



Notice of Public Meeting

The Board of Retirement of the San Mateo County Employees' Retirement Association will meet on **Tuesday, September 28, 2021, at 10:00 A.M.**

In accordance with the Governor's Executive Orders N-29-20 (3), N-08-21 (42), and N-15-21 (1), the Members of the Board will be participating via Zoom video conference and teleconference. Pursuant to Government Code §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/92184395260>
- To join the meeting via telephone, dial: (669) 900-9128, and enter Meeting ID: 921 8439 5260

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 samcera@samcera.org 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 24, 2021

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4. Approval of the Consent Agenda*

- 4.1 Disability Retirements (1)
 - Liao, Yuwen
- 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 Resolution Amending Policy on Records Retention
- 4.12 Approval of Resolution Authorizing CEO to Execute Contract with Buchalter for Tax Counsel Services

5. Benefit & Actuarial Services

- 5.1 Consideration of Agenda Items, if any, Removed from the Consent Agenda
- 5.2 Presentation of the June 30, 2021 Annual Actuarial Valuation by Milliman, Inc
- 5.3 Approval of Resolution Accepting the Fiscal Year 2022-2023 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, 2021
- 6.2 Report on Opportunistic Credit Manager Annual Review
- 6.3 Approval of Resolution Amending SamCERA's Investment Policy Statement

7. Board & Management Support

- 7.1 Discussion of AB 361 Brown Act Requirements for Telemeetings

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

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10. Adjournment in Memory of the Following Deceased Members:

Molinari, Shirley	March 16, 2021	Treasurer's
Hollimon, Dolores	August 1, 2021	Hospital
Markovitz, Judith	August 11, 2021	Crystal Springs Rehab
Bernier, Eleanor	August 11, 2021	Mental Health
Buriani Ioli	August 12, 2021	Aging & Adult Services
Patla, Robert	August 16, 2021	Behavioral Health
Mitchell, Sara	August 21, 2021	Sheriff's
Baker, Maureen	August 25, 2021	Controller's
Jones, Richard	August 27, 2021	Probation
Lopez, Victor R.	August 27, 2021	Parks
Recio, Justa	August 28, 2021	San Mateo County Health
Robinson, Mary	August 28, 2021	Vocational Services
Raabe, Anita	August 29, 2021	Probation
Fontenna, Regino	August 31, 2021	General Services
Garrison, David	August 31, 2021	Controller's
Herring, Ester	August 31, 2021	Controller's



Scott Hood, Chief Executive Officer

Posted: September 22, 2021

(* 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 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 www.samcera.org. 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 24, 2021 – REGULAR BOARD MEETING MINUTES

2108.1 Call to Order, Roll Call and Miscellaneous Business

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

Roll Call:

Present: Sandie Arnott, Mark Battey, Al David, Paul Hackleman, Kurt Hoefer, Katherine O'Malley, Elaine Orr, and Robert Raw.

Absent: Ben Bowler and Susan Lee.

Alternates: Alma Salas.

Staff: Michael Coultrip, Lili Dames, Scott Hood, Elizabeth LeNguyen, JulieAnne Nagal, Doris Ng, Paul Okada, Gladys Smith, and Anne Trujillo.

Consultants and speakers: Joe Abdou, Marc Gesell, Margaret Jadallah, and Faraz Shooshani (Verus).

2108.1.1 Administration of the Oath of Office: Ms. Arnott administered the Oath of Office to newly appointed Trustee, Elaine Orr (Fourth Member).

2108.1.2 Announcement of Appointment of Board Committees: Mr. Raw announced the following appointments to Board Committees for FY 2021-22:

Standing Committees:

Audit Committee: Sandie Arnott, Al David, Paul Hackleman, and Katherine O'Malley, Chair.

Investment Committee: Mark Battey, Alma Salas, and Kurt Hoefer, Chair.

Ad-hoc Committee:

CEO Review Committee: Sandie Arnott, Katherine O'Malley, and Al David, Chair.

2108.2.1 Oral Communications from the Board: None.

2108.2.2 Oral Communications from the Public: Mr. Raw 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.

2108.3.1 Approval of Regular Board Meeting Minutes from July 27, 2021: Mr. Raw asked if there were any changes or corrections, or objections, to the meeting minutes from the Board meeting held on July 27, 2021. There were no changes, corrections, or objections presented.

Action: Ms. Arnott moved to approve the minutes from the Board meeting on July 27, 2021. The motion was seconded by Mr. David and carried with a vote of 5-0, with trustees Arnott, Battey, David, O'Malley, and Raw all in favor; Hackleman, Hoefer, and Orr abstained; none opposed.

2108.4.0 Approval of the Consent Agenda: Mr. Raw asked if there were any items to be removed for discussion from the Consent Agenda. No items were removed.

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

2108.4.1 **Disability Retirements:**

- a) The Board found that **Cal'Landrea Glenn** (1) is permanently incapacitated from the performance of her usual and customary duties as an Assessor/Recorder Technician II, (2) found that her disability was the result of an injury arising out of and in the course of her employment and (3) granted her application for a service-connected disability retirement.

2108.4.2 **Survivor Death Benefits:** None.

2108.4.3 **Service Retirements:**

Name	Effective Retirement Date	Department
Ancheta, Brandon	June 11, 2021	San Mateo County Health
Axelson, Pamela	June 26, 2021	Deferred - Probation
Barth, Greg	June 11, 2021	Public Works
Coffman, Susan	July 1, 2021	Human Services Agency
Cooper, Noyd	June 21, 2021	Deferred - Human Services Agency
Del Rosario, Maria	June 29, 2021	Deferred - San Mateo County Health
Dolidze, Ekaterina	June 5, 2021	Deferred - Sheriff's Office
Garcia, Rudolph	June 30, 2021	Public Works
Hargis, Karene	June 26, 2021	Human Services Agency
Hollister, Irma	June 26, 2021	Public Health
Houser, Susan	June 14, 2021	San Mateo County Health
Hwang, Hui	July 1, 2021	Deferred – Superior Court
Mandal, Sudhir	June 19, 2021	Controller's Office
Morris, Sherri	July 1, 2021	Deferred – Superior Court
Pacumio, Alfredo	June 13, 2021	San Mateo County Health
Reed, Susann	June 16, 2021	Behavioral Health
Sanchez, John	June 3, 2021	Deferred - Sheriff's Office
Selbach, Lawrence	June 26, 2021	Behavioral Health
Sheldon, Stephen	June 12, 2011	Probation
Singh, Ajay	July 1, 2021	Public Health
Singh, Usha	July 1, 2021	Probation
Tannenwald, Eric	June 11, 2021	Child Support Services
Tavares, Renee	July 1, 2021	Deferred - Public Health
Thompson, Guy	June 2, 2021	Superior Court
White, Melody	June 30, 2021	Deferred - District Attorney's Office

2108.4.4 **Continuances:**

Survivor's Name	Beneficiary of:
Ndegwa, Machanga	Ndegwa, Tom
Perroton-Galloway, Suzanne	Stuart, Bette

2108.4.5 **Deferred Retirements:**

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

Name	Retirement Plan Type
Fung, Nga Yew	G4, Vested - Reciprocity
Guest-Brown, Stefane	G7, Vested
Ncube, Brighton	G7, Non-vested - Reciprocity
Rojo Sousa, Annamaria	G7, Non-vested - Reciprocity
Schanmier, Tami	G7, Vested
Singer, Grae Matan	G4, Non-vested - Reciprocity
Walton, Jon	G5, Vested
Wilkinson, Michael	G7, Vested

2108.4.6 **Member Account Refunds:**

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

Name	Retirement Plan Type
Berkovatz-Isidro, Julie	G7, Non-vested
Kershaw, Karen	G1, Vested
Levett, Rebecca	G7, Non-vested
Rodriguez, Veronica	G7, Vested

2108.4.7 **Member Account Rollovers:**

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

Name	Retirement Plan Type
Chitwood, Amalie	G4, Non-vested
Fricke, Cassandra	G4, Non-vested
Garciano, Reuluz	G4, Non-vested
Kershaw, Karen	G1, Vested

2108.4.8 **Member Account Redeposits:** None.

2108.4.9 **Acceptance of Trustees' Reports of Educational Activities:** None.

2108.4.10 **Acceptance of Semi-Annual Compliance Certification Statements for Period Ended June 30, 2021:** The Board accepted the semi-annual Compliance Certification Statements for SamCERA's non-alternative investment managers as of June 30, 2021.

2108.4.11 **Report on Securities Lending Program:** The Board accepted the report on SamCERA's Securities Lending Program as of June 30, 2021.

2108.4.12 **Report on Preliminary Financial Statements for the Fiscal Year Ended June 30, 2021:** The Board accepted the Preliminary Financial Statements for the Fiscal Year Ended June 30, 2021.

2108.4.13 **Report on Budget-to-Actual for the Fiscal Year Ended June 30, 2021:** The Board accepted the Preliminary Report on Budget-to-Actual for the fiscal year ended June 30, 2021.

- 2108.4.14 **Reaffirm Policy and Procedures for Correcting Inaccuracies in Member Records:** The Board reaffirmed the “Policy and Procedure for Correcting Inaccuracies Relating to Member Contributions, Withdrawals and the Payment of Benefits” in substantially the same form as the policy reaffirmed in August 2018 with minor modifications for readability.
- 2108.4.15 **Reaffirm Policy for Felony Forfeiture:** The Board reaffirmed the “Procedure for Felony Forfeitures” in substantially the same form as the procedure created and approved in August 2018 with minor modifications for readability.
- 2108.5.1 **Consideration of Agenda Items, if any, Removed from the Consent Agenda:** None.
- 2108.6.1 **Report on Preliminary Monthly Portfolio Performance Report for the Period Ended July 31, 2021:** Mr. Coultrip informed the Board that preliminary report for July was not available in time for the Board mailing and was distributed last night and available on Dropbox. He reported that SamCERA’s net preliminary return for July was 0.6% bringing the preliminary trailing twelve month return ending July 2021 to 20.8% net, which is above SamCERA’s Plan Benchmark return of 20.3% and above SamCERA’s Actuarial Assumed Earnings Rate of 6.25%. This item was informational and for discussion only, no action was taken.
- 2108.6.2 **Report on SamCERA’s Risk Dashboard as of June 30, 2021:** Mr. Gesell of Verus presented to the Board the SamCERA Risk Dashboard with data as of June 30, 2021. This item was informational and for discussion only, no action was taken.
- 2108.6.3 **Report on Quarterly Investment Performance Report for Period Ended June 30, 2021:** Mr. Coultrip reported that the 2nd quarter net total return for the SamCERA portfolio was +5.0%, which was 30 bps higher than the +4.7% policy benchmark return. Private equity and absolute return were the main contributors of performance. Ms. Jadallah and Mr. Abdou presented the report to the Board and answered questions from the Board. This item was informational and for discussion only, no action was taken.
- 2108.6.4 **Report on Fixed Income Manager Annual Reviews:** Ms. Ng reviewed the meeting notes from the annual reviews of SamCERA’s opportunistic and private credit bond managers. She reported that staff and consultants met virtually with opportunistic and private credit bond managers, PIMCO and Beach Point on July 29th and with private credit manager, Blackrock on August 10th. Each meeting consisted of a firm/organizational update, investment process review, performance review and attribution, and current positioning/market outlook. She reported there were no significant concerns identified during the reviews. This item was informational and for discussion only, no action was taken.
- 2108.6.5 **Approval of Proposed Alternative Investment (to be heard in Closed Session, Confidential Under Gov. Code §54956.81 and §6254.26, see item C2):** The Board met in Closed Session at 10:59 a.m. and reconvened in Open Session at 11:16 a.m. See Closed Session report under C2.
- 2108.7 **Board and Management Support:** No items were on the agenda.
- 2108.8.1 **Chief Executive Officer’s Report:** Mr. Hood welcomed Elaine Orr to the Board of Retirement. He updated the Board on AB 826 which is a bill currently in the State Senate which would modify the definition of compensation earnable. Mr. Hood shared that all of staff will be returning to the office on September 7th and will be working on a hybrid schedule. He provided the Board with an update on SamCERA’s VoIP system with installation to take place mid-October. Mr. Hood shared that he will be serving on the CALAPRS 2022 Conference Planning Committee. He previewed a few items on the September agenda including a presentation on the actuarial valuation and contribution rates from

Milliman, Inc., and a review of SamCERA's records retention policy. Mr. Hood also informed the Board that the current suspension of Brown Act teleconferencing requirements is scheduled to expire on September 30th. As such, staff is preparing for a hybrid meeting beginning October. Mr. Hood acknowledged and congratulated Ms. Smith for her 30 years of County service.

2108.8.2 **Assistant Executive Officer's Report:** None.

Ms. Trujillo informed Board members about upcoming educational opportunities.

2108.8.3 **Chief Investment Officer's Report:** Mr. Coultrip reported staff will hold annual manager reviews on September 2nd at 10:00 a.m. with opportunistic credit manager, Brigade; September 16th with absolute return managers, Graham Capital at 9:30 a.m., Aberdeen at 11:00 a.m., and State Street at 1:00 p.m. He also shared that staff and consultants plan to hold a future follow up discussion with the Board regarding the liquidity pool presentation from the March Board/Staff Retreat.

2108.8.4 **Chief Legal Counsel's Report:** Mr. Okada provided the Board with an update on the Governor's recent Executive Order reinstating the waiver of the 180-day break in service requirement for retirees and shared that staff is in the process of notifying County departments. Mr. Okada, Mr. Hood, and Ms. Smith provided the Board with an update regarding the implementation of the *Alameda* decision from last year.

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 6.5):** Mr. Okada reported that the Board approved a commitment of \$10 million to Summit Partners Growth Equity Fund XI, LP, as part of SamCERA's Venture Capital portfolio within Private Equity. The motion was approved by a vote of 8-0, with trustees Arnott, Battey, David, Hackleman, Hoefer, O'Malley, Orr, and Raw all in favor; none opposed. No other reportable action was taken.

2108.10 **Adjournment:** Mr. Raw adjourned the meeting at 11:41 a.m. in memory of the deceased members listed below.

Ellsworth, Patricia	July 19, 2021	Public Health
Crist-Whitzel, Janet	July 12, 2021	Mental Health
Gunning, Helen	July 20, 2021	Hospital
Jackson, Willie	July 13, 2021	Vocational Rehab
Perry, Inez	July 30, 2021	Mental Health
Martin, David	August 2, 2021	District Attorney's Office
Moerman, Matthew	August 15, 2021	Sheriff's
Newton, James	August 15, 2021	Public Works

Robert Raw
Board Chair

SAN MATEO COUNTY EMPLOYEES' RETIREMENT ASSOCIATION
Board of Retirement

September 28, 2021

Agenda Items 4.1- 4.9

TO: Board of Retirement

FROM: Elizabeth LeNguyen, Retirement Benefits Manager



SUBJECT: Approval of Consent Agenda Items 4.1 – 4.9

4.1 Disability Retirements

- a) The Board finds that **Yuwen Liao** (1) is permanently incapacitated from the performance of her usual and customary duties as a Nurse Practitioner, (2) find that her disability was not the result of an illness arising out of and in the course of her employment and (3) grant her application for a non-service-connected disability retirement.

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
Acha, Roderick	July 20, 2021	Deferred - District Attorney's Office
Amador, Josephine	July 31, 2021	San Mateo County Health
Banuelos, Regina	July 16, 2021	Deferred - Treasurer's
Baxter, Michelle	July 17, 2021	Deferred - Sheriff's Office
Carlos, Guadalupe	July 31, 2021	San Mateo County Health
Chavez, Erika	July 24, 2021	Probation
Corpus, Rhonda	July 31, 2021	Probation
DeRocher, Frank	July 25, 2021	Sheriff's Office
Feely, Annemarie	July 15, 2021	Human Services Agency
Ferreira, Alisa	July 31, 2021	San Mateo County Health
Green, Steven	July 31, 2021	Information Services
Grindrod, Ronald	July 31, 2021	Building and Planning
Hebert, Michelle	July 15, 2021	Already retired - Plan 3 Portion
Kabasares, Kristian	June 25, 2021	Deferred - Social Services

Maharaj, Umesh	July 15, 2021	Deferred - Probation
Paz, Gloria	July 31, 2021	Mental Health
Peltz, Charles S	July 31, 2021	Behavioral Health
Porter, James	July 3, 2021	Public Works
Rodriguez, Rebecca	July 26, 2021	Deferred - Child Support Services
Tierney, Mary Jo	July 31, 2021	San Mateo County Health
Tolentino, Gerardo	July 17, 2021	Superior Court
Wegner, Grazyna	July 24, 2021	Information Services
Yang, Chin-Po	July 17, 2021	Behavioral Health

4.4 Continuances

None.

4.5 Deferred Retirements

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

Name	Retirement Plan Type
Briscoe, Kristin	G7, Non-vested - Reciprocity
Bursten, Juliana	G5, Vested - Auto Defer - Code 31700
Dixon, Rochelle	G7, Vested - Auto Defer - Code 31700
Eggers, Brian	G7, Vested - Auto Defer - Code 31700
Fernandez, Oscar	G7, Non-vested - Reciprocity
Selvy, Vernon	G5, Vested

4.6 Member Account Refunds

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

Name	Retirement Plan Type
Casey, Brian	S5, Non-vested
Thorpe, Kimberly	G7, Non-vested

4.7 Member Account Rollovers

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

Name	Retirement Plan Type
Bauzon, Jeannie	G7, Non-vested
Chow, Lucas	G4, Non-vested

Harrison, Adam	G7, Non-vested
Hollomon, Carl (FBO: Ellingberg, Frances)	G4, Vested
Pasch, Jaclyn	G7, Non-vested
Siva, Carl	G7, Non-vested

4.8 Member Account Redeposits

None.

4.9 Acceptance of Trustees' Reports of Educational Activities

None.

SAN MATEO COUNTY EMPLOYEES' RETIREMENT ASSOCIATION
Board of Retirement

September 28, 2020

Agenda Item 4.10

TO: 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 7, 2021, 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

SAN MATEO COUNTY EMPLOYEES' RETIREMENT ASSOCIATION
Board of Retirement

Questions for Annual Auditor Consultant Evaluation

Please provide information about the following events and activities and whether they occurred during Fiscal Year 2020-21.

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 2020-21

- 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?

SAN MATEO COUNTY EMPLOYEES' RETIREMENT ASSOCIATION
Board of Retirement

- 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 28, 2021

Agenda Item 4.11

TO: Board of Retirement
FROM: Scott Hood, Chief Executive Officer
SUBJECT: Records Retention Policy



Recommendation

Approve a resolution amending the Board of Retirement's Records Retention Policy.

Background

The Board has 24 policies which it has adopted at various times to govern the Board in its activities and to guide staff's administration of the system. Staff brings these policies to the Board for periodic reaffirmation or amendment on an as needed basis. The policy before the Board is its Records Retention Policy. Staff is recommending amendments to this policy which was last approved by the Board in 2018.

Discussion

The '37 Act provides that: "The board may establish efficient records management procedures, which may include, but need not be limited to, maintenance and, when determined by the board to be necessary, disposal of records in its jurisdiction." (Government Code § 31537.) SamCERA is not required to maintain unofficial records which, as described in the proposed policy, generally consist of drafts and other preliminary documents or recordings. The proposed amendments to the policy: (1) clarify the definitions of "official" and "unofficial" records; (2) clarify that "litigation holds" supersede the policy's provisions allowing the disposal of records; (3) set forth the process for the disposal of records; and (4) identify discrete categories of physical records that may now be destroyed in accordance with applicable law and best practices.

Attachments

- Resolution Amending Records Retention Policy
- Proposed Amended Records Retention Policy (Redlined Version)
- Proposed Amended Records Retention Policy (Clean Version)

SAN MATEO COUNTY EMPLOYEES' RETIREMENT ASSOCIATION

RESOLUTION 2021-__

*RESOLUTION APPROVING AMENDMENT OF
BOARD OF RETIREMENT'S RECORDS RETENTION POLICY*

WHEREAS, pursuant to Government Code § 31537, "The board may establish efficient records management procedures, which may include, but need not be limited to, maintenance and, when determined by the board to be necessary, disposal of records in its jurisdiction" and;

WHEREAS, the Board has a Records Retention Policy for SamCERA's records, and desires to amend the policy to (1) clarify the definitions of "official" and "unofficial" records; (2) clarify that "litigation holds" supersede the policy's provisions allowing the disposal of records; (3) set forth the process for the disposal of records; and (4) identify discrete categories of physical records that may now be destroyed in accordance with applicable law and best practices.; and

WHEREAS, the Board has reviewed the amendments to the "Board of Retirement's Records Retention Policy" and desires to adopt such policy;

THEREFORE, BE IT RESOLVED, that the Board hereby adopts the attached amended "Board of Retirement Records Retention Policy."

* * * * *

Regularly passed and adopted, by the San Mateo County Employees' Retirement Association, Board of Retirement, on September 28, 2021.

Ayes, Trustees:

Noes, Trustees:

Absent, Trustees:

Abstain, Trustees:

Mark Battey, SamCERA Board Secretary

~~SAN MATEO COUNTY EMPLOYEES RETIREMENT ASSOCIATION~~

~~San Mateo County Employees' Retirement Association~~

**BOARD OF RETIREMENT
RECORDS RETENTION POLICY**

I. Purpose.

Information recorded in any form, whether paper or electronic, can be considered a record. SamCERA maintains ~~those~~ official records that document SamCERA's business matters ~~except for emails~~ and this policy concerns the maintenance of such records with the exception of e-mails that are sent or received through the County of San Mateo's ~~email~~-mail system. Such ~~email~~e-mail records are subject to the ~~County's email~~County's e-mail retention policy and not this policy. The purposes of this policy are to: (1) ensure that SamCERA maintains official records that are essential to its ~~operation~~operations; (2) reduce recordkeeping costs; (3) improve the efficiency of recordkeeping; ~~and~~ (4) ensure legal compliance with state, federal, ~~and~~ other regulatory recordkeeping requirements; and (5) set forth the general procedures concerning the maintenance and disposal of SamCERA's records, pursuant to Government Code § 31537.

~~II. Maintenance of Official Records.~~

The retention rules set forth in Section IV below apply to "official records" created or received by the SamCERA Board and/or staff. Whether or not a document constitutes an "official record" is set forth in Section II below.

If a document is an "unofficial record" as defined in Section III below, the Board and/or staff may retain or dispose of such documents at their discretion in accordance with the document's relevance and usefulness to business needs.

On occasion, the Chief Executive Officer or Chief Legal Counsel may issue a "Litigation Hold Notice." A Litigation Hold Notice requests that the Board and/or staff identify and preserve certain documents (both electronic and physical) for litigation purposes. Such a Litigation Hold Notice supersedes any retention requirements and/or schedules set out in this policy.

II. Definition of Official Records.

"Official records" are records that reflect the final and official position or activities of SamCERA-related to the specific content of the record. SamCERA will create and maintain trustworthy official records in order to preserve the rights of members and beneficiaries, and to promote quality decision-making and efficient business practices. A record is trustworthy when it has:

- Reliability - a full and accurate representation of the activities or facts to which ~~they~~ attest ~~attests~~, and can be depended upon in the course of other transactions or activities.
- Integrity - protected against unauthorized addition, deletion, and alteration.
- Usability - able to be located, retrieved, presented, and ~~read~~ ~~III.~~ read.

III. Definition of Unofficial Records.

“Unofficial records” include, but are not limited to, works-in-progress, drafts, and copies of documents or other media that have either not been finalized or approved. SamCERA is not required to maintain unofficial records.

Once the minutes of meetings of the Board of Retirement or any Standing Committee of the Board have been approved, recordings of such meetings, if any, are deemed to be unofficial records, and if at least 30 days have elapsed from the meeting date, such recordings of such meetings, if any, are deemed to may be unofficial records deleted or otherwise destroyed. If staff determines that portions of the recording may need to be retained longer for beyond such 30-day period as the result of an administrative procedure or other legal process, such portion of the recording will remain an official record may be retained during such period. Unofficial records consist of works in progress, copies, but thereafter should be deleted or otherwise destroyed upon the conclusion of ~~notes and records that have not been either finalized or approved.~~ Records such administrative procedure or legal process. Documents that do not yet reflect the official position of SamCERA and/or which remain subject to change before completion are also considered “unofficial records.” Publications and materials not produced by SamCERA, not produced at SamCERA’s request, or not required to be received by SamCERA are ~~not official~~ also “unofficial records.” However, such ~~a record materials~~ may be deemed “official records” if it adds to they are necessary for a complete understanding of ~~SamCERA~~ SamCERA’s actions, operations, and responsibilities.

IV. Process for Maintaining the Maintenance of Official Records.

A. Conversion of Paper Documents Existing Physical Records. All official member records that are in paper or other physical format and which are currently stored at the SamCERA office and any additional official records designated or at a secure offsite location by the Chief Executive Officer that are currently in paper format SamCERA shall be converted into an electronic documents. Thereformat. Conversion of records into an electronic format shall be: (1) documentation of each step of undertaken in such a manner that the conversion process to ensure adequate proof of the chain of custody and (2) electronic storage so that the scanned documents records cannot be added to, deleted, or otherwise changed. The paper documents, and that the chain of custody of such records may be established if necessary. Following conversion, the physical records will be kept for a period of time postconversion destroyed unless there are specific circumstances requiring that such physical records be maintained. To the Chief Executive Officer extent the CEO determines is appropriate that it is not feasible or cost-effective to convert existing physical records into an electronic format, then such records may continue to be stored in physical form.

B. Conversion of Paper Documents Physical Records on an On-Going Basis. All official records that are hereafter created or received in a paper or other physical format should be converted into an electronic format in such a manner that allows for the record to be trustworthy, efficiently stored, and retrievable. There Conversion of records into an electronic format shall be: (1) documentation of each step of the conversion process to ensure adequate proof of the undertaken in such manner that the chain of custody of such records may be established if necessary, and (2) electronic storage so that the scanned documents the records cannot be added to, deleted, or otherwise changed. After the Following conversion, the paper document physical records will be destroyed unless there are specific circumstances requiring that it be kept, such as, but not limited to, a litigation hold or document preservation order. such physical records be maintained.

C. Electronic Documents Records. All official records that are converted, created or received electronically shall be maintained and stored electronically in such a manner that allows for the record to be trustworthy, efficiently stored, and retrievable.

D. Destruction of Electronic Documents. All documents that either originated electronically or are converted into an electronic form will be electronically stored "indefinitely" until such time that the Board directs staff otherwise. Staff will monitor the electronic storage capacity on an ongoing basis. If it is determined that there should be destruction of any electronic records, staff will present a destruction schedule for the Board's approval.

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V. Disposal of Official Records.

A. Electronic Records - With respect to official records in an electronic format, staff will monitor SamCERA's electronic storage capacity on an ongoing basis. If the CEO determines that it is not feasible or cost-effective to continue to maintain such electronic records, and if

SamCERA is not legally required to maintain such records, then staff will present a disposal schedule for the Board's approval.

B. Physical Records - With respect to official records that are in a physical format, those physical records set forth on **Attachment A** may be destroyed following retention for the period required thereon or conversion into electronic format, whichever is earlier. All other official records, whether in physical or electronic form, that are not specified in the attached schedule shall be stored indefinitely until such time as the Board authorizes their disposal.

C. Process for Disposal of Official Records - In accordance with Sections IV.A. and IV.B., records in paper form that have been converted into an electronic format shall be destroyed as soon as practicable after they have been converted into electronic format. Additionally, all physical records described in **Attachment A** shall be destroyed following the required retention period at the beginning of each fiscal year or as soon as practicable thereafter. All records which have been designated for disposal, whether in physical or electronic format, shall be destroyed in manner that will prevent their future recovery.

Last amended 7/24/2018[DATE]

San Mateo County Employees' Retirement Association

BOARD OF RETIREMENT RECORDS RETENTION POLICY

I. Purpose.

Information recorded in any form, whether paper or electronic, can be considered a record. SamCERA maintains official records that document SamCERA's business matters and this policy concerns the maintenance of such records with the exception of e-mails that are sent or received through the County of San Mateo's e-mail system. Such e-mail records are subject to the County's e-mail retention policy and not this policy. The purposes of this policy are to: (1) ensure that SamCERA maintains official records that are essential to its operations; (2) reduce recordkeeping costs; (3) improve the efficiency of recordkeeping; (4) ensure legal compliance with state, federal, and other regulatory recordkeeping requirements; and (5) set forth the general procedures concerning the maintenance and disposal of SamCERA's records, pursuant to Government Code § 31537.

The retention rules set forth in Section IV below apply to "official records" created or received by the SamCERA Board and/or staff. Whether or not a document constitutes an "official record" is set forth in Section II below.

If a document is an "unofficial record" as defined in Section III below, the Board and/or staff may retain or dispose of such documents at their discretion in accordance with the document's relevance and usefulness to business needs.

On occasion, the Chief Executive Officer or Chief Legal Counsel may issue a "Litigation Hold Notice." A Litigation Hold Notice requests that the Board and/or staff identify and preserve certain documents (both electronic and physical) for litigation purposes. Such a Litigation Hold Notice supersedes any retention requirements and/or schedules set out in this policy.

II. Definition of Official Records.

"Official records" are records that reflect the final and official position or activities of SamCERA-related to the specific content of the record. SamCERA will create and maintain trustworthy official records in order to preserve the rights of members and beneficiaries, and to promote quality decision-making and efficient business practices. A record is trustworthy when it has:

- Reliability - a full and accurate representation of the activities or facts to which it attests, and can be depended upon in the course of other transactions or activities.
- Integrity - protected against unauthorized addition, deletion, and alteration.
- Usability - able to be located, retrieved, presented, and read.

III. Definition of Unofficial Records.

“Unofficial records” include, but are not limited to, works-in-progress, drafts, and copies of documents or other media that have either not been finalized or approved. SamCERA is not required to maintain unofficial records.

Once the minutes of meetings of the Board of Retirement or any Standing Committee of the Board have been approved, recordings of such meetings, if any, are deemed to be unofficial records, and if at least 30 days have elapsed from the meeting date, such recordings may be deleted or otherwise destroyed. If staff determines that portions of the recording need to be retained beyond such 30-day period as the result of an administrative procedure or other legal process, such portion of the recording may be retained, but thereafter should be deleted or otherwise destroyed upon the conclusion of such administrative procedure or legal process. Documents that do not yet reflect the official position of SamCERA and/or which remain subject to change before completion are also considered “unofficial records.” Publications and materials not produced by SamCERA, not produced at SamCERA’s request, or not required to be received by SamCERA are also “unofficial records.” However, such materials may be deemed “official records” if they are necessary for a complete understanding of SamCERA’s actions, operations, and responsibilities.

IV. Process for the Maintenance of Official Records.

A. Conversion of Existing Physical Records. All official records that are in paper or other physical format and which are currently stored at the SamCERA office or at a secure offsite location by SamCERA shall be converted into an electronic format. Conversion of records into an electronic format shall be undertaken in such a manner that the records cannot be added to, deleted, or otherwise changed, and that the chain of custody of such records may be established if necessary. Following conversion, the physical records will be destroyed unless there are specific circumstances requiring that such physical records be maintained. To the extent the CEO determines that it is not feasible or cost-effective to convert existing physical records into an electronic format, then such records may continue to be stored in physical form.

B. Conversion of Physical Records on an On-Going Basis. All official records that are hereafter created or received in a paper or other physical format should be converted into an electronic format in such a manner that allows for the record to be trustworthy, efficiently stored, and retrievable. Conversion of records into an electronic format shall be undertaken in such manner that the chain of custody of such records may be established if necessary, and the records cannot be added to, deleted, or otherwise changed. Following conversion, the physical records will be destroyed unless there are specific circumstances requiring that such physical records be maintained.

C. Electronic Records. All official records that are created or received electronically shall be maintained and stored electronically in such a manner that allows for the record to be trustworthy, efficiently stored, and retrievable.

V. Disposal of Official Records.

A. Electronic Records - With respect to official records in an electronic format, staff will monitor SamCERA's electronic storage capacity on an ongoing basis. If the CEO determines that it is not feasible or cost-effective to continue to maintain such electronic records, and if SamCERA is not legally required to maintain such records, then staff will present a disposal schedule for the Board's approval.

B. Physical Records - With respect to official records that are in a physical format, those physical records set forth on **Attachment A** may be destroyed following retention for the period required thereon or conversion into electronic format, whichever is earlier. All other official records, whether in physical or electronic form, that are not specified in the attached schedule shall be stored indefinitely until such time as the Board authorizes their disposal.

C. Process for Disposal of Official Records - In accordance with Sections IV.A. and IV.B., records in paper form that have been converted into an electronic format shall be destroyed as soon as practicable after they have been converted into electronic format. Additionally, all physical records described in **Attachment A** shall be destroyed following the required retention period at the beginning of each fiscal year or as soon as practicable thereafter. All records which have been designated for disposal, whether in physical or electronic format, shall be destroyed in manner that will prevent their future recovery.

Last amended [DATE]

ATTACHMENT A

RECORDS RETENTION SCHEDULE

Finance Division Records

Records Category	Minimum Retention Period	Notes & Citation (if any)
Retirement Payroll Records	Current FY + 15 years	29 U.S.C. § 1027 26 U.S.C. § 6502(a) (IRS Levy limitation period)
Audit Work Papers & Records [does <u>not</u> include financial statements, audit reports, ACFRs]* <i>(e.g., correspondence with auditor; information exchanged with auditor; other support documentation)</i>	7 years after audit	*Financial statements, audit reports, and ACFRs are to be maintained permanently. PCAOB – Auditing Standard No. 3. Securities and Exchange Commission, RIN 3235-A174, Retention of Records Relevant to Audits and Reviews.
Actuary Work Papers & Records [does <u>not</u> include actuarial reports]* <i>(e.g., correspondence with actuary; information exchanged with actuary)</i>	7 years	*Actuarial reports are to be maintained permanently
Tax Records <i>(e.g., 1099 files; annual/quarterly payroll tax returns filed with federal and state agencies; IRS Form 1042)</i>	10 years	
Contract-Related Records <i>(e.g., agreements, invoices; payment support documents; contract deliverable reports or other reports demonstrating performance; procurement documents)</i>	Active + 4 years after contract expiration	Code of Civil Procedure § 337
Journal Entries <i>(e.g., journal entries created through accounting systems such as OFAS and Great Plains)</i>	Current FY + 5 years	Code of Civil Procedure §§ 337, 338, 343 General accounting principles
Accounts Payable, Accounts Receivable, Cash Receipt, and Non-Payroll Payment Records* <i>(e.g., invoices, deposit permits; wire transfers, accounts receivable/payable ledgers and schedules)</i>	Current FY + 5 years	*All contract-related documents must be maintained per the category “Contract-Related Records” above. Code of Civil Procedure §§ 337, 338, 343; 29 U.S.C. § 1027 General accounting principles

ATTACHMENT A

RECORDS RETENTION SCHEDULE

Benefits Division Records

Records Category	Minimum Retention Period	Notes & Citation (if any)
Disability File – Medical Records*	Active + 7 years*	Govt Code §§ 911.2, 911.4, 31532; Code of Civil Procedure §§ 338, 1094.6; *Cases are considered “active” until all administrative proceedings have concluded, the Board has made a final decision, and the period for appeal has expired. *This schedule only authorizes the destruction of medical records. Other portions of member disability files should be maintained pending further revisions to the records retention policy.

SAN MATEO COUNTY EMPLOYEES' RETIREMENT ASSOCIATION
Board of Retirement

September 28, 2021

Agenda Item 4.12

TO: Board of Retirement

FROM: Scott Hood, Chief Executive Officer 

SUBJECT: Agreement with Buchalter, P.C., for Tax Counsel Services

Recommendation

Approve a resolution authorizing the Chief Executive Officer to execute an agreement with Buchalter, P.C., for Tax Counsel Services.

Background

It is important that SamCERA remain compliant with applicable state and federal tax laws and regulations. From time to time SamCERA has utilized the services of outside counsel to address tax issues raised in the administration of benefits. In June 2017, staff issued a Request for Proposals soliciting proposals from three firms experienced in tax issues arising from county retirement systems. After a review of the proposals, interviews, and reference checks, staff recommended Steptoe & Johnson LLP (Steptoe) to the Board and, in July 2017, the Board approved the retention of Steptoe through June 2022, with the legal services to be performed by Don Wellington and Jenni Kregel and other Steptoe attorneys as appropriately delegated.

Subsequently, Mr. Wellington and Ms. Kregel moved to the firm of Reed Smith LLP (Reed Smith) and, in April 2018, the Board authorized the execution of a legal services agreement with Reed Smith with substantially the same terms and conditions provided for under the Steptoe agreement.

Discussion

Ms. Kregel, who is actively advising SamCERA with respect to certain tax matters, recently informed SamCERA's Chief Legal Counsel that she was moving to the firm of Buchalter, P.C. (Buchalter). This resolution authorizes the Chief Executive Officer to execute an agreement with Buchalter for the provision of tax counsel services on substantially the same terms and conditions as the agreement with Reed Smith up to a maximum of \$25,000, with authority to amend that agreement by an additional \$10,000, throughout the term, if needed.

As with the Reed Smith agreement, the Buchalter agreement will run through June 2022, unless terminated earlier. Buchalter's hourly billing rates through the agreement term, which are discounted for SamCERA, are \$595 for Ms. Kregel and \$440 for Tonie Bitseff, who is the primary associate to be delegated matters from Ms. Kregel.

SAN MATEO COUNTY EMPLOYEES' RETIREMENT ASSOCIATION
Board of Retirement

As Mr. Wellington continues to be a valued legal services provider with subspecialties that would be beneficial to utilize from time to time, staff does not recommend terminating the tax counsel agreement with Reed Smith, but will instead insure that the total payments for both the Buchalter and Reed Smith agreements do not exceed \$50,000 through June 2022.

Attachment

Resolution Authorizing the Chief Executive Officer to Execute an Agreement with Buchalter, P.C., for Tax Counsel Services

SAN MATEO COUNTY EMPLOYEES' RETIREMENT ASSOCIATION

RESOLUTION ____ - __

RESOLUTION AUTHORIZING THE CHIEF EXECUTIVE OFFICER TO EXECUTE AN AGREEMENT WITH BUCHALTER, P.C., FOR TAX COUNSEL SERVICES

WHEREAS, Article XVI, §17 of the Constitution of the State of California vests the Board with plenary authority and fiduciary responsibility for the investment of moneys and the administration of the system; and

WHEREAS, it is important that SamCERA remain compliant with applicable state and federal tax laws and regulations and to obtain tax refunds and favorable tax rulings in foreign jurisdictions in which the Fund has investments; and

WHEREAS, in June 2017 SamCERA's agreement with tax counsel expired and staff issued a Request for Proposal for tax counsel services and the Board determined that it was in SamCERA's best interests to enter into a 5-year agreement with Steptoe & Johnson, LLP (Steptoe) to provide tax counsel services; and

WHEREAS, the agreement with Steptoe provided that the services were to be provided by Don Wellington and Jenni Krengel, both of whom subsequently joined the firm of Reed Smith LLP (Reed Smith) in or about April 2018; and

WHEREAS, in April 2018, the Board approved a resolution terminating the legal services agreement with Steptoe and authorizing the execution of an agreement with Reed Smith for the provision of tax counsel services; and

WHEREAS, Ms. Krengel has recently joined the firm of Buchalter, P.C. (Buchalter), and it is in the best interests of SamCERA to continue to utilize Ms. Krengel for tax counsel services;

THEREFORE, BE IT RESOLVED, that the Board of Retirement authorizes the Chief Executive Officer to execute an agreement with Buchalter, P.C., for tax counsel services in an amount not to exceed \$25,000; and

BE IT FURTHER RESOLVED, that the Chief Executive Officer is hereby authorized and directed to execute any subsequent amendments and minor modifications in an amount not to exceed \$10,000, for a total not to exceed \$35,000.

* * * * *

*Regularly passed and adopted, by the San Mateo County Employees'
Retirement Association, Board of Retirement, on September 28, 2021.*

Ayes, Trustees:

Noes, Trustees:

Absent, Trustees:

Abstain, Trustees:

*Mark Battey, Board Secretary
SamCERA*

SAN MATEO COUNTY EMPLOYEES' RETIREMENT ASSOCIATION
Board of Retirement

September 28, 2021

Agenda Item 5.2

TO: Board of Retirement

FROM: Scott Hood, Chief Executive Officer 

SUBJECT: Presentation of the June 30, 2021, Actuarial Valuation Report by Milliman, Inc.

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, 2021. This year's actuarial valuation process resulted in:

- A decrease in the Employer Statutory Contribution rate from 38.91% (effective July 1, 2021) to 38.33% (effective July 1, 2022).
- An increase in the member contribution rates for all plans (effective July 1, 2022).
- An increase in the funded ratio of the system from 86.4% as of June 30, 2020, to 88.1% as of June 30, 2021.

Attachments

Milliman Presentation on 2021 Valuation

San Mateo County Employees' Retirement Association June 30th, 2021 Actuarial Valuation

Actuarial Funding Valuation as of June 30, 2021 for SamCERA

Nick Collier and Craig Glyde

SEPTEMBER 28, 2021



Overview

- Key 2021 funding valuation findings and results
 - Recommended FY 2022-2023 contribution rates; employer rates assume 3-year phase-in of contribution rate increase due to assumption change
- COVID-19 Impact
- GASB 67/68 financial report valuation will be completed next month
- Looking forward
- Summary of recommendations



Results: Funded Ratio

- Increase in AAL greater than expected primarily due to:
 - Lower investment return assumption
 - Demographic experience only had small impact
- Valuation assets increase greater than expected primarily due to:
 - Prior year fiscal year return of approximately 23.5%
 - After smoothing, FY2020-2021 actuarial return = 8.2%

	June 30, 2021	June 30, 2020
<i>(\$Millions)</i>		
Actuarial Accrued Liability	\$ 6,227.1	\$ 5,786.1
Valuation Assets (Total)	<u>5,489.0</u>	<u>4,998.3</u>
Unfunded Actuarial Accrued Liability	\$ 738.1	\$ 787.8
Funded Ratio (AVA Basis)	88.1%	86.4%

Results: Statutory Contribution Rates

- Recommend adopting new employer Statutory Contribution Rates
 - Detail by plans in Exhibit 10 of report

	Fiscal Year Beginning		Change
	July 1, 2022	July 1, 2021	
Gross Normal Cost Rate	24.04%	23.11%	0.93%
Member Contribution Rate	(12.49)%	(12.21)%	(0.28)%
Employer Normal Cost Rate	11.55%	10.90%	0.65%
UAAL Amortization Rate	29.21%	28.01%	1.20%
Calculated Employer Rate	40.76%	38.91%	1.85%
Deferred Recognition of Assumption Change	(2.43)%	-	(2.43)%
Employer Rate with Phase-in	38.33%	38.91%	(0.58)%
County Contribution Rate	38.51%	39.14%	(0.63)%
Courts Contribution Rate	35.73%	35.85%	(0.12)%
SMCM&VCD Contribution Rate	12.10%	12.76%	(0.66)%

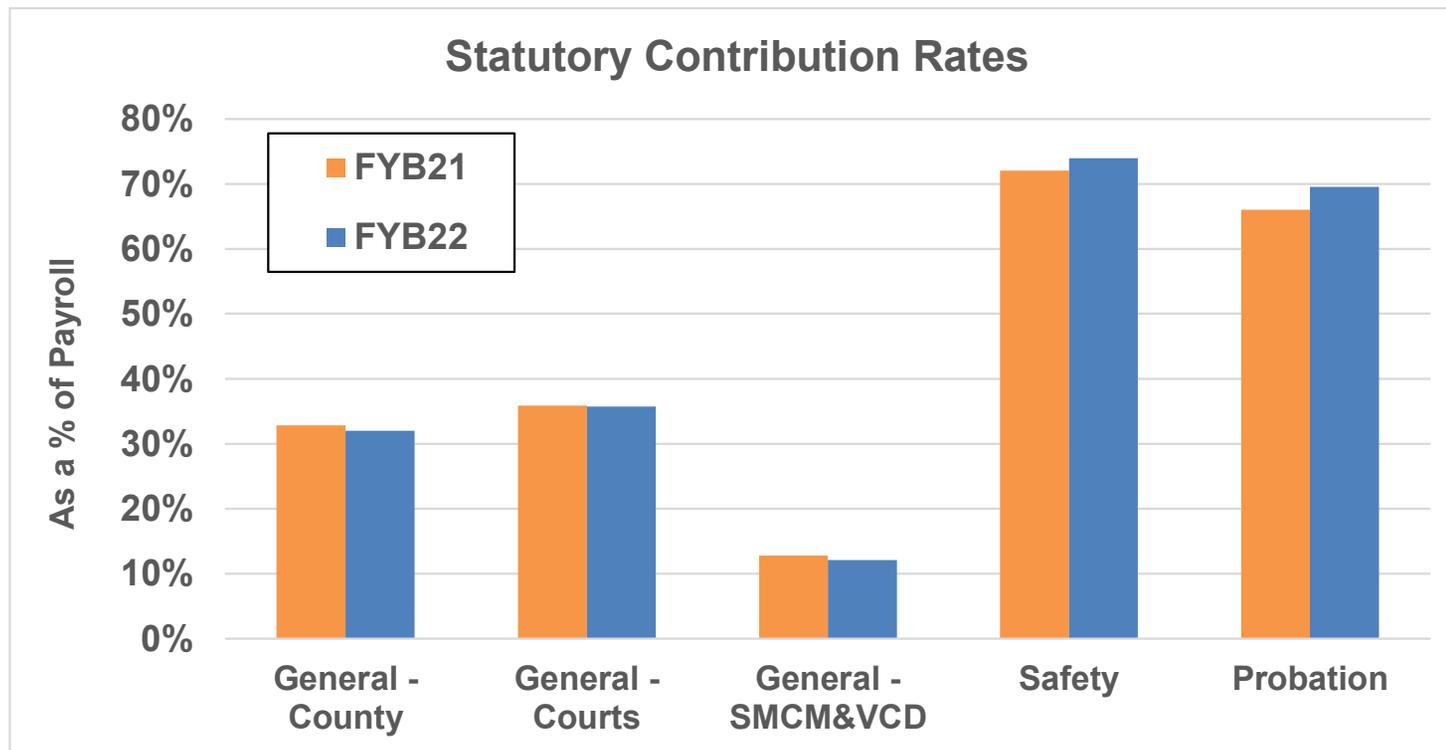
Statutory Contribution Rates - Impact of SCAs

- CSCA equals \$220.2M, DSCA equals \$1.1M as of June 30, 2021
 - CSCA: Statutory contribution rate calculated excluding CSCA, then credit based on 15-year layered amortization of CSCA
 - DSCA: Statutory contribution rate calculated excluding DSCA, then credit based on 5-year layered amortization of DSCA

	Fiscal Year Beginning July 1, 2022			
	All Employers	County	Courts	SMCM&VCD
Preliminary Rate with Phase-In	42.51%	42.78%	35.73%	37.55%
CSCA Credit	(4.09)%	(4.27)%	-	-
DSCA Credit	(0.09)%	-	-	(25.45)%
Employer Contribution Rate	38.33%	38.51%	35.73%	12.10%

Changes by Employer Class

- Overall SCR decreased, but varied by class



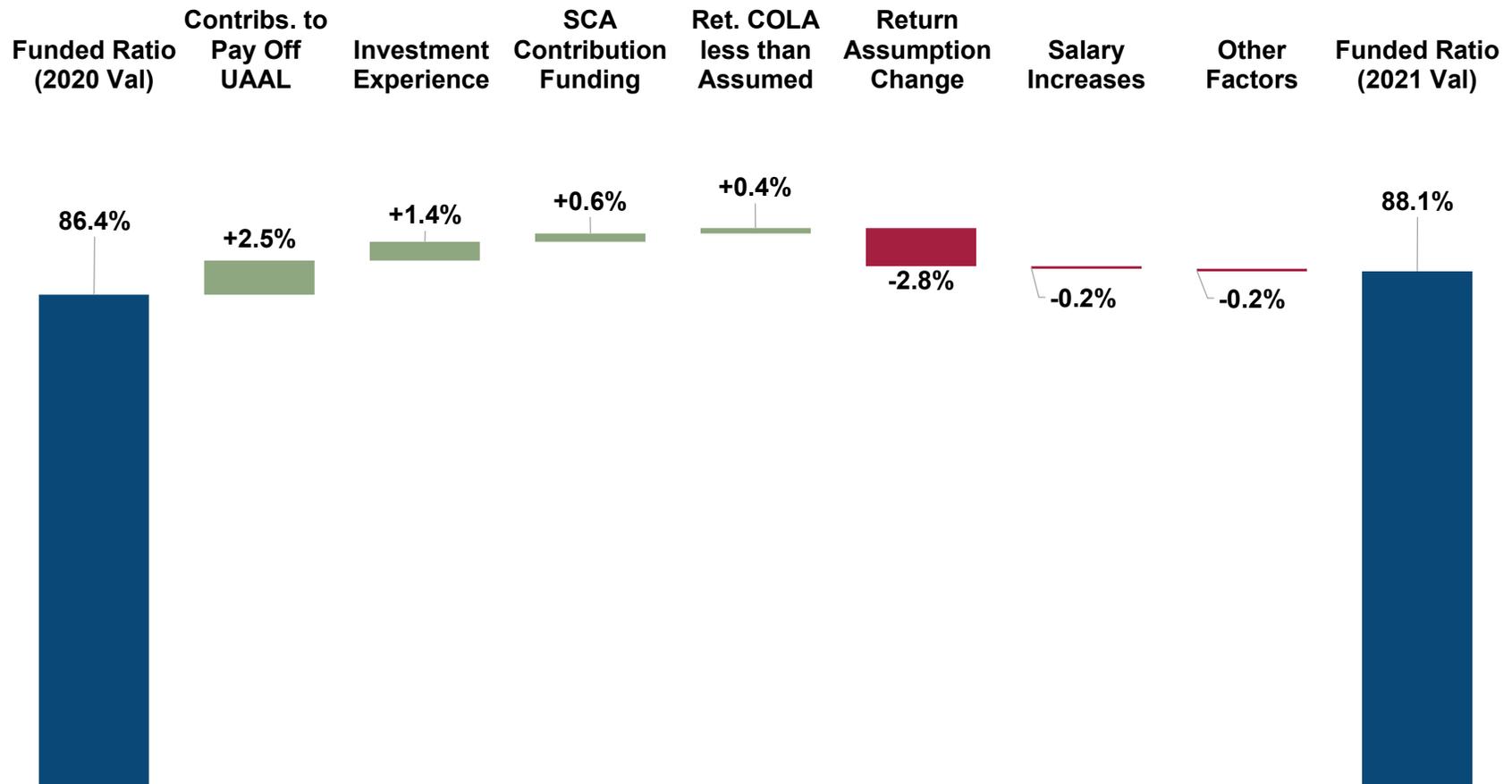
Changes Between Valuations

- Investment return assumption reduced from 6.50% to 6.25%
 - Valuation assumes impact of change on employer contribution will be phased in over 3 years
- FYE2021 market return of approximately 23.5% was greater than the prior year assumption (6.5%)
- County contribution of about \$40 million in excess of Statutory Contribution Rate credited to CSCA
- Inflation (for retiree COLAs) less than assumed (1.5% vs. 2.5%)

Changes Since Last Year – Statutory Contribution Rate



Changes Since Last Year – Funded Ratio



Member Contribution Rates - General

- Recommend adopting new member contribution rates
 - Basic and COLA rates change due to new assumptions (Plans 1 – 6; COLA rates do not apply to Plan 3)
 - Plan 7 rates are equal to 50% of the plan’s Normal Cost Rate
 - Detail in Appendix D of report

Sample Changes in Member Rates (Based on June 30, 2021 Actuarial Valuation)					
	<u>Entry Age</u>	<u>Current</u>	<u>New</u>	<u>Increase</u>	<u>Range of Changes for All Entry Ages</u>
General County & Courts Members					
Plan 1	35	14.54%	15.15%	0.61%	0.45% to 0.69%
Plan 2	35	14.50%	15.19%	0.69%	0.55% to 0.75%
Plan 4	35	13.44%	14.07%	0.63%	0.48% to 0.69%
Plan 5	35	8.96%	9.65%	0.69%	0.58% to 0.72%
General Members					
Plan 7	All	8.75%	9.17%	0.42%	0.42% to 0.42%
SMCM&VCD Members					
Plan 7	All	9.67%	10.12%	0.45%	0.45% to 0.45%

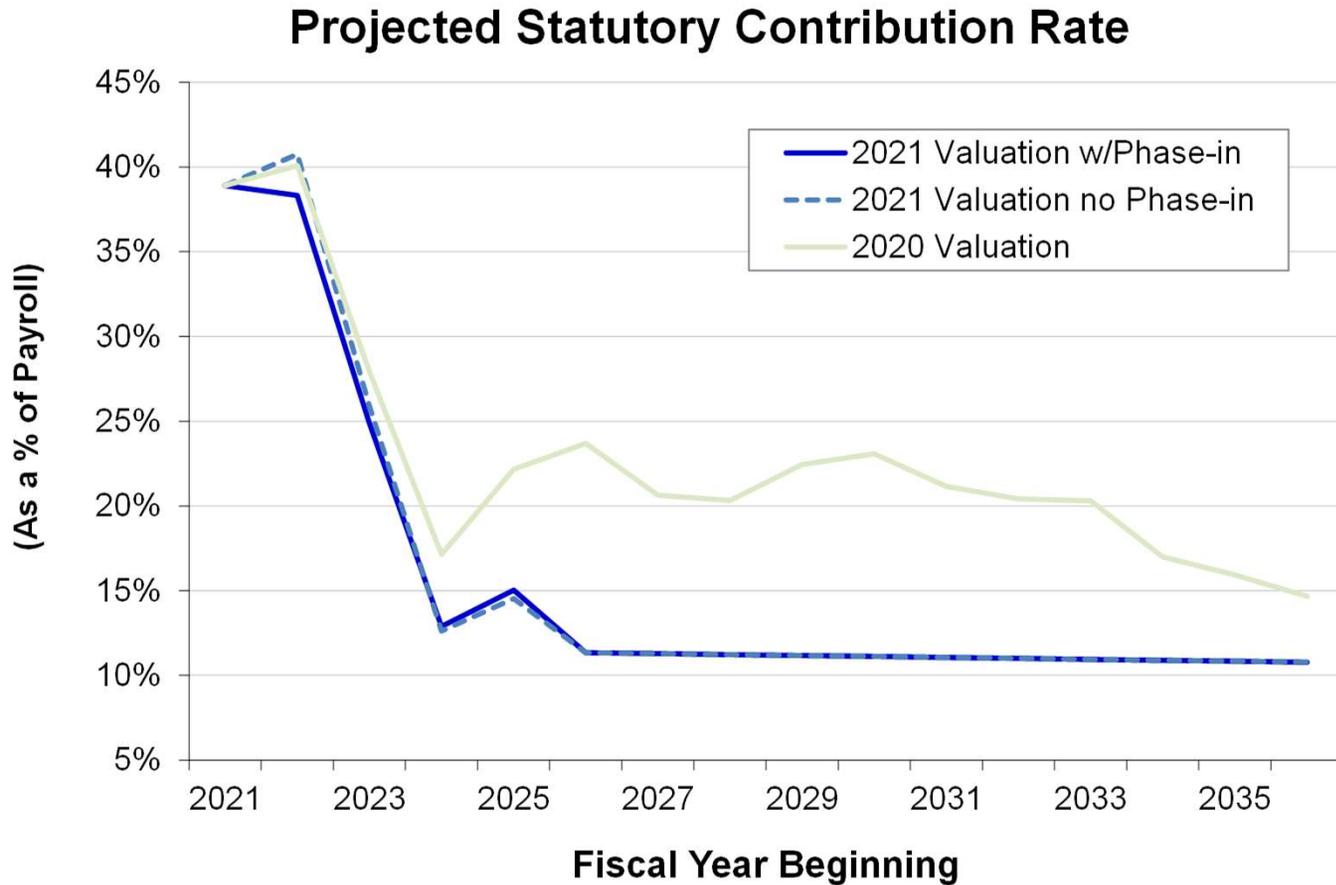
General Plan 4 member with an age 35 entry age and earning \$4,000 bi-weekly will see an increase of \$25.20 in their bi-weekly contribution rate (from \$537.60 to \$562.80)

Member Contribution Rates – Probation and Safety

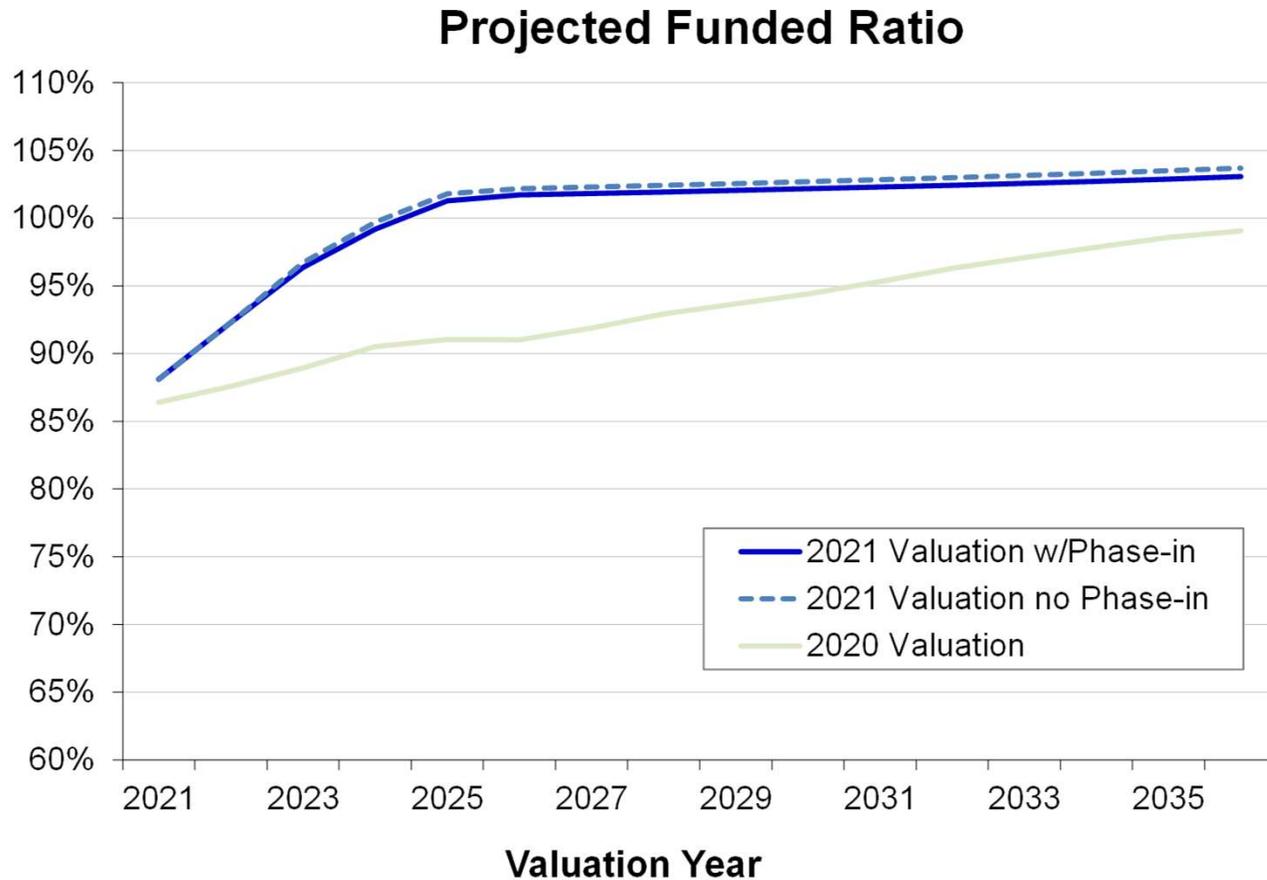
Sample Changes in Member Rates (Based on June 30, 2021 Actuarial Valuation)					
	Entry Age	Current	New	Increase	Range of Changes for All Entry Ages
Probation Members					
Plan 1	25	18.96%	19.89%	0.93%	0.64% to 1.01%
Plan 2	25	18.96%	19.95%	0.99%	0.71% to 1.06%
Plan 4	25	17.08%	18.01%	0.93%	0.69% to 0.99%
Plan 5	25	16.62%	17.59%	0.97%	0.76% to 1.02%
Plan 6	25	12.68%	13.45%	0.77%	0.51% to 0.83%
Plan 7	All	14.85%	15.74%	0.89%	0.89% to 0.89%
Safety Members -- non-Deputy Sheriff					
Plan 1	25	19.93%	20.83%	0.90%	0.62% to 0.98%
Plan 2	25	20.31%	21.38%	1.07%	0.83% to 1.13%
Plan 4	25	18.52%	19.60%	1.08%	0.87% to 1.11%
Plan 5	25	17.09%	18.32%	1.23%	1.09% to 1.25%
Plan 6	25	12.88%	13.66%	0.78%	0.52% to 0.85%
Plan 7	All	14.72%	15.66%	0.94%	0.94% to 0.94%

Safety Plan 4 member (non-Deputy Sheriff) with an age 25 entry age and earning \$5,000 bi-weekly will see an increase of \$54.00 in their bi-weekly contribution rate (from \$926.00 to \$980.00)

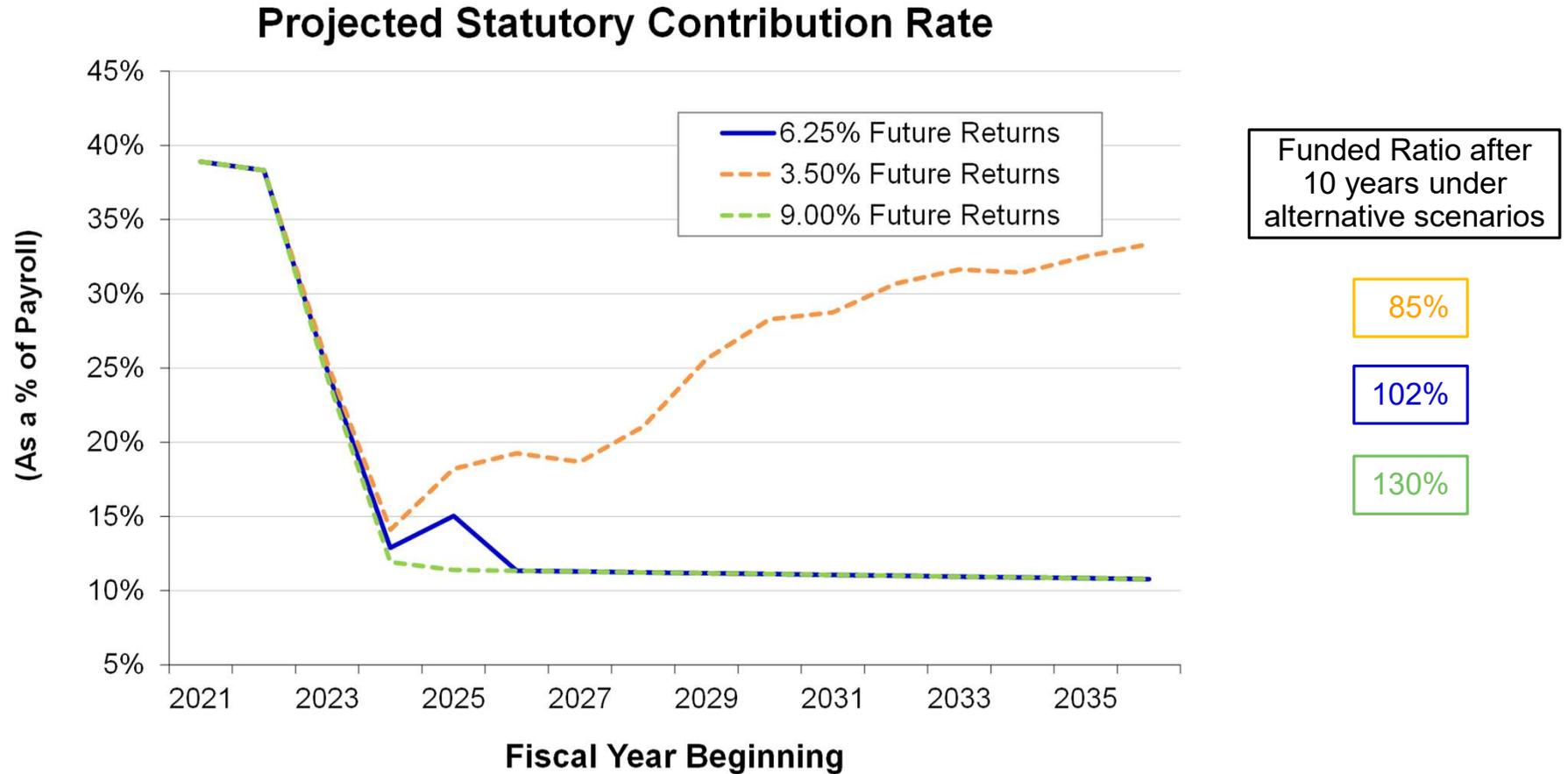
Looking Forward SCR – All Assumptions Met



Looking Forward Funded Ratio – All Assumptions Met



Looking Forward SCR – Return Volatility



Summary of recommendations



- Adopt new employer statutory contribution rates effective July 1, 2022
 - See Exhibits 10, 10a–10d of report for details
 - County General = 32.02% (32.79% in FY21-22)
 - Courts = 35.73% (35.85% in FY21-22)
 - Mosquito & Vector Control District = 12.10% (12.76% in FY21-22)
 - County Safety = 73.94% (71.99% in FY21-22)
 - County Probation = 69.52% (65.98% in FY21-22)
- Adopt new member contribution rates for all plans effective July 1, 2022
 - As shown on pages 4 and 5
 - See Appendix D of 2021 funding valuation report for complete listing of member rates



Questions



Caveats and Disclaimers

This presentation is based on the data, methods, assumptions and plan provisions described in our actuarial valuation report dated September 20, 2021. 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, 2021 Actuarial Valuation

Prepared by:

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September 20, 2021

Board of Retirement
San Mateo County Employees' Retirement Association
100 Marine Parkway, Suite 125
Redwood City, CA 94065-5208

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, 2022.

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, 2021 and member contribution rates effective July 1, 2022. 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.

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 experience for SamCERA. The valuation results were developed using models intended for valuations that use standard actuarial techniques.

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.

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.

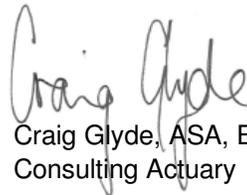
We would like to express our appreciation to Scott Hood, Chief Executive Officer of SamCERA, and to members of his staff, who gave substantial assistance in supplying the data on which this report is based.

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

Sincerely,

A handwritten signature in black ink that reads "Nick Collier".

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

A handwritten signature in black ink that reads "Craig Glyde".

Craig Glyde, ASA, EA, MAAA
Consulting Actuary

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1. Summary of Findings

This report presents the results of the June 30, 2021 actuarial valuation, including the Employer Statutory Contribution Rate calculated for the fiscal year beginning July 1, 2022 and the Funded Ratio of SamCERA. The following table summarizes these key results from the current and prior valuations.

	June 30, 2021	June 30, 2020
Employer Statutory Contribution Rate (all employers)	38.33%	38.91%
County Statutory Contribution Rate	38.51%	39.14%
Funded Ratio	88.1%	86.4%

Key findings and results from the valuation are summarized below.

Investment Return

SamCERA's net investment return on the market value of assets of 23.5% for the fiscal year ended June 30, 2021 was greater than the assumed rate for the prior fiscal year of 6.5%.

Under the asset smoothing method, the strong investment return for the first six months of the fiscal year offset the entire unrecognized investment losses as of June 30, 2020. Combined with the strong investment return for the second six months of the fiscal year there is approximately \$438 million of unrecognized investment gains as of June 30, 2021 that will be recognized over the next five years.

The net result was a return on Valuation Assets of 8.2%, which is greater than the prior year assumed rate of 6.5%, and caused a decrease in the Statutory Contribution Rate (SCR) of 1.36% of pay and an increase of 1.4% in the Funded Ratio. Note that this impact is strictly due to the investment return, and other factors caused additional changes to the SCR and Funded Ratio, as described in this report.

Investment Return Assumption & Phase-In Approach

At the May 25, 2021 Board of Retirement meeting, the Board adopted an investment return assumption of 6.25% effective for the June 30, 2021 actuarial valuation. All other assumptions described in our report dated July 22, 2020 Investigation of Experience report were reaffirmed by the Board for use in this valuation.

The net effect of the assumption change was an increase in the Unfunded Actuarial Accrued Liability (UAAL) of approximately \$198 million effective June 30, 2021, a decrease in the Funded Ratio of 2.8%, and an aggregate increase in the employer contribution rate of 3.64% of payroll.

Based on direction from the Board we have recognized the impact of the increase in employer contribution rate due to the new assumptions 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%) will be included in the SCR, and two-thirds (2.43%) will be deferred. Effective July 1, 2023 another 1.21% will be 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.

Member contribution rates for all plans (except the non-contributory Plan 3) changed as a result of the new assumptions, as described below.

Funding

The Funded Ratio increased from 86.4% to 88.1%, primarily due to investment returns greater than expected and employer contributions made to amortize the UAAL, which were partially offset by the impact of the investment return assumption change. On a market-value basis, the Funded Ratio increased from 82.6% to 96.1%, primarily due to the 23.5% net investment return over the period, compared to the assumed 6.5%.

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 County Supplementary Contribution Account (CSCA) and the District Supplementary Contribution Account (DSCA). Throughout this report we use the term SCA when referring to both of these accounts.

The County contributed \$39.7 million in excess of the SCR for the year ended June 30, 2021 which was credited to the CSCA. The District did not contribute to the DSCA over the year ended June 30, 2021. In total, the CSCA has an actuarial value of \$220.2 million and the DSCA has an actuarial value of \$1.1 million as of June 30, 2021. Without the CSCA and DSCA the Funded Ratio would be 84.6% as of June 30, 2021.

Employer Statutory Contribution Rate

The Statutory Contribution Rate (SCR) is comprised of the Employer Normal Cost rate and a separate component to amortize the UAAL. The SCR decreased by 0.58% of pay to 38.33% of pay, from 38.91% 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.

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 CSCA provides an offset of 4.27% of pay (compared to 3.54% of pay in the prior valuation) to the County's SCR, resulting in a County-only SCR of 38.51% of pay. Without the recognition of the CSCA, the County SCR would be 42.78% of pay.

The DSCA provides an offset of 25.45% of pay (compared to 25.83% of pay in the prior valuation) for the San Mateo County Mosquito and Vector Control District (SMCM&VCD). The DSCA offset is not permitted to be larger than the UAAL contribution rate for the SMCM&VCD.

Member Contribution Rates

New member contribution rates are recommended for all contributory plans effective July 1, 2022 based on the new investment return assumption adopted by the Board. Member contribution rates for all plans except Plan 3 and Plan 7 vary based on a member's entry age to SamCERA and the underlying actuarial assumptions. Due to the changes in the investment return assumption, we have calculated new member contribution rates for these plans effective July 1, 2022. Plan 7 member contribution rates are required 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. In general, there are increases for all contributory plans. 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.

Exhibit 1a
Summary of Recommended Minimum Statutory Contribution Rates

Recommendation #1: Adopt new Statutory Contribution Rates for fiscal year beginning July 1, 2022

	<u>Fiscal Year Beginning</u>		<u>Increase / (Decrease)</u>
	<u>July 1, 2022</u>	<u>July 1, 2021</u>	
Gross Normal Cost	24.04%	23.11%	0.93%
Member Contributions	(12.49)%	(12.21)%	(0.28)%
Employer Normal Cost	11.55%	10.90%	0.65%
UAAL Amortization	29.21%	28.01%	1.20%
Calculated Employer Rate	40.76%	38.91%	1.85%
Deferred Recognition of 2021 Assumptions	(2.43)%	-	(2.43)%
Total Employer Rate	38.33%	38.91%	(0.58)%
County Contribution Rate	38.51%	39.14%	(0.63)%
Courts Contribution Rate	35.73%	35.85%	(0.12)%
SMCM&VCD Contribution Rate	12.10%	12.76%	(0.66)%

Notes:

1. Detailed contribution rates by plan are shown in Section 6.
2. The Total Employer Statutory Contribution Rate of 38.33% is the aggregate rate for all employers.

Exhibit 1b
Summary of Recommended Member Contribution Rates

Recommendation #2: Adopt new member contribution rates for fiscal year beginning July 1, 2022

	Entry Age	Recommended Rates			Total as a % of Pay	Current	Ratio (New/Curr)
		Basic	50% COLA Sharing	Cost Sharing		Total as a % of Pay	
General Members (not including SMCM&VCD)							
Plan 1	25	7.71%	2.70%	3.00%	13.41%	12.75%	105.2%
	35	9.00%	3.15%	3.00%	15.15%	14.54%	104.2%
	45	10.56%	3.70%	3.00%	17.26%	16.72%	103.2%
Plan 2	25	7.71%	2.73%	3.00%	13.44%	12.71%	105.7%
	35	9.00%	3.19%	3.00%	15.19%	14.50%	104.7%
	45	10.56%	3.74%	3.00%	17.30%	16.67%	103.8%
Plan 4	25	7.45%	2.04%	3.00%	12.49%	11.83%	105.6%
	35	8.69%	2.38%	3.00%	14.07%	13.44%	104.6%
	45	10.15%	2.78%	3.00%	15.93%	15.35%	103.7%
Plan 5	25	6.51%	1.77%	0.00%	8.28%	7.57%	109.3%
	35	7.59%	2.06%	0.00%	9.65%	8.96%	107.8%
	45	8.88%	2.41%	0.00%	11.29%	10.63%	106.2%
Plan 7	All	7.34%	1.83%	0.00%	9.17%	8.75%	104.8%
SMCM&VCD Members							
Plan 1	25	7.71%	0.00%	0.00%	7.71%	7.22%	106.8%
	35	9.00%	0.00%	0.00%	9.00%	8.55%	105.3%
	45	10.56%	0.00%	0.00%	10.56%	10.16%	103.9%
Plan 2	25	7.71%	0.00%	0.00%	7.71%	7.22%	106.8%
	35	9.00%	0.00%	0.00%	9.00%	8.55%	105.3%
	45	10.56%	0.00%	0.00%	10.56%	10.16%	103.9%
Plan 4	25	7.45%	0.00%	0.00%	7.45%	6.98%	106.7%
	35	8.69%	0.00%	0.00%	8.69%	8.26%	105.2%
	45	10.15%	0.00%	0.00%	10.15%	9.77%	103.9%
Plan 7	All	8.08%	2.04%	0.00%	10.12%	9.67%	104.7%

Notes:

1. All General members contribute 50% of the cost of COLA benefits except for all members of SMCM&VCD.
2. Plan 7 COLA share represents one-half of the cost of the COLA.
3. 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.

Exhibit 1b
Summary of Recommended Member Contribution Rates (continued)

Recommendation #2: Adopt new member contribution rates for fiscal year beginning July 1, 2022

	Entry Age	Recommended Rates			Total as a % of Pay	Current	Ratio (New/Curr)
		Basic	50% COLA Sharing	Cost Sharing		Total as a % of Pay	
Safety Members							
Plan 1	25	10.70%	5.13%	5.00%	20.83%	19.93%	104.5%
	35	12.21%	5.85%	5.00%	23.06%	22.26%	103.6%
	45	13.96%	6.69%	5.00%	25.65%	24.99%	102.7%
Plan 2	25	10.70%	5.68%	5.00%	21.38%	20.31%	105.3%
	35	12.21%	6.49%	5.00%	23.70%	22.71%	104.3%
	45	13.96%	7.42%	5.00%	26.38%	25.50%	103.4%
Plan 4	25	10.31%	4.29%	5.00%	19.60%	18.52%	105.8%
	35	11.76%	4.89%	5.00%	21.65%	20.64%	104.9%
	45	13.22%	5.50%	5.00%	23.72%	22.80%	104.0%
Plan 5	25	10.31%	4.01%	4.00%	18.32%	17.09%	107.2%
	35	11.76%	4.57%	4.00%	20.33%	19.14%	106.2%
	45	13.22%	5.14%	4.00%	22.36%	21.23%	105.3%
Plan 6	25	10.31%	3.35%	0.00%	13.66%	12.88%	106.1%
	35	11.76%	3.82%	0.00%	15.58%	14.89%	104.6%
	45	13.22%	4.29%	0.00%	17.51%	16.94%	103.4%
Plan 7	All	12.15%	3.51%	0.00%	15.66%	14.72%	106.4%
Probation Members							
Plan 1	25	10.70%	5.69%	3.50%	19.89%	18.96%	104.9%
	35	12.21%	6.50%	3.50%	22.21%	21.38%	103.9%
	45	13.96%	7.43%	3.50%	24.89%	24.20%	102.8%
Plan 2	25	10.70%	5.75%	3.50%	19.95%	18.96%	105.2%
	35	12.21%	6.56%	3.50%	22.27%	21.38%	104.1%
	45	13.96%	7.50%	3.50%	24.96%	24.20%	103.1%
Plan 4	25	10.31%	4.20%	3.50%	18.01%	17.08%	105.5%
	35	11.76%	4.79%	3.50%	20.05%	19.20%	104.4%
	45	13.22%	5.39%	3.50%	22.11%	21.36%	103.5%
Plan 5	25	10.31%	3.78%	3.50%	17.59%	16.62%	105.9%
	35	11.76%	4.31%	3.50%	19.57%	18.67%	104.9%
	45	13.22%	4.85%	3.50%	21.57%	20.76%	103.9%
Plan 6	25	10.31%	3.14%	0.00%	13.45%	12.68%	106.1%
	35	11.76%	3.58%	0.00%	15.34%	14.66%	104.6%
	45	13.22%	4.02%	0.00%	17.24%	16.68%	103.4%
Plan 7	All	12.18%	3.56%	0.00%	15.74%	14.85%	106.0%

Notes:

1. All Safety and Probation members contribute 50% of the cost of COLA benefits.
2. Plan 7 COLA share represents one-half of the cost of the COLA.
3. 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.
4. Safety member cost sharing shown is for all members who are not Deputy Sheriffs. Cost sharing varies for Deputy Sheriffs.

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 2021 (2020 valuation)	38.91%	86.4%
Expected Year-to-Year Change	0.00%	2.5%
Assumption Changes	3.64%	-2.8%
<u>Recognized Asset Gain / Loss</u>		
From Current Year	-5.52%	5.7%
From Prior Years	4.16%	-4.3%
Combined Asset Gain / Loss	-1.36%	1.4%
Payroll Increases different than assumed	0.55%	-0.2%
Contributions different than assumed	0.07%	0.0%
SCA Contribution Funding	-0.69%	0.6%
<u>Liability Gain / Loss</u>		
Retiree COLA different than assumed	-0.40%	0.4%
Changes in Plan 7 Membership	-0.12%	0.0%
Other Experience Changes	0.16%	-0.2%
Combined Liability Gain / Loss	-0.36%	0.2%
Deferred Recognition of 2021 Assumptions	-2.43%	0.0%
Total Change	-0.58%	1.7%
Calculated Rate for 2022 (2021 valuation)	38.33%	88.1%

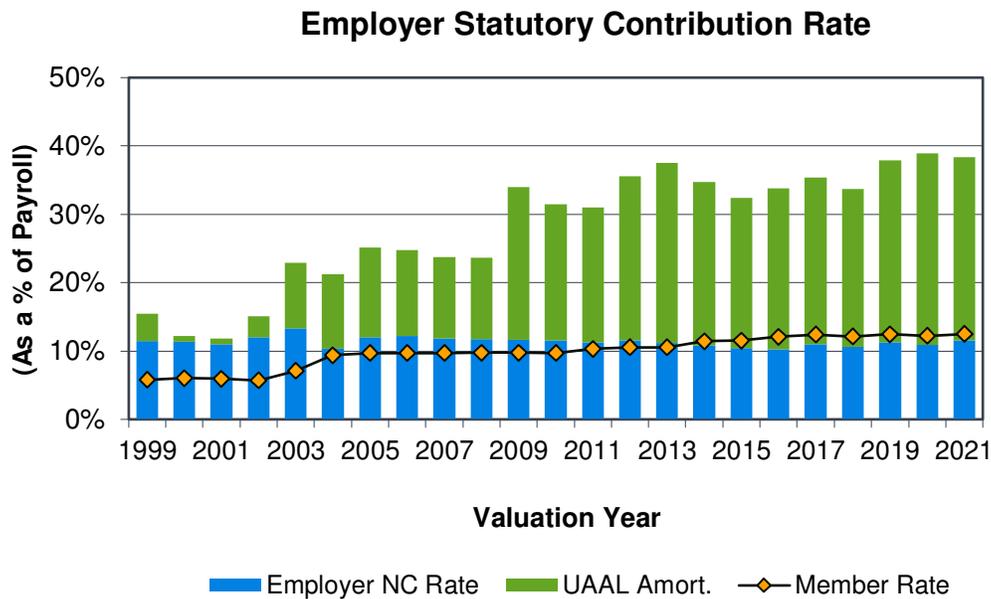
Employer Statutory Contribution Rate

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 38.33% for the fiscal year beginning July 1, 2022.

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 SCR's 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.



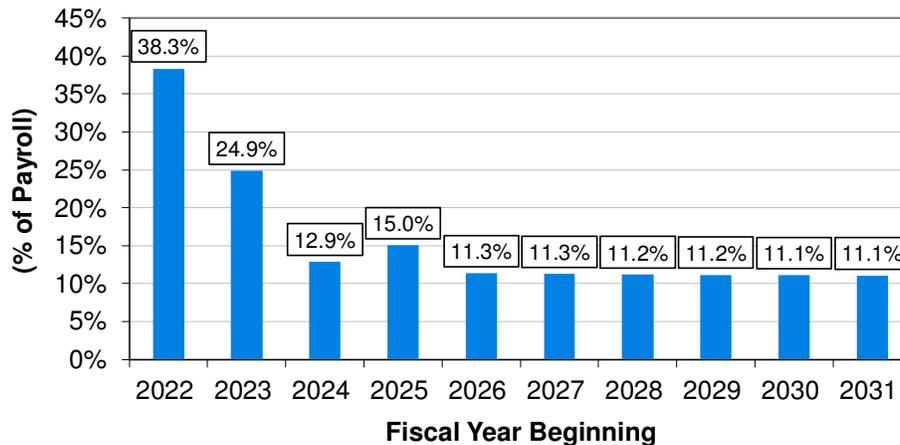
Projected Future Statutory Employer Contribution Rate

The statutory employer contribution rate beginning July 1, 2022 is 38.33% 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, 2022. Effective with the fiscal year beginning July 1, 2023, a large decrease is projected as the June 30, 2008 amortization layer is fully amortized and currently deferred investment gains are recognized. In future years there are increases and decreases as amortization layers “roll off.” Effective June 30, 2025 the Funded Ratio is projected to be greater than 100%. As a result, effective July 1, 2026 the projected employer contribution rate is equal to the Employer Normal Cost rate.

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 gains as of June 30, 2021. This projection is shown in the graph below.

Projected Employer Contribution Rate⁽¹⁾



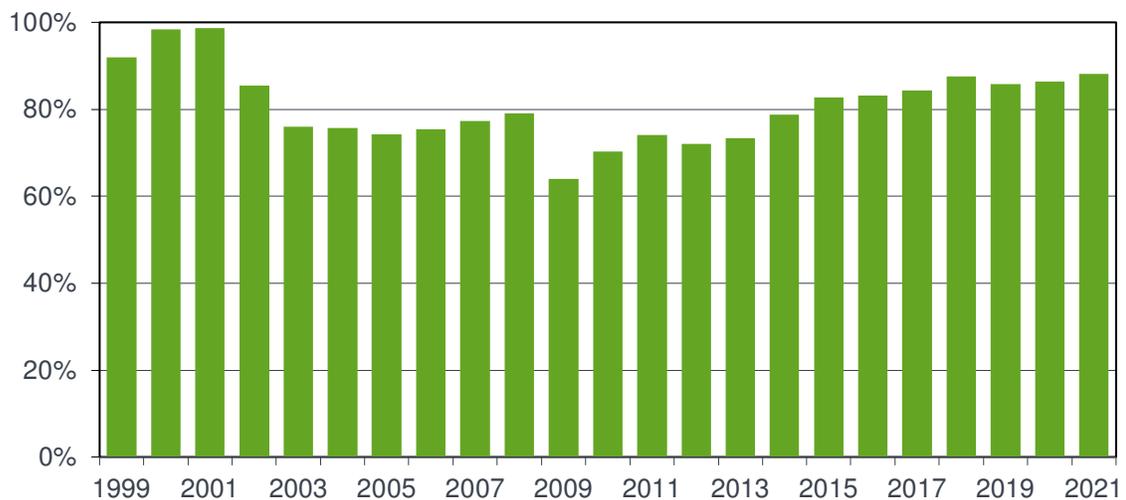
1. Projections assume that all actuarial assumptions are met after June 30, 2021, and reflect the scheduled recognition of investment gains currently being deferred. Actual results will vary.

Funding Progress

Based on the 2020 valuation, the expected UAAL as of June 30, 2021 was \$630 million. The actual UAAL for the fiscal year ended June 30, 2021 is \$738 million. This difference is due to a combination of factors, including: reducing the investment return assumption from 6.50% to 6.25% and reflecting 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



Assets

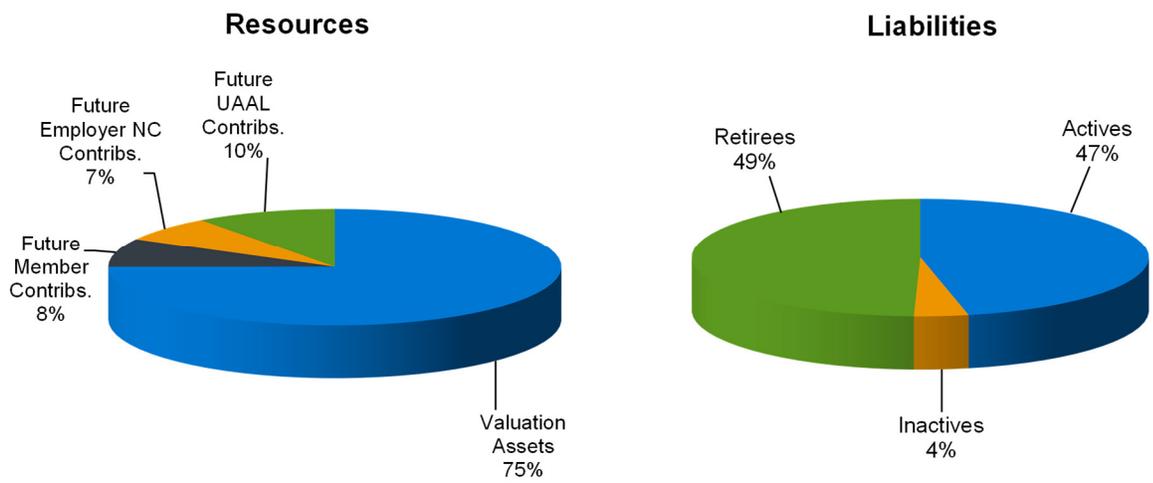
For the fiscal year ended June 30, 2021, SamCERA earned 23.5% on a market value basis net of investment and administrative expenses. Note that this rate of return may differ from that calculated by SamCERA and shown in the Annual Comprehensive Financial Report (ACFR) based on the calculation method.

SamCERA uses an asset-smoothing method in the calculation of the UAAL contribution. Under this method, the market value returns are 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 8.2% net of expenses, was greater than the assumed return of 6.5% for the fiscal year ended June 30, 2021.

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.

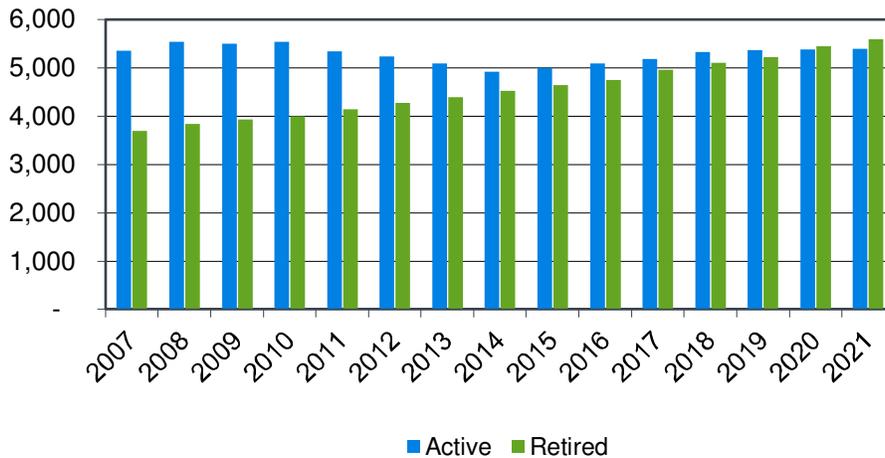


Member Information

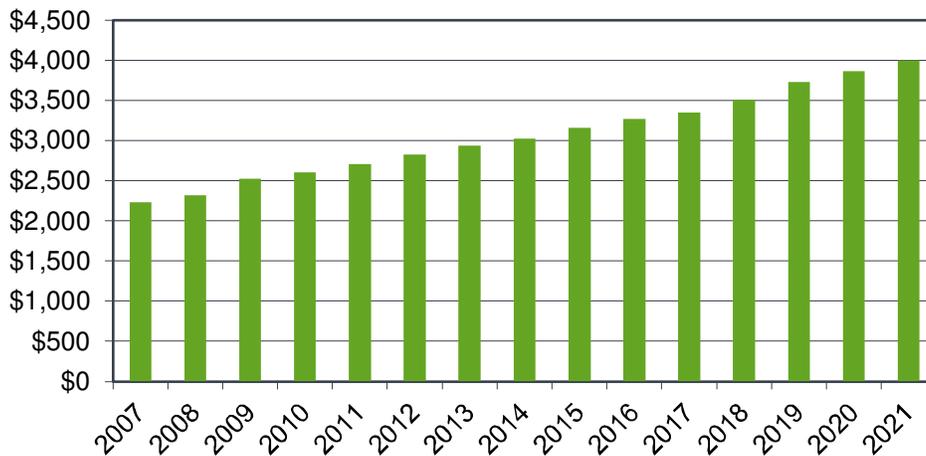
The number of active members included in the valuation decreased from 5,400 in 2020 to 5,356 in 2021.

Retired member counts continue to increase steadily. For 2021, there were 5,592 retired members and beneficiaries with an average benefit of \$3,995 per month. This represents a 2.5% increase in count (up from 5,454 in 2020) and a 3.4% increase in the average monthly benefit (up from \$3,865 over the period). There are also 1,986 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



Average Monthly Retirement Benefit



Analysis of Change in Member Population

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

	Active Members	Inactive Members	Service Retired Members	Disabled Retired Members	Beneficiaries in Pay	Total
As of June 30, 2020	5,400	1,882	4,292	506	656	12,736
New Members	339	21	1	-	38	399
Status Change:						
to Active	13	(13)	-	-	-	-
to Inactive	(188)	188	-	-	-	-
to Service Retirement	(171)	(56)	227	-	-	-
to Disabled Retirement	(1)	(1)	(5)	7	-	-
to Beneficiary	-	(2)	-	-	2	-
Refunds	(30)	(28)	-	-	-	(58)
Terminated non-vested	(1)	(1)	-	-	-	(2)
Deaths	(5)	(4)	(94)	(14)	(24)	(141)
As of June 30, 2021	5,356	1,986	4,421	499	672	12,934

Summary Valuation Results

Exhibit 2 presents a comparison of the key results from the June 30, 2021 and June 30, 2020 valuations. More detail on each of these elements can be found in the following sections and exhibits of this report.

Exhibit 2
Summary of Significant Valuation Results

	June 30, 2021	June 30, 2020	Relative Change
1. Total Membership			
A. Active Members	5,356	5,400	(0.8)%
B. Retired Members & Beneficiaries	5,592	5,454	2.5%
C. Inactive Members	1,986	1,882	5.5%
D. Total	12,934	12,736	1.6%
2. Pay Rate			
A. Annual Total (\$thousands)	\$ 606,677	\$ 594,573	2.0%
B. Monthly Average	9,439	9,176	2.9%
3. Average Monthly Benefit to Current Retirees and Beneficiaries			
A. Service Retirement	\$ 4,224	\$ 4,078	3.6%
B. Disability Retirement	4,027	3,892	3.5%
C. Surviving Spouse and Dependents	2,467	2,449	0.7%
D. Total Average	3,995	3,865	3.4%
4. Actuarial Accrued Liability (\$thousands)			
A. Active Members	\$ 2,318,546	\$ 2,176,840	6.5%
B. Retired Members	3,626,835	3,354,864	8.1%
C. Inactive Members	281,685	254,350	10.7%
D. Total	\$ 6,227,066	\$ 5,786,054	7.6%
5. Assets			
A. Market Value of Fund (\$thousands)	\$ 5,982,086	\$ 4,780,502	25.1%
B. Return on Market Value	23.5%	0.9%	
C. Actuarial Value (\$thousands)	\$ 5,488,958	\$ 4,998,316	9.8%
D. Return on Actuarial Value	8.2%	6.2%	
6. Unfunded Actuarial Accrued Liability or Surplus Funding (\$thousands)	\$ 738,108	\$ 787,738	(6.3)%
7. Statutory Employer Contribution Rate for all plans combined as a percent of total payroll			
A. Gross Normal Cost	24.04%	23.11%	4.0%
B. Member Contributions	(12.49)%	(12.21)%	2.3%
C. Employer Normal Cost	11.55%	10.90%	6.0%
D. UAAL Amortization	29.21%	28.01%	4.3%
E. Calculated Employer Contribution Rate	40.76%	38.91%	4.8%
F. Deferred Recognition of 2021 Assumptions	(2.43)%	-	
G. Employer Rate with Phase-in	38.33%	38.91%	(1.5)%
8. Funded Ratio (5C / 4D)	88.1%	86.4%	2.0%
9. Results Based on Market Value (No Asset Smoothing) -- For Informational Purposes Only			
A. Total Employer Rate	30.57%	42.46%	(28.0)%
B. Funded Ratio (5A / 4D)	96.1%	82.6%	16.3%

2. Scope of the report

This report presents the actuarial valuation of the San Mateo County Employees' Retirement Association as of June 30, 2021. This valuation is made in accordance to 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. The inventory is taken as of the actuarial valuation date. On that date, the assets available for the payment of retirement benefits are appraised. These assets are compared with the accrued and future actuarial liabilities, which are generally well in excess of the actuarial assets. 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, 2021.

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, 2021.
- 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:

Year	All dollar amounts in millions		
	Market Value of Total Assets	Actuarial Value	
		Non Valuation Assets	Valuation Assets
2002	\$ 1,207	\$ 32	\$ 1,417
2003	1,233	34	1,354
2004	1,435	31	1,453
2005	1,599	0	1,616
2006	1,790	0	1,769
2007	2,132	0	1,977
2008	2,011	0	2,219
2009	1,591	0	1,910
2010	1,816	0	2,179
2011	2,318	0	2,405
2012	2,360	0	2,480
2013	2,728	0	2,619
2014	3,292	30	2,993
2015	3,454	33	3,344
2016	3,541	36	3,625
2017	4,039	40	3,977
2018	4,374	44	4,352
2019	4,723	48	4,686
2020	4,781	51	4,998
2021	5,982	55	5,489

On June 30, 2021, the total market value of the fund was about \$5.98 billion. The actuarial value of the fund was determined to be \$5.54 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 that will 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.

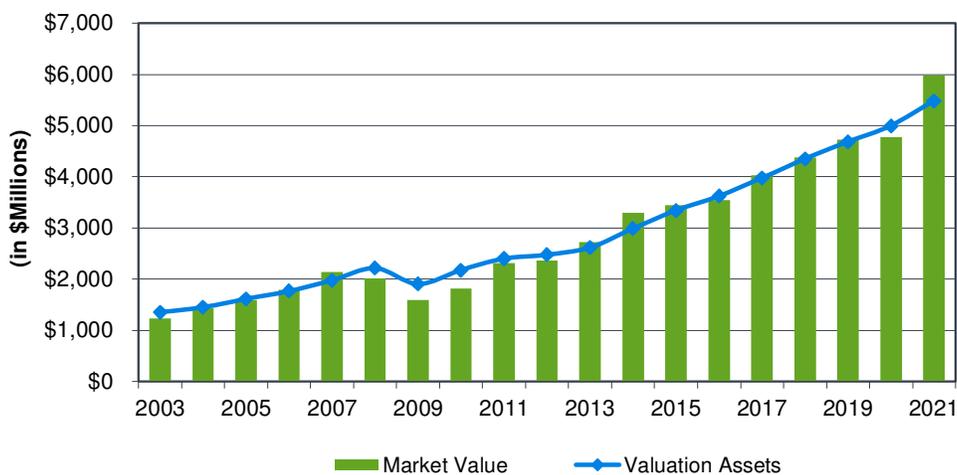
Beginning with the June 30, 2014 valuation, assets used to calculate the preliminary UAAL contribution rates exclude the value of the CSCA. The CSCA is used to adjust the County's Statutory Contribution Rate. Beginning with the June 30, 2016 valuation, assets used to calculate the preliminary UAAL contribution 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, 2021 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, 2021 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



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, 2021 and 2020

	2021	2020
ASSETS		
Cash and short-term investments:		
Cash and cash equivalents	\$ 153,467,110	\$ 107,989,686
Cash management overlay	64,054,219	54,095,321
Securities lending cash collateral	4,574,275	2,423,778
Total cash and short-term investments	<u>222,095,604</u>	<u>164,508,785</u>
Receivables:		
Contributions	15,060,101	12,376,867
Due from broker for investments sold	48,257,671	78,103,219
Investment income	7,838,202	5,390,580
Securities lending income	3,029	2,752
Other	83,607	86,859
Total receivables	<u>71,242,610</u>	<u>95,960,277</u>
Investments at fair value:		
Public equity	2,411,436,689	1,866,264,297
Fixed income	1,545,541,099	1,434,811,710
Alternatives	860,701,348	593,379,226
Inflation hedge	942,703,531	704,360,824
Total investments at fair value	<u>5,760,382,667</u>	<u>4,598,816,057</u>
Capital assets	8,324,720	8,108,286
Less: accumulated depreciation	<u>(3,737,459)</u>	<u>(2,898,887)</u>
Capital assets, net of accumulated depreciation	<u>4,587,261</u>	<u>5,209,399</u>
Total assets	<u>6,058,308,142</u>	<u>4,864,494,518</u>
LIABILITIES		
Investment management fees payable	3,151,269	2,035,363
Due to broker for investments purchased	66,319,257	78,241,899
Securities lending collateral due to borrowers	4,574,275	2,423,778
Other	2,177,391	1,291,165
Total liabilities	<u>76,222,192</u>	<u>83,992,205</u>
NET POSITION RESTRICTED FOR PENSIONS	<u>\$ 5,982,085,950</u>	<u>\$ 4,780,502,313</u>

Exhibit 4
Statement of Changes in Plan Net Assets for the Fiscal Years Ended 2021 and 2020

	2021	2020
ADDITIONS		
Contributions:		
Employer	\$ 225,302,472	\$ 198,582,998
Employer supplemental	39,700,000	-
Member	73,966,484	70,630,765
Total contributions	<u>338,968,956</u>	<u>269,213,763</u>
Investment income:		
Interest and dividends	87,240,822	76,762,516
Net appreciation in fair value of investments	1,110,924,843	5,173,433
Total investment income	<u>1,198,165,665</u>	<u>81,935,949</u>
Less: investment expenses	(65,039,394)	(39,581,080)
Net investment income	<u>1,133,126,271</u>	<u>42,354,869</u>
Securities lending income:		
Earnings	12,916	35,620
Rebates	51,515	16,474
Fees	(14,156)	(14,741)
Net securities lending income	<u>50,275</u>	<u>37,353</u>
Total additions	<u>1,472,145,502</u>	<u>311,605,985</u>
DEDUCTIONS		
Benefits:		
Service retirement benefits	229,730,556	212,632,929
Disability retirement benefits	28,342,469	27,601,908
Survivor, death and other benefits	1,282,749	1,790,029
Total benefits	<u>259,355,774</u>	<u>242,024,866</u>
Member refunds	2,796,160	3,796,277
Administrative expenses	7,059,702	6,371,363
Information technology expenses	1,350,229	2,021,101
Total deductions	<u>270,561,865</u>	<u>254,213,607</u>
Net increase	1,201,583,637	57,392,378
NET POSITION RESTRICTED FOR PENSIONS		
Beginning of year	4,780,502,313	4,723,109,935
End of year	<u>\$ 5,982,085,950</u>	<u>\$ 4,780,502,313</u>
Estimated Return, Net of Investment Expenses	23.5%	0.9%

Exhibit 5
Allocation of Assets by Accounting Reserve Amounts
as of June 30, 2021 and 2020

	2021	2020
Valuation Reserves		
1. Member Reserve	\$ 895,744,573	\$ 858,746,783
2. Employer Advance Reserve	1,379,732,982	1,213,276,549
3. Retiree Reserves	1,380,172,681	1,292,402,035
4. Cost of Living Adjustment Reserve	1,642,623,638	1,552,804,970
5. County Supplemental Contributions Account Reserve	236,971,881	174,529,290
6. District Supplemental Contributions Account Reserve	1,109,806	1,519,451
Total Valuation Reserves	5,536,355,561	5,093,279,078
Non-Valuation Reserves		
1. Contingency Reserve	55,444,026	50,488,044
2. Undistributed Earnings / (Losses) Reserve	(30,609,675)	(105,190,095)
Total Non-Valuation Reserves	24,834,351	(54,702,051)
Market Stabilization Account	420,896,038	(258,074,714)
Total Reserves (Market Value of Assets)	\$ 5,982,085,950	\$ 4,780,502,313

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 Unexpected Asset Gains and Losses								
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)
06/30/2021	\$ 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
06/30/2017	3,721,598,964	154,997,828	98,037,329	4,038,701,990	3.500%	131,806,865	260,142,527	128,335,662
12/31/2016	3,541,388,497	105,889,408	95,202,951	3,721,598,964	3.500%	125,157,215	169,524,010	44,366,795

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)
06/30/2021	\$ 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
06/30/2017	3,637,603,049	127,692,026	98,037,329	3,921,574,858	3.500%	128,867,008	254,317,112	125,450,104
12/31/2016	3,461,178,323	105,889,408	95,202,951	3,637,603,049	3.500%	122,349,858	165,738,269	43,388,411

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

History of Unexpected Asset Gains and Losses								
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	Unexpected Gain / (Loss)
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
06/30/2017	82,353,954	33,600,000	6,544,198	115,170,236	3.500%	2,882,388	5,760,480	2,878,092
12/31/2016	78,626,500	-	-	82,353,954	3.500%	2,751,928	3,727,454	975,526

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

History of Unexpected Asset Gains and Losses									
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	Unexpected Gain / (Loss)	
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	
06/30/2017	1,641,961	250,000	-	1,956,896	3.500%	57,469	64,935	7,466	
12/31/2016	1,583,674	-	-	1,641,961	3.500%	55,429	58,287	2,858	

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

Development of Market Stabilization Reserve					
<u>Six-Month Period Ended</u>	<u>Investment Gain / (Loss)</u>	<u>Adjusted Investment Gain / (Loss)</u>		<u>Percent Excluded</u>	<u>Adjusted Gain / (Loss) Excluded</u>
06/30/2021	\$ 237,300,225	\$ 237,294,653	x	90%	= \$ 213,565,188
12/31/2020	548,443,441	280,147,663	x	80%	= 224,118,130
06/30/2020	(346,866,582)	0	x	70%	= 0
12/31/2019	63,891,489	0	x	60%	= 0
06/30/2019	342,546,233	0	x	50%	= 0
12/31/2018	(371,528,532)	0	x	40%	= 0
06/30/2018	(150,913,352)	0	x	30%	= 0
12/31/2017	138,304,954	0	x	20%	= 0
06/30/2017	128,335,662	0	x	10%	= 0
12/31/2016	44,366,795	0	x	0%	= 0
Total Gain / (Loss) Excluded =					\$ 437,683,318

Development of Valuation Assets		
1. Market Value of Assets as of June 30, 2021		\$ 5,982,085,950
2. Preliminary Market Stabilization Reserve		<u>437,683,318</u>
3. Preliminary Actuarial Value of Assets (1) - (2)		5,544,402,632
4. Corridor Around Market Value		
a) Minimum = 80% of Market	\$ 4,785,668,760	
b) Maximum = 120% of Market	7,178,503,140	
c) Corridor Adjustment		0
5. Market Stabilization Reserve	437,683,318	
6. Gross Actuarial Valuation of Assets (3) - (4c)		\$ 5,544,402,632
7. Non-Valuation Reserves		
a) Contingency Reserve	55,444,026	
b) Undistributed Earnings / (Losses) Reserve	0	
c) Other Specified Reserves	<u>0</u>	
d) Total		55,444,026
8. Valuation Assets (6) - (7d)		\$ 5,488,958,606

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

Development of Market Stabilization Reserve					
<u>Six-Month Period Ended</u>	<u>Investment Gain / (Loss)</u>	<u>Adjusted Investment Gain / (Loss)</u>		<u>Percent Excluded</u>	<u>Adjusted Gain / (Loss) Excluded</u>
06/30/2021	\$ 227,142,047	\$ 227,142,047	x	90%	= \$ 204,427,842
12/31/2020	528,659,960	270,585,245	x	80%	= 216,468,196
06/30/2020	(333,122,698)	0	x	70%	= 0
12/31/2019	61,358,028	0	x	60%	= 0
06/30/2019	331,582,592	0	x	50%	= 0
12/31/2018	(359,622,065)	0	x	40%	= 0
06/30/2018	(146,680,275)	0	x	30%	= 0
12/31/2017	134,394,694	0	x	20%	= 0
06/30/2017	125,450,104	0	x	10%	= 0
12/31/2016	43,388,411	0	x	0%	= 0
Total Gain / (Loss) Excluded =					\$ 420,896,038

Development of Valuation Assets		
1. Market Value of Assets as of June 30, 2021		\$ 5,744,004,263
2. Preliminary Market Stabilization Reserve		<u>420,896,038</u>
3. Preliminary Actuarial Value of Assets (1) - (2)		5,323,108,225
4. Corridor Around Market Value		
a) Minimum = 80% of Market	\$ 4,595,203,410	
b) Maximum = 120% of Market	6,892,805,116	
c) Corridor Adjustment		0
5. Market Stabilization Reserve	420,896,038	
6. Gross Actuarial Valuation of Assets (3) - (4c)		\$ 5,323,108,225
7. Non-Valuation Reserves		
a) Contingency Reserve	55,444,026	
b) Undistributed Earnings / (Losses) Reserve	0	
c) Other Specified Reserves	<u>0</u>	
d) Total		55,444,026
8. Valuation Assets (6) - (7d)		\$ 5,267,664,199

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

Development of Market Stabilization Reserve					
<u>Six-Month Period Ended</u>	<u>Investment Gain / (Loss) ¹</u>	<u>Adjusted Investment Gain / (Loss)</u>		<u>Percent Excluded</u>	<u>Adjusted Gain / (Loss) Excluded</u>
06/30/2021	\$ 10,140,503	\$ 10,140,503	x	90%	= \$ 9,126,453
12/31/2020	19,777,742	9,562,418	x	80%	= 7,649,934
06/30/2020	(13,732,872)	0	x	70%	= 0
12/31/2019	2,531,469	0	x	60%	= 0
06/30/2019	10,969,368	0	x	50%	= 0
12/31/2018	(11,888,853)	0	x	40%	= 0
06/30/2018	(4,237,793)	0	x	30%	= 0
12/31/2017	3,897,662	0	x	20%	= 0
06/30/2017	2,878,092	0	x	10%	= 0
12/31/2016	975,526	0	x	0%	= 0
Total Gain / (Loss) Excluded =					\$ 16,776,387

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 Assets		
1. Market Value of Assets as of June 30, 2021		\$ 236,971,881
2. Preliminary Market Stabilization Reserve		<u>16,776,387</u>
3. Preliminary Actuarial Value of Assets (1) - (2)		220,195,494
4. Corridor Around Market Value		
a) Minimum = 80% of Market	\$ 189,577,505	
b) Maximum = 120% of Market	284,366,257	
c) Corridor Adjustment		0
5. Market Stabilization Reserve	16,776,387	
6. Gross Actuarial Valuation of Assets (3) - (4c)		\$ 220,195,494
7. Non-Valuation Reserves		
a) Contingency Reserve		0
b) Undistributed Earnings / (Losses) Reserve		0
c) Other Specified Reserves		<u>0</u>
d) Total		0
8. Valuation Assets (6) - (7d)		\$ 220,195,494

**Exhibit 7d
 Five-Year Smoothing – Development of DCSA Assets**

Development of Market Stabilization Reserve

Six-Month Period Ended	Investment Gain / (Loss) ¹	Adjusted Investment Gain / (Loss)	Percent Excluded	Adjusted Gain / (Loss) Excluded
06/30/2021	\$ 17,675	\$ 12,103	x 90%	= \$ 10,893
12/31/2020	5,739	0	x 80%	= 0
06/30/2020	(11,012)	0	x 70%	= 0
12/31/2019	1,992	0	x 60%	= 0
06/30/2019	(5,727)	0	x 50%	= 0
12/31/2018	(17,614)	0	x 40%	= 0
06/30/2018	4,716	0	x 30%	= 0
12/31/2017	12,598	0	x 20%	= 0
06/30/2017	7,466	0	x 10%	= 0
12/31/2016	2,858	0	x 0%	= 0
Total Gain / (Loss) Excluded =				\$ 10,893

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, 2021	\$	1,109,806
2. Preliminary Market Stabilization Reserve		10,893
3. Preliminary Actuarial Value of Assets (1) - (2)		1,098,913
4. Corridor Around Market Value		
a) Minimum = 80% of Market	\$	887,845
b) Maximum = 120% of Market		1,331,767
c) Corridor Adjustment		0
5. Market Stabilization Reserve		10,893
6. Gross Actuarial Valuation of Assets (3) - (4c)	\$	1,098,913
7. Non-Valuation Reserves		
a) Contingency Reserve		0
b) Undistributed Earnings / (Losses) Reserve		0
c) Other Specified Reserves		0
d) Total		0
8. Valuation Assets (6) - (7d)	\$	1,098,913

Exhibit 8
Allocation of Valuation Assets

(Dollars in thousands)

ALLOCATION OF VALUATION ASSETS

For the Year Ended June 30, 2021

(Dollars in thousands)

	General	Safety	Probation	Total
1. Prior Year UAAL	\$ 687,498	\$ 208,641	\$ 77,875	\$ 974,014
2. Expected UAAL Contribution for Preceding Year	(123,709)	(39,784)	(11,940)	(175,433)
3. Expected Interest at 6.50%	40,730	12,289	4,680	57,699
4. Expected UAAL Based on Prior Year Assumptions	604,519	181,146	70,615	856,280
5. Percentage of Total Expected UAAL	70.60%	21.15%	8.25%	100.00%
6. Actual UAAL Based on Prior Year Assumptions				761,681
7. Actual AAL Based on Prior Year Assumptions	\$ 4,441,595	\$ 1,159,173	\$ 428,577	\$ 6,029,345
8. Allocated UAAL Based on Prior Year Assumptions	537,746	161,096	62,839	761,681
9. Valuation Assets (excluding SCA assets)	\$ 3,903,849	\$ 998,077	\$ 365,738	\$ 5,267,664
10. Actual UAAL excluding SCA Valuation Assets	\$ 683,375	\$ 198,389	\$ 77,638	\$ 959,402
11. Allocation of UAAL	71.23%	20.68%	8.09%	100.00%
12. Valuation Assets (CSCA)	\$ 156,845	\$ 45,536	\$ 17,814	\$ 220,195
13. Valuation Assets (DSCA)	\$ 1,099	\$ -	\$ -	\$ 1,099
14. Valuation Assets (Total)	\$ 4,061,793	\$ 1,043,613	\$ 383,552	\$ 5,488,958

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, 2021.

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.

The actuarial assumptions used to determine the liabilities are based on the results of our 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. These assumptions are shown in Appendix A. The assumptions will next be reviewed in detail in 2023 as part of the triennial 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, 2021**

(Dollars in thousands)

Resources				
	General	Safety	Probation	Total
Valuation Assets (Actuarial)	\$ 4,061,793	\$ 1,043,613	\$ 383,552	\$ 5,488,958
Present Value of Future Member Contributions	453,251	97,177	28,416	578,844
Present Value of Future Employer Contributions to Fund:				
a) Normal Cost	390,364	94,118	30,013	514,495
b) Unfunded Actuarial Accrued Liability	525,431	152,853	59,824	738,108
Total Resources	\$ 5,430,839	\$ 1,387,761	\$ 501,805	\$ 7,320,405

Liabilities				
	General	Safety	Probation	Total
Present Value of Future Benefits				
1. Present Retired Members	\$ 2,516,478	\$ 843,075	\$ 267,282	\$ 3,626,835
2. Current Inactive Members	244,328	18,932	18,425	281,685
3. Current Active Members				
- Service Retirement	2,415,679	465,690	198,537	3,079,906
- Termination Benefits	116,935	14,846	3,785	135,566
- Death Benefits	25,042	3,561	1,005	29,608
- Disability Benefits	112,377	41,657	12,771	166,805
- Total Active	2,670,033	525,754	216,098	3,411,885
Total Actuarial Liabilities	\$ 5,430,839	\$ 1,387,761	\$ 501,805	\$ 7,320,405

Exhibit 9b
Actuarial Balance Sheet (excluding SCAs)
June 30, 2021

(Dollars in thousands)

Resources				
	General	Safety	Probation	Total
Valuation Assets (Actuarial)	\$ 3,903,849	\$ 998,077	\$ 365,738	\$ 5,267,664
Present Value of Future Member Contributions	453,251	97,177	28,416	578,844
Present Value of Future Employer Contributions to Fund:				
a) Normal Cost	390,364	94,118	30,013	514,495
b) Unfunded Actuarial Accrued Liability	683,375	198,389	77,638	959,402
Total Resources	\$ 5,430,839	\$ 1,387,761	\$ 501,805	\$ 7,320,405

Liabilities				
	General	Safety	Probation	Total
Present Value of Future Benefits				
1. Present Retired Members	\$ 2,516,478	\$ 843,075	\$ 267,282	\$ 3,626,835
2. Current Inactive Members	244,328	18,932	18,425	281,685
3. Current Active Members				
- Service Retirement	2,415,679	465,690	198,537	3,079,906
- Termination Benefits	116,935	14,846	3,785	135,566
- Death Benefits	25,042	3,561	1,005	29,608
- Disability Benefits	112,377	41,657	12,771	166,805
- Total Active	2,670,033	525,754	216,098	3,411,885
Total Actuarial Liabilities	\$ 5,430,839	\$ 1,387,761	\$ 501,805	\$ 7,320,405

Exhibit 9c
Analysis of Change in the Unfunded Actuarial Accrued Liability
June 30, 2021

(Dollars in thousands)

	Amount	As a Percent of June 30, 2021 Actuarial Accrued Liability
Unfunded Actuarial Accrued Liability - June 30, 2020	\$ 787,738.0	12.7%
Increase in UAAL due to new assumptions	197,719.9	3.2%
Interest Accrued	51,203.0	0.8%
Benefits Accrued (Normal Cost)	139,671.4	2.2%
<u>Contributions</u>		
Employers	\$ (232,509.5)	-3.7%
Members	(76,332.6)	-1.2%
CSCA and DCSA Contributions	<u>(39,700.0)</u>	-0.6%
Total	<u>(348,542.1)</u>	-5.6%
Expected Unfunded Actuarial Accrued Liability - June 30, 2021	\$ 827,790.2	13.3%
Sources of Change:		0.0%
(Gain) / Loss due to Investment Income	(87,747.6)	-1.4%
<u>Liability (Gains) and Losses</u>		
Salary Increases Greater than Expected	\$ 12,064.4	0.2%
Active Member Experience (non salary)	3,320.9	0.1%
CPI Greater than Expected	(25,972.5)	-0.4%
Mortality Experience	2,144.1	0.0%
All Other Experience	<u>6,508.5</u>	0.1%
Total	<u>(1,934.6)</u>	0.0%
Total Changes	\$ (89,682.2)	-1.4%
Unfunded Actuarial Accrued Liability - June 30, 2021	\$ 738,108.0	11.9%

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% ($7.59\% \times 27.14\%$) 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 2021 valuation is effective July 1, 2022, and the UAAL is amortized over the remaining 14 years.

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 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).

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 2022-2023 Fiscal Year

	All Plans							Prior Year Total Contribution Rate
	Employer Rates							
	Gross Normal Cost	Member Contributions	Basic Normal Cost	COLA Normal Cost	Total Normal Cost	UAAL Contribution Rate ⁽¹⁾⁽²⁾	Total Contribution Rate	
<u>General</u>								
County	21.63%	(11.45)%	7.90%	2.28%	10.18%	21.84%	32.02%	32.79%
Courts	21.97%	(11.69)%	7.97%	2.31%	10.28%	25.45%	35.73%	35.85%
Total	21.67%	(11.46)%	7.90%	2.31%	10.21%	22.00%	32.21%	32.93%
SMCM&VCD ⁽³⁾	21.29%	(9.19)%	8.93%	3.17%	12.10%	0.00%	12.10%	12.76%
Safety	37.20%	(18.36)%	14.56%	4.28%	18.84%	55.10%	73.94%	71.99%
Probation	37.42%	(18.02)%	15.03%	4.37%	19.40%	50.12%	69.52%	65.98%
All Plans	24.04%	(12.49)%	8.94%	2.61%	11.55%	26.78%	38.33%	38.91%
County Only	24.12%	(12.54)%	8.98%	2.60%	11.58%	26.93%	38.51%	39.14%

1. County UAAL Contribution Rate includes an aggregate offset of 4.27% of payroll to reflect the County Supplementary Contribution Account.

Offsets vary by class of member as follows:

- General member UAAL offset is 3.61% of payroll
- Safety member UAAL offset is 7.53% of payroll
- Probation member UAAL offset is 8.43% of payroll

2. UAAL Contribution Rate includes an aggregate offset of 2.43% 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 2.14% of payroll
- Safety member UAAL offset is 3.82% of payroll
- Probation member UAAL offset is 4.61% of payroll

3. SMCM&VCD UAAL Contribution Rate includes an offset of 25.45% of payroll to reflect the District Supplementary Contribution Account.

Exhibit 10a
Employer Statutory Contribution Rates – General Members
For the 2022-2023 Fiscal Year

	Employer Rates							Prior Year Total Contribution Rate
	Gross Normal Cost	Member Contributions	Basic Normal Cost	COLA Normal Cost	Total Normal Cost	UAAL Contribution Rate ⁽¹⁾⁽²⁾	Total Contribution Rate	
Plan 1								
County	28.50%	(13.46)%	10.62%	4.42%	15.04%	21.84%	36.88%	35.07%
Courts	28.50%	(13.46)%	10.62%	4.42%	15.04%	25.45%	40.49%	38.07%
Total	28.50%	(13.46)%	10.62%	4.42%	15.04%	21.84%	36.88%	35.07%
Plan 2								
County	24.82%	(14.32)%	7.22%	3.28%	10.50%	21.84%	32.34%	32.97%
Courts	24.82%	(14.32)%	7.22%	3.28%	10.50%	25.45%	35.95%	35.97%
Total	24.82%	(14.32)%	7.22%	3.28%	10.50%	21.97%	32.47%	33.09%
Plan 3								
County	9.23%	0.00%	9.23%	0.00%	9.23%	21.84%	31.07%	31.73%
Courts	9.23%	0.00%	9.23%	0.00%	9.23%	25.45%	34.68%	34.73%
Total	9.23%	0.00%	9.23%	0.00%	9.23%	21.93%	31.16%	31.80%
Plan 4								
County	24.67%	(13.92)%	8.15%	2.60%	10.75%	21.84%	32.59%	33.21%
Courts	24.67%	(13.92)%	8.15%	2.60%	10.75%	25.45%	36.20%	36.21%
Total	24.67%	(13.92)%	8.15%	2.60%	10.75%	22.03%	32.78%	33.37%
Plan 5								
County	22.91%	(9.89)%	10.68%	2.34%	13.02%	21.84%	34.86%	34.97%
Courts	22.91%	(9.89)%	10.68%	2.34%	13.02%	25.45%	38.47%	37.97%
Total	22.91%	(9.89)%	10.68%	2.34%	13.02%	22.02%	35.04%	35.12%
Plan 7								
County	18.33%	(9.17)%	7.34%	1.82%	9.16%	21.84%	31.00%	31.96%
Courts	18.33%	(9.17)%	7.34%	1.82%	9.16%	25.45%	34.61%	34.96%
Total	18.33%	(9.17)%	7.34%	1.82%	9.16%	21.99%	31.15%	32.09%
All Plans								
County	21.63%	(11.45)%	7.90%	2.28%	10.18%	21.84%	32.02%	32.79%
Courts	21.97%	(11.69)%	7.97%	2.31%	10.28%	25.45%	35.73%	35.85%
Total	21.67%	(11.46)%	7.90%	2.31%	10.21%	22.00%	32.21%	32.93%

1. UAAL Contribution Rate includes an offset of 3.61% of payroll to reflect the County Supplementary Contribution Account, except for Courts.
 2. UAAL Contribution Rate includes an offset of 2.14% of payroll to reflect the deferred recognition of costs associated with assumption changes.

**Exhibit 10b
 Employer Statutory Contribution Rates – SMCM&VCD Members
 For the 2022-2023 Fiscal Year**

SMCM&VCD Members								
	Gross Normal Cost	Member Contributions	Employer Rates				Total Contribution Rate	Prior Year Total Contribution Rate
			Basic Normal Cost	COLA Normal Cost	Total Normal Cost	UAAL Contribution Rate ⁽¹⁾⁽²⁾		
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	22.56%	(8.07)%	10.01%	4.48%	14.49%	0.00%	14.49%	14.94%
Plan 7	20.23%	(10.12)%	8.03%	2.08%	10.11%	0.00%	10.11%	10.06%
All Plans	21.29%	(9.19)%	8.93%	3.17%	12.10%	0.00%	12.10%	12.76%

1. UAAL Contribution Rate includes an offset of 25.45% of payroll to reflect the District Supplementary Contribution Account.
 2. UAAL Contribution Rate includes an offset of 2.14% 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 2022-2023 Fiscal Year**

Safety Members								
	Gross Normal Cost	Member Contributions	Employer Rates				Total Contribution Rate	Prior Year Total Contribution Rate
			Basic Normal Cost	COLA Normal Cost	Total Normal Cost	UAAL Contribution Rate ⁽¹⁾⁽²⁾		
Plan 1 ⁽³⁾	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
Plan 2	44.17%	(22.19)%	15.65%	6.33%	21.98%	55.10%	77.08%	75.73%
Plan 4	40.61%	(20.01)%	15.96%	4.64%	20.60%	55.10%	75.70%	73.35%
Plan 5	39.68%	(18.92)%	16.27%	4.49%	20.76%	55.10%	75.86%	73.19%
Plan 6 ⁽³⁾	N/A	N/A	N/A	N/A	NA	NA	NA	NA
Plan 7	31.31%	(15.66)%	12.15%	3.50%	15.65%	55.10%	70.75%	69.13%
All Plans	37.20%	(18.36)%	14.56%	4.28%	18.84%	55.10%	73.94%	71.99%

1. UAAL Contribution Rate includes an offset of 7.53% of payroll to reflect the County Supplementary Contribution Account.
 2. UAAL Contribution Rate includes an offset of 3.82% 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 2022-2023 Fiscal Year**

Probation Members								
	Gross Normal Cost	Member Contributions	Employer Rates				Total Contribution Rate	Prior Year Total Contribution Rate
			Basic Normal Cost	COLA Normal Cost	Total Normal Cost	UAAL Contribution Rate ⁽¹⁾⁽²⁾		
Plan 1 ⁽³⁾	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
Plan 2	42.12%	(20.16)%	15.81%	6.15%	21.96%	50.12%	72.08%	68.62%
Plan 4	39.10%	(18.62)%	15.93%	4.55%	20.48%	50.12%	70.60%	66.83%
Plan 5	35.98%	(18.08)%	13.73%	4.17%	17.90%	50.12%	68.02%	63.66%
Plan 6 ⁽³⁾	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
Plan 7	31.47%	(15.74)%	12.17%	3.56%	15.73%	50.12%	65.85%	62.53%
All Plans	37.42%	(18.02)%	15.03%	4.37%	19.40%	50.12%	69.52%	65.98%

1. UAAL Contribution Rate includes an offset of 8.43% of payroll to reflect the County Supplementary Contribution Account.
 2. UAAL Contribution Rate includes an offset of 4.61% 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					
Plan	Normal Cost				Total Gross Normal Cost
	Service Retirement	Disability Retirement	Death Benefits while Active	Termination Benefits	
General Plan 1	21.47%	2.08%	0.30%	4.65%	28.50%
General Plan 2	18.11%	1.64%	0.32%	4.75%	24.82%
General Plan 3	8.51%	0.00%	0.00%	0.72%	9.23%
General Plan 4	18.32%	1.72%	0.32%	4.31%	24.67%
General Plan 5	17.26%	2.07%	0.34%	3.24%	22.91%
General Plan 7	13.66%	1.77%	0.26%	2.64%	18.33%
General Total	16.12%	1.74%	0.29%	3.52%	21.67%
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	16.98%	1.56%	0.27%	3.75%	22.56%
SMCM&VCD Plan 7	15.11%	1.88%	0.38%	2.86%	20.23%
SMCM&VCD Total	15.96%	1.73%	0.33%	3.27%	21.29%
Safety Plan 1	N/A	N/A	N/A	N/A	N/A
Safety Plan 2	34.47%	5.14%	0.49%	4.07%	44.17%
Safety Plan 4	31.62%	4.99%	0.43%	3.57%	40.61%
Safety Plan 5	29.75%	6.44%	0.43%	3.06%	39.68%
Safety Plan 6	N/A	N/A	N/A	N/A	N/A
Safety Plan 7	23.06%	5.41%	0.35%	2.49%	31.31%
Safety Total	28.32%	5.36%	0.40%	3.12%	37.20%
Probation Plan 1	N/A	N/A	N/A	N/A	N/A
Probation Plan 2	34.13%	3.93%	0.36%	3.70%	42.12%
Probation Plan 4	31.25%	3.98%	0.35%	3.52%	39.10%
Probation Plan 5	28.11%	4.54%	0.33%	3.00%	35.98%
Probation Plan 6	N/A	N/A	N/A	N/A	N/A
Probation Plan 7	23.95%	4.55%	0.31%	2.66%	31.47%
Probation Total	29.64%	4.12%	0.34%	3.32%	37.42%
All Plans	18.03%	2.24%	0.30%	3.47%	24.04%

Exhibit 12a
UAAL Amortization Detail – General Members

(Dollars in Thousands)

Unfunded Actuarial Liability Amortization Detail							
Date Established	Description	Balance as of June 30, 2021	Interest on Balance	Amortization Payment on June 30, 2022	Balance as of June 30, 2022	Remaining Period as of June 30, 2022	July 1, 2022 Amortization Payment
June 30, 2008	Initial UAAL	\$ 104,402	\$ 6,525	\$ 56,462	\$ 54,466	1 Year	\$ 55,388
June 30, 2009	(Gain) / Loss	\$ 137,162	\$ 8,573	\$ 50,274	\$ 95,461	2 Years	\$ 49,292
June 30, 2010	(Gain) / Loss	\$ (62,150)	\$ (3,884)	\$ (17,367)	\$ (48,667)	3 Years	\$ (17,012)
June 30, 2011	(Gain) / Loss	\$ (21,471)	\$ (1,342)	\$ (4,879)	\$ (17,934)	4 Years	\$ (4,774)
June 30, 2012	(Gain) / Loss	\$ 73,751	\$ 4,609	\$ 14,193	\$ 64,167	5 Years	\$ 13,874
June 30, 2013	(Gain) / Loss	\$ 15,057	\$ 941	\$ 2,524	\$ 13,474	6 Years	\$ 2,465
June 30, 2014	(Gain) / Loss	\$ (33,937)	\$ (2,121)	\$ (5,058)	\$ (31,000)	7 Years	\$ (4,934)
June 30, 2015	(Gain) / Loss	\$ (26,576)	\$ (1,661)	\$ (3,577)	\$ (24,659)	8 Years	\$ (3,486)
June 30, 2016	(Gain) / Loss	\$ 87,740	\$ 5,484	\$ 10,799	\$ 82,424	9 Years	\$ 10,512
June 30, 2017	(Gain) / Loss	\$ 63,827	\$ 3,989	\$ 7,255	\$ 60,562	10 Years	\$ 7,055
June 30, 2018	(Gain) / Loss	\$ (20,519)	\$ (1,282)	\$ (2,172)	\$ (19,630)	11 Years	\$ (2,110)
June 30, 2019	(Gain) / Loss	\$ 221,479	\$ 13,842	\$ 21,976	\$ 213,345	12 Years	\$ 21,326
June 30, 2020	(Gain) / Loss	\$ 64,114	\$ 4,007	\$ 5,999	\$ 62,122	13 Years	\$ 5,816
June 30, 2021	(Gain) / Loss	\$ 80,496	\$ 5,031	\$ (3,570)	\$ 89,097	14 Years	\$ 7,858
Total Amortization Payment July 1, 2022:							\$ 141,269
Projected Payroll July 1, 2022:							\$ 511,982
UAAL as of June 30, 2021:		\$ 683,375	UAAL Contribution Rate (as a % of Payroll) FYB July 1, 2022:		27.59%		

Notes:

- Amortization Payments are based on a fixed schedule that increases by the payroll growth assumption each year.
- The calculation of UAAL is as of June 30, 2021; whereas, the contribution rates are effective as of July 1, 2022. The June 30, 2021 UAAL is adjusted to June 30, 2022 based on the July 1, 2021 contribution rates and June 30, 2021 valuation assumptions.
- (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	Balance as of June 30, 2021	Interest on Balance	Amortization Payment on June 30, 2022	Balance as of June 30, 2022	Remaining Period as of June 30, 2022	July 1, 2022 Amortization Payment
June 30, 2008	Initial UAAL	\$ 38,099	\$ 2,381	\$ 20,605	\$ 19,876	1 Year	\$ 20,213
June 30, 2009	(Gain) / Loss	\$ 50,303	\$ 3,144	\$ 18,437	\$ 35,009	2 Years	\$ 18,077
June 30, 2010	(Gain) / Loss	\$ (23,248)	\$ (1,453)	\$ (6,496)	\$ (18,205)	3 Years	\$ (6,364)
June 30, 2011	(Gain) / Loss	\$ (9,958)	\$ (622)	\$ (2,263)	\$ (8,318)	4 Years	\$ (2,214)
June 30, 2012	(Gain) / Loss	\$ 21,927	\$ 1,370	\$ 4,220	\$ 19,078	5 Years	\$ 4,125
June 30, 2013	(Gain) / Loss	\$ 4,403	\$ 275	\$ 738	\$ 3,940	6 Years	\$ 721
June 30, 2014	(Gain) / Loss	\$ (13,655)	\$ (853)	\$ (2,035)	\$ (12,473)	7 Years	\$ (1,985)
June 30, 2015	(Gain) / Loss	\$ (7,401)	\$ (463)	\$ (996)	\$ (6,867)	8 Years	\$ (971)
June 30, 2016	(Gain) / Loss	\$ 23,655	\$ 1,478	\$ 2,911	\$ 22,222	9 Years	\$ 2,834
June 30, 2017	(Gain) / Loss	\$ 17,708	\$ 1,107	\$ 2,013	\$ 16,802	10 Years	\$ 1,957
June 30, 2018	(Gain) / Loss	\$ (4,985)	\$ (312)	\$ (528)	\$ (4,769)	11 Years	\$ (512)
June 30, 2019	(Gain) / Loss	\$ 62,803	\$ 3,925	\$ 6,232	\$ 60,496	12 Years	\$ 6,047
June 30, 2020	(Gain) / Loss	\$ 21,229	\$ 1,327	\$ 1,986	\$ 20,569	13 Years	\$ 1,926
June 30, 2021	(Gain) / Loss	\$ 17,510	\$ 1,094	\$ (3,377)	\$ 21,981	14 Years	\$ 1,939
Total Amortization Payment July 1, 2022:							\$ 45,792
Projected Payroll July 1, 2022:							\$ 68,913
UAAL as of June 30, 2021:		\$ 198,389	UAAL Contribution Rate (as a % of Payroll) FYB July 1, 2022:				66.45%

Notes:

- Amortization Payments are based on a fixed schedule that increases by the payroll growth assumption each year.
- The calculation of UAAL is as of June 30, 2021; whereas, the contribution rates are effective as of July 1, 2022. The June 30, 2021 UAAL is adjusted to June 30, 2022 based on the July 1, 2021 contribution rates and June 30, 2021 valuation assumptions.
- (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	Balance as of June 30, 2021	Interest on Balance	Amortization Payment on June 30, 2022	Balance as of June 30, 2022	Remaining Period as of June 30, 2022	July 1, 2022 Amortization Payment
June 30, 2008	Initial UAAL	\$ 9,546	\$ 597	\$ 5,162	\$ 4,980	1 Year	\$ 5,064
June 30, 2009	(Gain) / Loss	\$ 12,660	\$ 791	\$ 4,640	\$ 8,811	2 Years	\$ 4,550
June 30, 2010	(Gain) / Loss	\$ (5,674)	\$ (355)	\$ (1,586)	\$ (4,443)	3 Years	\$ (1,553)
June 30, 2011	(Gain) / Loss	\$ (2,284)	\$ (143)	\$ (519)	\$ (1,908)	4 Years	\$ (508)
June 30, 2012	(Gain) / Loss	\$ 7,394	\$ 462	\$ 1,423	\$ 6,433	5 Years	\$ 1,391
June 30, 2013	(Gain) / Loss	\$ 1,124	\$ 70	\$ 188	\$ 1,006	6 Years	\$ 184
June 30, 2014	(Gain) / Loss	\$ (2,760)	\$ (173)	\$ (411)	\$ (2,521)	7 Years	\$ (401)
June 30, 2015	(Gain) / Loss	\$ (1,996)	\$ (125)	\$ (269)	\$ (1,852)	8 Years	\$ (262)
June 30, 2016	(Gain) / Loss	\$ 9,678	\$ 605	\$ 1,191	\$ 9,091	9 Years	\$ 1,159
June 30, 2017	(Gain) / Loss	\$ 9,235	\$ 577	\$ 1,050	\$ 8,762	10 Years	\$ 1,021
June 30, 2018	(Gain) / Loss	\$ (1,681)	\$ (105)	\$ (178)	\$ (1,609)	11 Years	\$ (173)
June 30, 2019	(Gain) / Loss	\$ 23,788	\$ 1,487	\$ 2,360	\$ 22,915	12 Years	\$ 2,291
June 30, 2020	(Gain) / Loss	\$ 11,689	\$ 731	\$ 1,094	\$ 11,326	13 Years	\$ 1,060
June 30, 2021	(Gain) / Loss	\$ 6,920	\$ 433	\$ (1,732)	\$ 9,085	14 Years	\$ 801
Total Amortization Payment July 1, 2022:							\$ 14,624
Projected Payroll July 1, 2022:							\$ 23,153
UAAL as of June 30, 2021:		\$ 77,638	UAAL Contribution Rate (as a % of Payroll) FYB July 1, 2022:		63.16%		

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, 2021; whereas, the contribution rates are effective as of July 1, 2022. The June 30, 2021 UAAL is adjusted to June 30, 2022 based on the July 1, 2021 contribution rates and June 30, 2021 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)

General Members							
Date Established	Description	Balance as of June 30, 2021	Interest on Balance	Amortization Payment on June 30, 2022	Balance as of June 30, 2022	Remaining Period as of June 30, 2022	July 1, 2022 Amortization Payment
June 30, 2014	Initial CSCA	\$ 28,794	\$ 1,800	\$ 4,292	\$ 26,302	7 Years	\$ 4,186
June 30, 2015	CSCA Addition	\$ 6,838	\$ 427	\$ 920	\$ 6,345	8 Years	\$ 897
June 30, 2016	CSCA Addition	\$ 12,891	\$ 806	\$ 1,587	\$ 12,110	9 Years	\$ 1,544
June 30, 2017	CSCA Addition	\$ 22,799	\$ 1,425	\$ 2,591	\$ 21,632	10 Years	\$ 2,520
June 30, 2018	CSCA Addition	\$ 19,680	\$ 1,230	\$ 2,083	\$ 18,827	11 Years	\$ 2,023
June 30, 2019	CSCA Addition	\$ 34,379	\$ 2,149	\$ 3,411	\$ 33,117	12 Years	\$ 3,310
June 30, 2020	CSCA Addition	\$ (979)	\$ (61)	\$ (92)	\$ (949)	13 Years	\$ (89)
June 30, 2021	CSCA Addition	\$ 32,443	\$ 2,028	\$ -	\$ 34,471	14 Years	\$ 3,177
Total CSCA County Offset Payment July 1, 2022:							\$ 17,569
Projected County Payroll July 1, 2022:							\$ 486,507
CSCA Value as of June 30, 2021:		\$ 156,845		CSCA County Offset (as a % of Payroll) FYB July 1, 2022:			3.61%

Notes:

- CSCA Offsets are based on a fixed schedule that increases by the payroll growth assumption each year.
- The calculation of CSCA amounts are as of June 30, 2021; whereas, the contribution rates are effective as of July 1, 2022. The June 30, 2021 CSCA is adjusted to June 30, 2022 based on the July 1, 2021 contribution rates and June 30, 2021 valuation assumptions.

Exhibit 12e
CSCA Amortization Detail - Safety Members

(Dollars in Thousands)

Safety Members							
Date Established	Description	Balance as of June 30, 2021	Interest on Balance	Amortization Payment on June 30, 2022	Balance as of June 30, 2022	Remaining Period as of June 30, 2022	July 1, 2022 Amortization Payment
June 30, 2014	Initial CSCA	\$ 9,757	\$ 610	\$ 1,454	\$ 8,913	7 Years	\$ 1,419
June 30, 2015	CSCA Addition	\$ 2,319	\$ 145	\$ 312	\$ 2,152	8 Years	\$ 304
June 30, 2016	CSCA Addition	\$ 3,910	\$ 244	\$ 481	\$ 3,673	9 Years	\$ 468
June 30, 2017	CSCA Addition	\$ 6,880	\$ 430	\$ 782	\$ 6,528	10 Years	\$ 760
June 30, 2018	CSCA Addition	\$ 6,089	\$ 381	\$ 644	\$ 5,825	11 Years	\$ 626
June 30, 2019	CSCA Addition	\$ 9,372	\$ 586	\$ 930	\$ 9,028	12 Years	\$ 902
June 30, 2020	CSCA Addition	\$ (658)	\$ (41)	\$ (62)	\$ (638)	13 Years	\$ (60)
June 30, 2021	CSCA Addition	\$ 7,867	\$ 492	\$ -	\$ 8,358	14 Years	\$ 770
Total CSCA County Offset Payment July 1, 2022:							\$ 5,191
Projected County Payroll July 1, 2022:							\$ 68,913
CSCA Value as of June 30, 2021:		\$ 45,536		CSCA County Offset (as a % of Payroll) FYB July 1, 2022:			7.53%

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, 2021; whereas, the contribution rates are effective as of July 1, 2022. The June 30, 2021 CSCA is adjusted to June 30, 2022 based on the July 1, 2021 contribution rates and June 30, 2021 valuation assumptions.

Exhibit 12f
CSCA Amortization Detail - Probation Members

(Dollars in Thousands)

Probation Members							
Date Established	Description	Balance as of June 30, 2021	Interest on Balance	Amortization Payment on June 30, 2022	Balance as of June 30, 2022	Remaining Period as of June 30, 2022	July 1, 2022 Amortization Payment
June 30, 2014	Initial CSCA	\$ 2,654	\$ 166	\$ 395	\$ 2,424	7 Years	\$ 386
June 30, 2015	CSCA Addition	\$ 661	\$ 41	\$ 89	\$ 613	8 Years	\$ 87
June 30, 2016	CSCA Addition	\$ 1,364	\$ 85	\$ 168	\$ 1,281	9 Years	\$ 163
June 30, 2017	CSCA Addition	\$ 2,722	\$ 170	\$ 309	\$ 2,583	10 Years	\$ 301
June 30, 2018	CSCA Addition	\$ 2,053	\$ 128	\$ 217	\$ 1,964	11 Years	\$ 211
June 30, 2019	CSCA Addition	\$ 3,759	\$ 235	\$ 373	\$ 3,621	12 Years	\$ 362
June 30, 2020	CSCA Addition	\$ 1,020	\$ 64	\$ 95	\$ 989	13 Years	\$ 93
June 30, 2021	CSCA Addition	\$ 3,582	\$ 224	\$ -	\$ 3,806	14 Years	\$ 351
Total CSCA County Offset Payment July 1, 2022:							\$ 1,953
Projected County Payroll July 1, 2022:							\$ 23,153
CSCA Value as of June 30, 2021:		\$ 17,814		CSCA County Offset (as a % of Payroll) FYB July 1, 2022:			8.43%

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, 2021; whereas, the contribution rates are effective as of July 1, 2022. The June 30, 2021 CSCA is adjusted to June 30, 2022 based on the July 1, 2021 contribution rates and June 30, 2021 valuation assumptions.

**Exhibit 12g
 Amortization Detail – District SCA Offsets**

(Dollars in Thousands)

Preliminary Offset Calculations									
Date Established	Description	Balance as of June 30, 2021	Interest on Balance	Amortization Payment on June 30, 2022	Balance as of June 30, 2022	Remaining Period as of June 30, 2022	July 1, 2022 Amortization Payment		
June 30, 2016	Initial DSCA	\$ 938	\$ 59	\$ 507	\$ 489	1 Year	\$ 498		
June 30, 2017	DSCA Addition	\$ 154	\$ 10	\$ 83	\$ 80	1 Year	\$ 82		
June 30, 2018	DSCA Addition	\$ 2	\$ 0	\$ 1	\$ 1	1 Year	\$ 1		
June 30, 2019	DSCA Addition	\$ 3	\$ 0	\$ 1	\$ 2	2 Years	\$ 1		
June 30, 2020	DSCA Addition	\$ 0	\$ 0	\$ 0	\$ 0	3 Years	\$ 0		
June 30, 2021	DSCA Addition	\$ 2	\$ 0	\$ -	\$ 2	4 Years	\$ 0		
							Total DSCA Offset Payment July 1, 2022:	\$ 582	
							Projected District Payroll July 1, 2022:	\$ 2,070	
DSCA Value as of June 30, 2021:		<u>\$ 1,099</u>	DSCA District Offset (as a % of Payroll) FYB July 1, 2022:					<u>28.12%</u>	

Adjusted Offset Calculations									
Date Established	Description	Balance as of June 30, 2021	Interest on Balance	Amortization Payment on June 30, 2022	Balance as of June 30, 2022	Remaining Period as of June 30, 2022	July 1, 2022 Amortization Payment		
June 30, 2016	Initial DSCA	\$ 938	\$ 59	\$ 507	\$ 489	1 Year	\$ 450		
June 30, 2017	DSCA Addition	\$ 154	\$ 10	\$ 83	\$ 80	1 Year	\$ 74		
June 30, 2018	DSCA Addition	\$ 2	\$ 0	\$ 1	\$ 1	1 Year	\$ 1		
June 30, 2019	DSCA Addition	\$ 3	\$ 0	\$ 1	\$ 2	2 Years	\$ 1		
June 30, 2020	DSCA Addition	\$ 0	\$ 0	\$ 0	\$ 0	3 Years	\$ 0		
June 30, 2021	DSCA Addition	\$ 2	\$ 0	\$ -	\$ 2	4 Years	\$ 0		
							Total DSCA Offset Payment July 1, 2022:	\$ 527	
							Projected District Payroll July 1, 2022:	\$ 2,070	
DSCA Value as of June 30, 2021:		<u>\$ 1,099</u>	DSCA District Offset (as a % of Payroll) FYB July 1, 2022:					<u>25.45%</u>	

Notes:

- DSCA Offsets are based on a fixed schedule that increases by the payroll growth assumption each year.
- The calculation of DSCA amounts are as of June 30, 2021; whereas, the contribution rates are effective as of July 1, 2022. The June 30, 2021 DSCA is adjusted to June 30, 2022 based on the July 1, 2021 contribution rates and June 30, 2021 valuation assumptions.
- 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, 2021 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)

<u>Actuarial Valuation Date</u>	<u>(a) Actuarial Value of Valuation Assets</u>	<u>(b) Actuarial Accrued Liabilities</u>	<u>(b-a) Unfunded Actuarial Accrued Liabilities (UAAL)</u>	<u>(a/b) Funded Ratio</u>	<u>(c) Covered Payroll</u>	<u>[(b-a)/c] UAAL as a Percentage of Covered Payroll</u>
June 30, 2012	\$ 2,480,271	\$ 3,442,553	\$ 926,282	72.0%	\$ 418,916	229.71%
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%

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

Exhibit 14
Solvency Test

(Dollars in Thousands)

Actuarial Valuation Date	Valuation Assets	Actuarial Accrued Liabilities for			Portion of Actuarial Accrued Liabilities Covered by Assets		
		Active Member Contributions (A)	Retirees and Beneficiaries ⁽¹⁾ (B)	Active Members (Employer Financed Portion) (C)	(A)	(B)	(C)
June 30, 2012	\$ 2,480,271	\$ 498,569	\$ 2,022,791	\$ 921,193	100%	98%	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%

1. Includes inactive members.

Exhibit 15
History of Employer Statutory Contribution Rates

Statutory Contribution Rates									
Valuation Year	General Members (County & Courts)			General Members (Nurses & UAPD)			General Members (SMCM&VCD)		
	Normal	UAAL	Total	Normal	UAAL	Total	Normal	UAAL	Total
2012	9.98%	20.17%	30.15%	8.96%	20.17%	29.13%	11.68%	20.17%	31.85%
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 Year	General Members (County)			General Members (Courts)			General Members (SMCM&VCD)		
	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%

Statutory Contribution Rates									
Valuation Year	Safety Member			Probation Members (excluding Managers)			Probation Members (Managers)		
	Normal	UAAL	Total	Normal	UAAL	Total	Normal	UAAL	Total
2012	19.05%	48.51%	67.56%	19.99%	26.71%	46.70%	Same as Probation (ex Managers)		
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)		

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				
	2021	2020	2019	2018	2017
Unfunded Liability as of July 1	\$ 787,737,000	\$ 774,476,000	\$ 619,033,000	\$ 743,133,000	\$ 737,570,000
Expected Change in UAAL	(157,668,000)	(85,527,000)	(153,261,000)	(109,756,000)	(110,404,000)
Salary (Gain) / Loss	12,064,000	25,190,000	50,472,000	10,401,000	27,685,000
Retiree COLA more / (less) than expected	(25,973,000)	18,992,000	21,749,000	12,203,000	7,050,000
Asset (Gain) / Loss	(87,748,000)	15,884,000	46,909,000	(42,796,000)	(28,286,000)
Change due to Assumption Changes	197,720,000	11,593,000	173,944,000	0	133,221,000
Miscellaneous Experience	11,976,000	27,129,000	15,630,000	5,848,000	(23,703,000)
Unfunded Liability as of June 30	\$ 738,108,000	\$ 787,737,000	\$ 774,476,000	\$ 619,033,000	\$ 743,133,000

Exhibit 17
Summary of Significant Actuarial Statistics and Measures

	June 30th of		Relative
	2021	2020	Change
1. Active Members			
Number of Members	5,356	5,400	(0.8)%
Average Age	45.1	45.0	0.2%
Average Credited Service	10.5	10.3	1.8%
Covered Payroll (\$thousands)	\$ 600,369	\$ 593,295	1.2 %
Average Monthly Salary	\$ 9,439	\$ 9,176	2.9 %
2. Retired Members			
Number of Members			
Service Retirement	4,421	4,292	3.0 %
Disability Retirement	499	506	(1.4)%
Beneficiaries	672	656	2.4 %
Average Age	71.5	71.3	0.3 %
Actual Retiree Benefits Paid (\$thousands)	\$ 259,356	\$ 242,025	7.2 %
Average Monthly Pension	\$ 3,995	\$ 3,865	3.4 %
3. Number of Inactive Members			
	1,986	1,882	5.5 %
4. Assets			
Market Value of Fund (\$thousands)	\$ 5,982,086	\$ 4,780,502	25.1 %
Return on Market Value	23.5%	0.9%	
Valuation Assets (\$thousands)	\$ 5,488,958	\$ 4,998,316	9.8 %
Return on Valuation Assets	8.2%	6.2%	
5. Liability Values (\$thousands)			
Actuarial Accrued Liability	\$ 6,227,066	\$ 5,786,054	7.6 %
Unfunded Actuarial Accrued Liability	\$ 738,108	\$ 787,738	(6.3)%
Deferred Asset (Gains) / Losses	\$ (437,683)	\$ 268,302	
6. Funded Ratio			
(based on valuation assets)	88.1%	86.4%	2.0 %

Exhibit 18
Summary of SamCERA Membership

Plan	One	Two	Three	Four	Five	Six	Seven	Total
Retirees and beneficiaries currently receiving benefits:								
General	1,242	2,188	122	1,053	16	-	20	4,641
Safety	262	256	-	135	4	-	2	659
Probation	96	120	-	75	-	-	1	292
Subtotal	<u>1,600</u>	<u>2,564</u>	<u>122</u>	<u>1,263</u>	<u>20</u>	<u>-</u>	<u>23</u>	<u>5,592</u>
Inactive employees entitled to but not currently receiving benefits (Deferred):								
General	7	227	68	772	108	-	642	1,824
Safety	-	9	-	41	12	-	32	94
Probation	-	16	-	41	1	-	10	68
Subtotal	<u>7</u>	<u>252</u>	<u>68</u>	<u>854</u>	<u>121</u>	<u>-</u>	<u>684</u>	<u>1,986</u>
Current employees:								
Vested:								
General	2	355	45	1,639	190	-	741	2,972
Safety	-	22	-	184	48	-	89	343
Probation	-	5	-	130	8	-	21	164
Non-Vested:								
General	-	1	4	8	92	-	1,566	1,671
Safety	-	-	-	1	16	-	160	177
Probation	-	-	-	-	-	-	29	29
Subtotal	<u>2</u>	<u>383</u>	<u>49</u>	<u>1,962</u>	<u>354</u>	<u>-</u>	<u>2,606</u>	<u>5,356</u>
Total SamCERA Membership	1,609	3,199	239	4,079	495	-	3,313	12,934

Exhibit 19
Summary of Active Member Valuation Data

Valuation Date		Members	Annual Salary	Average Annual Salary	% Change Average Salary
2012	General	4,361	\$351,965,689	\$80,708	1.9%
	Safety	435	51,129,267	117,539	0.7%
	Probation	299	24,554,583	82,122	1.9%
	Total	5,095	427,649,539	83,935	1.8%
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%

Exhibit 20
Summary of Demographic Activity of Retirees and Beneficiaries

Year Ended	Added to Rolls ⁽¹⁾		Removed from Rolls		Rolls end of year		% Increase in Payroll	Average Monthly Allowances
	No.	Annual Allowances in Thousands	No.	Annual Allowances in Thousands	No.	Total Retiree Payroll in Thousands		
June 30, 2012	218	\$ 14,379	90	\$ 4,209	4,275	\$ 144,845	7.6 %	\$ 2,823
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

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

Exhibit 21
Average Salary and Active Counts by Employer

	2021	2020	2019	2018	2017
General Plan 1	\$18,022	\$11,102	\$9,793	\$10,121	\$11,305
General Plan 2	10,957	10,665	10,088	9,526	8,994
General Plan 3	8,623	8,221	7,872	7,462	7,484
General Plan 4	10,087	9,671	9,302	8,534	8,134
General Plan 5	11,092	10,635	10,180	9,672	8,980
General Plan 7	8,014	7,726	7,395	6,974	6,737
General Plan Total	9,173	8,897	8,622	8,128	7,869
Safety Plan 1	0	0	0	0	14,434
Safety Plan 2	15,162	15,125	14,197	13,607	13,528
Safety Plan 4	13,494	13,204	12,391	11,894	11,381
Safety Plan 5	12,619	12,367	11,708	11,349	10,544
Safety Plan 6	0	0	0	0	0
Safety Plan 7	9,765	9,581	9,030	8,747	8,356
Safety Plan Total	11,671	11,610	11,146	10,958	10,786
Probation Plan 1	0	0	0	0	7,722
Probation Plan 2	10,641	10,174	9,908	9,061	9,069
Probation Plan 4	10,359	9,827	9,103	8,714	8,270
Probation Plan 5	9,911	9,343	8,587	8,219	7,612
Probation Plan 6	0	0	0	0	7,347
Probation Plan 7	8,378	7,598	6,973	6,676	6,121
Probation Plan Total	9,835	9,289	8,678	8,379	8,061
Grand Total	9,439	9,176	8,873	8,407	8,154

Participating Employers and Active Members

	2021	2020	2019	2018	2017
<i>County of San Mateo</i>					
General Members	4,375	4,379	4,350	4,343	4,303
Safety Members	520	522	530	508	503
Probation Members	193	223	237	256	274
Total	5,088	5,124	5,117	5,107	5,080
<i>San Mateo County Mosquito and Vector Control District</i>					
General Members Total	19	20	20	21	20
<i>Courts</i>					
General Members Total	249	256	240	239	237
Total Active Membership	5,356	5,400	5,377	5,367	5,337

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.	\$ 143,082,873
Statutory Contribution \$	Expected Statutory Contribution paid at mid-year.	\$ 228,135,047
Asset Smoothing Ratio	Actuarial Value of Assets divided by Market Value of Assets	91.8%
Asset Volatility Ratio	Market Value of Assets divided by Payroll	10.1
Liability Volatility Ratio	Actuarial Accrued Liability divided by Payroll	10.5

This Section 8 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.

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 is different than are 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 as part of the triennial Investigation of Experience 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 10.1 and a Liability Volatility Ratio of 10.5.

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 an 10.1 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% investment return translates to a 9.3% 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 10.2% in the Funded Ratio (on a market-value basis) from the current Funded Ratio of 88.1%.

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.

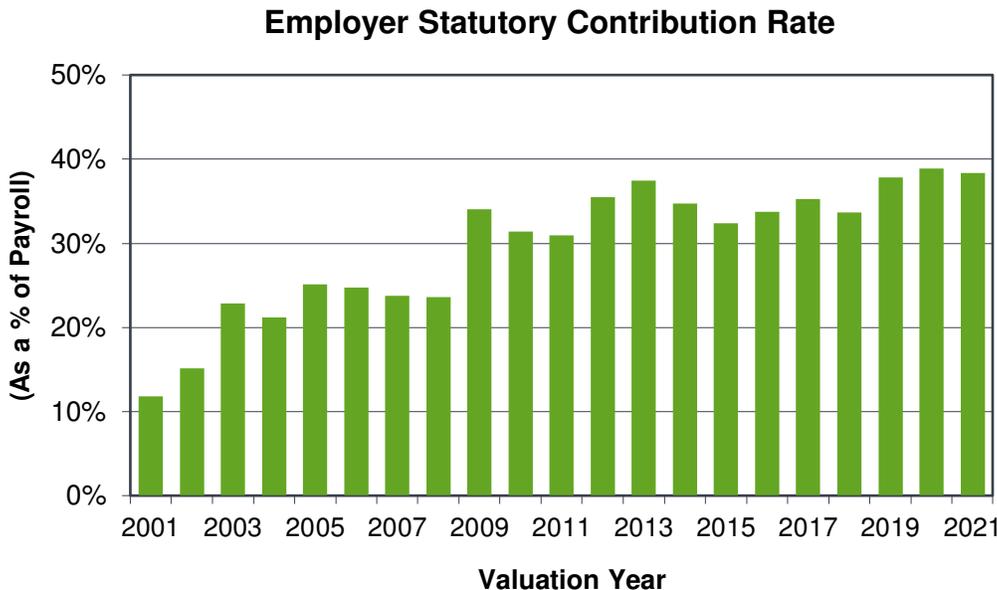
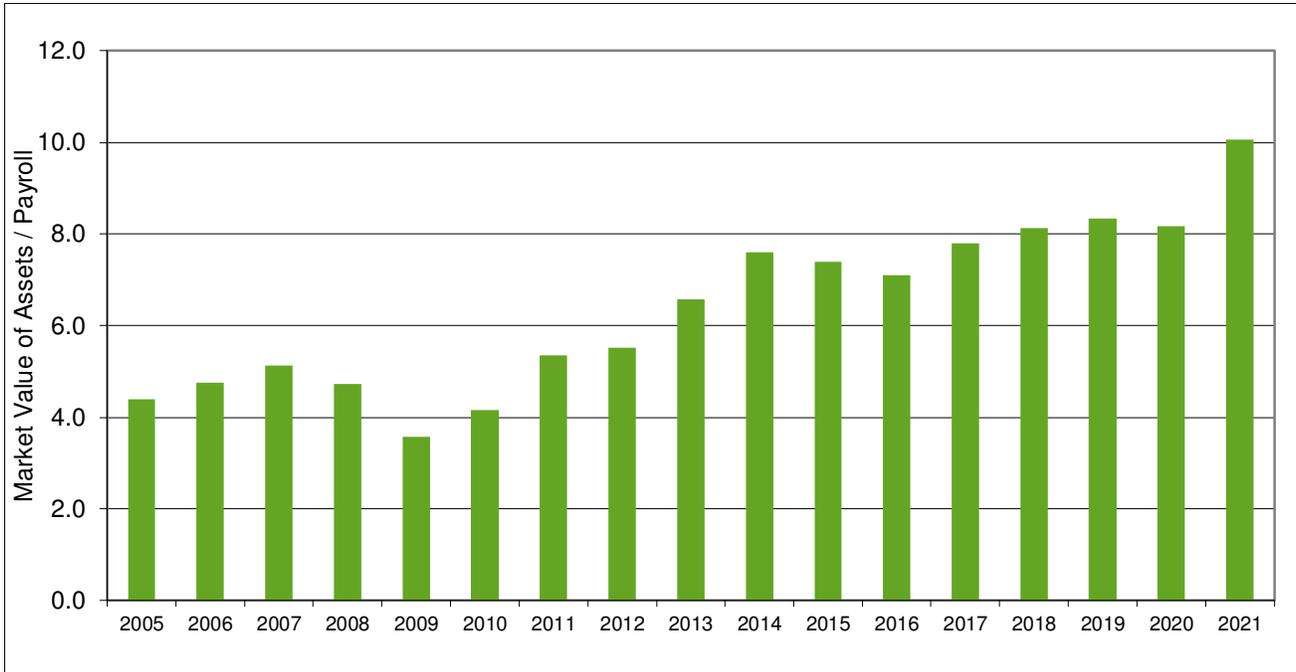
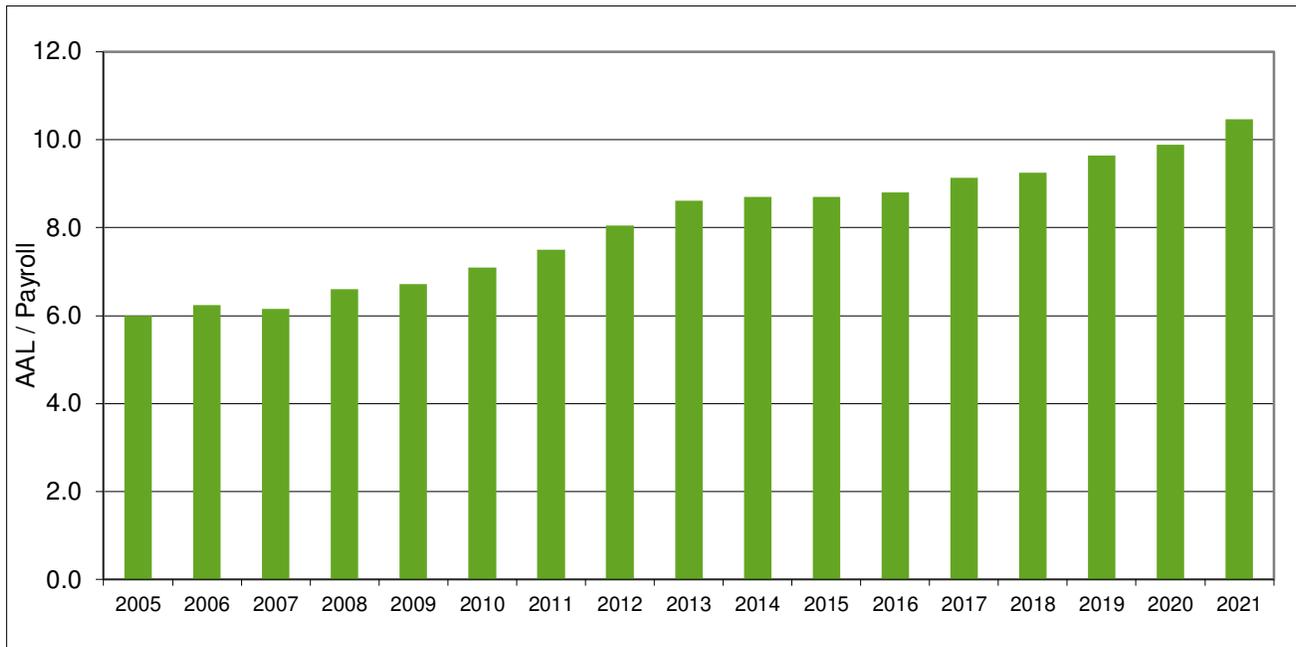


Exhibit 22
Asset and Liability Volatility Ratios

Asset Volatility Ratios



Liability Volatility Ratios



Appendix A Actuarial Procedures and Assumptions

The actuarial procedures and assumptions to be used in the June 30, 2021 valuation are described in this section. 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% and reaffirmed all other assumptions.

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.

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 (by multiplying by 26) 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.

Class	Gender	
General	Male	PubG-2010 (100%*) Disabled Retiree Male
General	Female	PubG-2010 (100%*) Disabled Retiree Female
Safety	Male	PubS-2010 (100%) Disabled Retiree Male
Safety	Female	PubS-2010 (100%) Disabled Retiree 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, 2021

Economic assumptions

A. General wage increases	3.00%
B. Investment earnings	6.25%
C. Growth in active membership	0.00%
D. CPI-U inflation assumption	2.25%
E. CPI inflation assumption	2.50%

Demographic assumptions

A. Salary increases due to service	Exhibit A-5
B. 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
H. Mortality for members retired for disability	Exhibit A-3
I. Mortality for beneficiaries	Exhibit A-2

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

<u>Age</u>	<u>General Male</u>	<u>General Female</u>	<u>Safety Male</u>	<u>Safety Female</u>
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%

Annual Projected Mortality Improvement

<u>Age</u>	<u>All Groups</u>
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 2021 is 7.692% calculated as follows:

$$\begin{aligned}
 \text{Age 85 rate in 2021} &= \text{Age 85 rate in 2010 with 11 years improvement} \\
 &= 8.591\% \times (100.0\% - 1.0\%)^{(2021-2010)} \\
 &= 7.692\%
 \end{aligned}$$

Exhibit A-3
Mortality for Members Retired for Disability

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-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%

**Exhibit A-5
 Annual Increase in Salary**

Years of Service	Due to Promotion and Longevity		Total Annual Increase ⁽¹⁾	
	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%

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

Age	Service Retirement ⁽¹⁾⁽²⁾		Service Disability	Ordinary Disability	Service Death	Ordinary Death	Years of Service	Other Terminations
	Plans 1, 2, 4	Plans 5 & 7						
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	19	0.02100
38	0.00000	0.00000	0.00081	0.00044	N/A	0.00057	20	0.01900
39	0.00000	0.00000	0.00090	0.00048	N/A	0.00061	21	0.01700
40	0.00000	0.00000	0.00099	0.00054	N/A	0.00066	22	0.01500
41	0.00000	0.00000	0.00107	0.00058	N/A	0.00071	23	0.01400
42	0.00000	0.00000	0.00116	0.00063	N/A	0.00077	24	0.01300
43	0.00000	0.00000	0.00128	0.00069	N/A	0.00083	25	0.01200
44	0.00000	0.00000	0.00140	0.00076	N/A	0.00090	26	0.01100
45	0.00000	0.00000	0.00155	0.00083	N/A	0.00098	27	0.01000
46	0.00000	0.00000	0.00164	0.00089	N/A	0.00107	28	0.01000
47	0.00000	0.00000	0.00175	0.00094	N/A	0.00116	29	0.01000
48	0.00000	0.00000	0.00184	0.00099	N/A	0.00127	30 & Above ⁽³⁾	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

Age	Service Retirement ⁽¹⁾⁽²⁾		Service Disability	Ordinary Disability	Service Death	Ordinary Death	Years of Service	Other Terminations
	Plans 1, 2, 4	Plans 5 & 7						
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	0.00030	20	0.01900
39	0.00000	0.00000	0.00090	0.00048	N/A	0.00033	21	0.01700
40	0.00000	0.00000	0.00099	0.00054	N/A	0.00036	22	0.01500
41	0.00000	0.00000	0.00107	0.00058	N/A	0.00040	23	0.01400
42	0.00000	0.00000	0.00116	0.00063	N/A	0.00043	24	0.01300
43	0.00000	0.00000	0.00128	0.00069	N/A	0.00047	25	0.01200
44	0.00000	0.00000	0.00140	0.00076	N/A	0.00051	26	0.01100
45	0.00000	0.00000	0.00155	0.00083	N/A	0.00056	27	0.01000
46	0.00000	0.00000	0.00164	0.00089	N/A	0.00061	28	0.01000
47	0.00000	0.00000	0.00175	0.00094	N/A	0.00066	29	0.01000
48	0.00000	0.00000	0.00184	0.00099	N/A	0.00071	30 & Above ⁽³⁾	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.

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

<u>Age</u>	<u>Service Retirement</u>	<u>Service Disability</u>	<u>Ordinary Disability</u>	<u>Service Death</u>	<u>Ordinary Death</u>	<u>Years of Service</u>	<u>Other Terminations</u>
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		
63	0.10000	N/A	N/A	N/A	0.00401		
64	0.15000	N/A	N/A	N/A	0.00433		
65	0.30000	N/A	N/A	N/A	0.00468		
66	0.30000	N/A	N/A	N/A	0.00506		
67	0.30000	N/A	N/A	N/A	0.00548		
68	0.30000	N/A	N/A	N/A	0.00594		
69	0.30000	N/A	N/A	N/A	0.00646		
70	0.40000	N/A	N/A	N/A	0.00703		
71	0.40000	N/A	N/A	N/A	0.00767		
72	0.40000	N/A	N/A	N/A	0.00837		
73	0.40000	N/A	N/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-9
Rate of Separation from Active Service
General Plan 3 – Female

<u>Age</u>	<u>Service Retirement</u>	<u>Service Disability</u>	<u>Ordinary Disability</u>	<u>Service Death</u>	<u>Ordinary Death</u>	<u>Years of Service</u>	<u>Other Terminations</u>
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	0.3000	N/A	N/A	N/A	0.00327		
67	0.3000	N/A	N/A	N/A	0.00362		
68	0.3000	N/A	N/A	N/A	0.00400		
69	0.3000	N/A	N/A	N/A	0.00442		
70	0.4000	N/A	N/A	N/A	0.00489		
71	0.4000	N/A	N/A	N/A	0.00541		
72	0.4000	N/A	N/A	N/A	0.00598		
73	0.4000	N/A	N/A	N/A	0.00661		
74	0.4000	N/A	N/A	N/A	0.00731		
75	1.0000	N/A	N/A	N/A	N/A		

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

Age	Service Retirement ⁽¹⁾⁽²⁾		Service Disability	Ordinary Disability	Service Death	Ordinary Death	Years of Service	Other Terminations
	Plans 1, 2, 4	Plans 5, 6, 7						
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		
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

Age	Service Retirement ⁽¹⁾⁽²⁾		Service Disability	Ordinary Disability	Service Death	Ordinary Death	Years of Service	Other Terminations
	Plans 1, 2, 4	Plans 5, 6, 7						
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
39	0.00000	0.00000	0.00350	0.00000	0.00010	0.00046		
40	0.00000	0.00000	0.00370	0.00000	0.00010	0.00049		
41	0.00000	0.00000	0.00390	0.00000	0.00010	0.00052		
42	0.00000	0.00000	0.00410	0.00000	0.00010	0.00056		
43	0.00000	0.00000	0.00430	0.00000	0.00010	0.00059		
44	0.00000	0.00000	0.00450	0.00000	0.00010	0.00063		
45	0.05000	0.00000	0.00470	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	0.00550	0.00000	0.00010	0.00080		
49	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	0.00920	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	0.01430	0.00000	0.00010	0.00116		
55	0.25000	0.20000	0.01600	0.00000	0.00010	0.00123		
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	0.02280	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, 2021. 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. Only General members are eligible for Plan 3. **Government 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.

Cost-of-Living:

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.

Cost Sharing:

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.

MEMBER CONTRIBUTIONS (Continued)

Safety Members: Deputy Sheriffs in Plans 1, 2, 4, and 5 contribute the following additional cost sharing rates based on age and service:

- | | |
|-----------------------------------|------|
| If age 45 or older | 4.5% |
| If age is less than 45 | |
| ▪ Service is less than 5 years: | 3.0% |
| ▪ Service between 5 and 15 years: | 3.5% |
| ▪ Service is more than 15 years: | 4.5% |

Safety members (except Deputy Sheriffs) in Plans 1, 2, and 4 contribute an additional 5.0% cost sharing.

Safety members (except Deputy Sheriffs) in Plan 5 contribute an additional 4.0% cost sharing.

Safety members in Plan 6 and 7 do not participate in cost sharing.

Probation Members: Members of Plans 1, 2, 4, and 5 contribute an additional 3.5% for cost sharing.

Members of Plans 6 and 7 do not participate in cost sharing.

Interest Crediting: Interest is credited to contributions semiannually on June 30 and December 31 at an interest rate set by the Board of Retirement on amounts that have been on deposit for at least six months. (31591, 31700)

Employer Pick-Up: Effective with the first pay period in July 2016, no employer provides for employer pick-up contributions.

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 investigation, valuation and recommendation of the actuary. (31453, 31453.5, 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: (31663.25)

- Age 50 with 10 years of service;
- Any age with 20 years of service.

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 RETIREMENT 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.

Monthly Allowance:

Plans 1, 2, 4, and 5:	<p>General members: $1/60 \times \text{Final Average Compensation} \times \text{General age factor} \times \text{years of service.}$</p> <p>Safety & Probation members: $3\% \times \text{Final Average Compensation} \times \text{Safety age factor} \times \text{years of service.}$</p>	<p>(31676.14) – Plans 1, 2 & 4 (31676.1) – Plan 5 (31664.1) – Plans 1, 2 & 4 (31664.2) – Plan 5</p>
Plan 6:	<p>Safety & Probation members: $2\% \times \text{Final Average Compensation} \times \text{Safety age factor} \times \text{years of service.}$</p>	<p>(31664)</p>
Plan 7:	<p>General members: $2\% \times \text{Final Average Compensation} \times \text{General age factor} \times \text{years of service.}$</p> <p>Safety and Probation members: $2\% \times \text{Final Average Compensation} \times \text{Safety age factor} \times \text{years of service.}$</p>	<p>7522.20(a) 7522.25(d)</p>
Plan 3:	<p>General members: (a)+(b)-(c) where:</p> <p>(a) $2\% \times \text{Final Average Compensation} \times (\text{Years of Service, up to 35 years}),$ plus</p> <p>(b) $1\% \times \text{Final Average Compensation} \times \text{Years of Service in excess of 35}$ (up to 10 years)</p> <p>(c) $\text{Estimated Primary Insurance Amount (PIA)} \times \text{Years of Covered Service}$ (up to 35 years) divided by 35.</p> <p>The PIA is calculated based on certain assumptions specified by statute, and an assumed Social Security retirement age of 65.</p> <p>If retirement occurs prior to age 65, benefit amount is adjusted by an actuarial equivalent factor (see Sample Plan Age Factors).</p>	<p>(31496)</p>

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.

Maximum

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 service exceeds 35 years. (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 includes certain domestic partners.	(31780.2)

Optional Retirement Allowance:

A member may elect to have the actuarial equivalent of the service or disability retirement allowance applied to a lesser retirement allowance during the retired member's life in order to provide an optional 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 4, the continuance will not be paid if the member revokes their election and names another beneficiary 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 occur mid-month, the full month's payment is made. (31600)

SERVICE-CONNECTED DISABILITY RETIREMENT ALLOWANCE

<u>Eligibility:</u>		
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 Allowance:</u>	Greater of (1) 50% of Final Average Compensation or (2) the service retirement allowance, if eligible to retire.	(31727.4)
<u>Normal Form 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)
<u>Monthly Allowance:</u>	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 Payment:</u>	Life Annuity with 60% continuance to a surviving spouse (or eligible children).	(31760.1)

SERVICE-CONNECTED DEATH BENEFITS

Eligibility

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: (31781.3)

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 benefit equal to 12 x monthly rate of compensation at the time of member's death in addition to all other 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.

NONSERVICE-CONNECTED DEATH BENEFITS

Eligibility:

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): (31781)

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: (31781.1)

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: (31781.2, 31765.2)

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 the number of completed years of service (benefit not to exceed 50% of the 12 months' compensation), plus (31781.3)

(b) A monthly payment equal to 60% of the monthly retirement allowance to which the 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. (31781.1)

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 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. (31765.1)

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 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. (31765)

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

Eligibility:

All Plans, except Plans 3 and 7: Age 50 with 10 years of membership. (31700)

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.

Plan 3: Age 55 with 10 years of service. (31496)

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 on changes in the Consumer Price Index (CPI) from the previous January 1 to the current January 1, to the nearest ½ of 1%.	(31870, 31870.1, 31870.2, 31874.4)
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, 2021 was supplied to us by SamCERA staff. On the following table, Exhibit C-1, we present a summary of SamCERA membership at June 30, 2021 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 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.

Exhibit C-1
SamCERA Membership – Active Members as of June 30, 2021

	Total Number	Annual Salary	Average Age	Average Monthly Salary	Average Credited Service
General Members					
Plan 1	2	\$ 432,536	70.5	\$ 18,022	44.3
Plan 2	356	46,810,383	57.2	10,957	28.0
Plan 3	49	5,070,273	54.8	8,623	17.0
Plan 4	1,647	199,355,717	50.6	10,087	16.4
Plan 5	282	37,536,490	46.8	11,092	6.5
Plan 7	2,307	221,864,550	39.8	8,014	3.8
Total	4,643	\$ 511,069,950	45.6	\$ 9,173	10.4
Safety Members					
Plan 1	-	\$ -	-	\$ -	-
Plan 2	22	4,002,889	54.6	15,162	25.0
Plan 4	185	29,956,622	47.6	13,494	16.1
Plan 5	64	9,691,053	42.3	12,619	6.8
Plan 7	249	29,178,986	35.1	9,765	3.9
Total	520	\$ 72,829,550	41.3	\$ 11,671	9.5
Probation Members					
Plan 1	-	\$ -	-	\$ -	-
Plan 2	5	638,459	51.2	10,641	26.2
Plan 4	130	16,160,302	46.8	10,359	17.9
Plan 5	8	951,452	37.8	9,911	8.7
Plan 6	-	-	-	-	-
Plan 7	50	5,026,879	34.6	8,378	4.8
Total	193	\$ 22,777,092	43.4	\$ 9,835	14.3
Grand Total	5,356	\$ 606,676,591	45.1	\$ 9,439	10.5

Exhibit C-2
SamCERA Membership – Inactive Members as of June 30, 2021

	Deferred Vested Number	Deferred Vested Average Age	Contingent Vested Number	Contingent Vested Average Age
General Members				
Plan 1	7	66.0	-	-
Plan 2	184	57.3	43	57.2
Plan 3	68	59.1	-	-
Plan 4	594	47.6	178	49.4
Plan 5	42	44.0	66	44.4
Plan 7	68	40.5	574	39.6
Total	963	49.8	861	42.9
Safety Members				
Plan 1	-	-	-	-
Plan 2	4	53.3	5	59.0
Plan 4	27	45.0	14	51.0
Plan 5	5	46.4	7	42.3
Plan 7	6	32.2	26	35.6
Total	42	44.1	52	42.9
Probation Members				
Plan 1	-	-	-	-
Plan 2	9	53.9	7	52.6
Plan 4	32	44.8	9	49.7
Plan 5	-	-	1	41.0
Plan 6	-	-	-	-
Plan 7	1	36	9	31.8
Total	42	46.6	26	43.9
Grand Total	1,047	49.4	939	42.9

Exhibit C-3a
SamCERA Membership – Retired Members as of June 30, 2021

	Number	Average Age	Monthly Allowance	Average Monthly Benefit
General Members				
Plan 1	1,242	80.8	\$ 5,216,599	\$ 3,928
Plan 2	2,188	70.6	8,173,987	3,617
Plan 3	122	72.6	196,408	549
Plan 4	1,053	66.6	2,533,219	2,383
Plan 5	16	60.3	28,748	1,597
Plan 7	20	63.0	19,972	999
Total	4,641	72.4	\$ 16,168,934	\$ 3,484
Safety Members				
Plan 1	262	76.5	\$ 1,940,719	\$ 7,379
Plan 2	256	63.0	2,143,851	8,277
Plan 4	135	58.3	622,328	4,543
Plan 5	4	56.3	9,094	2,273
Plan 7	2	62.0	3,234	1,617
Total	659	67.4	\$ 4,719,226	\$ 7,161
Probation Members				
Plan 1	96	78.3	\$ 414,559	\$ 4,146
Plan 2	120	62.2	694,203	5,299
Plan 4	75	57.2	342,810	4,339
Plan 7	1	57.0	2,084	2,084
Total	292	66.2	\$ 1,453,655	\$ 4,978
Grand Total	5,592	71.5	\$ 22,341,816	\$ 3,995

Exhibit C-3b
SamCERA Membership – Retired Members as of June 30, 2021
Subtotaled by Class and Retirement Type

<u>Plan</u>	<u>Retirement Type</u>	<u>Number</u>	<u>Monthly Benefit</u>	<u>Average Monthly Benefit</u>
General Plans:				
	Healthy	3,738	\$ 13,844,920	\$ 3,378
	Disabled	363	1,170,087	3,145
	Beneficiaries	<u>540</u>	<u>1,153,928</u>	<u>2,000</u>
	Total	4,641	\$ 16,168,934	\$ 3,484
Safety Plans:				
	Healthy	432	\$ 3,525,611	\$ 8,105
	Disabled	118	747,094	6,226
	Beneficiaries	<u>109</u>	<u>446,521</u>	<u>4,059</u>
	Total	659	\$ 4,719,226	\$ 7,161
Probation Plans:				
	Healthy	251	\$ 1,303,891	\$ 4,939
	Disabled	18	92,194	4,390
	Beneficiaries	<u>23</u>	<u>57,570</u>	<u>2,214</u>
	Total	292	\$ 1,453,655	\$ 4,978
Grand Totals				
	Healthy	4,421	\$ 18,674,421	\$ 4,224
	Disabled	499	2,009,375	4,027
	Beneficiaries	<u>672</u>	<u>1,658,019</u>	<u>2,467</u>
	Total	5,592	\$ 22,341,816	\$ 3,995

Exhibit C-4
Age & Service Distribution of Active Members by Count and Average Compensation
as of June 30, 2021 – All Members

Count										
Age	Years of Service									Total Count
	0-1	1-4	5-9	10-14	15-19	20-24	25-29	30-34	35&Over	
Under 25	20	14	0	0	0	0	0	0	0	34
25-29	101	252	30	0	0	0	0	0	0	383
30-34	82	372	209	18	0	0	0	0	0	681
35-39	52	295	288	106	41	2	0	0	0	784
40-44	35	189	187	158	145	36	0	0	0	750
45-49	14	148	140	135	202	143	20	0	0	802
50-54	16	110	110	125	155	160	60	13	1	750
55-59	10	79	91	88	88	112	52	51	11	582
60-64	9	52	66	63	74	65	34	28	6	397
65 & Over	2	25	36	41	36	21	7	12	13	193
Total Count	341	1,536	1,157	734	741	539	173	104	31	5,356

Compensation										
Age	Years of Service									Average Comp.
	0-1	1-4	5-9	10-14	15-19	20-24	25-29	30-34	35&Over	
Under 25	\$65,288	\$79,313	-	-	-	-	-	-	-	\$71,063
25-29	84,305	89,964	104,487	-	-	-	-	-	-	89,609
30-34	87,970	95,888	109,953	120,227	-	-	-	-	-	99,895
35-39	92,795	102,747	110,811	118,402	115,173	89,502	-	-	-	107,782
40-44	87,952	103,006	114,871	126,807	121,341	113,996	-	-	-	114,348
45-49	90,584	104,975	118,421	123,810	134,903	126,599	124,333	-	-	122,118
50-54	98,096	101,916	122,316	133,445	121,404	135,346	127,991	136,734	104,697	123,934
55-59	77,176	106,111	109,661	123,799	118,833	118,805	132,602	131,495	119,675	118,057
60-64	105,074	98,108	102,456	133,738	119,313	120,865	139,234	134,100	116,063	118,653
65 & Over	257,402	105,993	125,192	139,001	108,193	145,754	135,254	150,415	143,677	129,254
Avg. Annual Compensation	\$87,999	\$99,031	\$113,043	\$126,927	\$123,571	\$126,651	\$131,457	\$135,034	\$128,558	\$113,270

Exhibit C-4a
Age & Service Distribution of Active Members by Count and Average Compensation
as of June 30, 2021 – General Members

Count										
Age	Years of Service									Total Count
	0-1	1-4	5-9	10-14	15-19	20-24	25-29	30-34	35&Over	
Under 25	17	11	0	0	0	0	0	0	0	28
25-29	88	196	17	0	0	0	0	0	0	301
30-34	74	320	149	10	0	0	0	0	0	553
35-39	47	274	247	84	34	2	0	0	0	688
40-44	31	175	172	131	115	28	0	0	0	652
45-49	14	141	126	119	149	96	16	0	0	661
50-54	14	101	95	109	134	137	49	12	1	652
55-59	10	71	83	82	83	105	50	51	11	546
60-64	9	52	62	55	72	63	31	28	6	378
65 & Over	2	24	35	38	32	21	7	12	13	184
Total Count	306	1,365	986	628	619	452	153	103	31	4,643

Compensation										
Age	Years of Service									Average Comp.
	0-1	1-4	5-9	10-14	15-19	20-24	25-29	30-34	35&Over	
Under 25	\$60,036	\$73,040	-	-	-	-	-	-	-	\$65,145
25-29	82,578	85,127	93,212	-	-	-	-	-	-	84,839
30-34	86,926	92,935	103,445	110,212	-	-	-	-	-	95,275
35-39	92,671	101,724	107,249	113,126	108,688	89,502	-	-	-	104,790
40-44	86,036	101,781	112,284	124,551	114,400	102,961	-	-	-	110,654
45-49	90,584	103,811	115,432	121,439	132,333	117,834	120,881	-	-	117,799
50-54	93,153	99,542	117,163	129,776	116,739	129,793	116,687	124,539	104,697	118,674
55-59	77,176	103,894	106,544	120,600	119,619	117,349	130,687	131,495	119,675	116,644
60-64	105,074	98,108	100,095	125,426	118,735	120,061	137,819	134,100	116,063	116,370
65 & Over	257,402	104,006	124,379	141,335	107,789	145,754	135,254	150,415	143,677	129,699
Avg. Annual Compensation	\$86,756	\$97,126	\$109,410	\$123,688	\$119,771	\$121,907	\$126,832	\$133,597	\$128,558	\$110,073

Exhibit C-4b
Age & Service Distribution of Active Members by Count and Average Compensation
as of June 30, 2021 – Safety Members

Count											
Age	Years of Service									Total Count	
	0-1	1-4	5-9	10-14	15-19	20-24	25-29	30-34	35&Over		
Under 25	3	3	0	0	0	0	0	0	0	0	6
25-29	13	47	11	0	0	0	0	0	0	0	71
30-34	8	39	49	6	0	0	0	0	0	0	102
35-39	5	17	31	12	5	0	0	0	0	0	70
40-44	4	13	13	16	10	6	0	0	0	0	62
45-49	0	6	12	11	26	21	2	0	0	0	78
50-54	2	8	13	14	13	14	8	1	0	0	73
55-59	0	8	8	6	4	5	2	0	0	0	33
60-64	0	0	4	8	2	2	3	0	0	0	19
65 & Over	0	1	1	3	1	0	0	0	0	0	6
Total Count	35	142	142	76	61	48	15	1	0	0	520

Compensation											
Age	Years of Service									Average Comp.	
	0-1	1-4	5-9	10-14	15-19	20-24	25-29	30-34	35&Over		
Under 25	\$95,051	\$102,315	-	-	-	-	-	-	-	-	\$98,683
25-29	95,999	109,783	122,019	-	-	-	-	-	-	-	109,155
30-34	97,620	119,725	129,661	139,040	-	-	-	-	-	-	123,901
35-39	93,959	120,354	139,077	160,225	156,196	-	-	-	-	-	136,156
40-44	102,800	121,033	149,851	152,459	188,629	154,122	-	-	-	-	148,114
45-49	-	135,454	149,244	150,882	161,924	164,993	155,149	-	-	-	157,032
50-54	132,692	134,403	159,406	167,381	168,722	181,388	194,165	283,073	-	-	168,841
55-59	-	125,786	141,995	167,529	105,855	145,650	180,458	-	-	-	141,213
60-64	-	-	139,047	190,887	140,118	146,177	153,857	-	-	-	164,076
65 & Over	-	153,671	153,671	109,435	148,630	-	-	-	-	-	130,713
Avg. Annual Compensation	\$98,871	\$118,333	\$138,479	\$158,683	\$162,672	\$165,617	\$179,073	\$283,073	-	-	\$140,057

Exhibit C-4c
Age & Service Distribution of Active Members by Count and Average Compensation
as of June 30, 2021 – Probation Members

Count											
Age	Years of Service									Total Count	
	0-1	1-4	5-9	10-14	15-19	20-24	25-29	30-34	35&Over		
Under 25	0	0	0	0	0	0	0	0	0	0	0
25-29	0	9	2	0	0	0	0	0	0	0	11
30-34	0	13	11	2	0	0	0	0	0	0	26
35-39	0	4	10	10	2	0	0	0	0	0	26
40-44	0	1	2	11	20	2	0	0	0	0	36
45-49	0	1	2	5	27	26	2	0	0	0	63
50-54	0	1	2	2	8	9	3	0	0	0	25
55-59	0	0	0	0	1	2	0	0	0	0	3
60-64	0	0	0	0	0	0	0	0	0	0	0
65 & Over	0	0	0	0	3	0	0	0	0	0	3
Total Count	0	29	29	30	61	39	5	0	0	0	193

Compensation											
Age	Years of Service									Average Comp.	
	0-1	1-4	5-9	10-14	15-19	20-24	25-29	30-34	35&Over		
Under 25	-	-	-	-	-	-	-	-	-	-	-
25-29	-	\$91,800	\$103,894	-	-	-	-	-	-	-	\$93,999
30-34	-	97,087	110,323	113,861	-	-	-	-	-	-	103,977
35-39	-	97,963	111,164	112,540	122,869	-	-	-	-	-	110,563
40-44	-	83,132	109,968	116,364	127,609	148,119	-	-	-	-	123,097
45-49	-	86,195	121,817	120,697	123,071	127,949	121,129	-	-	-	124,209
50-54	-	81,779	125,988	95,858	122,664	148,261	136,161	-	-	-	129,985
55-59	-	-	-	-	105,495	128,107	-	-	-	-	120,570
60-64	-	-	-	-	-	-	-	-	-	-	-
65 & Over	-	-	-	-	99,024	-	-	-	-	-	99,024
Avg. Annual Compensation	\$0	\$94,182	\$112,018	\$114,278	\$123,028	\$133,679	\$130,148	-	-	-	\$118,016

Exhibit C-5
Distribution of Retired Members by Age and Retirement Year
as of June 30, 2021 – All Plans Combined

Age	Retirement Year								Total Count	Monthly Benefit
	Pre-1990	1990-94	1995-99	2000-04	2005-09	2010-14	2015-19	2020-24		
Under 35	-	-	-	-	-	4	2	-	6	\$ 1,268
35-39	-	-	1	1	1	-	1	-	4	2,372
40-44	-	-	-	-	-	5	14	2	21	3,589
45-49	-	-	-	-	8	8	17	8	41	3,861
50-54	-	-	1	6	7	11	100	71	196	4,812
55-59	-	-	7	7	20	63	239	89	425	4,361
60-64	-	-	9	16	49	187	309	133	703	4,457
65-69	-	3	14	62	172	295	399	72	1,017	4,210
70-74	3	14	68	149	280	345	220	28	1,107	4,168
75-79	7	31	121	186	297	166	73	14	895	4,224
80-84	20	84	117	153	90	49	33	12	558	3,234
85-89	39	55	100	51	27	24	17	6	319	2,997
90-94	56	52	45	8	6	11	12	4	194	2,370
95-99	41	13	15	5	4	2	5	1	86	2,462
100 & Over	10	3	3	2	-	1	1	-	20	2,645
Total Count	176	255	501	646	961	1,171	1,442	440	5,592	
Avg Monthly Benefit	\$ 2,335	\$ 2,645	\$ 2,797	\$ 3,753	\$ 4,650	\$ 3,976	\$ 4,204	\$ 5,098		\$ 3,995

Exhibit C-5a
Distribution of Retired Members by Age and Retirement Year
as of June 30, 2021 – General Plans Combined

Age	Retirement Year								Total Count	Average Monthly Benefit
	Pre-1990	1990-94	1995-99	2000-04	2005-09	2010-14	2015-19	2020-24		
Under 35	-	-	-	-	-	4	2	-	6	\$ 1,268
35-39	-	-	1	1	1	-	-	-	3	1,362
40-44	-	-	-	-	-	2	9	1	12	4,128
45-49	-	-	-	-	5	7	5	2	19	2,882
50-54	-	-	-	3	5	10	38	27	83	2,574
55-59	-	-	5	2	10	42	154	66	279	3,088
60-64	-	-	7	11	35	140	265	126	584	3,853
65-69	-	2	10	55	134	259	372	70	902	3,773
70-74	2	9	54	107	240	323	208	24	967	3,757
75-79	1	23	83	131	279	153	62	12	744	3,848
80-84	15	69	83	132	85	40	27	8	459	2,844
85-89	35	51	90	47	27	23	13	5	291	2,926
90-94	53	52	43	8	6	10	12	4	188	2,229
95-99	40	13	15	5	4	2	5	1	85	2,413
100 & Over	10	3	2	2	-	1	1	-	19	2,517
Total Count	156	222	393	504	831	1,016	1,173	346	4,641	
Avg Monthly Benefit	\$ 2,017	\$ 2,331	\$ 2,238	\$ 3,086	\$ 4,205	\$ 3,501	\$ 3,623	\$ 4,627		\$ 3,484

Exhibit C-5b
Distribution of Retired Members by Age and Retirement Year
as of June 30, 2021 – Safety Plans Combined

Age	Retirement Year								Total Count	Average Monthly Benefit
	Pre-1990	1990-94	1995-99	2000-04	2005-09	2010-14	2015-19	2020-24		
Under 35	-	-	-	-	-	-	-	-	-	\$ -
35-39	-	-	-	-	-	-	1	-	1	5,402
40-44	-	-	-	-	-	2	4	-	6	2,830
45-49	-	-	-	-	3	1	5	2	11	4,801
50-54	-	-	1	3	2	1	33	26	66	6,817
55-59	-	-	2	4	9	13	55	14	97	7,223
60-64	-	-	2	3	12	35	33	5	90	8,064
65-69	-	1	4	6	29	21	24	2	87	8,166
70-74	1	5	11	38	26	15	11	4	111	7,612
75-79	6	7	29	38	9	7	8	1	105	6,791
80-84	5	11	24	9	2	5	5	4	65	5,782
85-89	4	2	3	1	-	-	2	1	13	5,658
90-94	3	-	1	-	-	1	-	-	5	7,671
95-99	1	-	-	-	-	-	-	-	1	6,570
100 & Over	-	-	1	-	-	-	-	-	1	5,080
Total Count	20	26	78	102	92	101	181	59	659	
Avg Monthly Benefit	\$ 4,818	\$ 5,337	\$ 5,265	\$ 7,002	\$ 8,827	\$ 7,931	\$ 7,264	\$ 7,311		\$ 7,161

Exhibit C-5c
Distribution of Retired Members by Age and Retirement Year
as of June 30, 2021 – Probation Plans Combined

Age	Retirement Year								Total Count	Average Monthly Benefit
	Pre-1990	1990-94	1995-99	2000-04	2005-09	2010-14	2015-19	2020-24		
Under 35	-	-	-	-	-	-	-	-	-	\$ -
35-39	-	-	-	-	-	-	-	-	-	-
40-44	-	-	-	-	-	1	1	1	3	2,951
45-49	-	-	-	-	-	-	7	4	11	4,611
50-54	-	-	-	-	-	-	29	18	47	5,949
55-59	-	-	-	1	1	8	30	9	49	5,947
60-64	-	-	-	2	2	12	11	2	29	5,444
65-69	-	-	-	1	9	15	3	-	28	6,001
70-74	-	-	3	4	14	7	1	-	29	4,698
75-79	-	1	9	17	9	6	3	1	46	4,446
80-84	-	4	10	12	3	4	1	-	34	3,626
85-89	-	2	7	3	-	1	2	-	15	2,061
90-94	-	-	1	-	-	-	-	-	1	2,246
95-99	-	-	-	-	-	-	-	-	-	-
100 & Over	-	-	-	-	-	-	-	-	-	-
Total Count	-	7	30	40	38	54	88	35	292	
Avg Monthly Benefit	\$ -	\$ 2,621	\$ 3,699	\$ 3,865	\$ 4,268	\$ 5,519	\$ 5,668	\$ 6,020		\$ 4,978

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 2022-2023 fiscal year, Plan 7 member contribution rates are:

- General Plan 7 members: 9.17%
- SMCM&VCD Plan 7 members: 10.12%
- Safety Plan 7 members: 15.66%
- Probation Plan 7 members: 15.74%

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

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

Entry Age ⁽¹⁾	Basic Member Rates				
	General & SMCM&VCD			General	SMCM&VCD
	Plans 1&2	Plan 4	Plan 5	Plan 7	Plan 7
16	6.71%	6.49%	5.66%	9.17%	10.12%
17	6.82%	6.59%	5.75%	9.17%	10.12%
18	6.92%	6.69%	5.84%	9.17%	10.12%
19	7.03%	6.80%	5.93%	9.17%	10.12%
20	7.14%	6.90%	6.03%	9.17%	10.12%
21	7.25%	7.01%	6.12%	9.17%	10.12%
22	7.36%	7.12%	6.22%	9.17%	10.12%
23	7.48%	7.23%	6.31%	9.17%	10.12%
24	7.59%	7.34%	6.41%	9.17%	10.12%
25	7.71%	7.45%	6.51%	9.17%	10.12%
26	7.83%	7.57%	6.61%	9.17%	10.12%
27	7.95%	7.68%	6.72%	9.17%	10.12%
28	8.07%	7.80%	6.82%	9.17%	10.12%
29	8.20%	7.92%	6.92%	9.17%	10.12%
30	8.33%	8.05%	7.03%	9.17%	10.12%
31	8.46%	8.17%	7.14%	9.17%	10.12%
32	8.59%	8.30%	7.25%	9.17%	10.12%
33	8.72%	8.43%	7.36%	9.17%	10.12%
34	8.86%	8.56%	7.48%	9.17%	10.12%
35	9.00%	8.69%	7.59%	9.17%	10.12%
36	9.14%	8.83%	7.71%	9.17%	10.12%
37	9.28%	8.97%	7.83%	9.17%	10.12%
38	9.43%	9.12%	7.95%	9.17%	10.12%
39	9.59%	9.26%	8.08%	9.17%	10.12%
40	9.74%	9.41%	8.20%	9.17%	10.12%
41	9.91%	9.57%	8.33%	9.17%	10.12%
42	10.07%	9.72%	8.46%	9.17%	10.12%
43	10.24%	9.86%	8.60%	9.17%	10.12%
44	10.40%	10.01%	8.74%	9.17%	10.12%
45	10.56%	10.15%	8.88%	9.17%	10.12%
46	10.71%	10.28%	9.03%	9.17%	10.12%
47	10.86%	10.40%	9.17%	9.17%	10.12%
48	11.00%	10.51%	9.31%	9.17%	10.12%
49	11.13%	10.60%	9.44%	9.17%	10.12%
50	11.25%	10.66%	9.58%	9.17%	10.12%
51	11.34%	10.66%	9.70%	9.17%	10.12%
52	11.39%	10.66%	9.81%	9.17%	10.12%
53	11.39%	10.91%	9.92%	9.17%	10.12%
54	11.39%	11.23%	10.00%	9.17%	10.12%
55	11.39%	11.23%	10.06%	9.17%	10.12%
56	11.39%	11.23%	10.06%	9.17%	10.12%
57	11.39%	11.23%	10.06%	9.17%	10.12%
58	11.39%	11.23%	10.29%	9.17%	10.12%
59	11.39%	11.23%	10.60%	9.17%	10.12%
60	11.39%	11.23%	10.60%	9.17%	10.12%

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

Exhibit D-2
Safety/Probation Member Contribution Rates

Entry Age ⁽¹⁾	Basic Member Rates			
	Safety & Probation		Safety	Probation
	Plans 1&2	Plans 4&5&6	Plan 7	Plan 7
16	9.52%	9.17%	15.66%	15.74%
17	9.65%	9.29%	15.66%	15.74%
18	9.77%	9.41%	15.66%	15.74%
19	9.90%	9.54%	15.66%	15.74%
20	10.03%	9.66%	15.66%	15.74%
21	10.16%	9.79%	15.66%	15.74%
22	10.29%	9.91%	15.66%	15.74%
23	10.43%	10.04%	15.66%	15.74%
24	10.56%	10.18%	15.66%	15.74%
25	10.70%	10.31%	15.66%	15.74%
26	10.84%	10.44%	15.66%	15.74%
27	10.98%	10.58%	15.66%	15.74%
28	11.13%	10.72%	15.66%	15.74%
29	11.27%	10.86%	15.66%	15.74%
30	11.42%	11.00%	15.66%	15.74%
31	11.57%	11.15%	15.66%	15.74%
32	11.73%	11.30%	15.66%	15.74%
33	11.89%	11.45%	15.66%	15.74%
34	12.05%	11.60%	15.66%	15.74%
35	12.21%	11.76%	15.66%	15.74%
36	12.38%	11.92%	15.66%	15.74%
37	12.56%	12.09%	15.66%	15.74%
38	12.73%	12.25%	15.66%	15.74%
39	12.92%	12.42%	15.66%	15.74%
40	13.10%	12.59%	15.66%	15.74%
41	13.28%	12.75%	15.66%	15.74%
42	13.47%	12.91%	15.66%	15.74%
43	13.65%	13.04%	15.66%	15.74%
44	13.82%	13.15%	15.66%	15.74%
45	13.96%	13.22%	15.66%	15.74%
46	14.07%	13.23%	15.66%	15.74%
47	14.12%	13.23%	15.66%	15.74%
48	14.12%	13.53%	15.66%	15.74%
49	14.12%	13.94%	15.66%	15.74%
50	14.12%	13.94%	15.66%	15.74%

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

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

Entry Age ⁽¹⁾	50% Member COLA Rates			
	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	2.70%	2.73%	2.04%	1.77%
26	2.74%	2.77%	2.07%	1.79%
27	2.78%	2.81%	2.10%	1.82%
28	2.82%	2.86%	2.14%	1.85%
29	2.87%	2.90%	2.17%	1.88%
30	2.92%	2.95%	2.20%	1.91%
31	2.96%	2.99%	2.24%	1.94%
32	3.01%	3.04%	2.27%	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%
36	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%

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

Exhibit D-4
Safety Member Contribution Rates

Entry Age ⁽¹⁾	50% Member COLA Rates				
	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%

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

Exhibit D-5
Probation Member Contribution Rates

Entry Age ⁽¹⁾	50% Member COLA Rates				
	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%

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 28, 2021

Agenda Item 5.3

TO: Board of Retirement

FROM: Scott Hood, Chief Executive Officer 

SUBJECT: Acceptance of the Fiscal-Year 2022-2023 Employer and Member Contribution Rates

Recommendation

Approve the "Resolution Accepting Contribution Rates to Recommend to the Board of Supervisors for the 2022-2023 Fiscal Year."

Background

At its May 25, 2021 meeting, the Board approved for use in the annual valuation report, the existing economic assumptions previously adopted except for the investment return, which was lowered to 6.25%. The assumption changes that remain unchanged were: 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 2021 actuarial valuation report include the following elements:

Funding: SamCERA's funded ratio increased by 1.7 percentage points from 86.4% to 88.1%. This increase was mainly due to market gains that exceeded the investment return assumption. In addition, the County contributed \$39.7 million to their County Supplemental Contribution Account (CSCA) this year. Without the Supplemental Contribution Accounts (SCA), the funded status would have been 3.5% lower, at 84.6%.

Contribution Rates: The Employer Normal Cost increased from 10.90% to 11.55% of pay and the portion of the Statutory Contribution Rate (SCR) that is used to finance the UAAL increased from 28.01 to 29.21% of pay. The Board has opted to phase-in the recognition of the impact of the assumption rate change over three years. This serves to lower the Employer Contribution rate by 2.43% for fiscal year 2022-23. The net result is that the aggregate employer rate is 38.33% of payroll, down from 38.91% last year.

The County's contribution rate to finance the UAAL would have increased to 42.78% of payroll. However, when the value of the County's CSCA account is factored in the calculation, the County's contribution rate decreased to 38.51% of payroll instead, a 4.27% reduction. Similarly, when the District's DSCA was factored in, its rate decreases to 12.10% compared to 12.76% of payroll over the previous year.

Investment Returns: SamCERA's investment return on the market value of assets was 23.5% for fiscal year 2020-21, which was much greater than the actuarial assumed rate of 6.5%. Combined with the recognition of deferred investment losses from prior years, the net result

was a return on the actuarial value of valuation assets of 8.2%, which is more than the assumed rate of return.

Member Rates: Basic member rates and member COLA rates will increase for all plans due to the new economic assumptions adopted by the Board at its May 25, 2021 meeting.

Summary of Recommendation

The following tables summarize Milliman’s 2022-23 recommended Statutory Contribution Rates and Employer and Member Contribution rates for the Board. 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, 2022:

	Fiscal Year Beginning		Increase / (Decrease)
	July 1, 2022	July 1, 2021	
Gross Normal Cost	24.04%	23.11%	0.93%
Member Contributions	<u>(12.49)%</u>	<u>(12.21)%</u>	(0.28)%
Employer Normal Cost	11.55%	10.90%	0.65%
UAAL Amortization	<u>29.21%</u>	<u>28.01%</u>	1.20%
Calculated Employer Rate	40.76%	38.91%	1.85%
Deferred Recognition of 2021 Assumptions	<u>(2.43)%</u>	-	(2.43)%
Total Employer Rate	38.33%	38.91%	(0.58)%
County Contribution Rate	38.51%	39.14%	(0.63)%
Courts Contribution Rate	35.73%	35.85%	(0.12)%
SMCM&VCD Contribution Rate	12.10%	12.76%	(0.66)%

Notes:

1. Detailed contribution rates by plan are shown in Section 6.
2. The Total Employer Statutory Contribution Rate of 38.33% is the aggregate rate for all employers.

Recommendation #2: Adopt the new member contribution rates for fiscal year beginning July 1, 2022 as shown in the actuarial valuation.

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 2022-2023 Fiscal Year

SAN MATEO COUNTY EMPLOYEES' RETIREMENT ASSOCIATION

Board of Retirement

RESOLUTION ACCEPTING CONTRIBUTION RATES TO RECOMMEND TO THE BOARD OF SUPERVISORS FOR THE 2022-2023 FISCAL YEAR.

RESOLUTION 2021-__

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, 2021, 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, 2021, Actuarial Valuation of the San Mateo County Employees' Retirement Association effective for the fiscal year 2022-2023.

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, 2021, Actuarial Valuation, effective July 1, 2022.

Be it further

RESOLVED that the Board of Retirement hereby recommends that the Board of Supervisors adopt the recommended **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, 2021, Actuarial Valuation, effective July 1, 2022.

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, 2022.

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 28, 2021.

Ayes, Trustees:

Noes, Trustees:

Absent, Trustees:

Abstain, Trustees:

Mark Battey, Board Secretary, SamCERA

Exhibit 1a
Summary of Recommended Minimum Statutory Contribution Rates

Recommendation #1: Adopt new Statutory Contribution Rates for fiscal year beginning July 1, 2022

	Fiscal Year Beginning		Increase / (Decrease)
	July 1, 2022	July 1, 2021	
Gross Normal Cost	24.04%	23.11%	0.93%
Member Contributions	(12.49)%	(12.21)%	(0.28)%
Employer Normal Cost	11.55%	10.90%	0.65%
UAAL Amortization	29.21%	28.01%	1.20%
Calculated Employer Rate	40.76%	38.91%	1.85%
Deferred Recognition of 2021 Assumptions	(2.43)%	-	(2.43)%
Total Employer Rate	38.33%	38.91%	(0.58)%
County Contribution Rate	38.51%	39.14%	(0.63)%
Courts Contribution Rate	35.73%	35.85%	(0.12)%
SMCM&VCD Contribution Rate	12.10%	12.76%	(0.66)%

Notes:

- Detailed contribution rates by plan are shown in Section 6.
- The Total Employer Statutory Contribution Rate of 38.33% is the aggregate rate for all employers.

Exhibit 10
Employer Statutory Contribution Rates – All Plans
For the 2022-2023 Fiscal Year

	All Plans							Prior Year Total Contribution Rate
			Employer Rates					
	Gross Normal Cost	Member Contributions	Basic Normal Cost	COLA Normal Cost	Total Normal Cost	UAAL Contribution Rate ⁽¹⁾⁽²⁾	Total Contribution Rate	
<u>General</u>								
County	21.63%	(11.45)%	7.90%	2.28%	10.18%	21.84%	32.02%	32.79%
Courts	21.97%	(11.69)%	7.97%	2.31%	10.28%	25.45%	35.73%	35.85%
Total	21.67%	(11.46)%	7.90%	2.31%	10.21%	22.00%	32.21%	32.93%
SMCM&VCD ⁽³⁾	21.29%	(9.19)%	8.93%	3.17%	12.10%	0.00%	12.10%	12.76%
Safety	37.20%	(18.36)%	14.56%	4.28%	18.84%	55.10%	73.94%	71.99%
Probation	37.42%	(18.02)%	15.03%	4.37%	19.40%	50.12%	69.52%	65.98%
All Plans	24.04%	(12.49)%	8.94%	2.61%	11.55%	26.78%	38.33%	38.91%
County Only	24.12%	(12.54)%	8.98%	2.60%	11.58%	26.93%	38.51%	39.14%

1. County UAAL Contribution Rate includes an aggregate offset of 4.27% of payroll to reflect the County Supplementary Contribution Account. Offsets vary by class of member as follows:

- General member UAAL offset is 3.61% of payroll
- Safety member UAAL offset is 7.53% of payroll
- Probation member UAAL offset is 8.43% of payroll

2. UAAL Contribution Rate includes an aggregate offset of 2.43% 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 2.14% of payroll
- Safety member UAAL offset is 3.82% of payroll
- Probation member UAAL offset is 4.61% of payroll

3. SMCM&VCD UAAL Contribution Rate includes an offset of 25.45% of payroll to reflect the District Supplementary Contribution Account.

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 2022-2023 fiscal year, Plan 7 member contribution rates are:

- General Plan 7 members: 9.17%
- SMCM&VCD Plan 7 members: 10.12%
- Safety Plan 7 members: 15.66%
- Probation Plan 7 members: 15.74%

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

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

Entry Age ⁽¹⁾	Basic Member Rates				
	General & SMCM&VCD			General	SMCM&VCD
	Plans 1&2	Plan 4	Plan 5	Plan 7	Plan 7
16	6.71%	6.49%	5.66%	9.17%	10.12%
17	6.82%	6.59%	5.75%	9.17%	10.12%
18	6.92%	6.69%	5.84%	9.17%	10.12%
19	7.03%	6.80%	5.93%	9.17%	10.12%
20	7.14%	6.90%	6.03%	9.17%	10.12%
21	7.25%	7.01%	6.12%	9.17%	10.12%
22	7.36%	7.12%	6.22%	9.17%	10.12%
23	7.48%	7.23%	6.31%	9.17%	10.12%
24	7.59%	7.34%	6.41%	9.17%	10.12%
25	7.71%	7.45%	6.51%	9.17%	10.12%
26	7.83%	7.57%	6.61%	9.17%	10.12%
27	7.95%	7.68%	6.72%	9.17%	10.12%
28	8.07%	7.80%	6.82%	9.17%	10.12%
29	8.20%	7.92%	6.92%	9.17%	10.12%
30	8.33%	8.05%	7.03%	9.17%	10.12%
31	8.46%	8.17%	7.14%	9.17%	10.12%
32	8.59%	8.30%	7.25%	9.17%	10.12%
33	8.72%	8.43%	7.36%	9.17%	10.12%
34	8.86%	8.56%	7.48%	9.17%	10.12%
35	9.00%	8.69%	7.59%	9.17%	10.12%
36	9.14%	8.83%	7.71%	9.17%	10.12%
37	9.28%	8.97%	7.83%	9.17%	10.12%
38	9.43%	9.12%	7.95%	9.17%	10.12%
39	9.59%	9.26%	8.08%	9.17%	10.12%
40	9.74%	9.41%	8.20%	9.17%	10.12%
41	9.91%	9.57%	8.33%	9.17%	10.12%
42	10.07%	9.72%	8.46%	9.17%	10.12%
43	10.24%	9.86%	8.60%	9.17%	10.12%
44	10.40%	10.01%	8.74%	9.17%	10.12%
45	10.56%	10.15%	8.88%	9.17%	10.12%
46	10.71%	10.28%	9.03%	9.17%	10.12%
47	10.86%	10.40%	9.17%	9.17%	10.12%
48	11.00%	10.51%	9.31%	9.17%	10.12%
49	11.13%	10.60%	9.44%	9.17%	10.12%
50	11.25%	10.66%	9.58%	9.17%	10.12%
51	11.34%	10.66%	9.70%	9.17%	10.12%
52	11.39%	10.66%	9.81%	9.17%	10.12%
53	11.39%	10.91%	9.92%	9.17%	10.12%
54	11.39%	11.23%	10.00%	9.17%	10.12%
55	11.39%	11.23%	10.06%	9.17%	10.12%
56	11.39%	11.23%	10.06%	9.17%	10.12%
57	11.39%	11.23%	10.06%	9.17%	10.12%
58	11.39%	11.23%	10.29%	9.17%	10.12%
59	11.39%	11.23%	10.60%	9.17%	10.12%
60	11.39%	11.23%	10.60%	9.17%	10.12%

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

Exhibit D-2
Safety/Probation Member Contribution Rates

Entry Age ⁽¹⁾	Basic Member Rates			
	Safety & Probation		Safety	Probation
	Plans 1&2	Plans 4&5&6	Plan 7	Plan 7
16	9.52%	9.17%	15.66%	15.74%
17	9.65%	9.29%	15.66%	15.74%
18	9.77%	9.41%	15.66%	15.74%
19	9.90%	9.54%	15.66%	15.74%
20	10.03%	9.66%	15.66%	15.74%
21	10.16%	9.79%	15.66%	15.74%
22	10.29%	9.91%	15.66%	15.74%
23	10.43%	10.04%	15.66%	15.74%
24	10.56%	10.18%	15.66%	15.74%
25	10.70%	10.31%	15.66%	15.74%
26	10.84%	10.44%	15.66%	15.74%
27	10.98%	10.58%	15.66%	15.74%
28	11.13%	10.72%	15.66%	15.74%
29	11.27%	10.86%	15.66%	15.74%
30	11.42%	11.00%	15.66%	15.74%
31	11.57%	11.15%	15.66%	15.74%
32	11.73%	11.30%	15.66%	15.74%
33	11.89%	11.45%	15.66%	15.74%
34	12.05%	11.60%	15.66%	15.74%
35	12.21%	11.76%	15.66%	15.74%
36	12.38%	11.92%	15.66%	15.74%
37	12.56%	12.09%	15.66%	15.74%
38	12.73%	12.25%	15.66%	15.74%
39	12.92%	12.42%	15.66%	15.74%
40	13.10%	12.59%	15.66%	15.74%
41	13.28%	12.75%	15.66%	15.74%
42	13.47%	12.91%	15.66%	15.74%
43	13.65%	13.04%	15.66%	15.74%
44	13.82%	13.15%	15.66%	15.74%
45	13.96%	13.22%	15.66%	15.74%
46	14.07%	13.23%	15.66%	15.74%
47	14.12%	13.23%	15.66%	15.74%
48	14.12%	13.53%	15.66%	15.74%
49	14.12%	13.94%	15.66%	15.74%
50	14.12%	13.94%	15.66%	15.74%

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

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

Entry Age ⁽¹⁾	50% Member COLA Rates			
	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	2.70%	2.73%	2.04%	1.77%
26	2.74%	2.77%	2.07%	1.79%
27	2.78%	2.81%	2.10%	1.82%
28	2.82%	2.86%	2.14%	1.85%
29	2.87%	2.90%	2.17%	1.88%
30	2.92%	2.95%	2.20%	1.91%
31	2.96%	2.99%	2.24%	1.94%
32	3.01%	3.04%	2.27%	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%
36	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%

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

Exhibit D-4
Safety Member Contribution Rates

Entry Age ⁽¹⁾	50% Member COLA Rates				
	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%

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

Exhibit D-5
Probation Member Contribution Rates

Entry Age ⁽¹⁾	50% Member COLA Rates				
	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%

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

SAN MATEO COUNTY EMPLOYEES' RETIREMENT ASSOCIATION
Board of Retirement

September 28, 2021

Agenda Item 6.1

TO: Board of Retirement

FROM: Michael Coultrip, Chief Investment Officer



SUBJECT: Preliminary Monthly Portfolio Performance Report for the Period Ended August 31, 2021

Recommendation

Accept the preliminary performance report dated August 31, 2021.

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 page two and net manager returns (pages 3-9) also shown.

Discussion

The fund's net preliminary return for August was 1.6%, bringing the preliminary trailing twelve-month net return ending August 2021 to 19.2%. The preliminary twelve-month net return is above both SamCERA's Plan Benchmark return of 18.3% and SamCERA's Actuarial Assumed Earnings Rate of 6.25%.

Global equity performance was strong during the month. In the U.S., large-cap equity markets continued their drive higher with the S&P 500 Index posting thirteen new daily highs during August. For the month, the U.S. equity market (measured by the S&P 500 Index) was up 3.0%, while small-capitalization stocks were up 2.2%. Developed international equity (as measured by MSCI EAFE) was up 1.8% while emerging markets were up 2.6%.

Economic data was mostly positive as the economic recovery continued. The second estimate of real GDP grew at an annual rate of 6.6% in the second quarter. Manufacturing was moderately positive during the month, while the U.S. labor market also continued its recovery (although slower than expected). Non-farm payrolls grew by 235,000 in August, which was less than the expected 733,000. Consumer confidence sagged in August, while the Consumer Price Index rose 5.3% during the past year, according to the U.S. Bureau of Labor Statistics.

The general U.S. fixed income market was lower by 0.2% as interest rates rose slightly. The 10-year U.S. Treasury yield was higher by 9 basis points during the month and ended at 1.31% by month-end. High Yield returns were up 0.5%, and the Bloomberg Commodity Index was down 0.3%.

Attachments

Verus Capital Market Update

Northern Trust Monthly Preliminary Performance Report



**PERSPECTIVES
THAT DRIVE
ENTERPRISE
SUCCESS**

AUGUST 2021
Capital Markets Update

Market commentary

U.S. ECONOMICS

- Non-farm payrolls grew by just 235,000 in August, falling well short of economists' estimates of 733,000. Job losses in the retail trade sector and the leisure and hospitality sector remained unchanged and led to disappointment in the headline print.
- University of Michigan's gauge of consumer sentiment fell 13.5% from its July reading and hit its lowest level since December 2011. The plunge in confidence was attributed to the spread of the Delta variant of Covid-19 which led some consumers to sense that the end of the pandemic might be further away than they had anticipated.
- Senate leaders passed a bipartisan \$1 trillion infrastructure bill on to the House of Representatives where it awaits a much tougher test. The proposed bill contains \$550 billion of new spending and would be partially funded by raising the corporate tax rate to 28% from 21%.

U.S. EQUITIES

- S&P 500 advanced +3.0%, supported by growth stocks still benefitting from low rates. On August 16th, the S&P 500 Price Index closed at 4,480, double the 2,237 level it had bottomed at during the Q1 2020 equity market selloff. While a bull market on average takes around 1,000 trading days to double off a bottom, the most recent doubling took place in just 354 trading days.
- In August, the S&P 500 posted thirteen new daily highs. Year to date, the S&P 500 has closed higher 53 out of 167 trading days, accounting for nearly a third of the trading sessions this year.
- Facebook and Google combined to make up 83% of the return within the S&P 500 Communications Sector (+5.0%).

U.S. FIXED INCOME

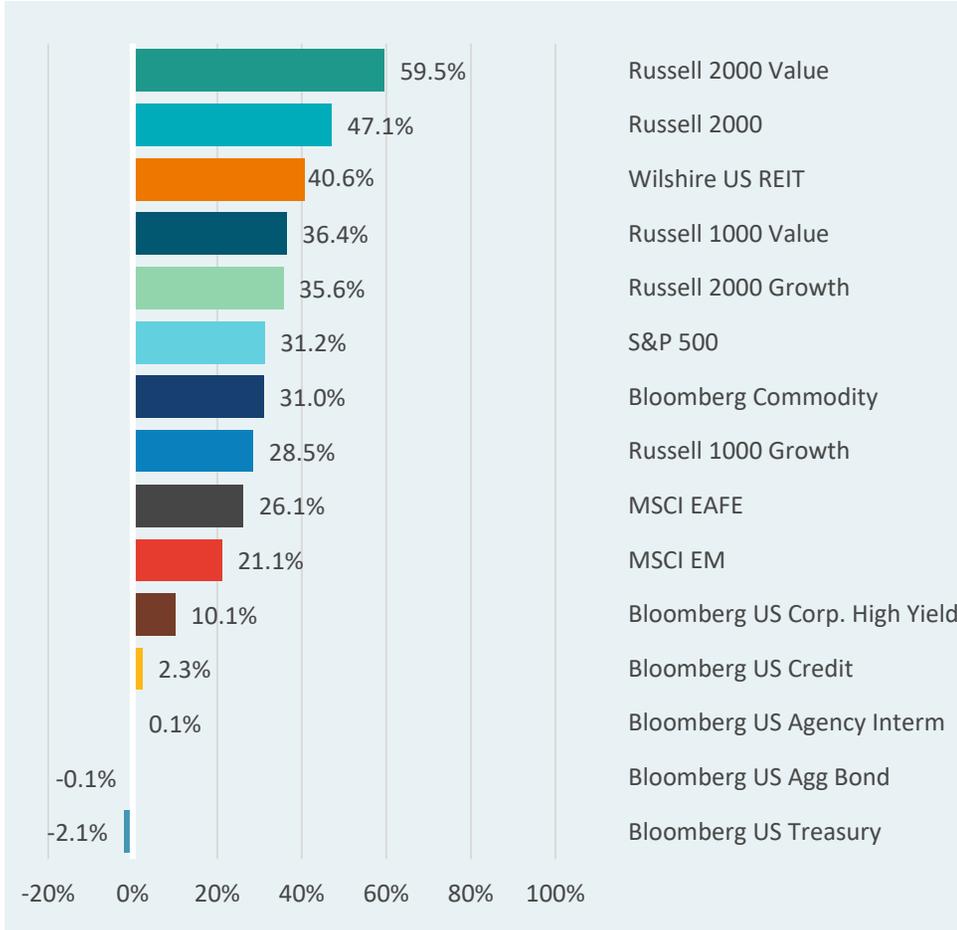
- At the much-anticipated Jackson Hole Economic Symposium, Fed Chairman Jerome Powell remarked that the July jobs report indicated "clear progress" but that the Delta variant will be an important factor in deliberation. The tone was largely reflective of the July meeting minutes and lack of clarity around a timeline for tapering received a muddled response from bond markets.
- The yield curve began to steepen in August. With shorter-end rates fixed, the 10-2 yield curve rose as the 10-year yield increased six basis points to 1.30%.
- TIPS breakeven rates were little changed over the month with both the five- and 10-year breakeven rates falling a basis point, as the measures of priced inflation expectations remained elevated.

INTERNATIONAL MARKETS

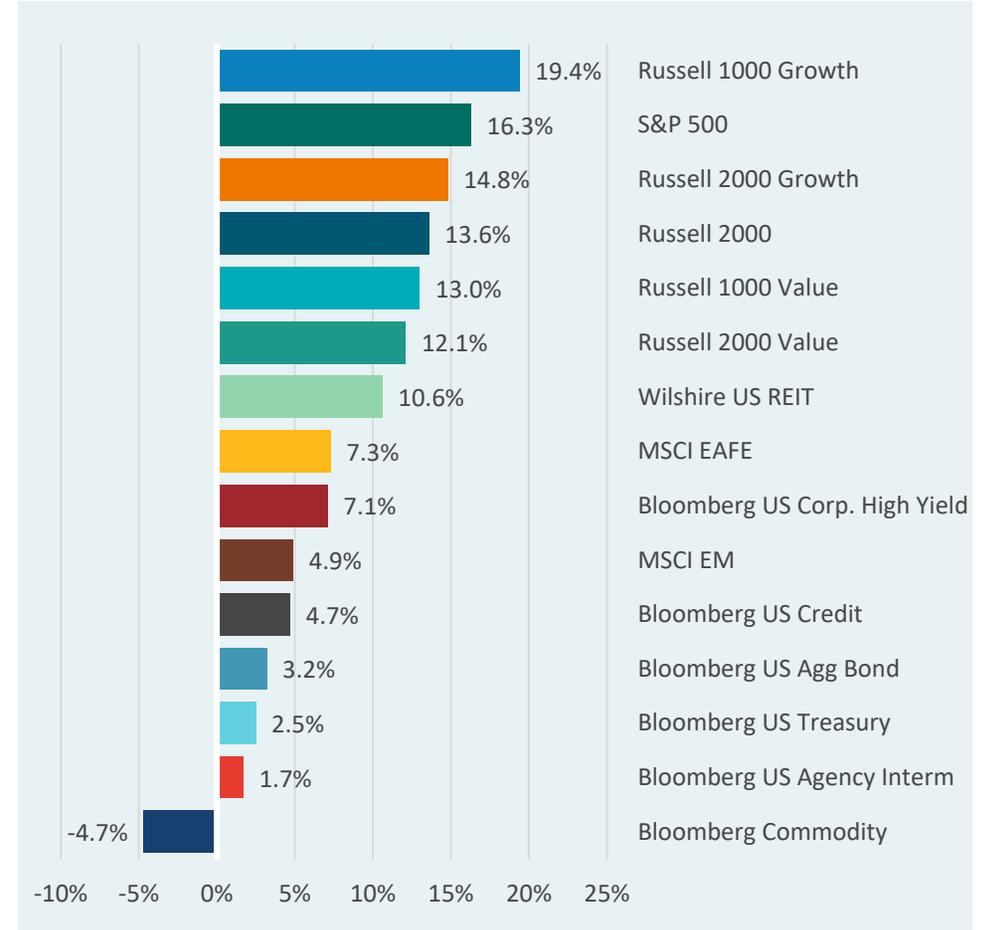
- The EU recommended that its 27 member states halt travel to the US for non-vaccinated individuals, delisting the country that was only added to the safe list in June of 2021. Within the US, 70% of adults have received at least one shot, and lagged the EU who reached this point in July. Some scientists believe herd immunity would require 80% of a population being fully vaccinated.
- Japan's broad TOPIX Index rose +3.2% and reached its highest level in 30 years at 1,961. The Index, which tracks the Tokyo Stock Exchange, has experienced two big bull-runs - one in 2007 and one in 2018 - neither were able to breach the 1,900 level.
- The Europe-wide Euro STOXX 600 (+2.2%) posted its seventh consecutive month of positive performance in August, marking its longest monthly winning streak in over eight years.

Major asset class returns

ONE YEAR ENDING AUGUST



TEN YEARS ENDING AUGUST



*Only publicly traded asset performance is shown here. Performance of private assets is typically released with a 3- to 6-month delay.

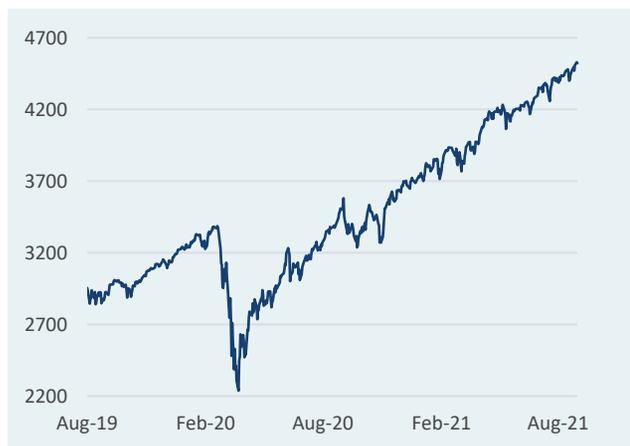
Source: Morningstar, as of 8/31/21

Source: Morningstar, as of 8/31/21

U.S. large cap equities

- The S&P 500 climbed +3.0% over the month, marking its seventh consecutive month of gains. The index hasn't seen more than a 5% intra-month correction since October 2020.
- Every sector but one of the 11 GICS S&P 500 sectors posted positive performance in August. Financials (+5.1%), Comm Services (+5.0%), Utilities (+4.0%) and Information Technology (+3.6%) were the only sectors to contribute positively to performance. Consumer Staples (+1.4%) and Industrials (+1.1%) weighed on the index. Energy (-2.0%) was the lone sector in decline and posted the worst return over the month.
- The S&P 500 Price Index closed the month at 4,523, a price which is already 2.3% above the average year-end target of 4,421. The price target was derived by taking the average price target of 15 strategists across Wall Street, which had been polled by CNBC.
- The VIX Index of implied volatility fell -9.9% over the month of August. The index rose 3.4 to an intra-month high of 21.7 on August 19th surrounding risk off sentiment in global equities. The index fell in the second half of the month back down below its 50- and 200-day moving averages to 16.5

S&P 500 PRICE INDEX



Source: Bloomberg, as of 8/31/21

IMPLIED VOLATILITY (VIX INDEX)



Source: CBOE, as of 8/31/21

S&P 500 VALUATION SNAPSHOT

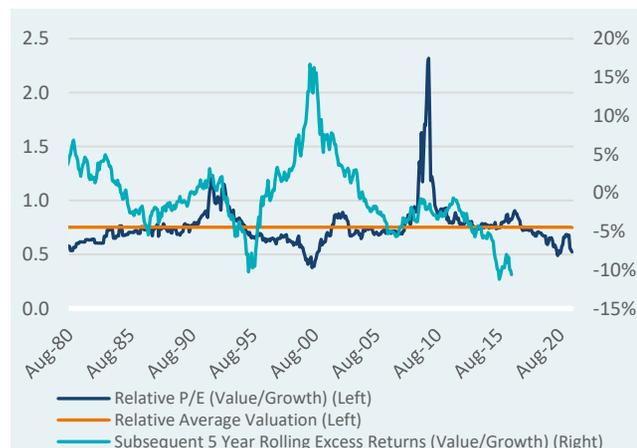


Source: Bloomberg, as of 8/31/21

Domestic equity size and style

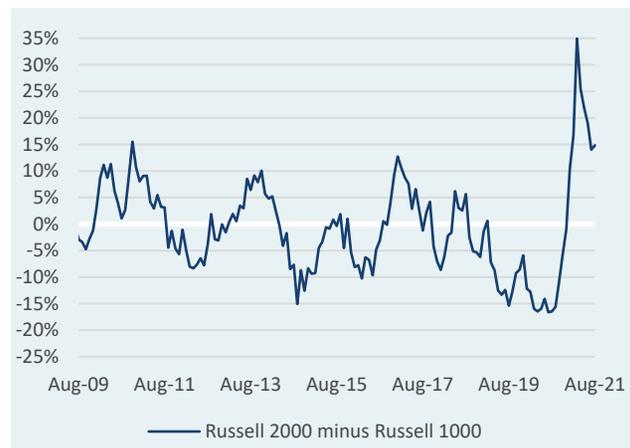
- The Russell 1000 (+2.9%) outperformed the Russell 2000 (+2.2%) and marked the fifth consecutive month of large-cap equity outperformance of its small-cap peers. The large-cap Communications Services sector (+5.4%) returned far more than the same sector within the small-cap equity space (+0.3%).
- Growth-oriented stocks within the Russell 3000 Growth Index (+3.6%) performed better than value stocks (Russell 3000 Value +2.0%). The value-leaning Financial sector (+5.1%) narrowed the margin of relative performance, but the Energy (-2.0%) and Industrials (+1.1%) sectors proved a headwind for value.
- The S&P 500 Momentum Index (+4.5%), which mirrors the strategy of entering holdings that are rising the fastest and exiting positions that are falling fastest, outperformed the S&P 500 (+3.0%).
- The S&P Low Volatility High Dividend Index (+1.5%) lagged the overall S&P 500 (+3.0%). Companies with high dividends on average carry a higher debt load which tends to make these companies more interest-rate-sensitive and rising interest rates can cause interest-rate-sensitive sectors to fall.

VALUE VS. GROWTH RELATIVE VALUATIONS



Source: FTSE, Bloomberg, as of 8/31/21

VALUE VS. GROWTH 1-YR ROLLING RELATIVE PERFORMANCE



Source: FTSE, Bloomberg, as of 8/31/21

SMALL VS. LARGE 1-YR ROLLING RELATIVE PERFORMANCE

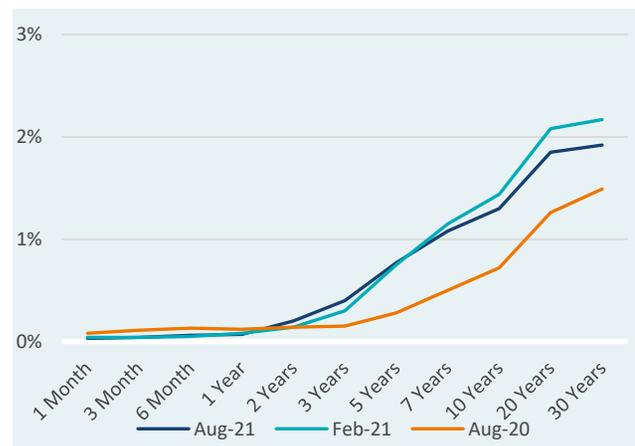


Source: FTSE, Bloomberg, as of 8/31/21

Fixed income

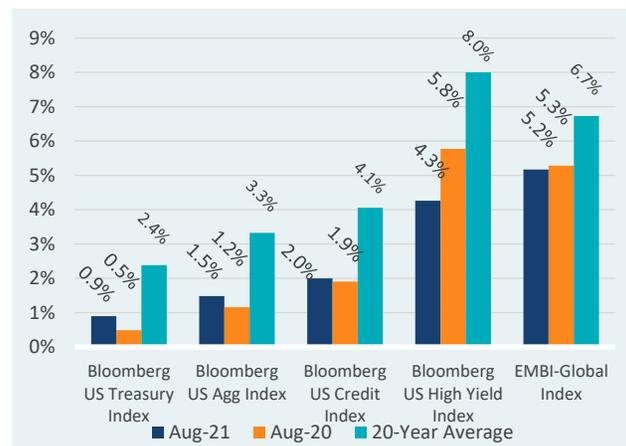
- Riskier global credit outperformed U.S. credit in August. Hard-currency denominated emerging market debt (JPM EMBI Global Diversified Index +1.0%) gained over the month and outperformed the Bloomberg US corporate High Yield Index (+0.5%).
- The European Central Bank announced that it would buy bonds at a “moderately lower pace”. Currently the ECB is buying roughly 80 billion euros (\$95 billion) per month. The more hawkish tone from the ECB comes as the Eurozone saw a preliminary year-on-year CPI reading of 2.7% in August, above the central bank’s 2.0% target.
- Five-year yields (+8bps) moved up by more than 30-year yields (+3bps), resulting in a flatter long-end of the yield curve.
- The yield on the ICE BofA US High Yield Option-Adjusted Spread Index fell 11 basis points in August. At month end, the index’s price was above \$100 signifying the average bond was priced above face value, something not seen since February of 2020. Higher prices may be a testament to the Federal Reserve supporting high-yield bond prices that investors wouldn’t otherwise pay in absence of unprecedented support from the Fed.

U.S. TREASURY YIELD CURVE



Source: Bloomberg, as of 8/31/21

NOMINAL YIELDS



Source: Morningstar, as of 8/31/21

BREAKEVEN INFLATION RATES

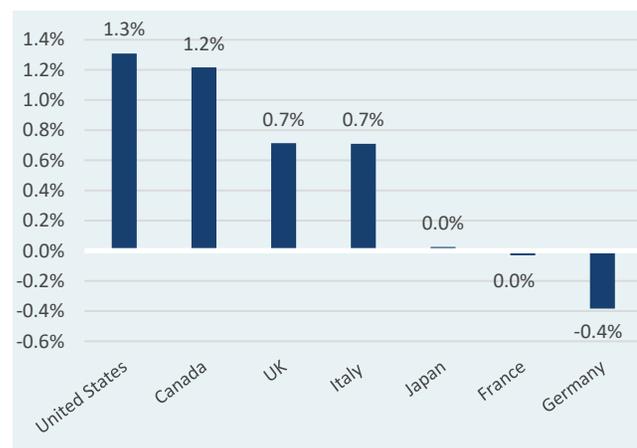


Source: Bloomberg, as of 8/31/21

Global markets

- World equities (+2.5% MSCI ACWI) advanced over the month led by Japanese (MSCI Japan +3.1%) and US (S&P 500 +3.0%) equities. Developed market equities (MSCI EAFE +1.8%) lagged world equities and were hindered by the United Kingdom (MSCI UK +0.8%).
- At the onset of the month emerging market equities stalled but recovered to close up +2.6%. India's equity market (MSCI India +8.9%) helped emerging markets higher. Covid cases within India remained low despite lifting some social distancing restrictions. Latin American equities (MSCI Latin American +0.8%) weighed on the emerging market equity basket.
- The Pound weakened (-1.0%) to the US dollar likely due to subdued demand for the Pound against haven currencies as well as a mid-month reaction to weaker than expected inflation in the UK. The MSCI UK Hedged Index (+1.9%) outperformed the MSCI UK Unhedged (+0.9%) as unhedged US investors were affected negatively by the strengthening US dollar.
- The Nasdaq Golden Dragon China Index – an index comprised of Chinese companies whose stock is traded in the US dropped -15.2% midway through the month before recovering to a -1.6% return in August. The move was driven by tighter Chinese tech regulations.

GLOBAL SOVEREIGN 10-YEAR YIELDS



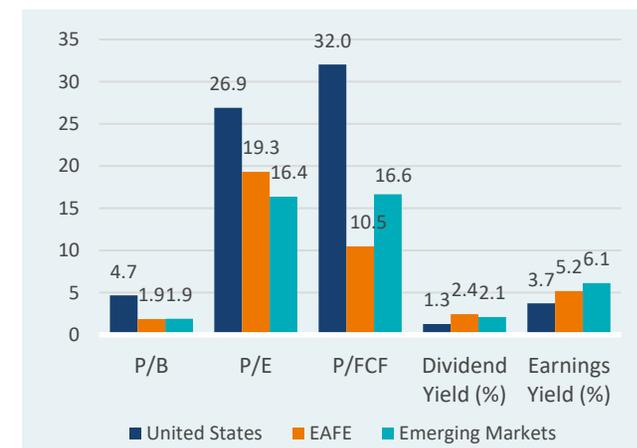
Source: Bloomberg, as of 8/31/21

U.S. DOLLAR MAJOR CURRENCY INDEX



Source: Federal Reserve, as of 8/31/21

MSCI VALUATION METRICS (3-MONTH AVG)



Source: Bloomberg, as of 8/31/21

Commodities

- The Bloomberg Commodity Index closed the month down -0.3%. Petroleum (-4.7%) and Grains (-1.9%) troubled the overall commodities basket and brought the index into negative territory for the second month in 2021.
- The Bloomberg Energy Sub-Index (-0.4%) mirrors the holdings of the Bloomberg Petroleum Sub-Index (-4.7%) but the former holds natural gas as its largest weight. Natural gas prices rose 13.3%. Prices were pulled higher by hotter than expected temperatures in August that raised demand in the electric power sector while Hurricane Ida caused a decline in production that pushed prices higher.
- Grains (-1.9%) make up roughly 23% of the Bloomberg Commodity Index and weighed on performance over the month. Soybean and corn saw contracts fell -4.2%, and -2.3%, respectively.
- The Bloomberg Softs Sub-Index posted a strong +7.9% return and was accretive to overall commodity performance. The Sub-Index was propelled higher from positive price action in sugar and coffee, which saw their contracts appreciate 10.8% and 9.1%, respectively. The price action in large part was due to concerns over frost damage to crops in Brazil where roughly 25% of the world’s coffee and 39% of the worlds sugar comes from.

INDEX AND SECTOR PERFORMANCE

	Month	QTD	YTD	1 Year	3 Year	5 Year	10 Year
Bloomberg Commodity	(0.3)	3.4	23.0	31.0	5.8	4.2	(4.7)
Bloomberg Agriculture	0.1	(1.1)	19.3	49.8	11.5	2.7	(4.3)
Bloomberg Energy	(0.4)	15.2	49.5	38.1	(9.3)	(1.6)	(11.4)
Bloomberg Grains	(1.9)	(5.7)	13.7	47.7	9.5	3.5	(4.7)
Bloomberg Industrial Metals	0.3	1.0	22.7	36.2	12.5	12.2	(0.9)
Bloomberg Livestock	0.1	(2.9)	8.7	19.6	(5.3)	(3.0)	(3.9)
Bloomberg Petroleum	(4.7)	5.7	44.8	62.0	(7.2)	3.5	(7.6)
Bloomberg Precious Metals	(1.4)	(7.1)	(5.9)	(11.0)	13.8	5.0	(2.4)
Bloomberg Softs	7.9	14.9	34.0	45.6	12.4	(1.9)	(7.5)

Source: Morningstar, as of 8/31/21

COMMODITY PERFORMANCE



Source: Bloomberg, as of 8/31/21

Appendix

Periodic table of returns

	1999	2000	2001	2002	2003	2004	2005	2006	2007	2008	2009	2010	2011	2012	2013	2014	2015	2016	2017	2018	2019	2020	YTD	5-Year	10-Year
Small Cap Value	66.4	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	25.4	24.4	19.4
Commodities	43.1	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	23.0	18.2	16.4
Large Cap Growth	33.2	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	21.1	16.6	14.8
Large Cap Equity	27.3	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	20.7	14.4	13.6
Large Cap Value	26.5	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	20.3	11.7	13.0
Small Cap Equity	21.3	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	15.8	11.7	12.1
International Equity	24.3	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	11.6	10.4	8.8
60/40 Global Portfolio	20.9	-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	8.5	9.7	7.6
Small Cap Growth	13.2	-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	6.9	9.7	7.3
Real Estate	11.4	-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	5.4	6.1	4.9
Hedge Funds of Funds	7.3	-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	5.1	5.7	4.1
Emerging Markets Equity	4.8	-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	2.8	4.2	3.2
Cash	-0.8	-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	0.0	3.1	0.6
US Bonds	-1.5	-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	-0.7	1.1	-4.7

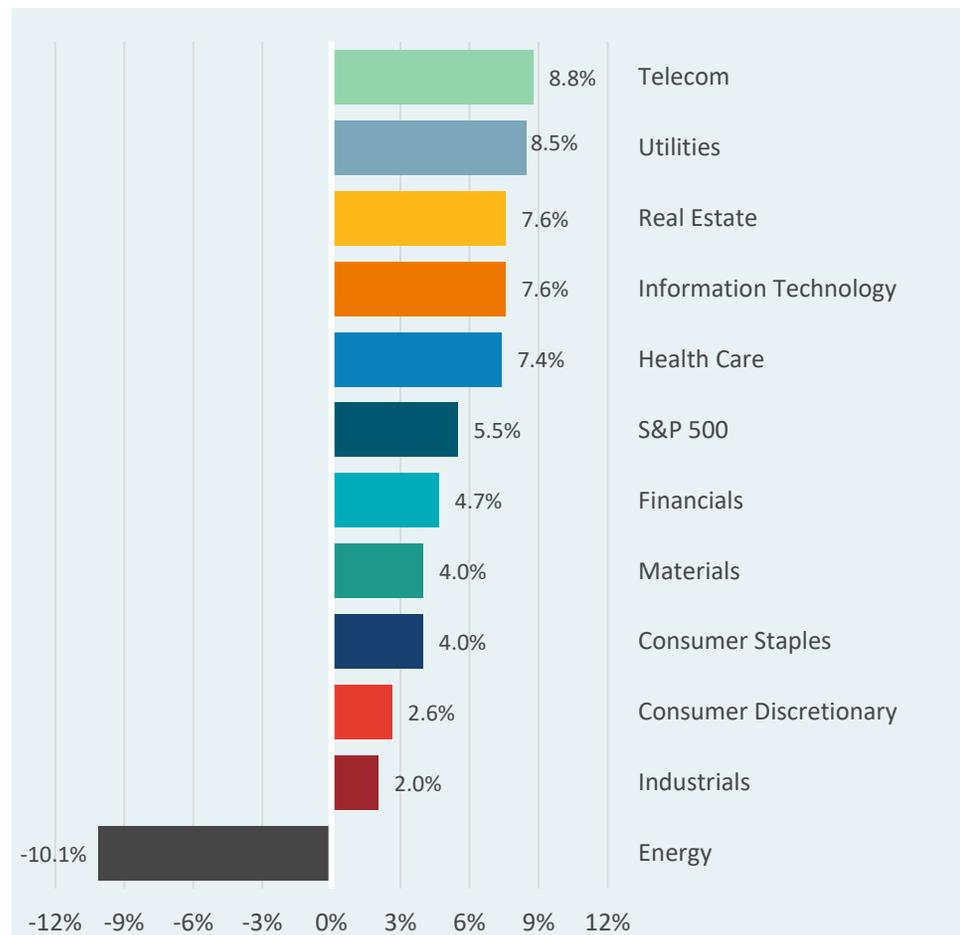
BEST
↑
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WORST

- Large Cap Equity
- Small Cap Growth
- Commodities
- Large Cap Value
- International Equity
- Real Estate
- Large Cap Growth
- Emerging Markets Equity
- Hedge Funds of Funds
- US Bonds
- 60% MSCI ACWI/40% BBgBarc Global Bond
- Small Cap Value
- Cash

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 6/30/21.

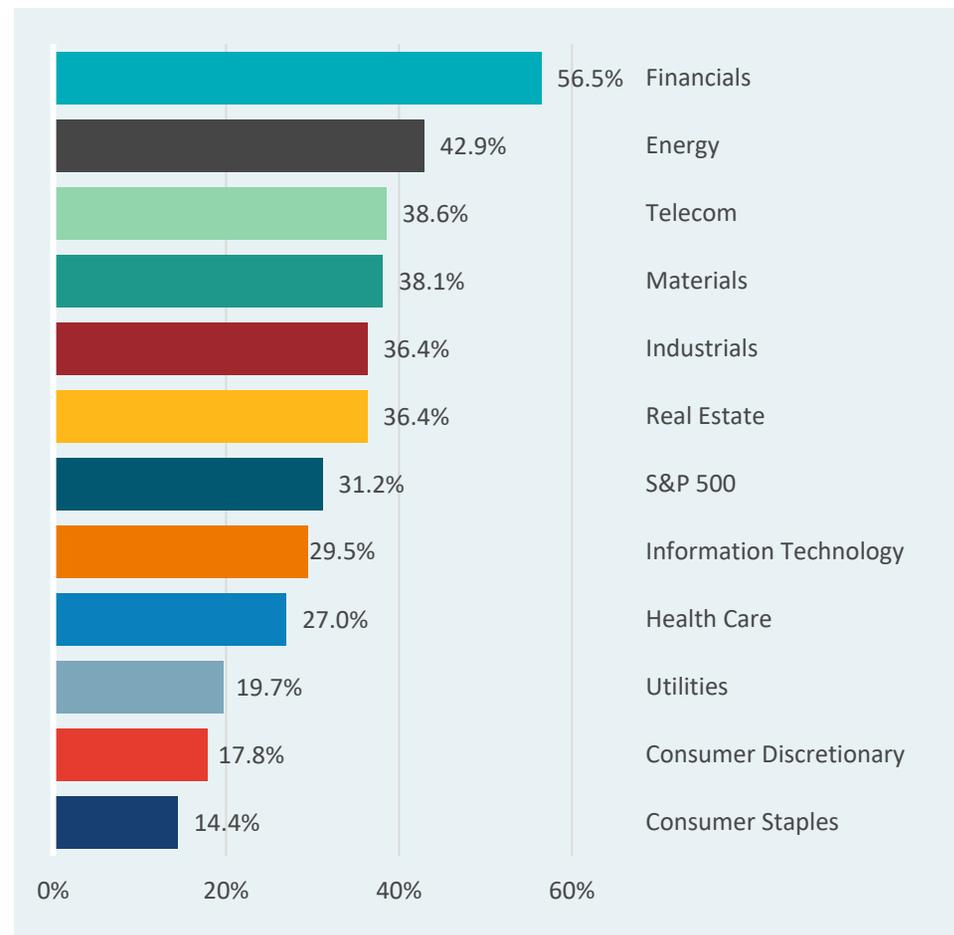
S&P 500 sector returns

QTD



Source: Morningstar, as of 8/31/21

ONE YEAR ENDING AUGUST



Source: Morningstar, as of 8/31/21

Detailed index returns

DOMESTIC EQUITY

	Month	QTD	YTD	1 Year	3 Year	5 Year	10 Year
Core Index							
S&P 500	3.0	5.5	21.6	31.2	18.1	18.0	16.3
S&P 500 Equal Weighted	2.4	3.7	23.6	42.7	15.8	15.5	15.3
DJ Industrial Average	1.5	2.9	17.0	26.8	13.3	16.6	14.5
Russell Top 200	3.0	5.7	21.0	29.4	19.5	19.3	17.0
Russell 1000	2.9	5.0	20.7	32.3	18.4	18.2	16.4
Russell 2000	2.2	(1.5)	15.8	47.1	10.7	14.4	13.6
Russell 3000	2.9	4.6	20.4	33.0	17.9	18.0	16.2
Russell Mid Cap	2.5	3.3	20.1	41.2	15.6	15.4	14.8
Style Index							
Russell 1000 Growth	3.7	7.2	21.1	28.5	24.6	24.4	19.4
Russell 1000 Value	2.0	2.8	20.3	36.4	11.5	11.7	13.0
Russell 2000 Growth	1.8	(1.9)	6.9	35.6	12.3	16.6	14.8
Russell 2000 Value	2.7	(1.0)	25.4	59.5	8.4	11.7	12.1

INTERNATIONAL EQUITY

Broad Index							
MSCI ACWI	2.5	3.2	15.9	28.6	14.3	14.3	11.3
MSCI ACWI ex US	1.9	0.2	9.4	24.9	9.4	9.9	6.6
MSCI EAFE	1.8	2.5	11.6	26.1	9.0	9.7	7.3
MSCI EM	2.6	(4.3)	2.8	21.1	9.9	10.4	4.9
MSCI EAFE Small Cap	2.9	4.6	14.1	32.8	10.1	11.8	9.9
Style Index							
MSCI EAFE Growth	2.4	4.1	11.2	24.9	13.3	12.6	9.2
MSCI EAFE Value	1.1	0.9	11.7	27.0	4.4	6.6	5.3
Regional Index							
MSCI UK	0.8	1.8	14.5	27.2	3.7	5.5	4.7
MSCI Japan	3.1	1.8	3.1	20.0	7.6	9.1	7.9
MSCI Euro	2.0	3.1	16.3	31.1	9.7	10.6	7.5
MSCI EM Asia	2.6	(5.7)	(0.0)	17.5	10.9	12.0	7.5
MSCI EM Latin American	0.8	(3.3)	5.3	34.7	3.9	3.9	(1.9)

FIXED INCOME

	Month	QTD	YTD	1 Year	3 Year	5 Year	10 Year
Broad Index							
Bloomberg US TIPS	(0.2)	2.5	4.3	5.6	7.3	4.6	3.2
Bloomberg US Treasury Bills	0.0	0.0	0.0	0.1	1.3	1.2	0.7
Bloomberg US Agg Bond	(0.2)	0.9	(0.7)	(0.1)	5.4	3.1	3.2
Bloomberg US Universal	(0.1)	0.9	(0.2)	0.9	5.7	3.5	3.6
Duration							
Bloomberg US Treasury 1-3 Yr	(0.0)	0.2	0.1	0.1	2.7	1.7	1.2
Bloomberg US Treasury Long	(0.2)	3.4	(4.8)	(7.3)	9.2	3.6	5.7
Bloomberg US Treasury	(0.2)	1.2	(1.4)	(2.1)	4.9	2.4	2.5
Issuer							
Bloomberg US MBS	(0.2)	0.5	(0.3)	(0.2)	3.8	2.3	2.5
Bloomberg US Corp. High Yield	0.5	0.9	4.5	10.1	7.1	6.7	7.1
Bloomberg US Agency Interm	(0.1)	0.5	(0.1)	0.1	3.3	2.0	1.7
Bloomberg US Credit	(0.2)	1.1	(0.2)	2.3	7.4	4.5	4.7

OTHER

Index							
Bloomberg Commodity	(0.3)	1.5	23.0	31.0	5.8	4.2	(4.7)
Wilshire US REIT	1.9	7.1	31.5	40.6	11.3	7.6	10.6
CS Leveraged Loans	0.5	0.5	4.0	8.5	4.1	4.7	5.0
Alerian MLP	(2.3)	(8.5)	35.3	54.8	(6.8)	(3.7)	0.6
Regional Index							
JPM EMBI Global Div	1.0	1.4	0.7	4.6	6.9	4.4	5.6
JPM GBI-EM Global Div	0.8	0.3	(3.0)	4.1	5.8	3.2	0.4
Hedge Funds							
HFRI Composite	0.8	(0.1)	9.9	20.8	8.4	7.4	5.4
HFRI FOF Composite	1.1	0.4	5.1	13.4	6.2	5.7	4.1
Currency (Spot)							
Euro	(0.5)	(0.5)	(3.5)	(1.3)	0.5	1.2	(2.0)
Pound Sterling	(1.0)	(0.4)	0.7	2.8	1.9	1.0	(1.7)
Yen	(0.1)	1.0	(6.0)	(3.5)	0.3	(1.2)	(3.6)

Source: Morningstar, HFRI, as of 8/31/21

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	48.2	19.3	15.9	12.6
Global Private Equity Direct Funds *	58.5	22.9	20.0	15.2
U.S. Private Equity Direct Funds *	61.1	25.1	20.9	16.6
Europe Private Equity Direct Funds *	51.8	19.5	20.0	12.7
Asia Private Equity Direct Funds *	54.3	20.0	17.9	14.6

Public Index Time-weighted Returns	1 Year	3 Year	5 Year	10 Year
MSCI World	54.0	12.8	13.4	9.9
S&P 500	56.4	16.8	16.3	13.9
MSCI Europe	44.9	5.6	8.2	5.1
MSCI AC Asia Pacific	51.8	8.2	12.2	6.7

Private Real Estate Pooled IRRs	1 Year	3 Year	5 Year	10 Year
U.S. All Private Real Estate	13.1	7.0	8.5	11.7

Public Index Time-weighted Returns	1 Year	3 Year	5 Year	10 Year
FTSE NAREIT Equity REIT	37.8	9.5	5.3	8.6

Private Credit Pooled IRRs	1 Year	3 Year	5 Year	10 Year
U.S. All Private Debt **	32.0	10.4	11.5	10.4

Public Index Time-weighted Returns	1 Year	3 Year	5 Year	10 Year
S&P / LSTA U.S. Leveraged Loan 100 Index	15.3	4.1	5.0	3.9

Private Real Assets Pooled IRRs	1 Year	3 Year	5 Year	10 Year
Global Nature Resources ***	19.6	(4.7)	1.7	0.6
Global Infrastructure	16.9	9.1	10.9	9.7

Public Index Time-weighted Returns	1 Year	3 Year	5 Year	10 Year
S&P Global Natural Resources	67.7	5.5	11.4	1.1
S&P Global Infrastructure	37.0	5.7	6.8	6.3

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

* 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.

Notices & disclosures

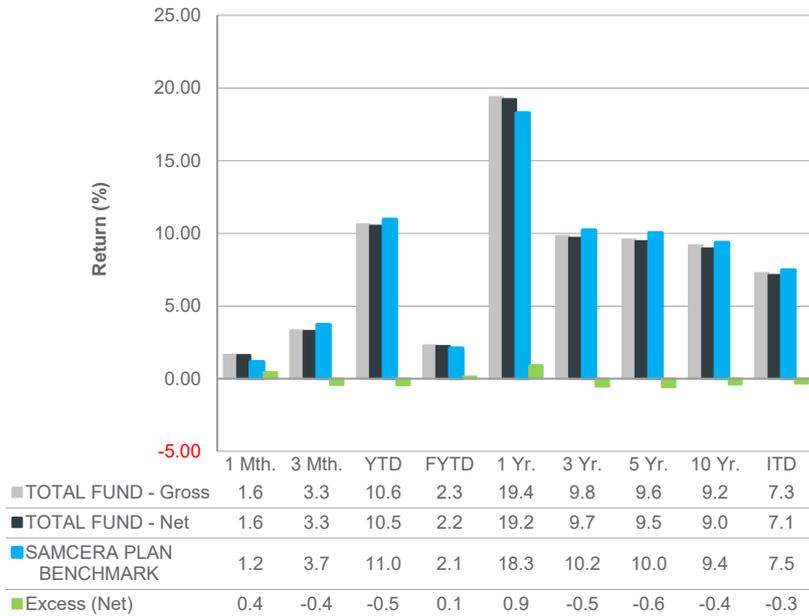
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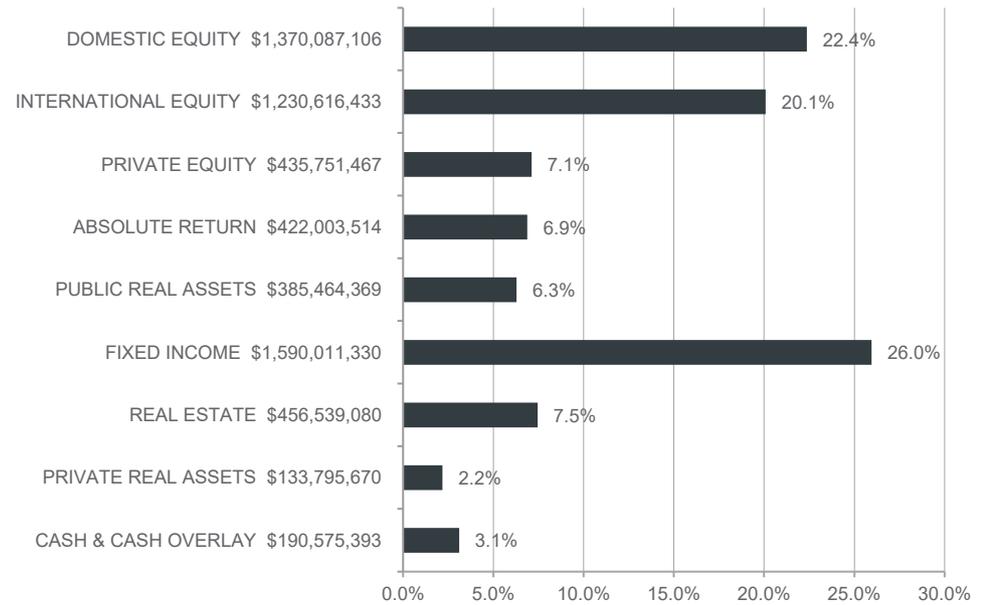
San Mateo County Composite Return Summary August 31, 2021



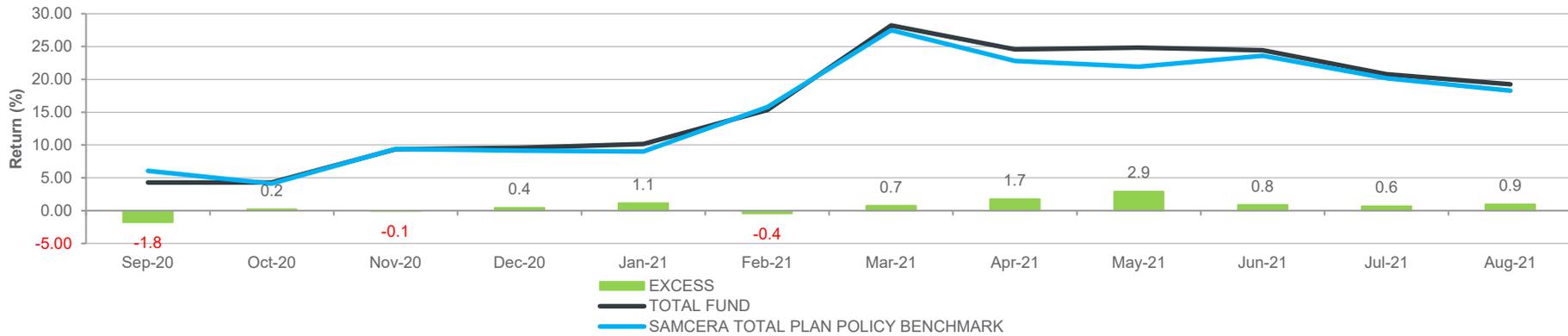
Total Fund Performance



Asset Allocation



Rolling Month End Annual Returns

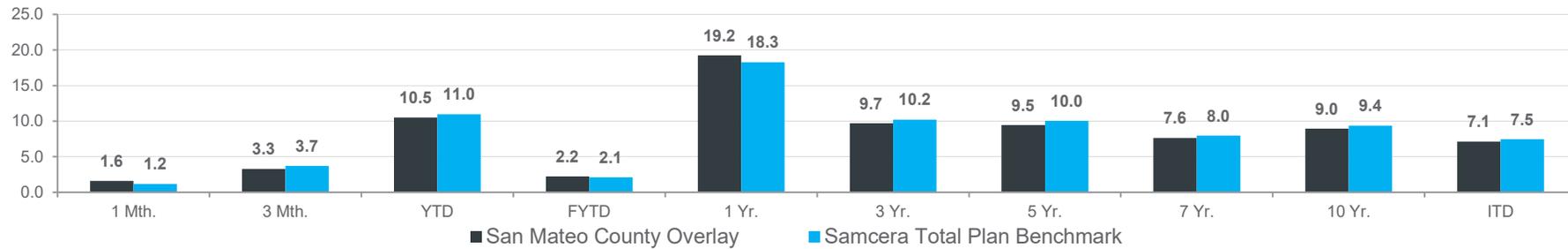


San Mateo County Composite Return Summary

August 31, 2021



Return Comparison



Composite Returns (Net of Manager Fees)	Market Value (\$)	1 Mth.	3 Mth.	YTD	FYTD	1 Yr.	3 Yr.	5 Yr.	7 Yr.	10 Yr.	ITD
San Mateo County Overlay	6,126,548,046	1.6	3.3	10.5	2.2	19.2	9.7	9.5	7.6	9.0	7.1
Samcera Total Plan Benchmark		1.2	3.7	11.0	2.1	18.3	10.2	10.0	8.0	9.4	7.5
Excess		0.4	-0.4	-0.5	0.1	0.9	-0.5	-0.6	-0.3	-0.4	-0.3
San Mateo Ex-Clifton Overlay	6,112,128,286	1.6	3.3	10.5	2.2	19.2	9.6	9.4	7.5	8.9	7.1
Samcera Total Plan Benchmark		1.2	3.7	11.0	2.1	18.3	10.2	10.0	8.0	9.4	7.5
Excess		0.4	-0.4	-0.5	0.1	0.9	-0.6	-0.7	-0.4	-0.5	-0.4
Total Equity	2,600,703,539	2.3	3.7	14.7	2.4	28.6	13.0	13.8	10.3	12.0	8.5
Samcera Total Equity Benchmark		2.5	4.3	16.3	2.8	29.9	14.1	14.8	11.4	13.1	9.2
Excess		-0.2	-0.7	-1.6	-0.5	-1.3	-1.0	-1.0	-1.1	-1.0	-0.7
Fixed Income	1,590,011,330	0.3	1.6	2.3	0.8	4.9	5.9	4.9	4.2	4.8	5.5
Samcera Fixed Income Benchmark		0.1	1.8	0.8	1.0	2.4	6.1	4.0	3.8	3.6	5.0
Excess		0.2	-0.2	1.5	-0.1	2.5	-0.1	1.0	0.4	1.2	0.5
Alternatives	857,754,981	2.8	5.9	15.4	5.2	34.4	17.9	13.6	10.7	8.8	1.0
Samcera Alternatives Benchmark		0.5	5.1	15.0	3.1	22.9	13.1	12.5	9.3	10.3	8.6
Excess		2.3	0.8	0.4	2.1	11.5	4.9	1.1	1.4	-1.5	-7.6
Inflation Hedge	975,799,118	1.2	3.3	11.8	2.1	14.7	2.8	4.5	--	--	5.3
SamCERA Inflation Hedge Index		0.4	4.4	13.3	1.5	17.5	6.6	6.8	--	--	--
Excess		0.9	-1.1	-1.5	0.5	-2.8	-3.9	-2.3	--	--	--
Cash	190,575,393	0.1	0.0	0.2	0.0	0.4	0.8	0.8	0.7	0.7	1.8
Samcera Cash Benchmark		0.0	0.0	0.0	0.0	0.1	1.2	1.2	0.9	0.6	1.7
Excess		0.1	0.0	0.2	0.0	0.3	-0.4	-0.4	-0.2	0.0	0.0



San Mateo County Composite Return Summary

August 31, 2021



Composite Returns (NET)	Market Value (\$)	1 Mth.	3 Mth.	YTD	FYTD	1 Yr.	3 Yr.	5 Yr.	7 Yr.	10 Yr.	ITD
Total Equity	2,600,703,539	2.3	3.7	14.7	2.4	28.6	13.0	13.8	10.3	12.0	8.5
Samcera Total Equity Benchmark		2.5	4.3	16.3	2.8	29.9	14.1	14.8	11.4	13.1	9.2
Excess		-0.2	-0.7	-1.6	-0.5	-1.3	-1.0	-1.0	-1.1	-1.0	-0.7
Domestic Equity	1,370,087,106	2.6	6.0	18.4	4.3	30.2	14.6	16.3	13.0	14.9	9.6
Samcera Dom. Equity Benchmark		2.9	7.2	20.4	4.6	33.0	17.9	18.0	14.3	16.1	10.3
Excess		-0.3	-1.1	-2.0	-0.3	-2.8	-3.3	-1.7	-1.3	-1.2	-0.6
Large Cap Equity	1,251,178,973	2.5	6.5	18.0	4.6	28.7	15.4	16.8	13.7	15.4	10.4
Russell 1000		2.9	7.7	20.7	5.0	32.3	18.4	18.2	14.6	16.4	10.9
Excess		-0.4	-1.1	-2.7	-0.4	-3.6	-3.0	-1.4	-0.9	-1.0	-0.6
Blackrock Russell 1000	567,904,894	2.9	7.6	20.7	5.0	32.7	18.6	--	--	--	18.7
Russell 1000		2.9	7.7	20.7	5.0	32.3	18.4	--	--	--	18.5
Excess		-0.0	-0.0	-0.1	-0.0	0.5	0.2	--	--	--	0.2
DE Shaw Commingled Fund	205,850,209	2.0	5.8	14.9	3.7	28.4	14.8	16.9	--	--	14.4
Russell 1000		2.9	7.7	20.7	5.0	32.3	18.4	18.2	--	--	14.8
Excess		-0.9	-1.9	-5.8	-1.3	-3.9	-3.6	-1.4	--	--	-0.4
Acadian US MGD V-SL	235,505,078	2.8	6.8	16.8	5.1	23.4	--	--	--	--	17.3
Russell 1000		2.9	7.7	20.7	5.0	32.3	--	--	--	--	27.9
Excess		-0.1	-0.9	-3.9	0.1	-8.9	--	--	--	--	-10.6
Panagora Defuseq -SL	241,918,791	1.9	4.4	15.6	4.1	24.0	--	--	--	--	19.2
Russell 1000		2.9	7.7	20.7	5.0	32.3	--	--	--	--	27.9
Excess		-1.0	-3.2	-5.1	-0.9	-8.3	--	--	--	--	-8.8
Domestic Equity Overlay	3,392,565	0.7	3.1	101.8	1.2	165.5	--	--	--	--	137.1
ICE BofAML US 3-Month Treasury Bill		0.0	0.0	0.0	0.0	0.1	--	--	--	--	0.1
Excess		0.7	3.1	101.7	1.2	165.5	--	--	--	--	137.0
Small Cap Equity	115,515,568	2.8	1.0	22.2	0.6	49.1	5.8	11.2	7.4	10.9	6.9
Russell 2000		2.2	0.5	15.8	-1.5	47.1	10.7	14.4	11.4	13.6	8.9
Excess		0.5	0.5	6.4	2.1	2.0	-5.0	-3.2	-4.0	-2.7	-2.0



San Mateo County Composite Return Summary

August 31, 2021



Composite Returns (NET)	Market Value (\$)	1 Mth.	3 Mth.	YTD	FYTD	1 Yr.	3 Yr.	5 Yr.	7 Yr.	10 Yr.	ITD
QMA US Small Cap	115,515,568	2.8	1.0	22.2	0.6	49.1	5.8	11.2	--	--	11.1
Russell 2000		2.2	0.5	15.8	-1.5	47.1	10.7	14.4	--	--	14.3
Excess		0.5	0.5	6.4	2.1	2.0	-5.0	-3.2	--	--	-3.3
International Equity	1,230,616,433	2.0	1.1	10.6	0.2	26.9	11.2	10.6	6.6	7.4	6.2
SamCERA Custom Hedge Intl		2.1	1.1	11.6	0.8	26.4	9.6	10.1	5.7	6.8	5.7
Excess		-0.1	-0.0	-1.0	-0.5	0.5	1.6	0.5	0.9	0.6	0.5
Baillie Gifford	389,944,177	2.6	3.0	8.5	1.5	26.9	17.5	15.1	10.5	--	11.4
MSCI ACWI ex USA Growth		2.3	1.1	7.5	0.7	21.5	13.6	12.9	8.6	--	--
Excess		0.4	1.9	1.0	0.7	5.4	3.8	2.2	1.9	--	--
Blackrock MSCI ACWI ex US IMI	394,577,303	1.9	0.1	10.3	0.6	26.5	--	--	--	--	26.6
MS AC WIdxUS IMI Nt		2.0	-0.0	10.3	0.6	26.3	--	--	--	--	26.8
Excess		-0.0	0.1	0.1	-0.0	0.2	--	--	--	--	-0.2
Mondrian Investment Partners	361,191,203	0.8	-3.0	9.0	-1.8	25.4	6.1	6.9	3.6	5.6	5.5
MSCI ACWI xUSA Value		1.6	-1.9	11.8	-0.2	29.3	5.8	7.7	3.0	5.2	5.4
Excess		-0.8	-1.1	-2.9	-1.6	-3.9	0.3	-0.8	0.5	0.3	0.1
Currency Hedge Futures	437,116,255	-0.6	-2.8	-3.4	-0.3	-1.3	--	--	--	--	3.9
ICE BofAML US 3-Month Treasury Bill		0.0	0.0	0.0	0.0	0.1	--	--	--	--	0.1
Excess		-0.6	-2.8	-3.4	-0.3	-1.3	--	--	--	--	3.8
Currency Hedge Futures Offsets	437,116,255	0.0	0.0	0.0	-0.0	0.0	--	--	--	--	0.0
ICE BofAML US 3-Month Treasury Bill		0.0	0.0	0.0	0.0	0.1	--	--	--	--	0.1
Excess		-0.0	-0.0	-0.0	-0.0	-0.1	--	--	--	--	-0.1
International Equity Overlay	84,903,750	1.5	-3.5	3.9	1.0	12.0	--	--	--	--	32.4
ICE BofAML US 3-Month Treasury Bill		0.0	0.0	0.0	0.0	0.1	--	--	--	--	0.1
Excess		1.5	-3.5	3.8	1.0	11.9	--	--	--	--	32.3
Fixed Income	1,590,011,330	0.3	1.6	2.3	0.8	4.9	5.9	4.9	4.2	4.8	5.5
Samcera Fixed Income Benchmark		0.1	1.8	0.8	1.0	2.4	6.1	4.0	3.8	3.6	5.0
Excess		0.2	-0.2	1.5	-0.1	2.5	-0.1	1.0	0.4	1.2	0.5



San Mateo County Composite Return Summary

August 31, 2021



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	1,010,242,914	-0.1	1.5	0.0	0.8	1.3	5.6	3.7	3.7	4.0	5.2
BBG US Aggregate		-0.2	1.6	-0.7	0.9	-0.1	5.4	3.1	3.3	3.2	4.9
Excess		0.1	-0.1	0.7	-0.1	1.4	0.1	0.6	0.4	0.8	0.4
FIAM B Core Bond	271,812,387	-0.2	1.9	-0.0	1.0	1.3	6.6	4.1	--	--	4.8
BBG US Aggregate		-0.2	1.6	-0.7	0.9	-0.1	5.4	3.1	--	--	3.6
Excess		0.0	0.3	0.7	0.1	1.4	1.2	0.9	--	--	1.2
Western Total Return	235,110,509	0.2	0.6	0.0	0.1	3.8	5.8	4.7	--	--	4.5
BBG US Aggregate		-0.2	1.6	-0.7	0.9	-0.1	5.4	3.1	--	--	3.5
Excess		0.4	-1.0	0.7	-0.8	3.9	0.4	1.6	--	--	1.0
DoubleLine	263,296,770	-0.3	1.6	0.6	0.8	1.4	--	--	--	--	4.1
BBG US Aggregate		-0.2	1.6	-0.7	0.9	-0.1	--	--	--	--	1.9
Excess		-0.1	-0.0	1.3	-0.1	1.4	--	--	--	--	2.2
NISA Core Bond	240,023,248	-0.2	1.8	-0.6	1.0	0.1	--	--	--	--	1.8
BBG US Aggregate		-0.2	1.6	-0.7	0.9	-0.1	--	--	--	--	1.3
Excess		-0.0	0.2	0.1	0.0	0.2	--	--	--	--	0.6
Core Fixed Income Overlay	0	-9.2	-6.3	-9.9	-6.9	-10.2	--	--	--	--	-7.7
ICE BofAML US 3-Month Treasury Bill		0.0	0.0	0.0	0.0	0.1	--	--	--	--	0.1
Excess		-9.2	-6.3	-9.9	-6.9	-10.3	--	--	--	--	-7.8
Opportunistic Credit	579,768,417	1.0	1.8	6.5	0.9	12.2	6.6	7.1	6.0	8.3	8.6
BBG BA Intermediate HY Ind		0.5	2.2	3.6	1.0	7.3	7.7	6.1	5.6	6.7	7.3
Excess		0.4	-0.5	2.9	-0.1	4.9	-1.1	1.0	0.5	1.7	1.3
Pimco Private Income	54,209,278	3.5	3.5	13.1	3.5	18.9	--	--	--	--	9.9
BBG BA Intermediate HY Ind		0.5	2.2	3.6	1.0	7.3	--	--	--	--	7.7
Excess		2.9	1.2	9.5	2.4	11.6	--	--	--	--	2.2
AG CREDIT SOL FU LP	14,112,301	0.0	6.5	27.4	0.0	36.7	--	--	--	--	30.0
BBG BA Intermediate HY Ind		0.5	2.2	3.6	1.0	7.3	--	--	--	--	6.8
Excess		-0.5	4.2	23.8	-1.0	29.4	--	--	--	--	23.2



San Mateo County Composite Return Summary

August 31, 2021



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	3,877,605	-0.0	3.1	22.0	-0.0	27.5	--	--	--	--	23.7
BBG BA Intermediate HY Ind		0.5	2.2	3.6	1.0	7.3	--	--	--	--	16.4
Excess		-0.5	0.9	18.4	-1.1	20.2	--	--	--	--	7.3
AG Opportunistic Whole Loan	1,614,892	6.2	11.7	33.0	6.2	55.9	12.8	17.8	12.7	--	11.8
BBG BA Intermediate HY Ind		0.5	2.2	3.6	1.0	7.3	7.7	6.1	5.6	--	5.6
Excess		5.7	9.5	29.4	5.1	48.5	5.1	11.7	7.1	--	6.2
Angelo Gordon	1	0.0	0.0	-12.8	0.0	-3.4	19.6	21.6	16.5	--	15.7
BBG BA Intermediate HY Ind		0.5	2.2	3.6	1.0	7.3	7.7	6.1	5.6	--	5.8
Excess		-0.5	-2.2	-16.4	-1.0	-10.8	11.9	15.5	10.9	--	9.9
Blackrock Direct Lending Feede	15,577,364	1.2	1.5	3.2	1.2	13.7	--	--	--	--	2.3
BBG BA Intermediate HY Ind		0.5	2.2	3.6	1.0	7.3	--	--	--	--	8.1
Excess		0.7	-0.7	-0.4	0.2	6.4	--	--	--	--	-5.8
Beach Point Select Fund	93,141,780	0.2	2.3	10.4	0.5	21.0	9.9	9.5	--	--	9.3
BBG BA Intermediate HY Ind		0.5	2.2	3.6	1.0	7.3	7.7	6.1	--	--	6.0
Excess		-0.4	0.1	6.9	-0.5	13.7	2.2	3.4	--	--	3.3
Brigade Cap Mngmt	87,713,026	0.7	1.8	11.2	0.5	20.4	6.4	6.8	5.3	6.6	6.8
BBG BA Intermediate HY Ind		0.5	2.2	3.6	1.0	7.3	7.7	6.1	5.6	6.7	6.8
Excess		0.2	-0.4	7.6	-0.5	13.1	-1.3	0.7	-0.3	-0.1	-0.0
White Oak YSF V	33,847,584	1.3	-0.5	0.1	-0.5	--	--	--	--	--	0.1
BBG BA Intermediate HY Ind		0.5	2.2	3.6	1.0	--	--	--	--	--	4.9
Excess		0.8	-2.7	-3.5	-1.5	--	--	--	--	--	-4.8
White Oak Yield Spec	33,503,754	1.6	1.6	4.9	1.6	6.5	5.9	--	--	--	--
BBG BA Intermediate HY Ind		0.5	2.2	3.6	1.0	7.3	7.7	--	--	--	6.3
Excess		1.1	-0.6	1.4	0.6	-0.8	-1.8	--	--	--	--
PIMCO Div. Income Fund	136,053,569	0.4	2.1	1.6	1.1	5.0	6.5	--	--	--	5.1
BBG BA Intermediate HY Ind		0.5	2.2	3.6	1.0	7.3	7.7	--	--	--	6.0
Excess		-0.1	-0.1	-2.0	0.0	-2.3	-1.1	--	--	--	-0.9



San Mateo County Composite Return Summary

August 31, 2021



Composite Returns (NET)	Market Value (\$)	1 Mth.	3 Mth.	YTD	FYTD	1 Yr.	3 Yr.	5 Yr.	7 Yr.	10 Yr.	ITD
TCP Direct Lending VIII	28,193,285	0.6	1.9	5.3	0.6	11.2	7.1	6.3	--	--	--
BBG BA Intermediate HY Ind		0.5	2.2	3.6	1.0	7.3	7.7	6.1	--	--	6.7
Excess		0.1	-0.3	1.8	-0.5	3.9	-0.5	0.1	--	--	--
Franklin Templeton	77,923,977	1.3	-0.8	-1.4	0.3	-0.3	-1.5	0.2	-0.5	1.5	2.0
Bloomberg Multiverse Index		-0.4	0.1	-2.1	0.9	0.9	4.7	2.7	2.1	2.0	2.6
Excess		1.6	-0.9	0.7	-0.6	-1.3	-6.2	-2.4	-2.6	-0.5	-0.6
Alternatives	857,754,981	2.8	5.9	15.4	5.2	34.4	17.9	13.6	10.7	8.8	1.0
Samcera Alternatives Benchmark		0.5	5.1	15.0	3.1	22.9	13.1	12.5	9.3	10.3	8.6
Excess		2.3	0.8	0.4	2.1	11.5	4.9	1.1	1.4	-1.5	-7.6
Private Equity	435,751,467	5.0	11.3	29.1	10.2	63.5	38.8	29.0	24.2	18.9	-5.8
Samcera PE Benchmark		0.6	10.0	30.8	6.0	47.1	21.1	19.4	16.3	18.6	17.8
Excess		4.3	1.3	-1.7	4.2	16.4	17.7	9.6	7.9	0.3	-23.6
Absolute Return	422,003,514	0.6	0.4	2.5	0.1	4.6	-4.0	-2.7	0.3	1.3	1.2
Samcera SOFR + 4%		0.3	1.0	2.7	0.7	4.1	5.3	5.2	5.0	4.7	4.7
Excess		0.2	-0.6	-0.2	-0.5	0.5	-9.2	-7.9	-4.7	-3.4	-3.6
Aberdeen Std GARS	79,743,598	1.0	-0.1	-1.9	-0.2	1.2	4.2	2.8	--	--	1.7
Samcera SOFR + 4%		0.3	1.0	2.7	0.7	4.1	5.3	5.2	--	--	5.1
Excess		0.7	-1.1	-4.6	-0.9	-2.8	-1.0	-2.5	--	--	-3.4
Graham Global Investment	88,220,700	-1.2	-1.2	0.7	-2.0	2.0	--	--	--	--	2.8
Samcera SOFR +4%		0.3	1.0	2.7	0.7	4.1	--	--	--	--	4.3
Excess		-1.6	-2.2	-2.0	-2.7	-2.1	--	--	--	--	-1.5
PIMCO MAARS Fund L.P.	84,522,608	1.3	4.7	5.6	4.8	7.3	--	--	--	--	5.6
Samcera SOFR +4%		0.3	1.0	2.7	0.7	4.1	--	--	--	--	4.2
Excess		1.0	3.7	2.9	4.1	3.2	--	--	--	--	1.4
Acadian MAAR Fund LLC	83,430,080	0.7	3.8	3.1	1.9	--	--	--	--	--	5.0
Samcera SOFR +4%		0.3	1.0	2.7	0.7	--	--	--	--	--	3.7
Excess		0.4	2.8	0.5	1.3	--	--	--	--	--	1.3



San Mateo County Composite Return Summary

August 31, 2021



Composite Returns (NET)	Market Value (\$)	1 Mth.	3 Mth.	YTD	FYTD	1 Yr.	3 Yr.	5 Yr.	7 Yr.	10 Yr.	ITD
CFM SYS Global Macro Fund	86,086,528	1.3	-3.6	7.5	-2.5	--	--	--	--	--	13.0
Samcera SOFR +4%		0.3	1.0	2.7	0.7	--	--	--	--	--	3.7
Excess		0.9	-4.6	4.8	-3.2	--	--	--	--	--	9.3
Inflation Hedge	975,799,118	1.2	3.3	11.8	2.1	14.7	2.8	4.5	--	--	5.3
SamCERA Inflation Hedge Index		0.4	4.4	13.3	1.5	17.5	6.6	6.8	--	--	--
Excess		0.9	-1.1	-1.5	0.5	-2.8	-3.9	-2.3	--	--	--
Real Estate	456,539,080	0.5	3.6	7.3	0.8	7.5	5.6	6.5	--	--	6.9
Samcera NCREIF ODCE (gross)		0.0	3.9	6.1	0.0	8.0	5.5	6.6	--	--	6.5
Excess		0.5	-0.3	1.2	0.8	-0.5	0.1	-0.1	--	--	0.4
Invesco Core Real Estate	274,859,289	0.8	4.7	7.8	0.7	7.5	5.0	6.2	8.2	9.0	7.3
Samcera NCREIF ODCE (gross)		0.0	3.9	6.1	0.0	8.0	5.5	6.6	8.4	9.6	7.5
Excess		0.8	0.8	1.7	0.7	-0.6	-0.5	-0.4	-0.2	-0.6	-0.2
Invesco US Val IV	13,877,128	0.0	4.7	10.8	4.7	11.8	10.0	9.8	--	--	10.8
Samcera NCREIF ODCE (gross)		0.0	3.9	6.1	0.0	8.0	5.5	6.6	--	--	7.1
Excess		0.0	0.8	4.7	4.7	3.8	4.5	3.3	--	--	3.7
PGIM Real Estate US Debt Fund	85,151,374	0.3	1.2	4.4	0.3	5.7	5.8	--	--	--	4.9
Samcera NCREIF ODCE (gross)		0.0	3.9	6.1	0.0	8.0	5.5	--	--	--	6.0
Excess		0.3	-2.7	-1.7	0.3	-2.3	0.3	--	--	--	-1.1
Invesco US VAL V	24,631,503	0.0	4.8	20.9	4.8	20.2	--	--	--	--	8.8
Samcera NCREIF ODCE (gross)		0.0	3.9	6.1	0.0	8.0	--	--	--	--	--
Excess		0.0	0.9	14.8	4.8	12.1	--	--	--	--	--
Harrison Street Core Property	53,684,007	0.0	2.7	5.4	-0.3	6.5	--	--	--	--	4.4
Samcera NCREIF ODCE (gross)		0.0	3.9	6.1	0.0	8.0	--	--	--	--	4.4
Excess		0.0	-1.2	-0.7	-0.3	-1.5	--	--	--	--	0.0
Stockbridge Value IV	4,335,779	-1.6	-10.8	--	-1.6	--	--	--	--	--	-10.8
Samcera NCREIF ODCE (gross)		0.0	3.9	--	0.0	--	--	--	--	--	3.9
Excess		-1.6	-14.8	--	-1.6	--	--	--	--	--	-14.8



San Mateo County Composite Return Summary

August 31, 2021



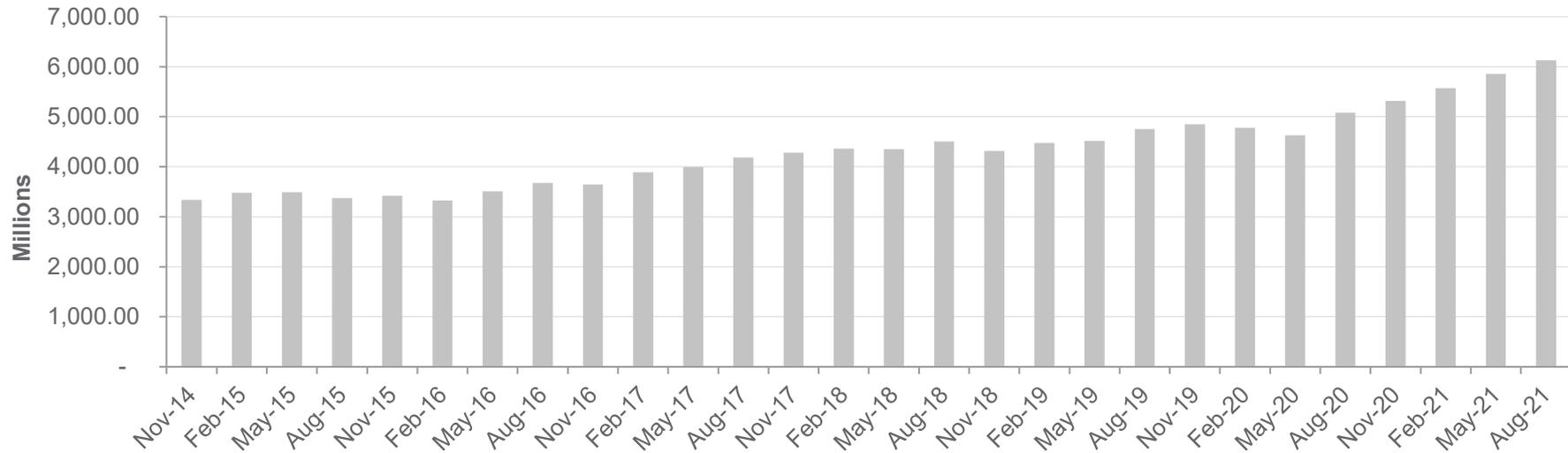
Composite Returns (NET)	Market Value (\$)	1 Mth.	3 Mth.	YTD	FYTD	1 Yr.	3 Yr.	5 Yr.	7 Yr.	10 Yr.	ITD
Public Real Assets	385,464,369	-0.1	0.8	12.8	1.2	22.2	-0.9	--	--	--	--
SamCera Liquid Real Asset Inde		-0.0	0.8	12.8	1.2	22.3	4.7	5.6	--	--	6.6
Excess		-0.0	-0.0	-0.0	-0.0	-0.1	-5.6	--	--	--	--
SSGA CST REAL ASSET NL	385,464,369	-0.1	0.8	12.8	1.2	22.2	4.6	--	--	--	--
SamCera Liquid Real Asset Inde		-0.0	0.8	12.8	1.2	22.3	4.7	5.6	--	--	5.6
Excess		-0.0	-0.0	-0.0	-0.0	-0.1	-0.1	--	--	--	--
Private Real Assets	133,795,670	8.0	9.6	30.9	9.3	31.8	6.2	8.0	--	--	10.7
SamCERA Private Real Asset Idx		1.6	9.2	29.9	5.3	34.1	7.6	10.3	--	--	12.1
Excess		6.4	0.5	0.9	4.0	-2.2	-1.5	-2.3	--	--	-1.4
Cash Overlay	14,419,760	-0.2	-0.2	-0.1	-0.2	-0.0	--	--	--	--	0.1
ICE BofAML US 3-Month Treasury Bill		0.0	0.0	0.0	0.0	0.1	--	--	--	--	0.1
Excess		-0.2	-0.2	-0.1	-0.2	-0.1	--	--	--	--	0.0
General Account	89,800,761	0.0	0.0	0.1	0.0	0.0	1.2	1.2	1.0	0.7	1.9
County Treasury Pool	34,404,019	0.4	0.2	0.8	0.2	1.3	1.8	1.5	1.3	1.1	2.6
Currency Hedge Cash Overlay	51,950,843	-0.1	-0.1	-0.0	-0.1	0.0	--	--	--	--	0.1
San Mateo County Overlay	6,126,548,046	1.6	3.3	10.5	2.2	19.2	9.7	9.5	7.6	9.0	7.1
Samcera Total Plan Benchmark		1.2	3.7	11.0	2.1	18.3	10.2	10.0	8.0	9.4	7.5
Excess		0.4	-0.4	-0.5	0.1	0.9	-0.5	-0.6	-0.3	-0.4	-0.3



Record of Asset Growth

	Three Months	One Year
TOTAL FUND		
Beginning Market Value	5,852,918,464	5,076,834,742
Contributions	144,952,931	514,618,646
Withdrawals	-68,120,132	-530,519,003
Income Received	27,169,036	85,804,071
Gain/Loss	169,934,995	898,314,432
Ending Market Value	6,126,548,046	6,126,548,046

Net Asset Values Over Time (\$000)

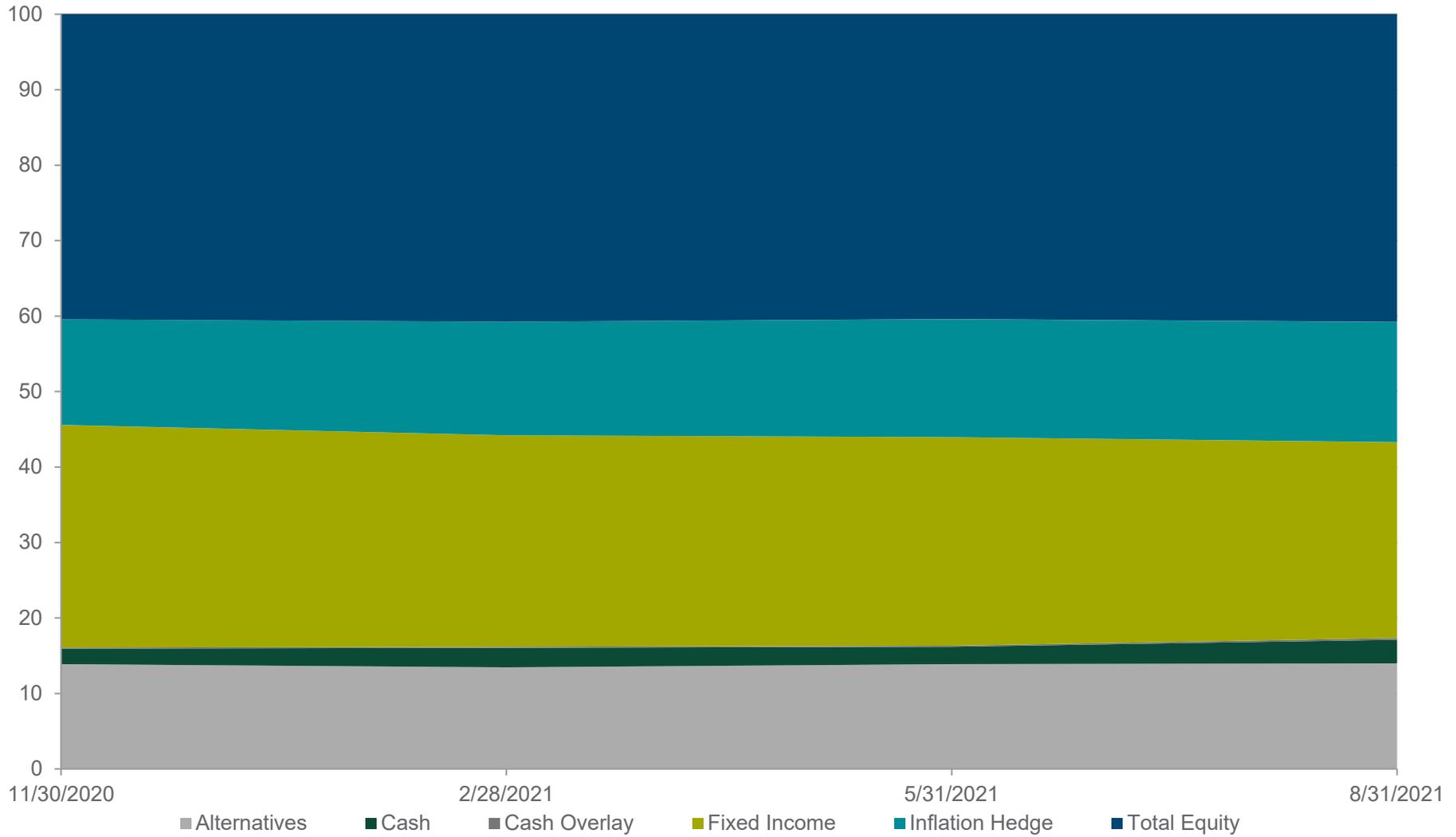


Actual vs Target Weights

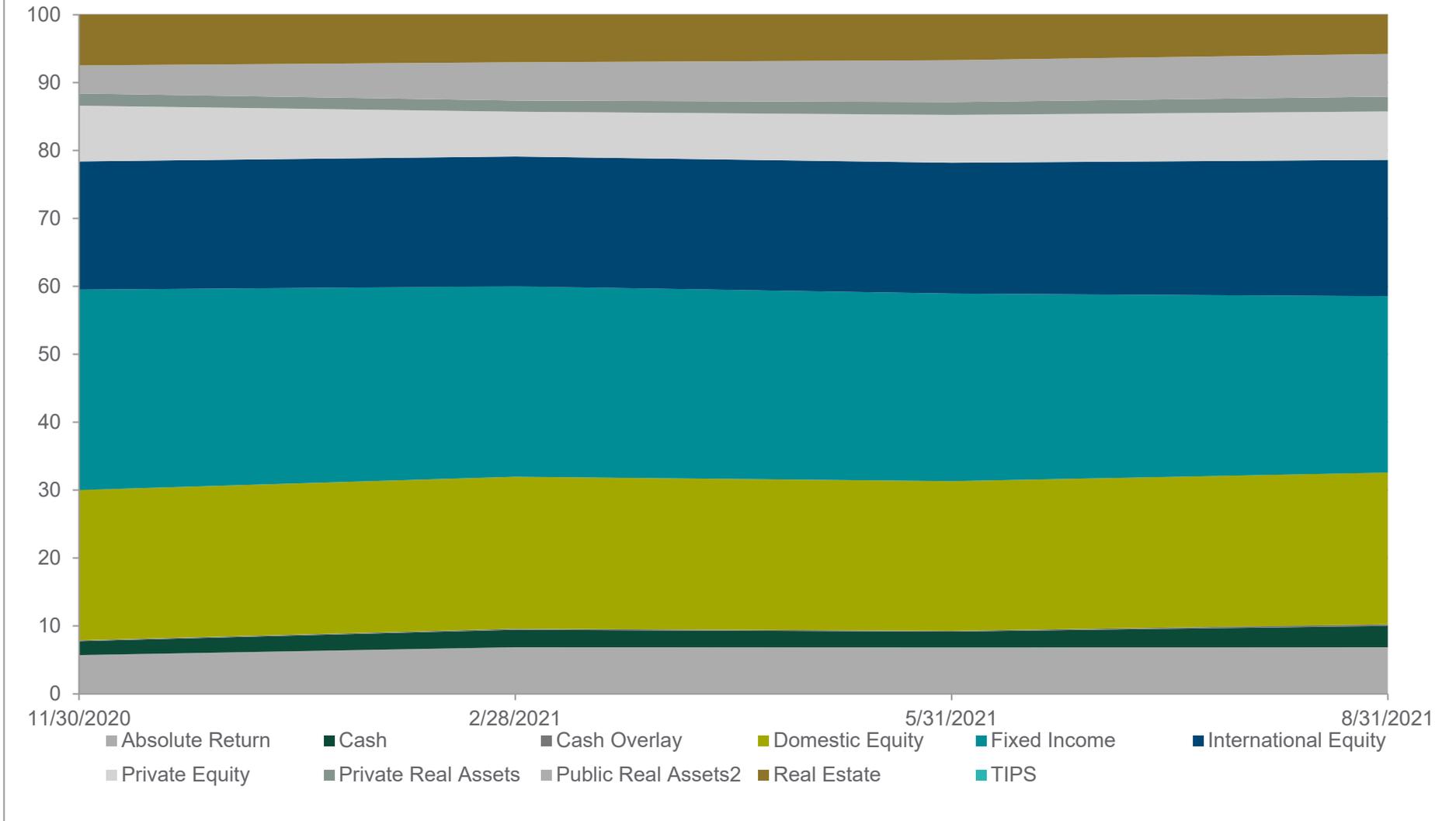


	Min	Actual	Target	Deviation	Max
Domestic Equity	20.0	22.4	22.0	0.4	24.0
International Equity	17.0	20.1	19.0	1.1	21.0
Fixed Income	26.0	26.0	28.0	-2.0	30.0
Private Equity	4.0	7.1	6.0	1.1	8.0
Absolute Return	5.0	6.9	7.0	-0.1	9.0
Liquidity	0.0	3.1	1.0	2.1	2.0
Public Real Assets	2.0	6.3	4.0	2.3	6.0
Real Estate	7.0	7.5	9.0	-1.5	11.0
Private Real Assets	2.0	2.2	4.0	-1.8	6.0

Asset Allocation over Time



Sub-Asset Class Allocation Over Time



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SAN MATEO COUNTY EMPLOYEES' RETIREMENT ASSOCIATION
Board of Retirement

September 28, 2021

Agenda Item 6.2

TO: Board of Retirement

FROM: Doris Ng, Investment Analyst 

SUBJECT: Report on Opportunistic Credit Manager Annual Review

Recommendation

Accept the report on the annual review of SamCERA's opportunistic credit manager.

Background

On September 2nd, SamCERA staff and consultant held a virtual annual review meeting with our opportunistic credit manager, Brigade Capital Management.

The 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

Brigade Capital Management's Opportunistic Credit product, which is a fundamental, bottom-up strategy focused on high yield corporate bonds and bank loans with tactical allocations to structured securities, convertibles and other sectors of the bond markets, was reviewed. The firm noted the departure of its CEO.

There were no other significant concerns identified during the portfolio review. Attached you will find meeting notes from Verus summarizing the findings from the annual review.

Attachment

Brigade Annual Review Meeting Notes (confidential)

SAN MATEO COUNTY EMPLOYEES' RETIREMENT ASSOCIATION
Board of Retirement

September 28, 2021

Agenda Item 6.3

TO: Board of Retirement
FROM: Michael Coultrip, Chief Investment Officer 
SUBJECT: Approval of Resolution Amending SamCERA's Investment Policy Statement

Recommendation

Adopt a resolution amending SamCERA's Investment Policy Statement.

Background

SamCERA's Investment Policy Statement ("Policy") is periodically updated to reflect the Board's recent decisions regarding investments. The Board typically updates the Policy twice a year as warranted. The Investment Policy Statement was last updated in December 2020.

Discussion

In January 2021, the Board approved a new asset allocation policy portfolio as part of its annual asset allocation review. The new policy portfolio tweaks the old portfolio by adding 2% to the Growth bucket and reducing Diversifying by 2%, while keeping the overall allocation to Inflation Hedge unchanged. To reflect these updates, staff recommends that Sections 6.0 and 9.0-11.0 be amended.

Staff is also proposing the following additional changes to the Investment Policy Statement:

Amend Section 6.0 "Asset Allocation & Portfolio Structure" to add "Liquidity" as a sub-category within Diversifying in addition to Core Fixed Income and Absolute Return.

Amend Section 9.0 "Growth Assets Investment Policies" to remove the 2% maximum tracking error for the Opportunistic Credit composite. Given the opportunistic nature of this composite, along with the composite consisting of both public and private investments, the benefit of utilizing a tracking error measure is reduced.

Amend Section 10.0 "Diversifying Assets Investment Polices" to change the description of Core Fixed Income from the "lowest risk" fixed income category to a "lower" risk fixed income category.

Attachments

Proposed Amendments to the Investment Policy Statement (Redlined Version)
Proposed Amendments to the Investment Policy Statement (Clean Version)
Resolution Revising the Investment Policy Statement and Attached Investment Policy Statement



SamCERA's Investment Policy Statement

Latest Revision ~~September~~December 20210

1.0 ESTABLISHMENT OF INVESTMENT POLICY

The Board of Retirement (the “Board”), having exclusive authority and exclusive fiduciary responsibility for the investment and administration of the Trust Fund (the “Fund”), hereby establishes the following Investment Policy (the “Policy”) for the investment of the San Mateo County Employees’ Retirement Association (“SamCERA”) assets. The Board reserves the right to amend, supplement or rescind this Policy at any time.

The purpose of this Policy is to assist SamCERA in effectively supervising its investments in order to meet the requirements of the California Constitution, the County Employees Retirement Law of 1937 (“the 1937 Act”), the Mission and Goals of SamCERA and other requirements, and to encourage effective communication between SamCERA and its investment managers (the “Manager(s)”) and investment consultants (the “Consultant(s)”).

A. GOVERNING DOCUMENTS FOR THE INVESTMENTS OF THE FUND.

The powers and duties of the Board are set forth in the 1937 Act and in Article XVI of the State Constitution. They are further defined by the Mission and Goals adopted by the Board.

SamCERA was created by San Mateo County Ordinance No. 564 adopted by the Board of Supervisors, effective July 1, 1944. This ordinance established the retirement system in accordance with the provisions of California’s County Employees’ Retirement Law of 1937.

Constitution of the State of California

Article XVI, Section 17, relates to the administration of the system and investment of the Fund assets. It reads in pertinent part:

“(a)...The assets of a public pension or retirement system are trust funds and shall be held for the exclusive purposes of providing benefits to participants in the pension or retirement system and their beneficiaries and defraying reasonable expenses of administering the system.

“(b) The members of the retirement board of a public pension or retirement system shall discharge their duties with respect to the system solely in the interest of, and for the exclusive purposes of providing benefits to, participants and their beneficiaries, minimizing employer contributions thereto, and defraying reasonable expenses of administering the system. A retirement board’s duty to its participants and their beneficiaries shall take precedence over any other duty.

“(c) The members of the retirement board of a public pension or retirement system shall discharge their duties with respect to the system with the care, skill, prudence, and diligence under the circumstances then prevailing that a prudent person acting in a like capacity and familiar with these matters would use in the conduct of an enterprise of a like character and with like aims.

“(d) The members of the retirement board of a public pension or retirement system shall diversify the investments of the system so as to minimize the risk of loss and to

maximize the rate of return, unless under the circumstances it is clearly not prudent to do so.”

The 1937 Act

The 1937 Act contains language similar to that in the State Constitution regarding the investments of the Fund:

Government Code section 31595.

“The board has exclusive control of the investment of the employees retirement fund. The assets of a public pension or retirement system are trust funds and shall be held for the exclusive purposes of providing benefits to participants in the pension or retirement system and their beneficiaries and defraying reasonable expenses of administering the system. Except as otherwise expressly restricted by the California Constitution and by law, the board may, in its discretion, invest, or delegate the authority to invest, the assets of the fund through the purchase, holding, or sale of any form or type of investment, financial instrument, or financial transaction when prudent in the informed opinion of the board.

The board and its officers and employees shall discharge their duties with respect to the system: (a) Solely in the interest of, and for the exclusive purposes of providing benefits to, participants and their beneficiaries, minimizing employer contributions thereto, and defraying reasonable expenses of administering the system.

(b) With the care, skill, prudence, and diligence under the circumstances then prevailing that a prudent person acting in a like capacity and familiar with these matters would use in the conduct of an enterprise of a like character and with like aims.

(c) Shall diversify the investments of the system so as to minimize the risk of loss and to maximize the rate of return, unless under the circumstances it is clearly prudent not to do so.

SamCERA’s Mission and Goals

The Board has adopted a Mission and Goals statement. The Mission summarizes SamCERA’s reason to exist.

“Mission: SamCERA exists to serve as loyal fiduciary for its members and as prudent administrator of the retirement system.”

The Mission is further defined by three goals. One goal speaks to the management of the assets of the Fund. This asset management goal reads:

“Prudently manage the assets in order to appropriately fund the actuarial liabilities of the retirement system, to ensure the ability to pay all earned benefits while minimizing the costs to employers.”

In recognition of the requirements of the California Constitution, the 1937 Act, the SamCERA Mission and Goals and other legal requirements, the SamCERA Board has established this Investment Policy.

2.0 MANAGEMENT OF THE FUND

A. ROLES AND PRINCIPAL DUTIES

The Fund investments shall be prudently planned, implemented, managed, and monitored by the Board. Investment Staff (the “Staff”), Investment Consultant (the “Consultant”), Custodian Bank (the “Custodian”), and Investment Managers (the “Managers”) shall support the Board in this activity. The roles are set forth below:

1. The Board establishes and maintains the investment policy, including: investment philosophy, investment objectives, strategic asset allocation, allocation-level performance benchmarks, and risk philosophy. The Board makes investment and monitoring decisions based upon the recommendations of Staff, Consultants, and other service providers engaged by the Board. The Board reviews and monitors all investments, as well as the policies, guidelines and procedures required to prudently administer the Fund and to effectively mitigate risk to the Fund. From time to time, the Board will utilize its Investment Committee to assist the Board in these activities and related specified tasks.
2. Staff oversees the Fund’s investment program activities, implements the Board’s decisions, manages the existing fund investments, and makes recommendations to the Board regarding Fund management, including investment-related policies and procedures. Staff makes recommendations regarding the selection of the Consultant, Managers, Custodian as set forth below and monitors the performance and compliance of these and other investment related service providers.
3. The Consultant reviews, analyzes and evaluates the Fund’s effectiveness and efficiency and makes fund management related recommendations. Consultant assists Staff in implementing the Board’s decisions and developing all investment-related policies. Consultant’s responsibilities are detailed in the service agreement between SamCERA and Consultant.
4. The Custodian provides custody of SamCERA’s investment assets. In addition, the Custodian manages the securities lending program. The Custodian’s responsibilities are detailed in the service agreement between SamCERA and Custodian.
5. The Managers manage their mandated allocations in accordance with all applicable laws, Board-established policies, guidelines and procedures, as well as specific investment guidelines. For separately managed accounts, managers’ responsibilities are detailed in the Investment Management Agreements (IMA) between SamCERA and each Manager. For commingled funds, managers’ responsibilities are detailed in the related Fund documents.

B. INVESTMENT PORTFOLIO MANAGEMENT

The Board, with the assistance of Staff and Consultant, select and monitor Managers to manage the assets of the Fund.

1. Hiring New Managers

For public markets manager searches (i.e. non private equity and private real assets), Staff will inform the Board about the search process, including scope of the mandate, and the investment style, benchmark, and the minimum qualifications for candidates. Staff will update the Board on the short list of potential managers. Consultant and Staff will perform due diligence activities deemed applicable by the Chief Investment Officer, which may include analysis of performance records, meetings, due diligence questionnaires, interviews, and on-site visits. Upon completion of such due diligence, Staff and Consultant will bring a finalist to the Board for approval. The recommendation shall provide the Board with a summary description of the conducted due diligence activities.

For private markets (private equity and private real assets), the Consultant, with Staff input, sources managers that can best fit the desired mandate consistent with the annual pacing study and applicable investment policy. Consultant and Staff will bring potential private markets opportunities to the Board for approval. An exception to this policy is when a decision for a private market investment must be made prior to the date of the next regularly scheduled Board meeting. In these instances, and for investments of \$35 million or less, the Chief Executive Officer is authorized to make an investment-related decision after consulting with the Board Chair, or if the Chair is not available, the Vice Chair, and one member of the Investment Committee as long as such decision is in the best interest of the fund and consistent with applicable Board policy. Any action under this authorization will be reported to the Board at a subsequent regularly scheduled meeting.

2. Managing and Monitoring Existing Managers

The Board monitors the individual investment managers on a continuous basis through information provided by Staff, the Consultant, the Managers, and other investment service providers. Monthly, the Chief Investment Officer will present a preliminary performance report to the Board that is meant to provide a high-level summary of how the fund and each monthly-valued manager is performing. In addition, for SamCERA's separate accounts, Staff receives holdings and attribution reports from each separate account Manager on a monthly basis. For commingled funds, staff receives from the Manager either monthly or quarterly portfolio performance, attribution, exposure, and commentary reports.

Quarterly, the Consultant, with assistance from the Chief Investment Officer, will present an investment performance report to the Board, as specified in Section 14.0 (Quarterly Investment

Performance Reporting) in the Investment Policy. This report provides a more detailed performance attribution for the total plan and individual Managers, and helps to identify any short-term outlier deviations from expectations.

Semi-annually (month-end June and December of each year), every public markets (i.e. not private equity or private real asset) Manager completes a compliance statement identifying any significant firm, regulatory, and portfolio issues. In addition, semi-annually as of June and December of each year, Consultant will present performance reports for both the Private Equity and Private Real Assets programs that summarize each program and shows total program performance and program diversification by strategy, geography, industry, and vintage year.

Annually, Staff and Consultant will convene an investment strategy session, as specified in Section 15.0 (Annual Investment Strategy) in the Investment Policy, to allow a longer-term assessment of the Managers and the total fund performance. Lastly, all public markets Managers are interviewed annually by Staff and Consultant, and must complete a due diligence questionnaire.

During these presentations at SamCERA, Managers will provide an update on the Manager's organization and business plan, any changes to the investment process, and a summary of investment performance. Staff and Consultant report to the Board following these meetings.

After the Board approves an initial investment to be held in a separate account or open-end evergreen commingled fund, staff will be responsible for managing that allocation, including initiating any adjustments to that allocation amount, consistent with the allocation ranges outlined in Section 6.0. For those investments held in closed-end (or non-perpetual life) commingled funds (e.g. private equity, private real assets, private credit, value-add real estate), staff will seek Board approval for any additional allocation to those funds, including re-up commitments, unless the timing of the decision is subject to the policy exception set forth in paragraph 1.

3. Terminating Existing Managers

The Board recognizes investments may need to be adjusted or removed from the Fund from time to time for a variety of reasons, including organization changes at the Manager, changes in Manager style, underperformance relative to expectations, and the Managers' strategy is no longer appropriate for the fund. The Board determines if a Manager should be terminated after receiving input and or recommendations from Staff and Consultant.

In situations in which developments give immediate concern that an investment with a Manager is no longer prudent for the investment program and a termination or other related investment decision should be made prior to the next regularly scheduled Board meeting, the Chief Executive Officer is authorized to terminate the Manager and or move Fund assets after consulting with the Board Chair (or Vice Chair or Secretary based on availability, in that order) and one member

of the Investment Committee. Situations causing an immediate concern, include, but are not limited to, when: (1) the firm suffers the resignation or other loss of its key portfolio managers on the strategy, (2) the firm dissolves, ceases to exist, or is otherwise incapable of carrying out its activities in the ordinary course of its business, (3) the firm is actually or effectively shut down by a regulatory agency or is accused of theft or fraud or other serious malfeasance by a regulatory agency, or (4) the fund's investment is in jeopardy of material loss. The Board will be promptly notified of the determination by the Chief Executive Officer.

3.0 INVESTMENT OBJECTIVES

The Board shall develop an investment program, consistent with the Investment Beliefs and General Investment Policies as stipulated in Sections 4.0 and 5.0, respectively, in order to meet the following objectives:

- A. Generate risk-adjusted returns that exceed the Asset Allocation Policy Benchmark (as defined in Section 6.0) on a net-of-fee basis over five-year rolling periods.
- B. Achieve a Fund return that meets or exceeds the long-term forecast of capital market returns for the asset allocation portfolio benchmark over multiple economic cycles (e.g. 15-20 years).
- C. Provide a more consistent return stream than a traditional 60% Equity / 40% Fixed Income portfolio as measured by lower portfolio drawdowns over a full market cycle.

4.0 INVESTMENT BELIEFS

The following section summarizes the Board's investment beliefs that have guided it in the development of this Policy document and will guide it in the oversight of the Plan assets.

- Strategic asset allocation is the primary driver of portfolio risk and return.
- SamCERA should have a long-term horizon and not be tempted to deviate from its long-term plan in response to short-term volatility.
- Everything else being equal, simplicity is preferred over complexity.
- For those asset classes evidencing market efficiencies, the manager structure may favor the employment of passive strategies.
- Focus on income and capital appreciation should be balanced and not overly dependent on one or the other.
- Diversification is fundamental.
- There is no single definition of risk. There are various measures of 'risk' that can be used for various purposes.
- The portfolio should be diversified across many risk dimensions/timeframes.

- SamCERA should not pursue investments that will not adequately compensate it for the risks that those investments bring.
- Costs matter.

5.0 GENERAL INVESTMENT POLICIES

Consistent with the investment beliefs contained in Section 4.0, it is the investment policy of the Board to:

- Achieve long-term risk-adjusted returns consistent with its fiduciary duty.
- Pursue an investment strategy that reduces the volatility of returns through prudent diversification of the portfolio across a broad selection of distinct asset classes, as provided for in Section 6.0 of this Investment Policy.
- Further diversify other risks, including extreme events, liquidity, and leverage by looking beyond traditional asset class definitions by utilizing multiple lenses on portfolio risks.
- Adopt an asset allocation target to guide the structure of the investment portfolio, as provided for in Section 6.0, and reevaluate on an annual basis.
- Reevaluate the asset-liability study every three to five years.
- Delegate to staff the management of existing investment managers, and for those strategies in separately managed accounts and evergreen (or open-end) commingled fund structures, the on-going adjustments to allocations to such managers consistent with the investment policies and investment ranges contained in Section 6.0.
- Delegate full discretion, including whether to include environmental, social, and governance factors, if such factors have a direct relationship to the economic and financial value of an investment, when analyzing the financial merits of competing investment choices on behalf of SamCERA, to each investment manager to the extent authorized in their Investment Management Agreement (IMA).
- Adopt objectives that encourage investment managers to maximize their performance, within acceptable risk parameters, relative to their individual investment style benchmark.
- Refrain from drastically shifting asset class allocations over short time spans, unless it is in the Fund's best interest to do so.
- Rebalance the portfolio in accordance with the Rebalancing Policy set forth in Section 7.0.

6.0 ASSET ALLOCATION & PORTFOLIO STRUCTURE

A. Asset Allocation by Performance Driver

In addition to grouping investments into traditional asset classes (Public Equity, Fixed Income, Alternative Assets, Inflation Hedge and Liquidity), SamCERA also groups its investments by the underlying performance drivers within each asset class composite. As part of this process, SamCERA classifies its portfolio into three main drivers of performance listed below.

Growth

The Growth category includes assets in which their primary driver of returns is tied to the general strength of economic output. These assets will generally do well when economic conditions are favorable, but generally struggle in times of economic weakness and recession. Assets classified in the Growth category include Public Equity (consisting of U.S. and International Equity), Private Equity within Alternatives, and Opportunistic Credit within Fixed Income.

Diversifying

Diversifying assets provide protection from equity risk and may be characterized as being more defensive (i.e. may help provide stability when markets fall) or more absolute-return oriented (i.e. performance is not as dependent on the overall strength of equity markets). Assets classified in the Diversifying category include Core Fixed Income, Liquidity, and Absolute Return within Alternatives.

Inflation Hedge

Lastly, Inflation Hedge assets provide additional diversification from equity risk and provide a potential hedge against unexpected inflation. Assets classified in this category include Real Estate, Public Real Assets, and Private Real Assets.

Asset Allocation Policy			
Performance Driver View	Target Allocation	Rebalancing Range	Traditional Asset Class View **
Growth	575%	±3%	
Public Equity	<u>4139%</u>	±3%	Public Equity
Private Equity *	6%	±2%	Alternatives
Opportunistic Credit	10%	±2%	Fixed Income
Diversifying	268%	±2%	
Core Fixed Income	<u>1824%</u>	±2%	Fixed Income

Absolute Return	7 6%	±2%	Alternatives
Liquidity	1%	±2%	Liquidity
Inflation Hedge	17%	±2%	
Real Estate	9 10%	±2%	Inflation Hedge
Private Real Assets *	4 3%	±2%	Inflation Hedge
Public Real Assets	4%	±2%	Inflation Hedge

* Recognizing the illiquidity of the asset class, rebalancing will be considered over six- to twelve-month periods.

** Traditional Asset Allocation: ~~39~~41% Public Equity, ~~34~~28% Fixed Income, ~~12~~13% Alternatives, 17% Inflation Hedge, and 1% Liquidity.

B. Growth Asset Allocation

Growth assets shall be allocated to managers within the following asset/sub-asset classes:

GROWTH ASSET CLASSES	TARGET ALLOCATION	REBALANCE RANGE
Public Equity	41 39%	±3%
Large Capitalization Domestic	20 19.0%	±2%
Passive Core	9 8.0%	±2%
Active Core	3.0%	±2%
Active Low-Volatility Core	8.0%	±2%
Small Capitalization Domestic	2.0%	±2%
Active Core	2.0%	±2%
International	19 8.0%	±2%
Passive Core	6 .40%	±2%
Growth	6 .30%	±2%
Value	6 .30%	±2%
Private Equity	6%	±2%
Opportunistic Credit	10%	±2%
Total Growth	56 75%	±3%

C. Diversifying Asset Allocation

Diversifying assets shall be allocated to managers within the following asset/sub-asset classes:

DIVERSIFYING ASSET CLASSES	TARGET ALLOCATION	REBALANCE RANGE
Core Fixed Income	18.21 %	±2%
Core	104.0 %	±2%
Core Securitized	4.0%	±2%
Core Unconstrained	43.0 %	±2%
Absolute Return	7.6 %	±2%
Liquidity	1%	±2%
TOTAL DIVERSIFYING	268 %	±2%

D. Inflation Hedge Asset Allocation

Inflation Hedge assets shall be allocated as follows:

INFLATION HEDGE ASSET CLASSES	TARGET ALLOCATION	REBALANCE RANGE
Real Estate	910.0	±2%
Private Real Assets	43.0 %	±2%
Public Real Assets	4.0%	±2%
TOTAL INFLATION HEDGE ASSETS	17.0%	±2%

E. Asset Allocation Policy Benchmark

The Asset Allocation Policy Benchmark defined below is derived by assigning a passive benchmark to each of the sub-asset classes referenced in Sections 6.0 (A) through 6.0 (D) and weighting each by the Target Allocation. The performance of the Asset Allocation Policy Benchmark is computed by the Plan's investment consultant.

Benchmark	Asset Allocation Policy Benchmark
Growth Assets	575 %
Russell 3000 Index	221 %
MSCI ACWI x US IMI Index Hedged*	198 %
Russell 3000 +3% (One Quarter Lagged)	6%
BC BA Intermediate High Yield Index	10%

Diversifying Assets	268%
BC Aggregate Index	182 1%
SOFR + 4%	7 6%
91 Day T-Bills	1%
Inflation Hedge	17%
NCREIF ODCE	9 10%
Custom Private Real Asset Index**	4 3%
Custom Public Real Asset Index***	4%

* 50% hedge ratio starting 10/1/19.

**Comprised of 75% S&P Global Infrastructure Index and 25% S&P Global LargeMidCap Commodity and Resources Index + 2% (One Quarter Lagged)

***Comprised of 25% Bloomberg Roll Select Commodity Index, 25% Bloomberg US TIPS Index, 25% S&P Global LargeMidCap Commodity and Resources Index, and 25% S&P Global Infrastructure Index.

7.0 REBALANCING POLICY

- A. The Chief Investment Officer (CIO) shall rebalance the portfolio as needed in conformance with the asset allocation tactical ranges set forth in Section 6.0.
- B. The potential need to rebalance will be continuously monitored, and will be subject to deviations within the established rebalance ranges specified in Section 6.0.
- C. The CIO will have discretion to rebalance to Target or to some other allocation, as long as it is within policy ranges.
- D. Cash flows will be used first to rebalance, and to the extent possible, exchange-traded derivatives will be used to rebalance in a cost-effective manner.
- E. All rebalancing activity shall be reported to the Board at the next scheduled meeting.

8.0 GENERAL MANAGER INVESTMENT PERFORMANCE POLICIES

The responsibility for securities selection, purchase and sale decisions, and proxy voting (where appropriate) is delegated to the external investment managers. The individual investment guideline parameters (including diversification constraints, concentration limits, asset type exclusions, etc.) and performance objectives for each investment manager will be established within the IMA or other applicable legal agreement(s) with each firm.

The Board expects to measure investment performance quarterly and will generally follow prudent time horizons when evaluating short term, intermediate term, and long term performance of its investment managers. Generally, the Board defines underperformance as: Cumulative annualized performance (net of fees) over a three-year period below a broad market-based benchmark return times 0.9, or five year return (net of fees) below the broad market based benchmark return.

Performance will also be evaluated in light of the manager's stated style and discipline.

9.0 GROWTH ASSETS INVESTMENT POLICIES

GROWTH ASSETS OVERVIEW:

Assets classified in the Growth category include Public Equity (consisting of U.S. and International Equity), Private Equity within Alternatives, and Opportunistic Credit within Fixed Income.

Public Equity: Public equity assets include funds shares/stock of a company through a public market. SamCERA invests utilizing both passive approaches (meant to track the performance and characteristics of major market indices, like the Russell 1000 Index and MSCI ACWI ex US IMI Index), and via active approaches that are meant to outperform the major market benchmarks. Public Equity is expected to produce returns higher than that provided from Fixed Income but at potentially higher levels of volatility. Exposure to this asset class will provide return streams generally correlated to that of general economic growth. There are two primary components to the Public Equity category: 1) Domestic Equity, and 2) International Equity.

1) Domestic Equity: SamCERA further breaks out its U.S. public equity holdings into two sub-composites: 1) U.S. Large Capitalization Domestic, which is comprised of U.S. companies valued generally over \$10 billion, and 2) U.S. Small Capitalization Domestic, which is comprised of U.S. companies valued generally under \$2 billion.

For the domestic equity program, the majority of the tracking error will come from stock selection via active management as the overall manager structure for domestic equities will not possess any significant biases in terms of investment style. The Domestic Equity composite will consist of two sub-composites: 1) Large-Capitalization Equity, and 2) Small-Capitalization Equity. Large Capitalization Equity will consist of four Core strategies: one passive, one low-tracking error active, and two low-volatility active strategies. Small-Capitalization Equity will consist of an actively-managed Core strategy.

2) International Equity: International Equity consists of developed (public companies domiciled in developed market countries such as Germany, France, UK, Japan, etc.) and emerging markets (public companies domiciled in emerging market countries such as China, Brazil, Mexico, Russia, etc.)

International Equity will consist of three strategies: 1) a passive Core component, 2) Active Value, and 3) Active Growth. All three strategies will have exposure to both developed and emerging markets.

Private Equity: Private Equity are funds, typically illiquid investments, that directly invest in private companies, or that engage in buyouts of public companies. Private Equity is expected to be one of the highest returning asset classes over the long-term. Its role in the portfolio is to provide high return potential in order to maximize the ability of the Fund to meet its performance objectives.

The Private Equity program will contain manager allocations to three primary sub-categories: 1) Buyouts, 2) Venture Capital, and 3) Debt/Special Situations. These allocations will be implemented via allocation to primary and secondary fund investments and co-investment opportunities. The sub-allocation targets and target ranges are summarized below:

Sub-Category	Target Allocation	Range
Buyouts	60%	+/- 20%
Venture Capital	20%	0 – 30%
Debt/Special Situations	20%	+/- 10%

The responsibility for private equity sourcing is delegated to SamCERA’s investment consultant. The private equity portfolio shall adhere to the following investment guidelines covering diversification and quality:

(a) **Diversification:** Subject to availability of sufficient attractive opportunities, the portfolio is to be diversified over multiple years by the following:

Vintage Year: It is expected that roughly equal amounts of new funding will be committed in each calendar year, with deviations permitted to accommodate market opportunities and to facilitate initial entry into the asset class.

Investment Manager: The reported value plus unfunded commitments of any one investment manager (excluding fund of funds) up to no more than twenty (20) percent of the reported value plus unfunded commitments of the total private equity portfolio.

Geography: Through commitments to funds located and/or investing both in and outside of the United States.

Industry: It is expected that the private equity portfolio will be generally diversified by sector/industry.

(b) **Quality:** All commitments to private equity by SamCERA must be of institutional quality as evidenced by other tax-exempt institutional investors’ commitments to the investment manager’s prior or current funds.

Fund managers are expected to comply with SamCERA’s private placement disclosure rules.

Opportunistic Credit: Fixed income assets are debt investments that provide a return in periodic payments in debt instruments issued by governments and corporations. Opportunistic Credit is expected to be the highest-risk category within fixed income, and will be used to enhance return by investing via public and private investments in non-traditional sectors of the fixed income market, including emerging market debt, high yield bonds, direct lending, bank loans, convertible bonds, and CMBS/ABS securities. This sub-category will be exposed to general economic risk factors, similar to public equities, but may provide a steadier stream of returns than public equity asset classes.

GROWTH ASSETS PERFORMANCE OBJECTIVE:

The performance objective of the Growth Assets Composite is to outperform, on a net-of-fee basis, a customized index (Customized Benchmark Portfolio) incorporating the weighted average components for four composite sub-asset classes (which results in the following weights: ~~398%~~ Russell 3000, 33% MSCI ACWI ex US IMI Index hedged*, 11% Russell 3000 Index + 3% (one quarter lagged), and ~~178%~~ Barclays BA Intermediate High Yield Index).

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The Public Equity composite has a maximum tracking error of 3% to its composite benchmark. ~~while the Opportunistic Credit composite has a maximum tracking error of 2% to its composite benchmark.~~

GROWTH ASSETS RISK EXPOSURES AND RISK MITIGATION:

Public Equity: The primary risk factors for Public Equity are correlation to general economic growth, high volatility in returns, and potential illiquidity in smaller-capitalization and certain emerging market stocks. SamCERA will control for these risk factors by diversifying the plan across assets that exhibit limited correlation to economic growth. In addition, SamCERA's rebalancing ranges for small-cap equity will help ensure adequate diversification within the equity portion of the SamCERA portfolio.

Private Equity: Private Equity, while expected to provide attractive returns, also have a number of risks. Chief among these are illiquidity risk and leverage. By their nature Private Equity is generally illiquid in that the life of these fund investments can be as long as ten to twelve years. SamCERA recognizes that this illiquidity is a necessary characteristic (and source of return premium) for these asset classes and as such will endeavor to take this illiquidity into account at the total plan level when addressing total plan liquidity needs during strategic planning asset liability studies. Leverage can be employed by private equity managers to enhance the overall risk-adjusted returns. SamCERA will control leverage exposure through partnership selection and portfolio construction and diversification.

Opportunistic Credit: Opportunistic Credit is generally the highest risk, lowest liquidity sub-category within Fixed Income. SamCERA will take into account unique risk factors when constructing the fixed income portfolio to help ensure that the overall risk profile of the total portfolio is consistent with expectations. Opportunistic Credit typically includes the risk factors contained in Core and Core Unconstrained, but, depending on the mandate, with higher emphasis to credit default risks, emerging markets sovereign/corporate default risk, potential leverage, and potential illiquidity. It is expected that strategies within Opportunistic Credit will have a maximum leverage ratio of 2.5x at the fund level (i.e. certain holdings may be levered higher than the 2.5x limit, as long as the fund (or strategy) has a maximum 2.5x leverage). Strategies employing higher leverage will be relegated to the debt/special situations category of Private Equity (see above).

GROWTH ASSET CLASSES	BENCHMARK INDEX
Growth Assets	Customized Benchmark Portfolio
Public Equity	
Domestic Equity	Russell 3000
Large Capitalization Domestic Equity	Russell 1000
Passive Core	Russell 1000
Active Core	Russell 1000
Active Low Volatility Core	Russell 1000
Small Capitalization Domestic Equity	Russell 2000
Active Core	Russell 2000
International Equity	MSCI All Country World ex US IMI hedged*
International Passive Core	MSCI ACWI ex US IMI
International Growth	MSCI ACWI Free ex US Growth
International Value	MSCI ACWI Free ex US Value
Private Equity	Russell 3000 + 3% (One Quarter Lagged)
Opportunistic Credit	Barclays Capital BA Intermediate High Yield Index

* 50% hedge ratio starting 10/1/19.

10.0 DIVERSIFYING ASSETS INVESTMENT POLICIES

DIVERSIFYING ASSETS OVERVIEW:

Assets classified in the Diversifying category include Core Fixed Income, Absolute Return within Alternatives, and Liquidity.

Fixed Income: Fixed income assets are debt investments that provide a return in periodic payments in debt instruments issued by governments and corporations. Core Fixed Income is generally the lowest risk and highest liquidity sub-category within Fixed Income. It is expected to provide a lower, but steadier stream of returns than public equity asset classes, and also to reduce the risk of the overall portfolio as bonds have lower risk than most other major asset classes. That said, there are a number of sub-categories within Core Fixed Income, which exhibit different risk/return trade-offs and hold slightly different tasks in terms of role in the portfolio, but have the common goal of dampening portfolio volatility. Core Fixed Income is broken out into three subcategories:

- 1) Core, 2) Core Securitized, and 3) Core Unconstrained

Core: Core is generally considered ~~a the~~ ~~lower~~ ~~st~~-risk fixed income category, and one that invests in primarily liquid, investment grade U.S. Dollar denominated bonds. It also generally consists of sectors that comprise the Bloomberg Barclays Aggregate Bond Index. Core's role in the portfolio is to dampen portfolio volatility and protect the portfolio in times of economic duress.

Core Securitized: Core Securitized is a low/medium-risk fixed income sub-category, and contains securitized sectors, including mortgage-backed securities, commercial mortgage-backed securities, and asset-backed securities. Core Securitized's role in the portfolio, in addition to dampening portfolio volatility, is to provide higher yield and slightly lower interest rate sensitivity as compared to the Bloomberg Barclays Aggregate Bond Index.

Core Unconstrained: Core Unconstrained is a medium-risk fixed income sub-category, and contains the sectors contained in Core plus high yield (below investment grade bonds), non-U.S. Dollar denominated bonds, and emerging market fixed income securities. Core Unconstrained's role in the portfolio is a combination of total portfolio volatility dampening and some moderate return enhancement.

Absolute Return: The Absolute Return category will focus on funds that have an absolute return orientation and are not expected to contain significant levels of public market beta over the long term. This category is expected to provide a diversifying return stream to the total plan that is not correlated to the public markets. Suitable investment strategies include multi-strategy funds, alternative risk premia funds, GTAA or global macro funds, and CTA/Managed Futures trend following funds. It is expected that this category will be implemented via commingled funds and not in separate accounts so that SamCERA's investment in any single fund would be 'ring-fenced' (i.e. any potential losses would be limited to the investment in the single fund, and not extend to the total plan assets).

Liquidity: The Liquidity category currently consists of cash and cash-equivalent type investments with short duration.

DIVERSIFYING ASSETS PERFORMANCE OBJECTIVE:

The performance objective of the Diversifying Assets Composite is to outperform, on a net-of-fee-basis, a customized index (Customized Benchmark Portfolio) incorporating the weighted average components for three composite sub-asset classes (which results in the following weights: 69.75% Bloomberg Barclays Aggregate Index, 27.1% to SOFR + 4%, and 4% to 91 Day T-Bills). The Core Fixed Income sub-asset class has a maximum tracking error of 3.2% to its composite benchmark.

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DIVERSIFYING ASSETS RISK EXPOSURES AND RISK MITIGATION:

The Core Fixed Income sub-sectors have different risk factor exposures. SamCERA will take into account these unique risk factors when constructing the Core Fixed Income portfolio to help ensure that the overall risk profile of the total portfolio is consistent with expectations.

Core: The primary risk factors are sensitivity to changes in interest rates, changes in mortgage prepayment speeds, and investment-grade corporate and sovereign credit risk.

Core Securitized: The primary risk factors are complexity, credit and prepayment risk across various securitized sectors (e.g. ABS, CMBS, and RMBS) with interest rate sensitivity being a relatively lower risk factor as compared to assets within Core (above). The focus is on higher quality securitized investments to minimize credit risk.

Core Unconstrained: The primary risk factors typically include the risk factors found in Core with additional exposures to high-yield default risks, emerging markets sovereign/corporate default risk, and potential illiquidity. The allocation to these risk exposures will be dynamic over time as the portfolio is not constrained to a benchmark.

Absolute Return: Absolute Return, while expected to provide attractive returns that are less correlated to the returns provided by public asset classes, also has a number of risks. Chief among these is leverage. Leverage can be employed by absolute return managers to enhance the overall risk-adjusted returns. SamCERA will control leverage exposure through fund selection as well as portfolio construction and diversification.

DIVERSIFYING ASSET CLASSES	BENCHMARK INDEX
DIVERSIFYING ASSETS	CUSTOMIZED BENCHMARK PORTFOLIO
Core Fixed Income	
Core/Core Securitized/Core Unconstrained	Bloomberg Barclays Aggregate Bond Index
Absolute Return	SOFR + 4%

11.0 INFLATION HEDGE INVESTMENT POLICIES

INFLATION HEDGE OVERVIEW:

The Inflation Hedge category combines inflation-sensitive assets under a single asset class to simplify the asset allocation process and enable better performance monitoring of the plan’s overall, direct exposure to assets with inflation-hedging properties. The plan also has indirect exposure to inflation-sensitive assets through other asset classes, such as Public Equity, Fixed Income, and Alternatives. When determining the appropriate allocation of inflation protection, both direct and indirect exposures to inflation-sensitive assets across the plan are taken into account. The Inflation Hedge category is expected to provide a high degree of inflation beta, attractive risk-adjusted returns and diversification benefits to the overall plan.

Inflation Hedge is broken out into four subcategories:

- 1) Real Estate, 2) Private Real Assets, and 3) Public Real Assets

Real Estate: Real Estate is expected to provide a return and risk profile between that provided by fixed income and equities. Real estate will be composed of three sub-categories: 1) Core, 2) Value-Add, and 3) Debt. The majority of exposure will be in Core real estate assets of the highest quality located in the best locations in North America, Europe, and Asia. Value-Add properties are expected to provide somewhat higher return potential along with somewhat higher risk than Core assets. Real Estate Debt strategies range from lower risk senior loans on stable properties to higher risk/return mezzanine and construction loans. SamCERA utilizes Debt strategies for risk mitigation and to enhance the portfolio’s yield.

Income will be a large part of the return stream generated from the Real Estate portfolio. The role of this portfolio is to provide diversification benefits, some protection against

unanticipated inflation, and a steady income stream. Higher risk Opportunistic/Development real estate strategies will reside in the Private Real Assets composite due to their higher-risk, longer time horizon, and the less liquid nature of the investment set compared to Core, Value-Add, and Debt strategies. The sub-allocation targets and target ranges are summarized below:

Real Estate Strategy	Target Allocation	Range
Core Real Estate	60%	50 -70%
Value-Add Real Estate	20%	0 - 30%
Real Estate Debt	20%	0 - 30%

Private Real Assets: Private Real Assets are expected to provide attractive total and risk-adjusted returns that exhibit low correlations with traditional asset classes but positive correlation with inflation. Private Real Assets will be composed of two sub-categories: 1) Infrastructure (Core and Value-Add, Secondary, Midstream Energy, and Power), and 2) Natural Resources (Energy Exploration & Production, Mining, Farmland, Timber, and Water). These allocations will be implemented via allocation to primary and secondary fund investments and co-investment opportunities. The sub-allocation targets and target ranges are summarized below:

Sub-Category	Target Allocation	Range
Infrastructure	75%	+/- 25%
Natural Resources	25%	+/- 25%

Public Real Assets: Similar to Private Real Assets, Public Real Assets is expected to provide positive correlation to inflation, but with potentially higher beta to public equity markets. Public Real Assets may be used to fund new strategies in Private Real Assets and will be composed of four sub-categories: 1) Commodities, 2) U.S. TIPS, 3) Listed Global Natural Resources, and 4) Listed Global Infrastructure. All four sub-categories are meant to provide some protection from higher levels of unanticipated inflation while providing a diversifying return stream from that of public markets.

The sub-allocation targets and target ranges are summarized below:

Sub-Category	Target Allocation	Range
Commodities	25%	0 - 50%

U.S. TIPS	25%	0 - 50%
Listed Global Natural Resources	25%	0 – 50%
Listed Global Infrastructure	25%	0 – 50%

INFLATION HEDGE PERFORMANCE OBJECTIVE:

The performance objective of the Inflation Hedge Composite is to outperform, on a net-of-fee basis, a customized index (Customized Benchmark Portfolio) incorporating the weighted average components for three composite sub-asset classes (which results in the following weights: 53.9% NCREIF ODCE, 23.5% Custom Public Real Asset Index, and 23.518% Custom Private Real Asset Index).

INFLATION HEDGE RISK EXPOSURES AND RISK MITIGATION:

Real Estate: Many real estate funds utilize leverage to enhance returns. Lack of liquidity is also a concern, but less so for core real estate and senior debt investments. Value-add, mezzanine debt, and opportunistic strategies also tend to have more exposure to general economic conditions than core properties.

These risks will be mitigated in a number of ways. First, the primary emphasis of SamCERA’s real estate program will be focused on Core properties, with a secondary emphasis to Value-Add properties and Debt strategies. Opportunistic-oriented strategies will reside in our Private Real Assets portfolio due to their higher risk profile. In addition, SamCERA’s core real estate fund has a leverage limit of 35%, and SamCERA also sits on the Fund’s Advisory Committee.

Private Real Assets: By their nature, Private Real Assets are generally illiquid in that the life of these fund investments can be as long as ten to twelve years. SamCERA recognizes that this illiquidity is a necessary characteristic (and source of return premium) for these asset classes and as such will endeavor to take this illiquidity into account at the total plan level when addressing total plan liquidity needs during strategic planning asset liability studies. Leverage can be employed by alternative managers to enhance the overall risk-adjusted returns. SamCERA will control leverage exposure through partnership selection and portfolio construction and diversification.

INFLATION HEDGE ASSET CLASSES	BENCHMARK INDEX
INFLATION HEDGE ASSETS	CUSTOMIZED BENCHMARK PORTFOLIO
REAL ESTATE	NCREIF ODCE
PRIVATE REAL ASSETS	CUSTOM PRIVATE REAL ASSET INDEX
PUBLIC REAL ASSETS	CUSTOM PUBLIC REAL ASSET INDEX

12.0 QUARTERLY INVESTMENT PERFORMANCE REPORTING

The quarterly investment performance reports will be designed as a risk management tool and will afford the Board the opportunity to timely identify potential risk issues within the portfolio and to assess the relative performance of the investment managers.

The report will provide sufficient information to assess the following:

- A. Total and active risk assessment at total fund, composite and individual manager level.
- B. Performance attribution at total fund, composite and individual manager level.
- C. Adherence to the investment style for which the manager is retained, as measured by the quarterly risk adjusted active return (deviation of the manager's performance from the specified performance benchmark) over the last quarter, six months, one-, three-, and five-year periods, including updates from previous quarterly reports regarding adherence to the style for which the firm was retained;
- D. Ability of the active manager to demonstrate consistently positive information ratios, including updates from previous quarterly reports regarding the firm's information ratios;
- E. Quarterly, annual, three- and five-year total time-weighted returns relative to the specified performance benchmark and manager style peer group.

13.0 ANNUAL INVESTMENT STRATEGY

Annually, the Board/Staff shall convene an investment strategy session (typically as part of the annual retreat) with the objective of addressing strategic investment policy issues and to deliberate any policies that could benefit the performance of the retirement Fund. The agenda for these sessions should include (but is not limited to) the following information:

- (a) Compare the Fund's actual investment performance for the prior fiscal year against the investment objectives set forth in Section 3.0 and evaluate the relative success or failure of the prior year's performance; specific commentary to this objective shall be an integral part of the performance measurement process.
- (b) Compare each investment manager's investment performance for the prior fiscal year against the relevant benchmarks and peer groups and evaluate the relative success or failure of their prior year's performance.
- (c) Evaluate and review the total Fund performance attribution and contribution to return at the composite level to isolate performance drivers.
- (d) Evaluate and review the various risk exposures of the plan versus appropriate policy limits and on-going trends through time.
- (e) Evaluate and review the portfolio rebalancing activity for the year.
- (f) Evaluate the Fund's liquidity requirements for the current and next fiscal years.
- (g) Compare each investment manager's fees to their respective peer universe.

14.0 PROXY VOTING

The Investment Managers are delegated authority for the voting of proxies, subject to the following guidelines:

- A. All proxies shall be voted in the best interest of the shareholders, but in no instance shall the economic interests of the retirement Fund be subordinated to any other interest.
- B. Investment managers shall provide staff with quarterly reports on all proxies cast, in a mutually acceptable format.

15.0 SECURITIES LENDING

- A. Pursuant to Section 2.0 (A), the Custodian shall manage a securities lending program to enhance income in accordance with the terms and conditions set forth in a mutually acceptable securities lending agreement and guaranty.
- B. The Board reserves exclusive authority to approve the securities lending agreement prior to the commencement of securities lending activity.
- C. Unless otherwise specified in the agreement(s):
 - (i) All loans shall be marked-to-market daily.
 - (ii) Collateral on each loan shall be maintained daily at 102% of loan value for domestic securities and 105% of loan value for international securities.
 - (iii) Acceptable collateral shall be in the form of cash or obligations issued or guaranteed by the U.S. Government, or its agencies or instrumentalities.
 - (iv) Borrower must have a long-term credit rating of either "A" from S&P or "A2" from Moody's. For split rated borrowers, the higher rating shall prevail if not the same rating, with the lower rating having a minimum long-term credit rating of either "A-" from S&P or "A3" from Moody's.
 - (v) The maximum allowable amount of assets on loan to any single borrower shall not be greater than \$3 million.
 - (vi) The maximum total amount of program assets on loan shall not be greater than \$10 million.
- D. The Chief Investment Officer shall be responsible for monitoring the securities lending program and recommending changes as appropriate.

APPENDIX A

SAN MATEO COUNTY EMPLOYEES' RETIREMENT ASSOCIATION
Investment Committee Charter as Amended
RESOLUTION 99-00-09

*This Resolution, adopted by the Board of Retirement (Board)
of the San Mateo County Employees' Retirement Association (SamCERA),
sets forth the Charter for the Board's Investment Committee.*

WHEREAS, Article XVI, §17 of the Constitution of the State of California as amended in 1992 to read, in pertinent part, as follows:

Notwithstanding any other provisions of law or this Constitution to the contrary, the retirement board of a public pension or retirement system shall have plenary authority and fiduciary responsibility for investment of moneys and administration of the system, subject to all of the following:

(a) The retirement board ... shall have the sole and exclusive fiduciary responsibility over the assets of the ... system. The retirement board shall also have sole and exclusive responsibility to administer the system in a manner that will assure prompt delivery of benefits and related services to the participants and their beneficiaries. The assets ... are trust funds and shall be held for the exclusive purposes of providing benefits to participants ... and their beneficiaries and defraying reasonable expenses of administering the system.

(b) The members of the retirement board ... shall discharge their duties with respect to the system solely in the interest of, and for the exclusive purposes of providing benefits to, participants and their beneficiaries, minimizing employer contributions thereto, and defraying reasonable expenses of administering the system. A retirement board's duty to its participants and their beneficiaries shall take precedence over any other duty.

(c) The members of the retirement board ... shall discharge their duties with respect to the system with the care, skill, prudence, and diligence under the circumstances then prevailing that a prudent person acting in a like capacity and familiar with these matters would use in the conduct of an enterprise of a like character and with like aims.

(d) The members of the retirement board...shall diversify the investments of the system so as to minimize the risk of loss and to maximize the rate of return, unless under the circumstances it is clearly not prudent to do so.

(e) The retirement board..., consistent with the exclusive fiduciary responsibilities vested in it, shall have the sole and exclusive power to provide for actuarial services in order to assure the competency of the assets of the... system. &

WHEREAS, California Government Code §31595 states, as follows:

The Board has exclusive control of the investment of the employees retirement fund. The assets of a public pension or retirement system are trust funds and shall be held for the exclusive purposes of providing benefits to participants in the pension or retirement system and their beneficiaries and defraying reasonable expenses of administering the system. Except as otherwise expressly

restricted by the California Constitution and by law, the Board may, in its discretion, invest, or delegate the authority to invest, the assets of the fund through the purchase, holding, or sale of any form or type of investment, financial instrument, or financial transaction when prudent in the informed opinion of the Board...; &

WHEREAS, *The Board of Retirement*, wishes to exercise these powers as follows:

EXERCISE OF POWERS: *The Board shall exercise its investment, management and administrative authority and responsibility through the approval of motions recorded in public meeting &*

WHEREAS, the Board has adopted SamCERA's Investment Policy and amendments thereto to direct the investments of the Retirement Fund and now wishes to establish an Investment Committee to guide the future evolution of SamCERA's Investment Policy. Therefore, be it

RESOLVED that the Board hereby establishes a standing Investment Committee to direct the Board in its ongoing evaluation of SamCERA's Investment Policy, including but not limited to

- 1.0 CONDUCT ASSET ALLOCATION STUDIES
 - 1.1 Determine the characteristics of the Policy's liabilities in regards to the nature of Fund's cash flows
- 2.0 DEVELOP ASSET MIX ALTERNATIVES TO MEET LIABILITY REQUIREMENTS
 - 2.1 Establish allowable asset classes
 - 2.2 Determine asset class benchmarks
 - 2.3 Develop risk, return & correlation projections
- 3.0 EVALUATE EFFICIENT FRONTIER ALTERNATIVES
 - 3.1 Define risk, return and correlation
 - 3.2 Evaluate mean variance optimization
 - 3.3 Determine low risk alternatives and high risk alternatives
 - 3.4 Scale portfolios between two extremes
 - 3.5 Evaluate optimized efficient frontier
 - 3.6 Integrate optimized efficient frontier with asset-liability relationships
- 4.0 ANALYZE BOARD RISK TOLERANCE
 - 4.1 Assess risk/reward trade-offs
 - 4.2 Assess contribution rate sensitivity & variability
 - 4.3 Assess ability to exceed actuarial interest rate
 - 4.4 Assess comfort level with characteristics of specific asset mixes
- 5.0 RECOMMEND PREFERRED ASSET MIX
 - 5.1 Evaluate differences from current target
 - 5.2 Evaluate Board's willingness to implement new target asset mix
 - 5.3 Evaluate appropriateness of variance from peer public fund norms
- 6.0 RECOMMEND AMENDMENTS TO SAMCERA'S INVESTMENT POLICY
 - 6.1 Adjust target asset mix
 - 6.2 Introduce new benchmarks
 - 6.3 Include required asset class/portfolio modifications

- 7.0 RECOMMEND REVISIONS TO MANAGER STRUCTURE
 - 7.1 Adjust manager/style line-up as necessary
 - 7.2 Introduce new managers/asset classes
 - 7.3 Terminate managers/asset classes as necessary
 - 7.4 Establish active & passive allocation targets as appropriate
- 8.0 IMPLEMENT CHANGES TO MANAGER STRUCTURE
 - 8.1 Recommend time-line & approach to revise structure
 - 8.2 Conduct manager evaluations
 - 8.3 Establish portfolio and asset allocation rebalancing procedures
- 9.0 EVALUATE MANAGER PERFORMANCE
 - 9.1 Monitor results of managers both gross and net of investment management fees
 - 9.2 Assess consistency of portfolio decision making
 - 9.3 Evaluate organizational, ownership, personnel & other firm developments
- 10.0 RECOMMEND AND EVALUATE INVESTMENT CONSULTANT STRUCTURE & PERFORMANCE
 - 10.1 Recommend for Board determination the retention and termination of Investment Consultant(s) as necessary
 - 10.2 Define and assign special projects as warranted
 - 10.3 Monitor performance of Investment Consultant(s)
 - 10.4 Conduct evaluations of Investment Consultant(s)
 - 10.5 Evaluate organizational, ownership, personnel and other firm developments
- 11.0 INITIATE & EVALUATE SPECIAL INVESTMENT STUDIES
- 12.0 UNDERTAKE OTHER WORK ASSIGNED TO IT BY THE BOARD Be it further

RESOLVED that the Chair may appoint the members of the Investment Committee per Regulation 2.5.1. Be it further

RESOLVED that the Chief Executive Officer is hereby instructed to provide the Committee with access to all appropriate and available resources and records, so long as such access is consistent with sound fiduciary practices. Be it further

RESOLVED that the Chief Executive Officer is hereby authorized to provide compensation of \$100 per meeting for not more than two meetings per month to the members of the Committee eligible for such compensation, per GC§31521. Be it further

RESOLVED that the Board hereby reserves to itself sole authority to accept, modify, or reject the recommendations, which the Investment Committee may present from time to time pursuant to the provisions of this Resolution, per Regulation 2.3.

ADOPTED by unanimous vote, January 25, 2000

AMMENDED by unanimous vote, May 22, 2001

AMMENDED by unanimous vote, October 25, 2004

APPENDIX B

Derivatives Investment Policy

1) Introduction

There is a genuine need to allow SamCERA's separate account managers to evaluate new securities and introduce them into their portfolios, given that the investment process followed by the investment managers complies with the subsequent provisions of this policy statement. This policy statement allows SamCERA's separate account Managers to exercise reasonable investment freedom, while minimizing the possibility of adverse implications for the Board.

2) Derivative Definition

A 'derivative' commonly is defined as a financial instrument whose performance is derived, at least in part, from the performance of an underlying asset (such as a security or an index of securities).

3) Types of Securities Included or Excluded

Since the derivative sector of the market is likely to experience considerable change, provisions must be made for the general characteristics of a derivative security, its evaluation and monitoring. Therefore, it is most appropriate to not attempt to definitively list all of the derivative securities that are covered by this policy. Instead, what will be explicitly stated is the investment process that governs derivative investments and the evaluation and monitoring requirements of this policy.

4) Approach to Policy

An approach has been developed which states allowable derivative investments, limited allocation derivative investments and restricted derivative investments.

Derivative securities not specified in the above three groups of securities must be evaluated in accordance with the following section entitled Derivative Investment Process. If the security meets these provisions and the spirit of these policies, the manager may establish a prudent position in the instrument. However, the manager must be able to demonstrate the appropriateness of such an investment in light of SamCERA's guidelines.

5) Counter-Party Evaluation

When entering into a non-exchange traded derivative investment, the investment manager must fully evaluate the other side of the derivative transaction—the counter-parties to the trade. Due to the possibility of counter-party default, SamCERA's investment managers must evaluate the risks associated with the counter-party as if an investment were being made in the traditional securities issued by the counter-party.

At a minimum, the investment manager must evaluate the counter-party's following criteria:

- a) Corporate earnings stream
- b) Corporate asset quality
- c) Capitalization
- d) Corporate liquidity
- e) Moody's and Standard & Poor's debt ratings
- f) Other fundamental investment and risk characteristics

For those counter-parties that are broker/dealers, they must:

- a) Have investment grade (Moody's and S&P rated) debt
- b) Be registered with the SEC
- c) Have significant net capital to protect against potential adverse market circumstances

For those counter-parties that are financial institutions (banks), they must have:

- a) Investment grade (Moody's and S&P rated) debt
- b) Total assets in excess of \$1 billion
- c) Significant net capital to protect against potential adverse market circumstances

The investment manager must monitor individual investment and total portfolio exposure to counter-parties. Individual counter-party exposure must be well diversified and not concentrated in a small number of organizations.

6) Purposes for Derivatives

The acceptable investment purposes for the use of derivatives are as follows:

- a. Appropriate to use futures, options and forward currency contracts to assist investment managers in mitigating portfolio risk.
- b. Useful substitute for an existing, traditional investment. In certain circumstances it may be cheaper, quicker or easier to invest in a derivative instrument or security rather than transacting in the cash or traditional security market.
- c. Provides investment value to the portfolio, while being consistent with SamCERA's overall and specific investment policies.
- d. Obtains investment exposure that is appropriate with the manager's investment strategy and SamCERA's investment guidelines, but could not be made through traditional investment securities.

Given that one or more of these investment purposes are clearly met, it is the responsibility of the investment manager to explain and demonstrate how derivative investments impact portfolio risk and the context of the investment within the overall portfolio.

Any other derivative investment purpose is not allowed. Derivatives may not be introduced into the portfolio to create economic leverage or to create investment exposures that are otherwise excluded by SamCERA's Investment Policy. However, if a manager develops an investment purpose other than those listed above which he/she feels is legitimate and consistent with the spirit of SamCERA's guidelines, this purpose should be proposed in writing to the Board.

7) Investment Restrictions and Derivatives Policy

For the purpose of these guidelines, convertible debt, traditional zero coupon bonds, mortgage pass-through securities and asset-backed securities are not viewed as derivatives. Based upon the factors enumerated in the above Section 4 entitled Approach to Policy, the following guidelines have been established:

Allowable derivative investments

- a. Stable and well-structured mortgage CMO's (Collateralized Mortgage Obligations)
- b. Financial futures (if Exchange Traded)
- c. Currency forward contracts and currency options (Exchange and OTC traded)
- d. Interest rate swaps

Derivative investments with allocation limits

- a. Interest only mortgage CMO's
- b. Principal only mortgage CMO's
- c. Options (if Exchange Traded)
- d. Caps and floors as they apply to the above stated allowable derivative investments
- e. Credit Default Swaps (CDS)

Derivative investments with allocation limits, as listed above, may not represent more than 5% of the individual portfolio manager's assets (based on market value) managed for SamCERA. At the same time, derivative investments with allocation limits in aggregate may not expose the individual manager's portfolio to losses in excess of 5% of the manager's total assets managed for SamCERA. In addition, the use of options, caps and floors, and CDS may be used only for defensive investment purposes.

Managers investing in the above-defined limited allocation derivative instruments should ensure that portfolio exposure is maintained within the stated constraints, and communicate the assumptions and model used to estimate VAR (Value at Risk) and/or other reasonable risk measurement procedures annually to the Boards.

Restricted derivative investments

- a. Inverse floating rate notes and bonds
- b. Structured notes

Restricted derivatives cannot be held in SamCERA's separate account portfolios at any time.

8) Risk Analysis and Monitoring of Derivatives

For those securities that are classified as derivative investments with allocation limits, the investment managers are required to test and measure derivative investment sensitivities to changes in key risk factors. These risk factors include extreme changes in interest rates, volatility, liquidity, credit quality, and cash market prices.

These risk factors will be assessed prior to initial investment and on a quarterly basis. Results of such risk testing on derivative investments with allocation limits will be supplied to SamCERA on an annual basis (December 31). If the investment manager identifies additional risks that should be evaluated, these other risk factors should be added to the list and handled in a manner consistent with the previously stated approach.

9) Derivative Investment Process

Investment managers are expected to cover the following issues before purchasing a derivative instrument or security, whether specifically stated as an allowable derivative investment, a derivative investment with

allocation limits, or a derivative not specifically discussed in the Investment Restrictions and Derivatives Policy section above:

- a. Determine if the purpose for investing in a derivative security is consistent with one or more of the purposes in the previous section entitled Purposes for Derivatives.
- b. Determine where the security fits into the classification system, if at all, stated in the Investment Restrictions and Derivatives Policy.
- c. Evaluate, at a minimum, the counter-party risk and the risks stated in the Risk Analysis and Monitoring section of the derivatives policy.
- d. Evaluate the derivative in a comparably thorough manner as the firm would any other traditional investment opportunity.

10) Reporting Requirements

It is the responsibility of SamCERA's investment managers to certify and demonstrate that their portfolios are in compliance with SamCERA's overall guidelines as well as those that apply to derivative investments. On an annual basis (December 31), SamCERA's investment managers will provide the following minimum monitoring information on all derivative securities:

- a. A general statement from the investment manager that its portfolio is in compliance with this Derivatives Policy.
- b. When stating the market value of the derivative exposure, the manager will specify the security pricing sources. The pricing source must be exchange-listed.
- c. A statement of the risks (credit risk—an evaluation of potential counter-party default on obligations, market risk—percent of portfolio invested in derivatives, and any other relevant risks) associated with the derivative investments.
- d. Potential adverse impact on market values if extreme adverse market movements occur.
- e. A statement regarding the liquidity of the derivative investments.
- f. Summary comments and the firm's list of approved counter-parties, ratings, and a statement regarding any changes to this list.
- g. An overall statement discussing the legal and regulatory risks associated with the portfolio manager's investments in derivatives.

Appendix C

DISCLOSURE OF PLACEMENT AGENT FEES, GIFTS, AND CAMPAIGN CONTRIBUTIONS

This amended policy is effective immediately upon adoption. This policy is intended to supplement any applicable provisions of state or federal law, which shall govern in the event of any inconsistency.

I. PURPOSE

This Policy is adopted pursuant to the requirements set forth in Government Code Section 7513.85 to help ensure that the San Mateo County Employees' Retirement Association (SamCERA) investment decisions are made solely on the merits of the investment opportunity. This Policy requires broad, timely, and updated disclosure of all Placement Agents, as that term is defined by Government Code section 7513.8, their relationships, compensation and fees.

II. APPLICATION

This Policy applies broadly to every type of SamCERA investment managers including general partners, sponsors of hedge funds, private equity funds, real estate funds and infrastructure funds, as well as public market investment managers.

This Policy as amended applies to all agreements with External Managers that are entered into after the date this Policy is adopted and all existing agreements if, after the date this amended Policy is adopted, the agreement is amended to continue, terminate, or extend the term of the agreement or the investment period, increase the commitment of funds by SamCERA or increase or accelerate the fees or compensation payable to the External Manager (Referred to hereafter as "Amendment".) In the case of an Amendment, the disclosure provisions of this Policy shall apply to the Amendment and not to the original agreement.

III. RESPONSIBILITIES

A. The Board is responsible for:

1. Not entering into any agreement with an External Manager that does not agree in writing to comply with this policy.
2. Not entering into any agreement with an External Manager who has violated this policy within the previous five years. However, this prohibition may be reduced by a majority vote of the Board at a public session upon a showing of good cause.

B. Each External Manager is responsible for:

1. Executing an agreement that provides the External Manager will comply with this policy.
2. Providing the following information to SamCERA Investment Staff within 45 days of the time investment discussions are initiated by the External Manager, but in any event, prior to the completion of due diligence. In the case of Amendments, the Placement Agent Information Disclosure is required prior to execution of the Amendment.
 - a. Disclosure of payments or compensation by the External Manager or any of its principals, employees, agents or affiliates, directly or indirectly, to any person or entity to act as a Placement Agent in connection with SamCERA investments.
 - b. A resume for each officer, partner, principal of the Placement Agent detailing the person's education, professional designations, regulatory licenses and investment and work experience. If any such person is a current or former SamCERA Board Member, employee or Consultant or a member of the immediate family of any such person, this fact shall be specifically noted.
 - c. A description of any and all compensation of any kind provided or agreed to be provided to a Placement Agent, including the nature, timing and value thereof. Compensation to Placement Agents shall include, but not be limited to, compensation to third parties as well as employees of the External Manager who solicit or market investments to SamCERA or who are paid based upon investment commitments secured by such employees.
 - d. A description of the services to be performed by the Placement Agent and a statement as to whether the Placement Agent is utilized by the External Manager with all prospective clients or only with a subset of the External Manager's prospective clients.
 - e. A written copy of any and all agreements between the External Manager and the Placement Agent.
 - f. A statement whether the placement agent, or any of its affiliates, are registered with the Securities and Exchange Commission or the Financial Industry Regulatory Association, or any similar regulatory agent in a country other than the United States, and the details of that registration or explanation as to why no registration is required.
 - g. A statement whether the placement agent, or any of its affiliates, is

registered as a lobbyist with any state or national government.

h. The names of any current or former SamCERA Board Members, employees, or Consultants who suggested the retention of the Placement Agent.

3. Providing an update of any changes to any of the information provided pursuant to section B.2 above within 30 calendar days of the date that the External Manager knew or should have known of the change in information.
4. Representing and warranting the accuracy of the information described in section B.2 above.
5. Causing its engaged Placement Agent to disclose, prior to acting as a Placement Agent to SamCERA:
 - a. All campaign contributions made by the Placement Agent to any publicly elected SamCERA Board Member during the prior 24-month period. Additionally, any subsequent campaign contribution made by the Placement Agent to any publicly elected SamCERA Board Member during the time the Placement Agent is receiving compensation in connection with a SamCERA investment shall also be disclosed.
 - b. All gifts, as defined in Government Code Section 82028, given by the Placement Agent to any SamCERA Board Member during the prior 24-month period. Additionally, any subsequent gift made by the Placement Agent to any SamCERA Board Member during the time the Placement Agent is receiving compensation in connection with a SamCERA investment shall also be disclosed.
6. SamCERA reserves the right to deem the failure to disclose the information required by 5(a) and 5(b) as a material breach of the agreement with the External Manager.

C. SamCERA Investment Staff (“Staff”) are responsible for:

1. Providing External Managers with a copy of this Policy at the time that discussions are initiated with respect to a prospective investment or engagement.
2. Confirming that the information in section B above has been received within 45 days of the time the execution of the investment contract or Amendment.
3. For new contracts and amendments to contracts existing as of the date of the initial adoption of this Policy, securing the agreement of the External Manager in the final written agreement between SamCERA and the External Manager to provide in the event that there was or is an intentional material omission or

inaccuracy in the Placement Agent Information Disclosure or any other violation of this Policy, SamCERA reserves the right to reimbursement of any management or advisory fees paid by SamCERA from the date of violation to the date of the imposition of the fees.

4. Prohibiting any External Manager or Placement Agent from soliciting new investments from SamCERA for five years after they have committed a material violation of this Policy; provided, however, that SamCERA's Board, by majority vote at a noticed, public meeting, may reduce this prohibition upon a showing of good cause.
5. Providing the Board with Placement Agent information relating to each investment at the time the investment is brought to the Board for its decision.
6. Maintaining Placement Agent Information Disclosures as a public record and reporting to the Board any a material violation of this Policy.

Adopted December 14, 2010
Amended October 25, 2011
Amended March 28, 2017

DEFINITIONS:

The following definitions are excerpted from California Government Code section 7513.8 and are current as of March 28, 2017. Should the legislature subsequently amend the definitions below, the definition of these terms as amended shall supersede the definitions contained in this policy.

"External Manager" means either of the following: (1) a Person who is seeking to be, or is, retained by a board or an Investment Vehicle to manage a portfolio of securities or other assets for compensation; (2) a Person who manages an Investment Fund and who offers or sells, or has offered or sold, an ownership interest in the Investment Fund to a board or an Investment Vehicle. (All code section references are to the Government Code, unless otherwise noted.)

"Person" means an individual, corporation, partnership, limited partnership, limited liability company, or association, either domestic or foreign.

"Investment Vehicle" means a corporation, partnership, limited partnership, limited liability company, association, or other entity, either domestic or foreign, managed by an External Manager in which a board is the majority investor and that is organized in order to invest with, or retain the investment management services of, other External Managers.

"Investment Fund" means a private equity fund, public equity fund, venture capital fund, hedge fund, fixed income fund, real estate fund, infrastructure fund, or similar pooled investment

entity that is, or holds itself out as being, engaged primarily, or proposes to engage primarily, in the business of investing, reinvesting, owning, holding, or trading securities or other assets. Notwithstanding the preceding sentence, an investment company that is registered with the Securities and Exchange Commission pursuant to the Investment Company Act of 1940 (15 U.S.C. Sec. 8a-1 et seq.) and that makes a public offering of its securities is not an Investment Fund.

“Placement Agent” means any Person directly or indirectly hired, engaged, or retained by, or serving for the benefit of or on behalf of, an External Manager or an Investment Fund managed by an External Manager, and who acts or has acted for compensation as a finder, solicitor, marketer, consultant, broker or other intermediary in connection with the offer or sale to a board or an Investment Vehicle either of the following: in the case of an External Manager as defined in subpart (1) of the definition of an External Manager, the investment management services of the External Manager; in the case of an External Manager as defined in subpart (2) of the definition of an External Manager, an ownership interest in an Investment Fund managed by the External Manager. Notwithstanding the preceding sentence, an individual who is an employee, officer, director, equityholder, partner, member, or trustee of an External Manager and who spends one-third or more of his or her time, during a calendar year, managing the securities or assets owned, controlled, invested, or held by the External Manager is not a Placement Agent.



SamCERA's Investment Policy Statement

Latest Revision September 2021

1.0 ESTABLISHMENT OF INVESTMENT POLICY

The Board of Retirement (the “Board”), having exclusive authority and exclusive fiduciary responsibility for the investment and administration of the Trust Fund (the “Fund”), hereby establishes the following Investment Policy (the “Policy”) for the investment of the San Mateo County Employees’ Retirement Association (“SamCERA”) assets. The Board reserves the right to amend, supplement or rescind this Policy at any time.

The purpose of this Policy is to assist SamCERA in effectively supervising its investments in order to meet the requirements of the California Constitution, the County Employees Retirement Law of 1937 (“the 1937 Act”), the Mission and Goals of SamCERA and other requirements, and to encourage effective communication between SamCERA and its investment managers (the “Manager(s)”) and investment consultants (the “Consultant(s)”).

A. GOVERNING DOCUMENTS FOR THE INVESTMENTS OF THE FUND.

The powers and duties of the Board are set forth in the 1937 Act and in Article XVI of the State Constitution. They are further defined by the Mission and Goals adopted by the Board.

SamCERA was created by San Mateo County Ordinance No. 564 adopted by the Board of Supervisors, effective July 1, 1944. This ordinance established the retirement system in accordance with the provisions of California's County Employees' Retirement Law of 1937.

Constitution of the State of California

Article XVI, Section 17, relates to the administration of the system and investment of the Fund assets. It reads in pertinent part:

“(a)...The assets of a public pension or retirement system are trust funds and shall be held for the exclusive purposes of providing benefits to participants in the pension or retirement system and their beneficiaries and defraying reasonable expenses of administering the system.

“(b) The members of the retirement board of a public pension or retirement system shall discharge their duties with respect to the system solely in the interest of, and for the exclusive purposes of providing benefits to, participants and their beneficiaries, minimizing employer contributions thereto, and defraying reasonable expenses of administering the system. A retirement board's duty to its participants and their beneficiaries shall take precedence over any other duty.

“(c) The members of the retirement board of a public pension or retirement system shall discharge their duties with respect to the system with the care, skill, prudence, and diligence under the circumstances then prevailing that a prudent person acting in a like capacity and familiar with these matters would use in the conduct of an enterprise of a like character and with like aims.

“(d) The members of the retirement board of a public pension or retirement system shall diversify the investments of the system so as to minimize the risk of loss and to

maximize the rate of return, unless under the circumstances it is clearly not prudent to do so.”

The 1937 Act

The 1937 Act contains language similar to that in the State Constitution regarding the investments of the Fund:

Government Code section 31595.

“The board has exclusive control of the investment of the employees retirement fund. The assets of a public pension or retirement system are trust funds and shall be held for the exclusive purposes of providing benefits to participants in the pension or retirement system and their beneficiaries and defraying reasonable expenses of administering the system. Except as otherwise expressly restricted by the California Constitution and by law, the board may, in its discretion, invest, or delegate the authority to invest, the assets of the fund through the purchase, holding, or sale of any form or type of investment, financial instrument, or financial transaction when prudent in the informed opinion of the board.

The board and its officers and employees shall discharge their duties with respect to the system: (a) Solely in the interest of, and for the exclusive purposes of providing benefits to, participants and their beneficiaries, minimizing employer contributions thereto, and defraying reasonable expenses of administering the system.

(b) With the care, skill, prudence, and diligence under the circumstances then prevailing that a prudent person acting in a like capacity and familiar with these matters would use in the conduct of an enterprise of a like character and with like aims.

(c) Shall diversify the investments of the system so as to minimize the risk of loss and to maximize the rate of return, unless under the circumstances it is clearly prudent not to do so.

SamCERA’s Mission and Goals

The Board has adopted a Mission and Goals statement. The Mission summarizes SamCERA’s reason to exist.

“Mission: SamCERA exists to serve as loyal fiduciary for its members and as prudent administrator of the retirement system.”

The Mission is further defined by three goals. One goal speaks to the management of the assets of the Fund. This asset management goal reads:

“Prudently manage the assets in order to appropriately fund the actuarial liabilities of the retirement system, to ensure the ability to pay all earned benefits while minimizing the costs to employers.”

In recognition of the requirements of the California Constitution, the 1937 Act, the SamCERA Mission and Goals and other legal requirements, the SamCERA Board has established this Investment Policy.

2.0 MANAGEMENT OF THE FUND

A. ROLES AND PRINCIPAL DUTIES

The Fund investments shall be prudently planned, implemented, managed, and monitored by the Board. Investment Staff (the “Staff”), Investment Consultant (the “Consultant”), Custodian Bank (the “Custodian”), and Investment Managers (the “Managers”) shall support the Board in this activity. The roles are set forth below:

1. The Board establishes and maintains the investment policy, including: investment philosophy, investment objectives, strategic asset allocation, allocation-level performance benchmarks, and risk philosophy. The Board makes investment and monitoring decisions based upon the recommendations of Staff, Consultants, and other service providers engaged by the Board. The Board reviews and monitors all investments, as well as the policies, guidelines and procedures required to prudently administer the Fund and to effectively mitigate risk to the Fund. From time to time, the Board will utilize its Investment Committee to assist the Board in these activities and related specified tasks.
2. Staff oversees the Fund’s investment program activities, implements the Board’s decisions, manages the existing fund investments, and makes recommendations to the Board regarding Fund management, including investment-related policies and procedures. Staff makes recommendations regarding the selection of the Consultant, Managers, Custodian as set forth below and monitors the performance and compliance of these and other investment related service providers.
3. The Consultant reviews, analyzes and evaluates the Fund’s effectiveness and efficiency and makes fund management related recommendations. Consultant assists Staff in implementing the Board’s decisions and developing all investment-related policies. Consultant’s responsibilities are detailed in the service agreement between SamCERA and Consultant.
4. The Custodian provides custody of SamCERA’s investment assets. In addition, the Custodian manages the securities lending program. The Custodian’s responsibilities are detailed in the service agreement between SamCERA and Custodian.
5. The Managers manage their mandated allocations in accordance with all applicable laws, Board-established policies, guidelines and procedures, as well as specific investment guidelines. For separately managed accounts, managers’ responsibilities are detailed in the Investment Management Agreements (IMA) between SamCERA and each Manager. For commingled funds, managers’ responsibilities are detailed in the related Fund documents.

B. INVESTMENT PORTFOLIO MANAGEMENT

The Board, with the assistance of Staff and Consultant, select and monitor Managers to manage the assets of the Fund.

1. Hiring New Managers

For public markets manager searches (i.e. non private equity and private real assets), Staff will inform the Board about the search process, including scope of the mandate, and the investment style, benchmark, and the minimum qualifications for candidates. Staff will update the Board on the short list of potential managers. Consultant and Staff will perform due diligence activities deemed applicable by the Chief Investment Officer, which may include analysis of performance records, meetings, due diligence questionnaires, interviews, and on-site visits. Upon completion of such due diligence, Staff and Consultant will bring a finalist to the Board for approval. The recommendation shall provide the Board with a summary description of the conducted due diligence activities.

For private markets (private equity and private real assets), the Consultant, with Staff input, sources managers that can best fit the desired mandate consistent with the annual pacing study and applicable investment policy. Consultant and Staff will bring potential private markets opportunities to the Board for approval. An exception to this policy is when a decision for a private market investment must be made prior to the date of the next regularly scheduled Board meeting. In these instances, and for investments of \$35 million or less, the Chief Executive Officer is authorized to make an investment-related decision after consulting with the Board Chair, or if the Chair is not available, the Vice Chair, and one member of the Investment Committee as long as such decision is in the best interest of the fund and consistent with applicable Board policy. Any action under this authorization will be reported to the Board at a subsequent regularly scheduled meeting.

2. Managing and Monitoring Existing Managers

The Board monitors the individual investment managers on a continuous basis through information provided by Staff, the Consultant, the Managers, and other investment service providers. Monthly, the Chief Investment Officer will present a preliminary performance report to the Board that is meant to provide a high-level summary of how the fund and each monthly-valued manager is performing. In addition, for SamCERA's separate accounts, Staff receives holdings and attribution reports from each separate account Manager on a monthly basis. For commingled funds, staff receives from the Manager either monthly or quarterly portfolio performance, attribution, exposure, and commentary reports.

Quarterly, the Consultant, with assistance from the Chief Investment Officer, will present an investment performance report to the Board, as specified in Section 14.0 (Quarterly Investment

Performance Reporting) in the Investment Policy. This report provides a more detailed performance attribution for the total plan and individual Managers, and helps to identify any short-term outlier deviations from expectations.

Semi-annually (month-end June and December of each year), every public markets (i.e. not private equity or private real asset) Manager completes a compliance statement identifying any significant firm, regulatory, and portfolio issues. In addition, semi-annually as of June and December of each year, Consultant will present performance reports for both the Private Equity and Private Real Assets programs that summarize each program and shows total program performance and program diversification by strategy, geography, industry, and vintage year.

Annually, Staff and Consultant will convene an investment strategy session, as specified in Section 15.0 (Annual Investment Strategy) in the Investment Policy, to allow a longer-term assessment of the Managers and the total fund performance. Lastly, all public markets Managers are interviewed annually by Staff and Consultant, and must complete a due diligence questionnaire.

During these presentations at SamCERA, Managers will provide an update on the Manager's organization and business plan, any changes to the investment process, and a summary of investment performance. Staff and Consultant report to the Board following these meetings.

After the Board approves an initial investment to be held in a separate account or open-end evergreen commingled fund, staff will be responsible for managing that allocation, including initiating any adjustments to that allocation amount, consistent with the allocation ranges outlined in Section 6.0. For those investments held in closed-end (or non-perpetual life) commingled funds (e.g. private equity, private real assets, private credit, value-add real estate), staff will seek Board approval for any additional allocation to those funds, including re-up commitments, unless the timing of the decision is subject to the policy exception set forth in paragraph 1.

3. Terminating Existing Managers

The Board recognizes investments may need to be adjusted or removed from the Fund from time to time for a variety of reasons, including organization changes at the Manager, changes in Manager style, underperformance relative to expectations, and the Managers' strategy is no longer appropriate for the fund. The Board determines if a Manager should be terminated after receiving input and or recommendations from Staff and Consultant.

In situations in which developments give immediate concern that an investment with a Manager is no longer prudent for the investment program and a termination or other related investment decision should be made prior to the next regularly scheduled Board meeting, the Chief Executive Officer is authorized to terminate the Manager and or move Fund assets after consulting with the Board Chair (or Vice Chair or Secretary based on availability, in that order) and one member

of the Investment Committee. Situations causing an immediate concern, include, but are not limited to, when: (1) the firm suffers the resignation or other loss of its key portfolio managers on the strategy, (2) the firm dissolves, ceases to exist, or is otherwise incapable of carrying out its activities in the ordinary course of its business, (3) the firm is actually or effectively shut down by a regulatory agency or is accused of theft or fraud or other serious malfeasance by a regulatory agency, or (4) the fund's investment is in jeopardy of material loss. The Board will be promptly notified of the determination by the Chief Executive Officer.

3.0 INVESTMENT OBJECTIVES

The Board shall develop an investment program, consistent with the Investment Beliefs and General Investment Policies as stipulated in Sections 4.0 and 5.0, respectively, in order to meet the following objectives:

- A. Generate risk-adjusted returns that exceed the Asset Allocation Policy Benchmark (as defined in Section 6.0) on a net-of-fee basis over five-year rolling periods.
- B. Achieve a Fund return that meets or exceeds the long-term forecast of capital market returns for the asset allocation portfolio benchmark over multiple economic cycles (e.g. 15-20 years).
- C. Provide a more consistent return stream than a traditional 60% Equity / 40% Fixed Income portfolio as measured by lower portfolio drawdowns over a full market cycle.

4.0 INVESTMENT BELIEFS

The following section summarizes the Board's investment beliefs that have guided it in the development of this Policy document and will guide it in the oversight of the Plan assets.

- Strategic asset allocation is the primary driver of portfolio risk and return.
- SamCERA should have a long-term horizon and not be tempted to deviate from its long-term plan in response to short-term volatility.
- Everything else being equal, simplicity is preferred over complexity.
- For those asset classes evidencing market efficiencies, the manager structure may favor the employment of passive strategies.
- Focus on income and capital appreciation should be balanced and not overly dependent on one or the other.
- Diversification is fundamental.
- There is no single definition of risk. There are various measures of 'risk' that can be used for various purposes.
- The portfolio should be diversified across many risk dimensions/timeframes.

- SamCERA should not pursue investments that will not adequately compensate it for the risks that those investments bring.
- Costs matter.

5.0 GENERAL INVESTMENT POLICIES

Consistent with the investment beliefs contained in Section 4.0, it is the investment policy of the Board to:

- A. Achieve long-term risk-adjusted returns consistent with its fiduciary duty.
- B. Pursue an investment strategy that reduces the volatility of returns through prudent diversification of the portfolio across a broad selection of distinct asset classes, as provided for in Section 6.0 of this Investment Policy.
- C. Further diversify other risks, including extreme events, liquidity, and leverage by looking beyond traditional asset class definitions by utilizing multiple lenses on portfolio risks.
- D. Adopt an asset allocation target to guide the structure of the investment portfolio, as provided for in Section 6.0, and reevaluate on an annual basis.
- E. Reevaluate the asset-liability study every three to five years.
- F. Delegate to staff the management of existing investment managers, and for those strategies in separately managed accounts and evergreen (or open-end) commingled fund structures, the on-going adjustments to allocations to such managers consistent with the investment policies and investment ranges contained in Section 6.0.
- G. Delegate full discretion, including whether to include environmental, social, and governance factors, if such factors have a direct relationship to the economic and financial value of an investment, when analyzing the financial merits of competing investment choices on behalf of SamCERA, to each investment manager to the extent authorized in their Investment Management Agreement (IMA).
- H. Adopt objectives that encourage investment managers to maximize their performance, within acceptable risk parameters, relative to their individual investment style benchmark.
- I. Refrain from drastically shifting asset class allocations over short time spans, unless it is in the Fund's best interest to do so.
- J. Rebalance the portfolio in accordance with the Rebalancing Policy set forth in Section 7.0.

6.0 ASSET ALLOCATION & PORTFOLIO STRUCTURE

A. Asset Allocation by Performance Driver

In addition to grouping investments into traditional asset classes (Public Equity, Fixed Income, Alternative Assets, Inflation Hedge and Liquidity), SamCERA also groups its investments by the underlying performance drivers within each asset class composite. As part of this process, SamCERA classifies its portfolio into three main drivers of performance listed below.

Growth

The Growth category includes assets in which their primary driver of returns is tied to the general strength of economic output. These assets will generally do well when economic conditions are favorable, but generally struggle in times of economic weakness and recession. Assets classified in the Growth category include Public Equity (consisting of U.S. and International Equity), Private Equity within Alternatives, and Opportunistic Credit within Fixed Income.

Diversifying

Diversifying assets provide protection from equity risk and may be characterized as being more defensive (i.e. may help provide stability when markets fall) or more absolute-return oriented (i.e. performance is not as dependent on the overall strength of equity markets). Assets classified in the Diversifying category include Core Fixed Income, Liquidity, and Absolute Return within Alternatives.

Inflation Hedge

Lastly, Inflation Hedge assets provide additional diversification from equity risk and provide a potential hedge against unexpected inflation. Assets classified in this category include Real Estate, Public Real Assets, and Private Real Assets.

Asset Allocation Policy			
Performance Driver View	Target Allocation	Rebalancing Range	Traditional Asset Class View **
Growth	57%	±3%	
Public Equity	41%	±3%	Public Equity
Private Equity *	6%	±2%	Alternatives
Opportunistic Credit	10%	±2%	Fixed Income
Diversifying	26%	±2%	
Core Fixed Income	18%	±2%	Fixed Income

Absolute Return	7%	±2%	Alternatives
Liquidity	1%	±2%	Liquidity
Inflation Hedge	17%	±2%	
Real Estate	9%	±2%	Inflation Hedge
Private Real Assets *	4%	±2%	Inflation Hedge
Public Real Assets	4%	±2%	Inflation Hedge

* Recognizing the illiquidity of the asset class, rebalancing will be considered over six- to twelve-month periods.

** Traditional Asset Allocation: 41% Public Equity, 28% Fixed Income, 13% Alternatives, 17% Inflation Hedge, and 1% Liquidity.

B. Growth Asset Allocation

Growth assets shall be allocated to managers within the following asset/sub-asset classes:

GROWTH ASSET CLASSES	TARGET ALLOCATION	REBALANCE RANGE
Public Equity	41%	±3%
Large Capitalization Domestic	20.0%	±2%
Passive Core	9.0%	±2%
Active Core	3.0%	±2%
Active Low-Volatility Core	8.0%	±2%
Small Capitalization Domestic	2.0%	±2%
Active Core	2.0%	±2%
International	19.0%	±2%
Passive Core	6.4%	±2%
Growth	6.3%	±2%
Value	6.3%	±2%
Private Equity	6%	±2%
Opportunistic Credit	10%	±2%
Total Growth	57%	±3%

C. Diversifying Asset Allocation

Diversifying assets shall be allocated to managers within the following asset/sub-asset classes:

DIVERSIFYING ASSET CLASSES	TARGET ALLOCATION	REBALANCE RANGE
Core Fixed Income	18%	±2%
Core	10.0%	±2%
Core Securitized	4.0%	±2%
Core Unconstrained	4.0%	±2%
Absolute Return	7%	±2%
Liquidity	1%	±2%
TOTAL DIVERSIFYING	26%	±2%

D. Inflation Hedge Asset Allocation

Inflation Hedge assets shall be allocated as follows:

INFLATION HEDGE ASSET CLASSES	TARGET ALLOCATION	REBALANCE RANGE
Real Estate	9.0%	±2%
Private Real Assets	4.0%	±2%
Public Real Assets	4.0%	±2%
TOTAL INFLATION HEDGE ASSETS	17.0%	±2%

E. Asset Allocation Policy Benchmark

The Asset Allocation Policy Benchmark defined below is derived by assigning a passive benchmark to each of the sub-asset classes referenced in Sections 6.0 (A) through 6.0 (D) and weighting each by the Target Allocation. The performance of the Asset Allocation Policy Benchmark is computed by the Plan's investment consultant.

Benchmark	Asset Allocation Policy Benchmark
Growth Assets	57%
Russell 3000 Index	22%
MSCI ACWI x US IMI Index Hedged*	19%
Russell 3000 +3% (One Quarter Lagged)	6%
BC BA Intermediate High Yield Index	10%
Diversifying Assets	26%

BC Aggregate Index	18%
SOFR + 4%	7%
91 Day T-Bills	1%
Inflation Hedge	17%
<hr/>	
NCREIF ODCE	9%
Custom Private Real Asset Index**	4%
Custom Public Real Asset Index***	4%

* 50% hedge ratio starting 10/1/19.

**Comprised of 75% S&P Global Infrastructure Index and 25% S&P Global LargeMidCap Commodity and Resources Index + 2% (One Quarter Lagged)

***Comprised of 25% Bloomberg Roll Select Commodity Index, 25% Bloomberg US TIPS Index, 25% S&P Global LargeMidCap Commodity and Resources Index, and 25% S&P Global Infrastructure Index.

7.0 REBALANCING POLICY

A. The Chief Investment Officer (CIO) shall rebalance the portfolio as needed in conformance with the asset allocation tactical ranges set forth in Section 6.0.

B. The potential need to rebalance will be continuously monitored, and will be subject to deviations within the established rebalance ranges specified in Section 6.0.

C. The CIO will have discretion to rebalance to Target or to some other allocation, as long as it is within policy ranges.

D. Cash flows will be used first to rebalance, and to the extent possible, exchange-traded derivatives will be used to rebalance in a cost-effective manner.

E. All rebalancing activity shall be reported to the Board at the next scheduled meeting.

8.0 GENERAL MANAGER INVESTMENT PERFORMANCE POLICIES

The responsibility for securities selection, purchase and sale decisions, and proxy voting (where appropriate) is delegated to the external investment managers. The individual investment guideline parameters (including diversification constraints, concentration limits, asset type exclusions, etc.) and performance objectives for each investment manager will be established within the IMA or other applicable legal agreement(s) with each firm.

The Board expects to measure investment performance quarterly and will generally follow prudent time horizons when evaluating short term, intermediate term, and long term performance of its investment managers. Generally, the Board defines underperformance as: Cumulative annualized performance (net of fees) over a three-year period below a broad market-based benchmark return times 0.9, or five year return (net of fees) below the broad market based benchmark return.

Performance will also be evaluated in light of the manager's stated style and discipline.

9.0 GROWTH ASSETS INVESTMENT POLICIES

GROWTH ASSETS OVERVIEW:

Assets classified in the Growth category include Public Equity (consisting of U.S. and International Equity), Private Equity within Alternatives, and Opportunistic Credit within Fixed Income.

Public Equity: Public equity assets include funds shares/stock of a company through a public market. SamCERA invests utilizing both passive approaches (meant to track the performance and characteristics of major market indices, like the Russell 1000 Index and MSCI ACWI ex US IMI Index), and via active approaches that are meant to outperform the major market benchmarks. Public Equity is expected to produce returns higher than that provided from Fixed Income but at potentially higher levels of volatility. Exposure to this asset class will provide return streams generally correlated to that of general economic growth. There are two primary components to the Public Equity category: 1) Domestic Equity, and 2) International Equity.

1) Domestic Equity: SamCERA further breaks out its U.S. public equity holdings into two sub-composites: 1) U.S. Large Capitalization Domestic, which is comprised of U.S. companies valued generally over \$10 billion, and 2) U.S. Small Capitalization Domestic, which is comprised of U.S. companies valued generally under \$2 billion.

For the domestic equity program, the majority of the tracking error will come from stock selection via active management as the overall manager structure for domestic equities will not possess any significant biases in terms of investment style. The Domestic Equity composite will consist of two sub-composites: 1) Large-Capitalization Equity, and 2) Small-Capitalization Equity. Large Capitalization Equity will consist of four Core strategies: one passive, one low-tracking error active, and two low-volatility active strategies. Small-Capitalization Equity will consist of an actively-managed Core strategy.

2) International Equity: International Equity consists of developed (public companies domiciled in developed market countries such as Germany, France, UK, Japan, etc.) and emerging markets (public companies domiciled in emerging market countries such as China, Brazil, Mexico, Russia, etc.)

International Equity will consist of three strategies: 1) a passive Core component, 2) Active Value, and 3) Active Growth. All three strategies will have exposure to both developed and emerging markets.

Private Equity: Private Equity are funds, typically illiquid investments, that directly invest in private companies, or that engage in buyouts of public companies. Private Equity is expected to be one of the highest returning asset classes over the long-term. Its role in the portfolio is to provide high return potential in order to maximize the ability of the Fund to meet its performance objectives.

The Private Equity program will contain manager allocations to three primary sub-categories: 1) Buyouts, 2) Venture Capital, and 3) Debt/Special Situations. These allocations will be implemented via allocation to primary and secondary fund investments and co-investment opportunities. The sub-allocation targets and target ranges are summarized below:

Sub-Category	Target Allocation	Range
Buyouts	60%	+/- 20%
Venture Capital	20%	0 – 30%
Debt/Special Situations	20%	+/- 10%

The responsibility for private equity sourcing is delegated to SamCERA’s investment consultant. The private equity portfolio shall adhere to the following investment guidelines covering diversification and quality:

(a) **Diversification:** Subject to availability of sufficient attractive opportunities, the portfolio is to be diversified over multiple years by the following:

Vintage Year: It is expected that roughly equal amounts of new funding will be committed in each calendar year, with deviations permitted to accommodate market opportunities and to facilitate initial entry into the asset class.

Investment Manager: The reported value plus unfunded commitments of any one investment manager (excluding fund of funds) up to no more than twenty (20) percent of the reported value plus unfunded commitments of the total private equity portfolio.

Geography: Through commitments to funds located and/or investing both in and outside of the United States.

Industry: It is expected that the private equity portfolio will be generally diversified by sector/industry.

(b) **Quality:** All commitments to private equity by SamCERA must be of institutional quality as evidenced by other tax-exempt institutional investors’ commitments to the investment manager’s prior or current funds.

Fund managers are expected to comply with SamCERA’s private placement disclosure rules.

Opportunistic Credit: Fixed income assets are debt investments that provide a return in periodic payments in debt instruments issued by governments and corporations. Opportunistic Credit is expected to be the highest-risk category within fixed income, and will be used to enhance return by investing via public and private investments in non-traditional sectors of the fixed income market, including emerging market debt, high yield bonds, direct lending, bank loans, convertible bonds, and CMBS/ABS securities. This sub-category will be exposed to general economic risk factors, similar to public equities, but may provide a steadier stream of returns than public equity asset classes.

GROWTH ASSETS PERFORMANCE OBJECTIVE:

The performance objective of the Growth Assets Composite is to outperform, on a net-of-fee basis, a customized index (Customized Benchmark Portfolio) incorporating the weighted average components for four composite sub-asset classes (which results in the following weights: 39% Russell 3000, 33% MSCI ACWI ex US IMI Index hedged*, 11% Russell 3000 Index + 3% (one quarter lagged), and 17% Barclays BA Intermediate High Yield Index).

The Public Equity composite has a maximum tracking error of 3% to its composite benchmark.

GROWTH ASSETS RISK EXPOSURES AND RISK MITIGATION:

Public Equity: The primary risk factors for Public Equity are correlation to general economic growth, high volatility in returns, and potential illiquidity in smaller-capitalization and certain emerging market stocks. SamCERA will control for these risk factors by diversifying the plan across assets that exhibit limited correlation to economic growth. In addition, SamCERA's rebalancing ranges for small-cap equity will help ensure adequate diversification within the equity portion of the SamCERA portfolio.

Private Equity: Private Equity, while expected to provide attractive returns, also have a number of risks. Chief among these are illiquidity risk and leverage. By their nature Private Equity is generally illiquid in that the life of these fund investments can be as long as ten to twelve years. SamCERA recognizes that this illiquidity is a necessary characteristic (and source of return premium) for these asset classes and as such will endeavor to take this illiquidity into account at the total plan level when addressing total plan liquidity needs during strategic planning asset liability studies. Leverage can be employed by private equity managers to enhance the overall risk-adjusted returns. SamCERA will control leverage exposure through partnership selection and portfolio construction and diversification.

Opportunistic Credit: Opportunistic Credit is generally the highest risk, lowest liquidity sub-category within Fixed Income. SamCERA will take into account unique risk factors when constructing the fixed income portfolio to help ensure that the overall risk profile of the total portfolio is consistent with expectations. Opportunistic Credit typically includes the risk factors contained in Core and Core Unconstrained, but, depending on the mandate, with higher emphasis to credit default risks, emerging markets sovereign/corporate default risk, potential leverage, and potential illiquidity. It is expected that strategies within Opportunistic Credit will have a maximum leverage ratio of 2.5x at the fund level (i.e. certain holdings may be levered higher than the 2.5x limit, as long as the fund (or strategy) has a maximum 2.5x leverage). Strategies employing higher leverage will be relegated to the debt/special situations category of Private Equity (see above).

GROWTH ASSET CLASSES	BENCHMARK INDEX
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Growth Assets	Customized Benchmark Portfolio
Public Equity	
Domestic Equity	Russell 3000
Large Capitalization Domestic Equity	Russell 1000
Passive Core	Russell 1000
Active Core	Russell 1000
Active Low Volatility Core	Russell 1000
Small Capitalization Domestic Equity	Russell 2000
Active Core	Russell 2000
International Equity	MSCI All Country World ex US IMI hedged*
International Passive Core	MSCI ACWI ex US IMI
International Growth	MSCI ACWI Free ex US Growth
International Value	MSCI ACWI Free ex US Value
Private Equity	Russell 3000 + 3% (One Quarter Lagged)
Opportunistic Credit	Barclays Capital BA Intermediate High Yield Index

* 50% hedge ratio starting 10/1/19.

10.0 DIVERSIFYING ASSETS INVESTMENT POLICIES

DIVERSIFYING ASSETS OVERVIEW:

Assets classified in the Diversifying category include Core Fixed Income, Absolute Return within Alternatives, and Liquidity.

Fixed Income: Fixed income assets are debt investments that provide a return in periodic payments in debt instruments issued by governments and corporations. Core Fixed Income is generally the lowest risk and highest liquidity sub-category within Fixed Income. It is expected to provide a lower, but steadier stream of returns than public equity asset classes, and also to reduce the risk of the overall portfolio as bonds have lower risk than most other major asset classes. That said, there are a number of sub-categories within Core Fixed Income, which exhibit different risk/return trade-offs and hold slightly different tasks in terms of role in the portfolio, but have the common goal of dampening portfolio volatility. Core Fixed Income is broken out into three subcategories:

- 1) Core, 2) Core Securitized, and 3) Core Unconstrained

Core: Core is generally considered a lower-risk fixed income category, and one that invests in primarily liquid, investment grade U.S. Dollar denominated bonds. It also generally consists of sectors that comprise the Bloomberg Barclays Aggregate Bond Index. Core's role in the portfolio is to dampen portfolio volatility and protect the portfolio in times of economic duress.

Core Securitized: Core Securitized is a low/medium-risk fixed income sub-category, and contains securitized sectors, including mortgage-backed securities, commercial mortgage-backed securities, and asset-backed securities. Core Securitized's role in the portfolio, in addition to dampening portfolio volatility, is to provide higher yield and slightly lower interest rate sensitivity as compared to the Bloomberg Barclays Aggregate Bond Index.

Core Unconstrained: Core Unconstrained is a medium-risk fixed income sub-category, and contains the sectors contained in Core plus high yield (below investment grade bonds), non-U.S. Dollar denominated bonds, and emerging market fixed income securities. Core Unconstrained's role in the portfolio is a combination of total portfolio volatility dampening and some moderate return enhancement.

Absolute Return: The Absolute Return category will focus on funds that have an absolute return orientation and are not expected to contain significant levels of public market beta over the long term. This category is expected to provide a diversifying return stream to the total plan that is not correlated to the public markets. Suitable investment strategies include multi-strategy funds, alternative risk premia funds, GTAA or global macro funds, and CTA/Managed Futures trend following funds. It is expected that this category will be implemented via commingled funds and not in separate accounts so that SamCERA's investment in any single fund would be 'ring-fenced' (i.e. any potential losses would be limited to the investment in the single fund, and not extend to the total plan assets).

Liquidity: The Liquidity category currently consists of cash and cash-equivalent type investments with short duration.

DIVERSIFYING ASSETS PERFORMANCE OBJECTIVE:

The performance objective of the Diversifying Assets Composite is to outperform, on a net-of-fee-basis, a customized index (Customized Benchmark Portfolio) incorporating the weighted average components for three composite sub-asset classes (which results in the following weights: 69% Bloomberg Barclays Aggregate Index, 27% to SOFR + 4%, and 4% to 91 Day T-Bills). The Core Fixed Income sub-asset class has a maximum tracking error of 3% to its composite benchmark.

DIVERSIFYING ASSETS RISK EXPOSURES AND RISK MITIGATION:

The Core Fixed Income sub-sectors have different risk factor exposures. SamCERA will take into account these unique risk factors when constructing the Core Fixed Income portfolio to help ensure that the overall risk profile of the total portfolio is consistent with expectations.

Core: The primary risk factors are sensitivity to changes in interest rates, changes in mortgage prepayment speeds, and investment-grade corporate and sovereign credit risk.

Core Securitized: The primary risk factors are complexity, credit and prepayment risk across various securitized sectors (e.g. ABS, CMBS, and RMBS) with interest rate sensitivity being a relatively lower risk factor as compared to assets within Core (above). The focus is on higher quality securitized investments to minimize credit risk.

Core Unconstrained: The primary risk factors typically include the risk factors found in Core with additional exposures to high-yield default risks, emerging markets sovereign/corporate default risk, and potential illiquidity. The allocation to these risk exposures will be dynamic over time as the portfolio is not constrained to a benchmark.

Absolute Return: Absolute Return, while expected to provide attractive returns that are less correlated to the returns provided by public asset classes, also has a number of risks. Chief among these is leverage. Leverage can be employed by absolute return managers to enhance the overall risk-adjusted returns. SamCERA will control leverage exposure through fund selection as well as portfolio construction and diversification.

DIVERSIFYING ASSET CLASSES	BENCHMARK INDEX
DIVERSIFYING ASSETS	CUSTOMIZED BENCHMARK PORTFOLIO
Core Fixed Income	
Core/Core Securitized/Core Unconstrained	Bloomberg Barclays Aggregate Bond Index
Absolute Return	SOFR + 4%

11.0 INFLATION HEDGE INVESTMENT POLICIES

INFLATION HEDGE OVERVIEW:

The Inflation Hedge category combines inflation-sensitive assets under a single asset class to simplify the asset allocation process and enable better performance monitoring of the plan’s overall, direct exposure to assets with inflation-hedging properties. The plan also has indirect exposure to inflation-sensitive assets through other asset classes, such as Public Equity, Fixed Income, and Alternatives. When determining the appropriate allocation of inflation protection, both direct and indirect exposures to inflation-sensitive assets across the plan are taken into account. The Inflation Hedge category is expected to provide a high degree of inflation beta, attractive risk-adjusted returns and diversification benefits to the overall plan.

Inflation Hedge is broken out into four subcategories:

- 1) Real Estate, 2) Private Real Assets, and 3) Public Real Assets

Real Estate: Real Estate is expected to provide a return and risk profile between that provided by fixed income and equities. Real estate will be composed of three sub-categories: 1) Core, 2) Value-Add, and 3) Debt. The majority of exposure will be in Core real estate assets of the highest quality located in the best locations in North America, Europe, and Asia. Value-Add properties are expected to provide somewhat higher return potential along with somewhat higher risk than Core assets. Real Estate Debt strategies range from lower risk senior loans on stable properties to higher risk/return mezzanine and construction loans. SamCERA utilizes Debt strategies for risk mitigation and to enhance the portfolio’s yield.

Income will be a large part of the return stream generated from the Real Estate portfolio. The role of this portfolio is to provide diversification benefits, some protection against

unanticipated inflation, and a steady income stream. Higher risk Opportunistic/Development real estate strategies will reside in the Private Real Assets composite due to their higher-risk, longer time horizon, and the less liquid nature of the investment set compared to Core, Value-Add, and Debt strategies. The sub-allocation targets and target ranges are summarized below:

Real Estate Strategy	Target Allocation	Range
Core Real Estate	60%	50 -70%
Value-Add Real Estate	20%	0 - 30%
Real Estate Debt	20%	0 - 30%

Private Real Assets: Private Real Assets are expected to provide attractive total and risk-adjusted returns that exhibit low correlations with traditional asset classes but positive correlation with inflation. Private Real Assets will be composed of two sub-categories: 1) Infrastructure (Core and Value-Add, Secondary, Midstream Energy, and Power), and 2) Natural Resources (Energy Exploration & Production, Mining, Farmland, Timber, and Water). These allocations will be implemented via allocation to primary and secondary fund investments and co-investment opportunities. The sub-allocation targets and target ranges are summarized below:

Sub-Category	Target Allocation	Range
Infrastructure	75%	+/- 25%
Natural Resources	25%	+/- 25%

Public Real Assets: Similar to Private Real Assets, Public Real Assets is expected to provide positive correlation to inflation, but with potentially higher beta to public equity markets. Public Real Assets may be used to fund new strategies in Private Real Assets and will be composed of four sub-categories: 1) Commodities, 2) U.S. TIPS, 3) Listed Global Natural Resources, and 4) Listed Global Infrastructure. All four sub-categories are meant to provide some protection from higher levels of unanticipated inflation while providing a diversifying return stream from that of public markets.

The sub-allocation targets and target ranges are summarized below:

Sub-Category	Target Allocation	Range
Commodities	25%	0 - 50%

U.S. TIPS	25%	0 - 50%
Listed Global Natural Resources	25%	0 – 50%
Listed Global Infrastructure	25%	0 – 50%

INFLATION HEDGE PERFORMANCE OBJECTIVE:

The performance objective of the Inflation Hedge Composite is to outperform, on a net-of-fee basis, a customized index (Customized Benchmark Portfolio) incorporating the weighted average components for three composite sub-asset classes (which results in the following weights: 53% NCREIF ODCE, 23.5% Custom Public Real Asset Index, and 23.5% Custom Private Real Asset Index).

INFLATION HEDGE RISK EXPOSURES AND RISK MITIGATION:

Real Estate: Many real estate funds utilize leverage to enhance returns. Lack of liquidity is also a concern, but less so for core real estate and senior debt investments. Value-add, mezzanine debt, and opportunistic strategies also tend to have more exposure to general economic conditions than core properties.

These risks will be mitigated in a number of ways. First, the primary emphasis of SamCERA’s real estate program will be focused on Core properties, with a secondary emphasis to Value-Add properties and Debt strategies. Opportunistic-oriented strategies will reside in our Private Real Assets portfolio due to their higher risk profile. In addition, SamCERA’s core real estate fund has a leverage limit of 35%, and SamCERA also sits on the Fund’s Advisory Committee.

Private Real Assets: By their nature, Private Real Assets are generally illiquid in that the life of these fund investments can be as long as ten to twelve years. SamCERA recognizes that this illiquidity is a necessary characteristic (and source of return premium) for these asset classes and as such will endeavor to take this illiquidity into account at the total plan level when addressing total plan liquidity needs during strategic planning asset liability studies. Leverage can be employed by alternative managers to enhance the overall risk-adjusted returns. SamCERA will control leverage exposure through partnership selection and portfolio construction and diversification.

INFLATION HEDGE ASSET CLASSES	BENCHMARK INDEX
INFLATION HEDGE ASSETS	CUSTOMIZED BENCHMARK PORTFOLIO
REAL ESTATE	NCREIF ODCE
PRIVATE REAL ASSETS	CUSTOM PRIVATE REAL ASSET INDEX
PUBLIC REAL ASSETS	CUSTOM PUBLIC REAL ASSET INDEX

12.0 QUARTERLY INVESTMENT PERFORMANCE REPORTING

The quarterly investment performance reports will be designed as a risk management tool and will afford the Board the opportunity to timely identify potential risk issues within the portfolio and to assess the relative performance of the investment managers.

The report will provide sufficient information to assess the following:

- A. Total and active risk assessment at total fund, composite and individual manager level.
- B. Performance attribution at total fund, composite and individual manager level.
- C. Adherence to the investment style for which the manager is retained, as measured by the quarterly risk adjusted active return (deviation of the manager's performance from the specified performance benchmark) over the last quarter, six months, one-, three-, and five-year periods, including updates from previous quarterly reports regarding adherence to the style for which the firm was retained;
- D. Ability of the active manager to demonstrate consistently positive information ratios, including updates from previous quarterly reports regarding the firm's information ratios;
- E. Quarterly, annual, three- and five-year total time-weighted returns relative to the specified performance benchmark and manager style peer group.

13.0 ANNUAL INVESTMENT STRATEGY

Annually, the Board/Staff shall convene an investment strategy session (typically as part of the annual retreat) with the objective of addressing strategic investment policy issues and to deliberate any policies that could benefit the performance of the retirement Fund. The agenda for these sessions should include (but is not limited to) the following information:

- (a) Compare the Fund's actual investment performance for the prior fiscal year against the investment objectives set forth in Section 3.0 and evaluate the relative success or failure of the prior year's performance; specific commentary to this objective shall be an integral part of the performance measurement process.
- (b) Compare each investment manager's investment performance for the prior fiscal year against the relevant benchmarks and peer groups and evaluate the relative success or failure of their prior year's performance.
- (c) Evaluate and review the total Fund performance attribution and contribution to return at the composite level to isolate performance drivers.
- (d) Evaluate and review the various risk exposures of the plan versus appropriate policy limits and on-going trends through time.
- (e) Evaluate and review the portfolio rebalancing activity for the year.
- (f) Evaluate the Fund's liquidity requirements for the current and next fiscal years.
- (g) Compare each investment manager's fees to their respective peer universe.

14.0 PROXY VOTING

The Investment Managers are delegated authority for the voting of proxies, subject to the following guidelines:

- A. All proxies shall be voted in the best interest of the shareholders, but in no instance shall the economic interests of the retirement Fund be subordinated to any other interest.
- B. Investment managers shall provide staff with quarterly reports on all proxies cast, in a mutually acceptable format.

15.0 SECURITIES LENDING

- A. Pursuant to Section 2.0 (A), the Custodian shall manage a securities lending program to enhance income in accordance with the terms and conditions set forth in a mutually acceptable securities lending agreement and guaranty.
- B. The Board reserves exclusive authority to approve the securities lending agreement prior to the commencement of securities lending activity.
- C. Unless otherwise specified in the agreement(s):
 - (i) All loans shall be marked-to-market daily.
 - (ii) Collateral on each loan shall be maintained daily at 102% of loan value for domestic securities and 105% of loan value for international securities.
 - (iii) Acceptable collateral shall be in the form of cash or obligations issued or guaranteed by the U.S. Government, or its agencies or instrumentalities.
 - (iv) Borrower must have a long-term credit rating of either "A" from S&P or "A2" from Moody's. For split rated borrowers, the higher rating shall prevail if not the same rating, with the lower rating having a minimum long-term credit rating of either "A-" from S&P or "A3" from Moody's.
 - (v) The maximum allowable amount of assets on loan to any single borrower shall not be greater than \$3 million.
 - (vi) The maximum total amount of program assets on loan shall not be greater than \$10 million.
- D. The Chief Investment Officer shall be responsible for monitoring the securities lending program and recommending changes as appropriate.

APPENDIX A

SAN MATEO COUNTY EMPLOYEES' RETIREMENT ASSOCIATION
Investment Committee Charter as Amended
RESOLUTION 99-00-09

This Resolution, adopted by the Board of Retirement (Board) of the San Mateo County Employees' Retirement Association (SamCERA), sets forth the Charter for the Board's Investment Committee.

WHEREAS, Article XVI, §17 of the Constitution of the State of California as amended in 1992 to read, in pertinent part, as follows:

Notwithstanding any other provisions of law or this Constitution to the contrary, the retirement board of a public pension or retirement system shall have plenary authority and fiduciary responsibility for investment of moneys and administration of the system, subject to all of the following:

(a) The retirement board ... shall have the sole and exclusive fiduciary responsibility over the assets of the ... system. The retirement board shall also have sole and exclusive responsibility to administer the system in a manner that will assure prompt delivery of benefits and related services to the participants and their beneficiaries. The assets ... are trust funds and shall be held for the exclusive purposes of providing benefits to participants ... and their beneficiaries and defraying reasonable expenses of administering the system.

(b) The members of the retirement board ... shall discharge their duties with respect to the system solely in the interest of, and for the exclusive purposes of providing benefits to, participants and their beneficiaries, minimizing employer contributions thereto, and defraying reasonable expenses of administering the system. A retirement board's duty to its participants and their beneficiaries shall take precedence over any other duty.

(c) The members of the retirement board ... shall discharge their duties with respect to the system with the care, skill, prudence, and diligence under the circumstances then prevailing that a prudent person acting in a like capacity and familiar with these matters would use in the conduct of an enterprise of a like character and with like aims.

(d) The members of the retirement board...shall diversify the investments of the system so as to minimize the risk of loss and to maximize the rate of return, unless under the circumstances it is clearly not prudent to do so.

(e) The retirement board..., consistent with the exclusive fiduciary responsibilities vested in it, shall have the sole and exclusive power to provide for actuarial services in order to assure the competency of the assets of the... system. &

WHEREAS, California Government Code §31595 states, as follows:

The Board has exclusive control of the investment of the employees retirement fund. The assets of a public pension or retirement system are trust funds and shall be held for the exclusive purposes of providing benefits to participants in the pension or retirement system and their beneficiaries and defraying reasonable expenses of administering the system. Except as otherwise expressly

restricted by the California Constitution and by law, the Board may, in its discretion, invest, or delegate the authority to invest, the assets of the fund through the purchase, holding, or sale of any form or type of investment, financial instrument, or financial transaction when prudent in the informed opinion of the Board...; &

WHEREAS, *The Board of Retirement*, wishes to exercise these powers as follows:

EXERCISE OF POWERS: *The Board shall exercise its investment, management and administrative authority and responsibility through the approval of motions recorded in public meeting &*

WHEREAS, the Board has adopted SamCERA's Investment Policy and amendments thereto to direct the investments of the Retirement Fund and now wishes to establish an Investment Committee to guide the future evolution of SamCERA's Investment Policy. Therefore, be it

RESOLVED that the Board hereby establishes a standing Investment Committee to direct the Board in its ongoing evaluation of SamCERA's Investment Policy, including but not limited to

1.0 CONDUCT ASSET ALLOCATION STUDIES

1.1 Determine the characteristics of the Policy's liabilities in regards to the nature of Fund's cash flows

2.0 DEVELOP ASSET MIX ALTERNATIVES TO MEET LIABILITY REQUIREMENTS

- 2.1 Establish allowable asset classes
- 2.2 Determine asset class benchmarks
- 2.3 Develop risk, return & correlation projections

3.0 EVALUATE EFFICIENT FRONTIER ALTERNATIVES

- 3.1 Define risk, return and correlation
- 3.2 Evaluate mean variance optimization
- 3.3 Determine low risk alternatives and high risk alternatives
- 3.4 Scale portfolios between two extremes
- 3.5 Evaluate optimized efficient frontier
- 3.6 Integrate optimized efficient frontier with asset-liability relationships

4.0 ANALYZE BOARD RISK TOLERANCE

- 4.1 Assess risk/reward trade-offs
- 4.2 Assess contribution rate sensitivity & variability
- 4.3 Assess ability to exceed actuarial interest rate
- 4.4 Assess comfort level with characteristics of specific asset mixes

5.0 RECOMMEND PREFERRED ASSET MIX

- 5.1 Evaluate differences from current target
- 5.2 Evaluate Board's willingness to implement new target asset mix
- 5.3 Evaluate appropriateness of variance from peer public fund norms

6.0 RECOMMEND AMENDMENTS TO SAMCERA'S INVESTMENT POLICY

- 6.1 Adjust target asset mix
- 6.2 Introduce new benchmarks
- 6.3 Include required asset class/portfolio modifications

- 7.0 RECOMMEND REVISIONS TO MANAGER STRUCTURE
 - 7.1 Adjust manager/style line-up as necessary
 - 7.2 Introduce new managers/asset classes
 - 7.3 Terminate managers/asset classes as necessary
 - 7.4 Establish active & passive allocation targets as appropriate
- 8.0 IMPLEMENT CHANGES TO MANAGER STRUCTURE
 - 8.1 Recommend time-line & approach to revise structure
 - 8.2 Conduct manager evaluations
 - 8.3 Establish portfolio and asset allocation rebalancing procedures
- 9.0 EVALUATE MANAGER PERFORMANCE
 - 9.1 Monitor results of managers both gross and net of investment management fees
 - 9.2 Assess consistency of portfolio decision making
 - 9.3 Evaluate organizational, ownership, personnel & other firm developments
- 10.0 RECOMMEND AND EVALUATE INVESTMENT CONSULTANT STRUCTURE & PERFORMANCE
 - 10.1 Recommend for Board determination the retention and termination of Investment Consultant(s) as necessary
 - 10.2 Define and assign special projects as warranted
 - 10.3 Monitor performance of Investment Consultant(s)
 - 10.4 Conduct evaluations of Investment Consultant(s)
 - 10.5 Evaluate organizational, ownership, personnel and other firm developments
- 11.0 INITIATE & EVALUATE SPECIAL INVESTMENT STUDIES
- 12.0 UNDERTAKE OTHER WORK ASSIGNED TO IT BY THE BOARD Be it further

RESOLVED that the Chair may appoint the members of the Investment Committee per Regulation 2.5.1. Be it further

RESOLVED that the Chief Executive Officer is hereby instructed to provide the Committee with access to all appropriate and available resources and records, so long as such access is consistent with sound fiduciary practices. Be it further

RESOLVED that the Chief Executive Officer is hereby authorized to provide compensation of \$100 per meeting for not more than two meetings per month to the members of the Committee eligible for such compensation, per GC§31521. Be it further

RESOLVED that the Board hereby reserves to itself sole authority to accept, modify, or reject the recommendations, which the Investment Committee may present from time to time pursuant to the provisions of this Resolution, per Regulation 2.3.

ADOPTED by unanimous vote, January 25, 2000

AMMENDED by unanimous vote, May 22, 2001

AMMENDED by unanimous vote, October 25, 2004

APPENDIX B

Derivatives Investment Policy

1) Introduction

There is a genuine need to allow SamCERA's separate account managers to evaluate new securities and introduce them into their portfolios, given that the investment process followed by the investment managers complies with the subsequent provisions of this policy statement. This policy statement allows SamCERA's separate account Managers to exercise reasonable investment freedom, while minimizing the possibility of adverse implications for the Board.

2) Derivative Definition

A 'derivative' commonly is defined as a financial instrument whose performance is derived, at least in part, from the performance of an underlying asset (such as a security or an index of securities).

3) Types of Securities Included or Excluded

Since the derivative sector of the market is likely to experience considerable change, provisions must be made for the general characteristics of a derivative security, its evaluation and monitoring. Therefore, it is most appropriate to not attempt to definitively list all of the derivative securities that are covered by this policy. Instead, what will be explicitly stated is the investment process that governs derivative investments and the evaluation and monitoring requirements of this policy.

4) Approach to Policy

An approach has been developed which states allowable derivative investments, limited allocation derivative investments and restricted derivative investments.

Derivative securities not specified in the above three groups of securities must be evaluated in accordance with the following section entitled Derivative Investment Process. If the security meets these provisions and the spirit of these policies, the manager may establish a prudent position in the instrument. However, the manager must be able to demonstrate the appropriateness of such an investment in light of SamCERA's guidelines.

5) Counter-Party Evaluation

When entering into a non-exchange traded derivative investment, the investment manager must fully evaluate the other side of the derivative transaction—the counter-parties to the trade. Due to the possibility of counter-party default, SamCERA's investment managers must evaluate the risks associated with the counter-party as if an investment were being made in the traditional securities issued by the counter-party.

At a minimum, the investment manager must evaluate the counter-party's following criteria:

- a) Corporate earnings stream
- b) Corporate asset quality
- c) Capitalization
- d) Corporate liquidity
- e) Moody's and Standard & Poor's debt ratings
- f) Other fundamental investment and risk characteristics

For those counter-parties that are broker/dealers, they must:

- a) Have investment grade (Moody's and S&P rated) debt
- b) Be registered with the SEC
- c) Have significant net capital to protect against potential adverse market circumstances

For those counter-parties that are financial institutions (banks), they must have:

- a) Investment grade (Moody's and S&P rated) debt
- b) Total assets in excess of \$1 billion
- c) Significant net capital to protect against potential adverse market circumstances

The investment manager must monitor individual investment and total portfolio exposure to counter-parties. Individual counter-party exposure must be well diversified and not concentrated in a small number of organizations.

6) Purposes for Derivatives

The acceptable investment purposes for the use of derivatives are as follows:

- a. Appropriate to use futures, options and forward currency contracts to assist investment managers in mitigating portfolio risk.
- b. Useful substitute for an existing, traditional investment. In certain circumstances it may be cheaper, quicker or easier to invest in a derivative instrument or security rather than transacting in the cash or traditional security market.
- c. Provides investment value to the portfolio, while being consistent with SamCERA's overall and specific investment policies.
- d. Obtains investment exposure that is appropriate with the manager's investment strategy and SamCERA's investment guidelines, but could not be made through traditional investment securities.

Given that one or more of these investment purposes are clearly met, it is the responsibility of the investment manager to explain and demonstrate how derivative investments impact portfolio risk and the context of the investment within the overall portfolio.

Any other derivative investment purpose is not allowed. Derivatives may not be introduced into the portfolio to create economic leverage or to create investment exposures that are otherwise excluded by SamCERA's Investment Policy. However, if a manager develops an investment purpose other than those listed above which he/she feels is legitimate and consistent with the spirit of SamCERA's guidelines, this purpose should be proposed in writing to the Board.

7) Investment Restrictions and Derivatives Policy

For the purpose of these guidelines, convertible debt, traditional zero coupon bonds, mortgage pass-through securities and asset-backed securities are not viewed as derivatives. Based upon the factors enumerated in the above Section 4 entitled Approach to Policy, the following guidelines have been established:

Allowable derivative investments

- a. Stable and well-structured mortgage CMO's (Collateralized Mortgage Obligations)
- b. Financial futures (if Exchange Traded)
- c. Currency forward contracts and currency options (Exchange and OTC traded)
- d. Interest rate swaps

Derivative investments with allocation limits

- a. Interest only mortgage CMO's
- b. Principal only mortgage CMO's
- c. Options (if Exchange Traded)
- d. Caps and floors as they apply to the above stated allowable derivative investments
- e. Credit Default Swaps (CDS)

Derivative investments with allocation limits, as listed above, may not represent more than 5% of the individual portfolio manager's assets (based on market value) managed for SamCERA. At the same time, derivative investments with allocation limits in aggregate may not expose the individual manager's portfolio to losses in excess of 5% of the manager's total assets managed for SamCERA. In addition, the use of options, caps and floors, and CDS may be used only for defensive investment purposes.

Managers investing in the above-defined limited allocation derivative instruments should ensure that portfolio exposure is maintained within the stated constraints, and communicate the assumptions and model used to estimate VAR (Value at Risk) and/or other reasonable risk measurement procedures annually to the Boards.

Restricted derivative investments

- a. Inverse floating rate notes and bonds
- b. Structured notes

Restricted derivatives cannot be held in SamCERA's separate account portfolios at any time.

8) Risk Analysis and Monitoring of Derivatives

For those securities that are classified as derivative investments with allocation limits, the investment managers are required to test and measure derivative investment sensitivities to changes in key risk factors. These risk factors include extreme changes in interest rates, volatility, liquidity, credit quality, and cash market prices.

These risk factors will be assessed prior to initial investment and on a quarterly basis. Results of such risk testing on derivative investments with allocation limits will be supplied to SamCERA on an annual basis (December 31). If the investment manager identifies additional risks that should be evaluated, these other risk factors should be added to the list and handled in a manner consistent with the previously stated approach.

9) Derivative Investment Process

Investment managers are expected to cover the following issues before purchasing a derivative instrument or security, whether specifically stated as an allowable derivative investment, a derivative investment with

allocation limits, or a derivative not specifically discussed in the Investment Restrictions and Derivatives Policy section above:

- a. Determine if the purpose for investing in a derivative security is consistent with one or more of the purposes in the previous section entitled Purposes for Derivatives.
- b. Determine where the security fits into the classification system, if at all, stated in the Investment Restrictions and Derivatives Policy.
- c. Evaluate, at a minimum, the counter-party risk and the risks stated in the Risk Analysis and Monitoring section of the derivatives policy.
- d. Evaluate the derivative in a comparably thorough manner as the firm would any other traditional investment opportunity.

10) Reporting Requirements

It is the responsibility of SamCERA's investment managers to certify and demonstrate that their portfolios are in compliance with SamCERA's overall guidelines as well as those that apply to derivative investments. On an annual basis (December 31), SamCERA's investment managers will provide the following minimum monitoring information on all derivative securities:

- a. A general statement from the investment manager that its portfolio is in compliance with this Derivatives Policy.
- b. When stating the market value of the derivative exposure, the manager will specify the security pricing sources. The pricing source must be exchange-listed.
- c. A statement of the risks (credit risk—an evaluation of potential counter-party default on obligations, market risk—percent of portfolio invested in derivatives, and any other relevant risks) associated with the derivative investments.
- d. Potential adverse impact on market values if extreme adverse market movements occur.
- e. A statement regarding the liquidity of the derivative investments.
- f. Summary comments and the firm's list of approved counter-parties, ratings, and a statement regarding any changes to this list.
- g. An overall statement discussing the legal and regulatory risks associated with the portfolio manager's investments in derivatives.

Appendix C

DISCLOSURE OF PLACEMENT AGENT FEES, GIFTS, AND CAMPAIGN CONTRIBUTIONS

This amended policy is effective immediately upon adoption. This policy is intended to supplement any applicable provisions of state or federal law, which shall govern in the event of any inconsistency.

I. PURPOSE

This Policy is adopted pursuant to the requirements set forth in Government Code Section 7513.85 to help ensure that the San Mateo County Employees' Retirement Association (SamCERA) investment decisions are made solely on the merits of the investment opportunity. This Policy requires broad, timely, and updated disclosure of all Placement Agents, as that term is defined by Government Code section 7513.8, their relationships, compensation and fees.

II. APPLICATION

This Policy applies broadly to every type of SamCERA investment managers including general partners, sponsors of hedge funds, private equity funds, real estate funds and infrastructure funds, as well as public market investment managers.

This Policy as amended applies to all agreements with External Managers that are entered into after the date this Policy is adopted and all existing agreements if, after the date this amended Policy is adopted, the agreement is amended to continue, terminate, or extend the term of the agreement or the investment period, increase the commitment of funds by SamCERA or increase or accelerate the fees or compensation payable to the External Manager (Referred to hereafter as "Amendment".) In the case of an Amendment, the disclosure provisions of this Policy shall apply to the Amendment and not to the original agreement.

III. RESPONSIBILITIES

A. The Board is responsible for:

1. Not entering into any agreement with an External Manager that does not agree in writing to comply with this policy.

2. Not entering into any agreement with an External Manager who has violated this policy within the previous five years. However, this prohibition may be reduced by a majority vote of the Board at a public session upon a showing of good cause.

B. Each External Manager is responsible for:

1. Executing an agreement that provides the External Manager will comply with this policy.
2. Providing the following information to SamCERA Investment Staff within 45 days of the time investment discussions are initiated by the External Manager, but in any event, prior to the completion of due diligence. In the case of Amendments, the Placement Agent Information Disclosure is required prior to execution of the Amendment.
 - a. Disclosure of payments or compensation by the External Manager or any of its principals, employees, agents or affiliates, directly or indirectly, to any person or entity to act as a Placement Agent in connection with SamCERA investments.
 - b. A resume for each officer, partner, principal of the Placement Agent detailing the person's education, professional designations, regulatory licenses and investment and work experience. If any such person is a current or former SamCERA Board Member, employee or Consultant or a member of the immediate family of any such person, this fact shall be specifically noted.
 - c. A description of any and all compensation of any kind provided or agreed to be provided to a Placement Agent, including the nature, timing and value thereof. Compensation to Placement Agents shall include, but not be limited to, compensation to third parties as well as employees of the External Manager who solicit or market investments to SamCERA or who are paid based upon investment commitments secured by such employees.
 - d. A description of the services to be performed by the Placement Agent and a statement as to whether the Placement Agent is utilized by the External Manager with all prospective clients or only with a subset of the External Manager's prospective clients.
 - e. A written copy of any and all agreements between the External Manager and the Placement Agent.
 - f. A statement whether the placement agent, or any of its affiliates, are registered with the Securities and Exchange Commission or the Financial Industry Regulatory Association, or any similar regulatory agent in a country other than the United States, and the details of that registration or explanation as to why no registration is required.
 - g. A statement whether the placement agent, or any of its affiliates, is

registered as a lobbyist with any state or national government.

h. The names of any current or former SamCERA Board Members, employees, or Consultants who suggested the retention of the Placement Agent.

3. Providing an update of any changes to any of the information provided pursuant to section B.2 above within 30 calendar days of the date that the External Manager knew or should have known of the change in information.
4. Representing and warranting the accuracy of the information described in section B.2 above.
5. Causing its engaged Placement Agent to disclose, prior to acting as a Placement Agent to SamCERA:
 - a. All campaign contributions made by the Placement Agent to any publicly elected SamCERA Board Member during the prior 24-month period. Additionally, any subsequent campaign contribution made by the Placement Agent to any publicly elected SamCERA Board Member during the time the Placement Agent is receiving compensation in connection with a SamCERA investment shall also be disclosed.
 - b. All gifts, as defined in Government Code Section 82028, given by the Placement Agent to any SamCERA Board Member during the prior 24-month period. Additionally, any subsequent gift made by the Placement Agent to any SamCERA Board Member during the time the Placement Agent is receiving compensation in connection with a SamCERA investment shall also be disclosed.
6. SamCERA reserves the right to deem the failure to disclose the information required by 5(a) and 5(b) as a material breach of the agreement with the External Manager.

C. SamCERA Investment Staff (“Staff”) are responsible for:

1. Providing External Managers with a copy of this Policy at the time that discussions are initiated with respect to a prospective investment or engagement.
2. Confirming that the information in section B above has been received within 45 days of the time the execution of the investment contract or Amendment.
3. For new contracts and amendments to contracts existing as of the date of the initial adoption of this Policy, securing the agreement of the External Manager in the final written agreement between SamCERA and the External Manager to provide in the event that there was or is an intentional material omission or

inaccuracy in the Placement Agent Information Disclosure or any other violation of this Policy, SamCERA reserves the right to reimbursement of any management or advisory fees paid by SamCERA from the date of violation to the date of the imposition of the fees.

4. Prohibiting any External Manager or Placement Agent from soliciting new investments from SamCERA for five years after they have committed a material violation of this Policy; provided, however, that SamCERA's Board, by majority vote at a noticed, public meeting, may reduce this prohibition upon a showing of good cause.
5. Providing the Board with Placement Agent information relating to each investment at the time the investment is brought to the Board for its decision.
6. Maintaining Placement Agent Information Disclosures as a public record and reporting to the Board any a material violation of this Policy.

Adopted December 14, 2010

Amended October 25, 2011

Amended March 28, 2017

DEFINITIONS:

The following definitions are excerpted from California Government Code section 7513.8 and are current as of March 28, 2017. Should the legislature subsequently amend the definitions below, the definition of these terms as amended shall supersede the definitions contained in this policy.

“External Manager” means either of the following: (1) a Person who is seeking to be, or is, retained by a board or an Investment Vehicle to manage a portfolio of securities or other assets for compensation; (2) a Person who manages an Investment Fund and who offers or sells, or has offered or sold, an ownership interest in the Investment Fund to a board or an Investment Vehicle. (All code section references are to the Government Code, unless otherwise noted.)

“Person” means an individual, corporation, partnership, limited partnership, limited liability company, or association, either domestic or foreign.

“Investment Vehicle” means a corporation, partnership, limited partnership, limited liability company, association, or other entity, either domestic or foreign, managed by an External Manager in which a board is the majority investor and that is organized in order to invest with, or retain the investment management services of, other External Managers.

“Investment Fund” means a private equity fund, public equity fund, venture capital fund, hedge fund, fixed income fund, real estate fund, infrastructure fund, or similar pooled investment

entity that is, or holds itself out as being, engaged primarily, or proposes to engage primarily, in the business of investing, reinvesting, owning, holding, or trading securities or other assets. Notwithstanding the preceding sentence, an investment company that is registered with the Securities and Exchange Commission pursuant to the Investment Company Act of 1940 (15 U.S.C. Sec. 8a-1 et seq.) and that makes a public offering of its securities is not an Investment Fund.

“Placement Agent” means any Person directly or indirectly hired, engaged, or retained by, or serving for the benefit of or on behalf of, an External Manager or an Investment Fund managed by an External Manager, and who acts or has acted for compensation as a finder, solicitor, marketer, consultant, broker or other intermediary in connection with the offer or sale to a board or an Investment Vehicle either of the following: in the case of an External Manager as defined in subpart (1) of the definition of an External Manager, the investment management services of the External Manager; in the case of an External Manager as defined in subpart (2) of the definition of an External Manager, an ownership interest in an Investment Fund managed by the External Manager. Notwithstanding the preceding sentence, an individual who is an employee, officer, director, equityholder, partner, member, or trustee of an External Manager and who spends one-third or more of his or her time, during a calendar year, managing the securities or assets owned, controlled, invested, or held by the External Manager is not a Placement Agent.

**RESOLUTION AMENDING SAMCERA'S
INVESTMENT POLICY STATEMENT**

RESOLUTION 2021-___

WHEREAS, pursuant to Article XVI, Section 17, of the California Constitution, the Board of Retirement (the "Board"), has the exclusive authority and fiduciary responsibility for the investment and administration of the assets of the retirement system (the "Fund"), and on September 28, 2021, established an Investment Policy Statement (the "Policy") for the investment of the Fund assets; and

WHEREAS, the purpose of the Policy is to assist SamCERA in effectively supervising its investments in order to meet the requirements of the California Constitution, the County Employees Retirement Law of 1937, the Mission and Goals of SamCERA and other requirements, and to encourage effective communication between SamCERA and its investment managers and investment consultants; and

WHEREAS, the Board periodically reviews its Policy and amends it as necessary so as to remain up to date to reflect recent actions of the Board; and

WHEREAS, in January 2021, the Board approved a new asset allocation policy portfolio as part of its annual asset allocation review. The new policy portfolio tweaks the old portfolio by adding 2% to the Growth bucket and reducing Diversifying by 2%, while keeping the overall allocation to Inflation Hedge unchanged. To reflect these updates, staff recommends that Sections 6.0 and 9.0-11.0 be amended; and

WHEREAS, Staff is also proposing the following additional change to the Policy:

Amend Section 6.0 "Asset Allocation & Portfolio Structure" to add "Liquidity" as a sub-category within Diversifying in addition to Core Fixed Income and Absolute Return.

Amend Section 9.0 "Growth Assets Investment Policies" to remove the 2% maximum tracking error for the Opportunistic Credit composite. Given the opportunistic nature of this composite,

along with the composite consisting of both public and private investments, the benefit of utilizing a tracking error measure is reduced.

Amend Section 10.0 "Diversifying Assets Investment Polices" to change the description of Core Fixed Income from the "lowest risk" fixed income category to a "lower" risk fixed income category.

WHEREAS, the Board and desires to make such amendments; Now, therefore, be it

RESOLVED, that the SamCERA "Investment Policy Statement" be revised to read as set forth in the attached document.

* * * * *

Regularly passed and adopted, by the San Mateo County Employees' Retirement Association, Board of Retirement, on September 28, 2021.

Ayes, Trustees:

Noes, Trustees:

Absent, Trustees:

Abstain, Trustees:

Mark Battey, Board Secretary
SamCERA

SAN MATEO COUNTY EMPLOYEES' RETIREMENT ASSOCIATION
Board of Retirement

September 28, 2021

Agenda Item 7.1

TO: Board of Retirement

FROM: Scott Hood, Chief Executive Officer 

SUBJECT: Discussion of AB 361 Brown Act Requirements for Telemeetings

Recommendation

Discuss the implementation of AB361 with regards to future SamCERA Board meetings.

Background

On September 16, 2021, the Governor signed AB 361 into law. The law amends the Brown Act to allow for the suspension of the Brown Act's teleconferencing requirements during a declared state of emergency as long as certain other requirements are satisfied. AB 361's provisions will be in effect until January 1, 2024, when the bill sunsets.

During the pandemic, the Governor issued a number of Executive Orders suspending various Brown Act requirements. The most recent Executive Order clarified that the suspension of these Brown Act requirements will last until September 30, 2021, at which point the requirements of AB 361 will be in effect.

Under AB 361, local governmental bodies, like SamCERA's Board of Retirement, are required to make certain determinations (e.g., the existence of a state of emergency and imminent risk to meeting attendees) in order for the Brown Act's Teleconferencing requirements to be suspended.

Discussion

Staff will present more specific information about AB 361 including an overview of the AB 361 requirements that will need to be fulfilled at the Board's future meetings in order to continue meeting via Zoom videoconference.