milliman's advice is not intended to be a substitute for qualified legal or accounting counsel.

The signing actuaries are independent of the plan sponsors. We are not aware of any relationship that would impair the objectivity of our work.

On the basis of the foregoing, we hereby certify that, to the best of our knowledge and belief, this report is complete and accurate and has been prepared in accordance with generally recognized and accepted actuarial principles and practices, which are consistent with the principles prescribed by the Actuarial Standards Board and the *Code of Professional Conduct* and *Qualification Standard for Actuaries Issuing Statements of Actuarial Opinion* in the United States, published by the American Academy of Actuaries. We are members of the American Academy of Actuaries and meet the Qualification Standards to render the actuarial opinion contained herein.

We would like to express our appreciation to Scott Hood, Chief Executive Officer of SamCERA, and to members of his staff, who gave substantial assistance in supplying the data on which this report is based.

We respectfully submit the following report, and we look forward to discussing it with you.

Sincerely,

Lad C. ll

Nick Collier, ASA, EA, MAAA Consulting Actuary NC/CG/va

Craig Glyde, ASA, EA, MAAA Consulting Actuary

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1. Summary of Findings

This report presents the results of the June 30, 2022 actuarial valuation, including the Employer Statutory Contribution Rate calculated for the fiscal year beginning July 1, 2023 and the Funded Ratio of SamCERA. The following table summarizes these key results from the current and prior valuations.

	June 30, 2022	June 30, 2021
Employer Statutory Contribution Rate (all employers)	26.19%	38.33%
County Statutory Contribution Rate	26.19%	38.51%
Funded Ratio	90.7%	88.1%

Key findings and results from the valuation are summarized below.

Employer Statutory Contribution Rate

The Statutory Contribution Rate (SCR) is comprised of the Employer Normal Cost rate and a separate component to amortize the Unfunded Actuarial Accrued Liability (UAAL). The SCR decreased by 12.14% of pay to 26.19% of pay, from 38.33% of pay (calculated in the prior valuation). The SCR is a weighted average of the statutory contribution rates for each individual SamCERA plan. The actual percent of payroll to be contributed by each employer varies by plan, as shown in Section 6 of this report. In particular, both the County and Courts will see significant decreases in their SCR; however, the San Mateo County Mosquito and Vector Control District (SMCM&VCD) will see an increase as discussed below.



The decrease in the SCR is primarily due to the full amortization of the UAAL layer established as of June 30, 2008 which resulted in a SCR

decrease of 13.36% of pay. Effective June 30, 2023, the UAAL layer established as of June 30, 2008 has reached the end of its 15-year amortization period and no future amortization payments are required for that layer.

The "Analysis of Change" section that follows later in Section 1 provides an analysis of the sources of change in the SCR since last year. In addition, the section "Projected Future Employer Contribution Rates" below shows a 10-year projection of the statutory employer contribution rate.

The County Supplementary Contributions Account (CSCA) provides an offset of 4.59% of pay (compared to 4.27% of pay in the prior valuation) to the County's SCR, resulting in a County-only SCR of 26.19% of pay. Without the recognition of the CSCA, the County SCR would be 30.78% of pay.

The District Supplementary Contributions Account (DSCA) provides an offset of 2.72% of pay (compared to 25.45% of pay in the prior valuation) for SMCM&VCD. The decrease in the DSCA offset is due to the DSCA balance being almost entirely utilized as of June 30, 2023. As the DSCA offset no longer has a large impact, the calculated District contribution rate increases significantly from the prior year. The DSCA will be entirely utilized effective June 30, 2024 and no further SCR offset will be applicable after that date, unless the District makes additional contributions.

Throughout this report we use the term SCA when referring to both of the CSCA and DSCA.

Based on direction from the Board, the valuation recognizes the impact of the increase in employer contribution rate due to the new assumptions adopted effective June 30, 2021 in three equal installments beginning with the employer contribution rate effective July 1, 2022. Effective on that date one-third of the 3.64% increase (1.21%)

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was included in the SCR, and two-thirds (2.43%) was deferred. Effective July 1, 2023, another 1.21% is included in the SCR (with 1.22% deferred), and the final 1.22% will be included in the SCR effective July 1, 2024. The impact of the assumption change was determined separately for each member class, with different recognitions for each class. These impacts by member class are shown in Section 6 of this report.

Investment Return



SamCERA's money-weighted net investment return on the market value of assets of negative 6.1% for the fiscal year ended June 30, 2022, was less than the assumed rate of 6.25%.

Under the asset smoothing method, the investment losses entirely offset the unrecognized investment gains as of June 30, 2021. As of June 30, 2022 there is approximately \$333 million of unrecognized investment losses that will be recognized over the next five years.

Due to the asset smoothing method and the recognition of prior year investment gains, the net result was a return on Valuation Assets of 7.1%, which is greater than the assumed rate of 6.25%, and caused a decrease in

the Statutory Contribution Rate (SCR) of 0.72% of pay and an increase of 0.7% in the Funded Ratio. Note that this impact is strictly due to the smoothed investment return. Other factors caused additional changes to the SCR and Funded Ratio, as described in this report.

Funding

The Funded Ratio increased from 88.1% to 90.7%, primarily due to employer contributions made to amortize the UAAL and the recognition of prior investment returns greater than expected. On a market-value basis, the Funded Ratio decreased from 96.1% to 86.5%, primarily due to the -6.1% net investment return over the period, compared to the assumed 6.25%.

The "Analysis of Change" section that follows later in Section 1 provides an analysis of the sources of change in the Funded Ratio since last year.

The assets used in the calculation of the Funded Ratio include the value of the SCAs.

The County contributed \$15.2 million in excess of the SCR for the year ended

June 30, 2022 which was credited to the CSCA. The District did not contribute to the DSCA over the year ended June 30, 2022. In total, the CSCA has an actuarial value of \$230.2 million and the DSCA has an actuarial value of \$0.6 million as of June 30, 2022. Without the CSCA and DSCA the Funded Ratio would be 87.2% (instead of 90.7%) as of June 30, 2022.



2

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Member Contribution Rates



Individual member contribution rates are unchanged for all legacy plans. Legacy plans are all plans except Plan 7. Member contribution rates for legacy plans vary based on a member's entry age to SamCERA and the underlying actuarial assumptions. Since there are no changes in actuarial assumptions for this valuation compared to the prior valuation, members rates for these plans are unchanged.

Plan 7 member contribution rates are adjusted annually to be equal to 50% of the Gross Normal Cost Rate of the respective plans.

Exhibit 1b includes a summary of recommended member contribution rates for Plans 7. In general, there are increases between 0.04% and 0.15% of pay for all Plan 7 classes except SMCM&VCD which decreased by 0.67% of pay. Member contribution rates are discussed in Section 5 of this report, and a complete list of all member contribution rates is shown in Appendix D.

Summary of Contribution Rates

The following exhibits summarize our recommendations to the Board.

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Exhibit 1a Summary of Recommended Minimum Statutory Contribution Rates

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Recommendation #1.	Adopt new Statutor	V Contribution Rates for fiscal	vear neoinnino .iiiv 1 /u/.s
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	Fiscal Year I	Increase /	
	July 1, 2023	July 1, 2022	(Decrease)
Gross Normal Cost	23.64%	24.04%	(0.40)%
Member Contributions	(12.27)%	(12.49)%	0.22%
Employer Normal Cost	11.37%	11.55%	(0.18)%
UAAL Amortization	16.04%	29.21%	(13.17)%
Calculated Employer Rate	27.41%	40.76%	(13.35)%
Deferred Recognition of 2021 Assumptions	(1.22)%	(2.43)%	1.21%
Total Employer Rate	26.19%	38.33%	(12.14)%
County Contribution Rate	26.19%	38.51%	(12.32)%
Courts Contribution Rate	26.02%	35.73%	(9.71)%
SMCM&VCD Contribution Rate	25.06%	12.10%	12.96%

Notes:

1. Detailed contribution rates by plan are shown in Section 6.

2. The Total Employer Statutory Contribution Rate of 26.19% is the aggregate rate for all employers.

Exhibit 1b Summary of Recommended Member Contribution Rates

Recommendation #2: Adopt new Plan 7 member contribution rates for fiscal year beginning July 1, 2023

		Recommended Rates			Current		
	Entry Age	Basic	50% COLA Sharing	Cost Sharing	Total as a % of Pay	Total as a % of Pay	Ratio (New/Curr)
General Members	All	7.45%	1.85%	0.00%	9.30%	9.17%	101.4%
SMCM&VCD Members	All	7.52%	1.93%	0.00%	9.45%	10.12%	93.4%
Probation Members	All	12.21%	3.57%	0.00%	15.78%	15.74%	100.3%
Safety Members	All	12.28%	3.53%	0.00%	15.81%	15.66%	101.0%

Notes:

1. Plan 7 COLA share represents one-half of the cost of the COLA.

2. See Appendix B of this report for a full description of members COLA share. See Appendix D of this report for a full schedule of rates.

6

Analysis of changes since last year

A detailed analysis of the sources of changes in both the Statutory Contribution Rate and the Funded Ratio was performed. There were several factors that caused the changes, with the overall impact of these factors being an increase in the Funded Ratio and a decrease in the Statutory Contribution Rate from the prior valuation.

The following chart shows how the various factors affected the overall funding of SamCERA, as compared to the prior valuation.

Sources of Change	Statutory Contribution Rate	Funded Ratio
Calculated Rate for 2022 (2021 valuation)	38.33%	88.1%
Expected Year-to-Year Change Assumption Changes	-13.36% 0.00%	2.3% 0.0%
<u>Recognized Investment Gain / Loss</u> From Current Year From Prior Years Combined Investment Gain / Loss	5.96% -6.68% -0.72%	-6.0% 6.7% 0.7%
Payroll increases different than assumed Contributions different than assumed	0.26% 0.09%	0.0% 0.0%
SCA Contribution Funding	-0.21%	0.3%
Liability Gain / Loss Salary increases different than assumed Retiree COLAs different than assumed Changes in Plan Membership Other Combined Liability Gain / Loss	0.53% 0.25% -0.16% <u>-0.03%</u> 0.59%	-0.5% -0.2% 0.0%
Deferred Recognition of 2021 Assumptions	1.21%	0.0%
Total Change	-12.14%	2.6%
Calculated Rate for 2023 (2022 valuation)	26.19%	90.7%

Employer Statutory Contribution Rate

The Statutory Contribution Rate (SCR) for each plan is equal to the payment of the Employer Normal Cost rate plus a 15-year layered amortization of the UAAL (excluding the CSCA and DSCA) for each year beginning with the UAAL as of June 30, 2008. The UAAL rate for the County is reduced to reflect the CSCA, as is the UAAL rate for SMCM&VCD to reflect the DSCA. The SCR (blended average for all employers) is 26.19% for the fiscal year beginning July 1, 2023.

As discussed above, the decrease in the calculated SCR in the 2022 valuation is primarily due to the full amortization of the UAAL layer established as of June 30, 2008,

It should be noted that these rates are a weighted average of each individual SamCERA plan. The actual percent of payroll to be contributed by each employer varies by plan. See Exhibit 10 for the SCR by classification and Exhibits 10a through 10d for the SCR by plan.

In our opinion, the SCRs calculated are adequate to maintain the funding of SamCERA based on the actuarial methods and assumptions shown in Appendix A of this report.

A historical perspective of the total SCR is shown in the following graph.



Employer Statutory Contribution Rate

Projected Future Statutory Employer Contribution Rate

The statutory employer contribution rate beginning July 1, 2023 is 26.19% of payroll, which is a weighted average for all SamCERA plans. The actual percent of payroll to be contributed by the employers varies by plan as shown in Exhibit 10.

The new statutory employer contribution rate is effective for the fiscal year beginning July 1, 2023. Effective with the fiscal year beginning July 1, 2023, the June 30, 2008 amortization layer has been fully amortized causing a large decrease in the statutory employer contribution rate. Effective with the fiscal year beginning July 1, 2024, a large decrease is projected as the June 30, 2009 amortization layer is fully amortized. In future years there are increases and decreases as amortization layers "roll off." Given the projected variance of future employer contribution rates, SamCERA may wish to consider an adjustment to its amortization policy with the next valuation to reduce this variation.

To illustrate these impacts, we have performed a 10-year projection of the employer contribution rate that assumes all actuarial assumptions are met, and reflects the projected recognition of the deferred investment losses as of June 30, 2022. This projection is shown in the graph below.



Projected Employer Contribution Rate⁽¹⁾

1. Projections assume that all actuarial assumptions are met after June 30, 2022, and reflect the scheduled recognition of investment gains currently being deferred. Actual results will vary.

Funding Progress

Based on the 2021 valuation, the expected UAAL as of June 30, 2022 was \$600 million. The actual UAAL for the fiscal year ended June 30, 2022 is \$607 million. This difference is due to a combination of factors, including salary increases and retiree cost of living adjustments (COLAs) larger than expected by the assumptions and the recognition of prior year investment returns greater than assumed.

The Funded Ratio compares the value of the Actuarial Value of Assets (net of certain non-valuation reserves) to the Actuarial Accrued Liability (AAL) for all SamCERA plans combined. Due primarily to investment returns less than assumed from 2001 through 2009, SamCERA's Funded Ratio decreased significantly over those years. In recent years, the Funded Ratio has improved, due primarily to better-than-assumed investment performance and strong funding by the employers.



Historical Funded Ratios

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Assets

For the fiscal year ended June 30, 2022, SamCERA earned -6.1% on a market value basis net of investment and administrative expenses. Note that this rate of return may differ from that calculated by SamCERA and shown in the Annual Comprehensive Financial Report (ACFR) based on the calculation method.

SamCERA uses a modified asset-smoothing method in the calculation of the UAAL contribution. Under this method, asset gains or losses for the most recently completed fiscal period are offset against prior period gains or losses and all remaining gains or losses are then smoothed over a five-year (10 six-month) period. Due to the recognition of current and deferred investment gains, the return on Actuarial Valuation Assets, at 7.1% net of expenses, was greater than the assumed return of 6.25% for the fiscal year ended June 30, 2022. Additional detail on the asset smoothing method is included in Section 3.

Actuarial Balance Sheet

One part of the valuation process is to compare the total Valuation Assets of SamCERA with its total liabilities for all plans. In this analysis, SamCERA's resources equal the actuarial assets plus the expected future contributions by both the employers and members. Liabilities reflect benefits already earned in the past and those expected to be earned in the future by current members. This relationship is shown in the following chart. The AAL is the total of these liabilities less expected future Normal Cost contributions.

Comparing the current and future resources to the current and future liabilities, we then determine the annual contribution amount for the coming fiscal year.



Member Information

The number of active members included in the valuation decreased from 5,356 in 2021 to 5,249 in 2022.

Retired member counts continue to increase steadily. For 2022, there were 5,779 retired members and beneficiaries with an average benefit of \$4,174 per month. This represents a 3.3% increase in count (up from 5,592 in 2021) and a 4.5% increase in the average monthly benefit (up from \$3,995 over the period). There are also 2,224 members who are no longer actively employed or retired but are entitled to a future retirement benefit or a refund of member contributions.



Membership Count

Active Retired



Average Monthly Retirement Benefit

Analysis of Change in Member Population

	Active Members	Inactive Members	Service Retired Members	Disabled Retired Members	Beneficiaries in Pay	Total
As of June 30, 2021	5,356	1,986	4,421	499	672	12,934
New Members	496	55	5	-	42	598
Status Change:						
to Active	13	(13)	-	-	-	-
to Inactive	(311)	311	-	-	-	-
to Service Retirement	(241)	(69)	310	-	-	-
to Disabled Retirement	(1)	(3)	(3)	7	-	-
to Beneficiary	-	(2)	-	-	2	-
Refunds	(59)	(36)	-	-	-	(95)
Terminated non-vested	(2)	(1)	-	-	-	(3)
Deaths	(2)	(4)	(125)	(13)	(38)	(182)
As of June 30, 2022	5,249	2,224	4,608	493	678	13,252

The following table summarizes the year-to-year change in member population.

Summary Valuation Results

Exhibit 2 presents a comparison of the key results from the June 30, 2022 and June 30, 2021 valuations. More detail on each of these elements can be found in the following sections and exhibits of this report.

			June 30, 2022		June 30, 2021	Relative Change
1.	Total Membership					
	A. Active Members B. Retired Members & Beneficiaries C. Inactive Members D. Total		5,249 5,779 2,224 13,252		5,356 5,592 1,986 12,934	(2.0)% 3.3% 12.0% 2.5 %
2	Pay Rate		-, -		,	-
	A. Annual Total (\$thousands) B. Monthly Average	\$	613,703 9,743	\$	606,677 9,439	1.2% 3.2%
3.	Average Monthly Benefit to Current Retirees and Beneficiaries					
	A. Service Retirement B. Disability Retirement C. Surviving Spouse and Dependents D. Total Average	\$	4,423 4,117 2,524 4,174	\$	4,224 4,027 2,467 3,995	4.7% 2.2% 2.3% 4.5%
4.	Actuarial Accrued Liability (\$thousands)					
	A. Active Members B. Retired Members C. Inactive Members	\$	2,289,384 3,922,840 317,815	\$	2,318,546 3,626,835 281,685	(1.3)% 8.2% 12.8%
	D. Total	\$	6,530,039	\$	6,227,066	4.9%
5.	Assets A. Market Value of Fund (\$thousands) B. Return on Market Value C. Actuarial Value (\$thousands) D. Return on Actuarial Value	\$ \$	5,649,674 -6.1% 5,922,894 7.1%	\$ \$	5,982,086 23.5% 5,488,958 8.2%	(5.6)% 7.9%
6.	Unfunded Actuarial Accrued Liability or Surplus Funding (\$thousands)	\$	607,145	\$	738,108	(17.7)%
7.	Statutory Employer Contribution Rate for all plans combined as a percent of total payroll					
	A. Gross Normal CostB. Member Contributions		23.64% (12.27)%		24.04% (12.49)%	(1.7)% (1.8)%
	C. Employer Normal Cost D. UAAL Amortization		11.37% 16.04%		11.55% 29.21%	(1.6)% (45.1)%
	E. Calculated Employer Contribution Rate F. Deferred Recognition of 2021 Assumptions		27.41% (1.22)%		40.76% (2.43)%	(32.8)%
	G. Employer Rate with Phase-in		26.19%		38.33%	(31.7)%
8.	Funded Ratio (5C / 4D)		90.7%		88.1%	2.9%
9.	Results Based on Market Value (No Asset Smoothin A. Total Employer Rate B. Funded Ratio (5A / 4D)	ıg)	For Informationa 30.42% 86.5%	ll Pu	rposes Only 30.57% 96.1%	(0.5)% (9.9)%

Exhibit 2 Summary of Significant Valuation Results

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2. Scope of the report

This report presents the actuarial valuation of the San Mateo County Employees' Retirement Association as of June 30, 2022. This valuation is made in accordance with SamCERA's annual valuation cycle. Section 31453 of the County Employees Retirement Law of 1937 (the CERL) requires an actuarial valuation to be performed at least every three years for the purposes of setting contribution rates.

In reading our cover letter, please pay particular attention to the guidelines employed in the preparation of this report. We also comment on the sources and reliability of both the data and the actuarial assumptions upon which our findings depend. Those comments are the basis for our certification that this report is complete and accurate to the best of our knowledge and belief.

In many respects, an actuarial valuation can be thought of as an inventory process as of the valuation date. On that date, the assets available for the payment of retirement benefits are appraised and compared with the accrued and future actuarial liabilities. The purpose of the valuation is to determine what future contributions by the members and employers are needed to pay all expected future benefits not funded by the current assets.

A summary of the findings resulting from this valuation is presented in the previous section. The following sections of the report provide the details of the actuarial valuation.

Section 3 describes the assets and investment experience of SamCERA. The assets and investment income are presented in Exhibits 3-5. Exhibits 6-8 develop the Actuarial Value of Assets as of June 30, 2022.

Section 4 describes the benefit obligations of SamCERA. Exhibits 9a and 9b show the Actuarial Balance Sheet. Additional analysis on the change in UAAL is also provided in this section.

Sections 5 and 6 deal with the process for determining required contributions based on the relationship between the actuarial assets and the actuarial liabilities. Section 5 discusses the member contribution rates and Section 6 discusses the employer contributions needed to fund the benefits under the actuarial cost method in use.

Section 7 discloses supplemental information that may be included in SamCERA's ACFR.

Section 8 discusses risks that could potentially affect future valuation results.

This report includes several appendices:

- Appendix A A summary of the actuarial procedures and assumptions used to estimate liabilities and contributions.
- Appendix B A summary of the current benefit structure, as determined by the provisions of governing law as of June 30, 2022.
- Appendix C Schedules of valuation data classified by various categories of members by plan.
- Appendix D Member contribution rates by plan.
- Appendix E A glossary of actuarial terms used in this report.

3. Assets

This section of the report deals with the determination of assets used for funding purposes. A historical summary of SamCERA's assets is presented below:

	All dolla	All dollar amounts in millions					
		Actuar	ial Value				
Year	Market Value of Total Assets	Non Valuation Assets	Valuation Assets				
2003 2004 2005 2006 2007	\$ 1,233 1,435 1,599 1,790 2,132	\$ 34 31 0 0 0	\$ 1,354 1,453 1,616 1,769 1,977				
2008 2009 2010 2011 2012	2,011 1,591 1,816 2,318 2,360	0 0 0 0	2,219 1,910 2,179 2,405 2,480				
2013 2014 2015 2016 2017	2,728 3,292 3,454 3,541 4,039	0 30 33 36 40	2,619 2,993 3,344 3,625 3,977				
2018 2019 2020 2021 2022	4,374 4,723 4,781 5,982 5,650	44 48 51 55 60	4,352 4,686 4,998 5,489 5,923				

On June 30, 2022, the total market value of the fund was about \$5.65 billion. The actuarial value of the fund was determined to be \$5.98 billion, including the non-valuation reserves.

Financial Exhibits

Exhibit 3 presents a Statement of Plan Net Assets and Exhibit 4 presents a Statement of Changes in Plan Net Assets.

Exhibit 5 describes the allocation of SamCERA's assets by the various reserve values determined for accounting purposes.

Exhibits 3-5 are taken from data furnished to us by SamCERA for its annual financial report. We have accepted these tables for use in this report without audit, but we have reviewed them for reasonableness and consistency with previous reports.

Actuarial Value of Assets

The actuarial value of assets is equal to the market value of assets with a five-year (10 six-month periods) recognition of the difference between expected and actual investment returns. Effective with the June 30, 2018 valuation, all deferred gains and losses were combined into a single amount to be recognized over a five-year (10 six-month) period. Beginning with the six-month period immediately following the June 30, 2018 valuation, offsetting of current period gains or losses against prior period gains or losses occur, as follows. First, to the extent there is a loss for the period, it shall be used to offset any unrecognized over a five-year (10 six-month) period. Any remaining loss for the period is recognized over a five-year (10 six-month) period. Similarly, any gain for the period shall be offset against unrecognized losses from prior periods.

Beginning with the June 30, 2014 valuation, assets used to calculate the preliminary UAAL contribution rates exclude the value of the CSCA. The CSCA is used to adjust the County's Statutory Contribution Rate. Beginning with the June 30, 2016 valuation, assets used to calculate the preliminary UAAL contribution rates also exclude the value of the DSCA. The DSCA is used to adjust the SMCM&VCD's Statutory Contribution Rate. To adjust the Statutory Contribution Rate, we track the CSCA and DSCA assets separately.

The development of the June 30, 2022 actuarial value of assets is shown in Exhibits 6 and 7. Exhibits 6a and 7a show the development of the total actuarial value of assets. Exhibits 6b and 7b show the development excluding the Supplemental Contribution Account (SCA) assets. Exhibits 6c and 7c show the development of the actuarial value of assets for the CSCA. Exhibits 6d and 7d show the development of the actuarial value of assets for the DSCA.

The County and the SMCM&VCD each made their contributions for the year ended June 30, 2022 based on the SCR. Since the SCR reflected offsets due to the respective SCAs, each employer effectively used up an amount of the SCA equivalent to the offset. Therefore, we have shown this in the "Credits Used" column in Exhibits 6c and 6d.

The following graph shows a historical comparison of the total actuarial and market assets used for valuation purposes.



Applicable Asset Values

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Valuation Assets

Valuation Assets are the actuarial value of the fund, less the value of any reserves which have been set aside for current liabilities and special benefits (if any) that are to be funded outside of the actuarially determined contribution rates.

Valuation Assets are allocated by classification (General, Safety, and Probation) as shown in Exhibit 8. This allocation is necessary because the UAAL contribution rates are determined separately by employer and class.

Allocation of Assets

In the calculation of the Statutory Contribution Rate, the Normal Cost Rate is determined separately for each plan. The UAAL portion of the rate is allocated proportionately to each classification. To determine the UAAL amount by classification, the actual UAAL is allocated in proportion to the expected UAAL after reflecting expected contributions from the prior year to pay down the UAAL. The allocation is done without consideration of the SCAs. Valuation Assets are equal to the AAL minus the UAAL for each classification. These calculations are shown in Exhibit 8.

CSCA valuation assets are allocated to each County member classification (General, Safety or Probation) in proportion to the actual UAAL excluding SCAs. These assets directly reduce the UAAL of each classification.

DSCA assets are allocated entirely to the SMCM&VCD General member classification.

Exhibit 3 Statement of Plan Net Assets as of June 30, 2022 and 2021

	2022	2021
ASSETS		
Cash and short-term investments:		
Cash and cash equivalents	\$ 237,495,568	\$ 153,467,110
Cash management overlay	73,569,285	64,054,219
Securities lending cash collateral	4,120,692	4,574,275
Total cash and short-term investments	315,185,545	222,095,604
Receivables:		
Contributions	14,690,743	15,060,101
Due from broker for investments sold	60,199,734	48,257,671
Investment income	8,049,214	7,838,202
Securities lending income	16,435	3,029
Other	131,903	83,607
Total receivables	83,088,029	71,242,610
Prepaid Expenses	352,332	-
Investments at fair value:		
Public equity	2,065,993,116	2,411,436,689
Fixed income	1,365,666,389	1,545,541,099
Alternatives	807,907,593	860,701,348
Inflation hedge	1,105,638,764	942,703,531
Total investments at fair value	5,345,205,862	5,760,382,667
Lease assets	3,325,962	-
Less: accumulated amortization	(511,692)	-
Lease assets, net of accumulated amortization	2,814,270	-
Capital assets	8,462,302	8,324,720
Less: accumulated depreciation	(4,586,899)	(3,737,459)
Capital assets, net of accumulated depreciation	3,875,403	4,587,261
Total assets	5,750,521,441	6,058,308,142
LIABILITIES		
Investment management fees payable	2,125,820	3,151,269
Due to broker for investments purchased	90,090,580	66,319,257
Securities lending collateral due to borrowers	4,120,692	4,574,275
Lease liability	2,890,295	-
Other	1,619,608	2,177,391
Total liabilities	100,846,995	76,222,192
NET POSITION RESTRICTED FOR PENSIONS	<u> </u>	\$ 5,982,085,950

Exhibit 4

Statement of Changes in Plan Net Assets for the Fiscal Years Ended 2022 and 2021

	 2022	 2021
ADDITIONS		
Contributions:		
Employer	\$ 234,746,179	\$ 225,302,472
Employer supplementary	15,200,000	39,700,000
Member	73,967,823	73,966,484
Total contributions	323,914,002	338,968,956
Investment income:		
Interest and dividends	99,498,163	87,240,822
Net increase (decrease) in the fair value of investments	(415,521,032)	1,110,924,843
Total investment income	(316,022,869)	1,198,165,665
Less: investment expenses	(50,676,576)	(65,039,394)
Net investment income	(366,699,445)	 1,133,126,271
Securities lending activities:	<u> </u>	
Securities lending income	32,658	12,916
Borrower rebate	61,277	51,515
Management fees	(20,645)	(14,156)
Net income from securities lending activities	 73,290	 50,275
Total additions	 (42,712,153)	 1,472,145,502
DEDUCTIONS		
Benefits:		
Service retirement benefits	246.250.375	229.730.556
Disability retirement benefits	28.674.627	28,342,469
Survivor, death and other benefits	1,577,229	1,282,749
Total benefits	276,502,231	 259,355,774
Member refunds	4.407.297	2,796,160
Administrative expenses	7.196.431	7.059.702
Information technology expenses	1.593.392	1.350.229
Total deductions	289,699,351	 270,561,865
Net increase (decrease) in net position	(332,411,504)	1,201,583,637
NET POSITION RESTRICTED FOR PENSIONS		
Beginning of year	5,982,085,950	4,780,502,313
End of year	\$ 5,649,674,446	\$ 5,982,085,950
Estimated Return, Net of Investment Expenses	-6.1%	23.5%

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Exhibit 5 Allocation of Assets by Accounting Reserve Amounts as of June 30, 2022 and 2021

			2022		2021	
Valuation Reserves						
1.	Member Reserve	\$	937,791,042	\$	895,744,573	
2.	Employer Advance Reserve		1,523,311,607		1,379,732,982	
3.	Retiree Reserves		1,496,585,584		1,380,172,681	
4.	Cost of Living Adjustment Reserve		1,737,309,767		1,642,623,638	
5.	County Supplemental Contributions Account Reserve		215,660,082		236,971,881	
6.	District Supplemental Contributions Account Reserve		595,202		1,109,806	
7.	Undistributed Earnings / (Losses) Reserve		(2,859,547)		(30,609,675)	
	Total Valuation Reserves		5,908,393,737		5,505,745,886	
No	on-Valuation Reserves					
1.	Contingency Reserve		59,827,218		55,444,026	
	Total Non-Valuation Reserves		59,827,218		55,444,026	
Market Stabilization Account			(318,546,509)		420,896,038	
Total Reserves (Market Value of Assets)		\$	5,649,674,446	\$	5,982,085,950	

Note: These amounts were determined by SamCERA for accounting purposes.
Exhibit 6a Five-Year Smoothing of Gains and Losses on Market Value (Total Assets) – History

			History of Une	(pected Asset Ga	ins and Los	ses		
Six-Month Period Ended	Market Value at Beginning of Period	Contributions	Benefit Payments	Market Value at End of Period	Assumed Rate of Return	Expected Return	Actual Return	Unexpected Gain / (Loss)
06/30/2022	\$ 6,176,561,202	\$ 161,928,657	\$ 144,035,148	\$ 5,649,674,446	3.125%	\$ 194,281,326	\$ (544,780,265)	\$ (739,061,591)
12/31/2021	5,982,085,950	161,985,345	136,874,380	6,176,561,202	3.125%	188,713,042	169,364,287	(19,348,755)
06/30/2021	5,604,786,769	92,110,542	133,842,465	5,982,085,950	3.250%	181,730,879	419,031,104	237,300,225
12/31/2020	4,780,502,313	246,858,414	128,309,469	5,604,786,769	3.250%	157,292,070	705,735,511	548,443,441
06/30/2020	4,950,278,117	141,276,359	126,289,581	4,780,502,313	3.250%	162,104,000	(184,762,582)	(346,866,582)
12/31/2019	4,723,109,935	127,937,403	119,531,561	4,950,278,117	3.250%	154,870,851	218,762,340	63,891,489
06/30/2019	4,251,567,361	102,883,854	116,505,474	4,723,109,935	3.375%	142,617,961	485,164,194	342,546,233
12/31/2018	4,373,961,514	210,310,184	110,679,649	4,251,567,361	3.375%	149,503,844	(222,024,688)	(371,528,532)
06/30/2018	4,337,368,899	146,901,128	106,950,260	4,373,961,514	3.375%	147,555,099	(3,358,253)	(150,913,352)
12/31/2017	4,038,701,990	124,539,824	102,104,343	4,337,368,899	3.375%	137,926,474	276,231,428	138,304,954

Exhibit 6b Five-Year Smoothing of Gains and Losses on Market Value (excluding SCAs) – History

	History of Unexpected Asset Gains and Losses										
Six-Month Period Ended	Market Value at Beginning of Period	Contributions and SCA Credits	Benefit Payments	Market Value at End of Period	Assumed Rate of Return	Expected Return	Actual Return	Unexpected Gain / (Loss)			
06/30/2022	\$ 5,921,524,752	\$ 178,303,937	\$ 144,035,148	\$ 5,433,419,162	3.125%	\$ 186,297,896	\$ (522,374,379)	\$ (708,672,275)			
12/31/2021	5,744,004,263	151,985,345	136,874,380	5,921,524,752	3.125%	181,142,781	162,409,524	(18,733,257)			
06/30/2021	5,403,232,963	73,393,630	133,842,465	5,744,004,263	3.250%	174,078,088	401,220,135	227,142,047			
12/31/2020	4,604,453,572	246,858,414	128,309,469	5,403,232,963	3.250%	151,570,486	680,230,446	528,659,960			
06/30/2020	4,750,877,586	157,364,783	126,289,581	4,604,453,572	3.250%	155,623,482	(177,499,216)	(333,122,698)			
12/31/2019	4,532,439,649	127,937,403	119,531,561	4,750,877,586	3.250%	148,674,067	210,032,095	61,358,028			
06/30/2019	4,114,925,851	64,852,245	116,505,474	4,532,439,649	3.375%	137,584,435	469,167,027	331,582,592			
12/31/2018	4,230,263,350	210,310,184	110,679,649	4,114,925,851	3.375%	144,654,031	(214,968,034)	(359,622,065)			
06/30/2018	4,212,378,467	128,178,746	106,950,260	4,230,263,350	3.375%	143,336,672	(3,343,603)	(146,680,275)			
12/31/2017	3,921,574,858	124,539,824	102,104,343	4,212,378,467	3.375%	133,973,434	268,368,128	134,394,694			

Exhibit 6c Five-Year Smoothing of Gains and Losses on Market Value of CSCA – History

					Hist	ory of Unexp	becte	ed Asset Gair	is and Los	ses					
Six-Month Period Ended	4	Account Value at Beginning of Period	Co	ontributions		Credits Used	A	ccount Value at End of Period	Assumed Rate of Return		Expected Return		Actual Return	(Unexpected Gain / (Loss)
06/30/2022	\$	253,879,479	\$	5,200,000	\$	20,982,395	\$	215,660,082	3.125%	\$	7,947,275	\$	(22,437,002)	\$	(30,384,277)
12/31/2021		236,971,881		10,000,000		-		253,879,479	3.125%		7,535,580		6,907,598		(627,982)
06/30/2021		199,979,234		39,700,000		20,449,473		236,971,881	3.250%		7,601,617		17,742,120		10,140,503
12/31/2020		174,529,290		-		-		199,979,234	3.250%		5,672,202		25,449,944		19,777,742
06/30/2020		197,473,708		-		15,629,442		174,529,290	3.250%		6,417,896		(7,314,976)		(13,732,872)
12/31/2019		188,806,043		-		-		197,473,708	3.250%		6,136,196		8,667,665		2,531,469
06/30/2019		134,646,329		50,668,357		12,444,200		188,806,043	3.375%		4,966,189		15,935,557		10,969,368
12/31/2018		141,751,083		-		-		134,646,329	3.375%		4,784,099		(7,104,754)		(11,888,853)
06/30/2018		122,954,893		27,630,129		8,745,874		141,751,083	3.375%		4,149,728		(88,065)		(4,237,793)
12/31/2017		115,170,236		-		-		122,954,893	3.375%		3,886,995		7,784,657		3,897,662
	Six-Month Period Ended 06/30/2022 12/31/2021 06/30/2021 12/31/2020 06/30/2020 12/31/2019 06/30/2018 06/30/2018 12/31/2017	Six-Month Period Ended A 06/30/2022 \$ 12/31/2021 \$ 06/30/2021 1 12/31/2020 \$ 06/30/2020 1 12/31/2019 \$ 06/30/2019 1 12/31/2018 \$ 06/30/2018 1	Six-Month Period Ended Account Value at Beginning of Period 06/30/2022 \$ 253,879,479 12/31/2021 236,971,881 06/30/2021 199,979,234 12/31/2020 174,529,290 06/30/2020 197,473,708 12/31/2019 188,806,043 06/30/2019 134,646,329 12/31/2018 141,751,083 06/30/2018 122,954,893 12/31/2017 115,170,236	Six-Month Period Ended Account Value at Beginning of Period Cd 06/30/2022 \$ 253,879,479 \$ 12/31/2021 236,971,881 \$ 06/30/2021 199,979,234 \$ 12/31/2020 174,529,2900 \$ 06/30/2020 197,473,708 \$ 12/31/2019 188,806,043 \$ 06/30/2019 134,646,329 \$ 12/31/2018 141,751,083 \$ 06/30/2018 122,954,893 \$	Six-Month Period Ended Account Value at Beginning of Period Contributions 06/30/2022 \$ 253,879,479 \$ 5,200,000 12/31/2021 236,971,881 10,000,000 06/30/2021 199,979,234 39,700,000 12/31/2020 174,529,290 39,700,000 12/31/2020 197,473,708 - 06/30/2020 197,473,708 - 06/30/2019 188,806,043 - 12/31/2019 134,646,329 50,668,357 12/31/2018 141,751,083 - 06/30/2018 122,954,893 27,630,129 12/31/2017 115,170,236 -	Six-Month Period Ended Account Value at Beginning of Period Contributions 06/30/2022 \$ 253,879,479 \$ 5,200,000 \$ 12/31/2021 236,971,881 10,000,000 \$ 06/30/2021 199,979,234 39,700,000 \$ 12/31/2020 174,529,290 - \$ 06/30/2020 197,473,708 - \$ 06/30/2019 134,646,329 50,668,357 \$ 12/31/2018 141,751,083 - \$ 06/30/2018 122,954,893 27,630,129 \$ 12/31/2017 115,170,236 - \$	Six-Month Period Ended Account Value at Beginning of Period Contributions Credits Used 06/30/2022 \$ 253,879,479 \$ 5,200,000 \$ 20,982,395 12/31/2021 236,971,881 10,000,000 - 06/30/2021 199,979,234 39,700,000 20,449,473 12/31/2020 174,529,290 - - 06/30/2020 197,473,708 - 15,629,442 12/31/2019 188,806,043 - - 06/30/2019 134,646,329 50,668,357 12,444,200 12/31/2018 141,751,083 - - 06/30/2018 122,954,893 27,630,129 8,745,874 12/31/2017 115,170,236 - -	Six-Month Period Ended Account Value at Beginning of Period Contributions Credits Used A 06/30/2022 \$ 253,879,479 \$ 5,200,000 \$ 20,982,395 \$ 12/31/2021 236,971,881 10,000,000 - - 06/30/2021 199,979,234 39,700,000 20,449,473 - 06/30/2020 174,529,290 - - - 06/30/2020 197,473,708 - 15,629,442 - 12/31/2019 188,806,043 - - - 06/30/2019 134,646,329 50,668,357 12,444,200 - 12/31/2018 141,751,083 - - - 06/30/2018 122,954,893 27,630,129 8,745,874 - 12/31/2017 115,170,236 - - -	Six-Month Period Ended Account Value at Beginning of Period Contributions Credits Used Account Value at End of Period 06/30/2022 \$ 253,879,479 \$ 5,200,000 \$ 20,982,395 \$ 215,660,082 12/31/2021 236,971,881 10,000,000 - 253,879,479 06/30/2021 199,979,234 39,700,000 20,449,473 236,971,881 12/31/2020 174,529,290 - - 199,979,234 06/30/2020 197,473,708 - 15,629,442 174,529,290 12/31/2019 188,806,043 - 197,473,708 197,473,708 06/30/2019 134,646,329 50,668,357 12,444,200 188,806,043 12/31/2018 141,751,083 - - 134,646,329 06/30/2018 122,954,893 27,630,129 8,745,874 141,751,083 12/31/2017 115,170,236 - - 122,954,893	Six-Month Period Ended Account Value at Beginning of Period Contributions Credits Used Account Value at End of Period Assumed Rate of Return 06/30/2022 \$ 253,879,479 \$ 5,200,000 \$ 20,982,395 \$ 215,660,082 3.125% 12/31/2021 236,971,881 10,000,000 - 253,879,479 3.125% 06/30/2021 199,979,234 39,700,000 20,449,473 236,971,881 3.250% 12/31/2020 174,529,290 - - 199,979,234 3.250% 06/30/2020 197,473,708 - 15,629,442 174,529,290 3.250% 12/31/2019 188,806,043 - - 197,473,708 3.250% 06/30/2020 197,473,708 - - 197,473,708 3.250% 12/31/2019 134,646,329 50,668,357 12,444,200 188,806,043 3.375% 12/31/2018 141,751,083 27,630,129 8,745,874 141,751,083 3.375% 12/31/2017 115,170,236 - - 122,954,893 3.375%	Six-Month Period Ended Account Value at Beginning of Period Contributions Credits Used Account Value at End of Period Assumed Rate of Return 06/30/2022 \$ 253,879,479 \$ 5,200,000 \$ 20,982,395 \$ 215,660,082 3.125% \$ 12/31/2021 236,971,881 10,000,000 - 253,879,479 3.125% \$ 06/30/2021 199,979,234 39,700,000 20,449,473 236,971,881 3.250% 12/31/2020 174,529,290 - - 199,979,234 3.250% 06/30/2020 197,473,708 - 15,629,442 174,529,290 3.250% 12/31/2019 188,806,043 - - 197,473,708 3.250% 06/30/2019 134,646,329 50,668,357 12,444,200 188,806,043 3.375% 12/31/2018 141,751,083 - - 134,646,329 3.375% 06/30/2018 122,954,893 27,630,129 8,745,874 141,751,083 3.375% 12/31/2017 115,170,236 - - 122,954,893	Six-Month Period Ended Account Value at Beginning of Period Contributions Credits Used Account Value at End of Period Assumed Rate of Return Expected Return 06/30/2022 \$ 253,879,479 \$ 5,200,000 \$ 20,982,395 \$ 215,660,082 3.125% \$ 7,947,275 12/31/2021 236,971,881 10,000,000 - 253,879,479 3.125% 7,535,580 06/30/2021 199,979,234 39,700,000 20,449,473 236,971,881 3.250% 7,601,617 12/31/2020 174,529,290 - - 199,979,234 3.250% 5,672,202 06/30/2020 197,473,708 - 15,629,442 174,529,290 3.250% 6,417,896 12/31/2019 188,806,043 - - 197,473,708 3.250% 6,136,196 06/30/2019 134,646,329 50,668,357 12,444,200 188,806,043 3.375% 4,966,189 12/31/2018 141,751,083 27,630,129 8,745,874 141,751,083 3.375% 4,149,728	Six-Month Period Ended Account Value at Beginning of Period Contributions Credits Used Account Value at End of Period Assumed Rate of Return Expected Return 06/30/2022 \$ 253,879,479 \$ 5,200,000 \$ 20,982,395 \$ 215,660,082 3.125% \$ 7,947,275 \$ 12/31/2021 236,971,881 10,000,000 - 253,879,479 3.125% 7,535,580 06/30/2021 199,979,234 39,700,000 20,449,473 236,971,881 3.250% 7,601,617 12/31/2020 174,529,290 - - 199,979,234 3.250% 6,417,896 12/31/2019 188,806,043 - 15,629,442 174,529,290 6,136,196 12/31/2019 188,806,043 - 197,473,708 3.250% 6,136,196 12/31/2019 134,646,329 50,668,357 12,444,200 188,806,043 3.375% 4,966,189 12/31/2018 141,751,083 - - 134,646,329 3.375% 4,149,728 12/31/2017 115,170,236 - - 122,954,893	Six-Month Period Ended Account Value at Beginning of Period Contributions Credits Used Account Value at End of Period Assumed Rate of Return Expected Return Actual Return 06/30/2022 \$ 253,879,479 \$ 5,200,000 \$ 20,982,395 \$ 215,660,082 3.125% \$ 7,947,275 \$ (22,437,002) 12/31/2021 236,971,881 10,000,000 - 253,879,479 3.125% 7,535,580 6,907,598 06/30/2021 199,979,234 39,700,000 20,449,473 236,971,881 3.250% 5,672,202 25,449,944 06/30/2020 174,529,290 - - 199,979,234 3.250% 6,417,896 (7,314,976) 12/31/2019 188,806,043 - 15,629,442 174,529,290 3.250% 6,136,196 8,667,665 06/30/2020 197,473,708 - - 197,473,708 3.250% 6,136,196 8,667,665 06/30/2019 134,646,329 50,668,357 12,444,200 188,806,043 3.375% 4,784,099 (7,104,754) 06/30/2018 122,954,893 27	Six-Month Period Ended Account Value at Beginning of Period Contributions Credits Used Account Value at End of Period Assumed Rate of Return Expected Return Actual Return Actual Retu

Exhibit 6d Five-Year Smoothing of Gains and Losses on Market Value of DSCA – History

		ł	listo	ry of Unexp	pecte	d Asset Gain	s and Loss	es				
Six-Month Period Ended	Account Value at Beginning of Period	Contributions		Credits Used	Ad	ccount Value at End of Period	Assumed Rate of Return	E	Expected Return	Actual Return	Un Ga	expected in / (Loss)
06/30/2022	\$ 1,156,971	\$ -	\$	592,885	\$	595,202	3.125%	\$	36,155	\$ 31,116	\$	(5,039)
12/31/2021	1,109,806	-		-		1,156,971	3.125%		34,681	47,165		12,484
06/30/2021	1,574,572	-		533,615		1,109,806	3.250%		51,174	68,849		17,675
12/31/2020	1,519,451	-		-		1,574,572	3.250%		49,382	55,121		5,739
06/30/2020	1,926,823	-		458,982		1,519,451	3.250%		62,622	51,610		(11,012)
12/31/2019	1,864,243	-		-		1,926,823	3.250%		60,588	62,580		1,992
06/30/2019	1,995,181	-		192,548		1,864,243	3.375%		67,337	61,610		(5,727)
12/31/2018	1,947,081	-		-		1,995,181	3.375%		65,714	48,100		(17,614)
06/30/2018	2,035,539	-		161,873		1,947,081	3.375%		68,699	73,415		4,716
12/31/2017	1,956,896	-		-		2,035,539	3.375%		66,045	78,643		12,598

Exhibit 7a Five-Year Smoothing – Development of Valuation Assets (Total Assets)

	Development of Market Stabilization Reserve									
Six-Month Period Ended	Investment Gain / (Loss)	Adjusted Investment Gain / (Loss)		Percent Excluded			Adjusted Gain / (Loss) Excluded			
06/30/2022	\$ (739,061,591)	\$ (370,068,232)	x	90%	=	\$	(333,061,408)			
12/31/2021	(19,348,755)	12,485	х	80%	=		9,988			
06/30/2021	237,300,225	5,806	х	70%	=		4,064			
12/31/2020	548,443,441	0	х	60%	=		0			
06/30/2020	(346,866,582)	0	х	50%	=		0			
12/31/2019	63,891,489	0	х	40%	=		0			
06/30/2019	342,546,233	0	х	30%	=		0			
12/31/2018	(371,528,532)	0	х	20%	=		0			
06/30/2018	(150,913,352)	0	х	10%	=		0			
12/31/2017	138,304,954	0	х	0%	=		0			
		Total G	Gain /	(Loss) Excluded	=	\$	(333,047,356)			

Development of V	Valuation Assets	
1. Market Value of Assets as of June 30, 2022		\$ 5,649,674,446
2. Preliminary Market Stabilization Reserve		(333,047,356)
3. Preliminary Actuarial Value of Assets (1) - (2)		5,982,721,802
 4. Corridor Around Market Value a) Minimum = 80% of Market b) Maximum = 120% of Market c) Corridor Adjustment 	\$ 4,519,739,557 6,779,609,335	0
5. Market Stabilization Reserve	(333,047,356)	
6. Gross Actuarial Valuation of Assets (3) - (4c)		\$ 5,982,721,802
 7. Non-Valuation Reserves a) Contingency Reserve b) Other Specified Reserves c) Total 	59,827,218 0	59,827,218
8. Valuation Assets (6) - (7c)		\$ 5,922,894,584

Exhibit 7b Five-Year Smoothing – Development of Valuation Assets (excluding SCAs)

	Development of Market Stabilization Reserve									
Six-Month Period Ended	Investment Gain / (Loss)	Adjusted Investment Gain / (Loss)		Percent Excluded			Adjusted Gain / (Loss) Excluded			
06/30/2022	\$ (708,672,275)	\$ (353,940,566)	x	90%	=	\$	(318,546,509)			
12/31/2021	(18,733,257)	0	х	80%	=		0			
06/30/2021	227,142,047	0	х	70%	=		0			
12/31/2020	528,659,960	0	х	60%	=		0			
06/30/2020	(333,122,698)	0	х	50%	=		0			
12/31/2019	61,358,028	0	х	40%	=		0			
06/30/2019	331,582,592	0	х	30%	=		0			
12/31/2018	(359,622,065)	0	х	20%	=		0			
06/30/2018	(146,680,275)	0	х	10%	=		0			
12/31/2017	134,394,694	0	х	0%	=		0			
		Total G	Gain /	(Loss) Excluded	=	\$	(318,546,509)			

	Development of Valu	uation Assets	
1.	Market Value of Assets as of June 30, 2022		\$ 5,433,419,162
2.	Preliminary Market Stabilization Reserve		(318,546,509)
3.	Preliminary Actuarial Value of Assets (1) - (2)		5,751,965,671
4.	Corridor Around Market Value a) Minimum = 80% of Market b) Maximum = 120% of Market c) Corridor Adjustment	\$ 4,346,735,330 6,520,102,994	0
5.	Market Stabilization Reserve	(318,546,509)	
6.	Gross Actuarial Valuation of Assets (3) - (4c)		\$ 5,751,965,671
7.	Non-Valuation Reserves a) Contingency Reserve b) Other Specified Reserves c) Total	59,827,218 0	59,827,218
8.	Valuation Assets (6) - (7c)		\$ 5,692,138,453

Exhibit 7c Five-Year Smoothing – Development of CSCA Assets

	Developme	nt of M	arket Stab	iliza	ation Reserve			
Six-Month Period Ended	Investment Gain / (Loss) ¹	A Inv Gai	djusted estment n / (Loss)		Percent Excluded		(Adjusted Gain / (Loss) Excluded
06/30/2022	\$ (30,384,277)	\$ (*	16,127,666)	x	90%	=	\$	(14,514,899)
12/31/2021	(627,982)		0	х	80%	=		0
06/30/2021	10,140,503		0	х	70%	=		0
12/31/2020	19,777,742		0	х	60%	=		0
06/30/2020	(13,732,872)		0	х	50%	=		0
12/31/2019	2,531,469		0	х	40%	=		0
06/30/2019	10,969,368		0	х	30%	=		0
12/31/2018	(11,888,853)		0	х	20%	=		0
06/30/2018	(4,237,793)		0	х	10%	=		0
12/31/2017	3,897,662		0	х	0%	=		0
			Total G	Gain	/ (Loss) Excluded	=	\$	(14,514,899)

1. Historical amounts were recalculated as of June 30, 2019 for consistency with Addenda #1 of the MOU regarding retirement system funding.

	Development of Valuation	n As	ssets	
1.	Market Value of Assets as of June 30, 2022			\$ 215,660,082
2.	Preliminary Market Stabilization Reserve			 (14,514,899)
3.	Preliminary Actuarial Value of Assets (1) - (2)			230,174,981
4.	Corridor Around Market Value a) Minimum = 80% of Market b) Maximum = 120% of Market c) Corridor Adjustment	\$	172,528,066 258,792,098	0
5.	Market Stabilization Reserve		(14,514,899)	
6.	Gross Actuarial Valuation of Assets (3) - (4c)			\$ 230,174,981
7.	Non-Valuation Reserves a) Contingency Reserve b) Other Specified Reserves c) Total		0 0	0
8.	Valuation Assets (6) - (7c)			\$ 230,174,981

Exhibit 7d Five-Year Smoothing – Development of DSCA Assets

	Development of Market Stabilization Reserve									
Six-Month Period Ended	Inve Gain	estment / (Loss) ¹	Ao Inv Gair	djusted estment n / (Loss)		Percent Excluded		A Gai E	djusted n / (Loss) xcluded	
06/30/2022	\$	(5,039)	\$	0	x	90%	=	\$	0	
12/31/2021		12,484		12,485	х	80%	=		9,988	
06/30/2021		17,675		5,806	х	70%	=		4,064	
12/31/2020		5,739		0	х	60%	=		0	
06/30/2020		(11,012)		0	х	50%	=		0	
12/31/2019		1,992		0	х	40%	=		0	
06/30/2019		(5,727)		0	х	30%	=		0	
12/31/2018		(17,614)		0	х	20%	=		0	
06/30/2018		4,716		0	х	10%	=		0	
12/31/2017		12,598		0	х	0%	=		0	
				Total C	Gain /	(Loss) Excluded	=	\$	14,052	

1 Historical amounts were recalculated as of June 30, 2019 for consistency with the District's MOU regarding retirement system funding.

	Development of Valuation Assets		
1.	Market Value of Assets as of June 30, 2022		\$ 595,202
2.	Preliminary Market Stabilization Reserve	_	14,052
3.	Preliminary Actuarial Value of Assets (1) - (2)		581,150
4.	Corridor Around Market Valuea) Minimum = 80% of Market\$ 476,16b) Maximum = 120% of Market714,24c) Corridor Adjustment714,24)2 2	0
5.	Market Stabilization Reserve 14,05	52	
6.	Gross Actuarial Valuation of Assets (3) - (4c)		\$ 581,150
7.	Non-Valuation Reserves a) Contingency Reserve b) Other Specified Reserves c) Total	0 0	0
8.	Valuation Assets (6) - (7c)		\$ 581,150

Exhibit 8 Allocation of Valuation Assets

(Dollars in thousands)

ALLOCATION OF VALUATION ASSETS

For the Year Ended June 30, 2022

(Dollars in thousands)

		General		Safety	Probation	Total
1.	Prior Year UAAL	\$	683,375	\$ 198,389	\$ 77,638	\$ 959,402
2.	Expected UAAL Contribution for Preceding Year		(132,272)	(41,122)	(12,310)	(185,704)
3.	Expected Interest at 6.25%		38,640	 11,134	 4,474	 54,248
4	Expected UAAL Based on Prior Year Assumptions		589,743	168,401	69,802	827,946
5.	Percentage of Total Expected UAAL		71.23%	20.34%	8.43%	100.00%
6.	Actual UAAL Based on Prior Year Assumptions					837,899
7.	Actual AAL Based on Prior Year Assumptions	\$	4,823,806	\$ 1,241,164	\$ 465,067	\$ 6,530,037
8.	Allocated UAAL Based on Prior Year Assumptions		596,835	 170,429	 70,635	 837,899
9.	Valuation Assets (excluding SCA assets)	\$	4,226,971	\$ 1,070,735	\$ 394,432	\$ 5,692,138
10.	Actual UAAL excluding SCA Valuation Assets	\$	596,835	\$ 170,429	\$ 70,637	\$ 837,901
11.	Allocation of UAAL		71.23%	 20.34%	 8.43%	 100.00%
12.	Valuation Assets (CSCA)	\$	163,953	\$ 46,818	\$ 19,404	\$ 230,175
13.	Valuation Assets (DSCA)	\$	581	\$ -	\$ 	\$ 581
14.	Valuation Assets (Total)	\$	4,391,505	\$ 1,117,553	\$ 413,836	\$ 5,922,894

4. Actuarial Liabilities

This section of the report focuses on the commitments of SamCERA for retirement benefits, which are referred to as its actuarial liabilities. All liabilities reflect the benefits effective through June 30, 2022.

In an active retirement system, the combined current and future actuarial liabilities will almost always exceed the actuarial assets. This difference has to be provided by future contributions. An actuarial valuation method sets out a schedule of future contributions that will deal with this difference in an orderly fashion. The determination of the level of future contributions needed is discussed in the next section.

Except as noted, the actuarial assumptions used to determine the liabilities are based on the results of the 2020 Investigation of Experience study for the period ended April 30, 2020. At its meeting on May 25, 2021, the Board adopted an investment return assumption of 6.25% and reaffirmed all other assumptions. At its meeting on May 24, 2022, the Board reaffirmed all assumptions used in the prior valuation for use in the June 30, 2022 actuarial valuation. These assumptions are shown in Appendix A. The assumptions will next be reviewed in detail as part of the 2023 Investigation of Experience study.

Actuarial Balance Sheet

The Actuarial Balance Sheet compares the Present Value of Future Benefits for retired, inactive and active members to the resources available to meet them. The amount of any difference is called the Unfunded Actuarial Accrued Liability (UAAL). For the purpose of the Actuarial Balance Sheet, SamCERA's resources are equal to the sum of:

- (a) Assets currently available to pay benefits and considered for funding purposes, the Valuation Assets,
- (b) The present value of future contributions expected to be made by current active members, and
- (c) The present value of future contributions expected to be made by the employer.

Exhibit 9a contains an analysis of the Present Value of Future Benefits compared to total Valuation Assets.

Exhibit 9b contains an analysis using the Valuation Assets excluding the SCA assets (sum of the CSCA and DSCA). These analyses are displayed by class of membership and by type of benefit.

Unfunded Actuarial Accrued Liability

The Actuarial Accrued Liability (AAL) represents the value of benefits earned as of the valuation date, and is one component of the Present Value of Future Benefits. The difference between the AAL and Valuation Assets is referred to as the Unfunded Actuarial Accrued Liability (UAAL).

Exhibit 9c provides an analysis of the change in the UAAL since the prior valuation date.

Exhibit 9a Actuarial Balance Sheet (Total Assets) June 30, 2022

(Dollars in thousands)

	Resources	i.				
	General		Safety	Ρ	robation	Total
Valuation Assets (Actuarial)	\$ 4,391,505	\$	1,117,553	\$	413,836	\$ 5,922,894
Present Value of Future Member Contributions	463,259		96,724		25,779	585,762
Present Value of Future Employer Contributions to Fund:						
a) Normal Cost	399,485		92,831		27,062	519,378
b) Unfunded Actuarial Accrued Liability	432,301		123,611		51,233	607,145
Total Resources	\$ 5,686,550	\$	1,430,719	\$	517,910	\$ 7,635,179

	Liabilities				
	General	Safety	Ρ	robation	Total
Present Value of Future Benefits					
1. Present Retired Members	\$ 2,723,187	\$ 900,006	\$	299,647	\$ 3,922,840
2. Current Inactive Members	285,106	17,119		15,590	317,815
3. Current Active Members					
- Service Retirement	2,418,817	454,026		186,427	3,059,270
- Termination Benefits	118,681	14,534		3,381	136,596
- Death Benefits	25,253	3,527		938	29,718
- Disability Benefits	115,506	41,507		11,927	168,940
- Total Active	2,678,257	513,594		202,673	3,394,524
Total Actuarial Liabilities	\$ 5,686,550	\$ 1,430,719	\$	517,910	\$ 7,635,179

Exhibit 9b Actuarial Balance Sheet (excluding SCAs) June 30, 2022

(Dollars in thousands)

	Resources				
	General	Safety	Ρ	robation	Total
Valuation Assets (Actuarial)	\$ 4,226,971	\$ 1,070,735	\$	394,432	\$ 5,692,138
Present Value of Future Member Contributions	463,259	96,724		25,779	585,762
Present Value of Future Employer Contributions to Fund:					
a) Normal Cost	399,485	92,831		27,062	519,378
b) Unfunded Actuarial Accrued Liability	596,835	170,429		70,637	837,901
Total Resources	\$ 5,686,550	\$ 1,430,719	\$	517,910	\$ 7,635,179

	Liabilities				
	General	Safety	Ρ	robation	Total
Present Value of Future Benefits					
1. Present Retired Members	\$ 2,723,187	\$ 900,006	\$	299,647	\$ 3,922,840
2. Current Inactive Members	285,106	17,119		15,590	317,815
3. Current Active Members					
- Service Retirement	2,418,817	454,026		186,427	3,059,270
- Termination Benefits	118,681	14,534		3,381	136,596
- Death Benefits	25,253	3,527		938	29,718
- Disability Benefits	115,506	41,507		11,927	168,940
- Total Active	2,678,257	513,594		202,673	3,394,524
Total Actuarial Liabilities	\$ 5,686,550	\$ 1,430,719	\$	517,910	\$ 7,635,179

Exhibit 9c Analysis of Change in the Unfunded Actuarial Accrued Liability June 30, 2022

(Dollars in thousands)

			Amount	As a Percent of June 30, 2022 Actuarial Accrued Liability
Unfunded Actuarial Accrued Liability - June 30, 2021			\$ 738,108	11.3%
Increase in UAAL due to new assumptions			0	0.0%
Interest Accrued			46,132	0.7%
Benefits Accrued (Normal Cost)			148,879	2.3%
Contributions			,	
Employers	\$	(241.971)		-3.7%
Members	Ŧ	(76.244)		-1.2%
CSCA and DSCA Contributions		(15,200)		-0.2%
Total			(333,415)	-5.1%
Expected Unfunded Actuarial Accrued Liability - June 30, 2022			\$ 599,703	9.2%
Sources of Change:				0.0%
(Gain) / Loss due to Investment Income			(47,017)	-0.7%
Liability (Gains) and Losses				
Salary Increases Greater than Expected	\$	34,541		0.5%
Active Member Experience (non salary)		4,834		0.1%
CPI Greater than Expected		16,379		0.3%
Mortality Experience		(6,633)		-0.1%
All Other Experience		5,337		0.1%
Total			 54,458	0.8%
Total Changes			\$ 7,442	0.1%
Unfunded Actuarial Accrued Liability - June 30, 2022			\$ 607,145	9.3%

5. Member Contributions

For SamCERA members in Plans 1-6, contributions are of three types: Basic contributions, Cost Sharing contributions, and COLA Cost Sharing contributions.

SamCERA members in Plan 7 pay contributions equal to one-half of the total Normal Cost rate for all members.

There are no member contributions under General Plan 3.

Basic Member Contributions

Basic contribution member rates for General members in Plans 1, 2 and 4 are defined in Section 31621.9 of the County Employees Retirement Law (CERL). General Plan 5 member rates are defined in Section 31621, and Probation and Safety member rates in Plans 1-6 are defined in Section 31639.25.

Basic member contributions are determined using the Entry Age Normal Cost Method and the following actuarial assumptions:

- 1. Expected rate of return on assets
- 2. Individual salary increase rate (wage growth + merit)
- 3. Mortality for members based on service retirement
- 4. No COLAs are assumed

The basic member contribution rates for Plans 1-6 were recalculated as of the June 30, 2021 valuation to reflect assumptions adopted by the Board of Retirement on May 25, 2021. The rates are shown in Appendix D.

Cost of Living Member Contributions

Members in Plans 1-6 (except Plan 3 and SMCM&VCD members) may share in the cost of the Cost of Living Adjustment (COLA) benefit by making additional contributions. The COLA level is described in detail in the Member Contributions section of Appendix B.

COLA member rates for Plans 1-6 are determined by calculating and applying a load factor to the basic member rates. New COLA load factors were calculated in the 2021 valuation to reflect the new investment return assumption. COLA load factors are determined for each class and plan of member separately, as shown in the following table:

	Plan	COLA Share	COLA Load
General 1		50%	35.00%
General 2		50%	35.40%
General 4		50%	27.38%
General 5		50%	27.14%
Safety 1		50%	47.93%
Safety 2		50%	53.13%
Safety 4		50%	41.58%
Safety 5		50%	38.88%
Safety 6		50%	32.47%
Probation 1		50%	53.21%
Probation 2		50%	53.70%
Probation 4		50%	40.74%
Probation 5		50%	36.69%
Probation 6		50%	30.44%

As an example, a member who enters General Plan 5 at age 35 has a basic member contribution rate of 7.59% (Exhibit D-1). The General Plan 5 COLA load is 27.14% for a member COLA contribution of 2.06% (7.59% x 27.14%) of pay. The basic plus COLA member contribution rate is 9.65% (7.59% + 2.06%).

The COLA load for each plan is determined as follows: the present value of future normal costs with and without COLA provisions is calculated. The difference is multiplied by the COLA share percentage, and then divided by the present value of future basic only member contributions.

Cost Sharing Contributions

All Plan 1, 2, and 4 employees (except SMCM&VCD), as well as Plan 5 Safety and Probation employees, make additional cost-sharing contributions as shown in Appendix B. Plan 5 General employees, and all Plan 6 and 7 employees do not participate in cost-sharing. For valuation purposes, cost-sharing contributions are assumed to be permanent. The cost-sharing contributions are fixed and not impacted by changes in assumptions.

Member Contribution Rates (Plan 7)

Contributions for Plan 7 are defined in Section 7522.30 of the Government Code.

All employees of the same class who are members of Plan 7 shall contribute the same percentage of payroll. Such percentage will be 50% of the total Normal Cost rate for that class. The rates are recalculated annually.

6. Employer Contributions

Employer contribution rates are determined using the Entry Age Normal Cost Method. The portion of the actuarial present value of retirement benefits allocated to a valuation year by the Actuarial Cost Method is called the Normal Cost. These amounts are usually expressed as a percentage of payroll and called the Normal Cost Contribution Rate. Exhibit 11 shows the Normal Cost Rates by type of benefit and for each plan based on this valuation.

It should be noted that when we use the term "Gross Normal Cost rate," we are referring to the value of benefits earned by active members allocated to the valuation year. The Employer Normal Cost rate is the portion of the annual benefit that the employer is responsible for. This is simply the Gross Normal Cost rate less the contributions expected to be made by the members.

Statutory Contribution Rate

A summary of the total Statutory Contribution Rate for each classification, along with a comparison to the prior year's rates, can be found in Exhibit 10, with additional detail for each plan in Exhibits 10a through 10d. These results are expressed as a percentage of payroll. Note that SamCERA's UAAL is determined separately for each class. Thus, the employers fund the UAAL evenly as a percentage of pay over salaries for all members within a class.

The UAAL rate reflects a layered 15-year amortization beginning with the June 30, 2008 valuation. Gains and losses after that date are reflected over new 15-year periods starting with the valuation date. A one-year deferral in the implementation of the new rate is reflected. Therefore, the new employer contribution rate calculated in the 2022 valuation is effective July 1, 2023, and the UAAL is amortized over the remaining 14 years (or lesser periods for existing layers).

The impact on the Statutory Contribution Rate of the assumptions adopted effective June 30, 2021 will be recognized in three equal installments beginning with the July 1, 2022 Statutory Contribution Rate. The full impact will be phased-in effective with the July 1, 2024 Statutory Contribution Rate. The impact of the new assumptions used in the phase-in calculation was determined separately for each class.

The SCA (CSCA for the County and DSCA for the SMCM&VCD) UAAL offset amounts are calculated in a similar manner to the UAAL amortization described above. Effective with the June 30, 2018 valuation, the DSCA balance and subsequent UAAL layers are amortized over a period of five years. The SMCM&VCD last contributed funds to the DSCA in the Fiscal Year Ended June 30, 2017. Projected amortization payments, and the UAAL offset, from the DSCA effective July 1, 2024 are small. Therefore, we have combined all DSCA bases effective June 30, 2023 and calculated an amortization payment effective July 1, 2023 that will fully amortize the DSCA by June 30, 2024.

Exhibits 12a through 12c show detailed information on how the UAAL contribution rate is calculated using the layered method. The UAAL contribution rates are calculated prior to reflecting the SCAs.

Exhibits 12d through 12f show detailed information on how the CSCA offsets are calculated using the same layered approach as used for UAAL amortizations, and Exhibit 12g shows similar information on the DSCA offsets.

Exhibit 10 Employer Statutory Contribution Rates – All Plans For the 2023-2024 Fiscal Year

All Plans

			Employer Rates									
	Gross Normal Cost	Member Contributions	Basic Normal Cost	COLA Normal Cost	Total Normal Cost	UAAL Contribution Rate ⁽¹⁾⁽²⁾	Total Contribution Rate	Prior Year Total Contribution Rate				
<u>General</u>												
County	21.37%	(11.29)%	7.83%	2.25%	10.08%	12.01%	22.09%	32.02%				
Courts	21.44%	(11.28)%	7.92%	2.24%	10.16%	15.86%	26.02%	35.73%				
Total	21.40%	(11.29)%	7.83%	2.28%	10.11%	12.20%	22.31%	32.21%				
SMCM&VCD (3)	20.73%	(8.81)%	8.79%	3.13%	11.92%	13.14%	25.06%	12.10%				
Safety	36.68%	(18.12)%	14.34%	4.22%	18.56%	28.79%	47.35%	73.94%				
Probation	37.16%	(17.89)%	14.93%	4.34%	19.27%	34.48%	53.75%	69.52%				
All Plans	23.64%	(12.27)%	8.81%	2.56%	11.37%	14.82%	26.19%	38.33%				
County Only	23.73%	(12.33)%	8.85%	2.55%	11.40%	14.79%	26.19%	38.51%				

1. County UAAL Contribution Rate includes an aggregate offset of 4.59% of payroll to reflect the County Supplementary Contribution Account. Offsets vary by class of member as follows:

- General member UAAL offset is 3.85% of payroll

- Safety member UAAL offset is 8.18% of payroll

- Probation member UAAL offset is 10.29% of payroll

2. UAAL Contribution Rate includes an aggregate offset of 1.22% of payroll to reflect the deferred recognition of costs associated with assumption changes. Offsets vary by class of member as follows:

- General and SMCM&VCD member UAAL offset is 1.07% of payroll

- Safety member UAAL offset is 1.91% of payroll

- Probation member UAAL offset is 2.31% of payroll

3. SMCM&VCD UAAL Contribution Rate includes an offset of 2.72% of payroll to reflect the District Supplementary Contribution Account.

Exhibit 10a Employer Statutory Contribution Rates – General Members For the 2023-2024 Fiscal Year

			Ge	neral Mem	ibers			
					En	nployer Rates		
	Gross Normal Cost	Member Contributions	Basic Normal Cost	COLA Normal Cost	Total Normal Cost	UAAL Contribution Rate ⁽¹⁾⁽²⁾	Total Contribution Rate	Prior Year Total Contribution Rate
<u>Plan 1</u>								
County	27.82%	(13.68)%	9.99%	4.15%	14.14%	12.01%	26.15%	36.88%
Courts	27.82%	(13.68)%	9.99%	4.15%	14.14%	15.86%	30.00%	40.49%
Total	27.82%	(13.68)%	9.99%	4.15%	14.14%	12.01%	26.15%	36.88%
<u>Plan 2</u>								
County	24.23%	(14.18)%	6.86%	3.19%	10.05%	12.01%	22.06%	32.34%
Courts	24.23%	(14.18)%	6.86%	3.19%	10.05%	15.86%	25.91%	35.95%
Total	24.23%	(14.18)%	6.86%	3.19%	10.05%	12.14%	22.19%	32.47%
<u>Plan 3</u>								
County	9.05%	0.00%	9.05%	0.00%	9.05%	12.01%	21.06%	31.07%
Courts	9.05%	0.00%	9.05%	0.00%	9.05%	15.86%	24.91%	34.68%
Total	9.05%	0.00%	9.05%	0.00%	9.05%	12.13%	21.18%	31.16%
<u>Plan 4</u>								
County	24.41%	(13.83)%	7.98%	2.60%	10.58%	12.01%	22.59%	32.59%
Courts	24.41%	(13.83)%	7.98%	2.60%	10.58%	15.86%	26.44%	36.20%
Total	24.41%	(13.83)%	7.98%	2.60%	10.58%	12.21%	22.79%	32.78%
<u>Plan 5</u>								
County	22.90%	(9.79)%	10.73%	2.38%	13.11%	12.01%	25.12%	34.86%
Courts	22.90%	(9.79)%	10.73%	2.38%	13.11%	15.86%	28.97%	38.47%
Total	22.90%	(9.79)%	10.73%	2.38%	13.11%	12.26%	25.37%	35.04%
<u>Plan 7</u>								
County	18.60%	(9.30)%	7.44%	1.86%	9.30%	12.01%	21.31%	31.00%
Courts	18.60%	(9.30)%	7.44%	1.86%	9.30%	15.86%	25.16%	34.61%
Total	18.60%	(9.30)%	7.44%	1.86%	9.30%	12.20%	21.50%	31.15%
<u>All Plans</u>								
County	21.37%	(11.29)%	7.83%	2.25%	10.08%	12.01%	22.09%	32.02%
Courts	21.44%	(11.28)%	7.92%	2.24%	10.16%	15.86%	26.02%	35.73%
Total	21.40%	(11.29)%	7.83%	2.28%	10.11%	12.20%	22.31%	32.21%

UAAL Contribution Rate includes an offset of 3.85% of payroll to reflect the County Supplementary Contribution Account, except for Courts.
 UAAL Contribution Rate includes an offset of 1.07% of payroll to reflect the deferred recognition of costs associated with assumption changes.

Exhibit 10b Employer Statutory Contribution Rates – SMCM&VCD Members For the 2023-2024 Fiscal Year

SMCM&VCD Members

					En	nployer Rates		
	Gross Normal Cost	Member Contributions	Basic Normal Cost	COLA Normal Cost	Total Normal Cost	UAAL Contribution Rate ⁽¹⁾⁽²⁾	Total Contribution Rate	Prior Year Total Contribution Rate
Plan 1 ⁽³⁾	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
Plan 2 ⁽³⁾	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
Plan 4	22.85%	(8.07)%	10.25%	4.53%	14.78%	13.14%	27.92%	14.49%
Plan 7	18.89%	(9.45)%	7.51%	1.93%	9.44%	13.14%	22.58%	10.11%
All Plans	20.73%	(8.81)%	8.79%	3.13%	11.92%	13.14%	25.06%	12.10%

1. UAAL Contribution Rate includes an offset of 2.72% of payroll to reflect the District Supplementary Contribution Account.

2. UAAL Contribution Rate includes an offset of 1.07% of payroll to reflect the deferred recognition of costs associated with assumption changes.

3. There are currently no active Plan 1 or Plan 2 members. Employer rates will be developed in the future if needed.

Exhibit 10c Employer Statutory Contribution Rates – Safety Members For the 2023-2024 Fiscal Year

Safety Members

			Employer Rates										
	Gross Normal Cost	Member Contributions	Basic Normal Cost	COLA Normal Cost	Total Normal Cost	UAAL Contribution Rate ⁽¹⁾⁽²⁾	Total Contribution Rate	Prior Year Total Contribution Rate					
Plan 1 ⁽³⁾	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A					
Plan 2	43.10%	(21.23)%	15.34%	6.53%	21.87%	28.79%	50.66%	77.08%					
Plan 4	40.39%	(20.00)%	15.76%	4.63%	20.39%	28.79%	49.18%	75.70%					
Plan 5	39.57%	(18.87)%	16.18%	4.52%	20.70%	28.79%	49.49%	75.86%					
Plan 6 ⁽³⁾	N/A	N/A	N/A	N/A	NA	NA	NA	NA					
Plan 7	31.61%	(15.81)%	12.26%	3.54%	15.80%	28.79%	44.59%	70.75%					
All Plans	36.68%	(18.12)%	14.34%	4.22%	18.56%	28.79%	47.35%	73.94%					

1. UAAL Contribution Rate includes an offset of 8.18% of payroll to reflect the County Supplementary Contribution Account.

2. UAAL Contribution Rate includes an offset of 1.91% of payroll to reflect the deferred recognition of costs associated with assumption changes.

3. There are currently no active Safety Plan 1 or Plan 6 members. Employer rates will be developed in the future if needed.

Exhibit 10d Employer Statutory Contribution Rates – Probation Members For the 2023-2024 Fiscal Year

Probation Members

			Employer Rates										
	Gross Normal Cost	Member Contributions	Basic Normal Cost	COLA Normal Cost	Total Normal Cost	UAAL Contribution Rate ⁽¹⁾⁽²⁾	Total Contribution Rate	Prior Year Total Contribution Rate					
Plan 1 ⁽³⁾	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A					
Plan 2	41.97%	(16.76)%	17.85%	7.36%	25.21%	34.48%	59.69%	72.08%					
Plan 4	39.03%	(18.60)%	15.88%	4.55%	20.43%	34.48%	54.91%	70.60%					
Plan 5	35.56%	(17.97)%	13.46%	4.13%	17.59%	34.48%	52.07%	68.02%					
Plan 6 ⁽³⁾	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A					
Plan 7	31.56%	(15.78)%	12.21%	3.57%	15.78%	34.48%	50.26%	65.85%					
All Plans	37.16%	(17.89)%	14.93%	4.34%	19.27%	34.48%	53.75%	69.52%					

1. UAAL Contribution Rate includes an offset of 10.29% of payroll to reflect the County Supplementary Contribution Account.

2. UAAL Contribution Rate includes an offset of 2.31% of payroll to reflect the deferred recognition of costs associated with assumption changes.

3. There are currently no active Probation Plan 1 or Plan 6 members. Employer rates will be developed in the future if needed.

Exhibit 11 Calculated Gross Normal Cost Rates

All Plans												
			Normal Cost									
Plan	Service Retirement	Disability Retirement	Death Benefits while Active	Termination Benefits	Total Gross Normal Cost							
General Plan 1	20.96%	2.03%	0.29%	4.54%	27.82%							
General Plan 2	17.64%	1.58%	0.30%	4.71%	24.23%							
General Plan 3	8.41%	0.00%	0.00%	0.64%	9.05%							
General Plan 4	18.13%	1.69%	0.31%	4.28%	24.41%							
General Plan 5	17.31%	2.06%	0.34%	3.19%	22.90%							
General Plan 7	13.90%	1.79%	0.26%	2.65%	18.60%							
General Total	15.94%	1.74%	0.29%	3.43%	21.40%							
SMCM&VCD Plan 1	N/A	N/A	N/A	N/A	N/A							
SMCM&VCD Plan 2	N/A	N/A	N/A	N/A	N/A							
SMCM&VCD Plan 4	17.30%	1.58%	0.26%	3.71%	22.85%							
SMCM&VCD Plan 7	13.83%	1.68%	0.32%	3.06%	18.89%							
SMCM&VCD Total	15.45%	1.63%	0.29%	3.36%	20.73%							
Safety Plan 1	N/A	N/A	N/A	N/A	N/A							
Safety Plan 2	34.39%	4.30%	0.46%	3.95%	43.10%							
Safety Plan 4	31.56%	4.84%	0.43%	3.56%	40.39%							
Safety Plan 5	29.81%	6.29%	0.43%	3.04%	39.57%							
Safety Plan 6	N/A	N/A	N/A	N/A	N/A							
Safety Plan 7	23.24%	5.54%	0.35%	2.48%	31.61%							
Safety Total	27.91%	5.33%	0.40%	3.04%	36.68%							
Probation Plan 1	N/A	N/A	N/A	N/A	N/A							
Probation Plan 2	34.07%	3.86%	0.41%	3.63%	41.97%							
Probation Plan 4	31.18%	3.98%	0.35%	3.52%	39.03%							
Probation Plan 5	27.97%	4.39%	0.32%	2.88%	35.56%							
Probation Plan 6	N/A	N/A	N/A	N/A	N/A							
Probation Plan 7	24.02%	4.57%	0.31%	2.66%	31.56%							
Probation Total	29.39 %	4.14%	0.34%	3.29%	37.16%							
All Plans	17.74%	2.22%	0.30%	3.38%	23.64%							

Exhibit 12a UAAL Amortization Detail – General Members

(Dollars in Thousands)

Unfunded Actuarial Liability Amortization Detail												
Date Established	Description	Bal Jur	ance as of ne 30, 2022	Interest on Balance		Amortization Payment on June 30, 2023		Balance as of June 30, 2023		Remaining Period as of June 30, 2023	Ju Am P	ly 1, 2023 ortization ayment
June 30, 2008	Initial UAAL	\$	54,466	\$	3,404	\$	57,870	\$	-	0 Years	\$	-
June 30, 2009	(Gain) / Loss	\$	95,461	\$	5,966	\$	51,501	\$	49,926	1 Year	\$	50,771
June 30, 2010	(Gain) / Loss	\$	(48,667)	\$	(3,042)	\$	(17,775)	\$	(33,935)	2 Years	\$	(17,523)
June 30, 2011	(Gain) / Loss	\$	(17,934)	\$	(1,121)	\$	(4,988)	\$	(14,067)	3 Years	\$	(4,917)
June 30, 2012	(Gain) / Loss	\$	64,167	\$	4,010	\$	14,496	\$	53,682	4 Years	\$	14,290
June 30, 2013	(Gain) / Loss	\$	13,474	\$	842	\$	2,575	\$	11,741	5 Years	\$	2,539
June 30, 2014	(Gain) / Loss	\$	(31,000)	\$	(1,937)	\$	(5,155)	\$	(27,782)	6 Years	\$	(5,082)
June 30, 2015	(Gain) / Loss	\$	(24,659)	\$	(1,541)	\$	(3,642)	\$	(22,559)	7 Years	\$	(3,590)
June 30, 2016	(Gain) / Loss	\$	82,424	\$	5,152	\$	10,983	\$	76,593	8 Years	\$	10,827
June 30, 2017	(Gain) / Loss	\$	60,562	\$	3,785	\$	7,371	\$	56,976	9 Years	\$	7,266
June 30, 2018	(Gain) / Loss	\$	(19,630)	\$	(1,227)	\$	(2,204)	\$	(18,653)	10 Years	\$	(2,173)
June 30, 2019	(Gain) / Loss	\$	213,345	\$	13,334	\$	22,281	\$	204,398	11 Years	\$	21,965
June 30, 2020	(Gain) / Loss	\$	62,122	\$	3,883	\$	6,076	\$	59,928	12 Years	\$	5,990
June 30, 2021	(Gain) / Loss	\$	89,097	\$	5,569	\$	8,210	\$	86,456	13 Years	\$	8,094
June 30, 2022	(Gain) / Loss	\$	3,608	\$	225	\$	(250)	\$	4,083	14 Years	\$	360
				Total Amortization P				ortization Pay	ment July 1, 2023:	\$	88,818	
								Projected Pa	ayroll July 1, 2023:	\$	524,563	
UAAL as o	of June 30, 2022:	\$	596,835		UAAL	. Cont	ribution Rate	(as a 🤆	% of Payroll) I	FYB July 1, 2023:		16.93%

Notes:

1. Amortization Payments are based on a fixed schedule that increases by the payroll growth assumption each year.

2. The calculation of UAAL is as of June 30, 2022; whereas the contribution rates are effective as of July 1, 2023. The June 30, 2022 UAAL is adjusted to June 30, 2023 based on the July 1, 2022 contribution rates and June 30, 2022 valuation assumptions.

3. (Gain)/Loss includes new assumptions adopted in each of the following valuations: 2011, 2012, 2014, 2016, 2017, 2019, 2020, and 2021.

Exhibit 12b UAAL Amortization Detail – Safety Members

(Dollars in Thousands)

Unfunded Actuarial Liability Amortization Detail												
Date Established	Description	Bal Jun	ance as of le 30, 2022	Int B	erest on alance	An Pa Jur	nortization lyment on ne 30, 2023	Balance as of June 30, 2023		Remaining Period as of June 30, 2023	Jul Ame Pa	y 1, 2023 ortization ayment
June 30, 2008	Initial UAAL	\$	19,876	\$	1,242	\$	21,118	\$	-	0 Years	\$	-
June 30, 2009	(Gain) / Loss	\$	35,009	\$	2,188	\$	18,887	\$	18,310	1 Year	\$	18,620
June 30, 2010	(Gain) / Loss	\$	(18,205)	\$	(1,138)	\$	(6,649)	\$	(12,694)	2 Years	\$	(6,555)
June 30, 2011	(Gain) / Loss	\$	(8,318)	\$	(520)	\$	(2,313)	\$	(6,524)	3 Years	\$	(2,281)
June 30, 2012	(Gain) / Loss	\$	19,078	\$	1,192	\$	4,310	\$	15,960	4 Years	\$	4,249
June 30, 2013	(Gain) / Loss	\$	3,940	\$	246	\$	753	\$	3,433	5 Years	\$	742
June 30, 2014	(Gain) / Loss	\$	(12,473)	\$	(780)	\$	(2,074)	\$	(11,179)	6 Years	\$	(2,045)
June 30, 2015	(Gain) / Loss	\$	(6,867)	\$	(429)	\$	(1,014)	\$	(6,282)	7 Years	\$	(1,000)
June 30, 2016	(Gain) / Loss	\$	22,222	\$	1,389	\$	2,961	\$	20,650	8 Years	\$	2,919
June 30, 2017	(Gain) / Loss	\$	16,802	\$	1,050	\$	2,045	\$	15,807	9 Years	\$	2,016
June 30, 2018	(Gain) / Loss	\$	(4,769)	\$	(298)	\$	(535)	\$	(4,531)	10 Years	\$	(528)
June 30, 2019	(Gain) / Loss	\$	60,496	\$	3,781	\$	6,318	\$	57,959	11 Years	\$	6,229
June 30, 2020	(Gain) / Loss	\$	20,569	\$	1,286	\$	2,012	\$	19,843	12 Years	\$	1,983
June 30, 2021	(Gain) / Loss	\$	21,981	\$	1,374	\$	2,026	\$	21,329	13 Years	\$	1,997
June 30, 2022	(Gain) / Loss	\$	1,088	\$	68	\$	(1,558)	\$	2,714	14 Years	\$	239
							То	tal Am	ortization Pay	ment July 1, 2023:	\$	26,586
								Projected Pa	ayroll July 1, 2023:	\$	68,383	
UAAL as o	of June 30, 2022:	\$	170,429		UAAL	. Cont	ribution Rate	(as a 🤆	% of Payroll)	FYB July 1, 2023:		38.88%

Notes:

1. Amortization Payments are based on a fixed schedule that increases by the payroll growth assumption each year.

2. The calculation of UAAL is as of June 30, 2022; whereas the contribution rates are effective as of July 1, 2023. The June 30, 2022 UAAL is adjusted to June 30, 2023 based on the July 1, 2022 contribution rates and June 30, 2022 valuation assumptions.

3. (Gain)/Loss includes new assumptions adopted in each of the following valuations: 2011, 2012, 2014, 2016, 2017, 2019, 2020, and 2021.

Exhibit 12c UAAL Amortization Detail – Probation Members

(Dollars in Thousands)

	Unfunded Actuarial Liability Amortization Detail											
Date Established	Description	Bala Jun	ance as of e 30, 2022	Inte Ba	erest on alance	Amortization Payment on June 30, 2023		Balance as of June 30, 2023		Remaining Period as of June 30, 2023	Jul Ame Pa	y 1, 2023 ortization ayment
June 30, 2008	Initial UAAL	\$	4,980	\$	311	\$	5,291	\$	-	0 Years	\$	-
June 30, 2009	(Gain) / Loss	\$	8,811	\$	551	\$	4,754	\$	4,608	1 Year	\$	4,686
June 30, 2010	(Gain) / Loss	\$	(4,443)	\$	(278)	\$	(1,623)	\$	(3,098)	2 Years	\$	(1,600)
June 30, 2011	(Gain) / Loss	\$	(1,908)	\$	(119)	\$	(531)	\$	(1,497)	3 Years	\$	(523)
June 30, 2012	(Gain) / Loss	\$	6,433	\$	402	\$	1,453	\$	5,382	4 Years	\$	1,433
June 30, 2013	(Gain) / Loss	\$	1,006	\$	63	\$	192	\$	876	5 Years	\$	189
June 30, 2014	(Gain) / Loss	\$	(2,521)	\$	(158)	\$	(419)	\$	(2,260)	6 Years	\$	(413)
June 30, 2015	(Gain) / Loss	\$	(1,852)	\$	(116)	\$	(274)	\$	(1,694)	7 Years	\$	(270)
June 30, 2016	(Gain) / Loss	\$	9,091	\$	568	\$	1,211	\$	8,448	8 Years	\$	1,194
June 30, 2017	(Gain) / Loss	\$	8,762	\$	548	\$	1,066	\$	8,243	9 Years	\$	1,051
June 30, 2018	(Gain) / Loss	\$	(1,609)	\$	(101)	\$	(181)	\$	(1,529)	10 Years	\$	(178)
June 30, 2019	(Gain) / Loss	\$	22,915	\$	1,432	\$	2,393	\$	21,954	11 Years	\$	2,359
June 30, 2020	(Gain) / Loss	\$	11,326	\$	708	\$	1,108	\$	10,926	12 Years	\$	1,092
June 30, 2021	(Gain) / Loss	\$	9,085	\$	568	\$	837	\$	8,816	13 Years	\$	825
June 30, 2022	(Gain) / Loss	\$	561	\$	35	\$	(1,589)	\$	2,185	14 Years	\$	193
				Total Amortization P				ortization Pay	ment July 1, 2023:	\$	10,039	
								Projected Pa	ayroll July 1, 2023:	\$	21,324	
UAAL as o	of June 30, 2022:	\$	70,637		UAAL	. Cont	ribution Rate	(as a %	% of Payroll) I	FYB July 1, 2023:		47.08%

Notes:

1. Amortization Payments are based on a fixed schedule that increases by the payroll growth assumption each year.

2. The calculation of UAAL is as of June 30, 2022; whereas the contribution rates are effective as of July 1, 2023. The June 30, 2022 UAAL is adjusted to June 30, 2023 based on the July 1, 2022 contribution rates and June 30, 2022 valuation assumptions.

3. (Gain)/Loss includes new assumptions adopted in each of the following valuations: 2011, 2012, 2014, 2016, 2017, 2019, 2020, and 2021.

Exhibit 12d CSCA Amortization Detail - General Members

(Dollars in Thousands)

					Genera	l Memi	bers					
Date Established	Description	Bala Jun	ance as of e 30, 2022	as of Inter , 2022 Bal		Ame Pay June	ortization /ment on e 30, 2023	Balance as of June 30, 2023		Remaining Period as of June 30, 2023	July 1, 2023 Amortization Payment	
June 30, 2014	Initial CSCA	\$	26,302	\$	1,644	\$	4,374	\$	23,572	6 Years	\$	4,312
June 30, 2015	CSCA Addition	\$	6,345	\$	397	\$	937	\$	5,804	7 Years	\$	924
June 30, 2016	CSCA Addition	\$	12,110	\$	757	\$	1,614	\$	11,253	8 Years	\$	1,591
June 30, 2017	CSCA Addition	\$	21,632	\$	1,352	\$	2,633	\$	20,352	9 Years	\$	2,595
June 30, 2018	CSCA Addition	\$	18,827	\$	1,177	\$	2,114	\$	17,890	10 Years	\$	2,084
June 30, 2019	CSCA Addition	\$	33,117	\$	2,070	\$	3,459	\$	31,728	11 Years	\$	3,410
June 30, 2020	CSCA Addition	\$	(949)	\$	(59)	\$	(93)	\$	(915)	12 Years	\$	(91)
June 30, 2021	CSCA Addition	\$	34,471	\$	2,154	\$	3,177	\$	33,449	13 Years	\$	3,131
June 30, 2022	CSCA Addition	\$	12,098	\$	756	\$	-	\$	12,854	14 Years	\$	1,134
							Total CSC	A Cour	nty Offset Pay	ment July 1, 2023:	\$	19,089
								Projec	ted County Pa	ayroll July 1, 2023:	\$	495,982
CSCA Value as o	f June 30, 2022:	\$	163,953		С	SCA C	ounty Offset	(as a %	6 of Payroll)	FYB July 1, 2023:		3.85%

Notes:

1. CSCA Offsets are based on a fixed schedule that increases by the payroll growth assumption each year.

2. The calculation of CSCA amounts are as of June 30, 2022; whereas the contribution rates are effective as of July 1, 2023. The June 30, 2022 CSCA is adjusted to June 30, 2023 based on the July 1, 2022 contribution rates and June 30, 2022 valuation assumptions.

Exhibit 12e CSCA Amortization Detail - Safety Members

(Dollars in Thousands)

					Safety	Memb	oers					
Date Established	Description	Balance as of June 30, 2022		Inte Ba	rest on lance	Am Pa <u>y</u> Jun	ortization yment on e 30, 2023	n Balance a 23 June 30, 2		Remaining Period as of June 30, 2023	July Amo Pa	y 1, 2023 ortization ayment
June 30, 2014	Initial CSCA	\$	8,913	\$	557	\$	1,482	\$	7,988	6 Years	\$	1,461
June 30, 2015	CSCA Addition	\$	2,152	\$	134	\$	318	\$	1,969	7 Years	\$	313
June 30, 2016	CSCA Addition	\$	3,673	\$	230	\$	489	\$	3,413	8 Years	\$	483
June 30, 2017	CSCA Addition	\$	6,528	\$	408	\$	794	\$	6,141	9 Years	\$	783
June 30, 2018	CSCA Addition	\$	5,825	\$	364	\$	654	\$	5,535	10 Years	\$	645
June 30, 2019	CSCA Addition	\$	9,028	\$	564	\$	943	\$	8,650	11 Years	\$	930
June 30, 2020	CSCA Addition	\$	(638)	\$	(40)	\$	(62)	\$	(615)	12 Years	\$	(62)
June 30, 2021	CSCA Addition	\$	8,358	\$	522	\$	770	\$	8,111	13 Years	\$	759
June 30, 2022	CSCA Addition	\$	2,978	\$	186	\$	-	\$	3,164	14 Years	\$	279
							Total CSC	A Coun	ty Offset Pay	ment July 1, 2023:	\$	5,591
								Project	ted County Pa	ayroll July 1, 2023:	\$	68,383
CSCA Value as of	June 30, 2022:	\$	46,818		С	SCA C	ounty Offset	(as a %	of Payroll)	FYB July 1, 2023:		8.18%

Notes:

1. CSCA Offsets are based on a fixed schedule that increases by the payroll growth assumption each year.

2. The calculation of CSCA amounts are as of June 30, 2022; whereas the contribution rates are effective as of July 1, 2023. The June 30, 2022 CSCA is adjusted to June 30, 2023 based on the July 1, 2022 contribution rates and June 30, 2022 valuation assumptions.

Exhibit 12f CSCA Amortization Detail - Probation Members

(Dollars in Thousands)

					Probati	on Men	nbers					
Date Established	Description	Bala Jun	ince as of e 30, 2022	Interest on Balance		Amortization Payment on June 30, 2023		Balance as of June 30, 2023		Remaining Period as of June 30, 2023	July 1, 2023 Amortization Payment	
June 30, 2014	Initial CSCA	\$	2,424	\$	151	\$	403	\$	2,172	6 Years	\$	397
June 30, 2015	CSCA Addition	\$	613	\$	38	\$	91	\$	561	7 Years	\$	89
June 30, 2016	CSCA Addition	\$	1,281	\$	80	\$	171	\$	1,191	8 Years	\$	168
June 30, 2017	CSCA Addition	\$	2,583	\$	161	\$	314	\$	2,430	9 Years	\$	310
June 30, 2018	CSCA Addition	\$	1,964	\$	123	\$	220	\$	1,866	10 Years	\$	217
June 30, 2019	CSCA Addition	\$	3,621	\$	226	\$	378	\$	3,469	11 Years	\$	373
June 30, 2020	CSCA Addition	\$	989	\$	62	\$	97	\$	954	12 Years	\$	95
June 30, 2021	CSCA Addition	\$	3,806	\$	238	\$	351	\$	3,693	13 Years	\$	346
June 30, 2022	CSCA Addition	\$	2,124	\$	133	\$	-	\$	2,257	14 Years	\$	199
							Total CSC	A Coun	ty Offset Pay	ment July 1, 2023:	\$	2,195
				Projected County Payroll July 1, 2023:						ayroll July 1, 2023:	\$	21,324
CSCA Value as of	June 30, 2022:	\$	19,404	CSCA County Offset (as a % of Payroll) FYB July 1, 2023:							10.29%	

Notes:

1. CSCA Offsets are based on a fixed schedule that increases by the payroll growth assumption each year.

2. The calculation of CSCA amounts are as of June 30, 2022; whereas the contribution rates are effective as of July 1, 2023. The June 30, 2022 CSCA is adjusted to June 30, 2023 based on the July 1, 2022 contribution rates and June 30, 2022 valuation assumptions.

Exhibit 12g Amortization Detail – District SCA Offsets

(Dollars in Thousands)

				S	MCM&	VCD I	Nembers					
Date Established	Description	Bala June	nce as of 9 30, 2022	Int Ba	erest on lance	Ar Pa Ju	nortization ayment on ne 30, 2023	Bala Jun	ance as of e 30, 2023	Remaining Period as of June 30, 2023	July Amc Pa	r 1, 2023 rtization syment
June 30, 2016	Initial DSCA	\$	489	\$	31	\$	471	\$	49	1 Year	\$	50
June 30, 2017	DSCA Addition	\$	80	\$	5	\$	77	\$	8	1 Year	\$	8
June 30, 2018	DSCA Addition	\$	1	\$	0	\$	1	\$	0	1 Year	\$	0
June 30, 2019	DSCA Addition	\$	2	\$	0	\$	1	\$	1	1 Year	\$	1
June 30, 2020	DSCA Addition	\$	0	\$	0	\$	0	\$	0	1 Year	\$	0
June 30, 2021	DSCA Addition	\$	2	\$	0	\$	0	\$	1	1 Year	\$	1
June 30, 2022	DSCA Addition	\$	6	\$	0	\$	-	\$	7	1 Year	\$	7
							Total	DSC	A Offset Payn	nent July 1, 2023:	\$	68
							P	roject	ed District Pa	yroll July 1, 2023:	\$	2,512
DSCA Value as of	June 30, 2022:	\$	581		DSC	A Dis	trict Offset (a	s a %	of Payroll) F	YB July 1, 2023:		2.72%

Notes:

1. DSCA Offsets are based on a fixed schedule that increases by the payroll growth assumption each year.

2. The calculation of DSCA amounts are as of June 30, 2022; whereas the contribution rates are effective as of July 1, 2023.

The June 30, 2022 DSCA is adjusted to June 30, 2023 based on the July 1, 2022 contribution rates and June 30, 2022 valuation assumptions.

3. If the preliminary calculation of DSCA Offset results in a larger offset than the UAAL contribution rate payable by the District, the offset must be limited to the adjusted offset to prevent a negative UAAL contribution rate.

7. Supplemental Information

We are providing several exhibits in this report for consistency with prior reports and as supporting information for inclusion in SamCERA's ACFR.

- Exhibit 13 Schedule of Funding Progress
- Exhibit 14 Solvency Test
- Exhibit 15 History of Employer Contribution Rates
- Exhibit 16 Actuarial Analysis of Financial Experience
- Exhibit 17 Summary of Significant Actuarial Statistics and Measures
- Exhibit 18 Summary of SamCERA Membership
- Exhibit 19 Summary of Active Member Valuation Data
- Exhibit 20 Summary of Demographic Activity of Retirees and Beneficiaries
- Exhibit 21 Average Salary and Active Counts by Employer

The Governmental Accounting Standards Board (GASB) Statement No. 67 sets standards for defined benefit pension plan reporting and disclosures. The reporting requirements for GASB 67 include certain supplementary information that must be added to the financial statements. GASB Statement No. 68 specifies financial reporting for pension accounting by state and local governmental employers. We will provide information required for GASB 67 and GASB 68 in a separate report.

All liability calculations shown in this Section 7 are based on an investment return assumption of 6.25%. GASB 67 and 68 calculations as of June 30, 2022 will use an investment return assumption of 6.42%, as the investment return for GASB 67 and 68 is required to be gross of expected administrative expenses.

Exhibit 13 Schedule of Funding Progress

(Dollars in Thousands)

Actuarial Valuation Date	01	(a) Actuarial Value f Valuation Assets	(b) Actuarial Accrued Liabilities		(b-a) Unfunded Actuarial Accrued Liabilities (UAAL)		(a/b) Funded Ratio	Cov	(c) ered Payroll	[(b-a)/c] UAAL as a Percentage of Covered Payroll
June 30, 2013	\$	2,618,639	\$	3,572,750	\$	954,111	73.3%	\$	404,361	235.96%
June 30, 2014		2,993,187		3,797,042		803,855	78.8%		416,274	193.11%
June 30, 2015		3,343,550		4,045,786		702,236	82.6%		439,018	159.96%
June 30, 2016		3,624,726		4,362,296		737,570	83.1%		472,385	156.14%
June 30, 2017		3,976,717		4,719,850		743,133	84.3%		510,132	145.67%
June 30, 2018		4,351,502		4,970,535		619,033	87.5%		535,938	115.50%
June 30, 2019		4,685,502		5,459,978		774,476	85.8%		554,734	139.61%
June 30, 2020		4,998,316		5,786,054		787,738	86.4%		593,295	132.77%
June 30, 2021		5,488,958		6,227,066		738,108	88.1%		600,369	122.94%
June 30, 2022		5,922,894		6,530,039		607,145	90.7%		611,957	99.21%

Note: The Covered Payroll amounts are consistent with the GASB 67/68 Disclosure report.

Exhibit 14 Solvency Test

(Dollars in Thousands)

			Actu	uarial	Accrued Liabi	lities f	or			
		Activ	ve Member	Re	etirees and	Acti (ve Members Employer Financed	Portio Lia	n of Actuarial A bilities Covered Assets	ccrued by
Actuarial	Valuation	Cor	tributions	Bei	Beneficiaries ^(') (B)		Portion)	(A)	(B)	
Valuation Date	 A55615		(A)	(D)			(0)	(A)	<u> (B) </u>	(0)
June 30, 2013	\$ 2,618,639	\$	534,276	\$	2,157,590	\$	880,884	100%	97%	0%
June 30, 2014	2,993,187		584,080		2,285,328		927,634	100%	100%	13%
June 30, 2015	3,343,550		628,287		2,451,544		965,955	100%	100%	27%
June 30, 2016	3,624,726		679,246		2,635,409		1,047,641	100%	100%	30%
June 30, 2017	3,976,717		735,102		2,811,651		1,173,097	100%	100%	37%
June 30, 2018	4,351,502		783,887		3,032,813		1,153,835	100%	100%	46%
June 30, 2019	4,685,502		769,137		3,369,094		1,321,747	100%	100%	41%
June 30, 2020	4,998,316		858,906		3,609,214		1,317,934	100%	100%	40%
June 30, 2021	5,488,958		895,745		3,908,520		1,422,801	100%	100%	48%
June 30, 2022	5,922,894		937,791		4,240,655		1,351,593	100%	100%	55%

1. Includes inactive members.

Exhibit 15 **History of Employer Statutory Contribution Rates**

				Statutory Cor	tribution Rat	es			
Valuation	Ge (C	eneral Membe county & Court	rs s)	Ge (N	eneral Membe lurses & UAP[rs D)	G	eneral Membe (SMCM&VCD	ers)
Year	Normal	UAAL	Total	Normal	UAAL	Total	Normal	UAAL	Total
2013	9.74%	22.35%	32.09%	8.92%	22.35%	31.27%	11.70%	22.35%	34.05%
2014	10.12%	20.27%	30.39%	9.14%	20.21%	29.35%	11.72%	21.16%	32.88%

	Statutory Contribution Rates													
Valuation	Ge	eneral Member (County)	rs	G	eneral Membe (Courts)	rs	G	eneral Membe (SMCM&VCD	ers)					
Year	Normal	UAAL	Total	Normal	UAAL	Total	Normal	UAAL	Total					
2015	8.67%	18.37%	27.04%	9.04%	19.54%	28.58%	11.75%	19.54%	31.29%					
2016	8.91%	19.81%	28.72%	9.09%	21.30%	30.39%	12.02%	12.50%	24.52%					
2017	9.58%	20.55%	30.13%	9.65%	22.58%	32.23%	12.32%	12.37%	24.69%					
2018	9.22%	19.32%	28.54%	9.27%	21.76%	31.03%	12.13%	0.00%	12.13%					
2019	9.93%	22.18%	32.11%	10.01%	25.21%	35.22%	12.58%	0.00%	12.58%					
2020	9.57%	23.22%	32.79%	9.63%	26.22%	35.85%	12.37%	0.39%	12.76%					
2021	10.18%	21.84%	32.02%	10.28%	25.45%	35.73%	12.10%	0.00%	12.10%					
2022	10.08%	12.01%	22.09%	10.16%	15.86%	26.02%	11.92%	13.14%	25.06%					

Statutory Contribution Rates

Valuation	Safety Member			Pro (exc	obation Memb cluding Manag	ers ers)	Probation Members (Managers)			
Year	Normal	UAAL	Total	Normal	UAAL	Total	Normal	UAAL	Total	
2013	18.51%	50.33%	68.84%	18.33%	29.32%	47.65%	17.85%	29.32%	47.17%	
2014	18.99%	46.48%	65.47%	18.92%	28.09%	47.01%	18.79%	28.09%	46.88%	
2015	15.14%	43.58%	58.72%	15.31%	26.77%	42.08%	17.23%	26.77%	44.00%	
2016	16.31%	44.25%	60.56%	15.94%	31.72%	47.66%	Same as Probation (ex Managers)			
2017	17.28%	45.57%	62.85%	17.42%	32.87%	50.29%	Same as Probation (ex Managers)			
2018	16.98%	44.68%	61.66%	16.95%	32.88%	49.83%	Same as Probation (ex Managers)			
2019	18.02%	50.87%	68.89%	17.97%	42.55%	60.52%	Same as Probation (ex Managers)			
2020	17.57%	54.42%	71.99%	18.30%	47.68%	65.98%	Same as Probation (ex Managers)			
2021	18.84%	55.10%	73.94%	19.40%	50.12%	69.52%	Same as Probation (ex Managers)			
2022	18.56%	28.79%	47.35%	19.27%	34.48%	53.75%	Same as Probation (ex Managers)			

Notes:

1. Contribution rates shown are those calculated in the corresponding actuarial valuation. In some cases, actual contributions were higher.

2. Beginning with the 2010 actuarial valuation, the SMCM&VCD adopted the same benefit formula and member contribution rates as Plan 1, 2 & 4 General County members (excluding cost sharing and COLA sharing on member rates).

3. Beginning with the 2011 actuarial valuation, Plan 1, 2, and 4 members of the CNA contribute 25% of the cost of COLA, in addition to current member rates and cost sharing.

4. Beginning with the 2012 actuarial valuation, Plan 1, 2, and 4 Probation members (excluding Managers) contribute 25% of the cost of COLA, in addition to current member rates and cost sharing.

5. Beginning with the 2013 actuarial valuation, Plan 1, 2, and 4 members of the UAPD contribute 25% of the cost of COLA, in addition to current member rates and cost sharing. In 2011 and 2012 these members contributed the same as County General members.

6. Beginning with the 2015 actuarial valuation, Plan 1, 2, and 4 members of the UAPD and the CNA, and Probation members (Managers) contribute 50% of the cost of COLA, in addition to current member rates and cost sharing.

7. Effective with the first pay period after June 30, 2016 all members (except those with benefits negotiated under Court Interpreters and Board of Supervisors bargaining units, and SMCM&VCD members) contribute 50% of the cost of COLA, in addition to current member rates and cost sharing. Additionally, pick-up contributions are discontinued for members with benefits negotiated under the PDA bargaining unit.

8. Effective October 2016, all members (except those with benefits negotiated under Board of Supervisors bargaining unit, and SMCM&VCD members) contribute 50% of the cost of COLA, in addition to current member rates and cost sharing. This is reflected in 2016 values.

9. Effective July 1, 2018, the Board of Supervisors contribute 50% of the cost of COLA, in addition to current member rates and cost sharing. Additionally, pick-up contributions were eliminated.

Exhibit 16							
Actuarial Analysis of Financial Experience							

Summary of (Gains) / Losses		Change In Liability								
	2022	2021	2020	2019	2018					
Unfunded Liability as of July 1	\$ 738,108,000	\$ 787,737,000	\$ 774,476,000	\$ 619,033,000	\$ 743,133,000					
Expected Change in UAAL	(138,405,000)	(157,668,000)	(85,527,000)	(153,261,000)	(109,756,000)					
Salary (Gain) / Loss	34,541,000	12,064,000	25,190,000	50,472,000	10,401,000					
Retiree COLA more / (less) than expected	16,379,000	(25,973,000)	18,992,000	21,749,000	12,203,000					
Asset (Gain) / Loss	(47,017,000)	(87,748,000)	15,884,000	46,909,000	(42,796,000)					
Change due to Assumption Changes	0	197,720,000	11,593,000	173,944,000	0					
Miscellaneous Experience	3,539,000	11,976,000	27,129,000	15,630,000	5,848,000					
Unfunded Liability as of June 30	\$ 607,145,000	\$ 738,108,000	\$ 787,737,000	\$ 774,476,000	\$ 619,033,000					

			June 30th of		of	Relative	
			2022		2021	Change	
1.	Active Members						
	Number of Members		5,249		5,356	(2.0)%	
	Average Age		44.9		45.1	(0.4)%	
	Average Credited Service		10.3		10.5	(1.7)%	
	Covered Payroll (\$thousands)	\$	611,957	\$	600,369	1.9 %	
	Average Monthly Salary	\$	9,743	\$	9,439	3.2 %	
2.	Retired Members						
	Number of Members		4 000		4 404		
	Service Retirement		4,608		4,421	4.2 %	
			493		499	(1.2)%	
	Beneficiaries		0/8		0/2	0.9 %	
	Average Age Actual Retiree Benefits Paid (\$thousands)	¢	276 502	¢	7 T.J 250 356	(0.1)%	
		ψ	210,502	ψ	239,330	0.0 %	
	Average Monthly Pension	\$	4,174	\$	3,995	4.5 %	
3.	Number of Inactive Members		2,224		1,986	12.0 %	
4.	Assets						
	Market Value of Fund (\$thousands)	\$	5,649,674	\$	5,982,086	(5.6)%	
	Return on Market Value		-6.1%		23.5%		
	Valuation Assets (\$thousands)	\$	5,922,894	\$	5,488,958	7.9 %	
	Return on Valuation Assets		7.1%		8.2%		
5	Liability Values (\$thousands)						
0.	Actuarial Accrued Liability	\$	6 530 039	¢	6 227 066	19%	
	Linfunded Actuarial Accrued Liability	Ψ \$	607 145	\$	738 108	(17 7)%	
	Deferred Asset (Gains) / Losses	\$	333,047	\$	(437,683)	(11.1)/0	
6.	Funded Ratio						
	(based on valuation assets)		90.7%		88.1%	2.9 %	

Exhibit 17 Summary of Significant Actuarial Statistics and Measures

Plan	One	Two	Three	Four	Five	Six	Seven	Total
Retirees and beneficiaries curren	tly receiving	benefits:						
General	1,173	2,250	126	1,167	30	-	38	4,784
Safety	253	267	-	164	6	-	2	692
Probation	89	122		91	-	-	1	303
Subtotal	1,515	2,639	126	1,422	36	-	41	5,779
Inactive employees entitled to bu	it not current	ly receiving t	penefits (Defe	rred):				
General	6	201	69	799	124	-	854	2,053
Safety	-	7	-	36	12	-	51	106
Probation	-	12	-	39	1	-	13	65
Subtotal	6	220	69	874	137	-	918	2,224
Current employees:								
Vested:								
General	2	275	37	1,497	188	-	912	2,911
Safety	-	11	-	162	52	-	105	330
Probation	-	2	-	114	8	-	31	155
Non-Vested:								
General			3	4	72	-	1,613	1,692
Safety	-		-		12	-	134	146
Probation	-		-			-	15	15
Subtotal	2	288	40	1,777	332	-	2,810	5,249
Total SamCERA Membership	1,523	3,147	235	4,073	505	-	3,769	13,252

Exhibit 18 Summary of SamCERA Membership
Valuation	1			Average	% Change
Date		Members	Annual Salary	Annual Salary	Average Salary
2013	General	4,173	\$338,595,633	\$81,140	2.5%
	Safety	452	52,233,510	115,561	-1.0%
	Probation	292	23,722,165	81,240	0.8%
	Total	4,917	414,551,308	84,310	2.2%
2014	General	4,272	352,918,558	82,612	1.8%
	Safety	452	52,974,475	117,200	1.4%
	Probation	280	23,514,343	83,980	3.4%
	Total	5,004	429,407,375	85,813	1.8%
2015	General	4,334	382,303,295	88,210	6.8%
	Safety	479	55,917,864	116,739	-0.4%
	Probation	282	24,418,977	86,592	3.1%
	Total	5,095	462,640,136	90,803	5.8%
2016	General	4,421	408,191,518	92,330	4.7%
	Safety	495	61,564,028	124,372	6.5%
	Probation	271	24,034,819	88,689	2.4%
	Total	5,187	493,790,365	95,198	4.8%
2017	General	4,560	430,613,886	94,433	2.3%
	Safety	503	65,105,116	129,434	4.1%
	Probation	274	26,503,623	96,729	9.1%
	Total	5,337	522,222,625	97,849	2.8%
2018	General	4,603	448,931,595	97,530	3.3%
	Safety	508	66,799,289	131,495	1.6%
	Probation	256	25,741,800	100,554	4.0%
	Total	5,367	541,472,684	100,889	3.1%
2019	General	4,610	476,944,186	103,459	6.1%
	Safety	530	70,890,519	133,756	1.7%
	Probation	237	24,680,991	104,139	3.6%
	Total	5,377	572,515,696	106,475	5.5%
2020	General	4,655	496,992,584	106,765	3.2%
	Safety	522	72,724,015	139,318	4.2%
	Probation	223	24,856,263	111,463	7.0%
	Total	5,400	594,572,862	110,106	3.4%
2021	General	4,643	511,069,950	110,073	3.1%
	Safety	520	72,829,550	140,057	0.5%
	Probation	193	22,777,092	118,016	5.9%
	Total	5,356	606,676,591	113,270	2.9%
2022	General	4,603	522,675,192	113,551	3.2%
	Safety	476	69,870,562	146,787	4.8%
	Probation	170	21,156,904	124,452	5.5%
	Total	5,249	613,702,657	116,918	3.2%

Exhibit 19 Summary of Active Member Valuation Data

	Add	ed to Rol	ls ⁽¹⁾	Remo	ved from	Rolls	R	olls end of	year			
Year Ended	No.	A Allo in Th	nnual wances ousands	No.	Ar Allov in The	nnual wances ousands	No.	Total Ro in Tl	etiree Payroll nousands	% Increase in Payroll	Average Allov	e Monthly vances
June 30, 2013	186	\$	13,024	63	\$	3,095	4,398	\$	154,774	6.9 %	\$	2,933
June 30, 2014	203		12,474	83		3,479	4,518		163,769	5.8		3,021
June 30, 2015	213		16,290	93		4,179	4,638		175,880	7.4		3,160
June 30, 2016	233		15,347	123		5,030	4,748		186,197	5.9		3,268
June 30, 2017	310		16,738	102		3,867	4,956		199,068	6.9		3,347
June 30, 2018	315		21,360	162		5,242	5,109		215,186	8.1		3,510
June 30, 2019	306		24,547	190		5,769	5,225		233,964	8.7		3,731
June 30, 2020	362		23,862	133		4,862	5,454		252,963	8.1		3,865
June 30, 2021	270		19,466	132		4,327	5,592		268,102	6.0		3,995
June 30, 2022	363		27,963	176		6,607	5,779		289,458	8.0		4,174

Exhibit 20 Summary of Demographic Activity of Retirees and Beneficiaries

1. Amount added to rolls includes COLAs granted in year to continuing retirees and beneficiaries.

	2022	2021	2020	2019	2018
General Plan 1	\$18,575	\$18,022	\$11,102	\$9,793	\$10,121
General Plan 2	11,516	10,957	10,665	10,088	9,526
General Plan 3	8,850	8,623	8,221	7,872	7,462
General Plan 4	10,680	10,087	9,671	9,302	8,534
General Plan 5	11,659	11,092	10,635	10,180	9,672
General Plan 7	8,291	8,014	7,726	7,395	6,974
General Plan Total	9,463	9,173	8,897	8,622	8,128
Safety Plan 1	0	0	0	0	0
Safety Plan 2	16,177	15,162	15,125	14,197	13,607
Safety Plan 4	14,157	13,494	13,204	12,391	11,894
Safety Plan 5	13,127	12,619	12,367	11,708	11,349
Safety Plan 6	0	0	0	0	0
Safety Plan 7	10,507	9,765	9,581	9,030	8,747
Safety Plan Total	12,232	11,671	11,610	11,146	10,958
Probation Plan 1	0	0	0	0	0
Probation Plan 2	11,203	10,641	10,174	9,908	9,061
Probation Plan 4	10,927	10,359	9,827	9,103	8,714
Probation Plan 5	10,219	9,911	9,343	8,587	8,219
Probation Plan 6	0	0	0	0	0
Probation Plan 7	8,983	8,378	7,598	6,973	6,676
Probation Plan Total	10,371	9,835	9,289	8,678	8,379
Grand Total	9,743	9,439	9,176	8,873	8,407

Exhibit 21 Average Salary and Active Counts by Employer

Participating Employers and Active Members

	2022	2021	2020	2019	2018
County of San Mateo					
General Members	4,294	4,375	4,379	4,350	4,343
Safety Members	476	520	522	530	508
Probation Members	170	193	223	237	256
Total	4,940	5,088	5,124	5,117	5,107
San Mateo County Mosquito					
and Vector Control District					
General Members Total	22	19	20	20	21
Courts					
General Members Total	287	249	256	240	239
Total Active Membership	5,249	5,356	5,400	5,377	5,367

8. Risk Discussion

Overview

The results of any actuarial valuation are based on one set of reasonable assumptions. Although we believe the current assumptions provide a reasonable estimate of future expectations, it is almost certain that future experience will differ from the assumptions to some extent. It is therefore important to consider the potential impacts of these likely differences when making decisions that may affect the future financial health of the Plan, or of the Plan's members.

Actuarial Standard of Practice No. 51 (ASOP 51) addresses these issues by providing actuaries with guidance for assessing and disclosing the risk associated with measuring pension liabilities and the determination of pension plan contributions. Specifically, it directs the actuary to:

- Identify risks that may be significant to the Plan.
- Assess the risks identified as significant to the Plan. The assessment does not need to include numerical calculations.
- Disclose plan maturity measures and historical information that are significant to understanding the Plan's risks.

ASOP 51 states that if in the actuary's professional judgment, a more detailed assessment would be significantly beneficial in helping the individuals responsible for the Plan to understand the risks identified by the actuary, then the actuary should recommend that such an assessment be performed.

In addition, the California Actuarial Advisory Panel (CAAP) has adopted a set of model disclosure elements for actuarial valuation reports of public retirement systems in California. Most of these elements are included in other areas of this report. The remaining CAAP-recommended disclosures are as follows:

Disclosure Element	Description	Value
Gross Normal Cost \$	Normal Cost allocated to valuation year, paid at mid-year.	\$ 143,083,055
Statutory Contribution \$	Expected Statutory Contribution paid at mid-year.	\$ 158,577,666
Asset Smoothing Ratio	Actuarial Value of Assets divided by Market Value of Assets	104.8%
Asset Volatility Ratio	Market Value of Assets divided by Payroll	9.3
Liability Volatility Ratio	Actuarial Accrued Liability divided by Payroll	10.8

This risk discussion uses the framework of ASOP 51 and the Asset and Liability Volatility Ratios shown above to communicate important information about: significant risks to the Plan, the Plan's maturity, and relevant historical Plan data.

This work product was prepared solely for SamCERA for the purposes described herein and may not be appropriate to use for other purposes. Milliman does not intend to benefit and assumes no duty or liability to other parties who receive this work. Milliman recommends that third parties be aided by their own actuary or other qualified professional when reviewing the Milliman work product.

Factors Affecting Future Results

There are a number of factors that affect future valuation results. To the extent actual experience for these factors varies from the assumptions, this will likely cause either increases or decreases in the plan's future funding level and employer Statutory Contribution Rates (SCR). The factors that can have the most significant impact on SamCERA's valuation results are:

Investment returns

To the extent that actual investment returns differ from the assumed investment return, the Plan's future assets, SCR, and funded status may differ significantly from those presented in this valuation. Additional discussion of the impact of variance of investment returns is included below.

Compensation increases

Individual member retirement benefits are linked to that member's compensation. As such, assumptions need to be made as to a member's future compensation increases. Higher future compensation increases will generally result in larger retirement benefits, liabilities, SCRs, and a lower funded status. Conversely, lower compensation increases than assumed will generally result in smaller retirement benefits, liabilities, SCRs, and a higher funded status.

Payroll variation

In the valuation, an assumption is made for the overall rate of payroll growth of SamCERA from year-to-year. To the extent that the overall rate of payroll growth is greater than assumed, the SCR may decrease since the Unfunded Actuarial Accrued Liability (UAAL) will be amortized over a larger payroll base. The opposite will occur if the overall rate of payroll growth is lower than assumed.

This effect often will offset somewhat with individual compensation increases, discussed above.

Longevity and other demographic risks

The liabilities reported in this valuation have been calculated by assuming that members will follow specific patterns of demographic experience (e.g., mortality, retirement, termination, disability) as described in Appendix A. To the extent that actual demographic experience is different than is assumed to occur, future liabilities, SCRs, and funded status may differ from that presented in this valuation.

All of these assumptions are reviewed in detail during the triennial Investigation of Experience study, and are also reviewed annually during the valuation process. Changes in assumptions are generally recommended if actual experience has been materially different than assumed or forecasts have been changed significantly. Additionally, changes may be recommended and discussed at each valuation if they are deemed to be appropriate at that time.

Asset and Liability Volatility Ratios

Asset and Liability Volatility Ratios are a measure of the level of assets (or liabilities) to payroll. In general, a higher ratio means that the SCR is more sensitive to changes in levels of assets or liabilities. Asset and Liability Volatility Ratios are shown in Exhibit 22.

As shown above, in the current valuation SamCERA has an Asset Volatility Ratio of 9.3 and a Liability Volatility Ratio of 10.8.

Discussion of Investment Return Risk

Of these factors, we believe the factor with the greatest potential risk to impact future valuation results for SamCERA is future investment returns. For example, if actual returns fall short of the current assumption of 6.25% per year, this will cause an increase in the SCR and a decrease in the Funded Ratio, all other things being equal. Conversely, if actual returns exceed the current assumption of 6.25% per year, this will cause a decrease in the SCR and an increase in the Funded Ratio.

The magnitude of the increase or decrease in the SCR is affected by the maturity level, and specifically the asset volatility ratio. SamCERA has accumulated a significant amount of assets relative to its payroll and by several measures is considered a mature plan. Accumulating assets to pay for future benefit obligations is responsible funding, but it does mean changes in the investment markets can have a significant impact on the SCR.

In terms of the SCR, for SamCERA with a 9.3 asset volatility ratio, a 10% investment gain or loss relative to the assumed 6.25% investment return assumption (that is, an investment return of -3.75%, or of 16.25%, translates to a 8.6% of pay increase (or decrease) in the SCR, all other things being equal. Since SamCERA uses actuarial smoothing, the increase would not be immediate, but would occur gradually over five years and could potentially be offset, or further increased, by future investment gains or losses or other factors.

In terms of the Funded Ratio, this level of volatility would result in an increase or decrease of approximately 9.2% in the Funded Ratio (on a market-value basis) from the current Funded Ratio of 90.7%.

Over the last several years, the County has been able to reduce the year-to-year variation in its actual contribution rate by contributing at a rate that is higher than the SCR.

Historical Variation in Statutory Contribution Rate

One way to assess future risks is to look at historical measurements. The following graph shows how the SCR has varied over the last 20 years under various investment return and assumption environments.



Employer Statutory Contribution Rate



Exhibit 22 Asset and Liability Volatility Ratios



Liability Volatility Ratios



Appendix A Actuarial Procedures and Assumptions

The actuarial procedures and assumptions to be used in the June 30, 2022 valuation are described in this section. Except as noted, the assumptions were reviewed and changed effective June 30, 2020 as a result of the 2020 Investigation of Experience study. At its meeting on May 25, 2021 the Board adopted an investment return assumption of 6.25% effective for the June 30, 2021 valuation. At its meeting on May 24, 2022 the Board reaffirmed all assumptions for use in the June 30, 2022 actuarial valuation.

The actuarial assumptions used in the valuations are intended to estimate the future experience of the members of SamCERA and of SamCERA itself in areas that affect the projected benefit flow and anticipated investment earnings. Any variations in future experience from that expected from these assumptions will result in corresponding changes in the estimated costs of SamCERA's benefits.

Exhibit A-1 summarizes the assumptions. The mortality rates are taken from the sources listed.

Exhibits A-2 and A-3 show how members are expected to leave retired status due to death.

Exhibit A-4 presents the probability of refund of contributions upon termination of employment while vested.

Exhibit A-5 presents the expected annual percentage increase in salaries.

Exhibits A-6 to A-11 present the probabilities a member will leave employment for various reasons.

NOTE: Assumptions for Probation members are assumed to be the same as Safety members unless otherwise noted.

Actuarial Cost Method

The actuarial valuation is prepared using the entry age actuarial cost method (CERL 31453.5). Under the principles of this method, the actuarial present value of the projected benefits of each individual included in the valuation is allocated as a level percentage of the individual's projected compensation between entry age and assumed exit (until maximum retirement age).

For members who transferred from Plan 3 to another General Plan, entry age is based on the transfer date.

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 sum of (a) the actuarial value of the assets, and (b) the actuarial present value of future normal costs is called the Unfunded Actuarial Accrued Liability (UAAL). The UAAL as of June 30, 2008 is amortized as a level percentage of the projected salaries of present and future members of SamCERA over the remaining period from the valuation date to June 30, 2023. This is commonly referred to as a "closed amortization method". Actuarial gains and losses after the June 30, 2008 valuation are amortized over new closed 15-year periods from their respective valuation dates.

The SCA (CSCA for the County UAAL and DSCA for the SMCM&VCD) offset amounts are calculated using a similar closed amortization method to the UAAL rate described above. However, effective with the June 30, 2018 valuation, the DSCA balance is amortized over five years. All layers are re-amortized as of June 30, 2018, and any future layers are amortized over new five-year periods. The total DSCA offset amount in a given year is limited to the SMCM&VCD UAAL rate, and the DSCA will be adjusted to reflect the actual offset (after reflecting the limitation, if any).

Records and Data

The data used in this valuation consist of financial information and the age, service, and income records for active and inactive members and their survivors. All of the data were supplied by SamCERA and are accepted for valuation purposes without audit.

Replacement of Terminated Members

The ages and relative salaries at entry of future members are assumed to follow a new entrant distribution based on the pattern of current members. Under this assumption, the normal cost rates for active members will remain fairly stable in future years unless there are changes in the governing law, the actuarial assumptions or the pattern of the new entrants.

Growth in Membership

For benefit determination purposes, no growth in the membership of SamCERA is assumed. For funding purposes, if amortization is required, the total payroll of covered members is assumed to grow due to the combined effects of future wage increases of current active members and the replacement of the current active members by new employees. No growth in the total number of active members is assumed.

Internal Revenue Code Section 415 Limit

The Internal Revenue Code Section 415 maximum benefit limitations are not reflected in the valuation for funding purposes. Any limitation is reflected in a member's benefit after retirement, except for Plan 7 members which cannot receive benefits in excess of the 415 limit. For Plan 7 members, the benefit levels, combined with the limited compensation are low enough that it is unlikely the 415 limit would apply.

Internal Revenue Code Section 401(a)(17)

The Internal Revenue Code Section 401(a)(17) maximum compensation limitation is not reflected in the valuation for funding purposes. Any limitation is reflected in a member's benefit after retirement.

Government Code Section 7522.10

The maximum compensation limit under Government Code 7522.10 is reflected in the valuation for funding purposes. Any limitation is also reflected in a member's benefit after retirement.

Employer Contributions

The statutory employer contribution rate is set by the Retirement Board based on actuarial valuations.

Member Contributions

The member contribution rates vary by entry age (except for Plan 7) and are described in the law. Code references are shown in Appendix B of the valuation report. The methods and assumptions used are detailed later in this section.

The individual member rates by entry age, plan, and class are illustrated in Appendix D of the valuation report.

Valuation of Assets

The assets are valued using a modified five-year smoothed method based on the difference between the expected market value and the actual market value of the assets as of the end of each six-month period (12/31 and 6/30). The expected market value is the prior period's market value increased with the net increase in the cash flow of funds, all increased with interest during the period at the expected investment return rate assumption.

Effective June 30, 2018 all deferred gains and losses are combined into a single amount to be recognized over a five-year (10 six-month) period. Beginning with the six-month period immediately following the June 30, 2018 valuation, offsetting of current period gains or losses against prior period gains or losses will occur, as follows. First, to the extent there is a loss for the period, it shall be used to offset any unrecognized gains from prior periods in the order of oldest to most recent. Any remaining loss for the period is recognized over a five-year

(10 six-month) period. Similarly, any gain for the period shall be offset against unrecognized losses from prior periods.

The gross preliminary Actuarial Value of Assets is equal to the Market Value of Assets less any of the remaining unrecognized differences. A 20% corridor is then applied, so that the gross Actuarial Value of Assets cannot be greater than 120% of the Market Value of Assets nor less than 80% of the Market Value of Assets. The Valuation Assets used in the calculation of the SCR are equal to the gross Actuarial Value of Assets less any non-valuation reserves.

Investment Earnings and Expenses

The future investment earnings of the assets of SamCERA are assumed to accrue at an annual rate of 6.25% compounded annually, net of both investment and administrative expenses. This rate was adopted effective June 30, 2021.

CPI Inflation

The CPI inflation assumption is used in the determination of assumptions for individual salary increases, overall wage growth, and postretirement benefit increases. The CPI inflation assumption is 2.50% per year effective June 30, 2017.

Postretirement Benefit Increases

Postretirement increases are described in Appendix B. Assumed increases for valuation purposes are:

	General	Safety	Probation
Plan 1	2.50%	2.50%	2.50%
Plan 2	2.40%	2.40%	2.40%
Plan 3	0.00%	N/A	N/A
Plans 4, 5, and 7	1.90%	1.90%	1.90%
Plan 6	N/A	1.90%	1.90%

Assumed Plan 1 General and Safety COLAs are set at the CPI inflation assumption of 2.50% per year. Since Plan 2 does not have a COLA bank, it is expected that increases will be limited in some years. This reduces the overall expected rate and is reflected in a lower assumed increase.

Interest on Member Contributions

The annual credited interest rate on member contributions is assumed to be 6.25% compounded semi-annually (3.125% per six-month period) for an annualized rate of 6.35%. This rate was adopted effective June 30, 2021 for valuation purposes; the change in member crediting is effective July 1, 2022.

Individual Salary Increases

Salaries increases of individual members are assumed to include the following components: (1) a general wage growth assumption that applies to all members, and (2) an individual-specific increase due to promotion and longevity based on years of service.

The rates of annual salary increase due to promotion and longevity assumed for the purpose of the valuation are illustrated in Exhibit A-5. The general wage growth assumption is 3.00% per year. This includes a 2.50% CPI component, and a 0.50% productivity (or "real wage growth") component.

Increases are assumed to occur mid-year. The mid-year timing reflects that salary increases occur throughout the year, or on average mid-year.

SamCERA supplied two types of compensation data:

- 1) pensionable pay from the most recent bi-weekly pay period; and
- 2) pensionable pay from the prior year.

We annualized bi-weekly pay and then used the greater of the two amounts.

Growth in Payroll

The overall pensionable payroll of SamCERA active members is assumed to increase at 3.00% per annum.

PEPRA Compensation Limit

The PEPRA compensation limit is assumed to increase in line with the Consumer Prices Index for All Urban Consumers (CPI-U) U.S City Average. We assume that CPI-U will increase at the rate of 2.25% per year.

This assumption was adopted effective June 30, 2020.

Social Security Wage Base

Plan 3 members have their benefits offset by an assumed Social Security Benefit. For valuation funding purposes, we need to project the Social Security Benefit. We assume the current Social Security provisions will continue and the annual Wage Base will increase at the rate of 2.75% per year, based on the CPI-U and real wage growth assumptions. Note, statutory provisions describe how to compute a member's offset amount at time of termination or retirement.

This assumption was adopted effective June 30, 2020.

Retirement

Retirement rates vary by age and are shown by plan in Exhibits A-6 through A-11.

All General members who attain or who have attained age 75 and all Safety members who have attained age 65 are assumed to retire immediately. Additionally, if a member's benefit is equal to or greater than the 100% of compensation limit, they are also assumed to retire immediately. For purposes of the valuation, immediate retirement is assumed at:

- Age 62 with 38 years of service (General, Plans 1, 2, and 4)
- Age 65 with 41 years of service (General Plan 5)
- Age 67 with 40 years of service (General Plan 7)
- Age 50 with 33 years of service (Safety & Probation, Plans 1, 2, and 4)
- Age 55 with 33 years of service (Safety & Probation Plan 5)
- Age 55 with 38 years of service (Safety & Probation Plan 6)
- Age 57 with 38 years of service (Safety & Probation Plan 7)

Deferred vested members are assumed to retire at the later of current age and:

- Age 58 (General Members, except Plan 3 and Plan 7)
- Age 65 (General Plan 3 Members)
- Age 62 (General Plan 7 Members)
- Age 50 (Probation and Safety members)

The retirement rates were adopted effective June 30, 2020.

Disability

Rates of disability are illustrated in Exhibits A-6 through A-11.

The disability rates were adopted effective June 30, 2020.

Active Member Mortality

Rates of mortality from active service are illustrated in Exhibits A-6 through A-11. The mortality rates are based on the following mortality tables and mortality improvement scale.

Class	Gender	
General	Male	PubG-2010 (100%) Employee Male
General	Female	PubG-2010 (100%) Employee Female
Safety	Male	PubS-2010 (100%) Employee Male
Safety	Female	PubS-2010 (100%) Employee Female

All mortality rates are projected with the MP-2014 Ultimate Projection Scale.

Safety members have an additional service-connected mortality rate of 0.01% per year.

These rates were adopted effective June 30, 2020.

Other Terminations of Employment

Exhibits A-6 to A-11 show, for all ages, the rates assumed for future termination from active service other than for death, disability or retirement. These rates do not apply to members eligible for service retirement.

Terminating employees may withdraw their contributions immediately upon termination of employment and forfeit the right to further benefits, or they may leave their contributions on deposit with SamCERA. Former contributing members whose contributions are on deposit may later elect to receive a refund, may return to work or may remain inactive until becoming eligible to receive a retirement benefit under either SamCERA or a reciprocal retirement system. All terminating members who are not eligible for vested benefits are assumed to withdraw their contributions immediately.

The rates of termination were adopted effective June 30, 2020.

Probability of Refund

Exhibit A-4 shows the assumed probabilities that vested members will withdraw their contributions and elect a refund immediately upon termination and the probability the remaining members will elect a deferred vested benefit. For Plan 3, 100% of members are assumed to elect a vested benefit. All non-vested members are assumed to elect a refund and withdraw their contributions.

The probability of refund assumptions were adopted effective June 30, 2020.

Probability of Eligible Survivor

For members not currently in pay status, 75% of all males and 55% of all females are assumed to have eligible survivors (spouses or qualified domestic partners). Survivors are assumed to be three years younger than male members and two years older than female members. Survivors are assumed to be of the opposite sex as the member. There is no explicit assumption for children's benefits. We believe the survivor benefits based on this assumption are sufficient to cover children's benefits as they occur.

PostRetirement Mortality – Other Than Disabled Members

Rates of mortality for retired members, except for those retired on account of disability, are illustrated in Exhibit A-2. Beneficiary mortality is assumed to be the same as for healthy members. Beneficiaries are assumed to be of the opposite sex and have the same mortality as General members. The mortality rates are based on the following mortality tables and mortality improvement scale.

Class	Gender	
General	Male	PubG-2010 (100%) Healthy Retiree Male
General	Female	PubG-2010 (100%) Healthy Retiree Female
Safety	Male	PubS-2010 (100%) Healthy Retiree Male
Safety	Female	PubS-2010 (100%) Healthy Retiree Female

All mortality rates are projected with the MP-2014 Ultimate Projection Scale.

The rates of retired mortality were adopted effective June 30, 2020.

PostRetirement Mortality – Disabled Members

Rates of mortality for members retired on account of disability are illustrated in Exhibit A-3. The mortality rates are based on the following mortality tables and mortality improvement scale.

Gender	
Male	PubG-2010 (100%*) Disabled Retiree Male
Female	PubG-2010 (100%*) Disabled Retiree Female
Male	PubS-2010 (100%) Disabled Retiree Male
Female	PubS-2010 (100%) Disabled Retiree Female
	Gender Male Female Male Female

*Disabled General mortality rates are 100% of the standard table at ages 85 and above; 60% at ages 65 and below; and graded from 60% to 100% at 2% per year between age 65 and age 85.

All mortality rates are projected with the MP-2014 Ultimate Projection Scale.

The rates of mortality were adopted effective June 30, 2020.

Deferred Member Mortality

Rates of mortality for members after termination from employment and before retirement are the same as PostRetirement Mortality – Other Than Disabled Members.

Valuation of Current Deferred Members

Current non-vested members who have terminated active employment are assumed to take a refund of their contributions at the valuation date.

Current vested members who have terminated active employment are assumed to keep their accounts with SamCERA and retire as specified in this section. An adjustment for these individuals such that the greater of the Final Average Compensation and annualized bi-weekly pay limited to two times the Final Average Compensation is used.

Reciprocal Benefits

30% of future deferred vested General members and 40% of future deferred vested Safety members are assumed to immediately join a reciprocal agency. For future reciprocal members, salaries are assumed to increase at the same rate as if they had remained in active employment with SamCERA. For current deferred vested members, eligibility is based on the data supplied by SamCERA and future salaries are assumed to increase at 3.52% annually for General members and 3.88% annually for Safety members.

This assumption was adopted effective June 30, 2020.

Part-Time Employees

For valuation purposes, part-time employees are assumed to continue working the same number of hours in the future.

Adjustment to Plan 3 Normal Cost Rate

Plan 3 members are eligible to transfer to Plans 2, 4 or 5 (depending on entry date) after five years of service. We have adjusted the Plan 3 Normal Cost to account for this. The adjustment is equal to 50% of the difference between the unadjusted Plan 3 Normal Cost rate and the Plan 4 Normal Cost rate.

Member Contribution Rate Assumptions

In general, for all plans except Plan 3 and Plan 7, the member rate is determined by the present value of the future benefit (PVFB) payable at retirement age, divided by the present value of all future salaries payable between age at entry and retirement age. For these purposes, per the CERL:

- A. The annuity factor used for General members is based on a 33% / 67% blend of the male and female annuity factors using current valuation assumptions and no COLA. For Safety members it is based on a 75% / 25% blend of the male and female annuity factors using current valuation assumptions. The valuation mortality tables use a static projection to 2042.
- B. The annuity factor used in determining the present value of future benefits (PVFB) at entry age is equal to the life only annuity factor at 6.25%.
- C. Projected Final Average Compensation is based on annual salary in the year prior to the assumed retirement age (Plans 1 and 2), or average annual salary in the three years prior to the assumed retirement date (Plans 4, 5 and 6).
- D. Member Rates are assumed to increase with entry age. There are a few exceptions at the higher entry ages where the calculated rate is less than the previous entry age. In these cases the member contribution rate is adjusted so that it is no less than the value for the previous entry age.

Member rates for all Plans 1, 2, 4, 5, and 6 members are loaded to account for a 50% COLA share. The COLA loads are applied to the otherwise applicable basic member rates prior to the addition of any cost-sharing rates.

For Plan 7, the member contribution rate is equal to one-half of the aggregate Normal Cost of the respective plan.

Exhibit A-1

Summary of Valuation Assumptions as of June 30, 2022

Ec	conomic assumptions				
A.	General wage increases	3.00%			
В.	Investment earnings	6.25%			
C.	Growth in active membership	0.00%			
D.	CPI-U inflation assumption	2.25%			
Ε.	CPI inflation assumption	2.50%			

Demographic assumptions

Α.	Salary increases due to service	Exhibit A-5
В.	Retirement from active service	Exhibits A-6 to A-11
C.	Disability from active service	Exhibits A-6 to A-11
D.	Mortality for active members prior to termination	Exhibits A-6 to A-11
E.	Other terminations of employment	Exhibits A-6 to A-11
F.	Probability of refund of contributions upon vested termination	Exhibit A-4
G.	Mortality for active members after termination and service retired members	Exhibit A-2
Н.	Mortality for members retired for disability	Exhibit A-3
I.	Mortality for beneficiaries	Exhibit A-2

Age	General Male	General Female	Safety Male	Safety Female
20	0.074%	0.035%	0.061%	0.021%
25	0.056%	0.024%	0.055%	0.026%
30	0.072%	0.040%	0.061%	0.035%
35	0.094%	0.062%	0.070%	0.047%
40	0.132%	0.096%	0.088%	0.064%
45	0.196%	0.150%	0.122%	0.087%
50	0.298%	0.222%	0.192%	0.149%
55	0.431%	0.286%	0.306%	0.258%
60	0.615%	0.384%	0.508%	0.446%
65	0.913%	0.613%	0.881%	0.770%
70	1.526%	1.063%	1.568%	1.329%
75	2.671%	1.883%	2.826%	2.295%
80	4.774%	3.360%	5.103%	3.962%
85	8.591%	6.205%	9.135%	6.842%
90	14.672%	11.487%	15.860%	11.815%

Exhibit A-2 Mortality for Members Retired for Service⁽¹⁾

Annual Projected Mortality Improvement

Age	All Groups
65 & Less	1.000%
70	1.000%
75	1.000%
80	1.000%
85	1.000%
90	0.930%
95	0.850%
100	0.640%
105	0.430%
110	0.210%
115	0.000%

1. Mortality rates are those applicable for the fiscal year beginning in 2010. Annual projected improvements are assumed in the following years under the schedule shown. For example, the annual mortality rate for an 85-year old General male in fiscal year beginning in 2022 is 7.615% calculated as follows:

Age 85 rate in 2022 = Age 85 rate in 2010 with 12 years improvement = 8.591% x (100.0% - 1.0%) ^ (2022-2010) = 7.615%

Age	General Male	General Female	Safety Male	Safety Female
20	0.247%	0.140%	0.121%	0.053%
25	0.167%	0.098%	0.110%	0.065%
30	0.212%	0.154%	0.122%	0.089%
35	0.275%	0.241%	0.138%	0.121%
40	0.387%	0.377%	0.174%	0.164%
45	0.604%	0.591%	0.242%	0.223%
50	0.963%	0.890%	0.353%	0.304%
55	1.268%	1.045%	0.480%	0.461%
60	1.502%	1.174%	0.735%	0.699%
65	1.826%	1.354%	1.186%	1.061%
70	2.731%	2.003%	1.907%	1.610%
75	4.154%	3.202%	3.241%	2.443%
80	6.613%	5.406%	5.598%	3.962%
85	10.815%	9.331%	9.213%	6.842%
90	16.253%	13.665%	15.860%	11.815%

Exhibit A-3 Mortality for Members Retired for Disability

Exhibit A-4
Immediate Refund of Contributions upon Termination of Employment
(Excludes Plan 3)

Years of		
Service	General	Safety
0	100%	100%
1	100%	100%
2	100%	100%
3	100%	100%
4	100%	100%
5	26%	26%
6	26%	26%
7	26%	26%
8	26%	26%
9	26%	25%
10	25%	24%
11	25%	23%
12	24%	22%
13	23%	20%
14	23%	18%
15	23%	16%
16	22%	14%
17	21%	11%
18	19%	8%
19	17%	5%
20	15%	0%
21	14%	0%
22	11%	0%
23	9%	0%
24	7%	0%
25	5%	0%
26	2%	0%
27	0%	0%
28	0%	0%
29	0%	0%
30 & Up	0%	0%

Years of	Due to Promotion and Longevity		Total Annua	I Increase ⁽¹⁾
Service	General	Safety	General	Safety
<1	6.50%	6.00%	9.70%	9.18%
1	4.75%	4.75%	7.89%	7.89%
2	3.50%	3.50%	6.61%	6.61%
3	2.75%	2.75%	5.83%	5.83%
4	2.00%	2.10%	5.06%	5.16%
5	1.75%	1.70%	4.80%	4.75%
6	1.50%	1.40%	4.55%	4.44%
7	1.25%	1.20%	4.29%	4.24%
8	1.05%	1.10%	4.08%	4.13%
9	0.90%	1.00%	3.93%	4.03%
10	0.80%	0.95%	3.82%	3.98%
11	0.70%	0.90%	3.72%	3.93%
12	0.60%	0.85%	3.62%	3.88%
13	0.50%	0.85%	3.52%	3.88%
14	0.50%	0.85%	3.52%	3.88%
15	0.50%	0.85%	3.52%	3.88%
16	0.50%	0.85%	3.52%	3.88%
17	0.50%	0.85%	3.52%	3.88%
18	0.50%	0.85%	3.52%	3.88%
19	0.50%	0.85%	3.52%	3.88%
20 or More	0.50%	0.85%	3.52%	3.88%

Exhibit A-5 Annual Increase in Salary

1. The total expected increase in salary is the increase due to promotion and longevity, adjusted for assumed 3.00% per annum increases in the general wage. The total result is compounded rather than additive.

Rates of Separation from Active Service Exhibits A-6 to A-11

A schedule of the probabilities of termination of employment due to the following causes can be found on the following pages:

Service Retirement:	Member retires after meeting age and service requirements for reasons other than disability.
Withdrawal:	Member terminates and elects a refund of member contributions, or a deferred retirement benefit.
Service Disability:	Member receives disability retirement; disability is service related.
Ordinary Disability:	Member receives disability retirement; disability is not service related.
Service Death:	Member dies before retirement; death is service related.
Ordinary Death:	Member dies before retirement; death is not service related.

Each rate represents the probability that a member will separate from service at each age due to the particular cause. For example, a rate of 0.0300 for a member's service retirement at age 50 means we assume that 30 out of 1,000 members who are age 50 will retire at that age.

Each Exhibit represents the detailed rates needed for each SamCERA plan by sex:

- A-6: General Plans 1, 2, 4, 5, and 7 Males
- A-7: General Plans 1, 2, 4, 5, and 7 Females
- A-8: General Plan 3 Males
- A-9: General Plan 3 Females
- A-10: Safety and Probation Plans 1, 2, 4, 5, 6, and 7 Males
- A-11: Safety and Probation Plans 1, 2, 4, 5, 6, and 7 Females

Exhibit A-6 Rate of Separation from Active Service General Plans 1, 2, 4, 5, and 7 – Male

	Service Retirement (1)(2)							
Age	Plans 1, 2, 4	Plans 5 & 7	Service Disability	Ordinary Disability	Service Death	Ordinary Death	Years of Service	Other Terminations
18	0.00000	0.00000	0.00034	0.00018	N/A	0.00036	0	0.15000
19	0.00000	0.00000	0.00034	0.00018	N/A	0.00038	1	0.13000
20	0.00000	0.00000	0.00036	0.00020	N/A	0.00037	2	0.10500
21	0.00000	0.00000	0.00037	0.00020	N/A	0.00036	3	0.08500
22	0.00000	0.00000	0.00038	0.00020	N/A	0.00033	4	0.07500
23	0.00000	0.00000	0.00037	0.00020	N/A	0.00031	5	0.06700
24	0.00000	0.00000	0.00037	0.00020	N/A	0.00029	6	0.06000
25	0.00000	0.00000	0.00038	0.00020	N/A	0.00028	7	0.05400
26	0.00000	0.00000	0.00038	0.00020	N/A	0.00030	8	0.04900
27	0.00000	0.00000	0.00038	0.00020	N/A	0.00031	9	0.04400
28	0.00000	0.00000	0.00038	0.00020	N/A	0.00033	10	0.04100
29	0.00000	0.00000	0.00042	0.00023	N/A	0.00034	11	0.03800
30	0.00000	0.00000	0.00044	0.00024	N/A	0.00036	12	0.03500
31	0.00000	0.00000	0.00047	0.00026	N/A	0.00038	13	0.03300
32	0.00000	0.00000	0.00048	0.00026	N/A	0.00040	14	0.03100
33	0.00000	0.00000	0.00054	0.00029	N/A	0.00042	15	0.02900
34	0.00000	0,00000	0.00059	0.00031	N/A	0.00044	16	0.02700
35	0.00000	0.00000	0.00062	0.00033	N/A	0.00047	17	0.02500
36	0.00000	0.00000	0.00067	0.00036	N/A	0.00050	18	0.02300
37	0.00000	0.00000	0.00072	0.00039	N/A	0.00053	10	0.02100
38	0.00000	0.00000	0.00072	0.00000	N/A	0.00057	20	0.02100
30	0.00000	0.00000	0.00001	0.00044	N/A	0.00001	20	0.01300
40	0.00000	0.00000	0.00030	0.00040	N/A	0.00066	21	0.01700
40	0.00000	0.00000	0.00033	0.00059	N/A	0.00000	22	0.01300
41	0.00000	0.00000	0.00107	0.00058	N/A	0.00071	23	0.01400
42	0.00000	0.00000	0.00110	0.00003	N/A	0.00077	24	0.01300
43	0.00000	0.00000	0.00120	0.00009	N/A	0.00000	25	0.01200
44	0.00000	0.00000	0.00140	0.00070	N/A	0.00090	20	0.01100
40	0.00000	0.00000	0.00155	0.00083	N/A	0.00096	21	0.01000
40	0.00000	0.00000	0.00104	0.00069	IN/A	0.00107	20	0.01000
47	0.00000	0.00000	0.00175	0.00094	IN/A	0.00116	29	0.01000
48	0.00000	0.00000	0.00184	0.00099	N/A	0.00127	30 & Above ⁽⁸⁾	0.01000
49	0.00000	0.00000	0.00192	0.00103	N/A	0.00138		
50	0.03000	0.02400	0.00202	0.00108	N/A	0.00149		
51	0.03000	0.02400	0.00208	0.00112	N/A	0.00162		
52	0.03000	0.02400	0.00217	0.00117	N/A	0.00175		
53	0.04000	0.03200	0.00229	0.00123	N/A	0.00189		
54	0.05000	0.04000	0.00240	0.00129	N/A	0.00203		
55	0.10000	0.08000	0.00250	0.00135	N/A	0.00219		
56	0.05000	0.04000	0.00263	0.00141	N/A	0.00236		
57	0.07500	0.06000	0.00274	0.00148	N/A	0.00255		
58	0.10000	0.08000	0.00288	0.00155	N/A	0.00275		
59	0.15000	0.12000	0.00302	0.00162	N/A	0.00296		
60	0.15000	0.12000	0.00313	0.00169	N/A	0.00319		
61	0.20000	0.16000	0.00324	0.00175	N/A	0.00344		
62	0.25000	0.20000	0.00337	0.00182	N/A	0.00371		
63	0.22000	0.17600	0.00334	0.00180	N/A	0.00401		
64	0.22000	0.17600	0.00329	0.00177	N/A	0.00433		
65	0.30000	0.24000	0.00317	0.00171	N/A	0.00468		
66	0.30000	0.24000	0.00313	0.00169	N/A	0.00506		
67	0.30000	0.36000	0.00320	0.00172	N/A	0.00548		
68	0.30000	0.30000	0.00329	0.00177	N/A	0.00594		
69	0.30000	0.30000	0.00332	0.00179	N/A	0.00646		
70	0.30000	0.30000	0.00307	0.00165	N/A	0.00703		
71	0.30000	0.30000	0.00304	0.00163	N/A	0.00767		
72	0.30000	0.30000	0.00326	0.00176	N/A	0.00837		
73	0.30000	0.30000	0.00364	0.00196	N/A	0.00915		
74	0.30000	0.30000	0.00390	0.00210	N/A	0.01001		
75	1.00000	1.00000	N/A	N/A	N/A	N/A		

1. 100% probability of retirement is assumed at ages 62 and above with 38 or more years of service (65/41 for Plan 5; 67/40 for Plan 7). Rates of retirement are 0.00% prior to age 52 for Plan 7.

2. Service retirement rates vary by years of service (75% of these rates are applicable at less than 20 years of service; 120% at 20 to 29 years of service; 160% at 30 or more years of service).

3. 0.00% probability of termination with 30 years of service and above for Plans 1, 2, 4, and 5.

Exhibit A-7 Rate of Separation from Active Service General Plans 1, 2, 4, 5, and 7 – Female

	Service Retirement (1)(2)							
Age	Plans 1, 2, 4	Plans 5 & 7	Service Disability	Ordinary Disability	Service Death	Ordinary Death	Years of Service	Other Terminations
18	0.00000	0.00000	0.00034	0.00018	N/A	0.00013	0	0.15000
19	0.00000	0.00000	0.00034	0.00018	N/A	0.00013	1	0.13000
20	0.00000	0.00000	0.00036	0.00020	N/A	0.00013	2	0.10500
21	0.00000	0.00000	0.00037	0.00020	N/A	0.00012	3	0.08500
22	0.00000	0.00000	0.00038	0.00020	N/A	0.00011	4	0.07500
23	0.00000	0.00000	0.00037	0.00020	N/A	0.00010	5	0.06700
24	0.00000	0.00000	0.00037	0.00020	N/A	0.00009	6	0.06000
25	0.00000	0.00000	0.00038	0.00020	N/A	0.00009	7	0.05400
26	0.00000	0.00000	0.00038	0.00020	N/A	0.00010	8	0.04900
27	0.00000	0.00000	0.00038	0.00020	N/A	0.00011	9	0.04400
28	0.00000	0.00000	0.00038	0.00020	N/A	0.00012	10	0.04100
29	0.00000	0.00000	0.00042	0.00023	N/A	0.00013	11	0.03800
30	0.00000	0.00000	0.00044	0.00024	N/A	0.00015	12	0.03500
31	0.00000	0.00000	0.00047	0.00026	N/A	0.00016	13	0.03300
32	0.00000	0.00000	0.00048	0.00026	N/A	0.00018	14	0.03100
33	0.00000	0.00000	0.00054	0.00029	N/A	0.00019	15	0.02900
34	0.00000	0.00000	0.00059	0.00031	N/A	0.00021	16	0.02700
35	0.00000	0,00000	0.00062	0.00033	N/A	0.00023	17	0.02500
36	0.00000	0.00000	0.00067	0.00036	N/A	0.00025	18	0.02300
37	0.00000	0.00000	0.00072	0.00039	N/A	0.00028	19	0.02100
38	0.00000	0.00000	0.00081	0.00044	N/A	0.00020	20	0.01900
30	0.00000	0.00000	0.00001	0.00044	N/A	0.00000	20	0.01700
40	0.00000	0.00000	0.000000	0.00040	N/A	0.00036	21	0.01500
40	0.00000	0.00000	0.000000	0.00058	N/A	0.00000	22	0.01400
41	0.00000	0.00000	0.00107	0.00050	N/A	0.00040	23	0.01400
42	0.00000	0.00000	0.00110	0.00000	N/A	0.00043	24	0.01200
40	0.00000	0.00000	0.00120	0.00003	N/A	0.00047	20	0.01200
44	0.00000	0.00000	0.00140	0.00070	N/A	0.00051	20	0.01100
45	0.00000	0.00000	0.00155	0.00080	N/A	0.00050	21	0.01000
40	0.00000	0.00000	0.00104	0.00003	N/A	0.00001	20	0.01000
47	0.00000	0.00000	0.00173	0.00094	N/A	0.00000	29	0.01000
48	0.00000	0.00000	0.00184	0.00099	N/A	0.00071	30 & Above	0.01000
49	0.00000	0.00000	0.00192	0.00103	N/A	0.00077		
50	0.03000	0.02400	0.00202	0.00108	N/A	0.00083		
51	0.03000	0.02400	0.00208	0.00112	N/A	0.00090		
52	0.03000	0.02400	0.00217	0.00117	N/A	0.00097		
53	0.04000	0.03200	0.00229	0.00123	N/A	0.00105		
54	0.05000	0.04000	0.00240	0.00129	N/A	0.00113		
55	0.10000	0.08000	0.00250	0.00135	N/A	0.00123		
56	0.05000	0.04000	0.00263	0.00141	N/A	0.00133		
57	0.07500	0.06000	0.00274	0.00148	N/A	0.00144		
58	0.10000	0.08000	0.00288	0.00155	N/A	0.00156		
59	0.15000	0.12000	0.00302	0.00162	N/A	0.00170		
60	0.15000	0.12000	0.00313	0.00169	N/A	0.00186		
61	0.20000	0.16000	0.00324	0.00175	N/A	0.00203		
62	0.25000	0.20000	0.00337	0.00182	N/A	0.00222		
63	0.22000	0.17600	0.00334	0.00180	N/A	0.00244		
64	0.22000	0.17600	0.00329	0.00177	N/A	0.00269		
65	0.30000	0.24000	0.00317	0.00171	N/A	0.00296		
66	0.30000	0.24000	0.00313	0.00169	N/A	0.00327		
67	0.30000	0.36000	0.00320	0.00172	N/A	0.00362		
68	0.30000	0.30000	0.00329	0.00177	N/A	0.00400		
69	0.30000	0.30000	0.00332	0.00179	N/A	0.00442		
70	0.30000	0.30000	0.00307	0.00165	N/A	0.00489		
71	0.30000	0.30000	0.00304	0.00163	N/A	0.00541		
72	0.30000	0.30000	0.00326	0.00176	N/A	0.00598		
73	0.30000	0.30000	0.00364	0.00196	N/A	0.00661		
74	0.30000	0.30000	0.00390	0.00210	N/A	0.00731		
75	1.00000	1.00000	N/A	N/A	N/A	N/A		

1. 100% probability of retirement is assumed at ages 62 and above with 38 or more years of service (65/41 for Plan 5; 67/40 for Plan 7). Rates of retirement are 0.00% prior to age 52 for Plan 7.

2. Service retirement rates vary by years of service (75% of these rates are applicable at less than 20 years of service; 120% at 20 to 29 years of service; 160% at 30 or more years of service).

3. 0.00% probability of termination with 30 years of service and above for Plans 1, 2, 4, and 5.

Age	Service Retirement	Service Disability	Ordinary Disability	Service Death	Ordinary Death	Years of Service	Other Terminations
18	0.00000	N/A	N/A	N/A	0.00036	0	0.15000
19	0.00000	N/A	N/A	N/A	0.00038	1	0.13000
20	0.00000	N/A	N/A	N/A	0.00037	2	0.10500
21	0.00000	N/A	N/A	N/A	0.00036	3	0.08500
22	0.00000	N/A	N/A	N/A	0.00033	4	0.07500
23	0.00000	N/A	N/A	N/A	0.00031	5	0.06700
24	0.00000	N/A	N/A	N/A	0.00029	6	0.06000
25	0.00000	N/A	N/A	N/A	0.00028	7	0.05400
26	0.00000	N/A	N/A	N/A	0.00030	8	0.04900
27	0.00000	N/A	N/A	N/A	0.00031	9	0.04400
28	0.00000	N/A	N/A	N/A	0.00033	10	0.04100
29	0.00000	N/A	N/A	N/A	0.00034	11	0.03800
30	0.00000	N/A	N/A	N/A	0.00036	12	0.03500
31	0.00000	N/A	N/A	N/A	0.00038	13	0.03300
32	0.00000	N/A	N/A	N/A	0.00040	14	0.03100
33	0.00000	N/A	N/A	N/A	0.00042	15	0.02900
34	0.00000	N/A	N/A	N/A	0.00044	16	0.02700
35	0.00000	N/A	N/A	N/A	0.00047	17	0.02500
36	0.00000	N/A	N/A	N/A	0.00050	18	0.02300
37	0.00000	N/A	N/A	N/A	0.00053	19	0.02100
38	0.00000	N/A	N/A	N/A	0.00057	20	0.01900
39	0.00000	N/A	N/A	N/A	0.00061	21	0.01700
40	0.00000	N/A	N/A	N/A	0.00066	22	0.01500
41	0.00000	N/A	N/A	N/A	0.00071	23	0.01400
42	0.00000	N/A	N/A	N/A	0.00077	24	0.01300
43	0.00000	N/A	N/A	N/A	0.00083	25	0.01200
44	0.00000	N/A	N/A	N/A	0.00090	26	0.01100
45	0.00000	N/A	N/A	N/A	0.00098	27	0.01000
46	0.00000	N/A	N/A	N/A	0.00107	28	0.01000
47	0.00000	N/A	N/A	N/A	0.00116	29	0.01000
48	0.00000	N/A	N/A	N/A	0.00127	30 & Above	0.01000
49	0.00000	N/A	N/A	N/A	0.00138		
50	0.00000	N/A	N/A	N/A	0.00149		
51	0.00000	N/A	N/A	N/A	0.00162		
52	0.00000	N/A	N/A	N/A	0.00175		
53	0.00000	N/A	N/A	N/A	0.00189		
54	0.00000	N/A	N/A	N/A	0.00203		
55	0.03000	N/A	N/A	N/A	0.00219		
56	0.03000	N/A	N/A	N/A	0.00236		
57	0.03000	N/A	N/A	N/A	0.00255		
58	0.03000	N/A	N/A	N/A	0.00275		
59	0.03000	N/A	N/A	N/A	0.00296		
60	0.03000	N/A	N/A	N/A	0.00319		
61	0.06000	N/A	N/A	N/A	0.00344		
62	0.15000	N/A	N/A	N/A	0.00371		
03	0.10000	N/A	N/A	IN/A	0.00401		
64 65	0.15000	N/A	N/A	N/A	0.00433		
60	0.30000	IN/A	N/A	IN/A	0.00400		
67	0.30000	IN/A	N/A	IN/A	0.00000		
0/ 69	0.30000	IN/A	IN/A	IN/A	0.00504		
00	0.30000	IN/A	IN/A	IN/A	0.00594		
09 70	0.30000	IN/A	IN/A	IN/A	0.00040		
70	0.40000	IN/A	IN/A	IN/A	0.00703		
70	0.40000	IN/A	IN/A	IN/A	0.00/0/		
12	0.40000	IN/A	N/A	N/A	0.00015		
13	0.40000	IN/A	IN/A	N/A	0.00915		
74	0.40000	N/A	N/A	N/A	0.01001		
75	1.00000	N/A	N/A	N/A	N/A		

Exhibit A-8 Rate of Separation from Active Service General Plan 3 – Male

Age	Service Retirement	Service Disability	Ordinary Disability	Service Death	Ordinary Death	Years of Service	Other Terminations
18	0.0000	N/A	N/A	N/A	0.00013	0	0.15000
19	0.0000	N/A	N/A	N/A	0.00013	1	0.13000
20	0.0000	N/A	N/A	N/A	0.00013	2	0.10500
21	0.0000	N/A	N/A	N/A	0.00012	3	0.08500
22	0.0000	N/A	N/A	N/A	0.00011	4	0.07500
23	0.0000	N/A	N/A	N/A	0.00010	5	0.06700
24	0.0000	N/A	N/A	N/A	0.00009	6	0.06000
25	0.0000	N/A	N/A	N/A	0.00009	7	0.05400
26	0.0000	N/A	N/A	N/A	0.00010	8	0.04900
27	0.0000	N/A	N/A	N/A	0.00011	9	0.04400
28	0.0000	N/A	N/A	N/A	0.00012	10	0.04100
29	0.0000	N/A	N/A	N/A	0.00013	11	0.03800
30	0.0000	N/A	N/A	N/A	0.00015	12	0.03500
31	0.0000	N/A	N/A	N/A	0.00016	13	0.03300
32	0.0000	N/A	N/A	N/A	0.00018	14	0.03100
33	0.0000	N/A	N/A	N/A	0.00019	15	0.02900
34	0.0000	N/A	N/A	N/A	0.00021	16	0.02700
35	0.0000	N/A	N/A	N/A	0.00023	17	0.02500
36	0.0000	N/A	N/A	N/A	0.00025	18	0.02300
37	0.0000	N/A	N/A	N/A	0.00028	19	0.02100
38	0.0000	N/A	N/A	N/A	0.00030	20	0.01900
39	0.0000	N/A	N/A	N/A	0.00033	21	0.01700
40	0.0000	N/A	N/A	N/A	0.00036	22	0.01500
41	0.0000	N/A	N/A	N/A	0.00040	23	0.01400
42	0.0000	N/A	N/A	N/A	0.00043	24	0.01300
43	0.0000	N/A	N/A	N/A	0.00047	25	0.01200
44	0.0000	N/A	N/A	N/A	0.00051	26	0.01100
45	0.0000	N/A	N/A	N/A	0.00056	27	0.01000
46	0.0000	N/A	N/A	N/A	0.00061	28	0.01000
47	0.0000	N/A	N/A	N/A	0.00066	29	0.01000
48	0.0000	N/A	N/A	N/A	0.00071	30 & Above	0.01000
49	0.0000	N/A	N/A	N/A	0.00077		
50	0.0000	N/A	N/A	N/A	0.00083		
51	0.0000	N/A	N/A	N/A	0.00090		
52	0.0000	N/A	N/A	N/A	0.00097		
53	0.0000	N/A	N/A	N/A	0.00105		
54	0.0000	N/A	N/A	N/A	0.00113		
55	0.0400	N/A	N/A	N/A	0.00123		
56	0.0400	N/A	N/A	N/A	0.00133		
57	0.0400	N/A	N/A	N/A	0.00144		
58	0.0400	N/A	N/A	N/A	0.00156		
59	0.0400	N/A	N/A	N/A	0.00170		
60	0.0400	N/A	N/A	N/A	0.00186		
61	0.0600	N/A	N/A	N/A	0.00203		
62	0.1500	N/A	N/A	N/A	0.00222		
63	0.1000	N/A	N/A	N/A	0.00244		
64	0.1500	N/A	N/A	N/A	0.00269		
65	0.3000	N/A	N/A	N/A	0.00296		
66 67	0.3000	N/A	N/A	N/A	0.00327		
0/	0.3000	IN/A	IN/A	IN/A	0.00362		
60	0.3000	N/A	N/A	N/A	0.00400		
69 70	0.3000	N/A	N/A	N/A	0.00442		
70	0.4000	IN/A	IN/A	IN/A	0.00489		
70	0.4000	IN/A	IN/A	IN/A	0.00041		
1 Z 70	0.4000	IN/A	IN/A	IN/A	0.00098		
13	0.4000	IN/A	IN/A	IN/A	0.00001		
/4 75	0.4000	N/A	N/A	IN/A	U.UU731		
10	1.0000	IN/A	IN/A	IN/A	IN/A		

Exhibit A-9 Rate of Separation from Active Service General Plan 3 – Female

Exhibit A-10 Rate of Separation from Active Service Safety & Probation Plans – Male

	Service Ret	irement ⁽¹⁾⁽²⁾						
Age	Plans 1, 2, 4	Plans 5, 6, 7	Service Disability	Ordinary Disability	Service Death	Ordinary Death	Years of Service	Other Terminations
18	0.00000	0.00000	0.00150	0.00000	0.00010	0.00037	0	0.10000
19	0.00000	0.00000	0.00150	0.00000	0.00010	0.00040	1	0.08000
20	0.00000	0.00000	0.00150	0.00000	0.00010	0.00041	2	0.06000
21	0.00000	0.00000	0.00150	0.00000	0.00010	0.00041	3	0.04500
22	0.00000	0.00000	0.00150	0.00000	0.00010	0.00040	4	0.03500
23	0.00000	0.00000	0.00150	0.00000	0.00010	0.00039	5	0.03000
24	0.00000	0.00000	0.00150	0.00000	0.00010	0.00038	6	0.02600
25	0.00000	0.00000	0.00150	0.00000	0.00010	0.00037	7	0.02300
26	0.00000	0.00000	0.00150	0.00000	0.00010	0.00038	8	0.02100
27	0.00000	0.00000	0.00150	0.00000	0.00010	0.00039	9	0.01900
28	0.00000	0.00000	0.00150	0.00000	0.00010	0.00040	10	0.01700
29	0.00000	0.00000	0.00150	0.00000	0.00010	0.00041	11	0.01500
30	0.00000	0.00000	0.00170	0.00000	0.00010	0.00041	12	0.01350
31	0.00000	0.00000	0.00190	0.00000	0.00010	0.00042	13	0.01200
32	0.00000	0.00000	0.00210	0.00000	0.00010	0.00043	14	0.01100
33	0.00000	0.00000	0.00230	0.00000	0.00010	0.00044	15	0.01000
34	0.00000	0.00000	0.00250	0.00000	0.00010	0.00045	16	0.00900
35	0.00000	0.00000	0.00270	0.00000	0.00010	0.00047	17	0.00800
36	0.00000	0.00000	0.00290	0.00000	0.00010	0.00049	18	0.00700
37	0.00000	0.00000	0.00310	0.00000	0.00010	0.00050	19	0.00600
38	0.00000	0.00000	0.00330	0.00000	0.00010	0.00053	20 & Above ⁽³⁾	0.00500
39	0.00000	0.00000	0.00350	0.00000	0.00010	0.00056	20 0 / 10010	0.00000
40	0.00000	0.00000	0.00370	0.00000	0.00010	0.00059		
41	0.00000	0.00000	0.00390	0.00000	0.00010	0.00062		
42	0 00000	0.00000	0.00410	0.00000	0.00010	0.00067		
43	0.00000	0,00000	0.00430	0,00000	0.00010	0.00071		
44	0 00000	0 00000	0.00450	0 00000	0.00010	0.00076		
45	0.05000	0 00000	0.00470	0 00000	0.00010	0.00082		
46	0.05000	0.00000	0.00490	0.00000	0.00010	0.00088		
47	0.05000	0 00000	0.00520	0 00000	0.00010	0.00095		
48	0.05000	0.00000	0.00550	0.00000	0.00010	0.00102		
49	0.11000	0.00000	0.00580	0.00000	0.00010	0.00111		
50	0.22500	0.18000	0.00750	0.00000	0.00010	0.00120		
51	0.16000	0.12800	0.00920	0.00000	0.00010	0.00129		
52	0.16000	0.12800	0.01090	0.00000	0.00010	0.00140		
53	0.22000	0.17600	0.01260	0.00000	0.00010	0.00151		
54	0.22000	0.17600	0.01430	0.00000	0.00010	0.00162		
55	0.25000	0.20000	0.01600	0.00000	0.00010	0.00175		
56	0.25000	0.20000	0.01770	0.00000	0.00010	0.00190		
57	0.25000	0.25000	0.01940	0.00000	0.00010	0.00205		
58	0.25000	0.25000	0.02110	0.00000	0.00010	0.00223		
59	0.25000	0.25000	0.02280	0.00000	0.00010	0.00243		
60	0.40000	0.40000	0.02080	0.00000	0.00010	0.00264		
61	0.40000	0.40000	0.01880	0.00000	0.00010	0.00288		
62	0.40000	0.40000	0.01680	0.00000	0.00010	0.00315		
63	0.40000	0.40000	0.01480	0.00000	0.00010	0.00344		
64	0.40000	0.40000	0.01280	0.00000	0.00010	0.00375		
65	1.00000	1.00000	N/A	N/A	N/A	N/A		

1. 100% probability of retirement is assumed as follows:

- with 33 or more years of service for Safety and Probation Plans 1, 2, and 4.

- at ages 55 and above with 33 or more years of service for Safety and Probation Plan 5.

- at ages 55 and above with 38 or more years of service for Safety and Probation Plan 6.

- at ages 57 and above with 38 or more years of service for Safety and Probation Plan 7.

2. Service retirement rates vary by years of service (40% of these rates are applicable at less than 15 years of service; 90% at 15 to 19 years of service; 120% at 20 to 24 years of service; 170% at 25 or more years of service).

3. 0.00% probability of termination with 20 years of service and above for all Safety/Probation plans except Plan 7.

Exhibit A-11 Rate of Separation from Active Service Safety & Probation Plans – Female

	Service Retirement (1)(2)							
Age	Plans 1, 2, 4	Plans 5, 6, 7	Service Disability	Ordinary Disability	Service Death	Ordinary Death	Years of Service	Other Terminations
18	0.00000	0.00000	0.00150	0.00000	0.00010	0.00014	0	0.10000
19	0.00000	0.00000	0.00150	0.00000	0.00010	0.00015	1	0.08000
20	0.00000	0.00000	0.00150	0.00000	0.00010	0.00016	2	0.06000
21	0.00000	0.00000	0.00150	0.00000	0.00010	0.00017	3	0.04500
22	0.00000	0.00000	0.00150	0.00000	0.00010	0.00017	4	0.03500
23	0.00000	0.00000	0.00150	0.00000	0.00010	0.00018	5	0.03000
24	0.00000	0.00000	0.00150	0.00000	0.00010	0.00019	6	0.02600
25	0.00000	0.00000	0.00150	0.00000	0.00010	0.00020	7	0.02300
26	0.00000	0.00000	0.00150	0.00000	0.00010	0.00021	8	0.02100
27	0.00000	0.00000	0.00150	0.00000	0.00010	0.00022	9	0.01900
28	0.00000	0.00000	0.00150	0.00000	0.00010	0.00024	10	0.01700
29	0.00000	0.00000	0.00150	0.00000	0.00010	0.00025	11	0.01500
30	0.00000	0.00000	0.00170	0.00000	0.00010	0.00027	12	0.01350
31	0.00000	0.00000	0.00190	0.00000	0.00010	0.00028	13	0.01200
32	0.00000	0.00000	0.00210	0.00000	0.00010	0.00030	14	0.01100
33	0.00000	0.00000	0.00230	0.00000	0.00010	0.00032	15	0.01000
34	0.00000	0.00000	0.00250	0.00000	0.00010	0.00034	16	0.00900
35	0.00000	0.00000	0.00270	0.00000	0.00010	0.00036	17	0.00800
36	0.00000	0.00000	0.00290	0.00000	0.00010	0.00038	18	0.00700
37	0.00000	0.00000	0.00310	0.00000	0.00010	0.00041	19	0.00600
38	0.00000	0.00000	0.00330	0.00000	0.00010	0.00043	20 & Above ⁽³⁾	0.00500
30	0.00000	0.00000	0.000000	0.00000	0.00010	0.00046	20 0 / 100/0	0.00000
40	0.00000	0.00000	0.00370	0.00000	0.00010	0.00049		
40	0.00000	0.00000	0.00070	0.00000	0.00010	0.00040		
42	0.00000	0.00000	0.000000	0.00000	0.00010	0.00056		
42	0.00000	0.00000	0.00430	0.00000	0.00010	0.00000		
40	0.00000	0.00000	0.00450	0.00000	0.00010	0.00063		
45	0.05000	0.00000	0.00400	0.00000	0.00010	0.00067		
46	0.05000	0.00000	0.00490	0.00000	0.00010	0.00071		
47	0.05000	0.00000	0.00520	0.00000	0.00010	0.00076		
48	0.05000	0.00000	0.00020	0.00000	0.00010	0.00080		
40	0.11000	0.00000	0.00580	0.00000	0.00010	0.00085		
50	0.22500	0.18000	0.00750	0.00000	0.00010	0.00091		
51	0.16000	0.12800	0.00700	0.00000	0.00010	0.00097		
52	0.16000	0 12800	0.01090	0.00000	0.00010	0.00103		
53	0.22000	0 17600	0.01260	0.00000	0.00010	0.00109		
54	0.22000	0 17600	0.01230	0.00000	0.00010	0.00116		
55	0.22000	0.20000	0.01400	0.00000	0.00010	0.00110		
56	0.25000	0 20000	0.01770	0.00000	0.00010	0.00131		
57	0.25000	0.25000	0.01940	0.00000	0.00010	0.00140		
58	0.25000	0.25000	0.02110	0.00000	0.00010	0.00148		
59	0.25000	0.25000	0.02110	0.00000	0.00010	0.00158		
60	0 40000	0 40000	0.02080	0.00000	0.00010	0.00168		
61	0.40000	0.40000	0.01880	0.00000	0.00010	0.00178		
62	0 40000	0 40000	0.01680	0.00000	0.00010	0.00190		
63	0.40000	0 40000	0.01480	0.00000	0.00010	0.00202		
64	0 40000	0 40000	0.01280	0.00000	0.00010	0.00215		
65	1.00000	1.00000	N/A	N/A	N/A	N/A		

1. 100% probability of retirement is assumed as follows:

- with 33 or more years of service for Safety and Probation Plans 1, 2, and 4.

- at ages 55 and above with 33 or more years of service for Safety and Probation Plan 5.

- at ages 55 and above with 38 or more years of service for Safety and Probation Plan 6.

- at ages 57 and above with 38 or more years of service for Safety and Probation Plan 7.

2. Service retirement rates vary by years of service (40% of these rates are applicable at less than 15 years of service; 90% at 15 to 19 years of service; 120% at 20 to 24 years of service; 170% at 25 or more years of service).

3. 0.00% probability of termination with 20 years of service and above for all Safety/Probation plans except Plan 7.

Appendix B Summary of Benefit Provisions

All actuarial calculations are based on our understanding of the statutes governing the SamCERA as contained in the County Employees Retirement Law (CERL) of 1937, with provisions adopted by the SamCERA Board, effective through June 30, 2022. The benefit and contribution provisions of this law are summarized briefly below, along with corresponding references to the Code Section. This summary does not attempt to cover all the detailed provisions of the law.

MEMBERSHIP IN RETIREMENT PLANS

The County has established 12 defined benefit plans based on a member's date of entry into
SamCERA. Plans 1, 2, 4, 5, 6, and 7 are open to all members depending on their date of entry.Government
Code SectionOnly General members are eligible for Plan 3.Code Section

Employees of the SMCM&VCD are eligible for participation in all General retirement plans, except for Plan 3.

- Plan 1: Employees hired on or before July 5, 1980.
- Plan 2: Employees hired after July 5, 1980 but on or before July 12, 1997.
- Plan 3:
 General members hired on or before December 22, 2012 may have elected to participate in Plan 3. After five years of service, Plan 3 members can elect membership under the open eligible contributory plan. Members currently working in a contributory plan with Plan 3 service may purchase an upgrade of their Plan 3 service.
 (31496)
- Plan 4: Employees hired after July 12, 1997 and before August 7, 2011 (General members, except Plan 5 transfers; see below); before July 10, 2011 (Probation members); and before January 8, 2012 (Safety members).
- Plan 5: General members hired on or after August 7, 2011, and Deputy Sheriffs hired on or after January 8, 2012. Probation members hired on or after July 10, 2011 and Safety members (except Deputy Sheriffs) may elect this Plan. Members must be first hired before January 1, 2013 to be eligible to elect this Plan.

After 10 years of service, General Plan 5 members can elect to transfer to Plan 4 and must pay the total actuarial equivalent cost of the increase in past service benefits at the date of transfer.

- **Plan 6:** Probation members hired on or after July 10, 2011 and Safety members (except Deputy Sheriffs) may elect this Plan. Members must be first hired before January 1, 2013 to be eligible to elect this Plan.
- **Plan 7:** Employees first hired on or after January 1, 2013.

MEMBER CONTRIBUTIONS

Basic:		
Plans 1, 2, 4, 5, and 6:	Contributions are based on the entry age and class of each member and are required of all members. See section 5 for details on this calculation. Current member rates are shown in Appendix D.	
	Basic contributions cease when general members are credited with 30 years of service in a contributory plan provided they were members of SamCERA or a reciprocal system on March 7, 1973, and continuously thereafter. All Safety members are eligible for the 30-year cessation of contributions.	(31625.2, 31664.1)
Plan 7:	Members contribute 50% of the aggregate Normal Cost rate for their Plan.	
Plan 3:	No member contributions are required under Plan 3.	
<u>Cost-of-Living:</u> Plans 1, 2, and 4:	All members of Plans 1, 2 and 4 contribute 50% of the cost of COLA benefits in addition to other current member rates and cost sharing, except as described in the following paragraph.	
	Members of SMCM&VCD do not contribute towards the COLA benefit.	
Plans 5 and 6:	All members of Plans 5 and 6 contribute 50% of the cost of the COLA.	
Plan 7:	Members contribute 50% of the aggregate Normal Cost rate for their Plan.	
<u>Cost Sharing:</u> General Members:	All members of Plans 1, 2, and 4 (except SMCM&VCD) contribute an additional 3.0% for cost sharing.	(31678.2)
	All other General members do not participate in cost sharing.	

, 31700)

MEMBER CONTR	RIBUTIONS (Continued)		
Safety Members:	Deputy Sheriffs in Plans 1, 2, 4, and 5 contribusharing rates based on age and service:	ite the following additional cost	
	If age 45 or older	4.5%	
	If age is less than 45		
	 Service is less than 5 years: Service between 5 and 15 years: Service is more than 15 years: 	3.0% 3.5% 4.5%	
	Safety members (except Deputy Sheriffs) in Pl additional 5.0% cost sharing.	ans 1, 2, and 4 contribute an	
	Safety members (except Deputy Sheriffs) in Pl 4.0% cost sharing.	an 5 contribute an additional	
	Safety members in Plan 6 and 7 do not particip	pate in cost sharing.	
Probation Members:	Members of Plans 1, 2, 4, and 5 contribute an sharing.	additional 3.5% for cost	
	Members of Plans 6 and 7 do not participate ir	n cost sharing.	
<u>Interest</u> Crediting:	Interest is credited to contributions semiannua December 31 at an interest rate set by the Boa that have been on deposit for at least six mont	lly on June 30 and ard of Retirement on amounts hs.	(31591
<u>Employer</u> <u>Pick-Up:</u>	Effective with the first pay period in July 2016, employer pick-up contributions.	no employer provides for	

EMPLOYER CONTRIBUTIONS

The employer (County, Courts, or District) contributes to the retirement fund a percent of the total compensation provided for all members based on an actuarial valuation and the	(31453, 31453.5,
recommendation of the actuary.	31453.6, 31454 31581)

SERVICE RETIREMENT ALLOWANCE

Eligibility:		
General Members:	All members of Plans 1, 2, 4, and 5 are eligible to retire after meeting one of the following age and service requirements:	(31672)
	 Age 50 with 10 years of service*; Any age with 30 years of service; or Age 70 regardless of service. 	
	Plan 3 members are eligible to retire at age 65 with 10 years of service. A reduced benefit is also payable at age 55 with 10 years of service.	(31496)
	Plan 7 members are eligible to retire at age 52 with 5 years of service.	
	* For part-time employees, age 50 is replaced with age 55.	(31672.1)
Safety and Probation Members:	 Members of all plans except Plan 7 are eligible to retire after meeting one of the following age and service requirements: Age 50 with 10 years of service; Any age with 20 years of service. 	(31663.25)
	Plan 7 members are eligible to retire at age 50 with 5 years of service.	
Final Average Compensation: Plans 1 and 2:	Monthly average of a member's highest 12 consecutive months of compensation.	(31462.1)
All other Plans:	Monthly average of a member's highest compensation during any three years. Years do not have to be consecutive, except for Plan 7.	[31462, 31496.3(d)]
Compensation Limit: All Plans, except Plan 7:	The amount of compensation that is taken into account in computing benefits payable to any person who first becomes a member on or after July 1, 1996, shall not exceed the dollar limitations in Section 401(a)(17) of Title 26 of the US Code.	(31671)

SERVICE RETIRE	MENT ALLOWANCE (Continued)	
Plan 7:	 The amount of compensation taken into account shall not exceed the following applicable percentage of the Social Security Taxable Wage Base: 100% for a member covered by Social Security (County and Courts General members); 120% for a member not covered by Social Security (all other members). 	
	The amount of compensation taken into account shall be adjusted based on changes in the Consumer Price Index for All Urban Consumers. Adjustments shall be effective annually on January 1.	
<u>Monthly</u>		
Allowance: Plans 1, 2, 4, and 5:	General members: 1/60 x Final Average Compensation x General age factor x years of service.	(31676.14) – Plans 1, 2 & 4
		(31676.1) – Plan 5
	Safety & Probation members:	(31664.1) – Plans 1, 2 & 4
		(31664.2) – Plan 5
Plan 6:	Safety & Probation members: 2% x Final Average Compensation x Safety age factor x years of service.	(31664)
Plan 7:	General members: 2% x Final Average Compensation x General age factor x years of service.	7522.20(a)
	Safety and Probation members: 2% x Final Average Compensation x Safety age factor x years of service.	7522.25(d)
Plan 3:	 General members: (a)+(b)-(c) where: (a) 2% x Final Average Compensation x (Years of Service, up to 35 years), plus (b) 1% x Final Average Compensation x Years of Service in everage of 25 	(31496)
	(b) 1% X Final Average Compensation X Years of Service in excess of 35 (up to 10 years)	
	 (c) Estimated Primary Insurance Amount (PIA) x Years of Covered Service (up to 35 years) divided by 35. 	
	The PIA is calculated based on certain assumptions specified by statute, and an assumed Social Security retirement age of 65.	
	If retirement occurs prior to age 65, benefit amount is adjusted by an actuarial equivalent factor (see Sample Plan Age Factors).	

SERVICE RETIREMENT ALLOWANCE (Continued)

Percentage of Final Average Compensation at Sample Ages:

Plan	Age 50	Age 55	Age 60	Age 65	
County General 1,2 & 4	1.475%	1.948%	2.440%	2.611%	(31676.14)
SMCM&VCD*	1.475%	1.948%	2.440%	2.611%	(31676.14)
General Plan 3**	N/A	0.780%	1.220%	2.000%	(31496)
General Plan 5	1.182%	1.492%	1.917%	2.432%	(31676.1)
General Plan 7	N/A	1.300%	1.800%	2.300%	(7522.20(a))
Safety/Probation 1,2, & 4	3.000%	3.000%	3.000%	3.000%	(31664.1)
Safety/Probation Plan 5	2.290%	3.000%	3.000%	3.000%	(31664.2)
Safety/Probation Plan 6	2.000%	2.620%	2.620%	2.620%	(31664)
Safety/Probation Plan 7	2.000%	2.500%	2.700%	2.700%	(7522.25(d))

* As of the June 30, 2010 actuarial valuation, SMCM&VCD has adopted the same benefit structure as County General.

** Prior to reduction for PIA benefit. Actual percentage will be less.

service exceeds 35 years.

<u>Maximum</u> Allowance:	Allowance may not exceed 100% of Final Average Compensation.	
All Plans Except 3:		
Plan 3:	The sum of the normal retirement allowance and the estimated PIA cannot exceed 70% of Final Average Compensation for a member with 35 or less years of service, and cannot exceed 80% of Final Average Compensation if	(31496)

SERVICE RETIREMENT ALLOWANCE (Continued)

Unmodified Retirement Allowance (Normal Form):

All Plans Except 3:	Life Annuity payable to retired member with 60% continuance to an eligible survivor (or eligible children).	(31760.1)
Plan 3:	Life Annuity payable to retired member with 50% continuance to an eligible survivor (or eligible children).	(31497.71)
Eligible survivor ind	cludes certain domestic partners.	(31780.2)
Optional Retireme A member may ele allowance applied provide an optiona	ent Allowance: ect to have the actuarial equivalent of the service or disability retirement to a lesser retirement allowance during the retired member's life in order to I survivor allowance.	
Option 1:	Member's allowance is reduced to pay a cash refund of any unpaid annuity payments (up to the amount of the member's contributions at retirement) to the member's estate or to a beneficiary having an insurable interest in the life of the member.	(31761)
Option 2:	100% of member's reduced allowance is payable to an eligible survivor or beneficiary having an insurable interest in the life of the member.	(31762)
Option 3:	50% of member's reduced allowance is payable to an eligible survivor or beneficiary having an insurable interest in the life of the member.	(31763)
Option 4:	Other % of member's reduced allowance is payable to an eligible survivor or beneficiary(ies) having an insurable interest in the life of the member.	(31764)
For Options 2, 3 or names another ber	⁻ 4, the continuance will not be paid if the member revokes their election and neficiary after retirement.	(31782)
All Allowances:	All allowances are made on a pro rata basis (based on the number of days in that month) if not in effect for the entire month of retirement. For deaths that	(31600)

occur mid-month, the full month's payment is made.

SERVICE-CONNECTED DISABILITY RETIREMENT ALLOWANCE

Eligibility:

All Plans Except 3:	Any age or years of service; disability must result from occupational injury or disease, and member must be permanently incapacitated for the performance of duty.	(31720, 31720.5, 31720.6, 31720.7, 31720.9)
Plan 3:	Not available under Plan 3.	(31487)
<u>Monthly</u> Allowance:	Greater of (1) 50% of Final Average Compensation or (2) the service retirement allowance, if eligible to retire.	(31727.4)
<u>Normal Form</u> <u>Of Payment:</u>	Life Annuity with 100% continuance to a surviving spouse (or eligible children).	(31760, 31786)

NONSERVICE-CONNECTED DISABILITY RETIREMENT ALLOWANCE

<u>Eligibility:</u> All Plans Except 3:	Any age with five years of service and permanently incapacitated for the performance of duty.	(31720, 31836)
Plan 3:	Not available under Plan 3.	(31487)
Monthly Allowance:	The monthly allowance is equal to a service retirement allowance if the member is eligible to retire, otherwise allowance equals (a) or (b) where:	(31726, 31726.5)
General Members:	(a) 90% of 1/60th of Final Average Compensation x years of service, if member must rely on service in another retirement system in order to be eligible to retire, or allowance exceeds 1/3 of Final Average Compensation.	(31727(a))
	(b) 90% of 1/60th of Final Average Compensation x years of service projected to age 65, not to exceed 1/3 of Final Average Compensation.	(31727(b))
Safety Members:	1/60 is replaced by 1/50 and age 65 is replaced by age 55 in (a) and (b) above.	(31727.2)
<u>Normal Form Of</u> <u>Payment:</u>	Life Annuity with 60% continuance to a surviving spouse (or eligible children).	(31760.1)

(31781.3)

SERVICE-CONNECTED DEATH BENEFITS

<u>Eligibility</u> All Plans Except 3:	Active members who die in service as a result of injury or disease arising out of and in the course of employment.	(31787)
Plan 3:	Not available under Plan 3.	(31487)
Monthly Allowance:	An annual death allowance is payable monthly to an eligible survivor (or eligible children) equal to 50% of the member's Final Average Compensation.	(31787)

Optional Combined Benefit:

In lieu of the monthly allowance above, an eligible survivor may elect:

- (a) A lump sum equal to 1/12 of the compensation earned in the preceding 12 months x years of service (benefit not to exceed 50% of the 12 months' compensation), plus
- (b) A monthly payment equal to 50% of the member's Final Average Compensation, reduced by a monthly amount, which is the actuarial equivalent of (a) above based on the age of eligible survivor.

Death Benefit (Lump Sum):(31781)The member's normal contributions and interest, plus 1/12 of the compensation earned in the
preceding 12 months x years of service (benefit not to exceed 50% of the 12 months'
compensation).

 Additional Allowance for Children:
 (31787.5)

 25% of death allowance (whether or not the monthly allowance or combined benefit is chosen)
 for one child, 40% for two children, and 50% for three or more children.

Additional Amount for Spouse of Safety Member:(31787.6)An eligible survivor of a Safety member is also entitled to receive a lump sum death benefitequal to 12 x monthly rate of compensation at the time of member's death in addition to allother benefits.

Note: For valuation purposes, an unmarried member is assumed to take the lump sum benefit. A married member is assumed to take the monthly allowance or the lump sum, whichever is more valuable.

(31781)

(31781.1)

(31781.2)31765.2)

NONSERVICE-CONNECTED DEATH BENEFITS

|--|

All Plans Except 3:	Active members who die while in service or while physically or mentally incapacitated for the performance of duty.	(31780)
Plan 3:	Not available under Plan 3.	

Death Benefit (Lump Sum):

The member's normal contributions and interest, plus 1/12 of the Compensation earned in preceding 12 months x the number of completed years of service (benefit not to exceed 50% of the 12 months' compensation).

Optional Death Benefit:

In lieu of the lump sum death benefit, several optional death benefits are available to provide flexibility to survivors, as follows.

First Optional Death Benefit:

If a member who would have been entitled to a nonservice-connected disability retirement allowance dies prior to retirement as a result of such disability, the eligible survivor (or eligible children) may elect to receive an optional death allowance equal to 60% of the monthly retirement allowance to which the member would have been entitled as of the date of death.

Second Optional Death Benefit:

If a member dies prior to reaching the minimum retirement age but has 10 or more years of service, an eligible survivor (or eligible children) may elect to leave the amount of the death benefit on deposit until the earliest date the member could have retired and at that time receive the allowance provided for in 31765.2 (a 60% continuance).

Third Optional Death Benefit:

An eligible survivor of a member who dies after five years of service may elect a combined benefit equal to:

- (a) A lump sum equal to 1/12 of the compensation earnable in the preceding 12 months x (31781.3)the number of completed years of service (benefit not to exceed 50% of the 12 months' compensation), plus
- (b) A monthly payment equal to 60% of the monthly retirement allowance to which the (31781.1)member would have been entitled if the member retired or had been retired for a nonservice-connected disability as of the date of death, reduced by a monthly amount which is the actuarial equivalent of (a) above based on the age of the eligible survivor.
NONSERVICE-CONNECTED DEATH BENEFITS (Continued)

Fourth Optional Death Benefit:

If a member dies while eligible for a service retirement and the eligible survivor is designated (31765.1) as beneficiary, the spouse (or eligible children) may elect to receive 60% of the monthly retirement allowance to which the member would have been entitled as of the date of death.

Note for Third and Fourth Optional Death Benefits: In order to leave the eligible survivor the greatest benefit, the member is assumed to have retired for nonservice-connected disability, elected the Option 2 retirement allowance, and then died the next day.

Fifth Optional Death Benefit:

If a member dies while eligible for a service retirement and the eligible survivor is designated (31765) as beneficiary and survives the member by not less than 30 days the spouse (or eligible children) may elect to receive the same retirement allowance as the spouse would have received had the member retired on the date of death and selected Option 3.

Note: For valuation purposes, an unmarried member is assumed to take the lump sum benefit. A married member is assumed to receive an annuity or a lump sum, whichever is more valuable. The annuity is equal to the Option 2-100% Continuance calculation for the larger of either (1) a non-service connected disability benefit or (2) the member's earned service retirement benefit (if eligible).

DEFERRED RETIREMENT BENEFITS

<u>Eligibility:</u> All Plans, except Plans 3 and 7:	Age 50 with 10 years of membership. Member contributions must be left on deposit (except Plan 3) and the member must have terminated with five years of service or entered a reciprocal agency. Members are eligible for service retirement when they would have reached eligibility if they would have remained in an active position	(31700)
Plan 3:	Age 55 with 10 years of service	(31496)
		(01400)
Plan 7:	General members:	
	Age 52 with 5 years of service.	
	Safety and Probation members:	
	Age 50 with 5 years of service.	
All Plans:	Member contributions must be left on deposit and the member must have terminated with 5 years of service or entered a reciprocal agency. Members (except for Plan 7) are eligible for service retirement when they would have reached eligibility if they would have remained in an active position.	
Monthly Allowance:		
All Plans Except 3:	Same as service retirement allowance; payable any time after the member would have been eligible for service retirement.	(31703, 31704 31705)
	If a terminated member dies before the effective date of the deferred retirement allowance, the member's accumulated contributions are paid to the estate or to the named beneficiary.	(31702)
Plan 3:	Same as service retirement allowance at normal retirement age 65 or in an actuarially equivalent reduced amount at early retirement, after age 55.	(31496)
	No benefit is paid for death while inactive.	

COST-OF-LIVING INCREASES

Cost-of-living increases (or decreases) are applied to all retirement allowances (service and disability), optional death allowances, and annual death allowances effective April 1, based 3 on changes in the Consumer Price Index (CPI) from the previous January 1 to the current 3 January 1, to the nearest ½ of 1%.							
Plan 1:	General & Safety Members (and their beneficiaries) are limited to a maximum 5% cost-of-living increase.	(31870.2)					
	Probation Members (and their beneficiaries) are limited to a maximum 3% cost-of-living increase.	(31870.1)					
Plan 2:	All members Members (and their beneficiaries) are limited to a maximum 3% cost-of-living increase.	(31870.1)					
Plan 3:	Plan 3 does not have a COLA.	(31487)					
Other Plans:	All members Members (and their beneficiaries) are limited to a maximum 2% cost-of-living increase.	(31870)					
COLA Bank							
Plan 1:	When the CPI exceeds the applicable percentage (3% or 5%), the difference between the actual CPI and the maximum cost-of-living increase given in any year is credited to the COLA Accumulation (COLA Bank). It may be used in future years to provide cost-of-living increases when the CPI falls below the applicable percentage.	(31870.1, 31870.2)					
Other Plans:	All other Plans do not have a COLA bank.	(31874.4)					

Appendix C Valuation Data and Schedules

Data on SamCERA membership as of June 30, 2022 was supplied to us by SamCERA staff. On the following table, Exhibit C-1, we present a summary of SamCERA membership at June 30, 2022 for active members. Similar information is shown in Exhibit C-2 for inactive members and Exhibits C-3a and C-3b for retired members.

Note that salary amounts shown are annualized amounts based on the biweekly pay for the period prior to the valuation date. If the annualized amount was less than the total prior year earnings, total prior year earnings were used.

Additional statistical data on both active and retired members is shown in the following tables.

Exhibit C-4: Age, Service, Compensation Distribution of Active Members

Exhibit C-5: Age, Retirement Year, Benefit Amount and Plan Distribution of Retired Members

Exhibits C-4 and C-5 are shown for all plans combined as well as for classification separately.

	Total			Average	A N	verage Ionthly	Average Credited
	Number	r Annual Salary		Age	9	Salary	Service
General Mem	bers						
Plan 1	2	\$	445,795	71.5	\$	18,575	45.2
Plan 2	275		38,001,804	57.1		11,516	28.6
Plan 3	40		4,247,920	54.8		8,850	17.6
Plan 4	1,501		192,375,895	51.0		10,680	17.3
Plan 5	260		36,374,743	47.5		11,659	7.2
Plan 7	2,525		251,229,035	40.2		8,291	4.0
Total	4,603	\$	522,675,192	45.3	\$	9,463	10.1
Safety Membe	ers						
Plan 1	-	\$	-	-	\$	-	-
Plan 2	11		2,135,339	53.9		16,177	27.2
Plan 4	162		27,520,377	48.0		14,157	17.1
Plan 5	64		10,081,421	43.0		13,127	7.6
Plan 7	239		30,133,424	36.1		10,507	4.8
Total	476	\$	69,870,562	41.5	\$	12,232	9.8
Probation Me	mbers						
Plan 1	-	\$	-	-	\$	-	-
Plan 2	2		268,867	52.5		11,203	28.3
Plan 4	114		14,948,189	46.6		10,927	18.5
Plan 5	8		981,041	38.8		10,219	9.7
Plan 6	-		-	-		-	-
Plan /	46	¢	4,958,807	35.1	¢	8,983	5.8
IOTAI	170	φ	21,150,904	43.2	φ	10,371	14.8
Grand Total	5,249	\$	613,702,657	44.9	\$	9,743	10.3

Exhibit C-1 SamCERA Membership – Active Members as of June 30, 2022

_	Deferred Vested Number	Deferred Vested Average Age	Contingent Vested Number	Contingent Vested Average Age
General Members				
Plan 1	6	66.5	-	-
Plan 2	164	58.1	37	57.5
Plan 3	69	59.7	-	-
Plan 4	627	48.3	172	49.9
Plan 5	52	43.9	72	45.1
Plan 7	135	40.1	719	39.7
Total	1,053	49.4	1,000	42.5
Safety Members				
Plan 1	-	-	-	-
Plan 2	3	54.0	4	62.3
Plan 4	23	44.3	13	50.3
Plan 5	4	43.8	8	42.5
Plan 7	10	35.6	41	36.0
Total	40	42.8	66	41.2
Probation Members				
Plan 1	-	-	-	-
Plan 2	7	54.6	5	52.6
Plan 4	32	45.5	7	50.7
Plan 5	-	-	1	42.0
Plan 6	-	-	-	-
Plan 7	1	37	12	32.9
Total	40	46.9	25	42.2
Grand Total	1,133	49.1	1,091	42.4

Exhibit C-2 SamCERA Membership – Inactive Members as of June 30, 2022

_	Number	Average Age	Monthly Allowance	A Montl	verage nly Benefit
General Memb	ers				
Plan 1	1,173	81.0	\$ 5,150,907	\$	4,111
Plan 2	2,250	70.9	8,981,776		3,866
Plan 3	126	73.2	217,154		587
Plan 4	1,167	66.9	3,004,971		2,551
Plan 5	30	61.5	52,562		1,643
Plan 7	38	64.0	41,335		1,088
Total	4,784	72.4	\$ 17,448,706	\$	3,647
Safety Membe	rs				
Plan 1	253	77.3	\$ 1,927,830	\$	7,590
Plan 2	267	63.4	2,311,782		8,562
Plan 4	164	58.5	794,477		4,786
Plan 5	6	58.0	13,740		2,290
Plan 7	2	63.0	3,298		1,649
Total	692	67.3	\$ 5,051,127	\$	7,299
Probation Men	nbers				
Plan 1	89	79.2	\$ 410,081	\$	4,409
Plan 2	122	62.5	753,532		5,500
Plan 4	91	57.4	455,936		4,652
Plan 7	1	58.0	2,126		2,126
Total	303	65.9	\$ 1,621,675	\$	5,352
Grand Total	5,779	71.4	\$ 24,121,507	\$	4,174

Exhibit C-3a SamCERA Membership – Retired Members as of June 30, 2022

Plan	Retirement Type	Number		Monthly Benefit		Average Monthly Benefit
General Plans:						
	Healthy	3,885	\$	15,092,857	\$	3,552
	Disabled	357		1,174,244		3,217
	Beneficiaries	542		1,181,605		2,037
	Total	4,784	\$	17,448,706	\$	3,647
Safety Plans:						
-	Healthy	461	\$	3,825,617	\$	8,245
	Disabled	118		759,197		6,327
	Beneficiaries	113		466,312		4,090
	Total	692	\$	5,051,127	\$	7,299
Probation Plans:						
	Healthy	262	\$	1,462,455	\$	5,186
	Disabled	18		96,061		4,366
	Beneficiaries	23		63,159		2,526
	Total	303	\$	1,621,675	\$	5,352
Grand Totals						
	Healthy	4,608	\$	20,380,929	\$	4,423
	Disabled	493		2,029,502		4,117
	Beneficiaries	678	_	1,711,076	_	2,524
	Total	5,779	\$	24,121,507	\$	4,174

Exhibit C-3b SamCERA Membership – Retired Members as of June 30, 2022 Subtotaled by Class and Retirement Type

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Exhibit C-4

Age & Service Distribution of Active Members by Count and Average Compensation as of June 30, 2022 – All Members

Count										
	_			Ye	ars of Servio	ce				Total
Age	0-1	1-4	5-9	10-14	15-19	20-24	25-29	30-34	35&Over	Count
Under 25	32	13	0	0	0	0	0	0	0	45
25-29	102	218	33	0	0	0	0	0	0	353
30-34	119	334	212	10	0	0	0	0	0	675
35-39	84	257	316	77	39	2	0	0	0	775
40-44	59	175	219	127	136	34	0	0	0	750
45-49	35	126	159	108	202	156	16	1	0	803
50-54	28	87	123	91	170	156	63	12	0	730
55-59	18	79	85	62	95	120	51	40	10	560
60-64	12	46	65	55	61	70	29	16	8	362
65 & Over	6	23	45	33	38	20	11	9	11	196
Total Count	495	1,358	1,257	563	741	558	170	78	29	5,249

Compensation]									
	-			Y	ears of Serv	ice				Average
Age	0-1	1-4	5-9	10-14	15-19	20-24	25-29	30-34	35&Over	Comp.
Under 25	\$62,970	\$82,105	-	-	-	-	-	-	-	\$68,498
25-29	80,228	95,149	99,877	-	-	-	-	-	-	91,279
30-34	85,949	99,019	115,106	105,839	-	-	-	-	-	101,868
35-39	92,625	106,736	116,004	126,984	114,799	77,897	-	-	-	111,328
40-44	92,878	108,308	116,794	132,373	128,902	123,208	-	-	-	118,057
45-49	94,277	106,165	122,177	137,046	134,752	135,618	117,164	109,195	-	126,107
50-54	103,358	104,451	121,720	145,901	135,458	140,861	137,066	140,380	-	130,893
55-59	80,433	106,980	116,257	130,138	118,766	132,882	131,861	140,334	141,716	122,917
60-64	90,653	106,906	104,831	129,238	128,775	126,500	139,451	151,165	95,102	121,164
65 & Over	100,631	126,459	119,399	134,458	121,201	135,521	145,025	161,892	146,730	129,106
Avg. Annual Compensation	\$86,908	\$103,099	\$116,468	\$133,817	\$129,554	\$134,385	\$134,553	\$144,651	\$130,759	\$116,918

Exhibit C-4a

Age & Service Distribution of Active Members by Count and Average Compensation as of June 30, 2022 – General Members

Count										
	_			Ye	ars of Servio	ce				Total
Age	0-1	1-4	5-9	10-14	15-19	20-24	25-29	30-34	35&Over	Count
Under 25	29	11	0	0	0	0	0	0	0	40
25-29	100	169	25	0	ů 0	0	0 0	0	0	294
30-34	117	292	143	8	0	0	0	0	0	560
35-39	83	238	269	55	32	2	0	0	0	679
40-44	57	162	198	109	103	27	0	0	0	656
45-49	35	120	146	92	157	112	14	1	0	677
50-54	25	81	113	78	148	132	57	12	0	646
55-59	18	69	78	54	87	110	48	39	10	513
60-64	12	45	61	50	59	69	28	16	8	348
65 & Over	6	23	42	31	38	19	11	9	11	190
Total Count	482	1,210	1,075	477	624	471	158	77	29	4,603

Compensation										
	-			Y	ears of Serv	ice				Average
Age	0-1	1-4	5-9	10-14	15-19	20-24	25-29	30-34	35&Over	Comp.
Under 25	\$59,870	\$76,200	-	-	-	-	-	-	-	\$64,361
25-29	79,954	89,303	90,729	-	-	-	-	-	-	86,244
30-34	85,392	96,569	108,867	101,460	-	-	-	-	-	97,444
35-39	92,596	105,885	112,402	116,940	108,548	77,897	-	-	-	107,781
40-44	91,912	107,247	113,482	132,375	121,796	110,380	-	-	-	114,385
45-49	94,277	105,069	120,397	133,892	131,038	130,205	110,739	109,195	-	122,038
50-54	98,053	102,299	117,295	141,804	131,142	135,541	131,533	140,380	-	126,215
55-59	80,433	103,417	113,152	129,140	117,692	129,626	129,207	136,101	141,716	120,484
60-64	90,653	106,434	104,815	123,888	124,487	125,895	139,460	151,165	95,102	119,486
65 & Over	100,631	126,459	117,105	132,130	121,201	137,564	145,025	161,892	146,730	128,487
Avg. Annual Compensation	\$86,177	\$101,183	\$113,034	\$130,639	\$125,305	\$129,872	\$131,328	\$142,563	\$130,759	\$113,551

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Exhibit C-4b

Age & Service Distribution of Active Members by Count and Average Compensation as of June 30, 2022 – Safety Members

Count										
	-			Ye	ars of Servio	ce				Total
Age	0-1	1-4	5-9	10-14	15-19	20-24	25-29	30-34	35&Over	Count
	•									_
Under 25	3	2	0	0	0	0	0	0	0	5
25-29	2	44	6	0	0	0	0	0	0	52
30-34	2	35	53	1	0	0	0	0	0	91
35-39	1	19	34	18	4	0	0	0	0	76
40-44	2	12	19	12	13	6	0	0	0	64
45-49	0	5	11	13	22	14	2	0	0	67
50-54	3	6	8	13	14	16	4	0	0	64
55-59	0	9	7	7	4	8	2	1	0	38
60-64	0	1	4	5	2	1	1	0	0	14
65 & Over	0	0	3	2	0	0	0	0	0	5
Total Count	13	133	145	71	59	45	9	1	0	476

Compensation	1									
				Y	ears of Serv	ice				Average
Age	0-1	1-4	5-9	10-14	15-19	20-24	25-29	30-34	35&Over	Comp.
Under 25	\$92,938	\$114,583	-	-	-	-	-	-	-	\$101,596
25-29	93,957	116,911	135,654	-	-	-	-	-	-	118,191
30-34	118,544	118,716	132,961	120,895	-	-	-	-	-	127,032
35-39	95,010	117,393	145,311	161,061	157,158	-	-	-	-	142,023
40-44	120,413	122,000	153,453	141,413	184,109	172,916	-	-	-	152,317
45-49	-	136,478	145,864	162,138	169,538	179,728	162,133	-	-	163,656
50-54	147,565	133,499	180,370	170,481	179,825	183,382	213,848	-	-	175,155
55-59	-	136,611	150,852	140,150	144,457	166,054	192,804	305,441	-	154,311
60-64	-	128,148	105,085	182,743	255,281	168,250	139,199	-	-	162,873
65 & Over	-	-	151,522	170,542	-	-	-	-	-	159,130
Avg. Annual Compensation	\$114,027	\$120,781	\$142,727	\$158,829	\$175,556	\$177,433	\$189,385	\$305,441	-	\$146,787

Exhibit C-4c Age & Service Distribution of Active Members by Count and Average Compensation as of June 30, 2022 – Probation Members

Count										
	-			Ye	ars of Servio	ce				Total
Age	0-1	1-4	5-9	10-14	15-19	20-24	25-29	30-34	35&Over	Count
Under 25	0	0	0	0	0	0	0	0	0	0
25-29	0	5	2	0	0	0	0	0	0	7
30-34	0	7	16	1	0	0	0	0	0	24
35-39	0	0	13	4	3	0	0	0	0	20
40-44	0	1	2	6	20	1	0	0	0	30
45-49	0	1	2	3	23	30	0	0	0	59
50-54	0	0	2	0	8	8	2	0	0	20
55-59	0	1	0	1	4	2	1	0	0	9
60-64	0	0	0	0	0	0	0	0	0	0
65 & Over	0	0	0	0	0	1	0	0	0	1
Total Count	0	15	37	15	58	42	3	0	0	170

Compensation										
				Y	ears of Serv	ice				Average
Age	0-1	1-4	5-9	10-14	15-19	20-24	25-29	30-34	35&Over	Comp.
Under 25	-	-	-	-	-	-	-	-	-	-
25-29	-	\$101,219	\$106,900	-	-	-	-	-	-	\$102,842
30-34	-	102,711	111,727	125,817	-	-	-	-	-	109,685
35-39	-	-	113,874	111,744	125,006	-	-	-	-	115,118
40-44	-	115,826	96,439	114,261	129,616	171,328	-	-	-	125,264
45-49	-	86,195	121,859	125,043	126,828	135,242	-	-	-	130,158
50-54	-	-	137,110	-	137,644	143,599	141,181	-	-	140,326
55-59	-	86,195	-	113,900	116,430	179,265	137,373	-	-	129,080
60-64	-	-	-	-	-	-	-	-	-	-
65 & Over	-	-	-	-	-	96,714	-	-	-	96,714
Avg. Annual Compensation	\$0	\$100,886	\$113,314	\$116,493	\$128,470	\$138,872	\$139,912	-	-	\$124,452

Exhibit C-5 Distribution of Retired Members by Age and Retirement Year as of June 30, 2022 – All Plans Combined

	Retirement Year									Av M	Average Monthly	
Age	Pre-1990	1990-94	1995-99	2000-04	2005-09	2010-14	2015-19	2020-24	Count	Benefit		
Under 35	-	-	-	-	-	4	2	1	7	\$	1,541	
35-39	-	-	1	1	1	-	-	-	3		1,402	
40-44	-	-	-	-	-	2	12	3	17		3,650	
45-49	-	-	-	-	5	8	18	18	49		4,049	
50-54	-	-	-	4	9	14	65	117	209		4,875	
55-59	-	-	6	7	13	31	218	151	426		4,598	
60-64	-	-	8	12	40	169	302	235	766		4,711	
65-69	-	3	13	48	151	258	397	161	1,031		4,391	
70-74	3	12	47	127	249	357	248	57	1,100		4,182	
75-79	4	22	109	190	316	201	90	23	955		4,418	
80-84	12	69	125	161	124	65	37	17	610		3,583	
85-89	31	58	88	61	21	21	18	9	307		3,227	
90-94	49	46	47	10	8	15	12	3	190		2,530	
95-99	40	14	13	3	7	3	5	3	88		2,306	
100 & Over	11	4	1	4	-	-	1	-	21		2,459	
Total Count	150	228	458	628	944	1,148	1,425	798	5,779			
Avg Monthly Benefit	\$ 2,446	\$ 2,748	\$ 2,849	\$ 3,872	\$ 4,783	\$ 4,088	\$ 4,327	\$ 5,035		\$	4,174	

Exhibit C-5a Distribution of Retired Members by Age and Retirement Year as of June 30, 2022 – General Plans Combined

	Retirement Year									Av Mo	Average Monthly	
Age	Pre-1990	1990-94	1995-99 2000-04		2005-09	2010-14	2015-19	2020-24	Count	Benefit		
Under 35	-	-	-	-	-	4	2	-	6	\$	1,301	
35-39	-	-	1	1	1	-	-	-	3		1,402	
40-44	-	-	-	-	-	2	7	2	11		3,883	
45-49	-	-	-	-	3	5	7	7	22		2,832	
50-54	-	-	-	1	6	12	26	42	87		2,446	
55-59	-	-	3	3	6	22	126	113	273		3,267	
60-64	-	-	7	8	30	122	249	217	633		4,137	
65-69	-	2	9	41	116	220	370	153	911		3,954	
70-74	2	7	36	98	211	331	231	52	968		3,780	
75-79	-	16	88	125	290	185	81	20	805		4,000	
80-84	6	54	78	138	120	57	30	12	495		3,173	
85-89	27	54	79	56	21	20	16	7	280		3,149	
90-94	45	46	45	10	8	14	11	3	182		2,339	
95-99	40	14	13	3	7	3	5	3	88		2,306	
100 & Over	11	4	-	4	-	-	1	-	20		2,320	
Total Count	131	197	359	488	819	997	1,162	631	4,784			
Avg Monthly Benefit	\$ 2,094	\$ 2,401	\$ 2,268	\$ 3,164	\$ 4,325	\$ 3,599	\$ 3,723	\$ 4,573		\$	3,647	

Exhibit C-5b Distribution of Retired Members by Age and Retirement Year as of June 30, 2022 – Safety Plans Combined

	Retirement Year									A۱ M	Average Monthly	
Age	Pre-1990	1990-94	1995-99	2000-04	2005-09	2010-14	2015-19	2020-24	Count	B	enefit	
Under 35	-	-	-	-	-	-	-	1	1	\$	2,981	
35-39	-	-	-	-	-	-	-	-	-		-	
40-44	-	-	-	-	-	-	4	-	4		3,335	
45-49	-	-	-	-	2	2	6	3	13		4,627	
50-54	-	-	-	3	3	2	18	47	73		6,730	
55-59	-	-	3	3	6	5	62	24	103		7,445	
60-64	-	-	1	4	8	34	35	14	96		7,994	
65-69	-	1	4	4	28	22	23	8	90		8,349	
70-74	1	5	9	28	25	19	16	4	107		7,369	
75-79	4	5	17	47	15	8	8	2	106		7,563	
80-84	6	11	34	11	1	4	5	5	77		6,130	
85-89	4	3	3	1	-	-	1	1	13		5,808	
90-94	4	-	2	-	-	1	1	-	8		6,856	
95-99	-	-	-	-	-	-	-	-	-		-	
100 & Over	-	-	1	-	-	-	-	-	1		5,233	
Total Count	19	25	74	101	88	97	179	109	692			
Avg Monthly Benefit	\$ 4,867	\$ 5,418	\$ 5,328	\$ 7,241	\$ 9,163	\$ 8,220	\$ 7,431	\$ 7,006		\$	7,299	

Exhibit C-5c Distribution of Retired Members by Age and Retirement Year as of June 30, 2022 – Probation Plans Combined

	Retirement Year									Average Monthly
Age	Pre-1990	1990-94	1995-99	2000-04	2005-09	2010-14	2015-19	2020-24	Count	Benefit
Under 35	-	-	-	-	-	-	-	-	-	\$-
35-39	-	-	-	-	-	-	-	-	-	-
40-44	-	-	-	-	-	-	1	1	2	3,002
45-49	-	-	-	-	-	1	5	8	14	5,424
50-54	-	-	-	-	-	-	21	28	49	6,427
55-59	-	-	-	1	1	4	30	14	50	5,998
60-64	-	-	-	-	2	13	18	4	37	6,019
65-69	-	-	-	3	7	16	4	-	30	5,795
70-74	-	-	2	1	13	7	1	1	25	6,120
75-79	-	1	4	18	11	8	1	1	44	4,496
80-84	-	4	13	12	3	4	2	-	38	3,762
85-89	-	1	6	4	-	1	1	1	14	2,391
90-94	-	-	-	-	-	-	-	-	-	-
95-99	-	-	-	-	-	-	-	-	-	-
100 & Over	-	-	-	-	-	-	-	-	-	-
Total Count	-	6	25	39	37	54	84	58	303	
Avg Monthly Benefit	\$-	\$ 3,004	\$ 3,861	\$ 3,999	\$ 4,512	\$ 5,678	\$ 6,058	\$ 6,357		\$ 5,352

Appendix D Member Contribution Rates

This section illustrates the member basic contribution rates and COLA sharing contribution rates by entry age for Plans 1 through 6. For different COLA sharing percentages, the COLA contribution rates may be adjusted ratably, and should be rounded to two decimal places.

Member contribution rates for Plan 7 are not defined by entry age. Plan 7 members contribute 50% of the total Normal Cost rate. For the 2023-2024 fiscal year, Plan 7 member contribution rates are:

- General Plan 7 members: 9.30%
- SMCM&VCD Plan 7 members: 9.45%
- Safety Plan 7 members: 15.81%
- Probation Plan 7 members: 15.78%

Please refer to Appendix B for a detailed description of member contribution rates.

	Basic Member Rates								
	Gei	neral & SMCM8	VCD	General	SMCM&VCD				
Entry Age ⁽¹⁾	Plans 1&2	Plan 4	Plan 5	Plan 7	Plan 7				
16	6.71%	6.49%	5.66%	9.30%	9.45%				
17	6.82%	6.59%	5.75%	9.30%	9.45%				
18	6.92%	6.69%	5.84%	9.30%	9.45%				
19	7.03%	6.80%	5.93%	9.30%	9.45%				
20	7.14%	6.90%	6.03%	9.30%	9.45%				
21	7.25%	7.01%	6.12%	9.30%	9.45%				
22	7.36%	7.12%	6.22%	9.30%	9.45%				
23	7.48%	7.23%	6.31%	9.30%	9.45%				
24	7.59%	7.34%	6.41%	9.30%	9.45%				
25	7.71%	7.45%	6.51%	9.30%	9.45%				
26	7.83%	7.57%	6.61%	9.30%	9.45%				
27	7.95%	7.68%	6.72%	9.30%	9.45%				
28	8.07%	7.80%	6.82%	9.30%	9.45%				
29	8.20%	7.92%	6.92%	9.30%	9.45%				
30	8.33%	8.05%	7.03%	9.30%	9.45%				
31	8.46%	8.17%	7.14%	9.30%	9.45%				
32	8.59%	8.30%	7.25%	9.30%	9.45%				
33	8.72%	8.43%	7.36%	9.30%	9.45%				
34	8.86%	8.56%	7.48%	9.30%	9.45%				
35	9.00%	8.69%	7.59%	9.30%	9.45%				
36	9.14%	8.83%	7.71%	9.30%	9.45%				
37	9.28%	8.97%	7.83%	9.30%	9.45%				
38	9.43%	9.12%	7.95%	9.30%	9.45%				
39	9.59%	9.26%	8.08%	9.30%	9.45%				
40	9.74%	9.41%	8.20%	9.30%	9.45%				
41	9.91%	9.57%	8.33%	9.30%	9.45%				
42	10.07%	9.72%	8.46%	9.30%	9.45%				
43	10.24%	9.86%	8.60%	9.30%	9.45%				
44	10.40%	10.01%	8.74%	9.30%	9.45%				
45	10.56%	10.15%	8.88%	9.30%	9.45%				
46	10.71%	10.28%	9.03%	9.30%	9.45%				
47	10.86%	10.40%	9.17%	9.30%	9.45%				
48	11.00%	10.51%	9.31%	9.30%	9.45%				
49	11.13%	10.60%	9.44%	9.30%	9.45%				
50	11.25%	10.66%	9.58%	9.30%	9.45%				
51	11.34%	10.66%	9.70%	9.30%	9.45%				
52	11.39%	10.66%	9.81%	9.30%	9.45%				
53	11.39%	10.91%	9.92%	9.30%	9.45%				
54	11.39%	11.23%	10.00%	9.30%	9.45%				
55	11.39%	11.23%	10.06%	9.30%	9.45%				
56	11.39%	11.23%	10.06%	9.30%	9.45%				
57	11.39%	11.23%	10.06%	9.30%	9.45%				
58	11.39%	11.23%	10.29%	9.30%	9.45%				
59	11.39%	11.23%	10.60%	9.30%	9.45%				
60	11.39%	11.23%	10.60%	9.30%	9.45%				

Exhibit D-1 General Member Contribution Rates (including SMCM&VCD)

1. For General and SMCM&VCD members entering after age 60, the rate equals the rate at age 60.

	Safety & Probation		Safety	Probation
Entry Age ⁽¹⁾	Plans 1&2	Plans 4&5&6	Plan 7	Plan 7
16	9.52%	9.17%	15.81%	15.78%
17	9.65%	9.29%	15.81%	15.78%
18	9.77%	9.41%	15.81%	15.78%
19	9.90%	9.54%	15.81%	15.78%
20	10.03%	9.66%	15.81%	15.78%
21	10.16%	9.79%	15.81%	15.78%
22	10.29%	9.91%	15.81%	15.78%
23	10.43%	10.04%	15.81%	15.78%
24	10.56%	10.18%	15.81%	15.78%
25	10.70%	10.31%	15.81%	15.78%
26	10.84%	10.44%	15.81%	15.78%
27	10.98%	10.58%	15.81%	15.78%
28	11.13%	10.72%	15.81%	15.78%
29	11.27%	10.86%	15.81%	15.78%
30	11.42%	11.00%	15.81%	15.78%
31	11.57%	11.15%	15.81%	15.78%
32	11.73%	11.30%	15.81%	15.78%
33	11.89%	11.45%	15.81%	15.78%
34	12.05%	11.60%	15.81%	15.78%
35	12.21%	11.76%	15.81%	15.78%
36	12.38%	11.92%	15.81%	15.78%
37	12.56%	12.09%	15.81%	15.78%
38	12.73%	12.25%	15.81%	15.78%
39	12.92%	12.42%	15.81%	15.78%
40	13.10%	12.59%	15.81%	15.78%
41	13.28%	12.75%	15.81%	15.78%
42	13.47%	12.91%	15.81%	15.78%
43	13.65%	13.04%	15.81%	15.78%
44	13.82%	13.15%	15.81%	15.78%
45	13.96%	13.22%	15.81%	15.78%
46	14.07%	13.23%	15.81%	15.78%
47	14.12%	13.23%	15.81%	15.78%
48	14.12%	13.53%	15.81%	15.78%
49	14.12%	13.94%	15.81%	15.78%
50	14.12%	13.94%	15.81%	15.78%

Exhibit D-2 Safety/Probation Member Contribution Rates

Basic Member Rates

1. For Safety and Probation members entering after age 50, the rate equals the rate at age 50.

	50% Member COLA Rates								
Entry Age ⁽¹⁾	Plan 1	Plan 2	Plan 4	Plan 5					
16	2.35%	2.38%	1.78%	1.54%					
17	2.39%	2.41%	1.80%	1.56%					
18	2.42%	2.45%	1.83%	1.58%					
19	2.46%	2.49%	1.86%	1.61%					
20	2 50%	2 53%	1 89%	1 64%					
21	2.54%	2.57%	1.92%	1.66%					
22	2.58%	2 61%	1.95%	1 69%					
23	2 62%	2 65%	1.98%	1 71%					
24	2.66%	2 69%	2 01%	1 74%					
25	2.00%	2 73%	2.01%	1.71%					
26	2.76%	2.70%	2.07%	1 79%					
20	2.74%	2.11%	2.07%	1.70%					
28	2.70%	2.86%	2.10%	1.02 %					
20	2.0270	2.00%	2.14%	1.88%					
29	2.07 /0	2.90 %	2.17 /0	1.00 %					
30	2.9270	2.90%	2.20%	1.9170					
27	2.9070	2.99%	2.24 /0	1.94 /0					
32	3.0170	3.04%	2.21 70	1.97 %					
33	3.05%	3.09%	2.31%	2.00%					
34	3.10%	3.14%	2.34%	2.03%					
35	3.15%	3.19%	2.38%	2.06%					
30	3.20%	3.24%	2.42%	2.09%					
37	3.25%	3.29%	2.46%	2.13%					
38	3.30%	3.34%	2.50%	2.16%					
39	3.36%	3.39%	2.54%	2.19%					
40	3.41%	3.45%	2.58%	2.23%					
41	3.47%	3.51%	2.62%	2.26%					
42	3.52%	3.56%	2.66%	2.30%					
43	3.58%	3.62%	2.70%	2.33%					
44	3.64%	3.68%	2.74%	2.37%					
45	3.70%	3.74%	2.78%	2.41%					
46	3.75%	3.79%	2.81%	2.45%					
47	3.80%	3.84%	2.85%	2.49%					
48	3.85%	3.89%	2.88%	2.53%					
49	3.90%	3.94%	2.90%	2.56%					
50	3.94%	3.98%	2.92%	2.60%					
51	3.97%	4.01%	2.92%	2.63%					
52	3.99%	4.03%	2.92%	2.66%					
53	3.99%	4.03%	2.99%	2.69%					
54	3.99%	4.03%	3.07%	2.71%					
55	3.99%	4.03%	3.07%	2.73%					
56	3.99%	4.03%	3.07%	2.73%					
57	3.99%	4.03%	3.07%	2.73%					
58	3.99%	4.03%	3.07%	2.79%					
59	3.99%	4.03%	3.07%	2.88%					
60	3.99%	4.03%	3.07%	2.88%					

Exhibit D-3 General Member Contribution Rates (except SMCM&VCD)

1. For General and SMCM&VCD members entering after age 60, the rate equals the rate at age 60.

		50% Member COLA Rates								
Entry Age ⁽¹⁾	Plan 1	Plan 2	Plan 4	Plan 5	Plan 6					
16	4.56%	5.06%	3.81%	3.57%	2.98%					
17	4.63%	5.13%	3.86%	3.61%	3.02%					
18	4.68%	5.19%	3.91%	3.66%	3.06%					
19	4.75%	5.26%	3.97%	3.71%	3.10%					
20	4.81%	5.33%	4.02%	3.76%	3.14%					
21	4.87%	5.40%	4.07%	3.81%	3.18%					
22	4.93%	5.47%	4.12%	3.85%	3.22%					
23	5.00%	5.54%	4.17%	3.90%	3.26%					
24	5.06%	5.61%	4.23%	3.96%	3.31%					
25	5.13%	5.68%	4.29%	4.01%	3.35%					
26	5.20%	5.76%	4.34%	4.06%	3.39%					
27	5.26%	5.83%	4.40%	4.11%	3.44%					
28	5.33%	5.91%	4.46%	4.17%	3.48%					
29	5.40%	5.99%	4.52%	4.22%	3.53%					
30	5.47%	6.07%	4.57%	4.28%	3.57%					
31	5.55%	6.15%	4.64%	4.34%	3.62%					
32	5.62%	6.23%	4.70%	4.39%	3.67%					
33	5.70%	6.32%	4.76%	4.45%	3.72%					
34	5.78%	6.40%	4.82%	4.51%	3.77%					
35	5.85%	6.49%	4.89%	4.57%	3.82%					
36	5.93%	6.58%	4.96%	4.63%	3.87%					
37	6.02%	6.67%	5.03%	4.70%	3.93%					
38	6.10%	6.76%	5.09%	4.76%	3.98%					
39	6.19%	6.86%	5.16%	4.83%	4.03%					
40	6.28%	6.96%	5.23%	4.89%	4.09%					
41	6.37%	7.06%	5.30%	4.96%	4.14%					
42	6.46%	7.16%	5.37%	5.02%	4.19%					
43	6.54%	7.25%	5.42%	5.07%	4.23%					
44	6.62%	7.34%	5.47%	5.11%	4.27%					
45	6.69%	7.42%	5.50%	5.14%	4.29%					
46	6.74%	7.48%	5.50%	5.14%	4.30%					
47	6.77%	7.50%	5.50%	5.14%	4.30%					
48	6.77%	7.50%	5.63%	5.26%	4.39%					
49	6.77%	7.50%	5.80%	5.42%	4.53%					
50	6.77%	7.50%	5.80%	5.42%	4.53%					

Exhibit D-4 Safety Member Contribution Rates

1. For Safety members entering after age 50, the rate equals the rate at age 50.

	50% Member COLA Rates								
Entry Age ⁽¹⁾	Plan 1	Plan 2	Plan 4	Plan 5	Plan 6				
16	5.07%	5.11%	3.74%	3.36%	2.79%				
17	5.13%	5.18%	3.78%	3.41%	2.83%				
18	5.20%	5.25%	3.83%	3.45%	2.86%				
19	5.27%	5.32%	3.89%	3.50%	2.90%				
20	5.34%	5.39%	3.94%	3.54%	2.94%				
21	5.41%	5.46%	3.99%	3.59%	2.98%				
22	5.48%	5.53%	4.04%	3.64%	3.02%				
23	5.55%	5.60%	4.09%	3.68%	3.06%				
24	5.62%	5.67%	4.15%	3.74%	3.10%				
25	5.69%	5.75%	4.20%	3.78%	3.14%				
26	5.77%	5.82%	4.25%	3.83%	3.18%				
27	5.84%	5.90%	4.31%	3.88%	3.22%				
28	5.92%	5.98%	4.37%	3.93%	3.26%				
29	6.00%	6.05%	4.42%	3.98%	3.31%				
30	6.08%	6.13%	4.48%	4.04%	3.35%				
31	6.16%	6.21%	4.54%	4.09%	3.39%				
32	6.24%	6.30%	4.60%	4.15%	3.44%				
33	6.33%	6.38%	4.66%	4.20%	3.49%				
34	6.41%	6.47%	4.73%	4.26%	3.53%				
35	6.50%	6.56%	4.79%	4.31%	3.58%				
36	6.59%	6.65%	4.86%	4.37%	3.63%				
37	6.68%	6.74%	4.93%	4.44%	3.68%				
38	6.77%	6.84%	4.99%	4.49%	3.73%				
39	6.87%	6.94%	5.06%	4.56%	3.78%				
40	6.97%	7.03%	5.13%	4.62%	3.83%				
41	7.07%	7.13%	5.19%	4.68%	3.88%				
42	7.17%	7.23%	5.26%	4.74%	3.93%				
43	7.26%	7.33%	5.31%	4.78%	3.97%				
44	7.35%	7.42%	5.36%	4.82%	4.00%				
45	7.43%	7.50%	5.39%	4.85%	4.02%				
46	7.49%	7.56%	5.39%	4.85%	4.03%				
47	7.51%	7.58%	5.39%	4.85%	4.03%				
48	7.51%	7.58%	5.51%	4.96%	4.12%				
49	7.51%	7.58%	5.68%	5.11%	4.24%				
50	7.51%	7.58%	5.68%	5.11%	4.24%				

Exhibit D-5 Probation Member Contribution Rates

1. For Probation members entering after age 50, the rate equals the rate at age 50.

Appendix E Glossary

The following definitions include excerpts from a list adopted by the major actuarial organizations in the United States. In some cases, the definitions have been modified for specific applicability to SamCERA and include terms used exclusively by SamCERA. Defined terms are capitalized throughout this Appendix.

Accrued Benefit

The amount of an individual's benefit (whether or not vested) as of a specific date, determined in accordance with the terms of a pension plan and based on compensation and service to that date.

Actuarial Accrued Liability

That portion, as determined by a particular Actuarial Cost Method, of the Actuarial Present Value of pension plan benefits and expenses which is not provided for by future Normal Costs.

Actuarial Assumptions

Assumptions as to the occurrence of future events affecting pension costs, such as: mortality, withdrawal, disability, and retirement; changes in compensation; rates of investment earnings and asset appreciation or depreciation; procedures used to determine the Actuarial Value of Assets; and other relevant items.

Actuarial Gain (Loss)

A measure of the difference between actual experience and that expected based on a set of Actuarial Assumptions during the period between two Actuarial Valuation dates, as determined in accordance with a particular Actuarial Cost Method.

Actuarial Present Value

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.

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 pension plan.

Actuarial Value of Assets

The value of cash, investments and other property belonging to a pension plan, as used by the actuary for the purpose of an Actuarial Valuation.

Actuarially Equivalent

Of equal Actuarial Present Value, determined as of a given date with each value based on the same set of Actuarial Assumptions.

Amortization Payment

That portion of the pension plan contribution which is designed to pay interest on and to amortize the Unfunded Actuarial Accrued Liability.

COLA

Cost of living adjustments to benefit payments are made each April 1. See full description in Appendix B.

County Supplementary Contributions Account (CSCA) Reserve

This is a reserve for supplemental contributions from the County of San Mateo that are over and above the County's required statutory contribution rates.

District Supplementary Contributions Account (DSCA) Reserve

This is a reserve for supplemental contributions from the San Mateo County Mosquito and Vector Control District ("District") that are over and above the District's required statutory contribution rates.

Employer Reserve

The accumulation of employer contributions for future retirement benefit payments. Additions include contributions from employers and related earnings. Deductions include annuity payments to retired members and survivors, lump sum death benefit payments to member survivors, and supplemental disability payments.

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 ages. 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.

Funded Ratio

A measurement of funded status. The Funded Ratio is calculated by dividing the Valuation Assets by the Actuarial Accrued Liability. For example, a Funded Ratio of 90% indicates assets are 10% less than liabilities.

Member Reserve

The accumulation of member contributions. Additions include member contributions and related earnings. Deductions include annuity payments to retirees and refunds to members.

Non-Valuation Reserves

Reserves excluded from the calculation of contribution rates.

Normal Cost

That portion of the Actuarial Present Value of pension plan benefits and expenses which is allocated to a valuation year by the Actuarial Cost Method.

Plan Year

A 12-month period beginning July 1 and ending June 30.

Projected Benefits

Those pension plan benefit amounts which are 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 and past and anticipated future compensation and service credits.

Unfunded Actuarial Accrued Liability

The excess, if any, of the Actuarial Accrued Liability over the Actuarial Value of Assets.

Valuation Date

The date upon which the Normal Cost, Actuarial Accrued Liability, and Actuarial Value of Assets are determined. Generally, the Valuation Date will coincide with the ending of a Plan Year.

Valuation Reserves

All reserves excluding the Non-Valuation Reserves.

SAN MATEO COUNTY EMPLOYEES' RETIREMENT ASSOCIATION **Board of Retirement**

September 27, 2022

Agenda Item 5.3

TO: Board of Retirement

Scott Hood, Chief Executive Officer FROM:

SUBJECT: Acceptance of the Fiscal-Year 2023-2024 Employer and Member **Contribution Rates**

Recommendation

Approve the "Resolution Accepting Contribution Rates to Recommend to the Board of Supervisors for the 2023-2024 Fiscal Year."

Background

At its May 24, 2022 meeting, the Board approved for use in the annual valuation report, the existing economic assumptions previously adopted. The assumption changes that remain unchanged were: investment return at 6.25%, inflation at 2.50%, wage at 3.00%, payroll growth at 3.00%, and COLA assumption for Plans 1 and 2 to be set in accordance with the inflation assumption.

Discussion

The highlights of the June 2022 actuarial valuation report include the following elements:

Funding: SamCERA's funded ratio increased by 2.6 percentage points from 88.1% to 90.7%. This increase was mainly due to the recognition of prior market gains being greater than expected and employer contributions made to amortize the Unfunded Accrued Actuarial Liability (UAAL) including the County's contribution of \$15.3 million to the County Supplemental Contribution Account (CSCA) this year. Without the Supplemental Contribution Accounts (SCA), the funded status would have been 3.5% lower, at 87.2%.

Contribution Rates: The Employer Statutory Contribution Rate (the weighted average for all employers) decreased by 12.14% to 26.19%. This was due to the full amortization of the UAAL layer established on June 30, 2008. However, the San Mateo County Mosquito and Vector Control District (SMCM&VCD) will see an increase in its contribution rate to 25.06% (from 12.10%) as the balance in its supplemental account has been almost fully utilized under its accelerated recognition plan.

The County's SCR would have decreased to 30.78% of payroll, however, when the value of the County's CSCA account is factored in the calculation, the County's contribution rate decreased to 26.19% of payroll instead, a 4.59% reduction.

Investment Returns: SamCERA's investment return on the market value of assets was -6.1% for fiscal year 2021-22, which was less than the actuarial assumed rate of 6.25 %. When combined with the recognition of deferred investment gains from the prior year, however, the net result was a return on the actuarial value of valuation assets of 7.1%, which is more than the assumed rate of return.

Member Rates: Basic member rates for Plan 7 members will increase slightly for County and Courts employees and decrease slightly for SMCM&VCD employees. Plan 7 member rates are calculated annually to be equal to 50% of the Gross Normal Cost. All legacy plan member rates remain the same.

Summary of Recommendation

The following tables summarize Milliman's 2023-24 recommended Statutory Contribution Rates and Employer and Member Contribution rates for the Board's approval. Staff provided this rate information to the County Manager's Office, the County's Human Resources Director, to the Court Executive Officer and to the District Manager of the San Mateo County Mosquito and Vector Control District.

Recommendation #1: Adopt the following new Statutory Contribution Rates for fiscal year beginning July 1, 2023:

	Fiscal Year I	Beginning	Increase /
	July 1, 2023	July 1, 2022	(Decrease)
Gross Normal Cost	23.64%	24.04%	(0.40)%
Member Contributions	(12.27)%	(12.49)%	0.22%
Employer Normal Cost	11.37%	11.55%	(0.18)%
UAAL Amortization	16.04%	29.21%	(13.17)%
Calculated Employer Rate	27.41%	40.76%	(13.35)%
Deferred Recognition of 2021 Assumptions	(1.22)%	(2.43)%	1.21%
Total Employer Rate	26.19%	38.33%	(12.14)%
County Contribution Rate	26.19%	38.51%	(12.32)%
Courts Contribution Rate	26.02%	35.73%	(9.71)%
SMCM&VCD Contribution Rate	25.06%	12.10%	12.96%

Notes:

1. Detailed contribution rates by plan are shown in Section 6.

2. The Total Employer Statutory Contribution Rate of 26.19% is the aggregate rate for all employers.

Recommendation #2: Adopt the new Plan 7 member contribution rates for fiscal year beginning July 1, 2023:

		Recommended Rates				Current	
	Entry Age	Basic	50% COLA Sharing	Cost Sharing	Total as a % of Pay	Total as a % of Pay	Ratio (New/Curr)
General Members	All	7.45%	1.85%	0.00%	9.30%	9. <mark>1</mark> 7%	101.4%
SMCM&VCD Members	All	7.52%	1.93%	0.00%	9.45%	10.12%	93.4%
Probation Members	All	12.21%	3.57%	0.00%	15.78%	15.74%	100.3%
Safety Members	All	12.28%	3.53%	0.00%	15.81%	15.66%	101.0%

Notes:

1. Plan 7 COLA share represents one-half of the cost of the COLA.

2. See Appendix B of this report for a full description of members COLA share. See Appendix D of this report for a full schedule of rates.

SamCERA staff reviewed the valuation report and its recommendations and discussed them with Milliman, Inc. in order to confirm our understanding. Staff supports the results and recommendations of the valuation.

Attachment

Resolution Accepting Contribution Rates to Recommend to the Board of Supervisors for the 2023-2024 Fiscal Year

RESOLUTION ACCEPTING CONTRIBUTION RATES TO RECOMMEND TO THE BOARD OF SUPERVISORS FOR THE 2023-2024 FISCAL YEAR.

RESOLUTION 2022-___

- WHEREAS, Government Code §31453 mandates the periodic actuarial valuation of the Retirement Fund and requires that the Board..."shall, at least 45 days prior to the beginning of the succeeding fiscal year, recommend to the Board of Supervisors such changes in the rates of interest, in the rates of contributions of members, and in the county and district appropriations as are necessary...;" and
- WHEREAS, the Board has received and accepted the June 30, 2022, valuation report from its actuarial firm, Milliman, Inc., and
- WHEREAS, the Chief Executive Officer has recommended, in agreement with Milliman, Inc., the contribution rates necessary to assure the actuarial soundness of the Retirement Fund,

Therefore, be it

RESOLVED that the Board hereby accepts the employer and member contribution rates as recommended by Milliman, Inc. in its June 30, 2022, Actuarial Valuation of the San Mateo County Employees' Retirement Association effective for the fiscal year 2023-2024.

Be it further

RESOLVED that the Board recommends that the Board of Supervisors adopt the recommended employer contribution rates for the County of San Mateo, the San Mateo Superior Court and the San Mateo County Mosquito & Vector Control District in accordance with the schedules provided by Milliman, Inc. in its June 30, 2022, Actuarial Valuation, effective July 1, 2023.

Be it further

RESOLVED that the Board of Retirement hereby recommends that the Board of Supervisors adopt the recommended **Plan 7 member contribution rates** for SamCERA active members of the County of San Mateo, the San Mateo County Superior Court and the San Mateo County Mosquito & Vector Control District in accordance with the schedules provided by Milliman, Inc. in its June 30, 2022, Actuarial Valuation, effective July 1, 2023.

Be it further

RESOLVED that the Chief Executive Officer is hereby authorized to transmit the attached rates and recommendations to the Board of Supervisors and to take all actions necessary to provide for their implementation effective July 1, 2023.

SAN MATEO COUNTY EMPLOYEES' RETIREMENT ASSOCIATION Board of Retirement

* * * * *

Regularly passed and adopted, by the San Mateo County Employees' Retirement Association, Board of Retirement, on September 27, 2022.

Ayes, Trustees:

Noes, Trustees:

Absent, Trustees:

Abstain, Trustees:

Alma Salas, Board Secretary SamCERA

SAN MATEO COUNTY EMPLOYEES' RETIREMENT ASSOCIATION Board of Retirement

September 27, 2022

Agenda Item 6.1

то:	Board of Retirement	
FROM:	Michael Coultrip, Chief Investment Officer	Michael R. Couttinp
SUBJECT:	Preliminary Monthly Portfolio Performance I August 31, 2022	Report for the Period Ended

Recommendation

Accept the preliminary performance report dated August 31, 2022.

Background

This preliminary report is intended to provide a high-level view of the portfolio and its trends. It is not intended to provide short-term performance upon which the Board would act. The quarterly performance metrics are not yet available for our private equity, private credit, private real asset, and real estate portfolios. The performance for these portfolios will be reflected in the quarterly performance report generated by Verus.

The attached performance report shows both net and gross of fee returns for the total plan on page one, with net composite returns on pages two and three, and net manager returns (pages 4-10) also shown.

Discussion

The fund's net preliminary return for August was -2.0%, bringing the preliminary trailing twelvemonth net return ending August 2022 to -5.7%, lower than both the policy benchmark return of -5.1% and our assumed earnings rate of 6.25%.

Most assets classes were lower in August as market participants reacted to Chairman Powell's reinforcement of the Fed's commitment to bring inflation down. Investor optimism plummeted as yields rose across the yield curve.

The U.S. equity market (measured by the S&P 500 Index) was down 4.1%, while smallcapitalization stocks were down 2.0%. Developed international equity (as measured by MSCI EAFE) was down 4.7% while emerging markets were up slightly (+0.4%).

Economic activity continued to be mixed in August. Manufacturing softened in August but was still in positive territory, while consumer sentiment climbed higher in part due to lower gas prices. The labor market remained strong in August, adding 315,000 new jobs in August, while the headline unemployment rate ticked up to 3.7%. While inflation (as measured by the Consumer Price Index - All Urban Consumers) increased 8.3% for the twelve months ended August (which was slightly lower than last month on lower energy prices), there was more widespread persistent core inflation than markets were expecting.

The general U.S. fixed income market was down 2.8% in August as interest rates rose across the yield curve. The 10-year U.S. Treasury yield was higher by 68 basis points during the month and ended at 3.35% by month-end. High Yield returns were down 2.3% and the Bloomberg Commodity Index was up 0.1%.

Attachments

Verus Capital Market Update Northern Trust Monthly Performance Report



PERSPECTIVES THAT DRIVE ENTERPRISE SUCCESS

AUGUST 2022 Capital Markets Update

Market commentary

U.S. ECONOMICS

- The U.S. job market remained strong in August as non-farm payrolls increased by 315,000 jobs and measured near expectations. Despite the rise in jobs, the unemployment rate rose +0.2% to 3.7% over the month as the total labor force increased 786,000 since July.
- The U.S. Manufacturing Purchasing Managers' Index (PMI) fell for a fourth consecutive month to 51.5, indicating the weakest business sentiment since July 2020.
- The University of Michigan Consumer Sentiment Index climbed 13.0% to 58.2 in August as slowed inflation growth spurred confidence in U.S. consumers. Despite the month-over-month rise, the print measured -17.2% below August 2021 and -7.5% below its 12-month average.

U.S. EQUITIES

- The S&P 500 Index fell -4.1% over the month, reversing July's bear market rally. The index ended August +8.2% higher than its 2022 low achieved in mid-June but has fallen -16.1% year-to-date.
- Excluding the Energy sector, S&P 500 earnings growth was negative in Q2. While the blended Q2 earnings growth rate for the S&P 500 totaled +6.7%, it measured just -3.7% on an ex-Energy basis. Energy led the 11 GICS Sectors in year-over-year Q2 earnings growth as the sector reported EPS growth of +293% over the period, per FactSet.
- Q2 earnings season neared close at month end as 492 S&P 500 members had reported results, as of 9/2. Per FactSet, "Inflation" was the hottest topic of discussion as 412 index members mentioned the term on Q2 calls. Recession commentary was likewise pertinent as the term was mentioned by 240 members, the most since 2010.

U.S. FIXED INCOME

- At the Fed's annual Jackson Hole Economic Symposium, Chairman Jerome Powell reinforced the Central Bank's restrictive policy stance on price stability. Powell remarked that the Fed's current efforts to combat inflation are "likely to require a sustained period of below-trend growth."
- As market participants weighed the Fed's reiterated commitment to lowering inflation to the 2.0% long-term target, market expectations for when the Fed will first cut rates moved back from February to May of 2023.
- The Bloomberg U.S. Aggregate Bond Index declined -2.8% as yields rose across the yield curve and the market priced in the impact of sustained rate increases by the Fed into the longer end of the treasury curve.

INTERNATIONAL MARKETS

- The People's Bank of China instituted cuts to multiple key policy rates in a move to spur lending growth as zero-covid policies continue to weigh on economic growth. The Bank lowered rates on its one-year medium-term lending facility and seven-day reverse repo by 10 basis points each mid-month and followed with cuts to the one-year and five-year loan prime rates.
- The Japanese Yen (-3.6%) fell to a fresh 24-year low against the U.S. Dollar toward month end as BOJ Governor Kuroda's continued dovish stance alongside hawkish Fed policy added to the disparity between the two currencies.
- UK Gilts sold off sharply as investors reacted to the release of a more than 40-year high inflation print of 10.1% for July. Two-year Gilt yields jumped 128 basis points.

Major asset class returns

ONE YEAR ENDING AUGUST



*Only publicly traded asset performance is shown here. Performance of private assets is typically released with a 3- to 6-month delay. Source: Morningstar, as of 8/31/22 Source: Morningstar, as

Source: Morningstar, as of 8/31/22

TEN YEARS ENDING AUGUST



Capital Markets Update August 2022

U.S. large cap equities

- The S&P 500 Index declined -4.1% in August despite reaching an intra-month high not seen since early May. While stocks climbed early in the month on signs of a reversing inflation trend, hawkish comments from Fed Chairman Jerome Powell at the Jackson Hole Economic Symposium quashed investor optimism.
- Losses within U.S. sectors were broad as 9 of 11 S&P 500 GICS Sectors saw monthly declines. Positive performance was limited to the Energy (+2.8%) and Utilities (+0.5%) sectors while Information Technology (-6.1%), Health Care (-5.8%), and Real Estate (-5.6%) performed the worst.
- The Cboe VIX Index of implied volatility increased materially as volatility accelerated toward month end. The index gained 4.5 points over the month to close August at 25.87 which exceeded both its year-to-date and one-year daily average.
- Congress enacted the \$437 billion Inflation Reduction Act mid-month in a move to address climate concerns, prescription drug costs, and rising energy prices. The bill notably institutes a 15% corporate minimum tax, along with a 1% tax on share buybacks.

S&P 500 PRICE INDEX



IMPLIED VOLATILITY (VIX INDEX)



S&P 500 VALUATION SNAPSHOT



Source: Bloomberg, as of 8/31/22

Source: Cboe, as of 8/31/22

Source: Bloomberg, as of 8/31/22

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Domestic equity size and style

- Value stocks (Russell 3000 Value -3.0%) outperformed growth stocks (Russell 3000 Growth -4.4%) in August as reaffirmed hawkish sentiment from the Fed likely weighed on growth expectations and put a damper on the preceding bear market rally.
- Small-cap equities (Russell 2000 Index -2.0%) fell less than large-cap equities (Russell 1000 Index -3.8%) in August and marked the fourth consecutive month of small-cap outperformance. In contrast to broader trends, small-cap growth (Russell 2000 Growth -0.9%) widely outperformed value (Russell 2000 Value -3.2%).



VALUE VS. GROWTH RELATIVE VALUATIONS

VALUE VS. GROWTH 1-YR ROLLING RELATIVE PERFORMANCE

of 12-month periods.

July, per S&P Global.

- Breadth was significantly negative over the month as

73.8% of S&P 500 Index constituents saw negative

performance in August. Only 8 index members gained

more than 10.0% over the month compared to 217 in

- Over the trailing year ended in August, the Russell 1000

Index by +11.6% which marked value's highest trailing

12-month overperformance since April 2005. In the last

20 years, value has outperformed growth in just 36.3%

Value Index outperformed the Russell 1000 Growth



Source: FTSE, Bloomberg, as of 8/31/22

SMALL VS. LARGE 1-YR ROLLING RELATIVE PERFORMANCE



Source: FTSE, Bloomberg, as of 8/31/22

Source: FTSE, Bloomberg, as of 8/31/22
Fixed income

- U.S. Treasury yields rose across tenors, as shorter-term yields rose at a faster rate than longer-term yields – the 2-year climbed 53 basis points and the 10-year rose 17 basis points. The 10-2 spread ended the month inverted by 30 basis points, a potential indicator that investors lack confidence in the Fed's ability to manage a soft landing for the U.S. economy.
- High Yield spreads (ICE BofA US High Yield Index) ended the month 20 basis points higher at 5.0% after an initial -62 basis point decline to start the month. Spreads widened alongside increased hesitancy towards a softlanding outcome and hawkish remarks by Fed officials.
- **U.S. TREASURY YIELD CURVE** 3% 2% 1% 0% 5 years Month Treats 10 Years 20 Years 1 Month 3 Month 2 Years 3 years 30 Years rear Feb-22 Aug-21

NOMINAL YIELDS



13.6% year-to-date.

- The Bloomberg Dollar Spot Index (DXY) reached a 20-

year intra-month high and ended the month 2.6%

higher in a continuation of recent dollar strength. The

Fed's reiterated commitment to hawkish policy likely helped relative dollar strength. The DXY has increased

- The Bloomberg Municipal Bond Index declined -2.2%

and fared marginally better than the Bloomberg US

Aggregate Index (-2.8%) in a continuation of recent

date and net outflows from Muni-focused ETF's and

bond funds have totaled \$84B over the same period.

outperformance. The index has declined -8.6% year-to-

BREAKEVEN INFLATION RATES



Source: Bloomberg, as of 8/31/22

Source: Morningstar, as of 8/31/22

Source: Bloomberg, as of 8/31/22

6



Global markets

- International equities were lower in August as the MSCI European stocks (MSCI Euro Index -6.3%) fell in excess ACWI ex USA Index fell -3.2%. Foreign losses were driven heavily by declines in developed market equities (MSCI EAFE -4.8%) and buoyed by gains in emerging markets (MSCI EM +0.4%).
- The MSCI China Index (+0.3%) was mostly flat over the month as investors balanced the impact of Covid-19 pressures with a fresh release of \$1 trillion yuan in economic stimulus. Gains in Chinese equities were concentrated in the country's Energy sector (+7.5%) as companies have resold natural gas imports to Europe in record quantities.

of foreign peers as recession fears continued to heighten. Halted natural gas flows from Russia pressured energy prices higher which helped drive August Eurozone inflation to a record 9.1%.

- Israeli (MSCI Israel Index +5.2%) and Turkish (MSCI Turkey Index +22.7%) equities trounced international peers as the two countries announced normalized relations. The MSCI Turkey Index posted the best performance of MSCI EM constituents while the MSCI Israel Index was the only MSCI EAFE constituent to record gains in August.

GLOBAL SOVEREIGN 10-YEAR YIELDS



U.S. DOLLAR MAJOR CURRENCY INDEX



Source: Federal Reserve, as of 8/31/22

MSCI VALUATION METRICS (3-MONTH AVG)



Source: Bloomberg, as of 8/31/22

Source: Bloomberg, as of 8/31/22

Commodities

- The Bloomberg Commodity Index (+0.1%) ended the month relatively flat as declines in oil prices (Bloomberg Petroleum Sub-Index -5.4%) and precious metals (Bloomberg Precious Metals Sub-Index -4.9%) prices were partially offset by advances in agriculture (Bloomberg Agriculture Sub-Index +3.6%).
- Natural gas prices jumped +10.9% over the month as Europe's energy crisis intensified. Toward month end, Russia's Gazprom ceased gas flows to Europe entirely which added pressure to sparse supply and further complicates the ability of European governments to hit storage goals ahead of winter.

INDEX AND SECTOR PERFORMANCE

	Month	QTD	YTD	1 Year	3 Year	5 Year	10 Year
Bloomberg Commodity	0.1	(6.9)	23.6	27.7	17.2	8.7	(1.1)
Bloomberg Agriculture	3.6	(7.7)	14.7	21.7	23.6	8.5	(2.4)
Bloomberg Energy	1.0	(3.1)	79.7	82.9	18.8	11.5	(4.3)
Bloomberg Grains	2.7	(11.9)	15.8	23.2	22.1	8.5	(4.0)
Bloomberg Industrial Metals	(2.7)	(16.9)	(10.6)	(5.0)	10.8	4.5	1.3
Bloomberg Livestock	(1.7)	4.7	1.5	1.4	(3.1)	(3.6)	(3.5)
Bloomberg Petroleum	(5.4)	(12.3)	49.4	68.1	18.6	14.1	(3.5)
Bloomberg Precious Metals	(4.9)	(9.7)	(10.9)	(11.1)	1.4	3.0	(2.2)
Bloomberg Softs	8.4	(2.7)	6.8	14.7	23.4	5.4	(2.6)

- Corn prices rallied +8.8% in a continuation of the prior month trend as present crop conditions have worsened and yield estimates fell short of expectations. In the U.S., 2022 corn production estimates from the Pro Farmer Crop Tour near month end measured -4.2% lower than USDA estimates released early in the month.
- The Bloomberg Precious Metals Sub-Index (-4.9%) declined over the month as gold (-3.1%), which accounts for 77.6% of the Sub-Index, fell for a fifth consecutive month and spot prices for silver (-11.5%) submerged \$18 per ounce for the first time since June 2020.

COMMODITY PERFORMANCE



Source: Bloomberg, as of 8/31/22

Source: Morningstar, as of 8/31/22





Periodic table of returns

	2000	2001	2002	2003	2004	2005	2006	2007	2008	2009	2010	2011	2012	2013	2014	2015	2016	2017	2018	2019	2020	2021	YTD	5-Year	10-Year
Commodities	31.8	14.0	25.9	56.3	26.0	34.5	32.6	39.8	5.2	79.0	29.1	14.3	18.6	43.3	13.5	13.3	31.7	37.3	6.7	36.4	38.5	28.3	23.6	14.8	15.1
Real Estate	22.8	8.4	10.3	48.5	22.2	21.4	26.9	16.2	1.4	37.2	26.9	7.8	18.1	38.8	13.2	5.7	21.3	30.2	1.9	31.4	34.6	27.6	8.7	11.6	13.0
Cash	12.2	7.3	6.7	47.3	20.7	20.1	23.5	15.8	-6.5	34.5	24.5	2.6	17.9	34.5	13.0	0.9	17.3	25.0	0.0	28.5	21.0	27.1	0.4	8.9	10.5
Hedge Funds of Funds	11.6	3.3	1.6	46.0	18.3	14.0	22.2	11.8	-21.4	32.5	19.2	1.5	17.5	33.5	11.8	0.6	12.1	22.2	-1.5	26.5	20.0	26.5	-5.0	8.7	10.2
Large Cap Value	7.0	2.8	1.0	39.2	16.5	7.5	18.4	11.6	-25.9	28.4	16.8	0.4	16.4	33.1	6.0	0.0	11.8	21.7	-3.5	25.5	18.3	25.2	-9.8	7.9	10.0
US Bonds	4.1	-2.4	-6.0	29.9	14.3	6.3	15.5	10.3	-33.8	23.3	16.1	-2.1	15.3	23.3	4.9	-0.8	11.2	14.6	-6.0	22.4	14.0	17.7	-10.8	6.9	9.7
Small Cap Value	6.0	2.5	-5.9	30.0	14.5	7.1	16.6	10.9	-28.9	27.2	16.7	0.1	16.3	32.5	5.6	-0.4	11.3	17.1	-4.8	22.0	10.3	14.8	-12.2	6.7	9.5
60/40 Global Portfolio	-3.0	-5.6	-11.4	29.7	12.9	5.3	15.1	7.0	-35.6	20.6	15.5	-2.9	14.6	12.1	4.2	-1.4	8.0	13.7	-8.3	18.6	7.8	11.3	-16.8	6.6	5.2
Large Cap Equity	-7.3	-9.1	-15.5	25.2	11.4	4.7	13.3	7.0	-36.8	19.7	13.1	-4.2	11.5	11.0	3.4	-2.5	7.1	7.8	-9.3	18.4	7.5	8.9	-16.9	3.8	5.0
Small Cap Equity	-7.8	-9.2	-15.7	23.9	9.1	4.6	10.4	5.8	-37.6	18.9	10.2	-5.5	10.5	9.0	2.8	-3.8	5.7	7.7	-11.0	8.7	4.6	6.5	-17.2	3.6	3.8
Emerging Markets Equity	-14.0	-12.4	-20.5	11.6	6.9	4.6	9.1	4.4	-38.4	11.5	8.2	-5.7	4.8	0.1	0.0	-4.4	2.6	7.0	-11.2	7.8	2.8	2.8	-17.5	1.6	2.9
International Equity	-22.4	-19.5	-21.7	9.0	6.3	4.2	4.8	-0.2	-38.5	5.9	6.5	-11.7	4.2	-2.0	-1.8	-7.5	1.0	3.5	-12.9	7.7	0.5	0.0	-19.6	1.0	1.4
Small Cap Growth	-22.4	-20.4	-27.9	4.1	4.3	3.2	4.3	-1.6	-43.1	0.2	5.7	-13.3	0.1	-2.3	-4.5	-14.9	0.5	1.7	-13.8	6.4	0.5	-1.5	-22.3	0.6	0.6
Large Cap Growth	-30.6	-21.2	-30.3	1.0	1.4	2.4	2.1	-9.8	-53.2	-16.9	0.1	-18.2	-1.1	-9.5	-17.0	-24.7	0.3	0.9	-14.6	2.1	-3.1	-2.5	-23.2	0.5	-1.1
	L	arge C	Cap Equ	uity			I	Si	mall Ca	ap Gro	wth			1	Co	ommo	dities								
	L	arge C	ap Val	lue				In	nterna	tional	Equity	,			Re	eal Est	ate								
	L	arge C	ap Gro	owth				E	mergir	ng Mar	kets E	quity			He	edge F	unds o	of Fund	s						
	S	mall C	ap Equ	uity				U	S Bond	ls					60)% MS	CIACW	/1/40%	Bloom	berg G	ilobal I	Bond			
	S	mall C	ap Val	lue				C	ash																

Source Data: Morningstar, Inc., Hedge Fund Research, Inc. (HFR), National Council of Real Estate Investment Fiduciaries (NCREIF). Indices used: Russell 1000, Russell 1000 Value, Russell 1000 Growth, Russell 2000, Russell 2000 Value, Russell 2000 Growth, MSCI EAFE, MSCI EM, Bloomberg US Aggregate, T-Bill 90 Day, Bloomberg Commodity, NCREIF Property, HFRI FOF, MSCI ACWI, Bloomberg Global Bond. NCREIF Property Index performance data as of 6/30/22.



BEST

WORST

10

S&P 500 sector returns

QTD



ONE YEAR ENDING AUGUST



Source: Morningstar, as of 8/31/22

Source: Morningstar, as of 8/31/22



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Detailed index returns

DOMESTIC EQUITY							
	Month	QTD	YTD	1 Year	3 Year	5 Year	10 Year
Core Index							
S&P 500	(4.1)	4.8	(16.1)	(11.2)	12.4	11.8	13.1
S&P 500 Equal Weighted	(3.5)	4.9	(12.6)	(8.3)	12.4	10.8	12.8
DJ Industrial Average	(3.7)	2.8	(12.0)	(9.1)	8.3	9.9	11.8
Russell Top 200	(4.1)	4.7	(17.0)	(12.3)	13.2	12.5	13.5
Russell 1000	(3.8)	5.1	(16.9)	(13.0)	12.1	11.6	13.0
Russell 2000	(2.0)	8.2	(17.2)	(17.9)	8.6	6.9	10.0
Russell 3000	(3.7)	5.3	(16.9)	(13.3)	11.9	11.3	12.8
Russell Mid Cap	(3.1)	6.4	(16.5)	(14.8)	9.4	9.2	11.6
Style Index							
Russell 1000 Growth	(4.7)	6.8	(23.2)	(19.1)	14.5	14.8	15.1
Russell 1000 Value	(3.0)	3.5	(9.8)	(6.2)	8.9	7.9	10.5
Russell 2000 Growth	(0.9)	10.2	(22.3)	(25.3)	5.9	6.7	10.2
Russell 2000 Value	(3.2)	6.2	(12.2)	(10.2)	10.4	6.6	9.5
INTERNATIONAL EQUITY							
Broad Index							
MSCI ACWI	(3.7)	3.0	(17.8)	(15.9)	8.0	7.0	8.7
MSCI ACWI ex US	(3.2)	0.1	(18.3)	(19.5)	2.9	1.7	4.5
MSCI EAFE	(4.7)	(0.0)	(19.6)	(19.8)	2.4	1.6	5.0
MSCI EM	0.4	0.2	(17.5)	(21.8)	2.7	0.6	2.9
MSCI EAFE Small Cap	(4.4)	1.9	(23.3)	(26.0)	2.8	1.2	7.1
Style Index							
MSCI EAFE Growth	(6.1)	1.4	(25.8)	(25.8)	2.3	3.1	6.1
MSCI EAFE Value	(3.4)	(1.4)	(13.3)	(13.9)	1.9	(0.3)	3.7
Regional Index							
MSCI UK	(5.6)	(2.1)	(10.8)	(7.7)	2.7	1.4	3.1
MSCI Japan	(2.6)	3.0	(17.9)	(19.0)	2.3	2.0	6.2
MSCI Euro	(6.3)	(1.8)	(26.5)	(27.4)	(0.1)	(0.7)	4.4
MSCI EM Asia	0.4	(0.9)	(18.0)	(22.1)	4.7	1.8	5.3

FIXED INCOME							
	Month	QTD	YTD	1 Year	3 Year	5 Year	10 Year
Broad Index							
Bloomberg US TIPS	(2.7)	1.6	(7.5)	(6.0)	2.7	3.2	1.7
Bloomberg US Treasury Bills	0.2	0.2	0.3	0.3	0.6	1.1	0.7
Bloomberg US Agg Bond	(2.8)	(0.5)	(10.8)	(11.5)	(2.0)	0.5	1.4
Bloomberg US Universal	(2.6)	(0.2)	(11.1)	(11.9)	(1.8)	0.6	1.6
Duration							
Bloomberg US Treasury 1-3 Yr	(0.8)	(0.4)	(3.4)	(4.0)	(0.2)	0.7	0.7
Bloomberg US Treasury Long	(4.4)	(1.9)	(22.7)	(22.6)	(6.8)	(0.4)	1.2
Bloomberg US Treasury	(2.5)	(0.9)	(10.0)	(10.8)	(2.2)	0.3	0.8
Issuer							
Bloomberg US MBS	(3.4)	(0.3)	(9.1)	(9.7)	(2.0)	0.1	1.1
Bloomberg US Corp. High Yield	(2.3)	3.5	(11.2)	(10.6)	1.0	2.6	4.5
Bloomberg US Agency Interm	(1.5)	(0.6)	(5.5)	(6.6)	(0.9)	0.5	0.8
Bloomberg US Credit	(2.8)	0.1	(13.7)	(14.4)	(2.1)	1.0	2.2
OTHER							
Index							
Bloomberg Commodity	0.1	4.4	23.6	27.7	17.2	8.7	(1.1)
Wilshire US REIT	(5.9)	2.3	(19.8)	(10.9)	3.1	5.6	7.3
CS Leveraged Loans	1.5	3.4	(1.2)	0.2	3.0	3.5	4.0
S&P Global Infrastructure	(1.5)	2.4	1.9	5.2	4.9	4.3	7.3
Alerian MLP	4.0	17.1	28.6	33.6	6.1	2.9	1.7
Regional Index							
JPM EMBI Global Div	(0.9)	1.9	(18.8)	(20.8)	(5.2)	(1.3)	1.9
JPM GBI-EM Global Div	(0.1)	0.2	(14.4)	(19.4)	(5.2)	(3.0)	(1.7)
Hedge Funds							
HFRI Composite	0.5	1.8	(4.0)	(3.8)	6.9	5.1	5.0
HFRI FOF Composite	0.9	1.7	(5.0)	(4.5)	4.7	3.6	3.8
Currency (Spot)							
Euro	(1.4)	(3.8)	(11.6)	(14.8)	(3.0)	(3.3)	(2.2)
Pound Sterling	(4.4)	(4.2)	(14.1)	(15.5)	(1.5)	(2.0)	(3.1)
Ven	(3.6)	(2.0)	(16.9)	(20.8)	(8.5)	(4.5)	(5.6)

Source: Morningstar, HFRI, as of 8/31/22.

2.7

7.1

6.5 (7.1) (1.5) (1.7) (1.6)



MSCI EM Latin American

Detailed private market returns

Comparison to public market index returns

Private Equity Pooled IRRs	1 Year	3 Year	5 Year	10 Year
Global Private Equity FoFs & Secondary Funds	38.9	26.4	20.7	14.7
Global Private Equity Direct Funds *	37.9	29.1	23.6	17.7
U.S. Private Equity Direct Funds *	45.0	32.1	25.2	19.1
Europe Private Equity Direct Funds *	33.1	27.6	24.8	16.2
Asia Private Equity Direct Funds *	15.7	18.4	16.6	14.7
Public Index Time-weighted Returns				
MSCI World	21.8	21.7	15.0	12.7
S&P 500	28.7	26.1	18.5	16.6
MSCI Europe	16.3	14.9	10.1	8.2
MSCI AC Asia Pacific	(1.5)	12.1	9.9	8.0
Private Real Estate Pooled IRRs	1 Year	3 Year	5 Year	10 Year
U.S. All Private Real Estate	30.0	13.0	11.8	13.0
Public Index Time weighted Peturns				

Private Credit Pooled IRRs	1 Year	3 Year	5 Year	10 Year
U.S. All Private Debt **	32.4	16.8	13.9	12.6
Public Index Time-weighted Returns				
S&P / LSTA U.S. Leveraged Loan 100 Index	3.5	5.6	3.9	4.3

Private Real Assets Pooled IRRs	1 Year	3 Year	5 Year	10 Year
Global Nature Resources ***	31.3	1.9	2.5	2.1
Global Infrastructure	13.8	11.6	12.4	11.0
Public Index Time-weighted Returns				
S&P Global Natural Resources	25.2	13.9	9.6	4.6
S&P Global Infrastructure	11.9	10.2	7.8	7.7

Source: Pooled IRRs are from Thompson Reuters C|A and Time-weighted Returns are from Investment Metrics, as of December 31st, 2021. All returns in U.S. dollars.

18.4

10.8

11.4

43.2

* Includes Buyout, Growth Equity and Venture Capital.

** Includes Control-Oriented Distressed, Credit Opportunities, Senior Debt and Subordinated Capital.

*** Includes Private Equity Energy, Timber and Upstream Energy & Royalties.



FTSE NAREIT Equity REIT

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Notices & disclosures

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Total Fund Performance























Composite Returns (NET)	Market Value (\$)	1 Mth.	3 Mth.	YTD	FYTD	1 Yr.	3 Yr.	5 Yr.	7 Yr.	10 Yr.	ITD
Total Equity	2,192,504,763	-3.5	-4.7	-15.4	2.9	-13.8	7.7	6.9	8.5	9.3	7.6
Samcera Total Equity Benchmark		-3.0	-4.6	-15.6	3.7	-13.8	8.8	7.6	9.4	10.3	8.3
Excess		-0.6	-0.1	0.2	-0.8	-0.1	-1.0	-0.7	-1.0	-1.0	-0.6
Domestic Equity	1,219,116,060	-3.2	-3.1	-12.9	4.8	-8.7	10.9	10.5	11.4	12.2	8.9
Samcera Dom, Equity Benchmark	.,,,,,	-3.7	-3.5	-16.9	5.3	-13.3	11.9	11.3	11.9	12.7	9.3
Excess		0.6	0.4	4.0	-0.5	4.5	-1.0	-0.7	-0.6	-0.5	-0.4
Large Cap Equity	1,093,260,443	-3.4	-3.5	-13.4	4.1	-9.1	10.8	10.8	11.9	12.6	9.6
Russell 1000		-3.8	-3.7	-16.9	5.1	-13.0	12.1	11.6	12.3	13.0	10.0
Excess		0.4	0.2	3.5	-1.0	3.8	-1.3	-0.8	-0.4	-0.3	-0.4
Blackrock Russell 1000	469.626.488	-3.8	-3.7	-16.9	5.1	-12.9	12.4	11.7			12.3
Russell 1000	,,	-3.8	-3.7	-16.9	5.1	-13.0	12.1	11.6			12.2
Excess		-0.0	0.0	0.0	0.0	0.1	0.2	0.1			0.2
DE Shaw Commingled Fund	167,349,119	-2.9	-3.6	-14.7	5.6	-10.0	11.3	10.4	12.0		10.9
Russell 1000		-3.8	-3.7	-16.9	5.1	-13.0	12.1	11.6	12.3		10.8
Excess		0.9	0.1	2.2	0.4	3.0	-0.8	-1.2	-0.3		0.1
Acadian US MGD V-SL	215,800,155	-3.4	-3.1	-13.2	2.6	-8.5	5.6				9.7
Russell 1000		-3.8	-3.7	-16.9	5.1	-13.0	12.1				15.2
Excess		0.4	0.6	3.7	-2.5	4.5	-6.5				-5.6
Panadora Defused -SI	240 484 681	-2.8	-3.5	-4.8	27	-0.6	8.2				13.4
Russell 1000	240,404,001	_3.8	-3.7	-16.0	5.1	-13.0	12.1				15.2
Excess		1.0	0.2	12.1	-2.5	12.4	-3.9				-1.8
Domestic Equity Overlay	18,725,225	1.9	2.5	170.4	11.5	182.7					155.6
ICE BofAML US 3-Month Treasury Bill		0.2	0.2	0.4	0.2	0.4					0.2
Excess		1.7	2.2	170.1	11.3	182.3					155.4
Small Cap Equity	107,130,392	-1.9	-0.8	-11.0	9.5	-7.8	9.5	6.0	6.5	8.5	6.3
Russell 2000	,	-2.0	-0.7	-17.2	8.2	-17.9	8.6	6.9	8.3	10.0	7.6
Excess		0.1	-0.1	6.1	1.3	10.1	0.9	-0.9	-1.8	-1.6	-1.3





Composite Returns (NET)	Market Value (\$)	1 Mth.	3 Mth.	YTD	FYTD	1 Yr.	3 Yr.	5 Yr.	7 Yr.	10 Yr.	ITD
OMA US Small Cap	107 130 392	-19	-0.8	-11.0	9.5	-7.8	9.5	6.0			77
Russell 2000	101,100,002	-2.0	-0.7	-17.2	8.2	-17.9	8.6	6.9			8.2
Excess		0.1	-0.1	6.1	1.3	10.1	0.9	-0.9			-0.5
International Equity	973,388,703	-4.0	-6.7	-18.2	0.6	-19.4	4.1	2.7	5.0	5.3	5.1
SamCERA Custom Hedge Intl		-2.1	-5.9	-14.2	1.7	-14.6	5.0	3.1	5.3	5.4	4.8
Excess		-1.9	-0.8	-4.0	-1.2	-4.9	-0.9	-0.4	-0.3	-0.1	0.3
Baillie Gifford	286,661,660	-5.1	-4.4	-31.1	3.8	-34.0	2.9	2.5	5.6	6.3	5.9
MSCI ACWI ex USA Growth		-3.9	-6.8	-23.6	1.4	-25.1	3.1	3.1	5.5		
Excess		-1.2	2.4	-7.5	2.4	-9.0	-0.2	-0.6	0.1		
Blackrock MSCI ACWI ex US IMI	316,673,819	-3.2	-8.6	-18.5	0.4	-19.8					3.1
MS AC WIdxUS IMI Nt		-3.1	-8.5	-18.7	0.5	-20.0					3.1
Excess		-0.1	-0.1	0.1	-0.1	0.2					0.0
Mondrian Investment Partners	320,172,703	-5.0	-11.8	-15.9	-4.3	-17.5	1.0	0.1	2.4	3.4	4.1
MSCI ACWI xUSA Value		-2.5	-10.0	-12.4	-1.1	-12.9	3.1	0.8	3.5	3.9	4.3
Excess		-2.6	-1.7	-3.5	-3.2	-4.5	-2.1	-0.7	-1.1	-0.5	-0.2
Currency Hedge Futures	177,649,693	-2.9	-6.9	-12.4	-4.0	-14.9					-4.6
ICE BofAML US 3-Month Treasury Bill		0.2	0.2	0.4	0.2	0.4					0.2
Excess		-3.1	-7.1	-12.8	-4.2	-15.2					-4.8
Currency Hedge Futures Offsets	177,649,693	0.0	0.0	0.0	0.0	0.0					0.0
ICE BofAML US 3-Month Treasury Bill		0.2	0.2	0.4	0.2	0.4					0.2
Excess		-0.2	-0.2	-0.4	-0.2	-0.4					-0.2
International Equity Overlay	49,880,520	-5.5	-9.6	-17.9	-1.8	-18.8					7.4
ICE BofAML US 3-Month Treasury Bill		0.2	0.2	0.4	0.2	0.4					0.2
Excess		-5.7	-9.8	-18.3	-2.0	-19.1					7.2
Fixed Income	1,425,284,882	-1.6	-2.2	-9.1	0.0	-9.3	0.0	1.6	2.8	2.9	4.9
Samcera Fixed Income Benchmark		-2.9	-2.4	-10.4	0.9	-10.7	-1.0	1.2	2.2	1.8	4.4
Excess		1.2	0.2	1.4	-0.8	1.4	1.1	0.4	0.7	1.1	0.5





Composite Returns (NET)	Market Value (\$)	1 Mth.	3 Mth.	YTD	FYTD	1 Yr.	3 Yr.	5 Yr.	7 Yr.	10 Yr.	ITD
Core Fixed Income	867.926.861	-2.1	-2.0	-10.9	-0.3	-11.9	-1.4	0.5	1.7	1.9	4.4
BBG US Aggregate	,	-2.8	-2.0	-10.8	-0.5	-11.5	-2.0	0.5	1.3	1.4	4.1
Excess		0.7	0.1	-0.1	0.2	-0.3	0.6	-0.0	0.4	0.5	0.3
FIAM B Core Bond	241,353,278	-2.5	-1.9	-10.8	-0.2	-11.3	-0.8	1.3			2.1
BBG US Aggregate		-2.8	-2.0	-10.8	-0.5	-11.5	-2.0	0.5			1.1
Excess		0.3	0.1	-0.0	0.3	0.2	1.2	0.8			1.0
Western Total Return	182,262,748	-0.3	-2.2	-11.2	0.2	-12.3	-0.6	0.4	2.0		2.0
BBG US Aggregate		-2.8	-2.0	-10.8	-0.5	-11.5	-2.0	0.5	1.3		1.2
Excess		2.5	-0.1	-0.4	0.7	-0.8	1.4	-0.2	0.8		0.7
DoubleLine	230,846,923	-2.2	-1.9	-11.2	-0.5	-12.6					-2.9
BBG US Aggregate		-2.8	-2.0	-10.8	-0.5	-11.5					-3.7
Excess		0.6	0.1	-0.5	-0.1	-1.1					0.7
NISA Core Bond	213,463,912	-2.7	-1.8	-10.4	-0.3	-11.2					-4.0
BBG US Aggregate		-2.8	-2.0	-10.8	-0.5	-11.5					-4.4
Excess		0.1	0.2	0.3	0.1	0.3					0.5
Core Fixed Income Overlay	38,751,898	-3.2	-2.6	-7.9	-1.7	-8.0					-3.7
ICE BofAML US 3-Month Treasury Bill		0.2	0.2	0.4	0.2	0.4					0.2
Excess		-3.4	-2.8	-8.3	-1.9	-8.3					-3.9
Opportunistic Credit	557,358,021	-0.9	-2.6	-5.8	0.6	-4.8	2.7	3.7	5.1	6.0	7.5
BBG BA Intermediate HY Ind		-3.0	-3.5	-10.3	2.8	-9.8	1.1	2.7	4.0	4.3	5.8
Excess		2.1	0.9	4.4	-2.3	5.0	1.6	1.0	1.1	1.7	1.6
Pimco Private Income	52,789,264	-0.5	-0.5	2.1	-0.5	4.3	9.3				8.3
BBG BA Intermediate HY Ind		-3.0	-3.5	-10.3	2.8	-9.8	1.1				2.2
Excess		2.5	3.0	12.3	-3.4	14.2	8.2				6.0
AG CREDIT SOL FU LP	14,726,963	-4.6	-4.5	-0.5	-4.5	2.1					18.7
BBG BA Intermediate HY Ind		-3.0	-3.5	-10.3	2.8	-9.8					0.2
Excess		-1.6	-10	9.8	-74	11.9					18.5





Composite Returns (NET)	Market Value (\$)	1 Mth.	3 Mth.	YTD	FYTD	1 Yr.	3 Yr.	5 Yr.	7 Yr.	10 Yr.	ITD
AG CSF ANX DISLOC FD	360	0.0	0.0	-39.2	0.0	-35.7					-5.6
BBG BA Intermediate HY Ind		-3.0	-3.5	-10.3	2.8	-9.8					4.7
Excess		3.0	3.5	-28.9	-2.8	-25.8					-10.4
AG CSF II	8,921,976	-5.3	-5.0		-5.3						-3.8
BBG BA Intermediate HY Ind		-3.0	-3.5		2.8						-7.6
Excess		-2.3	-1.5		-8.1						3.8
AG Opportunistic Whole Loan	208,596	0.0	-8.4	28.6	0.0	33.2	18.7	20.2	17.3		14.2
BBG BA Intermediate HY Ind		-3.0	-3.5	-10.3	2.8	-9.8	1.1	2.7	4.0		3.6
Excess		3.0	-4.9	38.9	-2.8	43.0	17.6	17.6	13.2		10.5
Angelo Gordon	0										
BBG BA Intermediate HY Ind		-3.0	-3.5	-10.3	2.8	-9.8	1.1	2.7	4.0		4.1
Excess											
Blackrock Direct Lending Feede	35,966,802	1.5	1.3	2.1	1.5	4.3	3.2				2.9
BBG BA Intermediate HY Ind		-3.0	-3.5	-10.3	2.8	-9.8	1.1				2.2
Excess		4.5	4.8	12.4	-1.3	14.2	2.1				0.7
Beach Point Select Fund	98,569,844	-0.6	-2.3	-4.7	1.0	0.1	8.4	7.3	7.9		8.0
BBG BA Intermediate HY Ind		-3.0	-3.5	-10.3	2.8	-9.8	1.1	2.7	4.0		3.7
Excess		2.4	1.3	5.6	-1.9	9.9	7.3	4.7	3.9		4.3
Brigade Cap Mngmt	98,958,889	-0.7	-3.1	-6.8	0.9	-4.2	4.3	3.8	5.4	5.0	5.8
BBG BA Intermediate HY Ind		-3.0	-3.5	-10.3	2.8	-9.8	1.1	2.7	4.0	4.3	5.3
Excess		2.3	0.5	3.5	-2.0	5.7	3.2	1.2	1.4	0.7	0.5
White Oak YSF V	29,860,759	0.2	1.6	2.3	0.2	2.8					1.6
BBG BA Intermediate HY Ind		-3.0	-3.5	-10.3	2.8	-9.8					-3.1
Excess		3.2	5.1	12.6	-2.7	12.6					4.8
White Oak Yield Spec	32,595,034	1.4	1.4	5.0	1.4	5.7	5.9	6.3			
BBG BA Intermediate HY Ind		-3.0	-3.5	-10.3	2.8	-9.8	1.1	2.7			3.1
Excess		4.4	4.9	15.3	-1.4	15.5	4.9	3.6			





Composite Returns (NET)	Market Value (\$)	1 Mth.	3 Mth.	YTD	FYTD	1 Yr.	3 Yr.	5 Yr.	7 Yr.	10 Yr.	ITD
DIMCO Div Income Fund	116 049 695	2.4	2.0	12.6	1.0	147	0.0	0.7			0.0
PINICO DIV. Income Fund	110,040,000	-2.4	-3.2	-13.0	1.9	-14.7	-2.3	0.7			0.9
		-3.0	-3.3	-10.3	2.0	-9.0	1.1	2.1			2.7
Excess		0.0	0.3	-3.3	-0.9	-4.9	-3.3	-2.0			-1.0
TCP Direct Lending VIII	16,868,842	0.2	-0.4	1.2	-1.0	3.6	5.7	5.8			
BBG BA Intermediate HY Ind		-3.0	-3.5	-10.3	2.8	-9.8	1.1	2.7			3.9
Excess		3.2	3.1	11.4	-3.9	13.5	4.7	3.1			
Franklin Templeton	51.842.007	-1.5	-9.7	-12.8	-0.7	-15.5	-9.4	-4.8	-1.9	-0.5	0.4
Bloomberg Multiverse Index	- , - ,	-3.8	-5.1	-15.4	-1.7	-17.5	-4.3	-1.4	0.3	-0.1	0.7
Excess		2.3	-4.6	2.6	1.0	2.0	-5.1	-3.4	-2.2	-0.4	-0.3
Alternatives	801 424 896	-12	-29	0.1	-3.0	-0.2	14 0	11.3	99	8 1	10
Samcera Alternatives Benchmark	001,424,000	0.3	-2.0	-0.3	-3.8	1 9	11.0	10.2	10.0	9.4	8.3
Excess		-1.5	-0.9	0.4	0.8	-2.1	2.6	1.1	-0.1	-1.3	-7.3
						10.0			10.0	(= 0	
Private Equity	363,114,112	-4.8	-8.4	-10.1	-1.1	-10.2	24.3	22.6	19.3	17.8	-6.2
Samcera PE Benchmark		0.1	-5.3	-3.9	-8.5	-0.9	18.6	15.0	15.6	16.3	16.1
Excess		-4.9	-3.1	-6.2	0.8	-9.3	5.7	7.6	3.7	1.5	-22.3
Absolute Return	438,310,784	2.0	2.2	10.6	1.3	10.2	0.8	-1.8	-0.0	2.1	1.9
Samcera SOFR + 4%		0.5	1.4	3.2	1.0	4.5	4.6	5.2	5.0	4.8	4.7
Excess		1.5	0.8	7.4	0.3	5.6	-3.8	-7.0	-5.0	-2.6	-2.8
Aberdeen Std GARS	47.963.999	-1.2	-1.7	-9.0	-2.3	-9.7	-1.0	0.0			-0.0
Samcera SOFR + 4%	,,	0.5	1.4	3.2	1.0	4.5	4.6	5.2			5.0
Excess		-1.7	-3.1	-12.2	-3.3	-14.2	-5.6	-5.2			-5.0
Graham Global Investment	105.782.751	1.8	1.8	23.7	0.7	19.9					9.1
Samcera SOER +4%	,	0.5	1.4	3.2	1.0	4.5					4 4
Excess		1.3	0.4	20.6	-0.3	15.4					4.7
	102 120 072	30	6 5	15 7	15	20 1					10.0
Sameara SOER +1%	103,100,072	0.5	1 /	3.0	4.5	16					12.2
Excess		2.7	5.1	12.5	3.5	17.5					7.8





Composite Returns (NET)	Market Value (\$)	1 Mth.	3 Mth.	YTD	FYTD	1 Yr.	3 Yr.	5 Yr.	7 Yr.	10 Yr.	ITD
Assider MAAD Fund LLC	00 005 550	0.0	0.0	4.0	0.0	0.0					0.5
	83,285,553	2.0	-0.6	1.3	0.8	-0.2					2.5
Samcera SOFR +4%		0.5	1.4	3.2	1.0	4.6					4.3
Excess		1.5	-2.0	-1.9	-0.2	-4.7					-1.8
CFM SYS Global Macro Fund	98.098.408	2.8	3.0	16.6	0.9	14.0					14.1
Samcera SOFR +4%		0.5	1.4	3.2	1.0	4.6					4.3
Excess		2.3	1.6	13.4	-0.1	9.4					9.8
Inflation Hodgo	1 114 702 427	0.2	0.4	10.0	1.0	15 5	7 /	5 5			6 9
SamCEPA Inflation Hodgo Index	1,114,793,427	-0.3	-0.4	10.9	0.0	22.4	12.6	0.3			0.0
		1.2	2.0	12.0	0.9	6.0	12.0 5.2	9.0			
Excess		-1.2	-3.2	-1.0	0.5	-0.9	-0.0	-3.0			
Real Estate	531,191,121	0.4	4.1	14.2	0.7	20.8	10.0	8.9			9.0
Samcera NCREIF ODCE (gross)		0.0	4.8	12.5	0.0	29.5	12.7	10.5			9.8
Excess		0.4	-0.7	1.7	0.7	-8.7	-2.7	-1.7			-0.8
Invesco Core Real Estate	327.399.193	0.0	4.8	18.0	0.7	26.9	11.2	9.7	9.6	10.7	8.3
Samcera NCREIF ODCE (gross)		0.0	4.8	12.5	0.0	29.5	12.7	10.5	10.3	11.2	8.6
Excess		0.0	0.0	5.5	0.7	-2.6	-1.4	-0.9	-0.8	-0.4	-0.3
Invesco I IS Val IV	2 174 468	0.0	-5.5	0.5	-5.5	3.6	7.0	9.0			97
Sameera NCREIE ODCE (gross)	2,111,100	0.0	4.8	12.5	0.0	29.5	12.7	10.5			10.1
Excess		0.0	-10.3	-12.0	-5.5	-25.9	-5.7	-1.6			-0.4
PCIM Pool Ectate US Debt Fund	75 513 602	0.5	1 2	3 1	0.8	53	5 /	5.2			5.0
Sameera NCREIE ODCE (gross)	73,013,002	0.0	4.8	12.5	0.0	29.5	12.7	10.5			10.2
Excess		0.5	-3.5	-9.1	0.8	-24.2	-7.3	-5.4			-5.2
Invesco US VAL V	31,109,956	0.0	0.6	8.8	0.6	18.4	15.3				11.4
Samcera NCREIF ODCE (gross)		0.0	4.8	12.5	0.0	29.5	12.7				
Excess		0.0	-4.2	-3.7	0.6	-11.1	2.7				
Harrison Street Core Property	70,989,209	0.0	5.3	10.7	-1.0	13.8					7.8
Samcera NCREIF ODCE (gross)		0.0	4.8	12.5	0.0	29.5					13.2
Excess		0.0	0.5	-1.8	-1.0	-15.7					-5.4





Composite Returns (NET)	Market Value (\$)	1 Mth.	3 Mth.	YTD	FYTD	1 Yr.	3 Yr.	5 Yr.	7 Yr.	10 Yr.	ITD
Stockbridge Value IV	24,004,693	9.0	9.0	29.0	9.0	31.1					12.4
Samcera NCREIF ODCE (gross)		0.0	4.8	12.5	0.0	29.5					25.0
Excess		9.0	4.2	16.5	9.0	1.6					-12.5
Public Real Assets	359,974,372	-0.3	-6.3	6.3	3.1	10.8	3.8	2.0			
SamCera Liquid Real Asset Inde		-0.3	-6.3	5.9	3.2	10.5	8.6	5.3			7.2
Excess		-0.0	-0.1	0.4	-0.0	0.2	-4.8	-3.3			
SSGA CST REAL ASSET NL	359,974,372	-0.3	-6.3	6.3	3.1	10.8	8.5	5.2			
SamCera Liquid Real Asset Inde	, - , -	-0.3	-6.3	5.9	3.2	10.5	8.6	5.3			6.4
Excess		-0.0	-0.1	0.4	-0.0	0.2	-0.1	-0.0			
Private Real Assets	223,627,934	-2.0	0.3	10.1	-0.4	8.3	12.0	5.0			10.3
SamCERA Private Real Asset Idx		4.1	6.9	18.1	0.5	17.2	13.0	10.4			12.9
Excess		-6.1	-6.6	-7.9	-0.9	-8.9	-1.1	-5.4			-2.5
Cash Overlay	19,867,649	-0.9	-0.7	-1.0	-0.8	-1.2					-0.5
ICE BofAML US 3-Month Treasury Bill		0.2	0.2	0.4	0.2	0.4					0.2
Excess		-1.0	-1.0	-1.4	-1.0	-1.6					-0.7
General Account	85,490,786	0.2	0.4	0.4	0.3	0.4	0.6	1.2	1.0	0.8	1.8
County Treasury Pool	104,154,905	0.0	0.1	0.5	0.1	0.9	1.3	1.5	1.3	1.1	2.5
Currency Hedge Cash Overlay	39,333,032	0.1	0.3	0.3	0.2	0.2					0.1
Insight Investment	89,483,257	-0.6			-0.6						-0.6
Excess											
San Mateo County Overlay	5,803,731,859	-2.0	-2.9	-6.9	0.9	-5.7	6.2	5.8	6.9	7.4	6.6
Samcera Total Plan Benchmark		-1.8	-2.3	-7.6	1.4	-5.1	6.9	6.4	7.4	7.8	7.0
Excess		-0.2	-0.6	0.7	-0.5	-0.6	-0.7	-0.7	-0.6	-0.4	-0.4
-											





	Three Months	One Year
TOTAL FUND		
Beginning Market Value	5,894,267,493	6,126,548,046
Contributions	152,406,718	307,142,867
Withdrawals	-74,262,733	-290,032,185
Income Received	24,391,730	91,177,953
Gain/Loss	-192,998,147	-430,704,353
Ending Market Value	5,803,731,859	5,803,731,859

Net Asset Values Over Time (\$000)







Actual vs Target Weights



Actual Target

	Min	Actual	Targe	t Deviatio	n Max
Domestic Equity	19.0	21.0	21.0	0.0	23.0
International Equity	17.0	16.8	19.0	-2.2	21.0
Fixed Income	24.5	24.6	26.5	-1.9	28.5
Private Equity	5.0	6.3	7.0	-0.7	9.0
Absolute Return	5.0	7.6	7.0	0.6	9.0
Real Estate	7.0	9.2	9.0	0.2	11.0
Public Real Assets	2.0	6.2	4.0	2.2	6.0
Private Real Assets	2.0	3.9	4.0	-0.1	6.0
Liquidity		4.6	2.5	2.1	















SAN MATEO COUNTY EMPLOYEES' RETIREMENT ASSOCIATION Board of Retirement

September 27, 2022

TO: Board of Retirement

FROM: Doris Ng, Investment Analyst

SUBJECT: Report on Opportunistic Credit Manager Annual Reviews

Recommendation

Accept and review the report on the annual reviews of SamCERA's private credit managers, White Oak Global Advisors and Blackrock.

Background

On August 11th, SamCERA staff and consultant held annual review meetings with our private credit managers, White Oak Global Advisors and Blackrock. Each meeting lasted approximately 1.5 hours, and consisted of a firm/organizational update, investment process review, performance review and attribution, and current positioning/market outlook.

Discussion

White Oak's Yield Spectrum Fund IV and V were both reviewed. Both strategies are private investment funds that invest primarily in senior-secured corporate credit and debt instruments, including term loans, asset-based loans, and equipment financing to small and middle-market companies.

Next, we reviewed two direct lending strategies, TCP Direct Lending Fund VIII and Blackrock Direct Lending Fund IX, with Blackrock. Both direct lending funds are private investment funds that invest in privately-originated, performing senior secured debt in middle-market companies, with a value-oriented approach. The firm noted a senior retirement that took place in December 2021 as previously reported and a few senior-level departures.

Attached you will find meeting notes from Verus summarizing the findings from these annual reviews.

Attachments

White Oak Annual Review Meeting Notes (Confidential) TCP-Blackrock Direct Lending Annual Review Meeting Notes (Confidential)



Agenda Item 6.2

SAN MATEO COUNTY EMPLOYEES' RETIREMENT ASSOCIATION Board of Retirement

September 27, 2022

Agenda Item 6.3

TO:	Board of Retirement	
FROM:	Michael Coultrip, Chief Investment Officer	Michael R. Couttrip
SUBJECT:	Approval of Investment Policy Amendment	(Policy Benchmark Change)

Recommendation

Approve amendment to resolution amending SamCERA's Investment Policy Statement that was approved July 26, 2022.

Background

In July, the Board approved changes to SamCERA's Investment Policy that reflected the addition of a cash-flow matched portfolio. As part of this, a new category was established titled "Liquidity". This is the fourth category, joining Growth, Diversifying, and Inflation Hedge. Liquidity was further broken into two sub-categories:

- 1. Cash Flow-Matched Liquidity
- 2. Cash & Cash Equivalents

Discussion

The policy benchmark approved in July for the Cash Flow-Matched Liquidity sub-category was the BC 1-3 Year Credit Index, which reflects the credit orientation for cash-flow matched account managed by Insight Investment.

As staff was implementing these changes to the portfolio structure, it became clear that the County Cash Pool should also be included in the Cash Flow-Matched Liquidity sub-category as SamCERA uses this account to pay out benefit payments.

Given that the County Cash Pool mostly contains short-term government and governmentrelated holdings, changing the policy benchmark for the Cash Flow-Matched Liquidity subcategory to the BC 1-3 Year Government/Credit Index from the BC 1-3 Year Credit Index is appropriate.

To reflect this update, staff recommends amending SamCERA's Investment Policy Statement to reflect this change in Sections 6.0 and 10.0 of the Investment Policy.

SAN MATEO COUNTY EMPLOYEES' RETIREMENT ASSOCIATION Board of Retirement

September 27, 2022

Agenda Item 7.1

TO: Board of Retirement

FROM: Gladys Smith, Assistant Executive Officer

SUBJECT: Board of Retirement Meeting Schedule for 2023

Recommendation

Approve a Resolution Setting the Board of Retirement's Regular Meeting Schedule for Calendar Year 2023

Background

Board regulation 3.4 provides that the regular meetings of the Board shall be held on the Fourth Tuesday of each month and shall begin at 10:00 a.m. It further provides that by resolution, the Board may add, cancel, and/or change the date, time, and/or location of meetings, if the proposed change is included on the agenda of a regular meeting.

Historically, the Board combines its November and December meetings due to conflicts with the holidays at the end of those months. It is prudent to anticipate these changes by adopting a meeting schedule and placing it on the SamCERA website to provide public notice.

Consistent with recent years, the 2023 proposed schedule includes:

- Ten total meetings;
- Holding all, but the December meeting, on the fourth Tuesday of the month;
- Convening the meetings at 10:00 a.m., except for the Board/Staff Retreat meeting;
- Holding the annual Board/Staff Retreat on March 28 (fourth Tuesday) with regular business taken up at 8:30 a.m.;
- Holding **no** meeting in June 2023;
- Holding **no** meeting in November due to the Thanksgiving Day holiday; and
- Holding the December meeting on December 5, 2023, the first Tuesday of that month; because of the holidays and to space the time between the October and December meetings.

Attachment

Resolution Setting the Board of Retirement's Regular Meeting Schedule for Calendar Year 2023

RESOLUTION SETTING THE BOARD OF RETIREMENT'S REGULAR MEETING SCHEDULE FOR CALENDAR YEAR 2023

RESOLUTION 2022-____

RESOLVED, by the Board of Retirement, that

- WHEREAS, Board of Retirement Regulation Article III, Section 3.4 "Regular Meetings" provides that regular meetings of the Board shall be held on the Fourth Tuesday of each month, and that meetings shall begin at 10:00 a.m. and shall be held in SamCERA's offices; and
- WHEREAS, Regulation Section 3.4 further provides that by resolution, the Board may add, cancel, and or change the date, time, and/or location of meetings within the County, if the proposed change is included on the agenda of a regular meeting; and
- WHEREAS, this Board desires to set its meeting schedule for calendar year 2023 which generally has its meetings on the Fourth Tuesday of the month, but also reflects some cancellations and date changes;
- NOW, THEREFORE, IT IS HEREBY DETERMINED AND ORDERED that the schedule of regular meetings for the Board of Retirement for calendar year 2023 shall be as reflected on the attached schedule, unless changed by subsequent resolution of the Board:

Regularly passed and adopted, by the San Mateo County Employees' Retirement Association, Board of Retirement, on September 27, 2022.

Ayes, Trustees: Noes, Trustees: Absent, Trustees: Abstain, Trustees:

Alma Salas, Board Secretary SamCERA

2023 SamCERA Board Meeting Schedule All meetings to be held at 100 Marine Parkway, Suite 160 Redwood City, CA 94065

MONTH	DAY	WEEK & DAY	TIME	
JANUARY	24	FOURTH TUESDAY	10:00 A.M.	
FEBRUARY	28	FOURTH TUESDAY	10:00 A.M.	
MARCH (BOARD/STAFF RETREAT)	28	FOURTH TUESDAY	8:30 A.M. BUSINESS ITEMS, FOLLOWED BY RETREAT	
APRIL	25	FOURTH TUESDAY	10:00 A.M.	
MAY	23	FOURTH TUESDAY	10:00 A.M.	
JUNE	NO MEETING	NONE		
JULY	25	FOURTH TUESDAY	10:00 A.M.	
AUGUST	22	FOURTH TUESDAY	10:00 A.M.	
SEPTEMBER	26	FOURTH TUESDAY	10:00 A.M.	
OCTOBER	24	FOURTH TUESDAY	10:00 A.M.	
NOVEMBER	NO MEETING	NONE		
DECEMBER	5	FIRST TUESDAY	10:00 A.M.	